

POST COMPENSATED FLOW SHARING VALVE HIGH EFFICIENCY ENERGY SAVING



Connector to be ordered separately, see page 103.

ORDERING CODE

CFS	FLOW SHARING valve
3	Size
*	Mounting (see table 1)
*	Body type: A = Ports G3/8" parallel P = Ports G1/2" parallel Q = Ports SAE8 3/4" - 16UNF parallel G = Interface for modular valves
**	Spool type (7) 03 =
N	Symmetrical flow path control
*	Nominal flow rating
*	Max. current at solenoid (2): E = 2.35 A (9 Vdc) - Special coil F = 1.76 A (12 Vdc) G = 0.88 A (24 Vdc)
**	Variants (3): S1 = No variant LF/LV = Emergency control lever (4) For body type G order LR variant (emergency lever 180° rotated) SV = Viton ES = Emergency button (4) P2 = Rotary emergency (4) R5 = Rotary emergency 180° (4) AJ = AMP Junior coil (see page 109) CZ = Deutsch DT04-2P coil (see page 109)
1	Serial No.

*	Δp 14 bar from P to A,B
1	8 l/min
2	16 l/min
3	25 l/min
4	40 l/min
5 (5)	55 l/min

High efficiency energy saving valve FLOW SHARING

- High efficiency energy saving valve
- Compact dimensions
- Venting valves can be adopted to de-pilot pressure compensators on port A and/or B
- Valve's body with the same interface of all bankable valves range, so can be assembled with all existings valves, precompensated (CXDH3) included
- Cast iron zinc plated body.

FEATURES

Max. operating pressure	310 bar
Max. operating pressure ports T (Pressure dynamic allowed for 2 millions of cycles)	250 bar
Regulated flow rate (A / B ports) (6)	up to 55 l/min (Δp 14 bar) up a 60 l/min (Δp 18 bar)
Relative duty cycle	Continuous 100% ED
Type of protection (Hirschmann coil)	IP 65
Fluid viscosity	10 ÷ 500 mm ² /s
Fluid temperature	-20°C ÷ 75°C
Ambient temperature	-20°C ÷ 60°C
Max. contamination level (filter $\beta_{10} \geq 75$)	ISO 4406:1999: class 19/17/14 NAS 1638: class 8
Weight with single solenoid	3.70 kg
Weight with double solenoid	4.20 kg

Solenoid	@ 9Vdc	@ 12Vdc	@ 24Vdc
Current supply	PWM (pulse width modulation)		
Max. current solenoid	2.35 A	1.76 A	0.88 A
Solenoid coil resistance at 25°C (77°F)	2.25 Ohm	4.0 Ohm	16.0 Ohm
PWM or superimposed dither frequency	100 ÷ 150 Hz		
Response time			
0 ÷ 100%	32 ms	40 ms	85 ms
100% ÷ 0	33 ms	33 ms	33 ms
Frequency response -3db (input signal 50% \pm 25% Vmax)	22 Hz	22 Hz	12 Hz

Operating specifications are valid for fluid with 46 mm²/s viscosity at 40°C, using the specified Dana Brevini electronic control units. (input voltage = 24V).

Accessories

REM.S.RA.*.*	Card type control for single and double solenoid
REM.D.RA.*.*	
CEPS...	Electronic amplifier plug version for single solenoid
MAV	Electronic module for integrate control of proportional valves and ON/OFF
JMPEIOM700101	Joystick with standard handle
JMPIUOM700138	Joystick Person present handle
Modular valves	CM3P (page 93) and CM3M (page 95)

Calibrated diaphragms on P line, see page 102.

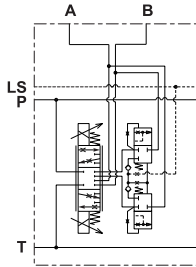
- (1) Available spool 01 A and B ports are not sealed.
- (2) Coils technical data, see page 109
Voltage codes are not stamped on the plate, their are readable on the coils
- (3) Connector to be ordered separately, see page 103; Other variants available on request.
- (4) Emergency see page 77
- (5) Only for emergency lever
- (6) With FH35PQ you can set a Δp variable (from LS and P); with FEH30PQ the Δp is fixed at 13 bar

Tab.1 - Mounting

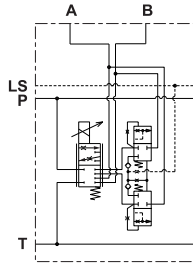
Code	Symbol
C	
A	
B	

HYDRAULIC SYMBOLS

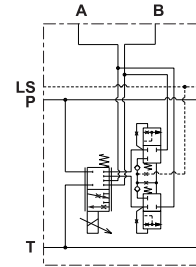
Spool 01 mounting C-A-B



CFS3C.01 ..

