### NOTE:

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## SPLIT SYSTEM AIR CONDITIONERS

13.4 SEER2 – R-410A – 1 PHASE 1.5 THRU 5 NOMINAL TONS MODELS: J4AC3018 - 3060









#### **CONDENSERS**

#### **DESCRIPTION**

The Oxbox line of heating and cooling products offer you Mexible and affordable options for your HVAC equipment needs. Oxbox air conditioners have been tested to perform even in the hottest climates, with equipment that's quiet, dependable, and affordable.

#### WARRANTY

Our innovative 1-10 registration warranty gives you maximum peace of mind. Plus, every piece of equipment is warranted to the home, not the homeowner—providing an extra measure of coverage when it comes time to sell ypur home.

1 Year: Unit Replacement

Compressors or coils fail, complete unit replacement.

10 Years: Standard Parts Warrantyh10 Years: Compressor Replacement

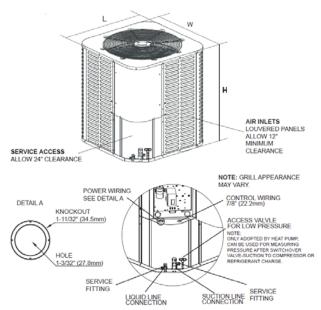
#### **FEATURES**

- General The J4AC is fully charged from the factory. This unit is designed to operate
  at outdoor ambient temperatures as high as 115°F. Cooling capacities are matched
  with air handlers and furnace coils that are AHRI certified. The unit is certified ETL.
  Exterior is designed for outdoor application
- Small Footprint Minimum footprint for easier handling, transportation, and installation.
- Casing Unit casing is constructed of heavy gauge, Galvanized steel and painted with a weather resistant powder coat on all grilles, panels, prepaint on all other panels. Salt spray rated to 500 hours.
- Refrigerant Controls Refrigerant system controls include condenser fan and compressor contactor.
- Rotary/hScroll Compressor Featrures include low vibration and noise.
- Consenser Coils The outdoor coil provides low airflow resistance and efficient heat flow transfer.
- Rugged Coil Protection Coils are protected from mechanical damage by a proven stamped steel coil guard design.
- Environmentally Friendly CFC-free R-410A refrigerant delivers environmentally friendly performance with zero ozone depletion.
- Top Discharge Warm air is blown up, away from the structure and any landscaping and allows compact location on multi-unit applications.
- Low Operating Sound Levels The sturdy cabinet and top design provides sound performance of 76 dBA or lower.
- Agency Listed Safety certified by ETL to UL 1995. Performance certified to AHRI Standard 210/240 in accordance with the Unitary Small Equipment certification program.h



#### PHYSICAL AND ELECTRICAL DATA

MODEL		J4AC18E 1000AA	J4AC24E 1000AA	J4AC30E 1000AA	J4AC36E 1000AA	J4AC42E 1000AA	J4AC48E 1000AA	J4AC60E 1000AA		
Unit Supply Vo	ltage			2	08-230V, 1o, 60	)Hz				
Normal Voltage			187 to 252							
Minimum Circu	it Ampacity	11.9	16.3	16.3	21.1	24.8	29.7	38.6		
Max. Overcurre	ent Device Amps	20	25	30	35	40	50	60		
Min. Overcurre	nt Device Amps	20	25	30	35	40	50	60		
Compressor Ty	уре	Rotary	Rotary	Rotary	Scroll	Scroll	Scroll	Scroll		
Compressor	Rated Load	8.2	11.8	11.8	15.1	18.5	22.4	29.5		
Amps	Locked Rotor	35.0	43.0	58.0	72.0	112.3	108	127.9		
Crankcase Heater		No								
Factory External Discharge Muffler		No								
HS Kit Required with TXV		Yes								
Fan Diameter I	nches	18-7/8	18-7/8	23-1/6	23-5/8	23-1/6	23-1/6	23-5/8		
	Rated HP	1/6	1/6	1/6	1/3	1/3	1/3	1/3		
Es Materia	Rated Load Amps	1.60	1.60	1.6	2.2	1.7	1.7	1.7		
Fan Motor	Nominal RPM	980	980	850	930	1075	1075	1075		
	Nominal CFM	1600	1900	2650	3100	3700	3700	4000		
	Face Area Sq. Ft.	10.0	10.0	12.8	13.6	17.4	17.4	18.4		
Coil	Rows Deep	1	2	2	2	2	2	Microchannel		
	Fins / Inches	19	21	21	21	21	21	Microchannel		
Liquid Line Set	OD (Field Installed)	3/8	3/8	3/8	3/8	3/8	3/8	3/8		
Vapor Line Set	OD (Field Installed)	3/4	3/4	3/4	3/4	3/4	7/8	7/8		
Unit Charge (L	bs Oz.)	4 - 4	5.0	5 - 12	5 - 12	7 - 9	7 - 12	8 - 3		
Charge Per Fo	ot, Oz.	0.62	0.62	0.62	0.62	0.67	0.67	0.75		
Operating Weig	ght Lbs.	108	119	136	147	191	189	200		



	D	imensions (Inches)	Refrigerant Connectio Service Valve Size		
Unit Model	L	W	н	Liquid	Vapor
J4AC3018E1000A	24	24	25		
J4AC3024E1000A	24	24	25		
J4AC3030E1000A	28	28	25		3/4
J4AC3036E1000A	30	30	25	3/8	
J4AC3042E1000A	28	28	33		
J4AC3048E1000A	28	28	33		7/8
J4AC3060E1000A	30	30	34		



RAC SERIES
SPLIT-SYSTEM AIR
CONDITIONERS
13 SEER – R-410A
1.5 THRU 5 NOMINAL TONS

### MODELS: RAC 18 THRU 60



#### DESCRIPTION

The 13 SEER Series unit is the outdoor part of a versatile climate system. It is designed with a matching indoor coil component from Johnson Controls Unitary Products. Available for typical applications this climate system is supported with accessories and documents to serve specific functions.

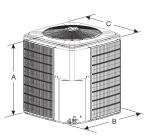
#### WARRANTY

Standard 5-Years limited parts warranty.
Standard 5-Years limited compressor warranty.
Extended 10-Years limited parts and compressor warranty
when product is registered online within 90 days of purchase for
replacement or closing for new home construction.

#### FEATURES

- Small Footprint Extremely lightweight with a compact footprint, it is a perfect fit for any application.
- Quality Condenser Coils The coil is constructed of aluminum microchannel tubing and enhanced aluminum fins for reduced size and increased officially
- Coil Protection Coils are protected from damage by a slotted, stamped steel coil guard.
- Optional Factory E-Coat Available ElectroFin® or factory approved equivalent (contact the factory for details) coated coil on select models.
- Protected Compressor Compressors are protected internally by a high pressure relief valve and a temperature sensor, and

- externally by the system high pressure switch. A factory installed liquid line filter-drier further protects the compressor against moisture and debris.
- Environmentally Friendly Refrigerant The R-410A refrigerant delivers environmentally friendly performance with zero ozone depletion.
- Durable Finish An automotive quality finish provides the ultimate protection from harmful UV rays and rust-creep, ensuring a long-lasting, high quality apprearance. A powder paint top coat is applied over a baked on primer using a galvanized, zinc coated steel base material.
- Lower Installed Cost Installation time and costs are reduced by easy power and control wiring connections. The unit is factory charged for a 15-foot lineset. The small base dimension means less space is required on the ground or roof.
- Top Discharge Warm air from the top mounted fan is blown up, away fro0m the structure and any landscaping. This allows compact location on multi-unit applications.
- Low Operating Sound Levels The upward air flow carries the normal operating noise away from the living area. The rigid top panel effectively isolates any motor sound. Isolator mounted compressor and the condenser coil muffle the normal fan motor and compressor operating sounds.
- Low Maintenance Long life, permanently lubricated motorbearings need no annual servicing.
- Easy Service Access Fully exposed refrigerant connections and a single panel covering the electrical controls make for easy servicing of the unit.
- Secured Service Valves Secured, re-usable service valves are provided on both the liquid and vapor sweat connections for ease of evacuating and charging.



Unit		Dimensions (Inches)	5	Refrigerant Connection Service Valve Size		
Model	Α	В	С	Liquid	Vapor	
18	28-1/4	24	24			
24	28-1/4	24	24		3/4"	
30	28-1/4	24	24			
36	28-1/4	29-1/2	29-1/2	3/8"		
42	30-1/4	29-1/2	29-1/2			
48	30-1/4	29-1/2	29-1/2		7/8"	
60	32-1/4	34	34			

#### PHYSICAL AND ELECTRICAL DATA

MODEL		RAC13J18 4S21	RAC13J24 4S21	RAC13J30 4S21	RAC13J36 4S21	RAC13J42 4S21	RAC13J48 4S21	RAC13J60 4S21			
Unit Supply Vo	ltage		208-230V, 1o, 60Hz								
Normal Voltage	e Range	187 to 252									
Minimum Circu	it Ampacity	10.0	12.4	14.7	17.9	21.5	21.1	34.5			
Max. Overcurre	ent Device Amps	15	20	25	30	35	35	60			
Min. Overcurre	nt Device Amps	15	15	15	20	25	25	35			
Compressor	Type	Rotary	Recip	Recip	Recip	Recip	Recip	Scroll			
Compressor	Rated Load	7.6	9.3	10.6	13.1	16	15.7	26.4			
Amps	Locked Rotor	40	43	54	74	88	84	134			
Crankcase Hea	ater	No	No	No	No	No	No	No			
Factory External Discharge Muffler		No	No	No	No	No	Yes	No			
Factory External Check Valve		No	No	No	No	No	No	No			
HS Kit Required with TXV <sup>4</sup>		Yes	Yes	Yes	Yes	Yes	Yes	No			
Fan Diameter I	nches	17.5	17.5	17.5	22.0	22.0	22.0	24.0			
	Rated HP	1/12	1/8	1/4	1/4	1/4	1/4	1/4			
Fan Motor	Rated Load Amps	0.5	0.8	1.4	1.5	1.5	1.5	1.5			
r arr iviolor	Nominal RPM	1100	1075	1100	850	850	850	850			
	Nominal CFM	1400	1950	2050	3200	3050	2950	3400			
	Face Area Sq. Ft.	9.60	9.60	9.60	13.07	14.16	14.16	18.68			
Coil	Rows Deep	1	1	1	1	1	1	1			
	Fin / Inches	23	23	23	23	23	23	23			
Liquid Line Set	OD (Field Installed)	3/8	3/8	3/8	3/8	3/8	3/8	3/8			
Vapor Line Set	OD (Field Installed)	5/8	3/4	3/4	3/4	7/8	7/8	7/8			
Unit Charge (L	bs Oz.)	3 - 3	3 - 13	3 - 14	4 - 9	4 - 10	4 - 9	5 - 8			
Charge Per Fo	ot, Oz.	0.58	0.62	0.62	0.62	0.67	0.67	0.67			
Operating Wei	ght Lbs.	97	129	131	145	164	173	220			





#### **ADD-ON COILS**

FOR USE WITH SPLIT-SYSTEM COOLING MODELS: J4GX, J4MX

600 - 2000 CFM 1.5 - 5 TON COILS

#### **UPFLOW/DOWNFLOW FULL CASED**

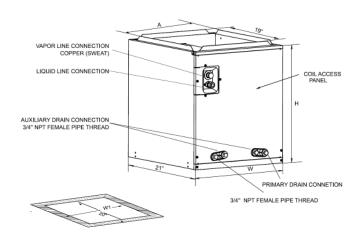
The Oxbox line of heating and cooling products offer you flexible and affordable options for your HVAC equipment needs. The function of indoor air coils is simple: heating or cooling your system's air and removing humidity. Oxbox indoor air coils make that process as effective as possible, maximizing the efficiency of all system components—and keeping you as comfortable as possible in all seasons.

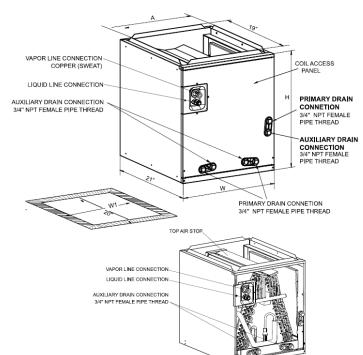
#### **Dimensions - J4GX Up/Downflow Full Cased Coils**

		Dime	nsions		Ref	rigerant
Models <sup>h</sup>	Height Width Duct		Widths	Connections		
	Н	W	Α	W1	Liquid	Vapor
J4GXCB002	20"	17-1/2"	16"	16-1/2		
J4GXCA003	20"	14-1/2"	13"	13-1/2		3/4
J4GXCB004	20"	17-1/2"	16"	16-1/2"		
J4GXCC005	20"	21"	19-1/2"	20"	3/8	
J4GXCC007	26"	21"	19-1/2"	20		
J4GXCD008	26"	24-1/2"	23"	23-1/2"		7/8
J4GXCD010	30"	24-1/2	23"	23-1/2		

#### **Dimensions - J4MX Multi-Position Full Cased Coils**

		Dime	nsions		Refrigerant	
Models	Height	Height Width		Opening Widths		ections
	Н	W	Α	W1	Liquid	Vapor
J4MXCA003	20"	14-1/2"	13"	13-1/2		
J4MXCB004	20"	17-1/2"	16"	16-1/2		3/4"
J4MXCC005	20"	21"	19-1/2"	20"		
J4MXCB006	26"	17-1/2"	16"	16-1/2"		
J4MXCC007	26"	21"	19-1/2"	20"	3/8	
J4MXCD008	26"	24-1/2"	23"	23-1/2"		
J4MXCC009	30"	21"	19-1/2"	20"		7/8
J4MXCD010	30"	24-1/2"	23"	23-1/2"		







#### **FOR USE WITH SPLIT-SYSTEM COOL-ING & HEAT PUMPS**

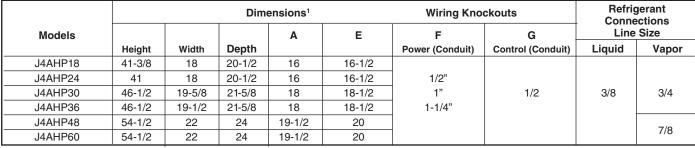
#### **MODELS: J4AHh SERIES**





#### **DIMENSIONS & DUCT CONNECTION DIMENSIONS**

#### **DIMENSIONS**



<sup>1</sup> All dimensions are in inches

#### PHYSICAL & ELECTRICAL DATAHH

Models		18B	24B	30B	36B	48C	60C		
Blower - Diam	eter x Width	10 x 8	10 x 8	10 x 10	10 x 10	10 x 10	10 x 10		
Matau	HP	1/8 HP	1/3 HP	1/5 HP	1/2 HP	2/5 HP	1/2 HP		
Motor	Nominal RPM	705	1050	903	1050	925	990		
Voltage		208/230	208/230	208/230	208/230	208/230	208/230		
Full Load Amp	s @230V	1.36	2.6	1.8	3.0	3.01	3.8		
	Туре	DISPOSABLE OR PERMANENT							
Filter <sup>1</sup>	Size	16 x 20 x 1	16 x 20 x 1	18 x 20 x 1	18 x 20 x 1	20 x 22 x 1	20 x 22 x 1		
	Permanent Type Kit								
Shipping / Ope	erating Weight (lbs.)	117/104	114/101	143/128	141/125	177/159	177/159		

#### 1. Field supplied.

#### SINGLE PIECE PSC AIR HANDLERS

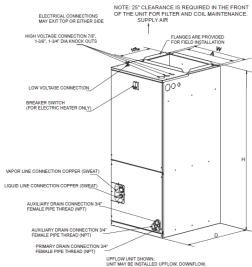
#### **DESCRIPTION**

The Oxbox fan coil line offers you flexible and affordable options for your HVAC equipment needs. It's also the ultimate in application flexibility. This unit may be used for upflow, downflow, horizontal right, or horizontal left applications.

- Unique Cabinet Design-Metal shell and glass cotton thermal insulation layer
- Multi-Position UP/Down Flow Horizontal Left /Right
- Braze in Refrigerant Connection
- Primary/Secondary Condensate Connections
- Blower with Integrated Slide Deck for Easy Removal
- Inner-groove aluminum tube and high-efficiency aluminumfin Coil with Integrated Slide Deck for Easy Removal
- More auxiliary Electric Heaters optional
- PSC 3 Speed Motor
- High Efficiency
- Integrated Horizontal Drain pans and metal Vertical Drain
- Fused 24V Power
- Suitable for Manufactured/Mobile Home Use.

