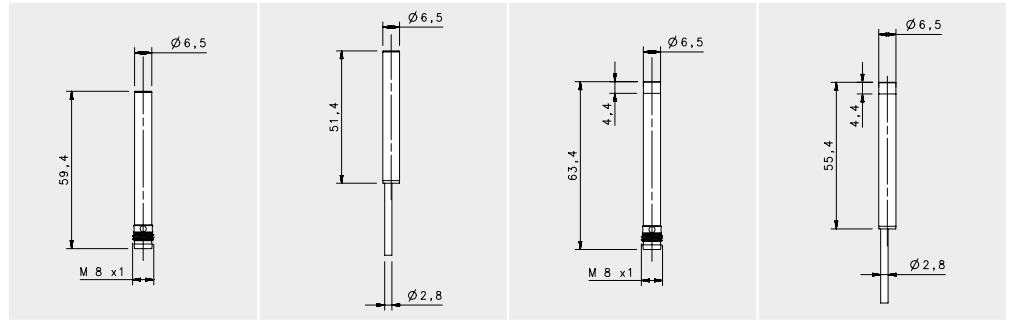


# BASIC M6.5



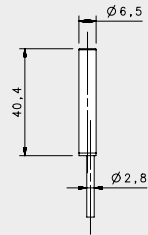
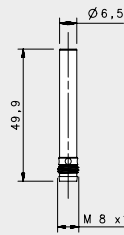
## STANDARD

				FLUSH		NON FLUSH	
				M8 conn	cable	M8 conn	cable
				1,5 mm	1,5 mm	2 mm	2 mm
<b>NOMINAL SWITCHING DISTANCE</b>							
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	PNP NO	3 wires	order No.	IS-65-A1-S1 95B066050	IS-65-A1-03 95B064730	IS-65-C1-S1 95B066210	IS-65-C1-03 95B064890
10-30 Vdc	PNP NC	3 wires	order No.	IS-65-A2-S1 95B066090	IS-65-A2-03 95B064770	IS-65-C2-S1 95B066250	IS-65-C2-03 95B066300
10-30 Vdc	NPN NO	3 wires	order No.	IS-65-A3-S1 95B064970	IS-65-A3-03 95B064650	IS-65-C3-S1 95B066130	IS-65-C3-03 95B064810
10-30 Vdc	NPN NC	3 wires	order No.	IS-65-A4-S1 95B066010	IS-65-A4-03 95B064690	IS-65-C4-S1 95B066170	IS-65-C4-03 95B064850
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---	---
20-250 Vac	NO	2/3wires	order No.	---	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---

	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%	< 10%
Max. Output Current	200 mm	200 mA	200 mm	200 mA
Min. Output Current	---	---	---	---
Residual Current	< 1,6 mA	< 1,6 mA	< 1,6 mA	< 1,6 mA
Voltage Drop	< 1,2 V (I=100 mA)	< 1,2 V (I=100 mA)	< 1,2 V (I=100 mA)	< 1,2 V (I=100 mA)
Operation Led	Yellow	Yellow	Yellow	Yellow
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Start Up Delay	< 50 ms	< 50 ms	< 50 ms	< 50 ms
Repeatability	< 3%	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67	IP67	IP67
Cable Length	---	2 m	---	2 m
Cable Section	---	3x 0,14 mm <sup>2</sup>	---	3x 0,14 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active Face	LCP	LCP	LCP	LCP
Tightening torque	---	---	---	---
Weight - Cable Output	---	80 g	---	80 g
Weight - Connector Output	40 g	---	40 g	---



# BASIC M6.5



## SHORT X2

FLUSH

M8 conn

cable

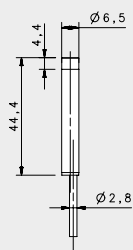
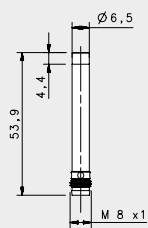
2 mm

2 mm

### NOMINAL SWITCHING DISTANCE

				M8 conn 2 mm	cable 2 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---
10-30 Vdc	PNP NO	3 wires	order No.	IS-65-G1-S1 95B066060	IS-65-G1-03 95B064740
10-30 Vdc	PNP NC	3 wires	order No.	IS-65-G2-S1 95B066100	IS-65-G2-03 95B064780
10-30 Vdc	NPN NO	3 wires	order No.	IS-65-G3-S1 95B064980	IS-65-G3-03 95B064660
10-30 Vdc	NPN NC	3 wires	order No.	IS-65-G4-S1 95B066020	IS-65-G4-03 95B064700
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---
10-30 Vdc	NO-NC	2 wires	order No.	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---
20-250 Vac	NO	2/3wires	order No.	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---

	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%
Hysteresis	< 10%	< 10%
Max. Output Current	200 mA	200 mA
Min. Output Current	---	---
Residual Current	< 10 mA	< 10 mA
Voltage Drop	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Operation Led	Yellow	Yellow
Switching Frequency	500 Hz	500 Hz
Start Up Delay	< 75 ms	< 75 ms
Repeatability	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +70 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67
Cable Length	---	2 m
Cable Section	---	3 x 0,14 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP
Tightening torque	---	---
Weight - Cable Output	---	80 g
Weight - Connector Output	40 g	---

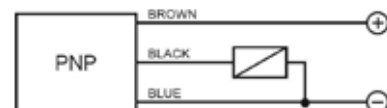
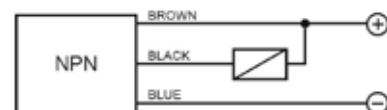


## SHORT X 2

NON FLUSH

M8 conn	cable
<b>3 mm</b>	<b>3 mm</b>
---	---
IS-65-H1-S1	IS-65-H1-O3
95B066220	95B064900
IS-65-H2-S1	IS-65-H2-O3
95B066260	95B064940
IS-65-H3-S1	IS-65-H3-O3
95B066140	95B064820
IS-65-H4-S1	IS-65-H4-O3
95B066180	95B064860
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---	---
---	---
---	---
---	---
---	---
---	---
10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
< 10%	< 10%
< 10%	< 10%
200 mA	200 mA
---	---
< 10 mA	< 10 mA
< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Yellow	Yellow
500 Hz	500 Hz
< 75 ms	< 75 ms
< 3%	< 3%
Present (self-resetting)	Present (self-resetting)
Against polarity reversal inductive loads	Against polarity reversal inductive loads
(-25 ... +70 °C)	(-25 ... +70 °C)
IP67	IP67
---	2 m
---	3 x 0,14 mm <sup>2</sup>
Nickel-plated brass	Nickel-plated brass
LCP	LCP
---	---
---	80 g
40 g	---

3 wires PNP or NPN

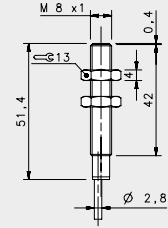
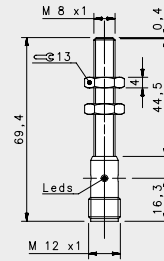
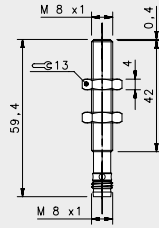


M8 3 pole



Available	Contacts numbers		
	1	3	4
NPN/PNP	BROWN +	BLUE -	BLACK NO/NC

# BASIC M8



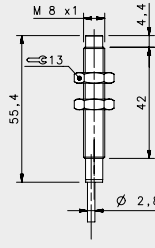
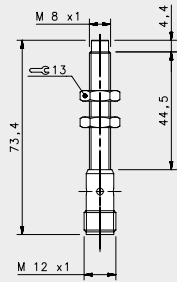
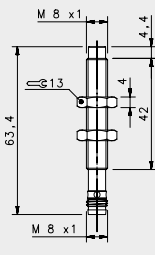
## STANDARD

### FLUSH

#### NOMINAL SWITCHING DISTANCE

				M8 conn	M12 conn	cable
				1,5 mm	1,5 mm	1,5 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---	---
10-30 Vdc	PNP NO	3 wires	order No.	IS-08-A1-S1 95B061141	IS-08-A1-S2 95B061131	IS-08-A1-03 95B061121
10-30 Vdc	PNP NC	3 wires	order No.	IS-08-A2-S1 95B061171	IS-08-A2-S2 95B061161	IS-08-A2-03 95B061151
10-30 Vdc	NPN NO	3 wires	order No.	IS-08-A3-S1 95B061081	IS-08-A3-S2 95B061071	IS-08-A3-03 95B061061
10-30 Vdc	NPN NC	3 wires	order No.	IS-08-A4-S1 95B061111	IS-08-A4-S2 95B061101	IS-08-A4-03 95B061091
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	---	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---
20-250 Vac	NO	2/3 wires	order No.	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---

