

### All-purpose limit switch – series CSA-xxx

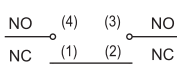
3 YEAR WARRANTY

The all-purpose limit switches are devices used in automatic systems as a control element. They are used for setting of gearing limits. They are mounted on transport lines, conveyors and other linear progressive motion machines. They feature a vibration-resistant metal shell.

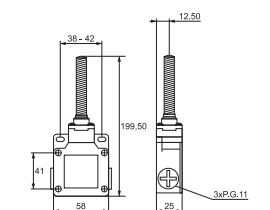
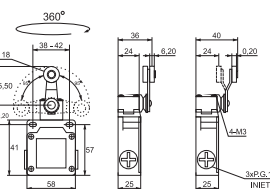
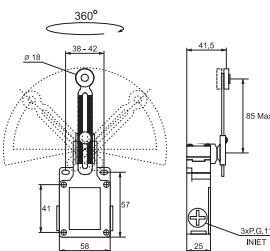
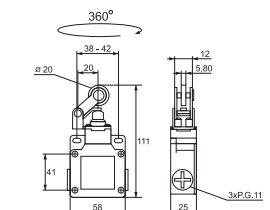
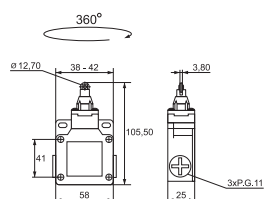
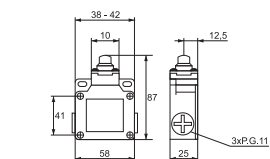
#### Product conformity documentation:

- Standard: EN 60947-1; EN 60947-5-1
- Dielectric strength: 1000V AC
- Insulating resistance: 100mΩ
- Electrical endurance (number of cycles): 500 000 with active load
- Mechanical endurance (number of cycles): 1 000 000
- Gearing speed: 5mm/s to 0.5 m/s
- Rated voltage: 230V
- Rated current: up to 10A
- IP code: IP66
- Cable input: cable gland PG11
- Section of power supply conductor: up to 2mm<sup>2</sup>
- Fastening strength of terminals: 6-8kgf/cm

#### Type of contact system



Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Rated current	Packing/Box (pcs)	Catalogue number
CSA - 001	metal cylinder	800	400	2.0mm	5.8mm	10A-active 4A-inductive	10 / 90	<b>46A001</b>
CSA - 003	cylinder with metal roll	800	400	2.0mm	5.8mm	10A-active 4A-inductive	10 / 90	<b>46A003</b>
CSA - 012	horizontal lever with metal roll	800	400	2.0mm	5.8mm	10A-active 4A-inductive	10 / 90	<b>46A012</b>
CSA - 031	adjustable lever with metal roll	400	100	22.5°	95°	10A-active 4A-inductive	10 / 80	<b>46A031</b>
CSA - 021	lever with metal roll	400	100	22.5°	95°	10A-active 4A-inductive	10 / 80	<b>46A021</b>
CSA - 081	spring lever	150	50	22.5°	50mm	10A-active 4A-inductive	10 / 80	<b>46A081</b>



### All-purpose limit switch – series TZ-6xxx

**3** YEAR WARRANTY

The all-purpose limit switches are installed on transport lines, conveyors and other linear progressive motion machines. The miniature limit switch is mounted in an aluminum shell, resistant to vibrations, lubricants and water.

#### Product conformity documentation:

- Standard: EN 60947-1; EN 60947-5-1
- Dielectric strength: 1000V AC
- Insulating resistance: 100mΩ
- Contact resistance: 15mΩ
- Electrical endurance (number of cycles): 500 000 with active load
- Mechanical endurance (number of cycles): 10 000 000
- Gearing speed: 0.1mm/s to 0.5 m/s
- Rated voltage: 230V
- IP code: IP65
- Cable input: cable gland PG11
- Section of power supply conductor: up to 1.5mm<sup>2</sup>

Type of contact system



Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Rated current	Packing/Box (pcs)	Catalogue number
TZ-6001	metal cylinder	350g	115g	0.5mm	5.5mm	15A-active 5A-inductive	1 / 50	<b>466001</b>
TZ-6101	oil-resistant metal cylinder	800g	240g	2mm	5mm	15A-active 5A-inductive	1 / 50	<b>466101</b>
TZ-6102	oil-resistant cylinder with metal roll	500g	100g	1mm	3.5mm	15A-active 5A-inductive	1 / 50	<b>466102</b>
TZ-6104	oil-resistant horizontal lever with metal roll	640g	230g	5mm	6mm	15A-active 5A-inductive	1 / 50	<b>466104</b>
TZ-6143	oil-resistant vertical lever with metal roll	640g	230g	5mm	6mm	15A-active 5A-inductive	1 / 50	<b>466143</b>
TZ-6106	spring lever	150g	-	20°	-	-	1 / 50	<b>466106</b>

## Universal Limit Switch – Series CM-1xxx

3 YEAR WARRANTY

Limit switches of the CM series are used mainly as replacement of the limit switches of the TZ series or for setting the movement limits of some types of equipment. The switches are supplied with screw cable terminals. They can work at resistance loads as high as 15A, and are of single circuit type. Limit switches have high accuracy and can operate at wide variety of speeds.

