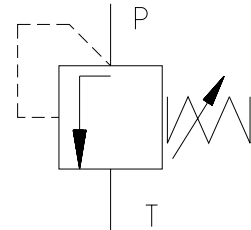


- Single-stage pressure relief valve
- Cartridge in threaded housing - with metric or BSP threads
- Cartridge in subplate mounted housing
- Four pressure adjustment options
- Six pressure ranges
- Subplates - see catalogue HA 0002



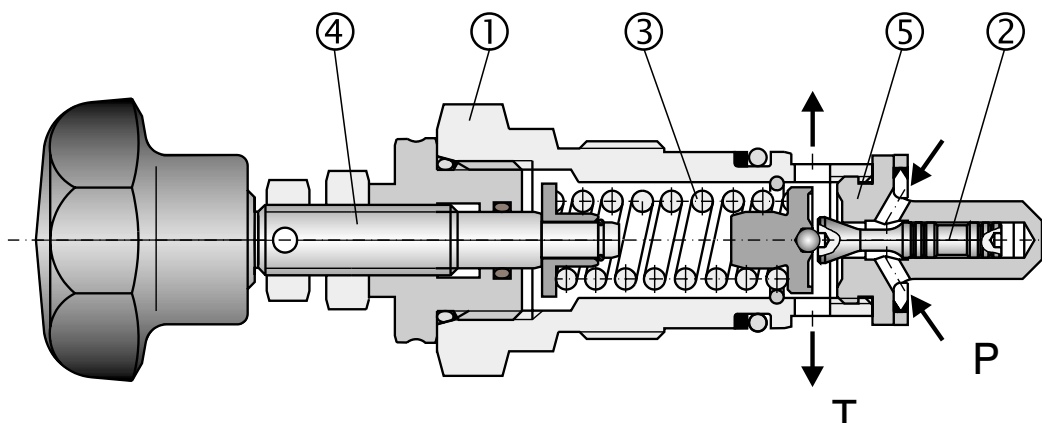
Functional Description

Pressure relief valves VPP2-06 were designed for applications requiring a safety valve or a pressure regulating valve working over a wide range of pressures and flow rates.

The valve basically consists of the valve body (1), poppet with damping spool (2) and compression spring (3). Pressure is manually set by an adjustment screw (4). The spring pushes the poppet into the seat (5) holding the valve in its normally closed position. When the force, caused by the pressure acting on the exposed surface

area of the poppet, exceeds the spring force, the valve opens and the flow passes from port P to port T.

To optimize the valve performance, five pressure ranges are available. Choosing the closest range is recommended. The design enables the valve to be used as a screw-in cartridge for manifold mounting, built into a threaded housing or in a subplate mounted housing. Both the threaded and the subplate mounted housings can be delivered either with metric or pipe threads.



Ordering Code

VPP2-06 /

Direct operated relief pressure valves

Nominal size

Adjustment option

Hexagon set screw locknut 5 mm
Adjustable handknob
Lockable cylindrical handknob
ANon-lockable cylindrical handknob

S
R
O
Z

2.5
6.3
10
16
25
32

Pressure range

up to 25 bar
up to 63 bar
up to 100 bar
up to 160 bar
up to 250 bar
up to 320 bar

V
M
G
P

Model

screw-in cartridge valve
cartridge in threaded housing - with metric threads
cartridge in threaded housing - with BSP threads
cartridge in subplate mounted housing

