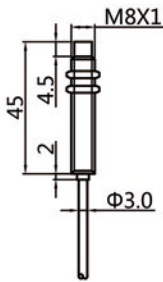


Features :

- M8*1 mm, Full stainless steel housing;
- 2mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



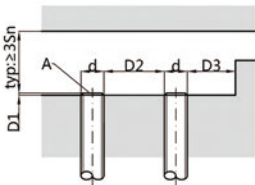
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
NPN N.O.	BFB-M802N-V11P2
NPN N.C.	BFB-M802N-V21P2
PNP N.O.	BFB-M802P-V11P2
PNP N.C.	BFB-M802P-V21P2

Mounting



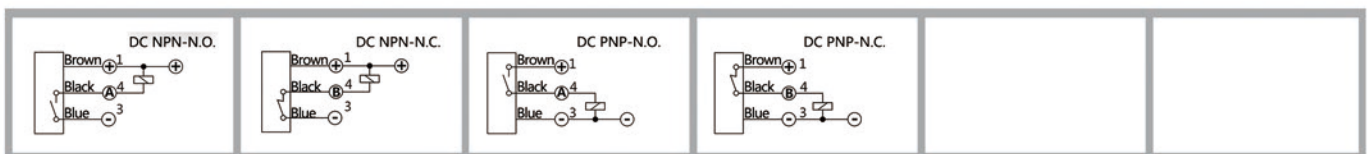
d : diameter
D1 : 1mm
D2 : ≥d
D3 : ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.18mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring



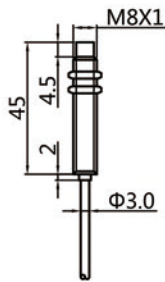


Features :

- M8*1 mm, Full stainless steel housing;
- 4mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



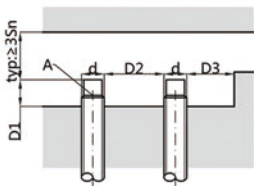
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
NPN N.O.	BFN-M804N-V11P2
NPN N.C.	BFN-M804N-V21P2
PNP N.O.	BFN-M804P-V11P2
PNP N.C.	BFN-M804P-V21P2

Mounting



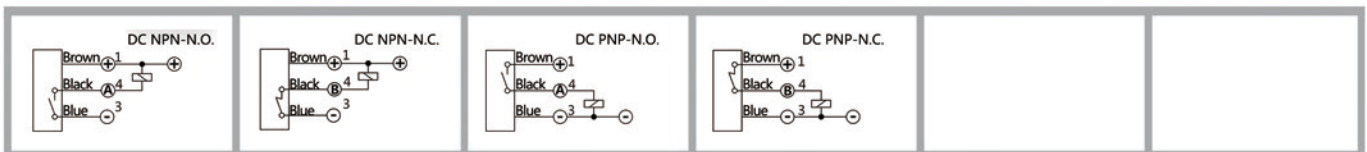
d : diameter
 D2 : ≥2d
 D3 : ≥2Sn
 A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.18mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

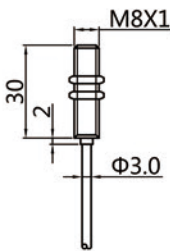


Features :

- M8*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 2mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



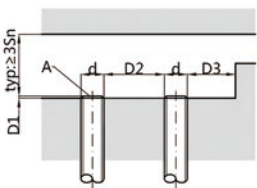
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
NPN N.O.	BFB-M802N-V11P2-S
NPN N.C.	BFB-M802N-V21P2-S
PNP N.O.	BFB-M802P-V11P2-S
PNP N.C.	BFB-M802P-V21P2-S

Mounting



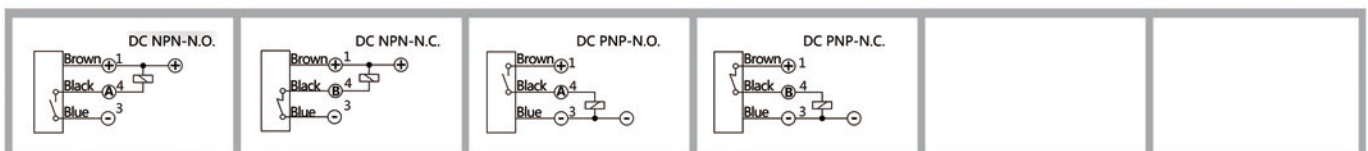
d : diameter
D1 : 1mm
D2 : ≥d
D3 : ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.18mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

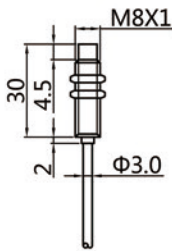


Features :

- M8*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 4mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



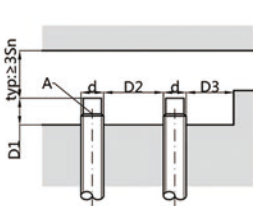
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
NPN N.O.	BFN-M804N-V11P2-S
NPN N.C.	BFN-M804N-V21P2-S
PNP N.O.	BFN-M804P-V11P2-S
PNP N.C.	BFN-M804P-V21P2-S

Mounting



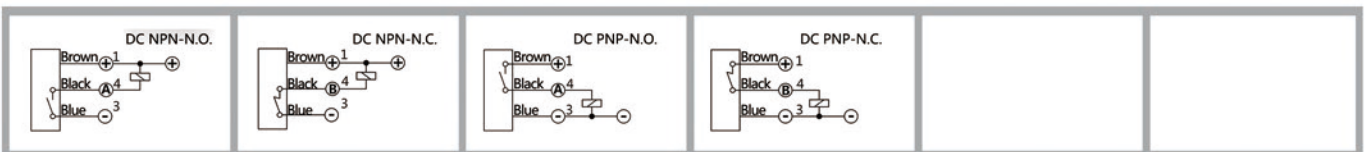
d : diameter
 D2 : ≥2d
 D3 : ≥2Sn
 A: active surface
 ⚠ Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.18mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

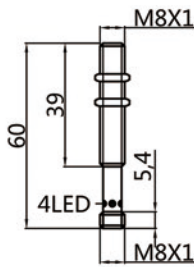


Features :

- M8*1 mm, Full stainless steel housing;
- 2mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connctor versions



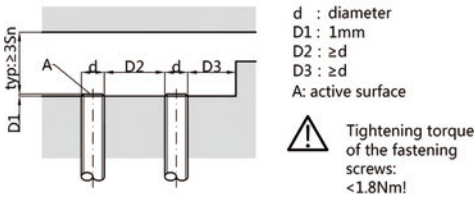
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
NPN N.O.	BFB-M802N-V11S8
NPN N.C.	BFB-M802N-V21S8
PNP N.O.	BFB-M802P-V11S8
PNP N.C.	BFB-M802P-V21S8

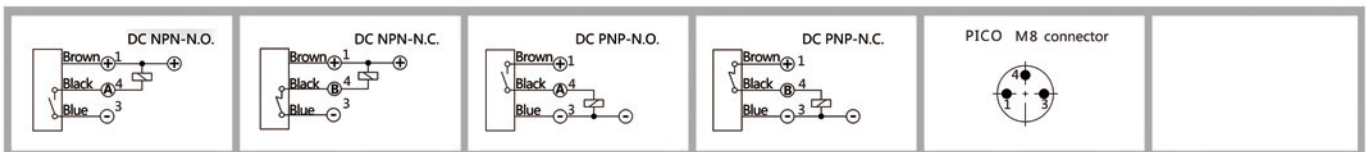
Mounting



Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M8 connector
Accessories	Accessories	B8-3GV2/B8-3WV2 (to be ordered separately)

Wiring

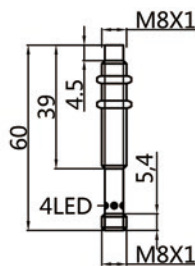


Features :

- M8*1 mm, Full stainless steel housing;
- 4mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



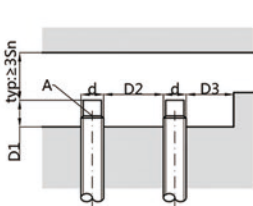
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
NPN N.O.	BFN-M804N-V11S8
NPN N.C.	BFN-M804N-V21S8
PNP N.O.	BFN-M804P-V11S8
PNP N.C.	BFN-M804P-V21S8

Mounting



d : diameter
D2 : $\geq 2d$
D3 : $\geq 2Sn$

A: active surface

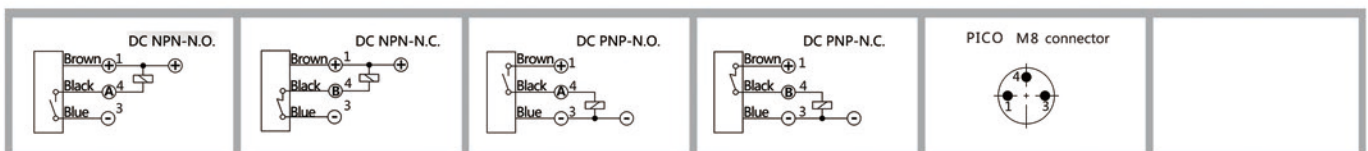
⚠ Tightening torque of the fastening screws: $< 1.8\text{Nm!}$

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	$< 2.0\text{V}$
	Load current	100mA
	No load current	$< 10\text{mA}$ (24 V)
	Hysteresis	$< 15\%$ (Sr)
	Repeatability	$< 1.0\%$ (Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M8 connector
Accessories	Accessories	B8-3GV2/B8-3WV2 (to be ordered separately)

Wiring

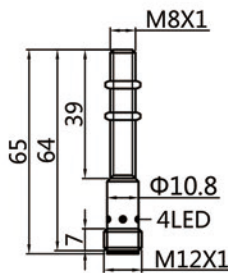


Features :

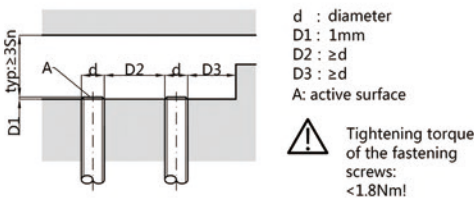
- M8*1 mm, Full stainless steel housing;
- 2mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



Dimensioned drawing



Mounting



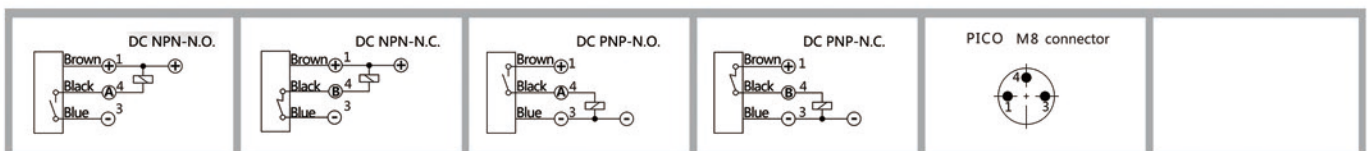
Model No.

