Part number:

096-10295



HYDRAULICKÉ SYSTÉMY







HYDRAULIC SYMBOLS



RPC*-* T3 PRESSURE AND TEMPERATURE COMPENSATED THREE-WAY FLOW CONTROL VALVES

SUBPLATE MOUNTING RPC 2-T3 CETOP 06 RPC 3-T3 CETOP 07



It allows control of the flow rate to an actuator by discharging the flow exceeding that required by the plant at any one moment. As a consequence, energy consumption is reduced and appropriate at every instant throughout the cycle. The exceeding flow returns to tank at system pressure rather than at relief value pressure.

 Versions with single-turn adjustment knob (RPC**/M), with incorporated maximum pressure valve (RPCQ*) and with solenoid valve to unload the entire flow (RPCQM* - see par. 6) are available upon request.

PERFORMANCE RATINGS (obtained with mineral oil with viso	cosity of 36 cSt at 50°C)	RPC*2-T3	RPC*3-T3
Maximum operating pressure Minimum pressure difference between E and U	bar bar	320 10	250 12
Maximum controlled flow rate Minimum controlled flow rate	l/min l/min	50 0,060	150 0,130
Ambient temperature range	°C	-20 ÷ +50	
Fluid temperature range	°C	-20 ÷ +70	
Fluid viscosity range	cSt	2,8 ÷ 380	
Recommended filtration Recommended filtration for < 0,5 l/min flow rates	µm absolute µm absolute	≤ 25 ≤ 10	
Recommended viscosity	cSt	25	
Mass	kg	4,7	9

RPC*-*T3

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 3% of the the maximum flow controlled by the valve for maximum pressure variation between the intake and outlet chambers of the valve.

5 - TEMPERATURE COMPENSATION

A device located on the first throttle which is sensitive to the temperature fluctuations corrects the position keeping the controlled flow more or less unaltered even should the oil viscosity change.

The fluctuation of the set flow rate stays within \pm 2,5% of the maximum flow controlled by the valve.

6 - VENTING

The RPCQ*T3 model with incorporated pressure relief valve can be equipped with a type MD1D solenoid valve to unload the flow. In this case the RPCQM*T3 valve allows discharge of the entire pump flow to the reservoir with modest pressure drops.

RPC*-*T3

7 - RPC*-2T3 SERIES 31 OVERALL AND MOUNTING DIMENSIONS



8 - RPC*-3T3 SERIES 43 OVERALL AND MOUNTING DIMENSIONS



RPC*-*T3

9 - RPCQM-2T3 SERIES 31 AND RPCQM-3T3 SERIES 43 OVERALL AND MOUNTING DIMENSIONS



10 - ELECTRIC CONNECTORS

The solenoid valves are never supplied with connector. Connectors must be ordered separately. For the identification of the connector type to be ordered, please see catalogue 49 000.

11 - APPLICATION EXAMPLES



12 - SUBPLATES (see catalogue 51 000)

Туре	PMRPCQ2-AI4G with rear ports	PMRPCQ3-AI6G with rear ports
Port dimension E, U, T	1/2" BSP	1" BSP
х	1/4" BSP	1/4" BSP