



# KT08

## CARTRIDGE SOLENOID VALVE

### SERIES 10

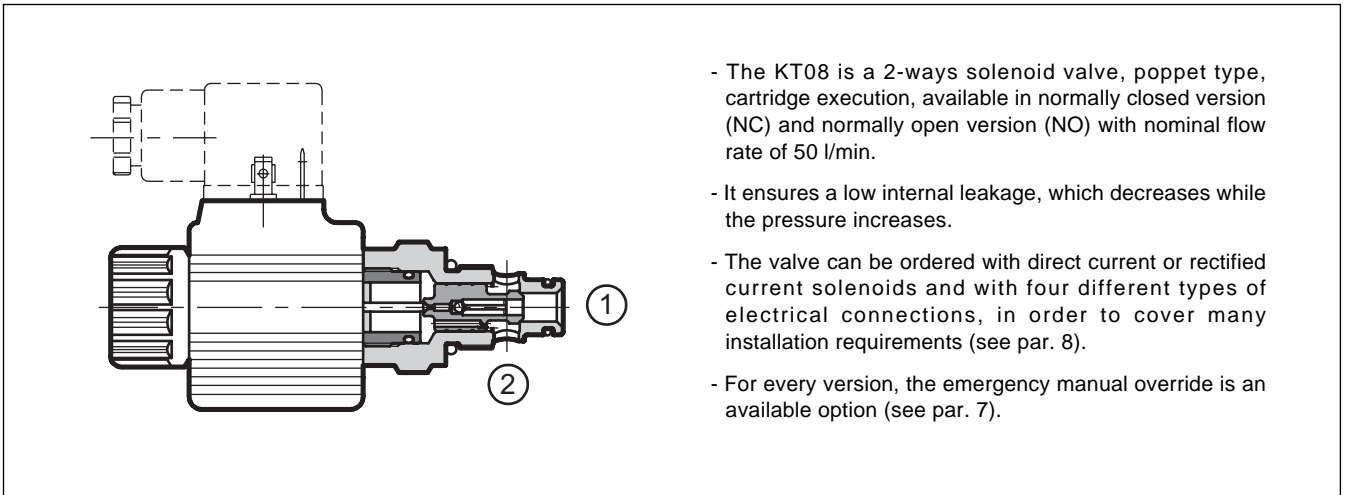
#### CARTRIDGE TYPE

seat 3/4-16 UNF-2B ISO 725

**p** max 350 bar

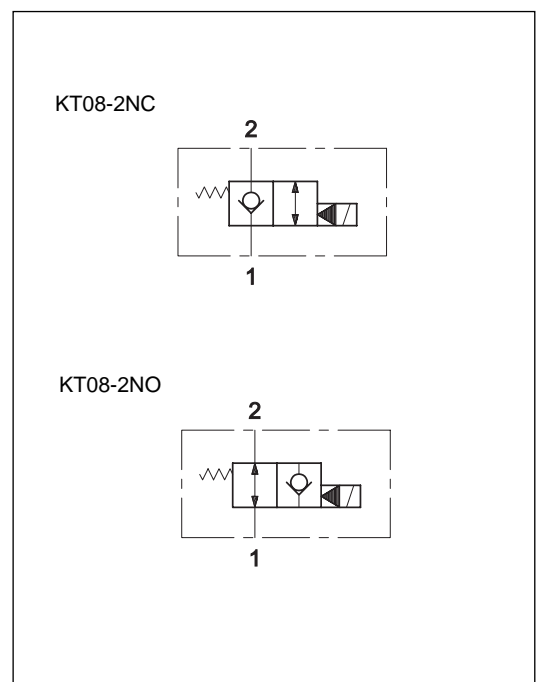
**Q** nom 50 l/min

#### OPERATING PRINCIPLE



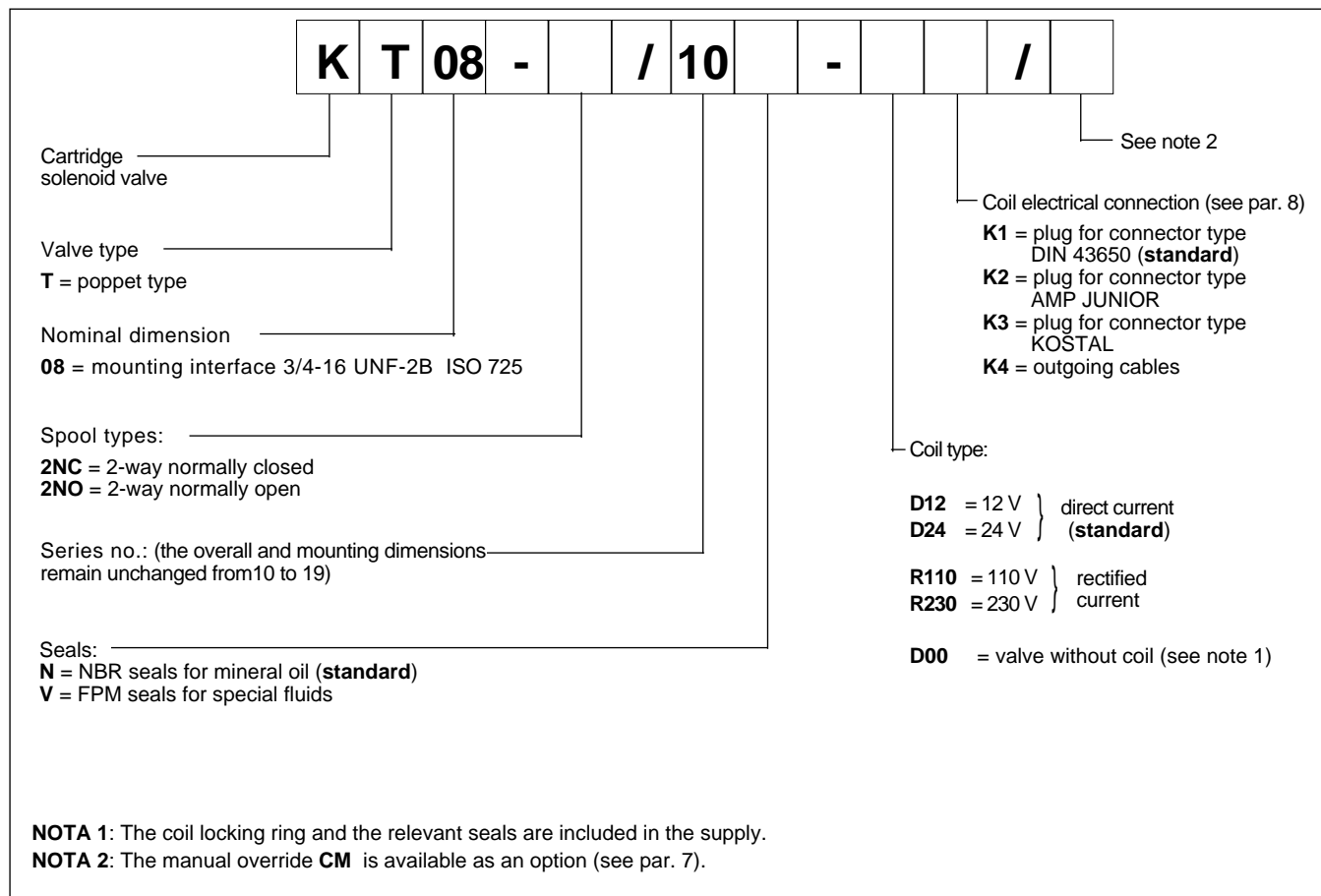
PERFORMANCE RATINGS (working with mineral oil of viscosity of 36 cSt at 50°C)		
Maximum operating pressure	bar	350
Nominal flow rate	l/min	50
Pressure drops $\Delta p-Q$	see par. 3	
Electrical characteristics	see par. 5	
Electrical connections	see par. 8	
Ambient temperature range	°C	-20 ÷ +50
Fluid temperature range	°C	-20 ÷ +80
