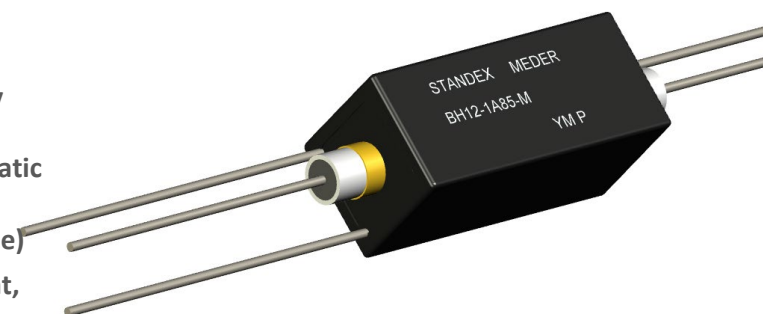


BH Series Reed Relays

- **Features:** High Power and High Insulation Resistance Relay
High Isolation Voltage, Low Leakage Current
- **Multi-channel Dry-switch Design** with Integrated Electrostatic and Magnetic Shield
- **Reliable, Stable and Low Contact Resistance (On-Resistance)**
- **Applications:** Test & Measurement, Isolation Measurement, Semiconductor Testers, Alternative of Mercury Relays
- **Markets:** Test & Measurement, Automated Test Equipment


Part Description: **BH00-0X85-M**

Nominal Voltage	Contact Quantity	Contact Form	Switch Model	Option
05, 12, 24	1, 2, 3, 4	A	85	M

Customer Options	Switch Model	Unit
Contact Data (@ 20°C)	85 (A-Dry)	
Contact Material	Rhodium	
Rated Power (max.) Any DC combination of V&A not to exceed max. rated power	100	W
Switching Voltage (max.) DC or peak AC	1000	V
Switching Current (max.) DC or peak AC	1.0	A
Carry Current (max.) DC or peak AC	2.5	A
Contact Resistance (max.) @ 0.5V & 10mA, Measured with 40% Pull-In Overdrive	150	mOhm
Breakdown Voltage (min.) (upon request)* According to EN60255-27	3 (up to 5)*	kVDC
Operating Time (max.) Including Bouncing, Measured with 40% Pull-In Overdrive	1.1	ms
Release Time (max.) Measured without Coil Suppression	0.4	ms
Insulation Resistance (min.) Rh<45%, 100V Test Voltage	10 ¹³	Ohm
Capacitance (typ.) @ 10kHz across open Switch	0.5	pF

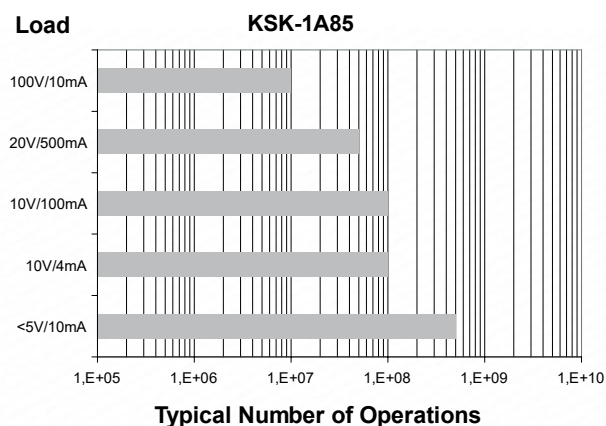
BH Series Reed Relays

Coil Data (at 20°C)		Coil Voltage (VDC)		Coil Resistance (Ohm)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Coil Power (mW)	Coil Inductance (mH)
Contact Form	Switch Model	Nominal	Max.	Typical (± 10 %)	Max.	Min.	Nominal	Nominal
1A	85	5	7.5	100	3.75	0.7	250	23
		12	16	400	8.8	1.2	360	42.5
		24	30	1600	17.6	2.4	360	250
2A	85	5	7.5	100	3.75	0.7	250	31
		12	16	400	8.8	1.2	360	88
		24	30	1600	17.6	2.4	360	235
3A	85	5	7.5	100	3.75	0.7	250	TBD
		12	16	400	8.8	1.2	360	TBD
		24	30	1600	17.6	2.4	360	TBD
4A	85	5	7.5	70	3.75	0.7	360	20
		12	16	400	8.8	1.2	360	103
		24	30	1600	17.6	2.4	360	392

