

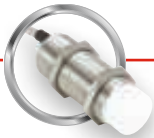
PRODUCT GUIDE

NOTE: FOR EASE OF NAVIGATION THROUGH THIS DOCUMENT, CLICK ON ANY PRODUCT PAGE TO JUMP TO THAT PRODUCT PAGE. CLICK ON THE HTM™ SENSORS LOGO IN ANY PRODUCT PAGE TO RETURN TO THESE TABLE OF CONTENTS.



PROXIMITY SENSORS 4-39

STANDARD RANGE PROXIMITY SENSORS..... 4-5
 EXTENDED RANGE PROXIMITY SENSORS..... 6-7
 LONG RANGE PROXIMITY SENSORS 8-9
 AUTOMOTIVE GENERAL PURPOSE SENSORS..... 10-11
 WELD FIELD IMMUNE PROXIMITY SENSORS 12-13
 METALHEAD™ PROXIMITY SENSORS 14-15
 METALHEAD™ ALL METAL SENSING PROXIMITY SENSORS 16-17
 METALHEAD™ FOOD GRADE SENSORS 18-19
 TITANPROX™ 1-PIECE TITANIUM..... 20-21
 METALHEAD™ SENSORS WITH SPATTERGUARD™ 22-23
 HIGH TEMPERATURE WFI METALHEAD™ SENSORS..... 24-25
 METALHEAD™ FLATPACK SENSORS..... 26-29
 HIGH TEMPERATURE METALHEAD™ FLATPACK SENSORS..... 30-31
 MINI FIXED-MOUNT SENSORS 32-33
 MINIATURE INDUCTIVE PROXIMITY SENSORS 34-35
 INDUCTIVE RING PROXIMITY SENSORS 36-37
 LIMIT SWITCH STYLE PROXIMITY SENSORS..... 38-39



CAPACITIVE SENSORS 40-41

CAPACITIVE PROXIMITY SENSORS 40-41



PHOTOELECTRIC SENSORS 42-53

M18 PHOTOELECTRIC SENSORS..... 42-43
 IP69K STAINLESS STEEL PHOTOELECTRIC SENSORS 44-45
 RP74 PHOTOELECTRIC SENSORS 46-47
 RP76 PHOTOELECTRIC SENSORS 48-49
 MP SERIES PHOTOELECTRIC SENSORS 50-51
 H30 PHOTOELECTRIC SENSORS..... 52-53



ULTRASONIC SENSORS 54-55

M18 ULTRASONIC SENSORS 54-55



SAFETY LIGHT CURTAINS 56-57

SAFETY LIGHT CURTAINS - CATEGORY 4 HAND PROTECTION 56-57



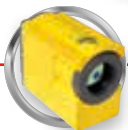
CABLES AND CONNECTORS 58-71

QUICK-CONNECT SENSOR CABLES - M8..... 58-59
 QUICK-CONNECT SENSOR CABLES - M12..... 60-61
 FACTORY PRE-INSTALLED SILICONE CABLES 62-63
 HIGH PERFORMANCE TPE AUTOMOTIVE CABLES..... 64-65
 HIGH PERFORMANCE, SILICONE PROTECTED TPE AUTOMOTIVE CABLES.. 66-67
 FIELD CONNECTORS..... 68-69
 SENSOR CONNECTION DISTRIBUTION BLOCKS..... 70-71



PNEUMATIC SENSORS 72-73

PNEUMATIC CYLINDER SENSORS..... 72-73



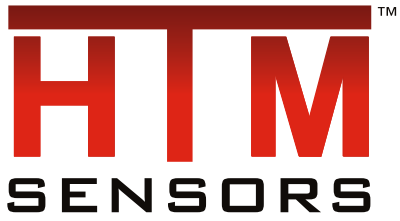
NON-CONTACT THERMO SENSORS 74-75

NON-CONTACT THERMO SENSORS..... 74-75



SENSOR PROTECTION 76-79

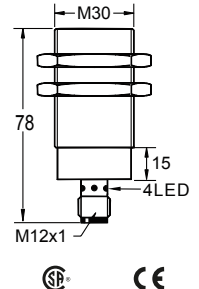
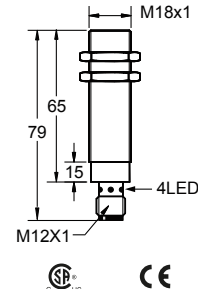
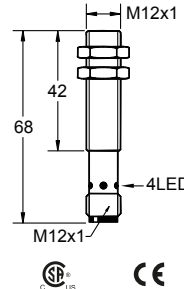
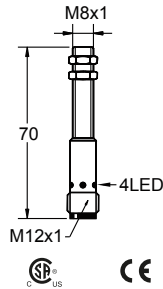
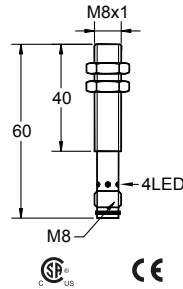
SENSOR PROTECTION DEVICES 76-77
 SILICONE WELD SPATTER PROTECTION 78-79



- STANDARD RANGE SENSORS FOR THE DETECTION OF METAL TARGETS
- LOWEST PRICE OF ALL THE MAJOR BRANDS FOR STANDARD SENSORS
- 1,000'S IN STOCK FOR SAME DAY DELIVERY
- STANDARD LIFETIME WARRANTY AGAINST DEFECTS
- RELIABLE NON-CONTACT OPERATION FOR MANY TYPES OF MACHINES
- IDEAL FOR USE WHERE A LOW-COST SENSOR IS NEEDED FOR DETECTION



