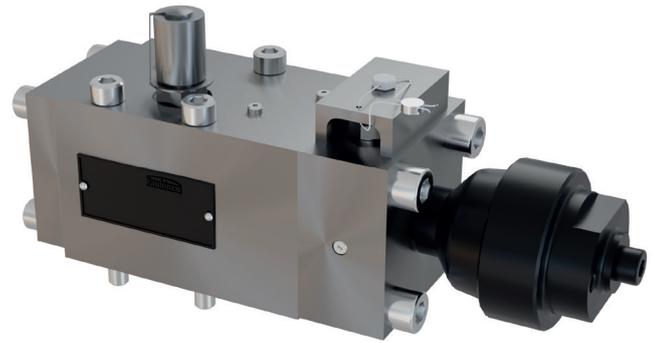


Pressure reducing valve

DN10 - DN16 PN400, PN500



Features

- Direct controlled pressure reducing valve.
- All parts are made of corrosion-resistant materials, and they are easily replaceable.
- Hydraulic accumulator as a preload element
- Attachment, structural plate form or pipe connection

Control function

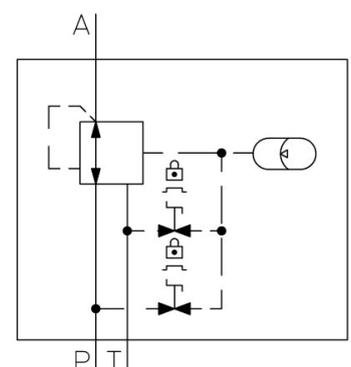
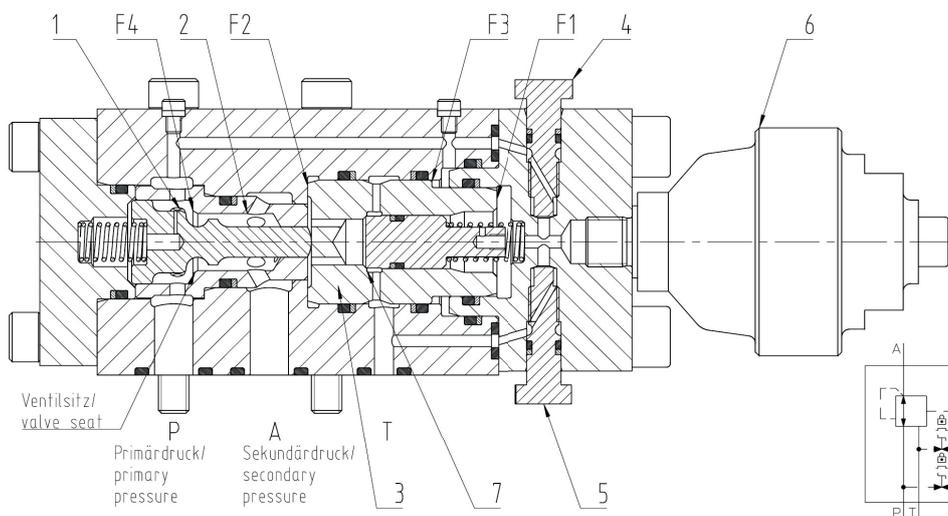
The Pressure reducing valve reduces the primary pressure on port P to a previously set secondary pressure in port A. For primary pressures up to 400 (500) bar, reduced pressures can be set between 20 and 350 (480) bar. A hydraulic accumulator (6), which is prefilled with nitrogen on the gas side, serves as a preload element. The pressure in the hydraulic accumulator (6) is set by opening the adjusting screw (4). Readjustment of the set pressure is possible by releasing the pressure via the adjusting screw (5) into the tank connection (T).

In the basic valve position, pressure medium flows through the valve seat (2) from primary side (P) to secondary side (A). The pressure in the hydraulic accumulator (6) acts to surface (F1) of piston (3). The primary pressure acts to surface F2 and F3. As long as the primary pressure is lower than the set pressure, the valve bolt (1) remains open since the surface F1 to F2-F3 are balanced. When the set pressure in the hydraulic accumulator is reached or exceeded, the piston (3) and thus the valve bolt (1) moves and closes the open valve seat. In closed position, the primary pressure acts to surface (4). The surface F3 is just as large as the surface F4 so that the secondary pressure is kept constant by permanently opening and closing the valve bolt (1).

The pressure relief valve (7) prevents an unwanted pressure increase in the event of leaks at the valve seat. The excess pressure is discharged via the tank connection (T).

