

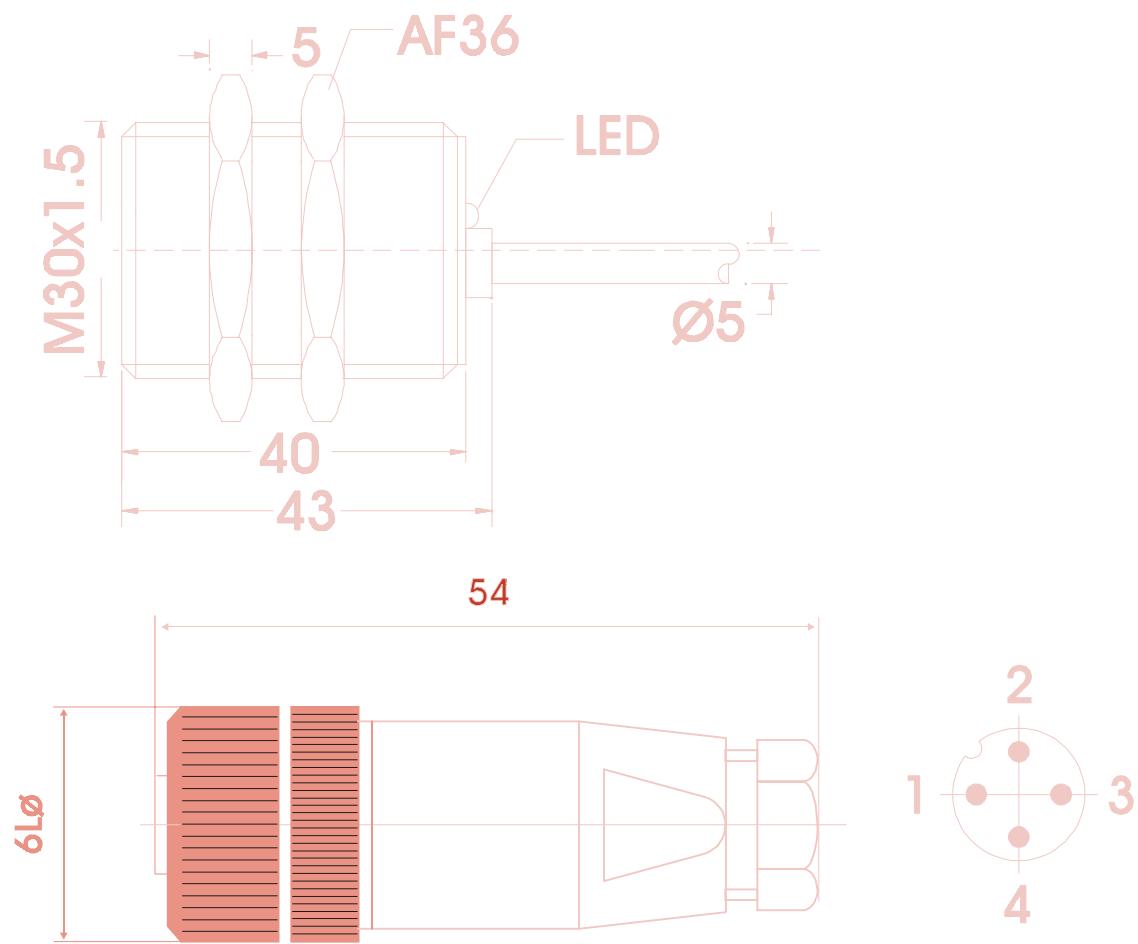
PRECISION SWITCHES

EUCHNER

TEKNIK

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Inductive Proximity Switches

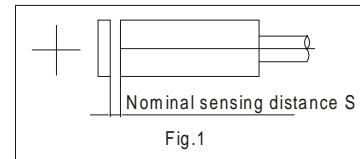


INDUCTIVE PROXIMITY SWITCHES

The **TEKNIC EUCHNER** inductive proximity switches are solid state switching devices that require no physical contact to actuate them. Used for control and positioning signals they can be connected directly into conventional or electronic control systems. The use for such switching devices has increased in recent times as machines in general have become more and more automated.

BASIC DEFINITIONS:

1. Sensing distance: The sensing distance is the maximum distance between the target and sensing face to be sure of obtaining a switching signal. This distance is measured using a square mild steel target 1 mm in thickness. The sides of the square should be equal to the diameter of the sensing face of the Proximity switch (see Fig.1)

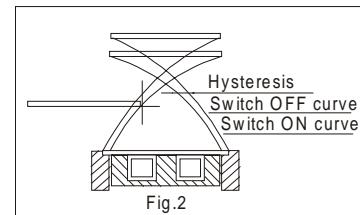


2. The Reduction Factor: To be taken into account when the target is of material other than steel or having varied thickness and dimensions.

Material	Factor
Steel (St.37)	1.0
Brass	0.35... 0.5
Copper	0.25...0.45
Aluminium	0.35...0.5
Stainless Steel	0.6... 1.0

3. Repeat Accuracy: It is the reproduction accuracy between two successive operations under the same ambient conditions.

4. Switch Hysteresis: The difference between switch ON and switch OFF points when the target approaches and moves away from the sensing face resp. Is called Switch Hysteresis (see..Fig.2)

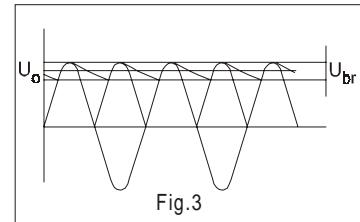


5. The Temperature Drift: The temperature drift is the change in switch point in micrometers/K due to variations in ambient temperature conditions when all other conditions remain constant.

ELECTRICAL CHARACTERISTICS:

The Voltage

The Operating Voltage V is the voltage that can be used to operate the inductive proximity switch.



The Voltage Drop Ud is the voltage measured between the energized output and switched potential.

The Ripple Voltage is the AC voltage U_{br} (peak to peak) superimposed on the mean DC voltage U_o expressed as a percentage. The provision of a smooth DC supply within 10% (to DIN 41755) maximum ripple is absolutely essential for the effective operation of DC switches (see.Fig.3)

Precision Switches

The Current

The Load Current I_a is the maximum current at which the inductive proximity switch can be continually operated.

The No-Load Current is the current consumed by the switch at the maximum operating voltage without there being any external load current.

The Residual Current – It is the current, which flows through the load even when the switch is in its blocked state.

The Switch Frequency:

The switch frequency is the maximum number of switching functions per second. This frequency is measured as per EN 50010 in which the sensing face of the proximity is kept at a distance of $S/2$ from the target, S being the sensing distance.

The methods of protection:

The TEKNIC EUCHNER inductive proximity switches have an **Environmental Protection** to IP 67 to DIN 400050.

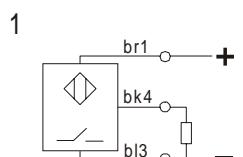
Short Circuit Protection: Switches with built in short circuit and overload protections are protected against damage to output stage. After elimination of the short circuit the switch resets automatically and is ready for operation.

Reverse polarity protection: The inductive proximity switches are protected against damage due to inverted supply line connection.

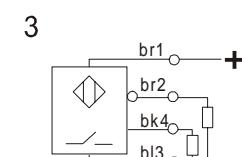
Transient voltage protection: The TEKNIC EUCHNER proximity switches are protected against damage caused by supply line transient voltages.

