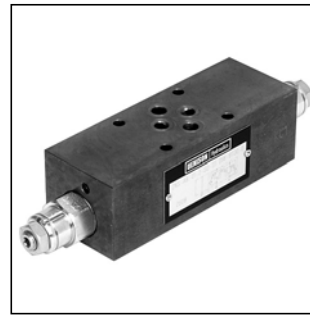


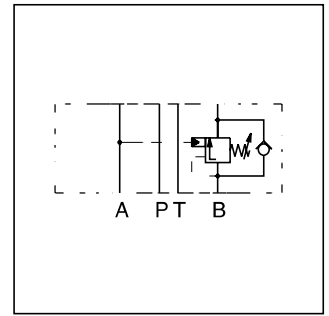
The counterbalance valve series ZNS controls the actuator movement at overrunning loads.

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.

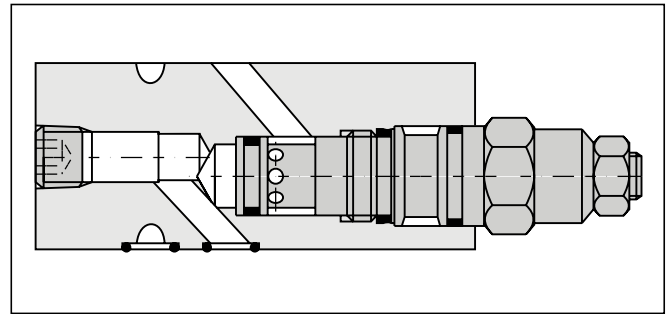
The counter balance valve operates as a pressure relief valve. The setting pressure is lowered by the pressure in the inlet line. To ensure safe load holding the setting pressure should be approximately 30 % higher than the max. load pressure.



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

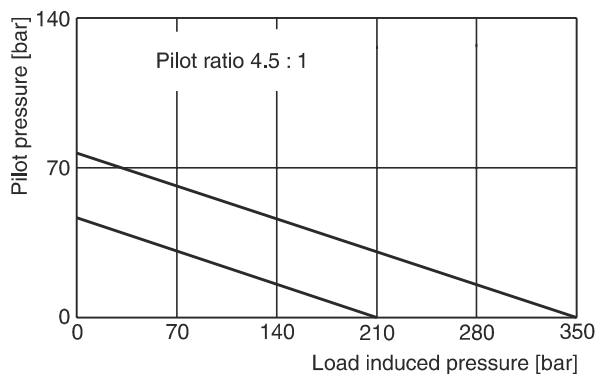
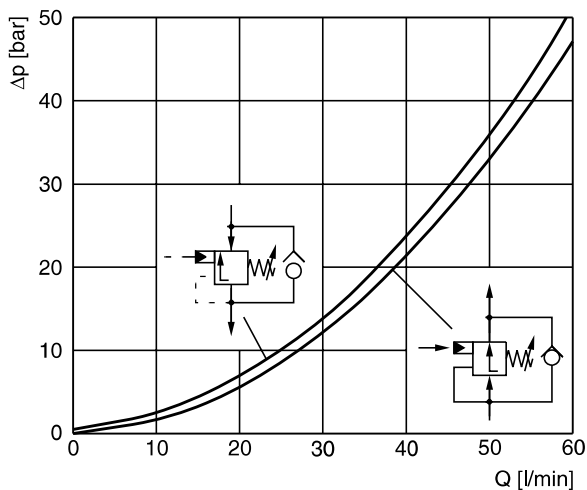
<p>Counterbalance in A</p>	<p>ZNS*01</p> <p>Series ZNS-A01-2-S0-D1 ZNS-A01-5-S0-D1</p>	<p>ZNS*02</p> <p>Series ZNS-A02-2-S0-D1 ZNS-A02-5-S0-D1</p>
<p>Counterbalance in B</p>	<p>Series ZNS-B01-1-S0-D1 ZNS-B01-5-S0-D1</p>	<p>Series ZNS-B02-1-S0-D1 ZNS-B02-5-S0-D1</p>
<p>Counterbalance in A and B</p>	<p>Series 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

