

# SED

SED Flow Control GmbH

## Metal Diaphragm Valves for Industrial Application



an *OAliaxis* company

## SED introduces itself ...



CAD Workstation within the research and development department. The system illustrates first hand the 3D-CAD system in use with CNC machines



Mechanical workshop with a number of CNC machines controlled by the 3D-CAD system.



Injection moulding machine during production of lined diaphragm valve bodies.

SED was founded in 1984 and is engaged in the development, manufacture and distribution of valve technology and flow meters with a comprehensive range of control units and accessories. Continuous research and development guarantees that our products are of the highest quality and reliability. The company specialises in the production of diaphragm and globe seat valves in plastic or metal including actuation. The SED product range is based upon modular construction principles which provide many advantages for customers, including reduction in stock holding requirements, prompt delivery times and allow customised assemblies to be offered quickly.

SED is a part of ETEX GROUP; a large industrial group with several core business divisions, SED is included in the "pressure industries" divisions. The organisational structure of the group creates the best conditions for the evolution of our business, we have the advantage of a solid industrial group and an autonomous business.

The benefits of this are fully realised through their combined synergy. A clearly defined range of products, flexibility and proximity to our clients are factors of considerable

importance to our customers, our employees identify with product and company, leading to the high quality and proven reliability of our production.








The research and development department is equipped with very modern apparatus and systems. An example of this is the 3D CAD system which is directly connected to the CNC controlled machine centres.

The factory is organised for maximum flexibility and to keep all expertise concentrated on 'in house' production of our range. Efficiency in manufacturing is key to offering high quality and competitive products to our customers, utilising CNC lathes and 5 axis milling centres. Computer controlled welding equipment is used to produce welding to all standards, data is stored in house and can be reproduced upon request, weld data print outs are available to customers if required.

SED has specialised know how and equipment for plastic moulding technology, with the ability to mould fluorochemicals such as PFA or PVDF into metal bodies, producing fully lined products, together with components for valve actuation and flow measurement all manufactured within the company.

### Easily seen advantages

- Highly qualified staff with many years experience in the development and manufacture of valve systems in most materials.
- Flexibility as an independent unit operating within the framework of a large PLC. group.
- Extremely compact actuators with excellent construction based on a continuous programme of research and development.
- The modular construction system gives substantial advantages to the customer as well as the manufacturer.
- A comprehensive selection of accessories for all sizes of valves is always readily available.

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	295	10-15 3/8"-1/2"	X		4-5
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	985	15-100 1/2"-4"	X		10-11
	987	15-200 1/2"-8"	X		10-11
	385 587	15-80 1/2"-3"		X	12-13
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# 2/2 way Metal Diaphragm Valve Manually Operated

## Type 289 / 295

DN 10 - DN 15 / G<sup>1</sup>/<sub>4</sub> - G<sup>1</sup>/<sub>2</sub>


### Construction

289 Handwheel operated actuator in plastic

This compact designed valve is ideal for using where space is at a premium. The smooth contour finish of the plastic cover eliminating accumulation of dirt and is corrosion resistant.

295 Handwheel operated actuator with stainless steel bonnet

The same compact design as type 289 but with a stainless steel bonnet which allows this valve to be used for higher temperature, depending on the diaphragm material to be used.

### Features

- Process media can be neutral or aggressive liquid, and gaseous, dependent upon material selection of body and diaphragm
- Flow can be in either direction
- Insensitive to dirty or contaminated media
- Excellent flow characteristics
- Bubble tight sealing
- Installation can be in any position
- Eliminates water hammer
- Complete with position indicator
- Compact construction
- Maintenance free and non corrosive actuator

### Technical data

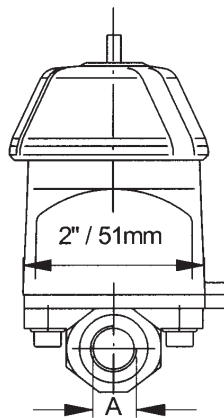
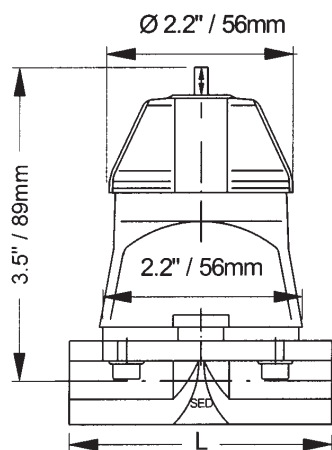
- Temperature: Type 289 max 95 °C (200°F)  
Type 295 max 150 °C (300 °F) depending on diaphragm material

Size inch	DN mm	Connection A	Length L		Weight	
					Typ 295	Typ 289
1/4	10	G <sup>1</sup> / <sub>4</sub>	2.20"	56mm	0.45kg / 0.99Lbs	0.54kg / 1.19Lbs.
3/8	12	G <sup>3</sup> / <sub>8</sub>	2.20"	56mm	0.47kg / 1.03Lbs.	0.55kg / 1.21Lbs.
1/2	15	G <sup>1</sup> / <sub>2</sub>	2.95"	75mm	0.47kg / 1.03Lbs.	0.56kg / 1.23Lbs.

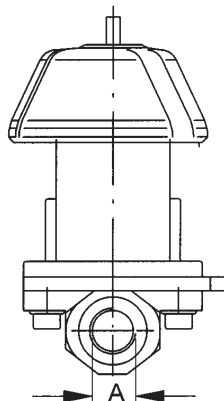
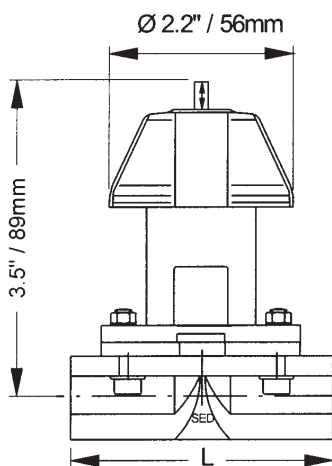
## 2/2 way Metal Diaphragm Valve Manually Operated

### Type 289 / 295

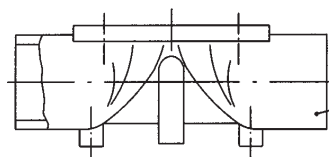
DN 10 - DN 15 / G<sup>1</sup>/<sub>4</sub> - G<sup>1</sup>/<sub>2</sub>



Type 289



Type 295



Information on  
SED Diaphragm Valves  
for Pharmaceutical and  
Biotech Processing  
see Leaflet TD970010

Size inch	DN mm	Working Pressure bar	C <sub>v</sub> -Value gpm	K <sub>v</sub> -Value m <sup>3</sup> / h
1/4	10	0 - 6	2.8	2.4
3/8	12	0 - 6	3.3	2.8
1/2	15	0 - 6	4.9	4.2

Ordering example see page 18 · Accessories see page 17 · Options on request





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## 2/2 way Metal Diaphragm Valve Pneumatically Operated

# Type 188 / 189

DN 10 - DN 15 / G<sup>1</sup>/<sub>4</sub> - G<sup>1</sup>/<sub>2</sub>



### Construction

This compact designed valve is ideal for using where space is at a premium. The smooth contour finish of the plastic cover eliminating accumulation of dirt and is corrosion resistant. The actuator is designed in plastic and is a highly efficient piston design.

