

Characteristics / Ordering Code

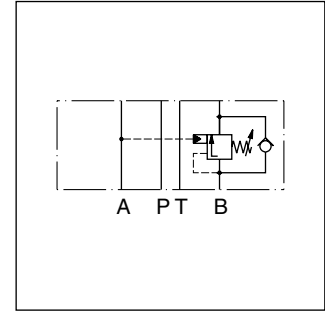
The counterbalance valve series ZNS controls the actuator movement at overrunning loads.

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.

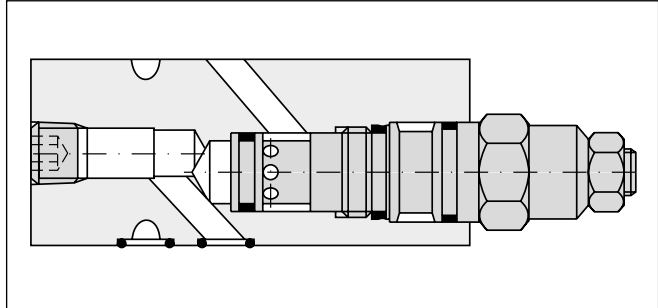
The counter balance valve operates as a pressure relief valve. The setting pressure is lowered by the pressure in the inlet line. To ensure safe load holding the setting pressure should be approximately 30 % higher than the max. load pressure.



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	Seal
1	NBR
5	FPM

Code	Nominal size
01	NG06
02	NG10

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

¹⁾ NG10 to 315 bar.

Ordering code details

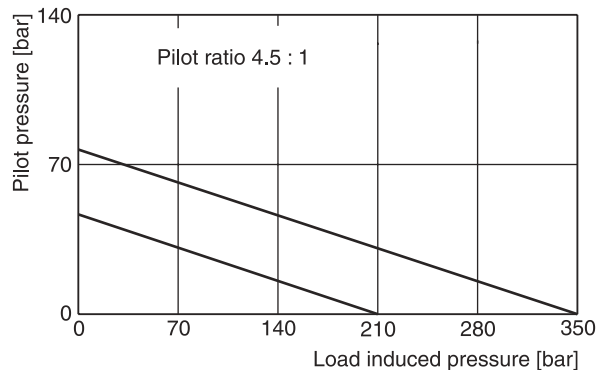
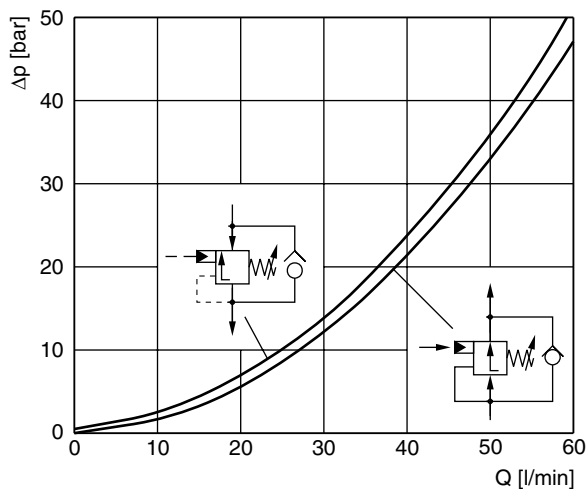
	ZNS*01	ZNS*02
<p>Counterbalance in A</p> <p style="text-align: center;">A PT B</p>	<p>Series ZNS-A01-2-S0-D1 ZNS-A01-5-S0-D1</p>	<p>Series ZNS-A02-2-S0-D1 ZNS-A02-5-S0-D1</p>
<p>Counterbalance in B</p> <p style="text-align: center;">A PT B</p>	<p>Series ZNS-B01-1-S0-D1 ZNS-B01-5-S0-D1</p>	<p>Series ZNS-B02-1-S0-D1 ZNS-B02-5-S0-D1</p>
<p>Counterbalance in A and B</p> <p style="text-align: center;">A PT B</p>	<p>Series ZNS-AB01-1-S0-D1 ZNS-AB01-5-S0-D1</p>	<p>Series ZNS-AB02-1-S0-D1 ZNS-AB02-5-S0-D1</p>
	<p>2 = 70 ... 175 bar 5 = 140... 350 bar</p>	<p>2 = 70 ... 175 bar 5 = 140 ...315 bar</p>

