



MICRO-MACHINED SILICON TRANSDUCERS

WET/WET DIFFERENTIAL PRESSURE MODELS

PX409 Series

mV/V, 0 to 5 or 0 to 10 Vdc, or 4 to 20 mA Outputs

Uni-Directional Ranges

0-10 inH₂O to 0-1000 psid

Starts at
\$775



**Fast Delivery! Stock
to 2 Weeks On Most
Models**

- ✓ Precision Micro-Machined Silicon Core
- ✓ 5-Point NIST Traceable Calibration
- ✓ High Stability, Low Drift
- ✓ Welded Stainless Steel Construction
- ✓ 316L SS Wetted Parts
- ✓ Premium Temperature Performance
- ✓ Broad Compensated Temperature Range
- ✓ Durable, 1 Million Cycle Life
- ✓ Ruggedized with Secondary Containment
- ✓ Customized Specifications Available

Get all the great performance characteristics of the Micro-Machined Silicon Transducers in these wet/wet differential pressure models. These rugged stainless steel transducers are ideal for tough industrial automotive, or aerospace applications requiring a wet/wet transducer. They can be used in test benches, filter monitoring, hydraulic, flow, or water/wastewater applications, as well as factory or pneumatic air, pitot tubes, air speed and other industrial or aerospace applications. The solid state silicon core and all stainless steel wetted parts will provide long, reliable service life with excellent long term stability.

COMMON SPECIFICATIONS

Accuracy: 0.08% BSL linearity, hysteresis and repeatability combined

Minimum Resistance Between Transducer Body and Any Wire: 100 MΩ

Operating Temperature:

mV/V and 5 to 10 Vdc Output: -45 to 121°C (-49 to 250°F)

mA Output: -45 to 115°C (-49 to 239°F)

Compensated Temperature Range:

10 inH₂O to 5 psi: -17 to 85°C (1 to 185°F)

15 to 1000 psi: -29 to 85°C (-20 to 185°F)

Thermal Accuracy: **Zero** **Span**

% Span Shift over compensated temperature range

10 inH₂O to 1 psi: ±1.00% ±1.00%

2.5 to 1000 psi: ±0.50% ±0.50%

Cable style.

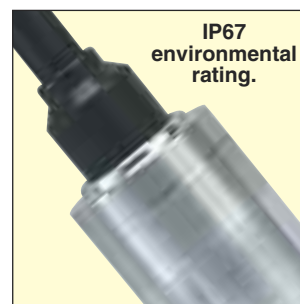
**High 0.08%
Accuracy**

PX409-015DWUV,
15 psid range,
10 mV/V output,
\$775, shown
actual size.

Metric thread
adaptors
and snubbers
available,
see section C.



Four Electrical Termination Styles



PX409, 2 m (6') cable.



PX419, mini DIN.



PX409C, conduit cable.



PX429, twist-lock.

MICRO-MACHINED SILICON TRANSDUCERS WET/WET DIFFERENTIAL PRESSURE MODELS



DIFFERENTIAL
PRESSURE TRANSDUCERS
B

Pressure Cycles: 1 million minimum

Long Term Stability (1-Year):

±0.1% FS typical

Bandwidth: DC to 1 kHz typical

Response Time: <1 ms

CE Compliant: Meets EN1326-1: 2006 for industrial locations

Shock: 50 g, 11 ms, half-sine shock (under test)

Vibration: ±20 g (under test)

Wetted Parts: 316L stainless steel

Line/Static Pressure: 500 psi max applied to both sides simultaneously

Proof Pressure (Differential):

10 inH₂O range = 10 times range

1 psi range = 6 times range

2.5 to 750 psi ranges = 4 times range

1000 psi range = 3 times range

Hi Side Containment Pressure

(Differential):

Ranges 10 inH₂O to 5 psi: to 1000 psi

Ranges 15 to 1000 psi: to 3000 psi

Pressure Ports: ¼ NPT male

Electrical Terminations:

PX409: 2 m (6') cable

PX409C: 2 m (6') cable with ½ NPT conduit thread

PX419: mini DIN

(mating connector included)

PX429: Twist-lock,

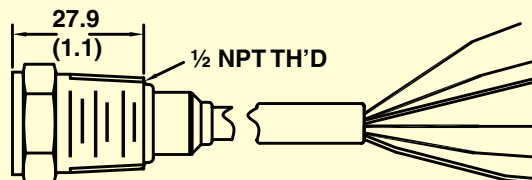
(mating connector sold separately)

