

Diaphragm separators mounted on ISO or ANSI flanges

D631-D621-D421-D611 D411-D501-D701

These series are designed for the measurement of gauge pressure between 0.16 and 1000 bar of corrosive fluids within the temperature range of - 60°C to + 200°C.

In the event of damage sustained by the pressure indicator or transmitter, the diaphragm of the separator ensures leak proof sealing of the system.

Various mounting configurations for customers' requirements:

D631 to D634 : 0.16 to 25 bar and -1 +0 to -1 +24 bar

D421-424

D621-D624

} 1* to 40 bar and -1 +3 to -1 +24 bar

D411 to D414

D611 to D614

} 4 to 160 bar and -1 +9 to -1 +24 bar

D501-D701 : 160 to 420 bar

Pressures given above are indicative. For more details, please consult the technical leaflet : «chemical seal guide».

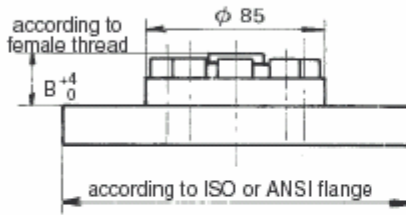
* For -20°C ≤ T° fluid ≤ 100°C - For 0°C ≤ T fluid ≤ 40°C, P from 0.4 to 40 bar



Dimensions (mm)

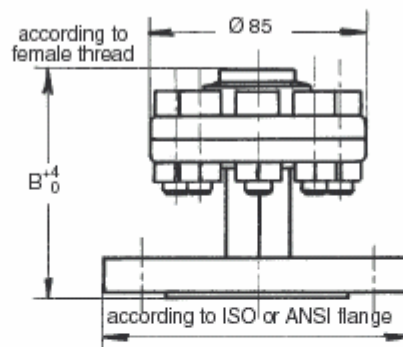
Sizes and weight

D411, 414, 421, 424, 501



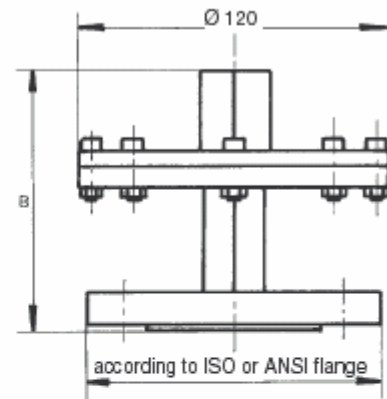
Type	B
D411, D421, D501	26
D414, D424	41

D6X1 to D6X4, D701 (X = 1 or 2)



Type	B
D6X1	101
D6X2	109
D6X3, D6X4	116
D701	114

D631 to D634



Type	B
D631	106
D632	112
D633, D634	120

Coating of PTFE, 2 mm thick, limits the operating pressure to 10 bar.
It is possible only on faces A-B and G and on DN ≤ 40 (or ≤ 1 1/2) for D61X-62X-63X.

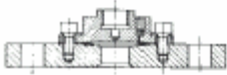
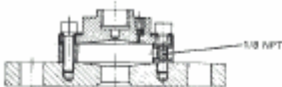


Tables to specify other chemical seals

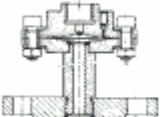
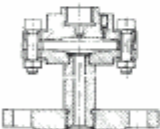
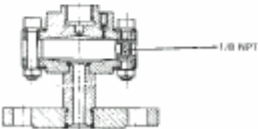
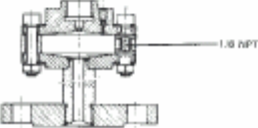
After choosing the chemical seal type = **D411-D414, D421-D424, D611 to D614, D621 to D624, D631 to D634, D501, D701** (table A) specify the various characteristics in the order given in the following tables (B to L).

		Table	Code**	Example
Chemical seal type	:	A	D633	(separator with cleaning ring and clamped diaphragm mounted on BRD flange)
Top housing	: material	C	AC	(steel)
	: female thread	D	F 001	(G1/2)
Diaphragm	: material	E	Ti	(titanium)
	: coating	I	0	(without coating)
Only D632, 622, 612	Clamping ring	: material	F	-
	: coating	H	-	-
Only D424-414-633-623 D613-634-624-614	Cleaning ring	: material	F	SS (316 L stainless steel)
	Flanges (see tables)	: standard	B	ISO
	: PN or class	B	10	
	: DN	B	40	
	: face	J	A	flat face
	: finish	K	0	standard
	: material	F	SS	(316 L stainless steel)
For separators without cleaning ring	: coating	H	0	(without coating)
Filling liquid	:	L	LRS2	-60° to +150°C

** Codes must be used to define the various characteristics of chemical seals.

A Chemical seal type		1' ≤ P ≤ 40 bar P : -1+3 to -1+24 bar	4 ≤ P ≤ 160 bar P : -1+9 to -1+24 bar	160 ≤ P ≤ 420 bar
D4X1 TO D4X4 et D501 (X= 1 or 2)	Type of assembly	FEMALE CONNECTION/FLANGE		
	Separators with welded diaphragm mounted on BRP flange	-	D421 D428 ⁽²⁾	D411 D418 ⁽¹⁾
	Separators with cleaning ring and welded diaphragm mounted on BRP flange	-	D424 D429 ⁽²⁾	D414 D419 ⁽¹⁾

