

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Plugs, socket-outlets and ship couplers for high-voltage shore connection systems (HVSC-systems) –**

**Part 2: Dimensional compatibility and interchangeability requirements for accessories to be used by various types of ships**

**Prises de courant et connecteurs de navires pour les systèmes haute tension de raccordement des navires à quai –**

**Partie 2: Règles dimensionnelles de compatibilité et d'interchangeabilité pour les appareils destinés à être utilisés par divers types de navires**



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ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PLUGS, SOCKET-OUTLETS AND SHIP COUPLERS FOR HIGH-VOLTAGE  
SHORE CONNECTION SYSTEMS (HVSC-SYSTEMS) –****Part 2: Dimensional compatibility and interchangeability requirements  
for accessories to be used by various types of ships**

## FOREWORD

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International Standard IEC 62613-2 has been prepared by subcommittee 23H: Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) addition of configuration I: 7,2 kV 350 A three-phase accessories with three IP0 pilot contacts;
- b) addition of configuration J: 12 kV 500 A three-phase accessories with seven pilot contacts;
- c) improvement of drawings in standard sheets and addition of missing dimensions.

The text of this standard is based on the following documents:

| CDV         | Report on voting |
|-------------|------------------|
| 23H/352/CDV | 23H/362/RVC      |

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part of IEC 62613 shall be read in conjunction with IEC 62613-1:2011.

The clauses of these particular requirements supplement or modify the corresponding clauses in Part 1. Where the text of subsequent parts indicates an "addition" to or a "replacement" of the relevant requirement, test specification or explanation of Part 1, these changes are made to the relevant text of Part 1, which then becomes part of the standard. Where no change is necessary, the words "Clause X of IEC 62613-1:2011 applies" are used. Standard sheets are in Annexes A, B, etc.

A list of all the parts in the IEC 62613 series, under the general title *Plugs, socket-outlets and ship couplers for high-voltage shore connection systems (HVSC-systems)*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

## INTRODUCTION

International Standard series IEC 62613 has been developed to address the needs in terms of plugs, socket-outlets and ship couplers (ship connectors and ship inlets), herein referred to as “accessories”, of IEC/ISO/IEEE 80005-1:2012, *Utility connections in port – Part 1: High Voltage Shore Connection (HVSC) Systems – General requirements*. The purpose of IEC/ISO/IEEE 80005-1 is to define requirements that allow compliant ships to connect to compliant high-voltage shore power supplies through standardized shore-to-ship connection accessories.

Ships that do not require connecting with standardized high-voltage shore power supplies as above may use accessories that are not covered by the standard sheets of IEC 62613-2 but they may find it impossible to connect to these shore supplies.

Other low voltage plugs, socket-outlets, connectors and inlets used for the connection of certain ship types to low-voltage shore power supplies can be found in the IEC 60309 series.

The IEC 62613 series is divided into the following parts:

- *Part 1: General requirements*, comprising clauses of a general character
- *Part 2: Dimensional compatibility and interchangeability requirements for accessories to be used by various types of ships*

These ships are described in IEC/ISO/IEEE 80005-1.

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# PLUGS, SOCKET-OUTLETS AND SHIP COUPLERS FOR HIGH-VOLTAGE SHORE CONNECTION SYSTEMS (HVSC-SYSTEMS) –

## Part 2: Dimensional compatibility and interchangeability requirements for accessories to be used by various types of ships

### 1 Scope

This part of IEC 62613 contains standard sheets for different configurations of (shore) socket-outlets, (shore) plugs, ship connectors and ship inlets, hereinafter referred to as accessories, up to 12 kV, 500 A, 50/60 Hz and with up to seven pilot/auxiliary contacts.

General requirements are given in IEC 62613-1.

### 2 Normative references

Clause 2 of IEC 62613-1:2011 applies, with the following exception:

*Addition:*

IEC 62613-1:2011, *Plugs, socket-outlets and ship couplers for high-voltage shore connection systems (HVSC-systems) – Part 1: General requirements*

### 3 Terms and definitions

Clause 3 of IEC 62613-1:2011 applies.

### 4 General

Clause 4 of IEC 62613-1:2011 applies.

### 5 Standard ratings

Clause 5 of IEC 62613-1:2011 applies.

### 6 Classification

Clause 6 of IEC 62613-1:2011 applies.

### 7 Marking

Clause 7 of IEC 62613-1:2011 applies.

### 8 Dimensions

Clause 8 of IEC 62613-1:2011 applies except as follows:

#### 8.1 Replacement:

Accessories shall comply with the appropriate standard sheets given in Annexes A to J.

## **9 Protection against electric shock**

Clause 9 of IEC 62613-1:2011 applies.

## **10 Provision for Earthing**

Clause 10 of IEC 62613-1:2011 applies.

## **11 Terminals and terminations**

Clause 11 of IEC 62613-1:2011 applies.

## **12 Locking devices and interlocks**

Clause 12 of IEC 62613-1:2011 applies.

## **13 Resistance to ageing of rubber and thermoplastic material**

Clause 13 of IEC 62613-1:2011 applies.

## **14 General construction**

Clause 14 of IEC 62613-1:2011 applies.

## **15 Construction of socket-outlets and ship inlets**

Clause 15 of IEC 62613-1:2011 applies.

## **16 Construction of ship connectors**

Clause 16 of IEC 62613-1:2011 applies.

## **17 Construction of plugs**

Clause 17 of IEC 62613-1:2011 applies.

## **18 Degrees of protection**

Clause 18 of IEC 62613-1:2011 applies.

## **19 Insulation resistance, dielectric withstand and partial discharge tests**

Clause 19 of IEC 62613-1:2011 applies.

## **20 Normal operation**

Clause 20 of IEC 62613-1:2011 applies.

## **21 Temperature rise**

Clause 21 of IEC 62613-1:2011 applies.

## **22 Flexible cables and their connection**

Clause 22 of IEC 62613-1:2011 applies.

## **23 Mechanical strength**

Clause 23 of IEC 62613-1:2011 applies.

## **24 Screws, current-carrying parts and connections**

Clause 24 of IEC 62613-1:2011 applies.

## **25 Resistance to heat, to fire and to tracking**

Clause 25 of IEC 62613-1:2011 applies.

## **26 Corrosion and resistance to rusting**

Clause 26 of IEC 62613-1:2011 applies.

## **27 Conditional short-circuit current withstand test**

Clause 27 of IEC 62613-1:2011 applies.

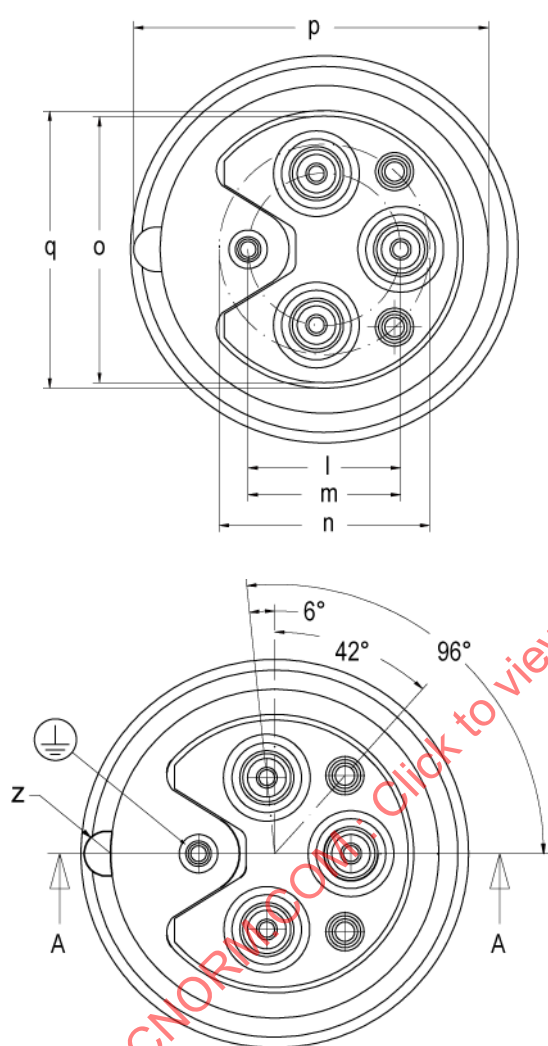
## **28 Electromagnetic compatibility**

Clause 28 of IEC 62613-1:2011 applies.

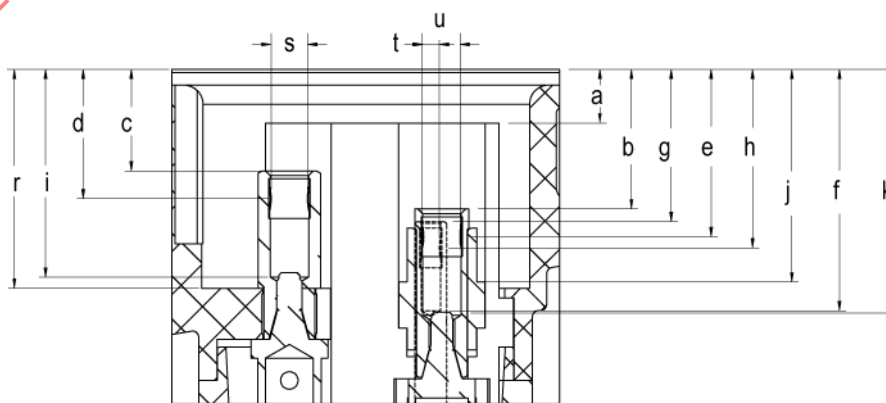
## Annex A (normative)

### Standard sheets A: 7,2 kV 350 A three-phase accessories with two IP0 pilot contacts

#### A.1 Socket-outlet

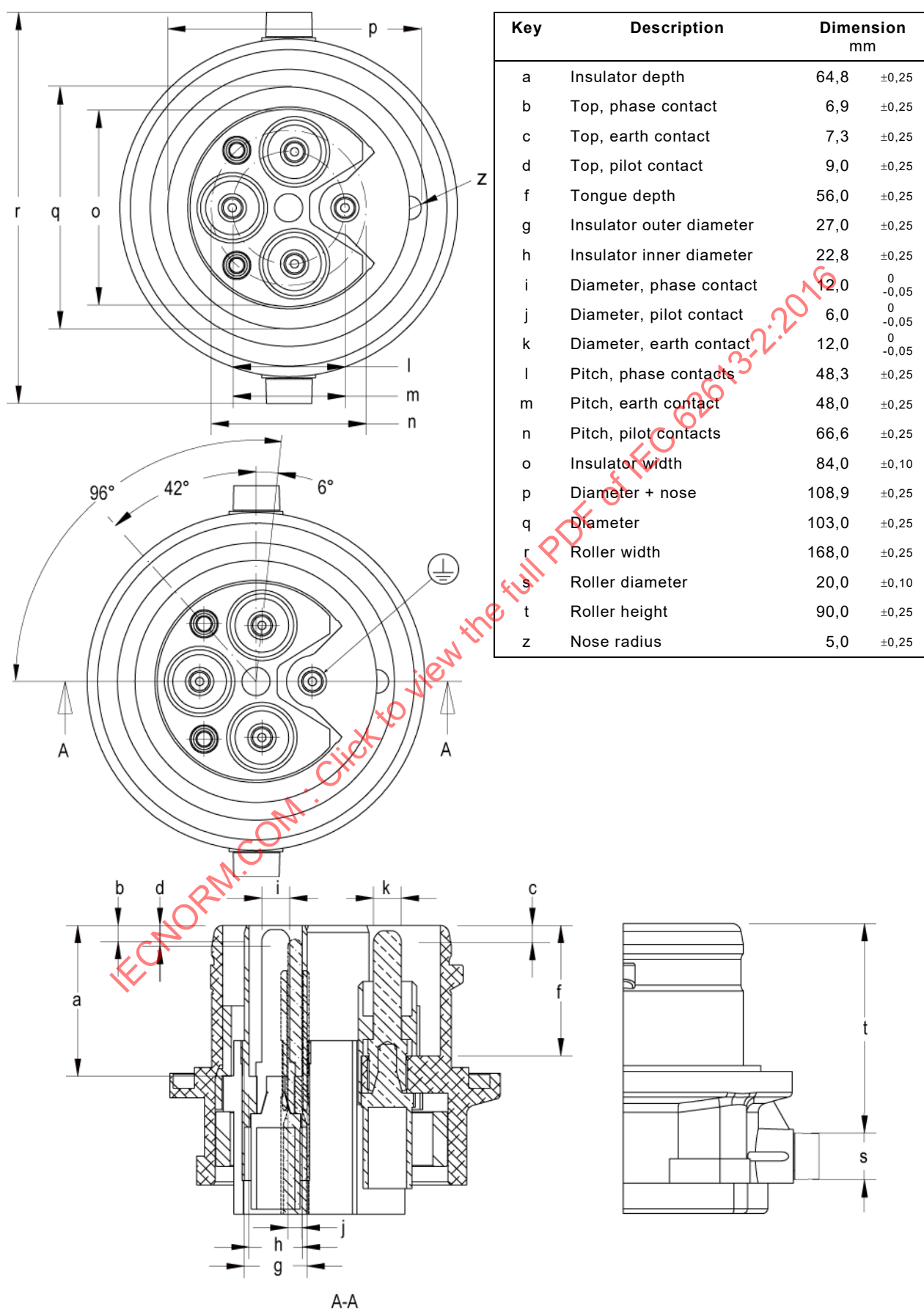


| Key | Description             | Dimension<br>mm |
|-----|-------------------------|-----------------|
| a   | Top, insulator          | 17,0 ±0,25      |
| b   | Top, phase contact      | 44,0 ±0,25      |
| c   | Top, earth contact      | 32,0 ±0,25      |
| d   | Earth contact           | 37,6 ±0,25      |
| e   | Phase contact           | 50,1 ±0,25      |
| f   | Bottom, pilot contact   | 76,0 ±0,25      |
| g   | Top, pilot contact      | 48,0 ±0,25      |
| h   | Pilot contact           | 53,4 ±0,25      |
| i   | Bottom, earth contact   | 64,0 ±0,25      |
| j   | Bottom, insulator       | 66,0 ±0,25      |
| k   | Bottom, phase contact   | 76,5 ±0,25      |
| l   | Pitch, phase contacts   | 48,3 ±0,25      |
| m   | Pitch, earth contact    | 48,0 ±0,25      |
| n   | Pitch, pilot contacts   | 66,6 ±0,25      |
| o   | Insulator diameter      | 84,0 ±0,10      |
| p   | Diameter + nose         | 111,6 ±0,25     |
| q   | Diameter                | 87,5 ±0,25      |
| r   | Tongue depth            | 69,0 ±0,25      |
| s   | Diameter, earth contact | 12,0 +0,10<br>0 |
| t   | Diameter, pilot contact | 6,0 +0,10<br>0  |
| u   | Diameter, phase contact | 12,0 +0,10<br>0 |
| z   | Nose radius             | 7,0 ±0,25       |

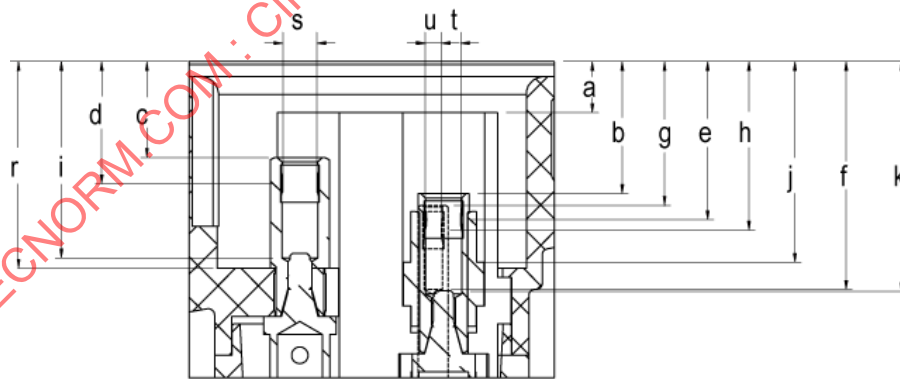
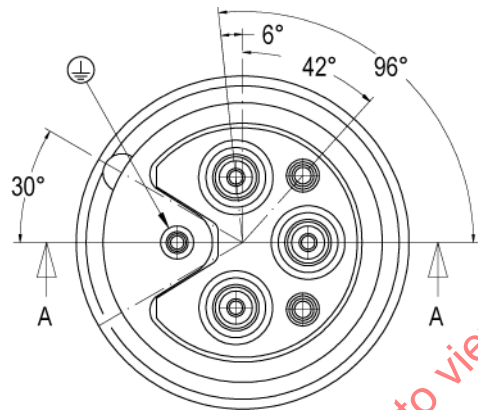
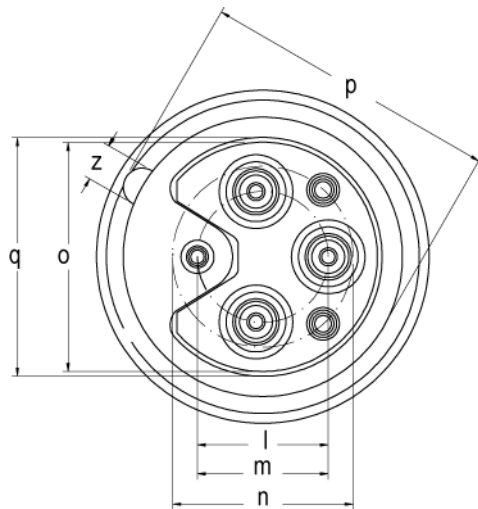


A-A

## A.2 Plug top



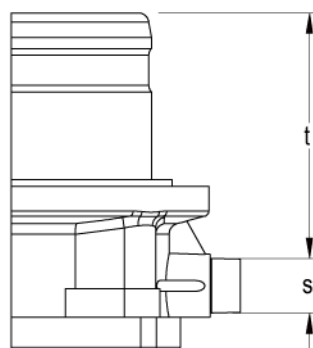
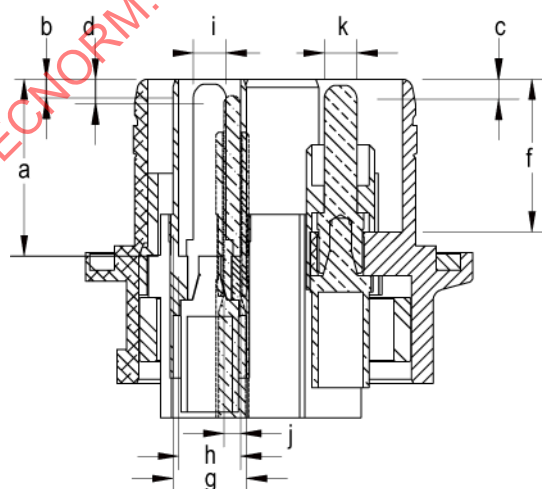
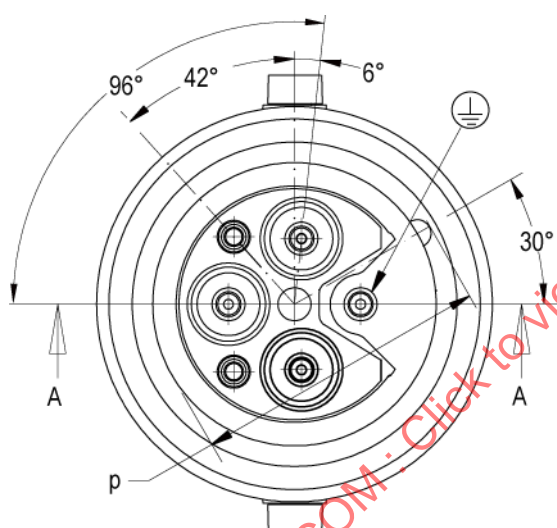
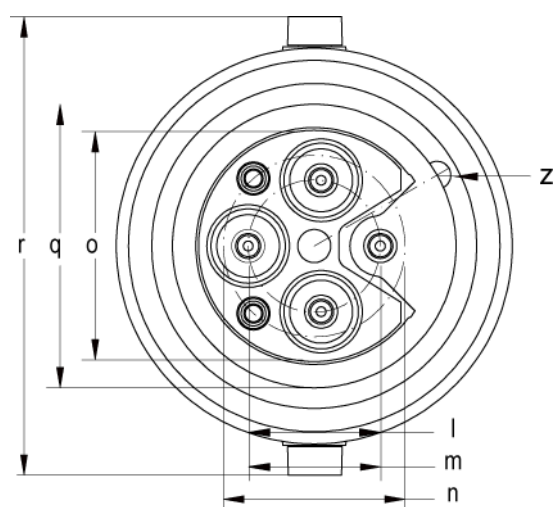
### A.3 Ship connector top



A-A

| Key | Description             | Dimension<br>mm |
|-----|-------------------------|-----------------|
| a   | Top, insulator          | 17,0 ±0,25      |
| b   | Top, phase contacts     | 44,0 ±0,25      |
| c   | Top, earth contact      | 32,0 ±0,25      |
| d   | Earth contact           | 37,6 ±0,25      |
| e   | Phase contact           | 50,1 ±0,25      |
| f   | Bottom, pilot contact   | 76,0 ±0,25      |
| g   | Top, pilot contact      | 48,0 ±0,25      |
| h   | Pilot contact           | 53,4 ±0,25      |
| i   | Bottom, earth contact   | 64,0 ±0,25      |
| j   | Bottom, insulator       | 66,0 ±0,25      |
| k   | Bottom, phase contact   | 76,5 ±0,25      |
| l   | Pitch, phase contacts   | 48,3 ±0,25      |
| m   | Pitch, earth contacts   | 48,0 ±0,25      |
| n   | Pitch, pilot contact    | 66,6 ±0,25      |
| o   | Insulator width         | 84,0 ±0,10      |
| p   | Diameter + nose         | 111,6 ±0,25     |
| q   | Diameter                | 87,5 ±0,25      |
| r   | Tongue depth            | 69,0 ±0,25      |
| s   | Diameter, earth contact | 12,0 +0,10<br>0 |
| t   | Diameter, pilot contact | 6,0 +0,10<br>0  |
| u   | Diameter, phase contact | 12,0 +0,10<br>0 |
| z   | Nose diameter           | 14,0 ±0,25      |

## A.4 Ship inlet

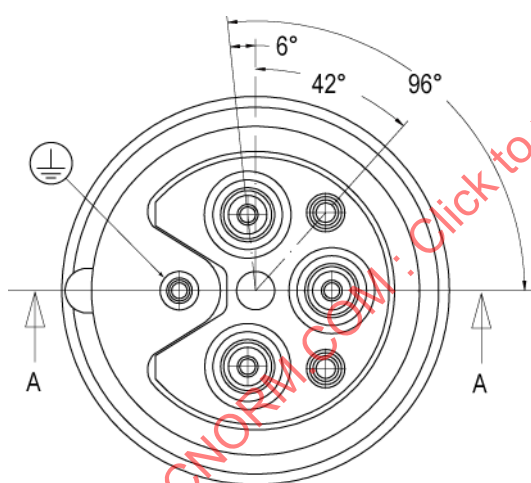
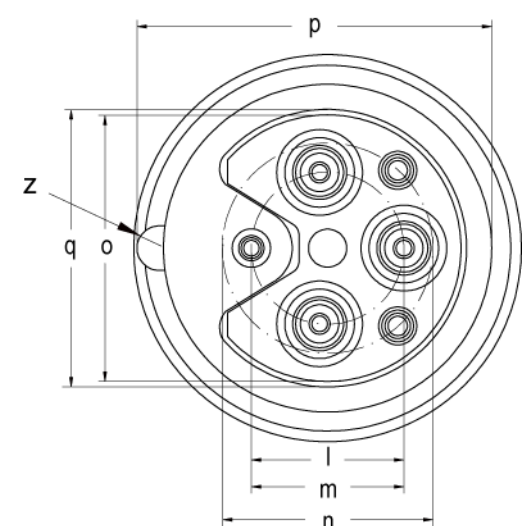


| Key | Description              | Dimension<br>mm                    |
|-----|--------------------------|------------------------------------|
| a   | Insulator depth          | 64,8 ±0,25                         |
| b   | Top, phase contact       | 6,9 ±0,25                          |
| c   | Top, earth contact       | 7,3 ±0,25                          |
| d   | Top, pilot contact       | 9,0 ±0,25                          |
| f   | Tongue depth             | 56,0 ±0,25                         |
| g   | Insulator outer diameter | 27,0 ±0,25                         |
| h   | Insulator inner diameter | 22,8 ±0,25                         |
| i   | Diameter, phase contact  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| j   | Diameter, pilot contact  | 6,0 <sup>0</sup> <sub>-0,05</sub>  |
| k   | Diameter, earth contact  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| l   | Pitch, phase contacts    | 48,3 ±0,25                         |
| m   | Pitch, earth contact     | 48,0 ±0,25                         |
| n   | Pitch, pilot contacts    | 66,6 ±0,25                         |
| o   | Insulator width          | 84,0 ±0,10                         |
| p   | Diameter + nose          | 108,9 ±0,25                        |
| q   | Diameter                 | 103,0 ±0,25                        |
| r   | Roller width             | 168,0 ±0,25                        |
| s   | Roller diameter          | 20,0 ±0,10                         |
| t   | Roller height            | 90,0 ±0,25                         |
| z   | Nose radius              | 5,0 ±0,25                          |

## Annex B (normative)

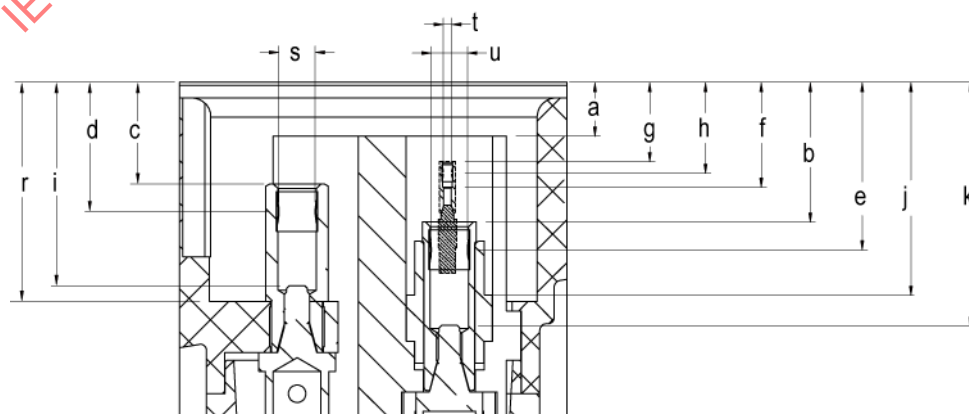
### Standard sheets B: 7,2 kV 350 A three-phase accessories with two IP2X pilot contacts

#### B.1 Socket-outlet



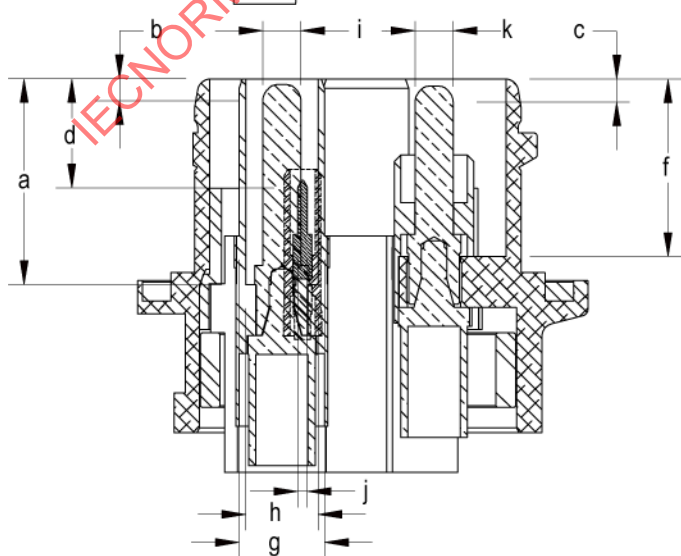
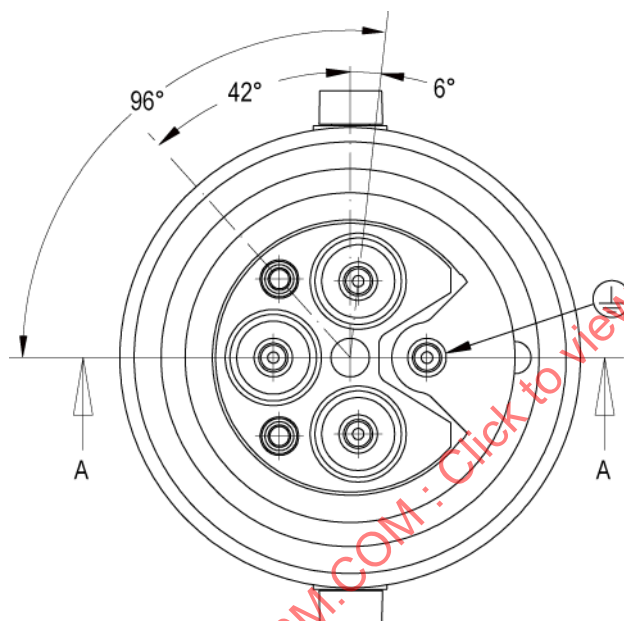
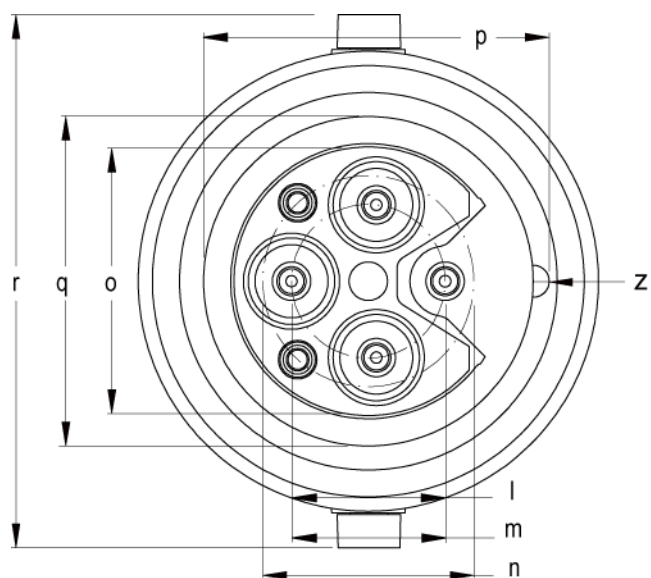
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| Key | Description             | Dimension<br>mm |
|-----|-------------------------|-----------------|
| a   | Top, insulator          | 17,0 ±0,25      |
| b   | Top, phase contacts     | 44,0 ±0,25      |
| c   | Top, earth contact      | 32,0 ±0,25      |
| d   | Earth contact           | 38,0 ±0,25      |
| e   | Phase contact           | 50,1 ±0,25      |
| f   | Bottom, pilot contact   | 33,0 ±0,25      |
| g   | Top, pilot contact      | 25,0 ±0,25      |
| h   | Pilot contact           | 27,2 ±0,25      |
| i   | Bottom, earth contact   | 64,0 ±0,25      |
| j   | Bottom, insulator       | 66,0 ±0,25      |
| k   | Bottom, phase contacts  | 76,5 ±0,25      |
| l   | Pitch, phase contacts   | 48,3 ±0,25      |
| m   | Pitch, earth contact    | 48,0 ±0,25      |
| n   | Pitch, pilot contacts   | 66,6 ±0,25      |
| o   | Insulator width         | 84,0 ±0,10      |
| p   | Diameter + nose         | 111,6 ±0,25     |
| q   | Diameter                | 87,5 ±0,25      |
| r   | Tongue depth            | 69,0 ±0,25      |
| s   | Diameter, earth contact | 12,0 +0,10<br>0 |
| t   | Diameter, pilot contact | 3,0 +0,10<br>0  |
| u   | Diameter, phase contact | 12,0 +0,100     |
| z   | Nose radius             | 7,0 ±0,25       |

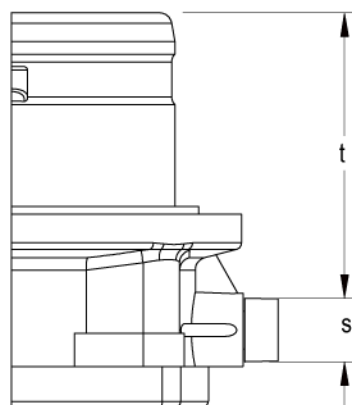


A-A

## B.2 Plug top

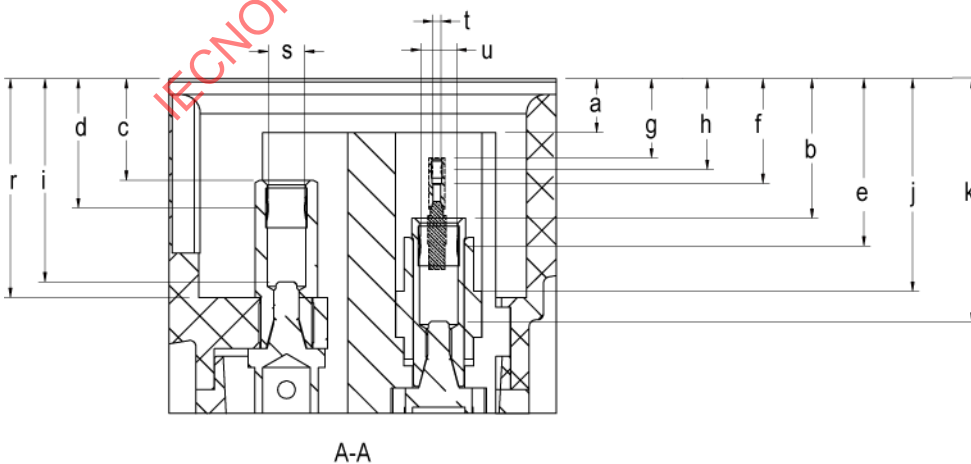
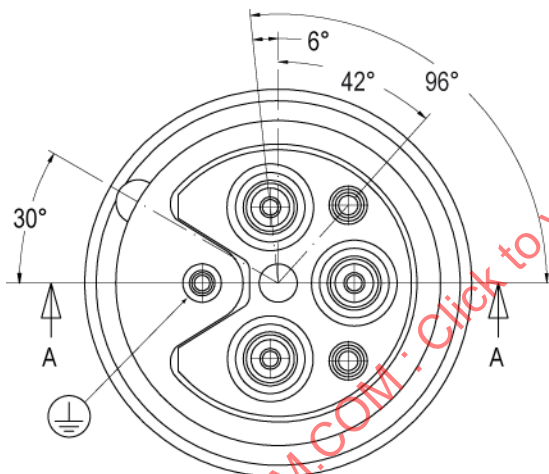
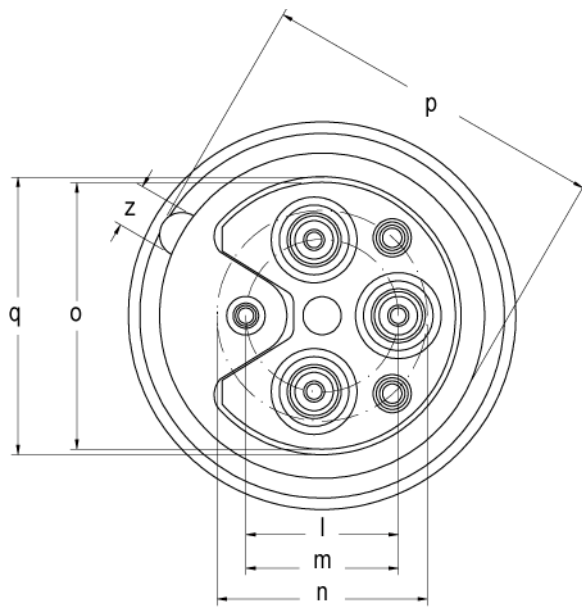


A-A



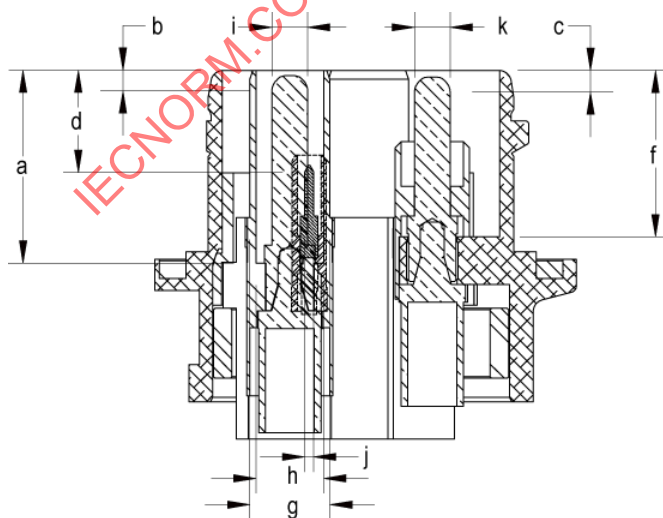
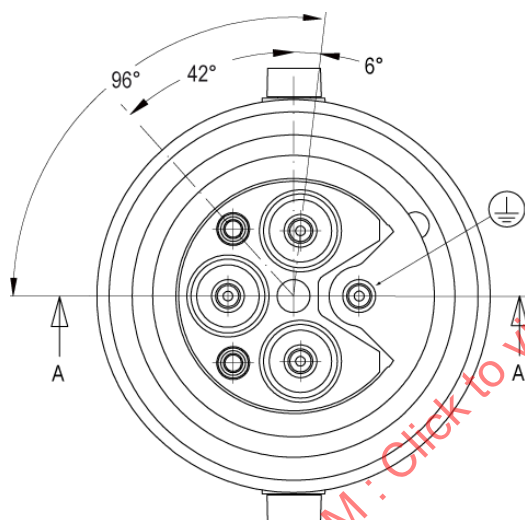
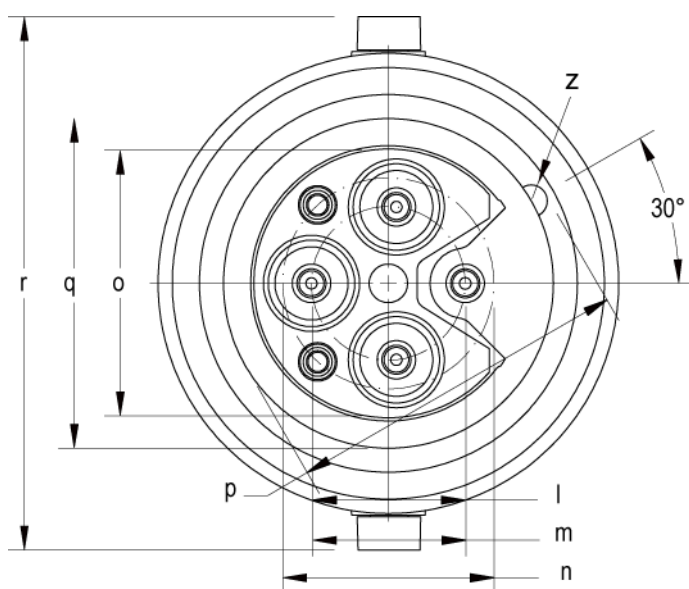
| Key | Description              | Dimension<br>mm                    |
|-----|--------------------------|------------------------------------|
| a   | Insulator depth          | 64,8 ±0,25                         |
| b   | Top, phase contact       | 6,9 ±0,25                          |
| c   | Top, earth contact       | 7,3 ±0,25                          |
| d   | Top, pilot contact       | 34,3 ±0,25                         |
| f   | Tongue depth             | 56,0 ±0,25                         |
| g   | Insulator outer diameter | 27,0 ±0,25                         |
| h   | Insulator inner diameter | 22,8 ±0,25                         |
| i   | Diameter, phase contact  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| j   | Diameter, pilot contact  | 3,0 <sup>0</sup> <sub>-0,05</sub>  |
| k   | Diameter, earth contact  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| l   | Pitch, phase contacts    | 48,3 ±0,25                         |
| m   | Pitch, earth contact     | 48,0 ±0,25                         |
| n   | Pitch, pilot contacts    | 66,6 ±0,25                         |
| o   | Insulator width          | 84,0 ±0,10                         |
| p   | Diameter + nose          | 108,9 ±0,25                        |
| q   | Diameter                 | 103,0 ±0,25                        |
| r   | Roller width             | 168,0 ±0,25                        |
| s   | Roller diameter          | 20,0 ±0,10                         |
| t   | Roller height            | 90,0 ±0,25                         |
| z   | Nose radius              | 5,0 ±0,25                          |

