

The Series 5 valves are available in a large number of different variants. You are looking for a valve to shutoff, regulate, protect or distribute – no problem when using our overview. Unlike the other Series, we have structured the Series 5 by valve function for a better overview. In this way you can easily find the right valve for your specific application. The Series 5 valves are available in a large variety of materials. They are thus very suitable for the usage of aggressive media.







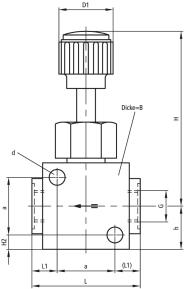


- 1) Panel mounting
- 2) Regulation and shut-off possible due to special design
- 3) Thread seam-less in accordance with DIN, USAS or JIS ⇒ Numerous connection options
- 4) Series 5L: particularly light and compact design
- 5) Series 5L: housing made of PP, PVDF and PFA  $\Rightarrow$  High media resistance
- 6) Series 5A: housing made of PP, PVDF and PTFE  $\Rightarrow$  High media resistance
- 7) Maintenance-free design  $\Rightarrow$  For long-term usage

Wherever gas and liquid flows must be regulated, the Series 5 regulation valves are the ideal partner: they are available in different materials for usage with aggressive media. They have a female thread on both ends and can thus be used with various connecting elements from the EM-TECHNIK modular system. The Series 5L regulation valves are light and compact due to their special design. As standard they are intended for panel mounting. The Series 5A regulation valves have been in our product range for years. Today they are predominantly in demand in PTFE.







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A111G0414PKFP	DN04	G1/4"	G1/4"	PEEK/FPM
5A111G0414PPFP	DN04	G1/4"	G1/4"	PP/FPM
5A111G0414PTFK	DN04	G1/4"	G1/4"	PTFE/FFKM
5A111G0414PTFP	DN04	G1/4"	G1/4"	PTFE/FPM
5A111G0414PVEP	DN04	G1/4"	G1/4"	PVDF/EPDM
5A111G0414PVFP	DN04	G1/4"	G1/4"	PVDF/FPM
5A111G0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5A111G0812PTFP	DN08	G1/2"	G1/2"	PTFE/FPM
5A111G0812PVFK	DN08	G1/2"	G1/2"	PVDF/FFKM
5A111G0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM
5A111G1012PPFP	DN10	G1/2"	G1/2"	PP/FPM
5A111G1012PTFK	DN10	G1/2"	G1/2"	PTFE/FFKM
5A111G1012PTFP	DN10	G1/2"	G1/2"	PTFE/FPM
5A111G1534PPEP	DN15	G3/4"	G3/4"	PP/EPDM
5A111G1534PPFP	DN15	G3/4"	G3/4"	PP/FPM

# Dimensions 5A111...

G	L	L1	Н	H2	h	a	D1	d	В
5A111G G 1/4"	45	10.5	~73	6	18	24	22.5	6.6	24
5A1110 G 1/2"	66	16	~117	7	24	34	30.5	6.6	30
5A111N NPT 1/4"	50	13	~73	6	18	24	22.5	6.6	24
5A111N NPT 1/2"	75	20.5	~117	7	24	34	30.5	6.6	30

# Materials 5A111G. . ., 5A111N. . .

Housing	PP	PVDF	PTFE
Spindle	PTFE	PTFE	PTFE
O-ring*	FPM	FPM	FPM

\* EPDM, FFKM on request

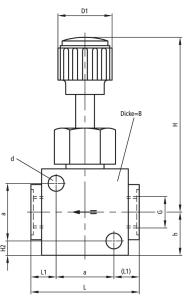
#### Technical data 5A111G..., 5A111N...

Max. media tempera- ture*	PP	PVDF	PTFE
	90℃	120℃	150℃
Pressure stage	PN 10		
Kvs-value	1/4"	1/2"	
5A111G	0.15 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	
5A111N	0.15 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A111N0414PPEP	DN04	NPT1/4"	NPT1/4"	PP/EPDM
5A111N0414PPFP	DN04	NPT1/4"	NPT1/4"	PP/FPM
5A111N0414PTFK	DN04	NPT1/4"	NPT1/4"	PTFE/FFKM
5A111N0414PTFP	DN04	NPT1/4"	NPT1/4"	PTFE/FPM
5A111N0414PVFK	DN04	NPT1/4"	NPT1/4"	PVDF/FFKM
5A111N0414PVFP	DN04	NPT1/4"	NPT1/4"	PVDF/FPM
5A111N0812PVFP	DN08	NPT1/2"	NPT1/2"	PVDF/FPM
5A111N1012PTFP	DN10	NPT1/2"	NPT1/2"	PTFE/FPM
5A111N1012PVFP	DN10	NPT1/2"	NPT1/2"	PVDF/FPM

### Dimensions 5A111...

G	L	L1	Н	H2	h	а	D1	d	В
5A111G G 1/4"	45	10.5	~73	6	18	24	22.5	6.6	24
5A1110 G 1/2"	66	16	~117	7	24	34	30.5	6.6	30
5A111N NPT 1/4"	50	13	~73	6	18	24	22.5	6.6	24
5A111N NPT 1/2"	75	20.5	~117	7	24	34	30.5	6.6	30

# Materials 5A111G. . . , 5A111N. . .

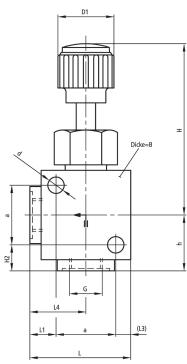
Housing	PP	PVDF	PTFE
Spindle	PTFE	PTFE	PTFE
O-ring*	FPM	FPM	FPM

### Technical data 5A111G..., 5A111N...

Max. media temperature*	PP	PVDF	PTFE
	90℃	120℃	150℃
Pressure stage	PN 10		
Kvs-value	1/4"	1/2"	
5A111G	0.15 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	
5A111N	0.15 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A211G0414PPFP	DN04	G1/4"	G1/4"	PP/FPM
5A211G0414PVEP	DN04	G1/4"	G1/4"	PVDF/EPDM
5A211G0414PVFP	DN04	G1/4"	G1/4"	PVDF/FPM
5A211G0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5A211G0812PTFP	DN08	G1/2"	G1/2"	PTFE/FPM
5A211G1012PTFP	DN10	G1/2"	G1/2"	PTFE/FPM
5A211G1012PVFP	DN10	G1/2"	G1/2"	PVDF/FPM

# Dimensions 5A211...

G	L	L1	L3	L4	h	Н	H2	а	D1	d	B1
5A211GG 1/4"	40.5	10.5	6	22.5	22.5	~73	10.5	24	22.5	6.6	24
5A211 G 1/2"	57	16	7	33	33	~117	16	34	30.5	6.6	30
5A211N NPT 1/4"	45.5	13	8.5	25	22.5	~73	10.5	24	22.5	6.6	24
5A211 NPT 1/2"	66	20.5	11.5	37.5	33	~117	16	34	30.5	6.6	30

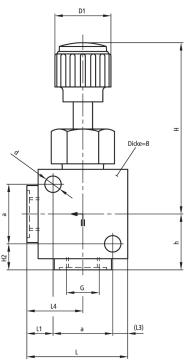
# Technical data 5A211G..., 5A211N...

Max. media tempera- ture*	PP	PVDF	PTFE
	90℃	120℃	150℃
Pressure stage	PN 10		
Kvs-value	1/4"	1/2"	
5A211G	0.15 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	
5A211N	0.15 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	

 $<sup>^\</sup>star$ Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







Article-Nr		Nomin	al Diam	eter	Connect	ion A	Conne	ection B		Material	
5A211N0812F	PFP	DN08			NPT1/2"		NPT1/2" PF				/FPM
Dimensions 5A	\ <b>211</b>										
G	L	L1	L3	L4	h	Н	H2	а	D1	d	B1
5A211GG 1/4"	40.5	10.5	6	22.5	22.5	~73	10.5	24	22.5	6.6	24
5A211 G 1/2"	57	16	7	33	33	~117	16	34	30.5	6.6	30
5A211N NPT 1/4"	45.5	13	8.5	25	22.5	~73	10.5	24	22.5	6.6	24
5A211 NPT 1/2"	66	20.5	11.5	37.5	33	~117	16	34	30.5	6.6	30

# Technical data 5A211G..., 5A211N...

90 °C     120 °C     150 °C       Pressure stage     PN 10     PN 10       Kvs-value     1/4"     1/2"       5A211G     0.15 m³/h     1.1 m³/h       5A211N     0.15 m³/h     1.1 m³/h	Max. media tempera- ture*	PP	PVDF	PTFE
Kvs-value         1/4"         1/2"           5A211G         0.15 m³/h         1.1 m³/h		90℃	120℃	150℃
5A211G 0.15 m <sup>3</sup> /h 1.1 m <sup>3</sup> /h	Pressure stage	PN 10		
	Kvs-value	1/4"	1/2"	
5A211N 0.15 m <sup>3</sup> /h 1.1 m <sup>3</sup> /h	5A211G	0.15 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	
	5A211N	0.15 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	

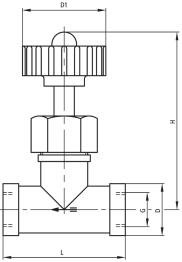


- 1) Housing made of PP, PVDF and PTFE ⇒ High media resistance
- 2) Seam-less G- and NPT-thread in accordance with DIN and USAS  $\Rightarrow$  Integration in the EM-TECHNIK modular system, numerous connection options
- 3) Tightness test in accordance with DIN 3230 ⇒ Very high quality control
- 4) Low wear valve seat
- 5) Flow optimised design
- 6) Suitable for wall mounting

The Series 5A shut-off valves are available in various variants – with straight or angled design. By screwing in the spindle the media flow is reliably shut-off. The valves are available in different materials for usage with aggressive media. They have a female thread on both sides and can thus be used with various connecting elements from the EM-TECHNIK modular system.







