

Catalog "E"

Established 1948

Stuart W. Johnson & Co., Inc.

Equipment & Supplies for the Food & Dairy Industries





Stuart W. Johnson & Co., Inc.

Equipment and Supplies for the Food and Dairy Industries

In Wisconsin 800-242-5933 or 800-558-5904 nationally

Operating weekdays 7:30 a.m. through 5:00 p.m.

Off hour inquiries may be faxed to (262) 248-0277 or e-mail sales@stuartjohnsonco.com

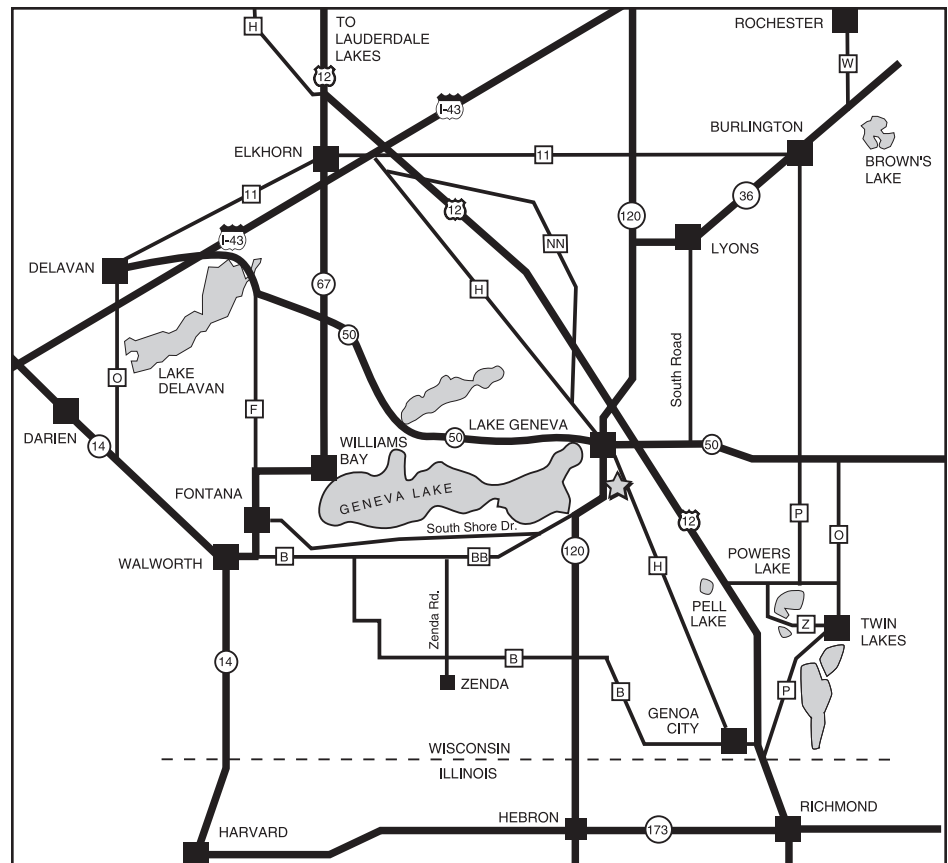
ABOUT STUART W. JOHNSON & CO., INC.

Stuart W. Johnson & Co., Inc. distributes supplies and equipment to industry. We have a tradition of making customer satisfaction our number one priority with both small and large companies. Solid relationships with manufacturers and consumers of our marketed products have been established to fill a need in the Food, Dairy, Paint, Plastics, and Pharmaceutical markets. Stuart W. Johnson & Co., Inc. is committed to meeting and exceeding customer needs in this ever-changing marketplace.

VISION STATEMENT

Our customers are offered an outstanding range of products and engineering services. By choosing to do business with Stuart W. Johnson & Co., Inc., you have placed your trust in our abilities and our associates. We promise to meet your project requirements and daily needs through active, energetic, and ethical performance. Our growth will only be achieved by meeting and exceeding customer needs, and responding to this ever changing industry with organization and attitude that focuses on service.

See us on the web at
www.stuartjohnsonco.com
 or visit our office at
 1002 Mobile St.
 Lake Geneva, Wisconsin



COD shipments also available.



Stuart W. Johnson & Co., Inc.

GENERAL INFORMATION AND BILLING TERMS

PRICING

Please contact our sales office at (800) 242-5933 for item pricing. Quoted prices are firm for 30 days from the date of offer, unless specified otherwise. All applicable taxes and shipping charges are the responsibility of the customer.

PAYMENT TERMS

Terms are net 20 days for all Stuart W. Johnson & Co., Inc. accounts. Past due accounts are subject to finance charges. For non account-based clients, we accept Visa, MasterCard, or COD shipping arrangements.

NEW ACCOUNTS

To open an account, please contact our customer service department. You may also fax your request to (262) 248-0277, attention "New Accounts". Please supply your bank and trade references on company letterhead. In addition, please offer a contact name for possible account questions or notifications.

SHIPPING

Unless specified, all shipments are FOB factory or Lake Geneva, Wisconsin.

RETURNS

Stock items must be returned in saleable condition within 60 days of purchase. Incorrect or defective items returned will receive full credit and swift replacement. Please supply your purchase order number, date of order, and reason for return when requesting an authorization. All returns are subject to inspection and possible restocking charges.

DAMAGED OR LOST ITEMS

We shall not be held liable for any delay or damage caused by carriers. We recommend that if damage is visible on delivery, refuse delivery or make note of damage on the freight bill. If damage is found internally post delivery, it is recommended you keep the original carton and contact the related carrier immediately. Following this, contact your Stuart W. Johnson & Co., Inc. sales person to arrange a replacement order.

CUSTOMER COMMENTS

Your satisfaction is the key to our success, and we are open to any comments or complaints you might have. No matter the issue, our customer service and sales staff will respond in a timely and appropriate manner. Please, let us know what you're thinking.

STUART W. JOHNSON & CO., INC.

P.O. Box 999
1002 Mobile St.
Lake Geneva, WI 53147
www.stuartjohnsonco.com

In Wisconsin: (800) 242-5933
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TOOLS AND UTENSILS

LUBRI-FILM HEAVY DUTY SANITARY LUBRICANT

Specially developed for lubrication of food processing and packaging equipment. Conforms within FDA requirements. Available in both spray and tube. Lubri-Film is a high polymer lubricant with high load bearing low friction properties suitable for low and high temperatures. Working range (-5° F to +210° F). For wet or dry conditions. Highly resistant to separation or bleed. Will not dry or gum. Contains no soap, metals, solid petrolatum, silicones nor toxic additives.



Prod. No.	Description	Packaging
HLFT4	Lubri-Film 4oz. Tube	12 tubes/carton
HLF	Lubri-Film 14 oz. Spray Can	6 cans/carton

HAYNES SANITARY LUBRICATING SPRAY

The modern Haynes spray method. The Haynes Spray thin film lubricant has hundreds of applications in home and industry



Prod. No.	Description	Packaging
HAYNRED	Haynes 10 oz. Spray Can	6 cans/carton

LAGENCO SILICONE SPRAY

Stop sticking with Lagenco Silicone Spray release agent. Manufactured especially for the food packaging and food processing industry.

For packaging and processing equipment, such as ovens, freezers, conveyors, belts, and chutes. Proper use of Silicone Spray minimizes clean up time, speeds equipment disassembly, stops sticking and binding, protects equipment, and increases production. Ends "poly build-up" on the mandrels, transfer chutes, and guide rails of the Pure-Pak paper milk carton machines. Prevents jamming and production slowdown. Keeps food from sticking to cooking vessels, freezing trays, bake tins, ovens, mixers, conveyors, evaporators, slicing machines, cooking coils, grinders, saws, and hand equipment. Lagenco Silicone Spray complies with applicable FDA regulations, and when applied according to direction, can be used in contact with fresh, frozen, cooked, or baked food products.

Heat stable: unaffected by temperatures ranging from -40° to 400° F.



Prod. No.	Description	Packaging
946	55 ml Spray Can	12 cans/case

CIP LUBE

Odorless, tasteless and sterile. Component parts are listed in the Federal Register at the F.D.A. office. Melts at 130°F.



Prod. No.	Description	Packaging
CIP1	4 oz. Tube	12 tubes/carton

ORANGE SOLID OIL

The Super Lubricating Film Orange Solid Oil is famous for protecting machinery. Saves bearings, material, power, time, and labor. Lasts two to four times as long as ordinary greases. Keeps production up! Maintenance repairs down! To minimize production downtime, reduce maintenance costs, and keep your output at top level, lubricate with famous, time tested, job-proven Orange Solid Oil



Prod. No.	Description	Packaging
OSO1	4 oz. Tube	12 tubes/carton

LAGENCO SPRAY LUBRICANT - LITE

U.S.P. LIQUID PETROLATUM SPRAY - Lubricates all types of dairy and food processing equipment without danger of contamination.

NON-TOXIC, TASTELESS - won't turn rancid (contains NO Vegetable Oils). Conforms to U.S.P. Public Health Service Requirements.

RECOMMENDED FOR LUBRICATION OF: Sanitary Valves, Positive Pump Parts, Filling Machine Parts, Copper Slides & Parts, Homogenizer Pistons & Rings and all other sanitary machine parts which require daily cleaning and lubrication.



Prod. No.	Description	Packaging
940	12 oz. Spray Can	12 cans/case

SPRAYWAY STAINLESS STEEL POLISH AND CLEANER

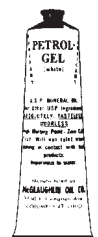
Stainless steel surfaces remain cleaner longer because there is no film for soil to cling to. The gloss is renewed and will be retained. The cleaning process is simple. No rubbing required. Won't scratch-Cleans-Polishes-Protects. Excellent for Formica-Porcelain-Ceramic Tile-Chrome. Contains NO acid or abrasive substances. Will NOT leave a powdery residue.



Prod. No.	Description	Packaging
841	15 oz. Spray Can	12 cans/case

PETROL-GEL (TECHNICAL WHITE)

USES: Sanitary Fittings, Stainless Steel Valves, Homogenizer Pistons, Filling Machine Pistons, Centrifugal Pumps, Guides & Slides, Mechanisms, Continuous Direct Draw Ice Cream Freezers, Gaskets and Seals



Prod. No.	Description	Packaging
PG1	4 oz. Tube	12 tubes/carton

**LAGENCO IS A TRADEMARK FOR
THE LAKE GENEVA COMPANY (LA-JÉN-CO).**

TOOLS AND UTENSILS

TAPERED PAIL WITH SIDE TILTING HANDLE

Transport and pour with confidence in Vollrath's stainless steel utility pail with side tilting handle. NSF Certified.



Prod. No.	Capacity	L	Top Diameter x Height	
	qt		in	cm
58161	14 3/4	13.9	12 x 10 1/8	30.5 x 25.7
5803	Hook-on pail cover for 58161			

TAPERED DAIRY OR UTILITY PAILS

Vollrath dairy pails are at home on the farm or in the kitchen of food service operations. Because they're made of stainless steel, they resist denting, corrosion and tarnishing. The pails clean easily to reduce the danger of bacteria growth. NSF Certified.



Prod. No.	Capacity	L	Top Diameter x Height	
	qt		in	cm
5813	12 1/2	11.8	12 x 10	30.5 x 25.4
5816	14 3/4	13.9	12 x 10 1/8	30.5 x 25.7
5820	23	21.8	14 7/8 x 11 7/8	37.8 x 30.2
5803	Hook-on pail cover for 5813, 5816			

STAINLESS STEEL MILK CAN

- Modern
- Sanitary
- Economical

Prod. No.	Description
SS40	10 Gallon Stainless Steel Can with Cover, 7 1/2" Neck



5 GALLON OPEN HEAD HEAVY DUTY HIGH DENSITY POLYETHYLENE PLASTIC PAIL

Bottom diameter 10 1/4, top diameter 12 1/4 over all height 14 7/16.

- All colors except black are FDA approved food grade.
- Multiple cover styles available



Prod. No.	Description
PCI40BORHTSSL2	Orange 5 gal. pail
PCI40BBKHTSSL2	Black 5 gal. pail
PCI40DBHTSSL2	Blue 5 gal. pail
PCI40BGNHTSSL2	Green 5 gal. pail
PCI40BGRHTSSL2	Grey 5 gal. pail
PCI40BRDHTSSL2	Red 5 gal. pail
PCI40BWHHCSSL2	White 5 gal. pail
PCI40BYLHTSSL2	Yellow 5 gal. pail
PCI40BRNHTSSL2	Brown 5 gal. pail



STAINLESS STEEL STOCK POTS AND STORAGE CONTAINERS

Vollrath's stock pots, the industry standard, are made from non-porous 18-8, Type 304 stainless steel, the best material to resist corrosion from food acids or cleansers. The easy cleaning finish resists scratches and stains in everyday use and stays new looking longer. Stainless stock pots feature a special conductive bottom to distribute heat evenly and reduce energy consumption, and are equipped with strong welded loop handles for carrying ease. Matching flat covers are available for convenient stacking and storage. NSF Certified.



STAINLESS STEEL STOCK POT AND STORAGE CONTAINERS

Prod. No.	Pot	Cover	Capacity qt (L)	Diameter in (cm)	Depth	Gauge
7856	77572		7 1/2 (7.1)	8 3/8 (21.3)	8 3/4 (22.2)	24
7858	77572		11 1/2 (10.9)	10 3/8 (26.4)	8 7/8 (22.5)	20
7860	77662		16 (15.1)	12 1/4 (31.1)	9 (22.9)	20
7861	77662		20 (18.9)	12 1/4 (31.1)	11 (27.9)	20
7862	77662		24 (22.7)	12 1/4 (31.1)	13 (33.0)	20
7863	77682		38 1/2 (36.4)	13 7/8 (35.2)	15 1/4 (40.0)	20
7864	77702		60 (56.8)	16 (40.6)	18 (45.7)	18

ALUMINUM STOCK POTS

Designed for efficiency and long life. Double thick 1/8" top and bottom for added strength, where it counts. Completely sanitary - with no bead to catch and hold food or dirt particles. Made from THICK STRONG ALUMINUM. NSF Approved.

ALUMINUM STOCK POTS

Prod. No.	Capacity/Quarts	Inside Diameter	Inside Depth
67508	8 1/2	10"	6 1/2"
67510	10	10"	7 5/8"
67512	12	10"	9"
67516	16	10"	12"
67520	20	12"	10 1/2"
67524	24	12"	12 3/8"
67532	32	13"	14"
67540	40	14"	15"
67560*	60	16 7/8"	15 13/16"
67580*	80	16 3/4"	21"

*Has half bead - same thickness throughout.

COMPOTHANE SAFETY HAMMERS

One piece uni-cast safety hammers with dead blow heads are ideal for an unlimited variety of industrial, automotive and construction operations including manufacturing, fabrication, assembly, installation and repair. Four standard sizes offer 1 3/4", 2", 2 1/2" and 2 3/4" diameter faces and are molded in H (hard) Compothane with shot filled Dead Blow heads. Overall weight 1 1/2 to 4 pounds.



- Exceed all OSHA standards
- Completely safe for product, machinery and workman - no mark - no spark

Setting new standards for SAFETY & PERFORMANCE in all types of application including:

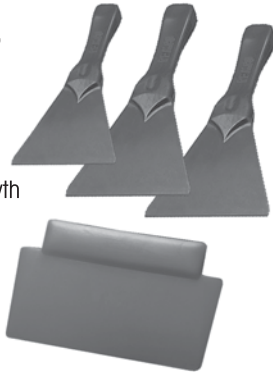
Aircraft maintenance	Glass & muffler installation
Assembly work	Guttering installation
Automotive & heavy machinery service shops	Heating & air conditioning
Body shops	Machinery repair
Building & construction	Marine, air & space projects
Demolition work	Mining operations
Electrical repair	Mold & casting operations
Explosive & ammunition depots	Railroad & shipyards
Foundry operations	Sheet metal fabrication
Gas & oil fields & refineries	Tool & die shops
	Tractor & farm equipment

Prod. No.	Face Diameter	Head Length	Approx Length	Approx. Weight
1HD	1 3/4"	3 3/4"	11"	1 1/2 lbs
2HD	2"	4 1/4"	12 3/4"	2 lbs
3HD	2 1/2"	4 3/4"	11"	3 lbs
4HD	2 3/4"	5 1/4"	14"	4 lbs

HAND SCRAPERS

Polypropylene Hand Scraper (One-piece)

- One-piece, injection molded polypropylene construction
- Meets FDA requirements
- Sterilizable; durable
- No seams or cracks for bacterial growth
- Will not rust or corrode chemical resistant
- Will not scratch metal surfaces
- Handles shaped for strong grip
- Available in colors



Prod.No.	Description
6961	Small Scraper 3" x 8"
6962	Large Scraper 4.4" x 9.7"
6960	Bench Scraper 5" x 8"

Hi-Temp Scraper (One-piece)

- Working temps up to 465°F/240°C
- Non food grade

Prod.No.	Description
6963	Large Hi-temp Scraper(Blue Only) 4.4" x 9.7"

REMCO

PRODUCTS

REMCO HYGIENIC ONE PIECE SHOVEL

Tough. Lightweight. Hygienic. Molded in one piece from FDA approved polypropylene, it is available in two sizes and many colors. A workhorse for moving bulk materials and an integral part of any professional cross-contamination containment program. The Remco shovel, initially developed over 30 years ago, doesn't just meet the standard, it is the standard. Characteristics:

- Heavy duty, one-piece, injection molded polypropylene construction
- Meets FDA and USDA requirements
- Tough and Resilient
- Rigid, yet lightweight
- Non-sparking
- Chemical and corrosion resistant
- Colors: 41076 in Green(09), Red(05), Blue(14) White(02), Yellow(04)
41077 in Red(05), White(02), Yellow(04)

Applications & Markets:

- Meat, seafood and poultry
- General food handling
- Commercial fishing
- Material handling
- Agriculture
- Chemical and industrial applications



Prod. No. Description

41076	11" x 13" Spectrum® Sanitary Shovel
41077	14" x 16" Spectrum® Sanitary Shovel

VAT SQUEEGEES

Wipe down the sides of your vat and gather all the fines when you ditch the curd with this easy to handle tool. Choose either the 50" handle with a 2 1/2"x15" blade or the 69" handle with a 2 3/4"x26 1/2" blade, all welded stainless steel. White rubber replacement blades are available for both sizes



Prod.No. Description

VS1	50" handle with 2 1/2"x15" blade
VS2	69" handle with 2 3/4"x26 1/2" blade

STAINLESS STEEL SCOOP

Mirror finish outside. Satin finish inside. Type 304 18-gauge stainless steel. NSF Certified.



Prod. No.	Capacity oz ml	Bowl Size in cm	Handle Length in cm
9211	52 1537.8	7 7/8 x 5 1/4 20.0 x 13.3	4 10.2

FOR BEST DISCOUNT - ORDER CASE QUANTITIES.

TOOLS AND UTENSILS

CONTICO SCOOPS

- Easy grip plastic handle transfers less cold than metal scoop
- Durable dishwasher safe Polycarbonate material for long-lasting use
- Features a hole for hanging or tying to a container
- Colors: designated by (07)

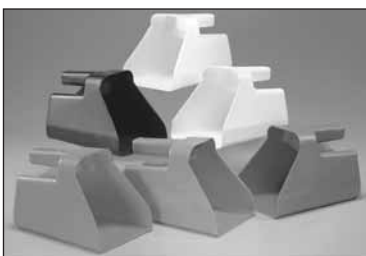


Prod. No. Description

9932	32 oz. Small Scoop
9964	64 oz. Large Scoop

3 QUART SCOOP

- Superior all-purpose scoop for dry or liquid
- Protected handle excellent for scooping dry chemicals
- Use for ice melt, seed, feeds, fertilizer, dry foods, boat bailer
- 14 1/2 high, 6" wide, 6" deep
- Material: polypropylene
- Private label imprinting available
- BRIGHT NEON COLORS available in dozens
- Standard White available by piece

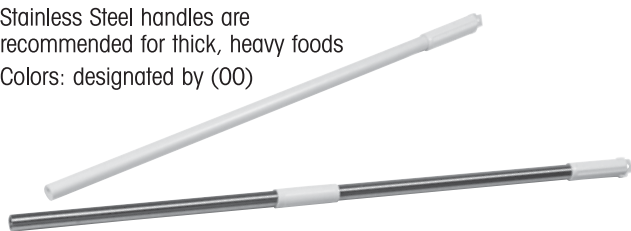


Prod. No. Description

PS621	3 Quart Scoop
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SPATULA & PADDLE SCRAPER REPLACEMENT HANDLES

- Use long handle versions for stirring, mixing, and cleaning kettles, vats, and large pots
- Heavy duty, threaded, Stainless Steel handles have plastic grips (end and center) to provide comfort and heat resistance when used in high temperatures or high viscosity applications
- Available as a plastic handle/paddle combination for lower temperatures and lower viscosity uses
- Stainless Steel handles are recommended for thick, heavy foods
- Colors: designated by (00)



Prod. No. Description Case Qty.

41301	7" Nylon Spatula Scraper Handle (fits 40360, 40361, 40362)	6
41447	33" Nylon Paddle Handle (fits 40360, 40361, 40362)	6
41302	42" Nylon Paddle Handle (fits 40360, 40361, 40362)	6
41448	54" Nylon Paddle Handle (fits 40360, 40361, 40362)	6
41449	43" Stainless Steel Paddle Handle (fits 40360, 40361, 40362)	6
41450	67" Stainless Steel Paddle Handle (fits 40360, 40361, 40362)	6

SPATULA & PADDLE SCRAPERS

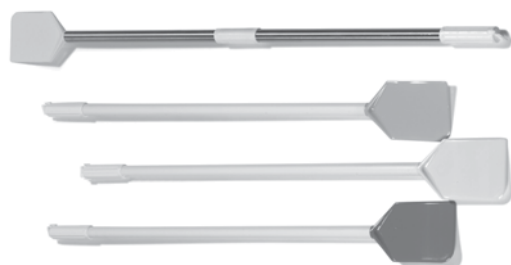
Large Nylon Paddle Scraper with 48" Stainless Steel Handle (40354) is recommended for greater stirring and cleaning action of large kettles. Soft Polyethylene Paddle Scraper offers greater flexibility, allowing the blade to conform to kettle contours and tight cleaning areas.

- Spatulas are perfect for general mixing and stirring
- Exceptional quality construction
- Standard Nylon (300°F) or soft flexible Polyethylene (150°F) blades will sharpen and contour to your specific application with usage
- Smooth finished, water-proof construction for easy clean-up
- Colors: designated by (00) White, (02) Yellow, (05) Red



Prod. No. Description - Spatula Case Qty.

40350	13 1/2" Plastic Handle w/4 1/2" x 7 1/2" Nylon Spatula Scraper	6
40351	13 1/2" Plastic Handle w/4 1/2" x 7 1/2" Polyethylene Soft Spatula Scraper	6



Prod. No. Description - Paddle Scraper Case Qty.

40352	40" Plastic Handle w/4 1/2" x 7 1/2" Nylon Paddle Scraper	6
40357	40" Plastic Handle w/4 1/2" x 7 1/2" Polyethylene Soft Paddle Scraper	6
40353	48" Plastic Handle w/4 1/2" x 7 1/2" Nylon Paddle Scraper	6
41358	48" Plastic Handle w/4 1/2" x 7 1/2" Polyethylene Soft Paddle Scraper	6
40354	48" Stainless Steel Handle w/4 1/2" x 7 1/2" Nylon Paddle Scraper	6
40356	48" Stainless Steel Handle w/6 1/2" x 9" Polyethylene Soft Paddle Scraper	6
41359	60" Plastic Handle w/4 1/2" x 7 1/2" Polyethylene Soft Paddle Scraper	6
40355	72" Stainless Steel Handle w/4 1/2" x 7 1/2" Nylon Paddle Scraper	6
41040	72" Stainless Steel Handle w/6 1/2" x 9" Nylon Paddle Scraper	6



Prod. No. Description - Replacement Parts Case Qty.

40361	Nylon 4 1/2" x 7 1/2" Replacement Blade	6
40360	Soft Polyethylene 4 1/2" x 7 1/2" Replacement Blade	6
40362	Nylon 6 1/2" x 9" Replacement Blade	6

For multiple duty stirring and scraping, blades are easily replaced or interchanged in seconds.

Colors designated by Red(05), Yellow(04), White(02)

FOR BEST DISCOUNT - ORDER CASE QUANTITIES.

TOOLS AND UTENSILS

FRENCH WHIPS

- Light and balanced for perfect mixing, stirring, and whipping of batters, sauces, and soufflés
- High quality chrome-plated brass handles with high quality Stainless Steel spring wire construction



Prod. No.	Description
40683	18" Stainless Steel French Whip
40681	36" Stainless Steel French Whip
40682	48" Stainless Steel French Whip

STAINLESS STEEL GRADUATED MEASURES

Vollrath measures are made of durable stainless steel for years of food preparation. The easy-to-read graduation marks inside are calibrated in both ounces and cc's for easy conversion of any recipe. Pouring spout and comfortable handle for ease of use. Heavy Gauge – 18 Gauge with beveled lip. NSF Certified.



Prod. No.	qt	Capacity		ml	Height	
		l	oz		in	cm
9516	1/2	0.5	16	473.2	4 5/8	11.7
9532	1	0.9	32	946.4	5 1/4	13.3
9564	2	1.9	64	1892.7	6 3/4	17.1
95128	4	3.78	128	3785.4	8	20.0

MEASURING CUPS

Graduations embossed in metric and english on opposite sides, will not wash off. These measures have a self-draining bottom and an "I-Beam" handle with thumb grip control. Dishwasher and Freezer safe to -40°F to 212°F (-40°C to 100°C). Deep handle width prevents burns when transferring hot liquids.



Prod. No.	Size	Color	Pack Case
9808	1 cup	Clear	12
9816	1 pint	Clear	6
9832	1 quart	Clear	6
9864	2 quart	Clear	6
9828	4 quart	Clear	6

VOLLRATH PROFESSIONAL COOKWARE MILK STIRRER/MASHER

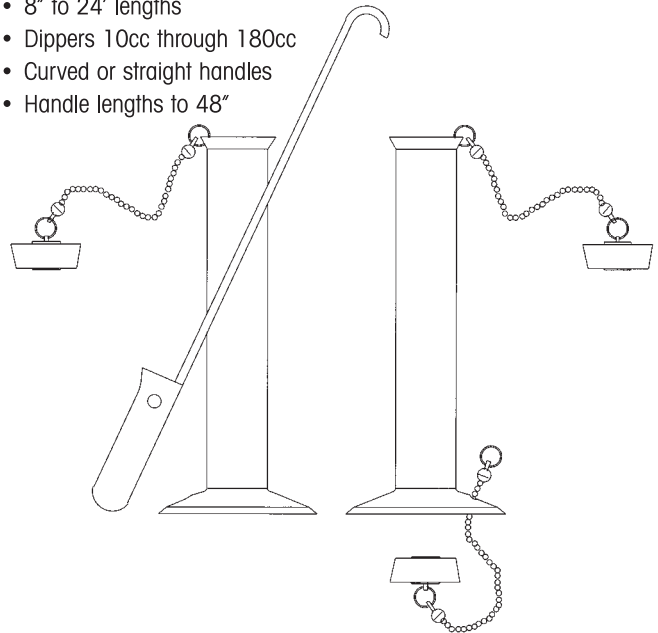
The Vollrath perforated milk stirrer with its extra long handle doubles as an excellent potato masher for large quantity preparation. Constructed of 18 gauge, 304 stainless steel.



Prod. No.	Handle Length		Blade Diameter	
	in	cm	in	cm
9232	26	66.0	5	12.7

LAGENCO ALL WELDED STAINLESS STEEL SAMPLE DIPPER

- TYPE 304 stainless steel
- Open or closed bottoms
- 8" to 24" lengths
- Dippers 10cc through 180cc
- Curved or straight handles
- Handle lengths to 48"



Prod. No.	Description
31757	1 oz. SS Dipper - 19" handle
31759	2 oz. SS Dipper - 19" handle
31760	3 oz. SS Dipper - 19" handle
31761	4 oz. SS Dipper - 19" handle

Other sizes and handle lengths available.
Call for Dipper Holder information.

STAINLESS STEEL LADLES

Portion control with exact ounce capacities—cost savings, less waste, controls food costs. Made of 18-8, Type 304 stainless steel for corrosion resistance. Attractive bright finish for nice presentation and smooth handling. Handle is hooked to prevent slippage and grooved for added strength.



Prod. No.	Capacity		Bowl Diameter		Handle Length	
	oz	ml	in	cm	in	cm
5800	1/2	14.8	1 3/4	4.4	6	15.2
5841	1	29.6	1 3/4	4.4	6 7/8	17.5
5851	1	29.6	1 3/4	4.4	10	25.4
5852	1 1/2	44.4	2 3/8	6.0	9 7/8	25.1
5862	2	59.1	2 3/8	6.0	9 7/8	25.1
5843	3	88.7	2 7/8	7.3	12 5/8	32.1
5844	4	118.3	3 3/8	8.6	12 5/8	32.1
5845	5	147.9	3 3/8	8.6	12 1/2	31.8
5846	6	177.4	3 1/2	8.9	12 3/8	31.4
5848	8	236.6	4	10.2	12 5/8	32.1
5850	12	354.9	4 3/8	11.1	12 1/8	30.8
5854	24	709.8	6	15.2	18 1/8	46.0
5860	72	2129.3	8 1/8	20.6	17	43.2

FOR BEST DISCOUNT - ORDER CASE QUANTITIES.

MATERIAL HANDLING



HUSKEE RECEPTACLES & LIDS

Molded of engineered resins with seamless construction, the Huskee is a strong, long lasting receptacle used by virtually every industry. From food prep to foundries, from refuse to bio-hazard waste, the Huskee keeps on working. Stackable with lid on, nestable with lid off.



Prod. No.	Capacity	Color	Case Qty.
1001GY	10 gallon	Grey	6
1001WH	10 gallon	White	6
2000BL	20 gallon	Blue	6
2000GY	20 gallon	Grey	6
2000WH	20 gallon	White	6
3200BL	32 gallon	Blue	6
3200GY	32 gallon	Grey	6
3200GY BP	32 gallon	Grey	48/Bulk
3200RD	32 gallon	Red	6
3200WH	32 gallon	White	6
3200YW	32 gallon	Yellow	6
4444BL	44 gallon	Blue	4
4444GY	44 gallon	Grey	4
4444GY BP	44 gallon	Grey	32/Bluk
4444RD	44 gallon	Red	4
4444WH	44 gallon	White	4
4444YW	44 gallon	Yellow	4
5500GY	55 gallon	Grey	3

Huskee Lids

Prod. No.	Fits	Color	Case Qty.
1002GY	Fits 10 gallon	Grey	6
1002WH	Fits 10 gallon	White	6
2001GY	Fits 20 gallon	Grey	6
2001WH	Fits 20 gallon	White	6
3201GY	Fits 32 gallon	Grey	6
3201RD	Fits 32 gallon	Red	6
3201WH	Fits 32 gallon	White	6
3201YW	Fits 32 gallon	Yellow	6
4445GY	Fits 44 gallon	Grey	4
4445RD	Fits 44 gallon	Red	4
4445WH	Fits 44 gallon	White	4
4445YW	Fits 44 gallon	Yellow	4
5501GY	Fits 55 gallon	Grey	3

HUSKEE TILT N' WHEEL

These 50 gallon containers have a hinged double walled lid with standard 8" non-marking wheels.

Prod. No.	Color	Case Qty.
5850BK	Black	2
5850YW	Yellow	2



HUSKEE DOME TOPS

The economic answer wherever large refuse collection in public places is required. Conveniently sized to fit our 32, 44 and 55 gallon Huskees. The 44 gallon model Dome Top also fits 55 gallon metal drums. The wide rim and tight fitting door with rain deflector keeps debris and odors in and rain and pests out.



Prod. No.	Fits	Color	Case Qty.
3232BL	Fits 32 gallon	Blue	2
3232BK	Fits 32 gallon	Black	2
3232GY	Fits 32 gallon	Grey	2
3232RD	Fits 32 gallon	Red	2
4456BL	Fits 44 gallon	Blue	2
4456BK	Fits 44 gallon	Black	2
4456GY	Fits 44 gallon	Grey	2
4456RD	Fits 44 gallon	Red	2
5550BL	Fits 55 gallon	Blue	2
5550BK	Fits 55 gallon	Black	2
5550GY	Fits 55 gallon	Grey	2
5550RD	Fits 55 gallon	Red	2

HUSKEE FUNNEL TOPS

Designed for high volume applications, this open top funnel lid handles indoor applications ranging from food service to industrial.



Prod. No.	Fits	Color	Case Qty.
3233GY	Fits 32 gallon	Grey	4
4457GY	Fits 44 gallon	Grey	4

HUSKEE ROUND DOLLY

The twist-on, twist-off Round Dolly converts a stationary Huskee into a mobile hard working tool. It fits the 20, 32, 44, and 55 gallon Huskees and features five, 3" non-marking swivel casters



Prod. No.	Color	Case Qty.
3255	Black	2

INGREDIENT BINS & FOOD STORAGE

Units are equipped with four 3" non-marking casters, 2 swivel for fingertip maneuverability and 2 fixed. The Ingredient Bin body is constructed of durable Derma-Tek™ smooth surface plastic. The seamless walls and round corner design make cleaning simple and thorough.



Prod. No.	Capacity	Dimensions	Color	Case Qty.
9321	21 gallon	27 3/4"x12 3/4"x29 15/16"	White	1
9326	26 gallon	27 3/4"x15 1/4"x29 15/16"	White	1



Harper Trucks has many more models to chose from.
Alternate features include:

- Aluminum Frames
- Stair Crawler Kits
- Extended Base Plates (to 36")
- Heavy Gauge Steel Fenders to prevent load from rubbing on wheels
- Extend height to 60"

HAND TRUCKS

MODEL 52T16

- Curved steel straps, welded front and back, allow for cylindrical object handling
- 8-gauge high strength steel plate with machine beveled edge to slide under the load easier, and rounded corners for safety
- Stair glides ease loads up or down stairs and over curbs
- Dual handle for easy load control

50" Height, 20" Width
7" x 14" Base Plate, 10" Solid Rubber Wheels



MODEL 56T60

- 8-gauge high strength steel base plate with machine beveled edge to slide under the load more easily for safety
- Curved steel straps, welded front and back, allow for cylindrical object handling
- "Tri-Hole" axle bracket for choice of 6", 8", or 10" wheels
- Continuous handle for easy load control

800 lb Frame Capacity,
50" Height, 21 1/4" Width,
8" x 14" Base Plate, 10" Pneumatic Wheels



MODEL 9268-63

- Rear wheel assembly makes for even weight distribution and easy, safe handling for the operator

- Handle design allows for easy loading and unloading of drums on pallets
- Spring-loaded kickstand holds truck in vertical position
- Handles drums from 22 1/2" to 44" high
- Also available with WH84 and WH69 solid rubber wheels. WH68P and WH63P poly wheels

1000 lb Frame Capacity,
59" Height, 24" Width,
10" Mold-on Rubber Wheels, 6" Mold-on Rubber Wheels



BARREL TRUCK - RETRACTABLE HANDLES

MODEL 8818-41

- Lower height design allows for easier break-over and return to vertical position
- Two retractable handles are standard on this series
- Bung drain is 21" off the floor in the horizontal position
- Shipped knocked down in a 36" x 23 1/2" x 3 1/2" carton
- Non-skid cross tube prevents sliding when drum is tipped
- Handles 55-gallon drums
- 600 lb Frame Capacity
- Contact Stuart W. Johnson for other wheel options



DRUM TRUCK - HEAVY DUTY

MODEL 76A59

- 1200 lb capacity
- Universal chime hook to fit all plastic, steel and fibre drums
- 2 each 10" molded rubber wheels
- Foot rest positions truck under drum and eases break over
- Includes a spring loaded device to assist drum onto lifting toes - automatically returns truck to vertical position when drum is disengaged



"TILT TRUCKS"

These models are equipped with deluxe roller bearing wheels and heavy-duty casters. Wheels are inset to fit standard doorways and to reduce wall and door damage. This Tilt Truck is easily handled by one person and can be easily cleaned with steam or high pressure hot water.



Prod. No.	Cu. Yds.	Item	Capacity	Color	Case Qty.
5833BK	1.1	Standard	800 lbs.	Black	1
5845BK	1.1	Heavy Duty	2000 lbs.	Black	1
5833BK	1.5	Standard	1200 lbs.	Black	1
5845BK	1.5	Heavy Duty	2100 lbs.	Black	1

CARLISLE UTILITY CART

- 40"x19" utility cart if the perfect size for transporting large or heavy items
- Durable utility cart is made of easy care structural polypropylene foam
- Sturdy molded-in handle, parts tray and cord wrap
- Convenient knock-down design, easy assembly
- 500 pound load capacity
- Flat shelves make a convenient work surface
- Heavy-duty 5" standard non-marking casters, 2 rigid, 2 swivel
- Colors: Grey (23)



Prod. No.	Item	Case Qty.
UC1940	19"x40" Utility Cart	1 ea



ONE HANDLE PLATFORM TRUCKS

Structural plastic construction and rounded corners protect against accidental wall and door damage. No bumpers required. Plastic construction will not rust, dent, crack, chip, peel or splinter unlike conventional metal or wood. All platform trucks come in charcoal grey and feature a heavy-duty, reinforced steel handle.



Prod. No.	Item	Caster Size	Deck Size	Capacity	Case Qty.
5860	Utility	5 in.	24" x 48"	700 lbs.	1
5865	Standard	6 in.	24" x 48"	1200 lbs.	1
5870	Heavy Duty	8 in.	24" x 48"	2200 lbs.	1
5875	Utility	5 in.	30" x 60"	700 lbs.	1
5880	Standard	5 in.	30" x 60"	1200 lbs.	1
5885	Heavy Duty	5 in.	30" x 60"	2200 lbs.	1

UTILITY CARTS

The 5800 and 5805 two shelf Utility Carts feature 5" heavy-duty, non-marking grey casters for industrial use. Supports 200 lbs. (400 lbs. max capacity) per shelf. Optional center shelf available.



Prod. No.	Color	Dimensions Case Qty.
5800BE	Beige	34 3/8" x 17 1/2" x 33"H
5800GY	Grey	34 3/8" x 17 1/2" x 33"H
5805BE	Beige	40 3/8" x 25 1/2" x 33"H
5805GY	Grey	40 3/8" x 25 1/2" x 33"H

Optional Shelf Prod. No.	Fits	Color	Case Qty.
5801BE	Fits 5800	Beige	1
5801GY	Fits 5800	Grey	1
5806BE	Fits 5805	Beige	1
5806GY	Fits 5805	Grey	1

UTILITY CARTS, LAKESIDE ANGLE-LEG MODELS

Durable chassis frame with protective bumpers on legs and handles. Ideal for constant usage with light to moderate loads. Available in 200 lb. and 400 lb. capacity. 1" lip on three (3) sides of top and middle shelves. All rubber swivel casters standard. In stock, ships ready to use.



ANGLE-LEG UTILITY CARTS – 3-SHELF

Model No.	Overall Size (in.) WxLxH Shelf Clearance (in.) Weight (lbs.)	Shelf Size (in.) Capacity (lbs.)	Shelves Caster Size (in.)
422	19 x 31 x 33 3/8 11 7/8 42	18 x 27 400	3 4
444	22 3/8 x 39 1/4 x 37 1/4 13 1/8 68	21 x 35 400	3 5

GILLIS PALLET TRUCKS

Gillis Hand Pallet Trucks are built to last! "Domestic quality at an import price." 6.5" wide forks have welded steel entry glides, polyurethane load rollers, and an additional exit roller for ease of exiting the pallet. 7.5" x 2" polyurethane wheels with aluminum core dissipate heat for increased wheel life in high use applications. Articulating axle adjusts automatically to ensure load stability over uneven surfaces or small debris.

Additional Features

- 5500 lb. Capacity
- 3-Position Fingertip Control • Raise • Lower • Neutral
- Adjustable push rods and reinforced forks.
- 2.9" Lowered Height
- Built-in Foot Release (Standard)
- Quality Engineered Pump Design with overload bypass valve and lowering valve for controlled rate of descent
- Pump has a full 2 year warranty!
- Full Pump Stroke design only requires 10 strokes for maximum lift of 7.75"
- Powder Coated Red
- Grease fittings and bushings at all pivot points for easy maintenance

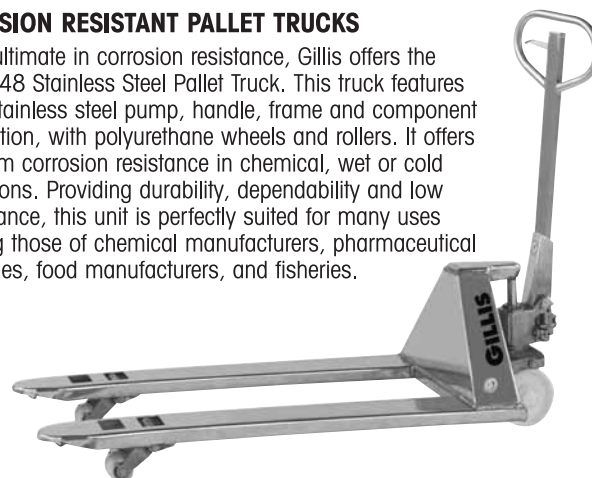


HAND PALLET TRUCKS

Prod. No.	Capacity (lbs.)	Fork Size W x L (in.)	Lowered Height (in.)	Wheel Size (in.)	Wgt. (lbs.)
IE2748-55HC	5500	27 x 48	2.9	7.5 x 2	180
IE2742-55HC	5500	27 x 42	2.9	7.5 x 2	180
IE2148-55HC	5500	21 x 48	2.9	7.5 x 2	180
IE2142-55HC	5500	21 x 42	2.9	7.5 x 2	180

CORROSION RESISTANT PALLET TRUCKS

For the ultimate in corrosion resistance, Gillis offers the ISSPT2748 Stainless Steel Pallet Truck. This truck features 100% stainless steel pump, handle, frame and component construction, with polyurethane wheels and rollers. It offers maximum corrosion resistance in chemical, wet or cold applications. Providing durability, dependability and low maintenance, this unit is perfectly suited for many uses including those of chemical manufacturers, pharmaceutical companies, food manufacturers, and fisheries.



ISSPT2748 STAINLESS STEEL PALLET TRUCK

Prod. No.	Capacity (lbs.)	Fork Size W x L (in.)	Lowered / Raised Height (in.)	Roller Size (in.)	Steering Wheel Size (in.)	Wgt. (lbs.)
IGSPT2748	5500	27x48	2.9-7.75	7 x 2	2.9 x 3.6	175
ISSPT2748	5500	27x48	2.9-7.75	7 x 2	2.9 x 3.6	175

MATERIAL HANDLING

ECONOMY SAFETY FAUCETS AND DRUM FAUCETS - 3/4" NPT

- No after drip. Teflon "O" ring seals, which are inert to most fluids, cannot swell or decompose to cause leakage. There is no loss of costly liquids.
- Designed for safety. An anti-flash screen prevents flame propagation in the dispensing of flammable solvents.
- Easily cleaned. Originally designed for sanitary operation, thorough cleaning can be accomplished in a matter of minutes without special tools. Because of the construction materials, the unit can be chemically and/or steam sterilized.
- Self-closing. Fume and vapor tight design.



Prod. No.	Description
531S	Drum/Safety Faucet

TOLCO PLASTIC DRUM FAUCETS



Prod. No.	Description
PLASF 3/4	Plastic Drum Faucet
PLASF 2	Plastic Drum Faucet

UNIVERSAL DRUM WRENCH

- Both models fit 3/4" to 2" bungs
- 12" size for steel or plastic drums- high strength aluminum/magnesium alloy with offset handle
- 7" size for plastic drums only - aluminum



Prod. No.	Description
DPW	Universal Drum Wrench

**IF YOU HAVE QUESTIONS ON ORDERING,
PLEASE CONTACT
STUART W. JOHNSON & CO. INC.
FOR ADDITIONAL INFORMATION.**

ACID & ALKALI TRANSFER PUMPS

VITON® 236PF SERIES

The Beckson 236 series of hand pumps will eliminate the lifting and tilting of drums and carboys. They are designed to transfer most acids with relative ease. The body and shaft are constructed of a special polyvinyl chloride with the valves and patented seal of DuPont's Viton®. The pumps in this series are 38" long with a diameter of 1 1/2".

28 oz. per stroke.

Pumps individually packaged.

236PF Series UL Listed for transferring Sulphuric Acid (H2SO4) in concentrations up to 50% maximum at 120°F maximum.

Warning: The 236PF series is not compatible with some alkalis, acetic acid (30%) and methyl alcohol.



HYPALON® 436PF SERIES

Our 436PF is designed to transfer detergents, waxes, alkalis and certain acids. This model also incorporates the same design features as the 236PF series with the valves and seals of DuPont's Hypalon®.

28 oz. per stroke.

Partial List of Compatible Chemicals: Most Alkalis, Hydrofluoric Acid, Acetic Acid (30%), Methyl Alcohol

436PF Series UL Listed for transferring Hydrochloric Acid (HCL) in concentrations up to 30% maximum at 100°F maximum.

Prod. Number	Adapter	Hose Length	Prod. Number	Adapter	Hose Length
236PF3	None	3 feet	436PF3	None	3 feet
236PF6	None	6 feet	436PF6	None	6 feet
236PF3-S	Std 2" IPS Bung	3 feet	436PF3-S	Std 2" IPS Bung	3 feet
236PF6-S	Std 2" IPS Bung	6 feet	436PF6-S	Std 2" IPS Bung	3 feet
236PF3-B	Buttress Del Drum	3 feet	436PF3-B	Buttress Del Drum	3 feet
236PF6-B	Buttress Del Drum	6 feet	436PF6-B	Buttress Del Drum	3 feet



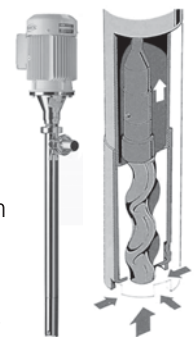
FLUX PUMPS CORPORATION DRUM PUMPING APPLICATIONS

HIGH VISCOSITY - FLUX MODEL F560S3A

Design Features:

- Positive displacement
- Up to 10GPM
- Electric or Air Driven (to 5hp)
- Up to 100,000 cps
- Disassembly/reassembly to clean in 10 minutes
- Progressive cavity design

Specify:
Barrel Depth
Electric/
Air Drive
Teflon or
Buna Stator



DRUM PUMPING APPLICATIONS

LOW VISCOSITY - FLUX MODEL F427S3A

Design Features:

- Centrifugal
- Up to 50GPM
- Electric or Air Driven (to 1/2 HP)



MATERIAL HANDLING

WIRE SHELVING

Begin your shelving system with a starter unit and then use economical add-on units to continue the row

- Shelves may be located at any level desired
- Greatest strength and stability is attained by locating the bottom shelf in the lowest possible position
- All shelving units cataloged consist of four shelves
- Optional ledges – 4" high to prevent items from falling off shelf
- Starter Units include four shelves and four posts
- Add-On Units consist of four shelves, two posts and add-on clips to securely attach to the starter units
- Add-On Units can continue to be added either in straight shelving rows or can be used to turn corners



Size	Starter Unit			Add-On Units		
	63"H	74"H	86"H	63"H	74"H	86"H
36"Wx18"D	WS600	WS616	WS632	WS608	WS624	WS640
48"Wx18"D	WS601	WS617	WS633	WS609	WS625	WS641
60"Wx18"D	WS602	WS618	WS634	WS610	WS626	WS642
72"Wx18"D	WS603	WS619	WS635	WS611	WS627	WS643
36"Wx24"D	WS604	WS620	WS636	WS612	WS628	WS644
48"Wx24"D	WS605	WS621	WS637	WS613	WS629	WS645
60"Wx24"D	WS606	WS622	WS638	WS614	WS630	WS646
72"Wx24"D	WS607	WS623	WS639	WS615	WS631	WS647

EXTRA SHELVES

Model No.	Size	Model No.	Size
WS648	36"W x 18"D	WS652	36"W x 24"D
WS649	48"W x 18"D	WS653	48"W x 24"D
WS650	60"W x 18"D	WS654	60"W x 24"D
WS651	72"W x 18"D	WS655	72"W x 24"D

PLASTIC BIN PARTS STORAGE UNITS

Concentrate all your small parts in one location

- Save time searching for misplaced inventory
- Heavy duty steel shelving units are combined with polystyrene plastic bins
- Parts bins are easy to clean; unaffected by most chemicals or oils



Model No.	Style/Shelves	Overall Size Bin Sizes	No. of Bins
PB306	Open/13	36"W x 12"D x 75"H 4"W x 12"D x 4"H	96
PB307	Open/13	36"W x 18"D x 75"H 4"W x 18"D x 4"H	96
PB308	Open/13	36"W x 12"D x 75"H 8"W x 12"D x 4"H	48
PB309	Open/13	36"W x 12"D x 75"H (48) 4"W x 12"D x 4"H (24) 8"W x 12"D x 4"H	72
PB310	Open/7	36"W x 12"D x 42"H 4"W x 12"D x 4"H	48
PB311	Open/7	36"W x 12"D x 42"H 8"W x 12"D x 4"H	24

FLAMMABLE LIQUIDS SAFETY CABINETS

Provide dependable storage for your flammable and combustible liquids and help prevent costly accidents and damage to employees and workplaces

Standard 2-door manual close design available in 30, 45 and 60 gallon capacity models

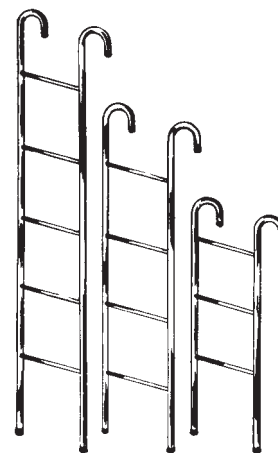
- Double wall 18 gauge welded steel construction with 1 1/2 inch air space
- Dual 2 inch capped vents with flash arrestors for external exhaust
- 2 inch high leakproof door sill contains spills
- Adjustable leveling feet
- Locking handle with 3-point latch
- 500 pound capacity galvanized shelves are adjustable on 2 1/2 inch centers
- Construction meets NFPA Code 30 and OSHA Standard 1910.106 for storage of Class I, II and III liquids
- Factory Mutual Approved
- Many sized and styles
- Ask about self-closing units
- FM Approved



Prod. No.	Description/Size	Gallon Capacity	Shelves
SC300F	Double Door - Manual Close 43"W x 18"D x 44"H	30	1
SC450F	Double Door - Manual Close 43"W x 18"D x 65"H	45	2
SC600F	Double Door - Manual Close 34"W x 34"D x 65"H	60	2

STAINLESS STEEL SAFETY LADDERS

Ladder construction includes rails formed of 7/8" O.D. stainless tubing with 1/2" solid stainless round bar rungs. The rungs are 12" long and spaced 12" apart. The ladder rails are drilled for insertion of the rung so that both the weld and rail carry rung loading. All welds are ground and polished and the ladder ends have rubber caps to prevent slipping and scratching. The rubber caps are removable and replaceable



Prod. No.	Description
504-4	Safety ladder, 4' high
504-5	Safety ladder, 5' high
504-6	Safety ladder, 6' high

LADDERS



RHINO 375™ FIBERGLASS CHANNEL EXTENSION LADDER/FE4000HD SERIES

Our New Top of the Line Fiberglass Extension Ladder. Designed to meet the most demanding utility/industrial/contractor applications. Meets ANSI Type IAA 375 lb. Standard.

- Aluminum Plate Connection Rungs
- D-Shaped or Round Rungs
- New 375 lb. Rated Safety Yellow Rail
- Mar-Resistant Rail End Caps
- Louisville Ladder's Full Metal Boot™
- QuickLatch™



Specifications

Sizes	Rail Depth	Stack Height	Inside Width Base	Inside Width Fly	Outside Width Base	Outside Width Fly
16'-28'	3 1/4"	6"	15 3/8"	13 11/16"	17 3/4"	16 1/16"
32'	3 5/16"	6 1/8"	15 3/8"	13 11/16"	17 3/4"	16 1/16"

SINGLE LADDERS - D-RUNG

Prod. No.	Length Total	Approx. Weight
FE4108HD	8'	18
FE4110HD	10'	22
FE4112HD	12'	25
FE4114HD	14'	28

SINGLE LADDERS - ROUND RUNG

Prod. No.	Length Total	Approx. Weight
FE4508HD	8'	18
FE4510HD	10'	22
FE4512HD	12'	25
FE4514HD	14'	28

TWO SECTION EXTENSION LADDERS - D-RUNG

Prod. No.	Length Total	Section Length	Max. Ext. Length	Approx. Weight
FE4216HD*	16'	8'	13'	39
FE4220HD	20'	10'	17'	47
FE4224HD	24'	12'	21'	54
FE4228HD	28'	14'	25'	62

TWO SECTION EXTENSION LADDERS - ROUND RUNG

Prod. No.	Length Total	Section Length	Max. Ext. Length	Approx. Weight
FE4616HD*	16'	8'	13'	38
FE4620HD	20'	10'	17'	46
FE4624HD	24'	12'	21'	53
FE4628HD	28'	14'	25'	61

*Does not include rope and pulley.

Straight ladders available as special order

LOUISVILLE FIBERGLASS CHANNEL EXTENSION LADDER FE3200 SERIES

The extra heavy duty channel extension ladder for lighter industrial use. Full channel nonconductive side rails. Designed for 300 lb. workload when set at the proper working angle.

- D-Shaped Rungs
- Swivel Safety Shoes
- Outside Slide Guides
- Mar-Resistant Rail End Caps
- QuickLatch™



Specifications

Sizes	Rail Depth	Stack Height	Inside Width Base	Inside Width Fly	Outside Width Base	Outside Width Fly
16'-28'	3 1/4"	5 3/4"	14 11/16"	13 11/16"	17 1/16"	16 1/16"
32'-40'	3 5/16"	6 1/8"	15 5/16"	14 5/16"	17 11/16"	16 11/16"

TWO SECTION EXTENSION LADDERS - D-RUNG

Prod. No.	Length Total	Section Length	Max. Ext. Length	Approx. Weight
FE3216*	16'	8'	13'	35
FE3220	20'	10'	17'	43
FE3224	24'	12'	21'	50
FE3228	28'	14'	25'	57
FE3232	32'	16'	29'	68
FE3236**	36'	18'	32'	77
FE3240**	40'	20'	35'	86

*Does not include rope and pulley. **Type I, 250 lb. rated. Straight ladders not available in FE3200 Series

LOUISVILLE BRUTE™ 375 FIBERGLASS STEP LADDER FS1400HD SERIES

CRAFTED WITH DURABLE PARTS AND DESIGNED TO MEET THE MOST DEMANDING INDUSTRIAL / CONTRACTOR APPLICATIONS. NEW MOLDED DESIGN - Polypropylene copolymer upper boot provides strength, durability and fiberglass rail surface protection. Thick non-marring Santoprene® rubber tread is bonded and mechanically fastened to the upper boot and provides a slip resistant footing. RAIL INSPECTION MADE EASY - Inside, Da Boot™ has a unique open design that allows for quick and easy visual inspection of the fiberglass rail.

- Heavy Gusseted Bracing - Two pair of steel gussets under bottom step for extra support. All gussets are heavy duty steel.
- Riveted Step Construction with Gussets - Each step features heavy duty steel gussets secured with large-headed, semi-tubular steel rivets for maximum strength. 30% greater shear strength than solid aluminum rivets.
- Reinforced Bottom Back Brace - Heavy duty bottom back brace provides additional strength to the bottom of the ladder.
- Wide Back Braces - Vertically mounted U-shaped back braces spaced on one foot intervals provide maximum stiffness and discourage unsafe climbing.
- Inside Spreader Braces - Spreader braces inside fiberglass rails help keep braces from getting hooked or abused during transit.
- Full Channel Fiberglass Rail - Nonconductive full channel rails are covered with a polyester veil for years of durable service.



Prod. No.	Size	Step Size	Bottom Width	Approx. Spread
FS1404HD	4' 3"	18 7/8"	28"	13 3.
FS1406HD	6' 3"	21 7/8"	40"	20
FS1408HD	8' 3"	24 7/8"	52"	27
FS1410HD	10' 3"	27 7/8"	65"	34
FS1412HD	12' 3"	30 7/8"	78"	47

WERNER FIBERGLASS MECHANIC TWIN STEP LADDER T7400 SERIES

- Heavy gauge aluminum extruded top; back-up aluminum plates reinforce all top connectors
- Shoulder bolt and lock nut on top hinge; 4 solid aluminum rivets attach top to each rail
- Slip-resistant Traction-Tred® steps are double riveted and knee-braced; rubber step bumpers to resist damage
- Extra heavy duty internal spreaders; thick slide plates
- Glas*Mark® Violator stripes on rails allow ladder to be more visible
- The EDGE® bracing system helps to decrease damage to rail; shoe pads riveted to the EDGE® structure; aluminum external rail shield helps protect against abrasion damage
- Every rivet backed up by metal part or washer to protect rails
- 14', 16', 18' and 20' are 300 lbs Load Capacity, Type IA Duty Rating (per side)



Prod. No.	Size	Approx. Width	Approx. Spread	Approx. Weight	Capacity
T4704	4'	21 1/2"	36 1/8"	21.5	375 lbs
T4706	6'	25"	50 1/8"	30.0	375 lbs
T4708	8'	28 1/2"	64 1/8"	40.5	375 lbs
T4710	10'	32"	78 1/4"	51.5	375 lbs
T4712	12'	35 1/2"	92 1/4"	63.5	375 lbs
T4714	14'	39"	106 1/4"	86.0	300 lbs
T4716	16'	42 1/8"	120 1/4"	103.5	300 lbs
T4718	18'	46"	136 1/8"	126.0	300 lbs
T4720	20'	49 1/2"	150 1/8"	149.0	300 lbs

Both sides of an T7400 mechanic series ladder can be used simultaneously by one person per side. Each side is designed to support one person including materials up to 300 lbs. Total combined weight on ladder must not exceed 600 lbs. (300 lbs. per side).

GREEN BULL PLATFORM FIBERGLASS STEP LADDER - SERIES 2072

Molded Wrap Around Boot - Structural PVC boot supports the lower leg for durability and abrasion resistance.

Heavy Duty Step Attachment - Each step is attached by 6 steel rivets. Bottom step is double gusseted on both sides.

Reinforced Back Braces - Formed back braces are stronger than standard angle stock, without adding weight.

Large, Stable Platform - Slip resistant serrated surface is a full 21" X 13 1/2". The platform locks the ladder in place when in the open position.

- Type 1A
- 300 lb. duty rating



Prod. No.	Size (Ft.)	Step Size (In.)	Bottom Width(In.)	Approx-Spread(In.)	Approx-Weight(Lbs.)
207202	2	3	22 1/2	32 3/8	20
207203	3	3	24	38 3/8	23
207204	4	3	25 1/2	44 3/8	27
207205	5	3	27	50 3/8	31
207206	6	3	28 1/2	56 3/8	36
207207	7	3	30	62 1/4	43
207208	8	3	31 1/2	68 1/4	50
207210	10	3	34 1/2	80 1/8	60
*207212	12	3	37 1/2	92	72

*This size uses aluminum shoes with serrated rubber tread.

GREEN BULL FIBERGLASS STEP LADDER SERIES 2032

Armor Plated Legs - Fiberglass sleeves surround the lower legs, protecting the area from damage and wear.

Gusseted Back Braces - All back braces are fully gusseted for extra rigidity.

Steel Reinforced Spreader Connection - Each step is attached by 6 steel rivets.

Molded Top with Recessed Tool Tray - Non-Conductive material resists denting or bending. Includes tool holes and a paint can hook.

Heavy Duty Step Attachment - Located inside the rails for protection during transit and storage. Extra steel plates strengthen the hinge area on the outside of the rail.

- Type 1AA
- 375 lb. duty rating
- Armor Plated Legs
- Gusseted Back Braces
- Steel Reinforced
- Spreader Connection



Prod. No.	Size (Ft.)	Step Size (In.)	Bottom Width(In.)	Approx-Spread(In.)	Approx-Weight(Lbs.)
203203	3	3	18	22 3/8	15
203204	4	3	19 1/2	28 3/8	18
203205	5	3	21	34 3/8	22
203206	6	3	22 1/2	40 1/4	25
203207	7	3	24	46 1/4	31
203208	8	3	25 1/2	52 1/4	35
203210	10	3	28 1/2	64 1/4	44
203212	12	3	31 1/2	76 1/4	54

GREEN BULL DOUBLE FRONT FIBERGLASS STEP LADDER - SERIES 2062

Ladder can be used by two people at the same time, not to exceed 300 lbs. per side.

Top Hinge - All steel top hinge uses 10 steel rivets on each side for long-lasting strength and durability.

Inside Spread Braces - Located inside the rails for protection during transit and storage.

Heavy Duty Step Attachment - Each step is attached by 6 steel rivets.

Molded Wrap Around Boot - Structural PVC boot supports the lower leg for durability and abrasion resistance.

- Type 1A
- 300 lb. duty rating
- Heavy Duty



Prod. No.	Size (Ft.)	Step Size (In.)	Bottom Width(In.)	Approx-Spread(In.)	Approx-Weight(Lbs.)
206204	4	3	19 1/4	38 1/8	25
206205	5	3	20 3/4	45 1/2	28
206206	6	3	22 1/4	53	33
206208	8	3	25 1/4	68	42
206210	10	3	28 1/4	83	57
206212	12	3	31 1/4	98	69

MATERIAL HANDLING

60° STANDARD ANGLE ALUMINUM LADDER

MODEL A7R2 (EXAMPLE)

- Aluminum alloy 6061-T6 unpainted
- 12" deep top step—Other steps are 7" deep
- 2" retracting spring casters
- Set-up all-welded
- G-Strut steps only

Step Width 18"	No.	Platform Height (in.)	Overall Height (in.)	Base WxL (in.)	Wgt. (lbs.)	G-Strut Cat. No.
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No Handrail—All Welded (set-up)

1	12	12	18x18	12	A1N1*
2	20	20	20x24	17	A2N1*
3	30	30	20x29	22	A3N1

With Handrail—All Welded (set-up)

2	20	50	21x22	21	A2R1
3	30	60	24x28	31	A3R1
4	40	70	24x34	34	A4R1
5	50	80	27x42	37	A5R1
6	60	90	—	—	—
7	70	100	—	—	—

Step Width 26"	No.	Platform Height (in.)	Overall Height (in.)	Base WxL (in.)	Wgt. (lbs.)	G-Strut Cat. No.
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No Handrail—All Welded (set-up)

1	12	12	26x18	14	A1N2*
2	20	20	28x24	25	A2N2*
3	30	30	28x29	26	A3N2

With Handrail—All Welded (set-up)

2	20	50	29x22	27	A2R2
3	30	60	31x28	31	A3R2
4	40	70	31x34	37	A4R2
5	50	80	32x42	42	A5R2
6	60	90	34x48	51	A6R2
7	70	100	34x55	56	A7R2

*Ships UPS (KD) boxed with no extra packaging charges.



60° STANDARD ANGLE

60° SAF-T LADDER

COTTERMAN SAF-T LADDERS 60° STANDARD ANGLE LADDER

MODEL P6R3

Step Width 18"

No.	Platform Height (in.)	Overall Height (in.)	Base WxL (in.)	Wgt. (lbs.)	G-Strut Cat. No.	G-Perf Cat. No.
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No Handrail—All Welded (set-up) 4 - 2" Retractable Spring Casters

1	12	12	18x18	20	S1N1*	P1N1*
2	20	20	20x24	28	S2N1*	P2N1*
3	30	30	20x31	36	S3N1	P3N1
4	40	40	23x36	50	S4N1	P4N1

With Handrail—All Welded (set-up) 4 - 2" Retractable Spring Casters

2	20	50	20x24	36	S2R1**	P2R1**
3	30	60	20x31	44	S3R1	P3R1
4	40	70	20x36	60	S4R1	P4R1
5	50	80	20x43	76	S5R1	P5R1

With Handrail—Knocked Down (KD) - SAF-T Lock System 4 - 4" Casters

6	60	90	28x50	102	S6R1†	P6R1†
7	70	100	28x50	114	S7R1†	P7R1†
8	80	110	—	—	—	—
9	90	120	—	—	—	—
10	100	130	—	—	—	—
11	110	140	—	—	—	—
12	120	150	—	—	—	—
13	130	172	—	—	—	—
14	140	182	—	—	—	—
15	150	192	—	—	—	—
16	160	205	—	—	—	—

Step Width 26"

No.	Platform Height (in.)	Overall Height (in.)	Base WxL (in.)	Wgt. (lbs.)	G-Strut Cat. No.	G-Perf Cat. No.
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No Handrail—All Welded (set-up) 4 - 2" Retractable Spring Casters

1	12	12	26x18	24	S1N2*	P1N2*
2	20	20	28x24	32	S2N2*	P2N2*
3	30	30	28x31	40	S3N2	P3N2
4	40	40	30x36	64	S4N2	P4N2

With Handrail—All Welded (set-up) 4 - 2" Retractable Spring Casters

2	20	50	28x24	40	S2R2**	P2R2**
3	30	60	28x31	48	S3R2	P3R3
4	40	70	30x36	68	S4R2	P4R2
5	50	80	30x43	82	S5R2	P5R2

With Handrail—Knocked Down (KD) - SAF-T Lock System 4 - 4" Casters

6	60	90	32x50	112	S6R2	P6R2
7	70	100	32x57	126	S7R2	P7R2
8	80	110	32x62	184	S8R2	P8R2
9	90	120	32x68	200	S9R2	P9R2
10	100	130	32x78	216	S10R2	P10R2
11	110	140	32x81	232	S11R2	P11R2
12	120	150	32x88	250	S12R2	P12R2
13	130	172	40x96	266	S13R2	P13R2
14	140	182	40x103	285	S14R2	P14R2
15	150	192	40x109	296	S15R2	P15R2
16	160	205	40x116	315	S16R2	P16R2



ALFA LAVAL TRI-CLOVER PUMPS

As a key component to any liquid process system, Alfa Laval/Tri-Clover Pumps offer performance and economy for most any application. Stuart W. Johnson & Co., Inc. has made it our priority to provide pumps to processors when needed. We stock as many as 20 centrifugal and positive displacement pumps at all times in Lake Geneva, WI for your convenience. Call us with your application.

PUMP SIZING

In order to correctly size any type of pump, some essential information is required as follows:

Product/Fluid Data

- Fluid to be pumped
- Viscosity
- SG/Density
- Pumping temperature
- Vapor pressure
- Solids content (max. size and concentration)
- Fluid behavior (i.e. Newtonian or Pseudoplastic, etc.)
- Is product hazardous or toxic?
- Does fluid crystallize in contact with atmosphere?
- Is CIP required?

Performance Data

- Capacity (Flow rate)
- Discharge head/pressure
- Suction condition (flooded or suction lift)

Site Services Data

- Power source
(electric, air, or hydraulic)
If electric - motor enclosure and electrical supply
- Seal flushing fluid

In an ideal situation, all the above criteria should be known before sizing a pump—however, in many instances not all of this information is known and made available. In such cases, to complete the sizing process, some assumptions may need to be made based upon application knowledge, experience, etc. These should be subsequently confirmed, as they could be critical to satisfactory installation and operation.

CALL OUR SALES ENGINEERS FOR YOUR PUMP SIZING NEEDS

PUMP SELECTION

As demands on processes increase, major factors evolve such as the quality of products and process profitability. In view of this, the correct selection of a pump is of great importance.

The pump must be able to carry out various duties under differing conditions.

Some of these are as follows:

- Transfer various types of fluids/products
- Gentle treatment of the fluids/products
- Overcome different losses and pressure drops in the system
- Provide hygienic, economical and long lasting operation
- Ensure easy and safe installation, operation and maintenance

Some pump problems can be:

- The correct type of pump for the right application
- The correct design of pump
- The correct selection of pump with regard to inlet and outlet conditions, product data, operating conditions, etc.
- Correct selection of shaft seals
- Correct selection of drive units

CENTRIFUGAL PUMPS

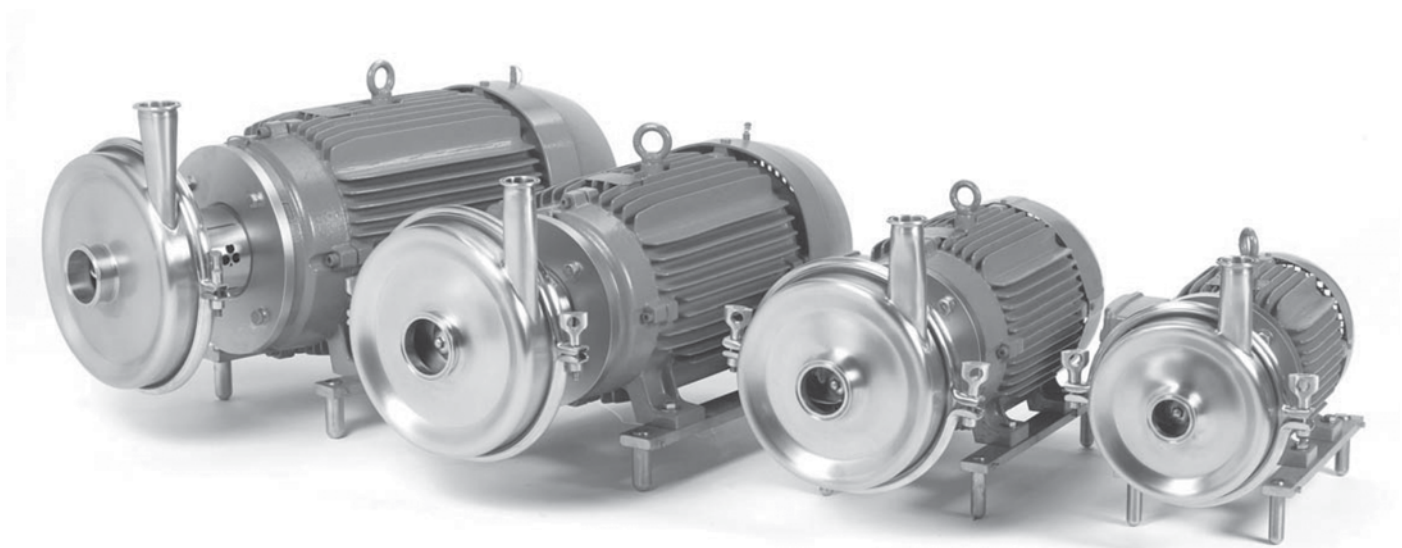
The Alfa Laval/Tri-Clover range of Centrifugal Pumps has been designed especially for use in the food, dairy, beverage, pharmaceutical and light chemical industries. Centrifugal pumps including multi-stage designs and those for high inlet pressure, can handle most low viscosity applications. Centrifugal pumps can provide the most cost effective solution.