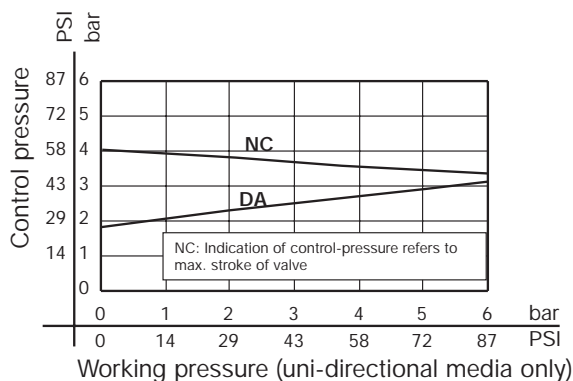
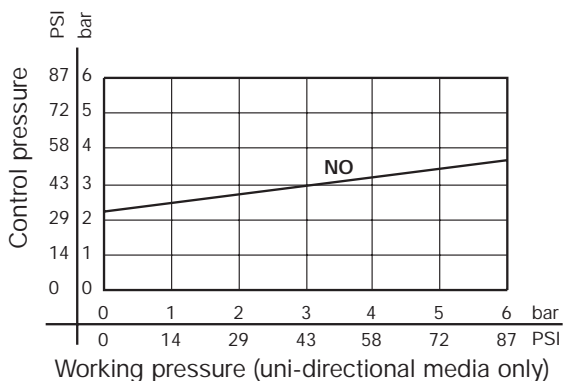
### Features

- Process media can be neutral and aggressive liquid and gaseous, dependent upon material selection of body and diaphragm
- Flow can be in either direction
- Insensitive to dirty or contaminated media
- Excellent flow characteristics
- Bubble tight sealing
- Installation can be in any position
- Eliminates water hammer
- Complete with position indicator
- Compact construction
- Maintenance free Plastic- Piston actuator non corrosive
- Actuators for different orientated air control connection

### Technical data

Temperature: Type 188/189 max 95 °C (200 °F) up to 150 °C (300 °F) available on request higher Temperature versions

Size inch	DN mm	Working pressure	Control pressure	C <sub>v</sub> -Value gpm	K <sub>v</sub> -Value m <sup>3</sup> / h	Filling Volume	
						Cubic Inch	NL
1/4	10	0-87psi / 0-6bar	58-101psi / 4-7bar	2.6	2.2	1.648	0.027 NL
3/8	12	0-87psi / 0-6bar	58-101psi / 4-7bar	3.3	2.8	1.648	0.027 NL
1/2	15	0-87psi / 0-6bar	58-101psi / 4-7bar	4.0	3.5	1.648	0.027 NL





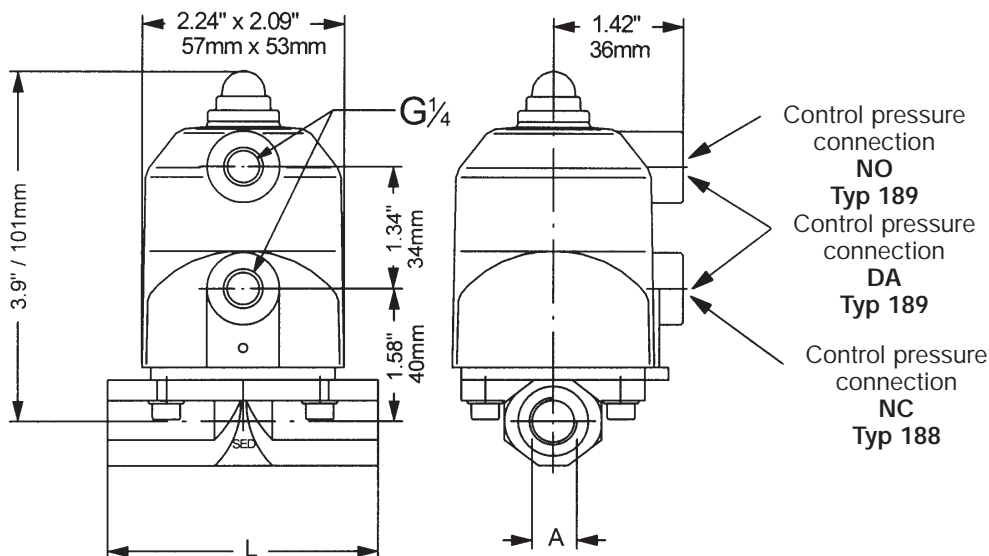
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## 2/2 way Metal Diaphragm Valve Pneumatically Operated

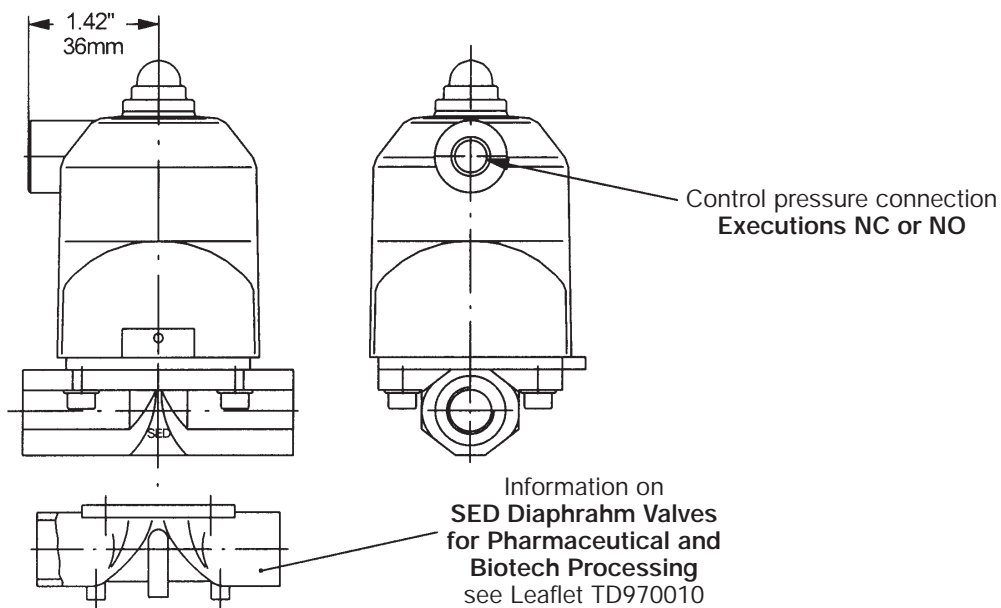
### Type 188 / 189

DN 10 - DN 15 / G<sup>1</sup>/<sub>4</sub> - G<sup>1</sup>/<sub>2</sub>

Control pressure connection in 90° to the flow direction



Control pressure connection in flow direction (for NO and NC)