#### WARRANTY

Standard 5-year limited parts warranty.





#### SINGLE PIECE PSC AIR HANDLERS

#### **ELECTRICAL DATA FOR SINGLE SOURCE POWER SUPPLY: 208/230-1-60**

				Field '	Wiring	
ir Handler	Heater	Heater	Min. Circu	it Ampacity	M	OP. <sup>1</sup>
Models	Models	KW	208V	230V	208V	230V
	JAYHTR1A05BRKR	5	24.4	27.9	25	25
18	JAYHTR1A08BRKR	7.5	35.7	40.9	40	45
	JAYHTR1A10BRKR	10	47	53.9	50	60
	JAYHTR1A05BRKR	5	25.9	29.4	30	30
24	JAYHTR1A08BRKR	7.5	37.2	42.4	40	45
	JAYHTR1A10BRKR	10	55.4	55.4	50	60
	JAYHTR1A05BRKR	5	25.5	29	30	35
	JAYHTR1A08BRKR	7.5	36.8	42	40	45
30	JAYHTR1A10BRKR	10	48.1	55	50	60
	JAYHTR1A15BRKR	15	48.1	55	50	60
	JAYHTR1A05BRKR	5	26.4	29.9	30	30
36	JAYHTR1A08BRKR	7.5	37.7	42.9	40	45
	JAYHTR1A10BRKR	10	49	55.9	50	60
	JAYHTR1A15BRKR	15	49	55.9	50	60
	JAYHTR1A20BRKR	20	49	55.9	50	60
	JAYHTR1A05BRKR	5	26.8	30.3	30	35
	JAYHTR1A08BRKR	7.5	38.1	43.3	40	50
48C	JAYHTR1A10BRKR	10	49.4	56.3	50	60
	JAYHTR1A15BRKR	15	49.4	56.3	50	60
	JAYHTR1A20BRKR	20	49.4	56.3	50	60
	JAYHTR1A05BRKR	5	28.3	31.8	30	40
	JAYHTR1A08BRKR	7.5	39.6	44.8	40	45
	JAYHTR1A10BRKR	10	50.9	57.8	60	60
60D	JAYHTR1A15BRKR	15	50.9	57.8	60	60
	JAYHTR1A20BRKR	20	50.9	57.8	60	60

<sup>1.</sup> MOP = Maximum Overcurrent Protection device; must be HACR type service disconnect or time delay fuse. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

## Wall-Mounted Heat Pumps E9RKUA / E12RKUA / E18RKUA / E24RKUA

## **Panasonic**



Indoor Unit CS-E9RKUA / CS-E12RKUA



Outdoor Unit CU-E9RKUA / CU-E12RKUA



Wireless Remote Controller (Included)



Wired Remote Controller (CZ-RD516C-1) (Optional)



Indoor Unit CS-E18RKUA / CS-E24RKUA



Outdoor Unit CU-E18RKUA / CU-E24RKUA



Wireless Remote Controller (Included)



Wired Remote Controller (CZ-RD516C-1) (Optional)

Model No.			E9	RKUA	E1	2RKUA	E18	RKUA	E24R	KUA	
Unit Model No.			Indoor Unit	Outdoor Unit	Indoor Unit	Outdoor Unit	Indoor Unit CS-E18RKUAW	Outdoor Unit CU-E18RKUA	Indoor Unit CS-E24RKUAW	Outdoor Uni	
Performance & Electrical I	Ratings										
Capacity	Cooling	Btu/h	9.000 (4.	100-10,200)	11.500 (4	1,100–13,300)	17.200 (5.8	800-19,800)	24,000 (5,8	00-27.200)	
	Heating	Btu/h		.100–14.100)		1,100–16,300)		800–22,000)	28,800 (5,8		
Moisture Removal	High	Pints/H	,,,,,	1.3	.,	1.7	, ,	3.0	7.6		
Dry Air Flow	High	CFM		425		450	6	570	670		
SEER	Cooling			23.0	22.5		19.5		19	.0	
EER	Cooling			13.0	12.5		1	3.2	10	.2	
HSPF	Heating			11.0	11.0		1	0.0	10	.0	
Power Supply	V. Phase, Hz		230/208	. 1PH. 60Hz	230V, 1PH, 60Hz		230 / 208V. 1PH. 60Hz		230 / 208V.	1PH. 60Hz	
Running Amps	Cooling	Α	3.	2/3.6	4.	2 / 4.7	6.3 / 7.0		10.8 /	11.9	
•	Heating	Α	5.1 / 5.7		5.6 / 6.3		8.3 / 9.3		11.4 /	12.6	
Power Input	Cooling	W	690 (	250-850)	920 (2	920 (250-1,150)		1,300 (430–1,600)		0-2.720)	
	Heating	W	1,120 (200–1,500)		1,250 (	200–1,710)	1,750 (380–1,800)		2,500(380-2,660)		
Back-up Heater	<u> </u>	kW	, , ,				, , , ,			. ,	
Fuse or Circuit Breaker C	apacity	Α	15			15	1 :	20	25		
eatures									_	-	
Controls			Micro	processor	Micro	processor	Microp	rocessor	Micropro	ocessor	
Low Ambient Control			Eq	uipped	Ec	uipped	Equ	ipped	Equip	Equipped	
Wireless Controller			Inc	cluded	In	cluded	Incl	luded	Inclu	ided	
Wired Remote Controller	(optional)		CZ-R	D516C-1	CZ-F	RD516C-1	CZ-RE	0516C-1	CZ-RD516C-1		
Fan Speeds			5 Speeds + Auto		5 speeds + Auto		5 Speed	ds + Auto	5 Speed	s + Auto	
Timer			24-hr	Program	24-hi	r Program	24-hr Program		24-hr Program		
Air Deflection	Horizontal		M	anual	Manual		Automatic		Automatic		
	Vertical		Au	tomatic	Au	tomatic	Auto	omatic	Autor	natic	
Air Filter			Washable + A	nti Microbial Filter	Washable + A	Anti Microbial Filter	Washable + Anti Microbial Filter		Washable + Ant	i Microbial Filte	
Refrigerant			R	-410A	R	-410A	R-4	410A	R-4	10A	
Refrigerant control			Electric Ex	pansion Valve	Electric Ex	cpansion Valve	Electric Exp	ansion Valve	Electric Expa	ansion Valve	
Operation Sound	In(Hi/Me/Lo/Qt)	dB-A	40	/25/20	43	3/28/20	47 / 3	39 / 36	48 / 4	0 / 37	
	Outdoor(Hi)	dB-A		47		48	4	49	5	1	
Refrigerant Piping	Туре			lare		Flare	F	lare	Fla	ire	
	Discharge	inches		1/4"		1/4"		/4"	1/-	4"	
	Suction	inches		3/8"		1/2"	1	/2"	5/8	8"	
Refrigerant Pipe Length		Ft.	Ma	x. 65.6	Ma	ax. 65.6	Max	c. 100	Max.	100	
Elevation Difference	Outdoor Above	Ft.	Ma	x. 49.2	Ma	ax. 49.2	Max	c. 49.2	Max.	49.2	
	Outdoor Below	Ft.	Ma	x. 49.2	Ma	ax. 49.2	Max	r. 49.2	Max.	49.2	
Dimensions & Weight			Indoor Unit	Outdoor Unit	Indoor Unit	Outdoor Unit	Indoor Unit	Outdoor Unit	Indoor Unit	Outdoor Uni	
Height		inches	11-7/16"	21-9/32"	11-7/16"	21-9/32"	11-7/16"	31-5/16"	11-7/16"	31-5/16"	
Width		inches	34-9/32"	30-23/32"	34-9/32"	30-23/32"	42-5/32"	34-15/32"	42-5/32"	34-15/32"	
Depth		inches	8-7/16"	11-13/32"	8-7/16"	11-13/32"	9-15/32"	12-5/8"	9-15/32"	12-5/8"	
Net Weight		Lbs.	20.0	82.0	20.0	82.0	26.0	132.0	26.0 13		

<sup>\*\*</sup> This is maximum elevation difference when the indoor unit is located above the outdoor unit.



## **PTAC UNITS**

#### **PTW-Series**

#### **MAIN FEATURES:**

- Energy Efficient Operation with High EER (up to 11.6)
- Quiet 2 Fan Motors operation
- Industry Standard size (42' x 16')
- Attractive Appearance
- Easy to Operate Controls
- Solid State Control
- Fan Cycle Switch
- Discrete Electric Resistance Heater
- Freeze Protection
- 2-way Adjustable Discharge Louver
- Easy to Clean Up-front Filters

- Heat Pump Operation as low as 25°F (H/P only)
- Indoor Coil Freeze Control
- Manual Ventilation Control up to 70 CFM
- Weather-Resistant Super Seal
- Front Desk Control Capability
- Remote Control Capability
- Temperature Limiter
- · Load Shedding Control Capability
- Random Restart Circuit
- Automatic Emergency Heat
- Compressor Restart Function



#### **MODEL IDENTIFICATION**

#### PTW 09 2 \* C 2

SANYO Packaged Terminal A/C J

Nominal Cooling Capacity 06: 7000BTU 12:12000BTU 09: 9000BTU

15:15000BTU

 Development Series # Unit Type: C: Cooling Only w/E. Heater H: Heat Pump w/E. Heater Heater Size ( Refer to the table below )

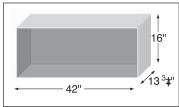
Voltage:

2: 230/208V 3: 265V

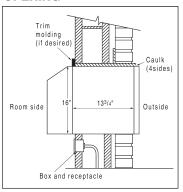
#### **Heater Specification Table**

Heater		230 / 208	/ Model					
Designator	Heater Amp	Watt	Min. Amp	BTU/h				
2	11.1/10.0	2550/2090	15	8600/7100				
3	15.0/13.6	3450/2820	20	11700/9600				
5	21.7/19.7	5000/4090	30	17000/13900				
Heater	265V Model							
Designator	Heater Amp	Watt	Min. Amp	BTU/h				
3	11.3	3000	15	10200				
4	15.1	4000	20	13600				
5	18.9	5000	30	17000				

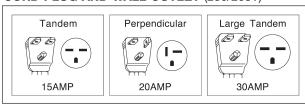
#### WALL CASE DIMENSIONS



#### **MINIMUM WALL SLEEVE OPENING**



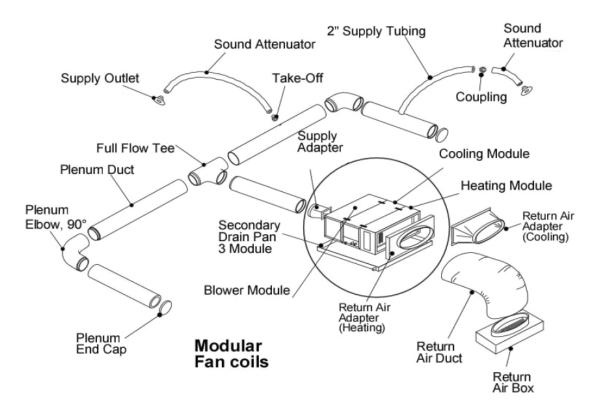
#### **CORD PLUG AND WALL OUTLET (230/208V)**

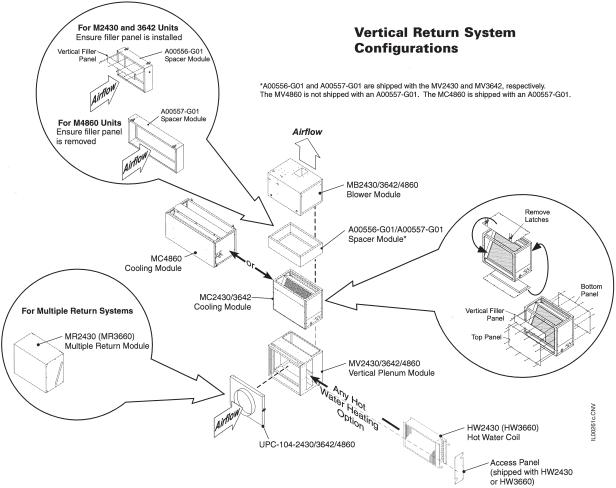


#### SPECIFICATION

SPECIFICATION								
			coc	LING & ELECTF	IC HEATING MO	DEL		
Model Number	PTW0723H5C	PTW0734H5C	PTW0923H5C	PTW0934H5C	PTW1223H5C	PTW1234H5C	PTW1523H5C	PTW1534H5Ch
Voltage Rating	230/208	265	230/208	265	230/208	265	230/208	265
Cooling Capacity (BTU/h)	7100/7000	7100	9100/8900	9100	12000/11900	12000	14200/14000	14200
EER	11.6/11.6	11.6	11.4/11.4	11.4	10.9/10.9	10.9	9.5/9	6 9.5
Power (Watts)	610/600	610	800/780	800	1100/1090	1100	1490/1460	1490
Amp F.L.	2.7/2.9	2.4	3.5/3.8	3.1	4.9/5.4	4.2	6.9/7.2	5.8
Amp L.R.	17	13	22	15	29	24	41	31
CFM Hi	315/285	315	315/285	315	410/370	410	410/370	410
CFM Low	275/235	275	275/235	275	355/320	355	355/320	355
Moisture Removal (Pints/h)	1.8	1.8	2.3	2.3	2.8	2.8	3.8	3.8
Sensible Heat Ratio	0.71	0.71	0.71	0.71	0.69	0.69	0.65	0.65
Vent CFM	65	65	65	65	70	70	70	70
Weight (Ship/Net)	110/95	110/95	110/95	110/95	120/105	120/105	120/105	120/105







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The Unico System is a small-duct central heating and air conditioning system that utilizes compact, modular air handlers and flexible 2" supply tubing to supply conditioned air to homes and commercial spaces. The flexible supply tubing snakes through a structure's existing cavities, eliminating the need for extensive remodeling or the construction of soffits or other concealments. This tubing terminates in round, plastic or wood outlets, about the size of a CD, that can be painted or stained to match any décor. A slotted outlet is also available.

The Unico System is 1/3 the size of conventional HVAC systems and can fit into smaller spaces. Once installed, the system is virtually invisible

The modules can be arranged in a horizontal, upflow, or downflow configuration.

Blowers suffixed with an "L" are low speed modules intended for new systems and most replacement applications and provide improved efficiency and radiated sound levels. Units suffixed with an "H" are high-speed modules intended for replacement installations with existing Unico System and other high static ducts that are restrictive and impractical to upgrade.

The Unico System operates at a higher static pressure than conventional duct systems and has unique design and layout requirements for proper air distribution. It is important that the manufacturer's installation instructions be followed exactly to achieve maximum effectiveness.



#### **BLOWER/MODULE**

Match blower module with appropriate cooling/heat pump module (and/or heating module if hot water or electric heat are required).

LCB Blower modules have an electronic enhanced control board.