Fluid viscosity range	cSt	10 ÷ 400
Recommended viscosity	cSt	25
Fluid contamination degree	according to NAS 1638 class 10	
Mass	kg	0,32
Surface treatment with white colour zinc	Fe / Zn 8c 1B UNI ISO 2081/4520	

#### HYDRAULIC SYMBOLS

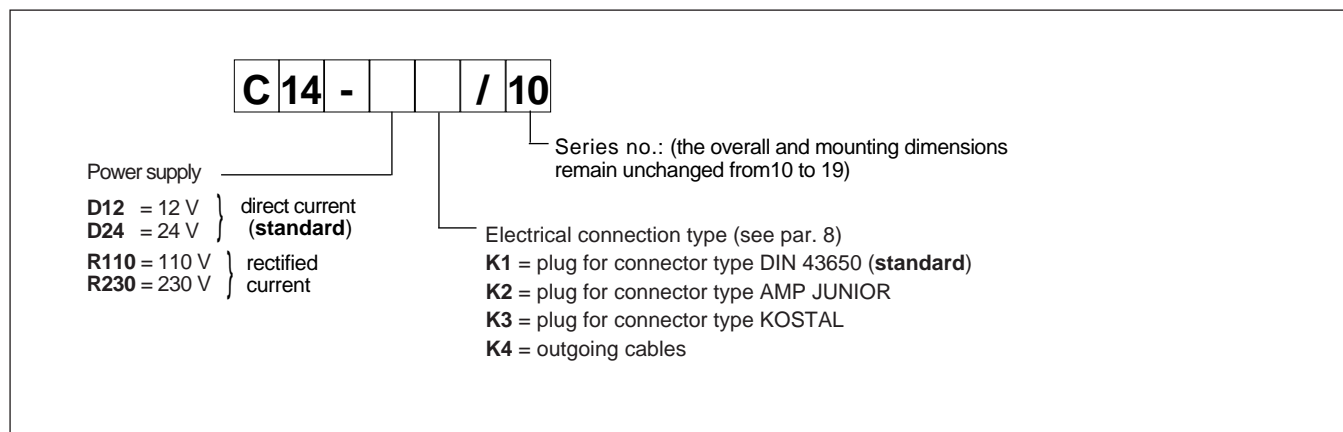




## 1 - IDENTIFICATION CODE



### 1.1 - COIL IDENTIFICATION CODE



## 2 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HLP type, according to ISO 6743/3.  
 For fluids HFD-R type (phosphate esters) use FPM seals (code V).  
 For the use of other fluid types such as HFA, HFB, HFC, please consult our technical department.