Connection-Diagrams

DC Supply Voltage

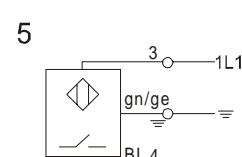


AP-NO, P-Switching

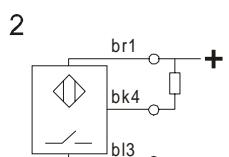


UP-NO+NC,P-Switching

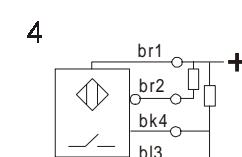
AC Supply Voltage



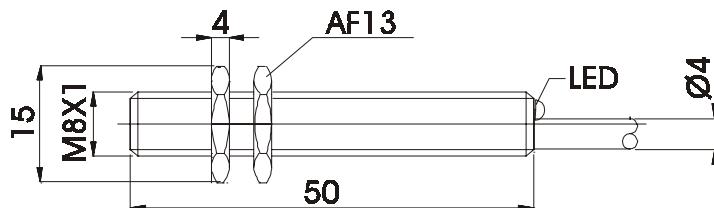
AW - NO



AN-NO, N-Switching



UN-NO+NC,N-Switching



TECHNICAL DATA

DC Operating Voltage

Housing Material	Stainless Steel	
Environmental Protection	IP 67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Encapsulated oil resistant cable	
Cable Length (mm)	2000 or 5000	
Conductor Cross Section (mm)	0.14	
Sensing Distance Sn (mm)	Flush Fitting = 1	
Switch Point Hysteresis H (mm)	≤	0.15
Repeat Accuracy (mm)	≤	0.05
Operating Voltage (V)	10-30	
Operating Voltage Ripple (%)	≤	10
Load Current Ia (mA) max.	250	
Residual Current Ir (mA)	≤	0.001
No-Load Current (mA)	≤	11
Voltage Drop Ud (V)	≤	1.3
Internal Resistance Ri (Kohms)	10	
Temperature Drift S ($\mu\text{m}/\text{K}$)	≤	-3
Switching Frequency (Hz)	2000	
Output Function	A=NO	
Output Polarity	P=Positive Switching N=Negative Switching	
Status Indication	LED (see ordering code)	

Ordering Code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
1	P	-	X	EGT08X01AP024-	1
	N	-	X	EGT08X01AN024-	2

Specify Cable Length required (2000 or 5000)

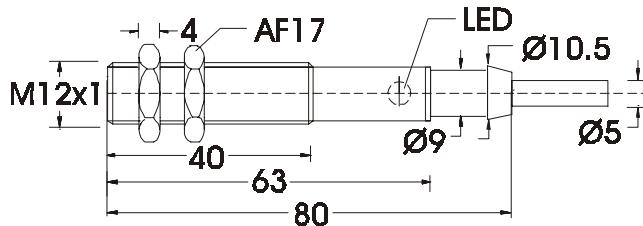
Specify Status Indication LED (L) following Cable Length

Ordering Example: EGT 08X01...NO, 10-30VDC, 5m Cable Length with LED

or: EGT 08X01AP024 – 5000L

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 12X02



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.34
Sensing Distance Sn (mm)	Flush Fitting = 2
Switch Point Hysteresis H (mm) ≤	0.2
Repeat Accuracy (mm) ≤	0.1
Operating Voltage (V)	10-30
Operating Voltage Ripple (%) ≤	10
Load Current Ia (mA) max.	250
Residual Current Ir (mA) ≤	0.001
No-Load Current (mA) ≤	15
Voltage Drop Ud(V) ≤	2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (um/K) ≤	- 4
Switching Frequency (Hz)	1000
Output Function	A=NO, U=NO + NC
Output Polarity	P= Positive Switching N= Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
2	P	A	X	X	EGT 12X02AP024-	1
		U	-	X	EGT 12X02UP024-	3
	N	A	X	X	EGT 12X02AN024-	2
		U	-	X	EGT 12X02UN024-	4

Specify Cable Length required (2000 or 5000)

Specify Status indication LED (L) and either PVC or PUR Cables
following Cable Length.

Ordering Example: EGT 12X02..Flush Fitting, 10-30 VDC, 2m Cable Length, with LED

EGT 12X02AP024 – 2000L

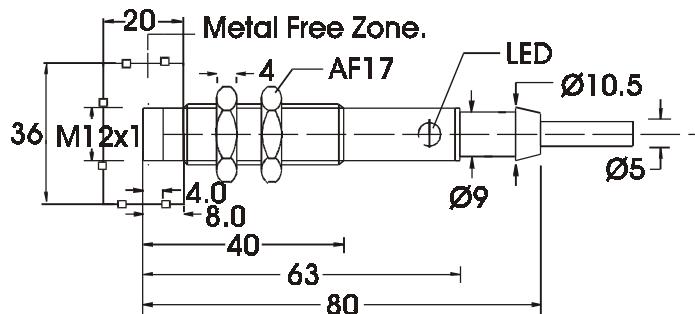
Or: EGT 12X02AP024 – 2000LP

Specify Status indication LED(L) and letter P if PU cable is required (only for 'NO' types).

Precision Switches

TEKNIC EUCHNER

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 12X04



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.34
Sensing Distance Sn (mm)	Non Flush Fitting = 4
Switch Point Hysteresis H (mm) \leq	0.6
Repeat Accuracy (mm) \leq	0.3
Operating Voltage (V)	10-30
Operating Voltage Ripple (%) \leq	10
Load Current Ia (mA) max.	250
Residual Current Ir (mA) \leq	0.001
No-Load Current (mA) \leq	15
Voltage Drop Ud(V) \leq	2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (μ m/K) \leq	- 8
Switching Frequency (Hz)	1000
Output Function	A=NO, U=NO + NC
Output Polarity	P= Positive Switching N= Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
4	P	A	X	X	EGT 12X04AP024-	1
		U	-	X	EGT 12X04UP024-	3
	N	A	X	X	EGT 12X04AN024-	2
		U	-	X	EGT 12X04UN024-	4

Specify Cable Length required (2000 or 5000)

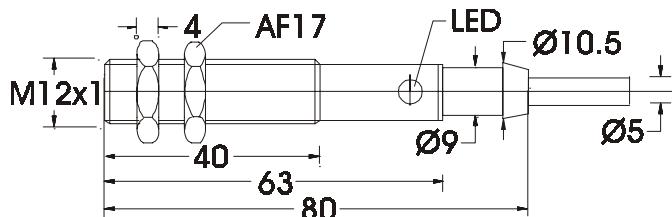
Specify Status indication LED (L) and either PVC or PUR Cables
following Cable Length.

Ordering Example: EGT 12X04...Non Flush Fitting, 10-30 VDC, 2m Cable Length, with LED
EGT 12X04AP024 – 2000L
Or : EGT 12X04AP024 – 2000LP

Specify Status indication LED(L) and letter P if PU cable is required (only for 'NO' types).

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 12X02AW



TECHNICAL DATA

AC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.5
Sensing Distance Sn (mm)	Flush Fitting = 2.0
Switch Point Hysteresis H (mm) \leq	0.4
Repeat Accuracy (mm) \leq	0.1
Operating Voltage (V)	90-250
Load Current Ia (mA) max.	\leq 250(90-250V)
Inrush Current Ik (mA) 20 ms.	1.5
Residual Current Ir (mA)	\leq 3
Holding Current Ih (mA)	\geq 10
Voltage Drop Ud(V)	\leq 9(90-250V)
Internal Resistance Ri (Kohms)	-
Temperature Drift S (μ m/K)	\leq -4
Switching Frequency (Hz)	10
Output Function	A=NO
Output Polarity	-
Status Indication	LED (see ordering code)

Ordering Code

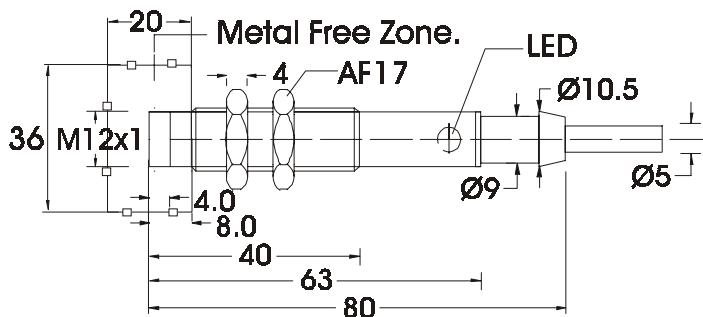
Sensing Distance Sn	Output Function	LED (optional)	Type	Connection Diagram
2	A	X	EGT12X02AW220-	5

Specify Cable Length required (2000 or 5000)

Specify Status indication LED (L) following Cable Length.

