

Opti-Gard Ferrule (OPF)

Technical Information



- General specifications
- Performance data
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General specifications

Size range	25mm to 100mm (1" to 4")
Burst pressure range	0.9 barg to 20.70 barg (13 psig to 300 psig)
Temperature range	-40°C to 200°C
Materials available	Stainless Steel as standard, others available on request
Maximum operating ratio	95% of minimum burst pressure (92% of nominal burst pressure)
Performance tolerance	+/- 3% (zero manufacturing design range)
Fragmenting / non-fragmenting	Non-fragmenting
Vacuum service	Full vacuum
Fluid compatibility	Gas+liquid, gas, vapour
K _r value	1.74
Torque sensitive	n/a
Cycle life	Tested to over 100,000 pressure vacuum cycles*
Reversal ratio	n/a with offset tag + System-Loc
Damage ratio	<1 fail-safe
Protective linings	n/a
Relief valve isolation	Excellent
Leak tightness	Excellent
Disc surface finish	n/a

(* from full vacuum to 95% of the minimum burst pressure)

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Performance data

Burst pressure range in barg (psig) at 15-30°C (59-86°F)

Nominal bore		Material					
		Hastelloy		Stainless Steel/Inconel		Nickel/Monel	
mm	inch	min	max	min	max	min	max
25	1	4.8 (70)	20.7 (300)	4.8 (70)	20.7 (300)	4.8 (70)	20.7 (300)
40	1.5	2.1 (30)	20.7 (300)	2.1 (30)	20.7 (300)	2.1 (30)	20.7 (300)
50	2	0.9 (13)	10 (145)	0.9 (13)	10 (145)	0.9 (13)	10 (145)
65	2.5	0.9 (13)	10 (145)	0.9 (13)	10 (145)	0.9 (13)	10 (145)
80	3	0.9 (13)	10 (145)	0.9 (13)	10 (145)	0.9 (13)	10 (145)
100	4	0.9 (13)	10 (145)	0.9 (13)	10 (145)	0.9 (13)	10 (145)

Performance tolerance (Zero manufacturing design range)

Burst Pressure	Tolerance	Burst Pressure	Tolerance
≤4.48 barg	+/- 0.14 barg	≤65 psig	+/- 2.0 psig
>4.48 barg	+/- 3%	>65 psig	+/-3%

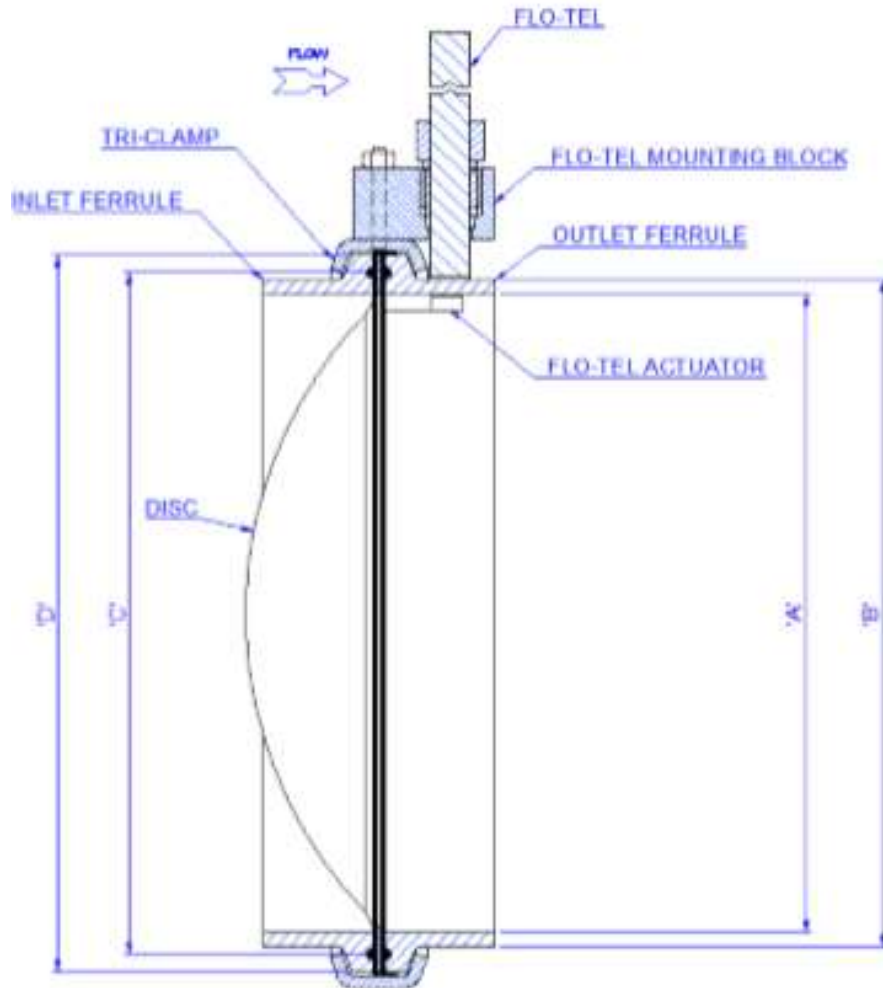
Free flow area / Minimum net flow area (MNFA)

Nominal bore		MNFA with no vacuum support (XXX)	
mm	inch	mm ²	inch ²
25	1	297	0.461
40	1.5	739	1.146
50	2	1375	2.132
65	2.5	2247	3.484
80	3	3252	5.041
100	4	5757	8.923

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Product Schematic



Size (mm)	Nominal Size	Ferrule Bore ID 'A'	Ferrule Bore OD 'B'	Gasket Pip 'C'	Ferrule Face OD 'D'
25	25	22.1	25.4	43.5	50.5
40	38	34.8	38.1	43.5	50.5
50	51	47.5	50.8	56.5	64
65	63.5	60.2	63.5	70.5	77.5
80	76.1	72.9	76.2	83.5	91
100	101.6	97.4	101.6	110	119