

FF49 SERIES

FLUSH FACE, HEAVY DUTY, NON-SPILL QUICK COUPLINGS

The FF49 Series quick couplings provide rugged-flush-face valving for non-spill dry breaks, and allow one-hand push-to-connect with safety sleeve-lock standard. The 3/8" size meets HTMA dimensional standards while providing significantly higher pressure containment than other brands (10,000 operating psi). The FF49-6 and FF49-6-12 are rated at 6,000 operating psi and have a significantly smaller footprint than other brands. Ideally suited for use in hydraulic hand tools, overhead bucket hoists, skid steer loaders, and wherever spillage can constitute a safety or environmental hazard.



- Interchangeable with quick couplings meeting ISO 16028 dimensional requirements while exceeding performance requirements.
- Interchangeable with SafeWay's FFE49, with higher maximum operating pressure.
- 3/8" size is available in 303 stainless steel (SF49-3).
- Available in 3/8" and 1/2" body size in a wide variety of thread sizes and types (pipe and ORB standard).
- 3/8" size meets HTMA dimensional requirements. A black sleeve and "10,000 PSI MAX" stamping identify this size as the high pressure model within this interchange.
- Provides significantly higher working pressure than couplers we replace, with equal or better flow.
- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Rugged flush face valving allows easy cleaning to minimize system contamination.
- Nitrile seals are standard. Seals made of Viton® are standard in the SF49-3.
- The FF49 Series includes unique double seals behind the coupler sleeve to prevent contamination from reaching critical toleranced parts.
- Smooth push-to-connect operation will allow connections against a maximum of 250 psi trapped pressure in the 3/8" body size; a maximum of 400 psi in the 1/2" body size.
- Standard sleeve lock feature prevents unintended disconnection.
- Additional detent (locking) balls greatly improve durability and increase pressure containment.
- Excellent for use anywhere spillage can result in a safety or environmental hazard.
- Heavy-duty steel dust plugs and dust caps are currently available for 3/8" body size male and female halves.
- All FF49 Series quick couplings are 100% leak tested.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

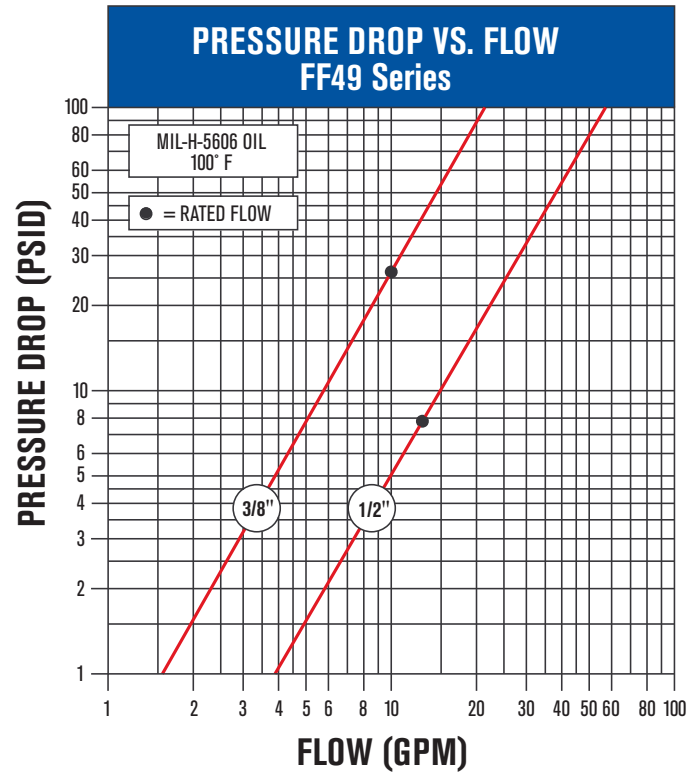
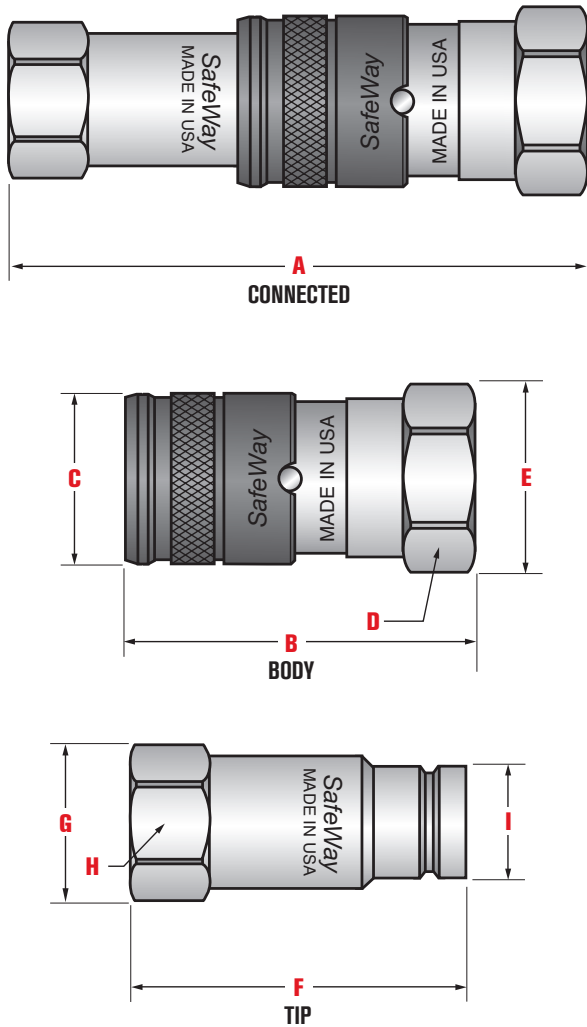
PERFORMANCE DATA

