

# PRE Series 16 Amp Plugs and Sockets

## Increased Safety

Zone 1 and 2 - 21 and 22  
Gas (G) and Dust (D)

### Applications

- Plugs and receptacles are used with portable or stationery electrical equipment such as:
  - Lighting systems
  - Conveyors
  - Heaters
  - Motor generators
  - Air conditioning equipment
  - Compressors
  - Pumps.
- For use in corrosive atmospheres and installations in Zone 1 and 2 and 21 and 22 of the oil and gas industry; such as:
  - Refineries
  - Chemical and petrochemical plants
  - Pipelines
  - Loading docks
  - Onshore and offshore drilling platforms
  - LNG Trains
  - Gas Compressor Stations.

### Features

- Plug and socket system is designed with a safe disconnect mechanism to insure maximum hazardous location protection:
  - The contact separation is in a flameproof chamber
  - The automatic electrical disconnection of each phase is contained in a second flameproof chamber
- Short circuit protection is 20 kA, while normal reference is 10 kA.
- Different voltages are color coded for easy identification.
- The receptacles are keyed to accept only ATX plugs (other plugs can not be inserted).
- Operating temperature of -40 °C to +55 °C.

### Standard Materials

- Wall Socket for 2P, 2P+ E, 3P: high impact resistance polycarbonate.
- Wall Socket for 3P+E, 3P+N+E: high impact resistance fiberglass reinforced polyester.
- Plug, mobile socket and flush socket: polyamide.

### Certifications and Compliances

#### ◆ ATEX/IECEx Certification

- Certification Type PCX (Plug, socket and mobile socket)**
  - Gas: Zones 1 and 2
    - Conforming to ATEX 94/9/CE:  II 2 G
    - Type of Protection: Ex de IIC
    - Temperature class: T6 for Ta ≤ +40 °C and T5 for +55 °C
  - Dust: Zones 21 and 22
    - Conforming to ATEX 94/9/CE:  II 2 D
    - Type of Protection: Ex td A21
    - Surface Temperature: T68 °C
  - Ambient Temperature: -40 °C ≤ Ta ≤ +55 °C
  - Index of Protection according EN/IEC 60529: IP66
  - Impact Resistance (shock): IK10 (Polyester) and IK09 (Polyamide)
  - CE Declaration of Conformity: 50228
  - ATEX Certificate: LCIE 02 ATEX 6068
  - IECEx Certificate: IECEx LCI 04.0014



### Technical Data

| Breaking Capacity |                |
|-------------------|----------------|
| AC 3              | 4 kW – 220 V   |
|                   | 4.3 kW – 240 V |
|                   | 7.5 kW – 380 V |
|                   | 8.2 kW – 415 V |
| ICC               | 20 kA          |

- Certification Type PCX/EN (Flush socket)**

- Gas: Zones 1 and 2
  - Conforming to ATEX 94/9/CE:  II 2 G
  - Type of Protection: Ex de IIC
  - Temperature class: T6 for Ta ≤ +40 °C and T5 for +55 °C
- Dust: Zones 21 and 22
  - Conforming to ATEX 94/9/CE:  II 2 D
  - Type of Protection: Ex td A21
  - Surface Temperature: T68 °C
- Ambient Temperature: -40 °C ≤ Ta ≤ +55 °C
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK09 (Polyamide)
- CE Declaration of Conformity: 5C214
- ATEX Certificate: LCIE 02 ATEX 0001U
- IECEx Certificate: IECEx LCI 07.0012U

- ◆ EURASEC Certification**

- Certification Type PCX (Plug, socket and mobile socket)**
  - EURASEC N° TC RU C-FR.Г505.В.00910
- Certification Type PCX/EN (Flush socket)**
  - EURASEC N° TC RU C-FR.Г505.В.00910

- ◆ Others Certification**

- Certification Type PCX (Plug, socket and mobile socket)**
  - Inmetro Certificate: BVC11.0639 <sup>①</sup>
- Certification Type PCX/EN (Flush socket)**
  - Inmetro Certificate: BVC11.0598-U <sup>①</sup>

① Inmetro certification available on special request only. Contact your local sales for more information

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Plugs and Receptacles

INCREASED SAFETY EX E



Wall Mounting Socket

- Three M20 threaded entries (one on the top and two on the bottom).
- Supplied with one M20 cable gland – Ø 6.5 to Ø 14.5 mm and two M20 blanking plugs.
- Terminal capacity 2 x 4 mm². Can be through-wired.
- Fitted with three linked earth terminals.