Ordering Example: EGT 12X02...Flush Fitting, 90-250 VAC, 2m Cable Length, with LED
EGT 12X02AW220 – 2000L

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 12X04AW



TECHNICAL DATA

AC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.5
Sensing Distance Sn (mm)	Non Flush Fitting = 4.0
Switch Point Hysteresis H (mm)	≤ 0.6
Repeat Accuracy (mm)	≤ 0.4
Operating Voltage (V)	90-250
Load Current Ia (mA) max	≤ 250(90-250V)
Inrush Current Ik (mA) 20 ms.	1,5
Residual Current Ir (mA)	≤ 3
Holding Current Ih(mA)	≥ 10
Voltage Drop Ud(V)	≤ 9(90-259V)
Internal Resistance Ri (Kohms)	-
Temperature Drift S (um/K)	≤ - 8
Switching Frequency (Hz)	10
Output Function	A=NO
Output Polarity	-
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Function	LED (optional)	Type	Connection Diagram
4	A	X	EGT 12X04AW220-	5

Specify Cable Length required (2000 or 5000)

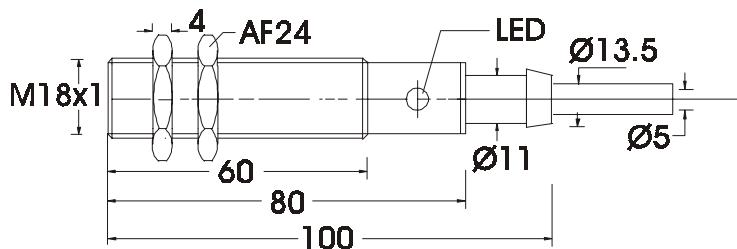
Specify Status indication LED (L) following Cable Length .

Ordering Example: EGT 12X04...Non Flush Fitting, NO,90-250 VAC 2m Cable Length, with LED

EGT 12X04AW220 – 2000L

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 18X05



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.34
Sensing Distance Sn (mm)	Flush Fitting = 5.0
Switch Point Hysteresis H (mm) \leq	0.5
Repeat Accuracy (mm) \leq	0.2
Operating Voltage (V)	10-30
Operating Voltage Ripple (%) \leq	10
Load Current Ia (mA) max.	250
Residual Current Ir (mA) \leq	0.001
No-Load Current (mA) \leq	15
Voltage Drop Ud(V) \leq	2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (μ m/K) \leq	- 10
Switching Frequency (Hz)	500
Output Function	A=NO, U=NO + NC
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
5	P	A	X	X	EGT 18X05AP024-	1
		U	-	X	EGT 18X05UP024-	3
	N	A	X	X	EGT 18X05AN024-	2
		U	-	X	EGT 18X05UN024-	4

Specify Cable Length required (2000 or 5000)

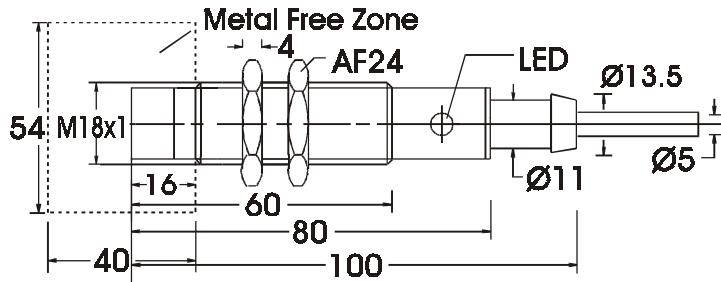
Specify Status indication LED (L) and either PVC or PUR Cables
following Cable Length

Ordering Example: EGT 18X05... Flush Fitting, 10-30 VDC, 2m Cable Length, with LED
EGT 18X05AP024 – 2000L

Or: EGT 18X05AP024 – 2000LP

Specify Status indication LED(L) and letter P if PU cable is required (only for 'NO' types).

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 18X08



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.34
Sensing Distance Sn (mm)	Non Flush Fitting = 8.0
Switch Point Hysteresis H (mm) \leq	0.8
Repeat Accuracy (mm) \leq	0.2
Operating Voltage (V)	10-30
Operating Voltage Ripple (%) \leq	10
Load Current Ia (mA) max.	250
Residual Current Ir (mA) \leq	0.001
No-Load Current (mA) \leq	15
Voltage Drop Ud(V) \leq	2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (μ m/K) \leq	- 16
Switching Frequency (Hz)	500
Output Function	A=NO, U=NO + NC
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
8	P	A	X	X	EGT 18X08AP024-	1
		U	-	X	EGT 18X08UP024-	3
	N	A	X	X	EGT 18X08AN024-	2
		U	-	X	EGT 18X08UN024-	4

Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) and either PVC or PUR Cables following Cable Length.

Ordering Example: EGT 18X08..Non-Flush Fitting, 10-30 VDC, 2m Cable Length, with LED

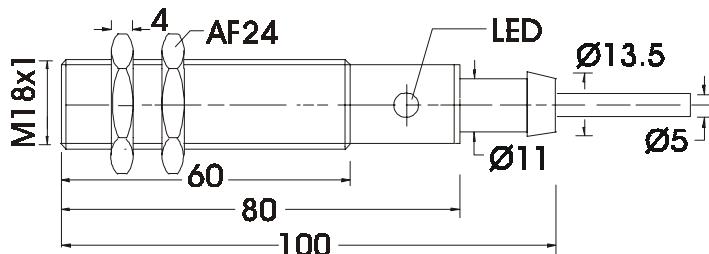
EGT 18X08AP024 – 2000L

Or: EGT 18X08AP024 – 2000LP

Specify Status indication LED (L) and letter P if PU cable is required (only for 'NO' types).

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 18X05AW



TECHNICAL DATA

AC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.5
Sensing Distance Sn (mm)	Flush Fitting = 5.0
Switch Point Hysteresis H (mm)	≤ 0.5
Repeat Accuracy (mm)	≤ 0.2
Operating Voltage (V)	90-250
Load Current Ia (mA) max.	≤ 250(90-250V)
Inrush Current Ik (mA) 20ms	1.5
Residual Current Ir (mA)	≤ 3
Holding Current Ih (mA)	≥ 10
Voltage Drop Ud(V)	≤ 9(90-250V)
Internal Resistance Ri (Kohms)	-
Temperature Drift S (um/K)	≤ - 10
Switching Frequency (Hz)	10
Output Function	A=NO
Output Polarity	-
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Function	LED (optional)	Type	Connection Diagram
5	A	X	EGT 18X05AW220-	5

Specify Cable Length Required (2000 or 5000)

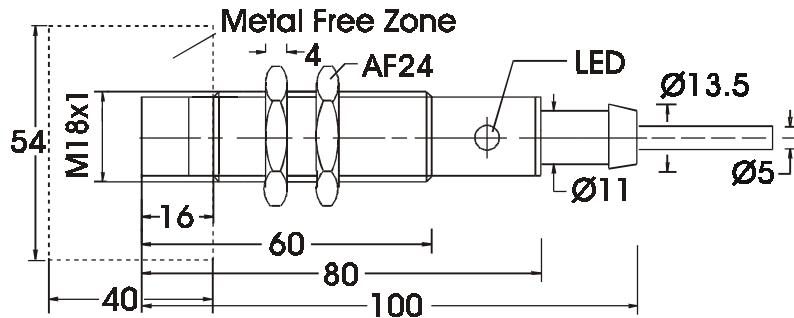
Specify Status indication LED (L) following Cable Length.

Ordering Example: EGT 18X05..Flush Fitting, NO 90-250 VAC, 2m Cable Length, with LED
EGT 18X05AW220 – 2000L

Precision Switches

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INDUCTIVE PROXIMITY SWITCHES TYPE EGT 18X08AW



TECHNICAL DATA

AC Operating Voltage		
Housing Material	Brass Nickel Plated	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Encapsulated oil resistant cable	
Cable Length (mm)	2000 or 5000	
Conductor Cross Section (mm)	0.5	
Sensing Distance Sn (mm)	Non Flush Fitting = 8.0	
Switch Point Hysteresis H (mm)	≤	0.8
Repeat Accuracy (mm)	≤	0.2
Operating Voltage (V)	90-250	
Load Current Ia (mA) max	≤	250 (90-250V)
Inrush Current Ik (mA) 20 ms.	1.5	
Residual Current Ir (mA)	≤	3
Holding Current Ih (mA)	≥	10
Voltage Drop Ud(V)	≤	9 (90-250V)
Internal Resistance Ri (Kohms)	-	
Temperature Drift S (um/K)	≤	- 16
Switching Frequency (Hz)	10	
Output Function	A=NO	
Output Polarity	-	
Status Indication	LED (see ordering code)	

Ordering Code

Sensing Distance Sn	Output Function	LED (optional)	Type	Connection Diagram
8	A	X	EGT 18X08AW220-	5

