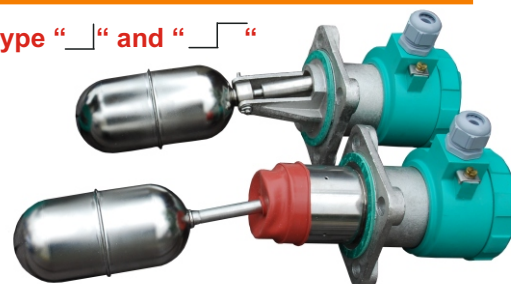


## LEVEL SWITCHES type ERH-...-06

LEVEL SWITCHES IN MARINE VERSION ARE DESIGNED FOR SIGNALLING OF LIQUID LIMIT LEVELS OR TWO-TERM LIQUID LEVEL CONTROL IN OPEN AND CLOSED PRESSURIZED TANKS, IN NON-EXPLOSIVE ATMOSPHERE. THE CONTROLLERS CAN OPERATE ON SHIPS IN MARINE CLIMATE. THE LEVEL SWITCHES ARE PROVIDED WITH CERTIFICATES ISSUED BY: GERMANISCHER LLOYD, LLOYD'S REGISTER, DNV, ABS, PRS, GOST-R and PZH. LEVEL SWITCHES CAN OPERATED IN AGGRESSIVE LIQUIDS NOT REACTING ON 1H18N9T STEEL (321 SS) AND 316.

◦ curve pipe type “” and “”



- material of dry parts - Al alloy
- material of wet parts - 1H18N9T (321 ss) and 316
- top and side mounted
- nominal pressure 4 MPa

◦ marine certificates:  
GL, LR, DNV, ABS, BV, GOST-R, PRS,  
certificate for food industry  
HZ/D/1475/2007

◦ available version with saller float ER2-1661  
(52 dia and 162 mm)



### TECHNICAL DATA

Parameters	ERH-01-06	ERH-02-06	ERH-03-06	ERH-04-06
Switching hysteresis	10; 20; 30mm	10; 20; 30mm	100...400mm 50...250mm	32...1350mm
Repeatability	±15%	±15%	±15%; ±2%	±15%; ±2%
Mass	1.8 kg	2.0 kg	2.1 kg	3.0 kg
Static pressure of the medium	4 MPa			1.6 MPa
Permissible temperature of the medium	250°C	200°C	250°C	
Ambient temperature	-25°C...+70°C			
Casing protection degree	IP 66			
Minimum liquid density	0.6 x 10 <sup>-3</sup> kg/cm <sup>3</sup>			
Application	In clear fluids without impurities of constant suspensions	In impurities fluids of constant suspensions	In clear fluids without impurities with constant suspensions	In clear and impurities fluids of constant suspensions

### ELECTRIC PARAMETERS OF LEVEL SWITCH:

Rated switching voltage  $U_e$

AC-15 230V; 50...60Hz

DC-13 220V=

Rated switching currents:

$I_e$ /AC 15  $U_e$  230V; 50...60Hz AC1 10A

$I_e$ /DC 13  $U_e$  220V; 0,6A

Switching durability:

AC-15 AC1-3,0x10<sup>5</sup>

DC-13 0,3x10<sup>5</sup>

Minimal voltage and switching current: 10V; 20mA

Cross sections of connecting wires - for single-core wires: 1...2.5 sq. mm

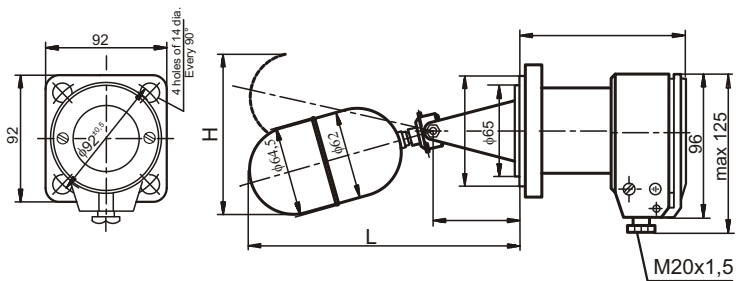
- for multile-core wires: 0.75...1.5 sq. mm