PART NUMBERS			DESCRIPTION		OPERATING PRESSURE		RATED FLOW		MAX. SPILLAGE
Complete Coupler	Female Body Half	Male Tip Half	ISO Body Size	Thread Size and Description	Maximum		GPM	(LPM)	(per disconnect)
					PSI	(BAR)			CC
SF49-3	SF495-3	SF491-3	3/8"	3/8" Female Pipe	3,000	(207)	10	(38)	.02
FF49-3	FF495-3	FF491-3	3/8"	3/8" Female Pipe	10,000	(690)	10	(38)	.02
FF49-3M	FF495-3M	FF491-3	3/8"	3/8" Female/Male Pipe	10,000	(690)	10	(38)	.02
FF49-3-8	FF495-3-8	FF491-3-8	3/8"	3/4"-16 Female ORB	10,000	(690)	10	(38)	.02
FF49-3-1/2 (was FF49-4)	FF495-3-1/2	FF491-3-1/2	3/8"	1/2" Female Pipe	10,000	(690)	10	(38)	.02
FF49-6	FF495-6	FF491-6	1/2"	3/4" Female Pipe	6,000	(414)	12	(45)	.04
FF49-6-12	FF495-6-12	FF491-6-12	1/2"	1-1/16"-12 Female ORB	6,000	(414)	12	(45)	.04

The SF49-3 is produced in 303 series stainless steel with Viton® seals standard. Dimensional data is identical to the FF49-3.

Temperature Range: Standard Seals (Buna-N) -40° to +250° F Viton® Option (std. in SF49-3) -15° to +450° F Other Seals Available. Viton® is a registered trademark of DuPont Dow Elastomers.
Vacuum Data: 27.4 inches Hg. both connected and disconnected.

Pressure rating (Max. Operating Pressure) is based on Non-Pulsating, Low Cycle applications with essentially steady pressure during the operating cycle. Please consult factory regarding other applications.



DIMENSIONAL DATA

Complete Coupler Number	DIMENSIONS (inches)								
	Overall Length A	Body Length B	Diameter C	Hex D	Diameter E	Tip Length F	Diameter G	Hex H	Tip Diameter I
SF49-3	4.19	2.47	1.19	1.12	1.24	2.35	1.04	.94	.78
FF49-3	4.19	2.47	1.19	1.12	1.24	2.35	1.04	.94	.78
FF49-3M	4.47	2.75	1.19	1.12	1.24	2.35	1.04	.94	.78
FF49-3-8	4.56	2.67	1.19	1.12	1.24	2.52	1.18	1.06	.78
FF49-3-1/2 (was FF49-4)	4.54	2.67	1.19	1.12	1.24	2.50	1.18	1.06	.78
FF49-6	5.20	3.06	1.50	1.38	1.57	2.81	1.55	1.38	.96
FF49-6-12	5.60	3.29	1.50	1.38	1.57	2.98	1.55	1.38	.96

See pages 34-36 for accessories to the FF49 Series.