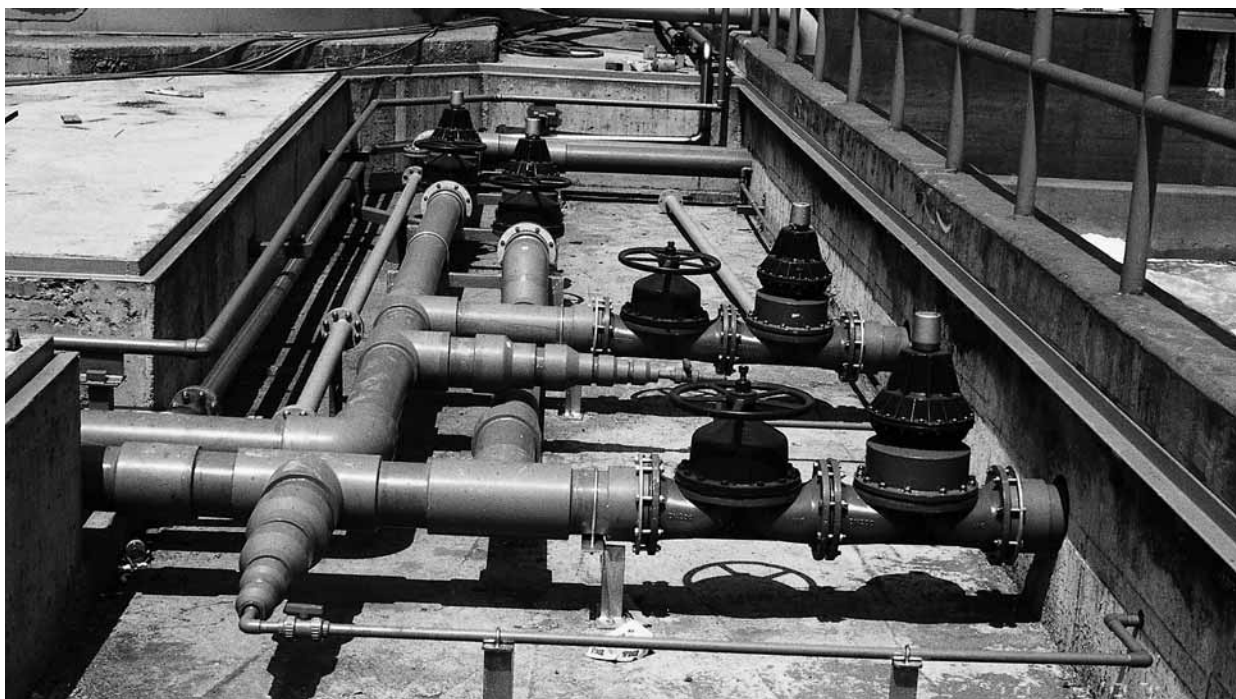
Size inch	DN mm	Connection A	Length L	Weight
1/4	10	G <sup>1</sup> / <sub>4</sub>	2.20" / 56 mm	0.52Lbs. / 0.24kg
3/8	12	G <sup>3</sup> / <sub>8</sub>	2.20" / 56 mm	0.50Lbs. / 0.23kg
1/2	15	G <sup>1</sup> / <sub>2</sub>	2.95" / 75 mm	0.59Lbs. / 0.27kg

Ordering example see page 18 · Accessories see page 17 · Options on request





*Metal diaphragm valve used in a desalination plant for sea water*

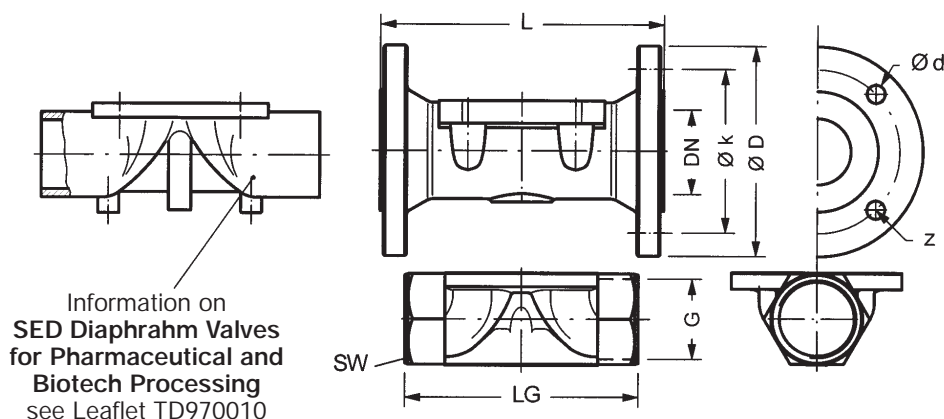


*Distribution of cooling water with additional manual valves as emergency function*

Ordering example see page 18 · Accessories see page 17 · Options on request



## Dimensional Data Valve Body



### FACE TO FACE DIMENSIONS

DN SIZE		15 1½"	20 ¾"	25 1"	32 1¼"	40 1½"	50 2"	65 2½"	80 3"	100 4"	125 5"	150 6"	200 8"	
LENGTH	EN DIN 558-1	mm inch	130 5.11	150 5.90	160 6.29	180 7.08	200 7.87	230 9.05	290 11.41	310 12.2	350 13.77	400 15.74	480 18.89	600 23.62
	MSS-SP88	mm inch		146 5.75	146 5.75	171 6.73	171 6.73	197 7.76	222 8.74	260 10.24	324 12.78			
	BS 5156	mm inch		123 4.84	133 5.23	171 6.73	165 6.49	197 7.76	222 8.74	260 10.24	311 12.44			

### FLANGE DRILLING

DIN PN10 / 16	Ø D	mm inch	95 3.74	105 4.13	115 4.52	140 5.51	150 5.9	165 6.49	185 7.28	200 7.87	220 8.66	250 9.84	285 11.22	340 13.38
	Ø d	mm inch	14 0.55	14 0.55	14 0.55	18 0.70	18 0.70	18 0.70	18 0.70	18 0.70	18 0.70	18 0.70	22 0.86	22 0.86
	Ø k	mm inch	65 2.55	75 2.95	85 3.34	100 3.93	110 4.33	125 4.92	145 5.7	160 6.29	180 7.08	210 8.26	240 9.44	295 11.61
	z			4	4	4	4	4	4	4	8			

ANSI 150	Ø D	mm inch		98.4 3.87	108 4.25	117 4.60	127 5.00	152 5.98	178 7.00	191 7.52	229 9.02			
	Ø d	mm inch		16 0.62	16 0.62	16 0.62	16 0.62	19 0.74	19 0.74	19 0.74	19 0.74			
	Ø k	mm inch		70 2.75	79 3.11	89 3.5	98 3.85	121 4.76	140 5.51	152 5.98	191 7.51			
	z			4	4	4	4	4	4	4	8			

BS 10 Table D/E	Ø D	mm inch		105 4.13	114 4.48	117 4.60	133 5.23	152 5.98	178 7.00	184 7.24	229 9.02			
	Ø d	mm inch		16 0.62	16 0.62	16 0.62	16 0.62	19 0.74	19 0.74	19 0.74	19 0.74			
	Ø k	mm inch		75 3.07	85 3.34	100 3.93	110 4.33	125 4.92	145 5.7	160 6.29	180 7.08			
	z			4	4	4	4	4	4	4	8			

THREADED SOCKET	L	mm inch	85 3.34	85 3.34	110 4.33	120 4.72	140 5.51	165 6.49						
	SW Cast Iron	mm inch	32 1.25	41 1.61	46 1.81	55 2.16	65 2.55	75 2.95						
	SW Stainless Steel	mm inch	27 1.06	32 1.25	41 1.61	50 1.96	55 2.16	70 2.75						
	G		1/2	3/4	1	1 1/4	1 1/2	2						

Rubberlined bodies flat face (FF) All other bodies raised face (RF) Other flange drilling on request



SED Flow Control GmbH

## 2/2 way Metal Diaphragm Valve Manually Operated

### Type 985 / 987

DN 15 - DN 200 / 1/2" - 8"



#### Construction

985 Handwheel operated actuator in plastic. This compact designed valve with non rising Handwheel has a smooth contour finish on this plastic cover to eliminates accumulation of dirt and is corrosion resistant.

987 Handwheel operated actuator in metal. This valve with non rising handwheel has a robust designed metal actuator which allows higher temperatures applications, depending on the diaphragm material to be used.

