

Pilot Check Valve with State Detection

Features

- The use of positive overlap ensures that signals are output only after the valve has closed completely.

* Positive overlap: Structure that ensures a completely closed state by slightly displacing the position of the valve after it has fully closed (to eliminate the effects of hysteresis)

- The open or closed position of the check valve is detected by the auto switch.

- Wide size variations

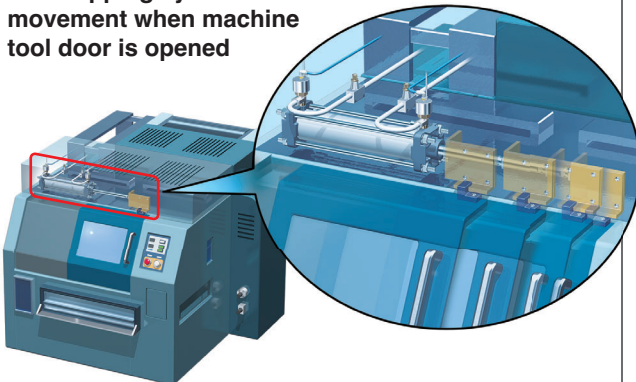
Body size: 5 types

Port size: M5, G1/8, G1/4, G3/8, G1/2

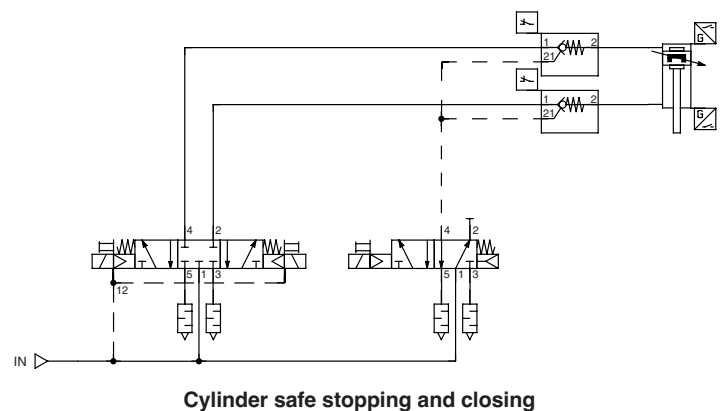


Application Example

For stopping cylinder movement when machine tool door is opened



Circuit Example



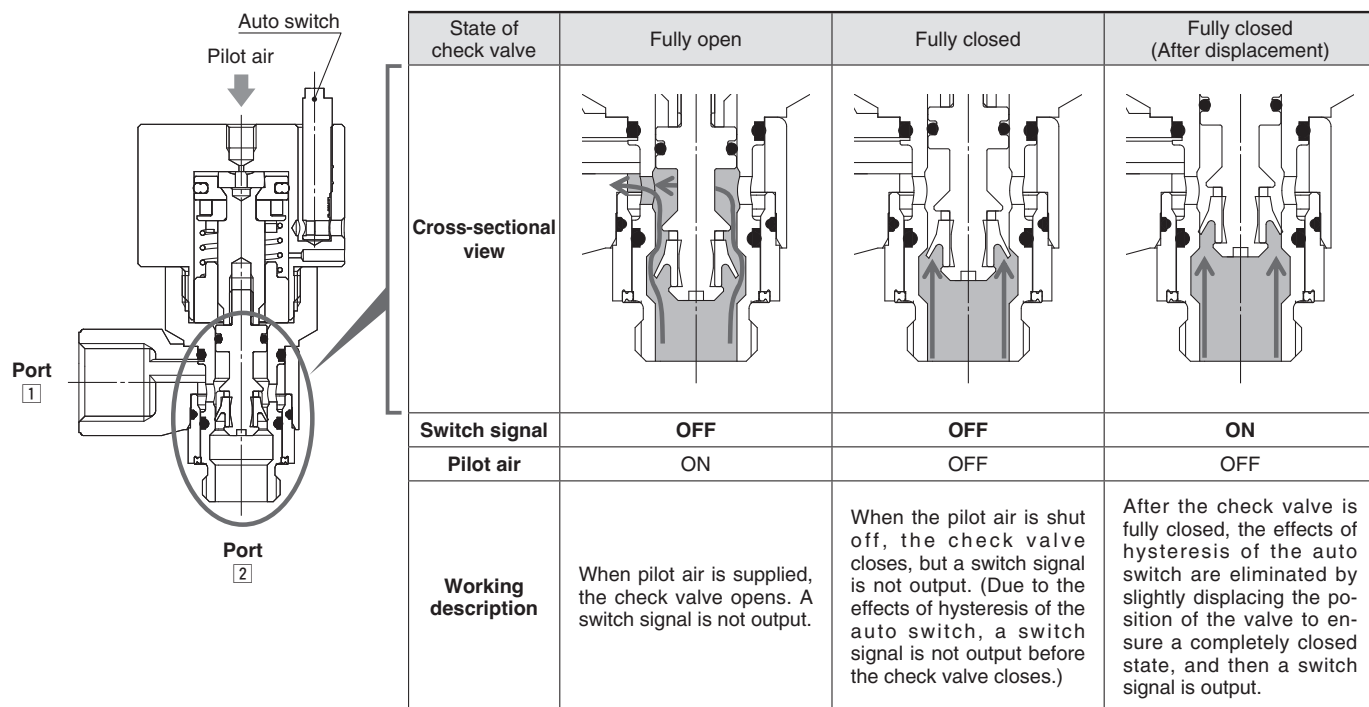
XT34-303-□



SP173X-020EU-UK

XT34-303-□

Working Principle



Specifications

Fluid		Air
Operating pressure range		0.1 to 0.7 MPa
Pilot check valve operating pressure	XT34-303-M5	50 % or more of the operating pressure (0.25 MPa or more)
	XT34-303-F01 to F04	60 % or more of the operating pressure (0.35 MPa or more)
Ambient and fluid temperatures		-5 to 60 °C (No freezing)