## Items are compliant with the following standards:

EN 60947-1; EN 60947-5-1

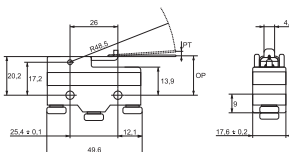
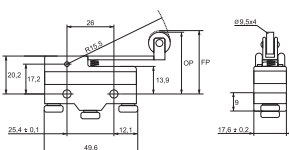
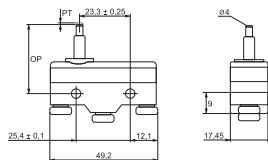
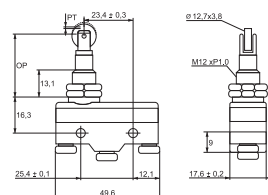
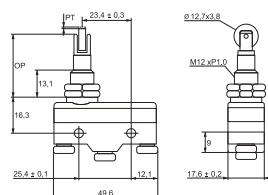
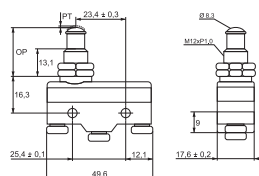
- Dielectric Strength: 1000V AC
- Insulation Resistance: 100mΩ min. (at 500VDC)
- Contact Resistance: 5mΩ
- Electrical Life (No. of cycles): 500 000 with non-inductive load

- Mechanical Life (No. of cycles): 5 000 000
- Operating frequency: 20 electrical operations/minute
- Operating speed: 0.1mm/s to 1.0m/s
- Rated voltage: 230V
- IP code: IP65
- Fastening strength of terminals: 6-8kgf/cm

Type of contact system



Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Rated current	Packing/Box (pcs)	Catalogue number
CM-1307	Metal cylinder	350g	114g	0.4mm	5.5mm	15A-active 5A-inductive	1 / 480	468105
CM-1309	Cylinder and transverse metal roll	350g	114g	0.4mm	5.5mm	15A-active 5A-inductive	1 / 480	468106
CM-1308	Cylinder longitudinal metal roll	350g	114g	0.4mm	5.5mm	15A-active 5A-inductive	1 / 480	468109
CM-1305	Metal cylinder	350g	114g	0.4mm	1.6mm	15A-active 5A-inductive	1 / 480	468110
CM-1703	Extended metal roll	160g	22g	7.1mm	1.02mm	15A-active 5A-inductive	1 / 480	468113
CM-1705	Spring lever	10g	3g	20mm	5.6mm	15A-active 5A-inductive	1 / 480	468117



## All-purpose limit switch – series TZ-8xxx

**3** YEAR WARRANTY

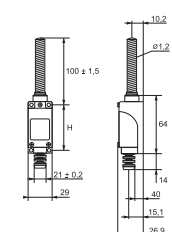
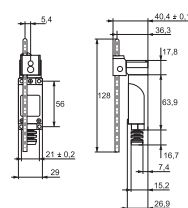
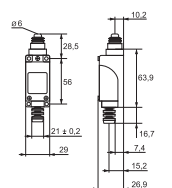
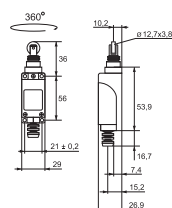
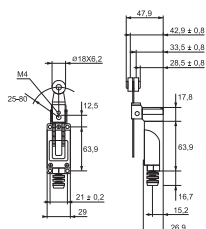
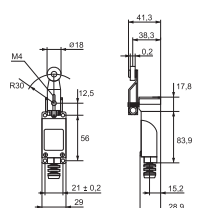
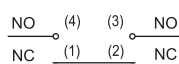
The all-purpose limit switches are devices used for setting gearing limits. They are mounted on transport lines, conveyors and other linear progressive motion machines. They have small dimensions and a vibration-resistant metal shell with plastic lid, resistant to oil and water.

## Product conformity documentation:

- Standard: EN 60947-1; EN 60947-5-1
- Dielectric strength: 1000V AC
- Insulating resistance: 100MΩ
- Contact Resistance: 25mΩ
- Electrical endurance (number of cycles): 500 000 with active load

- Mechanical endurance (number of cycles): 5 000 000
- Gearing speed: 5mm/s to 0.5 m/s
- Rated voltage: 230V
- IP code: IP40
- Cable input: cable gland PG11
- Section of power supply conductor: up to 2mm
- Fastening strength of terminals: 6-8kgf/cm

