

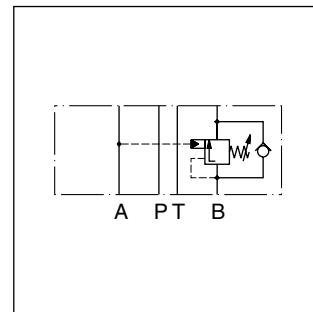
The counterbalance valve series ZNS controls the actuator movement at overrunning loads.

The return flow from the actuator is piloted and controlled by the inlet flow to the actuator, ensuring a cavitation-free lowering of the load.

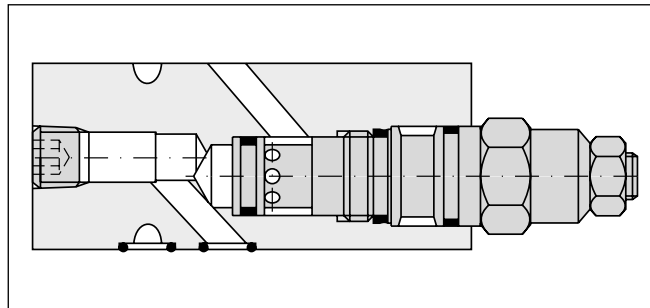
The counter balance valve operates as a pressure relief valve. The setting pressure is lowered by the pressure in the inlet line. To ensure safe load holding the setting pressure should be approximately 30 % higher than the max. load pressure.



ZNS-AB01



ZNS-B01



ZNS-B01

Features

- Controlled movement loads
- Load holding via leak-free poppet valve
- Secondary relief protection for the actuator
- ZNS*01 – NG06 (CETOP 03)
ZNS*02 – NG10 (CETOP 05)

Ordering code

ZNS					S0	D	
Counterbalance valve	Pressure control	Nominal size	Pressure stages	Hexagon screw with lock nut	Design series	Seal	

Code	Pressure control
A	in A
B	in B
AB	in A and B

Code	Nominal size
01	NG06
02	NG10

Code	Seal
1	NBR
5	FPM

Code	Pressure stages
2	70 - 175 bar
5 ¹⁾	140 - 350 bar

¹⁾ NG10 to 315 bar.

Ordering code details

	ZNS*01	ZNS*02
Counterbalance in A	Series ZNS-A01-2-S0-D1 Order no. 098-91126-0 ZNS-A01-5-S0-D1 Order no. 098-91127-0	Series ZNS-A02-2-S0-D1 Order no. 098-91132-0 ZNS-A02-5-S0-D1 Order no. 098-91133-0
Counterbalance in B	Series ZNS-B01-1-S0-D1 Order no. 098-91128-0 ZNS-B01-5-S0-D1 Order no. 098-91129-0	Series ZNS-B02-1-S0-D1 Order no. 098-91134-0 ZNS-B02-5-S0-D1 Order no. 098-91135-0
Counterbalance in A and B	Series ZNS-AB01-1-S0-D1 Order no. 098-91130-0 ZNS-AB01-5-S0-D1 Order no. 098-91131-0	Series ZNS-AB02-1-S0-D1 Order no. 098-91136-0 ZNS-AB02-5-S0-D1 Order no. 098-91137-0
	↑ 2 = 70 ... 175 bar 5 = 140... 350 bar	↑ 2 = 70 ... 175 bar 5 = 140 ...315 bar

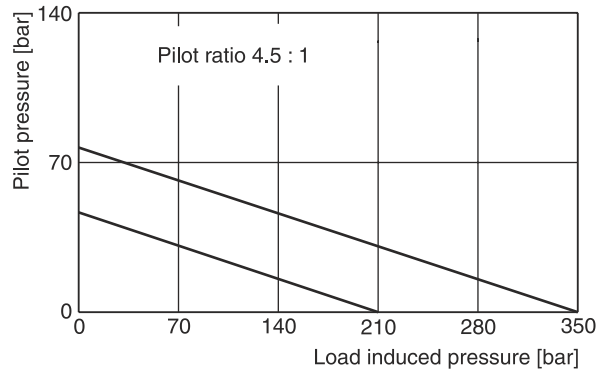
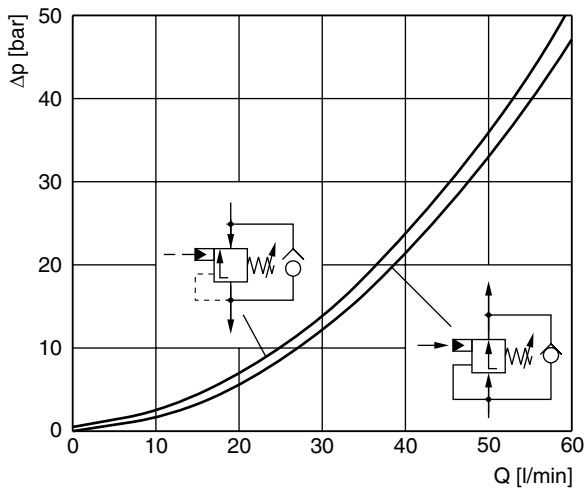
Technical Data / Characteristic Curves

