T-TYPE enclosures
Standard & Aggressive environments,
Hygienic applications

T-TYPE
STANDARD
for standard applications

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T-TYPE/W
for aggressive environments

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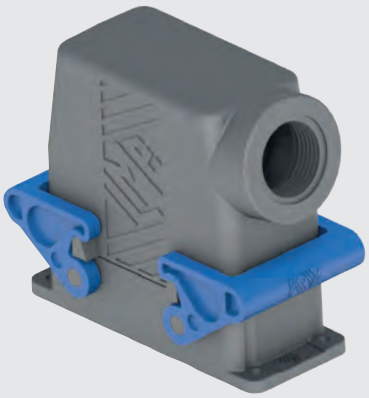
HYGIENIC T-TYPE/H
for food & beverage

HYGIENIC T-TYPE/C
for low temperatures



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ECOLAB

T-TYPE general information

International standards

T-TYPE enclosures have been **successfully** tested in accordance with the following international standards, guaranteeing their usage for numerous applications:

- **EN 61984: Connectors - Safety requirements and tests.**
- **ANSI/UL 50 (Enclosures for Electrical Equipment)** equivalent to voluntary North American standard NEMA 250 (NEMA = National Electrical Manufactures Association) and the corresponding Canadian standard CSA C22.2 No. 94 (Special Purpose Enclosures) for degrees of protection used in North America and required by local installation codes (e.g. NFPA 70 National Electrical Code in the USA, CSA plant standards for Canada). The current type approval was obtained after passing a series of tests carried out in accordance with the standard, in particular: **Type 12 (= NEMA 12)** for internal use, similar to degree of protection IP54 according to IEC/EN 60529. (Only standard T-TYPE enclosures).
- **EN 60529: Degrees of protection provided by enclosures (IP Code)** for ratings IP65, IP66 and IP69 (according to type).
- **EN 62262: Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK Code)** for ratings IK09 (enclosures with levers), IK10 (enclosures without levers).
- **IEC 60068-2-52: Environmental testing - Part 2-52:**
  Salt mist, cyclic: with 5% solution of sodium chloride (NaCl), solution Ph from 6,5 to 7,2;
  ENVIRONMENTAL CONDITIONS: salt mist 35 °C for 2 hours; 40 °C for 168 hours with 93% relative humidity;
  NO. OF CYCLES: 4;
  TEST PASSED: maintaining the IP degree of protection and with a change of contact resistance ≤ 50% of the initial value or ≤ 5 mΩ.
- **IEC 60068-2-6: Environmental testing - Part 2-6:**
  Vibration (sinusoidal): with values 10Hz÷500Hz, 0,35 mm amplitude of displacement, 50m/s² ($5g_n$), crossover point 60,1 Hz;
  NO. OF CYCLES: 10;
  TEST PASSED: scanning 3 axes for 2 hours, with a change of contact resistance value ≤ 50% of the initial value or ≤ 5 mΩ and no micro-interruption (≥ 1 µs).
- **IEC 60068-2-3: Environmental testing - Part 2-3:**
  Damp heat, steady state: at 40 °C, 93% relative humidity, 504 hours;
  TEST PASSED: with a change of contact resistance value ≤ 50% of the initial value or ≤ 5 mΩ and no disruptive discharge (insulation resistance > 100 GΩ).
- **IEC 60068-2-30: Environmental testing - Part 2-30:**
  Damp heat, cyclic: 40 °C, 95% relative humidity, 12 hours at ambient temperature;
  NO. OF CYCLES: 21;
  TEST PASSED: with a change of contact resistance value ≤ 50% of the initial value or ≤ 5 mΩ and no disruptive discharge (insulation resistance > 100 GΩ).

T-TYPE general information

Resistance to chemicals comparison table

A	T-TYPE	T-TYPE/W	T-TYPE/H	T-TYPE/C
Acetone (propanone)	x	x	x	x
Active chlorine	x	x	x	x
Alum	●	●	●	●
Ammonia, 10% aqueous solution	●	x	●	●
Ammonia, liquid	x	x	●	●
Ammonium acetate	●	x	●	●
Ammonium carbonate	●	●	●	x
Ammonium chloride	●	●	●	x
Ammonium nitrate	●	●	●	●
Ammonium phosphate	●	●	●	●
Ammonium sulphate	●	●	●	●
Amyl alcohol	□	□	□	x
Aniline	□	□	x	x
Aqua regia (1:3 nitric acid : hydrochloric acid)	x	x	x	x
Asphalt	□	□	□	x
B				
Beer	●	●	●	●
Benzene	x	□	x	x
Borax	□	□	□	□
Boric acid	●	●	●	●
Boric acid, 10% aqueous solution	●	●	●	●
Boric water (boric acid 3%)	●	●	●	●
Butane, gas	□	□	□	x
Butane, liquid	□	□	□	x
C				
Calcium chloride	●	●	●	●
Calcium chloride, 10% aqueous solution	●	●	●	●
Calcium chloride, diluted suspension	●	●	●	●
Calcium nitrate	●	●	●	●
Calcium sulphate	●	●	x	●
Caustic potash (potassium hydroxide) 10%	x	●	●	x
Citric acid 50% aqueous solution	x	x	●	●
Copper sulphate 10% aqueous solution	●	●	●	●
Cresol	□	□	x	x
Cresolic solution	□	□	x	x
Cutting oil	□	□	□	x
Cyclo-hexane	□	□	□	x
D				
Deca-hydro-naphtalene	x	x	x	x
Di-Ethylhexyl Phtalate	●	x	x	x
Di-isononyl Phtalate	●	x	x	x
Di-octyl Phtalate	●	●	x	x
Diesel Oil	□	□	□	□
Diluted Glucose	●	●	●	●

D	T-TYPE	T-TYPE/W	T-TYPE/H	T-TYPE/C
Diluted Glycerine	●	●	●	●
Diluted Glycol	●	●	●	●
Diluted Phenol	□	□	x	x
Diluted urea	●	●	●	●
E				
Ethanol (ethyl alcohol)	x	x	●	●
Ethyl alcohol, 10% aqueous solution	●	●	●	●
Ethylene-glycol or propylene-glycol	●	●	●	●
F				
Fatty acids	●	●	●	□
Ferric chloride, 10% aqueous solution	x	x	x	x
Formalin (formaldehyde 40% aqueous solution)	x	x	●	●
Fruit juices	●	●	●	●
Fuel oils	□	□	□	x
G				
Gaseous ammonia	□	x	●	●
Gaseous propane	x	●	●	x
Glycerine	●	●	●	●
Grinding oil	□	□	□	x
Gypsum (see calcium sulphate)	●	●	x	●
H				
Heptane	□	□	□	x
Hexane	□	□	□	x
Hydrochloric acid, <2% aqueous solution	x	x	●	□
Hydrogen sulphide	□	x	●	x
I				
Ink	●	●	●	●
IRM oil 901	●	●	●	●
IRM oil 902	□	●	●	x
IRM oil 903	x	□	□	□
Isopropyl alcohol	□	●	●	●
K				
Kitchen salt, aqueous solution	●	●	●	●
L				
Lactic acid	●	●	●	●
Linseed oil	●	●	●	●
Liquid soap	x	●	●	●
Lubricating engine oil	□	□	□	x
Lubricating oil	●	●	●	x

The classification herewith provided is only a generic reference guide in order to enable a first selection. It is based on literature data provided by the suppliers of the raw materials used, which are related to tests carried out on specimens under test conditions which are not always homogeneous and involving accelerating techniques, therefore not necessarily describing real operational conditions. The actual behaviour of products in the field may therefore be positively or negatively influenced by several variable environmental parameters such as temperature, relative humidity, simultaneous presence of a plurality of substances and their concentration, exposure time, dynamic or static application condition, and so on. The accuracy of transferring the indications given herein to the actual conditions of use is therefore merely indicative and does not imply any guarantee or responsibility by ILME.

NOTE: As the characterizing element of the T-TYPE/W series is the different sealing gasket material, hoods and covers without sealing gaskets for this series are the same of T-TYPE Standard.

	T-TYPE	T-TYPE/W	T-TYPE/H	T-TYPE/C
M				
Mercury	●	●	●	●
Methanol (methyl alcohol)	x	x	●	●
Methyl alcohol, diluted 50%	□	□	●	●
Mineral based oil	●	●	●	●
Mineral oils (un-tasteful)	●	●	●	●
Mothballs (naphthalene, paradichlorobenzene)	□	□	x	x
Muriatic acid, concentrated	x	x	x	x
N				
n-Butanol (butyl alcohol)	●	●	●	●
Naphthalene	□	●	x	x
Normal (low octane) gasoline (petrol)	□	□	□	x
O				
Octane	□	□	□	x
Oleic acid	●	●	●	x
Oxalic acid	●	●	●	●
Ozone	x	x	x	□
P				
Paraffin oil	●	●	●	●
Petrol ether	□	□	□	□
Petroleum	●	●	●	●
Petroleum spirit (dry cleaning)	□	□	x	x
Potassium carbonate	●	●	●	●
Potassium chlorate	●	●	x	●
Potassium chloride	●	●	●	●
Potassium cyanide, aqueous solution	●	●	●	●
Potassium di-chromate	□	□	●	●
Potassium iodide	□	□	●	●
Potassium nitrate	□	x	x	●
Potassium persulphate	□	□	x	●
Potassium sulphate	□	□	●	●
S				
Sea water	●	●	●	●
Silicon oil	●	●	●	x
Soap solution	□	●	●	●
Sodium bicarbonate (oxide)	●	●	●	●
Sodium carbonate (washing soda)	●	●	●	●
Sodium chlorate	●	●	x	●
Sodium chloride (kitchen salt)	●	●	●	●
Sodium bisulphate, aqueous solution	●	●	●	●
Sodium hydroxide (caustic soda)	x	x	●	●
Sodium hydroxide 12,5% (liscivia)	□	x	●	●
Sodium Hypochlorite	x	x	●	●

