

## Type 510/511 All Welded Diaphragm Seal



### FEATURES

- Compact size
- Light weight
- All-welded design
- 100 bar rating standard, 345 bar rating optional (HP)
- Continuous duty design
- Minimized fill volume
- Male connections eliminate adapters/fittings
- Available flushing connection (Type 511)
- Dual inch and metric wrench flats

### APPLICATIONS

- Corrosive processes
- Controlling fugitive emissions
- Elevated process temperatures
- Suspended solids in the process
- Limited space
- Where male connections are preferred

### CONSTRUCTION

This compact isolator is small enough in design to be used in confined spaces, but provides sufficient displacement to drive a wide variety of instrumentation. Its all-welded tamper proof design prevents possible process media leakage.

### SPECIFICATIONS

#### Maximum Pressure Rating

Standard 100 bar (1500 psi)  
at 23 °C (73 °F)  
Optional 345 bar (5000 psi)  
at 23 °C (73 °F) - option (HP)

#### Top Housing material

Stainless Steel 1.4404 (316L),  
Hastelloy C-276 or Monel 400

#### Diaphragm Materials

Stainless Steel 1.4435 (316L),  
Hastelloy C-276 or Monel 400

#### Lower Housing Materials

Stainless Steel 1.4404 (316L)  
Hastelloy C-276 or Monel 400

#### Instrument Connection Sizes

¼ NPT, ½ NPT female,  
G ¼, G ½ female

#### Process Connections

¼ NPT, ½ NPT male according to  
ANSI/ASME B1.20.1  
G ¼ B, G ½ B male according to EN 837  
\*Others available upon request

#### Accuracy (typical)

Seal will add 0,5 % to the stated full scale  
accuracy of the instrument attached.

#### Standard Fill Medias

Glycerine  
Silicone  
Halocarbon  
Syltherm  
\*Others available upon request

#### ATEX

Conformity according to RL 94/9/EC  
appendix X for mechanical equipment  
in potential hazardous areas:  
Optional, marking  
CE 0044 Ex II 2 GD c II TX  
File no. 35101282 at notified body 0044,  
TÜV NORD CERT  
The temperature class will be determined  
by the used measuring device.

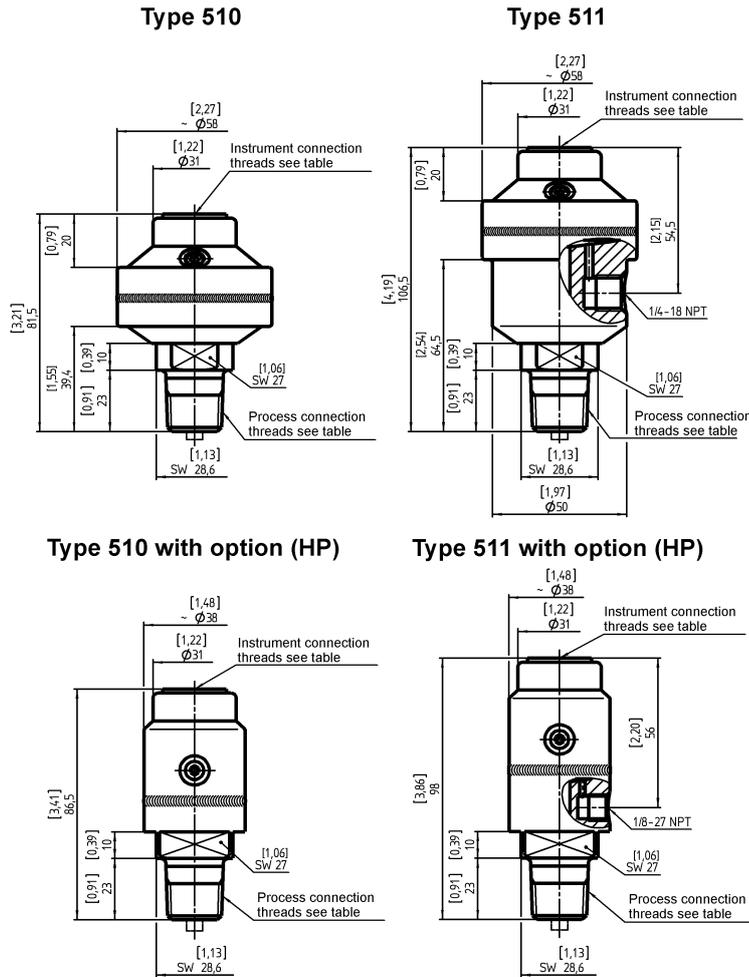
#### Pressure Rating

-1 ... 100 bar (vac. to 1.500 psi) standard  
100 ... 345 bar (vac. to 5.000 psi) with (HP)  
option

#### OPTIONS

DU - Welded instrument connection  
HP - 345 bar / 5000 psi rating  
PU - Flushing connection plug  
6B - Oxygen cleaned  
C3 - Material certificate EN 10204 3.1

General dimensions in mm [inch]



Rev. 0

Order information

Process connection	Seal type	Diaphragm material	Housing material	Instrument connection	Fill fluid	Options
(02) ¼ NPT male	510 Threaded 511 Threaded with flushing connection <sup>1)</sup>	(S) Stainless steel 1.4435 (316L) (only for st. steel housing) (H) Hastelloy C-276 (only for st. steel or Hastelloy housing) (P) Monel 400 (only for Monel housing)	(S) Stainless steel 1.4404 (316L) (H) Hastelloy C-276 (P) Monel 400	(02T) ¼ NPT female	(CG) Glycerin (Direct mounting, -18/204 °C, 0/400 °F) (CK) Silicone (Direct mounting or with capillary line ≤ 10' (3 m), -40/315 °C, -40/600 °F) (EJ) Silicone (Capillary line >10' (3 m), -40/315 °C, -40/600 °F) (CF) Halocarbon (Direct mounting or with capillary line, -56/149 °C, -70/300 °F) (HA) Syltherm 800 (Direct mounting or with capillary line, -40/400 °C, -40/750 °F)	(HP) High pressure rating <sup>1)</sup> (350 bar, 5000 psi) (ATEX) ATEX approval (DU) Welded instrument connection (PU) Pipe plug for flushing connection (same material as bottom housing) (6B) Oxygen cleaned (only with Halocarbon filling) (C3) Material certificate acc. to EN 10204 3.1
(04) ½ NPT male				(04T) ½ NPT female		
(13) G ¼ B male				(13T) G ¼ female		
(15) G ½ B male				(15T) G ½ female		
Others on request	<sup>1)</sup> on request				Maximum pressure rating is limited at high media temperature.	<sup>1)</sup> on request

Order example

Process connection	Seal type	Diaphragm material	Housing material	Instrument connection	Fill fluid	Options
04	510	S	S	04T	CK	C3

Ashcroft Instruments GmbH

Germany  
Max-Planck-Str. 1, D-52499 Baesweiler  
P.O. Box 11 20, D-52490 Baesweiler  
Tel.: +49 (0) 2401 808-0, Fax: +49 (0) 2401 808-125

France  
48, Chemin des Landes  
F-69700 Montagny  
Tel.: +33 (0) 9 65 32 71 31, Fax: +33 (0) 4 72 39 10 57

Website: www.ashcroft.eu

United Kingdom  
Unit 5 William James House  
Cowley Road, Cambridge CB4 0WX  
Tel.: +44 (0) 12 23 39 55 00, Fax: +44 (0) 12 23 39 55 01

e-Mail: sales@ashcroft.com