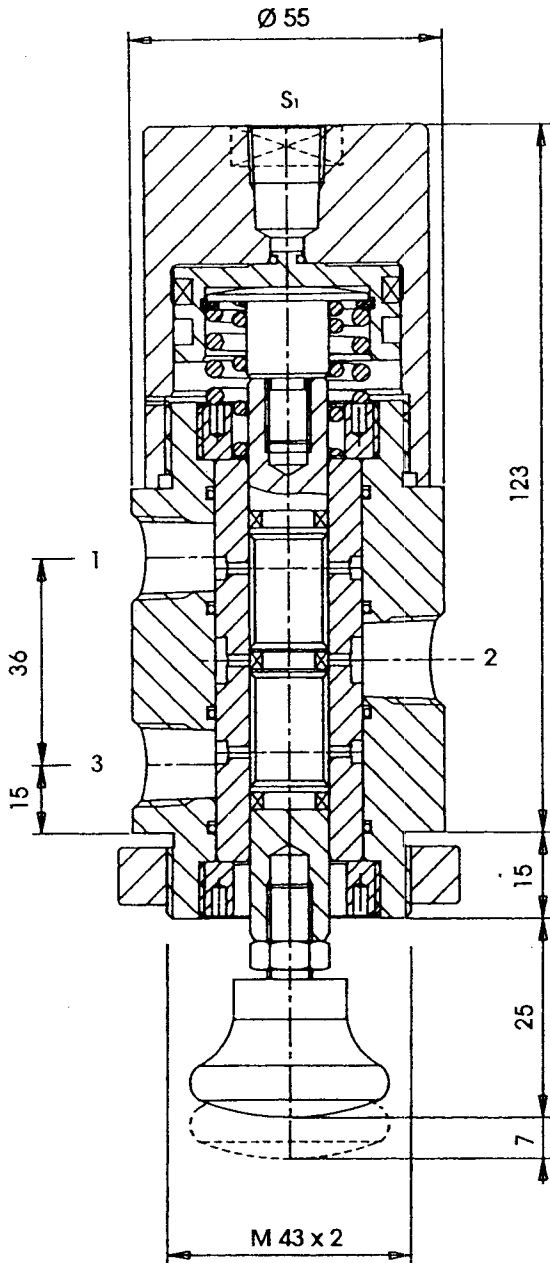


SERVOVALVE

SV3-500 SERIES

HANDBOOK



UNIVERSAL THREE WAY PNEUMATIC SERVOVALVE

- maximum line pressure 35 bar (500 Psig);
- signal pressure from 1 to 18 bar (from 15 to 250 Psig);
- minimum passage area 0.2 cm² (equal to Ø 5 mm);
- temperature limits from -20°C to + 100°C;
- operation : automatic, manual reset, bistable or manual;
- line connections 1/4" NPT-female;
- signal connections 1/4" NPT-female.

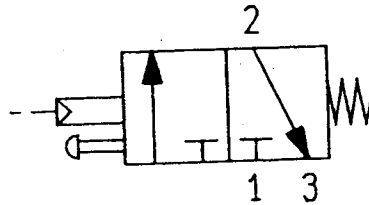
CODICE code	PRESSIONE SEGNALE signal pressure bar (psig)	TIPO type	ATTACCHI connections		SEZIONE MINIMA minimum passage area cm ²	PRESSIONE DI LINEA line pressure bar (psig)
			SEGNALE signal	LINEA line		
SV3-01M-60	1 - 18 (15 - 250)	AUTOMATICA	1/4" NPT	1/4" NPT	0,2	35 (500)
SV3-010-60	2 - 18 (30 - 250)	automatic				
SV3-03M-60	1 - 18 (15 - 250)	CON RIARMO MANUALE				
SV3-030-60	2 - 18 (30 - 250)	manual reset				
SV3-020-60	1 - 18 (15 - 250)	BISTABILE bistable				
SV3-040-60	-	MANUALE manual				

Pneumatic servovalve SV3

The SV3 servovalve is a three way distributor that changes over the internal connections using a pneumatic signal.

