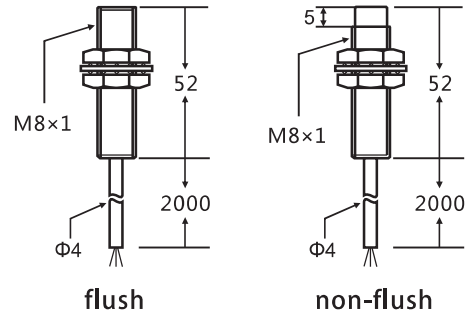


Inductive proximity switch

Standard model

Cylindrical housing M8



DC 3-wire Model Number

M8(flush)

FM8-SN1R5-N1	NPN.NO	Rated operating distance
FM8-SN1R5-N2	NPN.NC	1.5mm
FM8-SN1R5-P1	PNP.NO	Assured operating distance
FM8-SN1R5-P2	PNP.NC	0 to 1.2mm

M8(non-flush)

FM8-SN2-N1	NPN.NO	Rated operating distance
FM8-SN2-N2	NPN.NC	2mm
FM8-SN2-P1	PNP.NO	Assured operating distance
FM8-SN2-P2	PNP.NC	0 to 1.6mm

M8(flush)

FM8-SN1R5-N1-A	NPN.NO	Rated operating distance
FM8-SN1R5-N2-A	NPN.NC	1.5mm
FM8-SN1R5-P1-A	PNP.NO	Assured operating distance
FM8-SN1R5-P2-A	PNP.NC	0 to 1.2mm

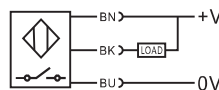
M8(non-flush)

FM8-SN2-N1-A	NPN.NO	Rated operating distance
FM8-SN2-N2-A	NPN.NC	2mm
FM8-SN2-P1-A	PNP.NO	Assured operating distance
FM8-SN2-P2-A	PNP.NC	0 to 1.6mm

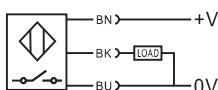
Operating voltage:	10 ... 30 VDC
Output current:	≤100 mA
Hysteresis:	≤10%
Voltage drop:	≤1.5V
Off-state current:	0 ... 0.5 mA/typ. 0.1 uA
No-load supply current:	<10mA
Ambient temperature range:	-25 ... +70°C
Short-circuit protection:	built-in
Reverse polarity protection:	reverse polarity protected
pulse protection:	built-in
Connection cable:	PVC 2 m
	Suffix-A Connector M8 x 1, 3-pin
	PBT
Sensing face:	
Housing materia:	Metal, Nickel-plated brass

Wiring diagrams

DC 3-wire NPN



DC 3-wire PNP



DC 2-wire Model Number

M8(flush)

FM8-SN1R5-D1	NPN.NO	Rated operating distance
FM8-SN1R5-D2	NPN.NC	1.5mm
FM8-SN1R5-D3	PNP.NO	Assured operating distance
FM8-SN1R5-D4	PNP.NC	0 to 1.2mm

M8(non-flush)

FM8-SN2-D1	NPN.NO	Rated operating distance
FM8-SN2-D2	NPN.NC	2mm
FM8-SN2-D3	PNP.NO	Assured operating distance
FM8-SN2-D4	PNP.NC	0 to 1.6mm

M8(flush)

FM8-SN1R5-D1-A	NPN.NO	Rated operating distance
FM8-SN1R5-D2-A	NPN.NC	1.5mm
FM8-SN1R5-D3-A	PNP.NO	Assured operating distance
FM8-SN1R5-D4-A	PNP.NC	0 to 1.2mm

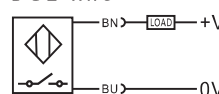
M8(non-flush)

FM8-SN2-D1-A	NPN.NO	Rated operating distance
FM8-SN2-D2-A	NPN.NC	2mm
FM8-SN2-D3-A	PNP.NO	Assured operating distance
FM8-SN2-D4-A	PNP.NC	0 to 1.6mm

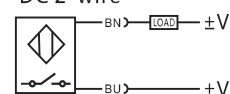
Operating voltage:	10 ... 30 VDC
Output current:	≤100 mA
Hysteresis:	≤10%
Output voltage drop:	-D1 -D2 ≤3V -D3 -D4 ≤5V
No-load supply current:	≤0.6mA
Ambient temperature range:	-25 ... +70°C
Short-circuit protection:	built-in
Reverse polarity protection:	-D1 -D2 no -D3 -D4 reverse polarity tolerant
pulse protection:	built-in
Connection cable:	PVC 2 m
Sensing face:	PBT
Housing materia:	Metal, Nickel-plated brass