Sensing range	Sn: 2 mm
NPN N.O.	BFB-M802N-V11S12
NPN N.C.	BFB-M802N-V21S12
PNP N.O.	BFB-M802P-V11S12
PNP N.C.	BFB-M802P-V21S12

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M8 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

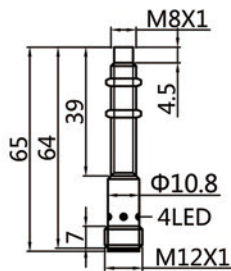


Features :

- M8*1 mm, Full stainless steel housing;
- 4mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



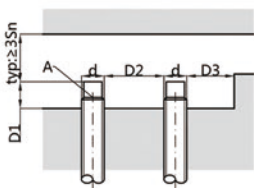
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
NPN N.O.	BFN-M804N-V11S12
NPN N.C.	BFN-M804N-V21S12
PNP N.O.	BFN-M804P-V11S12
PNP N.C.	BFN-M804P-V21S12

Mounting



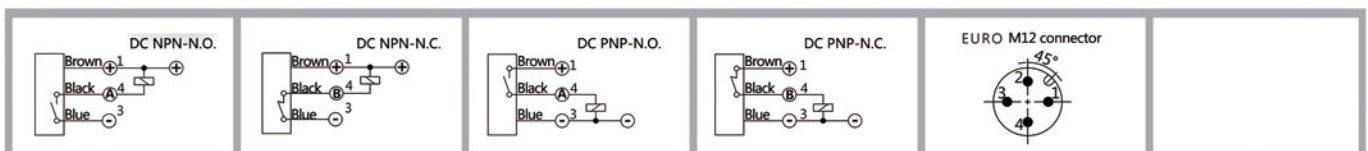
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M8 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

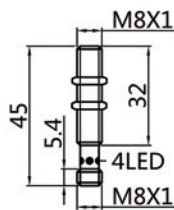


Features :

- M8*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 2mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



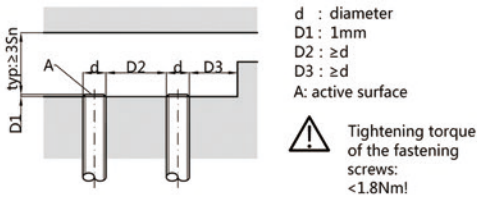
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
NPN N.O.	BFB-M802N-V11S8-S
NPN N.C.	BFB-M802N-V21S8-S
PNP N.O.	BFB-M802P-V11S8-S
PNP N.C.	BFB-M802P-V21S8-S

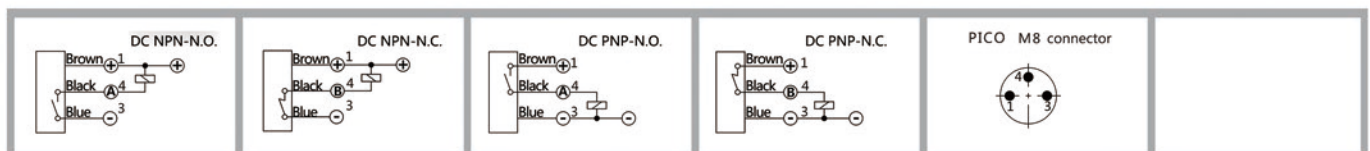
Mounting



Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M8 connector
Accessories	Accessories	B8-3GV2/B8-3WV2 (to be ordered separately)

Wiring

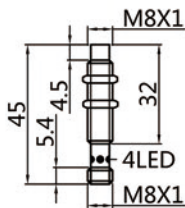


Features :

- M8*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 4mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



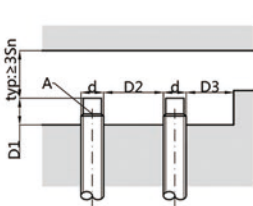
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
NPN N.O.	BFN-M804N-V11S8-S
NPN N.C.	BFN-M804N-V21S8-S
PNP N.O.	BFN-M804P-V11S8-S
PNP N.C.	BFN-M804P-V21S8-S

Mounting



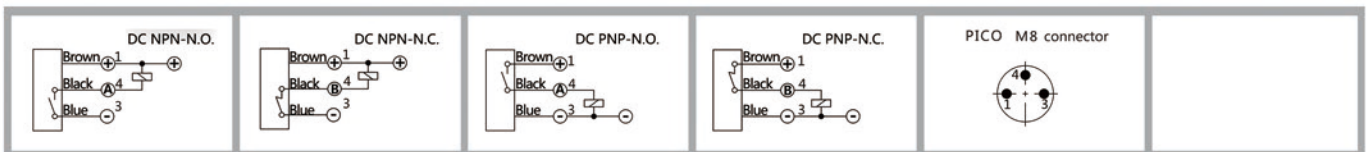
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M8 connector
Accessories	Accessories	B8-3GV2/B8-3WV2 (to be ordered separately)

Wiring

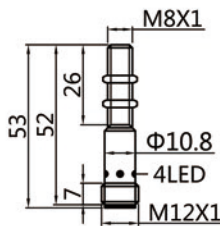


Features :

- M8*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 2mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



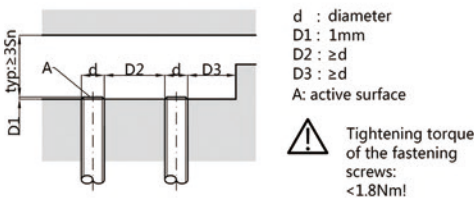
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
NPN N.O.	BFB-M802N-V11S12-S
NPN N.C.	BFB-M802N-V21S12-S
PNP N.O.	BFB-M802P-V11S12-S
PNP N.C.	BFB-M802P-V21S12-S

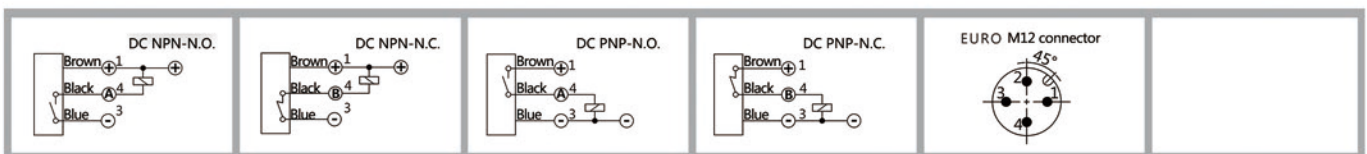
Mounting



Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

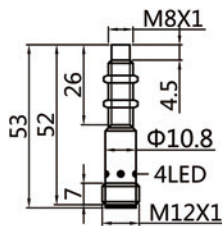


Features :

- M8*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 4mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



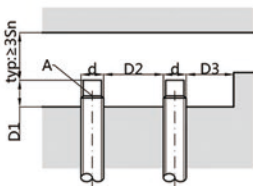
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
NPN N.O.	BFN-M804N-V11S12-S
NPN N.C.	BFN-M804N-V21S12-S
PNP N.O.	BFN-M804P-V11S12-S
PNP N.C.	BFN-M804P-V21S12-S

Mounting



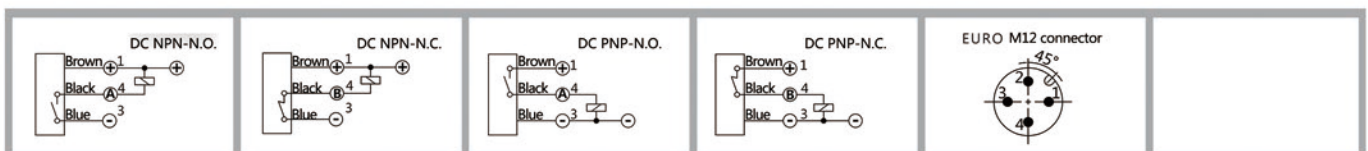
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

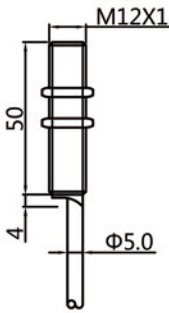


Features :

- M12*1 mm, Full stainless steel housing;
- 2/4mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



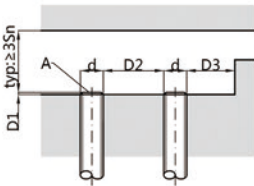
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm	Sn: 4 mm
NPN N.O.	BFB-M1202N-V11P2	BFB-M1204N-V11P2
NPN N.C.	BFB-M1202N-V21P2	BFB-M1204N-V21P2
PNP N.O.	BFB-M1202P-V11P2	BFB-M1204P-V11P2
PNP N.C.	BFB-M1202P-V21P2	BFB-M1204P-V21P2

Mounting



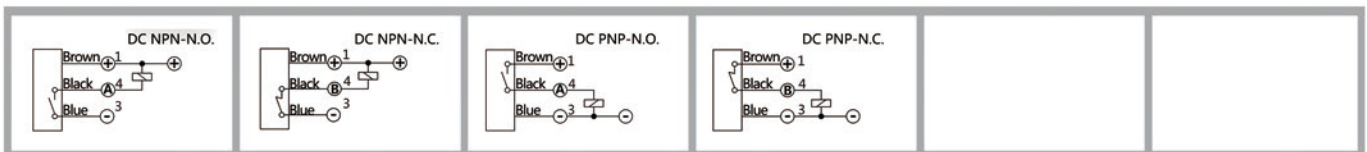
d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

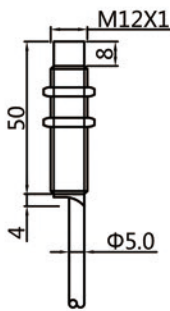


Features :

- M12*1 mm, Full stainless steel housing;
- 4/6mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



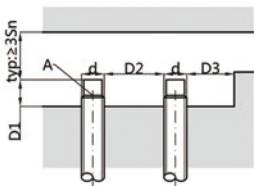
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm	Sn: 6 mm
NPN N.O.	BFN-M1204N-V11P2	BFN-M1206N-V11P2
NPN N.C.	BFN-M1204N-V21P2	BFN-M1206N-V21P2
PNP N.O.	BFN-M1204P-V11P2	BFN-M1206P-V11P2
PNP N.C.	BFN-M1204P-V21P2	BFN-M1206P-V21P2

Mounting



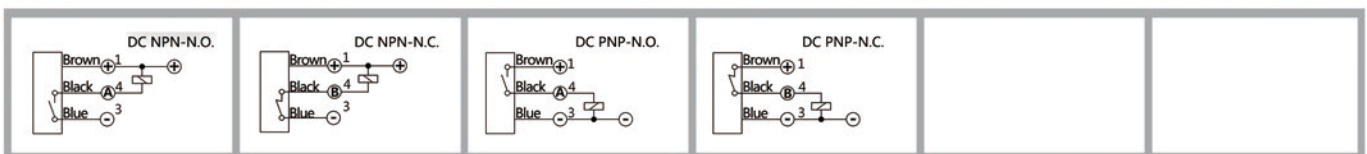
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

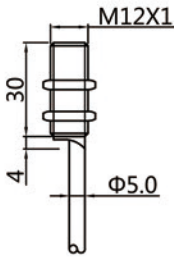


Features :

- M12*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 2/4mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



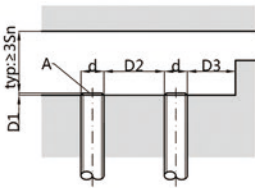
Dimensioned drawing



Mode No.

