



### Main Features

- Wide range of threaded process connections
- Internal welded diaphragm
- Lower part exchangeable
- Option : exotic materials for wetted parts
- Option : with cleaning ring

### Applications

- Oil & Gas / Chemical
- Water & Waste water
- Energy
- Transportation & Logistics
- Machinery

### Technical Data

This universal chemical seals with threaded process connection are used to protect pressure gauges from high temperatures, aggressive, crystalizing or corrosive fluids.

Chemical seals can be mounted to mechanical pressure gauges, switches or transmitters directly or with a flexible capillary.

The filling fluid of the measuring system has to be chosen compatible to the application.

A wide choice of materials for the wetted parts allow the user to adapt the seal to many different applications and process fluids.

The lower part of the product family DT can be exchanged very easy without new calibration of the filled system.

This allows the user to adapt the system to different process connections.

Upper parts alone are supplied with screws and gasket.

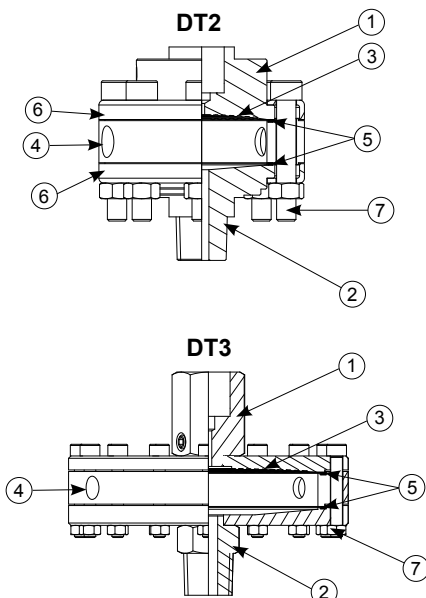
Pressure ranges 0 ... 160 mbar to 0 ... 1000 bar  
(see ordering details)

Wetted parts Stainless steel 1.4404 (AISI 316L)  
Stainless steel 1.4435 (AISI 316L)  
Option : exotic materials or coatings  
(see ordering details)

Cleaning ring (option) With 1 flushing port 1/8 NPT female  
Only DT1, DT2, DT3

Gaskets DT1, DT2, DT3 : PTFE (max. 200°C)  
DT5 : stainless steel 1.4404 (max. 200°C)  
DT8 : graphite (max. 400°C)

### Materials



	N°	DT1	DT2	DT3	DT5	DT8
Upper part	①	1.4404 (316L)				
Lower part	②	1.4404 (316L) <sup>1)</sup>				
Diaphragm	③	1.4435 (316L) <sup>1)</sup>				
Cleaning ring	④	1.4404 (316L) <sup>1)</sup>			-	-
Gaskets	⑤	PTFE	PTFE	PTFE	1.4404	Graphite
Fixing flanges <sup>3)</sup>	⑥	1.4301 (304) <sup>2)</sup>		-	Carbon steel	1.4404 (316L)
Bolts/Nuts	⑦	1.4301 (304) <sup>2)</sup>			Carbon steel	1.4404 (316L)

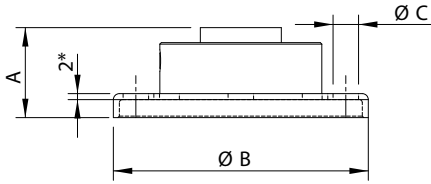
<sup>1)</sup> Others materials see ordering details on page 3