Example: Pressure reducing 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	DN10: ≤ 400 bar, DN16: ≤ 500 bar
Hydraulic pressure connector A	DN10: ≤ 350 bar, DN16: ≤ 480 bar
Hydraulic pressure connector T	≤ 10 bar
setting range of hydraulic response pressure Pa	DN10: 20-350 bar, DN16: 20-480 bar
control ratio:	
- pressure reducing function (P-A)	1:1
- pressure relief function (A-T)	1:0,95
direction of flow	P→A
max. volume flow	DN10: 60 l/min, DN16: 200 l/min
Pressure fluid	Water, HFA
- Medium - Temperature range	5 to 40°C
- Medium - Quality	see Hauhinco media requirement, water, HFA
- min filter fineness	Filter fineness 100µm
Pressure fluid	Mineral oil HLP according to DIN51624-2
- Medium - Temperature range	5 to 50°C
- Medium - Quality	Cleanliness class -/19/16 according to ISO 4406
- Viscosity	0,6 bis 100 mm ² /s
Use of other pressure fluids on request.	

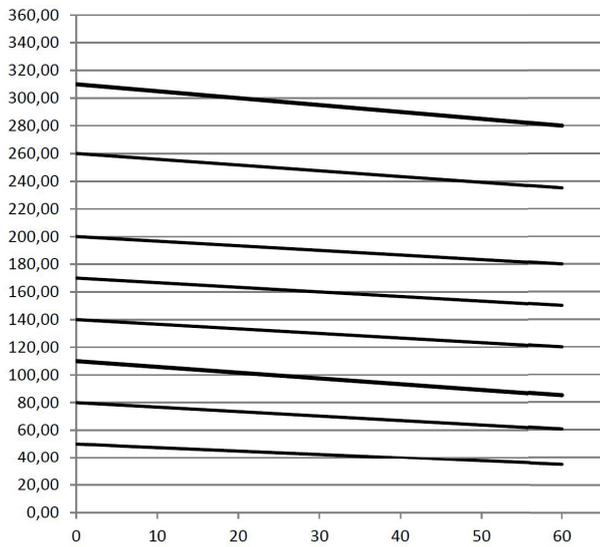
Order information

Included in the scope of supply					
Mounting screws for the valves					
Pressure setting according to customer specification					
Factory test certificate on request					
Designation	Weight [kg]	max. Pressure [bar]	Setting range [bar]	Type	Article number
Pressure relief valve DN10	6,0	400	30-350	Plate-type	6260896
Pressure relief valve D500/30	15,6	500	20-480	Plate-type	6262090
Druckminderventil D500/30	15,6	500	20-480	Pipe connection	6206530

Characteristic curves pressure reducing valve

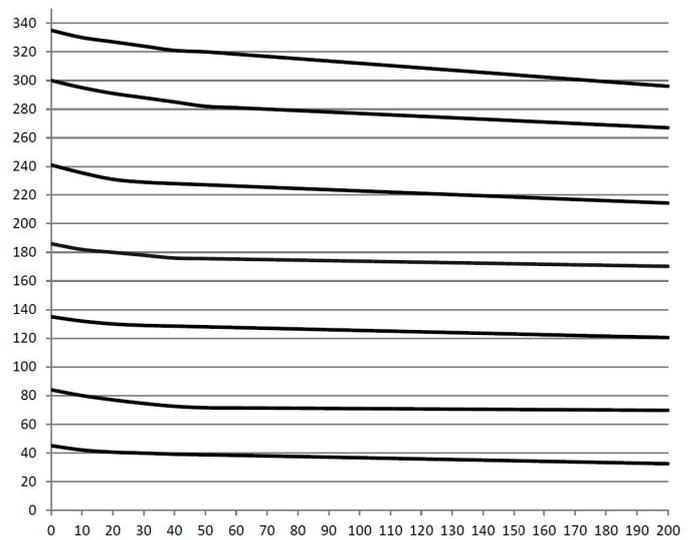
$\Delta p - qV$ characteristic curves DN10