STANDARD RANGE PROXIMITY SENSORS SPECIFICATIONS



SENSING DISTANCE	1 mm	1 mm	2 mm	5 mm	10 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +70 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	Stainless Steel	Chrome Plated Brass			
PART NUMBERS					
DC 3-wire 10-30 V PNP - Open	FCU1-0801P-ACU3	FCM1-0801P-ARU4	FCM1-1202P-ARU4	FCM1-1805P-ARU4	FCM1-3010P-ARU4
DC 3-wire 10-30 V PNP - Closed	FCU1-0801P-BCU3	FCM1-0801P-BRU4	FCM1-1202P-BRU4	FCM1-1805P-BRU4	FCM1-3010P-BRU4
DC 3-wire 10-30 V NPN - Open	FCU1-0801N-ACU3	FCM1-0801N-ARU4	FCM1-1202N-ARU4	FCM1-1805N-ARU4	FCM1-3010N-ARU4
DC 3-wire 10-30 V NPN - Closed	FCU1-0801N-BCU3	FCM1-0801N-BRU4	FCM1-1202N-BRU4	FCM1-1805N-BRU4	FCM1-3010N-BRU4
DC 2-wire 10-60 V - Open	FCU1-0801C-ACU3	FCM1-0801C-ARU4	FCM1-1202C-ARU4	FCM1-1805C-ARU4	FCM1-3010C-ARU4
DC 2-wire 10-60 V - Closed	FCU1-0801C-BCU3	FCM1-0801C-BRU4	FCM1-1202C-BRU4	FCM1-1805C-BRU4	FCM1-3010C-BRU4

Short body versions available upon request.

NOTE: Specifications subject to change without notification.

STANDARD RANGE SENSORS HAVE THE BEST PRICE OF ALL THE MAJOR BRANDS FOR APPLICATIONS THAT REQUIRE A RELIABLE AND LOW-COST SENSOR.



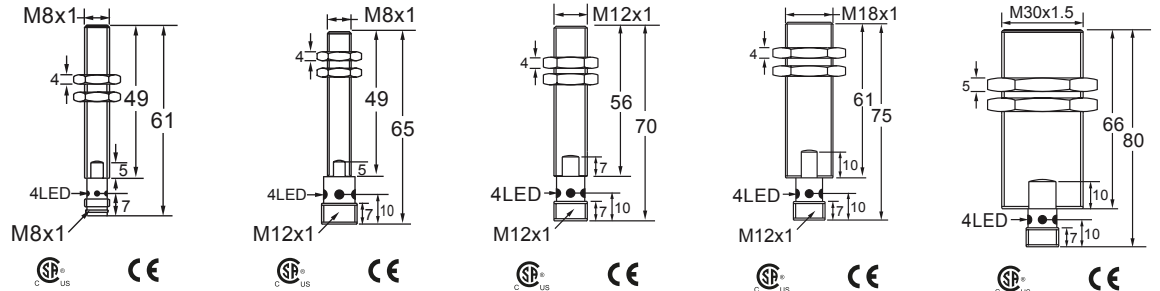
HTMTM
SENSORS



- EXTENDED RANGE SENSORS FOR AUTOMATED MACHINERY
- DOUBLE THE RANGE OF STANDARD SENSORS FOR RELIABLE DETECTION
- TIGHT HYSTERESIS FOR A REPEATABLE SENSING RANGE
- HIGH-TORQUE BARREL IS EXTRA THICK FOR MORE DURABILITY
- WRENCH FLATS AND 4-VIEW LED FOR EASY INSTALLATION
- IDEAL FOR USE IN ALL TYPES OF MACHINES FOR PART DETECTION



EXTENDED RANGE PROXIMITY SENSORS SPECIFICATIONS



SENSING DISTANCE	2 mm	2 mm	4 mm	8 mm	15 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +70 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	Stainless Steel		Chrome Plated Brass		
PART NUMBERS					
DC 3-wire 10-30 V PNP - Open	OCN1-0802P-ACL3	OCN1-0802P-ARL4	OCN1-1204P-ARL4	OCN1-1808P-ARL4	OCN1-3015P-ARL4
DC 3-wire 10-30 V PNP - Closed	OCN1-0802P-BCL3	OCN1-0802P-BRL4	OCN1-1204P-BRL4	OCN1-1808P-BRL4	OCN1-3015P-BRL4
DC 3-wire 10-30 V NPN - Open	OCN1-0802N-ACL3	OCN1-0802N-ARL4	OCN1-1204N-ARL4	OCN1-1808N-ARL4	OCN1-3015N-ARL4
DC 3-wire 10-30 V NPN - Closed	OCN1-0802N-BCL3	OCN1-0802N-BRL4	OCN1-1204N-BRL4	OCN1-1808N-BRL4	OCN1-3015N-BRL4
DC 2-wire 10-60 V - Open	OCN1-0802C-ACL3	OCN1-0802C-ARL4	OCN1-1204C-ARL4	OCN1-1808C-ARL4	OCN1-3015C-ARL4
DC 2-wire 10-60 V - Closed	OCN1-0802C-BCL3	OCN1-0802C-BRL4	OCN1-1204C-BRL4	OCN1-1808C-BRL4	OCN1-3015C-BRL4

Short body versions available upon request.

