# **Series P-05**

# Pneumatically operated valves, 3/2-way

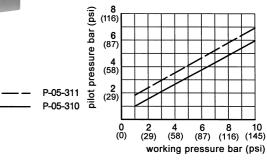
G1/8 • 750 NI/min (0.762 Cv)











#### Design, function and technical data

Pneumatically operated spool valve. The valve switches upon pressurization of the pilot port (10 or 12).

Valve P-05-311 is available for use with vacuum, order number P-05-312.

The pressure can be connected at 1 (normally closed) or at 3 (normally open).

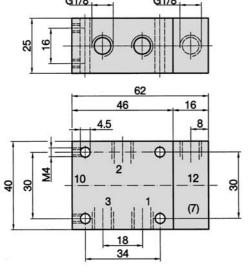
For manifold mounting see series R-181/n (page 4.113).

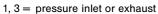
Valves P-05-320 and P-05-322 are available for use with vacuum (-0.95 ... 10 bar/-14 ... 175 psi).

Order number changes to P-05-320-Q and P-05-322-Q.

Valves of this series are available in explosion proof design in accordance with 2014/34/EU (ATEX). For further details see chapter 13 of this catalogue.

## P-05-310, P-05-311, P-05-312



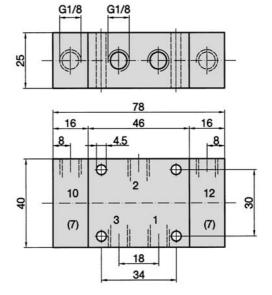


= outlet

12 = pilot port

= The pilot port can be repositioned by (180°).

# P-05-320, P-05-320-Q, P-05-322, P-05-322-Q



1, 2, 3 = for interchangeable use

12, 10 = pilot port (7) = The pilot port can be repositioned by (180°).

Order number	P-05-310	P-05-311	P-05-312	P-05-320	P-05-322
Function	3/2-way, single pilot air spring return	3/2-way, single pilot spring return		3/2-way, double pilot	3/2-way, double pilot dominant
Connection	G1/8				
Nominal size	6 mm				
Flow rate	750 NI/min (0.762 Cv)				
Pressure range	2 10 bar (29 145 psi)	1 10 bar (14 145 psi)	- 0,95 10 bar (- 14 145 psi)	0 10 bar (0 145 psi)	
Pilot pressure range	see diagram 2 10 bar (29 145 psi)				5 psi)
Temperature range	– 10 °C + 70 °C (+ 14 °F + 158 °F)				
Materials	Body: Al (anodized), Inner parts: Al, brass, stainless steel, Seals: NBR and POM				
Medium	Compressed air in accordance with ISO 8573-1: 2010, Class 7:2:4 - and free of aggressive additives.				
Weight	0.156 kg (0.344 lb.)	0.158 kg (0.348 lb.)			

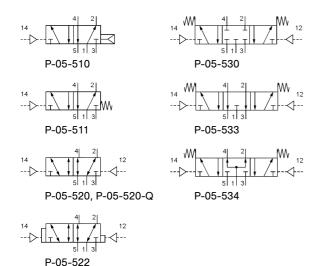
Subject to change

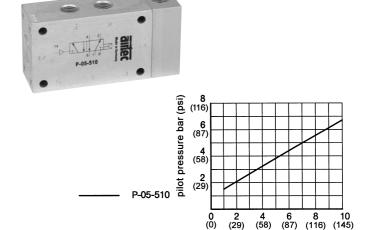
# Series P-05

Pneumatically operated valves, 5/2- and 5/3-way G1/8 • 650 and 750 NI/min (0.661 and 0.762 Cv)



working pressure bar (psi)





#### Design, function and technical data

Pneumatically operated spool valve. The valve switches upon pressurization of the pilot port (12 or 14).

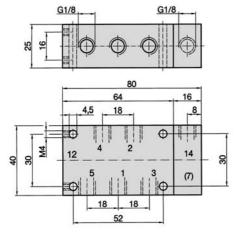
For manifold mounting see series R-181/n resp. R-183/n (page 4.113).

Valve P-05-520 is available for use with vacuum (-0.95 ... 10 bar/-14 ... 175 psi).

Order number changes to P-05-520-Q.

Valves of this series are available in explosion proof design in accordance with 2014/34/EU (ATEX). For further details see chapter 13 of this catalogue.

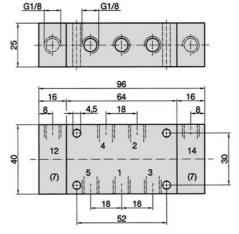
### P-05-510, P-05-511



= pressure inlet 2, 4 = outlet 3, 5 = exhausts 14 = pilot port = pilot port

= The pilot port can be repositioned by (180°).

# P-05-520, P-05-520-Q, P-05-522, P-05-530, P-05-533, P-05-534



P-05-530, P-05-533, P-05-534

= pressure inlet 2, 4 3, 5 = outlet

= exhausts

12, 14 = pilot port

(7) = The pilot port can be repositioned by (180°).

