



**DIPLOMATIC**  
HYDRAULICS

32 250/197 ED



# RPC1-T3

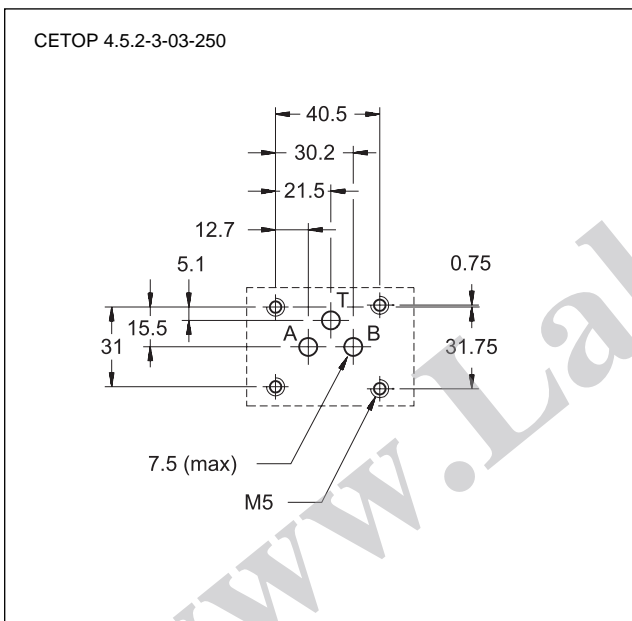
**PRESSURE AND TEMPERATURE  
COMPENSATED THREE-WAY  
FLOW CONTROL VALVE  
SERIES 41**

