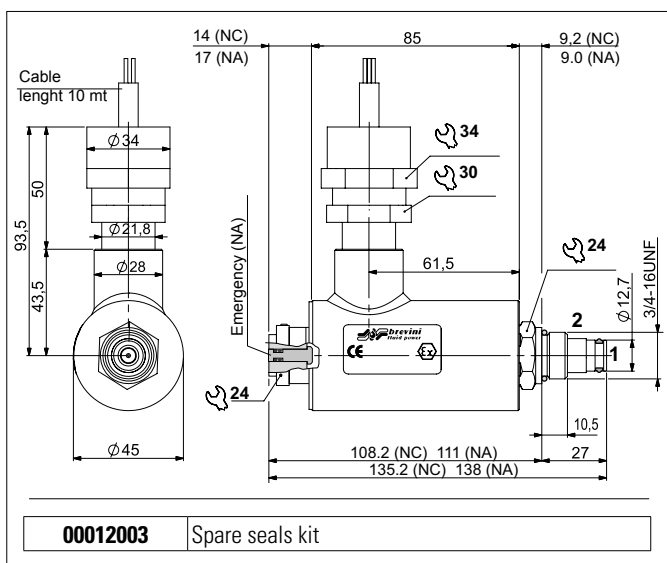


VALVES IN ACCORDANCE WITH ATEX 94/9/CE DIRECTIVE



The CRP04X series of valves are electrically-controlled, 2-way / 2-position directional valves, available in 12V and 24V versions.

The "2" to "1" seal is guaranteed by a tapered shutter.

Available in normally open (NA) or normally closed (NC) versions.

- NA, free passage (from "2" to "1") with de-energised coil
- NC, free passage (from "2" to "1") with energised coil or "1" to "2" with de-energised coil

The valves work with the coils in DC.

These coils have separate certification marking II 2 GD Ex d IIC T6/T85°C. The coils are supplied with a three-pole lead whose wires have a section of at least 1.5 mm², length 10 mt.

Operating intermittence: ED100% if the room temperature does not exceed 40 °C. Degree of protection: IP67 according to EN 60529.

Supply voltage: must not exceed +5% / -10% of the nominal value. The sleeves are made of steel with galvanised surface protection (NC) or burnishing and nichel-plating (NA).

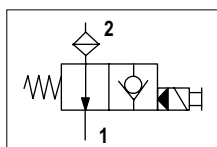
The CRP04X series of valves are Group II equipment, for use in areas classed for the presence of gas (category 2 G) and combustible dust (category 2 D). They are designed and manufactured according to the ATEX 94/9/EC directive, according to European standards: EN 1127-1, EN 13463-1, EN 13463-5.

The fluids used are hydraulic fluids for oil-pressure applications, such as: mineral oils, water-glycol solutions, biocompatible oils, etc.. whose viscosity ranges between 10 and 500 mm² / s.

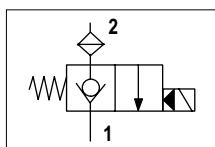
The coil used for the CRP04X series is certified for a room temperature range of -20 °C / + 40 °C; it is used with fluid temperatures up to +40 °C.

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HYDRAULIC SYMBOLS

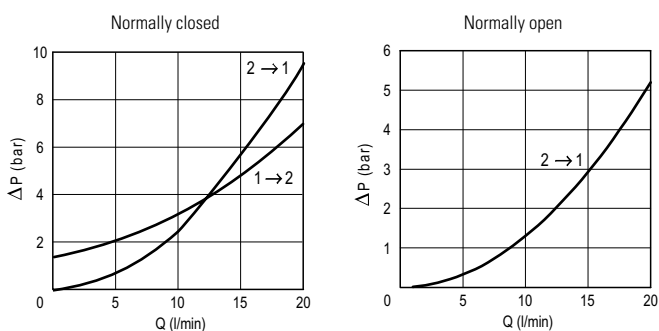


Normally open



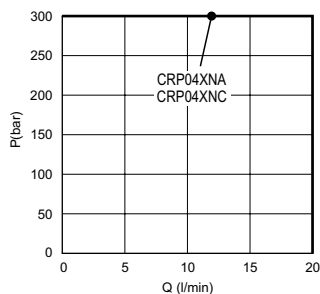
Normally closed

PRESSURE DROPS



1 → 2 Only with coil not energised

LIMITS OF USE



FEATURES

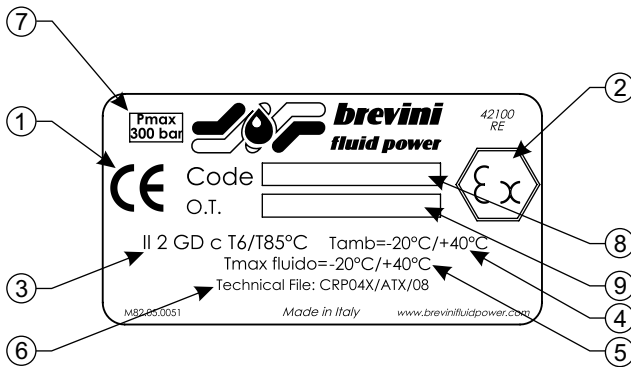
Max. pressure	300 bar
Max. Flow	20 l/min
Max. Leakage (0 ÷ 10 drops/min)	0 ÷ 0.5 cm ³ /min
Max. excitation frequency	2 Hz
Duty cycle	100% ED
Hydraulic fluids	DIN 51524 Mineral oils
Fluid viscosity	10 ÷ 500 mm ² /s
Fluid temperature	-20 ÷ +40 °C
Ambient temperature	-20 ÷ +40 °C
Max. contamin. level class with filter	ISO 4406:1999 - class 19/17/14
Cartridge filter	280µm
Coil power	7 W
Supply tolerance	-5 ÷ +10 %
Type of protection (in relation to the connection used)	IP67
Weight (with coil)	1.29 kg
Cartridge tightening torque	25 ÷ 30 Nm (2.5 ÷ 3 kgm)
Coil ring nut tightening torque	6 Nm (0.6 kgm)
Cavity (3/4 - 16 UNF)	CD018006



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.