Type of contact system



Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Rated current	Packing/Box (pcs)	Catalogue number
TZ -8104	lever with metal roll	750g	100g	20°	50°	5A-active 3A-inductive	10 / 100	<b>468104</b>
TZ -8108	adjustable lever with metal roll	750g	100g	20°	50°	5A-active 3A-inductive	10 / 100	<b>468108</b>
TZ -8112	cylinder with metal roll	900g	150g	1.5mm	4.0mm	5A-active 3A-inductive	10 / 100	<b>468112</b>
TZ -8111	metal cylinder	900g	150g	1.5mm	4.0mm	5A-active 3A-inductive	10 / 100	<b>468111</b>
TZ -8107	metal rod	750g	100g	20°	50°	5A-active 3A-inductive	10 / 100	<b>468107</b>
TZ -8167	spring lever	150g	-	30mm	-	5A-active 3A-inductive	10 / 100	<b>468167</b>

### All-purpose limit switch – series CWL-xxx

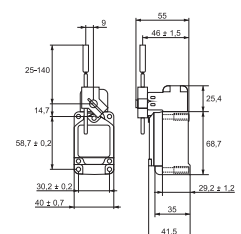
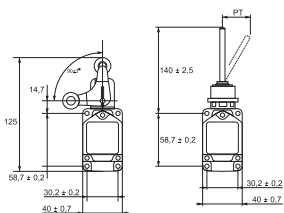
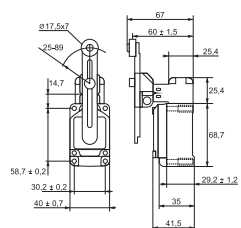
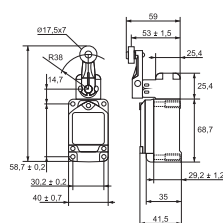
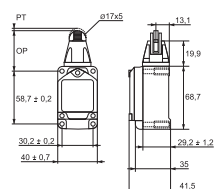
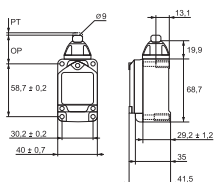
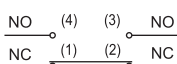
**3** YEAR WARRANTY

The all-purpose limit switches are devices used for setting gearing limits. They are mounted on transport lines, conveyors and other linear progressive motion machines. They have aluminium shell of high mechanic strength and resistance to oil, water and pressure.

#### Product conformity documentation:

- Standard: EN 60947-1; EN 60947-5-1
- Dielectric strength: 1000V AC
- Insulating resistance: 100mΩ
- Contact resistance: 15mΩ
- Electrical endurance (number of cycles): 500 000 with active load
- Mechanical endurance (number of cycles): 10 000 000
- Gearing speed: 1mm/s to 2 m/s
- Rated voltage: 230V
- IP code: IP66
- Cable input: cable gland
- Metal shell
- Vibration-resistant

#### Type of contact system



Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Rated current	Packing/Box (pcs)	Catalogue number
CWLD	metal cylinder	2720g	910g	2.0mm	6.4mm	10A-active 3A-inductive	1 / 50	<b>46LD</b>
CWLD2	cylinder with metal roll	2720g	910g	2.0mm	5.6mm	10A-active 3A-inductive	1 / 50	<b>46LD2</b>
CWL-CA2-2	lever with metal roll	1360g	227g	20°	50°	10A-active 3A-inductive	1 / 50	<b>46LCA2-2</b>
CWL-CA12-2-Q	adjustable lever with metal roll	2720g	910g	20°	50°	10A-active 3A-inductive	1 / 50	<b>46LCA12-2-Q</b>
CWL-CA32-41	fork	1200g	-	55°	90±10°	10A-active 3A-inductive	1 / 50	<b>46LCA32-41</b>
CWLNJ	oil-resistant spring lever	150g	-	28mm	90±10°	10A-active 3A-inductive	1 / 50	<b>46LNJ</b>
CWLCL	metal rod	142g	28g	20°	50°	10A-active 3A-inductive	1 / 50	<b>46LCL</b>

### Universal Limit Switch – Series CZ93-xx

**3** YEAR WARRANTY

Limit switches of the CZ 93 series are Safety Key Interlock Switches. They are used in object control systems with high safety requirements. The limit switch body is mounted to the fixed system component, while the safety key is mounted to the movable system component. System operation cannot start, unless a full interlocking is achieved. Safety key interlock switches can operate at up to 10A non-inductive resistance load, 3A lamp load and 5A inductive load. They have high operating accuracy at wide variety of speeds. These limit switches are available in two versions depending on the operating contacts number: 2NC and NO+NC

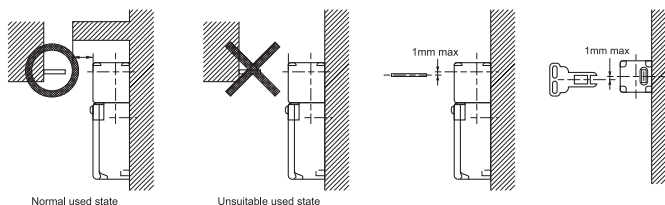
#### Items are compliant with the following standards:

EN 60947-1; EN 60947-5-1

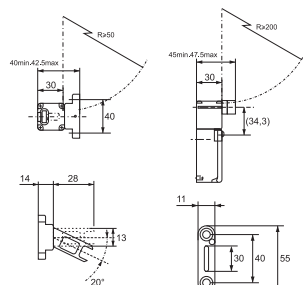
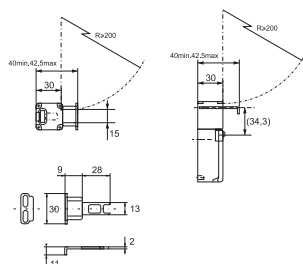
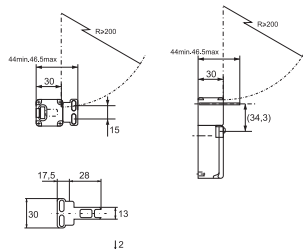
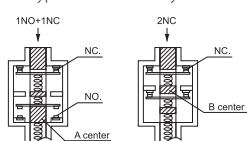
- Dielectric Strength: 2500V AC
- Insulation Resistance: 100mΩ min. (at 500VDC)
- Contact Resistance: 25mΩ
- Electrical Life (No. of cycles): 50 000 with non-

inductive load

- Mechanical Life (No. of cycles): 2 000 000
- Operating frequency: 30 electrical operations/minute
- Operating speed: 0.1mm/s to 0.5m/s
- Rated voltage: 230V
- IP code: IP65



#### Type of the contact system



Type	Key type	Power of starting (g)	Power of release (g)	Switching position	General movement	Rated current	Packing/ Box (pcs)	Catalogue number
CZ-93BPG01	CZ93-K1	147N	29.4N	6 mm	28mm	10A-active 3A-inductive	10 / 100	<b>46CZ08</b>
CZ-93CPG01	CZ93-K1	147N	29.4N	6 mm	28mm	10A-active 3A-inductive	10 / 100	<b>46CZ09</b>
CZ-93BPG02	CZ93-K2	147N	29.4N	6 mm	28mm	10A-active 3A-inductive	10 / 100	<b>46CZ10</b>
CZ-93CPG02	CZ93-K2	147N	29.4N	6 mm	28mm	10A-active 3A-inductive	10 / 100	<b>46CZ11</b>
CZ-93BPG03	CZ93-K3	147N	29.4N	6 mm	28mm	10A-active 3A-inductive	10 / 100	<b>46CZ12</b>
CZ-93CPG03	CZ93-K3	147N	29.4N	6 mm	28mm	10A-active 3A-inductive	10 / 100	<b>46CZ13</b>
Type	Key Actuating	Packing / Box (pcs)		Catalogue number				
CZ 93 - K 1	Horizontal	1 / 100		<b>46CZ931</b>				
CZ 93 - K 2	Vertical	1 / 100		<b>46CZ932</b>				
CZ 93 - K 3	Adjustable	1 / 100		<b>46CZ933</b>				

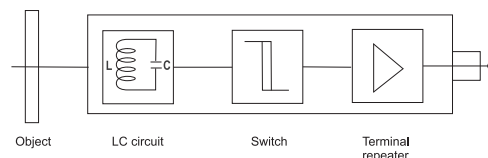
## All-purpose proximity switch – series LM xx

**5** YEAR WARRANTY

\*for industrial usage, 3 years warranty

Proximity induction sensors are all-purpose switches used in machine systems and equipment for no contact surveillance of metal elements motion. They can also be used in other machine systems applications as no contact control sensors for level of liquids, control sensors for the speed and position of rotating chains, etc. 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.

- Insulating resistance:  $\geq 50 \text{ M}\Omega$
- Gearing distance: from 2 mm to 7 mm
- Precision of repetition: 0.01
- Ambient temperature:  $-25^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$
- Gearing speed: 5mm/s
- Rated voltage: 6~36VDC; 90~230VAC
- IP code: IP 67