	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%
Max. Output Current	200mA	200mA	200mA
Min. Output Current	---	---	---
Residual Current	< 10 mA	< 10 mA	< 10 mA
Voltage Drop	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Operation Led	Yellow	Yellow	Yellow
Switching Frequency	1000 Hz	1000 Hz	1000 Hz
Start Up Delay	< 50 ms	< 50 ms	< 50 ms
Repeatability	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67	IP67
Cable Length	---	---	2 m
Cable Section	---	---	3x 0,14 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP	LCP
Tightening torque	4Nm	4Nm	4Nm
Weight - Cable Output	---	---	80 g
Weight - Connector Output	35g	55g	---

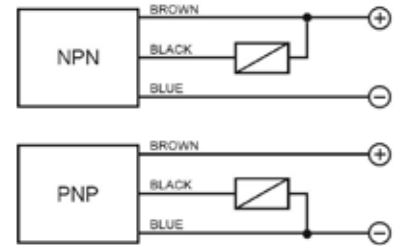


## STANDARD

### NON FLUSH

M8 conn 2 mm	M12 conn 2 mm	cable 2 mm
---	---	---
---	---	---
IS-08-C1-S1	IS-08-C1-S2	IS-08-C1-03
95B061541	95B061531	95B061521
IS-08-C2-S1	IS-08-C2-S2	IS-08-C2-03
95B061571	95B061561	95B061551
IS-08-C3-S1	IS-08-C3-S2	IS-08-C3-03
95B061481	95B061471	95B066410
IS-08-C4-S1	IS-08-C4-S2	IS-08-C4-03
95B061511	95B061501	95B066450
---	---	---
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---	---	---
---	---	---
---	---	---
---	---	---
10-30 Vdc (-15%/10%)	10-30 Vdc (-15%/10%)	10-30 Vdc (-15%/10%)
< 10%	< 10%	< 10%
< 10%	< 10%	< 10%
200mA	200mA	200mA
---	---	---
< 10 mA	< 10 mA	< 10 mA
< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Yellow	Yellow	Yellow
1000 Hz	1000 Hz	1000 Hz
< 50 ms	< 50 ms	< 50 ms
< 3%	< 3%	< 3%
Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
IP67	IP67	IP67
---	---	2 m
---	---	3x 0,14 mm <sup>2</sup>
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
LCP	LCP	LCP
4Nm	4Nm	4Nm
---	---	80 g
35g	55g	---

3 wires PNP or NPN



M12 3 pole



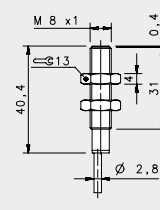
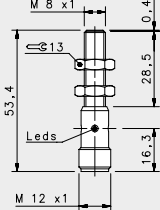
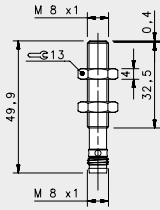
Available (NO or NC)	CONTACTS CONFIGURATION			Contacts numbers
	1	2	3	
(NO or NC)	+	+	-	NO/NC

M8 3 pole



Available	CONTACTS CONFIGURATION			Contacts numbers
	1	3	4	
NPN/PNP	BROWN +	BLUE -	BLACK NO/NC	

# BASIC M8



## SHORT

### FLUSH

#### NOMINAL SWITCHING DISTANCE

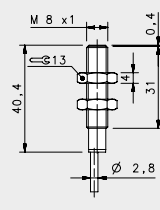
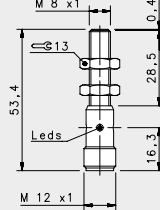
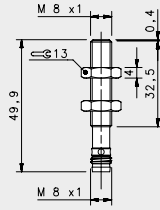
				M8 conn	M12 conn	cable
				1,5 mm	1,5 mm	1,5 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---	---
10-30 Vdc	PNP NO	3 wires	order No.	IS-08-B1-S1 95B066860	IS-08-B1-S2 95B066590	IS-08-B1-03 95B061921
10-30 Vdc	PNP NC	3 wires	order No.	IS-08-B2-S1 95B066890	IS-08-B2-S2 95B066620	IS-08-B2-03 95B061951
10-30 Vdc	NPN NO	3 wires	order No.	IS-08-B3-S1 95B066810	IS-08-B3-S2 95B066530	IS-08-B3-03 95B061861
10-30 Vdc	NPN NC	3 wires	order No.	IS-08-B4-S1 95B066830	IS-08-B4-S2 95B066560	IS-08-B4-03 95B061891
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	---	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---
20-250 Vac	NO	2/3 wires	order No.	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---

	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%
Max. Output Current	200mA	200mA	200mA
Min. Output Current	---	---	---
Residual Current	< 10 mA	< 10 mA	< 10 mA
Voltage Drop	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Operation Led	Yellow	Yellow	Yellow
Switching Frequency	1000 Hz	1000 Hz	1000 Hz
Start Up Delay	< 50 ms	< 50 ms	< 50 ms
Repeatability	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67	IP67
Cable Length	---	---	2 m
Cable Section	---	---	3 x 0,14 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP	LCP
Tightening torque	4Nm	4Nm	4Nm
Weight - Cable Output	---	---	80 g
Weight - Connector Output	35g	55g	---





# BASIC M8



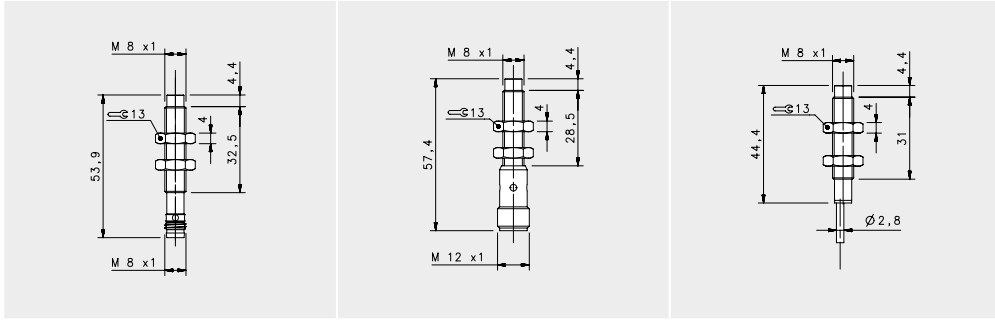
## SHORT X2

FLUSH

### NOMINAL SWITCHING DISTANCE

				M8 conn	M12 conn	cable
				2 mm	2 mm	2 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---	---
10-30 Vdc	PNP NO	3 wires	order No.	IS-08-G1-S1 95B066850	IS-08-G1-S2 95B066580	IS-08-G1-O3 95B066370
10-30 Vdc	PNP NC	3 wires	order No.	IS-08-G2-S1 95B066880	IS-08-G2-S2 95B066610	IS-08-G2-O3 95B066390
10-30 Vdc	NPN NO	3 wires	order No.	IS-08-G3-S1 95B066800	IS-08-G3-S2 95B066520	IS-08-G3-O3 95B066330
10-30 Vdc	NPN NC	3 wires	order No.	IS-08-G4-S1 95B063131	IS-08-G4-S2 95B066550	IS-08-G4-O3 95B066350
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	---	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---
20-250 Vac	NO	2/3 wires	order No.	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---

	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%
Max. Output Current	200mA	200mA	200mA
Min. Output Current	---	---	---
Residual Current	< 10 mA	< 10 mA	< 10 mA
Voltage Drop	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Operation Led	Yellow	Yellow	Yellow
Switching Frequency	500 Hz	500 Hz	500 Hz
Start Up Delay	< 75 ms	< 75 ms	< 75 ms
Repeatability	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +60 °C)	(-25 ... +60 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67	IP67
Cable Length	---	---	2 m
Cable Section	---	---	3 x 0,14 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP	LCP
Tightening torque	4Nm	4Nm	4Nm
Weight - Cable Output	---	---	80 g
Weight - Connector Output	35g	55g	---

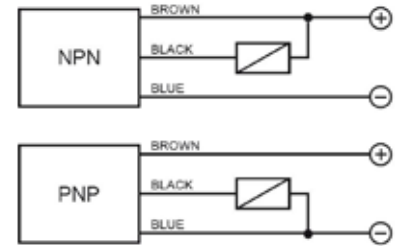


## SHORT X2

### NON FLUSH

M8 conn	M12 conn	cable
3 mm	3 mm	3 mm
---	---	---
---	---	---
IS-08-H1-S1	IS-08-H1-S2	IS-08-H1-03
95B066960	95B066690	95B066480
IS-08-H2-S1	IS-08-H2-S2	IS-08-H2-03
95B066990	95B063301	95B066500
IS-08-H3-S1	IS-08-H3-S2	IS-08-H3-03
95B066910	95B066640	95B066420
IS-08-H4-S1	IS-08-H4-S2	IS-08-H4-03
95B063251	95B063241	95B066460
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---	---	---
10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
< 10%	< 10%	< 10%
< 10%	< 10%	< 10%
200mA	200mA	200mA
---	---	---
< 10 mA	< 10 mA	< 10 mA
< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Yellow	Yellow	Yellow
500 Hz	500 Hz	500 Hz
< 75 ms	< 75 ms	< 75 ms
< 3%	< 3%	< 3%
Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
(-25 ... +60 °C)	(-25 ... +60 °C)	(-25 ... +70 °C)
IP67	IP67	IP67
---	---	2 m
---	---	3 x 0,14 mm <sup>2</sup>
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
LCP	LCP	LCP
4Nm	4Nm	4Nm
---	---	80 g
35g	55g	---

