



Flow-control valves are used mainly where there is a need to regulate piston speed in double or single acting pneumatic cylinders. They are also used to regulate air flow, where necessary. The unidirectional flow regulator allows flow regulation in one direction only (indicated on the apparatus), and the bidirectional version in both directions.

TECHNICAL CHARACTERISTICS

Body in anodized aluminium alloy or painted zamak
 Oil-resistant seals
 Brass regulation pin with non-removable lock
 Max. working pressure: 12 bar

Ambient and fluid temperature: -20 ÷ 80 °C
 Seal closing and opening movements are automatic and work without the help of adjustment springs

OPERATING PRINCIPLES AND FLOW-CAPACITY CHARACTERISTICS

Flow regulators with M5 - G 1/8 - G 1/4 - G 3/8 - G 1/2 connections

Flow regulators with G 1/2 - G 3/4 - G 1 connections

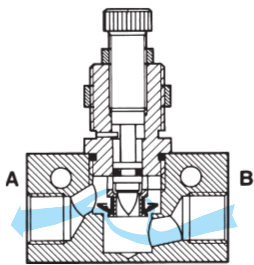


Fig. 1: air direction with free flow

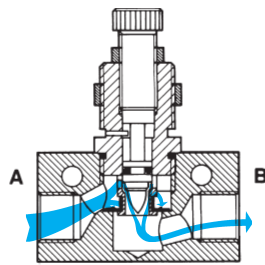
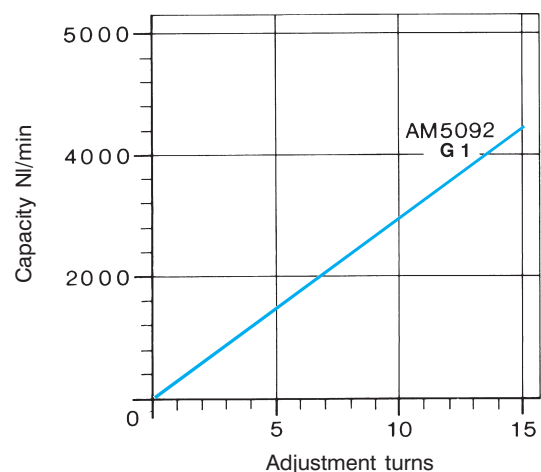
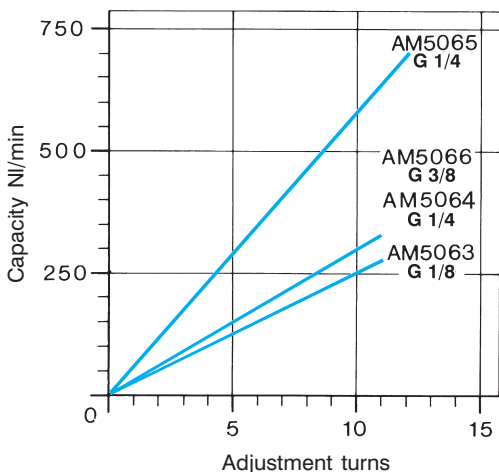
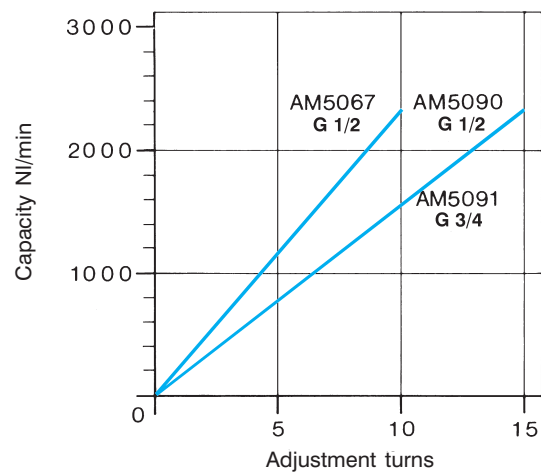
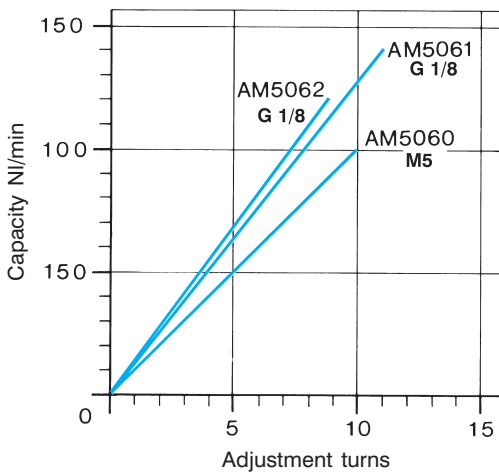
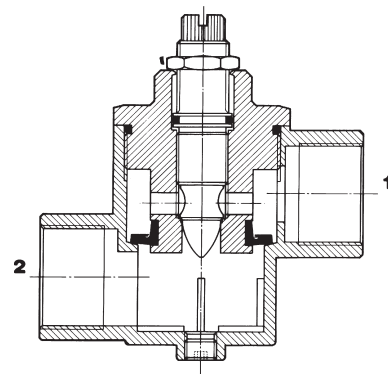


