



Diaphragm Valves SDV Series

are ideally suited for Shut-off, Flow Control and Throttling of corrosive and abrasive process media in either liquid or gaseous state.

Modular Design

Diaphragm Valves SDV Series are available as DIN- or ANSI-Valves, with handwheel for manual operation as per standard.

The sturdy design bodies are made of cast steel 1.0619 (WCB), coating RAL 5005 signal-blue or stainless steel casting 1.4408 (CF-8M), with resistant linings such as PFA or PFA-AS (anti-static).

Proven PTFE/EPDM-diaphragms assure faultless closing function at any time.



Main Features

- Heavy-duty, robust construction, maintenance-free
- Bubble-tight shut-off throughout the full pressure and temperature range
- Spindle protected against atmospheric corrosion
- Force limiting device protecting diaphragm from cold flow and other deformations, high life cycle
- Yellow sight indicator showing actual position of diaphragm
- Easy replacement of components on site
- Flanges acc. to DIN PN10/16 resp. ANSI 150lbs for installation into existing piping systems

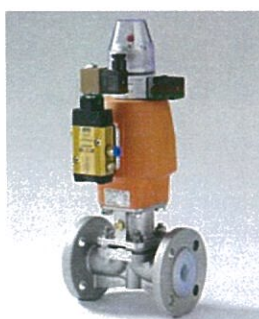
CE Conformity according to European Pressure Equipment Directive 97/23/EC (PED)

