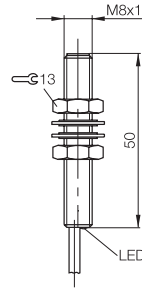
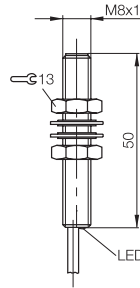


Inductive Proximity switches
Global Version

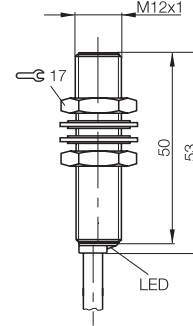
Housing size	M8 x 1	M8 x 1	M12 x 1	M12 x 1
Mounting type	Shield A	ShieldB1	Shield A	ShieldB1
Rated operating distance(Sn)	1.5mm	2mm	2mm	4mm
Assured operating distance(Sa)	0...1.2mm	0...1.6mm	0...1.6mm	0...3.2mm



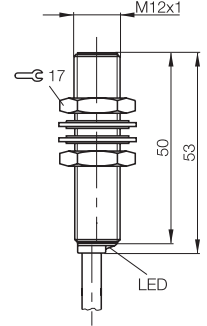
PX1571



PX1571



PX1423



PX1423

Type number	PNP	N.O. N.C.	BES M08MI-PSC15B BES M08MI-POC15B	BES M08MI-PSC20B	BES M12MI-PSC20B BES M12MI-POC20B	BES M12MI-PSC40B BES M12MI-POC40B
Type number	NPN	N.O. N.C.	BES M08MI-NSC15B	BES M08MI-NSC20B	BES M12MI-NSC20B	BES M12MI-NSC40B
Rated operational voltage(Ue)	24V DC		24V DC	24V DC	24V DC	24V DC
Supply voltage(U _B)	12...30V DC		12...30V DC	12...30V DC	12...30V DC	12...30V DC
Voltage drop(U _d)	≤2.5V		≤2.5V	≤2.5V	≤2.5V	≤2.5V
Rated operational current(I _a)	100mA		100mA	200mA	200mA	200mA
No-load supply current(I _o)	PNP=<10mA,NPN=<18mA		PNP=<10mA,NPN=<18mA	PNP=<10mA,NPN=<18mA	≤15mA	≤15mA
Off-state current(I _r)	≤0.08mA		≤0.08mA	≤0.08mA	≤0.02mA	≤0.02mA
Circuit protection	Polarity, Short circuit		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)	-25...+70degrees C		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	1000Hz		1000Hz	700Hz	1200Hz	300Hz
Function indication	Yes		Yes	Yes	Yes	Yes
Protection class per IEC60529	IP67		IP67	IP67	IP68 per BWN pr.20	IP68 per BWN pr.20
Material	Housing	Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass
	Active surface	PA12	PBT	PA12	LCP	LCP
Connection	Cable ¹⁾		Cable ¹⁾	Cable ¹⁾	Cable ¹⁾	Cable ¹⁾
Cable	Outer sheath	PVC	PVC	PVC	PVC	PVC
	Diameter/core	φ 3mm / 3 x 0.14mm ²	φ 3mm / 3 x 0.14mm ²	φ 5mm / 3 x 0.34mm ²	φ 5mm / 3 x 0.34mm ²	φ 5mm / 3 x 0.34mm ²
	Length	2m	2m	3m	3m	3m
Remarks						

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

CableOuter sheath PVC = BV
PU = BP

Cable length 2m = 02

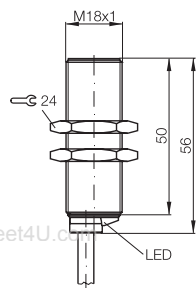
Ordering example (PVC cable 2m)
BES M08MI-PSC15B-BP02

1)Connector type is also available.

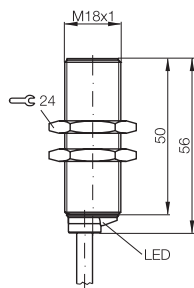
DC 3-wire/Tubular
M8/M12/M18/M30
Sn 1.5/2/4/5/8/10mm

Proximity
switches
Inductive

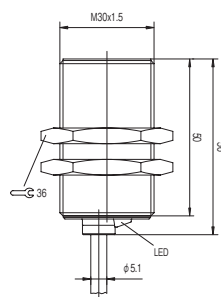
M18 x 1	M18 x 1	M30 x 1.5		
Shield A	ShieldB1	Shield A		
5mm	8mm	10mm		
0...4.1mm	0...6.5mm	0...8.1mm		



PX0268



PX0268



www.DataSheet4U.com

G		G		G			
BES M18MI-PSC50B	BES M18MI-PSC80B	BES M30MI-PSC10B					
BES M18MI-POC50B		BES M30MI-POC10B					
BES M18MI-NSC50B	BES M18MI-NSC80B	BES M30MI-NSC10B					
		BES M30MI-NOC10B					
24V DC	24V DC	24V DC					
12...30V DC	12...30V DC	12...30V DC					
=<2.5V	=<2.5V	=<2.5V					
200mA	200mA	200mA					
=<15mA	=<15mA	=<10mA					
=<0.02mA	=<0.02mA	=<0.02mA					
Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit					
-25...+70degrees C	-25...+70degrees C	-25...+70degrees C					
700Hz	150Hz	400Hz					
Yes	Yes	Yes					
IP68 per BWN pr.20	IP68 per BWN pr.20	IP68 per BWN pr.20					
Nickel plated brass	Nickel plated brass	Nickel plated brass					
PA12	PA12	PA12					
Cable ¹⁾	Cable ¹⁾	Cable ¹⁾					
PVC	PVC	PVC					
Ø 5mm / 3 x 0.34mm ²	Ø 5mm / 3 x 0.34mm ²	Ø 5mm / 3 x 0.34mm ²					
3m	3m	3m					

Global
Version

Standard

Extended
distance

Aluminum chip
non-detectable

Multi metal

Weld
immune

Weld splatter
resistance

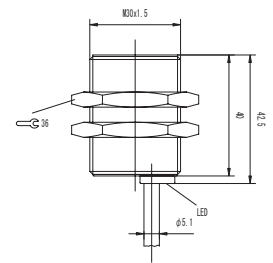
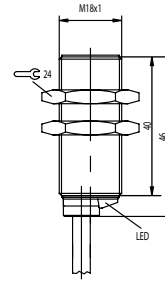
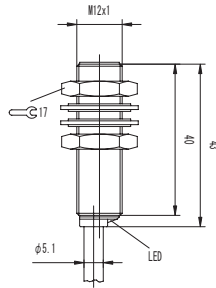
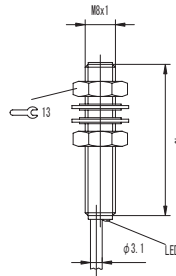
Steel face

Temperature
rated

Pressure
rated

ATEX

Housing size	M8 x 1	M12 x 1	M18 x 1	M30 x 1.5
Mounting type	ShieldB1	ShieldB1	ShieldB1	ShieldB1
Rated operating distance(Sn)	2mm	3mm	7mm	15mm
Assured operating distance(Sa)	0...1.6mm	0...2.4mm	0...5.7mm	0...12.2mm



Type number	N.O.	BES M08MG-GSC20B-BP	BES M12MG-GSC30B-BP	BES M18MG-GSC70B-BP	BES M30MF-GSC15B-BP
Rated operational voltage(Ue)		24V DC	24V DC	24V DC	24V DC
Supply voltage(U _B)		10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(U _d)		=<5V	=<4V	=<4V	=<4V
Rated operational current(I _a)		5...100mA	5...100mA	5...100mA	5...100mA
Off-state current(I _r)		=<0.6mA	=<0.6mA	=<0.6mA	=<0.6mA
Circuit protection		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)		1500Hz	1300Hz	600Hz	400Hz
Function indication		Yes	Yes	Yes	Yes
Protection class per IEC60529		IP67	IP67	IP67	IP67
Material	Housing	Nickel-free plated brass	Nickel-free plated brass	Nickel-free plated brass	Nickel-free plated brass
	Active surface	PBT	PA12	PBT	PA12
Connection		Cable ²⁾	Cable ²⁾	Cable ²⁾	Cable ²⁾
Cable	Outer sheath	PU	PU	PU	PU
	Diameter/core	φ 3mm / 2 x 0.14mm ²	φ 5mm / 2 x 0.34mm ²	φ 5mm / 2 x 0.34mm ²	φ 5mm / 2 x 0.34mm ²
	Length	3m,5m	3m,5m	3m,5m	3m,5m
Remarks					

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

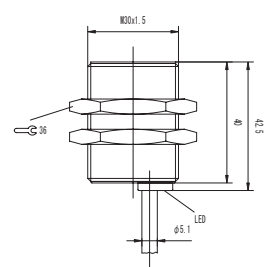
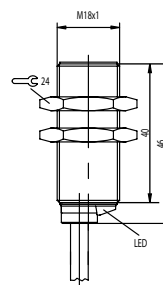
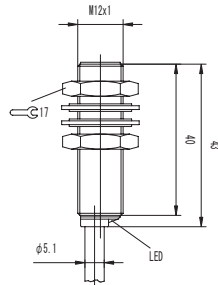
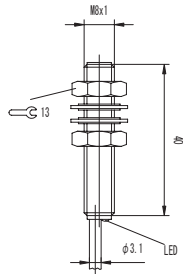
CableOuter sheath PU = BP

Cable length 3m = 03

Ordering example (PVC cable 3m)
BES M08MG-GSC20B-BP03

2)Cable with connector type are also available.

