

PRODIA WT MEMBRANVENTIL
WEIR TYPE DIAPHRAGM VALVE
VALVULA DIAFRAGMA TIPO W



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PROCONVAL
PROCESS CONTROL VALVES

ProDia Diaphragm Valves Type W T



Pneumatically, hydraulically and electrically operated WeirType Diaphragm Valves are available for the automatic control of process plants. The actuators can be fitted with many forms of positioners, micro and proximity switches. Numerous other options offer unique cost effective process control of corrosive services.

ProDia Diaphragm Valves are known for their benefits in corrosion and abrasion resistance, offering features of leak tightness and low cost maintenance in severe service applications.

The valves are based on simple operating principles and have recently become more widely used by process engineers as a result of the increased range of diaphragms and body lining materials.

Weir Type 'W' Diaphragm Valves are extremely versatile in their application because of the variety of body materials, linings, coatings and grades of diaphragms available.

Weir Type diaphragms incorporate the use of PTFE, offering maximum chemical and temperature resistance.

Weir Type Diaphragm Valves manual bonnet assemblies incorporate position indication, as well as adjustable tamper-proof and over-closure-protection. Over-closure is the most common cause of diaphragm damage, particularly in temperatures above 800C (1750F).

The valves are self-draining when installed at a certain slight angle on the horizontal plane.

Material & application

GRADE	MATERIALS	TEMP. °C °F	SIZE RANGE	TYPICAL SERVICES
10	Natural rubber	-40 to 100 -40 to 212	1/2" - 14"	General purpose, abrasives, water, diluted mineral acids
11	Natural rubber composite	-40 to 100 -40 to 212	1/2" - 8"	Abrasives, slurry & suspended solids
20	EPDM/black	-40 to 140 -40 to 284	1/2" - 14"	General purpose, highly-resistant to temperatures, most corrosive chemicals and abrasive liquids
2F	EPDM/food grade	-30 to 120 -22 to 248	1/2" - 8"	Food & pharmaceuticals
30	Butyl rubber	-30 to 130 -22 to 266	1/2" - 14"	Acids, alkalis, hot water, low pressure steam
40	Nitrile rubber	-20 to 100 -4 to 212	1/2" - 14"	Oils, fats & fuels
50	Neoprene	-20 to 100 -4 to 212	1/2" - 14"	Air, weak chemicals, greases
60	Hypalon *	-20 to 100 -4 to 212	1/2" - 14"	Concentrated acids & alkalis, chlorine services
70	Viton * FPM	-20 to 150 -4 to 302	1/2" - 8"	Concentrated sulphuric & other acids, aromatic hydrocarbons, chlorine services
80	Silicone	-30 to 175 -22 to 347	1/2" - 8"	Moderate or oxidizing chemicals, ozone, concentrated sodium hydroxide. Recommended for food
92	PTFE/EPDM Backed	-30 to 175 -22 to 347	1/2" - 8"	Highest chemical and temperature resistance
93	PTFE/Butyl backed	-30 to 150 -22 to 300		
96	PTFE/Hypalon* backed	-20 to 120 -4 to 248		
97	PTFE/Viton* backed	-20 to 175 -4 to 347		

* VITON and HYPALON are registered E.I. Du Pont.