	T-TYPE	T-TYPE/W	T-TYPE/H	T-TYPE/C
S				
Sodium nitrate	●	●	●	x
Sodium nitrite	□	□	●	x
Sodium perborate	●	●	●	●
Sodium phosphate	●	●	●	x
Sodium silicate	●	x	x	●
Sodium sulphate	●	●	●	●
Sodium sulphide	●	●	●	●
Sodium Thiosulphate (photographic fixer)	●	●	●	●
Solution for photographic processing	●	●	●	●
Starch, aqueous (amylum)	●	●	●	●
Stearic acid	●	●	●	●
Succinic acid (butanedioic acid)	●	●	●	●
Sulphur	●	●	x	x
Sulphur dioxide (sulphurous anhydride)	□	x	x	□
Sulphuric acid, 2% aqueous solution	x	x	□	□
T				
Tallow	●	●	●	●
Tar	□	□	x	□
Tartaric acid	●	●	●	●
Toluene	x	x	x	x
Transformer oil (dielectric)	●	●	●	●
Trichloroethylene	x	x	x	x
Tricresyl phosphate	●	●	x	x
Turpentine essence	x	□	□	x
U				
Urine	●	●	●	●
V				
Vegetable oil	●	●	●	●
Vinegar	x	□	●	□
W				
Water	●	●	●	●
White alcohol (isopropanol + ethanol)	□	●	●	●
X				
Xylene	x	x	x	x

Legend

● : Resistant □ : Limited resistance x : Not resistant

T-TYPE HYGIENIC

New, improved design for smoother locking levers and cleanproof logo

▶ New ILME-striped logo in high relief 0,15 mm thickness and rounded edges

▶ Levers with rounded edges, more compact design, improved ergonomics

Safety, detectability and cleaning for food contamination prevention

Find out more
www.ilme.com

TECHNICAL FEATURES

Watch our technical clip

The **T-TYPE HYGIENIC** series (T-TYPE /H and T-TYPE /C) enclosures have been **improved** in their design to enhance their cleanability, thus reducing the likeliness of providing seat for dirt.

This has been achieved by a overhaul design of their locking levers, keeping its **sturdiness** and impeccable **locking function,** still made with blue coloured thermoplastic insulating material qualified for contact with food and resistant to the most popular cleaning agents, now also **metal-detectable**, in the remote event - frankly quite unlikely - of loss of parts of said levers in the food.

The **new design** of the T-TYPE HYGIENIC locking levers is characterized by:

- a **"family air"** shared with the new IL-BRID locking levers for standard metallic connector enclosures (see previous pages);
- the **smoothening** of any recess;
- the **remodelling** of any part possibly retaining dirt;
- the keeping of utmost **ergonomics;**
- the achieving of significant **reduction** in footprint, during movement, particularly on the angles.

Additionally, the ILME-striped logo, signature trait of the T-TYPE series hoods, has become a **smoothed, only slightly high relief and clean proof sign,** guaranteeing an even more cleanable surface compared to the previous bas-relief version.

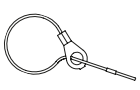
The ILME logo improvement regards all T-TYPE variants, including the standard type and the T-TYPE /W, all sharing the same hoods. **Part numbers remain unchanged.** Zip code will be announced by a dedicated Product Info (also for standard T-TYPE and T-TYPE /W).

In addition to the models described in detail in the following pages, all **surface mounting housings with both M cable entries opened** and all hoods and **housings with preassembled CR ... BPE protective earth jumpers** are available. See Table below for all part Nos.

Variants with preassembled **CR ... BPE** protective earth jumpers are available for **all series T-TYPE** hoods and housings, **including also standard types and T-TYPE /W**. Their part number is the same of base model plus **letter B** at the end, as shown – for T-TYPE HYGIENIC models only – in the table below.

			T-TYPE HYGIENIC /H		T-TYPE HYGIENIC Cold /C	
Size	**Cable outlet**	**Locking lever**	**part No.**	**part No.***	**part No.**	**part No.***
44.27	-	single	THIH 06 L	THIH 06 LB	THIC 06 L	THIC 06 LB
57.27	-	double	THIH 10	THIH 10 B	THIC 10	THIC 10 B
77.27	-		THIH 16	THIH 16 B	THIC 16	THIC 16 B
104.27	-		THIH 24	THIH 24 B	THIC 24	THIC 24 B
44.27	M25	single	TAPH 06 L25	TAPH 06L25B	TAPC 06 L25	TAPC 06L25B
	M32		TAPH 06 L32	TAPH 06L32B	TAPC 06 L32	TAPC 06L32B
	2xM25		TAPH 06 L225	TAPH06L225B	TAPC 06 L225	TAPC06L225B
	2xM32		TAPH 06 L232	TAPH06L232B	TAPC 06 L232	TAPC06L232B
57.27	M25	double	TAPH 10.25	TAPH 10.25B	TAPC 10.25	TAPC 10.25B
	M32		TAPH 10.32	TAPH 10.32B	TAPC 10.32	TAPC 10.32B
	2xM25		TAPH 10.225	TAPH10.225B	TAPC 10.225	TAPC10.225B
	2xM32		TAPH 10.232	TAPH10.232B	TAPC 10.232	TAPC10.232B
77.27	M32		TAPH 16.32	TAPH 16.32B	TAPC 16.32	TAPC 16.32B
	M40		TAPH 16.40	TAPH 16.40B	TAPC 16.40	TAPC 16.40B
	2xM32		TAPH 16.232	TAPH16.232B	TAPC 16.232	TAPC16.232B
	2xM40		TAPH 16.240	TAPH16.240B	TAPC 16.240	TAPC16.240B
104.27	M32		TAPH 24.32	TAPH 24.32B	TAPC 24.32	TAPC 24.32B
	M40		TAPH 24.40	TAPH 24.40B	TAPC 24.40	TAPC 24.40B
	2xM32		TAPH 24.232	TAPH24.232B	TAPC 24.232	TAPC24.232B
	2xM40		TAPH 24.240	TAPH24.240B	TAPC 24.240	TAPC24.240B
44.27	M25	single	TAVH 06 LG25	TAVH06LG25B	TAVC 06 LG25	TAVC06LG25B
	M32		TAVH 06 LG32	TAVH06LG32B	TAVC 06 LG32	TAVC06LG32B
57.27	M25	double	TAVH 10 G25	TAVH 10G25B	TAVC 10 G25	TAVC 10G25B
	M32		TAVH 10 G32	TAVH 10G32B	TAVC 10 G32	TAVC 10G32B
77.27	M32		TAVH 16 G32	TAVH 16G32B	TAVC 16 G32	TAVC 16G32B
	M40		TAVH 16 G40	TAVH 16G40B	TAVC 16 G40	TAVC 16G40B
104.27	M32		TAVH 24 G32	TAVH 24G32B	TAVC 24 G32	TAVC 24G32B
	M40		TAVH 24 G40	TAVH 24G40B	TAVC 24 G40	TAVC 24G40B

* Enclosures with protective earth jumpers CR...BPE preassembled with part No. of base model plus **letter B** at the end.

			Covers for T-TYPE HYGIENIC	Covers for T-TYPE HYGIENIC Cold
Size	**With loop**	**Locking lever**	**part No.**	**part No.**
44.27		single	THCH 06 LG	THCC 06 LG
57.27		double	THCH 10 G	THCC 10 G
77.27			THCH 16 G	THCC 16 G
104.27			THCH 24 G	THCC 24 G

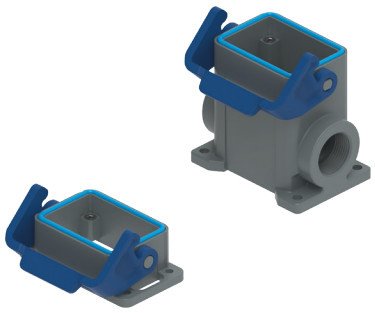
T-TYPE / H for production lines HYGIENIC SERIES

inserts		page:
CDD	24 poles + ⏚	**76**
CDS	9 poles + ⏚	**-**
CDSH	9 poles + ⏚	**86**
CDSH NC	6 poles + ⏚	**95**
CNE	6 poles + ⏚	**110**
CSE	6 poles + ⏚	**-**
CSH	6 poles + ⏚	**110**
CSH S	6 poles + ⏚	**122**
CCE	6 poles + ⏚	**130**
CSS	6 poles + ⏚	**148**
CT, CTSE (16 A)*	6 poles + ⏚	**160**
CQE	10 poles + ⏚	**168**
MIXO	2 modules	**262 - 317**

* only for standard insulating version THIH

refer to CN.19 pages

housings with single lever
HNBR gasket



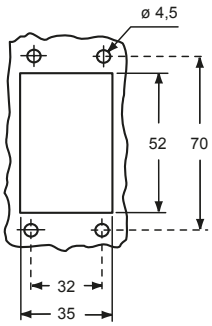
FROM JULY 2022

hoods with 2 pegs

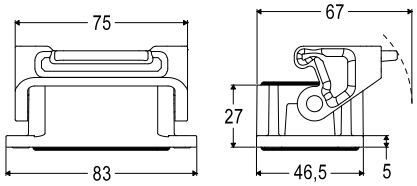
FROM JULY 2022

description	part No.	entry M	part No.	entry M
bulkhead mounting housing with thermoplastic lever	**THIH 06 L**			
surface mounting housing with thermoplastic lever, high construction	**TAPH 06 L25**	25		
surface mounting housing with thermoplastic lever, high construction	**TAPH 06 L32**	32		
with pegs, side entry, high construction			**TMAO 06 L25**	25
with pegs, side entry, high construction			**TMAO 06 L32**	32
with pegs, top entry, high construction			**TMAV 06 L25**	25
with pegs, top entry, high construction			**TMAV 06 L32**	32