Options



Sliding Spindle

Body 1.0619/PFA, for external actuators



Automated Valve

Body CF-8M/PFA, with pneum. actuator, el. position indicator and solenoid valve



Limit Switch Box



Safety Padlock

SDV: Technical Data, Construction

21 Diaphragm Valves, plastomer-lined

PM 21 M.01 e
March 2006



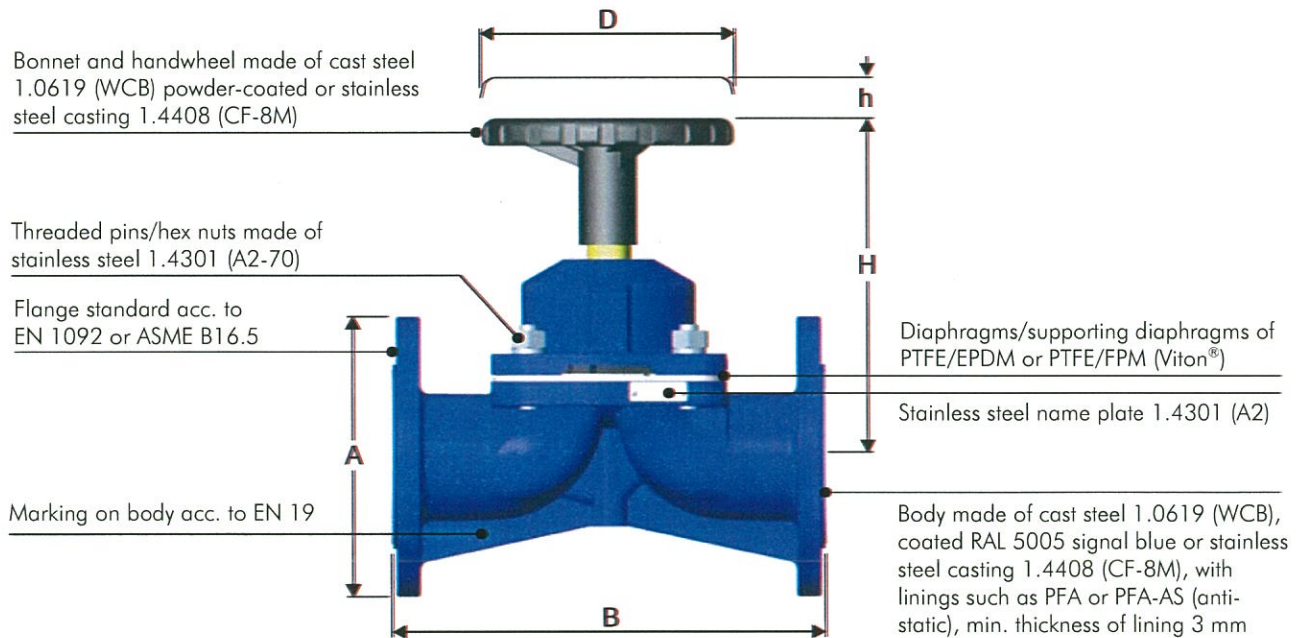
Operating Conditions

- Temperature range from -30°C up to +150°C (depending on lining material)
- Pressure range from 13.33 mbar up to 16 bar (depending on size)

Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, and spark testing at 35 kV to assure lining integrity. Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificate acc. to EN 10204-3.1

Construction of Valve



Technical Data Dimensions in mm (usg/min. = m³/hr x 1.16)

DN	A DIN	A ANSI	B DIN	B ANSI	D	H	h Stroke	Revol. per stroke	kg	PS max. bar	Closing Force (N)	Kv-Value (m ³ /hr)
15/1/2"	95	95	130	130	85	115	8	4.5	2.5	16	1'900	7.8
20/3/4"	105	105	150	150	85	117	8	4.5	3.0	16	2'400	10.0
25/1"	115	108	160	146	85	124	10	5.5	3.8	16	2'900	15.0
32/1 1/4"	140	140	180	180	85	134	12	7.0	5.2	16	3'600	22.5
40/1 1/2"	150	127	200	174	120	173	24	12.0	7.4	16	4'400	37.0
50/2"	165	152	230	200	120	186	30	15.0	9.7	16	6'000	65.0
65/2 1/2"	185	185	290	290	180	208	30	12.0	13.5	10	7'800	95.0
80/3"	200	190	310	260	180	233	34	13.5	18.0	8	9'100	134.0
100/4"	220	229	350	327	250	282	40	13.5	30.0	7	11'400	200.0
125/5"	250	250	400	400	250	345	52	17.5	43.0	7	17'000	320.0
150/6"	285	279	480	416	400	412	60	15.0	66.0	7	33'300	452.0
200/8" ¹⁾	340	340	600	600	400	442	90	22.5	122.0	5	43'500	650.0

Face to face B acc. to DIN EN 558-1 range 1, ANSI-Valves acc. to US standard (1/2", 3/4", 1 1/4", 2 1/2", 5", 8" acc. to EN 558-1 range 1
¹⁾ above PS max. 3 bar: supplier to be contacted