Level switches type ERH-...-06

DIMENSIONED DRAWINGS

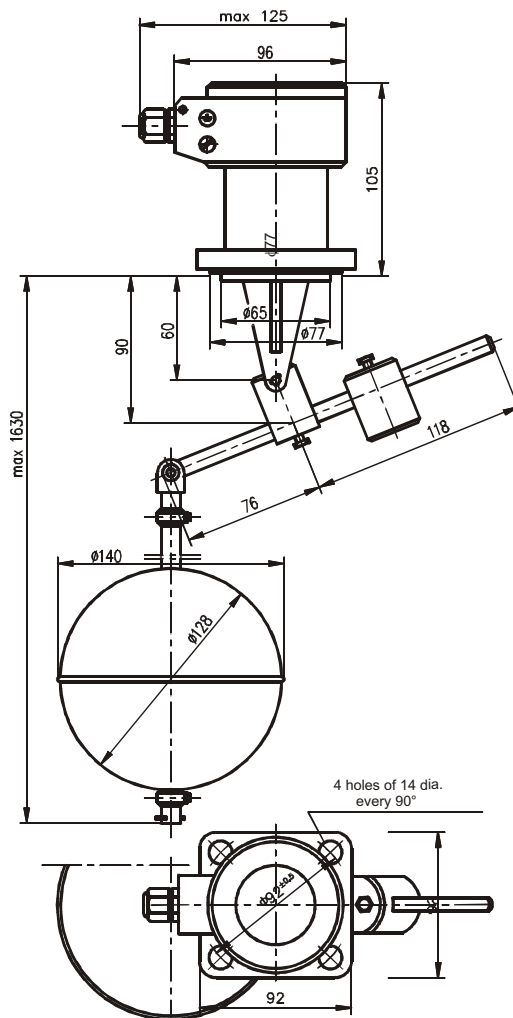
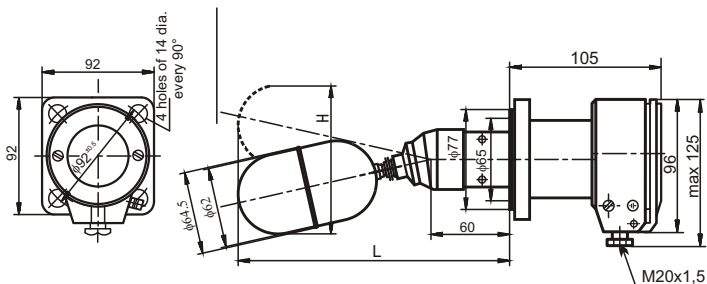
**ERH-01-06**

Symbol	Hmm	Lmm	Hysteresis "h"
- 1	120	190	10
- 2	140	230	20
- 3	150	255	30

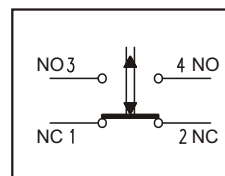


**ERH-02-06**

Symbol	Hmm	Lmm	Hysteresis "h"
- 1	120	190	10
- 2	140	230	20
- 3	150	255	30



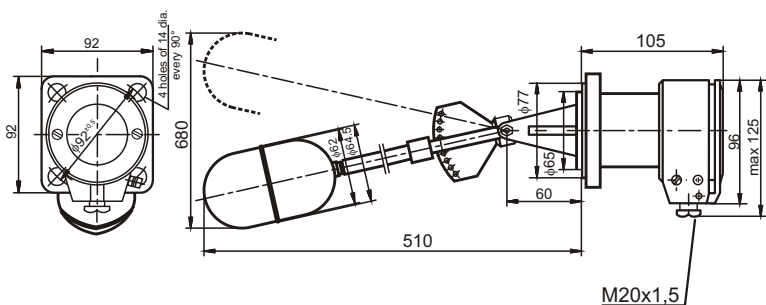
Electric circuit diagram of level switches



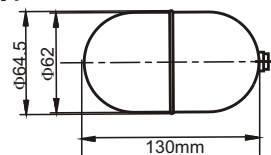
NC - closing contact  
NO - opening contac

**ERH-03-06**

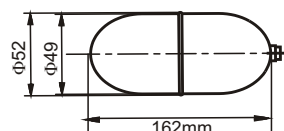
Symbol	Hmm	Lmm	Hysteresis "h"
- 1	680	510	from 100 to 400
- 2	450	380	from 50 to 250



Float type ER2-1024 with dimensions

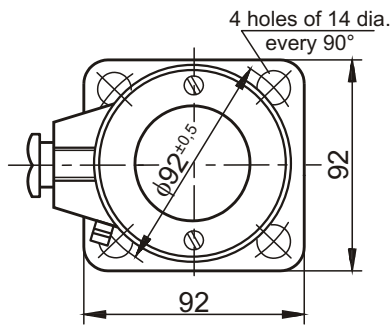
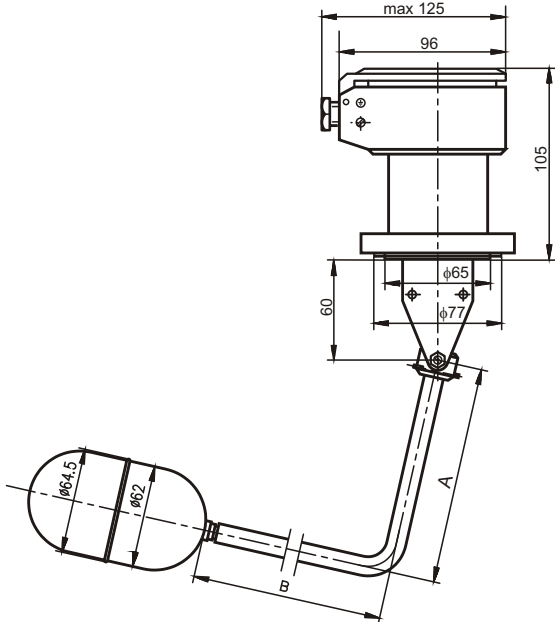