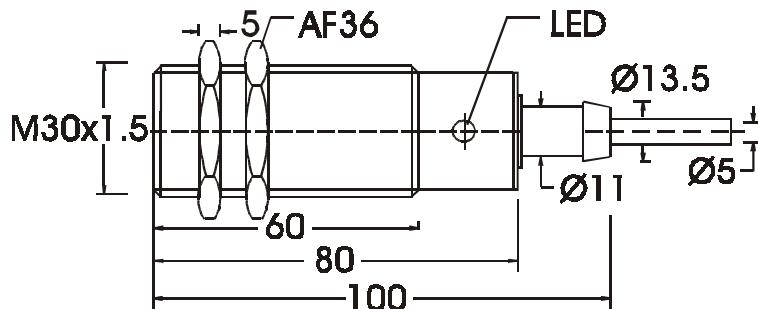
Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) following Cable Length

Ordering Example: EGT 18X08..Non- Flush Fitting, NO.90-250 VAC, 2m Cable Length, with LED
EGT 18X08AW220 – 2000L

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 30X10



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.34
Sensing Distance Sn (mm)	Flush Fitting = 10
Switch Point Hysteresis H (mm) ≤	1
Repeat Accuracy (mm) ≤	0.3
Operating Voltage (V)	10-30
Operating Voltage Ripple (%) ≤	10
Load Current Ia (mA) max.	250
Residual Current Ir (mA) ≤	0.001
No-Load Current (mA) ≤	15
Voltage Drop Ud(V) ≤	2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (um/K) ≤	- 20
Switching Frequency (Hz)	300
Output Function	A=NO, U=NO + NC
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
10	P	A	X	X	EGT 30X10AP024-	1
		U	-	X	EGT 30X10UP024-	3
	N	A	X	X	EGT 30X10AN024-	2
		U	-	X	EGT 30X10UN024-	4

Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) and either PVC or PUR Cables
following Cable Length

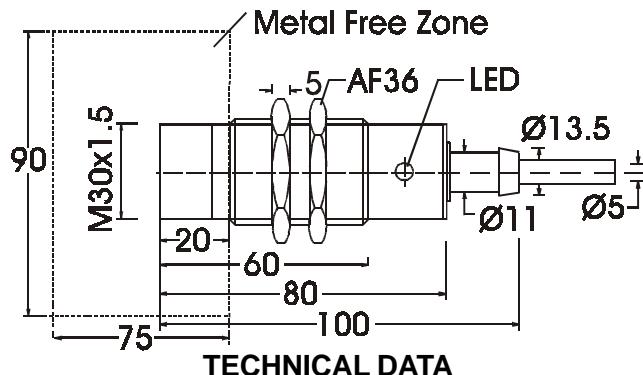
Ordering Example: EGT 30X10..Flush Fitting, 10-30 VDC, 2m Cable Length, with LED

EGT 30X10AP024 – 2000L

Or : EGT 30X10AP024 – 2000LP

Specify Status indication LED (L) and letter P if PU cable is required (only for 'NO' types).

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 30X15



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.34
Sensing Distance Sn (mm)	Non-Flush Fitting = 15
Switch Point Hysteresis H (mm) \leq	1.5
Repeat Accuracy (mm) \leq	0.3
Operating Voltage (V)	10-30
Operating Voltage Ripple (%) \leq	10
Load Current Ia (mA) max.	250
Residual Current Ir (mA) \leq	0.001
No-Load Current (mA) \leq	15
Voltage Drop Ud(V) \leq	2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (μ m/K) \leq	- 30
Switching Frequency (Hz)	300
Output Function	A=NO, U=NO + NC
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
15	P	A	X	X	EGT 30X15AP024-	1
		U	-	X	EGT 30X15UP024-	3
	N	A	X	X	EGT 30X15AN024-	2
		U	-	X	EGT 30X15UN024-	4

Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) and either PVC or PUR Cables
following Cable Length

Ordering Example: EGT 30X15..Non-Flush Fitting, 10-30 VDC, 2m Cable Length, with LED

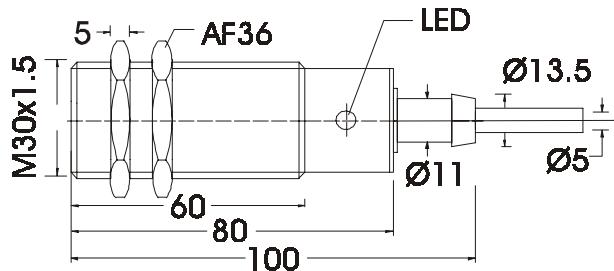
EGT 30X15AP024 – 2000L

Or : EGT 30X15AP024 – 2000LP

Specify Status indication LED (L) and letter P if PU cable is required (only for 'NO' types).

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 30X10AW



TECHNICAL DATA

AC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.5
Sensing Distance Sn (mm)	Flush Fitting = 10
Switch Point Hysteresis H (mm)	≤ 1.0
Repeat Accuracy (mm)	≤ 0.3
Operating Voltage (V)	90-250
Load Current Ia (mA) max.	≤ 250 (90-250 V)
Inrush Current Ik (mA) 20 ms	1.5
Residual Current Ir (mA)	≤ 3
Holding Current Ih (mA)	≥ 10
Voltage Drop Ud(V)	≤ 9 (90-250 V)
Internal Resistance Ri (Kohms)	-
Temperature Drift S (um/K)	≤ - 20
Switching Frequency (Hz)	10
Output Function	A=NO
Output Polarity	-
Status Indication	LED (see ordering code)

Ordering Code

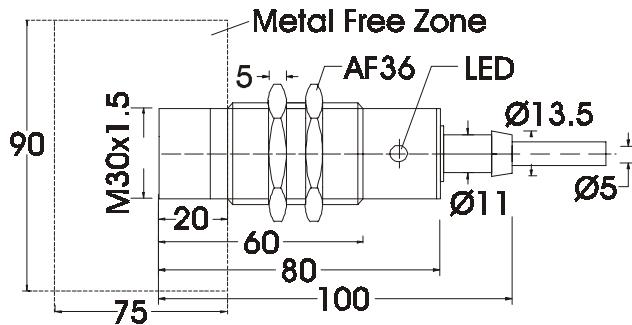
Sensing Distance Sn	Output Function	LED (optional)	Type	Connection Diagram
10	A	X	EGT 30X10AW220-	5

Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) following Cable Length

Ordering Example: EGT 30X10..Flush Fitting, NO,90-250 VAC, 2m Cable Length, with LED
EGT 30X10AW220 – 2000L

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 30X15AW



TECHNICAL DATA

DC Operating Voltage

Housing Material	Brass Nickel Plated	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Encapsulated oil resistant cable	
Cable Length (mm)	2000 or 5000	
Conductor Cross Section (mm)	0.5	
Sensing Distance Sn (mm)	Non Flush Fitting = 15	
Switch Point Hysteresis H (mm)	≤	1.0
Repeat Accuracy (mm)	≤	0.3
Operating Voltage (V)	90-250	
Load Current Ia (mA) max.	≤	250 (90-250 V)
Inrush Current Ik (mA) 20 ms	1.5	
Residual Current Ir (mA)	≤	3
Holding Current Ih (mA)	≥	10
Voltage Drop Ud (V)	≤	9 (90-250 V)
Internal Resistance – Ri (Kohms)	-	
Temperature Drift S (um/K)	≤	- 30
Switching Frequency (Hz)	10	
Output Function	A=NO	
Output Polarity	-	
Status Indication	LED (see ordering code)	

Ordering Code

Sensing Distance Sn	Output Function	LED (optional)	Type	Connection Diagram
15	A	X	EGT 30X15AW220-	5

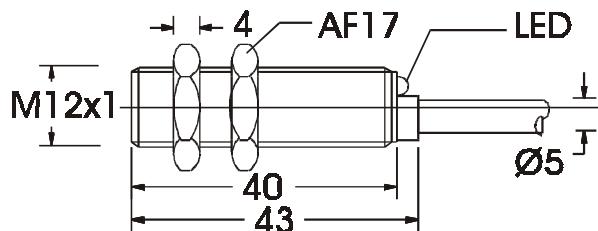
Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) following Cable Length

Ordering Example: EGT 30X15..Non-Flush Fitting, NO.90-250 VAC, 2m Cable Length, with LED
EGT 30X15AW220 – 2000L

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGL 12X02



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm ²)	0.34
Sensing Distance Sn (mm)	Flush Fitting = 2
Switch Point Hysteresis H (mm)	≤ 0.2
Repeat Accuracy (mm)	≤ 0.1
Operating Voltage (V)	10-30
Operating Voltage Ripple (%)	≤ 10
Load Current I _a (mA) max.	250
Residual Current I _r (mA)	≤ 0.001
No-Load Current (mA)	≤ 15
Voltage Drop U _d (V)	≤ 2.5
Internal Resistance R _i (Kohms)	4.7
Temperature Drift S (um/K)	≤ - 4
Switching Frequency (Hz)	1000
Output Function	A=NO
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
2	P	X	X	EGL 12X02AP024-	1
	N	X	X	EGL 12X02AN024-	2

Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) following Cable Length

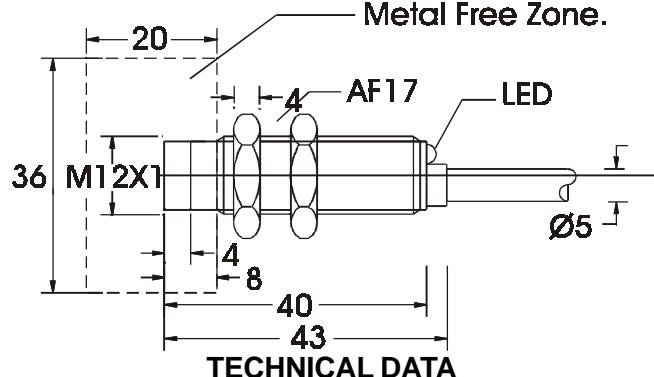
Specify Short Circuit Protection (K)

Ordering Example: EGL12X02..Flush Fitting, 10-30 VDC, 2m Cable Length, with LED With SCP.
EGL12X02AP024 – 2000LK

Precision Switches

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INDUCTIVE PROXIMITY SWITCHES TYPE EGL12X04



DC Operating Voltage

Housing Material	Brass Nickel Plated	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Encapsulated oil resistant cable	
Cable Length (mm)	2000 or 5000	
Conductor Cross Section (mm ²)	0.34	
Sensing Distance Sn (mm)	Non-Flush Fitting = 4	
Switch Point Hysteresis H (mm) ≤	0.6	
Repeat Accuracy (mm) ≤	0.3	
Operating Voltage (V)	10-30	
Operating Voltage Ripple (%) ≤	10	
Load Current I _a (mA) max.	250	
Residual Current I _r (mA) ≤	0.001	
No-Load Current (mA) ≤	15	
Voltage Drop U _d (V) ≤	2.5	
Internal Resistance R _i (Kohms)	4.7	
Temperature Drift S (um/K) ≤	- 8	
Switching Frequency (Hz)	1000	
Output Function	A=NO	
Output Polarity	P=Positive Switching N=Negative Switching	
Status Indication	LED (see ordering code)	

Ordering Code

Sensing Distance S _n	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
4	P	X	X	EGL12X04AP024-	1
	N	X	X	EGL12X04AN024-	2

Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) following Cable Length

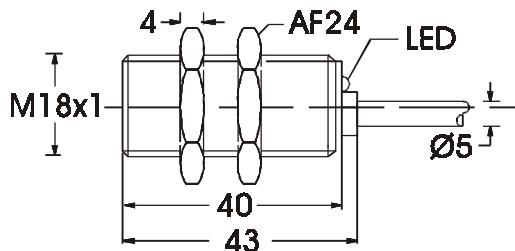
Specify Short Circuit Protection (K)

Ordering Example: EGL12X04..Non Flush Fitting, 10-30 VDC, 2m Cable Length, with LED With SCP.

EGL12X04AP024 – 2000LK

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGL 18X05



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm ²)	0.34
Sensing Distance Sn (mm)	Flush Fitting = 5
Switch Point Hysteresis H (mm)	≤ 0.5
Repeat Accuracy (mm)	≤ 0.2
Operating Voltage (V)	10-30
Operating Voltage Ripple (%)	≤ 10
Load Current I _a (mA) max.	250
Residual Current I _r (mA)	≤ 0.001
No-Load Current (mA)	≤ 15
Voltage Drop U _d (V)	≤ 2.5
Internal Resistance R _i (Kohms)	4.7
Temperature Drift S (um/K)	≤ -10
Switching Frequency (Hz)	500
Output Function	A=NO
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
5	P	X	X	EGL 18X05AP024-	1
	N	X	X	EGL 18X05AN024-	2

Specify Cable Length Required (2000 or 5000)

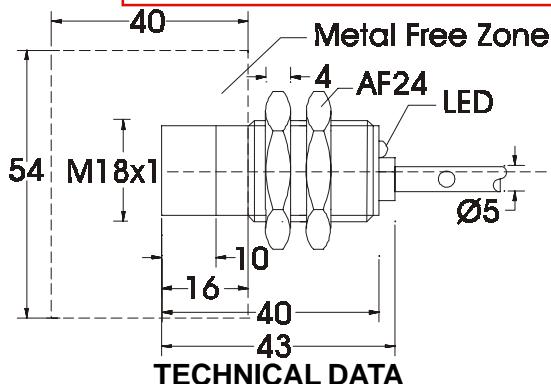
Specify Status indication LED (L) following Cable Length

Specify Short Circuit Protection (K)

Ordering Example: EGL 18X05..Flush Fitting, NO 00010-30 VDC, 2m Cable Length, with LED, with SCP

EGL18X05AP024 – 2000 LK

INDUCTIVE PROXIMITY SWITCHES TYPE EGL 18X08



DC Operating Voltage

Housing Material	Brass Nickel Plated	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Encapsulated oil resistant cable	
Cable Length (mm)	2000 or 5000	
Conductor Cross Section (mm ²)	0.34	
Sensing Distance Sn (mm)	Non-Flush Fitting = 8	
Switch Point Hysteresis H (mm)	≤	0.8
Repeat Accuracy (mm)	≤	0.2
Operating Voltage (V)	10-30	
Operating Voltage Ripple (%)	≤	10
Load Current Ia (mA) max.	250	
Residual Current Ir (mA)	≤	0.001
No-Load Current (mA)	≤	15
Voltage Drop Ud(V)	≤	2.5
Internal Resistance Ri (Kohms)	4.7	
Temperature Drift S (um/K)	≤	- 16
Switching Frequency (Hz)	500	
Output Function	A = NO	
Output Polarity	P=Positive Switching N=Negative Switching	
Status Indication	LED (see ordering code)	

Ordering code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
8	P	X	X	EGL 18X08AP024-	1
	N	X	X	EGL 18X08AN024-	2

Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) following Cable Length

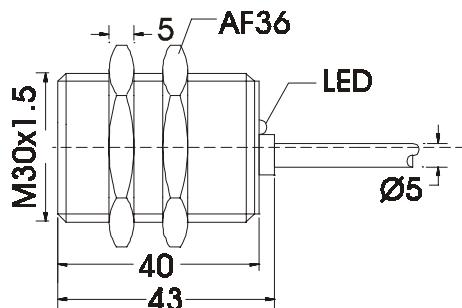
Specify Short Circuit Protection (K)

Ordering Example: EGL 18X08..Non Flush Fitting, NO 10-30 VDC, 2m Cable Length, with LED, with SCP

EGL18X08AP024 – 2000 LK

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGL 30X10



TECHNICAL DATA

DC Operating Voltage		
Housing Material	Brass Nickel Plated	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Encapsulated oil resistant cable	
Cable Length (mm)	2000 or 5000	
Conductor Cross Section (mm ²)	0.34	
Sensing Distance Sn (mm)	Flush Fitting = 10	
Switch Point Hysteresis H (mm)	≤	1
Repeat Accuracy (mm)	≤	0.3
Operating Voltage (V)	10-30	
Operating Voltage Ripple (%)	≤	10
Load Current I _a (mA) max.	250	
Residual Current I _r (mA)	≤	0.001
No-Load Current (mA)	≤	15
Voltage Drop U _d (V)	≤	2.5
Internal Resistance R _i (Kohms)	4.7	
Temperature Drift S (um/K)	≤	- 20
Switching Frequency (Hz)	300	
Output Function	A=NO	
Output Polarity	P=Positive Switching N=Negative Switching	
Status Indication	LED (see ordering code)	

Ordering Code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
10	P	X	X	EGL 30X10AP024-	1
	N	X	X	EGL 30X10AN024-	2

Specify Cable Length Required (2000 or 5000)

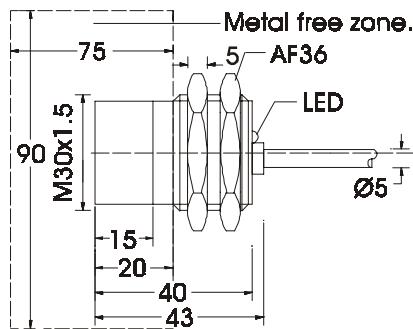
Specify Status indication LED (L) following Cable Length

