



Section





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INTERLOCKED SOCKET-OUTLETS MARINE USE

The products and recommended applications

ABOARD SHIP				SHIPYARDS	
Signal	Technical rooms	Onboard garage	Container areas	Fixed systems	Mobile systems
THERMOSETTING (GRP)					
	 TAIS IP67		 TAIS IP67 with incorporated MCB		 TAIS IP67
ALUMINIUM ALLOY					
	 ALUPRES IP67		 ALUPRES IP67 with incorporated MCB		 ALUPRES IP67
BRASS					
 NAVE IP56					





Interlocked socket-outlets



TAIS 230
In thermosetting (GRP) material IP65/IP67



ALUPRES 230
In aluminium IP55/IP67



topTER 231
In thermoplastic IP66/IP67



NAVE 231
In brass IP56/IP66





CONNECTION SYSTEMS FOR CONTAINERS

Thermosetting (GRP)



TAIS SERIES
Wall-mounted socket-outlet with **MCB**, mechanical interlock, signal lamp, in thermosetting (GRP) insulating modular enclosure IP67 > IK10

Lloyd's Register

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+≋	3	474771	1

Aluminium



ALUPRES SERIES
Wall-mounted socket-outlets with **MCB**, mechanical interlock, signal lamp in modular enclosure made of aluminium alloy - IP67 > IK10

Lloyd's Register

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+≋	3	474486	1



TAIS SERIES
Wall-mounted interlocked socket-outlet with **direct power supply** in thermosetting (GRP) insulating modular enclosure IP67 > IK10

Lloyd's Register

Rated current (A)	Rated voltage	Voltage colour	Dimensions (mm)	Poles	h ref.	Palazzoli code	Pack Q.ty
32	380/440V	●	91,5x240	3P+≋	3	469233	1



ALUPRES SERIES
Wall-mounted interlocked socket-outlet with **direct power supply** in thermosetting (GRP) insulating modular enclosure IP67 > IK10

Lloyd's Register

Rated current (A)	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	380/440V	●	3P+≋	3	460233	1



TAIS SERIES
Wall-mounted interlocked socket-outlets and **EN50022 rail**, transparent door, in thermosetting (GRP) modular enclosure IP67 > IK10

Lloyd's Register

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+≋	3	472133	1



ALUPRES SERIES
Wall-mounted interlocked socket-outlets, **EN50022 rail** and transparent door in aluminium alloy modular enclosure IP67 >>IK10

Lloyd's Register

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+≋	3	472735	1



**PLUGS, SOCKET-OUTLETS,
INDUSTRIAL BOARDS
AND TURRETS**



Thermoplastic



topTER SERIES
Interlocked socket-outlets for
thermoplastic distribution board
installations
IP66/IP67

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+⊕	3	491233	1

Brass



NAVE SERIES
Watertight UNAV 2169 plugs in
brass enclosure painted marine
grey, with switch, for supply to
refrigerated containers
IP66

Rated current (A)	Frequency	Rated voltage	Poles	h ref.	No. entries	Entries	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	3P+⊕	3	1	30x18 M30x2 UNAV 1948	472401	1
	50/60Hz	380/440V	3P+⊕	3	2 side opposite	1" gas	472411	1



NAVE SERIES
UNAV 2172 watertight plug in
painted marine grey brass
IP66

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+⊕	3	477411	2

Equipment:

36x21 cable gland UNAV 1948.

Uses:

for refrigerated containers power supply.



CEE SERIES
High performance straight
watertight plugs, low voltage
IP67

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+⊕	3	477486	1



CEE SERIES
90° angled watertight wall-
mounting appliance inlets, high
performance and low voltage
IP67

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+⊕	3	476486	1

Complementary items: watertight covers on page 26.



CEE SERIES
Watertight straight connectors,
high performance and low voltage
IP67

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+⊕	3	473486	1



topTER SERIES
Angled fixed plugs for distribution
board installation
IP66/IP67

Rated current (A)	Freq.	Rated voltage	Voltage colour	Dimensions (mm)	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	88x100	3P+⊕	3	489233	1



NAVE series Corrosion Immunity

Watertight fixed interlocked socket-outlets in brass to UNAV standards



No cracks

TECHNIQUE

The NAVE SERIES plugs and socket-outlets are designed for the specific system requirements for use on board container ships and ferries, in warehouses for container transit and shipping and in maritime terminals. The enclosures are made of die-cast brass, oven-painted in marine grey. The cover and internal/external floor fixing screws are made of stainless steel. The plug has bayonet connection for plug watertight locking. The ring nut and the protection cover are made of self-extinguishing insulating materials, held back by a stainless steel chain. The insulating contact holding part is in thermosetting (GRP) material and the socket contacts are made of nickel-plated brass. The plug has the grip and ring nut in die-cast brass and nickel coated brass pins. The UNAV connections are ideal for cables with minimum section of 2.5 and maximum section of 10mmq. The cable gland in insulating

material is equipped with cable clamp that adapts to the different cable diameter, from the minimum to the maximum section, turning the position of the two installation collars of 180°. All the equipment is only made of watertight material (IPX5 for below board or covered applications and IP56 for use on the open deck since it is subject to the risk of flooding). It generally complies with the UNAV naval standardisation tables.

Trademarks, symbols, awards



THE ADVANTAGES



ETERNAL

All the components of the NAVE series are made of non-magnetic material with very high resistance to oxidation, such as die-cast solid brass, stainless steel, which ensures durability.



SUPER-RESISTANT

Characterised by a reinforced structure with even thicker walls, they are ideal in cases of extreme stress/vibrations (engine rooms) and also ensure high impact resistance.



ECO-FRIENDLY

Brass does not contain toxic substances. It is, therefore, in conformity with the current directives regarding health and ecology.



