

CR

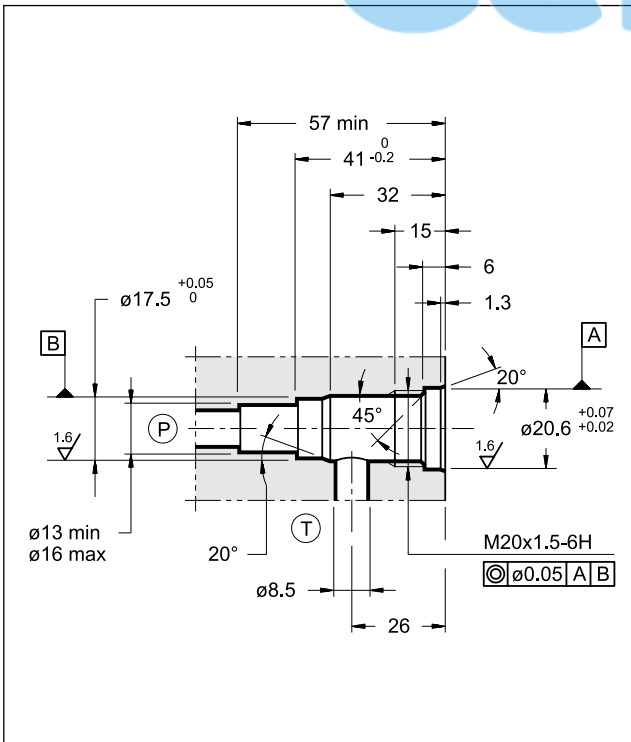
DIRECT OPERATED PRESSURE CONTROL VALVE SERIES 22



CARTRIDGE TYPE

p max 350 bar
Q max 50 l/min

SEAT DIMENSIONS: D-10B



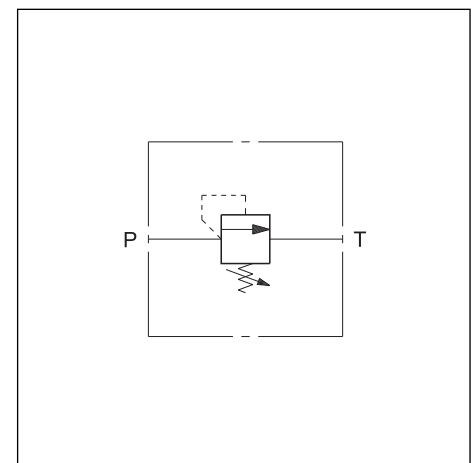
OPERATING PRINCIPLE

- The CR valve is a direct operated pressure control valve cartridge type that can be used in blocks or panels with type D-10B seat.
- It is normally used to control the maximum pressure in the hydraulic circuits or as a limiting device for pressure peaks generated during hydraulic actuator movement variation.
- It is available in five different pressure control ranges up to 350 bar.
- The circuit pressure acts on the shutter which is directly loaded by a spring on the opposite side. Once the set pressure is reached, the shutter opens, and discharges the excess flow in port T connected directly to the reservoir.
- The pressure can be adjusted by a screw, usually supplied as the countersunk hex type, equipped with locking nut and maximum adjustment limiter.

PERFORMANCES (measured with mineral oil of viscosity 36 cSt at 50°C)

Max working pressure	bar	350
Minimum controlled pressure and pressure drop	see diagram	
Maximum flow rate	l/min	50
Ambient temperature range	°C	-20 / +50
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 + 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass	kg	0,16
Surface treatment: electrolytic zinc covering	Fe // Zn 8 // B EN 12329	

HYDRAULIC SYMBOL





CR

SERIES 22

1 - IDENTIFICATION CODE

	C	R	/	22	/	
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Direct operated pressure control valve Cartridge type

Pressure adjustment range:

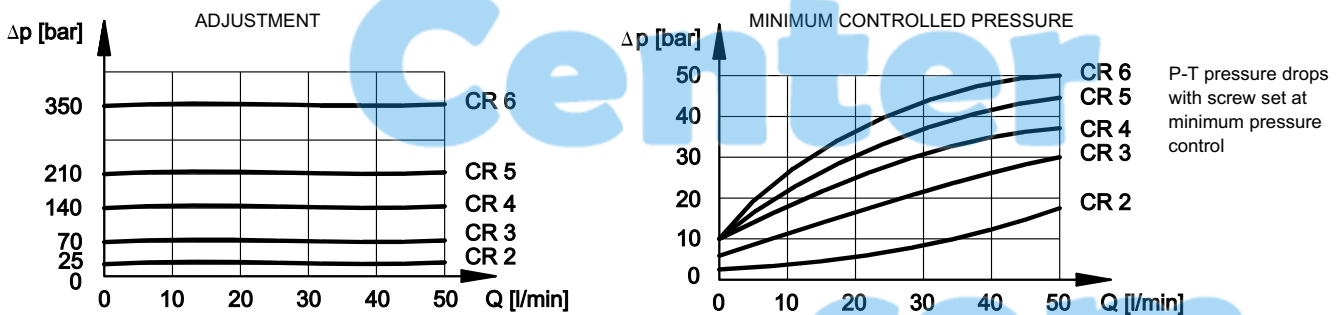
- 2 = up to 25 bar
- 3 = up to 70 bar
- 4 = up to 140 bar
- 5 = up to 210 bar
- 6 = up to 350 bar

K = Adjustment knob (omit for adjustment with countersunk hex screw - **standard**)

Seals:
N = NBR seals for mineral oils (**standard**)
V = FPM seals for special fluids

Series No. (the overall and mounting dimensions remain unchanged from 20 to 29)

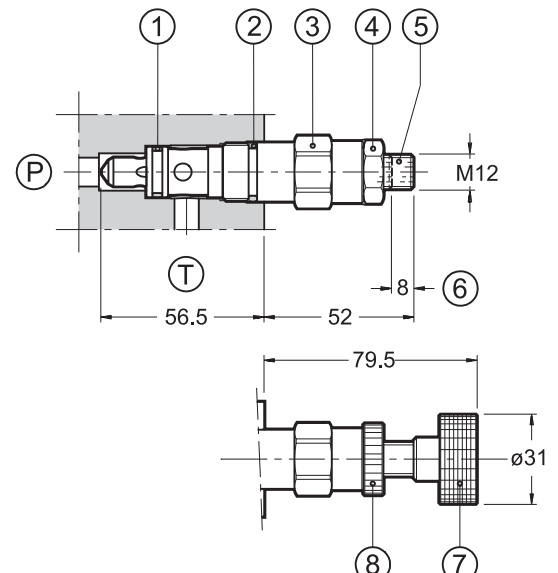
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)



3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code N). For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics. The fluid must be preserved in its physical and chemical characteristics.

4 - OVERALL AND MOUNTING DIMENSIONS



dimensions in mm

1	OR tipo 2056 (14.00x1.78) 90 Shore
2	OR tipo 3062 (15.54x2.62) 90 Shore
3	Hexagonal: spanner 22 Tightening torque 45 ± 50 Nm
4	Locking nut: spanner 19
5	Countersunk hex adjustment screw: spanner 6 (standard) Clockwise rotation to increase pressure
6	Maximum screw stroke
7	Adjustment knob: K
8	Locking ring



DIPLOMATiC OLEODINAMiCA S.p.A.
 20015 PARABIAGO (MI) • Via M. Re Depaolini 24
 Tel. +39 0331.895.111
 Fax +39 0331.895.339
 www.diplomatic.com • e-mail: sales.exp@diplomatic.com