Sensing range	Sn: 2 mm	Sn: 4 mm
NPN N.O.	BFB-M1202N-V11P2-S	BFB-M1204N-V11P2-S
NPN N.C.	BFB-M1202N-V21P2-S	BFB-M1204N-V21P2-S
PNP N.O.	BFB-M1202P-V11P2-S	BFB-M1204P-V11P2-S
PNP N.C.	BFB-M1202P-V21P2-S	BFB-M1204P-V21P2-S

Mounting



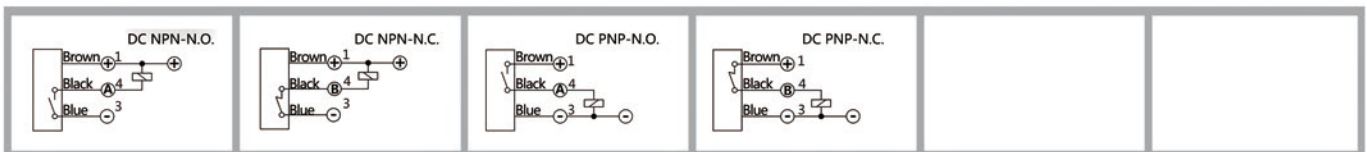
d : diameter
D1 : 1mm
D2 : ≥d
D3 : ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

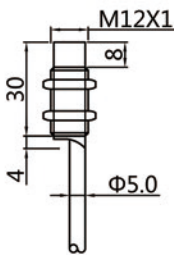


Features :

- M12*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 4/6mm, non-flush mountable ;
- DC 3-wire, switching output;
- Cable & connector versions



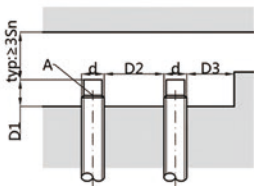
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm	Sn: 6 mm
NPN N.O.	BFN-M1204N-V11P2-S	BFN-M1206N-V11P2-S
NPN N.C.	BFN-M1204N-V21P2-S	BFN-M1206N-V21P2-S
PNP N.O.	BFN-M1204P-V11P2-S	BFN-M1206P-V11P2-S
PNP N.C.	BFN-M1204P-V21P2-S	BFN-M1206P-V21P2-S

Mounting



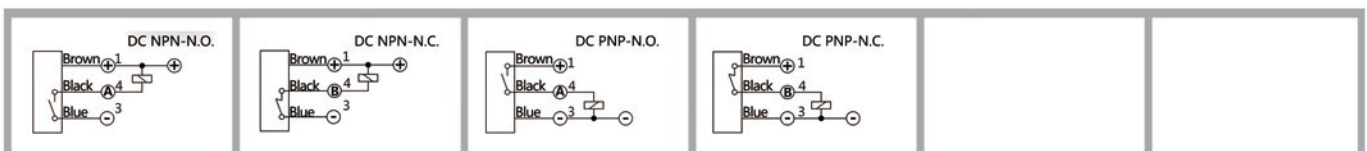
d : diameter
 D2 : ≥2d
 D3 : ≥2Sn
 A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

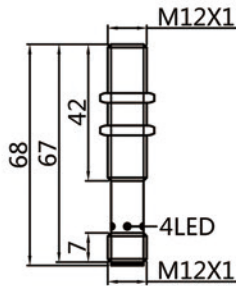


Features :

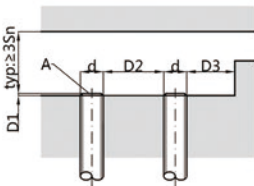
- M12*1 mm, Full stainless steel housing;
- 2/4mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



Dimensioned drawing



Mounting



d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

! Tightening torque of the fastening screws: <1.8Nm!

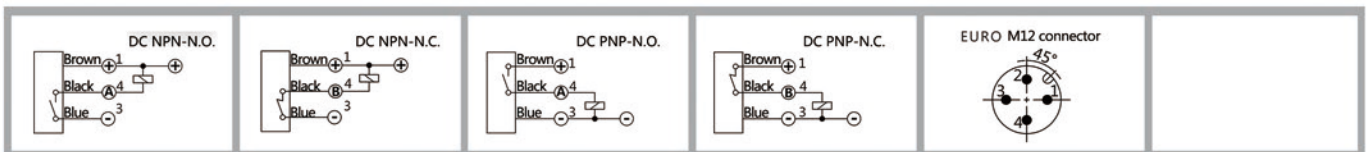
Model No.

Sensing range	Sn: 2 mm	Sn: 4 mm
NPN N.O.	BFB-M1202N-V11S12	BFB-M1204N-V11S12
NPN N.C.	BFB-M1202N-V21S12	BFB-M1204N-V21S12
PNP N.O.	BFB-M1202P-V11S12	BFB-M1204P-V11S12
PNP N.C.	BFB-M1202P-V21S12	BFB-M1204P-V21S12

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

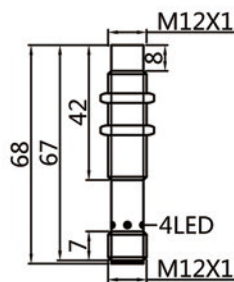


Features :

- M12*1 mm, Full stainless steel housing;
- 4/6mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



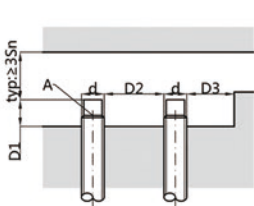
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm	Sn: 6 mm
NPN N.O.	BFN-M1204N-V11S12	BFN-M1206N-V11S12
NPN N.C.	BFN-M1204N-V21S12	BFN-M1206N-V21S12
PNP N.O.	BFN-M1204P-V11S12	BFN-M1206P-V11S12
PNP N.C.	BFN-M1204P-V21S12	BFN-M1206P-V21S12

Mounting



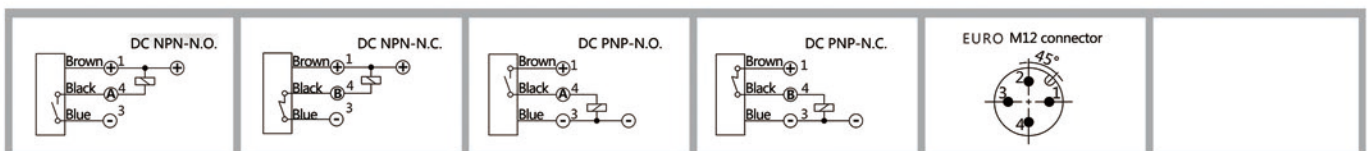
d : diameter
D2 : $\geq 2d$
D3 : $\geq 2Sn$
A: active surface
 Tightening torque of the fastening screws: <math>< 1.8\text{Nm}</math>!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<math>< 2.0\text{V}</math>
	Load current	200mA
	No load current	<math>< 10\text{mA}</math> (24 V)
	Hysteresis	<math>< 15\%(\text{Sr})</math>
	Repeatability	<math>< 1.0\%(\text{Sr})</math>
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2
		(to be ordered separately)

Wiring

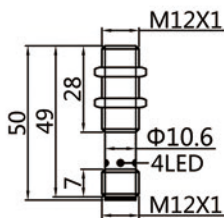


Features :

- M12*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 2/4mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



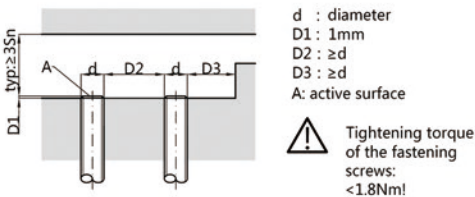
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm	Sn: 4 mm
NPN N.O.	BFB-M1202N-V11S12-S	BFB-M1204N-V11S12-S
NPN N.C.	BFB-M1202N-V21S12-S	BFB-M1204N-V21S12-S
PNP N.O.	BFB-M1202P-V11S12-S	BFB-M1204P-V11S12-S
PNP N.C.	BFB-M1202P-V21S12-S	BFB-M1204P-V21S12-S

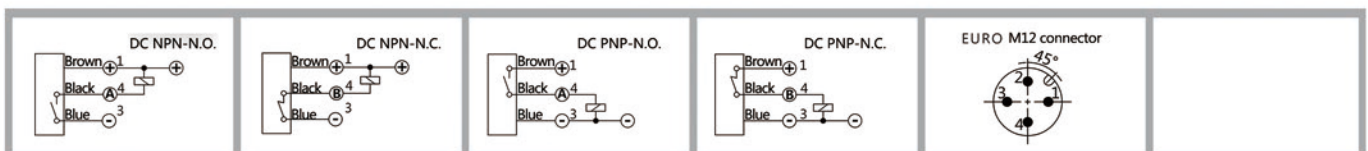
Mounting



Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	2000Hz
	Voltage drop	$<2.0\text{V}$
	Load current	200mA
	No load current	$<10\text{mA}$ (24 V)
	Hysteresis	$<15\%$ (Sr)
	Repeatability	$<1.0\%$ (Sr)
Environment	Ambient temperature	$-25\text{...}70^\circ\text{C}$
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

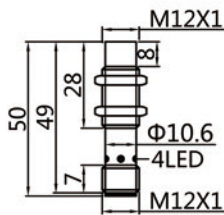


Features :

- M12*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 4/6mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



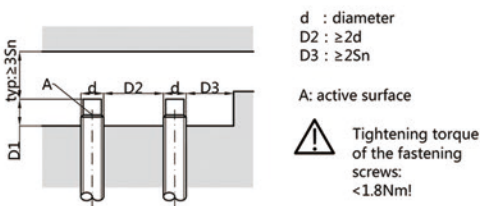
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm	Sn: 6 mm
NPN N.O.	BFN-M1204N-V11S12-S	BFN-M1206N-V11S12-S
NPN N.C.	BFN-M1204N-V21S12-S	BFN-M1206N-V21S12-S
PNP N.O.	BFN-M1204P-V11S12-S	BFN-M1206P-V11S12-S
PNP N.C.	BFN-M1204P-V21S12-S	BFN-M1206P-V21S12-S

Mounting

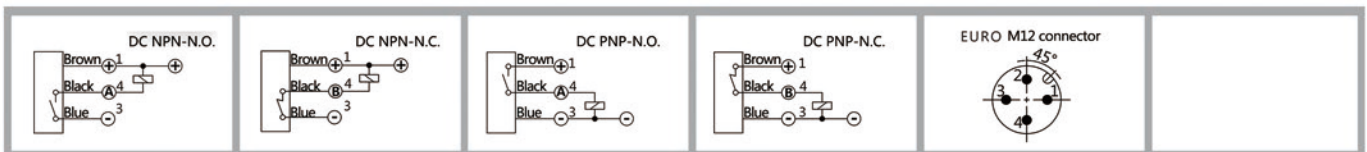


Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2
		(to be ordered separately)

Wiring



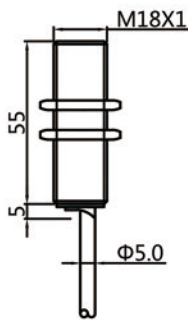


Features :

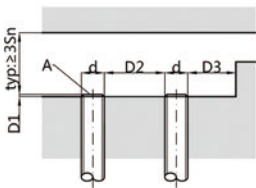
- M18*1 mm, Full stainless steel housing;
- 5/8mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



Dimensioned drawing



Mounting



d : diameter
D1 : 1mm
D2 : ≥ d
D3 : ≥ d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

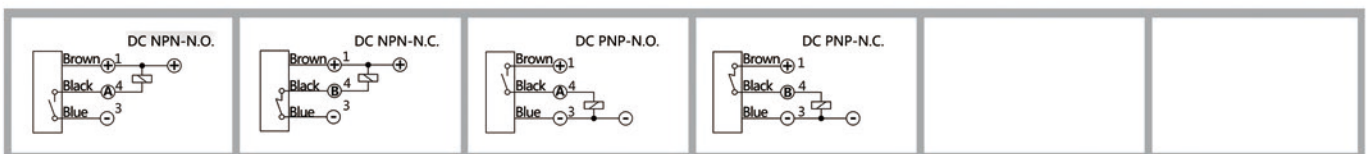
Model No.

Sensing range	Sn: 5 mm	Sn: 8 mm
NPN N.O.	BFB-M1805N-V11P2	BFB-M1808N-V11P2
NPN N.C.	BFB-M1805N-V21P2	BFB-M1808N-V21P2
PNP N.O.	BFB-M1805P-V11P2	BFB-M1808P-V11P2
PNP N.C.	BFB-M1805P-V21P2	BFB-M1808P-V21P2

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

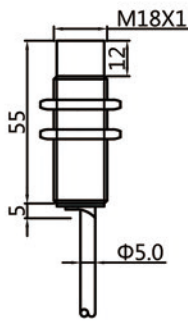


Features :

- M18*1 mm, Full stainless steel housing;
- 8/12mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



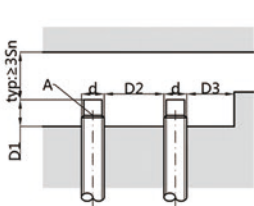
Dimensioned drawing



Model No.

