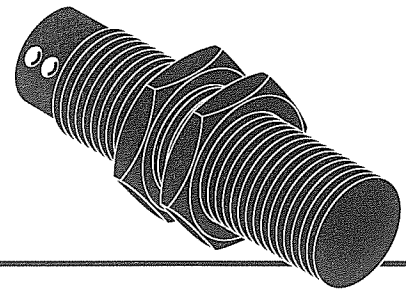


12mm
18mm

Inductive Tubular Threaded Barrel

Weld Field Immune



Proximity Sensors

- Weld Field and Electrical Noise Immunity
- Standard Latching Short Circuit Protection (SCP), Non-Latching SCP available for DC models only
- Predictable, consistent electrical performance
- New Hardcoat housings are resistant to weld expulsion

These sensors are specifically designed for extreme duty use in harsh applications (i.e., automotive fabrication, assembly plants, etc.). The tubular series is popular as part present and machine location sensors for demanding applications such as resistance welding of body assemblies. Namco's proprietary Hardcoat housings will not allow the hot weld expulsion to adhere to the housing.

Connector Type	Circuit Description	Housing Material	Housing Length	Shielded Model No.	Unshielded Model No.	Maximum Load Current	Leakage Current	Voltage Drop*	Maximum Switching Frequency		Short Circuit Protected
									Shielded	Unshielded	
12mm WFI DC 10-30V Hardcoat, 2mm (Shielded) and 4mm (Unshielded) Sensing Ranges											
4-pin Euro	3W, PNP, NO	Metal-HC**	76mm	EE510-78 442	EE510-79442	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Latching
18mm WFI DC 10-30V Hardcoat, 5mm (Shielded) and 8mm (Unshielded) Sensing Ranges											
4-pin Euro	3W, PNP, NO	Metal-HC**	76mm	EE510-73442	EE510-72442	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Latching
90° 4-pin Euro	3W, PNP, NO	Metal-HC**	67mm	EE510-73452	EE510-72452	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Latching
4-pin Mini	3W, PNP, NO	Metal-HC**	76mm	EE510-73402	EE510-72402	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Latching
90° 4-pin Mini	3W, PNP, NO	Metal-HC**	67mm	EE510-73422	EE510-72422	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Latching
8' Cable***	3W, PNP, NO	Metal	76mm	EE510-73410	EE510-72410	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Latching
18mm WFI AC/DC 20-230V Hardcoat, 5mm (Shielded) and 8mm (Unshielded) Sensing Ranges											
3-pin Mini	2W, NO	Metal-HC**	76mm	EE530-73402	EE530-72402	500mA	1.7mA	<10V	16Hz	16Hz	Latching
3-pin Mini	2W, NO	Metal-HC**	76mm	EE560-73402	EE560-72402	500mA	4.5mA	<10V	16Hz	16Hz	Latching
8' Cable***	2W, NO	Metal	76mm	EE530-73410	EE530-72410	500mA	1.7mA	<10V	16Hz	16Hz	Latching
3-pin Micro	2W, NO	Metal-HC**	76mm	EE530-73432	EE530-72432	500mA	1.7mA	<10V	16Hz	16Hz	Latching
90° 3-pin Mini	2W, NO	Metal-HC**	67mm	EE530-73422	EE530-72422	500mA	1.7mA	<10V	16Hz	16Hz	Latching
90° 3-pin Mini	2W, NO	Metal-HC**	67mm	EE560-73422	EE560-72422	500mA	4.5mA	<10V	16Hz	16Hz	Latching
8' Cable***	2W, NO	Metal	67mm	EE560-73410	EE560-72410	500mA	4.5mA	<10V	16Hz	16Hz	Latching
18mm WFI AC/DC 10-30V Hardcoat, 5mm (Shielded) and 8mm (Unshielded) Sensing Ranges											
4-pin Euro	3W, PNP, NO	Metal-HC**	76mm	EE510-73042	EE510-72042	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Non-Latching
90° 4-pin Euro	3W, PNP, NO	Metal-HC**	76mm	EE510-73052	EE510-72052	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Non-Latching
4-pin Mini	3W, PNP, NO	Metal-HC**	76mm	EE510-73002	EE510-72002	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Non-Latching
90° 4-pin Mini	3W, PNP, NO	Metal-HC**	76mm	EE510-73022	EE510-72022	200mA	10µA	2 VDC @ 100mA	16Hz	16Hz	Non-Latching

* Across conducting sensor

** Hard Coat: Weld spatter resistant

*** Non-hardcoat versions

- ▶ Consult factory for normally closed model availability.
- ▶ See page 89 for detailed description of standard WFI features.

Accessories: see pages 84-87.



Common Sensor Characteristics

18mm DIAMETER WFI SENSORS		
	18mm	12mm
Shielded Sensing Range ($\pm 10\%$)	5mm	2mm
Unshielded Sensing Range ($\pm 10\%$)	8mm	4mm
Short Circuit Protection	yes	yes
Cable Type	PVC	n/a
Repeatability	$< \pm 1\%$	
Hysteresis	3-10%	
Temperature Drift (max.)	$\pm 10\%$	
Ambient Temperature Range	-4°F to +158°F	
Reverse Polarity Protected	yes	
Current Consumption (3-wire DC only)	10mA	
NEMA Enclosure Type	1, 3, 4, 6, 13	
LED Indicator	red = power green = target	
Metal Housings	Weld Flash Proof	
Shipping Weight	Connector model: 4 oz. Cable model: 9 oz.	

Circuit Drawings

EURO CONNECTOR MODELS

Male view shown

3 Wire DC N.O.

MINI CONNECTOR MODELS

Male views shown

3 Wire DC N.O.

2 Wire AC/DC N.O.

MICRO CONNECTOR

Male view shown

2 Wire AC/DC N.O.

CABLE MODELS

3 Wire DC N.O.

2 Wire AC/DC N.O.

Dimensional Drawings 12/18mm-WFI

18mm EURO CONNECTOR

Body threads = M18x1

18mm MINI CONNECTOR

12mm EURO CONNECTOR

Body threads = M12x1

Proximity Sensors



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