					CFM Dimensions (In.)		(In.)	Shipping	
PSC Motor	Usage	Voltage	Tonnage		@1.5" ESP	W	. D	. н	Wgt.
U1218L-1ST2EX	Blower & Coil	208-230/1/60	1 to 1 1/2		370	20	38	12	100
M2430BL2-ST2	Blower	208-230/1/60	2 to 2 1/2		600	25	13.75	17.5	62
M3036BL2-ST2	Blower	208-230/1/60	2 1/2 to 3		1000	30	13.75	17.5	72
M3642BL2-ST2	Blower	208-230/1/60	3 to 3 1/2		1000	38	13.75	17.5	72
M4860BL2-ST2	Blower	208-230/1/60	4 to 5		1250	38	13.75	17.5	85
ECM Motor, SMAF	ECM Motor, SMART Board								
U1218L-1EC1EX	Blower & Coil	115/1/60	1 to 1 1/2	30	0, 1.2" ESP, 160V	V 20	38	12	100
U1218L-1EC2EX	Blower & Coil	208-230/1/60	1 to 1 1/2	30	0, 1.2" ESP, 160V	V 20	38	12	100
M2430BL1-EC1	Blower	115/1/60	2 to 2 1/2	50	0, 1.2" ESP, 206V	V 25	13.75	17.5	62
M2430BL1-EC2	Blower	208-230/1/60	2 to 2 1/2	50	0, 1.2" ESP, 206V	V 25	13.75	17.5	62
M3036BL1-EC1	Blower	115/1/60	2 1/2 to 3	50	0, 1.2" ESP, 206V	<b>V</b> 30	13.75	17.5	62
M3036BL1-EC2	Blower	208-230/1/60	2 1/2 to 3	50	0, 1.2" ESP, 206V	<b>V</b> 30	13.75	17.5	62
M3642BL1-EC1	Blower	115/1/60	3 to 3 1/2	75	52, 1.2" ESP, 280V	<i>y</i> 38	13.75	17.5	72
M3642BL1-EC2	Blower	208-230/1/60	3 to 3 1/2	75	52, 1.2" ESP, 280V	<i>y</i> 38	13.75	17.5	72
M4860BL1-EC1	Blower	115/1/60	4 to 5	100	00, 1.2" ESP, 346\	V 38	13.75	17.5	72
M4860BL1-EC2	Blower	208-230/1/60	4 to 5	100	00, 1.2" ESP, 346\	V 38	13.75	17.5	72



#### **COOLING MODULE**

These evaporator coil modules can be easily installed with the matching Unico System blower modules. M1218AC includes coil.

• Use unit width as a selection guide

			Dimensions (In.)		Shipping	
Part No.	Usage	Tonnage	W	D	Н	Wgt. (Lbs.)
M2430CL1-B	Cooling, R410A	2 to 2 1/2	25	13.75	17.5	48
M3036CL1-B	Cooling, R410A	2 1/2 to 3	30	13.75	17.5	67
MC3642CL1-B	Cooling, R410A	3 to 3 1/2	38	13.75	17.5	74
M4860CL1-B	Cooling, R410A	4 to 5	38	24	17.5	67
M2430CL1-C	Chilled Water Cooling Module	2 to 2-1/2	25	13.75	17.5	48
M3036CL1-C	Chilled Water Cooling Module	2-1/2 to 3	30	13.75	17.5	67
M3642CL1-C	Chilled Water Cooling Module	2-1/2 to 3	38	13.75	17.5	67
M4860CL1-C	Chilled Water Cooling Module	4 TO 5	38	24	17.5	105

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#### HIGH PRESSURE AIR CONDITIONING





#### **HEATING MODULE**

Match with appropriate blower module for heating only applications or to improve cooling air flow and provide for future heat capability (sleeve only-add appropriate coil).

				Dimensions (In.)		Shipping	
Part No.	Tonnage	Capacity (BTUH)	Description	W	D	. н	Wgt. (Lbs.)
MH2430	2 to 2 1/2		Sleeve only	25	12	17 1/2	20
MH3660	3 to 5		Sleeve only	38	12	17 1/2	27
HW2430	2 to 2 1/2	73800	Hot Water Coil only	_	_	_	33
HW3660	3 to 5	120000	Hot Water Coil only	_	_	_	48



#### **ELECTRIC HEAT COIL**

The electric furnaces are designed to provide primary heating or auxiliary heating in a heat pump system.

Ships with a 10" round adapter.All units 230v/1ph.

Part No.	K.W.	System Matchup	Min. CFM
WON0202	2	All	200
WON0502	5	All	250
WON0752	7.5	All	300
WON1002	10	2430, 3642, 4860	500
WON1502	15	2430, 3642, 4860	600
WON2002	20	3642,4860	800



#### HORIZONTAL RETURN PLENUM

Vertical plenum kits include Plenum Module, Spacer Module (except 4860), pleated filter, 2 insulated filler plates and 2 brackets (except 4860), screws, latches latch keepers and insulation strips.

		Dimensions (In.)			
Part No.	Tonnage	L	W	Н	
MR2430	2 to 2 1/2	25	13.75	17.5	
MR3660	3 to 3 1/2	38	13.75	17.5	



### RETURN AIR ADAPTER, HEATING MODULE

- Mates directly to heating module
- No additional fabrication
- Use for horizontal or vertical installations
- Height 17.5 in.

Part No.	Usage	Width (In.)	Duct Dia. (In.)
UPC104-1218	1218	20	12
UPC104-2430	2430	25	14
UPC104-3036	3036	30	16
UPC104-3642	3642	38	18
UPC104-4860	4860	38	20



#### **VERTICAL RETURN PLENUM**

The MV module features a built in secondary drain pan with a 3/4" PVC socket connection, pleated filter, and place for an optional hot water coil.

		Dimensions (In.)		
Part No.	Tonnage	L	W	Н
M2430V1	2 to 2 1/2	25	17.5	18.25
M3036V1	2 1/2 to 3	30	17.5	18.25
M3642V1	3 to 3 1/2	38	17.5	18.25
M4860V1	4 to 5	38	23	18.25



#### RETURN GRILLE/FILTER

Includes throwaway filter, 2 duct bands and clips.

Note: Unico supplies a return duct system, but field supplied systems are acceptable as long as pressure drop including filter does not exceed .15" W.G.

		Dimensions (In.)		
Part No.	Tonnage	L	W	Duct
UPC01-1218	1 to 1 1/2	15.5	10	12
UPC01-2430	2 to 2 1/2	25.25	14.25	14
UPC01-3036	2 1/2 to 3	30.25	14.25	16
UPC01-3642	3 to 3 1/2	30.25	14.25	18
UPC01-4860	4 to 5	30.25	24.25	20



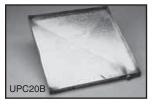
#### **SUPPLY AIR PLENUM ADAPTER**

- 1" insulation blanket provided
- Transitions blower module to indicated round duct

Part No.	Usage	Diameter (In.)	Length (In.)
UPC61-1218	1218	7	12
UPC61-2430	2430	7	12
UPC61-3036	3036	9	18
UPC61-3642	3642	9	18
UPC61-4860	4860	10	18

#### HIGH PRESSURE AIR CONDITIONING

## The Unico System®



#### **SECONDARY DRAIN PAN**

• For added protection against condensate drainage

			Dimensions (In.)		
Part No.	Usage	Modules	L	W	Н
UPC94	1218	1	42	24	1.5
UPC20B	2430	2	31.5	29	1.5
UPC20C	2430	3	43.75	29	1.5
UPC27B	3036	2	31.5	34	1.5
UPC27C	3036	3	43.75	34	1.5
UPC24B	3642	2	31.5	42	1.5
UPC24C	3642/4860	3	43.75	42	1.5
UPC24D	4860	3	54	42	1.5



#### **CRIMPING TOOL**

Part No.	Description	
UPC54	Clamp Pliers	
UPC55	Hole Cutter	



#### **OUTLET KIT, 2 INCH**

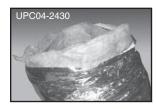
Kits include list below plus specific itemized takeoffs.
UPC56B supply outlet (off-white)
UPC53 scrim core clamp "575"
UPC52 supply tube clamp "605"



## RETURN AIR ADAPTER, COOLING MODULE

• Includes insulation wrap shipped loose

		Dimensions (In.)				
Part No.	Usage	L	Н	Depth	Duct	
UPC59-2430	2430	23	13.5	11.5	14	
UPC59-3036	3036	27	13.5	11.5	16	
UPC59-3642	3642	35	13.5	10	18	
UPC59-4860	4860	35	11.5	15	20	



#### **RETURN AIR DUCT**

• 10 Ft

Part No.	R Value	Usage	Duct Dia. (In.)
UPC04-1218	R4.2	1218	12
UPC04-2430	R4.2	2430	14
UPC04-3036	R4.2	3036	16
UPC04-3642	R4.2	3642	18
UPC04-4860	R4.2	4860	20

UPC51 toggle and screw
UPC35 balancing orifice kit
UPC42 winter shutoff
UPC38 supply duct coupling
Takeoff balancing cap

Part No.	Description	Includes Above Plus
UPC80F-1	Fiberglass Single Outlet Kit	UPC23 Fiberglass Takeoff + UPC26C 12' Sound Alternator tube
UPC89F	Fiberglass Multi-Install Kit	UPC23 Fiberglass Takeoffs
UPC80M-1	Metal Single Outlet Kit	UPC28 Metal Takeoff + UPC26C 12' Sound Alternator tube
UPC89M	Metal Multi-Install Kit	UPC28 Metal Takeoffs



#### **SOUND ATTENUATOR**

- Tough aluminized mylar outer wrap
- Spun-bonded nylon and helical wire core
- Fully insulated
- 12' length
- Certified as an air duct per UL181

Part No.	ID (In.)	R-Factor	Pkg. Quantity
UPC26C	2.0	R-3.2	6



#### **SUPPLY TUBING**

- Tough aluminized mylar outer wrap
- Two-ply aluminum core
- 25' length
- Certified as an air duct per UL181

Part No.	ID (In.)	R-Factor	Pkg. Quantity
UPC25	2	R-3.2	4

#### HIGH PRESSURE AIR CONDITIONING





#### **SLOTTED OUTLET**

0
UPC58125

#### **SUPPLY TERMINATOR**

Part No.	Description
UPC67A	90⊠ Slotted Outlet w/hardware
UPC68	Straight Slotted Outlet w/hardware

Part No.	Description
UPC56B	Standard 0° Outlet, 2.0"
UPC57	Oak Face 0° Outlet, 2.0"



Part No.

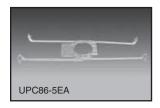
UPC45

UPC51

Part No.

UPC42

#### **OUTLET ACCESSORIES**



#### **PLASTER FRAME KIT**

Designed for locating outlet before sheetrock is applied (for new construction)

- 2 Left hanger bars
- 2 Right hanger bars
- 1 Plaster frame

Part No.	Includes above plus
UPC86	Plaster Frame Kit, pkg. 5



#### WINTER SHUTOFF

Description

Outlet Deflector, 2", each

Outlet Toggle and Screw pkg. 10



#### **BALANCING ORIFICE KIT**

Takeoff kit includes: 3 disks 15% - 50%

Outlet kit includes: 3 caps 15% - 50%

Part No.	Description
UPC35-15	Takeoff Orifice Kit
UPC36-15	Outlet Orifice Kit



#### **PLENUM TAKE OFF**

Description

Winter Supply Shutoff, 2"

- Provides positive connection to ductwork
- UPC23 for round or square duct



#### **SUPPLY DUCT COUPLING**

Includes tubing clamps and tape rings

1000		
Part No.	Tube Diameter (In.)	Description
UPC23B	2.0	For 1" Fiberglass
UPC28	2.0	For Metal Includes Tane Ring Gasket

Part No.	Description
UPC38C10EA	Supply Connector, 2.0", ea



**TUBING CLAMP** 



**EXPANSION VALVE, R410A** 

Part No.	Description
UPC52	Supply Tubing Clamp, 2", pkg 50
UPC53	Sound Atten. Tube Clamp, 2", pkg 50

Part No.	Usage
A00805013	2 Ton, A/C
A00808014	3 to 3 1/2 Ton, A/C
A00805015	4 Ton, A/C
A00808014	3 to 3 1/2 Ton, Heat Pump
A00808015	4 Ton, Heat Pump



#### CONDENSATE PUMPS

#### **MEDIUM CONDENSATE PUMP - CB15 Series**

These are Beckett's most popular and dependable units. They can handle high acidity condensation produced by High Efficiency furnaces. Units include a high impact polystyrene tank with a capacity of 1.7 U.S. quarts, a flame retardant plastic cover, 3/8" O.D. check valve, stainless steel shaft and a 6 ft power cord with a 3 prong plug. Mounting slots are provided on each end of the tank cover. 20 ft of clear vinyl tubing.



Model									Gallo	ns pei	hour	@ 60 H	lz & Ra	ted Vol	tage	Safety	Check	Cord	Shut
Number	Н	W	L	Outlet	Volts	Amps	Watts	H.P.	1'	5'	10'	15'	20'	30'	40'	Switch	Valve	w/plug	Off (ft)
CB151UL	6.25"	5"	11-1/8	3/8" O.D.	115	1.1	60	1/50	85	70	50		_		_	Υ	Υ	Υ	15'
CB201TUL*	6.25"	5"	11-1/8	3/8" O.D.	115	2.2	85	1/30	105	95	73	36	_	_	_	Y	Υ	Υ	
20'																			

<sup>\*</sup>Includes tubing

#### COMPACT MODEL LOW PRO® CONDENSATE PUMP CL20 Series

This High Efficiency furnace model is compact and has a Low Profile so that they can be used in applications where space is limited. This unit is capable of handling high acidity condensation. The shut off height 🛘 for the CL20 is 20 ft. Model includes a built in safety switch, 3/8" O.D. check valve, stainless steel shaft, 6 ft power cord with a 3 prong plug, high impact polystyrene tank and a flame retardant plastic cover.



Model									Gallo	ns pe	hour	@ 60 H	z & Ra	ted Vo	tage	Safety	Check	Cord	Shut
Number	н	w	L	Outlet	Volts	Amps	Watts	H.P.	1'	5'	10'	15'	20'	30'	40'	Switch	Valve		
CL201UL	4-3/4"	5"	11-1/8"	3/8" Barb	115	1.95	90	1/30	115	92	62	33	_	_	_	Y	Υ	Y	20'

#### **LARGE CONDENSATE PUMP - CB22 Series**

This large condensate pump is capable of handling high acidity condensation. The shut off height for this model is 22 ft. Model includes a high impact, flame retardant ABS plastic tank with a capacity of one U.S. gallon, a flame retardant plastic motor cover, 3/8" O.D. check valve and stainless steel shaft.



Model								Gallons per hour @ 60 Hz & Rated Voltage					Safety	Check	Cord	Shut			
Number	н	W	L	Outlet	Volts	Amps	Watts	H.P.	1'	5'	10'	15'	20'	30'	40'	Switch	Valve	w/plug	Off (ft)
CB221UL	9-1/4"	6"	12"	3/8" O.D.	115	1.5	120	1/25	108	90	70	45	19	_	_	Y	Y	Y	22'
CB222UL	9-1/4"	6"	12"	3/8" O.D.	230	1.0	120	1/25	108	90	70	45	19	_	_	Υ	Y	Y	22'

#### **INDUSTRIAL CONDENSATE PUMP - CB50 Series**

These are Beckett's Industrial models for your heavy duty pumping applications. They both feature a built in safety switch, a pre-wired terminal block, non-corrosive brass wetted parts and stainless steel shaft. CU55 has a 1/2" O.D. check valve. Model has a high quality painted galvanized steel cover and a high impact polystyrene tank with a capacity of 1 U.S. gallon.