Housing size	M8 x 1	M12 x 1	M18 x 1	M30 x 1.5
Mounting type	ShieldB1	ShieldB1	ShieldB1	ShieldB1
Rated operating distance	2mm	3mm	7mm	15mm
Assured operating distance	0...1.6mm	0...2.4mm	0...5.7mm	0...12.2mm



www.DataSheet4U.com

Type number	N.O.	BES M08MG-USC20B-BV	BES M12MG-USC30B-BV	BES M18MG-USC70B-BV	BES M30MF-USC15B-BP
Rated operational voltage(Ue)		24V DC	24V DC	24V DC	24V DC
Supply voltage(Ua)		10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(Ud)		=<5V	=<5V	=<5V	=<5V
Rated operational current(Ia)		5...100mA	5...100mA	5...100mA	5...100mA
Off-state current(Ir)		=<0.6mA	=<0.6mA	=<0.6mA	=<0.6mA
Circuit protection		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(Ta)		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)		1500Hz	1300Hz	600Hz	400Hz
Function indication		Yes	Yes	Yes	Yes
Protection class per IEC60529		IP67	IP67	IP67	IP67
Material	Housing	Nickel-free plated brass	Nickel-free plated brass	Nickel-free plated brass	Nickel-free plated brass
	Active surface	PBT	PA12	PBT	PA12
Connection		Cable ¹⁾	Cable ¹⁾	Cable ¹⁾	Cable ¹⁾
Cable	Outer sheath	PVC	PVC	PVC	PU
	Diameter/core	φ 3mm / 2 x 0.14mm ²	φ 5mm / 2 x 0.34mm ²	φ 5mm / 2 x 0.34mm ²	φ 5mm / 2 x 0.34mm ²
	Length	3m	3m	3m	3m
Remarks					

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

CableOuter sheath PVC = BV

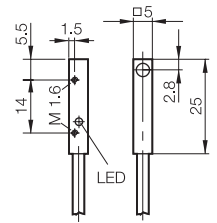
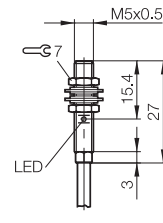
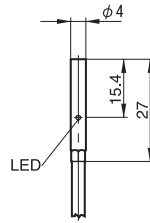
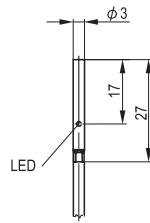
Cable length 3m = 03

Ordering example (PVC cable 3m)
BES M08MG-USC20B-BV03

1)Connector type is also available.

Inductive Proximity switches Standard sensors

Housing size	φ 3	φ 4	M5 x 0.5	□ 5
Mounting type	ShieldB1	ShieldB1	ShieldB1	Shield A
Rated operating distance(Sn)	1mm	1.5mm	1.5mm	0.8mm
Assured operating distance(Sa)	0...0.8mm	0...1.2mm	0...1.2mm	0...0.6mm



www.DataSheet4U.com

PX0706

PX0707a

PX0712

Type number	PNP	N.O. N.C.	BES516-3044-G-E4-C-PU	BES516-3007-G-E4-C-PU BES516-3017-G-E4-C-PU	BES516-3005-G-E4-C-PU BES516-3022-G-E4-C-PU	BES516-3040-I02-C-PU BES516-3042-I02-C-PU
Type number	NPN	N.O. N.C.	BES516-3046-G-E4-L-PU	BES516-3008-G-E4-C-PU BES516-3018-G-E4-C-PU	BES516-3006-G-E4-C-PU BES516-3023-G-E4-C-PU	BES516-3041-I02-C-PU
Rated operational voltage(Ue)	24V DC		24V DC	12...24V DC	12...24V DC	12...24V DC
Supply voltage(U _B)	10...30V DC		10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(U _d)	PNP=<2.5V,NPN=<1.5V		PNP=<2.5V,NPN=<1.5V	=<3V	=<3V	=<1V
Rated operational current(I _a)	100mA		100mA	100mA	100mA	150mA
No-load supply current(I _o)	=<12mA		=<12mA	=<12mA	=<12mA	=<10mA
Off-state current(I _r)	=<0.08mA		=<0.08mA	=<0.08mA	=<0.08mA	=<0.05mA
Circuit protection	Polarity, Short circuit		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)	PNP:-25...+70degrees		PNP:-25...+70degrees	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	2000Hz		2000Hz	1800Hz	1800Hz	1000Hz
Function indication	Yes		Yes	Yes	Yes	Yes
Protection class per IEC60529	IP67		IP67	IP67	IP67	IP65
Material	Housing	Active surface	Stainless steel	Stainless steel	Stainless steel	Al
Connection	Cable		POM	POM	POM	POM
Cable	Outer sheath	Diameter/core	PU	Cable ³⁾ PU	Cable ³⁾ PU	Cable ¹⁾ PU
	Length		φ 2.3mm / 3 x 0.09mm ² 2m,5m	φ 3mm / 3 x 0.14mm ² 2m,5m	φ 3mm / 3 x 0.14mm ² 2m,5m	φ 3mm / 3 x 0.14mm ² 2m,5m
Remarks						

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

CableOuter sheath PVC = blank
PU = PU

Cable length 3m = 03

Ordering example (PVC cable 3m)
BES516-3007-G-E4-C-PU03

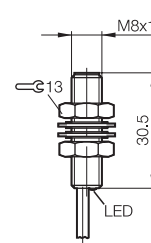
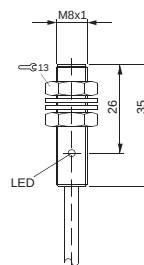
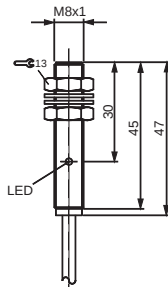
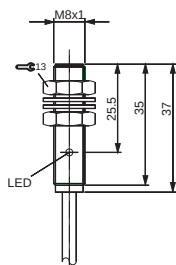
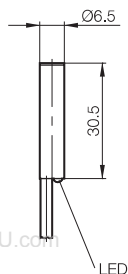
1 Connector type is also available.

3 Connector type and cable with connector type are also available.

www.DataSheet4U.com

DC 3-wire
 ϕ 3/ ϕ 4/H5/ $\square$ 5
/ ϕ 6.5/M8
Sn 1/1.5/2mm

ϕ 6.5	M8 x 1	M8 x 1	M8 x 1	M8 x 1
ShieldB1	Shield A	Shield A	Shield A	ShieldB1
2mm	1.5mm	1.5mm	2mm	2mm
0...1.2mm	0...1.2mm	0...1.2mm	0...1.6mm	0...1.6mm



PX0134

G	J	J	J	G
BES516-371-G-E4-C	BES516-324-E3R	BES516-324-E5R		BES516-324-G-E4-C
BES516-3021-G-E4-C	BES516-377-E3R	BES516-377-E5R		BES516-377-G-E4-C
BES516-372-G-E4-C	BES516-343-E3R	BES516-343-E5R	BL3-0802N	BES516-343-G-E4-C
	BES516-378-E3R	BES516-378-E5R		BES516-378-G-E4-C
12...24V DC	12...24V DC	12...24V DC	12...24V DC	12...24V DC
10...30V DC	10...30V DC	10...30V DC	10...30V DC	10...30V DC
=<2.5V	=<1.5V	=<1.5V	=<2.5V	=<2.5V
200mA	200mA	200mA	200mA	200mA
=<25mA	=<13mA	=<13mA	=<20mA	=<25mA
=<0.08mA	=<0.08mA	=<0.08mA	=<0.08mA	=<0.08mA
Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
1000Hz	1000Hz	1000Hz	1000Hz	1000Hz
Yes	Yes	Yes	Yes	Yes
IP67	IP67	IP67	IP67	IP67
Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
PBT	Poly Propylene	Poly Propylene	Poly Propylene	PBT
Cable	Cable	Cable	Cable	Cable ³⁾
PVC	PVC	PVC	PVC	PVC
ϕ 3mm / 3 x 0.14mm ²	ϕ 4mm / 3 x 0.14mm ²	ϕ 4mm / 3 x 0.14mm ²	ϕ 4mm / 3 x 0.14mm ²	ϕ 4mm / 3 x 0.14mm ²
2m	2m,3m,5m	2m,3m,5m	2m,3m,5m	2m