The Pull-In, Drop-Out Voltage and Coil Resistance will change at rate of 0.4% per °C

Relay Data (@ 20°C)		Unit
Dielectric Strength Coil/Contact (min.) According to EN60255-27	3.5	kVDC
Insulation Resistance Coil/Contact (min.) Rh<45%, 200V Test Voltage	10 ¹³	Ohm
Capacitance Coil/Contact (typ.) @ 10 kHz (Differs by Contact Form 1A – 4A)	3.3 (1A) 5.3 (2A) 8.5 (4A)	pF
Shock Resistance (max.) 1/2 sine wave, 6md, 3-axis	50	g
Vibration Resistance (max.) 10 – 2,000 Hz	20	g
Operating Temperature (max.) Surrounding of the relay's housing	-20 to 70	°C
Storage Temperature (max.) Surrounding of the relay's housing	-35 to 95	°C
Soldering Temperature (max.) 5 sec. max.	260	°C
Washability Aqueous rinse suitable. Proper drying necessary.	Fully Sealed	

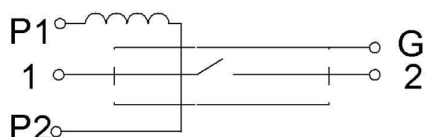
Life Test Data (*Load increase reduces life expectancy of Reed Switches)



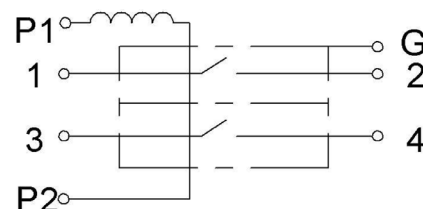
BH Series Reed Relays

Pin-Out (Top View)

