
Electronic sensors for pressure control

OsiSense XM

Catalogue



Simply easy!™



Telemecanique
Sensors

Electronic pressure sensors
OsiSense XM

Applications	Type of installation
	Type of sensor and features
Control circuits	
Devices without display	
Pressure transmitters	
Analogue output, 4...20 mA, 0...10 V or ratiometric output, 0.5...4.5 V	



Sizes	-1...0 bar, -1...5 bar (-14.5...72.5 psi), 0...6 bar (0...87 psi) -14.5...0 psi, -14.5...60 psi (-1...4.14 bar), 0...50 psi (0...3.45 bar)	
Fluids or products controlled	Fresh water (0...+ 125 °C) Air, hydraulic oils (- 15...+ 125 °C)	
Fluid connection	G 1/4 A DIN 3852-E male, 1/4"-18NPT male, SAE 7/16-20 UNF-2B female	
Rated supply voltage	12/24 V $\overline{\text{---}}$ (4...20 mA), 24 V $\overline{\text{---}}$ (0...10 V), 5 V $\overline{\text{---}}$ (0.5.....4.5 V)	
Voltage limits	7...33 V $\overline{\text{---}}$ (4...20 mA), 12...33 V $\overline{\text{---}}$ (0...10 V), 4.5...5.5 V $\overline{\text{---}}$ (0.5.....4.5 V)	
Current consumption	< 23 mA (4...20 mA), < 7 mA (0...10 V), < 5 mA (0.5.....4.5 V)	
Electrical connection	M12 connector, EN 175301-803-A (ex DIN 43650A) connector, Packard Metri-Pack 150 connector or 2 m PVC cable	
Type of output	Analogue, 4...20 mA, 0...10 V or 0.5...4.5 V	
Materials in contact with fluid	Ceramic Al ₂ O ₃ , stainless steel type AISI 316L, FPM fluorocarbon	
Output response time	< 2 ms at 92% of maximum deviation	
Precision including linearity, hysteresis, repeat accuracy	± 0.5% of the measuring range (except for size 0.5 bar: ±1.5% and size 0.25 bar: ± 2%)	
Service life	> 10 million operating cycles	
Dimensions of case (mm)	Width x height x depth Ø 26 x 32.3 (with M12 connector) Ø 26 x 55 (with EN 175301-803-A connector) Ø 26 x 49.2 (with Packard Metri-Pack 150 connector) Ø 26 x 57 (with cable)	
Conforming to standards	CE, ROHS, EN/IEC 61326-2-3, NSF ANSI 61	
Product certifications	cULus conforming to UL 61010-1 and CSA-C22.2 n° 61010-1, EAC	
Ambient air temperature for operation	- 30...+ 85 °C	
Degree of protection	IP 65 or IP 67 conforming to EN/IEC 60529 IP 69K conforming to DIN 40050 (versions with M12 connector)	
Vibration resistance	20 gn (10...2000 Hz) conforming to EN/IEC 60068-2-64	
Shock resistance	100 gn (half sine wave 11 ms) conforming to EN/IEC 60068-2-27	
Type reference	XMLP●●●D●●F XMLP●●●C●●F XMLP●●●L●●F XMLP●●●R●●3F XMLP●●●D●●FQ (1) XMLP●●●C●●FQ (1) XMLP●●●L●●FQ (1) XMLP●●●R●●3FQ (1)	
Pages	24 to 36	

Other versions
(1) Sold in lots of 25.
(2) Sold in lots of 40.

Control circuits	
Devices without display	
Pressure transmitters	
Analogue output, 4...20 mA, 0...10 V or ratiometric output, 0.5...4.5 V	



- 1...9 bar (- 14.5...130 psi), 0...600 bar (0...8700 psi), 0...10,000 psi (0 bar...690 bar)	
Fresh water (0...+ 120 °C) Air, hydraulic oils, refrigeration fluids (- 20...+ 120 °C)	
G 1/4 A DIN 3852-E male (≤ 40 bar), G 1/4 A DIN 3852-A male (≥ 100 bar) SAE 7/16-20 UNF-2A male, SAE 7/16-20 UNF-2B female or 1/4"-18 NPT male	
12/24 V $\overline{\text{---}}$ (4...20 mA), 24 V $\overline{\text{---}}$ (0...10 V), 5 V $\overline{\text{---}}$ (0.5.....4.5 V)	
8...30 V $\overline{\text{---}}$ (4...20 mA), 14...30 V $\overline{\text{---}}$ (0...10 V), 4.75...5.25 V $\overline{\text{---}}$ (0.5.....4.5 V)	
< 20 mA (4...20 mA), < 10 mA (0...10 V), < 5 mA (0.5.....4.5 V)	
M12, EN 175301-803-A (ex-DIN 43650A) or Packard Metri-Pack 150 connector	
Analogue, 4...20 mA, 0...10 V or 0.5...4.5 V	
17-4PH stainless steel, stainless steel type AISI 304, FKM fluorocarbon (Viton)	
< 5 ms at 90% of maximum deviation	
± 0.5% of the measuring range	
> 10 million operating cycles	
Ø 30 x 26 (with M12 connector) Ø 30 x 25 (with EN 175301-803-A connector) Ø 30 x 37 (with Packard Metri-Pack 150 connector)	
CE, ROHS, EN/IEC 61326-1	
cULus conforming to UL 61010-1 and CSA-C22.2 no. 61010-1, EAC	
- 30...+ 120 °C	
IP 65 or IP 67 conforming to EN/IEC 60529 IP 69K conforming to DIN 40050 (versions with M12 connector)	
20 gn (10...2000 Hz) conforming to EN/IEC 60068-2-64	
25 gn (half sine wave 11 ms) conforming to EN/IEC 60068-2-27	
XMLP●●●B●●1V XMLP●●●B●● XMLP●●●P●●3	XMLP●●●B●●1VQ (2) XMLP●●●B●●Q (2) XMLP●●●P●●3Q (2)
24 to 36	

Other versions
(1) Sold in lots of 25.
(2) Sold in lots of 40.

Applications	Type of installation
	Type reference and features
Control circuits	
Switches with 4-digit display	
- With an analogue output, 4...20 mA and a switching output, PNP or NPN type - With two PNP or NPN switching outputs	



Sizes	–
Fluids or products controlled	–
Fluid connection	–
Display	7 segment/4-digit display. Pressure units in bar, psi or pascal. 41 display ranges can be selected, from -14.5 to 6000
Rated supply voltage	24 V $\overline{\text{---}}$
Voltage limits	17...33 V $\overline{\text{---}}$
Current consumption	≤ 50 mA
Electrical connection	M12, 4-pin connector
Type of output	■ Analogue, 4...20 mA + one switching output, PNP or NPN, 200 mA ■ 2 switching outputs, PNP or NPN, 200 mA
Materials in contact with fluid	–
Output response time	≤ 3 ms
Precision including linearity, hysteresis, repeat accuracy	± 1% of the measuring range
Service life	> 10 million operating cycles
Dimensions of case (mm)	Width x height x depth 41 x 77 x 42
Conforming to standards	CE, ROHS, EN/IEC 61000-6-2, EN/IEC 61000-6-4
Product certifications	cULus conforming to UL 508 and CSA-C22.2 no. 14, EAC
Ambient air temperature for operation	- 25...+ 70°C
Degree of protection	IP 65 or IP 67 conforming to EN/IEC 60529, IP 69K conforming to DIN 40050
Vibration resistance	5 gn (10...2000 Hz) conforming to EN/IEC 60068-2-6
Shock resistance	25 gn conforming to EN/IEC 60068-2-27
Type reference	ZMLPA1●2S● ZMLPA2●0SH
Pages	39

Other versions (1) For other fluid connections, please consult our Customer Care Centre.

Control circuits	
Pressure transmitters with 4-digit display	Pressure and vacuum switches with 4-digit display
- With one analogue output, 4...20 mA or 0...10 V and one input for diagnosis	- With one analogue output, 4...20 mA or 0...10 V and one switching output, PNP or NPN type - With two switching outputs, PNP or NPN type - With one analogue output, 4...20 mA, and two switching outputs, PNP or NPN type



- 1...600 bar (- 14.5 psi...8700 psi)	
Fresh water (0...+ 80°C). Air, hydraulic oils, refrigeration fluids (- 20...+ 80°C)	
G 1/4 A DIN3852-Y female, 1/4"-18 NPT female or SAE 7/16-20 UNF female (1)	
7-segment/4-digit display. Pressure units in bar, psi or pascal. Signalling LED for the pressure unit and output state.	
24 V $\overline{\text{---}}$	
17...33 V $\overline{\text{---}}$	
≤ 50 mA	
M12, 4-pin connector	M12, 4 or 5-pin connector
■ Analogue, 4...20 mA or 0...10 V	■ Analogue, 4...20 mA or 0...10 V + one switching output, PNP or NPN, 250 mA ■ Two switching outputs, PNP or NPN, 250 mA ■ Analogue, 4...20 mA + two switching outputs, PNP or NPN, 250 mA
≤ 40 bar: Ceramic AL ₂ O ₃ , stainless steel 316L, FPM fluorocarbon ≥ 100 bar: Stainless steel 316L, FKM fluorocarbon (Viton)	
≤ 10 ms	≤ 10 ms (analogue output) ≤ 5 ms (switching output)
± 1% of the measuring range	
> 10 million operating cycles	
41 x 93 x 42	
CE, ROHS, EN/IEC 61326-2-3, NFS ANSI 61	
cULus conforming to UL 61010-1 and CSA-C22.2 no. 61010-1, EAC	
- 20...+ 80°C	
IP 66, IP 67 conforming to EN/IEC 60529	
20 gn (10...2000 Hz) conforming to EN/IEC 60068-2-6	
50 gn conforming to EN/IEC 60068-2-27	
XMLR●●●G0●●● XMLR●●●M0●●●	XMLR●●●G1●●●, XMLR●●●G2●●● XMLR●●●M1●●●, XMLR●●●M2●●●
43 to 46	

Electronic pressure sensors

OsiSense XM

For control circuits

Functions

Electronic pressure sensors

The function of electronic pressure sensors is the control and measurement of pressure or vacuum levels in hydraulic or pneumatic systems. Being electronic, the sensors have no mechanical moving parts.

Pressure transmitters

Pressure transmitters convert the pressure into an electrical signal which is proportional to the applied pressure. Their high precision makes them suitable for all industrial applications requiring pressure/vacuum display, control or regulation.

Being very robust, they are equally suitable for applications involving high operating rates.

Pressure and vacuum switches

Electronic pressure switches and vacuum switches convert a change in pressure into a digital electrical signal when the switching points which have been set are reached.

They are distinguished from electromechanical pressure switches and vacuum switches by their very wide switching adjustment ranges.

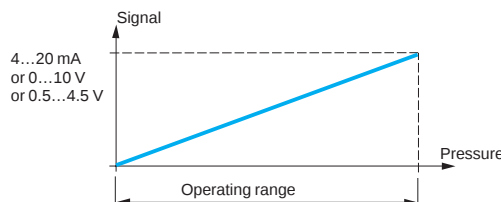
Their robustness, together with their excellent adherence to the set values over a period of time, make them ideal for applications involving high operating rates. In addition, the high repeat accuracy and fast response time of these sensors make them equally suitable for applications requiring accurate pressure regulation and monitoring.

Note: Some sensors in the OsiSense XM ranges have both one analogue output and one or two digital outputs.

Operating principle

Pressure transmitters

These devices provide an analogue output which has a signal proportional to the pressure applied to the sensor. Depending on the model, this signal can be 4...20 mA, 0...10 V or 0.5...4.5 V.



Pressure and vacuum switches

These devices have one or two digital outputs depending on the model. The status of these outputs is defined by high (SP) and low (rP) switching points which can usually be independently adjusted.

Pressure switches and vacuum switches can have 2 different switching modes:

- Hysteresis mode, particularly suited to pumping applications (filling/emptying).
- Window mode, more suitable for applications where the pressure is regulated.

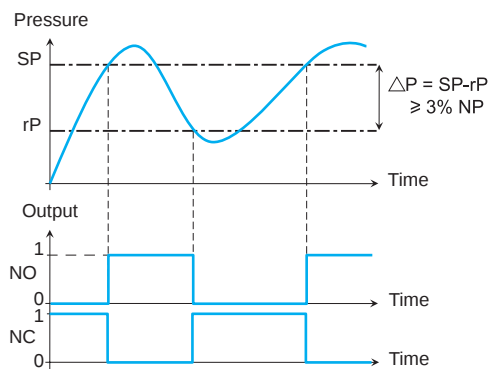
The switching outputs can usually be configured as normally open (NO) or normally closed (NC).

