

Standard Float switches



Electrical data

Switching function	Changeover / NC / NO contacts	Changeover / NC / NO contacts
Contact ID letter	K	L (min. Switching power 3 VA)
Switching voltage (max)	250 V AC/DC	250 V AC/DC
Switching current (max)	0.5 A	1 A
Switching power (max)	30 VA	60 VA
Switching power (min)		3 VA

Mechanical data

Container connection options	Flange enclosure RD 77 mm	Flange enclosure RD 77 mm
	Flange enclosure RD 165 mm	Flange enclosure RD 165 mm
	Flange enclosure RD 185 mm	Flange enclosure RD 185 mm
	Cable gland PG9	Cable gland PG9
	Cable gland R3/8"	Cable gland R3/8"
	Cable gland R1/5" with connector DIN 43650	Cable gland R1/5" with connector DIN 43650
	Oval flange 75 x 50 mm with connector DIN 43650	Oval flange 75 x 50 mm with connector DIN 43650

Float switch material

	Stainless steel 1.4571	Stainless steel 1.4571
	Brass MS63	Brass MS63
	PVC	PVC

Float variants

A/M/K	Cylinder float	RD 40 x 27 mm (POM)	A/M/K	Cylinder float	RD 40 x 27 mm (POM)
T/C/I	Cylinder float	RD 30 x 44 mm (PP)	T/C/I	Cylinder float	RD 30 x 44 mm (PP)
V/D	Cylinder float	RD 42 x 44 mm (NBR)	V/D	Cylinder float	RD 42 x 44 mm (NBR)
R/S	Cylinder float	RD 30 x 44 mm (NBR)	R/S	Cylinder float	RD 30 x 44 mm (NBR)
N/P	Cylinder float	RD 44 x 45 mm (stainless steel)	N/P	Cylinder float	RD 44 x 45 mm (stainless steel)
E/F	Ball float	RD 52 mm (stainless steel)	E/F	Ball float	RD 52 mm (stainless steel)
B/O	Ball float	RD 62 mm (stainless steel)	B/O	Ball float	RD 62 mm (stainless steel)
G/H	Ball float	RD 84 mm (stainless steel)	G/H	Ball float	RD 84 mm (stainless steel)

Ambient conditions

Protection class (DIN 40050)	IP 65 (up to IP 68 on request)	IP 65 (up to IP 68 on request)
Temperature range	-5 °C to +60 °C (from -30 °C to +150 °C on request)	-5 °C to +60 °C (from -30 °C to +150 °C on request)
Pressure	5 bar (up to 25 bar on request)	5 bar (up to 25 bar on request)

Miniature Float Switches



Electrical data

Switching function	NO contacts	Changeover / NC contacts
Contact ID letter	B	X
Switching voltage (max)	250 V AC/DC	150 V AC/DC
Switching current (max)	0.5 A	1 A
Switching power (max)	10 VA	20 VA

Mechanical data

Container connection options	Cable gland PG7	Cable gland PG7
	Cable gland R1/8"	Cable gland R1/8"
	Cable gland R3/8"	Cable gland R3/8"
	Cable gland R3/8" with connector	Cable gland R3/8" with connector

Float switch material

	Stainless steel 1.4571	Stainless steel 1.4571
	PP	PP
	PVC	PVC
	Brass MS63	Brass MS63

Float variants

K1	Cylinder float	RD 25 x 20 mm (PP)	K1	Cylinder float	RD 25 x 20 mm (PP)
K2	Cylinder float	RD 25 x 20 mm (PVC)	K2	Cylinder float	RD 25 x 20 mm (PVC)
K3	Cylinder float	RD 20 x 20 mm (NBR)	K3	Cylinder float	RD 20 x 20 mm (NBR)
K4	Cylinder float	RD 23 x 25 mm (NBR)	K4	Cylinder float	RD 23 x 25 mm (NBR)
N1	Ball float	RD 30 mm (stainless steel)	N1	Ball float	RD 30 mm (stainless steel)

Ambient conditions

Protection class (DIN 40050)	IP 65 (up to IP 68 on request)	IP 65 (up to IP 68 on request)
Temperature range	-5 °C to +60 °C (from -30 °C to +150 °C on request)	-5 °C to +60 °C (from -30 °C to +150 °C on request)
Pressure	5 bar (up to 15 bar on request)	5 bar (up to 15 bar on request)

Adjustable Float Switches



Electrical data		
Contact ID letter	P	L
Switching module, type designation	REEDK. KPL. F. MA	REEDK. KPL. F. MA
Article number	4910007069	4916007075
Switching function	NC / NO contact (bi)	Changeover contact (bi)
Switching voltage (max)	250 V AC / DC	250 V AC / DC
Switching current (max)	5 A	1 A
Switching power (max)	250 VA	60 VA
Mechanical data		
Container connection options	Flange DN 50 (PVC/stainless steel) Flange DN 65 (PVC/stainless steel) Cable gland R1.5" (PVC/stainless steel) Cable gland R2" (PVC/stainless steel)	Flange DN 50 (PVC/stainless steel) Flange DN 65 (PVC/stainless steel) Cable gland R1.5" (PVC/stainless steel) Cable gland R2" (PVC/stainless steel)
Float switch material	Stainless steel 1.4571 Brass MS63 PVC	Stainless steel 1.4571 Brass MS63 PVC
Float variants	N/P Cylinder float RD 52 x 55 mm (stainless steel) V/D/L Cylinder float RD 52 x 55 mm (PVC)	N/P Cylinder float RD 52 x 55 mm (stainless steel) V/D/L Cylinder float RD 52 x 55 mm (PVC)
Ambient conditions		
Protection class (DIN 40050)	IP 65 (up to IP 68 on request)	IP 65 (up to IP 68 on request)
Temperature range	-5 °C to +60 °C (from -30 °C to +150 °C on request)	-5 °C to +60 °C (from -30 °C to +150 °C on request)
Pressure	5 bar (up to 15 bar on request)	5 bar (up to 15 bar on request)

