



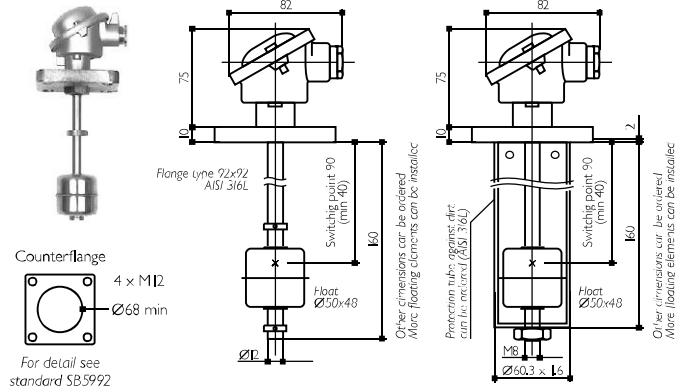
**MAGNETIC
LEVEL
SWITCHES**



MAGNETIC LEVEL SWITCHES ITMLS

- Designed for using on board ships, in petrol industries etc.
- Material used (stainless steel AISI 316L) makes it suitable for use in various liquids
- Various vessel connections can be done
- Top or side mounting
- Submersible version with teflon cable
- Using Intrinsic Safety Isolators can operate in hazardous area

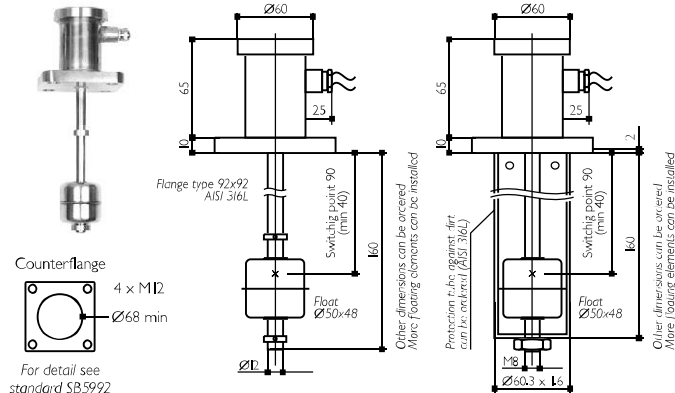
ITMLS-01-II0-92



TECHNICAL CHARACTERISTICS

- Connection head protection: IP 65 with cable gland PG 16
Higher IP protection on request
- Wet side material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
Other types can be ordered
- Top mounting
- Floating element Ø50x48, floatness 0,55
- Up to 3 floating elements can be installed (if so, distance between any one 100mm min)
- Electrical contacts: change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
For other types of contact see Ordering information
- Temperature range: up to 120°C
- Weight ≈ 1,1 kg
- Protection tube against dirt can be ordered

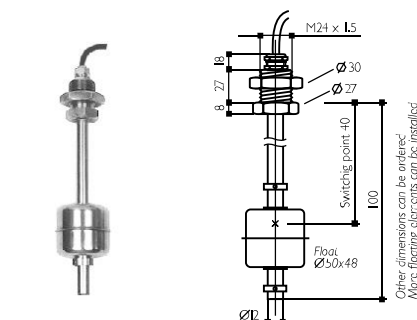
ITMLS-02-II0-92 SUBMERSIBLE



TECHNICAL CHARACTERISTICS

- Submersible version, IP 68 protection
- Material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
Other types can be ordered
- PTFE, teflon cable 3, 5, 7m or more can be ordered
- Top mounting
- Floating element Ø50x48, floatness 0,55
- Up to 3 floating elements can be installed (if so, distance between any one 100mm min)
- Electrical contacts: change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
For other types of contact see Ordering information
- Temperature range: up to 120°C
- Weight ≈ 1,4 kg with 5m cable
- Protection tube against dirt can be ordered