max. open valve, dyn. viscosity 1mm²/s

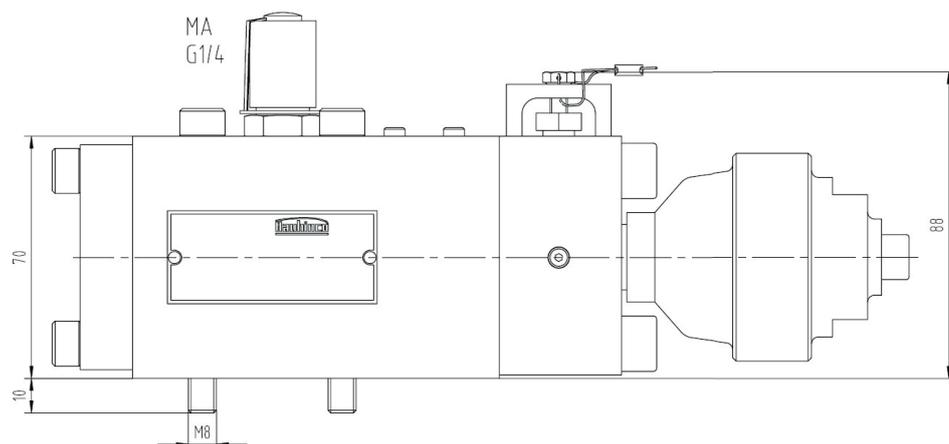
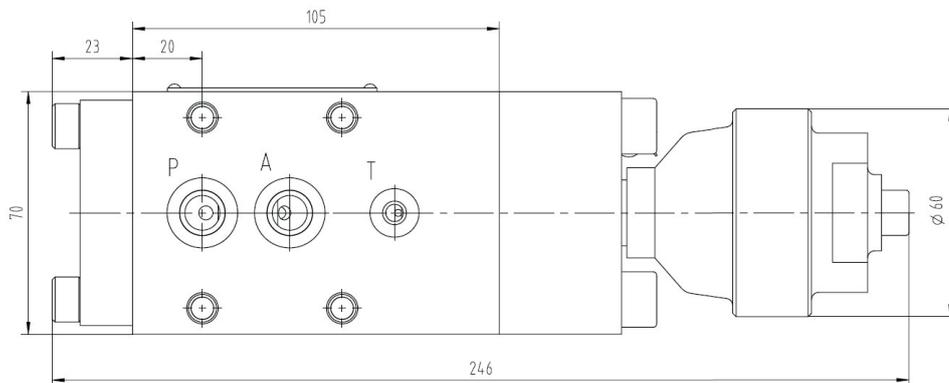
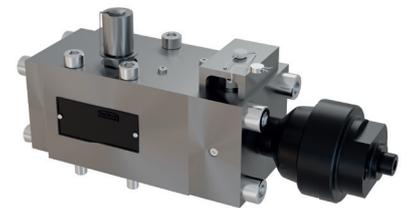


$\Delta p - qV$ characteristic curves DN16

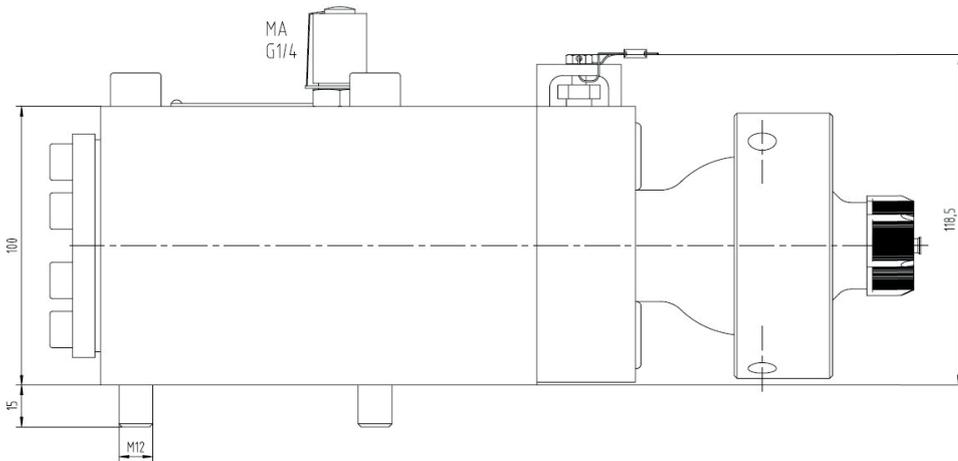
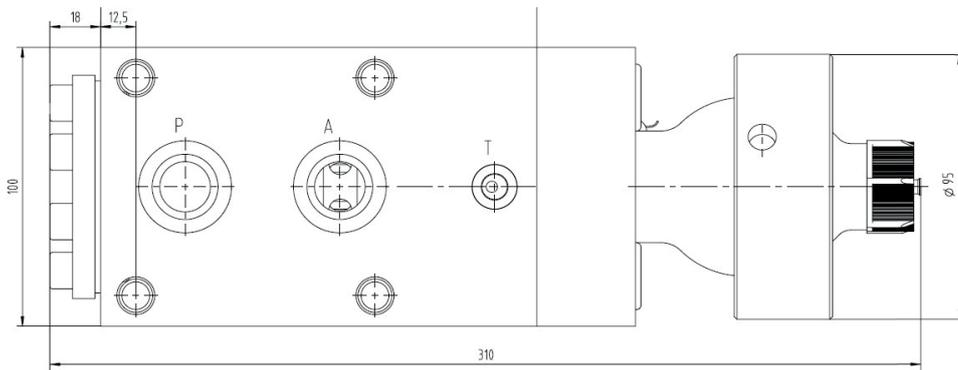
max. open valve, dyn. viscosity 1mm²/s



Pressure reducing valve DN10, plate-type



Pressure reducing valve DN16, plate-type



Pressure reducing valve DN16, pipe connection

