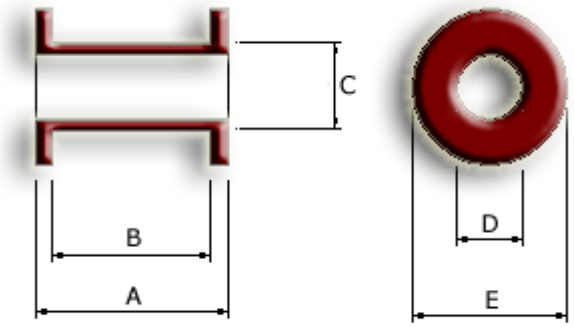
Test Coils

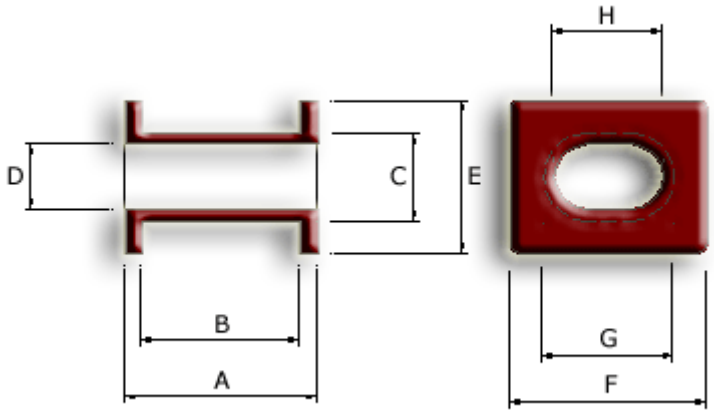
For Reed Switches and Sensors



Cylindrical

Test Coil No.	717 102 001	717 102 002	717 102 003	717 102 004	717 102 005
A	53.3	21.0	12.0	27.8	19.0
B	50.8	19.0	10.0	25.4	15.0
C	7.6	4.3	3.3	8.7	3.7
D	5.6	3.4	2.3	2.4	2.9
E	14.1	7.7	11.0	17.2	11.0
Wire Diameter	0.090	0.050	0.060	0.100	0.071
Turns	10000	5000	5000	5000	5000
Coil Res. Ω	845	740	600	404	450

All dimensions in mm



Rectangular

Test Coil	TCP 3001	TCP3002	TCP 3003	TCP 3004
A mm	13.5	23.3	42.5	42.5
B mm	7	19.7	36.5	36.5
C mm	8	6.8	14.8	15.8
D mm	6	6.2	13.8	13.8
E mm	14	14.8	25.0	25.0
F mm	18	20.6	28.6	35.6
G mm	12	12.2	14.6	22.8
H mm	10	11.6	13.6	20.8
Wire Diameter mm	0.05	0.08	0.15	0.15
Turns	5000	10000	5000	5000
Coil Resistance Ω	2000	1900	290	440

Due to continual improvement, specifications are subject to change without notice

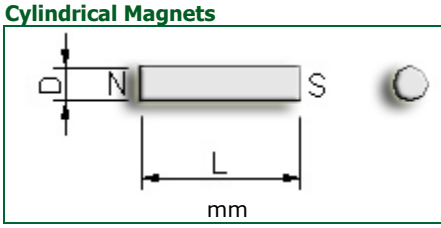
www.reed-sensor.com

6 December 2004

Standard Magnets

For Reed Switches and Sensors

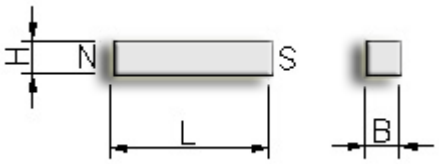
Cylindrical Magnets



mm

Part Number	Material	D (mm)	L (mm)
NDC-T	NdFeB:N35	2.0	4.0
NDC-S	NdFeB:N35	3.0	7.0
NDC-M	NdFeB:N35	4.0	10.0
NDC-L	NdFeB:N35	8.0	15.0

Bar Magnets



mm

Part Number	Material	L (mm)	B (mm)	H (mm)
NDR-T	NdFeB:N35	4.0	1.5	1.5
NDR-S	NdFeB:N35	6.0	2.5	2.5
NDR-M	NdFeB:N35	8.0	3.0	3.0
NDR-L	NdFeB:N35	19.0	4.0	4.0

Magnet Material Specifications

Magnet Type		Remanance	Coercivity		Energy Product max.	Operating Temperature
Composition	Code	Br (mT)	HcB (kA/m)	HcJ (kA/m)	BH (kJ/m^3)	(°C)
Ferrite	C8	385	235	242	27.8	300
AlNiCo	LNG37	1180	48	53	37	550
NdFeB	N35	1180	880	955	270	80
NdFeB	N35SH	1180	880	1353	270	120
SmCo	YX20	925	680	1595	160	300

Due to continual improvement, specifications are subject to change without notice

www.reed-sensor.com

30 August 2006

Restriction of Hazardous Substances

RoHS Compliance

In late 2002 the European Parliament approved two directives related to the reduction of electrical and electronic waste, namely the Waste Electrical and Electronic Equipment (WEEE) and Restriction of the use of certain Hazardous Substances (RoHS) Directives. The WEEE Directive aims to regulate the reuse, recycling and recovery of waste electrical and electronic equipment; the ultimate goal is to prevent the disposal of this waste.

In the RoHS Directive, the use of the aforementioned substances in most electrical and electronic equipment will be banned or severely restricted. The RoHS Directive calls for the elimination of these substances from most electronic equipment starting 1 July 2006. Our products are SGS certified for the RoHS compliant levels of Lead, Mercury, Cadmium and Hexalent Chromium.

End-of-Life Vehicle (ELV)

End-of-Life Vehicle (ELV) regulations set limits for the following substances:
Lead
Mercury
Cadmium
Hexavalent Chromium

Restriction of Hazardous Substances (RoHS)

The Reduction of Hazardous Substances (RoHS) regulations set limits for the following substances:
Lead
Mercury
Cadmium
Hexavalent Chromium
Polybrominated Biphenyls (PBB)
Polybrominated Diphenyl Ethers (PBDE)

To certify to the above compliances, these substances must not be intentionally added to the product AND cannot exceed the following maximum allowable levels as a trace substance:

0.1% (1,000 ppm) for: Lead*, Mercury, Hexavalent Chromium, PBB and PBDE
0.01% (100 ppm) for: Cadmium

*Lead as an alloying element in copper alloys is allowed up to 4.0% (40,000 ppm); in steel up to 0.35% (3,500 ppm) is allowed; in aluminum alloys up to 0.40% (4,000 ppm) is allowed. These requirements must be applied at the homogeneous material level. Since RoHS compliance is a stricter standard than ELV compliance, parts that are RoHS compliant are also ELV compliant.

Magnet Sensor Usage Notes

Magnet Sensors are delicate products. Handle with extra care.

Do's

When switching inductive or capacitive loads, use contact protection circuits.

Don'ts

Do not use ferro-magnetic mounting parts, screws, or other ferro-magnetic devices nearby. This will affect the sensitivity (AT).

When manual soldering, do not subject to more than a 5 second dwell. This may cause damage to the seals, change sensitivity, and reduce solderability.

Do not drop. Dropping or subjection to shock will permanently damage the contact or alter the sensitivity (AT).

Switching voltage, switching current, and contact rating should not exceed maximum limits stated in specification sheets.