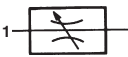




Fig. 2: air direction with regulated flow



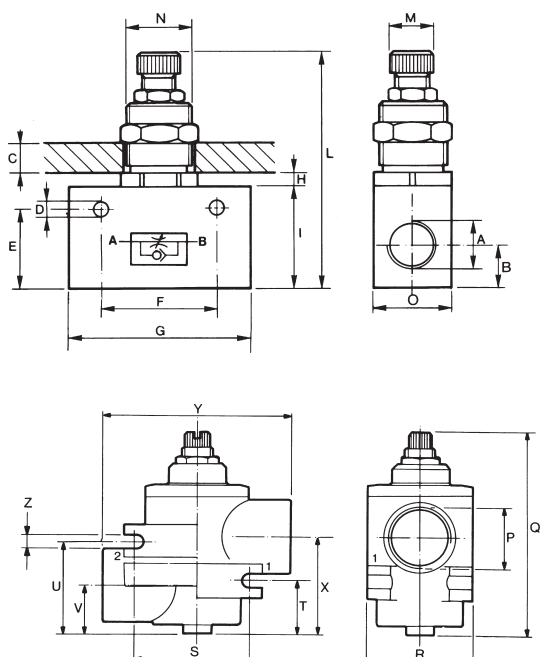
Type	Symbol	Connections	Capacity regulated	NI/min free	Ø Orifice mm regulated	free	Pressure bar	Mass kg	Part number
M5 - G 1/8 - G 1/4 - G 3/8 - G 1/2 unidirectional and bidirectional flow regulators									
M5 ÷ G 1/2 	 unidirectional regulation	M5	99	125	1	2	0 ÷ 12	0,06	AM-5060
		G 1/8	140	410	1	5		0,05	AM-5061
		G 1/8	120	470	2,25	5		0,05	AM-5062
		G 1/8	280	520	3,5	5		0,05	AM-5063
		G 1/4	350	890	5	7		0,12	AM-5064
		G 1/4	700	900	6	7		0,12	AM-5065
		G 3/8	350	980	6	7		0,11	AM-5066
		G 1/2	2200	2800	9	12		0,22	AM-5067
	 bidirectional regulation	M5 •	99		1		0 ÷ 12	0,06	AM-5070
		G 1/8 •	140		1			0,05	AM-5071
		G 1/8 •	120		2,25			0,05	AM-5072
		G 1/4	350		5			0,12	AM-5074
		G 3/8	350		6			0,11	AM-5076
		G 1/2	2200		9			0,22	AM-5077

G 1/2 - G 3/4 - G 1 unidirectional flow regulators

G 1/2 ÷ G 1 		G 1/2	2300	4500	9	15	0,42	AM-5090
		G 3/4	2300	4500	9	15	0,35	AM-5091
		G 1	4200	5500	12	24	0,83	AM-5092

•The locking nut is included.
 For G 1/4 - G 1/2 - G 3/8 connections, the locking nut must be ordered separately (part number **AM-5100**).

Overall dimensions



Connections A	B	max. C	D	E	F	G	H	I	L min-max	M	N	O
M5	10	6	3,5	17	19	25	4	23	48-55	7	M 12x1	15
G 1/8	8	6	4,5	18	25	35	4	23	48-55	7	M 12x1	15
G 1/4	11	14	6,3	23,5	35	52	4	30	69-76	10	M 20x1,5	25
G 3/8	11	14	6,3	23,5	35	52	4	30	69-76	10	M 20x1,5	25
G 1/2	18,5	18	6,5	35	44	65	5	40	82-92	15	M 20x1,5	30

Connections P	Q min-max	R	S	T	U	V	X	Y	Z
G 1/2 - G 3/4	92 - 102	40	43	25	41	22	47	67	6,245
G 1	108 - 121	57	58	30	50	26	53	101	8,25