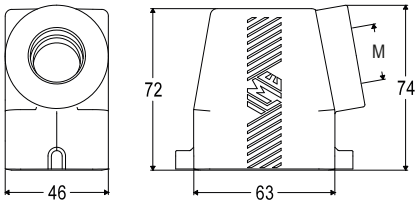
panel cut-out for bulkhead mounting housings



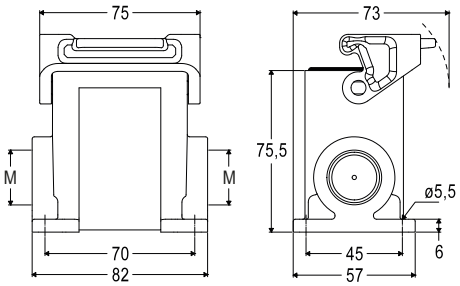
THIH L



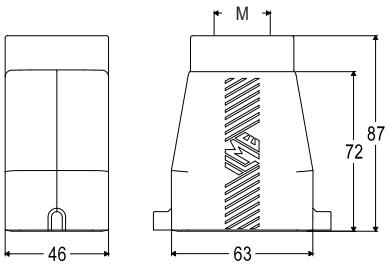
TMAO L



TAPH L



TMAV L



(•) The surface mounting, high construction housings are supplied with an open threaded entry (•) and diametrically opposite a closed threaded entry which can be opened by the user if required (with suitable tool).

cURus
Type 12 pending

EN 60529 IP66 IP69 IEC 60529 ambient temperature limits -40 °C / +70 °C

T-TYPE / H for production lines HYGIENIC SERIES

inserts		page:
CDD	24 poles + ⏚	**76**
CDS	9 poles + ⏚	**-**
CDSH	9 poles + ⏚	**86**
CDSH NC	6 poles + ⏚	**95**
CNE	6 poles + ⏚	**110**
CSE	6 poles + ⏚	**-**
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CSH S	6 poles + ⏚	**122**
CCE	6 poles + ⏚	**130**
CSS	6 poles + ⏚	**148**
CT, CTSE (16 A)*	6 poles + ⏚	**160**
CQE	10 poles + ⏚	**168**
MIXO	2 modules	**262 - 317**

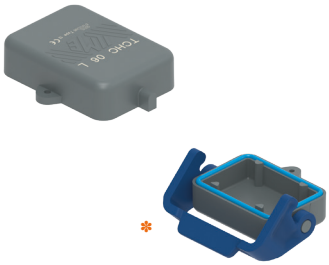
* only for standard insulating version TCHC

refer to CN.19 pages

hoods with single lever top entry, HNBR gasket

FROM JULY 2022

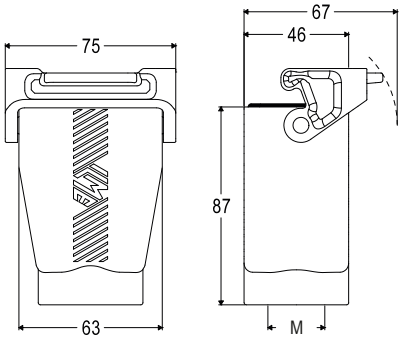
covers HNBR gasket



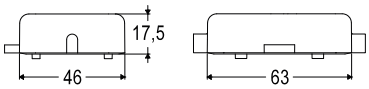
FROM JULY 2022*

description	part No.	entry M	part No. (with eyelet)	part No. (with loop)
with thermoplastic lever and gasket, high construction	**TAVH 06 LG25**	25		
with thermoplastic lever and gasket, high construction	**TAVH 06 LG32**	32		
with pegs			**TCHC 06 L**	**TCHC 06 SL**
with thermoplastic lever and gasket				**THCH 06 LG** *

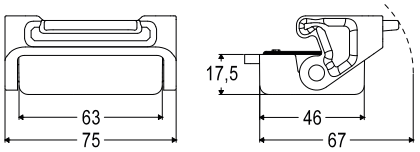
TAVH LG



TCHC L (SL)

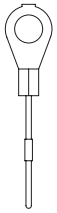


THCH LG



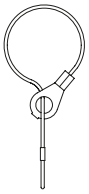
For fixing on housings

eyelet



For fixing on hoods

loop



cURus
Type 12 pending

IP66 IP69 EN 60529 IEC 60529 ambient temperature limits -40 °C / +70 °C

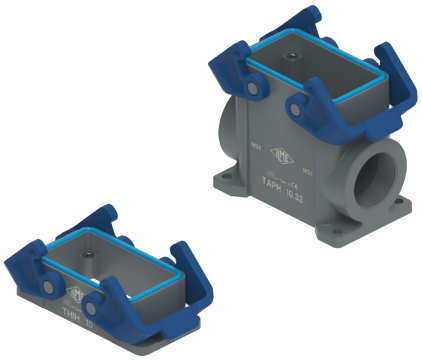
T-TYPE / H for production lines HYGIENIC SERIES

inserts		page:
CDD	42 poles + ⏚	**78**
CDS	18 poles + ⏚	**-**
CDSH	18 poles + ⏚	**87**
CNE	10 poles + ⏚	**111**
CSE	10 poles + ⏚	**-**
CSH	10 poles + ⏚	**111**
CSH S	10 poles + ⏚	**123**
CCE	10 poles + ⏚	**131**
CMSH	3+2 (aux) poles + ⏚	**136**
CMCE	3+2 (aux) poles + ⏚	**137**
CSS	10 poles + ⏚	**149**
CT, CTSE (16 A)*	10 poles + ⏚	**161**
CQE	18 poles + ⏚	**169**
CX	8/24 poles + ⏚	**194**
MIXO	3 modules	**262 - 317**

* only for standard insulating version THIH

refer to CN.19 pages

housings with 2 levers
HNBR gasket



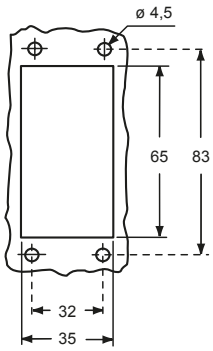
FROM JULY 2022

hoods with 4 pegs

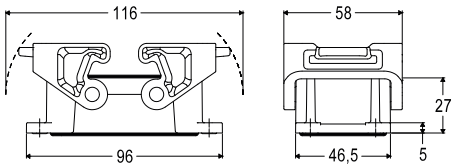
FROM JULY 2022

description	part No.	entry M	part No.	entry M
bulkhead mounting housing with thermoplastic levers	**THIH 10**			
surface mounting housing, thermoplastic levers, high construction	**TAPH 10.25**	25		
surface mounting housing, thermoplastic levers, high construction	**TAPH 10.32**	32		
with pegs, side entry, high construction			**TMAO 10.25**	25
with pegs, side entry, high construction			**TMAO 10.32**	32
with pegs, top entry, high construction			**TMAV 10.25**	25
with pegs, top entry, high construction			**TMAV 10.32**	32

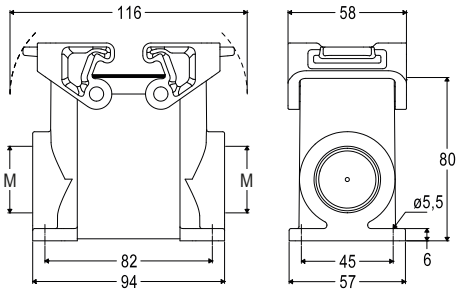
panel cut-out for bulkhead mounting housings



THIH

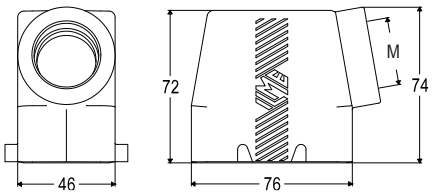


TAPH

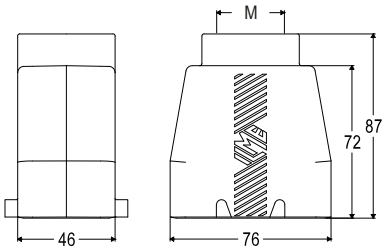


The surface mounting, high construction housings are supplied with an open threaded entry and diametrically opposite a closed threaded entry which can be opened by the user if required (with suitable tool).

TMAO



TMAV



cURus
Type 12 pending

IP66 IP69 EN 60529 IEC 60529 ambient temperature limits -40 °C / +70 °C

T-TYPE / H for production lines HYGIENIC SERIES

inserts		page:
CDD	42 poles + ⏚	**78**
CDS	18 poles + ⏚	**-**
CDSH	18 poles + ⏚	**87**
CNE	10 poles + ⏚	**111**
CSE	10 poles + ⏚	**-**
CSH	10 poles + ⏚	**111**
CSH S	10 poles + ⏚	**123**
CCE	10 poles + ⏚	**131**
CMSH	3+2 (aux) poles + ⏚	**136**
CMCE	3+2 (aux) poles + ⏚	**137**
CSS	10 poles + ⏚	**149**
CT, CTSE (16 A)*	10 poles + ⏚	**161**
CQE	18 poles + ⏚	**169**
CX	8/24 poles + ⏚	**194**
MIXO	3 modules	**262 - 317**