Swissfluid AG

Tel. +41 62 889 20 10 Fax +41 62 889 20 11 info@swissfluid.ch

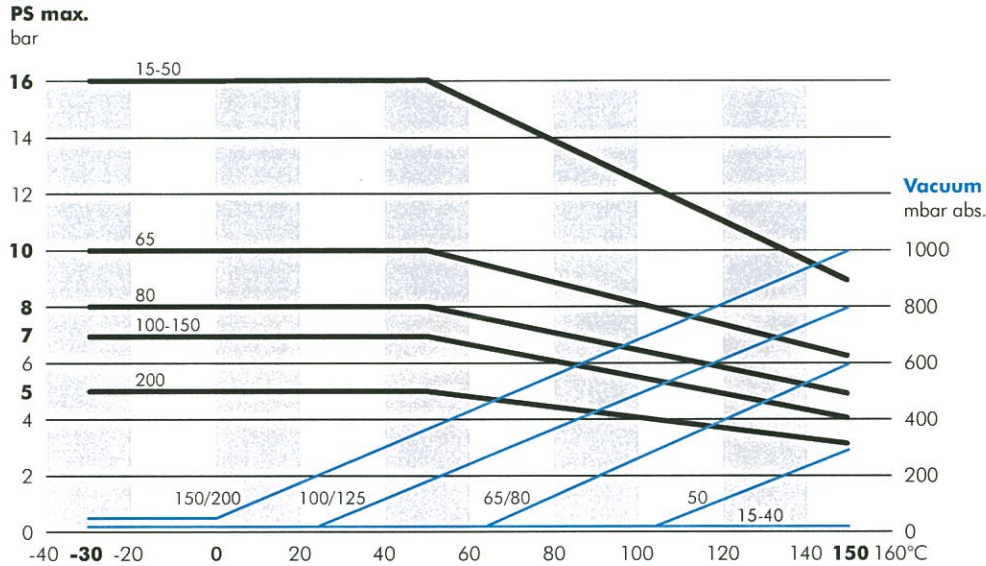
SDV: PT-Diagram, Options

21 Diaphragm Valves, plastomer-lined

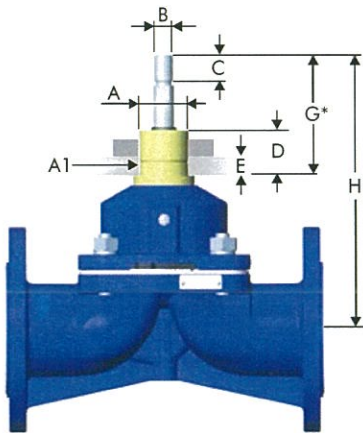
PM 21 M.02 e
November 2010



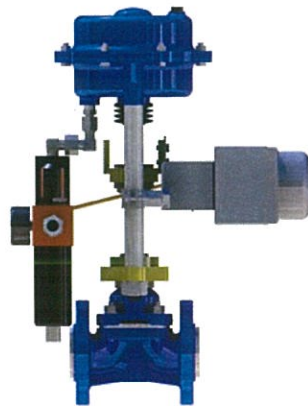
Pressure-/Temperature Diagram



Options



Type Ss
Bonnet with sliding spindle for easy actuation with pneumatic or electric actuators (not suitable for Swissfluid type actuators)



Bonnet Type Stroke Actuator
optional with limit switch box and filter regulator, dimensions/data on request

Dimensions in mm

DN	A	A1	B	C	D	E	G*	H	H1*
15/1/2"	M30x1.5	32	M12	26	26	10	110	168	223
20/3/4"	M30x1.5	32	M12	26	26	10	110	170	225
25/1"	M30x1.5	32	M12	26	26	10	110	179	229
32/1 1/4"	M30x1.5	32	M12	26	26	10	110	190	239
40/1 1/2"	M40x1.5	40	M16	28	35	12	110	208	284
50/2"	M40x1.5	40	M16	28	35	12	110	221	291
65/2 1/2"	M48x1.5	48	M18x1.5	35	38	12	110	232	335
80/3"	M48x1.5	48	M18x1.5	35	38	12	110	257	356
100/4"	M52x1.5	52	M24x2	35	38	12	110	290	430
125/5"	M52x1.5	52	M24x2	35	38	12	110	305	443
150/6"	M62x1.5	62	M30x2	35	38	12	110	357	564
200/8"	M62x1.5	62	M30x2	35	38	12	110	432	564