UNAV PLUGS AND INTERLOCKED SOCKET-OUTLETS



NAVE series	
PRODUCT SPECIFICATIONS	
Conformity to standards:	specific UNAV standards
Protection rating:	IP66
Impact resistance:	> IK 10
Temperature resistance:	Operating: -40°C - +70°C Storage: -50°C - +80°C
Casing:	Painted solid brass



NAVE SERIES
Watertight UNAV 1436 interlocked plugs in brass enclosure painted marine grey, with cable glands UNAV 1948 IP56

Rated current (A)	Rated voltage	Poles	No. cable glands	Palazzoli code	Pack Q.ty
10	127V~	2P+⊕	1	462151	1
	230V~	2P+⊕	1	462131	1

Equipment:

brass cable glands M24x1.5, Earth screws inside and outside the box.



NAVE SERIES
Watertight UNAV 1437 plugs with ring-nut and rubber protection sleeve IP56

Rated current (A)	Rated voltage	Poles	Palazzoli code	Pack Q.ty
10	24V~	2P+⊕	467021	10
	127V~	2P+⊕	467051	10
	230V~	2P+⊕	467031	10



NAVE SERIES
Watertight UNAV 2169 plugs in brass enclosure painted marine grey, with switch, for supply to refrigerated containers IP66

Rated current (A)	Frequency	Rated voltage	Poles	h ref.	No. entries	Entries	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	3P+⊕	3	1	30x18 M30x2 UNAV 1948	472401	1
					2 side opposite	1" gas		

Equipment:

brass cable glands 3x16 mm² terminal block on ceramic support.

Characteristics:

switch is controlled directly by inserting/removing the plug.

Uses:

on board container ships and ferries, in container warehouses and maritime, naval, railway terminals, etc.



NAVE SERIES
Watertight screwcaps with gasket for UNAV 2169 socket outlet entries IP66

Thread	Manufacture material	Palazzoli code	Pack Q.ty
1" gas	brass	472901	10



NAVE SERIES
UNAV 2172 watertight plug in painted marine grey brass IP66

Rated current (A)	Frequency	Rated voltage	Voltage colour	Poles	h ref.	Palazzoli code	Pack Q.ty
32	50/60Hz	380/440V	●	3P+⊕	3	477411	2

Equipment:

36x21 cable gland UNAV 1948.

Uses:

for refrigerated containers power supply.

Spare parts page 374

Product specifications page 233

Dimensions page 430



Pontoon installed distribution turrets



B-SMART 235
For wharfs



B-SMART 236
For camp sites and urban areas



B-SMART 236
For fire prevention



B-SMART 237
Technical accessories





**PLUGS, SOCKET-OUTLETS,
INDUSTRIAL DISTRIBUTION
BOARDS AND TURRETS**



B-SMART series		
PRODUCT SPECIFICATIONS		
Conformity to standards:	CEI EN 60439-1	CEI 17-13/1
Protection rating:	IP56	
Impact resistance:	>> IK 10	
Protections:	1 residual current circuit-breaker for each socket-outlet	
Lighting:	9W 230V fluorescent lamp	
Insulation class:	II	
Temperature	Operating:	-25°C - +50°C
resistance:	Storage:	-30°C - +70°C



B-SMART SERIES
Compact turrets in stainless steel **AISI 316L** for wharfs with 2 industrial socket-outlets and 2 water taps Class II - >>IK10 IP56

Industrial socket-outlets 2P+≐ 220V	Dimensions (mm)	Palazzoli code	Pack Q.ty
2x16A	360x895x208	576100	1
1x16A / 1x32A	360x895x208	576101	1



B-SMART SERIES
Compact turrets in stainless steel **AISI 316L** for wharfs with 2 industrial socket-outlets and 2 water taps Class II - >>IK10 IP56

Industrial interlocked socket-outlets			Dimensions (mm)	Palazzoli code	Pack Q.ty
2P+≐ 220V	3P+≐ 380V	3P+N+≐ 380V			
2x16A			360x895x208	576110	1
1x16A			360x895x208	576111	1
1x32A					
		2x63A	360x895x208	576112	1
		1x32A	360x895x208	576113	1
		1x63A			

Characteristics:

3P+N+≐ 35 mm² power supply terminal block, 2P 6 mm² lighting circuit terminal block. Switch compartment door with triangular safety lock. Anti-wrench device for cables. Suitable for fastening onto concrete using max M8 threaded pins (not supplied).

Equipment:

the cabinet is supplied with 9W-230V fluorescent lighting, power supply and G23 lampholder (bulb not supplied). Water taps (to fit) with 1/2" female coupling and hose connection.



B-SMART SERIES
Standard stainless steel turrets **AISI 316L** for wharfs with 4 interlocked socket-outlets and 4 water taps Class II ->> IK10 IP56

Industrial interlocked socket-outlets			Dimensions (mm)	Palazzoli code	Pack Q.ty
2P+≐ 220V	3P+≐ 380V	3P+N+≐ 380V			
4x16A			360x895x276	576200	1
4x32A			360x895x276	576201	1
2x16A	2x16A		360x895x276	576202	1
2x16A			360x895x276	576203	1
2x32A					
2x16A		2x16A	360x895x276	576205	1
2x16A	1x16A	1x32A	360x895x276	576206	1

Characteristics:

3P+N+≐ 35 mm² power supply terminal block, 2P 6 mm² lighting circuit terminal block. Switch compartment door with triangular safety lock. Anti-wrench device for cables. Suitable for fastening onto concrete using max. M10 threaded pins (not supplied).

Equipment:

the cabinet is supplied with 9W-230V fluorescent lighting, power supply and G23 lampholder (bulb not supplied). Water taps (to fit) with 1/2" female coupling and hose connection.



B-SMART SERIES
Turrent for stainless steel wharf-end **AISI 316L** prepared for protection devices Class II - >> IK10 IP56

No. modules EN50022	Dimensions (mm)	Palazzoli code	Pack Q.ty
36 (12x3)	360x895x276	576800	1

Characteristics:

the protection devices can be mounted on EN50022 rail in 3 separate watertight insulating enclosures. The input and output of the power supply lines can be made from below. Suitable for fastening onto concrete using max. M10 threaded pins (not supplied).

Application:

it can be used as a control board (e.g. for lighting and watering) in gardens, parks or squares.





