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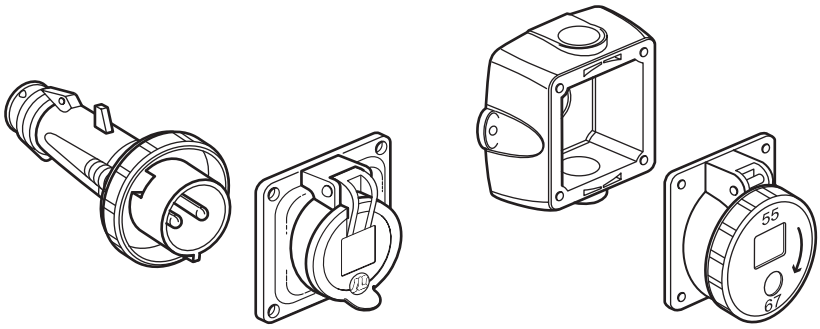
Domestic sockets
IP44, IP 66/67-55, 2P+E 16A 250V~

Cat. No.(s) : 521 18 - 539 03/10/11/32/33/37/38



CONTENTS ..... **Page**

1. General characteristics 1
2. Range 1
3. Technical characteristics 1
4. Materials 2
5. Dimensions 3
6. Mounting instructions 3

1. GENERAL CHARACTERISTICS

- Products intended for electrical household appliances used in the industrial or commercial sector
- Plastic material only
- IK09
- With safety shutters
- Connection capacity:
  - panel and surface mounting sockets: min. 1.5 / max. 2.5 mm^2
  - plugs and mobile sockets: min. 0.75 / max. 1.5 mm^2

1.1. Conpliance with standards

- Complies with standard NF C 61314
- Complies with standards IEC 529, EN 60 529 (IP)
- Complies with standard EN 50 102 (IK)
- Complies with standard NFC 15-100 (premises BA2)

1.2. Products features

Mobile plugs and sockets
- Integrated cable gland
- Guaranteed weatherproof with cable gland.
- External clamp allowing the cable to be clamped and retighteneed, if necessary, without having to dismantle the product.
- Captive cable clamp and external screws.
- Secure cable clamping: two half clamps ensure an uniform grip around the whole diameter of the cable.
- Angled plugs at 30° providing improved cable bending.

Sockets and boxes
- Surface-mounted socket assembled from socket and box
- Angle = 0°
- Box with 2 cable entries for M20 cable glands, with one of them fitted with blank.
- Specification of fixing dimensions on the back of the box.
- Use of plate 521 18, (single fixing centres) to fix the socket to Hypra combined units. (Screws provided)
- Fixing centers identical to the former Martin Lunel panel mounting socket.

2. RANGE

539 03: panel mounting socket IP 44
539 10: box
539 11: panel mounting socket IP 66/67-55
539 32: straight plug IP 66/67-55
539 33: angled plug IP 66/67-55
539 37: mobile socket IP 66/67-55
539 38: mobile socket IP 44
521 18: adapter plate for fixing to Hypra unit

Martin Lunel range	Hypra range	
	IP44	IP66/67-55
539 02	539 10 + 539 03	539 10 + 539 11
539 03	539 03	539 11
539 30	→	539 32
539 31	→	539 33
539 38	539 38	539 37

3. TECHNICAL CHARACTERISTICS

3.1. Indexes of protection

- Panel mounting socket 539 03 and mobile socket 539 38: IP 44 connected and not connected.
- Other cat. nos:

Connected, IP 55 ensured with flap down.
Not connected, IP 55 automatically ensured with the flap down by clipping.
Connected and not connected, IP 66/67 ensured by ring locking.

3.2. Resistance to harsh environments

Only relates to IP 66/67-55 cat. nos.
- Resistance to temperature variations using spray jets:

test carried out on the same day using three temperature intervals from 5 to 60° C/Spray jet 3-4 bars at 30 cm from the nozzle.
- Resistance to industrial cleaning procedures generally carried out in the agribusiness sector:

high-pressure pre-wash/detergent cleaning/high-presure, high-temperature wash.
- Pre-wash degreasing test:
  test carried out using a high-pressure machine set between 70 and 90 bars.
  Hot water between 70 and 80° C.
  Spraying at a distance of 50 cm for one minute without any direct application on the tested product.
- Detergent cleaning: two detergents are used:
  Galorox acid and Galorox 3 %
  Each detergent is applied by spraying it around the product for 10 seconds.
  The detergent is then left to take effect for 30 minutes.
- Wash:

A high-pressure machine set between 110 and 120 bars.
- Spraying hot water between 70 and 80° C
- The other settings are identical to those in the pre-wash degreasing test.
- Result: all the tested products successfully passed the detergen tests based on the above-specified conditions.

