Prefill valve



Features

• This valve is used as a suction/exhaust valve between an oil hydraulic cylinder and a tank. In a quick forward stroke of a large press machine, this valve sucks oil from a tank to an oil hydraulic cylinder, while in an pressurization process, it obstructs a reverse flow from a hydraulic cylinder to a tank, and in a return process, exhausting oil from a hydraulic cylinder to a tank.

Nomenclature



(1) Nomenclature of applied fluid

No mark: Working oil with petroleum contents,
Working oil with water / glycol contents
F: Working oil with phosphoric acid ester

(2) Model No.

HPF: H series pre-fill valve

(3) Connections

F : Flange connection

(4) Nominal diameter

16:2 20:2¹/₂ 24:3 32:4 (5) Clacking pressure mark

1 : 0.005MPa {0.05kgf/cm²}2 : 0.015MPa {0.15kgf/cm²}

(6) Design number (design number is subject to change)

10 : Nominal diameter 16 (2), 24 (3), 32 (4)

20 : Nominal diameter 20 (21/2)

(7) Option mark

No mark : with flange ★1
N : without flange

Note) ★1 In case that flange is attached, R side flange or CL side flange is attached to the nominal diameter 16, 20 and 24, while R side flange is attached to the nominal

diameter 32.

Specifications

Model code	Nom. Dia.	Max. operating pressure MPa {kgf/cm²}			Max. flow rate L/min		Area ratio	Weight ★2
		CL side	R side	Pilot pressure	R→CL	CL→R	Seat: Pilot piston	kg
HPF-F16-*-10	2	25 {250}	2 {20}	25 {250}	160	320	1.66:1	6.1
HPF-F20-*-20	21/2				320	640	2.37:1	12
HPF-F24-*-10	3				500	1000	2.93:1	15.5
HPF-F32-*-10	4				900	1800	3.05:1	18.9

Note) ★2 It doesn't include weights of flange and bolts.