**SUBPLATE MOUNTING:  
CETOP 03**

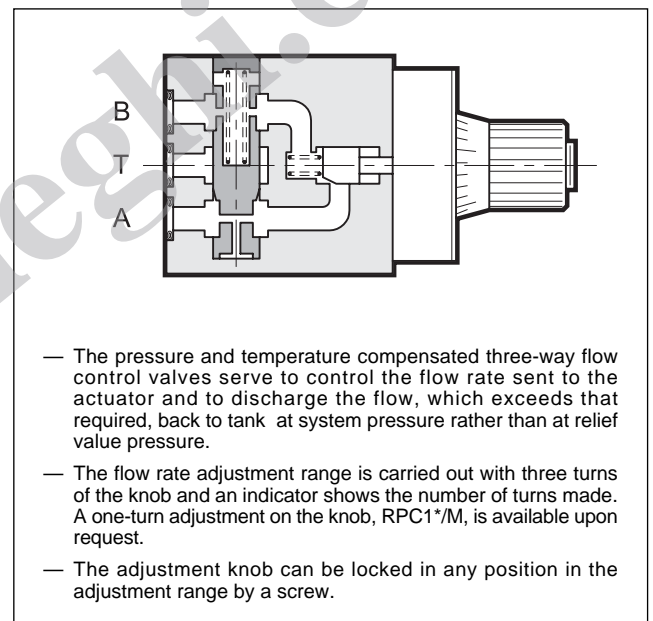
**p max 250 bar**

**Q max (see performance ratings table)**

## MOUNTING INTERFACE



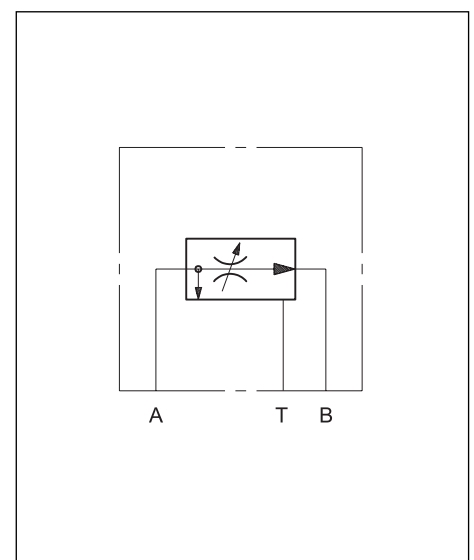
## OPERATING PRINCIPLE



## PERFORMANCE RATINGS (obtained with mineral oil with viscosity of 36 cSt at 50°C)

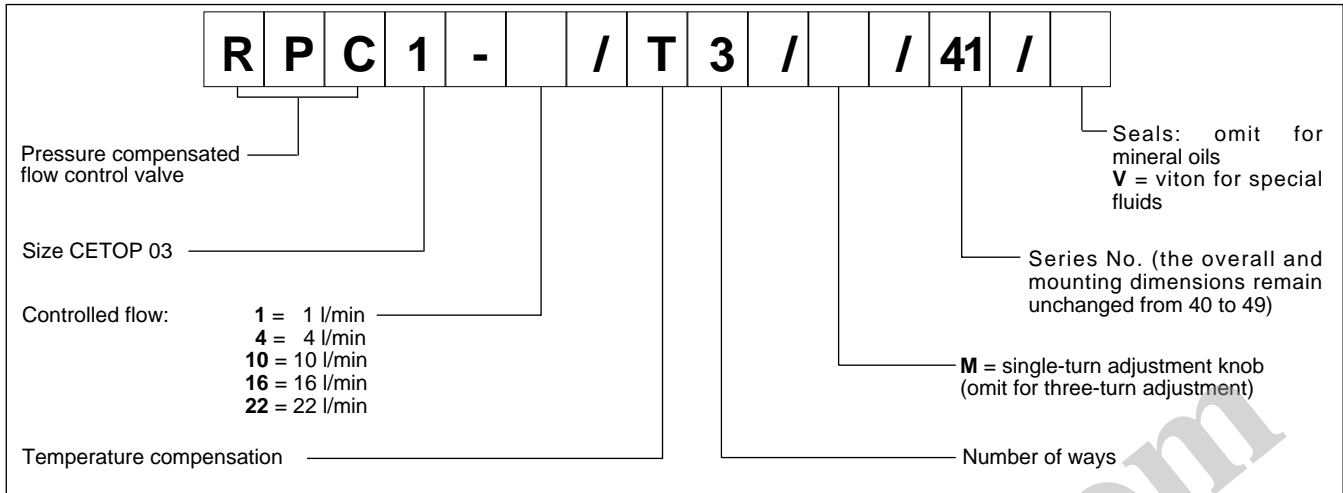
Maximum operating pressure	bar	250
Minimum pressure difference between A and B	bar	12
Maximum controlled flow rates	l/min	1-4-10-16-22
Minimum controlled flow rate (for 1 and 4 l/min)	l/min	0,035
Ambient temperature range	°C	-20 ÷ +50
Fluid temperature range	°C	-20 ÷ +70
Fluid viscosity range	cSt	2,8 ÷ 380
Recommended filtration	µm absolute	≤ 25
Filtration recommended for < 0,5 l/min flow rates	µm absolute	≤ 10
Recommended viscosity	cSt	25
Mass	kg	1,5
Number of adjustment knob turns	RPC1-T3	3
	RPC1-T3/M	1

## HYDRAULIC SYMBOL

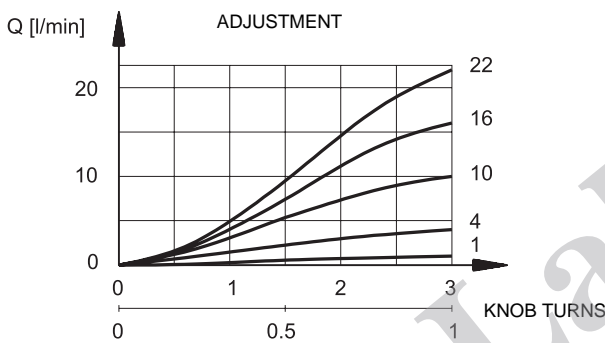




## 1 - IDENTIFICATION CODE



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



## 3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids, with the addition of suitable anti-frothing and anti-oxidizing agents. For the use of other types (water glycol, phosphate esters and others), please consult our technical department.

## 4 - PRESSURE COMPENSATION

Two throttles in series are in the valve. The first is an opening regulated by the knob; the second, piloted by the pressure upstream and downstream of the first throttle, assures a constant pressure drop across the adjustable throttle. In these conditions, the set flow rate value stays constant within a tolerance range of  $\pm 2\%$  of the maximum flow controlled by the valve for maximum pressure variation between the intake and outlet chambers of the valve.

