



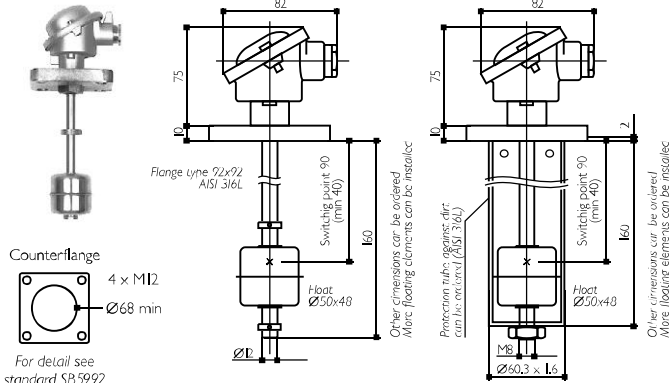
M A G N E T I C  
L E V E L  
S W I T C H E S



# 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

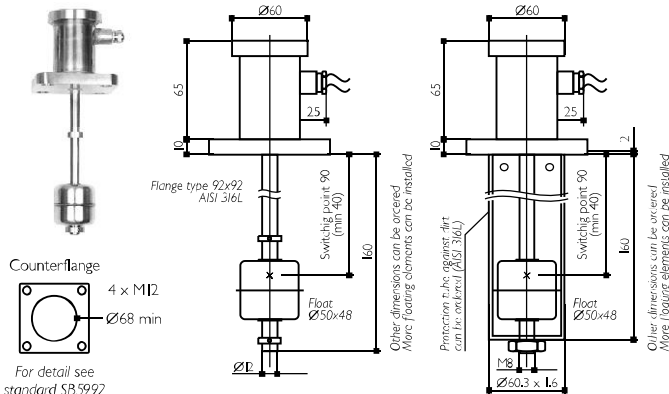
## ITMLS-01-II0-92



### TECHNICAL CHARACTERISTICS

- Connection head protection: IP 65 with cable gland PG 16  
Higher IP protection on request
- Wetside 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

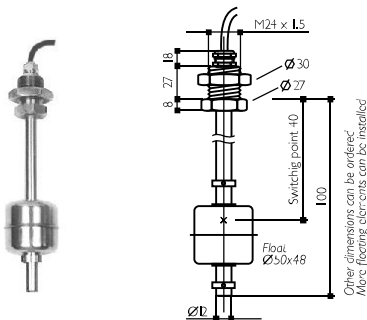
## ITMLS-02-II0-92 SUBMERSIBLE



### 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

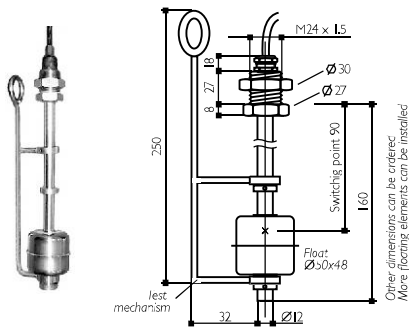


### TECHNICAL CHARACTERISTICS

- 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

All dimensions are in mm.

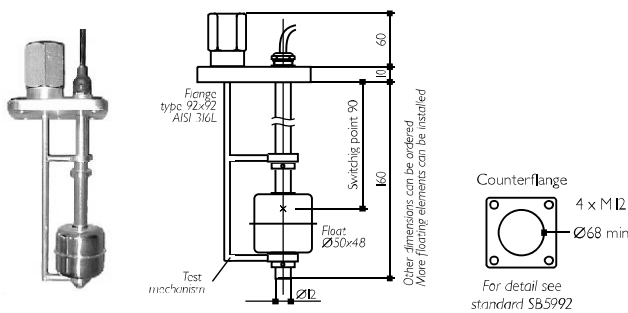
**ITMLS-02A-II0-00**  
**WITH TEST MECHANISM** *SUBMERSIBLE*