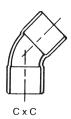
Model									Gallo	ns pei	hour	@ 60 H	z & Ra	ted Vol	tage	Safety	Check	Cord	Shut
Number	н	w	L	Outlet	Volts	Amps	Watts	H.P.	1'	5'	10'	15'	20'	30'	40'	Switch	Valve		
CB501UL	10-1/8"	6"	12"	1/2" O.D.	115	4.0	360	1/5	476	441	396	351	306	216	126	Y	Y		48'



#### **COPPER FITTINGS**

#### ELBOWS, 45° NO. WE-504, C x C Propress Fittings

	i	
	SIZE	SIZE
PART #	NOMINAL	O.D.
W3005	1/8"	1/4"
W3012	1/4"	3/8"
W3021	3/8"	1/2"
W3026	1/2"	5/8"
W3030	5/8"	3/4"
W3034	3/4"	7/8"
W3044	1"	1-1/8"
W3050	1-1/4"	1-3/8"
W3055	1-1/2"	1-5/8"
W3059	2"	2-1/8"
W3063	2-1/2"	2-5/8"
W3073	4"	4-1/8"



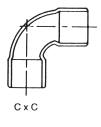
ELBOWS, 45° NO. WE-505, FTG x C

	SIZE	SIZE
PART #	NOMINAL	O.D.
W3312	1/4"	3/8"
W3321	3/8"	1/2"
W3326	1/2"	5/8"
W3330	5/8"	3/4"
W3334	3/4	7/8"
W3344	1"	1-1/8"
W3350	1-1/4"	1-3/8"
W3355	1-1/2"	1-5/8"
W3363	2-1/2"	2-5/8"



## ELBOWS, 90° SHORT RADIUS NO. WE-500, C X C

PART #	SIZE NOMINAL	SIZE O.D.
W2003 W2009 W2017 W1622 W2028 W1634 W1647	1/8" 1/4" 3/8" 1/2" 5/8" 3/4"	1/4" 3/8" 1/2" 5/8" 3/4" 7/8"
W2084 W2085 W2086 W2087 W2088 W2089	1-1/4" 1-1/2" 2" 2-1/2" 3" 3-1/2"	1-3/8" 1-5/8" 2-1/8" 2-5/8" 3-1/8" 3-5/8"



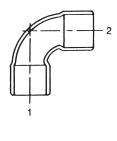
#### **ELBOWS 90° LONG RADIUS**

NO. WE-500L, C x C

PART#	SIZE NOMINAL	SIZE O.D.	PART#	SIZE NOMINAL	SIZE O.D.
W2715	1/8"	1/4"	W2734	3/4"	7/8"
W2710		5/16"	W2747	1"	1-1/8"
W2716	1/4"	3/8"	W2055	1-1/4"	1-3/8"
W2717	3/8"	1/2"	W2063	1-1/2"	1-5/8"
W2722	1/2"	5/8"	W2072	2"	2-1/8"
W2728	5/8"	3/4"			

## ELBOWS, $90^{\circ}$ SHORT RADIUS - REDUCING NO. WE-500R, C x C

PART #	-	SIZ MII	E NAL		IZ D.C	_
	1		2	1		2
W2011	1/4	х	1/8	3/8	х	1/4
W2019	3/8	Х	1/4	1/2	Х	3/8
W2023	1/2	Х	3/8	5/8	Х	1/2
W2025		Х	1/4		Х	3/8
W2029	5/8	Х	1/2	3/4	Х	5/8
W2030		Х	3/8		Х	1/2
W2035	3/4	х	5/8	7/8	Х	3/4
W2036		Х	1/2		Х	5/8
W2037		Χ	3/8		Х	1/2
W2049	1	Χ	3/4	1-1/8	Х	7/8
W2050		Χ	5/8		Х	3/4
W2051		Χ	1/2		Х	5/8
W2056	1-1/4	x	1	1-3/8	х	1-1/8
A2638*		Х	3/4		Х	7/8
W2077	1-	Х	1-1/4	1-5/8	Х	1-3/8
W2078	2	Х	1-1/2	2-1/8	Х	1-5/8
A2778*	3	Х	2	3-1/8	х	2-1/8

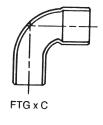


## ELBOWS, $90^{\circ}$ LONG RADIUS - REDUCING NO. WE-500LR, C x C

	PART #	SIZE NOMINAL	SIZE O.D.
ľ	W2067	1-1/2 x 3/4	1-5/8 x 7/8

## ELBOWS, 90° SHORT RADIUS NO. WE-503, FTG x C

PART #	SIZE NOMINAL	SIZE O.D.
W2312	1/4"	3/8"
W2321	3/8"	1/2"
W1652	1/2"	5/8"
W2330	5/8"	3/4"
W1654	3/4"	7/8"
W2344	1"	1-1/8"
W2384	1-1/4"	1-3/8"
W2385	1-1/2"	1-5/8"
W2386	2"	2-1/8"
W2387	2-1/2"	2-5/8"
W2388	3"	3-1/8"
W2390	4"	4-1/8"



## ELBOWS, $90^{\circ}$ LONG RADIUS NO. WE-503L, FTG x C

PART #	SIZE NOMINAL	SIZE O.D.
W2822	1/2"	5/8"
W2828	5/8"	3/4"
W2834	3/4"	7/8"
W2847	1"	1-1/8"
W2350	1-1/4"	1-3/8"

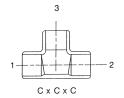
<sup>\*</sup> CAST BRONZE



### **COPPER FITTINGS**

**TEES** 





	SIZE			SIZE						
PART #		N	MIMC	٩L		O.D.			•	
	1		2		3	1		2		3
W40368	1/8 1/4	X	1/8 1/4	X	1/4 1/2	1/4	X	1/4	X	3/8
W4016 W4005	1/4	Х	1/4	X	3/8	3/8	Χ	3/8	X	5/8 1/2
W40324				X	1/8				X	1/4
W40330			1/8	Х	1/4			1/4	Х	3/8
W40332				Х	1/8				Х	1/4
W4015	3/8	Х	3/8	Х	1/2	1/2	Х	1/2	Χ	5/8
W4002				Χ	1/4				X	3/8
W40350 W4003		~	1/4	X	1/8		v	3/8	X	1/4
W4004		Х	1/4	X	3/8 1/4		Х	3/0	X	1/2
W40363		х	1/8	X	3/8		х	1/4	X	3/8 1/2
W40366		^	1/0	X	1/8		^	17-7	X	1/4
W4047	1/2	х	1/2	Х	3/4	5/8	х	5/8	Х	7/8
W4029				Х	5/8				Х	3/4
W4007				х	3/8				Χ	1/2
W4008			- 1-	Х	1/4				Χ	3/8
W4009		Х	3/8	X	1/2		Х	1/2	X	5/8
W4010 W4012		х	1/4	X	3/8 1/2		х	3/8	X	1/2 5/8
W4013				X	1/4			0,0	X	3/8
W4046	5/8	х	5/8	x	3/4	3/4	х	3/4	X	7/8
W4018				х	1/2				Х	5/8
W4019				х	3/8				Х	1/2
W4020				Χ	1/4				Χ	3/8
W4021		X	1/2	Х	5/8		X	5/8	Χ	3/4
W4022			0/0	X	1/2			1/0	X	5/8
W4025 W4027		Х	3/8	X	5/8 3/8		Χ	1/2	X	3/4 1/2
W4065	3/4	х	3/4	X	1	7/8	х	7/8		1-1/8
W4032				х	5/8				х	3/4
W4033				х	1/2				Х	5/8
W4034				Х	3/8				Х	1/2
W4036		Х	5/8	Х	3/4		Х	3/4	Χ	7/8
W4041		Х	1/2	X	3/4		Х	5/8	X	7/8 =/0
W4043				X	1/2				X	5/8
W4044 W40232		х	3/8	X	3/8 3/8		х	1/2	X	1/2 1/2
W4049	1	X	3/0 1	X	3/4	1-1/8		1-1/8		7/8
W4051				Х	1/2				Х	5/8
W4055		Х	3/4	Х	1		Х	7/8	Х	1-1/8
W4056				Χ	3/4				Х	
W4059				Χ	3/8				Χ	1/2
W4061 W4062		Χ	1/2	X X	1 3/4		Χ	5/8		1-1/8 7/8
	1 1/4		1 1/4			1 2/0	.,	1 2/0	X	
W40100 W4069	1-1/4	Х	1-1/4	X	1-1/2 1	I-3/8 	Χ	1-3/8		1-5/8 1-1/8
W4070				X	3/4				X	7/8
W4071				Х	1/2				X	5/8
W4073		Х	1	Х	1-1/4		Х	1-1/8	х	

		SIZE		SIZE	
PART #		NOMINA		O.D.	
	1	2	3	1 2	3
W4074	1-1/4	x 1	x 1	1-3/8 x 1-1/8	
W4075			x 3/4		x 7/8
W4076		0/4	x 1/2	7/0	x 5/8
W4078 W4080		x 3/4	x 1-1/4 x 3/4	x 7/8	x 1-3/8 x 7/8
W40121	1-1/2	x 1-1/2		1-5/8 x 1-5/8	
W4085	1-1/2	X 1-1/2	x 1-1/4	1-5/6 X 1-5/6	x 1-3/8
W4086			x 1		x 1-1/8
W4087			x 3/4		x 7/8
W4088			x 1/2		x 5/8
W4090	1-1/2	x 1-1/4	x 1-1/2	1-5/8 x 1-3/8	x 1-5/8
W4091			x 1-1/4		x 1-3/8
W4092			x 1		x 1-1/8
W4093 W4095		x 1	x 3/4 x 1-1/2	v 1 1/0	x 7/8 x 1-5/8
		x 1		X 1-1/6	
W4096 W4097			x 1-1/4 x 1		x 1-3/8 x 1-1/8
W4097 W4098			x 3/4		x 7/8
W4099		x 3/4	x 1-1/2	x 7/8	x 1-5/8
W40244		x 1/2	x 1-1/2	x 5/8	x 1-5/8
W40144	2	x 2	x 2-1/2	2-1/8 x 2-1/8	x 2-5/8
W40103			x 1-1/2		x 1-5/8
W40104			x 1-1/4		x 1-3/8
W40105			x 1		x 1-1/8
W40106			x 3/4		x 7/8
W40107 W40109		x 1-1/2	x 1/2 x 2	v 1 E/0	x 5/8 x 2-1/8
W40109 W40110		X 1-1/2	x 1-1/2	X 1-5/6	x 1-5/8
W40110 W40111			x 1-1/2		x 1-3/8
W40113			x 3/4		x 7/8
W40114			x 1/2		x 5/8
W40115		x 1-1/4	x 2	x 1-3/8	x 2-1/8
W40245		x 1	x 2		x 2-1/8
W40248	0.4/0	x 3/4	x 2	x 7/8	x 2-1/8
A1812	2-1/2	x 2-1/2	x 3	2-5/8 x 2-5/8	
W40124			x 2 x 1-1/2		x 2-1/8
W40125 W40126			x 1-1/2 x 1-1/4		x 1-5/8 x 1-3/8
W40126 W40127			x 1-1/4 x 1		x 1-3/6 x 1-1/8
W40129			x 1/2		x 5/8
W40132		x 2	x 1-1/2	x 2-1/8	x 1-5/8
W40149	3	x 3	x 1-1/2	3-1/8 x 3-1/8	x 1-5/8
W40145			x 1/2		x 5/8
W40167		x 2	x 3		x 3-1/8
W40196	4	x 4	x 2	4-1/8 x 4-1/8	
W40195			x 1-1/2		x 1-5/8

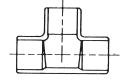


#### TEES,

#### NO. WT-600 Yellow Propress Fittings

PART #	SIZE NOMINAL	SIZE O.D.
W40306	1/8"	1/4"
W40313		5/16"
W4000	1/4"	3/8"
W4001	3/8"	1/2"
W4006	1/2"	5/8"
W4017	5/8"	3/4"
W4031	3/4"	7/8"

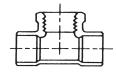
	SIZE	SIZE
PART #	NOMINAL	O.D.
W4048	1"	1-1/8"
W4068	1-1/4"	1-3/8"
W4084	1-1/2"	1-5/8"
W40102	2"	2-1/8"
W40123	2-1/2"	2-3/8"



#### **TEES, FORGED BRASS**

NO. WT-602 CxCxF

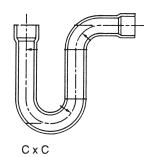
PART #	SIZE NOMINAL						SIZE O.D.				
	1		2		3		l	2		3	
W4228	1/4	Х	1/4	х	1/4	3/8	Х	3/8	Х	3/8	
W4229	1/4	Х	1/4	Х	1/8	3/8	Х	3/8	Х	1/4	
W4259	3/8	Х	3/8	Х	1/4	1/2	X	1/2	Х	3/8	
W4283	1/2	Х	1/2	Х	3/8	5/8	Х	5/8	Х	1/2	



#### **SUCTION LINE P-TRAPS**

NO. WE-544P

SIZE NOMINAL	SIZE O.D.
1/2"	5/8"
5/8"	3/4"
3/4"	7/8"
1"	1-1/8"
1-1/4"	1-3/8"
	1/2" 5/8" 3/4" 1"



#### **SA-902 SANDCLOTH**

PART #				
WG SC10				

If you can't find what you need...

**CALL US** 

We have it or can get it

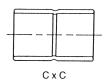


#### **COPPER FITTINGS**

#### **COUPLINGS**

COUPLINGS, ROLLED STOP NO. WC-400, C x C Yellow Propress Fittings

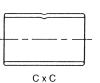
PART #	SIZE NOMINAL	SIZE O.D.
W1000		1/8"
W1003		1/4"
W1009	1/4"	3/8"
W1017	3/8"	1/2"
W1022	1/2"	5/8"
W1028	5/8"	3/4"
W1034	3/4"	7/8"
W1047	1"	1-1/8"
W1055	1-1/4"	1-3/8"
W1063	1-1/2"	1-5/8"
W1072	2"	2-1/8"
W1082	2-1/2"	2-5/8"



#### **COUPLINGS, STAKED STOP**

NO. WC-400S, C X C

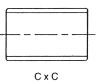
PART #	SIZE NOMINAL	SIZE O.D.
W10142		5/16"



### **COUPLINGS, NO STOP**

NO. WC-400NS, C x C

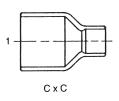
PART #	SIZE NOMINAL	SIZE O.D.
W1901	1/4"	3/8"
W1902	3/8"	1/2"
W1903	1/2"	5/8"
W1904	5/8"	3/4"
W1905	3/4"	7/8"
W1906	1"	1-1/8"
W1907	1-1/4"	1-3/8"
W1908	1-1/2"	1-5/8"
W1909	2"	2-1/8"



### **COUPLINGS, REDUCING**

NO. WC-400R, C X C

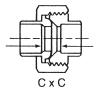
DART "	SIZE NOMINAL	SIZE
PART #		O.D.
	1 2	1 2
W1002		3/16 x 1/8
W1005		1/4 x 1/8
W1010		3/8 x 5/16
W1019	3/8 x 1/4	1/2 x 3/8
W1021	x 1/8	x 1/4
W1023	1/2 x 3/8	5/8 x 1/2
W1025	x 1/4	x 3/8
W1029	5/8 x 1/2	3/4 x 5/8
W1030	x 3/8	x 1/2
W1031	x 1/4	x 3/8
W1035	3/4 x 5/8	7/8 x 3/4
W1036	x 1/2	x 5/8
W1037	x 3/8	x 1/2
W1038	x 1/4	x 3/8
W1049	1 x 3/4	1-1/8 x 7/8
W1050	1 x 5/8	1-1/8 x 3/4
W1051	x 1/2	x 5/8
W1052	x 3/8	x 1/2
W1056	1-1/4 x 1	1-3/8 x 1-1/8
W1058	x 3/4	x 7/8
W1060	x 1/2	x 5/8
W1064	1-1/2 x 1-1/4	1-5/8 x 1-3/8
W1065	x 1	x 1-1/8
W1067	x 3/4	x 7/8
W1073	2 x 1-1/2	2-1/8 x 1-5/8
W1074	x 1-1/4	x 1-3/8
W1075	x 1	x 1-1/8
W1079	x 1/2	x 5/8
W1083	2-1/2 x 2	2-5/8 x 2-1/8
W1084	x 1-1/2	x 1-5/8
W1093	3 x 2-1/2	3-1/8 x 2-5/8



#### **COUPLINGS, UNION**

NO. WC-407, C x C

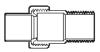
PART #	SIZE NOMINAL	SIZE O.D.
W8003	1/2"	5/8"
W8004	3/4"	7/8"
W8005	1"	1-1/8"
A11205*	1-1/4"	1-3/8"
A11206*	1-1/2"	1-5/8"
A11207*	2"	2-1/8"



### **COUPLINGS, UNION**

NO. C-108, C x MPT

PART #	SIZE NOMINAL	SIZE O.D.
A11211*	3/4 x 3/4"	7/8 x 3/4"



<sup>\*</sup>Cast Bronze





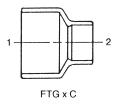
#### **BUSHINGS**

#### **BUSHINGS, EXTENDED**

NO. WC-403, FTG x C

PART #	SIZE NOMINAL	SIZE O.D.
	1 2	1 2
W1306	1/4 x 1/8	3/8 x 1/4
W1312	3/8 x 1/4	1/2 x 3/8
W1314	3/8 x 1/8	1/2 x 1/4
W1315	1/2 x 3/8	5/8 x 1/2
W1317	1/2 x 1/4	5/8 x 3/8
W1320	5/8 x 1/2	3/4 x 5/8
W1321	5/8 x 3/8	3/4 x 1/2
W1325	3/4 x 5/8	7/8 x 3/4
W1326	3/4 x 1/2	7/8 x 5/8
W1327	3/4 x 3/8	7/8 x 1/2
W1337	1 x 3/4	1-1/8 x 7/8

