

Modular Balanced Valve

Model: PHF



- ◆ Size 6/10
- ◆ Maximum working pressure 350 bar
- ◆ Maximum flow rate to 120 L/min

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Features

- Sandwich plate mounting
- Installation size to ISO4413
- Variety pilot ratio, optional

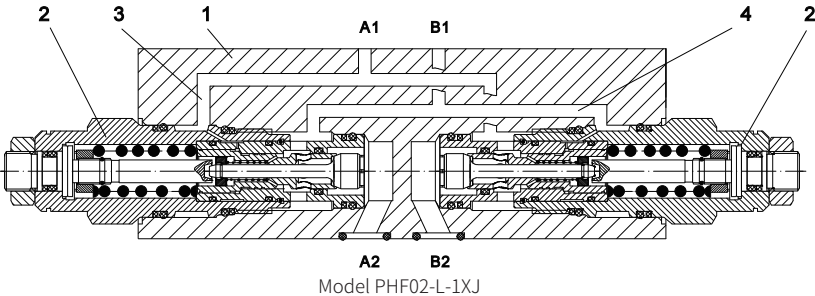
Function description, sectional drawing

The PHF valve is modular balance valve. It is composed of modular valve body (1) and two plug-in counterbalance valves (2).

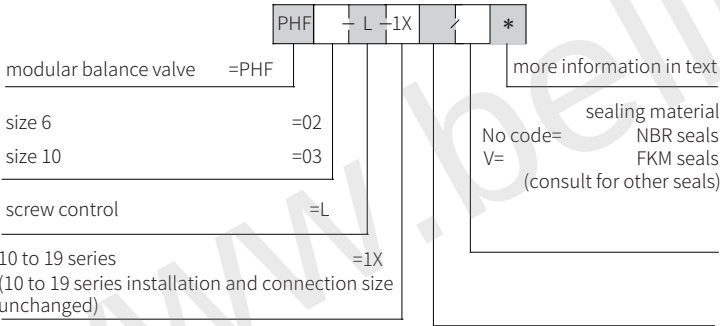
Function:

The valve allows the hydraulic oil to flow from A2 to A1 (or from B2 to B1) to lift load and keep load position unchanged. By adjusting the pressure of the control line (3) or (4) to control the opening of the valve to make the load reduced smoothly at the required speed.

If the pressure in A2 or B2 exceeds the setting pressure due to, for example, external forces or thermal expansion, the balancing overflow function is opened to avoid damage of the hydraulic actuator because of overpressure. At this time, the setting pressure is generally more than 1.3 times of the opening pressure of the main relief valve of the system to ensure that the load lifted by the maximum working pressure is not reduced because of the overflow function in normal condition.

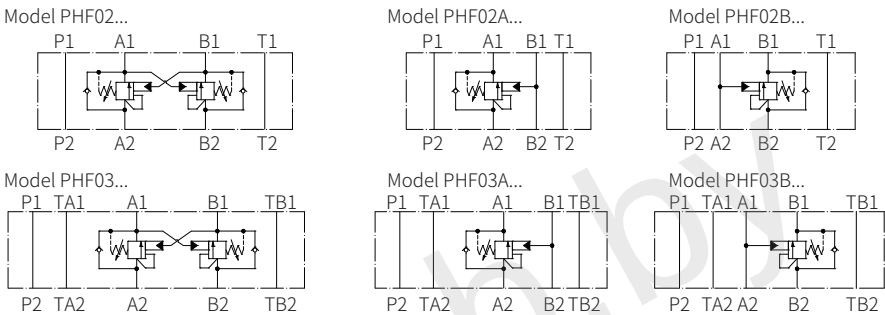


Models and specifications



Note:
The default pilot ratio is 3:1, other pilot ratio please consult us

Functional symbols

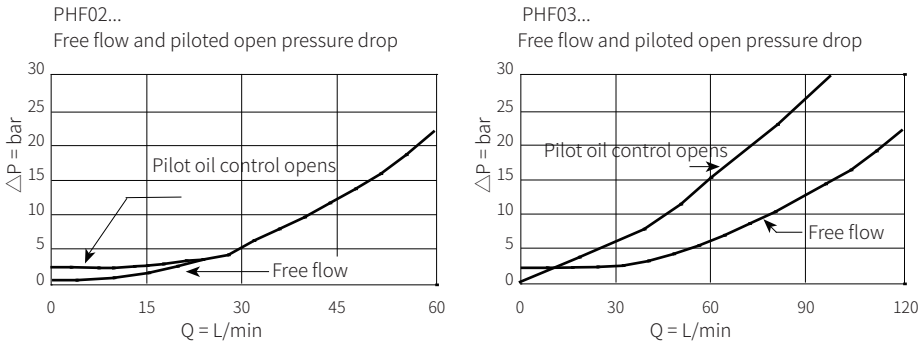


Technical parameters

Medium	Mineral hydraulic oil or phosphate hydraulic oil
Temperature range	°C -40 to +120 (NBR)
Viscosity range	mm²/s 7.4 to 420
Maximum working pressure	bar to 280 ¹⁾
Inner leakage	drop/min Max. 0.4
Setting pressure at port A2 or B2	The back pressure at A2 or B2 increases the setting pressure of the valve by an amount equivalent to the A2 or B2 back pressure x (1+ pilot ratio of the balance valve).
Pilot ratio	3:1
Flow	L/min see characteristic curve

