HYDAC	INTERNATIONAL
	2/2-way pressure relief valve CX CBV
<u>.</u>	Model code (also order example)CX CBV15120G1FE24V
	Designation CX CBV = pressure relief valve
	Nominal size 15 = DN 15
CX CBV-E	Pressure range 120 = 5 - 120 bar
	Connection G1 = female threaded connection G1"
CX CBV-P	Seal F = FPM (Viton)
	E = electrical control with proportional control valve   P = smooth manual control with pilot valve to reduce pressure   H = smooth manual control of pressure
	Supply voltage 24 V = 24 V DC (not for CX CBV – H)

#### CX CBV-H

If order details or application data are inaccurate or incomplete, there is a risk that the technical configuration of the valves may not be correct for the desired use. This may result in the physical and/or chemical characteristics of the materials or seals used not being adequate for the intended use.

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## Design

Essentially this valve consists of a valve body with integrated valve seat, and a hardened and ground closing cone. The pre-set force is produced by a spring and a pressurized piston. On the coaxial type, the inlet and outlet are in line.

## **Functional description**

The compressed air with the spring produces a pre-charge force on the closing cone and this is pressed onto the valve seat. Hydraulic compressive force is exerted on the opposite side of the closing cone. If this is below the pre-set pre-load force, the valve is closed. If the hydraulic compressive force exceeds the pre-set pre-load force, then the closing cone is lifted away from the valve seat and operating fluid flows from pressure port P to tank port T. This has the effect of limiting the pressure at port P. The hydraulic energy used is converted to heat and the operating fluid is drained to tank.

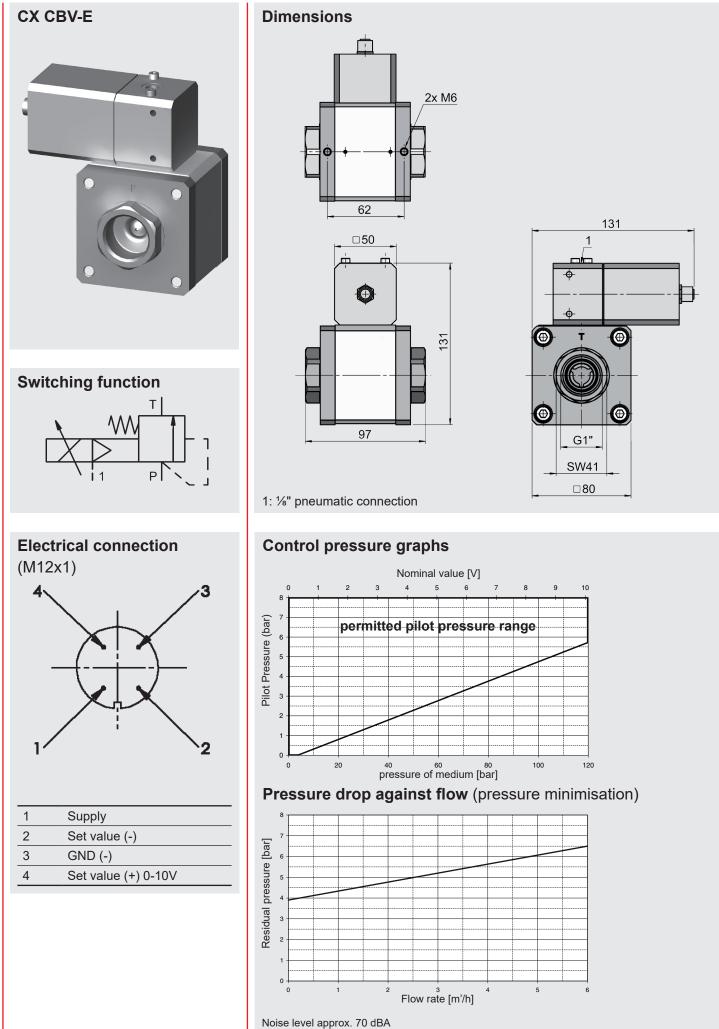
## **Technical specifications**

Model	E: Smooth electrical control of pressure
	P: Smooth manual control of pressure with a pilot valve for unpressurised flow
	H: Smooth manual control of pressure
Media	fluid – contaminated (50µ)
Nominal size	DN 15
Pressure range	5 – 120 bar
Flow rate	max. 6 m³/h
Body material	Steel, zinc-plated
Seal material	FKM
Temperature of fluid	0 °C to +60 °C
Ambient temperature	0 °C to +50 °C
Connection	Female threaded connection G1"
Electrical connection	E: M12x1 connector (LED indicator)
	P: DIN EN 175301-803 socket optional: M12 x 1 coil with LED
Supply voltage	E: 24 V DC (max. residual ripple 10 %)
	P: 24 V DC, 230 V AC, special voltages
Voltage tolerance	E / P: ± 10 % to VDE 0580
Power consumption	E: 2.5 watts
	P: 230 V 50 Hz: 9.2 VA   24 V DC: 6 W
Duty cycle	E / P: 100 %
Protection class	E / P: IP 65 when fitted with connector
Mounting position	E: M12 connection preferably uppermost H / P: pressure gauge preferably uppermost
Control air	40 μ filtered, max. 8 bar