Using fluids at temperatures higher than 70°C causes a faster degradation of the fluid and of the seals characteristics.  
 The fluid must be preserved in its physical and chemical characteristics.

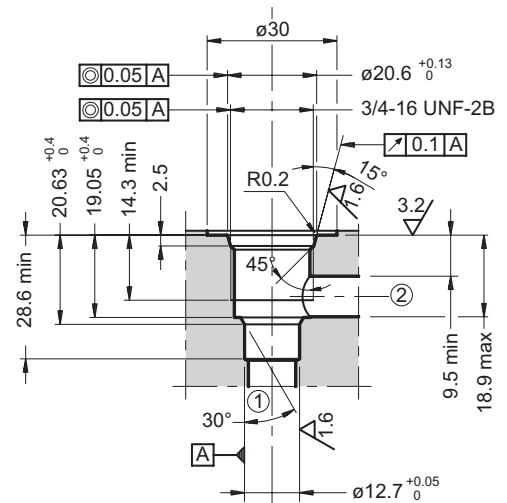
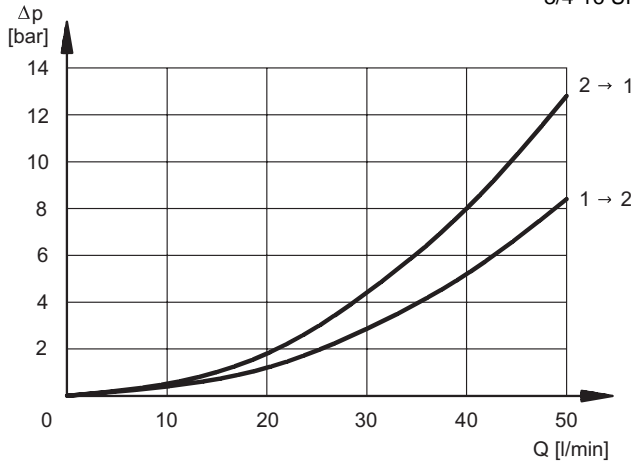


### 3 - PRESSURE DROPS $\Delta p$ -Q (obtained with viscosity of 36 cSt at 50 °C)

The values in graphs refer to both NC and NO valves and they differ for the mounting interface used.

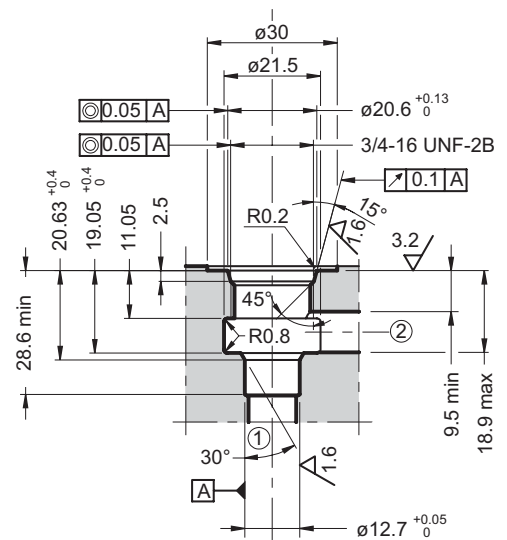
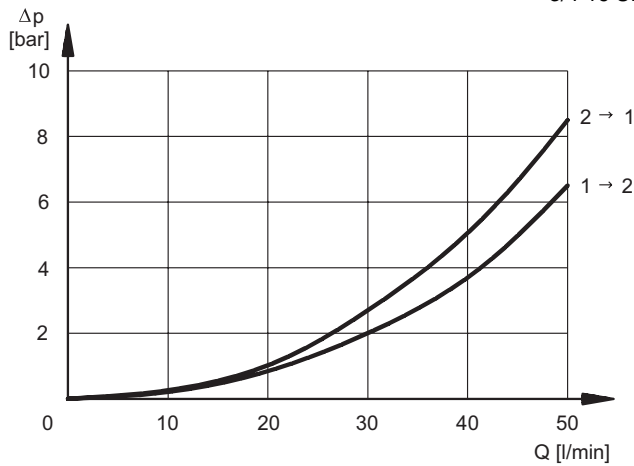
**standard mounting interface dimensions**  
3/4-16 UNF-2B ISO 725

dimensions in mm



**oversize mounting interface dimensions**  
3/4-16 UNF-2B ISO 725

dimensions in mm



### 4 - SWITCHING TIMES

The values indicated refer to a valve tested with Q=25 l/min, p=350 bar, working with mineral oil at a temperature of 50°C and a viscosity of 36 cSt.

