

# ENERGY SAVING PRODUCTS

AIR CONDITIONING, HEATING, AND REFRIGERATION



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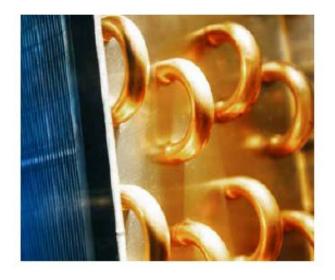
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#### 8732 Premium 100% Silicone

8732 Premium 100% silicone has exceptional adhesion and sealing qualities. This product meets USDA, FDA, UL, and NSF and has -40° to +450° F range. For general purpose refrigeration, air conditioning and heating applications. Available in 10.3 oz. cartridges or 3 oz. squeeze tube, individually boxed in clear, white, aluminum, or black.

8732 C,W, A, B 10.3 oz cartridge or 3 oz squeeze tube Quantity 6 Per Box



## 8736 Hi-Temp Silicone

8736 Hi-temp silicone is also available, with use range of -85° F to 500° F (intermittent to 600° F, red only.)

#### 8736R

10.3 oz cartridge or 3 oz squeeze tube

**Quantity 6 Per Box** 



#### **AC&R Silicone**

AC&R New low cost 100% silicone has exceptional adhesion and sealing qualities. This product meets USDA, FDA, and has -40° to +450° F range. For general purpose refrigeration, air conditioning and heating applications. Available in 10.3 oz. cartridges in clear, white, aluminum, or black.

ACR C,W, A, or B, 10.3 oz. Quantity 6 Per Box

# XTRABOND150 =

#### XtraBond 150 RTV Silicone

XtraBond®150 a one component, permanently flexible, RTV (Room Temperature Vulcanizing) mildew-resistant silicone sealant that is the industry standard. The product's tough chemical resistance makes it a worry-free solution for a wide range of applications. Clear.

- Approved for Cultured Marble
- Excellent Adhesion to Glass
- Window & Door Approved
- Easy to Gun, Easy to Tool
- Non-Sag & Slump
- Non-Paintable







#### **XB150**

**Quantity 24 Per Box** 

#### XtraBond 250 RTV Silicone

XtraBond®250 anti-microbial formula is NSF approved and FDA compliant, so it can be used confidently around food applications. Its resistance to moisture makes it ideal for use in high moisture areas such as marine, baths, and walk-in coolers. Available in aluminum, clear, and white

- Consistent Gunablility & Tooling
- Approved for Cultured Marble
- Anti-Microbial Formula
- FDA/USDA Compliant
- Excellent Adhesion
- Non-Paintable







## XB250 Quantity 24 Per Box

#### **VULKEM 116**

Vulkem 116 is a textured, single-component, moisture-curing, gun-grade polyurethane seal-ant. Vulkem 116 is an excellent general-purpose sealant designed for use on poured and precast concrete, masonry work, window and door perimeters, and similar types of construction joints. Available in Gray, White, and Bronze.















## **Butyl Caulk**

An inexpensive sealant used as perimeter seal, or capping around windows, doors, masonry or metal to metal applications. Used extensively in refrigerated cases, walk-in cooler doors by the fast food and convenience store market. Available in White and Gray.

7757WC - White 11 oz - Quantity 12 Per Box

7757GC - Gray 11 oz - Quantity 12 Per Box



## Mobil Grease Polyrex "EM"

Super-premium Mobil Polyrex EM Series grease is specially formulated for electric motor bearings. The advanced thickener formulation and proprietary manufacturing techniques provide improved bearing performance and protection for long electric motor life.

EM - Blue 14.1 oz - Quantity 10 Per Box



#### Mobil Grease "EP"

Mobil Premium Lubricating Grease is a lithium thickened grease containing oxidation and corrosion inhibitors. It is suitable for lubrication of high speed ball and roller bearings found in motors, saws, spindles, generators, fans, and squirrel cages. Superior water resistance. Meets GM spec 7830695, 998537, and Detroit Diesel Corp. 1Y12 spec. - 30° to 350° max exposure. Available in 14.1 oz. tubes.

EP2 - 14.1 oz - Quantity 10 Per Box



## Mobil Grease XHP222 / FM222

Mobil Extended High Temp Service is a suitable bearing grease providing water resistance and corrosion protection for industrial, construction and marine service. Available in 14.1 oz. tubes.

XHP222 - 14.1 oz - Quantity 10 Per Box

FM222 - 14.1 oz - Quantity 10 Per Box



#### Mobil Red Lithium Grease

This is an advanced full synthetic grease formulated with a proprietary blend of high-performance synthetic base stocks and a lithium complex soap thickener. The thickener system provides a high dropping point, while additives impart excellent extreme-pressure properties and resistance to water wash, rust and corrosion. The proprietary blend of high-performance synthetic base stocks used in Mobil 1 Synthetic Grease gives reliable lubrication over wide temperature ranges -50 C (-58 F) to 246 C (475 F).

121071 - 14.1 oz - Quantity 10 Per Case



#### **Absorbent Pads**

Perfect for oil spills or placing under vacuum pumps when changing oil. These pads and rolls are constructed of two layers of fine fiber polypropylene and are ultrasonically bonded around a high-loft meltblown core. 15" x 17"

ABSP25 - Pack of 25 pads



## FireStop Foam

Great for residential applications. Foam is better than conventional fireblock products at blocking smoke & flames, and has proven cost effectiveness due to easy application & excellent yield rate as opposed to standard caulks and fiberglass. Orange in color.

P30033 12 OZ. (12/cs)



## **Expanding Foam**

This foam is a low-pressure, one-component, polyurethane foam sealant is a moisture-cured, multipurpose sealant designed to seal and fill small cracks and voids, creating a tight barrier against noise, moisture and air infiltration. HandiFoam® Sealant is UL GREENGUARD Gold Certified, contributing to healthier indoor environments.

P30002 - 12 OZ. (12/cs)

P30181 - 24 OZ. (12/cs)



## **FireStop**

This is a latex based, high solids firestop caulk. This material, when properly installed, effectively seals penetration openings in wood frame construction against the spread of fire, smoke and combustion byproducts. It is a single stage intumescent. When exposed to elevated temperatures, WF310 expands rapidly to seal off voids left by the burning or melting of combustible materials.

WF310 - 10.1 OZ. (24/cs)

## **LUBRICANTS | CEMENT**



#### PB B'laster

B'laster PB Penetrating Catalyst is a powerful, concentrated penetrant that frees stubborn rusted or immobilized parts by releasing the surface tension that causes them to stick. PB magnetically creeps up, around and into tight, hard-to-reach cavities, then converts into a high lubricant, loosening troublesome nuts, bolts, rusted joints, pipe threads and other frozen parts in record time! B'laster PB's non-evaporating formula then stays on the surface of the part to protect against rust and corrosion. 16 oz. aerosol.

16-PB-DS - Quantity 12 Per Box





## Wet/Dry Roof Cement

A heavy consistency mastic formulated with refined asphalt, filler, plastosizer, and solvent. All-purpose repair cement adheres to damp substrates. Remains soft and pliable through wide temperature fluctuations. Meets all requirements of ASTM D-4586-8-6, asbestos free.

WDRC 1 Gal - 6 / box WDRC 10.3 oz. - 12 / box



## **Acid Pump**

The ESP compact submersible pump is designed to circulate strong acids and cleaning solutions. All parts are constructed of acid-resistant materials. Motor is protected by thermal overload. Powerful 300 GPH pump.

**G325A** 



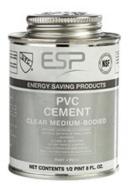


## **NEW Replacement Pump**

Drill pump for Glycol/Oil/Any Fluid.

PUP62 and PUP63

## **PVC GLUE | PRIMER**



#### **PVC Clear Glue**

This medium body solvent cement is used to join PVC pipe and fittings for potable water and drain, waste and vent systems. Recommended for PVC Types I and II, schedule 40" to 8" and schedule 80" to 6" diameters. ASTMD-2564. Available in 1/4 and 1/2 and 1 pint cans with dauber.

PG14 - 24 / box, PG100 - 12 / box



## ABS, PVC, CPVC All Purpose Glue

This clear regular bodied cement can be used on ABS, PVC schedule 40 and 80 Type I and Type II, gas pipe, conduit and CPVC schedule 40 up to 4" in diameter. Set time 45 seconds. Available in 1/4, 1/2, and 1 pint containers.

AP14 & AP12 - 12 / box



## **Purple Primer**

Softens and prepares PVC pipe and fittings for gluing . Use for potable water and drain, waste and vent systems. ASTM F656.

PP14 (1/4 pint), PP12 (1/2 pint) 24 / box

PP100 (1 pint) containers, all with dauber - 12 / box



#### Clear Cleaner

Cleans and prepares PVC, CPVC and ABS fittings for gluing.

PC14 (1/4 pint). PC12 (1/2 pint) - 24 / box

PC100 (1 pint) - 12 / box

## THREAD TAPE / SEALANTS / TOOLS



## **Insulation Adhesive**

Used by contractors nationwide as the premier insulation adhesive. Is now specified by a major insulation tubing manufacturer to be used on their products. Color: Amber. Viscosity: 200 - 300 CPS. Odor: solvent when wet / none dry. Bonding range: to 20 minutes. CAUTION: Extremely flammable. Avoid open flame or spark. Apply in well ventilated area.

CC12 (1/2 pint) - 24 / box CC100 (1 pint) - 12 / box





## Teflon Thread Seal Tape

Teflon thread seal tape offered in both .0035 and .0032 thick tape manufactured by Dupont. Both meet MILT-27730A specs, are recognized by NSF and are approved by NASA. .0035 Tape is UL approved. Available in 260" and 520"

TT260 or TT520 for 1/2", .0032 mil and .70 density- *Packed 100 /box or 10 /sleeve* TTUL260 or TTUL520 for 1/2", .0035 mil, .90 density Both packed 144 /box

#### **TOOLS**







#### **DETAILS**

- Converts 120V to 24V check systems
- Designed for the lab, available to the contractor
- Perfect for parts counter control checking
- Professional 40" silicone test leads with point probes, and interchangeable alligator clip extensions
- 24v manual reset overload protection
- Lighted 120v power switch
- · High strength magnetic backing grips metal surfaces
- One Year Warranty



**VP24** 



#### The Old Switcheroo

The Old Switcheroo is a heavy duty industrial magnet designed to hold down pop out switches while the technician trouble shoots the furnace or air handler. Two wings will reach out to switches that are set apart from a flat metal surface. A must in the tool box. Ask for free counter display with tri-folds.

**FF75** 

FF75 Display







#### N-Take 2

This unique device is installed within the draft induction supply line in between the outdoor intake and the furnace. When a blocked intake would normally result in a no heat call, and a shut down furnace, the N-Take 2 opens due to a slight vacuum inside the pipe. Not to be used as a primary combustion inlet. Alternate only.

Free display pictured here.

**NT02** 

**NT02 Display** 











## LI'L POPPER Voltage 24V

Li' L Popper control circuit breaker saves the technician dozens of blown fuses while he diagnoses control circuit failures. Simply plug the leads in to the ATC fuse receptacle on the board, and manually reset the Li' L Popper each time the breaker blows. Has a quick setting thermal cut out. Self adhering backing allows the contractor to leave the unit on the job site overnight if he is out of fuses. Available in 3 amp, 5 amp, 10 amp, 15 amp, and 20 amp. Alligator clip versions are available.

POP3, POP5 for residential or commercial amp applications or POP10, POP15, POP20 for microwave and appliance applications POP3Z, POP5Z for Alligator clip versions



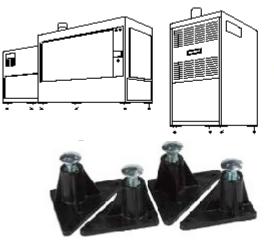


Revolutionary furnace leveling system created for the perfectionist. Four sturdy bolt-adjusted leg extensions supplied with mounting materials. Simply turn the lag bolted insert clockwise or counter clockwise to raise or lower each corner of the furnace. Supports up to 400 lbs Adjustment from 2 3/4" - 4" Height.

Free display, holds eight packages.

Patent #7,137,604

#### **EL10**









EL10 Display







Durable, high quality, and heavy duty. Made of heavy gauge metal with positive action plunger rod.

012-DC



#### Plews Grease Guns

Meet the toughest grease guns around. The all new grease gun line from Plews. These guns have been completely redesigned and incorporate advanced features that are unmatched in the industry.

Constructed of heavy duty steel and finished in rugged baked enamel and tough zinc plate. Every feature of these grease guns has been engineered for the rigors of professional use. Lifetime warranty.

30200



#### **Grease Hose**

There are 1/8" NPT male fittings on each end. Meets U.S. Government mil-spec.

10-212 for 12" and 10-219 for 18"



#### Fan Blade and Blower Wheel Tools

Fan blade and blower puller tool by ESP offers a simple and easy solution to locked fan blades and blower wheels. Will not damage blower or blade, so the unit quickly pays for itself.

#### **FB100**



## Wilde Gasket Scraper

Heavy-duty 11" industrial gasket scraper for quick and easy removal with a one inch face and 1 1/2" face.

**GS-516 1" Face** 

**GS-516 Wide 11/2" Face** 

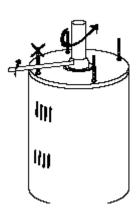


#### **Anti-Windmill**

This patented device slips over the motor shaft and will prevent the motor from rotating in the opposite direction due to windage. Most motors will start and continue to run in the opposite direction if the reverse rotation is severe enough, causing premature motor failure. Fits shaft sizes 1/2" and 5/8".

#### **AW12 or AW58**

- Wrong rotation will cause the rod to strike thru-bolt,
   which will stop the shaft from turning
- Shaft will rotate the correct direction freely
- NOTE: This device will stop windmilling in the wrong rotation only





## 6 'N 1 Lug Wrench

- · Offers both hexagon and square sockets
- Four nut drives sized 1/4", 5/16", 11/32", 3/8"
- Two squares sized 3/16" and 1/4"
- Use as a handle for 1/4" extension drives
- Fits MC and B acetylene tanks
- Fits service valves
- High-quality vanadium tool steel
- · Easy grip round handle
- Pocket sized
- · Lightweight and compact
- · All drives will accept long screws
- · Individually bagged with card & hanging tab

LW601





## **Rubber Stretch Straps**

The specially compounded rubber resists sun and weather to last indefinitely. Tensile strength to 50 pounds. Made In the USA Available in 10",15", 21", 31" and 41"

RS10, RS15, RS21, RS31 or RS41



## **Nozzle Buddy**

The easiest way to change oil nozzles

40437



## **Pocket Caliper**

Stainless steel 3" caliper, 1/32" and millimeters, inside, outside graduations.