NOTE: Specifications subject to change without notification.

EXTENDED RANGE SENSORS ARE THE BEST VALUE IN THE SENSOR LINE UP WITH GREAT PERFORMANCE FEATURES, EXTENDED RANGE, MORE DURABILITY AND A LOW PRICE FOR ALL APPLICATIONS.



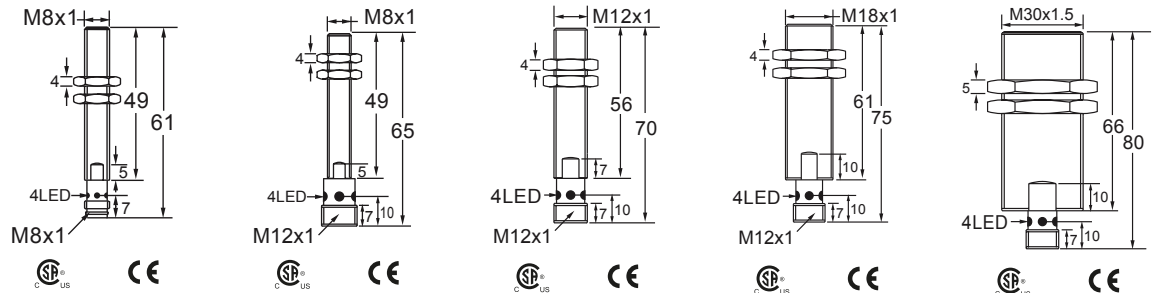
HTMTM
SENSORS



- LONG RANGE SENSORS FOR AUTOMATED MACHINERY
- UP TO 3 TIMES THE STANDARD RANGE FOR RELIABLE DETECTION
- ALLOWS THE SENSOR TO BE MOUNTED FURTHER AWAY TO AVOID CONTACT
- GREAT FOR ANGLED PARTS WHERE THE TARGET CAN BE A VARIABLE DISTANCE
- AVAILABLE WITH A PRE-WIRED CABLE, PIGTAIL, OR QUICK-CONNECTOR
- IDEAL FOR USE IN MACHINES WHERE THE TARGET IS FURTHER AWAY



LONG RANGE PROXIMITY SENSORS SPECIFICATIONS



SENSING DISTANCE	3 mm	3 mm	6 mm	12 mm	22 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +70 °C				
HOUSING MATERIAL	Stainless Steel		Chrome Plated Brass		
Shielded					
DC 3-wire 10-30 V PNP - Open	LCN1-0803P-ACL3	LCN1-0803P-ARL4	LCN1-1206P-ARL4	LCN1-1812P-ARL4	LCN1-3022P-ARL4
DC 3-wire 10-30 V PNP - Closed	LCN1-0803P-BCL3	LCN1-0803P-BRL4	LCN1-1206P-BRL4	LCN1-1812P-BRL4	LCN1-3022P-BRL4
DC 3-wire 10-30 V NPN - Open	LCN1-0803N-ACL3	LCN1-0803N-ARL4	LCN1-1206N-ARL4	LCN1-1812N-ARL4	LCN1-3022N-ARL4
DC 3-wire 10-30 V NPN - Closed	LCN1-0803N-BCL3	LCN1-0803N-BRL4	LCN1-1206N-BRL4	LCN1-1812N-BRL4	LCN1-3022N-BRL4
Quasi Shielded Sensing Range	4 mm	4 mm	8 mm	16 mm	25 mm
DC 3-wire 10-30 V PNP - Open	LCN1-0804P-ACL3	LCN1-0804P-ARL4	LCN1-1208P-ARL4	LCN1-1816P-ARL4	LCN1-3025P-ARL4
DC 3-wire 10-30 V NPN - Open	LCN1-0804N-ACL3	LCN1-0804N-ARL4	LCN1-1208N-ARL4	LCN1-1816N-ARL4	LCN1-3025N-ARL4

Short body versions available upon request.

NOTE: Specifications subject to change without notification.

LONG RANGE PROXIMITY SENSORS ARE THE BEST CHOICE FOR AUTOMATED MACHINERY WHERE A LONGER RANGE IS REQUIRED FOR REPEATABLE OPERATION, AND WHERE CONTACT NEEDS TO BE AVOIDED FROM PARTS OR TOOLING.



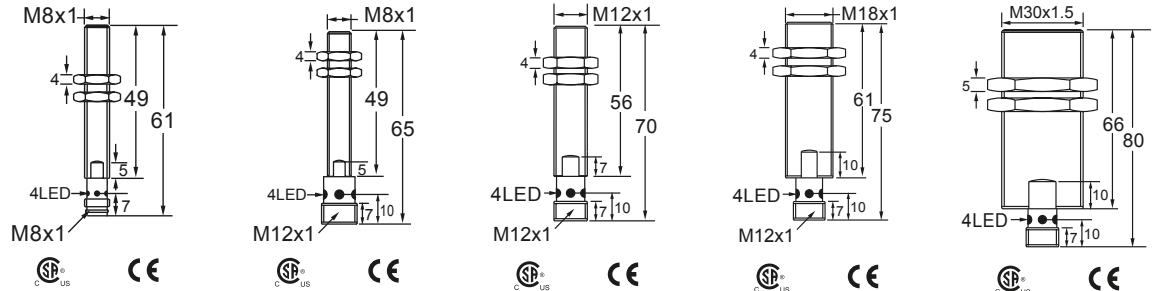
HTMTM
SENSORS



- DOUBLE RANGE SENSORS FOR USE IN AUTOMOTIVE APPLICATIONS
- HIGH TORQUE BARREL CONSTRUCTION FOR RUGGED OPERATION
- WRENCH FLATS FOR EASY INSTALLATION AND A TIGHT FIT
- SPATTERGUARD™ PTFE COATING TO RESIST WELD SPATTER DAMAGE
- 100 °C RATING FOR HOT WELDING AREAS
- AVAILABLE IN PNP, NPN, AC, AND DC 2-WIRE OUTPUT FUNCTIONS