Sensing range	Sn: 8 mm	Sn: 12 mm
NPN N.O.	BFN-M1808N-V11P2	BFN-M1812N-V11P2
NPN N.C.	BFN-M1808N-V21P2	BFN-M1812N-V21P2
PNP N.O.	BFN-M1808P-V11P2	BFN-M1812P-V11P2
PNP N.C.	BFN-M1808P-V21P2	BFN-M1812P-V21P2

Mounting



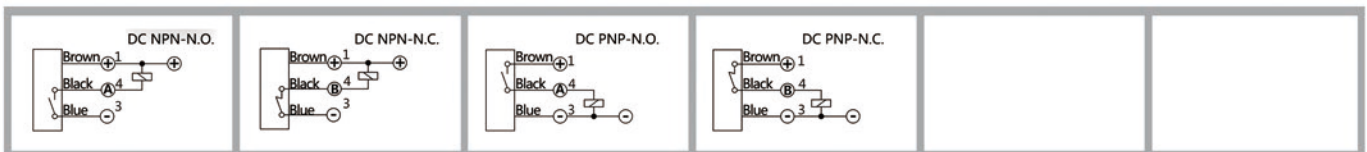
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	500Hz
	Voltage drop	<2.0V
	Load current	100mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

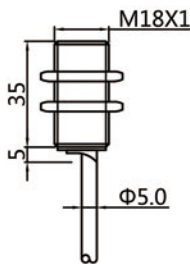


Features :

- M18*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 5/8mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



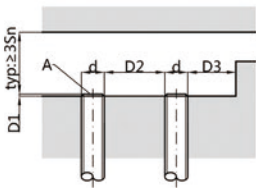
Dimensioned drawing



Model No.

Sensing range	Sn: 5 mm	Sn: 8 mm
NPN N.O.	BFB-M1805N-V11P2-S	BFB-M1808N-V11P2-S
NPN N.C.	BFB-M1805N-V21P2-S	BFB-M1808N-V21P2-S
PNP N.O.	BFB-M1805P-V11P2-S	BFB-M1808P-V11P2-S
PNP N.C.	BFB-M1805P-V21P2-S	BFB-M1808P-V21P2-S

Mounting



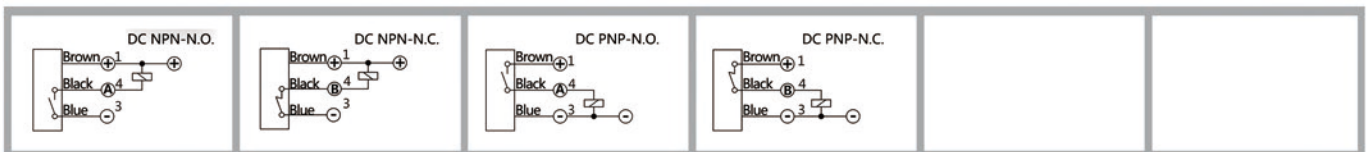
d : diameter
D1 : 1mm
D2 : ≥d
D3 : ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

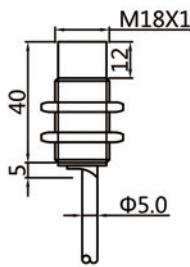


Features :

- M18*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 8/12mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



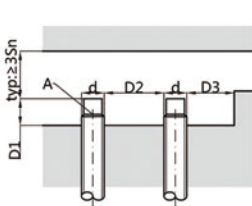
Dimensioned drawing



Model No.

Sensing range	Sn: 8 mm	Sn: 12 mm
NPN N.O.	BFN-M1808N-V11P2-S	BFN-M1812N-V11P2-S
NPN N.C.	BFN-M1808N-V21P2-S	BFN-M1812N-V21P2-S
PNP N.O.	BFN-M1808P-V11P2-S	BFN-M1812P-V11P2-S
PNP N.C.	BFN-M1808P-V21P2-S	BFN-M1812P-V21P2-S

Mounting



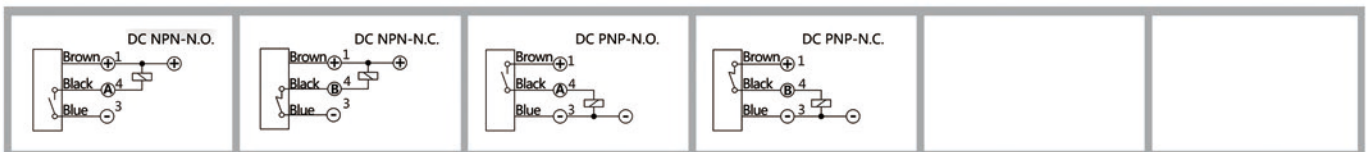
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	500Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

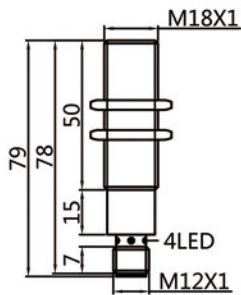


Features :

- M18*1 mm, Full stainless steel housing;
- 5/8mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



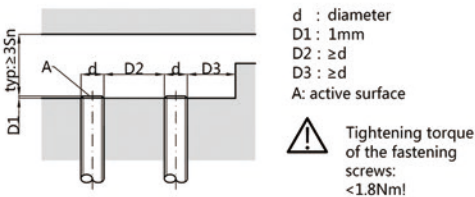
Dimensioned drawing



Model No.

Sensing range	Sn: 5 mm	Sn: 8 mm
NPN N.O.	BFB-M1805N-V11S12	BFB-M1808N-V11S12
NPN N.C.	BFB-M1805N-V21S12	BFB-M1808N-V21S12
PNP N.O.	BFB-M1805P-V11S12	BFB-M1808P-V11S12
PNP N.C.	BFB-M1805P-V21S12	BFB-M1808P-V21S12

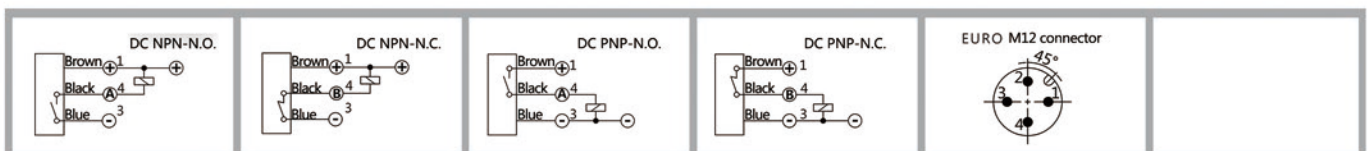
Mounting



Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

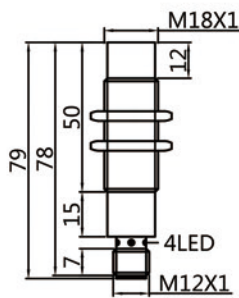


Features :

- M18*1 mm, Full stainless steel housing;
- 8/12mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



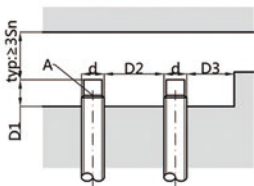
Dimensioned drawing



Model No.

Sensing range	Sn: 8 mm	Sn: 12 mm
NPN N.O.	BFN-M1808N-V11S12	BFN-M1812N-V11S12
NPN N.C.	BFN-M1808N-V21S12	BFN-M1812N-V21S12
PNP N.O.	BFN-M1808P-V11S12	BFN-M1812P-V11S12
PNP N.C.	BFN-M1808P-V21S12	BFN-M1812P-V21S12

Mounting



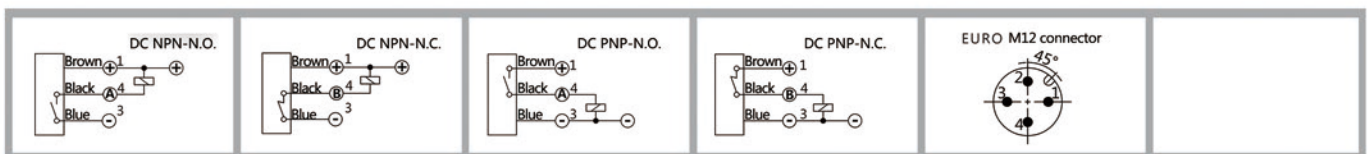
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	500Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

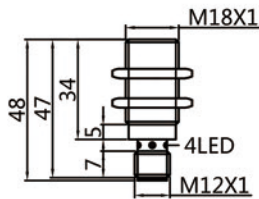


Features :

- M18*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 5/8mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



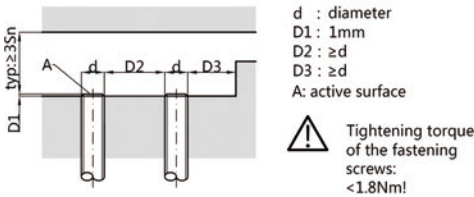
Dimensioned drawing



Model No.

Sensing range	Sn: 5 mm	Sn: 8 mm
NPN N.O.	BFB-M1805N-V11S12-S	BFB-M1808N-V11S12-S
NPN N.C.	BFB-M1805N-V21S12-S	BFB-M1808N-V21S12-S
PNP N.O.	BFB-M1805P-V11S12-S	BFB-M1808P-V11S12-S
PNP N.C.	BFB-M1805P-V21S12-S	BFB-M1808P-V21S12-S

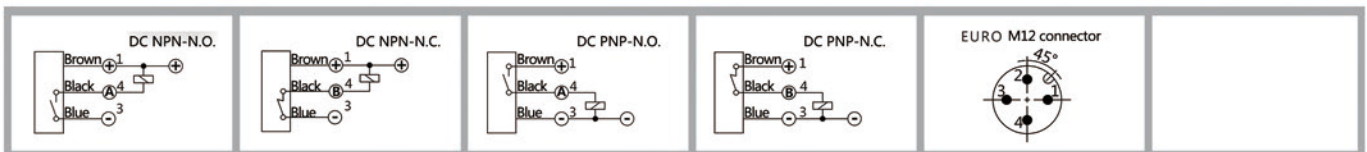
Mounting



Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	1000Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

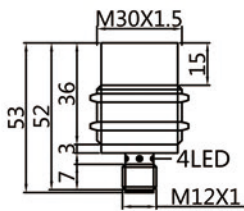


Features :

- M18*1 mm, Full stainless steel housing;
- Short body, compact construction;
- 8/12mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



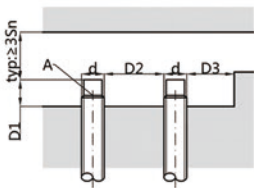
Dimensioned drawing



Model No.

Sensing range	Sn: 8 mm	Sn: 12 mm
NPN N.O.	BFN-M1808N-V11S12-S	BFN-M1812N-V11S12-S
NPN N.C.	BFN-M1808N-V21S12-S	BFN-M1812N-V21S12-S
PNP N.O.	BFN-M1808P-V11S12-S	BFN-M1812P-V11S12-S
PNP N.C.	BFN-M1808P-V21S12-S	BFN-M1812P-V21S12-S

Mounting



d : diameter
D2 : $\geq 2d$
D3 : $\geq 2Sn$

A: active surface

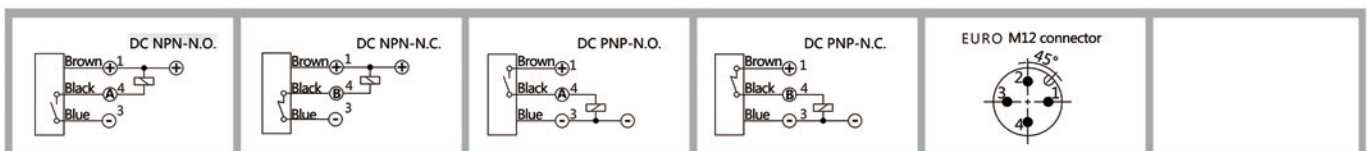
⚠ Tightening torque of the fastening screws: $< 1.8\text{Nm!}$

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	500Hz
	Voltage drop	$< 2.0\text{V}$
	Load current	200mA
	No load current	$< 10\text{mA}$ (24 V)
	Hysteresis	$< 15\%$ (Sr)
	Repeatability	$< 1.0\%$ (Sr)
Environment	Ambient temperature	$-25...70^\circ\text{C}$
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2
		(to be ordered separately)

Wiring



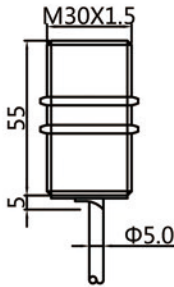


Features :

- M30*1.5mm, Full stainless steel housing;
- 10mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



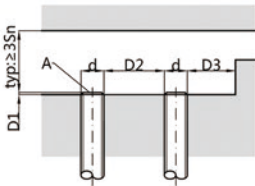
Dimensioned drawing



Model No.