#### Features

- Process media can be neutral and aggressive liquid and gaseous, dependent upon material selection of body and diaphragm
- Flow can be in either direction
- Insensitive to dirty or contaminated media
- Excellent flow characteristics
- Bubble tight sealing
- Installation can be in any position
- Eliminates water hammer
- Complete with position indicator
- Compact construction
- Maintenance free non corrosive actuator

#### Technical data

Temperature: Type 985 max 95 °C (200 °F), Type 987 max 150 °C (300 °F) depending on diaphragm and body material

DN mm	Size Inch	operating pressure bar	operating pressure PSJ	C <sub>v</sub> gpm	K <sub>v</sub> m <sup>3</sup> /h	Face to face DIN 3202					Face to face MSS-SP88		Face to face BS 5156			Threaded Socket 1.4435 or GG25
						GG 25	GG 25 Rubber Lined	**GGG 40.3 PFA Lined	**GGG 40.3 PP Lined	**GGG 40.3 PTFE Lined	Stainless Steel	Stainless Steel PFA Lined	**GGG 40.3 PFA Lined	**GGG 40.3 PP Lined	Stainless Steel	
15	1/2	0 -10	0-145	8	7	X		X	X		X				X	X
20	3/4	0 -10	0-145	16	14	X	X	X	X		X	X	X	X	X	X
25	1	0 -10	0-145	23	20	X	X	X	X		X	X	X	X	X	X
32	1 1/4	0 -10	0-145	42	36	X	X	X	X		X		X	X	X	X
40	1 1/2	0 -10	0-145	47	40	X	X	X	X		X	X	X	X	X	X
50	2	0 -10	0-145	94	80	X	X	X	X		X	X	X	X	X	X
65	2 1/2	0 -10	0-145	140	120	X *	X *	X	X		X		X *	X *	X	
80	3	0 -10	0-145	187	160	X	X	X	X		X		X	X	X	
100	4	0 -10	0-145	278	238	X	X	X	X		X		X	X	X	
125	5	0 -10	0-145	440	376	X	X			X	X				X	
150	6	0 -10	0-145	580	496	X	X			X	X				X	
200	8	0 - 6	0-87	1064	910	X	X			X	X				X	

\* = always with Handwheel operated actuator Metall Typ 987

\*\* = Ductile Iron

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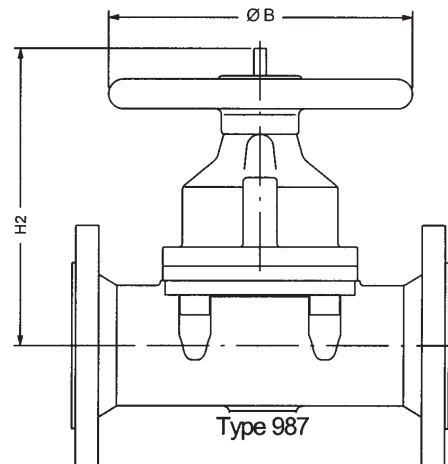
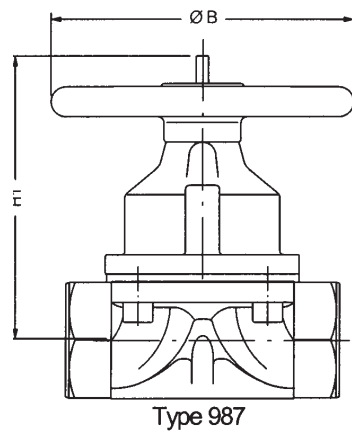
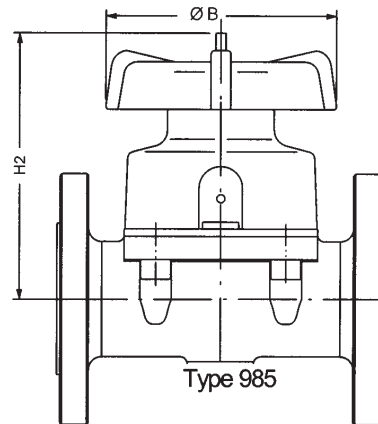
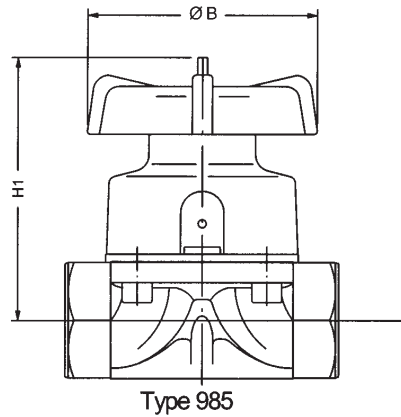


Ordering example see page 18 · Accessories see page 17 · Options on request

## 2/2 way Metal Diaphragm Valve Manually Operated

### Type 985 / 987

DN 15 - DN 200 / 1/2" - 8"



		Type 987 with Flange						Type 985 with Flange						Type 987 with Threaded Socket				Type 985 with Threaded Socket			
DN mm	Size Inch	Ø B		H2		Lbs.	kg	Ø B		H2		Lbs.	kg	H1		Lbs.	kg	H1		Lbs.	kg
		mm	Inch	mm	Inch			mm	Inch	mm	Inch			mm	Inch			mm	Inch		
15	1/2	100	3.93	111	4.37	6.61	3.0	90	3.54	105	4.13	3.74	1.7	102	4.01	3.30	1.5	96	3.77	1.32	0.6
20	3/4	100	3.93	111	4.37	7.93	3.6	90	3.54	105	4.13	6.39	2.9	105	4.13	3.52	1.6	99	3.89	2.42	1.1
25	1	100	3.93	115	4.52	9.92	4.5	90	3.54	109	4.13	8.37	3.8	109	4.29	3.96	1.8	103	4.05	3.52	1.6
32	1 1/4	140	5.51	157	6.18	15.43	7.0	115	4.52	128	5.03	11.90	5.4	153	6.02	6.61	3.0	124	4.88	5.73	2.6
40	1 1/2	140	5.51	163	6.41	17.63	8.0	115	4.52	134	5.27	14.33	6.5	156	6.14	8.81	4.0	127	5.00	7.71	3.5
50	2	140	5.51	176	6.92	24.91	11.3	140	5.51	169	6.65	18.73	8.5	172	6.77	13.22	6.0	165	6.49	12.34	5.6
65	2 1/2	225	8.85	258	10.15	41.88	19.0	250	9.84	284	11.18	33.06	15.0								
80	3	225	8.85	258	10.15	44.75	20.3	250	9.84	300	11.81	36.37	16.5								
100	4	225	8.85	292	11.49	72.75	33.0	250	9.84	332	13.07	52.47	23.8								
125	5	310	12.2	416	16.81	167.55	76.0														
150	6	368	14.48	427	16.81	176.36	80.0														
200	8	471	18.54	581	22.87	352.74	160.0														

Ordering example see page 18 · Accessories see page 17 · Options on request

## 2/2 way Metal Diaphragm Valve Pneumatically Operated

## Type 385 / 587

DN 15 - DN 80 / 1/2" - 3"

### Construction

385 Pneumatically operated valve with plastic actuator normally closed (NC)

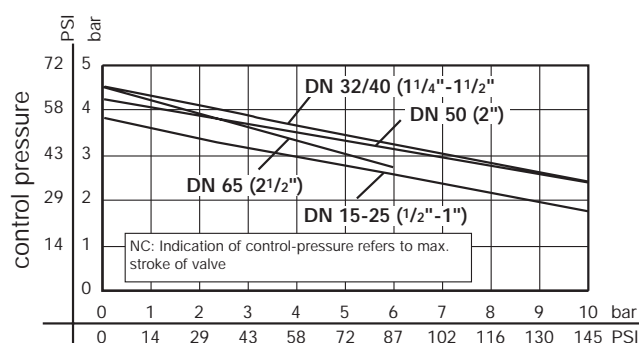
587 Pneumatically operated valve with plastic actuator normally open (NO) or double acting (DA)  
This compact design and light weight valve has a smooth contour finish on the plastic cover to eliminate accumulation of dirt and is corrosion resistant. The actuator is designed as a maintenance free diaphragm actuator. Various accessories are available for adjustments, control and regulation which can be assembled in the factory or on the job site afterwards.