**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

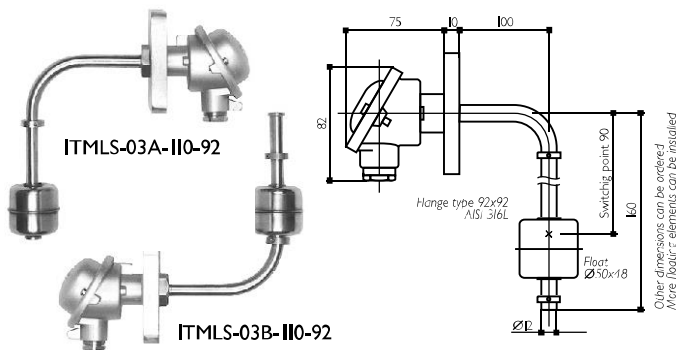
**ITMLS-02A-II0-92**  
**WITH TEST MECHANISM** *SUBMERSIBLE*



**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

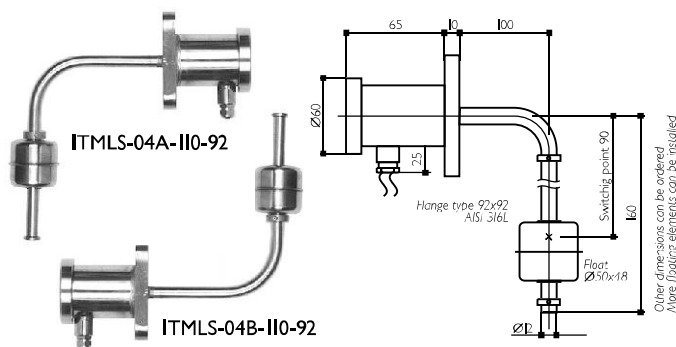
**ITMLS-03A-II0-92**  
**ITMLS-03B-II0-92**



