# Type 310, 315 All-Welded "Mini" Diaphragm Seal



# PRODUCT FEATURES

- Compact size to fit space-restricted areas
- Designed to protect transducers, miniswitches and 3½" or smaller pressure gauges from corrosion, plugging or freeze-up
- All-welded metal construction prevents leakage of process media
- Rated for 2500 psi at 100°F
- · Fill/bleed connection is standard
- Available with male process connection (Type 310)

The compact size of the Ashcroft® 310 mini-seal allows it to fit into space-restricted areas and is designed to protect transducers, mini-switches, and 3½" or smaller dial size pressure gauges from corrosion, plugging or freeze- up. All welded metal construction prevents leakage of process media. It is rated for 2500 psi at 100°F and has a 316L stainless steel top housing standard. Lower housing materials include 316L stainless steel or Hastelloy C. Diaphragm materials include 316L stainless, Hastelloy C or Tantalum. ¼ NPT or ½ NPT process connection sizes are available.

## **PRODUCT SPECIFICATIONS**

Model Number:	Туре 310, 315
Process Connection Size:	<sup>1</sup> /4", <sup>1</sup> /2" ( <sup>1</sup> /8", <sup>3</sup> /4", 1"- 310 only) (see table A)
Instrument Connection Size:	1⁄8, 1⁄4 NPT
Diaphragm Material:	316L SS, Hastelloy C276, Tantalum, Monel
Bottom Housing Materials:	316L SS, Hastelloy C276, Monel, Hastelloy B
Filling Fluid:	Glycerin, Silicone, Halocarbon, Syltherm

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# Type 310, 315 All-Welded "Mini" Diaphragm Seal

Table A – Process Connection			
Process Connection	Size	Code	
Threaded – male NPT*	1/8	01	
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	

\*Available in Type 310 only. †Available in Types 310 & 315.

Pressure Ratings – All 2500 psi except flanged seals are per ASME B 16.5, temperature limit determined by diaphragm, bottom housing and/or filling fluid.

#### Table B – Type

Description	Code
All-welded mini-seal	310
All-welded midi-seal w/flushing connection	315

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

## Table D – Housing Materials

Bottom <sup>(1)</sup>	Code	Top <sup>(2)</sup>
316L SS	S	316L SS
Hastelloy C-276	Н	316L SS
Monel	М	Monel

(1) Other bottom housing materials on application. (2) Top housing material is 316L SS (standard). Monel mini-seal standard with monel top housing

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Table E – Instrument Connection			
Instrument Connection	Size	Code	
Threaded – female NPT	1⁄4	02T	
Threaded – female NPT	1⁄8	01T	

#### NOTES:

(1) For use with most 31/2" and smaller gauges. Movementless gauge 4½" (exception).

(2) Other bottom housing materials on application.

(3) Top housing material is 316L SS (standard). Monel mini-seal

standard with monel top housing.

(4) Not available with monel bottom housing.

#### Table E – Filling Fluid

Fill	Service	<b>Connection to Instrument</b>	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	

Monel is a registered trademark of Huntington Alloys, Inc. Hastelloy is a registered trademark of Cabot Corp.

Halocarbon is a registered trademark of Halocarbon Products GYLON 3510 is a registered trademark of Garlock Inc.

#### **HOW TO ORDER:**

1. From Table A... select PROCESS CONNECTION (e.g., 1/4" process code 25)

2. From Table B... select TYPE (310)

- 3. From Table B... select DIAPHRAGM MATERIAL. (e.g., 316L stainless steel-code S)
- 4. From Table C... select BOTTOM HOUSING MATERIAL. (e.g., 316 stainless steel-code S)
- 5. From Table D... select INSTRUMENT CONNECTION size. (e.g., 1/4 NPT-code 02T)
- 6. From Table E... select FILLING FLUID, if diaphragm seal will be attached to instrument. (e.g., Glycerin-code CG) Coded order: 25-310SS-02T-CG

#### Dimension





Types 310 mini-seal - Threaded ¼, ½, ¾, NPT Types 315 mini-seal - Threaded ¼, ½, ¾, NPT

	Α	В	С	
	in mm	in mm	in mm	
Type 310	1.75 (38)	.81 (30)	1.34 (34)	
Type 315	1.73 (44)	2.25 (57.2)	1.34 (34)	