### B.3 Ship connector top

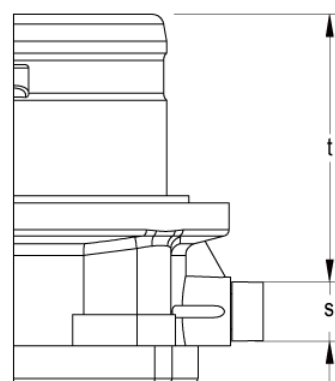


| Key | Description              | Dimension<br>mm |
|-----|--------------------------|-----------------|
| a   | Top, insulator           | 17,0 ±0,25      |
| b   | Top, phase contacts      | 44,0 ±0,25      |
| c   | Top, earth contact       | 32,0 ±0,25      |
| d   | Earth contact            | 38,0 ±0,25      |
| e   | Phase contact            | 50,1 ±0,25      |
| f   | Bottom, pilot contact    | 33,0 ±0,25      |
| g   | Top, pilot contact       | 25,0 ±0,25      |
| h   | Pilot contact            | 27,2 ±0,25      |
| i   | Bottom, earth contact    | 64,0 ±0,25      |
| j   | Bottom, insulator        | 66,0 ±0,25      |
| k   | Bottom, phase contact    | 76,5 ±0,25      |
| l   | Pitch, phase contacts    | 48,3 ±0,25      |
| m   | Pitch, earth contact     | 48,0 ±0,25      |
| n   | Pitch, pilot contacts    | 66,6 ±0,25      |
| o   | Insulator diameter       | 84,0 ±0,10      |
| p   | Diameter + nose          | 111,6 ±0,25     |
| q   | Diameter                 | 87,5 ±0,25      |
| r   | Tongue depth             | 69,0 ±0,25      |
| s   | Diameter, earth contact  | 12,0 +0,10<br>0 |
| t   | Diameter, pilot contacts | 3,0 +0,10<br>0  |
| u   | Diameter phase contact   | 12,0 +0,10<br>0 |
| z   | Nose diameter            | 14,0 ±0,25      |

## B.4 Ship inlet



A-A

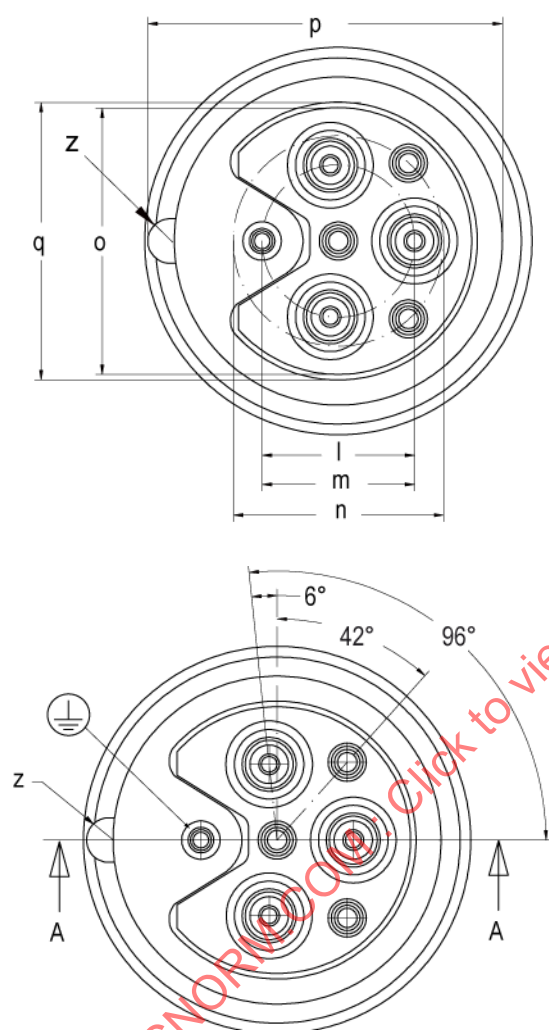


| Key | Description              | Dimension<br>mm |            |
|-----|--------------------------|-----------------|------------|
| a   | Insulator depth          | 64,8            | ±0,25      |
| b   | Top, phase contact       | 6,9             | ±0,25      |
| c   | Top, earth contact       | 7,3             | ±0,25      |
| d   | Top, pilot contact       | 34,3            | ±0,25      |
| f   | Tongue depth             | 56,0            | ±0,25      |
| g   | Insulator outer diameter | 27,0            | ±0,25      |
| h   | Insulator inner diameter | 22,8            | ±0,25      |
| i   | Diameter, phase contact  | 12,0            | 0<br>-0,05 |
| j   | Diameter, pilot contact  | 3,0             | 0<br>-0,05 |
| k   | Diameter, earth contact  | 12,0            | 0<br>-0,05 |
| l   | Pitch, phase contacts    | 48,3            | ±0,25      |
| m   | Pitch, earth contact     | 48,0            | ±0,25      |
| n   | Pitch, pilot contacts    | 66,6            | ±0,25      |
| o   | Insulator width          | 84,0            | ±0,10      |
| p   | Diameter + nose          | 108,9           | ±0,25      |
| q   | Diameter                 | 103,0           | ±0,25      |
| r   | Roller width             | 168,0           | ±0,25      |
| s   | Roller diameter          | 20,0            | ±0,10      |
| t   | Roller height            | 90,0            | ±0,25      |
| z   | Nose radius              | 5,0             | ±0,25      |

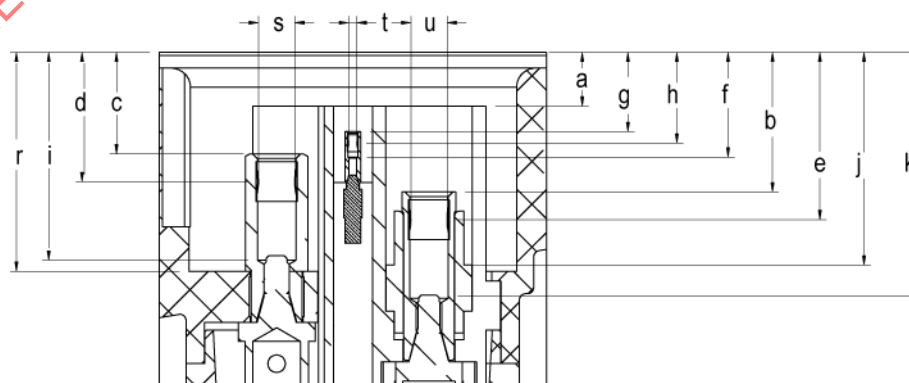
## Annex C (normative)

### Standard sheets C: 7,2 kV 350 A three-phase accessories with three IP2X pilot contacts

#### C.1 Socket-outlet

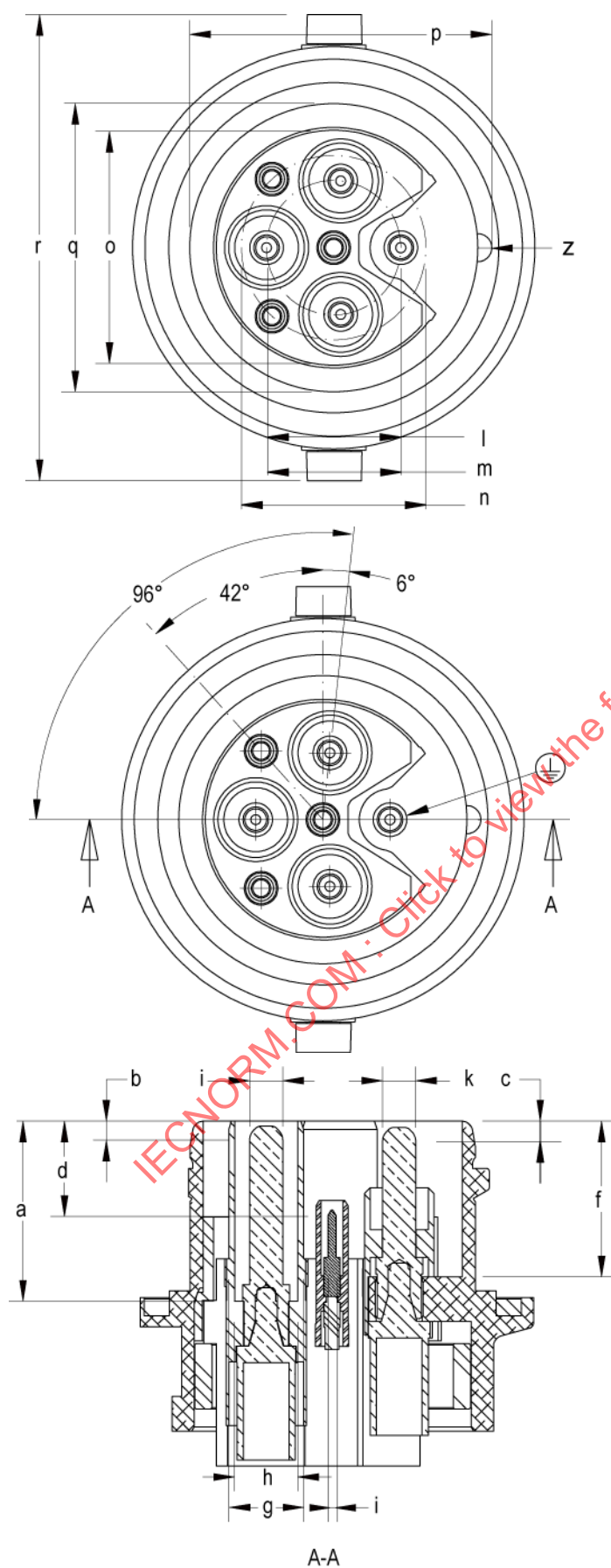


| Key | Description             | Dimension<br>mm |
|-----|-------------------------|-----------------|
| a   | Top, insulator          | 17,0 ±0,25      |
| b   | Top, phase contacts     | 44,0 ±0,25      |
| c   | Top, earth contact      | 32,0 ±0,25      |
| d   | Earth contact           | 38,0 ±0,25      |
| e   | Phase contact           | 50,1 ±0,25      |
| f   | Bottom, pilot contact   | 33,0 ±0,25      |
| g   | Top, pilot contact      | 25,0 ±0,25      |
| h   | Pilot contact           | 27,2 ±0,25      |
| i   | Bottom, earth contact   | 64,0 ±0,25      |
| j   | Bottom, insulator       | 66,0 ±0,25      |
| k   | Bottom, phase contact   | 76,5 ±0,25      |
| l   | Pitch, phase contacts   | 48,3 ±0,25      |
| m   | Pitch, earth contact    | 48,0 ±0,25      |
| n   | Pitch, pilot contacts   | 66,6 ±0,25      |
| o   | Insulator width         | 84,0 ±0,10      |
| p   | Diameter + nose         | 111,6 ±0,25     |
| q   | Diameter                | 87,5 ±0,25      |
| r   | Tongue depth            | 69,0 ±0,25      |
| s   | Diameter, earth contact | 12,0 +0,10<br>0 |
| t   | Diameter, pilot contact | 3,0 +0,10<br>0  |
| u   | Diameter, phase contact | 12,0 +0,10<br>0 |
| z   | Nose radius             | 7,0 ±0,25       |



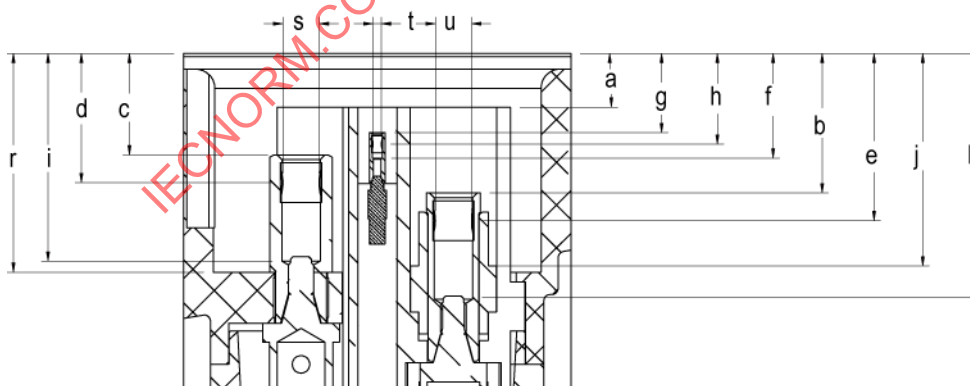
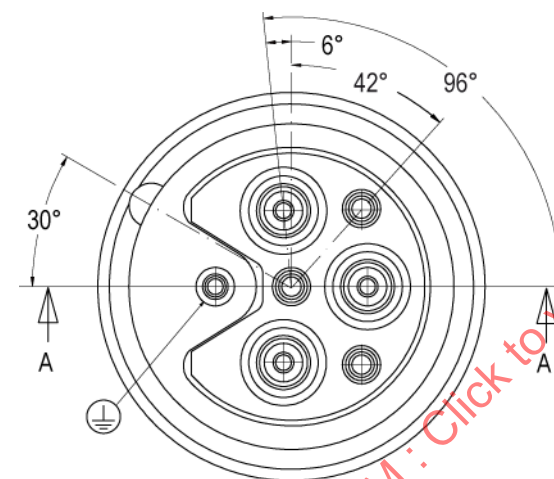
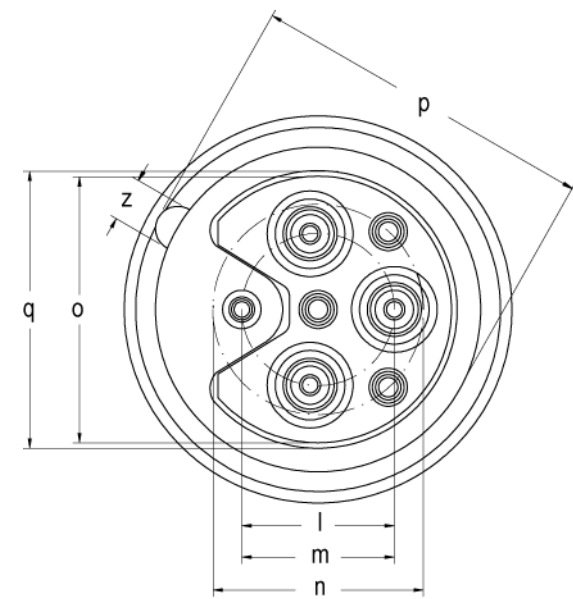
A-A

## C.2 Plug top



| Key | Description              | Dimension<br>mm                    |
|-----|--------------------------|------------------------------------|
| a   | Insulator depth          | 64,8 ±0,25                         |
| b   | Top, phase contacts      | 6,9 ±0,25                          |
| c   | Top, earth contact       | 7,3 ±0,25                          |
| d   | Top, pilot contact       | 34,3 ±0,25                         |
| f   | Tongue depth             | 56,0 ±0,25                         |
| g   | Insulator outer diameter | 27,0 ±0,25                         |
| h   | Insulator inner diameter | 22,8 ±0,25                         |
| i   | Diameter, phase contact  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| j   | Diameter, pilot contact  | 3,0 <sup>0</sup> <sub>-0,05</sub>  |
| k   | Diameter, earth contact  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| l   | Pitch, phase contacts    | 48,3 ±0,25                         |
| m   | Pitch, earth contact     | 48,0 ±0,25                         |
| n   | Pitch, pilot contacts    | 66,6 ±0,25                         |
| o   | Insulator width          | 84,0 ±0,10                         |
| p   | Diameter + nose          | 108,9 ±0,25                        |
| q   | Diameter                 | 103,0 ±0,25                        |
| r   | Roller width             | 168,0 ±0,25                        |
| s   | Roller diameter          | 20,0 ±0,10                         |
| t   | Roller height            | 90,0 ±0,25                         |
| z   | Nose radius              | 5,0 ±0,25                          |

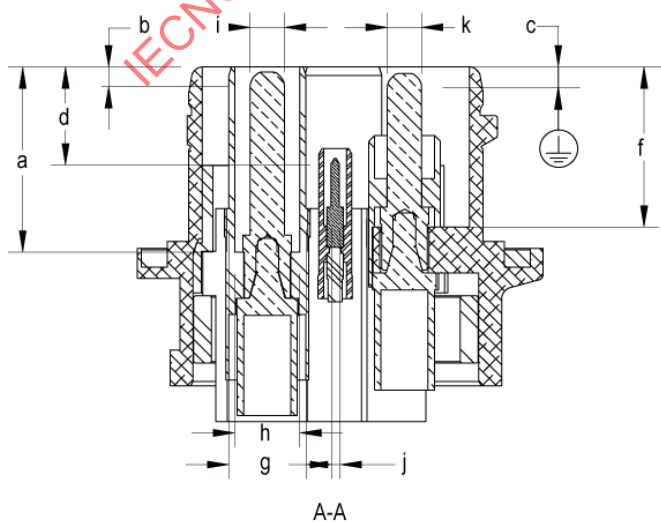
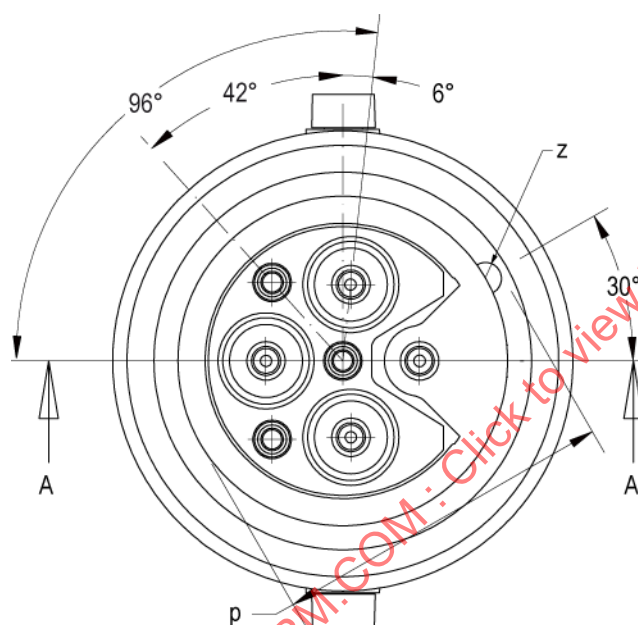
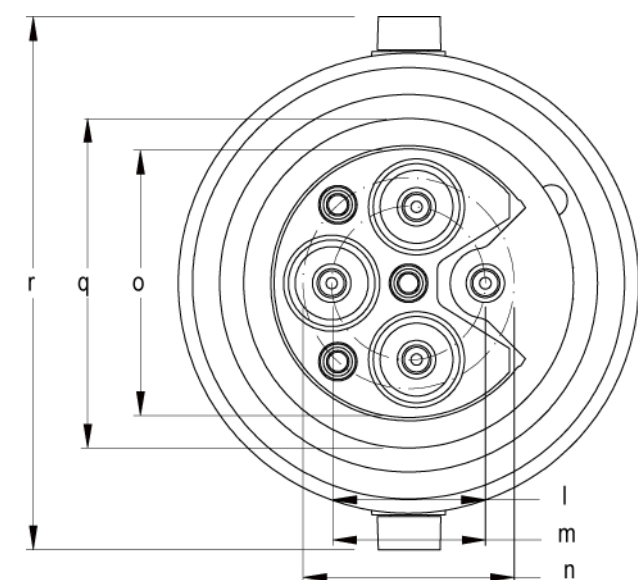
Ship connector top



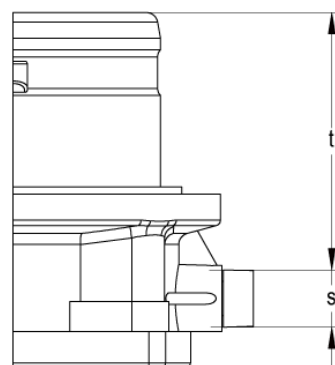
A-A

| Key | Description             | Dimension<br>mm |            |
|-----|-------------------------|-----------------|------------|
| a   | Top, insulator          | 17,0            | ±0,25      |
| b   | Top, phase contacts     | 44,0            | ±0,25      |
| c   | Top, earth contact      | 32,0            | ±0,25      |
| d   | Earth contact           | 38,0            | ±0,25      |
| e   | Phase contact           | 50,1            | ±0,25      |
| f   | Bottom, pilot contact   | 33,0            | ±0,25      |
| g   | Top, pilot contact      | 25,0            | ±0,25      |
| h   | Pilot contact           | 27,2            | ±0,25      |
| i   | Bottom, earth contact   | 64,0            | ±0,25      |
| j   | Bottom, insulator       | 66,0            | ±0,25      |
| k   | Bottom, phase contact   | 76,5            | ±0,25      |
| l   | Pitch, phase contacts   | 48,3            | ±0,25      |
| m   | Pitch, earth contact    | 48,0            | ±0,25      |
| n   | Pitch, pilot contacts   | 66,6            | ±0,25      |
| o   | Insulator diameter      | 84,0            | ±0,10      |
| p   | Diameter + nose         | 111,6           | ±0,25      |
| q   | Diameter                | 87,5            | ±0,25      |
| r   | Tongue depth            | 69,0            | ±0,25      |
| s   | Diameter, earth contact | 12,0            | +0,10<br>0 |
| t   | Diameter, pilot contact | 3,0             | +0,10<br>0 |
| u   | Diameter, phase contact | 12,0            | +0,10<br>0 |
| z   | Nose diameter           | 14,0            | ±0,25      |

### C.3 Ship inlet



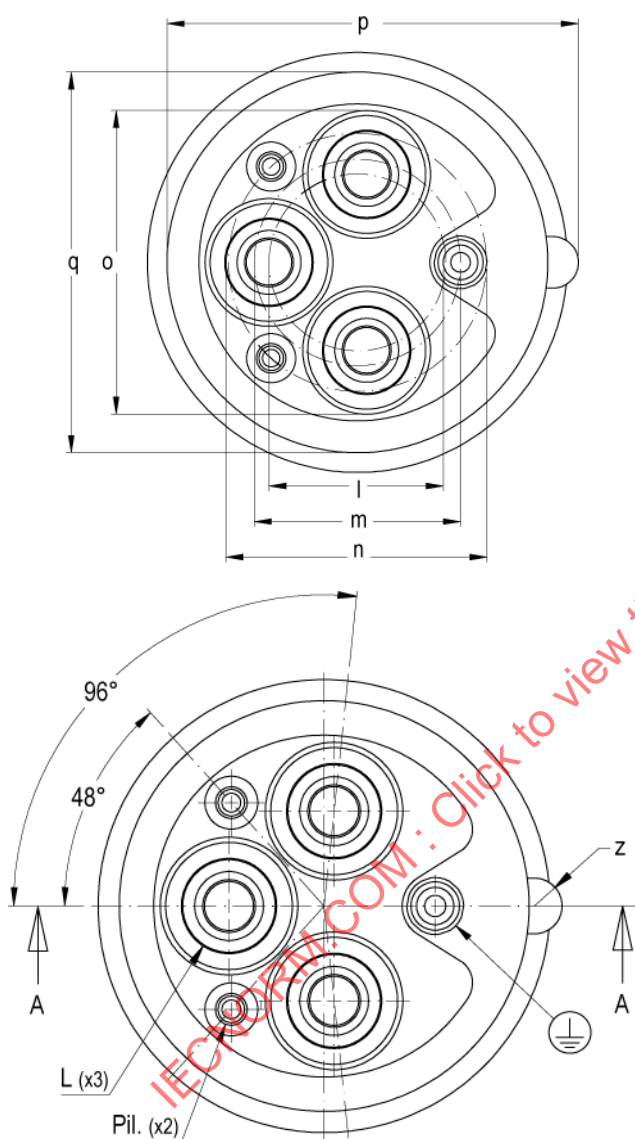
| Key | Description              | Dimension<br>mm                    |
|-----|--------------------------|------------------------------------|
| a   | Insulator depth          | 64,8 ±0,25                         |
| b   | Top, phase contact       | 6,9 ±0,25                          |
| c   | Top, earth contact       | 7,3 ±0,25                          |
| d   | Top, pilot contact       | 34,3 ±0,25                         |
| f   | Tongue depth             | 56,0 ±0,25                         |
| g   | Insulator outer diameter | 27,0 ±0,25                         |
| h   | Insulator inner diameter | 22,8 ±0,25                         |
| i   | Diameter, phase contact  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| j   | Diameter, pilot contact  | 3,0 <sup>0</sup> <sub>-0,05</sub>  |
| k   | Diameter, earth contact  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| l   | Pitch, phase contacts    | 48,3 ±0,25                         |
| m   | Pitch, earth contact     | 48,0 ±0,25                         |
| n   | Pitch, pilot contacts    | 66,6 ±0,25                         |
| o   | Insulator width          | 84,0 ±0,10                         |
| p   | Diameter + nose          | 108,9 ±0,25                        |
| q   | Diameter                 | 103,0 ±0,25                        |
| r   | Roller width             | 168,0 ±0,25                        |
| s   | Roller diameter          | 20,0 ±0,10                         |
| t   | Roller height            | 90,0 ±0,25                         |
| z   | Nose radius              | 5,0 ±0,25                          |



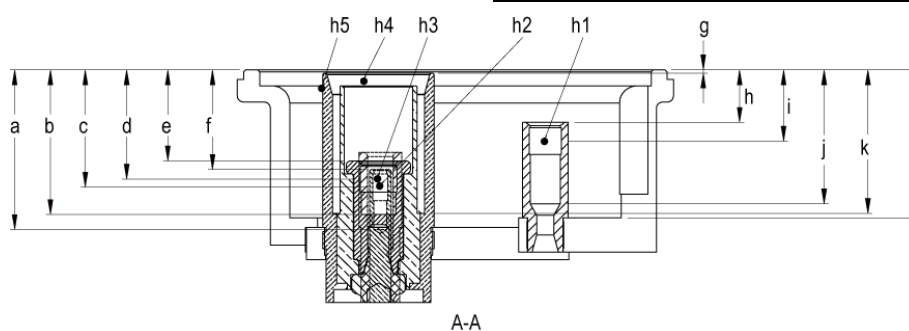
## Annex D (normative)

### Standard sheets D: 12 kV 500 A three-phase accessories with two IP0 pilot contacts

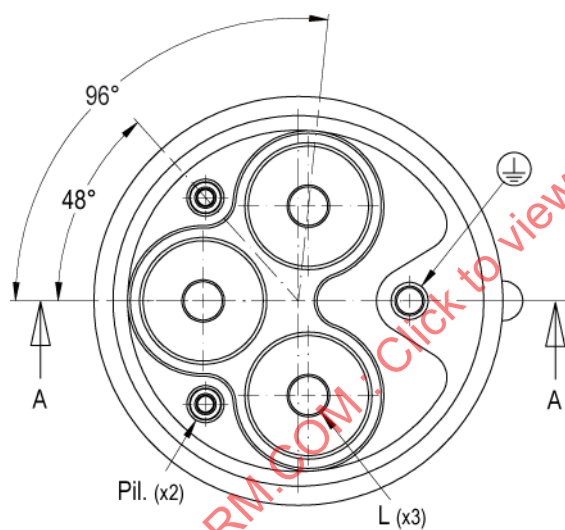
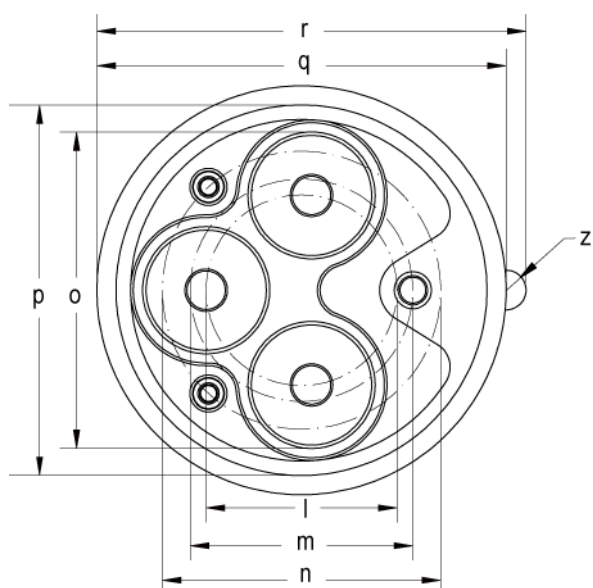
#### D.1 Socket-outlet



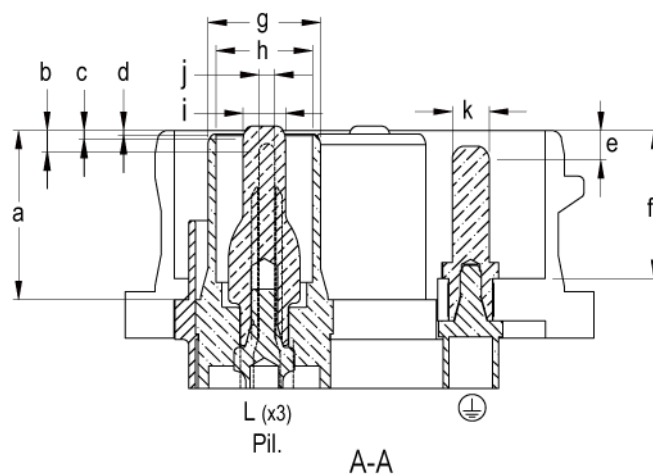
| Key  | Description                   | Dimension<br>mm                                         |
|------|-------------------------------|---------------------------------------------------------|
| a    | Bottom, pilot contact         | 74,5 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$ |
| b    | Bottom, phase contact         | 67,5 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$ |
| c    | Pilot contact                 | 52,0 $\pm 0,25$                                         |
| d    | Phase contact                 | 48,3 $\pm 0,25$                                         |
| e    | Top, phase contacts           | 42,5 $\pm 0,25$                                         |
| f    | Top, pilot contact            | 46,5 $\pm 0,25$                                         |
| g    | Top, insulator                | 1,5 $\pm 0,25$                                          |
| h    | Top, earth contact            | 24,5 $\pm 0,25$                                         |
| i    | Earth contact                 | 30,5 $\pm 0,25$                                         |
| j    | Bottom, earth contact         | 62,5 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$ |
| k    | Bottom, insulator             | 67,0 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$ |
|      | Pitch, phase contacts         | 71,6 $\pm 0,25$                                         |
| m    | Pitch, earth contact          | 84,0 $\pm 0,25$                                         |
| n    | Pitch, pilot contacts         | 106,0 $\pm 0,25$                                        |
| o    | Insulator diameter            | 123,6 $\pm 0,25$                                        |
| p    | Diameter+ nose                | 167,5 $\pm 0,25$                                        |
| q    | Diameter                      | 155,0 $\pm 0,25$                                        |
| r    | Tongue depth                  | 69,0 $\pm 0,25$                                         |
| h1   | Earth contact inner diameter  | 14,0 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$ |
| h2   | Pilot contacts inner diameter | 6,0 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$  |
| h3   | Phase contacts inner diameter | 16,0 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$ |
| h4   | Insulator inner diameter      | 43,0 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$ |
| h5   | Insulator outer diameter      | 52,0 $\pm 0,25$                                         |
| z    | Nose radius                   | 10,5 $\pm 0,25$                                         |
| L    | Phase contacts                |                                                         |
| Pil. | Pilot contacts                |                                                         |



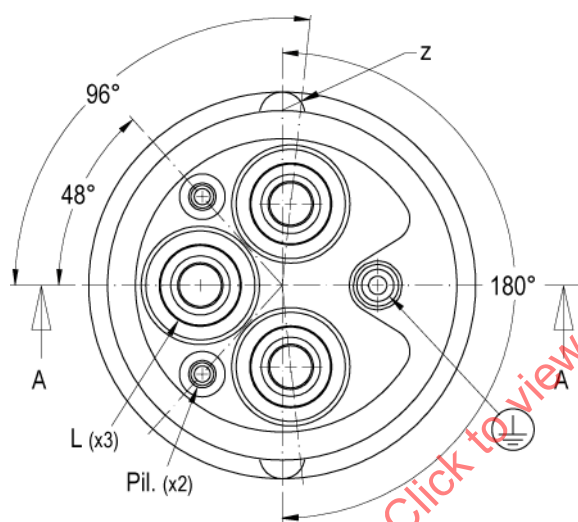
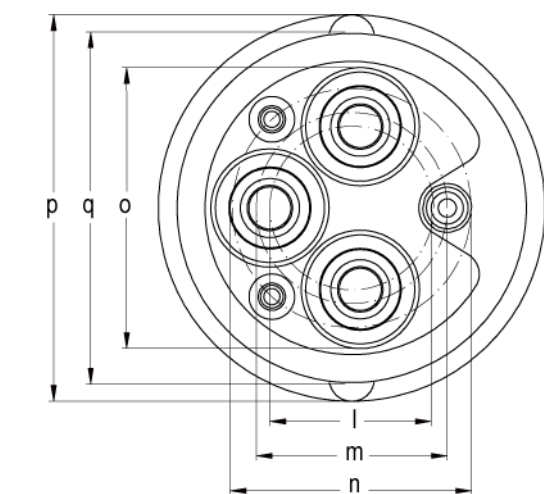
## D.2 Plug top



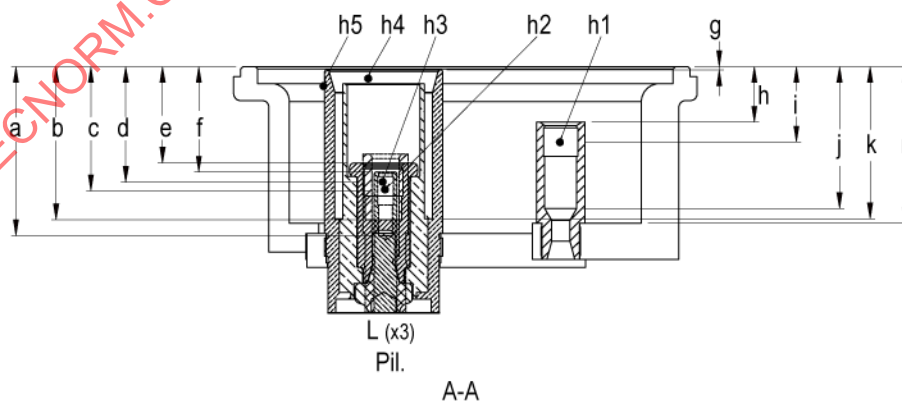
| Key  | Description                | Dimension<br>mm |                               |
|------|----------------------------|-----------------|-------------------------------|
| a    | Insulator depth            | 64,0            | <sup>0</sup> <sub>-0,25</sub> |
| b    | Pilot contact              | 8,0             | <sup>0</sup> <sub>-0,25</sub> |
| c    | Phase contact              | 3,4             | <sup>0</sup> <sub>-0,10</sub> |
| d    | Top, insulator             | 1,9             | <sup>0</sup> <sub>-0,10</sub> |
| e    | Earth contact              | 11,1            | <sup>0</sup> <sub>-0,10</sub> |
| f    | Tongue depth               | 56,0            | <sup>0</sup> <sub>±0,25</sub> |
| g    | Insulator outside diameter | 42,5            | <sup>+0,10</sup> <sub>0</sub> |
| h    | Insulator inside diameter  | 36,5            | <sup>0</sup> <sub>±0,10</sub> |
| i    | Diameter, phase contact    | 16,0            | <sup>0</sup> <sub>-0,05</sub> |
| j    | Diameter, pilot contact    | 6,0             | <sup>0</sup> <sub>-0,05</sub> |
| k    | Diameter, earth contact    | 14,0            | <sup>0</sup> <sub>-0,05</sub> |
| l    | Pitch, phase contacts      | 71,6            | <sup>0</sup> <sub>±0,25</sub> |
| m    | Pitch, earth contact       | 84,0            | <sup>0</sup> <sub>±0,25</sub> |
| n    | Pitch, pilot contacts      | 105,0           | <sup>0</sup> <sub>±0,25</sub> |
| o    | Insulator diameter         | 119,6           | <sup>0</sup> <sub>±0,25</sub> |
| p    | Inner diameter             | 140,0           | <sup>+0,10</sup> <sub>0</sub> |
| q    | Outer diameter             | 154,5           | <sup>0</sup> <sub>-0,10</sub> |
| r    | Diameter + nose            | 162,0           | <sup>0</sup> <sub>±0,25</sub> |
| z    | Nose radius                | 7,5             | <sup>0</sup> <sub>±0,25</sub> |
| L    | Phase contacts             |                 |                               |
| Pil. | Pilot contacts             |                 |                               |



