

2/2 Pressure Start-up Valves



Nominal sizes 6 to 25
 Piston seat valve
 Port sizes G 1/4 to G 1
 Operating pressure 0 to 16 bar

Catalog Register
 P 12

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Description

The 2/2 pressure start-up valve is used for slow pressurization (start-up) of pneumatic systems. Connection of a 3/2 directional control valve upstream of the pressure start-up valve is recommended.

As the pressure rises, cylinders and other pneumatic consuming devices take up their operating position. The pressure start-up valve completely opens at half the operating pressure.

After the system has been switched off by means of the 3/2 directional control valve, the system pressure rapidly drops again to approximately 10% of the operating pressure. The remaining pressure is then vented via the incorporated throttle.



Mounting position: Optional
 Fluid: Filtered, lubricated or nonlubricated air
 Temperature range: -10 to +60°C
 Materials:
 - Valve body: Red brass
 - Seal: POM

Features

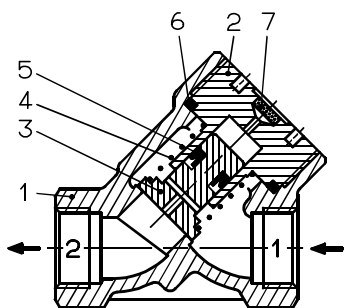
- High flow capacity
- Effective means of protecting equipment and tools

Parameters

Symbol	Nominal size	Port size	Operating pressure [bar]		Flow Q _v max. [l/min]	Weight [kg]	Fixed throttle dia. [mm]	Cat. No.
			min.	max.				
	6	G 1/4	0	16	2000	0.52	2	1025134
	12	G 1/2	0	16	3300	0.45	2	1025133
	18	G 3/4	0	16	6000	0.65	2.5	1025135
	25	G 1	0	16	10000	0.87	3	1025136

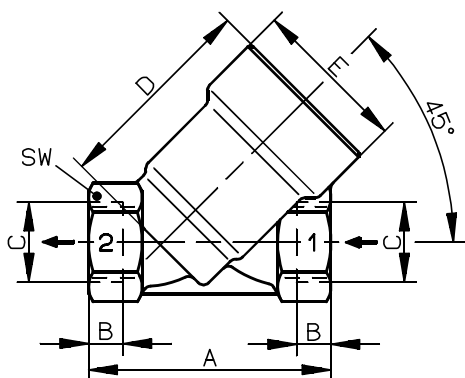
- For pneumatically operated 3/2 directional control valves, see Pneumatics Catalog, Reg. 8
- For electromagnetically operated 3/2 directional control valves, see Pneumatics Catalog, Reg. 10

Sectional drawing



- 1 Body
- 2 Threaded piece
- 3 Piston
- 4 Spring
- 5 Grooved ring
- 6 O-ring
- 7 Disc

Dimensional drawing [mm]

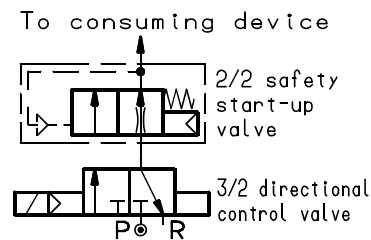


Dimensional table [mm]

Cat. No.	A	B	C	D	E	SW
1025134	77.5	15.5	G 1/4	56	41	27
1025133	63.5	9	G 1/2	56	41	27
1025135	75	11	G 3/4	67	46	32
1025136	90	12	G 1	72	51	41

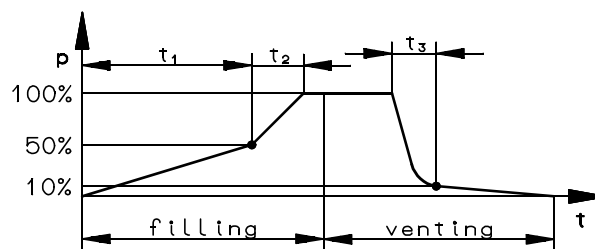
Circuit diagram

Example



Pressure curve

Pressure distribution at port A



Cat. No.	V (l)	t ₁ (s)	t ₂ (s)	t ₃ (s)
1025134	4	3.5	0.5	1
	8	7	1	2
1025133	4	3.5	0.2	0.5
	8	7	0.4	1
1025135	4	2.5	0.1	0.2
	8	5	0.2	0.4
1025136	4	1.5	0.05	0.1
	8	3	0.1	0.2

Times at p = 5 bar, consuming device V = 4 dm³ and 8 dm³ (approximate values)