Reliability characteristic data for: Pressure switch

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Checked	
Approved	N.v. 17. 2011 K. Tokoh

Model number: IS10 series

B10 data

Based on the following endurance test results of the pressure switch IS10 series, and assuming a failure mode following the Weibull distribution the following B10 data has been estimated. (90% confidence level)

	B10
IS10 series	4 million cycles

NOTE:

The estimated reliability data provided is only applicable to the component in the stated operating conditions.

Use of this data for any assessment under standards or otherwise, is at the sole risk of the user.

This product is not a safety component and is not supplied to provide a safety function.

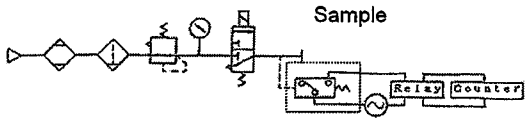
Endurance test results

For reference

- 7 pressure switch were tested up to 5 million cycles, and found to have zero failure.

Endurance test conditions

1) Test circuit



2) Pressure: 0.7MPa
3) Lubrication: None
4) Air supply: Dry air
5) Operating freq.: 1 times / sec.
6) Laboratory: Life test room
7) Ambient temp.: Normal temp. (13 to 33°C)
8) Load: None

Result of design assessment and validation to EN ISO 13849-1:2008 & EN ISO 13849-2:2008

This component conforms to the basic safety principles ☑ yes

This component conforms to the basic safety principles and well tried safety principles ☐ yes

IMM No. IS-TFP23

The component is not a safety component as defined by Article2(c) of the Machinery Directive 2006/42/EC

HOW TO ORDER

O IS10-01 Series

I S 1 0 - □ 0 1 □ - □
① ② ③

Semi-standard:Select one each for a to c
Semi-standard symbol:When more than one specification is required,indicate in alphaumeric order.
Example) IS10-N01-6PZ

		Symbol	Description
①	Thread type	Nil	Rc
		N	NPT
②	Sealant	Nil	Without sealant
		S	With sealant
③ Semi-standard	a Max.pressure	Nil	0.1~0.4MPa
		6 Note1)	0.1~0.6MPa
	b Lead wire length	Nil	0.5m
		L	3m
		Z	5m
	c Pressure display with scale plate	Nil	MPa
		P Note2)	MPa・psi

Note 1) Set pressure range of 6P(L, Z) is 0.2 to 0.6MPa (30 to 90psi).
Note 2)This product is for overseas use only according to the new Measuement Law.
(The SI unit type is provided for use in Japan.)

O AC20~60 Spacer Series with Pressure Switch

I S 1 0 M - 3 0 - □
① ②

Semi-standard:Select one each for a to c
Semi-standard symbol:When more than one specification is required,indicate in alphaumeric order.
Example) IS10M-30-6LP

		Code	Content	① Body size 20	30	40	50	60
② Semi-standard	a Max.pressure	Nil	0.1~0.4MPa	●	●	●	●	●
		6 Note1)	0.1~0.6MPa	●	●	●	●	●
	b Lead wire length	Nil	0.5m	●	●	●	●	●
		L	3m	●	●	●	●	●
		Z	5m	●	●	●	●	●
	c Pressure display with scale plate	Nil	MPa	●	●	●	●	●
		P Note2)	MPa・psi	●	●	●	●	●

Body size	Applicable model
20	AC20
30	AC25,30
40	AC40-02~04
50	AC40-06
60	AC50,55,60

Note 1) Set pressure range of 6P(L, Z) is 0.2 to 0.6MPa (30 to 90psi).
Note 2)This product is for overseas use only according to the new Measuement Law.
(The SI unit type is provided for use in Japan.)
*Prepare a spacer (Y series) separately for modular connection.

O AC20~40 Pressure Switch with piping Adapter series

IS10E-[30][ ][03]-[ ]
①②③④

Semi-standard:Select one each for **a** to **d**
Semi-standard symbol:When more than one specification is required,indicate in alphaumeric order.
Example) IS10E-3N03YT-6PRZ

		Code	Content	① Body size 20	30	40
②	Thread type	Nil	Rc	●	●	●
		N Note1)	NPT	●	●	●
		F Note1)	G	●	●	●
③	Port size	01	1/8	●	–	–
		02	1/4	●	●	●
		03	3/8	●	●	●
		04	1/2	–	●	●
		06	3/4	–	–	●
④ Semi-standard	a Max.pressure	Nil	0.1~0.4MPa	●	●	●
		6 Note2)	0.1~0.6MPa	●	●	●
	b Lead wire length	Nil	0.5m	●	●	●
		L	3m	●	●	●
		Z	5m	●	●	●
	c Pressure display with scale plate	Nil	MPa	●	●	●
		P Note1)	MPa・psi	●	●	●
	d Mounting position	Nil	Right	●	●	●
		R	Left	●	●	●

Body size	Applicable model
20	AC20
30	AC25,30
40	AC40-02~04

Note 1) Set pressure range of 6P(L, Z) is 0.2 to 0.6MPa (30 to 90psi).
Note 2)This product is for overseas use only according to the new Measuement Law.
(The SI unit type is provided for use in Japan.)
*A pressure switch can be mounted to AC40-06 or larger by screwing IS10-01 into the piping adapter E500-*06-X501 or E600-*06 to 10-X501 (Rc1/8 thread on top surface). The assembled product is treated as a special product. This should be checked beforehand.
*Prepare a spacer (Y series) separately for modular connection.