Reliability characteristic data for:

Solenoid Valve

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Model number: SY3*00/SY5*00 series

B10 /B10$_d$ data

Based on the following endurance test results of the Solenoid Valve SY3*00/SY5*00 series, and assuming a failure mode following the weibull distribution the following B10 and B10$_d$ data has been estimated. (90% confidence level)

	B10	B10$_d$
SY3*00/SY5*00 series	60 million cycles	120 million cycles
SY3*00/SY5*00 series(3POS)	26 million cycles	52 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.

The B10$_d$ value is based on the tested B10 value using B10×2.

Endurance test results

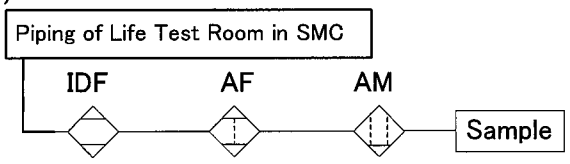
For reference

SY3*00/SY5*00 series

- 10 Solenoid Valves were tested up to 70 million cycles, and found to have zero failure.
- 10 Solenoid Valves(3POS) were tested up to 30 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.: 5 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. SY-TFP49(Refer to the following for applicable products)

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

Validated products to EN ISO 13849-1:2008&EN ISO 13849-2:2008

