Modular Fittings

Pre-engineered modular fittings has added advantage over the traditional rigid VJP, especially when use with Semi-Flex system. This option provide simplicity and cost saving as it reduces the necessity for precise system layout measurements. It also allows the fitting to be easily reused if use-point locations and plant layout are changed.

Modular fittings facilitate users to design and construct their own LN2 delivery system with minimum piping engineering experience or knowledge.

All Modular Fittings come with CSM renowned customer service, from conceptual design to implementation, and are backed by a one year warranty

Vacuum Insulated Modular Fittings

CSM vacuum insulated fittings are recommended when system efficiency and elimination of frost, ice and moisture are essential. The initial cost is greater for the vacuum insulated option, but the savings outweigh the investment in less than a year.

The vacuum insulated Modular Fitting guarantees extremely low heat leak for minimum gas boil-off compared to foam-insulated fitting by at least 20 times. Thus, not only can liquid loss be reduced but the quality of liquid can be maintained at the same time.

Modular fittings are commonly used in both rigid and flexible types of vacuum jacketed piping systems, whether in Dynamic or Static vacuum technology.

Related Products:

Modular Valve

Features and Benefits

- Readily available in stock for immediate delivery
- Available in Tee, Elbow and other configurations for ease of selection
- Ease of installation, no welding or field cutting required
- Vacuum insulated modular fittings are maintenance free up to 10 years with no performance deterioration over that period
- 5 years vacuum warranty for static vacuum

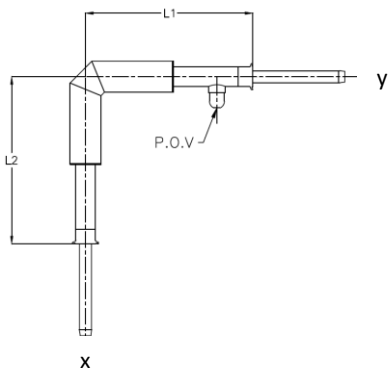
Modular Fitting Specifications

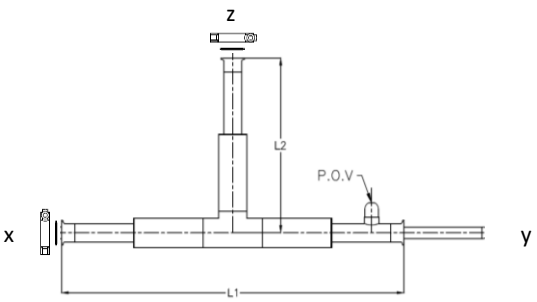
Model	C5	C10
Process Tube	0.75" ODT (19.05 mm OD)	1.125" ODT (29 mm OD)
Jacket Pipe	1.5" IPS (48.3 mm OD)	2.0" IPS (60.3 mm OD)
Steady State Heat Leak	0.32 btu/hr/ft (0.31 watts/m)	0.47 btu/hr/ft (0.45 watts/m)
Bayonet Heat Leak	4.0 btu/hr (1.2 watts)	8.1 btu/hr (2.4 watts)
Max. Operating Pressure	150 psig (10.3 bar)	150 psig (10.3 bar)
Vacuum Insulation Type	Static or Dynamic Vacuum	
Material Construction	Stainless Steel Series 300	
Standard Testing	Dimensional Check He leak checked 1 x 1 0 - 9 cc/s	
Optional	Pneumatic pressure test, Vacuum retention testing, LN2 cold shock, pre-material certs., X-ray, ASME B31.3 certification, CFOS cleaning for O2 services	

Modular Fitting Dimensions

Configuration*		C5		C10	
Item	**x - y**	**L1**	**L2**	**L1**	**L2**
Elbow	F x F	12.8" (326mm)	12.8" (326mm)	13.4" (340mm)	13.4" (340mm)
	F x M	12.8" (326mm)	12.8" (326mm)	13.4" (340mm)	13.4" (340mm)
	M x M	12.8" (326mm)	12.8" (326mm)	13.4" (340mm)	13.4" (340mm)
Item	**x - y - z**	**L1**	**L2**	**L1**	**L2**
Tee	F x F x F	28.8" (732mm)	13.9" (353mm)	30.0" (764mm)	14.0" (355mm)
	F x F x M	28.8" (732mm)	13.9" (353mm)	30.0" (764mm)	14.0" (355mm)
	F x M x F	28.8" (732mm)	13.9" (353mm)	30.0" (764mm)	14.0" (355mm)
	F x M x M	28.8" (732mm)	13.9" (353mm)	30.0" (764mm)	14.0" (355mm)
	M x M x F	28.8" (732mm)	13.9" (353mm)	30.0" (764mm)	14.0" (355mm)
	M x M x M	28.8" (732mm)	13.9" (353mm)	30.0" (764mm)	14.0" (355mm)
	F x F x NPT	28.8" (732mm)	9.8" (250mm)	30.0" (764mm)	9.8" (250mm)
	F x M x NPT	28.8" (732mm)	9.8" (250mm)	30.0" (764mm)	9.8" (250mm)
	M x M x NPT	28.8" (732mm)	9.8" (250mm)	30.0" (764mm)	9.8" (250mm)

*Other configurations are available please contact us for more inquiries





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