

In addition to the pressure control function, the pump flow may be varied by means of a differential pressure over an adjustable orifice (e.g. directional valve) installed in the service line to the actuator. The pump flow is equal to the actual required flow by the actuator, regardless of changing pressure levels.

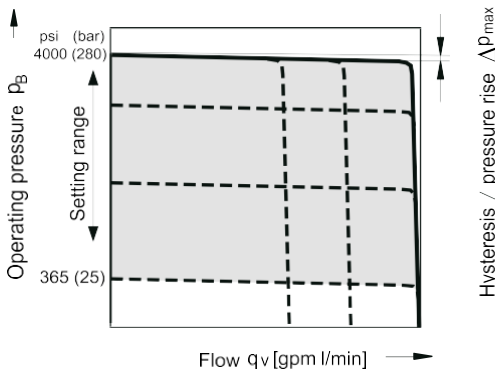
The pressure control overrides the flow control function.

**Note**

The DFR1 version has no connection between X and the reservoir. Unloading the LS-pilot line must be possible in the valve system. Because of the flushing function sufficient unloading of the X-line must also be provided.

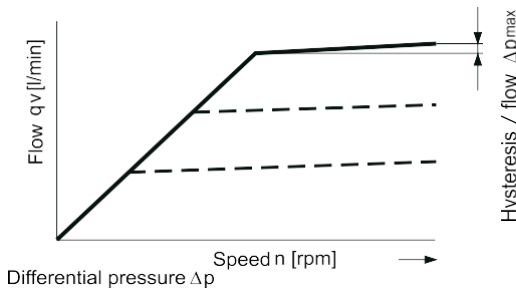
**Static characteristic**

Flow control at  $n_1 = 1500 \text{ rpm}$  ;  $t_{\text{fluid}} = 122^\circ\text{F} (50^\circ\text{C})$



In order to prevent damage to the pump and the system, this setting range is the permissible setting range and must not be exceeded. The range of possible settings at the valve are greater.

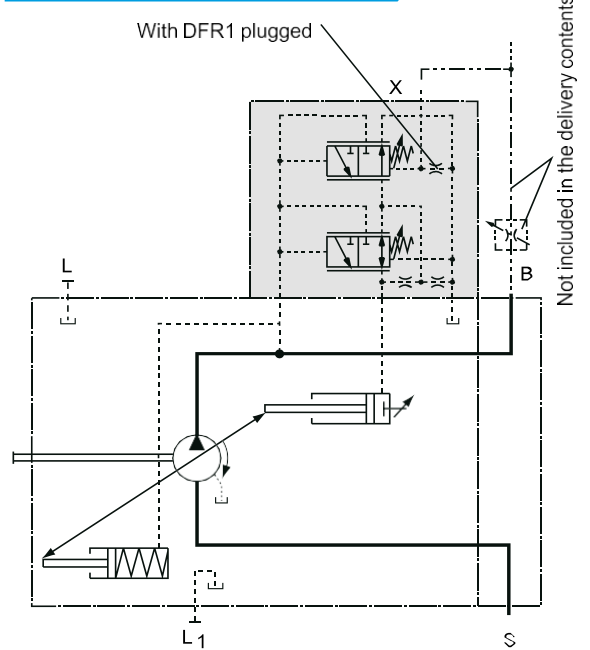
**Static characteristic at variable speed**



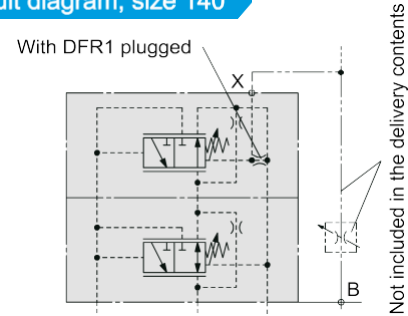
Standard setting : 200 to 320 psi (14 to 22 bar).

If another setting is required, please state in clear text. Relieving the load on port X to the reservoir results in a zero stroke ("standby") pressure which lies about 15 to 30 psi (1 to 2 bar) higher than the differential pressure  $\Delta p$ . System influences are not taken into account.

**Circuit diagram, sizes 18 to 100**



**Circuit diagram, size 140**



	Port for
B	Service line
S	Suction line
L · L1	Case drain (L1 plugged)
X	Pilot pressure

**Control data**

Data for pressure control DR, please see page 9  
 Maximum flow deviation measured at drive speed  $n = 1500 \text{ rpm}$ .

NG	18	28	45	71	100	140
$\Delta q_v \text{ max}$ gpm	0.24	0.26	0.48	0.75	1.06	1.60
l/min	(0.9)	(1.0)	(1.8)	(2.8)	(4.0)	(6.0)

Contr fluid consum. DFR\_\_max. approx. 0.8 to 1.2 gpm  
 (3 to 4.5 l/min)

Contr. fluid consumption max. approx. 0.8 gpm (3 l/min)  
 please see page 9