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A100G0414PNEP	DN04	G1/4"	G1/4"	PP- NATUR/EPDM
5A100G0414PNFP	DN04	G1/4"	G1/4"	PP-NATUR/FPM
5A100G0414PPEP	DN04	G1/4"	G1/4"	PP/EPDM
5A100G0414PPFK	DN04	G1/4"	G1/4"	PP/FFKM
5A100G0414PPFP	DN04	G1/4"	G1/4"	PP/FPM
5A100G0414PVEP	DN04	G1/4"	G1/4"	PVDF/EPDM
5A100G0414PVFK	DN04	G1/4"	G1/4"	PVDF/FFKM
5A100G0414PVFP	DN04	G1/4"	G1/4"	PVDF/FPM
5A100G0414PVPT	DN04	G1/4"	G1/4"	PVDF
5A100G0638PNFP	DN06	G3/8"	G3/8"	PP-NATUR/FPM
5A100G0638PPEP	DN06	G3/8"	G3/8"	PP/EPDM
5A100G0638PPFP	DN06	G3/8"	G3/8"	PP/FPM
5A100G0638PVEP	DN06	G3/8"	G3/8"	PVDF/EPDM
5A100G0638PVFP	DN06	G3/8"	G3/8"	PVDF/FPM
5A100G0812PNFP	DN08	G1/2"	G1/2"	PP-NATUR/FPM
5A100G0812PPEP	DN08	G1/2"	G1/2"	PP/EPDM
5A100G0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5A100G0812PVFK	DN08	G1/2"	G1/2"	PVDF/FFKM
5A100G0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM
5A100G0812PVPT	DN08	G1/2"	G1/2"	PVDF

### Dimensions 5A100. . .

	G	L	Н	D	D1
5A100G	G 1/4"	47	~68	20	32
5A100G	G 3/8"	55	~100	24	63
5A100G	G 1/2"	66	~106	28	63
5A100N	NPT 1/4"	57	~68	20	32
5A100N	NPT 1/2"	75	~106	28	63

### Materials 5A100G.... 5A100N...

Housing	PP	PVDF	PTFE
Spindle	PP	PVDF	PTFE
O-ring*	FPM	FPM	FPM

\* EPDM, FFKM on request

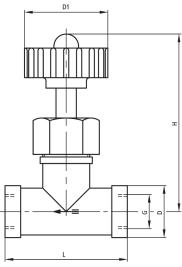
### Technical data 5A100G..., 5A100N...

Max. media tempera- ture*	PP	PVDF	
	90℃	120℃	
Pressure stage	PN 10		
Kvs-value	1/4"	3/8"	1/2"
5A100G	0.4 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h	1.2 m <sup>3</sup> /h
5A100N	0.4 m <sup>3</sup> /h	./.	1.2 m <sup>3</sup> /h

<sup>\*</sup> Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A100N0414PPFP	DN04	NPT1/4"	NPT1/4"	PP/FPM
5A100N0414PVFK	DN04	NPT1/4"	NPT1/4"	PVDF/FFKM
5A100N0414PVFP	DN04	NPT1/4"	NPT1/4"	PVDF/FPM
5A100N0812PNFP	DN08	NPT1/2"	NPT1/2"	PP-NATUR/FPM
5A100N0812PPFP	DN08	NPT1/2"	NPT1/2"	PP/FPM
5A100N0812PVFP	DN08	NPT1/2"	NPT1/2"	PVDF/FPM

#### Dimensions 5A100...

	G	L	Н	D	D1
5A100G	G 1/4"	47	~68	20	32
5A100G	G 3/8"	55	~100	24	63
5A100G	G 1/2"	66	~106	28	63
5A100N	NPT 1/4"	57	~68	20	32
5A100N	NPT 1/2"	75	~106	28	63

# Materials 5A100G. . . . 5A100N. . .

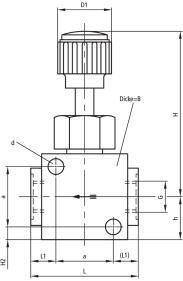
Housing	PP	PVDF	PTFE
Spindle	PP	PVDF	PTFE
O-ring*	FPM	FPM	FPM

# Technical data 5A100G..., 5A100N...

Max. media tempera- ture*	PP	PVDF	
	90℃	120℃	
Pressure stage	PN 10		
Kvs-value	1/4"	3/8"	1/2"
5A100G	0.4 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h	1.2 m <sup>3</sup> /h
5A100N	0.4 m <sup>3</sup> /h	/	1.2 m <sup>3</sup> /h







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A110G0414PPEP	DN04	G1/4"	G1/4"	PP/EPDM
5A110G0414PPFP	DN04	G1/4"	G1/4"	PP/FPM
5A110G0414PTFK	DN04	G1/4"	G1/4"	PTFE/FFKM
5A110G0414PTFP	DN04	G1/4"	G1/4"	PTFE/FPM
5A110G0414PVFP	DN04	G1/4"	G1/4"	PVDF/FPM
5A110G0812PPEP	DN08	G1/2"	G1/2"	PP/EPDM
5A110G0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5A110G0812PTFK	DN08	G1/2"	G1/2"	PTFE/FFKM
5A110G0812PTFP	DN08	G1/2"	G1/2"	PTFE/FPM
5A110G0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM
5A110G1012PPFP	DN10	G1/2"	G1/2"	PP/FPM
5A110G1012PTFP	DN10	G1/2"	G1/2"	PTFE/FPM
5A110G1012PVFP	DN10	G1/2"	G1/2"	PVDF/FPM

### Dimensions 5A110...

G	L	L1	Н	H2	h	а	D1	d	В
5A110G G 1/4"	45	10.5	~69	6	18	24	22.5	6.6	24
5A1100 G 1/2"	66	16	~109	7	24	34	30.4	6.6	30
5A110N NPT 1/4"	50	13	~69	6	18	24	22.5	6.6	24
5A110N NPT 1/2"	75	20.5	~109	7	24	34	30.4	6.6	30

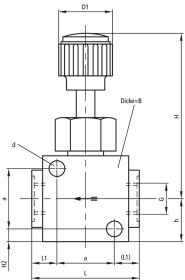
### Technical data 5A110G..., 5A110N...

Max. media tempera- ture*	PP	PVDF	PTFE
	90℃	120℃	150℃
Pressure stage	PN 10		
Kvs-value	1/4"	1/2"	
5A110G	0.3 m <sup>3</sup> /h	1.2 m <sup>3</sup> /h	
5A110N	0.3 m <sup>3</sup> /h	1.2 m <sup>3</sup> /h	

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20  $^{\circ}$ C), the permissible pressure reduces with increasing temperature!







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A110N0414PPFP	DN04	NPT1/4"	NPT1/4"	PP/FPM
5A110N0414PTFK	DN04	NPT1/4"	NPT1/4"	PTFE/FFKM
5A110N0414PTFP	DN04	NPT1/4"	NPT1/4"	PTFE/FPM
5A110N0414PVFP	DN04	NPT1/4"	NPT1/4"	PVDF/FPM
5A110N0812PTFP	DN08	NPT1/2"	NPT1/2"	PTFE/FPM

### Dimensions 5A110...

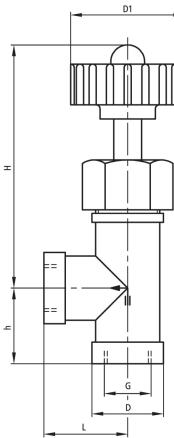
	G L	L1	Н	H2	h	a	D1	d	В
5A110G 1/4"	G 45	10.5	~69	6	18	24	22.5	6.6	24
5A1100 1/2"	G 66	16	~109	7	24	34	30.4	6.6	30
5A110N NP 1/4"	T 50	13	~69	6	18	24	22.5	6.6	24
5A110N NP 1/2"	T 75	20.5	~109	7	24	34	30.4	6.6	30

### Technical data 5A110G..., 5A110N...

Max. media tempera- ture*	PP	PVDF	PTFE
	90℃	120℃	150℃
Pressure stage	PN 10		
Kvs-value	1/4"	1/2"	
5A110G	0.3 m <sup>3</sup> /h	1.2 m <sup>3</sup> /h	
5A110N	0.3 m <sup>3</sup> /h	1.2 m <sup>3</sup> /h	







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A200G0414PNFP	DN04	G1/4"	G1/4"	PP-NATUR/FPM
5A200G0414PPEP	DN04	G1/4"	G1/4"	PP/EPDM
5A200G0414PPFK	DN04	G1/4"	G1/4"	PP/FFKM
5A200G0414PPFP	DN04	G1/4"	G1/4"	PP/FPM
5A200G0414PVFK	DN04	G1/4"	G1/4"	PVDF/FFKM
5A200G0414PVFP	DN04	G1/4"	G1/4"	PVDF/FPM
5A200G0638PPFP	DN06	G3/8"	G3/8"	PP/FPM
5A200G0638PVFP	DN06	G3/8"	G3/8"	PVDF/FPM
5A200G0812PNFP	DN08	G1/2"	G1/2"	PP-NATUR/FPM
5A200G0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5A200G0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM

### Dimensions 5A200...

	G	L	h	Н	D	d1
5A200G	G 1/4"	25.5	23	~68	20	Ø 32
5A200G	G 3/8"	27.5	27.5	~100	24	Ø 63
5A200G	G 1/2"	33	33	~106	27	Ø 63
5A200N	NPT 1/4"	28.5	28.5	~68	20	Ø 32
5A200N	NPT 1/2"	37.5	37.5	~106	24	Ø 63

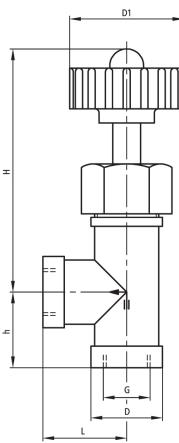
# Technical data 5A200G..., 5A200N...

