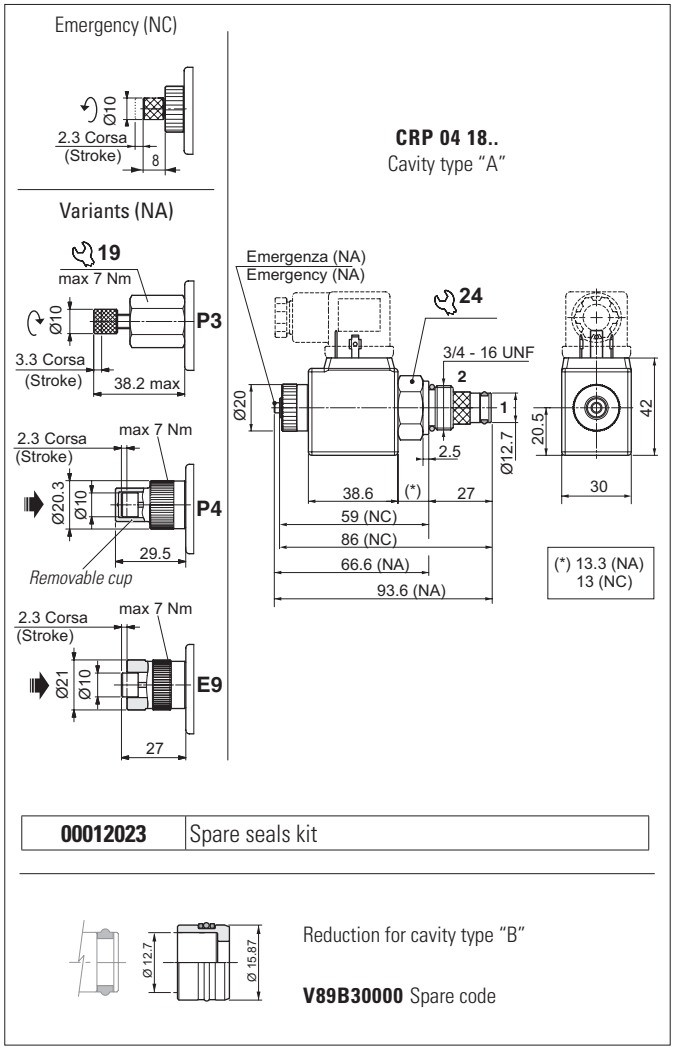
PILOTED OPERATED SOLENOID VALVE



00012023	Spare seals kit

Reduction for cavity type "B"

V89B30000 Spare code

Connector to be ordered separately, see sect. 20

The pilot-operated electric 2-way 2-position directional valve is controlled electrically.
The tapered poppet is in tempered and ground steel.
Available in normally open (NA) or normally closed (NC) versions.

Valve	Free passage	Coil	Type
CRP..NA	2 → 1	DE-ENERGISED	Unidirectional
CRP..NC	2 → 1	ENERGISED	
	1 → 2	DE-ENERGISED	
CRB..NA	1 → 2	DE-ENERGISED	Bidirectional
	2 → 1		
CRB..NC	1 → 2	ENERGISED / DE-ENERGISED	
	2 → 1	ENERGISED	

AC normally closed valves (NC) can work also with coils in DC.
Normally open valves work with DC coils whereas RAC coils with a connector and incorporated rectifier must be used for AC applications.
The NC valve sleeve is in galvanised steel and the NA valve sleeve with nikel coated.

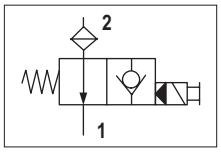
FEATURES

Max. pressure	300 bar (*)
Max. Flow	40 l/min
Max. Leakage (0 ÷ 10 drops/min)	0 ÷ 0.5 cm³/min
Max. excitation frequency	2 Hz
Duty cycle	100% ED
Hydraulic fluids	DIN 51524 Mineral oils
Fluid viscosity	10 ÷ 500 mm²/s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamin. level class with filter	ISO 4406:1999 - class 19/17/14
Cartridge filter	280µm
Type of protection (in relation to the connection used)	IP65
Weight (with coil)	0.27 kg
Cartridge tightening torque	25 ÷ 30 Nm
Coil ring nut tightening torque Emergency tightening torque	7 Nm
Cavity standard "A" (3/4 - 16 UNF)	CD018006 (See section 17)
Cavity standard "A" + seat VSCOA**01	CD018009 (See section 17)
Cavity with reduction "B" (3/4 - 16 UNF)	CD018012 (See section 17)

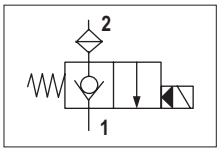
(*) 80000 cycles at 300 bar / 200000 cycles at 210 bar

Valve housings see section 14.

