

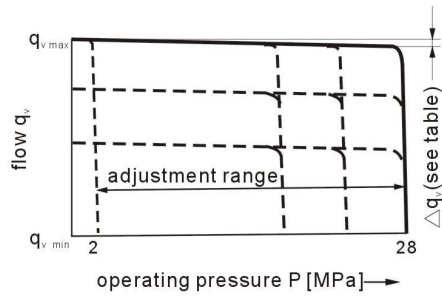
DFR/DFR1 Pressure / Flow Control

In addition to the pressure control function, the pump flow may be varied by means of a differential pressure over an orifice or valvespool, installed in the service line. The pump flow is equal to the actual required flow by the actuator.

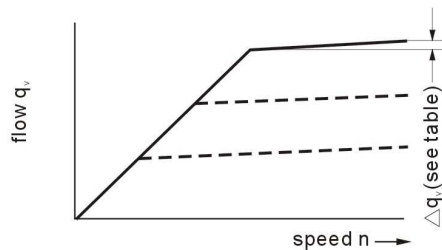
The DFR1-valve has no connection between X and the tank. For function of pressure control see pages 87/88.

● Static operating curve

(at $n_1=1500$ rpm; $t_{oil}=50^\circ\text{C}$)

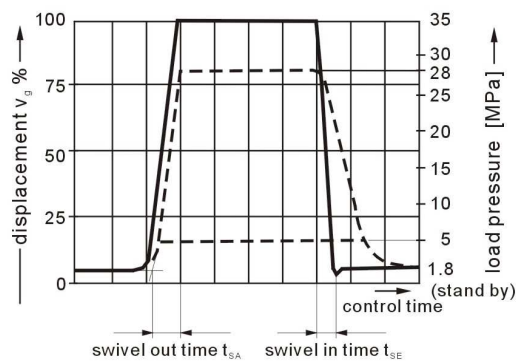


● Static operating curve at variable speed

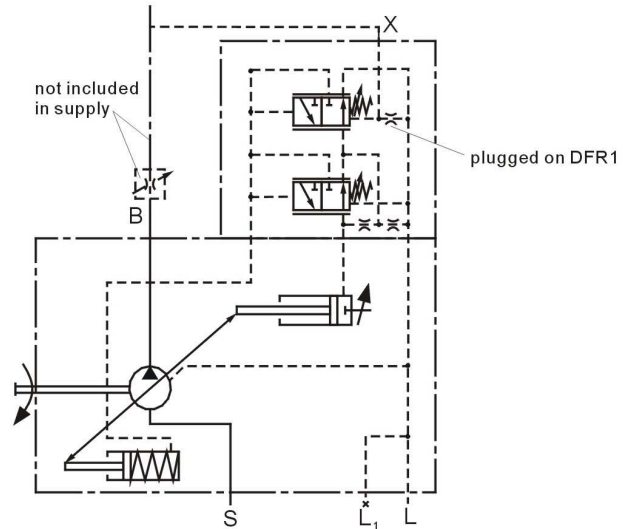


● Dynamic flow control operating curve

The operating curves are average values measured under test conditions with the unit mounted inside the tank.



Size	t_{SA} (ms)	t_{SE} (ms)	t_{SE} (ms)
	stand by-28 MPa	28 MPa-stand by	5 MPa-stand by
28	40	20	40
45	50	25	50
71	60	30	60
100	120	60	120
140	130	60	130



Ports

- B Pressure port
- S Suction port
- L, L₁ Case drain ports (L₁ plugged)
- X Pilot pressure port

● Differential Pressure ΔP

Adjustable between 1 and 2.2 MPa (higher valves on request).
Standard setting: 1.4 MPa. If a different setting is required please indicate in clear text.
When port X is unloaded to tank a "zerostroke pressure" of $P=1.8 \pm 0.2$ MPa (stand by) results (dependent on ΔP).