In addition, for the OsiSense XMLR range (1), output switching can be delayed for between 1 and 50 seconds, both on the pressure rising edge and falling edge.

(1) See pages 40 to 47.

Operating principle (continued)**Pressure and vacuum switches (continued)****Switching output: hysteresis mode**

Hysteresis mode is generally used for pumping and/or emptying applications.



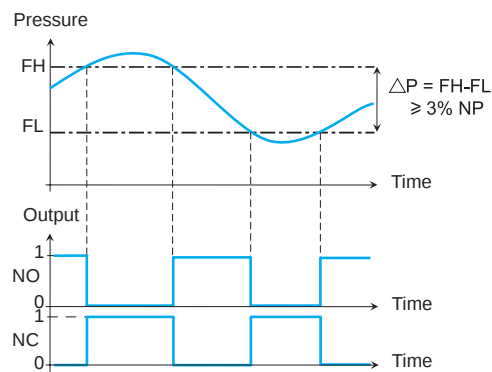
SP: High switching point

rP: Low switching point

NP: Nominal pressure

Switching output: Window mode

Window mode is generally used for pressure regulation applications.



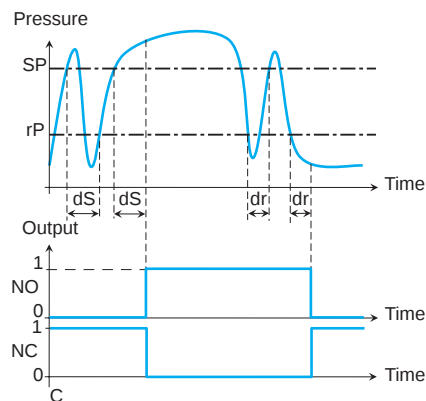
FH: High switching point

FL: Low switching point

NP: Nominal pressure

Switching output: time delay mode

Time delay mode is generally used to filter fast transient pressures. The output only switches after a "dS" and "dR" time period which can be set between 0 and 50 seconds.



FH: High switching point

FL: Low switching point

NP: Nominal pressure

Terminology

Nominal pressure NP or size

The nominal pressure is the maximum pressure or vacuum which can be measured by the sensor.

Maximum permissible accidental pressure

This is the maximum pressure, excluding pressure surges, to which the pressure sensor can occasionally be subjected without being damaged.

Destruction pressure

The pressure value which if exceeded is likely to cause serious damage to the sensor i.e. leaking, bursting, component failure, etc.

High switching point (SP)

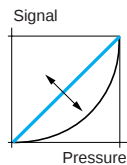
This is the upper pressure setting selected on the pressure or vacuum switch at which the electrical output changes state when this pressure value is reached.

Low switching point (rP)

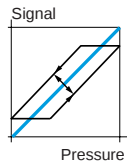
This is the lower pressure setting selected on the pressure or vacuum switch at which the electrical output changes state when this pressure value is reached.

Precision

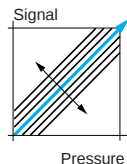
The sensor's overall precision is the result of several error sources linked to linearity, hysteresis, repeat accuracy and setting tolerances. It is expressed as a % of the nominal pressure.



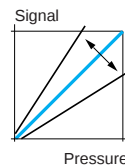
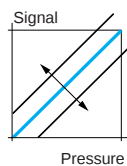
The linearity is the maximum deviation between the actual transmitter curve and the nominal curve.



The hysteresis is the maximum deviation between the rising pressure curve and the falling pressure curve.



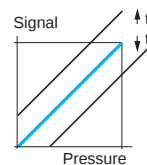
The repeat accuracy is the maximum drift encountered after several successive pressure variation cycles.



The setting tolerances are the calibration tolerances regarding the zero point and sensitivity set during sensor manufacture (gradient of output signal curve from the pressure transmitter).

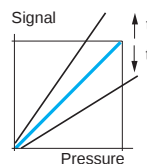
Temperature drift

Although the pressure sensor is compensated electronically, its accuracy is still slightly influenced by the temperature to which it is subjected.



Zero point drift

This is proportional to the temperature and is expressed as % NP/°C.



Sensitivity drift

This is proportional to the temperature and is expressed as % NP/°C.

(NP: Nominal pressure)

Main criteria for selecting an electronic pressure sensor

The fluid or gas to be controlled

Our products, including the materials used, are compatible with the majority of fluids or gases encountered in industrial applications.

However some particularly corrosive fluids (sea water, for example) can affect product operation sooner or later.

The fluid temperature can also be an aggravating factor.

The materials in contact with the fluid are described in the technical data sheets which can be found on our website, www.tesensors.com.

If in doubt about compatibility, contact our Customer Care Centre.

The maximum pressure of the fluid to be controlled

The maximum pressure of the fluid to be controlled will determine the nominal pressure (or size) of the product to be used.

Our product ranges include a number of sizes which cover a pressure range from -1 to 600 bar.

It is advisable to choose a size just above the maximum pressure to be controlled, in order to have the best possible accuracy.

However, sometimes it is necessary to take account of transient pressure surges caused by the system operation (for example: the phenomenon of water hammer) and choose a size well above the maximum pressure to be controlled.

The fluid entry

There are a number of formats for the fluid and pneumatic connections.

Our ranges have the 3 most common types of fluid entry:

- G 1/4
- 1/4" - 18 NPT
- SAE 7/16-20UNF

The type and configuration of the electrical output(s)

Depending on the product range, each sensor reference has one, two or three outputs which may be analogue or digital.

It is important to clearly identify the function(s) the pressure sensor has to fulfil in the control system, in order to select the correct product.

The electrical connection

All products in the OsiSense XM ranges offer connection via an M12 x 1, 4 or 5-pin male cylindrical connector.

Some pressure transmitters also have an EN 175301-803-A or Packard Metri-Pack 150 connector.

We recommend connecting our pressure sensors by means of our OsiSense XZ cabling accessories.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, stainless steel fluid entry

With analogue output



"Low pressure" transmitters.
AISI 316L stainless steel casing



"High pressure" transmitters.
AISI 304 stainless steel casing

Presentation

XMLP pressure transmitters rated at less than 9 bar or 100 psi

These transmitters integrate a ceramic pressure measuring cell. Ceramic technology has been used successfully for many years and offers a high level of sensitivity that is particularly suitable for measuring low pressures.

Ceramic also provides good resistance to abrasive fluids.

An internal fluorocarbon rubber gasket provides the seal between the ceramic measuring cell and the AISI 316L stainless steel casing.

Pressure transmitters can be used to measure the following types of pressure:

- air
- fresh water
- the majority of hydraulic oils

It is important, however, to ensure that the gasket is compatible with the fluid being controlled.

These transmitters can control fluids ranging in temperature from -15 to 125 °C.

Their power supply depends on the type of analogue output:

- 5 V +/- 10% for the 0.5...4.5 V ratiometric output
- 12 or 24 V (nominal), operating from 7 to 33 V for the 4...20 mA output
- 24 V (nominal), operating from 12 to 33 V for the 0...10 V output

XMLP pressure transmitters rated greater than or equal to 9 bar or 100 psi

These transmitters integrate a "thin film" metal pressure measuring cell.

This measuring cell, which is welded directly onto the AISI 304 stainless steel transmitter body, offers the following advantages:

- An all-metal pressure chamber, with no elastomer gasket in contact with the fluid
- Compatibility with a large number of fluids:
 - air
 - fresh water
 - hydraulic oils
 - refrigeration fluids
 - all fluids or gases compatible with AISI 304 stainless steel

XMLP pressure transmitters can control fluids from -30 to 120 °C.

Their power supply depends on the type of analog output:

- 5 V +/- 5% for the 0.5...4.5 V ratiometric output
- 12 or 24 V (nominal), operating from 8 to 30 V for the 4...20 mA output
- 24 V (nominal), operating from 14 to 30 V for the 0...10 V output

General characteristics

Made of stainless steel, XMLP pressure transmitters are compact and rugged.

Their degree of protection varies according to the type of connector:

- IP 65 for EN 175301-803-A connector versions
- IP 65 and IP 67 for Packard Metri-Pack connector versions
- IP 65, IP 67 and IP 69K for M12 connector versions

With typical precision better than 0.5% of the rating, these transmitters are particularly suitable for industrial applications such as:

- machine tools
- moulding presses
- stamping presses
- lifting gear
- HVAC systems (for ratings greater than or equal to 9 bar or 100 psi only)

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, stainless steel fluid entry

With analogue output.

Functions

XMLP pressure transmitters have an analogue output which delivers a signal proportional to the measured pressure.

This output can be one of the following types:

- 4...20 mA
- 0...10 V
- 0.5...4.5 V ratiometric

The pressure ranges available are:

- vacuum measuring
 - -1...0 bar
 - -14.5...0 psi
- pressure measuring
 - 0...600 bar
 - 0...10,000 psi
- combined pressure measuring (vacuum and pressure)
 - -1...25 bar
 - -14.5...60 psi

The XMLP offer is available with three types of electrical connection:

- M12, 4-pin connector
- EN 175301-803-A (ex DIN 43650) connector
- Packard Metri-Pack 150 connector
- 2 m PVC cable

Several types of fluid connection are available:

- G1/4 A male
- 1/4"-18NPT male
- SAE 7/16-20UNF-2A male
- SAE 7/16-20UNF-2B female (with or without Schrader pin depending on the model)

Depending on the model, XMLP transmitters are sold:

- individually
- in lots of 25
- in lots of 40

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 316L stainless steel fluid entry
With analogue output. Sizes in bar



XMLP●●●GD●1F



XMLP●●●GC●1F



XMLP●●●GL●1F

-1 to 0 bar (-14.5 to 0 psi)

Maximum permissible accidental pressure: 3 bar, destruction pressure: 5 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLPM00GD21F (1)	0.080
	EN 175301-803-A	XMLPM00GC21F (1)	0.096
	2 m cable	XMLPM00GL21F	0.197
0...10 V	M12	XMLPM00GD71F (1)	0.080
	EN 175301-803-A	XMLPM00GC71F (1)	0.096
	2 m cable	XMLPM00GL71F	0.197
0.5...4.5 V ratiometric	M12	XMLPM00GD11F	0.080
	EN 175301-803-A	XMLPM00GC11F	0.096

SAE 7/16-20UNF-2B (female) fluid connection

4...20 mA	M12	XMLPM00GD2BF	0.080
	EN 175301-803-A	XMLPM00GC2BF	0.096
0...10 V	M12	XMLPM00GD7BF	0.080
	EN 175301-803-A	XMLPM00GC7BF	0.096

-1 to 1 bar (-14.5 to 14.5 psi)

Maximum permissible accidental pressure: 3 bar, destruction pressure: 5 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLPM01GD21F (1)	0.080
	EN 175301-803-A	XMLPM01GC21F (1)	0.096
0...10 V	M12	XMLPM01GD71F	0.080
	EN 175301-803-A	XMLPM01GC71F	0.096

-1 to 5 bar (-14.5 to 72.6 psi)

Maximum permissible accidental pressure: 18 bar, destruction pressure: 24 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLPM05GD21F (1)	0.080
	EN 175301-803-A	XMLPM05GC21F (1)	0.096
0...10 V	M12	XMLPM05GD71F	0.080
	EN 175301-803-A	XMLPM05GC71F	0.096

(1) Sold in lots of 25: add the letter Q to the end of the selected reference.
For example, XMLPM00GD21F becomes XMLPM00GD21FQ.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 304 stainless steel fluid entry

With analogue output. Sizes in bar



XMLP09BD1V



XMLP09BC1V

-1 to 9 bar (-14.5 to 130 psi)

Maximum permissible accidental pressure: 20 bar, destruction pressure: 100 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLPM09BD21V (1)	0.050
	EN 175301-803-A	XMLPM09BC21V (1)	0.050
0...10 V	M12	XMLPM09BD71V (1)	0.050
	EN 175301-803-A	XMLPM09BC71V (1)	0.050
0.5...4.5 V ratiometric	M12	XMLPM09BD11V (1)	0.050
	EN 175301-803-A	XMLPM09BC11V (1)	0.050

-1 to 25 bar (-14.5 to 362.5 psi)

Maximum permissible accidental pressure: 50 bar, destruction pressure: 200 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLPM25BD21V	0.050

(1) Sold in lots of 40: add the letter Q to the end of the selected reference.
For example, XMLPM09BD21V becomes XMLPM09BD21VQ.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 316L stainless steel fluid entry