**132ME** 



## **Utility Vernier Caliper**

0-5" range, mm and 16th graduations. Durable Steel Construction

**722** 

For 0-4" Stainless order 729



## Four Way Key

Fits stopcocks, sillcocks, and valves. Sizes are 1/4" to 9/32" and 5/16" to 11/32" Precision machined plated steel.

FW1701







## New From ESP—The Mag Wheel

Perfect for opening acetylene tanks that don't already have knobs, this ultra magnetic tool allows you to easily open and close tanks without a wrench. Never lose it with an ultra rare earth magnet.

**MW10** 

#### New From ESP-ACR WINGMAN



**Condenser fan motor out?** Provides temporary coil cooling with water fan spray until motor replacement complete. Heavy duty magnetic attachment to attach to condenser enclosure. Shut off valve in handle

WM1





#### The Hex Revolver

Featuring 6 color-coded screwdriver holder for easy sorting and quick identification of bits and chucks. Keeps frequently used driver bits within reach. Quick-release design for effortless bit changes.

ESP's newest product, the Hex Revolver, is a must have for any technician. The kit includes a top of the line keychain, with six hex bit holders, and six impact rated, magnetic hex bits - 1/4", 5/16", 3/8", 7/16", 1/2", and 9/16". On your belt or on your bag - keep them handy at a great price.







#### **Z-Tool**

This handy dual nut driver has 1/4" and 5/16" pivoting sockets to reach the most difficult angles and tightest screw locations.

**ZT10** 



ZT10-Bulk 25/Box







## **Pin Extractor Tool**

This handy tool will help to pop out Molex and Amp Electrical pins in igniter and other controls.

**PE44** 







## **Core Gripper**

Just push in the base to extend four gripper fingers and the spring release grabs the core so that it can be turned out and removed.

#### CGR10





#### **TOOLS**



## Sight Glass Tool

The ESP sight glass tool slides easily into the notches of a scroll compressor sight glass and easily helps to extract the sight glass with a crescent or socket wrench.

1" diameter.

#### **SGRT**







## **Board Removal Tool**

Remove boards from their standoffs easily. Dual sided tool easily compresses both sizes of standoffs seen in the HVAC/R industry. A must have for the truck.

#### **BRT10**



#### TXV Power Head Element Wrench

This handy wrench fits most Sporlan and Alco power head elements for easy removal and replacement.

**PH10** 





## Rhino Tank and Compressor Tote

The Rhino tank and compressor tote allows the user to easily pick up nitrogen, CO2, and oxygen 20 and 40 lb cylinders, along with all hermetic compressors with lift tabs

#### **RH10**







#### **VALVES AND COUPLINGS**





## **Flowmeters**

Ground water-sourced, heat pump applications. This high quality polycarbonate bodied flowmeter has 3/4" MPT nylon threaded connections and 1-10 GPM capacity.

LDF357N-3/4" MPT 2-10 GPM

LDF359N-3/4" MPT 2-18

C-IK55-A020 King Glass/Brass Liebert Replacement 1" MPT



#### Pro-Line 1" NPT-Solenoid Valve

Normally closed 24V or 115V slow closing 150 psi solenoid valve for use on ground water source heat pumps. Maximum operating temperature 110°F.

**HP215 or HP510-115** 





## **BronzeY-Strainers**

Used primarily for all water applications. Working pressure: 300psi W.O.G.; 150psi W.S.P. 80 Mesh screen, 1/2" thru 3/4" sizes.

BY12 (1/2") - 8 per box

BY34 (3/4") - 8 per box





## **Plastic Y-Strainers**

Used extensively in the ice machine and water cooler industries. Size 3/8" Manitowoc part# 136067-9; Scotsman part # 16-0162-00.

**PY38** 

#### **VALVES AND COUPLINGS**





## QuickBlast

The QuickBlast is the easiest way to service condensate lines. Once installed, simply turn the ball valve closed, supply pressure upstream, then downstream, and turn the ball valve back open. No additional tools, no leaks, no restricted flow - just a quick and easy way to clear lines.

QB1



## **Quick Blast Adapter**

Connect a drain line gun directly to a Quick Blast or Line Drive.

QBA



#### Line Drive

This 3/4" x 3/4" slip on condensate pan blow out valve is a patented one of a kind item. No more buying little cartridges and trying to find the end of drain lines in the dark. Simply install this unit exiting the evaporator in your residential or commercial AC system, and hook up a 1/4" charging hose to the valve and the other end to your CO2 or Nitrogen tank. Turn the valve one way, and blow out the line. Turn it the other way, and remove any blockage inside the coil.



## Raychem Aluminum to Copper Refrigerant Coupling



Raychem tube couplings, repair leaks in aluminum or copper/aluminum joints.. When heated with a propane torch, this one-piece coupling shrinks to join and seal refrigerant tubing. Unlike traditional joining methods such as welding and brazing, where joint quality depends on preparation and technique, Raychem couplings create strong, reliable joints time after time. Joining copper or aluminum in hard-to-reach places. Trouble-free reliability. One-piece construction eliminates the problem of parts that vibrate loose after assembly. And Raychem tube couplings are stronger than the tubes they connect. They withstand pressures up to the burst pressure of the tubing, pullout forces in excess of the typical yield strength of the tubing, and vibration fatigue up to the failure of the tubing.

Easy to install. The only tool required is a propane torch. No flux, no solder, no wrenches are needed. Merely slip the coupling over the tube ends, and heat. A colored band at either end changes color to signal when the installation is complete. (This takes approximately 20 seconds for a 3/8" coupling.) And, because there is no residue, there is no need to flush the tubing. Now it is fast and easy to make these permanent, reliable joints even in hard-to-reach places.



PCL 1/4, PCL 3/8, PCL 1/2, and PCL 5/8 - 10 / box PCL RAYCHEM DISPLAY, N/C.- 10 / box





"FREE DISPLAY"

# KITZ



Code No.16 (Fig. CYU)



#### Class 150 Y-Pattern Strainer

Y-Pattern Strainers provide protection for equipment having internal moving parts. Has blow-out outlet for easy clean-out, threaded cap for easy removal. Bronze body and Type 304 stainless steel screen. NPT threaded ends or solder joint ends.

Working Pressure			Test	Test Pressure		
300 psi. W.C	).G. non-sho	ock	She	Shell450 psi.		
150 psi. W.S	S.P. saturate	ed				
Dimensions						inch
Size	1/4	3/8	1/2	3/4	1	1-1/4
L (IPS)	2.76	2.76	3.15	3.94	4.53	5.31
L(CxC)	_	_	3.15	4.13	4.92	5.71
Н	1.73	1.73	1.93	2.28	2.80	3.19
Drain Port	1/4	1/4	1/4	1/4	1/2	1/2
Α	1.41	1.41	1.57	1.96	2.52	2.95
В	0.59	0.59	0.70	0.90	1.14	1.42

15-014, 15-038, 15-012, 15-034, 15-100, 15-114

KITZ Code No. 15/16

# Code No.60 (Fig. NO. AKGZH) Threaded Ends



#### Gas Ball Valve

- Manual operated gas shut-off valves for appliances, appliance connector valve and hose end valves. The following agencies have certified these valves: AGA, CGA, ANSI, and ASME
- Forged Body Construction for Greater Strength
- Blowout-Proof Stem Design
- High Cycle Life PTFE Seats and NBR Seal
- Quarter Turn Open/Close Operation
- Positive Shutoff with Zero Leakage
- Rated for temperatures from -20° F to 125° F at pressures from 1/2 125 psi.

Wing Operator - KITZ Code # 60 (AKGZH)

Square Operator - KITZ Code # 60 SQ (AKGZHSQ)

60-012 or 60-034

# KITZ

Code No.07 (Fig. AKFS)



Code No.08 (Fig. CFS)



#### Class 125 Brass Gate Valve

Forged Brass Gate Valves have screwed-in-bonnet, non-rising stem, solid wedge disc, integral seat, NPT threaded or solder joint ends

\*\* high tensile strength. Non-rising Stem permits installation where head space is limited.

Dimensions					inch
Size	3/8	1/2	3/4	1	1-1/4
L (IPS)	1.50	1.65	1.85	1.97	2.36
L(CxC)	_	1.77	2.36	2.76	3.03
Н	2.95	2.95	3.39	3.82	4.61
D	1.97	1.97	2.17	2.36	2.76

07-012, 07-034, 07-100

KITZ Code No. 07/08



# KITZ

Code No.58 (Fig. AKZA)



Code No.59 (Fig. CZA)



## 600 WOG "Full Port" Brass Ball Valves

Full Port Brass Ball Valves are two-piece construction with a chrome plated brass ball, blowout-proof stem, PTFE seats and double 'O' ring stem seal. Quick quarter-turn for easy operation. For use in plumbing and light industry applications. Standard NPT end connection.

Working Pressure		Test P	Test Pressure				
600 psi W.O	.G.		Shell	Shell900 psi. hydrostatic			
150 psi A 30	00° F		Seat80 psi. air				
Dimensions						inch	
Size	1/4	3/8	1/2	3/4	1	1-1/4	
Bore	0.39	0.39	0.59	0.79	0.98	1.26	
L (IPS)	1.57	1.61	1.93	2.20	2.56	2.99	
L(CxC)	1.73	1.81	2.13	2.87	3.47	3.94	
Н	1.42	1.42	1.54	1.73	1.93	2.17	
D	3.15	3.15	3.15	5.12	5.12	5.12	

58-014, 58-038, 58-012, 58-034, 58-100, 58-114

58-112, 58-200

**KITZ Code No. 58/59** 





## FlexConnect Couplings and Adapters

Available in a variety of sizes, the FlexConnect line is a no adhesive way to couple and adapt PVC lines to one another. 3/4" is especially convenient in the HVAC industry for condensate line service or repair

Flexcon34-6 6 pack of 3/4" PVC COUPLINGS

Flexcon-BULK Box of 100 3/4" PVC COUPLINGS
FlexB-6 6 pack of 3/4" to 1/2" BUSHINGS

FlexCon1 1" COUPLING

FlexCon125 1.25" COUPLING

FlexCon150 1.5" COUPLING

FlexCon125150 1.25" to 1.5" ADAPTER

Flexcon2 2" COUPLING

Flexcon3 3" COUPLING

FlexCon23 2" to 3" ADAPTER

#### **CONDENSATE LINE ACCESSORIES**



## CO2 Cartridges

Compatible with all industry drain line guns. 16 gram cartridges available both threaded and unthreaded; 12 pack in merchandise packaging or 100 in bulk. 20 gram available unthreaded in a 12 pack.

CO2-12 - 12 pack unthreaded 16 gram

CO2-100 - 100 pack unthreaded 16 gram

CO2-12T - 12 pack threaded 16 gram

**C02-20-12 - 12 pack unthreaded 20 gram** 



#### **Drain Line Gun**

Accepts all 16 gram cartridges, threaded or unthreaded.

DLG-1



#### Drain Line Gun XL

Accepts 20 gram CO2 cartridges.

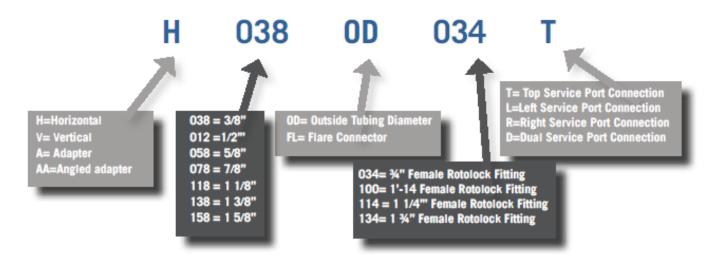
This gun packs an extra punch!

DLG-2

## ROTOLOCK VALVES, ADAPTERS, and ACCESSORIES

ESP offers the fullest line of rotolock valves, adapters, and accessories and a complete cross reference to most Copeland and Alfa/Standard Refrigeration parts. All valves and adapters are available with or without O-ring. If you purchase without, the TR-10 Teflon O-Ring kit contains three each of ALL sizes.

## Part Number Key: E.g. H 038 0D 034 T



#### **Service Port Connection Orientation**

\*Note Service Port connection left and right orientation determined by placing the valve with stem up, rotolock fitting facing up. This is a dual connection, with a upper left and lower right service port.







HORIZONTAL ROTOLOCK

ESP#	ESP WITH O- RING	COPELAND	ALFA-LAVAL#
TOP PORT			TOP PORT
H038FL034T	H038FL034T-O		H03FT
H038OD034T	H038OD034T-O		
H012FL034T	H012FL034T-O		
H012FL100T	H012FL100T-O		H04FT
H058FL100T	H058FL100T-O		HOSFT
H0120D100T	H0120D100T-O		H04ST
H0580D100T	H0580D100T-O		HOSST
H034OD114L	H034OD114T-O		
H0780D114T	H0780D114T-O		H07ST
H1180D114T	H1180D114T-O		H09ST
H1180D134T	H1180D134T-O		H11ST
	H138OD134T-O	998-0510-66	
LEFT PORT			LEFT PORT
H038FL034L	H038FL034L-O		H03FL
H038FL100L	H038FL100L-O	998-0510-58	
H012FL100L	H012FL100L-O		H04FL
H058FL100L	H058FL100L-O		HOSFL
H0120D100L	H0120D100L-O		H04SL
HOS80D100L	HOS80D100L-O		HOSSL
H034OD114L	H034OD114L-O	998-0510-38	
H0780D114L	H0780D114L-O		H07SL
H1180D114L	H1180D114L-O	998-0510-51	H09SL
H1180D134L	H1180D134L-O		H11SL
	H158OD214L-O	998-0510-68	



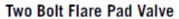
ALFA-LAVAL#	ESP#	ESP WITH O- RING	COPELAND
DUAL PORT			
	H038OD100D	H038OD100D-O	998-0510-97
	H038FL100D	H038FL100D-O	
	H038FL114D	H038FL114D-O	998-0510-42
	H038OD114D	H038OD114D-O	998-0510-43
	H012FL034D	H012FL034D-O	
	H012FL100D	H012FL100D-O	998-0510-40
	H012OD100D	H012OD100D-O	998-0510-98
	H012OD114D	H012OD114D-O	998-0510-44
	H058FL100D	H058FL100D-O	998-0510-41
	H058OD114D	H058OD114D-O	998-0510-45
	H034OD114D	H034OD114D-O	
	H078OD100D	H078OD100D-O	998-0510-89 & 52
RIGHT PORT			
H03FR	H038FL034R	H038FL034R-O	
H04FR	H012FL100R	H012FL100R-O	
HOSFR	H058FL100R	H058FL100R-O	998-0510-56
H04SR	H0120 D100	H0120 D100-O	
H05SR	H058OD100R	H058OD100R-O	
		H078OD100R-O	998-0510-52
H07SR	H078OD114R	H078OD114R-O	998-0510-39 & 90
	H078OD134R	H078OD134R-O	
H09ST	H118OD114R	H118OD114R-O	998-0510-99
		H118OD134R-O	998-0510-02
	H138OD134R	H138OD134R-O	998-0510-46
		H158OD134R-O	998-0510-66