## 5 - TEMPERATURE COMPENSATION

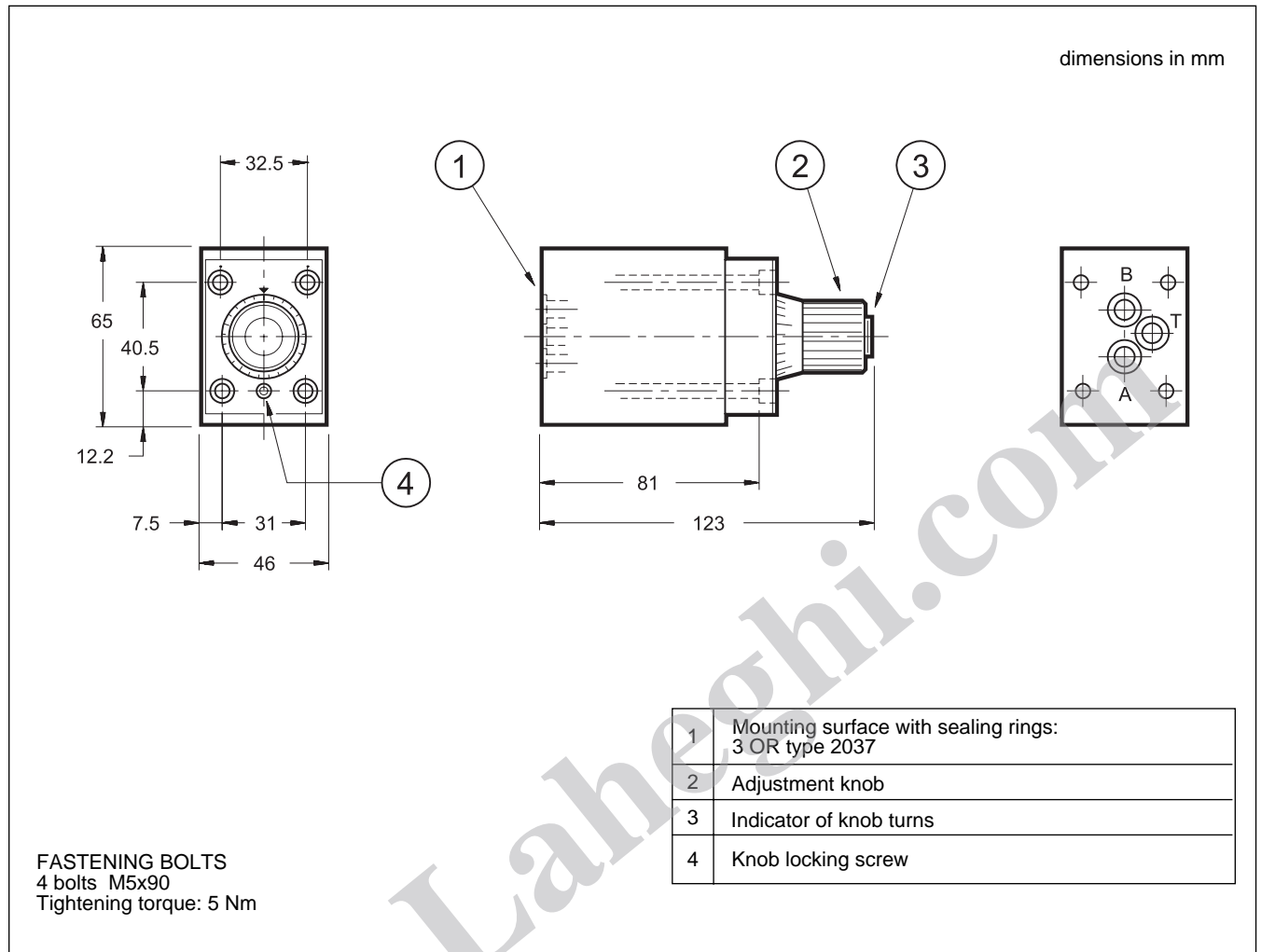
The valve temperature compensation is obtained with the principle of fluid passage across a thin wall orifice in which the flow rate is not substantially influenced by the oil viscosity fluctuations. For controlled flows of less than 0,5 l/min and with a temperature difference of 50 °C, flow is increased by about 13% of the set flow value. For higher flow rates, and with the same temperature difference, the flow increase is about 4% of the maximum flow controlled by the valve.