### Features

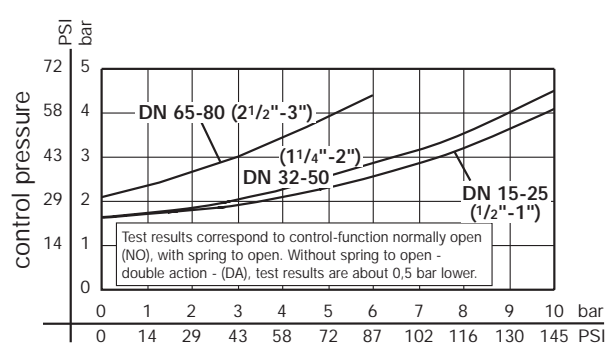
- Process media can be neutral and aggressive liquid and gaseous, dependent upon material selection of body and diaphragm
- Flow can be in either direction
- Insensitive to dirty or contaminated media
- Excellent flow characteristics
- Bubble tight sealing
- Installation can be in any position
- Eliminates water hammer
- Compact construction
- Maintenance free non corrosive actuator

### Technical data

Temperature: max 95 °C (200 °F), higher temperature versions up to 150 °C (300 °F) available on Request



Working pressure (uni-directional media only)



Working pressure (uni-directional media only)

														Face to Face DIN3202					Face to Face MSS-SP88			Face to Face BS 5156			
DN mm	Size mm	max. operating pressure bar	max. operating pressure PSI	max. control Pressure bar Type 385 (NC)	max. control Pressure PSI Type 385 (NC)	max. control Pressure bar Type 587 (NO/DA)	max. control Pressure PSI Type 587 (NO/DA)	C <sub>v</sub> gpm	K <sub>v</sub> m <sup>3</sup> /h	NL	Filling Volume Type 385 (NC) Cubic Inch	NL	Filling Volume Type 587 (NO/DA) Cubic Inch	GG 25	GG 25 Rubber Lined	*GGG 40.3 PFA Lined	*GGG 40.3 PP Lined	Stainless Steel	Stainless Steel PFA Lined	Stainless Steel	*GGG 40.3 PFA Lined	*GGG 40.3 PP Lined	Stainless Steel	*GGG 40.3 PFA Lined	*GGG 40.3 PP Lined
15	1/2	10	145	6	87	6	72	8	7	0.16	9.764	0.06	3.661	X		X	X	X		X			X		
20	3/4	10	145	6	87	6	72	16	14	0.16	9.764	0.06	3.661	X	X	X	X	X	X	X	X	X	X	X	X
25	1	10	145	6	87	6	72	23	20	0.16	9.764	0.06	3.661	X	X	X	X	X	X	X	X	X	X	X	X
32	1 1/4	10	145	6	87	6	72	42	36	0.36	21.969	0.11	6.713	X	X	X	X	X		X	X	X	X	X	X
40	1 1/2	10	145	6	87	6	72	47	40	0.36	21.969	0.11	6.713	X	X	X	X	X	X	X	X	X	X	X	X
50	2	10	145	6	87	6	72	94	80	1.15	70.177	0.32	19.528	X	X	X	X	X	X	X	X	X	X	X	X
65	2 1/2	6	87	6	87	6	72	140	120	2.1	128.15	2.2	134.252			X	X	X		X			X		
80	3	6	87	6	87	6	72	187	160	2.1	128.15	2.2	134.252			X	X	X	X		X			X	

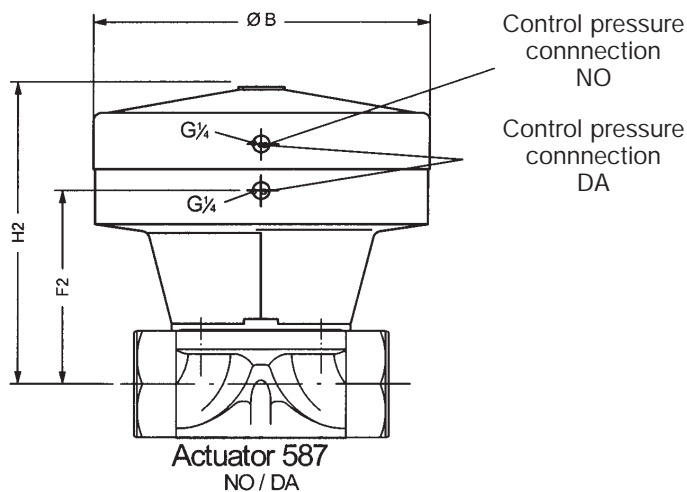
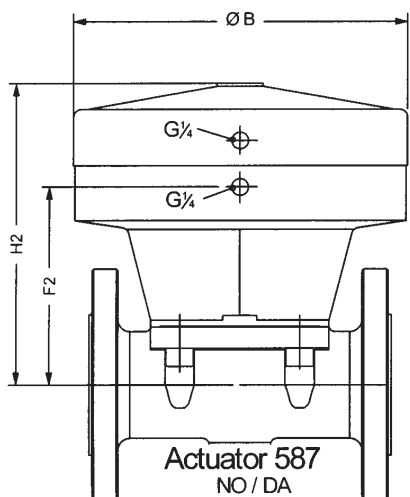
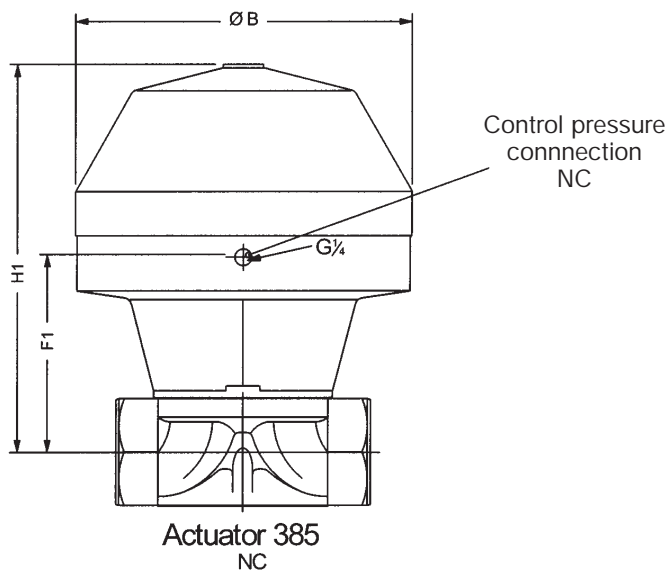
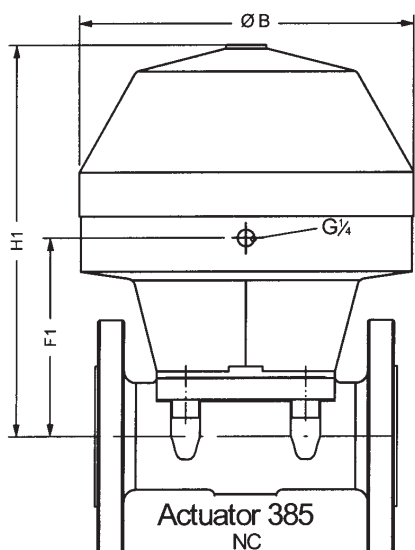
\* Ductile Iron



