FLOW CONTROL VALVES

SERIES PSCU, PMCU, PSVU, PMVU, PSCO, PMCO

Unidirectional and bidirectional flow regulators with banjo in brass (M5) or in technopolymer (G1/8, G1/4, G3/8)
Ports: M5, G1/8, G1/4, G3/8

These unidirectional and bidirectional flow controllers have been designed as small as possible so as to be mounted directly on valves or cylinders.
The great variety of adjustable fittings makes it possible to complete the regulator with the most suitable system in relation to the available tube.

All models are supplied complete with banjo flow controllers.

General Data

Construction	Needle type
Valve group	Unidirectional and bidirectional controller
Materials	Body, regulation screw: stainless steel (M5), brass (G1/8 - G1/4 - G3/8) Collet and insert = brass Banjo: brass (M5), technopolymer (G1/8 - G1/4 - G3/8) Controller = technopolymer - seals = NBR
Mounting	By male thread
Ports	M5 - G1/8 - G1/4 - G3/8
Installation	In any position
Operating temperature	0°C ÷ 60°C (with dry air -20°C)
Operating pressure	1 ÷ 10 bar
Nominal pressure	6 bar
Nominal flow	See graph
Nominal diameter	M5 = 1,5 mm - G1/8 = 2 mm - G1/4 = 4 mm - G3/8 = 7 mm
Fluid	Filtered air If lubricated air is used, it is recommended to use ISOVG 32 oil. Once applied the lubrication should never be interrupted.

FLOW CONTROL VALVES
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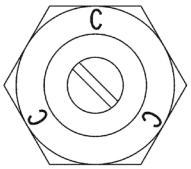
Coding Example

P	M	CU	7	04	-	1/8	-	4

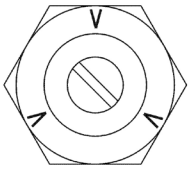
P	SERIES
M	ACTUATION M = Manual S = Screwdriver
CU	ASSEMBLY CU = On cylinders unidirectional VU = On valves unidirectional CO = Bidirectional
7	VERSIONS 6 = Needle (screwdriver operated) 7 = Needle (manual operated)
04	NOMINAL DIAMETER 02 = Ø1,5 MAX 04 = Ø2 MAX 06 = Ø4 MAX 08 = Ø7 MAX
1/8	PORTS M5 = M5 1/8 = G1/8 1/4 = G1/4 3/8 = G3/8
4	TUBE 4 = Ø4 6 = Ø6 8 = Ø8 10 = Ø10 12 = Ø12

To ensure the right choice of unidirectional flow controller, proceed as follows: calculate the quantity of air in Nl/min (see cylinders table); determine the stroke time of the cylinder; refer to graph to see which is the right type of controller.

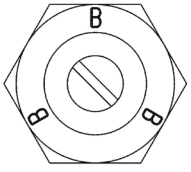
Unidirectional and bidirectional flow controllers



