

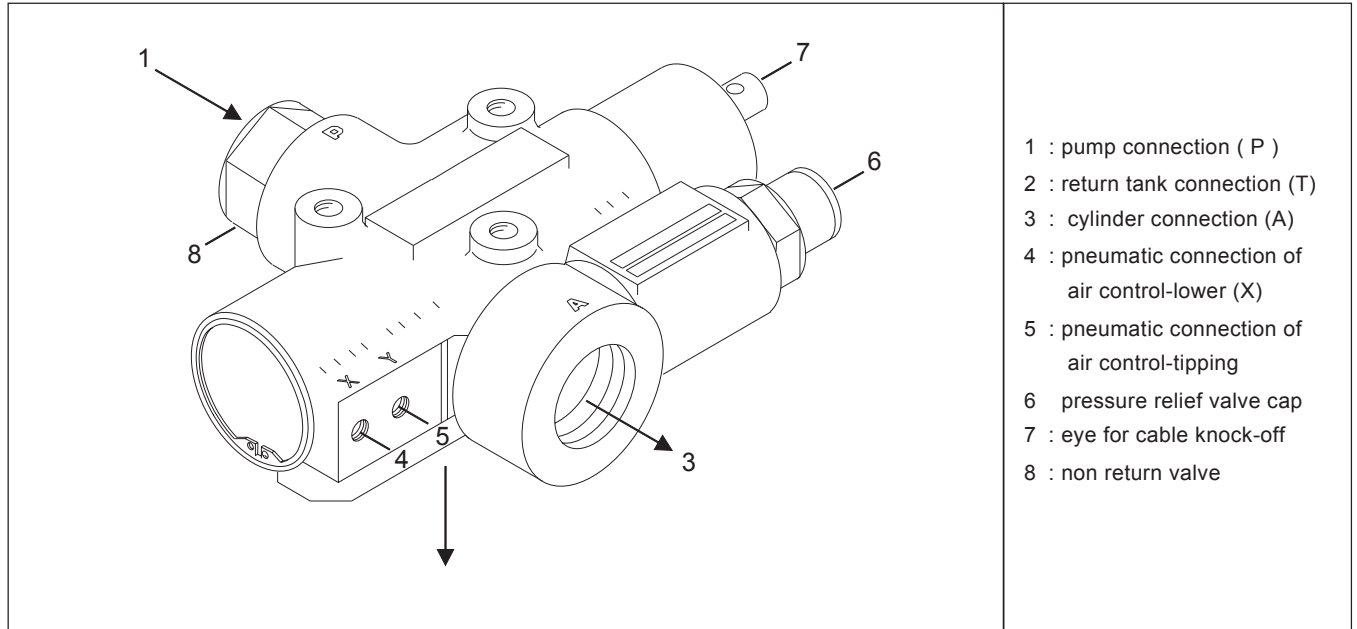
TIPPING VALVE

TIPPING VALVE - AIR OPERATING

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tipping valve type:
working pressure:
part number valve:

3 DHMP 70
160 bar
147 08 316 H



- 1 : pump connection (P)
- 2 : return tank connection (T)
- 3 : cylinder connection (A)
- 4 : pneumatic connection of air control-lower (X)
- 5 : pneumatic connection of air control-tipping
- 6 : pressure relief valve cap
- 7 : eye for cable knock-off
- 8 : non return valve

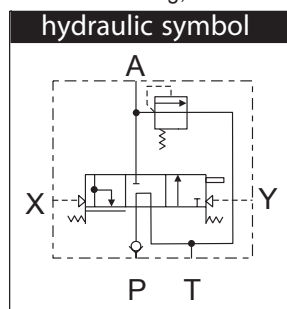
specifications

type	: Spool valve with pressureless bypass in neutral. Oil flow in lowering position is proportional with pneumatic pilot pressure.
hydraulic connections	: G3/4"
pneumatic connections	: G1/8"
max. working pressure	: 160 bar
max. peak pressure	: 400 bar
pneum. pilot pressure	: 6 bar
max. flow	: 110 L/min.(see $\Delta p - Q$ characteristic)
max. pressure on T-conn.	: 30 bar
filtration	: $\leq 25 \mu\text{m}$ (ISO 18/13)
oil types	: mineral oil (DIN 51524 / 51525)
viscosity range	: 3 / 380 mm ² /s
temperature range	: -20 / + 90 °C
s s a m	g k 5 . 3 :

general information

general information

- Mount the valve according to the mounting instructions.
- Use the correct washers and adapters in the ports to prevent housing deformation.
Do not use adapters with tapered threads.
- To further prevent deformation of the valve housing, the mounting plate surface or block must be completely flat and plane.
- To prevent corrosion of the pneumatic parts, the pressurized air must be free of moisture.
- Do not weld to the valve.
- Max. torque for bolts to mount the valve is 15 Nm.