Global
Version

Standard

Extended
distanceAluminum chip
non-detectable

Multi metal

Weld
immuneWeld splatter
resistance

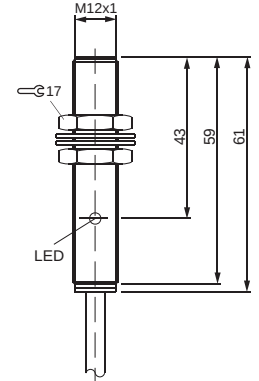
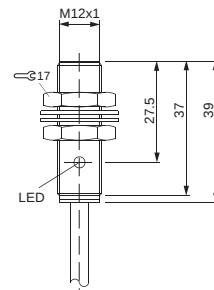
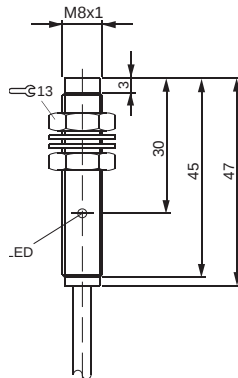
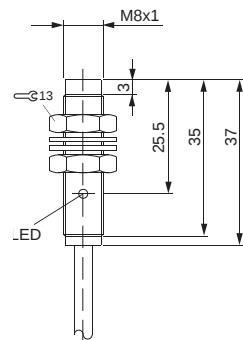
Steel face

Temperature
ratedPressure
rated

ATEX

Inductive Proximity switches Standard sensors

Housing size	M8 x 1	M8 x 1	M12 x 1	M12 x 1
Mounting type	Non-shield A	Non-shield A	Shield A	Shield A
Rated operating distance(Sn)	2.5mm	2.5mm	2mm	2mm
Assured operating distance(Sa)	0...2mm	0...2mm	0...1.6mm	0...1.6mm



Type number	PNP	N.O. N.C. N.O.+N.C.	BES516-383-E3R	BES516-383-E5R	BES516-325-E3R BES516-370-E3R	BES516-325-E5R BES516-370-E5R
Type number	NPN	N.O. N.C. N.O.+N.C.	BES516-384-E3R	BES516-384-E5R	BES516-329-E3R BES516-375-E3R	BES516-329-E5R BES516-375-E5R
Rated operational voltage(Ue)	12...24V DC		12...24V DC	12...24V DC	12...24V DC	12...24V DC
Supply voltage(U _B)	10...30V DC		10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(U _d)	≤1.5V		≤1.5V	≤1.5V	≤1.5V	≤3.5V
Rated operational current(I _a)	200mA		200mA	200mA	200mA	130mA
No-load supply current(I _o)	≤13mA		≤13mA	≤13mA	≤13mA	≤20mA
Off-state current(I _r)	≤0.08mA		≤0.08mA	≤0.08mA	≤0.08mA	≤0.08mA
Circuit protection	Polarity, Short circuit		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)	-25...+70degrees C		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	1000Hz		1000Hz	1000Hz	1000Hz	1000Hz
Function indication	Yes		Yes	Yes	Yes	Yes
Protection class per IEC60529	IP67		IP67	IP67	IP67	IP67
Material	Housing	Stainless steel	Stainless steel	Stainless steel	Nickel plated brass	Nickel plated brass
	Active surface	Poly Propylene	Poly Propylene	Poly Propylene	Poly Propylene	Poly Propylene
Connection	Cable		Cable	Cable	Cable	Cable
Cable	Outer sheath	PVC	PVC	PVC	PVC	PVC
	Diameter/core	φ 4mm / 3 x 0.14mm ²	φ 4mm / 3 x 0.14mm ²	φ 4mm / 3 x 0.14mm ²	φ 5mm / 3 x 0.3mm ²	φ 5mm / 3 x 0.3mm ²
	Length	2m,3m,5m	2m,3m,5m	2m,3m,5m	2m,3m,5m	2m,3m,5m
Remarks						

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

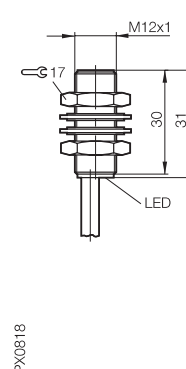
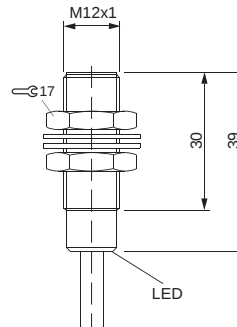
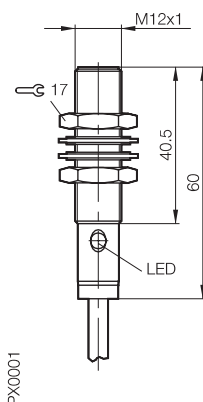
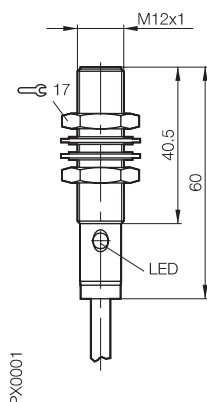
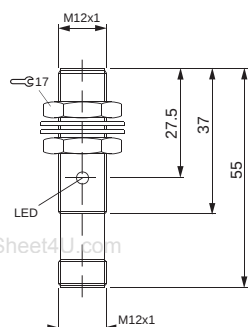
CableOuter sheath PVC = blank
PU = PU

Cable length 3m = 03

Ordering example (PVC cable 3m)
BES516-383-E3R-03

DC 3-wire/Tubular
M8/M12
Sn 2/2.5/4mm

M12 x 1	M12 x 1	M12 x 1	M12 x 1	M12 x 1
Shield A	Shield A	Shield A	Shield A	ShieldB1
2mm	2mm	2mm	4mm ^(*) (3.5mm)	4mm
0...1.6mm	0...1.6mm	0...1.6mm	0...3.2mm ^(*) (0...2.8mm)	0...3.2mm



J		G		J		G	
BC5-1202P			BES516-325-B0-C			BES516-325-G-E4Y	
BC5-1202P1		BES516-113-B0-C	BES516-370-B0-C			BES516-370-G-E4Y	
BC5-1202N			BES516-329-B0-C	BL3-1204N		BES516-329-G-E4Y	
BC5-1202N1		BES516-118-B0-C	BES516-375-B0-C			BES516-375-G-E4Y	
12...24V DC	12...24V DC	12...24V DC	12...24V DC	12...24V DC	12...24V DC	12...24V DC	12...24V DC
10...30V DC	10...30V DC	10...30V DC	10...30V DC	10...30V DC	10...30V DC	10...30V DC	10...30V DC
=<1.5V	=<2.5V	=<1.5V	=<1.5V	=<2.5V	=<3.5V	=<25mA	=<0.08mA
200mA	200mA	200mA	200mA	200mA	130mA	=<0.08mA	
=<13mA	=<32mA	=<8mA	=<0.01mA	=<13mA			
=<0.08mA	=<0.08mA			=<0.08mA			
Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	
-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	
300Hz	800Hz	3000Hz	400Hz	PNP:600Hz,NPN:400Hz			
Yes	Yes	Yes	Yes	Yes	Yes		
IP67	IP68 per BWN pr.20	IP68 per BWN pr.20	IP67	IP68 per BWN pr.20			
Nickel plated brass	Stainless steel	Stainless steel	Nickel plated brass	Nickel plated brass			
Poly Propylene	PA12	PA12	Poly Propylene	PA12			
connector/M12	Cable	Cable	Cable	Cable ^(*)			
	PVC	PVC	PVC	PVC			
	φ 5mm / 4 x 0.25mm ²	φ 5mm / 3 x 0.34mm ²	φ 5mm / 3 x 0.3mm ²	φ 5mm / 3 x 0.34mm ²			
	3m,5m	3m	2m,3m,5m	3m			
Pin assignment of NO & NC			(*)The distance in flush mounted.				
1 = + , 3 = -, 4 = output			The distance in () is non-flush.				