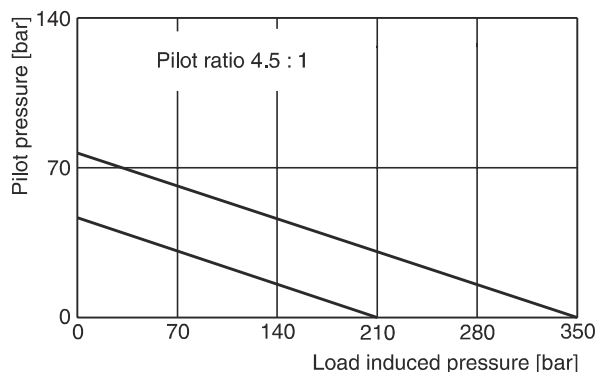
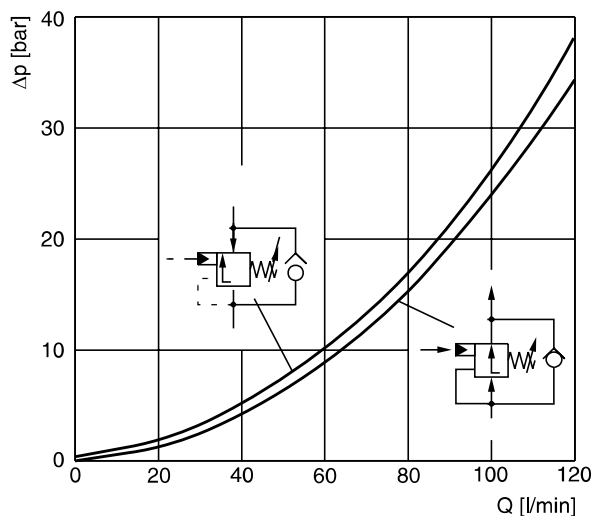
General			
Size		NG06	
Mounting interface		DIN 24340 A6 ISO 4401 NFFA D03	
		NG10	
		DIN 24340 A10 ISO 4401 NFFA D05	
Mounting position		unrestricted	
Ambient temperature	[°C]	-20...+60	
Weight	1 cartridge [kg]	1.3	1.6
	2 cartridges [kg]	3.0	3.9
Hydraulic			
Max. operating pressure	[bar]	350	
Pressure 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	
Viscosity, recommended	[cSt] / [mm ² /s]	30 ... 80	
Filtration		ISO 4406 (1999); 18/16/13	

p/Q performance curves

ZNS*01



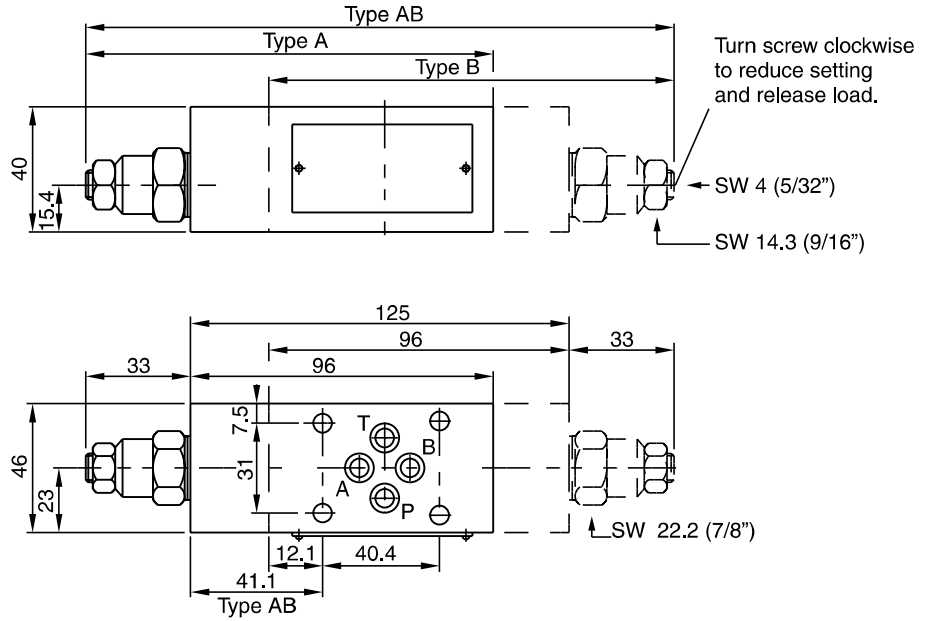
ZNS*02



All characteristic curves measured with HLP46 at 50 °C.