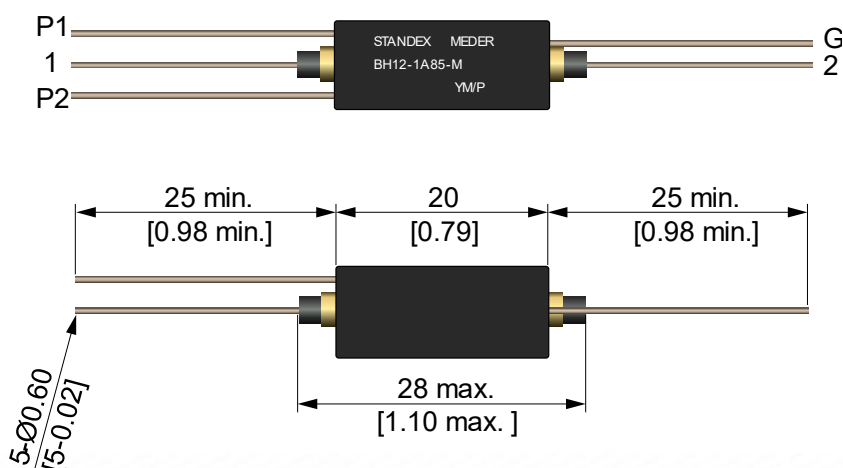
Form 1A



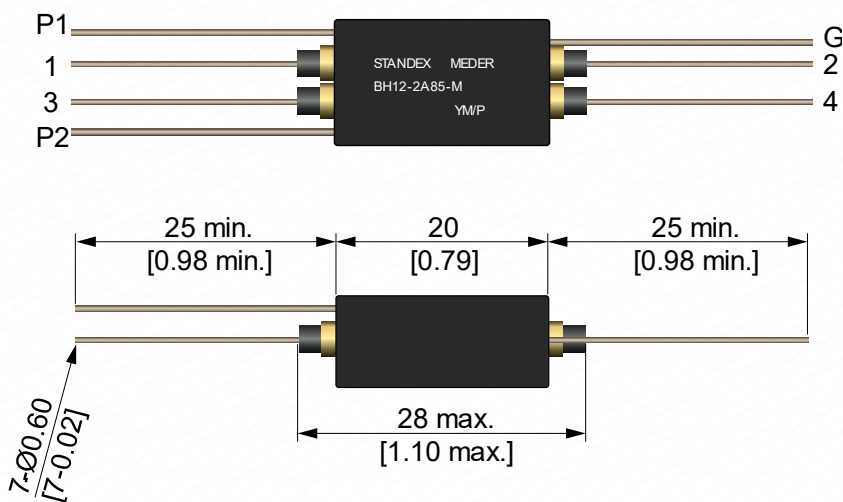
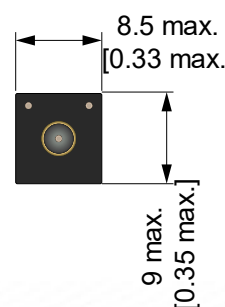
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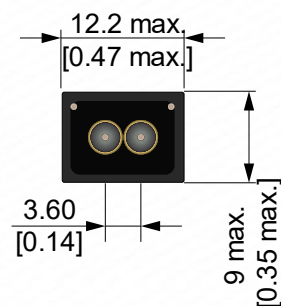
Dimensions (in mm [inch]) Tolerances acc. to ISO 2768-m



Form 1A



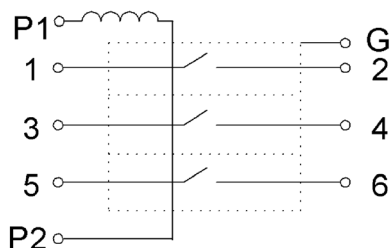
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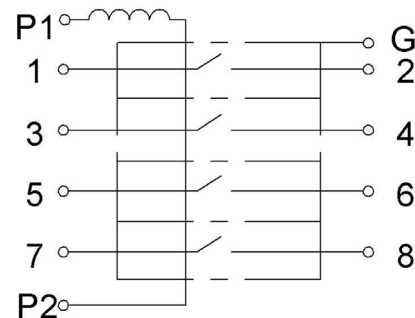
BH Series Reed Relays

Pin-Out (Top View)

