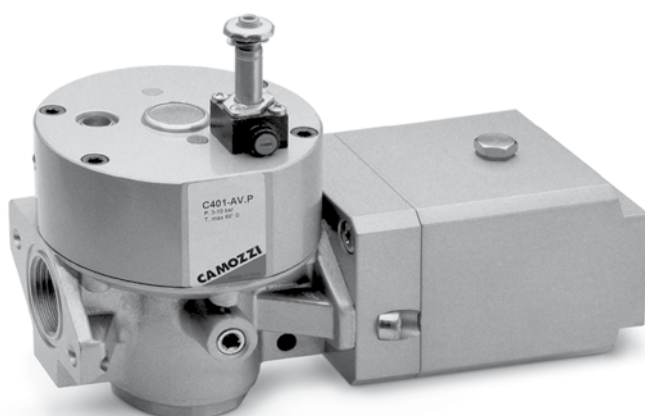


# Soft start valve Series C

Mod. C401-AV.P. Soft Start electrically-operated Valve  
Mod. C401-AV.P/1 . Soft Start pneumatically-operated Valve  
Ports G1 (compact modular)



The soft start valve is needed to prevent harming people or equipment when pressurising a pneumatic system. The specification of this component allows the gradual pressurisation of a pneumatic system. Pressure is gradually increased until 50% of the system pressure is reached. System pressure then increases to 100% of the set pressure in a very short time.

The natural location of the slow start valve is after the F.R.L.; in fact, the flanging allows for perfect adaptability with G1 Series C. Two different types of slow start valves are available: with electrical or pneumatic operation. For electrically operated soft start valves, a 3-way normally closed solenoid valve model A631- AC2- is used. This valve starts only when the electrical switch is operated. For pneumatically operated soft start valves, the base A631-AC2-AVP/-P incorporating a Super Rapid fitting  $\varnothing 4$ , is used. This Super Rapid fitting receives the signal produced by a NC 3-way manually operated valve which acts as a general switch.

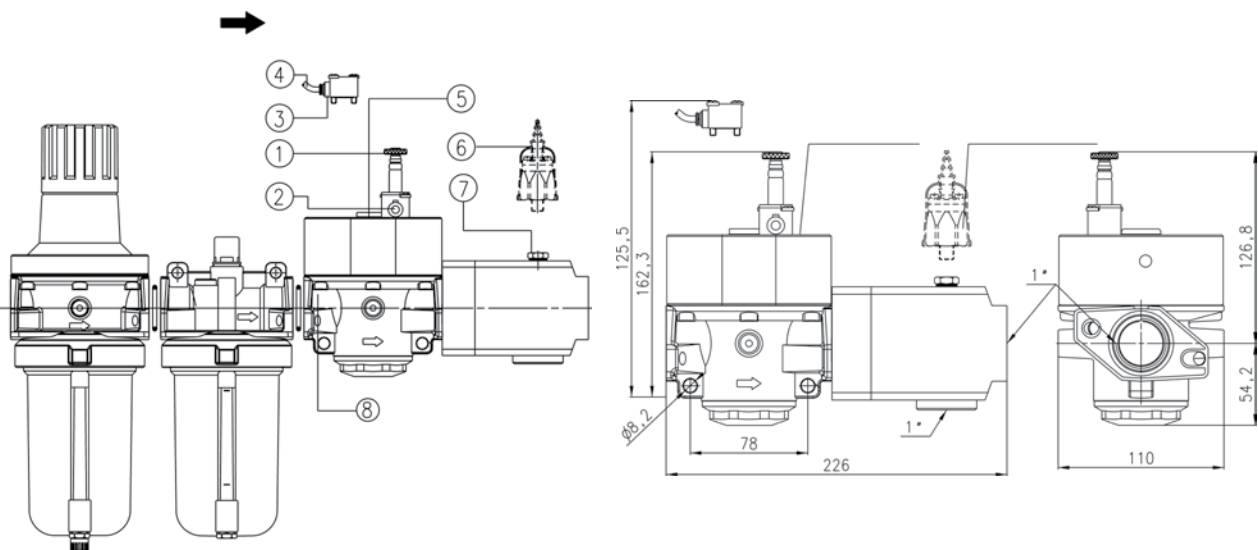
## GENERAL DATA

<b>Construction</b>	compact, poppet type
<b>Materials</b>	aluminium, NBR and Elastolan (seals)
<b>Ports</b>	G1
<b>Weight</b>	Kg 1,670
<b>Assembling type</b>	in-line
<b>Operating temperature</b>	0°C + 50 °C
<b>Finishing</b>	enamelled
<b>Operating pressure</b>	3 + 10 bar
<b>Nominal flow</b>	Qn 4700 NL/min with 6 bar $\Delta P$ 1n 4700 NL/min with 6 bar $\Delta P$ 1
<b>Exhaust flow</b>	13000 NI/min at $\Delta P$ 1

## CODING EXAMPLE

<b>C</b>	<b>4</b>	<b>01</b>	<b>-</b>	<b>AV.P</b>	<b>/1</b>
<b>C</b>	SERIES				
<b>4</b>	SIZE: 4 = G1				
<b>01</b>	PORT: 01 = G1				
<b>AV.P</b>	SOFT START VALVE				
<b>/1</b>	OPERATION: = Standard electrical /1 = pneumatic				

## Soft start valve C401-AV. P.and C401-AV.P/1



1. Solenoid valve A631 - AC2
2. Manual override
3. End- cover pneumatic pilot A631 - AC2 - AVP-P
4. Input pneumatic pilot

5. Regulation screw
6. Pressure switch PM 11 NA
7. Cap 2611 - 1/8
8. Assembly screw M8 x 25

VARIATION IN PRESSURISATION TIME

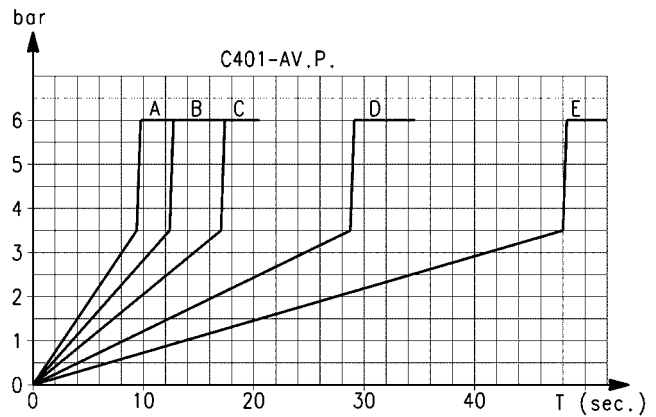
Variation in pressurisation time by using the regulation screw.

Constant k on the graph indicates the number of turns of the Regulating Screw required to obtain the required pressurisation time an inlet pressure of 6 Bar. Variations of the inlet pressure can cause deviations of the pressurisation time by , ±20 per cent.

$K = t/V$  where:

V = Volume of the downstream system in liters;

t = Desired pressurising time in seconds



Example

Example:

V = 20 liters

t = 16 seconds

$K = 16/20 = 0,8$

Using the graph the  $K=0,8$ , show that the number of turns of the Regulating Screw required to obtain the pressurisation time of 16 seconds is approximately 3.

Long pressurising times (1/4 - 100 sec bar with volume of 10 liters) will be obtained in the first turn of the Regulating Screw.