ATTRIBUTES INCLUDE:

- High efficiency
- Low power consumption
- Low noise level
- Low NPSH requirement
- Easy maintenance

MODEL OPTIONS

- 'C' Series
- 'SP' Series
- Solid 'C' Series
- LKH Series
- MR Liquid Ring
- Tri-Blender

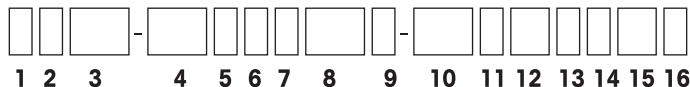


SOLID 'C' SERIES

Features:

- Combines low price and high efficiency in a new pump from Alfa Laval
- 4 sizes encompass whole range of fluid flow Flow rate to 400 gpm
- Pressure to 180' total discharge head
- Seals interchange with LKH pumps
- Seals available in single mechanical and double mechanical style
- All stainless steel adapter for rust resistance at no extra cost

SOLID C CENTRIFUGAL PUMP DESCRIPTION CODE



1. Model Size

- | | |
|--------------|--------------|
| 1 - SolidC 1 | 3 - SolidC 3 |
| 2 - SolidC 2 | 4 - SolidC 4 |

2. Connection Type

M - Tri-Clamp

3. Impeller Diameter (mm)*

090 - 3.54"	140 - 5.51"	190 - 7.48"	240 - 9.44"
100 - 3.94"	150 - 5.91"	200 - 7.87"	250 - 9.84"
110 - 4.33"	160 - 6.30"	210 - 8.27"	
120 - 4.72"	170 - 6.69"	220 - 8.66"	
130 - 5.12"	180 - 7.09"	230 - 9.06"	

* Refer to pump curves for available impeller sizes by model.
Contact Stuart W. Johnson & Co., Inc. if other options are required.

4. Seal Type

SSS - Single Shaft Seal (standard) FSS - Flushed Shaft Seal

5. Seal Type

2 - Carbon vs. SC (standard) 4 - SC vs. SC

6. Elastomer

E - EPDM (standard) U - Buna/Nitrile
Y - Fluoroelastomer (Viton, FPM, SFY)

7. Leg Type

S - SS Legs M - Mild Steel Legs
N - No Legs

8. Motor Kit

14T - 1 - 2 HP (140TC)	25T - 15 - 20 HP (250TC)
18T - 3 - 5 HP (180TC)	28T - 25 - 30 HP (280TC)
21T - 7 1/2 - 10 HP (210TC)	

9. Pump Options

0 - No Options

10. Motor HP

P50 - 1/2 HP	003 - 3 HP	015 - 15 HP
P75 - 3/4 HP	005 - 5 HP	020 - 20 HP
001 - 1 HP	7P5 - 7 1/2 HP	025 - 25 HP
002 - 2 HP	010 10 HP	030 - 30 HP

11. Motor Phase/Hz/Voltage

A - 3/60-208/230/460 (standard)	J - 3/50-190-190/380
B - 3/60-230/460	K - 3/50-208/416
C - 3/60-575	L - 3/50-220/380
D - 3/60-200	M - 3/50-200/400
E - 3/60-380	N - 3/50-200/440
F - 3/60-460	R - 1/60-115/230
Q - 1/60-230	

12. Motor Speed

18 - 1800/60Hz 36 - 3600/60Hz

13. Manufacturer

W - Weg	S - Sterling
R - Reliance	G - Gator (All Stainless)
X - Not Specified	

14. Enclosure

W - Washdown T - TEFC only

15. Body Efficiency

FF - Finned/EPACT

16. Motor Options

0 - No Options

SOLID 'C' COMPONENTS

Key #	Qty.	Description
1	1	Motor
7	1	Shaft
10	1	Drive ring
16	1	Adapter
17	4	Screw for motorflange
18	4	Nut for motorflange
19	4	Washer for motorflange
20	4	Nut for backplate
21	4	Washer for backplate
22	2	Safety guard
25	1	Backplate
26	1	O-ring for casing
29	1	Pump casing
36	1	Impeller screw
37	1	Impeller
38	1	O-ring for impeller screw
55	1	Clamp upper
60	1	Compression ring
61	4	Screw for compression ring
64	1	Motor flange
65	4	Screw for adapter
66	4	Spring washer for adapter

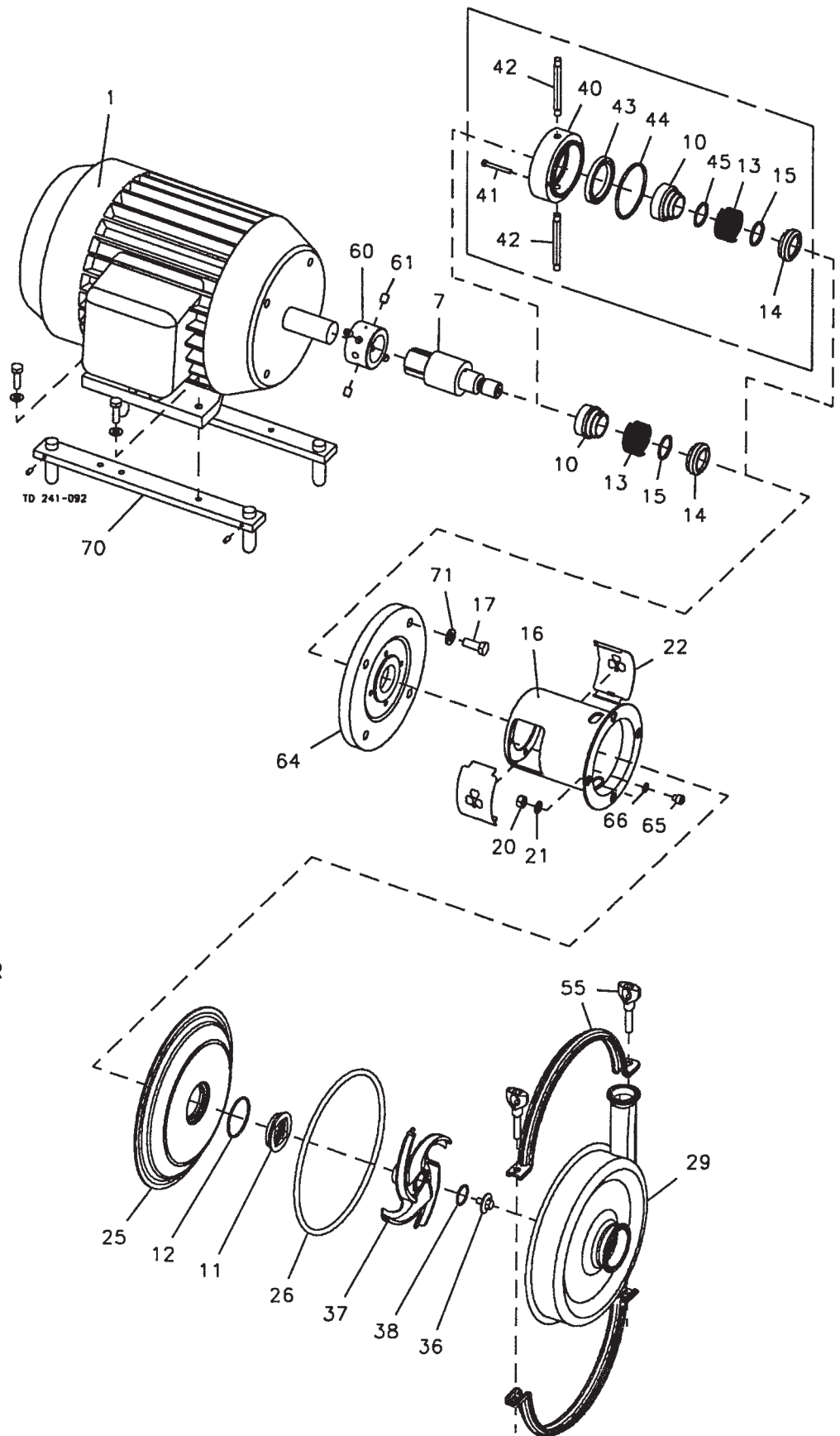
□ Single shaft seal

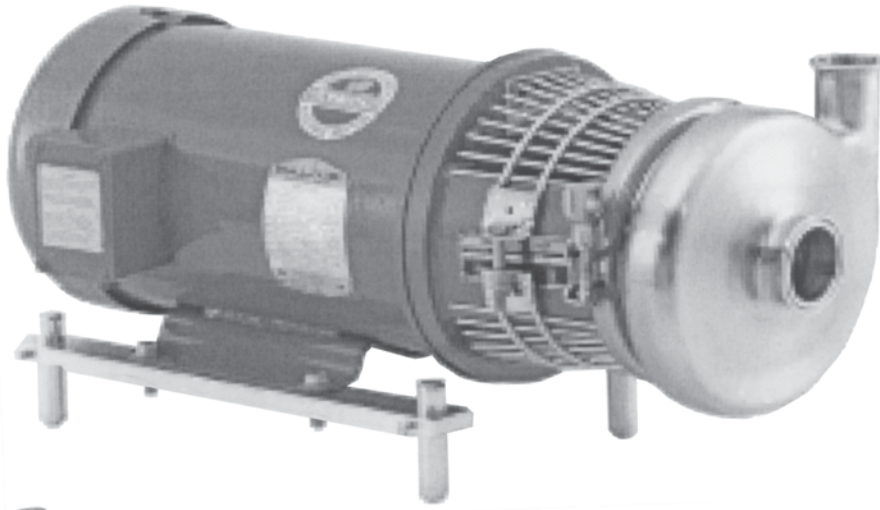
11	1	Stationary seal ring, SIC
12	1	O-ring, EPDM
13	1	Spring
14	1	Rotating seal ring, Carbon
15	1	O-ring, EPDM

○ Flushed shaft seal

11	1	Stationary seal ring, SIC
12	1	O-ring, EPDM
13	1	Spring
14	1	Rotating seal ring, Carbon
15	1	O-ring, EPDM
44	1	O-ring for seal housing EPDM
45	1	O-ring for drive ring
43	1	Lip seal

**WHEN ORDERING PARTS, SPECIFY
MODEL NUMBER AND SERIAL NUMBER
TO MATCH KEY NUMBER TO
COMPONENT NUMBER.
CALL YOUR INSIDE SALES
REPRESENTATIVE FOR GUIDANCE.**





'C' SERIES CENTRIFUGAL PUMPS

Features:

- Full cleanability and corrosion resistance
- Easy, no tool maintenance and simple tolerance adjustment
- Lowest priced, most popular pump in food, beverage, and dairy processing industries

C SERIES CENTRIFUGAL PUMP DESCRIPTION CODE

C **L**

1 2 3 4 5 6 7 8 9 10 11

1. Model Number

114	216	218
328	4410	

2. Connection Type

M - Tri-Clamp (standard)	T - Thd Bevel Seat
F - Flanged (industrial only)	S - NPT (industrial only)

3. Seal Type

D - External Balanced (standard)
DG - Clamped In Seat and External Balanced
E - Water Cooled Balanced Double
F - External Balanced with Water Cascading

4. Motor Kit

Motor Kits are determined by pump model and motor frame size.

Sanitary

adapter, shaft, hardware,
less leg bracket kit

56T - 1/2 - 2 HP (56C)
14T - 1 - 2 HP (140TC)
18T - 3 - 5 HP (180TC)
21T - 7 1/2 - 10 HP (210TC)
25T - 15 - 20 HP (250TC)
28T - 25 - 30 HP (280TC)
32T - 40 - 50 HP (320 TC)
36T - 60 - 75 HP (360TC)

Industrial

adapter, shaft, hardware,
less leg bracket kit

56TT - 1/2 - 2 HP (56C)
14TT - 1 - 2 HP (140TC)
18TT - 3 - 5 HP (180TC)
21TT - 7 1/2 - 10 HP (210TC)
25TT - 15 - 20 HP (250TC)
28TT - 25 - 30 HP (280TC)
32TT - 40 - 50 HP (320 TC)

5. Leg Bracket Motor Kit

Leave blank if not required

6. Port Size*

10 - 1 1/2" x 1 1/2"	50 - 3" x 2"
20 - 2" x 1 1/2"	60 - 4" x 2"
30 - 2 1/2" x 1 1/2"	70 - 4" x 4"
40 - 3 1/2" x 1 1/2"	80 - 6" x 4"

7. Casing Types***

ND - No Drain (standard)

8. Seal Face Materials***

01 - Carbon VS, ST, STL (standard on "D" seal types)
02 - Carbon VS, SC
04 - SC VS, SC

9. Elastomer

E - EPDM (standard)	U - Buna/Nitrile
Y - Fluoroelastomer (Viton, FPM, SFY)	

10. Impeller Diameter (mm)**

090 - 3.54"	140 - 5.51"	190 - 7.48"	240 - 9.44"
100 - 3.94"	150 - 5.91"	200 - 7.87"	250 - 9.84"
110 - 4.33"	160 - 6.30"	210 - 8.27"	
120 - 4.72"	170 - 6.69"	220 - 8.66"	
130 - 5.12"	180 - 7.09"	230 - 9.06"	

11. Finishes

SP - 32Ra ID and OD (standard)

* Refer to tables for port sizes available per model type.

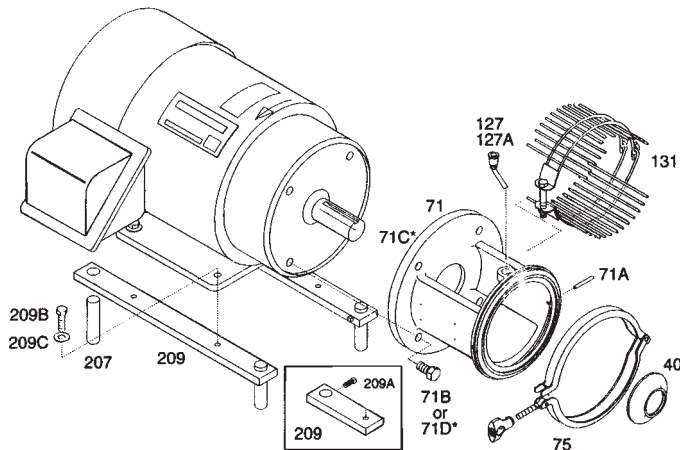
** Refer to pump curves for available impeller sizes by model.

*** Other options available upon request.

'C' SERIES - COMPONENT KEY NUMBERS

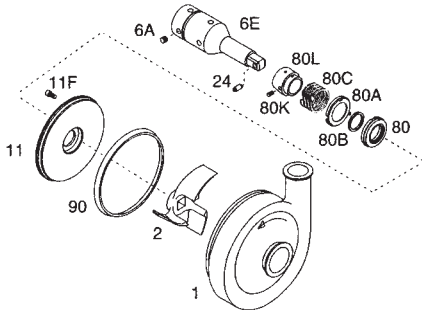
FOR ALL C SERIES PUMPS

Note: Depending on type of frame, some older models C114 and 216 with type E seals require a special adapter #71C, and longer mounting screws, #71D.



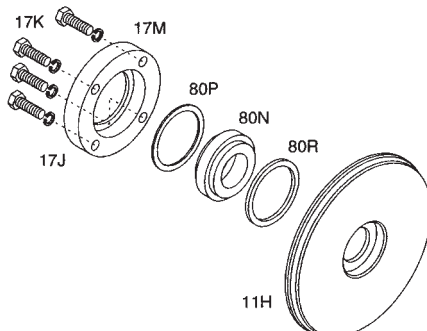
FLOATING RETAINER WITH TYPE D OR F EXTERNAL BALANCED SEALS

Type D - External Balanced Seal — Well-suited for multipurpose use, this seal is designed to give long service life. Seal consists of a single mechanical seal, carbon rotary vs. stainless steel backplate. Typical applications include: dairy products, beverages and water-like products, etc. Also applicable for CIP cleaning solutions and detergents.

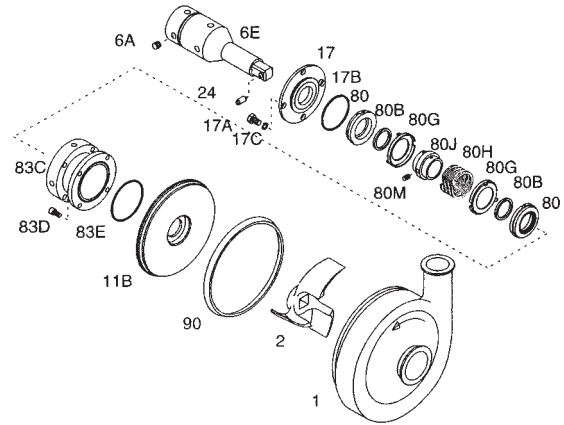


ADDITIONAL TYPE "DG" CLAMPED-IN SEAL SEAT COMPONENTS

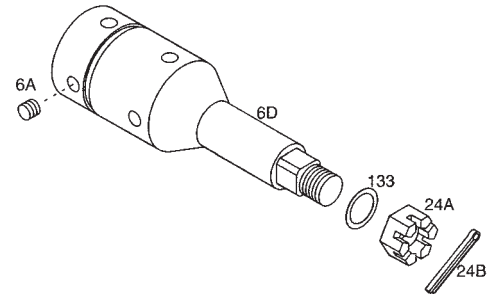
(For use with type D seal) Type DG - Clamped-In Seal/Seat — This long lasting seal assembly utilizes standard Type D rotating seal components, plus choice of silicon carbide, tungsten carbide or ceramic stationary clamped in seal seat. Designed for longer seal life in applications like pure water or other applications with abrasive or non-lubricating products. The stationary seat is reversible, for quick change-over if one side is damaged.



FLOATING RETAINER WITH TYPE E WATER COOLED BALANCED DOUBLE SEAL



THREADED SHAFT AND CASTELLATED NUT RETAINER SYSTEM for Use with Type D, F or E Seals



FOR COMPONENT PART NUMBERS, SEE PAGES 22 & 23.

C SERIES SEAL KITS

Kit Number 1 Service Kit

Includes 1 Casing Gasket #90, 1 Seal Carbon #80, 1 Seal O-Ring #80B, and 1 Impeller Pin #24

Kit Number 2 Multi-Pump Kit

Includes 3 Casing Gaskets #90, 3 Seal Carbons #80, 3 Seal O-Rings #80B

Kit Number 3 Seal Kit

Includes 1 Casing Gasket #90, 1 Seal Carbon #80, 1 Seal O-Ring #80B, and 1 Spring #80C, and 1 Cup #80A

Pump Size	Prod. No. Kit 1	Prod. No. Kit 2	Prod. No. Kit 3
114	C114-1-Elastomer	C114-2-Elastomer	C114-3-Elastomer
216	C216-1-Elastomer	C216-2-Elastomer	C216-3-Elastomer
218/328	C218/328-1-Elastomer	C218/328-2-Elastomer	C218/328-3-Elastomer
4410	C4410-1-Elastomer	C4410-2-Elastomer	C4410-3-Elastomer

Elastomers designated by U (Buna), E (EPDM), and SFY (Steam Resistant Fluoroelastomer)

**WE REPAIR PUMPS.
CONTACT STUART W. JOHNSON
FOR A QUOTE.**

MACHINERY AND EQUIPMENT

'C' SERIES - COMPONENT KEY NUMBERS

'C' SERIES COMPONENT LIST - FIXED

Key No.	Description	C114 Part No.	C216 Part No.	C218 Part No.	C328 Part No.	C4410 Part No.
1	Casing Tri Clamp	S114M 01C 316L	S216M 01C 316L	S218M 01D 316L	S328M 01C 316L	S4410M 01A 316L
1	Casing Bev Seat	S114T 01C 316L	S216T 01C 316L	S218T 01D 316L	S328T 01C 316	S4410T 01A 316
1	Casing NPT	S114S 01C 316L	S216S 01C 316L	S218S 01D 316L	S328 01C 316	SP4410S 01A 316
1	Casing Tri Clamp Glass Bead	S114M1 01C 316L	S216M1 01C 316	S218M1 01D 316	S328M1 01C 316	SP4410M1 01A 316
1	Casing Bev. Seat Glass Bead	S113T1 01C 316L	S216T1 01C 316	S218T1 01D 316	S328T1 01C 316	SP4410T1 01A 316
1	Casing FLG Glass Bead	S114F 01D 316L	S216F 01D 316L	S218F 01E 316L	S328 01D 316L	S4410F 01B 316
2	Impeller	S114 02C 316L	S216 02C 316L	S218 02C 316L	S328 02C 316	SP5410 02A 316
11	Back Plate	114D 11 316	216D 11 316	328D 11 316	328D 11 316	4410D 11 316
11B	Back Plate E Bal.	114E 11B 316	216E 11B 316	328E 11B 316	328E 11B 316	4410E 11 316
11F	Back Plate Pin	216D 11 1 S	216D 11 1 S	216D 11 1 S	216D 11 1 S	SC1108D M
11H	Back Plate DG Seal	SP114G 11316L	SP216G 11 316L	SP328G 11 316	SP328G 11 316	4410G 11 316
17	Follower	114E 17A 316	216E 17A 316	328E 17 316	328E 17 316	4410E 17 316
17A	Machine Screw	SC1106E SS	SC1308H SS	SC1308H SS	SC1308H SS	SC1308H SS
17B	O Ring	17 106 U25	17 275 U	17 274 U	17 274 U	17 108 U 25
17C	Lockwasher E Seal	LWA1100 SS	LWA 1300 SS	LWA 1300 SS	LWA 1300 SS	LWA 1300SS
17J	Gland Ring DG Seal	SP114G 17 316L	SP216G 17 316L	SP328G 17 316L	SP328G 17 316L	4410G 17 316L
17K	Bolt/Screw DG Seat	SC1110H SS	SC1310H SS	SC1311H SS	SC1311H SS	SC1311H SS
17M	Lockwasher DG Seal	LWA 1100 SS	LWA 1300 SS	LWA 1300 SS	LWA 1300 SS	LWA 1300SS
24	Impeller Retainer	114D 24B 316L	216D 24B 316L	328D 24B 316L	328D 24B 316L	328D 24C U 316L
24A	Castellated Imp.	SP114F 24 316	SP216F 24 316L	SP328F 24 316	SP328F 24 316	SP328F 24 316
24B	Cotter Pin	16 113 1/8X1 316	16 113 1/8X1/2 316	16 113 1/8X2 316	16 113 1/8X2 316	16 113 1/8X2 316
71A	Adapter Pin	216D 71A 1 S	216D 71A 1 S	216D 71A 1 S	216D 71A 1 S	SP5410 11A 1 S
75	Clamp Assembly	S114 75AR S	S216 75AR S	S328 75AR S	S328 75AR S	SP4410 75D S
75J	Eye Bolt	S114 75A 04 S	S114 75A 04 S	S114 75A 04 S	S114 75A 04 S	SC1542H SS
75K	Wing Nut	13MHHS 1-1/2 03 S	13MHHS 1-1/2 03S	13MHHS 1-1/2 03	13MHHS 1-1/2 03 S	13MV6 06AM
80	Carbon Seal	114E 801A	216E 80 1A	328E 80 1A	328E 80 1 A	4410E 80 1
80A	Cup	114D 80 3P	216D 80 3P	328D 80 3 P	328D 80 3P	4410D 80 3
80B	O Ring Seal	60C 3 34 A U	01 1165 19U	S328 802 U	S328 80 2 U	1715 U
80C	Spring	114D 80 4	216D 80 4	328D 80 4	328D 80 4	4410D 80 4
80G	Cup E Balanced	114E 80 3P	216E 80 3P	328E 80 3 P	328E 80 3P	4410E 80 3
80H	Spring E Balanced	114E 80 4A	216E 80 4 A	328E 80 4 A	328E 80 4A	4410E 80 4
80J	Drive Collar E Balanced	114E 23 316L	216E 23 316L	328E 23 316	328E23 316L	4410E 23 316
80K	Set Screw E Balanced	SC903A SS	SC 1103A SS	SC1103A SS	SC1103 A SS	SC1103A SS
80L	Drive Collar	SP114D 23P 316L	SP216D 23P S	SP328D 23P S	SP328D 23P S	4EHD 143 23P S
80M	Set Screw	SC905A SS	SC1105A SS	SC1105 A SS	SC1105A SS	SC1105A SS
80N	Type DG Seal Seat TC	SP114G 80 1 1 TC	SP216G 80 1 1 TC	SP328G 80 1 1 TC	SP328G 80 1 1 TC	4410G 80 1 1 TC
	Type DG Seal Seat Ceramic	SP114G 80 1 1 CER	SP216G 80 1 1 CER	SP328G 80 1 1 CER	SP328G 80 1 1 CER	4410G 80 1 1 CER
	Type DG Seal Seat SC	SP114G 80 1 1 SC	SP216G 80 1 1 SP	SP328G 80 1 1 SC	SP328G 80 1 1 SC	4410G 80 1 1 SC
80P	Gasket Outboard PTFE	SP114G 80 1 2 G	SP216G 80 1 2 G	SP328G 80 1 2 G	SP328G 80 1 2 G	4410G 80 1 2 G
80R	Gasket Inboard PTFE	SP114G 80 1 2A G	SP216G 80 1 2A G	SP328G 80 1 2 A G	SP328G 8 1 2A G	4410G 80 1 2 A G
83C	Stuffing Box	114E 83C 316	216E 83B 316	328E 83B 316	328E 83B 316	4410E 83 316
83D	Machine Screw	SC904E SS	SC1106E SS	SC1308 E SS	SC1308E SS	SC1308E SS
83E	O Ring	17 275 U	17 122 U	17 153 U	17153 U	17 153U
90	Casing Gasket	S114 90AU	S216 90A U	S328 90 A U	S328 90 A U	SP541090A U
127	Water Cascade Assembly	114D 127 01	216D 127 01	328D 127 01	328D 127 01	328D 127 01
127A	Lock Nut	114D127 02	114D 127 02	114D 127 02	114D 127 02	114D 127 02
133	Washer Shim	SP114 133 .005	SP216 133 .005	SP328 133 316	SP328 133 .005	SP328 133 316
133	Washer Shim	SP114 133 .010	SP216 133 .010	SP328 133 .005	SP328 133 .010	SP328 133 .010

MACHINERY AND EQUIPMENT

'C' SERIES - COMPONENT KEY NUMBERS

'C' SERIES - MODEL C114 COMPONENT LIST - VARIABLE BY MOTOR FRAME SIZE

Key No.	Description	56C NEMA Frames Part No.	180TC NEMA Frames Part No.	140TC NEMA Frames Part No.
6A	Set Screw (shaft)	SC1305A-SS	SC1303A-SS	SC1303A-SS
6D	Shaft-Threaded	C114E56T-06-316L	C114E18T-06-316L	C114E14T-06-316L
6E	Shaft-Standard	C114E56T-06-316L	C114E-18T-06-316L	C114E14T-06-316L
40	Deflector	US114D66-40-U	114D18T-40	US114D66-40-U
71	Adapter	114E56T-71C-C	114E-18T-71C-C	114E56T-71C-C
71B	Adapter Mounting Screw	SC1512H-SS	SC1710H-SS	SC1510H-SS
131	Seal Guard Assembly	C114-56T-131A-S	C114-18T-131A-S	C114-56T-131A-S
207	Adjustable Leg	114D-207-CS	114D-207-SC	114D-207-CS
209	Adjustable Leg Bracket	114D56T-209A-CS	114D184T-209A-CS	114D145T-209-CS
209A	Set Screw (Square Head)	SC1106C4-SS	SC1107C4-SS	SC1106C4-SS
209B	Bracket Mounting Screw	SC1307H-SS	SC1510H-SS	SC1307H-SS
209C	Washer	WA1300-SS	WA1500-SS	WA1300-SS

'C' SERIES - MODEL C216 COMPONENT LIST - VARIABLE BY MOTOR FRAME SIZE

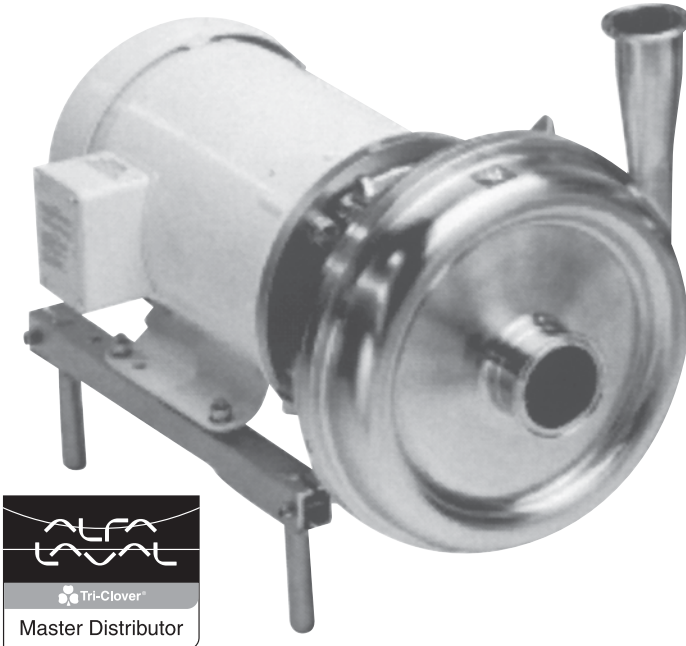
Key No.	Description	56C NEMA Frames Part No.	180TC NEMA Frames Part No.	210TC NEMA Frames Part No.	250TC NEMA Frames Part No.	140 TC NEMA Frames Part No.
6A	Set Screw (shaft)	SC1505A-SS	SC1303A-SS	SC1504A-SS	SC1504A-SS	SC1504A-SS
6D	Shaft-Threaded	216E56T-06A-316L	216E18T-06A-316L	C216E21T-06-316L	C216E25T-06-316L	216E-14T-06A-316L
6E	Shaft-Standard	CS216E56T-06-316L	CS216E-18T-06-316L	C216E21T-06-316L	C216E25T-06-316L	CS216E14T-06-316L
40	Deflector	216D21-40	216D21-40	216D21T-40-U	328D28-40	216D21-40
71	Adapter	216D56T-71D-C	216D18T-71D-C	216E21T-71D-C	216E25T-71D-C	216D56T-71D-C
71B	Adapter Mounting Screw	SC1510H-S	SC1710H-SS	SC1710H-SS	SC1710H-S	SC1510H-S
131	Seal Guard Assembly	C216-56T-131-S	C216-18T-131-S	C216-21T-131B-S	C216-21T-131B-S	C216-56T-131-S
207	Adjustable Leg	114D-207-CS	114D-207-CS	114D-207-CS	216D-207-CS	114D-207-CS
209	Adjustable Leg Bracket	114D56T-209A-CS	114D184T-209A-CS	216D215T-209A-CS	216D256T-209A-CS	114D145T-209-CS
209A	Set Screw (Square Head)	SC1106C4-SS	SC1107C4-SS	SC1107C4-SS	SC1107C4-SS	SC1106C4-SS
209B	Bracket Mounting Screw	SC1307H-SS	SC1512H-SS	SC1512H-SS	SC1714H-SS	SC1307H-SS
209C	Washer	WA1300-SS	WA1500-SS	WA1500-SS	WA1500-SS	WA1300-SS

MODEL C218 AND C328

Key No.	Description	180TC NEMA Frames Part No.	210TC NEMA Frames Part No.	250TC NEMA Frames Part No.	280TC NEMA Frames Part No.	140TC NEMA Frames Part No.	320TC NEMA Frames Part No.
6A	Set Screw (shaft)	SC1506A-SS	SC1506A-SS	SC1506A-SS	SC1506A-SS	SC1506A-SS	SC1506A-SS
6D	Shaft-Threaded	328E18T-06A-316L	328E21T-06A-316L	328E25T-06A-316L	C328E28T-06-316L	328E-14T-06A-316L	C328E32T-06-316
6E	Shaft-Standard	CS328E18T-06-316L	CS328E21T-06-316L	C328E25T-06-316L	C328E28T-06-316L	328E14T-06B-316L	C328E32T-06-316L
40	Deflector	328D18-40-U	328D28-40-U	328D28-40-U	328D28T-40-U	328D18-40-U	328D32T-40-U
71	Adapter	328D18T-71C-C	328D21T-71C-C	328D25T-71C-C	328D28T-71C-C	328D14T-71C-C	328E32T-71B-C
71B	Adapter Mounting Screw	SC1710H-SS	SC1710H-SS	SC1710H-SS	SC1710H-SS	SC1510H-S	SC1940H-SS
131	Seal Guard Assembly	C328-18T-131-S	C328-21T-131-S	C328-25T-131-S	C328-28T-131-S	C328-14T-131-S	C328-28T-131-S
207	Adjustable Leg	114D-207-CS	114D-207-CS	216D-207-CS	216D-207-CS	114D-207-CS	--
209	Adjustable Leg Bracket	114D184T-209A-CS	216D215T-209A-CS	216D256T-209A-CS	216D286T-209A-CS	114D145T-209-CS	--
209A	Set Screw (Square Head)	SC1107C4-SS	SC1107C4-SS	SC1107C4-SS	SC1107C4-SS	SC1107C4-SS	SC1107C4-SS
209B	Bracket Mounting Screw	SC1512H-SS	SC1512H-SS	SC1714H-SS	SC1714H-SS	SC1307H-SS	--
209C	Washer	WA1500-SS	WA1500-SS	WA1700-SS	WA1500-SS	WA1300-SS	--

MODEL C4410

Key No.	Description	210TC NEMA Frames Part No.	250TC NEMA Frames Part No.	280TC NEMA Frames Part No.	320TC NEMA Frames Part No.	360TC NEMA Frames Part No.
66A	Set Screw (shaft)	SC1507A2-SS	SC1507A2-SS	SC1507A2-SS	SC1507A2-SS	SC1507A2-SS
6D	Shaft-Threaded	4410E21T-06A-316L	4410E25T-06A-316L	4410E28T-06A-316L	4410E32T-06A-316L	4410E36T-06A-316L
6E	Shaft-Standard	4410E21T-06A-316L	4410E25T-06A-316L	4410E28T-06A-316L	4410E32T-06A-316L	4410E36T-06A-316L
40	Shaft Seal Seal	4410D28T-40A	4410D28T-40A	4410D28T-40A	4410D36T-40A	4410D36T-40A
71	Adapter	4410D25T-71-C	4410D25T-71-C	4410D28T-71	4410D32T-71	4410D32T-71
71B	Adapter Mounting Screw	SC1712H-S	SC1712H-S	SC1712H-S	SC1914H-SS	SC1914H-SS
131	Seal Guard Assembly	4410D25T-131A-S	4410D25T-131A-S	4410D28T-131A-S	4410D32T-131A-S	4410D32T-131A-S



ALFA LAVAL LKH SERIES

Features:

- Low NPSH Required - much lower than standard centrifugal pumps
- 11 different pumps to tailor your flow and pressure needs
- Flow rate to 1200 gpm
- Pressure to 550' total discharge head
- All pumps except 2 use the identical seal kit to cut down on spare parts inventory

LKH PUMP DESCRIPTION CODE

LKH

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

1. Model No. & Port Size	Model No. Port Size
05 - 2" x 1 1/2"	40 - 3" x 2"
10 - 2 1/2" x 2"	45 - 4" x 3"
15 - 4" x 3"	50 - 4" x 3"
20 - 2 1/2" x 2"	60 - 4" x 4"
25 - 3" x 2"	66 - 6" x 4"
35 - 2 1/2" x 2"	70 - 4" x 3"

2. Connection Type
M - Tri-Clamp (std); F - Flange; T - Bevel Seat; S - NPT; E - SMS

3. Impeller Size (mm)*

4. Seal Type
S - Single Shaft (standard) D - Double Shaft Seal
F - Flushed Shaft Seal

5. Seal Face Materials
O - Carbon vs. SC (Standard) O4 - SC vs. SC

6. Elastomer Material
E - EPDM G - PTFE Encapsulated
Y - Viton T - Kalrez/PTFE
U - Buna X - PI Silicon VI
W - White EPDM V - Class VI EPDM
K - Kalrez S - Silicone

7. Leg Bracket
N - No S - Stainless Steel

8. Motor Frame

56 - 56C	28 - 284TSC/286TSC
14 - 143TC/145TC	32 - 324TSC/326TSC
18 - 182TC/184TC	36 - 364TSC/365TSC
21 - 213TC/215TC	40 - 404TSC/405TSC
25 - 254TC/256TC	

9. Casing Drain

A - No Drain
B - C4H (90° Discharge 1/2" Horiz. Drain)
C - C4V (90° Discharge 1/2" Vert. Drain)
D - K4H (45° Discharge 1/2" Horiz. Drain)
E - K4V (45° Discharge 1/2" Vert. Drain)
F - C6H (90° Discharge 3/4" Horiz. Drain)
G - C6V (90° Discharge 3/4" Vert. Drain)
H - K6H (45° Discharge 3/4" Horiz. Drain)
J - K6V (45° Discharge 3/4" Vert. Drain)
K - A4H (Horiz. Discharge 1/2" Horiz. Drain)
L - A4V (Horiz. Discharge 1/2" Vert. Drain)
M - A6H (Horiz. Discharge 3/4" Horiz. Drain)
N - A6V (Horiz. Discharge 3/4" Vert. Drain)

10. Finish

A - 32Ra Mech; B - 20Ra Mech; C - 15Ra EP; I - 20Ra Mech+EP

11. Passivation

Y - Yes N - No

12. Options

- no options; L - Inducer; M - SS Drive Ring

13. Motor HP

P50 - 1/2 HP	005 - 5 HP	030 - 30 HP
P75 - 3/4 HP	7P5 - 7 1/2 HP	040 - 40 HP
001 - 1 HP	010 - 10 HP	050 - 50 HP
1P5 - 1 1/2 HP	015 - 15 HP	060 - 60 HP
002 - 2 HP	020 - 20 HP	075 - 75 HP
003 - 3 HP	025 - 25 HP	100 - 100 HP

14. Voltage

A - 3/60/208-230/460	F - 3/60/460
B - 3/60/230-460	J - 3/50/190-380
C - 3/60/575	K - 3/50/208-416
D - 3/60/200	L - 3/50/220-440
E - 3/60-380	M - 3/50/200-400

15. RPM

15 - 15	30 - 300
18 - 1800	36 - 3600

16. Motor Type

T - TEFC	W - Washdown	C - Chemical Duty
N - TENV	X - Explosion Proof	S - Stainless Steel - W/D

17. Manufacturer

S - Sterling; R - Reliance; B - Baldor

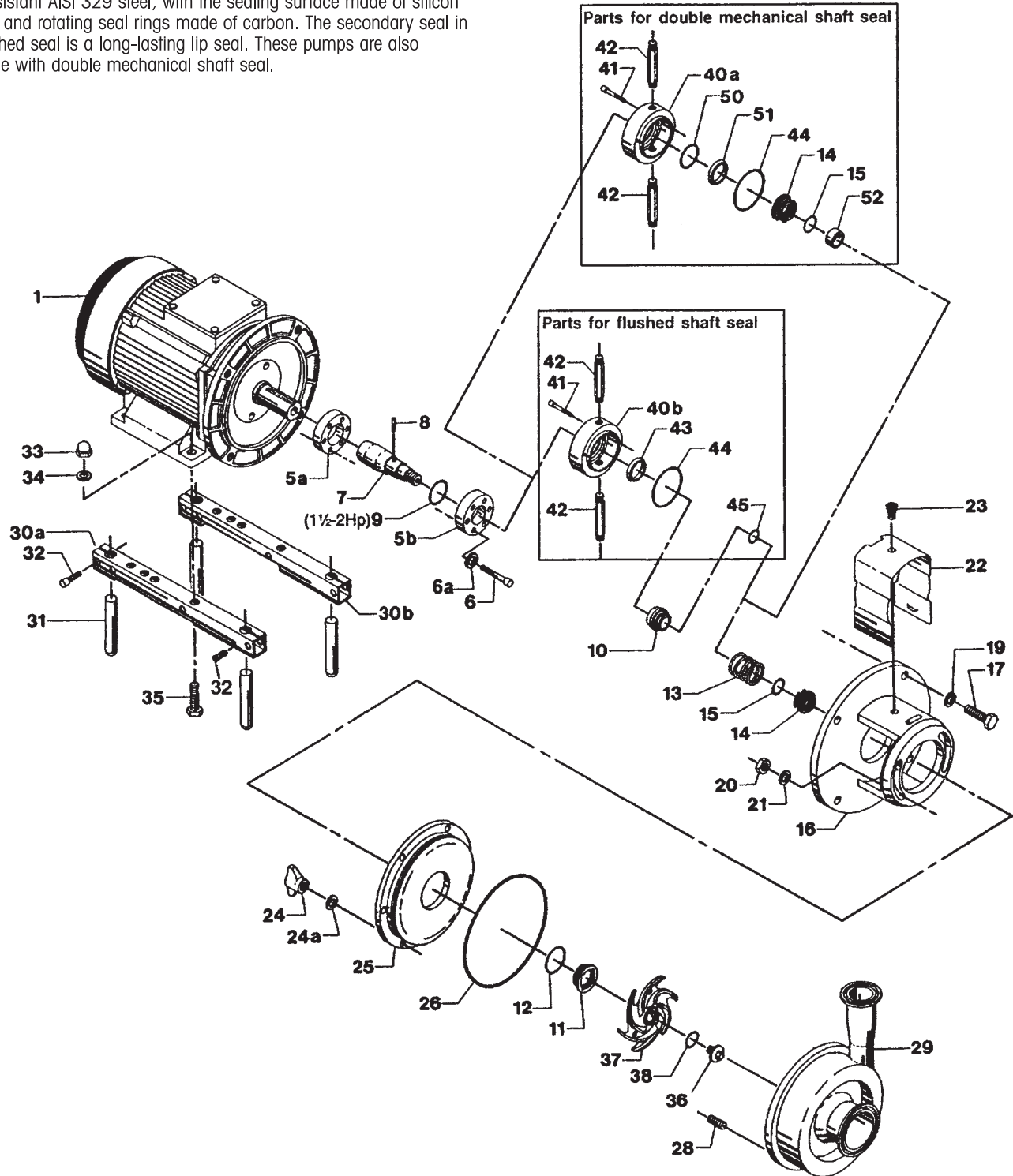
18. Options

A - No Options	D - Thermistats
B - Inverter Duty	E - High Thrust
C - Thermistors	P - Premium Efficient

* Refer to pump curves for available impeller sizes by model.
 **Other options available by request All motors will have locked bearings to limit axial shaft movement to .012" or less.
 The LKH 70 will have special high thrust bearings.

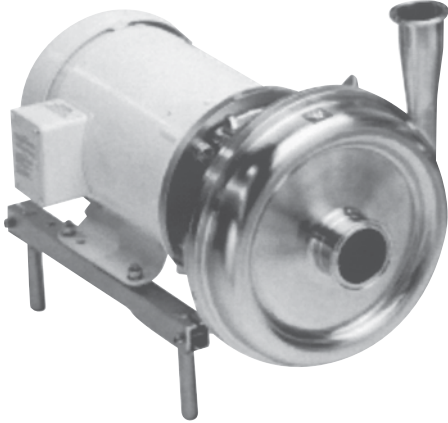
ALFA LAVAL LKH SERIES COMPONENT KEY

Each LKH pump is equipped with an external single seal or a flushed shaft seal. These are both fitted with stationary seal rings made of acid-resistant AISI 329 steel, with the sealing surface made of silicon carbide and rotating seal rings made of carbon. The secondary seal in the flushed seal is a long-lasting lip seal. These pumps are also available with double mechanical shaft seal.

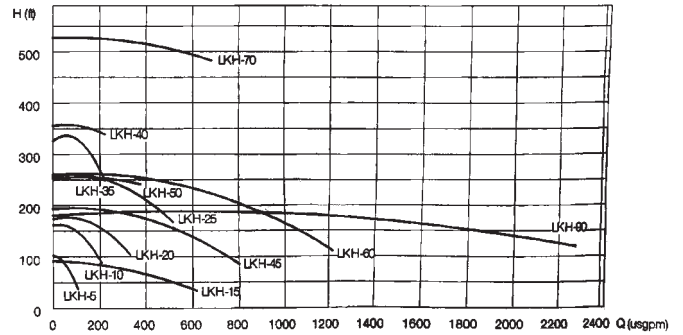


CALL WITH REQUEST FOR PARTS.
USE MODEL AND SERIAL NUMBERS
TO MATCH KEY NUMBERS
WITH COMPONENT NUMBERS.

LKH PUMP SEAL AND SERVICE KITS



Technical Data Volumetric Flow



LKH-05 THROUGH LKH-60

Seal Kit for Single Shaft Seal

C/SC Seal Kit, EPDM	9612-1296-09
C/SC Seal Kit, NBR	9612-1296-10
C/SC Seal Kit, FPM	9612-1296-11
SC/SC Seal Kit, EPDM	9612-1296-05
SC/SC Seal Kit, NBR	9612-1296-06
SC/SC Seal Kit, FPM	9612-1296-07

Seal Kit for Flushed Shaft Seal

C/SC Seal Kit, EPDM	9612-1296-25
C/SC Seal Kit, NBR	9612-1296-26
C/SC Seal Kit, FPM	9612-1296-27
SC/SC Seal Kit, EPDM	9612-1296-29
SC/SC Seal Kit, NBR	9612-1296-30
SC/SC Seal Kit, FPM	9612-1296-31

Seal Kit for Double Mechanical Shaft Seal

C/SC Seal Kit, EPDM	9612-1296-13
C/SC Seal Kit, NBR	9612-1296-14
C/SC Seal Kit, FPM	9612-1296-15
SC/SC Seal Kit, EPDM	9612-1296-17
SC/SC Seal Kit, NBR	9612-1296-18
SC/SC Seal Kit, FPM	9612-1296-19

Service Kit for Single Shaft Seal

C/SIC

SIC/SIC

Service Kit, EPDM	9611-92-2182	9611-92-2598
Service Kit, NBR	9611-92-2183	9611-92-2599
Service Kit, FPM	9611-92-2184	9611-92-2600
Service Kit, PTFE	9611-92-2185	9611-92-2601

Service Kit for Flushed Shaft Seal

C/SIC

SIC/SIC

Service Kit, EPDM	9611-92-2190	9611-92-2606
Service Kit, NBR	9611-92-2191	9611-92-2607
Service Kit, FPM	9611-92-2192	9611-92-2608
Service Kit, PTFE	9611-92-2193	9611-92-2609

Service Kit for

Double Mechanical Shaft Seal

C/SIC

SIC/SIC

Service Kit, EPDM	9611-92-2226	9611-92-2614
Service Kit, NBR	9611-92-2227	9611-92-2615
Service Kit, FPM	9611-92-2228	9611-92-2616
Service Kit, PTFE	9611-92-2229	9611-92-2617

LKH-70 THROUGH LKH-75

Seal Kit for Single Shaft Seal

C/SC Seal Kit, EPDM	9612-5151-01
C/SC Seal Kit, NBR	9612-5151-02
C/SC Seal Kit, FPM	9612-5151-03
SC/SC Seal Kit, EPDM	9612-5151-05
SC/SC Seal Kit, NBR	9612-5151-06
SC/SC Seal Kit, FPM	9612-5151-07

Seal Kit for Flushed Shaft Seal

C/SC Seal Kit, EPDM	9612-5151-09
C/SC Seal Kit, NBR	9612-5151-10
C/SC Seal Kit, FPM	9612-5151-11
SC/SC Seal Kit, EPDM	9612-5151-13
SC/SC Seal Kit, NBR	9612-5151-14
SC/SC Seal Kit, FPM	9612-5151-15

Service Kit for Single Shaft Seal

C/SIC

SIC/SIC

Service Kit, EPDM	9611-92-2238	9611-92-2643
Service Kit, NBR	9611-92-2239	9611-92-2644
Service Kit, FPM	9611-92-2240	9611-92-2645
Service Kit, PTFE	9611-92-2241	9611-92-2646

Service Kit for Flushed Shaft Seal

C/SIC

SIC/SIC

Service Kit, EPDM	9611-92-2242	9611-92-2647
Service Kit, NBR	9611-92-2243	9611-92-2648
Service Kit, FPM	9611-92-2244	9611-92-2649
Service Kit, PTFE	9611-92-2245	9611-92-2650

C = Carbon

SC = Silicon Carbide

EPDM = EPDM Elastomer

NBR = Buna Elastomer

FPM = Viton Elastomer

MR LIQUID RING PUMPS

The MR range of pumps is specifically designed for pumping liquids that contain air or gas. These pumps are most commonly used for CIP return applications in the food, dairy, beverage and pharmaceutical industries.

HOW IT WORKS

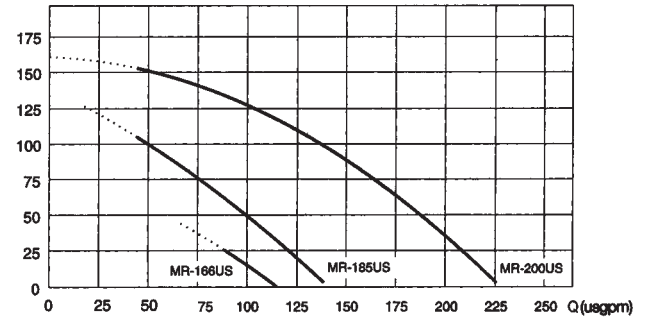
The MR liquid ring pump works on the basis of centrifugal force, as do the Alfa Laval LKH and SolidC pump ranges. However, in the MR design the fluid is not directed into a ring or volute type casing around the periphery. Instead it passes into channels on either side of the impeller, in the front and back plate of the pump.

These side channels increase in volume as the impeller passes the suction port. This creates a vacuum and draws liquid in. This volume is then automatically reduced at the discharge port, creating pressure and forcing liquid out, thus providing the pumping action.

A proportion of the centrifuged liquid is retained around the periphery and re-circulates, forming a "liquid ring" that is used to maintain the prime.

The combination of expansion and contraction of volume, centrifugal force and liquid ring construction increases the permissible gas content in the fluid being pumped. This in turn makes this type of pump particularly suitable for fluids with entrained gases.

H (ft) Volumetric flow MR-166US, -185US, -200US



Shaft Seal Kit (Part# 25-29)

91613-4239-01 EPDM

91613-4239-02 NBR

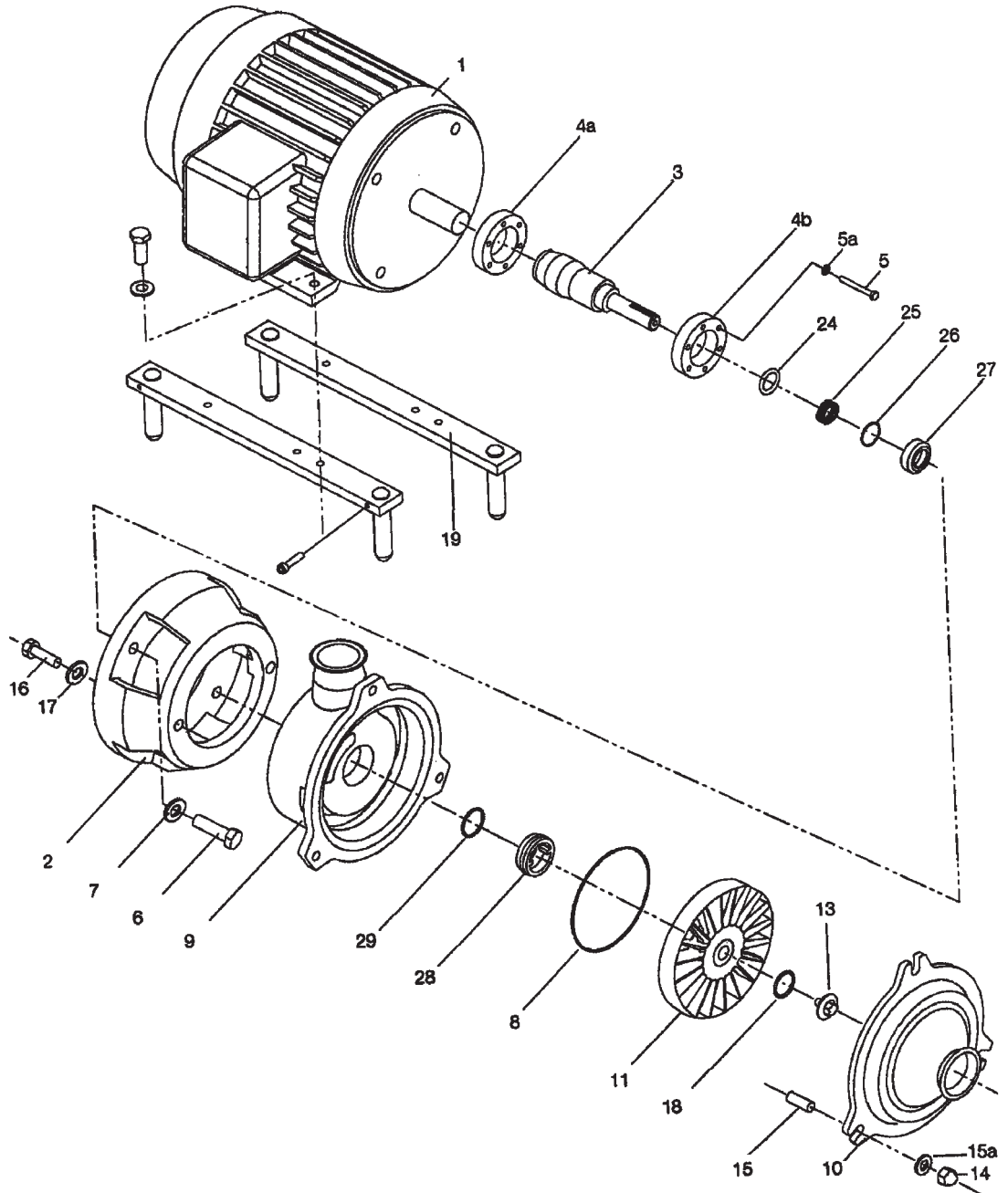
91613-4239-03 VITON

Cover O-Ring (Part #8)

9611-99-4417 EPDM

9611-99-4472 MBR

9611-99-4473 VITON

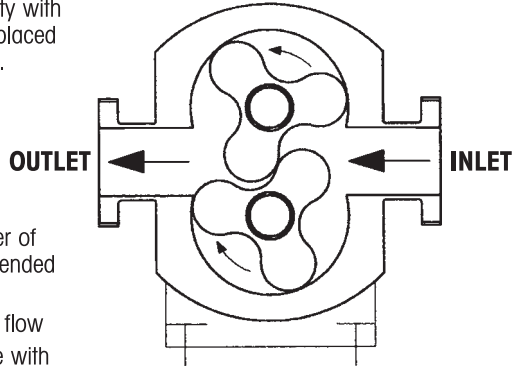


POSITIVE DISPLACEMENT

Principles of Operation

Alfa Laval Tri-Clover ranges of Rotary Lobe pumps are of conventional design operating with no internal contacting parts in the pump head. The rotors are driven by a gear train in the pump gear gearbox providing accurate synchronization or timing of the rotors. The rotors counter rotate within the pump head carrying fluid through the pump, in the cavities formed between the dwell of the rotor and the interior of the rotor case.

In hydraulic terms, the motion of the counter rotating rotors creates a partial vacuum that allows atmospheric pressure or other external pressures to force fluid into the pump chamber. As the rotors rotate an expanding cavity is formed which is filled with fluid. As the rotors separate, each dwell forms a cavity. The meshing of the rotor causes a diminishing cavity with the fluid being displaced into the outlet port.



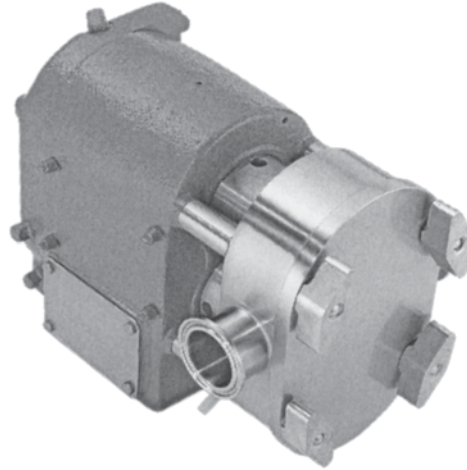
Features

- Gentle transfer of delicate suspended solids
- Bi-directional flow
- Compact size with high performance and low energy input
- Will pump shear sensitive media
- Different pumps for different duties
 - 'PR' Series - simple, popular
 - 'SRU' Series - high efficiency, low cost
 - 'SX' Series - ultra clean capable



"PR" SERIES

- Daily strip down pump for food, dairy applications
- Easy maintenance - replace seals and bearings in minutes. No shimming needed
- Flow rate to 300 gpm
- Pressure to 100 psig
- Single or double mechanical seal options



PR PUMP KITS

Kit Number 1 Service Kit

Includes 1 Casing Cover O-Ring, 2 Shaft O-Rings #80-3, 2 Casing O-Rings #80-4B, 2 Seal Rings #80-2a, and 2 Wear Rings #80-1

*NOTE - 4 Carbon Rings also included for kits with metal rotors only.

Kit Number 3 Shaft Kit

Includes 1 Drive Shaft #12, 1 Driven Shaft #6, 2 Bearing Inboards #16, 2 Bearing Outboards #18, 4** Bearing Seals #47, 2 Bearing Retainer Rings #102, 1 Gear Cover Gasket #73, and 4 Timing Gear Keys #96
 **Pumps 3, 10, and 60 use four #47 Bearing Seals; Pumps 25, 125, and 300 use 2 #47 and 2 #49.

Pump Size	Prod. No. Kit 1	Prod. No Kit 3
PR3	PR3-1-Elastomer	PR3-3-Elastomer
PR10	PR10-1-Elastomer	PR10-3-Elastomer
PR25	PR25-1-Elastomer	PR25-3-Elastomer
PR60/PR125	PR60/PR125-1-Elastomer	PR60/PR125-Elastomer
PR300	PR300-1-Elastomer	PR300-3-Elastomer

Elastomers designated by U (Buna), E (EPDM), and SFY (Steam Resistant Fluoroelastomer)

*Please note seal type: PRE or PRED.

CONTACT

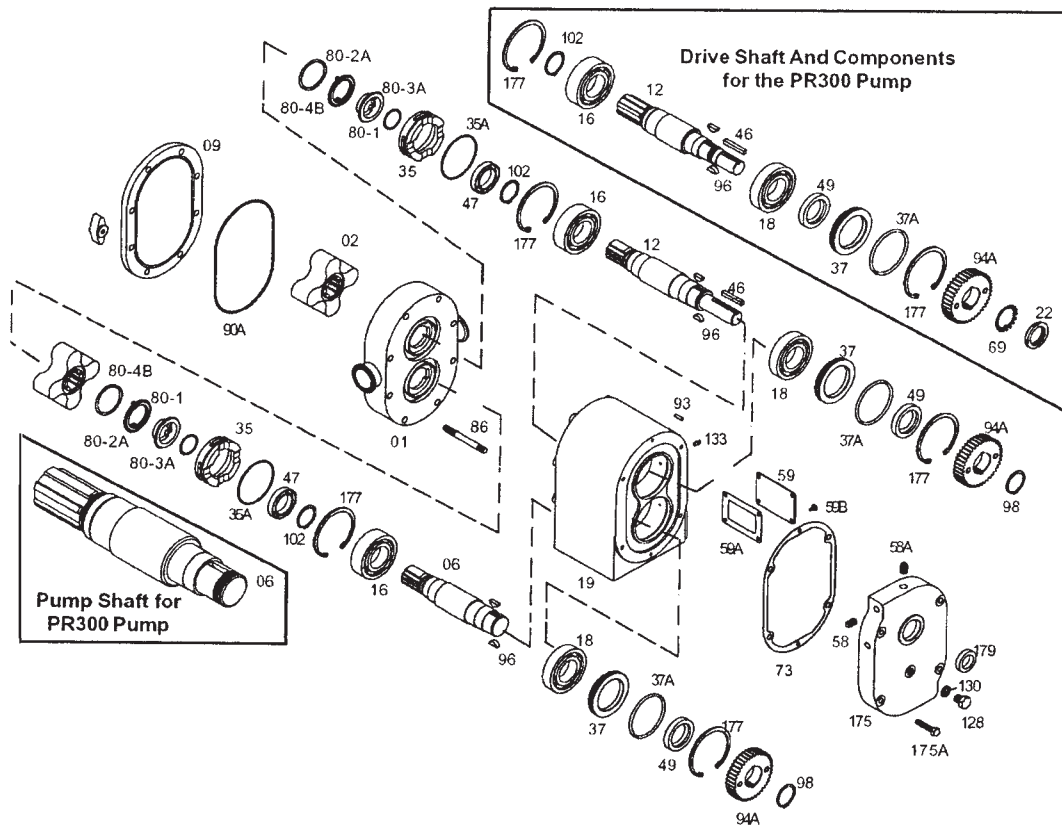
**STUART W. JOHNSON
FOR REPAIR SERVICES.**

MACHINERY AND EQUIPMENT

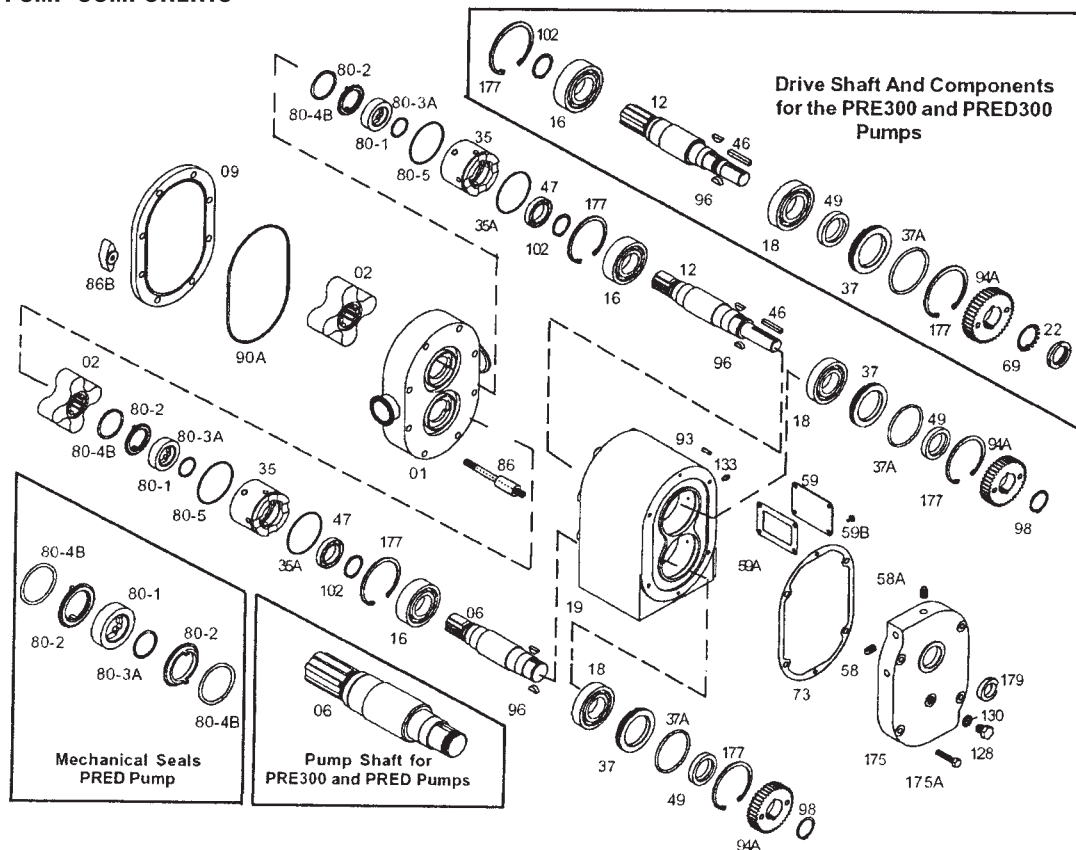
'PR' SERIES COMPONENTS

Match key numbers to part numbers on the following page. PRE and PRED pumps have extended alignment locating rings and casing studs for current 3A approval. Rubber or metal rotors available—call your inside sales representative for part numbers.

PR PUMP COMPONENTS



PRE AND PRED PUMP COMPONENTS



MACHINERY AND EQUIPMENT

TRI-CLOVER POSITIVE ROTARY PR/PRE/PRED SERIES

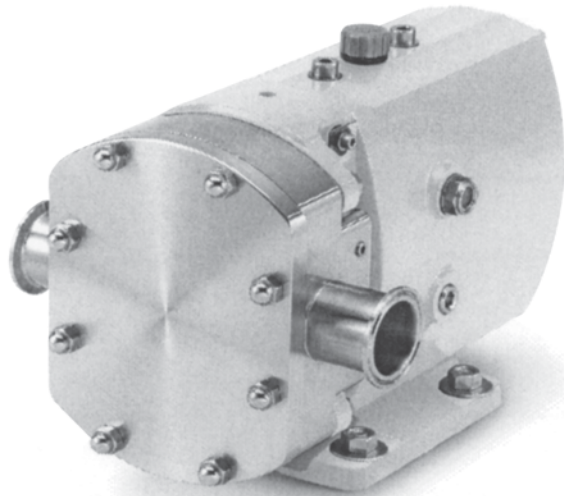
When ordering impellers, the base number designates the impeller size. When ordering specify the following: 1. Number of lobes; 2. If impeller is for pump or drive shaft; 3. Material; 4. Clearance (Rubber Impellers Only).

EXAMPLE: (Base Number) - (# of Lobes) (Drive-D or Pump Shaft-P) (Clearance Hot-H or Cold-C) - Material (Buna) (Part No. R3-1-02-6PC-U).

*Also available in flouroelastomer or EPDM. When ordering specify suffix "SFY" or "E" in place of "U". Priced on application.

