

BEZBEDNOSNA TEHNOLOGIJA
ZA ZAŠTITU
ŽIVOTNE SREDINE

SAFETY AND
ENVIRONMENTAL
TECHNOLOGY

E.L.B.
FÜLLSTANDSGERÄTE

05-03-03E

Plutajući prekidaci Bez žive QFS-3_/_... (μ -prekodac)

Ove plovak prekidace karakteriše sistem za uključivanje koji funkcioniše bez žive. Sistem za uključivanje sastoji se od μ -prekidaca kojim upravlja kugla i koji prekida pod uglom od približno $+3^\circ/+12^\circ$ (bez histereze) i pod uglom od približno $-26^\circ/+28^\circ$ (sa dodatnom histerezom).

Tehnicki podaci

Sistem zaštite	EN 60529 IP 68
Ulaz za kabl	PVC, PTFE ili PVDF
Materijal plovka	PPH (Polipropilen) PE (Polietilen)
QFS-30, QFS-31 QFS-34	
Kabl	TPK (Tehnicki polimer plastike)
Na zahtev	SIL (Silikon) FEP (Teflon) AEM (Etilen-akrilat-guma)
Presek provodnika	3 x 0,75 mm ²
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 SIL, FEP kabl sa PE plovkom: max. +80°C SIL, FEP kabl sa PP plovkom: max. +85°C
Operativni pritisak	1 bar (cilindar) 2 bar (kugla)
Gustina supstance	
QFS-30	TPK kabl $\rho \geq 0,85\text{g/cm}^3$ 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-31	$\rho \geq 0,60\text{g/cm}^3$
QFS-34	$\rho \geq 0,75\text{g/cm}^3$
Sistem za uključivanje	μ -prekidac
Veza	Promenljiva veza, NO, NC

Float switches Mercury Free QFS-3_/_... (μ -switch)

These float switches are characterised by their switching system which works without mercury. The switching system consists of a μ -switch which is operated by a ball and which switches with an angle of approx. $+3^\circ/+12^\circ$ (without hysteresis) and with an angle of approx. $-26^\circ/+28^\circ$ (with additional hysteresis).

Technical Data

System of protection	EN 60529 IP 68
Cable inlet	PVC, PTFE or PVDF
Material float	PPH (Polypropylen) PE (Polyethylene)
QFS-30, QFS-31 QFS-34	
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. + 85 °C
Operating pressure	1 bar (cylinder) 2 bar (ball)
Media density	
QFS-30	TPK cable $\rho \geq 0,85\text{g/cm}^3$ 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-31	$\rho \geq 0,60\text{g/cm}^3$
QFS-34	$\rho \geq 0,75\text{g/cm}^3$
Switching system	μ -switch
Contact	change-over contact, NO, NC



QFS-30



QFS-31



QFS-34

SCHWIMMSCHALTER • FLOAT SWITCHES

	Srebrna Veza	Zlatna Veza	Univerzalni μ -prekidac
Struja	20 mA... 1,5 A	1 mA... 100 mA	1 mA... 1,5 A
uključenja	24 ... 250 V AC	5 ... 250 V AC	5 ... 250 V AC
Napon	24 ... 250 V AC	24 ... 250 V AC	24 ... 250 V AC
uključenja	24 ... 150 V DC	5 ... 150 V DC	5 ... 150 V DC
Kapacitet	150 V DC	150 V DC	150 V DC
uključenja	350 VA 60 W	5 VA 5 W	300 VA 60 W
Histerezis	ca. 25/35 mm (TPK/FEP)	ca. 25/35 mm (TPK/FEP)	ca. 25/35 mm (TPK/FEP)
uključenja	ca. 130/155 mm (TPK/FEP)	ca. 130/155 mm (TPK/FEP)	ca. 130/155 mm (TPK/FEP)
Sa dodatnim			
histerezisom	ca. 130/155 mm (TPK/FEP)	ca. 130/155 mm (TPK/FEP)	ca. 130/155 mm (TPK/FEP)
Ugao	ca. +12°...+3°	ca. +12°...+3°	ca. +12°...+3°
uključenja	ca. +28°...-26°	ca. +28°...-26°	ca. +28°...-26°
Sa dodatnim			
histerezisom	ca. +28°...-26°	ca. +28°...-26°	ca. +28°...-26°