CODE	MATERIALS	TEMP. °C °F	SIZE RANGE	TYPICAL SERVICES
SR	Soft natural rubber	-30 to 85 -22 to 185	1/2" - 14"	General purpose, abrasives, water, diluted mineral acids
HR	Hard natural rubber	-30 to 85 -22 to 185	1/2" - 14"	General purpose, good acid & alkali resistance
BR	Butyl rubber	-30 to 120 -22 to 248	1/2" - 14"	Good acid & alkali resistance including sulphuric acid
NR	*Neoprene™ rubber	-30 to 105 -22 to 221	1/2" - 14"	Weak chemicals & greases
HY	Chlorosulfonated polyethylene – CSM *Hypalon™ rubber	-30 to 95 -22 to 203	1/2" - 14"	Concentrated acids & alkali
GL	Glass (Borosilicate Blue Glass Lined)	-10 to -14 to 347	1/2" - 8"	High chemical resistance, abrasion resistance, high temperature stability, suitable for foods
ECTFE	Ethylene chlorotrifluoroethylene HALAR™	-20 to 130 -4 to 265	1/2" - 8" Coated	High chemical resistance to mineral & oxidizing acids, alkalis, salts & nearly all solvents
PP	Polypropylene	-30 to 85 -22 to 185	1" - 6" Lined	Water treatment, effluent lines especially hot effluent lines from dye stuffs, chemical processing plating fluid & steel works picking lines
PVDF	Polyvinylidene Fluoride	-20 to 130 -4 to 265	1" - 6" Lined 1/2" - 8" Coated	Resistant to most inorganic acids & bases of moderate concentrations, Sodium hypo-chlorite service
ETFE	Ethylene Tetrafluoroethylene – * TEFZEL™	-20 to 150 -4 to 302	1" - 6" Lined 1/2" - 8" Coated	High chemical resistance, abrasion resistant, suitable for food
*PFA	Perfluoroalkoxy	-20 to 175 -4 to 347	1" - 6" Lined 1/2" - 8" Coated	High chemical resistance, abrasion resistance, high temperature stability, suitable for food
NY	Rilsan™ Nylon 11 Coated	-20 to 80 -4 to 175	1/2" - 8"	Potable Water and water treatment chemicals

* Halar TM is the registered mark of Ausimont UK Limited.

* Rilsan TM is the registered trademark of ATO Chemical Products

* Is the registered trademark of E.I. du Pont de Nemours and Company

Advantages

In-line maintenance – all topworks (diaphragm and operator) can be replaced without disassembling the body from the pipeline.

Regular diaphragm inspection, and replacement when necessary, will increase valve life
Bonnet isolation – all bonnet components are isolated from the service by means of the diaphragm

No packings/gaskets are required, thus eliminating a common leak path found in other valves types

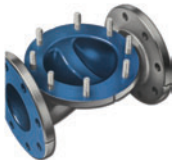
Design flexibility – wide range of diaphragms, linings and operators offering scope to maximize valve life.

Over-closure protection – lowers cost of owning ProDia diaphragm valves by reducing the possibility of over-closure, which decreases diaphragm and valve body life

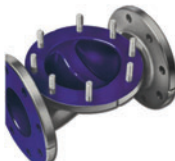
Diaphragm valves are self-draining and self-cleaning