PX429 Mating Connector:

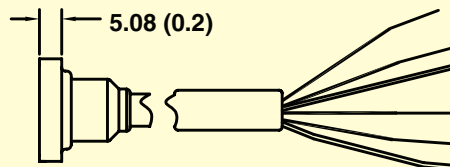
PT06F10-6S, \$26.50

Weight: 200 g (7 oz) max

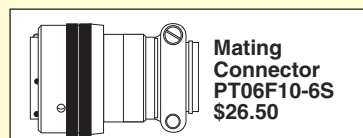
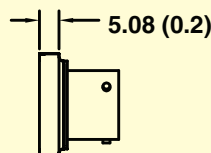
Conduit backend PX409C



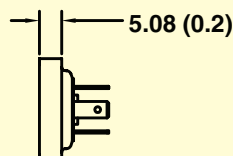
Integral cable backend PX409



Twist-lock backend PX429

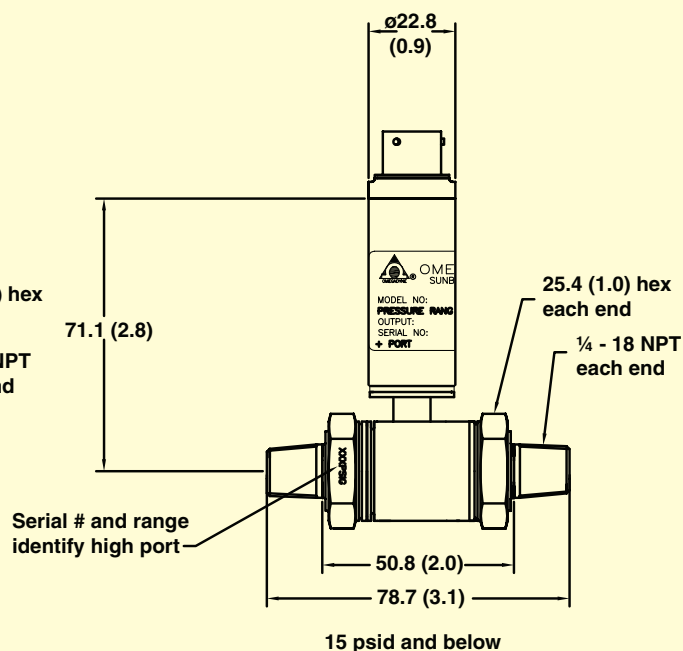
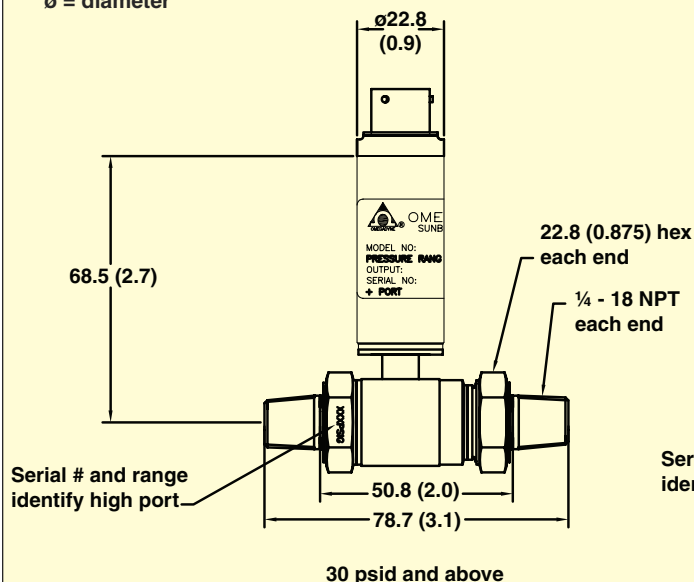


mini DIN backend PX419



Dimensions: mm (in)

Dimensions: mm (in)
ø = diameter





WET/WET DIFFERENTIAL PRESSURE MODELS

UNI-DIRECTIONAL RANGES WITH mV/V OUTPUTS

UNI-DIRECTIONAL mV/V SPECIFICATIONS

Output: 10 mV/V ratiometric

Supply Voltage: 5 to 10 Vdc

Current Draw: 5 mA @ 10 Vdc

Input Impedance: 1000 to 5000 Ω

Output Impedance: 5000 Ω $\pm$ 10% typical

Zero Balance:

Ranges $\leq$ 1psi: $\pm$ 1% typ (2% max)

Ranges $>$ 1psi: $\pm$ 0.5% typ (1% max)

Span Setting:

Ranges $\leq$ 1psi: $\pm$ 1% typ (2% max)

Ranges $>$ 1psi: $\pm$ 0.5% typ (1% max)



PX409-030DWUV, 30 psid range, 10 mV/V output, \$775, shown actual size.

