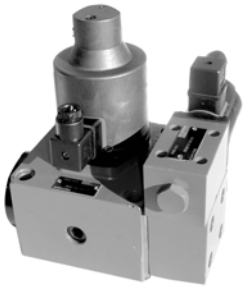
| BEIJING HUADE HYDRAULIC INDUSTRIAL GROUP CO.,LTD. | Proportional Electro-Hydraulic Relif and Flow Control Valves,Type PQ10-20/140-125 | | | RE 24750/06.2004 |
|---|---|---|---|---|
| | Size 10 | up to 14 MPa | up to 125 L/min | Replaces： |

**Features:**

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

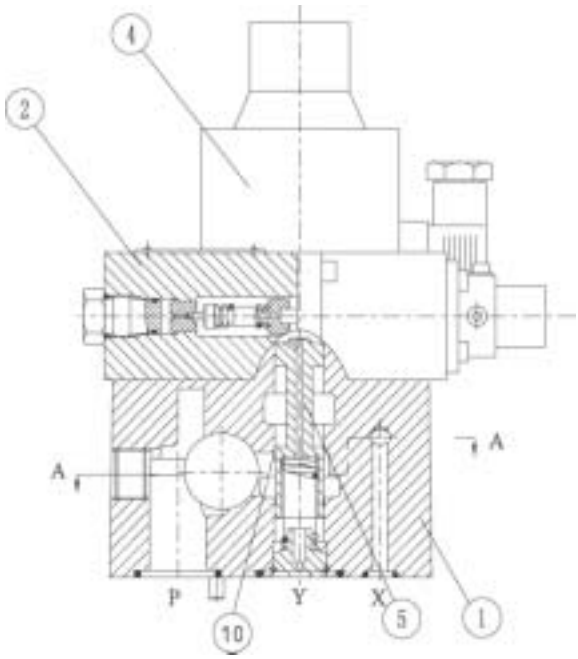


**Function, section;Symbol**

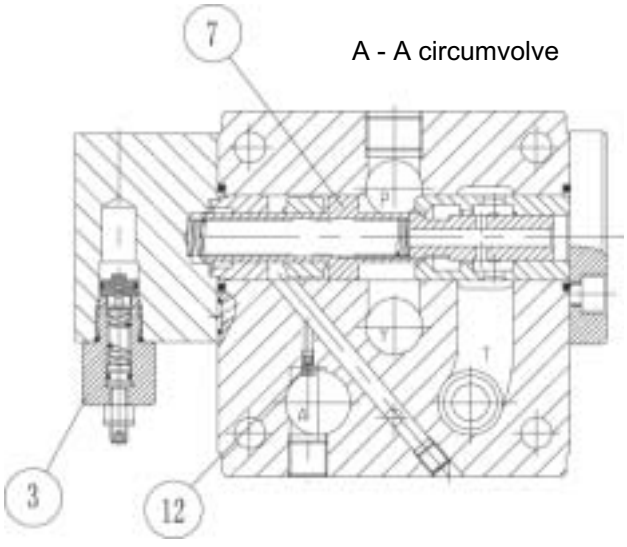
This pressure and flow control valve is an energy-saving valve that can adjust the pressure and flow of system proportional to electrical sign。

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.

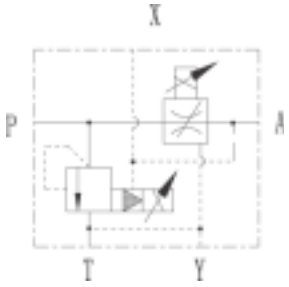
Further,since a temperature compensation function is incorporated,this valve provides consistent flow control without respect to the fluid temperature.