Max. media tempera- ture*	PP	PVDF	
	90℃	120℃	
Pressure stage	PN 10		
Kvs-value	1/4"	3/8"	1/2"
5A200G	0.35 m <sup>3</sup> /h	0.5 m <sup>3</sup> /h	1.0 m <sup>3</sup> /h
5A200N	0.35 m <sup>3</sup> /h	./.	1.0 m <sup>3</sup> /h

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A200N0414PPEP	DN04	NPT1/4"	NPT1/4"	PP/EPDM
5A200N0414PPFP	DN04	NPT1/4"	NPT1/4"	PP/FPM
5A200N0414PVFP	DN04	NPT1/4"	NPT1/4"	PVDF/FPM
5A200N0812PNFP	DN08	NPT1/2"	NPT1/2"	PP-NATUR/FPM
5A200N0812PPFP	DN08	NPT1/2"	NPT1/2"	PP/FPM
5A200N0812PVFP	DN08	NPT1/2"	NPT1/2"	PVDF/FPM

# Dimensions 5A200. . .

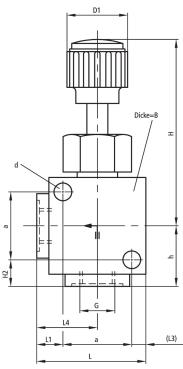
	G	L	h	Н	D	d1
5A200G	G 1/4"	25.5	23	~68	20	Ø 32
5A200G	G 3/8"	27.5	27.5	~100	24	Ø 63
5A200G	G 1/2"	33	33	~106	27	Ø 63
5A200N	NPT 1/4"	28.5	28.5	~68	20	Ø 32
5A200N	NPT 1/2"	37.5	37.5	~106	24	Ø 63

# Technical data 5A200G..., 5A200N...

Max. media temperature*	PP	PVDF	
	90℃	120℃	
Pressure stage	PN 10		
Kvs-value	1/4"	3/8"	1/2"
5A200G	0.35 m <sup>3</sup> /h	0.5 m <sup>3</sup> /h	1.0 m <sup>3</sup> /h
5A200N	0.35 m <sup>3</sup> /h	./.	1.0 m <sup>3</sup> /h







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A210G0414PPFP	DN04	G1/4"	G1/4"	PP/FPM
5A210G0414PTFP	DN04	G1/4"	G1/4"	PTFE/FPM
5A210G0414PVFP	DN04	G1/4"	G1/4"	PVDF/FPM
5A210G0638PPFP	DN06	G3/8"	G3/8"	PP/FPM
5A210G0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5A210G0812PTFP	DN08	G1/2"	G1/2"	PTFE/FPM
5A210G0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM
5A210G1012PPFP	DN10	G1/2"	G1/2"	PP/FPM
5A210G1012PTFP	DN10	G1/2"	G1/2"	PTFE/FPM

### Dimensions 5A210...

G	L	L1	L3	L4	h	Н	H2	a	D1	d	В
5A210GG	40 E	10 F	6	00 F	00 F	~69	10 E	24	00 E	6.6	24
1/4"	40.5	10.5		22.5	22.5		10.5		22.5		
5A210 G	57	16	7	33	33	400	16	34		6.6	30
1/2"						~109			30.5		
5A210N NPT	45.5	45.5	8.5	25	22.5	~69	10.5	24	22.5	6.6	24
1/4"	40.0	40.0			22.0		10.5		22.0		
5A210	66	66			33		16	34		6.6	30
NPT 1/2"			11.5	37.5		~109			30.5		

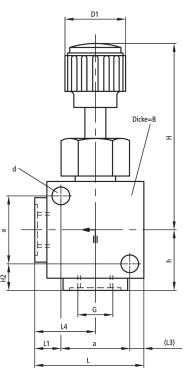
### Technical data 5A210G..., 5A210N...

Max. media tempera- ture*	PP	PVDF	PTFE
	90℃	120℃	150℃
Pressure stage	PN 10		
Kvs-value	1/4"	1/2"	
5A210G	0.28 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	
5A210N	0.28 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







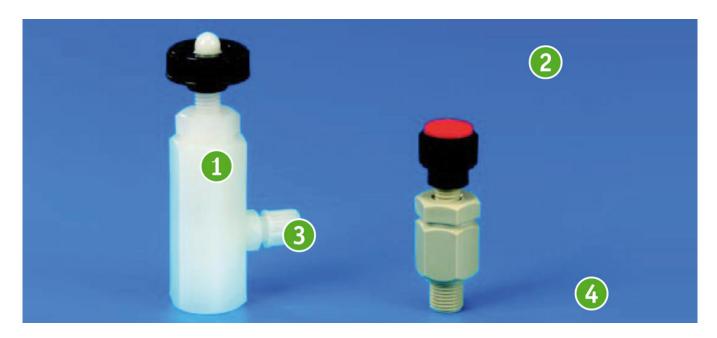
Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5A210N0414PTFP	DN04	NPT1/4"	NPT1/4"	PTFE/FPM
5A210N1012PTFP	DN10	NPT1/2"	NPT1/2"	PTFE/FPM

# Dimensions 5A210. . .

G	L	L1	L3	L4	h	Н	H2	а	D1	d	В
5A210GG	40.5	40.5	6	00.5	00.5	~69	40.5	24	00.5	6.6	24
1/4"	40.5	10.5		22.5	22.5		10.5		22.5		
5A210 G	57	16	7	33	33		16	34		6.6	30
1/2"						~109			30.5		
5A210N			8.5	25		~69		24		6.6	24
NPT 1/4"	45.5	45.5			22.5		10.5		22.5		
5A21(	66	66			33		16	34		6.6	30
NPT 1/2"			11.5	37.5		~109			30.5		

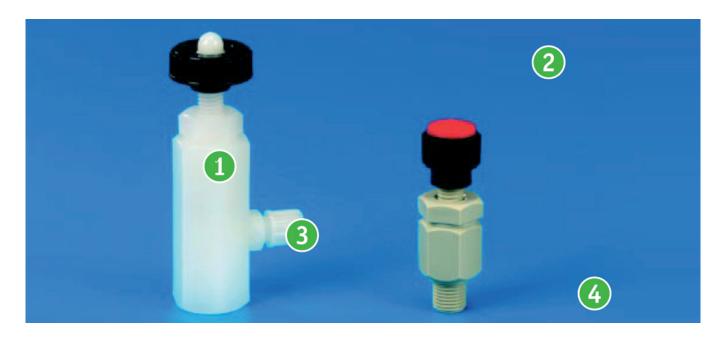
### Technical data 5A210G..., 5A210N...

Max. media tempera- ture*	PP	PVDF	PTFE
	90℃	120℃	150℃
Pressure stage	PN 10		
Kvs-value	1/4"	1/2"	
5A210G	0.28 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	
5A210N	0.28 m <sup>3</sup> /h	1.1 m <sup>3</sup> /h	



- 1) Sealing cone with O-ring ⇒ Very high tightness
- 2) Spring-return  $\Rightarrow$  Automatic flow direction change  $\Rightarrow$  Reliable protection of the control air system
- 3) As standard with seamless female thread  $\Rightarrow$  Numerous connection options
- 4) Short switching time  $\Rightarrow$  No return flow to control air inlet possible.

During the operation of pneumatic valves (diaphragm valves etc.) the protection of the control air system is of particular importance. The Series 5A compact safety valve reliably diverts media flow on leaks prior to the control air system. It works automatically and thus provides safety in the application.

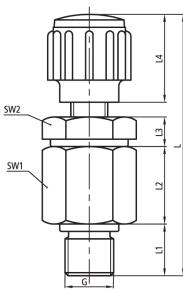


- 1) Housing made of PP and PVDF  $\Rightarrow$  High media resistance
- 2) Any installation position
- 3) Integrated flexible tube connector DN 4/6  $\Rightarrow$  Safe outlet on media discharge
- 4) Thread seam-less in accordance with DIN, USAS and JIS  $\Rightarrow$  Numerous connection options

The Series 5A venting valves are, depending on the design, suitable for the venting of unhazardous gases, for discharging aggressive media or also for special drainage of manifolds. Important for the application: the valves are only leak-proof in the fully open or fully closed state.







Article-Nr	Nominal Diameter	Connection A	Material
5A800MG0414PPFP	DN04	G1/4"	PP/FPM
5A800MG0812PPFP	DN08	G1/2"	PP/FPM

### Dimensions 5A800...

G	L	L1	L2	L3	L4	SW1	SW2
5A800MG G 1/4"	~71	14	21	8	23.8	22	22
5A800MG G 1/2"	~74	17	20	10	23.8	27	27
5A800MN NPT 1/4"	~74	15	23	8	23.8	22	22
5A800MN NPT 1/2"	~82	20	24	10	23.8	27	27

### Materials 5A800..., 5A810...

Housing	PP	PVDF
Spindle	PP	PVDF
O-ring*	FPM	FPM

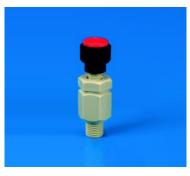
\* EPDM, FFKM on request

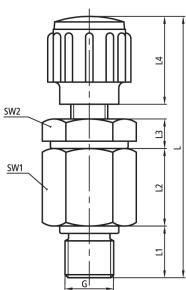
# Technical data 5A800. . .

