Reliability Data for: Pilot Check Valve XTO Series

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Checked	
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Important !

All use of the products described in this document shall comply with the currently valid technical documentation. (Catalogue, Instruction Manual (IM) or Operation Manual (OM), Handling Precautions for SMC products, e.t.c.) and is under the sole risk and responsibility of the user. SMC gives no warranty, neither express nor implied for the suitability of any component for the users intended application.

B_{10} / B_{10D} data

Based on the following endurance test results and assuming a failure mode following the Weibull distribution the following B_{10} and B_{10D} data have been estimated. (90% confidence level).

Series models	B_{10}	B_{10D}	Pressure MPa
Pilot Check Valve XTO Series	6.6 million cycles	13.2 million cycles	0.5

NOTES:

1) The estimated reliability data provided is only applicable to the component in the stated operating conditions. Other operating conditions may lead to different results.
2) The B_{10D} value is based on the provided B_{10} value using B_{10}×2 in accordance with EN ISO 13849.
3) The component is not a safety component as defined by Article2(c) of the Machinery Directive 2006/42/EC and is not supplied to directly provide a safety function.
4) The determination of B10 is generally based on the methods described in ISO 19973 “Pneumatic fluid power – Assessment of component reliability by testing” excluding the air pressure.

Result of reviewing the design with respect to ISO 13849-1:2015

This is a well tried component *. ☐ yes

Result of reviewing the design with respect to ISO 13849-2:2012

This component is capable of meeting the relevant basic safety principles*. ☐ yes

This component is capable of meeting the relevant basic and well-tried safety principles*. ☑ yes

Please refer to the table below.

Product	ISO 13849-2 : 2012								
	Annex A			Annex B			Annex D		
	A-1	A-2	A-3 I A-5	B-1	B-2	B-3 I B-18	D-1	D-2	D-3 I D-21
Pilot Check Valve XTO Series	●	●	-	●	●	-	-	-	-

A-1 , B-1 , D-1 : Basic safety principles

A-2 , B-2 , D-2 : Well-tried safety principles

●: reviewed

- : not reviewed

*Only when used as a component of a safety related part of a control system (SRP/CS) which is specified, designed, tested and maintained in accordance with the applicable safety requirements under the responsibility of a suitably qualified professional engineer.

Refer to IM No. XTO-SMV19 for details

Refer to the following how to order for validated products

XTO－2571－02

Body size

2571	Body O.D.:φ52
1239	Body O.D.:φ84
1719.	Body O.D.:φ98

Port size

02.	Rc1/4
03	Rc3/8
04.	Rc1/2
06	Rc3/4
10	Rc1

Model	Port size				
	Rc1/4	Rc3/8	Rc1/2	Rc3/4	Rc1
XTO-2571	●	●			
XTO-1239	●	●	●		
XTO-1719				●	●