With analogue output. Sizes in bar



XMLP000D01F



XMLP000C01F



XMLP001GL01F



XMLP001GC0BF



XMLP001GD0BF

0 to 0.25 bar (0 to 3.63 psi)

Maximum permissible accidental pressure: 3 bar, destruction pressure: 5 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP250MD21F (1)	0.080
	EN 175301-803-A	XMLP250MC21F (1)	0.096
0...10 V	M12	XMLP250MD71F (1)	0.080
	EN 175301-803-A	XMLP250MC71F (1)	0.096
0.5...4.5 V ratiometric	M12	XMLP250MD11F	0.080
	EN 175301-803-A	XMLP250MC11F	0.096

0 to 0.5 bar (0 to 7.26 psi)

Maximum permissible accidental pressure: 3 bar, destruction pressure: 5 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP500MD21F (1)	0.080
	EN 175301-803-A	XMLP500MC21F (1)	0.096
0...10 V	M12	XMLP500MD71F (1)	0.080
	EN 175301-803-A	XMLP500MC71F (1)	0.096
0.5...4.5 V ratiometric	M12	XMLP500MD11F	0.080
	EN 175301-803-A	XMLP500MC11F	0.096

0 to 1 bar (0 to 14.5 psi)

Maximum permissible accidental pressure: 3 bar, destruction pressure: 5 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP001GD21F (1)	0.080
	EN 175301-803-A	XMLP001GC21F (1)	0.096
	2 m cable	XMLP001GL21F	0.197
0...10 V	M12	XMLP001GD71F (1)	0.080
	EN 175301-803-A	XMLP001GC71F (1)	0.096
	2 m cable	XMLP001GL71F	0.197
0.5...4.5 V ratiometric	M12	XMLP001GD11F (1)	0.080
	EN 175301-803-A	XMLP001GC11F	0.096

SAE 7/16-20UNF-2B (female) fluid connection

4...20 mA	M12	XMLP001GD2BF	0.080
	EN 175301-803-A	XMLP001GC2BF	0.096
0...10 V	M12	XMLP001GD7BF	0.080
	EN 175301-803-A	XMLP001GC7BF	0.096

(1) Sold in lots of 25: add the letter Q to the end of the selected reference.
For example, XMLP250MD21F becomes XMLP250MD21FQ.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 316L stainless steel fluid entry
With analogue output. Sizes in bar

XMLP000D01F



XMLP000C01F



XMLP000GL01F

0 to 2.5 bar (0 to 36.3 psi)

Maximum permissible accidental pressure: 7.5 bar, destruction pressure: 10 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP2D5GD21F (1)	0.080
	EN 175301-803-A	XMLP2D5GC21F (1)	0.096
	2 m cable	XMLP2D5GL21F	0.197
0...10 V	M12	XMLP2D5GD71F (1)	0.080
	EN 175301-803-A	XMLP2D5GC71F (1)	0.096
	2 m cable	XMLP2D5GL71F	0.197
0.5...4.5 V ratiometric	M12	XMLP2D5GD11F	0.080
	EN 175301-803-A	XMLP2D5GC11F	0.096

0 to 4 bar (0 to 58 psi)

Maximum permissible accidental pressure: 12 bar, destruction pressure: 16 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP004GD21F (1)	0.080
	EN 175301-803-A	XMLP004GC21F (1)	0.096
0...10 V	M12	XMLP004GD71F (1)	0.080
	EN 175301-803-A	XMLP004GC71F (1)	0.096
0.5...4.5 V ratiometric	M12	XMLP004GD11F	0.080
	EN 175301-803-A	XMLP004GC11F	0.096

0 to 6 bar (0 to 87 psi)

Maximum permissible accidental pressure: 18 bar, destruction pressure: 24 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP006GD21F (1)	0.080
	EN 175301-803-A	XMLP006GC21F (1)	0.096
	2 m cable	XMLP006GL21F	0.197
0...10 V	M12	XMLP006GD71F (1)	0.080
	EN 175301-803-A	XMLP006GC71F (1)	0.096
	2 m cable	XMLP006GL71F	0.197
0.5...4.5 V ratiometric	M12	XMLP006GD11F (1)	0.080
	EN 175301-803-A	XMLP006GC11F	0.096

(1) Sold in lots of 25: add the letter Q to the end of the selected reference.
For example, XMLP004GD71F becomes XMLP004GD71FQ.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 304 stainless steel fluid entry

With analogue output. Sizes in bar



XMLP000BD01V



XMLP000BC01V



XMLP000BD07



XMLP000BC07



XMLP000BD09



XMLP000BC09

0 to 10 bar (0 to 145 psi)

Maximum permissible accidental pressure: 20 bar, destruction pressure: 100 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP010BD21V (1)	0.050
	EN 175301-803-A	XMLP010BC21V (1)	0.050
0...10 V	M12	XMLP010BD71V (1)	0.050
	EN 175301-803-A	XMLP010BC71V (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP010BD11V (1)	0.050
	EN 175301-803-A	XMLP010BC11V (1)	0.050

SAE 7/16-20UNF-2A (male) fluid connection

4...20 mA	M12	XMLP010BD27 (1)	0.050
	EN 175301-803-A	XMLP010BC27 (1)	0.050

SAE 7/16-20UNF-2B (female with Schrader pin) fluid connection

4...20 mA	M12	XMLP010BD29 (1)	0.050
	EN 175301-803-A	XMLP010BC29 (1)	0.050
0...10 V	M12	XMLP010BD79 (1)	0.050
	EN 175301-803-A	XMLP010BC79	0.050
0.5...4.5 V ratiometric	M12	XMLP010BD19	0.050

0 to 16 bar (0 to 232 psi)

Maximum permissible accidental pressure: 32 bar, destruction pressure: 160 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP016BD21V (1)	0.050
	EN 175301-803-A	XMLP016BC21V (1)	0.050
0...10 V	M12	XMLP016BD71V (1)	0.050
	EN 175301-803-A	XMLP016BC71V (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP016BD11V (1)	0.050
	EN 175301-803-A	XMLP016BC11V (1)	0.050

SAE 7/16-20UNF-2A (male) fluid connection

4...20 mA	M12	XMLP016BD27 (1)	0.050
	EN 175301-803-A	XMLP016BC27 (1)	0.050

SAE 7/16-20UNF-2B (female with Schrader pin) fluid connection

4...20 mA	M12	XMLP016BD29 (1)	0.050
	EN 175301-803-A	XMLP016BC29 (1)	0.050
0...10 V	M12	XMLP016BD79 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP016BD19	0.050

(1) Sold in lots of 40: add the letter Q to the end of the selected reference.
For example, XMLP016BD21V becomes XMLP016BD21VQ.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 304 stainless steel fluid entry

With analogue output. Sizes in bar



XMLP●●●BD●1V



XMLP●●●BC●1V



XMLP●●●BD●7



XMLP●●●BC●7



XMLP●●●BD●9



XMLP●●●BC●9

0 to 25 bar (0 to 362.5 psi)

Maximum permissible accidental pressure: 50 bar, destruction pressure: 200 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP025BD21V (1)	0.050
	EN 175301-803-A	XMLP025BC21V (1)	0.050
0...10 V	M12	XMLP025BD71V (1)	0.050
	EN 175301-803-A	XMLP025BC71V (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP025BD11V (1)	0.050
	EN 175301-803-A	XMLP025BC11V (1)	0.050

SAE 7/16-20UNF-2A (male) fluid connection

4...20 mA	M12	XMLP025BD27 (1)	0.050
	EN 175301-803-A	XMLP025BC27 (1)	0.050
0...10 V	M12	XMLP025BD77	0.050

SAE 7/16-20UNF-2B (female with Schrader pin) fluid connection

4...20 mA	M12	XMLP025BD29 (1)	0.050
	EN 175301-803-A	XMLP025BC29 (1)	0.050
0...10 V	M12	XMLP025BD79 (1)	0.050

0 to 40 bar (0 to 580 psi)

Maximum permissible accidental pressure: 80 bar, destruction pressure: 320 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP040BD21V (1)	0.050
	EN 175301-803-A	XMLP040BC21V (1)	0.050
0...10 V	M12	XMLP040BD71V (1)	0.050
	EN 175301-803-A	XMLP040BC71V (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP040BD11V (1)	0.050
	EN 175301-803-A	XMLP040BC11V (1)	0.050

SAE 7/16-20UNF-2A (male) fluid connection

4...20 mA	M12	XMLP040BD27 (1)	0.050
	EN 175301-803-A	XMLP040BC27 (1)	0.050

SAE 7/16-20UNF-2B (female with Schrader pin) fluid connection

4...20 mA	M12	XMLP040BD29 (1)	0.050
	EN 175301-803-A	XMLP040BC29 (1)	0.050
0...10 V	M12	XMLP040BD79 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP040BD19	0.050

(1) Sold in lots of 40: add the letter Q to the end of the selected reference.
For example, XMLP040BD21V becomes XMLP040BD21VQ.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 304 stainless steel fluid entry

With analogue output. Sizes in bar

XMLP060BD●1V
XMLP100BD●2XMLP060BC●1V
XMLP100BC●2

XMLP060BD●7



XMLP060BC●7



XMLP060BD●9



XMLP060BC●9

0 to 60 bar (0 to 870 psi)

Maximum permissible accidental pressure: 120 bar, destruction pressure: 480 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-E (male) fluid connection			
4...20 mA	M12	XMLP060BD21V (1)	0.050
	EN 175301-803-A	XMLP060BC21V (1)	0.050
0...10 V	M12	XMLP060BD71V (1)	0.050
	EN 175301-803-A	XMLP060BC71V (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP060BD11V (1)	0.050
	EN 175301-803-A	XMLP060BC11V (1)	0.050

SAE 7/16-20UNF-2A (male) fluid connection

4...20 mA	M12	XMLP060BD27 (1)	0.050
	EN 175301-803-A	XMLP060BC27 (1)	0.050

SAE 7/16-20UNF-2B (female with Schrader pin) fluid connection

4...20 mA	M12	XMLP060BD29 (1)	0.050
	EN 175301-803-A	XMLP060BC29 (1)	0.050
0...10 V	M12	XMLP060BD79 (1)	0.050

0 to 100 bar (0 to 1450 psi)

Maximum permissible accidental pressure: 200 bar, destruction pressure: 600 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-A (male) fluid connection			
4...20 mA	M12	XMLP100BD22 (1)	0.050
	EN 175301-803-A	XMLP100BC22 (1)	0.050
0...10 V	M12	XMLP100BD72 (1)	0.050
	EN 175301-803-A	XMLP100BC72 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP100BD12 (1)	0.050
	EN 175301-803-A	XMLP100BC12 (1)	0.050

(1) Sold in lots of 40: add the letter Q to the end of the selected reference.
For example, XMLP060BD21V becomes XMLP060BD21VQ.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 304 stainless steel fluid entry

With analogue output. Sizes in bar

PF120706



XMLP000BD02

PF120700



XMLP000BD02

0 to 160 bar (0 to 2320 psi)

Maximum permissible accidental pressure: 320 bar, destruction pressure: 960 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-A (male) fluid connection			
4...20 mA	M12	XMLP160BD22 (1)	0.050
	EN 175301-803-A	XMLP160BC22 (1)	0.050
0...10 V	M12	XMLP160BD72 (1)	0.050
	EN 175301-803-A	XMLP160BC72 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP160BD12 (1)	0.050
	EN 175301-803-A	XMLP160BC12 (1)	0.050

0 to 250 bar (0 to 3625 psi)

Maximum permissible accidental pressure: 500 bar, destruction pressure: 1000 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-A (male) fluid connection			
4...20 mA	M12	XMLP250BD22 (1)	0.050
	EN 175301-803-A	XMLP250BC22 (1)	0.050
0...10 V	M12	XMLP250BD72 (1)	0.050
	EN 175301-803-A	XMLP250BC72 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP250BD12 (1)	0.050
	EN 175301-803-A	XMLP250BC12 (1)	0.050

0 to 400 bar (0 to 5800 psi)

Maximum permissible accidental pressure: 800 bar, destruction pressure: 1600 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-A (male) fluid connection			
4...20 mA	M12	XMLP400BD22 (1)	0.050
	EN 175301-803-A	XMLP400BC22 (1)	0.050
0...10 V	M12	XMLP400BD72 (1)	0.050
	EN 175301-803-A	XMLP400BC72 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP400BD12 (1)	0.050
	EN 175301-803-A	XMLP400BC12 (1)	0.050

