

# PART X-01 ~ X-11

Diameter

● Shielded    ○ non-Shielded

Switching Distance Sn mm

Housing Material

● With LED    ○ Without LED

Dimensions (unit: mm)

Operating

Ripple

NO-load supply current

Max. load current

Off-state current

Voltage drop

Switching frequency

Response Time

Switching Hysteresis

Repeat Accuracy

protection category

Ambient temperature range

Temperature Drift

Short Circuit protected

Overload Trip Point

Protected against polarity reversal

EMC

Shock / Vibration

Material of sensing face

Utilization categories

High pressure rated up to

DC 3 wire 10-30V NPN N.O.

DC 3 wire 10-30V NPN N.C.

DC 3 wire 10-30V PNP N.O.

DC 3 wire 10-30V PNP N.C.

DC 4 wire 10-30V Changeover PNP (N.O. & N.C.)

DC 4 wire 10-30V Changeover NPN (N.O. & N.C.)

DC 2 wire 10-60V N.O.

DC 2 wire 10-60V N.C.

DC 3 wire 10-55v NPN N.O.

DC 3 wire 10-55v NPN N.C.

DC 3 wire 10-55v PNP N.O.

DC 3 wire 10-55v PNP N.C.

AC 2 wire 20-250V N.O.

AC 2 wire 20-250V N.C.

AC 2 wire 20-250V N.O. or N.C. Changeable

AC/DC 2 wire 20-250V N.O.

AC/DC 2 wire 20-250V N.C.

AC/DC 2 wire 20-250V N.O. or N.C. Changeable

Remark

Cable 2M (PVC)

Weight

Please put each catalog page in the blank. The specification on the left will help your reading.











## DC HIGH PRESSURE RATED SENSORS

## WELD FIELD IMMUNE

<b>M12</b>	
●	
1.5 mm	
SUS 303 stainless steel	
○	
10-30VDC	
<10%	
< 10mA	
200mA	
<0.01mA	
≤ 1.0V	
2000Hz	
0.1ms/0.1ms	
<15%(Sr)	
< 1%(Sr)	
IP 68	
-25...+70°C	
<10%(Sr)	
YES	
220mA	
YES	
RFI>3V/m / EFT>1KV / ESD>4KV (contact)	
IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2	
EPOXY	
DC13	
100 bar	
PCU1-121.5N-ARU4/138	29
PCU1-121.5N-BRU4/138	30
PCU1-121.5P-ARU4/138	31
PCU1-121.5P-BRU4/138	32
Installatin:	
Approx.65 g	

<b><math>\phi 16</math></b>	
●	
1.5 mm	
SUS 303 stainless steel	
○	
10-30VDC	
<10%	
< 10mA	
200mA	
<0.01mA	
≤ 1.5V	
1000Hz	
0.2ms/0.2ms	
<15%(Sr)	
< 1%(Sr)	
IP 68	
-25...+80°C	
<10%(Sr)	
YES	
220mA	
YES	
RFI>3V/m / EFT>1KV / ESD>4KV (contact)	
IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2	
EPOXY	
DC13	
500 bar	
PCU1-D161.5N-A3U2/50	29
PCU1-D161.5N-B3U2/50	30
PCU1-D161.5P-A3U2/50	31
PCU1-D161.5P-B3U2/50	32
Installatin:	
4 $\phi$ 3x0.34 Approx.100 g	

<b>M16</b>	
●	
1.5 mm	
SUS 303 stainless steel	
○	
10-30VDC	
<10%	
< 10mA	
200mA	
<0.01mA	
≤ 1.5V	
1000Hz	
0.2ms/0.2ms	
<15%(Sr)	
< 1%(Sr)	
IP 68	
-25...+80°C	
<10%(Sr)	
YES	
220mA	
YES	
RFI>3V/m / EFT>1KV / ESD>4KV (contact)	
IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2	
EPOXY	
DC13	
350 bar	
PCU1-161.5N-ARU4/73A	29
PCU1-161.5N-BRU4/73A	30
PCU1-161.5P-ARU4/73A	31
PCU1-161.5P-BRU4/73A	32
Installatin:	
Approx.80 g	



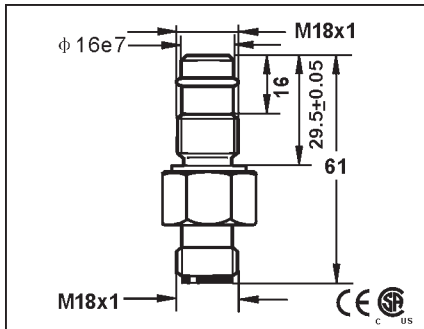




DC HIGH PRESSURE RATED SENSORS

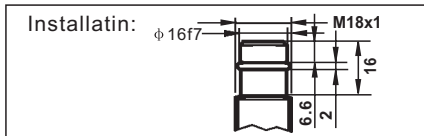
WELD FIELD IMMUNE

<b>M18</b>
●
3 mm
SUS 303 stainless steel
○



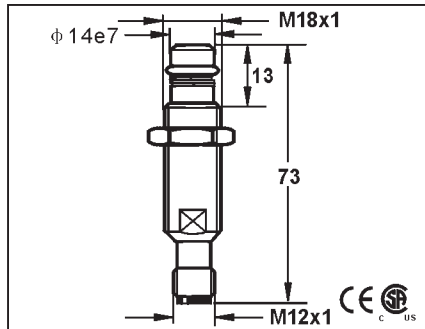
10-30VDC
<10%
< 10mA
200mA
<0.01mA
≤ 1.5V
1000Hz
0.2ms/0.2ms
<15%(Sr)
< 1%(Sr)
IP 68
-25...+80°C
<10%(Sr)
YES
220mA
YES
RFI>3V/m / EFT>1KV / ESD>4KV (contact)
IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2
EPOXY
DC13
500 bar