A - A circumvolve




Symbol:



## Ordering details

| PQ | 10 | — | 20 | B | / | 140 | 125 | | * |
|---|---|---|---|---|---|---|---|---|---|

Further details in clear text

Proportional Electro-Hydraulic pressure and Flow Control Valves

No code = NBR seals
V = FPM seals

Nominal size 10 = 10

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

125 = Max. Flow 125 L/min

Technology of Beijing Huade Hydraulic =B

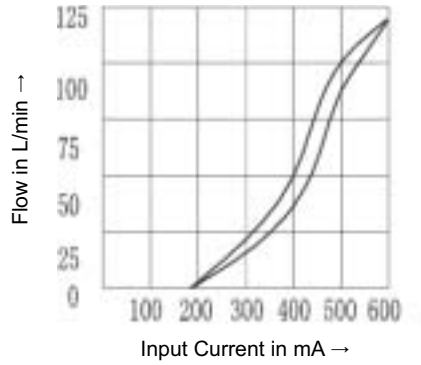
140 = Pressure stage 140

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

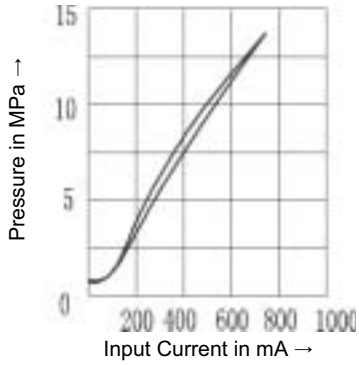
| | | | |
|---|---|---|---|
| Pressure fluid | | | Mineral oil(for NBR seal), |
| | | | Phosphate ester (for FPM seal) |
| Pressure fluid temperature range | | (℃) | - 30 to + 80 (with NBR seals) |
| | | | - 20 to + 80 (with FKM seals) |
| Viscosity range | | ($mm^2/s$) | 2.8 to 500 |
| Degree of contamination | | | 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 $\beta_{10} \geqslant 75$. |
| 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 Resisitance | (Ω) | 43.5 |
| | Differential Pressure | (MPa) | 0.6 |
| | Hysteresis | | 7% |
| | Repeatabibly | | 1% |
| Pressure Controls | Pressure Adjust Range | (MPa) | 0.8～14 |
| | Rated Current | | 710 |
| | Coil Resisitance | (Ω) | 10 |
| | Hysteresis | | 3% |
| | Repeatabibly | | 1% |
| Weight | | (Kg) | 16 |

## Operating Curves (measured at v =41 × $10^{-6}m^2/S$ t=50℃ )

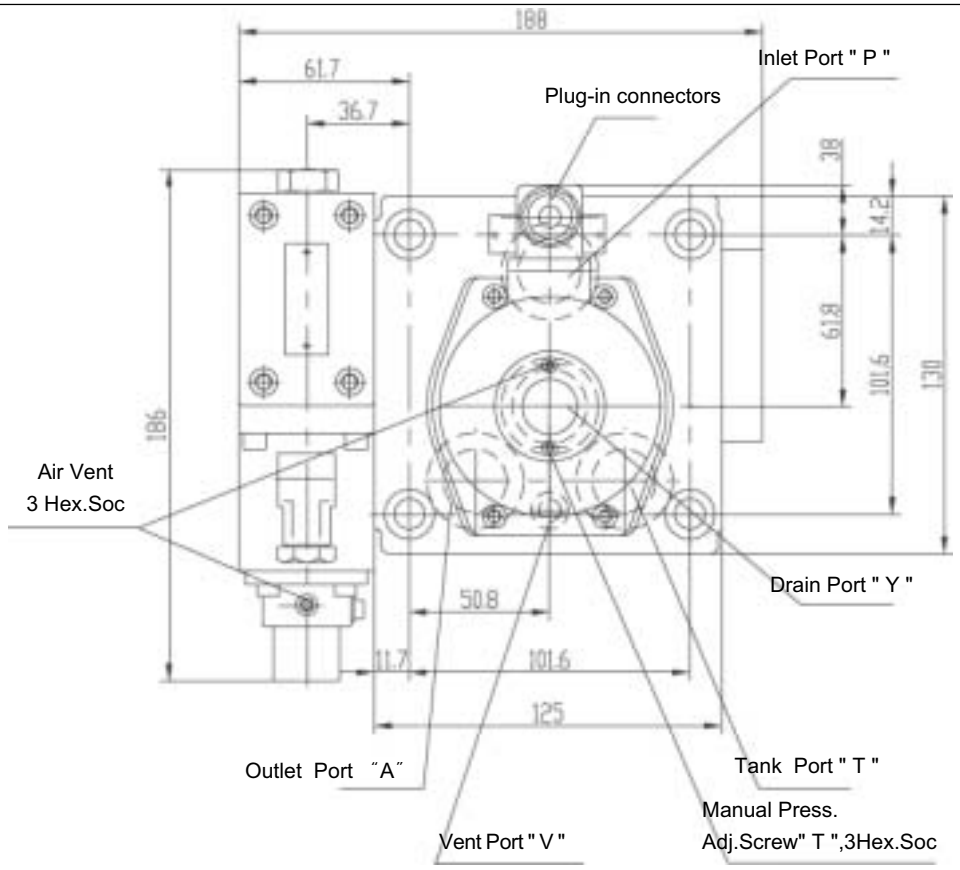
Relationship of the flow to the input current