FFE49 SERIES

FLUSH FACE, HEAVY DUTY, NON-SPILL QUICK COUPLINGS

SafeWay's FFE49 Series is a non-spill, push-to-connect, fluid transfer quick coupling designed for use with most industrial fluids. This series is interchangeable with quick couplings meeting Industry Standard ISO 16028 dimensional requirements, and our field proven, heavy-duty FF49 Series. Some basic applications include skid steer loaders, power utility equipment, construction equipment, agricultural equipment, and hydraulic hand tools. Use this quick coupling series whenever spillage can result in a safety or environmental hazard, when air inclusion during connection to a hydraulic system cannot be tolerated, and when international interchangeability with other brands is required.

- Smooth, one hand, push-to-connect locking mechanism.
- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Interchangeable half-for-half with Parker/Pioneer FEM Series, Eaton FF Series, Holmbury HQ Series, Faster 2FFI Series, and others conforming to ISO 16028 dimensional requirements.
- Rugged flush face valving allows easy cleaning to minimize system contamination.
- Maximum flow for quick system response.
- Available in ISO 1/4" through ISO 1" body size in a variety of thread sizes and styles.
- If you require a 3/8" size please use the FF49 Series, which meets the interchange requirements of ISO 16028 while providing higher operating psi.



- Anti-blowout Buna and Teflon® tip half seals reduce the likelihood of premature failure due to connection under residual system pressure. Maximum residual system pressure is 250 psi.
- All FFE49 Series quick couplings are 100% leak tested before leaving the factory.
- Heat treated surfaces resist wear.
- Sleeve lock option, to minimize accidental disconnect, is available upon request.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods.*

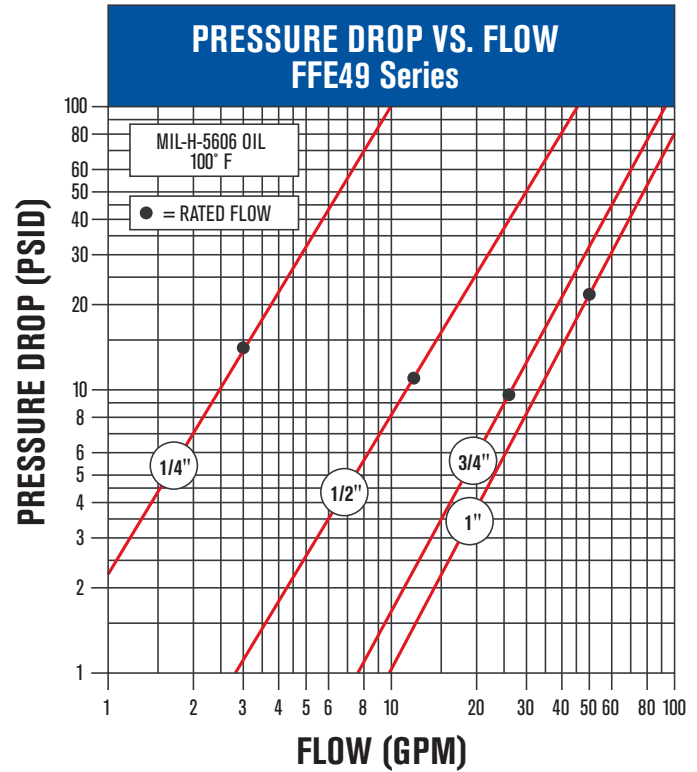
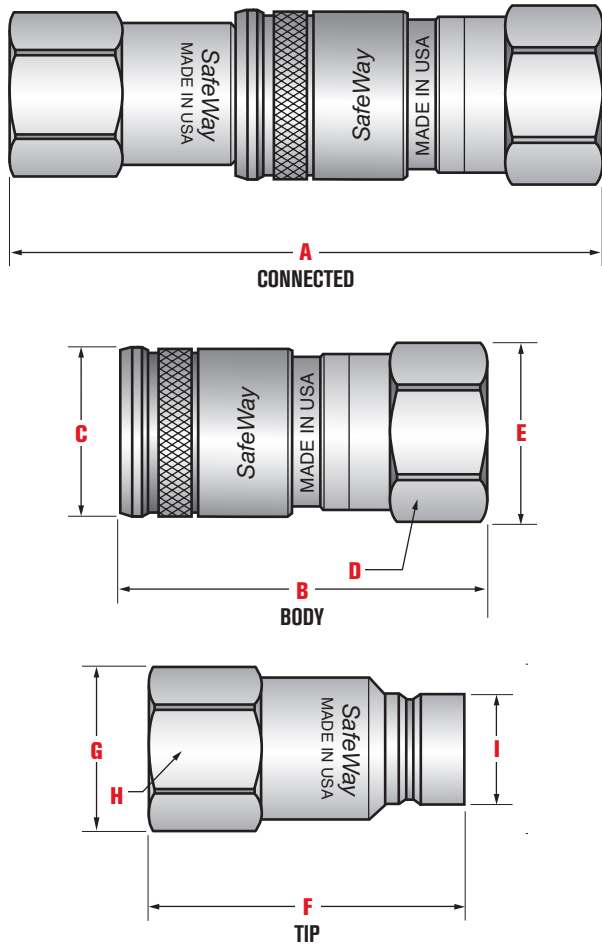
PERFORMANCE DATA