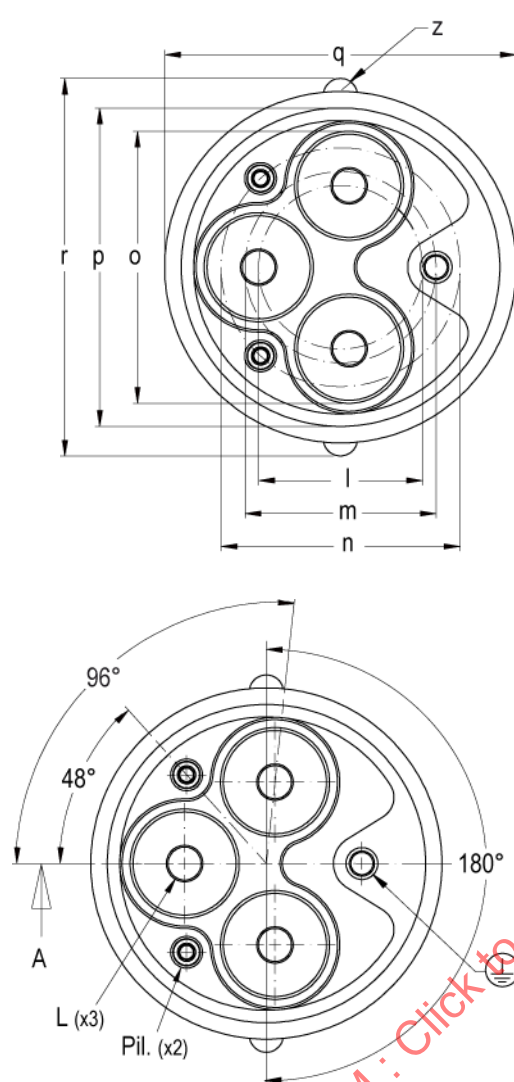
### D.3 Ship connector top



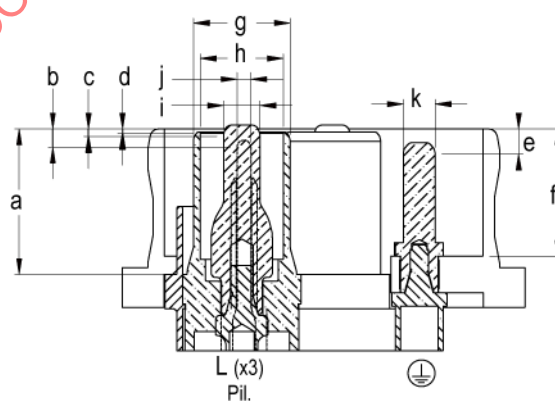
| Key  | Description                | Dimension<br>mm                    |
|------|----------------------------|------------------------------------|
| a    | Bottom, pilot contact      | 74,5 <sup>+0,10</sup> <sub>0</sub> |
| b    | Bottom, phase contact      | 67,5 <sup>+0,10</sup> <sub>0</sub> |
| c    | Pilot contact              | 52,0 <sup>±0,25</sup>              |
| d    | Phase contact              | 48,3 <sup>±0,25</sup>              |
| e    | Top, phase contacts        | 42,5 <sup>±0,25</sup>              |
| f    | Top, pilot contact         | 46,5 <sup>±0,25</sup>              |
| g    | Top, insulator             | 1,5 <sup>±0,25</sup>               |
| h    | Top, earth contact         | 24,5 <sup>±0,25</sup>              |
| i    | Earth contact              | 30,5 <sup>±0,25</sup>              |
| j    | Bottom, earth contact      | 62,5 <sup>+0,10</sup> <sub>0</sub> |
| k    | Bottom, insulator          | 67,0 <sup>+0,10</sup> <sub>0</sub> |
| l    | Pitch, phase contacts      | 71,6 <sup>±0,25</sup>              |
| m    | Pitch, earth contact       | 84,0 <sup>±0,25</sup>              |
| n    | Pitch, pilot contacts      | 106,0 <sup>±0,25</sup>             |
| o    | Insulator diameter         | 123,6 <sup>±0,25</sup>             |
| p    | Diameter + nose            | 170,0 <sup>±0,25</sup>             |
| q    | Diameter                   | 155,0 <sup>±0,25</sup>             |
| r    | Tongue depth               | 69,0 <sup>±0,25</sup>              |
| h1   | Diameter, earth contact    | 14,0 <sup>+0,10</sup> <sub>0</sub> |
| h2   | Diameter, pilot contact    | 6,0 <sup>+0,10</sup> <sub>0</sub>  |
| h3   | Diameter, phase contact    | 16,0 <sup>+0,10</sup> <sub>0</sub> |
| h4   | Insulator inside diameter  | 43,0 <sup>+0,10</sup> <sub>0</sub> |
| h5   | Insulator outside diameter | 52,0 <sup>±0,25</sup>              |
| z    | Nose radius                | 10,5 <sup>±0,25</sup>              |
| L    | Phase contacts             |                                    |
| Pil. | Pilot contacts             |                                    |



## D.4 Ship inlet



| Key  | Description                | Dimension<br>mm                     |
|------|----------------------------|-------------------------------------|
| a    | Insulator depth            | 64,0 <sup>0</sup> <sub>-0,25</sub>  |
| b    | Pilot contact              | 8,0 <sup>0</sup> <sub>-0,25</sub>   |
| c    | Phase contact              | 3,4 <sup>0</sup> <sub>-0,10</sub>   |
| d    | Top, insulator             | 1,9 <sup>0</sup> <sub>-0,10</sub>   |
| e    | Earth contact              | 11,1 <sup>0</sup> <sub>-0,10</sub>  |
| f    | Tongue depth               | 56,0 ±0,25                          |
| g    | Insulator outside diameter | 42,5 <sup>+0,10</sup> <sub>0</sub>  |
| h    | Insulator inside diameter  | 36,5 ±0,10                          |
| i    | Phase contacts diameter    | 16,0 <sup>0</sup> <sub>-0,05</sub>  |
| j    | Pilot contacts diameter    | 6,0 <sup>0</sup> <sub>-0,05</sub>   |
| k    | Diameter, earth contact    | 14,0 <sup>0</sup> <sub>-0,05</sub>  |
| l    | Pitch, phase contacts      | 71,6 ±0,25                          |
| m    | Pitch, pilot contacts      | 84,0 ±0,25                          |
| n    | Pitch, earth contact       | 105,0 ±0,25                         |
| o    | Insulator diameter         | 119,6 ±0,25                         |
| p    | Inner diameter             | 140,0 <sup>+0,10</sup> <sub>0</sub> |
| q    | Outer diameter             | 154,5 <sup>0</sup> <sub>-0,10</sub> |
| r    | Diameter + nose            | 166,0 ±0,25                         |
| z    | Nose radius (x2)           | 7,5 ±0,25                           |
| L    | Phase contacts             |                                     |
| Pil. | Pilot contacts             |                                     |

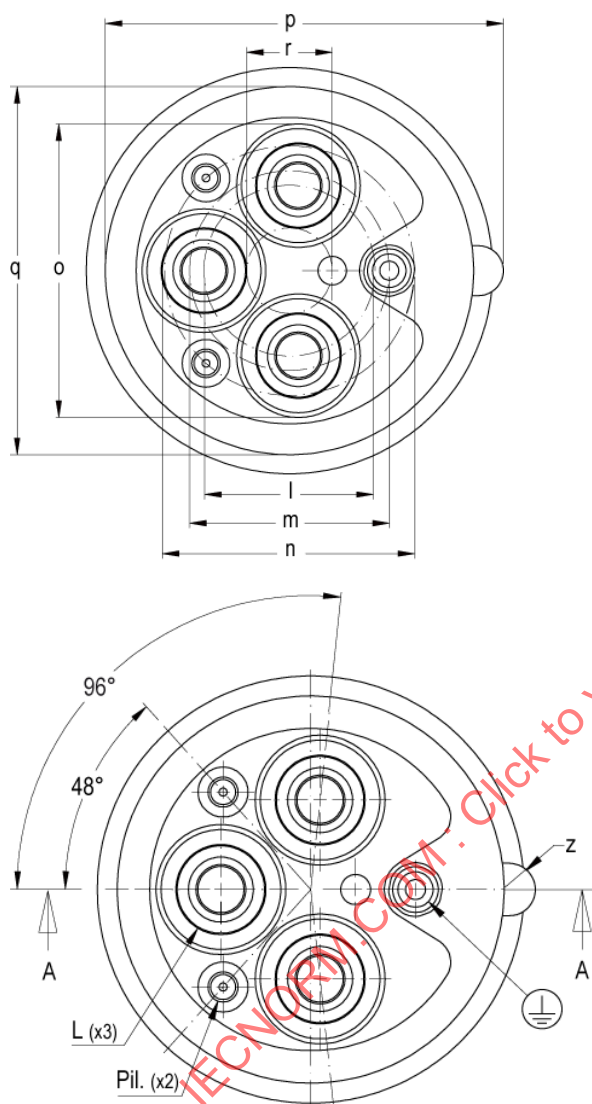


A-A

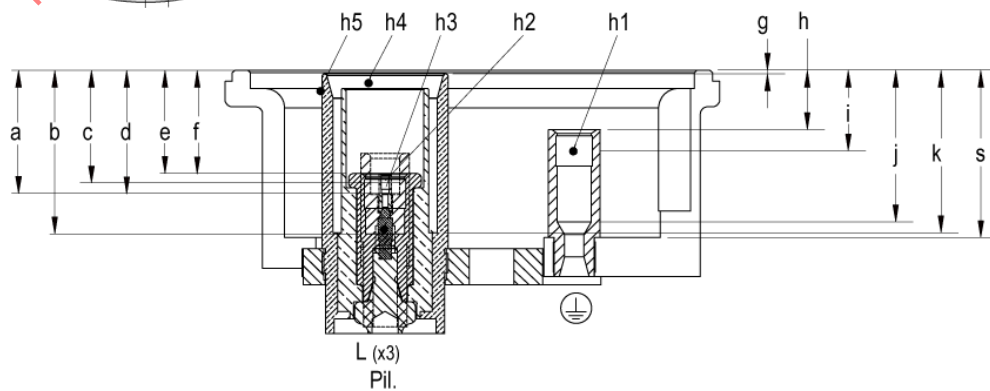
## Annex E (normative)

### Standard sheets E: 12 kV 500 A three-phase accessories with two IP2X pilot contacts

#### E.1 Socket-outlet

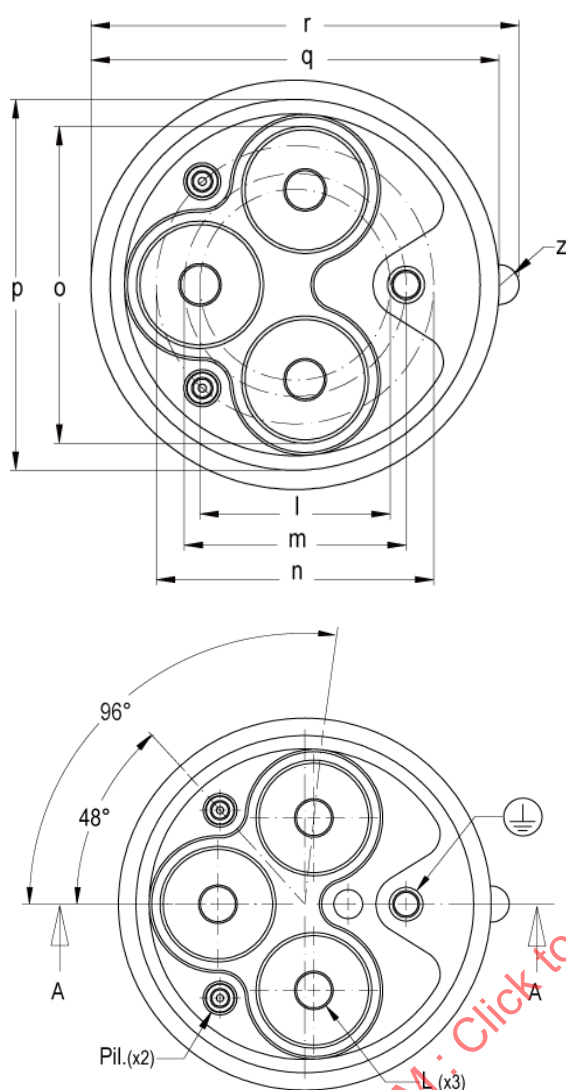


| Key  | Description                | Dimension<br>mm |            |
|------|----------------------------|-----------------|------------|
| a    | Bottom, pilot contact      | 50,8            | +0,10<br>0 |
| b    | Bottom, phase contact      | 67,5            | +0,10<br>0 |
| c    | Pilot contact              | 45,0            | ±0,25      |
| d    | Phase contact              | 48,3            | ±0,25      |
| e    | Top, phase contacts        | 42,5            | ±0,25      |
| f    | Top, pilot contacts        | 42,8            | ±0,25      |
| g    | Top, insulator             | 1,5             | ±0,25      |
| h    | Top, earth contact         | 24,5            | ±0,25      |
| i    | Earth contact              | 30,5            | ±0,25      |
| j    | Bottom, earth contacts     | 62,5            | +0,10<br>0 |
| k    | Bottom, insulator          | 67,0            | +0,10<br>0 |
| l    | Pitch, phase contacts      | 71,6            | ±0,25      |
| m    | Pitch, earth contact       | 84,0            | ±0,25      |
| n    | Pitch, pilot contacts      | 106,0           | ±0,25      |
| o    | Insulator diameter         | 123,6           | ±0,25      |
| p    | Diameter + nose            | 167,5           | ±0,25      |
| q    | Diameter                   | 155,0           | ±0,25      |
| r    | Partition pilot diameter   | 36,0            | ±0,25      |
| s    | Tongue depth               | 69,0            | ±0,25      |
| h1   | Diameter, earth contact    | 14,0            | +0,10<br>0 |
| h2   | Diameter, pilot contact    | 3,0             | +0,10<br>0 |
| h3   | Diameter, phase contact    | 16,0            | +0,10<br>0 |
| h4   | Insulator inside diameter  | 43,0            | ±0,25      |
| h5   | Insulator outside diameter | 52,0            | ±0,25      |
| z    | Nose radius                | 10,5            | ±0,25      |
| L    | Phase contacts             |                 |            |
| Pil. | Pilot contacts             |                 |            |

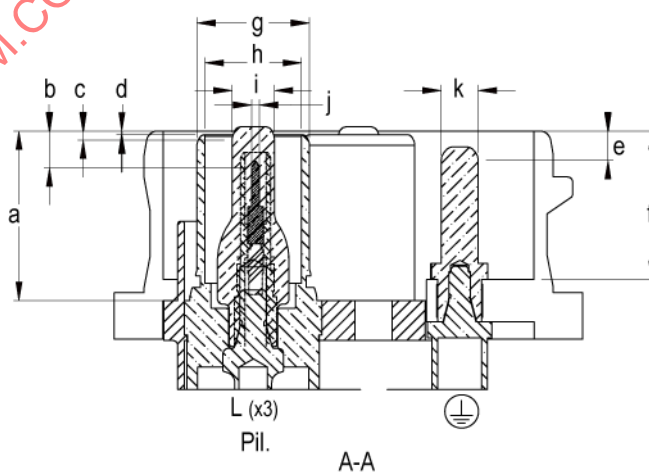


A-A

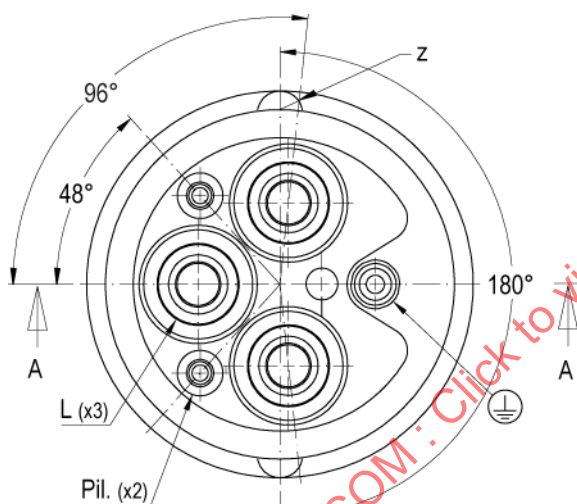
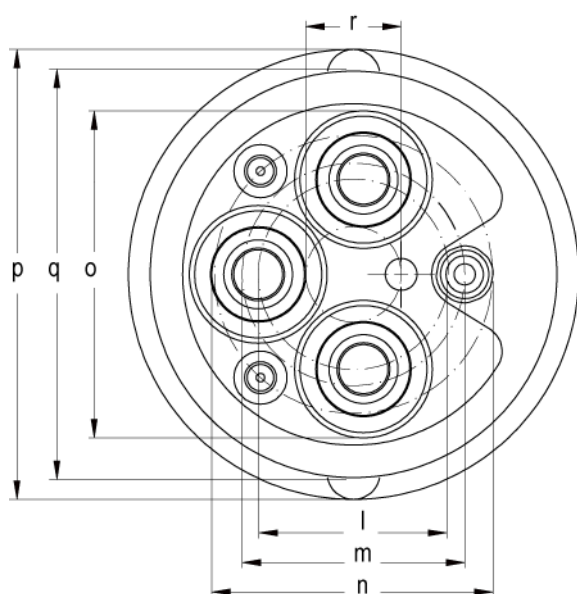
## E.2 Plug top



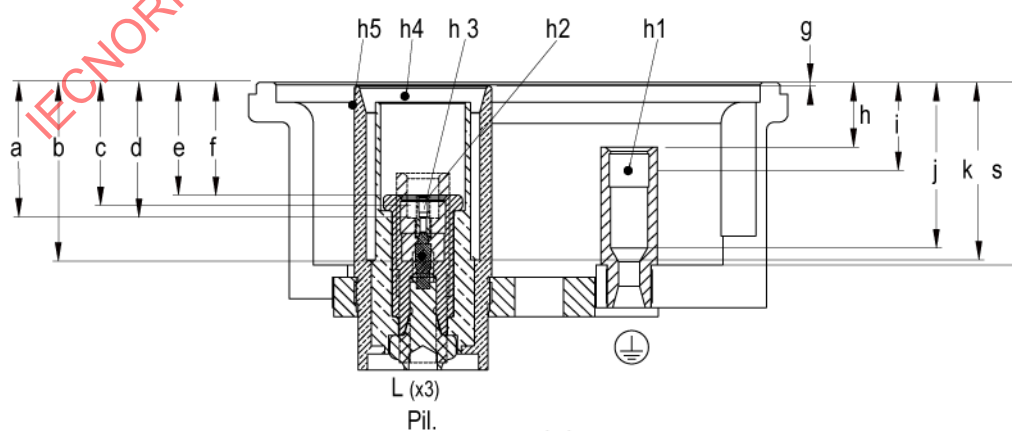
| Key  | Description                | Dimension<br>mm     |
|------|----------------------------|---------------------|
| a    | Insulator depth            | 64,0<br>0<br>-0,25  |
| b    | Pilot contact              | 13,8<br>0<br>-0,25  |
| c    | Phase contact              | 3,4<br>0<br>-0,10   |
| d    | Top, insulator             | 1,4<br>0<br>-0,10   |
| e    | Earth contact              | 11,1<br>0<br>-0,10  |
| f    | Tongue depth               | 56,0<br>±0,25       |
| g    | Insulator outside diameter | 42,5<br>+0,10<br>0  |
| h    | Insulator inside diameter  | 36,5<br>±0,10       |
| i    | Diameter, phase contact    | 16,0<br>0<br>-0,05  |
| j    | Diameter, pilot contact    | 3,0<br>0<br>-0,05   |
| k    | Diameter, earth contact    | 14,0<br>0<br>-0,05  |
| l    | Pitch, phase contacts      | 71,6<br>±0,25       |
| m    | Pitch, pilot contacts      | 84,0<br>±0,25       |
| n    | Pitch, earth contact       | 105,0<br>±0,25      |
| o    | Insulator diameter         | 119,6<br>±0,25      |
| p    | Inner diameter             | 140,0<br>+0,10<br>0 |
| q    | Outer diameter             | 154,5<br>0<br>-0,10 |
| r    | Diameter + nose            | 162,0<br>±0,25      |
| z    | Nose radius                | 7,5<br>±0,25        |
| L    | Phase contacts             |                     |
| Pil. | Pilot contacts             |                     |



### E.3 Ship connector top

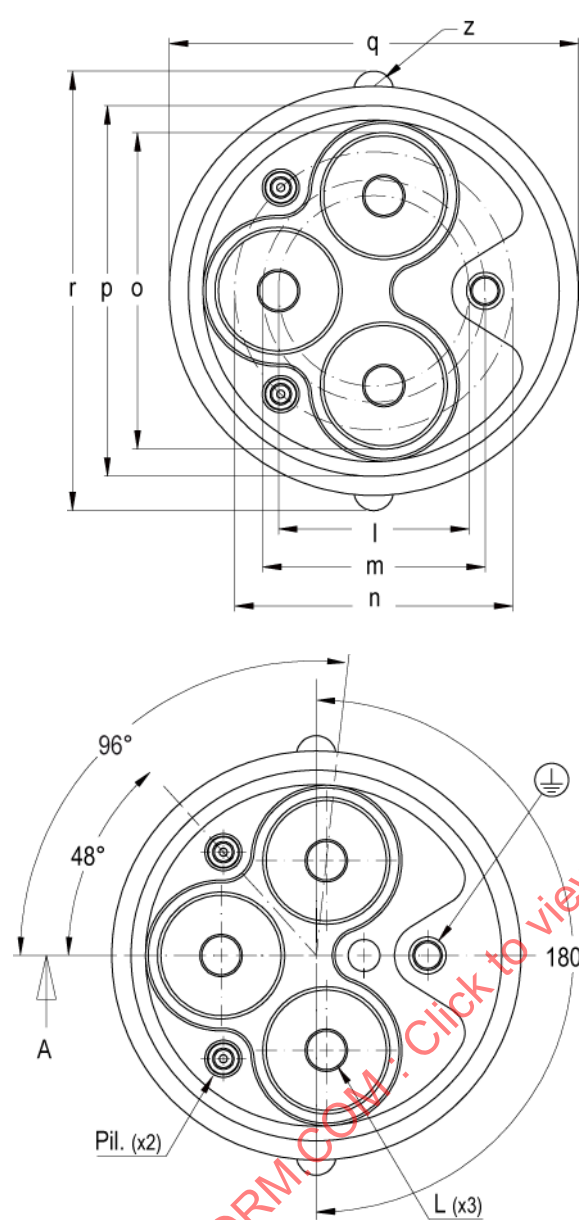


| Key  | Description                | Dimension<br>mm   |
|------|----------------------------|-------------------|
| a    | Bottom, pilot contact      | 50,8 $^{+0,10}_0$ |
| b    | Bottom, phase contact      | 67,5 $^{+0,10}_0$ |
| c    | Pilot contact              | 45,0 $\pm 0,25$   |
| d    | Phase contact              | 48,3 $\pm 0,25$   |
| e    | Top, phase contacts        | 42,5 $\pm 0,25$   |
| f    | Top, pilot contact         | 42,8 $\pm 0,25$   |
| g    | Top, insulator             | 1,5 $\pm 0,25$    |
| h    | Top, earth contact         | 24,5 $\pm 0,25$   |
| i    | Earth contact              | 30,5 $\pm 0,25$   |
| j    | Bottom, earth contact      | 62,5 $^{+0,10}_0$ |
| k    | Bottom, insulator          | 67,0 $^{+0,10}_0$ |
| l    | Pitch, phase contacts      | 71,6 $\pm 0,25$   |
| m    | Pitch, earth contact       | 84,0 $\pm 0,25$   |
| n    | Pitch, pilot contacts      | 106,0 $\pm 0,25$  |
| o    | Insulator diameter         | 123,6 $\pm 0,25$  |
| p    | Diameter + nose            | 170,0 $\pm 0,25$  |
| q    | Diameter                   | 155,0 $\pm 0,25$  |
| r    | Pitch pilot contact        | 36,0 $\pm 0,25$   |
| s    | Tongue depth               | 69,0 $^{+0,10}_0$ |
| h1   | Diameter, earth contact    | 14,0 $^{+0,10}_0$ |
| h2   | Diameter, pilot contact    | 3,0 $^{+0,10}_0$  |
| h3   | Diameter, phase contact    | 16,0 $^{+0,10}_0$ |
| h4   | Insulator inside diameter  | 43,0 $^{+0,10}_0$ |
| h5   | Insulator outside diameter | 52,0 $\pm 0,25$   |
| z    | Nose radius                | 10,5 $\pm 0,25$   |
| L    | Phase contacts             |                   |
| Pil. | Pilot contacts             |                   |

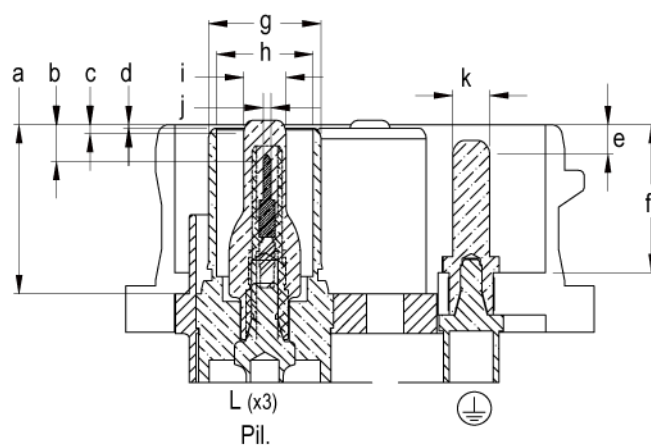


A-A

## E.4 Ship inlet



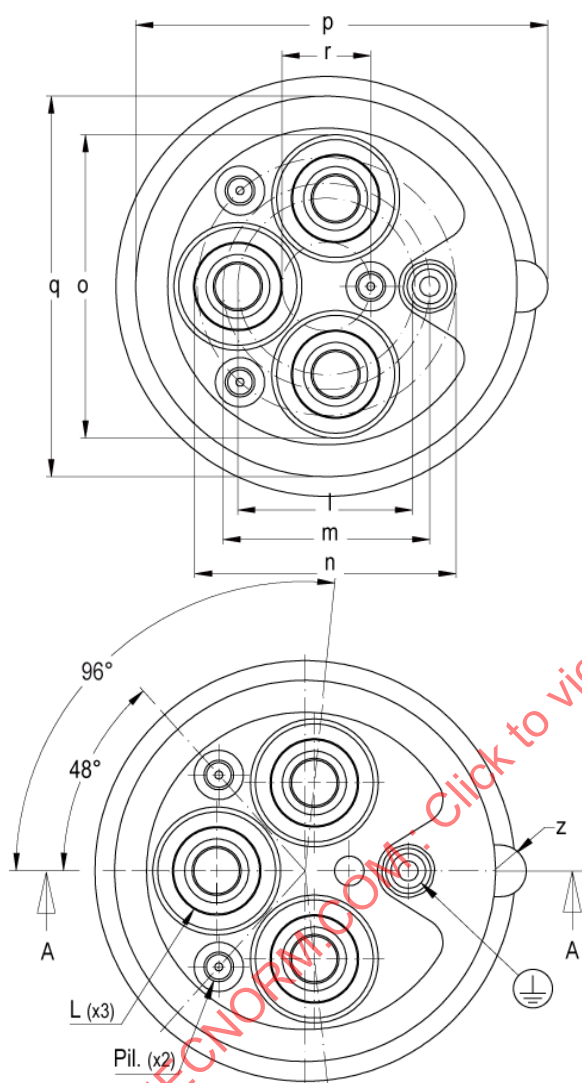
| Key  | Description              | Dimension<br>mm     |
|------|--------------------------|---------------------|
| a    | Insulator depth          | 64,0<br>0<br>-0,25  |
| b    | Pilot contact            | 13,8<br>0<br>-0,25  |
| c    | Phase contact            | 3,4<br>0<br>-0,10   |
| d    | Top, insulator           | 1,4<br>0<br>-0,10   |
| e    | Earth contact            | 11,1<br>0<br>-0,10  |
| f    | Tongue depth             | 56,0<br>±0,25       |
| g    | Insulator outer diameter | 42,5<br>+0,10<br>0  |
| h    | Insulator inner diameter | 36,5<br>±0,10       |
| i    | Diameter, phase contact  | 16,0<br>0<br>-0,05  |
| j    | Diameter, pilot contact  | 3,0<br>0<br>-0,05   |
| k    | Diameter, earth contact  | 14,0<br>0<br>-0,05  |
| l    | Pitch, phase contacts    | 71,6<br>±0,25       |
| m    | Pitch, pilot contacts    | 84,0<br>±0,25       |
| n    | Pitch, earth contact     | 105,0<br>±0,25      |
| o    | Insulator diameter       | 119,6<br>±0,25      |
| p    | Inner diameter           | 140,0<br>+0,10<br>0 |
| q    | Outer diameter           | 154,5<br>0<br>-0,10 |
| r    | Outer diameter + noses   | 166,0<br>±0,25      |
| z    | Nose radius              | 7,5<br>±0,25        |
| L    | Phase contacts           |                     |
| Pil. | Pilot contacts           |                     |



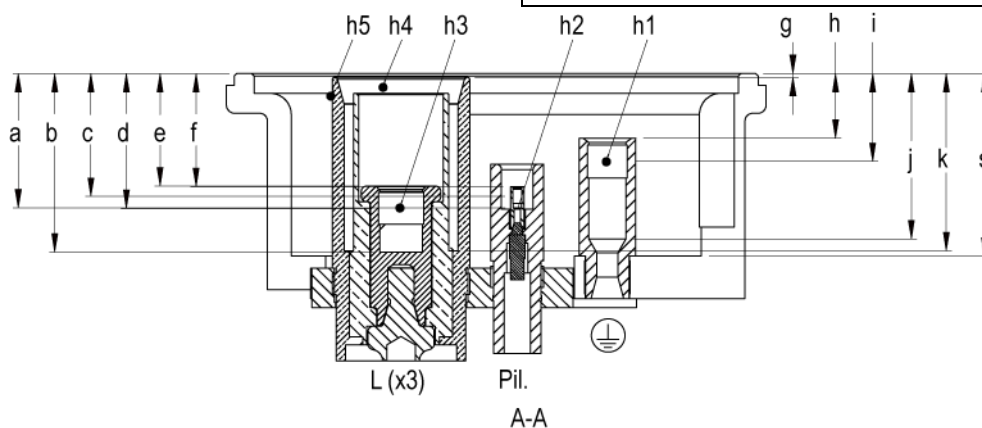
## Annex F (normative)

### Standard sheets F: 12 kV 500 A three-phase accessories with three IP2X pilot contacts

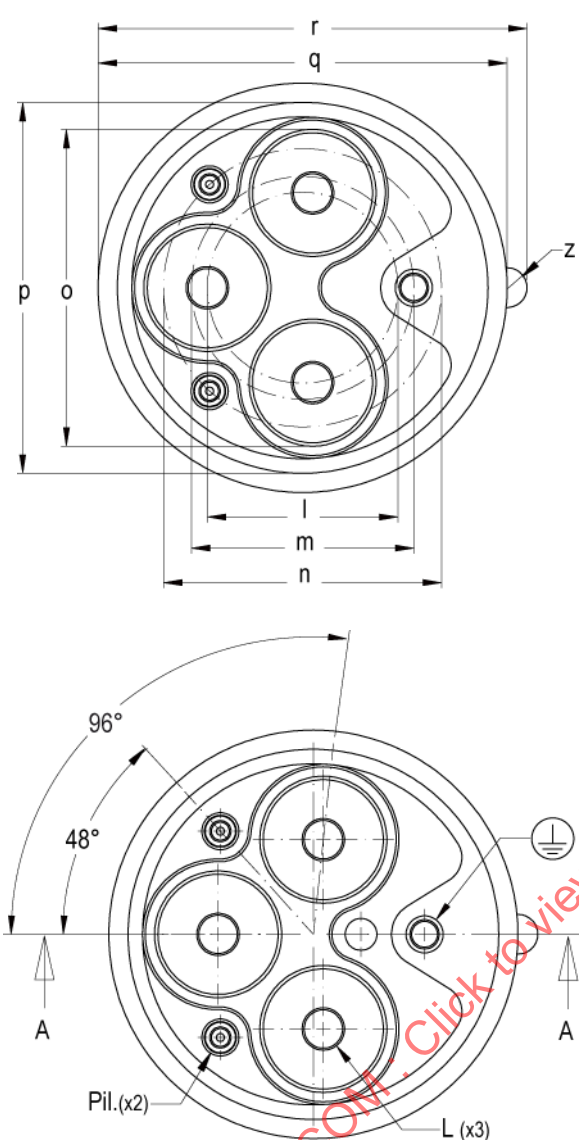
#### F.1 Socket-outlet



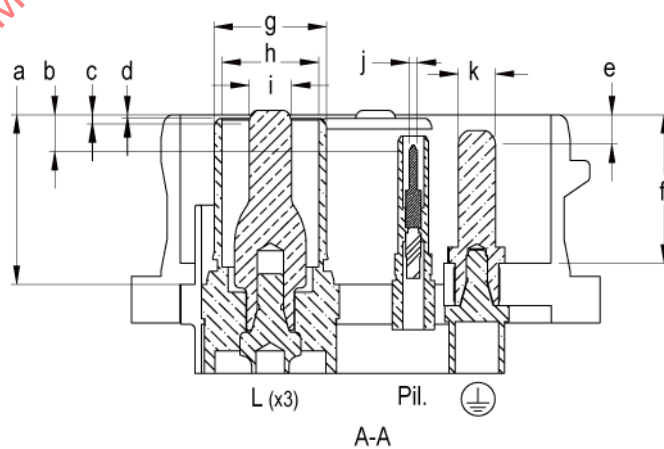
| Key  | Description                | Dimension<br>mm   |
|------|----------------------------|-------------------|
| a    | Bottom, pilot contact      | 50,8 $^{+0,10}_0$ |
| b    | Bottom, phase contact      | 67,5 $^{+0,10}_0$ |
| c    | Pilot contact              | 45,0 $\pm 0,25$   |
| d    | Phase contact              | 48,3 $\pm 0,25$   |
| e    | Top, phase contacts        | 42,5 $\pm 0,25$   |
| f    | Top, pilot contact         | 42,8 $\pm 0,25$   |
| g    | Top, insulator             | 1,5 $\pm 0,25$    |
| h    | Top, earth contact         | 24,5 $\pm 0,25$   |
| i    | Earth contact              | 30,5 $\pm 0,25$   |
| j    | Bottom, earth contact      | 62,5 $^{+0,10}_0$ |
| k    | Bottom, insulator          | 67,0 $^{+0,10}_0$ |
| l    | Pitch, phase contacts      | 71,6 $\pm 0,25$   |
| m    | Pitch, earth contact       | 84,0 $\pm 0,25$   |
| n    | Pitch, pilot contacts      | 106,0 $\pm 0,25$  |
| o    | Insulator diameter         | 123,6 $\pm 0,25$  |
| p    | Socket + guide             | 167,5 $\pm 0,25$  |
| q    | Diameter                   | 155,0 $\pm 0,25$  |
| r    | Pitch, pilot contacts      | 36,0 $\pm 0,25$   |
| s    | Tongue depth               | 69,0 $\pm 0,25$   |
| h1   | Diameter, earth contact    | 14,0 $^{+0,10}_0$ |
| h2   | Diameter, pilot contact    | 3,0 $^{+0,10}_0$  |
| h3   | Diameter, phase contact    | 16,0 $^{+0,10}_0$ |
| h4   | Insulator inside diameter  | 43,0 $^{+0,10}_0$ |
| h5   | Insulator outside diameter | 52,0 $\pm 0,25$   |
| z    | Nose radius                | 10,5 $\pm 0,25$   |
| L    | Phase contacts             |                   |
| Pil. | Pilot contacts             |                   |



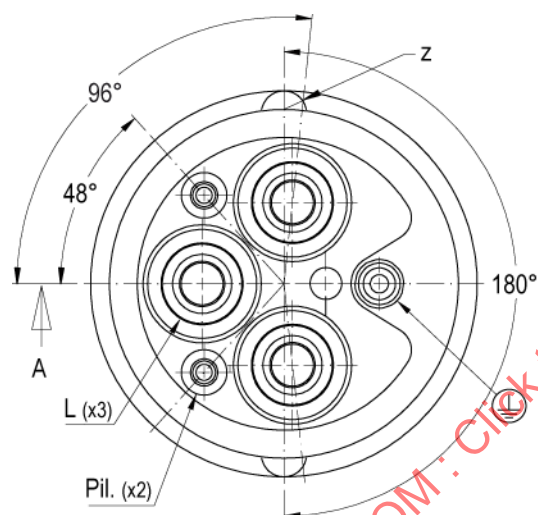
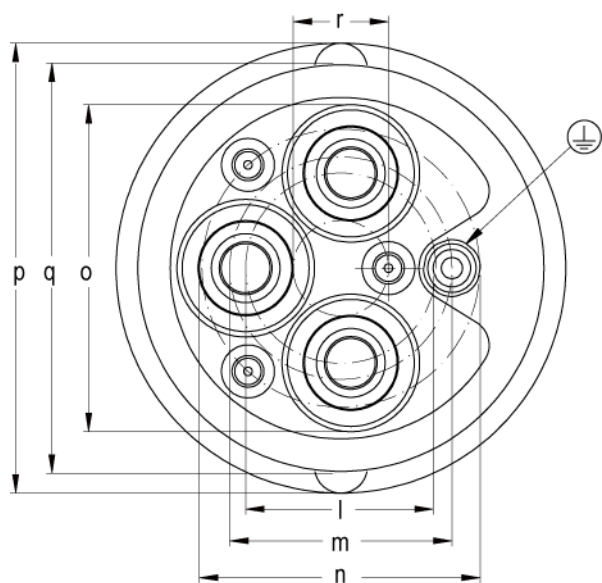
## F.2 Plug top



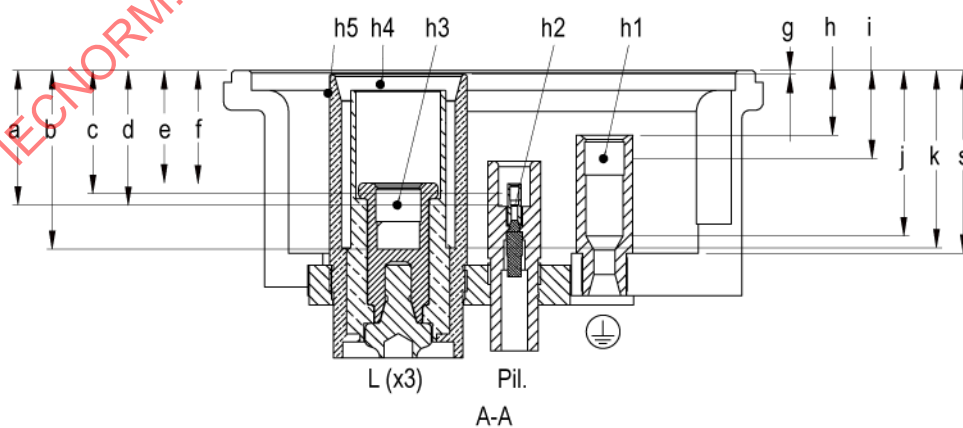
| Key  | Description              | Dimension<br>mm                     |
|------|--------------------------|-------------------------------------|
| a    | Insulator depth          | 64,0 <sup>0</sup> <sub>-0,25</sub>  |
| b    | Pilot contact            | 13,8 <sup>0</sup> <sub>-0,25</sub>  |
| c    | Phase contact            | 3,4 <sup>0</sup> <sub>-0,10</sub>   |
| d    | Top, insulator           | 1,4 <sup>0</sup> <sub>-0,10</sub>   |
| e    | Earth contact            | 11,1 <sup>0</sup> <sub>-0,10</sub>  |
| f    | Tongue depth             | 56,0 ±0,25                          |
| g    | Insulator outer diameter | 42,5 <sup>+0,10</sup> <sub>0</sub>  |
| h    | Insulator inner diameter | 36,5 ±0,10                          |
| i    | Diameter, phase contact  | 16,0 <sup>0</sup> <sub>-0,05</sub>  |
| j    | Diameter, pilot contact  | 3,0 <sup>0</sup> <sub>-0,05</sub>   |
| k    | Diameter, earth contact  | 14,0 <sup>0</sup> <sub>-0,05</sub>  |
| l    | Pitch, phase contacts    | 71,6 ±0,25                          |
| m    | Pitch, earth contact     | 84,0 ±0,25                          |
| n    | Pitch, pilots contacts   | 105,0 ±0,25                         |
| o    | Insulator diameter       | 119,6 ±0,25                         |
| p    | Inner diameter           | 140,0 <sup>+0,10</sup> <sub>0</sub> |
| q    | Outer diameter           | 154,5 <sup>0</sup> <sub>-0,10</sub> |
| r    | Outer diameter + nose    | 162,0 <sup>0</sup> <sub>-0,10</sub> |
| z    | Nose radius              | 7,5 ±0,25                           |
| L    | Phase contacts           |                                     |
| Pil. | Pilot contacts           |                                     |



