

Series PF

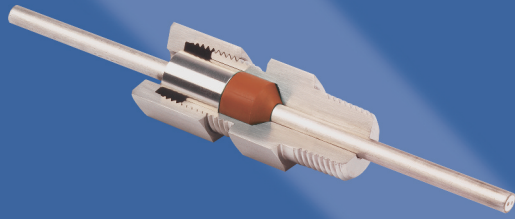
Feedthroughs for single elements

These feedthroughs are designed for sealing single elements, usually sensors, probes or tubes, where they penetrate a pressure or environmental boundary.

Common applications include sealing sheathed thermocouples and resistance thermometers, small-bore tubes and other types of sensor where they enter a process enclosure.

Series PF feedthroughs seal elements from 0.5mm dia. to 25.4mm (1"). There are five body sizes having 1/8", 1/4", 1/2", 3/4" and 1" process connections with BSPT (conical gas or DIN 2999 'R') and NPT threads.

Spectite® feedthroughs are designed for ease of assembly and installation. Elements can be adjusted, removed and replaced when not under pressure or vacuum conditions.



■ **ATEX / IECEx Approved to Ex II 2 GD, Ex d IIC Gb / Ex e IIC Gb, Ex ta IIIC Da**

■ **Seal on probes, sensors, small-bore tubes and other similar elements**

■ **Immersion length of the element can be easily adjusted**

■ **Five sizes of feedthrough assembly**

■ **Designed for easy installation of single elements 0.5mm to 25.4mm (1") diameter**

■ **Pressure range: Vacuum to 700 bar***

■ **Temperature range: -60°C to +450°C***

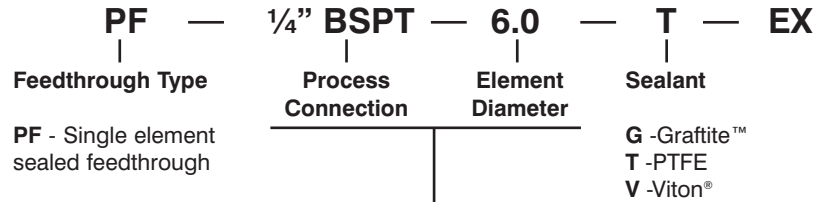
■ **Stainless steel body (316L), internal metal components and cap**

■ **Choice of three sealant materials**

■ **Reusable fitting – internal components replaceable**

* dependent on sealant and fitting selected

Order Code example:



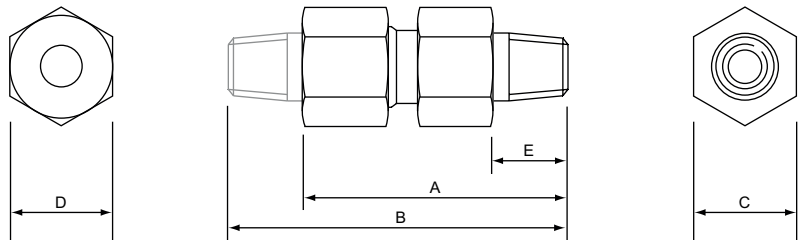
Series PF		Process Connection											
		BSPT (Conical Gas / DIN 2999 'R' thread) or NPT ¹											
		1/8"	1/4"	1/2"	3/4"	1"							
Sealants		G	T	V	G	T	V	G	T	V	G	T	V
Element sizes (dia) ³		The highlighted areas indicate the available element sizes for each feedthrough body size. The maximum pressure rating (in bar) is shown for each sealant material according to element size. ²											
(ins.)	mm												
0.020	0.5												
0.032	0.8		200	350									
0.040	1.0	450											
0.059	1.5		150	500	550	500							
0.062	1.59												
0.080	2.0												
0.118	3.0	400			700	250							
0.125	3.175		100	550		700							
0.177	4.5						200	550					
0.187	4.76	350			550	200							
0.236	6.0												
0.250	6.35			450	150								
0.312	8.0						550						
0.375	9.53							550	400				
0.393	10.0									100			165
0.472	12.0										350	250	
0.500	12.7												55
0.625	15.875												
0.750	19.05												
0.840	21.3												
1.0	25.4												75

¹ Other types of process connection available, see back cover

² The pressure ratings shown for each type of sealant are qualified at 20°C. With an increase in temperature, a reduction in the maximum pressure rating can be expected. Contact TC Ltd. for further details.

³ The element diameters shown are the common sizes that are routinely demanded by customers for general industrial applications. Any size of element can be accommodated between the minimum and maximum element diameters shown for each size of feedthrough. Blank (undrilled) sealants are also available for series PF feedthroughs. When a blank sealant is required, the word 'Blank' should be inserted in the order code instead of an element diameter. Feedthroughs with blank sealants are not pressure rated.

Dimensions (mm)



Process Connection	Overall length with plain cap	Overall length with cap with extension thread	Body hex.	Cap hex.	Body to process end
	Dim A	Dim B	Dim C	Dim D	Dim E
1/8"	32.5	-	13.0	13.0	9.5
1/4"	52.0	66.5	19.0	19.0	14.5
1/2"	67.5	87.5	25.4	25.4	20.0
3/4"	86.0	106.0	32.0	38.0	20.0
1"	110.0	130.0	50.8	50.8	20.0

For further information on cap styles, see page 5 under 'ordering information' and the back cover of this catalogue.