AUTOMOTIVE GENERAL PURPOSE SENSORS SPECIFICATIONS



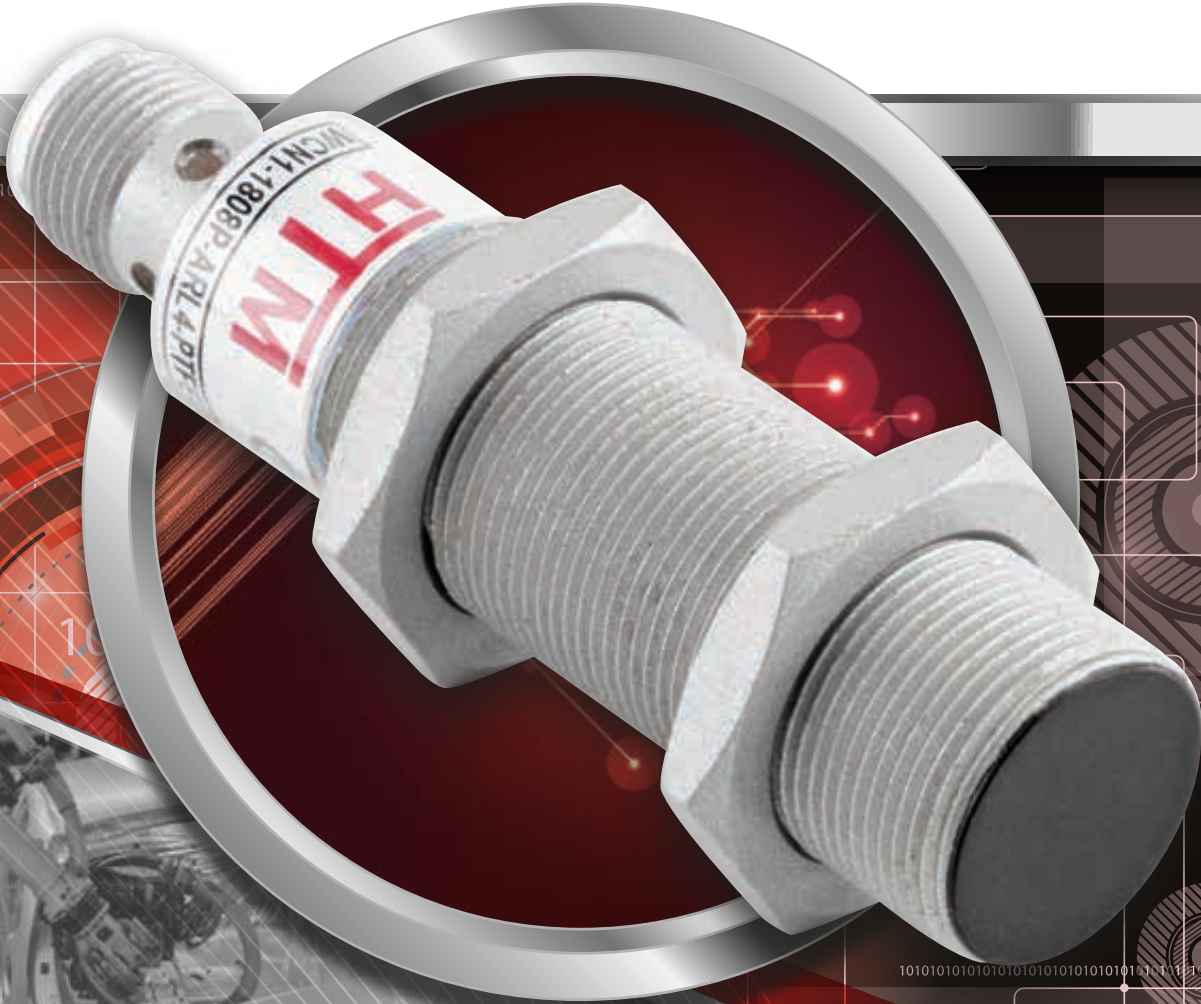
SENSING DISTANCE	2 mm	2 mm	4 mm	8 mm	15 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +100 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	PTFE Coated Stainless Steel		PTFE Coated Brass		
PART NUMBERS					
DC 3-wire 10-30 V PNP - Open	OCN1-0802P-ACL3-PTFE-100C	OCN1-0802P-ARL4-PTFE-100C	OCN1-1204P-ARL4-PTFE-100C	OCN1-1808P-ARL4-PTFE-100C	OCN1-3015P-ARL4-PTFE-100C
DC 3-wire 10-30 V PNP - Closed	OCN1-0802P-BCL3-PTFE-100C	OCN1-0802P-BRL4-PTFE-100C	OCN1-1204P-BRL4-PTFE-100C	OCN1-1808P-BRL4-PTFE-100C	OCN1-3015P-BRL4-PTFE-100C
DC 3-wire 10-30 V NPN - Open	OCN1-0802N-ACL3-PTFE-100C	OCN1-0802N-ARL4-PTFE-100C	OCN1-1204N-ARL4-PTFE-100C	OCN1-1808N-ARL4-PTFE-100C	OCN1-3015N-ARL4-PTFE-100C
DC 3-wire 10-30 V NPN - Closed	OCN1-0802N-BCL3-PTFE-100C	OCN1-0802N-BRL4-PTFE-100C	OCN1-1204N-BRL4-PTFE-100C	OCN1-1808N-BRL4-PTFE-100C	OCN1-3015N-BRL4-PTFE-100C
DC 2-wire 10-60 V - Open	OCN1-0802C-ACL3-PTFE-100C	OCN1-0802C-ARL4-PTFE-100C	OCN1-1204C-ARL4-PTFE-100C	OCN1-1808C-ARL4-PTFE-100C	OCN1-3015C-ARL4-PTFE-100C
DC 2-wire 10-60 V - Closed	OCN1-0802C-BCL3-PTFE-100C	OCN1-0802C-BRL4-PTFE-100C	OCN1-1204C-BRL4-PTFE-100C	OCN1-1808C-BRL4-PTFE-100C	OCN1-3015C-BRL4-PTFE-100C