Chemical Resistance

Float switch materials at +20 °C

Chemical substance	Conc. in %	POM	PP	NBR	PVC	Brass MS63	1.4571
Acetone	100	+	+	U	U	+	+
Aluminium sulphate	10	/	+	+	+	U	+
Aluminium chloride	10	/	+	+	+	U	+
Formic acid	85	+	+	U	+	U	+
Ammonia	10	+	+	U	O	U	+
Aniline	100	/	+	U	U	O	+
Ethyl acetate	100	O	O	U	U	+	+
Ethyl ether	100	+	+	U	/	+	+
Ethylene chloride	100	/	U	U	U	/	+
Benzine	100	+	U	+	+	+	+
Benzene	100	+	U	O	U	+	+
Boric acid	10	/	+	+	+	+	+
Butyl acetate	100	+	O	U	U	/	+
Calcium chloride	10	+	+	+	+	U	+
Chlorobenzene	100	+	+	U	U	/	+
Chlorine water	-	/	+	U	O	U	+
Chloroform	100	/	U	U	U	+	+
Chromic acid	10	O	+	U	+	U	+
Ferrous chloride	10	O	+	+	+	U	U
Acetic acid	10	+	+	U	+	U	+
Acetic acid	80	O	+	U	+	U	+
Formaldehyde	20	+	+	+	+	O	+
Glycerine	90	+	+	+	+	+	+
Urea	10	/	+	+	+	/	+
Iodine	-	/	+	+	U	/	+
Potassium bichromate	5	/	+	O	+	U	+
Potassium nitrate	10	/	+	+	+	/	+
Potassium permanganate	1	+	+	O	+	/	+
Copper sulphate	10	/	/	+	+	U	+
Magnesium chloride	10	/	+	+	+	U	+
Methylene chloride	100	U	U	U	O	/	+
Lactic acid	10	+	+	O	+	O	+
Mineral oil	100	+	+	+	+	+	+
Sodium bisulphite	10	/	+	U	O	U	+
Sodium carbonate	10	+	+	+	+	O	+
Sodium chloride	10	+	+	+	+	O	+
Sodium sulphate	10	/	+	+	+	+	+
Oxalic acid	40	/	O	U	+	O	O
Phenol, aqueous	10	U	+	U	+	/	+
Phosphoric acid	10	+	+	O	+	U	+
Mercury	100	/	+	+	+	U	+
Mercuric chloride	5	/	+	+	O	U	+
Nitric acid	65	U	U	U	+	U	+
Nitric acid	10	U	O	U	+	U	+
Hydrochloric acid	10	U	+	U	+	U	U
Hydrochloric acid	2	U	+	U	+	U	U
Carbon disulphide	100	+	U	U	U	+	+
Sulphuric acid	10	+	+	+	+	U	+
Sulphuric acid	98	U	O	U	O	U	+
Hydrogen sulphide	2	/	+	+	+	O	+
Soap solution	1	+	+	+	+	+	+
Carbon tetrachloride	100	+	U	U	O	+	+
Trichloroethylene	100	O	O	U	U	O	+
Wine	-	/	+	+	+	O	+
Zinc chloride	10	/	+	+	+	U	+

+ = Resistant

The material remains fully resistant to the medium or is minimally affected. The effect of pressure and temperature changes on the materials must be taken into account.

O = Conditionally resistant

The material is affected by the medium; sealing materials swell. Application may be possible if concentration, pressure, temperature, service life or other influencing factors are restricted.

U = Non-resistant

The material may not be used in the specified medium or at the given temperature unless under very clearly defined preconditions.

/ = No data available

Enquiry and Order Form Float Switches

Enquiry

Date: _____

Order

Receiver

Sender

BERNSTEIN AG
Tieloser Weg 6
D-32457 Porta Westfalica

Telephone: +49-(0)571/793-0
Fax: +49-(0)571/793-555
info@de.bernstein.eu

Company:

Customer No.:

Contact:

Department:

Street:

Town:

Telephone:

Fax:

E-mail:

Operational environment

Medium: _____ Temperature: from _____ °C to _____ °C

Pressure: min. _____ bar max. _____ bar

One-off Batch order Sample

Batch size: _____ pcs.

Annual quantity: _____ pcs.

Electrical data

Voltage: _____ V AC DC Current: _____ A

Power: min. _____ VA max. _____ VA

Technical data

Cable length*: _____ m Separate contacts

Mounting: From top From bottom From side

*Standard 1 m

Type

1	2	3	4	5	6	7	8	9	10	11	12	13	

Special features

Remarks