FLOOR-STANDING TURRETS



B-SMART SERIES
Stainless steel standard turrets
AISI 316L for camp sites with 4
industrial socket-outlets
Class II - >> IK10 - IP56

Industrial socket-outlets 2P+≐ 220V	Dimensions (mm)	Palazzoli code	Pack Q.ty
4x16A	360x895x276	576401	1

Characteristics:

3P+N+≐ 35 mm² power supply terminal block, 2P 6 mm² lighting circuit terminal block. Switch compartment door with triangular safety lock. Anti-wrench device for cables. Suitable for fastening onto concrete using max. M10 threaded pins (not supplied).

Equipment:

the cabinet is supplied with 9W-230V fluorescent lighting, power supply and G23 lampholder (bulb not supplied).



B-SMART SERIES
Fire prevention turrets in stainless
steel **AISI 316L** for an extinguisher
Class II - IP56

Housable extinguisher	Dimensions (mm)	Palazzoli code	Pack Q.ty
1 6 or 9 kg extinguisher	360x895x276	576600	1

Characteristics:

flat breakable glass with "SAFE CRASH" patent. the cabinet is supplied with 9W-230V fluorescent lighting, red diffuser and G23 lampholder (bulb not supplied) Suitable for fastening onto concrete using max. M10 threaded pins (not supplied).



B-SMART SERIES
Stainless steel standard turrets
AISI 316L for camp sites with 4
interlocked socket-outlets
Class II - >> IK10 - IP56

Industrial socket-outlets 2P+≐ 220V	Dimensions (mm)	Palazzoli code	Pack Q.ty
4x16A	360x895x276	576400	1

Characteristics:

3P+N+≐ 35 mm² power supply terminal block, 2P 6 mm² lighting circuit terminal block. Switch compartment door with triangular safety lock. Anti-wrench device for cables. Suitable for fastening onto concrete using max. M10 threaded pins (not supplied).

Equipment:

the cabinet is supplied with 9W-230V fluorescent lighting, power supply and G23 lampholder (bulb not supplied).



B-SMART SERIES
Stainless steel fire prevention
turret **AISI 316L** equipped with
fire hose and nozzle
Class II - IP56

Equipment	Dimensions (mm)	Palazzoli code	Pack Q.ty
Fire hose and nozzle	360x895x276	576601	1

Characteristics:

20m "gomel" fire hose, 45mm diameter. AWG UNI45 nozzle with 3 effects complete with 1"1/2 UNI45 brass tap. Flat breakable glass with "SAFE CRASH" patent. The cabinet is supplied with 9W-230V fluorescent lighting, red diffuser and G23 lampholder (bulb not supplied) Suitable for fastening onto concrete using max. M10 threaded pins (not supplied).





**PLUGS, SOCKET-OUTLETS,
INDUSTRIAL DISTRIBUTION
BOARDS AND TURRETS**



B-SMART SERIES
Base for turret rising
B-SMART



For turret	Application	Material	Palazzoli code	Pack Q.ty
Compact	Rising 65 mm and	Stainless steel	575701	1
Standard	earth flush-mounted		575702	1

B-SMART SERIES
Flat breakable "SAFE CRASH"
glass for fire prevention cabinets.



Description	Palazzoli code	Pack Q.ty
flat breakable glass with "SAFE CRASH" patent	575706	1

B-SMART SERIES
Decorative frame in stainless steel
for floor-standing distribution
cabinets



Description	For turret	Palazzoli code	Pack Q.ty
Stainless steel frame with fixing screws	compact	575711	1
Stainless steel frame with fixing screws	standard	575710	1

B-SMART SERIES
Lock kit for distribution cabinet
doors for wharfs and camp sites



Description	Palazzoli code	Pack Q.ty
Kit with 2 keys with standardised code	575708	1





Watertight junction boxes



PH 124
In thermoplastic material IP65



TAIS-MIGNON 124
In thermosetting (GRP) material IP65



TAIS
In thermosetting (GRP) material IP67 ...126
In thermosetting (GRP) material IP68 ...126



NAVE 239
In brass and GRP material IP66/67



ALUPRES 127
Heavy-duty use in aluminium
IP55/IP67





NAVE series	
PRODUCT SPECIFICATIONS	
Conformity to standards:	specific UNAV standards
Protection rating:	IP66/IP67
Impact resistance:	> IK 10
Temperature	Operating: -40°C - +70°C
resistance:	Storage: -50°C - +80°C
Casing:	thermosetting (GRP) / Polished brass Painted brass



NAVE SERIES
Watertight UNAV 2181 junction boxes with blind walls, with terminal block, in thermosetting (GRP) material IP67

External dimensions (mm)	Terminal blocks	Palazzoli code	Pack Q.ty
92x92x100	4x6 mm ²	115200	1
125x92x100	2 4x6 mm ² lines	115201	1
125x92x42	2 4x6 mm ² lines	115202	1



NAVE SERIES
Watertight UNAV 1398 junction box in brass painted marine grey, with terminal block and UNAV 1948 cable glands IP66

Internal diameter (mm)	Terminal blocks	No. cable glands	Palazzoli code	Pack Q.ty
70	4x6 mm ²	2 opposite	115125	1
70	4x6 mm ²	3 opposite	115135	1
70	4x6 mm ²	4 opposite	115145	1

Equipment:
M24x1.5 brass cable glands with gasket.
Earth screws inside and outside the box

Characteristics:
terminal block with mantle terminals.

Complementary items:
M24x1.5 cable glands on page 255.



NAVE SERIES
Watertight UNAV 2161 junction boxes in brass painted marine grey, with double opposite entry points, together with terminal block and UNAV 1948 cable glands IP66

Internal diameter (mm)	Terminal blocks	No. cable glands	Palazzoli code	Pack Q.ty
62	4x6 mm ²	2 opposite + 2 caps	115628	1
62	4x6 mm ²	3 opposite + 1 cap	115638	1
62	4x6 mm ²	4 opposite	115648	1

Equipment:
M24x1.5 brass cable glands with gasket.
Earth screws inside and outside the box

Characteristics:
terminal block with mantle terminals.