REGISTERED MARK AND IDENTIFICATION PLATE

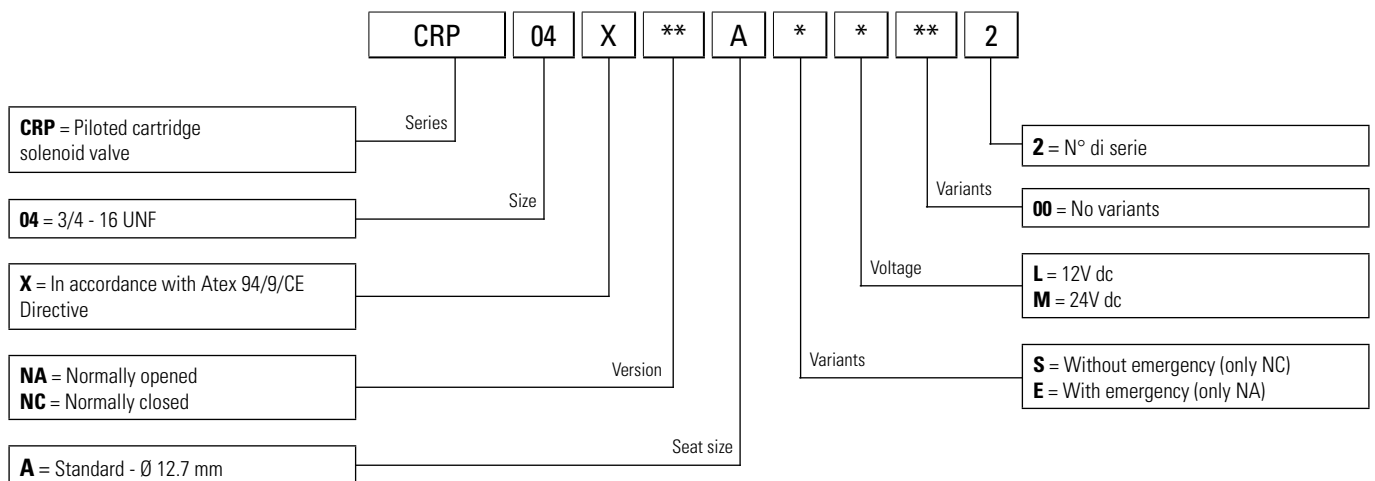
Every moduls are supply with its "Identification Plate" and with the "Declaration of Conformity" in accordance with the 94/4/CE Atex Directive.

The identification plate shows the most important technical performance and constructive specifications so it has to be always integral and visible.



1		In accordance with Europe Directive
2		In accordance with Atex 94/9/CE Directive
3	II 2 GD c T6/T85°C	Explosive atmosphere which is comprised of gas, vapours or mist
4	Tamb = -20°C ÷ +40°C	Operating ambient temperature
5	Tmax fluido = -20°C ÷ +40°C	Operating fluid temperature
6	CRP04X/ATX/08	Reference of the Technical issue put down at the Notifying Body
7	P max = 300 bar	Max. operating pressure
8	Code	Orediering code (10 characters printed)
9	O.T.	Technical ordering code (printed)

ORDERING CODE



SAFETY INSTRUCTIONS

Carefully read everything reported in the instruction sheet attached to the valves, before installation. All maintenance operations must be performed according to the manual.

The CRP04X series valves must be installed and maintained in compliance with plant and maintenance regulations for environments classified against the risk of explosion because of presence of gas (for example: EN 60079-14, EN 60079-17 or other national regulations/standards).

The valves must be connected to earth using the special anti-loosening and anti-rotation connection element.

For all safety aspects tied to the use of the coil see the relative use and maintenance instructions. The electrical appliances/components must not be opened when live.

The user must periodically control, depending on the conditions of use and the substances used, the presence of deposits, cleaning, wear and correct functioning of the valves.

All installation and maintenance interventions must be performed by qualified staff.

INSTRUCTIONS FOR A CORRECT INSTALLATION

Carry out wiring of the solenoids according to the user instructions of the relative coils (a copy is always supplied with each solenoid).

- The valves must be connected to earth using the special anti-loosening and anti-

rotation connection element.

- When mounting the valve onto the base (manifold) ensure not to damage the OR sealing rings on the surface.
- For the aspects tied to the installation of the solenoids, see the relative safety instructions. The electrical components must not be opened when live.
- If it is necessary to loosen the ring nuts on the external ends of the coil to opportunely position the cable-holders, they must be tightened again to the respective tightening torques.

INSTRUCTIONS FOR A CORRECT USE AND MAINTENANCE

USE

- Respect functional limits indicated in the technical features section and those, where restrictive, indicated in the solenoid safety instructions.
- The oil used must be within the types envisioned by the manufacturer and its contamination level must be maintained within the indicated limits.

MAINTENANCE

- The user must periodically control, depending on the conditions of use and the substances used, the presence of deposits, cleaning, wear and correct functioning of the valves.
- If the OR sealing rings are damaged, only replace them with those specifically supplied by the manufacturer.