VERTICAL ROTOLOCK

ALFA-LAVAL#	ESP#	ESP WITH O- RING	COPELAND
TOP PORT			
V03FT	V038FL100T	V038FL100T-O	998-0510-58
V04FT			
VO5FT			
V04ST	V0120D100T	V0120D100T-O	
VO5ST	V0580D100T	V0580D100T-O	
V07ST	V0780D114T	V0780D114T-O	
V09ST	V1180D114T	V1180D114T-O	
V11ST	V138D134T	V138OD134T-O	
LEFT PORT			
V03FL			
V04FL			
VO5FL			
V04SL	V0120D100L	V0120D100L-O	
VO5SL	VOS80D100L	V0580D100L-O	
V07SL	V0780D114L	V0780D114L-O	
V09SL	V1180D114L	V1180D114L-O	
V11SL	V130D134L	V130D134L-O	
H09SL	H1180D114L	H1180D114L-O	998-0510-51
H11SL	H1180D134L	H1180D134L-O	
		H158OD214L-O	998-0510-68
DUAL			
	V012OD100D	V012OD100D-O	
	V038OD034D	V038OD034D-O	
	V058OD100D	V058OD100D-O	
	V078OD114D	V078OD114D-O	
	V118OD114D	V118OD114D-O	
RIGHT PORT			
V03FR			
V04FR			
VO5FR			
V04SR	V0120D100R	V0120D100R-O	
VO5SR	V0580D100R	V0580D100R-O	
V07SR	V0780D114R	V0780D114R-O	
V09SR	VI180D114R	VI180D114R-O	







Two BoltSweat Pad Valve

ESP#	ESP WITH O- RING	COPELAND	ALFA-LAVAL#
TWO BOLT PAD	VALVE		
PV012FLLH	2B12FL158L	998-0510-28	
PV58FLLH	2B58FL158L	998-0510-29	
PV02FLLH	2B12FL158R	998-0510-30	
PV058SWLH	2B58FL158R	998-0510-31	
PV038FLLH	2B38FL158L	998-0510-32	
PV014FLLH	2B14FL158L	998-0510-33	
PV058SWRH	2B58OD158R	998-0510-34	
PV038SWRH	2B38OD158R	998-0510-35	
PV038SWLH	2B38OD158L	998-0510-36	

## SIGHT GLASS





ESP#	ESP WITH O- RING	COPELAND	ALFA-LAVAL#
SIGHT GLASS			
SG12			SG12
SG34			
SG10			
SG114			
SG20			
3/4"			



**Angle Adapter Steel** 





Male Adapter Steel



Straight Adapter



Pad Adapter

ESP#	ESP WITH O- RING	COPELAND	AALFA-LAVAL#
STRAIGHT ADAR	TER		
A0380D114	A0380D114-O		SA03
A0120D114	A0120D114-O		SA04
	A012OD100-O	998-0034-18	
	A058OD100-O	998-0034-17	
A0580D114	A0580D114-O		SAO5
	A034OD114-O	998-0034-07	
A078D114	A078D114-O	998-0034-08	SA07
	A1180D114-0	998-0034-09	
A138OD134	A1380D134-0		SA11
	A1180D134-0	998-0034-10	
	A1380D134-0	998-0034-13	
	A1380D214-0	998-0510-11	
	A1580D214-0	998-0519-12	

ESP#	ESP WITH O- RING	COPELAND	ALFA-LAVAL#				
MALE STEEL AD	MALE STEEL ADAPTER						
	MA038OS114-O	998-0034-14					
A012OD100M	MA012OS100-O	998-0034-15					
	MA058OD100-O	998-0510-16					
	MA0340D114-0	998-0034-01					
A078OD114M	MA078OD114-O	998-0034-02					
A118OD134M	MA1180D134-0						
ANGLE STEEL A	DAPTER						
AA038OD100	AA038OD100-O		AA03				
AA012OD100	AA012OD100-O		AA04				
AA058OD100	AA058OD100-O		AA05				
AA078OD114	AA078OD114-O		AA07				
AA1180D114	AA1180D114-0		AA09				
AA1380D134	AA1380D134-0		AA11				
MALE BRASS AD	APTER						
7000-186	7000-186-0		BA03X06				
7000-187	7000-187-O		BA03X08				
7000-190	7000-190-O		BA04X08				
N/A	N/A		BA05X08				
7000-188	7000-188-O		BA07X10				
7000-193	7000-193-O		BA09X10				
7000-196	7000-196-0		B09X14				
7000-200	7000-200-O		BA11X14				

## **Rotolock Caps**







Steel Rotolock Caps

ESP #	COPELAND	AALFA-LAVAL#
ROTOLOCK CAPS		
3/4" rotalock cap, plastic (2/pk)		RC034-2
1" rotalock cap, plastic (2/pk)		RC100-2
1 1/4" rotalock cap, plastic (2/pk)		RC114-2
1 3/4" rotalock cap, steel (1/pk)		RC134-1



## Teflon O-Rings

**TR10-12 O-Ring Kit** 

ESP#	ALFA-LAVAL#	Description	
TEFLON O-RINGS			
TR034-6	TS-24590	3/4 rotolock o-ring 6/pack	
TR100-6	TS-24591	1" rotolock o-ring 6/pack	
TR114-6	TS-24592	1 1/4" rotolock o-ring 6/pack	
TR134-6	TS-24593	1 3/4" rotolock o-ring 6/pack	
TR10-12	TR10	3 each, 3/4,1" 1 1/4" and 1 3/4" o-rings	





ESP delivers o-rings, o-ring kits, valve caps & kits, rotolock pad adapters, and gaskets.

Plus our gasket book — Finny's Gasket Book



This array of 36 different gaskets replaces most common gaskets used today in expansion and solenoid valves and pumps. This fine gasket material Garlock replaces old gaskets on Sporlan, Penn, Alco, Jackes Evans, Parker, Mueller, Hamilton Pax, Henry and Primore for a fraction of the price. Attractive counter pad with all 36 life-size gaskets available.

**GB10** 







# **Brass Compression Fittings**

Bass compression fittings can be used with copper, aluminum, brass, and plastic tube. Compatible with a wide variety of liquids and gases such as water, air, and fuels. Listed with U.L. for flammable liquid. Manufactured for low and medium pressure tubing connection work where excessive vibration or tube movement is not involved. Not recommended for application using gaseous media.

Working pressure ranges:

Tube OD	Tube Wall (inches)
1/8	.030
3/16	.030
1/4	.030
5/16	.032
3/8	.032
1/2	.035
	1/8 3/16 1/4 5/16 3/8

Available in most configurations from 1/8" thru 5/8". Sleeves, nuts, unions, tees, adapters, elbows and other specials available on request.





# Heresite Touch-Up Spray

This VR-554T air dry phenolic heresite spray is the highest quality metal protective coating sold in the U.S. today. Can be used to protect any surface subjected to corrosive atmospheres, 12 oz. Can.

**VR-554** 



# Rustoleum Spray Paint

Available in a variety of colors. 12 oz. unless specified. General purpose paint adheres to a variety of surfaces including wood, metal, and plastic.

3838506 - Flat Black (6/cs)

3838508 - Glossy Black (6/cs)

3838509 - Dove Gray (6/cs)

3843043 - High Heat Black (6/cs)

3843110 - Safety Yellow (6/cs)

429762 - Safety Red (6/cs) (15 oz.)

## PERSONAL PROTECTIVE EQUIPMENT



### HPPE Knit Gloves - Nitrile Palm

13-gauge High Performance Polyethylene knit shell. Micro-foam nitrile coated palm. Comfortable and superior performance. Meets current ASTM F2992-15 Standard for Cut Level A5

6773-02 - Medium (12/cs)

6773-03 - Large (12/cs)

6773-04 - XL (12/cs)

6773-05 -2XL (12/cs)



# **Heavy Duty Professional Coveralls**

Microporous non-woven material with polyethylene coating. Comfortable cloth-like fiber. Full zipper front. Elastic wrist and ankle cuffs. Meet ASTM F903-10 Chemical Penetration test for Solvent Based Paints.

6952 - Medium (24/cs)

6953 - Large (24/cs)

6954 - XL (24/cs)

6955 - 2XL (24/cs)

6956 - 3XL (24/cs)





# **Waterproof Shoe Covers**

Durable, waterproof CPE material. Textured surface for better grip. Easy to put on and remove. Elastic opening for secured fit. Keeps shoes, boots and worksites clean

6884-06 - 6 pairs

6884-40 - 40 pairs

### PERSONAL PROTECTIVE EQUIPMENT



### Raven 7 mil Nitrile Black Gloves

Powder-free exam grade nitrile. Non-latex. Outstanding strength, wear and dexterity. Textured for enhanced gripping power. 7 mil thick. 100 gloves per box

66517 - Medium

66518 - Large

66519 - XL

66520 - 2XL



# Raven 7 mil Nitrile Hi Visibility Gloves

Powder-free exam grade nitrile. Non-latex. Outstanding strength, wear and dexterity. Textured for enhanced gripping power. High visibility green color. 7 mil thick. 100 gloves per box.

66551 - Medium

66552 - Large

66553 - XL

66554 - 2XL



### **Derma-Tuff Nitrile Gloves**

Powder-free exam grade nitrile. Non-latex. Outstanding strength, wear and dexterity. Textured for enhanced gripping power. 6 mil thick. 100 gloves per box.

66587 - Medium

66588 - Large

66589 - XL

66590 - 2XL



# **Blue-Seamed Wiping Cloths**

Heavy-duty blue seamed industrial cotton for any cleanup job. Available in 5 or 10lb. boxes.

# WC05 (5lb.) or WC10 (10lb.)







# **Bad Ass Bags**

42 gallon, 3 mil, black contractor trash bag with flaps. Essential truck stock

**CTB25-25 count** 

# Rough Touch SCRUBS



# Scrubs-In-A-Bucket

Scrubs-in-a-bucket provide fast, easy and effective hand cleaning with portability. Pumice performance without gritty residue. Can be used with or without rinse. Removes grease, graphite, and even tar 6 per box.

SB72. 72 sheets, 10-1/4" x 12-1/4"



**SB30** 

30 sheet, tool-box size



# Handy Bucket and Bucket Seat

Available with both a wire and rope type handle, this 5 gallon bucket is a cut above the rest. The bottom side of the bucket has a handle which gives you something to grip when carrying, dumping, or moving tools, condensate blow out, or whatever your bucket may contain. Great price, top of the line quality - Made in the USA













BUCKET-5GW - 5 gallon bucket with wire handle with ESP logo (10/box)
BUCKET-5GR - 5 gallon bucket with rope handle with ESP logo (10/box)
BUCKETSEAT - Rotating seat that pairs perfectly with bucket (White)
BUCKETLID - White bucket lid with rieke spout



### Universal Humidifier Solenoid

This universal solenoid can replace common units such as Aprilaire #4040, General's #990-53, Honeywell's #32001639 -002, and the Skuttle #A01-0814- 148 in 24V versions. The UHS will soon become an essential truck stock item. All appropriate fittings are included in the kit with a universal bracket. Flow can easily be reversed by removing two screws, turning the solenoid 180 degrees, and replacing the screws. 110V version is also available.

### **UHS24 or UHS120**





### **UHS 99 Universal Humidifier Solenoid**

UHS99

The UHS 99 can replace common units such as Aprilaire #4040, General's #990-53, Honeywell's #32001639-002, and the Skuttle #A01-0814-148 in 24V versions.

### **UHS99**



### **HUMIDIFIER PARTS**



Best Air is the #1 selling humidifier water pad in the USA. These pads maximize humidity output and out perform all other pads. Our patented drip pattern, and 100% clay covered media is the difference. Replaces Aprilaire, Honeywell, Lasko, Hamilton, and Lennox.

**A10PR, A12PR, A35PR** 



# **Humidifier Maintenance Kit**

Includes humidifier feed tube, in line strainer,  $\frac{1}{4}$ " compression sleeve and nut. Kit includes everything you need to update humidifier feed tube.









### **Smoke Emitters**

Supplied in clean-to-handle cartridges and leave no visible residue. Smoke produced is easy to see and photograph if required. Oil-free smoke eliminates possible damage to decorations or equipment. Sizes are 45, 90, and 150 seconds 10/Box.

**SE45, SE90, SE150** 

4 Minute and 8 minute smoke emitters

SE004 and SE008





## **Superior Smoke Emitters**

Superior® Classic Smoke Candles quickly and efficiently produce dense white smoke. The Superior® #1A Smoke Candle generates 4000 cubic feet of smoke in thirty seconds. The Superior® #2B Smoke Candle generates 8000 cubic feet of smoke in sixty seconds. The Superior® #3C Smoke Candle generates 40,000 cubic feet of smoke over a 3+ minute burn duration.

1A (12/cs)

2B (12/cs)

3C (12/cs)





### Smoke Check

SmokeCheck™, Smoke Detector Tester puts both photoelectric and ionization smoke detectors through their paces to ensure that the circuitry, alarm and power is functioning and that they are actively sampling the air for any hint of a fire. Our patented formulation simulates the entire range of fire conditions giving you the confidence of knowing your fire alarm system will respond promptly to all fire conditions. This product is approved for testing smoke detector function per NFPA 72 par. 8-2.4.1 when used as directed. Our SmokeCheck™, Smoke Detector Tester does not have HFC or CFC. Our products do not damage the Ozone layer and do not contribute to Global Warming. SmokeCheck™ has always been environmentally friendly. We did not change our products to comply with new codes or protocols. They were originally designed to be environmentally friendly. UL & ULC Listed, NFPA 72 Compliant, Safe on sensors.

**SDT-25S** 





# **Unit Disposal Labels**

6 labels per packet, Bright orange.

**UD12** 



# **Industrial First Aid Kit**

These 10, 25, 50 or 100 person weatherproof kits include all components listed in chart below

### Contents:

Description #10

Adhesive Strips 16

Large Wound Dressing -

Gauze Pads 4 (3")

Gauze Bandage, 4" Eye 1

Pads 2

Adhesive Tape, 1/2" 1

Triangular Bandage 1

Elastic Bandage —

Antiseptic Towelettes 10

First Aid Cream Packets —

Aspirin 10

Eye Flush, 1 oz. (1)\*

Eye Flush, 4 oz. —

Cold Pack 0

Latex Exam Gloves 2 pr.

Scissors 1

Forceps 1

First Aid Instructions 1





**FA6060 (10 person)** 





# The Sure Temp Product Thermometer

Is the least expensive device manufactured today to show exact product temperature in a case, reach-in or walk-in. The sensing probe itself is immersed in a glycol filled well that reacts to changes in ambient at the same rate as stored product. This assures the techni-cian that he is reading internal product temperature and not surrounding air temperature.