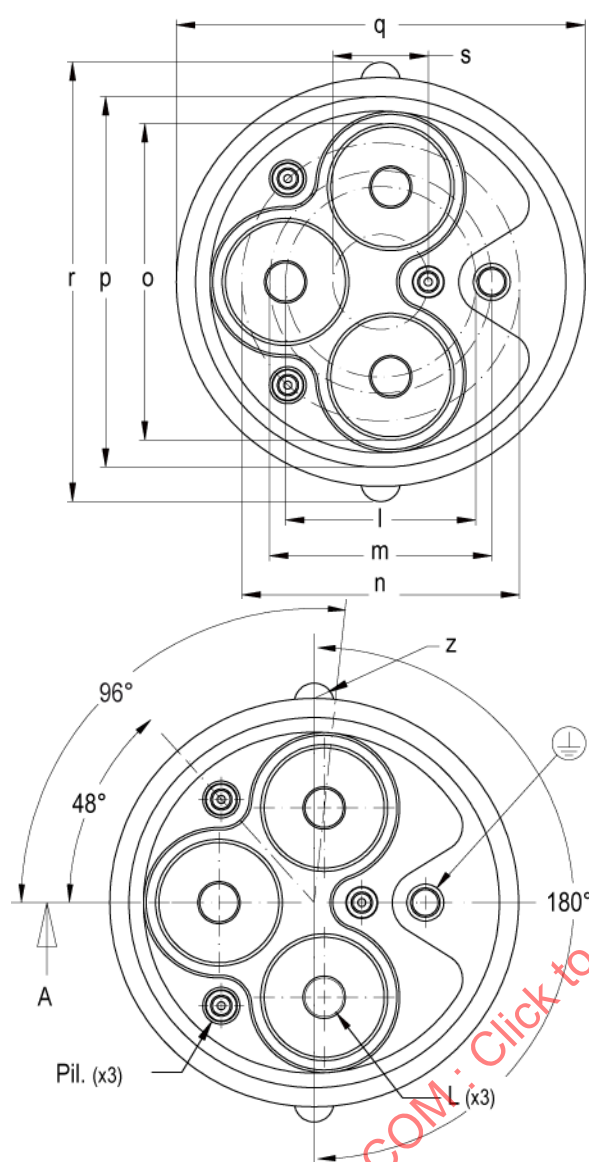
### F.3 Ship connector top



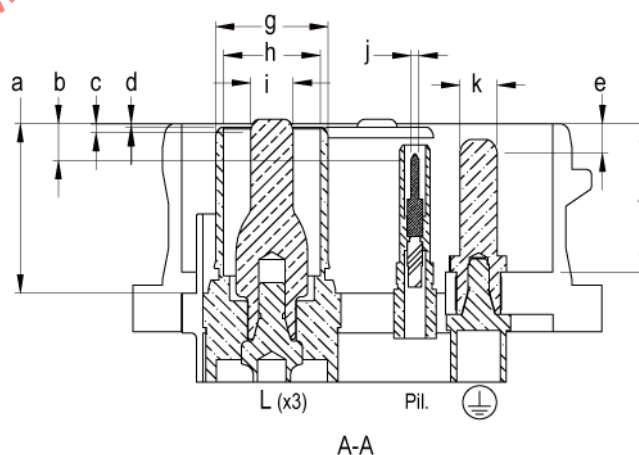
| Key  | Description                | Dimension<br>mm   |
|------|----------------------------|-------------------|
| a    | Bottom, pilot contacts     | 50,8 $+0,10$<br>0 |
| b    | Bottom, phase contact      | 67,5 $+0,10$<br>0 |
| c    | Pilot contact              | 45,0 $\pm 0,25$   |
| d    | Phase contact              | 48,3 $\pm 0,25$   |
| e    | Top, phase contacts        | 42,5 $\pm 0,25$   |
| f    | Top, pilot contact         | 42,8 $\pm 0,25$   |
| g    | Top, insulator             | 1,5 $\pm 0,25$    |
| h    | Top, earth contact         | 24,5 $\pm 0,25$   |
| i    | Earth contact              | 30,5 $\pm 0,25$   |
| j    | Bottom, earth contact      | 62,5 $+0,10$<br>0 |
| k    | Bottom, insulator          | 67,0 $+0,10$<br>0 |
| l    | Pitch, phase contacts      | 71,6 $\pm 0,25$   |
| m    | Pitch, earth contact       | 84,0 $\pm 0,25$   |
| n    | Pitch, pilot contacts      | 106,0 $\pm 0,25$  |
| o    | Insulator diameter         | 123,6 $\pm 0,25$  |
| p    | Diameter + nose            | 170,0 $\pm 0,25$  |
| q    | Diameter                   | 155,0 $\pm 0,25$  |
| r    | Pitch, pilot contact       | 36,0 $\pm 0,25$   |
| s    | Tongue depth               | 69,0 $\pm 0,25$   |
| h1   | Diameter, earth contact    | 14,0 $+0,10$<br>0 |
| h2   | Diameter, pilot contact    | 3,0 $+0,10$<br>0  |
| h3   | Diameter, phase contact    | 16,0 $+0,10$<br>0 |
| h4   | Insulator inside diameter  | 43,0 $+0,10$<br>0 |
| h5   | Insulator outside diameter | 52,0 $\pm 0,25$   |
| z    | Nose radius                | 10,5 $\pm 0,25$   |
| L    | Phase contacts             |                   |
| Pil. | Pilot contacts             |                   |



## F.4 Ship inlet



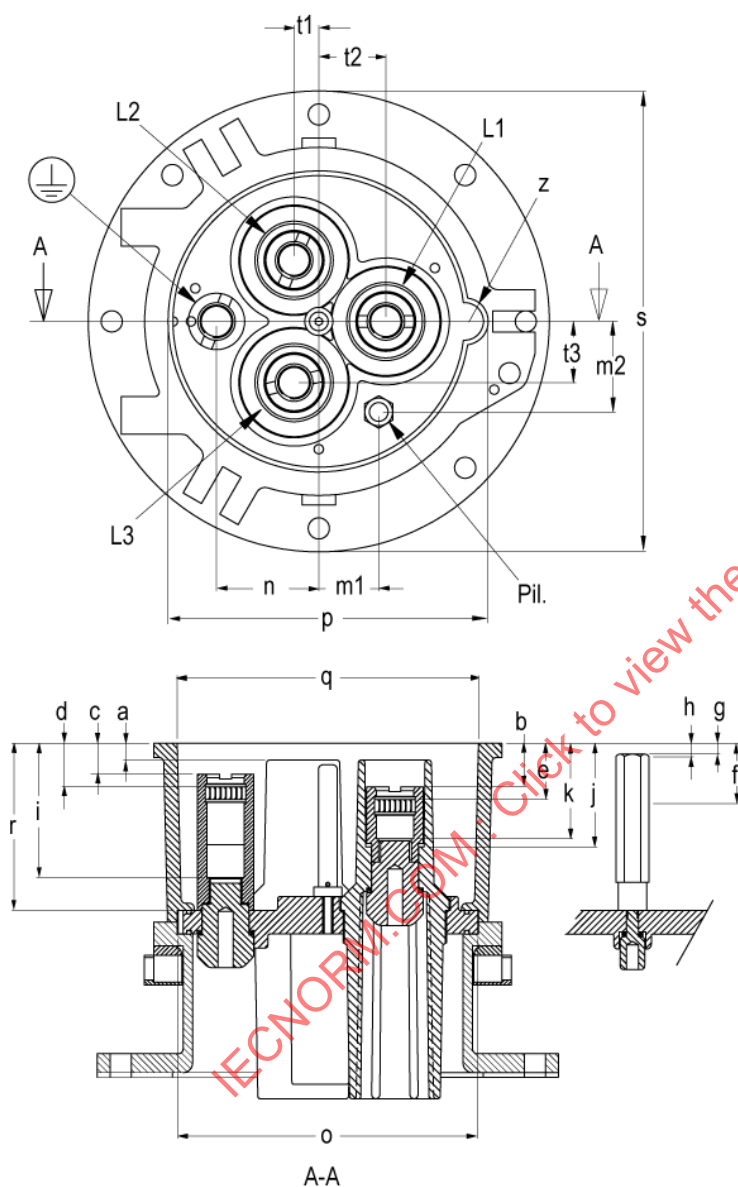
| Symbol | Description              | Dimension<br>mm                     |
|--------|--------------------------|-------------------------------------|
| a      | Insulator depth          | 64,0 <sup>0</sup> <sub>-0,25</sub>  |
| b      | Pilot contact            | 13,8 <sup>0</sup> <sub>-0,25</sub>  |
| c      | Phase contact            | 3,4 <sup>0</sup> <sub>-0,10</sub>   |
| d      | Top, insulator           | 1,4 <sup>0</sup> <sub>-0,10</sub>   |
| e      | Earth contact            | 11,1 <sup>0</sup> <sub>-0,10</sub>  |
| f      | Tongue depth             | 56,0 <sup>±0,25</sup>               |
| g      | Insulator outer diameter | 42,5 <sup>+0,10</sup> <sub>0</sub>  |
| h      | Insulator inner diameter | 36,5 <sup>±0,10</sup>               |
| i      | Diameter, phase contact  | 16,0 <sup>0</sup> <sub>-0,05</sub>  |
| j      | Diameter, pilot contact  | 3,0 <sup>0</sup> <sub>-0,05</sub>   |
| k      | Diameter, earth contact  | 14,0 <sup>0</sup> <sub>-0,05</sub>  |
| l      | Pitch, phase contacts    | 71,6 <sup>±0,25</sup>               |
| m      | Pitch, earth contact     | 84,0 <sup>±0,25</sup>               |
| n      | Pitch, pilot contacts    | 105,0 <sup>±0,25</sup>              |
| o      | Insulator diameter       | 119,6 <sup>±0,25</sup>              |
| p      | Inner diameter           | 140,0 <sup>+0,10</sup> <sub>0</sub> |
| q      | Outer diameter           | 154,5 <sup>+0,10</sup> <sub>0</sub> |
| r      | Outer diameter + noses   | 166,0 <sup>+0,10</sup> <sub>0</sub> |
| s      | Pitch, pilot contacts    | 36,0 <sup>±0,25</sup>               |
| z      | Nose radius              | 7,5 <sup>±0,25</sup>                |
| L      | Phase contacts           |                                     |
| Pil.   | Pilot contacts           |                                     |



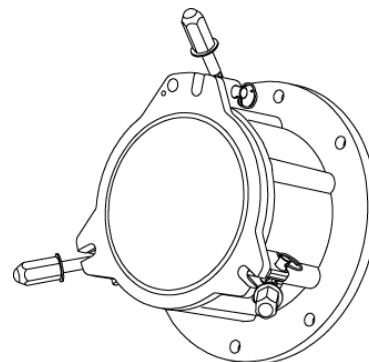
## Annex G (normative)

### Standard sheets G: 12 kV 500 A three-phase accessories with two pilot contacts

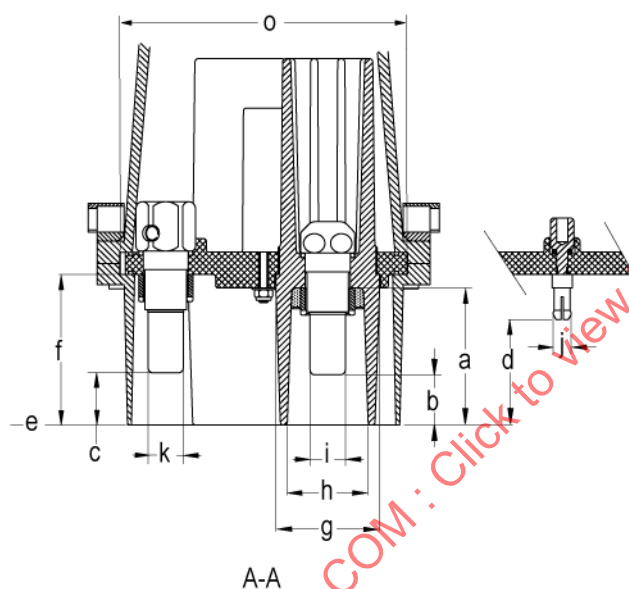
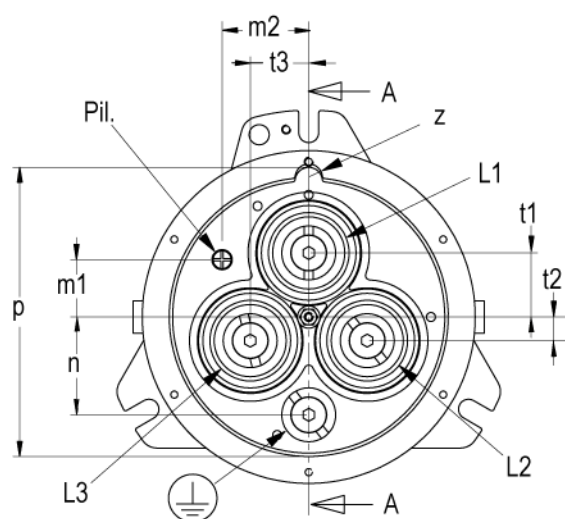
#### G.1 Socket-outlet



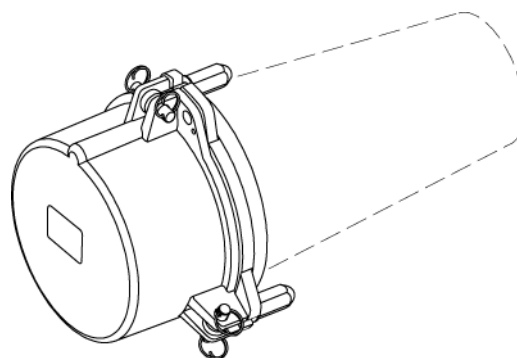
| Key      | Description           | Dimensions<br>mm |       |
|----------|-----------------------|------------------|-------|
| a        | Top, insulator        | 10,5             | ±0,50 |
| b        | Top, phase contacts   | 31,0             | ±0,50 |
| c        | Top, earth contact    | 19,5             | ±0,50 |
| d        | Earth contact         | 27,1             | ±0,50 |
| e        | Phase contact         | 39,0             | ±0,50 |
| f        | Bottom, pilot contact | 43,9             | ±0,50 |
| g        | Top, pilot contact    | 5,7              | ±0,50 |
| h        | Pilot contact         | 9,0              | ±0,50 |
| i        | Bottom, earth contact | 88,6             | ±0,50 |
| j        | Bottom, insulator     | 69,6             | ±0,50 |
| k        | Bottom, phase contact | 64,2             | ±0,50 |
| m1       | Pitch, pilot contact  | 40,4             | ±0,50 |
| m2       | Pitch, pilot contact  | 61,1             | ±0,50 |
| n        | Pitch, earth contact  | 69,0             | ±0,50 |
| o        | Insulator width       | 202,2            | ±0,50 |
| p        | Inner diameter + nose | 214,3            | ±0,50 |
| q        | Inner diameter        | 204,0            | ±1,50 |
| r        | Tongue depth          | 111,7            | ±0,50 |
| s        | Flange diameter       | 311,0            | ±0,50 |
| t1       | Pitch, phase contact  | 16,7             | ±0,50 |
| t2       | Pitch, phase contact  | 45,2             | ±0,50 |
| t3       | Pitch, phase contact  | 41,3             | ±0,50 |
| z        | Nose radius           | 12,0             | ±0,10 |
| L1/L2/L3 | Phase contacts        | -                |       |
| Pil.     | Ground check contact  | -                |       |



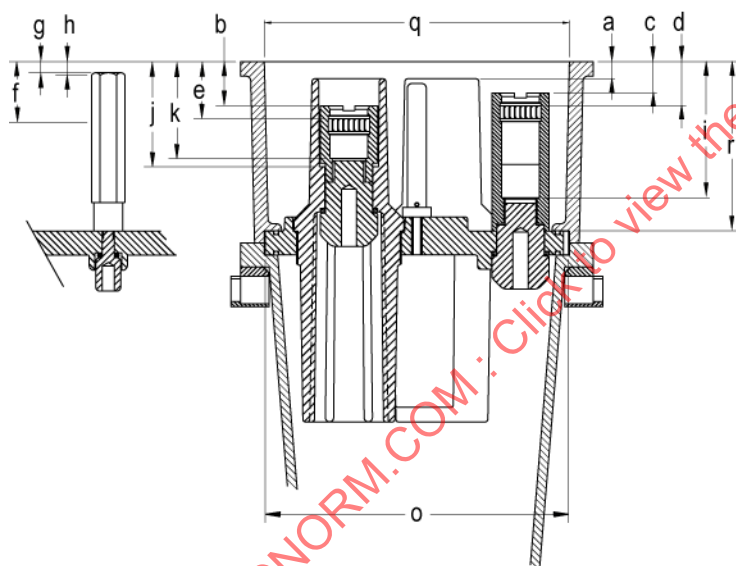
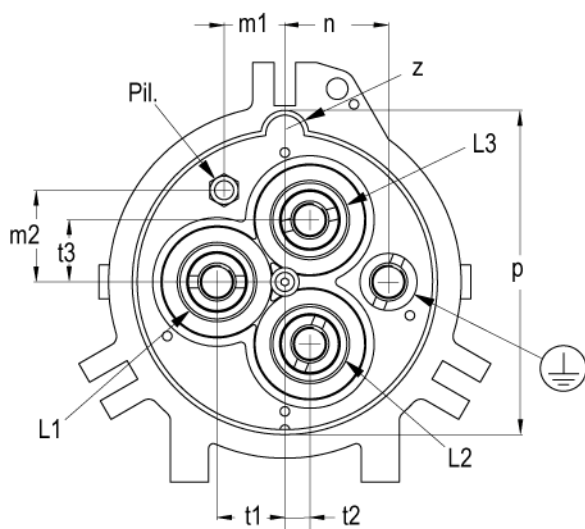
## G.2 Plug top



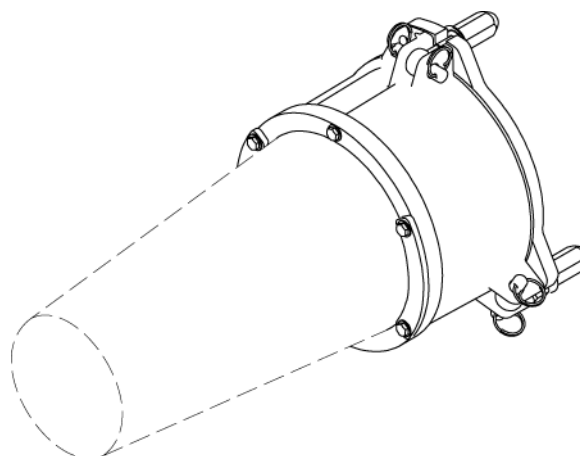
| Key      | Description                | Dimension<br>mm                    |
|----------|----------------------------|------------------------------------|
| a        | Insulator depth            | 96,4 ±1,50                         |
| b        | Top, phase contacts        | 34,2 ±1,50                         |
| c        | Top, earth contact         | 35,6 ±1,50                         |
| d        | Top, pilot contact         | 73,7 ±1,50                         |
| e        | Top, insulator             | 0,0                                |
| f        | Tongue depth               | 105,4 ±1,50                        |
| g        | Insulator outside diameter | 72,0 ±0,50                         |
| h        | Insulator inside diameter  | 56,6 ±0,50                         |
| i        | Diameter, phase contact    | 24,9 <sup>0</sup> <sub>-0,05</sub> |
| j        | Diameter, pilot contact    | 12,8 ±0,60                         |
| k        | Diameter, earth contact    | 24,9 <sup>0</sup> <sub>-0,05</sub> |
| m1       | Pitch, pilot contact       | 40,4 ±0,50                         |
| m2       | Pitch, pilot contact       | 61,1 ±0,50                         |
| n        | Pitch, earth contact       | 69,0 ±0,50                         |
| o        | Insulator width            | 202,2 ±0,50                        |
| p        | Outer diameter + nose      | 203,0 ±1,50                        |
| t1       | Pitch, phase contact       | 45,2 ±0,50                         |
| t2       | Pitch, phase contact       | 16,7 ±0,50                         |
| t3       | Pitch, phase contact       | 41,3 ±0,50                         |
| z        | Nose radius                | 9,5 ±0,10                          |
| L1/L2/L3 | Phase contacts             | -                                  |
| Pil.     | Ground check contact       | -                                  |



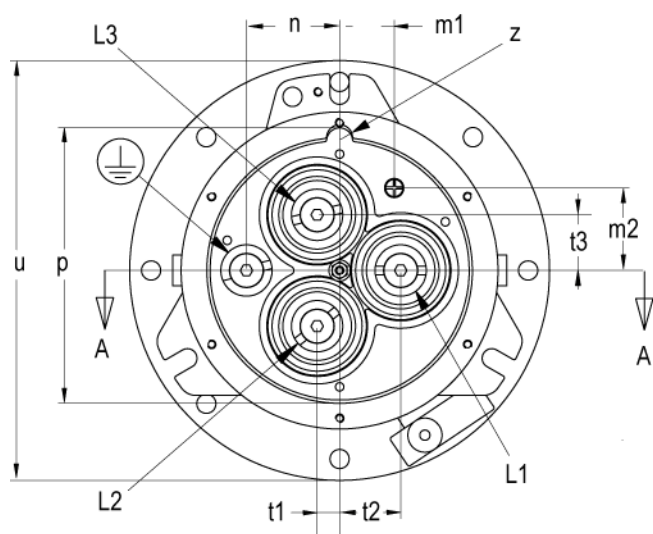
### G.3 Ship connector top



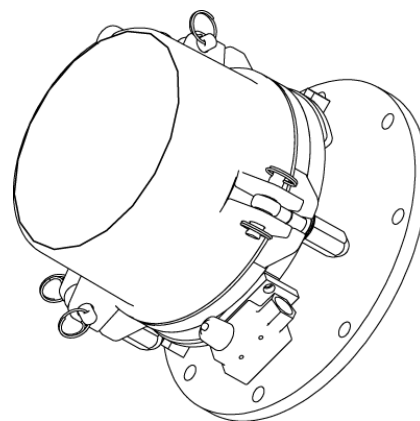
| Key      | Description           | Dimension<br>mm |       |
|----------|-----------------------|-----------------|-------|
| a        | Top, insulator        | 10,5            | ±0,50 |
| b        | Top, phase contacts   | 31,0            | ±0,50 |
| c        | Top, earth contact    | 19,5            | ±0,50 |
| d        | Earth contact         | 27,1            | ±0,50 |
| e        | Phase contact         | 39,0            | ±0,50 |
| f        | Bottom, pilot contact | 43,9            | ±0,50 |
| g        | Top, pilot contact    | 5,7             | ±0,50 |
| h        | Pilot contact         | 9,0             | ±0,50 |
| i        | Bottom, earth contact | 88,6            | ±0,50 |
| j        | Bottom, insulator     | 69,6            | ±0,50 |
| k        | Bottom, phase contact | 64,2            | ±0,50 |
| m1       | Pitch, pilot contact  | 40,4            | ±0,50 |
| m2       | Pitch, pilot contact  | 61,1            | ±0,50 |
| n        | Pitch, earth contact  | 69,0            | ±0,50 |
| o        | Insulator width       | 202,2           | ±0,50 |
| p        | Socket + nose         | 214,3           | ±0,50 |
| q        | Socket width          | 204,0           | ±1,50 |
| r        | Tongue depth          | 111,7           | ±0,50 |
| t1       | Pitch, phase contact  | 45,2            | ±0,50 |
| t2       | Pitch, phase contact  | 16,7            | ±0,50 |
| t3       | Pitch, phase contact  | 41,3            | ±0,50 |
| z        | Nose radius           | 12,0            | ±1,00 |
| L1/L2/L3 | Phase contacts        | -               |       |
| Pil.     | Ground check contact  |                 |       |



## G.4 Ship inlet



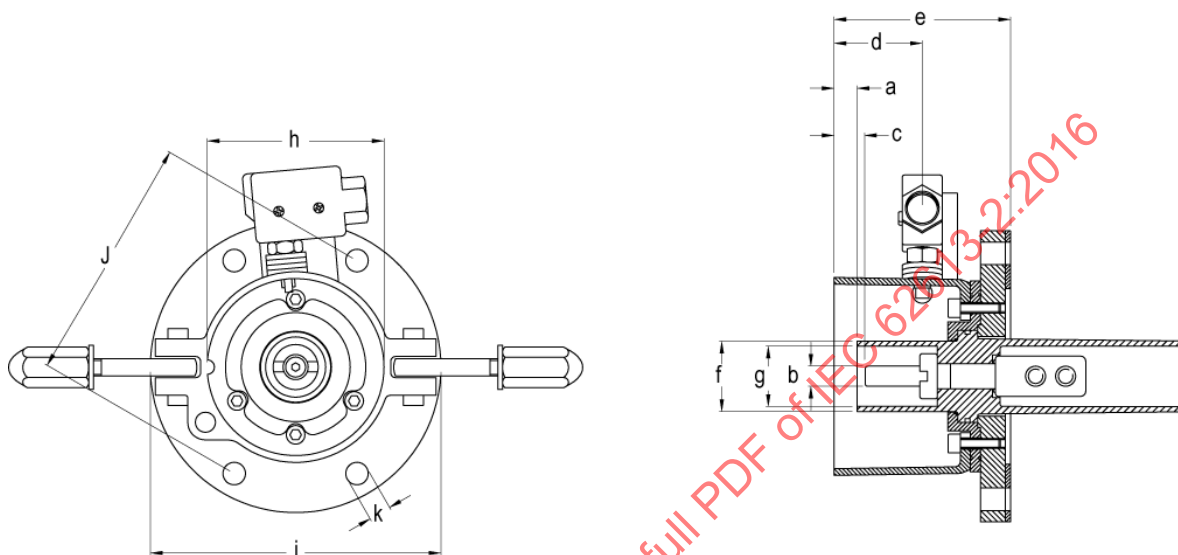
| Key      | Description                | Dimension<br>mm |             |
|----------|----------------------------|-----------------|-------------|
| a        | Insulator depth            | 96,4            | ±1,50       |
| b        | Top, phase contacts        | 34,2            | ±1,50       |
| c        | Top, earth contact         | 35,6            | ±1,50       |
| d        | Top, pilot contact         | 73,7            | ±1,50       |
| e        | Top, insulator             | 0,0             |             |
| f        | Tongue depth               | 105,4           | ±1,50       |
| g        | Insulator outside diameter | 72,0            | ±0,50       |
| h        | Insulator inside diameter  | 56,6            | ±0,50       |
| i        | Diameter, phase contact    | 24,9            | 0<br>-0,051 |
| j        | Diameter, pilot contact    | 12,8            | ±0,06       |
| k        | Diameter, earth contact    | 24,9            | ±0,051      |
| m1       | Pitch, pilot contacts      | 40,4            | ±0,50       |
| m2       | Pitch, pilot contacts      | 61,1            | ±0,50       |
| n        | Pitch, earth contact       | 69,0            | ±0,50       |
| o        | Insulator width            | 202,2           | ±0,50       |
| p        | Connector + nose           | 203,0           | ±1,50       |
| u        | Flange diameter            | 311,0           | ±1,50       |
| t1       | Pitch, phase contact       | 16,7            | ±0,50       |
| t2       | Pitch, phase contact       | 45,2            | ±0,50       |
| t3       | Pitch, phase contact       | 41,3            | ±0,50       |
| z        | Nose radius                | 12,0            | ±1,0        |
| L1/L2/L3 | Phase contacts             | -               |             |
| Pil.     | Ground check contact       | -               |             |



## Annex H (normative)

### Standard sheets H: 7,2 kV 250 A single-pole (neutral) accessories

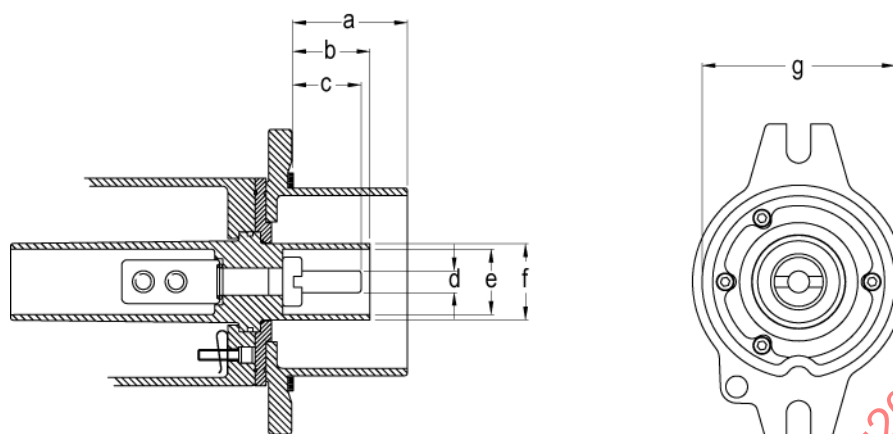
#### H.1 Socket-outlet



IEC

| Key | Description                         | Dimension<br>mm |       |
|-----|-------------------------------------|-----------------|-------|
| a   | Insulator depth                     | 3,4             | ±0,50 |
| b   | Contact diameter                    | 14,5            | ±0,50 |
| c   | Top, contact                        | 19,3            | ±0,50 |
| d   | Centre line of microswitch          | 55,9            | ±0,50 |
| e   | Overall height                      | 113,0           | ±1,50 |
| f   | Insulator inner diameter            | 47,6            | ±0,50 |
| g   | Insulator inner shed diameter       | 32,5            | ±0,50 |
| h   | Body inside diameter                | 114,0           | ±1,50 |
| i   | Flange diameter                     | 184,2           | ±1,50 |
| J   | Mounting hole pitch circle diameter | 155,6           | ±0,50 |
| k   | Mounting hole diameter              | 14,2            | ±0,50 |

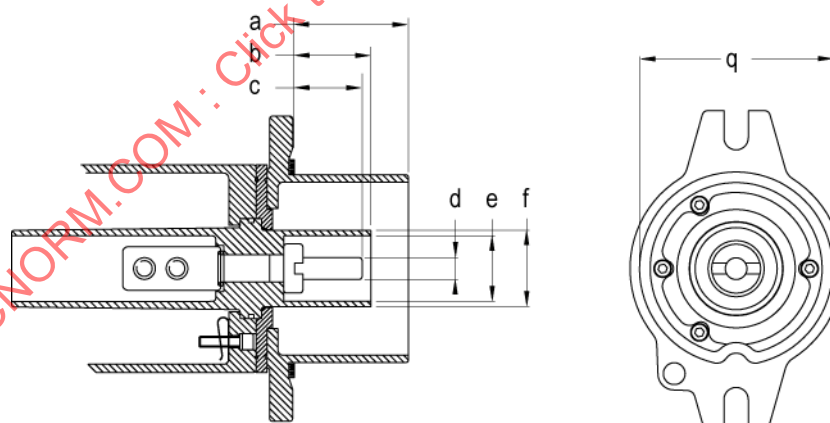
## H.2 Plug top



IEC

| Key | Description              | Dimension<br>mm |       |
|-----|--------------------------|-----------------|-------|
| a   | Front body height        | 67,1            | ±1,50 |
| b   | Insulator height         | 41,7            | ±0,50 |
| c   | Contact height           | 38,6            | ±0,50 |
| d   | Contact diameter         | 12,7            | ±0,06 |
| e   | Insulator inner diameter | 38,1            | ±1,50 |
| f   | Insulator outer diameter | 44,5            | ±0,50 |
| g   | Body diameter            | 110,4           | ±0,50 |

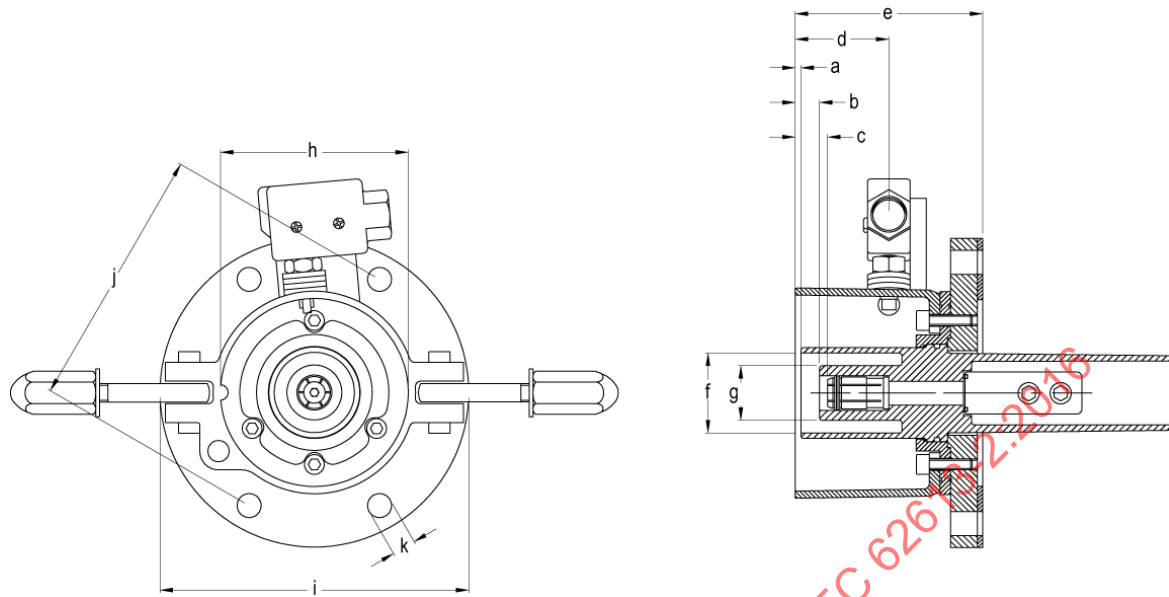
## H.3 Ship connector top



IEC

| Key | Description              | Dimension<br>mm |       |
|-----|--------------------------|-----------------|-------|
| a   | Front body height        | 14,7            | ±0,50 |
| b   | Insulator height         | 12,7            | ±0,06 |
| c   | Contact height           | 19,6            | ±0,50 |
| d   | Contact diameter         | 55,9            | ±0,50 |
| e   | Insulator inner diameter | 113,0           | ±1,50 |
| f   | Insulator outer diameter | 44,5            | ±0,50 |
| g   | Body inner diameter      | 38,1            | ±0,50 |

#### H.4 Ship inlet



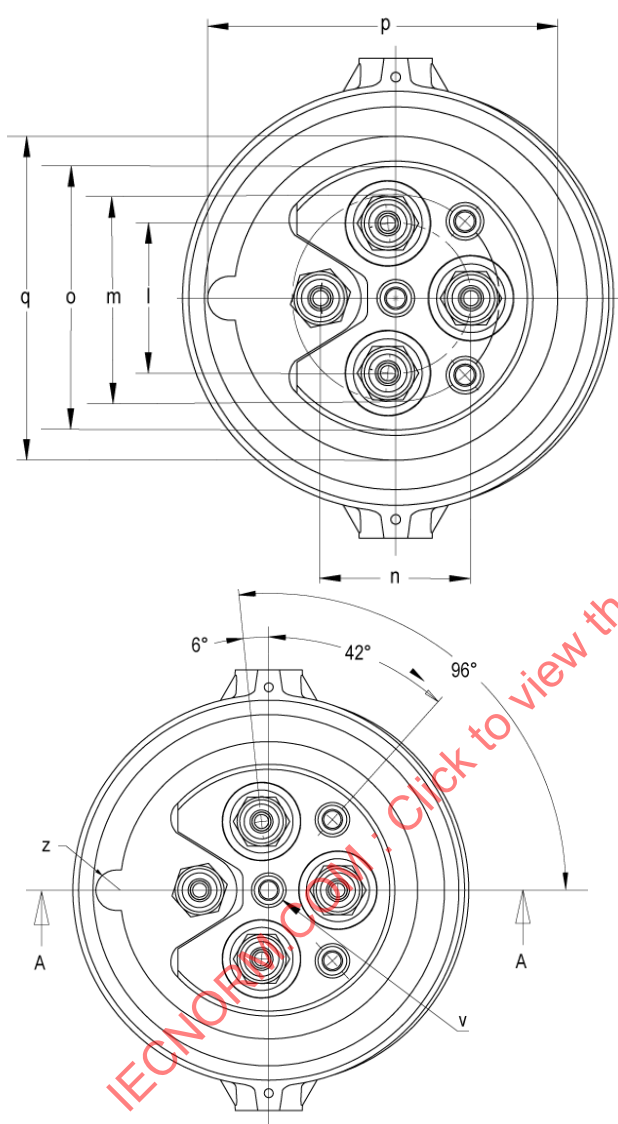
IEC

| Key | Description                         | Dimension<br>mm |       |
|-----|-------------------------------------|-----------------|-------|
| a   | Insulator depth                     | 14,7            | ±0,50 |
| b   | Contact diameter                    | 12,7            | ±0,06 |
| c   | Top contact                         | 19,6            | ±0,50 |
| d   | Centre line of microswitch          | 55,9            | ±0,50 |
| e   | Overall height                      | 113,0           | ±1,50 |
| f   | Insulator inner diameter            | 44,5            | ±0,50 |
| g   | Insulator outer diameter            | 38,1            | ±0,50 |
| h   | Body inside diameter                | 114,0           | ±1,50 |
| i   | Flange diameter                     | 184,2           | ±1,50 |
| j   | Mounting hole pitch circle diameter | 155,6           | ±0,50 |
| k   | Mounting hole diameter              | 14,2            | ±0,50 |

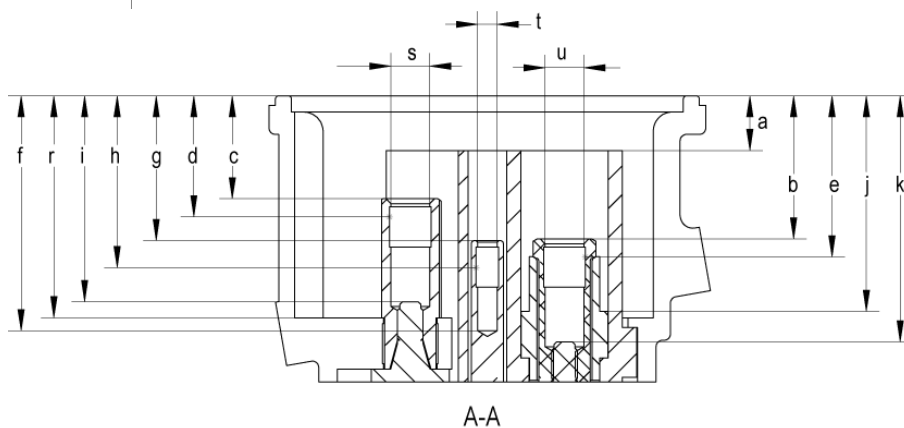
## Annex I (normative)

