

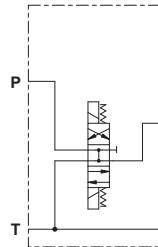
## DIRECTIONAL CONTROL VALVE CONNECTION B-P FOR INTERMEDIATE ELEMENT F13BP



1

Connector to be ordered separately, see page 103.

### HYDRAULIC SYMBOL



### ORDERING CODE

<b>CDC</b>	Directional control valve (with A09 coil)
<b>3</b>	Size
<b>R</b>	Body type
<b>E</b>	Electrical operator
<b>02</b>	Spool (tab.1)
<b>C</b>	Mounting (tab.1)
<b>*</b>	Voltage (tab.2)
<b>**</b>	Variants (tab.3)
<b>2</b>	Serial No.

Directional control valve CDC3R module with body type R can be assembled with intermediate module F13BP, to define an hydraulic scheme that can select the functions ahead or behind this module.

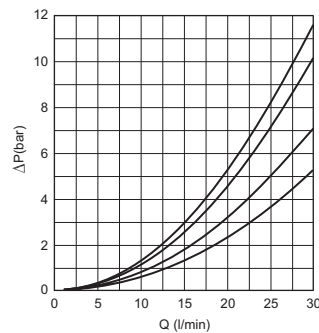
As shown in the example scheme, when the coil on side a is energised the flow is delivered to the sections behind this module CDC3R, instead when the coil on side b is energised the flow is delivered to the sections ahead.

- Emergency control.
- Coils protection IP65
- Power supply DC or AC (with rectifier).
- Standard connectors DIN 43650 ISO 4400, AMP Junior, flying leads and Deutsch
- Maximum flow until 30 l/min.
- Cast iron zinc plated body.

### FEATURES

Max. pressure ports P/A/B/T	250 bar
Max. Flow	30 l/min
Max excitation frequency	3 Hz
Duty cycle	100% ED
Hydraulic fluid	DIN 51524 Mineral oils
Fluid viscosity	10 ÷ 500 mm <sup>2</sup> /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level (filter β <sub>25</sub> ≥ 75)	ISO 4406:1999: class 21/19/16 NAS 1638: class 10
Weight	1.50 kg

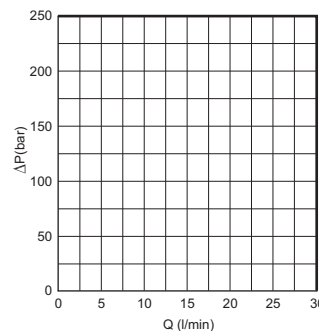
### PRESSURE DROPS



Curve	Connections
4	P → A
4	P → B
3	A → T
3	B → T
2	P → T
1	P/T passanti

Fluid used: mineral based oil with viscosity 46 mm<sup>2</sup>/s at 40°C.

### LIMITS OF USE



The tests have been carried out with solenoids at operating temperature and a voltage 10% less than rated voltage with a fluid temperature of 50 °C. The fluid used was a mineral oil with a viscosity of 46 mm<sup>2</sup>/s at 40 degrees C. The values in the diagram refer to tests carried out with the oil flow in two directions simultaneously (e.g. from P to A and at the same time B to T).

**In the cases where valves 4/2 and 4/3 are used with the flow in one direction only, the limits of use could have variations which may even be negative. The tests were carried out with a counter-pressure of 2 bar at T port.**

## ORDERING CODE

**Tab.1 - Standard spools**

Two solenoids, spring centred "C" Mounting			
<b>Code</b>		Covering	Transient position
<b>02</b>		-	

**Tab.2 - Coils A09 voltage (5)**

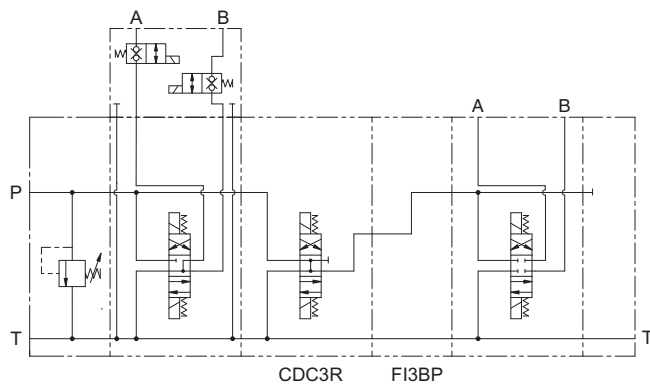
Code	Voltage	Max. winding temperature (Ambient temperature 25°C)	Rated power W	Resistance @ 20°C (Ohm) ±7%
<b>L</b>	12 Vdc	123 °C	27	5.3
<b>M</b>	24 Vdc	123 °C	27	21.3
<b>N</b> (1)	48 Vdc	123 °C	27	85.3
<b>Z</b> (2)	102 Vdc	123 °C	27	392
<b>P</b> (1)	110 Vdc	123 °C	27	448
<b>X</b> (4)	205 Vdc	123 °C	27	1577
<b>W</b> (4)	Without coils			

**Tab.3 - Variants (5-6)**

Code	Variant
<b>S1</b>	No variant
<b>SV</b>	Viton
<b>LF</b>	Emergency control lever (see page 34)
<b>LR</b>	Emergency control lever 180° rotated (see page 34)
<b>ES</b>	Emergency button (see page 34)
<b>P2</b> (7)	Rotary emergency button (see page 34)
<b>R5</b> (7)	Rotary emergency b. 180° (see page 34)
<b>3T</b>	First elem. for series connec.
<b>AJ</b> (8)	AMP Junior connection (see page 105)
<b>FL</b> (8)	Coil with flying leads 250 mm (see page 105)
<b>LD</b> (8)	Coil with flying leads 130 mm and integrated diode (see page 105)
<b>CX</b> (8)	Deutsch connection with bidirectional diode (see page 105)

1

## EXAMPLE WITH VALVE CDC3R AND INTERMEDIATE ELEMENT FI3BP



- (1) Special voltage
- (2) With rectifier: 115 VAC/50Hz - 120 VAC/60Hz
- (3) With rectifier: 230 VAC/50Hz - 240 VAC/60Hz
- (4) Performance are guaranteed only using valves completed with coil  
Coils technical data, see page 105;
- (5) Connector to be ordered separately, see page 103;  
Voltage codes are not stamped on the plate, their are readable on the coils
- (6) Other variants available on request
- (7) Tightening torque max. 6÷9 Nm (CH n. 22)
- (8) Available in 12V or 24V DC voltage only

## OVERALL DIMENSIONS

