

Proximity Switches – Capacitive

Low Profile, dc – E2K-F



- For detention of metallic or non-metallic objects
- Flat-pack construction allows a 10mm sensing range in a comparatively small space
- LED operation indicator fitted
- Protection to IP66

H = 10.1, W = 50 (overall), 34 (face), D = 20, Fixing centres = 42 (3.5 dia.), Cable L = 2m

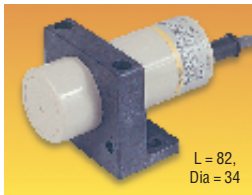
A plastic body capacitive proximity switch. The switch can be mounted directly onto a metal panel, though care should be taken with regard to surrounding metal, since the switch is of non-shielded construction and is side sensitive.

Sensing distance	10mm (max.)	Current consumption	10mA max. @ 24V dc
Operating voltage	10 to 30V dc, 10% ripple (max.)	Response frequency	100Hz
Output	NPN open-collector, N.O.	Temperature range	-10°C to +55°C

SEN153X

Mfrs. List No.	Order Code	1+	5+	10+
ESK-F10MC1	530-414			

34mm ac and dc – E2K-C Series



- Detects metallic or non-metallic objects without contact
- Sensitivity is adjustable by built-in potentiometer
- Output indication via LED
- Protection IP66
- DC types have UL listing
- Supplied with mounting bracket

Note: When mounting with bracket, provide 20mm (min) between face of detecting head and bracke

Sensing distance	3 to 25mm (adjustable)	Response frequency	dc type 70Hz
Output	200mA	ac type	10Hz
Current consumption	1 to 2mA (ac) 10 to 15mA (dc)	Temperature range	-25°C to +70°C
Output mode	Normally open		

Mfrs. List No. E2K-C25ME-1 = 103-035, E2K-C25MY-1 = 103-036, E2K-C25MF1 = 177-872.
E2K-C25ME2 = 357-4430, E2K-C25MY2 = 357-441

SEN60X

Voltage	Order Code	1+	5+	10+
10 to 40V dc/NPN	103-035			
10 to 40V dc.NPN NC	NEW 357-4430			
10 to 40V dc/PNP	177-872			
90 to 250V ac	103-036			
90 to 250V ac/NC	NEW 357-4441			

Flat Pack, dc – EC55

Prewired and M12 Plug-in



- Adjustable sensing range 5 to 25mm
- Units have both N.O. and N.C. switching with LED indication
- Choice of NPN or PNP output
- Sensors are sealed to IP67
- Easy-mounting using 2 M3.5 screws
- Available prewired or with M12 standard plug
- Capacitive sensors ideal for use in material handling applications

H = 35, W = 55, D = 15, Fixing Centres = 25 (Slot W = 3.5)

Sensing distance	5 to 25mm	Operating temperature	-25°C to +70°C
Operating voltage	10 – 40V dc	Housing material	Grey polycarbonate
Switching current	≤200mA	Cable on prewired units	Grey PUR, 2m
Frequency of operation	100Hz		

Mfrs. List No's: EC5525NPAP = 711-4941, EC5525PPAP = 711-4953,
EC5525NPAP-1 = 711-4965, ECC5525PPAP-1 = 711-4977

FOR SUITABLE 4-WAY M12 SENSORS CONNECTORS, SEE ORDER CODE 532-617

SEN303

	Order Code	1+	5+	10+
Prewired, NPN	711-4941			
Prewired, PNP	711-4953			
Plug-in, NPN	711-4965			
Plug-in, PNP	711-4977			

M18 dc, M30 ac and dc



L = 100 (incl. cable sleeve), Cable L = 2m



- M18 and M30 DC sensors available with either NPN or PNP outputs. Normally open or normally closed operation is selectable on the M30 types.
- M30 AC sensors available for either N.O or N.C operation.
- Sensitivity is adjustable by built-in potentiometer, and is factory set to 8mm on M18 types and 15mm on M30 types
- Output indication by LED
- Reverse polarity and short-circuit protection on DC sensors
- Transient protection on AC sensors
- Protection to IP67
- UL and CSA approved

Capacitive proximity switches in cylindrical polyester housings for detecting metallic or non-metallic objects without contact.

Note: Not for flush mounting over unthreaded area near tip – length 12mm (M30), 8mm (M18)

Output	ac type	20 to 500mA (thyristor)
	dc type	0 to 200mA (NPN or PNP transistor)
Supply voltage	ac type	20 to 265V ac
	dc type	10 to 40V dc
Temperature range		-25°C to +70°C

Sensing Distance	Thread Size	Output	Response Frequency	Mfrs. List No.	Order Code
2 to 10mm	M18	NPN/N.O.	25Hz	EC1808NPOP	254-447
2 to 10mm	M18	PNP/N.O.	25Hz	EC1808PPOP	673-894
3 to 20mm	M30	NPN/N.O.+N.C.	60Hz	EC3015NNAP	177-067
3 to 20mm	M30	PNP/N.O.+N.C.	60Hz	EC3015PNAP	179-319
3 to 20mm	M30	SCR/N.O.	10Hz	EC3015TBOP	175-679
3 to 20mm	M30	SCR/N.C.	10Hz	EC3015TBOP	673-900

SEN61X

	Sensing Distance	Output	Order Code	1+	5+	10+	25+
M18	8mm	NPN	254-447				
M18	8mm	PNP	673-894				
M30	15mm	NPN	177-067				
M30	15mm	PNP	179-319				
M30	15mm	AC/N.O.	175-679				
M30	15mm	AC/N.C.	673-900				

M30 ac/dc, Extended Sensing – ‘Tripleshield’

Prewired and M12 Plug-in



L = 72.6 (non-flush), 60.6 (flush), Thread = M3

- Outstanding high immunity against ESD, interference and transients, exceeding all industry norm requirements
- Adjustable extended sensing distances to 25mm
- Elevated temperature range -25°C to +80°C
- DC types available NPN or PNP with NO/NC dual output
- AC types have SCR output with programmable NO/NC switching
- DC types have reverse polarity and short-circuit protection
- Senses most materials ● IP67 protection



M30 sensors in thermoplastic polyester housing, triple protected against environmental disturbances, fitted with 2m PUR cable or M12 connector.

Output functions	dc types (4-wire): NO/NC, wire selectable
	ac types (2-wire): NO/NC, switch selectable
Sensing distance	Flush = 2 to 16mm, Non-flush = 4 to 25mm
Rated operating current (continuous)	≤500mA (ac types), ≤200mA (dc types)
Operating frequency	25Hz (ac types), 100Hz (dc types)

Operating voltage	Output type	Mounting style	Mfrs. List No	Order Code	Mfrs. List No	Order Code
10-40V dc	NPN	Non-flush	EC3025NPAPL	711-3201	EC3025NPAPL-1	721-2999
10-40V dc	PNP	Non-flush	EC3025PPAPL	711-3213	EC3025PPAPL-1	721-3001
20-250V ac	SCR	Non-flush	EC3025TBAPL	711-3249	EC3025TBAPL-6	721-3025
10-40V dc	NPN	Flush	EC3016NPAPL	711-3225	EC3016NPAPL-1	721-2975
10-40V dc	PNP	Flush	EC3016PPAPL	711-3237	EC3016PPAPL-1	721-2987
20-250V ac	SCR	Flush	EC3016TBAPL	711-3250	EC3016TBAPL-6	721-3013

FOR SUITABLE M12 SENSOR CONNECTORS SEE ORDER CODE 532-617 FOR DC TYPES AND ORDER CODES 722-1642 & 722-1654 FOR AC TYPES

SEN252