### Standard sheets I: 7,2 kV 350 A three-phase accessories with three IP0 pilot contacts

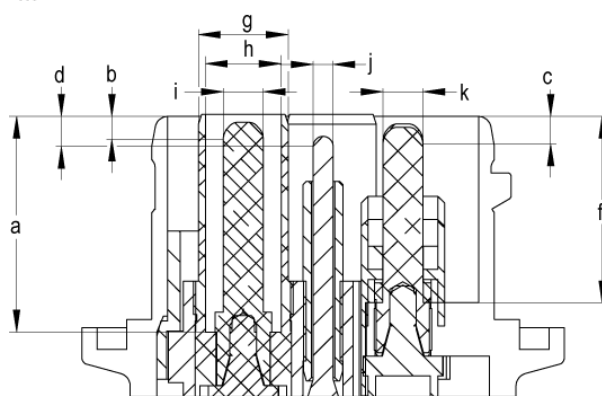
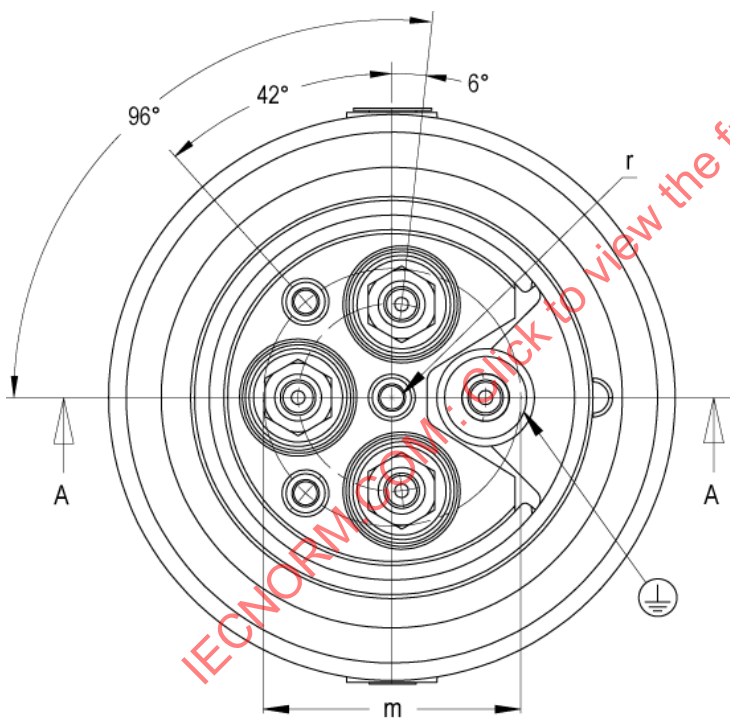
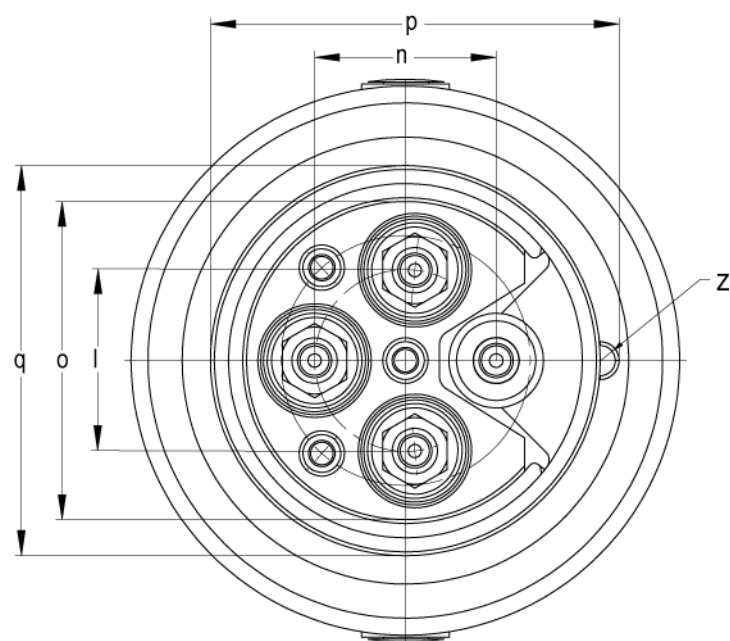
#### I.1 Socket-outlet



| Key | Description             | Dimension<br>mm                                          |
|-----|-------------------------|----------------------------------------------------------|
| a   | Top, insulator          | 17,0 ±0,25                                               |
| b   | Top, phase contact      | 44,0 ±0,25                                               |
| c   | Top, earth contact      | 32,0 ±0,25                                               |
| d   | Earth contact           | 37,6 ±0,25                                               |
| e   | Phase contact           | 50,1 ±0,25                                               |
| f   | Bottom, pilot contact   | 76,0 ±0,25                                               |
| g   | Top, pilot contact      | 48,0 ±0,25                                               |
| h   | Pilot contact           | 53,4 ±0,25                                               |
| i   | Bottom, earth contact   | 64,0 ±0,25                                               |
| j   | Bottom, insulator       | 66,0 ±0,25                                               |
| k   | Bottom, phase contact   | 76,5 ±0,25                                               |
| l   | Pitch, phase contacts   | 48,3 ±0,25                                               |
| m   | Pitch, pilot contacts   | 66,6 ±0,25                                               |
| n   | Pitch, earth contact    | 48,0 ±0,25                                               |
| o   | Insulator diameter      | 84,0 ±0,10                                               |
| p   | Socket + nose           | 111,6 ±0,25                                              |
| q   | Diameter                | 103,3 $\begin{smallmatrix} +0,20 \\ 0 \end{smallmatrix}$ |
| r   | Tongue depth            | 69,0 ±0,25                                               |
| s   | Diameter, earth contact | 12,0 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$  |
| t   | Diameter, pilot contact | 6,0 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$   |
| u   | Diameter, phase contact | 12,0 $\begin{smallmatrix} +0,10 \\ 0 \end{smallmatrix}$  |
| v   | Pitch, pilot contact    | 0,0 ±0,25                                                |
| z   | Nose radius             | 7,0 ±0,25                                                |



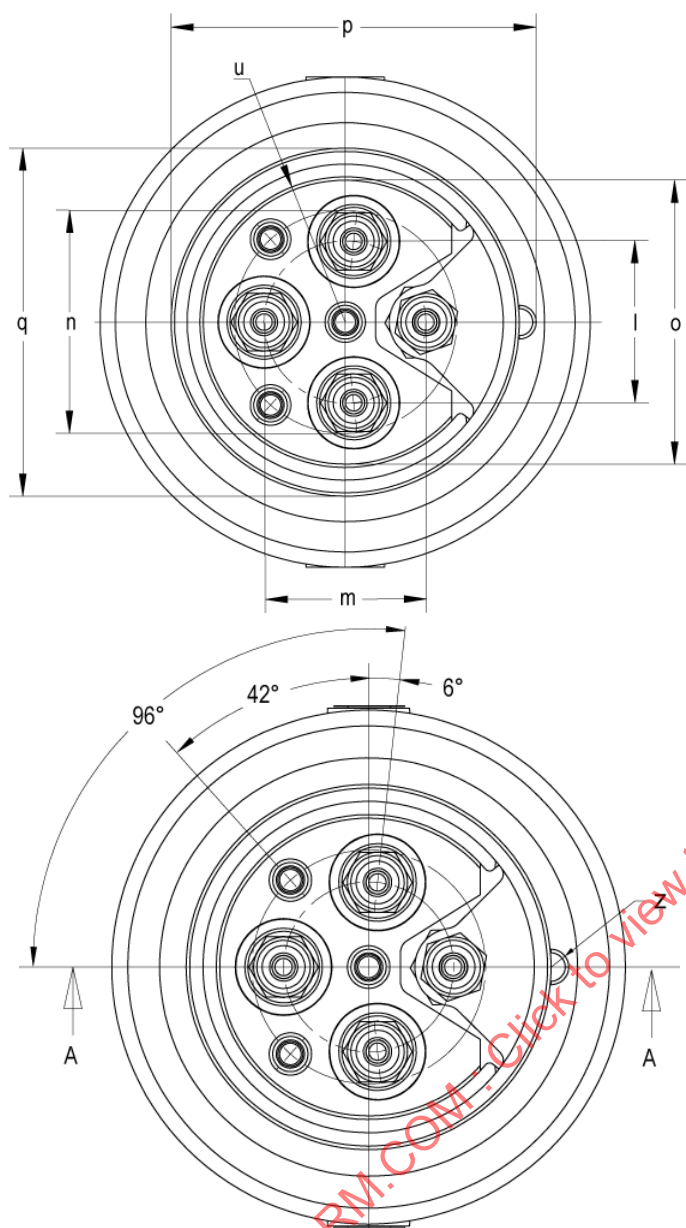
## I.2 Plug top



A-A

| Key | Description                | Dimension<br>mm                    |
|-----|----------------------------|------------------------------------|
| a   | Insulator depth            | 64,8 ±0,25                         |
| b   | Top, phase contact         | 6,9 ±0,25                          |
| c   | Top, earth contact         | 7,3 ±0,25                          |
| d   | Top, pilot contact         | 9,0 ±0,25                          |
| f   | Tongue depth               | 56,0 ±0,25                         |
| g   | Insulator outer diameter   | 27,0 ±0,25                         |
| h   | Insulator inner diameter   | 22,8 ±0,25                         |
| i   | Diameter, phase contacts   | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| j   | Diameter, pilot contacts   | 6,0 <sup>0</sup> <sub>-0,05</sub>  |
| k   | Diameter, earth contact    | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| l   | Pitch, phase contacts      | 48,3 ±0,25                         |
| m   | Pitch, pilot contacts      | 66,6 ±0,25                         |
| n   | Pitch, earth contact       | 48,0 ±0,25                         |
| o   | Insulator width            | 84,0 ±0,10                         |
| p   | Diameter + nose            | 108,9 ±0,25                        |
| q   | Diameter                   | 103,0 ±0,25                        |
| r   | Pitch, third pilot contact | 0,0 ±0,25                          |
| z   | Nose radius                | 5,0 ±0,25                          |

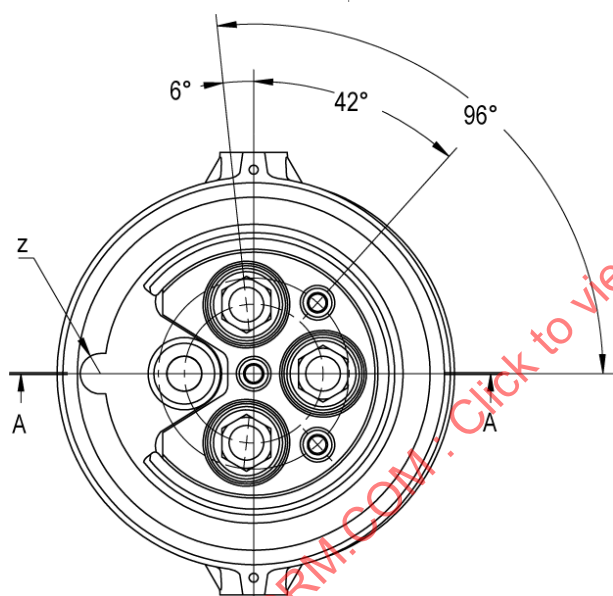
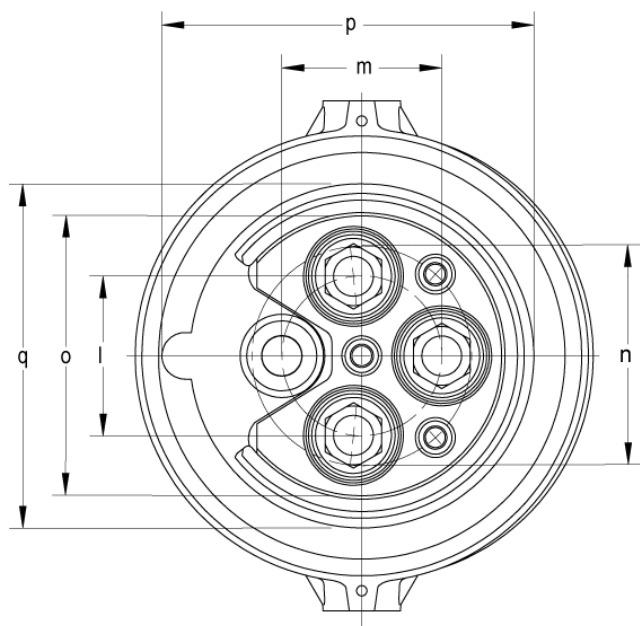
### I.3 Ship connector top



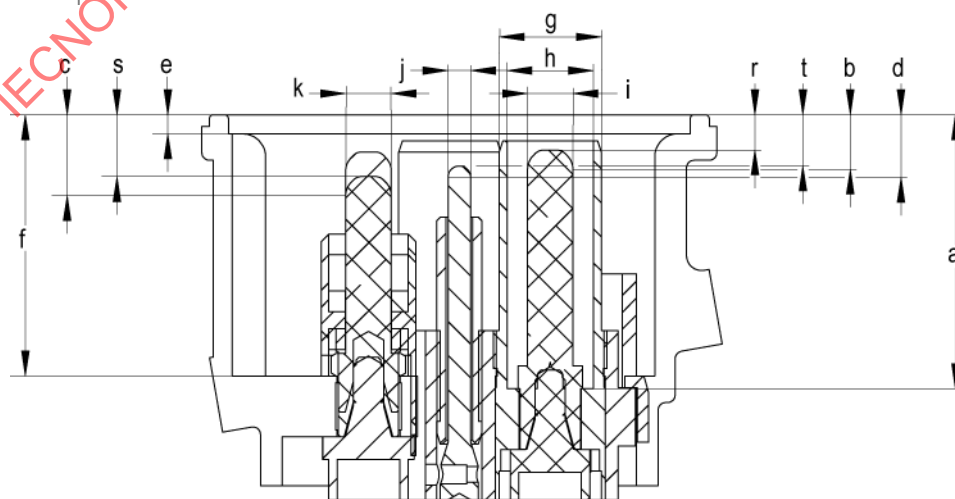
| Key | Description                  | Dimension<br>mm                     |
|-----|------------------------------|-------------------------------------|
| a   | Top, insulator               | 9,5 ±0,25                           |
| b   | Top, phase contact           | 36,5 ±0,25                          |
| c   | Top, earth contact           | 19,0 ±0,25                          |
| d   | Earth contact                | 27,7 ±0,25                          |
| e   | Phase contact                | 45,3 ±0,25                          |
| f   | Bottom, pilot contact        | 68,5 ±0,25                          |
| g   | Top, pilot contact           | 40,5 ±0,25                          |
| h   | Pilot contact                | 48,7 ±0,25                          |
| i   | Bottom, earth contact        | 51,0 ±0,25                          |
| j   | Bottom, insulator            | 58,5 ±0,25                          |
| k   | Bottom, phase contact        | 69,0 ±0,25                          |
| l   | Pitch, phase contacts        | 48,3 ±0,25                          |
| m   | Pitch, earth contact         | 48,0 ±0,25                          |
| n   | Pitch, pilot contacts        | 66,6 ±0,25                          |
| o   | Insulator width              | 84,0 ±0,10                          |
| p   | Diameter + nose              | 111,6 ±0,25                         |
| q   | Diameter                     | 103,0 <sup>0</sup> <sub>-0,20</sub> |
| r   | Phase contact inner diameter | 12,0 <sup>0</sup> <sub>+0,10</sub>  |
| s   | Earth contact inner diameter | 12,0 <sup>0</sup> <sub>+0,10</sub>  |
| t   | Pilot contact inner diameter | 6,0 <sup>0</sup> <sub>+0,10</sub>   |
| u   | Insulator inner diameter     | 43,0 ±0,25                          |
| z   | Nose radius                  | 5,0 ±0,25                           |

A-A

## I.4 Ship inlet



| Key | Description              | Dimension<br>mm                     |
|-----|--------------------------|-------------------------------------|
| a   | Insulator depth          | 72,3 ±0,25                          |
| b   | Top, phase contact       | 14,4 ±0,25                          |
| c   | Top, earth contact       | 21,3 ±0,25                          |
| d   | Top, pilot contact       | 16,5 ±0,25                          |
| e   | Top, insulator           | 5,0 ±0,25                           |
| f   | Tongue depth             | 69,0 ±0,25                          |
| g   | Insulator outer diameter | 27,0 ±0,25                          |
| h   | Insulator inner diameter | 22,8 ±0,25                          |
| i   | Diameter, phase contacts | 12,0 <sup>0</sup> <sub>-0,05</sub>  |
| j   | Diameter, pilot contacts | 6,0 <sup>0</sup> <sub>-0,05</sub>   |
| k   | Diameter, earth contact  | 12,0 <sup>0</sup> <sub>-0,05</sub>  |
| l   | Pitch, phase contacts    | 48,3 ±0,25                          |
| m   | Pitch, earth contact     | 48,0 ±0,25                          |
| n   | Pitch, pilot contacts    | 66,6 ±0,25                          |
| o   | Insulator width          | 84,0 ±0,10                          |
| p   | Inlet + nose             | 108,9 ±0,25                         |
| q   | Inlet width              | 103,3 <sup>+0,20</sup> <sub>0</sub> |
| r   | Top, phase contacts      | 9,3 ±0,25                           |
| s   | Top, earth contact       | 16,3 ±0,10                          |
| t   | Top, pilot contacts      | 13,5 ±0,25                          |
| z   | Nose radius              | 7,0 ±0,25                           |

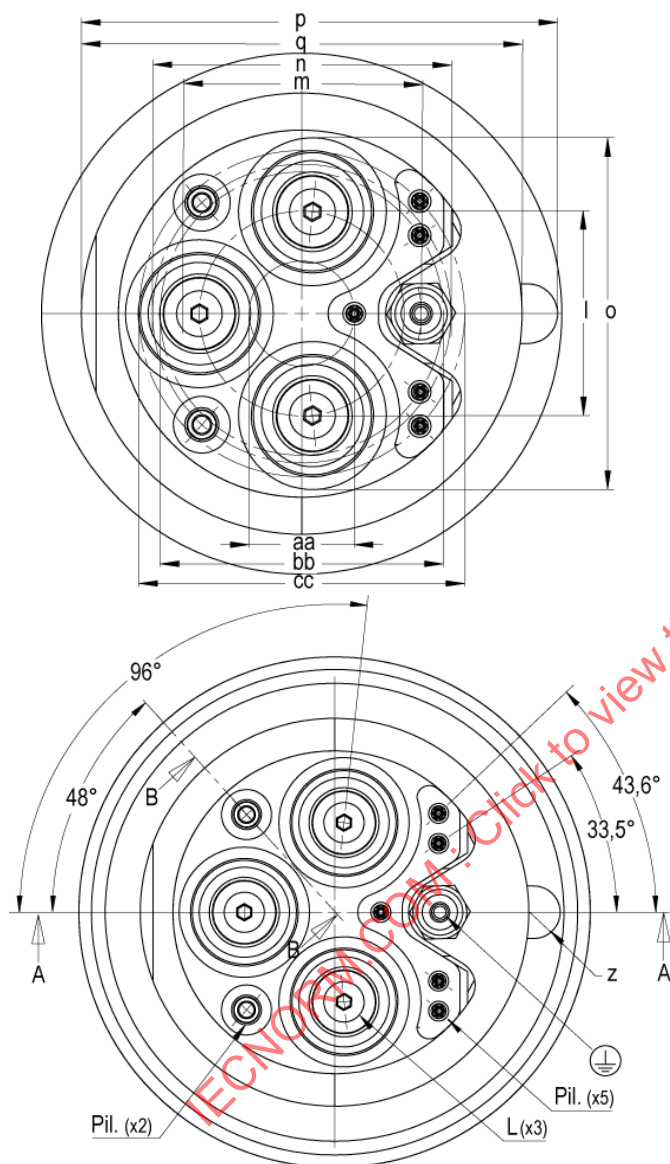


A-A

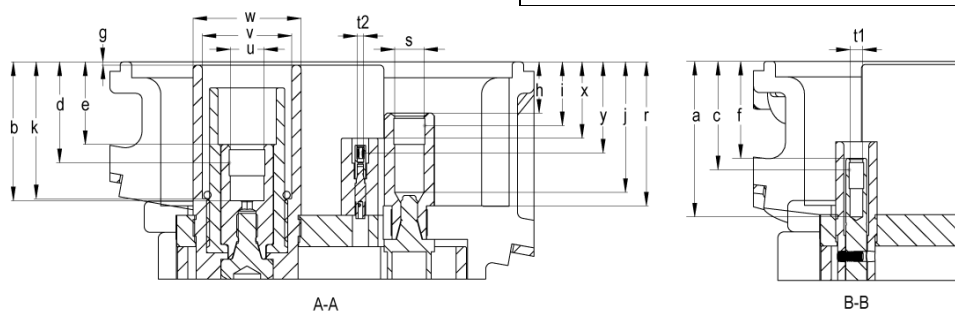
## Annex J (normative)

### Standard sheets J: 12 kV 500 A three-phase accessories with seven pilot contacts

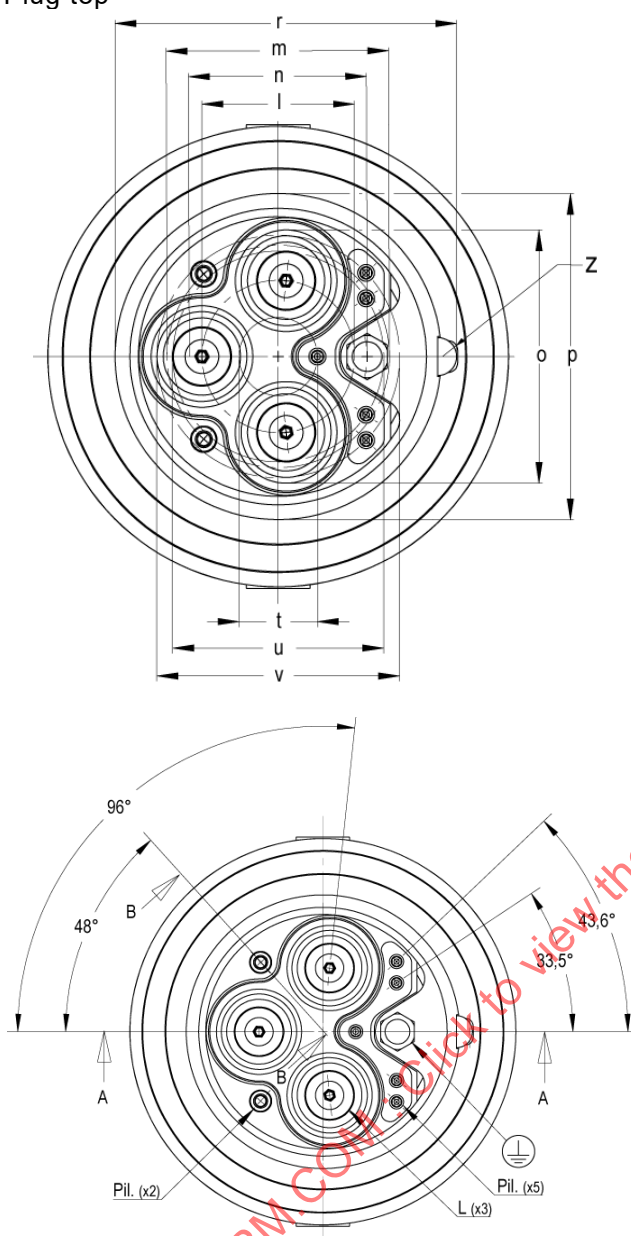
#### J.1 Socket-outlet



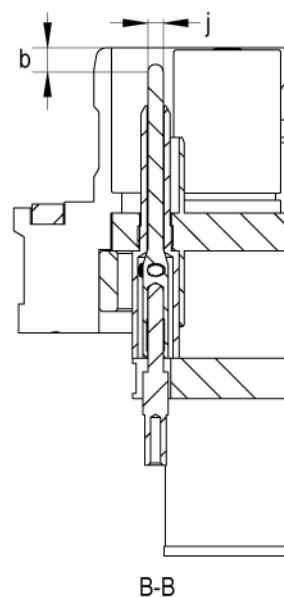
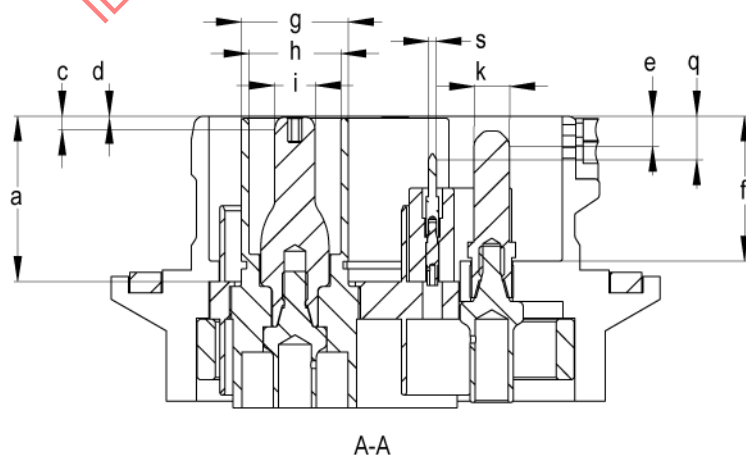
| Key  | Description                   | Dimension<br>mm   |
|------|-------------------------------|-------------------|
| a    | Bottom, pilot contact         | 74,5 $+0,10$<br>0 |
| b    | Bottom, phase contact         | 67,5 $+0,10$<br>0 |
| c    | Pilot contact                 | 52,0 $\pm 0,25$   |
| d    | Phase contact                 | 48,3 $\pm 0,25$   |
| e    | Top, phase contacts           | 39,5 $\pm 0,25$   |
| f    | Top, pilot contact            | 46,5 $\pm 0,25$   |
| g    | Top, insulator                | 2,0 $\pm 0,25$    |
| h    | Top, earth contact            | 24,5 $\pm 0,25$   |
| i    | Earth contact                 | 30,5 $\pm 0,25$   |
| j    | Bottom, earth contact         | 62,5 $\pm 0,25$   |
| k    | Bottom, insulator             | 66,5 $\pm 0,25$   |
| l    | Pitch, phase contacts         | 71,6 $\pm 0,25$   |
| m    | Pitch, earth contact          | 84,0 $\pm 0,25$   |
| n    | Pitch, pilot contacts         | 106,0 $\pm 0,25$  |
| o    | Insulator diameter            | 123,6 $\pm 0,10$  |
| p    | Socket-outlet diameter + nose | 167,5 $\pm 0,25$  |
| q    | Socket-outlet inner diameter  | 155,0 $\pm 0,25$  |
| r    | Tongue depth.                 | 69,0 $\pm 0,25$   |
| s    | Earth contact inner diameter  | 14,0 $+0,10$<br>0 |
| t1   | Pilot contact inner diameter  | 6,0 $+0,10$<br>0  |
| t2   | Pilot contact inner diameter  | 3,0 $+0,10$<br>0  |
| u    | Phase contact inner diameter  | 16,0 $+0,10$<br>0 |
| v    | Insulator inner diameter      | 43,0 $\pm 0,25$   |
| w    | Insulator outer diameter      | 52,0 $\pm 0,25$   |
| x    | Top, pilot contact            | 36,5 $\pm 0,25$   |
| y    | Pilot contact                 | 43,6 $\pm 0,25$   |
| z    | Nose radius                   | 10,5 $\pm 0,25$   |
| aa   | Pitch, pilot contact          | 37,0 $\pm 0,25$   |
| bb   | Pitch, pilot contacts         | 99,6 $\pm 0,25$   |
| cc   | Pitch, pilot contacts         | 114,6 $\pm 0,25$  |
| L    | Phase contacts                |                   |
| Pil. | Pilot contact                 |                   |



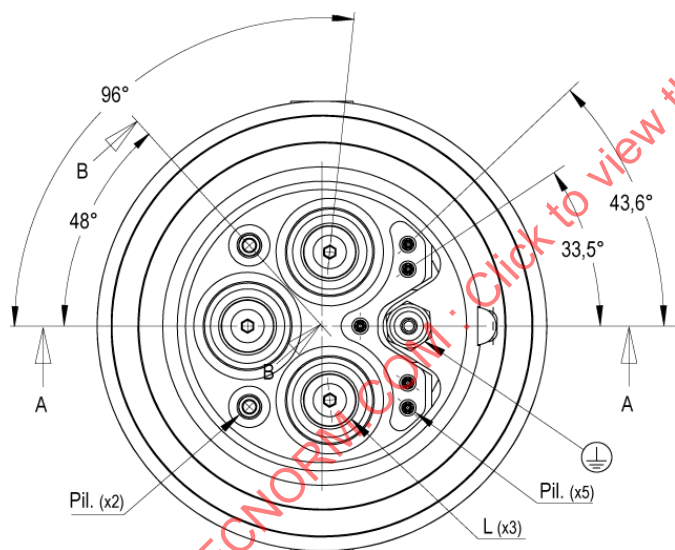
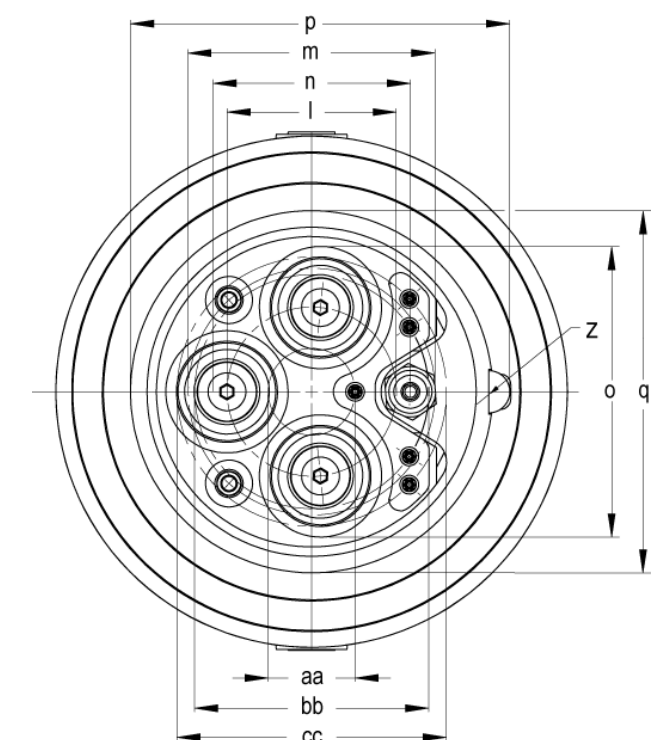
Plug top



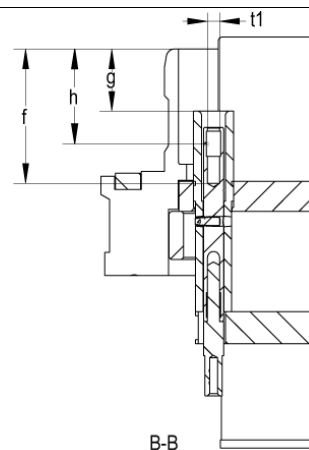
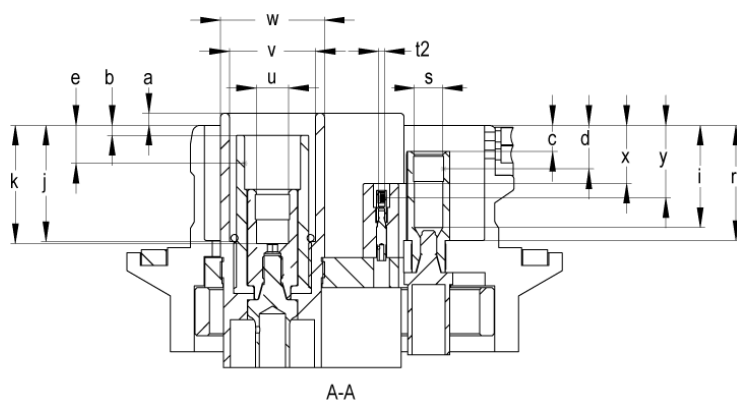
| Key  | Description                 | Dimension<br>mm    |
|------|-----------------------------|--------------------|
| a    | Insulator depth             | 65,5<br>0<br>-0,25 |
| b    | Pilot contact               | 9,5<br>0<br>-0,10  |
| c    | Phase contact               | 5,6<br>0<br>-0,10  |
| d    | Top, insulator              | 0,9<br>±0,25       |
| e    | Earth contact               | 11,0<br>0<br>-0,10 |
| f    | Tongue depth                | 57,5<br>±0,25      |
| g    | Insulator outer diameter    | 42,5<br>+0,10<br>0 |
| h    | Insulator inner diameter    | 36,5<br>±0,10      |
| i    | Diameter, phase contacts    | 16,0<br>0<br>-0,10 |
| j    | Diameter, pilot contacts    | 6,0<br>0<br>-0,10  |
| k    | Diameter, earth contact     | 14,0<br>0<br>-0,10 |
| l    | Pitch, phase contacts       | 71,6<br>±0,25      |
| m    | Pitch, outer pilot contacts | 106,0<br>±0,25     |
| n    | Pitch, earth contact        | 84,0<br>±0,25      |
| o    | Insulator diameter          | 119,6<br>±0,10     |
| p    | Plug outer diameter         | 154,5<br>±0,10     |
| q    | Pilot contact               | 17,3<br>±0,25      |
| r    | Plug outer diameter + nose  | 162,0<br>±0,25     |
| s    | Diameter, pilot contacts    | 3,0<br>0<br>-0,10  |
| t    | Pitch, pilot contact        | 37,0<br>±0,25      |
| u    | Pitch, pilot contacts       | 99,6<br>±0,25      |
| v    | Pitch, pilot contacts       | 114,6<br>±0,25     |
| z    | Nose radius                 | 7,5<br>±0,25       |
| L    | Phase contacts              |                    |
| Pil. | Pilot contacts              |                    |



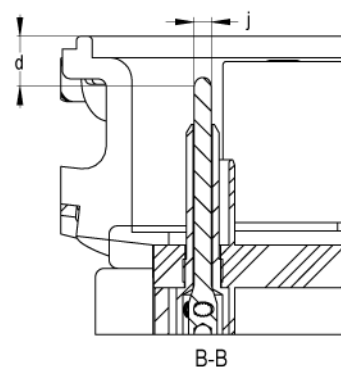
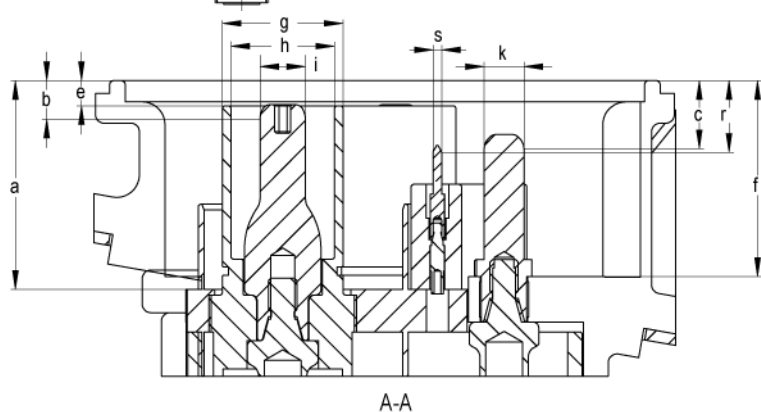
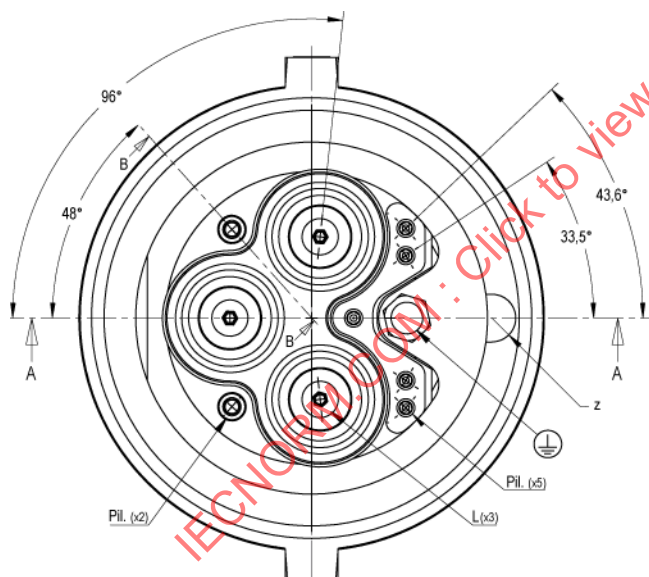
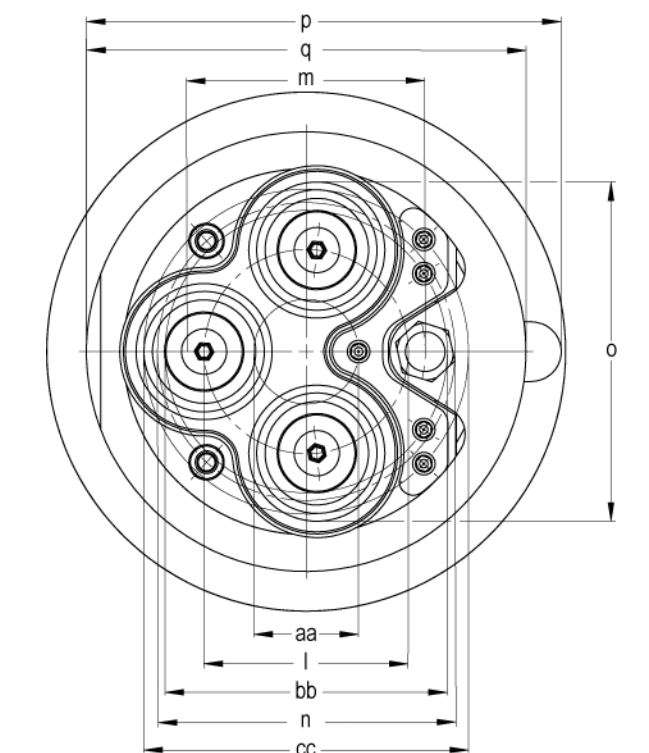
## J.2 Ship connector top



| Key  | Description                       | Dimension<br>mm                    |
|------|-----------------------------------|------------------------------------|
| a    | Top, insulator                    | 6,0 ±0,25                          |
| b    | Top, phase contacts               | 5,0 ±0,25                          |
| c    | Top, earth contact                | 13,0 ±0,25                         |
| d    | Earth contact                     | 21,8 ±0,25                         |
| e    | Phase contact                     | 19,0 ±0,25                         |
| f    | Bottom, pilot contacts            | 67,0 ±0,25                         |
| g    | Top, pilot contact                | 31,0 ±0,25                         |
| h    | Pilot contact                     | 47,0 ±0,25                         |
| i    | Bottom, earth contact             | 51,0 ±0,25                         |
| j    | Bottom, insulator                 | 58,0 ±0,25                         |
| k    | Bottom, phase contact             | 59,0 ±0,25                         |
| l    | Pitch, phase contacts             | 71,6 ±0,25                         |
| m    | Pitch, pilot contacts             | 106,0 ±0,25                        |
| n    | Pitch, earth contact              | 84,0 ±0,25                         |
| o    | Insulator width                   | 123,6 ±0,10                        |
| p    | Connector inner diameter+<br>nose | 161,2 ±0,25                        |
| q    | Connector inner diameter          | 154,0 ±0,25                        |
| r    | Tongue depth                      | 57,7 ±0,25                         |
| s    | Inner diameter, earth contact     | 14,0 <sup>+0,10</sup> <sub>0</sub> |
| t1   | Inner diameter, pilot contact     | 6,0 <sup>+0,10</sup> <sub>0</sub>  |
| t2   | Diameter, add. pilot contact      | 3,0 <sup>+0,10</sup> <sub>0</sub>  |
| u    | Phase inner diameter              | 16,0 <sup>+0,10</sup> <sub>0</sub> |
| v    | Inner diameter, insulator         | 43,0 ±0,25                         |
| w    | Outer diameter, insulator         | 52,0 ±0,25                         |
| x    | Top, pilot contact                | 29,0 ±0,25                         |
| y    | Pilot contact                     | 36,1 ±0,25                         |
| z    | Nose radius                       | 7,5 ±0,25                          |
| aa   | Pitch, pilot contact              | 37,0 ±0,25                         |
| bb   | Pitch, pilot contacts             | 99,6 ±0,25                         |
| cc   | Pitch, pilot contacts             | 114,6 ±0,25                        |
| L    | Phase contacts                    |                                    |
| Pil. | Pilot contacts                    |                                    |



### J.3 Ship inlet



| Key  | Description                  | Dimension<br>mm                    |
|------|------------------------------|------------------------------------|
| a    | Insulator depth              | 73,5 ±0,25                         |
| b    | Top, phase contact           | 13,6 ±0,25                         |
| c    | Top, earth contact           | 24,0 ±0,25                         |
| d    | Top, pilot contact           | 17,5 ±0,25                         |
| e    | Top, insulator               | 8,9 ±0,25                          |
| f    | Tongue depth                 | 69,0 ±0,25                         |
| g    | Insulator outer diameter     | 42,5 ±0,25                         |
| h    | Insulator inner diameter     | 36,5 ±0,25                         |
| i    | Diameter, phase contact      | 16,0 <sup>0</sup> <sub>-0,10</sub> |
| j    | Diameter, pilot contact      | 6,0 <sup>0</sup> <sub>-0,10</sub>  |
| k    | Diameter, earth contact      | 14,0 <sup>0</sup> <sub>-0,10</sub> |
| l    | Pitch, phase contacts        | 71,6 ±0,25                         |
| m    | Pitch, earth contact         | 84,0 ±0,25                         |
| n    | Pitch, pilot contacts        | 106,0 ±0,25                        |
| o    | Insulator diameter           | 119,6 ±0,10                        |
| p    | Inlet inner diameter + nose  | 167,5 ±0,25                        |
| q    | Inlet inner diameter         | 155,0 ±0,25                        |
| r    | Additional pilot contact     | 25,3 ±0,25                         |
| s    | Diameter, add. pilot contact | 3,0 <sup>0</sup> <sub>-0,10</sub>  |
| aa   | Pitch, pilot contact         | 37,0 ±0,25                         |
| bb   | Pitch, pilot contacts        | 99,6 ±0,25                         |
| cc   | Pitch, pilot contacts        | 114,6 ±0,25                        |
| z    | Nose radius                  | 10,5 ±0,25                         |
| L    | Phase contacts               |                                    |
| Pil. | Pilot contacts               |                                    |

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## COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

### **PRISES DE COURANT ET CONNECTEURS DE NAVIRES POUR LES SYSTÈMES HAUTE TENSION DE RACCORDEMENT DES NAVIRES À QUAI –**

#### **Partie 2: Règles dimensionnelles de compatibilité et d'interchangeabilité pour les appareils destinés à être utilisés par divers types de navires**

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Cette deuxième édition annule et remplace la première édition publiée en 2011. Cette édition constitue une révision technique.