Sensing range	Sn: 10 mm
NPN N.O.	BFB-M3010N-V11P2
NPN N.C.	BFB-M3010N-V21P2
PNP N.O.	BFB-M3010P-V11P2
PNP N.C.	BFB-M3010P-V21P2

Mounting



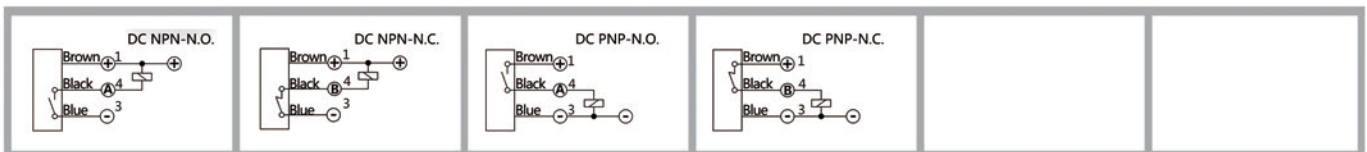
d : diameter
D1 : 1mm
D2 : ≥d
D3 : ≥d
A: active surface

Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	300Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring



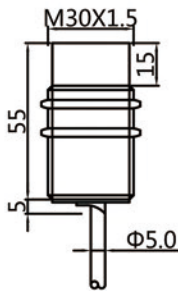


Features :

- M30*1.5mm, Full stainless steel housing;
- 15mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



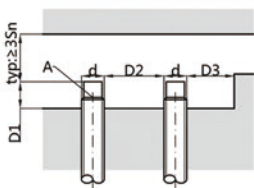
Dimensioned drawing



Model No.

Sensing range	Sn: 15 mm
NPN N.O.	BFN-M3015N-V11P2
NPN N.C.	BFN-M3015N-V21P2
PNP N.O.	BFN-M3015P-V11P2
PNP N.C.	BFN-M3015P-V21P2

Mounting



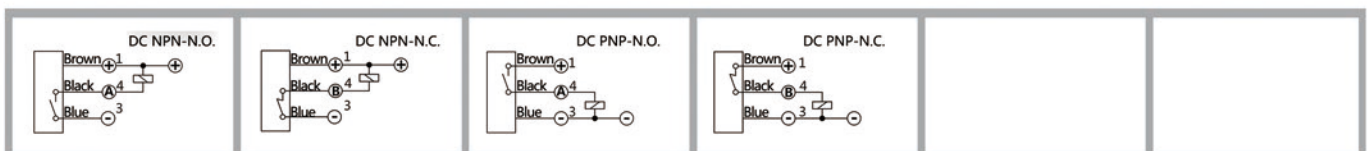
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	150Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring



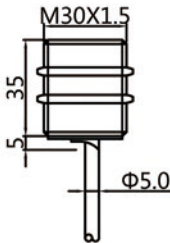


Features :

- M30*1.5mm, Full stainless steel housing;
- Short body, compact construction;
- 10mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



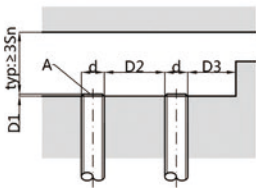
Dimensioned drawing



Model No.

Sensing range	Sn: 10 mm
NPN N.O.	BFB-M3010N-V11P2-S
NPN N.C.	BFB-M3010N-V21P2-S
PNP N.O.	BFB-M3010P-V11P2-S
PNP N.C.	BFB-M3010P-V21P2-S

Mounting



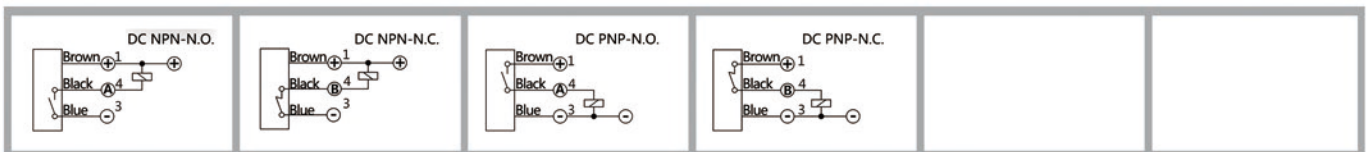
d : diameter
D1 : 1mm
D2 : ≥d
D3 : ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	300Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring



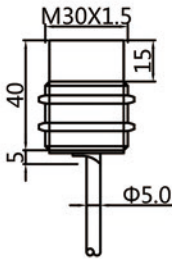


Features :

- M30*1.5mm, Full stainless steel housing;
- Short body, compact construction;
- 15mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



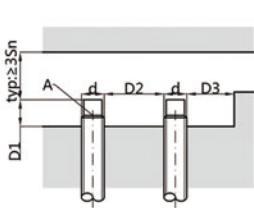
Dimensioned drawing



Model No.

Sensing range	Sn: 15 mm
NPN N.O.	BFN-M3015N-V11P2-S
NPN N.C.	BFN-M3015N-V21P2-S
PNP N.O.	BFN-M3015P-V11P2-S
PNP N.C.	BFN-M3015P-V21P2-S

Mounting



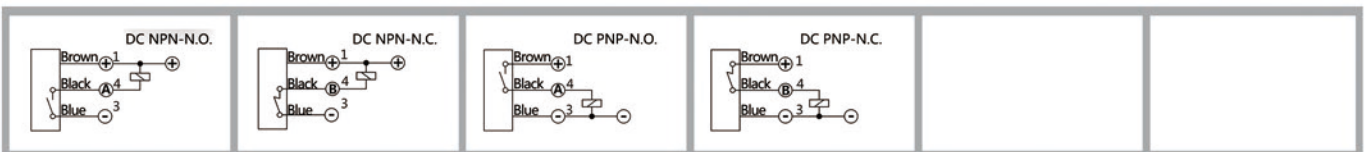
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	150Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

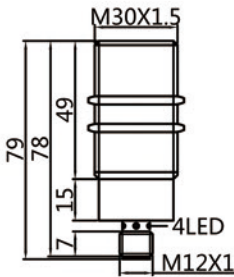


Features :

- M30*1.5mm, Full stainless steel housing;
- 10mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



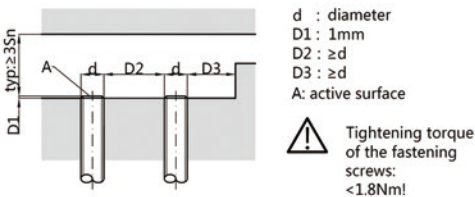
Dimensioned drawing



Model No.

Sensing range	Sn: 10 mm
NPN N.O.	BFB-M3010N-V11S12
NPN N.C.	BFB-M3010N-V21S12
PNP N.O.	BFB-M3010P-V11S12
PNP N.C.	BFB-M3010P-V21S12

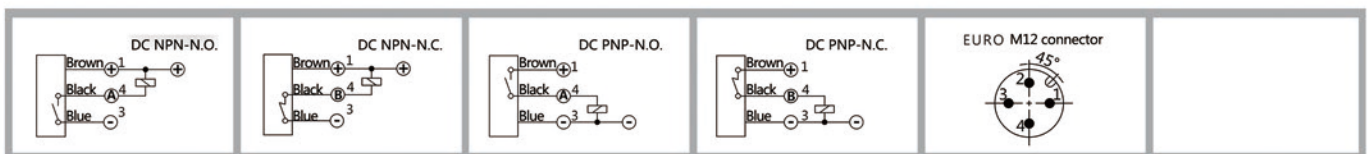
Mounting



Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	300Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Dimensioned drawing



General Information

Inductive Sensors

Capacitive Sensors

Photoelectric Sensors

Ultrasonic Sensors

Connectors

Accessories

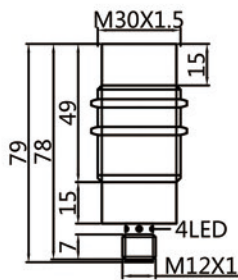
Index Of Types

Features :

- M30*1.5mm, Full stainless steel housing;
- 15mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



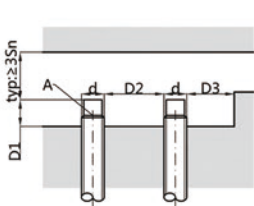
Dimensioned drawing



Model No.

Sensing range	Sn: 15 mm
NPN N.O.	BFN-M3015N-V11S12
NPN N.C.	BFN-M3015N-V21S12
PNP N.O.	BFN-M3015P-V11S12
PNP N.C.	BFN-M3015P-V21S12

Mounting



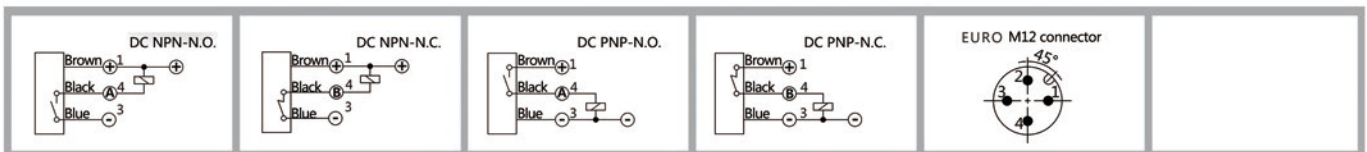
d : diameter
D2 : $\geq 2d$
D3 : $\geq 25Sn$
A: active surface
 Tightening torque of the fastening screws: <math>< 1.8Nm!</math>

Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	150Hz
	Voltage drop	<math>< 2.0V</math>
	Load current	200mA
	No load current	<math>< 10mA (24 V)</math>
	Hysteresis	<math>< 15\%(Sr)</math>
	Repeatability	<math>< 1.0\%(Sr)</math>
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2
		(to be ordered separately)

Wiring

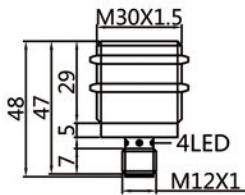


Features :

- M30*1.5mm, Full stainless steel housing;
- Short body, compact construction;
- 10mm, flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



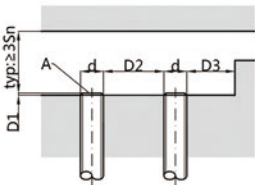
Dimensioned drawing



Model No.

Sensing range	Sn: 10 mm
NPN N.O.	BFB-M3010N-V11S12-S
NPN N.C.	BFB-M3010N-V21S12-S
PNP N.O.	BFB-M3010P-V11S12-S
PNP N.C.	BFB-M3010P-V21S12-S

Mounting



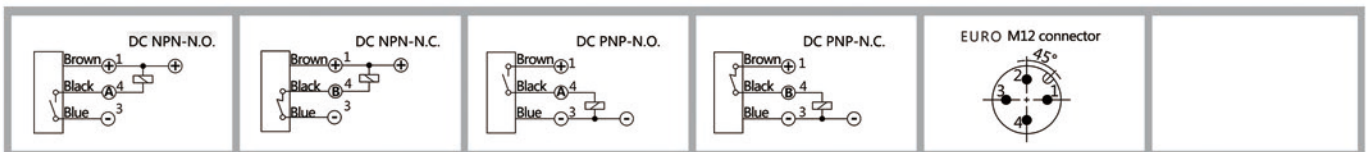
d : diameter
D1 : 1mm
D2 : ≥d
D3 : ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	300Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

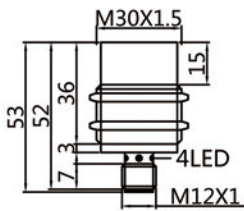


Features :

- M30*1.5mm, Full stainless steel housing;
- Short body, compact construction;
- 15mm, non-flush mountable;
- DC 3-wire, switching output;
- Cable & connector versions



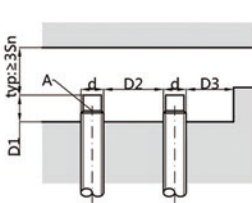
Dimensioned drawing



Model No.