0 to 600 bar (0 to 8700 psi)

Maximum permissible accidental pressure: 1200 bar, destruction pressure: 2400 bar

Analogue output type	Electrical connection	Reference	Weight kg
G 1/4 A DIN 3852-A (male) fluid connection			
4...20 mA	M12	XMLP600BD22 (1)	0.050
	EN 175301-803-A	XMLP600BC22 (1)	0.050
0...10 V	M12	XMLP600BD72 (1)	0.050
	EN 175301-803-A	XMLP600BC72 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP600BD12 (1)	0.050
	EN 175301-803-A	XMLP600BC12 (1)	0.050

(1) Sold in lots of 40: add the letter Q to the end of the selected reference.
For example, XMLP160BD22 becomes XMLP160BD22Q.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 316L stainless steel fluid entry

With analogue output. Sizes in psi

PF151605



XMLP●●●RD●3F

PF151606



XMLP●●●RC●3F

PF151607



XMLP●●●RP●3F

-14.5 to 0 psi (-1 to 0 bar)

Maximum permissible accidental pressure: 44 psi, destruction pressure: 73 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLPM00RD23F (1)	0.078
	EN 175301-803-A	XMLPM00RC23F	0.094
	Packard Metri-Pack 150	XMLPM00RP23F	0.080
0...10 V	M12	XMLPM00RD73F (1)	0.078
	EN 175301-803-A	XMLPM00RC73F	0.094
	Packard Metri-Pack 150	XMLPM00RP73F	0.080
0.5...4.5 V ratiometric	M12	XMLPM00RD13F	0.078
	EN 175301-803-A	XMLPM00RC13F	0.094
	Packard Metri-Pack 150	XMLPM00RP13F	0.080

-14.5 to 15 psi (-1 to 1.03 bar)

Maximum permissible accidental pressure: 44 psi, destruction pressure: 73 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLPM15RD23F (1)	0.078
	EN 175301-803-A	XMLPM15RC23F	0.094
	Packard Metri-Pack 150	XMLPM15RP23F (1)	0.080
0...10 V	M12	XMLPM15RD73F (1)	0.078

-14.5 to 60 psi (-1 to 4.14 bar)

Maximum permissible accidental pressure: 44 psi, destruction pressure: 73 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLPM60RD23F (1)	0.078
	EN 175301-803-A	XMLPM60RC23F	0.094
	Packard Metri-Pack 150	XMLPM60RP23F	0.080
0...10 V	M12	XMLPM60RD73F (1)	0.078

(1) Sold in lots of 25: add the letter Q to the end of the selected reference.
For example, XMLP030RD73F becomes XMLP030RD73FQ.

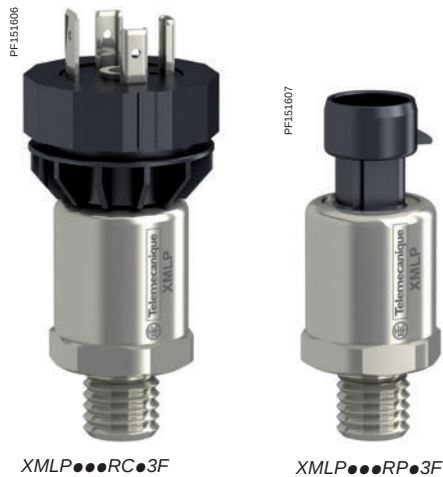
Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 316L stainless steel fluid entry

With analogue output. Sizes in psi



0 to 15 psi (0 to 1.03 bar)

Maximum permissible accidental pressure: 44 psi, destruction pressure: 73 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP015RD23F (1)	0.078
	EN 175301-803-A	XMLP015RC23F	0.094
	Packard Metri-Pack 150	XMLP015RP23F	0.080
0...10 V	M12	XMLP015RD73F (1)	0.078
	EN 175301-803-A	XMLP015RC73F	0.094
	Packard Metri-Pack 150	XMLP015RP73F	0.080

0 to 30 psi (0 to 2.07 bar)

Maximum permissible accidental pressure: 109 psi, destruction pressure: 145 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP030RD23F (1)	0.078
	EN 175301-803-A	XMLP030RC23F	0.094
	Packard Metri-Pack 150	XMLP030RP23F	0.080
0...10 V	M12	XMLP030RD73F (1)	0.078
	EN 175301-803-A	XMLP030RC73F	0.094
	Packard Metri-Pack 150	XMLP030RP73F	0.080

0 to 50 psi (0 to 3.45 bar)

Maximum permissible accidental pressure: 174 psi, destruction pressure: 232 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP050RD23F (1)	0.078
	EN 175301-803-A	XMLP050RC23F	0.094
	Packard Metri-Pack 150	XMLP050RP23F	0.080
0...10 V	M12	XMLP050RD73F (1)	0.078

(1) Sold in lots of 25: add the letter Q to the end of the selected reference.
For example, XMLP030RD73F becomes XMLP030RD73FQ.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 304 stainless steel fluid entry

With analogue output. Sizes in psi

PFI21705



XMLP●●●PD●3

PFI21704



XMLP●●●PP●3

0 to 100 psi (0 to 6.9 bar)

Maximum permissible accidental pressure: 200 psi, destruction pressure: 1000 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP100PD23 (1)	0.050
	Packard Metri-Pack 150	XMLP100PP23 (1)	0.050
0...10 V	M12	XMLP100PD73 (1)	0.050
	Packard Metri-Pack 150	XMLP100PP73 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP100PD13	0.050
	Packard Metri-Pack 150	XMLP100PP13	0.050

0 to 150 psi (0 to 10.3 bar)

Maximum permissible accidental pressure: 300 psi, destruction pressure: 1500 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP150PD23 (1)	0.050
	Packard Metri-Pack 150	XMLP150PP23 (1)	0.050
0...10 V	M12	XMLP150PD73 (1)	0.050
	Packard Metri-Pack 150	XMLP150PP73 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP150PD13	0.050
	Packard Metri-Pack 150	XMLP150PP13	0.050

0 to 200 psi (0 to 13.8 bar)

Maximum permissible accidental pressure: 400 psi, destruction pressure: 2000 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP200PD23 (1)	0.050
	Packard Metri-Pack 150	XMLP200PP23 (1)	0.050
0...10 V	M12	XMLP200PD73 (1)	0.050
	Packard Metri-Pack 150	XMLP200PP73 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP200PD13	0.050
	Packard Metri-Pack 150	XMLP200PP13	0.050

(1) Sold in lots of 40: add the letter Q to the end of the selected reference.
For example, XMLP150PD23 becomes XMLP150PD23Q.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 304 stainless steel fluid entry

With analogue output. Sizes in psi

PF121705



XMLP●●●PD●3

PF121704



XMLP●●●PP●3

0 to 300 psi (0 to 20.7 bar)

Maximum permissible accidental pressure: 600 psi, destruction pressure: 2400 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP300PD23 (1)	0.050
	Packard Metri-Pack 150	XMLP300PP23 (1)	0.050
0...10 V	M12	XMLP300PD73 (1)	0.050
	Packard Metri-Pack 150	XMLP300PP73 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP300PD13	0.050
	Packard Metri-Pack 150	XMLP300PP13	0.050

0 to 600 psi (0 to 41.4 bar)

Maximum permissible accidental pressure: 1200 psi, destruction pressure: 4800 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP600PD23 (1)	0.050
	Packard Metri-Pack 150	XMLP600PP23 (1)	0.050
0...10 V	M12	XMLP600PD73 (1)	0.050
	Packard Metri-Pack 150	XMLP600PP73 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP600PD13	0.050
	Packard Metri-Pack 150	XMLP600PP13	0.050

0 to 1000 psi (0 to 69 bar)

Maximum permissible accidental pressure: 2000 psi, destruction pressure: 6000 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP1K0PD23 (1)	0.050
	Packard Metri-Pack 150	XMLP1K0PP23 (1)	0.050
0...10 V	M12	XMLP1K0PD73 (1)	0.050
	Packard Metri-Pack 150	XMLP1K0PP73 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP1K0PD13	0.050
	Packard Metri-Pack 150	XMLP1K0PP13	0.050

(1) Sold in lots of 40: add the letter Q to the end of the selected reference.
For example, XMLP300PP23 becomes XMLP300PP23Q.

Electronic pressure sensors

OsiSense XM

XMLP pressure transmitters

Compact metal body, 304 stainless steel fluid entry

With analogue output. Sizes in psi

PF121705



XMLP●●●PD●3

PF121704



XMLP●●●PP●3

0 to 2000 psi (0 to 138 bar)

Maximum permissible accidental pressure: 4000 psi, destruction pressure: 12,000 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP2K0PD23 (1)	0.050
	Packard Metri-Pack 150	XMLP2K0PP23 (1)	0.050
0...10 V	M12	XMLP2K0PD73 (1)	0.050
	Packard Metri-Pack 150	XMLP2K0PP73 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP2K0PD13	0.050
	Packard Metri-Pack 150	XMLP2K0PP13	0.050

0 to 3000 psi (0 to 207 bar)

Maximum permissible accidental pressure: 6000 psi, destruction pressure: 12,000 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP3K0PD23 (1)	0.050
	Packard Metri-Pack 150	XMLP3K0PP23 (1)	0.050
0...10 V	M12	XMLP3K0PD73 (1)	0.050
	Packard Metri-Pack 150	XMLP3K0PP73 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP3K0PD13	0.050
	Packard Metri-Pack 150	XMLP3K0PP13	0.050

0 to 6000 psi (0 to 414 bar)

Maximum permissible accidental pressure: 11,600 psi, destruction pressure: 24,000 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP6K0PD23 (1)	0.050
	Packard Metri-Pack 150	XMLP6K0PP23 (1)	0.050
0...10 V	M12	XMLP6K0PD73 (1)	0.050
	Packard Metri-Pack 150	XMLP6K0PP73 (1)	0.050
0.5...4.5 V ratiometric	M12	XMLP6K0PD13 (1)	0.050
	Packard Metri-Pack 150	XMLP6K0PP13 (1)	0.050

0 to 10,000 psi (0 to 690 bar)

Maximum permissible accidental pressure: 17,400 psi, destruction pressure: 40,000 psi

Analogue output type	Electrical connection	Reference	Weight kg
1/4" - 18NPT (male) fluid connection			
4...20 mA	M12	XMLP10KPD23	0.050
	Packard Metri-Pack 150	XMLP10KPP23	0.050
0...10 V	M12	XMLP10KPD73	0.050
	Packard Metri-Pack 150	XMLP10KPP73	0.050
0.5...4.5 V ratiometric	M12	XMLP10KPD13	0.050
	Packard Metri-Pack 150	XMLP10KPP13	0.050

(1) Sold in lots of 40: add the letter Q to the end of the selected reference.
For example, XMLP2K0PD23 becomes XMLP2K0PD23Q.

Electronic pressure sensors

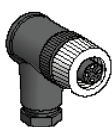
OsiSense XM

XMLP pressure transmitters

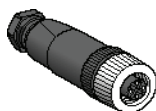
Separate parts



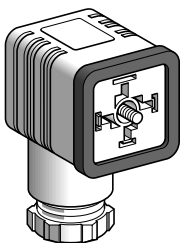
ZMLPA1P2SH



XZCC12FCM40B



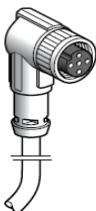
XZCC12FDM40B



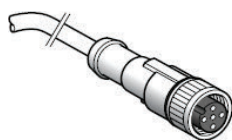
XZCC43FCP40B



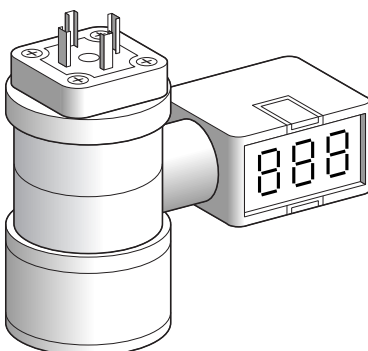
XMLZL016



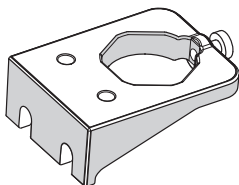
XZCP1241L5



XZCP1141L10



XMLEZ...