**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

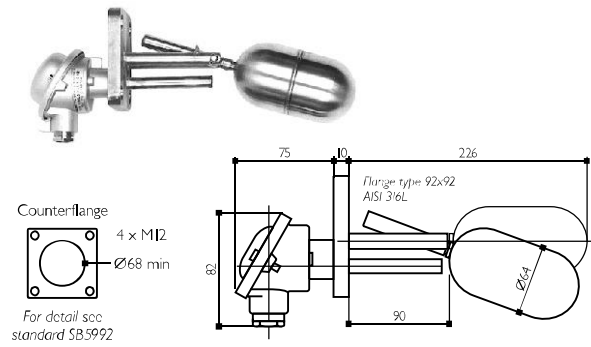
**ITMLS-04A-II0-92** *SUBMERSIBLE*  
**ITMLS-04B-II0-92** *SUBMERSIBLE*



**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

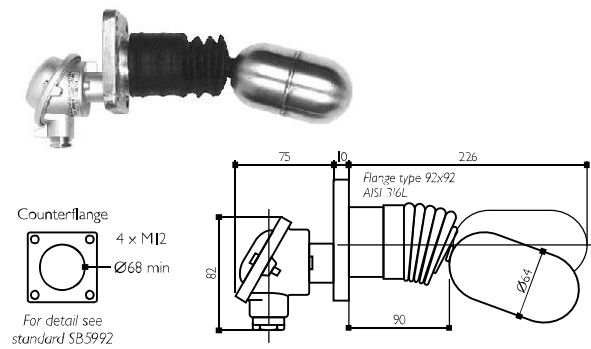
**ITMLS-06A-II0-92**



**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 1A 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

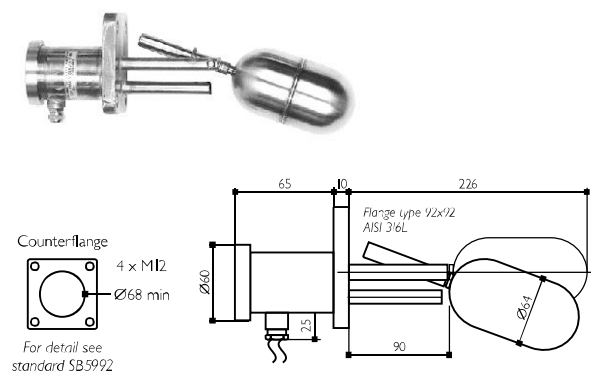
**ITMLS-06AC-II0-92**



**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 1A 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

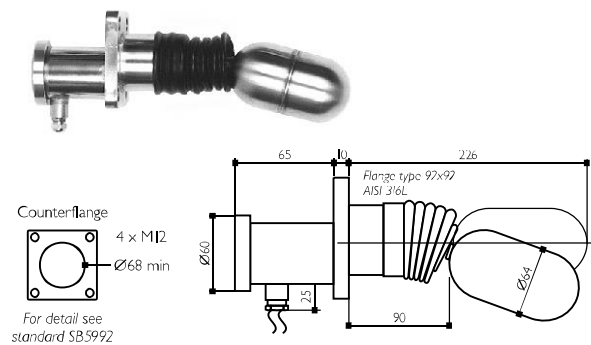
**ITMLS-06B-II0-92 SUBMERSIBLE**



**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 1A 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**

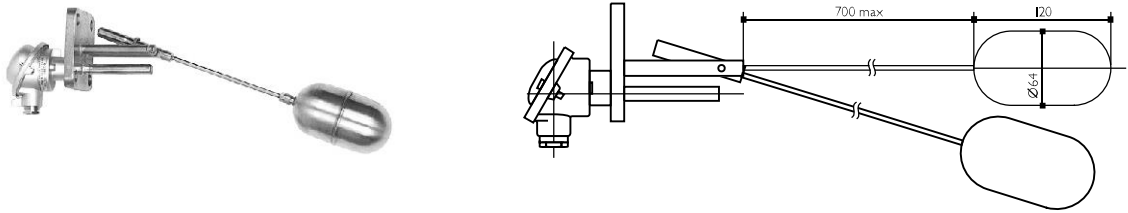


**TECHNICAL CHARACTERISTICS**

- 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 1A 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

All dimensions are in mm.

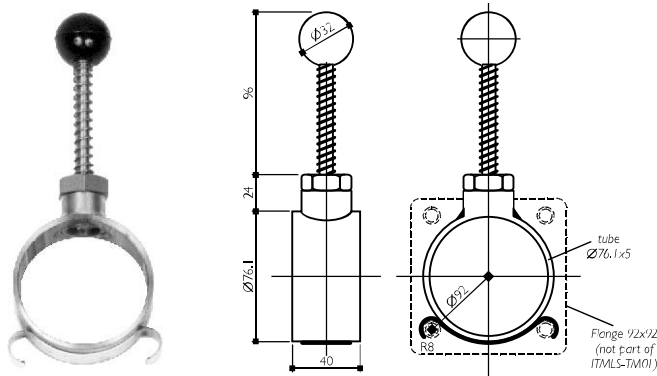
• **ROD EXTENSIONS** for horizontal types of level switches