Technical data

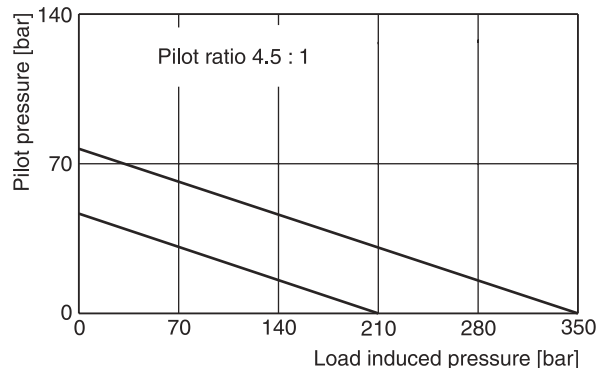
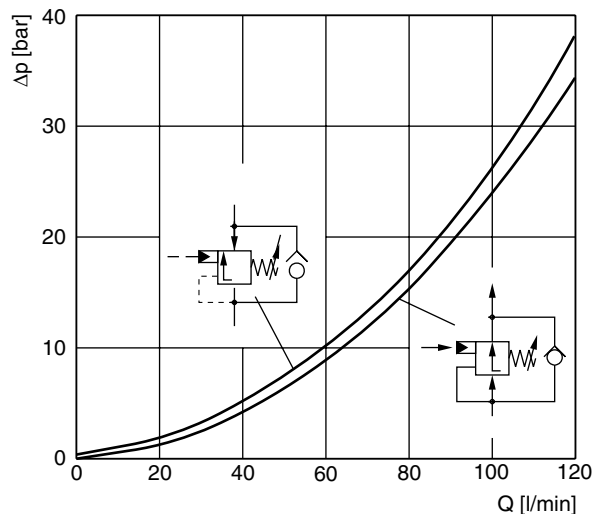
General			NG06	NG10
Size				
Mounting interface			DIN 24340 A6 ISO 4401 NFFPA D03	DIN 24340 A10 ISO 4401 NFFPA D05
Mounting position			unrestricted	
Ambient temperature		[°C]	-20...+60	
Weight	1 cartridge	[kg]	1.3	1.6
	2 cartridges	[kg]	3.0	3.9
Hydraulic				
Max. operating pressure		[bar]	350	315
Pressure stages		[bar]	175, 350	
Pilot ratio			4.5 : 1	
Leakage			on request	
Nominal flow		[l/min]	60	120
Opening pressure		[bar]	0.3	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	
Viscosity, recommended		[cSt] / [mm ² /s]	30 ... 80	
Filtration			ISO 4406 (1999); 18/16/13	