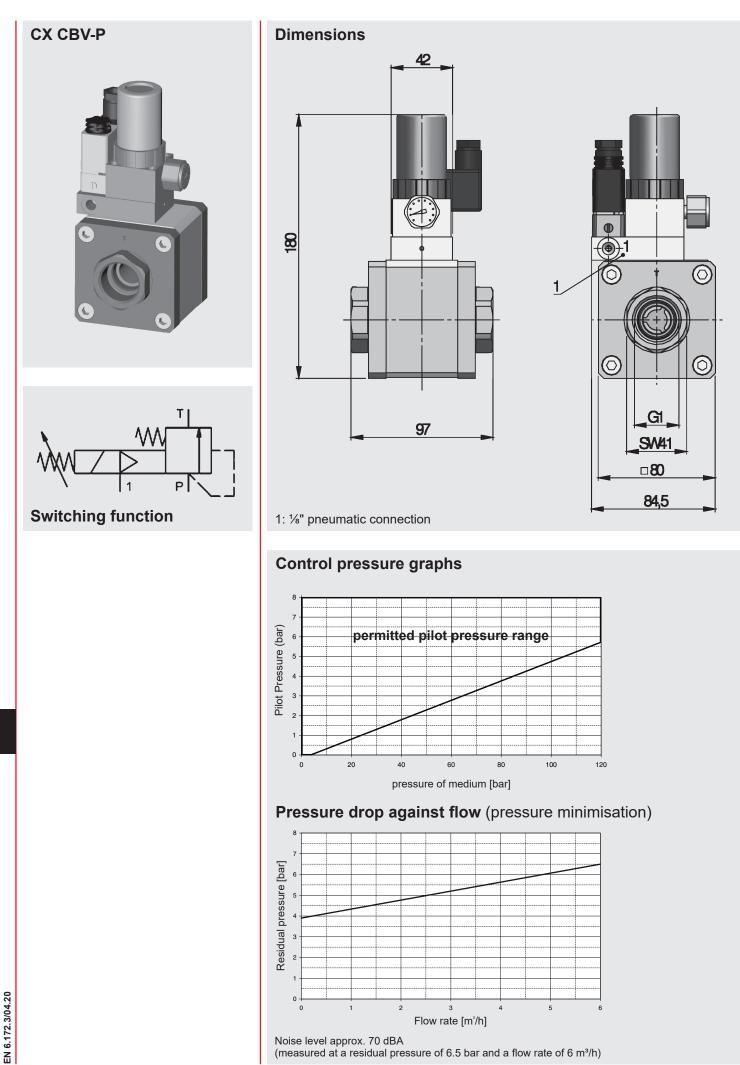
T-line should be connected without pressure to tank.

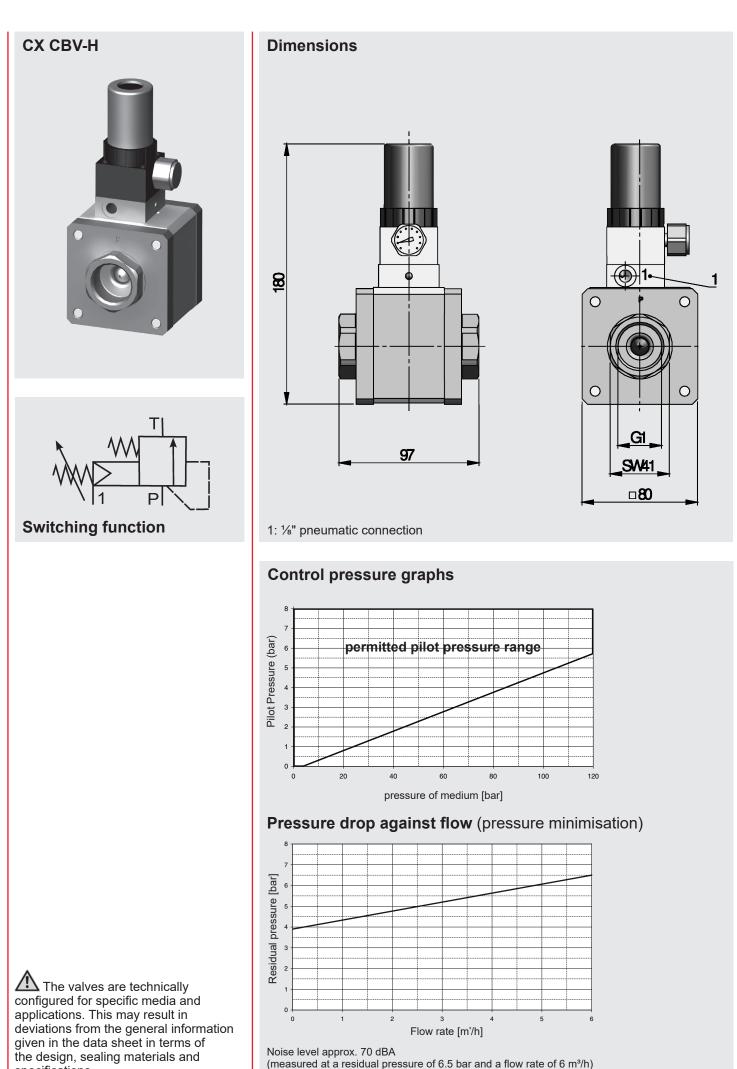
Further options and accessories available on request.

The material specifications refer exclusively to the valve connection parts in contact with the medium.



(measured at a residual pressure of 6.5 bar and a flow rate of 6  $m^3/h$ )





specifications.

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# NOTE

The information in this brochure relates to the operating conditions and applications described. For applications and operating conditions not described, please contact

the relevant technical department. The operator is always responsible for determ specific application. Quantified values for proceeding of the operator of the The operator is always responsible for determining the product suitability for the specific application. Quantified values for product characteristics are average values for a new product that undergo a time deterioration process.

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