Sensing range	Sn: 15 mm
NPN N.O.	BFN-M3015N-V11S12-S
NPN N.C.	BFN-M3015N-V21S12-S
PNP N.O.	BFN-M3015P-V11S12-S
PNP N.C.	BFN-M3015P-V21S12-S

Mounting



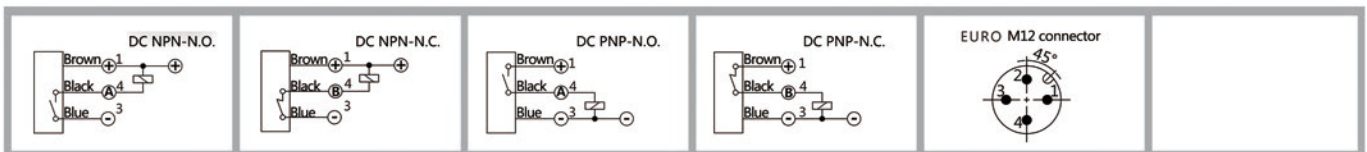
d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
 Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	150Hz
	Voltage drop	<2.0V
	Load current	200mA
	No load current	< 10mA (24 V)
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

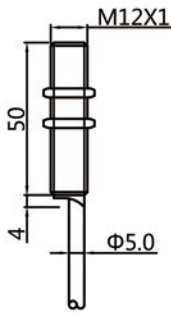


Features :

- M12*1 mm, Full stainless steel housing;
- 2mm, flush mountable;
- DC 2-wire, switching output;
- Cable & connector versions



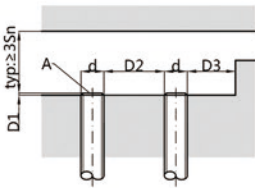
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
N.O.	BFB-M1202C-V13P2
N.C.	BFB-M1202C-V23P2

Mounting



d : diameter
D1 : 1mm
D2 : ≥d
D3 : ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-60V DC
	Switching frequency	2000Hz
	Voltage drop	<4.5V
	Load current	200mA
	Residual ripple	≤ 0.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 2*0.5mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

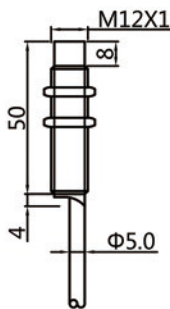


Features :

- M12*1 mm, Full stainless steel housing;
- 4mm, non-flush mountable;
- DC 2-wire, switching output;
- Cable & connector versions



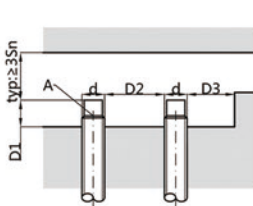
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
N.O.	BFN-M1204C-V13P2
N.C.	BFN-M1204C-V23P2

Mounting



d : diameter
D2 : ≥2d
D3 : ≥2Sn

A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-60V DC
	Switching frequency	1000Hz
	Voltage drop	<1.5V
	Load current	200mA
	Residual ripple	≤ 0.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 2*0.5mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

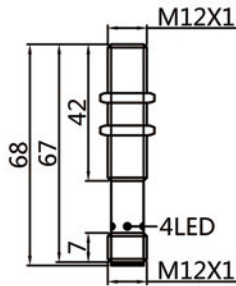


Features :

- M12*1 mm, Full stainless steel housing;
- 2mm, flush mountable;
- DC 2-wire, switching output;
- Cable & connector versions



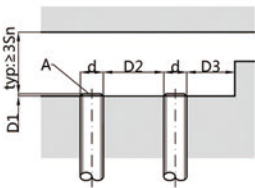
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
N.O.	BFB-M1202C-V13S12
N.C.	BFB-M1202C-V23S12

Mounting



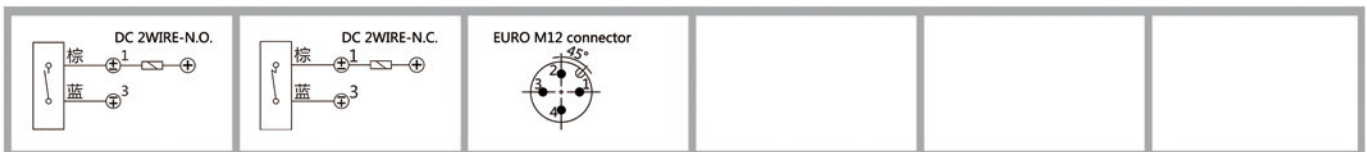
d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-60V DC
	Switching frequency	2000Hz
	Voltage drop	<4.5V
	Load current	200mA
	Residual ripple	≤ 0.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4WV2/B12-4GV2 (to be ordered separately)

Wiring

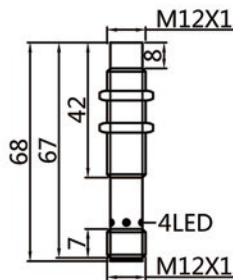


Features :

- M12*1 mm, Full stainless steel housing;
- 4mm, non-flush mountable;
- DC 2-wire, switching output;
- Cable & connector versions



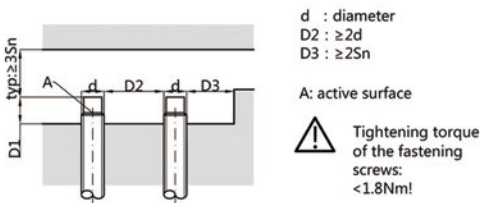
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
N.O.	BFN-M1204C-V13S12
N.C.	BFN-M1204C-V23S12

Mounting

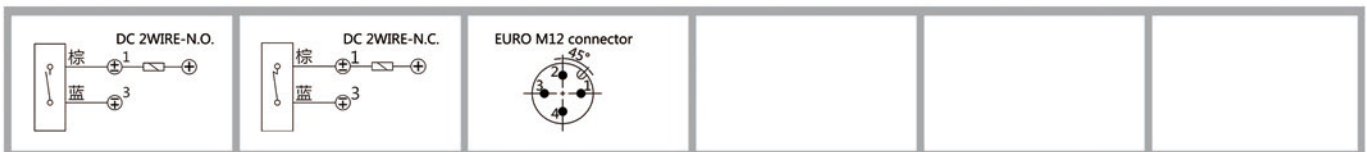


Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-60V DC
	Switching frequency	1000Hz
	Voltage drop	<1.5V
	Load current	200mA
	Residual ripple	≤ 0.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4WV2/B12-4GV2
		(to be ordered separately)

Wiring



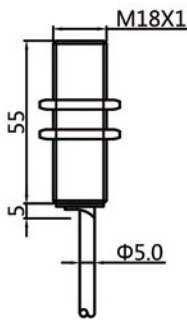


Features :

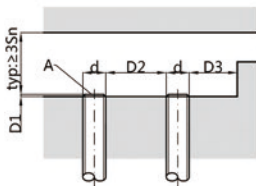
- M18*1 mm, Full stainless steel housing;
- 5mm, flush mountable;
- DC 2-wire, switching output;
- Cable & connector versions



Dimensioned drawing



Mounting



d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Model No.

Sensing range	Sn: 5 mm
N.O.	BFB-M1805C-V13P2
N.C.	BFB-M1805C-V23P2

Technical data

Electrical data	Operating voltage	10-60V DC
	Switching frequency	1000Hz
	Voltage drop	<4.5V
	Load current	200mA
	Residual ripple	≤ 0.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 2*0.5mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring



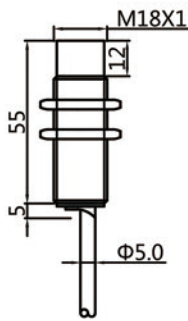


Features :

- M18*1 mm, Full stainless steel housing;
- 8mm, non-flush mountable;
- DC 2-wire, switching output;
- Cable & connector versions



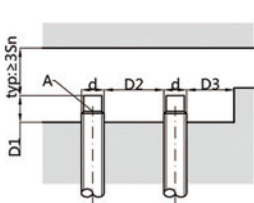
Dimensioned drawing



Model No.

Sensing range	Sn : 8 mm
N.O.	BFN-M1808C-V13P2
N.C.	BFN-M1808C-V23P2

Mounting



d : diameter
 D2 : ≥2d
 D3 : ≥2Sn
 A: active surface
 ⚠ Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-60V DC
	Switching frequency	500Hz
	Voltage drop	<1.5V
	Load current	200mA
	Residual ripple	≤ 0.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 2*0.5mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

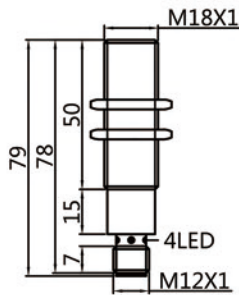


Features :

- M18*1 mm, Full stainless steel housing;
- 5mm, flush mountable;
- DC 2-wire, switching output;
- Cable & connector versions



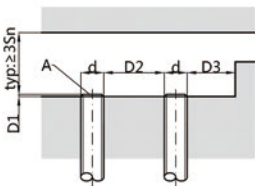
Dimensioned drawing



Model No.

Sensing range	Sn: 5 mm
N.O.	BFB-M1805C-V13S12
N.C.	BFB-M1805C-V23S12

Mounting



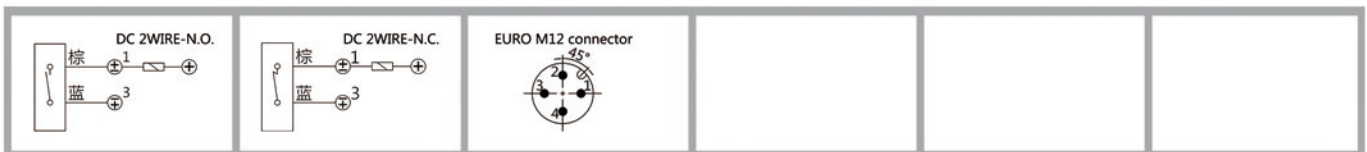
d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	10-60V DC
	Switching frequency	1000Hz
	Voltage drop	<4.5V
	Load current	200mA
	Residual ripple	≤ 0.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4WV2/B12-4GV2 (to be ordered separately)

Wiring

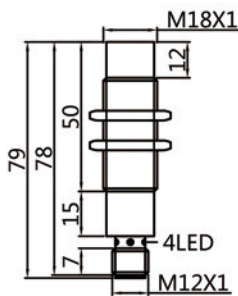


Features :

- M18*1 mm, Full stainless steel housing;
- 8mm, non-flush mountable;
- DC 2-wire, switching output;
- Cable & connector versions



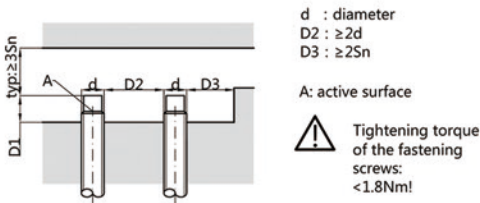
Dimensioned drawing



Model No.

