

# PF / PFQ



Features and Ratings	p. 128
PF / PFQ 300-600A	p. 129
Spare parts	p. 131
Dimensions	p. 132



## High amperage plugs & receptacles

PF and PFQ Series plugs and receptacles are engineered for use in high amperage applications where routine plug insertion and high reliability are required. They are ideal for power supply applications in mining, petroleum platform, ship to shore, power generation system, shipyard and other similar harsh environments.

### Main Advantages

- ▶ Durable in harsh environments
- ▶ Safety features provide maximum protection
- ▶ Easy plug insertion and removal



**PFQ300** devices are differentiated from similarly rated **PF300** devices in their smaller size, lighter weight and different pilot contacts.

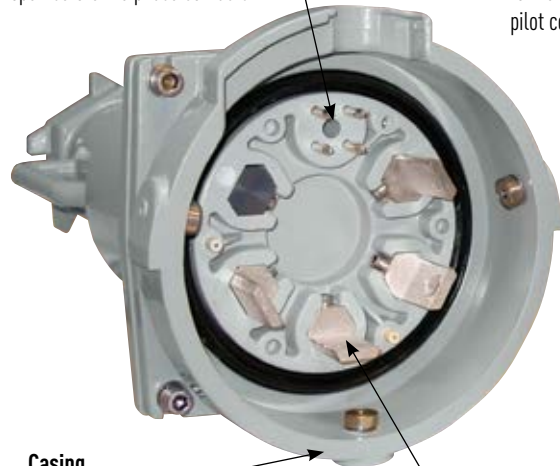
# Product Features

## Auxiliary Pilot Contacts

Provided for use with control circuits. They close after and open before the phase contacts.

## Mechanical Locking System

Ensures safety and watertightness. Mechanical lock secures the inlet to the receptacle and engages the pilot contacts.



## Casing

Epoxy/powder coated aluminum material offers great resistance to harsh environments.

## Silver Pressure Contacts

Silver material and self-cleaning action provides maximum conductivity and performance in dirty and corrosive conditions.



## Safety Shutter

Protects recessed female contacts and inhibits user access to live parts.

## General Ratings

Amperage	300 to 600A
Voltage*	1000 VAC*, 1000 VDC Max
Frequency	50-400 Hz
Environmental	IP66+IP67
Temperature	min -40°F/max 140°F

\* 600 VAC max for PFQ devices

+ UL listings do not apply above 600 VAC and 250 VDC

## Listings

Category	UL	CSA
Plugs and Receptacles	UL 1682*	C22.2 No. 182.1*

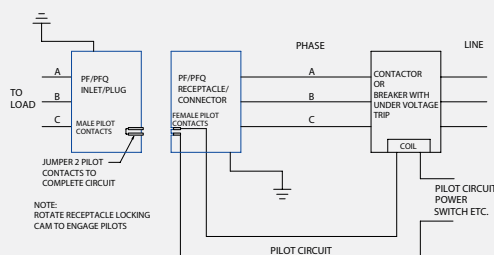
\* Listings only apply to 300A and 400A devices at 600V or less



**PFQ300** devices are differentiated from similarly rated **PF300** devices in their smaller size, lighter weight and different pilot contacts.

## Highlighted Feature

### Pilot Contacts



Line diagram of typical PF pilot control circuit

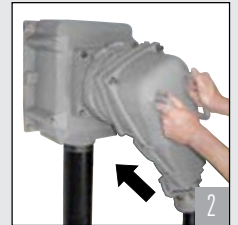
### Notes:

- The mechanical locking of the plug to the receptacle, via the rotation of a cam, closes the pilot contacts.
- Failure to use a pilot/relay system can create an electrical shock hazard.

## Operating Instructions



PF devices are preferred for the ease of operation relative to pin and sleeve devices.