PSCU
PMCU



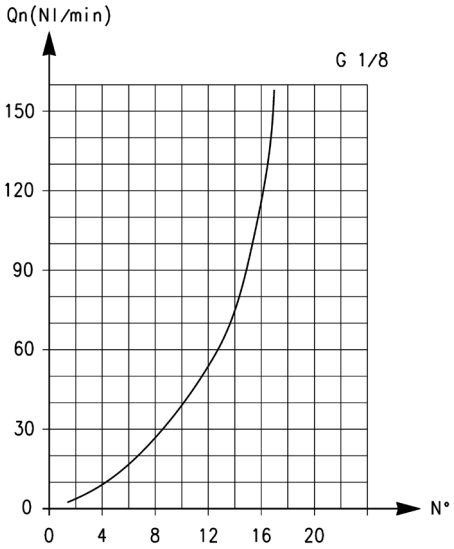
PSVU
PMVU



PSCO
PMCO

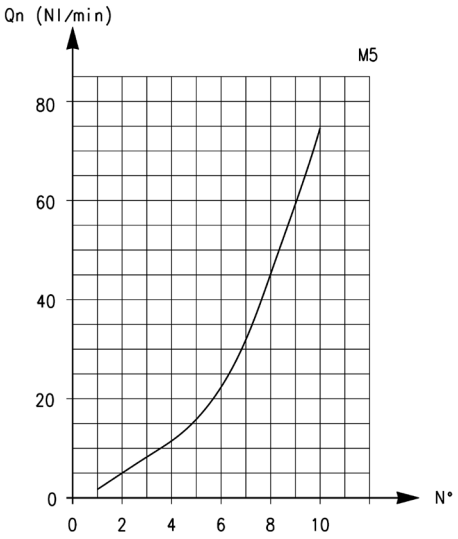
IDENTIFICATION OF DIFFERENT TYPES:
PSCU - PMCU = assembly directly on the cylinders
PSVU - PMVU = assembly directly on the valves
PSCO - PMCO = assembly directly on the cylinders or valves

Unidirectional and bidirectional flow control regulators



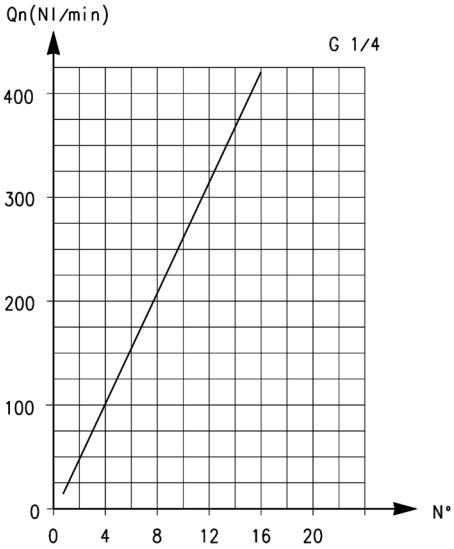
Flow Qn (Nl/min.) from 2 → 1 with controller OPEN: 200
Flow Qn (Nl/min.) from 2 → 1 with controller CLOSED: 70

Qn = Supply pressure of 6 bar and with ΔP = 1 bar at the outlet
N° = Number of screw turns.



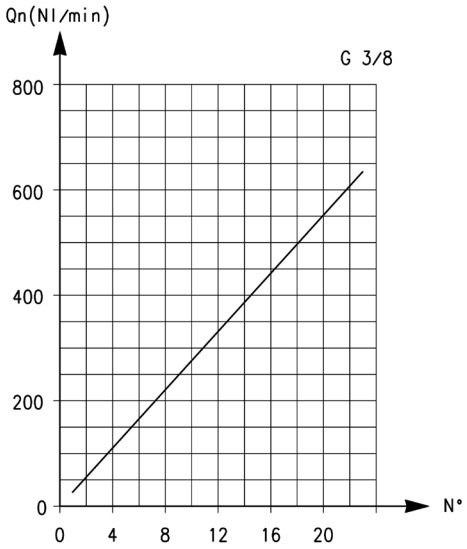
Flow Qn (Nl/min.) from 2 → 1 with controller OPEN: 70
Flow Qn (Nl/min.) from 2 → 1 with controller CLOSED: 33

N° = Number of screw turns
NB: Qn is determined with a supply pressure of 6 bar and with ΔP = 1 bar at the outlet.



Flow Qn (Nl/min.) from 2 → 1 with controller OPEN: 530
Flow Qn (Nl/min.) from 2 → 1 with controller CLOSED: 160

Qn = Supply pressure of 6 bar and with ΔP = 1 bar at the outlet
N° = Number of screw turns.



Flow Qn (Nl/min.) from 2 → 1 with controller OPEN: 710
Flow Qn (Nl/min.) from 2 → 1 with controller CLOSED: 410

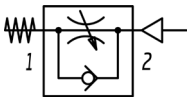
Qn = Supply pressure of 6 bar and with ΔP = 1 bar at the outlet
N° = Number of screw turns

FLOW CONTROL VALVES
SERIES PSCU, PMCU, PSVU, PMVU, PSCO, PMCO - DIMENSIONS

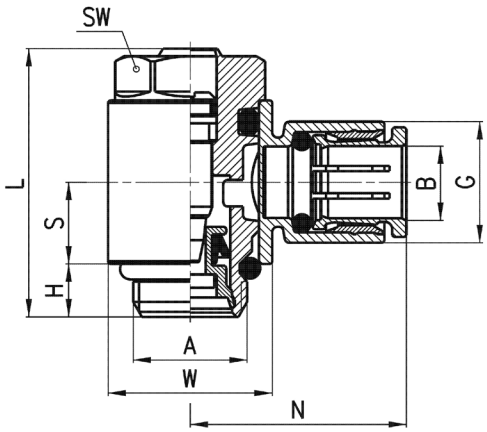
Unidirectional flow controllers Series PSCU

For mounting on single-acting or double-acting cylinders.
A screwdriver must be used to adjust the registration setting.
Ports: M5, G1/8, G1/4 and G3/8.