Cette édition comprend les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) ajout de la configuration I: 7,2 kV 350 A appareils triphasés avec trois contacts pilotes IP0;
- b) ajout de la configuration J: 12 kV 500 A appareils triphasés avec sept contacts pilotes;
- c) amélioration des dessins dans les feuilles de norme et ajout de dimensions manquantes.

Le texte de cette norme est issu des documents suivants:

| CDV         | Rapport de vote |
|-------------|-----------------|
| 23H/352/CDV | 23H/362/RVC     |

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette norme.

Ce document a été rédigée selon les Directives ISO/IEC, Partie 2.

La présente partie de l'IEC 62613 doit être lue conjointement avec l'IEC 62613-1:2011.

Les articles de ces règles particulières représentent des compléments ou modifications aux articles correspondants de la Partie 1. Si le texte des parties suivantes indique un «ajout» ou un «remplacement» des règles, essais ou commentaires de la Partie 1, ces changements sont introduits dans les passages pertinents de la Partie 1, et ils deviennent alors des parties de la norme. Lorsqu'aucune modification n'est nécessaire, les mots «L'article X de l'IEC 62613-1:2011 est applicable» sont utilisés. Les feuilles de norme figurent en annexes A, B, etc.

Une liste de toutes les parties de la série IEC 62613, publiées sous le titre général *Prises de courant et connecteurs de navires pour les systèmes haute tension de raccordement des navires à quai*, peut être consultée sur le site web de l'IEC.

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- reconduite,
- supprimée,
- remplacée par une édition révisée, ou
- amendée.

## INTRODUCTION

La série de Normes internationales IEC 62613 a été élaborée afin de répondre aux besoins en termes de prises de courant (socles et fiches) et de connecteurs de navires (socles de connecteurs et prises mobiles) désignés dans la suite du texte sous le nom d' «appareils», de l'IEC/ISO/IEEE 80005-1:2012. L'objet de l'IEC/ISO/IEEE 80005-1 est de définir les exigences permettant aux navires qui s'y conforment de se raccorder à des alimentations de quai conformes, au moyen d'appareils de connexion normalisés.

Les navires n'ayant pas besoin de se raccorder à des alimentations haute tension de quai comme indiquées ci-dessus peuvent utiliser des appareils qui ne sont pas couverts par les feuilles de norme de la IEC 62613-2 mais il leur sera alors impossible de se raccorder à ces alimentations de quai.

D'autres prises de courant et connecteurs de navire basse tension utilisés pour la connexion de certains types de navires à des alimentations de quai basse tension peuvent être trouvés dans la série IEC 60309.

La série IEC 62613 comporte les parties suivantes:

- *Partie 1: Règles générales*, qui comprend les articles à caractère général;
- *Partie 2: Règles dimensionnelles de compatibilité et d'interchangeabilité pour les appareils destinés à être utilisés par divers types de navires.*

Ces navires sont décrits dans l'IEC/ISO/IEEE 80005-1.

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# **PRISES DE COURANT ET CONNECTEURS DE NAVIRES POUR LES SYSTÈMES HAUTE TENSION DE RACCORDEMENT DES NAVIRES À QUAI –**

## **Partie 2: Règles dimensionnelles de compatibilité et d'interchangeabilité pour les appareils destinés à être utilisés par divers types de navires**

### **1 Domaine d'application**

Cette partie de l' IEC 62613 contient les feuilles de norme de différentes configurations de socles de prise (de quai), fiches (de quai), prises mobiles de navire et socles de connecteur de navire, ci-après désignés appareils, jusqu'à 12 kV, 500 A, 50/60 Hz et avec jusqu'à sept contacts pilotes ou auxiliaires.

Les règles générales sont données dans l'IEC 62613-1.

### **2 Références normatives**

L'Article 2 de l'IEC 62613-1:2011 est applicable avec l'exception suivante:

*Ajout:*

IEC 62613-1:2011, *Prises de courant et connecteurs de navire pour les systèmes haute tension de raccordement des navires à quai – Partie 1: Règles générales*

### **3 Termes et définitions**

L'Article 3 de l'IEC 62613-1:2011 est applicable.

### **4 Généralités**

L'Article 4 de l'IEC 62613-1:2011 est applicable.

### **5 Caractéristiques normalisées**

L'Article 5 de l'IEC 62613-1:2011 est applicable.

### **6 Classification**

L'Article 6 de l'IEC 62613-1:2011 est applicable.

### **7 Marques et indications**

L'Article 7 de l'IEC 62613-1:2011 est applicable.

### **8 Dimensions**

L'Article 8 de l'IEC 62613-1:2011 est applicable avec l'exception suivante:

### **8.1 Remplacement:**

Les appareils doivent être conformes aux feuilles de norme appropriées figurant aux Annexes A à J.

## **9 Protection contre les chocs électriques**

L'Article 9 de l'IEC 62613-1:2011 est applicable.

## **10 Dispositions en vue de la mise à la Terre**

L'Article 10 de l'IEC 62613-1:2011 est applicable.

## **11 Bornes et raccordements**

L'Article 11 de l'IEC 62613-1:2011 est applicable.

## **12 Dispositifs de verrouillage**

L'Article 12 de l'IEC 62613-1:2011 est applicable.

## **13 Résistance au vieillissement du caoutchouc et des matières thermoplastiques**

L'article 13 de l'IEC 62613-1:2011 est applicable.

## **14 Construction générale**

L'Article 14 de l'IEC 62613-1:2011 est applicable.

## **15 Construction des socles de prise de courant et des socles de connecteur de navire**

L'Article 15 de l'IEC 62613-1:2011 est applicable.

## **16 Construction des prises mobiles de navire**

L'Article 16 de l'IEC 62613-1:2011 est applicable.

## **17 Construction des fiches**

L'Article 17 de l'IEC 62613-1:2011 est applicable.

## **18 Degrés de protection**

L'Article 18 de l'IEC 62613-1:2011 est applicable.

**19 Résistance d'isolement, rigidité diélectrique et test de décharge partielle**

L'Article 19 de l'IEC 62613-1:2011 est applicable.

**20 Fonctionnement normal**

L'Article 20 de l'IEC 62613-1:2011 est applicable.

**21 Échauffement**

L'Article 21 de l'IEC 62613-1:2011 est applicable.

**22 Câbles souples et leur raccordement**

L'article 22 de l'IEC 62613-1:2011 est applicable.

**23 Résistance mécanique**

L'Article 23 de l'IEC 62613-1:2011 est applicable.

**24 Vis, parties transportant le courant et connexions**

L'Article 24 de l'IEC 62613-1:2011 est applicable.

**25 Résistance à la chaleur, au feu et aux courants de cheminement**

L'Article 25 de l'IEC 62613-1:2011 est applicable.

**26 Corrosion et résistance à la rouille**

L'Article 26 de l'IEC 62613-1:2011 est applicable.

**27 Essai de tenue au courant de court-circuit potentiel**

L'Article 27 de l'IEC 62613-1:2011 est applicable.

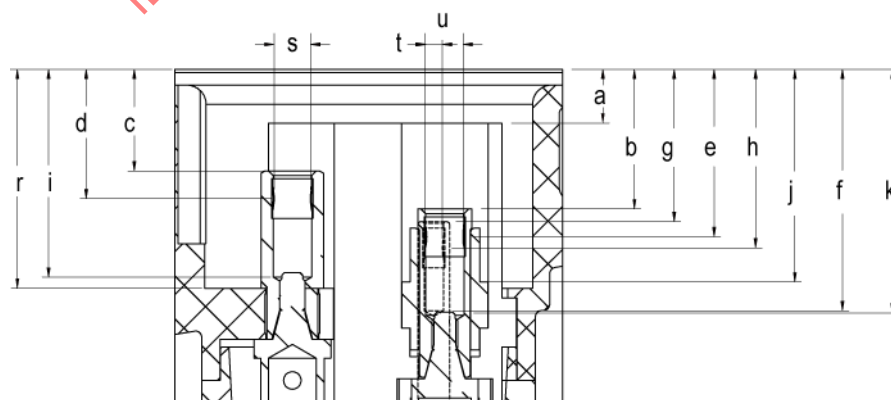
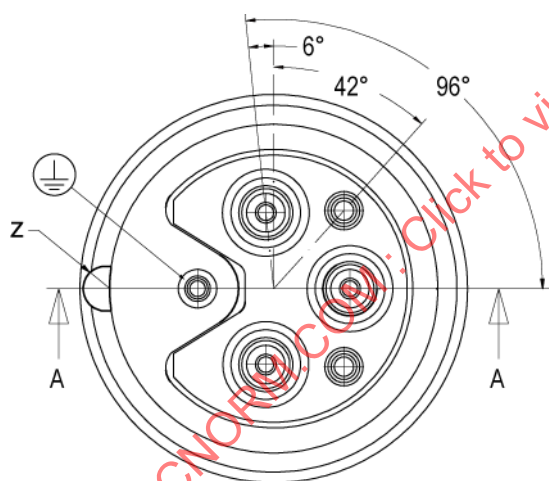
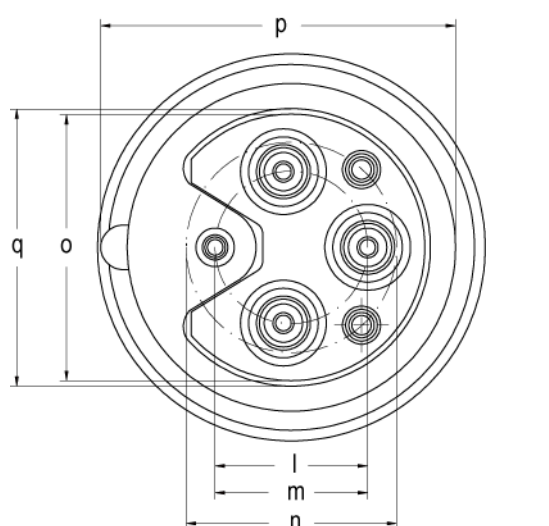
**28 Compatibilité électromagnétique**

L'Article 28 de l'IEC 62613-1:2011 est applicable.

## Annexe A (normative)

### Feuilles de norme A: Appareils 7,2 kV 350 A triphasés avec deux contacts pilotes IP0

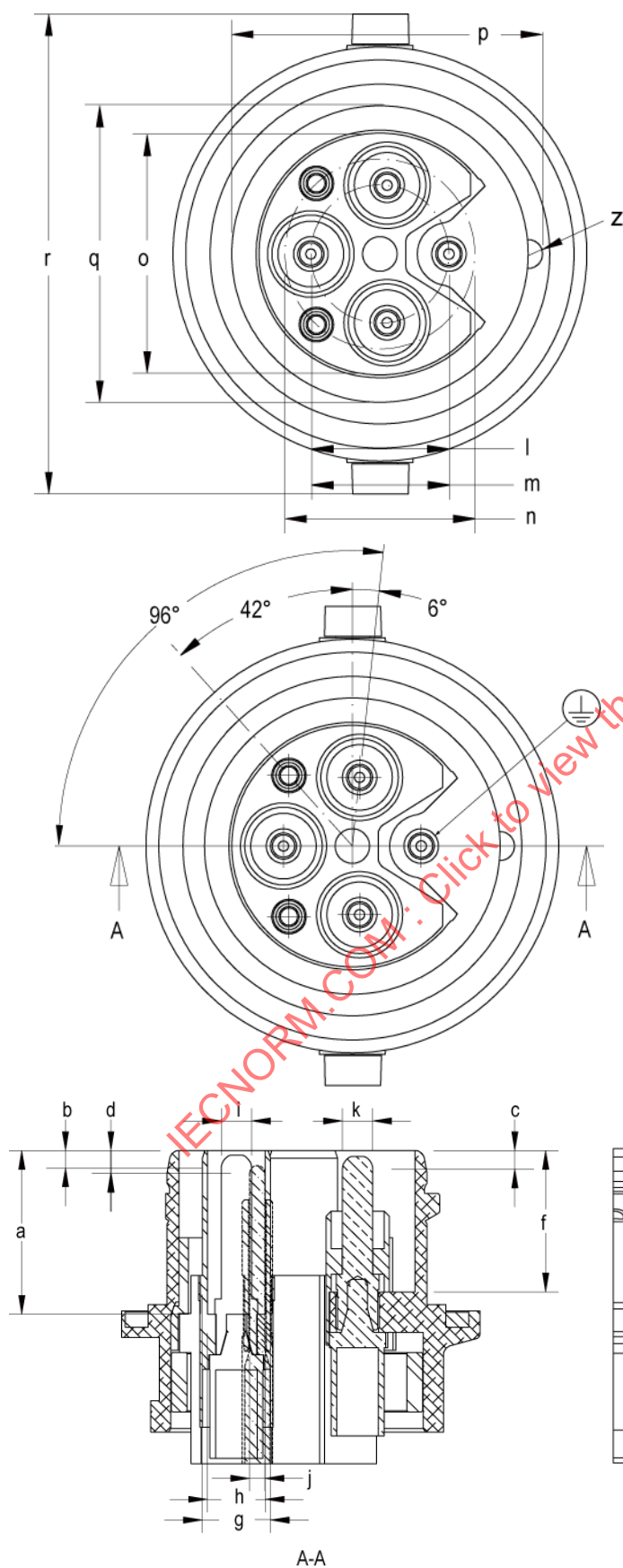
#### A.1 Socle de prise



A-A

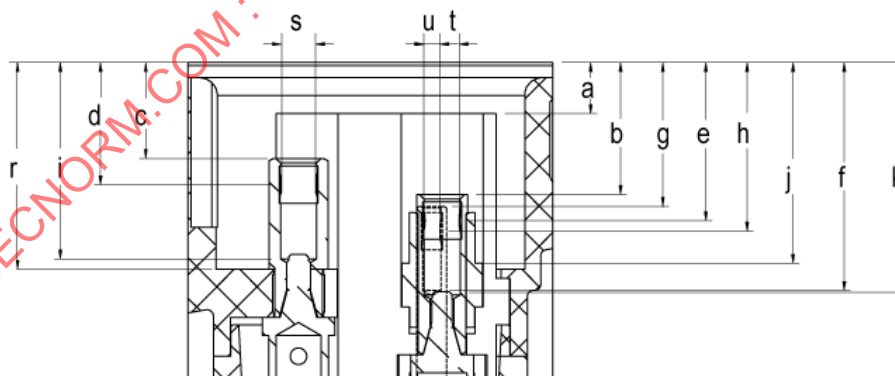
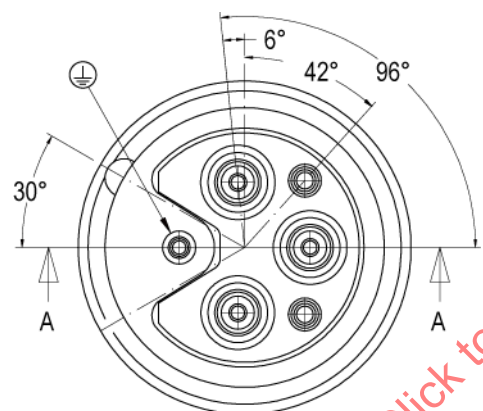
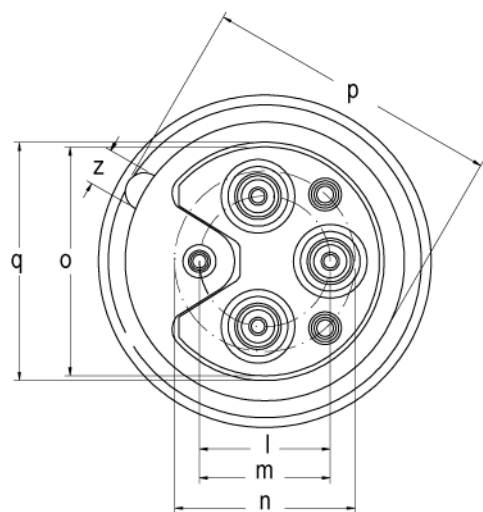
| Repère | Description                | Dimension<br>mm |
|--------|----------------------------|-----------------|
| a      | Sommet isolant             | 17,0 ±0,25      |
| b      | Sommet contacts phase      | 44,0 ±0,25      |
| c      | Sommet contact terre       | 32,0 ±0,25      |
| d      | Contact terre              | 37,6 ±0,25      |
| e      | Contact phase              | 50,1 ±0,25      |
| f      | Base contact pilote        | 76,0 ±0,25      |
| g      | Sommet contacts pilotes    | 48,0 ±0,25      |
| h      | Contact pilote             | 53,4 ±0,25      |
| i      | Base contact de terre      | 64,0 ±0,25      |
| j      | Base isolant               | 66,0 ±0,25      |
| k      | Base contacts phase        | 76,5 ±0,25      |
| l      | Pas des contacts phase     | 48,3 ±0,25      |
| m      | Pas du contact de terre    | 48,0 ±0,25      |
| n      | Pas des contacts pilotes   | 66,6 ±0,25      |
| o      | Diamètre isolant           | 84,0 ±0,10      |
| p      | Diamètre + ergot           | 111,6 ±0,25     |
| q      | Diamètre                   | 87,5 ±0,25      |
| r      | Profondeur enveloppe       | 69,0 ±0,25      |
| s      | Diamètre contact de terre  | 12,0 +0,10<br>0 |
| t      | Diamètre contacts pilotes  | 6,0 +0,10<br>0  |
| u      | Diamètre contacts de phase | 12,0 +0,10<br>0 |
| z      | Rayon de l'ergot           | 7,0 ±0,25       |

## A.2 Nez de fiche



| Repère | Description                | Dimension<br>mm |                                                    |
|--------|----------------------------|-----------------|----------------------------------------------------|
| a      | Profondeur isolant         | 64,8            | $\pm 0,25$                                         |
| b      | Sommet contact phase       | 6,9             | $\pm 0,25$                                         |
| c      | Sommet contact terre       | 7,3             | $\pm 0,25$                                         |
| d      | Sommet contact pilote      | 9,0             | $\pm 0,25$                                         |
| f      | Profondeur enveloppe       | 56,0            | $\pm 0,25$                                         |
| g      | Diamètre extérieur isolant | 27,0            | $\pm 0,25$                                         |
| h      | Diamètre Intérieur isolant | 22,8            | $\pm 0,25$                                         |
| i      | Diamètre contacts de phase | 12,0            | $\begin{smallmatrix} 0 \\ -0,05 \end{smallmatrix}$ |
| j      | Diamètre contacts pilotes  | 6,0             | $\begin{smallmatrix} 0 \\ -0,05 \end{smallmatrix}$ |
| k      | Diamètre contact de terre  | 12,0            | $\begin{smallmatrix} 0 \\ -0,05 \end{smallmatrix}$ |
| l      | Pas des contacts phase     | 48,3            | $\pm 0,25$                                         |
| m      | Pas du contact de terre    | 48,0            | $\pm 0,25$                                         |
| n      | Pas des contacts pilotes   | 66,6            | $\pm 0,25$                                         |
| o      | Diamètre isolant           | 84,0            | $\pm 0,10$                                         |
| p      | Diamètre + ergot           | 108,9           | $\pm 0,25$                                         |
| q      | Diamètre                   | 103,0           | $\pm 0,25$                                         |
| r      | Empattement galets         | 168,0           | $\pm 0,25$                                         |
| s      | Diamètre galets            | 20,0            | $\pm 0,10$                                         |
| t      | Hauteur galets             | 90,0            | $\pm 0,25$                                         |
| z      | Rayon de l'ergot           | 5,0             | $\pm 0,25$                                         |

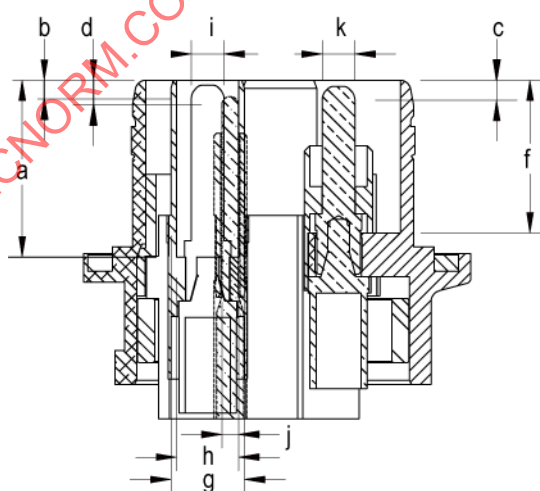
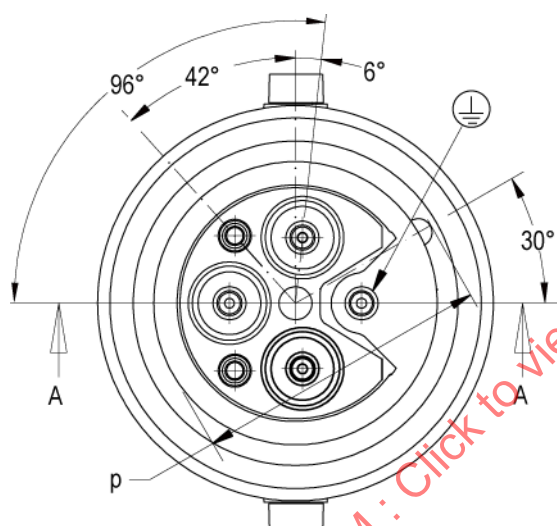
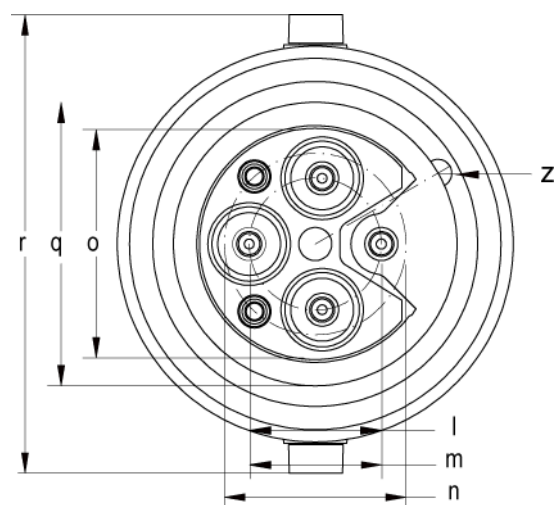
### A.3 Nez de prise mobile de navire



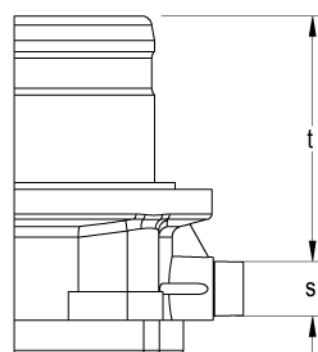
A-A

| Repère | Description                | Dimension<br>mm |
|--------|----------------------------|-----------------|
| a      | Sommet isolant             | 17,0 ±0,25      |
| b      | Sommet contacts phase      | 44,0 ±0,25      |
| c      | Sommet contact terre       | 32,0 ±0,25      |
| d      | Contact terre              | 37,6 ±0,25      |
| e      | Contact phase              | 50,1 ±0,25      |
| f      | Base contact pilote        | 76,0 ±0,25      |
| g      | Sommet contacts pilotes    | 48,0 ±0,25      |
| h      | Contact pilote             | 53,4 ±0,25      |
| i      | Base contact de terre      | 64,0 ±0,25      |
| j      | Base isolant               | 66,0 ±0,25      |
| k      | Base contacts phase        | 76,5 ±0,25      |
| l      | Pas des contacts phase     | 48,3 ±0,25      |
| m      | Pas du contact de terre    | 48,0 ±0,25      |
| n      | Pas des contacts pilotes   | 66,6 ±0,25      |
| o      | Diamètre isolant           | 84,0 ±0,10      |
| p      | Diamètre + ergot           | 111,6 ±0,25     |
| q      | Diamètre                   | 87,5 ±0,25      |
| r      | Profondeur enveloppe       | 69,0 ±0,25      |
| s      | Diamètre contact de terre  | 12,0 +0,10<br>0 |
| t      | Diamètre contacts pilotes  | 6,0 +0,10<br>0  |
| u      | Diamètre contacts de phase | 12,0 +0,10<br>0 |
| z      | Diamètre ergot             | 14,0 ±0,25      |

#### A.4 Socle de connecteur de navire



A-A

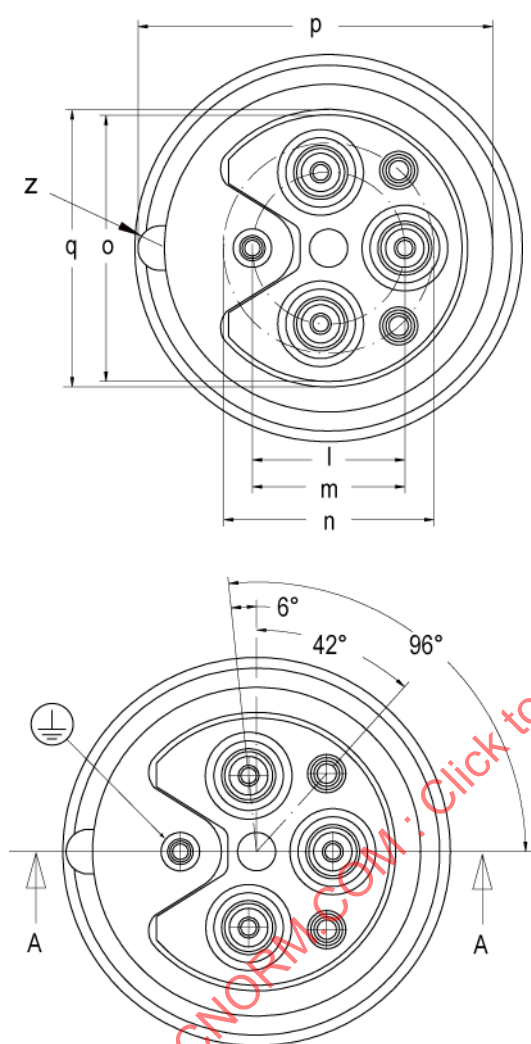


| Repère | Description                | Dimension<br>mm |            |
|--------|----------------------------|-----------------|------------|
| a      | Profondeur isolant         | 64,8            | ±0,25      |
| b      | Sommet contacts phase      | 6,9             | ±0,25      |
| c      | Sommet contact terre       | 7,3             | ±0,25      |
| d      | Sommet contacts pilotes    | 9,0             | ±0,25      |
| f      | Profondeur enveloppe       | 56,0            | ±0,25      |
| g      | Diamètre extérieur isolant | 27,0            | ±0,25      |
| h      | Diamètre intérieur isolant | 22,8            | ±0,25      |
| i      | Diamètre contacts de phase | 12,0            | 0<br>-0,05 |
| j      | Diamètre contacts pilotes  | 6,0             | 0<br>-0,05 |
| k      | Diamètre contact de terre  | 12,0            | 0<br>-0,05 |
| l      | Pas des contacts phase     | 48,3            | ±0,25      |
| m      | Pas du contact de terre    | 48,0            | ±0,25      |
| n      | Pas des contacts pilotes   | 66,6            | ±0,25      |
| o      | Diamètre isolant           | 84,0            | ±0,10      |
| p      | Diamètre + ergot           | 108,9           | ±0,25      |
| q      | Diamètre                   | 103,0           | ±0,25      |
| r      | Empattement galets         | 168,0           | ±0,25      |
| s      | Diamètre galets            | 20,0            | ±0,10      |
| t      | Hauteur galets             | 90,0            | ±0,25      |
| z      | Rayon de l'ergot           | 5,0             | ±0,25      |

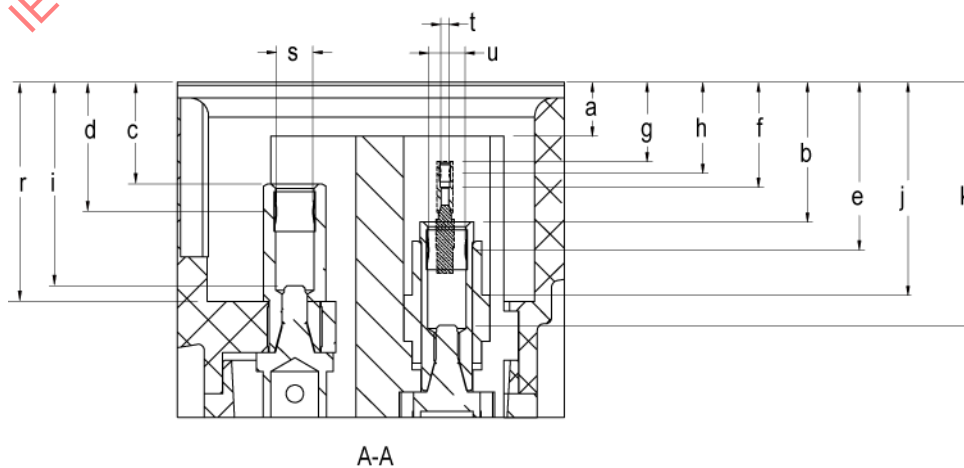
## Annexe B (normative)

### Feuilles de norme B: Appareils 7,2 kV 350 A triphasés avec deux contacts pilotes IP2X

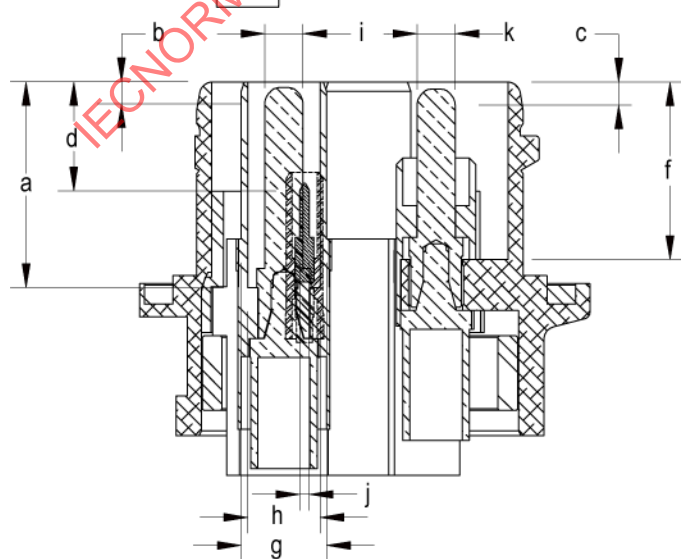
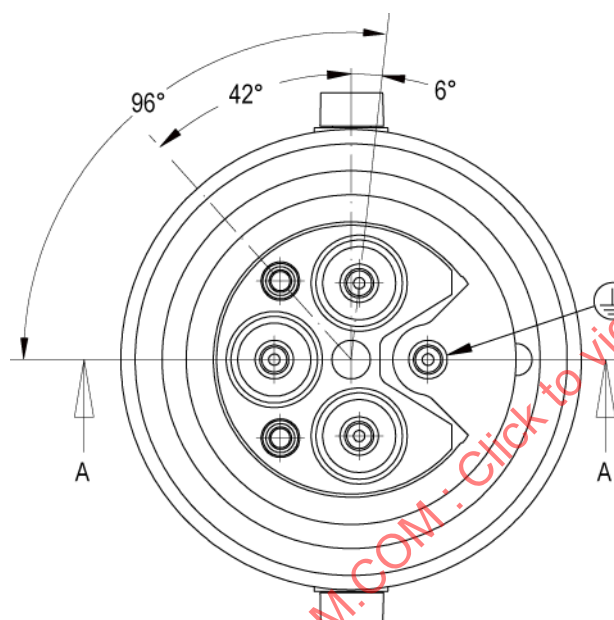
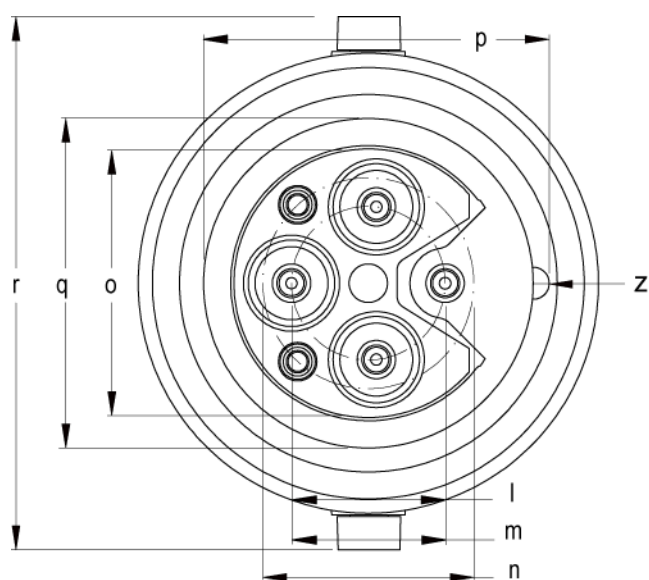
#### B.1 Socle de prise



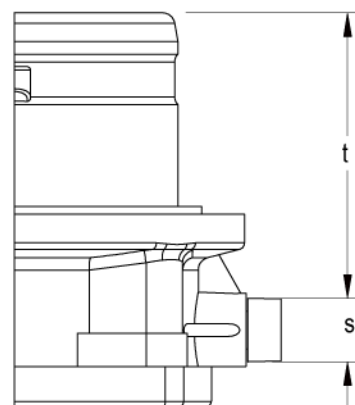
| Repère | Description                | Dimension<br>mm |            |
|--------|----------------------------|-----------------|------------|
| a      | Sommet isolant             | 17,0            | ±0,25      |
| b      | Sommet contacts phase      | 44,0            | ±0,25      |
| c      | Sommet contact terre       | 32,0            | ±0,25      |
| d      | Contact terre              | 38,0            | ±0,25      |
| e      | Contact phase              | 50,1            | ±0,25      |
| f      | Base contact pilote        | 33,0            | ±0,25      |
| g      | Sommet contacts pilotes    | 25,0            | ±0,25      |
| h      | Contact pilote             | 27,2            | ±0,25      |
| i      | Base contact de terre      | 64,0            | ±0,25      |
| j      | Base isolant               | 66,0            | ±0,25      |
| k      | Base contacts phase        | 76,5            | ±0,25      |
| l      | Pas des contacts phase     | 48,3            | ±0,25      |
| m      | Pas du contact de terre    | 48,0            | ±0,25      |
| n      | Pas des contacts pilotes   | 66,6            | ±0,25      |
| o      | Diamètre isolant           | 84,0            | ±0,10      |
| p      | Diamètre + ergot           | 111,6           | ±0,25      |
| q      | Diamètre                   | 87,5            | ±0,25      |
| r      | Profondeur enveloppe       | 69,0            | ±0,25      |
| s      | Diamètre contact de terre  | 12,0            | +0,10<br>0 |
| t      | Diamètre contacts pilotes  | 3,0             | +0,10<br>0 |
| u      | Diamètre contacts de phase | 12,0            | +0,10<br>0 |
| z      | Rayon de l'ergot           | 7,0             | ±0,25      |



