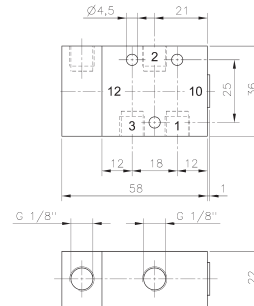
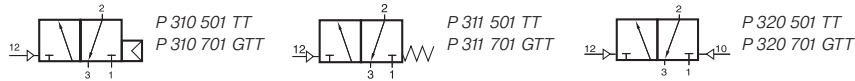


# P 310 501 TT/P 310 701 GTT/P 311 501 TT P 311 701 GTT/P 320 501 TT/P 320 701 GTT

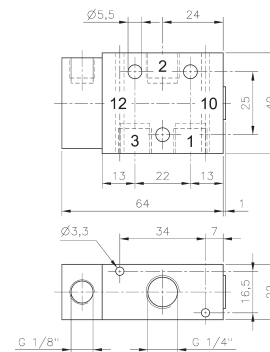


**P 310 501 TT/P 311 501 TT**

Pneumatically actuated 3/2-way spool valve for low temperature environment - 50° C to + 50° C.

- Type 310      single pilot n.c. air-spring return operating and actuating pressure should be at the same level.
- Type 311      single pilot n.c. mechanical spring return
- Type 320      double pilot

GTT: dual use, valves can be used in-line as well as on manifold plates. Manifolds for valves type 701 G are displayed on page 2.6. 1.5.

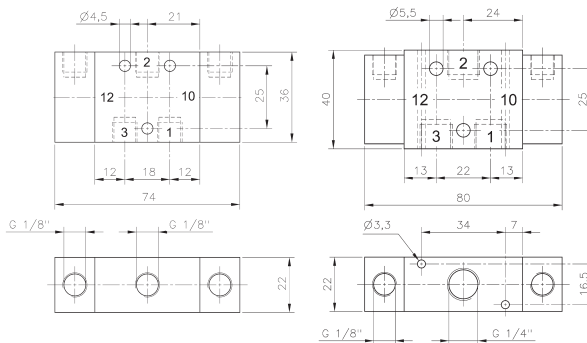


**P 310 701 GTT/P 311 701 GTT**

Due to the specific design of the low temperature seals pressure has to be applied to port 1. For other versions (e.g. normally open) please get in touch with the manufacturer.

Please notice:  
When operated below 0° C the pressure condensation point has to be at least 15° C below the temperature of environment and media. Air has to be dried!  
Below - 40° C the leakage-rate of the valve can increase to 10 cm<sup>3</sup> /min, actuation pressure minimum 3 bar.  
Use unlubricated air only.

Exhaust can be throttled.

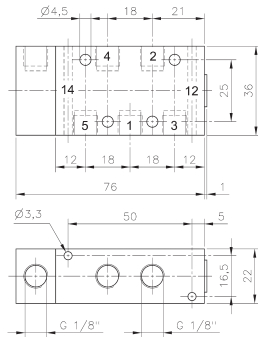
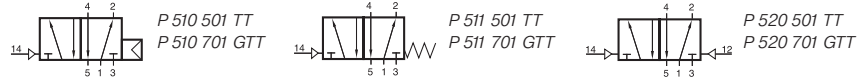


**P 320 501 TT**

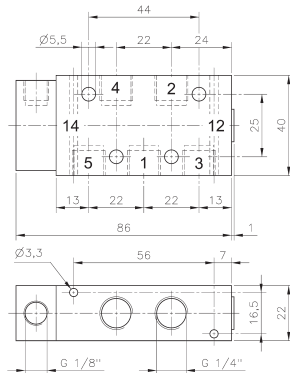
**P 320 701 GTT**

Type	Function	Port size	Air flow	Operating pressure	Actuating pressure	Weight
P 310 501 TT	n.c. air return	G 1/8"	650 l/min	2 - 10 bar	the same	0,13 kg
P 310 701 GTT	n.c. air return	G 1/4"	1250 l/min	2 - 10 bar	the same	0,14 kg
P 311 501 TT	n.c. mech. spring	G 1/8"	650 l/min	2 - 10 bar	3 - 10 bar	0,13 kg
P 311 701 GTT	n.c. mech. spring	G 1/4"	1250 l/min	2 - 10 bar	3 - 10 bar	0,14 kg
P 320 501 TT	double pilot	G 1/8"	650 l/min	2 - 10 bar	≤ operating press.	0,16 kg
P 320 701 GTT	double pilot	G 1/4"	1250 l/min	2 - 10 bar	≤ operating press.	0,17 kg

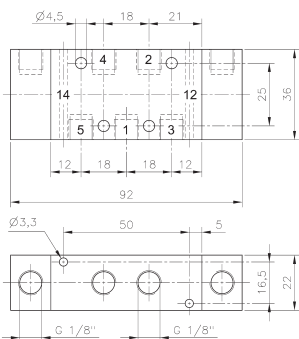
# P 510 501 GTT/P 510 701 GTT/P 511 501 GTT P 511 701 GTT/P 520 501 GTT/P 520 701 GTT



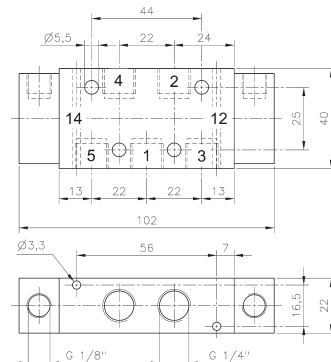
P 510 501 GTT/P 511 501 GTT



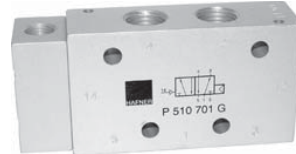
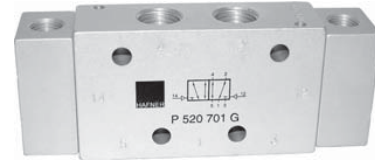
P 510 701 GTT/P 511 701 GTT



P 520 501 GTT



P 520 701 GTT



Pneumatically actuated 5/2-way spool valve for low temperature environment - 50° C to + 50° C.