Short body versions available upon request.
NOTE: Specifications subject to change without notification.

GENERAL PURPOSE AUTOMOTIVE SENSORS ARE THE BEST CHOICE FOR TOOLING AND ASSEMBLY FIXTURES, SPOT WELDING MACHINES, AND MIG WELDING CELLS WHERE A RELIABLE, COST-EFFECTIVE SENSOR IS REQUIRED FOR SENSING APPLICATIONS.



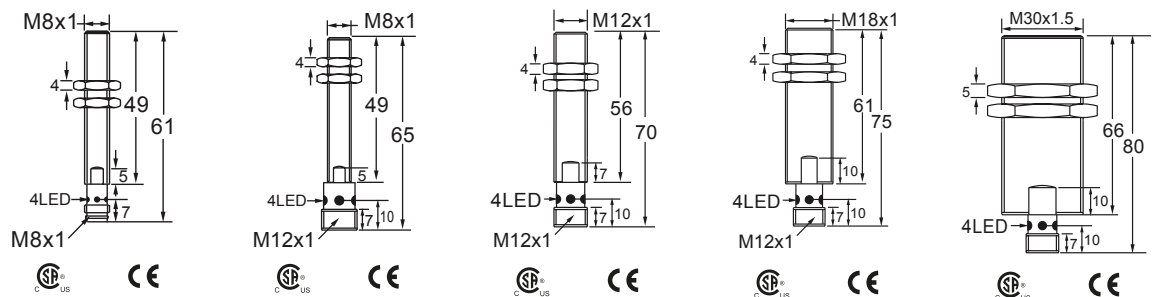
HTMTM
SENSORS



- WELD FIELD IMMUNE SENSORS FOR MIG AND SPOT WELDING MACHINES
- HIGH TORQUE BARREL WITH WRENCH FLATS FOR A TIGHT FIT
- SPATTERGUARD™ PTFE COATING TO RESIST WELD SPATTER DAMAGE
- 100 °C RATING FOR HOT WELDING ENVIRONMENTS
- AVAILABLE IN PNP, NPN AND AC OUTPUT FUNCTIONS
- IDEAL FOR USE IN HOT WELDING ENVIRONMENTS WITH WELD SPATTER



WELD FIELD IMMUNE PROXIMITY SENSORS SPECIFICATIONS



SENSING DISTANCE	2 mm	2 mm	4 mm	8 mm	15 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +100 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	PTFE Coated Brass				
PART NUMBERS					
DC 3-wire 10-30 V PNP - Open	WCN1-0802P-ACL3-PTFE-100C	WCN1-0802P-ARL4-PTFE-100C	WCN1-1204P-ARL4-PTFE-100C	WCN1-1808P-ARL4-PTFE-100C	WCN1-3015P-ARL4-PTFE-100C
DC 3-wire 10-30 V PNP - Closed	WCN1-0802P-BCL3-PTFE-100C	WCN1-0802P-BRL4-PTFE-100C	WCN1-1204P-BRL4-PTFE-100C	WCN1-1808P-BRL4-PTFE-100C	WCN1-3015P-BRL4-PTFE-100C
DC 3-wire 10-30 V NPN - Open	WCN1-0802N-ACL3-PTFE-100C	WCN1-0802N-ARL4-PTFE-100C	WCN1-1204N-ARL4-PTFE-100C	WCN1-1808N-ARL4-PTFE-100C	WCN1-3015N-ARL4-PTFE-100C
DC 3-wire 10-30 V NPN - Closed	WCN1-0802N-BCL3-PTFE-100C	WCN1-0802N-BRL4-PTFE-100C	WCN1-1204N-BRL4-PTFE-100C	WCN1-1808N-BRL4-PTFE-100C	WCN1-3015N-BRL4-PTFE-100C
DC 2-wire 10-60 V - Open	WCN1-0802C-ACL3-PTFE-100C	WCN1-0802C-ARL4-PTFE-100C	WCN1-1204C-ARL4-PTFE-100C	WCN1-1808C-ARL4-PTFE-100C	WCN1-3015C-ARL4-PTFE-100C
DC 2-wire 10-60 V - Closed	WCN1-0802C-BCL3-PTFE-100C	WCN1-0802C-BRL4-PTFE-100C	WCN1-1204C-BRL4-PTFE-100C	WCN1-1808C-BRL4-PTFE-100C	WCN1-3015C-BRL4-PTFE-100C

NOTE: Specifications subject to change without notification.