Plug

- One PG16 integrated cable gland – Ø 6.5 to Ø 14.5 mm.
- Terminal capacity 2.5 mm².



Mobile Socket

- One PG16 integrated cable gland – Ø 6.5 to Ø 14.5 mm.
- Terminal capacity 2 x 4 mm².



Flush Socket

- Terminal capacity 2 x 4 mm².

### Catalog Numbering Guide - Plugs and Receptacles

**PRE**  
PRE Series  
Zone 1, 2, 21 and 22

**2**  
Pin Configuration:  
2 - 2P  
3 - 2P+E  
4 - 3P+E  
5 - 3P+N+E  
6 - 3P

**16**  
Amps:  
16 - 16A

**R**  
Equipment:  
P - Plug  
R - Receptacle  
(Wall Mounting)  
M - Mobile Socket  
F - Flush Socket

**P**  
Voltage:  
P - 20 - 25 Vac 50/60 Hz  
W1 - 20 - 50 Vdc  
W - 40 - 50 Vac 50/60 Hz  
Y - 100 - 130 Vac 50/60 Hz  
B - 200 - 250 Vac 50/60 Hz  
R - 380 - 415 Vac 50/60 Hz  
N - 480 - 500 Vac 50/60 Hz  
G - 50 - 500 Vac 300 to 500 Hz

### ELV: Extra Low Voltage

| Purple (P) | White (W1) | White (W) |
|------------|------------|-----------|
| 20/25 Vac  | 20/50 Vdc  | 40/50 Vac |

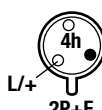
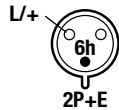
### LV: Low Voltage

| Yellow (Y)  | Blue (B)    | Red (R)     | Black (N)   | Green (G)                     |
|-------------|-------------|-------------|-------------|-------------------------------|
| 100/130 Vac | 200/250 Vac | 380/415 Vac | 480/500 Vac | 50/500 Vac<br>(300 to 500 Hz) |

# PRE Series 16 Amp Extra Low Voltage and Low Voltage Plugs and Sockets

## Increased Safety

Zone 1 and 2 - 21 and 22  
Gas (G) and Dust (D)

| Description                   | Pin Configuration                                                                   | Weight kg | Volume dm <sup>3</sup> | Catalog Number |
|-------------------------------|-------------------------------------------------------------------------------------|-----------|------------------------|----------------|
| Extra Low Voltage: ELV        |                                                                                     |           |                        |                |
| 20/25 Vac 50/60 Hz — Purple   |                                                                                     |           |                        |                |
| Wall Socket                   |    | 0.6       | 3.8                    | PRE216RP       |
| Plug                          |                                                                                     | 0.2       | 0.6                    | PRE216PP       |
| Mobile Socket                 |                                                                                     | 0.4       | 1.3                    | PRE216MP       |
| Flush Socket                  |                                                                                     | 0.2       | 1.3                    | PRE216FP       |
| Wall Socket                   |    | 0.6       | 3.8                    | PRE316RP       |
| Plug                          |                                                                                     | 0.2       | 0.6                    | PRE316PP       |
| Mobile Socket                 |                                                                                     | 0.4       | 1.3                    | PRE316MP       |
| Flush Socket                  |                                                                                     | 0.2       | 1.3                    | PRE316FP       |
| Wall Socket                   |    | 0.6       | 3.8                    | PRE616RP       |
| Plug                          |                                                                                     | 0.2       | 0.6                    | PRE616PP       |
| Mobile Socket                 |                                                                                     | 0.4       | 1.3                    | PRE616MP       |
| Flush Socket                  |                                                                                     | 0.2       | 1.3                    | PRE616FP       |
| 20/50 Vdc — White             |                                                                                     |           |                        |                |
| Wall Socket                   |  | 0.6       | 3.8                    | PRE216RW1      |
| Plug                          |                                                                                     | 0.2       | 0.6                    | PRE216PW1      |
| Mobile Socket                 |                                                                                     | 0.4       | 1.3                    | PRE216MW1      |
| Flush Socket                  |                                                                                     | 0.2       | 1.3                    | PRE216FW1      |
| 40/50 Vac 50/60 Hz — White    |                                                                                     |           |                        |                |
| Wall Socket                   |  | 0.6       | 3.8                    | PRE216RW       |
| Plug                          |                                                                                     | 0.2       | 0.6                    | PRE216PW       |
| Mobile Socket                 |                                                                                     | 0.4       | 1.3                    | PRE216MW       |
| Flush Socket                  |                                                                                     | 0.2       | 1.3                    | PRE216FW       |
| Wall Socket                   |  | 0.6       | 3.8                    | PRE616RW       |
| Plug                          |                                                                                     | 0.2       | 0.6                    | PRE616PW       |
| Mobile Socket                 |                                                                                     | 0.4       | 1.3                    | PRE616MW       |
| Flush Socket                  |                                                                                     | 0.2       | 1.3                    | PRE616FW       |
| Low Voltage: LV               |                                                                                     |           |                        |                |
| 100/130 Vac 50/60 Hz — Yellow |                                                                                     |           |                        |                |
| Wall Socket                   |  | 0.6       | 3.8                    | PRE316RY       |
| Plug                          |                                                                                     | 0.2       | 0.6                    | PRE316PY       |
| Mobile Socket                 |                                                                                     | 0.4       | 1.3                    | PRE316MY       |
| Flush Socket                  |                                                                                     | 0.2       | 1.3                    | PRE316FY       |
| 200/250 Vac 50/60 Hz — Blue   |                                                                                     |           |                        |                |
| Wall Socket                   |  | 0.6       | 3.8                    | PRE316RB       |
| Plug                          |                                                                                     | 0.2       | 0.6                    | PRE316PB       |
| Mobile Socket                 |                                                                                     | 0.4       | 1.3                    | PRE316MB       |
| Flush Socket                  |                                                                                     | 0.2       | 1.3                    | PRE316FB       |