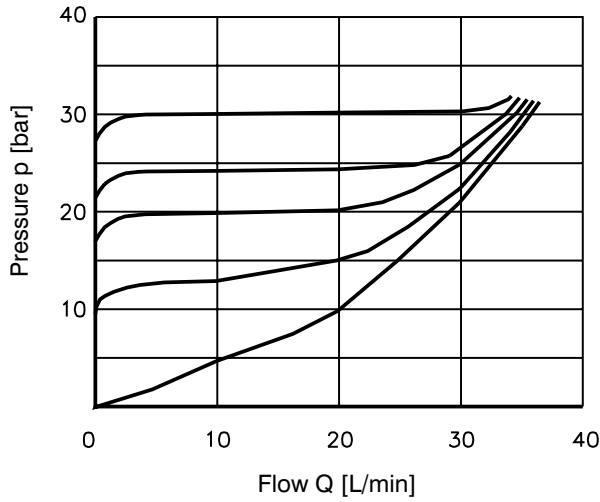
Technical Data

Nominal size	mm	06					
Maximal flow rate	L/min	50					
Maximum pressure	bar	25	63	100	160	250	320
Hydraulic fluid		Hydraulic oils of power classes HM, HV to CETOP - RP 91H in viscosity classes ISO VG 32, 46 and 68					
Fluid temperature range	°C	-30 ... +80					
Viscosity range	mm ² /s	20 ... 400					
Maximum degree of fluid contamination		Class 21/18/15 to ISO 4406 (1999).					
Weight	kg	0,4 1,5					
Mounting position		optional					