PVC coated



Email



Enamel coated



Halar coated



Rilsan coated



PFA lined

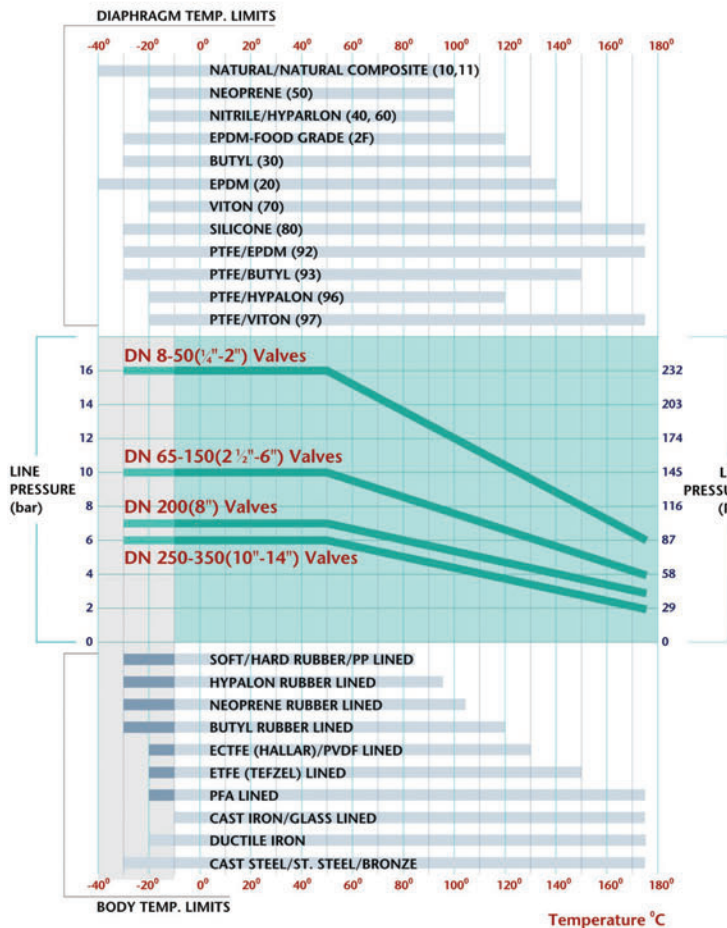


Rubber lined



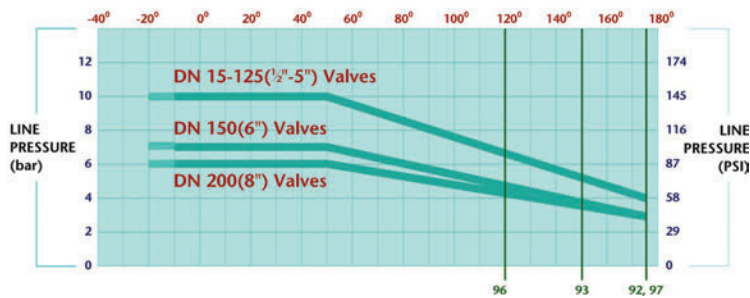
Stainless steel

For valves with elastomeric diaphragms



Body	Connection	DN
GG 25	Screwed	25-80
	Flanged end	25-350
	Flanged end	25-350
GGG 40.3	Screwed	25-80
	Flanged end	25-350
	Flanged end	25-350
GS-C25	Screwed	25-80
	Flanged end	25-350
	Flanged end	25-350
1.4408.	Butt weld	25-80
	Screwed	25-80
	Flanged end	25-350
Bronze	Screwed	25-50
	Flanged end	25-150
Weichgummi	Flanged end	25-350
Hartgummi	Flanged end	25-350
Butyl	Flanged end	25-350
Neoprene	Flanged end	25-350
Hypalon	Flanged end	25-350
ETFE	Flanged end	25-150
PFA	Flanged end	25-150
PVDF	Flanged end	25-150
PP	Flanged end	25-150
Email	Flanged end	25-200
ECTFE	Flanged end	25-200
ETFE	Flanged end	25-200
PVDF	Flanged end	25-200
NYLON 11	Flanged end	25-200

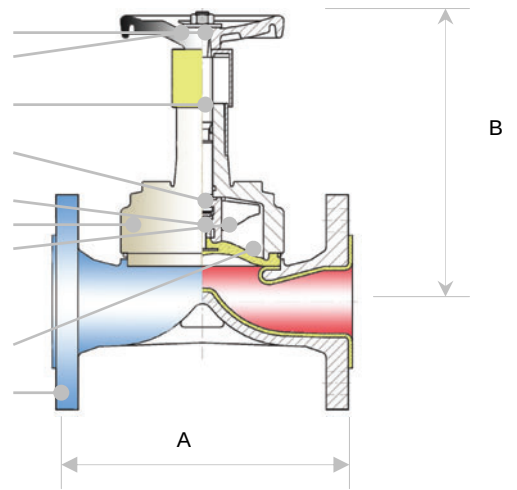
For valves with PTFE diaphragms (type 90)



Dimension / Weight

Handwheel Pin
Handwheel
Stem
Compressor Pin
Pressure ring
Bonnet
Compressor
Bolts/Nuts
Diaphragm
Body

Spring steel
Cast iron
Stainless steel
Spring steel
Polyacetal
Cast iron
Cast iron
Steel8.8
s. Spec
s. Spec