PART #	SIZE NOMINAL	SIZE O.D.
	1 2	1 2
W1338	1 x 5/8	1-1/8 x 3/4
W1339	1 x 1/2	1-1/8 x 5/8
W1343	1-1/4 x 1	1-3/8 x 1-1/8
W1345	1-1/4 x 3/4	1-3/8 x 7/8
W1350	1-1/2 x 1-1/4	1-5/8 x 1-3/8
W1351	1-1/2 x 1	1-5/8 x 1-1/8
W1358	2 x 1-1/2	2-1/8 x 1-5/8
W1359	2 x 1-1/4	2-1/8 x 1-3/8



#### **BUSHINGS, FLUSH**

NO. WC-106, FTG x C

PART #	SIZE NOMINAL	SIZE O.D.
	1 2	1 2
W1706	1/4 x 1/8	3/8 x 1/4
W1712	3/8 x 1/4	1/2 x 3/8
W1714	x 1/8	x 1/4
W1715	1/2 x 3/8	5/8 x 1/2
W1717	x 1/4	x 3/8
W1720	5/8 x 1/2	3/4 x 5/8
W1721	x 3/8	x 1/2
W1725	3/4 x 5/8	7/8 x 3/4
W1726	x 1/2	x 5/8
W1727	x 3/8	x 1/2

PART #	SIZE NOMINAL	SIZE O.D.
	1 2	1 2
W1737	1 x 3/4	1-1/8 x 7/8
W1738	x 5/8	x 3/4
W1739	x 1/2	x 5/8
W1743	1-1/4 x 1	1-3/8 x 1-1/8
W1745	x 3/4	x 7/8
W1751	1-1/2 x 1	1-5/8 x 1-1/8
W1758	2 x 1-1/2	2-1/8 x 1-5/8
W1759	x 1-1/4	x 1-3/8



#### **CAPS**

CAPS, NO. WC-415, C

PART #	SIZE NOMINAL	SIZE O.D.
W7002	1/8"	1/4"
W7004	1/4"	3/8"
W7006	3/8"	1/2"
W7007	1/2"	5/8"
W7008	5/8"	3/4"
W7009	3/4"	7/8"

PART #	SIZE NOMINAL	SIZE O.D.
W7011	1"	1-1/8"
W7012	1-1/4"	1-3/8"
W7013	1-1/2"	1-5/8"
W7014	2"	2-1/8"
W7015	2-1/2"	2-5/8"



#### **COPPER FITTINGS**

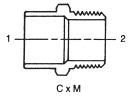
#### **ADAPTORS**

#### ADAPTORS,

NO. WC-401, C x M Yellow Propress Fittings

PART #	SIZE NOMINAL	SIZE O.D.
	1 2	1 2
W1106	1/8 x 1/4	1/4 x 1/4
W1110	_	5/16 x 1/4
W1114	1/4 x 3/8	3/8 x 3/8
W1115	x 1/4	x 1/4
W1124	3/8 x 1/2	1/2 x 1/2
W1125	x 3/8	x 3/8
W1126	x 1/4	x 1/4
W1129	1/2 x 1	5/8 x 1
W1130	x 3/4	x 3/4
W1131	x 1/2	x 1/2
W1132	x 3/8	x 3/8
W1139	5/8 x 1/2	3/4 x 1/2
W1145	3/4 x 1	7/8 x 1
W1146	x 3/4	x 3/4

PART #	SIZE NOMINAL 1 2	SIZE O.D. 1 2
W1147	3/4 x 1/2	7/8 x 1/2
W1162	1 x 1-1/4	1-1/8 x 1-1/4
W1163	x 1	x 1
W1164	x 3/4	x 3/4
W1165	x 1/2	x 1/2
W1170	1-1/4 x 1-1/2	1-3/8 x 1-1/2
W1171	x 1-1/4	x 1-1/4
W1172	x 1	x 1
W1179	1-1/2 x 1-1/2	1-5/8 x 1-1/2
W1180	x 1-1/4	x 1-1/4
W1187	2 x 2	2-1/8 x 2
W1188	x 1-1/2	x 1-1/2
W1196	2-1/2 x 2-1/2	2-5/8 x 2-1/2
W1199	3 x 3	3-1/8 x 3

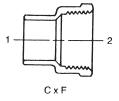


#### ADAPTORS,

NO. WC-402, Cx FPT

PART #	SIZE NOMINAL	SIZE O.D.
	1 2	1 2
W1205	1/8 x 3/4	1/4 x 3/8
W1206	x 1/4	x 1/4
W1214	1/4 x 3/8	3/8 x 3/8
W1215	x 1/4	x 1/4
W1223	3/8 x 3/4	1/2 x 3/4
W1224	x 1/2	x 1/2
W1225	x 3/8	x 3/8
W1230	1/2 x 3/4	5/8 x 3/4
W1231	x 1/2	x 1/2
W1232	x 3/8	x 3/8
W1233	x 1/4	x 1/4
W1238	5/8 x 3/4	3/4 x 3/4
W1239	x 1/2	x 1/2
W1245	3/4 x 1	7/8 x 1

PART #	SIZE NOMINAL	SIZE O.D.
	1 2	1 2
W1246	3/4 x 3/4	7/8 x 3/4
W1247	x 1/2	x 1/2
W1263	1 x 1	1-1/8 x 1
W1264	x 3/4	x 3/4
W1265	x 1/2	x 1/2
W1270	1-1/4 x 1-1/2	1-3/8 x 1-1/2
W1271	x 1-1/4	x 1-1/4
W1272	x 1	x 1
W1278	1-1/2 x 2	1-5/8 x 2
W1279	x 1-1/2	x 1-1/2
W1287	2 x 2	2-1/8 x 2
W1296	2-1/2 x 2-1/2	2-5/8 x 2-1/2

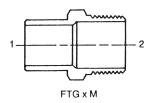


#### **ADAPTORS**

NO. WC-404, FTG x M

PART #	SIZE NOMINAL	SIZE O.D.
	1 2	1 2
W1425	3/8 x 3/8	1/2 x 3/8
W1431	1/2 x 1/2	5/8 x 1/2
W1432	x 3/8	x 3/8
W1446	3/4 x 3/4	7/8 x 3/4

PART #	SIZE NOMINAL	SIZE O.D.
	1 2	1 2
W1447	3/4 x 1/2	7/8 x 1/2
W1463	1 x 1	1-1/8 x 1
W1464	x 3/4	x 3/4
W1471	1-1/4 x 1-1/4	1-3/8 x 1-1/4





#### **COPPER FITTINGS**

#### **ADAPTORS**

#### **FITTING** WC-405, FTG x FPT



PART # *	SIZE NOMINAL	SIZE O.D.
W1514	1/4 x 3/8	3/8 x 3/8
W1525	3/8 x 3/8	1/2 x 3/8
W1531	1/2 x 1/2	5/8 x 1/2
W1532	x 3/8	x 3/8
W1546	3/4 x 3/4	7/8 x 3/4
W1547	x 1/2	x 1/2
W1563	1 x 1	1-1/8 x 1
W1571	1-1/4 x 1-1/4	1-3/8 x 1-1/4
W1579	1-1/2 x 1-1/2	1-5/8 x 1-1/2
W1587	2 x 2	2-1/8 x 2

#### **ADAPTORS**

#### UNION C-109, C x FPT



PART # *	SIZE NOMINAL	SIZE O.D.
A11422	1/2"	5/8"
A11423	3/4"	7/8"
A11424	1"	1-1/8"
A11425	1-1/4"	1-3/8"
A11426	1-1/2"	1-5/8"

<sup>\*</sup>CAST BRONZE

#### **ELBOWS**

#### **REDUCING ELBOW - 90°,** E-202, C x FPT



PART # *	SIZE NOMINAL	SIZE O.D.
A2641	1-1/4 x 1-1/2	1-3/8 x 1-5/8

<sup>\*</sup>CAST BRONZE

#### HIGH EAR ELBOW - 90°, E-211HE, C x FPT

PART # *	SIZE NOMINAL	SIZE O.D.
A3038	1/2"	5/8"

<sup>\*</sup>CAST BRONZE

#### **TEES**

#### **TEE, REDUCING** T-302, C X C x FPT



PART # *	SIZE NOMINAL	SIZE O.D.
A1512	1/2 x 1/2 x 1/2	5/8 x 5/8 x 1/2
A1538	3/4 x 3/4 x 3/4	7/8 x 7/8 x 3/4
A1539	x 1/2	x 1/2
A2655	1-1/4 x 1-1/4 x 1	1-3/8 x 1-3/8 x 1
A1644	1-1/2 x 1-1/2 x 1-1/2	1-5/8 x 1-5/8 x 1-1/2
A3663	x 1-1/4	x 1-1/4
A2688	x 1	x 1
A2673	x 3/4	x 3/4
A2703	2 x 2 x 1	2-1/8 x 2-1/8 x 1
A2706	x 3/4	x 3/4

<sup>\*</sup>CAST BRONZE



### T-303, C x FPT x C

С	Х	F	X	С

PART # *			SIZE O.D.							
A1548	3/4	Х	3/4	Х	3/4	7/8	х	3/4	х	7/8

<sup>\*</sup>CAST BRONZE



#### TEE, BASEBOARD NO. T-301, C x FPT x C

CxFxC

Р	PART # *			SIZE OMIN					SIZE O.D.	•	
1	A7750	1/2	Х	1/8	Х	1/2	5/8	Х	1/8	Х	5/8
A	7751	3/4	Х	1/8	Χ	3/4	7/8	Χ	1/8		7/8
I A	7754	1	Х	1/8	Х	1	1-1/8	Х	1/8	Х	1-1/8
P	A7775	1-1/4	Χ	1/8	Х	1-1/4	1-3/8	Х	1/8	Х	1-3/8

<sup>\*</sup>CAST BRONZE

## MUELLER BRASS CO.

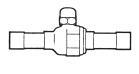
#### **COPPER FITTINGS**

#### **COMPRESSOR VALVES**

#### **BALL VALVES**

COMPATIBLE WITH REFRIGERANTS R-11, R-12, R-22, R-500, R-502.

PART #	SIZE O.D.
904203	3/8"
904204	1/2"
904205	5/8"
904307	7/8"
905409	1-1/8"
904511	1-3/8"
905613	1-5/8"
905717	2-1/8"



#### PACKLESS LINE VALVES FLARE TO FLARE, TYPE I, CLASS IV

	SIZE
PART #	O.D.
A14833	1/4"
A14835	3/8"
A14836	1/2"
A14837	5/8"



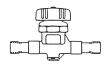
#### SOLDER TO SOLDER, TYPE I, CLASS II

PART #	SIZE O.D.
A14842	5/8"



#### **EXTENDED END, TYPE I, CLASS II**

PART #	SIZE O.D.
A14848	1/4"
A14850	3/8"



#### PRESSURE RELIEF VALVES

#### MPT INLET TO FLARE

PART # - PSI	INLET	OUTLET
5230-350	1/4"	3/8"
5230-425		
5231-235		
5231-350	3/8"	3/8"
5231-425		
5232-350	1/2"	5/8"
5232-425		



#### **ATMOSPHERIC - MPT INLET**

PART # - PSI	INLET	OUTLET	
HE 5221-425	1/4"	N/A	

## VIBRATION ABSORBERS SWEAT CONNECTION





PART #	SIZE / ID	SIZE / OD	MAX. PSI
F14	1/8"	1/4"	800
F38	1/4"	3/8"	800
F12	3/8"	1/2"	600
F58	1/2"	5/8"	500
F34	5/8"	3/4"	430
F78	3/4"	7/8"	370
F118	1"	1-1/8"	250
F138	1-1/4"	1-3/8"	200
F158	1-1/2"	1-5/8"	190
F218	2"	2-1/8"	170
	I		

#### **COPPER TUBE**





## NITROGENIZED® ACR COPPER TUBE 20 FT. LENGTHS

PART #	SIZE O.D.	WALL THICKNESS
3/8ACR	3/8"	.030
1/2ACR	1/2"	.035
5/8ACR	5/8"	.040
3/4ACR	3/4"	.042
7/8ACR	7/8"	.045
1-1/8ACR	1-1/8"	.050
1-3/8ACR	1-3/8"	.055
1-5/8ACR	1-5/8"	.060
2-1/8ACR	2-1/8	.070
2-5/8ACR	2-5/8"	.080

#### TYPE L 20 FT. LENGTHS

PART #	SIZE O.D.	SIZE NOMINAL	WALL THICKNESS
3/8L	1/2"	3/8"	.035
1/2L	5/8"	1/2"	.040
3/4L	7/8"	3/4"	.045
1L	1-1/8"	1"	.050
1-1/4L	1-3/8"	1-1/4"	.055
1-1/2L	1-5/8"	1-1/2"	.060
2L	2-1/8"	2"	.070
2-1/2L	2-5/8"	2-1/2"	.080

#### TYPE M 20 FT. LENGTHS

PART #	SIZE O.D.	SIZE NOMINAL	WALL THICKNESS
3/8M	1/2"	3/8"	.025
1/2M	5/8"	1/2"	.028
3/4M	7/8"	3/4"	.032
1M	1-1/8"	1"	.035
1-1/4M	1-3/8"	1-1/4"	.042
1-1/2M	1-5/8"	1-1/2"	.049
2M	2-1/8"	2"	.058
3M	3-1/8"	3"	.072
4M	4-1/8"	4"	.095

## REFRIGERATION SERVICE TUBE 50 FT. COILS

PART #	SIZE O.D.	WALL THICKNESS
1/8REF	1/8"	.030
3/16REF	3/16"	.030
1/4REF	1/4"	.030
5/16REF	5/16"	.032
3/8REF	3/8"	.032
1/2REF	1/2"	.032
5/8REF	5/8"	.035
5/8REF-100	5/8"	.035
3/4REF	3/4"	.035

7/8"

1-1/8"





#### **LINE SETS**

7/8REF

1-1/8REF

PART #	LIQUID LINE	SUCTION LINE	INSULATION	LENGTH
610-25	3/8	5/8	3/8	25'
610-35	3/8	5/8	3/8	35'
610-50	3/8	5/8	3/8	50'
612-25	3/8	3/4	3/8	25'
612-35	3/8	3/4	3/8	35'
612-50	3/8	3/4	3/8	50'
614-25	3/8	7/8	3/8	25'
614-35	3/8	7/8	3/8	35'
614-50	3/8	7/8	3/8	50'

.045

.050

#### **COPPER TUBE INSULATION**

6' LENGTH, 3/8" WALL

	0 =====================================		
ı	PART#	SIZE	
ı	38	3/8"	
ı	12XX	1/2"	
ı	58	5/8"	
ı	34	3/4"	
ı	78	7/8"	
	118	1-1/8"	

PART#	SIZE
138	1-3/8"
158	1-5/8"
218	2-1/8"
258	2-5/8"
318X	3-1/8"



#### **INSULATED SHEET**

**CONTINUOUS ROLLS** 

PART #	SIZE / IN.	THICKNESS
3648-34	36 x 48	3/4"
3648-1	36 x 48	1"

#### **FLARED BRASS TUBE FITTINGS**

#### FLARE NUT - OIL

PART #	TUBE - OD
41C	1/4
41 F	1/2
41 H	5/8



#### **FORGED FLARE NUT - REFRIG.**

PART #	TUBE - OD
NS4C	1/4
NS4D	5/16
NS4E	3/8
NS4F	1/2
NS4FE	1/2 x 3/8
NS4H	5/8
NS4J	3/4
NS4M	7/8



#### **SWIVEL FORGED NUT CONNECTOR**

PART #	TUBE - OD
US4C	1/4 x 1/4
US4D	5/16 x 5/16
US4E	3/8 x 3/8
US4H	5/8 x 5/8
US4J	3/4 x 3/4



#### UNIONS

PART #	TUBE - OD
42C	1/4 x 1/4
42D	5/16 x 5/16
42E	3/8 x 3/8
G42EC	3/8 x 1/4
42H	5/8 x 5/8
42J	3/4 x 3/4
42M	7/8 x 7/8