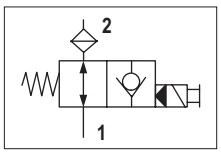
HYDRAULIC SYMBOLS



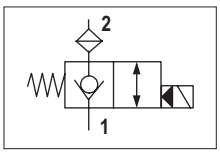
CRP - Normally open



CRP - Normally closed



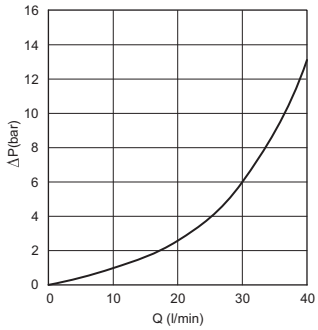
CRB - Normally open



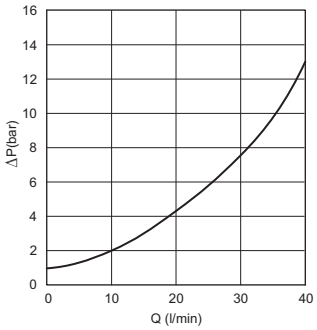
CRB - Normally closed

PRESSURE DROPS

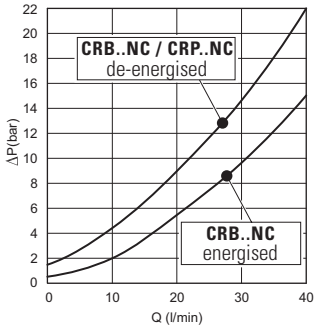
CRB..NA (1 → 2 2 → 1)
CRP..NA (2 → 1)



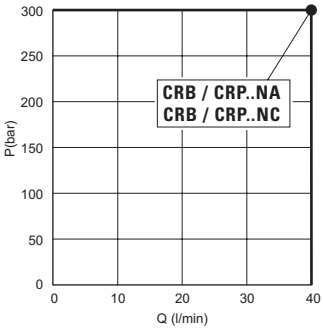
CRB..NC (2 → 1)
CRP..NC (2 → 1)



CRB..NC (1 → 2)
CRP..NC (1 → 2)



LIMITS OF USE



The tests were carried out with the solenoids at operating temperature, with a supply voltage 10% below nominal value and with a 40°C fluid temperature. The fluid used is a mineral oil with viscosity of 46 mm²/s at 40°C.

8

ORDERING CODE

CR*	04	18	**	*	*	*	**	*

CRB = Piloted solenoid valve bidirectional
CRP = Piloted solenoid valve unidirectional
(Series)

04 = 3/4 - 16 UNF
(Size)

18 = 18W dc (NA-NC) - C30
(Coil)

NA = Normally open (solo con bobine DC o RAC)
NC = Normally closed
(Version)

A = Standard - Ø 12.7 mm
B = With reduction - Ø 15.9 mm
(Seat size)

S = Without emergency (NC)
E = With emergency (NA-NC)
(Version)

1 = **CRB** - Serial No.
3 = **CRP** - Serial No.

Variants

00 = No variants
P4 = Push button Emergency with removable protection (..NA)
P3 = Rotary Emergency (..NA)
E9 = Push button Emergency direct control (..NA)
SF = Without cartridge filter
FK = With flying leads 600 mm (*1*)
CX = Deutsch connection with bidirectional diode (*2*)

Connector to be ordered separately, see sect. 20

Voltage

DC 18W (C30)	AC 18W (C30) (*7*)
L = 12 VDC	**A** = 24 VAC 50 Hz
M = 24 VDC	**J** = 115 VAC 50 Hz
N = 48 VDC	**I** = 230 VAC 50 Hz
2 = 21.6 VDC RAC (*3*)	**F** = 24 VAC 60 Hz
Z = 102 VDC RAC (*4*)	**C** = 110 VAC 60 Hz
X = 205 VDC RAC (*5*)	**D** = 220 VAC 60 Hz
W = Without coil (*6*)	**K** = Without coil (*6-8*)

Coils technical data, see sect. 19

(*1*) Only voltages 12 VDC - 24 VDC
(*2*) Only voltages 12 VDC - 24 VDC
(*3*) With rectifier: 24 VAC/50-60Hz
(*4*) With rectifier: 115 VAC/50Hz - 120VAC/60Hz
(*5*) With rectifier: 230 VAC/50Hz - 240VAC/60Hz
(*6*) Performance are guaranteed only using valves completed with BFP coil
(*7*) Only for NC valves
(*8*) Tested for working in AC and DC