XMLZL017

Switches with display for XMLP...D2... pressure transmitters (1)

Analogue output type	Solid-state output type	Switching mode	Reference	Weight kg
4...20 mA	1 x PNP	Hysteresis	ZMLPA1P2SH	0.104
		Window	ZMLPA1P2SW	0.104
	1 x NPN	Hysteresis	ZMLPA1N2SH	0.104
		Window	ZMLPA1N2SW	0.104
–	2 x PNP	Hysteresis	ZMLPA2P0SH	0.104
–	2 x NPN	Hysteresis	ZMLPA2N0SH	0.104

Accessories

Description	Type	Reference	Weight kg
Sealing gasket (Pack of 10 gaskets)	–	XMLZL016	0.025
M12 female connector metal clamping ring (2)	Straight	XZCC12FDM40B	0.020
	Elbowed	XZCC12FCM40B	0.020
EN 175301-803-A female connector (2)	–	XZCC43FCP40B	0.035

Description	Cable length	Cable material	Reference	Weight kg
Pre-wired M12, straight, female connectors	2 m	PUR	XZCP1141L2	0.090
		PVC	XZCPV1141L2	0.110
	5 m	PUR	XZCP1141L5	0.190
		PVC	XZCPV1141L5	0.210
	10 m	PUR	XZCP1141L10	0.370
		PVC	XZCPV1141L10	0.390
Pre-wired M12, elbowed, female connectors	2 m	PUR	XZCP1241L2	0.090
		PVC	XZCPV1241L2	0.110
	5 m	PUR	XZCP1241L5	0.190
		PVC	XZCPV1241L5	0.210
	10 m	PUR	XZCP1241L10	0.370
		PVC	XZCPV1241L10	0.390

Description	For use with	Size of transmitter bar	Reference	Weight kg
Digital displays for pressure transmitters	XMLPM00GC2...	- 1...0	XMLEZM01	0.100
	XMLP001GC2...	0...1	XMLEZ001	0.100
	XMLP010BC2...	0...10	XMLEZ010	0.100
	XMLP025BC2...	0...25	XMLEZ025	0.100
	XMLP060BC2...	0...60	XMLEZ060	0.100
	XMLP100BC2...	0...100	XMLEZ100	0.100
	XMLP250BC2...	0...250	XMLEZ250	0.100
	XMLP600BC2...	0...600	XMLEZ600	0.100
Fixing bracket (aluminium)	XMLP...M... XMLP...G... XMLP...R...	–	XMLZL017	0.029

(1) ZMLP switches are compatible with pressure transmitters with 4...20 mA analogue output and M12 connector (see pages 38 and 39).

(2) Connector with screw terminal connections.

Note: For other connection accessories, visit our website www.tesensors.com.



Example of remote mounting
(with jumper cable and fixing
bracket).



Example of direct mounting
on the pressure transmitter.



Presentation

Combined with a pressure transmitter, the ZMLP switch with display converts an analogue signal into one or two switching outputs with adjustable thresholds. It can also be used to display the measured pressure. One of 27 display ranges, from -14.5 to 6000, can be selected for this purpose, meaning the switch can adapt to the majority of pressure transmitters, whether calibrated in bar, psi or pascal.

Depending on the model, ZMLP switches with display are available with different output configurations:

- One 4...20 mA analogue output and one switching output, PNP or NPN type, hysteresis or window switching mode.
- Two switching outputs, PNP or NPN type, hysteresis switching mode (fixed hysteresis).

Compact and robust:

Its compact housing made of Valox™ PBT and polyester front face provide it with IP65, IP67 and IP69K degrees of protection, making it suitable for the harshest environments. These products are for a nominal supply voltage of 24 V $\pm$ and have a 17 to 33 V $\pm$ operating range.

Simplicity of setup:

These products must be connected to an electronic pressure transmitter with 4...20 mA analogue output and 4-pin M12 connector.

They can be mounted:

- Directly on the pressure transmitter. The product body can then pivot through 300°, enabling optimum orientation of the display and settings.
- Or mounted remotely, up to 20 metres from the transmitter, using a simple jumper cable. In this case, clever design accessories allow the product to be fixed in place quickly, horizontally, vertically or even directly on the pressure inlet pipe.

Description

- 1 4-pin male M12 output connector, for connection to an automation platform.
- 2 Indicator LEDs displaying the output status (LED lit when the output has been activated).
- 3 7-segment/4-digit display.
- 4 Pressure unit indication, bar by default, psi, kPa or MPa by the addition of an adhesive label supplied with the product.
- 5 Potentiometer for selecting the display size and adjusting the switching threshold values.
- 6 4-position rotary switch for selecting the parameter to be configured.
- 7 4-pin female M12 connector, for connection to the pressure transmitter.

Functions

Configurable functions

For the display:

- Pressure unit (bar, psi, kPa and MPa)
- 27 display ranges can be selected, from -14.5 to 6000

For the solid-state output(s):

- NO or NC contact

Locking/unlocking:

- In order to avoid losing the product settings accidentally, the product can be locked. The settings cannot then be changed

Fast diagnostic function

- Illumination of all the display segments on each power-up, enabling checking of their operation

Electronic pressure sensors

OsiSense XM

ZMLP switches with 4-digit display



ZMLPA1●2SH



ZMLPA1●2SW



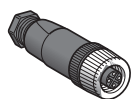
ZMLPA2●0SH



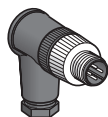
XMLPZLH01



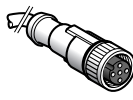
XMLPZLV01



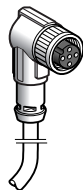
XZCC12FDM40B



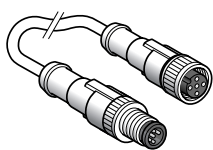
XZCC12MCM40B



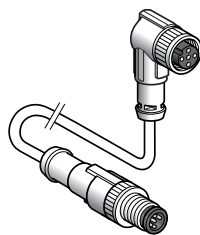
XZCP1141L●



XZCP1241L●



XZCR1511040A●



XZCR1512040A●

Switches with a display

for OsiSense XMLP pressure sensors (1)

Analogue output type	Solid-state output type	Switching mode	Reference	Weight kg
4...20 mA	1 x PNP	Hysteresis	ZMLPA1P2SH	0.104
		Window	ZMLPA1P2SW	0.104
	1 x NPN	Hysteresis	ZMLPA1N2SH	0.104
		Window	ZMLPA1N2SW	0.104
–	2 x PNP	Hysteresis	ZMLPA2P0SH	0.104
–	2 x NPN	Hysteresis	ZMLPA2N0SH	0.104

Fixing brackets

for ZMLP switches with display

Description	Reference	Weight kg
Metal bracket for fixing horizontally	XMLPZLH01	0.012
Metal bracket for fixing vertically or on an inlet pipe	XMLPZLV01	0.024

Cabling accessories

Type	Length of cable m	Reference	Weight kg
4-pin M12 connectors, for connection on screw terminals (2)			
Straight female connector	–	XZCC12FDM40B	0.020
Elbowed female connector	–	XZCC12FCM40B	0.020
Straight male connector	–	XZCC12MDM40B	0.025
Elbowed male connector	–	XZCC12MCM40B	0.025

Pre-wired M12, 4-pin connectors (PUR cable)

Straight female connector	2	XZCP1141L2	0.090
	5	XZCP1141L5	0.190
	10	XZCP1141L10	0.370
	15	XZCP1141L15	0.500
	20	XZCP1141L20	0.750
Elbowed female connector	2	XZCP1241L2	0.090
	5	XZCP1241L5	0.190
	10	XZCP1241L10	0.370
	15	XZCP1241L15	0.500
	20	XZCP1241L20	0.750

M12-M12, 3-pin jumper cables (PUR cable) (2)

Straight male and female connectors	1	XZCR1511040A1	0.065
	2	XZCR1511040A2	0.095
Straight male connector, elbowed female connector	1	XZCR1512040A1	0.065
	2	XZCR1512040A2	0.095

(1) For XMLP●●●●D2● pressure transmitters (see pages 24 to 36).

Switches with display are also compatible with XMLK●●●●D2● and XMLG●●●●D2● pressure transmitters (see pages 12 to 21).

(2) For connecting the pressure transmitter to the switch with display, in the case of remote mounting.

Electronic pressure sensors

OsiSense XM

XMLR pressure sensors with 4-digit display

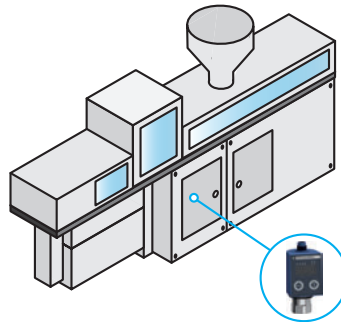
OsiSense XMLR

Electronic pressure sensors are used to control and measure pressure or vacuum levels in hydraulic or pneumatic systems. They convert the pressure into an electrical signal. They then produce an analogue output which is proportional to the measured pressure and/or one or two switching outputs on which the switching point is adjustable.

The high precision and performance of OsiSense XMLR pressure sensors makes them suitable for numerous industrial applications requiring display, control or regulation of pressure/vacuum levels.

Easy to mount

XMLR pressure sensors minimise installation time and effort. Their compact-sized, rotating body and "flip over display" function make mounting easy and flexible.



With its compact size, the OsiSense XMLR pressure sensor is easily integrated into the machine

Compact format

> With a height of just 88 to 100 mm depending on the pressure range and the fluid entry type, OsiSense XMLR is one of the most compact pressure switches on the market.



Rotating body

> The body of the OsiSense XMLR pressure sensor can be rotated 300°, thus enabling the user to orientate the front face of the product as required following connection to the pressure inlet pipe.

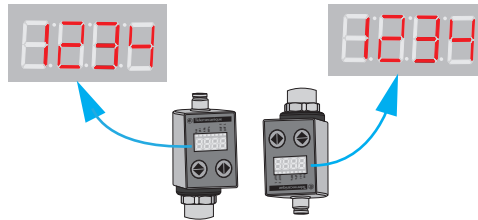


+ The easy switch for machine pressure control

Easy to mount (continued)

Flip over display function.

> The display can be inverted vertically to adapt to the sensor's installation position.



Easy to set up

Menu naming and structure based on the VDMA* standard

> The ergonomic design of OsiSense XMLR sets a new standard for ease of configuration.

Navigation using just two pushbuttons

> Two simple pushbuttons are all that is needed to navigate through an intuitive menu structured according to the VDMA* 24574-1 standard.



- 1 Pushbutton to display a value or parameter or to save a selected value or parameter and return to the menu.
- 2 Pushbutton to scroll from one menu to another or to increase a value or change a parameter.

Easy to maintain

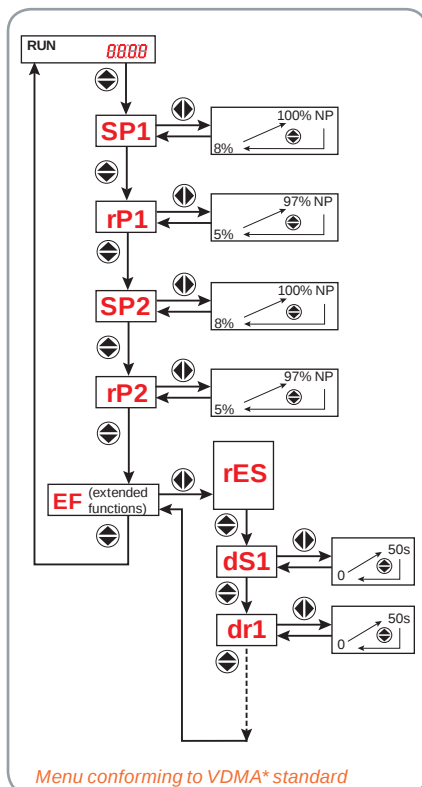
At each device start up, all segments of the display light up briefly to confirm that it is operating correctly.

The device can be tested using a diagnostic function which checks the whole electronic signal processing chain. This function is accessible via the "Dia" menu and the result of the test is indicated on the display (DONE or ERR). For transmitters, this function can also be remotely activated by connecting the Test input to an automation platform, thus enabling automatic verification without the need for intervention by an operator.

In this instance, the self-test also generates an analogue output signal which is equivalent to 50% of the sensor size (12 mA or 5 V) which, in turn, can be verified by the automation platform.

The pressure sensor can be considered as defective if the difference between the signal transmitted and the standard theoretical value is too great.

OsiSense XMLR pressure sensors also include a recording of the high and low pressure values measured since the last reset. These values can be displayed via the Hi and Lo menus.