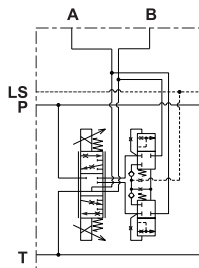


CFS3A.01 ..

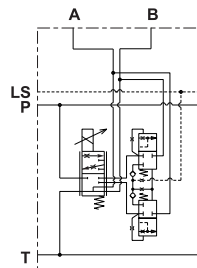


CFS3B.01 ..

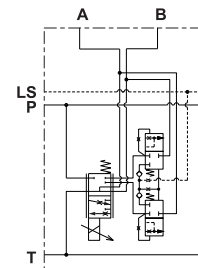
Spool 03 mounting C-A-B



CFS3C.03 ..



CFS3A.03 ..

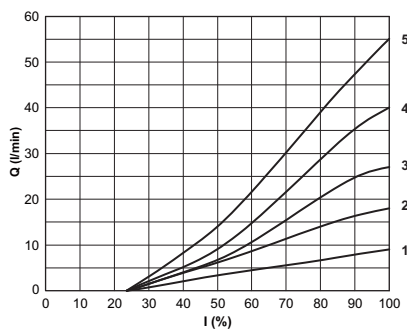


CFS3B.03 ..

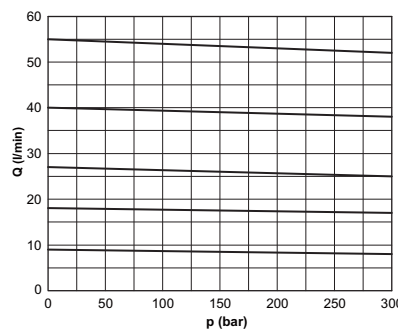
1

CHARACTERISTIC CURVES

Q-I curves with Δp 14bar



Compensation curves



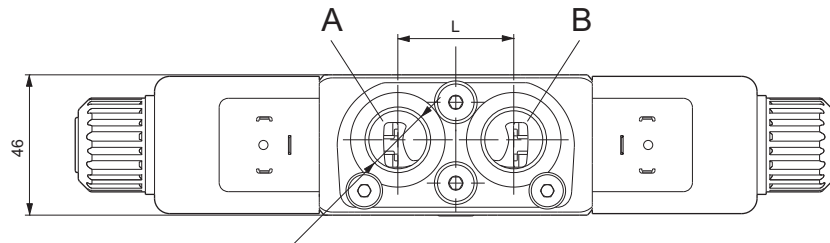
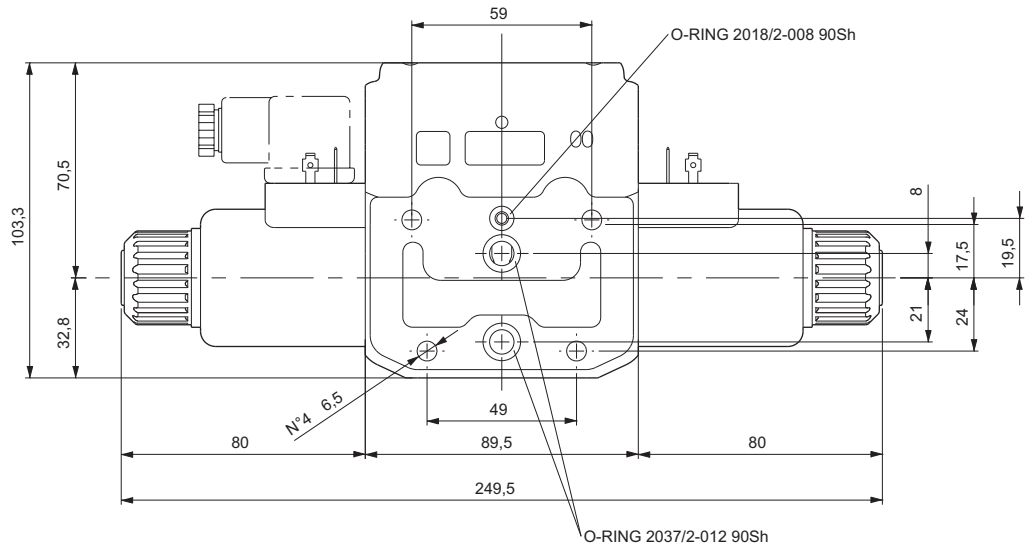
	Flow
1	8 l/min
2	16 l/min
3	25 l/min
4	40 l/min
5	55 l/min

OVERALL DIMENSIONS

Body

- A** = Ports G3/8" parallel
- P** = Ports G1/2" parallel
- Q** = Ports SAE8 3/4"-16UNF parallel