● Controller Data

Data pressure controller see page 87.
Max. Flow variation (hysteresis and increase) measured at drive speed $n=1500$ rpm

Size	28	45	71	100	140	
Δq_{vmax}	L/min	1.0	1.8	2.8	4.0	6.0

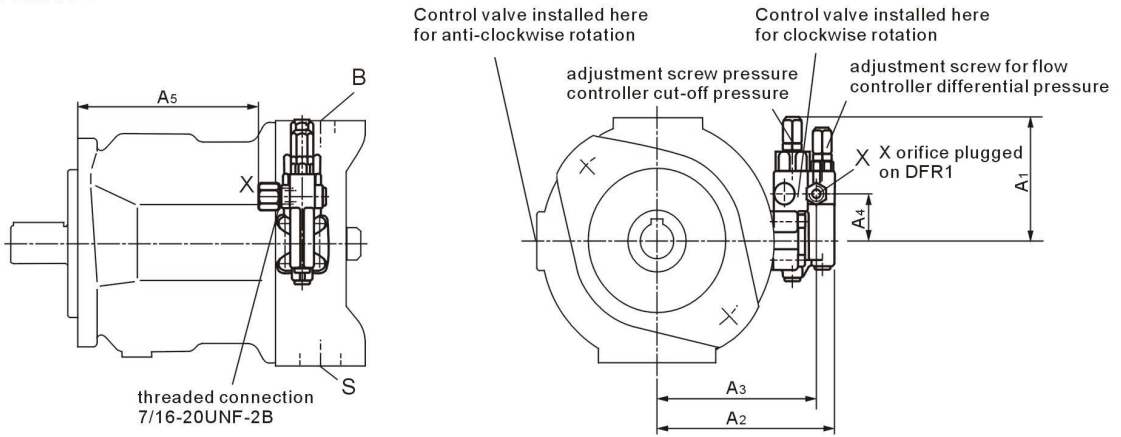
DFR pilot oil consumption _____ max. approx. 3...4.5 L/min

DFR1 pilot oil consumption _____ max. approx. 3 L/min

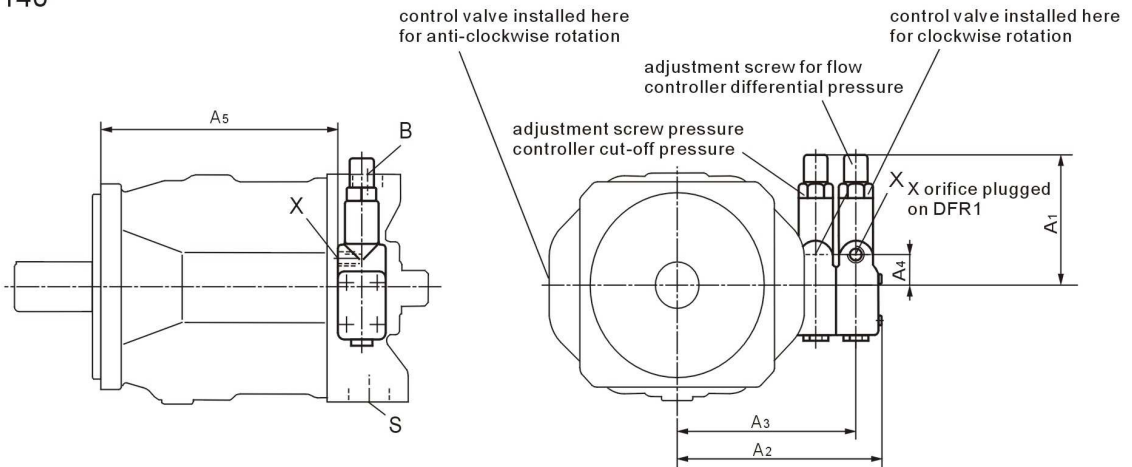
Installation Dimensions

HA10VSO*DFR/31R-*12N00
 HA10VSO*DFR1/31R-*12N00

Sizes 28...100



Size 140



Size	A ₁	A ₂	A ₃	A ₄	A ₅	Port X
28	109	136	119	40	119	M14 × 1.5; 12 deep
45	106	146	129	40	134	M14 × 1.5; 12 deep
71	106	160	143	40	162	M14 × 1.5; 12 deep
100	106	165	148	40	229	M14 × 1.5; 12 deep
140	127	209	183	27	244	M14 × 1.5; 12 deep

} with adaptor
 without adaptor

HA10VSO...