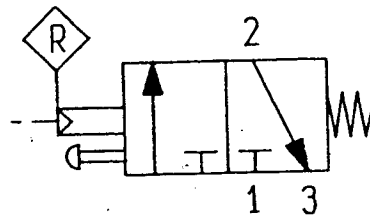
The available models are :

SV3 - A - 1/4"



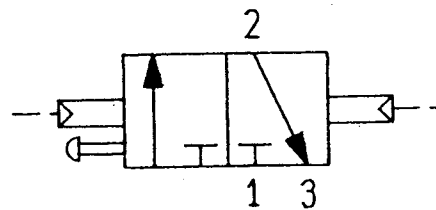
Three way automatic distributor, two position, with spring return and manual lever.

SV3 - R - 1/4"



Three way distributor, two positions, with spring return, lever and manual reset.

SV3 - B - 1/4"



Three way distributor, two positions, bistable with manual lever.

PNEUMATIC SERVOVALVE SV3 SERIES

The universal **SV3** Series pneumatic servovalve make it possible to automate a line under pressure. This is achieved by employing either a pneumatic signal or manual action to activate the Three-way distributor which switches over the internal connections.

The following configurations are available: automatic, with manual reset, bistable and manual.

AUTOMATIC OPERATION

In the absence of pilot-signal, the servovalve joins together the connections -2- and -3- shutting off the connection -1-.

When the pilot-signal acts upon the piston and moves the spindle to the end of the stroke, the connections -1- and -2- are joined together, while connection -3- is shut off.

When the pilot-signal ceases, a spring brings back the spindle to its initial position and the initial configuration is re-established.

OPERATION WITH MANUAL RESET

The configuration is the same as in automatic operation, except that the presence of an o-ring on the piston prevents the action of the pilot-signal without a previous manual reset by the operator.

When the pilot-signal is present at connection -S1-, the operator permits it to pass through by pulling the knob. The piston then moves the spindle to the end of the stroke, joining together the connections -1- and -2-.

When the pilot-signal ceases, a bring back the spindle to its initial position, thus joining together the connections -2- and -3-.

BISTABLE OR MANUAL OPERATION

The servovalve maintains its existing position in the absence of either a signal or manual action.

When the pilot-signal is present at connection -S1- or when the operator pulls the knob towards himself, the spindle moves to the end of the stroke, joining together the connections -1- and -2-.