* Valve in closed position

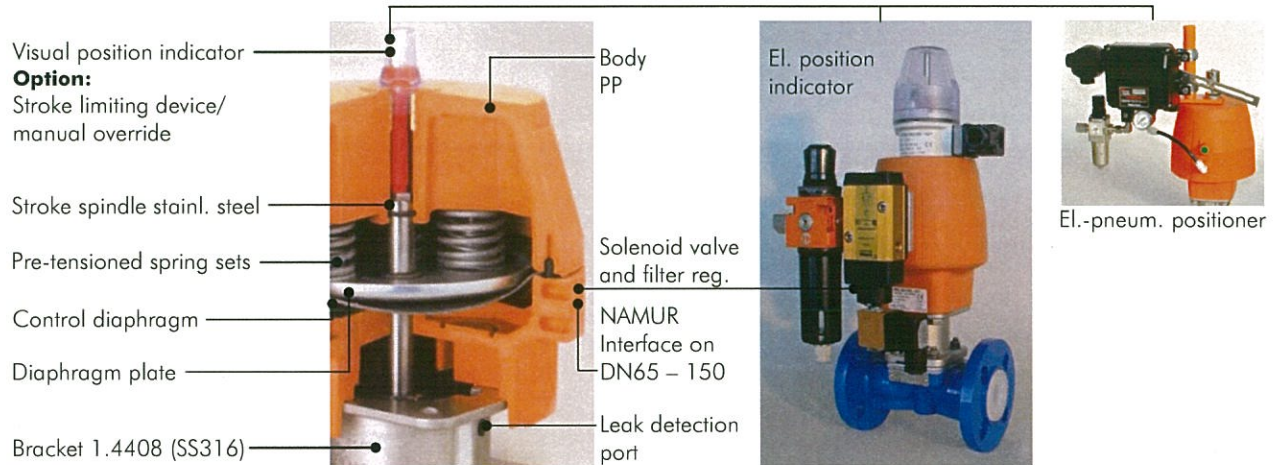
SDV autom.: Construction, Mounting Options

21 Diaphragm Valves, plastomer-lined

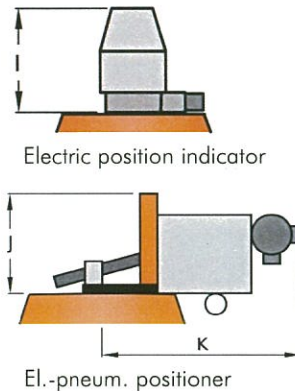
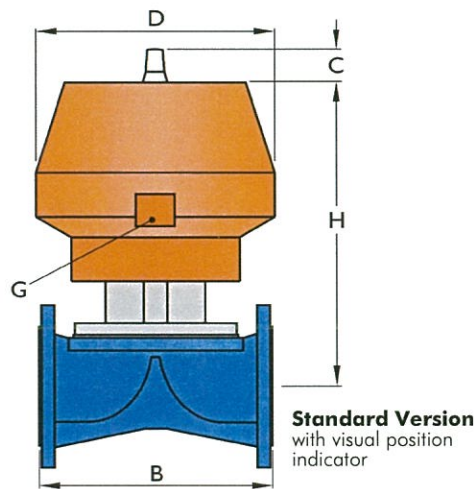
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November 2010



Construction of Linear Stroke Actuator Sectional view and accessories



Mounting Options Dimensions in mm (lbs = kg x 2.2)



Accessories

- Electric position indicator
- Adapter mounting kit must be applied if valve with stroke limiter and manual override is combined with an electric position indicator
- Stroke limiter/manual override
- Mounting flange kit for el.-pneum. positioner
- Electro-pneum. positioner
- 3/2-way solenoid valve for single-acting actuators
- 5/2-way solenoid valve for double-acting actuators
- Pneum. positioner
- NAMUR adapter plate

DN	B DIN	B ANSI	C	D	G	H	I	J	K	kg
15/1/2"	130	130	22.5	96	1/8"	211	100	160	290	4.8
20/3/4"	150	150	22.5	96	1/8"	213	100	160	290	5.3
25/1"	160	146	22.5	96	1/8"	227	100	160	290	6.4
32/1 1/4"	180	180	35.5	120	1/8"	253	100	160	290	7.8
40/1 1/2"	200	174	35.5	150	1/4"	284	100	160	290	13.9
50/2"	230	200	35.5	150	1/4"	302	100	160	290	16.0
65/2 1/2"	290	290	46	280	1/8"	366	129	160	290	19.8
80/3"	310	260	46	280	1/8"	373	129	160	290	32.8
100/4"	350	327	46	335	1/8"	448	129	160	290	46.7
125/5"	400	400	46	335	1/8"	533	129	160	290	60.0
150/6"	480	416	46	335	1/8"	620	129	160	290	84.0
200/8"	600	600	-	-	-	-	-	-	-	-

Standard Version w/o stroke limiter and manual override