

BEZBEDNOSNA TEHNOLOGIJA  
ZA ZAŠTITU  
ŽIVOTNE SREDINE

SAFETY AND  
ENVIRONMENTAL  
TECHNOLOGY

E.L.B.  
FÜLLSTANDSGERÄTE

05-00-01E

**VREMENSKI ROK ISTICE!** Od 13. Avgusta 2005. godine, odnosno 1. jula 2006. živini prekidaci bice ZABRANJENI prema uputstvima EU i veca od 27. januara 2003. i amandmana 2003/108EG od 8. decembra 2003. godine

**THE TIME LIMIT EXPIRES!** From August 13th, 2005 respectively July 1st, 2006 on mercury switches will be FORBIDDEN according to the EU directive and the council dated January 27th, 2003 and the amendment 2003/108/EG dated December 8th, 2003.

Odluka o zabranil  
Disposal proof  
Nr. ENF010023944  
za merkuri prekidace/  
for mercury switches

(Dodatne informacije [www.elb-bensheim.de](http://www.elb-bensheim.de))

(Information: [www.elb-bensheim.de](http://www.elb-bensheim.de))

## Prekidac plovka

Prekidaci plovka se koriste za prostu akviziciju limita vrednosti. Plovak pluta na tecnoj površini kroz vecu gustinu tecnosti, i pokrece operaciju skretanja kada plovak odstupa od horizontalnog položaja. U prekidacima plovka serije S..., instalirani su živini prekidaci, koji su postavljeni sa svih strana. U prekidacima plovaka u kojima nema žive QFS... serije, koriste se mikroprekidaci, kojima se upravlja preko tega ili kugle. Glavno polje primene je za akviziciju limitnih nivoa (zaštita od preopterećenja ili rada na suvo). Za kombinaciju kontrola minimuma/ maksimuma kod pumpi sa nekoliko prekidaca ima nekoliko odgovarajucih prekidaca plovaka. Prekidaci su fiksirani na cevi ili uz pomoc tegova i utega. Naši prekidaci plovaka mogu se koristiti i u vodi i u agresivnim supstancama.. Radi ovoga mora se izabrati ogrovarajuci materijal za kabl.

- Termoplastični gumeni kabl (TPK) je upotrebljiv u vodi, otpadnim vodama i uljanim tecnostima, kao i blago agresivnim tecnostima. Za supstance koje sadrže ulje, treba da se obezbedi PTFE prskalica (S-1...).

- Silikon (SIL) za tecnost za pranje na visokim temperaturama.

- Teflon (FEP) za agresivne tecnosti (kiseline/baze)

- TPK kabl sa zaštitom od etilen-kopolimera (AEM) za razblažene kiseline i baze

Tela plovaka su napravljena od PE, PVC, PTFE materijala ili nerđjavećeg celika V4A (1.4571). Za ugradjivanje prstena/cilindra sa strane mesing i kompresovan PVC 1" navoj veze (S-...) Su dostupni. Kada se instalira odozgo 2" PVC kompresija i konekcije preko žlezdastog navoja su neophodne pošto se popravka mora izvesti kroz G-902 teg-

- Niske cene za održavanje sistema
- Visoka hemijska izdržljivost
- Odgovarajuće za korišćenje u supstancama sa različitim gustinama
- Za temperature do 160°C
- Malih dimenzija (S-10...), instalacija kroz 1" moguca
- Upotreba u kategoriji 2 (Ex zona 1) sa ER-14...

## Detalji o sistemu

Za zaštitu kontakta u slučaju nenamernih kontakata sa prekidacima plovka S-1..., QFS3..., S2..., S-50... itd. I kombinacije prekidaca plovaka SK1... ili QFSK3 preporučujemo naš relej za zaštitu kontakta KR-164 (videti sekciju 10). Pojacalo za prebacivanje ER-1... je takodje objašnjem u sekciji 10. Prekidacima plovka može se suštinski bezbedno upravljati uz pomoc našeg IExII relej ER-14...

## Float Switches

Float switches are used for simple limit value acquisition. The float floats on the liquid surface through the higher density of the liquid, and acutates a switching operation when the float deviates from the horizontal position. In float switches of the S... series mercury switches are installed, which are cast on all sides. In the mercury-free float switches of the QFS... series microswitches are used, which are operated by a weight or with a ball.

The main field of application is for the acquisition of limit levels (overflow and dry-running protection). For min-max control of pumps float switch combinations with several float switches are suitable. The float switches are fixed on a tube or with loading weights. Our float switches can be used both in water and in aggressive media. For this a suitable cable material has to be selected.

- Thermoplastic rubber cable (TPK) is useable for waste water and oily liquids, as well as slightly aggressive liquids. For oil-containing media a PTFE nozzle (S-1...) should be provided.

- Silicone (SIL) for washing liquor at high temperatures

- Teflon (FEP) for aggressive liquids (acids/alkalies)

- TPK cable with an ethylene-copolymer coating (AEM)

for dilute acids and alkalies

The float bodies are made of PE, PP, PVC, PTFE or stainless steel V4A (1.4571).

For side mounting of the sleeve/cylinder brass and 1" PVC compression gland screw connections (S-10...) are available. When installing from above 2" PVC compression gland screw connections are required since fixing must be achieved through the G-902 loading weight.

- Low system costs
- High chemical resistance
- Suitable for use in liquids with different densities
- For temperatures up to 160°C
- Small dimensions (S-10...), installation through 1" possible
- Use in category 2 (Ex-zone 1) with ER-14...