Fast Delivery! Stock to 2 Weeks On Most Models

Metric thread adaptors and snubbers available, see section C.

CABLE TERMINATION*

To Order (Specify Model Number)

10 mV/V OUTPUT, 1/4 NPT MALE CONNECTORS

RANGE	METRIC	MODEL NO.	PRICE
0 to 10 inH ₂ O	25 mbar	PX409-10WDWUV	\$825
0 to 1 psi	70 mbar	PX409-001DWUV	825
0 to 2.5 psi	170 mbar	PX409-2.5DWUV	825
0 to 5 psi	350 mbar	PX409-005DWUV	775
0 to 15 psi	1 bar	PX409-015DWUV	775
0 to 30 psi	2 bar	PX409-030DWUV	775
0 to 50 psi	3.5 bar	PX409-050DWUV	775
0 to 100 psi	7 bar	PX409-100DWUV	775
0 to 150 psi	10 bar	PX409-150DWUV	775
0 to 250 psi	17.5 bar	PX409-250DWUV	775
0 to 500 psi	35 bar	PX409-500DWUV	775
0 to 750 psi	50 bar	PX409-750DWUV	775
0 to 1000 psi	70 bar	PX409-1.0KDWUV	775

* To order conduit fitting backend change model number from "PX409" to "PX409C", no additional charge.



TWIST-LOCK TERMINATION**

**MOST POPULAR
MODELS HIGHLIGHTED!**



10 mV/V OUTPUT, 1/4 NPT MALE CONNECTORS

RANGE	METRIC	MODEL NO.	PRICE
0 to 10 inH ₂ O	25 mbar	PX429-10WDWUV	\$825
0 to 1 psi	70 mbar	PX429-001DWUV	825
0 to 2.5 psi	170 mbar	PX429-2.5DWUV	825
0 to 5 psi	350 mbar	PX429-005DWUV	775
0 to 15 psi	1 bar	PX429-015DWUV	775
0 to 30 psi	2 bar	PX429-030DWUV	775
0 to 50 psi	3.5 bar	PX429-050DWUV	775
0 to 100 psi	7 bar	PX429-100DWUV	775
0 to 150 psi	10 bar	PX429-150DWUV	775
0 to 250 psi	17.5 bar	PX429-250DWUV	775
0 to 500 psi	35 bar	PX429-500DWUV	775
0 to 750 psi	50 bar	PX429-750DWUV	775
0 to 1000 psi	70 bar	PX429-1.0KDWUV	775

** Mating connector sold separately, order PT06F10-6S, \$26.50 each. Comes complete with 5-point NIST traceable calibration certificate.

Ordering Examples: PX409-100DWUV, 0 to 100 psi uni-directional wet/wet differential pressure range, 10 mV/V output, 0.08% accuracy, 1/4 NPT termination, 2 m (6') cable, \$775.

PX419-015DWUV, 0 to 15 psi uni-directional wet/wet differential pressure range, 10 mV/V output, 0.08% accuracy, 1/4 NPT termination, mini DIN connector, \$775.

PX429-10WDWUV, 0 to 10 inH₂O uni-directional wet/wet differential pressure range, 10 mV/V output, 0.08% accuracy, 1/4 NPT termination, twist-lock connector plus PT06F10-6S, mating connector, \$825 + 26.50 = \$851.50.