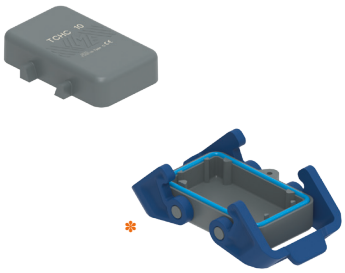
* only for standard insulating version TCHC

refer to CN.19 pages

hoods with 2 levers
top entry, HNBR gasket

FROM JULY 2022

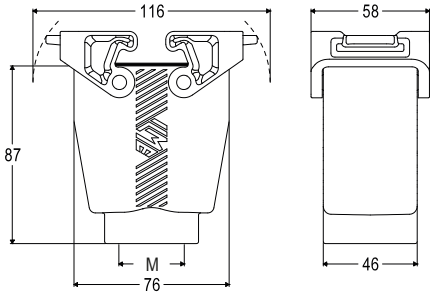
covers
HNBR gasket



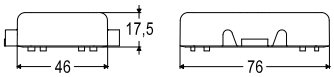
FROM JULY 2022*

description	part No.	entry M	part No. (with eyelet)	part No. (with loop)
with thermoplastic levers and gasket, high construction	**TAVH 10 G25**	25		
with thermoplastic levers and gasket, high construction	**TAVH 10 G32**	32		
with 4 pegs			**TCHC 10**	**TCHC 10 S**
with 2 thermoplastic levers and gasket				**THCH 10 G** *

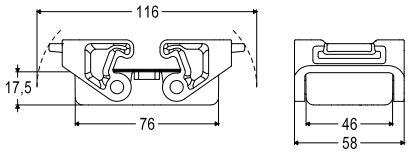
TAVH G



TCHC (S)



THCH G

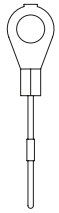


cURus
Type 12 pending

ambient temperature limits -40 °C / +70 °C

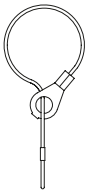
For fixing on housings

eyelet



For fixing on hoods

loop



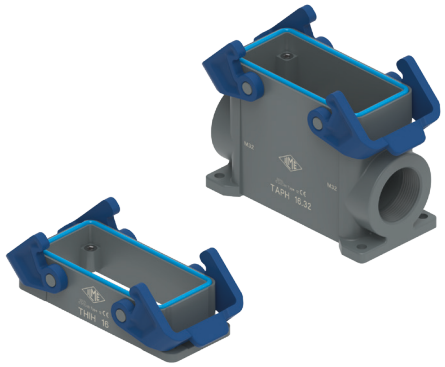
T-TYPE / H for production lines HYGIENIC SERIES

inserts		page:
CD	40 poles + ⏚	**70**
CDD	72 poles + ⏚	**79**
CDS	27 poles + ⏚	**-**
CDSH	27 poles + ⏚	**88**
CNE	16 poles + ⏚	**112**
CSE	16 poles + ⏚	**-**
CSH	16 poles + ⏚	**112**
CSH S	16 poles + ⏚	**124**
CCE	16 poles + ⏚	**132**
CMSH, CMCE	6+2 (aux) poles + ⏚	**138 - 139**
CSS	16 poles + ⏚	**150**
CT, CTSE (16 A)*	16 poles + ⏚	**162**
CQE	32 poles + ⏚	**170**
CQEE	40 poles + ⏚	**176**
CP	6 poles + ⏚	**178**
CX	6/12, 6/36 and 12/2 poles + ⏚	**197 - 199**
CX	4/0 and 4/2 poles + ⏚	**200 - 201**

* only for standard insulating version THIH

refer to CN.19 pages

housings with 2 levers
HNBR gasket



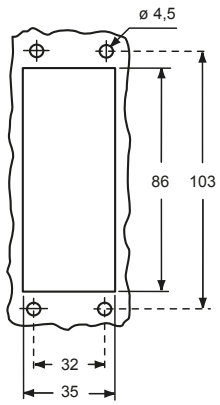
FROM JULY 2022

hoods with 4 pegs

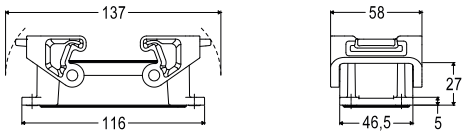
FROM JULY 2022

description	part No.	entry M	part No.	entry M
bulkhead mounting housing with thermoplastic levers	**THIH 16**			
surface mounting housing, thermoplastic levers, high construction	**TAPH 16.32**	32		
surface mounting housing, thermoplastic levers, high construction	**TAPH 16.40**	40		
with pegs, side entry, high construction			**TMAO 16.32**	32
with pegs, side entry, high construction			**TMAO 16.40**	40
with pegs, top entry, high construction			**TMAV 16.32**	32
with pegs, top entry, high construction			**TMAV 16.40**	40

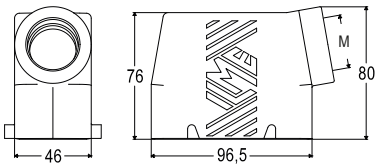
panel cut-out for bulkhead mounting housings



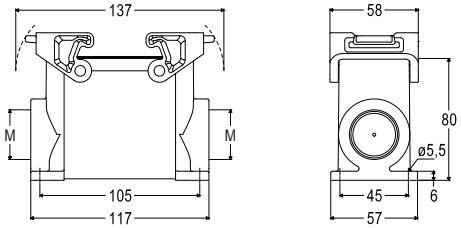
THIH



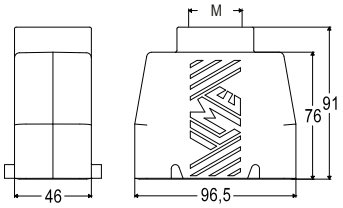
TMAO



TAPH



TMAV



The surface mounting, high construction housings are supplied with an open threaded entry and diametrically opposite a closed threaded entry which can be opened by the user if required (with suitable tool).

cURus
Type 12 pending

EN 60529 IP66 IP69 IEC 60529 ambient temperature limits -40 °C / +70 °C

T-TYPE / H for production lines HYGIENIC SERIES

inserts		page:
CD	40 poles + ⏚	**70**
CDD	72 poles + ⏚	**79**
CDS	27 poles + ⏚	**-**
CDSH	27 poles + ⏚	**88**
CNE	16 poles + ⏚	**112**
CSE	16 poles + ⏚	**-**
CSH	16 poles + ⏚	**112**
CSH S	16 poles + ⏚	**124**
CCE	16 poles + ⏚	**132**
CMSH, CMCE	6+2 (aux) poles + ⏚	**138 - 139**
CSS	16 poles + ⏚	**150**
CT, CTSE (16 A)*	16 poles + ⏚	**162**
CQE	32 poles + ⏚	**170**
CQEE	40 poles + ⏚	**176**
CP	6 poles + ⏚	**178**
CX	6/12, 6/36 and 12/2 poles + ⏚	**197 - 199**
CX	4/0 and 4/2 poles + ⏚	**200 - 201**

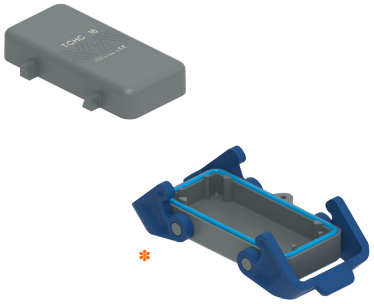
* only for standard insulating version TCHc

refer to CN.19 pages

hoods with 2 levers
top entry, HNBR gasket

FROM JULY 2022

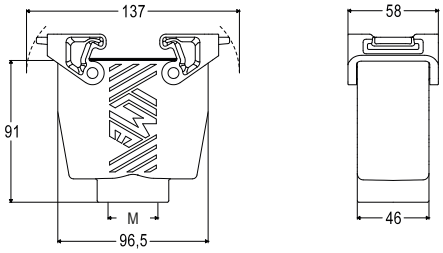
covers
HNBR gasket



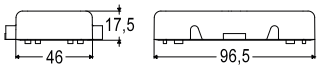
FROM JULY 2022*

description	part No.	entry M	part No. (with eyelet)	part No. (with loop)
with thermoplastic levers and gasket, high construction	**TAVH 16 G32**	32		
with thermoplastic levers and gasket, high construction	**TAVH 16 G40**	40		
with 4 pegs			**TCHC 16**	**TCHC 16 S**
with 2 thermoplastic levers and gasket				**THCH 16 G** *

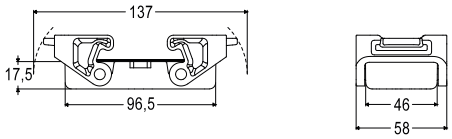
TAVH G



TCHC (S)

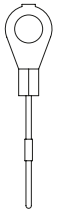


THCH G



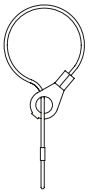
For fixing on housings

eyelet



For fixing on hoods

loop



cURus
Type 12 pending

EN 60529 IP66 IP69 IEC 60529 ambient temperature limits -40 °C / +70 °C

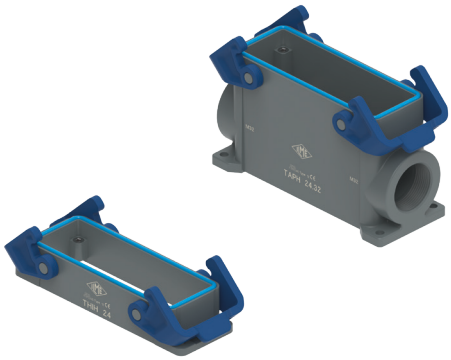
T-TYPE / H for production lines HYGIENIC SERIES

inserts		page:
CD	64 poles + ⏚	**72**
CDD	108 poles + ⏚	**81**
CDS	42 poles + ⏚	**-**
CDSH	42 poles + ⏚	**89**
CNE	24 poles + ⏚	**113**
CSE	24 poles + ⏚	**-**
CSH	24 poles + ⏚	**113**
CSH S	24 poles + ⏚	**125**
CCE	24 poles + ⏚	**133**
CMSH	10+2 (aux) poles + ⏚	**140**
CMCE	10+2 (aux) poles + ⏚	**141**
CSS	24 poles + ⏚	**151**
CT, CTSE (16 A)*	24 poles + ⏚	**163**
CQE	46 poles + ⏚	**171**
CQEE	64 poles + ⏚	**177**
CX	4/8 and 6/6 poles + ⏚	**204, 206**
MIXO	6 modules	**262 - 317**

