



**Proportional Electro-Hydraulic Relief and Flow Control Valves, Type PQ10-20/140-125**

RE 24750/06.2004

Size 10

up to 14 MPa

up to 125 L/min

Replaces :

**Features:**

- For subplate mounting
- Protected by high voltage
- Output flows scale by input elec-messages
- System Pressure could achieve the changes to scale

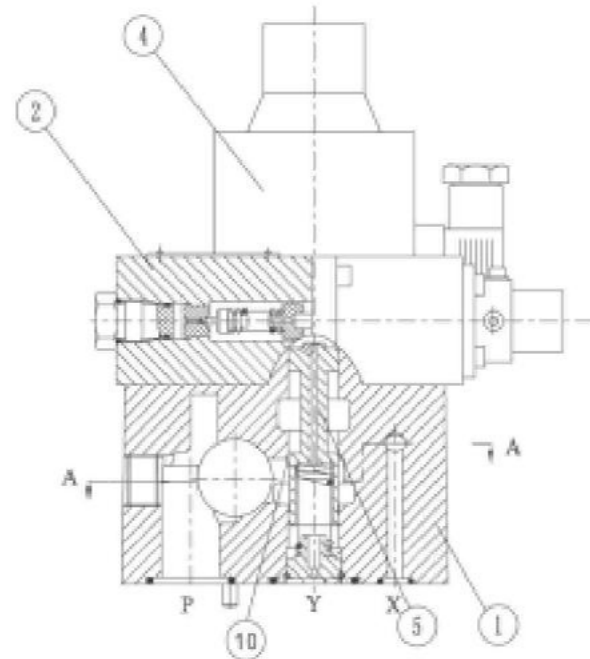


**Function, section;Symbol**

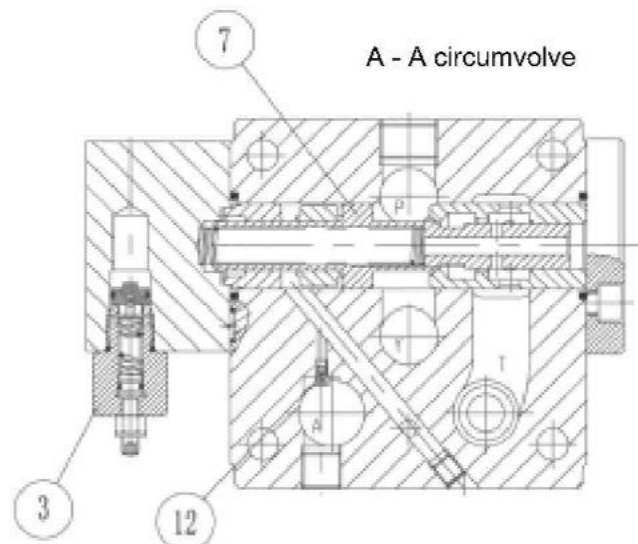
This pressure and flow control valve is an energy-saving valve that can adjust the pressure and flow of system proportional to electrical sign.

Since the valves controls the pump pressure by following the load pressure while keeping the differential pressure minimized, it serves as a low power-consumption energy-saving, meter-in, controlled flow control valve.

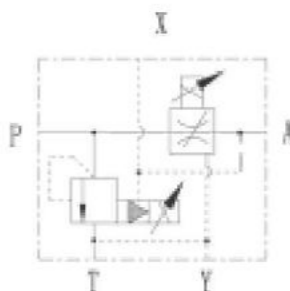
Further, since a temperature compensation function is incorporated, this valve provides consistent flow control without respect to the fluid temperature.



A - A circumsolve



Symbol:



## Ordering details

PQ 10 - 20 / 140 125 \*

Proportional Electro-Hydraulic pressure and Flow Control Valves

Nominal size 10 = 10

20 = Series 20 to 29  
(20 to 29: unchanged installation and connection dimensions)

Further details in clear text

No code = NBR seals  
V = FPM seals

125 = Max. Flow 125 L/min

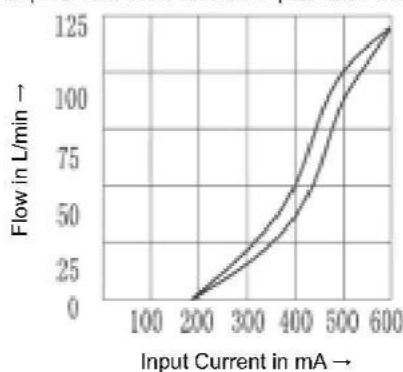
140 = Pressure stage 140

## Technical data (for applications outside these parameters, please consult us!)

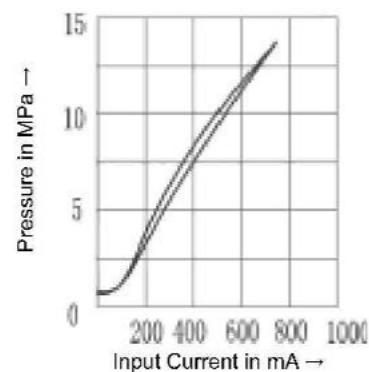
Pressure fluid	Mineral oil(for NBR seal), Phosphate ester (for FPM seal)	
Pressure fluid temperature range (°C)	- 30 to + 80 (with NBR seals) - 20 to + 80 (with FKM seals)	
Viscosity range (mm <sup>2</sup> /s)	2.8 to 500	
Degree of contamination	Maximum permissible degree of contamination of the pressure fluid is to NAS 1638 class 9. We, therefore, recommend a filter with a minimum retention rate of $\beta_{0.5} > 75$ .	
Max. operating pressure (MPa)	to 14	
Max. flow (L/min)	to 125	
Pressure fluid flow range (L/min)	1~125	
Flow Controls	Rated Current (L/min)	680
	Coil Resistance (Ω)	43.5
	Differential Pressure (MPa)	0.6
	Hysteresis	7%
	Repeatability	1%
Pressure Controls	Pressure Adjust Range (MPa)	0.8~14
	Rated Current	710
	Coil Resistance (Ω)	10
	Hysteresis	3%
	Repeatability	1%
Weight (Kg)	16	

## Operating Curves (measured at $v = 41 \times 10^{-6} \text{m}^2/\text{S}$ $t = 50^\circ\text{C}$ )

Relationship of the flow to the input current



Relationship of the pressure to the input current



Unit dimensions:

(Dimensions in mm)