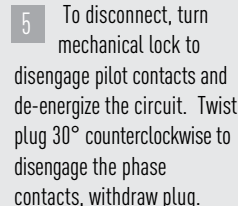
Insert the plug into the receptacle – this is done with little resistance relative to competitive devices.



Twist plug approximately 30° clockwise to engage the phase contacts and make unit watertight.



Turning the mechanical lock secures the inlet to the receptacle and engages the pilot contacts which energize the circuit.



To disconnect, turn mechanical lock to disengage pilot contacts and de-energize the circuit. Twist plug 30° counterclockwise to disengage the phase contacts, withdraw plug.

**PF/PFQ**

## PF/PFQ – 300A - 600A

### High Ampacity Plugs & Receptacles

#### Ratings

- Voltage**  
PF = 1000 VAC\*, 250 VDC  
PFQ = 600 VAC, 250 VDC
  - Current Interruption Capability**  
Not for current interrupting
  - Environmental Ratings**  
IP66+IP67
  - Temperature Range**  
Min -40°F/Max 140°F  
See pg 220 for temps below -15°F.
  - Wiring Capacity**  
PFQ = 2 AWG to 600 MCM  
PF = 2 AWG to 600 MCM
  - Listings**  
UL\*, CSA\*
- \* Listings apply only to 300A & 400A devices at 600V or less

#### Receptacle/Cap (female)

### 300A



Don't forget to add installation accessories to your order



PFQ shown

Voltage	Polarity	Part # PFQ300**	Part # PF300
277V	1P+N+G	47-34045	49-34045
347V	1P+N+G	47-34145	49-34145
480V	2P+G	47-34042	49-34042
480V	2P+N+G	47-34046	49-34046
480V	3P+G	47-34043	49-34043
480V	3P+N+G	47-34047	49-34047
600V	2P+G	47-34142	49-34142
600V	2P+N+G	47-34146	49-34146
600V	3P+G	47-34143	49-34143
600V	3P+N+G	47-34147	49-34147

#### Inlet/Cap (male)

### 300A



PFQ shown

Voltage	Polarity	Part # PFQ300**	Part # PF300
277V	1P+N+G	47-38045	49-38045
347V	1P+N+G	47-38145	49-38145
480V	2P+G	47-38042	49-38042
480V	2P+N+G	47-38046	49-38046
480V	3P+G	47-38043	49-38043
480V	3P+N+G	47-38047	49-38047
600V	2P+G	47-38142	49-38142
600V	2P+N+G	47-38146	49-38146
600V	3P+G	47-38143	49-38143
600V	3P+N+G	47-38147	49-38147

Other voltage configurations are available – contact customer service at 800.433.7642.

\*\* PFQ300 devices are differentiated from similarly rated PF300 devices in their smaller size, lighter weight and different pilot contacts.

#### Main Options

Receptacle with no cap	Recept # - 48
Receptacle with lockout hole	Recept # - 843
Inlet with no cap	Inlet # - 48
Inlet with lockout hole	Inlet # - 843

**Notes:**

- Metal caps are provided as standard with male and female devices.

- Heat shrink wrap is provided with each inlet and receptacle to provide insulation between terminals.

- **Lugs are not included.** The PF and PFQ contacts utilize bolt-on lug type wire terminals, which require a compression lug with a 9/16" or 5/8" hole. The angled handle requires straight lugs; the straight handle requires 90° lugs.

#### Receptacle/Cap (female)

### 400A/600A



For applications above 400A, please consult factory regarding NEC recommended conductor sizing.

