

Specifications



Photo is representative

Eaton 100518

Eaton Moeller® series E71 Proximity switch, optical, long range 10cm, 4L, 10-30VDC, PNP, M8

General specifications

PRODUCT NAME	Eaton Moeller® series E71 Proximity switch
CATALOG NUMBER	100518
MODEL CODE	E71-FFDP-M8
EAN	4015081643271
PRODUCT LENGTH/DEPTH	536.45 mm
PRODUCT HEIGHT	9.91 mm
PRODUCT WIDTH	9.91 mm
PRODUCT WEIGHT	0.09 kg
CERTIFICATIONS	UL 508 UL UL Category Control No.: NRKH, NRKH7 IEC/EN 60947-5-2 CE CSA-C22.2 No. 14 UL File No.: E166051 Certified by UL for use in Canada CSA File No.: UL report applies to both US and Canada

Product specifications

TYPE	Optical sensors
FEATURES	Focused, forward viewing beam
ELECTRIC CONNECTION TYPE	Connector M8
ENCLOSURE MATERIAL	Plastic
ENCLOSURE TYPE	Cuboid
OPERATING MODE	Switching principle: Adjustable bright/dark switching
EXPLOSION SAFETY CATEGORY FOR DUST	None
EXPLOSION SAFETY CATEGORY FOR GAS	None
FUNCTIONS	Protection against polarity reversal Short-circuit protection Reflected-light beam
VOLTAGE TYPE	DC
WIRE SIZE	0
CONNECTION TYPE	Plug-in connection M8 x 1 4-wire
CABLE SHEATH MATERIAL	Other
LIGHT TYPE	Polarity free red light Visible red light
DEGREE OF PROTECTION	IP67 NEMA 4
INTERFACE TYPE	Other
LED INDICATOR	Status indication of Switching state: Yellow LED Status indication of Operating voltage: Green LED
SWITCH FUNCTION TYPE	Other
LOAD CURRENT	Max. 100 mA (Ie)
LASER PROTECTION CLASS	None
OPERATION AGENT-SAFETY CLASS	Safety class 2
SHOCK RESISTANCE	30 g, Mechanical, Shock duration 11 ms
OPTICAL SURFACE MATERIAL	Plastic
OUTPUT CURRENT (MA) - MAX	100 mA
RATED CONTROL SUPPLY	30 V

Resources

BROCHURES	eaton-sensors-brochure-br053001en-en-us.pdf
DRAWINGS	eaton-proximity-switches-proximity-switch-dimensions-024.eps eaton-proximity-switches-proximity-switch-3d-drawing-002.eps
INSTALLATION INSTRUCTIONS	IL05305006Z
MCAD MODEL	DA-CS-90_28292_004 eaton-photoelectric-sensors-mcad-drawings-90-28292-004.dwg

VOLTAGE (US) AT DC - MAX	
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	10 V
RATED SWITCHING DISTANCE (SN)	100 mm
SENSOR HEIGHT	32 mm
SENSOR LENGTH	20 mm
SWITCHING DISTANCE - MAX	100 mm
SWITCHING VOLTAGE OF OSSD AT STATE HIGH	30 V
VOLTAGE RATING - MAX	30 V
SAFETY TYPE (IEC 61496-1)	1
SWITCHING FREQUENCY	500 Hz
SENSING MODE	Light-/dark switching
SWITCHING OUTPUT TYPE	PNP
SENSOR MATERIAL	Insulated material
VIBRATION RESISTANCE	10 - 55 Hz, Amplitude 0.5 mm According to IEC/EN 60068-2-6
WAVELENGTH OF THE SENSOR	660 nm
WIDTH SENSOR	12 mm
PRODUCT CATEGORY	E71 NanoView Series
RESPONSE TIME	1 ms
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
AMBIENT STORAGE TEMPERATURE - MIN	-25 °C
NUMBER OF CONTACT ENERGIZED OUTPUTS WITH SIGNALLING FUNCTION	0
NUMBER OF OUTPUTS (PROTECTED CONTACT ENERGIZED)	0
NUMBER OF OUTPUTS (PROTECTED SEMICONDUCTOR)	0
NUMBER OF OUTPUTS	1

(SEMICONDUCTOR WITH SIGNALING FUNCTION)	
OPERATING DISTANCE - MAX	100 mm
OPERATING DISTANCE - MIN	0 mm
OPERATING TEMPERATURE - MAX	55 °C
OPERATING TEMPERATURE - MIN	-25 °C
ADJUSTMENT TYPE	Manual adjustment

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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