
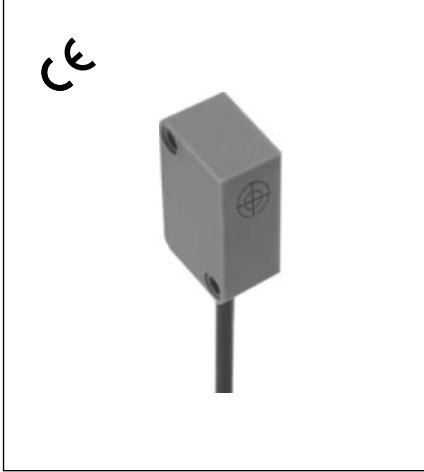
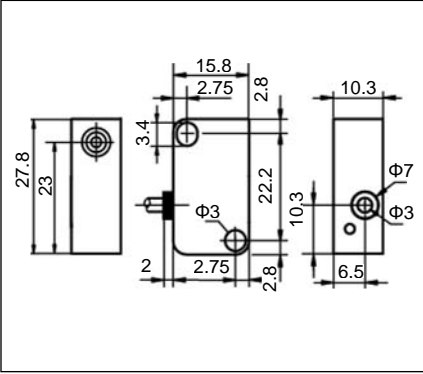
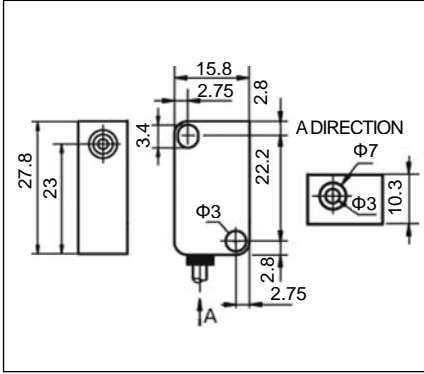


PLASTIC SQUARE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

Diameter	Q16x28x10	Q16x28x10
● Shielded ○ non-Shielded	● ○	● ○
Switching Distance, Sn: mm	1 mm 2 mm	1 mm 2 mm
Housing Material	PBT	PBT
● With LED ○ Without LED	●	●
Picture		
Dimensions (unit: mm)		
Ripple	<10%	<10%
No Load Current	<10mA	<10mA
Max. Load current	200mA	200mA
Leakage Current	<0.01mA	<0.01mA
Voltage Drop	<1.5V	<1.5V
Switching Frequency	2KHz	2KHz
Response Time	0.1ms/0.1ms	0.1ms/0.1ms
Switching Hysteresis	<15%(Sr)	<15%(Sr)
Repeat Accuracy	<1.0%(Sr)	<1.0%(Sr)
Protection Category	IP67	IP67
Operating Temperature	-25°C - +70°C	-25°C - +70°C
Temperature Drift	<10%(Sr)	<10%(Sr)
Short Circuit Protection	Yes	Yes
Overload Trip Point	220mA	220mA
Material Active Face	PBT	PBT
Connecting type	2M Cable (2.9 φ 3x0.15)	2M Cable (2.9 φ 3x0.15)
Weight	approx.55 g	approx.55 g
DC 3 wire 10-30V NPN N.O.	IPS-Q2801N-A1LN2 1* IPN-Q2802N-A1LN2	IPS-Q2801N-A1VN2 1* IPN-Q2802N-A1VN2
DC 3 wire 10-30V NPN N.C.	IPS-Q2801N-B1LN2 2 IPN-Q2802N-B1LN2	IPS-Q2801N-B1VN2 2 IPN-Q2802N-B1VN2
DC 3 wire 10-30V PNP N.O.	IPS-Q2801P-A1LN2 3 IPN-Q2802P-A1LN2	IPS-Q2801P-A1VN2 3 IPN-Q2802P-A1VN2
DC 3 wire 10-30V PNP N.C.	IPS-Q2801P-B1LN2 4 IPN-Q2802P-B1LN2	IPS-Q2801P-B1VN2 4 IPN-Q2802P-B1VN2
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.		
DC 3 wire 5-36 V NPN N.O.		
DC 3 wire 5-36 V NPN N.C.		
DC 3 wire 5-36 V PNP N.O.		
DC 3 wire 5-36 V PNP N.C.		