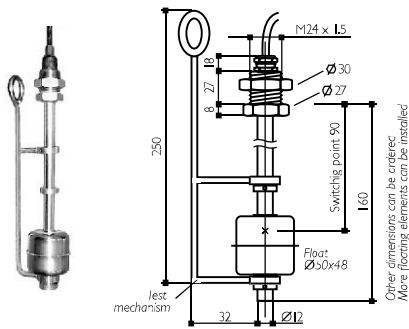
ITMLS-02A-II0-00 SUBMERSIBLE



TECHNICAL CHARACTERISTICS

- Submersible version, IP 68 protection
- Without protection box for the cable
- Material: stainless steel AISI 316L
- PTFE, teflon cable 3, 5, 7m or more can be ordered
- Top mounting
- Floating element Ø50x48, floatness 0,55
- Up to 3 floating elements can be installed (if so, distance between any one 100mm min)
- Electrical contacts: change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
For other types of contact see Ordering information
- Temperature range: up to 120°C
- Weight ≈ 0,5 kg with 5m cable

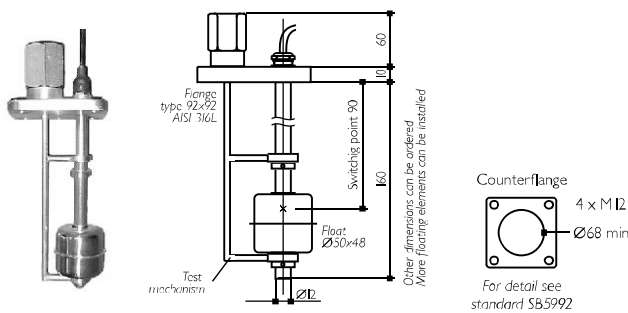
ITMLS-02A-II0-00
WITH TEST MECHANISM *SUBMERSIBLE*



TECHNICAL CHARACTERISTICS

- Submersible version, IP 68 protection
- Material: stainless steel AISI 316L
- PTFE, teflon cable 3, 5, 7m or more can be ordered
- Top mounting
- Floating element Ø50x48, floatness 0,55
- Up to 3 floating elements can be installed (if so, distance between any one 100mm min)
- Electrical contacts:
 - change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
- For other types of contact see *Ordering information*
- Temperature range: up to 120°C
- Weight ≈ 0,6 kg with 5m cable

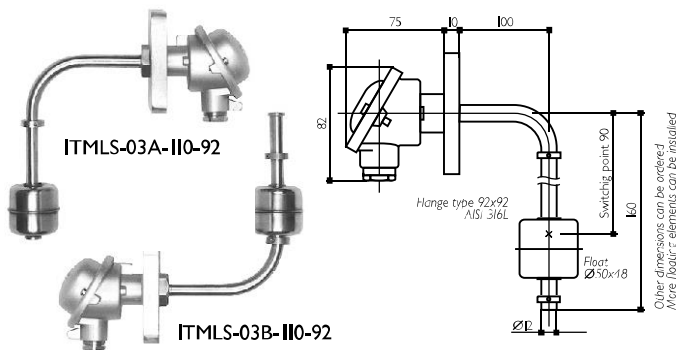
ITMLS-02A-II0-92
WITH TEST MECHANISM *SUBMERSIBLE*



TECHNICAL CHARACTERISTICS

- Submersible version, IP 68 protection
- Material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
- PTFE, teflon cable 3, 5, 7m or more can be ordered
- Top mounting
- Floating element Ø50x48, floatness 0,55
- Up to 3 floating elements can be installed (if so, distance between any one 100mm min)
- Electrical contacts:
 - change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
- For other types of contact see *Ordering information*
- Temperature range: up to 120°C
- Weight ≈ 1,3kg with 5m cable

