

BEZBEDNOSNA TEHNOLOGIJA
ZA ZAŠTITU
ŽIVOTNE SREDINE

SAFETY AND
ENVIRONMENTAL
TECHNOLOGY

E.L.B.
FÜLLSTANDSGERÄTE

05-03-01E

Plovak prekidaci Bez žive (Rid-releji) QFS-1 /...

QFS-10 i QFS-11 plovak prekidaci mogu se opremiti spoljašnjom kutijom od polietilena. Unutar plovka jedan ili dva jezicka veze sa obrtnim trajnim magnetom sacinjavaju uredjaj za ukljucivanje. Ovaj uredjaj za ukljucivanje je konstruisan tako da i najmanje pomeranje prekidaca iz horizontalne pozicije izaziva signal. Izuzetno fleksibilni kablovi sa tri jezgra se koriste i za elektricnu vezu i za mehanicku povezanost QFS uredjaja. Citava QFS jedinica je konstruisana tako da su plovak i ulazna linija hermeticki zatvoreni.

Tehnicki podaci

Sistem zaštite	EN 60529 IP 68
Ulazni kabl	PVC, PTFE
Materijal plovka	PE (polietilen)
Na zahtev	PVC (Polivinilhlorid)
Samo QFS-10	PPH (polipropilen)
Kabl	TPK (tehnicki polimer plastike)
na zahtev	SIL (silikon) FEP (teflon) AEM (etilen-akrilat-guma)
Presek provodnika	3 x 0,75mm ³
Dužina kabla x	između tela plovka i uredjaja
	TPK kabl 70mm, SIL kabl 80mm, FEP kabl 110mm, AEM kabl zavisi od unutrašnjeg kabla
Operativna temperatura	TPK, AEM kabl: Max. +60°C Silikonski, teflonski kabl sa PE plovkom: Max. +80°C Silikonski, teflonski kabl sa PP plovkom: Max. +90°C
Operativni pritisak	1 bar (cilindar) 2 bar (kugla)
Gustina supstance	
QFS-10	TPK kabl $\rho \geq 0,90 \text{ g/cm}^3$ SIL kabl $\rho \geq 0,90 \text{ g/cm}^3$ FEP kabl $\rho \geq 0,95 \text{ g/cm}^3$ AEM kabl $\rho \geq 0,90 \text{ g/cm}^3$
QFS-11	$\rho \geq 0,60 \text{ g/cm}^3$
QFS-14	$\rho \geq 0,75 \text{ g/cm}^3$
Sistem za ukljucivanje	Jezicak-prekidac
Veza	Promenljiva veza, NO, NC (QFS-11 samo NO ili NC)
Voltaža ukljucivanja	4...250 V AC/DC
Struja ukljucivanja	1mA...1A
Kapacitet ukljucivanja	0.01...60 VA/W
Histereza ukljucivanja	Približno 100mm
Ugao ukljucivanja	Približno +20° / -20°

Float switches Mercury Free (Reed switch) QFS-1 /...

The QFS-10 and QFS-11 float switches can be supplied with an outer casing of polyethylene. Inside the float one or two reed contacts with a pivoted permanent magnet form the switching device. The switching device is so constructed that a slight shift of the switch from a horizontal position triggers off the signal. A highly flexible, three-core cable is used both for the electrical connection and for the mechanical attachment of the QFS. The whole QFS unit is so constructed that the float and the lead-in line are hermetically sealed.

Technical Data

System of protection	EN 60529 IP 68
Cable inlet	PVC, PTFE
Material float	PE (Polyethylene)
On request (QFS-10 only)	PVC (Polyvinylchlorid), PPH (Polypropylen)
Cable	TPK (Technical Polymer Plastic)
On request	SIL (Silicone) FEP (Teflon) AEM (Ethylene-Acrylat- Rubber)
Conductor cross section	3 x 0,75 mm ²
Cable length X	between float body and fixture
	TPK cable 70 mm SIL cable 80 mm FEP cable 110 mm AEM cable dependent on the inner cable
Operating temperature	TPK, AEM cable: max. +60 °C Silicone, Teflon cable with PE float: max. +80 °C Silicone, Teflon cable with PP float: max. +90 °C
Operating pressure	1 bar (cylinder) 2 bar (ball)
Media density	
QFS-10	TPK cable $\rho \geq 0,90 \text{ g/cm}^3$ SIL cable $\rho \geq 0,90 \text{ g/cm}^3$ FEP cable $\rho \geq 0,95 \text{ g/cm}^3$ AEM cable $\rho \geq 0,90 \text{ g/cm}^3$
QFS-11	$\rho \geq 0,60 \text{ g/cm}^3$
QFS-14	$\rho \geq 0,75 \text{ g/cm}^3$
Switching system	Reed-switch
Contact	change-over contact, NO, NC (QFS-11 only NO or NC)
Switching voltage	4...250 V AC/DC
Switching current	1 mA...1 A
Switching capacity	0,01...60 VA/W
Switching hysteresis	approx. 100 mm
Switching angle	approx. +20° / -20°