* only for standard insulating version THIH

refer to CN.19 pages

housings with 2 levers
HNBR gasket



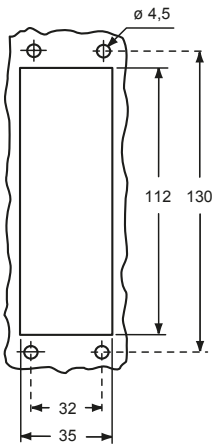
FROM JULY 2022

hoods with 4 pegs

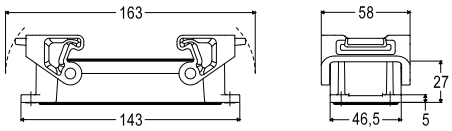
FROM JULY 2022

description	part No.	entry M	part No.	entry M
bulkhead mounting housing with thermoplastic levers	**THIH 24**			
surface mounting housing, thermoplastic levers, high construction	**TAPH 24.32**	32		
surface mounting housing, thermoplastic levers, high construction	**TAPH 24.40**	40		
with pegs, side entry, high construction			**TMAO 24.32**	32
with pegs, side entry, high construction			**TMAO 24.40**	40
with pegs, top entry, high construction			**TMAV 24.32**	32
with pegs, top entry, high construction			**TMAV 24.40**	40

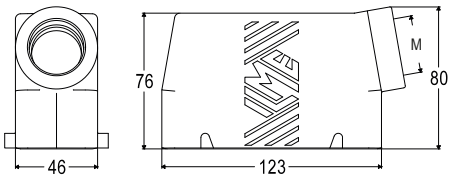
panel cut-out for bulkhead mounting housings



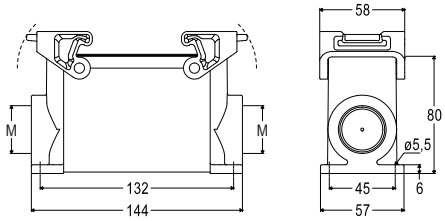
THIH



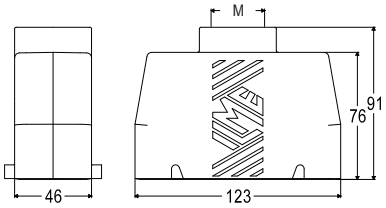
TMAO



TAPH



TMAV



The surface mounting, high construction housings are supplied with an open threaded entry and diametrically opposite a closed threaded entry which can be opened by the user if required (with suitable tool).

cURus
Type 12 pending

IP66 IP69 EN 60529 IEC 60529 ambient temperature limits -40 °C / +70 °C

T-TYPE / H for production lines HYGIENIC SERIES

inserts		page:
CD	64 poles + ⏚	**72**
CDD	108 poles + ⏚	**81**
CDS	42 poles + ⏚	**-**
CDSH	42 poles + ⏚	**89**
CNE	24 poles + ⏚	**113**
CSE	24 poles + ⏚	**-**
CSH	24 poles + ⏚	**113**
CSH S	24 poles + ⏚	**125**
CCE	24 poles + ⏚	**133**
CMSH	10+2 (aux) poles + ⏚	**140**
CMCE	10+2 (aux) poles + ⏚	**141**
CSS	24 poles + ⏚	**151**
CT, CTSE (16 A)*	24 poles + ⏚	**163**
CQE	46 poles + ⏚	**171**
CQEE	64 poles + ⏚	**177**
CX	4/8 and 6/6 poles + ⏚	**204, 206**
MIXO	6 modules	**262 - 317**

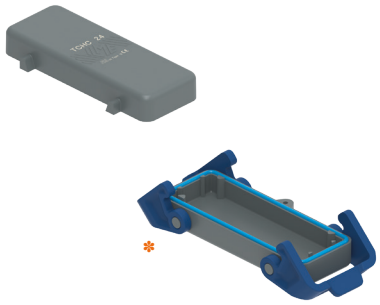
* only for standard insulating version TCHC

refer to CN.19 pages

hoods with 2 levers
top entry, HNBR gasket

FROM JULY 2022

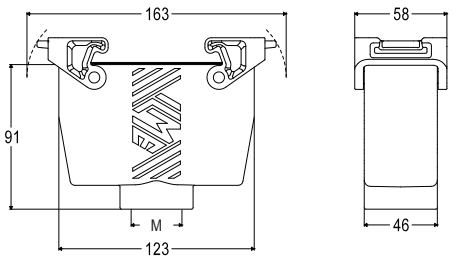
covers
HNBR gasket



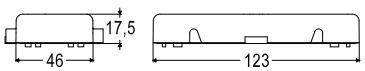
FROM JULY 2022*

description	part No.	entry M	part No. (with eyelet)	part No. (with loop)
with thermoplastic levers and gasket, high construction	**TAVH 24 G32**	32		
with thermoplastic levers and gasket, high construction	**TAVH 24 G40**	40		
with 4 pegs			**TCHC 24**	**TCHC 24 S**
with 2 thermoplastic levers and gasket				**THCH 24 G** *

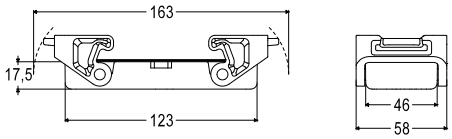
TAVH G



TCHC (S)



THCH G

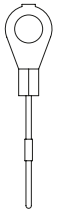


cURus
Type 12 pending

ambient temperature limits -40 °C / +70 °C

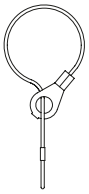
For fixing on housings

eyelet



For fixing on hoods

loop



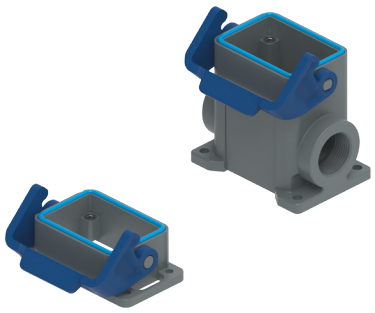
T-TYPE / C for low-temperature HYGIENIC SERIES

inserts		page:
CDD	24 poles + ⏚	**76**
CDS	9 poles + ⏚	**-**
CDSH	9 poles + ⏚	**86**
CDSH NC	6 poles + ⏚	**95**
CNE	6 poles + ⏚	**110**
CSE	6 poles + ⏚	**-**
CSH	6 poles + ⏚	**110**
CSH S	6 poles + ⏚	**122**
CCE	6 poles + ⏚	**130**
CSS	6 poles + ⏚	**148**
CT, CTSE (16 A)*	6 poles + ⏚	**160**
CQE	10 poles + ⏚	**168**
MIXO	2 modules	**262 - 317**

* only for standard insulating version THIH

refer to CN.19 pages

housings with 2 levers
SILICONE gasket



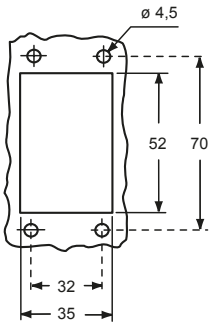
FROM JULY 2022

hoods with 4 pegs

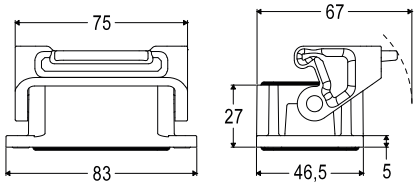
FROM JULY 2022

description	part No.	entry M	part No.	entry M
bulkhead mounting housing with thermoplastic lever	**THIC 06 L**			
surface mounting housing with thermoplastic lever, high construction	**TAPC 06 L25**	25		
surface mounting housing with thermoplastic lever, high construction	**TAPC 06 L32**	32		
with pegs, side entry, high construction			**TMAO 06 L25**	25
with pegs, side entry, high construction			**TMAO 06 L32**	32
with pegs, top entry, high construction			**TMAV 06 L25**	25
with pegs, top entry, high construction			**TMAV 06 L32**	32

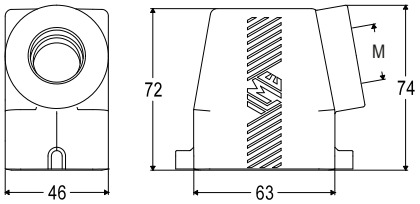
panel cut-out for bulkhead mounting housings



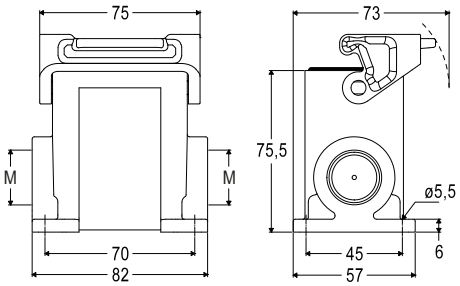
THIC L



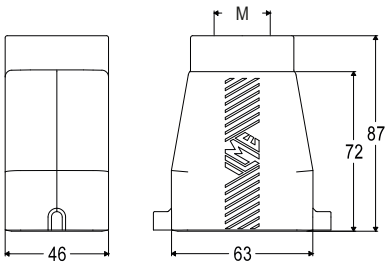
TMAO L



TAPC L



TMAV L



(•) The surface mounting, high construction housings are supplied with an open threaded entry (•) and diametrically opposite a closed threaded entry which can be opened by the user if required (with suitable tool).

cURus
Type 12 pending

EN 60529 IP66 IP69 IEC 60529 ambient temperature limits -50 °C / +70 °C

T-TYPE / C for low-temperature HYGIENIC SERIES

inserts		page:
CDD	24 poles + ⏚	**76**
CDS	9 poles + ⏚	**-**
CDSH	9 poles + ⏚	**86**
CDSH NC	6 poles + ⏚	**95**
CNE	6 poles + ⏚	**110**
CSE	6 poles + ⏚	**-**
CSH	6 poles + ⏚	**110**
CSH S	6 poles + ⏚	**122**
CCE	6 poles + ⏚	**130**
CSS	6 poles + ⏚	**148**
CT, CTSE (16 A)*	6 poles + ⏚	**160**
CQE	10 poles + ⏚	**168**
MIXO	2 modules	**262 - 317**