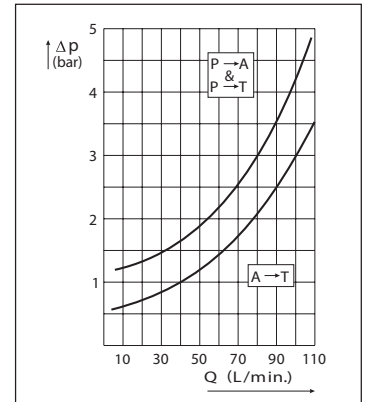


$\Delta p - Q$ characteristic

viscosity 30 mm²/s

This characteristic shows the pressure drop in relation to the flow.

- pump to tank (P→T)
- pump to cylinder (P→A)
- cylinder to tank (A→T)



mounting possibilities

1 standard mounting on oil tank with direct oil return

The tipping valve must be mounted onto the tank that is equipped with a valve mounting block. Use mounting kit no. 147 35 395

- Use the O-ring between valve-return line opening and valve block.
- Grease the O-ring light before mounting so it will stay in place.
- Fit the valve to the tank mounting block with the allen bolts and washers from the mounting kit.

2 remote mounting on the chassis

- Use the required mounting kit. (mount. kit: 147 35 398)
- Weld the chassis plate to the chassis.
- Fit the valve to the chassis plate with the hexagon bolts and washers from the mounting kit.

note : Do not unscrew the inlet adapter

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tipping valve type:

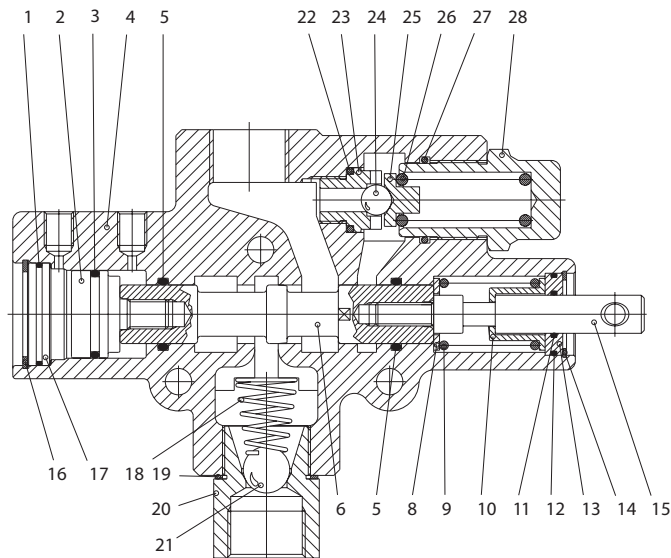
3 DHMP 70

working pressure:

160 bar

part number valve:

147 08 316 H



Parts

pos.	code no.	description	qty.
1	019 66 102 H	2125 O-ring	1
2		piston	1
3	019 66 104 H	3112 O-ring	1
4		body	1
5	019 99 106 H	3081 O-ring	2
6		rod	1
8		spring disc	1
9		rod spring	1
10		cup	1
11	019 68 445 H	2050 O-ring	1
12	019 68 455 H	2093 O-ring	1
13		disc	1
14	019 66 034 H	28i circlip	1
15		tie rod	1
16		35i circlip	1
17		cover	1
18		check valve spring	1
19		washer 80 - 220 bar	1
20		3/4" F connector	1
21	019 67 247 H	5/8" ball	1
22	019 68 460 H	123 O-ring	1
23		ball seat	1
24	019 68 565 H	13/32" Ball	1
25		ball slideway	1
26	019 68 568 H	spring 80 - 220 bar	1
27	019 68 566 H	3100 O-ring	1
28		valve body 80 - 220 bar	1
	019 63 510 H	seal kit	