

Check Valves



Flow Resistors SW

Nominal diameter from 0.25 mm to 2 mm



Suitability for Industry-Specific Applications



Flow resistors SW

Applications

- Flow resistor for handling of porous workpieces
- Reduction of the flow rate through individual suction pads in order to maintain the vacuum in the overall system
- May be installed in any orientation

Design

- Double-ended threaded nipple with reduced flow cross section
- Large gradation of different flow cross sections

Our Highlights...

- No moving parts
- Acts as a flow resistor with a reduced cross-section
- Minimum size

Your Benefits...

- > Robust design with long operating lifetime
- > Reduction of the cross-section of the vacuum line, particularly useful when handling porous workpieces
- > Also suitable for use in restricted spaces

Designation Code Flow Resistors SW

Abbreviated designation	Nominal size	Connection thread
Example SW 25 G1/8-AG:		
SW	25	G1/8-AG
SW	25 = 0.25 mm to 200 = 2.00 mm	G1/8-AG (AG = male (M)) G1/4-AG

Ordering Data Flow Resistors SW

Flow resistor SW is delivered as a ready to connect product.

Schmalz -
The Company

Vacuum
Knowledge

Vacuum
Suction Pads

Special
Grippers

Mounting
Elements

Vacuum
Generators

**Valve
Technology**

Switches and
Monitoring

Filters and
Connections

Vacuum Grip-
ping Systems

Services

Contact

Index
of Products



Flow Resistors SW

Nominal diameter from 0.25 mm to 2 mm

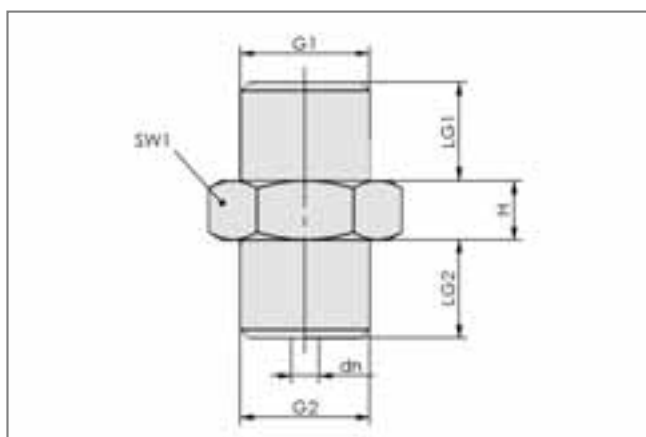
Flow Resistors SW

Type	Connection	
	G1/4"-M	G1/8"-M
SW 25	-	10.05.04.00034
SW 40	10.05.04.00010	10.05.04.00001
SW 50	10.05.04.00011	10.05.04.00002
SW 60	10.05.04.00012	10.05.04.00003
SW 70	10.05.04.00013	10.05.04.00004
SW 80	10.05.04.00014	10.05.04.00005
SW 90	10.05.04.00015	10.05.04.00006
SW 100	10.05.04.00016	10.05.04.00007
SW 110	10.05.04.00017	10.05.04.00008
SW 120	10.05.04.00018	10.05.04.00009
SW 150	10.05.04.00029	-
SW 200	10.05.04.00019	-

Technical Data Flow Resistors SW

Type	Nominal size	Required evacuation rate for pu = -0,3 bar		Required evacuation rate for pu = -0,6 bar	
		[m³/h]	[l/min]	[m³/h]	[l/min]
SW 25	0.25 mm	0.01	0.2	0.02	0.3
SW 40	0.40 mm	0.06	1.0	0.08	1.3
SW 50	0.50 mm	0.13	2.2	0.15	2.5
SW 60	0.60 mm	0.18	3.0	0.19	3.1
SW 70	0.70 mm	0.24	4.0	0.26	4.3
SW 80	0.80 mm	0.30	4.9	0.32	5.3
SW 90	0.90 mm	0.39	6.5	0.42	7.0
SW 100	1.00 mm	0.47	7.8	0.50	8.4
SW 110	1.10 mm	0.62	10.3	0.63	10.5
SW 120	1.20 mm	0.74	12.3	0.76	12.7
SW 150	1.50 mm	1.32	22.0	1.40	23.4
SW 200	2.00 mm	2.05	34.1	2.18	36.4

Design Data Flow Resistors SW



SW 25 to 200

Check Valves



Flow Resistors SW

Nominal diameter from 0.25 mm to 2 mm

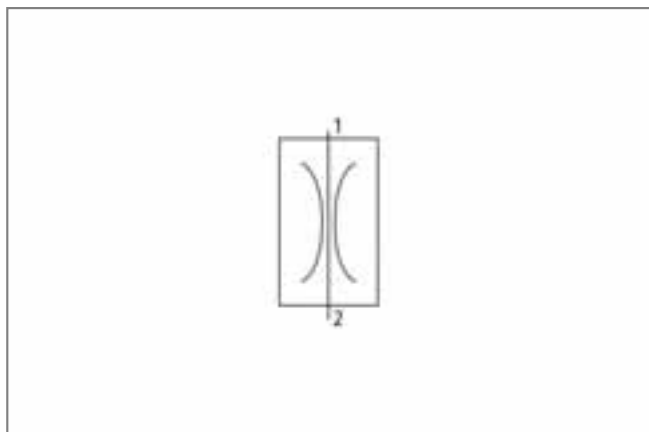


Design Data Flow Resistors SW

Type	Dimensions in mm						
	dn	G1	G2	H	LG1	LG2	SW1
SW 25 G1/8-AG	0.25	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 40 G1/8-AG	0.40	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 50 G1/8-AG	0.50	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 60 G1/8-AG	0.60	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 70 G1/8-AG	0.70	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 80 G1/8-AG	0.80	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 90 G1/8-AG	0.90	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 100 G1/8-AG	1.00	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 110 G1/8-AG	1.10	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 120 G1/8-AG	1.20	G1/8"-M	G1/8"-M	6	9.5	9.5	14
SW 40 G1/4-AG	0.40	G1/4"-M	G1/4"-M	6	10.0	10.0	17
SW 50 G1/4-AG	0.50	G1/4"-M	G1/4"-M	6	10.0	10.0	17
SW 60 G1/4-AG	0.60	G1/4"-M	G1/4"-M	6	10.0	10.0	17
SW 70 G1/4-AG	0.70	G1/4"-M	G1/4"-M	6	10.0	10.0	17
SW 80 G1/4-AG	0.80	G1/4"-M	G1/4"-M	6	10.0	10.0	17
SW 90 G1/4-AG	0.90	G1/4"-M	G1/4"-M	6	10.0	10.0	17
SW 100 G1/4-AG	1.00	G1/4"-M	G1/4"-M	6	10.0	10.0	17
SW 110 G1/4-AG	1.10	G1/4"-M	G1/4"-M	6	10.0	10.0	17
SW 120 G1/4-AG	1.20	G1/4"-M	G1/4"-M	6	10.0	10.0	17
SW 150 G1/4-AG	1.50	G1/4"-M	G1/4"-M	5	9.0	9.0	17
SW 200 G1/4-AG	2.00	G1/4"-M	G1/4"-M	5	9.0	9.0	17



Functional Circuit Diagram Flow Resistors SW



Circuit diagram SW 25-200 (1 = vacuum generator; 2 = suction pad)