Port M5: banjo in brass



RP02

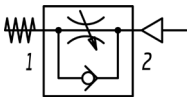


Mod.	A	B	G	H	L	N	S	W	SW
PSCU 602-M5-4	M5	4	8.6	3.5	21.5	18	5.7	8	8
PSCU 602-M5-6	M5	6	10.4	3.5	21.5	19	5.7	8	8
PSCU 604-1/8-4	G1/8	4	11.6	5	27	21	7.75	14	12
PSCU 604-1/8-6	G1/8	6	11.6	5	27	21	7.75	14	12
PSCU 604-1/8-8	G1/8	8	13.9	5	27	22.5	7.75	14	12
PSCU 606-1/4-6	G1/4	6	13.9	6	30.5	24.5	9.25	18.6	15
PSCU 606-1/4-8	G1/4	8	13.9	6	30.5	24.5	9.25	18.6	15
PSCU 606-1/4-10	G1/4	10	16.1	6	30.5	27	9.25	18.6	15
PSCU 608-3/8-10	G3/8	10	20.2	7	36.5	29	11	22	18
PSCU 608-3/8-12	G3/8	12	20.2	7	36.5	29	11	22	18

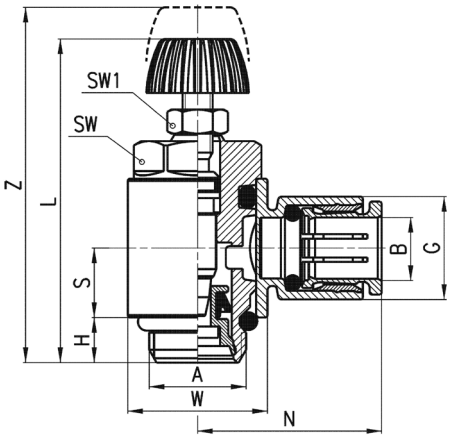
Unidirectional flow controllers Series PMCU

For mounting on single-acting or double-acting cylinders.
A manually operated knurled screw must be used to adjust the registration setting.
Ports: M5, G1/8, G1/4 and G3/8.

Port M5: banjo in brass



RP02

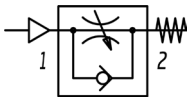


Mod.	A	B	G	H	L	N	S	W	SW	SW1	Z
PMCU 702-M5-4	M5	4	8.6	3.5	31	18	5.7	8	8	5.5	35
PMCU 702-M5-6	M5	6	10.4	3.5	31	19	5.7	8	8	5.5	35
PMCU 704-1/8-4	G1/8	4	11.6	5	36.5	21	7.75	14	12	7	42.5
PMCU 704-1/8-6	G1/8	6	11.6	5	36.5	21	7.75	14	12	7	42.5
PMCU 704-1/8-8	G1/8	8	13.9	5	36.5	22.5	7.75	14	12	7	42.5
PMCU 706-1/4-6	G1/4	6	13.9	6	42	24.5	9.25	18.6	15	7	48
PMCU 706-1/4-8	G1/4	8	13.9	6	42	24.5	9.25	18.6	15	7	48
PMCU 706-1/4-10	G1/4	10	16.1	6	42	27	9.25	18.6	15	7	48
PMCU 708-3/8-10	G3/8	10	20.2	7	48.5	29	11	22	18	10	56.5
PMCU 708-3/8-12	G3/8	12	20.2	7	48.5	29	11	22	18	10	56.5