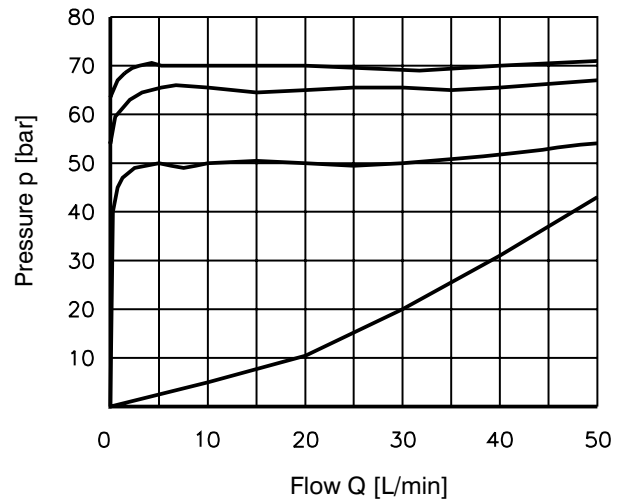
p-Q Characteristics

Measured at $v = 35 \text{ mm}^2/\text{s}$ and $t = 40 \text{ }^\circ\text{C}$

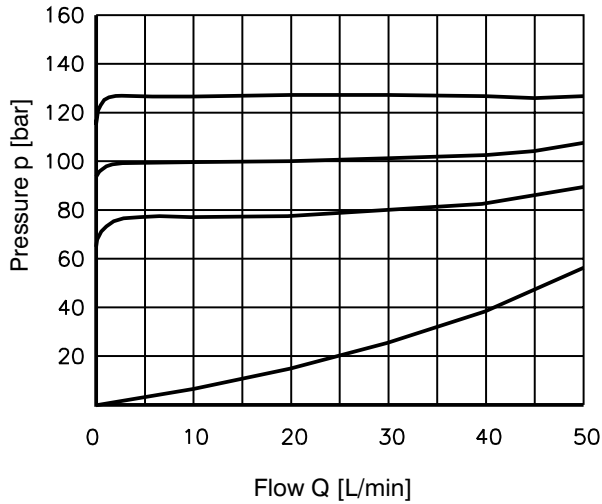
Pressure range 25 bar



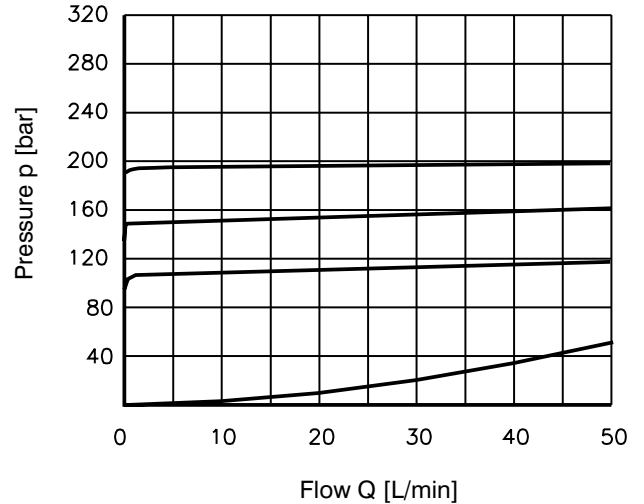
Pressure range 63 bar



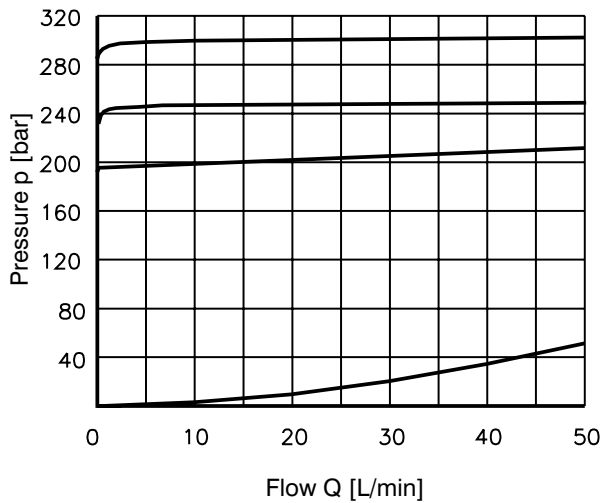
Pressure range 100 bar



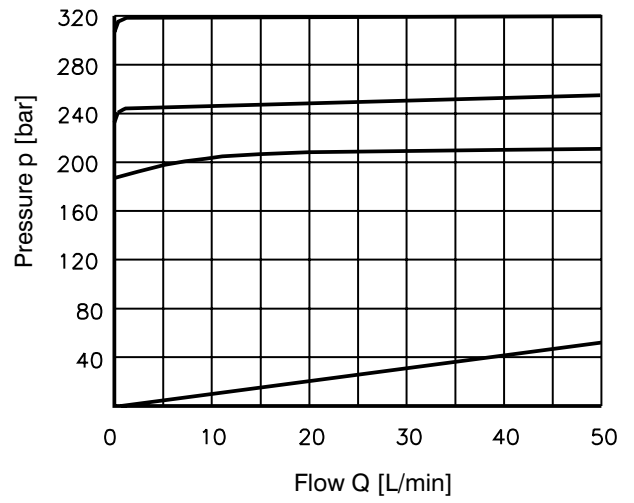
Pressure range 160 bar



Pressure range 250 bar



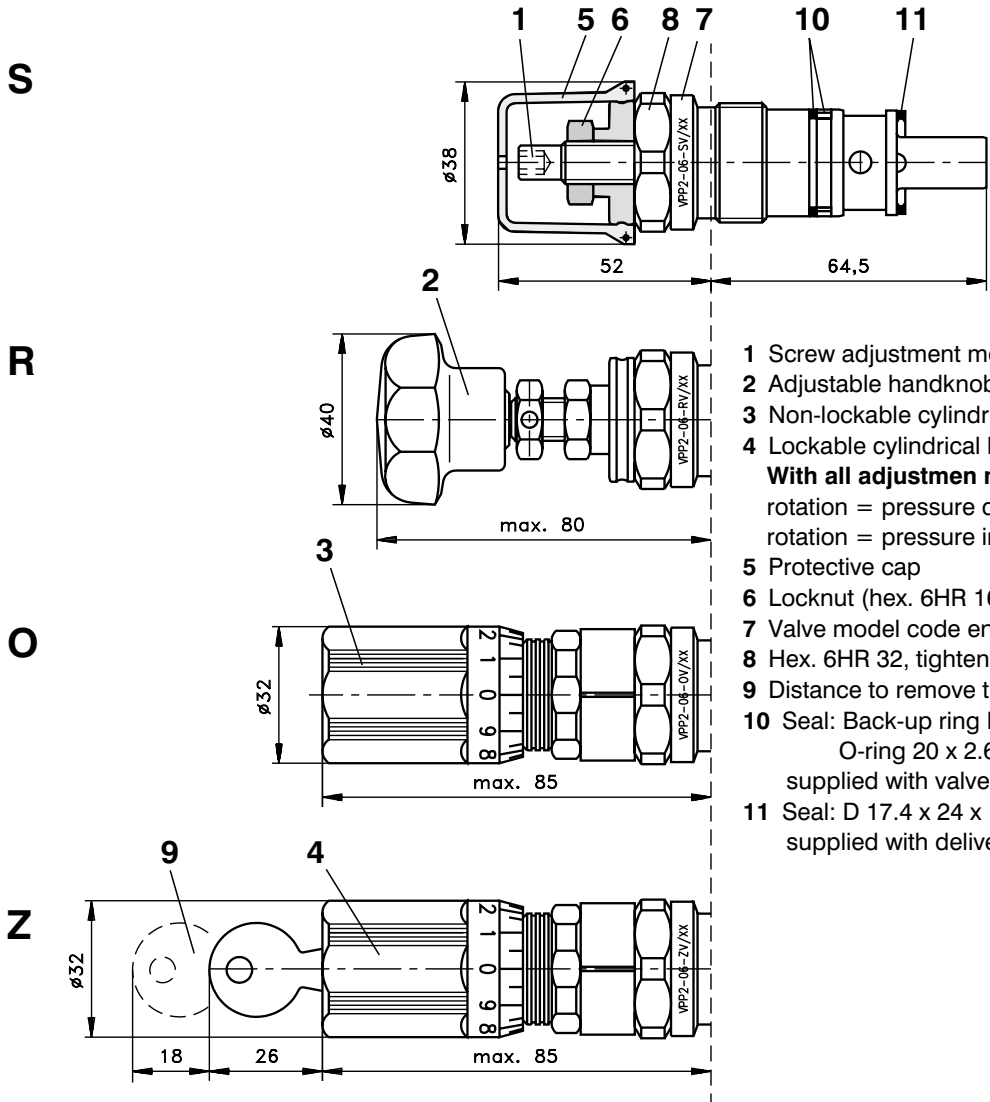
Pressure range 320 bar



Valve Dimensions

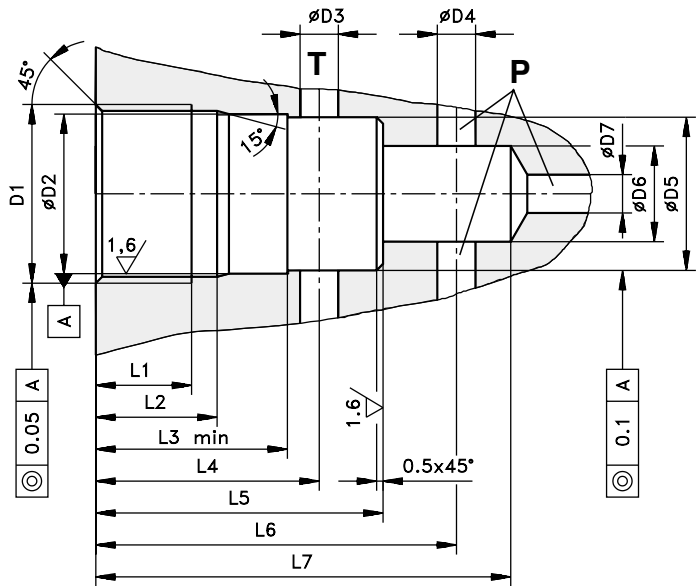
Dimensions in millimeters

Cartridge valve - model "V"



- 1 Screw adjustment model "S" (inside hex. 5 mm)
 - 2 Adjustable handknob model "R"
 - 3 Non-lockable cylindrical handknob model "O"
 - 4 Lockable cylindrical handknob model "Z"
- With all adjustmen mechanisms:**
 rotation = pressure decrease
 rotation = pressure increase
- 5 Protective cap
 - 6 Locknut (hex. 6HR 16)
 - 7 Valve model code engraved
 - 8 Hex. 6HR 32, tightening torque 80 Nm
 - 9 Distance to remove the key
 - 10 Seal: Back-up ring M8-116
O-ring 20 x 2.65 NBR70
supplied with valve
 - 11 Seal: D 17.4 x 24 x 1.5-NSA
supplied with delivery

