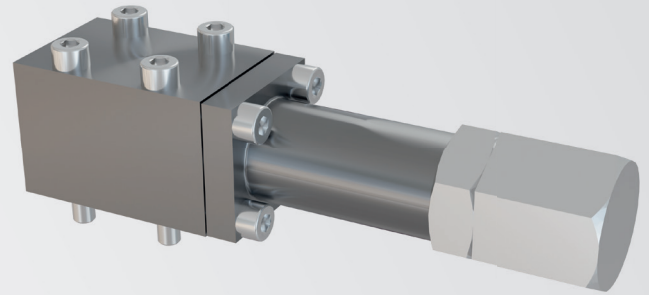


Pressure relief valve

DN3 - DN10, PN320 - PN350



Features

- Directly actuated pressure relief valve
- Seat valve with a leak-free, metallic conical seat seal
- All parts are made of corrosion-resistant materials, and they are easily replaceable
- Compression spring as a preload element
- Attachment, structural plate form with a Hauhinco connection diagram

Function

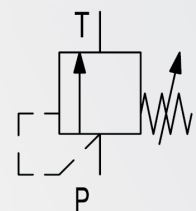
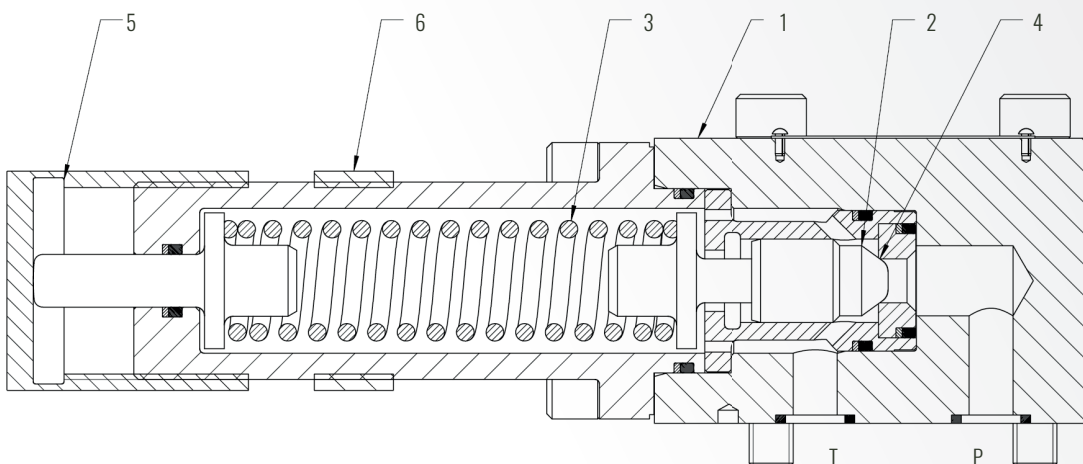
Pressure relief valve for the primary pressure setting at the hydraulic pumps and the pressure protection of the hydraulic drives and hydraulic components.

In the basic valve position, the power of the compression spring (3) acts on the valve piston (2) and transfers it to the valve seat (4). The valve seat (4) and the valve piston (2) form the valve seal at the conical surface. By turning the adjusting nut (5) the compression spring (3) is preloaded and the desired set pressure "Pe" set. The adjusting nut (5) can be fixed using the lock nut (6).

Within the operation of the valve, the system pressure „Ps“ enters the valve body (1) at the P-connector and generating a hydraulic (opening) force at the valve seat area of the valve piston (2). The force of the compression spring (3) maintains the valve piston (2) in the shut off basic position as long as the hydraulic opening force is < than the set closing force of the spring. If the system pressure „Ps“ increases to the extent that the force ratio reverses to be opening force > closing force, then the valve piston (2) is pressed out of the basic position, lines P and T are connected thus opening the valve. The valve opening increases proportionally with increasing system pressure until the maximum admissible volume flow for the valve has been reached, see valve characteristic.