CONNECTIONS—mV/V OUTPUT

PX429 TWIST-LOCK	PX419 MINI DIN	PX409 CABLE
Pin A +EXC	Pin 1 +EXC	Red +EXC
Pin B -EXC	Pin 2 -EXC	Black -EXC
Pin C +SIG	Pin 3 +SIG	White +SIG
Pin D -SIG	Pin 4 -SIG	Green -SIG
Pin E No Connection		
Pin F No Connection		

MINI DIN TERMINATION

10 mV/V OUTPUT, 1/4 NPT MALE CONNECTORS

RANGE	METRIC	MODEL NO.	PRICE
0 to 10 inH ₂ O	25 mbar	PX419-10WDWUV	\$825
0 to 1 psi	70 mbar	PX419-001DWUV	825
0 to 2.5 psi	170 mbar	PX419-2.5DWUV	825
0 to 5 psi	350 mbar	PX419-005DWUV	775
0 to 15 psi	1 bar	PX419-015DWUV	775
0 to 30 psi	2 bar	PX419-030DWUV	775
0 to 50 psi	3.5 bar	PX419-050DWUV	775
0 to 100 psi	7 bar	PX419-100DWUV	775
0 to 150 psi	10 bar	PX419-150DWUV	775
0 to 250 psi	17.5 bar	PX419-250DWUV	775
0 to 500 psi	35 bar	PX419-500DWUV	775
0 to 750 psi	50 bar	PX419-750DWUV	775
0 to 1000 psi	70 bar	PX419-1.0KDWUV	775



WET/WET DIFFERENTIAL PRESSURE MODELS

UNI-DIRECTIONAL RANGES WITH 0 to 5 Vdc OUTPUTS



UNI-DIRECTIONAL VOLTAGE OUTPUT SPECIFICATIONS

Output Voltage/Supply Voltage: 0 to 5 Vdc/
10 to 30 Vdc; 0 to 10 Vdc/15 to 30 Vdc
(change "5V" to "10V" in model number)

Current Draw: 10 mA max

Maximum Current Output: 2 mA (= 2500 Ω min
load resistance)

Output Impedance: 100 Ω

Zero Balance:

Ranges > 1psi: $\pm 0.5\%$ typ (1% max)

Ranges $\leq$ 1psi: $\pm 1\%$ typ (2% max)

Span Setting:

Ranges > 1psi: $\pm 0.5\%$ typ (1% max)

Ranges $\leq$ 1psi: $\pm 1\%$ typ (2% max)

CABLE TERMINATION*

To Order (Specify Model Number)

0 to 5 Vdc OUTPUT, 1/4 NPT MALE CONNECTORS

RANGE	METRIC	MODEL NO.	PRICE
0 to 10 inH ₂ O	25 mbar	PX409-10WDWU5V	\$890
0 to 1 psi	70 mbar	PX409-001DWU5V	890
0 to 2.5 psi	170 mbar	PX409-2.5DWU5V	890
0 to 5 psi	350 mbar	PX409-005DWU5V	840
0 to 15 psi	1 bar	PX409-015DWU5V	840
0 to 30 psi	2 bar	PX409-030DWU5V	840
0 to 50 psi	3.5 bar	PX409-050DWU5V	840
0 to 100 psi	7 bar	PX409-100DWU5V	840
0 to 150 psi	10 bar	PX409-150DWU5V	840
0 to 250 psi	17.5 bar	PX409-250DWU5V	840
0 to 500 psi	35 bar	PX409-500DWU5V	840
0 to 750 psi	50 bar	PX409-750DWU5V	840
0 to 1000 psi	70 bar	PX409-1.0KDWU5V	840

* To order conduit fitting backend change model number
from "PX409" to "PX409C", no additional charge.

MINI-DIN TERMINATION

0 to 5 Vdc OUTPUT, 1/4 NPT MALE CONNECTORS

RANGE	METRIC	MODEL NO.	PRICE
0 to 10 inH ₂ O	25 mbar	PX419-10WDWU5V	\$890
0 to 1 psi	70 mbar	PX419-001DWU5V	890
0 to 2.5 psi	170 mbar	PX419-2.5DWU5V	890
0 to 5 psi	350 mbar	PX419-005DWU5V	840
0 to 15 psi	1 bar	PX419-015DWU5V	840
0 to 30 psi	2 bar	PX419-030DWU5V	840
0 to 50 psi	3.5 bar	PX419-050DWU5V	840
0 to 100 psi	7 bar	PX419-100DWU5V	840
0 to 150 psi	10 bar	PX419-150DWU5V	840
0 to 250 psi	17.5 bar	PX419-250DWU5V	840
0 to 500 psi	35 bar	PX419-500DWU5V	840
0 to 750 psi	50 bar	PX419-750DWU5V	840
0 to 1000 psi	70 bar	PX419-1.0KDWU5V	840



PX419-100DWU5V,
100 psid range, 0 to 5 Vdc
output, \$840, shown actual size.