PART NUMBERS			DESCRIPTION		OPERATING PRESSURE		NFPA RATED FLOW		MAX. SPILLAGE
Complete Coupler	Female Body Half	Male Tip Half	Body Size	Thread Size and Description	Maximum		GPM	(LPM)	(per disconnect)
					PSI	(BAR)			
FFE49-2	FFE495-2	FFE491-2	1/4"	1/4" Female NPT	5,000	(345)	3	(12)	.01
FFE49-4	FFE495-4	FFE491-4	1/2"	1/2" Female NPT	4,000	(276)	12	(45)	.04
FFE49-4-3/4	FFE495-4-3/4	FFE491-4-3/4	1/2"	3/4" Female NPT	4,000	(276)	12	(45)	.04
FFE49-4-10	FFE495-4-10	FFE491-4-10	1/2"	7/8"-14 Female ORB	4,000	(276)	12	(45)	.04
FFE49-4-12	FFE495-4-12	FFE491-4-12	1/2"	1-1/16"-12 Female ORB	4,000	(276)	12	(45)	.04
FFE49-6	FFE495-6	FFE491-6	3/4"	3/4" Female NPT	4,000	(276)	26	(100)	.10
FFE49-6-1	FFE495-6-1	FFE491-6-1	3/4"	1" Female NPT	4,000	(276)	26	(100)	.10
FFE49-6-16	FFE495-6-16	FFE491-6-16	3/4"	1-5/16"-12 Female ORB	4,000	(276)	26	(100)	.10
FFE49-8	FFE495-8	FFE491-8	1"	1" Female NPT	3,000	(207)	50	(189)	.20
FFE49-8-114	FFE495-8-114	FFE491-8-114	1"	1-1/4" Female NPT	3,000	(207)	50	(189)	.20
FFE49-8-20	FFE495-8-20	FFE491-8-20	1"	1-5/8"-12 Female ORB	3,000	(207)	50	(189)	.20

Temperature Range: Standard Seals (Buna-N) -40° to +250° F Viton® Option -15° to +450° F Other Seals Available.
 Vacuum Data: 27.4 inches Hg. both connected and disconnected.

Viton® is a registered trademark of DuPont Dow Elastomers.

Pressure rating (Max. Operating Pressure) is based on Non-Pulsating, Low Cycle applications with essentially steady pressure during the operating cycle. Please consult factory regarding other applications.