Complementary items:
M24x1.5 cable glands on page 255.



NAUTILUX SERIES
UNAV 1398 watertight junction box in solid brass with terminal block IP66

Internal diameter (mm)	Terminal blocks	No. cable glands	Cable glands	Palazzoli code	Pack N.
70	4x6 mm ²	2	24x14 UNAV1948 M24x1,5	861551	1

Equipment:
with 2 brass cable glands.

Complementary items:
M24x1.5 cable glands on page 255.



Small devices in modular enclosures



domoTER 174
With thermoplastic enclosure



NAVE 242
With brass enclosure IP66



TAIS MIGNON 180
With thermosetting (GRP) enclosure

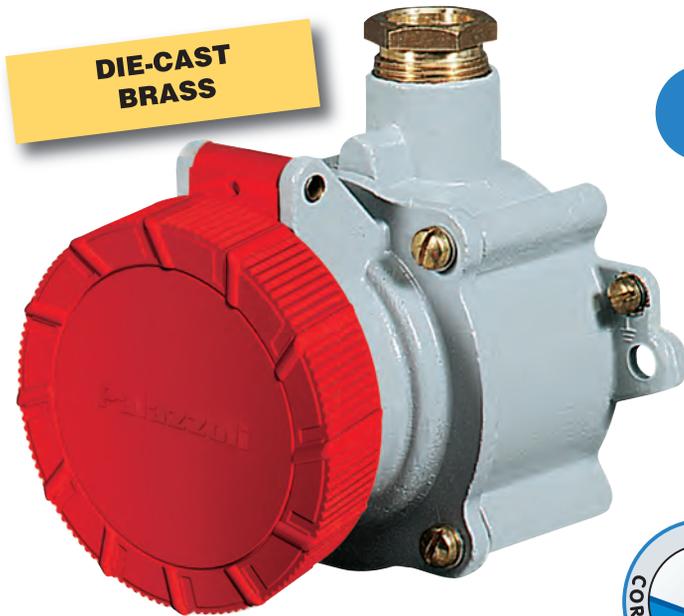


RONDÓ 189
With aluminium alloy enclosure



TAIS MIGNON 185
Panel-mounted thermosetting (GRP) enclosure





NAVE series Corrosion Immunity

Watertight devices for marine use



No cracks

TECHNIQUE

The NAVE SERIES plugs and socket-outlets are designed for the specific system requirements for use on board container ships and ferries, in warehouses for container transit and shipping and in maritime terminals. The enclosures are made of die-cast brass, oven-painted in marine grey. The cover and internal/external floor fixing screws are made of stainless steel. The cam control switch is equipped with contact holding disks in self-extinguishing anti-arc insulating thermosetting (GRP) material and double break contacts in special silver alloy. The plug has bayonet connection for plug watertight locking. The ring nut and the protection cover are made of self-extinguishing insulating materials, held back by a stainless steel chain. The insulating contact holding part is in thermosetting (GRP) material and the socket contacts are made of nickel-plated

brass. The plug has the grip and ring nut in die-cast brass and nickel coated brass pins. The UNAV connections are ideal for cables with minimum section of 2.5 and maximum section of 10mmq. All the equipment is only made of watertight material (IPX5 for below board or covered applications and IP56 for use on the open deck since it is subject to the risk of flooding). It generally complies with the UNAV naval standardisation tables.

Trademarks, symbols, awards



THE ADVANTAGES



WEAR-RESISTANT

The brass used by Palazzoli performs very well in sea water and it is ideal for dezincification and corrosion problems.



HARDER AND MORE RESISTANT

The mechanical structure, thicknesses used and compact dimensions make the NAVE series extremely solid and resistant to accidental impacts (>> IK10). The IP56 protection rating guarantees they are water, dust and pollution proof.



SCRATCH RESISTANT

The NAVE series are subject to a scratch resistant treatment which makes it more durable against abrasion.



**SMALL DEVICES FOR CONTROLLING, ENERGY USING,
AND SIGNALLING**

NAVE series	
PRODUCT SPECIFICATIONS	
Conformity to standards:	specific UNAV standards
Protection rating:	IP66 / IP67S
Impact resistance:	> IK 10
Temperature	Operating: -40°C - +70°C
resistance:	Storage: -50°C - +80°C
Casing:	Polished and painted solid brass



NAVE SERIES
Watertight UNAV 2162 rotary switches in brass enclosure painted marine grey, together with UNAV 1948 cable glands 250V IP66

Rated current (A)	Poles	No. cable glands	Palazzoli code	Pack Q.ty
10	1	1	232616	1
	1	2 combined	232626	1
	1	2 opposite	232636	1
	2	2 combined	232627	1
	2	2 opposite	232637	1

Equipment:
with M24x1.5 brass cable glands.
Earth screws inside and outside the box.



NAVE SERIES
Watertight UNAV 2162 two-way switches in brass enclosure painted marine grey, together with UNAV 1948 cable glands 250V - IP66

Rated current (A)	Poles	No. cable glands	Palazzoli code	Pack Q.ty
10	2	2 combined	232628	1

Equipment:
with M24x1.5 brass cable glands.
Earth screws inside and outside the box.



NAUTILUX SERIES
UNAV 2162 watertight rotary control switch in solid brass enclosure 250V - IP66

Rated current (A)	Poles	No. cable glands	Cable glands	Palazzoli code	Pack Q.ty
10	1	1	24x14 UNAV1948 M24x1,5	861550	1

Equipment:
with brass cable gland.

Spare parts
page 374

Product specifications
page 242

Dimensions
page 432





SMALL DEVICES FOR CONTROLLING, ENERGY USING, AND SIGNALLING



NAVE SERIES
Watertight UNAV 2166 wall-mounted socket-outlets in brass enclosure painted marine grey, with UNAV 1948 cable glands 250V - IP66

Rated current (A)	Frequency	Rated voltage	Voltage colour (h)	Poles	h ref.	Palazzoli code	Pack Q.ty
16	50-60Hz	230V	■	2P+⊕	6	478213	1
	50-60Hz	230V	■	3P+⊕	9	478313	1
	50-60Hz	400V	■	3P+⊕	6	478323	1

Equipment:

brass M24x1.5 cable gland.

