

Type 310, 315 All-Welded “Mini” Diaphragm Seal



PRODUCT FEATURES

- Compact size to fit space-restricted areas
- Designed to protect transducers, mini-switches and 3/8" 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 315)

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 3/8" 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. 1/4 NPT or 1/2 NPT process connection sizes are available.

PRODUCT SPECIFICATIONS

Model Number:	Type 310, 315
Process Connection Size:	1/4", 1/2" (3/4", 1" - 315 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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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	H
Tantalum	U
Monel	P

Table D – Housing Materials

Bottom ⁽¹⁾	Code	Top ⁽²⁾
316L SS	S	316L SS
Hastelloy C-276	H	316L SS
Monel	M	Monel

(1) Other bottom housing materials on application.

(2) Top housing material is 316L SS (standard). Monel mini-seal standard with monel top housing.

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 4 1/2" (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 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	CK
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.

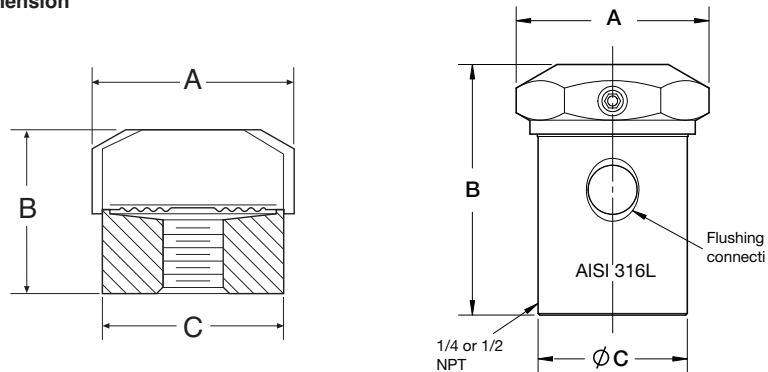
Halocarbon is a registered trademark of Halocarbon Products

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 C... select DIAPHRAGM MATERIAL. (e.g., 316L stainless steel-code S)
4. From Table D... select BOTTOM HOUSING MATERIAL. (e.g., 316 stainless steel-code S)
5. From Table E... select INSTRUMENT CONNECTION size. (e.g., 1/4 NPT-code 02T)
6. From Table F... 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 1/4, 1/2, 3/4, NPT
Types 315 mini-seal – Threaded 1/4, 1/2, 3/4, NPT

	A		B		C	
	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)