### 3 wires PNP or NPN



### M12 3 pole



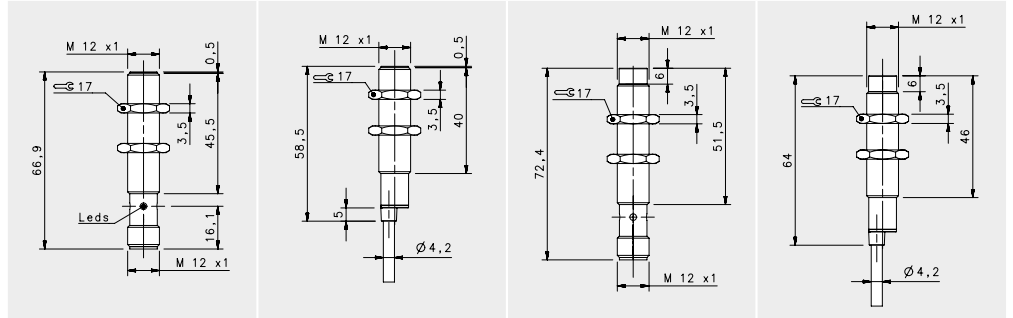
CONTACTS CONFIGURATION				
Available	Contacts numbers			
(NO or NC)	1	2	3	4
	+	-	-	NO/NC

### M8 3 pole



CONTACTS CONFIGURATION				
Available	Contacts numbers			
	1	3	4	
	BROWN	BLUE	BLACK	
NPN/ PNP	+	-	NO/NC	

# BASIC M12



## STANDARD

### FLUSH

### NON FLUSH

M12 conn

cable

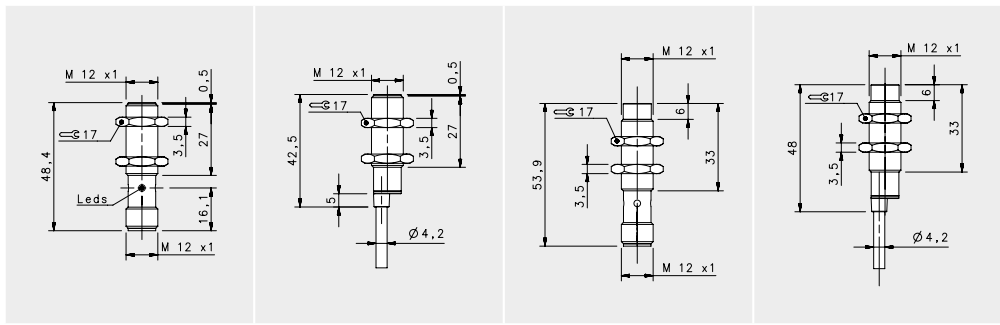
M12 conn

cable

### NOMINAL SWITCHING DISTANCE

				2 mm	2 mm	4 mm	4 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	IS-12-A0-S2 95B064060	IS-12-A0-03 95B064030	IS-12-C0-S2 95B064080	IS-12-C0-03 95B064040
10-30 Vdc	PNP NO	3 wires	order No.	IS-12-A1-S2 95B061251	IS-12-A1-03 95B061241	IS-12-C1-S2 95B061651	IS-12-C1-03 95B061641
10-30 Vdc	PNP NC	3 wires	order No.	IS-12-A2-S2 95B061281	IS-12-A2-03 95B061271	IS-12-C2-S2 95B061681	IS-12-C2-03 95B061671
10-30 Vdc	NPN NO	3 wires	order No.	IS-12-A3-S2 95B061191	IS-12-A3-03 95B061181	IS-12-C3-S2 95B061591	IS-12-C3-03 95B061581
10-30 Vdc	NPN NC	3 wires	order No.	IS-12-A4-S2 95B061221	IS-12-A4-03 95B061211	IS-12-C4-S2 95B061621	IS-12-C4-03 95B061611
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	IS-12-A9-S2 95B063931	IS-12-A9-03 95B064100	IS-12-C9-S2 95B064140	IS-12-C9-03 95B064110
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---	---
20-250 Vac	NO	2/3wires	order No.	---	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---

Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%	< 10%
Max. Output Current	200mA; 100 mA (2wires)	200mA; 100 mA (2wires)	200mA; 100 mA (2wires)	200mA; 100 mA (2wires)
Min. Output Current	> 1,6 mA (2wires)	> 1,6 mA (2wires)	> 1,6 mA (2wires)	> 1,6 mA (2wires)
Residual Current	< 10mA; < 1,6 mA (2wires)	< 10mA; < 1,6 mA (2wires)	< 10mA; < 1,6 mA (2wires)	< 10mA; < 1,6 mA (2wires)
Voltage Drop	< 1,8V; < 6,5 V (2wires)	< 1,8V; < 6,5 V (2wires)	< 1,8V; < 6,5 V (2wires)	< 1,8V; < 6,5 V (2wires)
Operation Led	Yellow	Yellow	Yellow	Yellow
Switching Frequency	1000 Hz/200 Hz (2 wires NO-NC)	1000 Hz/200 Hz (2 wires NO-NC)	1000 Hz/200 Hz (2 wires NO-NC)	1000 Hz/200 Hz (2 wires NO-NC)
Start Up Delay	< 50 ms	< 50 ms	< 50 ms	< 50 ms
Repeatability	< 3%	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67	IP67	IP67
Cable Length	---	2 m	---	2 m
Cable Section	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP	LCP	LCP
Tightening torque	10Nm	10Nm	10Nm	10Nm
Weight - Cable Output	---	110 g	---	110 g
Weight - Connector Output	60 g	---	60 g	---

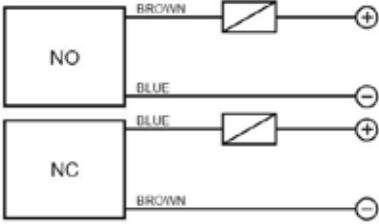


### SHORT

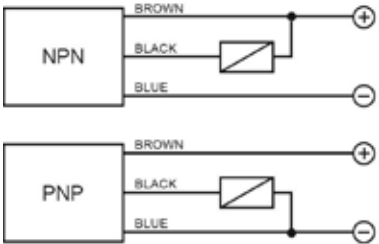
FLUSH		NON FLUSH	
M12 conn	cable	M12conn	cable
2 mm	2 mm	4 mm	4 mm
---	---	---	---
IS-12-B1-S2	IS-12-B1-03	IS-12-D1-S2	IS-12-D1-03
95B062051	95B062041	95B062451	95B062441
IS-12-B2-S2	IS-12-B2-03	IS-12-D2-S2	IS-12-D2-03
95B062081	95B062071	95B062481	95B062471
IS-12-B3-S2	IS-12-B3-03	IS-12-D3-S2	IS-12-D3-03
95B061991	95B061981	95B062391	95B062381
IS-12-B4-S2	IS-12-B4-03	IS-12-D4-S2	IS-12-D4-03
95B062021	95B062011	95B062421	95B062411
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10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
< 10%	< 10%	< 10%	< 10%
< 10%	< 10%	< 10%	< 10%
200 mA	200 mA	200 mA	200 mA
---	---	---	---
< 10 mA	< 10 mA	< 10 mA	< 10 mA
< 1,8 V (I=100mA)	< 1,8 V (I=100mA)	< 1,8 V (I=100mA)	< 1,8 V (I=100mA)
Yellow	Yellow	Yellow	Yellow
1000 Hz	1000 Hz	1000 Hz	1000 Hz
< 50 ms	< 50 ms	< 50 ms	< 50 ms
< 3%	< 3%	< 3%	< 3%
Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
(-25 ... +60 °C)	(-25 ... +70 °C)	(-25 ... +60 °C)	(-25 ... +70 °C)
IP67	IP67	IP67	IP67
---	2 m	---	2 m
---	3 x 0,14 mm <sup>2</sup>	---	3 x 0,14 mm <sup>2</sup>
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
LCP	LCP	LCP	LCP
10Nm	10Nm	10Nm	10Nm
---	110 g	---	110 g
60 g	---	60 g	---