p/Q performance curves

ZNS*01

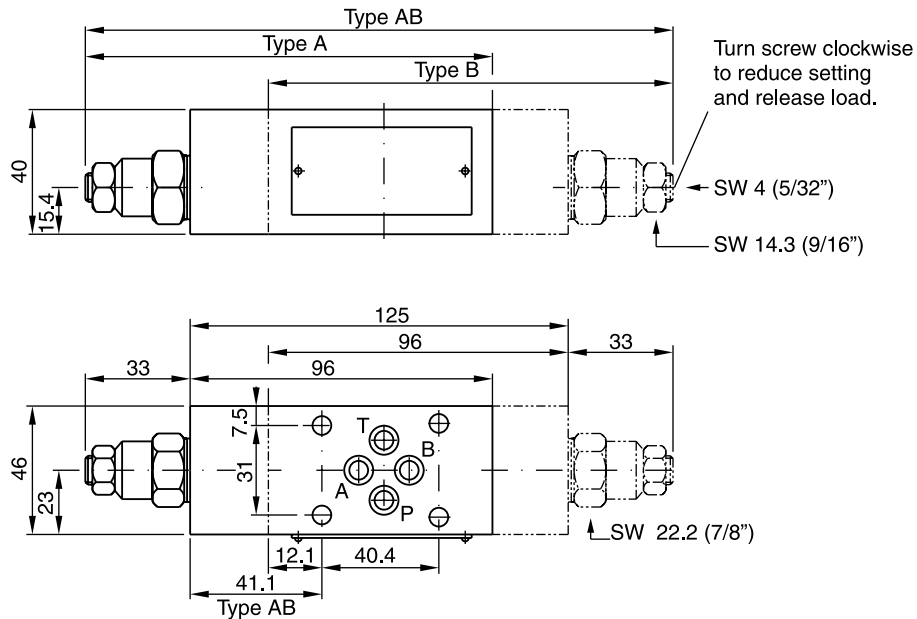


ZNS*02



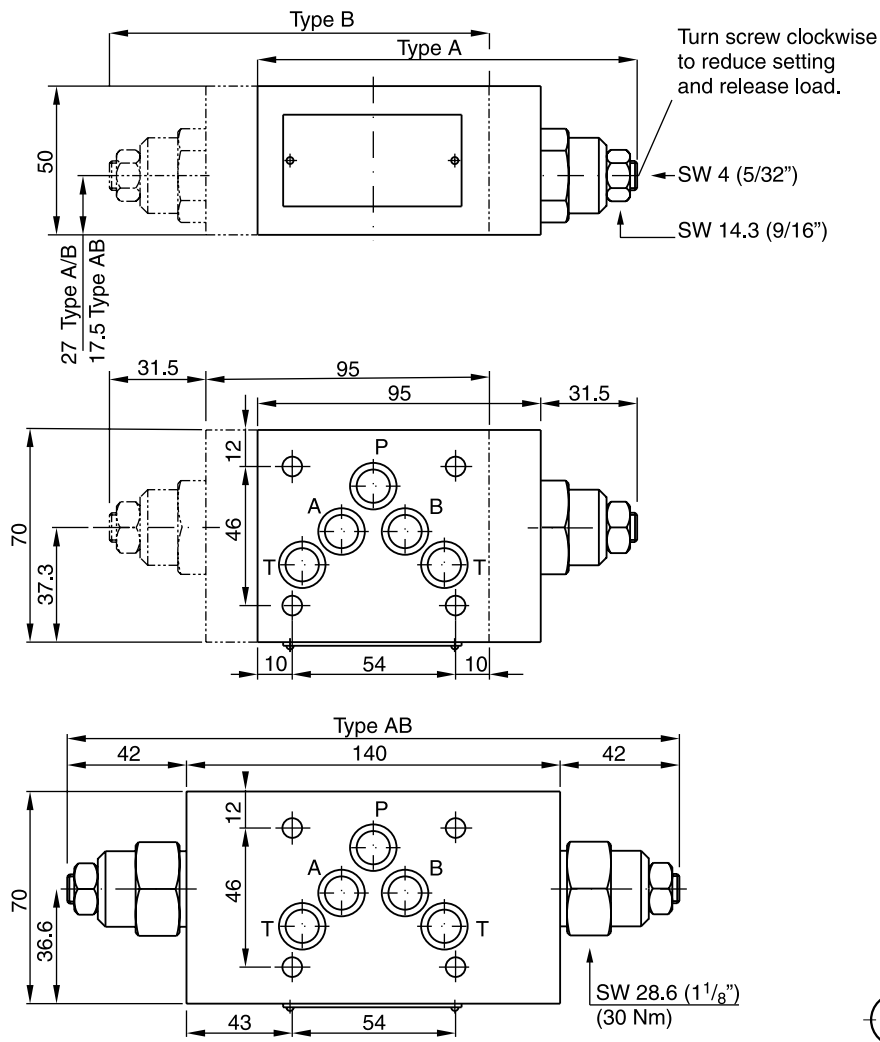
All characteristic curves measured with HLP46 at 50 °C.

ZNS*01

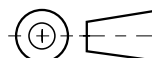


Seal kit ZNS*01	
Seal	Order code
NBR	098-91153-0
FPM	098-91154-0
Complete cartridge ZNS*01	
Pressure stage	Order code
2	517-01017-2
5	517-00448-8

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



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