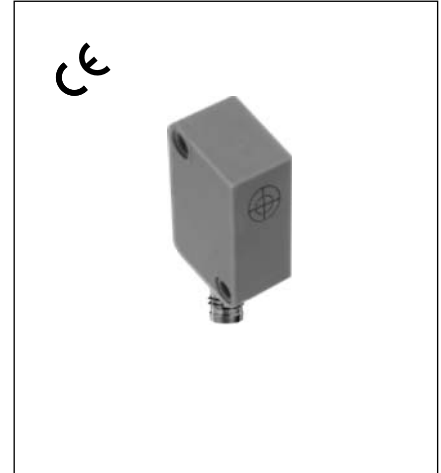
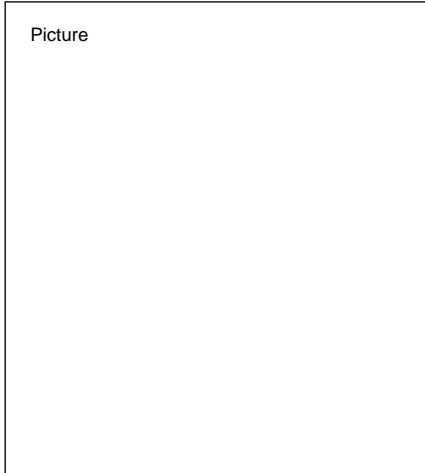
* Wiring diagram number. Please see the relevant wiring diagram shown on Page 013 and Page 014.

PLASTIC SQUARE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

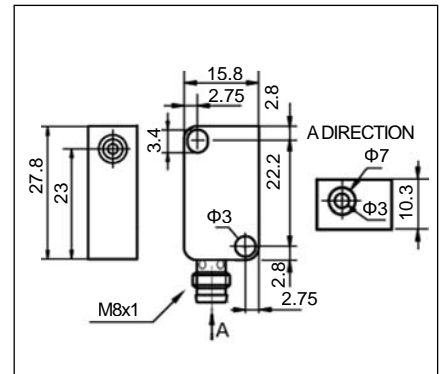
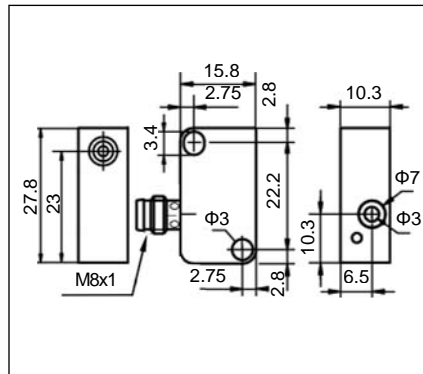
Diameter
● Shielded ○ non-Shielded
Switching Distance, Sn: mm
Housing Material
● With LED ○ Without LED

Q16x28x10	
●	○
1 mm	2 mm
PBT	
●	

Q16x28x10	
●	○
1 mm	2 mm
PBT	
●	



Dimensions (unit: mm)



Ripple
No Load Current
Max. Load current
Leakage Current
Voltage Drop
Switching Frequency
Response Time
Switching Hysteresis
Repeat Accuracy
Protection Category
Operating Temperature
Temperature Drift
Short Circuit Protection
Overload Trip Point
Material Active Face

<10%
<10mA
200mA
<0.01mA
<1.5V
2KHz
0.1ms/0.1ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
PBT

<10%
<10mA
200mA
<0.01mA
<1.5V
2KHz
0.1ms/0.1ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
PBT

Connecting type
Weight

M8 connector
approx.25 g

M8 connector
approx.25 g

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 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.
DC 3 wire 5-36 V NPN N.O.
DC 3 wire 5-36 V NPN N.C.
DC 3 wire 5-36 V PNP N.O.
DC 3 wire 5-36 V PNP N.C.

