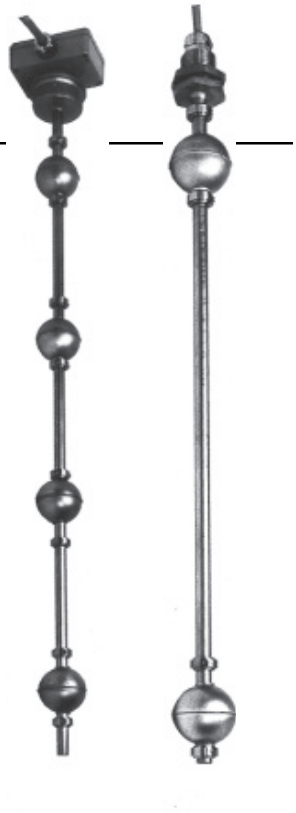
Multiple Level Switch LS-800E (1-7 switch points)



Max. contact loads of the reed switch: SPST 100 VA; 3.0 A; 250 VAC (NC/NO).
SPDT 20 VA; 0.5 A; 250 VAC (Change-over contact).

The data NC/NO are defined for: an empty tank / rising level.

Specifications

Materials			
Stem	Brass	Stainless Steel	
Mounting elements	Brass	Stainless Steel	
Flange		Stainless Steel only	
Float	Buna N	Stainless Steel	PTFE
Operating pressure	10 bar	30 bar	3 bar
Float temperature	-40°C to +80°C Water -40°C…+110°C Oil	-40°C to +150°C	-40°C to +150°C
Min. specific gravity of the liquid	0.58 g/cm³	0.80 g/cm³	0.71 g/cm³
Depth of immersion at a density of 1	~20mm	~30mm	~34mm
Protection rating	IP65 (IP64 for Potted Cable/Leads)		

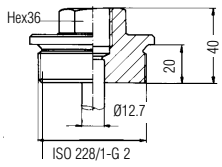
Mounting Direction

Tank top : O	Bottom : U

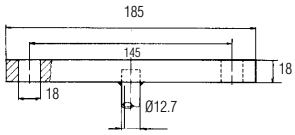
Mounting Types

(Material: Stainless Steel or brass)

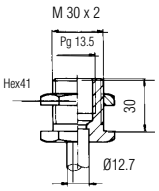
TM/TC = Tank screw DIN 910



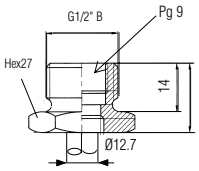
BCC = Flange DN65-PN 16



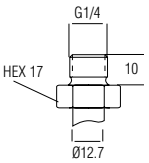
AM/AC = Bulkhead fitting



EM/EC = Put in plug G1/2



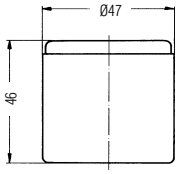
DM/DC = Put in plug G1/4



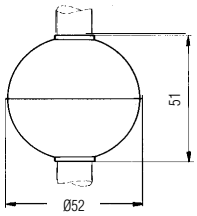
Available with Potted Cable/Leads Option only

Floats

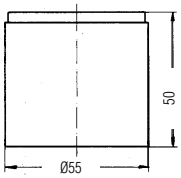
N = Buna N



C = Stainless Steel

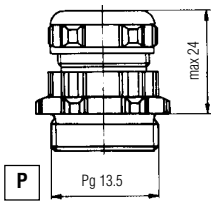


T = PTFE

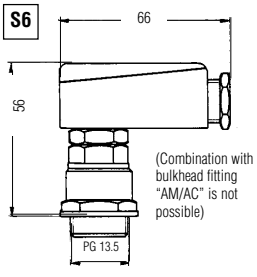


Electrical Connections

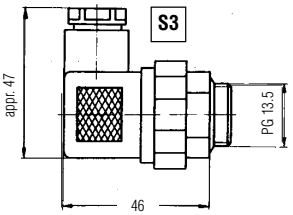
Pg 13.5 Cable and gland
Cable standard length appr. 1m;
Temperature: -20 ... +80°C



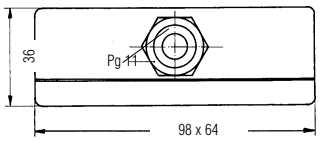
Plug connector acc. DIN43651*
6 poles + earth
Temperature: -20…+90°C
max switch points: Group 1 : 5, Group 2 : 3, Group 3 : 2, Group 4 : 2