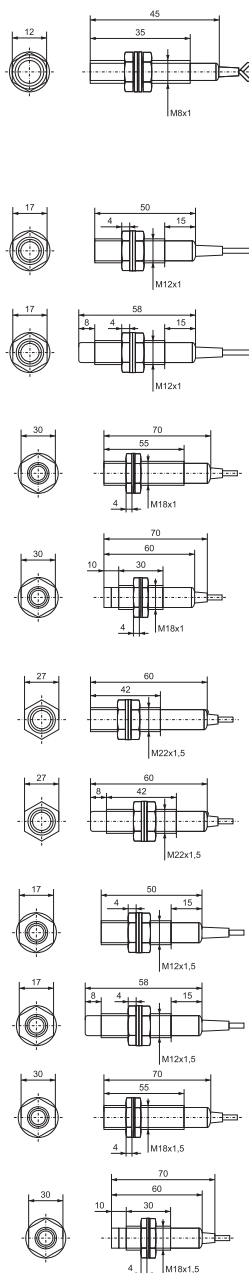


EL-LM8

EL-LM12

EL-LM18

EL-LM22



Type	Start distance (mm)	Power supply voltage	Type of transition	Type of contact	Output load	Packing / Box (pcs)	Catalogue number
EL-LM8-3002NA	2	15~30 VDC	NPN	NO	130 mA	2 / 200	<b>46LM 8-32NA</b>
EL-LM8-3002NB	2	15~30 VDC	NPN	NC	130 mA	2 / 200	<b>46LM 8-32NB</b>
EL-LM8-3002PA	2	15~30 VDC	PNP	NO	130 mA	2 / 200	<b>46LM 8-32PA</b>
EL-LM8-3002PB	2	15~30 VDC	PNP	NC	130 mA	2 / 200	<b>46LM 8-32PB</b>
EL-LM8-2002A	2	90~230VAC	SCR	NO	150 mA	2 / 200	<b>46LM 8-22A</b>
EL-LM12-3004NA	4	15~30 VDC	NPN	NO	200 mA	2 / 200	<b>46LM 12-34NA</b>
EL-LM12-3004NB	4	15~30 VDC	NPN	NC	200 mA	2 / 200	<b>46LM 12-34NB</b>
EL-LM12-3004PA	4	15~30 VDC	PNP	NO	200 mA	2 / 200	<b>46LM 12-34PA</b>
EL-LM12-3004PB	4	15~30 VDC	PNP	NC	200 mA	2 / 200	<b>46LM 12-34PB</b>
EL-LM12-2004A	4	90~230VAC	SCR	NO	300 mA	2 / 200	<b>46LM 12-24A</b>
EL-LM18-3008NA	8	15~30 VDC	NPN	NO	200 mA	1 / 100	<b>46LM 18-38NA</b>
EL-LM18-3008NB	8	15~30 VDC	NPN	NC	200 mA	1 / 100	<b>46LM 18-38NB</b>
EL-LM18-3008PA	8	15~30 VDC	PNP	NO	200 mA	1 / 100	<b>46LM 18-38PA</b>
EL-LM18-3008PB	8	15~30 VDC	PNP	NC	200 mA	1 / 100	<b>46LM 18-38PB</b>
EL-LM18-2008A	8	90~230VAC	SCR	NO	300 mA	1 / 100	<b>46LM 18-28A</b>
EL-LM22-3010NA	10	15~30 VDC	NPN	NO	200 mA	1 / 100	<b>46LM 22-30NA</b>
EL-LM22-3010NB	10	15~30 VDC	NPN	NC	200 mA	1 / 100	<b>46LM 22-30NB</b>
EL-LM22-3010PA	10	15~30 VDC	PNP	NO	200 mA	1 / 100	<b>46LM 22-30PA</b>
EL-LM22-3010PB	10	15~30 VDC	PNP	NC	200 mA	1 / 100	<b>46LM 22-30PB</b>
EL-LM22-2010A	10	90~230VAC	SCR	NO	300 mA	1 / 100	<b>46LM 22-20A</b>
EL-LM12-4002A	2	230VAC	inductive	NO	100 mA	2 / 200	<b>46LM 12-44A</b>
EL-LM12-4004A	4	230VAC	inductive	NO	300 mA	2 / 200	<b>46LM 12-46A</b>
EL-LM18-4006A	5	230VAC	inductive	NO	100 mA	1 / 100	<b>46LM 18-44A</b>
EL-LM18-4008A	8	230VAC	inductive	NO	300 mA	1 / 100	<b>46LM 18-48A</b>

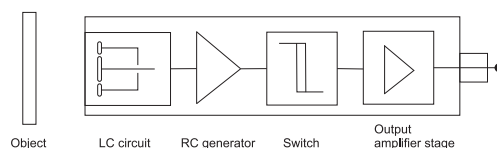
## Capacitive sensor

### Capacitive sensors – series CM xx

**5 YEAR WARRANTY** \*for industrial usage, 3 years warranty

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.

- 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  $+65^{\circ}\text{C}$
- Gearing speed: 5mm/s
- Rated voltage: 6~36VDC; 90~230VAC
- IP code: IP 54



EL-CM12



EL-CM18



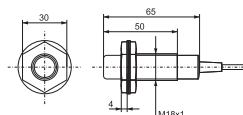
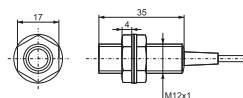
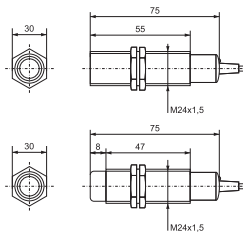
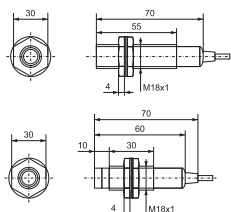
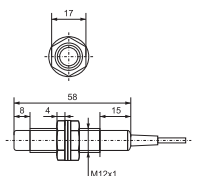
EL-CM24