Global
Version

Standard

Extended
distanceAluminum chip
non-detectable

Multi metal

Weld
immuneWeld splatter
resistance

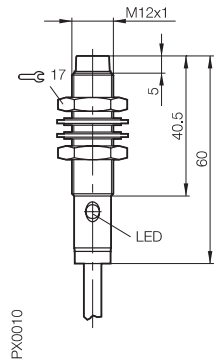
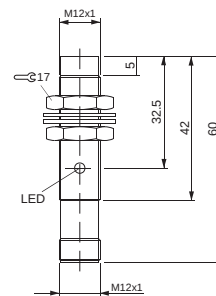
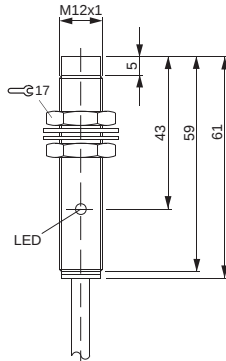
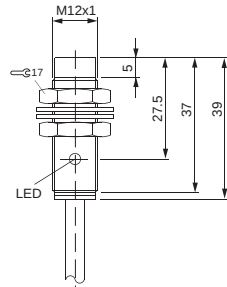
Steel face

Temperature
ratedPressure
rated

ATEX

Inductive Proximity switches Standard sensors

Housing size	M12 x 1	M12 x 1	M12 x 1	M12 x 1
Mounting type	Non-shield A	Non-shield A	Non-shield A	Non-shield A
Rated operating distance(Sn)	4mm	4mm	4mm	4mm
Assured operating distance(Sa)	0...3.2mm	0...3.2mm	0...3.2mm	0...3.2mm



Type number	PNP	N.O. N.C. N.O.+N.C.	BES516-356-E3R	BES516-356-E5R	BC5-1204P	BES516-356-B0-C BES516-3019-B0-C
Type number	NPN	N.O. N.C. N.O.+N.C.	BES516-357-E3R	BES516-357-E5R	BC5-1204N	BES516-357-B0-C BES516-3030-B0-C
Rated operational voltage(Ue)	12...24V DC		12...24V DC	12...24V DC	12...24V DC	24V DC
Supply voltage(U _B)	10...30V DC		10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(U _d)	≤1.5V		≤1.5V	≤3.5V	≤3.5V	≤1.5V
Rated operational current(I _a)	200mA		200mA	130mA	200mA	200mA
No-load supply current(I _o)	≤13mA		≤13mA	≤20mA	≤13/2mA	≤8mA
Off-state current(I _r)	≤0.08mA		≤0.08mA	≤0.08mA	≤0.08mA	≤0.01mA
Circuit protection	Polarity, Short circuit		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)	-25...+70degrees C		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	400Hz		400Hz	400Hz	400Hz	1500Hz
Function indication	Yes		Yes	Yes	Yes	Yes
Protection class per IEC60529	IP67		IP67	IP67	IP67	IP68 per BWN pr.20
Material	Housing	Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass	Stainless steel
	Active surface	Poly Propylene	Poly Propylene	Poly Propylene	Poly Propylene	PA12
Connection	Cable		Cable	Cable	connector/M12	Cable
Cable	Outer sheath	PVC	PVC	PVC		PVC or PUR
	Diameter/core	φ 5mm / 3 x 0.3mm ²	φ 5mm / 3 x 0.3mm ²	φ 5mm / 3 x 0.3mm ²		φ 5mm / 3 x 0.34mm ²
	Length	2m,3m,5m	2m,3m,5m			3m
Remarks					Pin assignment of NO & NC 1 = +, 3 = -, 4 = output	

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

CableOuter sheath PVC = blank
PU = PU

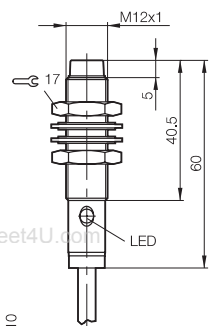
Cable length 3m = 03

Ordering example (PVC cable 3m)
BES516-356-E3R-03

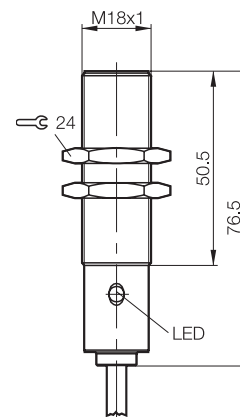
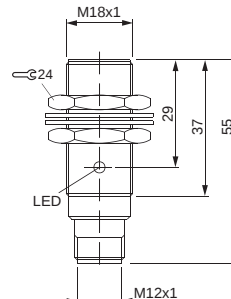
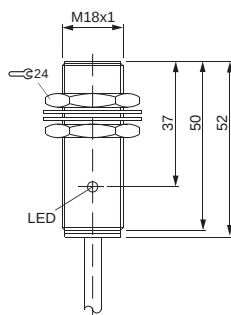
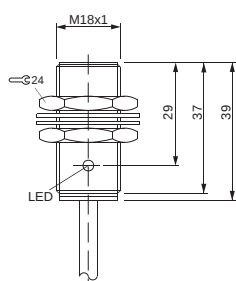
DC 3-wire/Tubular
M8/M12
Sn 4/5mm

Proximity
switches
Inductive

M12 x 1	M18 x 1	M18 x 1	M18 x 1	M18 x 1
Non-shield A	Shield A	Shield A	Shield A	Shield A
4mm	5mm	5mm	5mm	5mm
0...3.2mm	0...4mm	0...4mm	0...4mm	0...4.1mm



PX0010



G	J	J	J	G
BES516-131-B0-C	BES516-326-E3R BES516-367-E3R	BES516-326-E5R BES516-367-E5R	BC5-1805P BC5-1805P1	BES516-105-B0-C
BES516-122-B0-C	BES516-355-E3R BES516-366-E3R	BES516-355-E5R BES516-366-E5R	BC5-1805N BC5-1805N1	BES516-111-B0-C
12...24V DC	12...24V DC	12...24V DC	12...24V DC	12...24V DC
10...30V DC	10...30V DC	10...30V DC	10...30V DC	10...30V DC
=<2.5V	=<3.5V	=<3.5V	=<3.5V	=<2.5V
200mA	130mA	130mA	130mA	200mA
=<32mA	=<20mA	=<20mA	=<20mA	=<30mA
=<0.08mA	=<0.08mA	=<0.08mA	=<0.08mA	=<0.08mA
Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
400Hz	500Hz	500Hz	300Hz	500Hz
Yes	Yes	Yes	Yes	Yes
IP68 per BWN pr.20	IP67	IP67	IP67	IP67
Stainless steel	Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass
PA12	Poly Propylene	Poly Propylene	Poly Propylene	PA12
Cable	Cable	Cable	connector/M12	Cable
PVC or PUR	PVC	PVC		PVC or PUR
φ 5mm / 4 x 0.25mm ²	φ 5mm / 3 x 0.3mm ²	φ 5mm / 3 x 0.3mm ²		φ 5mm / 4 x 0.25mm ²
3m	2m,3m,5m	2m,3m,5m		3m
			Pin assignment of NO & NC 1 = +, 3 = -, 4 = output	

Global
Version

Standard

Extended
distance

Aluminum chip
non-detectable

Multi metal

Weld
immune

Weld splatter
resistance

Steel face

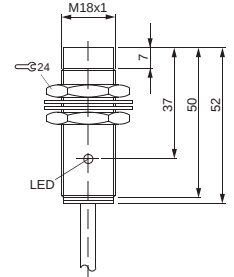
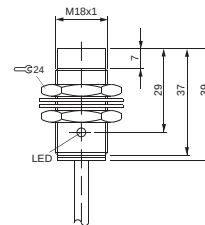
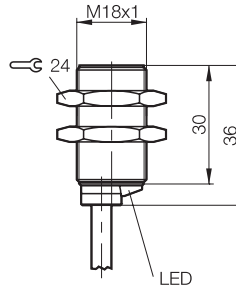
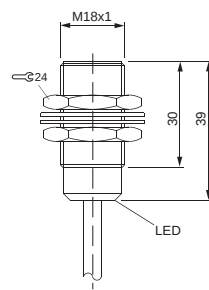
Temperature
rated

Pressure
rated

ATEX

Inductive Proximity switches Standard sensors

Housing size	M18 x 1	M18 x 1	M18 x 1	M18 x 1
Mounting type	Shield A	ShieldB1	Non-shield A	Non-shield A
Rated operating distance(Sn)	8mm (*) (7mm)	8mm	8mm	8mm
Assured operating distance(Sa)	0...6.4mm (*) (0...5.6mm)	0...6.5mm	0...6.4mm	0...6.4mm



Type number	PNP	N.O.		BES516-326-G-E4Y	BES516-360-E3R	BES516-360-E5R
		N.C.		BES516-367-G-E4Y		
		N.O.+N.C.				
Type number	NPN	N.O.	BL3-1808N	BES516-355-G-E4Y	BES516-361-E3R	BES516-361-E5R
		N.C.		BES516-366-G-E4Y		
		N.O.+N.C.				
Rated operational voltage(Ue)	12...24V DC		12...24V DC	12...24V DC	12...24V DC	12...24V DC
Supply voltage(U _B)	10...30V DC		10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(U _d)	≤2.5V		≤2.5V	≤3.5V	≤3.5V	≤3.5V
Rated operational current(I _a)	200mA		200mA	130mA	130mA	130mA
No-load supply current(I _o)	≤20mA		≤20mA	≤25mA	≤20mA	≤20mA
Off-state current(I _r)	≤0.08mA		≤0.08mA	≤0.08mA	≤0.08mA	≤0.08mA
Circuit protection	Polarity, Short circuit		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)	-25...+70degrees C		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	200Hz		200Hz	200Hz	200Hz	200Hz
Function indication	Yes		Yes	Yes	Yes	Yes
Protection class per IEC60529	IP67		IP67	IP68 per BWN pr.20	IP67	IP67
Material	Housing	Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass
	Active surface	Poly Propylene	Poly Propylene	PA12	Poly Propylene	Poly Propylene
Connection	Cable		Cable	Cable ¹⁾	Cable	Cable
Cable	Outer sheath	PVC	PVC	PVC	PVC	PVC
	Diameter/core	φ 5mm / 3 x 0.3mm ²	φ 5mm / 3 x 0.34mm ²	φ 5mm / 3 x 0.34mm ²	φ 5mm / 3 x 0.3mm ²	φ 5mm / 3 x 0.3mm ²
	Length	2m,3m,5m	3m	3m	2m,3m,5m	2m,3m,5m
Remarks	(*)The distance in flush mounted. The distance in () is non-flush.					