	TIMES (±10%)	
	ENERGIZING	DE-ENERGIZING
KT08-2NC	60 ms	85 ms
KT08-2NO	85 ms	60 ms



## 5 - ELECTRICAL FEATURES

### 5.1 Solenoids

These are essentially made up of two parts: tube and coil. The tube is threaded onto the valve body and includes the armature that moves immersed in oil, without wear. The inner part, in contact with the oil in the return line, ensures heat dissipation.

The coil is fastened to the tube by a threaded nut, and can be rotated according to the available space.

The interchangeability of coils of different voltages both D or R type is possible without removing the tube.

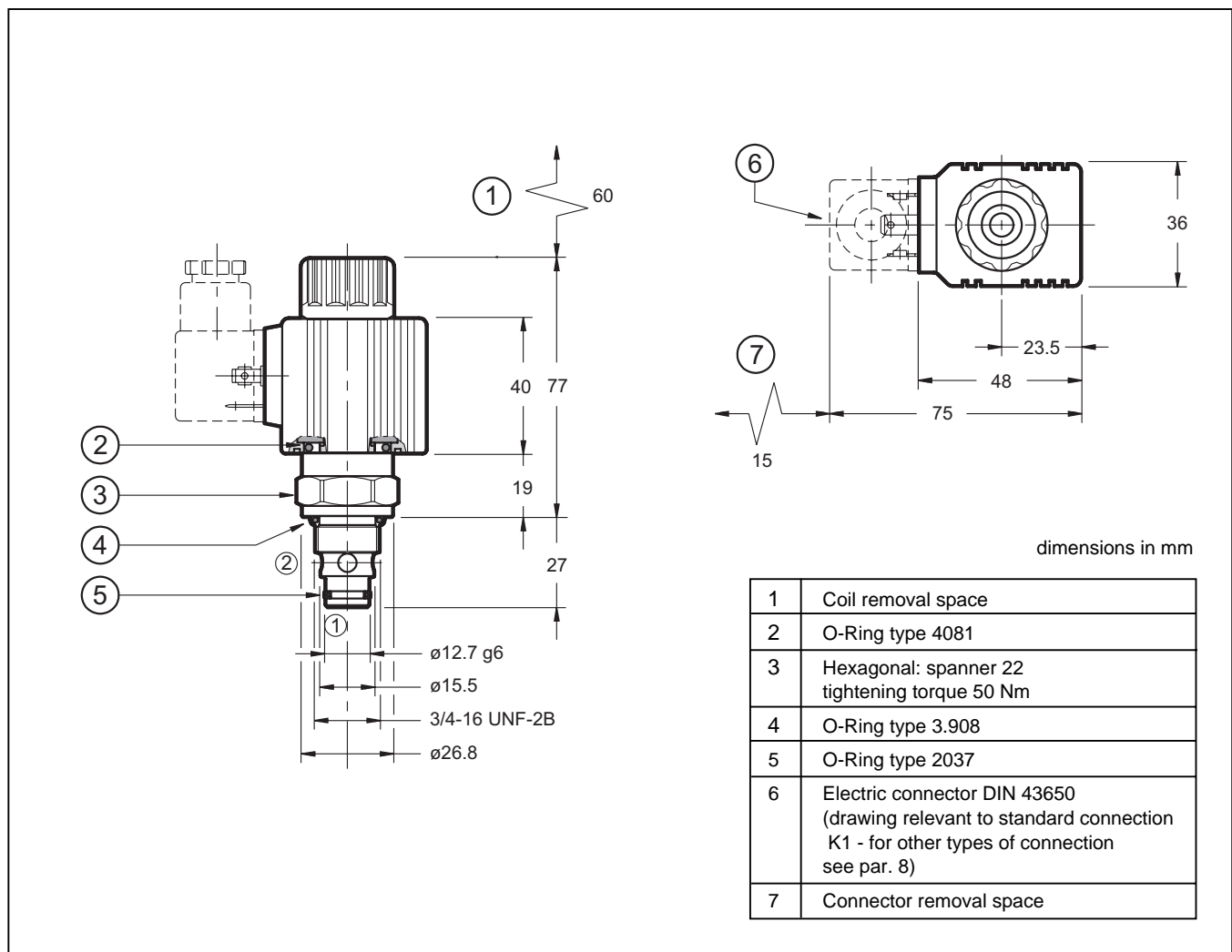
### 5.2 Current and absorbed power

In the table are shown current and power consumption values relevant to the different coil types. "R" coil must be used when the valve is fed with AC power supply subsequently rectified by means of rectifier bridge, externally or incorporated in the "D" type connector (see cat. 49 000).

