

Application example



1 SDV-P pressure maintenance valve

2 SWV pivot screw connection

3 PGN-plus 2-Finger Parallel Gripper
with workpiece-specific gripper
fingers

Pressure maintenance valve and fitting



Your advantages and benefits

Suitable for all SCHUNK gripper, rotary and linear modules and robot accessories

Everything from a single source

The SDV-P pressure maintenance valve protects against a loss of pressure

Version as plug-in connection (SCHUNK fittings)



Pressure maintenance valve

In the event of a loss of pressure, the pressure maintenance valve prevents the air from escaping out of the gripper. This prevents a loss in clamping force, and the workpieces remain securely clamped in the gripper jaws. Especially suitable for grippers that cannot be equipped with mechanical pressure maintenance.

Function

Two check valves connected in parallel, which automatically open the return channel and close the pressure line on a loss of pressure.

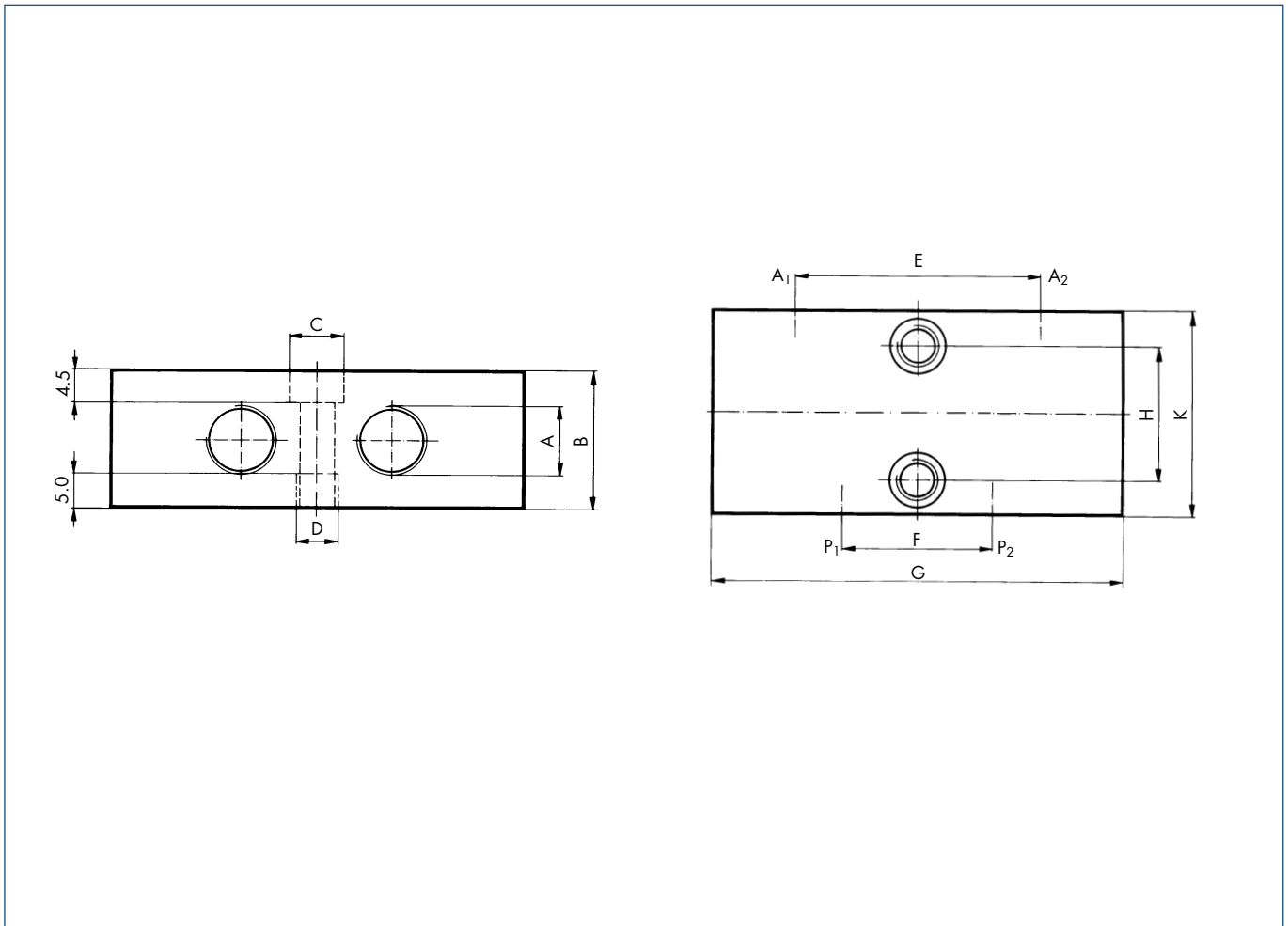


Technical data

Description		SDV-P 04	SDV-P 07
	ID	0403130	0403131
Nominal size	[mm]	4	7
Flow	[l/min]	200	300
Weight	[g]	100	180
Medium		filtered compressed air 10 µm lubricated or dry	filtered compressed air, 10 µm lubricated or dry
Pressure range	[bar]	0.5 - 10	0.5 - 10 bar
Temperature range	[°C]	-10 to +80	-10 to +80
Switching time	[ms]	approx. 10	approx. 10
Version		stainless steel	stainless steel
Max. drop in pressure within 24 h. (test volume 2 cm ³)	[bar]	0.5	0.5

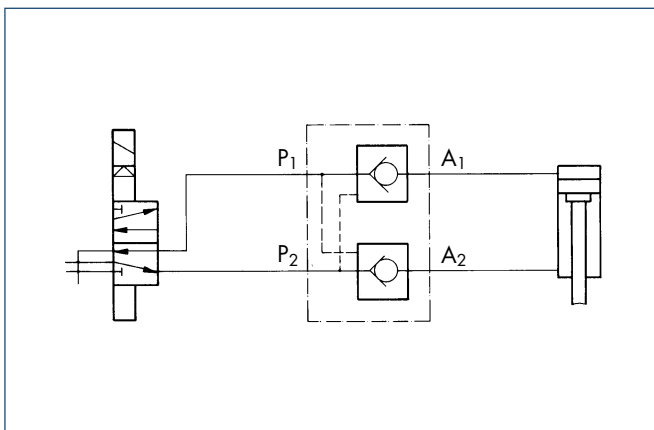
① Max. flow per port at p = 6 bar

Main views



Variable	SDV-P 04	SDV-P 07
A	G 1/8"	G 1/4"
B	20	24
C	8	8
D	M 5	M 5
E	36	44.6
F	22	26
G	60	75
H	20	26
K	30	40

Circuit diagram



WV elbow fitting

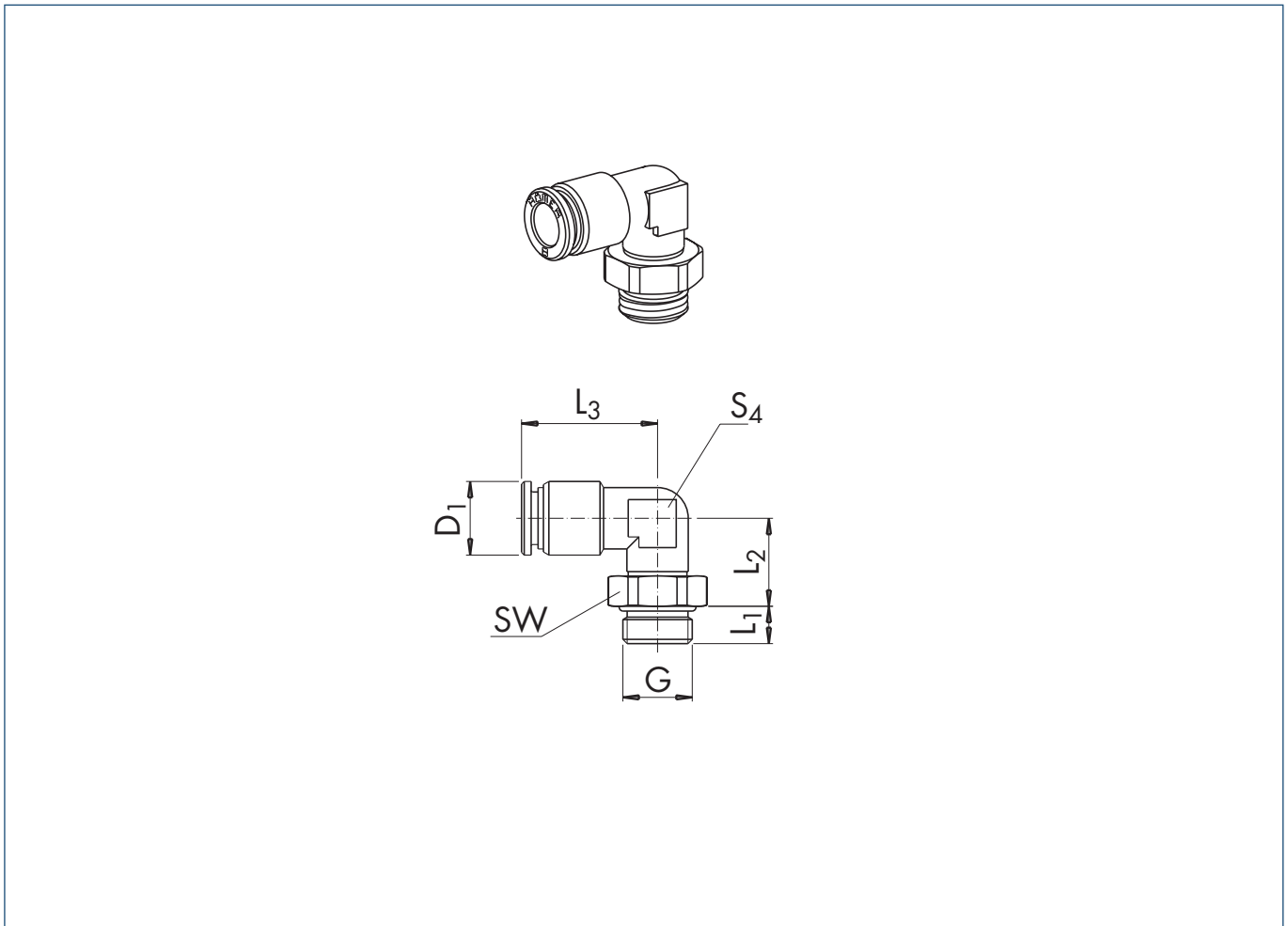
Version as push-in connection for simple, rapid connection to pneumatic energy supplies