Key No.	Description	MODEL 3 Part Number	MODEL 10 Part Number	MODEL 25 Part Number	MODEL 60 Part Number	MODEL 125 Part Number	MODEL 300 Part Number
01	Casing, Tri-Clamp Ports 1"x1"						
01	Casing, Bevel Seat Ports 1-1/2"x1-1/2"						
01	Casing, Tri-Clamp Ports 1-1/2"x1-1/2"						
01	Casing, Bevel Seat Ports 1-1/2"x1-1/2"						
01	Casing, Tri-Clamp Ports 1-1/2"x1-1/2"						
01	Casing, Tri-Clamp Ports 3"x 3"						
01	Casing, Tri-Clamp Ports 2"x 2"						
01	Casing, Tri-Clamp Ports 3"x 3"						
01	Casing, Bevel Seat Ports 2-1/2"x 2-1/2"						
01	Casing, Tri-Clamp Ports 2-1/2"x 2-1/2"						
01	Casing, Tri-Clamp Ports 3"x 3"						
01	Casing, Tri-Clamp Ports 4"x 4"						
01	Casing, Tri-Clamp Ports 6"x 6"						
02	Impeller 6 Lobe Rubber (Buna N-Cold)	See Above					
02	Impeller 6 Lobe Rubber (Buna N-Hot)	See Above					
02	Impeller 2 or 4 lobe Rubber (Buna N)*		See Above	See Above	See Above	See Above	See Above
02	Impeller 2 or 4 Lobe Tri-Clover Metal		See Above	See Above	See Above	See Above	See Above
06	Pump Shaft (PR Only)	R3-1-06-316	R10-1-1/2-06316L	R25-1-1/2-06-316	R60-06-316	R125-2-1/2-06-316	R300-4-06-316
06	Pump Shaft (PRE & PRED Only)	R3E-1-06-316	R10E-1-1/2-06-316L	R25E-1-1/2-06-316	R60E-2-06-316	R125E-2-1/2-06-316	R300E-4-06-316
08	Impeller Carbon		R10-1-1/2-08	R25-1-1/2--08	R60-2-08	R60-2-08	R300-4-08
09	Front Cover	R3-1-09-316	R10-1-1/2-09-316	R25-1-1/2-09-316	R60-2-09-316	R60-2-09-316	R300-4-09-316
12	Drive Shaft (PR Only)	R3-1-12-316	R10-1-1/2-12-316L	R25-1-1/2-12-316	R60-2-12-316	R125-2-1/2-12-316	R300-4-12-316
12	Drive Shaft (PRE & PRED Only)	R3E-1-12-316	R10E-1-1/2-316L	R25E-1-1/2-12-316	R60E-2-12-316	R125E-2-1/2-12-316	R300E-4-12-316L
16	Bearing - Inboard	R3-1-16	R10-1-1/2-16	R25-1-1/2-16	R60-2-18	R125-2-1/2-16	R300-4-16
18	Bearing - Outboard	R3-1-16	R10-1-1/2-16	R25-1-1/2-16	R60-2-18	R60-2-18	R300-4-18
19	Frame	R3-1-19-C	R10-1-1/2-19-C	R25-1-1/2-19-C	R60-2-19-C	R60-2-19-C	R300-4-19-C
22	Locknut						R300-4-22
35	Alignment Locating Ring (PR Only)	R3-1-A35-316L	R10-1-1/2-A35-316	R25-1-1/2-A35-316L	R60-2-A35-316L	R125-2-1/2-A35-316	R300-4-A35-316L
35	Alignment Locating Ring (PRE & PRED)	R3E-1-35-316L	R10E-1-1/2-35-316	R25E-1-1/2-35-316L	R60E-2-35-316L	R125E-2-1/2-35-316	R300E-4-35-316L
35A	Alignment Locating Ring O-ring	R3-1-37A-U	R10-1-1/2-35A-U	R25-1-1/2*-35A-U	R60-2-37A	R60-2-37A	R300-4-37A-U
37	Bearing Cover Outboard	R3-1-37-CS	R10-1-1/2-37-CS	R25-1-1/2-37-CS	R60-2-37-CS	R60-2-37-CS	R300-4-37-CS
37A	Bearing Cover O-ring	R3-1-37A-U	R10-1-1/2-37-CS	R25-1-1/2-37A-U	R60-2-37A	R60-2-37A	R300-4-37A-U
46	Coupling Key	R3-1-46	R10-1-1/2-46	R25-1-1/2-46	R60-2-46	R60-2-46	R300-4-46
47	Alignment Locating Ring Seal	R3-1-47	R10-1-1/2-47	R25-1-1/2-47	R60-2-47	R125-2-1/2-47	R300-4-47
49	Bearing Cover Seal	R3-1-47	R10-1-1/2-47	R25-1-1/2-49	R60-2-47	R60-2-47	R300-4-49
58	Plug	MS-105-58	2EBH-105-58	2EBH-105-58	2EBH-105-58	2EBH-105-58	2EBH-105-58
58A	Vented Plug	MS-105-58A	2EBH-105-58A	2EBH-105-58A	2EBH-105-58A	2EBH-105-58A	2EBH-105-58A
59	Cleanout Hole Cover	R3-1-59-S	R25-1-1/2-59-S	R25-1-1/2-59-S	R60-2-59-S	R60-2-59-S	R60-2-59-S
59A	Cleanout Hole Gasket	R3-1-59A	R25-1-1/2-59A	R25-1-1/2-59A	R60-2-59A	R60-2-59A	R60-2-59A
59B	Cleanout Hole Screw	SC905H-SS	SC905H-SS	SC905H-SS	SC905H-SS	SC905H-SS	SC905H-SS
69	Lockwasher						R300-4-69
73	Gear Cover Gasket	R3-1-73	R10-1-1/2-73	R25-1-1/2-73	R60-2-73	R60-2-73	R300-4-73
80-1	Wear Ring PR Only	R3-1-80-1-S	R10-1-1/2-80-1-S	R25-1-1/2-80-1-S	R60-2-80-1-S	R60-2-80-1-S	R300-4-80-1-S
80-1	Wear Ring PRE & PRED Only	R3E-1-80-1-316	R10E-1-1/2-80-1-S	R25E-1-1/2-80-1-S	R60E-2-80-1-S	R60E-2-80-1-S	R300E-4-80-1-S
80-2	Seal Ring PRE & PRED Only	R3E-1-80-2	R10E-1-1/2-80-2	R25E-1-1/2-80-2	R60E-2-80-2	R60E-2-80-2	R300E-4-80-2A
80-2	Seal Ring PR Only	R3-1-80-2	R10-1-1/2-80-2A	R25-1-1/2-80-2A	R60-2-80-2A	R60-2-80-2A	R300-4-80-2
80-3	Shaft O-ring (Buna N)*	R3-1-80-3A-U	R10-1-1/2-80-3A-U	R25-1-1/2-80-3A-U	R60-2-80-3A-U	R60-2-80-3A-U	R300-4-80-3A-U
80-4B	Casing O-ring (Buna N)*	R3-1-80-4B-U	R10-1-1/2-80-4B-U	R25-1-1/2-80-4B-U	R60-2-80-4B-U	R60-2-80-4B-U	R300-4-80-4B-U
80-5	O-Ring (Buna N)* PRE & PRED Only	17-125-U	17-25-U	17-7-U	R60-2-37A	R60-2-37A	R300-4-80-4B-U
86	Casing Stud PR Only	R3-1-86-316L	R10-1-1/2-86-S	R25-1-1/2-86-S	R60-2-86-S	R125-2-1/2-86-S	R300-4-86-S
86	Casing Stud PRE & PRED Only	R3E-1-S	R10E-1-1/2-86-S	R25E-1-1/2-86-S	4R60E-2-86-S	R125E-2-1/2-86-S	R300E-4-86-S
86B	Casing Nut	R3-1-86A-S	R25-1-1/2-86B-S	R25-1-1/2-86B-S	R60-2-86B-S	R60-2-86B-S	R300-4-86A-S
90A	Casing Cover O-ring (Buna N)*	R3-1-90B-U	R10-1-1/2-90B-U	R25-1-1/2-90B-U	R60-2-90B-U	R60-2-90B-U	R300-4-90B-U
93	Alignment Pin	R3-1-93	R25-1-1/2-93	R25-1-1/2-93	R60-2-93	R60-2-93	R60-2-93
94A	Timing Gear	R3-1-94A	R10-1-1/2-94A	R25-1-1/2-94A	R60-2-94A	R60-2-94A	R300-4-94A
96	Timing Gear Key	R3-1-98	R10-1-1/2-96	R25-1-1/2-96	R60-2-96	R60-2-96	R300-4-96
98	Gear Retainer Ring	R3-1-98	R10-1-1/2-98	R25-1-1/2-98	R60-2-98	R60-2-98	
102	Bearing Retainer Ring	R3-1-102	R10-1-1/2-102	R25-1-1/2-102	R60-2-102	R125-1-1/2-102	R300-4-102
128	Tachometer Plug with Gasket	R3-1-128	R3-1-128	R3-1-128	R3-1-128		R3-1-128
133	Grease Fitting	R25-1-1/2-133	R25-1-1/2-133	R25-1-1/2-133	R25-1-1/2-133	R25-1-1/2-133	R25-1-1/2-133
175	Gear Cover	R3-1-175-C	R10-1-1/2-175-C	R25-1-1/2-175-C	R60-2-175-C	R60-2-175-C	R300-4-175-C
177	Shaft Retainer Ring	R3-1-177	R10-1-1/2-177	R25-1-1/2-177	R60-2-177	R60-2-177	R300-4-177
179	Gear Cover Seal	R3-1-179	R10-1-1/2-179	R25-1-1/2-179	R60-2-179	R60-2-179	R300-4-179

**NEW CASINGS
NO LONGER
AVAILABLE**



"SX" SERIES

Features

- Low shear pumping
- Tapered roller bearings for smooth operation
- Heavy duty duplex shaft for high discharge pressure (up to 218 psig)
- Sealed rotors for ultra clean, CIP-able operation
- 3A and EHEDG (European Hygienic Equipment Design Group) approved
- Flow rate to 506 gpm

"SX" PUMP DESCRIPTION CODE

1	2	3	4	5	6	7	8	9	10	11	

1. Model Size

SX1	SX3	SX5	SX7
SX2	SX4	SX6	

2. Casing Code

N - Narrow	W - Wide
------------	----------

3. Power Frame

L - Long

4. Shaft Material

Duplex Stainless Steel

5. Port Size

10 - 1" (25mm)	30 - 3" (76mm)
15 - 1 1/2" (38mm)	40 - 4" (102mm)
20 - 2" (51mm)	60 - 6" (152mm)
25 - 2 1/2" (63.5mm)	

6. Connection Type

M - Tri-Clamp

7. Seal Type

D - Single Mechanical
E - Double Flushed
F - Single Flushed

8. Elastomer

E - EPDM V - Viton X - Silicon

9. Seal Face Combinations

0 - Carbon vs. SS	4 - SC vs. SC
2 - Carbon vs. SC	

Type E Double Seal: Above combinations apply to inboard seal faces only. Outboard seal is Carbon vs. SS as standard, unless otherwise specified.

10. Rotor Type and Clearance

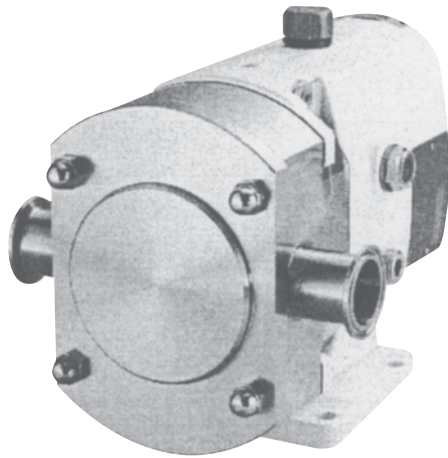
All rotors 4 lobe stainless steel designed for 300°F (150°C).	
03 - 43 psi (3 bar)	10 - 145 psi (10 bar)
05 - 70 psi (5 bar)	15 - 215 psi (15 bar)
07 - 100 psi (7 bar)	

11. Drive Shaft Location

H - Horizontal	T - Top
L - Lower	



**PLEASE CONTACT
STUART W. JOHNSON
FOR INFORMATION ON
PUMP REPAIR
AND ROTOR RE-COAT
SERVICES**



"SRU" SERIES

Features

- Low shear pumping
- 3A approved
- Flow rate to 466 gpm
- Pressure to 290 psig
- Side, top and bottom mounting for positioning ease
- No shaft changes
- Tri-Lobe rotors for smooth pumping
- Many seal configurations and materials available

"SRU" PUMP DESCRIPTION CODE

1	2	3	4	5	6	7	8	9	10	11	12

1. Model Size

SRU1	SRU3	SRU5
SRU2	SRU4	SRU6

2. Casing Code

N - Narrow	W - Wide
------------	----------

3. Power Frame

S - Short (SRU1 only)	L - Long (SRU1 through SRU6)
-----------------------	------------------------------

4. Shaft Material

S - Standard SS	D - Duplex (High Pressure)
-----------------	----------------------------

5. Port Size

10 - 1" (25mm)	30 - 3" (76mm)
15 - 1 1/2" (38mm)	40 - 4" (102mm)
20 - 2" (51mm)	60 - 6" (152mm)
25 - 2 1/2" (63.5mm)	

6. Connection Type

M - Tri-Clamp (standard)
A - Rectangular Inlet x Tri-Clamp - for rectangular inlet, specify on order if suction or discharge side.

7. Seal Type

G - Single Mechanical Hyclean (standard)	E - Double Mechanical (R90)
H - Double Flushed* Hyclean	F - Single Flushed* (R90)
J - Single Flushed* Hyclean	
D - Single Mechanical (R90)	

*Flushed is external lip seal-furnished in Buna N and/or SFY (Flouroelastomer).

8. Elastomer

E - EPDM	U - BunaN
Y - SFY (Flouroelastomer)	

9. Seal Face Combinations

0 - Carbon vs. SS
2 - Carbon vs. SC
4 - SC vs, SC

Type E Double Seal: Above combinations apply to inboard seal faces only. Outboard seal is Carbon vs. SS as standard, unless otherwise specified.

10. Rotor Type and Clearance

Temp Clearance	Tri Lobe		Bi Lobe	
	SS	Rubber	Non-galling	SS
Cold (Temps to 158°F)	C	M	J	R
Warm (159°F to 266°F)	W	-	K	S
Hot (267°F to 392°F)	H	-	L	T

11. Inlet Port

Inlet is identified when facing front

A - Top Inlet	T - Top (R90 only)
B - Bottom Inlet	L - Lower (R90 only)
C - Left Inlet	H - Horizontal (R90 only)
D - Right Inlet	

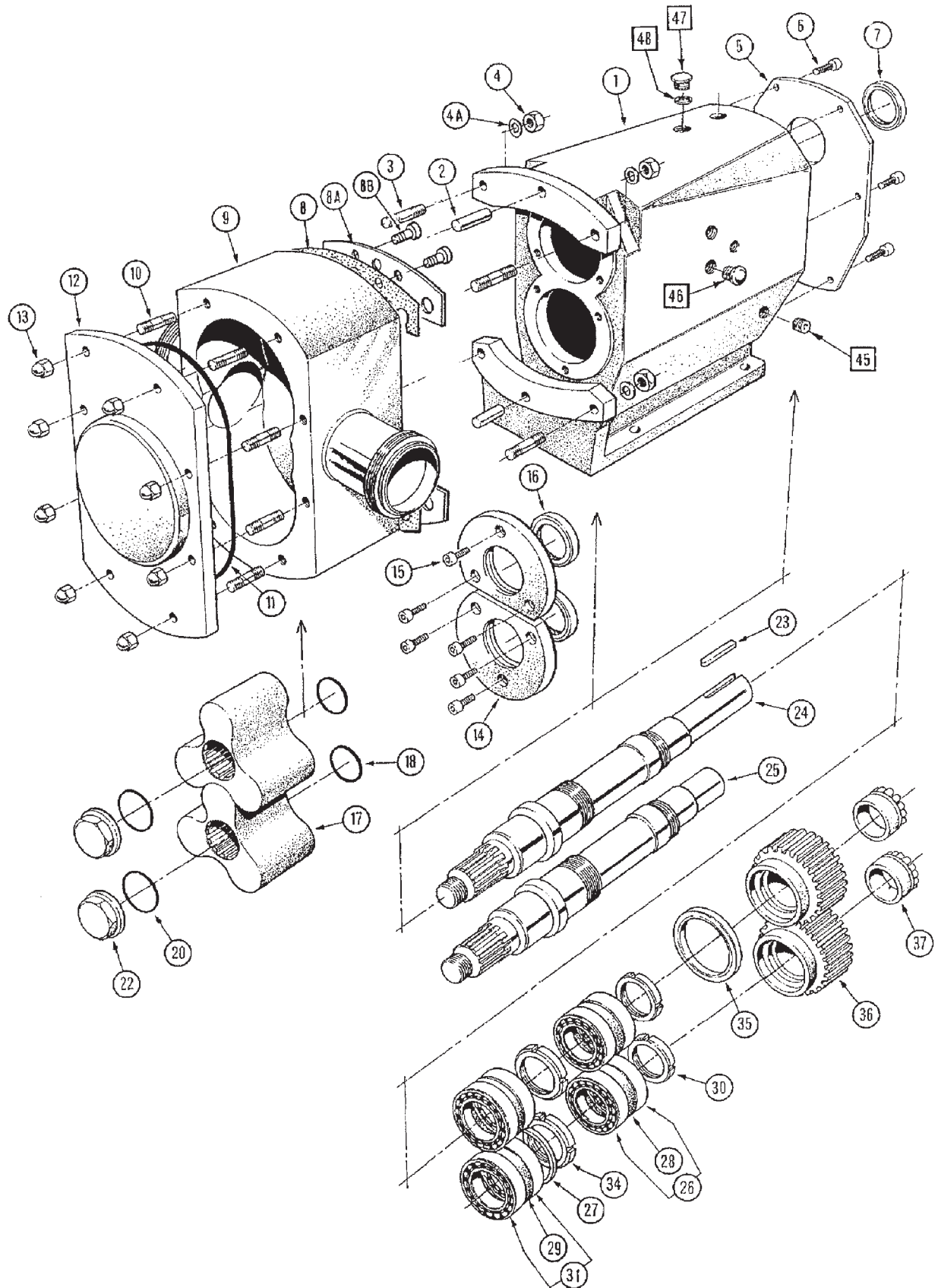
12. Options

Leave blank if not required.

R - Relief Valve
J - Jacket

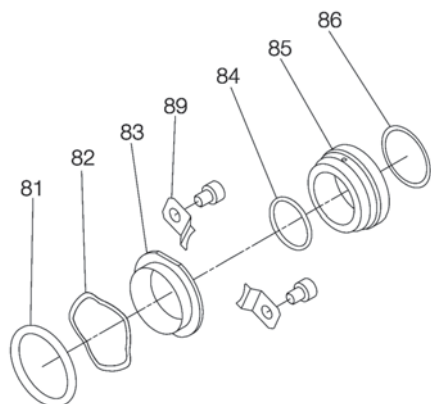


"SRU" SERIES



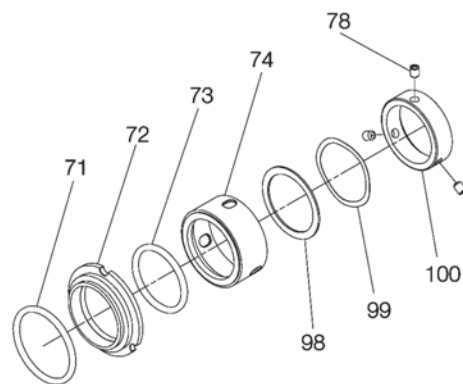
MACHINERY AND EQUIPMENT

"SRU" SEALS - HYCLEAN AND R90 (TSR)



Hyclean Mechanical Seal - Exploded View

Key No.	Description	Materials
71	Stationary Seat O-ring	N, E, G, SFY
72	Stationary Seat	C, IC, TC, SC
73	Rotary Seal O-ring	N, E, G, SFY
74	Rotary Seal	SS, TC, SC
75	Gasket	E, SFY
76	Lip Seal	N, SFY
77	Spacer O-ring	SFY
77A	Spacer	
78	Screw Grub	
79	Housing, Lip Seal	SS
81	Rotorcase O-ring	N, E, SFY
82	Wave Spring	
83	Stationary Seat	C, SC
84	Shaft O-ring	N, E, SFY

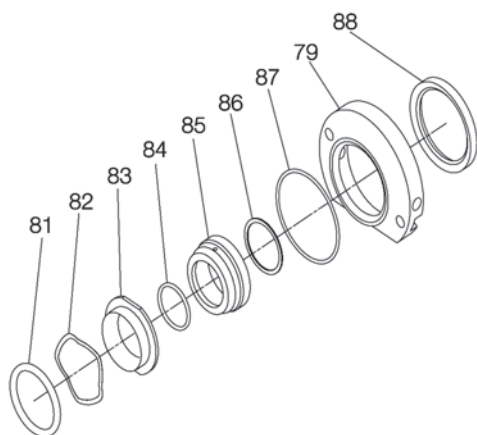


R90 Single Mechanical Seal - Exploded View

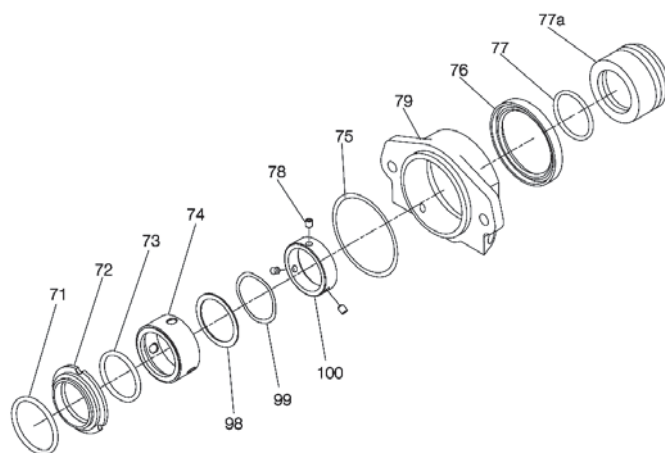
Key No.	Description	Materials
85	Rotary Seal Ring	SS, SC
86	Washer	
87	O-ring	SFY
88	Lip Seal	SFY
89	Retaining Clip and Screw	
98	Washer	
99	Wave Spring	
100	Seal Insert	

Materials Key

N	Duma	SS	Stainless Steel
E	EPDM	C	Carbon
G	Teflon	IC	Inserted Carbon
SFY	VITON	TC	Tungsten Carbide
		SC	Silicon Carbide



Hyclean Flushed Mechanical Seal - Exploded View



R90 Single Flushed Mechanical Seal - Exploded View

"OPTILOBE" SERIES

APPLICATION

The OptiLobe range of rotary lobe pumps combines cost-effective simplicity with Alfa Laval quality and reliability. The OptiLobe range has been developed for general applications within the Dairy, Beverage and Food Industries.

The 'OptiLobe' pump range has been certified by EHEDG (European Hygienic Equipment Design Group) as fully CIP cleanable to their protocol, and therefore is ideally suited to applications where cleanability is paramount.

Also the OptiLobe pump range conforms to USA 3-A Sanitary Standard and all media contacting components are FDA compliant. The pump features the "EasyFit" front loading seal which allows quick and easy inspection or replacement without the need for pipework disassembly.

The 'OptiLobe' pump range is compact, efficient and capable of flow rates up to 48 m³/h and pressures up to 8 bar.

STANDARD DESIGN

Pump Gearbox

The 'OptiLobe' pump range has a universal gearbox design which gives the flexibility of mounting pumps with the inlet and outlet ports in either a vertical or horizontal plane by simply changing the foot position. A stainless steel gear canister and electro-less nickel plated bearing housing provides a clean, paint free corrosion resistant external finish.

Pump Head Construction

The OptiLobe pump range has sanitary design full bore inlet and outlet ports to International Standards, maximizing inlet and outlet port efficiency and NPSH characteristics. Pumps are fitted with tri-lobe rotors rated to 130°C facilitating use with CIP processes.

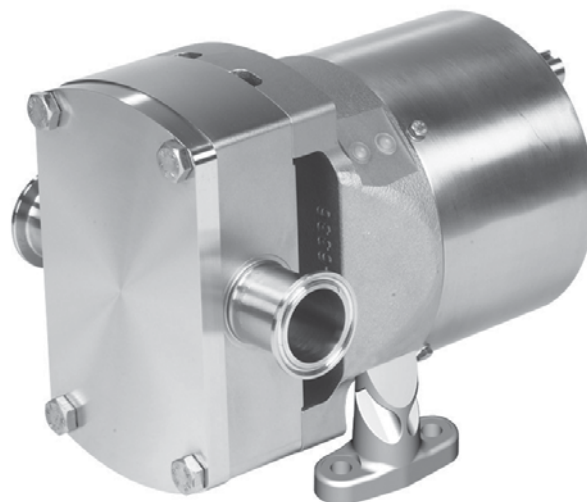
Shaft Seal Options

- EasyFit type single or single flush/quench mechanical seals.

All sealing options are fully front loading and fully interchangeable. Specialized seal setting of the mechanical seal is not required as the seal is dimensionally set on assembly. This feature further enhances fast and efficient on-site seal interchangeability.

Materials for Mechanical Seals

Carbon/Stainless Steel, Carbon/Silicon Carbide or Silicon Carbide/Silicon Carbide.



"OPTILOBE" PUMP DESCRIPTION CODE

<input type="text"/>	-	<input type="text"/>	M	<input type="text"/>	A	<input type="text"/>	A	A
1		2	3	4	5	6	7	8

1. Model Size

L22	L33
L23	L42
L32	L43

2. Port Size

15 - 1 1/2" (38mm)	25 - 2 1/2" (63.5mm)
20 - 2" (51mm)	30 - 3" (76mm)

3. Model Clamp

M - Tri-Clamp

4. Seal and Elastomer

002 - Easy Fit SS/C FPM	S02 - Easy Fit SS/C Flush FPM
006 - Easy Fit SS/C EPDM	S06 - Easy Fit SS/C Flush EPDM
012 - Easy Fit SC/C FPM	S12 - Easy Fit SC/C Flush FPM
016 - Easy Fit SC/C EPDM	S16 - Easy Fit SC/C Flush EPDM
022 - Easy Fit SC/SC FPM	S22 - Easy Fit SC/SC Flush FPM
026 - Easy Fit SC/SC EPDM	S26 - Easy Fit SC/SC Flush EPDM

5. Rotor Type and Clearance

A - SS TriLobe (8 Bar 130°C 266°F)

6. Shaft Position

A - Vertical LSD	C- Horizontal BSD
B - Vertical RSD	C- Horizontal TSD

7. Surface Finish

A - Standard 32Ra

8. Elastomers

A - No Option



SINE SANITARY POSITIVE DISPLACEMENT PUMPS

Sine Pump offers an innovative line of sanitary positive displacement pumps suitable for numerous applications throughout the food industry. By way of its patented sinusoidal rotor, Sine Pump provides superior process performance.

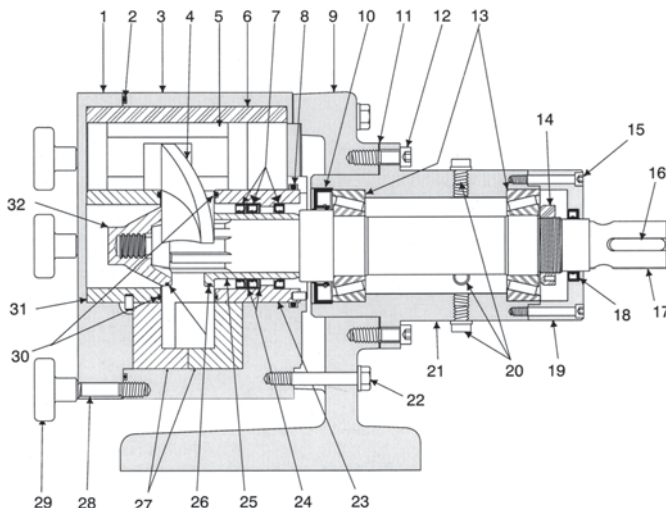


DESIGN ADVANTAGES

- Low Shear - Gentle wave rotor handles fragile solids and maintains product integrity.
- Powerful Suction - Patented design assures powerful suction for high viscosity applications.
- Low Pulsation - Constant volumetric displacement creates a smooth and consistent flow.
- Easy Maintenance - One rotor, one shaft, and one seal assembly equate to simple, economical maintenance.

APPLICATIONS

- Bakery - Fruit Fillings, Batters, Frosting
- Dairy - Cottage Cheese, Yogurt, Processed Cheese, Ice Cream
- Prepared Foods - Soups, Stews, Chili, Deli Salads, Condiments
- Meats - Emulsions, Comminuted Meats, Chicken Parts
- Confection - Caramel, Corn Syrup, Chocolate, Fondants
- Beverage - Juices, Concentrates, Syrups, Yeast Slurries
- Cosmetics - Lotions, Creams, Conditioners, Shampoo, Tooth Paste
- Pharmaceuticals - Gels, Cough Syrups, Ointments

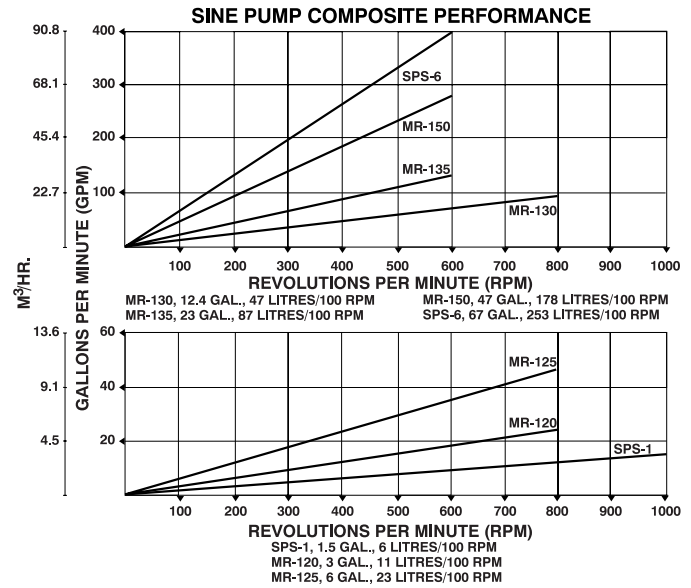


APPROVALS & AUTHORIZATIONS

- 3-A
- USDA, Meat & Poultry
- USDA, Dairy
- USDA, Egg

NINE MODELS TO FIT YOUR NEEDS

- Flows to 400 GPM (1514 L/min)
- Pressures to 225 PSIG (15 BAR)
- Temperatures to 300°F (150°C)



CALL OUR ENGINEERING GROUP TO SPECIFY YOUR PUMP

No.	Item	Description	No.	Item	Description
1	400	Front Cover	25	530	Shaft Sleeve
2	430	Front Cover O-Ring	26	030	Rotor O-Rings
3	300	Pump Housing	27	072	Liners
4	011	Rotor	28	450	Front Cover Stud
5	125	Scrapergate	29	441	Front Cover Wing Nut
6	100	Scrapergate Guide	30	515	Dynamic Face O-Rings
7	510	Lip Seals	31	370	Scrapergate Support
8	540	Seal Housing O-Ring	32	231	Shaft Nut
9	600	Power Frame			
10	741	Oil Seal, Inboard			
11	800	Shims			
12	640	Power Frame Cap Screw			
13	770	Tapered Roller Bearings			
14	750	Bearing Lock Nut			
15	768	Bearing Housing Cap Screw			
16	250	Shaft Key			
17	200	Shaft			
18	742	Oil Seal, Outboard			
19	761	Bearing Housing Cover			
20	737	Oil Level/Fill/Drain Plugs			
21	700	Bearing Housing			
22	340	Housing Mounting Bolt			
23	500	Seal Housing			
24	520	Lip Seal Support Rings			

SANITARY STRAINERS/FILTERS

THE MAINSTREAM® BASKET FILTER/STRAINER

Versatile, cost-effective and sanitary. Available in long and short models, Mainstream filters and strainers with side-entry ports provide versatile, cost-effective filtration. With their large surface area, Mainstream filters and strainers combine high flow rates, low pressure drop, and simple cleanup and servicing. The end result is more efficient separation, faster throughput, and reduced media changeover due to the larger surface area of the Mainstream.

COARSE STRAINING

Strainer SEB is a single coarse strainer with large perforations (.5, .25, .125, .09375 diameter perforations). Suited for straining out large particles and foreign materials. Maximum pressure differential is 100 psi at 70°F.

MEDIUM OR FINE STRAINING

Strainer SES is available with either a perforated metal basket (0.062 diameter perforations) or with wire mesh baskets in 20, 40, 60, 80, 100, 150, or 200 mesh. Suited for straining out particles down to 73 microns. Maximum pressure differential is 50 psi at 70°F.

FILTERING

Filter SEF is available for coarse filtering applications from 30 to 840 microns and for fine filtering applications from .5 to 25 microns. Filter media is available in a variety of materials including cotton, nylon, Nomex*, polypropylene, polyester, rayon, and FEP*. Suited for use wherever impurities need to be removed from product during processing. Maximum pressure differential is 50 psi at 70°F.

V-WIRE

Strainer SEBHVW is a V-wire type strainer with wire gaps of .005, .0075, .010, .015, .020, .025, .030, and .035. Equivalent micron rating and maximum pressure differential are listed below.



Mainstream Strainer Material Selection

Code	Description	Micron Rating	% of Open Area
A (SES only)	.033 dia./24 ga.	838	20.0
C (SES only)	.062 dia./22 ga.	1590	30.0
G (SEB only)	.250 dia./18 ga.	—	58.0
E (SEB only)	.125 dia./18 ga.	—	40.0
W (SEB only)	.500 dta./18 ga.	—	47.0
D (SEB only)	.09375 dia./18 ga.	—	33.0

Wire Mesh (SES Only)

Screen Code	Square Mesh Size	Space Between Wire (in.)	Micron Rating	% of Open Area
P	20	0.034	864	46.2
J	40	0.015	381	36.0
F	60	0.009	229	30.3
L	80	0.007	178	31.4
K	100	0.006	140	30.3
M	150	0.004	104	37.4
S	200	0.003	73	33.6

*Nomex and FEP are registered trademarks of Dupont.

Note: Polished ID/OD units are approved for use in USDA meat and poultry inspected plants.

MAINSTREAM ORDERING DESCRIPTION CODE

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1	2	3	4	5	6	7	8

1. Base Part Number

SES - Strainer	SEB - Single Screen Strainer
SEF - Filter	SEBW - Wedge-wire Strainer

2. Cover

R - Relief Cover (includes cap, gasket, and clamp)

3. Model

- 1- SHORT 1.7 sq. ft. strainer area
- 2- LONG 3.8 sq. ft. strainer area

4. Tri-Clamp® Connection Size

2 - 2" Tube OD 3 - 3" Tube OD 4 - 4" Tube OD

5. Strainer Material

For SES

P - 20 sq. mesh	M - 150 sq. mesh
J - 40 sq. mesh	S - 200 sq. mesh
F - 60 sq. mesh	A - .033 dia. perf.
L - 80 sq. mesh	C - .062 dia. perf
K - 100 sq. mesh	Additional screens available

For SEB

D - .09375 dia. hole	G - .250 dia. hole
E - .125 dia. hole	W - .500 dia. hole

For SEBW

A - .005	C - .010	E - .020	G - .030
B - .0075	D - .015	F - .025	H - .035

6. Gasket & O-Ring

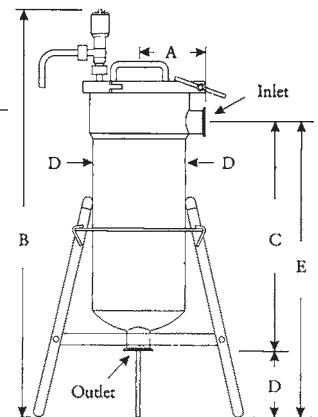
1 - Buna N (up to 225°F) 2 - Fluorelastomer (up to 450°F)

7. Relief Valve Handle & Cam Lock

- 1 - UHMW (ultrahigh molecular weight polyethylene up to 225°F)
- 2 - Aluminum Bronze (up to 450°F)

8. Finish (Type 316LS)

- P - Scotch Brite OD - 32 Ra or better ID
- I - Unpolished ID/OD



Mainstream Filter and Strainer Dimensions

Model	Inlet/Outlet Diameter	A	B	C	D	E
Model 1 (Short)	2"	5 11/16	35 3/8	19 1/4	8	27 1/4
	3"	5 11/16	35 3/8	19 3/4	8	27 3/4
	4"	6 5/16	35 3/8	20 1/4	8	28 1/4
Model 2 (Long)	2"	5 11/16	51 3/8	35 1/4	8	43 1/4
	3"	5 11/16	51 3/8	35 3/4	8	43 3/4
	4"	6 5/16	51 3/8	36 1/4	8	44 1/4

SANITARY STRAINERS/FILTERS

THE STREAMLINE® IN-LINE FILTER/STRAINER

One of the industry's most enduring product designs, the Streamline offers efficient free-flow design, corrosion-resistant 316L stainless steel, sanitary design, and lightweight construction. The Streamline is available in two lengths and for single, twin or multiple installations.

FILTRATION

Streamline filters can be furnished with any one of seven filtering media, down to 38 microns, including non-woven rayon, cotton, cheesecloth, nylon and woven nylon.

COARSE STRAINER

Furnished with a single perforated screen for straining large particles.

FINE OR MEDIUM STRAINER

Complete with a backup tube and overscreen with small perforations for removing finer particles (104 to 1130 microns).

Replacement Strainer Selection

Perforated Metal Strainer Single Screens

Screen Part No.	Port Connections	Gauge	Hole Dia (in.)	Holes/ Square In	Percent of Open Area
09G*	1, 1 1/2, 2	14	1/4 / .250	9	58
	2 1/2, 3	12	1/4 / .250	9	58
09D	1, 1 1/2, 2	16	3/32 / .093	47	33
09E	1, 1 1/2, 2	14	1/8 / .125	33	40
	2 1/2, 3	12	1/8 / .125	33	40
09V	2 1/2, 3	12	3/16 / .187	18	51

Replacement Strainer Selection

Perforated Metal Over Screens

Screen Part No.	Gauge	Holes/ Dia (in.)	Micron Rating	Holes/ Square In	Percent of Open Area
44A	26	.033	838	236	20
44B	26	.050	1270	132	26
44C	26	.062	1590	97	30
44U**	26	.040	1015	179	23

*Note: All strainers using over screens require a backup tube—the recommended type G screen will be furnished as standard backup tube in all Tri-Clover filters and strainers unless otherwise specified on your order.

**Available only in 1.95 and 2.25 sq. ft. areas.

Wire Cloth Mesh Over Screens

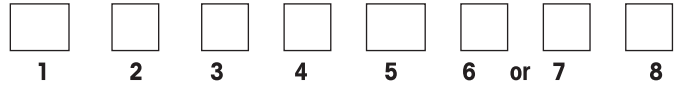
Screen Part No.	Square Mesh Size	Space between Wires (in.)	Micron Rating	Percent of Open Area
44R	16	0.045	1130	50.7
44N	50	0.011	279	30.3
44P	20	0.034	864	46.2
44L	80	0.007	178	31.4
44T	30	0.021	533	40.8
44K	100	0.006	140	30.3
44J	40	0.015	381	36.0
44M	150	0.004	104	37.4
44F	60	0.009	229	30.3
44H	120	0.005	117	30.7

Replacement Filter Media Schedule – Streamline

Media	Micron Rating*	Description
30A	38	Non-woven rayon
30B	513	Woven knapped cotton flannel
30C	300	Cheese cloth, single thickness cotton
30D	765	Nylon, 26/29 mesh, rectangular opening (.025" x .030")
30E	40-42	Non-woven rayon
30F	<40	Non-woven rayon
30G	420	Woven nylon, 40 mesh

*Estimated

STREAMLINE ORDERING DESCRIPTION CODE



1. Base Part Number

F - Single Filter S - Single Strainer
2F - Twin Filter 2S - Twin Strainer

2. Port Connection

M - Tri-Clamp® (for bevel seat delete letter "M")

3. Side-Entry

S - Side-Entry Port (leave blank for standard port)

4. Filter or Strainer Model

1 - Short unit 2 - Long unit

5. Size of End Connection

1 - 1" Tube OD 2 1/2 - 2 1/2" Tube OD
1 1/2 - 1 1/2" Tube OD 3 - 3" Tube OD
2 - 2" Tube OD

6. Screen Selection, for Strainer Unit

See replacement strainer chart for more information

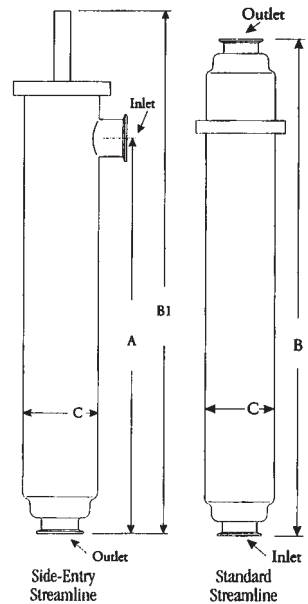
09G 09D 09E 09V
44A 44B 44C 44U

7. Filter Media, for Filter Unit

30A - Non-woven rayon
30B - Woven knapped cotton flannel
30C - Cheese cloth
30D - Nylon
30E - Non-woven rayon
30F - Non-woven rayon
30G - Woven rayon

8. Material

316L Stainless Steel



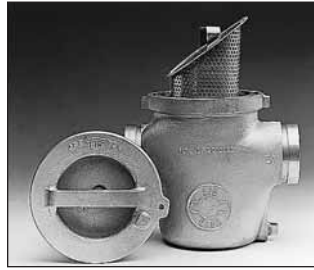
Streamline Dimensions

Port Connect Tube OD	Tri-Clamp® Length (in) A	Connections Length (in) B	Length (in) B1	Outer Dia. (in) C	Effective Filter Area
1	15 3/8	15 3/4	22 1/4	4	.065
1 1/2	15 3/8	15 3/4	22 1/4	4	.065
2	15 3/8	15 3/4	22 1/4	4	.065
2 1/2	15 3/8	15 3/4	22 1/4	4 1/2	.075
3	15 3/8	15 3/4	22 1/4	4 1/2	.075
1 1/2	35	35 3/8	41 7/8	4	1.95
2	35	35 3/8	41 7/8	4	1.95
2 1/2	35	35 3/8	41 7/8	4 1/2	2.25
3	35	35 3/8	41 7/8	4 1/2	2.25

THE LINE STRAINER

Use a line strainer for its intended purpose...to strain unwanted foreign objects which might damage the pump. Any system without a line strainer at the suction side of the pump risks a shut down of the system by pump damage from debris in the form of rags, metal objects, etc.

The line strainer is defined as a "course filter." Strainers are used to trap large foreign objects for pump protection. Filters, on the other hand, serve the purpose of filtering fine particles. If your needs require a filter, then a line strainer will not serve as a substitute.



Prod. No. Description

LSF 300	3" Line Strainer with grooved aluminum fittings
LSF 400	4" Line Strainer with grooved aluminum fittings



IN-LINE STRAINERS

Sani-Matic strainers are offered in two styles: angle-line and straight-line. Angle-line strainers are constructed with connections that enable the operator to inspect and clean the insert element without breaking the connections. Straight-line strainers are more economical but require that line connections be broken and the entire assembly removed to inspect and clean the insert element. All strainers are provided with easily disassembled inserts with either perforated or wedge wire elements. The perforated inserts can be provided with 1/8" or 1/4" perforations with wire mesh overlays.



Strainer Model	Tri-Clamp Sizes	Prod. No. 304 SS	Prod. No. 316 SS
Angle-Line	1 1/2", 2", 2 1/2", 3 & 4"	X	
Angle-Line	All sizes		X
Straight-Line	1 1/2" & 2"	X	
Straight-Line	2 1/2", 3 & 4"	X	X

Call for part number and price.

D54MP SIGHT GLASS ASSEMBLY

SIZE 316 STAINLESS STEEL

Product No.	in	mm
D54MP-2-316-L	1 1/2	38.1
D54MP-2-316-L	2	50.8
D54MP-3-316-L	2 1/2	63.5
D54MP-3-316-L	3	76.2
D54MP-4-316-L	4	101.6



TEE LINE STRAINER

Keep metal parts, gaskets, and other materials out of your pumps and process equipment with a Tee-line strainer assembly. Designed to provide the same open area as the line it is installed in, the Tee-line strainer will not appreciably increase line pressure, even with partial blockage due to objects in the liquid.

- 304 or 316 type stainless steel construction throughout
- Standard quick-clamp or bevel seat connections
- 5 fitting sizes available: 1 1/2", 2", 2 1/2", 3", or 4" diameter
- All-welded, pre-curved one-piece cap/insert assembly
- Choice of 1/4" standard or 1/8" hole perforations
- Economical, sturdy, sanitary CIP-able



Tee-Line Strainer Construction

- Cap/strainer insert assembly
- Gasket
- Quick-clamp
- Tee fitting



Description	Hole Size	Fitting Sizes - Prod. No.				
Tri-Clamp Fitting		1 1/2"	2"	2 1/2"	3"	4"
Complete Assembly 304 SS	1/8"	S10053	S10054	S10055	S10056	S10057
	1/4"	S10081	S10082	S10083	S10084	S10085
Complete Assembly 316 SS	1/8"	S10058	S10059	S10060	S10061	S10062
	1/4"	S10086	S10087	S10088	S10089	S10090
Insert only 316 SS	1/8"	740754	740755	740756	740757	740758
(Cap/Strainer)	1/4"	740759	740760	740761	740762	740763

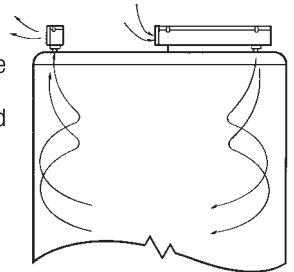
FOODLINE® TANK AIR PURIFICATION SYSTEM

WHAT IT DOES

Mounted on top of the storage tank, the air purifying unit draws outside air through the pliotron electrostatic filter to the ultraviolet light compartment. The U.V. radiation kills airborne micro-organisms, bacteria and mold spores.

An internal blower directs the filtered and purified air into the empty air space of the storage tank. The air is continuously circulated, replaced, and finally exhausted through a separate filtered vent located opposite the ultraviolet unit.

- 7" Electrostatic Filter
- Also available in 10" and 12", and with HEPA "Absolute" Filtration



AIR PURIFIER WITH UV LAMP - MODEL SC21

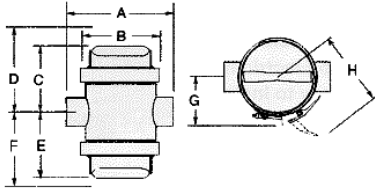
- Single 7.8" Electrostatic Filter
- Also available with 2, 4, or 8 lamps

Prod. No.	Description
STV-7	Tank Vent Only
SC 21	Air Purifier

CESCO MAGTRAPS

MAGTRAP MODEL 115

These USDA approved units are for high volume applications requiring gentle flow characteristics. The product flow is split by the internal baffle and diverted onto two flat plate magnets. Line sizes to 4". Water jackets are optional.



Magtrap Dimensions and Weights (inches/pounds)

Line Size	A	B	C	D	E	F	G	H	Weight
1.5"-2"	8.25*	7	4.8	5.3	4.8	5.3	5.3	8.7	27.8
2.5"-3"	10.25*	9	5.7	6.2	5.7	6.2	6	10	45.7
4"	10.25*	9	6.5	7	6.5	7	6	10	55

*Standard line connections only - others may vary.

Prod. No. Description

115-1 1/2	1 1/2" Tri-Clamp Magtrap
115-2	2" Tri-Clamp Magtrap
115-2 1/2	2 1/2" Tri-Clamp Magtrap
115-3	3" Tri-Clamp Magtrap
115-4	4" Tri-Clamp Magtrap

MAGTRAP MODEL 135

Our most popular and effective MAGTRAP has USDA approval. Designed for liquids and slurries with chunks up to 1/2". In the exploded view, the product flows from right-to-left through intense, multiple, magnetic fields generated by the protruding tubes. Trash is held on the tubes, until the unit is cleaned. Units to 2" line size have five tubes, while 2 1/2" to 4" line sizes have seven tubes. The removable base makes the unit easily accessible for cleaning. Water jackets are optional.



Magtrap Dimensions and Weights (inches/pounds)

Line Size	A	B	C	D	E	F	G	H	Weight
1.5"-2"	8.25*	7	4.4	8.5	4.4	4.9	5.3	8.7	23.4
2.5"-3"	10.25*	9	5.1	10.3	5.1	5.6	6	10	38.5
4"	10.25*	9	5.9	12.5	5.9	6.4	6	10	49.7

*Standard line connections only - others may vary.

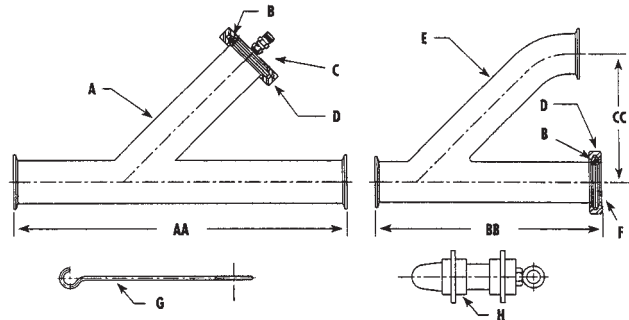
Prod. No. Description

135-1 1/2	1 1/2" Tri-Clamp Magtrap
135-2	2" Tri-Clamp Magtrap
135-2 1/2	2 1/2" Tri-Clamp Magtrap
135-3	3" Tri-Clamp Magtrap
135-4	4" Tri-Clamp Magtrap



LAGENCO PRODUCT RECOVERY SYSTEM

- Tube O.D. sizes 1 1/2" to 4"
- "Pig" will pass through elbows and tees
- Clamp connections
- Operates with air pressure
- Handles viscous products
- Type 316 stainless steel
- Recovers product otherwise lost
- Magnetic option for tracking "pig"
- Chase product or CIP solution from your lines
- Pays for itself in days through saved product and reduced sewage/waste
- Ask about the "check valve launcher" for total sanitary application



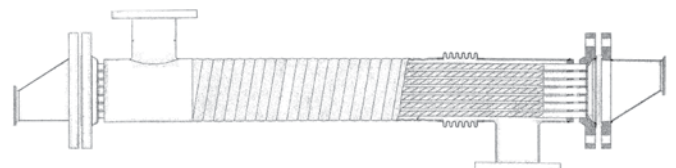
Detail Description

A	Catcher Body
B	Gasket
C	Purge valve assembly
D	Clamp
E	Launcher assembly
F	Air inlet
G	Retriever handle
H	Pig assembly

Part No.	Size	AA	BB	CC
1292-6B, -6V, -MB	1 1/2"	11 11/16"	8 5/16"	5 1/16"
1293-6B, -6V, -MB	2"	13 13/16"	10 3/8"	5 29/32"
1294-6B, -6V, -MB	2 1/2"	16"	11 21/32"	7 3/32"
1295-6B, -6V, -MB	3"	18 1/4"	12 15/32"	7 9/16"
1296-6B, -6V, -MB	4"	20 1/2"	13 5/8"	9 11/32"

SANITARY TUBULAR HEAT EXCHANGER

- 3A approved ASME VIII, DIV1
- Teflon gaskets
- 304L on 316L stainless steel
- Steel welded tube-tube sheet joints



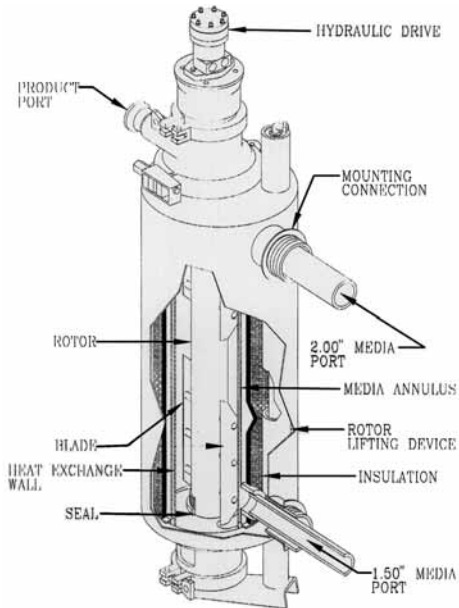
Prod. No.

BEUB Sanitary Tubular Heat Exchanger

CONTHERM BY ALFA LAVAL

The CONTHERM® Scraped Surface Heat Exchanger is widely used within the processed foods, pharmaceuticals, and cosmetics industries. The product applications for the CONTHERM® fall into four major categories:

1. Heating and cooling viscous products that would normally form a film on heat transfer surfaces.
2. Crystallization of products.
3. Heating and cooling products containing discrete particles.
4. Cooling liquids in which a change of state may be anticipated, such as in slush freezing.



Standard CONTHERM™ Scraped Surface Heat Exchanger (SSHE)

**CALL OUR SYSTEMS ENGINEERING GROUP FOR QUOTATIONS.
COMPONENTS FOR THESE UNITS ARE IN STOCK.**



BASE LINE PLATE HEAT EXCHANGER - PROCESS & UTILITY DUTY HEAT TRANSFER

FRONT LINE PLATE HEAT EXCHANGER SANITARY HEAT TRANSFER

M-LINE PLATE HEAT EXCHANGER MID-PRICE SANITARY HEAT TRANSFER

APPLICATION

Pasteurization and general cooling/heating in dairy and brewery products, fruit juices and similar food products.

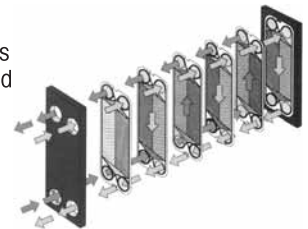
DESIGN

The heat exchanger consists of a number of corrugated plates clamped together in a frame and sealed at the edges by means of gaskets. The plates have ports at the corners and the gaskets are so arranged that the two media flow through alternate passages between the plates. The two media are separated by the plates and cannot be mixed. Heat is transferred through the plates, from the hot medium to the cold.

PLATE

The corrugation of the plates provides a passage between the plates, supports each plate against the adjacent one and enhances the turbulence, resulting in efficient heat transfer.

The plates are reversible and have parallel flow, which means only one type of plate is needed.



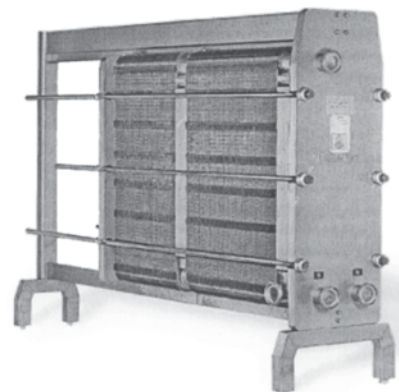
Flow principle of a plate heat exchanger

GASKET

The plates are supplied with glue-free Clip-On gaskets, which are easy to replace.

No tools are needed to replace the gaskets.

- Flow, End, and Port Gaskets in stock
- Gaskets, Plates, and complementary equipment available for Alfa Laval, APV, and WCB Heat Exchangers



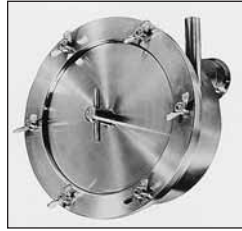


**accurate
metering
systems, inc.**

FLOWMETERS AND BATCH CONTROLLERS

POSITIVE DISPLACEMENT FLOWMETER

Designed for maintenance-free performance, the positive displacement flowmeter has only one moving part. As liquid flows through the measuring chamber, it causes the piston to rotate. Each rotation of the piston displaces a precise volume of liquid. A solid state electronic transducer counts the piston rotations. A positive displacement flowmeter measures volume, unlike other inferential type meters. As a result the meter achieves unmatched accuracy of $\pm 0.15\%$ over the entire flow range.



METER FLOW RANGES

Part No.	Meter Size	Sanitary Clamp Connection	Water (1cps)	Typical Flow Ranges in GPM				
				Fluid Milk (10 cps)	Light Oils (100 cps)	HFCS-55 (450 cps)	Corn Syrup (5000 cps)	
RZ-0A	3/4"	1"	0.25-2.5	0.2-2.5	0.2-2.2	0.1-1.5	0.1-1.0	
RZ-1A	1 1/2"	1 1/2"	1.6-16	1.5-15	1.2-12	1.0-10	.05-5	
RZ-2A	2"	2"	20-120	10-110	5-100	5-90	2-25	
RZ-3A	3"	3"	20-315	20-300	15-280	10-200	5-70	

TURBINE FLOWMETER

Designed as an accurate and economical flowmeter for clean non-viscous liquids of 100 cps or less, the turbine flowmeter efficiently handles aggressive and corrosive products such as acids, caustics, vinegar solutions, brine and de-ionized water. As liquid flows through the meter, it causes the rotor to spin. An external non-contact pick-up probe counts each passing vane of the rotor as it spins. Each revolution of the rotor equates to a volume of liquid.



Prod. No. Description

HM-075 S	3/4" Sanitary Clamp Connection
HM-100 S	1" Sanitary Clamp Connection
HM-150 S	1 1/2" Sanitary Clamp Connection
HM-200 S	2" Sanitary Clamp Connection

NOTE: Cable, Pickup Probe, and Display sold separately.

"HT" OPTICAL TRANSITION SENSOR

This device has an optical sensor that sends a beam of light into a passing product. Unit then measures the backscatter produced by suspended solids. Resulting degree of light scatter is converted to output signal.



- 4-20mA signal calibrated at 4mA=water and 20mA=white standard
- One unit with transmitting beam, and receiver—no need for any other parts
- Three additional points provided on Calibration Document

DESCRIPTION CODE HT 0

1 2

1. Fitting

005 - 2" Tri-Clamp	006 - 2.5" Tri-Clamp	007 - 3" Tri-Clamp
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2. Cable Length

00 - None	10 - 10m (32.8')	30 - 30m (98.4')
05 - 5m (16.4')	15 - 15m (49.2')	

ELECTROMAGNETIC FLOWMETER

Designed specifically for the dairy, food and beverage industries, the electromagnetic flowmeter carries a 3-A symbol and complies with all USDA sanitary standards. This electronics based digital electromagnetic flowmeter, with an obstructionless flow tube, is ideal for all conductive fluids and slurries. Measurement accuracy and performance are unaffected by suspended solids, particulates, product viscosity, density, specific gravity or temperature.



METER FLOW RANGES

Meter Size in	Sanitary Clamp Connection (mm)	IZMS Standard Flow Range 1	Flow Range 2	Flow Range 3	Flow Range 4	Flow Range 5
5/8"	15	1"	0.15-1.5	0.3-3	0.6-6	1.2-12
1 1/4"	32	1 1/2"	0.7-7	1.5-15	3-30	6-60
2"	50	2"	1.6-16	3.2-32	6.4-64	13-128
3"	80	3"	5-50	10-100	20-200	40-400
						80-800

Accuracy of $\pm 0.8\%$ or better for Flow Range 1.

Accuracy of $\pm 0.5\%$ or better for Flow Range 2.

Accuracy of $\pm 0.25\%$ or better for Flow Range 3, 4, and 5.

Repeatability $\pm 0.10\%$.

Prod. No. Size Connection

IZMS 15*	5/8"	1"
IZMS 32*	1 1/4"	1 1/2"
IZMS 50*	2"	2"
IZMS 80*	3"	3"

*To order converter with digital display and keypad add "D" to Product Number, otherwise a Non-display converter will be ordered.

Standard cable length supplied with Flowmeter is 25 feet. Requirements for longer cables should be discussed with factory at time of order.

SERVICE TERMINAL (MSD)

This service terminal is offered as an accessory to provide temporary access to the operational software within the IZMS converter. The service terminal is a useful tool for configuration, start-up and troubleshooting IZMS flowmeters that do not make use of a converter with integral display. Process variables such as flow total and flow rate can be observed directly.



Prod. No. Description

MSD	IZMS Service Terminal (hand held)
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BATCH CONTROLLER

The BC-104 is a stand alone batch controller with analog input and capability, control inputs, and additional relay and analog outputs. Features include multi-line display, 5 relay outputs and RS232 and RS485 communication ports. Standard panel mount si NEMA 4X. Can be orderd with NAMA 4X wall mount stainless steel enclosure. Solenoid available in wall mount only.



Prod. No. Description

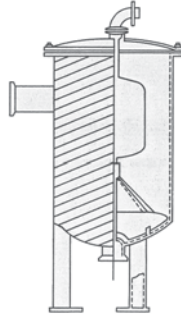
BC104P	Batch Controller, panel mount
BC104E	Batch Controller, stainless steel NEMA 4X enclosure
BC104S	Batch Controller, stainless steel NEMA 4X enclosure and solenoid

ACCURATE METERING SYSTEMS ANCILLARY EQUIPMENT

AIR ELIMINATOR

A simple and proven way of removing free air from liquids assures accurate metering and protects flowmeters from hydraulic shock. Its rugged construction provides trouble-free operation and is CIP cleanable. Eliminates air by slowing down the flow of the liquid to allow time for the air to rise to the surface, while at the same time generating a strong rotation of the liquid so that the centrifugal forces generated help move the heavier liquid away from the lighter air.

- Buffers hydraulic line shocks
- Rugged construction
- Easy installation
- Trouble free operation
- CIP cleanable
- Provides protection for meters
- Assures accurate metering



OPERATION

The liquid enters the unit through the port on the side of the tank. This entry is in a tangential manner so that the fluid flows around the interior wall to the bottom of the air eliminator while the air escapes to the center of the tank. When enough air has collected, the float will drop and the air will escape through the air vent in the top. The float guide on the bottom of the tank is so arranged that only liquid flowing along the interior wall (free from air) reaches the outlet.

SPECIFICATIONS

Flowrates: Up to 300 GPM. Maximum Pressure: 65 psi.
Construction: 304 Stainless Steel

Prod. No.	Description
AE-201	Air Eliminator - 2" sanitary clamp connection
AE-301	Air Eliminator - 3" sanitary clamp connection

BREDDO LIKWIFIERS

Dissolve and disperse viscous solids and semi-solids in less than 5 minutes. We can custom design 10 to 1,600 gallon capacity Likwifiers to meet your specific operation.

DESIGN

The BREDDO Likwifier is designed to dissolve solids or semi-solids where time, temperature and complete hydration are important. Originally developed to dissolve natural gums and synthetic thickeners used in the manufacture of frozen desserts, the Likwifier dissolves and disperses virtually any food product more efficiently and completely than any other system available. The unit will put into solution, not just suspension, products that can be dissolved by agitation. The benefits of the BREDDO Likwifier include dissolving soluble products in less than 5 minutes, complete hydration, total product liquefaction, elimination of solid "burn-on" in the vat, elimination of waste at strainers and tank bottoms and the complete dispersement of insoluble particles in water or non-aqueous media.

Gaskets and Seal Kits available from stock



Prod. No.	Description
87010000	Seal Kit

TANK COMPONENTS

We have agitator and door components for most models of sanitary tanks. These include the standard removable agitators or the CIP-able agitators for Walker, Feldmeier, Cherry Burrell, DCI, Damrow, Paul Mueller, Crepaco, Heil, Breddo (Lanco), and Chicago Stainless Units.

WALKER SILO TANKS AND PROCESSORS

Walker tanks are constructed of durable stainless steel and provide dependable, economical product storage and processing. When space saving exterior installation is desired, only the control alcove projects through the building wall providing considerable versatility with respect to tank placement. All Walker silo tanks feature a unique venting system which prevents damage from overfilling and insures positive cleaning in place. Processors offer heating and cooling jackets with ASME rating and CIP ability.

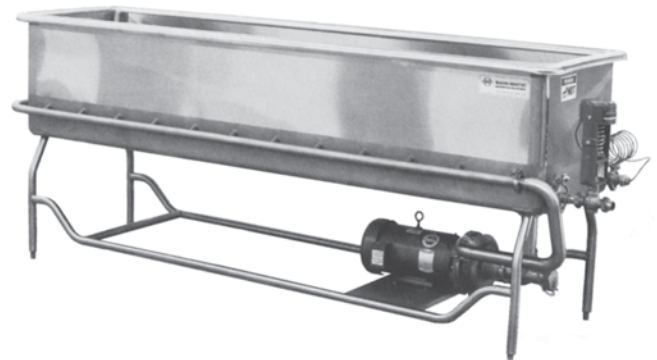


PLEASE CALL OUR ENGINEERING TEAM FOR A QUOTATION.

SANITARY C.O.P. TANK - MODEL RJW

Choose options below:

- Push-pull cleaning
- Dual or quad side jet cleaning
- Direct steam injection or shell & tube heating
- Pipe rack
- Drain Board
- 6' or 10' standard lengths
- Power brush with motor
- Alfa Laval pump included



Prod. No.	Description
RJW	Sanitary C.O.P. Tank

MODEL 20 SAMPLING VALVE

Key No.	Description	3/4"	1 1/2"	2"	2 1/2"	3"
1	Spindle -	9611-25-2176	9611-25-2176	9611-25-2176	9611-25-2176	9611-25-2176
2	O-ring, NBR	9611-99-0026	9611-99-0026	9611-99-0026	9611-99-0026	9611-99-0026
3	Valve Body	N/A	N/A	N/A	N/A	N/A
4	Fiber Seal	32249-0018-1	32249-0018-1	32249-0018-1	32249-0018-1	32249-0018-1
5	Sampling Valve type 20 / GC	882-27288	882-24965	882-27289	882-31402	881-307838

Part No.	Description
31350-0020-1	Industrial Sampling Valve, 20
31350-0020-2	Sanitary Sampling Valve, 20

A30S SAMPLING VALVE

The A30S sampling valve is available with a Tri-Clamp or plain bevel seat connection, designed to connect directly to a port in the side of a tank. The sample is taken with a simple press of the spring return manual actuator. Available models include 1 1/2" and 2" versions with a Buna plug.



Part No.	Description
A30SMP-1 1/2-316L	1 1/2" Tri-Clamp
A30SMP-2-316L	2" Tri-Clamp

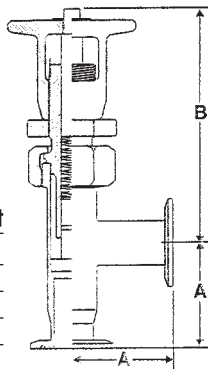
D60 RELIEF VALVE

- Available in 1" and 3" sizes
- Tri-Clamp ends have metal seats
- Valve body material made of 316 stainless steel
- T-body only

Sizes and Dimensions in Inches

Size	A	B min	B max	Weight
1	2 3/8	5 3/8	6 1/2	1.88
1 1/2	2 3/4	7 3/8	9	3.99
2	3 1/2	7 5/8	9 5/8	5.49
2 1/2	3 1/2	9 7/8	12	8.56
3	3 3/4	11 1/8	13 7/8	12.13

Material: 316L Stainless Steel
(Hex Union Nut is 304 S.S) End Connection: Tri-Clamp



Product No.	Description
D60RTHMP-SIZE-316	Relief Valve with metal seat

Relief spring ranges vary. Please specify process pressure when ordering.

SMO - SANITARY MANUALLY OPERATED VALVE

- Basic design with few moving parts
- Hand crank operation allows valve to be opened gradually
- Stainless steel construction (product-wetted parts, 316L)
- Authorized to carry the 3A symbol
- Available with locking handwheel crank as option



Part No.
SMO-GC-SIZE-316L

PLUG VALVES

Plug valves are designed for low pressure and temperature applications (less than 25 psig, maximum 100°F). They're suited for use with non-hazardous products and are subject to leakage due to normal operating and cleaning procedures (COP - "Clean Out of Place"). All Plug Valves are available in 1 1/2", 2", 2 1/2" and 3" Tube OD.

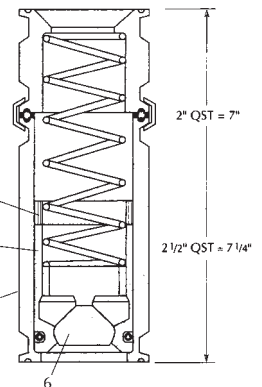


Part No.	Description
D10MPR-SIZE-S	304 or 316L SS, 2-way Plug Valve, Tri-Clamp connection, rubber plug
D10MP-SIZE-S	304 or 316L SS, 2-way Plug Valve, Tri-Clamp connection, metal plug
D11MPR-SIZE-S	304 or 316L SS, 3-way Plug Valve, Tri-Clamp connection, rubber plug
D11MP-SIZE-S	304 or 316L SS, 3-way Plug Valve, Tri-Clamp connection, metal plug
DL10WW-SIZE-S	304 SS, 2-way Plug Valve, Butt Weld connection, metal plug
DL10WWR-SIZE-S	304 SS, 2-way Plug Valve, Butt Weld connection, rubber plug
DL11WWW-SIZE-S	304 SS, 3-way Plug Valve, Butt Weld connection, rubber plug
DL11WWW-SIZE-S	304 SS, 3-way Plug Valve, Butt Weld connection, metal plug

QST PRESSURE RELIEF VALVE

HOW THE QST WORKS:

The sleeve (7) telescopes into the body (9) under increasing line pressure. When the pressure setting ring (4) contacts the body's inside shoulder at (2), the valve has reached its pre-set pressure. Any additional pressure will open the Plug (6), relieving the excess pressure. The Plug resets itself after sufficient pressure has been relieved.



Part No.	Description
20QSTTC	2" QST, Tri-Clamp
25QSTTC	2 1/2" QST, Tri-Clamp

MACHINERY AND EQUIPMENT

VACUUM BREAKERS

Models A49-42 and B44MP vacuum breakers are designed for line service only. They are not intended for use on tanks and vessels. Their typical application is at the high point of an HTST system to prevent siphon or back flow in the system.



Prod. No. Description

B44MP-SIZE-316	Vacuum Breaker (left) 1 1/2" and 2"
A4942-2-316	Vacuum Breaker (right) 2" only

GHVB AUTOMATIC VACUUM BREAKER

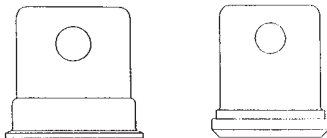
Model GHVB air-operated vacuum breaker is used to eliminate vacuum on the down stream side of the pasteurizer in an HTST system. It is truly CIP-able, needing only one air connection for CIP control. The GHVB Vacuum Breaker consists of a body which is clamped together with a base. Both have clamp connections for pipeline connection and air intake/CIP discharge. An air cylinder is fitted on the body. The air cylinder is connected to a plunger which opens the vacuum breaker (ball) during CIP. The ball is seated inside the base.



Part No. Description

343000	1 1/2" Tri-Clamp Only
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SPVAC & VAC – VACUUM BREAKERS



Product No.

Description

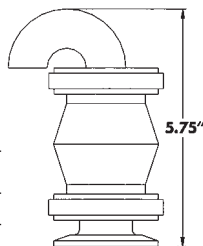
SPVAC-2	Bevel Seat Vacuum Breaker
SPVAC-2TC	Tri-Clamp Vacuum Breaker

AIR RELIEF VALVE

Available in 304 or 316 stainless steel. Sizes 1 1/2" or 2".

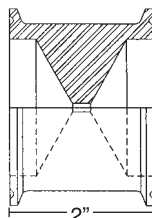
Product No. Description

SP60ARV-SIZE	Air Relief Valve
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PIPELINE ORIFICE

Supplied with 1/8" diameter hole as standard. Sizes Available: 1" - 4" Tri-Clamp

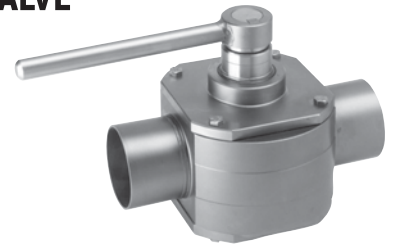


Product No. Description

SP484-SIZE	Line Orifice
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KOLTEK SHUTTER VALVE

The Koltek shutter valve is a manually or pneumatically operated valve, designed for use in the food, chemical, pharmaceutical and other industries where sanitary designs are required. Koltek valves meet 3A standards and are USDA-approved for dairy, meat and poultry plants.



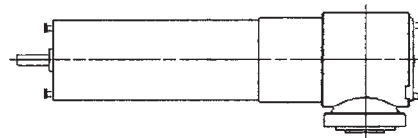
- Manually or pneumatically operated, these self-draining valves allow for multi-directional flow of product
- Available in 1", 1 1/2", 2", 2 1/2", 3" and 4" valves
- Air Actuator available in 2 or 3 positions, Air to Air, or Air to Spring
- An internal shutter closes ports progressively to help minimize pressure shock and stress
- Available with 2- or 3-port connections at the same level
- CIP-able in automated systems
- Authorized to carry the 3A symbol

Part No.

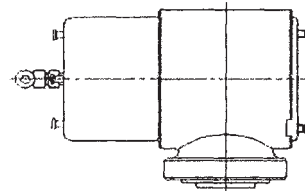
Description

AH10-GC-POL-SIZE	3P polished, 2-way, Tri-Clamp connection
AH10-W-POL-SIZE	3P polished, 2-way, Butt Weld connection
AH11-GC-POL-SIZE	3P polished, 3-way, Tri-Clamp connection
AH11-W-POL-SIZE	3P polished, 3-way, Butt Weld connection

KOLTEK VALVE ACTUATORS



KH630



KH631

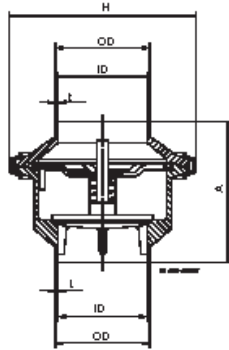
Part No. Description

KH630	Air-to-Air
KH631	Air-to-Spring

Other options available.

CHECK VALVES

LKC disc check valves are engineered exclusively for use in stainless steel pipe installations to prevent reverse flow. Their precise design and durable build make them reliable, high-performance valves for a variety of applications.