EL-SM12



EL-XM18



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	15~30 VDC	NPN	NO	200 mA	1 / 100	<b>46CM 12-32NA</b>
EL-CM12-3004NB	0~4	15~30 VDC	NPN	NC	200 mA	1 / 100	<b>46CM 12-32NB</b>
EL-CM12-3004PA	0~4	15~30 VDC	PNP	NO	200 mA	1 / 100	<b>46CM 12-32PA</b>
EL-CM12-3004PB	0~4	15~30 VDC	PNP	NC	200 mA	1 / 100	<b>46CM 12-32PB</b>
EL-CM18-3008NA	0~8	15~30 VDC	NPN	NO	200 mA	1 / 100	<b>46CM 18-38NA</b>
EL-CM18-3008NB	0~8	15~30 VDC	NPN	NC	200 mA	1 / 100	<b>46CM 18-38NB</b>
EL-CM18-3008PA	0~8	15~30 VDC	PNP	NO	200 mA	1 / 100	<b>46CM 18-38PA</b>
EL-CM18-3008PB	0~8	15~30 VDC	PNP	NC	200 mA	1 / 100	<b>46CM 18-38PB</b>
EL-CM18-2008A	0~8	90~230VAC	SCR	NO	300 mA	1 / 100	<b>46CM 18-28A</b>
EL-CM24-3012NA	8	15~30 VDC	NPN	NO	200 mA	1 / 100	<b>46CM 24-12NA</b>
EL-CM24-3012NB	8	15~30 VDC	NPN	NC	200 mA	1 / 100	<b>46CM 24-12NB</b>
EL-CM24-3012PA	8	15~30 VDC	PNP	NO	200 mA	1 / 100	<b>46CM 24-12PA</b>
EL-CM24-3012PB	8	15~30 VDC	PNP	NC	200 mA	1 / 100	<b>46CM 24-12PB</b>
EL-CM24-2012A	8	90~230VAC	SCR	NO	300 mA	1 / 100	<b>46CM 24-12A</b>
EL-SM12-3110NA	10	15~30 VDC	NPN	NO	200 mA	2 / 200	<b>46SM 12-31NA</b>
EL-SM12-3110NB	10	15~30 VDC	NPN	NC	200 mA	2 / 200	<b>46SM 12-31NB</b>
EL-SM18-3110PA	10	15~30 VDC	PNP	NO	200 mA	1 / 100	<b>46SM 18-31PA</b>
EL-SM18-3110PB	10	15~30 VDC	PNP	NC	200 mA	1 / 100	<b>46SM 18-31PB</b>
EL-XM18-305PMI	5	15~30 VDC inductive		NO	100 mA	1 / 100	<b>46XM 18-35A</b>
EL-XM18-305PMU	5	15~30 VDC inductive		NC	100 mA	1 / 100	<b>46XM 18-35B</b>
<b>Note: Sensor of Hall</b>							
EL-XM24-308PMI	8	15~30 VDC inductive		NO	300 mA	1 / 100	<b>46XM 24-38A</b>
EL-XM24-308PMU	8	15~30 VDC inductive		NC	300 mA	1 / 100	<b>46XM 24-38B</b>

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

## Photoelectrical sensor

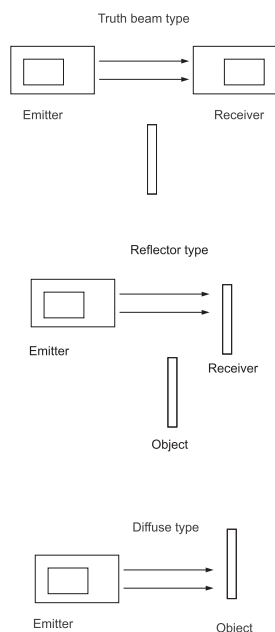
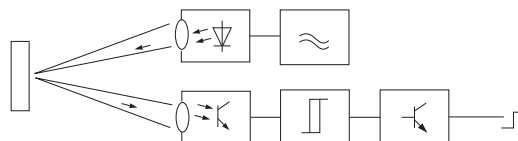
**5** YEAR WARRANTY

\*for industrial usage, 3 years warranty

Photoelectrical sensors of the Gxx series are all-purpose switches used in machine systems and equipment for no contact surveillance of motion of elements. They are based on the photoelectric principle of operation – inside the sensor there is a photo signal emitter and receiver of the returned signal. There are three types of sensors: diffuse sensors, reflector sensors and emitter-receiver sensors. These types of sensors differ in the way of returning the signal. They allow for gearing distance adjustment. 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 features:

- Insulating resistance:  $\geq 50 \text{ M}\Omega$
- Gearing distance: from 2 mm to 7 mm
- Precision of repetition: 0.01
- Ambient temperature:  $-25^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$
- Gearing speed: 5mm/s
- Rated voltage: 6~36VDC; 90~230VAC
- IP code: IP 67