DIMENSIONAL DATA

Complete Coupler Number	DIMENSIONS (inches)								
	Overall Length A	Body Length B	Diameter C	Hex D	Diameter E	Tip Length F	Diameter G	Hex H	Tip Diameter I
FFE49-2	3.60	2.21	1.06	.88	.95	1.82	.95	.88	.64
FFE49-4	5.18	3.06	1.50	1.38	1.57	2.77	1.42	1.25	.96
FFE49-4-3/4	5.20	3.06	1.50	1.38	1.57	2.81	1.55	1.38	.96
FFE49-4-10	5.33	3.19	1.50	1.38	1.57	2.94	1.42	1.25	.96
FFE49-4-12	5.60	3.29	1.50	1.38	1.57	2.98	1.55	1.38	.96
FFE49-6	6.07	3.77	1.82	1.62	1.82	3.17	1.82	1.62	1.18
FFE49-6-1	6.29	3.88	1.82	1.62	1.82	3.28	1.82	1.62	1.18
FFE49-6-16	6.49	3.98	1.82	1.62	1.82	3.38	1.82	1.62	1.18
FFE49-8	6.76	4.25	2.25	2.00	2.24	3.44	2.24	2.00	1.42
FFE49-8-114	6.76	4.25	2.25	2.00	2.24	3.44	2.24	2.00	1.42
FFE49-8-20	6.76	4.25	2.25	2.00	2.24	3.44	2.24	2.00	1.42

See pages 34-36 for accessories to the FFE49 Series.

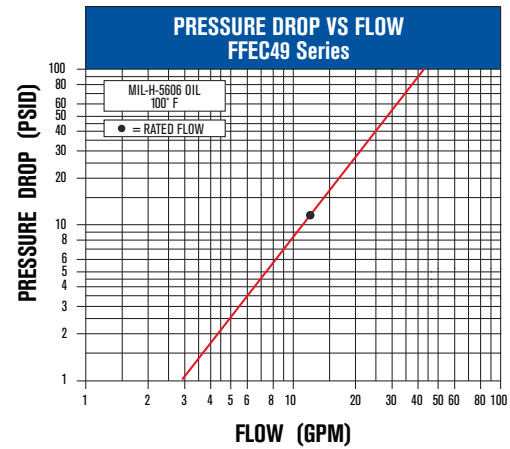
FLUSH FACE, NON-SPILL, CONNECT-UNDER-PRESSURE QUICK COUPLINGS

SafeWay's FFEC49 Series allows one-hand connection with trapped residual pressure in the nipple. It works with Industry Standard ISO 16028 female couplers in 1/2" body sizes from SafeWay and other manufacturers. SafeWay's FFEC49 Series products are widely used in the mobile equipment and construction markets on hydraulic attachments for skid steer loaders and hydraulic tools. Ideal for use in environments where thermal expansion of trapped fluid from temperature change or exposure to sun makes connection of the mating half difficult.



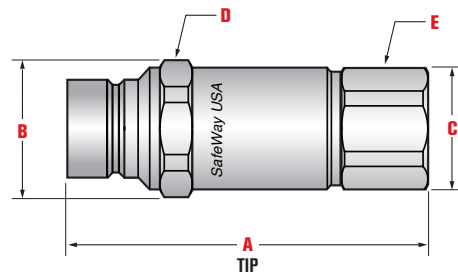
FFEC491-4

- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Interchangeable with Parker FEC-502-8FP.
- Bi-directional flow.
- Nipple connects under residual pressure by hand.
- Hardened locking surface.
- All FFEC49 Series couplings are 100% leak tested.
- Dimensionally interchangeable with all ISO 16028 compliant 1/2" male tips.
- Heavy duty steel construction.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.



PERFORMANCE DATA

PART NUMBERS	DESCRIPTION		CONNECT-UNDER-PRESSURE		OPERATING PRESSURE		NFPA RATED FLOW		MAX. SPILLAGE (per disconnect)
			Maximum	Maximum	Maximum	Maximum	GPM	(LPM)	
Male Tip	Body Size	Thread Size and Description	PSI	(BAR)	PSI	(BAR)	GPM	(LPM)	CC
FFEC491-4	1/2"	1/2" Female Pipe	3,000	(207)	4,000	(276)	12	(45)	.04