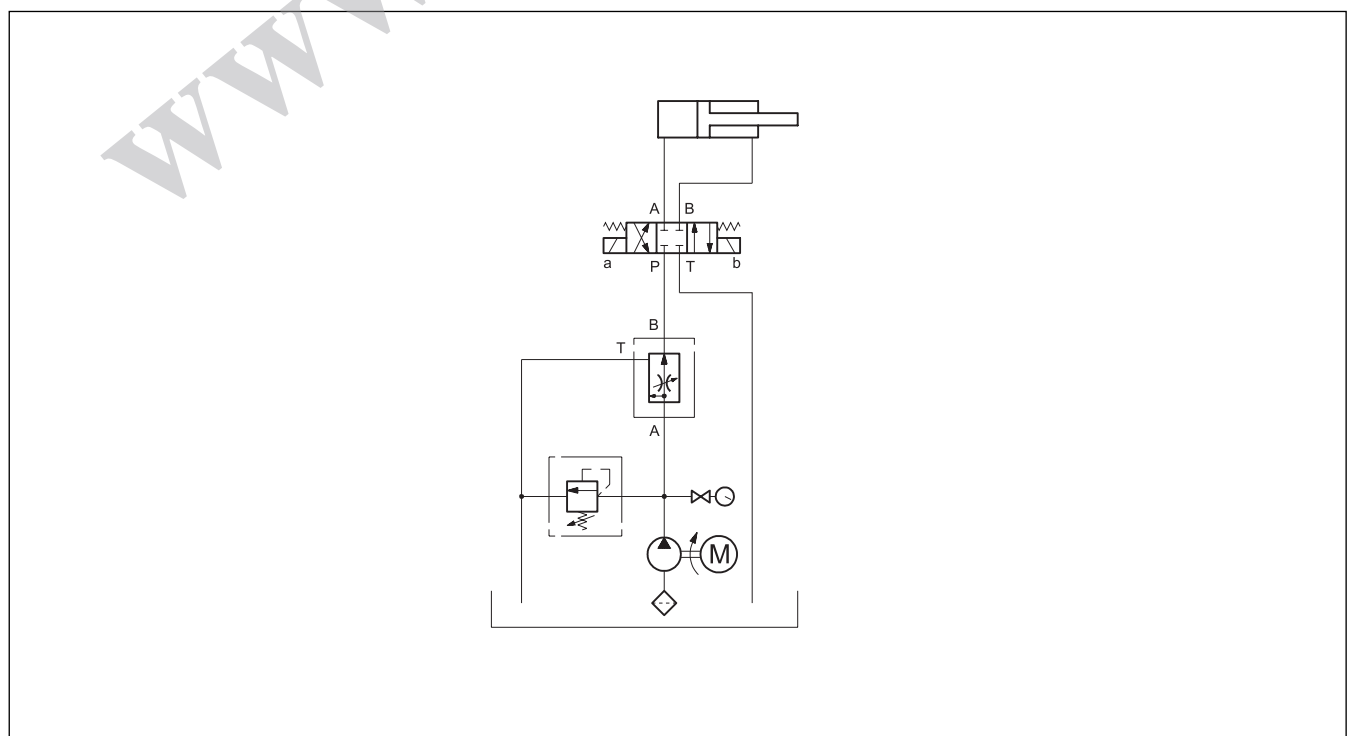
# RPC1-T3

SERIES 41

## 6 - OVERALL AND MOUNTING DIMENSIONS



## 7 - APPLICATION EXAMPLES





# RPC1-T3

SERIES 41

## 8 - SUBPLATES (see catalogue 51 000)

Type	PMMD-AI3G with rear ports with user P plugged
Type	PMMD-AL3G with side ports with user P plugged
Port dimension	3/8" BSP

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