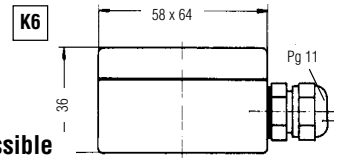
Plug connector acc. DIN43650*
3 poles + earth
Temperature: -20 ... +90°C
max switch points: Group 1 : 2, Group 2 : 1



Terminal box 12 poles* **K12**
Temperature: -20 ... +150°C



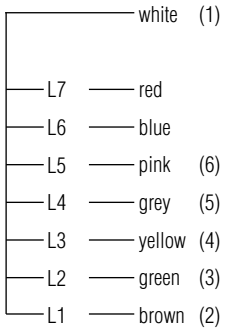
Terminal box 6 poles*
Temperature: -20 ... +150°C



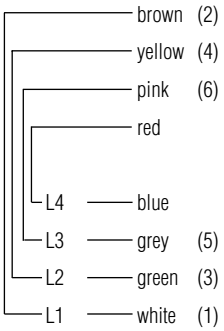
*** Combination with put in plug "EM/EC" is not possible**

Switching Groups

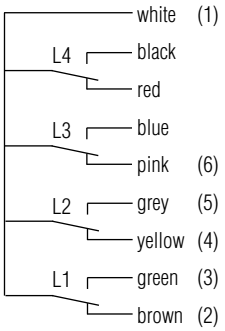
(Pin correlation of the plug connectors)



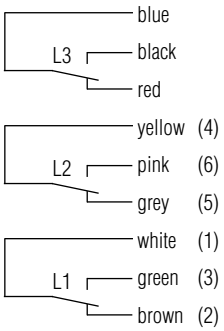
Group 1, max. 7 switch points, NC/NO



Group 2, max. 4 switch points, NC/NO



Group 3, max. 4 switch points (SPDT)



Group 4, max. 3 switch points (SPDT)

Options

Vertical adjustment

Vertical adjustment is only available with tank screw (T). It allows the stem to be adjusted vertically, limited only by the distance from the top stop ring to the electrical connector less the thickness of the mounting.

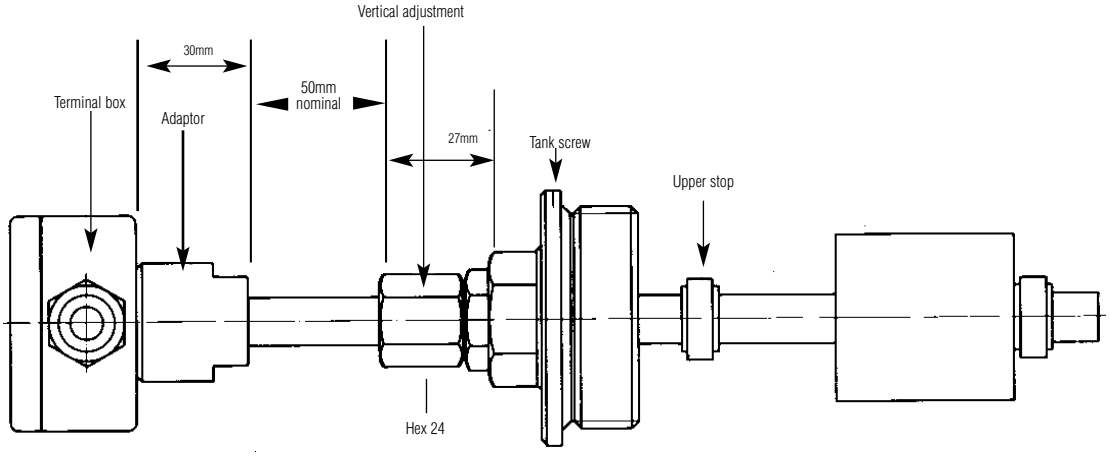
(Combination with bulkhead fitting “AM/AC” is not possible)

Vertical adjustment

VVM = Brass

VVC = Stainless Steel

max. pressure: 10 bar



Slosh shield

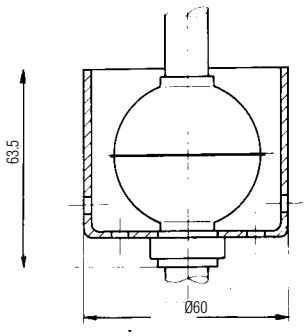
Each switch point can be equipped with a slosh shield, made from Stainless Steel, to avoid unintentional repetitive opening and closing of the switch due to turbulence or ripple.