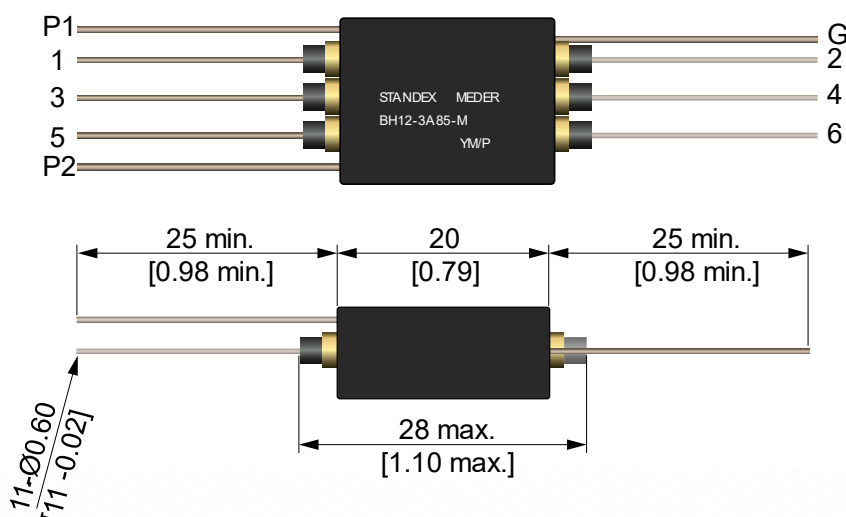
Form 3A



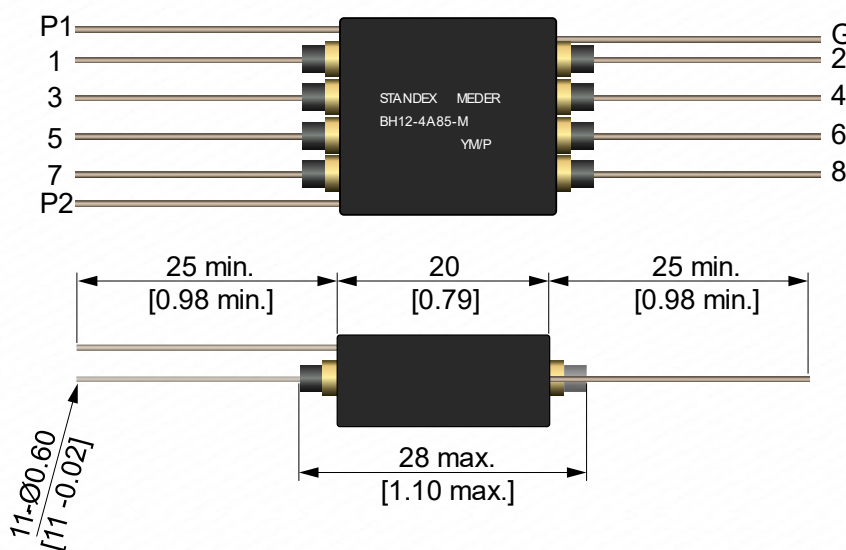
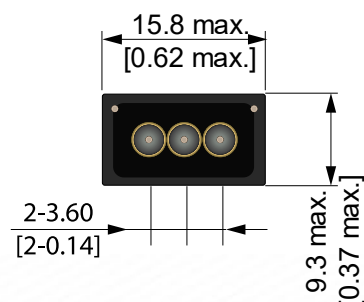
Form 4A



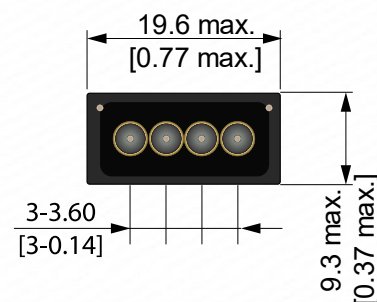
Dimensions (in mm [inch]) Tolerances acc. to ISO 2768-m



Form 3A



Form 4A



BH Series Reed Relays

Handling & Assembly Instructions

- Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used - see our website or contact our sales office.
- External magnetic fields and magnetic effects, due to adjacent relays in high density matrices that may influence the relays' electrical characteristics, must be taken into consideration.
- Mechanical shock impacts, e.g. dropping the relays, may cause immediate or post-installation failure.
- Suppressing coil diode can have a negative influence on total number of switching cycles, especially by switching high voltage. Zener diode in series with the suppression diode is recommended.
- Wave soldering: maximum 260°C / 5 seconds.

Glossary Options

L	Standard, without Diode
D	with Diode
M	with Magnetic Shield, without Diode
Q	with Diode and Magnetic Shield
HR	High Resistance Coil
BH Relays are available only with "M" Option	

Glossary Contact Form

Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw
Form C	Changeover SPDT = Single Pole Double Throw
Form E	Latching unchanged until an opposite impulse is present
BH Relays are available only in "Form A" configuration	

Please note: All technical specifications on this series datasheet refer to the standard product range. Modifications in the sense of technical progress are reserved. For general information only. For more specific information, please consult the product datasheet, available upon request.

This series datasheet could contain technical inaccuracies or typographical errors. Changes are periodically made to the information herein. These change will be incorporated in future revisions.

For deviating values, most current specifications and products please contact your nearest sales office.