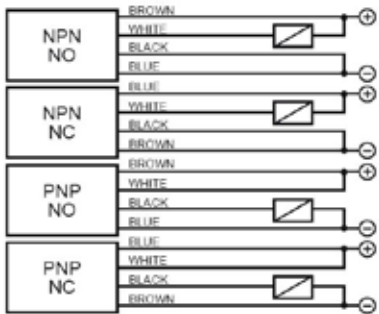
### 2 wires NO or NC



### 3 wires PNP or NPN



### 4 wires (PNP/NPN, NO/NC)



### M12 connector - connections



### 2 wires NO or NC

Available	Contacts numbers			
	1	2	3	4
NO	+	---	---	---
NC	---	---	+	---

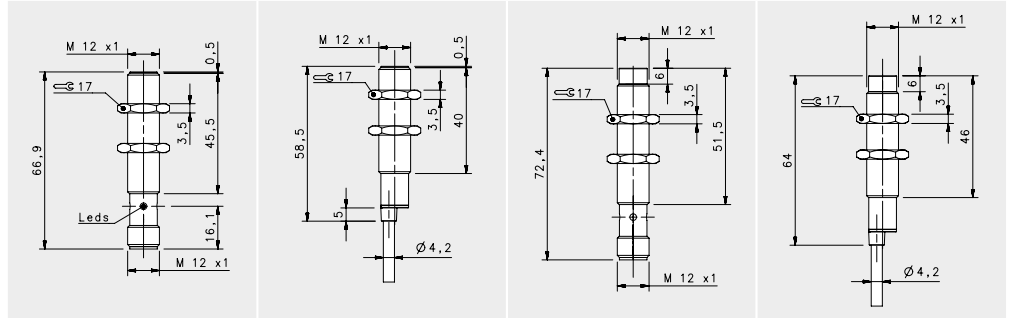
### 3 wires

Available	Contacts numbers			
	1	2	3	4
(NO or NC)	+	---	---	NO/NC

### 4 wires (PNP/NPN, NO/NC)

Output	Contacts numbers			
	1	2	3	4
NPN NO	+	NO	---	---
NPN NC	---	NC	+	---
PNP NO	+	+	---	NO
PNP NC	---	+	+	NC

# BASIC M12



## STANDARD X2

FLUSH

NON FLUSH

M12 conn

cable

M12 conn

cable

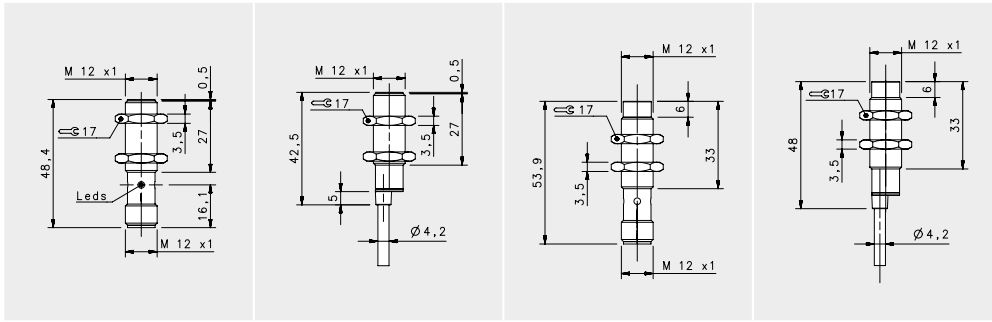
### NOMINAL SWITCHING DISTANCE

4 mm

8 mm

10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	IS-12-E0-S2 95B067230	IS-12-E0-03 95B067190	IS-12-F0-S2 95B067250	IS-12-F0-03 95B067210
10-30 Vdc	PNP NO	3 wires	order No.	IS-12-E1-S2 95B067030	IS-12-E1-03 95B067670	IS-12-F1-S2 95B067020	IS-12-F1-03 95B067740
10-30 Vdc	PNP NC	3 wires	order No.	IS-12-E2-S2 95B067640	IS-12-E2-03 95B067680	IS-12-F2-S2 95B067710	IS-12-F2-03 95B067750
10-30 Vdc	NPN NO	3 wires	order No.	IS-12-E3-S2 95B067650	IS-12-E3-03 95B067690	IS-12-F3-S2 95B067720	IS-12-F3-03 95B067760
10-30 Vdc	NPN NC	3 wires	order No.	IS-12-E4-S2 95B067660	IS-12-E4-03 95B067700	IS-12-F4-S2 95B067730	IS-12-F4-03 95B067770
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	IS-12-E9-S2 95B067240	IS-12-E9-03 95B067200	IS-12-F9-S2 95B067260	IS-12-F9-03 95B067220
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---	---
20-250 Vac	NO	2/3wires	order No.	---	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---

Nominal Voltage	10-30 Vdc (-15%/10%)	10-30 Vdc (-15%/10%)	10-30 Vdc (-15%/10%)	10-30 Vdc (-15%/10%)
Residual Ripple	< 10%	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%	< 10%
Max. Output Current	100 mA	100 mA	100 mA	100 mA
Min. Output Current	---	---	---	---
Residual Current	< 10 mA	< 10 mA	< 10 mA	< 10 mA
Voltage Drop	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Operation Led	Yellow	Yellow	Yellow	Yellow
Switching Frequency	500 Hz/200 Hz (2 wires NO-NC)	500 Hz/200 Hz (2 wires NO-NC)	400 Hz/200 Hz (2 wires NO-NC)	400 Hz/200 Hz (2 wires NO-NC)
Start Up Delay	< 75 ms	< 75 ms	< 75 ms	< 75 ms
Repeatability	< 3%	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67	IP67	IP67
Cable Length	---	---	---	---
Cable Section	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP	LCP	LCP
Tightening torque	10Nm	10Nm	10Nm	10Nm
Weight - Cable Output	---	---	---	---
Weight - Connector Output	60 g	60 g	60 g	60 g

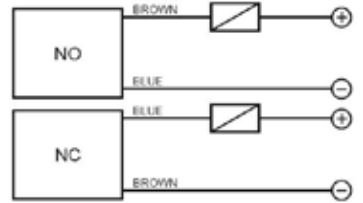


### SHORT X2

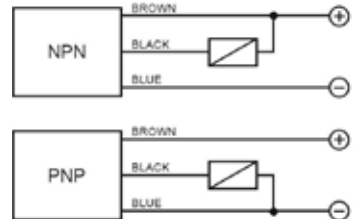
FLUSH		NON FLUSH	
M12 con	cable	M12 conn	cable
4 mm	4 mm	8 mm	8 mm
---	---	---	---
---	---	---	---
IS-12-G1-S2	IS-12-G1-03	IS-12-H1-S2	IS-12-H1-03
95B063371	95B063361	95B063451	95B063441
IS-12-G2-S2	IS-12-G2-03	IS-12-H2-S2	IS-12-H2-03
95B063391	95B063381	95B063471	95B063461
IS-12-G3-S2	IS-12-G3-03	IS-12-H3-S2	IS-12-H3-03
95B063331	95B063321	95B063411	95B063401
IS-12-G4-S2	IS-12-G4-03	IS-12-H4-S2	IS-12-H4-03
95B063351	95B063341	95B063431	95B063421
IS-12-G5-S2	IS-12-G5-03	IS-12-H5-S2	IS-12-H5-03
95B062691	95B062681	95B062771	95B062761
IS-12-G6-S2	IS-12-G6-03	IS-12-H6-S2	IS-12-H6-03
95B062671	95B062661	95B062751	95B062741
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10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
< 10%	< 10%	< 10%	< 10%
< 10%	< 10%	< 10%	< 10%
200 mA	200 mA	200 mA	200 mA
> 1,6 mA (2wires ver.)	> 1,6 mA (2wires ver.)	> 1,6 mA (2wires ver.)	> 1,6 mA (2wires ver.)
< 10 mA	< 10 mA	< 10 mA	< 10 mA
< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Yellow	Yellow	Yellow	Yellow
500 Hz/200 Hz (4 wires NO-NC)	500 Hz/200 Hz (4 wires NO-NC)	500 Hz/200 Hz (4 wires NO-NC)	500 Hz/200 Hz (4 wires NO-NC)
< 75 ms	< 75 ms	< 75 ms	< 75 ms
< 3%	< 3%	< 3%	< 3%
Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
IP67	IP67	IP67	IP67
---	2 m	---	2 m
---	3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>	---	3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
LCP	LCP	LCP	LCP
10Nm	10Nm	10Nm	10Nm
---	110 g	---	110 g
60 g	---	60 g	---

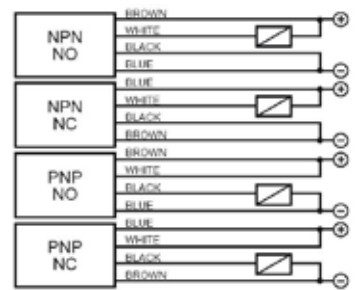
### 2 wires NO or NC



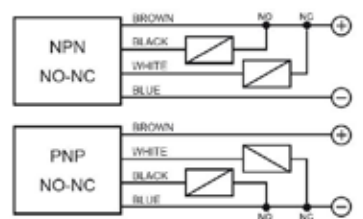
### 3 wires PNP or NPN



### 4 wires (PNP/NPN, NO/NC)



### 4 wires (NO+NC)



### M12 connector connections



### 2 wires NO or NC

Available	CONTACTS CONFIGURATION			
	Contacts numbers			
NO	+	2	3	4
NC	-		+	

### 3 wires

Available	CONTACTS CONFIGURATION			
	Contacts numbers			
(NO or NC)	+		-	NO/NC

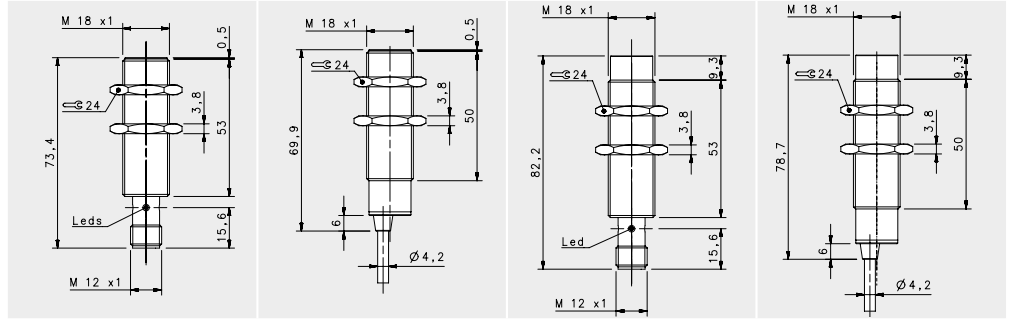
### 4 wires (PNP/NPN, NO/NC)

