

Servo valves Series LR

Flow control - LRWA2

3/3-way directly operated servo valves for the flow control

2

CONTROL



- » Rotary slide principal, metal to metal seal
- » Space saving design at high flow rate
- » Electronic control: precise dosing at low power loss
- » Integrated electronics, ready to connect
- » 3-way-function with nominal size 4 mm or 6 mm
- » Cabinet mounting on DIN-rail

The servo valves LRWA2-34 and LRWA2-36 are direct driven 3/3-way valves with patented rotary slide principle and electronic closed loop slide position control. The electronic board is integrated into the valve's body ready to connect.

The valves are prepared to be mounted in cabinets on DIN rail. Two clips allow to snap on the valve to the 35mm DIN rail without any other screws. The valves have a compact design to provide space-and cost-saving solutions.

GENERAL DATA

Power supply	24 VDC +/- 10%, stabilized, max. 0,8 A
Input specified value	+/- 10V vs. 100 kohm; 0-10V vs. 100 kohm; 0-20mA vs. 500 ohm
Hysteresis	ca. 1% FS related to slide position
Linearity	ca. 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. 0,700 kg
Maximum flow rate (fully opened)	6 bar to 0 bar 700 NI/min (LRWA2-34); 1100 NI/min (LRWA2-36) 6 bar to 5 bar 450 NI/min (LRWA2-34); 690 NI/min (LRWA2-36)
Medium	clean air, oiled or not oiled, 5 µm filtered
Supply pressure	-0,9 to 10 bar
Leakage	< 1% of maximum flow rate

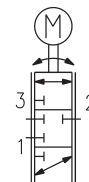
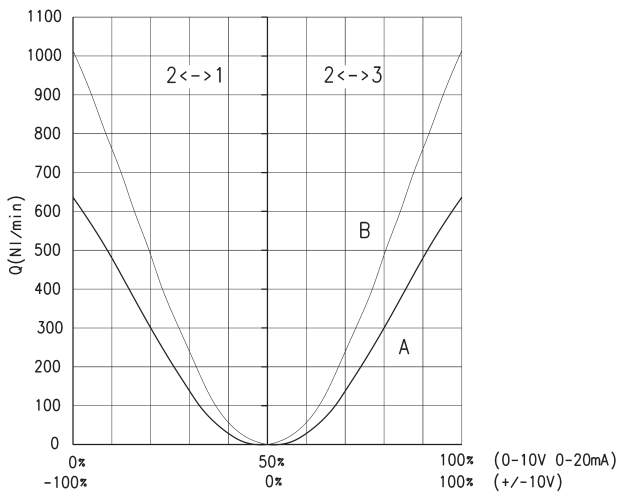
CODING EXAMPLE

L | **R** | **W** | **A** | **2** | **-** | **3** | **4** | **-** | **1** | **-** | **A** | **-** | **00**

L	SERIES: L = Proportional servo valves
R	TECHNOLOGY: R = rotary
W	VERSION: W = flow control
A	ELECTRONICS: A = analogic
2	MODEL: 2 = compact DIN-RAIL
3	FUNCTION: 3 = 3 way
4	DIAMETER: 4 = 4 mm 6 = 6 mm
1	INPUT SIGNAL: 1 = +/- 10 V 2 = 0-10 V 3 = 0-20 mA
A	FEEDBACK SIGNAL: A = internal encoder
00	CABLE: 00 = no cable

Accessories: CS-LF05HB-D200; CS-LF05HB-D500; CS-LR05HB-D200; CS-LR05HB-D500

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

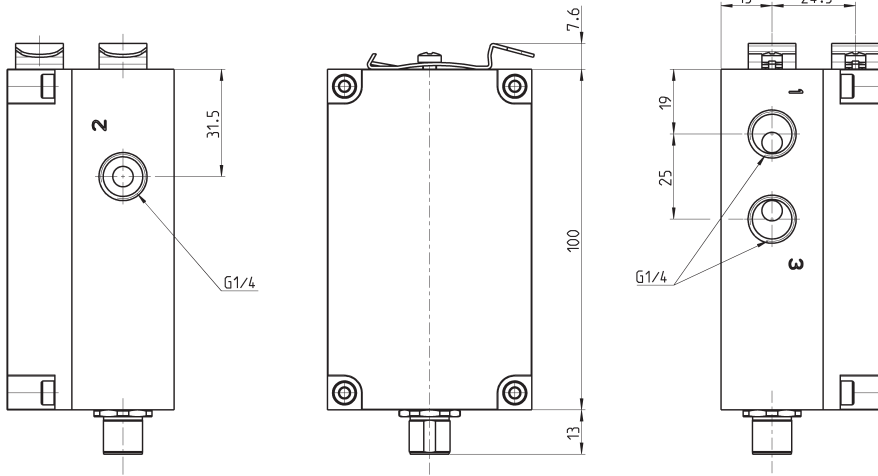
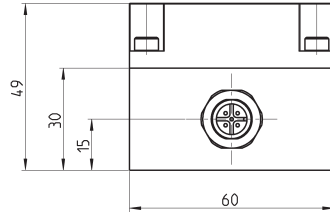


A: LRWA2-34
B: LRWA2-36

SERVO VALVES LRWA2 - PNEUMATICAL INSTALLATION


The typical modes of installation to control a pneumatical load are the modes I and II (see chart below); the only difference is the relation between directions of flow and command signal. Low command signals connect always ports 1 and 2, high command signals 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 LRWA2-34 and 6 mm for LRWA2-36.



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	P	A	R
Mode II	R	A	P
Mode III	A	P	B
Mode IV	A	R	B

ELECTRICAL CONNECTION (pin configuration)

PIN	FUNCTION	NOTES	COLORS OF THE ACCESSORIES CABLE
1	Power supply +24 VDC		Brown
4	Power supply GND		Black
3	Command signal		Blu
2	Command 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.	White
5	NC		Grey