# **NASHCROFT**®

## Midi-Diaphragm Seal Type 311/312 All Welded

- All welded metal construction, prevents leakage of process media
- No gaskets or bolts
- For use on pressure gauges up to 3<sup>1</sup>/<sub>2</sub>" from vacuum to 1000 psi and 4<sup>1</sup>/<sub>2</sub>" gauges 100 psi to 1000 psi
- Top housing material 316L stainless steel standard
- Diaphragm materials in 316L stainless steel, hastelloy C and tantalum
- Bottom housing materials in 316L stainless steel and hastelloy C

- 1/4 NPT or 1/2 NPT female, 1/4-1/2 NPT male process connections
- 1/4 NPT or 1/2 NPT instrument connections
- Type 312 furnished with 1/8 NPT flushing connection
- Not available in male process connections



#### **SELECTION TABLES**

Table A – Process Connection			
Process Connection	Size	Code	
Threaded – male NPT	1/4	02	
Threaded – male NPT	1/2	04	
Threaded – male NPT	3/4	06	
Threaded – male NPT	1	08	
Threaded – female NPT	1/4	25	
Threaded – female NPT	1/2	50	

Description	Code
All welded midi-seal	311
All welded midi-seal	
w/flushing connection	312

Table C – Diaphragm Materials	
Materials	Code
316L stainless steel	S
Tantalum	U
Hastelloy C-276	Н

Table D – Bottom Housing Materials		
Materials	Code	
316L stainless steel	S	1
Hastelloy C-276	Н	1

Table E – Instrument Connection		
Instrument Connection	Size	Code
Threaded – female NPT	<sup>1</sup> / <sub>4</sub> NPT	02T
Threaded – female NPT	<sup>1</sup> / <sub>2</sub> NPT	04T

#### Table F – Filling Fluid

Fill	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	-40/600	СК
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	-70/300	CF
Syltherm	Pressure	Direct or Flexible Line	-40/750	HA

### TO ORDER THIS TYPE 311/312 MIDI-SEAL ASSEMBLY:

- 1. From Table A...select PROCESS CONNECTION SIZE (e.g., 50 for ½" female NPT)
- 2. From Table B...select TYPE (e.g., 311 for all welded midi-seal)
- 3. From Table C...select DIAPHRAGM MATERIAL (e.g., U for Tantalum)
- 4. From Table D...select BOTTOM HOUSING MATERIAL (e.g., H for Hastelloy C)
- 5. From Table E...select INSTRUMENT CONNECTION SIZE (e.g., 02T for 1/4" female NPT)
- 6. From Table F...select FILLING FLUID, if diaphragm seal will be attached to instrument (e.g., Glycerin CG)

Coded order: 50-311-UH-02T-CG

#### Consult factory for guidance in product selection Phone (203) 378-8281, FAX (203) 385-0499 or visit our web site at www.ashcroft.com