## 2/2 way Metal Diaphragm Valve Pneumatically Operated

### Type 385 / 587

DN 15 - DN 80 / 1/2" - 3"



DN mm	Size Inch	Ø B		Type 385 Face to Face						Type 587 Face to Face						Type 385 with Threaded Socket						Type 587 with Threaded Socket					
				F1		H1				F2		H2				F1		H1				F2		H2			
		mm	Inch	mm	Inch	Lbs.	Kg			mm	Inch	mm	Inch			Lbs.	Kg	mm	Inch			mm	Inch	Lbs.	Kg		
15	1/2	130	5.11	66	2.59	160	6.3	6.8	3.1	95	3.74	128	5.04	4.6	2.1	57	2.24	151	5.94	4.2	1.9	86	3.39	119	4.69	4.2	1.9
20	3/4	130	5.11	66	2.59	160	6.3	8.2	3.7	95	3.74	128	5.04	6.0	2.7	60	2.36	154	6.06	4.4	2.0	89	3.5	122	4.80	4.4	2.0
25	1	130	5.11	70	2.76	160	6.3	9.3	4.2	95	3.74	129	5.04	7.1	3.2	64	2.52	154	6.06	5.1	2.3	89	3.5	123	4.84	5.1	2.3
32	1 1/4	161	6.33	108	4.25	208	8.19	17	7.7	134	5.28	167	6.57	14.8	6.7	104	4.09	204	8.03	9.9	4.5	130	5.12	163	6.42	9.9	4.5
40	1 1/2	161	6.33	108	4.25	213	8.39	18.1	8.2	134	5.28	171	6.73	15.9	7.2	101	3.98	206	8.11	10.8	4.9	127	5.0	164	6.46	10.8	4.9
50	2	218	8.58	127	5.00	263	10.35	29.1	13.2	159	6.26	203	7.99	28.0	12.7	123	4.84	259	10.20	19.0	8.6	155	6.1	199	7.83	19	8.6
65	2 1/2	265	10.43	182	7.17	330	12.99	57.3	26	225	8.86	291	11.5	51.6	23.4												
80	3	265	10.43	182	7.17	330	12.99	57.3	26	225	8.86	291	11.5	51.6	23.4												

Ordering example see page 18 · Accessories see page 17 · Options on request



SED Flow Control GmbH

# 2/2 way Metal Diaphragm Valve Pneumatically Operated

## Type 487

DN 65 - DN 200 / 2 1/2" - 8"



### Construction

Pneumatically operated valve, normally closed (NC), normally open (NO) and double acting (DA)  
The valves are designed with a maintenance free diaphragm actuator. There are a wide range of actuators which has to be chosen depending on max working- and/or control pressure. Various accessories are available for adjustments, control and regulation which can be assembled in the factory or almost all on the job site afterwards.

### Features

- Process media can be neutral and aggressive liquid and gaseous, dependent upon material selection of body and diaphragm
- Flow can be in either direction
- Insensitive to dirty or contaminated media
- Excellent flow characteristics
- Bubble tight sealing
- Installation can be in any position
- Eliminates water hammer
- Maintenance free non corrosive actuator

### Technical data

Temperature: Up to 150 °C (300 °F) available, depending on diaphragm and body material

		Valve normally closed Actuator 3 / Actuator 4 / Actuator 9				Valve normally open Actuator 5 / Actuator 6				Valve double acting actuator Actuator 7 / Actuator 8						
DN mm	Size inch	Working pressure  bar/PSI		Control pressure bar/PSI see Diagram Page 16	Actuator size	Weight  kg / Lbs.	Working pressure  bar/PSI	Control pressure bar/PSI see Diagram Page 16	Actuator size	Weight  kg / Lbs.	Working pressure  bar/PSI	Control pressure bar/PSI see Diagram Page 16	Actuator size	Weight  kg / Lbs.	C <sub>v</sub> gpm	K <sub>v</sub> m³/h
65	2 1/2	3	44	maximum 7 bar / 101 PSI	3/1	24/53	0-10/145	maximum 7 bar / 101 PSI	5	30/66	0-10/145	maximum 7 bar / 101 PSI	7	29/64	117	100
		6	87		3/2	26/57			5	33/72			7	32/70		
		8	116		3/3	27/60										
80	3	6	87		3/2	29/64	0-10/145		5	33/72	0-10/145		7	32/70	187	160
		8	116		3/3	30/66										
		10	145		4/3	73/161										
100	4	6	87		3/3	48/106	0-6/87		5	41/90	0-6/87		7	40/88	278	238
		10	145		4/3	81/179	0-10/145				6					
125	5	5	73		4/2	89/196	0-10/145		6	81/178	0-10/145		8	80/176	440	376
		8	116		4/3	91/201										
150	6	6	87		4/3	104/229	0-8/116		6	94/207	0-8/116		8	93/205	580	496
		6	87		9/2	153/337										
		8	116		9/3	153/337										
200	8	3	44		4/3	130/287	0-6/87		6	172/379	0-6/87		8	170/374	1064	910
		6	87		9/3	180/397										
Filling Volume		Actuator 3, 5 and 7: 2.5 NL/152.6 Cubic Inch				Actuator 4, 6 and 8: 6.8 NL/415 Cubic Inch										

The maximum working pressure is valid for uni-directional media only. See Diagram Page 16