Output	CONTACTS CONFIGURATION			
	Contacts numbers			
NPN NO	+	NO	-	-
NPN NC	-	NC	+	-
PNP NO	+	+	-	NO
PNP NC	-	+	+	NC

### 4 wires (NO+NC)

Available	Contacts numbers			
	(NO + NC)	+	NC	-

# BASIC M18



## STANDARD

### FLUSH

### NON FLUSH

M12 conn

cable

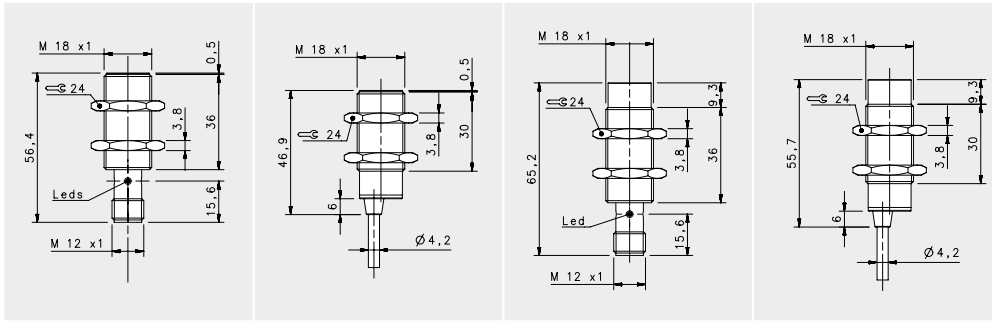
M12 conn

cable

### NOMINAL SWITCHING DISTANCE

				5 mm	5 mm	8 mm	8 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	IS-18-A0-S2 95B064260	IS-18-A0-03 95B064230	IS-18-C0-S2 95B064280	IS-18-C0-03 95B064240
10-30 Vdc	PNP NO	3 wires	order No.	IS-18-A1-S2 95B061351	IS-18-A1-03 95B061341	IS-18-C1-S2 95B061751	IS-18-C1-03 95B061741
10-30 Vdc	PNP NC	3 wires	order No.	IS-18-A2-S2 95B061371	IS-18-A2-03 95B061361	IS-18-C2-S2 95B061771	IS-18-C2-03 95B061761
10-30 Vdc	NPN NO	3 wires	order No.	IS-18-A3-S2 95B061311	IS-18-A3-03 95B061301	IS-18-C3-S2 95B061711	IS-18-C3-03 95B061701
10-30 Vdc	NPN NC	3 wires	order No.	IS-18-A4-S2 95B061331	IS-18-A4-03 95B061321	IS-18-C4-S2 95B061731	IS-18-C4-03 95B061721
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	IS-18-A9-S2 95B063941	S-18-A9-03 95B064300	IS-18-C9-S2 95B064340	IS-18-C9-03 95B064310
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---	---
20-250 Vac	NO	2/3wires	order No.	---	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---

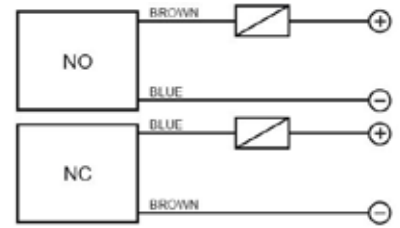
Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%	< 10%
Max. Output Current	200 mA	200 mA	200 mA	200 mA
Min. Output Current	> 1,6 mA (2wires ver.)	> 1,6 mA (2wires ver.)	> 1,6 mA (2wires ver.)	> 1,6 mA (2wires ver.)
Residual Current	< 10 mA	< 10 mA	< 10 mA	< 10 mA
Voltage Drop	< 1,8V; < 6,5 V (2wires ver.)	< 1,8V; < 6,5 V (2wires ver.)	< 1,8V; < 6,5 V (2wires ver.)	< 1,8V; < 6,5 V (2wires ver.)
Operation Led	Yellow	Yellow	Yellow	Yellow
Switching Frequency	1000 Hz/200 Hz (2 wires NO-NC)	1000 Hz/200 Hz (2 wires NO-NC)	1000 Hz/200 Hz (2 wires NO-NC)	1000 Hz/200 Hz (2 wires NO-NC)
Start Up Delay	< 50 ms	< 50 ms	< 50 ms	< 50 ms
Repeatability	< 3%	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +60 °C)	(-25 ... +60 °C)	(-25 ... +60 °C)	(-25 ... +60 °C)
Protection Degree	IP67	IP67	IP67	IP67
Cable Length	---	2 m	---	2 m
Cable Section	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP	LCP	LCP
Tightening torque	30Nm	30Nm	30Nm	30Nm
Weight - Cable Output	---	145g	---	145g
Weight - Connector Output	95g	---	95g	---



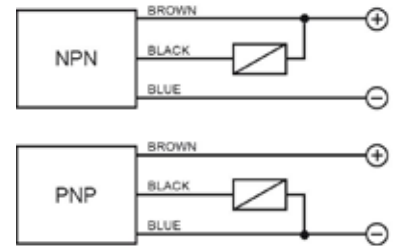
SHORT			
FLUSH		NON FLUSH	
M12 conn	cable	M12 conn	cable
5 mm	5 mm	8 mm	8 mm
---	---	---	---
---	---	---	---
IS-18-B1-S2	IS-18-B1-03	IS-18-D1-S2	IS-18-D1-03
95B062151	95B062141	95B062551	95B062541
IS-18-B2-S2	IS-18-B2-03	IS-18-D2-S2	IS-18-D2-03
95B062171	95B062161	95B062571	95B062561
IS-18-B3-S2	IS-18-B3-03	IS-18-D3-S2	IS-18-D3-03
95B062111	95B062101	95B062511	95B062501
IS-18-B4-S2	IS-18-B4-03	IS-18-D4-S2	IS-18-D4-03
95B062131	95B062121	95B062531	95B062521
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10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
< 10%	< 10%	< 10%	< 10%
< 10%	< 10%	< 10%	< 10%
200 mA	200 mA	200 mA	200 mA
---	---	---	---
< 10 mA	< 10 mA	< 10 mA	< 10 mA
< 1.8 V (I=100mA)	< 1.8 V (I=100mA)	< 1.8 V (I=100mA)	< 1.8 V (I=100mA)
Yellow	Yellow	Yellow	Yellow
1000 Hz	1000 Hz	1000 Hz	1000 Hz
< 50 ms	< 50 ms	< 50 ms	< 50 ms
< 3%	< 3%	< 3%	< 3%
Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
(-25 ... +60 °C)	(-25 ... +60 °C)	(-25 ... +60 °C)	(-25 ... +60 °C)
IP67	IP67	IP67	IP67
---	2 m	---	2 m
---	3 x 0,14 mm <sup>2</sup>	---	3 x 0,14 mm <sup>2</sup>
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
LCP	LCP	LCP	LCP
30Nm	30Nm	30Nm	30Nm
---	145g	---	145g
95g	---	95g	---

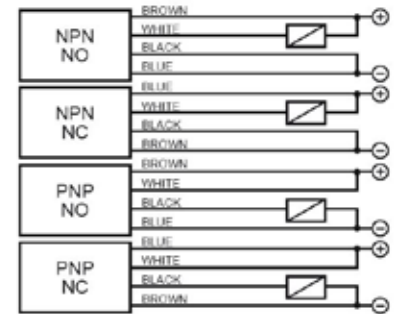
2 wires NO or NC



3 wires PNP or NPN



4 wires (PNP/NPN, NO/NC)