Float type ER2-1661 with dimensions



**ERH-01-06-x-x**

Level switch with curve pipe  
[x - length of arm (A,B or C)  
and A it is dimension from the flange]

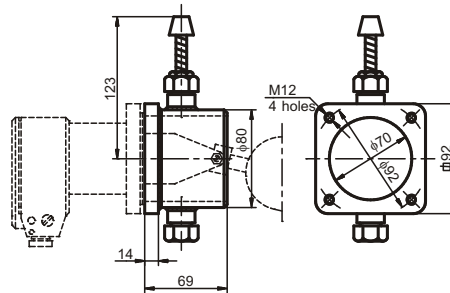
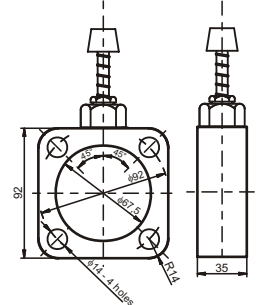


**EQUIPMENT**

for level switches type ERH

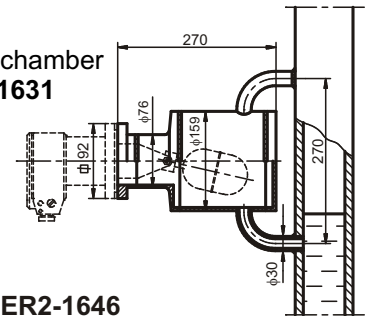
(technical details in catalogue data sheet of  
"equipment for level switches"  
available on web page [www.controlmatica.com.pl](http://www.controlmatica.com.pl))

Testing equipment  
type **ER3-1560**  
(for screwing,  
for ERH-01,03...)

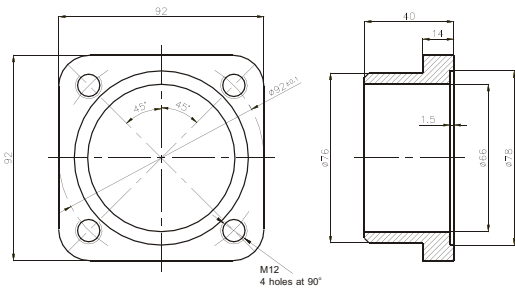


Testing equipment  
type **ER3-1495**  
(for welding, for ERH-01,03...)