<b>VOLTAGE SUPPLY FLUCTUATION</b>	± 10% Vnom	
<b>MAX SWITCH ON FREQUENCY</b>	10.000 ins/hr	
<b>DUTY CYCLE</b>	100%	
<b>ELECTROMAGNETIC COMPATIBILITY (EMC)</b>	in compliance with 89/336 CEE	
<b>EMISSIONS</b>	EN 50081-1	
<b>IMMUNITY</b>	EN 50082-2	
<b>LOW VOLTAGE</b>	in compliance with 73/23/CEE 96/68/CEE	
Class of protection according to IEC 144 Atmospheric agents Coil insulation Impregnation	IP 65 class H class H	

Coil type	Resistance at 20°C [Ω] ± 1%	Absorbed current A (± 5%)	Power (± 5%)	
			W	VA
C14-D12*	5,4	2,2	26,5	
C14-D24*	20,7	1,16	27,8	
C14-R110*	363	0,25		27,2
C14-R230*	1640	0,11		26,4

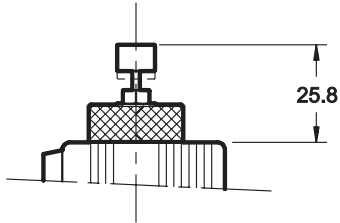
## 6 - OVERALL AND MOUNTING DIMENSIONS



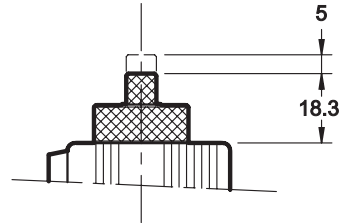


## 7 - MANUAL OVERRIDE

CM for NO version (pushing type)

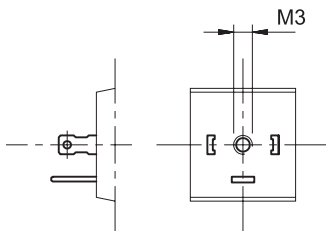


CM for NC version (screw type)

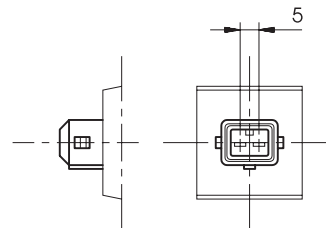


## 8 - ELECTRIC CONNECTIONS

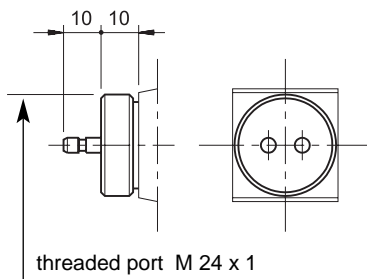
connection for DIN 43650 connector  
code **K1 (standard)**



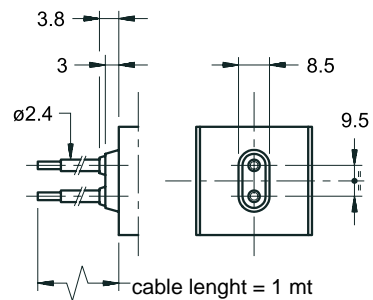
connection for AMP JUNIOR connector  
code **K2**



connection for KOSTAL connector  
code **K3**



outgoing cables connection  
codice **K4**



## 9 - ELECTRIC CONNECTORS

The solenoid valves are supplied without connectors.

For coils with standard electrical connections K1 type (DIN 43650) the connectors can be ordered separately.

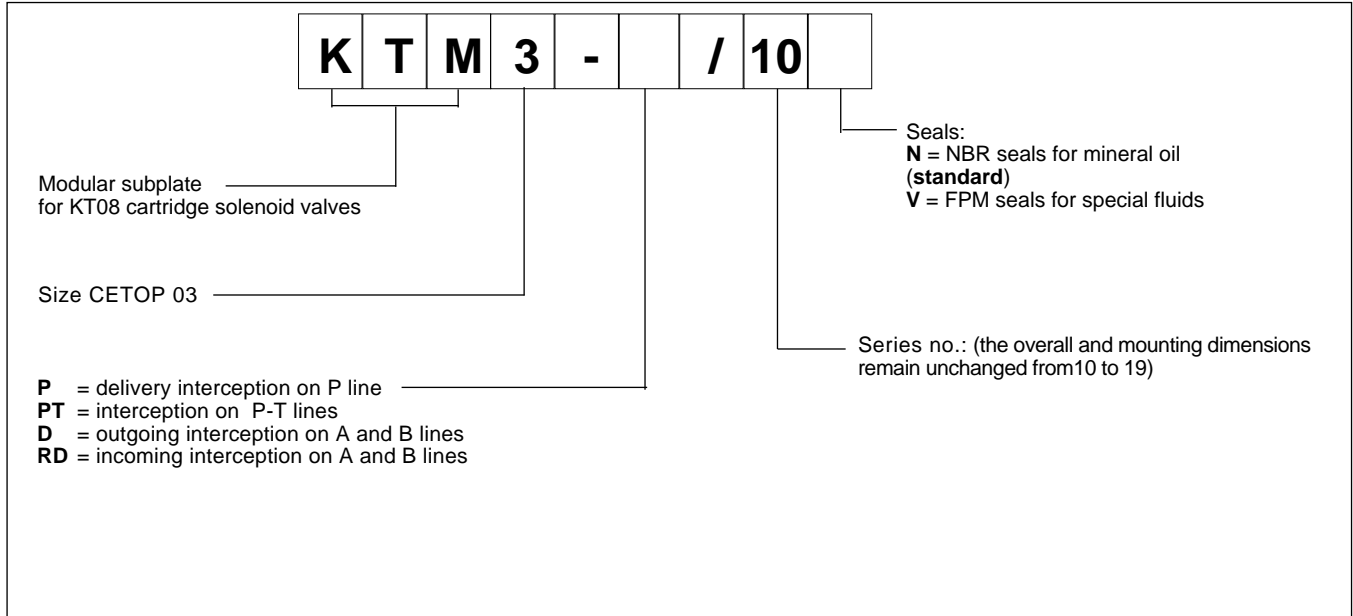
For the identification of the connector type to be ordered please see cat. 49 000.