#### **FEMALE CONNECTOR**

PART #	TUBE - OD
46C	1/4 x 1/8
46CF	1/4 x 1/2



#### MALE CONNECTOR (FL x MPT)

PART #	TUBE - OD
48C	1/4 x 1/8
48CC	1/4 x 1/4
48CE	1/4 x 3/8
48E	3/8 x 1/8
48EE	3/8 x 1/4
48EEE	3/8 x 3/8
48EF	3/8 x 1/2
48F	1/2 x 3/8
48FF	1/2 x 1/2
48H	5/8 x 1/2
48J	3/4 x 1/2
48JJ	3/4 x 3/4
48MJ	7/8 x 3/4



#### **MALE ELBOW**

PART #	TUBE - OD x MPT
49C	1/4 x 1/8
49CC	1/4 x 1/4
49CE	1/4 x 3/8
49DE	5/16 x 3/8
49EE	3/8 x 1/4
49EEE	3/8 x 3/8
49EF	3/8 x 1/2
49F	1/2 x 3/8
49FF	1/2 X 1/2
49H	5/8 X 1/2
49HJ	5/8 x 3/4
49J	3/4 x 1/2



#### **FLARE PLUG**

PART #	TUBE - OD
P2D	5/16
P2H	5/8
P2J	3/4



#### **FLARE UNION ELBOW**

PART #	TUBE - OD
55C	1/4
55E	3/8



#### **FLARED BRASS TUBE FITTINGS**

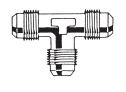
## SOLDER CONNECTOR FLARE x SOLDER TUBE

PART #	TUBE - OD
US3-CC	1/4 x 1/4
US3FF	1/2 x 1/2



#### **FLARE TEE**

PART #	TUBE - OD
44C	1/4
44D	5/16
44E	3/8
44F	1/2
44H	5/8
44 J	3/4



#### **DRUM CONNECTOR**

PART #	TUBE - OD x MPT
K1-1	1/4 x 3/4
K1-8	1/4 x 1/2



#### **GASKET**

PART #	TUBE - OD
K1-F	1/2
K1J	3/4



## ELBOW TUBE x FEMALE THREAD

PART #	SIZE
E4C	1/4 x 1/4
E4E	3/8 x 3/8
E4F	1/2 x 1/2



#### **GASKET** 45° COPPER FLARE

PART #	TUBE - OD
B2B	3/16
B2E	3/8
B2F	1/2
B2H	3/4



#### **REDUCING FLARE UNION**

PART #	TUBE - OD
G42EC	3/8 x 1/4
UR2-84	1/2 x 1/4
UR2-86	1/2 x 3/8
UR2-106	5/8 x 3/8



#### **FEMALE FLARE CONNECTOR**

PART #	TUBE - OD x FPT
46C	1/4 x 1/8
U3-4B	1/4 x 1/4
46CF	1/4 x 3/8
U3-4D	1/4 x 1/2
U3-6A	3/8 x 1/8
U3-6C	3/8 x 3/8
U3-6D	3/8 x 1/2
U3-8B	1/2 x 1/4
U3-8C	1/2 x 3/8
U3-8D	1/2 x 1/2
U3-8E	1/2 x 3/4
U3-10C	5/8 x 3/8
U3-10D	5/8 x 1/2
U3-10E	5/8 x 3/4



## REDUCING FLARE FITTING FEMALE x MALE

PART #	SIZE
UR3-44	1/4 x 1/4
UR3-45	1/4 x 5/16
UR3-46	1/4 x 3/8
UR3-48	1/4 x 1/2
UR3-54	5/16 x 1/4
UR3-68	3/4 x 1/2
UR3-86	1/2 x 3/8
UR3-810	1/2 x 5/8
UR3-106	5/8 x 3/8
UR3-108	5/8 x 1/2



#### **BRASS COMPRESSION FITTINGS**

#### SLEEVE

PART #	TUBE - OD
ΓAIII #	TOBE - OB
60C	1/4
60D	5/16
60E	3/8
60F*	1/2
60H*	5/8
60M	7/8



#### STANDARD NUT

PART #	TUBE - OD
61C	1/4
61D	5/16
61E	3/8
61F	1/2
61H*	5/8
61J	3/4



#### UNION

PART #	TUBE - OD
62A	1/8
62B	3/16
62C	1/4
62D	5/16
62E	3/8
62F*	1/2
62H*	5/8
62M	7/8



\*HEAVY

#### **REDUCING UNION**

PART #	SIZE
62REC	3/8 x 1/4
62RFE	1/2 x 3/8
62RHF	5/8 x 1/2



## PILOT LINE CONTROL NUT FOR THERMOSTATS

PART #	TUBE - OD
81 LC	1/4



#### **MALE CONNECTOR**

PART #	TUBE - OD x MPT
68A	1/8 x 1/8
68C	1/4 x 1/8
68CC	1/4 x 1/4
68E	3/8 x 1/8
68EE	3/8 x 1/4
68EEE	3/8 x 3/8
68EJ	3/8 x 3/4
68F*	1/2 x 3/8
68FF*	1/2 x 1/2
68FJ*	1/2 x 3/4
68H*	5/8 x 1/2
68HJ*	5/8 x 3/4
68JJ	3/4 x 3/4
68J	3/4 x 1/2
68MF	7/8 x 1/2
68MJ	7/8 x 3/4



#### **FEMALE CONNECTOR**

PART #	TUBE - OD x FPT
66EEE	3/8 x 3/8
66F	1/2 x 3/8



#### **MALE ELBOW**

PART #	TUBE - OD x FPT
69C	1/4 x 1/8
69CC	1/4 x 1/4
69E	3/8 x 1/8
69EE	3/8 x 1/4
69EEE	3/8 x 3/8
69EF	3/8 x 1/2
69FF*	1/2 x 1/2
69H	5/8 x 1/2
69JJ	3/4 x 3/4



#### **UNION ELBOW**

PART #	TUBE - OD
65C	1/4



<sup>\*</sup>HEAVY

#### **BRASS COMPRESSION FITTINGS**

#### TEE

PART #	TUBE - OD
64C	1/4
64D	5/16
64E	3/8
64F*	1/2
64H*	5/8
64J	3/4



#### **REDUCING TEE**

PART #	TUBE - OD
64CCE	1/4 x 1/4 x 3/8

#### W/MPT

PART #	SIZE
72C	1/4 x 1/4 x 1/8



#### **MALE RUN TEE**

PART #	SIZE
71C	1/4 x 1/8 x 1/4



#### **BRASS COMPRESSION TUBE FITTINGS POLYETHYLENE TUBING**

#### **PLASTIC SLEEVE**

PART #	TUBE - OD
460C	1/4



#### **INSERTS**

PART #	TUBE - OD
461C	1/4



#### **BRASS PIPE FITTINGS**

#### **SQUARE HEAD PLUG**

PART #	MPT
109N	1"



### **BUSHING HEX HEAD PLUG**

MPT x FPT



3/4 x 1/4 3/4 x 3/8



#### **COUPLING**

110JC

110JE

PART #	SIZE / FPT
L103A	1/8
103C	1/4



#### **CLOSE NIPPLES**

PART #	SIZE / MPT
112A	1/8"



<sup>\*</sup>HEAVY

#### **BRASS PIPE FITTINGS**

#### PIPE NIPPLE

1/8" DIA.

PART #	LENGTH
117A1-1/2	1-1/2"
117A3	3"



#### 1/4" DIA.

PART #	LENGTH
117C1-1/2	1-1/2"
117C2	2"
117C2-1/2	2-1/2"
117C3	3"

#### **REDUCING ADAPTOR**

FPT x MPT

PART #	SIZE
120RFE	1/2 x 3/8



#### 90° STREET ELBOW

FPT x MPT

PART #	SIZE
116SA-97	1/8"
116SE-30	3/8"



#### 90° ELBOW

PART #	SIZE / FPT
100A	1/8"
100C	1/4"



#### TEE

PART #	SIZE / FPT
101CX	1/4"



#### TEE

FPT x MPT x FPT

PART #	SIZE
127C	1/4"



#### **BRASS GARDEN HOSE FITTINGS**

## CONNECTOR MALE HOSE x MPT

PART #	SIZE
748JJF	3/4 x 3/4*



\*TAPPED UNDER MPT END.

## CONNECTOR MALE HOSE x FPT

PART #	SIZE
746JJ	3/4"



#### UNION MALE HOSE

PART #	SIZE
757JJ	3/4"



#### CAP FEMALE HOSE

PART #	SIZE
708J	3/4"



## SWIVEL UNION FEMALE HOSE

PART #	SIZE
703SJJ	3/4"



## EVAPORATIVE COOLER DRAIN W/ LOCKNUT AND GASKET MALE HOSE x FPT

PART #	SIZE
2CDJF	3/4 x 1/2



#### **WASHER**

PART #	SIZE
700G	3/4"



#### **HOSE x MULTI BARB BRASS FITTINGS**

#### **HOSE BARB x MALE HOSE**

PART #	SIZE
TAA2412	3/4 x 3/8barb
619HJ	3/4 x 5/8barb



#### **HOSE BARB x MPT**

PART #	HOSE ID	X	MALE PIPE
220B	3/16		
220E	3/8	Χ	1/8
220EE	3/8	Х	1/4
220EEE	3/8	х	3/8



#### **HOSE BARB UNION**

PART #	HOSE - ID	
222E	3/8"	
222F	1/2"	



#### **NYLON HOSE BARB FITTINGS**

## CONNECTOR BARB x MPT

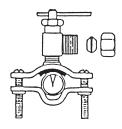
PART #	HOSE ID	х	MALE PIPE
NY220F	1/2	X	0,0
NY220FF	1/2	X	



## BRASS NEEDLE VALVES FOR COMPRESSION TUBING

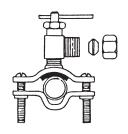
## SELF PIERCING NEEDLE VALVE AND SADDLE CLAMP

PART #	TUBE OD	x	MALE PIPE
123KCSP	1/4	х	1/8



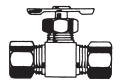
## NEEDLE VALVE AND SADDLE CLAMP

PART #	TUBE OD	X	MALE PIPE
123KC	1/4	Х	1/8



#### NEEDLE VALVE COMPRESSION TUBE BOTH ENDS

PART #	TUBE - OD
106KC	1/4
106KE	3/8



## TANK & VENT VALVES HEAVY SPRING CORE

PART #	TUBE - MPT
1VAH	1/8"





#### **TELE-SPOUT® OILER**

Squeeze pressure on the container allows the oil to flow in any direction with the flexible spout.

PART #	DESCRIPTION
D01	4 OZ. BOTTLE WITH TELE-SPOUT



#### **POCKET TESTERS**

PART#

TE2

TE3

Just the thing to make that fast electrical circuit check.

ii	rcuit check.
	DESCRIPTION
	HIGH VOLTAGE, 90-250VAC/DC

MULTI-VOLTAGE, 110, 220, 277 OR 440VAC/DC

#### **BRAZE-ON SERVICE VALVES**

#### Copper-To-Copper M-Series

The M-Series is the first and best braze-on, self-piercing copper saddle valve. It is widely used and easily installed on a charged line. After brazing the saddle portion onto line, the steel pin with valve core penetrates the line and is locked into place simply by tightening the cap. Available in sizes ranging from 1/4" to 1-1/8".



PART # CD5514

**PART # CD5558** 

copper saddle for 1/4" line

copper saddle for 5/8" line

PART # CD5516

PART # CD5578

copper saddle for 5/16" line

copper saddle for 7/8" line

#### **FIN COMBS**

Straighten and clean evaporator and condenser fins with these tough, durable nylon combs.

PART #	FINS PER INCH
P8	4, 5, 8 AND 10
P9	9 AND 15
P11	11 AND 13
P12	6, 7, 12 AND 14
P17	16 AND 17
P18	18 AND 20



#### **CHARGEFASTER**

Chargefaster is a calibrated restrictor device designed to meter liquid refrigerant into the low side of the system.



PART #	DESCRIPTION	
CH300	FOR SYSTEMS 5 TO 10 TONS	

#### **ADJUSTABLE LINE TAP VALVES**

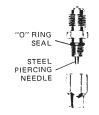
Threading wing cap on the depressor pin pierces the line. When the wing cap is removed, the valve closes, the line is pierced and ready for the connection of the charging hose.



PART#	TUBING SIZE O.D.
A1	1/4", 5/16", 3/8"
A2X	1/2", 5/8"

#### **SOLDER TYPE LINE TAP VALVE**

This easy to install "solder on" piercing valve has a unique O-ringseal, which prevents blow-by when piercing the line.



PART #	TUBING SIZE O.D.
B1-6S	3/8"
B1-8S	1/2"

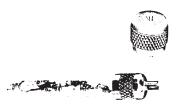
PART #	TUBING SIZE O.D.
B1-10S	5/8"
B1-14S	7/8"



#### **QUIK-CAP AND VALVE CORES**

Replacement valve cores are available 6 in a plastic tube. The cap is a QCR4 remover.

PART #	DESCRIPTION	
QC4 FOR 1/4" MALE FLARE		
AVC6	6 VALVE CORES IN TUBE WITH QC4R CAP	



#### **ACCESS VALVES**

Access valves are permanent access ports and are supplied with built-in valve cores and brass caps. All access valves have 1/4" male flare connections.

PART#	MODEL	SIZE / DESCRIPTION
AV2456 AV3346	STEP DOWN	1/8" I.D. HOLE, 3/16, 1/4, 5/16" STEPS 3/16" O.D. TUBE OR 1/4" & 3/8" SOLDER FITTING
AV34 AV46	SOLDER	3/16" O.D. OR 1/4" SOLDER FITTING 1/4" O.D. TUBE OR 3/8" SOLDER FITTING
AVU24 AVU45 AVU44	HALF UNION UNION	1/8" MPT OR 1/4" O.D. SOLDER 1/4" MPT OR 5/16" O.D. SOLDER 1/4" MALE FLARE x 1/4" FEMALE FLARE
AVX2 AVX3 AVX4 AVX5 AVX6	EXTENDED END	1/8" O.D. EXTENDED END TUBE 3/16" O.D. EXTENDED END TUBE 1/4" O.D. EXTENDED END TUBE 5/16" O.D. EXTENDED END TUBE 3/8" O.D. EXTENDED END TUBE
AVT4 AVT5 AVT6	SOLDER TEE	1/4" O.D. TUBE OR 3/8" SOLDER FITTING x 1/4" SAE 5/16" O.D. TUBE OR 3/8" SOLDER FITTING X 1/4" SAE 3/8" O.D. TUBE OR 1/2" SOLDER FITTING x 1/4" SAE
AVT34	UNION TEE	1/8" MPT x 1/4" MALE FLARE ON RUN
AVS4	SWIVEL NUT	1/4" SAE ACCESS FLARE WITH SWIVEL NUT
AVS44 AVS64	UNION TEE W/SWIVEL NUT	1/4" MALE x SWIVEL NUT ON RUN x 1/4" MALE BRANCH 1/4" MALE RUN x SWIVEL NUT ON BRANCH
AVW8 AVW10 AVW14	WROUGHT TEES	1/2" O.D. TUBE WITH 1/4" ACCESS ON BRANCH 5/8" O.D. TUBE WITH 1/4" ACCESS ON BRANCH 7/8" O.D. TUBE WITH 1/4" ACCESS ON BRANCH



#### PRESSURE CONTROLS

High and low pressure controls.

PART #	KLIXON #	OPEN	CLOSE
PSLP10-25	20P003FA025E010E	10 PSI	25 PSI
PSLP25-80	20P003FA080E025E	25 PSI	80 PSI
PSLP40-80	20P003FA080E040E	40 PSI	80 PSI
PSHP350-250	20P003FB350K250K	350 PSI	250 PSI
PSHP400-200	20P003FB400K200K	400 PSI	200 PSI
PSHP400-200	20P003FB450K250K	450 PSI	250 PSI





#### AIR CONDITIONING ACCESSORIES

#### **BULLET® PIERCING VALVES**

Has a metal to metal seat that creates a permanent, leakproof seal that will withstand any pressure and temperature for the life of the

PART #	OD TUBE SIZE
BPV31*	1/4", 5/16", 3/8"
BPV21*	1/2", 5/8"
BPV58	5/8"
BPV34	3/4"
BPV78	7/8"

<sup>\*</sup> Adaptor sleeves furnished for multiple applications.