(Combination with tank screw “TM/TC” is not possible)

Slosh shield

Material: Stainless Steel

DH



Temperature Switch

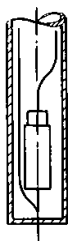
For Large or OEM applications the LS-800 may be fitted with a temperature switch.

It is installed at the lower end of the stem and reduces the number of switch points by one.

Maximum Rating 2A, 120 Vac or 2A, 24 Vdc

For full specification contact your sales office.

TS



LS-800E Multiple Level Switch check list

(Please copy and use as order form)

Customer: _____

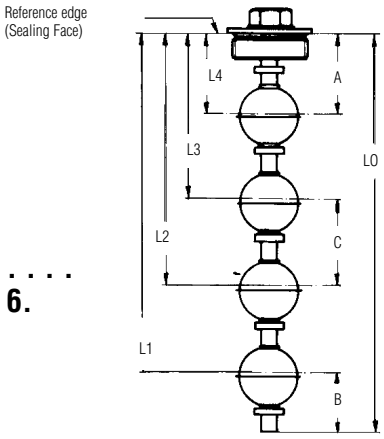
Order no.: _____ Quantity: _____

Application specific data: (Please complete fully and accurately)

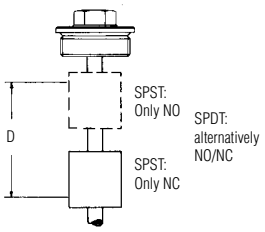
1. Medium _____
2. Pressure (bar): Min _____ Max _____
3. Temperature (°C): Min _____ Max _____
4. Specific gravity (g/cm3): _____ Min _____ Max _____
5. Viscosity (SSU): _____
6. Tank: Material _____ Depth _____
7. Connection periphery (eg relay, PLC,.....): _____

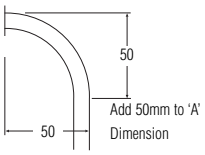
Dimensions

L_0 = 3000mm max.
A = 60mm min. distance to highest switch point.
B = 50mm min. distance between stem and lowest switch point.
C = 75mm min. between two switch points
D = 7mm min. dual action
(One float actuates two switch points).



Bent Stem Option





LS-800E - . . . . . - . . . . . - . . . . . - . . . . . - . . . . . - . . . . .
1. 2. 3. 4. 5. 6.

1. Mounting direction:	Through tank top	☐	**O**
	Through tank bottom	☐	**U**
2. Mounting:			
Tank screw G2"	Brass	☐	**TM**
	Stainless Steel	☐	**TC**
Bulkhead fitting	Brass	☐	**AM**
	Stainless Steel	☐	**AC**
Put in plug G1/2"	Brass	☐	EM
	Stainless Steel	☐	EC
Flange DN 65/PN16	Stainless Steel	☐	BCC
Put in plug G1/4"	Brass	☐	**DM**
	Stainless Steel	☐	**DC**
No Mounting:	Brass	☐	**OM**
	Stainless Steel	☐	**OC**
3. Floats:	Buna N	☐	**N**
	Teflon	☐	T
	Stainless Steel	☐	**C**
4. Electrical connection:	Plug connector DIN 43650	☐	**S3**
	Plug connector DIN 43651 (Not with AM/AC)	☐	**S6***
	Cable gland	☐	**P**
	Potted Cable	☐	**VC**
	Potted Leads	☐	**VL**
	Terminal box 6-poles	☐	**K6**
	Terminal box 12-poles	☐	**K12**
5. Switching group:	Group 1	☐	**1**
	Group 2	☐	**2**
	Group 3	☐	**3**
	Group 4	☐	**4**
6. Options:	Vertical adjustment Brass	☐	VVM
	Vertical adjustment Stainless Steel	☐	VVC
	Slosh Shield	☐	DH
	Temperature Switch	☐	TS
	Bent Stem	☐	BS

*S6 not available with AM/AC

Level dimensions (Tolerances ± 3mm) related to the mid of float.

Distance level	NO group 1	NC group 1	NO group 2	NC group 2	SPDT group 3	SPDT group 4
L1 =	☐	☐	☐	☐	☐	☐
L2 =	☐	☐	☐	☐	☐	☐
L3 =	☐	☐	☐	☐	☐	☐
L4 =	☐	☐	☐	☐	☐	
L5 =	☐	☐				
L6 =	☐	☐				
L7 =	☐	☐				
L0 =	±2mm		max 3000 mm			

Please specify each non listed part:

_____

_____

_____

Standard Products in **bold**