The Sure Temp Thermometer is NSF certified and meets the criteria of Food Service.

Operating: Range is -40 degrees F to +180 degress F. Dimensions are 1-5/15" X 6-7/8". Each unit comes with a bracket and screw for easy attachment to a rack or a panel. Each 10 unit case ships in an attractive counter display.

**ST1236-31, (10 / display box)** 

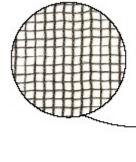


### **AC Leaf & Debris Protector**

This adjustable AC & Leaf Debris Protector, accommodates condensing unit sizes up to 4'x4' and covers all new high Seer residential units. It secures to the unit with heavy-duty elastic bands and makes spring cleaning easy 1/4" x1/4" openings.

### **ALDP**







### **SPECIALTY**



### Oil Refractometer

This precise instrument is used to determine percentage of mineral oil in a refrigeration system during a POE (polyol ester) changeover. A brix scale, a refractive index, or any list of markings can be used to determine mineral oil percentage. ESP utilizes the brix scale. Copeland recommends a 5% mineral oil level as acceptable. At a 65.9 brix reading (E.S.P. Scale) or below, the residual mineral oil is at that safe level. No need to plot graphs. Easily understandable directions packed with the unit in a foam filled carrying case with oil dropper and calibration screw driver.

### **RHB-82 for POE unit**

### **RHB-82-ND BVA Oil Refractometer**

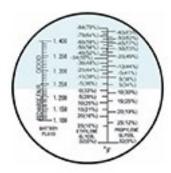


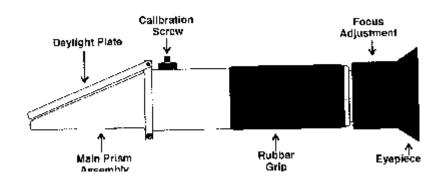


# **Glycol Refractometer**

This instrument will give "good down to" temperatures for both ethylene and propylene glycol solutions, and an exact percentage of glycol calculation on the scale. Operates just like the oil refractometer in that the operator places a drop or two of solution on the Daylight Plate of the instrument, and then as he looks thru the eyepiece and focuses, a separation on the scale shows an accurate reading.

**RHB-82G** 







# Thermo Plug

The Thermo Plug is a dual socketed temperature activated, single set point thermostat. Great for heat tapes, electric heaters, sump and tower heaters. Available in 35F and 50F.

### **THERMO PLUG #TP35**



- Saves Energy only operates when necessary.
- Red Power Indicator Light illuminates when power is on.
- Easy setup. The thermostat plugs into any standard outlet. No special wiring required. 120Volt 60Hz, Combined Maximum 15 amp and 1800 Watts.

### **THERMO PLUG #TP35**

The Thermo Plug is available in 35 F (on at 35, off at 45)



- For indoor use only in residential or commercial applications.
- Follow the Heater Manufacturer Instructions before connecting the device.
- TP35 Turns a heater or other device on at approximately 35F (4C) and off at 45F when ambient temperature rises. TP50 turns on at 50F and off at 60F

### **THERMO PLUG #TP50**

The Thermo Plug is available in 35 F (on at 50, off at 60)



### **Fast Stat**

Upgrade your HVAC equipment without new wiring. Receiver and sender included. Run two stage equipment and more over two wire communication.

FSCM00 - Adds a common to a thermostat cable

FS1000 - Adds one wire to a thermostat cable

FS3000 - Adds two wires to a thermostat cable

FS5000 - Adds three wires and a common

FS7000 - Extends the wiring between a heat pump, indoor

unit, and thermostat

FS9000 - Extends the wiring between a heat pump and

indoor unit

### **HEAT GUNS, TORCHES, & ACCESSORIES**



### Master Heat Gun

Heavy-duty industrial quality heat gun with temperature and power ratings of 750° F (399°C) and 1680 watts (120V). The airflow rating is 23 CFM at 3,000 FPM. A universal motor, die cast aluminum housing, reinforced mica-insulated ceramic heating element, and externally replaceable carbon brushes make the Master Heat Gun a rugged, reliable source of flameless heat whether you're working with freezer coils, plastic laminates, circuit boards, PVC, fiberglass, or heat-shrinkable materials.

### **HG501A**



### **ECOHEAT™ Heat Gun**

An economical, low cost, entry level, multi-use heat gun. Perfect for industrial and commercial applications.

### **Features & Benefits:**

- Two heat settings 500° and 1000°F, 120V, 10 Amps, 1200 Watts
- · Lightweight (1 lb.), easy to hold at any angle for long periods
- · Built-in hand guard, protects hands and fingers
- 3-Wire grounded cordset
- UL and CIL listed
- · Thermoplastic case, for high impact durability

### **EC-200**



### Flame Guardian™

This unique non-asbestos flame-guard system protects wood, painted or metal surfaces from the heat and flame of a torch. This 9-1/2" x 12-1/2" pad with aluminum backing can be formed to any application.

### **FG12**



### Reusable Heat Blocker

Reusable heat trap in a can. Completely stops heat down ferrous or non-ferrous pipe. Easily molds to any shape. Removes quickly & cleanly after each application. No drip or mess. Good for 100 jobs. 12 oz. Jar.

### **HB34**





## **Bussmann Limitron**

U.L. listed for branch circuit protection, motor control circuits, lighting ballasts, and control transformers. Grooved ferrule permits mounting in rejection type fuseholders as well as standard non-rejection type.

KTK-R (600V) (1-30A)



# Bussmann Glass and Specialty Fuses

ESP now makes these glass and specialty Buss fuses available to the diversified wholesaler.

ABC 1-30; AGX 1-50; AGC 1/2 - 30; GLQ 3-10; C2 -2-1/2; GMF 1-5; or No. 263-R; MDL 1-30















### Bussmann Fusetron

These dual element, time delay fuses afford the same excellent overload protection of low-peak fuses of motors and other type loads having temporary inrush currents such as caused by transformers and solenoids.

### FRN-R 250V and FRS-R 600V (2-1/2 - 200 A)

Bussmann low cost FRN-R replacements are also available.

**ECNR10-100** 

# Buss Fustat and Fustron Plug-In Fuses

Available in 1-1/4 thru 60 amp sizes.

S & SL (2-30A), SC (1-60A), Part # T & TL (1-1/4-30A)



# Buss Fustat and Fustron Plug-In Fuses

Available in 1-1/4 thru 60 amp sizes.

S & SL (2-30A), SC (1-60A), Part # T & TL (1-1/4-30A)













### **Bussmann Fuse Holders**



These four Bussmann fuse holders are now available for your HVAC needs.

HPF - 10 /ctn

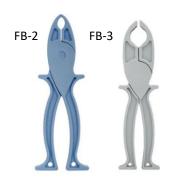
**HPS - 10 /ctn** 

HRK-10/ctn









### **Bussmann Fuse Pullers**

The safest, non-conductive tools used to remove fuse. Always remove power from fuse circuit before removing fuse.

FP-2 for 13/32" to 13/16 dia. fuses FP-3 for 1" to 1-3/4" dia. fuses



# Bussmann fused outlets, switches and receptacles

Also well stocked in our warehouse

SSU (switch)
SSY (fused receptacle)



# Bussmann Blade type fuses

For P.C. board applications. Fast acting, 36V, UL recognized 3-40 A

**ATC 1 through ATC 40** 



# **Wago Connectors**

Be prepared to provide customers with everything they'll need for R290 and beyond. Pull the lever up, insert a conductor and push the lever back down – done! As tool-free, lever-actuated connectors, WAGO's 221 Series Splicing Connectors easily, quickly and safely connect solid, stranded and fine-stranded conductors ranging from 24–10 AWG.



**NOTE:** Wire nuts are not approved for R290. All connections must be UL approved such as a push and lock connectors for wire connections. These connectors must have sufficient strength to hold the wire in place.



### **Bulk Connectors in Brown Boxes**

Part Number	# of Conductors	Connectors Per Box
221-412	2	100
221-413	3	50
221-415	5	25
221-2401	Butt Splice	60

### 10 Pack Connectors in Clamshells

Part Number	# of Conductors	Connectors Per Clam
221-412/996-010	2	10
221-413/996-010	3	10
221-415/996-010	5	10
221-2401/K000-0004	Butt Splice	10



### **Bulk ATC Fuses**

25 pack of blade type fuses. 3 amp and 5 amp available. UL listed

EATC3-25 - 25 pack of ATC3 fuses EATC5-25 - 25 pack of ATC5 fuses



# ATM Fuses Mini type blade fuses used on some residential equipment ATM3 (5/cs) ATM5 (5/cs)

### **ELECTRICAL PRODUCTS**



# **Transition Terminals**

To be used when control connectors don't match wire connections during replacements.

Transition Terminals from .250 Female to .187 Male, and .187 Female to .250 Male

### TT10 — 5 per pack





# Tool Light Flashlight

This unique tool light slips onto the shaft of any screwdriver, 3/16"-7/16" lights up the work area with three LED Just turn the grooved edge clockwise to turn on and off. Three magnets on the back will also hold it to the inside of your toolbox, or inside of a control compartment.

12 Per display box

TLFL



### **ELECTRICAL PRODUCTS**





### **Power Cords**

ESP power cords are outdoor heavy capacity electrical cords, 12 or 14 gauge, 25', 50' or 100'.

HC14-25, 50, 100 HC12-25, 50, or 100



### **Power Block**

ESP Power Blocks are heavy duty, 3 outlet electrical cords. Plug three power tools or appliances into one outlet. Available in 12 or 14 gauge, 25', 50', or 100'.

PB14-25, 50, or 100; PB12-25, 50, or 100

ESP offers a premium quality TPE-rubber cord Power Block for extremely high and sub-zero temperatures. Available in 12 gauge with 2' cord.

**PD12-2** 





# Light Bulbs

Light bulbs are now available in LED: 60W, 75W, 100W.

**RS60** 

**RS75** 

**RS100** 





### **Acid Blaster**

This is the premium two gallon compression sprayer manufactured specifically with the AC&R contractor in mind. This sturdy unit incorporates a patented acid valve and utilizes viton gaskets which are chemical resistant. There are no metal parts that contact liquid. Unit has stainless pump rod and plate. The nozzle has adjustable spray levels. Order part # AB10. Repair kits include all gaskets and seals, part # 6-1925.

### **AB10**





## Big Shot III.

This three gallon, acid resistant sprayer incorporates viton and polypropylene parts to minimize nuisance breakdowns and leakage. The wide angle, high delivery spray head provides quick application time and makes the coil cleaning job an easier one for your contractors.

**BS30** 

# Acid Blaster and Big Shot Replacement parts



6-6136, AB10 or BS30 Hose Assembly

6-1925 Gasket Kit includes: viton check, diaphragm, O-ring and gasket for handle; 6-7748, AB10 or BS30 Wand; 6-4626, AB10 or BS30 Handle; 6-6003, AB10 or BS30 Nozzle; 6-6136, AB10 or BS30 Hose Assembly.





6-7748, AB10 or BS30 Wand



6-1925 Gasket Kit



6-6003, AB10 or BS30 Nozzle



6-4626, AB10 or BS30 Handle











# "Tommy Gun"

Two quart compression sprayer made out of high pressure impact polyethylene. Equipped with adjustable spray nozzle, the Tommy Gun is lightweight and easy to use.

### **TG007**



# Tommy II

48 ounce sprayer in red, poly nozzle.

### **TGII**

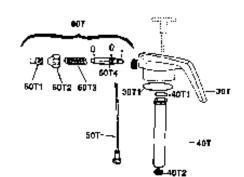
3-1802 (Nozzle)







# "Tommy Gun" Replacement Parts



- 10T Container only
- 20T Plunger complete
- 20T1 Plunger O-ring,
- 30T Pump head only
- 30T1 Container Sealing O-Ring,
- 40T Pump barrel
- 40T1 Sealing O-Ring,
- 40T2 Non Return Valve
- 50T Dip Tube & Filter
- 60T Nozzle & Spindle Assembly,
- 60T4—Nozzle Spindle
- 90T Complete Set of O-Rings and pump Non Return Valve.



# **Triple Shot Foamer**

Unique foamer tip produces a large volume of clinging foam. Comfort-grip cushioned trigger delivers 3.5 ML per stroke (3-4 times vs. our general purpose units). 32 oz. clear bottle makes product recognition an easy task.

TS32 (12/cs)



# **High Delivery Sprayer**

High delivery sprayer delivers 3.5 ML per stroke with adjustable nozzle and comfortgrip trigger. 32 oz. clear bottle to ease product recognition.

HD32 (12/cs)



# Chem-Sprayer

This chemical resistant sprayer holds up against harsh chemicals and solvents that cause standard trigger sprayers to fail. Adjustable nozzle, oring, and piston cup are made of chemical resistant viton. 32 oz. clear bottle to ease product recognition.

CR32 (12/cs)





# **Industrial Sprayer**

Economic design with extra long trigger for comfort. Provides average chemical resistance 24 oz. bottle.

IS005 (12/cs)



# **High Velocity Nozzle**

100 psi max. Pistol grip. Heavy Duty

HVN1-25 / Case



# **Expanding Garden Hose**

New and improved ESP black expanding hose expands to 50' when pressure is applied. When removed from pressure, the hose expels all water, avoiding a mess on the truck. Lightweight with heavy duty brass fittings plus shut off valve

BX50-30 / Case



### Premium Rubber Garden Hose



ESP now offers premium rubber hoses. Standard lengths are 50' on both the black and high temperature red hoses. Both are flexible down to - 40F. The red hose is rated for hot water use. Whether flushing hot water tanks, de-icing frosted coils, or just for general use, these made in the USA hoses are perfect for contractor's trucks.

Both style hoses are flexible to -40 F, have 400 psi burst pressure, and have heavy duty brass fittings.

The Red hose is rated for hot water



PRGH5825 - 25' PRGH5850 - 50' PRGH58100 - 100'



PRHWGH5850

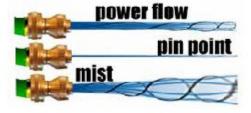


# **Bulls Eye Nozzle**

This carded adjustable hose nozzle, sprays a fine stream up to a solid heavy blast of water. Made of brass and stainless steel bearings.

810-C





### **INSTALLATION ACCESSORIES**





### Diamond Vent Screens

These covers and caps prevent pest infestations, bird nests, and other nuisance issues on air intake and exhaust lines. 2", 3", and 4" PVC screens available. Concentric caps for 2" and 3" available

DVS-2

DVS-3

DVS-4

CV-2 DVS

CV-3 DVS



# Mini Split Fitting

This is the next generation of AC MC connectors. They are designed to accommodate a broad range of cables. Each trade sized hub range overlaps the adjacent hub range, thereby minimizing the possibility of mismatched cables and fittings in the field

TECK50





### **Thermostat Guards**

Polycarbonate and Steel versions available. Stainless Steel also available upon request. Mounting hardware included. 2 chrome plated keys included. Mount vertical or horizontal.

