

RA 29 255/10.02

**Pump pre-load valve  
Model SYDZ 0001  
for the SYDFE closed loop control system**

Series 1X

Maximum operating pressure 5075 psi (350 bar)



HG670+6673.tif

Type SYDZ 0001-1X/250V071M    Type SYDZ 0001-1X/250V045M

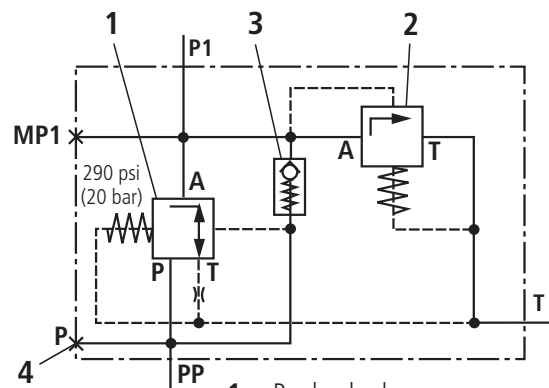
**Area of application**

SYDZ 0001 pump pre-load valves are used when the flow from A10VSO variable displacement pumps with a DFE control must be controllable at operating pressures lower than 174 psi (12 bar) and only internal pilot oil is available for adjustment.

In this case the valve is mounted directly onto the SAE pressure port of the A10VSO variable displacement pump (see RA 92 711 and RA 92 712).

**Function**

The pre-load function is only effective within the pressure range of up to 290 psi (20 bar). If the operating pressure in port P1 exceeds 435 psi (30 bar), the pre-load valve (1) is fully open. In order to limit the maximum pressure, a factory-preset pressure relief valve (2) is integrated into the pre-load valve (see ordering details). In addition, an integrated check valve (3) allows the pressure to be controlled in the range < 290 psi (20 bar).

**Symbol**

- 1 Pre-load valve
- 2 Pressure relief valve
- 3 Check valve
- 4 Bleed screw

**⚠ The pressure relief function is purely a safety function and is therefore not suitable for continuous use!  
The system must be bled during commissioning.**



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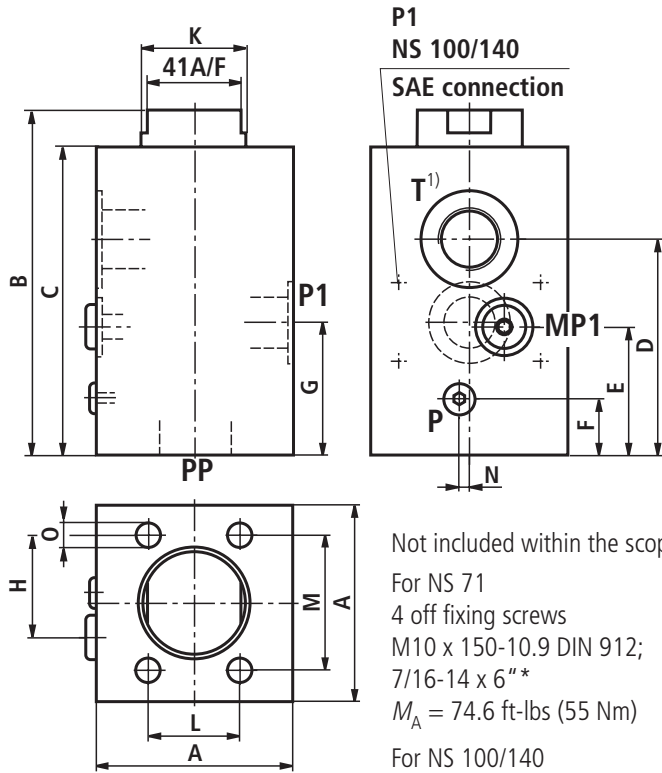
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**Unit dimensions:** Dimensions in inches (millimeters)

**NS 71, 100 and 140**



Not included within the scope of supply:

For NS 71  
 4 off fixing screws  
 M10 x 150-10.9 DIN 912;  
 7/16-14 x 6" \*  
 $M_A = 74.6$  ft-lbs (55 Nm)

For NS 100/140  
 4 off S.H.C.S.  
 M14 x 150-10.9 DIN912;  
 S.H.C.S. 1/2-13 x 6"  
 $M_A = 73.8$  ft-lbs (100 Nm)

\*Size 71 Code 62 port block

NS	71	100/140
A	3.35 (85)	3.35 (85)
B	5.91 (150)	5.79 (147)
C	5.28 (134)	5.16 (131)
D	3.70 (94)	3.58 (91)
E	2.17 (55)	2.05 (52)
F	0.94 (24)	0.94 (24)
G	2.20 (56)	2.22 (56.5)
H	1.73 (44)	1.77 (48)
K	Ø 1.77 (45)	Ø 1.77 (45)
L	1.19 (30.2)	1.25 (31.8)
M	2.31 (58.7)	2.63 (66.7)
N	0.18 (4.5)	0.18 (4.5)
O	4 x Ø 10.5	4 x Ø 15
PP	SAE 1 1/4"	SAE 1 1/4"
P1	G 1	SAE 1 1/4"
P	G 1/8	G 1/8
MP1	G 1/4	G 1/4
T <sup>1)</sup>	G 3/4	G 3/4

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