P-05-520, P-05-520-Q, P-05-522 1, 2, 3, 4, 5 = for interchangeable use 12, 14 = pilot port

Order number	P-05-510	P-05-511	P-05-520	P-05-522	P-05-530	P-05-533	P-05-534
Function	5/2-way single pilot air spring return	5/2-way single pilot spring return	5/2-way double pilot	5/2-way double pilot dominant	5/3-way center position closed	5/3-way center position exhausted	5/3-way center position pressurized
Connection	G1/8						
Nominal size	6 mm				5 mm		
Flow rate	750 NI/min (0.762 Cv)				650 NI/min (0.661 Cv)		
Pressure range	2 10 bar (29 145 psi)	0 10 bar (0 145 psi)					
Pilot pressure range	see diagram	3 10 bar (43 145 psi) 2 10 bar (29 145 psi)			3 10 bar (43 145 psi)		
Temperature range	- 10 °C + 70 °C (+ 14 °F + 158 °F)						
Materials	Body: Al (anodized), Inner parts: Al, brass, stainless steel, Seals: NBR and POM						
Medium	Compressed air in accordance with ISO 8573-1: 2010, Class 7:2:4 – and free of aggressive additives.						
Weight	0,200 kg (0.441 lb.)	0,205 kg (0.452 lb.)	0,245 kg (0.540 lb.)				

Subject to change

# Manifolds for valve

Series M-05 and P-05



# P-manifolds for M-05 and P-05



P-manifold will be delivered completely assembled with valves if requested.



Hollow bolt without O-ring **H-183** 



P-manifold with hollow bolts and O-rings. Available from 1 to 12 stations. See page 4.113. **R-181/n** 



Blind plate for blank station **R-181-V** page 4.113



Brackets (pair) R-181-W page 4.113

# P-R-S manifolds for M-05 and P-05



P-R-S-manifold will be delivered completely assembled with valves if requested



P-R-S-manifold with hollow bolts and O-rings. Available number of stations: see table on page 4.113 **R-183/n** 



Hollow bolt without O-ring **H-183** 



Blind plate for blank station **R-183-V** page 4.113

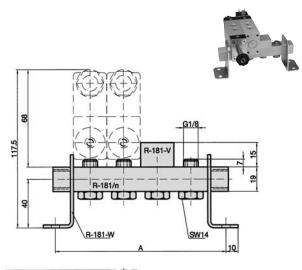
Subject to change 3

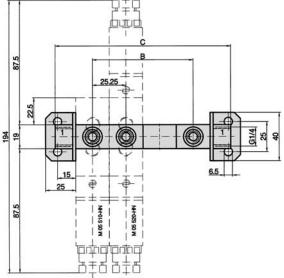
# Accessories for electrically operated valves

Manifolds for series M-05 and P-05

# airtec

# **Dimensions for P-manifold R-181**





1 = pressure inlet

#### R-181-V

Blind plate for blank station. Material: AI (anodized).

#### R-181-W

One pair of mounting brackets for P-manifold R-181.

Material: steel zinc plated.

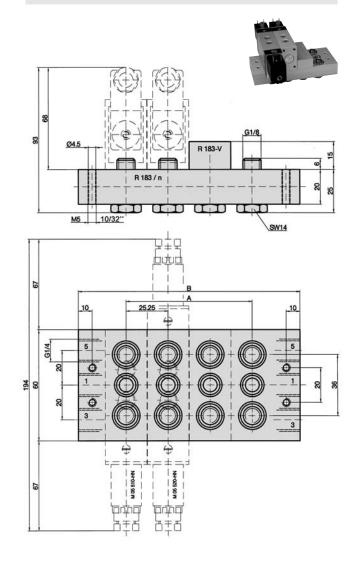
#### R-181/n

P-manifold with hollow bolts and O-rings. Within the brackets the manifold can be repositioned by 4 x  $90^\circ$ . Suitable for all valves of series M-05 and P-05.

Material: AI (anodized), O-rings: NBR, hollow bolts: brass

Order number	A	В	С	Weight
R-181/2	80.5	25.25	85	0.084 kg (0.185 lb.)
R-181/3	105.75	50.5	110	0.113 kg (0.249 lb.)
R-181/4	131	75.75	135	0.144 kg (0.317 lb.)
R-181/5	156.25	101	160	0.174 kg (0.383 lb.)
R-181/6	181.5	126.25	185	0.215 kg (0.473 lb.)
R-181/8	232	176.75	235	0.266 kg (0.585 lb.)
R-181/10	282.5	227.25	285	0.326 kg (0.717 lb.)
R-181/12	333	277.75	335	0.385 kg (0.788 lb.)

### **Dimensions for P-R-S-manifold R-183**



1 = pressure inlet

3, 5 = exhausts

#### R-183-V

Blind plate for blank station. Material: Al (anodized).

### R-183/n

P-R-S-manifold with hollow bolts and O-rings. Suitable for all 5/2- and 5/3-way valves of series M-05 and P-05.

Material: Al (anodized), O-rings: NBR, hollow bolts: brass.

Order number	Α	В	Weight
R-183/2	25.25	85	0.246 kg (0.541 lb.)
R-183/3	50.5	110	0.330 kg (0.726 lb.)
R-183/4	75.75	135	0.415 kg (0.913 lb.)
R-183/5	101	160	0.500 kg (1.100 lbs.)
R-183/6	126.25	185	0.580 kg (1.276 lbs.)
R-183/8	176.75	235	0.750 kg (1.650 lbs.)
R-183/10	227.25	285	0.910 kg (2.002 lbs.)