Mounting Cavity

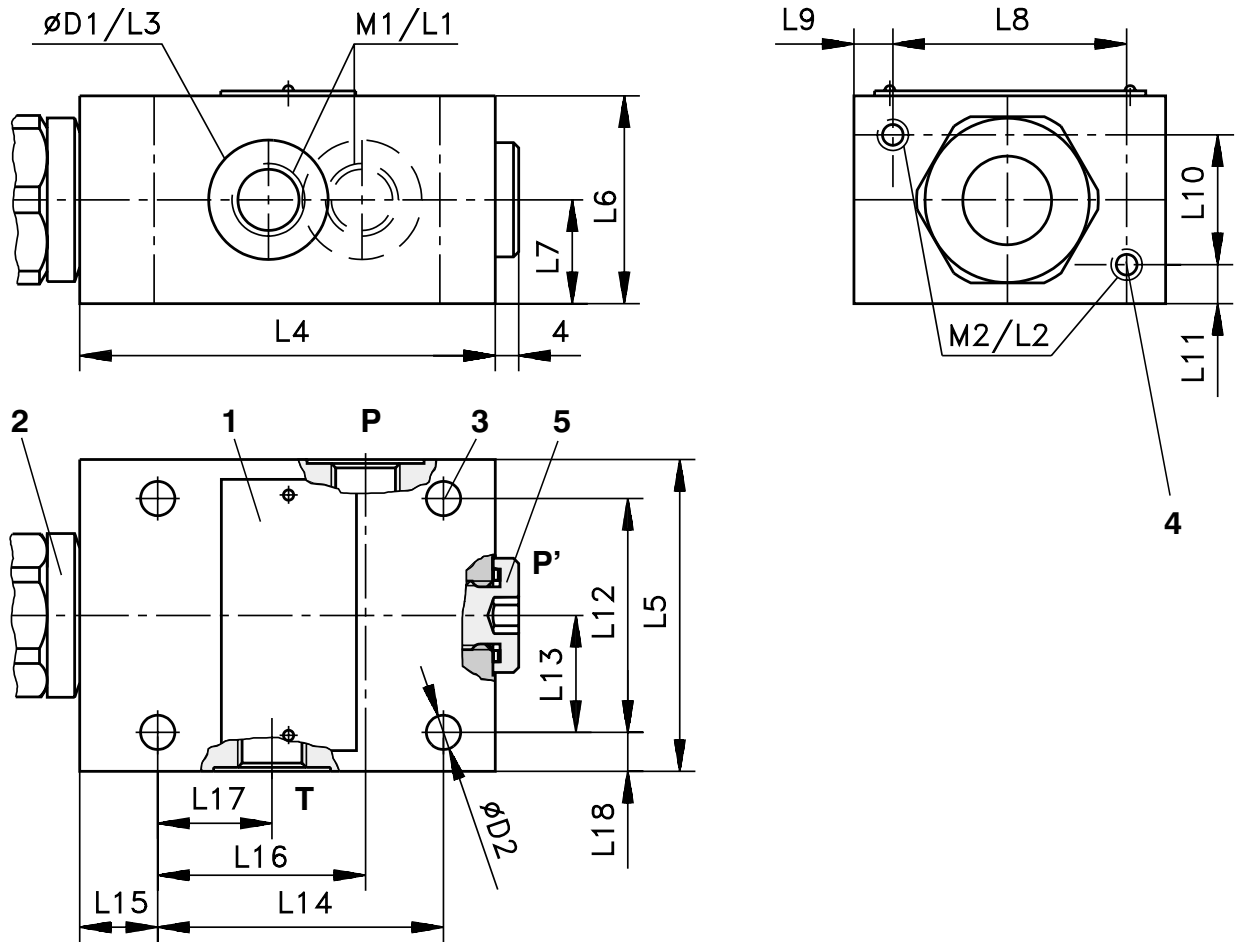


	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5	L6	L7
Size 06	M28x1.5	25 H9	6	6	24.9	15	6	15	19	32	35	45	56.5±5.5	65

Valve Dimensions

Dimensions in millimeters

Cartridge in threaded housing - models "M" and "G"



- 1 Name plate
- 2 Adjustment mechanism - see page 4
- 3 4 mounting through - holes
- 4 2 threaded holes (other mounting possibility)
- 5 Port P' (either P or P' can be used as input port), thread M1 / L1