Voltage	Polarity	Part # PF400	Part # PF600
277V	1P+N+G	49-44045	49-64045
347V	1P+N+G	49-44145	49-64145
480V	2P+G	49-44042	49-64042
480V	2P+N+G	49-44046	49-64046
480V	3P+G	49-44043	49-64043
480V	3P+N+G	49-44047	49-64047
600V	2P+G	49-44142	49-64142
600V	2P+N+G	49-44146	49-64146
600V	3P+G	49-44143	49-64143
600V	3P+N+G	49-44147	49-64147

#### Inlet/Cap (male)

### 400A/600A



Voltage	Polarity	Part # PF400	Part # PF600
277V	1P+N+G	49-48045	49-68045
347V	1P+N+G	49-48145	49-68145
480V	2P+G	49-48042	49-68042
480V	2P+N+G	49-48046	49-68046
480V	3P+G	49-48043	49-68043
480V	3P+N+G	49-48047	49-68047
600V	2P+G	49-48142	49-68142
600V	2P+N+G	49-48146	49-68146
600V	3P+G	49-48143	49-68143
600V	3P+N+G	49-48147	49-68147

# Installation Accessories

## Handles

Standard  
Clamp shown

Inlet/Receptacle Size	Metal Straight Handle	Metal 90° Angled Handle
PFQ300	47-3A013-XXX	47-3A913-XXX
PF300	49-3A013-XXX	49-3A913-XXX
PF400	49-4A013-XXX	49-4A913-XXX
PF600	49-6A013-XXX	49-6A913-XXX

Standard Clamp



+

XXX (Suffix #)	Cable Range
-200	2.000 - 2.125
-225	2.125 - 2.250
-237	2.250 - 2.375
-250	2.375 - 2.500
-275	2.500 - 2.750
-300	2.750 - 3.000
-312	3.000 - 3.125
-335	3.125 - 3.350
-350	3.350 - 3.390

or

NPT Adapter



XXX (Suffix #)	NPT Size
-N20	2.0" NPT
-N25	2.5" NPT
-N30	3.0" NPT

**Notes:** • For available cord grips, see pgs 193-194.

## Junction Boxes



Inlet/Receptacle Size	Hub Sizes	Metal Junction Box
PFQ300	See table	MB40PFQ-XX
PF300	See table	MB40-XX
PF400	See table	MB40-XX
PF600	See table	MB40-XX

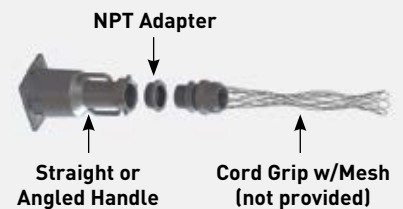
## Hub Sizes

XX (Suffix #)	Fitting Size
-20	2" NPT
-25	2.5" NPT
-30	3" NPT
-35	3.5" NPT
-40	4" NPT

## Accessory Spotlight

NEW  
Product

NPT Adapter



A NPT adapter accessory allows the user to connect a third party cord grip to the PF/PFQ handle.

## Miscellaneous Accessories

PF shown



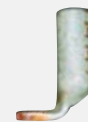
Inlet/Receptacle Size	Inlet Metal Cap	Receptacle Metal Cap
PFQ300	47-3A126	47-3A925
PF300	49-3A126	49-3A925
PF400	49-4A126	49-4A925
PF600	49-6A126	49-6A925

## Highlighted Feature

Bolt-on Lug (not provided)

Angled Lug

Straight Lug



The PF and PFQ contacts utilize bolt-on lug type wire terminals, which require a compression lug with a 9/16" or 5/8" hole. The angled handle requires straight lugs; the straight handle requires 90° lugs. **Lugs are not included.**

## Weights

Part	PF	PFQ
Inlet	15 lbs	9 lbs
Receptacle	25 lbs	12 lbs
Angled Handle	15 lbs	12 lbs
Straight Handle	10 lbs	10 lbs
Junction Box	45 lbs	45 lbs
Cap	3 lbs	3 lbs

## Order Example

A typical order should include an inlet part number, a receptacle part number **AND** the matching handles, angles or other required accessories. **(Lugs are not included.)**



Male Inlet with Handle (Plug)  
47-38047 + 47-3A913-200



Female Receptacle w/Junction Box  
47-34047 + MB40-20