**TP01CL - Polycarbonate mini** 

**TP02CL - Polycarbonate small** 

**TP03CL - Polycarbonate medium** 

**TP04CL - Polycarbonate large** 

**TP06M - Steel medium** 

**TP07M - Steel large** 

**TP08M - Steel mini** 

### **HVAC Service Center**

The quickest way to power residential furnaces - Plus the benefit of a switch and a constantly powered GFI.

Pre-wired switch box comes with an always hot 15 amp GFCI and service switch. 8' whip connects switch box with junction box. 12 awg wire.

### **HVACSC-1**



- 115 Volt
- 15 Amp
- Switch box comes pre-wired for an always hot GFI
- Switch controls power to equipment
- UL recognized components
- Fully Grounded
- 8' whip allows for easy mounting of junction box



EMT Connector (1)



Wire Nut (6)



Rommex Connector (1)



EMT One Hole Strap(3)



Greenfield Connector (1)

# **High Pressure Control Hoses**

Captu applicants a

Captube / Superhose replacement. Great for refrigerant pressure sensing applications. 1000 psi working pressure rated. Approved for most refrigerants and oils. 2mm inside diameter. 1/4" SAE fittings

HPCH18 - 18" STRAIGHT X 90 DEGREE

HPCH24 - 24" STRAIGHT X 90 DEGREE

HPCH30 - 30" STRAIGHT X 90 DEGREE

HPCH36 - 36" STRAIGHT X 90 DEGREE

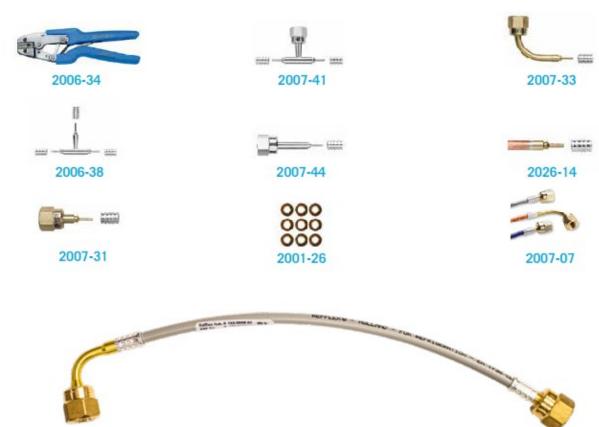
HPCH48 - 48" STRAIGHT X 90 DEGREE

# **High Pressure Control Hose Kit**

**HPCH Control Hoses** 

This handy control hose kit includes 24' of 2MM hose, with cutter, crimper, and a wide assortment of over fifty straight, and 90 degree fittings. Also has core depressors, copper gaskets, everything a professional technician needs to make his own custom length hoses on site. No more wasted trips to the supply house. Essential to the upper echelon of contractors.

### **HPHK**





# Natural Refrigerant Charging Hoses

Perfect for charging critically charged R290 or R600 units. Small diameter means minimal charge loss. 1/4" charging fittings

SH12KIT - 12" long set of 3 hoses STRAIGHT X 35 DEGREE SH18KIT - 18" long set of 3 hoses STRAIGHT X 35 DEGREE SH12Y - 12" long single hose STRAIGHT X 35 DEGREE SH18Y - 18" long single hose STRAIGHT X 35 DEGREE



### Oil Hoses

For applications that require oil flow as opposed to pressure sensing

522-0024-24 - 1/4 SAE STRAIGHT X 90 24" LONG 522-0024-36 - 1/4 SAE STRAIGHT X 90 36" LONG 533-0024-24 - 3/8 SAE STRAIGHT X 90 24" LONG 533-0024-36 - 3/8 SAE STRAIGHT X 90 36" LONG







# Premium Refrigeration Fitting Brushes 900 Series Stainless Steel Wire

The highest quality fitting brush, double spiral 4-ply wire construction. Solid plastic hand fitting handle with convenient hole for hanging. Individual package.



0	D REFRIGE	RATION SIZ	ES	OD REFRIGERATION SIZES					
PART#	SIZE	PACK	WGT	PART #	SIZE	PACK	WGT		
00924-1	1/4"	1	.04	00931-1	1-1/8"	1	.08		
00925-1	3/8"	1	.08	00932-1	1-3/8"	1	.08		
00926-1	1/2"	1	.08	00933-1	1-1/2"	1	.08		
00927-1	5/8"	1	.08	00934-1	1-5/8"	1	.08		
00928-1	3/4"	1	.08	00935-1	2-1/8"	1	.08		
00929-1	7/8"	1	.08	00936-1	2-3/8"	1	.10		
00930-1	1"	1	.08	00937-1	2-5/8"	1	.10		

# Premium Plumbing Fitting Brushes 900 Series Stainless Steel Wire



The highest quality fitting brush, double spiral 4-ply wire construction. Solid plastic hand fitting handle with convenient hole for hanging. Individual package.

0	D REFRIGE	RATION SIZ	ES	OD REFRIGERATION SIZES				
PART #	SIZE	PACK	WGT	PART #	SIZE	PACK	WGT	
00943-1	1/8"	1	.04	00949-1	1"	1	.10	
00944-1	1/4"	1	.08	00950-1	1-1/4"	ī	.10	
00945-1	3/8"	1	.08	00951-1	1-1/2"	1	12	
00946-1	1/2"	1	.10	00952-1	2"	1	.12	
00947-1	5/8"	1	.10	00953-1	2-1/4"	i	.14	
00948-1	3/4"	1	.110	00954-1	2-1/2"	ī	.14	

FITTING BRUSH SIZES & ACTUAL BRUSH DIAMETERS Fitting brushes are referred to by the size fitting they are designed to clean									
PLUMBING ID Brush and Fitting Size	REFRIGERATION OD BRUSH AND FITTING SIZE	ACTUAL BRUSH Diameter	PLUMBING ID Brush and Fitting size	REFRIGERATION OD BRUSH AND FITTING SIZE	ACTUAL BRUSH Diameter				
1/8"	1/4"	9/32"	1"	1-1/8"	1-3/16"				
1/4"	3/8"	7/16"	1-1/4"	1-3/8"	1-7/16"				
3/8"	1/2"	9/16"	1-1/2"	1-5/8"	1-3/4"				
1/2"	5/8"	11/16"	2"	2-1/8"	2-1/4"				
5/8"	3/4"	13/16"	2-1/4"	2-3/8"	2-1/2"				
3/4"	7/8"	15/16"	2-1/2"	2-5/8"	2-3/4"				

# SCHAEFER BRUSH

### 2-IN-1 TOOL

A combination tool that fits your hand comfortably and really works. One end cleans the fitting; the other cleans the tub.



	PLBG.	REFRIG.		
PART #	ID SIZE	OD SIZE	PACK	WEIGHT
00996-12	1/2"	5/8"	12	1.44
00998-12	3/4"	7/8"	12	1.44
00996-100	1/2"	5/8"	100	12
00998-100	3/4"	7/8"	100	12

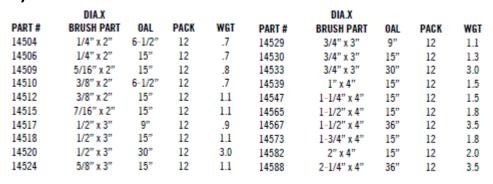
# **Outside Tube Cleaning Brush**





PART#	PLBG. ID SIZE	REFRIG. Od size	PACK	WGT	PART#	PLBG. Id size	REFRIG. Od size	PACK	WGT
00963-6	1/8"	1/4"	6	.24	00967-6	3/4"	5/8"	6	.48
00964-6	1/4"	3/8"	6	.24	00968-6	7/8"	7/8"	6	.48
00965-6	3/8"	1/2"	6	.24	00969-6	1"	5/8"	6	.48
00966-6	1/2"	5/8"	6	.24	00970-6	1-1/8"	7/8"	6	.48

# Nylon Tube Brush





# Natural Bristle or Hair



	DIA.X					DIA.X			
PART #	BRUSH PART	OAL	PACK	WGT	PART #	BRUSH PART	OAL	PACK	WGT
10209	1/4" x 2"	6-1/2"	12	.8	10212	3/4" x 3"	9"	12	1.1
10210	3/8" x 2"	6-1/2"	12	.8	10214	3/4" x 3"	12"	12	1.2
10220	3/8" x 2"	9"	12	.9	10213	1" x 4"	12"	12	1.3
10211	1/2" x 3"	9"	12	.8	10216	1" x 4"	18"	12	1.8
10221	1/2" x 3"	12"	12	1.1	10217	1-1/4" x 4"	18"	12	1.9
10222	1/2" x 3"	18"	12	1.2	10218	1-1/2" x 4"	18"	12	2.0
10223	1/2" x 3"	24"	12	1.3	10225	1-3/4" x 4"	18"	12	2.1
10224	1/2" x 3"	36"	12	2.3	10226	2" x 4"	18"	12	2.3

# SCHAEFER LONG HANDLE STAINLESS STEEL SINGLE ORIGIN TITLE SINGLE SPIRAL TUBE BRUSHES - 144 SERIES

3' brush part with long handle, filled with medium stiff wire.



EXACT			EXACT							
PART #	DIA.	OAL	PACK	WGT	PART #	DIA.	OAL	PACK	WGT	
14402	1/4"	15"	1	.04	14442	1/4"	27"	1	.08	
14404	3/8"	15"	1	.06	14444	3/8"	27"	1	.10	
14406	1/2"	15"	1	.08	14446	1/2"	27"	1	.14	
14408	5/8"	15"	1	.10	14448	5/8"	27"	1	.18	
14410	3/4"	15"	1	.12	14450	3/4"	27"	1	.18	
14412	7/8"	15"	1	.12	14452	7/8"	27"	1	.19	
14414	1"	15"	1	.12	14454	1"	27"	1	.19	
14416	1-1/4"	15"	1	.12	14456	1-1/4"	27"	1	.19	
14418	1-1/2"	15"	1	.13	14458	1-1/2"	27"	1	.20	



### LARGE DIAMETER BRASS TUBE BRUSHES

Double stem with 1/4" male pipe thread.

	BRUSH	BRUSH				BRUSH	BRUSH		
PART #	DIA.	LGTH	PACK	WGT	PART #	DIA.	LGTH	PACK	WGT
43636	1-1/4"	4-1/2"	1	.30	43653	2-3/4"	4-1/2"	1	.42
43639	1-1/2"	4-1/2"	1	.32	43656	3"	4-1/2"	1	.44
43642	1-3/4"	4-1/2"	1	.32	43658	3-1/4"	4-1/2"	1	.44
43645	2"	4-1/2"	1	.32	43660	3-1/2"	4-1/2"	1	.54
43648	2-1/4"	4-1/2"	1	.36	43662	3-3/4"	4-1/2"	1	.56
43651	2-1/2"	4-1/2"	1	.40	43664	4"	4-1/2"	1	.56



### **NYLON LARGE DIAMETER TUBE BRUSHES**

Single stem with 1/4" male pipe thread.

	BRUSH	BRUSH				BRUSH	BRUSH		
PART #	DIA.	LGTH	PACK	WGT	PART #	DIA.	LGTH	PACK	WGT
43736	1-1/4"	5"	1	.18	43753	2-3/4"	5"	1	.32
43739	1-1/2"	5"	1	.24	43756	3"	5"	1	.32
43742	1-3/4"	5"	1	.24	43758	3-1/4"	5"	1	.34
43745	2"	5"	1	.26	43760	3-1/2"	5"	1	.38
43748	2-1/4"	5"	1	.26	43762	3-3/4"	5"	1	.44
43751	2-1/2"	5"	1	.32	43764	4"	5"	1	.44

# SCHAEFER BRUSH

### **REFRIGERATOR COIL DUSTING & CLEANING BRUSHES**

Used to clean refrigerator coils, fan blades and areas under and behind appliances.



		STEM			
PART #	MATERIAL	DIA.	DESCRIPTION	PK.	WT.
00405	Bristle	.200	3/4" & 1-1/2" x 12" BR.	36	8.2
			15" Wood HDL. 28" O.A.L.		
00415	Bristle	.200	Same as 00405 in single box	1	.44
50405	Bristle	.200	Same as 00405 on 4-color card	10	3.3
00406	W. Poly	.225	3/4" & 1-1/2" x 12" BR.	36	9.8
			4-1/2" Wood HDL. 28" O.A.L.		
00416	W. Poly	.225	Same as 00406 in single box	1	.48
00408	Bristle	.200	3/4" to 1-1/2" taper x 12" BR.	36	9.2
			4-1/2" Wood HDL. 27" O.A.L.		
00402	Bristle	.200	2" x 6" BR. x 24" O.A.L.	36	8.2
00403	Bk. Poly	.225	3/4" to 1-1/2" taper x 12" BR.	36	9.2
			2-1/4" x 7" Br. x 24" O.A.L.		

### **DUCT CLEANING BRUSH**

7" long brush part with twisted wire stem and plastic, or wood handle.



		BRUSH	OVERALL		
PART #	MATERIAL	DIA.	LENGTH	PACK	WGT
76200	Cr. Brass Wire	2-1/8"	48"	1	.44
76210	Stainless Steel	2-1/8"	48"	1	.50
76220	Black Pat. Fibre	2-1/8"	48"	1	.40

# FIBRE/HAIR MIX FURNACE & BOILER BRUSHES 7624 SERIES



Extra heavy fill, 6" long brush part with twisted wire handle and large loop end.

		BRUSH	OVERALL			
P/	ART#	DIA.	LENGTH	PACK	WGT	
76	243	3"	27"	1	.34	
76	245	2"	42"	1	.44	



### RADIATOR OR REFRIGERATOR BRUSHES

Black natural bristle, twisted in wire with loop end.

	STEM	BRUSH	OVERALL	BRUSH		
PART #	DIA.	DIA.	LENGTH	LENGTH	PACK	WGT
00450	.200	1/2" to 1"	36"	7"	12	3.36
00442	.225	1" to 2"	42"	7"	12	4.56



### **RADIATOR DUSTING & CLEANING BRUSH**

Twisted in wire with plastic handle at end.



		BRUSH	BRUSH	OVERALL		
PART #	MATERIAL	LENGTH	DIA.	LENGTH	PACK	WEIGHT
76221	Bristle or Hair	7"	2"	27"	1	.22
76324	Black Horsehair	7"	2-1/2"	27"	1	.22
76524	HH/Poly Mix	7"	2-1/2"	27"	1	.22



# LONG WOOD HANDLE DUSTING BRUSH W/FLARED TIP

One row, curved lacquered wood handle

		BRUSH	BRUSH	OVERALL		
PART #	MATERIAL	LENGTH	TRIM	LENGTH	PACK	WEIGHT
76026	Horsehair	10"	2-1/4"	24"	1	.26



# NYLON SINGLE SPIRAL CONDENSER TUBE BRUSHES - 437 & 937 SERIES

Single spiral/single stem construction recommended for cleaning all tubes where deposits are light. 1/4" and 5/16" dia. brushes with female couplings have 8-32 threads, while 3/8" thru 1" dia. have 12-24 threads. 1/4", 5/16", and 3/8" dia. brushes with male couplings have 8-32 threads, while 7/16" thru 1" dia. have 1/4-28 threads.