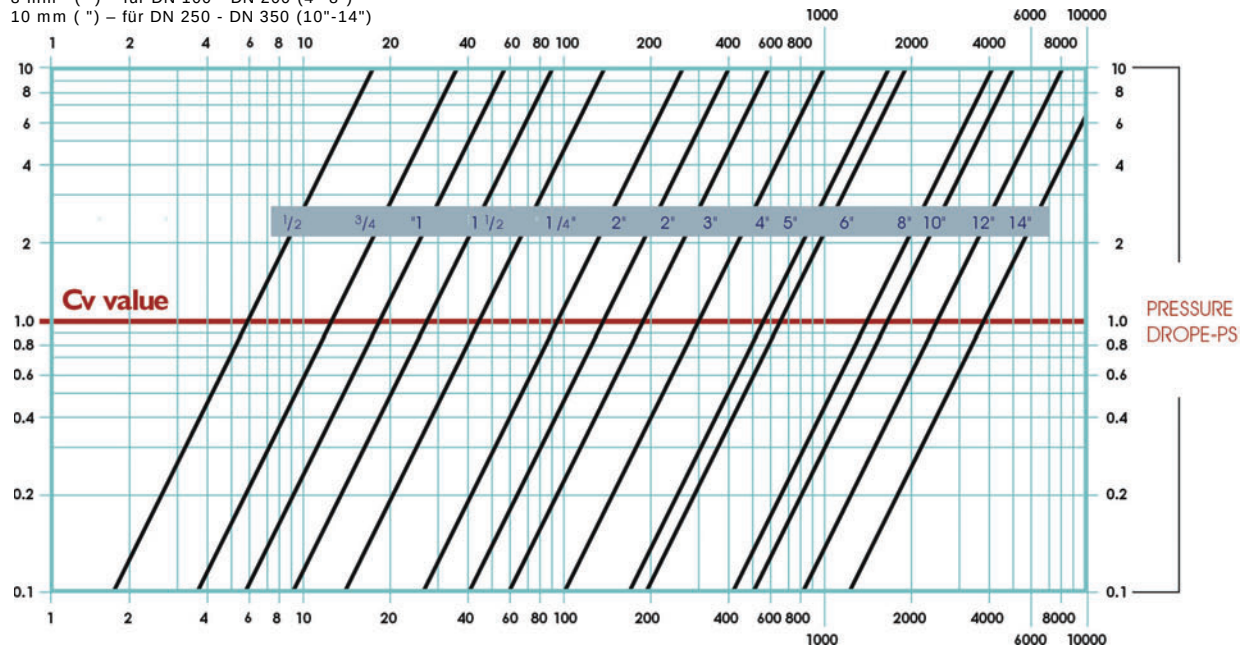
DIMENSION BS 5156		15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
UNLINED	A	108	117	127	146	159	190	216	254	305	356	406	521	635	749	749
	B	107	107	115	140	158	175	210	240	295	385	425	497	584	679	889
	Wkg	2,1	2,7	4,1	5,9	7,2	9,8	16	21,4	31,3	44	67,4	174	240	418	480
	A		123	133	152	165	196	223	261	313	364	414	529	645	759	759
RUBBER LINED	B		110	118	143	161	178	213	243	299	389	429	501	560	660	800
	A			133		165	196		262	312		410				
PLASTIC LINED DIN 3202/F1	B			118		161	178		244	299		430				
	A															
UNLINED	A	130	150	160	180	200	230	290	310	350	400	480	600	730	850	980
	B	107	107	115	140	158	174	210	240	295	385	425	497	560	660	800
	Wkg	2,1	2,8	4,6	6,4	7,6	10,3	16,7	22,9	32,1	50,0	74,4	174	275	480	550
	A		150	160	180	200	230	290	310	350	400	480	600	730	850	980
RUBBER LINED MSS SP 88	B		110	118	143	161	178	213	243	299	389	429	501	560	660	800
	A															
UNLINED	A	102	140	140	152	165	190	216	254	317	-	406	521			
	B	107	107	115	140	158	174	210	240	295	-	425	497			
	Wkg	2,0	2,9	4,2	6,2	7,4	9,8	16,0	21,4	32,5	-	67,4	174			
	A	-	146	146	159	171	197	223	261	324	-	415	530			
RUBBER LINED	B	-	110	118	143	161	178	213	243	299	-	429	501			
	A	-	148	148	-	176	200	-	262	327	-	410	-			
PLASTIC LINED	B	-	108	118	-	161	178	-	244	299	-	430	-			
	A															
SCREWED ENDS UNLINED		8	15	20	25	32	40	50	65	80						
	A	50	66	86	108	122	142	167	225	276						
	B	72	98	110	123	149	166	188	224	256						
	Wkg	0,23	0,79	1,15	1,95	3,13	4,0	6,0	9,7	16,9						

For rubber lined Bodies add following to total lengthh (exsept Standard DIN)

6 mm (") – für DN 25 - DN 80 (1"-3")

8 mm (") – für DN 100 - DN 200 (4"-8")

10 mm (") – für DN 250 - DN 350 (10"-14")



Process under Control ?

Yes we can !



Quelle der verwendeten Bilder im Prospekt: www.Fotolia.de
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