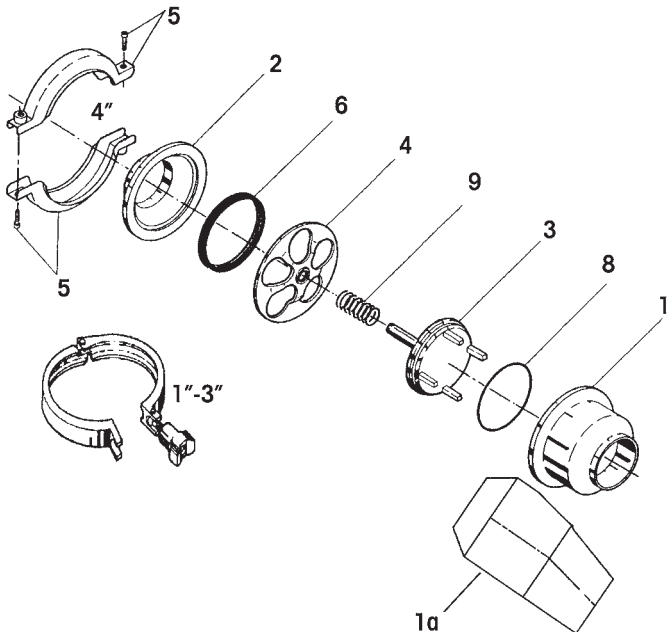
LKC-2 CHECK VALVE

TYPE LKC-2 VERTICAL

TYPE LKC-2 HORIZONTAL

Vertical LKC- 2

Size	1"	1.5"	2"	2.5"	3"	4"
A	2.46	2.95	3.44	3.74	4.53	6.10
OD	1.00	1.50	2.00	2.50	3.00	4.00
ID	0.89	1.40	1.91	2.38	2.83	3.84
†	0.06	0.06	0.06	0.07	0.09	0.09
H	3.23	3.75	4.29	5.39	5.83	6.46
Weight (lbs.)	1.1	1.5	2.2	3.8	5.3	9.5



Complete Valves

Prod. No.	Size	Material	Type
881-26-175	1"	304SS	Vertical Tri-Clamp
881-26-088	1 1/2"	304SS	Vertical Tri-Clamp
881-26-176	2"	304SS	Vertical Tri-Clamp
881-26-177	2 1/2"	304SS	Vertical Tri-Clamp
881-26-178	3"	304SS	Vertical Tri-Clamp
881-26-179	4"	304SS	Vertical Tri-Clamp
881-26-183	1"	316SS	Vertical Tri-Clamp
881-26-107	1 1/2"	316SS	Vertical Tri-Clamp
881-26-184	2"	316SS	Vertical Tri-Clamp
881-26-185	2 1/2"	316SS	Vertical Tri-Clamp
881-26-186	3"	316SS	Vertical Tri-Clamp
881-26-187	4"	316SS	Vertical Tri-Clamp
882-31-011	1"	316SS	Horizontal Tri-Clamp
882-31-012	1 1/2"	316SS	Horizontal Tri-Clamp
882-31-013	2"	316SS	Horizontal Tri-Clamp
882-34-480	2 1/2"	316SS	Horizontal Tri-Clamp
882-34-425	3"	316SS	Horizontal Tri-Clamp

Check Valve Components

Component Prod. No.	Size	Description
9611-99-1778	1"	Spring (#9)
9611-99-1779	1 1/2"	Spring (#9)
9611-99-1780	2"	Spring (#9)
9611-99-1781	2 1/2"	Spring (#9)
9611-99-1782	3"	Spring (#9)
9611-99-1783	4"	Spring (#9)
9611-25-3150	1"	EPDM Seal Ring (#6)
9611-25-3151	1 1/2"	EPDM Seal Ring (#6)
9611-25-3152	2"	EPDM Seal Ring (#6)
9611-25-3153	2 1/2"	EPDM Seal Ring (#6)
9611-25-3154	3"	EPDM Seal Ring (#6)
9611-25-3155	4"	EPDM Seal Ring (#6)
9611-99-0063	1"	EPDM O Ring (#8)
9611-99-0015	1 1/2"	EPDM O Ring (#8)
9611-99-0064	2"	EPDM O Ring (#8)
9611-99-0065	2 1/2"	EPDM O Ring (#8)
9611-99-0066	3"	EPDM O Ring (#8)
9611-99-0067	4"	EPDM O Ring (#8)
9611-25-3820	1"	Viton Seal Ring (#6)
9611-25-3821	1 1/2"	Viton Seal Ring (#6)
9611-25-3822	2"	Viton Seal Ring (#6)
9611-25-3823	2 1/2"	Viton Seal Ring (#6)
9611-25-3824	3"	Viton Seal Ring (#6)
9611-25-3825	4"	Viton Seal Ring (#6)
9611-99-1417	1"	Viton O Ring (#8)
9611-99-1418	1 1/2"	Viton O Ring (#8)
9611-99-1419	2"	Viton O Ring (#8)
9611-99-1420	2 1/2"	Viton O Ring (#8)
9611-99-1421	3"	Viton O Ring (#8)
9611-99-1422	4"	Viton O Ring (#8)

MACHINERY AND EQUIPMENT

BALL CHECK VALVE

Model 45BYMP ball check valve is available in 1 1/2" to 3" sizes with molded Buna-N, Viton or a solid Nylon ball. Body design allows full flow and can be used in conjunction with air blow check valve.

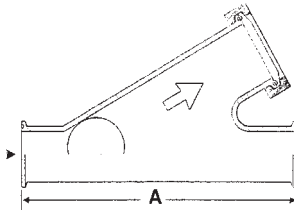


Part No.	Description
45BYMP-SIZE-316L*	Tri-Clamp Ball Check Valve
L45BYWW-SIZE-316L*	Butt Weld Ball Check Valve

*Specify Buna, Nylon or Viton

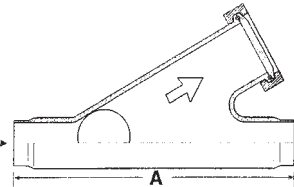
45BYMP - TRI-CLAMP

Size and Weight		
O.D. in	A in	Weight lbs
1 1/2	8 14/32	3.00
2	10 3/32	3.25
2 1/2	11 1/2	7.69
3	12 3/8	10.14



L45BYWW - TRI-CLAMP

Size and Weight		
O.D. in	A in	Weight lbs
1 1/2	8 7/8	3.99
2	10 1/2	5.49
2 1/2	12 13/16	8.56
3	13 11/16	12.13

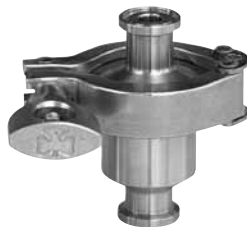


45BY REPLACEMENT BALLS

Tube O.D. Size	Ball Size
1 1/2	1 5/8
2	2 1/8
2 1/2	3 1/2
3	4 1/8

FRACTIONAL CHECK VALVE

Check valve is available with 316 SS ball or with PTFE plug/spring loaded 3/4" - (19mm) size approx. 1.5 PSI (0.1 BAR) relief pressure on both plug and ball, 1/2" - (12.7mm) size approx. 3 PSI (0.2 BAR)



Part No.	Description
C45MP-SIZE-316L*	Ball Check Valve - Specify 1/2" or 3/4"
C45MPS-SIZE-316L	Spring Check Valve - Specify 1/2" or 3/4"

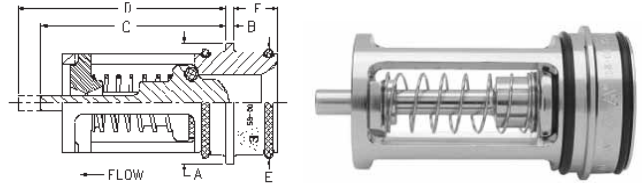
*C45MP (316SS Ball) for vertical application only

CHECK-ALL SANITARY CHECK VALVE

INSERT SERIES - STYLE 3SC

The 3-A Sanitary Check Valve is an all 316 stainless steel check valve for use in new or existing sanitary systems. The 3SC design seals on the ID of sanitary ferrules with 3-A specified materials (standard is EPDM). The valve seals inside fittings such as Tri-Clover® Bevel Seat and Tri-Clamp®.

The compact 3SC design fits inside a single set of ferrules, and requires no additional space in the line. The insert design makes it extremely economical when compared to full-bodied valves.



Pipe Size	Orifice Diameter	A	B	C	D	E	F*
1	0.475	1	1/16	1.72	2.15	0.375	0.870
1 1/2	0.890	1 1/2	1/16	2.54	3.47	0.375	1.370
2	1.135	2	1/16	3.04	4.11	0.469	1.870
2 1/2	1.595	2 1/2	1/16	3.28	4.60	0.469	2.370
3	2.633	3	1/16	4.04	5.52	0.469	2.870
4	2.699	4	1/16	4.73	6.28	.469	3.834

*Valves are designed to function with fittings having these internal diameters.

AIR BLOW CHECK VALVE

Our air blow check valve is designed to evacuate lines of product or CIP solution, and for air agitation of product in tanks and other vessels. Air drying of lines permits formation of protective oxide film: the key to placing a system in its most corrosion-resistant condition. Thus, the air agitation thoroughly mixes and blends product to improve product uniformity and quality.



Part No.

62-174RA -SIZE-316L	1 1/2" - 4 1/2" Tri-Clamp, 1600 C.F.M.
62-174RB -SIZE-316L	1 1/2" - 4 1/2" Tri-Clamp, 1600 C.F.M.
62-174RC -SIZE-316L	1 1/2" - 4 1/2" Tri-Clamp, 1600 C.F.M.
62-326RA -SIZE-316	2" - 4 1/2" Tri-Clamp, 4000 C.F.M.
62-326RB -SIZE-316	2" - 4 1/2" Tri-Clamp, 4000 C.F.M.
62-326RC -SIZE-316	2" - 4 1/2" Tri-Clamp, 4000 C.F.M.

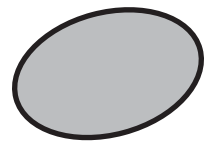
A = Quick disconnect plug

B = Hose barb, specify hose ID

C = Pipe thread, female, specify size

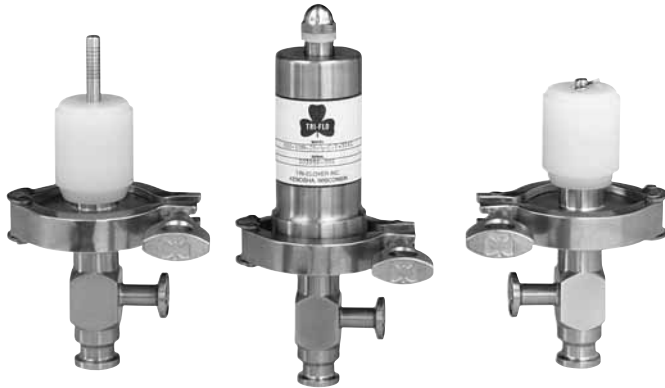
FILTER DISC

Disposable Air Filter Media for Air-Blow Check Valves



Product No.	Description
FA-1 1/2-30C	1 1/2" - 0.3 Micron for Model 62-174R (Pkg. of 50)
FA-2-30C	2" - 0.3 Micron for Model 62-326 (Pkg. of 50)

FRACTIONAL VALVES

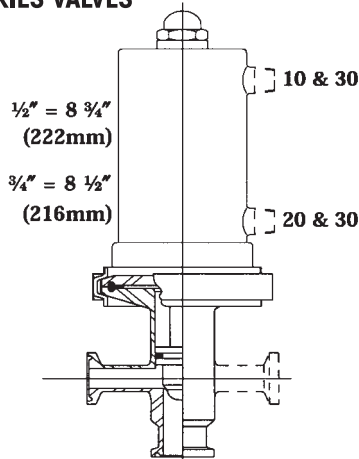


STANDARD DESIGN, 650 SERIES VALVES

The Tri-Clover® range of fractional valves has been designed for applications requiring a secure, sanitary or sterile environment within the food, beverage, pharmaceutical, cosmetic or biotechnology processing industries.

Actuator Air Supply Specifications:

- Air pressure range is 50-60 PSI (3.5-4.1 BAR)
- Air volume required at 50 PSI Normally Closed 1 3/4 cu. in. Normally Open 2 3/4 cu. in.
- Effective operating area is 2.19 sq. inches
- Filtered air and a pressure regulator are recommended
- Lubricated air is not required



Series 650 Air-Actuated Valve
650-30M-Actuator (cross body)



660 FRACTIONAL SAMPLING VALVE

Our 660 model sampling valve has a 1/2" Tri-Clamp connection and a 1/4" hose or 1/2" Tri-Clamp outlet. It also features a PTFE plug.

Part No.	Description
660-10-40HN-1/2x1/4-C-316L	Tri-Clamp x Hose Barb
660-10M-40HN-1/2x1/2-C-316L	Tri-Clamp x Tri-Clamp

650 SERIES VALVES ORDERING DESCRIPTION CODE

1	2	3	4	5	6	7	8

1. Valve Series

650 - Shut-Off/Manual	550 - Aseptic
655- Divert	555 - Aseptic

2. Body Style

Series 650	Series 655
10M - Tee	21M - Tee
30M - Cross	

3. Actuator Type

Air Actuated	Manual
(Air to Close/Spring to Open)	R40 - Relief
10 - No Switch	40 - Shut-off
13 - Microswitch	40BR - Optional Aluminum Bronze Handle
17 - Proximity Switch	
(Air to Open/Spring to Close)	
20 - No Switch	
23 - Microswitch	
27 - Proximity Switch	
(Air Both Ways)	
30 - No Switch	
33 - Microswitch	
37 - Proximity Switch	

4. Port Size - Tube O.D.

1/2" (12.7mm)	3/4" (19.0mm)
---------------	---------------

5. Seat

Series 650	Series 655
A - PTFE Lip Seal	A - Buna N plug
B - SFY Fluoroelastomer Lip Seal	B - Fluoroelastomer Plug Std.
C - PTFE Plug with O-Ring	C - EPDM Plug
	D - EPDM Sulfur Free Plug

6. Gasket/O-Ring Material

Y - SFY Fluoroelastomer	E - EPDM
U - Buna N	ES - EPDM Sulphur Free

7. Material

316L

8. Finish

- - 20 (0.5) Ra ID, Glass Beaded OD
PL - 20 (0.5) Ra ID, 32 (0.8) Ra OD
PM - 15 (0.4) Ra E/P ID, 32 (0.8) Ra OD
PP - 15 (0.4) Ra ID, 32 (0.8) Ra OD
PR - 10 (0.2) Ra E/P ID, 32 (0.8) Ra OD



MACHINERY AND EQUIPMENT

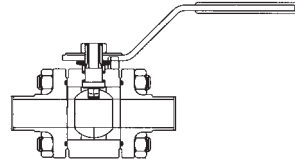
BALL VALVES

Designed by our processing specialists, corrosion- and contaminant-resistant Tri-Clover® Ball Valves have earned an enviable reputation for rugged dependability. They provide leak-proof operation, and they are easy to install.



Tri-Clamp® Ends Model 5308

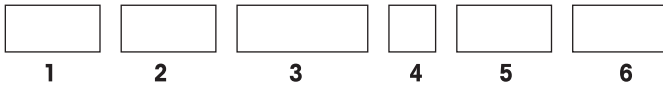
Our Tri-Clamp and Butt-Weld Valves put quality and reliability into your process. Full flow body design minimizes line turbulence and pressure drop. An optional encapsulated seat reduces the threat of product entrapment on critical process applications.



Butt-Weld Ends Model 5309

MANUAL AND SPECIALTY VALVES DESCRIPTION CODE

Standard Seat and Encapsulated Seat. These kits contain body seat, body O-rings, packing and stem seal.



1. Base Part Number

- 5308 - Tri-Clamp Ball Valve (1/2" - 4" sizes)
- 5309 - Butt-Weld Ball Valve (1/2" - 2" sizes)

NOTE: For electric and pneumatic actuators add "1" to Base Part Number

2. Seat Material

- 0718 - Standard PTFE Seat*
- 0818 - Encapsulated PTFE Seat*
- 3218 - Reinforced (glass filled) Encapsulated PTFE Seat**
- * For actuated valves, drop the "18" from the part number (e.g. use "07" for Standard PTFE Seat)
- ** All reinforced (glass filled) seats have vent hole in ball

3. Actuator

ELECTRIC, NEMA 4*

- EM30012 - 1/2", 3/4", 1" (12.7, 19.0, 25.4mm), 120V Nema 4
- EM31212 - 1 1/2", 2" (38.1, 50.8mm), 120V Nema 4/7
- EM51012 - 3", 4" (76.2, 101.6mm), 120V Nema4
- EM30022 - 1/2", 3/4", 1" (12.7, 19.0, 25.4mm), 220V Nema 4
- EM31222 - 1 1/2", 2" (38.1, 50.8mm), 220V Nema 4/7
- EM51022 - 3", 4" (76.2, 101.6mm), 220V Nema4
- * NEMA 7 also available



PNEUMATIC ACTUATOR/STAINLESS STEEL

- SAA2000 - 1/2", 3/4", 1", 1 1/2" (12.7, 19.0, 25.4, 38.1mm), Air-to-Air
- SAA5200 - 2" (50.8mm), Air-to-Air
- SAA1030 - 3", 4" (76.2, 101.6mm), Air-to-Air
- SSR2004 - 1/2" (12.7mm), Air-to-Spring
- SSR5204 - 3/4", 1", 1 1/2" (19.0, 25.4, 38.1mm), Air-to-Spring
- SSR1034 - 2" (50.8mm), Air-to-Spring
- SSR2954 - 3", 4" (76.2, 101.6mm), Air-to-Spring

PNEUMATIC ACTUATOR/ALUMINUM

- AA2000 - 1/2", 3/4", 1", 1 1/2" (12.7, 19.0, 25.4, 38.1mm), Air-to-Air
- AA3000 - 2" (50.8mm), Air-to-Air
- AA1030 - 3", 4" (76.2, 101.6mm), Air-to-Air
- SR2004 - 1/2" (12.7mm), Air-to-Spring
- SR3004 - 3/4", 1" (19.0, 25.4mm), Air-to-Spring
- SR5204 - 1 1/2" (38.1mm), Air-to-Spring
- SR7304 - 2" (50.8mm), Air-to-Spring
- SR2954 - 3", 4" (76.2, 101.6mm), Air-to-Spring

4. End Connection Size

- | | |
|-----------------|--------------|
| 1/2" (12.7mm) | 2" (50.8mm) |
| 3/4" (19.0mm) | 3" (76.2mm) |
| 1" (25.4mm) | 4" (101.6mm) |
| 1 1/2" (38.1mm) | |

5. Valve Material

316L

6. Position Indication and Solenoid Options

BASIC SWITCH ENCLOSURE

- G - NEMA 4, Enclosure (Standard)
- X - NEMA 4, 4X, 7 & 9 Enclosure
- P- NEMA 4 & 4X Enclosure

COVER

- 1 - Flat Cover - No Position Indication
- 2 - Position Indicating Dome

SWITCHES

- 0 - None
- 1 - (2) SPDT Mechanical Contact
- 2 - (4) SPDT Mechanical Contact
- 4 - (2) SPST Proximity Sensor
- 6 - (24) SPST Proximity Sensor

STANDARD SOLENOID VALVES

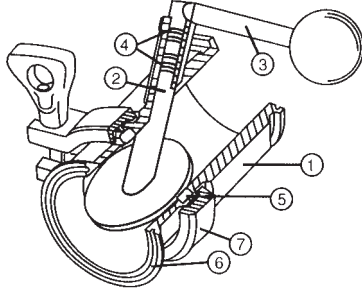
4/7 110VAC	4/7 220 VAC	4/7 24VDC	4/7 24VDC	NEMA Rating Voltage Rating
A	B	J	K	3 Way
C				3 Way w/Flow Control
E				4 Way
O				None

MANUAL VALVES LUMACO MINIDISC VALVE

The superb simplicity of disc meeting shaft at 45° means the seat is unpierced, for the purest of product integrity. The 180° rotation angles the disc cleanly through the product flow so the valve opens without resistance and stays in place. Half a turn of the valve handle provides quick, positive, leak-free shutoff. An "OPEN-CLOSE" mylar label indicates the status at a glance. A simple twist of the accessory lock-handle transforms the MINIDISC® into a regulating valve, locking firmly into any desired position.



1. Valve Body
2. Disc & Stem
3. Handle with Knob
4. Stem "O" Ring (2)
5. Seat
6. Ferrule Adapter
7. Heavy-Duty Clamp



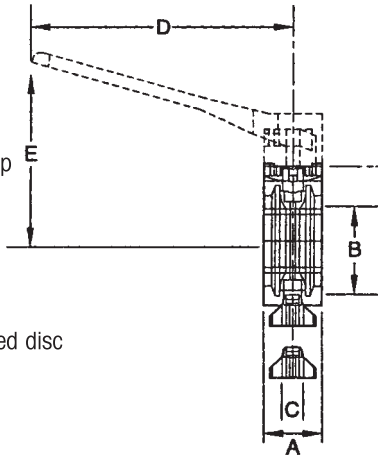
Part No.	Description
LU.D7-WW	Both ends weld
LU.D7	Inlet weld, outlet clamp
LU.D7-R	Inlet weld, outlet threaded
LU.D7-MP	Both ends clamp
LU.D7-RR	Both ends threaded
LU.D7-MP-R	Inlet threaded, outlet clamp
LU.D7-R-MP	Inlet clamp, outlet threaded

Above Lumaco Valves available in 1" to 6" tube O.D.
Also available as Air-Actuated. Please Call.



BRADFORD BUTTERFLY VALVES

- Replaces a standard clamp between two ferrules
- 304 Stainless Steel body and handle
- Choice of elastomers - Silicone, EPDM, or Viton
- 316L stainless steel profiled disc



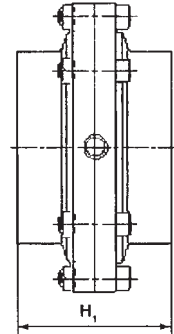
Part No.		
B5102BF	Clamp style butterfly valve	

Size	Dimensions					break torque in-lbs	psi at 68°F
	A	B	C	D	E		
1"	1.338	1.0	.629	6.220	3.996	60	200
1 1/2"	1.338	1.5	.629	6.220	3.996	100	200
2"	1.338	2.0	.629	6.220	4.527	120	200
2 1/2"	1.338	2.5	.629	6.220	4.783	150	200
3"	1.338	3.0	.629	6.220	5.031	200	150
4"	1.338	4.0	.629	6.220	5.570	200	110

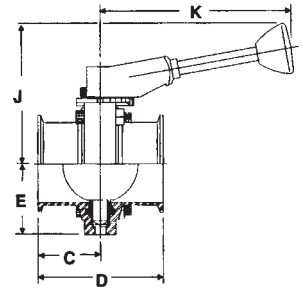
ALFA LAVAL BUTTERFLY VALVES

- Manual, Pneumatic (Air), or Electric
- 304 or 316L Stainless Steel
- Silicone, EPDM (Standard), Viton, or Nitrile seat material
- PVDF Bushings on top/bottom of disc
- Tri-Clamp or Butt Weld configuration
- THINKTOP for control and indication
- Microswitch indication
- Inductive proximity switches for indication
- Manual 2 or 4 position handles

MANUAL BUTTERFLY VALVES



LKB with welding ends

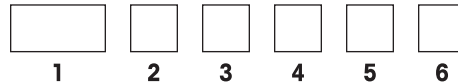


LKB multi-position green handle

LKB Manual Butterfly Valve with Green Handle Dimensions (inches)

Size	1"	1.5"	2"	2.5"	3"	4"	6"
C	1.75	1.75	1.85	1.88	2.03	2.38	3.06
D	3.50	3.50	3.69	3.75	4.06	4.75	6.13
E	1.53	1.53	1.94	2.31	2.59	3.34	4.25
H1	1.85	1.85	2.05	2.13	2.44	3.15	3.15
J	4.00	4.00	4.38	4.78	4.97	5.75	6.19
K	6.31	6.31	6.31	6.31	6.31	6.31	14.50

LKB BUTTERFLY VALVE DESCRIPTION CODE



1. End Connection

LKB51A - Tri-Clamp

LKB51W - Butt-Weld

2. Finish

-- Sanitary

I - Industrial

3. Size

Available from 1-6" (25.4-147mm)

4. Seat Material

E - EPDM

X - Silicone

FY - Fluoroelastomer

5. Body Material

S - 304 Stainless Steel (standard)

316L - 316L Stainless Steel

6. Handle

G - 9-position green Handle

MP - Multi-position handle

B2 - 2-position black handle

R - Regulating handle

B4 - 4-position black handle

NH - No handle

BL - 2-position locking black handle

PNEUMATIC BUTTERFLY VALVES

- LKB is pneumatic - Choices Air-to-Open, Air-to-Close and Air-to-Air
- LKB-T has "Green Top" for indication and solenoid control
- LKB-TKT has THINKTOP for digital interface, AS-interface, and DeviceNet Field Bus Network

LKB53 Pneumatic Butterfly Valve Dimensions (inches)

Size	1"	1.5"	2"	2.5"	3"	4"	6"
A	8.56	9.44	10.25	10.25	16.31	16.31	
B	10.13	12.06	13.56	13.56	20.56	20.56	
C	2.72	3.59	4.38	4.38	6.50	6.50	

LKB53 PNEUMATIC BUTTERFLY VALVE DESCRIPTION CODE

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1	2	3	4	5	6	7	8

1. End Connection

LKB53A - Tri-Clamp LKB53W - Butt-Weld

2. Finish

-- Sanitary I - Industrial

3. Actuator Type

LKB53A Pneumatic without control top

Air to Spring - Normally Open Air to Spring - Normally Closed

6200	1"-2 1/2" (25.4-63.5mm)	6000
6300	3" (76.2mm)	6100
6800	4" (101.6mm)	6700
7000	6" (152.4mm)	7200

Air to Air

6400	1"-2 1/2" (25.4-63.5mm)
6500	3" (76.2mm)
6900	4" (101.6mm)
7100	6" (152.4mm)

LKB53A Pneumatic with

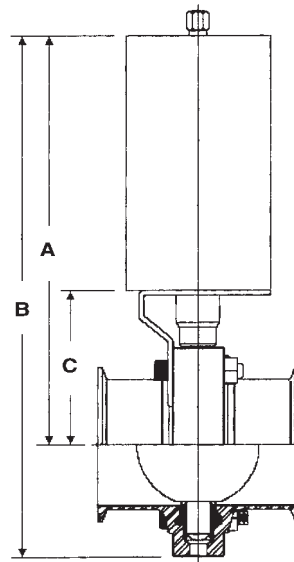
Green Control Top (T) or with ThinkTop (TKT)

Air to Spring - Normally Open Air to Spring - Normally Closed

6200 (T)(TKT)	1"-2 1/2" (25.4-63.5mm)	6000 (T)(TKT)
6300 (T)(TKT)	3" (76.2mm)	6100 (T)(TKT)
6800 (T)(TKT)	4" (101.6mm)	6700 (T)(TKT)
7000 (T)(TKT)	6" (152.4mm)	7200 (T)(TKT)

Air to Air

6400 (T)(TKT)	1"-2 1/2" (25.4-63.5mm)
6500 (T)(TKT)	3" (76.2mm)
6900 (T)(TKT)	4" (101.6mm)
7100 (T)(TKT)	6" (152.4mm)



4. Size

Available from 1-6" (25.4-147mm)

5. Seat Material

E - EPDM X - Silicone
FY - SFY Fluoroelastomer

6. Body Material

S - 304 Stainless Steel (standard)
316L - 316L Stainless Steel

7. Switch and Solenoid*

LKB53A with Green Control Top (*other voltages available)

	No Solenoid	24 (VDC)	110 VAC	24 VAC
	Norm	Norm	Norm	Norm
Mechanical (Qty: 1)	02	14	16	39
(VAC/VDC) (Qty: 2)	04	18	20	40
Proximity (Qty: 1)	10	30	32	43
(VAC/VDC) (Qty: 2)	12	34	36	44
No Switches/Sol. only	00	37	38	45

LKB53A with ThinkTop (*other voltages available)

	No Solenoid	1 Solenoid	2 Solenoids
Digital	A	B	c
AS-Interface	D	E	F
Device Net	G	H	I

8. Set-up Number (LKB53 with Green Control Top Pneumatic Only)

- 1 - No solenoid normally open or normally closed valve
- 2 - Normally open valve closes or Normally closed valve opens when solenoid is de-energized
- 5 - Normally closed valve opens or Normally open valve closes when solenoid is energized



MACHINERY AND EQUIPMENT

SINGLE SEAT VALVES 300 SERIES, 700 SERIES AND TANK OUTLET VALVES

DESCRIPTION CODE

1	1A	2	3	4	5	6	7	8	9

1. Model Number

361 - Sanitary/CIP	761 - Sanitary/CIP
371 - Throttling Valve	762 - Kettle Tank Outlet
741 - Industrial	771 - Throttling Valve

1A. Stem

None - Elastomer (3A)	M - SS T-316L (3A)
TR - PTFE Replaceable (3A)	T - Sandwich Seat

2. Body/Port Line

NOTE: For Port Line selection add "M" for Tri-Clamp®;
"T" for Bevel Seat; or "W" for Tri-Weld® to the Body Part Number

10 - Lower Tee	21 - Upper Tee/Lower Tee
23 - Upper Tee/Lower Cross	30 - Lower Cross
27 - Upper Tee Reverse Acting	90 - Y-Body
41 - Lower Tee/Upper Cross	
43 - Upper Cross/Lower Cross	
47 - Upper Cross Reverse Acting	

Elbow, Kettle

21 - 90° Long Tank Spud
31 - 90° Standard Tank Spud
35 - 45° Standard Tank Spud
33 - Flanged 45°
29 - Flanged 90°
22 - 90° Offset Down
57 - 90° Offset Right
58 - 90° Offset Left

Tank Outlet, Tangential

47 - Tee Offset Right
48 - Tee Offset Left
49 - Flanged Offset Right
50 - Flanged Offset Left
51 - Clamp Cross
52 - Flanged Cross

3. Actuators

NOTE: Add "L" for Long Stroke, "S" for Short Stroke: 700 Series only
Add "HP" for High Pressure: 2 1/2" (63.5mm)-4" (102mm) only

10 - Normally Open Piston
14D - Normally Open (Positioner) Diaphragm
14P - Normally Open (Positioner) Piston
15 - Normally Open Diaphragm
19 - Normally Open with Switches
20 - Normally Closed Piston
24D - Normally Closed (Positioner) Diaphragm (reverse acting only)
24P - Normally Closed (Positioner) Piston
25 - Normally Closed Diaphragm Reverse Acting
29 - Normally Closed with Switches
30 - Air-to-Air Piston
40SB - Manual Handle
80 - Three-Position Piston
90 - Micrometer (manual)

4. Size

Inch (mm)	Inch (mm)
1 (25.4)	2 1/2 (63.5)
1 1/2 (38.1)	3 (76.2)
2 (50.8)	4 (101.6)

5. Valve-Body Material

316L All Wetted Parts

6. Switches - Solenoid

NOTE: Not available for 300 Series

	No Solenoid Norm	24 (VDC) Norm	110 VAC Norm	24 VAC Norm
Mechanical (Qty: 1)	02	14	16	39
(VAC/VDC) (Qty: 2)	04	18	20	40
Proximity (Qty: 1)	10	30	32	43
(VAC/VDC) (Qty: 2)	12	34	36	44
No Switches/Sol. only	00	37	38	45

7. Set up

Chart A Use for model 761/741/771/762 Valves

Description	Setup #
No solenoid normally open or normally closed valve	1
Normally open valve closes when solenoid is de-energized	2
Normally closed valve opens when solenoid is de-energized	3
Normally closed valve opens when solenoid is energized	4
Normally open valve closes when solenoid is energized	5
Air both ways, normally closed	6

Chart B Use for model 762-31/35/29/33/21/22/57/58 Valves

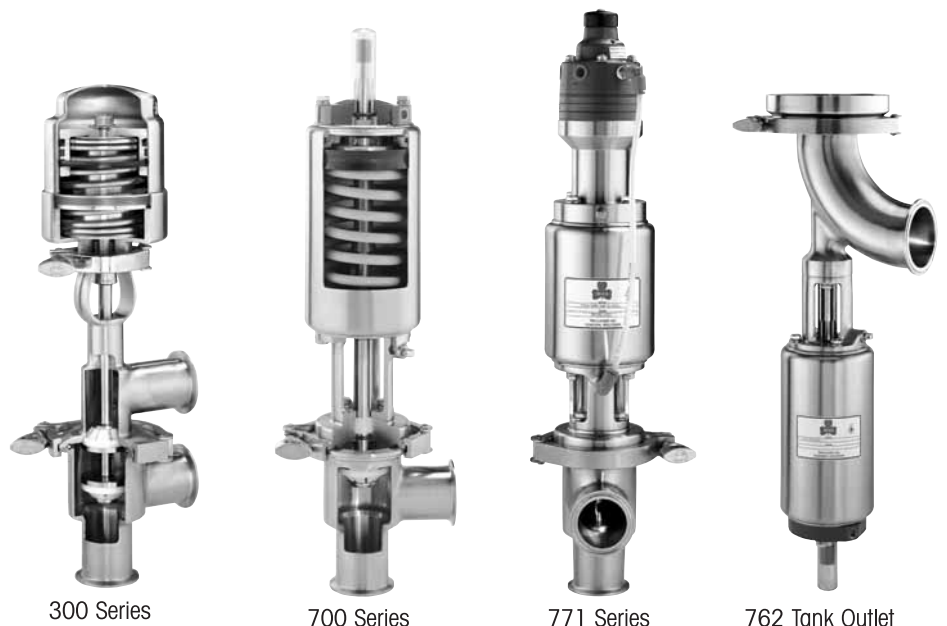
Description	Setup #
No solenoid normally open or normally closed valve	1
Normally closed valve opens when solenoid is de-energized	2
Normally open valve closes when solenoid is de-energized	3
Normally open valve closes when solenoid is energized	4
Normally closed valve opens when solenoid is energized	5
Air both ways, normally closed	7

8. Special Options

Customer description required.

9. Elastomer

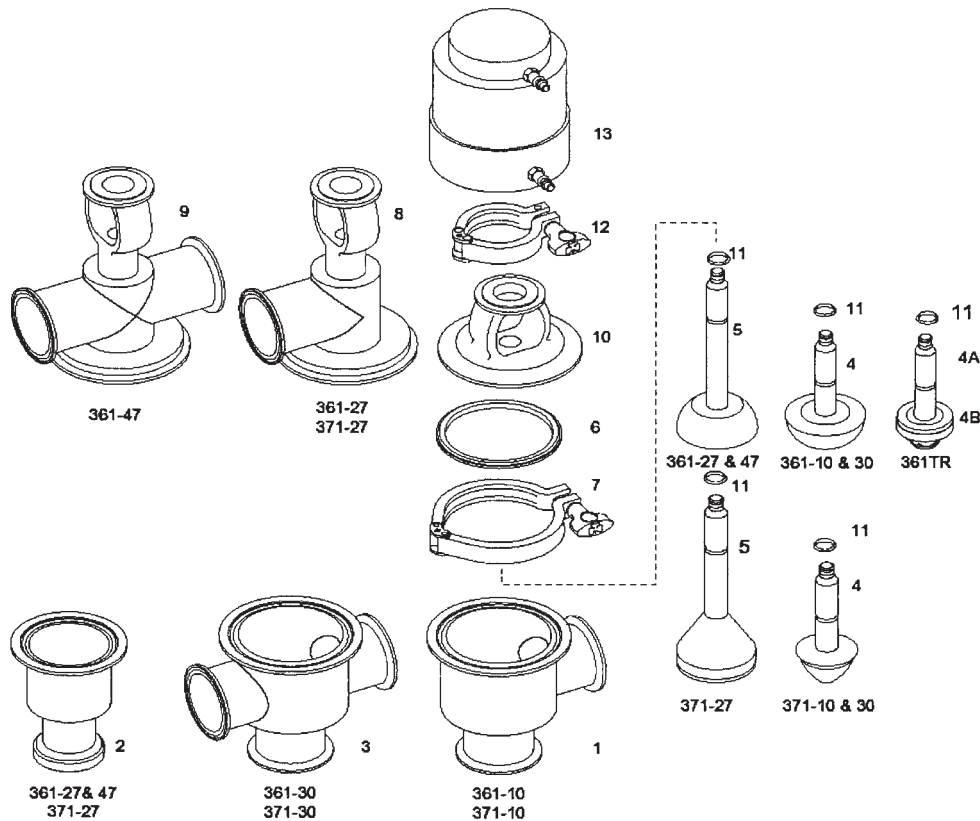
U - Buna	E - EPDM	SFY - Fluoroelastomer
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MACHINERY AND EQUIPMENT

361/361TR SHUT OFF VALVES 371-10, 30, 27 THROTTLING VALVES

Key No.	Description	1" Part Number	1 1/2" Part Number	2" Part Number	2 1/2" Part Number	3" Part Number
1	Valve, lower body - Models 361-10 & 371-10	7-225T-1-316	7-184T-1 1/2-316	7-184T-2-316	7-184T-2 1/2-316	7-184T-3-316
2	Valve, lower body - Models 361-27, 47 & 371-27	Not Available	7-200A-1 1/2-316	7-200A-2-316	7-200A-2 1/2-316	7-200A-3-316
3	Valve, lower body - Models 361-30 & 371-30	7-225C-1-316	7-184C-1 1/2-316	7-184C-2-316	7-184C-2 1/2-316	7-184C-3-316
4	Valve, plug assembly - Models 361-10 & 30 (Buna, EPDM, or Viton)	19LP-571-1-316	19LP-571-1 1/2-316	19LP-571-2-316	19LP-571-2 1/2-316	19LP-571-3-316
	Models 371-10 & 30	19-1215-1-316	19-1215-1 1/2-316	19-1215-2-316	19-1215-2 1/2-316	19-1215-3-316
4A	"TR" stem/seat plug assembly - Model 361TR 10 & 30	19TR-571-1-316	19TR-571-1 1/2-316	19TR-571A-2-316	19TR-571-2 1/2-316	19TR-571-3-316
4B	"TR" PTFE Snap-On (seat only)	20-514-1	20-514-1 1/2	20-514C-2	20-514C-2 1/2	20-514C-3
5	Valve, plug assembly - Models 361-27 & 47 (Buna, EPDM, or Viton)	Not Available	19-733-1 1/2-316	19-733-2-316	19-733-2 1/2-316	19-733-3-316
5	Valve, plug assembly 361-27	Not Available	19-1059-1 1/2-316	19-1059-2-316	19-1059-2 1/2-316	19-1059-3-316
6	Body, gasket - 361	17-62-1 1/2-U	17-62-2-U	17-62-2 1/2-U	17-62-3 1/2-U	17-62-4-U
	Body, gasket - 371	17-62-1 1/2	17-62-2	17-62-2 1/2	17-62-3 1/2	17-62-4
7	Body, clamp	H13MHM-1 1/2-S	13MHM-3-S	113MHVM-3-S	13MHVM-4-S	13MHM-5-S
8	Valve, upper body - Models 361-27 & 371-27	Not Available	7-192T-1 1/2-316	7-192T-2-316	7-192T-2 1/2-316	7-192T-3-316
9	Valve, upper body - Model 361-47	Not Available	192C-1 1/2-316	7-192C-2-316	7-192C-2 1/2-316	7-192C-3-316
10	Valve Bonnet - 10 & 30	12-146-1-316	12-146-1 1/2-316	12-146-2-316	12-146-2 1/2-316	12-146-3-316
11	O-Ring, valve plug stem - 361, 371	17-1-U25	17-1-U25	17-1-U25	17-5-U25	17-5-U25
12	Actuator, clamp	13MHM-2-S	13MHM-2-S	13MHM-2-S	13MHM-2-S	13MHM-2-S
13	Actuator - Type 210 Normally Open, Air to Close	25-361-210-S	25-361-210-S	25-361-210-S	25-361-210-S	25-361-210-S
13	Actuator - Type 215 Normally Open, Air to Close	25-263B-S	25-263B-S	25-263B-S	25-263B-S	25-263B-S
13	Actuator - Type 220 & 225 Normally Closed, Air to Open	25-361-220-S	25-361-220-S	25-361-220-S	25-361-220-	25-361-220-S



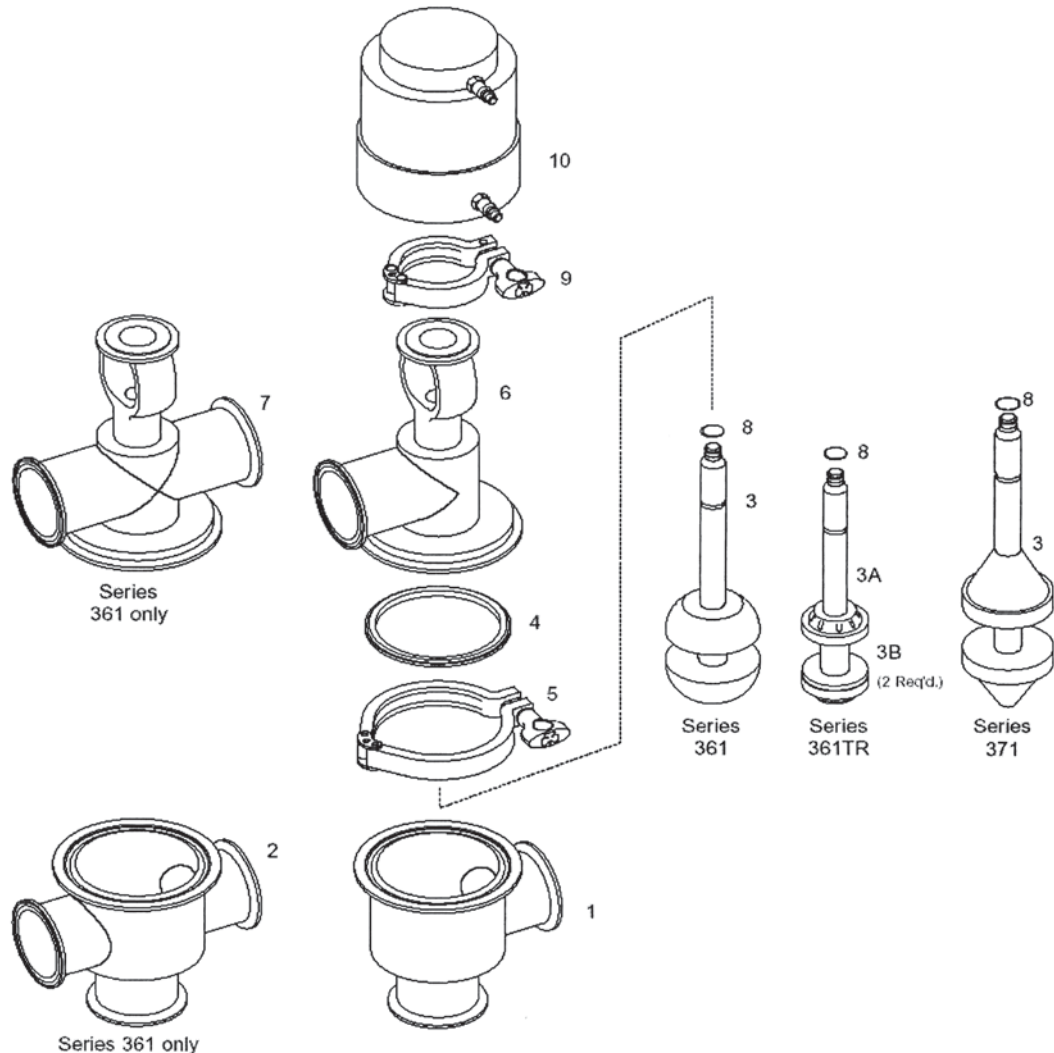
MACHINERY AND EQUIPMENT

361/361TR DIVERT VALVES AND 371-21 THROTTLING DIVERT VALVE

Key No.	Description	1 1/2"	2"	2 1/2"	3"
		Part Number	Part Number	Part Number	Part Number
1	Valve, lower body - Models 361-21, 41 & 371-21	7-184T-1 1/2-316	7-184T-2-316	7-184T-2 1/2-316	7-184T-3-316
2	Valve, lower body - Models 361-23, 43	7-184C-1 1/2-316	7-184C-2-316	7-184C-2 1/2-316	7-184C-3-316
3	Valve, plug assembly - Model 361 (Buna, EPDM, or Viton) Model 371	19LP-572-1 1/2-316 19-983-1 1/2-316	19LP-572-2-316 19-983-2-316	19LP-572-2 1/2-316 19-983-2 1/2-316	19LP-572-2 1/2-316 19-983-3-316
3A	"TR" stem/seat plug assembly	19TR-572A1 1/2-316	19TR-572B-2-316	19TR-572B-2 1/2-316	19TR-572B-3-316
3B	"TR" PTFE Snap-On (seat only)	20-514-1 1/2	20-514C-2	20-514C-2 1/2	20-514C-3
4	Body, gasket - 361	17-62-2-U	17-62-2 1/2-U	17-62-3 1/2-U	17-62-4-U
	Body, gasket - 371	17-62-2-316	17-62-2 1/2-316	17-62-3 1/2-316	17-62-4-316
5	Body, clamp	13MHM-3-S	13MHVM-3-S	13MHVM-4-S	13MHM-5-S
6	Valve, upper body - Models 361-21, 23 & 371-21	7-192T-1 1/2-316	7-192T-2-316	7-192T-2 1/2-316	7-192T-3-316
7	Valve, upper body - Models 361-41, 43	7-192C-1 1/2-316	7-192C-2-316	7-192C-2 1/2-316	7-192C-3-316
8	O-Ring, valve plug stem - 361, 371	17-1-U25	17-1-U25	17-5-U25	17-5-U25
9	Actuator, clamp	13MHM-2-S	13MHM-2-S	13MHM-2-S	13MHM-2-S
10	Actuator - Type 210 Normally Open, Air to Close	25-361-210-S	25-361-210-S	25-361-210-S	25-361-210-S
10	Actuator - Type 215 Normally Open, Air to Close	25-263B-S	25-263B-S	25-263B-S	25-263B-S
10	Actuator - Type 220 & 225 Normally Closed, Air to Open	25-361-220-S	25-361-220-S	25-361-220-S	25-361-220-S

For Tri-Clamp body connection, add "M" to part number.
eg. 7-184TM-1 1/2-316

For Butt weld body connection, add "W" to part number.
eg. 7-184TW-1 1/2-316.



CONSTANT PRESSURE MODULATING VALVES

CPM-I VALVE

This valve controls line inlet pressures

CPM-O VALVE

This valve controls line outlet pressures

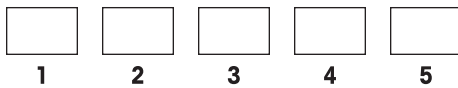
CONSTANT PRESSURE MODULATING VALVES DESCRIPTION CODE

Standard:

- EPDM/PTFE Diaphragm (product side)
- NBR Diaphragm (air side)
- AISI T316L

Options:

- EPDM/PTFE (air side)
- Solid PTFE (air and product side)



1. Valve Type

CPM-I-2 - Line Inlet Pressure Control

CPM-O-2 - Line Outlet Pressure Control

2. Connection

GC - Tri-Clamp W - Weld Other

3. Size

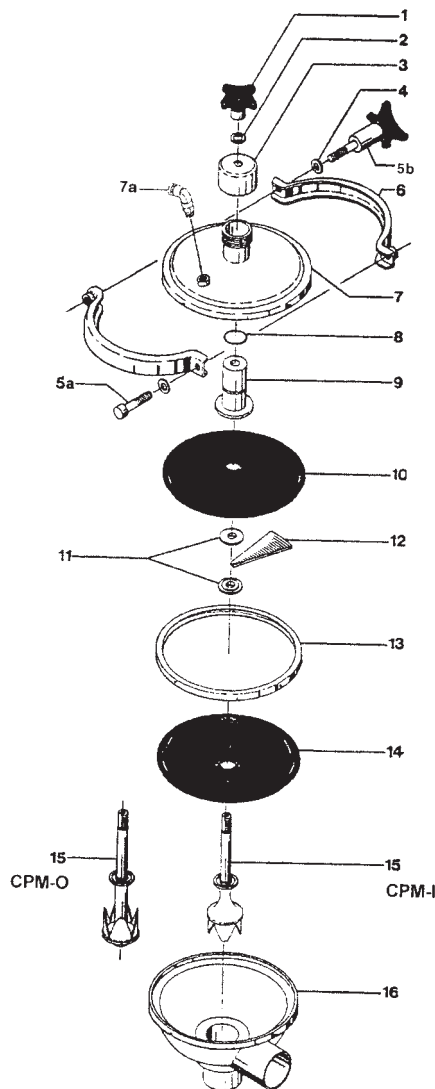
51 - 2"

4. KV

2/15 7 23

5. Finish

POL - 150X ID/OD IND - Dustblast ID/OD



Key No.	Qty.	Description	CPMI-2-Kv/23 Part Number	CPMO-2-Kv/23 Part Number	CPMI-2-Kv/15 Part Number	CPMO-2-Kv/15 Part Number
1	1	Top Handle	9611-99-2958	9611-99-2958	9611-99-2958	9611-99-2958
2	1	Washer	9611-99-2559	9611-99-2559	9611-99-2559	9611-99-2559
3	1	Top	31356-0003-4	31356-0003-4	31356-0003-4	31356-0003-4
4	2	Washer	9611-99-0786	9611-99-0786	9611-99-0786	9611-99-0786
5a	1	Screw	9611-99-1222	9611-99-1222	9611-99-1222	9611-99-1222
5b	1	Clamp Handle	9612-3370-01	9612-3370-01	9612-3370-01	9612-3370-01
6	2	Clamp	9612-3352-01	9612-3352-01	9612-3352-01	9612-3352-01
7	1	Cover	31356-0067-1	31356-0067-1	31356-0067-1	31356-0067-1
7a	1	Air fitting	881-39750	881-39750	881-39750	881-39750
8Δ	1	O-ring, NBR (standard)	223406-49	223406-49	223406-49	223406-49
	1	O-ring, FPM	9611-99-2253	9611-99-2253	9611-99-2253	9611-99-2253
9	1	Guide	31356-0072-2	31356-0072-2	31356-0072-2	31356-0072-2
10Δ	1	Upper diaphragm, NBR (standard)	31356-0014-2	31356-0014-2	31356-0014-2	31356-0014-2
	1	Upper diaphragm, EPDM/PTFE	31356-0014-4	31356-0014-4	31356-0014-4	31356-0014-4
	1	Upper diaphragm, PTFE	9612-3057-02	9612-3057-02	9612-3057-02	9612-3057-02
11	2	Inner ring	31356-0063-1	31356-0063-1	31356-0063-1	31356-0063-1
12	12	Support sector	31356-0062-1	31356-0062-1	31356-0062-1	31356-0062-1
13	1	Outer ring	9612-3058-01	9612-3058-01	9612-3058-01	9612-3058-01
14Δ	1	Lower diaphragm, EPDM/PTFE (standard)	9612-3066-01	9612-3066-01	9612-3066-01	9612-3066-01
	1	Lower diaphragm, PTFE	9612-3057-01	9612-3057-01	9612-3057-01	9612-3057-01
15	1	Valve plug	9612-3059-01	9612-3060-01	9612-3061-01	9612-3062-01
16	1	Valve body, weld	9612-3340-01	9612-3341-01	9612-3342-01	9612-3342-01
Δ	1	Service Kit for CPM valve	9611-92-0218	9611-92-0218	9611-92-0218	9611-92-0218

Parts marked with Δ are included in CPM Valve Service Kit

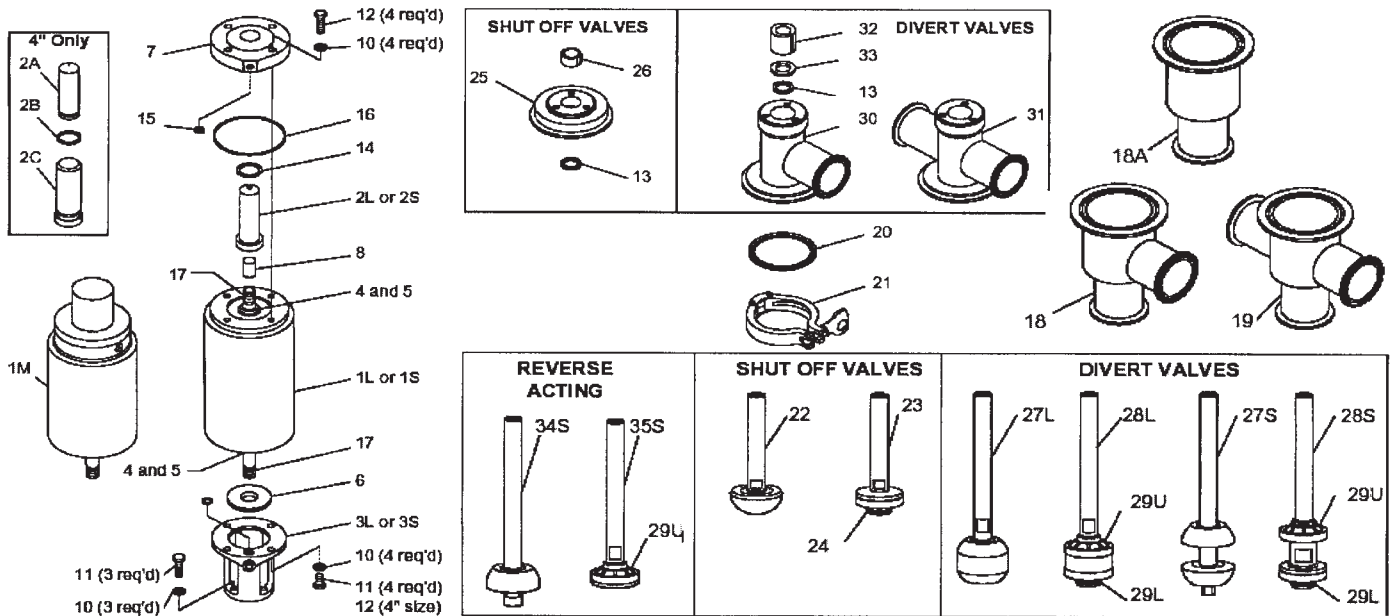
700 SERIES

MORE DEPENDABILITY AND EASY MAINTENANCE

The 700 Series valves are designed to deliver years of reliable performance. Rugged and long-lasting plastic stem bushings eliminate metal-to-metal galling. The stems are threaded to the actuator shaft, eliminating the coupling between the stem and the actuator, thereby ensuring proper alignment. Bushings at each end of the cylinder support the stem to ensure perfect alignment. The 700 Series features a heavy-duty bonnet and body ferrule design that will stand up to years of pounding from hydraulic shock.



761/741 SHUT OFF • DIVERT • REVERSE ACTING SHUT OFF



SEE NEXT PAGE FOR PART NUMBERS

**CONTACT STUART W. JOHNSON
FOR REPAIR SERVICES INCLUDING
STEM, ACTUATOR, OR ENTIRE VALVES.**



MACHINERY AND EQUIPMENT

700 SERIES

Key No.	Description	1" Part Number	1 1/2" Part Number	2" Part Number	2 1/2" Part Number	3" Part Number	4" Part Number
1L	10/20 Actuator, Long	Not Available	25-428-S	25-428-S	25-428-S	25-428-S	25-487-S
1L	30 Actuator, Long	Not Available	25-488-S	25-488-S	25-488-S	25-488-S	25-517-S
1LHD	Light Duty 4 1/2" Dia. Actuator, Long	Not Available	Not Available	Not Available	Not Available	Not Available	25-457-S
1M	Mid Position Actuator	Not Available	25-454-S	25-454-S	25-454-S	25-454-S	Not Available
1S	10/20 Actuator, Short	25-4488-S	25-436-S	25-436-S	25-436-S	25-436-S	25-497-S
1S	30 Actuator, Short	25-475-S	25-485-S	25-485-S	25-485-S	25-485-S	25-519-S
2A	Stem Protector, Long	Not Available	Not Available	Not Available	Not Available	Not Available	25-455-08A
2B	Stem Protector, O-Ring	Not Available	Not Available	Not Available	Not Available	Not Available	17-158-U
2C	Stem Protector, Spacer	Not Available	Not Available	Not Available	Not Available	Not Available	25-457-10-316L
2L	Stem Protector, Long	Not Available	25-428-08	25-428-08	25-428-08	25-428-08	Not Available
2S	Stem Protector, Short	25-436-08	25-436-08	25-436-08	25-436-08	25-436-08	25-428-08
3L	Yoke, Long	Not Available	12-495-S	12-495-S	12-495-S	12-495-S	12-518-316
3LI	Yoke, Long (741)	Not Available	12-495I-S	12-495I-S	12-495I-S	12-495I-S	12-518-316
3S	Yoke, Short	12-498-S	12-498-S	12-498-S	12-498-S	12-498-S	12-533-316L
3SI	Yoke, Short (741)	12-498I-S	12-498I-S	12-498I-S	12-498I-S	12-498I-S	12-533I-316L
4	Seal Retainer	25-428-05	25-428-05	25-428-05	25-428-05	25-428-05	25-428-05
5	V-Packing	17-98	17-98	17-98	17-98	17-98	17-98
5a	O-Ring to replace V-Packing	17-284-MatI	17-284-MatI	17-284-MatI	17-284-MatI	17-284-MatI	17-284-MatI
6	Packing Retainer	25-428-04	25-428-04	25-428-04	25-428-04	25-428-04	25-428-04
7	End Cap	25-428-06A	25-428-06A	25-428-06A	25-428-06A	25-428-06A	25-455-06
8	Red Caplug	12-493	12-493	12-493	12-493	12-493	12-493
9	Vent Plug (not shown)	MS-105-58A-CP	MS-105-58A-CP	MS-105-58A-CP	MS-105-58A-CP	MS-105-58A-CP	MS-105-58A-CP
10	Lockwasher	LWA1300-SS	LWA1300-SS	LWA1300-SS	LWA1300-SS	LWA1300-SS	LWA1300-SS
11	Screw	SC1308H-SS	SC1308H-SS	SC1308H-SS	SC1308H-SS	SC1308H-SS	SC1309H-SS
12	Screw	SC1312H-SS	SC1312H-SS	SC1312H-SS	SC1312H-SS	SC1312H-SS	SC1312H-SS
13	O-Ring	17-5-U	17-17-U	17-17-U	17-17-U	17-17-U	17-89-U
14	O-Ring	17-4-U	17-4-U	17-4-U	17-4-U	17-4-U	17-4-U
15	O-Ring	17-35-U	17-35-U	17-35-U	17-35-U	17-35-U	17-35-U
16	O-Ring	17-109-U	17-109-U	17-109-U	17-109-U	17-109-U	17-109-U
17	Nylon Lock Pin	9-300	9-300	9-300	9-300	9-300	9-300
18	Lower Body, Tee	7-1041TM-1-316L	7-1022TM-1 1/2-316L	7-1022TM-2-316L	7-1022TM-2 1/2-316L	7-1022TM-3-316L	7-225TM-4-316L
18I	Lower Body, Tee (741)	7-1041CMI-1-316L	7-1022TMA-1 1/2-316L	7-1022TMA-2-316L	7-1022TMA-2 1/2-316L	7-1022TMA-3-316L	7-225TMI-4-316L
18A	Lower Body (27 & 47)	Not Available	7-1053M-1 1/2-316L	7-1053M-2-316L	7-1053M-2 1/2-316L	7-1053M-3-316L	Not Available
19	Lower Body, Cross	7-1041CM-1-316L	7-1022CM-1 1/2-316L	7-1022CM-2-316L	7-1022CM-2 1/2-316L	7-1022CM-3-316L	7-225CM-4-316L
19I	Lower Body, Cross (741)	7-1041CMI-1-316L	7-1022CMA-1 1/2-316L	7-1022CMA-2-316L	7-1022CMA-2 1/2-316L	7-1022CMA-3-316L	7-225CMI-4-316L
20	Gasket	42MP-U-2	17-325-1 1/2-U	17-325-1 1/2-U	17-325-2 1/2-U	17-325-3-U	17-62-4 1/2-U
21	Clamp	13MHHM-2-S	13MHVM-3-S	13MHVM-3-S	13MHVM-4-S	13MMHHM-5-S	H13MHHM-4-S
22	Rubber Stem/Seat Assembly	19-1293-316L	19LP-1254-1 1/2-316L	19LP-1254-2-316L	19LP-1254-2 1/2-316L	19LP-1254-3-316L	19LP-1254A-4-316L
23	"TR" Stem/Seat Assembly	19TR-1293-316L	19TR-1254-1 1/2-316L	19TR-1254-2-316L	19TR-1254-2 1/2-316L	19TR-1254-3-316L	19TR-1254A-4-316L
24	"TR" Snap-On Seat	20-514-1	20-514-1 1/2	20-514C-2	20-514C-2 1/2	20-514C-3	20-514C-4
25	Bonnet	12-499-316L	12-487-1 1/2-316L	12-487-1 1/2-316L	12-487-2 1/2-316L	12-487-3-316L	12-515-316L
26	Split Stem Bushing	40-68	40-63	40-63	40-63	40-63	40-73
27L	Rubber Stem/Seat Ass'y, Long	Not Available	19-1255A-1 1/2-316L	19-1255A-2-316L	19-1255A-2 1/2-316L	19-1255B-3-316L	19-1255A-4-316L
27S	Rubber Stem/Seat Ass'y, Short	Not Available	19LP-1276-1 1/2-316L	19LP-1276-2-316L	19LP-1276-2 1/2-316L	19LP-1276-3-316L	Not Available
28L	"TR" Stem/Seat Ass'y, Long	Not Available	19TR-1255-1 1/2-316L	19TR-1255-2-316L	19TR-1255-2 1/2-316L	19TR-1255-3-316L	19TR-1255A-4-316L
28S	"TR" Stem/Seat Ass'y, Short	Not Available	19TR-1276-1 1/2-316L	19TR-1276-2-316L	19TR-1276-2 1/2-316L	19TR-1276-3-316L	Not Available
29U	"TR" Snap-On Seat Upper	Not Available	20-514C-2	20-514C-2	20-514C-2 1/2	20-514C-3	20-514C-4
29L	"TR" Snap-On Seat Lower	Not Available	20-514C-1 1/2	20-514C-2	20-514C-2 1/2	20-514C-3	20-514C-4
30	Upper Body, Tee	Not Available	7-1024TM-1 1/2-316L	7-1024TM-2-316L	7-1024TM-2 1/2-316L	7-1024TM-3-316L	7-1024ATM-4-316L
30I	Upper Body, Tee (741)	Not Available	7-1024TMA-1 1/2-316L	7-1024TMA-2-316L	7-1024TMA-2 1/2-316L	7-1024TMA-3-316L	7-1024ATMI-4-316L
31	Upper Body, Cross	Not Available	7-1024CM-1 1/2-316L	7-1024CM-2-316L	7-1024CM-2 1/2-316L	7-1024CM-3-316L	7-1024ACM-4-316L
31I	Upper Body, Cross (741)	Not Available	7-1024CMA-1 1/2-316L	7-1024CMA-2-316L	7-1024CMA-2 1/2-316L	7-1024CMA-3-316L	7-1024ACMI-4-316L
32	Split Stem Bushing	Not Available	40-64	40-64	40-64	40-64	40-75
33	Seal Retaining Washer	Not Available	15-171-316L	15-171-316L	15-171-316L	15-171-316L	15-175-316L
34L	Rubber Stem/Seat Ass'y, Long (27 & 47 Only)	Not Available	Not Available	Not Available	Not Available	Not Available	19-1377-4-316L
34S	Rubber Stem/Seat Ass'y, Short (27 & 47 Only)	Not Available	19-1306-2-316L	19-1306-2-316L	19-1306-2 1/2-316L	19-1306-3-316L	Not Available
34S	"TR" Stem/Seat Ass'y, Short (27 & 47 Only)	Not Available	19TR-1306-2-316L	19TR-1306-2-316L	19TR-1306-2 1/2-316L	19TR-1306-3-316L	Not Available
35L	"TR" Stem/Seat Ass'y, Long (27 & 47 Only)	Not Available	Not Available	Not Available	Not Available	Not Available	19TR-1377-4-316L

SRC AND ARC SERIES SINGLE SEAT VALVES

Alfa Laval's sanitary remote controlled valves require only a few simple moving parts for operation. They offer an extremely reliable and hygienic design for stopping or diverting product flow in single or multi-directional systems. Authorized to carry the 3A symbol

Features and Benefits

- Rubber lip seal wipes the stem clean during both upward and downward travel
- No O-ring or O-ring groove, so contaminants cannot migrate or collect within
- Features compact valve bodies to minimize space requirements
- Field reversible actuators (normally open and normally closed) for convenient system rebuilding
- Flat compression seat design for longer seat life
- Parts are interchangeable within the line to help reduce the burden and cost of carrying a large inventory of spare parts
- Stainless steel construction (product-wetted parts, 316L)
- Can be fitted with ThinkTop® control and indication unit
- Options include special actuator for opening or closing against higher product pressures or for accommodating split flows.

SRC-LS - LONG STROKE ACTUATED VALVE

- Allows for high Cv
- For high viscosity products or products with solids
- Used as a shut-off or divert valve

ARC - ASEPTIC REMOTE CONTROLLED VALVE WITH PTFE DIAPHRAGM

- Designed to meet most aseptic applications
- Sterile steam sealing is ensured by PTFE/rubber diaphragm unit
- The PTFE diaphragm does not allow product residue to build-up on the product contact service
- Excellent cleanability and gentle product treatment
- The valve does not require the use of steam
- Available as a shut-off or divert valve
- Authorized to carry the 3A symbol

ARC-SB - ASEPTIC REMOTE CONTROLLED VALVE WITH STEEL BELLOWS

- For most aseptic applications, particularly those with high activation frequencies
- Sterile steam sealing is ensured by a specially designed valve plug with stainless steel bellows
- Stainless steel bellows provide: immediate leakage indication; optimum hygienic qualities; safe sterile seal against the atmosphere
- The valve does not require the use of steam
- Available as a shut-off or divert valve
- Authorized to carry the 3A symbol

Maximum Holding Pressure (PSI) for Seat Valves (NC)

Valve Size	3" Actuator Std. Spring	3" Actuator Hvy. Spring	5" Actuator Std. Spring	5" Actuator Hvy. Spring
1.5"	102	131	145	*
2"	58	80	131	*
2.5"	36	51	87	*
3"			72	102
4"			51	65

*Exceeds maximum pressure rating of valve (145 PSI)

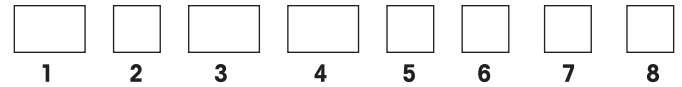
Air-Assist Requirements for SRC Valve with Type 20 Spring to close Actuator

SRC Valve Size	Actuator Size	1 PSI Air Supply Increases Holding Pressure
1.5"	3"	6 PSI
2"	3"	3 PSI
2.5"	3"	2 PSI
1.5"	5"	13 PSI
2"	5"	7 PSI
2.5"	5"	5 PSI
3"	5"	3 PSI
4"	5"	2 PSI

SRC AND ARC SERIES VALVES DESCRIPTION CODE

Standard: AISI T316L.

- Actuator 60 and 70 are designed for the special three-position and two-step valves
- Large actuator (only available size 1.5" - 2.5")
- Lifting tools for air actuators
- Heavy-duty spring
- Damper for water hammer



1. Valve Type

SRC - Sanitary Remote Control
 ARC - Aseptic Remote Control
 SPC-2 - Sanitary Electro-Pneumatic Control/Modulating

2. Optional Valve Models for SRC Valves Only

TL - Tangential Left TR - Tangential Right
 CT - Cone Bottom Tank LS - Long Stroke (only 2" - 4")

3. Connection

W - Weld GC - Clamp
 BS - Bevel Seat HDI - Clamp Other

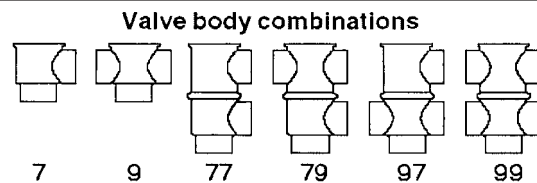
4. Finish

3A - 150x ID/OD #3 - 150X ID/Dustblast OD
 IND - Dustblast ID/OD

5. Size

1.5" 2" 2.5" 3" 4"

6. Body - See diagram below



7. Elastomer

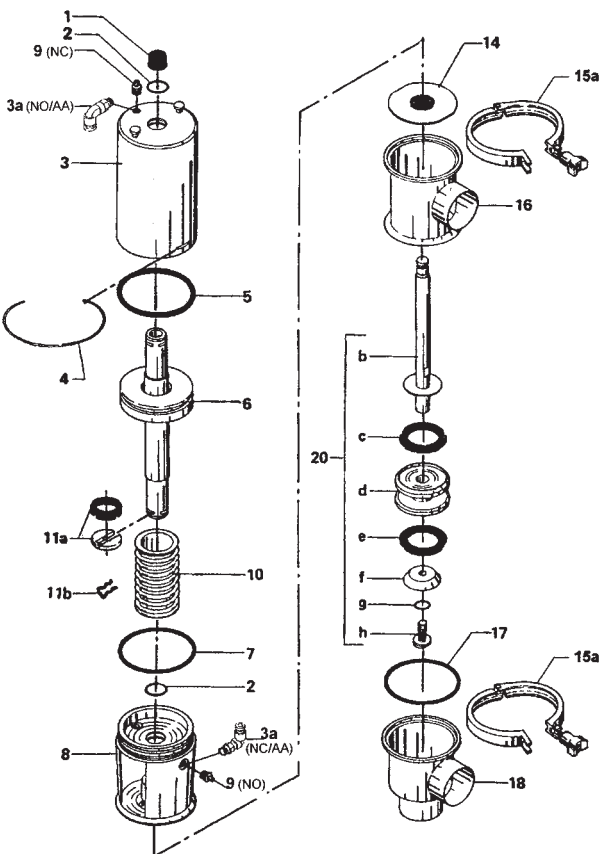
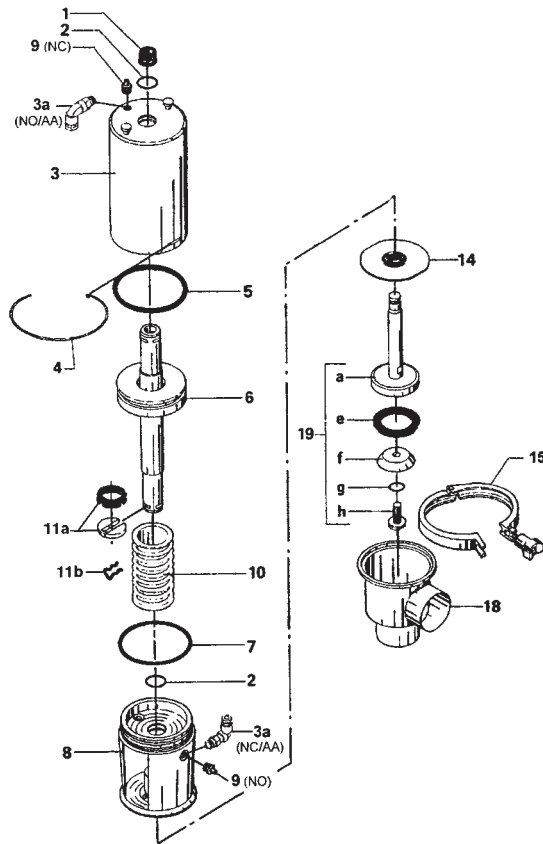
No letter - EPDM (standard) V - FPM
 N - Nitrile Other

8. Actuator

10 - Normally Open (NO) lower seat
 20 - Normally closed (NC) lower seat
 30 - Air/Air (A/A)
 60 - Normally Open (NO) lower seat - 3 position
 70 - Normally Closed (NC) lower seat - 3 position

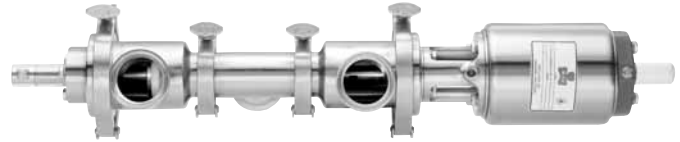
SRC SHUT-OFF AND DIVERT VALVES

- EPDM Elastomers Standard
- Tri-Clamp Bodies Standard



ALFA LAVAL REVERSE ACTING DIVERT VALVE AND FLO-DIVERSION VALVE

- Fully draining divert valve for horizontal mounting
- Non-slamming design takes away CIP and quick exhaust hammer
- Always seats against the flow of product.



