

ON/OFF PRE COMPENSATED VALVES



Connector to be ordered separately, see page 103.

ORDERING CODE

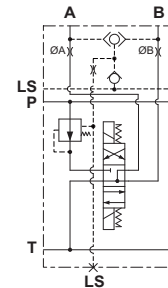
CDH	On/Off compensated bankable valve
3	Size
*	Body type: A = Ports G3/8" parallel
E	Electrical operator
**	Spool (see table 1)
*	Mounting (see table 2)
**	Holed washer on port A (see table 3)
**	Holed washer on port B (see table 3) Omit if equal to screw on port A
*	Differential pressure Δp 8 = Δp 8 bar 4 = Δp 4 bar
*	Voltage (see table 4)
**	Variants (see table 5)
1	Serial No.

Calibrated diaphragms on P line, see page 102.

ON/OFF Compensated Valves CDH3 with single or double solenoid, LS signal locally compensated.

- Used for controlling fluid direction and flow rate.
- Flow rate controlled by the valve predefined by a holed calibrated washer screwed into the port A and/or B.
- Flow regulation load independent . Load compensation is achieved by a 2 way pressure compensator which holds, the pressure drop constants across the proportional spool.
- Threaded ports G3/8"
- Emergency control.
- Standard connectors DIN 43650 ISO 4400, AMP Junior and Deutsch
- Cast iron zinc plated body.

HYDRAULIC SYMBOL



FEATURES

Max. operating pressure ports P/A/B	300 bar
Max. operating pressure ports T (Pressure dynamic allowed for 2 millions of cycles)	250 bar
Max flow	See table 3
Max excitation frequency	3 Hz
Duty cycle	100% ED
Type of protection (Hirschmann coil)	IP 65
Fluid viscosity	10 ÷ 500 mm ² /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level (filter $\beta_{25} \geq 75$)	ISO 4406:1999: class 21/19/16 NAS 1638: class 10
Weight with single solenoid	2.38 kg
Weight with double solenoid	2.77 kg
General flow tolerance	±10%

Operating specifications are valid for fluid with 46 mm²/s viscosity at 40°C, using the specified Dana Brevini electronic control units.

ORDERING CODE

Tab.1 - Spool

Two solenoids, spring centred "C" Mounting			
Code		Covering	Transient position
01		+	
02		-	
03		+	
04 (1)		-	

One solenoid, side A "E" Mounting

Code		Covering	Transient position
01		+	
02		-	
03		+	
04 (1)		-	
15		-	

One solenoid, side B "F" Mounting

Code		Covering	Transient position
01		+	
02		-	
03		+	
04 (1)		-	
15		-	

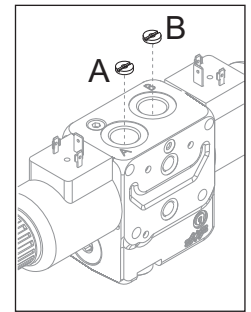
Tab.2 - Mounting

Code	Symbol
C	
E	
F	
G (7)	
H (7)	

Tab.3 - Holed washer on port A / B

Code	Flow (l/min)	
	$\Delta p = 8 \text{ bar}$	$\Delta p = 4 \text{ bar}$
10	1.7	1.3
15	4.0	3.0
20	7.5	5.5
25	10.0	8.0
30	14.2	9.5
35	17.2	11.5
40	18.0	13.5
45	22.5	17.5
50	26.0	19.5
99	without holed washer	

Other flow rates available on request



Interchangeable holed washer into fittings ports

Tab.4 - Coils D15 voltage (7)

Code	Voltage	Max. winding temperature (Ambient temperature 25°C)	Rated power W	Resistance @ 20°C (Ohm) ±10%
L	12 Vdc	110 °C	30	4.8
M	24 Vdc	110 °C	30	18.8
V (3)	28 Vdc	110 °C	30	25.6
N (3)	48 Vdc	110 °C	30	75.2
Z (4)	102 Vdc	110 °C	30	340
P (3)	110 Vdc	110 °C	30	387
X (5)	205 Vdc	110 °C	30	1375
W (6)	Without coils			

Tab.5 - Variants (7 - 8)

Code	Variant
S1	No variant
SV	Viton
LF	Emergency control lever (see page 72)
LR	Emergency control lever 180° rotated (vedi pagina 72)
ES	Emergency button (vedi pagina 72)
P2 (9)	Rotary emergency button (vedi pagina 72)
R5 (9)	Rotary emergency b. 180° (vedi pagina 72)
AJ (10)	AMP Junior connection (vedi pagina 106)
AD (10)	AMP Junior and integr diode (vedi pagina 106)
SL (10)	Coil with flying leads 175 mm (vedi pagina 106)
CZ (10)	Coil with Deutsch DT04-2P (vedi pagina 107)
CX (10)	Deutsch DT04-2P connection and integr diode (see page 107)

(1) Specials with price increasing

(2) On spool 01 and 04 A and B ports are not sealed: fluid can escape from LS line (see hydraulic scheme).