3. TECHNICAL CHARACTERISTICS *(continued)*

3.3. Resistance to glow wire and operating temperatures

• Glow wire:
- Plugs and mobile sockets
  750°C active parts support
  650°C housing
- Sockets
  850°C active parts support
  650°C housing

• Temp of use: - 5°C / + 35°C
• Dielectric strength: 2000 V - 50 Hz

3.4. UV resistance

No colour change or material alteration following the test:
• Radiation intensity: 550W/m^2
• Test duration: 168 hours
• IR and UV filter.

3.5. Ageing test

• thermoplastic material:
ageing test, 7 days at 70°C - No cracking of the material
• strength of flap springs:
5 000 openings/closings carried out - Conform result
• strength of seals:
ageing test, 10 days at 70°C, then IP verification
- Conform result

4. MATERIALS

4.1. Material of components

Body, ring, flap, cable clamp: plastic material

	539 03	539 11
Contacts	Brass	Nickel-plated brass
External screws	"without"	Stainless steel
External screws	Zinc-plated steel	Pin screw = nickel-plated brass Sleeve screw = zinc-plated steel

4.2. Resistance of plastic material to main chemical agents

Aqueous solutions	**Main material**	**Locking ring**
Cold water	++	++
Warm water	+	-
Vapour	-	--
Saltwater 5 %	+	+
Hydrogen peroxide	-	-
Water + detergent	++	
Water + surfactants	+	
Formic aldehide	++	++
Alcohols		
Ethanol	++	++
Methyl alcohol	+	-
Propanol	++	+
Butyl alcohol	++	+
Glycols		
Ethylene glycol	-	++
Carbolic acids	--	
Cresols	-	
Bases		
Ammoniac	+	+
Sodium hydroxide	+	--
Sodium hypochlorite (bleach 12°)	+	-
Hydroxyde de potassium (potasse)	+	+

4.2. Resistance of plastic material to main chemical agents *(continued)*

Oxydizing strong acids		
Concentrated acetic acid	--	+
Nitric acid 5 %	-	-
Sulfuric acid 10 %	-	+
Muriatic acid 30 %	-	+
Perchloric acid 70 %	-	
Hydrofluoric acid 70 %	--	
Chromic acid 50 %	--	-
Phosphoric acid 30 %	-	
Weak acids		
Diluted acetic acid < 25 %	-	+
Citric acid	+	+
Lactic acid	-	+
Formic acid	--	-
Uric acid	++	
Oils and lubricants - Animal origin		
Lard	++	++
Butter, cream	++	++
Oils and lubricants - Vegetal origin		
Linseed oil	++	++
Peanut / Olive	++	++
Castor oil	++	++
Glycerin	++	
Oils and lubricants - Mineral origin		
Paraffin	++	++
Engine oil	++	+
Silicone oil	+	++
Cutting oil	++	++
Hydraulic fluid	++	++
Hydrocarbons		
Unlead petrol	++	++
Diesel oil	++	++
Kerosen	++	++
White spirit	++	+
Chlorinated solvents		
Trichloroethylene	+	-
Trichloroethane	++	--
Perchloroethylene	++	-
Methyl chloride	-	--
Carbon tetrachloride	+	-
Chloroform	+	-
SAromatic solvents		
Benzen	++	+
Toluene	++	+
Xylene	++	+
Alphatic solvents		
Hexane	++	+
Fluoride solvents		
Trichlofluoridmethan	--	
Ketones		
Acetone	+	+
Methyl Etyl Ketone	+	+
Ethyl acetate	+	+
Turpens		
Turpentine	+	-

Resistance to chemical agents at ambient temperature according to risks of exposure with spraying.
(++) excellent resistance (continue exposure)
(+) good resistance (durable exposure)
(-) limited resistance (possible short exposure)

