

# Series SCU, MCU, SVU, MVU, SCO, MCO flow control valves

Unidirectional and bidirectional banjo flow control regulators Ports: M5, G1/8, G1/4, G3/8, G1/2



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.

Only the G1/2 model is supplied complete with banjo flow controllers. For the other models the banjo flow controller is to be requested separately.

#### **GENERAL DATA**

**Construction** needle type

Valve group unidirectional and bidirectional controller

Materials body and regulation screw: M5 = stainless steel; 1/8 - 1/4 - 3/8 - 1/2 = 0T;

seals = NBR

Mounting by male thread

Ports M5 - G1/8 - G1/4 - G3/8 - G1/2

**Installation** in any position

**Operating temperature**  $0^{\circ}\text{C} \div 80^{\circ}\text{C}$  (with dry air -  $20^{\circ}\text{C}$ )

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 - G1/2 = 12 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.

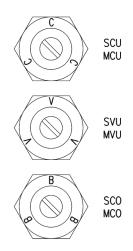


#### **CODING EXAMPLE**

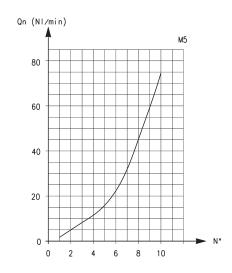
M	CU	7	02	-	М5
M	ACTUATION: M = Manual S = Screwdriver				
CU	ASSEMBLY: CU = on cylinders unidirectional VU = on valves unidirectional CO = bidirectional				
7	VERSIONS: 6 = needle (screwdriver operated) 7 = needle (manual operated)				
02	NOMINAL DIAMETER: 02 = Ø 1,5 max 04 = Ø 2 max 06 = Ø 4 max 08 = Ø 7 max 10 = Ø 12 max				
M5	PORTS: M5 = M5 1/8 = G1/8 1/4 = G1/4 3/8 = G3/8 1/2 = G1/2				

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

#### UNIDIRECTIONAL AND BIDIRECTIONAL FLOW CONTROLLERS



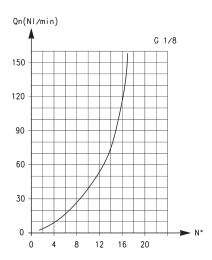
IDENTIFICATION OF DIFFERENT TYPES: SCU - MCU = assembly directly on the cylinders SVU - MVU = assembly directly on the valves SCO - MCO = assembly directly on the cylinders or valves

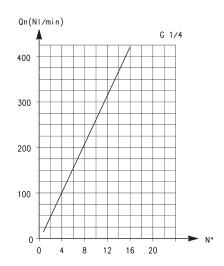


Flow Qn (Nl/min.) from  $2 \rightarrow 1$  with controller OPEN: 70 Flow Qn (Nl/min.) from  $2 \rightarrow 1$  with controller CLOSED: 33 Qn = supply pressure of 6 bar and with  $\Delta P = 1$  bar at the outlet  $N^{\circ}$  = number of screw turns.



#### UNIDIRECTIONAL AND BIDIRECTIONAL FLOW CONTROL REGULATORS





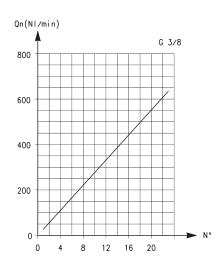
Flow Qn (NI/min.) from  $2 \rightarrow 1$  with controller OPEN: 200 Flow Qn (NI/min.) from  $2 \rightarrow 1$  with controller CLOSED: 70

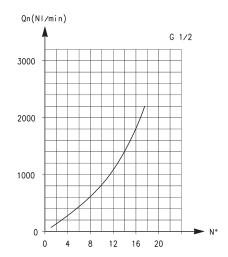
Qn = supply pressure of 6 bar and with  $\Delta P$  = 1 bar at the outlet N° = number of screw turns.

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

Qn = supply pressure of 6 bar and with  $\Delta P$  = 1 bar at the outlet N° = number of screw turns.

## UNIDIRECTIONAL AND BIDIRECTIONAL FLOW CONTROL REGULATORS





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

Qn = supply pressure of 6 bar and with  $\Delta P$  = 1 bar at the outlet  $N^{\circ}$  = number of screw turns.

Flow Qn (Nl/min.) from  $2 \rightarrow 1$  with controller OPEN: 2570 Flow Qn (Nl/min.) from  $2 \rightarrow 1$  with controller CLOSED: 1330

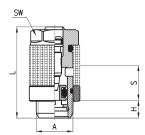
Qn = supply pressure of 6 bar and with  $\Delta P$  = 1 bar at the outlet  $N^{\circ}$  = number of screw turns.



## Silenced exhaust controllers Mod. SCO + 2905



The flow control valve Mod. SCO and the silencer Mod. 2905 are supplied separately.



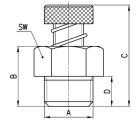
DIMENSIONS							
Mod.	А	Н	L	S	SW		
SCO 602-M5+2905 M5	M5	3.5	21.5	5.5	8		
SCO 604-1/8+2905 1/8	G1/8	5	31.5	12.5	12		
SCO 606-1/4+2905 1/4	G1/4	6	32.5	12.5	15		



# Series RSW flow control valves with silencer



Ports: G1/8, G1/4, G1/2.



DIMENSIONS									
Mod.	А	В	С	D	SW	Q* (Nl/min)			
RSW 1/8	G1/8	10.5	22	6	13	410			
RSW 1/4	G1/4	13	27	7.5	16	650			
RSW 3/8	G3/8	16	30	9.5	20	1100			
RSW 1/2	G1/2	18	40	10.5	26	1700			



\*determined with supply pressure 6 bar with free flow; ensuring screw is open to maximum output.