Max. media temperature*	PP	
	90℃	
Pressure stage	PN 10	
Kvs-value	1/4"	1/2"
5A800MG	0.5 m <sup>3</sup> /h	1.4 m <sup>3</sup> /h
5A800MN	0.5 m <sup>3</sup> /h	1.4 m <sup>3</sup> /h

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







Article-Nr	Nominal Dia	ameter	Connection A				Material
5A800MN0414PPFP	DN04		NPT1/4"				PP/FPM
Dimensions 5A800							
G	L	L1	L2	L3	L4	SW1	SW2
5A800MG G 1/4"	~71	14	21	8	23.8	22	22
5A800MG G 1/2"	~74	17	20	10	23.8	27	27
5A800MN NPT 1/4"	~74	15	23	8	23.8	22	22
5A800MN NPT 1/2"	~82	20	24	10	23.8	27	27

### Materials 5A800..., 5A810...

Housing	PP	PVDF
Spindle	PP	PVDF
O-ring*	FPM	FPM

# Technical data 5A800. . .

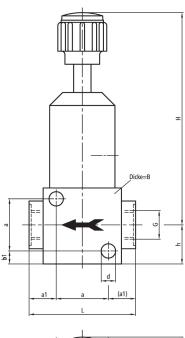
Max. media temperature*	PP	
	90℃	
Pressure stage	PN 10	
Kvs-value	1/4"	1/2"
5A800MG	0.5 m <sup>3</sup> /h	1.4 m <sup>3</sup> /h
5A800MN	0.5 m <sup>3</sup> /h	1.4 m <sup>3</sup> /h

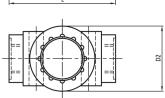


- 1) Spindle individually matched to the flow range
- 2) Linear flow rate characteristic ⇒ Very fine regulation
- 3) Due to special design very fine regulation and shutting off possible
- 4) Available with adjustment scale ⇒ Reproducible adjustments

The Series 5 precision metering valves regulate even the smallest flow rate with high precision. Worth mentioning is the exact, linear flow rate characteristic. Different spindle types, precisely matched to the media and the flow range, make numerous applications possible. Additional safety and reliability are achieved by means of the spindle thread outside the media flow. The precision metering valve is available in the materials PP, PVDF and PTFE and is suitable for the usage of aggressive media. Various types are available: the manually operated precision metering valve Series 5A is available with and without adjustment scale. At constant pressure and/or constant density, the adjustment scale enables liquid or gaseous flows to be exactly and reproducibly adjusted. Even more variable are the precision metering valves with electrical actuator Series 5E. The actuator can be opened and closed, stopped at any intermediate position and then opened or closed further – precise and reproducible for the specific application.







Article-Nr	Nominal Diameter	ameter Connection A Connection B Flow rate Medium		Material
5A113G10414PPFP	DN04	G1/4"	G1/4" 3-150l/h Air	PP/FPM
5A113G10414PTFK	DN04	G1/4"	G1/4" 3-150l/h Air	PTFE/FFKM
5A113G10414PTFP	DN04	G1/4"	G1/4" 3-150l/h Air	PTFE/FPM
5A113G10414PVFK	DN04	G1/4"	G1/4" 3-150l/h Air	PVDF/FFKM
5A113G10414PVFP	DN04	G1/4"	G1/4" 3-150l/h Air	PVDF/FPM
5A113G20414PPFP	DN04	G1/4"	G1/4" 40-675I/h Air	PP/FPM
5A113G20414PTFP	DN04	G1/4"	G1/4" 40-675I/h Air	PTFE/FPM
5A113G20414PVFK	DN04	G1/4"	G1/4" 40-675I/h Air	PVDF/FFKM
5A113G20414PVFP	DN04	G1/4"	G1/4" 40-675l/h Air	PVDF/FPM
5A113G30414PPFP	DN04	G1/4"	G1/4" 80-1150l/h Air	PP/FPM
5A113G41012PPEP	DN10	G1/2"	G1/2" 500-3000l/h Air	PP/EPDM
5A113G41012PPFP	DN10	G1/2"	G1/2" 500-3000l/h Air	PP/FPM
5A113G50414PPEP	DN03	G1/4"	G1/4" 1-30l/h H <sub>2</sub> O	PP/EPDM
5A113G50414PPFP	DN03	G1/4"	G1/4" 1-30l/h H <sub>2</sub> O	PP/FPM
5A113G50414PTFK	DN03	G1/4"	G1/4" 1-30l/h H <sub>2</sub> O	PTFE/FFKM
5A113G50414PTFP	DN03	G1/4"	G1/4" 1-30l/h H <sub>2</sub> O	PTFE/FPM
5A113G50414PVFK	DN03	G1/4"	G1/4" 1-30l/h H <sub>2</sub> O	PVDF/FFKM
5A113G50414PVFP	DN03	G1/4"	G1/4" 1-30l/h H <sub>2</sub> O	PVDF/FPM
5A113G60414PPFP	DN04	G1/4"	G1/4" 10-100l/h H <sub>2</sub> O	PP/FPM
5A113G60414PVFP	DN04	G1/4"	G1/4" 10-100l/h H <sub>2</sub> O	PVDF/FPM
5A113G70414PPEP	DN04	G1/4"	G1/4" 10-200l/h H <sub>2</sub> O	PP/EPDM
5A113G70414PPFP	DN04	G1/4"	G1/4" 10-200l/h H <sub>2</sub> O	PP/FPM
5A113G70414PTFP	DN04	G1/4"	G1/4" 10-200l/h H <sub>2</sub> O	PTFE/FPM
5A113G70414PVFP	DN04	G1/4"	G1/4" 10-200l/h H <sub>2</sub> O	PVDF/FPM

......continued on the next page

Article-Nr	Nominal Diameter	Connection A	Connection B Flow rate Medium	Material
5A113G81012PPEP	DN10	G1/2"	G1/2" 50-500l/h H <sub>2</sub> O	PP/EPDM
5A113G81012PPFP	DN10	G1/2"	G1/2" 50-500l/h H <sub>2</sub> O	PP/FPM
5A113G81012PTFP	DN10	G1/2"	G1/2" 50-500l/h H <sub>2</sub> O	PTFE/FPM
5A113G81012PVFP	A113G81012PVFP DN10		G1/2" 50-500l/h H <sub>2</sub> O	PVDF/FPM

#### Dimensions 5A113...

	G	D2	В	L	а	a1	b1	d	h	Н
5A113 1,	G /4"	30	25	49	24	12.5	6	6.6	18	~98
5A113.	G /2"	30	30	66	34	16	7	6.6	24	~105

### Materials 5A113..., 5A114...

Housing	PP	PVDF	PTFE
Spindle	PTFE	PTFE	PTFE
O-ring*	FPM	FPM	FPM

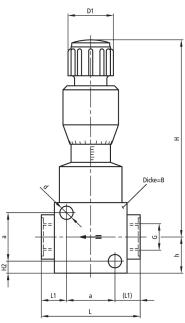
\* EPDM, FFKM on request

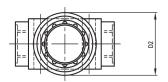
# Technical data 5A113G. . .

Max. media tempera- ture*	PP	PVDF	PTFE
	90℃	120℃	150℃
Pressure stage	PN 10		
Kvs-value	1/4"	1/2"	
5A113G1	0.1 m <sup>3</sup> /h		
5A113G2	$0.2 \text{ m}^3/\text{h}$		
5A113G3	0.3 m <sup>3</sup> /h		
5A113G4		0.5 m <sup>3</sup> /h	
5A113G5	0.03 m <sup>3</sup> /h		
5A113G6	0.1 m <sup>3</sup> /h		
5A113G7	0.2 m <sup>3</sup> /h		
5A113G8		0.5 m <sup>3</sup> /h	

<sup>\*</sup> Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature! Flow range for air at P = 0.1 bar, 20 °C Flow range for water at P = 1 bar, 20 °C







Article-Nr	Nominal Diameter	Connection A	Connection B Flow rate Medium	Material
5A114G0314PPEP	DN03	G1/4"	G1/4" 1-30l/h H <sub>2</sub> O	PP/EPDM
5A114G10414PPFP	DN04	G1/4"	G1/4" 3-150l/h Air	PP/FPM
5A114G10414PTFK	DN04	G1/4"	G1/4" 3-150l/h Air	PTFE/FFKM
5A114G10414PVFK	DN04	G1/4"	G1/4" 3-150l/h Air	PVDF/FFKM
5A114G30414PPFP	DN04	G1/4"	G1/4" 80-1150l/h Air	PP/FPM
5A114G50414PPFP	DN03	G1/4"	G1/4" 1-30l/h H <sub>2</sub> O	PP/FPM
5A114G60414PVFP	DN04	G1/4"	G1/4" 10-100l/h H <sub>2</sub> O	PVDF/FPM
5A114G70414PPFP	DN04	G1/4"	G1/4" 10-200l/h H <sub>2</sub> O	PP/FPM
5A114G70414PTFP	DN04	G1/4"	G1/4" 10-200l/h H <sub>2</sub> O	PTFE/FPM
5A114G81012PPFP	DN10	G1/2"	G1/2" 50-500l/h H <sub>2</sub> O	PP/FPM
5A114G81012PTFP	DN10	G1/2"	G1/2" 50-500l/h H <sub>2</sub> O	PTFE/FPM