	Silver contact	Gold contact	universal μ -switch
Switching current	20 mA... 1,5 A	1 mA... 100 mA	1 mA... 1,5 A
Switching voltage	24 ... 250 V AC	5 ... 250 V AC	5 ... 250 V AC
uključenja	24 ... 150 V DC	5 ... 150 V DC	5 ... 150 V DC
Kapacitet	150 V DC	150 V DC	150 V DC
uključenja	350 VA 60 W	5 VA 5 W	300 VA 60 W
Histerezis	approx. 25/35 mm (TPK/FEP)	approx. 25/35 mm (TPK/FEP)	approx. 25/35 mm (TPK/FEP)
uključenja	approx. 130/155 mm (TPK/FEP)	approx. 130/155 mm (TPK/FEP)	approx. 130/155 mm (TPK/FEP)
Sa dodatnim			
histerezisom	approx. 130/155 mm (TPK/FEP)	approx. 130/155 mm (TPK/FEP)	approx. 130/155 mm (TPK/FEP)
Ugao	approx. +12°...+3°	approx. +12°...+3°	approx. +12°...+3°
uključenja	approx. +28°...-26°	approx. +28°...-26°	approx. +28°...-26°
Sa dodatnim			
histerezisom	approx. +28°...-26°	approx. +28°...-26°	approx. +28°...-26°

Kljuc tipa

Osnovna oznaka (μ -prekidac)

Oblik plovka
 0 = cilindar Ø 29 mm (PP)
 1 = kugla Ø 90 mm (PP)
 4 = cilindar Ø 50 mm (PE)

Veza

W = promenljiva veza
 NO = zatvara se ako pluta
 NC = otvara se ako pluta

Element uključenja

0 = srebrna veza
 1 = zlatna veza
 2 = univerzalni μ -prekidac

Histereza

Bez indikacija = bez histereze
 H = sa histerezom

Materijal kabla

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

Duzina kabla u m

01 = 1 m
 02 = 2 m itd.

QFS§

Type Key

Basic designation (μ -switch)

Float form
 0 = Cylinder Ø 29 mm (PP)
 1 = Ball Ø 90 mm (PP)
 4 = Cylinder Ø 50 mm (PE)

Contact

W = change-over contact
 NO = closing if floating
 NC = opening if floating

Switching element

0 = silver contact
 1 = gold contact
 2 = universal μ -switch

Hysteresis

without indication =
 without hysteresis
 H = with hysteresis

Cable material

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

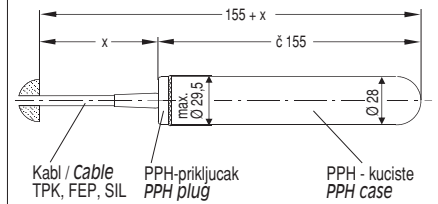
Cable length in m

01 = 1 m
 02 = 2 m etc.

QFS§

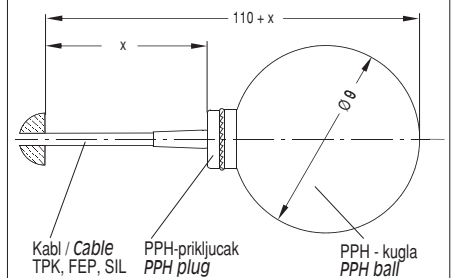
Dimenzioni crtez Dimensional Drawings

QFS-30



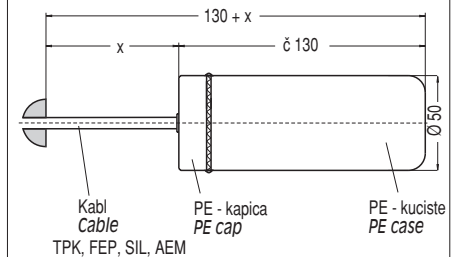
Dimenzije u mm / Dimensioning in mm

QFS-31

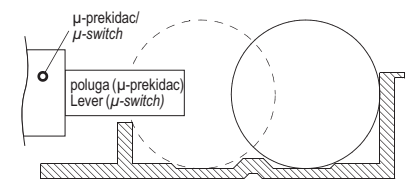


Dimenzije u mm / Dimensioning in mm

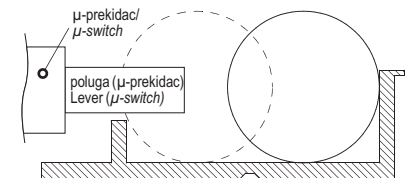
QFS-34



Dimenzije u mm / Dimensioning in mm



Mikroprekidac sa histerezisom /
Microswitch with hysteresis



Mikroprekidac bez histerezisa /
Microswitch without hysteresis

Zadržano pravo izmene bez najave.

Subject to change without prior notice,
errors excepted.

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