Technical data

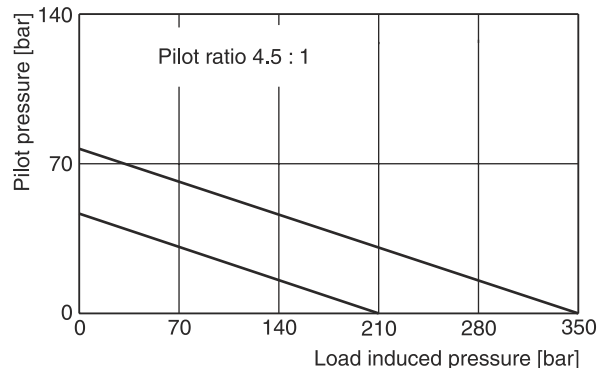
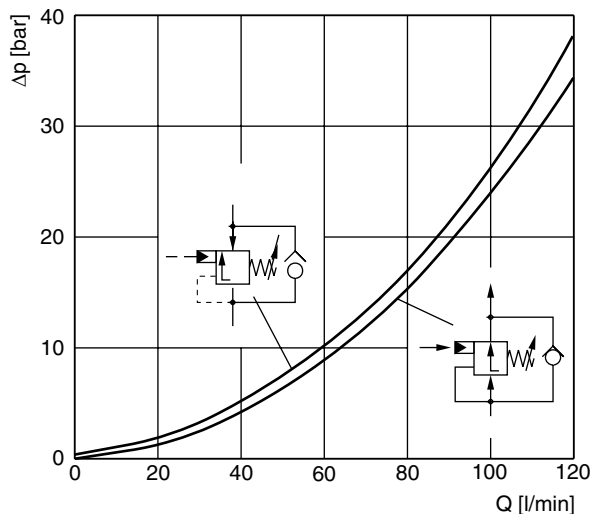
General			
Size			
Mounting interface	NG06 DIN 24340 A6 ISO 4401 NFPA D03		NG10 DIN 24340 A10 ISO 4401 NFPA D05
Mounting position	unrestricted		
Ambient temperature	-20...+60 [°C]		
Weight	1 cartridge	[kg]	1.3
	2 cartridges	[kg]	3.0
Hydraulic			
Max. operating pressure	[bar]	350	
Pressure stages	[bar]	175, 350	
Pilot ratio	4.5 : 1		
Leakage	on request		
Nominal flow	[l/min]	60	
Opening pressure	[bar]	0.3	
Fluid	Hydraulic oil according to DIN 51524		
Fluid temperature	[°C]	-20...+70 (NBR: -25...+70)	
Viscosity,	permitted	[cSt] / [mm ² /s]	20 ... 400
	recommended	[cSt] / [mm ² /s]	30 ... 80
Filtration	ISO 4406 (1999); 18/16/13		

