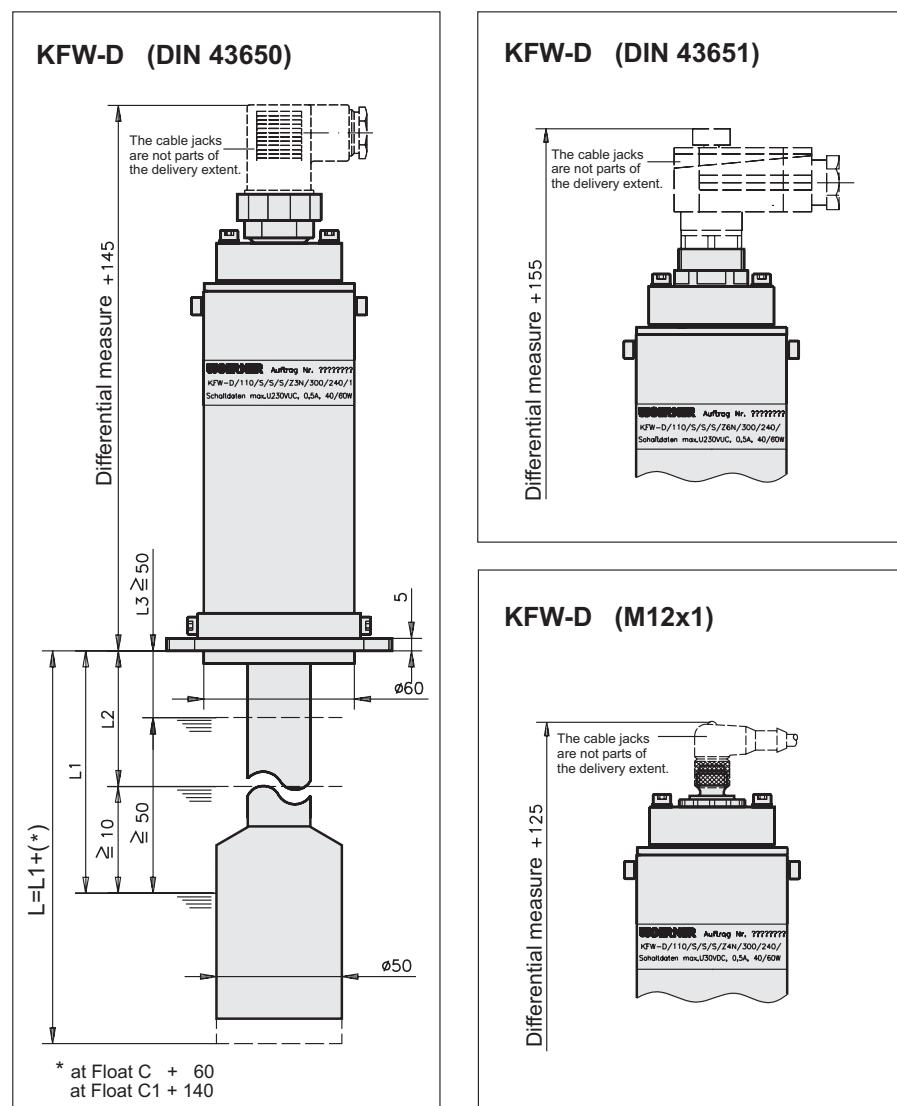




- Subject to modifications -



Order designation:

Level switch

(KFW-D) /O/O/O/O/O/O/O/O/O/O/O

Differential measure	Float	L1 switching point down level decreasing	L2 switching point middle level decreasing	L3 switching point up level decreasing	Plug-type connection without cable connector	Switching lenght		
					L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
110mm (110)	PUR-high resistance foam C	without (N) Opener (O)	without (N) Opener (O)	without (N)	3pol.+PE DIN43650 (Z3N) 4pol. M12x1 (Z4N)	state in the order		
200mm (200)	L max.500mm	Closer (S)	Closer (S)	without (N) Opener (O) Closer (S)	6pol.+PE DIN43651 (Z6BN)			
300mm (300)	PUR-high resistance foam C1							
400mm (400)	L max.1000mm							

KFW-D

EUGEN WOERNER GmbH & Co. KG
Postfach 1661 DE-97866 Wertheim
Am Eichamt 8 DE-97877 Wertheim
Tel. +49 (0) 9342 803-0 info@woerner.de
Fax.+49 (0) 9342 803-202 www.woerner.de

Leaflet-No. 0444.02.01 EN
Replaces No. 0444.06.99 EN

Page 1 of 2

KF- 4.1

Level switch
KFW-D

■ Use with heavily polluted liquids

Application:

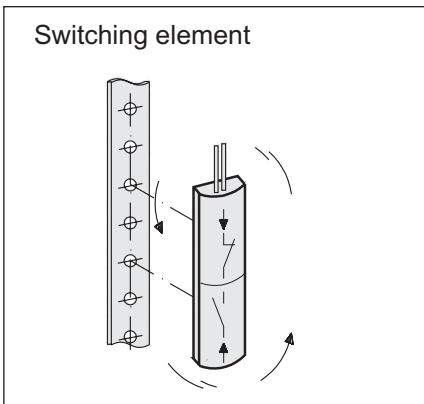
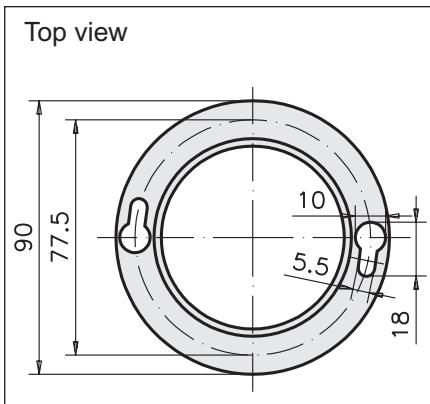
For watching and controlling the filling levels in reservoirs containing heavily polluted liquids with or without metallic abrasions.

Function:

Beneath the reservoir's cap there is a float in the liquid. The switching contacts and the switching magnet are situated above the reservoir's cap. The float is connected with the magnet via a pipe. Hence the movements of the float are transmitted into the upper part of the level switch.

The moving range of the float is limited by means of four differential measure areas. The switching points need to be arranged within the differential measures.

On a hole strip having very small differential spaces, 3 switching contacts can be positioned at maximum. The contacts can be shifted in a 10 mm grid. Their switching behaviour is bistable. When the float exceeds the switching point, the switching function will continue to be available. The switching functions "opener" or "closer" can be changed by turning the contact.



Technical Data - General

Operating pressure:	without
Temperature range:	0...90 °C
Insertion position:	vertically ±20°
Material:	
Float:	see order designation
Pipe:	Al-alloy
Flange	Al-alloy
Weight:	at L=300 ca. 1,0 kg

Technical Data - Reed Contact

Plug-in connection Z3N; Z6BN

Connection	DIN 43650
Connection:	DIN 43651
Protection type:	IP 65
Switching voltage:	10...250 VUC
Switching current max.:	0,5 A
Switching capacity max.:	40/40 W/VA

Technical Data - Reed Contact

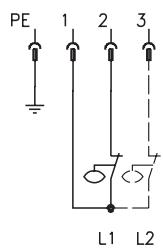
Plug-in connection Z4N

Connection	M12x1; 4pol.
Protection type:	IP 67
Switching voltage max.:	24VDC
Switching current max.:	0,5 A
Switching capacity max.:	40/40 W/VA

For inductive and capacitive loads, suppressor circuits shall be provided for.
(Diode, RC element, varistor)

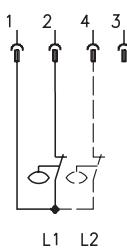
Wiring diagram: Z3N
Plug-and-socket connection
DIN 43650 3pol.+PE

two functions max.



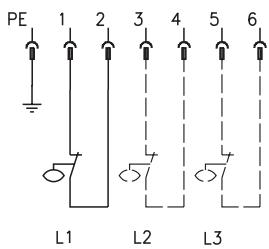
Wiring diagram: Z4N
Plug-and-socket connection
M12x1 4pol.

two functions max.



Wiring diagram: Z6BN
Plug-and-socket connection
DIN 43651 6pol.+PE

three functions max.



Order example:

Level switch KFW-D

Float C

L1 Opener at 350mm,

L2 Opener at 330mm,

L3 Closer at 170mm

Plug-and-socket connection

6pol.+PE DIN 43651

Differential measure

$$L1-L3 = 350-170 = 180\text{mm}$$

Next differential measure range = 200mm

$$\text{Total length } L = (L1+60) = 350+60 = 410$$

KFW-D

200/C/O/O/S/Z6BN/410/350/330/170

The cable jacks are not parts of the delivery extent.

Spare parts:

Switching element L1 red	477.127-60
Switching element L2 orange	477.128-60
Switching element L3 violet	477.215-60
Cable jack DIN 43650	913.400-20
Sealing for DIN 43650	913.400-22
Cable jack DIN 43651	913.400-27
Socket-contact for cable jack DIN 43651	913.400-29
Plug-contact	913.400-28