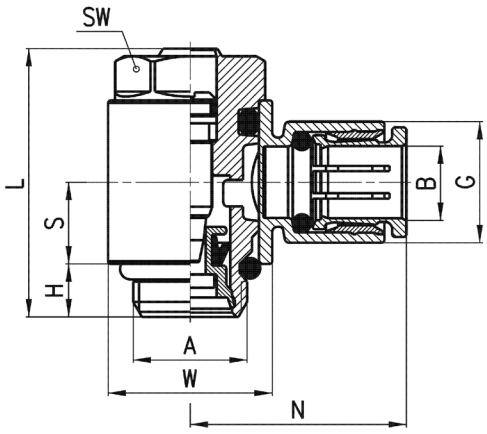
Unidirectional flow controllers Series PSVU

For mounting on valves.
A screwdriver must be used to adjust the registration setting.
Ports: M5, G1/8, G1/4 and G3/8.

Port M5: banjo in brass



RP01

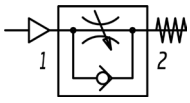


Mod.	A	B	G	H	L	N	S	W	SW
PSVU 602-M5-4	M5	4	8,6	3,5	21,5	18	5,7	8	8
PSVU 602 M5-6	M5	6	10,4	3,5	21,5	19	5,7	8	8
PSVU 604-1/8-4	G1/8	4	11,6	5	27	21	7,75	14	12
PSVU 604-1/8-6	G1/8	6	11,6	5	27	21	7,75	14	12
PSVU 604-1/8-8	G1/8	8	13,9	5	27	22,5	7,75	14	12
PSVU 606-1/4-6	G1/4	6	13,9	6	30,5	24,5	9,25	18,6	15
PSVU 606-1/4-8	G1/4	8	13,9	6	30,5	24,5	9,25	18,6	15
PSVU 606-1/4-10	G1/4	10	16,1	6	30,5	27	9,25	18,6	15
PSVU 608-3/8-10	G3/8	10	20,2	7	36,5	29	11	22	18
PSVU 608-3/8-12	G3/8	12	20,2	7	36,5	29	11	22	18

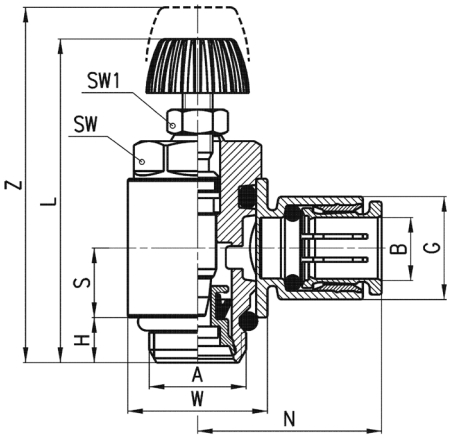
Unidirectional flow controllers Series PMVU

For mounting on valve.
A manually operated knurled screw must be used to adjust the registration setting.
Ports: M5, G1/8, G1/4 and G3/8.

Port M5: banjo in brass



RP01



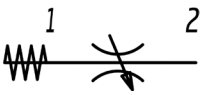
Mod.	A	B	G	H	L	N	S	W	SW	SW1	Z
PMVU 702-M5-4	M5	4	8.6	3.5	31	18	5.7	8	8	5.5	35
PMVU 702-M5-6	M5	6	10.4	3.5	31	19	5.7	8	8	5.5	35
PMVU 704-1/8-4	G1/8	4	11.6	5	36.5	21	7.75	14	12	7	42.5
PMVU 704-1/8-6	G1/8	6	11.6	5	36.5	21	7.75	14	12	7	42.5
PMVU 704-1/8-8	G1/8	8	13.9	5	36.5	22.5	7.75	14	12	7	42.5
PMVU 706-1/4-6	G1/4	6	13.9	6	42	24.5	9.25	18.6	15	7	48
PMVU 706-1/4-8	G1/4	8	13.9	6	42	24.5	9.25	18.6	15	7	48
PMVU 706-1/4-10	G1/4	10	16.1	6	42	27	9.25	18.6	15	7	48
PMVU 708-3/8-10	G3/8	10	20.2	7	48.5	29	11	22	18	10	56.5
PMVU 708-3/8-12	G3/8	12	20.2	7	48.5	29	11	22	18	10	56.5