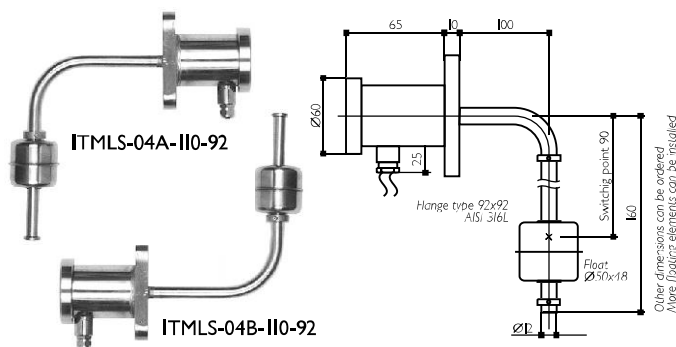
ITMLS-03A-II0-92
ITMLS-03B-II0-92



TECHNICAL CHARACTERISTICS

- Connection head protection:
 - IP 65 with cable gland PG 16
 - Higher IP protection on request
- Wetside material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
 - Other types can be ordered
- Side mounting
- Floating element Ø50x48, floatness 0,55
- Up to 3 floating elements can be installed (if so, distance between any one 100mm min)
- Electrical contacts:
 - change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
- For other types of contact see *Ordering information*
- Temperature range: up to 120°C
- Weight ≈ 1,2 kg

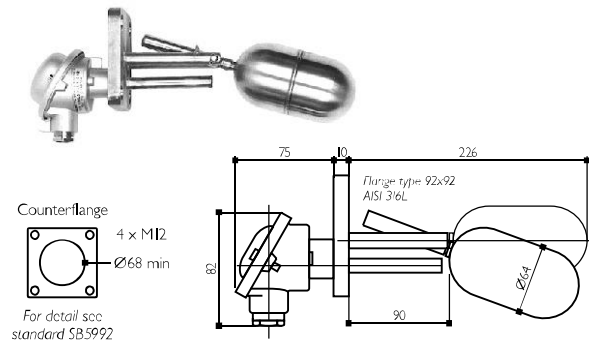
ITMLS-04A-II0-92 *SUBMERSIBLE*
ITMLS-04B-II0-92 *SUBMERSIBLE*



TECHNICAL CHARACTERISTICS

- Submersible version, IP 68 protection
- Material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
 - Other types can be ordered
- PTFE, teflon cable 3, 5, 7m or more can be ordered
- Side mounting
- Floating element Ø50x48, floatness 0,55
- Up to 3 floating elements can be installed (if so, distance between any one 100mm min)
- Electrical contacts:
 - change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
- For other types of contact see *Ordering information*
- Temperature range: up to 120°C
- Weight ≈ 1,5 kg with 5m cable

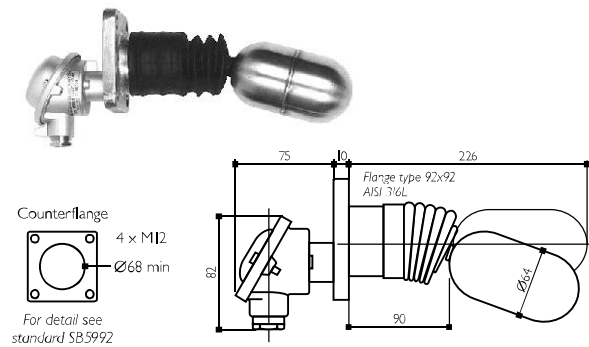
ITMLS-06A-II0-92



TECHNICAL CHARACTERISTICS

- Connection head protection: IP 65 with cable gland PG 16
Higher IP protection on request
- Wetside material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
- Side mounting
- Floating element Ø64x120
- Electrical contacts:
change-over; P=60W, Vac/Vdc: 400V,
switching current I_A max
- Temperature range: up to 120°C
- Additional protection against dirt available
(see ITMLS-06AC-II0-92 types)
- Test mechanism available
- Rod extension available (letter "H" in basic type mark)
- Weight ≈ 1,3 kg

