

! Contact our sales office for delivery dates and prices as this is a special model.

Specialized Product **P.G.** Point to Group information

# Pilot Check Valve with State Detection

## XT34-303-□

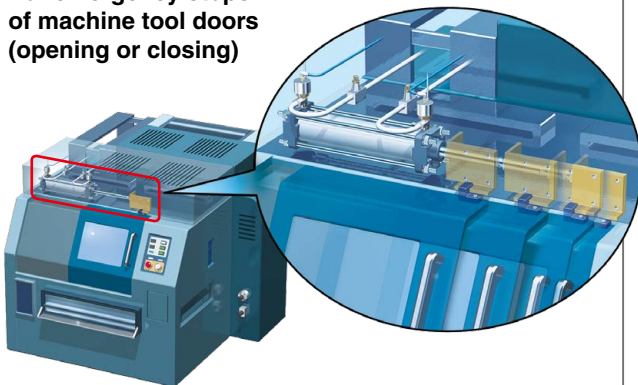
### Features

- **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

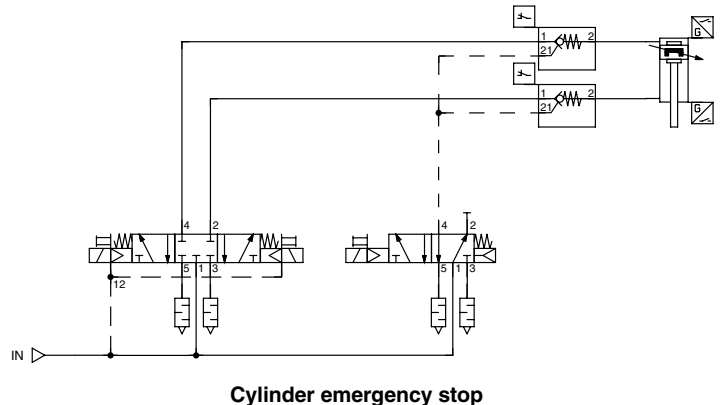


### Application Example

For emergency stops of machine tool doors (opening or closing)