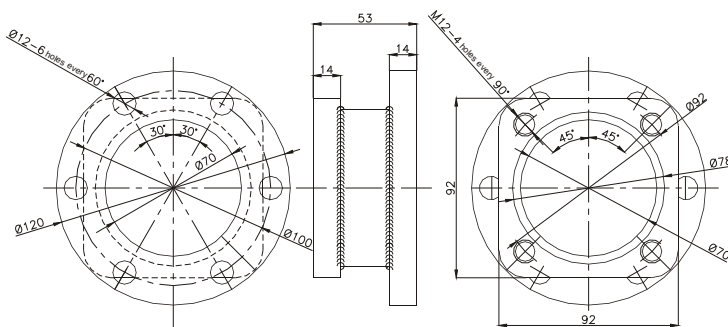
Assembly chamber  
type **ER3-1631**



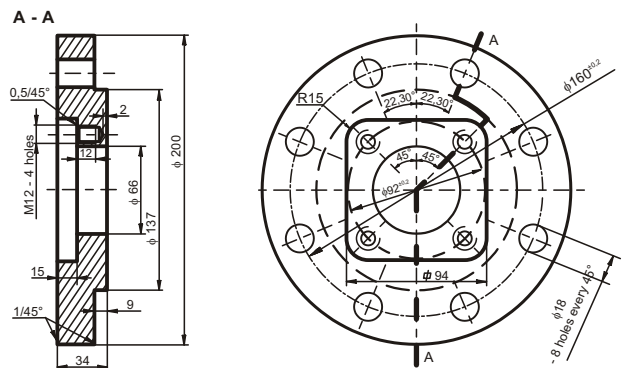
Counterflange type **ER2-1646**



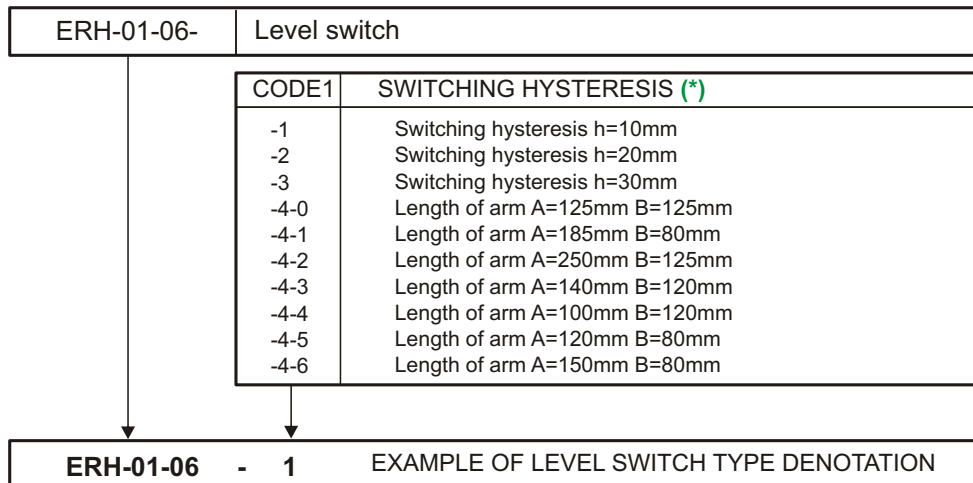
Reducing flange type **ER2-1642**



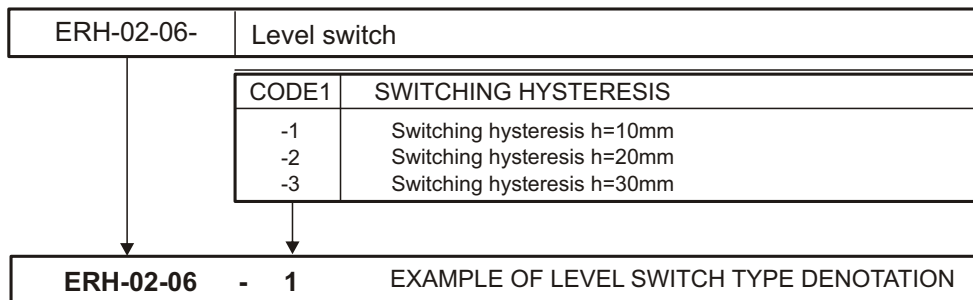
Fixing flange type **ER2-1587**



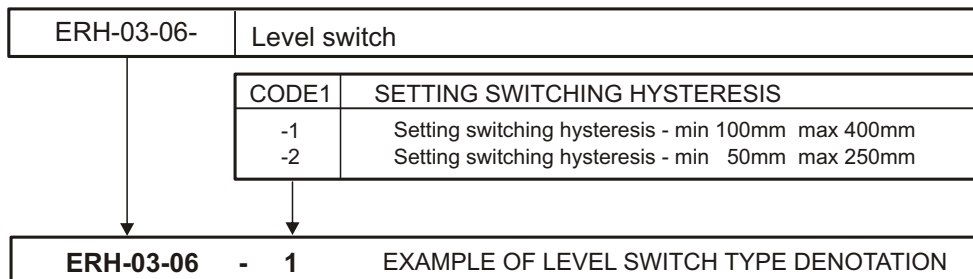
**ORDERING OF LEVEL SWITCH TYPE ERH-01-06**



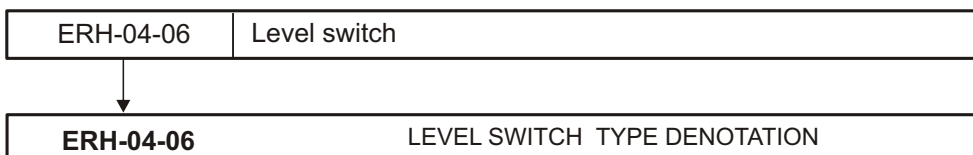
**ORDERING OF LEVEL SWITCH TYPE ERH-02-06**



**ORDERING OF LEVEL SWITCH TYPE ERH-03-06**



**ORDERING OF LEVEL SWITCH TYPE ERH-04-06**



**Example of ordering: level switch with switching hysteresis 10mm ERH-01-06-1**

*IMPORTANT: version with smaller float no. ER2-1661 (at dimension 52 dia and 162 mm length, min. hysteresis 18mm) is available on client request - please point out in the inquiry or order - it is connected with versions ERH-01,02,03-...*

The right of introducing design changes in the product, without deteriorating of its operation parameters, is reserved.