BRUSH DIA.	BRUSH Length	FEMALE Thread	FEMALE Part	MALE Thread	MALE Part	PACK	WEIGHT
1/4"	3"	8-32	43702	8-32	93702	1	.04
5/16"	3"	8-32	43703	8-32	93703	1	.04
3/8"	4"	12-24	43704	8-32	93704	1	.08
7/16"	4"	12-24	43707	1/4-28	93707	1	.10
1/2"	4"	12-24	43710	1/4-28	93710	1	.10
9/16"	4"	12-24	43713	1/4-28	93713	1	.10
5/8"	4"	12-24	43716	1/4-28	93716	1	.10
11/16"	4"	12-24	43719	1/4-28	93719	1	.10
3/4"	4"	12-24	43722	1/4-28	93722	1	.10
13/16"	4"	12-24	43725	1/4-28	93725	1	.10
7/8"	4"	12-24	43728	1/4-28	93728	1	.10
15/16"	4"	12-24	43731	1/4-28	93731	1	.10
1"	4"	12-24	43733	1/4-28	93733	1	.10







Single spiral/double stem construction recommended for brass or copper tubes. 1/4" and 5/16" dia. brushes with female couplings have 8-32 threads, while 3/8" thru 1" dia. have 12-24 threads. 1/4", 5/16", and 3/8" dia. brushes with male couplings have 8-32 threads, while 7/16" thru 1" dia. have 1/4-28 threads.

BRUSH DIA.	BRUSH Length	FEMALE Thread	FEMALE Part	MALE Thread	MALE Part	PACK	WEIGHT
1/4"	3"	8-32	43602	8-32	93602	1	.06
5/16"	3"	8-32	43603	8-32	93603	1	.06
3/8"	4"	12-24	43604	8-32	93604	1	.10
7/16"	4"	12-24	43607	1/4-28	93607	1	.10
1/2"	4"	12-24	43610	1/4-28	93610	1	.10
9/16"	4"	12-24	43613	1/4-28	93613	1	.14
5/8"	4"	12-24	43616	1/4-28	93616	1	.14
11/16"	4"	12-24	43619	1/4-28	93619	1	.14
3/4"	4"	12-24	43622	1/4-28	93622	1	.14
13/16"	4"	12-24	43625	1/4-28	93625	1	.16
7/8"	4"	12-24	43628	1/4-28	93628	1	.16
15/16"	4"	12-24	43631	1/4-28	93631	1	.16
1"	4"	12-24	43633	1/4-28	93633	1	.16

## STAINLESS STEEL SINGLE SPIRAL - 435 & 935 SERIES

Single spiral/double stem construction recommended for stainless steel tubes. 1/4" and 5/16" dia. brushes with female couplings have 8-32 threads, while 3/8" thru 1" dia. have 12-24 threads. 1/4", 5/16", and 3/8" dia. brushes with male couplings have 8-32 threads, while 7/16" thru 1" dia. have 1/4-28 threads.



BRUSH	BRUSH	FEMALE	FEMALE	MALE	MALE	ı	
DIA.	LENGTH	THREAD	PART	THREAD	PART	PACK	WEIGHT
1/4"	3"	8-32	43502	8-32	93502	1	.02
5/16"	3"	8-32	43503	8-32	93503	1	.06
3/8"	4"	12-24	43504	8-32	93504	1	.10
7/16"	4"	12-24	43507	1/4-28	93507	1	.10
1/2"	4"	12-24	43510	1/4-28	93510	1	.10
9/16"	4"	12-24	43513	1/4-28	93513	1	.10
5/8"	4"	12-24	43516	1/4-28	93516	1	.14
11/16"	4"	12-24	43519	1/4-28	93519	1	.14
3/4"	4"	12-24	43522	1/4-28	93522	1	.14
13/16"	4"	12-24	43525	1/4-28	93525	1	.14
7/8"	4"	12-24	43528	1/4-28	93528	1	.14
15/16"	4"	12-24	43531	1/4-28	93531	1	.16
1"	4"	12-24	43533	1/4-28	93533	1	.16

# SCHAEFER BRUSH

#### TIN HANDLE ACID & DOPE BRUSHES

Selected horsehair bristles are pressed securely in tin handles. Sold in gross packs only.

	BRUSH	HANDLE		
PART #	WIDTH	LENGTH	PACK	WEIGHT
10001	3/8"	5"	144	2.14
10002	1/2"	5"	144	2.64
10003	5/8"	5"	144	3.30

#### WOOD HANDLE DOPE BRUSH

Selected horsehair bristles secured tightly in metal ferrule. Sold in packs of 36.

	BRUSH	OVERALL	BRUSH		
PART #	WIDTH	LENGTH	MATERIAL	PACK	WEIGHT
10007	3/4"	7"	Horsehair	36	1.34

### IMPORT WHITE BRISTLE CHIP BRUSHES

White Chinese bristle, metal ferrule. Plain sanded wood handle. Low priced economy import.

PART#	WIDTH	THICKNESS	TRIM	PACK	WEIGHT
67191	1/2"	1/4"	1-3/8"	36	.72
67192	1"	5/16"	1-5/8"	36	1.44
67193	1-1/2"	5/16"	1-5/8"	36	1.44
67194	2"	5/16"	1-5/8"	24	1.44
67195	2-1/2"	3/8"	1-5/8"	24	2.40
67196	3"	3/8"	1-5/8"	24	2.40
67197	4"	11/16"	1-5/8"	12	3.84

#### IMPORT BLACK BRISTLE CHIP

Black Chinese bristle in a chemical resistant plastic handle.

PART#	WIDTH	THICKNESS	TRIM	PACK	WEIGHT
67230	1/2"	1/4"	1-3/8"	1	.02
67231	1"	5/16"	1-5/8"	1	.04
67232	1-1/2"	5/16"	1-5/8"	1	.06
67233	2"	5/16"	1-5/8"	1	.06
67234	2-1/2"	3/8"	1-5/8"	1	.10
67235	3"	3/8"	1-5/8"	1	.10



_			
	-	-	The Park Street





# SCHAEFER BRUSH



# WIRE HANDLE CHIP BRUSHES

Ideal for cleaning rust, corrosion, etc. in high heat situations.

PART #	FILL	TRIM	LENGTH	PACK	WEIGHT
81616	C. Steel	1-1/2"	5-1/2"	1	.10
81617	St. Steel	1-1/2"	5-1/2"	1	.10



# FLAT OIL /CHIP BRUSH

Absorbent natural tampico or poly in a twisted wire handle with ring end. Overall length 8-1/4".

	BRUSH	BRUSH	BRUSH		
PART #	MATERIAL	WIDTH	LENGTH	PACK	WEIGHT
24800	Tampico	2-1/4"	3"	1	.08
67118	Poly	2-1/4"	3"	1	.06



# CONDENSER FIN WHISK, DUSTERS & UPRIGHT BROOMS

Plastic handle whisk for cleaning condenser fins and evaporators - A whisk with a hundred uses.

	BRUSH		OVERALL		
PART#	WIDTH	TRIM	LENGTH	PACK	WEIGHT
02026	3-1/8"	2-1/8"	7"	1	04



#### Fin and Plenum Brush

The fin and plenum brush - has a 14", extra long handle. The total length of the brush is 18". Bristles are 2" wide, all natural. It's perfect for cleaning coils, and is especially useful for applying mastic and other sealants in hard to reach places.

**RAD2 - 12/CS** 

## **BENCH DUSTER**

Tough and durable brush available in tampico and horsehair.



		BKU2H	UVERALL			
PART #	MATERIAL	FACE	LENGTH	TRIM	PACK	WEIGHT
62034	Tampico	2" x 8"	14"	2-5/8"	1	.66



# POLYESTER VARNISH BRUSH

Durable black polyester filament with a solvent resistant plastic handle.



PART#	WIDTH	THICKNESS	TRIM	PACK	WEIGHT
67240	1/2"	1/4"	1-5/8"	1	.02
67241	1"	5/16"	1-3/4"	1	.04
67242	1-1/2"	5/16"	1-3/4"	1	.06
67243	2"	5/16"	1-3/4"	1	.08
67244	2-1/2"	3/8"	2"	1	.10
67245	3"	3/8"	2"	1	.12



## PARTS CLEANING BRUSH

Tampico or Poly fill in strong plastic handles, comes in standard or flow thru style.

	BRUSH	OVERALL		
PART#	MATERIAL	LENGTH	PACK	WEIGHT
25010	Poly	11-5/8"	1	.17
*25095	Poly	9"	1	.17
25013	Tampico	11-5/8"	1	.17
25015	All Poly	10-3/4"	1	.14

<sup>\*25095</sup> is a Flow-Thru model.

# SHOE HANDLE WIRE HAND BRUSH



10" hardwood handle filled with tempered steel, stainless steel, bronze, brass, fibre or poly.

				BRUSH		
PART #	FILL	ROWS	FILL SIZE	PART	PACK	WEIGHT
81232	T Steel	2 x 17	.012	5"	1	.20
81233	T Steel	3 x 17	.012	5"	1	.28
81234	T Steel	4 x 17	.012	5"	1	.38



#### **CURVED HANDLE WIRE HAND BRUSHES**

14" hardwood handle filled with tempered steel, stainless steel, bronze, brass, fibre or poly.



				BRUSH		
PART #	FILL	ROWS	FILL SIZE	PART	PACK	WEIGHT
*65341	Brass	4 x 17	.003	3-1/4"	1	.19
55104	Tampico	4 x 19	n/a	6-1/2"	1	.32
55105	Poly	4 x 19	.020	6-1/2"	1	.14
81008	T Steel	2 x 18	.012	6-1/2"	1	.22
81009	T Steel	3 x 19	.012	6-1/2"	1	.32
81010	T Steel	4 x 18	.012	6-1/2"	1	.42
81018	St. Steel	3 x 19	.012	6"	1	.22
81020	St. Steel	4 x 18	.012	6"	1	.38
81025	Bronze	4 x 18	.014	6"	1	.46
81044	Brass	3 x 19	.006	6"	1	.34
81045	Brass	4 x 19	.006	6"	1	.46

<sup>\*65341</sup> has a straight, 8-3/4" long handle with a 3-1/4" brush part and 3/4" trim

# **STOVE & APPLIANCE BRUSH**

2 X 9 rows, 5/8" trim. 8-5/8" long hardwood block with 2-7/8" long brush part.



				OVERALL		
PART #	FILL	ROWS	TRIM	LENGTH	PACK	WEIGHT
25301	St. Steel	2 x 9	5/8"	8-5/8"	1	.08
25302	Brass	2 x 9	5/8"	8-5/8"	1	.08

#### **DIE CAST BRUSHES**

3 X 7 rows, 1/2" trim. 7" long plastic block with 1-1/2" long brush part.



				OVERALL		
PART #	FILL	ROWS	TRIM	LENGTH	PACK	WEIGHT
25404	St. Steel	3 x 7	1/2"	7"	1	.04
25405	Brass	3 x 7	1/2"	7"	1	.04
25406	Bronze	3 x 7	1/2"	7"	1	.04
25407	Nylon	3 x 7	1/2"	7"	1	.04



## WELDER'S WIRE HAND BRUSH

3 X 7 rows, 1/2" trim. 8" long hardwood block with 1-1/2" long brush part.



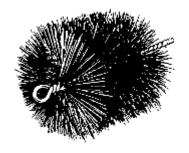
			UVEKALL		
FILL	ROWS	TRIM	LENGTH	PACK	WEIGHT
St. Steel	3 x 7	1/2"	8"	1	.04
Brass	3 x 7	1/2"	8"	1	.04
Nylon	3 x 7	1/2"	8"	1	.04
Horsehair	3 x 7	1/2"	8"	1	.04
	St. Steel Brass Nylon	St. Steel 3 x 7 Brass 3 x 7 Nylon 3 x 7	St. Steel 3 x 7 1/2"  Brass 3 x 7 1/2"  Nylon 3 x 7 1/2"	St. Steel 3 x 7 1/2" 8"  Brass 3 x 7 1/2" 8"  Nylon 3 x 7 1/2" 8"	FILL         ROWS         TRIM         LENGTH         PACK           St. Steel         3 x 7         1/2"         8"         1           Brass         3 x 7         1/2"         8"         1           Nylon         3 x 7         1/2"         8"         1



#### **BRASS WIRE UTILITY BRUSHES**

Curved hardwood block with crimped brass wire.

PART #	FILL	ROWS	TRIM	PART	PACK	WEIGHT
27698	Brass	6 x 9	5/8"	1-1/4" x 2-1/4"	1	.18
27668	Brass	9 x 10	5/8"	2-1/4" x 3"	1	.36

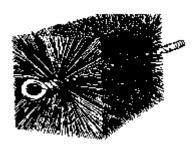


### PROFESSIONAL CHIMNEY BRUSHES

All our professional chimney brushes have extra heavy 1/2" dia. stems, constructed with four lengths of .162 dia. galvanized steel wire. Plated shaft with 3/8" male pipe threads are secured to the stems for easy coupling to our heaviest fiberglass rods.



Fully filled with round tempered steel wire using double spiral construction. These premium brushes have been the choice of many professional chimney sweeps for years.



ROUND					SQ	UARE	
PART#	SIZE	PACK	WEIGHT	PART#	SIZE	PACK	WEIGHT
33066	6"	1	1.90	33277	7"	1	2.10
33076	7"	1	2.00	33288	8"	1	2.10
33086	8"	1	2.10	33299	9"	1	2.60
33096	9"	1	2.50	33310	10"	1	2.80
33106	10"	1	2.60	33311	11"	1	2.90
33116	11"	1	2.70	33312	12"	1	3.10
33126	12"	1	2.80	33314	14"	1	3.40
33266	6"	1	2.00				



# FLUE, DUCT, CHIMNEY RODS & T-HANDLES



	PIPE		
PART#	THREAD	PACK	WEIGHT
30599	1/4"	1	.22
30600	3/8"	1	.24

#### **FLUE BRUSH HANDLE**

Semi-flexible, twisted galvanized wire with one female end and 1" ring at other end.



PART#	HANDLE Length	PACK	WEIGHT
30328	3"	1	.56
30438	4"	1	.70
30548	5"	1	.86
30658	6"	1	1.06

#### **FIBERGLASS RODS**

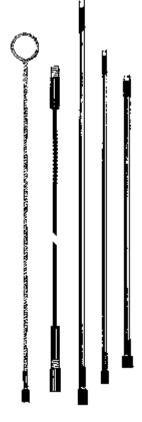
Strong extruded fiberglass rods in a variety of diameters provide the proper stiffness for most jobs. We recommend using these nonconducting fiberglass rods whenever possible.

