Servo valves Series LR Flow control - LRWA4



3/3 way servo valves for the flow control



- The servo valves LRWA3 and LRWA4 are direct driven 3/3-way valves with patented rotary slide principle and electronic closed loop slide position control.
- The servo valves are supplied with the body containing the valve with the electronic board and the corresponding sub-base with G 1/4 ports.

- » Rotary slide principal, metal to metal seal
- » Space saving design at high flow rate
- » Electronic closed loop slide position control, high precision
- » Integrated electronics, ready to connect
- » 3-way-function with nominal size 4 mm or 6 mm
- » Sub-base mounting version

GENERAL DATA			
Power supply	24 VDC +/- 10%, stabilized, max. 0,8 A		
Input specified value	+/- 10VDC vs. 100 kohm; 0-10VDC vs. 100 kohm; 0-20mA vs. 500 ohm; +/- 5VDC vs. 100 kohm		
Hysteresis	approx. 1% FS related to slide position		
Linearity	approx. 1% FS related to slide position		
Frequency limit (-3dB, -90°))	at +/-100% spec. val.: approx. 70 Hz; at +/- 50% spec. val.: approx. 110 Hz		
Switching time	0 to 100%: approx. 5 ms; +/- 100%: approx. 7 ms		
Temperature range	0 to 50° C		
Relative humidity of air	max. 90%		
Direction of assembly	any		
Weight of cartridge	approx. 1,0 kg		
Maximum flow rate (fully opened)	6 bar to 0 bar: 500 Nl/min (LRWA4-34) 800 Nl/min (LRWA4-36) 6 bar to 5 bar: 350 Nl/min(LRWA4-34 550 Nl/min(LRWA4-36)		
Medium	clean air, oiled or not oiled, 5 µm filtered		
Supply pressure	-0,9 to 10 bar		
Leakage	< 1% of maximum flow rate		

Α

00

CODING EXAMPLE 3 00 R 4 SERIES: L = Proportional servo valves TECHNOLOGY: R = rotary R VERSION: W = flow control W ELECTRONICS: Α A = analogic MODELS: 4 = with sub-base 4 FUNCTION: 3 3 = 3 way DIAMETER: 4 4 = 4 mm 6 = 6 mm INPUT SIGNAL: 1 = +/- 10V 2 = 0-10 V 1 3 = 0-20 mA 4 = +/- 5 V

Accessories: CS-PF07CB

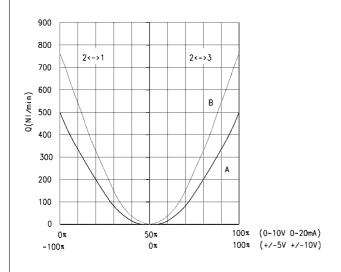
FEEDBACK SIGNAL: A = internal encoder

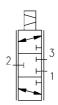
CABLE:

00 = no cable

FLOW DIAGRAM(NI/min) vs INPUT SIGNAL (%)

News





A: LRWA4-34 B: LRWA4-36

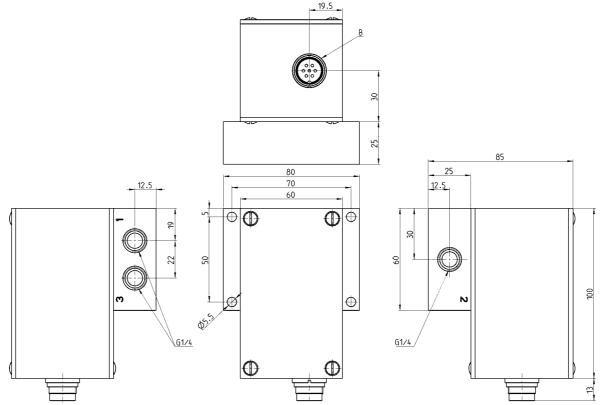
SERVO VALVES LRWA4 - PNEUMATICAL INSTALLATION

News



The typical modes of installation to control a pneumatical load are the modes I and II (see chart below); the only difference is the rela-tion between directions of flow and specified value. Low specified electrics values connect always ports 1 and 2, high specified values ports 2 and 3

The modes III and IV allow flow control of two pneumatical loads with only one servo valve. The inner diameters of connected fittings and tubes should correspond to the nominal size of the valves: at least 4 mm for LRWA4-34; at least 6 mm for LRWA4-36.



THE LENGTH OF THE LEADS SHOULD BE AS SHORT AS POSSIBLE, BETWEEN VALVE-OUTLET AND LOAD NORMALLY NOT MORE THAN 2 mts.

APPLICATION MODES TABLE					
MODES/Ports	1	2	3		
Mode I	Р	A	R		
Mode II	R	A	Р		
Mode III	Α	P	В		
Mode IV	Α	R	В		

B - ELECTRICAL CONNECTIONS(Pin configuration)				
PIN	FUNCTION	NOTES		
1	Power supply +24 VDC			
2	power supply GND			
3	Input signal			
4	Input signal GND	Pin 4 and 2 should be connected. If that is not possible, the voltage between both GND's may not increase +/- 30 V.		
5	NC			
6	NC			
7	NC			