Note: All Flo-Diversion Valves include control top option with one microswitch only. Can be made with two (2) for Canadian specifications.

Reverse Acting Divert Valve Description Code

761-21MRA [Z] [X]-10S/20S-Size-316L

Flo-Diversion Valve Less Panel Description Code

Standard 762TR-227M [Size]-316L -1-Y

Reverse Acting 762TR-227MRA [X]-Size-316L-1-Y

Flo-Diversion Valve with SLC500 Panel Description Code

Standard 762TR-121M [Size]-316L -1-Y

Reverse Acting 762TR-121MRA [X]-Size-316L-1-Y

X. Tangential Body

L - Left Hand R - Right Hand

Y. Solenoid

1 - 110VAC Solenoid 3 - 24VDC Solenoid
2 - 24VAC Solenoid 4 - No Solenoid (supplied in panel)

Z. Actuator-End Tangential Body

L - Left Hand R - Right Hand

STANDARD SPRING HOLDING PRESSURE

361	371	SCR/ARC
1" - 100 psi	1" - 108 psi	1" - 100 psi
1 1/2" - 150 psi	1 1/2" - 140 psi	1 1/2" - 105 psi
2" - 88 psi	2" - 92 psi	2" - 58 psi
2 1/2" - 48 psi	2 1/2" - 55 psi	2 1/2" - 36 psi
3" - 39 psi	3" - 39 psi	3" - 72 psi
	4" - 13 psi	4" - 51 psi

**CALL STUART W. JOHNSON & CO.
FOR COMPONENT PART NUMBERS AND PRICES
AND FOR INFORMATION ON:**

- FLO-DIVERSION VALVES FOR HTST PASTEURIZERS
- TANGENTIAL TANK VALVES
- HIGH PRESSURE ACTUATORS

THE UNIQUE 7000 SERIES VALVE

This new seat style valve combines all of the best features of Alfa Laval's past valves, creating a new process control component that exceeds competitive products.

- Ball shaped body for drainage and extra turbulence while cleaning
- Modular bodies allow for quick changes. Create shut off, divert, and reverse acting valves with identical components
- Lip seal type stem seal to prevent leakage and o-ring wear
- TR2 teflon seats standard, with option for elastomer o-ring. Can be compressed with a backload of air without rubber damage
- Bodies deep drawn from a single piece of 316L stainless steel allowing for heat traceability - An Industry First!
- Inexpensive "Lifetime" actuator standard on most valves - Optional "Serviceable" actuator allows user to switch actuation from top to bottom in the field. Also fully repairable
- High spring load capacity for process holding pressure - 4", 5", and 6" diameter actuators hold up to 150 psi product pressures without air assist.

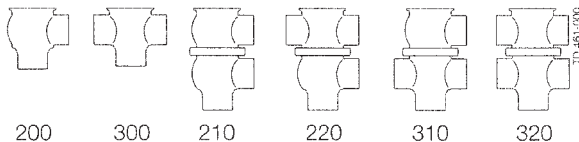
Technical Data

Max. product pressure:	145 psi (1000kPa (10 bar)). (depending on valve specifications)
Min. product pressure:	Full vacuum
Temperature range:	-50° to +284°F (EPDM)
Air pressure:	72.5 to 101.5 psi (500 to 700 kPa (5-7 bar))

Actuator Function

- Pneumatic downward movement, spring return
- Pneumatic upward movement, spring return
- Pneumatic upward and downward movement (A/A)
- Actuator for intermediate position of the valve plug (optional)

Valve Body Combinations



Air Consumption (in³ free air) for one stroke

Size	1" - 1 1/2"	2" - 2 1/2"	3" - 4"
NO & NC	0.96 x air pressure [psi]	2.17 x air pressure [psi]	5.51 x air pressure [psi]
A/A	1.94 x air pressure [psi]	4.82 x air pressure [psi]	11.15 x air pressure [psi]

Materials

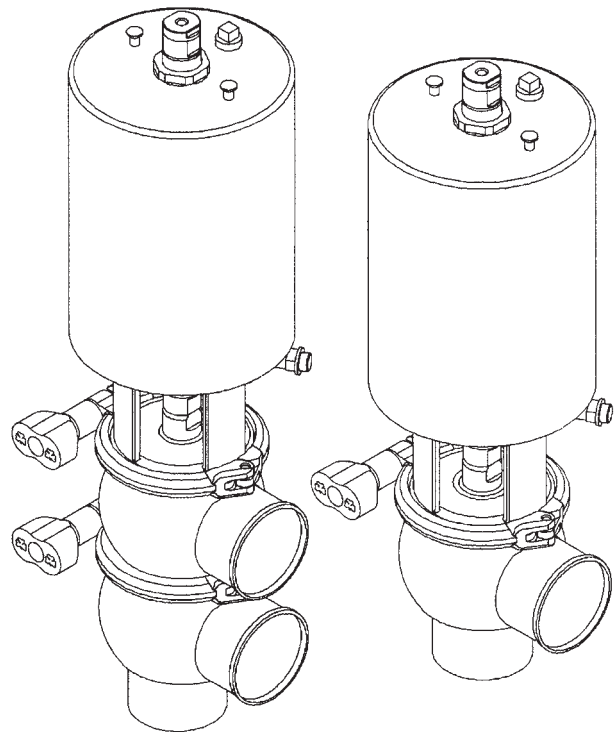
Product wetted steel parts:	AISI 316L (internal Ra<32 μ inch)
Other steel parts:	AISI 304
Plug seal:	PTFE (TR2) standard
Optional elastomer plug seal:	EPDM, HNBR or FPM
Other product wetted seals:	EPDM standard
Other seals:	NBR

Options

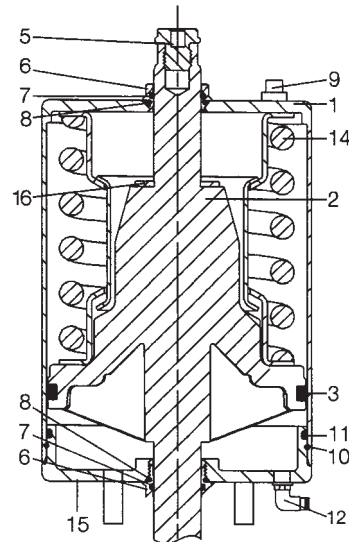
- Weld ends or connection types other than Tri-clamp
- Control and Indication: IndiTop, ThinkTop Basic and GreenTop
- Product wetted seals in HNBR or FPM
- Replaceable elastomer plug seals
- High pressure actuator
- Maintainable actuator
- External surface finish blasted

Ordering

Please state the following when ordering: Size, Connections, Valve Body Combination, Actuator Function (NC, NO or A/A), Options



MAINTAINABLE ACTUATOR



Key	Qty	Description	Key	Qty	Description
1	1	Cylinder	12	1(2)	Air fitting
2	1	Stem			(2 only for A/A)
3•*	1	O-ring	14	1	Spring assembly
5	1	Adapter	15	1	Bottom
6•*	2	Bushings	16•*1(2)		Support disc
7•*	2	O-ring			(2 only for A/A)
8•*	2	O-ring	13	1	Yoke (not shown)
9	1	Plug	17	3	Washer
10	1	Lock wire			(not shown)
11	1	O-ring	18	3	Nut (not shown)

•Service kits - Actuator, NO, NC *Service kits - Actuator, A/A

MACHINERY AND EQUIPMENT

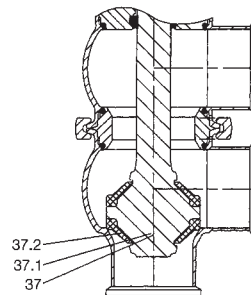
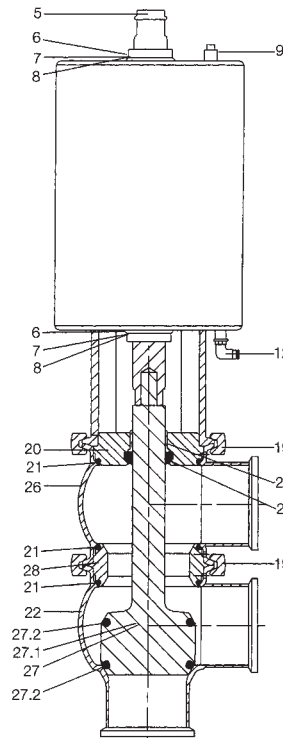
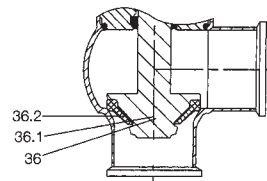
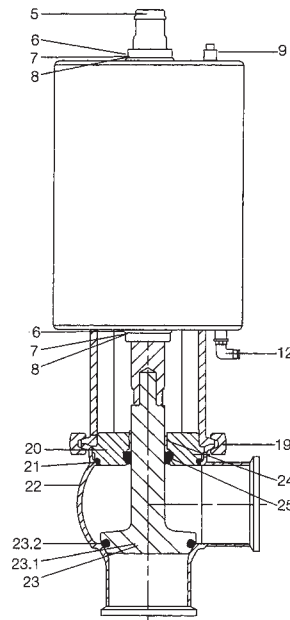
SHUT OFF VALVE

DIVERT VALVE

SHUT-OFF VALVE PARTS LIST

Key	Qty	Description
5	1	Adapter
6•	2	Bushings
7•	2	O-ring
8•	2	O-ring
9	1	Plug
12	1(2)	Air fitting (2 only for A/A)
19	1	Clamp
20	1	Bonnet
21°	1	O-ring
24°	1	Bushing
25°	1	Lip seal
22	1	Valve body, lower, 2 ports
22	1	Valve body, lower, 3 ports
Elastomer Seat Ring		
23	1	Plug, shut-off, complete
23.1	1	Plug, shut-off
23.2°	1	Plug seal
TR2 Seat Ring		
36	1	Plug, shut-off, complete
36.1	1	Plug, shut-off
36.2°	1	Plug seal, PTFE

- Service kits - Actuator
- °Service kits - EPDM
- °Service kits - HNBR
- °Service kits - FPM



DIVERT VALVE PARTS LIST

Key	Qty	Description
5	1	Adapter
6	2	Bushings
7	2	O-ring
8	2	O-ring
9	1	Plug
12	1(2)	Air fitting (2 only for A/A)
19	1	Clamp
20	1	Bonnet
21	3	O-ring
24	1	Bushing
25	1	Lip seal
28	1	Seat
26	1	Valve body, upper, 1 port
26	1	Valve body, upper, 2 ports
22	1	Valve body, lower, 2 ports
22	1	Valve body, lower, 3 ports
Elastomer Seat Ring		
27	1	Plug, change-over, complete
27.1	1	Plug, change-over
27.2°	1	Plug seal
TR2 Seat Ring		
37	1	Plug, change-over, complete
37.1	1	Plug, change-over
37.2°	1	Plug seal, PTFE

- Service kits - Actuator
- °Service kits - EPDM
- °Service kits - HNBR
- °Service kits - FPM

Pressure Data for Unique 7000 Series Valves

Table 1 - Shut-off and change-over valves Max. pressure in psi without leakage at the valve seat

Actuator / Valve Body Combination and Direction of Pressure	Air Pressure [psi]	Plug Position	1"	1 1/2"	2"	2 1/2"	3"	4"
SC TD 461-032	87.6	NO	145.0	118.9	121.8	65.2	98.6	63.8
SC TD 461-035		NO	145.0	110.2	139.2	81.2	104.4	69.6
AC TD 461-034	87.6	NC	145.0	142.1	145.0	88.4	111.6	72.5
AC TD 461-035	87.6	NC	145.0	91.3	104.4	60.9	92.8	60.9
SC TD 461-037		A/A	145.0	145.0	145.0	145.0	145.0	145.0
AC TD 461-036	87.6	A/A	145.0	145.0	145.0	145.0	145.0	145.0

A = Air

P = Product Pressure

AC = Air Closes

SC = Spring Closes

UNIQUE 7000 VALVES

DESCRIPTION CODE

1	2	3	4	A	B	C	D	E	F	5	6	7	8	9	10	11	12	13	14

1. Model Number

7610 - Unique 7000
 8610 - Unique 700 Aseptic
 7620 - Unique 7000 Tangential Outlet
 (Horizontal Mounting)
 7630 - Unique 7000 Tank Outlet
 (Vertical mounting)
 7710 - Unique 7000 Regulating

2. Body Style

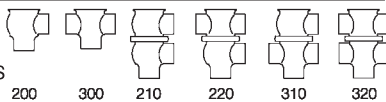
200 - Shut-off (2 port)
 300 - Shut-off (3 port)
 208 - Shut-off Tangential Right (2 port)
 207 - Shut-off Tangential Left (2 port)
 309 - Shut-off Tangential Cross (3 port)
 210 - Changeover (3 port)
 220 - Changeover (4 port)
 310 - Changeover (4 port)
 320 - Changeover (5 port)
 011 - Shut-off RA (Reverse Acting 2 port)
 021 - Shut-off RA (Reverse Acting 3 port)
 012 - Shut-off RA (Reverse Acting 3 port)
 022 - Shut-off RA (Reverse Acting 4 port)
 111 - Changeover RA (Reverse Acting 3 port)
 211 - Changeover RA (Reverse Acting 4 port)
 121 - Changeover RA (Reverse Acting 4 port)
 112 - Changeover RA (Reverse Acting 4 port)
 212 - Changeover RA (Reverse Acting 5 port)
 222 - Changeover RA (Reverse Acting 6 port)
 900 - Y-Body

3. Build In Dimension

S - Standard
 C - 700 Series Build Dimension
 (Center-Face, shut-off only)

4. Connection Ports - All Identical

W - Weld Ends - All Ports
 M - Tri-Clamp - All Ports
 T - Threaded Bevel - All Ports



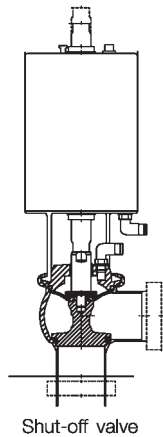
Connection Ports - Mixed

S - Mixed Connection Types

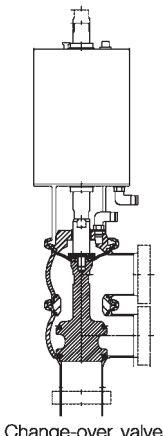
W - Weld Ends	C - Union DIN
M - Tri-Clamp	D - DIN Clamp
I - ISO Clamp	T - Threaded Bevel
S - Union SMS	N - No Port

5. Surface Finish

1 - 3A (OD = Dust Blast; ID = 32Ra)
 2 - 3A Bright (OD = Bright; ID = 32Ra)
 3 - PC (3A) (OD = Dust Blast; ID = 20Ra)
 4 - PL (3A) (OD = Bright; ID = 20Ra)
 5 - PP (3A) (OD = Bright; ID = 15Ra)
 6 - PM (3A) (OD = Bright; ID = 15Ra w/EP)



Shut-off valve



Change-over valve

6. Size (Port)

H05 - 1/2"	H20 - 2"
H07 - 3/4"	H25 - 2 1/2"
H10 - 1"	H30 - 3"
H15 - 1 1/2"	H40 - 4"

7. Actuation Mode

1 - Norm. Open/Spring to Open
 2 - Norm. Open/Spring to Open (RA)
 2 - Norm. Closed/Spring to Close
 1 - Norm. Closed/Spring to Close (RA)
 3 - Air to Air
 4 - Two-Step/Three Position
 5 - Manual

8. Actuator Stroke

S - Standard L - Long

9. Actuator Type

R - Maintainable S - Semi-Maintainable

10. Holding pressure Capability

S - Standard H - High Pressure

11. Stem Type

S - Elastomer Plug Seal T - TR2/PTFE Plug Seal

12. Wetted Seal Materials

E - EPDM U - HNBR
 Y - FPM (Fluoroelastomer)

13. S- Assembled Valve

14. Top Unit Type

TA - ThinkTop Digital 0 Solenoids
 TB - ThinkTop Digital 1 Solenoids
 TC - ThinkTop Digital 2 Solenoids
 TD - ThinkTop Digital 3 Solenoids
 TE - ThinkTop 110V Digital 0 Solenoids
 TF - ThinkTop ASI 0 Solenoids
 TG - ThinkTop ASI 1 Solenoids
 TH - ThinkTop ASI 2 Solenoids
 TI - ThinkTop ASI 3 Solenoids
 TJ - ThinkTop Device Net 0 Solenoids
 TK - ThinkTop Device Net 1 Solenoids
 TL - ThinkTop Device Net 2 Solenoids
 TM - ThinkTop Device Net 3 Solenoids
 IT - Indi Top
 Green Top Options

THE UNIQUE 7000 ASEPTIC VALVE

GENERAL INFORMATION

The Unique 7000 Series is an innovative new generation of Tri-Clover® single seat valves that are designed to meet the highest process demands of hygiene and safety. They're built on a well-proven platform from an installed base of more than one million valves.

APPLICATION

This aseptic version of the Tri-Clover Unique 7000 series features a one-piece PTFE diaphragm which eliminates the need for a steam barrier. In addition, this one-piece EPDM-backed diaphragm means you'll need fewer spare parts which translates into a low parts inventory and ultimately lower cost of valve ownership.

The PTFE constructed diaphragm offers improved cleanability and extended diaphragm life. Available as a shut-off or change-over valve, it's built for aseptic operating conditions such as high sterilization temperatures.

WORKING PRINCIPLE

Operated by means of compressed air, it can be supplied with or without spring return. Sterile stem sealing towards the atmosphere is ensured by a special designed PTFE/EPDM diaphragm and since the product-wetted part of the stem (below the diaphragm seal) never travels outside the product zone, there is no need for a steam barrier.

STANDARD DESIGN

The aseptic Tri-Clover Unique 7000 valve features the same one-piece body with no weld design benefits shared by the entire series. It consists of actuator, valve bonnet, stem with diaphragm unit and valve bodies. While the bonnet and stem configurations can vary, the body(s), actuator, clamps, stem guide bushing are all standard and common interchangeable components. The change-over version is a two-body design. The valve is assembled by means of clamps and a stem clip system for easy maintenance.



THE UNIQUE 7000 SMALL SINGLE SEAT VALVE

APPLICATION

The Small Single Seat Valve with its sanitary and flexible design is applicable for a wide range of tasks either as a stop valve with two or three ports or as a change-over valve with three to five ports. The valve is suitable for use in food, beverage, dairy and pharmaceutical industries.

WORKING PRINCIPLE

The valve is remote-controlled by means of compressed air or manually operated. The small single seat valve is very reliable due to its simple design and few moving parts.

STANDARD DESIGN

The Small Single Seat Valve is available as 1/2" and 3/4" Tri-Clamp, and consists of actuator, sealing element, lip seal, plug and valve bodies. The plug is a PVDF plug. All components are assembled by means of clamp rings whereas the piston and valve plug have a threaded connection. In order to facilitate installation the valve is only partly assembled when delivered. The valve has welding ends or clamp ends as standard.



APV HOMOGENIZERS

We offer the widest selection of homogenizers in the world, with hundreds of possible variations. Whatever you're processing, we'll custom-engineer a Gaulin or Rannie homogenizer with the right capacity, valve configuration and materials to meet your exact process requirements.

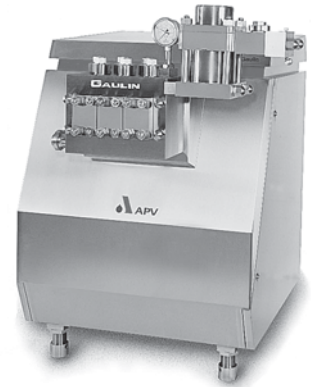
The key to the superior performance of Gaulin and Rannie homogenizers is our valve technology, the most advanced in the industry. You can choose from a wide variety of high-performance valves designed for a broad range of capacities and pressure requirements up to 21,750 psi.

Special purpose valves include our unique, patented Micro-Gap® valve that processes dairy products at pressures up to 35% lower than conventional valves. Also provided are cell-disruption valves that harvest high-yields of intracellular products with minimum debris, and steam-sterilized sealed valves for aseptic operation.

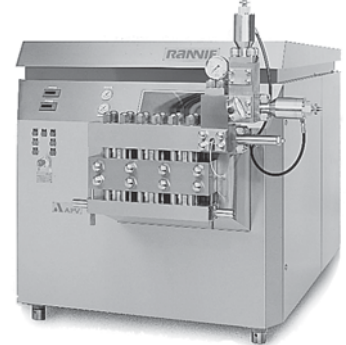
Both hydraulic and pneumatic valve actuation systems are available for all Gaulin and Rannie models.

We offer the largest selection of fluid end designs, materials and configurations in the industry. We'll help you select the right homogenizing valve cylinder design for your application or custom engineer one to meet your exact requirements. However viscous or abrasive your product, however adverse your operating conditions, we can meet your needs.

The Gaulin Model 37



The Rannie Model 95

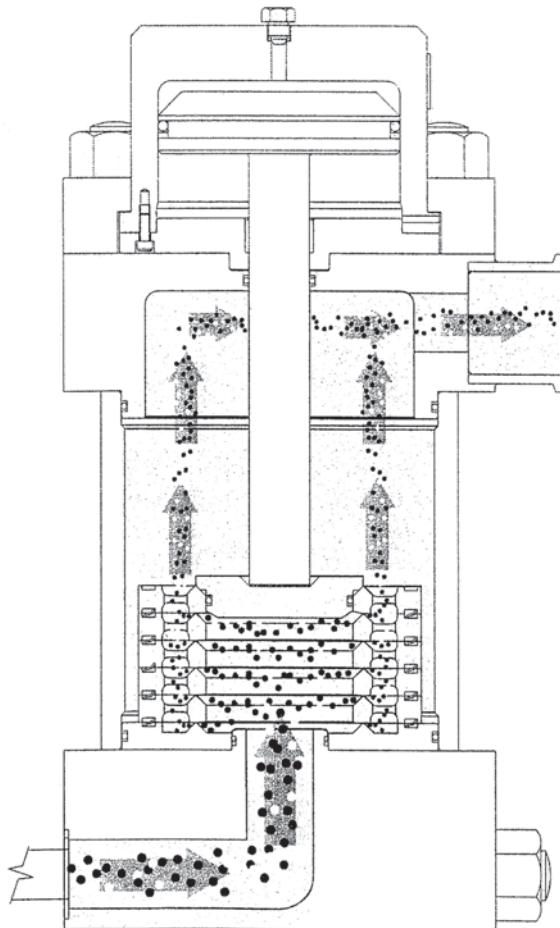


HOMOGENIZATION

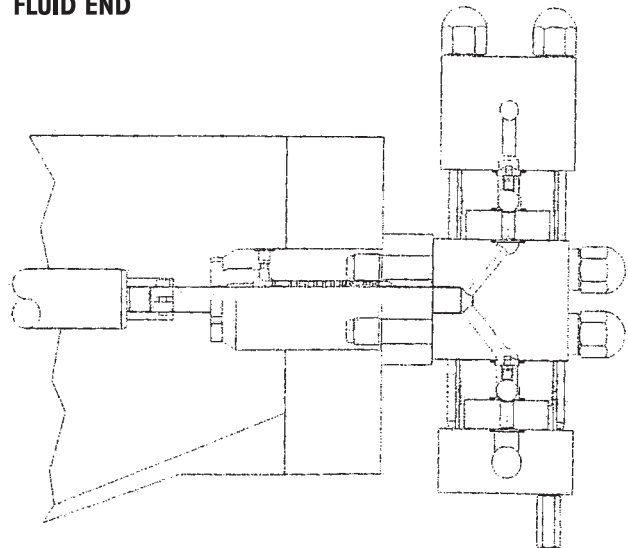
Homogenization is the process of emulsifying one liquid into another or dispersing solid particles uniformly throughout a product. The process breaks apart particles and liquid globules, reducing their size and substantially improving a number of important qualities. The difference before and after homogenization is clearly visible.

Processors all over the world use Gaulin and Rannie homogenizers to improve their products and gain a distinct competitive advantage. In fact, our homogenizers are used to enhance thousands of products in many diverse industries.

MICRO GAP



FLUID END

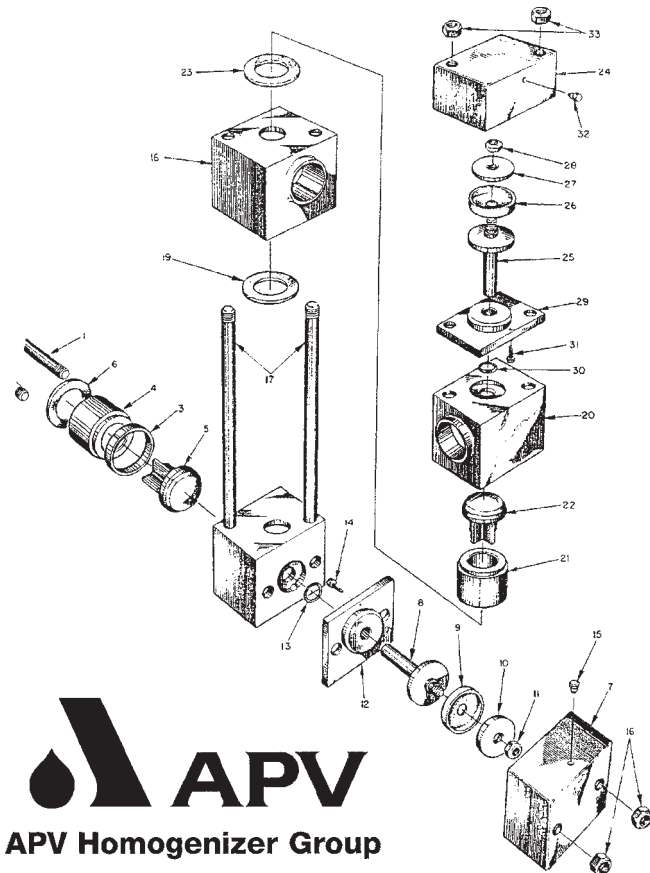


 **APV**
APV Homogenizer Group

GAULIN & RANNIE

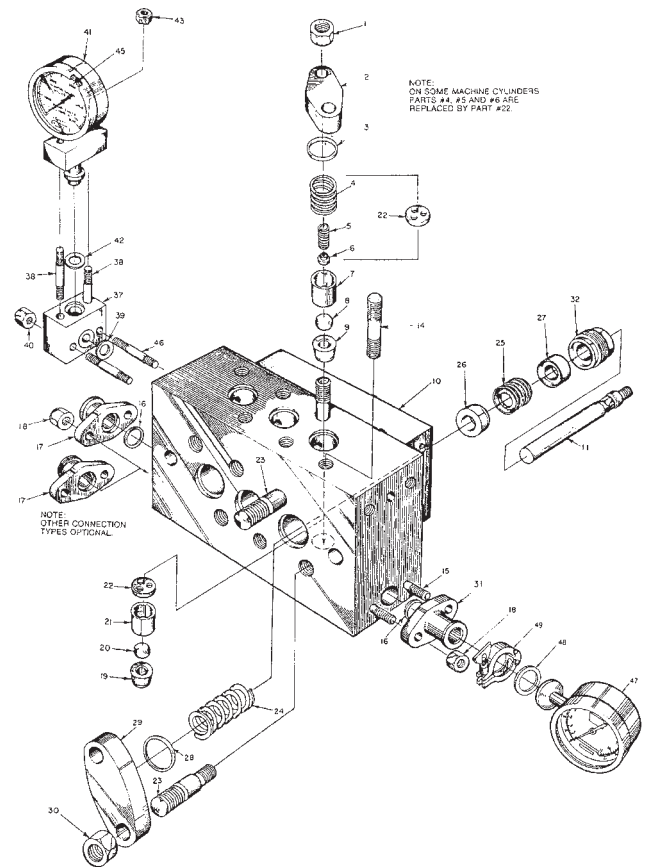
TWO-STAGE HOMOGENIZING VALVE ASSEMBLY

Discharge block located between homogenizing valve and by-pass or control valve assemblies



TAPERED BALL VALVE SEAT CYLINDER

Packing adjusting screw - TBA



FIRST STAGE PARTS LISTS

Key Qty	Description
1 2	Valve Body Stud
2 1	Valve Body
3 1	Impact Ring
4 1	Homo Valve Seat
5 1	Homo Valve
6 1	Homo Valve Seat Gasket
7 1	Actuator Body
8 1	Actuator Valve Rod
9 1	Actuator Packing
10 1	Actuator Packing Follower
11 1	Valve Rod Nut
12 1	Actuator Guide Plate
13 1	Valve Rod Seal
14 2	Actuator Body Screw
15 1	Vent Plug
16 2	Valve Body Stud Nut

SECOND STAGE PARTS LISTS

Key Qty	Description
17 2	Valve Body Stud
18 1	Discharge Block
19 1	Discharge Block Gasket
20 1	Valve Body
21 1	Homo Valve Seat
22 1	Homo Valve
23 1	Homo Valve Seat Gasket
24 1	Actuator Body
25 1	Actuator Valve Rod
26 1	Actuator Packing
27 1	Actuator Packing Follower
28 1	Valve Rod Nut
29 1	Actuator Guide Plate
30 1	Valve Rod Seal
31 2	Actuator Body Screw
32 1	Vent Plug
33 2	Valve Body Stud Nut

WHEN ORDERING PARTS, SPECIFY MODEL NO., SERIAL NO., AND PART ITEM NO. "M" SERIES BLOCK & VALVE ARRANGEMENT SHOWN ABOVE. MANY ALTERNATIVES EXISTS - CALL FOR EXACT SPECIFICATIONS

TBA CYLINDER PARTS LISTS

Key Qty	Description	Key Qty	Description
1 6	Upper Cap Stud Nut	24 3	Suction Valve Stop Retainer Spring
2 3	Upper Cap	25 *	Plunger Packing (*see machine identification sheet - varies)
3 3	Upper Cup Gasket	26 3	Plunger Rings
4 3	Discharge Valve Guide Retaining Spring	27 3	Packing Adjusting Ring
5 3	Discharge Valve Spring	28 3	Front Cap Gasket
6 3	Discharge Valve Spring Button	29 3	Front Cap Gasket
7 3	Discharge Valve Guide	30 6	Front Cap Stud Nut
8 3	Discharge Ball Valve	31 1	Inlet Connection
9 3	Tapered Discharge Valve Seat	32 3	Packing Adjusting Screw
10 1	Cylinder	37 1	Gauge Block
11 3	Plunger	38 2	Gauge Stud
14 3	Upper Cap Stud	39 1	Gauge Block Gasket
15 4	Connection Stud	40 2	Gauge Block Stud Nut
16 2	Connection Gasket	41 1	Gauge with Flange
17 1	Inlet Connection (Tri-Clamp or Standard)	42 1	Gauge Gasket
18 4	Connection Stud Nut	43 2	Gauge Stud Nut
19 3	Tapered Suction Valve Seat	45 1	Pressure Limiting Pointer
20 3	Suction Ball Valve	46 2	Gauge Block Stud
21 3	Suction Valve Guide	47 1	Infeed Pressure Gauge
22 3	Valve Stop	48 1	Infeed Pressure Gauge Gasket
23 6	Front Cap Stud	49 1	Infeed Gauge clamp

ALFA LAVAL SURFACE FINISH CODES

ID or Product Contact Surface Maximum Surface Roughness (Ra)			OD or Product Noncontact Surface	
Finish Code	Microinches (μ-inch)	Micrometers (μm)	Polishing Method	Polishing Method
1			Unpolished	Unpolished
3			Polished	Unpolished
7*	32	0.8	Mechanical Polished	Polished to Ra, 32μ-inch/0.8μm
PL*	20	0.5	Mechanical Polished	Polished to Ra, 32μ-inch/0.8μm
PM	15	0.4	Mechanical Polish Electropolished	Polished to Ra, 32μ-inch/0.8μm

Not all finishes available per fitting.

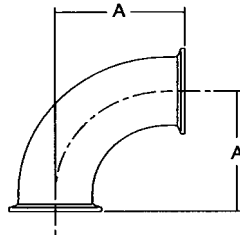
*Authorized to carry the 3A symbol.

ALFA LAVAL - TRI-CLAMP® FITTINGS

B2CMP - 90° ELBOW

Sizes and Dimensions

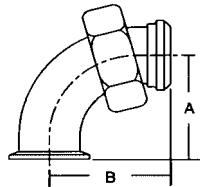
Size in	A in
1/2	1.63
3/4	1.63
1	2.00
1 1/2	2.75
2	3.50
2 1/2	4.25
3	5.00
4	6.63
6	10.50



2FMP-14- PLAIN BEVEL SEAT 90° ELBOW

Sizes and Dimensions

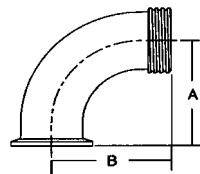
Size in	A in	B in
1	2.00	2.19
1 1/2	2.75	2.97
2	3.50	3.72
2 1/2	4.25	4.59
3	5.00	5.41
4	6.63	7.22



2FMP-15 - THREADED BEVEL SEAT 90° ELBOW

Sizes and Dimensions

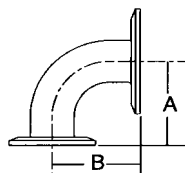
Size in	A in	B in
1	2.00	2.19
1 1/2	2.75	2.97
2	3.50	3.72
2 1/2	4.25	4.59
3	5.00	5.41
4	6.63	7.22



2CMP-31MP 90° REDUCING ELBOW, NON-TAPERED

Sizes and Dimensions

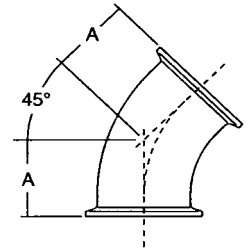
Size in	A in	B in
2 x 1	2.00	2.00
2 x 1 1/2	2.75	2.75
2 1/2 x 2	3.50	3.50
3 x 2	3.50	3.50
3 x 2 1/2	4.25	4.25
4 x 3	5.00	5.13



B2KMP - 45° ELBOW

Sizes and Dimensions

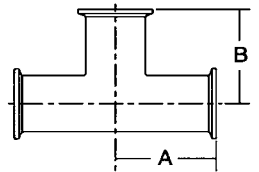
Size in	A in
1/2	1.00
3/4	1.00
1	1.13
1 1/2	1.44
2	1.75
2 1/2	2.06
3	3.38
4	3.13
6	5.25



B7MP - EQUAL TEE

Sizes and Dimensions

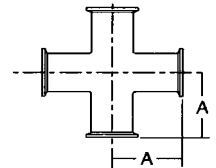
Size in	A in	B in
1/2	2.25	2.25
3/4	2.38	2.38
1	2.63	2.63
1 1/2	2.88	2.88
2	3.38	3.38
2 1/2	3.63	3.63
3	3.88	3.88
4	7.13	7.13
6	7.13	7.13



B9MP - EQUAL CROSS

Sizes and Dimensions

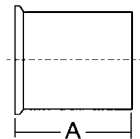
Size in	A in
1/2	2.25
3/4	2.38
1	2.63
1 1/2	2.88
2	3.38
2 1/2	3.63
3	3.88
4	4.75



L14AM - LONG WELD FERRULE

Sizes and Dimensions

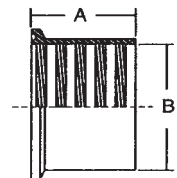
Size in	A in
1	1 1/8
1 1/2	1 1/8
2	1 1/8
2 1/2	1 1/8
3	1 1/8
4	1 1/8



14RMP - FERRULE FOR EXPANDING (RECESSLESS)

Sizes and Dimensions

Size in	A in	B in
1	0.75	1
1 1/2	1.13	1.50
2	1.31	2.00
2 1/2	1.38	2.50
3	1.44	3.00
4	1.50	4.0



MACHINERY AND EQUIPMENT

14WMPS/14WMO - SHORT WELD FERRULE

14WMPS Sizes and Dimensions

Size in	A in
1/2	0.50
3/4	0.50
1	0.50
1 1/2	0.50
2	0.50
2 1/2	0.50
3	0.50
4	0.63
6	0.75
6	1.50



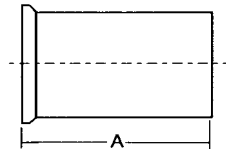
14WMO Sizes and Dimensions

Size in	A in
8	1.50
10	1.50
12	1.75

14WLMP/14WLMO - LIGHT TANK WELD FERRULE

14WLMP Sizes and Dimensions

Size in	A in
1	3.00
1 1/2	3.00
2	3.00
2 1/2	3.00
3	4.00
4	4.00



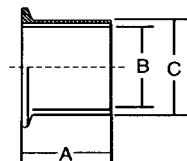
14WLMO Sizes and Dimensions

Size in	A in
6	6.00
8	6.00
10	6.00
12	6.00

14MPW - TANK WELD FERRULE

Sizes and Dimensions

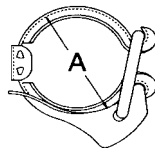
Size in	A in	B in	C in
1	1.63	0.88	1.16
1 1/2	1.63	1.38	1.67
2	1.75	1.88	2.19
2 1/2	1.75	2.38	2.70
3	1.81	2.88	3.22
4	2.13	3.83	4.25



13MHLA - LIGHT DUTY ADJUSTABLE TRI-CLAMP

Sizes and Dimensions

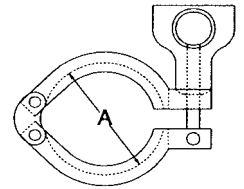
Size in	A in
1 1/2	2.14
2	2.61
2 1/2	3.14
3	3.67
4	4.78



13MHM** - DOUBLE HINGE HEAVY DUTY TRI-CLAMP WITH WING NUT

Sizes and Dimensions

Size in	A in
1 1/2	2.13
2	2.66
2 1/2	3.19
3	3.72
4	4.83
6	6.69
8	8.69

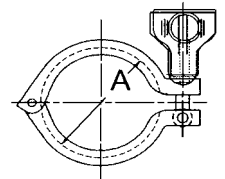


**Also available with bronze or stainless steel hex nut.

A13MHM - SINGLE HINGE HEAVY DUTY TRI-CLAMP WITH WING NUT

Sizes and Dimensions

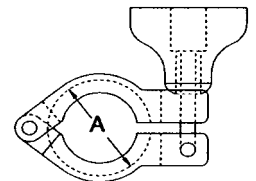
Size in	A in
1 1/2	2.13
2	2.64
2 1/2	3.19
3	3.72
4	4.81
6	6.69



13MHHS - FRACTIONAL TRI-CLAMP WITH WING NUT

Sizes and Dimensions

Size in	A in
3/4	1.13

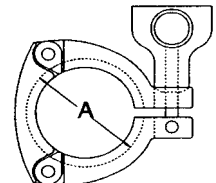


13MHHS - 3-SEGMENT HEAVY DUTY TRI-CLAMP WITH WING NUT

Sizes and Dimensions

Size in	A in
1 1/2	2.13
2	2.66
2 1/2	3.19
3	3.72
4	4.83

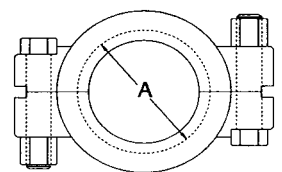
**Also available with hex nut.



13MHP - HIGH PRESSURE TRI-CLAMP

Sizes and Dimensions

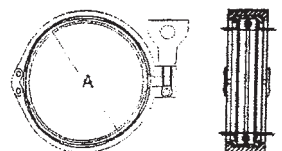
Size in	A in
1 1/2	2.05
2	2.58
2 1/2	3.11
3	3.64
4	4.73
6	6.63



A12MPS - SWIVEL JOINT

Sizes and Dimensions

Size in	A in
1 1/2	1.98
2	2.52
2 1/2	3.05
3	3.58
4	4.69

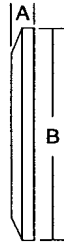


MACHINERY AND EQUIPMENT

16AMP/16AMO - SOLID END CAP

16AMP Sizes and Dimensions

Size in	A in	B in
3/4	0.19	0.98
1 1/2	0.25	1.98
2	0.25	2.52
2 1/2	0.25	3.05
3	0.25	3.58
4	0.25	4.69
6	0.44	6.58



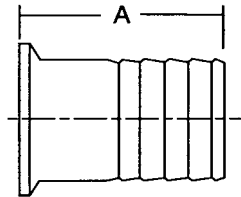
16AMO Sizes and Dimensions

Size in	A in	B in
8	0.44	6.39
10	0.44	8.58
12	0.56	12.58

14MPHR - RUBBER HOSE ADAPTER

Sizes and Dimensions

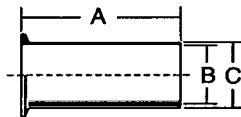
Size in	A in
1/2 x 1/4	1.50
1/2 x 3/8	1.50
1/2 x 1/2	1.50
3/4 x 1/4	1.50
3/4 x 3/8	1.50
3/4 x 1/2	1.50
3/4 x 3/4	1.50
1 x 1	1.69
1 1/2 x 1 1/2	1.69
2 x 2	2.31
2 1/2 x 2 1/2	2.00
3 x 3	3.11
4 x 4	3.41



14MPHT- TYGON HOSE ADAPTER

Sizes and Dimensions

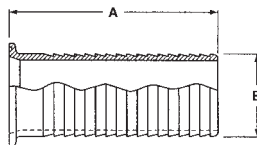
Size in	A in	B in	C in
1	4.50	0.88	1.00
1 1/2	4.50	1.38	1.50
2	4.50	1.88	2.00
2 1/2	4.50	2.38	2.50
3	4.50	2.88	3.00
4	4.63	3.83	4.00



14MPHRL- EXTRA LONG BREWERY HOSE BARB ADAPTER

Sizes and Dimensions

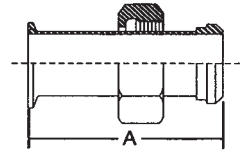
Size in	A in	B in	Prod. No.
1	3.50	1.00	14MPHRL100
1 1/2	5.00	1.50	14MPHRL150
2	5.00	2.00	14MPHRL200
2 1/2	5.50	2.50	14MPHRL250
3	5.50	3.00	14MPHRL300
4	5.5	4.00	14MPHRL400



17MP-14 - PLAIN BEVEL SEAT ADAPTER

Sizes and Dimensions

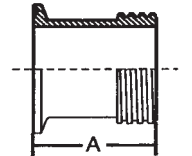
Size in	A in
1	3.00
1 1/2	3.00
2	3.00
2 1/2	3.50
3	3.75
4	4



17MP-15 - THREADED BEVEL SEAT ADAPTER

Sizes and Dimensions

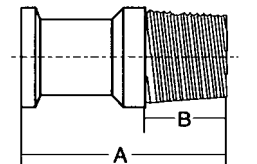
Size in	A in
1	1.69
1 1/2	1.72
2	1.72
2 1/2	1.84
3	1.91
4	2.34



21MP - MALE NPT ADAPTER

Sizes and Dimensions

Size in	A in	B in
1 1/2 x 1/8	2.00	0.40
1/2 x 1/4	2.00	0.59
1/2 x 3/8	2.00	0.60
1/2 x 1/2	2.00	0.78
1/2 x 3/4	2.00	0.79
3/4 x 1/8	2.00	0.40
3/4 x 1/4	2.00	0.59
3/4 x 3/8	2.00	0.60
3/4 x 1/2	2.00	0.78
3/4 x 3/4	2.00	0.79
1 x 3/4	2.19	0.98
1 x 1	2.25	0.69
1 1/2 x 1 1/4	2.44	0.70
1 1/2 x 1 1/2	2.44	0.72
1 1/2 x 3/4	2.19	0.55
1 1/2 x 1	2.31	0.72
1 1/2 x 2	2.63	0.72
2 x 1 1/2	2.47	0.75
2 x 2	2.66	0.75
2 1/2 x 2	3.13	1.14
2 1/2 x 2 1/2	3.28	1.38
3 x 3	3.50	1.20
4 x 4	3.81	1.30



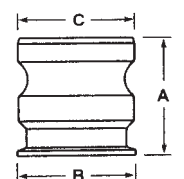
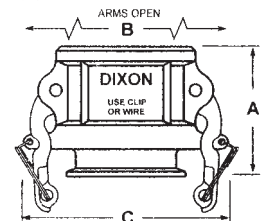
CAM AND GROOVE TRANSITION FITTINGS

Coupler Sizes and Dimensions

Size in	A in	B in	C in	Part. No.
1-1 1/2	2.687	7.875	3.937	RC150SE
2	2.812	8.25	4.312	RC200SE
3	3.0	10.0	5.625	RC300SE

Adaptor Sizes and Dimensions

Size in	A in	B in	C in	Part. No.
1-1 1/2	2.281	2.0	2.093	RE150SE
2	2.593	2.5	2.468	RE200SE
3	2.75	3.562	3.593	RE300SE



SPECIFY TYPE 304L OR TYPE 316L GRADE STAINLESS STEEL
WHEN ORDERING

MACHINERY AND EQUIPMENT

SURFACE FINISH CODES

ID or Product Contact Surface Maximum Surface Roughness (Ra)			OD or Product Noncontact Surface	
Finish Code	Micrometers (μm)	Micrometers (μm)	Polishing Method	Polishing Method
1			Unpolished	Unpolished
3			Polished	Unpolished
7*	32	0.8	Mechanical Polished	Polished to Ra, 32μ-inch/0.8μm
PL*	20	0.5	Mechanical Polished	Polished to Ra, 32μ-inch/0.8μm
PM	15	0.4	Mechanical Polish Electropolished	Polished to Ra, 32μ-inch/0.8μm

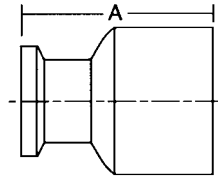
Not all finishes available per fitting.

*Authorized to carry the 3A symbol.

22MP - FEMALE NPT ADAPTER

Sizes and Dimensions

Size in	A in
1/2 x 1/8	1.25
1/2 x 1/4	1.50
1/2 x 3/8	1.50
1/2 x 1/2	1.50
1/2 x 3/4	1.62
3/4 x 1/8	1.25
3/4 x 1/4	1.50
3/4 x 3/8	1.50
3/4 x 1/2	1.50
3/4 x 3/4	1.62
1 x 3/4	1.63
1 x 1	1.63
1 1/2 x 1 1/4	2.25
1 1/2 x 1 1/2	2.25
1 1/2 x 3/4	1.63
1 1/2 x 1	1.63
2 x 1 1/2	1.69
2 x 2	2.34
2 1/2 x 1 1/2	1.69
2 1/2 x 2	1.41
2 1/2 x 2 1/2	2.09
3 x 3	2.19
4 x 4	2.66



23BMP - THERMOMETER CAP

No Tapped Hole -

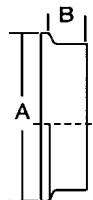
Sizes and Dimensions

Size in	A in	B in
1 x 1 1/2	1.98	0.63
2	2.52	0.63
2 1/2	3.05	0.63
3	3.58	0.63
4	4.69	0.63

Tapped with NPT Threads -

Sizes and Dimensions

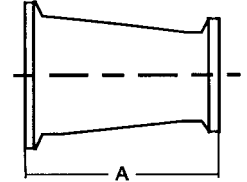
Size in	A in	B in
1 1/2 x 1/2	1.98	0.63
1 1/2 x 3/4	1.98	0.63
2 x 3/4	2.52	0.63
2 1/2 x 3/4	3.05	0.63
3 x 3/4	3.58	0.63
4 x 3/4	4.69	0.63



B31-14MP - CONCENTRIC REDUCER

Sizes and Dimensions

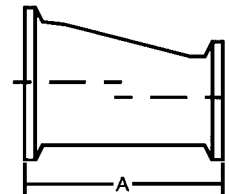
Size in	A in
3/4 x 1/2	2.00
1 x 1/2	2.50
1 x 3/4	2.00
1 1/2 x 1/2	3.50
1 1/2 x 3/4	3.00
1 1/2 x 1	3.00
2 x 3/4	5.00
2 x 1	5.00
2 x 1 1/2	3.00
2 1/2 x 1 1/2	5.00
2 1/2 x 2	3.00
3 x 1 1/2	7.00
3 x 2	5.00
3 x 2 1/2	3.00
4 x 2	9.13
4 x 2 1/2	9.13
4 x 3	5.13
6 x 3	7.63
6 x 4	7.63



B32-14MP - ECCENTRIC REDUCER

Sizes and Dimensions

Size in	A in
3/4 x 1/2	2.00
1 x 1/2	2.50
1 x 3/4	2.00
1 1/2 x 1/2	3.50
1 1/2 x 3/4	3.00
1 1/2 x 1	3.00
2 x 1	5.00
2 x 1 1/2	3.00
2 1/2 x 1 1/2	25.00
2 1/2 x 2	3.00
3 x 1 1/2	7.00
3 x 2	5.00
3 x 2 1/2	3.00
4 x 2	9.13
4 x 2 1/2	7.13
4 x 3	5.13
6 x 3	7.63
6 x 4	7.63

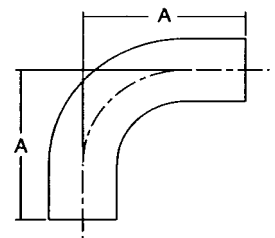


TRI-WELD® FITTINGS

B2S - BEND 90°, AUTOMATIC TRI-WELD

Sizes and Dimensions

Size in	A in
1/2	3.00
3/4	3.00
1	3.00
1 1/2	3.75
2	4.75
2 1/2	5.50
3	6.25
4	8.00
6	11.50



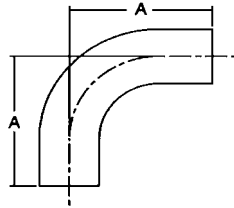
SPECIFY TYPE 304L OR TYPE 316L GRADE STAINLESS STEEL WHEN ORDERING

MACHINERY AND EQUIPMENT

L2S - BEND 90°

Sizes and Dimensions

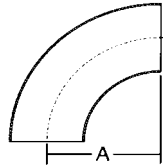
Size in	A in
1	2.06
1 1/2	2.94
2	4.06
2 1/2	5.19
3	6.31
4	8.31



2WCL - BEND 90°, NO TANGENT

Sizes and Dimensions

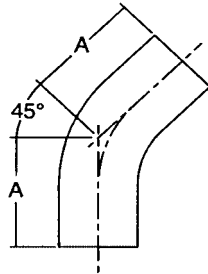
Size in	A in
1	1.50
1 1/2	2.25
2	3.00
2 1/2	3.75
3	4.50
4	6.00
6	9.00



B2KS - BEND 45°, AUTOMATIC TRI-WELD

Sizes and Dimensions

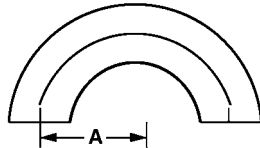
Size in	A in
1/2	2.25
3/4	2.25
1	2.25
1 1/2	2.50
2	3.00
2 1/2	3.38
3	3.63
4	4.50
6	6.25



2WUL - BEND 180°, NO TANGENT

Sizes and Dimensions

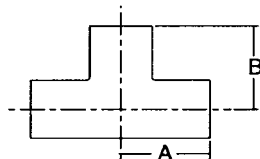
Size in	A in
1	1.50
1 1/2	2.25
2	3.00
2 1/2	3.75
3	4.50
4	6.00



B7WWW - EQUAL TEE

Sizes and Dimensions

Size in	A in	B in
1/2	1.88	1.88
3/4	2.00	2.00
1	2.13	2.13
1 1/2	2.38	2.38
2	2.88	2.88
2 1/2	3.13	3.13
3	3.38	3.38
4	4.13	4.13
6	5.63	5.63

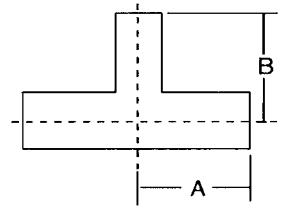


SPECIFY TYPE 304L OR TYPE 316L GRADE STAINLESS STEEL WHEN ORDERING

B7RWWW - REDUCING TEE

Sizes and Dimensions

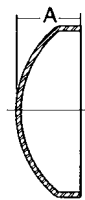
Size in	A in	B in
3/4 x 1/2	2.00	2.00
1 x 1/2	2.13	2.13
1 x 3/4	2.13	2.13
1 1/2 x 1/2	2.38	2.38
1 1/2 x 3/4	2.38	2.38
1 1/2 x 1	2.38	2.38
2 x 1/2	2.88	2.63
2 x 3/4	2.88	2.63
2 x 1	2.88	2.63
2 x 1 1/2	2.88	2.63
2 1/2 x 1/2	3.13	2.88
2 1/2 x 3/4	3.13	2.88
2 1/2 x 1	3.13	2.88
2 1/2 x 1 1/2	3.13	2.88
2 1/2 x 2	3.13	2.88
3 x 1/2	3.38	3.13
3 x 3/4	3.38	3.13
3 x 1	3.38	3.13
3 x 1 1/2	3.38	3.13
3 x 2	3.38	3.13
3 x 2 1/2	3.38	3.13
4 x 1/2	4.13	3.63
4 x 3/4	4.13	3.63
4 x 1	4.13	3.63
4 x 1 1/2	4.13	3.63
4 x 2	4.13	3.88
4 x 2 1/2	4.13	3.88
4 x 3	4.13	3.88
6 x 1/2	5.63	5.13
6 x 3/4	5.63	5.13
6 x 1	5.63	5.13
6 x 1 1/2	5.63	5.13
6 x 2	5.63	5.13
6 x 2 1/2	5.63	5.13
6 x 3	5.63	5.13
6 x 4	5.63	5.13



16W - END CAP

Sizes and Dimensions

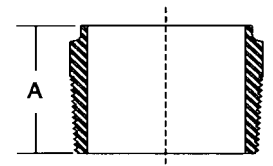
Size in	A in
1	0.38
1 1/2	0.56
2	0.75
2 1/2	1.00
3	1.25
4	1.50
6	2.25
8	2.63



19WB - MALE NPT ADAPTER

Sizes and Dimensions

Size in	A in
1/2	1.31
3/4	1.63
1	1.75
1 1/2	1.75
2	1.81
2 1/2	2.31
3	2.50
4	2.56

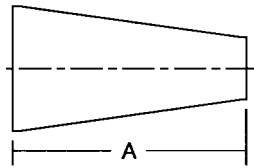


MACHINERY AND EQUIPMENT

L31 - CONCENTRIC REDUCER

Sizes and Dimensions
Size in A in

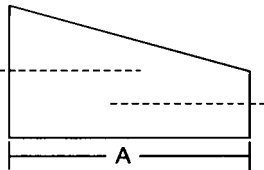
1 1/2 x 1	2.00
2 x 1	4.00
2 x 1 1/2	2.00
2 1/2 x 1 1/2	4.75
2 1/2 x 2	2.00
3 x 1 1/2	6.00
3 x 2	4.00
3 x 2 1/2	2.00
4 x 2	8.00
4 x 2 1/2	6.00
4 x 3	4.00
6 x 3	5.50
6 x 4	5.50



L32 - ECCENTRIC REDUCER

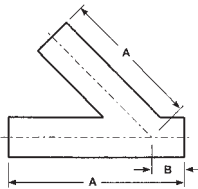
Sizes and Dimensions
Size in A in

1 1/2 x 1	2.00
2 x 1	4.00
2 x 1 1/2	2.00
2 1/2 x 1 1/2	4.00
2 1/2 x 2	2.00
3 x 2	4.00
3 x 2 1/2	2.00
4 x 2	8.00
4 x 2 1/2	6.00
4 x 3	4.00
6 x 3	5.50
6 x 4	5.50



B28WA 316 WELD END LATERAL Y - #7 FINISH

Tube Part. No.	O.D.	Dimensions A in	B in	Nominal Wall
B28WA-R100P	1	5.000	1.000	.065
B28WA-R150P	1 1/2	6.187	1.187	.065
B28WA-R200P	2	7.125	1.000	.065
B28WA-R250P	2 1/2	8.500	1.500	.065
B28WA-R300P	3	8.875	1.875	.065
B28WA-R400P	4	10.750	2.437	.083
B28WA-R600P	6	12.500	4.00	.109



SUPER SPEED TOOLS SAWING VISE

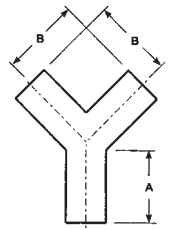
The SUPER SPEED Sawing Vise illustrated provides the most efficient tool for tube cutting...used in bench vise, this tool-hardened vise assures fast, accurate sawing of tubing, cuts clean all the way-no tubing wasted - Sawing Vise is used over and over again...a life-long tool.



Part Number	Tube Size O.D.	Part Number	Tube Size O.D.
071014-1A	1	071014-2 1/2A	2 1/2
071014-1 1/2A	1 1/2	071014-3A	3
071014-2A	2	071014-4A	4

B28W 316 WELD END TRUE Y - #7 FINISH

Tube Part. No.	O.D.	Dimensions A in	B in	Nominal Wall
B28W-R100P	1	2.000	2.438	.065
B28W-R150P	1 1/2	2.000	2.438	.065
B28W-R200P	2	2.625	3.250	.065
B28W-R250P	2 1/2	3.370	4.125	.065
B28W-R300P	3	4.000	4.875	.065
B28W-R400P	4	5.375	5.375	.083



SWEEP ELBOWS

Our 3A Sanitary approved, long radius elbows are available in several diameters and centerlines. All elbows have zero tangents and are available in 45 and 90 degree variations.



STANDARD 90° SWEEP ELBOWS IN STOCK

Prod. No*	Diameter	Gauge	Radius
2SXL-1.5-12-316L	1 1/2"	16 Ga.	12" CLR
2SXL-2-12-316L	2"	16 Ga.	12" CLR
2SXL-2-18-316L	2"	16 Ga.	18" CLR
2SXL-2-24-316L	2"	16 Ga.	24" CLR
2SXL-2.5-18-316L	2 1/2"	16 Ga.	18" CLR
2SXL-2.5-24-316L	2 1/2"	16 Ga.	24" CLR
2SXL-3-12-316L	3"	16 Ga.	12" CLR
2SXL-3-18-316L	3"	16 Ga.	18" CLR
2SXL-3-24-316L	3"	16 Ga.	24" CLR
2SXL-3-36-316L	3"	16 Ga.	36" CLR
2SXL-4-18-316L	4"	14 Ga.	18" CLR
2SXL-4-24-316L	4"	14 Ga.	24" CLR
2SXL-4-36-316L	4"	14 Ga.	36" CLR

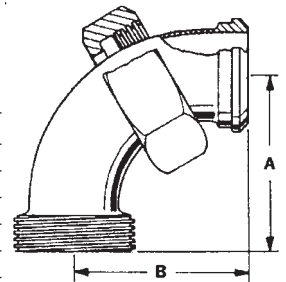
*Substitute 2KXL in part number for 45° elbows.

BEVEL SEAT FITTINGS

2F-90° SWEEP ELL (3A)

Sizes and Dimensions Bevel Seat

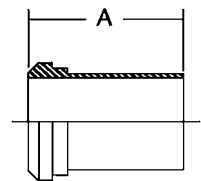
Tube O.D.	A in	B in
1	2	2
1 1/2	2 7/8	2 7/8
2	3 23/32	3 23/32
2 1/2	4 27/32	4 27/32
3	5 29/32	5 29/32
4	8 1/16	8 1/16



L14A - PLAIN LONG WELD FERRULE

Sizes and Dimensions

Size in	A in	Size in	A in
1	1.38	2 1/2	1.75
1 1/2	1.50	3	1.75
2	1.50	4	1.75



14PRFS - PLAIN SHORT WELD FERRULE

Sizes and Dimensions

Size in	A in	Size in	A in
1	0.69	2 1/2	0.84
1 1/2	0.72	3	0.91
2	0.72	4	1.22

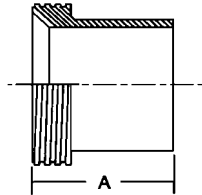


MACHINERY AND EQUIPMENT

L15A - THREADED LONG WELD FERRULE

Sizes and Dimensions

Size in	A in
1	1.38
1 1/2	1.50
2	1.50
2 1/2	1.75
3	1.75
4	1.75



15TRFS - THREADED SHORT WELD FERRULE

Sizes and Dimensions

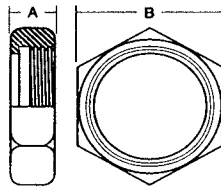
Size in	A in
1	0.69
1 1/2	0.72
2	0.72
2 1/2	0.84
3	0.91
4	0.53



13H - BEVEL SEAT NUT

Sizes and Dimensions

Size in	A in	B in
1	0.91	1.81
1 1/2	0.97	2.41
2	1.06	3.00
2 1/2	1.19	3.59
3	1.28	4.19
4	1.50	5.44



16A - PLAIN SOLID END CAP

Sizes and Dimensions

Size in	A in
1	1.31
1 1/2	1.84
2	2.38
2 1/2	2.91
3	3.44
4	4.50

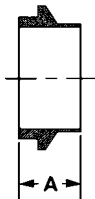


HDI-LINE FITTINGS (I-LINE)

HDI-14W - MALE SHORT FERRULE

Sizes and Dimensions

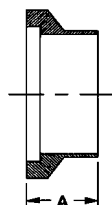
Size in	A in
1	0.78
1 1/2	0.94
2	1.03
2 1/2	1.16
3	1.22
4	1.34



HDI-15W - FEMALE SHORT FERRULE

Sizes and Dimensions

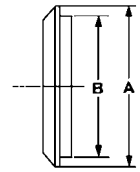
Size in	A in
1	0.78
1 1/2	0.94
2	1.03
2 1/2	1.16
3	1.22
4	1.34



HDI-16A-14 - MALE SOLID END CAP

Sizes and Dimensions

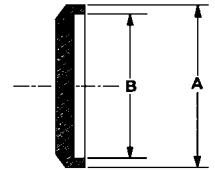
Size in	A in	B in
1 1/2	2.00	1.75
2	2.66	2.25
2 1/2	3.31	2.75
3	3.88	3.31
4	4.88	4.31



HDI-16A-15 - FEMALE SOLID END CAP

Sizes and Dimensions

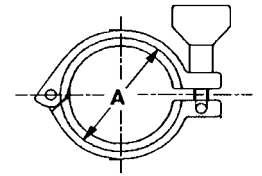
Size in	A in	B in
1 1/2	2.00	1.75
2	2.66	2.25
2 1/2	3.31	2.75
3	3.88	3.31
4	4.88	4.31



HDI-13-UD - CLAMP

Sizes and Dimensions

Size in	A in
1 1/2	2.22
2	2.97
2 1/2	3.59
3	4.16
4	5.13



HDI-40 - GASKET

Size in	Size in
1	2 1/2
1 1/2	3
2	4



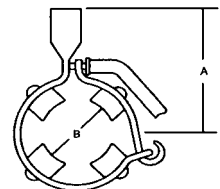
SEE PAGE 75 FOR EXACT DIMENSIONS.

MISCELLANEOUS FITTINGS

A24FCF - HINGED PIPE HANGER

Sizes and Dimensions

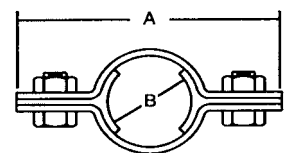
Size in	A in	B in
1	4.00	1.00
1 1/2	4.00	1.50
2	4.00	2.00
2 1/2	4.56	2.50
3	4.56	3.00
4	5.69	4.00
6	7.59	6.00



B24FCF - TWO PIECE PIPE HANGER

Sizes and Dimensions

Size in	A in	B in
1/2	2.69	0.50
3/4	2.69	0.75
1	3.25	1.00
1 1/2	3.75	1.50
2	4.25	2.00
2 1/2	4.75	2.50
3	5.25	3.00
4	6.25	4.00



MACHINERY AND EQUIPMENT

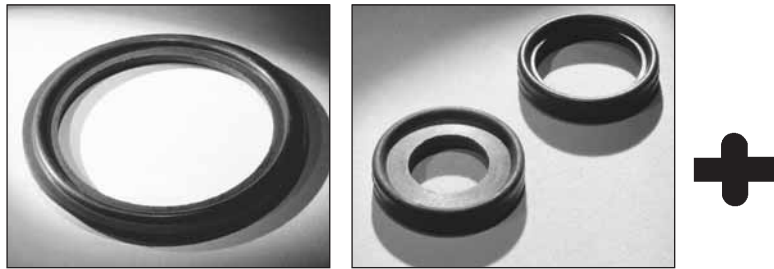
SANITARY GASKETS

There many types of sanitary gaskets specific to the North American market. Below you will find a compilation of the most popular gaskets and materials in use.