M12 connector - connections



2 wires NO or NC

Available	Contacts numbers			
	1	2	3	4
NO	+	-	-	-
NC	-	-	+	-

3 wires

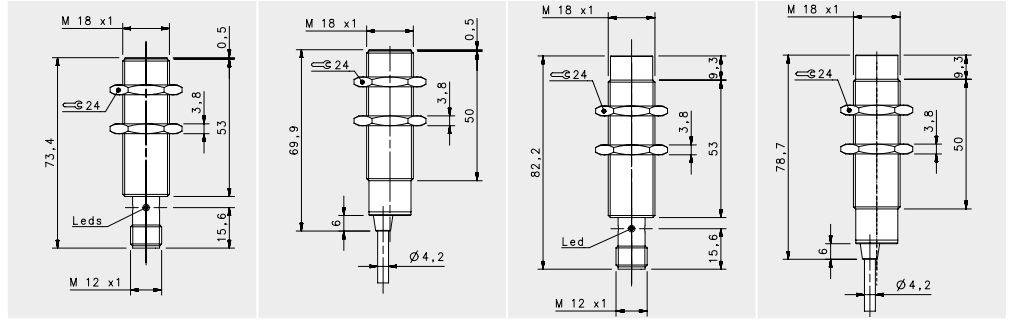
Available (NO or NC)	Contacts numbers			
	1	2	3	4
NO	+	-	-	NO/NC
NC	-	-	+	NO/NC

4 wires (PNP/NPN, NO/NC)

Output	Contacts numbers			
	1	2	3	4
NPN NO	+	NO	-	-
NPN NC	-	NC	+	-
PNP NO	+	+	-	NO
PNP NC	-	+	+	NC



# BASIC M18



## STANDARD X2

FLUSH

NON FLUSH

M12 conn

cable

M12 conn

cable

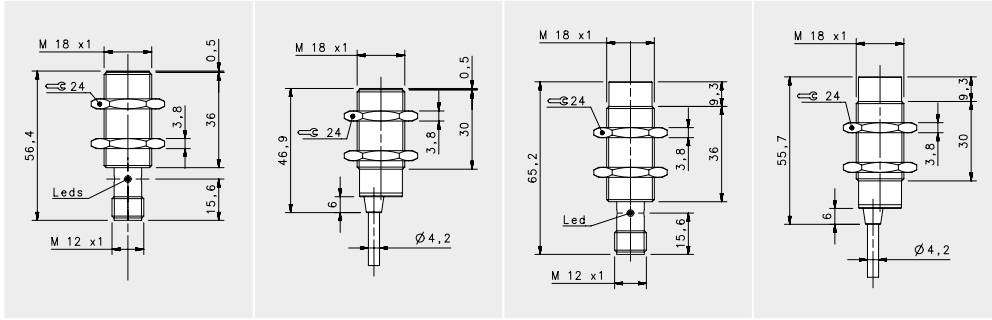
### NOMINAL SWITCHING DISTANCE

8 mm

14 mm

10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	IS-18-E0-S2 95B067310	IS-18-E0-O3 95B067270	IS-18-F0-S2 95B067330	IS-18-F0-O3 95B067290
10-30 Vdc	PNP NO	3 wires	order No.	IS-18-E1-S2 95B067050	IS-18-E1-O3 95B067810	IS-18-F1-S2 95B067040	IS-18-F1-O3 95B067880
10-30 Vdc	PNP NC	3 wires	order No.	IS-18-E2-S2 95B067780	IS-18-E2-O3 95B067820	IS-18-F2-S2 95B067850	IS-18-F2-O3 95B067890
10-30 Vdc	NPN NO	3 wires	order No.	IS-18-E3-S2 95B067790	IS-18-E3-O3 95B067830	IS-18-F3-S2 95B067860	IS-18-F3-O3 95B067900
10-30 Vdc	NPN NC	3 wires	order No.	IS-18-E4-S2 95B067800	IS-18-E4-O3 95B067840	IS-18-F4-S2 95B067870	IS-18-F4-O3 95B067910
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	IS-18-E9-S2 95B067320	IS-18-E9-O3 95B067280	IS-18-F9-S2 95B067340	IS-18-F9-O3 95B067300
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---	---
20-250 Vac	NO	2/3wires	order No.	---	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---

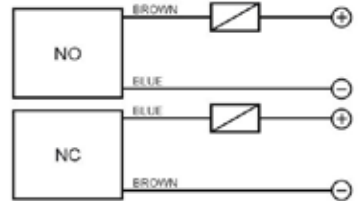
	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%	< 10%
Max. Output Current	200 mA	200 mA	200 mA	200 mA
Min. Output Current	---	---	---	---
Residual Current	< 10 mA	< 10 mA	< 10 mA	< 10 mA
Voltage Drop	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Operation Led	Yellow	Yellow	Yellow	Yellow
Switching Frequency	400 Hz	400 Hz	100 Hz	100 Hz
Start Up Delay	< 50 ms	< 50 ms	< 50 ms	< 50 ms
Repeatability	< 3%	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67	IP67	IP67
Cable Length	---	---	---	---
Cable Section	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP	LCP	LCP
Tightening torque	30Nm	30Nm	30Nm	30Nm
Weight - Cable Output	---	---	145g	145g
Weight - Connector Output	95g	95g	---	---



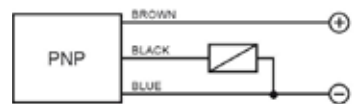
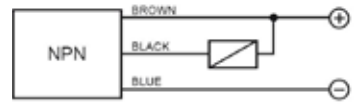
## SHORT X2

FLUSH		NON FLUSH	
M12 conn	8 mm cable	M12 conn	14 mm cable
---	---	---	---
IS-18-G1-S2	IS-18-G1-03	IS-18-H1-S2	IS-18-H1-03
95B063531	95B063521	95B063611	95B063601
IS-18-G2-S2	IS-18-G2-03	IS-18-H2-S2	IS-18-H2-03
95B063551	95B063541	95B063631	95B063621
IS-18-G3-S2	IS-18-G3-03	IS-18-H3-S2	IS-18-H3-03
95B063491	95B063061	95B063571	95B063561
IS-18-G4-S2	IS-18-G4-03	IS-18-H4-S2	IS-18-H4-03
95B063511	95B063501	95B063591	95B063581
IS-18-G5-S2	IS-18-G5-03	IS-18-H5-S2	IS-18-H5-03
95B062731	95B062721	95B062811	95B064220
IS-18-G6-S2	IS-18-G6-03	IS-18-H6-S2	IS-18-H6-03
95B062711	95B064200	95B062791	95B064210
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10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
< 10%	< 10%	< 10%	< 10%
< 10%	< 10%	< 10%	< 10%
200 mA	200 mA	200 mA	200 mA
> 1,6 mA (2wires ver.)	> 1,6 mA (2wires ver.)	> 1,6 mA (2wires ver.)	> 1,6 mA (2wires ver.)
< 10 mA	< 10 mA	< 10 mA	< 10 mA
< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Yellow	Yellow	Yellow	Yellow
400 Hz/100 Hz (4 wires NO-NC)	400 Hz/100 Hz (4 wires NO-NC)	400 Hz/100 Hz (4 wires NO-NC)	400 Hz/100 Hz (4 wires NO-NC)
< 75 ms	< 75 ms	< 75 ms	< 75 ms
< 3%	< 3%	< 3%	< 3%
Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
(-25 ... +60 °C)	(-25 ... +70 °C)	(-25 ... +60 °C)	(-25 ... +70 °C)
IP67	IP67	IP67	IP67
---	2 m	---	2 m
---	3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>	---	3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
LCP	LCP	LCP	LCP
30Nm	30Nm	30Nm	30Nm
---	145g	---	145g
95g	---	95g	---

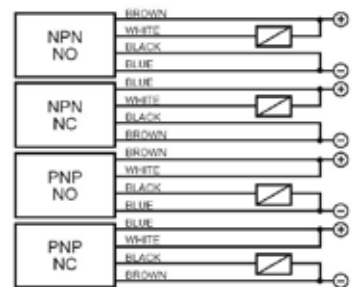
### 2 wires NO or NC



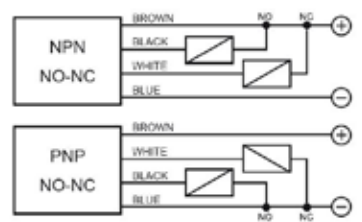
### 3 wires PNP or NPN



### 4 wires (PNP/NPN, NO/NC)



### 4 wires (NO+NC)



### M12 connector connections

#### 2 wires NO or NC

Available	CONTACTS CONFIGURATION			
	Contacts numbers			
NO	+	-	-	-
NC	-	-	+	-

#### 3 wires

Available	CONTACTS CONFIGURATION			
	Contacts numbers			
(NO or NC)	+	-	-	NO/NC

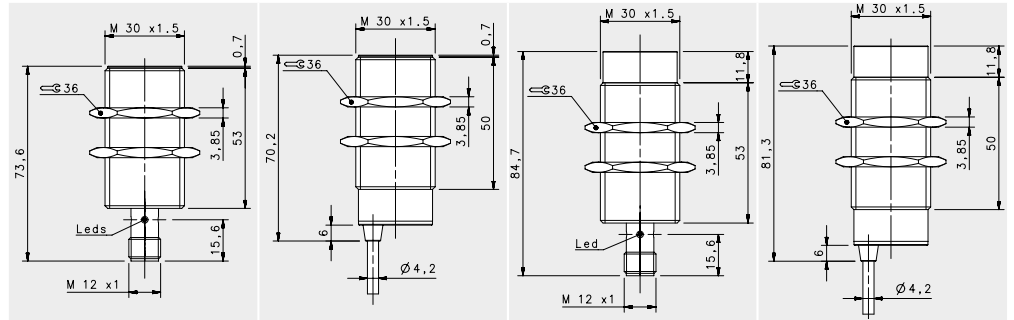
#### 4 wires (PNP/NPN, NO/NC)