Jasibic.			PIPE		
PART #	DIA.	LENGTH	THREAD	PACK	WEIGHT
30664	.350	4'	1/4"	1	.42
30666	.350	6'	1/4"	1	.68
36048	.440	4'	3/8"	1	.66
36072	.440	6'	3/8"	1	.92
30660	480	6'	3/8"	1	1 24

# **EXTENSION HANDLES**

Semi-flexible, twisted galvanized wire with female one end and male other.

PART #	HANDLE Length	PACK	WEIGHT
31438	4'	1	.78
31448	5'	1	.92
31458	6'	1	1.04





# TEMPERED WIRE SINGLE SPIRAL FLUE BRUSHES

4-1/2" long tempered wire brush part, 1/4" male pipe thread.



	FLUE	BRUSH				FLUE	BRUSH		
PART#	SIZE	DIA.	PK.	WT.	PART #	SIZE	DIA.	PK.	WT.
43206	1"	3/4"	1	.28	43224	2-3/4"	2-1/2"	1	.42
43208	1-1/4"	1"	1	.30	43226	3"	2-3/4"	1	.44
43212	1-1/2"	1-1/4"	1	.32	43228	3-1/4"	3"	1	.46
43214	1-3/4"	1-1/2"	1	.34	43232	3-1/2"	3-1/4"	1	.48
43216	2"	1-3/4"	1	.36	43234	3-3/4"	3-1/2"	1	.50
43218	2-1/4"	2"	1	.38	43236	4"	3-3/4"	1	.52
43222	2-1/2"	2-1/4"	1	.40	43238	4-1/4"	4"	1	.54

#### TEMPERED WIRE - DOUBLE SPIRAL

4-1/2" long tempered wire brush part, 1/4" male pipe thread. Brushes are individually boxed.



	FLUE	BRUSH				FLUE	BRUSH		
PART #	SIZE	DIA.	PK.	WT.	PART #	SIZE	DIA.	PK.	WT.
43306	1"	3/4"	1	.30	43324	2-3/4"	2-1/2"	1	.44
43308	1-1/4"	1"	1	.32	43326	3"	2-3/4"	1	.46
43312	1-1/2"	1-1/4"	1	.34	43328	3-1/4"	3"	1	.48
43314	1-3/4"	1-1/2"	1	.36	43332	3-1/2"	3-1/4"	1	.50
43316	2"	1-3/4"	1	.38	43334	3-3/4"	3-1/2"	1	.52
43318	2-1/4"	2"	1	.40	43336	4"	3-3/4"	1	.54
43322	2-1/2"	2-1/4"	1	.42	43338	4-1/4"	4"	1	.56

# STAINLESS STEEL - SINGLE SPIRAL FLUE BRUSHES

4-1/2" long brush part, 1/4" male pipe thread. Brushes are individually boxed.



PART#	FLUE SIZE	BRUSH DIA.	PK.	WT.	PART#	FLUE SIZE	BRUSH DIA.	PK.	WT.
43536	1-1/2"	1-1/4"	1	.36	43559	3-1/2"	3-1/4"	1	.52
43539	1-3/4"	1-1/2"	1	.38	43562	3-3/4"	3-1/2"	1	.54
43542	2"	1-3/4"	1	.40	43565	4"	3-3/4"	1	.56
43545	2-1/4"	2"	1	.42	43568	4-1/4"	4"	1	.58
43548	2-1/2"	2-1/4"	1	.44	43571	4-1/2"	4-1/4"	1	.60
43551	2-3/4"	2-1/2"	1	.46	43573	4-3/4"	4-1/2"	1	.62
43553	3"	2-3/4"	1	.48	43576	5"	4-3/4"	1	.64
43556	3-1/4"	3"	1	.50	43579	5-1/4"	5"	1	.66

# SCHAEFER BRUSH

#### FLAT BAFFLE BOILER BRUSH

Double spiral, black oil tempered wire brush part with 1/4" male pipe thread. Brushes are individually boxed.



	BRUSH	BRUSH		
PART #	SIZE	LENGTH	PK.	WT.
41218	1"	4-1/2"	1	.16
41228	2"	4-1/2"	1	.30
41238	3"	4-1/2"	1	.38
41248	4"	4-1/2"	1	.44

# ORIGINAL COLUMBIA BOILER BRUSH

Bristles stick out in all directions and are rough cut to a rectangular shape, approximately 1/2" x 1". Much lighter fill than the flat style.

PART#	BRUSH SIZE	HANDLE Length	PACK	WEIGHT
46328	1/2" x 1" x 4"	3'	1	.36
46348	1/2" x 1" x 4"	4'	1	.46

# FLAT STYLE COLUMBIA BOILER BRUSH

Bristles stick out to the 1" dimension as round brush is flattened after being made



	BRUSH	OVERALL		
PART#	SIZE	LENGTH	PACK	WEIGHT
46302	1/2" x 1" x 4-1/2"	27"	1	.41
46304	1/2" x 1" x 4-1/2"	48"	1	.72

#### WEILER MCLAIN BOILER BRUSH

1-1/2" x 1-1/8" x 4" oval shaped brush with crimped carbon steel or soft bristle. Long twisted wire handles with 1" ring end.



PART #	MATERIAL	DIA.	0.A.L.	PK.	WT.
14465	Crimped Wire	.20	30"	1	.32
14466*	Crimped Wire	.25	30"	1	.34
14467	Bristle	.20	30"	1	.40
14468*	Crimped Wire	.25	46"	1	.46
14476	Crimped Wire	.135	30"	1	.12
14477	Bristle	.135	30"	1	.10

# EXTRA LONG HANDLE/STIFF WIRE BRUSHES - 7625 SERIES

Single spiral fine wire brush part 4" long, twisted in wire handle with loop end. 42" overall length.



	BRUSH	OVERALL		
PART #	SIZE	LENGTH	PACK	WEIGHT
76252	1/2"	42"	1	.26
76253	3/4"	42"	1	.28
76254	1"	42"	1	.44
76255	1-1/2"	42"	1	.46
76256	2"	42"	1	.50
76257	2-1/2"	42	1	.52
76258	3"	42"	1	.54

CMALL DIA

LADGE DIA



### SPIN-GRITTM™

Single stem construction with silicone carbide impregnated nylon recommended for brass tubes. This brush is made oversized so the filament will lay over, resulting in increased contact with surface, providing better cleaning and longer life than conventional condenser cleaning brushes.



BRUSH	TUBE	FEMALE	FEMALE	MALE	MALE		
DIA.	SIZE	THREAD	PART #	THREAD	PART #	PK.	WT.
1/2"	1/4" - 5/16"	8-32	43482	8-32	93482	1	.02
3/4"	3/8" - 9/16"	12-24	43484	1/4-28	93484	1	.06
1"	5/8" - 11/16"	12-24	43486	1/4-28	93486	1	.06
1 1/4"	3/4" - 1"	12-24	43488	1/4-28	93488	1	.07

# SPIN-CLEAN<sup>TM</sup>

Single stem construction with silicone carbide impregnated nylon. This brush is made with a tapered trim to allow better cleaning of enhanced condenser tubes. The long bristles are designed oversized with the intention of bending over, allowing the aggressive filament to come into maximum contact with the lands. The short bristles are able to get into the grooves. These brushes provide better cleaning and longer life than conventional condenser cleaning brushes.



		IUDL	OMALL DIA.	LANGE DIA.
	PART #	SIZE	OF BRUSH	OF BRUSH
M48-W/8/42021Wast	93490	5/8"	5/8"	1"
	93491	1/2"	1/2"	3/4"
	93492	3/4"	3/4"	1-1/8"



## **RODS & ROD HANDLES**

- #13000 "T" handgrip handle with 1/4-28 cap nut. 4" long x 1/2" diameter. For use with #13010 rods.
- #13001 "T" handgrip handle with 12-24 screw. 4" long x 1/2" diameter. For use with #13002 and #13003 rods.
- #13002 24" aluminum extension rod 5/16" diameter with 12-24 male thread one end, female other. For use with 3/8" through 1" diameter condenser brushes.
- #13003 36" aluminum extension rod 5/16" diameter with 12-24 male thread one end, female other. For use with 3/8" through 1" diameter condenser brushes.
- #13010 36" galvanized steel condenser brush rod with 1/4-28 male thread one end and female thread at other end. For use with 1/4-28 male thread brushes.
- #13041 "T" handle with 8-32 male thread one end. For use with #13042 rods.
- #13042 24" x .162 dia. rod, 8-32 female thread one end, male 8-32 thread other end.
- #13044 48" x .162 dia. rod with 8-32 male thread one end, formed handle other end. For use with 1/4" and 5/16" dia. condenser brushes.



#### **ADAPTERS**

#13006 - 1/4-28 male thread to 12-24 male thread

#13008 - 1/4-28 female thread to 12-24 male thread





#### CLEVELAND CONTROLS AIR PRESSURE SENSING SWITCH

The model AFS-222 and AFS-262 are a general purpose proving switch designed for HVAC and Energy Management applications. It may be used to sense positive, negative, or differential air pressure. Installation kit included. Replaces White Rodgers 770-1.

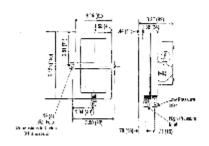
Set point range: 0.05 + .02" W.C. to 12.0" W.C. Operating temperature range: -40°F to 180°F Approvals: UL, FM, CSA

AFS-222-121 AFS-262-121

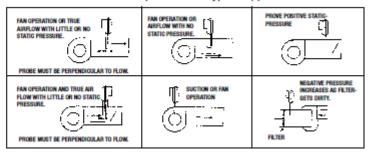




SERIES AFS SWITCHES



#### Location of Sample Lines for Typical Applications



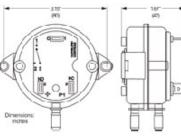


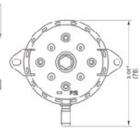
The NS2 series, Universal Small Footprint Air Switch, replaces hundreds of other small footprint exact replacement air switches today. Five separate springs cover ranges from .10"WC to 10"WC. Set screw adjustment with allen wrench included. Eight different orifice restrictors to set different time delays, and comes with two brackets for all applications.

#### NS2-0000-03











The EZS air switch line is the future of universal air pressure switches. Two line items allow you to replace any switch in the range of 0.15" - 10.0" W.C.

The "EZ Set" feature allows you to easily set EZS air switches without monometers, meters, or any tool other than the included allen wrench. Simply turn the dial and set it using the sight glass on the underside of the switch.

Out of the box, the switch comes in the historic RSS physical profile. If you have space limitations, or need to fit the NS2 profile area, once pressure is set, simply remove the outer case, and you have a set NS2 profile switch

EZS-495-11 (0.15" - 2.0")

EZS-498-13 (2.0"-10.0")







Fits Historic NS2 Profile



EZ Set with Allen Wrench

	EZS Series		RSS Series		NS2 Series
Part Number	EZS-495-11	EZS-498-13	RSS-495-11	RSS-498-13	NS2-0000-03
Setpoint Range (in. W.C.)	0.15" to 2.0"	2.0" to 10.0"	0.15" to 1.0"	1.0" to 4.0"	0.10" to 10.0"
Positive, Negative Differential Pressure	✓	✓	✓	✓	✓
UL, CUL, CSA, CE, AGA Approval	<b>✓</b>	✓	✓	✓	<b>✓</b>
-40 F to 190 F Temperature Range	✓	✓	✓	✓	✓
SPDT contacts rated for 100,000 cycles min.	<b>✓</b>	✓	✓	✓	<b>✓</b>
Contains Orifices for Time Delay Applications	✓	✓			✓
No Need to Select and Insert Spring	<b>✓</b>	✓	✓	✓	
'EZ' Set - No Tools Required	<b>✓</b>	✓			
Fits Both RSS and NS2 Physical Profile	<b>✓</b>	✓			
Future Availability	✓	✓			<b>√</b>



# CLEVELAND CONTROLS AIR PRESSURE SENSING SWITCH KIT



Series RSS Air Sensing Switch Kit contains compact, economical switches designed for a residential furnace and light commercial aftermarket applications. The RSS-495 switches have an adjustable set point range of 0.25" W.C. to 1.0" W.C. The RSS-498 switches have an adjustable set point range of 1.0" W.C. to 4.0" W.C. The field adjustability makes these switches ideal for aftermarket residential furnace applications, electronic air cleaners and humidifiers.

RSS-495-11 RSS-498-13







# Square Air Switch Tubing - Silicone

Square outside prevents kinking. Easily change out corroded tubing. 5' of tubing comes in each bag. Silicone material is easy to cut to size in the field and resistant to high temperatures.

**SQAST-SIL-5** 



# Square Air Switch Tubing - Neoprene

Square outside prevents kinking. Easily change out corroded tubing. 5' of tubing comes in each bag. Neoprene material is easy to cut to size in the field

**SQAST-5** 

# **CUSHIONED TUBING CLAMPS, GALVANIZED**

These channel mounted clamping systems are ideal for multiple line runs. They absorb shock and vibration, reduce unwanted noise, and prevent galvanic corrosion. The clamp features a unique shoulder stud which is securely fastened to one clamp half. This Controlled Squeeze design eliminates over-tightening and rotation while nylon insert nut assures a positive lock. Stocked with electro-dichromate finish, and available in stainless steel. The cushion is chemical resistant, and has a -50°F to 275°F operating range. A patented "Living Hinge" allows the cushion to be spread apart for quick, easy installation.