Example: Pressure relief valve DN10 - structural plate form

Symbol



Technical data

measured with HFA medium 97/3%, at 20°C

General

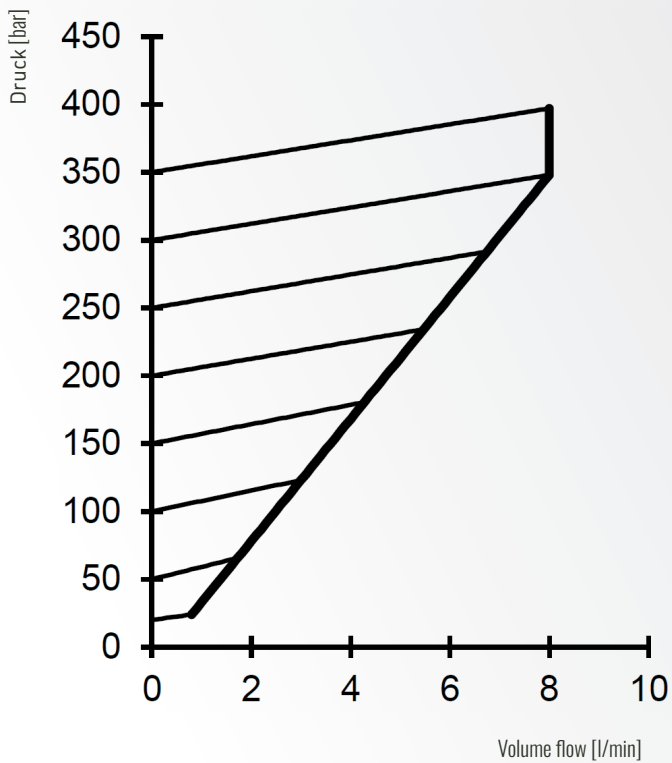
Weight	see Order information
Installation position	any
Ambient temperature	-10 to 50°C (hydraulic fluids, heed standard requirements)
Material Valve parts	Stainless steel, bronze
Material Seals	NBR, PTFE, PUR

Hydraulic

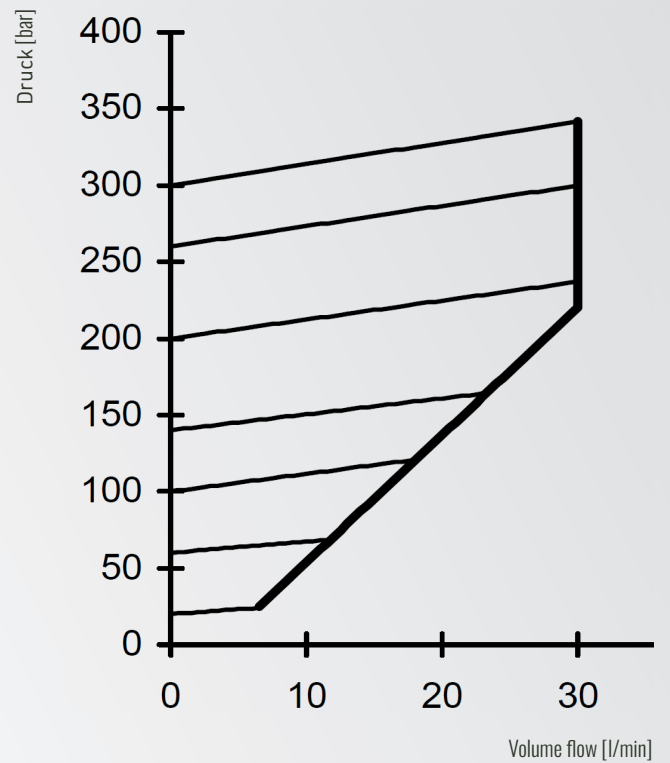
hydraulic pressure connector P	DN3: ≤ 350 bar DN6: ≤ 350 bar DN10: ≤ 320bar
hydraulic pressure connector T	≤ 50bar (observe counterpressure within the pressure setting)
Setting range of hydraulic response pressure P _e	see Order information
max. volume flow	DN3: 8 l/min DN6: 30 l/min DN10: 60 l/min
specified direction of flow	P→T
Pressure fluid - Medium - Temperature range - Medium - Quality - min filter fineness	Water, HFA 5 bis 40°C see Hauhinco media requirement, water, HFA Filter fineness 100µm
Pressure fluid - Medium - Temperature range - Medium - Quality	Mineral oil HLP according to DIN51624-2 5 to 50°C Cleanliness class -/19/16 according to ISO 4406
Use of other pressure fluids on request.	