## System Details

For contact protection involving protection against accidental contact with float switches S-1..., QFS3..., S-2..., S-50... etc and float switch combinations SK1... or QFSK3 we recommend our contact protection relay KR-164 (see section 10). Switching amplifier ER-1... is also given under section 10. The float switches can be intrinsically safely operated with our IExII-relay ER-14...

SCHWIMMSCHALTER • FLOAT SWITCHES

## Kljuc tipa Dodaci

Osnovne oznake tega

**Materijal tega bez indikacija = PVC Polivinilchlorid**  
 PP=Polipropilen  
 PTFE= Politetrafluoretilen

Otvor  
 TPK=za TPK kabl  
 FEP=za FEP kabl

G902

**Kompresiona žlezda**  
 PVC=Polivinil chlorid  
 MS=Mesing  
 PP=Polipropilen  
 PTFE= Politetrafluoretilen

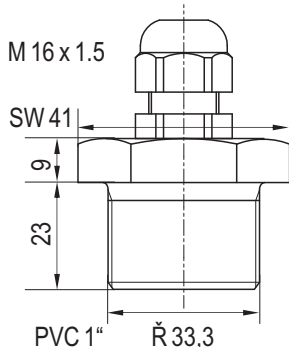
**Navoj za povezivanje**  
 1/2"=G 1/2" (samo PVC)  
 3/4"=G 3/4" (samo PVC)  
 1"=G 1"  
 1 1/2"=G 1 1/2" (samo PVC)  
 2"=G 2"

**Zaptivac (Ø)**  
 TPK=za TPK kabl  
 FEP=za FEP kabl

G902

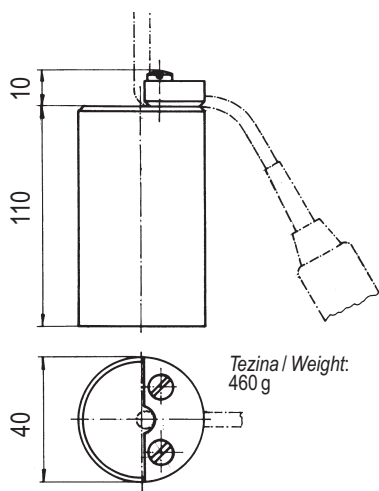
## Dimenzioni crtez Dimensional Drawing

Kompresiona zlezda  
 Compression gland



Dimenzije u mm / Dimensioning in mm

Teg za punjenje G-902  
 Loading weight G-902



Dimenzije u mm / Dimensioning in mm

## Type Key Accessories

Basic designation loading weight

Material weight without indication = PVC Polyvinylchloride  
 PP = Polypropylene  
 PTFE = Polytetrafluorethylene

Eyelet  
 TPK = for TPK cable  
 FEP = for FEP cable

G902

Compression gland  
 PVC = Polyvinylchloride  
 MS = Brass  
 PP = Polypropylene  
 PTFE = Polytetrafluorethylene

Connection thread  
 1/2" = G 1/2" (PVC only)  
 3/4" = G 3/4" (PVC only)  
 1" = G 1"  
 1 1/2" = G 1 1/2" (PVC only)  
 2" = G 2"

Gasket (R)  
 TPK = for TPK cable  
 FEP = for FEP cable

G902

Kompresiona zlezda  
 Compression gland

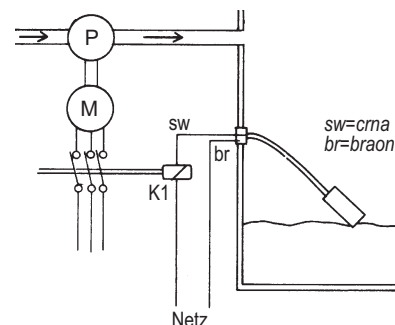


Teg za punjenje G-902  
 Loading weight G-902

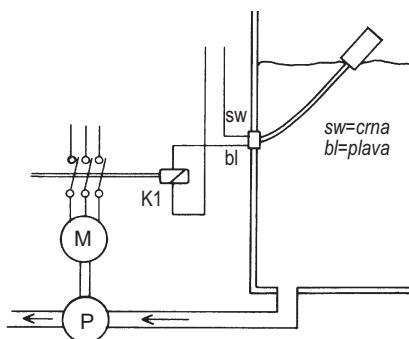


## Primer primene Example Application

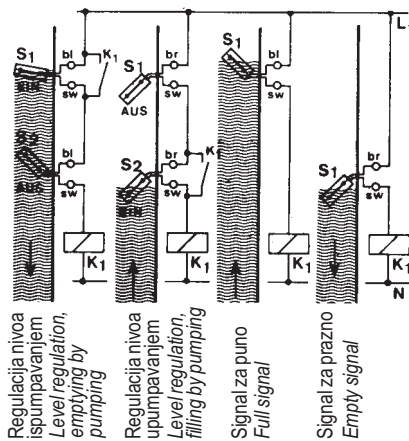
Primer primene „pumpa je puna”  
 Example Application “Pump full”



Primer primene „pumpa je prazna”  
 Example Application “Pump empty”



## Primer vezivanja Connection Examples



Oznake za jezgro kabl:  
 Crno-braon = otvara se kada pluta  
 Crno-plavo = zatvara se kada pluta

Assignment of the cable cores  
 Black/brown = opening when floating  
 Black/blue = closing when floating

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