

Swivel flow control valve

flow adjustable in one direction

Corrosion and acid-resistant design

Type GRL-...-S9

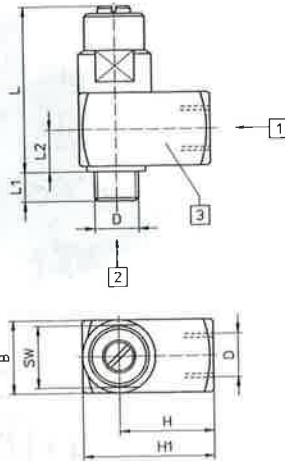


This valve is installed to regulate air flow, e.g. to control piston speed in single-acting and double-acting cylinders of the corrosion resistant type.

The adjusting screw controls the amount of air in the direction of the arrow. In the reverse direction the air flows through the non-return valve with full cross-sectional flow.

These space-saving valves are fitted directly onto the cylinder without any accessories. They can be rotated through 360 degrees.

For supply air throttling in single-acting cylinders the valve is reverse-mounted.

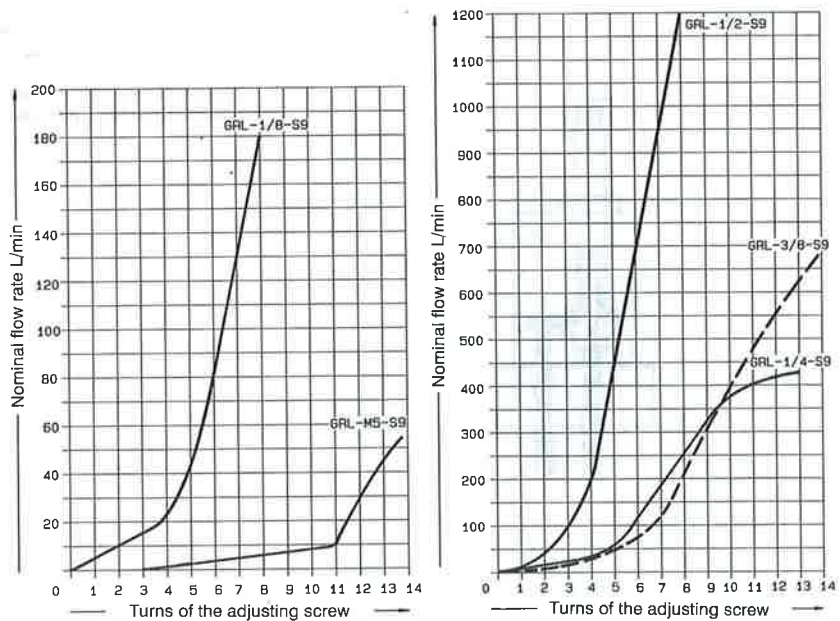


- 1 Non-return direction (free flow)
- 2 Throttle direction (flow rate adjustable)
- 3 360° rotatable

Care must be taken with the tightening torque of the hollow screw

Type	B	D	H	H ₁	L _{max}	L ₁	L ₂	SW	tightening torque Nm
GRL-M5-S9	11	M5	12.5	18	34.3	4.2	6.2	10	1.2
GRL- ¹ / ₈ -S9	16	g ¹ / ₈	20.5	28.5	40.5	5.5	9.1	14	10
GRL- ¹ / ₄ -S9	20	g ¹ / ₄	26	36	55.5	8	11.5	17	25
GRL- ³ / ₈ -S9	25	g ³ / ₈	29	41.5	59	9	14	22	50
GRL- ¹ / ₂ -S9	32	g ¹ / ₂	37	53	71	12	18.5	27	70

Flow rate as a function of turns of the adjusting screw (Q-s-characteristic curve)



Order code	Part no./type	10519 GRL-M5-S9	10520 GRL- ¹ / ₈ -S9	10521 GRL- ¹ / ₄ -S9	10522 GRL- ³ / ₈ -S9	10523 GRL- ¹ / ₂ -S9
Medium		Compressed air, filtered, lubricated or unlubricated				
Design		Flow control valve, adjustable in one direction				
Connection		M5	G ¹ / ₈	G ¹ / ₄	G ³ / ₈	G ¹ / ₂
Nominal size	in throttle direction mm	1.5	3	4.5	6	8
	in free flow direction mm	1.8	—	5	7	9.5
Standard nominal flow rate	in throttle direction	0 to 50	0 to 180	0 to 420	0 to 690	0 bis 1170
	in free flow direction	45 l/min	120 l/min	285 l/min	510 l/min	1740 l/min
Pressure range		0.3 to 10 bar				
Temperature range		- 10 to +60 °C				
Materials		Housing: X 12 Cr Ni S 18 8; Seals: Perbunan				
Weight		0.023 kg	0.068 kg	0.130 kg	0.230 kg	0.460 kg