

## TECHNICAL SPECIFICATION

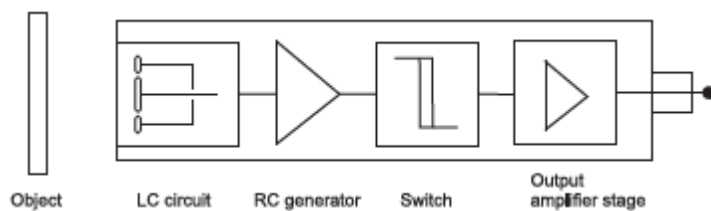
### Capacitive sensors – series CM xx

#### Description:

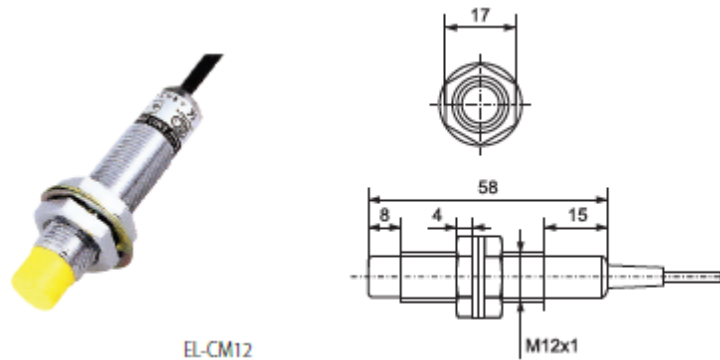
Capacitive sensors are used in machine systems and equipment for no-contact motion surveillance. They consist of two coaxial electrodes, a condenser and RC generator. This type of sensors reacts to both metal and non-metal objects, as the gearing distance for non-metal objects depends on their dielectric constants. They allow gearing distance adjustment for non-magnetic conductive materials. They are developed on the base of PNP and NPN transition. They have small dimensions and feature a metal cylindrical shell resistant to vibrations and a plastic lid which is oil and water resistant.

#### Technical data:

- Insulating resistance:  $\geq 50 \text{ M } \Omega$
- Gearing distance: from 2 mm to 15 mm
- Precision of repetition: 0.01
- Ambient temperature:  $-25^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Gearing speed: 5mm/s
- Rated voltage: 6~36VDC; 90~230VAC
- IP code: IP 54

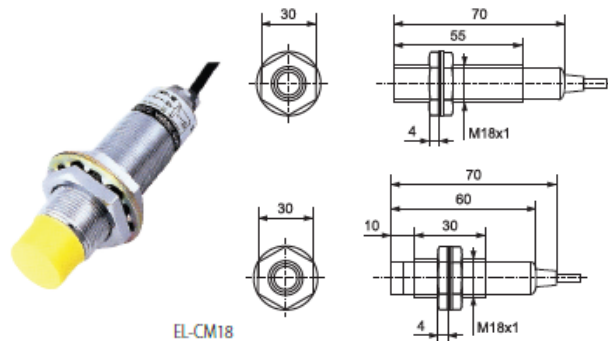


## Variant and dimensions:



EL-CM12

Type	Start distance (mm)	Power supply voltage	Type of transition	Type of contact	Output load	Packing / Box (pcs)	Catalogue number
EL-CM12-3004NA	0~4	15~30VDC	NPN	NO	200mA	1 / 100	46CM 12-32NA
EL-CM12-3004NB	0~4	15~30VDC	NPN	NC	200mA	1 / 100	46CM 12-32NB
EL-CM12-3004PA	0~4	15~30VDC	PNP	NO	200mA	1 / 100	46CM 12-32PA
EL-CM12-3004PB	0~4	15~30VDC	PNP	NC	200mA	1 / 100	46CM 12-32PB