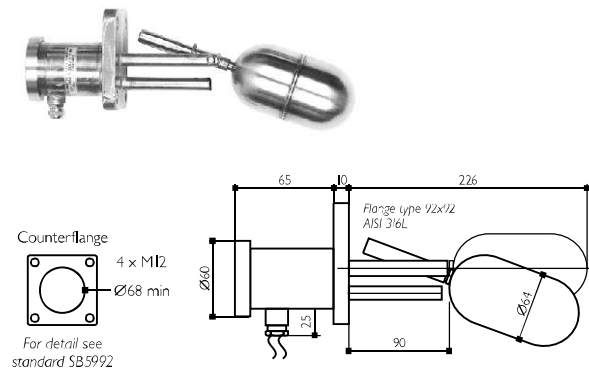
ITMLS-06AC-II0-92



TECHNICAL CHARACTERISTICS

- Connection head protection: IP 65 with cable gland PG 16
Higher IP protection on request
- Wetside material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
- Side mounting
- Floating element Ø64x120
- Electrical contacts:
change-over; P=60W, Vac/Vdc: 400V,
switching current I_A max
- Temperature range: up to 120°C
- With additional protection against dirt
- Test mechanism available on request
- Rod extension available (letter "H" in basic type mark)
- Weight ≈ 1,45 kg

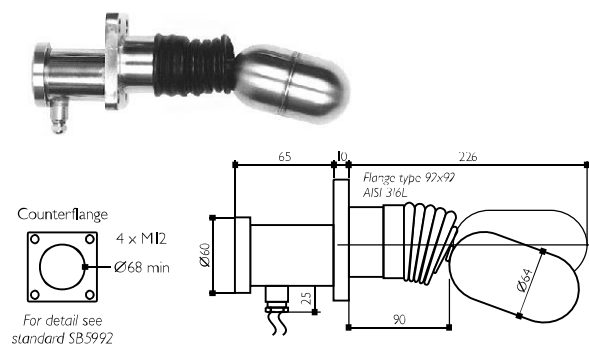
ITMLS-06B-II0-92 SUBMERSIBLE



TECHNICAL CHARACTERISTICS

- Submersible version, IP 68 protection
- Material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
- PTFE, teflon cable 3, 5, 7m or more can be ordered
- Side mounting
- Floating element Ø64x120
- Electrical contacts:
change-over; P=60W, Vac/Vdc: 400V,
switching current I_A max
- Temperature range: up to 120°C
- Additional protection against dirt available
(see ITMLS-06BC-II0-92 types)
- Test mechanism available
- Rod extension available (letter "H" in basic type mark)
- Weight ≈ 1,55 kg with 5m cable

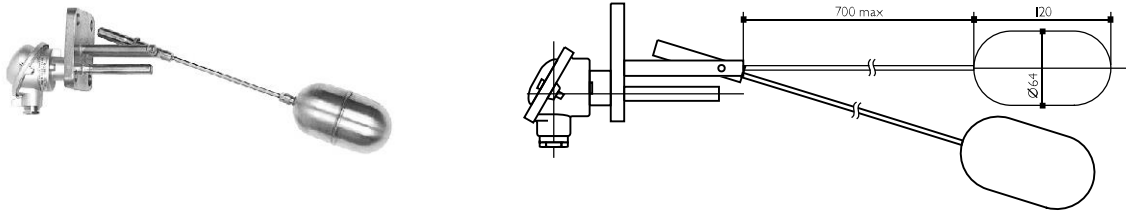
ITMLS-06BC-II0-92 SUBMERSIBLE



TECHNICAL CHARACTERISTICS

- Submersible version, IP 68 protection
- Material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
- PTFE, teflon cable 3, 5, 7m or more can be ordered
- Side mounting
- Floating element Ø64x120
- Electrical contacts:
change-over; P=60W, Vac/Vdc: 400V,
switching current I_A max
- Temperature range: up to 120°C
- With additional protection against dirt
- Test mechanism available on request
- Rod extension available (letter "H" in basic type mark)
- Weight ≈ 1,8 kg with 5m cable

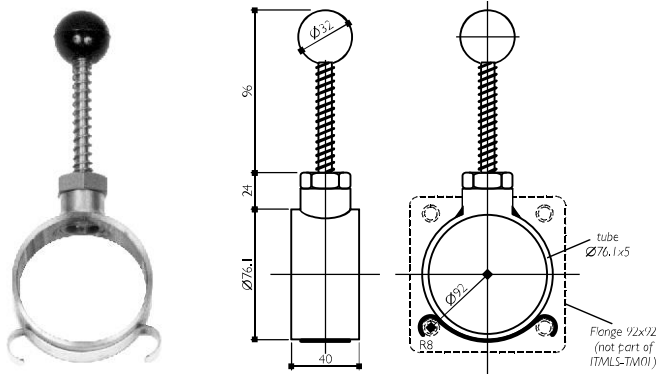
ROD EXTENSIONS for horizontal types of level switches