Characteristic curves Pressure relief valve DN3 - DN10

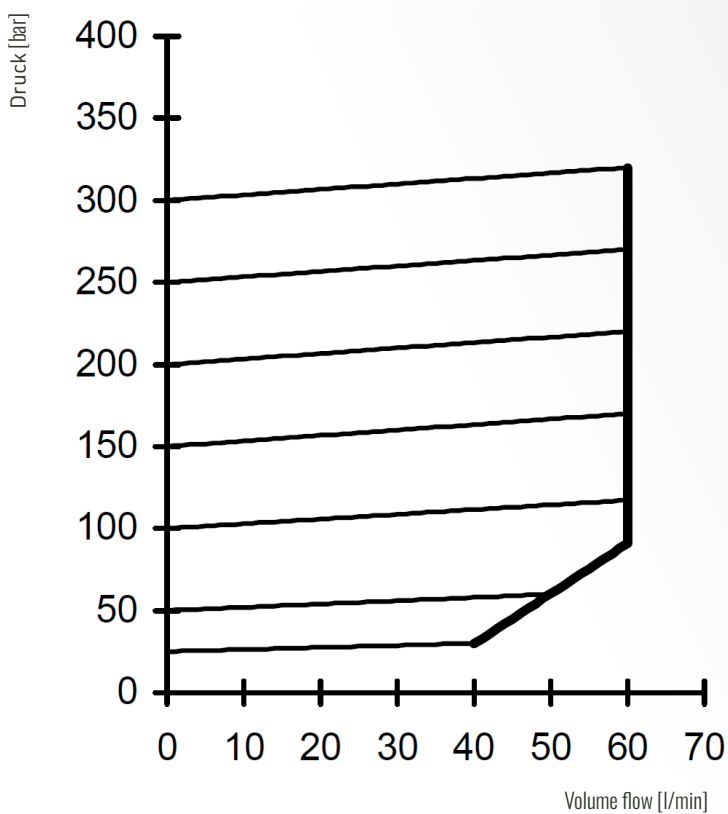
$\Delta p - qV$ characteristic curves DN3



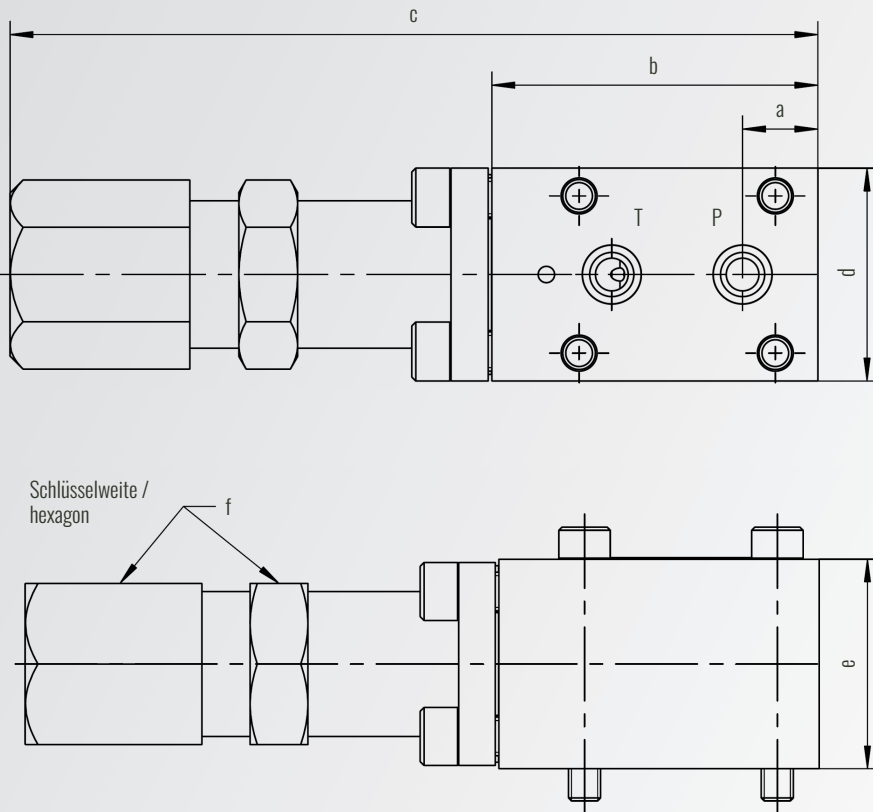
$\Delta p - qV$ characteristic curves DN6



$\Delta p - qV$ characteristic curves DN10



Pressure relief valve, plate-type DN3 - DN10



Order information

Included in the scope of supply

Mounting screws for the valves

Pressure setting according to customer specification

Factory test certificate on request

Nominal size	Weight [kg]	max. Pressure [bar]	Setting range [bar]	Type	Dimensions [mm]						Article number
					a	b	c	d	e	f	
DN3	1,3	350	20-160	Plate-type	22,5	66	158	40	40	34	6246354
DN3	1,3	350	150-340	Plate-type	22,5	66	158	40	40	34	6246362
DN6	2,4	350	20-155	Plate-type	24,5	75	210	50	50	41	6247679
DN6	2,4	350	145-275	Plate-type	24,5	75	210	50	50	41	6248714
DN6	2,4	350	270-340	Plate-type	24,5	75	210	50	50	41	6248722
DN10	5,3	320	20-130	Plate-type	23	100	298	65	65	50	6271642
DN10	5,3	320	30-210	Plate-type	23	100	298	65	65	50	6271634
DN10	5,3	320	190-320	Plate-type	23	100	298	65	65	50	6267491