FLOW CONTROL VALVES
SERIES PSCU, PMCU, PSVU, PMVU, PSCO, PMCO - DIMENSIONS

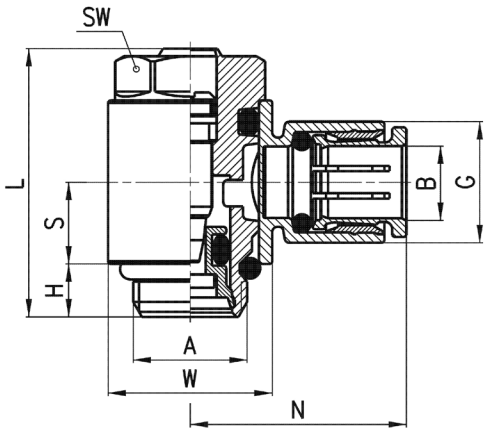
Bidirectional flow controllers Series PSCO

A screwdriver must be used to adjust the registration setting.
Ports: M5, G1/8, G1/4 and G3/8.

Port M5: banjo in brass



RP03

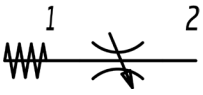


Mod.	A	B	G	H	L	N	S	W	SW
PSCO 602-M5-4	M5	4	8,6	3,5	21,5	18	5,7	8	8
PSCO 602-M5-6	M5	6	10,4	3,5	21,5	19	5,7	8	8
PSCO 604-1/8-4	G1/8	4	11,6	5	27	21	7,75	14	12
PSCO 604-1/8-6	G1/8	6	11,6	5	27	21	7,75	14	12
PSCO 604-1/8-8	G1/8	8	13,9	5	27	22,5	7,75	14	12
PSCO 606-1/4-6	G1/4	6	13,9	6	30,5	24,5	9,25	18,6	15
PSCO 606-1/4-8	G1/4	8	13,9	6	30,5	24,5	9,25	18,6	15
PSCO 606-1/4-10	G1/4	10	16,1	6	30,5	27	9,25	18,6	15
PSCO 608-3/8-10	G3/8	10	20,2	7	36,5	29	11	22	18
PSCO 608-3/8-12	G3/8	12	20,2	7	36,5	29	11	22	18

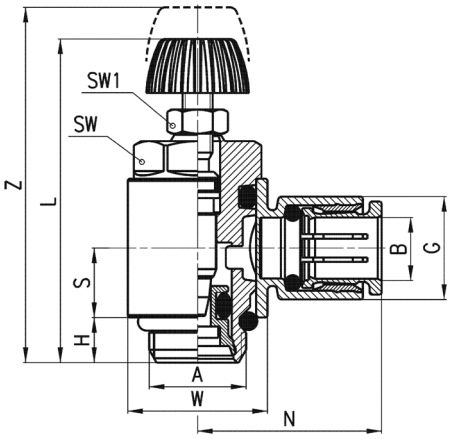
Bidirectional flow controllers Series PMCO

A manually operated knurled screw must be used to adjust the registration setting.
Ports: M5, G1/8, G1/4 and G3/8.

Port M5: banjo in brass



RP03



Mod.	A	B	G	H	L	N	S	W	SW	SW1	Z
PMCO 702-M5-4	M5	4	8,6	3,5	31	18	5,7	8	8	5,5	35
PMCO 702-M5-6	M5	6	10,4	3,5	31	19	5,7	8	8	5,5	35
PMCO 704-1/8-4	G1/8	4	11,6	5	36,5	21	7,75	14	12	7	42,5
PMCO 704-1/8-6	G1/8	6	11,6	5	36,5	21	7,75	14	12	7	42,5
PMCO 704-1/8-8	G1/8	8	13,9	5	36,5	22,5	7,75	14	12	7	42,5
PMCO 706-1/4-6	G1/4	6	13,9	6	42	24,5	9,25	18,6	15	7	48
PMCO 706-1/4-8	G1/4	8	13,9	6	42	24,5	9,25	18,6	15	7	48
PMCO 706-1/4-10	G1/4	10	16,1	6	42	27	9,25	18,6	15	7	48
PMCO 708-3/8-10	G3/8	10	20,2	7	48,5	29	11	22	18	10	56,5
PMCO 708-3/8-12	G3/8	12	20,2	7	48,5	29	11	22	18	10	56,5