## Dimensions 5A114. . .

G	L	L1	а	h	Н	H2	D1	D2	d	В
5A114 G 1/4"	49	12.5	24	18	~98	6	22.5	31	6.6	25
5A114 G 1/2"	66	16	34	24	~118	7	22.5	31	6.6	30

### Materials 5A113. . ., 5A114. . .

Housing	PP	PVDF	PTFE
Spindle	PTFE	PTFE	PTFE
O-ring*	FPM	FPM	FPM

#### Technical data 5A114G. . .

Max. media tempera- ture*	PP	PVDF	PTFE
	90℃	120℃	150℃
Pressure stage	PN 10		
Kvs-value	1/4"	1/2"	
5A114G1	0.1 m <sup>3</sup> /h		
5A114G2	$0.2 \text{ m}^3/\text{h}$		
5A114G3	0.3 m <sup>3</sup> /h		
5A114G4		0.5 m <sup>3</sup> /h	
5A114G5	0.03 m <sup>3</sup> /h		
5A114G6	0.1 m <sup>3</sup> /h		
5A114G7	0.2 m <sup>3</sup> /h		
5A114G8		0.5 m <sup>3</sup> /h	

<sup>\*</sup> Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature! Flow range for air at P = 0.1 bar, 20 °C Flow range for water at P = 1 bar, 20 °C

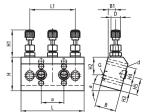


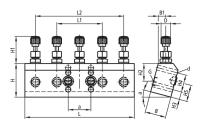
- 1) Direct assembly to differential pressure transmitters  $\Rightarrow$  DIN 19213
- 2) With 3 or 5 valves ⇒ Shut off, pressure compensation, test and draining in one block
- 3) As standard with seam-less female thread  $\Rightarrow$  Numerous connection options
- 4) Housing made of PVDF and PTFE  $\Rightarrow$  High media resistance

Series 5A transmitter valves are special valve blocks. They provide the safe connection of system pipes to differential pressure transducers (transmitters). Two designs are available: the valve blocks with 3 valves are suitable for shutting off and for pressure compensation in a block. Direct assembly to differential pressure transmitter is possible (DIN 19213). Shut off, pressure compensation, test and draining in one block – the valve blocks with 5 valves are suitable for a wide range of applications. They are also suitable for direct assembly to differential pressure transmitters (DIN 19213).









Article-Nr	Nominal Diameter	Connection	Valves	Material
5A630G030612PPFP	DN06	G1/2"	DIN19213	PP/FPM
5A630G030612PTFP	DN06	G1/2"	DIN19213	PTFE/FPM
5A630G030612PVFP	DN06	G1/2"	DIN19213	PVDF/FPM
5A630G050612PTFP	DN06	G1/2"	DIN19213	PTFE/FPM
5A630G050612PVFP	DN06	G1/2"	DIN19213	PVDF/FPM

### Dimensions 5A630...

	G	L	L1	L2	а	В	B1	Н	H1	H2	НЗ	H4	H5	D	d	a
5A63	80 <b>G</b> 03. 1/2"	150	108	./.	54 ± 0,2	50	18	80	~65	42	18,85	31,3 ± 0,2	39,5	22,5	12	15°
5A6	G 1/2"	160	108	210	54 ± 0,2	50	18	80	~65	42	18.8	31,3 ± 0,2	39.5	22.5	12	15°

#### Materials 5A630...

Housing	PVDF	PTFE
Spindle	PVDF	PTFE
O-ring*	FPM	FPM

\* EPDM, FFKM on request

#### Technical data 5A630. . .

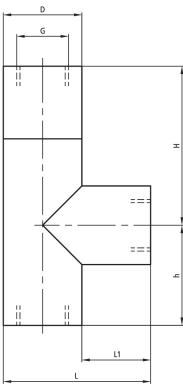
Max. media temperature*	PVDF	PTFE
	120℃	150℃
Pressure stage	PN 10	

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!









Article-Nr	Nominal Diameter	Connection A	Connection B Flow rate	Material
5A350G0414PNFP	DN03	G1/4"	G1/4" G1/4"	PP-NATUR/FPM
5A350G0414PPFK	DN03	G1/4"	G1/4" G1/4"	PP
5A350G0414PPFP	DN03	G1/4"	G1/4" G1/4"	PP/FPM
5A350G0414PVFP	DN03	G1/4"	G1/4" G1/4"	PVDF/FPM

### Dimensions 5A350...

	G	D	h	Н	L	L1
5A350G	G 1/4"	20	25.5	40.5	37.5	17.5

# Materials 5A350. . .

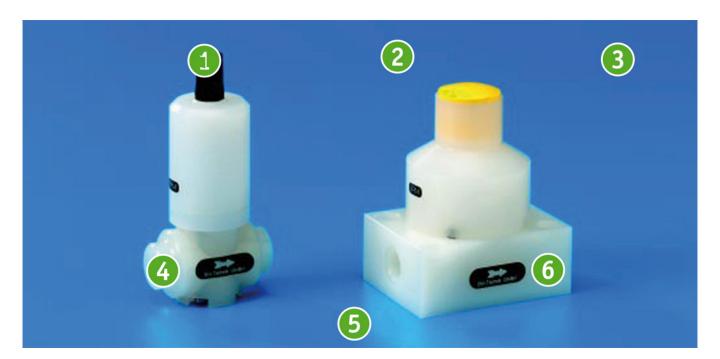
Housing	PP	PVDF	PFA
Sealing cone	PTFE	PTFE	PTFE
Spring	Hastelloy©	Hastelloy©	Hastelloy©
O-ring*	FPM	FPM	FPM

\* EPDM, FFKM on request

### Technical data 5A350. . .

Max. media tempera- ture*	PP	PVDF	PFA
	90℃	120℃	180℃
Pressure stage	PN 6		
Opening pressure A	0.7 bar		
Operating pressure A	2 bar		
$Flow\;A\toC$	0.6 m <sup>3</sup> /h (air at 2 bar)		

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!

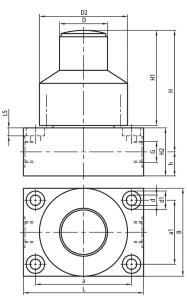


- 1) Valve adjustment also possible under working pressure
- 2) Safe reduction of pressure peaks and pulses
- 3) Small hysteresis
- 4) As standard with seam-less female thread ⇒ Numerous connection options
- 5) Any installation position ⇒ Variable usage
- 6) Housing made of PP, PVDF, and PTFE  $\Rightarrow$  High media resistance

Series 5D pressure keeping valves are used to remove overpressure produced during operation or for system-related reasons. They reduce the load on the system by reducing pressure peaks if the set pressure is exceeded. There are 2 types. Both versions can be installed in any position horizontal or vertical and can be used in numerous applications.







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5D110FG0614PTFEV	DN06	G1/4"	G1/4"	PTFE/FEV
5D110FG0614PVFEV	DN06	G1/4"	G1/4"	PVDF

### Materials 5D110...

Housing	PVDF	PTFE
Diaphragm	TFM	TFM
O-ring*	FPM	FPM

\* EPDM, FFKM on request

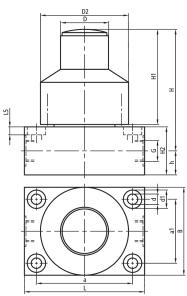
#### Technical data 5D110...

Max. media temperature*	PVDF	PTFE
	120℃	150℃
Pressure stage	PN 6	
Adjustment range	0.2 – 6 bar	

 $^{\star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







	Article-Nr	Nominal Diameter	Connection A	Connection B	Material
Ī	5D110FN0614PVFEV	DN06	NPT1/4"	NPT1/4"	PVDF
	5D110FN0614PVFP	DN06	NPT1/4"	NPT1/4"	PVDF/FPM

# Materials 5D110. . .

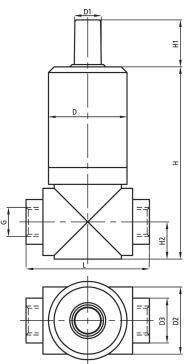
Housing	PVDF	PTFE
Diaphragm	TFM	TFM
O-ring*	FPM	FPM

# Technical data 5D110...

Max. media temperature*	PVDF	PTFE
	120℃	150℃
Pressure stage	PN 6	
Adjustment range	0.2 – 6 bar	







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5D210FG0614PPFP	DN05	G1/4"	G1/4"	PP/FPM
5D210FG0614PVFP	DN05	G1/4"	G1/4"	PVDF/FPM

### Materials 5D210...

Housing	PP	PVDF	
Diaphragm	TFM	TFM	

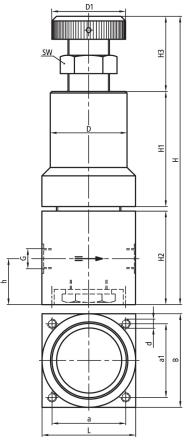
### Technical data 5D210...