Type	Start distance	Power supply voltage	Type of transition	Type of contact	Type of sensor	Packing / Box (pcs)	Catalogue number
EL-G12-3A07NA	70 mm	15~30 VDC	NPN	$\varnothing 12; I=50$	Diffuse	1 / 100	<b>46G12A071</b>
EL-G12-3A07PA	70 mm	15~30 VDC	PNP	$\varnothing 12; I=50$	Diffuse	1 / 100	<b>46G12A072</b>
EL-G12-3B1NA	1 m	15~30 VDC	NPN	$\varnothing 12; I=50$	Reflector	1 / 100	<b>46G123B11</b>
EL-G12-3B1PA	1 m	15~30 VDC	PNP	$\varnothing 12; I=50$	Reflector	1 / 100	<b>46G123B12</b>
EL-G12-3C3NA	3 m	15~30 VDC	NPN	$\varnothing 12; I=50$	Truth beam	1 / 100	<b>46G123C11</b>
EL-G12-3C3PA	3 m	15~30 VDC	PNP	$\varnothing 12; I=50$	Truth beam	1 / 100	<b>46G123C12</b>
EL-G18-3A10NA	100 mm	15~30 VDC	NPN	$\varnothing 18; I=70$	Diffuse	1 / 100	<b>46G18A101</b>
EL-G18-3A10PA	100 mm	15~30 VDC	PNP	$\varnothing 18; I=70$	Diffuse	1 / 100	<b>46G18A102</b>
EL-G18-3B2NA	2 m	15~30 VDC	NPN	$\varnothing 18; I=70$	Reflector	1 / 100	<b>46G183B11</b>
EL-G18-3B2PA	2 m	15~30 VDC	PNP	$\varnothing 18; I=70$	Reflector	1 / 100	<b>46G183B12</b>
EL-G18-3C5NA	5 m	15~30 VDC	NPN	$\varnothing 18; I=70$	Truth beam	1 / 100	<b>46G185C11</b>
EL-G18-3C5PA	5 m	15~30 VDC	PNP	$\varnothing 18; I=70$	Truth beam	1 / 100	<b>46G185C12</b>
EL-G30-3A70NA	500 mm	15~30 VDC	NPN	$\varnothing 22; I=70$	Diffuse	1 / 100	<b>46G30A101</b>
EL-G30-3A70PA	500 mm	15~30 VDC	PNP	$\varnothing 22; I=70$	Diffuse	1 / 100	<b>46G30A102</b>
EL-G30-3B3NA	3 m	15~30 VDC	NPN	$\varnothing 22; I=70$	Reflector	1 / 100	<b>46G303B11</b>
EL-G30-3B3PA	3 m	15~30 VDC	PNP	$\varnothing 22; I=70$	Reflector	1 / 100	<b>46G303B12</b>
EL-G30-3C101NA	10 m	15~30 VDC	NPN	$\varnothing 22; I=70$	Truth beam	1 / 52	<b>46G305C11</b>
EL-G30-3C101PA	10 m	15~30 VDC	PNP	$\varnothing 22; I=70$	Truth beam	1 / 52	<b>46G305C12</b>
EL-G35-3A50NA	500 mm	15~30 VDC	NPN	NO	Diffuse	1 / 100	<b>46G35A101</b>
EL-G35-3A50PA	500 mm	15~30 VDC	PNP	NO	Diffuse	1 / 100	<b>46G35A102</b>
EL-G35-3B3NA	3 m	15~30 VDC	NPN	NO	Reflector	1 / 100	<b>46G353B11</b>
EL-G35-3B3PA	3 m	15~30 VDC	PNP	NO	Reflector	1 / 100	<b>46G353B12</b>
EL-G35-3C5NA	5 m	15~30 VDC	NPN	NO	Truth beam	1 / 50	<b>46G355C11</b>
EL-G35-3C5PA	5 m	15~30 VDC	PNP	NO	Truth beam	1 / 50	<b>46G355C12</b>
EL-G50-3A30NA	500 mm	15~30 VDC	NPN	NO	Diffuse	1 / 100	<b>46G50A101</b>
EL-G50-3A30PA	500 mm	15~30 VDC	PNP	NO	Diffuse	1 / 100	<b>46G50A102</b>
EL-G50-3B4NA	4 m	15~30 VDC	NPN	NO	Reflector	1 / 100	<b>46G503B11</b>
EL-G50-3B4PA	4 m	15~30 VDC	PNP	NO	Reflector	1 / 100	<b>46G503B12</b>
EL-G50-3C5NA	5 m	15~30 VDC	NPN	NO	Truth beam	1 / 50	<b>46G505C11</b>
EL-G50-3C5PA	5 m	15~30 VDC	PNP	NO	Truth beam	1 / 50	<b>46G505C12</b>
EL-BZJ-211	10 mm	15~30 VDC	Reflector	NO	Colour detector	1 / 50	<b>46BZJ211</b>
EL-BZJ-311	9mm	15~30 VDC	Reflector	NO	Colour detector	1 / 50	<b>46BZJ311</b>
EL-BZJ-411	9mm	15~30 VDC	Reflector	NO	Colour detector	1 / 50	<b>46BZJ411</b>