- Type 510      single pilot air-spring return  
operating and actuating pressure  
should be at the same level.
- Type 511      single pilot mechanical  
spring return
- Type 520      double pilot

GTT: dual use, valves can be used in-line as well as on manifold plates. Manifolds for valves type 501 G are displayed on page 2.6.2.2, manifold for valves type 701 G are displayed on page 2.6.2.3.

Due to the specific design of the low temperature seals pressure has to be applied to port 1. For other versions please get in touch with the manufacturer.

Please notice:  
When operated below 0° C the pressure condensation point has to be at least 15° C below the temperature of environment and media. Air has to be dried!

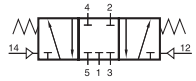
Below - 40° C the leakage-rate of the valve can increase to 10 cm<sup>3</sup> /min, actuation pressure minimum 3 bar.

Use unlubricated air only.

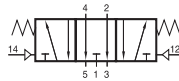
Exhaust can be throttled.

Type	Function	Port size	Air flow	Operating pressure	Actuating pressure	Weight	
P 510 501 GTT	air return	G 1/8"	650 l/min	2 - 10 bar	the same	0,16 kg	⊕
P 510 701 GTT	air return	G 1/4"	1250 l/min	2 - 10 bar	the same	0,18 kg	⊕
P 511 501 GTT	mech. spring	G 1/8"	650 l/min	2 - 10 bar	3 - 10 bar	0,16 kg	
P 511 701 GTT	mech. spring	G 1/4"	1250 l/min	2 - 10 bar	3 - 10 bar	0,18 kg	
P 520 501 GTT	double pilot	G 1/8"	650 l/min	2 - 10 bar	≤ operating press.	0,20 kg	⊕
P 520 701 GTT	double pilot	G 1/4"	1250 l/min	2 - 10 bar	≤ operating press.	0,22 kg	⊕

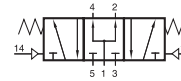
# P 53\_ 501 GTT/P 53\_ 701 GTT



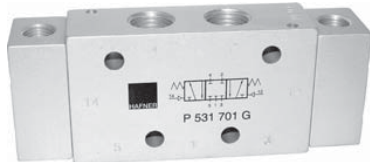
P 531 501 GTT  
P 531 701 GTT  
P 531 121 GTT



P 532 501 GTT  
P 532 701 GTT  
P 532 121 GTT



P 533 501 GTT  
P 533 701 GTT  
P 533 121 GTT



Pneumatically actuated 5/3-way spool valve for low temperature environment - 50° C to + 50° C.

Type 531            centre closed  
Type 532            centre exhausted  
Type 533            centre pressurized

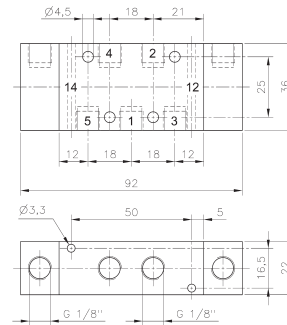
When ordering please complete the type number by 1, 2 or 3 according to the type required.

GTT: dual use, valves can be used in-line as well as on manifold plates. Manifolds for valves type 501 G are displayed on page 2.6.2.2, manifold for valves type 701 G are displayed on page 2.6.2.3.

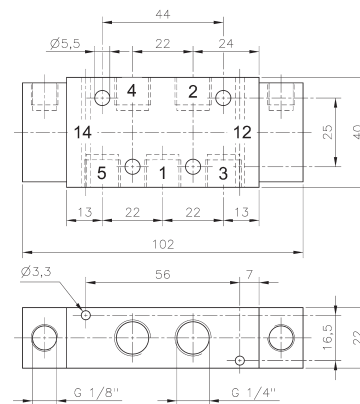
Due to the specific design of the low temperature seals pressure has to be applied to port 1. For other versions please get in touch with the manufacturer.

Please notice:  
When operated below 0° C the pressure condensation point has to be at least 15° C below the temperature of environment and media. Air has to be dried!  
Below - 40° C the leakage-rate of the valve can increase to 10 cm<sup>3</sup> /min.  
Use unlubricated air only.

For type 531: pressure at port 1 has to be ≥ pressure at 2 and 4. If pressure supply is lost, 2 or 4 can exhaust and actuator might move.



P 53\_ 501 GTT



P 53\_ 701 GTT

Type	Port size	Air flow	Operating pressure	Actuating pressure	Weight
P 53_ 501 GTT	G 1/8"	650 l/min	2 - 10 bar	3 - 10 bar	0,20 kg
P 53_ 701 GTT	G 1/4"	1250 l/min	2 - 10 bar	3 - 10 bar	0,22 kg