Output	CONTACTS CONFIGURATION			
	Contacts numbers			
NPN NO	+	NO	-	-
NPN NC	-	NC	+	-
PNP NO	+	+	-	NO
PNP NC	-	+	+	NC

#### 4 wires (NO+NC)

Available	CONTACTS CONFIGURATION			
	Contacts numbers			
(NO + NC)	+	NC	-	NO

# BASIC M30



## STANDARD

### FLUSH

### NON FLUSH

M12 conn

cable

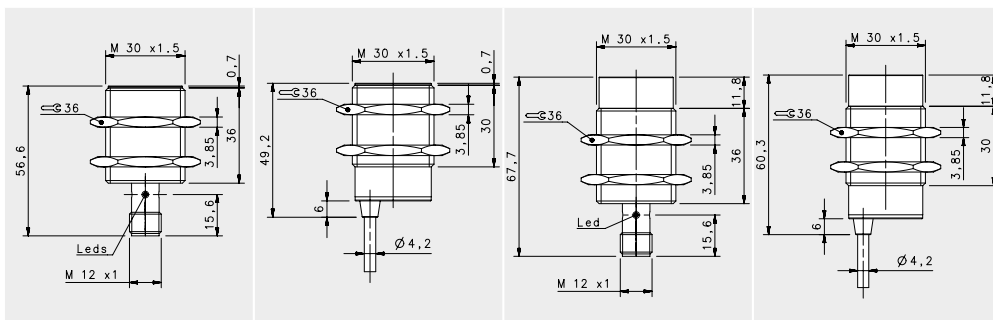
M12 conn

cable

### NOMINAL SWITCHING DISTANCE

				10 mm	10 mm	15 mm	15 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	IS-30-A0-S2 95B064490	IS-30-A0-03 95B064460	IS-30-C0-S2 95B064510	IS-30-C0-03 95B064470
10-30 Vdc	PNP NO	3 wires	order No.	IS-30-A1-S2 95B061431	IS-30-A1-03 95B061421	IS-30-C1-S2 95B061831	IS-30-C1-03 95B061821
10-30 Vdc	PNP NC	3 wires	order No.	IS-30-A2-S2 95B061451	IS-30-A2-03 95B061441	IS-30-C2-S2 95B061851	IS-30-C2-03 95B061841
10-30 Vdc	NPN NO	3 wires	order No.	IS-30-A3-S2 95B061391	IS-30-A3-03 95B061381	IS-30-C3-S2 95B061791	IS-30-C3-03 95B061781
10-30 Vdc	NPN NC	3 wires	order No.	IS-30-A4-S2 95B061411	IS-30-A4-03 95B061401	IS-30-C4-S2 95B061811	IS-30-C4-03 95B061801
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	IS-30-A9-S2 95B064570	IS-30-A9-03 95B064530	IS-30-C9-S2 95B064590	IS-30-C9-03 95B064550
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---	---
20-250 Vac	NO	2/3wires	order No.	---	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---

Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%	< 10%
Max. Output Current	200mA; 100 mA (2wires)	200mA; 100 mA (2wires)	200mA; 100 mA (2wires)	200mA; 100 mA (2wires)
Min. Output Current	> 1,6 mA (2wires)	> 1,6 mA (2wires)	> 1,6 mA (2wires)	> 1,6 mA (2wires)
Residual Current	< 1,6 mA	< 1,6 mA	< 1,6 mA	< 1,6 mA
Voltage Drop	< 1,8V; < 6,5 V (2wires)	< 1,8V; < 6,5 V (2wires)	< 1,8V; < 6,5 V (2wires)	< 1,8V; < 6,5 V (2wires)
Operation Led	Yellow	Yellow	Yellow	Yellow
Switching Frequency	300 Hz/250 Hz (2 wires NO-NC)	300 Hz/250 Hz (2 wires NO-NC)	300 Hz/250 Hz (2 wires NO-NC)	300 Hz/250 Hz (2 wires NO-NC)
Start Up Delay	< 50 ms	< 50 ms	< 50 ms	< 50 ms
Repeatability	< 3%	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67	IP67	IP67
Cable Length	---	2 m	---	2 m
Cable Section	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP	LCP	LCP
Tightening torque	60Nm	60Nm	60Nm	60Nm
Weight - Cable Output	---	210 g	---	210 g
Weight - Connector Output	170 g	---	170 g	---

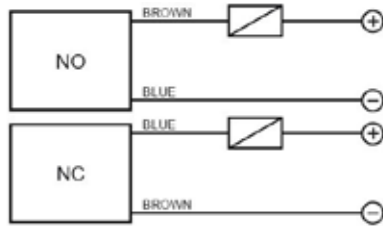


## SHORT

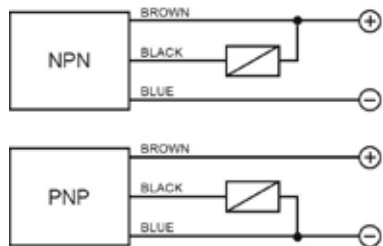
FLUSH		NON FLUSH	
M12 conn	cable	M12 conn	cable
10 mm	10 mm	15 mm	15 mm
---	---	---	---
---	---	---	---
IS-30-B1-S2	IS-30-B1-03	IS-30-D1-S2	IS-30-D1-03
95B062231	95B062221	95B062631	95B062621
IS-30-B2-S2	IS-30-B2-03	IS-30-D2-S2	IS-30-D2-03
95B062251	95B062241	95B062651	95B062641
IS-30-B3-S2	IS-30-B3-03	IS-30-D3-S2	IS-30-D3-03
95B062191	95B062181	95B062591	95B062581
IS-30-B4-S2	IS-30-B4-03	IS-30-D4-S2	IS-30-D4-03
95B062211	95B062201	95B062611	95B062601
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10-30 Vdc (-15%/10%)	10-30 Vdc (-15%/10%)	10-30 Vdc (-15%/10%)	10-30 Vdc (-15%/10%)
< 10%	< 10%	< 10%	< 10%
< 10%	< 10%	< 10%	< 10%
200 mA	200 mA	200 mA	200 mA
---	---	---	---
< 10 mA	< 10 mA	< 10 mA	< 10 mA
< 1,8 V (I=100mA)	< 1,8 V (I=100mA)	< 1,8 V (I=100mA)	< 1,8 V (I=100mA)
Yellow	Yellow	Yellow	Yellow
300 Hz	300 Hz	300 Hz	300 Hz
< 50 ms	< 50 ms	< 50 ms	< 50 ms
< 3%	< 3%	< 3%	< 3%
Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
(-25 ... +60 °C)	(-25 ... +60 °C)	(-25 ... +60 °C)	(-25 ... +60 °C)
IP67	IP67	IP67	IP67
---	2 m	---	2 m
---	3 x 0,14 mm <sup>2</sup>	---	3 x 0,14 mm <sup>2</sup>
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
LCP	LCP	LCP	LCP
60Nm	60Nm	60Nm	60Nm
---	210 g	---	210 g
170 g	---	170 g	---

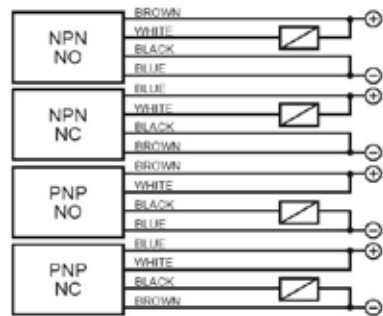
### 2 wires NO or NC



### 3 wires PNP or NPN



### 4 wires (PNP/NPN, NO/NC)



### M12 connector - connections



### 2 wires NO or NC

Available	CONTACTS CONFIGURATION			
	Contacts numbers			
NO	+	2	3	4
NC	-		+	

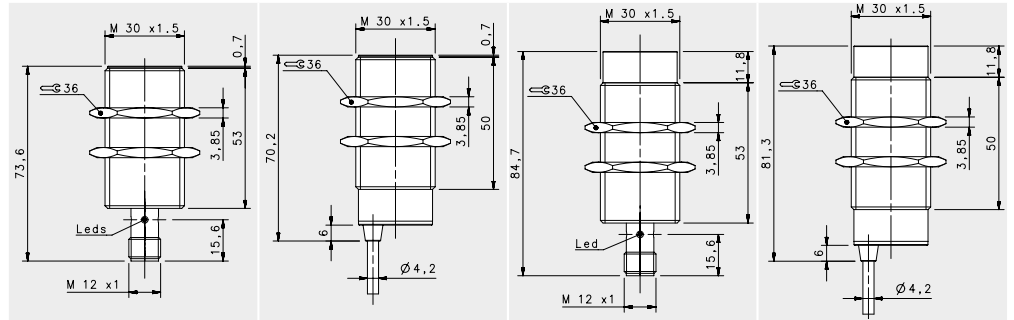
### 3 wires

Available	CONTACTS CONFIGURATION			
	Contacts numbers			
(NO or NC)	+	2	3	4
			-	NO/NC