Shaded catalog numbers are normally stocked items. All other items are made to order.

Plugs and Receptacles

INCREASED SAFETY EX E

# PRE Series 16 Amp Low Voltage Plugs and Sockets and Accessories

## Increased Safety

Zone 1 and 2 - 21 and 22  
Gas (G) and Dust (D)

Plugs and Receptacles

INCREASED SAFETY EX E

| Description                                                                                                                                                                       | Pin Configuration | Weight kg | Volume dm³ | Catalog Number |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|------------|----------------|
| Low Voltage: LV                                                                                                                                                                   |                   |           |            |                |
| 200/250 Vac 50/60 Hz — Blue                                                                                                                                                       |                   |           |            |                |
| Wall Socket                                                                                                                                                                       |                   | 1.5       | 4.7        | PRE416RB       |
| Plug                                                                                                                                                                              |                   | 0.6       | 0.6        | PRE416PB       |
| Mobile Socket                                                                                                                                                                     |                   | 0.6       | 4.0        | PRE416MB       |
| Flush Socket                                                                                                                                                                      |                   | 0.2       | 1.3        | PRE416FB       |
| Wall Socket                                                                                                                                                                       |                   | 1.6       | 4.7        | PRE516RB       |
| Plug                                                                                                                                                                              |                   | 0.3       | 1.3        | PRE516PB       |
| Mobile Socket                                                                                                                                                                     |                   | 0.6       | 4.0        | PRE516MB       |
| Flush Socket                                                                                                                                                                      |                   | 0.2       | 1.3        | PRE516FB       |
| (1) 120/208 V - 144/250 Vac 50/60 Hz                                                                                                                                              |                   |           |            |                |
| 380/415 Vac 50/60 Hz — Red                                                                                                                                                        |                   |           |            |                |
| Wall Socket                                                                                                                                                                       |                   | 1.5       | 4.7        | PRE416RR       |
| Plug                                                                                                                                                                              |                   | 0.2       | 0.6        | PRE416PR       |
| Mobile Socket                                                                                                                                                                     |                   | 0.6       | 4.0        | PRE416MR       |
| Flush Socket                                                                                                                                                                      |                   | 0.3       | 1.3        | PRE416FR       |
| Wall Socket                                                                                                                                                                       |                   | 1.6       | 4.7        | PRE516RR       |
| Plug                                                                                                                                                                              |                   | 0.3       | 1.3        | PRE516PR       |
| Mobile Socket                                                                                                                                                                     |                   | 0.6       | 4.0        | PRE516MR       |
| Flush Socket                                                                                                                                                                      |                   | 0.3       | 1.3        | PRE516FR       |
| (2) 200/346 V - 240/415 Vac 50/60 Hz                                                                                                                                              |                   |           |            |                |
| 480/500 Vac 50/60 Hz — Black                                                                                                                                                      |                   |           |            |                |
| Wall Socket                                                                                                                                                                       |                   | 1.5       | 4.7        | PRE416RN       |
| Plug                                                                                                                                                                              |                   | 0.2       | 0.6        | PRE416PN       |
| Mobile Socket                                                                                                                                                                     |                   | 0.6       | 4.0        | PRE416MN       |
| Flush Socket                                                                                                                                                                      |                   | 0.3       | 1.3        | PRE416FN       |
| 50/500 Vac 300/500 Hz — Green                                                                                                                                                     |                   |           |            |                |
| Wall Socket                                                                                                                                                                       |                   | 1.6       | 4.7        | PRE516RG       |
| Plug                                                                                                                                                                              |                   | 0.2       | 0.6        | PRE516PG       |
| Mobile Socket                                                                                                                                                                     |                   | 0.6       | 4.0        | PRE516MG       |
| Flush Socket                                                                                                                                                                      |                   | 0.3       | 1.3        | PRE516FG       |
| Accessories                                                                                                                                                                       |                   |           |            |                |
| Description                                                                                                                                                                       |                   |           |            | Catalog Number |
| <br>M5 earth stud with black neoprene sealing washer and green/yellow earth conductor, length 300 mm<br>Certification type BVE : Exe - IP66 - 03 ATEX 0011 U - IECEx LCI 04.0027U |                   |           |            | PREESTM20      |
| <br>M20 earth continuity adaptor with black neoprene sealing washer and green/yellow earth conductor, length 300 mm<br>Certification type ACC : Exe - IP66 - 03 ATEX 0020 U       |                   |           |            | PREECAM20      |