Sensing range	Sn: 8 mm
N.O.	BFN-M1808C-V13S12
N.C.	BFN-M1808C-V23S12

Mounting

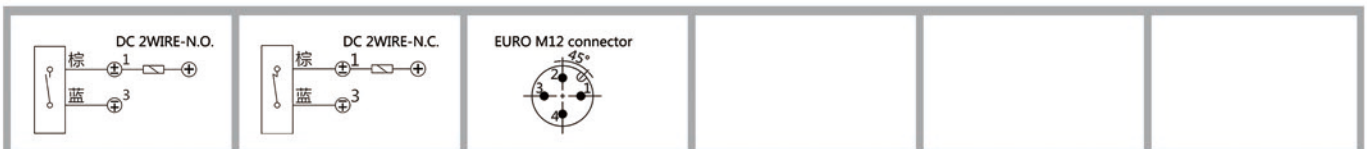


Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	10-60V DC
	Switching frequency	500Hz
	Voltage drop	<4.5V
	Load current	200mA
	Residual ripple	≤ 0.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4WV2/B12-4GV2 (to be ordered separately)

Wiring

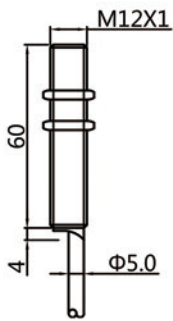


Features :

- M12*1 mm, Full stainless steel housing;
- 2mm, flush mountable;
- AC 2-wire, switching output;
- Momentary current: 5A(20ms);
- Cable & connector versions



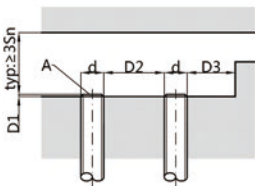
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
N.O.	BFB-M1202A-V14P2
N.C.	BFB-M1202A-V24P2

Mounting



d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	20-250V AC
	Switching frequency	25Hz
	Voltage drop	<8VAC ; 400mA
	Load current	Max. Load:400mA; Min. Load: 5mA
	Residual ripple	<1.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring



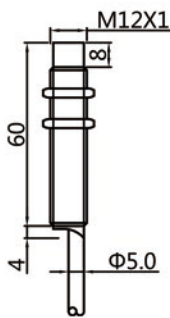


Features :

- M12*1 mm, Full stainless steel housing;
- 4mm, non-flush mountable;
- AC 2-wire, switching output;
- Momentary current: 5A(20ms);
- Cable & connector versions



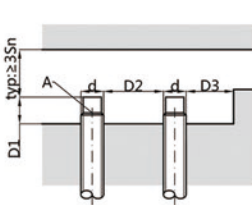
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
N.O.	BFN-M1204A-V14P2
N.C.	BFN-M1204A-V24P2

Mounting



d : diameter
 D2 : ≥2d
 D3 : ≥2Sn

A: active surface

Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	20-250V AC
	Switching frequency	25Hz
	Voltage drop	<8VAC ; 400mA
	Load current	Max. Load:400mA; Min. Load: 5mA
	Residual ripple	<1.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

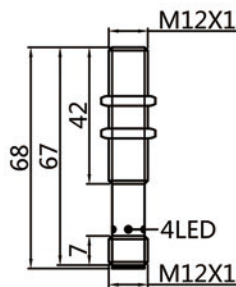


Features :

- M12*1 mm, Full stainless steel housing;
- 2mm, flush mountable;
- AC 2-wire, switching output;
- Momentary current: 5A(20ms);
- Cable & connector versions



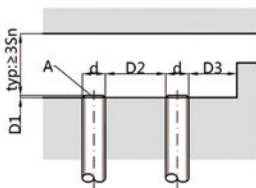
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
N.O.	BFB-M1202A-V14S12
N.C.	BFB-M1202A-V24S12

Mounting



d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	20-250V AC
	Switching frequency	25Hz
	Voltage drop	<8VAC ; 400mA
	Load current	Max. Load:400mA; Min. Load: 5mA
	Residual ripple	<1.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

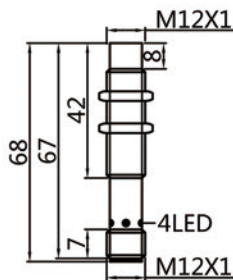


Features :

- M12*1 mm, Full stainless steel housing;
- 4mm, non-flush mountable;
- AC 2-wire, switching output;
- Momentary current: 5A(20ms);
- Cable & connector versions



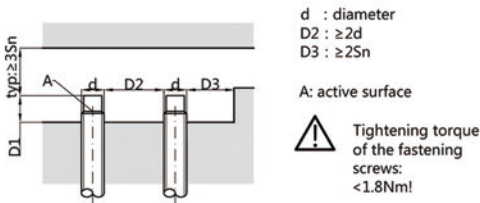
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
N.O.	BFN-M1204A-V14S12
N.C.	BFN-M1204A-V24S12

Mounting

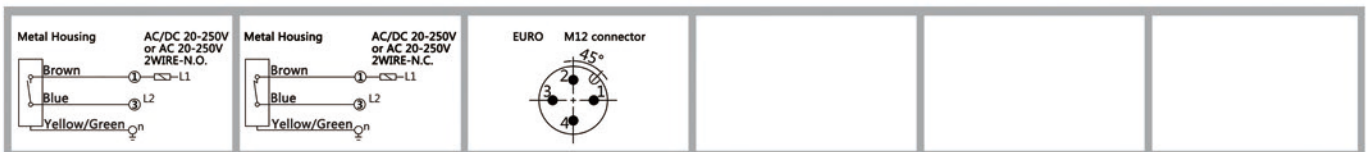


Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	20-250V AC
	Switching frequency	25Hz
	Voltage drop	$<8\text{VAC}; 400\text{mA}$
	Load current	Max. Load:400mA; Min. Load: 5mA
	Residual ripple	$<1.8\text{mA}$
	Hysteresis	$<15\%(\text{Sr})$
	Repeatability	$<1.0\%(\text{Sr})$
Environment	Ambient temperature	$-25\text{...}70^\circ\text{C}$
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2
		(to be ordered separately)

Wiring



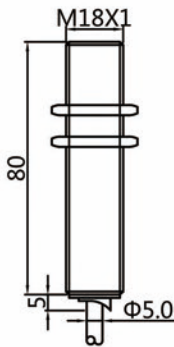


Features :

- M18*1 mm, Full stainless steel housing;
- 5mm, flush mountable;
- AC 2-wire, switching output;
- Momentary current: 5A(20ms);
- Cable & connector versions



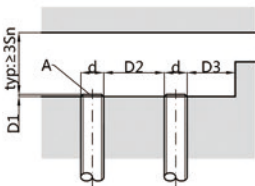
Dimensioned drawing



Model No.

Sensing range	Sn: 5 mm
N.O.	BFB-M1805A-V14P2
N.C.	BFB-M1805A-V24P2

Mounting



d : diameter
D1 : 1mm
D2 : ≥d
D3 : ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	20-250V AC
	Switching frequency	25Hz
	Voltage drop	<8VAC ; 400mA
	Load current	Max. Load:400mA; Min. Load: 5mA
	Residual ripple	<1.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

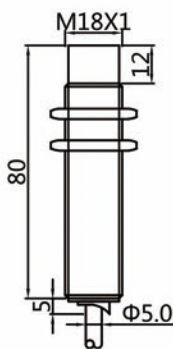


Features :

- M18*1 mm, Full stainless steel housing;
- 8mm, non-flush mountable;
- AC 2-wire, switching output;
- Momentary current: 5A(20ms);
- Cable & connector versions



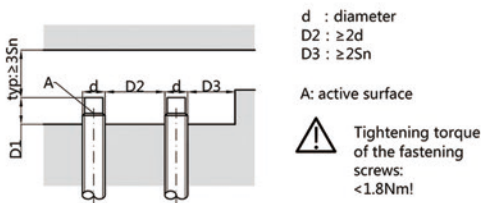
Dimensioned drawing



Model No.

Sensing range	Sn: 8 mm
N.O.	BFN-M1808A-V14P2
N.C.	BFN-M1808A-V24P2

Mounting



Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	20-250V AC
	Switching frequency	25Hz
	Voltage drop	$<8\text{VAC}$; 400mA
	Load current	Max. Load:400mA; Min. Load: 5mA
	Residual ripple	$<1.8\text{mA}$
	Hysteresis	$<15\%(\text{Sr})$
	Repeatability	$<1.0\%(\text{Sr})$
Environment	Ambient temperature	$-25\text{...}70^\circ\text{C}$
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; $3 \times 0.35\text{mm}^2$
Accessories	Accessories	NO (to be ordered separately)

Wiring

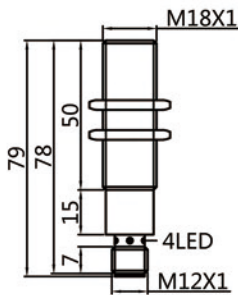


Features :

- M18*1 mm, Full stainless steel housing;
- 5mm, flush mountable;
- AC 2-wire, switching output ;
- Momentary current : 5A(20ms);
- Cable & connector versions



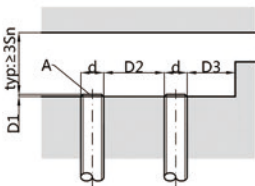
Dimensioned drawing



Model No.

Sensing range	Sn: 5 mm
N.O.	BFB-M1805A-V14S12
N.C.	BFB-M1805A-V24S12

Mounting



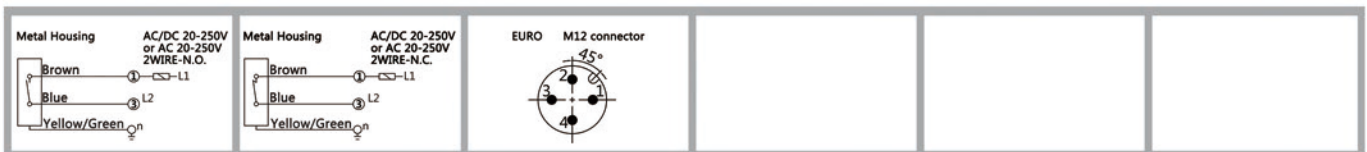
d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	20-250V AC
	Switching frequency	25Hz
	Voltage drop	<8VAC ; 400mA
	Load current	Max. Load:400mA; Min. Load: 5mA
	Residual ripple	<1.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

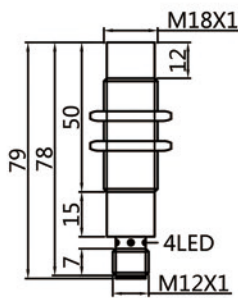


Features :

- M18*1 mm, Full stainless steel housing;
- 8mm, non-flush mountable;
- AC 2-wire, switching output;
- Momentary current: 5A(20ms);
- Cable & connector versions



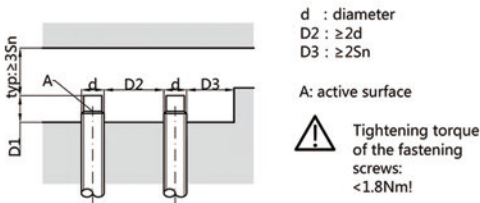
Dimensioned drawing



Model No.

Sensing range	Sn : 8 mm
N.O.	BFN-M1808A-V14S12
N.C.	BFN-M1808A-V24S12

Mounting

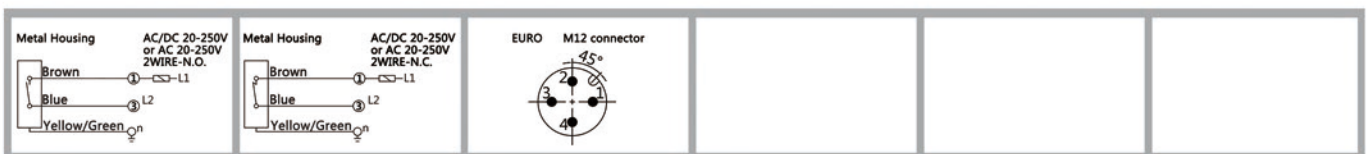


Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	20-250V AC
	Switching frequency	25Hz
	Voltage drop	<8VAC ; 400mA
	Load current	Max. Load:400mA; Min. Load: 5mA
	Residual ripple	<1.8mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring



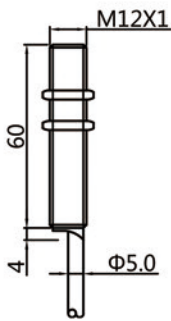


Features :

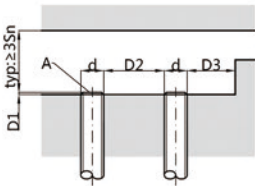
- M12*1 mm, Full stainless steel housing;
- 2mm, non-flush mountable;
- AC/DC 2-wire, switching output;
- Momentary current: 2.2A(20ms);
- Cable & connector versions



Dimensioned drawing



Mounting



d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Model No.