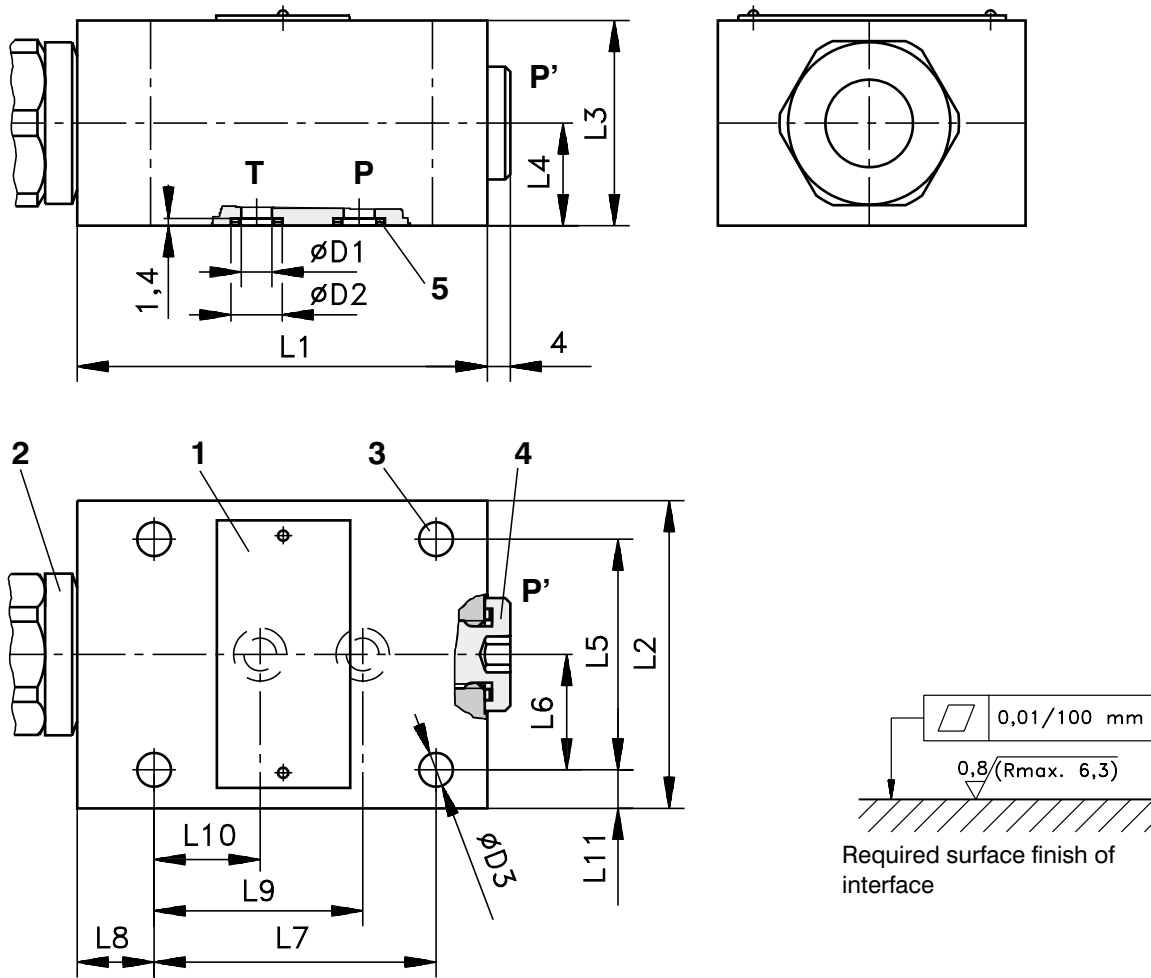
Model	M1	M2	D1	D2	L1	L2	L3	L4	L5	L6	L7
VPP2-06-xM/x	M14x1.5	M6	25	6.6	12	10	0.5	80	60	40	20
VPP2-06-xG/x	G1/4										

Model	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18
VPP2-06-xM/x	45	7.5	25	7.5	45	22.5	55	15	40	20	7.5
VPP2-06-xG/x											

Valve Dimensions

Dimensions in millimeters

Cartridge in subplate mountedhousing - model "P"



- 1 Name plate
- 2 Adjustment mechanism - see page 4
- 3 4 mounting through - holes
- 4 Port P' (e.g. for pressure measuring), thread M14 x 1.5 deep 12 mm
- 5 Square ring 7.65 x 1.68 (2 pcs.), supplied with delivery

Model	D1	D2	D3	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
VPP2-06-xP/x	6	10.8	6.6	80	60	40	20	45	22.5	55	15	40	20	7.5

Caution!

- The packing foil is recyclable.
- The protective plate can be returned to manufacturer.
- For model "P" is mounting bolts M6 x 50 DIN 912-10.9 are supplied with delivery. Tightening torque of the screws is 8.9 Nm.
- The technical information regarding the product presented in this catalogue is for descriptive purposes only. It should not be construed in any case as a guaranteed representation of the product properties in the sense of the law.

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