

740/741 High Displacement Threaded Diaphragm Seal

Features

- Large diaphragm provides ample displacement for inches of water ranges
- Ideal for high static, low differential pressure applications

Typical Uses

- Oil and Gas
- Refineries
- Chemical and Petrochemical
- Water and Wastewater
- NACE compliant Processes (Sour Gas Separation)
- Biogas and Biodiesel



740-41
High Displacement
Threaded Seal

Specifications

Connection Style:	740: threaded 741: threaded with flushing port
Process Connection Size:	¼, ½, ¾ or 1 NPT Female
Instrument Connection Size:	¼ or ½ NPT
Pressure Rating (MAWP):	up to 750 psi
Added Tolerance:	±0.5% typical

Wetted components

Diaphragm	Bottom Housing	Gasket
316 SS, Tantalum, Titanium, Hastelloy® B, Hastelloy® C 276, K-Monel®	316 SS, Tantalum, Titanium, Hastelloy® B, Hastelloy® C 276, Monel®, Carpenter® 20	PTFE (rated for -150 °F to 500 °F)

Non-Wetted Components

Top Housing	Bolts	Nuts
316L SS, Monel®, Titanium	Carbon Steel, 316 SS (optional)	Stainless steel



Key Benefits

- Diaphragm welded to top housing eliminates the risk of fill fluid loss
- Large displacement drives low pressure instrumentation
- Optimal for high-pressure, low-differential pressure applications

Contact Us

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Ordering Code	Example:	10	740	S	S	02T	XCK	NH
Process Connection Size								
25 - ¼ NPT Female								
50 - ½ NPT Female								
75 - ¾ NPT Female								
10 - 1 NPT Female		10						
Diaphragm Type								
740 - 740 High displacement seal, threaded process connection			740					
741 - 741 High displacement seal, threaded process connection with flush port								
Diaphragm Materials								
S - 316L Stainless steel				S				
P - Monel® 400								
U - Tantalum								
G - Hastelloy® B								
H - Hastelloy® C-276								
TI - Titanium								
Bottom Housing Materials								
S - 316L Stainless steel					S			
M - Monel® 400								
D - Carpenter 20®								
G - Hastelloy® B								
H - Hastelloy® C-276								
J - Hastelloy® C-22								
TI - Titanium								
B - Steel								
Instrument Connection Size								
02T - ¼ NPT Female						02T		
04T - ½ NPT Female								
Options (if choosing option(s) must include an "X")							X__	
Fill Fluid (See Table 1 on page 2 for more available fill fluids)								
CK - 50 cSt Silicone							CK	
CF - Halocarbon®								
Optional Features								
AW - Single ½ NPT flushing connection (741 only)								
DB - Dual ½ NPT flushing connections (741 only)								
DK - Dual ¼ NPT flushing connections (741 only)								
MQ - Positive material identification								
DU - Instrument welded to seal, instrument must be like-material to top housing								
PU - Pipe plug for flushing connection. Plug will match bottom housing material. Seals with flushing connections only								
NH - Stainless steel tag wired to product								NH
1H - Hydrostatic testing on assembly								
6B - Cleaned for oxygen service								

When selecting an instrument, refer to the [Min/Max Guide](#) for compatibility with this diaphragm seal or scan the QR code to the right.



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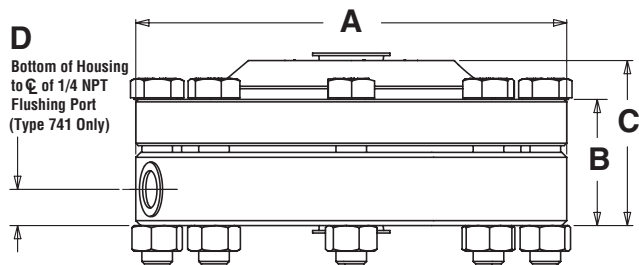
Table 1 - Fill Fluids

Fill Fluid	Temperature	Viscosity (cSt at 70°F (21°C))	Variation Code	Notes
Glycerin (food grade)	0°F to 400°F (-18°C to 204°C)	1,300	CG	Direct-mounting only. Not for use with vacuum service
50 cSt Silicone	-40°F to 500°F (-40°C to 260°C)	50	CK	
10 cSt Silicone	-40°F to 500°F (-40°C to 260°C)	10	DJ	
Halocarbon® 4.2	-70°F to 300°F (-57°C to 199°C)	4.2	CF	For use with oxygen/ oxidizing process media
Slytherm® 800	-40°F to 750°F (-40°C to 400°C)	10	HA	High temperature applications
Syltherm® XLT	-150°F to 500°F (-100°C to 260°C)	1.4	CC	Low temperature applications
Calflo® AF	-20°F to 600°F (-29°C to 316°C)	60	KF	High temperature, silicone-free
Mineral Oil	10°F to 400°F (-12°C to 204°C)	75	MY	
Neobee® M-20 (food grade)	5°F to 400°F (-15°C to 204°C)	9.5	NM	
Silicone (food grade)	-40°F to 500°F (-40°C to 260°C)	350	CZ	
Distilled Water	40°F to 185°F (4°C to 85°C)	0.9	FJ	
50/50 Glycerin/Water	15°F to 200°F (-9°C to 93°C)	30	GH	
Propylene Glycol	-50°F to 325°F (-46°C to 163°C)	54	CV	
Ethylene Glycol	20°F to 325°F (-7°C to 163°C)	14	FK	
50/50 Ethylene Glycol/Water	-25°F to 190°F (-32°C to 88°C)	2.9	CT	
80/20 Glycerin/Water	15°F to 225°F (-9°C to 107°C)	270	GR	
95/5 Water/Propylene Glycol	40°F to 185°F (4°C to 85°C)	1.0	PY	

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Dimensions in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings



Model	A	B	C	D
740-741	5.25 [133]	1.5 [38]	2.0 [51]	0.437 [11]