IPS-Q2801N-A1XN3	1*	IPN-Q2802N-A1XN3
IPS-Q2801N-B1XN3	2	IPN-Q2802N-B1XN3
IPS-Q2801P-A1XN3	3	IPN-Q2802P-A1XN3
IPS-Q2801P-B1XN3	4	IPN-Q2802P-B1XN3

IPS-Q2801N-A1PN3	1*	IPN-Q2802N-A1PN3
IPS-Q2801N-B1PN3	2	IPN-Q2802N-B1PN3
IPS-Q2801P-A1PN3	3	IPN-Q2802P-A1PN3
IPS-Q2801P-B1PN3	4	IPN-Q2802P-B1PN3

* Wiring diagram number. Please see the relevant wiring diagram shown on Page 013 to Page 015.

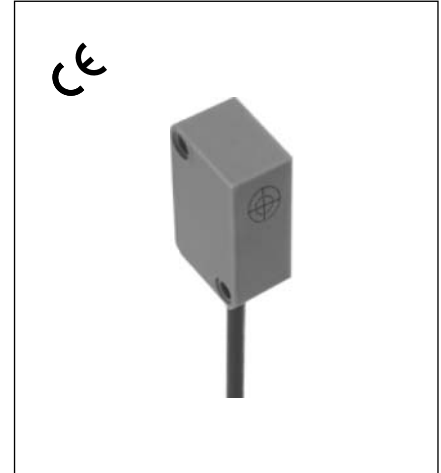
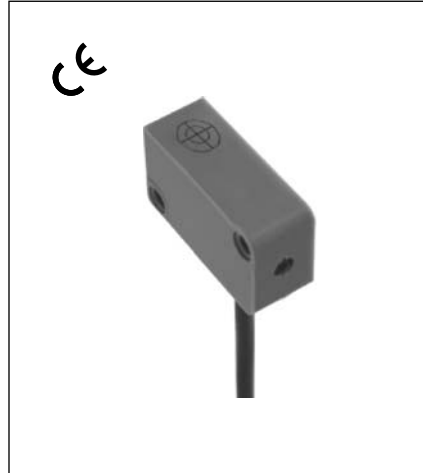
EXTENDED RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

Diameter
● Shielded ○ non-Shielded
Switching Distance, Sn: mm
Housing Material
● With LED ○ Without LED

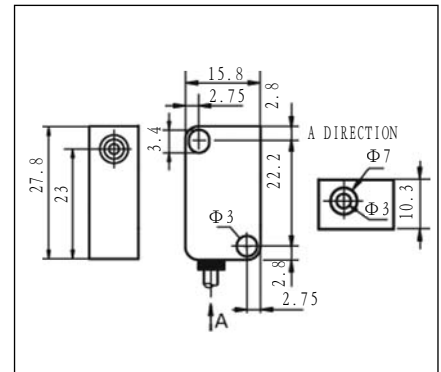
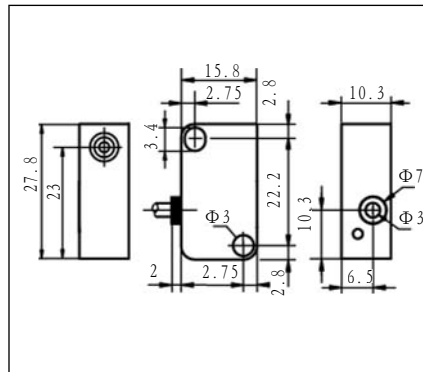
Q16x28x10	
●	○
2 mm	4 mm
PBT	
●	

Q16x28x10	
●	○
2 mm	4 mm
PBT	
●	

Picture



Dimensions (unit: mm)



Ripple	<10%
No Load Current	<10mA
Max. Load current	200mA
Leakage Current	<0.01mA
Voltage Drop	<2.0V
Switching Frequency	2KHz 1KHz
Response Time	0.1ms/0.1ms 0.2ms/0.2ms
Switching Hysteresis	<15%(Sr)
Repeat Accuracy	<1.0%(Sr)
Protection Category	IP67
Operating Temperature	-25°C - +70°C
Temperature Drift	<10%(Sr)
Short Circuit Protection	Yes
Overload Trip Point	220mA
Material Active Face	PBT

