

THREE-WAY SHUT-OFF VALVES: 92 & 802 SERIES

How It Works

The function of a three-way valve is to permit replacement of the pressure relief devices, while the other is protecting the pressure vessel. In this way, a vessel is protected from over-pressure during servicing. It also allows a pressure relief device to be replaced in-situ without removing the system refrigerant charge.

Applications

All three-way valves are suitable for HCFC, HFC, CO₂ and A2L refrigerants along with their associated oils. The 802 series is also suitable for ammonia.

Refrigeration standard, EN378, specifies that a three-way valve is required on vessels of CE Category II, III and IV. EN378 or an equivalent National Standard should be consulted for further guidance. It should be recognised however that a three-way valve can be fitted to a vessel of any size, to enable safe, easy and economical replacement of pressure relief devices.

Main Features

- Proven Robust Design
- Compact

Technical Specification

Allowable Operating Pressure:

0 to 46 barg (92 series)

0 to 130 barg (802 series)

Allowable Operating Temperature

-29°C to +150°C

Installation - Main Issues

1. Assemble the three-way valve to a vessel using a high strength pipe nipple, suitable for the maximum operating pressure. See table below for part numbers.
2. The pipework must not impose loads onto the relief assembly. The relief valve, rupture disc and three-way valve assembly should be isolated from piping stresses through proper support, anchoring, or flexibility of the discharge piping. Mechanical piping stresses can be caused by discharge gas forces, misalignment and equipment dead weight. Thermal induced stresses should also be avoided. Appropriate standards such as API 520 Part II should be referenced.
3. The three-way valve should only be used with a single outlet port fully engaged. Do not leave the valve with both outlet ports partially open as this will impair the flow and can result in insufficient discharge capacity through the PRVs.

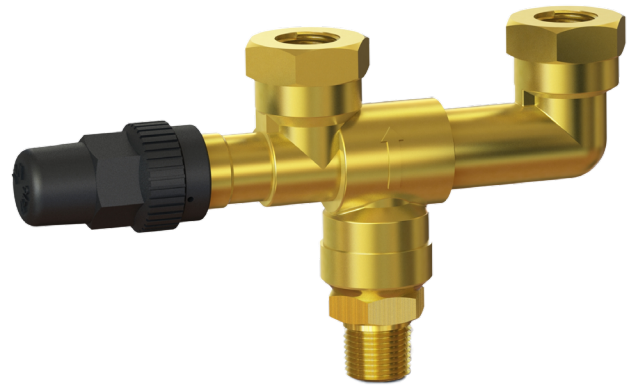
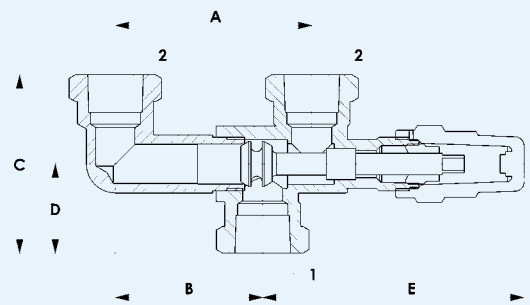
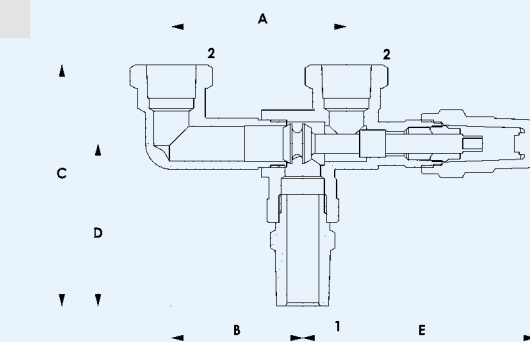


FIG. 1



- 1. INLET
- 2. OUTLET

FIG. 2



Type	Part No	Inlet Conn Size (inch)	Outlet Conn Size (inch)	Dimensions (mm)					Drawing reference	Optional Male Inlet Pipe Nipple	Weight (kg)	Kv (m ³ /hr)	Pipe Nipple Part No.	CE/UKCA Cat
				A	B	C	D	E						
92	923	3/8 FPT	3/8 FPT	70	52	64	32	93	Fig.1	N/A (Use 923M)	0.51	2.80	N/A	SEP
92	923M	3/8 MPT	3/8 FPT	70	52	90	57	93	Fig.2	N/A	0.57	2.80	N/A	SEP
92	925	1/2 FPT	1/2 FPT	70	52	64	32	93	Fig.1	N/A(Use 925M)	0.47	2.83	N/A	SEP
92	925M	1/2 MPT	1/2 FPT	70	52	97	65	93	Fig.2	N/A	0.57	2.83	N/A	SEP
802	8021TH	1/2 FPT	1/2 FPT	92	59	86	44	148	Fig.1	A4465	1.62	4.78	A4465	SEP
802	8022TH	3/4 FPT	3/4 FPT	92	59	86	44	148	Fig.1	2-009-5003	1.45	7.60	2-009-5003	SEP
802	8024TH	1 FPT	1 FPT	148	94	99	51	196	Fig.1	PP55-4	3.86	10.07	PP55-4	Cat II
802	8025TH	1 1/4 FPT	1 1/4 FPT	148	94	99	51	196	Fig.1	PP55-18	3.44	14.36	PP55-18	Cat II