EL-G12



EL-G18



EL-G30



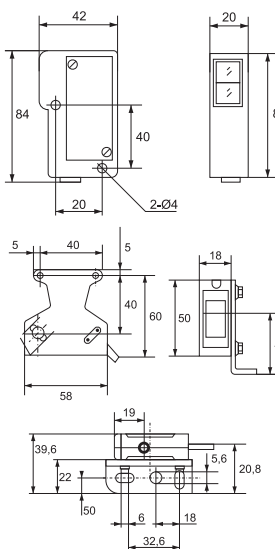
EL-G35



EL-G50



EL-BZJ



## Power supplies



## Power supplies

3 YEAR WARRANTY

The DRP-xx-xx series of power supplies are voltage reduction and rectification units ideally suited to provide stable power supply of systems and equipment for contact-free movement monitoring elements (such as inductive, capacity and photo sensors, logic elements and systems, etc.). They have small overall dimensions and can be installed on a DIN rail. The power units have metal or plastic cases resistant to vibrations and plastic oil- and waterproof covers. They are able to provide stable output voltage at comparatively fluctuating input voltage. Devices have built-in overload and short circuit protection, allowing short time overload of up to 130%. Power supplies are available with various output voltages (5, 12, 15 and 24 V DC) and different output power rates.

## Technical Specifications:

- Input voltage: 80 ~ 230V AC
- Over-voltage: 115 ~ 135% of the rated output voltage
- Overload: 120 ~ 120% of the rated output power
- Terminals: Input – 2 screw terminals; Output: 4 screw terminals;
- IP code: IP44
- Power indicator
- Installation: DIN rail
- Cooling: Free air cooling convection

Type	Output Voltage (V)	Output Load (A)	Tolerance	Power (W)	Dimensions W/H/L (mm)	Packing / Box (pcs)	Catalogue number
DR - 45 - 5	5	5	±2%	25	78 / 93 / 56	1 / 50	<b>46DR455</b>
DR - 45 - 12	12	3.5	±1%	42	78 / 93 / 56	1 / 50	<b>46DR4512</b>
DR - 45 - 15	15	2.8	±1%	42	78 / 93 / 56	1 / 45	<b>46DR4515</b>
DR - 45 - 24	24	2	±1%	48	78 / 93 / 56	1 / 16	<b>46DR4524</b>

Type	Output Voltage (V)	Output Load (A)	Tolerance	Power (W)	Dimensions W/H/L (mm)	Packing / Box (pcs)	Catalogue number
DR - 75 - 12	12	6.3	±2%	75	55.5 / 125.3 / 100	1 / 18	<b>46DR7512</b>
DR - 75 - 24	24	3.2	±1%	75	55.5 / 125.3 / 100	1 / 18	<b>46DR7524</b>
DRP - 240 - 24	24	10	±1%	240	125.5 / 125.3 / 100	1 / 12	<b>46DR2424</b>

## Float switches

3 YEAR WARRANTY

Float switches of the type QW-xx-xx are sealed units for direct pump control. They are intended for continuous liquid level maintenance in pools, tanks or ponds exercised through direct control of the pumping in or out process in the respective reservoir. They are pre-wired and depending on the chosen configuration can control either the pumping in, or pumping out of the reservoir. They allow direct control of single phase pumps with mounted power of 1 kW. Float switches are waterproof.

The automatic level control units of the DHC1Y-xx series are intended for mounting on pumping control

panels. They do not use any additional sensors, but conductive probes to contact the liquid. The unit sends low (harmless) voltage signals to the probes and once a contact between a probe and liquid is established, the unit changes its contactors' state. Units are available in three variants with different number of control contacts suitable for different applications. Each contact can transfer current of up to 5A, which is enough to ensure control over the powerful pumps' contactors or to directly control pumps with mounted power of 1 kW. The automatic level control units can be installed on a DIN rail.

Type	Number of probes (No. of levels)	Output Load (A)	Accuracy	Operating Voltage (V)	Note	Packing / Box (pcs)	Catalogue number
DHC1Y - S	1	5	±1%	230	-	100	<b>46DW001</b>
DHC1Y - SD	3	5	±1%	230	-	100	<b>46DW002</b>
DHC1Y - T	1	5	±1%	230	2 pumps control	100	<b>46DW003</b>

Type	Number of probes (No. of levels)	Output Load (A)	Accuracy	Operating Voltage (V)	Note	Packing / Box (pcs)	Catalogue number
QW - M 15 - 3	2	6	±1%	230	-	1 / 30	<b>46DW004</b>
QW - 70AB	2	4	±1%	230	-	1 / 20	<b>46DW005</b>