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

CableOuter sheath PVC = blank
PU = PU

Cable length 3m = 03

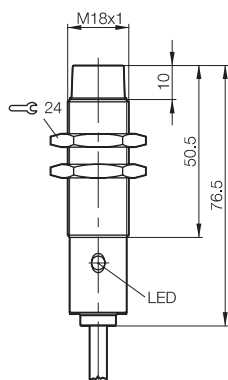
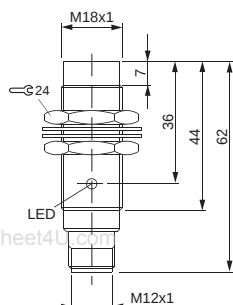
Ordering example (PVC cable 3m)
BL3-1808N-03

1)Connector type is also available.

DC 3-wire/Tubular
M18
Sn 8mm

Proximity
switches
Inductive

M18 x 1	M18 x 1			
Non-shield A	Non-shield A			
8mm	8mm			
0...6.4mm	0...6.5mm			



www.DataSheet4U.com

J		G		
BC5-1808P				
	BES516-123-BO-C			
BC5-1808N				
	BES516-124-BO-C			
12...24V DC	12...24V DC			
10...30V DC	10...30V DC			
=<3.5V	=<2.5V			
130mA	200mA			
=<20mA	=<30mA			
=<0.08mA	=<0.08mA			
Polarity, Short circuit	Polarity, Short circuit			
-25...+70degrees C	-25...+70degrees C			
200Hz	200Hz			
Yes	Yes			
IP67	IP67			
Nickel plated brass	Nickel plated brass			
Poly Propylene	PA12			
connector/M12	Cable ¹⁾			
	PVC			
	φ 5mm / 4 x 0.25mm ²			
	3m			

Global
Version

Standard

Extended
distance

Aluminum chip
non-detectable

Multi metal

Weld
immune

Weld splatter
resistance

Steel face

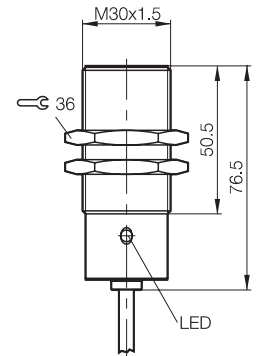
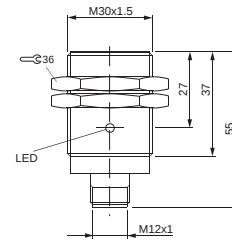
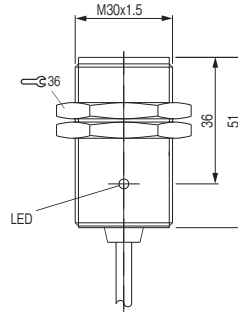
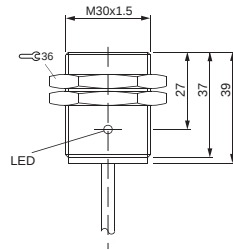
Temperature
rated

Pressure
rated

ATEX

Inductive Proximity switches Standard sensors

Housing size	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5
Mounting type	Shield A	Shield A	Shield A	Shield A
Rated operating distance(Sn)	10mm	10mm	10mm	10mm
Assured operating distance(Sa)	0...8mm	0...8mm	0...8mm	0...8.1mm



Type number	PNP	N.O. N.C. N.O.+N.C.	BES516-327-E3R	BES516-327-E5R	BC5-3010P	BES516-114-B0-C
Type number	NPN	N.O. N.C. N.O.+N.C.	BES516-359-E3R	BES516-359-E5R	BC5-3010N	BES516-120-B0-C
Rated operational voltage(Ue)	12...24V DC		12...24V DC	12...24V DC	12...24V DC	12...24V DC
Supply voltage(U _B)	10...30V DC		10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(U _d)	≤3.5V		≤3.5V	≤3.5V	≤3.5V	≤2.5V
Rated operational current(I _a)	130mA		130mA	130mA	130mA	200mA
No-load supply current(I ₀)	≤20mA		≤20mA	≤20mA	≤20mA	≤30mA
Off-state current(I _r)	≤0.08mA		≤0.08mA	≤0.08mA	≤0.08mA	≤0.08mA
Circuit protection	Polarity, Short circuit		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)	-25...+70degrees C		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	300Hz		300Hz	300Hz	300Hz	300Hz
Function indication	Yes		Yes	Yes	Yes	Yes
Protection class per IEC60529	IP67		IP67	IP67	IP67	IP67
Material	Housing	Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass
	Active surface	Poly Propylene	Poly Propylene	Poly Propylene	Poly Propylene	PA12
Connection	Cable		Cable	Cable	connector/M12	Cable
Cable	Outer sheath	PVC	PVC	PVC		PVC
	Diameter/core	φ 5mm / 3 x 0.3mm ²	φ 5mm / 3 x 0.3mm ²	φ 5mm / 3 x 0.3mm ²		φ 5mm / 4 x 0.25mm ²
	Length	2m,3m,5m	2m,3m,5m			3m
Remarks						

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

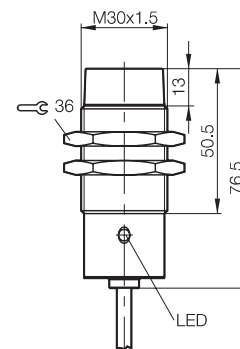
CableOuter sheath PVC = blank
PU = PU

Cable length 3m = 03

Ordering example (PVC cable 3m)
BES516-327-E3R-03

1)Connector type is also available.

www.DataSheet4U.com

Global
Version

Standard

Extended distance

Aluminum chip
non-detectable

Multi metal

Weld
immune

Weld splatter resistance

Steel face

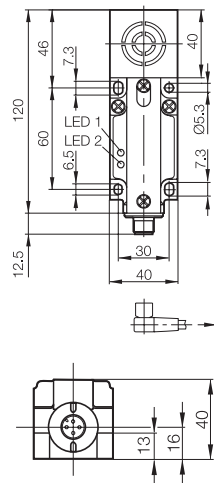
Temperature
ratedPressure
rated

ATEX

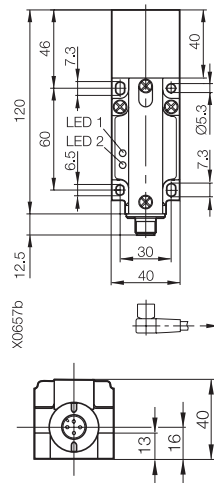
100

Inductive Proximity switches Standard sensors

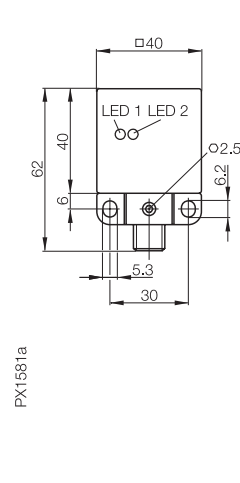
Housing size	40 x 40 x 120	40 x 40 x 120	40 x 40 x 62	
Mounting type	Shield A	Non-shield	Non-shield	Non-shield
Rated operating distance(Sn)	20mm	40mm	25mm	30mm
Assured operating distance(Sa)	0...16.2mm	0...32.4mm	0...20.3mm	0...24.3mm



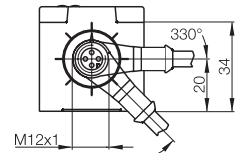
G



G



G



G

Type number	PNP	N.O.				
		N.C.				
		N.O.+N.C.	BES517-132-M6-H-S4	BES517-132-M7-H-S4		BES Q40KFU-PAC30F-S04G

Type number	NPN	N.O.				
		N.C.				
		N.O.+N.C.	BES517-134-M6-H-S4	BES517-134-M7-H-S4	BES Q40KFU-NAC25F-S04G	

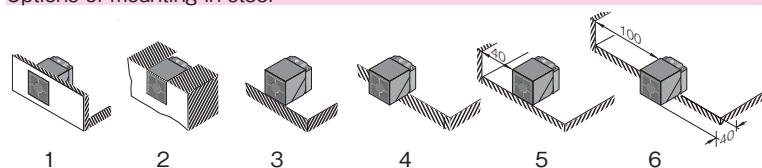
Rated operational voltage(Ue)	12...24V DC	12...24V DC	24V DC	24V DC
Supply voltage(U _B)	10...55V DC	10...55V DC	10...30V DC	10...30V DC
Voltage drop(U _d)	=<2.5V	=<2.5V	=<2.5V	=<2.5V
Rated operational current(I _a)	200mA	200mA	200mA	200mA
No-load supply current(I _o)	=<20mA	=<20mA	=<20mA	=<20mA
Off-state current(I _r)	=<0.08mA	=<0.08mA	=<0.08mA	=<0.08mA
Circuit protection	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit

Ambient temperature range(T _a)	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	50Hz	50Hz	50Hz	50Hz
LED indication	Function, Power	Function, Power	Function, Power	Function, Power

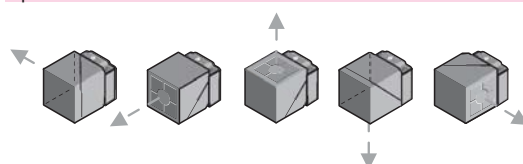
Protection class per IEC60529	IP67	IP67	IP67	IP67
Material	Housing: PBT	PBT	PBT/GD-AI	PBT/GD-AI
	Active surface: PBT	PBT	PBT	PBT
Connection	connector/M12	connector/M12	connector/M12	connector/M12

Mounting option	Fig.1.....6 are available.	Fig. 4 and 6 are available	Fig. 4 and 6 are available	Fig. 4 and 6 are available
Remarks	Active surface is oriented in five directions.		Active surface is oriented in five directions.	Active surface is oriented in five directions.

Options of mounting in steel



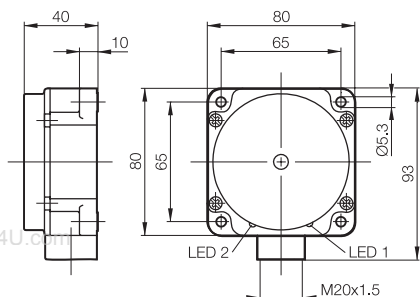
Options of active surface



DC 3-wire
Block style housing
Sn 20/25/30/40/50mm

Proximity
switches
Inductive

80 x 80 x 40				
Non-shield A	Non-shield A			
50mm	50mm ^(*)			
0...40.5mm	0...40mm ^(*)			



www.DataSheet4U.com

BES517-139-M5-H				
BES517-140-M5-H	BES517-140-M6-CA1			
12...24V DC	12...24V DC			
10...55V DC	10...55V DC			
=<2.5V	=<2.5V			
200mA	200mA			
=<15mA	=<15mA			
=<0.08mA	=<0.08mA			
Polarity, Short circuit	Polarity, Short circuit			
-25...+70degrees C	-25...+70degrees C			
100Hz	100Hz			
Function, Power	Function, Power			
IP67	IP67			
PBT	PBT			
PBT	PBT			
Screw terminals ¹⁾ /=<2.5mm ²	Screw terminals/=<2.5mm ²			
	(*) Adjustable by a potentiometer in the range of 25 to 60mm.			

1)Connector type is also available.

Global
Version

Standard

Extended
distance

Aluminum chip
non-detectable

Multi metal

Weld
immune

Weld splatter
resistance

Steel face

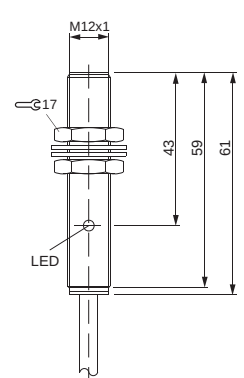
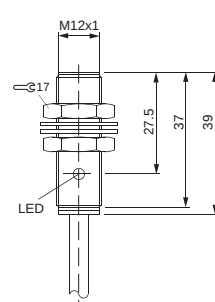
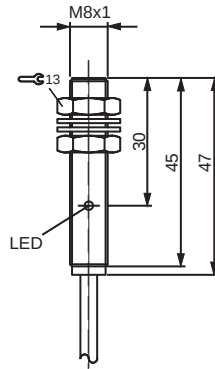
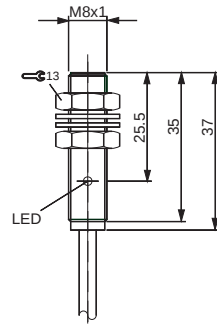
Temperature
rated

Pressure
rated

ATEX

Inductive Proximity switches Standard sensors

Housing size	M8 x 1	M8 x 1	M12 x 1	M12 x 1
Mounting type	Shield A	Shield A	Shield A	Shield A
Rated operating distance(Sn)	1.5mm	1.5mm	2mm	2mm
Assured operating distance(Sa)	0...1.2mm	0...1.2mm	0...1.6mm	0...1.6mm



Type number	DC2W	N.O. N.C.	BR3-0801D BR3-0801D1	BR5-0801D BR5-0801D1	BR3-1202D BR3-1202D1	BR5-1202D BR5-1202D1
Rated operational voltage(Ue)	12...24V DC		12...24V DC	12...24V DC	12...24V DC	12...24V DC
Supply voltage(U _B)	10...30V DC		10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(U _d)	=<3.5V		=<3.5V	=<3.5V	=<3.5V	=<3.5V
Rated operational current(I _a)	4...100mA		4...100mA	4...100mA	4...100mA	4...100mA
Off-state current(I _r)	=<0.65mA		=<0.65mA	=<0.65mA	=<0.65mA	=<0.65mA
Circuit protection	Polarity, Short circuit		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)	-25...+70degrees C		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	800Hz		800Hz	800Hz	800Hz	800Hz
LED indication	Function		Function	Function	Function	Function
Protection class per IEC60529	IP67		IP67	IP67	IP67	IP67
Material	Housing		Stainless steel	Stainless steel	Nickel plated brass	Nickel plated brass
	Active surface		Poly Propylene	Poly Propylene	Poly Propylene	Poly Propylene
Connection	Cable		Cable	Cable	Cable	Cable
Cable	Outer sheath		PVC	PVC	PVC	PVC
	Diameter/core		φ 4mm / 2 x 0.14mm ²	φ 4mm / 2 x 0.14mm ²	φ 5mm / 2 x 0.5mm ²	φ 5mm / 2 x 0.5mm ²
	Length		2m,3m,5m	2m,3m,5m	2m,3m,5m	2m,3m,5m
Remarks						

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

CableOuter sheath PVC = blank
PU = PU

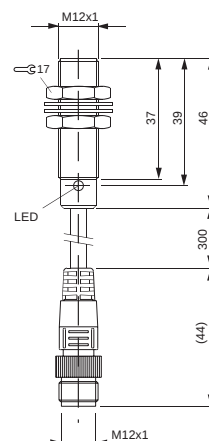
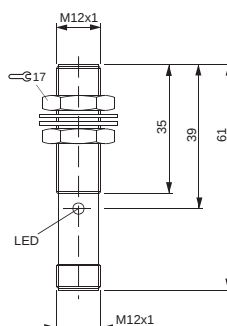
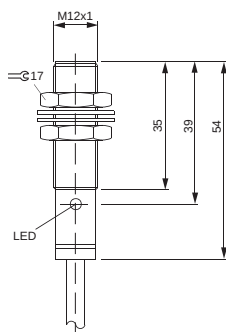
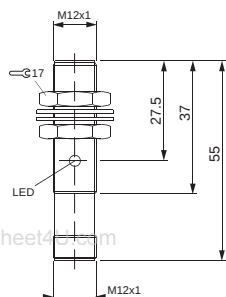
Cable length 3m = 03

Ordering example (PVC cable 3m)
BR3-0801D-03

DC 2-wire / Polarized/Tubular
M8/M12
Sn 1.5/2/3mm

Proximity
switches
Inductive

M12 x 1	M12 x 1	M12 x 1	M12 x 1	
Shield A	ShieldB2	ShieldB2	ShieldB2	
2mm	3mm	3mm	3mm	
0...1.6mm	0...2.4mm	0...2.4mm	0...2.4mm	



BC5-1202D	BR5-1203F	BCX-1203F	BCX-1203F-CP03	
BC5-1202D1				
12...24V DC	12...24V DC	12...24V DC	12...24V DC	
10...30V DC	10...30V DC	10...30V DC	10...30V DC	
=<3.5V	=<3.5V	=<3.5V	=<3.5V	
4...100mA	4...100mA	4...100mA	4...100mA	
=<0.65mA	=<0.65mA	=<0.65mA	=<0.65mA	
Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	
-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	
800Hz	800Hz	800Hz	800Hz	
Function	Function,Setting	Function,Setting	Function,Setting	
IP67	IP67	IP67	IP67	
Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass	
Poly Propylene	Nylon	Nylon	Nylon	
connector/M12	Cable	connector/M12	Cable with connector/M12	
	PVC			
	φ 5mm / 2 x 0.5mm ²			
	2m,3m,5m			
Pin assignment of NO & NC : 1= +, 3= -				