p/Q performance curves

ZNS*01

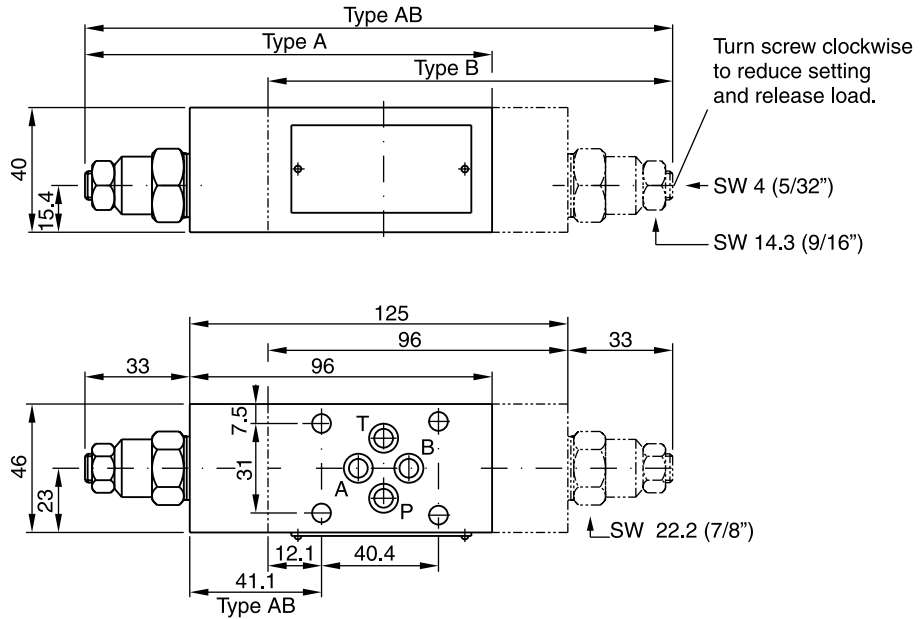


ZNS*02



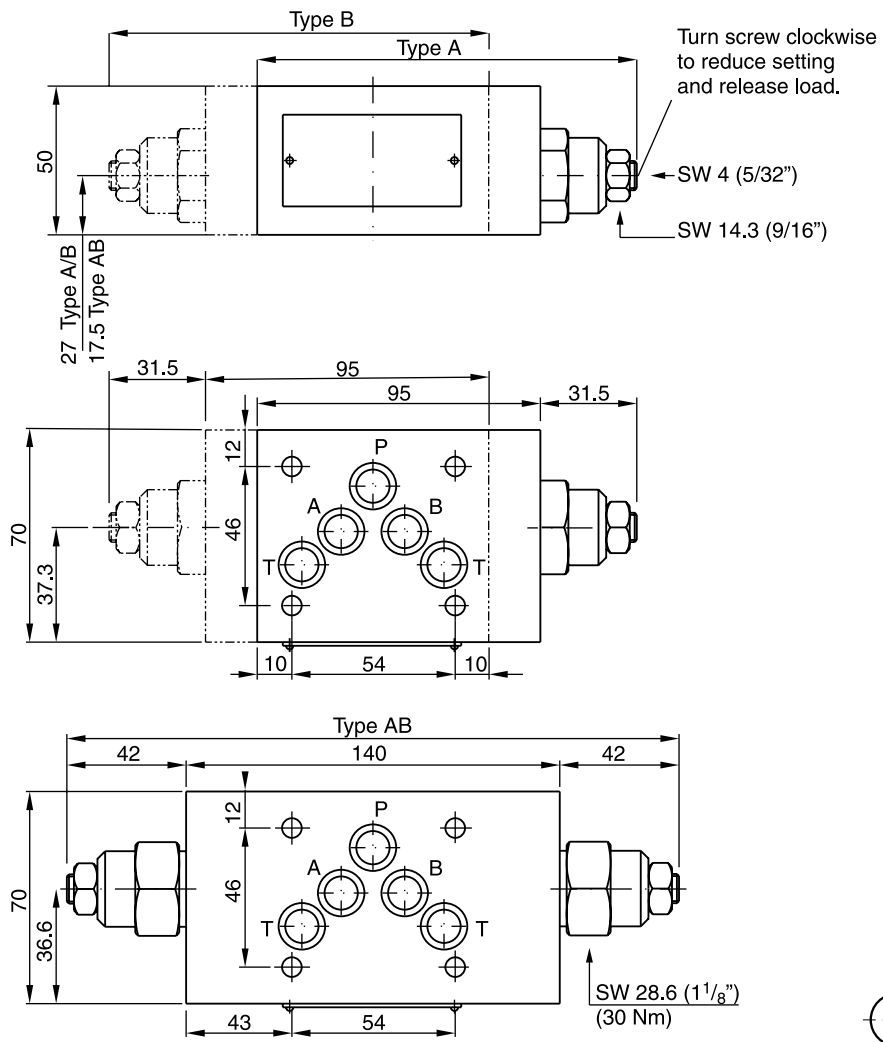
All characteristic curves measured with HLP46 at 50 °C.

ZNS*01



Seal kit ZNS*01	
Seal	Order code
NBR	098-91153-0
FPM	098-91154-0
Complete cartridge ZNS*01	
Pressure stage	Order code
2	517-01017-2
5	517-00448-8

ZNS*02



Seal kit ZNS*02	
Seal	Order code
NBR	098-91155-0
FPM	098-91156-0
Complete cartridge ZNS*02	
Pressure stage	Order code
2	517-00449-8
5	517-00450-8

7