Specify Short Circuit Protection (K)

Ordering Example: EGL 30X10..Flush Fitting, NO.10-30 VDC, 2m Cable Length, with LED with SCP

EGL 30X10AP024 – 2000LK

INDUCTIVE PROXIMITY SWITCHES TYPE EGL 30X15



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm ²)	0.34
Sensing Distance Sn (mm)	Non - Flush Fitting = 15
Switch Point Hysteresis H (mm)	≤ 1.5
Repeat Accuracy (mm)	≤ 0.3
Operating Voltage (V)	10-30
Operating Voltage Ripple (%)	≤ 10
Load Current Ia (mA) max.	250
Residual Current Ir (mA)	≤ 0.001
No-Load Current (mA)	≤ 15
Voltage Drop Ud(V)	≤ 2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (um/K)	≤ - 30
Switching Frequency (Hz)	300
Output Function	A=NO
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
15	P	X	X	EGL 30X15AP024-	1
	N	X	X	EGL 30X15AN024-	2

Specify Cable Length Required (2000 or 5000)

Specify Status indication LED (L) following Cable Length

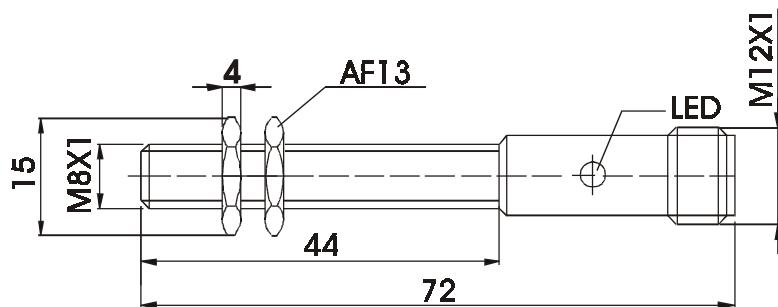
Specify Short Circuit Protection (K)

Ordering Example: EGL 30X15..Non Flush Fitting, NO.10-30 VDC, 2m Cable Length, with LED with SCP

EGL 30X15AP024 – 2000LK

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 08X01- SEM4L



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Stainless Steel
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Plug and Socket
Sensing Distance Sn (mm)	Flush Fitting = 1
Switch Point Hysteresis H (mm)	0.15
Repeat Accuracy (mm) <	0.05
Operating Voltage (V) ≤	10-30
Operating Voltage Ripple (%) < ≤	10
Load Current Ia (mA) max.	250
Residual Current Ir (mA) < ≤	0.001
No-Load Current (mA) <	11
Voltage Drop Ud(V) < ≤	1.3
Internal Resistance Ri (Kohms) ≤	10
Temperature Drift S (um/K) < ≤	-3
Switching Frequency (Hz)	2000
Output Function ≤	A=NO
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

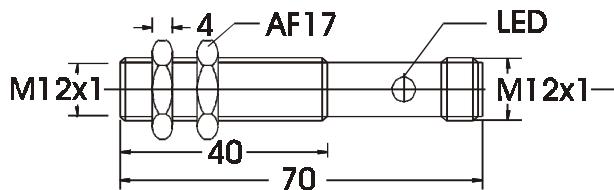
Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
1	P	A	-	X	EGT 08X01AP024-SEM4L	1
	N	A	-	X	EGT 08X01AN024-SEM4L	2

NOTE: The appropriate plug connector should be ordered separately

Ordering Example: EGT 08X01.....NO, 10-30 VDC, with LED, with Socket

EGT 08X01AP024 – SEM4L

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 12X02 — SEM4L



TECHNICAL DATA

DC Operating Voltage		
Housing Material	Brass Nickel Plated	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Plug and Socket	
Sensing Distance Sn (mm)	Flush Fitting = 2	
Switch Point Hysteresis H (mm)	≤	0.2
Repeat Accuracy (mm)	≤	0.1
Operating Voltage (V)	10-30	
Operating Voltage Ripple (%)	≤	10
Load Current Ia (mA) max.	250	
Residual Current Ir (mA)	≤	0.001
No-Load Current (mA)	≤	15
Voltage Drop Ud(V)	≤	2.5
Internal Resistance Ri (Kohms)	4.7	
Temperature Drift S (um/K)	≤	- 4
Switching Frequency (Hz)	1000	
Output Function	A=NO, U=NO + NC	
Output Polarity	P=Positive Switching N=Negative Switching	
Status Indication	LED (see ordering code)	

Ordering Code

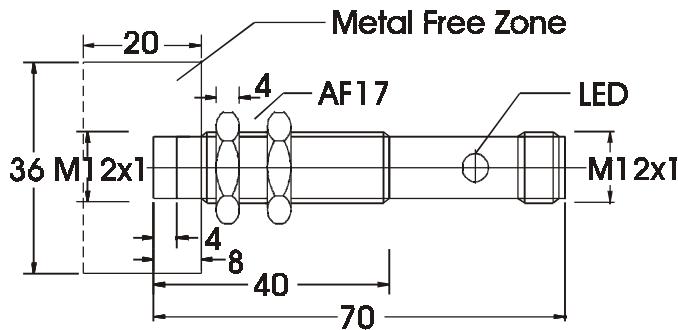
Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
2	P	A	X	X	EGT 12X02AP024-SEM4L	1
		U	-	X	EGT 12X02UP 024-SEM4L	3
	N	A	X	X	EGT 12X02AN024-SEM4L	2
		U	-	X	EGT 12X02UN024-SEM4L	4

NOTE: The appropriate plug connector should be ordered separately.

Ordering Example: EGT 12X02.....Flushing Fitting NO, 10-30 VDC, with LED, with Socket
EGT 12X02AP024 – SEM4L

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 12X04 - SEM4L



TECHNICAL DATA

DC Operating Voltage		
Housing Material	Brass Nickel Plated	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Plug and Socket	
Sensing Distance Sn (mm)	Non Flush Fitting = 4	
Switch Point Hysteresis H (mm)	≤	0.6
Repeat Accuracy (mm)	≤	0.3
Operating Voltage (V)	10-30	
Operating Voltage Ripple (%)	≤	10
Load Current Ia (mA) max.	250	
Residual Current Ir (mA)	≤	0.001
No-Load Current (mA)	≤	15
Voltage Drop Ud (V)	≤	2.5
Internal Resistance Ri (Kohms)	4.7	
Temperature Drift S (um/K)	≤	-8
Switching Frequency (Hz)	1000	
Output Function	A=NO, U=NO + NC	
Output Polarity	P=Positive Switching N=Negative Switching	
Status Indication	LED (see ordering code)	

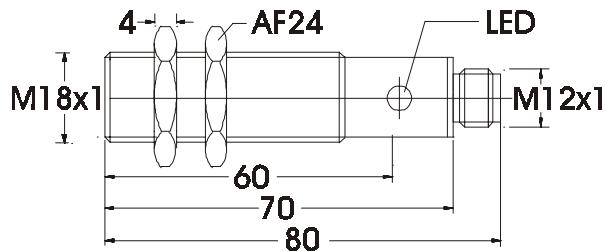
Ordering Code

Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
4	P	A	X	X	EGT 12X04AP024-SEM4L	1
		U	-	X	EGT 12X04UP024-SEM4L	3
	N	A	X	X	EGT 12X04AN024-SEM4L	2
		U	-	X	EGT 12X04UN024-SEM4L	4

NOTE: The appropriate plug connector should be ordered separately.