	<10%
	<10mA
	200mA
	<0.01mA
	<2.0V
	2KHz 1KHz
	0.1ms/0.1ms 0.2ms/0.2ms
	<15%(Sr)
	<1.0%(Sr)
	IP67
	-25°C - +70°C
	<10%(Sr)
	Yes
	220mA
	PBT

	<10%
	<10mA
	200mA
	<0.01mA
	<2.0V
	2KHz 1KHz
	0.1ms/0.1ms 0.2ms/0.2ms
	<15%(Sr)
	<1.0%(Sr)
	IP67
	-25°C - +70°C
	<10%(Sr)
	Yes
	220mA
	PBT

Connecting type
Weight

2M Cable (2.9 φ 3x0.15)
approx.55 g

2M Cable (2.9 φ 3x0.15)
approx.55 g

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 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.
DC 3 wire 5-36 V NPN N.O.
DC 3 wire 5-36 V NPN N.C.
DC 3 wire 5-36 V PNP N.O.
DC 3 wire 5-36 V PNP N.C.

IPS-Q2802N-A1LN2	1*	IPN-Q2804N-A1LN2
IPS-Q2802N-B1LN2	2	IPN-Q2804N-B1LN2
IPS-Q2802P-A1LN2	3	IPN-Q2804P-A1LN2
IPS-Q2802P-B1LN2	4	IPN-Q2804P-B1LN2

IPS-Q2802N-A1VN2	1*	IPN-Q2804N-A1VN2
IPS-Q2802N-B1VN2	2	IPN-Q2804N-B1VN2
IPS-Q2802P-A1VN2	3	IPN-Q2804P-A1VN2
IPS-Q2802P-B1VN2	4	IPN-Q2804P-B1VN2

* Wiring diagram number. Please see the relevant wiring diagram shown on Page 013 and Page 014.

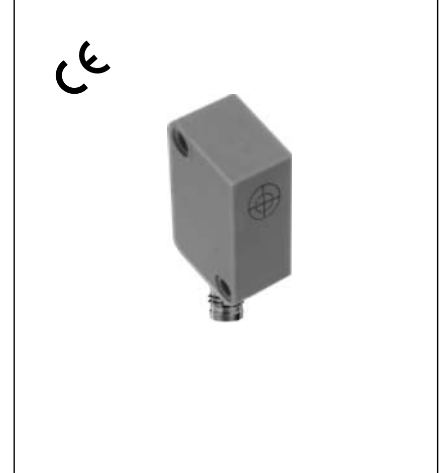
EXTENDED RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

Diameter
● Shielded ○ non-Shielded
Switching Distance, Sn: mm
Housing Material
● With LED ○ Without LED

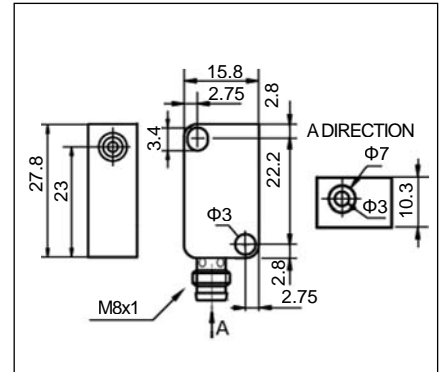
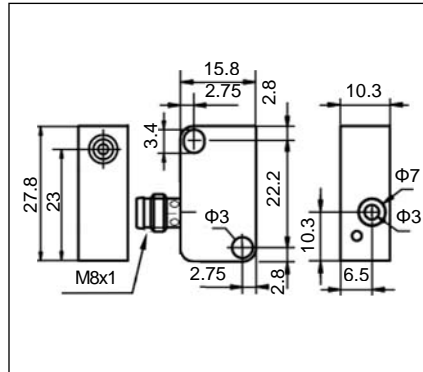
Q16x28x10	
●	○
2 mm	4 mm
PBT	
●	

Q16x28x10	
●	○
2 mm	4 mm
PBT	
●	

Picture



Dimensions (unit: mm)