* See front page for rating with respect to fluid T

D6X1 to D6X4 to D701 (X= 1 or 2 or 3)		0,16 ≤ P ≤ 25 bar 0 ≤ P ≤ 24 bar abs. -1+0 to -1+24 bar	1' ≤ P ≤ 40 bar P : -1+3 to -1+24 bar	4 ≤ P ≤ 160 bar P : -1+9 to -1+24 bar	160 ≤ P ≤ 420 bar
D6X1 to D6X4 to D701 (X= 1 or 2 or 3)	Type of assembly	FEMALE CONNECTION/FLANGE			
	Separators with welded diaphragm mounted on BRD flange	D631	D621 D628 ⁽²⁾	D611 D618 ⁽¹⁾	D701
	Separators with clamped diaphragm mounted on BRD flange	D632	D622	D612	-
	Separator with cleaning ring and clamped diaphragm mounted on BRD flange	D633	D623	D613	-
	Separator with cleaning ring and welded diaphragm mounted on BRD flange	D634	D624 D629 ⁽²⁾	D614 D619 ⁽¹⁾	-

(1) : 4 ≤ P ≤ 400 bar

(2) : 1 ≤ P ≤ 100 bar



Tables to specify other chemical seals

B Flange/Separator compatibility

D621 to D624 D421 to D424 D631 to D634

Selection of separator with flange to ISO standard								
PN								
DN	6	10	16	20	25	40	50	
10								
15								
20								
25								
32								
40								
50								
65								
80								
100								
125								
150								

Selection of separator with flange to ANSI standard			
Class			
DN	150	300	
1/2"			
3/4"			
1"			
1 1/4"			
1 1/2"			
2"			
2 1/2"			
3"			
4"			

D621 to 624
D631 to 634 (except PN40-50 and 300)
D421 - 424

D611 to D614 D411 to D414

Selection of separator with flange to ISO standard										
PN										
DN	6	10	16	20	25	40	50	100	150	
10										
15										
20										
25										
32										
40										
50										
65										
80										
100										
125										
150										

Selection of separator with flange to ANSI standard				
Class				
DN	150	300	600	900
1/2"				
3/4"				
1"				
1 1/4"				
1 1/2"				
2"				
2 1/2"				
3"				
4"				

D611to 614
D411 - 414

D501 to D701

Selection of separator with flange to ISO standard		
PN		
DN	250	420
10		
15		
20		
25		
32		
40		
50		
65		
80		
100		
125		
150		

Selection of separator with flange to ANSI standard			
Class			
DN	1500	2500	
1/2"			
3/4"			
1"			
1 1/4"			
1 1/2"			
2"			
2 1/2"			
3"			
4"			

D701
D501

Code**	C	
	Top housing material	
AC	Steel	
SS	Stainless steel 316 L	

Code**	D	
	Top housing female thread	
F001	Fem. G1/2	
F002	Fem. G1/4	
F003	Fem. 1/2NPT	
F004	Fem. 1/4NPT	

Code** diaphragm	E	F
	Material :	Code** Housing ring
	Steel	Ac
SS	Stainless steel 316 L	SS
Ur	Uranus B6	Ur
Ni	Nickel	Ni
HB	Hastelloy B	HB
HC	Hastelloy C 276	HC
Ta	Tantalum	Ta
Ti	Titanium ⁽¹⁾	Ti
Mo	Monel 400	Mo

(1) Clamped diaphragm only

Code**	H	I
	Coating	
	Housing and ring	Diaphragm
0	No coating	
1	PTFE . 0.02 mm thick	1 ⁽¹⁾
2	PTFE 2 mm thick	
3	Halar 0.2 mm thick	3 ⁽¹⁾
	PTFE lining 0.15 mm thick P=Pa	2
	Gold 15 µ thick	4

Code**	L	
	Filling fluid	
	Operating temperature	Application
LRS 0	No filling	
LRS 1	-15° + 150° C	Std
LRS 2	-60° + 150° C	Low temperature
LRS 3	-20° + 300° C	High temperature
LRS 4	-15° + 150° C	Oxygen-chlorinated products max. P = 150 bar

** Codes must be used to define the various characteristics of chemical seals

⁽¹⁾ : tantalum diaphragm coating not available for D200 and D63X serie



Tables to specify other chemical seals

J Flanges face

ISO PN 6-10-16-25 and 40	ISO PN 20 and 50 ANSI Class 150/300	ISO PN 100-150-250-420 ANSI Class 600/900/1500/2500
<p>Codes**</p> <p>A </p> <p>Flat Face FF</p> <p>B </p> <p>Raised Face RF</p> <p>C </p> <p>Male tongue</p> <p>D </p> <p>Female groove</p> <p>E </p> <p>Male spigot</p> <p>F </p> <p>Female spigot</p>	<p>Codes**</p> <p>G </p> <p>Raised Face (RF de 1,6)</p> <p>H I large small </p> <p>Male tongue</p> <p>K L large small </p> <p>Female groove</p> <p>M N large small </p> <p>Male spigot</p> <p>O P large small </p> <p>Female spigot</p> <p>Q </p> <p>Ring joint face (RTJ)</p>	<p>Codes**</p> <p>R </p> <p>Raised Face (RF de 6,4)</p> <p>H I large small </p> <p>Male tongue</p> <p>K L large small </p> <p>Female groove</p> <p>M N large small </p> <p>Male spigot</p> <p>O P large small </p> <p>Female spigot</p> <p>Q </p> <p>Ring joint face (RTJ)</p>

**Codes must be used to define the various characteristics of chemical seals.

Code**	K Surface finish of sealing faces	
	Description	Norme
0	Std. machining to NFE 29203 standard	ISO/ANSI
1	Stock Finish	ANSI
2	Spiral serrated	ANSI
3	Concentric Serrated	ANSI
4	Smooth Finish	ANSI
5	Cold Water Finish	ANSI

Nota : To define the type of face, a letter from **A to R** and a figure from **0 to 5** must be selected.
Example - **B1** - which corresponds to a raised face with Stock Finish surface finish.