Characteristics:

contact holder insert in thermosetting (GRP) self-extinguishing material.

Complementary items:

straight plugs on page 25,
90° angled plugs on page 27.



NAVE SERIES
Watertight UNAV 1435 socket-outlets in brass enclosure painted marine grey, with UNAV 1948 cable glands 250V - IP66

Rated current (A)	Rated voltage	Poles	No. cable glands	Palazzoli code	Pack Q.ty
10	24V~	2P+⊕	1	461121	1
	127V~	2P+⊕	1	461151	1
	230V~	2P+⊕	1	461131	1

Equipment:

brass M24x1.5 cable gland. Earth screws inside and outside the box.



NAVE SERIES
Watertight UNAV 1437 plugs with ring-nut and rubber protection sleeve IP56

Rated current (A)	Rated voltage	Poles	Palazzoli code	Pack Q.ty
10	24V~	2P+⊕	467021	10
	127V~	2P+⊕	467051	10
	230V~	2P+⊕	467031	10

Spare parts
page 374

Product specifications
page 239

Dimensions
page 432





Interlocked socket-outlets



NAVE 245
Brass sirens



NAVE 245
Brass bells





NAVE series		
PRODUCT SPECIFICATIONS		
Conformity to standards:	CEI EN 60529 UNAV 1948 / UNAV 1382	IEC 60529
Protection rating:	IP66	
Impact resistance:	> IK 10	
Temperature resistance:	Operating:	-40°C - +70°C
	Storage:	-50°C - +80°C



NAVE SERIES
Watertight UNAV 1382 bells for signalling and alarm in brass enclosure painted marine grey, with UNAV 1948 cable gland IP66 250V - IP66

Rated voltage	Frequency	1 metre sound level (dB)	Power (VA)	Cable glands	Palazzoli code	Pack Q.ty
24V~	50/60Hz	107/105	60VA initial vibrating 25VA	1x M24x1,5	900553	1
110V~	50/60Hz	107/105	60VA initial vibrating 25VA	1x M24x1,5	900563	1
230V~	50/60Hz	107/105	60VA initial vibrating 25VA	1x M24x1,5	900573	1

Equipment:

cable gland with gasket, terminal block in insulating thermosetting (GRP) material.

Characteristics:

with vibrating diaphragm, they are suitable for continuous and with 1 hour pause every 4 hours operation Earth screws inside and outside the box.



NAVE SERIES
Directional horn for UNAV 1382 sirens in brass painted marine grey

Diameter max (mm)	Projection siren-horn (mm)	Palazzoli code	Pack Q.ty
112	238	900548	1

Equipment:

inclusive of stainless steel fixing screws.



NAVE SERIES
Watertight UNAV 1384 bells for signalling and alarm in brass enclosure painted marine grey, with UNAV 1948 cable gland - IP66

Rated voltage	Drum diameter (mm)	1 metre sound level (dB)	Power (VA)	Cable glands	Palazzoli code	Pack Q.ty
24V~	105	101	initial 13VA 11VA vibrating	1x M24x1,5	900355	1
110V~	105	101	initial 13VA 11VA vibrating	1x M24x1,5	900365	1
230V~	105	101	initial 13VA 11VA vibrating	1x M24x1,5	900375	1

Equipment:

cable gland with gasket, terminal block in thermosetting (GRP) material.

Characteristics:

these are suitable for continuous or extended operation. Earth screws inside and outside the box.



LIGHTING FIXTURES

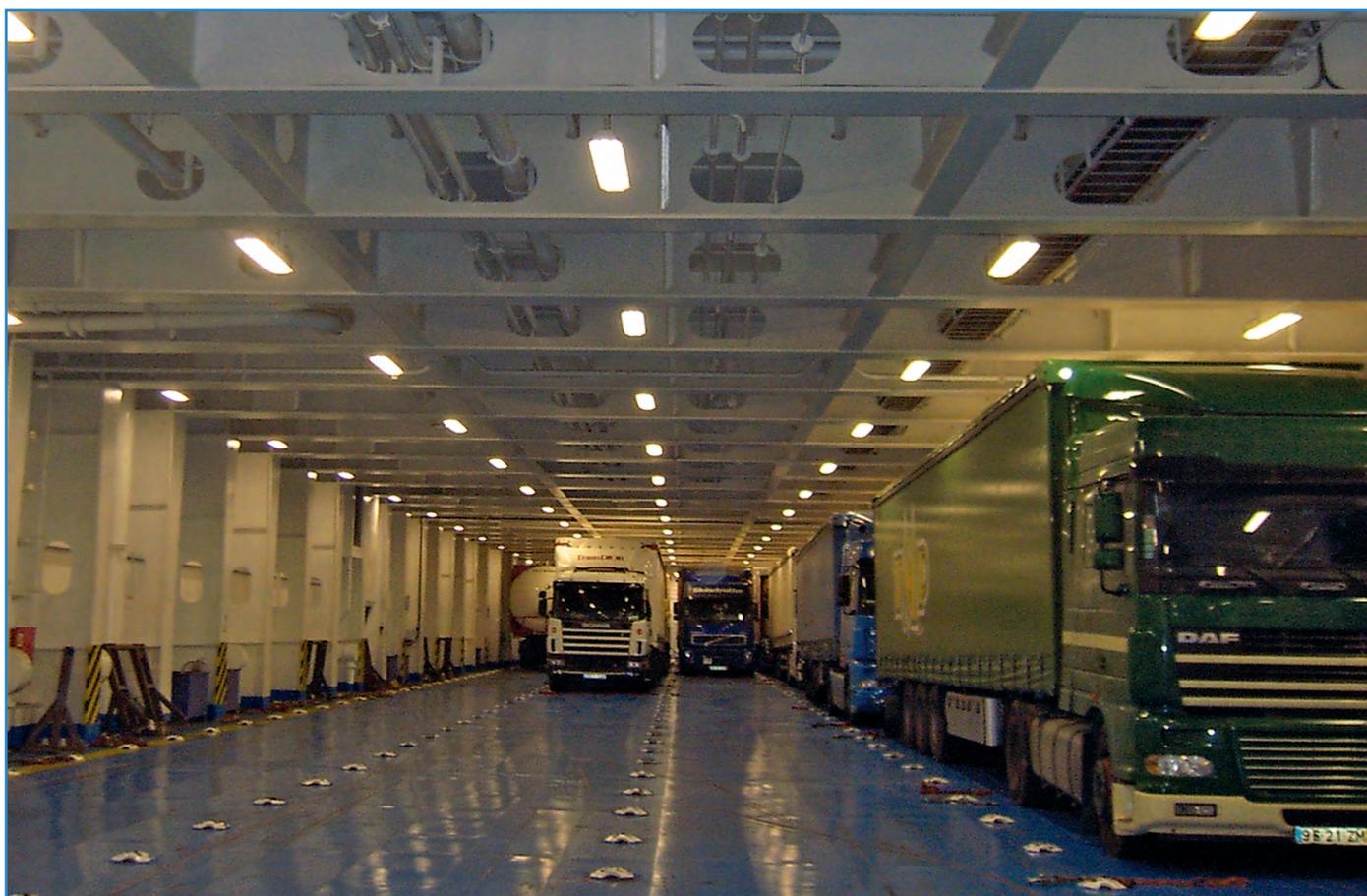
The products and recommended applications