Wiring diagrams

DC 2-wire



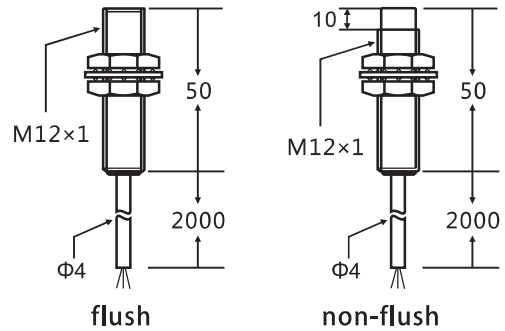
DC 2-wire



-D3 D4.Reverse polarity tolerant

Inductive proximity switch

Standard model
Cylindrical housing M12



DC 3-wire Model Number

M12(flush)

FM12-SN2-N1	NPN.NO	Rated operating distance
FM12-SN2-N2	NPN.NC	1.5mm
FM12-SN2-P1	PNP.NO	Assured operating distance
FM12-SN2-P2	PNP.NC	0 to 1.2mm

M12(non-flush)

FM12-SN4-N1	NPN.NO	Rated operating distance
FM12-SN4-N2	NPN.NC	2mm
FM12-SN4-P1	PNP.NO	Assured operating distance
FM12-SN4-P2	PNP.NC	0 to 1.6mm

M12(flush)

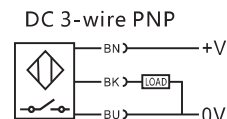
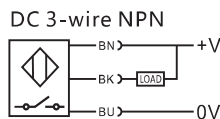
FM12-SN2-N1-A	NPN.NO	Rated operating distance
FM12-SN2-N2-A	NPN.NC	1.5mm
FM12-SN2-P1-A	PNP.NO	Assured operating distance
FM12-SN2-P2-A	PNP.NC	0 to 1.2mm

M12(non-flush)

FM12-SN4-N1-A	NPN.NO	Rated operating distance
FM12-SN4-N2-A	NPN.NC	2mm
FM12-SN4-P1-A	PNP.NO	Assured operating distance
FM12-SN4-P2-A	PNP.NC	0 to 1.6mm

Operating voltage:	10 ... 30 VDC
Output current:	≤150 mA
Hysteresis:	≤10%
Voltage drop:	≤1.5V
Off-state current:	0 ... 0.5 mA/typ. 0.1 uA
No-load supply current:	<10mA
Ambient temperature range:	-25 ... +70°C
Short-circuit protection:	built-in
Reverse polarity protection:	reverse polarity protected
pulse protection:	built-in
Connection cable:	PVC 2 m
	Suffix-A Connector M8 x 1, 3-pin
Sensing face:	PBT
Housing materia:	Metal, Nickel-plated brass

Wiring diagrams



DC 2-wire Model Number

M12(flush)

FM12-SN2-D1	NO	Rated operating distance
FM12-SN2-D2	NC	1.5mm
FM12-SN2-D3	NO	Assured operating distance
FM12-SN2-D4	NC	0 to 1.2mm

M12(non-flush)

FM12-SN4-D1	NO	Rated operating distance
FM12-SN4-D2	NC	2mm
FM12-SN4-D3	NO	Assured operating distance
FM12-SN4-D4	NC	0 to 1.6mm

M12(flush)

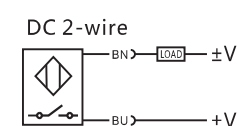
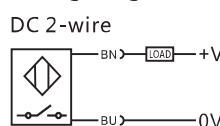
FM12-SN2-D1-A	NO	Rated operating distance
FM12-SN2-D2-A	NC	1.5mm
FM12-SN2-D3-A	NO	Assured operating distance
FM12-SN2-D4-A	NC	0 to 1.2mm

M12(non-flush)

FM12-SN4-D1-A	NO	Rated operating distance
FM12-SN4-D2-A	NC	2mm
FM12-SN4-D3-A	NO	Assured operating distance
FM12-SN4-D4-A	NC	0 to 1.6mm

Operating voltage:	10 ... 30 VDC
Output current:	≤150 mA
Hysteresis:	≤10%
Output voltage drop:	-D1 -D2 ≤3V -D3 -D4 ≤5V
No-load supply current:	≤0.6mA
Ambient temperature range:	-25 ... +70°C
Short-circuit protection:	built-in
Reverse polarity protection:	-D1 -D2 no -D3 -D4 reverse polarity tolerant
pulse protection:	built-in
Connection cable:	PVC 2 m
Sensing face:	PBT
Housing materia:	Metal, Nickel-plated brass

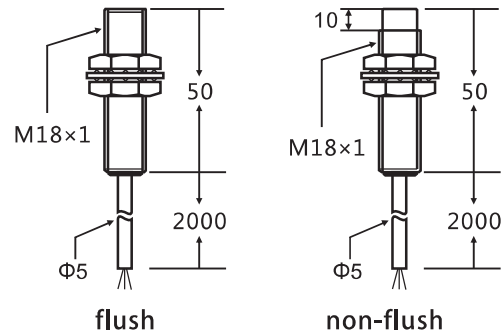
Wiring diagrams



-D3 -D4.Reverse polarity tolerant

Inductive proximity switch

Standard model
Cylindrical housing M18



DC 3-wire Model Number

M18(flush)