## B.2 Nez de fiche

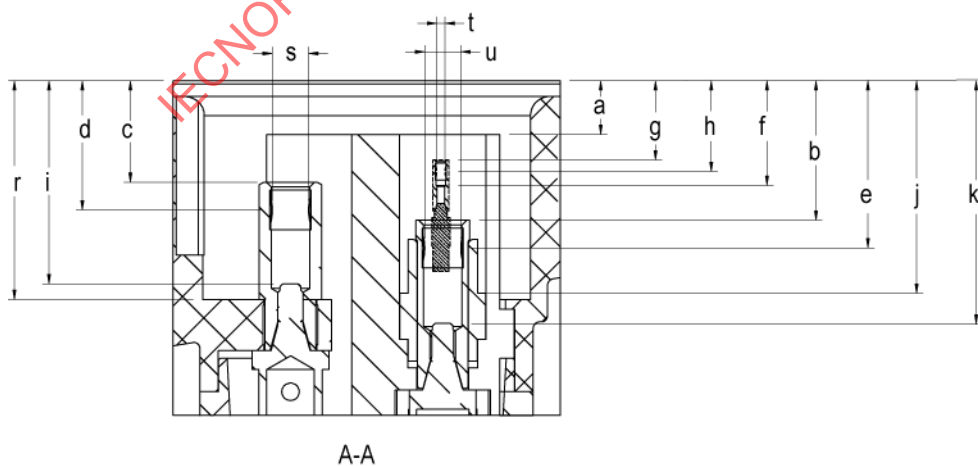
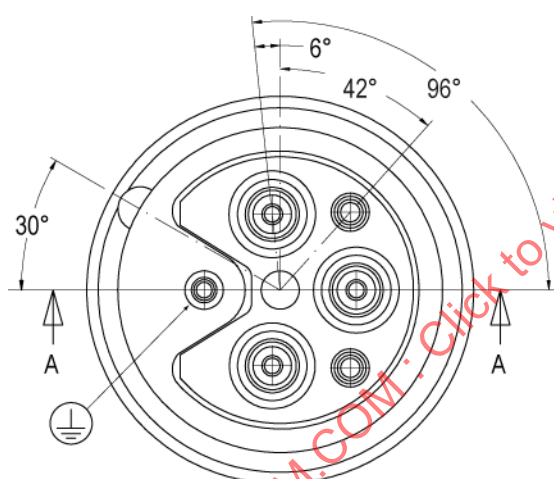
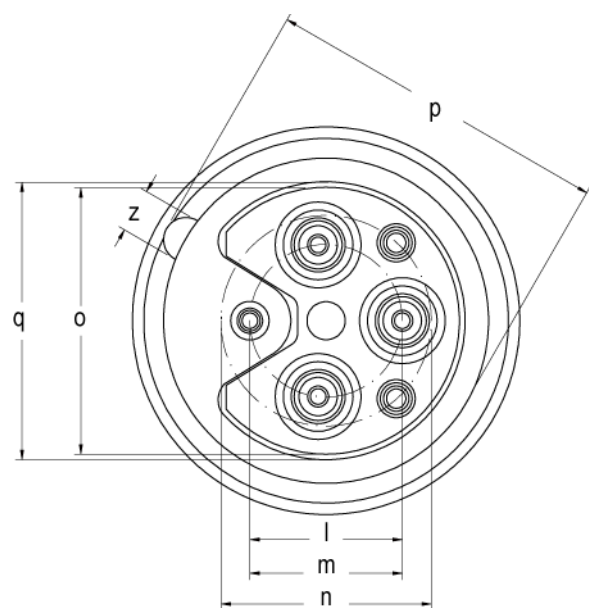


A-A



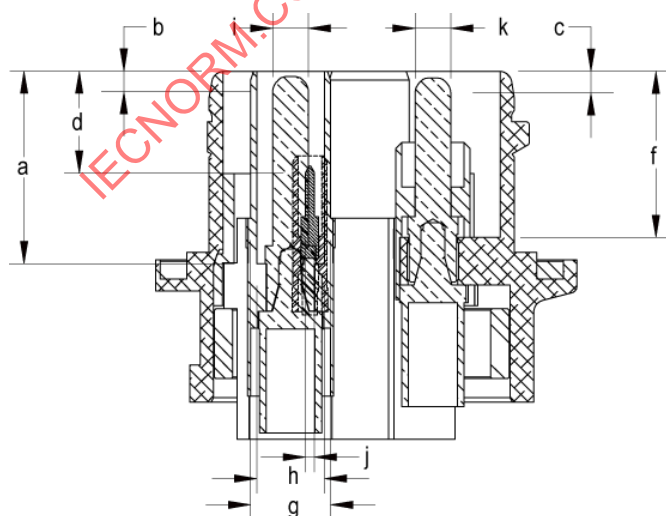
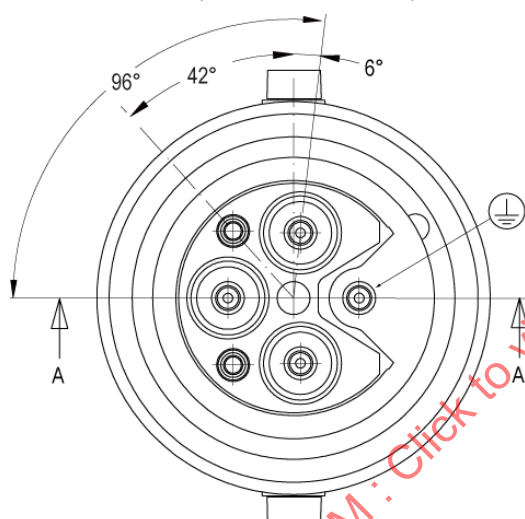
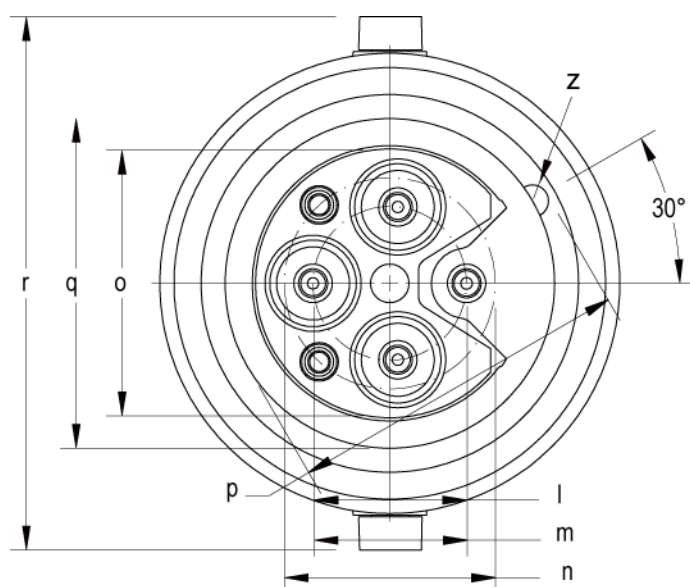
| Repère | Description                | Dimension mm                       |
|--------|----------------------------|------------------------------------|
| a      | Profondeur isolant         | 64,8 ±0,25                         |
| b      | Sommet contact phase       | 6,9 ±0,25                          |
| c      | Sommet contact terre       | 7,3 ±0,25                          |
| d      | Sommet contact pilote      | 34,3 ±0,25                         |
| f      | Profondeur enveloppe       | 56,0 ±0,25                         |
| g      | Diamètre extérieur isolant | 27,0 ±0,25                         |
| h      | Diamètre intérieur isolant | 22,8 ±0,25                         |
| i      | Diamètre contacts de phase | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| j      | Diamètre contacts pilotes  | 3,0 <sup>0</sup> <sub>-0,05</sub>  |
| k      | Diamètre contact de terre  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| l      | Pas des contacts phase     | 48,3 ±0,25                         |
| m      | Pas du contact de terre    | 48,0 ±0,25                         |
| n      | Pas des contacts pilotes   | 66,6 ±0,25                         |
| o      | Diamètre isolant           | 84,0 ±0,10                         |
| p      | Diamètre + ergot           | 108,9 ±0,25                        |
| q      | Diamètre                   | 103,0 ±0,25                        |
| r      | Empattement galets         | 168,0 ±0,25                        |
| s      | Diamètre galets            | 20,0 ±0,10                         |
| t      | Hauteur galets             | 90,0 ±0,25                         |
| z      | Rayon de l'ergot           | 5,0 ±0,25                          |

### B.3 Nez de prise mobile de navire



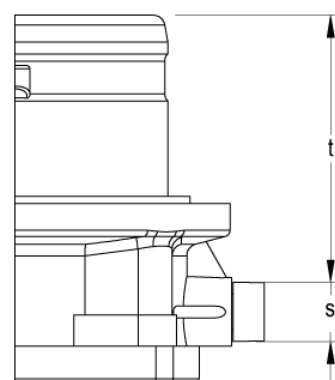
| Repère | Description                | Dimension<br>mm |            |
|--------|----------------------------|-----------------|------------|
| a      | Sommet isolant             | 17,0            | ±0,25      |
| b      | Sommet contacts phase      | 44,0            | ±0,25      |
| c      | Sommet contact terre       | 32,0            | ±0,25      |
| d      | Contact terre              | 38,0            | ±0,25      |
| e      | Contact phase              | 50,1            | ±0,25      |
| f      | Base contact pilote        | 33,0            | ±0,25      |
| g      | Sommet contacts pilotes    | 25,0            | ±0,25      |
| h      | Contact pilote             | 27,2            | ±0,25      |
| i      | Base contact de terre      | 64,0            | ±0,25      |
| j      | Base isolant               | 66,0            | ±0,25      |
| k      | Base contacts phase        | 76,5            | ±0,25      |
| l      | Pas des contacts phase     | 48,3            | ±0,25      |
| m      | Pas du contact de terre    | 48,0            | ±0,25      |
| n      | Pas des contacts pilotes   | 66,6            | ±0,25      |
| o      | Diamètre isolant           | 84,0            | ±0,10      |
| p      | Diamètre + ergot           | 111,6           | ±0,25      |
| q      | Diamètre                   | 87,5            | ±0,25      |
| r      | Profondeur enveloppe       | 69,0            | ±0,25      |
| s      | Diamètre contact de terre  | 12,0            | +0,10<br>0 |
| t      | Diamètre contacts pilotes  | 3,0             | +0,10<br>0 |
| u      | Diamètre contacts de phase | 12,0            | +0,10<br>0 |
| z      | Diamètre de l'ergot        | 14,0            | ±0,25      |

## B.4 Socle de connecteur de navire



A-A

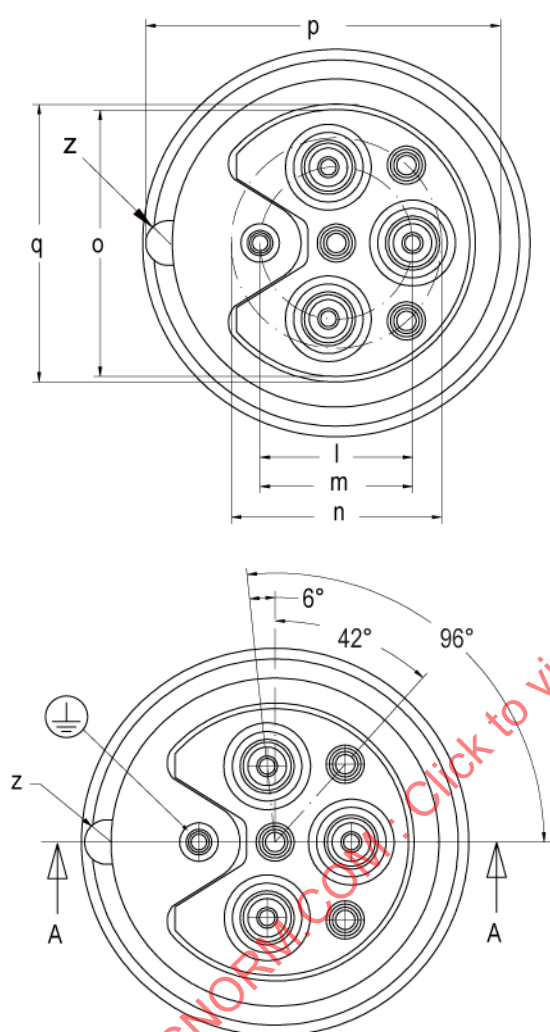
| Repère | Description                | Dimension<br>mm |                               |
|--------|----------------------------|-----------------|-------------------------------|
| a      | Profondeur isolant         | 64,8            | ±0,25                         |
| b      | Sommet contacts phase      | 6,9             | ±0,25                         |
| c      | Sommet contact terre       | 7,3             | ±0,25                         |
| d      | Sommet contact pilote      | 34,3            | ±0,25                         |
| f      | Profondeur enveloppe       | 56,0            | ±0,25                         |
| g      | Diamètre extérieur isolant | 27,0            | ±0,25                         |
| h      | Diamètre intérieur isolant | 22,8            | ±0,25                         |
| i      | Diamètre contacts de phase | 12,0            | <sup>0</sup> <sub>-0,05</sub> |
| j      | Diamètre contacts pilotes  | 3,0             | <sup>0</sup> <sub>-0,05</sub> |
| k      | Diamètre contact de terre  | 12,0            | <sup>0</sup> <sub>-0,05</sub> |
| l      | Pas des contacts phase     | 48,3            | ±0,25                         |
| m      | Pas du contact de terre    | 48,0            | ±0,25                         |
| n      | Pas des contacts pilotes   | 66,6            | ±0,25                         |
| o      | Diamètre isolant           | 84,0            | ±0,10                         |
| p      | Diamètre + ergot           | 108,9           | ±0,25                         |
| q      | Diamètre                   | 103,0           | ±0,25                         |
| r      | Empattement galets         | 168,0           | ±0,25                         |
| s      | Diamètre galets            | 20,0            | ±0,10                         |
| t      | Hauteur galets             | 90,0            | ±0,25                         |
| z      | Rayon de l'ergot           | 5,0             | ±0,25                         |



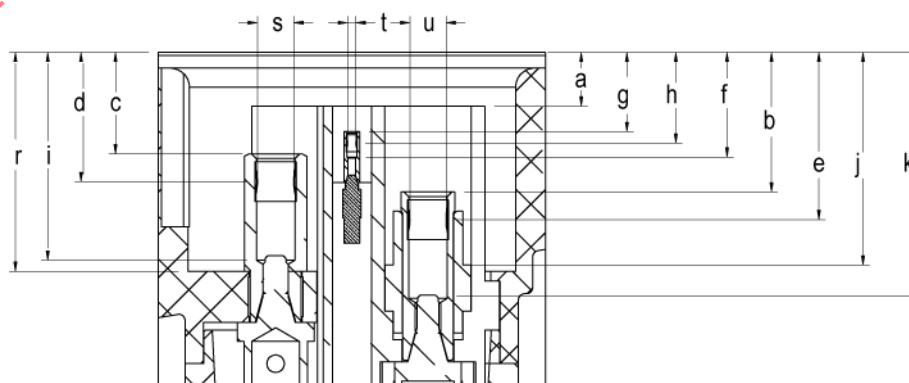
## Annexe C (normative)

### Feuilles de norme C: Appareils 7,2 kV 350 A triphasés avec trois contacts pilotes IP2X

#### C.1 Socle de prise

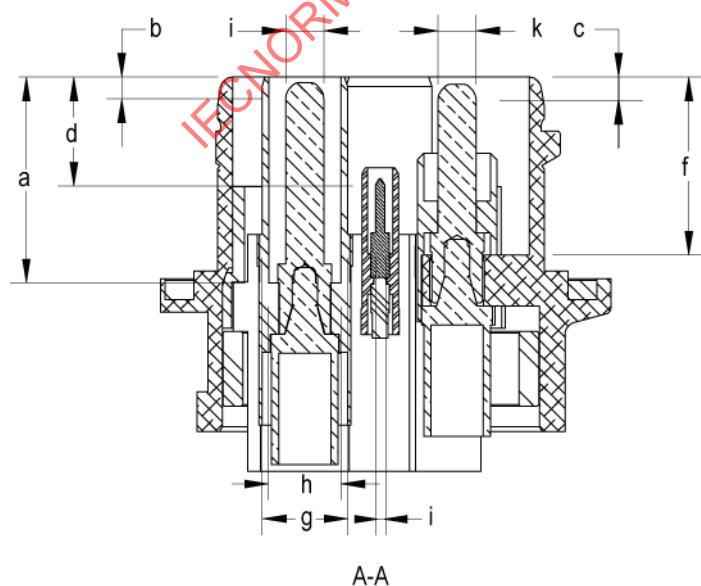
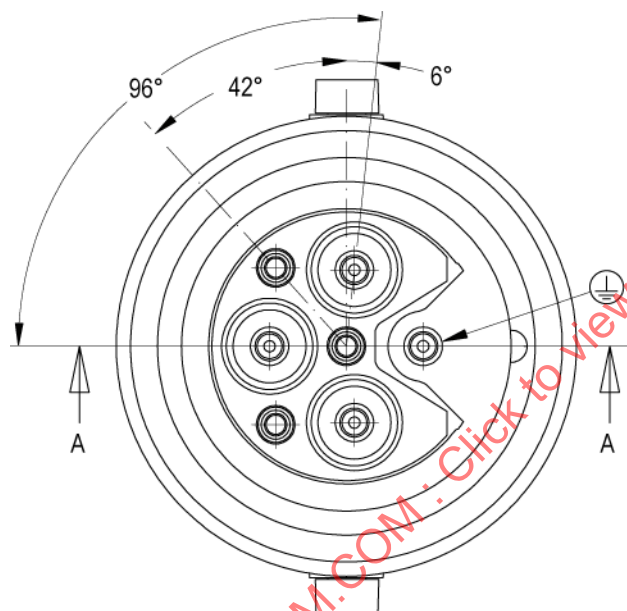
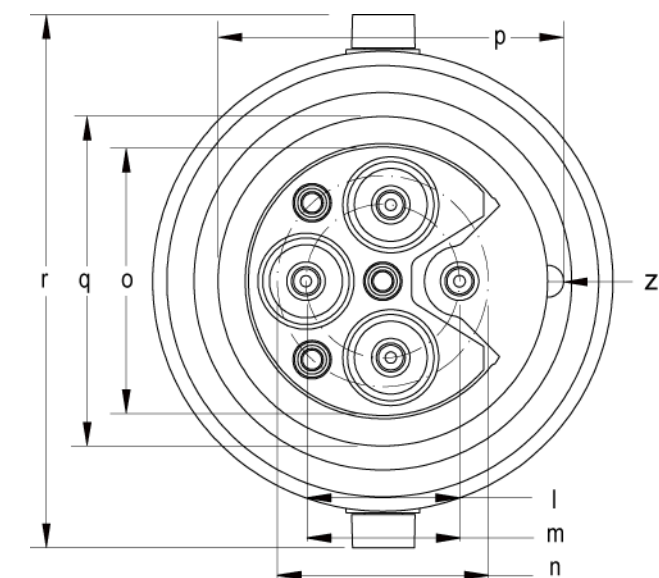


| Repère | Description                | Dimension<br>mm |
|--------|----------------------------|-----------------|
| a      | Sommet isolant             | 17,0 ±0,25      |
| b      | Sommet contacts phase      | 44,0 ±0,25      |
| c      | Sommet contact terre       | 32,0 ±0,25      |
| d      | Contact terre              | 38,0 ±0,25      |
| e      | Contact phase              | 50,1 ±0,25      |
| f      | Base contact pilote        | 33,0 ±0,25      |
| g      | Sommet contacts pilotes    | 25,0 ±0,25      |
| h      | Contact pilote             | 27,2 ±0,25      |
| i      | Base contact de terre      | 64,0 ±0,25      |
| j      | Base isolant               | 66,0 ±0,25      |
| k      | Base contacts phase        | 76,5 ±0,25      |
| l      | Pas des contacts phase     | 48,3 ±0,25      |
| m      | Pas du contact de terre    | 48,0 ±0,25      |
| n      | Pas des contacts pilotes   | 66,6 ±0,25      |
| o      | Diamètre isolant           | 84,0 ±0,10      |
| p      | Diamètre + ergot           | 111,6 ±0,25     |
| q      | Diamètre                   | 87,5 ±0,25      |
| r      | Profondeur enveloppe       | 69,0 ±0,25      |
| s      | Diamètre contact de terre  | 12,0 +0,10<br>0 |
| t      | Diamètre contacts pilotes  | 3,0 +0,10<br>0  |
| u      | Diamètre contacts de phase | 12,0 +0,10<br>0 |
| z      | Rayon de l'ergot           | 7,0 ±0,25       |

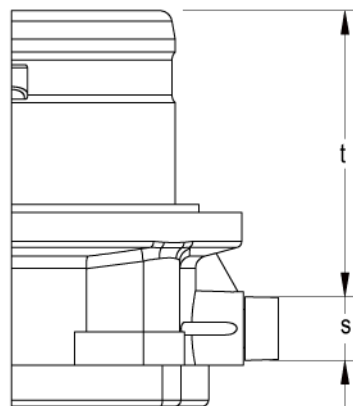


A-A

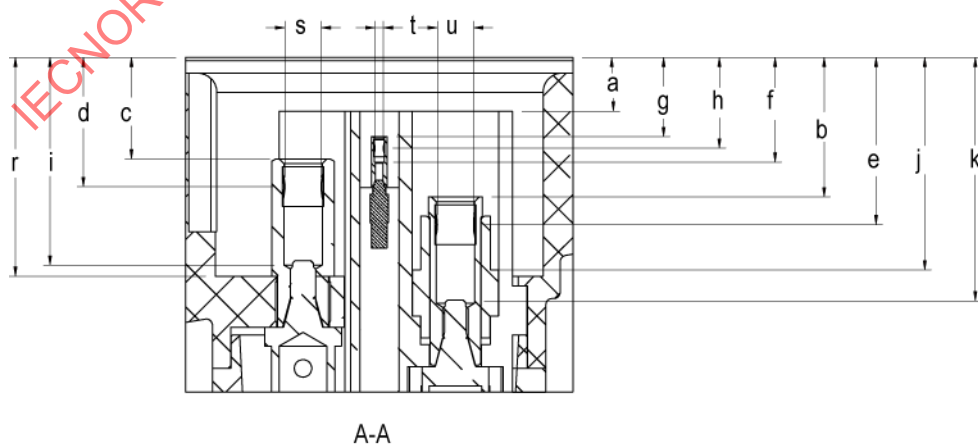
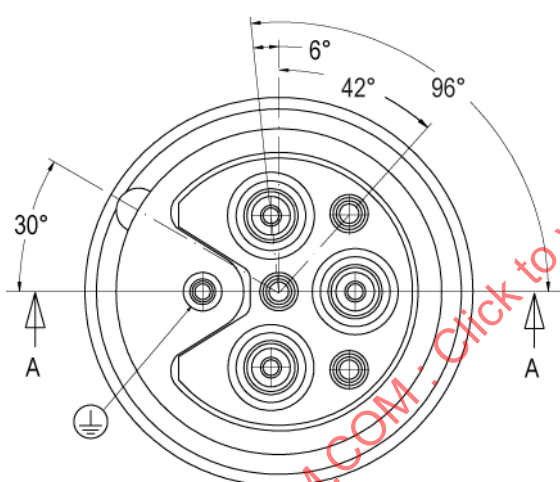
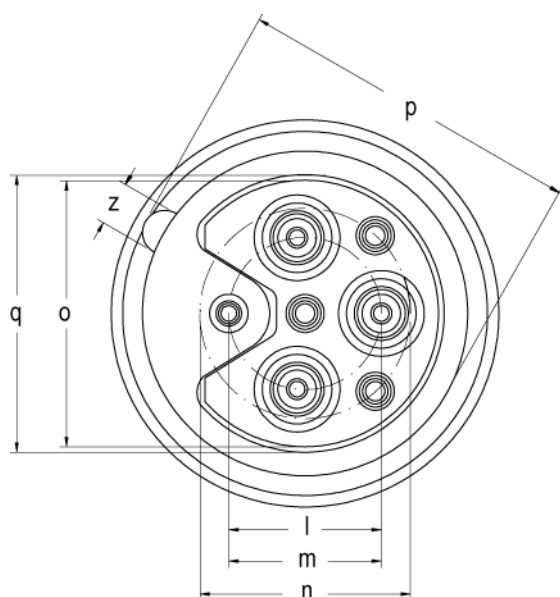
## C.2 Nez de fiche



| Repère | Description                | Dimension<br>mm                    |
|--------|----------------------------|------------------------------------|
| a      | Profondeur isolant         | 64,8 ±0,25                         |
| b      | Sommet contacts phase      | 6,9 ±0,25                          |
| c      | Sommet contact terre       | 7,3 ±0,25                          |
| d      | Sommet contacts pilotes    | 34,3 ±0,25                         |
| f      | Profondeur enveloppe       | 56,0 ±0,25                         |
| g      | Diamètre extérieur isolant | 27,0 ±0,25                         |
| h      | Diamètre intérieur isolant | 22,8 ±0,25                         |
| i      | Diamètre contacts de phase | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| j      | Diamètre contacts pilotes  | 3,0 <sup>0</sup> <sub>-0,05</sub>  |
| k      | Diamètre contact de terre  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| l      | Pas des contacts phase     | 48,3 ±0,25                         |
| m      | Pas des contacts pilotes   | 48,0 ±0,25                         |
| n      | Pas du contact de terre    | 66,6 ±0,25                         |
| o      | Diamètre isolant           | 84,0 ±0,10                         |
| p      | Diamètre + ergot           | 108,9 ±0,25                        |
| q      | Diamètre                   | 103,0 ±0,25                        |
| r      | Empattement galets         | 168,0 ±0,25                        |
| s      | Diamètre galets            | 20,0 ±0,10                         |
| t      | Hauteur galets             | 90,0 ±0,25                         |
| z      | Rayon de l'ergot           | 5,0 ±0,25                          |

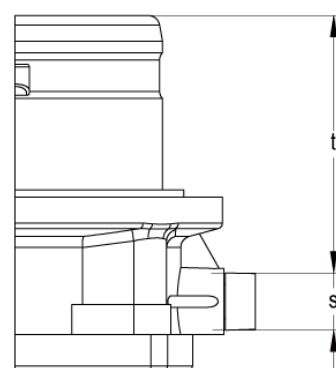
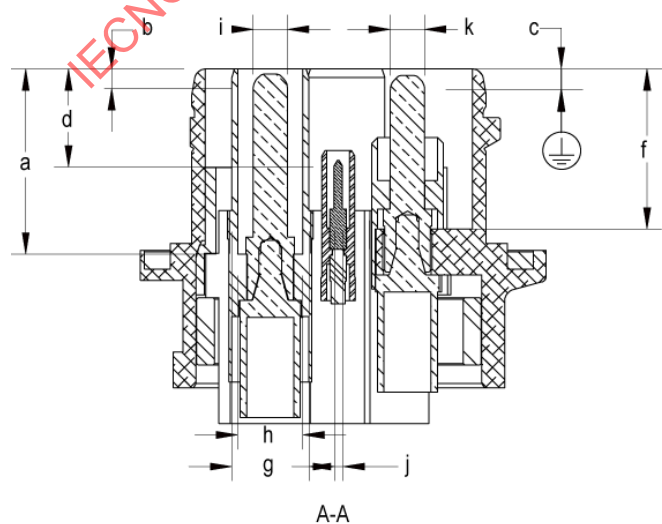
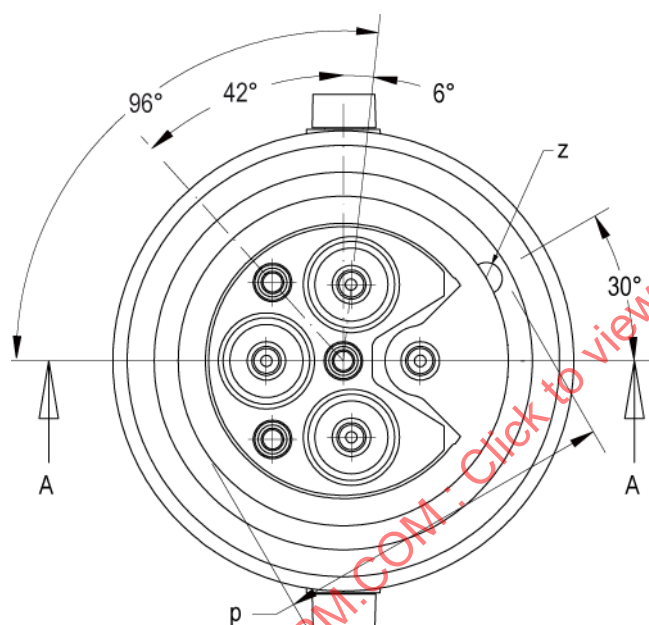
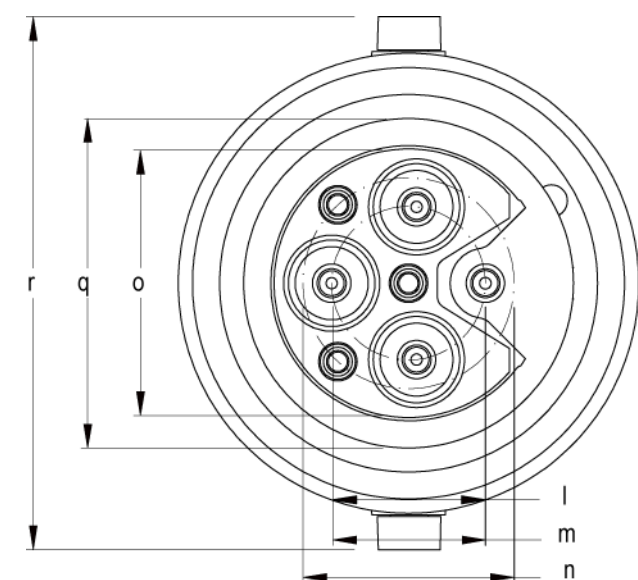


### C.3 Nez de prise mobile de navire



| Repère | Description                | Dimension<br>mm |
|--------|----------------------------|-----------------|
| a      | Sommet isolant             | 17,0 ±0,25      |
| b      | Sommet contacts phase      | 44,0 ±0,25      |
| c      | Sommet contact terre       | 32,0 ±0,25      |
| d      | Contact de terre           | 38,0 ±0,25      |
| e      | Contact phase              | 50,1 ±0,25      |
| f      | Base contact pilote        | 33,0 ±0,25      |
| g      | Sommet contacts pilotes    | 25,0 ±0,25      |
| h      | Contact pilote             | 27,2 ±0,25      |
| i      | Base contacts phase        | 64,0 ±0,25      |
| j      | Base isolant               | 66,0 ±0,25      |
| k      | Base contacts phase        | 76,5 ±0,25      |
| l      | Pas des contacts phase     | 48,3 ±0,25      |
| m      | Pas du contact de terre    | 48,0 ±0,25      |
| n      | Pas des contacts pilotes   | 66,6 ±0,25      |
| o      | Diamètre isolant           | 84,0 ±0,10      |
| p      | Diamètre + ergot           | 111,6 ±0,25     |
| q      | Diamètre                   | 87,5 ±0,25      |
| r      | Profondeur enveloppe       | 69,0 ±0,25      |
| s      | Diamètre contact de terre  | 12,0 +0,10<br>0 |
| t      | Diamètre contacts pilotes  | 3,0 +0,10<br>0  |
| u      | Diamètre contacts de phase | 12,0 +0,10<br>0 |
| z      | Diamètre de l'ergot        | 14,0 ±0,25      |

### C.4 Socle de connecteur de navire

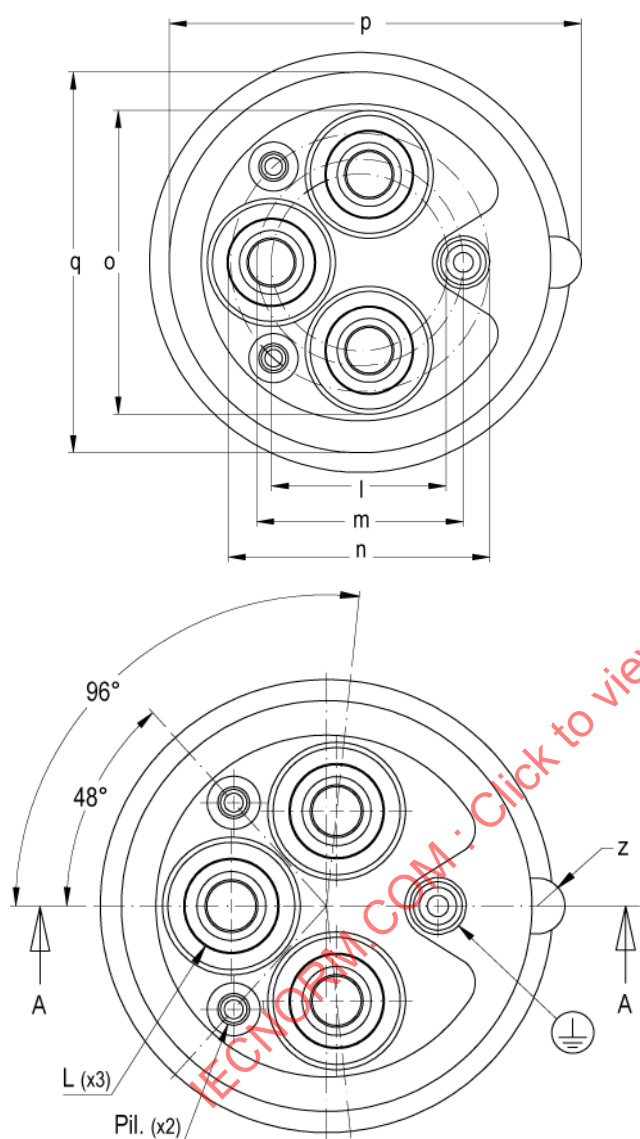


| Repère | Description                | Dimension<br>mm                    |
|--------|----------------------------|------------------------------------|
| a      | Profondeur isolant         | 64,8 ±0,25                         |
| b      | Sommet contacts phase      | 6,9 ±0,25                          |
| c      | Sommet contact terre       | 7,3 ±0,25                          |
| d      | Sommet contacts pilotes    | 34,3 ±0,25                         |
| f      | Profondeur enveloppe       | 56,0 ±0,25                         |
| g      | Diamètre extérieur isolant | 27,0 ±0,25                         |
| h      | Diamètre intérieur isolant | 22,8 ±0,25                         |
| i      | Diamètre contacts de phase | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| j      | Diamètre contacts pilotes  | 3,0 <sup>0</sup> <sub>-0,05</sub>  |
| k      | Diamètre contact de terre  | 12,0 <sup>0</sup> <sub>-0,05</sub> |
| l      | Pas des contacts phase     | 48,3 ±0,25                         |
| m      | Pas du contact de terre    | 48,0 ±0,25                         |
| n      | Pas des contacts pilotes   | 66,6 ±0,25                         |
| o      | Diamètre isolant           | 84,0 ±0,10                         |
| p      | Diamètre + ergot           | 108,9 ±0,25                        |
| q      | Diamètre                   | 103,0 ±0,25                        |
| r      | Empattement galets         | 168,0 ±0,25                        |
| s      | Diamètre galets            | 20,0 ±0,10                         |
| t      | Hauteur galets             | 90,0 ±0,25                         |
| z      | Rayon de l'ergot           | 5,0 ±0,25                          |

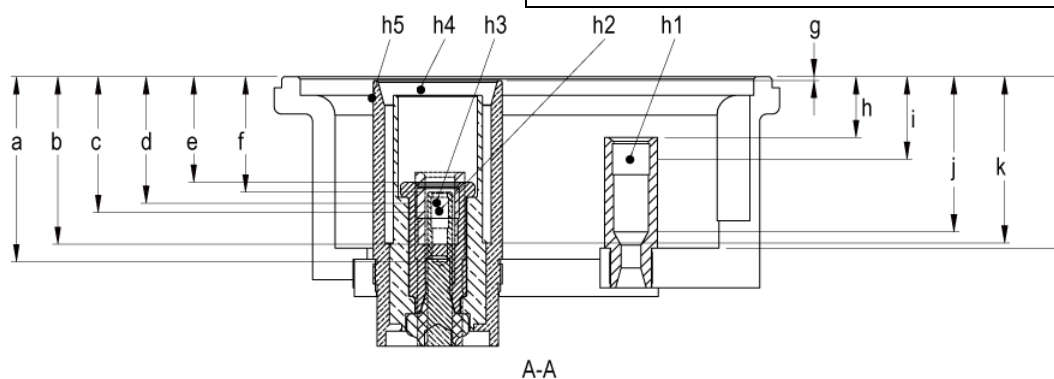
## Annexe D (normative)

### Feuilles de norme D: Appareils 12 kV 500 A triphasés avec deux contacts pilotes IP0

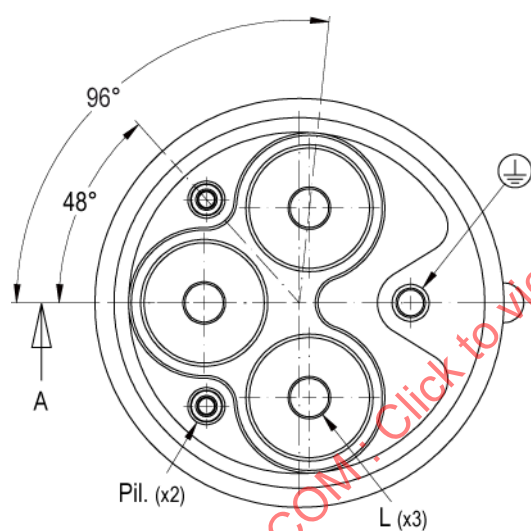
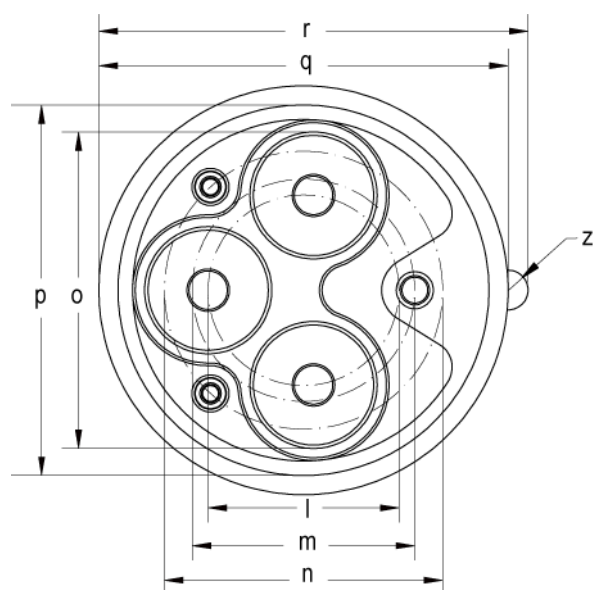
#### D.1 Socle de prise