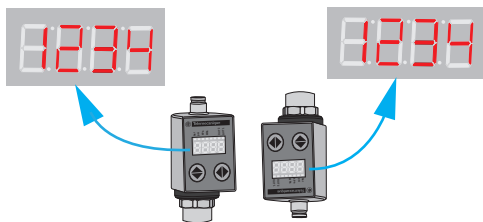


* VDMA: Verband Deutscher Maschinen und Anlagenbau e. V.

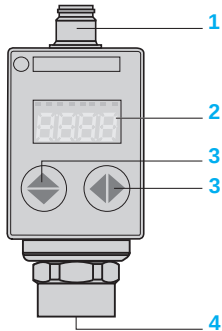
Electronic pressure sensors

OsiSense XM

XMLR pressure sensors with 4-digit display.
Compact plastic body, stainless steel 316L fluid entry.
With analogue and solid-state outputs.



"Flip over display" function.



Presentation

XMLR electronic pressure sensors are used for pressure control of hydraulic oils, fresh water, air and refrigeration fluids, between -1 and 600 bar.

Depending on the model, XMLR sensors are available with different output configurations in order to meet the highest number of requirements:

- One analogue output, 4...20 mA or 0...10 V, proportional to the measuring range
- One analogue output and one switching output, PNP or NPN type
- Two switching outputs, PNP or NPN type
- One 4...20 mA analogue output and two switching outputs, PNP or NPN type

Compact and robust:

The stainless steel 316L fluid entry and fibreglass impregnated polyacrylamide body provide the XMLR pressure sensors with excellent mechanical resistance, improved corrosion resistance and an P65/IP67 degree of protection. Compact in size (88 mm to 100 mm overall, depending on model), these products are for a nominal supply voltage of 24 V $\pm$ and have a 17 to 33 V $\pm$ operating range.

They are particularly suitable for:

- Moulding and thermoforming presses
- Injection machines
- Pneumatic systems and assembly machinery
- Hydraulic systems of lifting and handling equipment
- Pumping and fresh water treatment

Simplicity of setting-up

The body of the OsiSense XMLR pressure sensor can be turned through 300°, thus enabling the front face of the product to be orientated as required following connection to the pressure inlet pipe.

In addition, the "flip over display" function simplifies reading in the event of upside down mounting (fluid entry from above).

Description

- 1 M12 male connector, 4 or 5-pin depending on model.
- 2 4-digit, 7-segment display and LED indicator for pressure and output state (LED lit when the output has been activated).
- 3 Navigation keys for setting and configuring the menus (conforming to VDMA 24574).
- 4 Fluid entry: G 1/4 female, 1/4"-18 NPT female or SAE 7/16-20UNF female, depending on model.

Functions

Configurable functions

For the display:

- Pressure unit of measurement (bar, psi, kPa or MPa)
- Display refresh time: fast (50 ms), normal (200 ms), slow (600 ms)
- 180° flip over display
- Display off, power saving mode

For the analogue output (4...20 mA or 0...10 V):

- Compensation offset in the range of $\pm 5\%$ of the units size
- Adjustment of pressure between 75 and 125% of the nominal pressure

For each solid-state output:

- NO or NC contact
- Switching mode of outputs: Hysteresis (pumping) or Window (control)
- Time delay both on trip and on reset (adjustable from 0 to 50 s, in steps of 1 s)

Locking/unlocking:

- In order to avoid losing the product settings accidentally, the product can be locked. The settings cannot then be changed

Fast diagnostic functions

- Illumination of all the display segments on each power-up, enabling checking of their operation
- Diagnostic function for checking correct operation of the sensor
- Saving of min. and max. pressures measured by the sensor, up to 125% of the nominal pressure, and their subsequent display

Electronic pressure sensors

OsiSense XM

XMLR pressure sensors with 4-digit display.

Compact plastic body, stainless steel 316L fluid entry.
With analogue and solid-state outputs.



XMLR...G...5



XMLR...G...6

-1 to 0 bar (-14.5 to 0 psi)

Maximum permissible accidental pressure: 3 bar, destruction pressure: 3 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	—	XMLRM01G0T25	0.190
0...10 V	—	XMLRM01G0T75	0.190
4...20 mA	1 x PNP	XMLRM01G1P25	0.190
4...20 mA	1 x NPN	XMLRM01G1N25	0.190
0...10 V	1 x PNP	XMLRM01G1P75	0.190
0...10 V	1 x NPN	XMLRM01G1N75	0.190
—	2 x PNP	XMLRM01G2P05	0.190
—	2 x NPN	XMLRM01G2N05	0.190
4...20 mA	2 x PNP	XMLRM01G2P25	0.190
4...20 mA	2 x NPN	XMLRM01G2N25	0.190

1/4" - 18 NPT (female) fluid connection

4...20 mA	—	XMLRM01G0T26	0.212
4...20 mA	1 x PNP	XMLRM01G1P26	0.212
4...20 mA	1 x NPN	XMLRM01G1N26	0.212
—	2 x PNP	XMLRM01G2P06	0.212
—	2 x NPN	XMLRM01G2N06	0.212
4...20 mA	2 x PNP	XMLRM01G2P26	0.212
4...20 mA	2 x NPN	XMLRM01G2N26	0.212

0 to 1 bar (0 to 14.5 psi)

Maximum permissible accidental pressure: 7 bar, destruction pressure: 7 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	—	XMLR001G0T25	0.190
0...10 V	—	XMLR001G0T75	0.190
4...20 mA	1 x PNP	XMLR001G1P25	0.190
4...20 mA	1 x NPN	XMLR001G1N25	0.190
0...10 V	1 x PNP	XMLR001G1P75	0.190
0...10 V	1 x NPN	XMLR001G1N75	0.190
—	2 x PNP	XMLR001G2P05	0.190
—	2 x NPN	XMLR001G2N05	0.190
1/4" - 18 NPT (female) fluid connection			
4...20 mA	—	XMLR001G0T26	0.212
0...10 V	—	XMLR001G0T76	0.212
4...20 mA	1 x PNP	XMLR001G1P26	0.212
4...20 mA	1 x NPN	XMLR001G1N26	0.212
—	2 x PNP	XMLR001G2P06	0.212
—	2 x NPN	XMLR001G2N06	0.212

0 to 2.5 bar (0 to 36.2 psi)

Maximum permissible accidental pressure: 12 bar, destruction pressure: 12 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	—	XMLR2D5G0T25	0.190
0...10 V	—	XMLR2D5G0T75	0.190
4...20 mA	1 x PNP	XMLR2D5G1P25	0.190
4...20 mA	1 x NPN	XMLR2D5G1N25	0.190
0...10 V	1 x PNP	XMLR2D5G1P75	0.190
0...10 V	1 x NPN	XMLR2D5G1N75	0.190
—	2 x PNP	XMLR2D5G2P05	0.190
—	2 x NPN	XMLR2D5G2N05	0.190
1/4" - 18 NPT (female) fluid connection			
4...20 mA	1 x PNP	XMLR2D5G1P26	0.212
4...20 mA	1 x NPN	XMLR2D5G1N26	0.212
—	2 x PNP	XMLR2D5G2P06	0.212
—	2 x NPN	XMLR2D5G2N06	0.212

Electronic pressure sensors

OsiSense XM

XMLR pressure sensors with 4-digit display.
Compact plastic body, stainless steel 316L fluid entry.
With analogue and solid-state outputs.



XMLR000G0005

XMLR000G0006
XMLR000G0009

0 to 10 bar (0 to 145 psi)

Maximum permissible accidental pressure: 40 bar, destruction pressure: 40 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	–	XMLR010G0T25	0.190
0...10 V	–	XMLR010G0T75	0.190
4...20 mA	1 x PNP	XMLR010G1P25	0.190
4...20 mA	1 x NPN	XMLR010G1N25	0.190
0...10 V	1 x PNP	XMLR010G1P75	0.190
0...10 V	1 x NPN	XMLR010G1N75	0.190
–	2 x PNP	XMLR010G2P05	0.190
–	2 x NPN	XMLR010G2N05	0.190
4...20 mA	2 x PNP	XMLR010G2P25	0.190
4...20 mA	2 x NPN	XMLR010G2N25	0.190

1/4" - 18 NPT (female) fluid connection

4...20 mA	–	XMLR010G0T26	0.212
0...10 V	–	XMLR010G0T76	0.212
4...20 mA	1 x PNP	XMLR010G1P26	0.212
4...20 mA	1 x NPN	XMLR010G1N26	0.212
0...10 V	1 x PNP	XMLR010G1P76	0.212
0...10 V	1 x NPN	XMLR010G1N76	0.212
–	2 x PNP	XMLR010G2P06	0.212
–	2 x NPN	XMLR010G2N06	0.212
4...20 mA	2 x PNP	XMLR010G2P26	0.212
4...20 mA	2 x NPN	XMLR010G2N26	0.212

SAE 7/16-20UNF-2B (female) fluid connection

–	2 x PNP	XMLR010G2P09	0.210
–	2 x NPN	XMLR010G2N09	0.210

0 to 16 bar (0 to 232 psi)

Maximum permissible accidental pressure: 62 bar, destruction pressure: 62 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	–	XMLR016G0T25	0.190
0...10 V	–	XMLR016G0T75	0.190
4...20 mA	1 x PNP	XMLR016G1P25	0.190
4...20 mA	1 x NPN	XMLR016G1N25	0.190
0...10 V	1 x PNP	XMLR016G1P75	0.190
–	2 x PNP	XMLR016G2P05	0.190
4...20 mA	2 x PNP	XMLR016G2P25	0.190

1/4" - 18 NPT (female) fluid connection

4...20 mA	–	XMLR016G0T26	0.212
4...20 mA	1 x PNP	XMLR016G1P26	0.212
4...20 mA	1 x NPN	XMLR016G1N26	0.212
–	2 x PNP	XMLR016G2P06	0.212
–	2 x NPN	XMLR016G2N06	0.212

0 to 25 bar (0 to 362 psi)

Maximum permissible accidental pressure: 100 bar, destruction pressure: 100 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	–	XMLR025G0T25	0.190
0...10 V	–	XMLR025G0T75	0.190
4...20 mA	1 x PNP	XMLR025G1P25	0.190
4...20 mA	1 x NPN	XMLR025G1N25	0.190
0...10 V	1 x PNP	XMLR025G1P75	0.190
0...10 V	1 x NPN	XMLR025G1N75	0.190
–	2 x PNP	XMLR025G2P05	0.190
–	2 x NPN	XMLR025G2N05	0.190

1/4" - 18 NPT (female) fluid connection

4...20 mA	–	XMLR025G0T26	0.212
4...20 mA	1 x PNP	XMLR025G1P26	0.212
4...20 mA	1 x NPN	XMLR025G1N26	0.212
–	2 x PNP	XMLR025G2P06	0.212
–	2 x NPN	XMLR025G2N06	0.212

Electronic pressure sensors

OsiSense XM

XMLR pressure sensors with 4-digit display.

Compact plastic body, stainless steel 316L fluid entry.

With analogue and solid-state outputs.



XMLR...G...5



XMLR...G...6

XMLR...M...5
XMLR...M...6

XMLR...M...9

0 to 40 bar (0 to 580 psi)

Maximum permissible accidental pressure: 150 bar, destruction pressure: 150 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	–	XMLR040G0T25	0.190
0...10 V	–	XMLR040G0T75	0.190
4...20 mA	1 x PNP	XMLR040G1P25	0.190
4...20 mA	1 x NPN	XMLR040G1N25	0.190
0...10 V	1 x PNP	XMLR040G1P75	0.190
0...10 V	1 x NPN	XMLR040G1N75	0.190
–	2 x PNP	XMLR040G2P05	0.190
–	2 x NPN	XMLR040G2N05	0.190
4...20 mA	2 x PNP	XMLR040G2P25	0.190
4...20 mA	2 x NPN	XMLR040G2N25	0.190

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4...20 mA	–	XMLR040G0T26	0.212
4...20 mA	1 x PNP	XMLR040G1P26	0.212
4...20 mA	1 x NPN	XMLR040G1N26	0.212
–	2 x PNP	XMLR040G2P06	0.212
–	2 x NPN	XMLR040G2N06	0.212

0 to 100 bar (0 to 1450 psi)

Maximum permissible accidental pressure: 300 bar, destruction pressure: 600 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	–	XMLR100M0T25	0.186
0...10 V	–	XMLR100M0T75	0.186
4...20 mA	1 x PNP	XMLR100M1P25	0.186
4...20 mA	1 x NPN	XMLR100M1N25	0.186
0...10 V	1 x PNP	XMLR100M1P75	0.186
0...10 V	1 x NPN	XMLR100M1N75	0.186
–	2 x PNP	XMLR100M2P05	0.186
–	2 x NPN	XMLR100M2N05	0.186

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4...20 mA	–	XMLR100M0T26	0.186
4...20 mA	1 x PNP	XMLR100M1P26	0.186
4...20 mA	1 x NPN	XMLR100M1N26	0.186
–	2 x PNP	XMLR100M2P06	0.186
–	2 x NPN	XMLR100M2N06	0.186

0 to 160 bar (0 to 2320 psi)

Maximum permissible accidental pressure: 480 bar, destruction pressure: 960 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	–	XMLR160M0T25	0.186
0...10 V	–	XMLR160M0T75	0.186
4...20 mA	1 x PNP	XMLR160M1P25	0.186
4...20 mA	1 x NPN	XMLR160M1N25	0.186
0...10 V	1 x PNP	XMLR160M1P75	0.186
0...10 V	1 x NPN	XMLR160M1N75	0.186
–	2 x PNP	XMLR160M2P05	0.186
–	2 x NPN	XMLR160M2N05	0.186
SAE 7/16-20UNF-2B (female) fluid connection			
–	2 x PNP	XMLR160M2P09	0.212
–	2 x NPN	XMLR160M2N09	0.212

Electronic pressure sensors

OsiSense XM

XMLR pressure sensors with 4-digit display.
Compact plastic body, stainless steel 316L fluid entry.
With analogue and solid-state outputs.