¹⁾ Set by factory when flow at 32.8m1/min

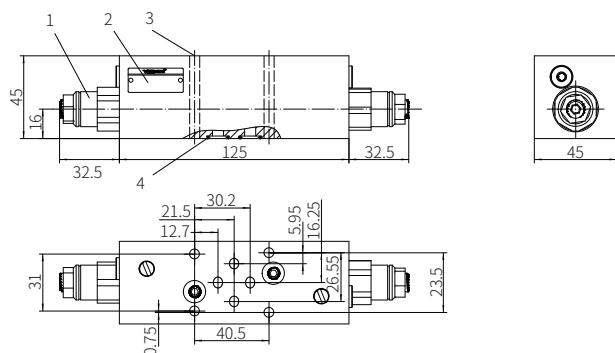
Characteristic curve



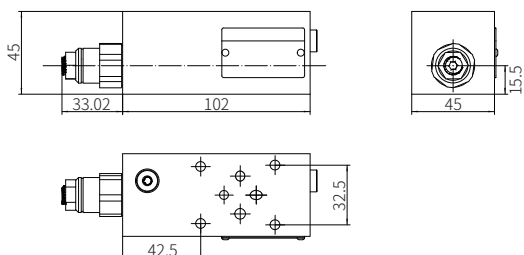
Component size

Size unit: mm

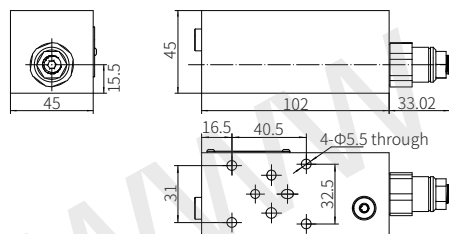
Model PHF02...-1XJ/...(two-way balance valve)



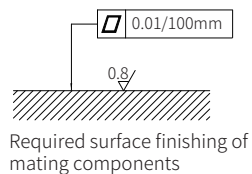
Model PHF02A...-1XJ/...(one-way balance valve)



Model PHF02B...-1XJ/...(one-way balance valve)



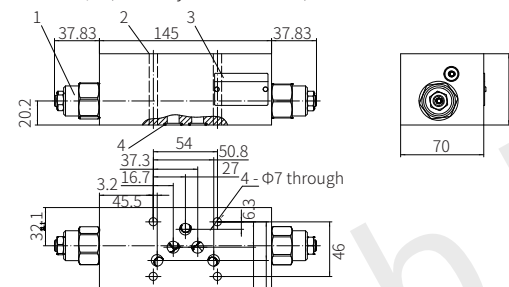
- 1 Plug-in counterbalance valve
- 2 Name plate
- 3 Valve fixing screw hole
- 4 O ring 9.25x1.78 (for port A, B, P, T)



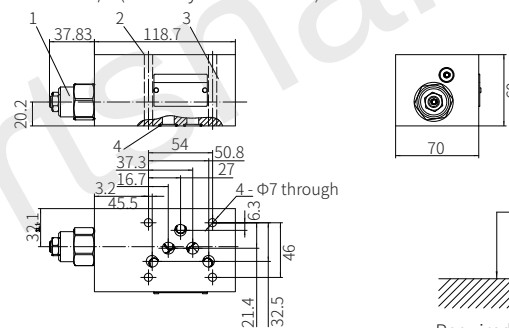
Component size

Size unit: mm

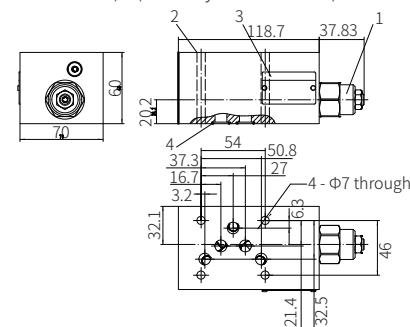
Model PHF03...-1XJ/...(two-way balance valve)



Model PHF03A...-1XJ/...(one-way balance valve)



Model PHF03B...-1XJ/...(one-way balance valve)



- 1 Plug-in counterbalance valve
- 2 Name plate
- 3 Valve fixing screw hole
- 4 O ring 9.25x1.78 (for port A, B, P, T)