14

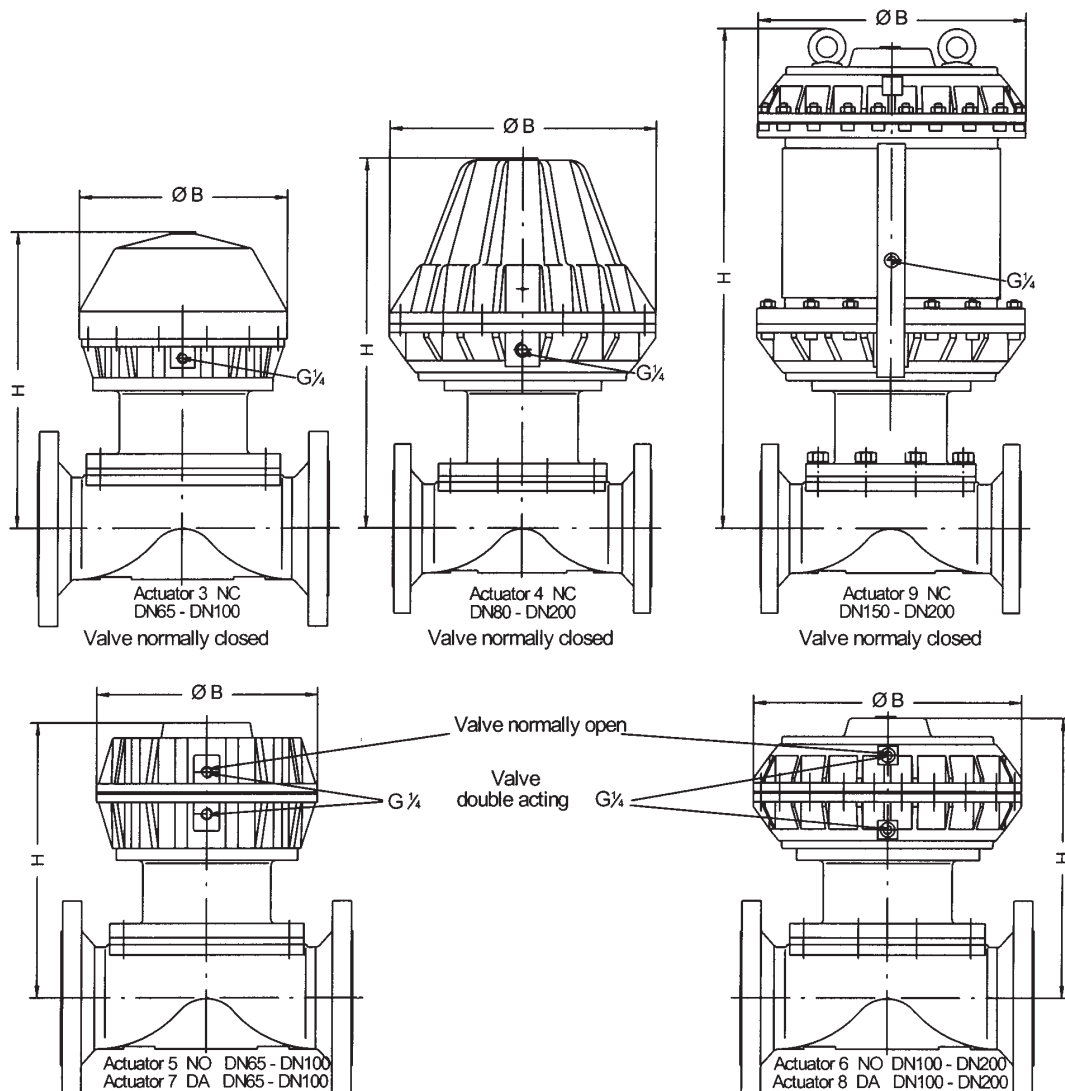


Ordering example see page 18 · Accessories see page 17 · Options on request

## 2/2 way Metal Diaphragm Valve Pneumatically Operated

### Type 487

DN 65 - DN 200 / 2½" - 8"



DN mm	Size inch	Actuator 3				Actuator 4				Actuator 5				Actuator 6 Actuator 8				Actuator 9/2 Actuator 9/3			
		H mm	H Inch	B mm	B Inch	H mm	H Inch	B mm	B Inch	H mm	H Inch	B mm	B Inch	H mm	H Inch	B mm	B Inch	H mm	H Inch	B mm	B Inch
65	2½	395	15.55	265	10.43					335	13.19	259	10.2								
80	3	390	15.35	265	10.43	494	19.45	360	14.17	335	13.19	259	10.2								
100	4	410	16.14	265	10.43	506	19.92	360	14.17	335	13.19	259	10.2	385	15.16	360	14.17				
125	5					533	20.98	360	14.17	341	13.43	259	10.2	420	16.54	360	14.17				
150	6					552	21.73	360	14.17					431	16.97	360	14.17	780	30.71	360	14.17
200	8					607	23.9	360	14.17					486	19.13	360	14.17	835	32.87	360	14.17

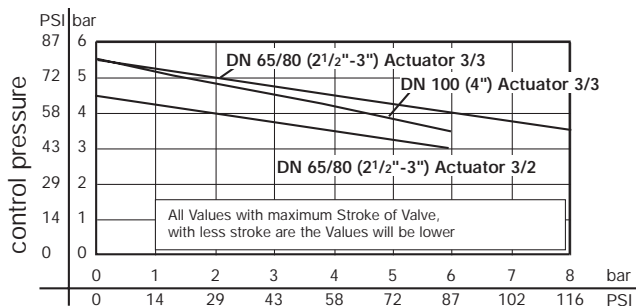
Ordering example see page 18 · Accessories see page 17 · Options on request

## 2/2 way Metal Diaphragm Valve Pneumatically Operated

### Type 487

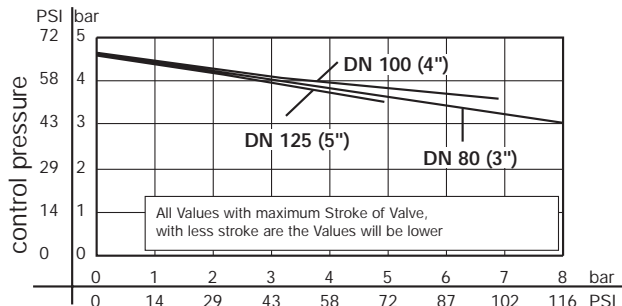
DN 65 - DN 200 / 2 1/2" - 8"

Actuator 3



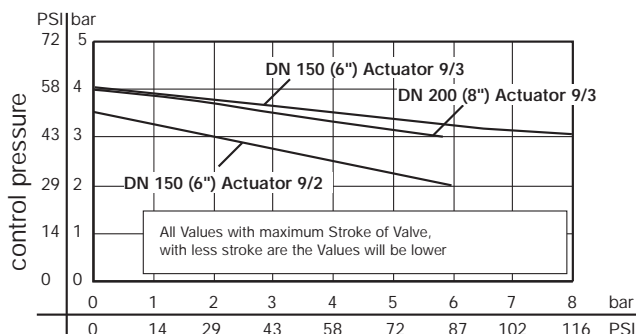
Working pressure (uni-directional media only)

Actuator 4/2



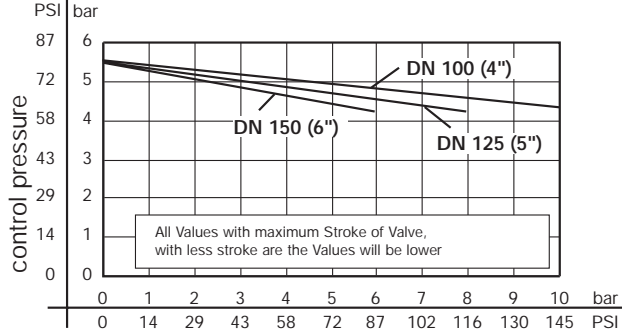
Working pressure (uni-directional media only)

Actuator 9/3 and 9/2



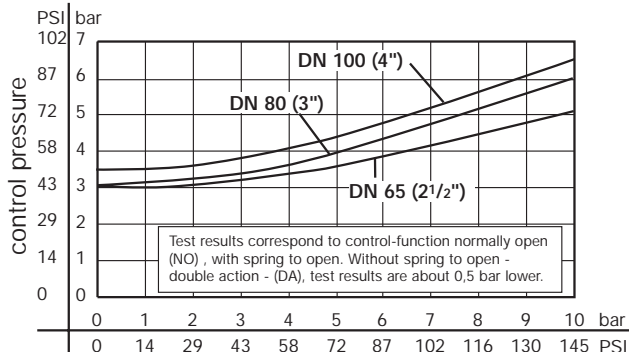
Working pressure (uni-directional media only)

Actuator 4/3



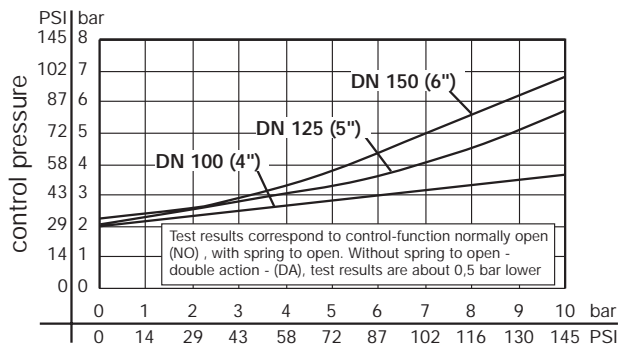
Working pressure (uni-directional media only)

Actuator 5



Working pressure (uni-directional media only)

Actuator 6



Working pressure (uni-directional media only)

Chart Control Pressure/Working Pressure Actuator NO / DA Size DN 200 / 8" on Request.