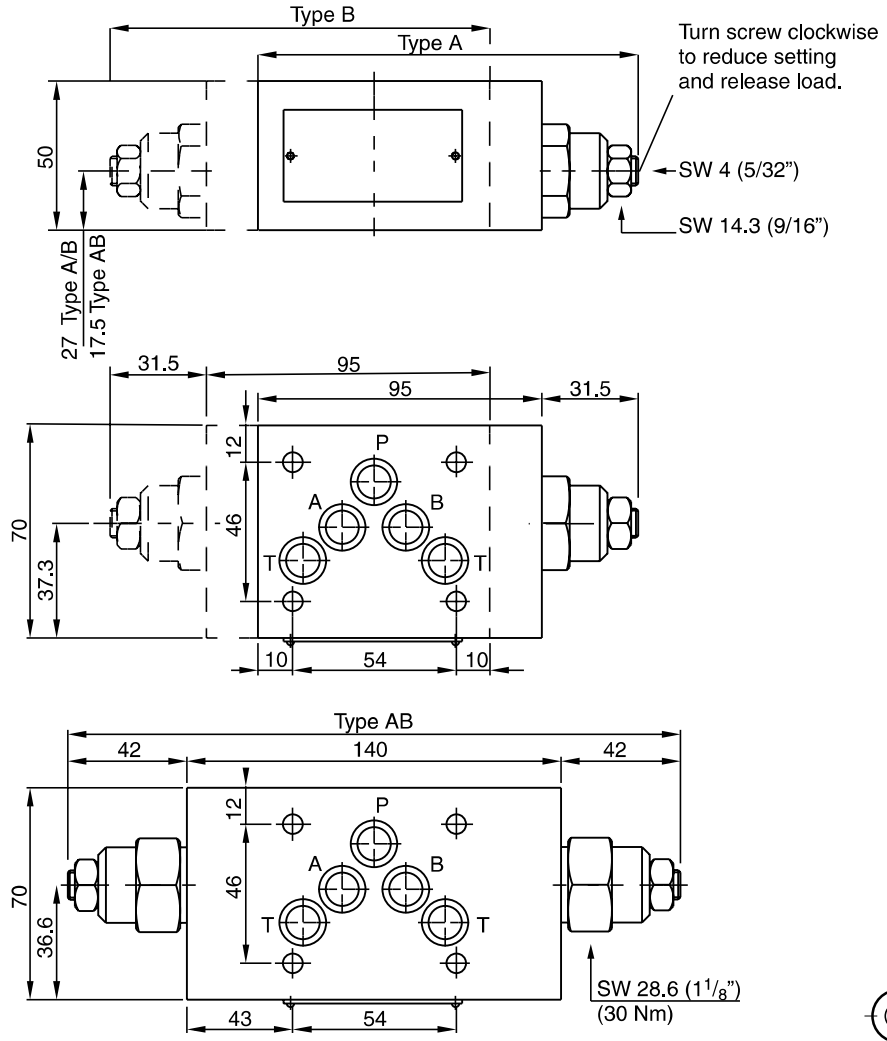
ZNS UK.indd 16.04.21

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

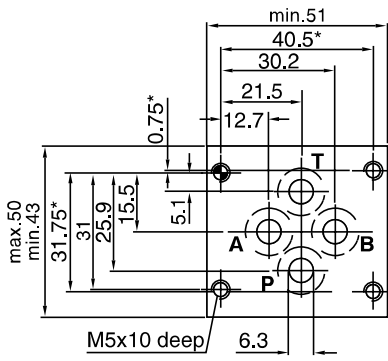
ZNS*02



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

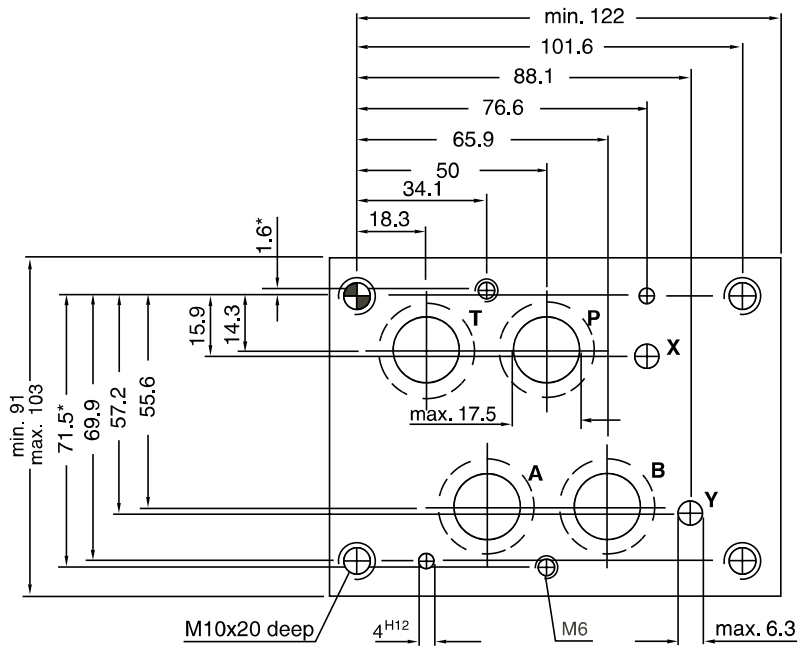
NG06

Code: ISO 4401-03-02-0-94