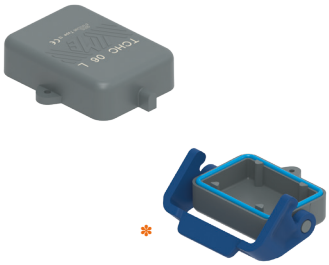
* only for standard insulating version TCHC

refer to CN.19 pages

hoods with 2 levers, top entry
SILICONE gasket

FROM JULY 2022

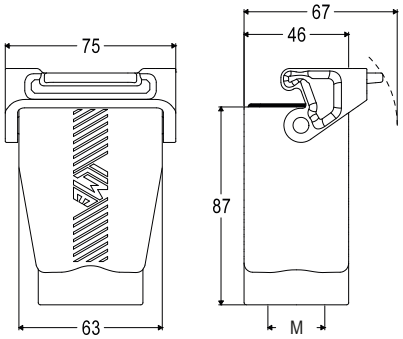
covers
SILICONE gasket



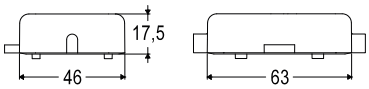
FROM JULY 2022*

description	part No.	entry M	part No. (with eyelet)	part No. (with loop)
with thermoplastic lever and gasket, high construction	**TAVC 06 LG25**	25		
with thermoplastic lever and gasket, high construction	**TAVC 06 LG32**	32		
with pegs			**TCHC 06 L**	**TCHC 06 SL**
with thermoplastic lever and gasket				**THCC 06 LG** ❄

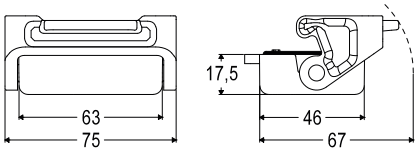
TAVC LG



TCHC L (SL)

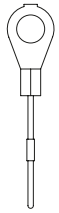


THCC LG



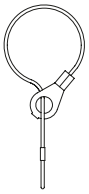
For fixing on housings

eyelet



For fixing on hoods

loop



cURus
Type 12 pending

IP66 IP69 EN 60529 IEC 60529 ambient temperature limits -50 °C / +70 °C

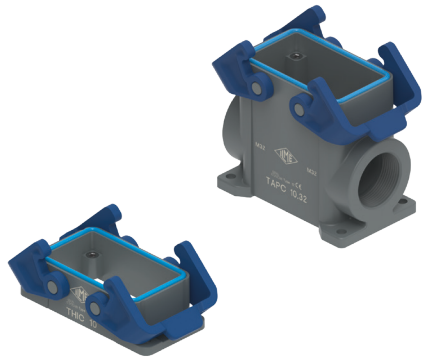
T-TYPE / C for low-temperature HYGIENIC SERIES

inserts		page:
CDD	42 poles + ⏚	**78**
CDS	18 poles + ⏚	**-**
CDSH	18 poles + ⏚	**87**
CNE	10 poles + ⏚	**111**
CSE	10 poles + ⏚	**-**
CSH	10 poles + ⏚	**111**
CSH S	10 poles + ⏚	**123**
CCE	10 poles + ⏚	**131**
CMSH	3+2 (aux) poles + ⏚	**136**
CMCE	3+2 (aux) poles + ⏚	**137**
CSS	10 poles + ⏚	**149**
CT, CTSE (16 A)*	10 poles + ⏚	**161**
CQE	18 poles + ⏚	**169**
CX	8/24 poles + ⏚	**194**
MIXO	3 modules	**262 - 317**

* only for standard insulating version THIH

refer to CN.19 pages

housings with 2 levers
SILICONE gasket



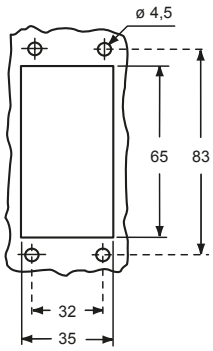
FROM JULY 2022

hoods with 4 pegs

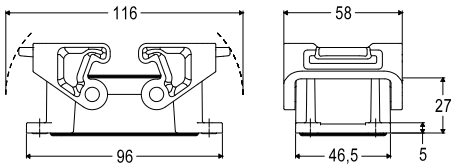
FROM JULY 2022

description	part No.	entry M	part No.	entry M
bulkhead mounting housing with thermoplastic levers	**THIC 10**			
surface mounting housing, thermoplastic levers, high construction	**TAPC 10.25**	25		
surface mounting housing, thermoplastic levers, high construction	**TAPC 10.32**	32		
with pegs, side entry, high construction			**TMAO 10.25**	25
with pegs, side entry, high construction			**TMAO 10.32**	32
with pegs, top entry, high construction			**TMAV 10.25**	25
with pegs, top entry, high construction			**TMAV 10.32**	32

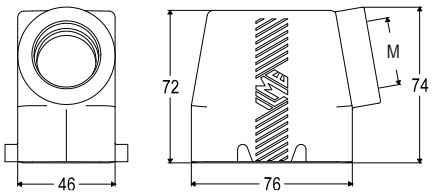
panel cut-out for bulkhead mounting housings



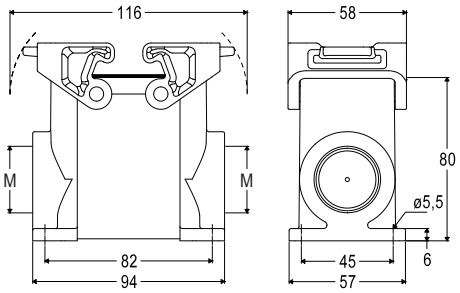
THIC



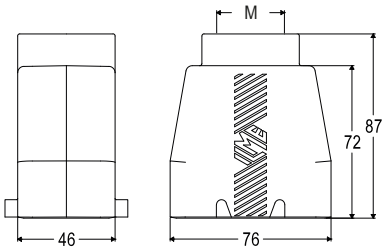
TMAO



TAPC



TMAV



The surface mounting, high construction housings are supplied with an open threaded entry and diametrically opposite a closed threaded entry which can be opened by the user if required (with suitable tool).

cURus
Type 12 pending

IP66 IP69 EN 60529 IEC 60529 ambient temperature limits -50 °C / +70 °C

T-TYPE / C for low-temperature HYGIENIC SERIES

inserts		page:
CDD	42 poles + ⏚	**78**
CDS	18 poles + ⏚	**-**
CDSH	18 poles + ⏚	**87**
CNE	10 poles + ⏚	**111**
CSE	10 poles + ⏚	**-**
CSH	10 poles + ⏚	**111**
CSH S	10 poles + ⏚	**123**
CCE	10 poles + ⏚	**131**
CMSH	3+2 (aux) poles + ⏚	**136**
CMCE	3+2 (aux) poles + ⏚	**137**
CSS	10 poles + ⏚	**149**
CT, CTSE (16 A)*	10 poles + ⏚	**161**
CQE	18 poles + ⏚	**169**
CX	8/24 poles + ⏚	**194**
MIXO	3 modules	**262 - 317**

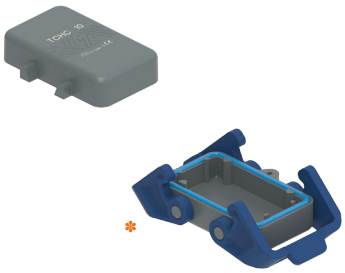
* only for standard insulating version TCHC

refer to CN.19 pages

hoods with 2 levers, top entry
SILICONE gasket

FROM JULY 2022

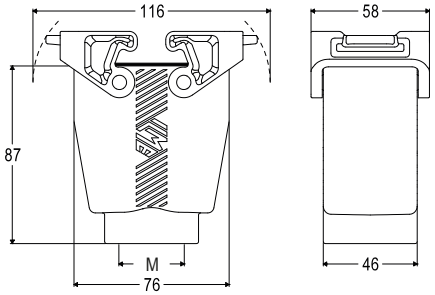
covers
SILICONE gasket



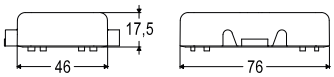
FROM JULY 2022*

description	part No.	entry M	part No. (with eyelet)	part No. (with loop)
with thermoplastic levers and gasket, high construction	**TAVC 10 G25**	25		
with thermoplastic levers and gasket, high construction	**TAVC 10 G32**	32		
with 4 pegs			**TCHC 10**	**TCHC 10 S**
with 2 thermoplastic levers and gasket				**THCC 10 G** *

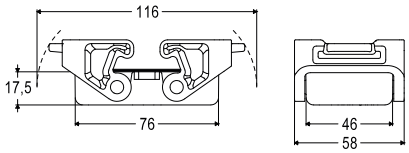
TAVC G



TCHC (S)