GASKET MATERIALS

Characteristic	Buna-N (U)	EPDM (E)	Fluoro- Elastomer(SFY)	Silicone (X)	PTFE (G)	Tef-Steel® (TS)	White Buna (UW)
Original Physical Properties							
Hardness, Shore A	70	70	70	70	-	68	70
Tensile Strength, psi	1875	1650	1212	1340	-	1928	1875
Elongation, %	340	317	272	260	-	270	340
Temperature Range	-65 to 200°F	-60 to 300°F	-20 to 350°F	-40 to 450°F	-40 to 200°F	-20 to 450°F	-65 to 200°F
Acid Resistance	Good	Good to Excellent	Good to Excellent	Poor to Good	Good to Excellent	Excellent	Good
Alkali Resistance	Fair to Good	Good to Excellent	Poor to Good	Poor to Fair	Excellent	Excellent	Fair to Good
Resistance to Fats/Oils	Good to Excellent	Poor	Good to Excellent	Poor to Good	Excellent	Excellent	Good
Abrasion Resistance	Excellent	Good	Good to Excellent	Poor	Fair	Good	Excellent
Compression Set Resistance	Good	Fair	Good to Excellent	Good to Excellent	Cold Flows	Fair	Good

TYPE 1 TRI-CLAMP GASKETS (TUBE O.D. SIZE)



Black Buna	EPDM	Viton	Silicone	Teflon®	Tef-Steel®	White Buna-UW
42MPU - 1/2	42MPE - 1/2	42MPSFY - 1/2	42MPX - 1/2	42MPG - 1/2	42MPG TS - 1/2	42MPUW - 1/2
42MPU - 3/4	42MPE - 3/4	42MPSFY - 3/4	42MPX - 3/4	42MPG - 3/4	42MPG TS - 3/4	42MPUW - 3/4
40MPU - 1	40MPE - 1	40MPSFY - 1	40MPX - 1	40MPG - 1	40MPG TS - 1	40MPUW - 1
40MPU - 1 1/2	40MPE - 1 1/2	40MPSFY - 1 1/2	40MPX - 1 1/2	40MPG - 1 1/2	40MPG TS - 1 1/2	40MPUW - 1 1/2
40MPU - 2	40MPE - 2	40MPSFY - 2	40MPX - 2	40MPG - 2	40MPG TS - 2	40MPUW - 2
40MPU - 2 1/2	40MPE - 2 1/2	40MPSFY - 2 1/2	40MPX - 2 1/2	40MPG - 2 1/2	40MPG TS - 2 1/2	40MPUW - 2 1/2
40MPU - 3	40MPE - 3	40MPSFY - 3	40MPX - 3	40MPG - 3	40MPG TS - 3	40MPUW - 3
40MPU - 4	40MPE - 4	40MPSFY - 4	40MPX - 4	40MPG - 4	40MPG TS - 4	40MPUW - 4
40MOU - 5	40MOE - 5	40MOSFY - 5	40MOX - 5	40MOG - 5		
40MOU - 6	40MOE - 6	40MOSFY - 6	40MOX - 6	40MOG - 6		
40MOU - 8	40MOE - 8	40MOSFY - 8	40MPOX - 8	40MOG - 8		
40MOU - 10	40MOE - 10	40MOSFY - 10	40MOX - 10	40MOG - 10		
40MOU - 12	40MOE - 12	40MOSFY - 12	40MOX - 12	40MOG - 12		

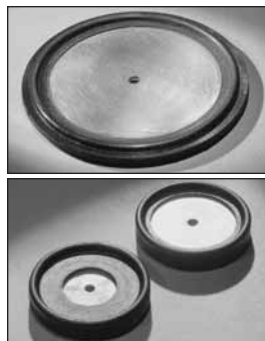
Tef-Steel TM of Rubberfab Mold & Gasket

TYPE 1 TRI-CLAMP ORIFICE PLATES

Black Buna 316 SS

A84MPU - 1/2
A84MPU - 3/4
A80MPU - 1
A80MPU - 1 1/2
A80MPU - 2
A80MPU - 2 1/2
A80MPU - 3
A80MPU - 4

Also available in EPDM, Viton,
and Teflon®



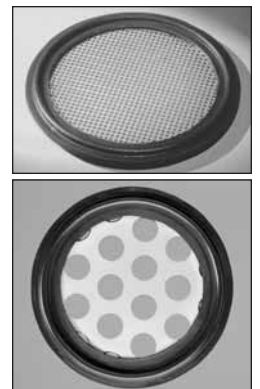
TYPE 1 TRI-CLAMP SCREEN GASKETS (PERFORATED METAL)

Specify by Hole Size and Tube O.D.
Hole Sizes—1/4", 3/16", 1/8", 3/32"

Black Buna 316 SS

40MPUP - 1 1/2
40MPUP - 2
40MPUP - 2 1/2
40MPUP - 3
40MPUP - 4

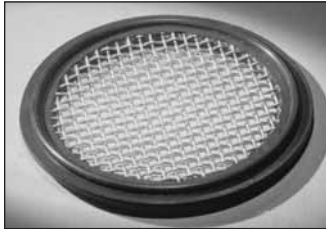
Also available in EPDM & Viton



MACHINERY AND EQUIPMENT

TYPE 1 TRI-CLAMP SCREEN GASKETS (MESH TYPE)

Type 304 Stainless Steel,
available in 1", 1 1/2", 2", 2 1/2", 3" and 4" sizes.
Specify by mesh size and tube O.D. (10 Mesh Standard)
Mesh Sizes - 4, 6, 10, 12, 20, 30, 40, 50, 60, 80, 100, 150, 200
Mesh = Holes per Linear Inch



Black Buna/316 SS

40MPU S - 1 1/2
40MPU S - 2
40MPU S - 2 1/2
40MPU S - 3
40MPU S - 4

Also available in Viton, EPDM and Silicone

TYPE 2 TRI-CLAMP GASKETS FLANGED GASKETS (TUBE O.D. SIZE)

Black Buna	Viton (SFY)
40MPF U - 1	40MPFSFY - 1
40MPF U - 1 1/2	40MPFSFY - 1 1/2
40MPF U - 2	40MPFSFY - 2
40MPF U - 2 1/2	40MPFSFY - 2 1/2
40MPF U - 3	40MPFSFY - 3
40MPF U - 4	40MPFSFY - 4
40MOF U - 6	40MPFSFY - 6
40MOF U - 8	40MPFSFY - 8
40MOF U - 10	40MPFSFY - 10
40MOF U - 12	40MPFSFY - 12

Also available in EPDM



TYPE 3 TRI-CLAMP GASKETS ENVELOPE GASKETS (TUBE O.D. SIZE)

Teflon Outer Viton Inner*
A42MPGR - 1/2
A42MPGR - 3/4
A40MPGR - 1
A40MPGR - 1 1/2
A40MPGR - 2
A40MPGR - 2 1/2
A40MPGR - 3
A40MPGR - 4
A40MOGR - 6
A40MOGR - 8
A40MOGR - 10
A40MOGR - 12

*Also available with EPDM Insert



TYPE 1, 2, AND 3 TRI-CLAMP GASKETS (SCHEDULE 5 SIZE)

Type 1 (Standard)		Type 2 (Flanged)		Type 3 (Envelope)
Black Buna	Viton (SFY)	Black Buna	Viton (SFY)	Teflon Outer/Viton Inner
40MVU - 1	40MVSFY - 1	40MVU - 1	40MVSFY - 1	A40MVG-R - 1
40MVU - 1 1/2	40MVSFY - 1 1/2	40MVU - 1 1/2	40MVSFY - 1 1/2	A40MVG-R - 1 1/2
40MVU - 2	40MVSFY - 2	40MVU - 2	40MVSFY - 2	A40MVG-R - 2
40MVU - 2 1/2	40MVSFY - 2 1/2	40MVU - 2 1/2	40MVSFY - 2 1/2	A40MVG-R - 2 1/2
40MVU - 3	40MVSFY - 3	40MVU - 3	40MVSFY - 3	A40MVG-R - 3
40MVU - 4	40MVSFY - 4	40MVU - 4	40MVSFY - 4	A40MVG-R - 4

JOHN PERRY GASKETS

Black Buna	Teflon®	EPDM
40JPU - 1 1/2	40JPG - 1 1/2	40JPE - 1 1/2
40JPU - 2	40JPG - 2	40JPE - 2
40JPU - 2 1/2	40JPG - 2 1/2	40JPE - 2 1/2
40JPU - 3	40JPG - 3	40JPE - 3
40JPU - 4	40JPG - 4	40JPE - 4



MACHINERY AND EQUIPMENT

TEFLON BEVEL SEAT GASKETS

For beveled joints, dairy and other sanitary services. Teflon is inert and will not impart odor or taste to products - is non-sticking - and is not affected by cleaning solutions, steam or solvents.
Useful temperature 450°F to -100°F

TEFLON - THIN (.1" THICK)

For new or refaced Bevelled Seat Joints. Bevelled face joints, standard thickness "Make-Up" height .090/.105"

Part No. Joint Size

DH-10	1"
DH-15	1 1/2"
DH-20	2"
DH-25	2 1/2"
DH-30	3"
DH-40	4"



TEFLON - THICK (.15" THICK)

For refaced Bevelled Seat Joints. Bevelled face joints, heavy thickness "Make-Up" height .145/.160"

Part No. Joint Size

DHR-10	1"
DHR-15	1 1/2"
DHR-20	2"
DHR-25	2 1/2"
DHR-30	3"
DHR-40	4"



BUNA MOLDED GASKETS

Available in black or white Buna N.

Part No.

40BSB - 1
40BSB - 1 1/2
40BSB - 2
40BSB - 2 1/2
40BSB - 3
40BSB - 4



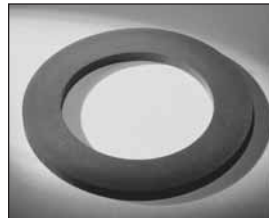
BUNA FLAT SEAT GASKETS

Available in black or white Buna N.
Sizes: 1 1/2", 2", 2 1/2", 3" and 4"

Part No.

40BSF - 1 1/2
40BSF - 2
40BSF - 2 1/2
40BSF - 3
40BSF - 4

Also available in Paper Style



HAYNES SNAP-TITE GASKETS

Low cost, reusable leak-preventing neoprene gasket for sanitary fittings. Haynes molded-to-shape neoprene re-usable gaskets do away with all the disadvantages of old style fibre gaskets.

- "Form-Fit" wide flange hugs standard bevel seat fittings
- Molded to precision standards
- Durable glossy surface
- Designed to snap into fittings

Part No. Size Per Box

STB 1	1"	100
STB 112	1 1/2"	100
STB 2	2"	100



I-LINE GASKETS

For Cherry Burrell "I" Line joints, standard thickness "Make-Up" height .145/.160"

Joint Size

I.D.	O.D.
1"	.901" 1.260"
1 1/2"	1.401" 1.760"
2"	1.869" 2.760"
2 1/2"	2.369" 3.260"
3"	2.896" 3.320"
4"	3.937" 4.312"



Gasket Material/Part No.

Black Buna	White EPDM	Teflon®	Viton	Tef-Steel
40IH-1	40IE-1	DG 10-1	40IV-1	40ITTS-1
40IH-1 1/2	40IE-1 1/2	DG 15-1 1/2	40IV-1 1/2	40ITTS-1 1/2
40IH-2	40IE-2	DG 20-2	40IV-2	40ITTS-2
40IH-2 1/2	40IE-2 1/2	DG 25-2 1/2	40IV-2 1/2	40ITTS-2 1/2
40IH-3	40IE-3	DG 30-3	40IV-3	40ITTS-3
40IH-4	40IE-4	DG 40-4	40IV-4	40ITTS-4

H-LINE GASKETS - G & H STYLE

Red Silicone

Part No.

H40 - 1 1/2
H40 - 2
H40 - 2 1/2
H40 - 3
H40 - 4

Also available in Black Viton or Black Buna Elastomers



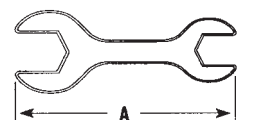
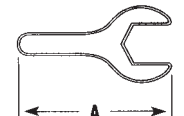
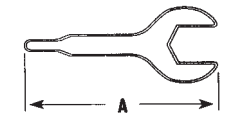
SANITARY WRENCHES

Aluminum Alloy

Part No.	Size in	A in
25HL 2 1/2	2 1/2	17 1/2
25HL3	3	20
25HL 3 1/2	3 1/2	21
25HL4	4	23

Part No.	Size in	A in
25HS 1 1/2	1 1/2	7 1/2
25HS 2	2	8
25HS 2 1/2	2 1/2	10
25HS 3	3	12

Part No.	Size in	A in
25DE 2x1 1/2	2 x 1 1/2	13 1/2
25HA 2 1/2x2	2 1/2 x 2	18



MACHINERY AND EQUIPMENT

A.P.C "K" CLAMP AND "PV" GASKETS

Available in black or gray Buna N.
Also available in Viton, Silicone, EPDM,
and Teflon.

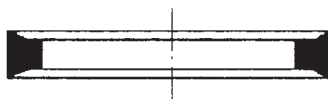
Sizes: 1", 1 1/2", 2", 2 1/2", 3" and 4"

Part No.

Gray Buna

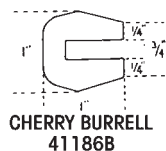
Teflon®

101 H - 1	101 T - 1
101 H - 1 1/2	101 T - 1 1/2
101 H - 2	101 T - 2
101 H - 2 1/2	101 T - 2 1/2
101 H - 3	101 T - 3
101 H - 4	101 T - 4

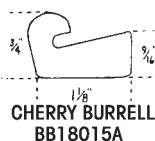


MANWAY GASKETS

How to order: Check the shape of the door gasket(s) you require and advise us of the dimensions (ID x OD and thickness) plus color and any other information you might have as to the make, size, model, capacity of your tanks, or SEND US A SAMPLE.



CHERRY BURRELL
41186B



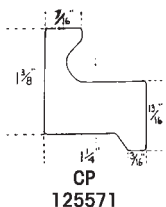
CHERRY BURRELL
BB18015A



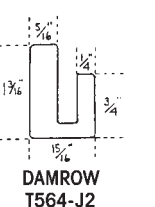
CHICAGO
STAIN
DPF12-4



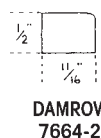
CP
83-004



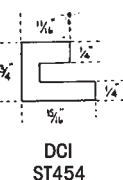
CP
125571



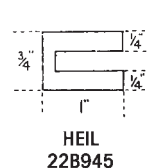
DAMROW
T564-J2



DAMROW
7664-2



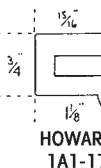
DCI
ST454



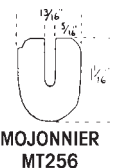
HEIL
22B945



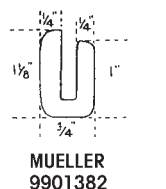
HEIL
22B1583



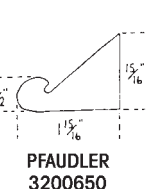
HOWARD
1A1-17



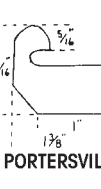
MOJONNIER
MT256



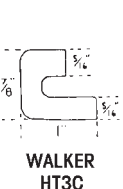
MUELLER
9901382



PFADLER
3200650



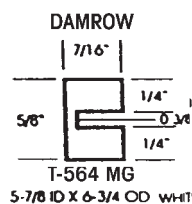
PORTERSVILLE



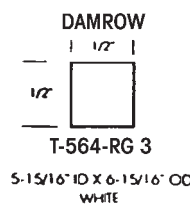
WALKER
HT3C

TANK SIGHT GLASS GASKETS

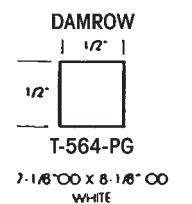
As with Tank Door Gaskets, check the dimensions of the existing gasket, or SEND US A SAMPLE. Many other sizes available.



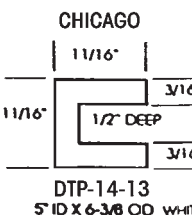
T-564 MG
5-7/8 ID X 6-3/4 OD WHITE



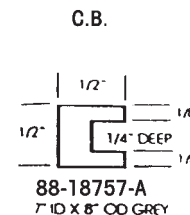
T-564-RG 3
5-15/16 ID X 6-15/16 OD WHITE



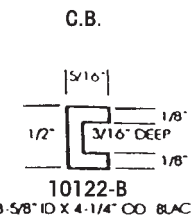
T-564-PG
7-1/8 ID X 8-1/8 OD WHITE



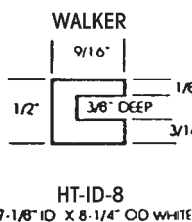
DTP-14-13
5 ID X 6-3/8 OD WHITE



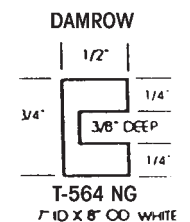
88-18757-A
7 ID X 8 OD GREY



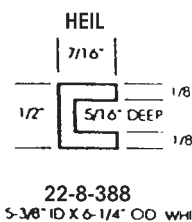
10122-B
3-5/8 ID X 4-1/4 OD BLACK



HT-ID-8
7-1/8 ID X 8-1/4 OD WHITE



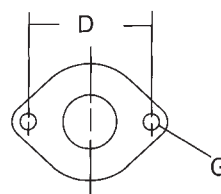
T-564 NG
7 ID X 8 OD WHITE



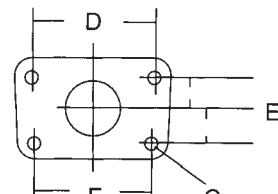
22-8-388
5-3/8 ID X 6-1/4 OD WHITE

TANK OUTLET FLANGE GASKETS

- Teflon
- Seals valve to tank
- Specify by valve manufacturer



2 hole flange
for 2" (51mm) valves



4 hole flange for
2 1/2" (63.5mm), 3" (76mm)
and 4" (102mm) valves

Size

Tube O.D.	D	E	F	G
1 1/2	2 3/8	6 3/4	1 23/32	3 7/16
2	2 3/4	7 1/2	2 1/8	4 1/4
2 1/2	3 15/32	8 21/32	2 5/8	5 1/4
3	3 11/16	9 23/32	3 5/16	6 5/8

Prod. No. Description

2506T	Tri-Clover 1 1/2" flange gasket
2516T	Tri-Clover 2" flange gasket
17-85G	Tri-Clover 2 1/2" flange gasket
17-83G	Tri-Clover 3" flange gasket

MACHINERY AND EQUIPMENT

LAGENCO WELD COLLAR - WALL FLANGES T-304

- Mounts permanently
- Seals tubing through walls
- Welds onto vertical tank agitator as drip deflector



TUBE SIZE S.S. WALL FLANGE (16 GAUGE)

Part Number	Size (I.D./O.D.)
WFT-1/2X3	1/2" X 3"
WFT-1/2	1/2" X 5"
WFT-3/4X3	3/4" X 3"
WFT-3/4	3/4" X 5"
WFT-1X3	1" X 3"
WFT-1	1" X 5"
WFT-1 1/2	1 1/2" X 5"
WFT-2	2" X 5"
WFT-2 1/2	2 1/2" X 5"
WFT-3	3" X 6"
WFT-4	4" X 7"
WFT-6	6" X 10"
WFT-8	8" X 12"
WFT-10	10" X 14"
WFT-12	12" X 16"

LAGENCO ADJUSTABLE STAINLESS STEEL FEET

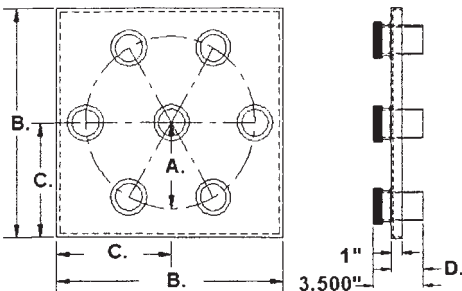
Part No.	Description
LFT 112	1 1/2" O.D. Adjustable Feet
LFT 2	2" O.D. Adjustable Feet



STAINLESS STEEL SANITARY FLOW PLATES

- Welds polished on front, seal welded and cleaned on back
- Constructed of either T-304 or T-316 S.S.
- Fabricated with tri-clamp, bevel seat or John Perry ferrules
- Constructed of 3/16" or 1/4" thick plate (as per your design)
- 1 1/2" bent lip on all four sides of plate
- 3" long butt weld tube or fitting on back
- Fabricated as per your design. Call for Pricing.

Most delivered in 1-2 weeks



Size	A	B	C	D
1"	4.500	16.000	8.000	2.250
2"	6.000	16.000	8.000	2.250
2 1/2"	7.500	24.000	12.000	2.250
3"	9.000	24.000	12.000	2.000

LAGENCO STAINLESS STEEL TUBING HANGERS

Part Number	Insert Styles
PHG - Size	Grommets - Viton or Buna
PHP - Size	PVC Collars (to 200°F)
PHP Newman-Size	Polypropylene collars (to 300°F)



TUBE SIZE S.S. HEX HANGERS T-304

Size (Tube O.D.)	Height A	Width B	Viton or Buna Grommet Size
1/2"	2 1/8"	3 7/8"	5/8"
3/4"	2 1/8"	3 7/8"	1/2"
1"	2 1/8"	3 7/8"	1/2"
1 1/2"	2 1/8"	4"	1/8"
2"	2 5/8"	4 3/8"	1/8"
2 1/2"	3 1/8"	5 1/2"	1/8"
3"	3 5/8"	5 5/8"	1/8"
4"	4 3/4"	7 3/8"	1/8"
5"	5 3/4"	7 3/4"	1/8"
6"	6 3/4"	9"	1/8"
8"	8 3/4"	11 7/16"	1/8"
10"	10 5/8"	14 5/8"	1/8"
12"	12 5/8"	15 3/4"	1/8"
14"	14 3/4"	19"	1/8"

STAINLESS STEEL SANITARY TUBING

3A authorized, and meets ASTM Standard A-270 for Sanitary Tubing and ASTM Standard A-269 for General Service.

Raw material is purchased from select domestic suppliers against United Industries' tight chemical mechanical ranges. Specific chemical composition eliminates inclusions in both the weld and parent materials. Specific 2B finish, designated grain size, and optimum mechanical characteristics yield superior full-finished products.

Weld reduction is continuous roll as opposed to reciprocating ironing systems, providing smooth bores and improved flow characteristics minimizing hang-up of water borne debris and preferential attack.

All tubing is fully annealed to a min. 1900°F and rapidly quenched; ensuring limited delta ferrite in the weld, full stress relief, and no chrome-carbide precipitation.

For surface finishes, see page 57.

Available in 304, 316L, Hastalloy, and AL6XN in the following sizes.

O.D. Size	Wall Thickness	Gallons per linear Foot	Case Quantity/Ft.
1/2"	.065	.0056	N/A
3/4"	.065	.0157	N/A
1"	.049/.065	.0332/.0309	280
1 1/2"	.049/.065	.0802/.0766	340
2"	.049/.065	.1476/.1427	340
2 1/2"	.065	.2292	220
3"	.065	.3361	220
4"	.065/.083	.611/.5998	100
6"	.083	1.3887	100

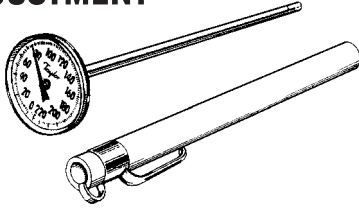
8", 10" and 12" also available.

Tubing is a market priced item which varies in price monthly. Please call Stuart W. Johnson for the most current pricing. Order case lot quantities for FOB to your plant shipping allowances.

MACHINERY AND EQUIPMENT

TAYLOR POCKET THERMOMETERS WITH EXTERNAL ADJUSTMENT

Supplied with a Delrin carrying case with an attached pencil clip. Stainless steel stem 5" long, guaranteed accurate 1/2 of 1%. With recalibrating device.



Model	Range	Increments
6071-1	-40° to 120°F	2°
6072-1	0° to 220°F	2°
6073-1	50° to 550°F	5°
6074-1	-40° to 50°C	2°
6075-1	25° to 125°F	1°
6076-1	40° to 160°F	2°
6077-1	0° to 150°C	2°
6078-1	0° to 250°C	5°
6079-1	-10° to 110°C	2°

TAYLOR DIGITAL POCKET THERMOMETER

New Economically Priced, 1 1/4" head, 5" Stainless Steel Stem.

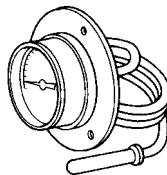
- 58° to 302°F Range
- .1°F Resolution up to 199.9°F
- One Second Update
- On/Off Switch for Long Battery Life
- Free Spare Battery Included



Model	Range	
09840	58° to 302°F	
09841	50° to 302°F and 50° to 150°C	(dual range)
09865	58° to 302°F	(heavy duty)

CAN AND BOTTLE WASHER THERMOMETERS

Guaranteed accurate vapor action thermometer for can and bottle washers. Comes only in large 3 1/2" easy to read dial. Has standard 1/2" brass union connection. 3 1/2" by 7/16" diameter with recalibrating device.



Model	Range	Length"
VA35R-30-6	-40° to 110°F	6'
VA35R-50-6	40° to 240°F	6'
VA35R-50-15	40° to 240°F	15'

INSTANT READ PROBE THERMOMETER

Instant temperature readings on easy-to-read 1 1/4" analog dial with shatterproof crystal. Stainless steel 5 1/4" slim stem with instant response. Protective sheath. Battery included.



Product No.

00663

FLOATING THERMOMETERS

This is the best general purpose floating dairy thermometer on the market today. Long mercury well for speed, accurate to 1°. Sold in shatter proofed glass only.



MASTER OR LABORATORY THERMOMETERS

Model	Range	Increments	Length"
30030	20° to 220°F	2°	10"
03130	30° to 120°F	1°	12"
03131	0° to 220°F	2°	12"
03132	30° to 300°F	2°	12"
03135	30° to 500°F	2°	16"
03137	30° to 750°F	2°	16"
03231	20° to 105°C	1°	12"
03232	-5° to 150°C	1°	12"
03206	5° to 200°C	1°	12"
03234	5° to 260°C	1°	16"
03237	-5° to 360°C	1°	16"

ALFA LAVAL BI-METALLIC DIAL THERMOMETER

COMPLETE THERMOMETER WITH DIAL, WELL AND CAP ASSEMBLY (316ST)

Order Part# 54-52-Temp Range-Size

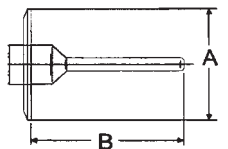
Sizes Available: 1 1/2", 2", 2 1/2", 3" and 4"



WELL & CAP ASSEMBLY ONLY (316ST)

Order Part# 37-121-Size-316

Size in	A in	B in
1 1/2	2.00	3.06
2	2.50	3.56
2 1/2	3.06	3.56
3	3.59	3.81
4	4.69	3.81



DIAL THERMOMETER ONLY

Order Part# 54-51-Temp Range

54-51-1	Thermometer
54-51-2	Thermometer
54-51-3	Thermometer

Temperature Code - °F

- 1 - 0-200
- 2 - 0-250
- 3 - 50-300

NIST CERTIFICATE AVAILABLE

MACHINERY AND EQUIPMENT

HOW TO CHOOSE STUART W. JOHNSON & CO., INC. DIAL THERMOMETER

- 1) Pick the Stuart W. Johnson dial thermometer on this page that best suits your process application
- 2) Take that product number and fill in the blanks

Stem Length Choices (not all lengths available for each model)

2 1/2", 3", 3 1/2", 4", 6", 9", 12", 15", 16", 18", 24", 30", 36", 40"

Connection Choices

1/4" NPT, 1/2" NPT, and Plain

Lens Material Choices

Plexiglass or Glass

Range (not all ranges available for each model)

-50° to 120°F, 25° to 125°F, 0° to 220°F, 30° to 240°F, 50° to 350°F

Sample Part Number

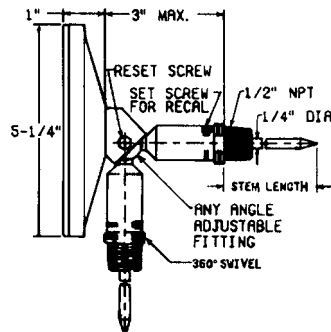
1848 - 9" - 1/2" NPT - Plexiglass - 0° to 220°F

STUART W. JOHNSON & CO., INC. 5" ADJUSTABLE ANGLE THERMOMETER

Type 304 stainless steel, plexiglass lens, slotted screw recal device with a 1/2" NPT threaded connection. Accuracy is 1% of scale range.

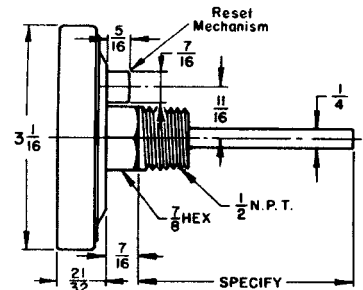
Product No.

1849



STUART W. JOHNSON & CO., INC. BIMETAL THERMOMETER- 3" DIAL

These easy to read thermometers are able to withstand rough treatment and a difficult environment. This thermometer has a recalibration feature and a 1/2" NPT or 1/4" NPT threaded connection. Type 304 stainless steel case, bezel and stem, aluminum dial, bimetallic sensing element and glass, plexiglass or tempered glass lens.

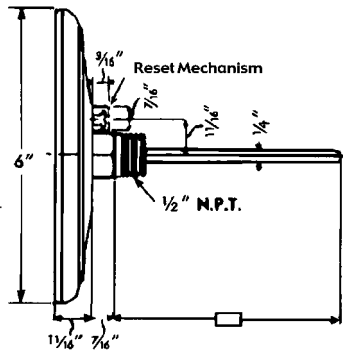


Product No.

1748

STUART W. JOHNSON & CO., INC. BIMETAL THERMOMETER- 5" DIAL

These easy to read extra-large thermometers have become very popular due to their ability to withstand rough treatment and difficult environments. This thermometer has a recalibration feature and a 1/2" NPT or 1/4" NPT threaded connection. Type 304 stainless steel case, bezel and stem, aluminum dial, bimetallic sensing element and glass, plexiglass or tempered glass lens.



Product No.

1848

STUART W. JOHNSON & CO., INC. BIMETAL THERMOMETER- 2" DIAL

These thermometers with recalibration feature are all purpose units for laboratory and general testing. Materials of construction are: type 304 stainless steel case bezel and stem, aluminum dial, bi-metallic sensing element and glass or plexiglass lens.

Product No.

1598



**ANDERSON
CHART RECORDERS**

AV9900 S.T.L.R. SAFETY THERMAL LIMIT RECORDER

PERFORMANCE

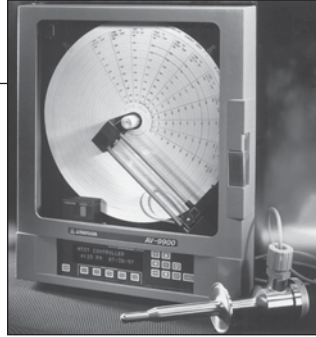
Recording Accuracy: $\pm 0.3\%$ of chart span reference accuracy

Operating Temperature: 0 to 50°C (32 to 122°F)

Humidity: 10 to 90% RH, non-condensing

Warranty: 2 years

Agency Approvals: UL Approved in the USA, UL certified for Canada



INPUTS

STLR: Dual Element, 1,000 ohm, 3-wire

Hot Water & Cold Product: Single Element, 100 ohm, 3-wire or 4-20mA, 2-wire

Flow Rate: 4-20mA, 2-wire

OUTPUTS

A total of four on/off relay outputs and up to four 4 to 20mA analog outputs are available.

STLR Relay: DPDT, 5 amps at 115 VAC, 2.5 amps at 230 VAC

Relay Outputs: SPDT, contacts rated 5 amps resistive at 115 VAC, 2.5 amps resistive at 230 VAC

POWER

AC Power: 115 or 230 VAC $\pm 15\%$, 50/60 Hz, auto-switching

PHYSICAL

Overall Dimensions: 14.12" wide x 16.77" high x 7.75" deep (358.65mm wide x 425.96mm high x 196.85mm deep)

Panel Depth: 5.25" (133.35mm)

Panel Cutout: 12.7" wide x 12.7" high (322.58mm x 322.58mm)

Front Panel Protrusion: 2.5" (63.5mm)

Weight: 25 lbs maximum (55 kg)

Vibration: 3 to 100 Hz @ 0.2g

Enclosure: Gasketed cover, structural foam case, and cover material with plastic window area, NEMA 4X

Mounting: Universal, panel, or wall

Chart: 12" diameter, 100 linear divisions

DISPLAY AND KEYPAD

Primary Display: 2 line, 40 character vacuum fluorescent display with character .21" (5mm) high

AV9900 DESCRIPTION CODE

AV99 0 3 AH
1 2 3 4 5 6 7 8 9

1. Hot Water Control

0 - None 2 - PID - Onboard PID Controller

2. Cold Water Control

0 - None 2 - Recorder with Controller
1 - Recorder

3. Flow Rate

0 - None
1 - Safety Flow Limit - Record Only
2 - Safety Flow Limit - Record & Control*

4. Relays (other than STLR Relay)

0 - None 4 - Four
2 - Two

5. Setpoint Selection†

0 - None (five internally selected setpoints)
1 - Two (2) remotely selected setpoints
2 - Four (4) remotely selected setpoints

6. 4-20mA Outputs

0 - None 4 - Four (internally powered)
1 - One (internally powered) 5 - Two (externally powered)
2 - Two (internally powered) 6 - Four (externally powered)
3 - Three (internally powered) 7 - Four (2 int., 2 ext. powered)

7. Transmitter Power Supply

0 - None 2 - Two
1 - One 3 - Three

8. Voltage

1 - 110 2 - 220

9. Case Mount

3 - Wall/Panel

Note: Request worksheet 1029 for additional information required prior to order acceptance.

*Must specify one mA output for each of the following additional functions specified.

Hot Water Control - Option 2

Cold Product - Option 2

Flow Rate - Option 3

**Must specify one for each unpowered mA input loop

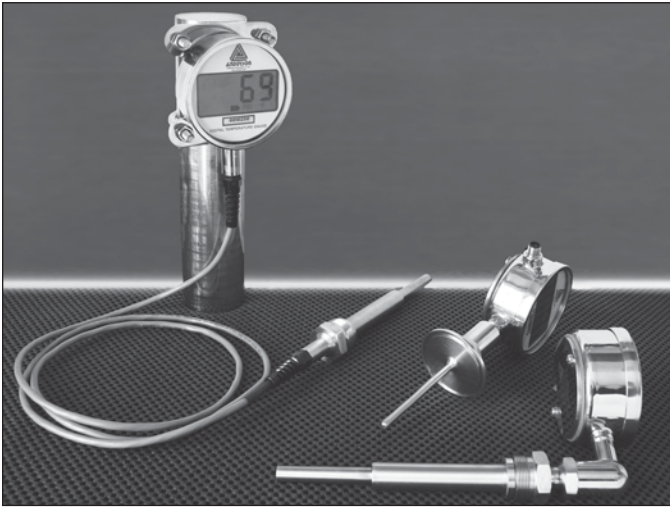
†If option (1) or (2) is selected, local setpoint select is disabled.

Charts: order #00215401

MACHINERY AND EQUIPMENT



ANDERSON "DTG" DIGITAL TEMPERATURE GAUGE



The Anderson DTG Digital Temperature Gauge carries on the tradition of accurate and reliable electronic temperature indication, while incorporating many new features tailored to a growing industry.

This "next generation" product provides high accuracy temperature monitoring in an operator friendly simple to read design. The DTG also offers new options for remote mounting as well as high and low switches for critical applications where user-defined setpoints can be easily programmed.

The battery-operated version can be ordered with or without a secondary 100 ohm 3-wire RTD. The secondary RTD option is ideal in applications that require local indication, as well as remote recording. As only one vessel penetration is required, a cost savings can be realized.

The DC powered version supplies two (2) SPST low voltage contacts assigned to the adjustable setpoint. An optional remote relay module is available that provides SPDT relays rated 6 amps at 250VAC. All models feature simple field calibration for fine tuning to the plant reference standard. As such, the DTG makes a perfect and cost-effective replacement for any mechanical thermometer, from bi-metals to mercury-in-glass. With resolution to a tenth of a degree, the DTG takes the guesswork out of reading dials and mercury columns.

- Ideal replacement for Mercury-In-Glass thermometers
- Models and fittings for Dairy, Fluid Food and Beverage Applications
- Operates on field replaceable batteries;; DC switching version available
- Large Liquid Crystal Display makes viewing easy and repeatable
- All models offer field calibration capability

STANDARD "DTG" DIGITAL TEMPERATURE GAUGE DESCRIPTION CODE

FH

1 2 3 4 5 6 7

1. Style

- 0 - Standard Thermometer
- 1 - Thermometer w/Optional RTD
- 2 - Thermometer w/Dual Switches (DC power/SPST)**
- 5 - Remote Display Thermometer (must order mounting style 9)

2. Display Units

0 - Deg F 1 - Deg C

3. Mounting

1 - Bottom 7 - Top
4 - Back (90° elbow) 8 - Back (45° elbow)
5 - Left 9 - Remote Display -
6 - Right Bottom Cable Exit

4. Fitting

Probe Length

001-013 - 1/2" Tri-Clamp	1 1/4"
002-037 - 3/4" Tri-Clamp	2 3/4"
004-037 - 1 1/2" Tri-Clamp	2 3/4"
005-049 - 2" Tri-Clamp	3 1/2"
006-049 - 2 1/2" Tri-Clamp	3 1/2"
007-053 - 3" Tri-Clamp	3 3/4"
008-065 - 4" Tri-Clamp	4 1/2"
010-031 - 1 1/2" APC "K"	2 3/8"
011-730 - 2" APC "K"	2 25/32"
016-031 - 1 1/2" Cherry I-Line	2 3/8"
017-730 - 2" Cherry I-Line	2 25/32"
027-044 - 1 1/2" G&H "H" Line (male)	3 3/16"
028-056 - 2" G&H "H" Line (male)	3 15/16"
032-033 - 1 1/2" Cherry "Q"	2 1/2"
033-049 - 2" Cherry "Q"	3 1/2"
044-029 - 1 1/2" #14 Bevel Seat (with 13 H Nut)	2 1/4"
045-035 - 2" #14 Bevel Seat (with 13 H Nut)	2 5/8"
060-221 - Umbrella	14 1/4"
060-360 - Umbrella	22 15/16"
060-435 - Umbrella	27 5/8"
060-532 - Umbrella	33 11/16"
060-680 - Umbrella	14 1/4"
061-077 - Split Ferrule	5 1/4"
062-139 - Projectile Well (41247)	9 1/8"
063-161 - Projectile Well (41280)	10 1/2"
064-187 - Projectile Well (41279)	12 1/8"
084-033 - Bi-metal Well 1/2 NPT	2 1/2"
084-057 - Bi-metal Well 1/2 NPT	4"
084-089 - Bi-metal Well 1/2 NPT	6"
084-137 - Bi-metal Well 1/2 NPT	9"
084-185 - Bi-metal Well 1/2 NPT	12"
084-233 - Bi-metal Well 1/2 NPT	15"
084-281 - Bi-metal Well 1/2 NPT	18"
084-377 - Bi-metal Well 1/2 NPT	24"

5. Probe

0 - Standard Probe (choose for projectile well fittings)
1 - Heavy duty probe* (recommended for lengths over 6")

6. Cable Length

00 - None (style 0 or 5)	08 - 40'
02 - 10'	10 - 50'
04 - 20'	15 - 75'
06 - 30'	20 - 100'

7. Remote Display Cable Length

0 - None	7 - 15' (Style 5)
5 - 5' (Style 5)	8 - 20' (Style 5)
6 - 10' (Style 5)	

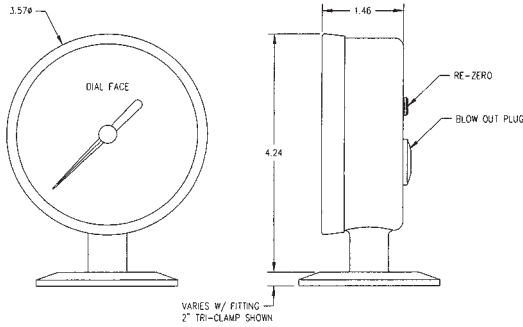
*Heavy Duty Probes with 3/4" Dial, insertion lengths from 3 1/2" to 43 1/2" available for standard fittings. Tri-Clamp®, Cherry "I", Bevel Seat and Umbrella. Consult us for other fittings.

** For AC Relays, order remote relay module #PM0606004



ANDERSON PRESSURE GAUGES

ANDERSON 90MM STANDARD PRESSURE GAUGE



90MM GAUGE DESCRIPTION CODE

EL 01 A
 1 2 3 4 5 6 7 8

1. Pressure Range

029 - 30" Hg/0/30 psig	082 - 0/600 psig
031 - 30" Hg/0/60 psig	055 - -1/0/2 Bar
032 - 30" Hg/0/100 psig	056 - -1/0/4 Bar
033 - 30" Hg/0/160 psig	057 - 0/2 Bar
034 - 30" Hg/0/300 psig	192 - 0/4 Bar
066 - 0/30 psig	309 - 0/7 Bar
069 - 0/60 psig	337 - 0/11 Bar
071 - 0/100 psig	065 - 0/20 Bar
074 - 0/160 psig	067 - 0/40 Bar
077 - 0/300 psig	

2. Dial Name/Logo

01 - Anderson Instrument Company

3. Fittings

004 - 1 1/2" Tri-Clamp	043 - 2" #15 APC (threaded male)
005 - 2" Tri-Clamp	044 - 1 1/2" #14 Bevel Seat w/13-H nut
006 - 2 1/2" Tri-Clamp	045 - 2" #14 Bevel Seat w/13-H nut
007 - 3" Tri-Clamp	048 - 1 1/2" #15 Bevel Seat (threaded male)
010 - 1 1/2" APC "K" Clamp	049 - 2" #15 Bevel Seat (threaded male)
011 - 2" APC "K" Clamp	050 - 2" Cherry "I" Aseptic (male)
016 - 1 1/2" Cherry "I" (male)	051 - 1 1/2" APC K15WXF (female) Self Aligning
017 - 2" Cherry "I" (male)	052 - 2" APC K15WXF (female) Self Aligning
022 - 1 1/2" Val-Line (male)	059 - 1 1/2" NPT
023 - 2" Val-Line (male)	106 - 2" AB Perlick w/814-C hex nut
027 - 1 1/2" G & H "H" Line (male)	
028 - 2" G & H "H" Line	
032 - 1 1/2" Cherry "Q"	
033 - 2" Cherry "Q"	
034 - 1 1/2" APC-PV w/13-H nut	
035 - 2" APC-PV w/13-H nut	

4. Mounting

1 - Bottom	6 - Right
4 - Back	7 - Top
5 - Left	

5. Dampening

0 - Standard Dampening
1 - Glycerin Filled Case (OF)
2 - Mechanical Dampening (MD)

6. Calibration Adjustment

0 - without Re-Zero (standard)
1 - with Re-Zero

7. Capillary Fill

1 - Mineral Oil (standard)
5 - Propylene Glycol (Neobee M-20)

8. Internal Materials

A - Standard

ANDERSON 1/8 DIN PROCESS CONTROLLER

Part Number	Description
801101000	Standard controller with programmable input, dual output
801401000	Same as above with 24 Volt D.C. transmitter power supply



ED-190 PROCESS CONTROL PACKAGE

The ED-190 Controller has been developed in response to a growing need for a field mounted electronic controller with a pneumatic output. This value added package incorporates a Nema 4X enclosure that houses a Model 801, micro-based, 1/8 DIN Controller and a pre-wired and piped I:P transducer. The customer can specify any of the wide range of Anderson electronic sensors to be pre-wired and calibrated to the controller. The controller output is directly compatible with industry standard 3-15 psi control valve actuators, making this the logical choice for retrofitting existing mechanical controllers with filled system inputs. The controller may also be specified for new applications where a control panel is not located near the process.

Applications:

- Temperature: RTD input, 3-15 psi output to throttle steam, water, or glycol valve.
- Pressure: 4-20 mA Pressure Transmitter input, 3-15 psi output to throttle feed pressure or back pressure control valve.
- Level: 4-20mA Level Transmitter Input, 3-15 psig output to throttle tank inlet or outlet valve.

Part Number	Description
70506-A1	Controller Package



**ANDERSON
TEMPERATURE
MEASUREMENT**

ANDERSON DART DIGITAL REFERENCE THERMOMETERS

**DART DIGITAL REFERENCE DISPLAY
DESCRIPTION CODE**

FD1 0
1

1. Voltage

1 - 115 VAC 50/60 Hz 2 - 230 VAC 50/60 Hz

0. Fixed Character

DART DIGITAL REFERENCE SENSOR DESCRIPTION CODE

SK
1 2 3 4

1. Fitting

004 - 1 1/2" Tri-Clamp	061 - Split Ferrule (button)
005 - 2" Tri-Clamp	101 - 1 1/4" 18UNEF (41074 well)
006 - 2 1/2" Tri-Clamp	119 - 3/4" Swagelok
007 - 3" Tri-Clamp	120 - 1" Swagelok
008 - 4" Tri-Clamp	

2. Housing

1 - Straight 2 - Bent (for split ferrule only)

3. Probe Length*

025 - 2" (std. for 119 fitting)
029 - 2 1/4" (std. for 120 fitting)
081 - 5 1/2" std. for 004 through 061)
091 - 6 1/8" (std. for 101 fitting)

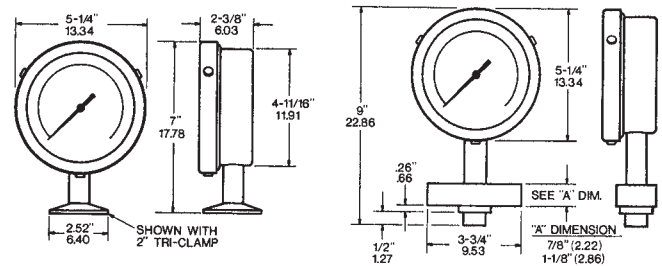
4. Cable Length*

00 - No cable	08 - 200'
01 - 25'	10 - 250'
02 - 50'	12 - 300'
03 - 75'	14 - 350'
04 - 100'	16 - 400'
05 - 125'	18 - 450'
06 - 150'	20 - 500'
07 - 175'	

*For longer or intermediate lengths,
consult Stuart W. Johnson & Co. Inc.



ANDERSON 120 MM STANDARD PRESSURE GAUGE



120MM GAUGE DESCRIPTION CODE

1 2 3 4 5 6 7 8

1. Gauge Type

EE - Homogenizer

EC - Sanitary

2. Pressure Range

Available with Homogenizer Fittings Only

084 - 0-1,000 psig (0-70 Bar)
085 - 0-1,500 psig
087 - 0-2,500 psig
090 - 0-5,000 psig
093 - 0-10,000 psig
094 - 0-15,000 psig

Not Available with Homogenizer Fittings

029 - 30" Hg/0/30 psig
(-1/0/2 Bar)
031 - 30" Hg/0/60 psig
(-1/0/4 Bar)
034 - 30" Hg/0/300 psig
(-1/0/20 Bar)
066 - 0-30 psig (0-2 Bar)
069 - 0-60 psig (0-4 Bar)
071 - 0-100 psig (0-7 Bar)
074 - 0-160 psig (0-11 Bar)
077 - 0-300 psig (0-20 Bar)
082 - 0-600 psig (0-40 Bar)

3. Dial Name/Logo

01 - Anderson

4. Process Connection

056 - Homogenizer (less flange)
057 - Homogenizer (7/8" flange)
058 - Homogenizer (1 1/8" flange)
004 - 1 1/2" Tri-Clamp
005 - 2" Tri-Clamp

5. Mounting

1 - Bottom	4 - Back
2 - Panel	5 - Left
3 - Wall	6 - Right

6. Capillary Fill

1 - Mineral Oil
4 - 80/20 Glycerin/H₂O (Standard)
5 - Propylene Glycol (Neobee M-20)

7. Case Fill

1 - Unfilled
2 - Glycerin Filled (std. on homo. gauges)



**ANDERSON
HTST CONTROLS**

JD PRESSURE DIFFERENTIAL SWITCHES

JD SANITARY DIFFERENTIAL PRESSURE SWITCH DESCRIPTION CODE

GB

1 2 3 4 5 6 7

1. Case and Mount

1 - Aluminum case (surface or panel mount)

2. Range

070 - 0-99psig 204 - 0-9.9 Bar

3. Engineering Units

G - PSIG B - Bar K - Kg/cm²

4. Differential

097 - 1-15 PSIG 101 - 5-75Bar 205 - .1-1.5 Bar

5. Power

1 - 115V 50/60 Hz 2 - 230V 50/60 Hz

6. Retransmission

1 - Past. & Diff. (std.) 2 - Raw & Past. 3 - Raw & Diff.

7. Inputs

1 - 0-50mV Raw & Past. (std.) 3 - 0-50mV Raw; 4-20mZ Past.
2 - 4-20mA Raw & Past. 4 - 4-20mA Raw; 0-50mV Past.

JD SANITARY TRANSDUCER WITH CONDUIT HOUSING DESCRIPTION CODE

SY

1 2 3 4 5 6

1. Range

070 - 0-99psig 204 - 0-9.9 Bar

2. Engineering Units

G - PSIG B - Bar K - Kg/cm²

3. Fittings

004 - 1 1/2" Tri-Clamp 027 - 1 1/2" G & H "H" Line
005 - 2" Tri-Clamp 028 - 2" G & H "H" Line
010 - 1 1/2" APC "K" 044 - 1 1/2" #14 Bevel Seat
011 - 2" APC "K" w/13-H nut
016 - 1 1/2" Cherry "I" (male) 045 - 2" #14 Bevel Seat
017 - 2" Cherry "I" (male) w/13-H nut

4. Diaphragm Material

1 - 316L Stainless Steel (Standard)

5. Diaphragm Finish

1 - Standard (Ra = 25 microinches)
2 - Electropolished (Ra = 8 microinches)

6. Cable Length

00 - No Cable 15 - 75' 22 - 150'
05 - 25' 20 - 100' 23 - 175'
10 - 50' 21 - 125' 24 - 200'



**ANDERSON
"LN" POTENTIOMETRIC LEVEL**

The "LN" Level Transmitter utilizes potentiometric technology. Potentiometric level measurement consists of applying voltage to a metallic conductive probe (potentiometer track). The medium in the tank acts a potentiometer slider and receives partial voltage from the probe that is measured on the wall of the tank for single probe models, or measured from reference probe on dual probe models. The measured partial voltage is proportional to the voltage on the probe and produces the value for the relative level. This measurement is generally independent of the conductivity of the medium. Only a conductivity of at least 1 μ S/cm must be present homogeneously throughout the medium for an accurate reading.



SL TRANSMITTER DESCRIPTION CODE

LN

1 2 3 4 5

1. Body (Fitting) Style

004 1 1/2" Tri-Clamp 007 3" Tri-Clamp
005 2" Tri-Clamp 008 4" Tri-Clamp
006 2 1/2" Tri-Clamp

2. No. of Probes

1 One (1) Probe (metallic and linear tank)
2 Two (2) Probes (nonmetallic and/or non-linear tank)

3. Probe Length

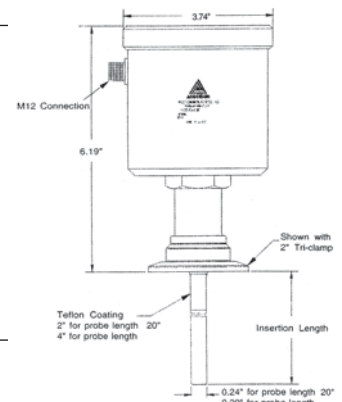
Single Probe		Single Probe		Dual Probe	
Code	Lengths	Code	Lengths	Code	Lengths
0800	8"	4800	48"	0800	8"
1200	12"	5200	52"	1200	12"
1600	16"	5600	56"	1600	16"
2000	20"	6000	60"	2000	20"
2400	24"	6400	64"	2400	24"
2800	28"	6800	68"	2800	28"
3200	32"	7200	72"	3200	32"
3600	36"	7600	76"	3600	36"
4000	40"	8000	80"		
4400	44"				

4. Sensor Wiring

00 - QDR w/no FWC & no Cable
01 - QDR w/FWC & no Cable
05 - QDR w/FWC & 25' Cable
10 - QDR w/FWC & 50' Cable
15 - QDR w/FWC & 75' Cable
20 - QDR w/FWC & 100' Cable
21 - QDR w/FWC & 125' Cable
22 - QDR w/FWC & 150' Cable
23 - QDR w/FWC & 175' Cable
24 - QDR w/FWC & 200' Cable

5. Documentation

0 - None
1 - Materials Certification



Single Probe

MACHINERY AND EQUIPMENT



ANDERSON RSP TRANSMITTERS (PRESSURE)



RSP TRANSMITTER DESCRIPTION CODE

SR

1 2 3 4 5 6

1. Range (Available Units)

025 - 30/0 (M)	073 - 0/150 (G, A)	217 - -1/0/3 (B)
028 - 30/015 (C)	074 - 0/160 (G, A)	056 - -1/0/4 (B)
029 - 30/0/30 (C)	077 - 0/300 (G, A)	304 - -1/0/7 (B)
031 - 30/0/60 (C)	081 - 0/500 (G)	057 - 0-2 (B)
032 - 30/0/100 (C)	084 - 0/1,000(G)	235 - 0-3 (B)
066 - 0/30/(G, A)	086 - 0/2,00* (G)	192 - 0-4 (B)
068 - 0/50 (G, A, B)	090 - 0/5,000* (G)	060 - 0-6 (B)
069 - 0/60 (G)	093 - 0/10,000* (G)	061 - 0-10 (B)
070 - 0/99 (G)	251 - -1/0/1 (B)	
071 - 0/100 (G, A)	286 - -1/02.5 (B)	

2. Engineering Units

A - PSIA	B - BAR
C - Vacuum/Pressure (*Hg & PSIG)	G - PSIG
M - Hg (Inches Mercury)	

3. Fittings

004 - 1 1/2" Tri-Clamp	056 - High Pressure
005 - 2" Tri-Clamp	(Homogenizer)
010 - 1 1/2" APC "K"	w/out flange
011 - 2" APC "K"	057 - High Pressure
016 - 1 1/2" Cherry "I" (male)	(Homogenizer) with
017 - 2" Cherry "I" (male)	7/8" flange
027 - 1 1/2" G & H "H" Line	058 - High Pressure
028 - 2" G & H "H" Line	(Homogenizer) with
044 - 1 1/2" #14 Bevel Seat	1 1/8" flange
w/13-H nut	059 - 1 1/2" NPY
045 - 2" #14 Bevel Seat	117 - High Pressure (Rannie)
w/13-H nut	129 - 38mm IDF w/nut
	131 - 51mm IDF w/nut

4. Display Value

0 - None	G - PSIG
A - PSIA	B - Bar
R - mA (milliamphere, for vac/press.)	
Q - % (percent, for vac/press.)	

5. Diaphragm Material

- 1 - 316L Stainless Steel
- 2 - Hastelloy "C" (Standard for fitting 056, 057, 058, 117)

5. Diaphragm Finish

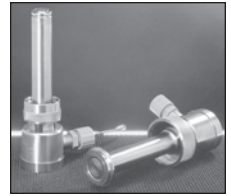
- 1 - Standard (Ra25)

6. Cable Length

00 - No Cable	15 - 75'	22 - 150'
05 - 25'	20 - 100'	23 - 175'
10 - 50'	21 - 125'	24 - 200'



ANDERSON SL TRANSMITTERS



SL TRANSMITTER DESCRIPTION CODE

SL

1 2 3 4 5 6

1. Span Range

5 - 0-30" to 140"	7 - 415.1" to 830"
6 - 140.1" to 415"	8 - 830.1" to 1350"

2. Fitting

- 089 - Anderson Flush Mount Long (insulated tank)
- 088 - Anderson Flush Mount Short (uninsulated tank)
- 091 - Cherry Burrell Flush Mount Long (insulated tank)
- 090 - Cherry Burrell Flush Mount Short (uninsulated tank)
- 092 - King Gage Flush Mount Long (1777-3)
- 093 - King Gage Flush Mount Medium (1777 standard)
- 094 - King Gage Flush Mount short (1777-2 non-insulated)
- 097 - Tank Mate Flush Mount Long (208WVE)**
- 096 - Tank Mate Flush Mount Medium (205WVE)**
- 095 - Tank Mate Flush Mount short (200WVE)**
- 004 - 1 1/2" Tri-Clamp
- 005 - 2" Tri-Clamp
- 059 - 1 1/2" NPT

3. Diaphragm

- 1 - SS-316L Electropolished
- 2 - Hastelloy "C" (available fitting 088 and 089 only)

4. Mounting

- 0 - Horizontal
- 1 - Vertical
- 2 - Other (specify angle from horizontal)

5. Cable Length

00 - No Cable	15 - 75'	22 - 150'
05 - 25'	20 - 100'	23 - 175'
10 - 50'	21 - 125'	24 - 200'

6. Span Range

- ####.# - Height in inches w.c.* (to nearest tenth)
- 00000 - Field Calibrated
- Examples: 10850 - 1,085.0 inches
- 00305 - 30.5 inches

Note

- *Calibration of span is in "inches water column".
- **Adapter kit required - Consult Stuart W. Johnson & Co.



ANDERSON ELECTRODELESS CONDUCTIVITY SENSORS



HC1 SENSOR DESCRIPTION CODE

HC1

1 2 3 4 5

1. Process Connection

0 2" Tri-Clamp

2. Product Contact

1 PFA Teflon®

3. Wiring Style

- 1 Sealed Cable (20 ft) w/Strain Relief
- 2 Sealed Cable (20 ft) w/male 1/2" NPT & Strain Relief

4. Junction Box*

- 0 No junction box
- 1 Thermoplastic Surface Mount Junction Box

5. Interconnect Cable Length**

- 00 No Junction Box
- 05 25 ft. additional cable
- 10 50 ft. additional cable
- 15 75 ft. additional cable
- 20 100 ft. additional cable

Accessories

73223-A0001 2" Sanitary Tee for Inductive Conductivity Sensor

Notes

- *Junction box required where interconnect distances of more than 20 ft. (6m) are required.
- **This 6-conductor must be used to connect between the junction box and the receiver.
- ***Consult factory for lead-time

Anderson's Model HC1 Electrodeless Conductivity Sensors are rugged, non-fouling sensors designed for cleaning solutions with conductivity ranges from 0-200 up to 0-2,000,000 microSiemens/cm and temperature compensated over a range of 0° and 200°C. Because these sensors are electrodeless and PFA Teflon® coated, there is no instance of polarization, process coating or contamination. For greatest performance accuracy, the HC1 can be installed in a standard 2 1/2" x 2" or 3" x 2" short outlet reducing tee, or can be ordered with our 2" x 2" special Inductive Conductivity Sensor sanitary tee.

DA1 ANALYZER DESCRIPTION CODE

DA1

1 2

1. Output

- A Standard
- B Optional - HART protocol***

2. Enclosure

- 0 No enclosure
- 1 NEMA 4X watertight fiberglass enclosure with liquid-tight connectors

Accessories

53433-A0001 Fuse Kit - includes two (2) replacement fuses and a bezel

DA2 TRANSMITTER DESCRIPTION CODE

DA2 A

1

1. Mounting Style

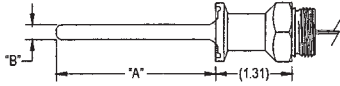
- 01 Panel Mount Kit - includes gasket, retainer plate and four (4) screws
- 02 Wall/Pipe/Integral Mounting (for integral mounting, sensor Wiring Style option 2 required)



ANDERSON RTD'S AND TEMPERATURE TRANSMITTERS

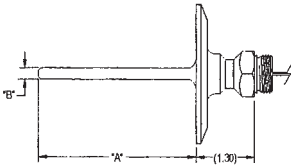
FITTING STYLES AND SIZES

1/2" & 3/4" TRI-CLAMP STYLE FITTING



Description	A Dim.	B Dim.
1/2" Tri-Clamp	1 1/4"	5/32 Dia
3/4" Tri-Clamp	2 3/4"	5/32 Dia
3/4" Tri-Clamp	2 3/4"	1/4 Dia

1 1/2" - 4" TRI-CLAMP STYLE FITTING



Description	A Dim.	B Dim.
1 1/2" Tri-Clamp	2 3/4"	1/4 Dia
2" Tri-Clamp	3 1/2"	1/4 Dia
2 1/2" Tri-Clamp	3 1/2"	1/4 Dia
3" Tri-Clamp	3 3/4"	1/4 Dia
4" Tri-Clamp	4 1/2"	1/4 Dia

WELL STYLES



Description	A Dim.
41247 Well	9 1/8"
41279 Well	12 1/8"

ADD "RTD" TO CT HEAD ON NEXT PAGE FOR COMPLETE UNIT

RTD'S DESCRIPTION CODE

SA - 0

1 2 3 4 5

1. Wiring Style

- 1 - Sealed Cable w/Strain Relief
- 2 - Sealed Cable w/male 1/2" NPT & Strain Relief
- 5 - 6" leads for use with wiring head (see CT matrix)

2. Element Type

- 1 - 100 ohm Single (DIN std.)
- 2 - 100 ohm Dual (DIN std.) (available w/wiring style #5 only)

3. Fitting

Insertion Length

004-037 - 1 1/2" Tri-Clamp	2 3/4"
005-049 - 2" Tri-Clamp	3 1/2"
006-049 - 2 1/2" Tri-Clamp	3 1/2"
007-053 - 3" Tri-Clamp	3 3/4"
008-065 - 4" Tri-Clamp	4 1/2"
010-031 - 1 1/2" APC "K"	2 3/8"
011-730 - 2" APC "K"	2 25/32"
012-044 - 2 1/2" APC "K"	3 3/16"
013-049 - 3" APC "K"	3 1/2"
016-031 - 1 1/2" Cherry-Burrell "I"	2 3/8"
017-730 - 2" Cherry-Burrell "I"	2 25/32"
018-044 - 2 1/2" Cherry-Burrell "I"	3 3/16"
019-049 - 3" Cherry-Burrell "I"	3 1/2"
027-044 - 1 1/2" G&H "H" Line (male)	3 3/16"
028-056 - 1 1/2" G&H "H" Line (male)	3 15/16"
029-056 - 1 1/2" G&H "H" Line (male)	3 15/16"
030-060 - 1 1/2" G&H "H" Line (male)	4 3/16"
032-033 - 1 1/2" Cherry "Q"	2 1/2"
033-049 - 2" Cherry "Q"	3 1/2"
034-028 - 1 1/2" #14 APC-PV (w/nut)	2 3/16"
035-729 - 2" #14 APC-PV (w/nut)	2 17/32"
036-040 - 2 1/2" #14 APC-PV (w/nut)	2 15/16"
037-045 - 3" #14 APC-PV (w/nut)	3 1/4"
038-028 - 1 1/2" #14 APC-PV (w/o nut)	2 3/16"
039-729 - 2" #14 APC-PV (w/o nut)	2 17/32"
040-040 - 2 1/2" #14 APC-PV (w/o nut)	2 15/16"
041-045 - 3" #14 APC-PV (w/o nut)	3 1/4"
044-731 - 1 1/2" #14 Bevel seat (w/nut)	2 15/16"
045-035 - 2" #14 Bevel seat (w/nut)	2 5/8"
046-731 - 1 1/2" #14 Bevel seat (w/o nut)	2 15/16"
047-035 - 2" #14 Bevel seat (w/o nut)	2 5/8"
051-029 - 1 1/2" APC K15WFX (female self aligning)	2 1/4"
052-036 - 2" APC K15WFX (female self aligning)	2 11/16"
060-221 - Umbrella	14 1/4"
060-360 - Umbrella	22 15/16"
060-435 - Umbrella	27 5/8"
060-532 - Umbrella	133 11/16"
060-680 - Umbrella	42 15/16"
061-077 - Split Ferrule (button)	5 1/4"
062-139 - Projectile Well (41247)	9 1/8"
063-161 - Projectile Well (41280)	10 1/2"
064-187 - Projectile Well (41279)	12 1/8"
074-185 - E1 Style - 1/4" dia. (plain)	12"
075-185 - E1 Style - 3/8" dia. (plain)	12"
079-185 - E3 Style - 1/4" dia. (with adjustable union)	12"
080-185 - E3 Style - 3/8" dia. (with adjustable union)	12"
083-137 - Bi-Metal Well - 1/4" NPT	9"
084-089 - Bi-Metal Well - 1/2" NPT	6"
088-000 - Anderson Flush Mount (short)	
089-000 - Anderson Flush Mount (long)	
098-000 - Taylor Flush Mount	

4. Cable Type

- 0 - No Cable Required (Wiring style #5)
- 1 - 4 conductor PVC w/Strain Relief (Standard w/wiring style #1 or #2)
- 2 - 6 conductor PVC (for element type #2)

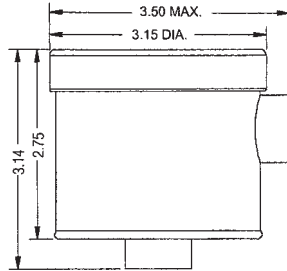
5. Cable Length

00 - No Cable (wiring style #5)	05 - 25' (standard w/wiring style #1)	20 - 100'
01 - 5' (standard w/wiring style #2)	10 - 50'	21 - 125'
	15 - 75'	22 - 150'
		23 - 175'
		24 - 200'



ANDERSON RTD'S AND TEMPERATURE TRANSMITTERS

MODULAR WIRING HEADS FOR RTD'S AND TRANSMITTERS FITTING STYLES AND SIZES



SL TRANSMITTER DESCRIPTION CODE

CT

1 2 3 4 5 6 7 8

1. Style

- 1 - Transmitter Head
- 2 - Transmitter Head w/Health Code Seal Provision
- 3 - Mini RTD Head
- 4 - Mini RTD Head w/Health Code Seal Provision

2. Module

- 0 - No Module
- 1 - Single RTD (Head Style 3 or 4 only)
- 2 - Dual RTD (Head Style 3 or 4 only)
- 3 - 4-20mA Transmitter (Head style 1 or 2 only)
- 4 - "SMART" module / 4-20mA with "HART" (Head style 1 or 2 only)

3. Output Range

- | | |
|-----------------------|-----------------------|
| 000 - None (RTD only) | 119 - 30-250 (F) |
| 069 - 0-60 (C only) | 132 - 50-250 (F) |
| 071 - 0-100 (F or C) | 160 - 100-300 (F) |
| 073 - 0-150 (F or C) | 255 - 0-180 (C only) |
| 075 - 0-200 (F only) | 999 - Programmable |
| 076 - 0-250 (F) | (Module style 4 only) |
| 077 - 0-300 (F only) | |

4. Engineering Units

- 0 - None-RTD only (Style 3 or 4 above)
- F - Fahrenheit
- C - Celsius
- P - Programmable (Module Style 4 only)

5. Display /Units (Head Style 1 Only)

- 00 - None
- 01 - 4-20mA
- 02 - 0-100% (Standard with Module Style 4)
- 03 - °F (same range as output)
- 04 - °C (same range as output)

6. Pre-Wired Element

- 0 - None
- 1 - Vertical Mount
- 2 - Horizontal Mount (Head Style 1 or 2 only)

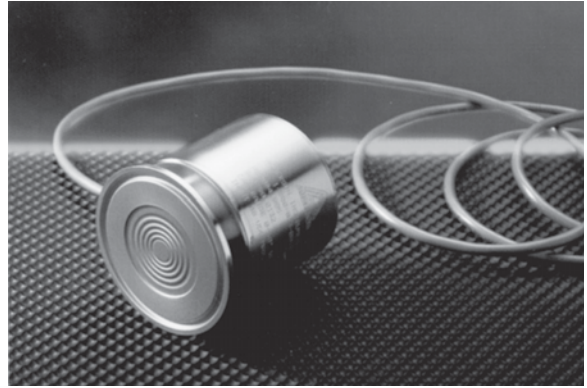
7. Mounting

- 1 - Direct (Standard)
- X - Remote (Wall/Pipe) - Consult factory for availability

8. Pre-Wired Cable

- | | |
|------------------------------|-----------|
| 0 - None Supplied (Standard) | |
| 05 - 25' | 15 - 75' |
| 10 - 50' | 20 - 100' |

HB "MINI" LEVEL TRANSMITTER



- Specifically designed for balance tank, CIP vessel, and other sanitary level control applications
- Rugged reliability in the harshest applications and environments
- Compact, ultra-sanitary package meets or exceeds requirements for food, beverage, dairy and bio-pharmaceutical applications.

HB "MINI" LEVEL TRANSMITTER DESCRIPTION CODE

HB

1 2 3 4 5 6 7

1. Span Range

- 1 - 0"-20" to 0"-60" Water Column
- 2 - 60.1" tp 0"-100" Water Column

2. Fitting

- 004 - 1 1/2" Tri-Clamp
- 005 - 2" Tri-Clamp

3. Diaphragm Material

- 1 - Stainless Steel - 316L

4. Mounting

- 0 - Horizontal
- 1 - Vertical (Diaphragm facing up)
- 2 - Other (Specify angle)

5. Cable Length

- | | |
|----------|-----------|
| 05 - 25' | 15 - 75' |
| 10 - 50' | 20 - 100' |

6. Calibration

- Calibration in inches w.c. (to nearest tenth)*
- *Exception: 100" = 100
- (only code which does not use tenth of an inch)

7. Sealed Cable

- Blank - Sealed cable ONLY
- C - Sealed Cable with Conduit Connection

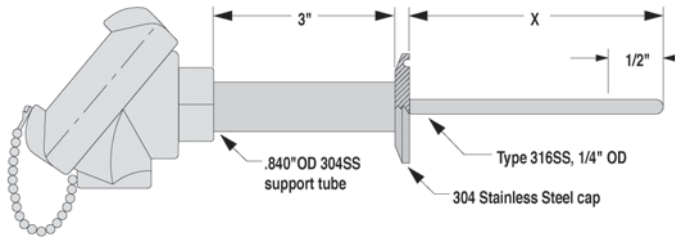
PyromATION[®], INC. Quality in Every Degree™

CIP SANITARY CONNECTED RTD'S FOR FOOD, DAIRY AND PHARMACEUTICAL



The below listed general purpose CIP sanitary connected RTD temperature sensors are used in food, dairy, beverage, pharmaceutical, and chemical processing applications where sensor corrosion and product contamination are critical factors. The sanitary caps listed are those most commonly used in such processes. The sanitary caps are welded to the sheath and to a heavier support tube, all of stainless steel, and then ground and polished to a finish that exceeds No. 4 minimum finish required by the 3-A Sanitary Council Standard #74 - 00. The process contact surfaces are free of pits, crevices, and pockets thus preventing corrosion and bacteria growth. The three wire constructed sensor assembly consists of a high accuracy platinum element sealed inside a 316 stainless steel sheath and is provided with a FDA compliant white thermoplastic gasketed connecting head. The complete assembly provides excellent washdown protection. It is recommended that once customer connections are made, the connecting terminals be further protected by applying a coating of moisture proof sealant over the connections.

Maximum temperature limit: 400°F (204°C)



PYROMATION CIP SANITARY RTD DESCRIPTION CODE

		CIP			
1	2		3	4	5

1. Platinum RTD Assemblies

ORDER CODE	TEMP. COEF.	ACCURACY @ 0° C	OHMS VALUE
Single			
R1T185L48	.00385	+/- .1%	100
R3T185L48	.00385	+/- .03%	100
R5T185L48	.00385	+/- .01%	100
R1T192L48	.00392	+/- .1%	100
R3T192L48	.00392	+/- .03%	100
Duplex			
R1T285L48	.00385	+/- .1%	100
R3T285L48	.00385	+/- .03%	100
R5T285L48	.00385	+/- .01%	100
R1T292L48	.00392	+/- .1%	100
R3T292L48	.00392	+/- .03%	100

2- Immersion Length "X"

Specify "X" length in inches using 2 digits, plus any fractional length desired. Examples: 04 = 4"

3- Sanitary Cap Size - Tube O.D.

- | | |
|------------------|----------------------|
| 1 - 1 1/2 Inches | 4 - 3 Inches |
| 2 - 2 Inches | 5 - Other (Specify) |
| 3 - 2 1/2 Inches | 6 - 3A4 adapter only |

4 - Sanitary Cap Style

- 1 - 16A cap - bevel seat
- 2 - 16A cap - bevel seat with 13-H nut
- 3 - 16APV cap
- 4 - 16APV cap with 13-H nut
- 5 - 16 AMP cap - Tri Clamp
- 6 - 3A4 adaptor (.50" OD support tube)
- 7 - 16Al-14l cap
- 8 - Other (describe)

5 - Options

- 31W - White epoxy coated aluminum head
- 63 - White polypropylene head
- 91 - Stainless steel head
- 0 - Supplied w/o head w/6" teflon leads
- T - Integral head mounted transmitter
- I - Stainless steel tags
- HS - Head supplied with wire seal security screws

C440 SERIES RTD TEMPERATURE TRANSMITTERS

The patented Pyromation RTD temperature transmitters are designed to produce a linearized (4 to 20) mA dc output current signal, which is directly proportional to the temperature of the RTD temperature sensing element. A variety of models are available for RTD sensor inputs of different element values and temperature coefficients. The model described is designed for use with RTDs that have platinum measuring elements with temperature coefficients of 0.00385 only.