Ripple
No Load Current
Max. Load current
Leakage Current
Voltage Drop
Switching Frequency
Response Time
Switching Hysteresis
Repeat Accuracy
Protection Category
Operating Temperature
Temperature Drift
Short Circuit Protection
Overload Trip Point
Material Active Face

<10%
<10mA
200mA
<0.01mA
<2.0V
2KHz 1KHz
0.1ms/0.1ms 0.2ms/0.2ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
PBT

<10%
<10mA
200mA
<0.01mA
<2.0V
2KHz 1KHz
0.1ms/0.1ms 0.2ms/0.2ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
PBT

Connecting type
Weight

M8 connector
approx.25 g

M8 connector
approx.25 g

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 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.
DC 3 wire 5-36 V NPN N.O.
DC 3 wire 5-36 V NPN N.C.
DC 3 wire 5-36 V PNP N.O.
DC 3 wire 5-36 V PNP N.C.

IPS-Q2802N-A1XN3	1*	IPN-Q2804N-A1XN3
IPS-Q2802N-B1XN3	2	IPN-Q2804N-B1XN3
IPS-Q2802P-A1XN3	3	IPN-Q2804P-A1XN3
IPS-Q2802P-B1XN3	4	IPN-Q2804P-B1XN3

IPS-Q2802N-A1PN3	1*	IPN-Q2804N-A1PN3
IPS-Q2802N-B1PN3	2	IPN-Q2804N-B1PN3
IPS-Q2802P-A1PN3	3	IPN-Q2804P-A1PN3
IPS-Q2802P-B1PN3	4	IPN-Q2804P-B1PN3

* Wiring diagram number. Please see the relevant wiring diagram shown on Page 013 to Page 015.

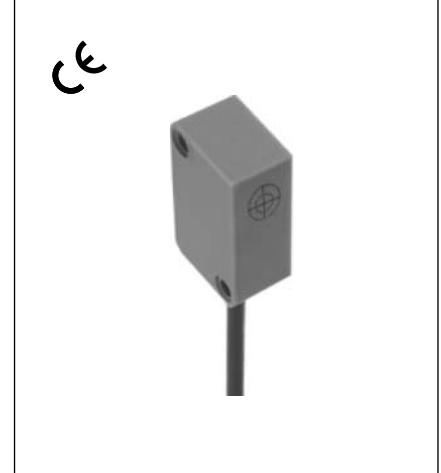
LONG RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

Diameter
● Shielded ○ non-Shielded
Switching Distance, Sn: mm
Housing Material
● With LED ○ Without LED

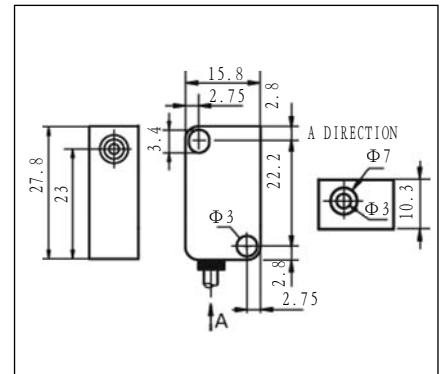
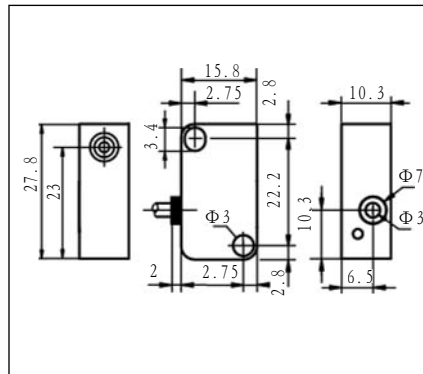
Q16x28x10	
●	○
3 mm	6 mm
PBT	
●	

Q16x28x10	
●	○
3 mm	6 mm
PBT	
●	

Picture



Dimensions (unit: mm)



Ripple
No Load Current
Max. Load current
Leakage Current
Voltage Drop
Switching Frequency
Response Time
Switching Hysteresis
Repeat Accuracy
Protection Category
Operating Temperature
Temperature Drift
Short Circuit Protection
Overload Trip Point
Material Active Face

<10%
<10mA
200mA
<0.01mA
<2.0V
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
PBT

<10%
<10mA
200mA
<0.01mA
<2.0V
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
PBT

Connecting type
Weight

2M Cable (2.9 φ 3x0.15)
approx.55 g

2M Cable (2.9 φ 3x0.15)
approx.55 g

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 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.
DC 3 wire 5-36 V NPN N.O.
DC 3 wire 5-36 V NPN N.C.
DC 3 wire 5-36 V PNP N.O.
DC 3 wire 5-36 V PNP N.C.