XMLR...M...5
XMLR...M...6



XMLR...M...9

0 to 250 bar (0 to 3625 psi)

Maximum permissible accidental pressure: 750 bar, destruction pressure: 1500 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	–	XMLR250M0T25	0.186
0...10 V	–	XMLR250M0T75	0.186
4...20 mA	1 x PNP	XMLR250M1P25	0.186
4...20 mA	1 x NPN	XMLR250M1N25	0.186
0...10 V	1 x PNP	XMLR250M1P75	0.186
0...10 V	1 x NPN	XMLR250M1N75	0.186
–	2 x PNP	XMLR250M2P05	0.186
–	2 x NPN	XMLR250M2N05	0.186
4...20 mA	2 x PNP	XMLR250M2P25	0.186
4...20 mA	2 x NPN	XMLR250M2N25	0.186

1/4" - 18 NPT (female) fluid connection

4...20 mA	–	XMLR250M0T26	0.186
4...20 mA	1 x PNP	XMLR250M1P26	0.186
4...20 mA	1 x NPN	XMLR250M1N26	0.186
0...10 V	1 x PNP	XMLR250M1P76	0.186
–	2 x PNP	XMLR250M2P06	0.186
–	2 x NPN	XMLR250M2N06	0.186

SAE 7/16-20UNF-2B (female) fluid connection

–	2 x PNP	XMLR250M2P09	0.212
–	2 x NPN	XMLR250M2N09	0.212

0 to 400 bar (0 to 5800 psi)

Maximum permissible accidental pressure: 1200 bar,
destruction pressure: 2400 bar

Analogue output type	Solid-state output type	Reference	Weight kg
G 1/4 DIN 3852-Y (female) fluid connection			
4...20 mA	–	XMLR400M0T25	0.186
0...10 V	–	XMLR400M0T75	0.186
4...20 mA	1 x PNP	XMLR400M1P25	0.186
4...20 mA	1 x NPN	XMLR400M1N25	0.186
0...10 V	1 x PNP	XMLR400M1P75	0.186
0...10 V	1 x NPN	XMLR400M1N75	0.186
–	2 x PNP	XMLR400M2P05	0.186
–	2 x NPN	XMLR400M2N05	0.186
4...20 mA	2 x PNP	XMLR400M2P25	0.186
4...20 mA	2 x NPN	XMLR400M2N25	0.186

1/4" - 18 NPT (female) fluid connection

4...20 mA	–	XMLR400M0T26	0.186
4...20 mA	1 x PNP	XMLR400M1P26	0.186
4...20 mA	1 x NPN	XMLR400M1N26	0.186
–	2 x PNP	XMLR400M2P06	0.186
–	2 x NPN	XMLR400M2N06	0.186

0 to 600 bar (0 to 8700 psi)

Maximum permissible accidental pressure: 1500 bar,
minimum destruction pressure: 2500 bar

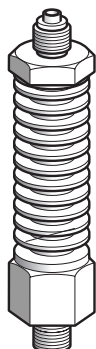
Analogue output type	Solid-state output type	Reference	Weight kg
Fluid connection G 1/4 (female)			
4...20 mA	–	XMLR600M0T25	0.186
0...10 V	–	XMLR600M0T75	0.186
4...20 mA	1 x PNP	XMLR600M1P25	0.186
0...10 V	1 x PNP	XMLR600M1P75	0.186
–	2 x PNP	XMLR600M2P05	0.186

Electronic pressure sensors

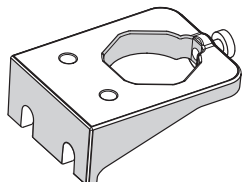
OsiSense XM

XMLR pressure sensors with 4-digit display

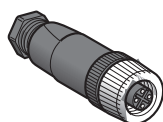
Accessories



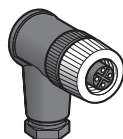
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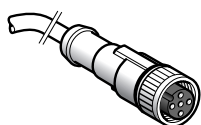
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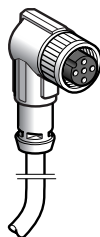
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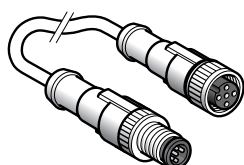
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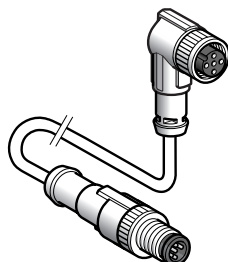
XZCP1141L●



XZCP1241L●



XZCR15110●●●●



XZCR15120●●●●

Accessories

Description	For use with	Reference	Weight kg
Cooler with G 1/4 A (male) connections Usage temperature: 150°C max. for the fluid, 50°C for the ambient air	XMLR●●●●●●●●5	XMLZL009	0.370

Fixing bracket aluminium	XMLR●●●	XMLZL017	0.029
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Connectors

Description	For use with	Type	Reference	Weight kg
M12 female connector, 4-pin	XMLR●●●●0T●● XMLR●●●●1P●● XMLR●●●●1N●●	Straight	XZCC12FDM40B	0.020
Metal clamping ring	XMLR●●●●2P0● XMLR●●●●2N0●	Elbowed	XZCC12FCM40B	0.020

M12 female connector, 5-pin	XMLR●●●●2P2● XMLR●●●●2N2●	Straight	XZCC12FDM50B	0.020
Metal clamping ring		Elbowed	XZCC12FCM50B	0.020

Pre-wired connectors and jumper cables

Description	For use with	Type	Length of cable m	Reference	Weight kg
Pre-wired M12, 4-pin connectors Metal clamping ring PUR cable	XMLR●●●●0T●● XMLR●●●●1●●● XMLR●●●●2P0● XMLR●●●●2N0●	Straight	2	XZCP1141L2	0.090
			5	XZCP1141L5	0.190
			10	XZCP1141L10	0.370
		Elbowed	2	XZCP1241L2	0.090
			5	XZCP1241L5	0.190
			10	XZCP1241L10	0.370

Pre-wired M12, 5-pin connectors PVC cable	XMLR●●●●2P2● XMLR●●●●2N2●	Straight female connector	2	XZCPV11V12L2	0.100
			5	XZCPV11V12L5	0.200
			10	XZCPV11V12L10	0.400
		Elbowed female connector	2	XZCPV12V12L2	0.100
			5	XZCPV12V12L5	0.200
			10	XZCPV12V12L10	0.400

M12-M12 4-pin jumper cables PUR cable	XMLR●●●●0T●● XMLR●●●●1●●● XMLR●●●●2P0● XMLR●●●●2N0●	Straight female connector	1	XZCR1511041C1	0.100
			2	XZCR1511041C2	0.100
		Elbowed female connector	1	XZCR1512041C1	0.100
			2	XZCR1512041C2	0.100

M12-M12 5-pin jumper cables PUR cable	XMLR●●●●2P2● XMLR●●●●2N2●	Straight female connector	1	XZCR1511064D1	0.100
			2	XZCR1511064D2	0.100
		Elbowed female connector	1	XZCR1512064D1	0.100
			2	XZCR1512064D2	0.100