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# PRE Series 16 Amp Plug and Socket Dimensions

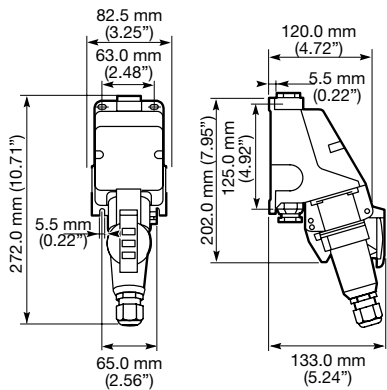
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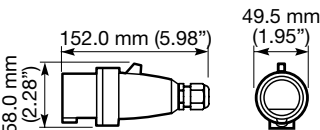
### Dimensions

#### 16A – 2P – 2P+E – 3P Versions

##### Wall Mounting Sockets

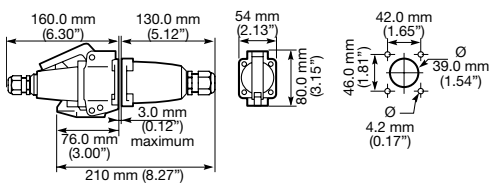


##### Plugs

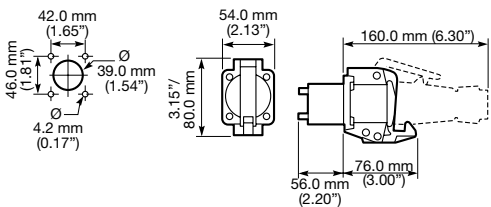


##### Mobile Sockets

Can be mounted on panel - 0.12"/3.0 mm thickness maximum

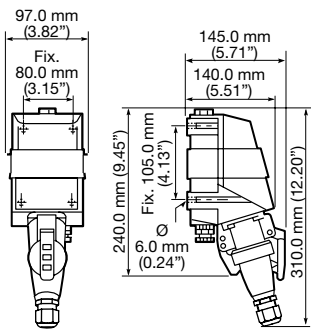


##### Flush Sockets

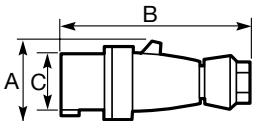


#### 16A – 3P+E – 3P+N+E Versions

##### Wall Mounting Sockets



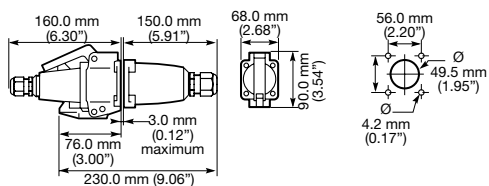
##### Plugs



| Dimensions in Millimeters |      |       |      |
|---------------------------|------|-------|------|
|                           | A    | B     | C    |
| 3 P + E                   | 66.0 | 154.0 | 55.5 |
| 3 P + N + E               | 73.0 | 166.0 | 62.0 |

##### Mobile Sockets

Can be mounted on panel - 3.0 mm thickness maximum



##### Flush Sockets