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

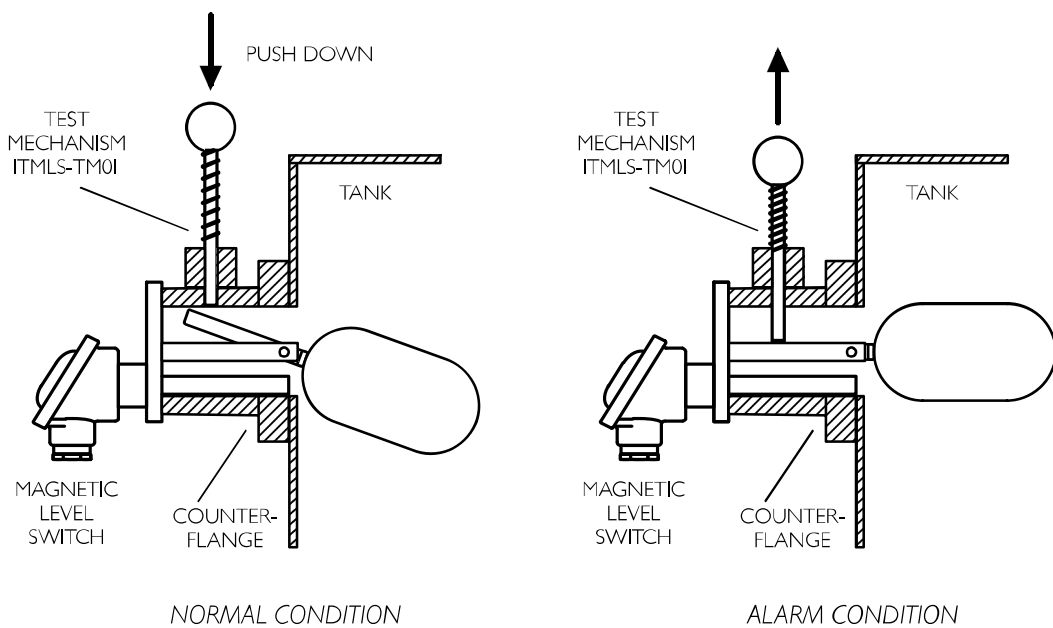


**TECHNICAL CHARACTERISTICS**

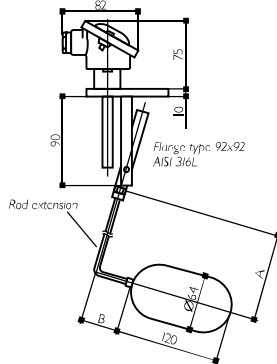
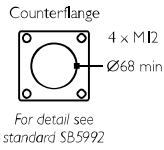
- Test mechanism for ITMLS-06 magnetic level switches
- Material: stainless steel AISI 316L
- Protection: IP 68
- 3 bar (more on request)
- Weight: 0,430 kg

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

**PRINCIPLE OF OPERATION:**



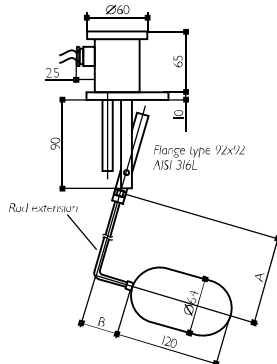
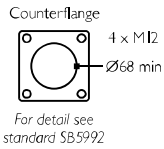
**ITMLS-06AV-110-92**  
**ITMLS-06ACV-110-92**



**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
- Wetside 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

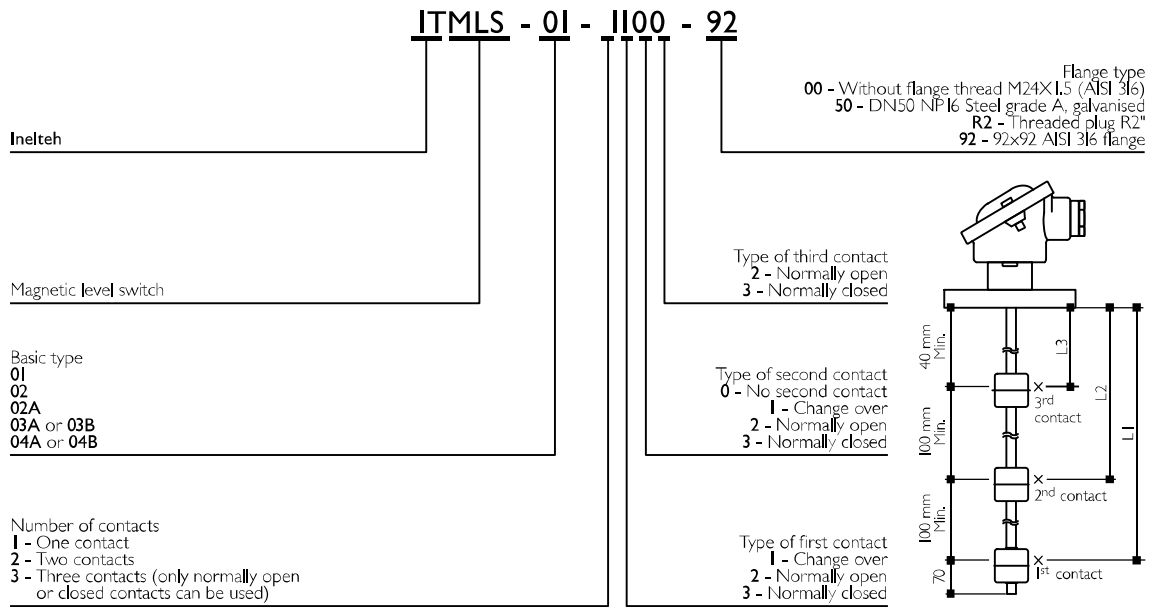
**ROD EXTENSION TABLE FOR VERTICAL TYPE ITMLS-06...V**