Max. media temperature*	PP	PVDF	
	90℃	120℃	
Pressure stage	PN 6		
Adjustment range	0.5 – 5 bar	·	

 $<sup>^\</sup>star$ Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5D510FG0514PPFP	DN05	G1/4"	G1/4"	PP/FPM
5D510FG0514PTFK	DN05	G1/4"	G1/4"	PTFE/FFKM
5D510FG0514PTFP	DN05	G1/4"	G1/4"	PTFE/FPM
5D510FG0514PVFK	DN05	G1/4"	G1/4"	PVDF/FFKM
5D510FG0514PVFP	DN05	G1/4"	G1/4"	PVDF/FPM

### Materials 5D510...

Housing	PVDF	PTFE
Diaphragm	TFM	TFM
Sealing cone	PTFE	PTFE
O-ring*	FPM	FPM

\* EPDM, FFKM on request

#### Technical data 5D510. . .

Max. media temperature*	PVDF	PTFE
	120℃	150℃
Pressure stage	PN 6	
Adjustment range	0.1 – 5 bar	
Working pressure variation	± 0.2 bar	
Kvs-value	0.35 m <sup>3</sup> /h	

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!

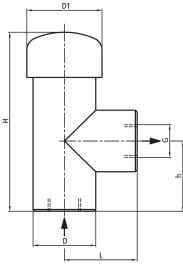


- 1) Can be operated with one hand
- 2) Connection G 1/4" female thread, seam-less
- 3) Housing made from PP, PVDF and PFA  $\Rightarrow$  High media resistance

In practical applications often a problem – taking samples using flexible tubes: You often only have one hand free, but a valve cannot be opened with one hand. Using the Series 5H single-hand operated valve, such tasks can be performed very easily.







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5H200FG0414PFFK	DN04	G1/4"	G1/4"	PFA/FFKM
5H200FG0414PFFP	DN04	G1/4"	G1/4"	PFA/FPM
5H200FG0414PPFK	DN04	G1/4"	G1/4"	PP/FFKM
5H200FG0414PPFP	DN04	G1/4"	G1/4"	PP/FPM
5H200FG0414PVFK	DN04	G1/4"	G1/4"	PVDF/FFKM
5H200FG0414PVFP	DN04	G1/4"	G1/4"	PVDF/FPM

### Dimensions 5H200...

	G	D	D1	L	h	Н
5H200FG	G 1/4"	Ø 25	Ø 30	29	28	~71

### Materials 5H200...

Housing	PP	PVDF	PFA
Sealing cone	PTFE	PTFE	PTFE
O-ring*	FPM	FPM	FPM

\* EPDM, FFKM on request

### Technical data 5H200FG...

Max. media tempera- ture*	PP	PVDF	PFA
	90℃	120℃	180℃
Pressure stage	PN 6		
Kvs-value	0.16 m <sup>3</sup> /h		

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!

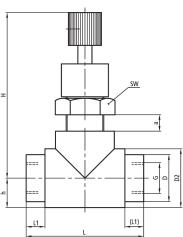


- 1) Panel mounting
- 2) Regulation and shut-off possible due to special design
- 3) Thread seam-less in accordance with DIN, USAS or JIS  $\Rightarrow$  Numerous connection options
- 4) Series 5L: particularly light and compact design
- 5) Series 5L: housing made of PP, PVDF and PFA ⇒ High media resistance
- 6) Series 5A: housing made of PP, PVDF and PTFE ⇒ High media resistance
- 7) Maintenance-free design ⇒ For long-term usage

Wherever gas and liquid flows must be regulated, the Series 5 regulation valves are the ideal partner: they are available in different materials for usage with aggressive media. They have a female thread on both ends and can thus be used with various connecting elements from the EM-TECHNIK modular system. The Series 5L regulation valves are light and compact due to their special design. As standard they are intended for panel mounting. The Series 5A regulation valves have been in our product range for years. Today they are predominantly in demand in PTFE.







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5L101G0318PFFK	DN03	G1/8"	G1/8"	PFA/FFKM
5L101G0318PFFP	DN03	G1/8"	G1/8"	PFA/FPM
5L101G0318PNFP	DN03	G1/8"	G1/8"	PP-NATUR/FPM
5L101G0318PPEP	DN03	G1/8"	G1/8"	PP/EPDM
5L101G0318PPFP	DN03	G1/8"	G1/8"	PP/FPM
5L101G0318PVFP	DN03	G1/8"	G1/8"	PVDF/FPM
5L101G0414PFFK	DN04	G1/4"	G1/4"	PFA/FFKM
5L101G0414PFFP	DN04	G1/4"	G1/4"	PFA/FPM
5L101G0414PNFP	DN04	G1/4"	G1/4"	PP-NATUR/FPM
5L101G0414PPEP	DN04	G1/4"	G1/4"	PP/EPDM
5L101G0414PPFP	DN04	G1/4"	G1/4"	PP/FPM
5L101G0414PVEP	DN04	G1/4"	G1/4"	PVDF/EPDM
5L101G0414PVFK	DN04	G1/4"	G1/4"	PVDF/FFKM
5L101G0414PVFP	DN04	G1/4"	G1/4"	PVDF/FPM
5L101G0812PFEP	DN08	G1/2"	G1/2"	PFA/EPDM
5L101G0812PFFK	DN08	G1/2"	G1/2"	PFA/FFKM
5L101G0812PFFP	DN08	G1/2"	G1/2"	PFA/FPM
5L101G0812PNFP	DN08	G1/2"	G1/2"	PP-NATUR/FPM
5L101G0812PPEP	DN08	G1/2"	G1/2"	PP/EPDM
5L101G0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5L101G0812PVEP	DN08	G1/2"	G1/2"	PVDF/EPDM
5L101G0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM

#### Dimensions 5L101G..., 5L101N...

G	D	D2	Н	h	a	L	L1	SW
					max.			
5L101G G 1/8"	Ø 15	Ø 20	~59	10	6	44	8	17
5L101G. G 1/4"	Ø 20	Ø 25	~70,5	12.5	7	50	8	22
5L101G G 1/2"	Ø 32	Ø 36	~85,5	18	9	60	14	27
5L101N. NPT 1/8"	Ø 15	Ø 20	~59	10	6	44	8	17
5L101N NPT 1/4"	Ø 20	Ø 25	~70,5	12.5	7	50	8	22
5L101N. NPT 1/2"	Ø 32	Ø 36	~85,5	18	9	60	14	27

# Materials 5L101G..., 5L101N..., 5L201G..., 5L201N...

Housing	PP	PVDF	PFA
Spindle	PCTFE	PCTFE	PCTFE
O-ring*	FPM	FPM	FPM

\* EPDM, FFKM on request

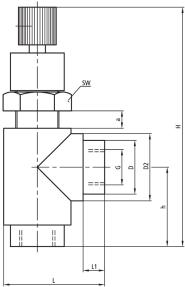
#### Technical data 5L101G..., 5L101N...

Max. media temperature*	PP	PVDF	PFA
	90℃	120℃	180℃
Pressure stage	PN 10		
Kvs-value	1/8"	1/4"	1/2"
5L101G	$0.07 \text{ m}^3/\text{h}$	0.25 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h
5L101N	$0.07 \text{ m}^3/\text{h}$	0.25 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5L201G0318PFFK	DN03	G1/8"	G1/8"	PFA/FFKM
5L201G0318PFFP	DN03	G1/8"	G1/8"	PFA/FPM
5L201G0318PPEP	DN03	G1/8"	G1/8"	PP/EPDM
5L201G0318PPFP	DN03	G1/8"	G1/8"	PP/FPM
5L201G0318PVFP	DN03	G1/8"	G1/8"	PVDF/FPM
5L201G0414PFFK	DN04	G1/4"	G1/4"	PFA/FFKM
5L201G0414PFFP	DN04	G1/4"	G1/4"	PFA/FPM
5L201G0414PNFP	DN04	G1/4"	G1/4"	PP-NATUR/FPM
5L201G0414PPFP	DN04	G1/4"	G1/4"	PP/FPM
5L201G0414PVFP	DN04	G1/4"	G1/4"	PVDF/FPM
5L201G0812PFFP	DN08	G1/2"	G1/2"	PFA/FPM
5L201G0812PNFP	DN08	G1/2"	G1/2"	PP-NATUR/FPM
5L201G0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5L201G0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM

# Dimensions 5L201G..., 5L201N...

G	D	D2	Н	h	a max.	L	L1	SW
5L201G G 1/8"	Ø 15	Ø 15	~ 76	22	6	32	8	17
5L201G. G 1/4"	Ø 15	Ø 15	~ 94,5	29.5	7	37.5	8	22
5L201G G 1/2"	Ø 15	Ø 15	~ 113,5	30	9	46	10	27
5L201N. NPT 1/8"	Ø 15	Ø 15	~ 76	22	6	32	8	17
5L201N NPT 1/4"	Ø 15	Ø 15	~ 94,5	29.5	7	37.5	8	22
5L201N. NPT 1/2"	Ø 15	Ø 15	~ 117,5	34	9	50	14	27

# Materials 5L101G. . . , 5L101N. . . , 5L201G. . . , 5L201N. . .

Housing	PP	PVDF	PFA
Spindle	PCTFE	PCTFE	PCTFE
O-ring*	FPM	FPM	FPM

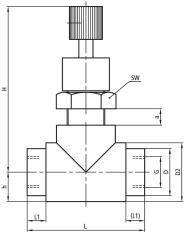
## Technical data 5L201G..., 5L201N...