Rod extensions are available for following types of magnetic level switches:

- ITMLS-06A-110-92 with rod extension = **ITMLS-06AH-110-92**
- ITMLS-06AC-110-92 with rod extension = **ITMLS-06ACH-110-92**
- ITMLS-06B-110-92 with rod extension = **ITMLS-06BH-110-92**
- ITMLS-06BC-110-92 with rod extension = **ITMLS-06BCH-110-92**

TEST MECHANISM type ITMLS-TM01

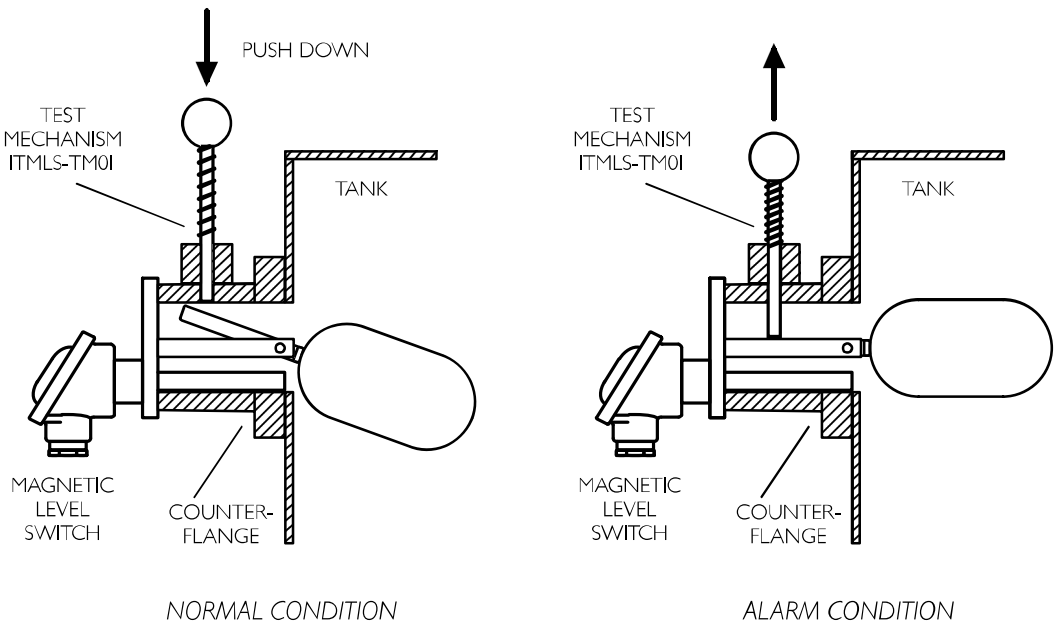


TECHNICAL CHARACTERISTICS

- Test mechanism for ITMLS-06 magnetic level switches
- Material: stainless steel AISI 316L
- Protection: IP 68
- 3 bar (more on request)
- Weight: 0,430 kg

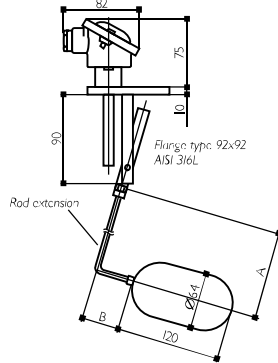
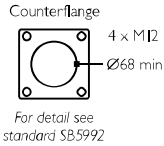
Test mechanism should be inserted between magnetic level switch and tank connection.

PRINCIPLE OF OPERATION:



All dimensions are in mm.