Global
Version

Standard

Extended
distance

Aluminum chip
non-detectable

Multi metal

Weld
immune

Weld splatter
resistance

Steel face

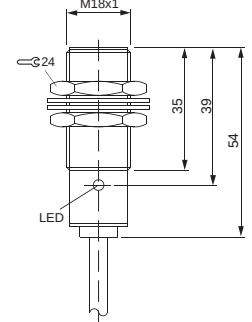
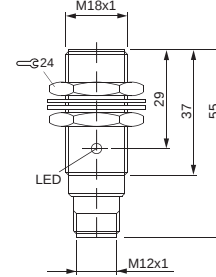
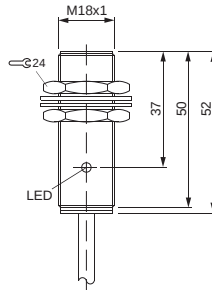
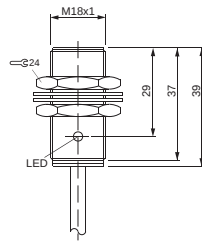
Temperature
rated

Pressure
rated

ATEX

Inductive Proximity switches Standard sensors

Housing size	M18 x 1	M18 x 1	M18 x 1	M18 x 1
Mounting type	Shield A	Shield A	Shield A	ShieldB2
Rated operating distance(Sn)	5mm	5mm	5mm	7mm
Assured operating distance(Sa)	0...4mm	0...4mm	0...4mm	0...5.6mm



Type number	DC2W	N.O. N.C.	BR3-1805D BR3-1805D1	BR5-1805D BR5-1805D1	BC5-1805D BC5-1805D1	BR5-1807F
Rated operational voltage(Ue)	12...24V DC		12...24V DC	12...24V DC	12...24V DC	12...24V DC
Supply voltage(U _B)	10...30V DC		10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(U _d)	=<3.5V		=<3.5V	=<3.5V	=<3.5V	=<3.5V
Rated operational current(I _a)	4...100mA		4...100mA	4...100mA	4...100mA	4...100mA
Off-state current(I _r)	=<0.5mA		=<0.5mA	=<0.5mA	=<0.5mA	=<0.65mA
Circuit protection	Polarity, Short circuit		Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(Ta)	-25...+70degrees C		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	500Hz		500Hz	500Hz	500Hz	200Hz
LED indication	Function		Function	Function	Function	Function,Setting
Protection class per IEC60529	IP67		IP67	IP67	IP67	IP67
Material	Housing		Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass
	Active surface		Poly Propylene	Poly Propylene	Poly Propylene	Nylon
Connection	Cable		Cable	Cable	connector/M12	Cable
Cable	Outer sheath		PVC	PVC		PVC
	Diameter/core		φ 5mm / 2 x 0.5mm ²	φ 5mm / 2 x 0.5mm ²		φ 5mm / 2 x 0.5mm ²
	Length		2m,3m,5m	2m,3m,5m		2m,3m,5m
Remarks					Pin assignment of NO & NC : 1= +, 3= -	

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

CableOuter sheath PVC = blank
PU = PU

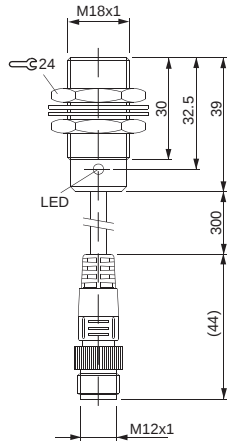
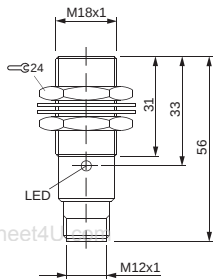
Cable length 3m = 03

Ordering example (PVC cable 3m)
BR3-1805D-03

DC 2-wire / Polarized/Tubular
M18
Sn 5/7mm

Proximity
switches
Inductive

M18 x 1	M18 x 1			
ShieldB2	ShieldB2			
7mm	7mm			
0...5.6mm	0...5.6mm			



①

①

BCX-1807F	BCX-1807F-CP03			
12...24V DC	12...24V DC			
10...30V DC	10...30V DC			
=<3.5V	=<3.5V			
4...100mA	4...100mA			
=<0.65mA	=<0.65mA			
Polarity, Short circuit	Polarity, Short circuit			
-25...+70degrees C	-25...+70degrees C			
200Hz	200Hz			
Function,Setting	Function,Setting			
IP67	IP67			
Nickel plated brass	Nickel plated brass			
Nylon	Nylon			
connector/M12	Cable with connector/M12			

Global
Version

Standard

Extended
distance

Aluminum chip
non-detectable

Multi metal

Weld
immune

Weld splatter
resistance

Steel face

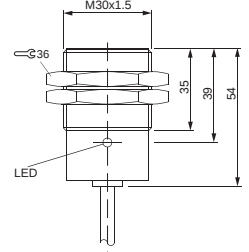
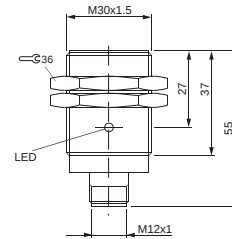
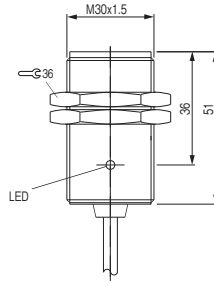
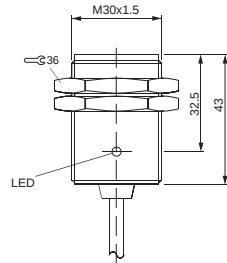
Temperature
rated

Pressure
rated

ATEX

Inductive Proximity switches Standard sensors

Housing size	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5
Mounting type	Shield A	Shield A	Shield A	ShieldB2
Rated operating distance(Sn)	10mm	10mm	10mm	12mm
Assured operating distance(Sa)	0...8mm	0...8mm	0...8mm	0...9.6mm



Type number	DC2W	N.O. N.C.	BR3-3010D BR3-3010D1	BR5-3010D BR5-3010D1	BC5-3010D	BR5-3012F
Rated operational voltage(Ue)			12...24V DC	12...24V DC	12...24V DC	12...24V DC
Supply voltage(U _B)			10...30V DC	10...30V DC	10...30V DC	10...30V DC
Voltage drop(U _d)			=<3.5V	=<3.5V	=<3.5V	=<3.5V
Rated operational current(I _a)			4...100mA	4...100mA	4...100mA	4...100mA
Off-state current(I _r)			=<0.65mA	=<0.65mA	=<0.5mA	=<0.65mA
Circuit protection			Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)			-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)			300Hz	300Hz	300Hz	200Hz
LED indication			Function	Function	Function	Function,Setting
Protection class per IEC60529			IP67	IP67	IP67	IP67
Material	Housing		Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass
	Active surface		Poly Propylene	Poly Propylene	Poly Propylene	Nylon
Connection			Cable	Cable	connector/M12	Cable
Cable	Outer sheath		PVC	PVC		PVC
	Diameter/core		φ 5mm / 2 x 0.5mm ²	φ 5mm / 2 x 0.5mm ²		φ 5mm / 2 x 0.5mm ²
	Length		2m,3m,5m	2m,3m,5m		2m,3m,5m
Remarks					Pin assignment : 1=+,3= -	

*In ordering, please specify cable specification (outer sheath and length) as following example.

Type number — Outer sheath Cable length

CableOuter sheath PVC = blank
PU = PU

Cable length 3m = 03

Ordering example (PVC cable 3m)
BR3-3010D-03

Global
Version

Extended distance

Aluminum chip
non-detectable

Multi metal

Weld
immune

Weld splatter resistance

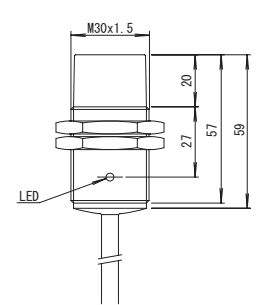
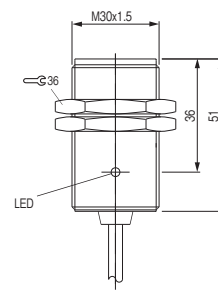
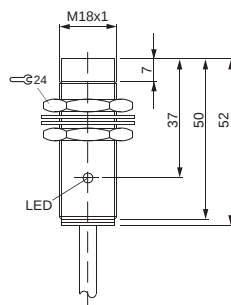
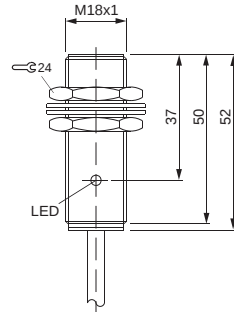
Steel face

Temperature
ratedPressure
rated

ATEX

www.DataSheet4U.com
BALLUFF

Housing size	M18 x 1	M18 x 1	M30 x 1.5	M30 x 1.5
Mounting type	Shield A	Non-shield A	Shield A	Non-shield B2
Rated operating distance(Sn)	5mm	8mm	10mm	20mm
Assured operating distance(Sa)	0...4mm	0...6.4mm	0...8.1mm	0...16mm