#### **TD60 SERIES DELAY ON MAKE TIMERS APPLICATION**

- . ON. Delay On Make
- . Multi Purpose .Delay on Make. timing.
- . Protects Air-conditioning, Refrigeration and Heat pumps from damage which
- may be caused by short cycling of compressor. . For compressor staging and stagger starting
- multiple units. . Helps to reduce power surges in multiple compressor applications.

PART #	DELAY	CONNECTIONS
TD69	6 Sec - 8 Min	1/4" Stake - Ons

#### **SOLID STATE POWER PAKS**

#### SUPER BOOST

Increases starting torque up to 500%

PART # VOLTAGE		INCREASED TORQUE
856	115-280	390 OUNCE INCHES



#### **SUPER BOOST STARTER**

Increases starting torque up to 600%

PART #	VOLTAGE	INCREASED TORQUE
SPP7S	120-230	450 OUNCE INCHES

Increases starting torque up to 690%

PART #	VOLTAGE	INCREASED TORQUE
SPP8E	120-230	520 OUNCE INCHES





#### **Electric Element Re-String Kits**

Designed to permit field repairs of damaged element sections of electric heaters.

Coil stretches to fit many applications. Contains 2 ceramic terminal insulator sets, plated bolts, nuts, washers and element.

PART #	DESCRIPTION
DH507	3kw @ 240v
DH506	4kw @ 240v
DH500	5kw @ 240v



#### **TD73 SERIES DELAY ON BREAK TIMERS APPLICATION**

- . OFF. Delay On Break
- . Multi Purpose .Delay on Make. timing.
- . Protects Air-conditioning, Refrigeration and Heat pumps from damage which may be caused by short cycling of compressor.
- For compressor staging and stagger starting multiple units.
- . Helps to reduce power surges in multiple compressor applications.

PART #	DELAY	CONNECTIONS
TD73	6 Sec - 5 Min	1/4" Stake - Ons
TD73W	6 Sec - 8 Min	Wire Leads & stake-ons

#### SIGHT GLASSES

PROVIDES A QUICK AND EASY INDICATION OF REFRIGERANT IN THE TUBE, AS WELL AS THE PRESENCE OF MOISTURE.

#### MALE/FEMALE FLARE

PART #	SIZE / IN.	LENGTH
SG115R*	3/8 x 3/8	3-1/4"
SG206R	1/2 x 1/2	3-11/16"

#### MALE/MALE FLARE

PART #	SIZE / IN.	LENGTH
SG110R*	1/4 x 1/4	3-1/8"
SG111R*	3/8 x 3/8	3-3/8"

#### **SOLDER TYPE**

PART #	SIZE / IN.	LENGTH
SG118R*	1/4 x 1/4	7-1/4"
SG119R*	3/8 x 3/8	7-3/4"

<sup>\*</sup> UL LISTED.





#### YELLOW JACKET® Charging Systems

#### YELLOW JACKET SERIES 41-45 MANIFOLDS

**Bold easy-to-read gauges.** Large bold numbers and colored scales are easy to read. Removable Lexan® crystals resist breakage. Standard gauge cases are color-coded red and blue. Brass and chrome are also available.

Pretested. Every manifold is individually pressure tested for reliability before shipping.

Limited Lifetime Warranty on manifold with valves. See manifold instructions for details.

**Yellow Jacket Hoses.** Most manifolds include color-coded Yellow Jacket charging hoses with 500 psi working pressure and all the other performance features you've come to expect. *Plus II* construction, different colors, lengths and fittings are available.

**Sliding double "O" ring pistons.** Non-rotating design reduces wear. Only 1-1/2 turns give you full flow. Long-life nylon seat is also for vacuum and 34a, R-404A, R-507, R-504A, etc.

## SERIES 41-45 MANIFOLDS - Temperature Scales R-12, R-22 and R-502 with red and blue °F\* gauges

R-22 Description R-410 R-502	Gauge Scales	Part # No Hose	Part# w/ Hoses
Basic unit: manifold,	R-12, R-22,		
gauges, hook and anchors	R-502	42001	41215

#### °F (FAHRENHEIT) PRESSURE & COMPOUND GAUGES - PSI



All Yellow Jacket gauges feature bold high-visibility dials with colored temperature scales for easy reading. And with Flutterless™ technology, surge protector minimizes the needle pulsation for improved accuracy.

Manifold dials feature R-12, R-502 and R-22 scales. New HFC refrigerant gauges for R-134a, R-507 and R-404A are available. Compound gauges feature over pressure protection to 350 pounds. 1/8" MPT lower mount fitting. Solid brass and chrome-plated brass gauges provide additional features:



- Heavy duty phosphor bronze and stainless steel internal components for precision reading and longer life under severe use.
- Improved pulsation suppression.

UPC#	Fig.	Description		
CFC & HCFC R-12, R-502, R-22				
49101	1	Red pressure 0-500° F		
49102	2	Blue pressure 30-0-120 °F		
49011	1	Brass pressure 0-500 °F		
R-410A				
49035	1	0-800 PSI		

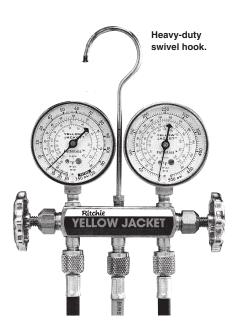
#### °F (FAHRENHEIT) BRUTE 4-VALVE SERIES with 1/2" or 3/8" vacuum ports



Large 3-1/8" liquid filled gauges available on some models. Larger, easier to read dials.

Other models available with red or blue gauges or the premium movement brass gauges. Both feature color coded protective boots.

UPC#	Vacuum Port	Hi&Lo Charge Ports	Gauge Type	Gauge Scales	Description
47312	3/8"	1/4"	R&B	R-410A	Manifold Only
46020	3/8"	1/4"	R&B	R-12,R-502,R-22	4V Manifold Only
46212	3/8"	1/4"	R&B	R-12,R-502,R-22	2V Manifold Only



#### YELLOW JACKET SLING PSYCHROMETER



Slim, compact tool easily checks humidity. One piece unit with self-contained housing fits into your pocket.

· Calibrated and easy-to-read.

UPC #	Description
	Sling psychrometer
69011	Replacement wicks (5 pack)
69015	Replacement thermometer

#### 9" Flexflow™ and Low Loss Adapter Hose



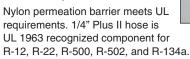
UPC #	Description
26002	3/8" Heavy Duty



### YELLOW JACKET® Charging Hoses

## Plus II<sup>™</sup> 1/4" CHARGING HOSES with double barrier protection

YELLOW JACKET® Plus II Hoses have proven performance benefits of the original line, plus double barrier protection for CFC, HCFC and HFC (R-404A, R-134a, R-507, R-407C, R-410A, etc.).



Moisture barrier provides improved resistance to moisture migration which contaminates expensive refrigerant.

Other features include 4000 psi minimum burst and 800 psi maximum working pressure for a 5 to 1 safety factor.

Standard 1/4" fitting or 45° with SealRight fitting at one end.

Operating temperature -20° to 180°F.

UPC #	Description
21986	Y/B/R 3-Pak

## PLUS II HOSE with SealRight<sup>™</sup> low loss anti-blow back fitting

Low loss anti-blowback SealRight fitting immediately traps refrigerant in the hose when disconnected, helping meet non-venting regulations and prevent finger burns. 45° end for ease in tight areas. Gaskets resist deterioration from existing CFC's, plus new HFC refrigerants and oils. Available with SealRight fittings on both ends. New ball valve hose recommended for R-410A.



ı		
	UPC #	Description
	22983	36" Y/B/R 3-Pak
	22985	60" Y/B/R 3-Pak
	22986	70" Y/B/R 3-Pak

UPC#	Description
22060	1 - 60" Yellow Hose
22260	1 - 60" Blue Hose
22660	1 - 60" Red Hose

#### MAX-FLOW™ DELUXE OIL PUMP

Improved for added reliability and a more powerful stroke, the Max-Flow deluxe oil pump is a high capacity unit for quick charging. Pumps 3.8 ounces or 112.38 ml per stroke. Other features:

- Remove oil for recovery and conversion.
- Add oil to existing systems.
- Operating unit in reverse with adapter hose accessory removes oil from equipment quickly and efficiently.
- Will pump against 250 psi pressure.

UPC #	Description	
77930	Max-Flow Deluxe oil pump	
77922	24" suction hose –	
	1/4" fitting one end only	



## HEAVY DUTY PLUS II 1/2" and 5/8" COMBINATION CHARGING / HI-VACUUM HOSE

Heavy-use construction with a *Plus II* barrier that reduces permeation and vacuum loss. Features:

- 500 psi working pressure; 2000 psi burst. 1/2" and 5/8" assemblies.
- Various fittings available on request.

1/4" access valve connection standard on one end CA and DA hoses.



L	"C" 1/2" fl. x 1/2" fl.
60"	# <b>15860</b> C-60"

#### HEAVY DUTY PLUS II 3/8" CHARGING / HI-VACUUM HOSE

Pull a vacuum much faster with heavy-duty 3/8" hose than with a 1/4" hose. 3/8" provides freer flow.

- Permeation resistant Plus II
   barrier
- Working pressure 500 psi; 2000 psi burst.



L	3/8" fl. sir. x 3/8" fl. str.
72"	# <b>15672</b> BC-72"

#### GAS PRESSURE TEST KIT

Easier to use than a manometer, this compact kit helps you accurately set manifold pressure for natural or L.P. gas.

UPC#	Capacity
78060	0- 35" WC



#### **WATER-TYPE MANOMETER**

Economical plastic tube manometer helps you set manifold pressure for natural or L.P. gas. Now goes to -2" W.C. for newer systems. Strong magnet on manometer holds it in convenient upright position. Includes tubing with fitting.

UPC#	Description
78075	-2" - 15" Scale





## YELLOW JACKET® SUPEREVAC™ Systems YELLOW JACKET 4, 6, SUPEREVAC PUMPS

All the new design features build on the performance-proven quality features the industry already expects from the Yellow Jacket line:

- High efficiency. CFM rated as "free air displacement." 15 micron field rating. The lower the micron number - the better the pump.
- Vacuum indicator gauge at the pump intake fitting shows evacuation progress down to the green 29" to 30" range, so you'll know when to turn on electronic gauge for more precise readings.
- Heavy duty high torque motor assures cold weather starting.
- Gas ballast speeds evacuation and keeps oil cleaner.
- Low operating temperature to improve efficiency and vacuum.

- Large oil reservoir to help reduce operating temperature and better dilute corrosive contaminants.
- Two stage rotary vane design (at right) increases efficiency and speeds pump down to 15 microns.



## YELLOW JACKET SUPEREVAC™ PUMPS SPECIFICATIONS

DOMESTIC	Model 93600
Free air displacement	7.0 CFM
Number of stages	2 stage rotary vane
Field blankoff	15 microns
Intake	1/4" x 1/4" x 3/8"
Motor 1725rpm	1/2hp -
Internal capacitor thermal overload	Temperature rise 40° C
Voltage (single phase)	115 Volt-60 cycle
Power cord	6' - motor mounted switch
Oil capacity	28 ounces
Dimensions	16.25" L x 6" x 11.5" H
Net weight	30.8 lbs. (14 kg)

## MICRO LED UV LEAK DETECTION KITS

Use these high visibility lamps to spot leaks on all A/C systems. Individual reflectors surround each of five LEDs recessed for protection in the stainless steel head. 69790 features 3 UV and 2 blue bulbs A/C for detection at greater distances. For greatest contrast with all fluorescent dyes, use P/N 69721 with 5 UV bulbs.

- 110,000+ hour LEDs.
- · Constant ON or momentary ON switch.
- · Sealing locks out moisture.
- · Long life lithium battery included.
- Aircraft aluminum body.
- · Limited lifetime warranty.



#69789

#### **FLARING/CUTTING KITS**



Tool designed to flare on the larger sized tubing - up to 1-1/8". Flaring bars are hardened and grip tubing securely. Yoke slips over flaring bar and locks in place. Long handle and precision threaded feed screw ensure easy flaring.

UPC #	Capacity
60240	1/8" - 3/4"

## LARGE SIZE 45° FLARING TOOLS 3/4" to 1-1/8" O.D.



Tool designed to flare on the larger sized tubing - up to 1-1/8". Flaring bars are hardened and grip tubing securely. Yoke slips over flaring bar and locks in place. Long handle and precision threaded feed screw ensure easy flaring.

ĺ	UPC#	Capacity
ı	60290	3/4" - 1-1/8"

#### **PUNCH-TYPE SWAGING TOOL**



5/8" to 7/8"

1/4" to 1/2"

Durable heat-treated and plated alloy steel tool expands one end of copper tubing for connecting same size tubes

UPC #	Capacity
60460	3/16" - 5/8"
60464	1/4" OD
60465	5/16" OD
60466	3/8" OD
60467	1/2" OD
60469	3/4" OD
60470	7/8" OD

## FULL RANGE HEAVY DUTY TUBE BENDERS for 1/4" to 7/8" radius

Make fast bends on almost every size of

AC&R copper, brass, aluminum, steel and soft stainless steel tubing to 180°.

Line features special hardened wearing surfaces to help maintain accuracy. 60390 is a compact three-in-one bender for 1/4", 5/16" and 3/8" O.D. tubing.

Calibrated markings for bends up to 180° help you duplicate angles.

UPC #	Description
60390	3 in1 bender

## Retering COMPANY INC.

#### REFRIGERATION RECOVERY

## REFRIGERANT RECOVERY SYSTEM #95730

Yellow Jacket System R 60a is rated as fast or faster than all competitive units in the ARI directory or UL listings for most CFC, HCFC, and HFC refrigerants including R-410A. Features include all of the following:

- Single valve control for easy changeover from liquid to vapor to purge (patent pending)
- Constant Pressure Regulator (CPR) valve regulates refrigerant to the compressor. Eliminates the need for the technician to throttle the suction valve
- Advanced 1/2 hp, 3425 rpm oil-less compressor with precision valves manufactured in an ISO-9001 facility
- Recovers refrigerant and shuts off when unit reaches 13" of vacuum. Unit will automatically restart if system pressure rises
- Indicator signals "recovery complete"
- Quiet running with components nested to reduce vibration and noise. Oil-less compressor is inherently quiet
- Controls and gauges inset for protection and angled for easy access and viewing
- Senses back pressure from tank and shuts off automatically at 517 psi for safety
- Reusable mesh particulate filter inserts into suction port for protection. Simple cleaning eliminates replacement due to clogging
- "On-the-fly" purge with simple turn of a knob to remove residual refrigerant and help prevent cross-contamination
- High efficiency fan keeps air moving across condenser for cool running even in hot weather
- High strength HDPE case for lightweight and rugged use. Rounded corners help protect from nicks and scrrapes
- Single high pressure safety switch
- Includes three-year compressor warranty
- Made in the USA

#### Specifications:

Capabilities: Vapor, liquid, push/pull

Refrigerants: 12, 22, 134a, 407C, 410A, 500, 502, and other

Class III, IV and V refrigerants

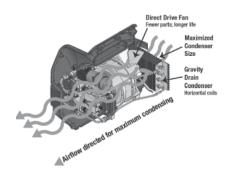
Compressor: ½ hp, twin cylinder, reciprocating, oil-less

Power Source: 115V/60 Hz Amps: 8.0 High Pressure Shut-Off: 517 psi – auto reset Operating Temperature: 40° to 122° F (4° to 50° C) Approvals: Performance tested by UL to ARI 740-98

Weight: 24 Lbs.

**Dimensions:** 9.0 (w) x 11.5 (h) x 13.5 (d) in. 22.86 (w) x 29.21 (h) x 34.29 (d) cm





High efficiency fan keeps air moving across an oversized condenser for cool running even in high temperature operating conditions.

#### **Built-In High Side Pressure Gauge**

- 2-1/2" Liquid-filled pressure gauge shows discharge pressure during recovery and internal pressure during purge.
- 0 40 bar; 0 600 psi helps you monitor recovery.
- Durable and easy to read under any conditions.