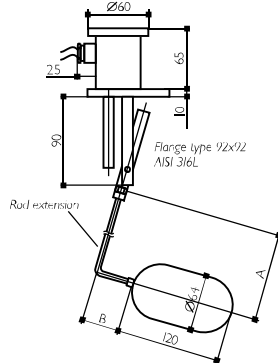
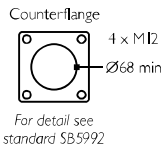
ITMLS-06AV-110-92
ITMLS-06ACV-110-92



TECHNICAL CHARACTERISTICS

- ITMLS-06AV-110-92 without protection against dirt
- ITMLS-06ACV-110-92 with additional protection against dirt
- Connection head protection:
 - IP 65 with cable gland PG 16
 - Higher IP protection on request
- Wet side material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
- Top mounting
- Floating element Ø64x120
- Electrical contacts:
 - change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
- Temperature range: up to 120°C
- Test mechanism available only for ITMLS-06AV-110-92
- With rod extension only (see Rod extension table)
- Weight: for ITMLS-06AV-110-92 ≈ 1,6 kg
 for ITMLS-06ACV-110-92 ≈ 1,8 kg

ITMLS-06BV-110-92 SUBMERSIBLE
ITMLS-06BCV-110-92 SUBMERSIBLE



TECHNICAL CHARACTERISTICS

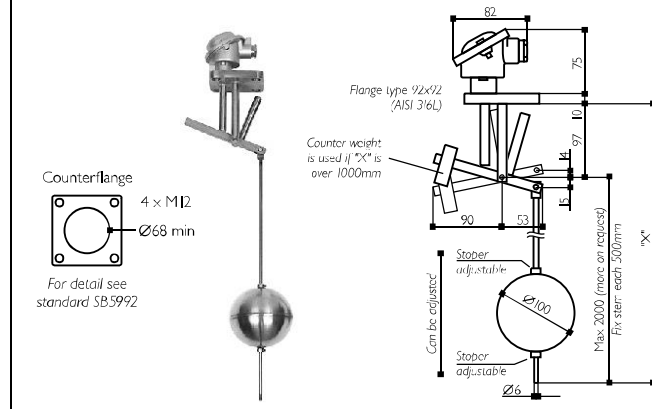
- ITMLS-06BV-110-92 without protection against dirt
- ITMLS-06BCV-110-92 with additional protection against dirt
- Submersible version, IP 68 protection
- Material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
- PTFE, teflon cable 3, 5, 7m or more can be ordered
- Top mounting
- Floating element Ø64x120
- Electrical contacts:
 - change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
- Temperature range: up to 120°C
- Test mechanism available only for ITMLS-06BV-110-92
- With rod extension only (see Rod extension table)
- Weight: for ITMLS-06BV-110-92 ≈ 1,9 kg with 5m cable
 for ITMLS-06BCV-110-92 ≈ 2,15 kg with 5m cable

ROD EXTENSION TABLE FOR VERTICAL TYPE ITMLS-06...V

HAVE TO BE FOLLOWED	EXAMPLES	A (mm)	B (mm)
A / B ≤ 2		50	25
A + B ≤ 750mm		100	50
A _{min} = 50 / A _{max} = 500		200	100
B _{min} = 25 / B _{max} = 500		500	250

All dimensions are in mm.

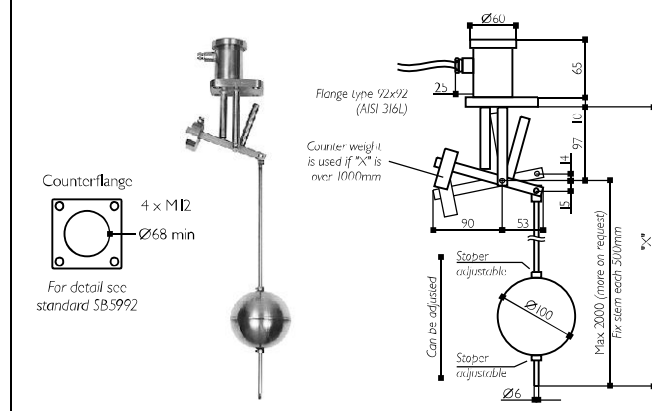
ITMLS-07A-II0-92



TECHNICAL CHARACTERISTICS

- Connection head protection: IP 65 with cable gland PG 16
- Wetside material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
- Top mounting
- Floating element Ø100
- Electrical contacts: change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
- Temperature range: up to 120°C
- Working pressure for wetside parts: up to 4 bars
- Weight ≈ 2,1 kg