FM18-SN5-N1	NPN.NO	Rated operating distance	1.5mm
FM18-SN5-N2	NPN.NC	Rated operating distance	1.5mm
FM18-SN5-P1	PNP.NO	Assured operating distance	0 to 1.2mm
FM18-SN5-P2	PNP.NC	Assured operating distance	0 to 1.2mm

M18(non-flush)

FM18-SN8-N1	NPN.NO	Rated operating distance	2mm
FM18-SN8-N2	NPN.NC	Rated operating distance	2mm
FM18-SN8-P1	PNP.NO	Assured operating distance	0 to 1.6mm
FM18-SN8-P2	PNP.NC	Assured operating distance	0 to 1.6mm

M18(flush)

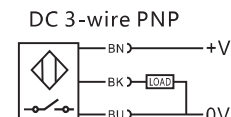
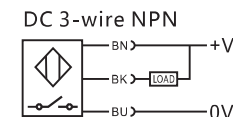
FM18-SN5-N1-A	NPN.NO	Rated operating distance	1.5mm
FM18-SN5-N2-A	NPN.NC	Rated operating distance	1.5mm
FM18-SN5-P1-A	PNP.NO	Assured operating distance	0 to 1.2mm
FM18-SN5-P2-A	PNP.NC	Assured operating distance	0 to 1.2mm

M18(non-flush)

FM18-SN8-N1-A	NPN.NO	Rated operating distance	2mm
FM18-SN8-N2-A	NPN.NC	Rated operating distance	2mm
FM18-SN8-P1-A	PNP.NO	Assured operating distance	0 to 1.6mm
FM18-SN8-P2-A	PNP.NC	Assured operating distance	0 to 1.6mm

Operating voltage:	10 ... 30 VDC
Output current:	≤150 mA
Hysteresis:	≤10%
Voltage drop:	≤1.5V
Off-state current:	0 ... 0.5 mA/typ. 0.1 μA
No-load supply current:	<10mA
Ambient temperature range:	-25 ... +70°C
Short-circuit protection:	built-in
Reverse polarity protection:	reverse polarity protected
pulse protection:	built-in
Connection cable:	PVC 2 m
	Suffix-A Connector M8 x 1, 3-pin
	PBT
Sensing face:	
Housing materia:	Metal, Nickel-plated brass

Wiring diagrams



DC 2-wire Model Number

M18(flush)

FM18-SN5-D1	NO	Rated operating distance	1.5mm
FM18-SN5-D2	NC	Rated operating distance	1.5mm
FM18-SN5-D3	NO	Assured operating distance	0 to 1.2mm
FM18-SN5-D4	NC	Assured operating distance	0 to 1.2mm

M18(non-flush)

FM18-SN8-D1	NO	Rated operating distance	2mm
FM18-SN8-D2	NC	Rated operating distance	2mm
FM18-SN8-D3	NO	Assured operating distance	0 to 1.6mm
FM18-SN8-D4	NC	Assured operating distance	0 to 1.6mm

M18(flush)

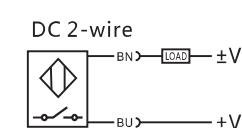
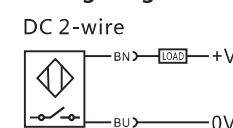
FM18-SN5-D1-A	NO	Rated operating distance	1.5mm
FM18-SN5-D2-A	NC	Rated operating distance	1.5mm
FM18-SN5-D3-A	NO	Assured operating distance	0 to 1.2mm
FM18-SN5-D4-A	NC	Assured operating distance	0 to 1.2mm

M18(non-flush)

FM18-SN8-D1-A	NO	Rated operating distance	2mm
FM18-SN8-D2-A	NC	Rated operating distance	2mm
FM18-SN8-D3-A	NO	Assured operating distance	0 to 1.6mm
FM18-SN8-D4-A	NC	Assured operating distance	0 to 1.6mm

Operating voltage:	10 ... 30 VDC
Output current:	≤150 mA
Hysteresis:	≤10%
Output voltage drop:	-D1 -D2 ≤3V -D3 -D4 ≤5V
No-load supply current:	≤0.6mA
Ambient temperature range:	-25 ... +70°C
Short-circuit protection:	built-in
Reverse polarity protection:	-D1 -D2 no -D3 -D4 reverse polarity tolerant
pulse protection:	built-in
Connection cable:	PVC 2 m
Sensing face:	PBT
Housing materia:	Metal, Nickel-plated brass

Wiring diagrams



-D3 D4.Reverse polarity tolerant