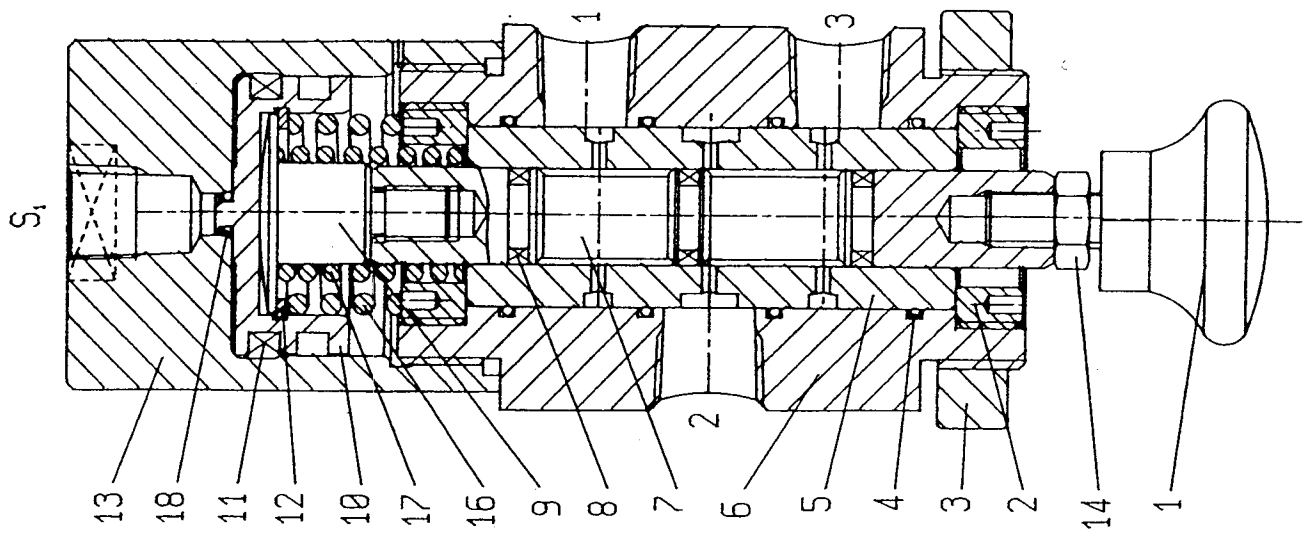
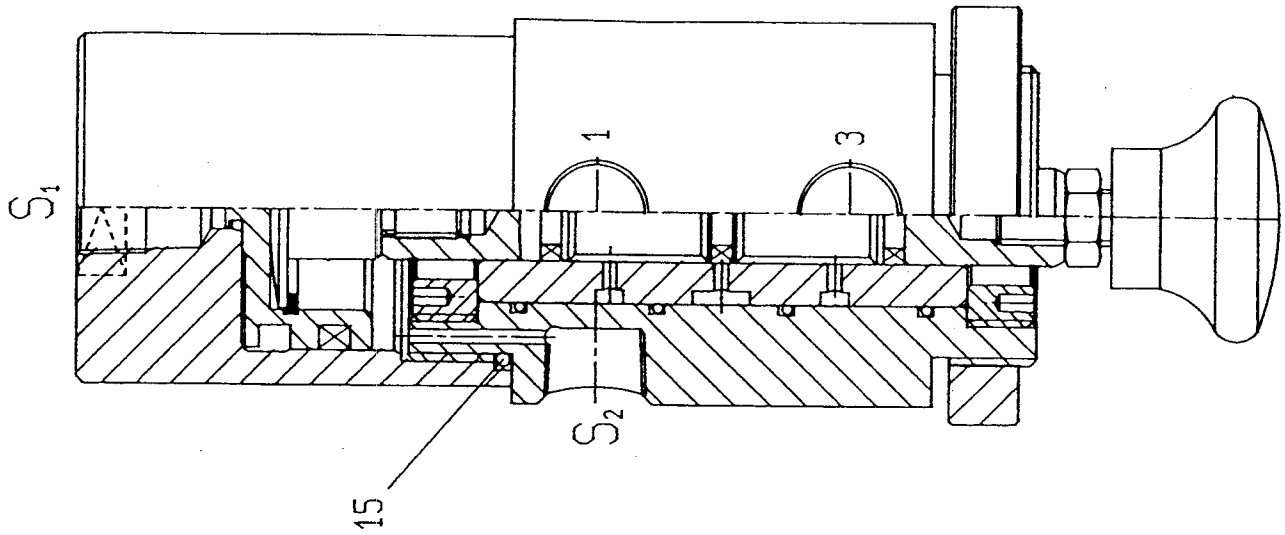
When however, the pilot-signal is present at connection -S2- or when the operator pushes the knob towards the servovalve, the spindle moves to the end of the stroke, thus joining together the connections -2- and -3-.

DISASSEMBLING AND ASSEMBLING

For disassembling, carry out the following operations progressively:

- fixing body (6), turn-counterclockwise the cap (13) until the complete separation;
- remove the knob (1) turning it in counterclockwise;
- extract the trim, remove the circlip (12) and divide the piston (10), from the upper stem (9);
- divide the upper stem (9) from the lower stem (7), turning it counterclockwise;
- remove the guides (2) and extract the bush (5).

For assembling, carry out the disassembling operations in reverse order.



technical

20060 Vignate - Milano (Italy)