<sup>2)</sup> 1.4404 (316L) with option 1999

<sup>3)</sup> Stamped parts for DT1 and DT2, turned parts for DT5 and DT8

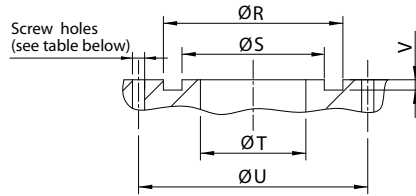
**Dimensions - Types of mounting**

**Upper part**

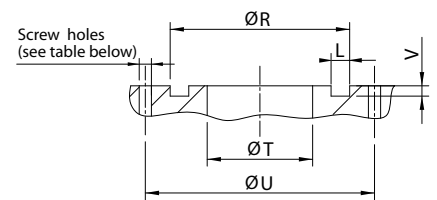


\* Only DT1/DT2

**Dimensions of counter flange**



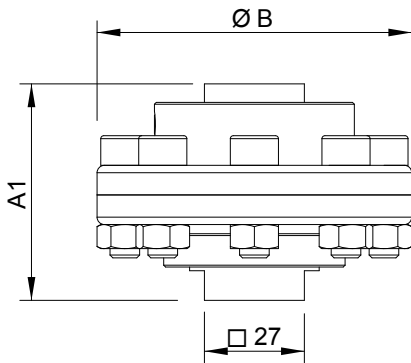
**DT1/DT2/DT3/DT5**



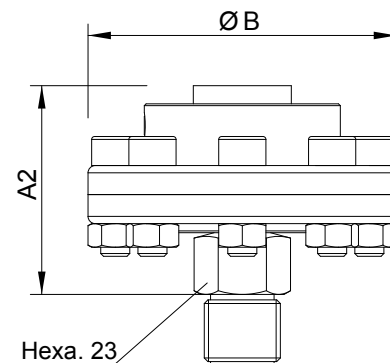
**DT8**

	Ø B	A	Ø C	Weight kg	Ø R	Ø S 0 / -0.1	L	V	Ø T 0 / -0.2	Ø U ±0.1	Screws	Gaskets
<b>DT1</b>	85	38	10.5	0.460	50.1 -0.05 / +0	46	-	0.6 -0 / +0.1	45	65	8 x M10	49.8 x 45.8 x 1 (PTFE)
<b>DT2</b>	85	30	8.5	0.500	59.1 -0.05 / +0	55	-	0.6 -0 / +0.1	54	70	8 x M8	58.8 x 54.8 x 1 (PTFE)
<b>DT3</b>	120	43	5.5	0.660	101.1 -0 / +0.2	96	-	0.6 -0 / +0.1	94	110	16 x M5	101 x 97 x 1 (PTFE)
<b>DT5</b>	85	43	10.5	0.800	40.1 -0.05 / +0	36	-	0.8 -0 / +0.1	35	65	8 x M10	40 x 36 x 1 (1.4404)
<b>DT8</b>	85	43	10.5	0.790	50.5 -0 / +0.05	-	2.25 -0 / +0.05	2.5 -0.1 / +0	45	65	8 x M10	50.5 x 46 x 3.3 (graphite)

**Upper part + lower part**



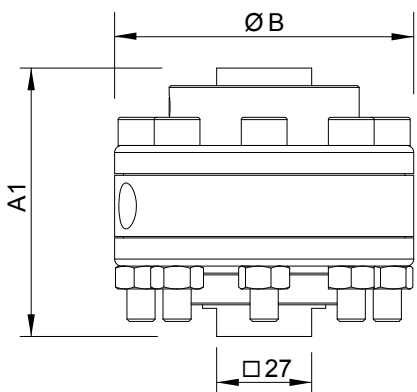
Female process connection



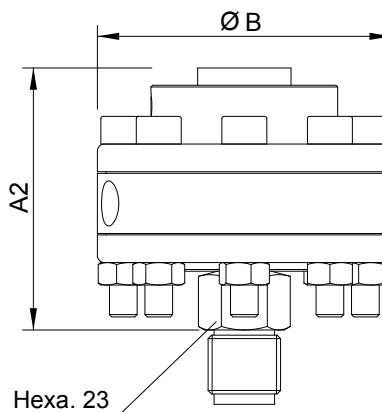
Male process connection

	A1	A2	Ø B	Weight kg
<b>DT1</b>	67	66	85	1.20
<b>DT2</b>	59	58	85	1.10
<b>DT3</b>	73	64	120	1.40
<b>DT5</b>	72	73	85	1.75
<b>DT8</b>	72	73	85	1.70