WELD FIELD IMMUNE SENSORS ARE THE BEST CHOICE FOR MIG AND SPOT WELDING MACHINERY WHERE A RELIABLE SENSOR IS REQUIRED FOR RELIABLE OPERATION AROUND HIGH HEAT, WELD SPATTER AND HIGH MAGNETIC FIELDS.



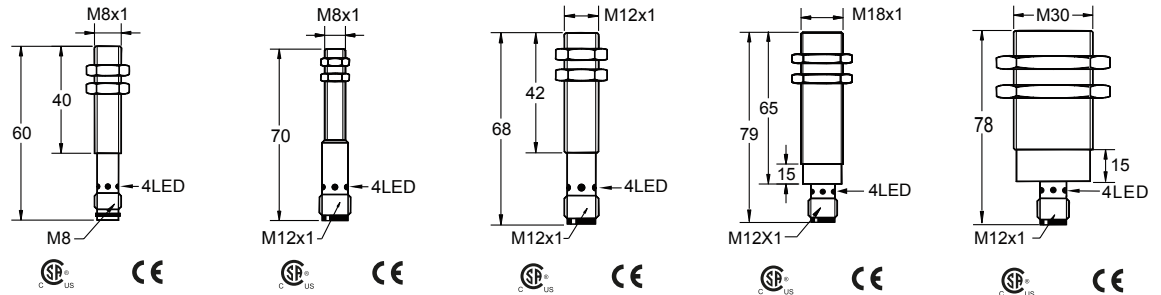
HTMTM
SENSORS



- DURABLE 1-PIECE STAINLESS STEEL CONSTRUCTION
- MADE FROM STAINLESS STEEL BAR, TURNED, AND BORED OUT FROM THE END
- SEALED AGAINST LIQUID, OIL, AND DUST FOR MAINTENANCE-FREE OPERATION
- LASTS LONGER THAN PLASTIC FACE SENSORS WHERE CONTACT IS FREQUENT
- IDEAL FOR USE WHERE A MORE DURABLE SENSOR IS REQUIRED FOR LESS DOWNTIME



METALHEAD™ PROXIMITY SENSORS SPECIFICATIONS



SENSING DISTANCE	1 mm	1 mm	2 mm	5 mm	10 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +70 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	1-piece Stainless Steel Face and Body				
PART NUMBERS					
DC 3-wire 10-30 V PNP - Open	FCS1-0801P-ACS3	FCS1-0801P-ARU4	FCS1-1202P-ARU4	FCS1-1805P-ARU4	FCS1-3010P-ARU4
DC 3-wire 10-30 V PNP - Closed	FCS1-0801P-BCS3	FCS1-0801P-BRU4	FCS1-1202P-BRU4	FCS1-1805P-BRU4	FCS1-3010P-BRU4
DC 3-wire 10-30 V NPN - Open	FCS1-0801N-ACS3	FCS1-0801N-ARU4	FCS1-1202N-ARU4	FCS1-1805N-ARU4	FCS1-3010N-ARU4
DC 3-wire 10-30 V NPN - Closed	FCS1-0801N-BCS3	FCS1-0801N-BRU4	FCS1-1202N-BRU4	FCS1-1805N-BRU4	FCS1-3010N-BRU4
DC 2-wire 10-60 V - Open	FCS1-0801C-ACS3	FCS1-0801C-ARU4	FCS1-1202C-ARU4	FCS1-1805C-ARU4	FCS1-3010C-ARU4
AC 20-240 V - Open	N/A	N/A	FCS1-1202A-AUL3	FCS1-1805A-AUL3	FCS1-3010A-AUL3

Short body versions available upon request.

NOTE: Specifications subject to change without notification.

METALHEAD™ SENSORS ARE MADE OF 1-PIECE OF STAINLESS STEEL BAR, BORED OUT FROM THE END FOR SUPERIOR STRENGTH AND DURABILITY.



