

Guide Specifications

Unions

A. Manufacturers:

1. Flow Design Inc., Model UP

B. Design and Material:

1/2" - 2 1/2" brass "O"-Ring type Union: EDPM "O"-Ring, DZR/Ametal nut and tailpiece. Available with threaded(MPT or FPT), solder or reduced size end connections. Ground joint DZR/Ametal/copper type are not acceptable.

C. Minimum Ratings:

400 PSIG @ 250° F

Y-Strainers

A. Manufacturers:

1. Flow Design Inc., Model YW, YC

B. Design and Material:

1/2" - 2 1/2" cast or forged DZR/Ametal with 20 mesh stain less screen and removable cap. Available with threaded (NPT/ISO7) connections (solder connections 1/2" - 1"). Strainer shall be fitted with a hose end blow-down valve with cap and chain or ball valve blowdown.

C. Minimum Ratings:

400 PSIG @ 250° F

Manual Air Vents

A. Manufacturers:

1. Flow Design, Inc., Model AV

B. Design and Material:

Brass body, knurled slotted handle, blowout-proof needle style valve, side vent, 1/4" NPT standard with extended length available.

C. Minimum Ratings:

400 PSIG @ 250° F

Automatic Air Vents

A. Manufacturers:

1. Flow Design, Inc., Model AA025

B. Design and Material:

Forged brass body; manual shut-off cap; polypropylene float; body designed to be disassembled for cleaning, and vent capacity of one SCFM @ 60 psig.

C. Minimum Ratings:

150 psi @ 240° F

Hoses

A. Manufacturers:

1. Flow Design Inc., Model S2, S3

B. Design and Material:

1/2" - 2 " inner core of EPDM suitable for water temperatures between 40° F and 230° F, an outer braided cover of stainless steel, with brass end fittings.

C. Minimum Ratings:

300 PSIG working and 1600 PSIG minimum burst pressure. Each assembly to be factory tested at 600 PSI. Product shall be fire retardant and shall meet ASTM - E85-05 and not exceed the following: Flame Spread - 5, Fuel Contribution - 0, Smoke Density - 20.

Dielectric Nipples

A. Manufacturers:

1. Flow Design Inc., Model DN

B. Design and Material:

Steel MPT x MPT nipple with a minimum of 2" long thermo plastic liner for dielectric separation.

C. Minimum Ratings:

300 PSIG @ 225° F

Ball Valves

A. Manufacturers:

1. Flow Design Inc., Models AC, MC, TC, UA, UB, YC
2. Optional BV available

B. Design

1. The valve shall have a plated steel handle with vinyl grip.
2. When the insulation exceeds 1", all handles must be extended to 2 1/2" high. Extended memory stop must be optionally available.
3. Must meet Federal Specifications: WW-V-35C type 2, Composition BZ Style 3.

C. Material:

DZR/Metal, blow-out proof stem, standard chromium-plated ball, adjustable packing gland and reinforced TFE seat and stuffing.

D. Minimum Ratings:

400 psi @ 250° F

E. Installation

1. Insulator must glue the pipe insulation to the plastic vapor seal on the extended handle.
2. Install in accordance with manufacturer's instructions.

Hook-Up Component Product Descriptions

Model AA - 1/4" MPT. Brass automatic air vent. Rated at 150 psi @ 240°. Polypropylene float material with a nylon cap.

Model AV - Brass body, knurled slotted handle, blowout-proof needle style valve, side vent. 1/4" standard and extended length. Rated at PSIG 400 @ 250° F

Model BF - 2" - 8" Cast iron lug-type butterfly valve. Infinite position handle with memory stop. Does not include mounting to other products, cap screws (CS).

Condensate Hose - Clear vinyl condensate hose, 3/4" I.D. with appropriate MPT sized nylon fittings. (To be used when 2" Diff. "P" trap is required.)

Model CW - 2" - 8" Cast iron wye strainer with 125# / 150# compatible flange connections. Use Model UB for optional blowdown valve. Stainless steel perforated screen.

Model DN - Steel MPT x MPT nipple with thermo plastic liner for dielectric separation.

Drain Plug - Removable 1/4" brass drain plug, hex type head.

Model E2 & E3 - Motor drives valve open, spring closes. No flow with thermostat off. 24 volt or 120 volt with 18" leads.

Model EH - Handle to provide approximately 2" extra clearance on ball valve products for insulation.

Model FA / FG - 2" - 8" 150# ANSI raised face forged accessory steel flange can have a 1/4" FPT tap for P/T port, air vent, mini-ball valve and other accessories. 1/2" and 3/4" connections are available for larger drains and thermowells. Options can be at clock positions: 3, 6, 9 & 12. Available flange x weld (FA) or flange x groove (FG).

Model GF - The grooved flange adapter provides a direct transition from flanged components to grooved piping. Metal flange washer adapters are shipped with the unit and recommended for use with butterfly valves and serrated flange surfaces.

Model S2 & Model S3 - 1/2" - 2" - inner core of nontoxic synthetic polymer, suitable for water temperatures between 40° F and 212° F. This tube has an outer braided cover of stainless steel rated at 300 PSI, 1600 PSI minimum burst and tested at 450 PSI. The fittings are brass. Product is fire retardant and will meet ASTM E85-05 and will not exceed the following: Flame Spread - 5, Fuel Contribution - 0, Smoke Density - 20.

Model UB - Model UB is a shut-off valve with large diameter plated ball and Teflon seats. Stem is blowout proof with EPDM O-ring and Teflon packing with packing nut. Micro handle customary on the A body, and standard handle customary on the B and C bodies; all available with optional adjustable memory stop for shut-off and resetting and vinyl coated grip. Available with union connection or fixed threaded or sweat connections each with a metal-to-metal and EPDM O-ring seal.

Model HN - Forged brass with 3/4" hose connections with a plastic handle. Rated at 400 psi at 250°.

Memory Stop - Adjustable metal bracket permitting valve to be closed for service and returned to memory position for balancing.

Metal Tag - Tempered aluminum tag with chrome plated ball chain. Mylar label with etched writable information blocks.

Plastic Tag - Polycarbonate printed tag with chrome plated ball chain. Etched writable information blocks.

SuperSeal Pressure/Temperature Test Port - 1/4" brass body/dual durometer EPDM (Nordel) valve with retained safety cap. Standard and extra long available. Rated at 1000 PSIG @ 250° F.

Model UP - Port section/union - Brass construction. EPDM O-ring union, brass nut and tailpiece. Available with threaded (MPT or NPT/ISO7), solder or reducer end connections. Rated at 400 PSIG @ 250° F. May be ordered with factory installed options. See options list.

Model YC - Combination ball valve, Y-strainer and union. The Y-strainer has a 20 mesh stainless screen and removable cap. Ball valve has Teflon packing, brass packing nut and stem, large diameter plated blowout proof ball. Full size steel handle with vinyl grip. EPDM 'O' ring type union with brass nut and tailpiece available in MPT, FPT, sweat male and female end connections. Rated at 400 PSIG @ 250 degrees F. May be ordered with factory installed options.

Model YW - Y-strainer, forged brass with 20 mesh stainless screen with removable access and drain cap. Body has tapped 1/4" FPT ports available for options. Available 1/2" - 2 1/2" with FPT ends and 1/2" - 1" with sweat ends. Rated at 400 PSIG @ 250° F.