Ordering Example: EGT 12X04..Non-Flush Fitting NO 10-30 VDC, with LED with Socket
EGT 12X04AP024 - SEM4L

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 18X05 — SEM4L



TECHNICAL DATA

DC Operating Voltage		
Housing Material	Brass Nickel Plated	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Plug and Socket	
Sensing Distance Sn (mm)	Flush Fitting = 5.0	
Switch Point Hysteresis H (mm)	≤	0.5
Repeat Accuracy (mm)	≤	0.2
Operating Voltage (V)	10-30	
Operating Voltage Ripple (%)	≤	10
Load Current Ia (mA) max.	250	
Residual Current Ir (mA)	≤	0.001
No-Load Current (mA)	≤	15
Voltage Drop Ud (V)	≤	2.5
Internal Resistance Ri (Kohms)	4.7	
Temperature Drift S (um/K)	≤	-10
Switching Frequency (Hz)	500	
Output Function	A=NO, U=NO + NC	
Output Polarity	P=Positive Switching N=Negative Switching	
Status Indication	LED (see ordering code)	

Ordering Code

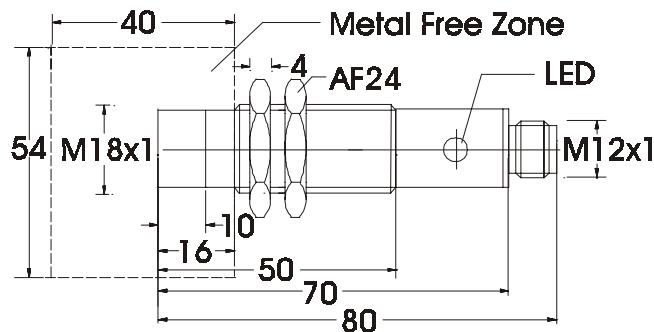
Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
5	P	A	X	X	EGT 18X05AP024-SEM4L	1
		U	-	X	EGT 18X05UP024-SEM4L	3
	N	A	X	X	EGT 18X05AN024-SEM4L	2
		U	-	X	EGT 18X05UN024-SEM4L	4

NOTE: The appropriate plug connector should be ordered separately.

Ordering Example: EGT 18X05..Flush Fitting NO 10-30 VDC, with LED with Socket
EGT 18X05AP024 - SEM4L

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 18X08 - SEM4L



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Plug and Socket
Sensing Distance Sn (mm)	Non-Flush Fitting = 8.0
Switch Point Hysteresis H (mm) ≤	0.8
Repeat Accuracy (mm) ≤	0.2
Operating Voltage (V)	10-30
Operating Voltage Ripple (%) ≤	10
Load Current Ia (mA) max.	250
Residual Current Ir (mA) ≤	0.001
No-Load Current (mA) ≤	15
Voltage Drop Ud (V) ≤	2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (um/K) ≤	- 16
Switching Frequency (Hz)	500
Output Function	A=NO, U=NO + NC
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

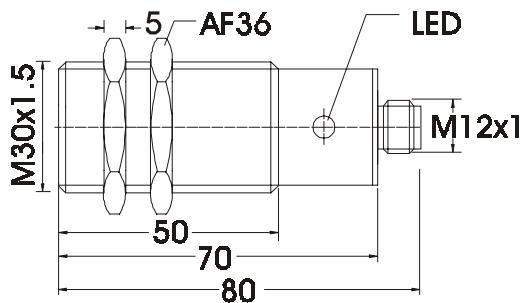
Ordering Code

Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
8	P	A	X	X	EGT 18X08AP024-SEM4L	1
		U	-	X	EGT 18X08UP024-SEM4L	3
	N	A	X	X	EGT 18X08AN024-SEM4L	2
		U	-	X	EGT 18X08UN024-SEM4L	4

NOTE: The appropriate plug connector should be ordered separately.

Ordering Example: EGT 18X08..Non Flush Fitting, NO, 10-30 VDC with LED with Socket
EGT 18X08AP024 - SEM4L

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 30X10 — SEM4L



TECHNICAL DATA

DC Operating Voltage		
Housing Material	Brass Nickel Plated	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Plug and Socket	
Sensing Distance Sn (mm)	Flush Fitting = 10.0	
Switch Point Hysteresis H (mm) ≤	1	
Repeat Accuracy (mm) ≤	0.3	
Operating Voltage (V)	10-30	
Operating Voltage Ripple (%) ≤	10	
Load Current Ia (mA) max.	250	
Residual Current Ir (mA) ≤	0.001	
No-Load Current (mA) ≤	15	
Voltage Drop Ud (V) ≤	2.5	
Internal Resistance Ri (Kohms)	4.7	
Temperature Drift S (um/K) ≤	- 20	
Switching Frequency (Hz)	300	
Output Function	A=NO, N=NO + NC	
Output Polarity	P=Positive Switching N=Negative Switching	
Status Indication	LED (see ordering code)	

Ordering Code

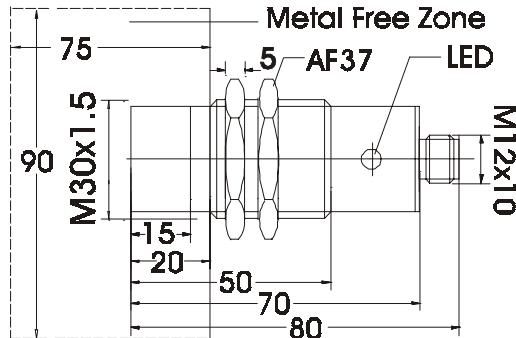
Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
10	P	A	X	X	EGT 30X10AP024-SEM4L	1
		U	-	X	EGT 30X10UP024-SEM4L	3
	N	A	X	X	EGT 30X10AN024-SEM4L	2
		U	-	X	EGT 30X10UN024-SEM4L	4

NOTE: The appropriate plug connector should be ordered separately.

Ordering Example: EGT 30X10..Flush Fitting, NO, 10-30 VDC with LED with Socket
EGT 30X10AP024 - SEM4L

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE EGT 30X15 -SEM4L



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Brass Nickel Plated
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Plug and Socket
Sensing Distance Sn (mm)	Non-Flush Fitting=15
Switch Point Hysteresis H (mm) ≤	1.5
Repeat Accuracy (mm) ≤	0.3
Operating Voltage (V)	10-30
Operating Voltage Ripple (%) ≤	10
Load current Ia (mA) max.	250
Residual Current Ir (mA) ≤	0.001
No-Load Current (mA) ≤	15
Voltage Drop Ud (V) ≤	2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (um/K) ≤	-30
Switching Frequency (Hz)	300
Output Function	A=NO, N=NO + NC
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Output Function	Short Circuit Protection	LED (optional)	Type	Connection Diagram
15	P	A	X	X	EGT 30X15AP024-SEM4L	1
		U	-	X	EGT 30X15UP024-SEM4L	3
	N	A	X	X	EGT 30X15AN024-SEM4L	2
		U	-	X	EGT 30X15UN024-SEM4L	4

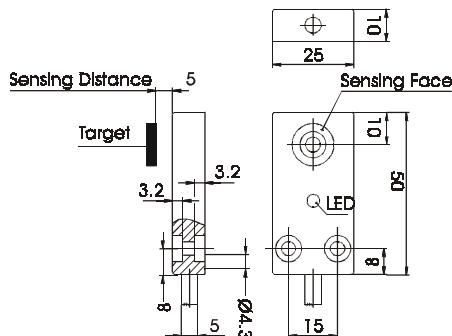
NOTE: The appropriate plug connector should be ordered separately.

Ordering Example: EGT 30X15..Non Flush Fitting. NO, 10-30 VDC with LED with Socket
EGT 30X15AP024 - SEM4L

Precision Switches

TEKNIC EUCHNER

INDUCTIVE PROXIMITY SWITCHES TYPE FG2X05



TECHNICAL DATA

DC Operating Voltage		
Housing Material	Plastic	
Environmental Protection	IP67	
Mounting Position	Optional	
Operating Temperature (deg.C)	-25 to + 70	
Connection	Encapsulated oil resistant cable	
Cable Length (mm)	2000 or 5000	
Conductor Cross Section (mm ²)	0.34	
Sensing Distance Sn (mm)	5.0	
Switch Point Hysteresis H (mm)	≤	0.5
Repeat Accuracy (mm)	≤	0.2
Operating Voltage (V)	10-30	
Operating Voltage Ripple (%)	≤	10
Load Current I _a (mA) max.	250	
Residual Current I _r (mA)	≤	0.001
No-Load Current (mA)	≤	15
Voltage Drop U _d (V)	≤	2.5
Internal Resistance R _i (Kohms)	4.7	
Temperature Drift S (um/K)	≤	-10
Switching Frequency (Hz)	500	
Output Function	A = NO	
Output Polarity	P=Positive Switching N=Negative Switching	
Status Indication	LED (see ordering code)	

Ordering Code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
5	P	X	X	FG2X05AP024 -	1
	N	X	X	FG2X05AN024-	2