For K2 and K3 connection type the relative connectors are not available.

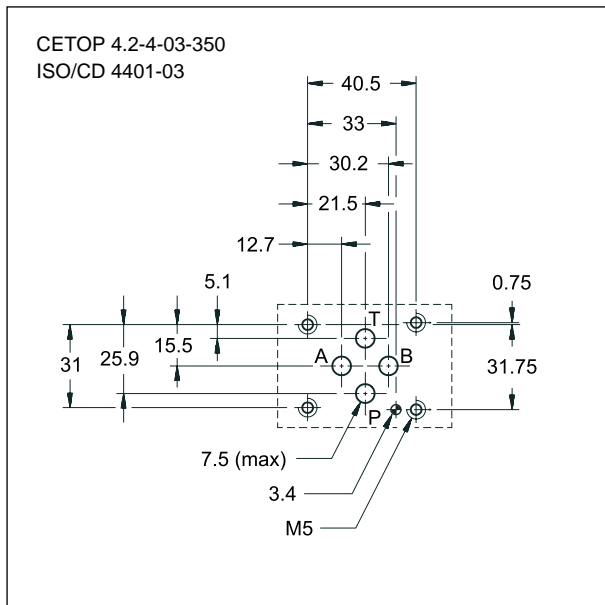


## 10 - SUBPLATES FOR MODULAR MOUNTING

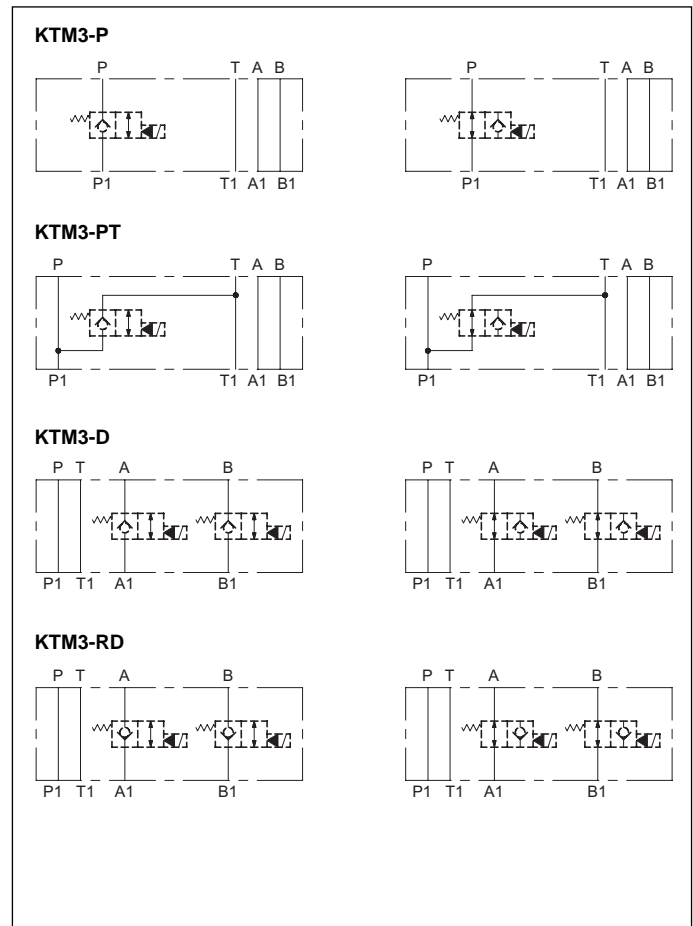
### 10.1 - Identification code



### MOUNTING INTERFACE

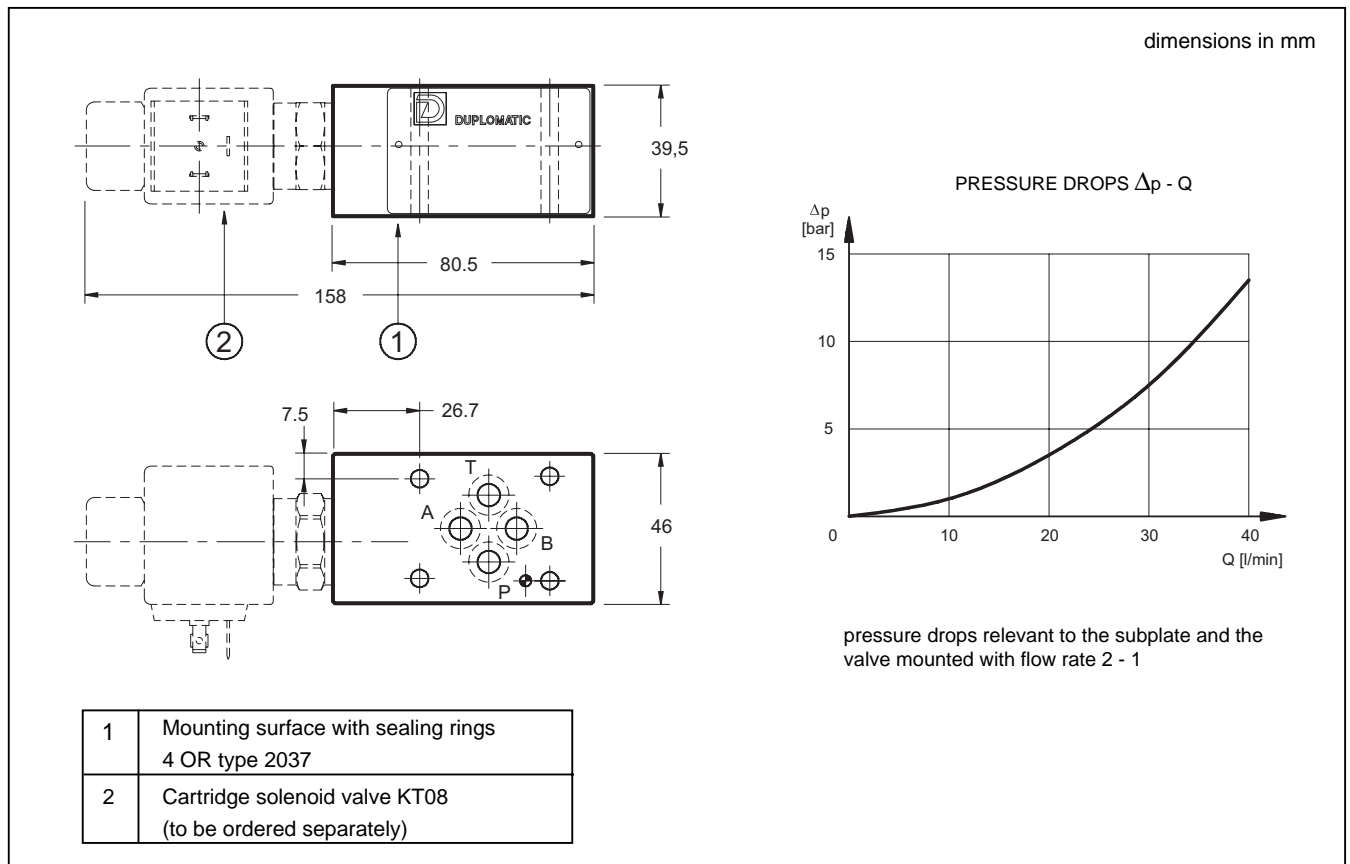


### HYDRAULIC SYMBOLS

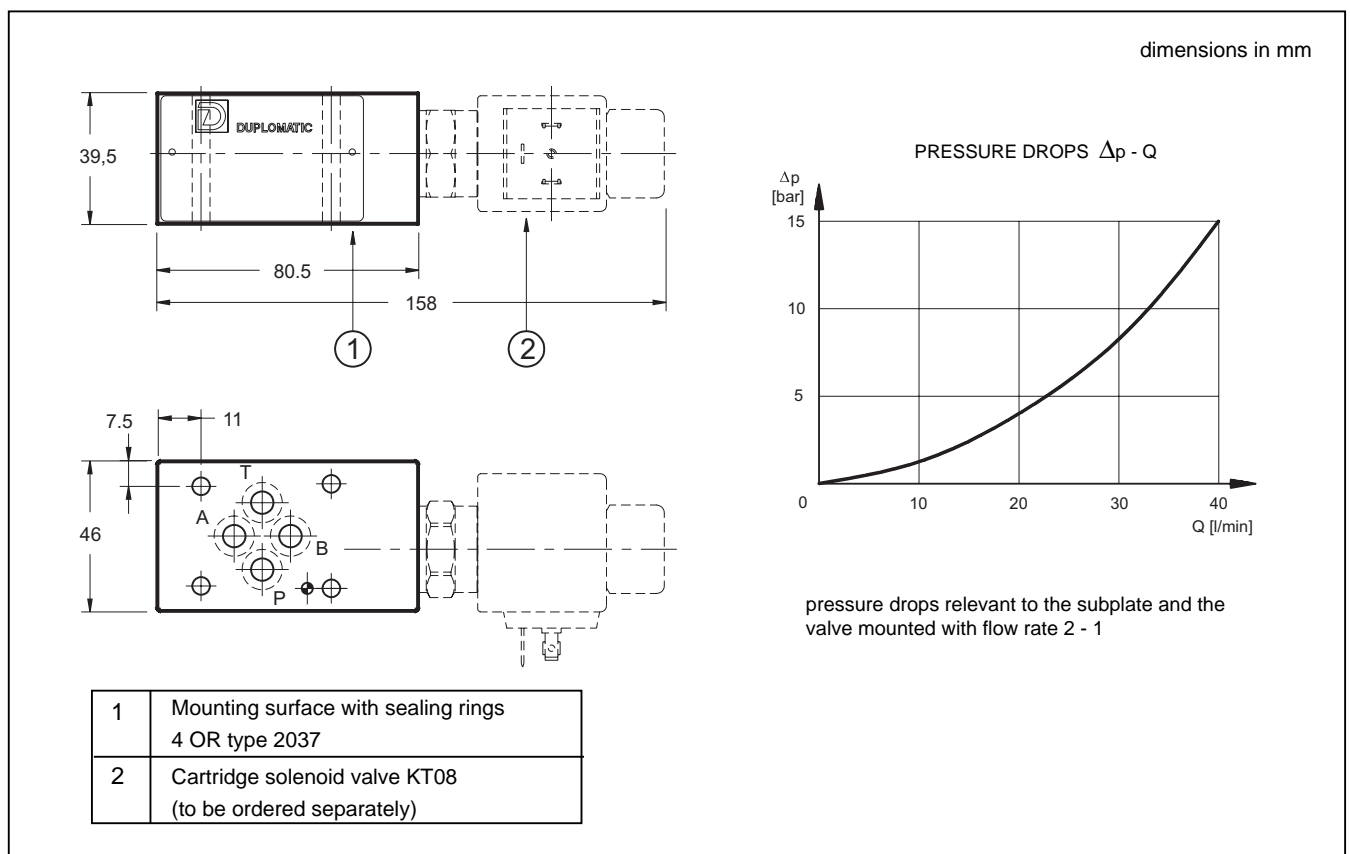




