## Specifications





Eaton Moeller® series E53 Proximity switch, capacitive, Sn=20mm, 1N/O, 3L, NPN, 10-30VDC, M30, insulated material, M12





General specifications		
PRODUCT NAME	Eaton Moeller® series E53 Proximity switch	
CATALOG NUMBER	134776	
MODEL CODE	E53KAL30T110SD	
EAN	4015081316281	
PRODUCT LENGTH/DEPTH	101.6 mm	
PRODUCT HEIGHT	25.4 mm	
PRODUCT WIDTH	88.9 mm	
PRODUCT WEIGHT	0.23 kg	
CERTIFICATIONS	CE IEC/EN 60947-5-2	



Product specifications	
ТҮРЕ	Capacitive sensor
ELECTRIC CONNECTION TYPE	Plug-in connection
ENCLOSURE MATERIAL FINISHING	Other
FITTED WITH:	Status indication
ACTUATION TYPE	Other
ENCLOSURE MATERIAL	Plastic
ENCLOSURE TYPE	Cylinder, screw-thread
CATEGORY (EN 954-1)	В
EXPLOSION SAFETY CATEGORY FOR DUST	None
EXPLOSION SAFETY CATEGORY FOR GAS	None
FUNCTIONS	Short-circuit protection Protection against wire breakage Protection against polarity reversal
VOLTAGE TYPE	DC
MOUNTING METHOD	Flush mounting
MATERIAL	Insulated material
<del></del>	msalacea material
CONNECTION TYPE	Plug-in connection M12 x 1 3-wire
	Plug-in connection M12 x
CONNECTION TYPE	Plug-in connection M12 x 1 3-wire
CONNECTION TYPE	Plug-in connection M12 x 1 3-wire Concise NEMA 13 NEMA 4 NEMA 12
CONNECTION TYPE  INSTALLATION TYPE  DEGREE OF PROTECTION	Plug-in connection M12 x 1 3-wire Concise NEMA 13 NEMA 4 NEMA 12 IP65
CONNECTION TYPE  INSTALLATION TYPE  DEGREE OF PROTECTION  INTERFACE TYPE	Plug-in connection M12 x 1 3-wire  Concise  NEMA 13 NEMA 4 NEMA 12 IP65  None  Status indication of
CONNECTION TYPE  INSTALLATION TYPE  DEGREE OF PROTECTION  INTERFACE TYPE  LED INDICATOR	Plug-in connection M12 x 1 3-wire  Concise  NEMA 13 NEMA 4 NEMA 12 IP65  None  Status indication of Switching state: Red LED
CONNECTION TYPE  INSTALLATION TYPE  DEGREE OF PROTECTION  INTERFACE TYPE  LED INDICATOR  SWITCH FUNCTION TYPE	Plug-in connection M12 x 1 3-wire  Concise  NEMA 13  NEMA 4  NEMA 12  IP65  None  Status indication of Switching state: Red LED  Normally open contact
CONNECTION TYPE  INSTALLATION TYPE  DEGREE OF PROTECTION  INTERFACE TYPE  LED INDICATOR  SWITCH FUNCTION TYPE  LOAD CURRENT  RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60	Plug-in connection M12 x 1 3-wire  Concise  NEMA 13 NEMA 4 NEMA 12 IP65  None  Status indication of Switching state: Red LED  Normally open contact  Max. 300 mA (le)
CONNECTION TYPE  INSTALLATION TYPE  DEGREE OF PROTECTION  INTERFACE TYPE  LED INDICATOR  SWITCH FUNCTION TYPE  LOAD CURRENT  RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN  RATED CONTROL SUPPLY VOLTAGE (US) AT DC -	Plug-in connection M12 x 1 3-wire  Concise  NEMA 13 NEMA 4 NEMA 12 IP65  None  Status indication of Switching state: Red LED  Normally open contact  Max. 300 mA (le)  0 V

Resources	
CATALOGUES	Product Range Catalog Sensors – products, basic information, applications
DECLARATIONS OF	DA-DC-00004648.pdf
CONFORMITY	DA-DC-00004653.pdf
DRAWINGS	eaton-proximity-switches- e53-proximity-switch- dimensions-008.eps eaton-proximity-switches- e53-proximity-switch- dimensions-006.eps
	eaton-proximity-switches- e53-proximity-switch- dimensions-007.eps
INSTALLATION INSTRUCTIONS	<u>IL05307002Z</u>

DISTANCE (SN)	
REPEATABILITY	10 %
SENSOR HEIGHT	0 mm
SENSOR LENGTH	80 mm
SUPPLY VOLTAGE - MAX	30 V
SUPPLY VOLTAGE - MIN	10 V
SWITCHING HYSTERESIS OF SN	20 %
VOLTAGE DROP (UD)	2 V
VOLTAGE RATING - MAX	250 V
WIDTH SENSOR	0 mm
PRODUCT CATEGORY	E53 Capacitive Series
OPERATIONAL CURRENT (IB)	< 10 mA (in the switched state at 24 V DC)
RESIDUAL CURRENT	0.1 mA (through the load in the blocked state at 230 V AC and 24 V DC)
RESIDUAL RIPPLE	10 % (U <sub>e</sub> )
SHOCK RESISTANCE	30 g, Mechanical, Shock duration 11 ms
SWITCHING FREQUENCY	250 Hz
SWITCHING OUTPUT TYPE	NPN
TEMPERATURE DRIFT OF SN	10 %
SAFETY PERFORMANCE LEVEL (EN ISO 13849-1)	None
SIL (IEC 61508)	None
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
DIAMETER SENSOR	30 mm
NUMBER OF CONTACT ENERGIZED OUTPUTS WITH SIGNALLING FUNCTION	0
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	1
NUMBER OF OUTPUTS (PROTECTED CONTACT ENERGIZED)	0
NUMBER OF OUTPUTS (PROTECTED SEMICONDUCTOR)	0

**NUMBER OF OUTPUTS** (SEMICONDUCTOR WITH **SIGNALING FUNCTION) OUTPUT CURRENT AT PROTECTED OUTPUT -**0 mA MAX **RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50** 0 V **HZ - MAX RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50** 0 V **HZ-MIN RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60** 0 V

**HZ - MAX** 

**PROJECT NAME: PROJECT NUMBER:** PREPARED BY: DATE:



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