ABOARD SHIP			
Bulkhead	Outside	Inside	Engine rooms
<p>STAINLESS steel AISI 316L</p>  <p>RINO IP65</p>			
		<p>PAINTED GLAVANISED STEEL</p>  <p>RINO IP65</p>	
		<p>BRASS</p>  <p>NAVE IP66</p>	
		<p>ALUMINIUM ALLOY</p>  <p>NAVE IP66</p>	





Lighting fixtures and luminaires



RINO 249
Painted stainless steel lighting fixtures for outdoors



RINO 249
Painted galvanized steel lighting fixtures for indoors



NAVE 252
UNAV lighting fixtures



RINO 254
Oval and round aluminium lighting fixtures



NAVE 255
Watertight lighting fixture



RINO 256
Watertight portable lighting fixture





STAINLESS AND GALVANISED STEEL

RINO Series Stainless

Stainless and painted galvanised steel lighting fixtures AISI 316



No welding

TECHNIQUE

The RINO marine fixture is designed to be an excellent product according to the type of boats to be illuminated. In fact there are versions available for external use with stainless steel body AISI 316L white painted and polycarbonate opaline white diffuser, for internal use with body in white painted galvanised steel and transparent polycarbonate diffuser and for bulkhead with pair of connections. The electrifications available range from versions with a low-leakage electromagnetic power supply to an electronic power supply and the version for emergencies. They answer the highest quality standards guaranteeing reliability and superior performance, such as, for example,

the production of a single shaped body with high photometric. All lighting fixtures are designed in compliance with IEC EN60598-1 and IEC EN60598-2-1 Standards.

Trademarks, symbols, awards



THE ADVANTAGES



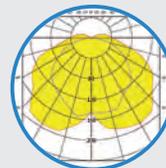
NO WELDING

Folded cut inserts which works as a substitution of weldings, guarantees the stainless quality of the product as well as the very high durability over time.



SAFE

The marine fixtures are equipped with stainless steel fixing pins with pre-assembled anti-vibration systems. The bolts are in stainless steel and guarantee perfect seal and maximum impact resistance.



ELEVATED BRIGHTNESS

The special setting of the RINO MARINE series lens guarantees enough lighting to reduce the number of lighting fixtures and save in terms of energy consumption.



RINO series	
PRODUCT SPECIFICATIONS	
Conformity to standards:	CEI EN 60598-1 CEI EN 60598-2-1 CEI 34-23
Protection rating:	IP65
Impact resistance:	> IK 10
Temperature resistance:	Operating: -15°C - +50°C Storage: -40°C - +70°C
Casing:	Stainless Steel AISI 316L painted Painted galvanised steel
Diffuser:	Tempered glass / shockproof polycarbonate
Lampholder:	G13 / G5
Homologations:	R.I.NA



RINO SERIES
Stainless steel painted fixtures and opaline polycarbonate diffuser for bulkhead
230V -60 Hz - IP65

Power (W)	Power supply	Lampholders and lamps	Palazzoli code	Pack Q.ty
2x18	Electromagnetic	G13 T8	881102	1
2x18	Electronic 230VAC/DC	G13 T8	881132	1

Characteristics: version with electromagnetic power supply with p.f. correction capacitor. Prepared for bulkhead connections.
Equipment: No. 2 2P+≋ terminal blocks for power supply entry/output.
On request: supplementary external earth connection with M6 bolt
Complementary items: bulkhead connections code 820007.



RINO SERIES
Stainless steel painted fixtures and opaline polycarbonate diffuser for ceilings
230V -60 Hz - IP65



2 inputs per heading

Power (W)	Power supply	Lampholders and lamps	Palazzoli code	Pack Q.ty
2x18	Electromagnetic	G13 T8	878102	1
2x36	Electromagnetic	G13 T8	878202	1
2x18	Electronic 230VAC/DC	G13 T8	878132	1
2x36	Electronic 230VAC/DC	G13 T8	878232	1
(1+1)x18	Emergency	G13 T8	878111	1
(1+1)x36	Emergency	G13 T8	878211	1

Characteristics: versions with electromagnetic power supply with p.f. correction capacitor.
Equipment: No. 2 2P+≋ terminal blocks for power supply entry/output. No. 2 M20 nickel-plated brass cable glands. No. 2 M20 caps in nickel-plated brass Kit for ceiling fixing with screw and M8 bolt.
On request: supplementary external earth connection with M6 bolt.