(3) Special voltage

(4) With rectifier: 115 VAC/50Hz - 120 VAC/60Hz

(5) With rectifier: 230 VAC/50Hz - 240 VAC/60Hz

(6) Performance are guaranteed only using valves completed with coil

(7) Connector to be ordered separately, see page 103;

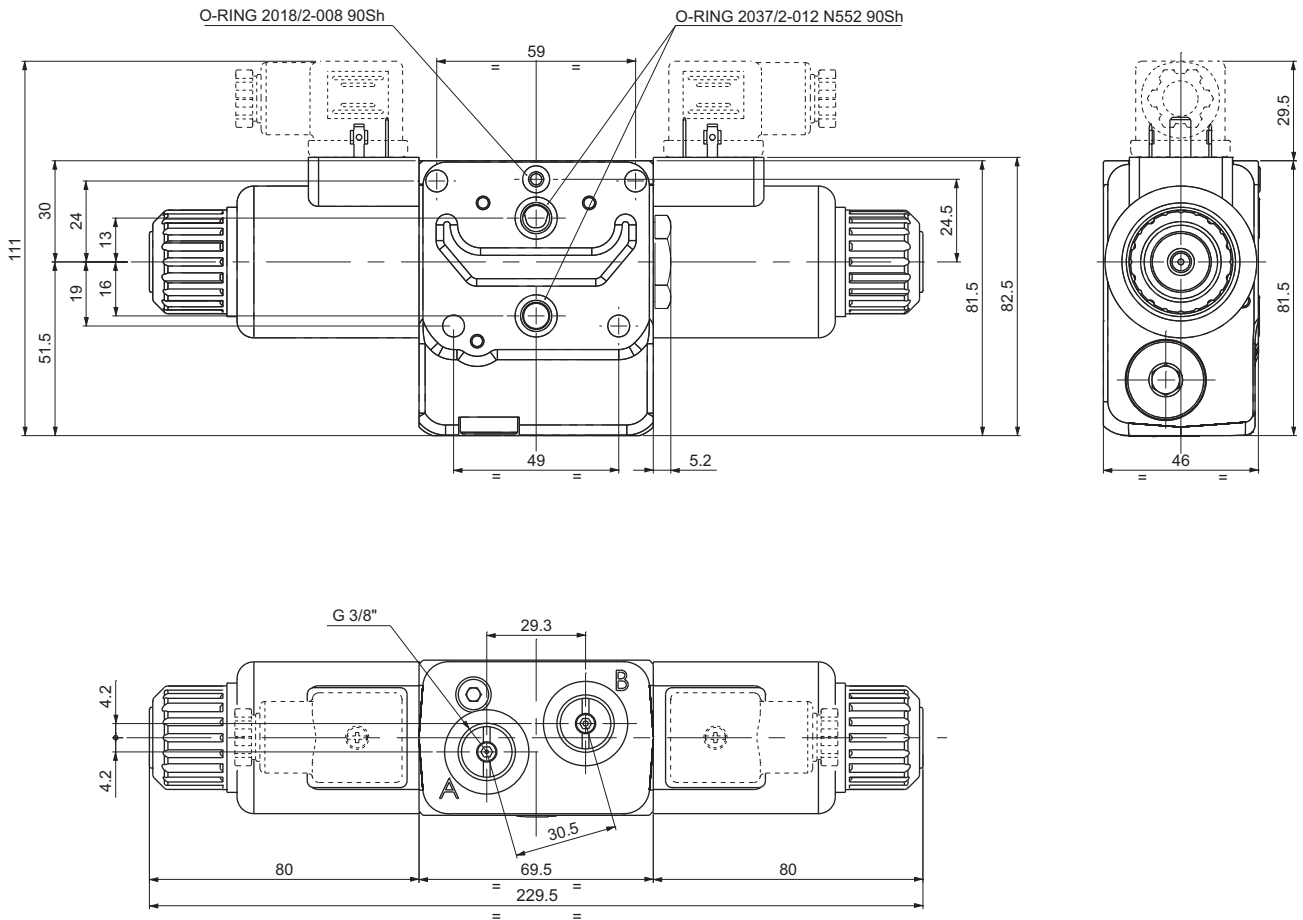
Coils technical data, see page 106 - 107;

(8) Other variants available on request. All the variants are considered without connectors.