Connector specification

Pin arrangement	Pin no. and designation	
	1	2
	DC (+)	
	3	4
	DC (-)	OUT

Flow Rate Characteristics

Flow direction		Model	XT34-303-M5	XT34-303-F01	XT34-303-F02	XT34-303-F03	XT34-303-F04
Flow rate [l/min (ANR)]	1 → 2		30	160	390	600	1300
	2 → 1		65	270	430	960	1100
Sonic conductance C [dm ³ /(s·bar)]	1 → 2		0.1	0.4	1.1	1.7	3.6
	2 → 1		0.2	0.8	1.2	2.7	3.1
Critical pressure ratio b	1 → 2		0.2	0.2	0.2	0.3	0.3
	2 → 1		0.1	0.3	0.1	0.3	0.3

* These values have been calculated according to ISO6358 and indicate the flow rate under standard conditions with an inlet pressure of 0.6 MPa (relative pressure) and a pressure drop of 0.1 MPa.

How to Order

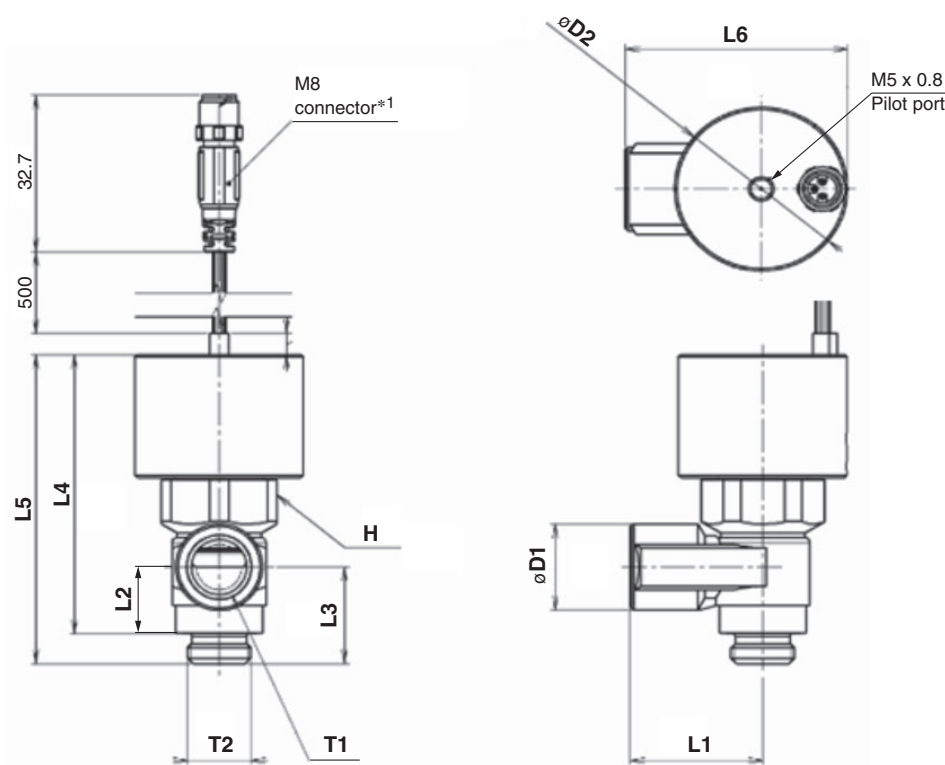
XT34-303-M5

Port size

Symbol	Port size	Pilot port
M5	M5	M5 x 0.8
F01	G1/8	
F02	G1/4	
F03	G3/8	
F04	G1/2	

Dimensions

[mm]



Model	T1	T2	H	D1	D2	L1	L2	L3	L4	L5	L6
XT34-303-M5 *2	M5 x 0.8	M5 x 0.8	9	—	24	10	7	—	47.7	51	—
XT34-303-F01 *3	G1/8	G1/8	19	14.3	30	18	—	17.5	55.4	60.6	33.5
XT34-303-F02 *4	G1/4	G1/4	24	18	35	27.5	—	20.2	57.6	63.9	45
XT34-303-F03 *5	G3/8	G3/8	27	22.6	40	30.5	—	23.6	65.6	71.5	50.8
XT34-303-F04 *6	G1/2	G1/2	36	27.5	44	39	—	30.4	82.1	89.6	61

*1 The solid state auto switch is a 3-wire PNP type with a 500 mm lead wire and an M8 connector.

*2 First, tighten it by hand, and then give it an additional 1/6 to 1/4 turn with a wrench. The reference value for the tightening torque is 1 to 1.5 N·m.

*3 First, tighten it by hand, and then use a wrench to tighten it an additional 10 to 20 degrees. The reference value for the tightening torque is 3 to 4 N·m.

*4 First, tighten it by hand, and then use a wrench to tighten it an additional 15 to 35 degrees. The reference value for the tightening torque is 4 to 5 N·m.

*5 First, tighten it by hand, and then use a wrench to tighten it an additional 15 to 35 degrees. The reference value for the tightening torque is 8 to 9 N·m.

*6 First, tighten it by hand, and then use a wrench to tighten it an additional 15 to 35 degrees. The reference value for the tightening torque is 14 to 15 N·m.



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