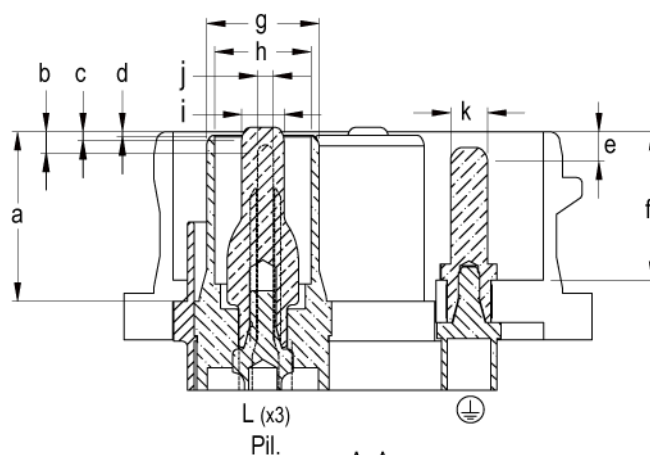
| Repère | Description                         | Dimension<br>mm |              |
|--------|-------------------------------------|-----------------|--------------|
| a      | Base contact pilote                 | 74,5            | $+0,10$<br>0 |
| b      | Base contacts phase                 | 67,5            | $+0,10$<br>0 |
| c      | Contact pilote                      | 52,0            | $\pm 0,25$   |
| d      | Contact phase                       | 48,3            | $\pm 0,25$   |
| e      | Sommet contacts phase               | 42,5            | $\pm 0,25$   |
| f      | Sommet contacts pilotes             | 46,5            | $\pm 0,25$   |
| g      | Sommet isolant                      | 1,5             | $\pm 0,25$   |
| h      | Sommet contact terre                | 24,5            | $\pm 0,25$   |
| i      | Contact de terre                    | 30,5            | $\pm 0,25$   |
| j      | Base contacts phase                 | 62,5            | $+0,10$<br>0 |
| k      | Base isolant                        | 67,0            | $+0,10$<br>0 |
| l      | Pas des contacts phase              | 71,6            | $\pm 0,25$   |
| m      | Pas du contact de terre             | 84,0            | $\pm 0,25$   |
| n      | Pas des contacts pilotes            | 106,0           | $\pm 0,25$   |
| o      | Diamètre isolant                    | 123,6           | $\pm 0,25$   |
| p      | Diamètre + ergot                    | 167,5           | $\pm 0,25$   |
| q      | Diamètre                            | 155,0           | $\pm 0,25$   |
| r      | Profondeur enveloppe                | 69,0            | $\pm 0,25$   |
| h1     | Diamètre intérieur contact terre    | 14,0            | $+0,10$<br>0 |
| h2     | Diamètre intérieur contacts pilotes | 6,0             | $+0,10$<br>0 |
| h3     | Diamètre intérieur contacts phase   | 16,0            | $+0,10$<br>0 |
| h4     | Diamètre intérieur isolant          | 43,0            | $+0,10$<br>0 |
| h5     | Diamètre extérieur isolant          | 52,0            | $\pm 0,25$   |
| z      | Rayon de l'ergot                    | 10,5            | $\pm 0,25$   |
| L      | Contacts phase                      |                 |              |
| Pil.   | Contact pilotes                     |                 |              |



## D.2 Nez de fiche

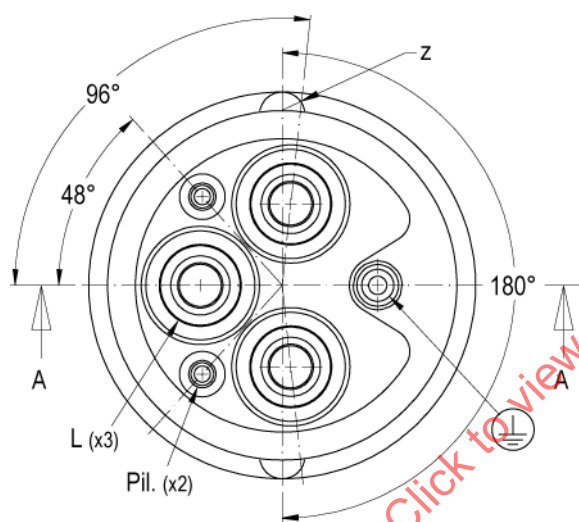
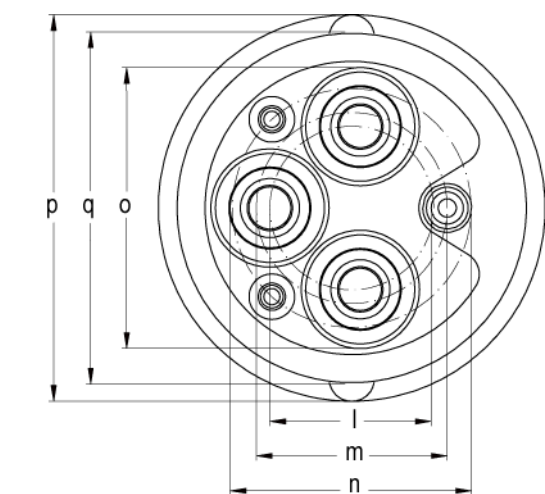


| Repère | Description                | Dimension<br>mm |                               |
|--------|----------------------------|-----------------|-------------------------------|
| a      | Profondeur isolant         | 64,0            | <sup>0</sup> <sub>-0,25</sub> |
| b      | Contact pilote             | 8,0             | <sup>0</sup> <sub>-0,25</sub> |
| c      | Contact phase              | 3,4             | <sup>0</sup> <sub>-0,10</sub> |
| d      | Sommet isolant             | 1,9             | <sup>0</sup> <sub>-0,10</sub> |
| e      | Contact de terre           | 11,1            | <sup>0</sup> <sub>-0,10</sub> |
| f      | Profondeur enveloppe       | 56,0            | ±0,25                         |
| g      | Diamètre extérieur isolant | 42,5            | <sup>+0,10</sup> <sub>0</sub> |
| h      | Diamètre intérieur isolant | 36,5            | ±0,10                         |
| i      | Diamètre contacts de phase | 16,0            | <sup>0</sup> <sub>-0,05</sub> |
| j      | Diamètre contacts pilotes  | 6,0             | <sup>0</sup> <sub>-0,05</sub> |
| k      | Diamètre contact de terre  | 14,0            | <sup>0</sup> <sub>-0,05</sub> |
| l      | Pas des contacts phase     | 71,6            | ±0,25                         |
| m      | Pas du contact de terre    | 84,0            | ±0,25                         |
| n      | Pas des contacts pilotes   | 105,0           | ±0,25                         |
| o      | Diamètre isolant           | 119,6           | ±0,25                         |
| p      | Diamètre intérieur         | 140,0           | <sup>+0,10</sup> <sub>0</sub> |
| q      | Diamètre extérieur         | 154,5           | <sup>0</sup> <sub>-0,10</sub> |
| r      | Diamètre + ergot           | 162,0           | ±0,25                         |
| z      | Rayon de l'ergot           | 7,5             | ±0,25                         |
| L      | Contacts phase             |                 |                               |
| Pil.   | Contact pilotes            |                 |                               |

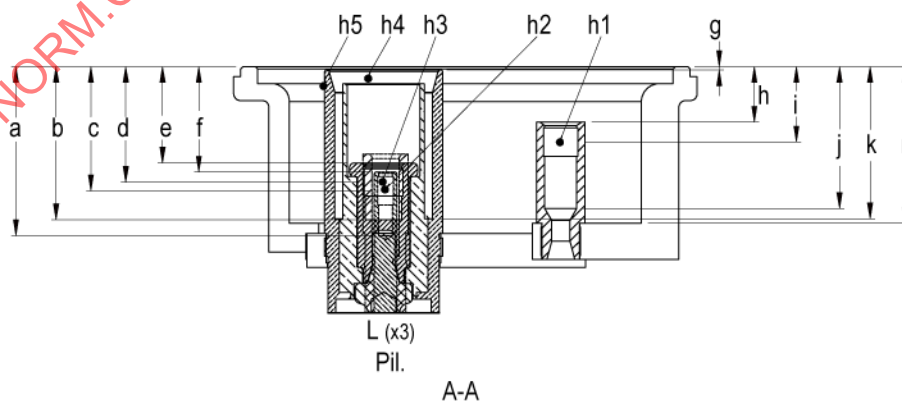


A-A

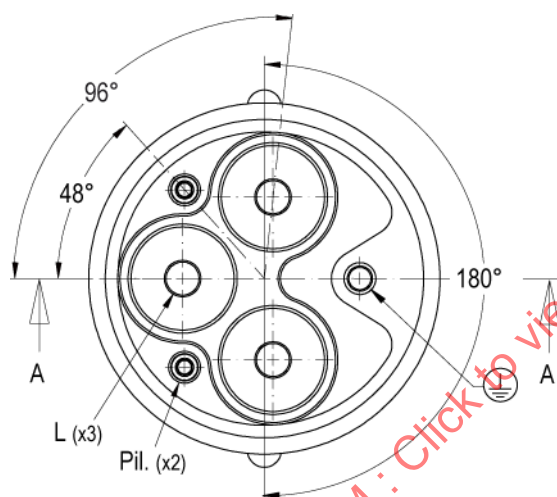
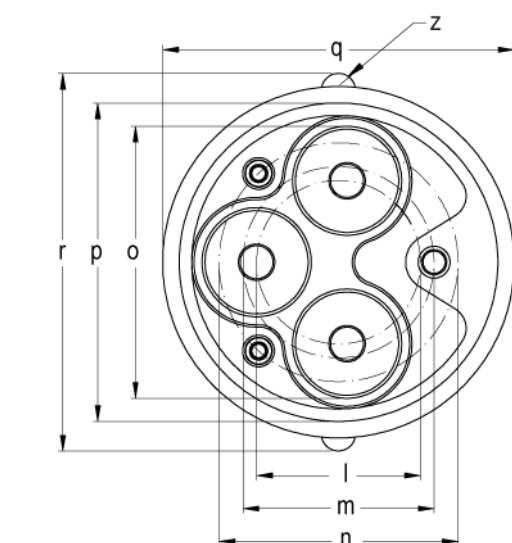
### D.3 Nez de prise mobile de navire



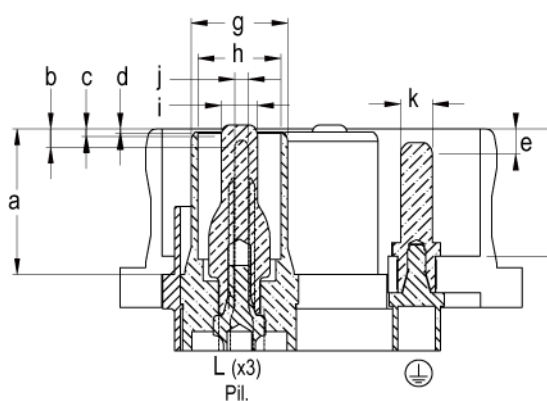
| Repère | Description                | Dimension<br>mm   |
|--------|----------------------------|-------------------|
| a      | Base contact pilote        | 74,5 $^{+0,10}_0$ |
| b      | Base contacts phase        | 67,5 $^{+0,10}_0$ |
| c      | Contact pilote             | 52,0 $\pm 0,25$   |
| d      | Contact phase              | 48,3 $\pm 0,25$   |
| e      | Sommet contacts phase      | 42,5 $\pm 0,25$   |
| f      | Sommet contacts pilotes    | 46,5 $\pm 0,25$   |
| g      | Sommet isolant             | 1,5 $\pm 0,25$    |
| h      | Sommet contact terre       | 24,5 $\pm 0,25$   |
| i      | Contact de terre           | 30,5 $\pm 0,25$   |
| j      | Base contacts phase        | 62,5 $^{+0,10}_0$ |
| k      | Base isolant               | 67,0 $^{+0,10}_0$ |
| l      | Pas des contacts phase     | 71,6 $\pm 0,25$   |
| m      | Pas du contact de terre    | 84,0 $\pm 0,25$   |
| n      | Pas des contacts pilotes   | 106,0 $\pm 0,25$  |
| o      | Diamètre isolant           | 123,6 $\pm 0,25$  |
| p      | Diamètre + ergot           | 170,0 $\pm 0,25$  |
| q      | Diamètre                   | 155,0 $\pm 0,25$  |
| r      | Profondeur enveloppe       | 69,0 $\pm 0,25$   |
| h1     | Diamètre contact de terre  | 14,0 $^{+0,10}_0$ |
| h2     | Diamètre contacts pilotes  | 6,0 $^{+0,10}_0$  |
| h3     | Diamètre contacts de phase | 16,0 $^{+0,10}_0$ |
| h4     | Diamètre intérieur isolant | 43,0 $^{+0,10}_0$ |
| h5     | Diamètre extérieur isolant | 52,0 $\pm 0,25$   |
| z      | Rayon de l'ergot           | 10,5 $\pm 0,25$   |
| L      | Contacts phase             |                   |
| Pil.   | Contact pilotes            |                   |



#### D.4 Socle de connecteur de navire



| Repère | Description                | Dimension<br>mm                     |
|--------|----------------------------|-------------------------------------|
| a      | Profondeur isolant         | 64,0 <sup>0</sup> <sub>-0,25</sub>  |
| b      | Contact pilote             | 8,0 <sup>0</sup> <sub>-0,25</sub>   |
| c      | Contact phase              | 3,4 <sup>0</sup> <sub>-0,10</sub>   |
| d      | Sommet isolant             | 1,9 <sup>0</sup> <sub>-0,10</sub>   |
| e      | Contact de terre           | 11,1 <sup>0</sup> <sub>-0,10</sub>  |
| f      | Profondeur enveloppe       | 56,0 ±0,25                          |
| g      | Diamètre extérieur isolant | 42,5 <sup>+0,10</sup> <sub>0</sub>  |
| h      | Diamètre intérieur isolant | 36,5 ±0,10                          |
| i      | Diamètre contacts de phase | 16,0 <sup>0</sup> <sub>-0,05</sub>  |
| j      | Diamètre contacts pilotes  | 6,0 <sup>0</sup> <sub>-0,05</sub>   |
| k      | Diamètre contact de terre  | 14,0 <sup>0</sup> <sub>-0,05</sub>  |
| l      | Pas des contacts phase     | 71,6 ±0,25                          |
| m      | Pas des contacts pilotes   | 84,0 ±0,25                          |
| n      | Pas du contact de terre    | 105,0 ±0,25                         |
| o      | Diamètre isolant           | 119,6 ±0,25                         |
| p      | Diamètre intérieur         | 140,0 <sup>+0,10</sup> <sub>0</sub> |
| q      | Diamètre extérieur         | 154,5 <sup>0</sup> <sub>-0,10</sub> |
| r      | Diamètre + ergots          | 166,0 ±0,25                         |
| z      | Rayon de l'ergot (x2)      | 7,5 ±0,25                           |
| L      | Contacts phase             |                                     |
| Pil.   | Contact pilotes            |                                     |

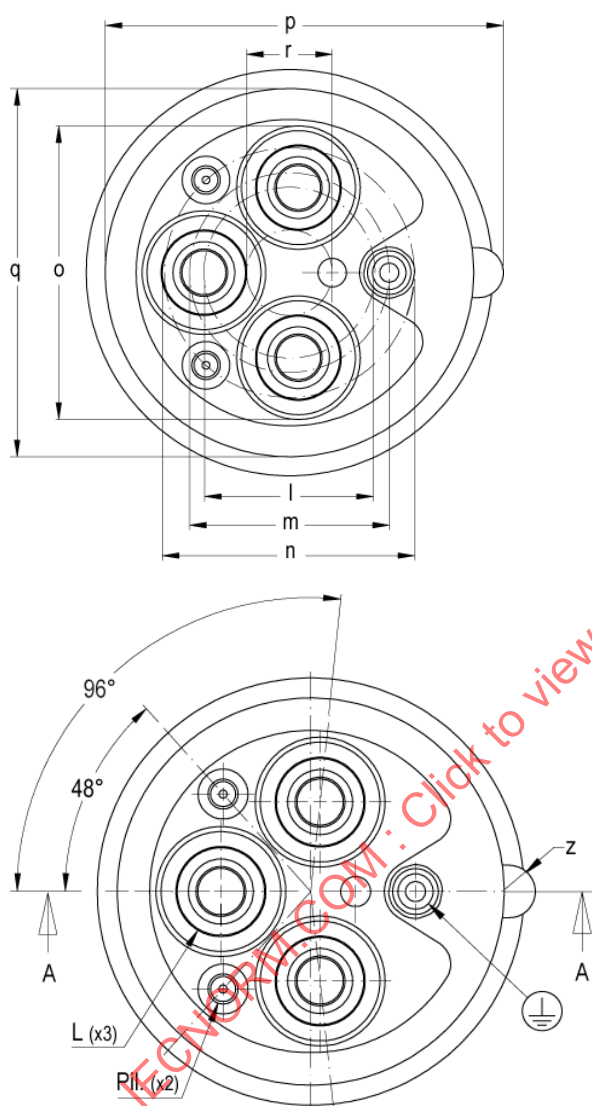


A-A

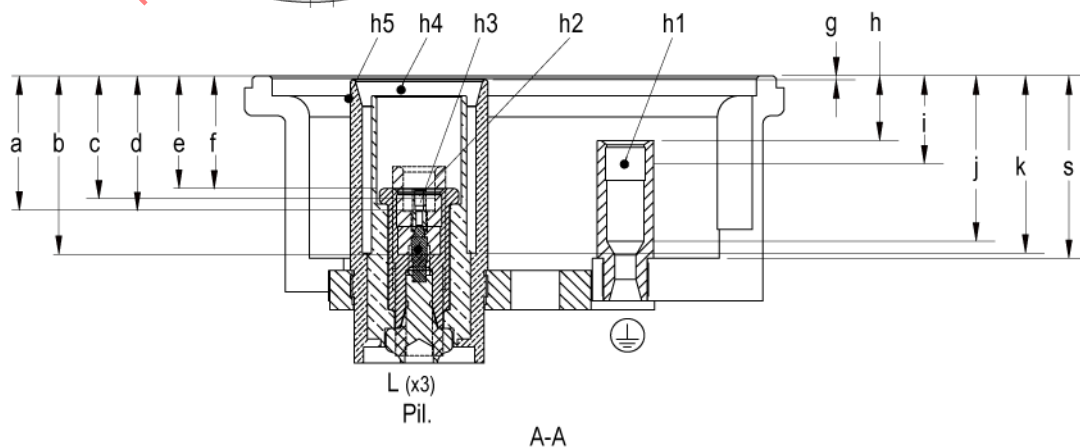
## Annexe E (normative)

### Feuilles de norme E: Appareils 12 kV 500 A triphasés avec deux contacts pilotes IP2X

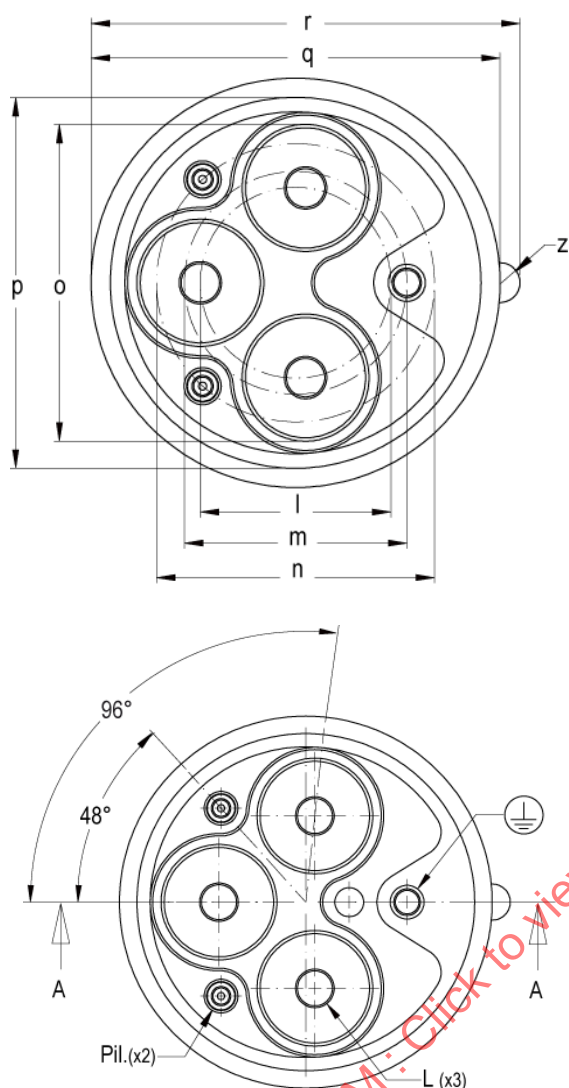
#### E.1 Socle de prise



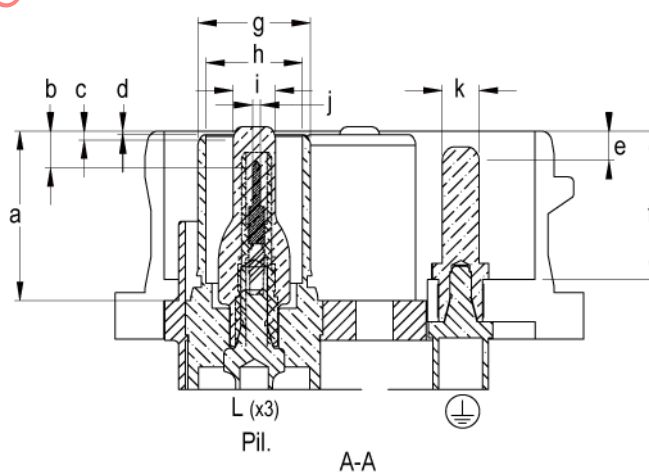
| Repère | Description                | Dimension<br>mm                    |
|--------|----------------------------|------------------------------------|
| a      | Base contact pilote        | 50,8 <sup>+0,10</sup> <sub>0</sub> |
| b      | Base contacts phase        | 67,5 <sup>+0,10</sup> <sub>0</sub> |
| c      | Contact pilote             | 45,0 ±0,25                         |
| d      | Contact phase              | 48,3 ±0,25                         |
| e      | Sommet contacts phase      | 42,5 ±0,25                         |
| f      | Sommet contacts pilotes    | 42,8 ±0,25                         |
| g      | Sommet isolant             | 1,5 ±0,25                          |
| h      | Sommet contact terre       | 24,5 ±0,25                         |
| i      | Contact de terre           | 30,5 ±0,25                         |
| j      | Base contacts phases       | 62,5 <sup>+0,10</sup> <sub>0</sub> |
| k      | Base isolant               | 67,0 <sup>+0,10</sup> <sub>0</sub> |
| l      | Pas des contacts phase     | 71,6 ±0,25                         |
| m      | Pas du contact de terre    | 84,0 ±0,25                         |
| n      | Pas des contacts pilotes   | 106,0 ±0,25                        |
| o      | Diamètre isolant           | 123,6 ±0,25                        |
| p      | Diamètre + ergot           | 167,5 ±0,25                        |
| q      | Diamètre                   | 155,0 ±0,25                        |
| r      | Pas du contact pilote      | 36,0 ±0,25                         |
| s      | Profondeur enveloppe       | 69,0 ±0,25                         |
| h1     | Diamètre contact de terre  | 14,0 <sup>+0,10</sup> <sub>0</sub> |
| h2     | Diamètre contacts pilotes  | 3,0 <sup>+0,10</sup> <sub>0</sub>  |
| h3     | Diamètre contacts de phase | 16,0 <sup>+0,10</sup> <sub>0</sub> |
| h4     | Diamètre intérieur isolant | 43,0 ±0,25                         |
| h5     | Diamètre extérieur isolant | 52,0 ±0,25                         |
| z      | Rayon de l'ergot           | 10,5 ±0,25                         |
| L      | Contacts phase             |                                    |
| Pil.   | Contact pilotes            |                                    |



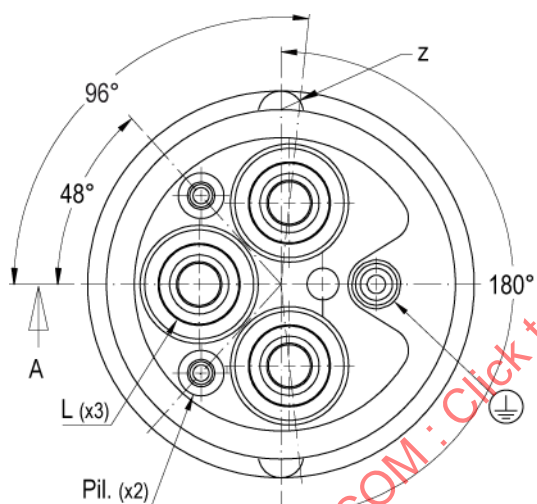
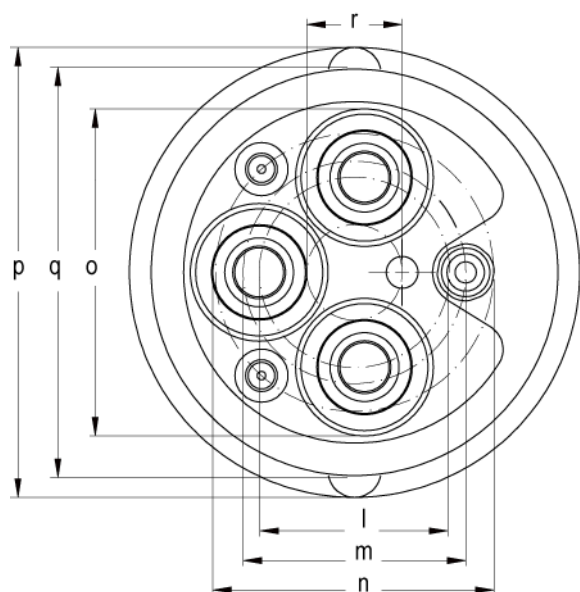
## E.2 Nez de fiche



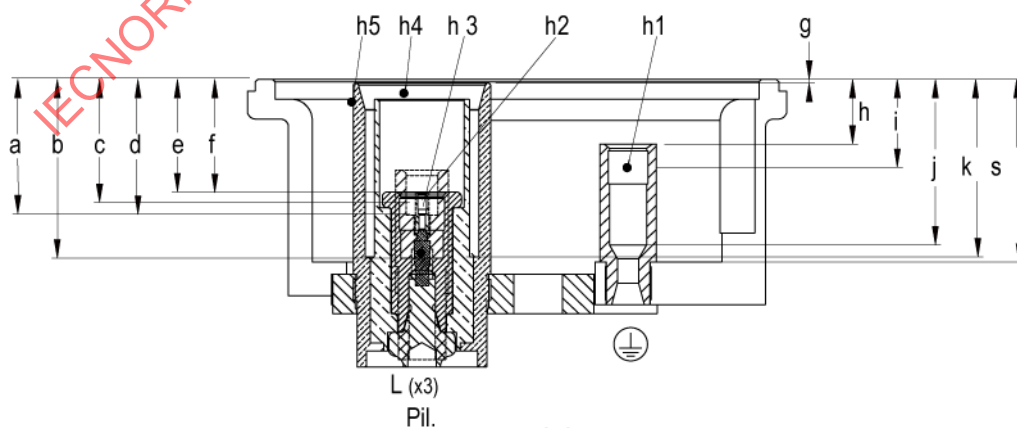
| Repère | Description                | Dimension<br>mm |                               |
|--------|----------------------------|-----------------|-------------------------------|
| a      | Profondeur isolant         | 64,0            | <sup>0</sup> <sub>-0,25</sub> |
| b      | Contact pilote             | 13,8            | <sup>0</sup> <sub>-0,25</sub> |
| c      | Contact phase              | 3,4             | <sup>0</sup> <sub>-0,10</sub> |
| d      | Sommet isolant             | 1,4             | <sup>0</sup> <sub>-0,10</sub> |
| e      | Contact de terre           | 11,1            | <sup>0</sup> <sub>-0,10</sub> |
| f      | Profondeur enveloppe       | 56,0            | ±0,25                         |
| g      | Diamètre extérieur isolant | 42,5            | <sup>+0,10</sup> <sub>0</sub> |
| h      | Diamètre intérieur isolant | 36,5            | ±0,10                         |
| i      | Diamètre contacts de phase | 16,0            | <sup>0</sup> <sub>-0,05</sub> |
| j      | Diamètre contacts pilotes  | 3,0             | <sup>0</sup> <sub>-0,05</sub> |
| k      | Diamètre contact de terre  | 14,0            | <sup>0</sup> <sub>-0,05</sub> |
| l      | Pas des contacts phase     | 71,6            | ±0,25                         |
| m      | Pas des contacts pilotes   | 84,0            | ±0,25                         |
| n      | Pas du contact de terre    | 105,0           | ±0,25                         |
| o      | Diamètre isolant           | 119,6           | ±0,25                         |
| p      | Diamètre intérieur         | 140,0           | <sup>+0,10</sup> <sub>0</sub> |
| q      | Diamètre extérieur         | 154,5           | <sup>0</sup> <sub>-0,10</sub> |
| r      | Diamètre + ergot           | 162,0           | ±0,25                         |
| z      | Rayon de l'ergot           | 7,5             | ±0,25                         |
| L      | Contacts phase             |                 |                               |
| Pil.   | Contact pilotes            |                 |                               |



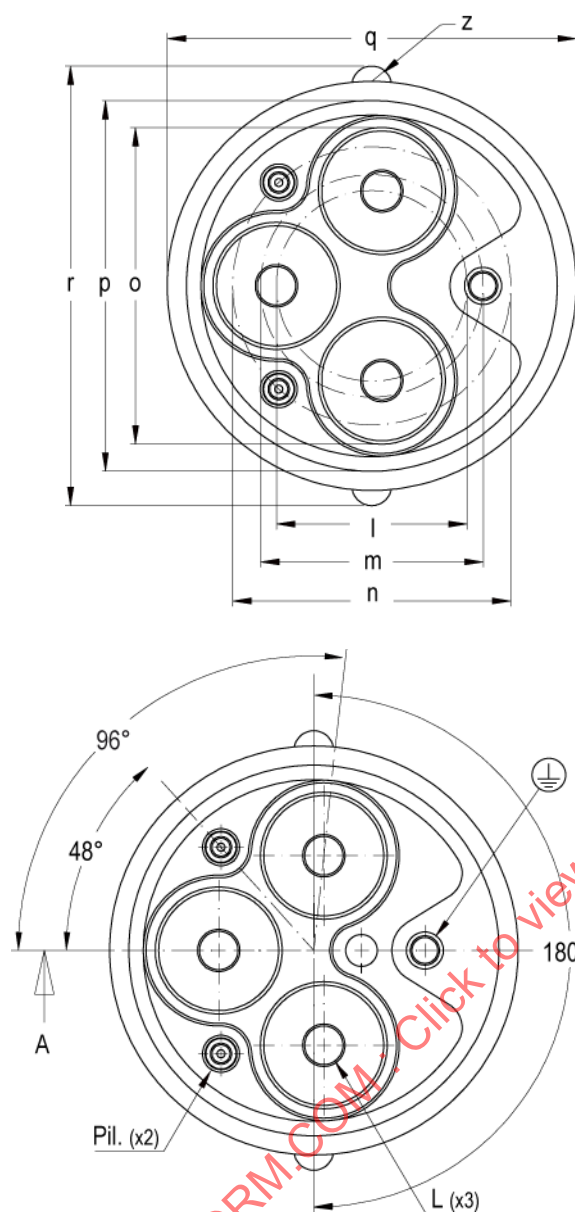
### E.3 Nez de prise mobile de navire



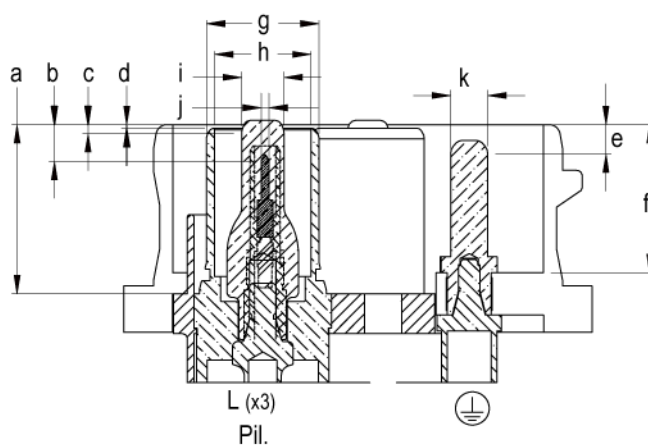
| Repère | Description                | Dimension<br>mm   |
|--------|----------------------------|-------------------|
| a      | Base contact pilote        | 50,8 $^{+0,10}_0$ |
| b      | Base contacts phase        | 67,5 $^{+0,10}_0$ |
| c      | Contact pilote             | 45,0 $\pm 0,25$   |
| d      | Contact phase              | 48,3 $\pm 0,25$   |
| e      | Sommet contacts phase      | 42,5 $\pm 0,25$   |
| f      | Sommet contacts pilotes    | 42,8 $\pm 0,25$   |
| g      | Sommet isolant             | 1,5 $\pm 0,25$    |
| h      | Sommet contact terre       | 24,5 $\pm 0,25$   |
| i      | Contact de terre           | 30,5 $\pm 0,25$   |
| j      | Base contacts phase        | 62,5 $^{+0,10}_0$ |
| k      | Base isolant               | 67,0 $^{+0,10}_0$ |
| l      | Pas des contacts phase     | 71,6 $\pm 0,25$   |
| m      | Pas du contact de terre    | 84,0 $\pm 0,25$   |
| n      | Pas des contacts pilotes   | 106,0 $\pm 0,25$  |
| o      | Diamètre isolant           | 123,6 $\pm 0,25$  |
| p      | Diamètre + ergot           | 170,0 $\pm 0,25$  |
| q      | Diamètre                   | 155,0 $\pm 0,25$  |
| r      | Pas du contact pilote      | 36,0 $\pm 0,25$   |
| s      | Profondeur enveloppe       | 69,0 $^{+0,10}_0$ |
| h1     | Diamètre contact de terre  | 14,0 $^{+0,10}_0$ |
| h2     | Diamètre contacts pilotes  | 3,0 $^{+0,10}_0$  |
| h3     | Diamètre contacts de phase | 16,0 $^{+0,10}_0$ |
| h4     | Diamètre intérieur isolant | 43,0 $^{+0,10}_0$ |
| h5     | Diamètre extérieur isolant | 52,0 $\pm 0,25$   |
| z      | Rayon de l'ergot           | 10,5 $\pm 0,25$   |
| L      | Contacts phase             |                   |
| Pil.   | Contact pilotes            |                   |



#### E.4 Socle de connecteur de navire



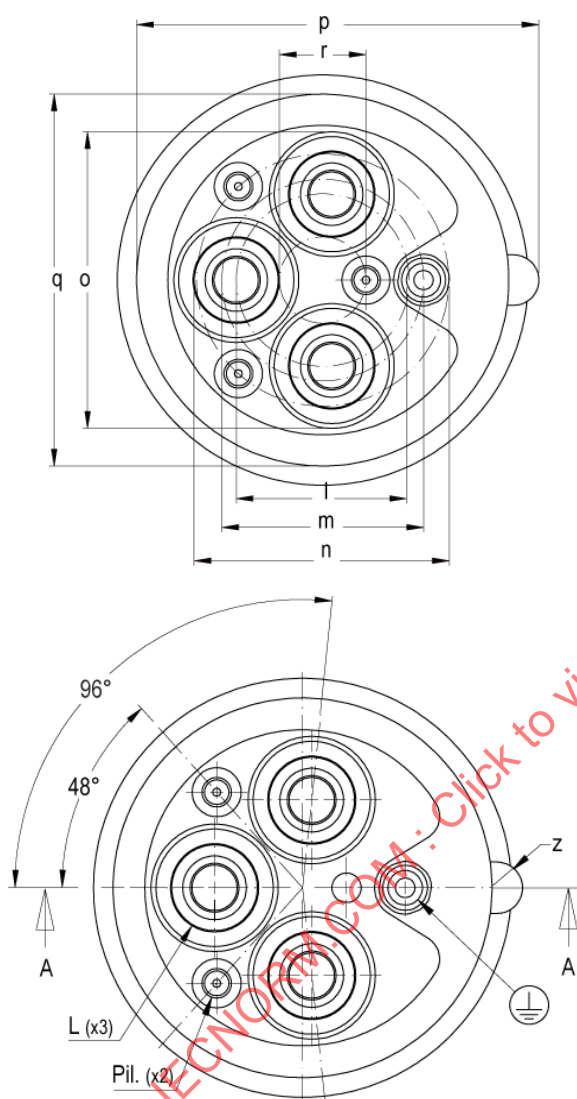
| Repère | Description                | Dimension<br>mm |                               |
|--------|----------------------------|-----------------|-------------------------------|
| a      | Profondeur isolant         | 64,0            | <sup>0</sup> <sub>-0,25</sub> |
| b      | Contact pilote             | 13,8            | <sup>0</sup> <sub>-0,25</sub> |
| c      | Contact phase              | 3,4             | <sup>0</sup> <sub>-0,10</sub> |
| d      | Sommet isolant             | 1,4             | <sup>0</sup> <sub>-0,10</sub> |
| e      | Contact de terre           | 11,1            | <sup>0</sup> <sub>-0,10</sub> |
| f      | Profondeur enveloppe       | 56,0            | ±0,25                         |
| g      | Diamètre extérieur isolant | 42,5            | <sup>+0,10</sup> <sub>0</sub> |
| h      | Diamètre intérieur isolant | 36,5            | ±0,10                         |
| i      | Diamètre contacts de phase | 16,0            | <sup>0</sup> <sub>-0,05</sub> |
| j      | Diamètre contacts pilotes  | 3,0             | <sup>0</sup> <sub>-0,05</sub> |
| k      | Diamètre contact de terre  | 14,0            | <sup>0</sup> <sub>-0,05</sub> |
| l      | Pas des contacts phase     | 71,6            | ±0,25                         |
| m      | Pas des contacts pilotes   | 84,0            | ±0,25                         |
| n      | Pas du contact de terre    | 105,0           | ±0,25                         |
| o      | Diamètre isolant           | 119,6           | ±0,25                         |
| p      | Diamètre intérieur         | 140,0           | <sup>+0,10</sup> <sub>0</sub> |
| q      | Diamètre extérieur         | 154,5           | <sup>0</sup> <sub>-0,10</sub> |
| r      | Diamètre + ergots          | 166,0           | ±0,25                         |
| z      | Rayon de l'ergot           | 7,5             | ±0,25                         |
| L      | Contacts phase             |                 |                               |
| Pil.   | Contact pilotes            |                 |                               |



## Annexe F (normative)

### Feuilles de norme F: Appareils 12 kV 500 A triphasés avec deux contacts pilotes IP2X

#### F.1 Socle de prise



| Repère | Description                | Dimension<br>mm |            |
|--------|----------------------------|-----------------|------------|
| a      | Base contact pilote        | 50,8            | +0,10<br>0 |
| b      | Base contacts phase        | 67,5            | +0,10<br>0 |
| c      | Contact pilote             | 45,0            | ±0,25      |
| d      | Contact phase              | 48,3            | ±0,25      |
| e      | Sommet contacts phase      | 42,5            | ±0,25      |
| f      | Sommet contacts pilotes    | 42,8            | ±0,25      |
| g      | Sommet isolant             | 1,5             | ±0,25      |
| h      | Sommet contact terre       | 24,5            | ±0,25      |
| i      | Contact de terre           | 30,5            | ±0,25      |
| j      | Base contacts phase        | 62,5            | +0,10<br>0 |
| k      | Base isolant               | 67,0            | +0,10<br>0 |
| l      | Pas des contacts phase     | 71,6            | ±0,25      |
| m      | Pas du contact de terre    | 84,0            | ±0,25      |
| n      | Pas des contacts pilotes   | 106,0           | ±0,25      |
| o      | Diamètre isolant           | 123,6           | ±0,25      |
| p      | Diamètre + ergot           | 167,5           | ±0,25      |
| q      | Diamètre                   | 155,0           | ±0,25      |
| r      | Pas des contacts pilotes   | 36,0            | ±0,25      |
| s      | Profondeur enveloppe       | 69,0            | ±0,25      |
| h1     | Diamètre contact de terre  | 14,0            | +0,10<br>0 |
| h2     | Diamètre contacts pilotes  | 3,0             | +0,10<br>0 |
| h3     | Diamètre contacts de phase | 16,0            | +0,10<br>0 |
| h4     | Diamètre intérieur isolant | 43,0            | +0,10<br>0 |
| h5     | Diamètre extérieur isolant | 52,0            | ±0,25      |
| z      | Rayon de l'ergot           | 10,5            | ±0,25      |
| L      | Contacts phase             |                 |            |
| Pil.   | Contact pilotes            |                 |            |