PYROMATION 440 SERIES RTD DESCRIPTION CODE

440				S()	
	1	2	3	4	5

1. Connection Type

- 2 - RTD 2 wire
- 3 - RTD 3 wire

2. Input Sensor

- RTD
- 85 - 100 Ohm, Platinum, $\alpha = 0.00385 \text{ } ^\circ\text{C}^{-1}$

3. Burnout

- U - Upscale Burnout $\geq 2.10 \text{ mA}$
- D - Downscale Burnout, $\leq 3.6 \text{ mA}$

4. Temperature Range

- S - State actual temperature range for example (50-300)

5. Temperature Scale

- C - Celsius
- F - Fahrenheit

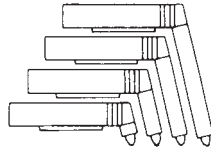
MACHINERY AND EQUIPMENT

RECORDING CHARTS AND PENS

For replacement charts and pens, please provide manufacturer, model, serial number and part numbers when available. If not available, please scan through our reference charts below or call Stuart W. Johnson & Co., Inc. for assistance.

ANDERSON/PARTLOW - 4000 SERIES/7000 SERIES

6 pens per package



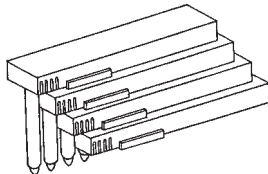
Mfg. Part No.	Color	Nib Length
60500401	Green	.15"
60500402	Red	.41"
60500403	Red	.15"
60500404	Red	.68

ANDERSON SERIES

Mfg. Part No.	Color	Nib Length
41725-B1	Red	.15"
41725-C2	Blue	.37"

TAYLOR/ABB KENT - UNIVERSAL SERIES

6 pens per package



Part No.	Color	Nib Length	Part No.	Color	Nib Length
82-39-0101-06	Black	.14"	82-39-0301-06	Black	.60"
82-39-0102-06	Red	.14"	82-39-0302-06	Red	.60"
82-39-0103-06	Blue	.14"	82-39-0303-06	Blue	.60"
82-39-0104-06	Green	.14"	82-39-0304-06	Green	.60"
82-39-0106-06	Purple	.14"	82-39-0306-06	Purple	.60"
82-39-0201-06	Black	.37"	82-39-0401-06	Black	.83"
82-39-0202-06	Red	.37"	82-39-0402-06	Red	.83"
82-39-0203-06	Blue	.37"	82-39-0403-06	Blue	.83"
82-39-0204-06	Green	.37"	82-39-0404-06	Green	.83"
82-39-0206-06	Purple	.37"	82-39-0406-06	Purple	.83"

HONEYWELL RIBBON CARTRIDGE - DPR3000 SERIES

1 each

Mfg. Part No.	Color	Cross Reference
46182712-001	Multi	300-383
46180501-001	Multi	600-503

HONEYWELL 10" AND 12" SERIES

6 per package

Mfg. Part No.	Color	Nib Length	Cross Reference
30735489006	Green	.60"	900313
82-39-0304-06	Green	.60"	900313

FOXBORO 10" AND 12" SERIES

6 per package

Mfg. Part No.	Color	Nib Length	Cross Reference
L0122AR	Red	.20"	200766
L0122BP	Purple	.56"	200774
L0121CT	Red	.68"	200776
L0121CV	Blue	.68"	200777
L0121CU	Green	.68"	200778
L0122CG	Green	.68"	200778

ANDERSON INSTRUMENTS PEN CARTRIDGES - AV RECORDERS

Mfg. Part No.	Color
60500802	Red, Green
60500804	Red, Green, Blue, Black

RECORDING CHARTS - CIRCULAR, FAN FOLD & THERMAL

HONEYWELL

100 per box

Mfg. Part No.	Description
30755317	Thermal TruLine
30755311	2 Sided
24001660-xxx	Circular Call with complete part number
12-xxx	Circular Call with complete part number
15-xxx	Circular Call with complete part number
16-xxx	Circular Call with complete part number

TAYLOR/ABB KENT

100 per box

Mfg. Part No.	Description
OP-xxxx	Series - Non Linear Call with complete part number
500P1225-xxx	Series - Linear Call with complete part number
500P1267-xxx	Series - Dual Range Linear Call with complete part number
82S-xxx	Series - Roll Charts (5 rolls per box) Call with complete part number

ANDERSON INSTRUMENT/PARTLOW 10"

100 per box

Mfg. Part No.	Description
002-xxx-xx	Series - Non Linear Call with complete part number
002-138-xx	Series - Linear Call with complete part number
002-144-xx	Series - Linear Call with complete part number
002-147-xx	Series - Linear Call with complete part number

ANDERSON INSTRUMENT 12"

100 per box

Mfg. Part No.	Description
26943-xxx	Series - Linear Call with complete part number
41367	Series - Linear
41368	Series - Linear
41369	Series - Linear
41800-xxx	Series - Linear Call with complete part number

PLEASE CALL WITH ADDITIONAL REQUESTS. IN ADDITION TO THE ABOVE WE PROVIDE CHARTS AND PRICES FOR DICKSON, FOXBORO, UNITED ELECTRIC, AND YOKOGAWA RECORDING DEVICES.

QMI ASEPTIC SAMPLER

Unique, patented...available only from QMI

- Sterilized and tested
- Guide holes for sampling syringes
- Dust and condensation protection
- Made of FDA food contact surface approved materials



Also available in kit form

- Unique patented sampling device
- Kit includes disposable syringes, sterile needles, alcohol wipes, aseptic sampler and dust cover
- Versatile for all liquid sampling
- 60 CC disposable syringes* provide sufficient sample volume improving accuracy of data
- Sterilized and tested to maintain aseptic conditions



*Availability of syringes is restricted by law in certain cases. Before ordering, consult your local Board of Health or an attorney for information concerning applicable prohibitions or restrictions in your locality.

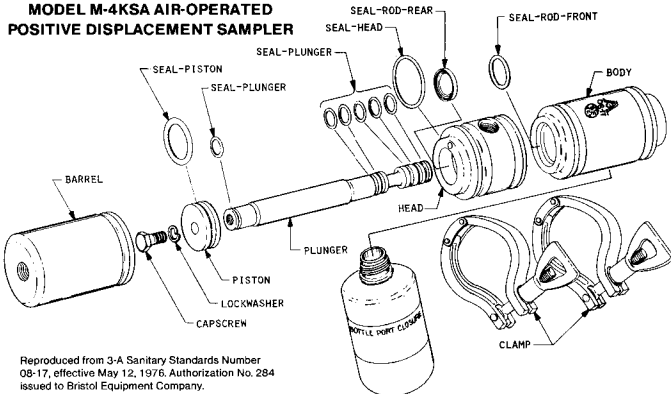
ISOLOK® SANITARY SAMPLER

MODEL M-4KSA

Accurate Sanitary Samples produced with ISOLOK Model M-4KSA
The ISOLOK Model M-4KSA is designed for sampling such sanitary products as Grade A or industrial grade raw or processed milk, whey, and other food or pharmaceutical products. The M-4KSA features ferrule clamp mounting suitable to any line size, quick disconnect to expose all wetted parts for cleaning, FDA and 3-A listed seal materials and a built-in mount for 24 mm thread sample bottles. 3-A Standard 08-17 covers the ISOLOK M-4KSA. Sampler and controls are suitable for receiving dock or in-plant installations on pressure or suction lines where it withdraws accurate composite samples for butterfat or other analysis.



MODEL M-4KSA AIR-OPERATED POSITIVE DISPLACEMENT SAMPLER

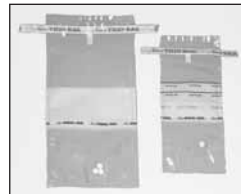


Reproduced from 3-A Sanitary Standards Number 08-17, effective May 12, 1976. Authorization No. 284 issued to Bristol Equipment Company.

WHIRL-PAK® BAGS

Developed over 35 years ago, American-made Whirl-Pak® bags were the first sterile sample bags on the market. They are designed to provide milk haulers with a container for collecting samples of bulk produced milk. Whirl-Pak® bags make possible the "universal sample system." This means that a single sample can be used for all tests required for quality control, product content, and legal compliance. Whirl-Pak® sample bags are made from a blended virgin, low-density polyethylene. Resins used in the extrusion of film for Whirl-Pak® are FDA and USDA approved for food contact. Bags are manufactured in accordance with the requirements for manufacturers of single service containers for milk and milk products.

Other sizes available on request.



STANDARD BAGS B00679WA

4-oz./120-ml capacity
3" W x 7 1/4" L - 7.5 cm x 18.5 cm
2.25 mil thick
Box of 500



B00736WA

18-oz./540-ml capacity
4 1/2" W x 9" L - 11.5 cm x 23 cm
2.5 mil thick
Box of 500



WRITE-ON BAG B01062WA

4-oz./120-ml capacity
3" W x 7 1/4" L - 7.5 cm x 18.5 cm
2.25 mil thick
Box of 500



ICE-BRIX

Colder than wet ice!

Ice Brix are used in shipping of samples and products worldwide.

Choose a size to fit your cooler.

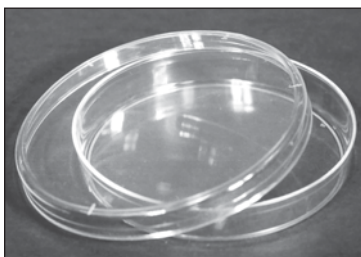


ICE BRIX STANDARD

Prod. No.	Weight	Approx. Dim. L x W x Thickness	Case Pack
IB3	3 oz	5 x 2 3/4 x 3/4	192
IB6	6 oz	5 1/2 x 4 x 3/4	96
IB8	8 oz	6 x 4 x 3/4	72
IB12	12 oz	6 x 5 3/4 x 1	48
IB16	16 oz	6 1/4 x 6 x 1	36
IB24	24 oz	8 x 6 x 1 1/4	24
IB31	32 oz	8 x 8 x 1 1/2	18
IB32	32 oz	10 x 6 x 1 1/2	18
IB48	48 oz	10 1/4 x 8 x 1 1/2	12

DISPOSABLE PETRI DISH

An outstanding value for top-quality, heavy-weight culture dishes. Sterilized with ethylene oxide. Rugged, flat, crystal-clear polystyrene. Optically clear for easy reading. Easy to grip semi-stacking style. We have found these culture dishes to be among the best quality on the market today. And our large volume purchasing allows us to offer an extremely competitive price!

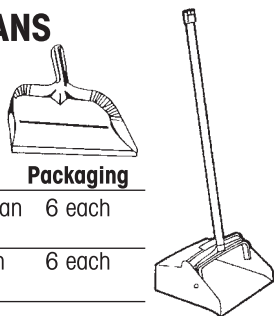


Prod. No.	Dimensions (mm)	Packaging
47	100 x 15	500/case

LOBBY BROOMS & DUSTPANS

Dustpans are available in metal or plastic, and in hand held or convenient flip-up lobby style

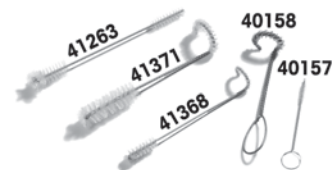
Prod. No.	Description	Packaging
2600DP	12" Wide Plastic Lobby Dustpan with Metal Handle	6 each
361437	12" Wide Steel Lobby Dustpan with Plastic Handle	6 each



CALL FOR PRICES AND QUANTITY DISCOUNTS

SPECIAL PURPOSE BRUSHES

- Nylon or Polyester bristles twisted into flexible wire handles for efficient cleaning of bacteria prone taps, spouts, plungers, tubes, blades and equipment fittings
- Base resins used to produce bristles are made of FDA approved materials
- Colors: White(O2)



Prod. No.	Description	Case Qty.
40155	13" Dispenser Spout Brush w/Polyester Bristles	12
40156	10 1/2" Dispenser Plunger Brush w/Polyester Bristles	12
40154	12" All Purpose Tube Brush w/Polyester Bristles	24
40157	5 1/4" Tap Line Brush w/Polyester Bristles	24
40158	6 1/2" Tap Head Brush w/Polyester Bristles	24
41263	9 1/4" All Purpose Tube Brush w/Nylon Bristles	12
41368	7 1/2" Dispenser Plunger Brush w/Nylon Bristles	12
41371	8" Blade Brush w/Nylon Bristles	12

PIPE BRUSHES

MEDIUM DUTY PIPE BRUSHES

- White, medium Polyester bristles with 5" brush part
- 12" to 36" in length for cleaning small tubing, lines, and openings
- Base resins used to produce bristles are made of FDA approved materials
- Colors: White(O2)



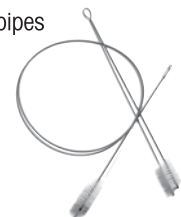
Bristle Dia.	12" Length	18" Length	24" Length	36" Length
1/4"	41101	41102	41103	41104
3/8"	41105	41106	41107	41108
1/2"	40176	41109	41110	41111
5/8"	40167	40168	40184	41112
3/4"	40169	41113	41114	41115
7/8"	41116	41117	41118	41119
1"	41160	41120	41121	41122
1 1/4"	41123	41124	41125	41126
1 1/2"	41127	41128	41380	41129
2"	41130	41131	41132	41133

Case Quantity for all of the above - 12

PIPE BRUSHES

HEAVY DUTY PIPE BRUSHES

- Specifically designed to clean inside tubes and pipes
- Heavy duty brushes in 3' up to 12' lengths
- Medium stiff Polyester bristles are twisted in 8 gauge wire with a 5" brush part
- Base resins used to produce bristles are made of FDA approved materials
- Colors: Designated by (00)



Bristle Dia.	3' Length	4' Length	6' Length	8' Length	10' Length
1 1/2"	41140		41142		
2"		41147			
3"	41158	41159	41164		41162

Case Quantity for all of the above - 12

SPARTA® SPECTRUM® ELBOW & FITTING BRUSHES

- 15" bent or straight brushes in five different brush diameters designed for cleaning straight pipes, elbows, tees, and valves
- Stiff Polyester bristles in galvanized wire with plastic handle
- Base resins used to produce bristles are made of FDA approved materials
- Colors: Blue(14), Brown(01), Green(09), Red(05), Tan(25), White(02), Yellow(04)



Prod. No.	Description	Bristle Dia.
40160	Bent Brush w/Polyester Bristles	1" D
40161	Bent Brush w/Polyester Bristles	1 1/2" D
40162	Bent Brush w/Polyester Bristles	2" D
41195	Bent Brush w/Polyester Bristles	2 1/2" D
41196	Bent Brush w/Polyester Bristles	3" D
40180	Straight Brush w/Polyester Bristles	1" D
40181	Straight Brush w/Polyester Bristles	1 1/2" D
40182	Straight Brush w/Polyester Bristles	2" D
40183	Straight Brush w/Polyester Bristles	2 1/2" D
41197	Straight Brush w/Polyester Bristles	3" D

Case Quantity for all of the above - 12

SPARTA® SPECTRUM® VALVE & FITTING BRUSHES

SPARTA® SPECTRUM ATLAS MULTI-PURPOSE BRUSHES

- Round or oval head Atlas brushes are versatile for cleaning a variety of commercial kitchen equipment with rounded surfaces such as, steam kettles, vats, beverage servers, pots, pans, crocks and tanks
- Rounded heads and ends protect against scratching and clean in all directions
- Medium stiff Polyester bristles provide aggressive cleaning
- Base resins used to produce blocks and bristles are made of FDA approved materials
- Colors: Blue(14), Green(09), Red(05), White(02), Yellow(04)



Prod. No.	Description	Bristle Dia.
40002	16" Brush w/Oval Trim Polyester Bristles	3 1/2" x 5" D
40003	30" Brush w/Oval Trim Polyester Bristles	3 1/2" x 5" D
40004	16" Brush w/Round Trim Polyester Bristles	3" D
40005	16" Brush w/Round Trim Polyester Bristles	4" D
40010	16" Brush w/Round Trim Polyester Bristles	5" D
40006	30" Brush w/Round Trim Polyester Bristles	3" D
40007	30" Brush w/Round Trim Polyester Bristles	4" D
40008	30" Brush w/Round Trim Polyester Bristles	5" D

Case Quantity for all of the above - 6

FOR BEST DISCOUNT - ORDER CASE QUANTITIES.

BOTTLE, JAR & JUG BRUSHES

- Wirewound brushes have smaller diameter handles and softer bristles for delicate cleaning of jars, bottles, and glasses with smaller openings
- 40415 bottle brush is perfect for cleaning bottles with narrow openings
- 40469, 40470, and 41276 are specifically designed to slip easily into bottle necks to remove deposits from hard to reach places
- All plastic handles
- Base resins used to produce bristles are made of FDA approved materials
- Colors: 40000, 40001 in Blue(14), Brown(01), Green(09), Red(05), Tan(25), White(02), Yellow(04)
40467 in Red(05), White(02), Yellow(04)
All others designated by (00)



Prod. No.	Description	Case Qty.
40000	12" Pint Brush w/Polyester Bristles - 2 3/4" D	12
40001	16" Quart Brush w/Polyester Bristles - 3 1/4" D	12
40415	16 1/2" Handle Small Neck Brush w/Soft Nylon Bristles	12
40466	12" Handle Pint Brush w/Polyester Bristles	12
40467	16" Tufted Quart Bottle Brush w/Polyester Bristles	12
40468	16" Handle half Gallon Brush w/Polyester Bristles	12
40469	19" Handle Gallon Brush w/Polyester Bristles	6
40470	17" Tufted End Gallon Brush w/Soft Polyester Bristles	6
41276	28" Handle 5 Gallon Brush w/Polyester Bristles	6
41459	16" Handle Quart Brush w/Polyester Bristles	12
41460	24" Handle Tufted Quart Brush w/Polyester Bristles	12

SPARTA® SPECTRUM® TANK & KETTLE BRUSHES

- Flare head design assures all-around thorough cleaning and can be used with different length threaded handles to reach bottom of kettles and tanks
- Crimped bristles are staple set into solid plastic head
- Nylon bristle brushes (40042, 40040) have excellent chemical resistance
- Base resins used to produce bristles are made of FDA approved materials
- Threaded handle hole; 40225 Sparta® Spectrum® Self-Locking Flex-Tip® Handle is recommended to complete HACCP compliant program
- Colors: 40041, 40043 in Black(03), Blue(14), Brown(01), Green(09), Red(05), Tan(25), White(02), Yellow(04).
40040, 40042 in White(02)



Prod. No.	Description
40043	5 1/2" x 9" Flare Head Brush Bristles - 3 1/2" x 5" D
40042	5 1/2" x 9" Flare Head Brush w/Nylon Bristles
40041	5 1/2" x 7 1/2" Flare Head Brush w/Polyester Bristles
40040	5 1/2" x 7 1/2" Flare Head Brush w/Nylon Bristles

Case Quantity for all of the above - 12

SPARTA® SPECTRUM® GENERAL CLEAN-UP BRUSHES

SPARTA® SPECTRUM ALL PURPOSE UTILITY SCRUB BRUSHES

- Versatile design for a wide variety of applications
- Multiple trim angles on bristles give you better surface contact for better cleaning
- Available with pistol grips in our most popular 8" or 20" handle lengths
- Plastic handles and crimped staple set Polyester bristles are rugged and will not absorb oils or moisture
- Handles are ergonomically shaped, with smooth edges for superior comfort
- Base resins used to produce bristles are made of FDA approved materials
- Colors: Black(03), Blue(14), Brown(01), Green(09), Red(05), Tan(25), White(02), Yellow(04)

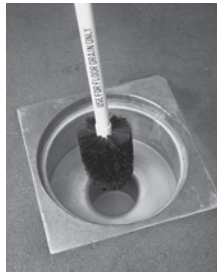


Prod. No.	Description
40541	8" Spectrum® Utility Scrub Brush w/Polyester Bristles
40501	20" Spectrum® Utility Scrub Brush w/Polyester Bristles

Case Quantity for all of the above - 12

FLOOR DRAIN BRUSHES & HANDLES

- Special female threaded handle accepts floor drain brushes only to prevent cross-contamination
- Long lasting Polypropylene bristles and plastic handle (sold separately) stand up to rugged use
- "USE FOR FLOOR DRAIN ONLY" is prominently imprinted in English and Spanish on the plastic drain handle (sold separately) to prevent contact with food and serving utensils



Prod. No.	Description	Case Pack
COLOR (00)		
40146	3" Floor Drain Brush	6 ea
40147	4" Floor Drain Brush	6 ea
41093	5" Floor Drain Brush	6 ea
40148	6" Floor Drain Brush	6 ea
40236	36" Plastic Drain Brush Handle	12 ea
40237	48" Plastic Drain Brush Handle	12 ea
40238	60" Plastic Drain Brush Handle	12 ea

HI-LO™ FLOOR SCRUB BRUSHES

- Our Sparta® 10" Hi-Lo™ series is made with three different brush surfaces for cleaning at different angles
- The split-shape is efficient for cleaning flat surfaces, under counters, around equipment and along baseboards
- Non-absorbent plastic blocks and crimped synthetic bristles wash easily and prevent gathering of mold and mildew
- Available in a variety of bristle colors for use in designated zones to help prevent cross-contamination
- Threaded to accept your choice of handles (not included)
- 40417 has Flo-Thru channels for use with Flo-Thru handles
- 40421 has multi-blade squeegee built into the head
- 40422 has bristles on the ends
- Base resins used to produce bristles are made of FDA approved materials
- Colors: 40423 in Black(03), Blue(14), Brown(01), Green(09), Red(05), Tan(25), White(02), Yellow(04)
Others designated by (00)



Prod. No.	Description
40422	12" Hi-Lo™ Brush w/End Bristles w/Polypropylene Bristles
40423	10" Hi-Lo™ Brush w/Polypropylene Bristles
40421	10" Hi-Lo™ Brush w/Stiff Polypropylene Bristles and Squeegee

Case Quantity for all of the above - 12

WALL & EQUIPMENT BRUSHES

FLO-THRU BRUSHES

- Excellent for cleaning greasy surfaces from kitchen walls, equipment, even vehicles
- Soft Nylex (flagged) bristles set in non-absorbent plastic blocks that won't crack or chip
- One threaded Flo-Thru handle hole
- 40050 has new and improved rounded block to help protect painted surfaces and delicate trim
- 41278 features a large 5" x 12" bristle spread
- All Flo-Thru brushes have threaded handle holes; recommend use with NEW 40225 Sparta® Spectrum® Self-Locking Flex-Tip™ Fiberglass Handle; sold separately
- Base resins used to produce bristles are made of FDA approved materials
- Colors: 40050 in Blue(14), Brown(01), Green(75), Red(05), Tan(25), White(02), Yellow(04)
41278 in Blue(14), Green(75), Red(05), White(02), Yellow(04)
41442 in Green(75)



Prod. No.	Description	Case Qty.
40050	9 1/2" Ultra Flo-Thru Brush w/Soft Nylex Bristles	6
41278	10" Flared Flo-Thru Brush w/Soft Nylex Bristles	12
41442	10" Hi-Lo™ Flo-Thru Brush w/Soft Nylex Bristles	12



COUNTER/BENCH BRUSHES



Prod. No.	Description	Block Dimensions	Bristle Length
2922	Stiff-bristled broom	2.5" x 18.5"	2.2"
3893	Hand scrub stiff bristle brush	2.5" x 7"	1.5"
4180	Long-handled churn stiff bristle brush	2.5" x 16"	1.9"
4188	Short-handled churn stiff bristle brush	3" x 10"	1.9"
4551	Short-handled bench brush with stiff bristles	1.5" x 10"	2"
4557*	Long-handled bench brush with soft bristles	1.5" x 14"	2.9"
4558	Short-handled bench brush with soft bristles	1.5" x 10"	2.8"
4559	Long-handled bench brush with stiff bristles	1.5" x 14"	2"
7045	Broom with soft bristles	2.5" x 11"	2.3"
7046	Deck scrub with soft bristles	2.5" x 11"	1.5"

* Also available in black

MOPPING EQUIPMENT CUT-END WET MOPS

- 4-ply cotton or 4-ply rayon provide super absorbency; ideal for all liquid applications
- High absorbency cotton mops allow fast floor drying
- Rayon offers exceptionally high liquid pick up, releases quickly, and is quick drying
- Maximum durability at the most economical price
- Colors: White



Prod. No.	Description	Case Qty.
369816	16 oz. 4-Ply Cotton Cut-End Wet Mop	12
369824	24 oz. 4-Ply Cotton Cut-End Wet Mop	12
369832	32 oz. 4-Ply Cotton Cut-End Wet Mop	12
369066	16 oz. 4-Ply Rayon Cut-End Wet Mop	12
369074	24 oz. 4-Ply Rayon Cut-End Wet Mop	12
369082	32 oz. 4-Ply Rayon Cut-End Wet Mop	12

BLENDED & FOODSERVICE MOPS

- 5" color-coded headband
- looped-end tailband provides even coverage without tangles
- cotton mop heads are good for heavier cleaning applications and picking up liquids
- rayon mops are tightly twisted to help eliminate mildew and lint



Prod. No. Description

4-Ply Cotton Mop Heads

369550	Small Yellow Band Mop
369551	Medium Green Band Mop
369552	Large Red Band Mop
369553	X-Large Blue Band Mop

4-Ply Rayon Mop Heads

369250	Small Yellow Band Mop
369251	Medium Green Band Mop
369252	Large Red Band Mop
369253	X-Large Blue Band Mop

Case Quantity for all of the above - 12

WET MOP HANDLES

- Traditional Quick Release (40340) Handle features cross bar and wing nut to securely hold mop head and allows for quick release
- Heavy duty plastic Jaw Style (40343) mop handle grips wide band wet mops for secure, precision handling
- Screw Top (40345) Handle has a threaded metal plate to accept the Screw Top Mops (41676, 41677, 41678), sold separately
- 60" Sparta® Spectrum® Quik-Release™ fiberglass color-coded handle (41664) is an ideal choice for your HACCP program
- Colors: 41664 in Blue(14), Green(09), Red(05), White(02), Yellow(04), others designated by (00)



40340 40345 41664 40343

Prod. No.	Description	Case Qty.
40340	63" Wood Handle w/Quick Release Metal Head	12
369475	60" Fiberglass Jaw Style Handle	12
41664	60" Sparta® Spectrum® Quik-Release™ handle	12

DUST MOPS

- Increase overall efficiency of regular floor maintenance with frequent dust mopping
- Available in convenient launderable or disposable style
- Launderable style requires laundry net bag, warm water temperatures, mild detergent, and gentle agitation to achieve its maximum life cycle
- 4-Ply cotton Wedge is ideal for dusting hard-to-reach places
- Sturdy chrome-plated frame reduces the possibility of rust and corrosion
- Colors: designated by (00)



Prod. No.	Description	Case Qty.
3648718	5" x 18" Disposable Dust Mop Refill	12
3648724	5" x 24" Disposable Dust Mop Refill	12
3648736	5" x 36" Disposable Dust Mop Refill	12
3648218	5" X 18" Launderable Dust Mop Refill	12
3648224	5" X 24" Launderable Dust Mop Refill	12
3648236	5" X 36" Launderable Dust Mop Refill	12
41671	18" Chrome-Plated Frame	12
41672	24" Chrome-Plated Frame	12
41673	36" Chrome-Plated Frame	12
45850	60" Dust Mop Handle	12
36490	Wedge Mop Complete	12
36490R	Wedge Mop Refill	12

Case Quantity for all of the above - 12

CARLISLE® SPECTRUM® ANGLE BROOMS

- Designed for extended use and superior performance with an ergonomic shape that prevents uneven wear
- Durable, sanitary Polypropylene bristles
- Available with 48" color-coded, Self-Locking Flex-Tip™ Fiberglass handle for more hygienic use and HACCP compliance
- 41082 has flagged bristles for cleaning up dust and fine particles
- Colors: Blue(14), Brown(01), Green(09), Red(05), Tan(25), White(02), Yellow(04)



Prod. No.	Description	Case Qty.
41082	54" Spectrum® Angle Broom w/Flagged Polypropylene Bristles	12
41370	54" Spectrum® Angle Broom w/Unflagged Polypropylene Bristles	12

FOR BEST DISCOUNT - ORDER CASE QUANTITIES.

INDUSTRIAL FLOOR SWEEPS

FINE SWEEP

- Popular block widths with 2 threaded handle holes and 3" bristle trim (T)
- Durable molded plastic block with rounded corners
- Horsehair and Polypropylene blend bristles for industrial applications of fine dust and medium soils; can be used with sweeping compounds



HORSEHAIR AND POLYPROPYLENE FLOOR SWEEP WITH PLASTIC BLOCK

Prod. No.	Description	Case Qty.
362208P1803	18" Floor Sweep - 3" T	12
362208P2403	24" Floor Sweep - 3" T	12

CARLISLE® SPECTRUM® COLOR-CODED OMNI SWEEPS™

- New color-coded bristle floor sweep with patent-pending design
- Unique sweep that combines the features of fine, medium, and heavy floor sweeps into one convenient, all purpose floor sweep
- Hygienic plastic block is non-absorbent
- Synthetic bristles have angled pitch for fast, effective sweeping on all types of floor surfaces
- Short, heavy bristles in front easily sweeps up heavy debris
- Long, fine/medium bristles in back sweep fine dust and particles; can be used with sweeping compounds
- An ideal addition to any HACCP compliant program; use with the 40225 Sparta® Spectrum® Color-Coded Self-Locking Flex-Tip™ Fiberglass Handle (sold separately)
- Base resins used to produce blocks and bristles are made of FDA approved materials
- Colors: Blue(14), Green(09), Red(05), Yellow(04), and White(02)



Prod. No.	Description	Case Qty.
41890	18" Sparta® Spectrum® Omni Sweep	12
41891	24" Sparta® Spectrum® Omni Sweep	12

FOR BEST DISCOUNT - ORDER CASE QUANTITIES.

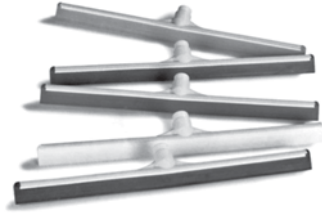
CARLISLE
Sanitary Maintenance Products



Sanitary Maintenance Products

ONE-PIECE RUBBER SQUEEGEE

- Sanitary, solid one-piece construction minimizes possible contamination areas; reduces possibility for dirt to collect in squeegee
- Economical squeegees are available in 5 Spectrum® HACCP friendly colors to help prevent cross contamination
- Uses standard Carlisle color coded handles
- Colors: Black (03); Blue (14), Green (08), Red (05), Yellow (04), White (02)

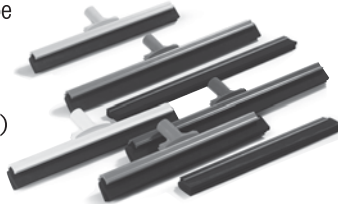


Prod. No.	Description	Case Qty.
36567	20" Rubber Squeegee	6 ea
36568	24" Rubber Squeegee	6 ea

FLOOR SQUEEGEES

CARLISLE® SPECTRUM® COLOR-CODED SQUEEGEES

- All plastic construction will not rust, safe to use on delicate tile and marble floors, helps prevent hazardous sparks when cleaning up flammable fluids; great on even floor surfaces
- Rigid frame provides easy removal and replacement of double blade foam cartridges without removing any screws or fasteners
- Replaceable, closed cell double foam blades provide superior clean-up and are easily removed
- Works with standard threaded handles for a secure fit
- Use with NEW! Sparta® Spectrum® Self-Locking Flex-Tip™ Handle (40225) to support your HACCP program
- Available in 5 colors for "zone isolation" to help prevent cross-contamination and can be used as part of a total HACCP compliance program
- Colors: Blue(14), Green(09), Red(05), White(02), Yellow(04)
41615, 41612 Refills designated by (00)



Prod. No.	Description	Case Qty.
41567	18" Spectrum® Color-Coded Squeegee	6
41568	24" Spectrum® Color-Coded Squeegee	6
40107	18" Spectrum® Squeegee Refill	6
40108	24" Spectrum® Squeegee Refill	6

RED GUM RUBBER FLOOR SQUEEGEES

- Non-marking red gum rubber for heavy duty use on large floor areas with medium flexibility
- Select from straight or curved heavy duty steel frames; Straight Frames (40075, 40076, 40077) are for general floor care; 40086 Curved Frame is excellent for cleaning large uneven surfaces
- Colors: designated by (00)



Prod. No.	Description	Case Qty.
40075	18" Straight Steel/Red Gum Squeegee	6
40103	18" Red Gum Refill	12
40076	24" Straight Steel/Red Gum Squeegee	6
40104	24" Red Gum Refill	12
40077	36" Straight Steel/Red Gum Squeegee	6
40086	36" Curved Steel/Red Gum Squeegee	6
40097	36" Red Gum Refill	12

WINDOW SQUEEGEES

- Economy style, one-piece "U" shaped steel channel for added strength, top quality rubber blade with steel handle, all steel parts are cadmium plated and assembled with brass plated screws
- Strip Window Washers, a complete unit, includes lint free synthetic mitt, plastic head, and handle socket
- Colors: designated by (00)



PROFESSIONAL SINGLE BLADE WINDOW SQUEEGEE

Prod. No.	Description	Case Qty.
40070	12" Single Blade Squeegee	12
40071	16" Single Blade Squeegee	12

ECONOMY WINDOW SQUEEGEE

Prod. No.	Description	Case Qty.
45720	10" Economy Squeegee	12
45722	12" Economy Squeegee	12
45724	14" Economy Squeegee	12
45726	16" Economy Squeegee	12

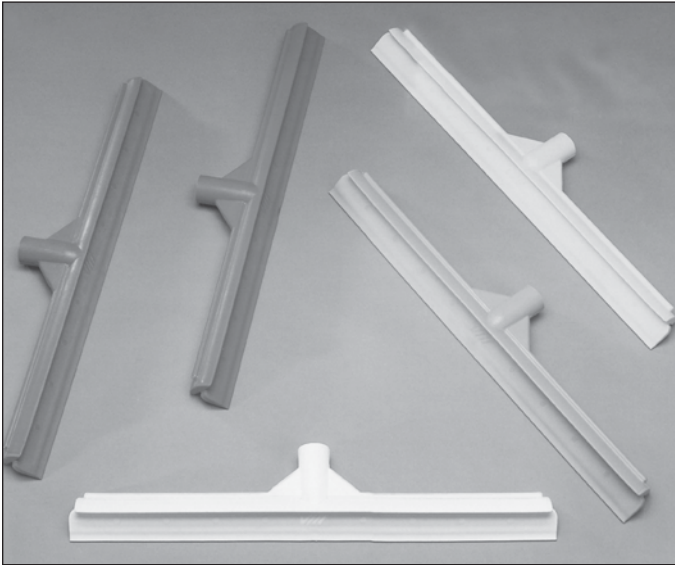
STRIP WINDOW WASHER

Prod. No.	Description	Case Qty.
41000	10" Window Washer Complete	6
41001	10" Refill Mitt	6
40069	14" Window Washer Complete	6
40095	14" Refill Mitt	6

FOR BEST DISCOUNT - ORDER CASE QUANTITIES.

REMCO PRODUCTS

ULTRA HYGIENE SQUEEGEES



- Reinforced polypropylene head, with specially blended rubber blade
- One-piece construction, single blade squeegee design
- "Ultra-Hygienic" autoclavable at temperatures up to 212°F/100°C
- Full mono-color construction for HACCP identification and tracking
- Double splash guard for push or pull applications
- Requires a European-thread handle

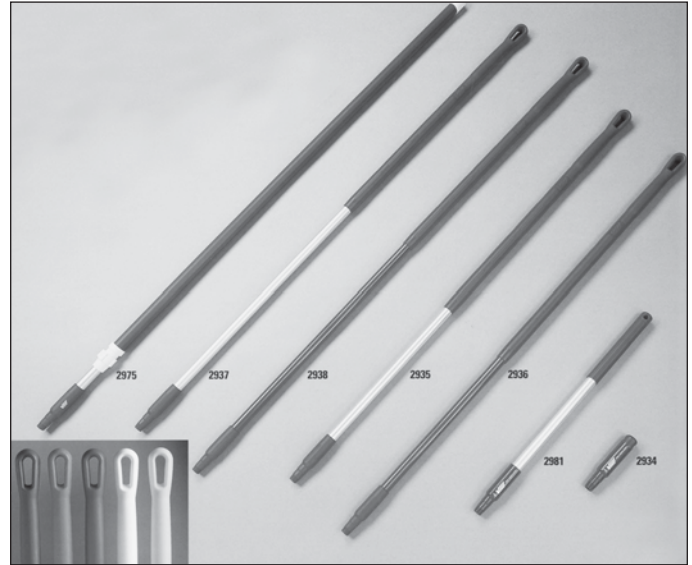
Prod. No.	Description
7070	16" Squeegee
7071	20" Squeegee
7072	24" Squeegee
7073	28" Squeegee

Add color code suffix to complete product number

2 - Green	5 - White
3 - Blue	6 - Yellow
4 - Red	

REMCO PRODUCTS

VIKAN COLOR CODED HANDLES



- European-thread handles
- Aluminum and fiberglass available
- Ergonomic sleeve
 - Optimum diameter for reduced muscle fatigue
 - Rounded grooves improve grip without compromising hygiene
- Wide range of lengths including telescopic feature
- Autoclavable at temperatures up to 212°F/100°C

Prod. No.	Description
2934	6.5", Polypropylene, Mini handle
2935	51", Aluminum, Ergonomic sleeve
2936	51", Fiberglass, Ergonomic sleeve
2937	59", Aluminum, Ergonomic sleeve
2938	59", Fiberglass, Ergonomic sleeve
2975	64"-115", Aluminum, Ergonomic sleeve
2981	26", Aluminum, Ergonomic sleeve

Add color code suffix to complete product number

2 - Green	5 - White
3 - Blue	6 - Yellow
4 - Red	

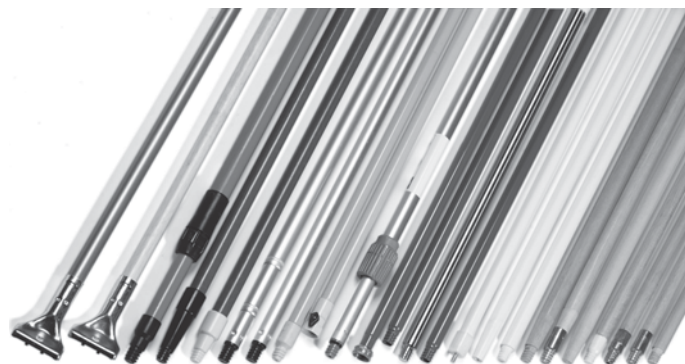
**THESE AND OTHER FINE REMCO PRODUCTS AVAILABLE FROM
STUART W. JOHNSON & CO., INC. CALL FOR INFORMATION.**



Sanitary Maintenance Products

HANDLES

- A wide selection of materials and sizes to fit all of your Sparta® products
- Colors: designated by (00)



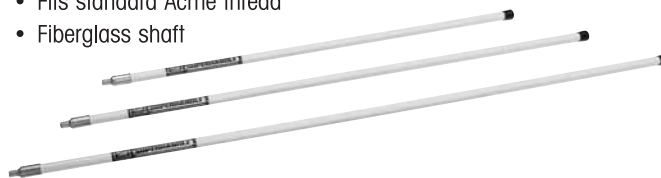
Prod. No.	Description - Threaded	Case Qty.
40267	60" Wood Handle – 1 1/8" D	12
40271	60" Wood Handle – 15/16" D	12
45267	60" Metal Tip Wood Handle – 15/16" D	12
45268	72" Metal Tip Wood Handle – 15/16" D	12
40275	40" Metal Tip Wood Handle – 7/8" D	12
40285	60" Nylon Tip Wood Handle – 15/16" D	12
41294	54" Wood Handle Metal Tip – 1 1/8" D	12
41199	60" Stainless Steel Handle – 1" D	12
45259	60" Steel Handle – 1" D	12
40230	36" Plastic w/Reinforced Tip – 1" D	12
40233	48" Plastic w/Reinforced Tip – 1" D	12
41165	54" Plastic w/Reinforced Tip – 1" D	12
40232	60" Plastic w/Reinforced Tip – 1" D	12

Prod. No.	Description - Tapered	
40261	54" Wood Handle – 1 1/8" D	12
40262	60" Wood Handle – 1 1/8" D	12
41232	60" Plastic Handle – 1" D	12

Prod. No.	Description - Other	
41010	42" Plastic Handle w/Threaded Stud – 1" D	12
40240	60" Metal Flo-Thru Handle – 1" D	12
41296	60" Plastic Handle w/Threaded Stud – 1" D	12
40241	60" Flo-Thru Fiberglass Handle – 1" D w/Shut Off Valve	12
40250	57" to 12' Telescoping Aluminum Handle – 1" D	6
41014	79" to 18' Telescoping Aluminum Handle – 1" D	6
40251	41" to 8' Telescoping Handle	6
45270	60" Anchor™ Wood Handle – 1 1/8" D	12

SUPERHANDLE

- Fits standard Acme thread
- Fiberglass shaft



Prod. No.	Description - Threaded	Case Qty.
SS48	48" Fiberglass Handle	6
SS60	60" Fiberglass Handle	6
SS72	72" Fiberglass Handle	6
SE612	6'-12' Fiberglass Handle Extension	3
SE824	8'-24' Fiberglass Handle Extension	3

SPARTA® SPECTRUM® HANDLES

- For use with Spectrum® push brooms, sweeps, squeegees, and floor scrubs
- 1" diameter fiberglass handles are available in threaded, tapered/threaded, and telescoping styles
- Self-Locking Flex-Tip™ Handle (40225) offers greater flexibility and reduces handle stress
- Quik-Release™ Mop Handle (41664) is 60" long; flexible head with gripper bites into mop band for maximum performance and releases quickly; ideal for HACCP program
- Colors: Blue(14), Brown(01), Green(09), Red(05), Tan(25), White(02), Yellow(04)
41291, 41225, and 41226 in White(00)

Prod. No.	Description - Threaded Handles	Case Qty.
41291(xx)	36" Sparta® White Fiberglass Handle	12
41225	48" Sparta® White Fiberglass Handle	12
40225	60" Sparta® Spectrum® Self-Locking Flex-Tip™ Handle	12
41226	72" Sparta® White Fiberglass Handle	12

Prod. No.	Description - Tapered/Threaded Handles	
40220	60" Sparta® Spectrum® Fiberglass Handle	12

Prod. No.	Description - Telescoping Handle	
41020	54" to 8' Sparta® Spectrum® Telescoping Fiberglass Handle	12

Prod. No.	Description - Mop Handle	
41664	Sparta® Spectrum® Quik-Release™ Mop Handle	12

FOR BEST DISCOUNT - ORDER CASE QUANTITIES.

HANDLE ACCESSORIES

FLEX-ALL™ ADAPTER

Our exclusive Flex-All™ Adapter provides a flexible link between broom heads and handles to prevent tip breakage, deforming, or whipping of handle if broom comes into contact with immobile objects

The Flex-All™ Adapter reduces the chance of personal injury, equipment, and door facing damage; prevents broom handle tip from breaking off in broom head.

- Colors: designated by (00)



Prod. No.	Description	Case Qty.
40235	4" Flex-All™ Handle Adapter	12
40281	58" Handle with Flex-All™ Adapter - 15/16"	6

ANCHOR™ ACCESSORIES

- Anchor™ handles, clamps, and braces sold separately
- Sturdy metal braces prevent broken handles even when sweeping large accumulations
- All parts are plated for rust-resistance and come complete with necessary hardware and instructions
- Colors: designated by (00)



Prod. No.	Description	Case Qty.
45270	60" Anchor™ Wood Handle, 1 1/8" Diameter	12
45280	Large Galvanized Brace	12
45281	Small Galvanized Brace	12
45196	Anchor™ Clamp with Bolts & Wing Nuts (2 ea)	12

ROLL 'N GRIP™ BROOM & BRUSH HOLDER SYSTEM

- Keeps brooms and brushes handy and secure
- Racks help prevent damage to bristles, handles, walls, and counters
- Promotes fast drying of mops and wet broom bristles
- 40731 Roll 'N Grip™ Holder System is adjustable for a variety of brooms and brushes with a unique system of plastic roller grippers that self-adjust to different handle diameters; quick and easy release and mounting for any length of handle
- The Roll 'N Grip™ Holder System also comes with a convenient hook that can be used for slotted handle tools and brushes (additional hooks and grippers are available by special order)
- Rack anchor holes are 16" on center (mounting screws included)
- Colors: designated by (00)



Prod. No.	Description	Case Qty.
40731	Roll 'N Grip™ Holder System. Consisting of: 3 Holders, 18" Mounting Bar, 4 Wood Screws, and Hook	12
40732	Roll 'N Grip™ Holder (2/pk) w 4 Wood Screws	12 pk
40734	18" Roll 'N Grip™ Vinyl Mounting Bar with 4 Wood Screws	12 pk
40733	Roll 'N Grip™ Hooks (2/pk) w 4 Wood Screws	12



Commercial Products

BUCKET/WRINGER COMBINATION PACKS

The leading products in hard floor care.

- Predominantly plastic, non-marking casters for reduced touch-up cleaning
- Smooth, easy-to-clean surfaces
- Color coded systems, for reduced potential of cross contamination



Prod. No.	Description	Color
7580	Mopping Combo Pack, 7570 Mop Bucket/6127-01 Wringer	BR, Y

FLOOR SIGNS



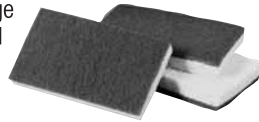
Lightweight and versatile, but makes a heavy statement about safety.

- "Closed" and "Caution" warning messages imprinted in English, French, German and Spanish for effective communication to broad audiences
- Two-sided, 25" (63.5 cm) model available for use in narrow areas
- Folding design for convenient storage or transport on Janitor Cart

Prod. No.	Description/Dimensions	Color
6112	Floor Sign with Multi-Lingual "Caution" Imprint, 2-Sided 26 1/2" l x 11" w x 1 1/2" d 25" h (Open)	Y
6112-77	Floor Sign with "Caution Wet Floor" Imprint, 2-Sided 26 1/2" l x 11" w x 1 1/2" d 25" h (Open)	Y
6112-78	Floor Sign with Multi-Lingual "Closed" Imprint, 2-Sided 26 1/2" l x 11" w x 1 1/2" d 25" h (open)	Y
6114	Floor Sign with Multi-Lingual "Caution" Imprint, 4-Sided 38" l x 12" w x 1 1/2" d 37" h (Open)	Y
6114-77	Floor Sign with "Caution Wet Floor" Imprint, 4-Sided 38" l x 12" w x 1 1/2" d 37" h (Open)	Y
6114-78	Floor Sign with Multi-Lingual "Closed" Imprint, 4-Sided 38" l x 12" w x 1 1/2" d 37" h (Open)	Y
6184	20' (6.1 m) Barrier Chain for 6114 1 1/2" l x 7/8" w x 1/4" dia (ea link)	Y

SCOTCH-BRIGHT™ MEDIUM DUTY SCRUB SPONGE NO. 74

Dual action cleaning tool. It's a No. 96 scouring pad on one side for scrubbing and cleaning. The cellulose sponge on the other side quickly wipes up spills and messes and can carry cleaning solutions to the work surface.



Prod. No.	Description	Packaging
74	3.6" x 6.1" x 0.7"	20 pads/case

SCOTCH-BRIGHT™ HEAVY DUTY SCOUR PAD NO. 86

Open construction pad with tough fibers and abrasives make fast work of heavy duty cleaning jobs. Use in kitchen to replace scrapers, steel wool and metal sponges. Typical applications include heavily baked-on food and food processing equipment.



Prod. No.	Description	Packaging
86	6" x 9"	36 pads/case

SCOTCH-BRIGHT™ GENERAL PURPOSE SCOUR PAD NO. 96

It's the original synthetic scouring pad and a performance pacesetter. Use it for everyday cleaning of most cooking utensils and equipment. It replaces steel wool and metal sponges and won't leave metal slivers in hands or food. Long lasting, non-rusting and resilient.



Prod. No.	Description	Packaging
96	6" x 9"	60 pads/case

3M™ DOODLEBUG™ PAD HOLDER

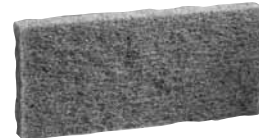
Durable swivel lets holder twist and turn to reach hard-to-get at places. Swivel head on pad holder is threaded to attach to standard brush handles.



Prod. No.	Description	Packaging
6472	Doodlebug Pad Holder/Blue or Brown	Each

3M™ DOODLEBUG™ PAD

A resilient pad made for medium-duty cleaning tasks such as stairs.



Prod. No.	Description	Packaging
8242	4.625 x 10, Blue, Medium Duty	5 pads/box
8541	4.625 x 10, Brown, Heavy Duty	5 pads/box
8440	4.625 x 10, White, Light Duty	5 pads/box

ANTI-FATIGUE & SAFETY MATS

WEARWELL VINYL GRID GRIPPER TREAD — RELIABLE SLIP PROTECTION

Vinyl Grid's deck board design elevates workers & parts above slippery areas and allows free drainage of fluid and debris.

- Uses: Wet indoor areas
- Surface Texture: Tire-like, gripper tread
- Compound: 100% Vinyl
- Thickness: 1/2"
- Colors: Black, Red



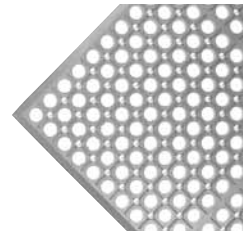
Prod. No.	Description/Stock Sizes	Custom Sizes
892	2' x 40' 3' x 40' 4' x 40'	2', 3' and 4' widths up to 40' in length

© Tennessee Mat Company, Inc.

WEARWELL WORKSAFE® LIGHT

Lighter weight, fatigue relief, and an excellent drainage design make WorkSafe® Light one of our most popular safety and anti-fatigue mats. The lightweight, 25-pound design eases the strain of clean-up, yet keeps employees comfortable. The molded beveled edges allow easy access for employees and carts. WorkSafe® Light's well-engineered drainage holes and underside knobs keep debris from becoming trapped and keep the mat from harboring germs and bacteria.

- Uses: Wet, dry and greasy work areas
- Surface Texture: Holes for drainage, raised ribs for traction
- Compound: Grease-resistant rubber, or Grease-proof rubber - please specify
- Edging: Molded safety bevels on all sides
- Thickness: 1/2"



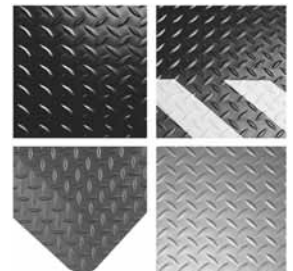
Prod. No.	Description/Stock Sizes
478	3' x 5' 3' x 10' 3' x 20'

© Tennessee Mat Company, Inc.

WEARWELL DIAMOND-PLATE SPONGECOTE®

Our most popular anti-fatigue mat ever, Diamond-Plate SpongeCote® gives workers comfort and safety all day long. Its safety-engineered surface adds extra traction, and the Nitricell™ sponge base is the most comfortable and resilient sponge base on the market. Black, Gray, Safety Alert and Yellow Bordered in stock.

- Uses: All dry work areas
- Surface Texture: Diamond embossed
- Compound: Chemical resistant, abrasion resistant, fire resistant
- Edging: Safety Bevel
- Borders: Colored border option on longitudinal sides
- Thickness: 9/16"



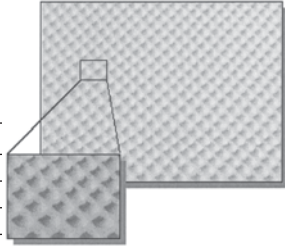
Prod. No.	Description/Stock Sizes
414	2' x 3' 3' x 5'
415	2' x 3' 3' x 5'

© Tennessee Mat Company, Inc.

NOBBY ANTI-FATIGUE MAT

Knobby Mats are available in white or black. White mats are compounded for Section 177.2600, FDA, which makes them ideal for use in food processing facilities. The patented "knobby" design allows free air flow all around the machine parts and helps prevent bacterial growth and provide a very effective non-skid surface. Knobby Mats are available in 21"x21" and 21"x27" sizes.

Prod. No.	Description
WHF2121X	21"x21", Black
KNOB2121W	21"x21", White
WHF2127X	21"x27", Black
KNOB2127W	21"x27", White



SAFGARD™ STAINLESS STEEL WASH TANKS

Wash Tank Features

- Single, double or triple compartments
- Sizes up to 97" (Any two or more sizes may be joined)
- Gallon capacity of tanks from 23" to 97" is roughly equal to number of inches. Example: 43" tank holds approx. 43 gallons.
- 22 gauge - type 304 Stainless Steel (Bright Annealed)
- 13 1/2" deep, 21" wide
- Includes drain



Single SS Wash Tanks

Prod. No.	Size
20038	18"
20012	23"
20013	29"
20014	37"
20015	43"
20016	49"
20017	55"
20018	61"
20034	73"
20035	85"
20036	97"

Double SS Wash Tanks

Prod. No.	Size
20086	18" - 18"
20019	23" - 23"
20021	23" - 29"
20087	23" - 37"
20084	23" - 49"
20020	29" - 29"

Order brackets or legs separately.
(Packaged in sets of two)

LEGS

(Packaged in sets of two)

Prod. No.	Description
20068	Blue
20069	Orange
20070	For 18" tank only
30474	304 SS for 23" to 97"



BRACKETS

(Packaged in sets of two)

Prod. No.	Description
20052	Blue Saddle
20057	For 18" tank



DRAIN, REPLACEMENT

(Fits any 1 3/4" drain hole)

Prod. No.	Description
20043	Drain complete
20044	Lock nut only
20046	Rubber gasket



RC STOPPER

Prod. No.	Description
20260	RC Stopper - 1 1/2"



ADVANCE TABCO STAINLESS STEEL LAVATORY/SCRUB SINKS

FEATURES:

One piece deep drawn sink bowl design. All sinks have large drain with a minimum dimension of 3" and are rectangular in design for increased capacity.

CONSTRUCTION:

All TIG welded. Welded areas are blended to match adjacent surfaces. Die formed No-Drip recessed "V-edge". One sheet of stainless steel is used. There are no welded seams other than corners.

MECHANICAL:

Faucet supply is 1/2" IPS male thread hot and cold. K-59 splash mounted 4" O.C. gooseneck faucet chrome plated furnished with aerator. K-6 stainless steel basket drain 1-1/2" IPS.

MATERIAL:

Heavy gauge type 304 series stainless steel. Wall mounting bracket is stainless steel and of offset design. All fittings are brass/nickel plated unless otherwise indicated.

MODEL 7PS20

- Bowl Size 10" x 14" x 5"
- Overall Size 17 1/4" x 17 1/4"
- Deck mounted faucet
- 9" back splash
- Economical



MODEL 7PS62

- Bowl Size 10" x 14" x 5"
- Overall Size 15 1/4" x 17 1/4"
- Splash mounted gooseneck faucet
- Basket style drain
- Knee operated valve

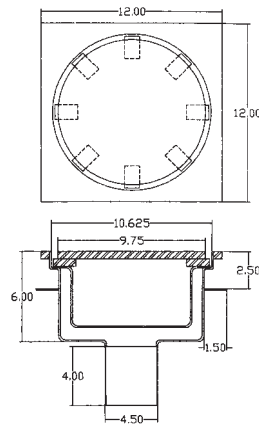


MODEL 7PS61

- As above, "Hands Free" with electronic sensor

SANITARY FLOOR DRAINS

- 12 Ga single piece, seamless construction on body
- T-304 stainless construction
- Withstands heavy equipment traffic
- Standard size 4" Sch.-10 outlet
- Other outlet sizes available
- Glass beaded finish
- Outer cement ring



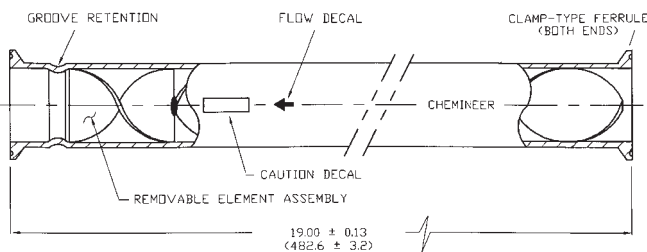
Part Number

FLOOR 4

FLOOR 6 (6" outlet)

SANITARY STATIC MIXER

Sanitary mixers have polished internal and external surfaces and are equipped with removable element assemblies for fast, easy cleaning. Sanitary mixers are fitted with Tri-Clamp Ferrules for compatibility with sanitary piping systems used in the food industry. Sanitary mixers are available in five diameters ranging from 1" to 3" and feature either 304SS or 316SS construction materials.



Prod. No.	Size
1.50KMR-SAN	1 1/2"
2.00KMR-SAN	2"
2.500KMR-SAN	2 1/2"
3.00KMR-SAN	3"

LKD AND LKDC 3A COMPLIANT MANWAYS

Installed at the top of each tank, circular LKDC manways are used on tanks or vessels where interior access is required above the liquid level. 3A compliant and constructed with 304 and 316 stainless steel, the LKDC cover is supplied with a replaceable, self-sealing double lip seal to better contain fluids during over-the-road tanker travel or CIP cleaning cycles. Oval 3A compliant LKD manways are used on tanks or vessels where access to the vessel interior is required below the liquid level. Installed on the side of tanks, the LKD manways are not affected by positive or negative tank pressure. In fact, they're designed to handle temperatures up to 212 F° and pressure rated up to 36psi.

Tank cover type LKD, oval shape



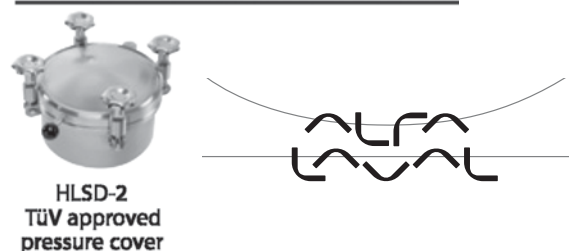
Tank cover type LKDC and LKDS, circular shape



Tank cover type C, O and R – circular, oval and rectangular shape



Tank cover type HLSD-2, circular shape



AGITATORS



ALT TOP-MOUNTED AGITATORS WITH NO BOTTOM SUPPORT

ALT agitators are characterized by having a shaft that does not need bottom support.

This makes it easy to get at everything inside the tank for inspection, cleaning and maintenance. Because there are no fittings in the bottom of the tank, Alfa Laval ALT agitators are normally the solution of choice when hygiene standards are the prime focus.

ALTB TOP-MOUNTED AGITATORS WITH BOTTOM SUPPORT

The shaft used in ALTB agitators is supported inside the tank by a steady bearing at the bottom. Despite this, Alfa Laval ALTB agitators are normally less expensive than comparable agitators with no shaft support inside the tank.

Alfa Laval ALTB agitators are available with two types of bottom support – the BS1 for when long bush service life is a prime concern and the BS2 with especially easy cleaning for when high hygiene standards are important.

ALB BOTTOM-MOUNTED AGITATORS

Alfa Laval ALB agitators are specifically designed to be mounted on the bottom of the tank. This means the upper part of the tank does not need to be built to bear the weight of the agitator unit, paving the way for savings on both purchase costs and installation costs for the tank.

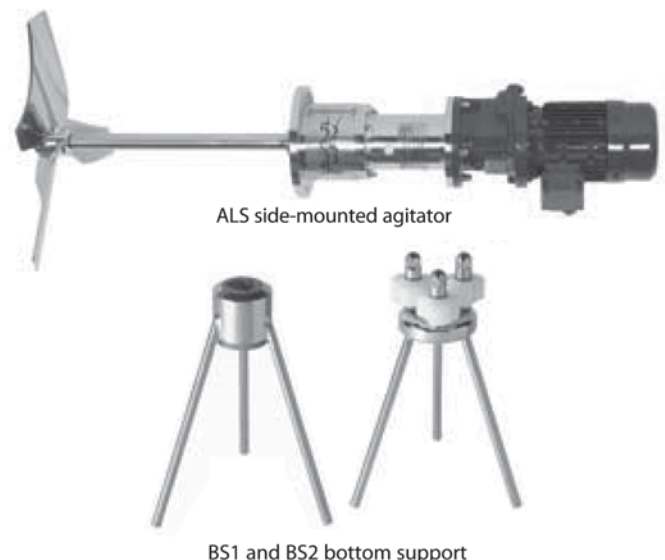
An additional benefit is that a bottom-mounted agitator can normally be operated – as well as inspected and serviced – from ground level, saving on time and manpower.

Alfa Laval ALB agitators can also be fitted with a special sanitary-quality sterile seal for high-pressure applications and aseptic use.



ALS SIDE-MOUNTED AGITATORS

Alfa Laval ALS agitators are side-mounted units widely used in storage tanks and silos. They are normally used for low-viscosity products and for keeping the product inside the tank homogeneous.



A COMPLETE LINE OF TANK EQUIPMENT FROM ALFA LAVAL



Toftejorg Rotary Spray Head SaniMidget

- Full coverage
- Effective cleaning at low flow rate
- Sanitary design



Toftejorg SaniMidget Retractor

- Retractable
- Suited to tanks with internal components
- Self cleaning and self draining



8000 Series Spray Ball

- 3A compliant
- Custom options
- A variety of surface finishes including EP



Toftejorg Rotary Jet Head SaniJet 20

- Totally self cleaning
- Follows EHEDG guidelines
- FDA compliant
- High-impact cleaning



Toftejorg Rotary TJ 20G

- 360° impact cleaning and coverage
- Award-winning hygienic design

High-impact cleaning, with its short cleaning cycles, reduces consumption of water, detergents and chemicals up to 75%. Recycled, filtered cleaning fluid can be used to clean more tanks. Cleaning with rotary equipment also requires less energy and fewer personnel.

Project costs are lower as well. CIP pumps can be smaller, fewer valves are needed and the amount of pipework is reduced. Combined with the low maintenance requirements and long working life-time of the rotary equipment, it adds up to low total cost of ownership.



1 Day
Others perform "semi-manual" cleaning using static spray balls. This method can take hours



Minutes
A full DIP pattern using high-impact rotary jet equipment from Alfa Laval is highly efficient and takes just a few minutes

Financial Benefits at a Glance

- Continuous operation, no downtime
- More batches processed - plant throughput increased
- Consumption of water and detergents reduced by 75%
- Lower environmental impact: Uses less energy and generates smaller volumes of waste

TOFTEJORG SANIMIDGET SB/3-A ROTARY SPRAY HEAD



Application

The Alfa Laval Toftejorg SaniMidget SB/3A Rotary Spray Head is uniquely designed with respect to self-cleaning, self draining and inspectability. Its novel patent pending one-clip assembly offers easy installation, disassembly and inspection without compromising cleanability or drainability. The SaniMidget SB/3A is an efficient replacement of the traditional static spray ball as it offers liquid impact on the entire tank wall that lies within the 270° upward pattern; this at a lower flow rate at equally low pressure.

Working Principles

The flow of cleaning media causes the head of the SaniMidget SB/3A to rotate, with fans of water laid out in a swirling pattern on the entire perimeter exposed to the spray patten. This generates a vibrating impact in the 270° upward pattern and a dynamic cascading flow that covers all internal surfaces of the tank, vessel or reactor. The SaniMidget SB/3A is designed according to EHEDG and GMP guidelines and meets the requirements of 3-A standards. The self cleaning feature is due to the unique design that includes cleaning of the down pipe. The device is self-draining.

Prod. No. Description

TE16B182-00 SaniMidget 1 1/2" Slip fitting

CHLORINE FOG GUN

The Lonn Chlorine Fog Gun operates on air to quickly fog entire interior rooms and spaces. It's the ideal unit for spraying chlorine solutions and other sanitizers.

Originally designed for fogging milk storage areas, the Fog Gun has been highly accepted by breweries and other industries where sanitizing of tanks or cans are required by various Boards of Health. Also, many industries have adapted this unit for the sanitizing of various machines.

Prod. No.

LFH-1	Fog Gun with hose
LFB-1	Curved Fog Gun with 32 oz. bottle



SANI-MATIC CIP SPRAY BALLS

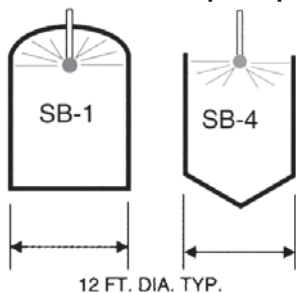
Sani-Matic CIP spray balls come in several standard designs. Special spray balls may be designated upon request. These special designs include alternate diameters, connection sizes and flow/pressure considerations. All spray balls are constructed of 316 SS and are polished to a 150-grit (#4) finish. Standard connections are made with 1 1/2" slip collars that are pinned to a 1 1/2" supply tube.



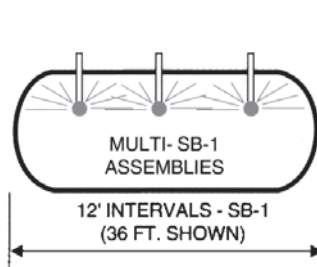
Prod. No.	Spray Patterns	Diameter	Flow/PSI
SB-1	180° upward spray pattern	4", 2.5"	40 gpm/25
SB-4	180° downward spray pattern	4", 2.5"	40 gpm/25
SB-5	360° spray pattern	4", 3", 2.5"	40 gpm/25

TYPICAL SPRAY BALL APPLICATIONS

VERTICLE TANK with closed or open tops



HORIZONTAL



SANITARY PIN - HAIR PIN STYLE

Fits all slip-fit collar sizes.



Prod. No.	Prod. No.
020382 1/2"	320149 1 1/2"
320091 3/4"	320068 2"
320033 1"	

COMMANDER "TRI-JET" FOGGER

The Comander provides effective chemical fogging or humidity control. The combination of the adjustable valve and the tornado action nozzle provides maximum cold mist up to 30 feet (9.1m).

- Powerful 2-stage 110 volts, heavy-duty motor
- Triple nozzle with two stage action
- Adjustable valve to regulate output
- Works with both oil and water-based products
- Adjustable output 0-12 ounce (0-335 ml) per minute
- Large 1 gal. (3.8 l) capacity
- 5-year limited warranty
- Rugged, rust-proof construction

Applications: Flying Insects, Pest Control, Odor Control, Disinfectants, Humidity Control, Sanitizers

Locations: Apartments, Barns, Hospitals, Hotels, Refuse Sites, Processing Plants, Green Houses



Prod. No. Description

220186	Commander "Tri-Jet" Fogger - 13" L x 8" W x 14" H
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Toftejorg

ALFA LAVAL TOFTEJORG TANK CLEANING SYSTEMS

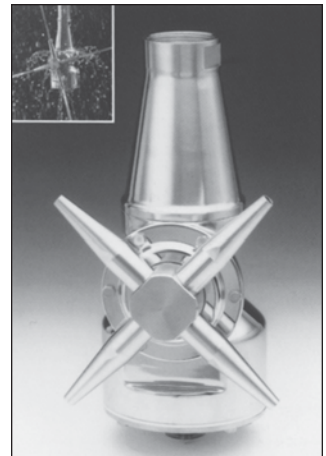
TZ-74 SELF CLEANING VERSION

Provides 360° indexed impact cleaning over a defined time period
Cleans processors, storage and transport tanks to 130,000 gallons
Flow of the cleaning solution makes the nozzles perform a geared rotation around vertical and horizontal axis
Specify nozzle size, and connections

Prod. No.

Description

TZ-74	Self-Cleaning 360° Rotating Spray Jet
-------	--



SPECIFICATIONS

Working Pressure – to 174 PSI
Recommended Pressure – 116 PSI
Working Temp.-Max. – 203 F
Effective Throw Length – 79 Ft.
Standard Fitting – 1 1/2" NPT



TZ-89

The TZ-89 rotary jet head provides 360° indexed impact cleaning over a defined time period. It is fully automatic and represents a guaranteed means of achieving quality assurance from cleaning tanks.

APPLICATIONS

Processing, storage, and transportation tanks and vessels between 130 to 13,000 US gallons. Used in breweries, food and dairy processes, pharmaceutical, chemical and many other industries. The TZ-89 rotary jet head is particularly suitable for industries using solvent cleaning for those applications where very low flows are preferred but 360° impact cleaning is still needed, e.g. pharmaceutical.

OPTIONS

Special versions include ultra low flow with fast rotation. An electronic rotation sensor to validate 360° coverage can also be included.

ORDERING INFORMATION

Please specify nozzle size, required connections and confirm application suitability with your Stuart W. Johnson & Co. sales associate.

Materials

316 Stainless steel construction

Working Pressure

30 - 100 psi

Recommended Pressure

44 - 87 psi

Maximum Working Temperature

203 °F

Throw Length, Static

13 - 23 ft.

Effective Throw Length

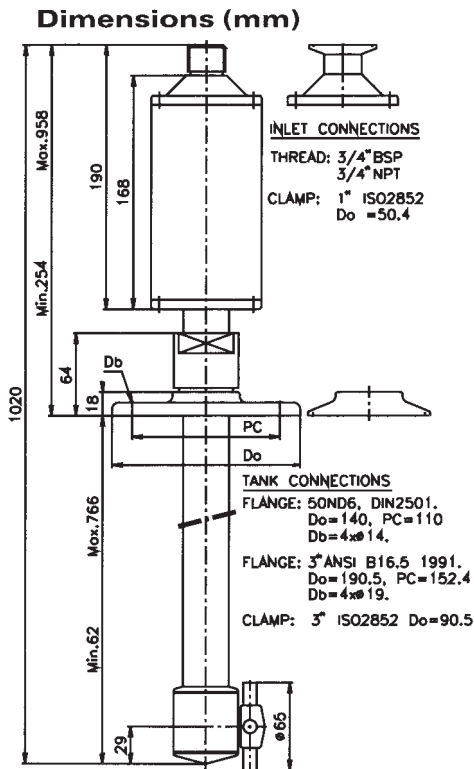
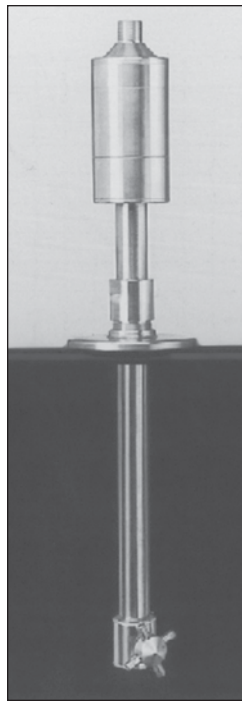
8 - 13 ft.