Technical data

Description		WV-G 1-8-6	WV-G 1-8-8	WV-G 1-4-6
	ID	9937129	9936730	9937170
Hose	[mm]	6	8	6
Material of body		Ms 58 nickel-plated		
Material of clamping collet		release ring: POM plastic, gray		
		stainless steel		
		seal: O-ring, NBR		
Temperature range	[°C]	-10 to 60	-10 to 60	-10 to 60
Max. operating pressure	[bar]	20	20	20

Main views of WV elbow fitting



Variable	WV-G 1-8-6	WV-G 1-8-8	WV-G 1-4-6
G	1/8"	1/8"	1/4"
L1	5	5	7
L2	13.5	16	15.5
L3	22	25.5	23.5
D1	12	14	12
SW	13	13	17
S4	10	12	10



SWV banjo fitting

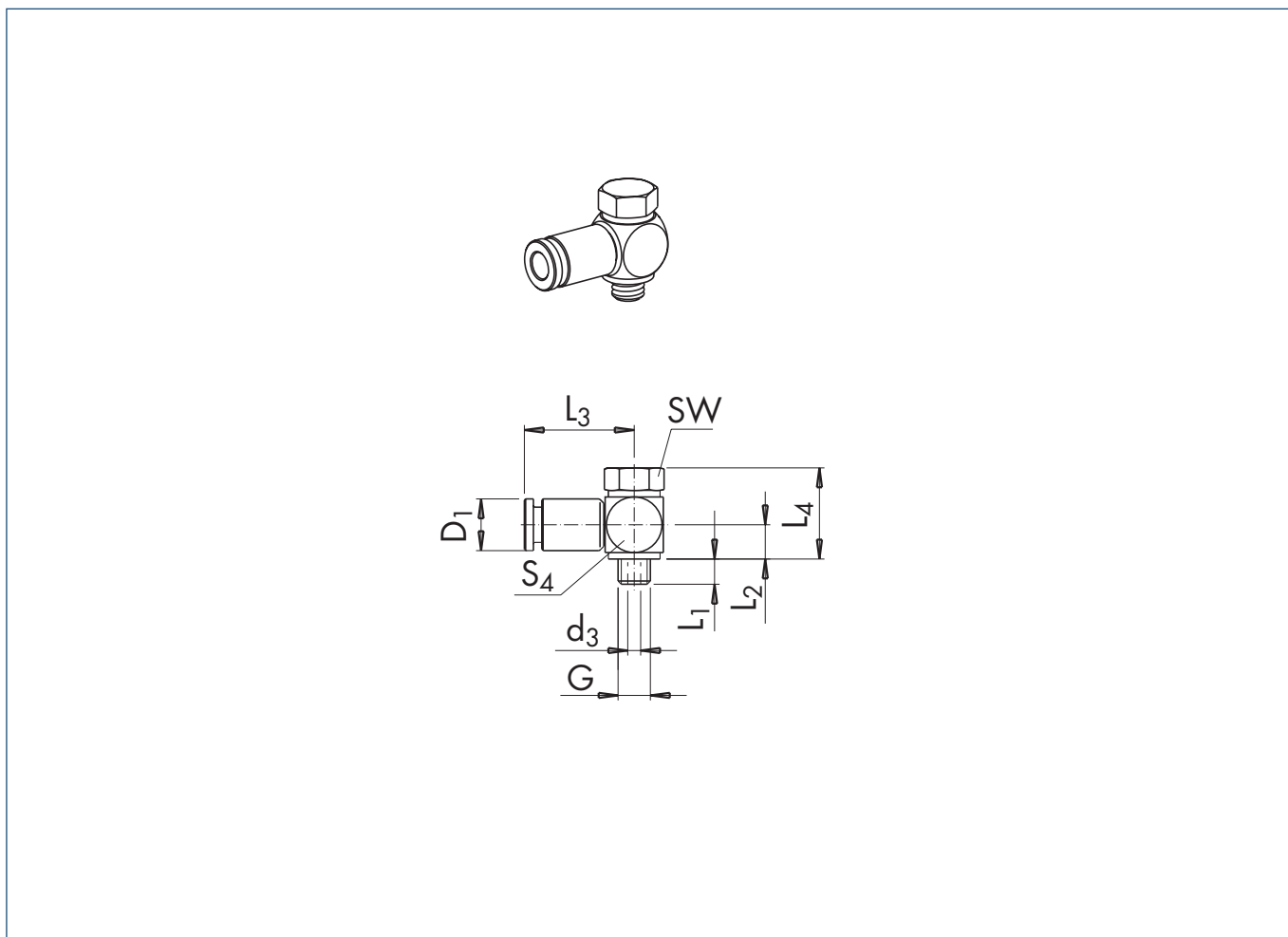
Version as push-in connection for simple, rapid connection to pneumatic energy supplies