**Fast Delivery! Stock
to 2 Weeks On Most
Models**

Metric thread adaptors
and snubbers available,
see section C.

TWIST-LOCK TERMINATION**

**MOST POPULAR
MODELS HIGHLIGHTED!**

0 to 5 Vdc OUTPUT, 1/4 NPT MALE CONNECTORS

RANGE	METRIC	MODEL NO.	PRICE
0 to 10 inH ₂ O	25 mbar	PX429-10WDWU5V	\$890
0 to 1 psi	70 mbar	PX429-001DWU5V	890
0 to 2.5 psi	170 mbar	PX429-2.5DWU5V	890
0 to 5 psi	350 mbar	PX429-005DWU5V	840
0 to 15 psi	1 bar	PX429-015DWU5V	840
0 to 30 psi	2 bar	PX429-030DWU5V	840
0 to 50 psi	3.5 bar	PX429-050DWU5V	840
0 to 100 psi	7 bar	PX429-100DWU5V	840
0 to 150 psi	10 bar	PX429-150DWU5V	840
0 to 250 psi	17.5 bar	PX429-250DWU5V	840
0 to 500 psi	35 bar	PX429-500DWU5V	840
0 to 750 psi	50 bar	PX429-750DWU5V	840
0 to 1000 psi	70 bar	PX429-1.0KDWU5V	840

** Mating connector sold separately, order **PT06F10-6S**, \$26.50 each.
Comes complete with 5-point NIST traceable calibration certificate.

Note: To order 0 to 10 Vdc output, change "5V" to "10V" in model
number, no additional charge.

Ordering Examples: **PX409-100DWU5V**, 0 to 100 psi uni-
directional wet/wet differential pressure range, 0 to 5 Vdc output,
0.08% accuracy, 1/4 NPT termination, 2 m (6') cable, **\$840**.

PX419-015DWU5V, 0 to 15 psi uni-directional wet/wet differential
pressure range, 0 to 5 Vdc output, 0.08% accuracy, 1/4 NPT
termination, mini DIN connector, **\$840**.

PX429-10WDWU5V, 0 to 10 inH₂O uni-directional wet/wet
differential pressure range, 0 to 5 Vdc output, 0.08% accuracy,
1/4 NPT termination, twist-lock connector plus **PT06F10-6S**, mating
connector, \$890 + 26.50 = **\$916.50**.

CONNECTIONS—VOLTAGE OUTPUT

PX429 TWIST-LOCK	PX419 MINI DIN	PX409 CABLE
Pin A +EXC	Pin 1 +EXC	Red +EXC
Pin B -COM	Pin 2 -COM	Black -EXC
Pin C +SIG	Pin 3 +SIG	White +SIG
Pin D No Conn	Pin 4 No Conn	Green No Conn
Pin E No Connection		
Pin F No Connection		

DIFFERENTIAL
PRESSURE TRANSDUCERS
B



WET/WET DIFFERENTIAL PRESSURE MODELS UNI-DIRECTIONAL RANGES WITH 4 to 20 mA OUTPUTS

UNI-DIRECTIONAL mA SPECIFICATIONS

Output: 4 to 20 mA

Supply Voltage: 9 to 30 Vdc;
[9 to 20 Vdc above 105°C (229°F)]

Max Loop Resistance: (Vs-9) x 50 Ω

Zero Balance:

Ranges > 1psi: ±0.5% typ (1% max)

Ranges ≤ 1psi: ±1% typ (2% max)

Span Setting:

Ranges > 1psi: ±0.5% typ (1% max)

Ranges ≤ 1psi: ±1% typ (2% max)

Fast Delivery! Stock
to 2 Weeks On Most
Models



PX429-005DWUI, 5 psid
range, 4 to 20 mA output,
\$840, shown actual size.

Metric thread adaptors
and snubbers available,
see section C.