**Upper part + cleaning ring + lower part**



Female process connection



Male process connection

	A1	A2	Ø B	Weight kg
<b>DT1</b>	82	81	85	1.60
<b>DT2</b>	77	76	85	1.60
<b>DT3</b>	88	78	120	1.90

**Ordering details DTx**

			2	.	.	.	.	.	.
<b>Model</b>									
	<b>Min. range <sup>1)</sup></b>	<b>P. max</b>							
For low pressure	-1...0 bar / 0...160 mbar	25 bar	DT3						
For normal pressure	-1...3 bar / 0...1 bar	40 bar	DT2						
For medium high pressure	-1...9 bar / 0...10 bar	160 bar	DT1						
For high pressure	-1...39 bar / 0...40 bar	400 bar	DT8						
For very high pressure	0...60 bar	1000 bar	DT5						
<b>Upper part material</b>									
Stainless steel 1.4404 (316L)			2						
<b>Instrument connection</b>									
G½ female								L	
G¼ female <sup>2)</sup>								H	
½ NPT female								N	
¼ NPT female <sup>2)</sup>								8	
<b>Diaphragm material</b>									
Stainless steel 316L (1.4435)								2	
Uranus B6 (1.4539)								3	
Hastelloy B (2.4617)								5	
Hastelloy C276 (2.4819)								6	
Tantalum <sup>3)</sup>								7	
Monel 400 (2.4360)								9	
<b>Diaphragm coating</b>									
No coating								0	
PTFE 20 µm <sup>4)</sup>								1	
PTFE 250 µm adhesive liner <sup>5) 6)</sup>								2	
HALAR 200 µm								4	
Gold 15 µm								7	
<b>Cleaning ring material <sup>7)</sup></b>									
Without cleaning ring								0	
Stainless steel 316L (1.4404)								2	
Uranus B6 (1.4539)								3	
Hastelloy B (2.4617)								5	
Hastelloy C276 (2.4819)								6	
Monel 400 (2.4360)								9	
<b>Lower part material</b>									
Without lower part								0	
Stainless steel 316L (1.4404)								2	
Uranus B6 (1.4539)								3	
Hastelloy B (2.4617)								5	
Hastelloy C276 (2.4819)								6	
Monel 400 (2.4360)								9	
PVC	max. 10 bar/40°C							C	
PVDF	max. 10 bar/80°C							D	
PPH	max. 10 bar/80°C							E	
PTFE	max. 10 bar/80°C							F	
<b>Process connection</b>									
Without lower part								0	
Male thread	G½							3	
	½ NPT <sup>8)</sup>							6	
	G¾ <sup>9)</sup>							J	
	G¼ <sup>2)</sup>							2	
	¼ NPT <sup>2) 8)</sup>							5	
Female thread	G½ <sup>8)</sup>							L	
	½ NPT <sup>8)</sup>							N	
	G¼ <sup>2) 8)</sup>							H	
	¼ NPT <sup>2) 8)</sup>							8	
<b>Lower part coating <sup>10)</sup></b>									
No coating								0	
PTFE 20 µm								1	
PTFE 2 mm	max. 10 bar/100°C							3	
HALAR 200 µm								4	

<sup>1)</sup> Valid for assembly with 100 mm pressure gauges and temperature between -20 and +70°C. For other conditions, the minimum pressure ranges may be different. Please contact Baumer

<sup>2)</sup> Max. 600 bar

<sup>3)</sup> No diaphragm coatings on Tantalum diaphragm available

<sup>4)</sup> Thin anti-sticking coating, limited corrosion resistance

<sup>5)</sup> Not for vacuum and compound pressure ranges

<sup>6)</sup> Only available for models DT1, DT2 and DT3

<sup>7)</sup> Cleaning rings only available for models DT1, DT2 and DT3

<sup>8)</sup> Not available with coating on the lower part

<sup>9)</sup> Max. 800 bar

<sup>10)</sup> No lower part coating available with cleaning ring