## Accessories for SED Valves

### Optical Position Indicator



**024.10.xxx**  
for NO, NC and DA

### Stroke Limiter



**024.11.xxx**  
Execution:  
NC – without cover  
NO and DA with cover

### Stroke Limiter with optical Position Indicator



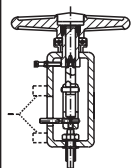
**024.12.xxx**  
Execution:  
NC without Cover  
NO and DA with Cover

### Stroke Limiter with optical Position Indicator and manual override up to DN 50



**024.13.xxx**  
supplied with a transparent Cover

### Handwheel



**024.40.xxx**  
Functions:  
Manually opening  
Manually closing  
Stroke-and Locklimiter  
Optical Indicator  
*Optional:*  
Electrical position Indicator

### Handwheel with optical Position Indicator



**024.42.xxx**  
Execution:  
NC: for opening  
NO: for closing

### ASIBUS Position Indicator



**024.89.xxx**  
with Solenoid Valve and  
one/two Switch(es)

### Electrical Limit Switch



**024.90.xxx**  
for manually and pneumatically  
Diaphragm Valves

with electromechanical Switch  
(not for Type 289/295)

### Electrical Position Indicator up to DN50



**024.91.xxx**  
with two Electro mechanical Micro-Switches

**024.92.xxx**  
with proximity Switches according  
to Namur

**024.93.xxx**  
with proximity Switches PNP

### Electrical Position Indicator



**024.85.xxx**  
with mechanical Limit Switches

**024.86.xxx**  
with slot proximity Switches according  
to Namur

**024.87.xxx**  
with slot proximity switches PNP

### Positioner



**024.16.100**  
pneumatic Positioner  
(0,2-1bar / 3-15psi)

**024.16.200**  
Electro-pneumatic Positioner  
(4-20 mA)

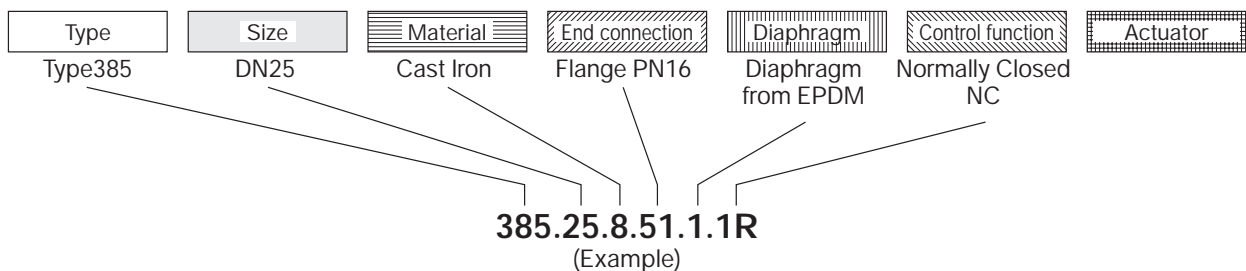
**024.16.003**  
Mounting kit

For ordering, please name accessories-no. with valve type and size (DN)

Other accessories on request

## Ordering Example

		Code Number	Description
	Type	188 / 385 / 487 189 / 587 / 487 289 / 295 / 985 / 987	Pneumatically operated normally closed (NC) Pneumatically operated normally open (NO) or double acting (DA) Manually operated Metal diaphragm valves
	Size	10 - 200	DN 10 bis DN 200 / 1/4" - 8"
	Material (Valvebody)	7 8 16 80 11 12 71 14	Stainless steel Cast Iron Standard (GG25) Brass Cast Iron rubber-lined Ductile Iron (GGG40.3) PFA lined until DN100. Up DN 100 until DN 200 PTFE-lined Ductile Iron (GGG40.3) PP-lined until DN 100 Stainless steel PFA-lined PTFE-lined
	End Connection	1 51 78 68	Threaded socket Face to face DIN 3202 Flange drilled to DIN PN10/16 Face to face MSS SP88 Flange drilled to ANSI150 Face to face BS 5156 Flange drilled to BS 10Table
	Diaphragm	1 2 3 4 31 41	EPDM Temperature: -4 °F - 266 °F (-20 °C - +130 °C) FPM (Viton®) Temperature: 14 °F - 302 °F (-10 °C - +150 °C) PTFE / EPDM single (FDA) NBR (Perbunan) Temperature: 14 °F - 266 °F (-10 °C - +130 °C) PTFE / EPDM two piece version Temperature: -40 °F - 212 °F (-40 °C - +100 °C) TFM / EPDM two piece version (FDA) Temperature: -4 °F - 320 °F (-20 °C - +160 °C) Temperature: -4 °F - 320 °F (-20 °C - +160 °C)
	Control Function	R S 1R 2R 3R 4R 5R	Manually operated Type 289 /985 (Plastic-handwheelactuator, Color red) Manually operated Type 987 (Metal-handwheelactuator, Color black) NC (normally closed) NO (normally opened) DA (double activ) NC (normally closed) air in flow direction NO (normall opened) air in flow direction
	Actuator (Type 487)	31 32 33 41 42 43 92 93 5 6 7 8	Actuator 3/1 NC Actuator 3/2 NC Actuator 3/3 NC Actuator 4/1 NC Actuator 4/2 NC Actuator 4/3 NC Actuator 9/2 NC Actuator 9/3 NC Actuator 5 NO Actuator 6 NO Actuator 7 DA Actuator 8 DA



Subject to alteration



Measurement of surface roughness



High frequency spark testing of body lining



Test stand for continuous improvement with saturated steam up to 230 °C / 450 °F

- Cycle testing
- Batch testing
- Qualifying diaphragm materials and actuators

Complete customer satisfaction is the ultimate measure of quality. We know this is the only way to guarantee a successful and lasting presence in today's market.

Not only is the functional capability of our products and a continuous development programme key to our company fundamentals, the application of our quality concept is present in all areas of the business including, development, manufacture, suppliers services and our own purchasing and sales departments.

### The essential areas of our quality policy:

#### Customers

Our customers are the source of our business, their ideas and wishes must be realised through the products of SED offers.

#### Employees

The greatest asset of our company is its workforce.

All-embracing quality is not the result of individual effort, but of successful teamwork.

The capacity to develop new ideas, to accept responsibility and to show initiative and creativity all lead to the continued progress of the firm. This way of working has to be achieved at every level and is assured by ongoing training.

### Products and services

By regular personal contact with the user, we can rapidly come up with appropriate solutions. This is based on SED's specialist know-how in intensive fields of development and manufacture.

### Suppliers

The quality of our products is undeniably dependent on the performance of our suppliers. Thorough reviews are undertaken and documented and serve as the basis for a close customer-supplier relationship.

### Work processes

At every one of the numerous steps leading up to the finished product, we adhere to a single motto: "My employee is my customer" – meaning that each of us must make his personal contribution in such a way that our internal customer is satisfied and that the work can progress in the best possible way.



## SED – Products at a Glance

SED Flow Control GmbH



Angle Seat Valve



Stainless Steel Valve for Sterile Applications



Metal Globe Valve



Flowmeters



Plastic Diaphragm Valve



Solenoid Valves

Distributor

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