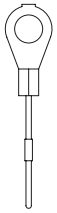


THCC G



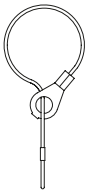
For fixing on housings

eyelet



For fixing on hoods

loop



cURus
Type 12 pending

IP66 IP69 EN 60529 IEC 60529 ambient temperature limits -50 °C / +70 °C

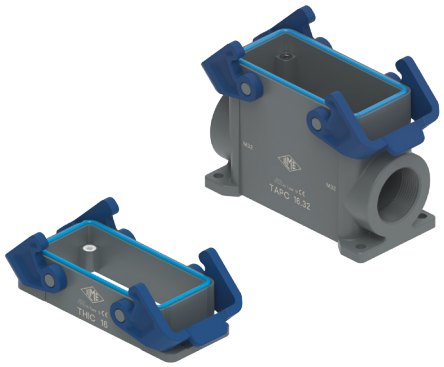
T-TYPE / C for low-temperature HYGIENIC SERIES

inserts		page:
CD	40 poles + ⏚	**70**
CDD	72 poles + ⏚	**79**
CDS	27 poles + ⏚	**-**
CDSH	27 poles + ⏚	**88**
CNE	16 poles + ⏚	**112**
CSE	16 poles + ⏚	**-**
CSH	16 poles + ⏚	**112**
CSH S	16 poles + ⏚	**124**
CCE	16 poles + ⏚	**132**
CMSH, CMCE	6+2 (aux) poles + ⏚	**138 - 139**
CSS	16 poles + ⏚	**150**
CT, CTSE (16 A)*	16 poles + ⏚	**162**
CQE	32 poles + ⏚	**170**
CQEE	40 poles + ⏚	**176**
CP	6 poles + ⏚	**178**
CX	6/12, 6/36 and 12/2 poles + ⏚	**197 - 199**
CX	4/0 and 4/2 poles + ⏚	**200 - 201**

* only for standard insulating version THIH

refer to CN.19 pages

housings with 2 levers
SILICONE gasket



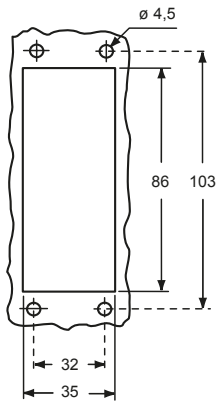
FROM JULY 2022

hoods with 4 pegs

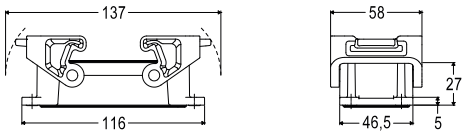
FROM JULY 2022

description	part No.	entry M	part No.	entry M
bulkhead mounting housing with thermoplastic levers	**THIC 16**			
surface mounting housing, thermoplastic levers, high construction	**TAPC 16.32**	32		
surface mounting housing, thermoplastic levers, high construction	**TAPC 16.40**	40		
with pegs, side entry, high construction			**TMAO 16.32**	32
with pegs, side entry, high construction			**TMAO 16.40**	40
with pegs, top entry, high construction			**TMAV 16.32**	32
with pegs, top entry, high construction			**TMAV 16.40**	40

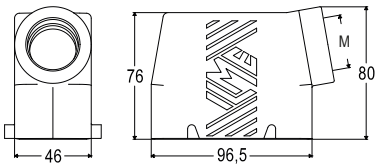
panel cut-out for bulkhead mounting housings



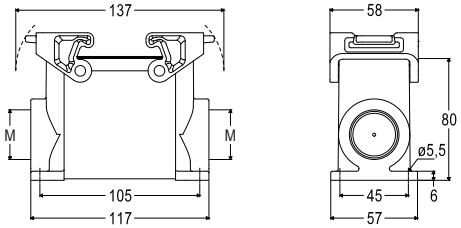
THIC



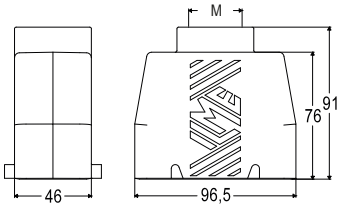
TMAO



TAPC



TMAV



The surface mounting, high construction housings are supplied with an open threaded entry and diametrically opposite a closed threaded entry which can be opened by the user if required (with suitable tool).

cURus
Type 12 pending

EN 60529 IP66 IP69 IEC 60529 ambient temperature limits -50 °C / +70 °C

T-TYPE / C for low-temperature HYGIENIC SERIES

inserts		page:
CD	40 poles + ⏚	**70**
CDD	72 poles + ⏚	**79**
CDS	27 poles + ⏚	**-**
CDSH	27 poles + ⏚	**88**
CNE	16 poles + ⏚	**112**
CSE	16 poles + ⏚	**-**
CSH	16 poles + ⏚	**112**
CSH S	16 poles + ⏚	**124**
CCE	16 poles + ⏚	**132**
CMSH, CMCE	6+2 (aux) poles + ⏚	**138 - 139**
CSS	16 poles + ⏚	**150**
CT, CTSE (16 A)*	16 poles + ⏚	**162**
CQE	32 poles + ⏚	**170**
CQEE	40 poles + ⏚	**176**
CP	6 poles + ⏚	**178**
CX	6/12, 6/36 and 12/2 poles + ⏚	**197 - 199**
CX	4/0 and 4/2 poles + ⏚	**200 - 201**

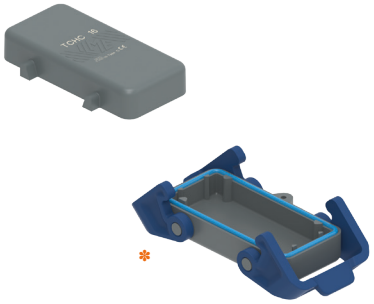
* only for standard insulating version THCH

refer to CN.19 pages

hoods with 2 levers, top entry
SILICONE gasket

FROM JULY 2022

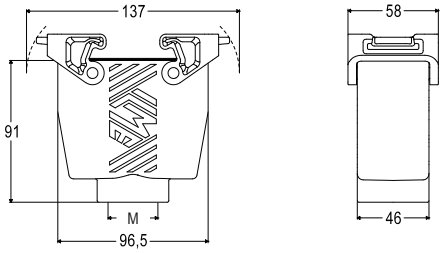
covers
SILICONE gasket



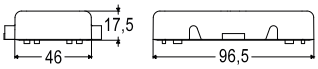
FROM JULY 2022*

description	part No.	entry M	part No. (with eyelet)	part No. (with loop)
with thermoplastic levers and gasket, high construction	**TAVC 16 G32**	32		
with thermoplastic levers and gasket, high construction	**TAVC 16 G40**	40		
with 4 pegs			**TCHC 16**	**TCHC 16 S**
with 2 thermoplastic levers and gasket				**THCC 16 G** *

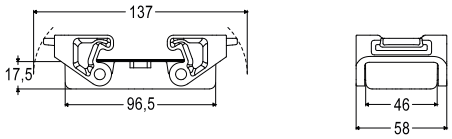
TAVC G



TCHC (S)

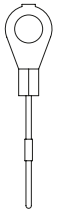


THCC G



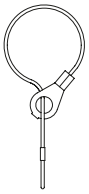
For fixing on housings

eyelet



For fixing on hoods

loop



cURus
Type 12 pending

IP66 IP69 EN 60529 IEC 60529 ambient temperature limits -50 °C / +70 °C

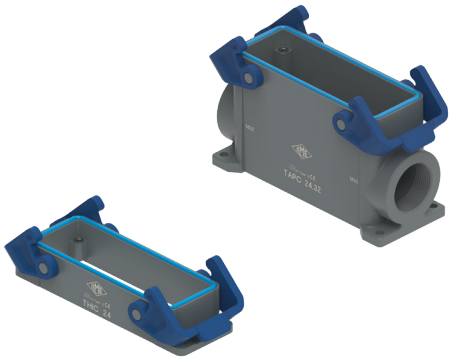
T-TYPE / C for low-temperature HYGIENIC SERIES

inserts		page:
CD	64 poles + ⏚	**72**
CDD	108 poles + ⏚	**81**
CDS	42 poles + ⏚	**-**
CDSH	42 poles + ⏚	**89**
CNE	24 poles + ⏚	**113**
CSE	24 poles + ⏚	**-**
CSH	24 poles + ⏚	**113**
CSH S	24 poles + ⏚	**125**
CCE	24 poles + ⏚	**133**
CMSH	10+2 (aux) poles + ⏚	**140**
CMCE	10+2 (aux) poles + ⏚	**141**
CSS	24 poles + ⏚	**151**
CT, CTSE (16 A)*	24 poles + ⏚	**163**
CQE	46 poles + ⏚	**171**
CQEE	64 poles + ⏚	**177**
CX	4/8 and 6/6 poles + ⏚	**204, 206**
MIXO	6 modules	**262 - 317**

* only for standard insulating version THIH

refer to CN.19 pages

housings with 2 levers
SILICONE gasket



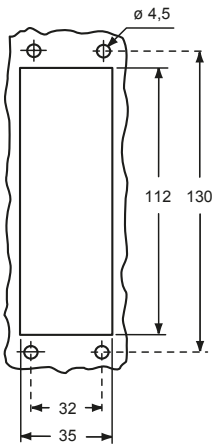
FROM JULY 2022

hoods with 4 pegs

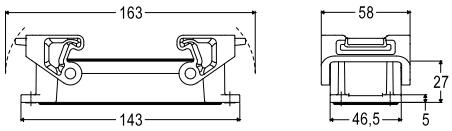
FROM JULY 2022

description	part No.	entry M	part No.	entry M
bulkhead mounting housing with thermoplastic levers	**THIC 24**			
surface mounting housing, thermoplastic levers, high construction	**TAPC 24.32**	32		
surface mounting housing, thermoplastic levers, high construction	**TAPC 24.40**	40		
with pegs, side entry, high construction			**TMAO 24.32**	32
with pegs, side entry, high construction			**TMAO 24.40**	40
with pegs, top entry, high construction			**TMAV 24.32**	32
with pegs, top entry, high construction			**TMAV 24.40**	40

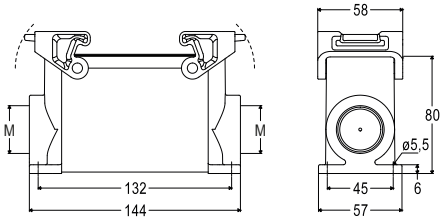
panel cut-out for bulkhead mounting housings



THIC

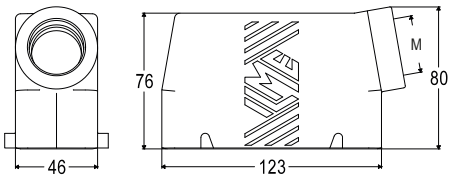


TAPC

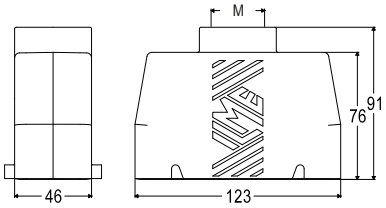


The surface mounting, high construction housings are supplied with an open threaded entry and diametrically opposite a closed threaded entry which can be opened by the user if required (with suitable tool).

