

**Magnetic Actuator**

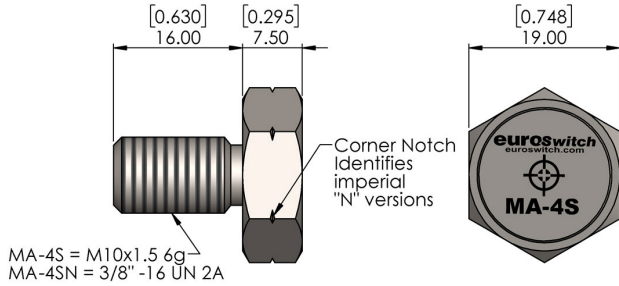
**MA-4S / MA-4SN**

**For extended sensing with ES Series Proximity Switches**

The Euroswitch ES Series proximity switches use a "Hermetically Sealed Reed Element". Reed switches are electromechanical devices that detect the position of a magnetic field; therefore, they require an external magnetic actuator to operate. Detailed below are our standard range of magnets designed to give solutions to a multitude of applications.



New improved design from Feb 2024  
Refer to factory bulletin for changes.



MAXIMUM TIGHTENING TORQUE = 100Nm / 73 lb ft

	MA-4S	MA-4SN
Body Material	316L Stainless Steel	316L Stainless Steel
Dimensions	19mm A/F x 23.5mm	¾" A/F x 0.87"
Thread	M10x1.5 x 16mm	3/8"-16 x 0.63"

**Magnetic Actuator Combinations**



Switch Model	MA-4S Sensing Range	Alternative Magnets	MA-1S Sensing Range	MA-2S Sensing Range	MA-3S Sensing Range	MA-7S / MA-7SN Sensing Range	MA-8S / MA-8N Sensing Range	MA-9S Sensing Range
ES-0	8.0mm (0.31")		6.0mm (0.24")	3.0mm (0.12")	18.0mm (0.71")	10.0mm (0.39")	8.0mm (0.31")	6.0mm (0.24")
ES-1	8.0mm (0.31")		6.0mm (0.24")	3.0mm (0.12")	18.0mm (0.71")	10.0mm (0.39")	8.0mm (0.31")	6.0mm (0.24")
ES-2	11.0mm (0.43")		10.0mm (0.39")	6.0mm (0.24")	26.0mm (1.02")	13.0mm (0.51")	11.0mm (0.43")	9.0mm (0.35")
ES-3	8.0mm (0.31")		8.0mm (0.31")	N/A	N/A	16.0mm (0.63")	8.0mm (0.31")	8.0mm (0.31")
ES-4	12.0mm (0.47")		12.0mm (0.47")	N/A	N/A	20.0mm (0.79")	12.0mm (0.47")	12.0mm (0.47")
ES-5 & 6	8.0mm (0.31")		8.0mm (0.31")	N/A	N/A	16.0mm (0.63")	8.0mm (0.31")	8.0mm (0.31")
ES-7 & 8	8.0mm (0.31")		8.0mm (0.31")	N/A	N/A	16.0mm (0.63")	8.0mm (0.31")	8.0mm (0.31")
ES-9 & 10	8.0mm (0.31")		8.0mm (0.31")	N/A	N/A	16.0mm (0.63")	8.0mm (0.31")	8.0mm (0.31")
ES-11 & 12	8.0mm (0.31")		8.0mm (0.31")	N/A	N/A	16.0mm (0.63")	8.0mm (0.31")	8.0mm (0.31")
ES-13 & 14	12.0mm (0.47")		12.0mm (0.47")	N/A	N/A	20.0mm (0.79")	12.0mm (0.47")	12.0mm (0.47")
ES-15 & 16	12.0mm (0.47")		12.0mm (0.47")	N/A	N/A	20.0mm (0.79")	12.0mm (0.47")	12.0mm (0.47")

For detailed information please visit, [www.euroswitch.com](http://www.euroswitch.com).

**Operating Principles**

To obtain the best results possible in your application, certain consideration should be observed.

Here are the two most typical examples of how the target would approach the ES Series Sensor.