METALHEAD™ ALL METAL SENSING
PROXIMITY SENSORS

HTMTM
SENSORS



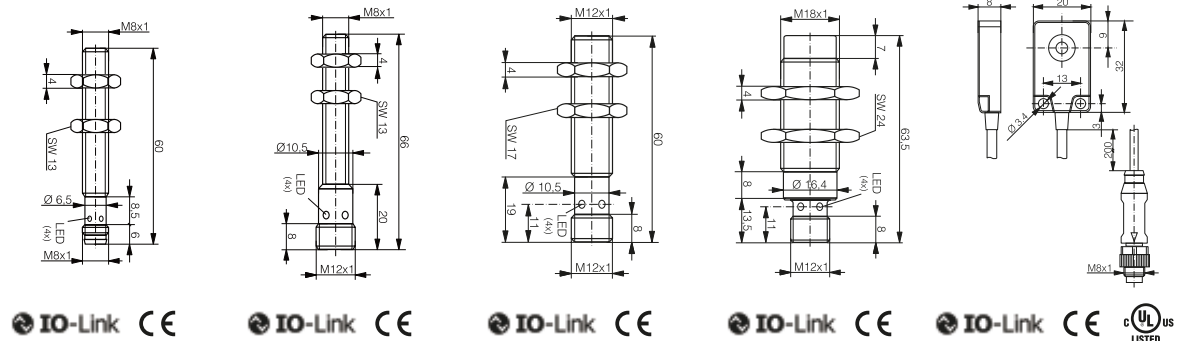
 **IO-Link**



- LONG RANGE SENSORS FOR AUTOMATED MACHINERY
- ONE-PIECE STAINLESS STEEL HOUSINGS
- EXTREMELY ROBUST AND CORROSION RESISTANT
- SENSES ALL METALS AT THE SAME RANGE (STEEL, ALUMINIUM, COPPER, STAINLESS, BRASS)
- AVAILABLE IN M8, M12, M18 AND RECTANGULAR FLATPACK
- IDEAL FOR MACHINES THAT NEED TO SENSE METAL TARGETS AT LONGER SENSING DISTANCES



METALHEAD™ ALL METAL SENSING PROXIMITY SENSORS SPECIFICATIONS



IO-Link CE IO-Link CE IO-Link CE IO-Link CE IO-Link CE UL LISTED

SENSING DISTANCE (SHIELDED)	3 mm	3 mm	6 mm	10 mm	7 mm
SENSING DISTANCE (UNSHIELDED)	6 mm	6 mm	10 mm	20 mm	N/A
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +85 °C				
HOUSING MATERIAL	Stainless-steel V2A				
IP RATING	IP 68 / IP 69K				
INTERFACE	IO-Link (PNP Versions only)				
Shielded PNP - Normally Open	LCS1-0803P-ACU3-AMS	LCS1-0803P-ARU4-AMS	LCS1-1206P-ARU4-AMS	LCS1-1810P-ARU4-AMS	EQS1-2007P-A3U0.2/P8
Unshielded PNP - Normally Open	LCS2-0806P-ACU3-AMS	LCS2-0806P-ARU4-AMS	LCS2-1210P-ARU4-AMS	LCS2-1820P-ARU4-AMS	N/A
Shielded NPN - Normally Open	LCS1-0803N-ACU3-AMS	LCS1-0803N-ARU4-AMS	LCS1-1206N-ARU4-AMS	LCS1-1810N-ARU4-AMS	EQS1-2007N-A3U0.2/P8
Unshielded NPN - Normally Open	LCS2-0806N-ACU3-AMS	LCS2-0806N-ARU4-AMS	LCS2-1210N-ARU4-AMS	LCS2-1820N-ARU4-AMS	N/A

* Normally Closed available upon request.

NOTE: Specifications subject to change without notification.

METALHEAD™ ALL METAL SENSING PROXIMITY SENSORS WITH IO-LINK ARE THE BEST CHOICE FOR THE DETECTION OF FERROUS AND NON-FERROUS TARGETS AT LONG SENSING DISTANCES. THIS DURABLE IP69K LINEUP IS EXTRA DURABLE, AND COMES STANDARD WITH THE ABILITY TO INTEGRATE WITH IO-LINK DEVICES FOR PROCESS OPTIMIZATION.



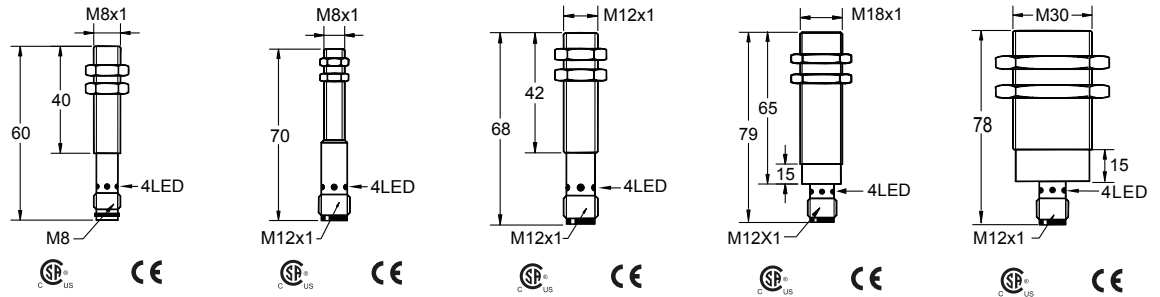
HTMTM
SENSORS



- 1-PIECE STAINLESS STEEL SENSORS FOR FOOD AND PACKAGING APPLICATIONS
- MADE OF 1-PIECE OF SUS 316 FOOD GRADE STAINLESS STEEL BAR
- DOUBLE THE RANGE FROM STANDARD, THE M12 HAS A 4 mm RANGE
- 100 °C RATING FOR HOT FOOD PRODUCTION OR CLEANING
- AVAILABLE IN PNP, NPN, DC 2-WIRE AND AC OUTPUT FUNCTIONS
- IDEAL FOR USE WHERE PRESSURE WASHDOWN AND DETERGENTS ARE USED