ITMLS-07B-II0-92 SUBMERSIBLE

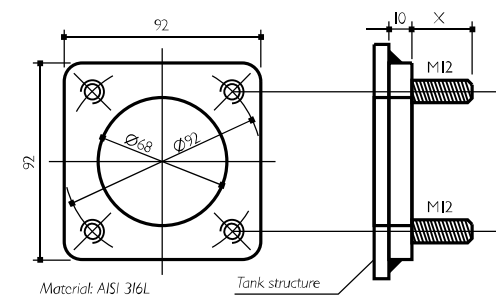


TECHNICAL CHARACTERISTICS

- Submersible version, IP 68 protection
- Material: stainless steel AISI 316L
- Flange: Standard 92x92 AISI 316L
- PTFE, teflon cable 3, 5, 7m or more can be ordered
- Top mounting
- Floating element Ø100
- Electrical contacts: change-over, P=60W, Vac/Vdc: 400V, switching current 1A max
- Temperature range: up to 120°C
- Working pressure for wetside parts: up to 4 bars
- Weight ≈ 2,8 kg with 5m cable

COUNTERFLANGE 92x92

for welding to tank structure



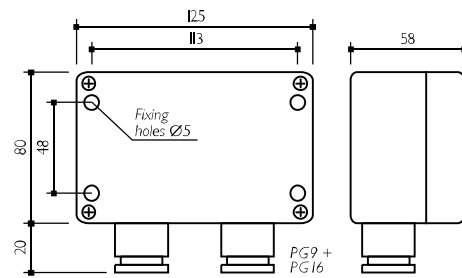
X=25 for ITMLS without test mechanism ITMLS-TM01
X=68 for ITMLS with test mechanism ITMLS-TM01

CONNECTION BOX

(for submersible types of level switches)

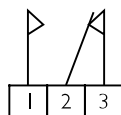
type ITJB-1208-1-3 (with 3 terminals)

type ITJB-1208-1-6 (with 6 terminals)

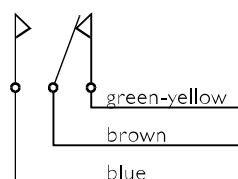


All dimensions are in mm.

CONNECTIONS:

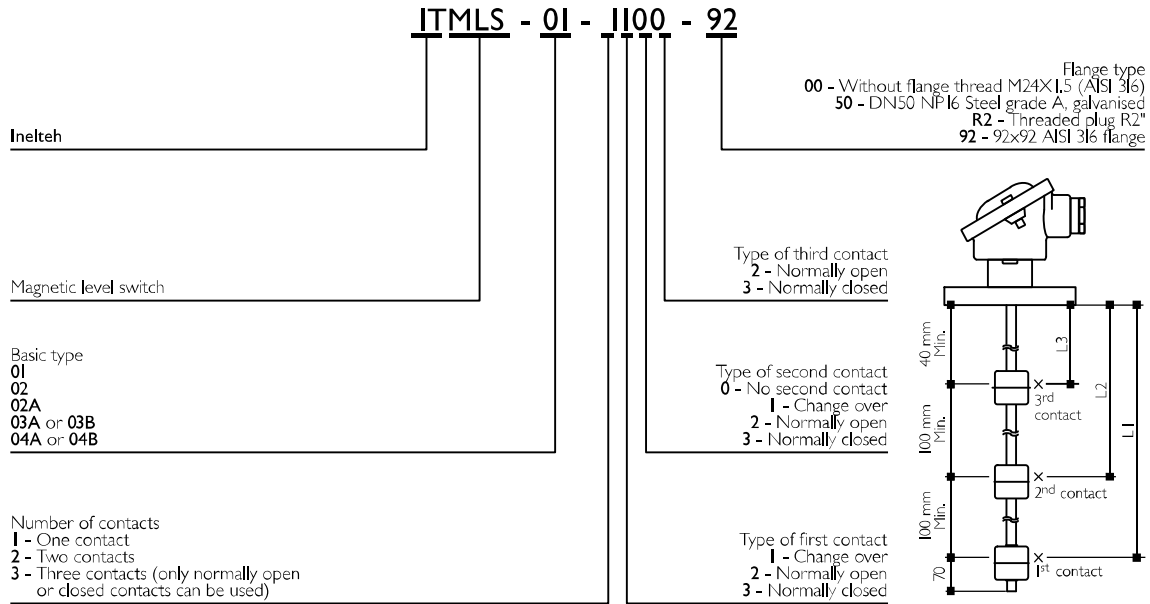


For magnetic level switches with connection head, IP 65



For submersible magnetic level switches (cable output), IP 68

ORDERING INFORMATION for basic types ITMLS-01 up to 04

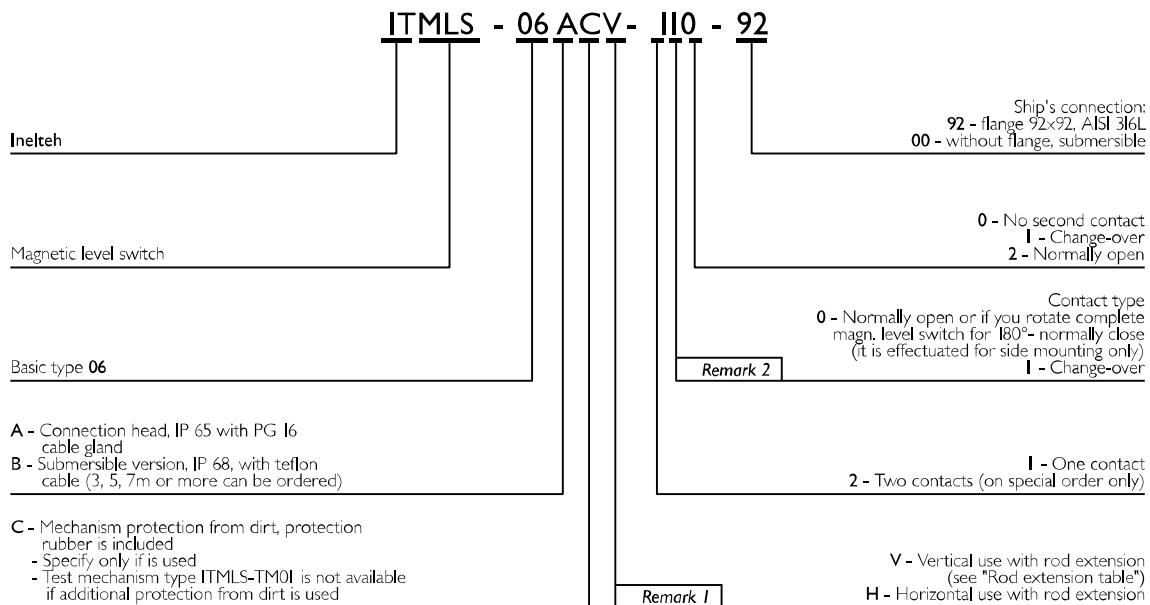


MI Change-over contacts Contact ratings: 60W max. / Switch. current: 1A max. / Vac/Vdc: 400V

MO Normally open Contact ratings: 60W max. / Switch. current: 1A max. / Vac/Vdc: 400 V

DO NOT FORGET Calculations: $P = U \times I$ (W), where P=power, U=voltage, I=current

ORDERING INFORMATION for basic type ITMLS-06



Remark 1 V or H letter specify only if rod extension is necessary. Otherwise do not specify anything.

Remark 2 **MI** Change-over contacts Contact ratings: 60W max. / Switch. current: 1A max. / Vac/Vdc: 400V

MO Normally open Contact ratings: 60W max. / Switch. current: 1A max. / Vac/Vdc: 400 V

DO NOT FORGET Calculations: $P = U \times I$ (W), where P=power, U=voltage, I=current