TMAO



TMAV



cURus
Type 12 pending

IP66 IP69 EN 60529 IEC 60529 ambient temperature limits -50 °C / +70 °C

T-TYPE / C for low-temperature HYGIENIC SERIES

inserts		page:
CD	64 poles + ⏚	**72**
CDD	108 poles + ⏚	**81**
CDS	42 poles + ⏚	**-**
CDSH	42 poles + ⏚	**89**
CNE	24 poles + ⏚	**113**
CSE	24 poles + ⏚	**-**
CSH	24 poles + ⏚	**113**
CSH S	24 poles + ⏚	**125**
CCE	24 poles + ⏚	**133**
CMSH	10+2 (aux) poles + ⏚	**140**
CMCE	10+2 (aux) poles + ⏚	**141**
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CQEE	64 poles + ⏚	**177**
CX	4/8 and 6/6 poles + ⏚	**204, 206**
MIXO	6 modules	**262 - 317**

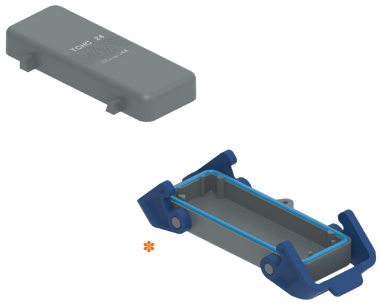
* only for standard insulating version TCHC

refer to CN.19 pages

hoods with 2 levers, top entry
SILICONE gasket

FROM JULY 2022

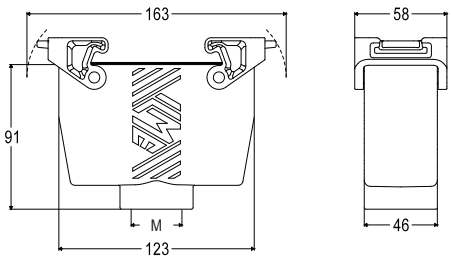
covers
SILICONE gasket



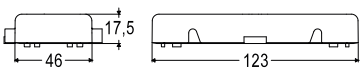
FROM JULY 2022*

description	part No.	entry M	part No. (with eyelet)	part No. (with loop)
with thermoplastic levers and gasket, high construction	**TAVC 24 G32**	32		
with thermoplastic levers and gasket, high construction	**TAVC 24 G40**	40		
with 4 pegs			**TCHC 24**	**TCHC 24 S**
with 2 thermoplastic levers and gasket				**THCC 24 G** *

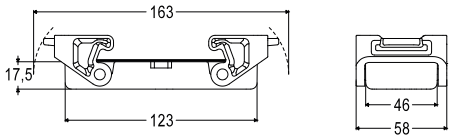
TAVC G



TCHC (S)

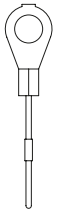


THCC G



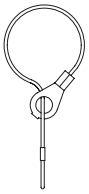
For fixing on housings

eyelet



For fixing on hoods

loop

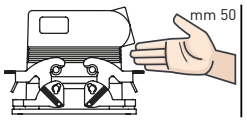
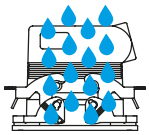
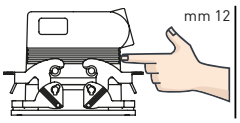
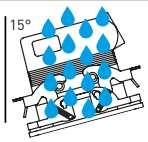
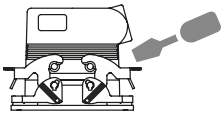
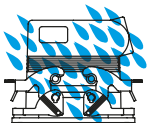
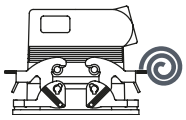
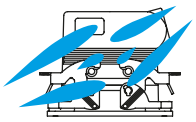
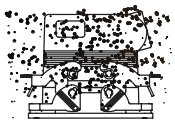
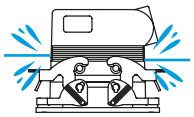
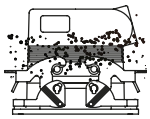
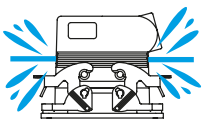
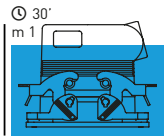
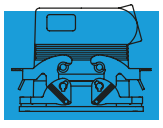
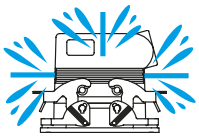


cURus
Type 12 pending

EN 60529 IP66 IP69 IEC 60529 ambient temperature limits -50 °C / +70 °C

THE DEGREE OF PROTECTION

The connector's housing, sealing and locking mechanism protect the connection from external influences such as mechanical shocks, foreign bodies, humidity, dust, water or other fluids such as cleansing and cooling agents, oils, etc. The degree of protection the housing offers is explained in the IEC 60529, DIN EN 60529, standards that categorize enclosures according to foreign body and water protection.
The following table shows the **IP (Ingress Protection) Ratings Guide**.

FIRST Index figure	Degree of protection SOLIDS		SECOND Index figure	Degree of protection WATER	
0		No protection	0		No protection
1		Protected against access to hazardous parts with the back of a hand and protected against solid foreign objects of Ø 50 mm and greater	1		Protected against vertically falling water drops
2		Protected against access to hazardous parts with a finger - protected against solid foreign objects of Ø 12,5 mm and greater	2		Protected against vertically falling water drops when enclosure tilted up to 15° (on either side of the vertical)
3		Protected against access to hazardous parts with a tool - protected againstsolid foreign objects of Ø 2,5 mm and greater	3		Protected against spraying water (at an angle up to 60° on either side of the vertical)
4		Protected against access to hazardous parts with a wire - protected against solid foreign objects of Ø 1,0 mm and greater	4		Protected against splashing water from any direction
5		Protected against access to hazardous parts with a wire dust-protected (no harmful dust deposit)	5		Protected against water jets from any direction
6		Protected against access to hazardous parts with a wire dust-tight (total protection against dust)	6		Protected against powerful water jets from any direction (similar to sea waves)
			7		Protected against the effects of temporary immersion in water at a maximum depth of 1 metre for 30 min
			8		Protected against the effects of continuous immersion in water at depth and/or duration upon agreement, more severe than for numeral 7
			9		Protected against high pressure and temperature water jets from any direction

RATING EXAMPLE

IP 6 5

Description according to IEC 60529

CHANGEOVER FROM PG THREADS TO METRIC

After 31st December 1999, the German safety standard DIN VDE 0619 (1987-09) and the standards it refers to - DIN 46319 for dimensions with metric threads and DIN 46320 (T1-T4), DIN 46255 and DIN 46259 for dimensions with Pg threads (Pg = Panzerrohr-Gewinde: literally “threads for armoured pipes”) - were withdrawn and European standard EN 50262 “Metric cable glands for electrical installations” has been in force since 1st January 2000.

This standard defines the new sizes with metric threads for cable glands according to EN 60423 and establishes the safety prescriptions.

Conversely, it does not specify the dimensions, such as the size of the tightening wrench, the diagonal dimension, or the dimensions of the tightness seals, as was the case in the withdrawn DIN for Pg cable glands.

The standard came definitively into force on 1st April 2001, when the contrasting national standards were withdrawn.

It is valid in all member countries of CENELEC (European Electrical Standardisation Committee) and its publication has led to a broadening of the supply of enclosures for multi-pole connectors for industrial use, to include new enclosure versions with cable entry suitable for metric cable glands.

NOTE – In 2016 the new EN 62444:2013 standard “Cable glands for electrical installations” replaced the former to cover only cable gland with metric thread whose range is now M6 through M110 (previously up to M75).

Cable gland producers have introduced the new metric series to add to the Pg size series, to gradually replace the latter type. The transitional period indicated in the new standard should have ended on 1st March 2001, after which date the use of cable entry devices with Pg thread and, as a result, enclosures with Pg thread, should have ended in new installations. Nevertheless, both the cable entry devices and the relevant enclosures with Pg thread, may continue to be used as spare parts. For the mandatory **CE** marking of these items, observance of the safety conditions specified by the Low Voltage Directive is sufficient, however adherence to the safety requirements of EN 62444 provides presumption of conformity.

To distinguish hoods and surface-mounting housings with metric entries from the relevant Pg versions (identified with a C pre-code), the ILME metric types are identified with an M pre-code. The transposition table below indicates the correspondence rule adopted in most cases by ILME for creating the new metric versions.

Pg → metric transposition table

Pg	Metric
Pg 11	M20
Pg 13.5	M20
Pg 16	M20
Pg 21	M25
Pg 29	M32
Pg 36	M40
Pg 42	M50

Cable diameter for use with ILME cable glands

∅ in mm	Metric thread				
Series	**20**	**25**	**32**	**40**	**50**
AS M..P	6 - 12,5	10 - 18	14 - 24	15 - 24	23 - 30
AS M..E	8 - 12,5	13,5 - 18	17 - 24	—	—
AG M..T	6 - 8 -10	11 - 14 - 17	19 - 21 -24	26 - 29 - 32	35 - 38 - 41
AG M..I	5 - 12,5	9 - 18	14 - 25	18 - 32	24 - 38,5
AG M..R	6 - 8 -10	11 - 14 - 17	19 - 21 - 24	—	—

For more information, please refer to the technical catalogue on www.ilme.com