X		XMLK006B2C21	13	XMLP2K0PP13	36	XMLP016BD71V	28	XMLP150PP73	34
XMLEZ001	37	XMLK006B2C71	13	XMLP2K0PP23	36	XMLP016BD79	28	XMLP160BC12	31
XMLEZ010	37	XMLK006B2D21	13	XMLP2K0PP73	36	XMLP025BC11V	29	XMLP160BC22	31
XMLEZ025	37	XMLK006B2D71	13	XMLP3K0PD13	36	XMLP025BC21V	29	XMLP160BC72	31
XMLEZ060	37	XMLK010B2C21	13	XMLP3K0PD23	36	XMLP025BC27	29	XMLP160BD12	31
XMLEZ100	37	XMLK010B2C71	13	XMLP3K0PD73	36	XMLP025BC29	29	XMLP160BD22	31
XMLEZ250	37	XMLK010B2D21	13	XMLP3K0PP13	36	XMLP025BC71V	29	XMLP160BD72	31
XMLEZ600	37	XMLK010B2D71	13	XMLP3K0PP23	36	XMLP025BD11V	29	XMLP200PD13	34
XMLEZM01	37	XMLK016B2C21	13	XMLP3K0PP73	36	XMLP025BD21V	29	XMLP200PD23	34
XMLG001D21	17	XMLK016B2C71	13	XMLP004GC11F	27	XMLP025BD27	29	XMLP200PD73	34
XMLG001D23	17	XMLK016B2D21	13	XMLP004GC21F	27	XMLP025BD29	29	XMLP200PP13	34
XMLG001D31TQ	20	XMLK016B2D71	13	XMLP004GC71F	27	XMLP025BD71V	29	XMLP200PP23	34
XMLG001D41TQ	20	XMLK025B2C21	13	XMLP004GD11F	27	XMLP025BD77	29	XMLP200PP73	34
XMLG001D71	17	XMLK025B2D21	13	XMLP004GD21F	27	XMLP025BD79	29	XMLP250BC12	31
XMLG001D73TQ	17	XMLK025B2D71	13	XMLP004GD71F	27	XMLP030RC23F	33	XMLP250BC22	31
XMLG006D21	17	XMLK100P2C23	14	XMLP006GC11F	27	XMLP030RC73F	33	XMLP250BC72	31
XMLG006D23	17	XMLK100P2C73	14	XMLP006GC21F	27	XMLP030RD23F	33	XMLP250BD12	31
XMLG006D71	17	XMLK100P2D23	14	XMLP006GC71F	27	XMLP030RD73F	33	XMLP250BD22	31
XMLG006D73TQ	17	XMLK100P2D73	14	XMLP006GD11F	27	XMLP030RP23F	33	XMLP250BD72	31
XMLG010D21	18	XMLK100P2P23	14	XMLP006GD21F	27	XMLP030RP73F	33	XMLP250MC11F	26
XMLG010D23	18	XMLK150P2C23	14	XMLP006GD71F	27	XMLP040BC11V	29	XMLP250MC21F	26
XMLG010D31TQ	20	XMLK150P2C73	14	XMLP006GL21F	27	XMLP040BC21V	29	XMLP250MC71F	26
XMLG010D41TQ	20	XMLK150P2D23	14	XMLP006GL71F	27	XMLP040BC27	29	XMLP250MD11F	26
XMLG010D71	18	XMLK150P2D73	14	XMLP6K0PD13	36	XMLP040BC29	29	XMLP250MD21F	26
XMLG010D73	18	XMLK150P2P23	14	XMLP6K0PD23	36	XMLP040BC71V	29	XMLP250MD71F	26
XMLG010D73TQ	18	XMLK200P2C23	14	XMLP6K0PD73	36	XMLP040BD11V	29	XMLP300PD13	35
XMLG010Q21TQ	18	XMLK200P2C73	14	XMLP6K0PP13	36	XMLP040BD19	29	XMLP300PD23	35
XMLG010Q71TQ	18	XMLK200P2D23	14	XMLP6K0PP23	36	XMLP040BD21V	29	XMLP300PD73	35
XMLG016D21	18	XMLK200P2D73	14	XMLP6K0PP73	36	XMLP040BD27	29	XMLP300PP13	35
XMLG016D23	18	XMLK200P2P23	14	XMLP010BC11V	28	XMLP040BD29	29	XMLP300PP23	35
XMLG016D71	18	XMLK300P2C23	14	XMLP010BC21V	28	XMLP040BD71V	29	XMLP300PP73	35
XMLG025D21	18	XMLK300P2C73	14	XMLP010BC27	28	XMLP040BD79	29	XMLP400BC12	31
XMLG025D23	18	XMLK300P2D23	14	XMLP010BC29	28	XMLP050RC23F	33	XMLP400BC22	31
XMLG025D31TQ	20	XMLK300P2D73	14	XMLP010BC71V	28	XMLP050RD23F	33	XMLP400BC72	31
XMLG025D41TQ	20	XMLK300P2P23	14	XMLP010BC79	28	XMLP050RD73F	33	XMLP400BD12	31
XMLG025D71	18	XMLP001GC2BF	26	XMLP010BD11V	28	XMLP050RP23F	33	XMLP400BD22	31
XMLG025D73TQ	18	XMLP001GC7BF	26	XMLP010BD19	28	XMLP060BC11V	30	XMLP400BD72	31
XMLG025Q21TQ	18	XMLP001GC11F	26	XMLP010BD21V	28	XMLP060BC21V	30	XMLP500MC11F	26
XMLG100D21	19	XMLP001GC21F	26	XMLP010BD27	28	XMLP060BC27	30	XMLP500MC21F	26
XMLG100D23	19	XMLP001GC71F	26	XMLP010BD29	28	XMLP060BC29	30	XMLP500MC71F	26
XMLG100D31TQ	20	XMLP001GD2BF	26	XMLP010BD71V	28	XMLP060BC71V	30	XMLP500MD11F	26
XMLG100D41TQ	20	XMLP001GD7BF	26	XMLP010BD79	28	XMLP060BD11V	30	XMLP500MD21F	26
XMLG100D71	19	XMLP001GD11F	26	XMLP10KPD13	36	XMLP060BD21V	30	XMLP500MD71F	26
XMLG100D73TQ	19	XMLP001GD21F	26	XMLP10KPD23	36	XMLP060BD27	30	XMLP600BC12	31
XMLG100Q21TQ	19	XMLP001GD71F	26	XMLP10KPD73	36	XMLP060BD29	30	XMLP600BC22	31
XMLG250D21	19	XMLP001GL21F	26	XMLP10KPP13	36	XMLP060BD71V	30	XMLP600BC72	31
XMLG250D23	19	XMLP001GL71F	26	XMLP10KPP23	36	XMLP060BD79	30	XMLP600BD12	31
XMLG250D31TQ	20	XMLP1K0PD13	35	XMLP10KPP73	36	XMLP100BC12	30	XMLP600BD22	31
XMLG250D41TQ	20	XMLP1K0PD23	35	XMLP015RC23F	33	XMLP100BC22	30	XMLP600BD72	31
XMLG250D71	19	XMLP1K0PD73	35	XMLP015RC73F	33	XMLP100BC72	30	XMLP600PD13	35
XMLG250D73TQ	19	XMLP1K0PP13	35	XMLP015RD23F	33	XMLP100BD12	30	XMLP600PD23	35
XMLG400D21	19	XMLP1K0PP23	35	XMLP015RD73F	33	XMLP100BD22	30	XMLP600PD73	35
XMLG400D23	19	XMLP1K0PP73	35	XMLP015RP23F	33	XMLP100BD72	30	XMLP600PP13	35
XMLG400D31TQ	20	XMLP2D5GC11F	27	XMLP015RP73F	33	XMLP100PD13	34	XMLP600PP23	35
XMLG400D41TQ	20	XMLP2D5GC21F	27	XMLP016BC11V	28	XMLP100PD23	34	XMLP600PP73	35
XMLG400D71	19	XMLP2D5GC71F	27	XMLP016BC21V	28	XMLP100PD73	34	XMLPM00GC2BF	24
XMLG400D73TQ	19	XMLP2D5GD11F	27	XMLP016BC27	28	XMLP100PP13	34	XMLPM00GC7BF	24
XMLGM01D21	17	XMLP2D5GD21F	27	XMLP016BC29	28	XMLP100PP23	34	XMLPM00GC11F	24
XMLGM01D23	17	XMLP2D5GD71F	27	XMLP016BC71V	28	XMLP100PP73	34	XMLPM00GC21F	24
XMLGM01D31TQ	20	XMLP2D5GL21F	27	XMLP016BD11V	28	XMLP150PD13	34	XMLPM00GC71F	24
XMLGM01D41TQ	20	XMLP2D5GL71F	27	XMLP016BD19	28	XMLP150PD23	34	XMLPM00GD2BF	24
XMLGM01D71	17	XMLP2K0PD13	36	XMLP016BD21V	28	XMLP150PD73	34	XMLPM00GD7BF	24
XMLGM01D73TQ	17	XMLP2K0PD23	36	XMLP016BD27	28	XMLP150PP13	34	XMLPM00GD11F	24
XMLGZ001	21	XMLP2K0PD73	36	XMLP016BD29	28	XMLP150PP23	34	XMLPM00GD21F	24

XMLPM00GD71F	24	XMLR010G0T26	44	XMLR100M1N25	45	XMLRM01G1P25	43	XZCPV1141L5	37
XMLPM00GL21F	24	XMLR010G0T75	44	XMLR100M1N26	45	XMLRM01G1P26	43	XZCPV1141L10	37
XMLPM00GL71F	24	XMLR010G0T76	44	XMLR100M1N75	45	XMLRM01G1P75	43	XZCPV1241L2	37
XMLPM00RC13F	32	XMLR010G1N25	44	XMLR100M1P25	45	XMLRM01G2N05	43	XZCPV1241L5	37
XMLPM00RC23F	32	XMLR010G1N26	44	XMLR100M1P26	45	XMLRM01G2N06	43	XZCPV1241L10	37
XMLPM00RC73F	32	XMLR010G1N75	44	XMLR100M1P75	45	XMLRM01G2N25	43	XZCR1511040A1	39
XMLPM00RD13F	32	XMLR010G1N76	44	XMLR100M2N05	45	XMLRM01G2N26	43	XZCR1511040A2	39
XMLPM00RD23F	32	XMLR010G1P25	44	XMLR100M2N06	45	XMLRM01G2P05	43	XZCR1511041C1	47
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XMLPM00RP23F	32	XMLR010G1P76	44	XMLR160M0T25	45	XMLRM01G2P26	43	XZCR1511064D2	47
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XMLPM01GC21F	24	XMLR010G2N06	44	XMLR160M1N25	45	XMLZL016	37	XZCR1512040A2	39
XMLPM01GC71F	24	XMLR010G2N09	44	XMLR160M1N75	45	XMLZL017	37	XZCR1512041C1	47
XMLPM01GD21F	24	XMLR010G2N25	44	XMLR160M1P25	45		47	XZCR1512041C2	47
XMLPM01GD71F	24	XMLR010G2N26	44	XMLR160M1P75	45	XZCC12FCM40B	15	XZCR1512064D1	47
XMLPM05GC21F	24	XMLR010G2P05	44	XMLR160M2N05	45		21	XZCR1512064D2	47
XMLPM05GC71F	24	XMLR010G2P06	44	XMLR160M2N09	45		37		
XMLPM05GD21F	24	XMLR010G2P09	44	XMLR160M2P05	45		39		
XMLPM05GD71F	24	XMLR010G2P25	44	XMLR160M2P09	45	XZCC12FCM50B	47		
XMLPM09BC11V	25	XMLR010G2P26	44	XMLR250M0T25	46	XZCC12FDM40B	15	Z	
XMLPM09BC21V	25	XMLR016G0T25	44	XMLR250M0T26	46		21	ZMLPA1N2SH	37
XMLPM09BC71V	25	XMLR016G0T26	44	XMLR250M0T75	46		37	ZMLPA1N2SW	37
XMLPM09BD11V	25	XMLR016G0T75	44	XMLR250M1N25	46		39	ZMLPA1P2SH	37
XMLPM09BD21V	25	XMLR016G1N25	44	XMLR250M1N26	46	XZCC12FDM50B	47		39
XMLPM09BD71V	25	XMLR016G1N26	44	XMLR250M1N75	46	XZCC12MCM40B	39	ZMLPA1P2SW	37
XMLPM15RC23F	32	XMLR016G1P25	44	XMLR250M1P25	46	XZCC12MDM40B	39		39
XMLPM15RD23F	32	XMLR016G1P26	44	XMLR250M1P26	46	XZCC43FCP40B	15	ZMLPA2N0SH	37
XMLPM15RD73F	32	XMLR016G1P75	44	XMLR250M1P75	46		37	ZMLPA2P0SH	37
XMLPM15RP23F	32	XMLR016G2N06	44	XMLR250M1P76	46	XZCP1141L2	15		39
XMLPM25BD21V	25	XMLR016G2P05	44	XMLR250M2N05	46		21		
XMLPM60RC23F	32	XMLR016G2P06	44	XMLR250M2N06	46		37		
XMLPM60RD23F	32	XMLR016G2P25	44	XMLR250M2N09	46		39		
XMLPM60RD73F	32	XMLR025G0T25	44	XMLR250M2N25	46	XZCP1141L5	15		
XMLPM60RP23F	32	XMLR025G0T26	44	XMLR250M2P05	46		21		
XMLPZLH01	39	XMLR025G0T75	44	XMLR250M2P06	46		37		
XMLPZLV01	39	XMLR025G1N25	44	XMLR250M2P09	46		39		
XMLR001G0T25	43	XMLR025G1N26	44	XMLR250M2P25	46	XZCP1141L10	15		
XMLR001G0T26	43	XMLR025G1N75	44	XMLR400M0T25	46		21		
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XMLR001G0T76	43	XMLR025G1P26	44	XMLR400M0T75	46		39		
XMLR001G1N25	43	XMLR025G1P75	44	XMLR400M1N25	46	XZCP1141L15	47		
XMLR001G1N26	43	XMLR025G2N05	44	XMLR400M1N26	46	XZCP1141L20	39		
XMLR001G1N75	43	XMLR025G2N06	44	XMLR400M1N75	46	XZCP1241L2	15		
XMLR001G1P25	43	XMLR025G2P05	44	XMLR400M1P25	46		21		
XMLR001G1P26	43	XMLR025G2P06	44	XMLR400M1P26	46		37		
XMLR001G1P75	43	XMLR040G0T25	45	XMLR400M1P75	46		39		
XMLR001G2N05	43	XMLR040G0T26	45	XMLR400M2N05	46	XZCP1241L5	15		
XMLR001G2N06	43	XMLR040G0T75	45	XMLR400M2N06	46		21		
XMLR001G2P05	43	XMLR040G1N25	45	XMLR400M2N25	46		37		
XMLR001G2P06	43	XMLR040G1N26	45	XMLR400M2P05	46		39		
XMLR2D5G0T25	43	XMLR040G1N75	45	XMLR400M2P06	46	XZCP1241L10	15		
XMLR2D5G0T75	43	XMLR040G1P25	45	XMLR400M2P25	46		21		
XMLR2D5G1N25	43	XMLR040G1P26	45	XMLR600M0T25	46		37		
XMLR2D5G1N26	43	XMLR040G1P75	45	XMLR600M0T75	46		39		
XMLR2D5G1N75	43	XMLR040G2N05	45	XMLR600M1P25	46		47		
XMLR2D5G1P25	43	XMLR040G2N06	45	XMLR600M1P75	46	XZCP1241L15	15		
XMLR2D5G1P26	43	XMLR040G2N25	45	XMLR600M2P05	46	XZCP1241L20	39		
XMLR2D5G1P75	43	XMLR040G2P05	45	XMLR600M2P06	46	XZCPV11V12L2	47		
XMLR2D5G2N05	43	XMLR040G2P06	45	XMLRM01G0T25	43	XZCPV11V12L5	47		
XMLR2D5G2N06	43	XMLR040G2P25	45	XMLRM01G0T26	43	XZCPV11V12L10	47		
XMLR2D5G2P05	43	XMLR100M0T25	45	XMLRM01G0T75	43	XZCPV12V12L2	47		
XMLR2D5G2P06	43	XMLR100M0T26	45	XMLRM01G1N25	43	XZCPV12V12L5	47		
XMLR010G0T25	44	XMLR100M0T75	45	XMLRM01G1N26	43	XZCPV12V12L10	47		
				XMLRM01G1N75	43	XZCPV1141L2	37		