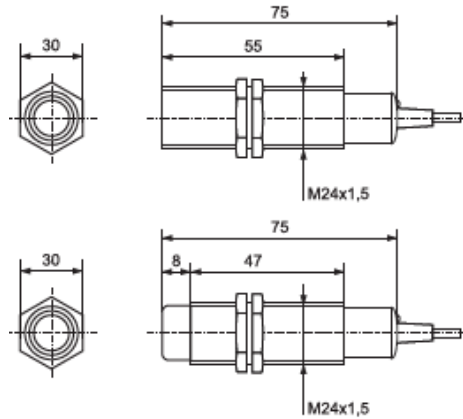


EL-CM18

Type	Start distance (mm)	Power supply voltage	Type of transition	Type of contact	Output load	Packing / Box (pcs)	Catalogue number
EL-CM18-3004NA	0~8	15~30VDC	NPN	NO	200mA	1 / 100	46CM 18-38NA
EL-CM18-3004NB	0~8	15~30VDC	NPN	NC	200mA	1 / 100	46CM 18-38NB
EL-CM18-3004PA	0~8	15~30VDC	PNP	NO	200mA	1 / 100	46CM 18-38PA
EL-CM18-3004PB	0~8	15~30VDC	PNP	NC	200mA	1 / 100	46CM 18-38PB
EL-CM18-2008A	0~8	90~230VAC	SCR	NO	300mA	1 / 100	46CM 18-28A



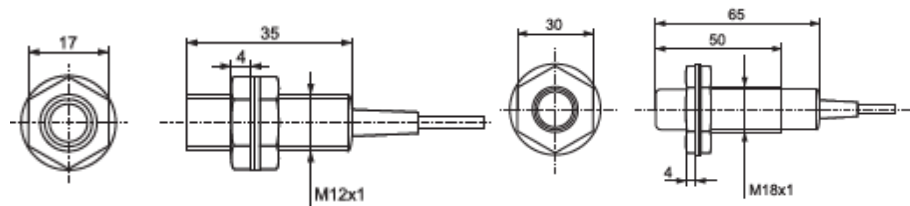
EL-CM24



Type	Start distance (mm)	Power supply voltage	Type of transition	Type of contact	Output load	Packing / Box (pcs)	Catalogue number
EL-CM24-3012NA	8	15~30VDC	NPN	NO	200mA	1 / 100	46CM 24-12NA
EL-CM24-3012NB	8	15~30VDC	NPN	NC	200mA	1 / 100	46CM 24-12NB
EL-CM24-3012PA	8	15~30VDC	PNP	NO	200mA	1 / 100	46CM 24-12PA
EL-CM24-3012PB	8	15~30VDC	PNP	NC	200mA	1 / 100	46CM 24-12PB
EL-CM24-2012A	8	90~230VAC	SCR	NO	300mA	1 / 100	46CM 24-12A



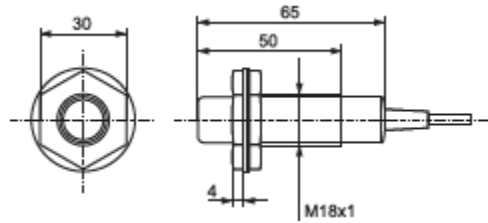
EL-SM12



Type	Start distance (mm)	Power supply voltage	Type of transition	Type of contact	Output load	Packing / Box (pcs)	Catalogue number
EL-SM12-3110NA	10	15~30VDC	NPN	NO	200mA	2 / 200	46SM 12-31NA
EL-SM12-3110NB	10	15~30VDC	NPN	NC	200mA	2 / 200	46SM 12-31NB
EL-SM18-3110PA	10	15~30VDC	PNP	NO	200mA	1 / 100	46SM 18-31PA
EL-SM18-3110PB	10	15~30VDC	PNP	NC	200mA	1 / 100	46SM 18-31PB



EL-XM18



Type	Start distance (mm)	Power supply voltage	Type of transition	Type of contact	Output load	Packing / Box (pcs)	Catalogue number
EL-XM18-305PMI	5	15~30VDC	inductive	NO	100mA	1 / 100	46XM 18-35A
EL-XM18-305PMU	5	15~30VDC	inductive	NC	100mA	1 / 100	46XM 18-35B
EL-XM24-308PMI	8	15~30VDC	inductive	NO	300mA	1 / 100	46XM 24-38A
EL-XM24-308PMU	8	15~30VDC	inductive	NC	300mA	1 / 100	46XM 24-38B

**Note:** MI – current type; MU – voltage type

**Standards:** EN 60947-5-2:2007/A1:2012

EN 60947-5-3:1999/A1:2005