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

All dimensions are in mm.



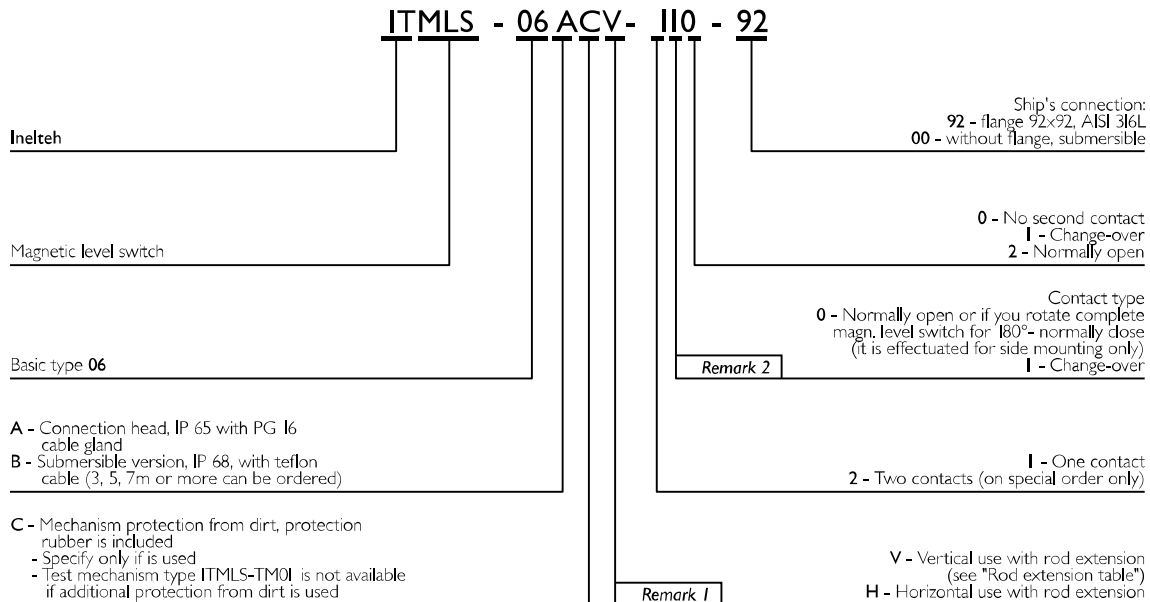
**ORDERING INFORMATION for basic types ITMLS-01 up to 04**



	<b>Change-over contacts</b> Contact ratings: 60W max. / Switch. current: 1A max. / Vac/Vdc: 400V
	<b>Normally open</b> 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**



<b>Remark 1</b>	V or H letter specify only if rod extension is necessary. Otherwise do not specify anything.
<b>Remark 2</b>	<b>Change-over contacts</b> Contact ratings: 60W max. / Switch. current: 1A max. / Vac/Vdc: 400V
	<b>Normally open</b> 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