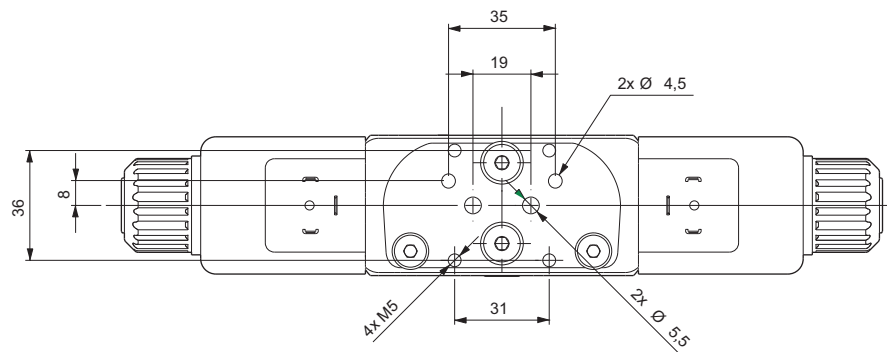
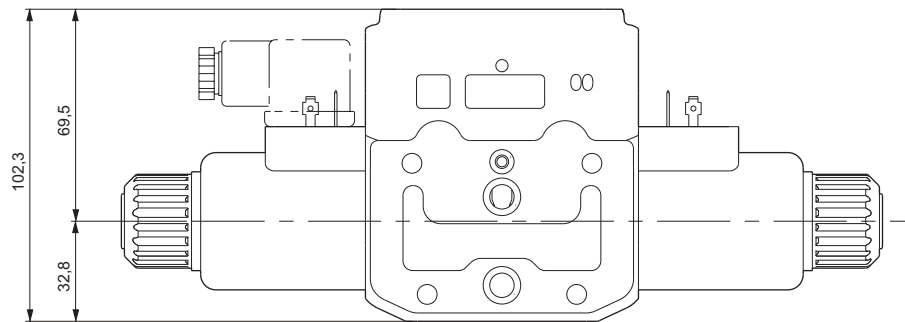
1



- A** = G3/8" L=30,5
- P** = G1/2" L=38,00
- Q** = SAE8 3/4"-16UNF L=38,00

Body type G

Interface for modular valves



Fittings, max. tightening torque 60 Nm

CFS3 (variants)

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



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.

HYDRAULIC SYMBOL

Var. LF/LR lever on the side A:



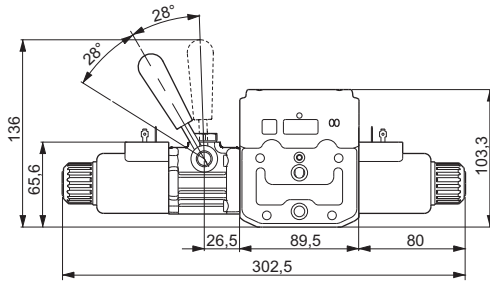
Var. LV lever on the side B:



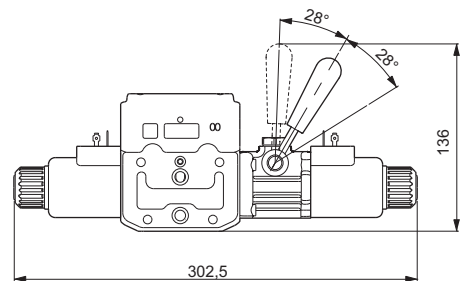
Max operating pressure port T	dynamic	160 bar
	static	210 bar
Mounting type Var. LF/LR		C - B
Mounting type Var. LV		C - A
Spools type		01 - 03

* 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.

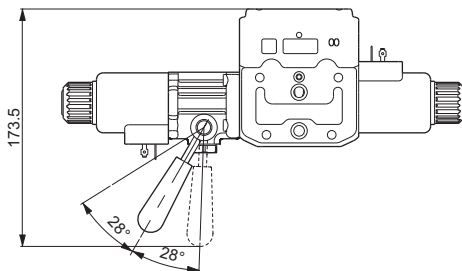
LF Variant



LV Variant



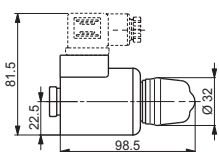
LR Variant



OTHER VARIANTS

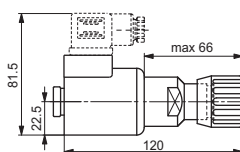
"ES"

Manual emergency



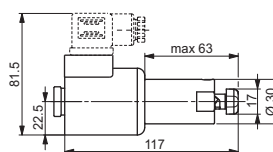
"P2"

Rotary emergency



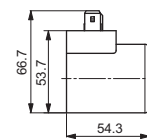
"R5"

Rotary emergency 180°



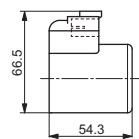
"AJ" AMP Junior

"AD" AMP Junior + Diode



"CZ"

Deutsch DT04-2P



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