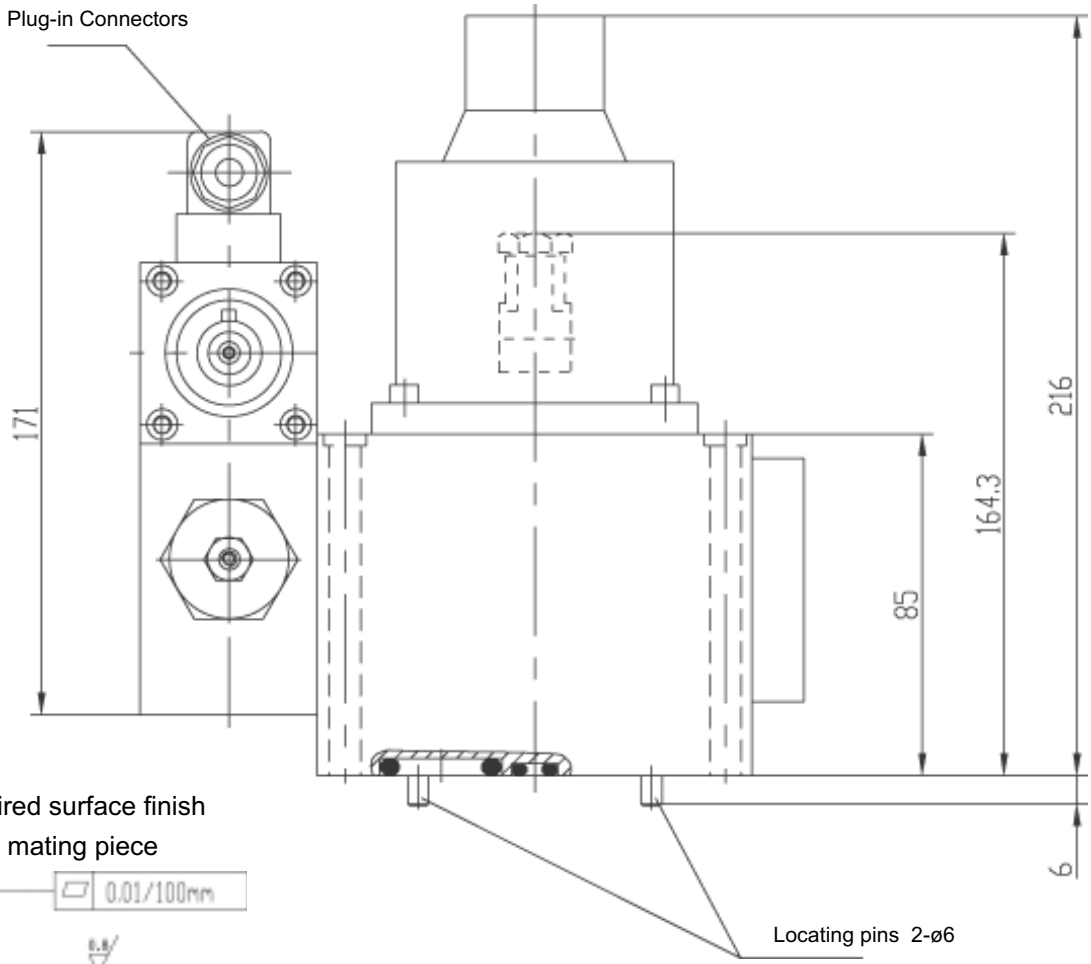



Relationship of the pressure to the input current



**Unit dimensions:** **(Dimensions in mm)**




Required surface finish
of the mating piece




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