

Rupture Disc Plugs

Specifications	
Thread Size	1/4"-3/4"
Thread Types	NPT or BSPT
Burst Pressure Range	2.5barg - 200barg (37psig - 2900psig)
Temperature Range	-40C - +400C (-40F - +752F)
Maximum Operating Ratio	90% of minimum burst pressure (2.5barg - 200barg) Uni-Gard (Reverse Acting) 85% of minimum burst pressure (55barg - 200barg) Conventional (Forward Acting)
Performance Tolerance	+/- 10% Reverse Acting Disc +/- 5% Forward Acting Disc
Leak Integrity	Non Electron Beam Welded 1*10 ⁻⁴ cc/sec Electron Beam Welded 1*10 ⁻⁷ cc/sec
Vacuum Service	Yes
Fluid Compatibility	Gas, Vapour
Tamperproof	Yes
Disc Type	Uni-Gard (Reverse Acting Disc) Conventional (Forward Acting Disc)
Material	Nickel, Stainless Steel
Fragmentation	May Fragment
Holder Design/Material	Screwed/Bonded - Brass/Stainless Steel, Electron Beam Welded Stainless Steel

Brass

Connections*		Burst Pressure Range@20C		Overall Length [†] 'A'	Hexagon A/F 'B'
Inlet	Outlet	Minimum	Maximum		
1/4" Male	1/4" Male	3barg (44psig)	70barg (1015psig)	57mm (2 1/4")	31.75mm (1 1/4")
	1/4" Female			48mm (1 7/8")	
	Baffle			57mm (2 1/4")	
1/2" Male	1/2" Male	2.5barg (37psig)	40barg (580psig)	48mm (1 7/8")	38.1mm (1 1/2")
	1/2" Female			68mm (2 11/16")	
	Baffle			57mm (2 1/4")	
3/4" Male	3/4" Male	2.5barg (37psig)	40barg (580psig)	68mm (2 11/16")	38.1mm (1 1/2")
	3/4" Female			57mm (2 1/4")	
	Baffle			57mm (2 1/4")	

*Available in either NPT or BSPT thread

[†]For burst pressures above 55barg add 3mm (1/8") to overall length

Stainless Steel

Connections*		Burst Pressure Range @ 20C		Overall Length 'A'	Hexagon A/F 'B'
Inlet	Outlet	Minimum	Maximum		
1/4" Male	1/4" Male	3barg (44psig)	200barg (2900psig)	49mm (1 15/16")	31.75mm (1 1/4")
	1/4" Female			46mm (1 13/16")	
	Baffle			49mm (1 15/16")	
1/2" Male	1/2" Male			46mm (1 13/16")	
	1/2" Female			56mm (2 1/4")	
	Baffle			53mm (2 1/16")	
3/4" Male	3/4" Male	2.5barg (37psig)	40barg (580psig)	56mm (2 1/4")	31.75mm (1 1/4")
	3/4" Female			53mm (2 1/16")	
	Baffle				

*Available in either NPT or BSPT thread

Burst Pressure Range

Disc Type	Material	Nominal Bore of Disc	Burst Pressure Range @ 15-30C				Tolerance	Max Operating Ratio
			Brass		Stainless Steel			
			Min	Max	Min	Max		
Uni-Gard (Compression Loaded)	Nickel	15mm (1/4", 1/2")	3barg (44psig)	55barg (800psig)	33barg (44psig)	55barg (800psig)	+/- 10%	90%
		19mm (3/4")	2.5barg (37psig)	40barg (580psig)	2.5barg (37psig)	40barg (580psig)		
	Stainless Steel	15mm (1/4", 1/2")	4barg (58psig)	55barg (800psig)	4barg (58psig)	55barg (800psig)		
		19mm (3/4")	4barg (58psig)	40barg (580psig)	4barg (58psig)	40barg (580psig)		
Conventional (Tension Loaded)	Nickel	15mm (1/4", 1/2")	55barg (800psig)	70barg (1015psig)	55barg (800psig)	200barg (2900psig)	+/- 5%	85%
		19mm (3/4")	N/A	N/A	N/A	N/A		
	Stainless Steel	15mm (1/4", 1/2")	55barg (800psig)	200barg (2900psig)	55barg (800psig)	200barg (2900psig)		
		19mm (3/4")	N/A	N/A	N/A	N/A		

Temperature Range

Body Material	Temperature C(F)			
	Standard		Alternative	
	Min	Max	Min	Max
Brass	15(59)	200(392)	-20(-4)	200(392)
Stainless Steel	15(59)	200(392)	-40(-40)	400(752)

Free Flow Area (Minimum Net Flow Area)

Body Material	Thread Size	Free Flow Area (MNFA)					
		Male Outlet		Female Outlet		Baffle Outlet	
		mm ²	inch ²	mm ²	inch ²	mm ²	inch ²
Brass	1/4"	28	0.0438	28	0.0438	28	0.0438
	1/2"	127	0.1964	127	0.1964	127	0.1964
	3/4"	286	0.4441	286	0.4441	286	0.4441
Stainless Steel	1/4"	28	0.0438	28	0.0438	28	0.0438
	1/2"	127	0.1964	127	0.1964	127	0.1964
	3/4"	286	0.4441	286	0.4441	286	0.4441

Leak Tightness

Brass Body

- Screwed and bonded with "Loc-Tite 290 Threadlocker"
- Optional Viton® O-Ring can be used with temperature range -30 ° to 204°C (-20 ° to 400 °F)
- Helium Leak tested and tight to 1x10⁻⁴ cc/sec (without O-Ring) 1x 10⁻⁶ (with O-Ring)

Stainless Steel Body

- Electron Beam Welded to withstand maximum burst pressure of the disc +10%
- Helium Leak tested and tight to 1x10⁻⁷ cc/sec