Sensing range	Sn: 2 mm
N.O.	BFB-M1202U-V15P2
N.C.	BFB-M1202U-V25P2

Technical data

Electrical data	Operating voltage	20-250V AC/DC
	Switching frequency	25Hz AC / 40Hz DC
	Voltage drop	<10VAC, 8VDC
	Load current	Max. Load:200mA; Min. Load: 5mA
	Residual ripple	<2.5mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring



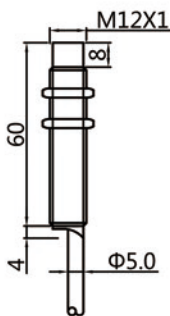


Features :

- M12*1 mm, Full stainless steel housing;
- 4mm, non-flush mountable;
- AC/DC 2-wire, switching output;
- Momentary current: 2.2A(20ms);
- Cable & connector versions



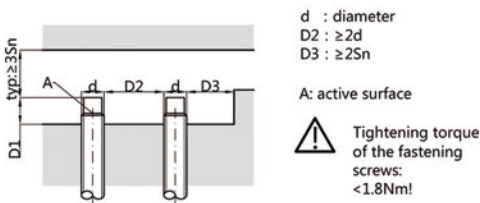
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
N.O.	BFN-M1204U-V15P2
N.C.	BFN-M1204U-V25P2

Mounting



Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	20-250V AC/DC
	Switching frequency	25Hz AC / 40Hz DC
	Voltage drop	<10VAC, 8VDC
	Load current	Max. Load: 200mA; Min. Load: 5mA
	Residual ripple	<2.5mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

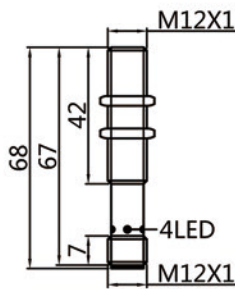


Features :

- M12*1 mm, Full stainless steel housing;
- 2mm, flush mountable;
- AC/DC 2-wire, switching output;
- Momentary current: 2.2A(20ms);
- Cable & connector versions



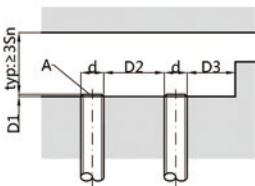
Dimensioned drawing



Model No.

Sensing range	Sn: 2 mm
N.O.	BFB-M1202U-V15S12
N.C.	BFB-M1202U-V25S12

Mounting



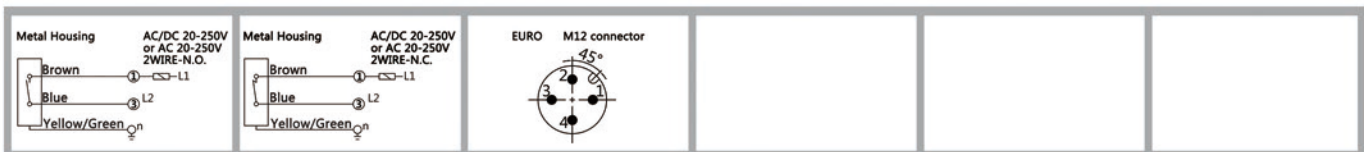
d : diameter
D1 : 1mm
D2 : ≥ d
D3 : ≥ d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	20-250V AC/DC
	Switching frequency	25Hz AC / 40Hz DC
	Voltage drop	<10VAC, 8VDC
	Load current	Max. Load: 200mA; Min. Load: 5mA
	Residual ripple	<2.5mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring



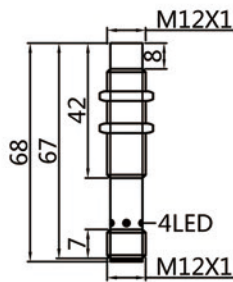


Features :

- M12*1 mm, Full stainless steel housing;
- 4mm, non-flush mountable;
- AC/DC 2-wire, switching output;
- Momentary current: 2.2A(20ms);
- Cable & connector versions



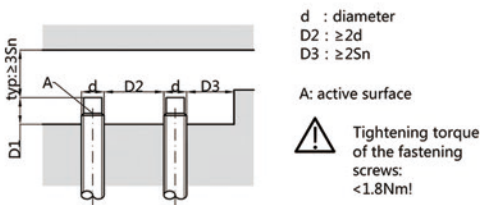
Dimensioned drawing



Model No.

Sensing range	Sn: 4 mm
N.O.	BFN-M1204U-V15S12
N.C.	BFN-M1204U-V25S12

Mounting

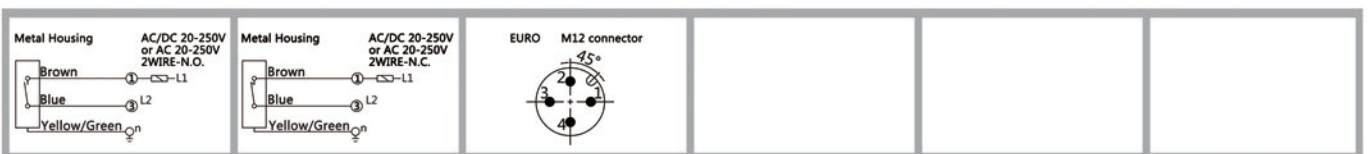


Installed in the metal	
size D1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	20-250V AC/DC
	Switching frequency	25Hz AC / 40Hz DC
	Voltage drop	<10VAC, 8VDC
	Load current	Max. Load:200mA; Min. Load: 5mA
	Residual ripple	<2.5mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2
		(to be ordered separately)

Wirng



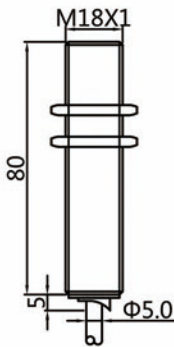


Features :

- M18*1 mm, Full stainless steel housing;
- 5mm, flush mountable;
- AC/DC 2-wire, switching output;
- Momentary current: 2.2A(20ms);
- Cable & connector versions



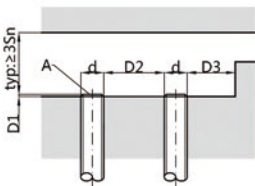
Dimensioned drawing



Model No.

Sensing range	Sn: 5 mm
N.O.	BFB-M1805U-V15P2
N.C.	BFB-M1805U-V25P2

Mounting



d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	20-250V AC/DC
	Switching frequency	25Hz AC / 40Hz DC
	Voltage drop	<10VAC, 8VDC
	Load current	Max. Load:200mA; Min. Load: 5mA
	Residual ripple	<2.5mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring



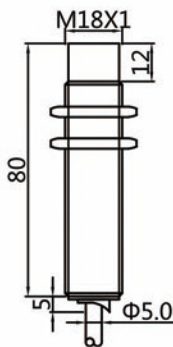


Features :

- M18*1 mm, Full stainless steel housing;
- 8mm, non-flush mountable;
- AC/DC 2-wire, switching output;
- Momentary current: 2.2A(20ms);
- Cable & connector versions



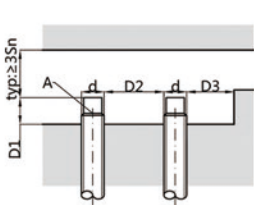
Dimensioned drawing



Model No.

Sensing range	Sn : 8 mm
N.O.	BFN-M1808U-V15P2
N.C.	BFN-M1808U-V25P2

Mounting



d : diameter
D2 : ≥2d
D3 : ≥2Sn
A: active surface
⚠ Tightening torque of the fastening screws: <1.8Nm!

Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	20-250V AC/DC
	Switching frequency	25Hz AC / 40Hz DC
	Voltage drop	<10VAC, 8VDC
	Load current	Max. Load:200mA; Min. Load: 5mA
	Residual ripple	<2.5mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	PVC cable/2m; 3*0.35mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring

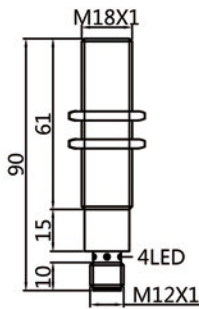


Features :

- M18*1 mm, Full stainless steel housing;
- 5mm, flush mountable;
- AC/DC 2-wire, switching output;
- Momentary current: 2.2A(20ms);
- Cable & connector versions



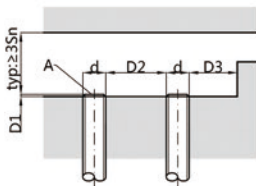
Dimensioned drawing



Model No.

Sensing range	Sn: 5 mm
N.O.	BFB-M1805U-V15S12
N.C.	BFB-M1805U-V25S12

Mounting



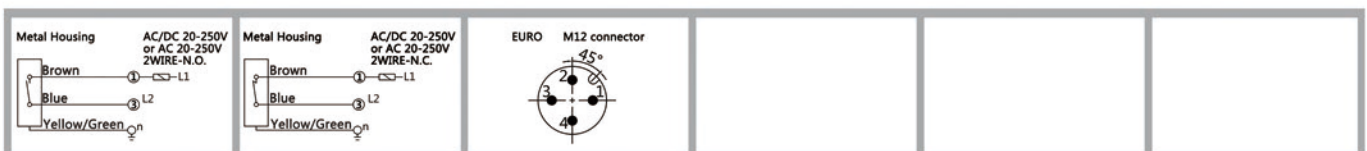
d : diameter
D1: 1mm
D2: ≥d
D3: ≥d
A: active surface

⚠ Tightening torque of the fastening screws: <1.8Nm!

Technical data

Electrical data	Operating voltage	20-250V AC/DC
	Switching frequency	25Hz AC / 40Hz DC
	Voltage drop	<10VAC, 8VDC
	Load current	Max. Load:200mA; Min. Load: 5mA
	Residual ripple	<2.5mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

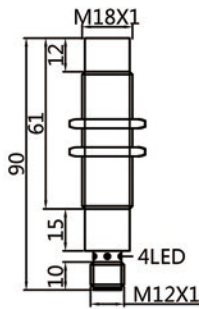


Features :

- M18*1 mm, Full stainless steel housing;
- 8mm, non-flush mountable;
- AC/DC 2-wire, switching output;
- Momentary current: 2.2A(20ms);
- Cable & connector versions



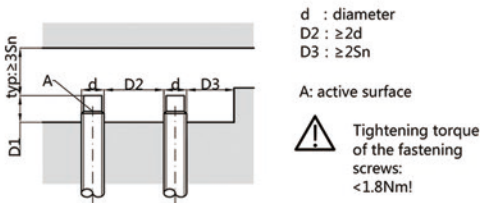
Dimensioned drawing



Model No.

Sensing range	Sn: 8 mm
N.O.	BFN-M1808U-V15S12
N.C.	BFN-M1808U-V25S12

Mounting



Installed in the metal	
sizeD1	D1(mm)
φ6.5	6
M8	6
Q8	6
M12	9
M18	16
M30	22

Technical data

Electrical data	Operating voltage	20-250V AC/DC
	Switching frequency	25Hz AC / 40Hz DC
	Voltage drop	<10VAC, 8VDC
	Load current	Max. Load:200mA; Min. Load: 5mA
	Residual ripple	<2.5mA
	Hysteresis	<15%(Sr)
	Repeatability	<1.0%(Sr)
Environment	Ambient temperature	-25...70°C
	Ingress protection	IP67
Mechanical data	Housing material	Stainless steel
	Face material	Stainless steel
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2
		(to be ordered separately)

Wiring