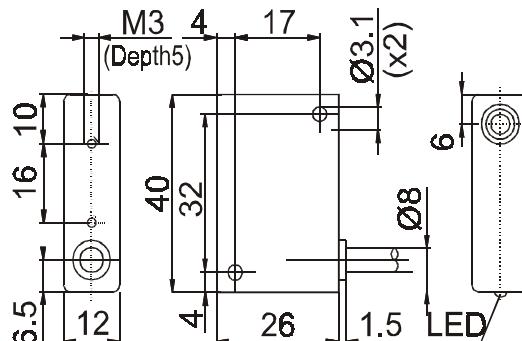
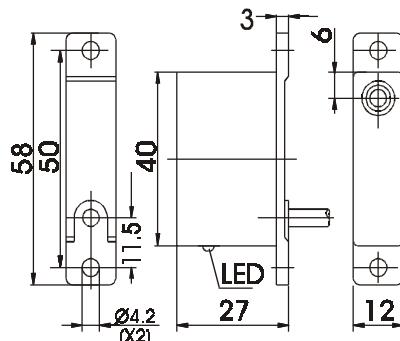
Specify Cable Length Required (2000 or 5000)

Specify Status Indication LED (L) following Cable Length

Ordering Example: FG2X05...NO, 10-30VDC, 5m Cable length with LED
FG2X05AP024-5000L

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE FG41X02



TECHNICAL DATA

DC Operating Voltage

Housing Material	Plastic
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm)	0.34
Sensing Distance Sn (mm)	2.0
Switch Point Hysteresis H (mm)	≤ 0.2
Repeat Accuracy (mm)	≤ 0.1
Operating Voltage (V)	10-30
Operating Voltage Ripple (%)	≤ 10
Load Current Ia (mA) max.	250
Residual Current Ir (mA)	≤ 0.001
No-Load Current (mA)	≤ 15
Voltage Drop Ud (V)	≤ 2.5
Internal Resistance Ri (K ohms)	4.7
Temperature Drift S ($\mu\text{m}/\text{K}$)	≤ -4
Switching Frequency (Hz)	200
Output Function	A = NO
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
2	P	X	X	FG41X02AP024 -	1
	N	X	X	FG41X02AN024-	2
2	P	X	X	FG4X02AP024-	1
	N	X	X	FG4X02AN024-	2

Specify Cable Length Required (2000 or 5000)

Specify Status Indication LED (L) following Cable Length

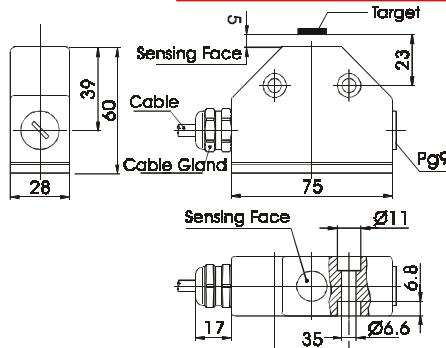
Ordering Example: FG41X02..NO, 10-30 VDC, 2m Cable Length with LED

FG41X02AP024 - 5000L

FG 4X02 ..NO, 10-30 VDC, 2m Cable Length with LED

FG4X02AP024 - 5000L

INDUCTIVE PROXIMITY SWITCHES TYPE N1A



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Aluminium Die Casting, Anodised
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm ²)	0.34
Sensing Distance Sn (mm)	5.0
Switch Point Hysteresis H (mm)	≤ 0.5
Repeat Accuracy (mm)	≤ 0.2
Operating Voltage (V)	10-30
Operating Voltage Ripple (%)	≤ 10
Load Current Ia (mA) max.	250
Residual Current Ir (mA)	≤ 0.001
No-Load Current (mA)	≤ 15
Voltage Drop Ud (V)	≤ 2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S μ (um/K)	≤ -10
Switching Frequency (Hz)	500
Output Function	A+NO, U=NO + NC
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (see ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
5	P	X	X	N1AX05AP024 -	1
			X	N1AX05UP024 -	3
	N	X	X	N1AX05AN024 -	2
		-	X	N1AX05UN024 -	4

Specify Cable Length Required (2000 or 5000)

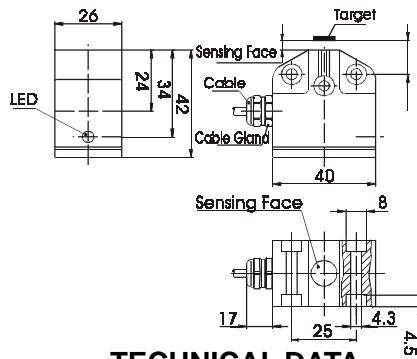
Specify Status Indication LED (L) following Cable Length

Ordering Example: N1AX05 ..NO, 10-30VDC, 5m Cable length, with LED

N1AX05AP024 - 5000L

Precision Switches

INDUCTIVE PROXIMITY SWITCHES TYPE SG01



TECHNICAL DATA

DC Operating Voltage	
Housing Material	Aluminium Die Casting, Anodised
Environmental Protection	IP67
Mounting Position	Optional
Operating Temperature (deg.C)	-25 to + 70
Connection	Encapsulated oil resistant cable
Cable Length (mm)	2000 or 5000
Conductor Cross Section (mm ²)	0.34
Sensing Distance Sn (mm)	2.0
Switch Point Hysteresis H (mm)	≤ 0.2
Repeat Accuracy (mm)	≤ 0.1
Operating Voltage (V)	10-30
Operating Voltage Ripple (%)	≤ 10
Load Current Ia (mA) max.	250
Residual Current Ir (mA)	≤ 0.001
No-Load Current (mA)	≤ 15
Voltage Drop Ud (V)	≤ 2.5
Internal Resistance Ri (Kohms)	4.7
Temperature Drift S (μm/K)	≤ -4
Switching Frequency (Hz)	500
Output Function	A = NO
Output Polarity	P=Positive Switching N=Negative Switching
Status Indication	LED (See ordering code)

Ordering Code

Sensing Distance Sn	Output Polarity	Short Circuit Protection	LED (optional)	Type	Connection Diagram
2	P	X	X	SG01X02AP024 -	1
	N	X	X	SG01X02AN024-	2

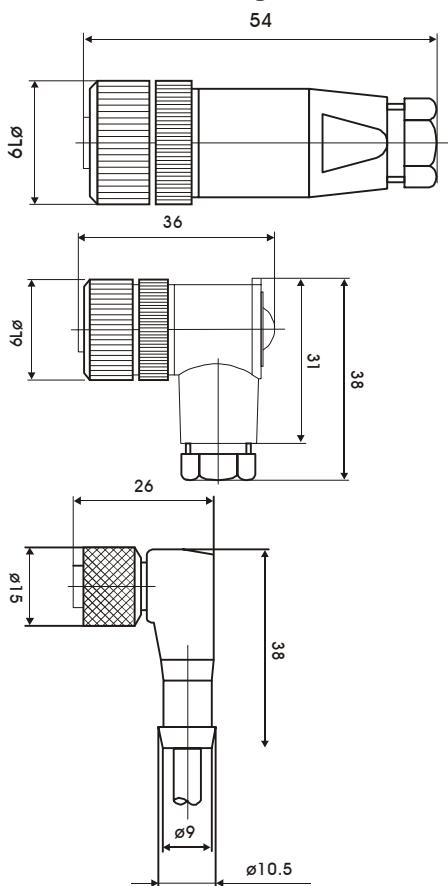
Specify Cable Length Required (2000 or 5000)

Specify Status Indication LED (L) following Cable Length

Ordering Example: SG01X02..NO, 10-30VDC, 5m Cable length with LED

SG01X02AP024 - 5000L

Connection Plug

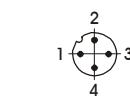


Connection
Diagrams :

DIAGRAM 1: NO PNP/NPN



Indication	without LED
Output Function	NO/NO + NC
Output Polarity	PNP/NPN
Type	SGF4
Connection diag.	1,2



Indication	without LED
Output Function	NO/NO + NC
Output Polarity	PNP/NPN
Type	SBF4
Connection diag.	1,2



Indication	with LED
Output Function	NO
Output Polarity	PNP
Cable length	2 m
	5 m
Type	SWLF3AP-2000P SWLF3AP-5000P
Connection diag.	3

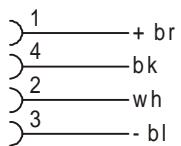


DIAGRAM 2: NO+NC PNP/NPN

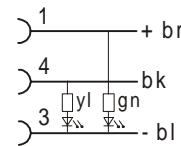


DIAGRAM 3: NO PNP

Ordering Code for Inductive Proximity Switches.