Inlet Connections

Thread: 3/4" BSP or NPT, male
Clamp: 1" ISO 2852

Tank Connection

Flange: 50 ND6 DIN 2501, or 3" ANSI B 16.5
Clamp: 3" ISO 2852

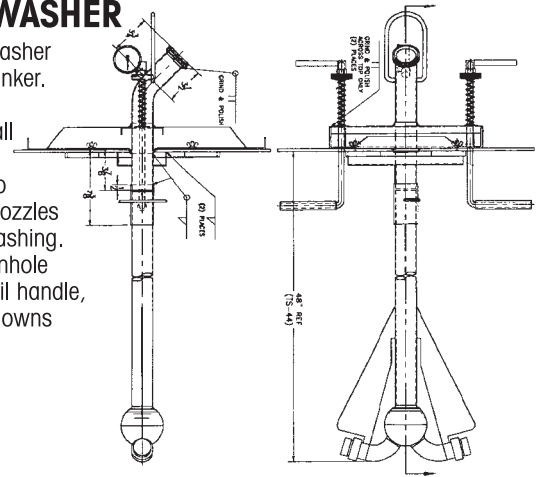


TANKER WASHER

Drop in style washer for up to 44' tanker.

TS-4 features a center spray ball for top spray pattern and two multi-bore jet nozzles for tank end washing. The vented manhole cover has a bail handle, and two hold downs with gasket.

Call for parts.



Prod. No.	Description	Flow/PSI
TS-4	For 20' to 44' tankers.	120 GPM @ 40 psi
320053	TS4 Gasket	



SANI-MATIC COP BASKETS

These baskets are designed to handle a variety of parts and fittings. Handles are provided to easily lift out of COP tanks without draining the tank. Baskets are desirable to immerse and remove quantities of parts and fittings without damage while keeping them contained. All have 316 SS construction with 1/4" rod for handles.



URWB-1



URWB-2



URWB-5



URWB-6

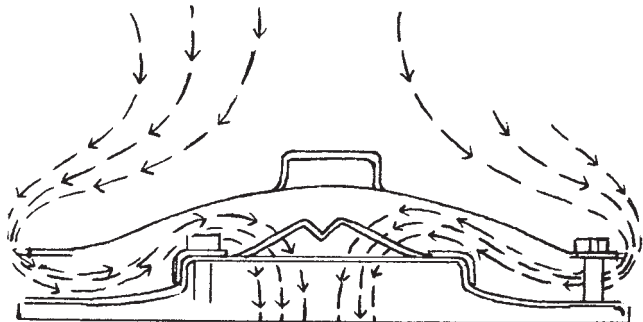
Prod. No.	Dimensions	Openings
URWB-1	19"L x 15 1/2"W x 3 1/2"D 14 gauge, 17"H handles	3/8" perforations
URWB-2	19 3/4"L x 15"W x 4"D 15"H handles	1" square 1/8" wire mesh
URWB-5	12"L x 6"W x 10"D 14 gauge, hanger-style handle	3/16" square perforations
URWB-6	22"L x 10 1/2"W x 10"D 24"H handles	1" square 1/8" wire mesh



SANITARY MANHOLE VENT



- Takes only seconds to attach
- Portable and lightweight (14 lbs.)
- Fits manholes up to 19" in diameter
- Spun cover protects filter pad against damage and moisture when in use
- Single unit can be moved from tank to tank without loss of time
- Ideal for plant unloading operations
- Provides protection against hazard of internal vacuum while unloading
- Proven in hundreds of installations
- Unique venting design permits adequate air flow for 3" capacity pump.
- Accepts standard 9 1/2" replaceable filter pads.
- All stainless steel sanitary construction. Easy to keep clean.



Unique venting design permits adequate air flow for 3" capacity pump.

Accepts standard 9 1/2" replaceable filter pads.

All stainless steel sanitary construction. Easy to keep clean.

Prod. No.	Description
A2002	Vent Assembly
3109	Replacement Filter/100 per box

TANKER VENT

FEATURES

Designed to allow unrestricted air exhaust during filling of tanker, primarily for dairy farm pickup at pump capacities and speeds up to 150 GPM.

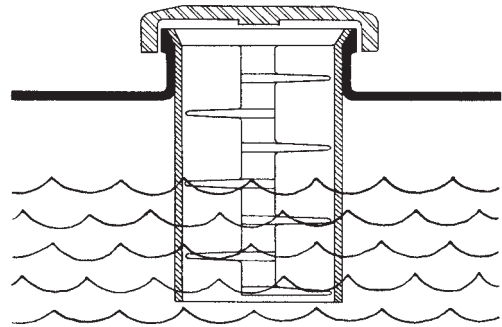
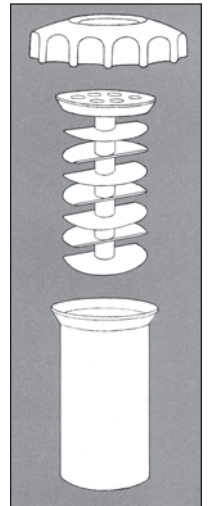
Allows breathing and baffles against spillage during transport.

High impact plastic meets requirements of FDA. Hard, glossy surface finish impervious to cleaning solutions.

One way assembly only, cannot be improperly assembled after cleaning.

Fits any standard 3" sanitary fitting.

Rating of +270 F before deforming at 66 p.s.i. exceeds all design criteria for temperatures normally encountered in cleaning and sanitizing with chlorines and other bactericides.



Prod. No.

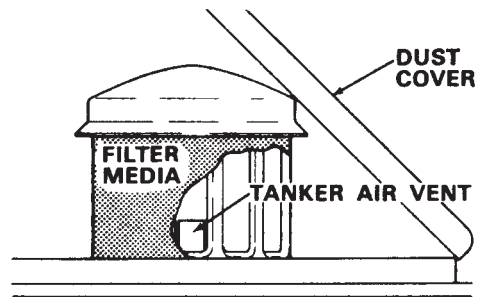
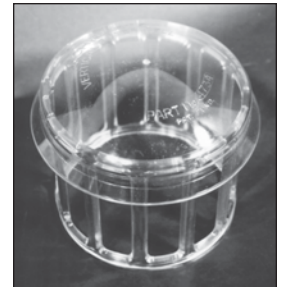
600	Complete Unit
600-01	Sleeve
600-02	Pagoda
600-03	Cap

TANKER AIR VENT FILTER

Inexpensive air filter assembly designed to filter air on pick-up tanks, or over the road tankers as they are being unloaded.

Prod. No.

4734-00-99	Filter Cell
4729-06-29	Filter Cell Cloth



LAGENCO THREADED OR SNAP-ON CLOSURES

- Unique anti-slip grip for easy opening or closing,
- Protect your pipelines and tanks from dust, insects and mold.
- Available with or without chain
- Snap-on closures for clamp type fittings or threaded closures for bevel seat fixtures
- Specify Black, red, or white

SNAP-ON CLOSURES FOR CLAMP TYPE FITTINGS



28 MALE CLOSURES BEVEL SEAT FITTINGS



29 FEMALE CLOSURES BEVEL SEAT FITTINGS



Prod. No. Size/Description

NOTE: For Closures with Chain attached add "C" to Product No.

1500	1 1/2", Snap-On Closure
2000	2", Snap-On Closure
2500	2 1/2", Snap-On Closure
3000	3", Snap-On Closure
1500-28	1 1/2", Male, Bevel Seat Closure
2000-28	2", Male, Bevel Seat Closure
2500-28	2 1/2", Male, Bevel Seat Closure
3000-28	3", Male, Bevel Seat Closure
1500-29	1 1/2", Female, Bevel Seat Closure
2000-29	2", Female, Bevel Seat Closure
2500-29	2 1/2", Female, Bevel Seat Closure
3000-29	3", Female, Bevel Seat Closure

FITTING CAPS

Ideal as dust and moisture seals, molded of tough polyethylene plastic. Suitable for threaded ferrules.

Designed for the dairy type sanitary fittings.



Prod. No.	Size	Standard Package	Colors
WW21	1 1/2"	25	Yellow, Red, White
WW250	2"	25	Yellow, Red, White
WW53	2 1/2"	25	Yellow, Red, White
1050	3"	15	Red, White
1076	4"	15	Red, White

Minimum order - One standard Package.

SAF-T-STRIP CURTAINS & DOORS

Available in a wide range of strip widths, thickness and overlaps; three temperature-rated PVC strip materials; and several mounting options.

Energy savings through temperature retention and control of heated and cooled air flow.

Improved work environment resulting from improved maintenance of ambient temperatures, draft reduction, and pest control.

Less maintenance due to blocking out wind, weather, dirt and debris.

Reduced noise levels up to 15 db.

Increased productivity and safety as a result of unrestricted traffic flow and excellent visibility.

Versatility allows motorized and personnel traffic - by utilizing various available strip widths - to pass through the same doorway.



APPLICATIONS:

- Plant floor doorways
- Manufacturing cell/operations doorways
- Conveyor operations openings
- Loading docks
- Rail cars
- Low-temperature/USDA facilities

SPECIFICATIONS:

For most applications:

Use 8" strips for 8' high openings (.080" strip thickness)

Use 12" strips for 12' high openings (.120" strip thickness)

Use 16" strips for 16' high openings (.160" strip thickness)

ORDERING INFORMATION:

Please round the height and width required to the nearest foot. Includes galvanized universal mounting bracket (14 gauge with cover plates and wing nuts).

Partial overlap design is suitable for most applications. Use full overlap for extreme applications where maximum energy control or sound attenuation is desired or excessive air movement is present.

If curtain is to be used as a multiple sided enclosure, include sketch of enclosure with all dimensions.

MB14 MOUNTING BRACKET:

The included mounting bracket has "built-in" inclined pin and separate wing nuts. Brackets include sectionalized front plate. Standard lengths are 8' and 10'. Standard support spacing is 6-7 feet. Special spacing available on request.

Special aluminum box beam mounting available by contacting Stuart W. Johnson & Co., Inc.

Prod. No.	Strip Width	Strip Thickness	Material	Feet per Roll
RSY-6	6"	.040"	UV Amber	500
RSC-6	6"	.040"	Clear	400
RSY-8	8"	.080"	UV Amber	300
RSO-8	8"	.080"	UV Orange	300
RSB-8	8"	.080"	UV Blue	300
RSC-8	8"	.080"	Clear	300
RSY-12	12"	.120"	UV Amber	200
RSC-12	12"	.120"	Clear	200
RSY-16	16"	.160"	UV Amber	100
RSC-16	16"	.160"	Clear	100

INSECT-O-CUTOR®

FLYING INSECT ELIMINATORS

HIGH PERFORMANCE (HP) OR ENERGY EFFICIENT (EE) MODELS

IOC® High Performance (HP) Models utilize Ultra High Current (UHC®) circuitry to increase black light emission and flying insect attraction. An exclusive innovation of Insect-O-Cutor®, this unique circuitry overdrives the insect attraction lamps without shortening lamp life. IOC Energy Efficient (EE) Models are powered by electronic-ballasted circuitry that converts normal 60 Hertz line current to 25kHz for increased operational efficiency...resulting in an 8% to 15% increase in light output.

HORIZONTAL LOW HEADROOM SERIES



Prod. No.	Description/Color	Dimensions
3692DGA	HP Model/Aluminized Steel	43.5" w x 12" h x 8.25" d
3694EDGA	EE Model/Aluminized Steel	43.5" w x 12" h x 8.25" d
3692DGS	HP Model/Stainless Steel	43.5" w x 12" h x 8.25" d
3694EDGS	EE Model/Stainless Steel	43.5" w x 12" h x 8.25" d

SCATTERPROOF SERIES - PORTABLE

IOC® Scatterproof Series may be installed in food handling areas where other style models are prohibited or restricted due to relative safe distance limitations to open foods and their respective preparation areas. Escape-proof design features virtually prevent scatter/fallout of dead insects...particles are totally contained. This Scatterproof Series may be wall mounted; placed on shelves, counters, worktables, and other flat platforms; or moved from area to area as portable protection.



Prod. No.	Description/Color	Dimensions
2591DG	HP Model/Sand Color Textured	28.9" w x 12.5" h x 5.5" d
2599EDG	EE Model/Sand Color Textured	28.9" w x 12.5" h x 5.5" d
1890DGA	HP Model/Aluminized Steel	22.9" w x 12.5" h x 5.5" d
1894EDGA	EE Model/Aluminized Steel	22.9" w x 12.5" h x 5.5" d
2591DGA	HP Model/Aluminized Steel	28.9" w x 12.5" h x 5.5" d
2599EDGA	EE Model/Aluminized Steel	28.9" w x 12.5" h x 5.5" d
1890DGS	HP Model/Stainless Steel	22.9" w x 12.5" h x 5.5" d
1894EDGS	EE Model/Stainless Steel	22.9" w x 12.5" h x 5.5" d
2591DGS	HP Model/Stainless Steel	28.9" w x 12.5" h x 5.5" d
2599EDGS	EE Model/Stainless Steel	28.9" w x 12.5" h x 5.5" d

ENERGY EFFICIENT VERTICAL WALL MOUNT SERIES

Vertical Wall Mount Series 7194E is equipped with three T8 black light insect attraction lamps. For increased operational efficiency, the lamps are powered by electronic-ballasted circuitry. These state-of-the-art models will effect a minimum 40% energy savings over non-electronic ballasted models. These streamlined wall mount units serve well in any given area of a facility...from exterior entryways, to production areas, to office areas. Their aesthetic appearance ensures harmony in designer decor! Offered in a choice of construction finishes: stainless steel, aluminized steel, or decorous sand color textured galvanized steel.



Prod. No.	Description/Color	Dimensions
7194EDG	Sand Color Textured	16" w x 45" h x 5" d
7194EDGA	Aluminized Steel	16" w x 45" h x 5" d
7194EDGS	Stainless Steel	16" w x 45" h x 5" d

INSECT-O-CUTOR REPLACEMENT BULBS

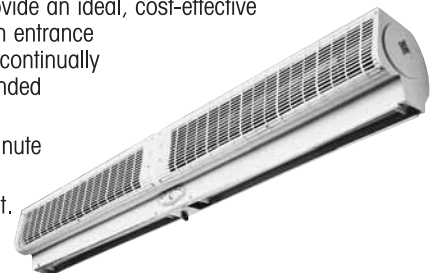
Insect-O-Cutor Gold Label & Xcentrix Insect Attraction Lamps are available in Filtered and Unfiltered styles, 18", 24", 36" and 48" lengths. Shatterproof lamps are also available. Ask for quantity and seasonal discounts. Freshness dated.



MARS WHISPURR AIR® DOORS

Air curtains prevent air from entering a conditioned environment such as a heated or air conditioned room. By generating an evenly distributed laminar air flow over an entryway, air curtains seal in heated or refrigerated air and repel wind borne contaminants such as dust, fumes and pollutants. Save energy by preventing air conditioning and heating systems from working overtime. The velocity and direction of air flow are adjustable to accommodate various environmental conditions. Mars Whispurr Air® curtains provide an ideal, cost-effective solution in places where an entrance door or service window is continually in use or left open for extended periods of time.

- Maximum Feet per minute at Nozzle: 1800
- Fits doors up to 7 foot.



Prod. No.	Length in	Maximum cu ft/min	Sound Level dBA 10ft/Nozzle	Amps 115v/230v	Weight lbs
WA 36	36	900	49	2.4/.9	16
WA 42	42	1050	50	2.4/.9	19
WA 48	48	1200	52	2.4/.9	22
WA 60	60	1500	52	2.6/1.3	25
WA 72	72	1800	53	2.6/1.3	28

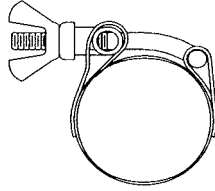
NOTE: Specify voltage when ordering.
Use multiple units for doors over 6 ft wide.

MANY OTHER MODELS AVAILABLE

SANITARY HOSE CLAMP - A14MHC FOR TYGON HOSE ADAPTER

Sizes Available Hose Outer Diameter

1.125	1.250	1.375
1.500	1.750	1.875
2.000	2.125	2.250
2.375	2.500	2.625
2.750	3.000	3.250
3.500	3.750	4.000
4.250	4.500	5.000



ALL STAINLESS STEEL CLAMPS

Prod. No. Sizes Available Hose Outer Diameter

62603	1/4 - 5/8"
67081	7/16 - 1"
67101	1/2 - 1 1/16"
67124	1/2 - 1 1/4"
67161	3/4 - 1 1/2"
67201	3/4 - 1 3/4"
67281	1 5/16 - 2 1/4"
10056	2 1/8 - 4"
10064	2 5/8 - 4 1/2"
10088	4 1/4 - 6"
63128	6 1/2 - 8 1/2"
63152	8 - 10"
63188	10 1/4 - 12 1/4"



KANAFLEX HOSE

SPIRAL REINFORCED PVC SUCTION HOSE

100% PVC construction
Spiral reinforcement made from rigid
PVC to resist impact, crushing,
and kinking

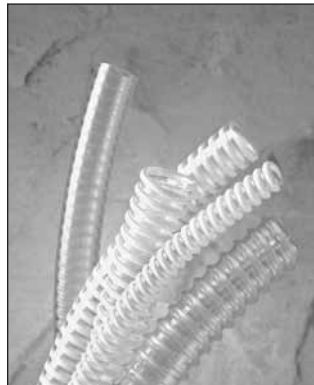
Lighter than ply-wrapped rubber
and other similar hoses

Available in Food or Industrial Grades

Food Grade made from non-toxic
ingredients conforming to FDA, 3A,
and USDA standards

Smooth interior produces low friction
loss permitting maximum flow

Heavy Duty—Clear, Smooth O.D.



Prod. No.	ID (In)	OD (In)	Work PSI at 70°F	Burst PSI at 70°F	Vac. Rate In/Hg	Bend Radius (in)	LBS. per 100 Ft.
KF34	3/4	15/16	105	315	28	3	20.0
KF100	1	1 1/4	100	300	28	3	27.0
KF114	1 1/4	1 1/2	95	285	28	3	30.0
KF112	1 1/2	1 13/16	85	255	28	4	40.0
KF200	2	2 3/8	80	240	28	5	60.0
KF212	2 1/2	2 7/8	75	225	28	7	85.0
KF300	3	3 7/16	65	195	28	8	115.0
KF312	3 1/2	3 15/16	60	180	28	9	135.0
KF400	4	4 1/2	50	150	28	10	175.0

*Please consider orders in 10 foot increments

PVC HOSES

CLEAR BRAID REINFORCED PVC HOSE

Open mesh polyester braiding
permanently encapsulated in
walls of clear, flexible PVC tubing

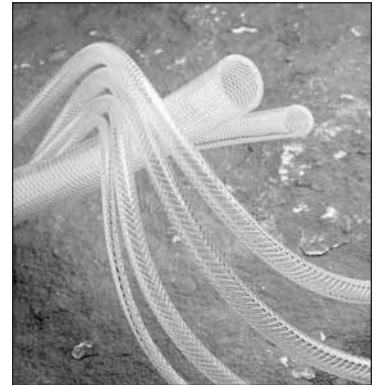
Offers far higher pressure
capabilities than un-reinforced
PVC tubing

Made from non-toxic ingredients
conforming to FDA standards

Crystal clear compound provides
full visual flow

Mirror smooth interior permits
outstanding flow characteristics

Corrosion and abrasion resistant
with flexibility similar to rubber
but with much longer life



Prod. No.	ID (In)	OD (In)	Wall (In)	Wall Type	Stand. Length (Ft)	Working PSI at 70°F	Burst PSI at 70°F	LBS. per 100 Ft.
100 0076	1/8	.315	.095	Std.	100, 500	465	1395	3.53
100 023	3/16	.394	.103	Std.	50, 100, 500	315	945	5.06
103 0309	1/4	.435	.093	Thin	100	316	948	5.35
100 0307	1/4	29/64	.102	Std.	50, 100, 500	300	900	6.03
102 0061	1/4	1/2	1/8	HP	50, 100, 500	400	1200	6.03
100 0461	5/16	17/32	3/32	Std.	50, 100, 500	280	840	7.77
103 0540	3/8	.575	.100	Thin	100	215	645	8.02
100 0538	3/8	.600	.113	Std.	50, 100, 500	230	690	9.26
102 0075	3/8	5/8	1/8	HP	50, 100, 500	265	795	9.26
103 0694	1/2	.710	.105	Thin	100	191	573	10.73
100 0692	1/2	.728	.114	Std.	50, 100, 200, 500	215	645	11.82
102 0096	1/2	.850	.175	HP	50, 100, 500	258	774	20.00
100 0846	5/8	29/32	9/64	Std.	50, 100, 200, 300, 500	200	600	18.17
100 0923	3/4	1.024	.137	Std.	50, 100, 300, 500	150	450	20.53
102 0117	3/4	1 1/8	3/16	HP	50, 100, 200, 300	233	699	20.53
100 1154	1	1.299	.150	Std.	50, 100, 300	130	390	29.03
102 0005	1	1 3/8	3/16	HP	50, 100	185	555	29.03
100 1308	1 1/4	1.732	.241	Std.	50, 100	110	330	60.70
102 0012	1 1/4	1.732	.241	HP	50, 100	150	450	60.70
100 1385	1 1/2	1.929	.215	Std.	50, 100	70	210	62.12
102 0019	1 1/2	1.950	.225	HP	50, 100	90	270	62.12
100 1462	2	2 1/2	1/4	Std.	50, 100	50	150	95.02
102 0026	2	2 1/2	1/4	HP	50, 100	133	399	95.02

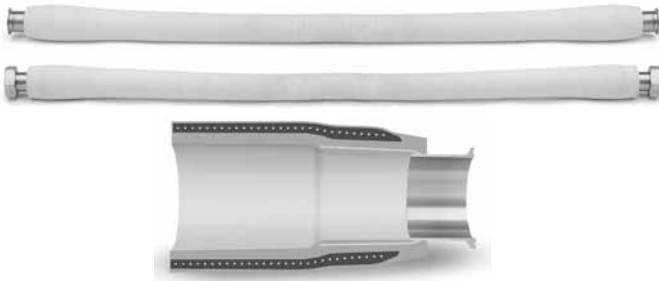
For fastest delivery, order in standard lengths

Cut lengths available

FOOD GRADE SANITARY VULCANIZED HOSE - WITH STAINLESS STEEL NIPPLES

Vulcanized design helps control bacteria concerns at nipple area. Stainless Steel nipple embedded in rubber to ensure no product entrapment. Nipples won't come loose, not necessary to remove nipples for washing. New design allows visual inspection of sealing area. Hose and fittings available in 1 1/2", 2", 2 1/2", 3" and 4" inside diameters.

- Many uses for Milk, Bakeries, Beverage, Food Process, Wineries, Cannerys, Pharmaceutical, etc.
- No hose clamps required
- No cracks or crevices in inner fitting area
- Abrasion resistant corrugated or smooth outer surface, with or without inner wire
- Withstands 180° temperature and 150 lbs. pressure
- Plain end stainless steel tubing or special connections available



HOSE SPECIFICATIONS

Nominal ID (In)	Actual ID (In)	Working Pressure (PSI)	Approx. WT. (Per Ft Lbs)	*Minimum Length (Ft)	Maximum (Ft)
1 1/2"	1 1/4"	250	.8	1'	50'
2"	1 3/4"	175	1.0	1'	50'
2 1/2"	2 1/4"	150	1.5	17'	50'
3"	2 3/4"	150	2.2	17'	50'
4"	3 3/4"	125	2.9	24'	19'

*Consult factory on 1 ft. length requirements.

Products or Service	Tube Material	Temperature
Milk, Juice, Beer, Wine, Fruit Concentrate & CIP Service	White EPDM-Natural Rubber - Standard	180-200°F
Same as above	White Butyl Optional	225°F
Same as above	Black Butyl Optional	275°F

Outer Cover available with smooth construction in white (standard). Colored Hoses available—red, blue, green, black

CREAMERY HOSE

Cover: Oil resistant, non-peeling, withstands rough treatment – resists tearing, cutting abrasion and sun checking.

Reinforcement: 2 ply braided rayon yarn, special coating bonds core securely to tube and cover, takes bending and twisting – Very flexible.

Tube: Nitrate tube. Maximum oil resistance, resistant to water absorption, will not flake into gummy particles that clog equipment.

Color: White

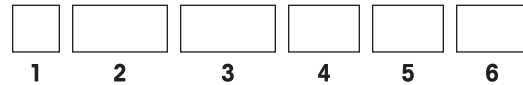
Available in 50' and 100' lengths.



Prod. No.	ID
6905	1/2"
6910	3/4"

VULCANIZED HOSE ORDER CODES

DESCRIPTION CODE



1. Color Code

W - White	G - Green
B - Black	R - Red
BL - Blue	

2. Hose ID and Fitting Size

112 - 1 1/2"	300 - 3"
200 - 2"	400 - 4"
212 - 2 1/2"	

3. Length in Feet - Specify your need

NOTE: If a special "to the inch" dimension must be met, please specify to your sales person.

4. Fitting (End 1) - Specify Size and Type of Fitting

BW - Butt Weld	CM - Camlock Male
TC - Tri-Clamp	CF - Camlock Female
BS - Bevel Seat Plain with Nut	IM - I Line Male
BT - Bevel Seat Thread End	IF - I Line Female

5. Fitting (End 2) - Specify Size and Type of Fitting

BW - Butt Weld	CM - Camlock Male
TC - Tri-Clamp	CF - Camlock Female
BS - Bevel Seat Plain with Nut	IM - I Line Male
BT - Bevel Seat Thread End	IF - I Line Female

6. Inner Tube

WE - White EPDM	WB - White Butyl (Standard)
BB - Black Butyl	

Example: W 200 10 200TC 200BT WE

The above code describes a White 2" Vulcanized Sanitary Hose, with 2" Tri-Clamp Fitting on one end, 2" Bevel Seat Thread Fitting on the other end, and a White EPDM (Standard) Inner Tube.

WATER SAVERS

MODELS L, M, R, S

Here are four unique water savers, different in their types of sprays to meet any application required by industrial users. All of these units can be used on tempered hot or cold water lines that need never be shut off as the water will only pass through the unit when pressure is applied to the hose end. By this design, consumption can be reduced substantially.



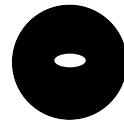
1. Model L
Medium
Pressure Stream



2. Model M Large
Open Flow Stream



3. Model R
Concentrated
Pressure Stream



4. Model S
Fan Shaped Spray



Part No. Description

L	Water Saver
M	Water Saver
R	Water Saver
S	Water Saver

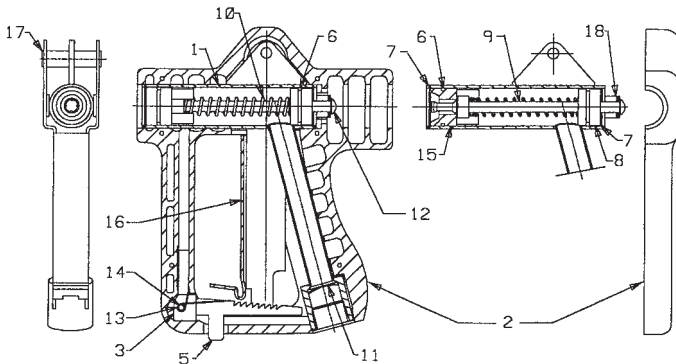
Strahman

NOZZLES, HOSES, HOT WATER MAKERS

HYDRO-PRO 150™ ERGONOMIC HOSE NOZZLE

The Hydro-Pro 150™ offers the unique combination of heavy-duty performance and lightweight handling. Weighing in at only 1 lb., 12 oz., this state-of-the-art nozzle features a patented locking trigger mechanism, ergonomic engineering for reduced hand fatigue, elimination of heat transfer to the hand, and a high impact Nylon outer cover and stainless steel housing for enhanced durability.

- Less operator fatigue
- Up to 200°F water
- 5 to 7 gpm @ 50 to PSI (10 gpm max.)



No.	Description	Part No.
1	Hydro-Pro Body	16717
2	Renewable Cover (set)	16714 (Black)
3	Hinge	16712
4	Cover Screw (Not Shown)	16694
5	Ratchet	16703
6	O-Ring	10029
7	Snap Ring	16692
8	Housing	16715
9	Stem	16716
10	Stem Spring	16691
11	Inlet Screen	16713
12	Stem Screw and Washer	10006
13	Ratchet Spring	16704
14	Spring Pin	16702
15	Seat	16687
16	Lever Arm	16705
17	Lever Arm Pivot	16693
18	U-Bracket	16698

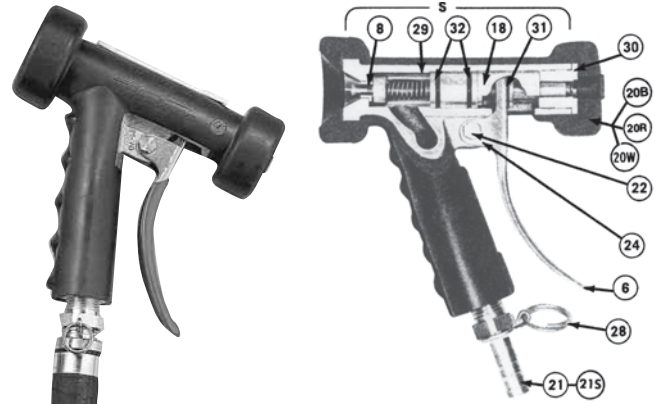
STRAHMAN M70 SERIES NOZZLES M-70 SERIES

The M-70 Series of nozzles releases only the amount of water you need. Squeeze the lever arm lightly and the nozzle provides a soft spray. Full pressure on the lever will produce a strong straight stream. This convenient control of the water ensures better cleaning with a lot less effort. The nozzle automatically shuts off the moment the lever is released, eliminating water waste. With its bronze internal construction (not aluminum), the M-70 Series ensures long-lasting performance.

- Setting the industry standard for over 40 years
- Easy to repair—economic

Part Numbers

M70LA	Black Covered Nozzle	(LA = Less Adapter)
M75LA	White Covered Nozzle	(LA = Less Adapter)
M77LA	Red Covered Nozzle	(LA = Less Adapter)



Nozzle Components Parts for M-70, M-75 and M-77 Part No.

S	Renewable Cartridge Unit for M-70 Series (Contains all working parts)
J	Renewable Cartridge Unit for S-80 Series (Contains all working parts)
F	Renewable Cartridge Unit for F-90 Series (Contains all working parts)
M	Renewable Cartridge Unit for E-76 Series (Contains all working parts)
6	Lever Arm
8	Stainless Steel Seat
18	Cage
20B	Black renewable rubber cover
20R	Red renewable rubber cover
20W	White renewable rubber cover
21	Hose Adapter (1/2", 5/8", 3/4" GHT) (Specify size)
21S	Swivel Adapter (1/2", 5/8", 3/4" GHT) (Specify size)
22	Lever Arm Bushing
24	Lever Arm Screw and Nut
28	Lock Ring Assembly
29	Body
30	Lock Screw
31	Stem Guide
32	Body Sealing "O" Rings

M-70 Nozzle Service Kit

Quantity	Part Number	Description
M70NRK	Black Nozzle Repair Kit	
M75NRK	White Nozzle Repair Kit	
M77NRK	Red Nozzle Repair Kit	
1	#20B**	Renewable Rubber Cover
1	#S	Renewable Cartridge Units
1	#6	Lever Arms
1	#18	Cages
1	#24	Lever Arm Screws and Nuts
1	#22	Lever Arm Bushings
1	#28	Lock Ring Assemblies
2	#32	Body Sealing "O" Rings

**Red cover available on request (Part #20R)

**White cover available on request (Part #20W)



STRAHMAN HOSE ASSEMBLIES

ASSEMBLY "A" — FOR M5000, M159, M156

- For hot and/or cold water use only.
- 5/8" high pressure Homoflex Black Hot Water Hose with 3/4" Male NPT fitting on one end and Spray Nozzle with Swivel Connector on other end. Internal spring assembly on nozzle and unit end.

Available with white hose and nozzle with white renewable rubber cover; or red hose and nozzle with red renewable rubber cover.

Part Number

Assy A Blk 100	100' Black Hose w/Nozzle
Assy A Wht 100	100' White Hose w/Nozzle
Assy A Red 100	100' Red Hose w/Nozzle
Assy A Blk 75	75' Black Hose w/Nozzle
Assy A Wht 75	75' White Hose w/Nozzle
Assy A Red 75	75' Red Hose w/Nozzle
Assy A Blk 50	50' Black Hose w/Nozzle
Assy A Wht 50	50' White Hose w/Nozzle
Assy A Red 50	50' Red Hose w/Nozzle
Assy A Blk 25	25' Black Hose w/Nozzle
Assy A Wht 25	25' White Hose w/Nozzle
Assy A Red 25	25' Red Hose w/Nozzle



ASSEMBLY "AX" — LESS NOZZLE FOR M-5000, M-159, M156

- High Pressure Homoflex Hot Water Hose
- 3/4" Male NPT with Internal Spring Assembly on one end
- 1/2" NPT Swivel Adapter and Internal Spring Assembly

AX Assembly—Less Nozzle

Part Numbers

Assy AX Blk 100	100' Black Hose Less Nozzle
Assy AX Wht 100	100' White Hose Less Nozzle
Assy AX Red 100	100' Red Hose Less Nozzle
Assy AX Blk 75	75' Black Hose Less Nozzle
Assy AX Wht 75	75' White Hose Less Nozzle
Assy AX Red 75	75' Red Hose Less Nozzle
Assy AX Blk 50	50' Black Hose Less Nozzle
Assy AX Wht 50	50' White Hose Less Nozzle
Assy AX Red 50	50' Red Hose Less Nozzle
Assy AX Blk 25	25' Black Hose Less Nozzle
Assy AX Wht 25	25' White Hose Less Nozzle
Assy AX Red 25	25' Red Hose Less Nozzle

PLASTIC SANITIZER NOZZLE

- Ideal for small hands
- On/off trigger control with lock
- Continuously adjustable from hard jet to fine mist, adjustable flow rate
- Quick connect hose adapter with auto water stop, Buna N "O" ring seals
- Withstands Iodine, Quat, and all Sanitizers



Prod. No.

1910 Plastic Sanitizer Nozzle



EXTRUDED ASSEMBLY—"THE YELLOW LINE"

This new addition to the Strahman product line offers an economical alternative to Strahman's standard hoses

- Flexible lightweight construction
- Highly visible "Safety" yellow color
- Resistant to oils, acids, fats, and abrasion
- Assy Y comes with M70LA Nozzle as standard

Part No. Yellow only

Assy Y 50	50' Yellow Hose w/Nozzle
Assy Y 25	25' Yellow Hose w/Nozzle
Assy YX 50	50' Yellow Hose Less Nozzle
Assy YX 25	25' Yellow Hose Less Nozzle

HOSE REPAIR COMPONENTS

NOZZLE END

Swivel Hose Adapter with Internal Stainless Steel Spring for 5/8" hose only (standard on Hose Assembly "A" and "E").



Part No. Description

ISANE	Internal Spring Assembly (Nozzle end) 18" Spring x 1/2" NPT Swivel Adapter
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UNIT END

3/4" NPT Male Adapter with Internal Stainless Steel Spring for 5/8" hose only (standard on Hose Assembly "A").



Part No. Description

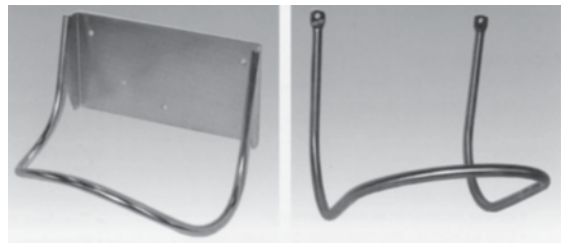
ISAUE	Internal Spring Assembly (Unit end) 18" Spring x 3/4" NPT Rigid Adapter
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HOSE RACKS

Stainless steel hose racks provide a convenient way to store hoses at cleaning stations and COP tanks. They are available in two styles.

MODEL 201A has a 5" x 12" backing plate to flush fit into a regular wall tile space.

MODEL 201B has mounting holes at each end to attach to a wall or a piece of equipment.



Model 201A

Model 201B

Strahman

NOZZLES, HOSES, HOT WATER MAKERS

M5000 HOT WATER MAKER

The Strahman Temperature Indicating Instant Hot Water Maker will produce hot water instantly and keep on producing it as long as there is a constant supply of steam and cold water.

- Specify hose length & color
- Low cost, low maintenance
- Can be installed where steam and cold water are located plant wide

NOTE

- 1) Water pressure—50 to 80 PSIG
- 2) Steam pressure—80 to 150 PSIG
- 3) Advise steam range when ordering



Model No.	Required Steam Pressure	Required Water Pressure	Flow GPM
M-5000 L	80-95 Lbs	50-80 Lbs	5 - 7
M-5000 M	96-130 Lbs	50-80 Lbs	4 1/2 - 6
M-5000 H	131-150 Lbs	50-80 Lbs	4 1/2 - 6

Above pressures required at the unit site

SAMPLE PART NUMBER

M5000M50W

Hot Water Maker, 50' white hose and nozzle, with steam range of 96-130 PSIG

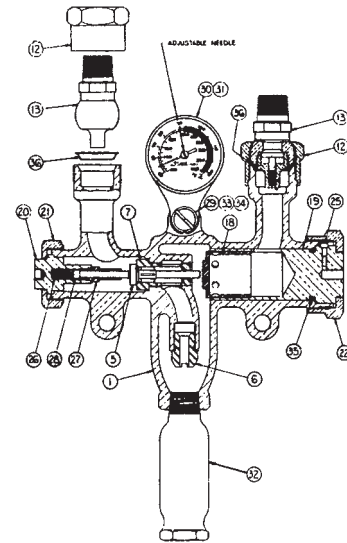


M-5000 SERVICE KIT

Prod. No.	Description
M-5000 LRK	Repair Kit, Low Steam Pressure
M-5000 MRK	Repair Kit, Medium Steam Pressure
M-5000 HRK	Repair Kit, High Steam Pressure

M-5000 Service Kit Parts List

Quantity	Part Number	Description
1	-	Ring Puller
1	-	Ring Seater
1	#8	Lantern
5	#13	Packing Rings
2	#9	Springs
5	#3	Bottom Valve Rings
3	#2	Base Rings
1	-	Poppet Tool
1	-	Poppet Seat Tool
2	#7	Poppet Seats
4	#5	Steam Poppets (specify: L, M or H when ordering)
2	#13	Ball Check Assemblies w/Gaskets Part #36



Parts List for M-5000 Unit

Part No.	Description	Material
1	M-5000 Body (Includes Part 6 & 7)	Bronze Chrome Plated
2	Cap Screw (Not Shown)	S.S.
3	Lock Washer (Not Shown)	S.S.
4	Connector (Not Shown)	Brass Chrome Plated
5	Steam Poppet (L, M or H)	S.S.
6	Steam Jet	S.S.
7	Poppet Seat	S.S.
8	Hose Rack Unit with Fittings (Not Shown)	S.S./Bronze S.S./Chrome Plated
10	Spacer (Not Shown)	S.S.
11	Wall Plate (Not Shown)	Brass Chrome Plated
12	Unit Nut	Brass Chrome Plated
13	Ball Check Valve (Includes Part #35)	Brass/S.S. Alum. Silicon Bronze Chrome Plated/S.S. Alum. Silicon Bronze
18	Water Chamber	S.S.
19	Water Chamber Housing (Includes Part #35)	Brass Chrome Plated
20	Poppet Guide	Brass Chrome Plated
21	Poppet Guide Nut	Brass Chrome Plated
22	Body Nut	Bronze Chrome Plated
25	Set Screw	S.S.
26	Poppet Spring	S.S.
27	Guide Extension	S.S.
28	Pusher	S.S.
29	Grommet	Rubber
30	Gauge Holder	Stainless Steel Glass Beaded
31	Temperature Gauge (Dual Dial, F & C)	Chrome Plated Brass
32	Blending Chamber	Bronze Chrome Plated
33	Grommet Lock Screw	S.S.
34	Lock Screw Holder	S.S.
35	"O" Sealing Ring for Water Chamber Housing	N-676-7
36	Ball Check Gasket	Copper/Teflon Coated

Strahman

NOZZLES, HOSES, HOT WATER MAKERS

M-159TM HOT AND COLD WATER MIXING UNIT

Not Suitable for Steam Service

Model M-159 is a complete mixing unit and hose station for thoroughly blending hot and cold water in any desired proportion. Its rugged construction and simplicity of operation combine to make it an essential piece of equipment where wash down operations are a requirement. A quick-acting temperature gauge with a specially designed blending chamber is a feature of this model. Unit furnished complete as shown. Furnished with either globe or angle valves. 3/4" size only.



Options Available:

White Hose, Red Hose
Nozzle with Red or White Renewable Rubber Cover
Chrome Plated

Special:

All Wetted Parts Stainless Steel
Unit Completely Stainless Steel

SAMPLE PART NUMBER

M159TM 50B Mixing Unit =
Strahman Mixing Unit with 50' Black Hose and Nozzle,
includes temperature gauge (optional)

SPRING REWIND HOSE REELS

Strahman Valves, Inc. now offers stainless steel and carbon steel hose reels for use with heavy duty hot water hoses.

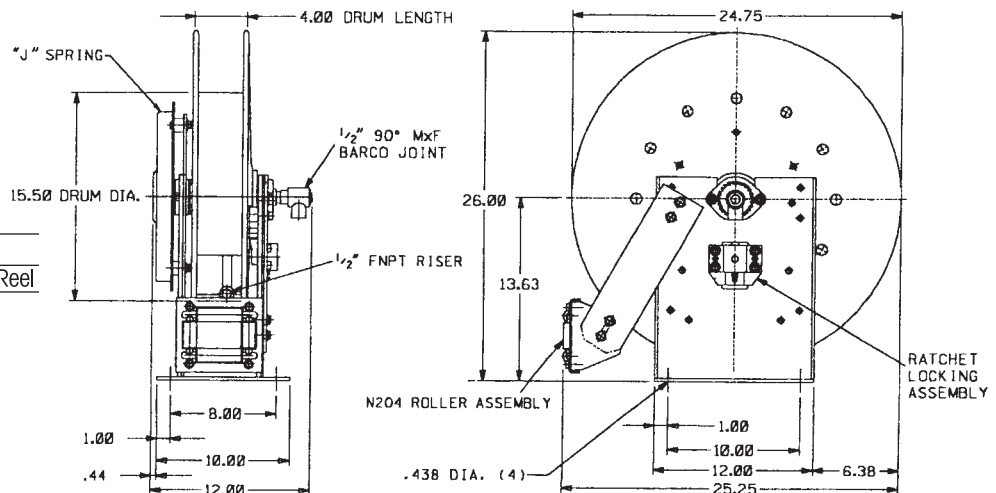
Ratchet assembly locks the reel when the desired length of hose has been pulled out. A gentle pull unlocks the reel and the spring drive retracts the hose.

Each reel comes with a ball shaped hose stop to prevent damage to hose reel rollers and nozzles.

- Versatile mounting - floor, wall, coiling
- Uses up to 50 feet of 5/8" ID hose (specify Black, Red, White)

Part No.	Description
SSN716-25-26J	Stainless Steel Hose Reel
N716-25-26J	Painted Carbon Steel Hose Reel

Hose reel to be used with our 5/8" ID hose assembly "R" only, maximum length 50 ft.



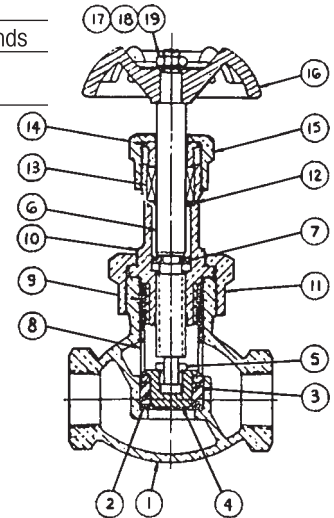
STRAHMAN PISTON VALVES

For Hot Water, Cold Water, and Steam

Part Number

V14S	3/4" - Female NPT both ends
V14U	3/4" - Union Connection x Female NPT

Also available Chrome Plated



Model: 3/4" - V-14-S (Screwed Ends)

1	Body (Screw Ends) Chrome Plated
2	Base Ring
3	Bottom Valve Ring
4**	Piston (Includes #5 Split Nut)
5	Splitnut
6**	Stem (Includes #7 Stop)
7	Stem Stop
8	Lantern
9	Spring, **Bonnet Assembly, Chrome Plated
10**	Bonnet, Chrome Plated
11	Bonnet Nut, Chrome Plated
12**	Retaining Spring
13**	Packing Ring
14**	Packing Gland
15**	Packing Nut, Chrome Plated
16	Handwheel
17	Handwheel Nut & #18 Lock Washer
18	Handwheel Lock Washer
19	Pressure Ident Tag

**Bonnet Assembly consists of these parts

CLOTHING AND SAFETY EQUIPMENT

FIBRE-METAL HARD HAT

SUPER-EIGHT IMPACT ENERGY CONTROL SYSTEM

- Unique, smooth crown reduces the risk of impacting objects being trapped by ribs, ridges or slots
- Head size is selected by a convenient rear-located mechanism
- The headband can be tilted, raised, lowered or moved front-to-rear within the shell while cap remains level
- Technically advanced suspension with eight load bearing points
- Available in blue, green, red, strong yellow, strong orange or white

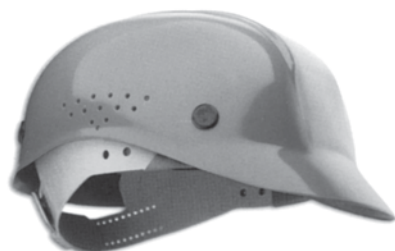


Prod. No.

E2RW	Hard Hat, Ratcheting
E2W	Hard Hat, Standard

FIBRE-METAL SCALP CAP

- Well ventilated, light at only 7 oz.
- Protects from cuts, scrapes, and minor bumps
- Available in red, yellow, blue, orange, green and white



Prod. No.

SG2	Scalp Cap
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THUNDER 29

THUNDER 29 (NRR 29) is fully dielectric with an extra-long, padded headband for a comfortable fit. Oversized vinyl cushions help distribute pressure evenly around the outer ear for maximum user comfort. Replaceable and washable soft foam ear cushions ideal for extended use.

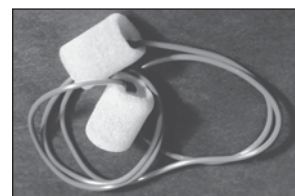
Prod. No.

TM29



E•A•R® CLASSIC®

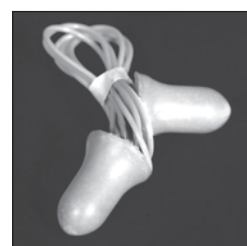
- Will not absorb moisture and swell. Foam will maintain its comfort, fit and critical recovery characteristics
- Shape equalizes pressure throughout the ear canal as it expands; prevents shifting and keeps effectiveness of noise seal constant
- Dermatologically safe foam is not irritating
- Custom fit every time. No sizing required. Reduces inventory of multiple sizes.
- 200 plugs per box, 10 boxes per case



Prod. No.	Description	Qty/Box
EAR CORDED	Corded Ear Plugs	200 pairs

MAX FOAM EARPLUGS

MAX30 corded pre-shaped foam earplugs feature a smooth outer skin for maximum user comfort. The NRR 33 rating offers the highest rated disposable earplug in the U.S. The smooth, soil-resistant skin helps prevent dirt from penetrating the surface prior to insertion. Coral color, packed in poly bags. 100 pair per box.



Prod. No.	Description	Qty/Box
MAX30	Ear Plugs, Corded	100 pairs

MAX-LITE

Ideal for long-term users and those with smaller ear canals, low pressure foam earplugs offer long-term user comfort not found in other pre-shaped foam earplugs. The non-irritating, non-allergenic self-adjusting foam recovers to fit virtually any ear canal. MAXLITE is also ideal for that portion of the population with smaller ear canals. Attenuation tested in accordance with ANSI S3.19-1974. NRR 30. Green color, 100 pair per box, 10 boxes per case.



Prod. No.	Description	Qty/Box
MAXLITE CORDED	Corded Ear Plugs	100 pairs

SPARKPLUGS® MULTI-COLORED FOAM EARPLUGS

Different colors in every package. Tapered for easy insertion in any size ear canal. Non-irritating, smooth surface for added comfort. NRR 30



Prod. No.	Description	Qty/Box
M6654	Corded Ear Plugs	100 pairs

CLOTHING AND SAFETY EQUIPMENT

FIBRE-METAL "SHARK" EYEWEAR

- Stylish wrap around design for wearer acceptance
- Adjustable temples with positive stops for individual fit and exceptional comfort
- High impact polycarbonate



Prod. No.	Description
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2200C	Shark
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FLEXIBLE SAFETY GOGGLES

Comfortable, lightweight and dependable. For spraying and dusting chemicals or pesticides. Protects eyes from flying chips of wood, metal or stone, and from dust and sparks. Fits over prescription glasses.



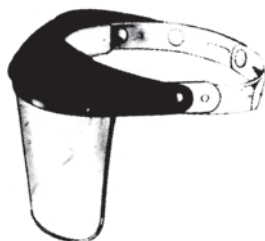
- Protects eyes from hazards of flying particles, splash and dust
- Generous ventilation - won't fog
- Soft flexible vinyl frame
- Hooded stack vents

Prod. No.	Description
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VG 15	Flexible Safety Goggles
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COMPLETE FACE PROTECTOR

- Plastic deflector
- Polyethylene headband
- Replaceable sweatband
- Window pivots up



Prod. No.	Description
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F-300	Headband Only
4118CLR	Clear Window Only

PARTICULATE RESPIRATOR

The 3M™ 8511 N95 Particulate Respirator is uniquely designed to help provide comfortable, reliable worker protection. It is ideally suited for work settings that involve heat, humidity, or long periods of wear. 3M™ Cool Flow™ Exhalation Valve, patented one-way valve offers easy exhalation and cool, dry comfort.



Prod. No.	Description	Packaging
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8511	Particulate Respirator	10 masks/box
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DISPOSABLE RESPIRATOR

The North 7130N95 Disposable Respirator is the economical workhorse you have been looking for. Ideal for extended use.



Prod. No.	Description/Size	Packaging
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7130N95, S	Disposable Respirator without valve Sizes Med/Large	20 masks/box
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LAGENCO SANITARY HEAD COVERINGS

Meets all national and local sanitary requirements where head covering is required.



BEARD RESTRAINTS

Prod. No.	Description
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NWBN1	100 per box
OMBNI	100 per box

OPERATING ROOM CAPS

Pleated Bouffant Style.

Prod. No.	Description
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ORD 19	Large - 100 per dispenser
ORD 21	Extra Large - 100 per dispenser
ORD 24	Super - 100 per dispenser



HAIR NETS

Perforated airy caps in dispenser.

Prod. No.	Description
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1818	Large - 100 per box
2020	Extra Large - 100 per box
2424	Super - 100 per box



LAGENCO REUSABLE DISPOSABLE APRONS

White, cost effective, excellent chemical resistant polyethylene one piece design. No fold, hem or seam to trap bacteria. 28" x 45" embossed, 100 count dispenser, 5 dispenser per case.

Prod. No.	Description
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PL2845	Reusable disposable aprons
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LAGENCO DISPOSABLE VINYL BOOTS

Disposable, quality protection, tailored to fit.

Prod. No.	Description
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DVB	100 boots per box
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CLOTHING AND SAFETY EQUIPMENT

DERMATHIN GLOVE

- Natural rubber
- Disposable
- Smooth finish
- Green for easy identification
- Powdered
- 5 mil

Prod. No. Description

1005SM	Medium
1005ML	Large



SKINNY DIP GLOVE

- Flexible rubber coating
- Wrinkle coated for gripping
- Seam free liner
- Great dexterity
- Replaces leather or cotton, puncture resistant

Prod. No. Description

381108	Palm coated, medium
381109	Palm coated, large
381110	Palm coated, x-large



SAFETY GLOVES

BEST® MASTER™

In compliance 21CFR, 170-199*

- Premium natural rubber
- Bisque finish or tractor-tread grip
- Unlined or flock-lined
- Straight cuff
- Offers dexterity and light chemical resistance
- Extended wear



FLOCK-LINED, 12", 18-MIL, TRACTOR-TREAD GRIP, CHLORINATED, YELLOW

Prod. No. Description

702S-07	Small
702M-08	Medium
702L-09	Large
702XL-10	Extra Large

Packaging: 12 pair per box



ULTRAFLEX® NEOPRENE®

In compliance 21CFR, 170-199*

- Neoprene coating
- Rough grip finish
- Fully coated
- Cotton interlock liner
- Sanitized®
- Chemical and abrasion resistant
- Durable, flexible, and comfortable
- Resists greases and oils



Prod. No. Description

3414-09	Medium - 12" gauntlet
3414-10	Large - 12" gauntlet

Packaging: 12 pair per box

NEO GRAB™

In compliance 21CFR, 170-199*

- Heavy-Duty Neoprene coating
- Unique wrinkle finish
- Fully coated
- Cotton flannel liner
- Sanitized®
- Gauntlet, or elbow-length gauntlet cuff
- Positive wet grip
- Heat resistant
- Superior chemical and oil resistance



Prod. No. Description

6784R-10	Large	Industrial-weight 14" gauntlet
6797R-10	Large	Heavyweight elbow-length gauntlet

Packaging: 12 pair per box

INSULATED SUPER FLEX™

- Low temperature PVC coating
- Fully coated, wrinkle finish
- Unique triple layer construction of foam insulation between a layer of 100% cotton jersey and 100% cotton interlock
- Available in orange, yellow or dark green
- Special PVC formulation remains flexible in cold temperatures
- Liquid resistant



INSULATED SUPER FLEX™

Prod. No. Description

73-10	Large - Orange - Knit wrist
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Packaging: 12 pair per box

CLOTHING AND SAFETY EQUIPMENT

NITRI-SOLVE®

In compliance 21CFR, 170-199*

- 100% nitrile
- Bisque finish
- Unlined or flock-lined
- Multiple thicknesses and lengths
- Excellent protection against abrasion, puncture, cut and snag
- Increased resistance to solvents, animal fats and other chemicals
- Ergonomic design



UNLINED, 13", 15-MIL, NON-SLIP GRIP

Prod. No.	Description	Prod. No.	Description
727-07	Small	727-10	Extra Large
727-08	Medium	727-11	Extra-extra Large
727-09	Large		

UNLINED, 19", 22-MIL, NON-SLIP GRIP

Prod. No.	Description
747-09	Large
747-10	Extra Large
747-11	Extra-extra Large

Packaging: 12 pair per box

VALUE MASTER™

In compliance 21CFR, 170-199*

- Natural rubber
- Tractor-tread grip
- Unlined or flock-lined
- Straight cuff
- Economical
- Recommended for general purpose use and food processing



UNLINED, 12", 18-MIL, TRACTOR-TREAD GRIP, CHLORINATED, AMBER

Prod. No.	Description
VMUS-07	Small
VMUM-08	Medium
VMUL-09	Large
VMUXL-10	Extra Large



D'FLEX® PLUS CUT RESISTANT GLOVES

The most recent year for which the Bureau of Labor statistics published hand injury data cited more than 160,000 workers experienced hand or finger injuries requiring days away from work. Approximately 140,000 of those injuries were caused by contact with sharp-edged equipment or knives. Best® manufactures a complete offering of hand/arm protection styles to resist cuts and prevent common injuries.

- Blue or white, Dyneema®-Spectra® engineered fiber
- Ambidextrous, smooth grip
- Fully launderable
- Approved for food handling
- Made in America



7-GAUGE SEAMLESS CUT-RESISTANT WIRE-FREE KNIT GLOVES

Prod. No.	Size	Packaging
8127-06	Extra Small	12 gloves per case
8127-07	Small	12 gloves per case
8127-08	Medium	12 gloves per case
8127-09	Large	12 gloves per case
8127-10	Extra Large	12 gloves per case

DISPOSABLE GLOVES

DISPOSABLE NITRILE GLOVES

- .5mil thickness - tear resistant
- Powder free
- Latex free
- Blue in color for easy identification and high visibility

Prod. No.	Description
7500PF-S	Small
7500PF-M	Medium
7500PF-L	Large
7500PF-XL	Extra Large



LAGENCO DISPOSABLE VINYL GLOVES

Prod. No.	Description
6306S	Small
6307M	Medium
6308L	Large
6309XL	Extra Large



LAGENCO STRING GLOVES

Sold by the dozen.

- Adds warmth to any application
- Launderable, ambidextrous

Prod. No.	Description
93WCJ	String Glove - one size

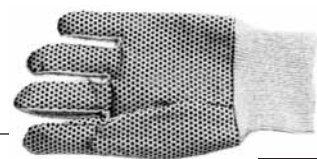


LAGENCO DOT STYLE STRING GLOVES

Sold by the dozen.

- Palm, thumb, and fingers covered with dots to provide excellent grip
- Outlasts canvas gloves in many applications

Prod. No.	Description
93P	Dot Gloves - one size



CLOTHING AND SAFETY EQUIPMENT

LAGENCO WHITE COTTON GLOVES

Knit Wrist, available in 8 ounce, or 12 oz.
Made in U.S.A.

Prod. No.	Description
C 108	White Cotton Gloves 8 oz
T83J	Jumbo White Cotton Gloves 12 oz



SOL-VEX® UNSUPPORTED NITRILE GLOVES

Embossed, straight cuff. Broad range of job applications:

- Chemical processing, oil refining, petro chemicals
- Food processing (red meat, poultry, vegetables, fruit, dairy and canning)



Prod. No.	Description
37-155	15 mil. 13" length. Sizes 7-7 1/2, 8-8 1/2, 9-9 1/2, 10, 11
37-185	22 mil. 18" length. Sizes 7-7 1/2, 8-8 1/2, 9-9 1/2, 10, 11

JOB-FITTED WORK GLOVES

NEOPRENE COATED

Gloves are "Job-Fitted" for handling in acids, caustics, alcohols and solvents.
2" fully coated gauntlet.



Prod. No.	Description
9-912	Neoprene Coated Gloves

TINGLEY NEOPRENE BOOTS

Neoprene is a synthetic rubber that is resistant to a broad range of animal fats and blood, oils, certain acids, alcohols, alkalis, caustics, and certain solvents. Our Neoprene material comes in a brick red color so it can be easily recognized in its application, as Neoprene.



Prod. No.	Description
MB920B	12" Plain Toe Boots
MB922B	12" Steel Toe Boots
MB924B	12" Steel Toe Boots (Safety-Loc)

LAGENCO PROTECTIVE INDUSTRIAL FOOTWEAR

All steel toe items meet or exceed ANSI STANDARD Z41 CLASS 75 for impact and compression.
Made in the U.S.A. by skilled American craftsmen.



6" WORK SHOE

Cleated sole with steel shank. Black/GREY.
Full sizes 6-13, men's only.

Prod. No.	Description
86104	6" Steel Toe Work Shoe



4" GALOSH

Sizes: Small, Medium, Large, X-Large & XX-Large.

Prod. No.	Description
86010	Black 4" Galosh
88010	Yellow 4" Galosh



12" & 16" SUPERPOLY BOOTS

The most advanced scientifically formulated Polyurethane/PVC compound for use in slaughterhouses and packing plants where the most severe conditions are found.
Brick Red with Beige sole. Mens sizes 5-13.

Chevron Sole



Prod. No.	Description
322-12	12" Steel Toe Boots
322-16	16" Steel Toe Boots



ECONOMY 12" & 16" PVC BOOTS

Durable, yet economical foot protection. Full men's sizes 4-13.

- Steel safety toe in selected styles
- Reinforced shank, kick-off lug
- Replaceable insoles
- Polyester lining for easy cleaning.

Prod. No.	Description
605-12	12" Plain Toe PVC Boots
606-12	12" Steel Toe PVC Boots
605-16	16" Plain Toe PVC Boots
606-16	16" Steel Toe PVC Boots



CLOTHING AND SAFETY EQUIPMENT



ALL-VU® ACRYLIC DOME MIRRORS

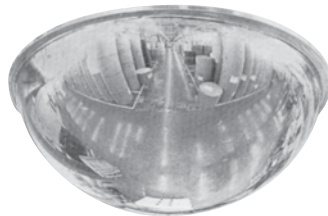
Use Brossard dome mirrors:

- to prevent accidents at blind corners, intersections, entrances and exits
- to monitor assembly lines and production machinery
- as a deterrent to pilferage and vandalism

Choose a mirror with the dome configuration and backing material best suited to your application. Steel-backed mirrors are recommended for outdoor use.

Hardboard Backed Dome

Durable hardboard back; extruded rubber rim; complete with mounting hardware.

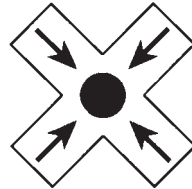


Steel Backed Dome

20-gauge galvanized steel back; extruded rubber rim; complete with mounting hardware.

FULL DOME - 360° VIEW

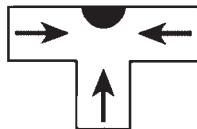
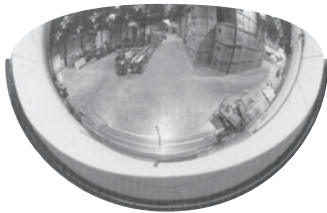
4-way intersections or large area panoramic viewing, ceiling mount.



Prod. No. Description

AV12F	12" dia. Acrylic, hardboard backed dome mirror, 6 lbs
AV18F	18" dia. Acrylic, hardboard backed dome mirror, 7 lbs
AV26F	26" dia. Acrylic, hardboard backed dome mirror, 15 lbs
AV32F	32" dia. Acrylic, hardboard backed dome mirror, 24 lbs
AV36F	36" dia. Acrylic, hardboard backed dome mirror, 26 lbs
AV48F	48" dia. Acrylic, hardboard backed dome mirror, 45 lbs
AV18FS	18" dia. Acrylic, steel backed dome mirror, 7 lbs
AV26FS	26" dia. Acrylic, steel backed dome mirror, 15 lbs
AV32FS	32" dia. Acrylic, steel backed dome mirror, 24 lbs
AV36FS	36" dia. Acrylic, steel backed dome mirror, 26 lbs

HALF DOME - 180°+ VIEW

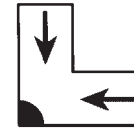


3-way "T" intersections, wall or ceiling mount.

Prod. No. Description

AV12H	12" dia. Acrylic, hardboard backed dome mirror, 3 lbs
AV18H	18" dia. Acrylic, hardboard backed dome mirror, 4 lbs
AV26H	26" dia. Acrylic, hardboard backed dome mirror, 7 lbs
AV32H	32" dia. Acrylic, hardboard backed dome mirror, 15 lbs
AV36H	36" dia. Acrylic, hardboard backed dome mirror, 20 lbs
AV18HS	18" dia. Acrylic, steel backed dome mirror, 5 lbs
AV26HS	26" dia. Acrylic, steel backed dome mirror, 10 lbs
AV32HS	32" dia. Acrylic, steel backed dome mirror, 15 lbs
AV36HS	36" dia. Acrylic, steel backed dome mirror, 18 lbs

QUARTER DOME - 90°+ VIEW



2-way "L" intersections, wall or ceiling mount.

Prod. No. Description

AV12Q	12" dia. Acrylic, hardboard backed dome mirror, 3 lbs
AV18Q	18" dia. Acrylic, hardboard backed dome mirror, 4 lbs
AV26Q	26" dia. Acrylic, hardboard backed dome mirror, 6 lbs
AV32Q	32" dia. Acrylic, hardboard backed dome mirror, 8 lbs
AV36Q	36" dia. Acrylic, hardboard backed dome mirror, 12 lbs
AV18QS	18" dia. Acrylic, steel backed dome mirror, 5 lbs
AV26QS	26" dia. Acrylic, steel backed dome mirror, 8 lbs
AV32QS	32" dia. Acrylic, steel backed dome mirror, 10 lbs
AV36QS	36" dia. Acrylic, steel backed dome mirror, 12 lbs

KLEAR-VU CIRCULAR CONVEX MIRRORS

Choose a mirror with the lens and backing materials best suited to your application for general wide-angled viewing. Recommended mounting height: 8 to 10 feet

- 160°+ viewing angle
- For indoor or outdoor use
- Equipped with adjustable swivel and mounting bracket for infinite adjustments

Convex Hardboard Backed

Weatherproof painted hardboard backing with heavy extruded rubber rims.

Convex Steel Backed

Heavy duty, 20-gauge, baked enamel spun steel back, sealed with a rubber gasket.



Prod. No. Description

P-080	8" dia. Acrylic, hardboard backed convex mirror, 3 lbs
P-120	12" dia. Acrylic, hardboard backed convex mirror, 4 lbs
P-180	18" dia. Acrylic, hardboard backed convex mirror, 7 lbs
P-260	26" dia. Acrylic, hardboard backed convex mirror, 13 lbs
P-300	30" dia. Acrylic, hardboard backed convex mirror, 16 lbs
P-360	36" dia. Acrylic, hardboard backed convex mirror, 19 lbs
080	8" dia. Glass, hardboard backed convex mirror, 3 lbs
120	12" dia. Glass, hardboard backed convex mirror, 5 lbs
180	18" dia. Glass, hardboard backed convex mirror, 9 lbs
260	26" dia. Glass, hardboard backed convex mirror, 15 lbs
300	30" dia. Glass, hardboard backed convex mirror, 21 lbs
360	36" dia. Glass, hardboard backed convex mirror, 28 lbs
P-080MR	8" dia. Acrylic, steel backed convex mirror, 3 lbs
P-120MR	12" dia. Acrylic, steel backed convex mirror, 5 lbs
P-180MR	18" dia. Acrylic, steel backed convex mirror, 8 lbs
P-260MR	26" dia. Acrylic, steel backed convex mirror, 17 lbs
P-300MR	30" dia. Acrylic, steel backed convex mirror, 21 lbs
P-360MR	36" dia. Acrylic, steel backed convex mirror, 28 lbs
080MR	8" dia. Glass, steel backed convex mirror, 3 lbs
120MR	12" dia. Glass, steel backed convex mirror, 5 lbs
180MR	18" dia. Glass, steel backed convex mirror, 9 lbs
260MR	26" dia. Glass, steel backed convex mirror, 16 lbs
300MR	30" dia. Glass, steel backed convex mirror, 22 lbs

360MR 36" dia. Glass, steel backed convex mirror, 29 lbs

HAWS EYEWASH WITH PLASTIC BOWL

These durable units offer double eyewash heads mounted in corrosion-resistant ABS plastic bowl with chrome-plated brass parts. Dust covers release from heads with water pressure. Emergency sign included.



Consider These Quality Features:

- Bowl: Durable ABS plastic in bright yellow.
- Heads: Soft PVC covered ABS plastic patented anti-surge heads in bright yellow. Directs gentle flow of water into eyes.
- Action Valve: Push-open chrome plated, brass valve stays open until manually closed.
- Flow Control: Automatic pressure compensation devices assure steady water flow under various pressures.
- Supply: 1/2" IPS
- Waste: 1 1/4" IPS

Prod. No. Description

7270B	Bracket Mounted Eyewash
7271	Eyewash, pedestal

EYE-FACE WASH WITH STAINLESS STEEL BOWL

These models offer double eye-face wash heads mounted in stainless steel bowl. Dust covers release from heads with water pressure. Emergency sign included.



Consider These Quality Features:

- Bowl: Easy-clean, corrosion-resistant stainless steel.
- Heads: ABS plastic patented heads in bright yellow. Direct gentle flow of water into eyes.
- Action Valve: Push-open chrome-plated brass valve stays open until manually closed.
- Flow Control: Automatic pressure compensation devices assure steady water flow under various pressures.
- Supply: 1/2" IPS
- Waste: 1 1/4" IPS

Prod. No. Description

7360BT	Wall Mounted Eye-Face Wash with trap
7360B	Wall Mounted Eye-Face Wash, no trap

HAND/FOOT OPERATED EYE-FACE WASH AND DRENCH SHOWER

High quality model provides emergency aid with both fast-action drench shower and foot or hand-operated eye-face wash. Protective dust covers on eye-face wash heads. Drain should be provided.

Consider These Quality Features:

Shower:

- Head: Durable ABS plastic in bright yellow.
- Action Valve: Fast-action chrome-plated brass ball valve opens with pull down on triangle handle of rod and stays open until rod is pushed upward.
- Flow Control: 30.0 GPM RCP brass assembly to shower.
- Standard: 1 1/4" galvanized pipe with 9" diameter floor flange.

Eye-Face Wash:

- Heads: Patented ABS plastic yellow spray heads mounted on chrome-plated brass supply.
- Bowl: Corrosion-resistant stainless steel.
- Flow Control: Automatic pressure compensation devices assure steady water flow under various pressures.
- Action Valve: Fast-action, chrome-plated brass ball valve operates with foot treadle or push flag. Stays open until manually closed.
- Supply: 1 1/4" IPS
- Waste: 1 1/4" IPS



Prod. No. Description

8309	Eye-Face Wash and Drench Shower
------	---------------------------------

LABORATORY SPRAY UNIT

This convenient unit provides quick access for emergencies because it can be mounted on wall or other locations. Eight-foot hose allows reach to any part of the body. Spray head includes protective dust cover. Emergency sign included. Drain should be provided.

Consider These Quality Features:

- Spray Head: Patented head is constructed of durable ABS plastic in bright yellow. Designed to assure gentle flow of water into eyes or body. Dust cover releases with pressure.
- Action Valve: Convenient stay-open squeeze-handle valve is chrome-plated and designed for quick release.
- Hose: Rugged 25/32" OD 8' 250 PSI rated rubber hose in bright yellow with chrome-plated swivel fitting at one end, automatic flow compensation device and wall bracket.
- Supply: 1/2" IPS



Prod. No. Description

8901B	Laboratory Unit, with 8' hose
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ORDER - Subject to the Company's acceptance and ability to supply and deliver. DATE 20

CHARGE TO _____ SHIP TO _____

ADDRESS ADDRESS

CITY STATE ZIP CITY STATE ZIP

CUSTOMER ORDER NO.	ATTENTION:	HOW SHIP	PRICES ARE F.O.B. SHIPPING POINT SUBJECT TO FEDERAL, STATE AND LOCAL TAXES NOW EFFECTIVE OR TO BE ENACTED
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[illegible]

This order or contract is given subject to Seller's ability to obtain materials for and to manufacture the items specified. Prices subject to change without notice, and it is agreed that Seller is authorized to invoice at Seller's prices in effect at time of shipment.

FIRM NAME _____

SAI ESMAN _____ CUSTOMER'S SIGNATURE _____ TITLE _____

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Stuart W. Johnson Co., Inc.

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