(9) Tightening torque max. 6-9 Nm (CH n. 22)

(10) Available in 12V or 24V DC voltage only.

OVERALL DIMENSIONS



Fittings, max. tightening torque 60 Nm

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CXDH3 / CDH3 (variants)

"LF", "LR" AND "LV" VARIANTS - EMERGENCY CONTROL LEVER



HYDRAULIC SYMBOL

Var. LF/LR lever on the side A:



Var. LV lever on the side B:



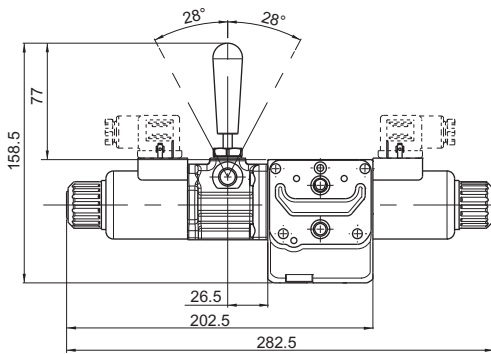
Spool 01 available on request

Max operating pressure port T	dynamic	160 bar
	static	210 bar
Mounting type Var. LF/LR	C - B - F - H	
Mounting type Var. LV	C-A	
Spools type	01-02-03-04 16-17-66	
Weight with single solenoid	3.34 kg	
Weight with double solenoid	3.73 kg	

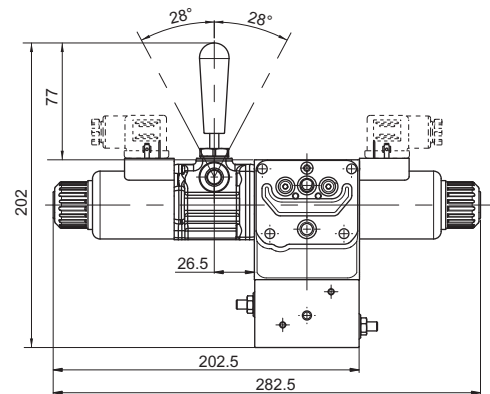
Thanks to his flexibility, the component is designed to be inserted between the valve body and the spool, providing total interchangeability between the different types of solenoid body valves manufactured by Dana Brevini (*). The control can be used as an emergency device in the event of power cuts.

* Max flow of proportional valves can be reduced compared to versions without emergency control lever when electrical operated. Max flow of proportional valves lever operated is increased compared to the max flow given when valves are electrical operated.