PCU1-1803N-ARU4/61	29
PCU1-1803N-B3U2/61	30
PCU1-1803P-ARU4/61	31
PCU1-1803P-B3U2/61	32



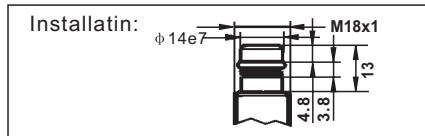
Approx.80 g
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<b>M18</b>
●
1.5 mm
SUS 303 stainless steel
○



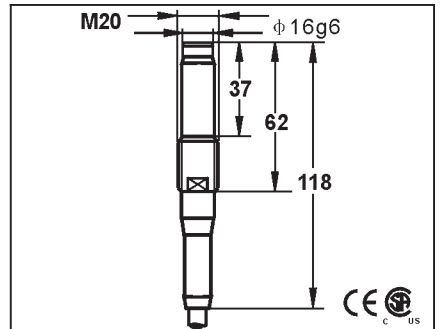
10-30VDC
<10%
< 10mA
200mA
<0.01mA
≤ 1.5V
1000Hz
0.2ms/0.2ms
<15%(Sr)
< 1%(Sr)
IP 68
-25...+80°C
<10%(Sr)
YES
220mA
YES
RFI>3V/m / EFT>1KV / ESD>4KV (contact)
IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2
EPOXY
DC13
350 bar

PCU1-D181.5N-ARU4/73	29
PCU1-D181.5N-BRU4/73	30
PCU1-D181.5P-ARU4/73	31
PCU1-D181.5P-BRU4/73	32



Approx.90 g
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<b>M20</b>
●
1.0 mm
SUS 303 stainless steel
○



10-30VDC
<10%
< 10mA
200mA
<0.01mA
≤ 1.5V
1000Hz
0.2ms/0.2ms
<15%(Sr)
< 1%(Sr)
IP 68
-25...+80°C
<10%(Sr)
YES
220mA
YES
RFI>3V/m / EFT>1KV / ESD>4KV (contact)
IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2
EPOXY
DC13
1500 bar, saltwaer protected

PCU1-2001N-A3U2/118	29
PCU1-2001N-B3U2/118	30
PCU1-2001P-A3U2/118	31
PCU1-2001P-B3U2/118	32

4 φ 3x0.34
Approx.150 g



- Weld field and Electrical Noise Immunity
- Standard Latching Short Circuit Protection
- Predictable, Consistent Electrical Performance
- 100% Tested and Burned-in
- Purpose Designed Housings and Materials

### ● Specification

	AC/DC	DC
Nominal Sensing Range(±10%)	2mm	
Current Consumption	1.7 or 4.5mA	10mA
Voltage Drop	10 VAC	2.0V@100mA
Temperature Drift (Max.)	±10%	
Short Circuit Protection	yes	
Reverse Polarity Protected	yes	
Ambient Temperature Range	- 20°C ~ 70°C	
Maximum Switching Frequency	16Hz	
Hysteresis	3-10%	
Repeatability	<±1.25%	
Protection category	IP 67	
Load Current	5mA to 500mA	200mA max.
Continduous Pressure Rating	3000psi	
LED Indicator	red=power green=target	
EMC	RFI>3V/m / EFT>1KV / ESD>4KV (contact)	
Shock / Vibration	IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2	
Material Active Face	PBT	
Shipping Weight	340g.	

### ● Selection Guide

	3-pin Mini		4-pin Mini	4-pin Euro
Voltage	AC/DC 2W,20-230V, NO	AC/DC 2W,20-230V, NO	DC, Sourcing 3W,10-30V, NO	DC,PNP 3W,10-30V, NO
Leakage Current	1.7mA	4.5mA	10 mA	10 mA
Probe Length(mm)	TYPE NUMBER	TYPE NUMBER	TYPE NUMBER	TYPE NUMBER
26.03	MQD2-EE1UO-AZU3C/W/26	MQD2-EE2UO-AZU3C/W/26	MQD2-EE3P1-AZU4C/W/26	MQD2-EE4P1-ARU4C/W/26
31.75	MQD2-EE1UO-AZU3C/W/31	MQD2-EE2UO-AZU3C/W/31	MQD2-EE3P1-AZU4C/W/31	MQD2-EE4P1-ARU4C/W/31
38.10			MQD2-EE3P1-AZU4C/W/38	
44.45			MQD2-EE3P1-AZU4C/W/44	
52.37	MQD2-EE1UO-AZU3C/W/52	MQD2-EE2UO-AZU3C/W/52	MQD2-EE3P1-AZU4C/W/52	MQD2-EE4P1-ARU4C/W/52
73.02	MQD2-EE1UO-AZU3C/W/73	MQD2-EE2UO-AZU3C/W/73	MQD2-EE3P1-AZU4C/W/73	MQD2-EE4P1-ARU4C/W/73
95.88	MQD2-EE1UO-AZU3C/W/95	MQD2-EE2UO-AZU3C/W/95	MQD2-EE3P1-AZU4C/W/95	MQD2-EE4P1-ARU4C/W/95
115.8	MQD2-EE1UO-AZU3C/W/115	MQD2-EE2UO-AZU3C/W/115	MQD2-EE3P1-AZU4C/W/115	MQD2-EE4P1-ARU4C/W/115

### ● Wiring Diagrams