RINO SERIES
Pair of bulkhead connections for external light fixtures

Fixtures	Palazzoli code	Pack Q.ty
For external bulkhead fixtures code 881102 and 881132	820007	1



RINO SERIES
Galvanised painted-glass lighting fixtures - polycarbonate with white reflector
230V -60 Hz - IP65



2 inputs per heading

Power (W)	Power supply	Lampholders and lamps	Palazzoli code	Pack Q.ty
2x18	Electromagnetic	G13 T8	849102	1
2x36	Electromagnetic	G13 T8	849202	1
2x18	Electronic 230VAC/DC	G13 T8	849132	1
2x36	Electronic 230VAC/DC	G13 T8	849232	1
(1+1)x18	Emergency	G13 T8	849111	1
(1+1)x36	Emergency	G13 T8	849211	1

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NAVE series Corrosion Immunity

UNAV standards
lighting fixtures



No
cracks

TECHNIQUE

The NAVE SERIES marine lighting equipment reflects the past and future, combining aesthetics with functionality, and performance with style, with all the technological precision required by today's nautical standards. Brass is an elegant choice which is also resistant to corrosive agents in salty atmospheres or traffic and industrial pollution. The E27 lampholders are made of porcelain, which offers higher

insulation and resistance to heat and tracking than the highest quality synthetic resins. The various fittings are small but highly effective. For example, the non-ageing elastomer gaskets, stainless steel screws and machining have been made with the highest precision.

Trademarks, symbols, awards



THE ADVANTAGES



SUPER-RESISTANT

Characterised by a reinforced structure with even thicker walls, they are ideal in cases of extreme stress/vibrations (engine rooms) and also ensure high impact resistance.



ETERNAL

All the components of the NAVE series are made of non-magnetic material with very high resistance to oxidation, such as die-cast solid brass, stainless steel, which ensures durability.



EASIER MAINTENANCE

Thanks to IP66 protection and the glass diffuser, periodical maintenance consists of simply cleaning the outer covering of brass and glass diffuser with a damp cloth or even water jets.





NAVE / RINO series	
PRODUCT SPECIFICATIONS	
Conformity to standards:	specific UNAV standards
Protection rating:	IP66
Impact resistance:	> IK 10
Temperature	Operating: -40°C - +70°C
resistance:	Storage: -50°C - +80°C
Casing:	Painted solid brass
Diffuser:	Pyrex type prismatic glass
Lampholder:	E27 in porcelain



NAVE SERIES
Housings in brass painted marine grey, with globe-holder rings for combinations of watertight UNAV 2134-1796 cylindrical lighting fixtures
250V - IP66

Lamp max. wattage (W)	Lampholder	No. cable glands	Cable glands	Palazzoli code	Pack Q.ty
60	E27	1	24x14 UNAV1948 M24x1,5	815141	1
60	E27	2 opposite	24x14 UNAV1948 M24x1,5	815151	1
60	E27	2 combined	24x14 UNAV1948 M24x1,5	815161	1
60	E27	2 combined	3/4" Bulkhead feedthrough fitting	815181	1

Equipment: brass cable glands with gaskets.
Internal and external earth screws.

Characteristics: The item 815181 is UNAV 1796 type.



NAVE SERIES
UNAV 1268 diffusers in smooth coloured glass for watertight cylindrical lighting fixtures

Lighting fixture max power	Colour	Palazzoli code	Pack Q.ty
60W	Transparent	850060	1
60W	Blue	850061	1
60W	Yellow	850062	1
60W	Red	850063	1
60W	Green	850064	1



RINO SERIES
Protection cage in stainless steel wire for watertight cylindrical lighting fixtures

Lighting fixture max power	Palazzoli code	Pack Q.ty
60W	819022	1
100W	850172	1



RINO SERIES
Reflectors in heat treated painted galvanized steel for watertight cylindrical lighting fixtures

Lighting fixture max power	Colour	Palazzoli code	Pack Q.ty
60W	White	819030	5
100W	White	819130	5
200W	White	819230	5



RINO SERIES
Shade in oven-painted galvanized steel, for directing light output from watertight cylindrical lighting fixtures

Lighting fixture max power	Colour	Palazzoli code	Pack Q.ty
60W	Aluminium	819035	1
100W	Aluminium	819135	1
200W	Aluminium	819235	1



NAVE SERIES
Swann type bayonet lampholder with tabs for watertight cylindrical lighting fixtures

Type	Lampholder material	Palazzoli code	Pack Q.ty
B22d 4A 250V	Brass	859400	1





LIGHTING FIXTURES



NAVE SERIES
UNAV 2133 cylindrical watertight lighting fixtures in brass marine grey
250V - IP66

Lamp max. wattage (W)	Lampholder porta	No. cable glands	Cable glands	Palazzoli code	Pack Q.ty
60	E27	2 combined	3/4" Bulkhead feedthrough fitting	850054	1

Equipment:

brass cable glands with gasket. Internal and external earth screws.

Characteristics:

cylindrical diffuser in smooth transparent glass.



NAVE SERIES
Housings in brass painted marine grey, for combinations of watertight UNAV 2133 cylindrical lighting fixtures - IP66

Lamp max. wattage (W)	Lampholder porta	No. cable glands	Cable glands	Palazzoli code	Pack Q.ty
60	E27	1	24x14 UNAV1948 M24x1,5	850042	1
60	E27	2 opposite	24x14 UNAV1948 M24x1,5	850045	1
60	E27	2 combined	3/4" Bulkhead feedthrough fitting	850065	1

Equipment:

brass cable glands with gasket. Internal and external earth screws.