Max. media tempera- ture*	PP	PVDF	PFA
	90℃	120℃	180℃
Pressure stage	PN 10		
Kvs-value	1/8"	1/4"	1/2"
5L201G	0.06 m <sup>3</sup> /h	0.25 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h
5L201N	0.06 m <sup>3</sup> /h	$0.25 \text{ m}^3/\text{h}$	0.6 m <sup>3</sup> /h

<sup>\*</sup> Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5L101N0318PPFP	DN03	NPT1/8"	NPT1/8"	PP/FPM
5L101N0318PVFK	DN03	NPT1/8"	NPT1/8"	PVDF/FFKM
5L101N0414PVFK	DN04	NPT1/4"	NPT1/4"	PVDF/FFKM
5L101N0414PVFP	DN04	NPT1/4"	NPT1/4"	PVDF/FPM

# Dimensions 5L101G..., 5L101N...

G	D	D2	Н	h	a	L	L1	SW
					max.			
5L101G G 1/8"	Ø 15	Ø 20	~59	10	6	44	8	17
5L101G. G 1/4"	Ø 20	Ø 25	~70,5	12.5	7	50	8	22
5L101G G 1/2"	Ø 32	Ø 36	~85,5	18	9	60	14	27
5L101N. NPT 1/8"	Ø 15	Ø 20	~59	10	6	44	8	17
5L101N NPT 1/4"	Ø 20	Ø 25	~70,5	12.5	7	50	8	22
5L101N. NPT 1/2"	Ø 32	Ø 36	~85,5	18	9	60	14	27

# Materials 5L101G. . . , 5L101N. . . , 5L201G. . . , 5L201N. . .

Housing	PP	PVDF	PFA
Spindle	PCTFE	PCTFE	PCTFE
O-ring*	FPM	FPM	FPM

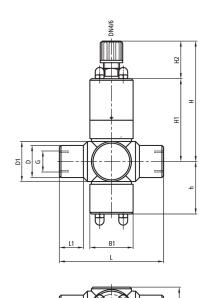
## Technical data 5L101G..., 5L101N...

Max. media tempera- ture*	PP	PVDF	PFA
	90℃	120℃	180℃
Pressure stage	PN 10		
Kvs-value	1/8"	1/4"	1/2"
5L101G	0.07 m <sup>3</sup> /h	0.25 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h
5L101N	0.07 m <sup>3</sup> /h	0.25 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h



- 1) Diaphragm made of PFA ⇒ High media resistance ⇒ Reliable and long-lived
- 2) Sealing principle: diaphragm with 90° cone made of PTFE ⇒ High tightness even with soiling
- 3) Any installation position ⇒ Variable usage
- 4) Design without dead space  $\Rightarrow$  ideal with th4e special connectors from the EM-TECHNIK modular system

The Series 5 diaphragm valves can be used in practice both as shutoff and as safety valves. Due to their special diaphragm, these valves have very high reliability and a long service life. The nominal diameters up to DN 05 ensure a good flow rate even with soiled media. Two variants are available: the Series 5B diaphragm valve is manually controlled. The Series 5P diaphragm valve is pneumatically controlled and thus also particularly suitable for usage in plant and process circuits for interrupting or diverting the media, e.g. on a pressure drop.



5P100G0514PF DN05 G1/4" G1/4"	Material
	PFA
5P100G0514PP DN05 G1/4" G1/4"	PP
5P100G0514PV DN05 G1/4" G1/4"	PVDF
Dimensions 5P100, 5P101	
G B B1 D D1 L L1 h H F	1 H2
5P100, G 30 Ø 27 Ø 20 Ø 25 65 15 ~ 33 ~ 75 ~ 5P1011/4"	2 ~ 23,5
Housing PP PVDF	PFA
Materials 5P100, 5P101, 5P132	
Diaphragm TFM TFM	TFM
DiaphragmTFMTFMSealing conePTFEPTFE	
Sealing cone PTFE PTFE  Technical data 5P100, 5P101  Max. media tempera- PP PVDF	PTFE
Sealing cone PTFE PTFE  Technical data 5P100, 5P101	PTFE
Sealing cone PTFE PTFE  Technical data 5P100, 5P101  Max. media temperature*  PP PVDF	PTFE
Sealing cone PTFE PTFE  Technical data 5P100, 5P101  Max. media temperature*  PP PVDF  120 ℃	PTFE
Sealing cone PTFE PTFE   Technical data 5P100, 5P101 PP PVDF   Max. media temperature* PP PVDF   90 °C 120 °C   Pressure stage PN 6   Opening pressure 3 bar	PTFE
Sealing cone PTFE PTFE  Technical data 5P100, 5P101  Max. media temperature*  90 °C 120 °C  Pressure stage PN 6  Opening pressure 3 bar 5P110G  Closing pressure 3 − 5 bar 5P111G  Kvs-value 1/4"	TFM PTFE PFA 180℃
Sealing cone  PTFE  PTFE  Technical data 5P100, 5P101  Max. media temperature*  PP  PVDF  120 ℃  Pressure stage PN 6  Opening pressure SP110G  Closing pressure 3 bar 5P111G	PTFE

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20  $^{\circ}$ C), the permissible pressure reduces with increasing temperature!

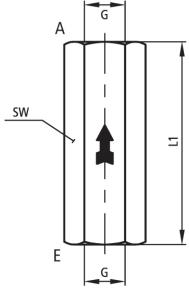


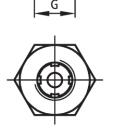
- 1) If required available with spring  $\Rightarrow$  Prevents return flow even on very slight pressure drop  $\Rightarrow$  Any installation position
- 2) Housing made of PP, PVDF and PFA  $\Rightarrow$  High media resistance
- 3) O-ring valve seat ⇒ Very high tightness
- 4) As standard with seam-less female G- or NPT-thread  $\Rightarrow$  Numerous connection options
- 5) Inlet also possible with seam-less male G- or NPTthread

Whenever a medium is to be prevented from flowing back into a system, or devices are to be protected against blow back, check valves are used. Two types are available: The check valve without spring is primarily used for the protection of fittings against blow back from a system. These valves have a low opening pressure. The check valve with spring on the other hand prevents the medium from flowing back when the pressure simply drops. Here the spring ensures that the valve closes automatically.









Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5R100FF0318PFFK	DN03	G1/8"	G1/8"	PFA/FFKM
5R100FF0318PPFK	DN03	G1/8"	G1/8"	PP/FFKM
5R100FF0318PPFP	DN03	G1/8"	G1/8"	PP/FPM
5R100FF0318PVFP	DN03	G1/8"	G1/8"	PVDF/FPM
5R100FF0414PFFK	DN03	G1/4"	G1/4"	PFA/FFKM
5R100FF0414PFFP	DN03	G1/4"	G1/4"	PFA/FPM
5R100FF0414PNFP	DN03	G1/4"	G1/4"	PP-NATUR/FPM
5R100FF0414PPEP	DN03	G1/4"	G1/4"	PP/EPDM
5R100FF0414PPFK	DN03	G1/4"	G1/4"	PP
5R100FF0414PPFP	DN03	G1/4"	G1/4"	PP/FPM
5R100FF0414PTFK	DN03	G1/4"	G1/4"	PTFE/FFKM
5R100FF0414PTFP	DN03	G1/4"	G1/4"	PTFE/FPM
5R100FF0414PVEP	DN03	G1/4"	G1/4"	PVDF/EPDM
5R100FF0414PVFK	DN03	G1/4"	G1/4"	PVDF/FFKM
5R100FF0414PVFP	DN03	G1/4"	G1/4"	PVDF/FPM
5R100FF0812PFFK	DN08	G1/2"	G1/2"	PFA/FFKM
5R100FF0812PFFP	DN08	G1/2"	G1/2"	PFA/FPM
5R100FF0812PNFP	DN08	G1/2"	G1/2"	PP- NATURE/FPM
5R100FF0812PPEP	DN08	G1/2"	G1/2"	PP/EPDM
5R100FF0812PPFK	DN08	G1/2"	G1/2"	PP/FFKM
5R100FF0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5R100FF0812PTFK	DN08	G1/2"	G1/2"	PTFE/FFKM
5R100FF0812PTFP	DN08	G1/2"	G1/2"	PTFE/FPM
5R100FF0812PVFK	DN08	G1/2"	G1/2"	PVDF/FFKM
5R100FF0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM

Housing	PP	PVDF	PFA
Sealing cone	PTFE	PTFE	PTFE
Spring	Hastelloy©	Hastelloy©	Hastelloy©
O-ring*	FPM	FPM	FPM

\* EPDM, FFKM on request

#### Technical data 5R...

Max. media tempera- ture*	PP	PVDF	PFA
	90℃	120℃	180℃
Pressure stage	1/4"	1/2"	
	PN 6	PN 10	
Opening pressure	1/4"	1/2"	
5R100FF	1.1 – 0.4 bar	0.1 - 0.9 bar	
5R100MF	1.1 – 0.4 bar	0.1 - 0.9 bar	
5R200FF	0.6 bar	1.2 bar	
5R200MF	0.6 bar	1.2 bar	
Kvs-value	1/4"	1/2"	
5R100FF	0.3 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h	
5R100MF	$0.3 \text{ m}^3/\text{h}$	0.6 m <sup>3</sup> /h	
5R200FF	0.25 m <sup>3</sup> /h	0.45 m <sup>3</sup> /h	
5R200MF	0.25 m <sup>3</sup> /h	0.45 m <sup>3</sup> /h	

 $<sup>^{\</sup>star}$  Starting from the nominal pressure rating (at 20 °C), the permissible pressure reduces with increasing temperature!

Dimensions 5R100FF..., 5R200FF..., 5R110FF..., 5R120FF...