Type number	AC2W	N.O. N.C.	BES516-420-E3R BES516-426-E3R	BES516-437-E3R	BES516-418-E3R BES516-427-E3R	BES516-434-E3R
Rated operational voltage(Ue)	100...225V AC/40...60Hz		100...225V AC/40...60Hz	100...225V AC/40...60Hz	100...225V AC/40...60Hz	100...225V AC/40...60Hz
Supply voltage(U _B)	90...250V AC/40...60Hz		90...250V AC/40...60Hz	90...250V AC/40...60Hz	90...250V AC/40...60Hz	90...250V AC/40...60Hz
Voltage drop(U _d)	=<8.5V		=<8.5V	=<8.5V	=<8.5V	=<8.5V
Rated operational current(I _a)	5...250mA		5...250mA	5...250mA	5...250mA	5...250mA
Inrush current(T=<20ms)	2A		2A	2A	2A	2A
Off-state current(I _r)	=<1.0...3.0mA		=<1.0...3.0mA	=<1.0...3.0mA	=<1.0...3.0mA	=<1.0...3.0mA
Circuit protection	No		No	No	No	No
Ambient temperature range(T _a)	-25...+70degrees C		-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	15Hz		5Hz	15Hz	15Hz	5Hz
Function indication	Yes		Yes	Yes	Yes	Yes
Protection class per IEC60529	IP67		IP67	IP67	IP67	IP67
Material	Housing		Nickel plated brass	Nickel plated brass	Nickel plated brass	Nickel plated brass
	Active surface		Poly Propylene	Poly Propylene	Poly Propylene	Poly Propylene
Connection	Cable		Cable	Cable	Cable	Cable
Cable	Outer sheath		PVC	PVC	PVC	PVC
	Diameter/core		φ 5mm / 2 x 0.5mm ²	φ 5mm / 2 x 0.5mm ²	φ 5mm / 2 x 0.5mm ²	φ 5mm / 2 x 0.5mm ²
	Length		2m,3m,5m	2m,3m,5m	2m,3m,5m	2m,3m,5m
Remarks						

*In ordering, please specify cable specification (outer sheath and length) as following example.

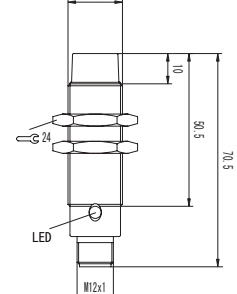
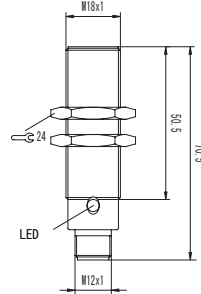
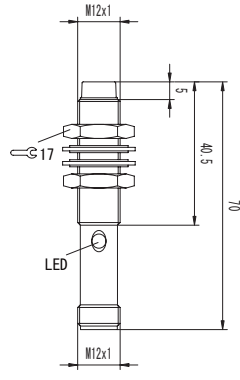
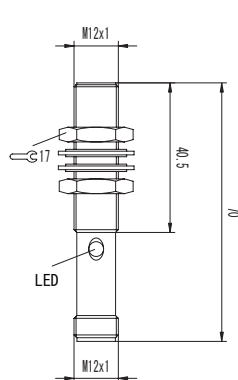
Type number — Outer sheath Cable length

CableOuter sheath PVC = blank
PU = PU

Cable length 3m = 03

Ordering example (PVC cable 3m)
BES516-420-E3R-03

Housing size	M12 x 1	M12 x 1	M18 x 1	M18 x 1
Mounting type	Shield A	Non-shield A	Shield A	Non-shield A
Rated operating distance	2mm	4mm	5mm	8mm
Assured operating	0...1.6mm	0...3.2mm	0...4.1mm	0...6.5mm



www.DataSheet4U.com

Type	AC/DC2W	N.O. N.C.	BES516-207-S27-E	BES516-209-S27-E	BES516-211-E5-E-S27	BES516-213-E5-E-S27
			BES516-208-S27-E	BES516-210-S27-E	BES516-212-E5-E-S27	BES516-214-E5-E-S27
Rated operational			110V AC	110V AC	110V AC	110V AC
Supply voltage(U _B)			20...250V AC/DC	20...250V AC/DC	20...250V AC/DC	20...250V AC/DC
Voltage drop(U _d)			=<11V	=<11V	=<11V	=<11V
Rated			130mA	130mA	250mA	250mA
			100mA	100mA	150mA	150mA
Inrush current (T=<20ms)			=<0.7A	=<0.7A	=<1.5A	=<1.5A
No-load supply current(I ₀)			5mA	5mA	5mA	5mA
Off-state current(I _r)			=<1.7mA(110V AC 時)	=<1.7mA(110V AC 時)	=<1.7mA(110V AC 時)	=<1.7mA(110V AC 時)
Circuit protection			Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature			-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)			1000Hz	600Hz	400Hz	250Hz
Function indication			Yes	Yes	Yes	Yes
Protection class per			IP67	IP67	IP67	IP67
Material	Housing		Stainless steel	Stainless steel	Nickel plated brass	Nickel plated brass
	Active		PA12	PA12	PA12	PA12
Connection			connector/M12	connector/M12	connector/M12	connector/M12
Remarks						

Global
Version

Standard

Extended
distance

Aluminum chip
non-detectable

Multi metal

Weld
immune

Weld splatter
resistance

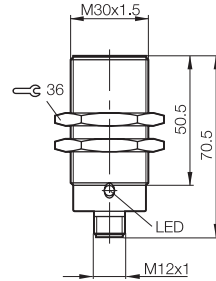
Steel face

Temperature
rated

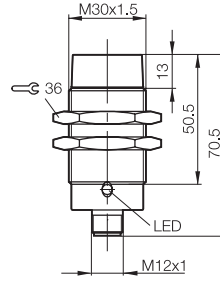
Pressure
rated

ATEX

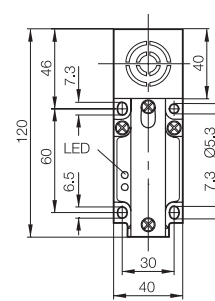
Housing size	M30 x 1.5	M30 x 1.5	40 x 40 x 120	
Mounting type	Shield A	Non-shield A	Shield A	Non-shield
Rated operating distance(Sn)	10mm	15mm	15mm	30mm
Assured operating distance(Sa)	0...8.1mm	0...12.2mm	0...12.2mm	0...24.3mm



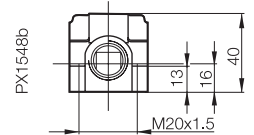
PX0371



PX0704



PX1548



PX1548b

Type number		Type number		Type number		Type number	
AC/	N.O.	BES516-215-E5E-S27	BES516-217-E5E-S27				
	N.C.	BES516-216-E5E-S27	BES516-218-E5E-S27				
N.O./N.C. 設定可				BES517-223-M3-E		BES517-223-M5-E	
Rated operational voltage(Ue)	110V AC	110V AC	110V AC	110V AC	110V AC	110V AC	110V AC
Supply voltage(U _B)	20...250V AC/DC	20...250V AC/DC	20...250V AC/DC	20...250V AC/DC	20...250V AC/DC	20...250V AC/DC	20...250V AC/DC
Voltage drop(U _d)	=<11V	=<11V	=<11V	=<11.5V	=<11.5V	=<11.5V	=<11.5V
Rated	250mA	250mA	250mA	250mA	250mA	250mA	250mA
	180mA	180mA	180mA	180mA	180mA	180mA	180mA
Inrush current(T=<20ms)	=<3A	=<3A	=<3A	=<1A/1Hz	=<1A	=<1A	=<1A
No-load supply current(I _o)	5mA	5mA	5mA	5mA	5mA	5mA	5mA
Off-state current(I _r)	=<1.7mA(110V AC 時)	=<1.7mA(110V AC 時)	=<1.7mA(110V AC 時)	=<1.7mA(110V AC 時)	=<1.7mA(110V AC 時)	=<1.7mA(110V AC 時)	=<1.7mA(110V AC 時)
Circuit protection	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit	Polarity, Short circuit
Ambient temperature range(T _a)	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C	-25...+70degrees C
Frequency of operation(f)	150Hz	100Hz	100Hz	100Hz	100Hz	100Hz	100Hz
Function indication	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Protection class per IEC60529	IP67	IP67	IP67	IP67	IP67	IP67	IP67
Material	Housing	Nickel plated brass	Nickel plated brass	PBT	PBT	PBT	PBT
	Active surface	PA12	PA12	PBT	PBT	PBT	PBT
Connection		connector/M12	connector/M12	接続端子 =<2.5mm ²	接続端子 =<2.5mm ²	接続端子 =<2.5mm ²	接続端子 =<2.5mm ²
Cable	Outer sheath						
	Diameter/core						
	Length						
金属への取付				図 1.....6 可能	図 4, 5, 6 可能	図 4, 5, 6 可能	図 4, 5, 6 可能
Remarks				Active surface5 方向可変	Active surface は上または	Active surface は上または	Active surface は上または