IPS-Q2803N-A1LN2	1*	IPN-Q2806N-A1LN2
IPS-Q2803N-B1LN2	2	IPN-Q2806N-B1LN2
IPS-Q2803P-A1LN2	3	IPN-Q2806P-A1LN2
IPS-Q2803P-B1LN2	4	IPN-Q2806P-B1LN2

IPS-Q2803N-A1VN2	1*	IPN-Q2806N-A1VN2
IPS-Q2803N-B1VN2	2	IPN-Q2806N-B1VN2
IPS-Q2803P-A1VN2	3	IPN-Q2806P-A1VN2
IPS-Q2803P-B1VN2	4	IPN-Q2806P-B1VN2

* Wiring diagram number. Please see the relevant wiring diagram shown on Page 013 and Page 014.

LONG RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

Diameter	Q16x28x10	Q16x28x10
<ul style="list-style-type: none"> ● Shielded ○ non-Shielded 	<ul style="list-style-type: none"> ● ○ 	<ul style="list-style-type: none"> ● ○
Switching Distance, Sn: mm	3 mm 6 mm	3 mm 6 mm
Housing Material	PBT	PBT
<ul style="list-style-type: none"> ● With LED ○ Without LED 	<ul style="list-style-type: none"> ● 	<ul style="list-style-type: none"> ●
Picture		
Dimensions (unit: mm)		
Ripple	<10%	<10%
No Load Current	<10mA	<10mA
Max. Load current	200mA	200mA
Leakage Current	<0.01mA	<0.01mA
Voltage Drop	<2.0V	<2.0V
Switching Frequency	1KHz 500Hz	1KHz 500Hz
Response Time	0.2ms/0.2ms 0.5ms/0.5ms	0.2ms/0.2ms 0.5ms/0.5ms
Switching Hysteresis	<15%(Sr)	<15%(Sr)
Repeat Accuracy	<1.0%(Sr)	<1.0%(Sr)
Protection Category	IP67	IP67
Operating Temperature	-25°C - +70°C	-25°C - +70°C
Temperature Drift	<10%(Sr)	<10%(Sr)
Short Circuit Protection	Yes	Yes
Overload Trip Point	220mA	220mA
Material Active Face	PBT	PBT
Connecting type	M8 connector	M8 connector
Weight	approx.25 g	approx.25 g
DC 3 wire 10-30V NPN N.O.	IPS-Q2803N-A1XN3 1* IPN-Q2806N-A1XN3	IPS-Q2803N-A1PN3 1* IPN-Q2806N-A1PN3
DC 3 wire 10-30V NPN N.C.	IPS-Q2803N-B1XN3 2 IPN-Q2806N-B1XN3	IPS-Q2803N-B1PN3 2 IPN-Q2806N-B1PN3
DC 3 wire 10-30V PNP N.O.	IPS-Q2803P-A1XN3 3 IPN-Q2806P-A1XN3	IPS-Q2803P-A1PN3 3 IPN-Q2806P-A1PN3
DC 3 wire 10-30V PNP N.C.	IPS-Q2803P-B1XN3 4 IPN-Q2806P-B1XN3	IPS-Q2803P-B1PN3 4 IPN-Q2806P-B1PN3
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.		
DC 3 wire 5-36 V NPN N.O.		
DC 3 wire 5-36 V NPN N.C.		
DC 3 wire 5-36 V PNP N.O.		
DC 3 wire 5-36 V PNP N.C.		

* Wiring diagram number. Please see the relevant wiring diagram shown on Page 013 to Page 015.