DIMENSIONAL DATA

Complete Coupler Number	DIMENSIONS (inches)				
	Overall Length A	Diameter B	Diameter C	Hex D	Hex E
FFEC491-4	3.56	1.35	1.20	1.25	1.12

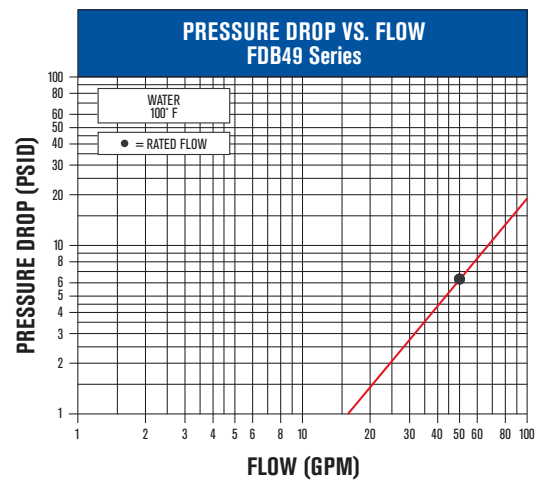
Temperature Range: Standard Seals (Buna-N) -40° to +250° F Viton® Option -15° to +450° F Other Seals Available. Viton® is a registered trademark of DuPont Dow Elastomers.
 Vacuum Data: 27.4 inches Hg, both connected and disconnected.

Pressure rating (Max. Operating Pressure) is based on Non-Pulsating, Low Cycle applications with essentially steady pressure during the operating cycle. Please consult factory regarding other applications.

FLUSH FACE, NON-SPILL, 316L STAINLESS STEEL QUICK COUPLINGS

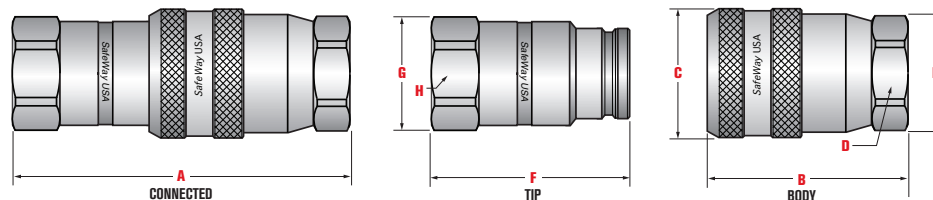
The FDB49 Series 316L Stainless Steel quick couplings provide rugged flush face valving for dry breaks, and allow one-hand push-to-connect. This high flow capacity product is a direct interchange with the Tuthill (Hansen) DB series coupler. Some basic applications include aerospace, food and beverage, oil and gas, chemical transfer and various military applications.

- Smooth, one hand, push-to-connect locking mechanism.
- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Interchangeable half-for-half with Tuthill (Hansen) DB series dimensional requirements. (Not ISO 16028).
- Rugged flush face valving allows for easy cleaning to minimize system contamination.
- Low temperature Viton® seals are standard.
- Designed for maximum flow for quick system response.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.



PERFORMANCE DATA

PART NUMBERS			DESCRIPTION		OPERATING PRESSURE		NFPA RATED FLOW		MAX. SPILLAGE
Complete Coupler	Female Body Half	Male Tip Half	Body Size	Thread Size and Description	Maximum		GPM	(LPM)	(per disconnect)
					PSI	(BAR)			
FDB49-8-316F	FDB495-8-316F	FDB491-8-316F	1"	1" Female Pipe	1,450	(100)	50	(189)	.04



DIMENSIONAL DATA

Complete Coupler Number	DIMENSIONS (inches)								
	Overall Length	Body Length	Diameter	Hex	Diameter	Tip Length	Diameter	Hex	
	A	B	C	D	E	F	G	H	
FDB49-8-316F	6.07	3.50	2.25	1.81	2.00	3.50	2.00	1.81	

Temperature Range: Standard Seals Low Temp Viton® -40° to +482° F
 Vacuum Data: 27.4 inches Hg, both connected and disconnected.

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Pressure rating (Max. Operating Pressure) is based on Non-Pulsating, Low Cycle applications with essentially steady pressure during the operating cycle. Please consult factory regarding other applications.