NAVE SERIES
UNAV 1268 diffusers in smooth coloured glass for watertight cylindrical lighting fixtures

Lighting fixture max. wattage	Colour	Palazzoli code	Pack Q.ty
60W	Transparent	850060	1
60W	Blue	850061	1
60W	Yellow	850062	1
60W	Red	850063	1
60W	Green	850064	1



NAVE SERIES
Globe-holder ring in nickel-plated brass for UNAV 2133 watertight cylindrical lighting fixtures

Lighting fixture max. wattage	Palazzoli code	Pack Q.ty
60W	850050	1



NAVE SERIES
Globe-holder ring in nickel-plated brass with stainless steel cage for UNAV 2133 watertight cylindrical lighting fixtures

Lighting fixture max. wattage	Palazzoli code	Pack Q.ty
60W	850058	1

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NAVE SERIES
UNAV 2132 cylindrical watertight lighting fixtures in painted brass marine grey 250V - IP66

Lamp max. wattage (W)	Lampholder	No. cable glands	Cable glands	Palazzoli code	Pack Q.ty
100	E27	1	24x14 UNAV1948 M24x1,5	850140	1
100	E27	2 opposite	24x14 UNAV1948 M24x1,5	850143	1

Equipment:

brass cable glands with gasket. Internal and external earth screws.

Characteristics:

cylindrical diffuser in smooth transparent glass.



RINO SERIES
Protection cage in stainless steel wire for watertight cylindrical lighting fixtures

Lighting fixture max. wattage	Palazzoli code	Pack Q.ty
60W	819022	1
100W	850172	1



NAVE SERIES
Base in tropicalized steel for ceiling installation of UNAV 2132, 2133 and 2134 watertight cylindrical lighting fixtures

Type	Palazzoli code	Pack Q.ty
A UNAV 1228	850090	1



NAVE SERIES
Wall-mounting installation base in tropicalized steel for watertight UNAV 2132, 2133 and 2134 cylindrical lighting fixtures

Type	Palazzoli code	Pack Q.ty
B UNAV 1228	850091	1

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LIGHTING FIXTURES



NAVE SERIES
Oval watertight lighting fixtures in brass painted marine grey with glass diffuser, type UNAV 2135 250V - IP66

Lamp max. wattage (W)	Lampholder	No. cable glands	Cable glands	Palazzoli code	Pack Q.ty
60	E27	1	24x14 UNAV1948 M24x1,5	831069	1
60	E27	2	24x14 UNAV1948 M24x1,5	831089	1
100	E27	1	24x14 UNAV1948 M24x1,5	831109	1
100	E27	2	24x14 UNAV1948 M24x1,5	831189	1
200	E27	1	24x14 UNAV1948 M24x1,5	831209	1
200	E27	2	24x14 UNAV1948 M24x1,5	831289	1

Equipment: M24x1.5 brass cable glands with gasket.
Internal and external earth screws.

Characteristics: diffuser in ribbed prismatic glass.



NAVE SERIES
Cage in stainless steel wire for oval lighting fixtures type UNAV 2135

Lighting fixtures max wattage	Palazzoli code	Pack Q.ty
60W	831527	1
100W	831627	1
200W	831727	1



NAVE SERIES
Swann B22d type bayonet lampholders with bracket for oval and round lighting fixtures

Type	Lampholder material	Palazzoli code	Pack Q.ty
B22d 4A 250V	Brass	859412	1

Equipment: installation bracket.





NAVE SERIES
Watertight large lighting fixtures type UNAV 2139 brass painted marine grey 250V - IP66

Lamp max. wattage (W)	Lampholder	Cable glands	Palazzoli code	Pack Q.ty
3x100	3xE27	24x14 UNAV1948 M24x1,5	850300	1

Equipment:

M24x1.5 brass cable gland with gasket. Internal and external earth screws.

Characteristics:

globe-holder ring with hinge. Transparent glass diffuser.



NAVE SERIES
Watertight large lighting fixture type UNAV 2139 brass painted marine grey, including tropicalized steel cage 250V - IP66

Lamp max. wattage (W)	Lampholder	Cable gland	Palazzoli code	Pack Q.ty
3x100	3xE27	24x14 UNAV1948 M24x1,5	850301	1

Equipment:

M24x1.5 brass cable gland with gasket. Internal and external earth screws.

Characteristics:

globe-holder ring with hinge. Transparent glass diffuser.



NAVE SERIES
Sprung installation base for UNAV 2139 large lighting fixtures

Type	Palazzoli code	Pack Q.ty
UNAV 1230 for 1/2" gas conduit	850391	1

Uses:

for pendant installation with 1/2" gas steel conduit.



NAVE SERIES
Brass cable glands including sleeve coupling, type UNAV 1948 IP66

Type	Palazzoli code	Pack Q.ty
B2 24 UNAV 1948 - M24x1,5	585410	10

Characteristics:

supplied without washers and gasket.



NAVE SERIES
Brass bush for earthing the cable reinforcement, type UNAV 1949 IP66

Internal diameter (mm)	Type	Palazzoli code	Pack Q.ty
8	B2 24 UNAV 1949	585316	10
9	B2 24 UNAV 1949	585317	10
10,5	B2 24 UNAV 1949	585318	10
13	B2 24 UNAV 1949	585319	10

Characteristics:

supplied without washers and gasket.



NAVE SERIES
Brass cable gland type: UNAV 1062

Type	Palazzoli code	Pack Q.ty
24 UNAV 1062	585480	10

Characteristics:

supplied without washers and gasket.

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LIGHTING FIXTURES



NAVE SERIES
Brass washers with gasket in non-ageing elastomer

Internal diameter (mm)	Palazzoli code	Pack Q.ty
8	585406	10
9	585407	10
10	585408	10
11	585409	10
12	585411	10
13	585412	10
14	585413	10
15	585414	10
16	585415	10
17	585416	10



NAVE SERIES
Brass screwcap with gasket IP66

Thread	Palazzoli code	Pack Q.ty
M24x1,5	585490	10



NAVE SERIES
Portable watertight lighting fixture, UNAV 2137 type in thermosetting (GRP) material, with stainless steel protection cage 250V - IP65

Lamp max. wattage (W)	Lampholder	Palazzoli code	Pack Q.ty
60	E27	814052	1

Equipment: cable entry with 1 1/2" gas cable gland and internal cable clamp.
Characteristics: diffuser in ribbed clear glass. Porcelain lampholder.

Example of usage