## 10.2 - OVERALL AND MOUNTING DIMENSIONS KTM3-P

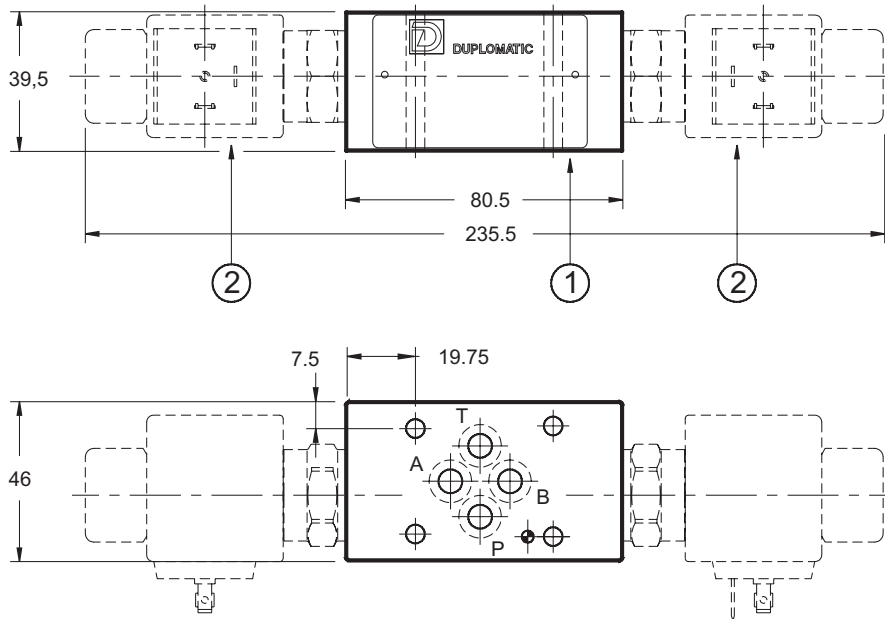


## 10.3 - OVERALL AND MOUNTING DIMENSIONS KTM3-PT

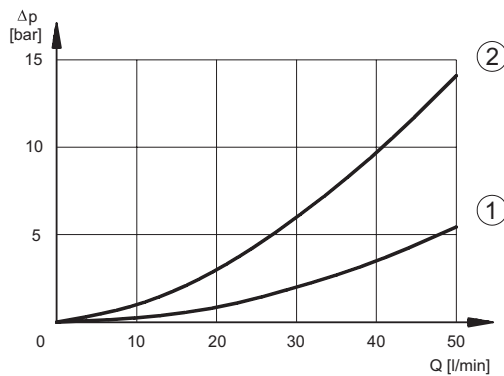




## 10.4 - OVERALL AND MOUNTING DIMENSIONS KTM3-D and KTM3-RD



PRESSURE DROPS  $\Delta p - Q$



- ① subplate pressure drops
- ② pressure drops relevant to the subplate and the valve mounted with flow rate 2 - 1

dimensions in mm

Note: in order to use a single port, a plug must be ordered separately, code 0266683 (for standard NBR seals) or 0266684 (for viton seals).

1	Mounting surface with sealing rings: 4 OR type 2037
2	Cartridge solenoid valve KT08 (to be ordered separately)