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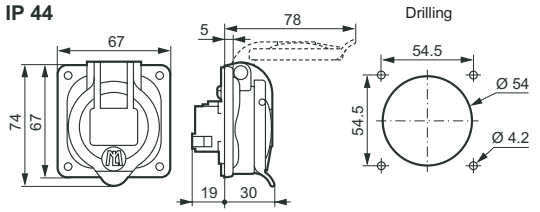
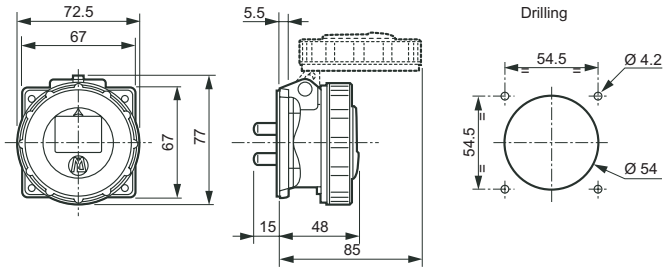
5. DIMENSIONS

Panel mounting socket

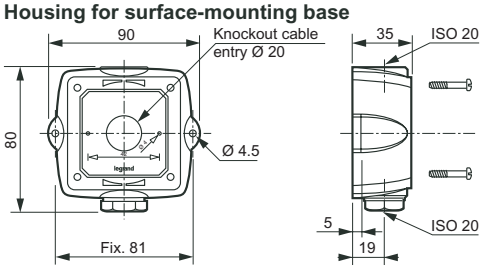
IP 44



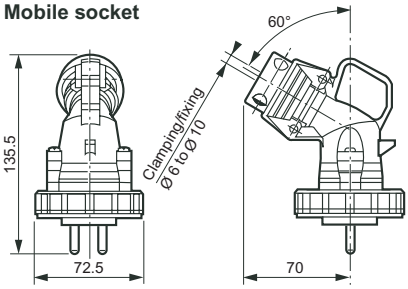
IP 66/67-55



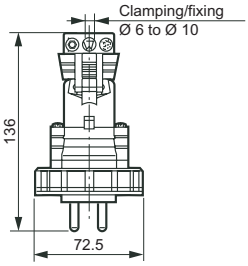
Housing for surface-mounting base



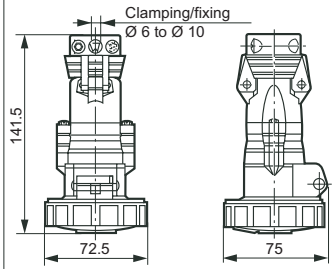
Mobile socket



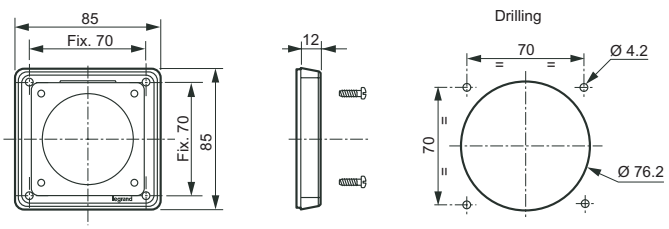
Straight plug



Mobile socket

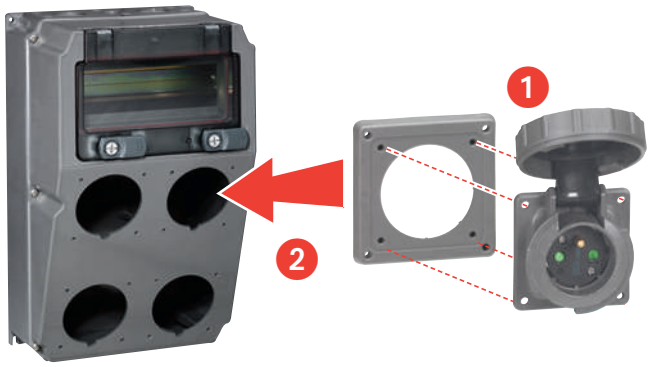


Adapter plate



6. MOUNTING INSTRUCTIONS

Adapter plate 521 18 supplied with screws



Replacement of Martin Lunel panel mounting socket by Hypra panel mounting socket