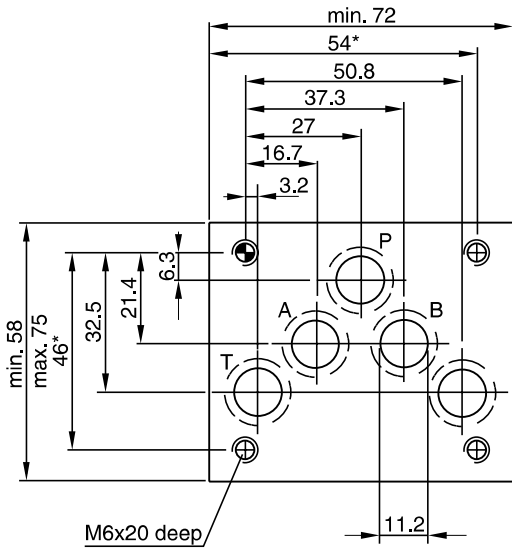
NG16

Code: ISO 4401-07-06-0-94



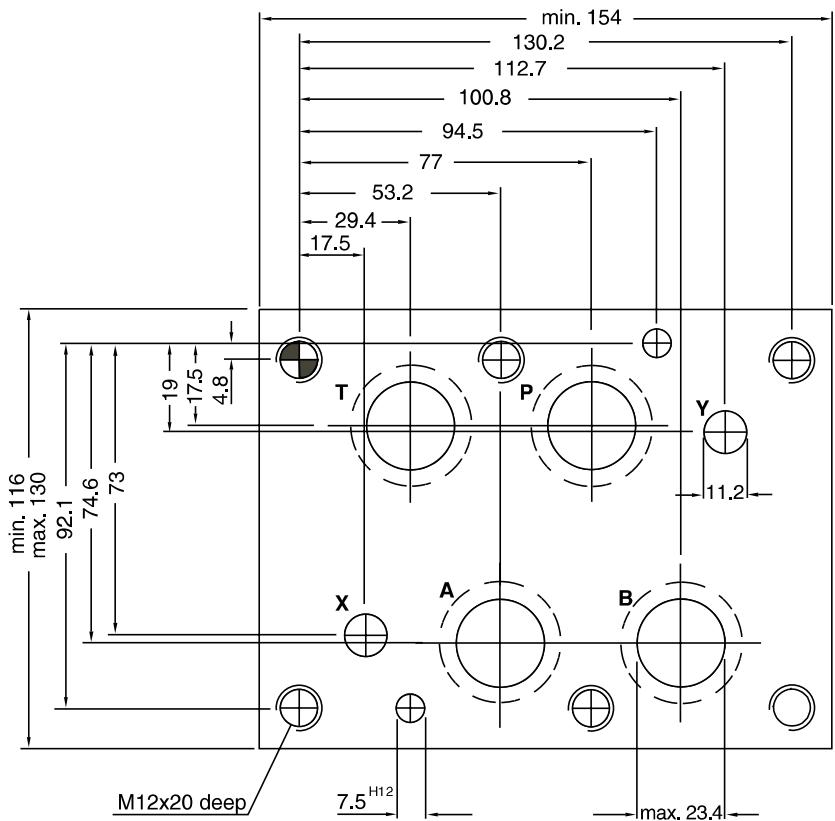
NG10

Code: ISO 4401-05-05-0-94



NG25

Code: ISO 4401-08-07-0-94 (Port diameter acc. to NFPA)



Dimensions marked with*: ± 0.1 mm.
 All other dimensions: ± 0.2 mm.