QFS-10



QFS-11



QFS-14

SCHWIMMSCHALTER • FLOAT SWITCHES

Ključ tipa

Osnovna oznaka

Oblik plovska
 0 = cilindar Ø 25 mm
 1 = kugla Ø 90 mm
 4 = cilindar Ø 50 mm

Veza

W = promenljiva veza (ne QFS-11)
 NO = zatvara se ako pluta
 NC = otvara se ako pluta
 N = Namur

Materijal plovska

PE = Polietilen
 PP = Polipropilen (samo QFS10)
 PV = Polivinilchlorid (samo QFS10)

Materijal kabla

TPK = Tehnicki polimer plastike
 FEP = Teflon
 SIL = Silikon
 AEM = Etilen-akrilat-guma

Bez indikacija = standardno
 0 = OE: za korišćenje TPK kabla
 u supstancama koje sadrže ulje

Dužina kabla u m
 01 = 1 m
 02 = 2 m itd.

QFS1

Type Key

Basic designation (Reed switch)

Float form
 0 = Cylinder Ø 25 mm
 1 = Ball Ø 90 mm
 4 = Cylinder Ø 50 mm

Contact

W = change-over contact (not QFS-11)
 NO = closing if floating
 NC = opening if floating
 N = Namur

Float material

PE = Polyethylene
 PP = Polypropylene (QFS10 only)
 PV = Polyvinylchloride (QFS10 only)

Cable material

TPK = Technical Polymer Plastic
 FEP = Teflon
 SIL = Silicone
 AEM = Ethylene-Acrylat-Rubber

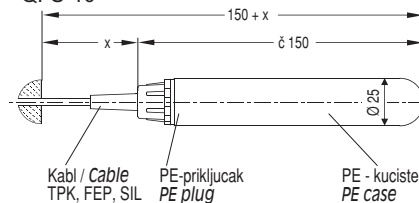
ohne Angabe = Standard
 0 = OE: for use of TPK cable only
 in oil containing media

Cable length in m
 01 = 1 m
 02 = 2 m etc.

QFS1

Dimensioni crtez Dimensional Drawings

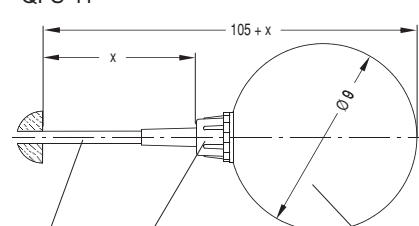
QFS-10



Dimenzije u mm / Dimensioning in mm

Tip kabla Cable type	X	min. Dužina min. installation length
FEP (Ø 4,0)	110 mm	=260 mm
TPK (Ø 5,9)	70 mm	=220 mm
TPK (Ø 7,3)	90 mm	=240 mm
SIL (Ø 6,4)	80 mm	=230 mm

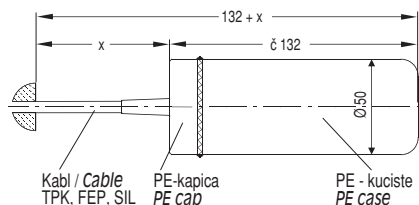
QFS-11



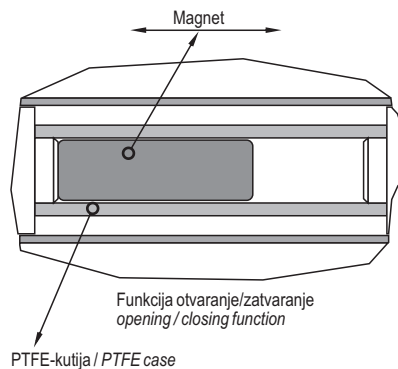
Dimenzije u mm / Dimensioning in mm

Tip kabla Cable type	X	min. Dužina min. installation length
FEP (Ø 4,0)	105 mm	=210 mm
TPK (Ø 5,9)	65 mm	=170 mm
TPK (Ø 7,3)	85 mm	=190 mm
SIL (Ø 6,4)	75 mm	=180 mm

QFS-14



Dimenzije u mm / Dimensioning in mm



Zadržano pravo izmene bez najave.
 Subject to change without prior notice,
 errors excepted.