CABLE TERMINATION*

To Order (Specify Model Number)

4 to 20 mA OUTPUT, ¼ NPT MALE CONNECTORS

RANGE	METRIC	MODEL NO.	PRICE
0 to 10 inH ₂ O	25 mbar	PX409-10WDWUI	\$890
0 to 1 psi	70 mbar	PX409-001DWUI	890
0 to 2.5 psi	170 mbar	PX409-2.5DWUI	890
0 to 5 psi	350 mbar	PX409-005DWUI	840
0 to 15 psi	1 bar	PX409-015DWUI	840
0 to 30 psi	2 bar	PX409-030DWUI	840
0 to 50 psi	3.5 bar	PX409-050DWUI	840
0 to 100 psi	7 bar	PX409-100DWUI	840
0 to 150 psi	10 bar	PX409-150DWUI	840
0 to 250 psi	17.5 bar	PX409-250DWUI	840
0 to 500 psi	35 bar	PX409-500DWUI	840
0 to 750 psi	50 bar	PX409-750DWUI	840
0 to 1000 psi	70 bar	PX409-1.0KDWUI	840

* To order conduit fitting backend change model number
from "PX409" to "PX409C", no additional charge.



TWIST-LOCK TERMINATION**

**MOST POPULAR
MODELS HIGHLIGHTED!**

4 to 20 mA OUTPUT, ¼ NPT MALE CONNECTORS

RANGE	METRIC	MODEL NO.	PRICE
0 to 10 inH ₂ O	25 mbar	PX429-10WDWUI	\$890
0 to 1 psi	70 mbar	PX429-001DWUI	890
0 to 2.5 psi	170 mbar	PX429-2.5DWUI	890
0 to 5 psi	350 mbar	PX429-005DWUI	840
0 to 15 psi	1 bar	PX429-015DWUI	840
0 to 30 psi	2 bar	PX429-030DWUI	840
0 to 50 psi	3.5 bar	PX429-050DWUI	840
0 to 100 psi	7 bar	PX429-100DWUI	840
0 to 150 psi	10 bar	PX429-150DWUI	840
0 to 250 psi	17.5 bar	PX429-250DWUI	840
0 to 500 psi	35 bar	PX429-500DWUI	840
0 to 750 psi	50 bar	PX429-750DWUI	840
0 to 1000 psi	70 bar	PX429-1.0KDWUI	840



** Mating connector sold separately, order PT06F10-6S, \$26.50 each.
Comes complete with 5-point NIST traceable calibration certificate.

Ordering Examples: PX409-100DWUI, 0 to 100 psi uni-directional
wet/wet differential pressure range, 4 to 20 mA output, 0.08%
accuracy, ¼ NPT termination, 2 m (6') cable, \$840.

PX419-015DWUI, 0 to 15 psi uni-directional wet/wet differential
pressure range, 4 to 20 mA output, 0.08% accuracy, ¼ NPT
termination, mini DIN connector, \$840.

PX429-10WDWUI, 0 to 10 inH₂O uni-directional wet/wet differential
pressure range, 4 to 20 mA output, 0.08% accuracy, ¼ NPT
termination, twist-lock connector plus PT06F10-6S, mating
connector, \$890 + 26.50 = \$916.50.

CONNECTIONS—CURRENT OUTPUT

PX429 TWIST-LOCK	PX419 MINI DIN	PX409 CABLE
Pin A +SUP	Pin 1 +SUP	Red +SUP
Pin B -SUP	Pin 2 -SUP	Black -SUP
Pin C No Conn	Pin 3 No Conn	White No Conn
Pin D No Conn	Pin 4 No Conn	Green No Conn
Pin E No Connection		
Pin F No Connection		

MINI DIN TERMINATION

4 to 20 mA OUTPUT, ¼ NPT MALE CONNECTORS

RANGE	METRIC	MODEL NO.	PRICE
0 to 10 inH ₂ O	25 mbar	PX419-10WDWUI	\$890
0 to 1 psi	70 mbar	PX419-001DWUI	890
0 to 2.5 psi	170 mbar	PX419-2.5DWUI	890
0 to 5 psi	350 mbar	PX419-005DWUI	840
0 to 15 psi	1 bar	PX419-015DWUI	840
0 to 30 psi	2 bar	PX419-030DWUI	840
0 to 50 psi	3.5 bar	PX419-050DWUI	840
0 to 100 psi	7 bar	PX419-100DWUI	840
0 to 150 psi	10 bar	PX419-150DWUI	840
0 to 250 psi	17.5 bar	PX419-250DWUI	840
0 to 500 psi	35 bar	PX419-500DWUI	840
0 to 750 psi	50 bar	PX419-750DWUI	840
0 to 1000 psi	70 bar	PX419-1.0KDWUI	840





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• Heaters

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