### 4 wires (PNP/NPN, NO/NC)

Output	CONTACTS CONFIGURATION			
	Contacts numbers			
NPN NO	+	NO	-	-
NPN NC	-	NC	+	-
PNP NO	+	+	-	NO
PNP NC	-	+	+	NC

# BASIC M30



## STANDARD X2

### FLUSH

### NON-FLUSH

M12 conn

cable

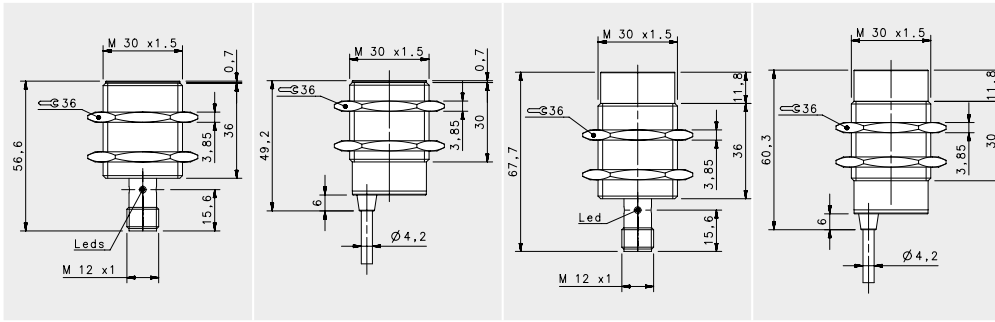
M12 conn

cable

### NOMINAL SWITCHING DISTANCE

				15mm	15mm	20 mm	20 mm
				FLUSH	FLUSH	NON-FLUSH	NON-FLUSH
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	IS-30-E0-S2 95B067390	IS-30-E0-03 95B067350	IS-30-F0-S2 95B067410	IS-30-F0-03 95B067370
10-30 Vdc	PNP NO	3 wires	order No.	IS-30-E1-S2 95B067060	IS-30-E1-03 95B067950	IS-30-F1-S2 95B067990	IS-30-F1-03 95B068030
10-30 Vdc	PNP NC	3 wires	order No.	IS-30-E2-S2 95B067920	IS-30-E2-03 95B067960	IS-30-F2-S2 95B068000	IS-30-F2-03 95B068040
10-30 Vdc	NPN NO	3 wires	order No.	IS-30-E3-S2 95B067930	IS-30-E3-03 95B067970	IS-30-F3-S2 95B068010	IS-30-F3-03 95B068050
10-30 Vdc	NPN NC	3 wires	order No.	IS-30-E4-S2 95B067940	IS-30-E4-03 95B067980	IS-30-F4-S2 95B068020	IS-30-F4-03 95B068060
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	IS-30-E9-S2 95B067400	IS-30-E9-03 95B067360	IS-30-F9-S2 95B067420	IS-30-F9-03 95B067380
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---	---
20-250 Vac	NO	2/3wires	order No.	---	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---

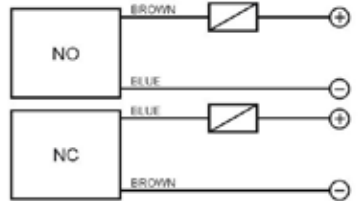
	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Nominal Voltage	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
Residual Ripple	< 10%	< 10%	< 10%	< 10%
Hysteresis	< 10%	< 10%	< 10%	< 10%
Max. Output Current	200 mA	200 mA	200 mA	200 mA
Min. Output Current	---	---	---	---
Residual Current	< 10 mA	< 10 mA	< 10 mA	< 10 mA
Voltage Drop	< 6,5 V (I=100mA)	< 6,5 V (I=100mA)	< 6,5 V (I=100mA)	< 6,5 V (I=100mA)
Operation Led	Yellow	Yellow	Yellow	Yellow
Switching Frequency	200 Hz/100 Hz (2 wires NO-NC)	200 Hz/100 Hz (2 wires NO-NC)	200 Hz/100 Hz (2 wires NO-NC)	200 Hz/100 Hz (2 wires NO-NC)
Start Up Delay	< 75 ms	< 75 ms	< 75 ms	< 75 ms
Repeatability	< 3%	< 3%	< 3%	< 3%
Short Circuit Protection	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
Protection Degree	IP67	IP67	IP67	IP67
Cable Length	---	---	---	---
Cable Section	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>	---	2 x 0,34 mm <sup>2</sup> 3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Active face	LCP	LCP	LCP	LCP
Tightening torque	60Nm	60Nm	60Nm	60Nm
Weight - Cable Output	---	---	---	---
Weight - Connector Output	170 g	170 g	170 g	170 g



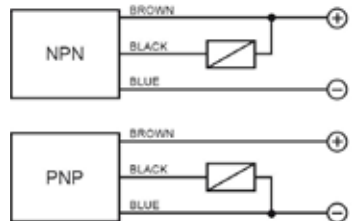
### SHORT X2

FLUSH		NON FLUSH	
M12 conn	cable	M12 conn	cable
15mm	15mm	20 mm	20 mm
---	---	---	---
IS-30-G1-S2	IS-30-G1-03	IS-30-H1-S2	IS-30-H1-03
95B063691	95B063681	95B063771	95B063761
IS-30-G2-S2	IS-30-G2-03	IS-30-H2-S2	IS-30-H2-03
95B063711	95B063701	95B063791	95B063781
IS-30-G3-S2	IS-30-G3-03	IS-30-H3-S2	IS-30-H3-03
95B063651	95B063641	95B063731	95B063721
IS-30-G4-S2	IS-30-G4-03	IS-30-H4-S2	IS-30-H4-03
95B063671	95B063661	95B063751	95B063741
IS-30-G5-S2	IS-30-G5-03	IS-30-H5-S2	IS-30-H5-03
95B063831	95B063821	95B064450	95B064420
IS-30-G6-S2	IS-30-G6-03	IS-30-H6-S2	IS-30-H6-03
95B064430	95B064400	95B064440	95B064410
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10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)	10-30 Vdc (-15/10%)
< 10%	< 10%	< 10%	< 10%
< 10%	< 10%	< 10%	< 10%
200 mA	200 mA	200 mA	200 mA
---	---	---	---
< 10 mA	< 10 mA	< 10 mA	< 10 mA
< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)	< 1,2 V (I=100mA)
Yellow	Yellow	Yellow	Yellow
200 Hz	200 Hz	200 Hz	200 Hz
< 75 ms	< 75 ms	< 75 ms	< 75 ms
< 3%	< 3%	< 3%	< 3%
Present (self-resetting)	Present (self-resetting)	Present (self-resetting)	Present (self-resetting)
Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)	(-25 ... +70 °C)
IP67	IP67	IP67	IP67
---	2 m	---	2 m
---	3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>	---	3 x 0,14 mm <sup>2</sup> 4 x 0,25 mm <sup>2</sup>
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
LCP	LCP	LCP	LCP
60Nm	60Nm	60Nm	60Nm
---	210 g	---	210 g
170 g	---	170 g	---

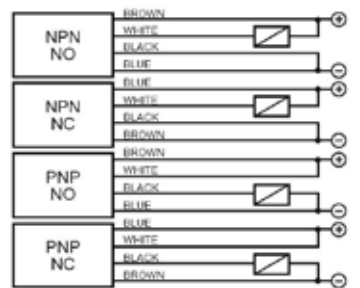
### 2 wires NO or NC



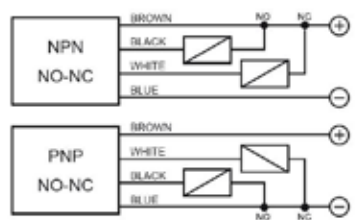
### 3 wires PNP or NPN



### 4 wires (PNP/NPN, NO/NC)



### 4 wires (NO+NC)



### M12 connector connections

#### 2 wires NO or NC

Available	CONTACTS CONFIGURATION			
	Contacts numbers			
NO	1	2	3	4
NC	-	-	+	-

#### 3 wires

Available	CONTACTS CONFIGURATION			
	Contacts numbers			
(NO or NC)	1	2	3	4
	+	-	-	NO/NC

#### 4 wires (PNP/NPN, NO/NC)

Output	CONTACTS CONFIGURATION			
	Contacts numbers			
NPN NO	1	2	3	4
NPN NC	+	NO	-	-
PNP NO	-	+	-	NO
PNP NC	-	+	+	NC

#### 4 wires (NO+NC)

Available	Contacts numbers			
	1	2	3	4
(NO + NC)	+	NC	-	NO