	G	L1	SW
5R100FF	G 1/8"	40	14
5R100FF	G 1/4"	55	19
5R100FF	G 1/2"	76	27

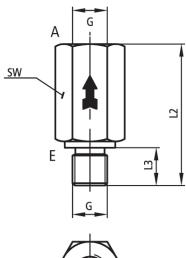
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	G	L1	SW
5R200FF	G 1/8"	46.5	14
5R200FF	G 1/4"	63	19
5R200FF	G 1/2"	76	27
5R110FF	NPT 1/8"	43	14
5R110FF	NPT 1/4"	56	19
5R120FF	NPT 1/8"	48	14
5R120FF	NPT 1/4"	63	19







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5R100MF0414PFFP	DN03	G1/4"	G1/4"	PFA/FPM
5R100MF0414PPEP	DN03	G1/4"	G1/4"	PP/EPDM
5R100MF0414PPFK	DN03	G1/4"	G1/4"	PP/FFKM
5R100MF0414PPFP	DN03	G1/4"	G1/4"	PP/FPM
5R100MF0414PTFK	DN03	G1/4"	G1/4"	PTFE/FFKM
5R100MF0414PTFP	DN03	G1/4"	G1/4"	PTFE/FPM
5R100MF0414PVEP	DN03	G1/4"	G1/4"	PVDF/EPDM
5R100MF0414PVFP	DN03	G1/4"	G1/4"	PVDF/FPM
5R100MF0812PPEP	DN08	G1/2"	G1/2"	PP/EPDM
5R100MF0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5R100MF0812PVFK	DN08	G1/2"	G1/2"	PVDF/FFKM
5R100MF0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM

Housing	PP	PVDF	PFA
Sealing cone	PTFE	PTFE	PTFE
Spring	Hastelloy©	Hastelloy©	Hastelloy©
O-ring*	FPM	FPM	FPM

## Technical data 5R...

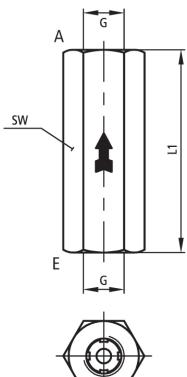
Max. media tempera- ture*	PP	PVDF	PFA
	90℃	120℃	180℃
Pressure stage	1/4"	1/2"	
	PN 6	PN 10	
Opening pressure	1/4"	1/2"	
5R100FF	1.1 – 0.4 bar	0.1 – 0.9 bar	
5R100MF	1.1 – 0.4 bar	0.1 – 0.9 bar	
5R200FF	0.6 bar	1.2 bar	
5R200MF	0.6 bar	1.2 bar	
Kvs-value	1/4"	1/2"	
5R100FF	0.3 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h	
5R100MF	0.3 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h	
5R200FF	0.25 m <sup>3</sup> /h	0.45 m <sup>3</sup> /h	
5R200MF	0.25 m <sup>3</sup> /h	0.45 m <sup>3</sup> /h	

## Dimensions 5R100MF. . . , 5R200MF. . . , 5R110MF. . . , 5R120MF. . .

	G	L2	L3	SW
5R100MF	G 1/8"	35	8	14
5R100MF	G 1/4"	45	12	19
5R100MF	G 1/2"	76	14	27
5R200MF	G 1/8"	42	8	14
5R200MF	G 1/4"	63	12	19
5R200MF	G 1/2"	76	14	27
5R110MF	NPT 1/8"	39	10	14
5R110MF	NPT 1/4"	47	15.4	19
5R120MF	NPT 1/8"	47	10	14
5R120MF	NPT 1/4"	65	15.4	19







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5R200FF0318PPEP	DN03	G1/8"	G1/8"	PP/EPDM
5R200FF0318PPFP	DN03	G1/8"	G1/8"	PP/FPM
5R200FF0318PVFP	DN03	G1/8"	G1/8"	PVDF/FPM
5R200FF0414PFFK	DN03	G1/4"	G1/4"	PFA/FFKM
5R200FF0414PFFP	DN03	G1/4"	G1/4"	PFA/FPM
5R200FF0414PNFP	DN03	G1/4"	G1/4"	PP-NATUR/FPM
5R200FF0414PPEP	DN03	G1/4"	G1/4"	PP/EPDM
5R200FF0414PPFK	DN03	G1/4"	G1/4"	PP/FFKM
5R200FF0414PPFP	DN03	G1/4"	G1/4"	PP/FPM
5R200FF0414PVEP	DN03	G1/4"	G1/4"	PVDF/EPDM
5R200FF0414PVFK	DN03	G1/4"	G1/4"	PVDF/FFKM
5R200FF0414PVFP	DN03	G1/4"	G1/4"	PVDF/FPM
5R200FF0812PFEP	DN08	G1/2"	G1/2"	PFA/EPDM
5R200FF0812PFFK	DN08	G1/2"	G1/2"	PFA/FFKM
5R200FF0812PFFP	DN08	G1/2"	G1/2"	PFA/FPM
5R200FF0812PPEP	DN08	G1/2"	G1/2"	PP/EPDM
5R200FF0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5R200FF0812PVFK	DN08	G1/2"	G1/2"	PVDF/FFKM
5R200FF0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM

Housing	PP	PVDF	PFA
Sealing cone	PTFE	PTFE	PTFE
Spring	Hastelloy©	Hastelloy©	Hastelloy©
O-ring*	FPM	FPM	FPM

# Technical data 5R...

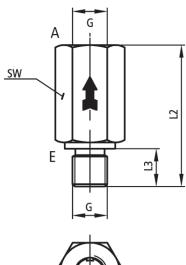
Max. media tempera- ture*	PP	PVDF	PFA
	90℃	120℃	180℃
Pressure stage	1/4"	1/2"	
	PN 6	PN 10	
Opening pressure	1/4"	1/2"	
5R100FF	1.1 - 0.4 bar	0.1 – 0.9 bar	
5R100MF	1.1 – 0.4 bar	0.1 – 0.9 bar	
5R200FF	0.6 bar	1.2 bar	
5R200MF	0.6 bar	1.2 bar	
Kvs-value	1/4"	1/2"	
5R100FF	0.3 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h	
5R100MF	0.3 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h	
5R200FF	0.25 m <sup>3</sup> /h	0.45 m <sup>3</sup> /h	
5R200MF	0.25 m <sup>3</sup> /h	0.45 m <sup>3</sup> /h	

### Dimensions 5R100FF..., 5R200FF..., 5R110FF..., 5R120FF...

	G	L1	SW
5R100FF	G 1/8"	40	14
5R100FF	G 1/4"	55	19
5R100FF	G 1/2"	76	27
5R200FF	G 1/8"	46.5	14
5R200FF	G 1/4"	63	19
5R200FF	G 1/2"	76	27
5R110FF	NPT 1/8"	43	14
5R110FF	NPT 1/4"	56	19
5R120FF	NPT 1/8"	48	14
5R120FF	NPT 1/4"	63	19







Article-Nr	Nominal Diameter	Connection A	Connection B	Material
5R200MF0318PPFK	DN03	G1/8"	G1/8"	PP/FFKM
5R200MF0414PFFP	DN03	G1/4"	G1/4"	PFA/FPM
5R200MF0414PPFK	DN03	G1/4"	G1/4"	PP/FFKM
5R200MF0414PPFP	DN03	G1/4"	G1/4"	PP/FPM
5R200MF0414PVFK	DN03	G1/4"	G1/4"	PVDF/FFKM
5R200MF0414PVFP	DN03	G1/4"	G1/4"	PVDF/FPM
5R200MF0812PFFK	DN08	G1/2"	G1/2"	PFA/FFKM
5R200MF0812PFFP	DN08	G1/2"	G1/2"	PFA/FPM
5R200MF0812PNFP	DN08	G1/2"	G1/2"	PP-NATUR/FPM
5R200MF0812PPEP	DN08	G1/2"	G1/2"	PP/EPDM
5R200MF0812PPFP	DN08	G1/2"	G1/2"	PP/FPM
5R200MF0812PVFP	DN08	G1/2"	G1/2"	PVDF/FPM

Housing	PP	PVDF	PFA
Sealing cone	PTFE	PTFE	PTFE
Spring	Hastelloy©	Hastelloy©	Hastelloy©
O-ring*	FPM	FPM	FPM

## Technical data 5R...

Max. media tempera- ture*	PP	PVDF	PFA
	90℃	120℃	180℃
Pressure stage	1/4"	1/2"	
	PN 6	PN 10	
Opening pressure	1/4"	1/2"	
5R100FF	1.1 – 0.4 bar	0.1 – 0.9 bar	
5R100MF	1.1 – 0.4 bar	0.1 – 0.9 bar	
5R200FF	0.6 bar	1.2 bar	
5R200MF	0.6 bar	1.2 bar	
Kvs-value	1/4"	1/2"	
5R100FF	0.3 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h	
5R100MF	0.3 m <sup>3</sup> /h	0.6 m <sup>3</sup> /h	
5R200FF	0.25 m <sup>3</sup> /h	0.45 m <sup>3</sup> /h	
5R200MF	0.25 m <sup>3</sup> /h	0.45 m <sup>3</sup> /h	

## Dimensions 5R100MF. . . , 5R200MF. . . , 5R110MF. . . , 5R120MF. . .

	G	L2	L3	SW
5R100MF	G 1/8"	35	8	14
5R100MF	G 1/4"	45	12	19
5R100MF	G 1/2"	76	14	27
5R200MF	G 1/8"	42	8	14
5R200MF	G 1/4"	63	12	19
5R200MF	G 1/2"	76	14	27
5R110MF	NPT 1/8"	39	10	14
5R110MF	NPT 1/4"	47	15.4	19
5R120MF	NPT 1/8"	47	10	14
5R120MF	NPT 1/4"	65	15.4	19