Technical data

Description		SWV-M3-4	SWV-M5-6	SWV-G8-6	SWV-G4-6	SWV-G4-8
ID		9210505	9936171	9937152	9937128	9936728
Hose	[mm]	4	6	6	6	8
Material of body		Ms 58 nickel-plated				
Material of clamping collet		release ring: POM plastic, gray stainless steel seal: O-ring, NBR				
Temperature range	[°C]	-10 to 60	-10 to 60	-10 to 60	-10 to 60	-10 to 60
Max. operating pressure	[bar]	20	20	20	20	20

Main views of SWV banjo fitting



Variable	SWV-M3-4	SWV-M5-6	SWV-G8-6	SWV-G4-6	SWV-G4-8
G	M3	M5	G1/8"	G1/4"	G1/4"
d3	1.1	2	5	7	7
L1	2	4	6.5	8	8
L2	2.5	6.2	8.25	8.4	15.3
L3	7.3	18.5	22.5	24.5	25
L4	7.3	15.8	20.5	21.6	21.6
D1	3.4	10	12	12	13.5
SW	5	8	14	17	17
S4	5	10	15	19	19



DSV banjo fitting with one-way flow control valve

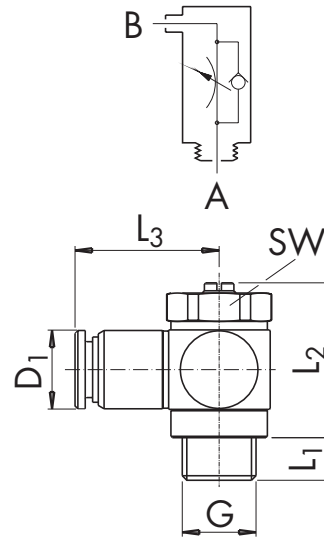
Version as push-in connection for simple, rapid connection to pneumatic energy supplies



Technical data

Description		DSV-M3-4	DSV-M5-6	DSV-G8-6	DSV-G4-6	DSV-G8-8
ID		9720005	9936160	9936159	9936161	9936162
Hose	[mm]	3	6	6	6	8
Material of body		Ms 58 nickel-plated				
Material of clamping collet		release ring: POM plastic, gray stainless steel seal: O-ring, NBR				
Temperature range	[°C]	-10 to 60	-10 to 60	-10 to 60	-10 to 60	-10 to 60
Max. operating pressure	[bar]	20	20	20	20	20

Main views of DSV banjo fitting with one-way flow control valve



Variable	DSV-M3-4	DSV-M5-6	DSV-G8-6	DSV-G4-6	DSV-G8-8
G	M3	M5	G1/8"	G1/4"	G1/8"
L1	2.5	4	5	6.5	5
L2 max.	29	21.5	30	32	30
L3	11	21	22.5	24.5	23
D1	4.8	10.4	12	12	14
SW	knurled	8	14	17	14