#### **Built-In Purge Circuit**

- Changeover from liquid to vapor to purge
- No external equipment required
- Simple to use move the hose and turn the selector button





## REFRIGERATION PRODUCTS AND ACCESSORIES

#### **SUCTION-LINE FILTER DRIERS**

PART#	FITTING TYPE AND SIZE	CU. IN. DESICCANT	FILTER AREA SQ. IN.	O.A. LENGTH	SHELL DIA.
SLD8-3SV	3/8" SWEAT	8	17.25	4.31"	3"
SLD8-4SV	1/2" SWEAT	8	17.25	4.44"	3"
SSD5SC	5/8" SWEAT	8	17.27	4.69"	3"
SSD6SC	3/4" SWEAT	13-1/2	26	5-3/16"	4"
SSD7SC	7/8" SWEAT	13-1/2	26	5-13/16"	4"



#### REPLACEABLE FILTER CORE DRIER

PART#	CORES	FILTER AREA	REF. FLOW CAP. IN TONS @ 2psi				FITTING CONNECTIONS INCHES	REFRIGERANT 12 & 502 PERM. INST.	REFRIGERANT 22 PERM. INST.
			12	22	500	502			
P487	1		22	29	25	18-1/2	7/8	6	10
P489	1	66	29	38	34	28	1-1/8	8	15
P967	2		38	50	43	33	7/8	6	10
P969	2	132	45	60	52	40	1-1/8	10	20
P9611	2		54	72	61	49	1-3/8	10	20
P1449	3	198	55	72	63	49	1-1/8	15	20
P14411	3		64	85	74	56	1-3/8	20	25



#### REPLACEABLE CORE DRIER KITS

(SPRING RETAINERS, GASKET, RODS & SCREEN ASSY.)

PART #	SHELL #'S
K4607-01	P485-P4813
K4607-02	P967-P9613
K4067-03	P1449-P14411
K4067-04	P19211-P19213



#### **SIGHT-GLASS MOISTURE INDICATOR**

PART#	FITTING SIZE	LENGTH / IN.
LDE-2S	1/4" SWEAT	3.05
PSG2S	1/4" SWEAT	4.88
LDE3	3/8" FLARE	3.05
LDE3S	3/8" SWEAT	4.88
PSG4MF	1/2" M/F FLARE	3.39
LDE4S	1/2" SWEAT	4.88
PSG5S	5/8" SWEAT	3.69
LDE5S	5/8" SWEAT	4.88
LDE7S	7/8" SWEAT	6.25
PSG9S	1-1/8" SWEAT	6.25
PSG10T	REPLACEMENT INDICATOR ELEMENT & "O" RING	





## REFRIGERATION PRODUCTS AND ACCESSORIES

#### **LIQUID LINE FILTER DRYERS**



#### • SWEAT

PART#	PIPE OD	LENGTH/ INCHES	DIAMETER/ INCHES
AH052S	1/4"	3-13/16	1-11/16
AH053S	3/8"	3-5/8	2-1/2
AH083S	3/8"	4-1/2	2-1/2
AH084S	1/2"	4-3/8	2-1/2
AH163S	3/8"	5-3/16	2-1/2
AH164S	1/2"	5-1/16	2-1/2
AH165S	5/8"	5-5/16	2-1/2
AH304S	1/2"	8	3
AH305S	5/8"	8	3
AH415S	5/8"	8	3-1/2
AH417S	7/8"	8	3-1/2
AH757S	7/8"	13-3/4	3-1/2
AH759S	1-1/8"	13-3/4	3-1/2

#### **SUCTION LINE ACCUMULATOR\***

#### FOR HEAT PUMP APPLICATIONS

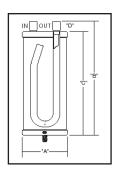
		Dime	Fittings		
Part #	Α	В	С	D	Inlet/Outlet
VA-56-7SRD	5"	13"	3"	1"	7/8"
VA-59-9SRD	5"	14"	3"	1"	1-1/8"

#### • FLARE



PART #	SAE FLARE	LENGTH/ INCHES	DIAMETER/ INCHES
AH032	1/4	4-1/8	1-11/16
AH052	1/4	4-3/4	2-1/2
AH053	3/8	5-3/16	2-1/2
AH083	3/8	6-1/16	2-1/2
AH162	1/4	6-15/16	2-1/2
AH163	3/8	6-3/4	2-1/2
AH164	1/2	7	2-1/2
AH305	5/8	10-3/16	3





#### **CAPACITIES AND SELECTION RECOMMENDATIONS**

		Ca	pacities (F				ditions)				Selection Recommendation (Nominal Ratings-tons)								
				ter Capac					rigerant			efrigerati		Alr Conditioning					
	Filter		12	R-2		R-5			acity @	-		nmercial			OEM		l	l Replace	
Model Number	Area Sq. In.	(15p	ppm)	(60 p	pm)	(30 p	pm)	pre	essure d	rop	Ten	ıp. Equip	ment	S	elf-contai	ned	or I	Field Built	-up
	<b></b>	75°F	125°F	75°F	125°F	75°F	125°F	R-12	R-22	R-502	R-12	R-22	R-502	R-12	R-22	R-502	R-12	R-22	R-502
032	10	33.8	30.6	31.0	28.8	29.7	27.0	1.8	2.4	1.6	1/4	1/4	1/4	3/4	1	3/4	1/2	3/4	1/2
032S	10	00.0	50.0	01.0	20.0	25.7	27.0	2.0	2.6	1.7									
052								2.0	2.6	1.7		1/2		1	1-1/2	1	3/4	1	3/4
052S	17	71.5	64.7	65.6	60.8	62.7	57.0	2.1	2.8	1.8	1/3		1/3						
053	''	71.5	04.7	05.0	00.0	02.7	37.0	4.2	5.5	3.7		1		2	3	2	1-1/2	2-1/2	1-1/2
053S								5.0	6.6	4.4									
082								2.0	2.6	1.8	1/2	3/4	1/2	1	1-1/2	1	3/4	1-1/2	3/4
082S								2.2	2.9	1.9									
083	27	116.5	105.5	107.0	99.1	102.0	93.0	4.7	6.2	4.1		2		3	5	3	2	3	2
083S	21	110.5	105.5	107.0	99.1	102.0	93.0	5.3	6.9	4.7	1		1						
084								7.5	9.8	6.6		3		4	7-1/2	4	3	5	3
084S								7.6	10.0	6.7									
162								2.3	3.1	2.0	1	1-1/2	3/4	1-1/2	2	1-1/2	1	2	1
162S								2.5	3.4	2.2									
163								5.6	7.5	4.9	2	3	2	4	5	4	3	4	3
163S								6.2	8.3	5.4									
164	34	206.0	187.0	190.0	176.0	181.0	165.0	9.5	12.7	7.8		4		5	7-1/2	5	3	5	3
164S								10.3	13.7	8.9	2		2						
165								13.3	17.7	11.6	_	5	i - I	7-1/2	10	7-1/2	5	7-1/2	5
165S								13.7	18.3	11.9		-				,=	_		_
303								5.7	7.7	5.0	3	4	2	4	5	4	3	5	3
303S								6.5	8.7	5.7	-		_		_		_	_	_
304								11.3	15.1	9.8	3	5	3	7-1/2	10	7-1/2	5	7-1/2	5
304S	61	416.0	377.0	383.0	355.0	365.0	333.0	13.1	17.5	11.4		Ü		,_		,_			
305	•.		077.0	000.0	000.0	000.0	000.0	15.5	20.7	13.5		7-1/2		10	15	10		10	
305S								17.1	22.8	14.9	5		5				7-1/2		7-1/2
307S								21.2	28.3	18.5		10	]	15	20	12-1/2	7 1/2	12-1/2	/ 1/2
413								5.7	7.7	5.0			4	5	7-1/2	5		5	4
414								11.4	15.3	9.9	4	5	5	7-1/2	10	7-1/2	5	7-1/2	5
414S								13.1	17.5	11.4	'	•		,_		,_		' ''-	
415	60	611.0	554.0	562.0	521.0	536.0	489.0	15.5	20.7	13.5		7-1/2		10	15	10	7-1/2	10	7-1/2
415S								17.1	22.9	14.9	7-1/2	. 1/2	7-1/2	.0	"		. 1/2	.0	,_
417S								24.3	32.4	21.1	, 1,2	10	1 ' ''-	15	20	12-1/2	10	15	10
756S	131	1072.0	972.0	986.0	915.0	940.0	858.0	20.7	27.6	18.0	12-1/2	20	1-1/2	15	25	12-1/2	12-1/2	20	12-1/2
757S	.51	1072.0	0,2.0	000.0	0.0.0	0.40.0	000.0	25.6	34.2	22.3	15	20	12-1/2	20	30	15	15	25	15
757S								28.3	37.7	24.6	20	25	15	20	30	20	20	30	20
, 555									J	24.0	20	20		20				1 00	



## REFRIGERATION PRODUCTS AND ACCESSORIES

#### **GENERAL PURPOSE SOLENOID VALVES**

#### PILOT OPERATED SOLENOID VALVES - TYPE I

COMMON FLUIDS 0°F TO 225°F

#### **APPLICATIONS:**

These general service two way valves are designed for normally closed operation with a wide range of non-corrosive fluids and gases.

#### **GENERAL SPECIFICATIONS:**

- FORGED BRASS BODY
- MAX MOPD 150psi
- MIN MOPD 1psi
- SWP 200psig

PART #	PIPE SIZE NPT	PORT SIZE INCHES	FLOW COEFFICIENT Cv
GP200	1/4"	5/16	.98
GP300	3/8"	1/2	3.35
GP400	1/2"	1/2	3.35
GP600	3/4"	3/4	7.40
GP10A	1"	1	12.20

<sup>\*</sup>COILS SOLD SEPARATELY

#### PILOT OPERATED SOLENOID VALVES - TYPE II

COMMON FLUIDS -20°F - 240°F

#### APPLICATIONS:

These two-way normally closed valves are for common fluid applications including water (to 180°F), light oils, fuel oils and other non-corrosive liquids.

#### **GENERAL SPECIFICATIONS:**

- CAST BRONZE BODY
- TEFLON DIAPHRAGM
- MAX MOPD 150psi
- MIN MOPD 2psi
- SWP 200psig

PART #	PIPE SIZE	PORT SIZE	FLOW COEFFICIENT
	NPT	INCHES	Cv
GP20X	2"	2	56.00

<sup>\*</sup>COILS SOLD SEPARATELY



## PILOT OPERATED SOLENOID VALVES - TYPE III APPLICATIONS:

These two-way normally closed valves are for water (over 180°F) and steam service at temperatures to 240°F and 1 to 10 psi steam.

#### **GENERAL SPECIFICATIONS:**

- FORGED BRASS BODY
- TEFLON DIAPHRAGM
- MAX MOPD 150
- MIN MOPD 1
- SWP 200 psig

PART #	PIPE SIZE NPT	PORT SIZE INCHES	FLOW COEFFICIENT Cv
GP207	1/4"	5/16	.98
GP307	1/2"	1/2	3.35
GP407	1/2"	1/2	3.35
GP607	3/4"	3/4	7.40
GP1007	1"	1	12.20

<sup>\*</sup>COILS SOLD SEPARATELY

#### **COILS**

MODEL # / VOLTAGE	
G23MM110V	_
G23MM208/230V	
G23MM24V	



#### **GAUGES**

#### Vari-Angle Thermometers

Weiss 9" Scale Vari-angle® Thermometers are the industry standard for HVAC applications. Union connection stem is offered for pipeline applications, for chilled and hot water installations with a 3-1/2" stem. Perforated 6" stem with a mounting flange is for air duct use.

UŅION CONN. STEM			
CAT. NO. RANGE SIZE		SIZE	
9VS-110* 40-0-110F&C 9"		9"	
7VS-110* 40-0-110F&C 7"		7"	
7VS-240*	30-240F&C	7"	

<sup>\*</sup>E35-75BS well required.



#### 6" Glass Thermometers

The Weiss 6" Navay Class Thermometer is compactly designed, ruggedly constructed and has excellent readability. The red-reading mercury-in-glass tube maintains accuracy despite vibrations and shock.

UNION CONN. STEM		
CAT. NO.	RANGE	SIZE
5AS2	40-240F	6"
5SS2*	40-240F	6"

<sup>\*</sup>Straight shank

\*Angle shank



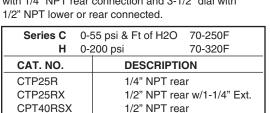
5AS2

#### **Tri-O-meters**

CTP40L

HTP40L

The Weiss Tri-O-meter is designed for use on all types of hot water heating systems. One instrument reads the water pressure, water temperature and system head in feet of H2O. Available in 2-1/2" dial with 1/4" NPT rear connection and 3-1/2" dial with



1/2" NPT lower

1/2" NPT lower



#### **Hot Water Thermometers**

The Weiss 6" Hot Water Thermometer is our most economical offering in industrial glass thermometers. The unit features components of non-corrosive materials and its compact design and excellent readability makes the HW Series ideal for a variety of general purpose applications. Typical applications include small pipe lines, residential and commercial boilers, solar heating systems.

UNION CONN. STEM		
CAT. NO. RANGE SIZE		
HW5S2	40-260F	6"
HW5A2*	40-260F	6"





#### **Trade Line Pressure Gauges**

Weiss TL Gauges are intended for general service conditions, for pressure or vacuum on air, oil, water, gas or other mediums that do not attack brass. TL Gauges are furnished in drawn steel cases, finished in black. 2" dial versions are available with 1/4" or 1/8" NPT connections. All other dial sizes are 1/4" NPT. All gauges conform with ANSI B40.1 accuracy Grade B - 2% mid scale.

2-1/2" DIAL 1/4" NPT LOWER CONN.	
CAT NO.	RANGE
TL25-015	0-15 PSI
TL25-030	0-30 PSI
TL25-060	0-60 PSI
TL25-100	0-100 PSI
TL25-100MR	LAZY HAND
TL25-160	0-160 PSI
TL25-200	0-200 PSI
TL25-200MR	LAZY HAND
TL25-300	0-300 PSI
TL25-VAC	-30-0 VAC
TL25P30-CBM	0-30 PSI

3-1/2" DIAL 1/4" NPT LOWER CONN.		
CAT NO.	RANGE	
TL35-015	0-15 PSI	
TL35-030	0-30 PSI	
TL350-30-CBM	0-30 Ctr Btm Mt	
TL35-060	0-60 PSI	
TL35-100	0-100 PSI	
TL35-160	0-160 PSI	
TL35-300	0-300 PSI	
TL35VP-30-0-30	-30-0-30 PSI	

4-1/2" DIAL 1/4" NP	T LOWER CONN.
CAT. NO.	RANGE
TL45-015	0-15PSI
TL45-030	0-30 PSI
TL45-060	0-60 PSI
TL45-100	0-100 PSI
TL45-160	0-160 PSI
TL45-300	0-300 PSI
TL45-VAC	-30-0 VAC
TL45VP-30-0-30	-30-0-30 PSI

# Dynatemp

#### REFRIGERANT

#### R-410A

R-410A is an azeotropic mixture of HFC-32 and HFC-125, with near-zero glide allowing for both

predictable performance and easy handling and recycling. Millions of R-410A air conditioners have been sold around the world, and over 25 equipment manufacturers now offer an R-410A option in their product line.



#### R421A

R421A is a unique non-ozone depleting green long term replacement for R22 refrigerant. R421A does not contain hydrocarbons such as Butane or Isobutane. Replaces R22 with no change of oil and is usable in R22 compressors. R421 is also comparable to R22's performance temperature. R421A is a two component blend packaged with a proprietary lubricant which should be transferred from the cylinder in the liquid phase,



#### **R22**

Genetron 22 is a single-component HCFC refrigerant manufactured to meet the tightest of manufacturer's specification, and can be used to service any equipment designed to use R-22. R-22 is popular in residential, commercial and industrial applications.





Rx11-flush is a unique solvent engineered specifically for flushing refrigeration and air conditioning systems. Based on patented HFC solvents developed by DuPont®, Rx11-flush is ozone-safe, nontoxic, and non-flammable. Used exactly like the old R-11 flushing process, its patented HFC based solvent formulation is powerful enough to flush away sludge, carbon residues, oils, acids, water and other particulate. It enhances system's service life and avoids the need for time-consuming repeat visits. Rx11-flush is ideal for system flushing after burnouts, during retrofits and for flushing line sets for R-410A conversions.

Rx11-flush has been the industry's standard for over a decade and contractors agree, it's the best flush for R-410A retrofits and after compressor burnouts. Over one million tons of system capacity has been successfully flushed with Rx11-flush solidifying its proven track record.

## Rx11 Flush



#430009



#430099 Injection Valve