#### **Z004T008 thru Z066N074**



1/4"

Z004T008



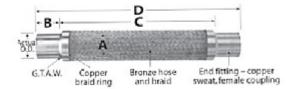
Z006T010	3/8"
Z008T012	1/2"
Z010T014	5/8"
Z012T016	3/4"
Z014T018	7/8"
Z016T020	1"
Z018T022	1-1/8"
Z020T024	1-1/4"
Z022T026	1-3/8"
Z024N028	1-1/2"
Z026N030	1-5/8"
Z028N032	1-3/4"
Z030N034	1-7/8"
Z032N036	2"
Z034N040	2-1/8"
Z036N042	2-1/4"
Z038N044	2-3/8"
Z040N046	2-1/2"
Z042N048	2-5/8"
Z046N052	2-7/8"
Z050N054	3"
Z050N056	3-1/8"
Z053N060	3-5/16"
Z056N062	3-1/2"
Z058N064	3-5/8"
Z064N072	4"
Z066N074	4-1/8"

# **Stainless Steel Vibration Absorbers**



Specify ESP Vibration Absorbers in refrigeration and air conditioning systems to:

- Reduce vibration and noise
- Extend compressor life
- Allow for horizontal or vertical movement
- Relieve stress on the compressor housing
- Reduce wear on the bearings



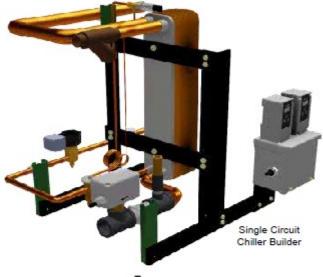
# Stainless Steel Vibration Absorbers Specifications

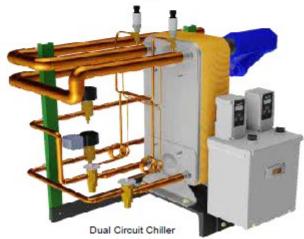
						Maximum
	To Fit Cop	per Tube	-A	"B"	"D"	Working
Part	Actual	Nominal	Nominal	Fitting	Assembly	Pressure
Number	0.D.	Tube	Hose I.D.	Length	Length	PSIG@70° F
VAB-2	1/4"	1/8"	1/4"	1/2"	7"	450
VAB-3	3/8"	1/4"	1/4"	1/2"	8-1/4"	450
VAB-4	1/2"	3/8"	3/8"	5/8"	9"	450
VAB-5	5/8"	1/2"	1/2"	7/8"	9-3/4"	450
VAB-6	3/4"	5/8"	1/2"	1"	10"	450
VAB-7	3/4"	5/8"	3/4"	1-1/8"	11-1/4"	440
VAB-8	7/8"	3/4"	3/4"	1-1/4"	11-1/2"	440
VAB-9	1-1/8"	1"	1"	1-1/2"	13"	400
VAB-10	1-3/8"	1-1/4"	1-1/4"	1-5/8"	14-3/4"	400
VAB-11	1-5/8"	1-1/2"	1-1/2"	2"	17"	400
VAB-12	2-1/8"	2"	2"	2-1/2"	20"	390
VAB-13SS	2-5/8"	2-1/2"	2-1/2"	3"	24"	340
VAB-14SS	3-1/8"	3"	3"	3-1/2"	27"	300

- 1. 1Minimum burst pressure is 5 times the maximum working pressure.
- 2. Hose may be helical or annular type.
- 3. Hose = C51000 (95/5) Braid = C22000 (90/10)
- 1. Length = D+1/4"
- 2. Hose is not to be used with ammonia refrigerants

# Chiller Builder Kits For Brazed Plate Evaporators

Contact ESP for part number information and pricing regarding chiller builder kits





# BUILD A COMPLETE WATER CHILLER QUICKLY AND ECONOMICALLY

#### CONNECTS TO YOUR CONDENSING UNIT

#### **IMMEDIATE AVAILABILITY**

Combine a Chiller Builder Kit with an Alfa Laval Brazed Plate Evaporator for a complete Low Side Chiller ready to be connected to your condensing unit. The Chiller Builder components and controls are properly matched to the evaporator, and can be used in either pump down and non-pump-down systems.

The evaporator and components are quickly assembled on the compact structural steel frame. The completed assembly can be conveniently located near the air handler or process load.

The Chiller Builder controls connect to the condensing unit thermostat terminals for simple and fool -proof installation and operation.

- Uses compact and efficient Brazed Plate Evaporators
- Available in single and dual refrigerant circuit models
- Available for R410A, R404A, R507, R22
- Brand name components
- Available in ranges from 2 to 80 tons
- Entire kit can be assembled in less than one hour
- Includes Digital Controls

#### **Included Components**

Structural Steel Framework | Electronic chiller controller with fault indicating lights | Temperature control | Electronic low pressure freeze protection switch | Expansion valve | Solenoids | Sight glass | Freezestat | Flow switch | Water strainer



#### **CHILLER BUILDER KIT**

#### Contact ESP for part number information and pricing regarding chiller builder kits

Chiller builder kits provide a simple solution for system installers. The systems include all of the components needed for the low side package and can be assembled in less than one hour.

TXKIT Single Circuit Standard Designs TXKIT are available in standard designs for water duty. They are available in 6 catalog models, which can be used with chiller barrels from 2 to 40 tons. The evaporator barrel is not included. All kits utilize brand name components.

TXKIT/DTXKIT Multiple Circuit Standard Designs

TXKIT/DTXKIT are available in standard designs for water duty. They are available in 9 catalog models, which can be used with evaporator barrels from 10 to 75 tons. The chiller barrel is not included. All kits utilize brand name components.

#### **Included Components**

- Control Power Supplies
- Expansion Valve
- Flow Switch
- Framework
- Freezestat
- Low Pressure Switch
- Piping
- Solenoids
- Temperature Controls

**Non-Approved Refrigerants** Unless Cleared by the Factory Ammonia/R717, due to copper tubing. R404A, R410A & R507A due to recommended operating pressures, custom units are available for these refrigerants.

#### **Other Refrigerants**

All other refrigerants must be approved by Standard Refrigera-tion/Alfa Laval before use.

#### **Alternative Options**

Kits with a supplied chiller barrel, use CBKIT. For a clean water alternative, use a BHE-KIT (brazed evaporator builder kit).



00402	68
00403	68
00405	68
00406	68
00408	68
00415	68
00442	68
00450	68
722	15
729	15
02026	72
6952	36
6953	36
6954	36
6955	36
6956	36
10001	71
10002	71
10003	71
10007	71
10209	66
10210	66
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13003	79
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13041	79
13042	79

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14404	67
14406	67
14408	67
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25405	74
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30666	76
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33126	75
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33312	75
33314	75
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36072	76
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41228	78



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41248	78
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76026	69
76200	68
76210	68
76220	68
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81018	74
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81025	74
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00966-6	66

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00996-12	66
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00998-100	66
00998-12	66
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07-100 / 08-100	23
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15-034 / 16-034	22
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15-100 / 16-100	22
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2007-33	63
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221-412	52
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221-413	52
221-413/996-010	52
221-415	52
221-415/996-010	52
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30T1	57
3C	43
40T	57
40T1	57

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43484/93484	79
43486/93486	79
43502/93502	70
43503/93503	70
43504/93504	70
43507/93507	70
43510/93510	70
43513/93513	70
43516/93516	70
43519/93519	70
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43533/93533	70
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43604/93604	70
43607/93607	70
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43613/93613	70
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43733/93733	69
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533-0024-36	64
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58-034 / 59-034	23
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58-114 / 59-114	23
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60-034	22
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6773-05	36
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6884-40	36
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810-C	50
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8732A3	1
8732B	1
8732B3	1
8732C	1
8732C3	1
8732W	1
8732W3	1
8736R	1
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A0340D114	31
A0580D100	31
A0780D114	31
A0780D114M	32
A10WPR	42
A1180D114	31
A1180D134	31
A1180D134M	32
A12WPR	42
A1380D134	31
A35WPR	42
AA0120D100	32
AA0380D100	32

AA0580D100	32
AA0780D114	32
AA1180D114	32
AA1380D134	32
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ABC15-R	49
ABC1-R	49
ABC20-R	49
ABC2-R	49
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ABC30-R	
ABC3-R	49
ABC4-R	49
ABC5-R	49
ABC6-R	49
ABC8-R	49
ABSP25	4
AC&RA	1
AC&RB	1
AC&RC	1
AC&RW	1
AFS-222-121	80
AFS-262-121	80
AGC1/2-R	49
AGC1/4-R	49
AGC1/8-R	49
AGC10-R	49
AGC1-1/2-R	49
AGC12-R	49
AGC15-R	49
AGC1-6/10-R	49
AGC1-R	49
AGC20-R	49
AGC2-1/2-R	49
AGC25-R	49
AGC2-R	49
AGC3/4-R	49
AGC3/8-R	49
AGC30-R	49
AGC3-R	49
AGC4-R	49
AGC5-R	49
AGC6-R	49
AGC8-R	49

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AGX1/4	49
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AGX2-1/2	49
AGX3	49
AGX3/8	49
AGX4	49
AGX5	49
ALDP	45
AP12	8
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ATC10	51
ATC15	51
ATC2	51
ATC20	51
ATC25	51
ATC3	51
ATC30	51
ATC4	51
ATC40	51
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ATM3	53
ATM5	53
AW12	13
AW58	13
BH1	16
BRT10	18
BS30	56
BUCKET-5GR	40
BUCKETLID	40
BUCKETSEAT	40
BURCKET-5GW	40
BX50	60
BY12	19
BY34	19
CC100	9
CC12	9
CGR10	17
C-IK55-A020	17
CO2-100	25
CO2-12	25
CO2-12T	25
CO2-20-100	25

CO2-20-12	25
CR32	59
CTB25	38
CV-2 DVS	61
CV-3 DVS	61
DLG-1	25
DLG-1	25
DVS-2	61
DVS-2	61
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EC-200	48
EL10	11
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FA6060	44
FB100	13
FF75	10
FG12	48
FLEXB-6	24
FLEXCON1	24
FLEXCON125	24
FLEXCON125150	24
FLEXCON150	24
FLEXCON2	24
FLEXCON23	24
FLEXCON3	24
FLEXCON34-6	24
FLEXCON-BULK	24
FM222	3
FP2	51
FP3	51
FRNR10	50
FRNR100	50
FRNR12	50
FRNR125	50
FRNR15	50
FRNR150	50
FRNR175	50
FRNR2	50
FRNR20	50
FRNR200	50
FRNR2-1/2	50

FRNR225	50
FRNR25	50
FRNR30	50
FRNR35	50
FRNR4	50
FRNR40	50
FRNR45	50
FRNR5	50
FRNR50	50
FRNR5-6/10-	50
FRNR60	50
FRNR6-1/4	50
FRNR70	50
FRNR8	50
FRNR80	50
FRNR90	50
FRSR10	50
FRSR100	50
FRSR12	50
FRSR15	50
FRSR175	50
FRSR2	50
FRSR20	50
FRSR25	50
FRSR30	50
FRSR3-2/10	50
FRSR35	50
FRSR40	50
FRSR45	50
FRSR5	50
FRSR50	50
FRSR60	50
FRSR70	50
FRSR8	50
FRSR80	50
FRSR9	50
FRSR90	50
FS1000	47
FS3000	47
FS5000	47
FS7000	47
FS9000	47
FSCM00	47
FW1701	15
G325A	7

GB10	33
GS516	13
H012FL034D	27,28
H012FL034T	27,28
H012FL100D	27,28
H012FL100T	27,28
H0120D100D	27,28
H0120D100T	27,28
H0340D114D	27,28
H0340D114T	27,28
H038FL034T	27,28
H038FL100D	27,28
H0380D034T	27,28
H0380D100D	27,28
H058FL100D	27,28
H058FL100T	27,28
H058OD100D	27,28
H058OD100T	27,28
H0580D114D	27,28
H0780D114D	27,28
H0780D114T	27,28
H0780D134D	27,28
H1180D114T	27,28
H1180D134T	27,28
H1180D14D	27,28
H1180D14D	27,28
H1380D134T	27,28
H1380D14D	27,28
HB34	48
HC12-100	55
HC12-25	55
HC12-50	55
HC14-100	55
HC14-25	55
HC14-50	55
HD32	58
HG-501A	48
HP215	19
HP510-115	19
НРСН	63
HPCH18	63
HPCH24	63
HPCH30	63
НРСН36	63
HPCH48	63

НРНК	63
HRK	51
HVACSC-1	62
HVN1	59
IS005	59
KTKR1	49
KTKR10	49
KTKR15	49
KTKR20	49
KTKR25	49
KTKR3	49
KTKR30	49
KTKR3-1/2	49
KTKR4	49
KTKR5	49
KTKR6	49
LD10	20
LDF357N-MPT	19
LDF359N-MPT	19
LW601	14
MDL10-R	49
MDL1-2/10-R	49
MDL15-R	49
MDL1-R	49
MDL20-R	49
MDL2-R	49
MDL30-R	49
MDL3-R	49
MDL4-R	49
MDL5-R	49
MDL6-R	49
MDL7-R	49
MDL8-R	49
MW10	16
NS2-0000-03	81
NT02	10
P30002	5
P30002	5
P30033	5
P30181	5
PB12-100	55
PB12-25	55
PB12-50	55
PB14-100	55
PB14-25	55
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PB14-50	55
PB16	6
PC100	8
PC12	8
PC14	8
PCL DISPLAY	21
PCL12	21
PCL14	21
PCL38	21
PCL58	21
PD12-2	55
PE44	17
PG100	8
PG14	8
PH10	18
POP10	11
P0P15	11
POP20	11
POP3	11
POP3Z	11
POP5	11
POP5Z	11
PP100	8
PP12	8
PP14	8
PUP63	7
PY38	19
QB1	20
QBA	20
RAD2	72
RC034-2	32
RC100-2	32
RC114-2	32
RC134-1	32
RH-10	18
RHB-82	46
RHB-82G	46
RS10	14
RS100	55
RS15	14
RS21	14
RS31	14
RS60	55
RS75	55
RSS-495-11	83

RSS-498-13	83
\$10	50
\$15	50
<b>S2</b>	50
S20	50
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S25	50
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S30	50
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\$3-2/10	50
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<b>S</b> 5	50
S6-1/4	50
\$8	50
SB30	39
SB72	39
SC1	50
SC10	50
SC15	50
SC2	50
SC20	50
SC25	50
SC3	50
SC30	50
SC35	50
SC4	50
SC40	50
SC45	50
SC5	50
SC50	50
SC6	50
SC60	50
SDT-25S	44
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SE45	44
SGRT	18
SH12KIT	64
SH12Y	64
SH18KIT	64
SH18Y	64
SL20	50
SL25	50

01.20	F0
SL30	50
SQAST-5	83
SQAST-SIL-5	83
SSU	51
SSY	51
ST1236-31	45
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T1-1/4	50
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T15	50
T1-6/10	50
T2	50
T2-/12	50
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T3-2/10	50
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T4-1/2	50
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T6-1/4	50
Т8	50
TECK50	61
TG007	57
TGII	57
TL15	50
TL20	50
TL25	50
TL30	50
TLFL	54
TP01CL	61
TP02CL	61
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TP08M	61
TP35	47
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TR034-6	33
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TTUL260	9
TTUL520	9
UD12	44
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UHS24	41
UHS99	41
V0120D100D	29
V0120D100T	29
V0380D034D	29
V0580D100D	29
V0580D100T	29
V0780D114D	29
V0780D114T	29
V1180D114D	29
V1180D114T	29
V1380D134T	29
VAB-10	85
VAB-11	85
VAB-12	85
VAB-13SS	85
VAB-14SS	85
VAB-2	85
VAB-3	85
VAB-4	85
VAB-5	85
VAB-6	85
VAB-8	85
VAB-9	85
VM116B	2
VM116G	2
VM116W	2
VP24	10
VR-554	35
WC05	38
WC10	38
WDRC 10 3	6
WDRC GAL	6
WF310	5
WM1	16
XHP222	3
XT150	2

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