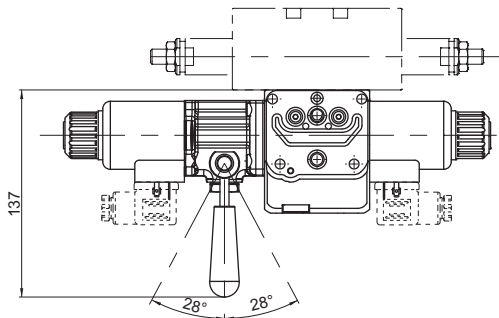
**LF Variant
(CXDH3 / CDH3)**



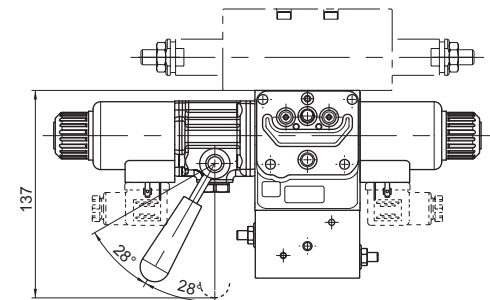
**LF Variant
Body L
(CXDH3)**



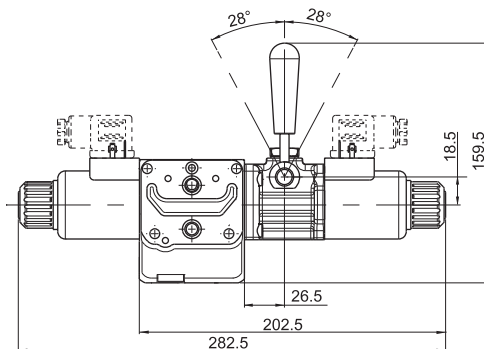
**LR Variant
(CXDH3 / CDH3)**



**LR Variant
M Body
(CXDH3)**



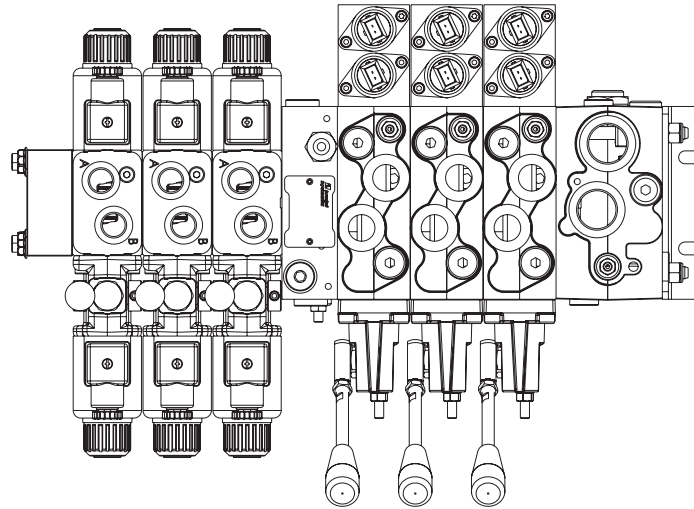
**LV Variant
(CXDH3 / CDH3)**



USE OF HSIF INTERFACE WITH MODULAR VALVES CXDH3/CDH3, WITH EMERGENCY LEVER

Distributor HPV41 right (DX, standard)

- Order modular valves CXDH3/CDH3 variant LV, with emergency lever on the side B

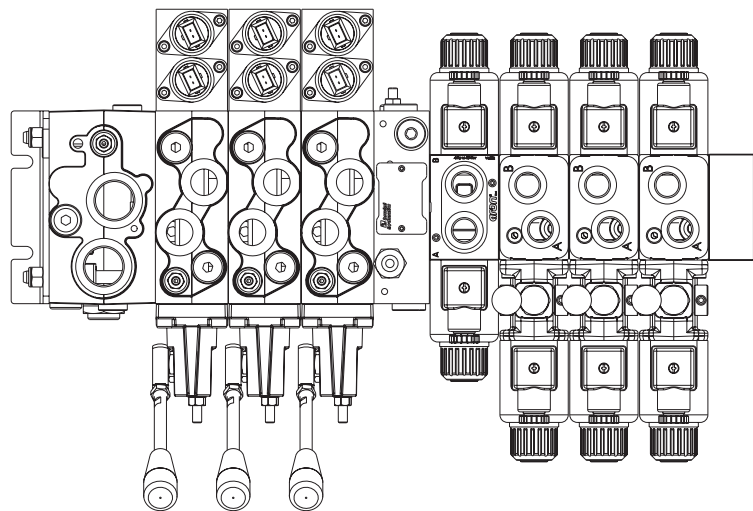


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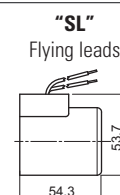
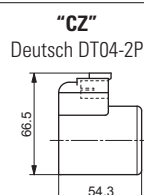
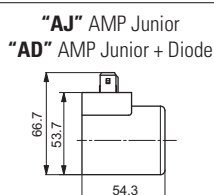
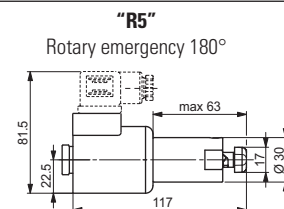
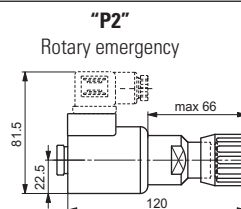
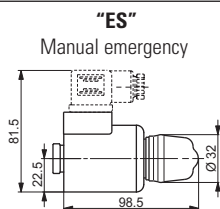
Distributor HPV41 left (SX)

- Order modular valves CXDH3/CDH3 variants LF / LR, with emergency lever on side A

- In this case it is not possible to mount the modular valve CXDH3/CDH3 variant LF / LR as the first element after HSIF interface.



OTHER VARIANTS



Emergency P2 and P5, tightening torque max. 6÷9 Nm (CH n. 22)