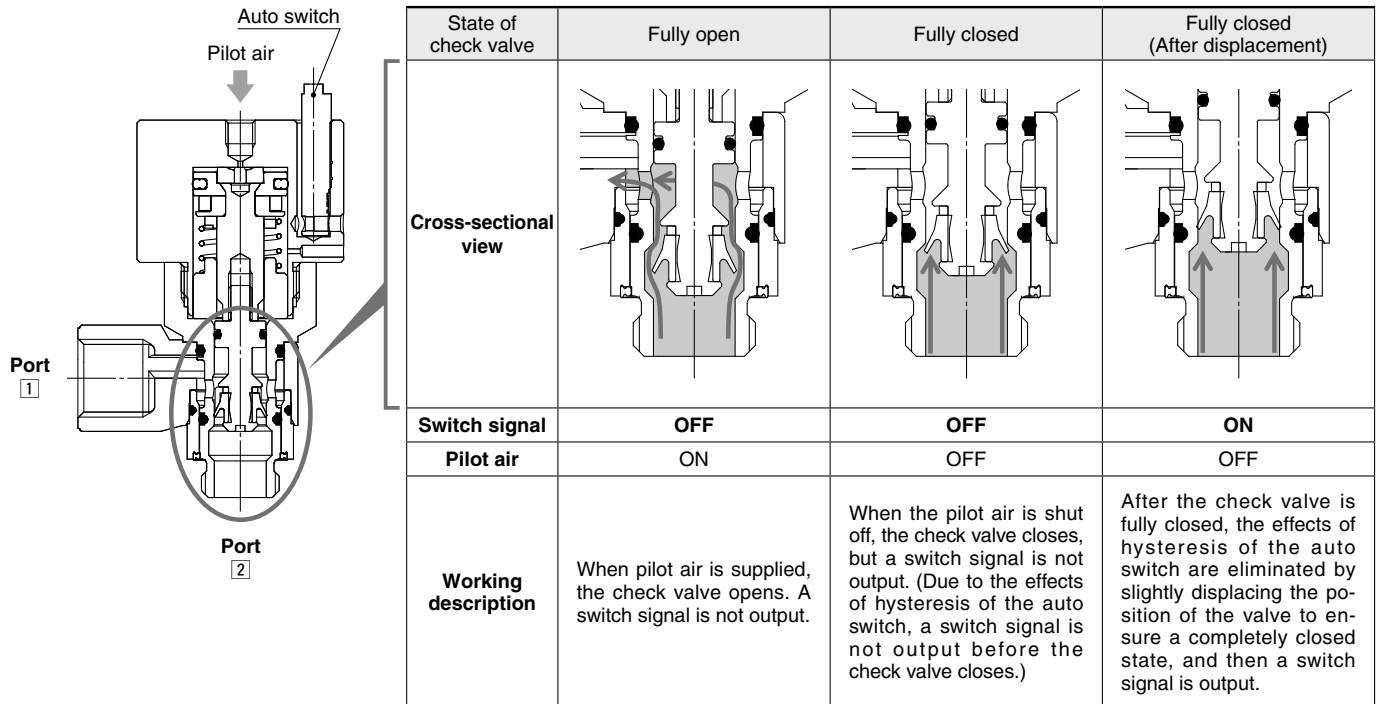
### Circuit Example



### Caution

To ensure the safest possible operation of this product, please be sure to thoroughly read the "Safety Instructions" in our "Best Pneumatics" catalog before use.

## Working Principle



## Specifications

<b>Fluid</b>	Air	
<b>Operating pressure range</b>	0.1 to 0.7 MPa	
<b>Pilot check valve operating pressure</b>	<b>XT34-303-M5</b>	50% or more of the operating pressure (0.25 MPa or more)
	<b>XT34-303-F01 to F04</b>	60% or more of the operating pressure (0.35 MPa or more)
<b>Ambient and fluid temperatures</b>	-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
<b>Flow rate [L/min (ANR)]</b>	1 → 2		30	160	390	600	1300
	2 → 1		65	270	430	960	1100
<b>Sonic conductance C [dm<sup>3</sup>/(s·bar)]</b>	1 → 2		0.1	0.4	1.1	1.7	3.6
	2 → 1		0.2	0.8	1.2	2.7	3.1
<b>Critical pressure ratio b</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

\* Flow rate values are measured at 0.5 MPa and 20°C.

## How to Order

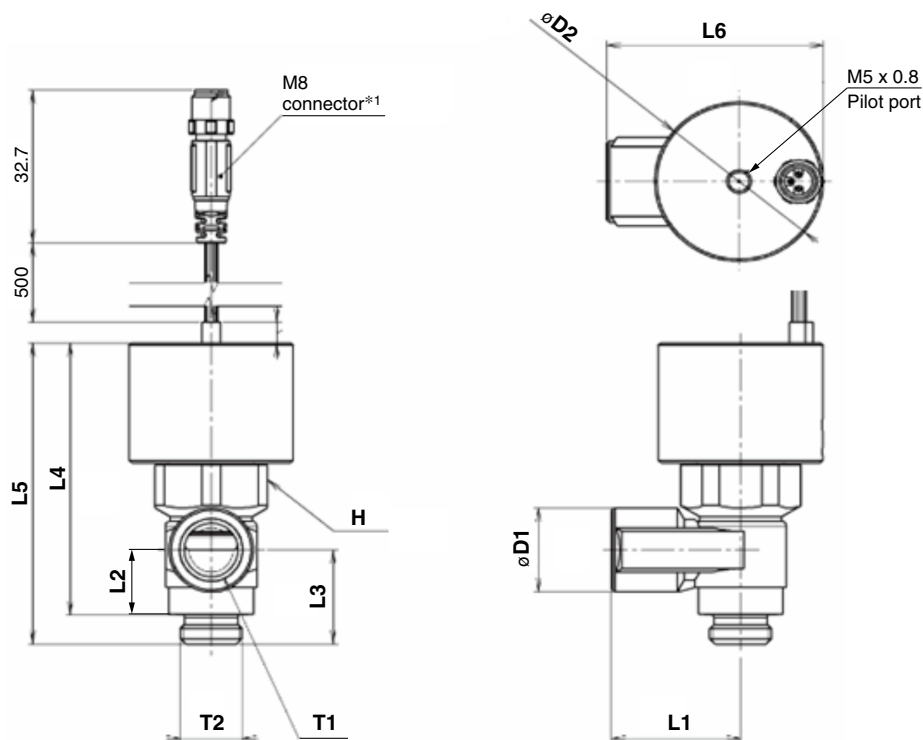
# XT34-303-M5

### Port size

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

## Dimensions

[mm]



Model	T1	T2	H	D1	D2	L1	L2	L3	L4	L5	L6
<b>XT34-303-M5</b> *2	M5 x 0.8	M5 x 0.8	9	—	24	10	7	—	51	55.2	—
<b>XT34-303-F01</b> *3	G1/8	G1/8	19	14.3	30	18	—	17.5	55.4	60.6	33.5
<b>XT34-303-F02</b> *4	G1/4	G1/4	24	18	35	27.5	—	20.2	57.6	63.9	45
<b>XT34-303-F03</b> *5	G3/8	G3/8	27	22.6	40	30.5	—	23.6	65.6	71.5	50.8
<b>XT34-303-F04</b> *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.