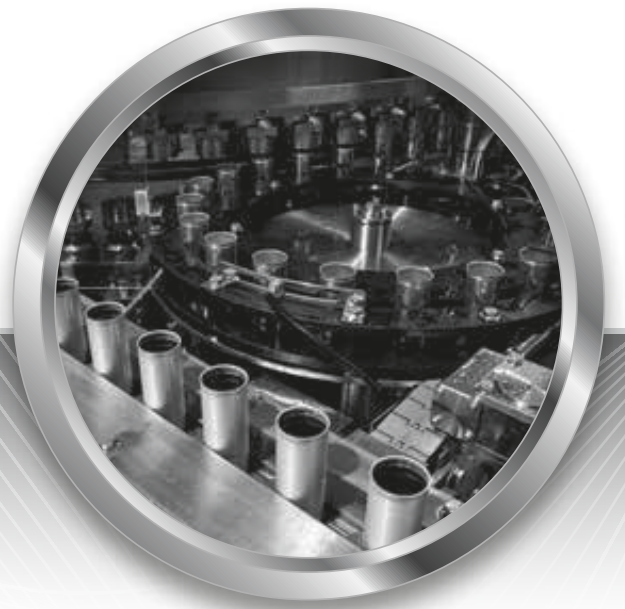
METALHEAD™ FOOD GRADE SENSORS SPECIFICATIONS



SENSING DISTANCE	2 mm	2 mm	4 mm	8 mm	15 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +100 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	1-piece Stainless Steel Face and Body - Food Grade SUS 316				
PART NUMBERS					
DC 3-wire 10-30 V PNP - Open	ECS1-0802P-ACS3-100C-316	ECS1-0802P-ARU4-100C-316	ECS1-1204P-ARU4-100C-316	ECS1-1808P-ARU4-100C-316	ECS1-3015P-ARU4-100C-316
DC 3-wire 10-30 V PNP - Closed	ECS1-0802P-BCS3-100C-316	ECS1-0802P-BRU4-100C-316	ECS1-1204P-BRU4-100C-316	ECS1-1808P-BRU4-100C-316	ECS1-3015P-BRU4-100C-316
DC 3-wire 10-30 V NPN - Open	ECS1-0802N-ACS3-100C-316	ECS1-0802N-ARU4-100C-316	ECS1-1204N-ARU4-100C-316	ECS1-1808N-ARU4-100C-316	ECS1-3015N-ARU4-100C-316
DC 3-wire 10-30 V NPN - Closed	ECS1-0802N-BCS3-100C-316	ECS1-0802N-BRU4-100C-316	ECS1-1204N-BRU4-100C-316	ECS1-1808N-BRU4-100C-316	ECS1-3015N-BRU4-100C-316
DC 2-wire 10-60 V - Open	ECS1-0802C-ACS3-100C-316	ECS1-0802C-ARU4-100C-316	ECS1-1204C-ARU4-100C-316	ECS1-1808C-ARU4-100C-316	ECS1-3015C-ARU4-100C-316
AC 20-240 V - Open	N/A	N/A	ECS1-1204A-AUL3-100C-316 *	ECS1-1808A-AUL3-100C-316 *	ECS1-3015A-AUL3-100C-316 *

* Connector thread for these AC part numbers is 1/2-20 UNF and not M12.
 Short body versions available upon request.
 NOTE: Specifications subject to change without notification.

FOOD GRADE METALHEAD™ SENSORS ARE THE BEST CHOICE FOR FOOD AND PACKAGING MACHINERY WHERE A RELIABLE AND COMPLETELY SEALED SENSOR IS REQUIRED FOR LONG-LASTING OPERATION IN A TOUGH ENVIRONMENT.



HTMTM
SENSORS



Titan**PROX**TM

1-PIECE TITANIUM

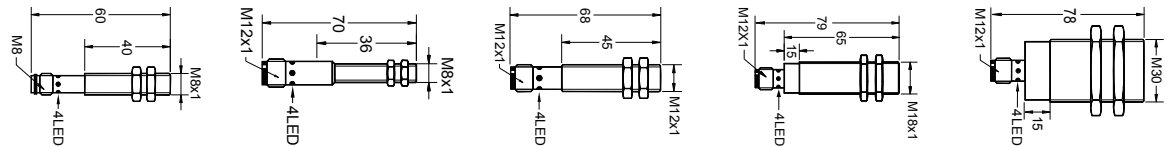
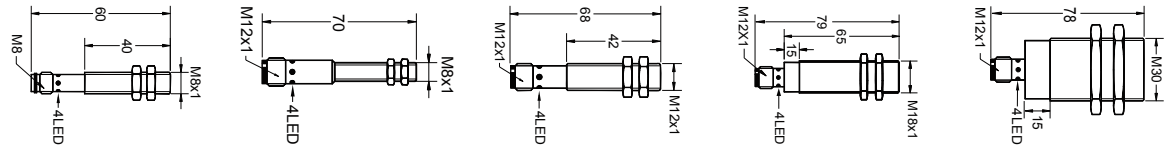


- 1-PIECE TC4 TITANIUM SENSORS FOR SUPERIOR STRENGTH AND DURABILITY
- MADE OF 1-PIECE OF BORED TC4 TITANIUM BAR
- DOUBLE THE RANGE FROM STANDARD, THE M12 HAS A 4 mm RANGE
- 100 °C RATING FOR HOT APPLICATION ENVIRONMENTS
- AVAILABLE IN PNP, NPN, DC 2-WIRE, AND AC OUTPUT FUNCTIONS
- IDEAL FOR USE WHERE EXTREME STRENGTH AND DURABILITY IS REQUIRED



TitanPROX™

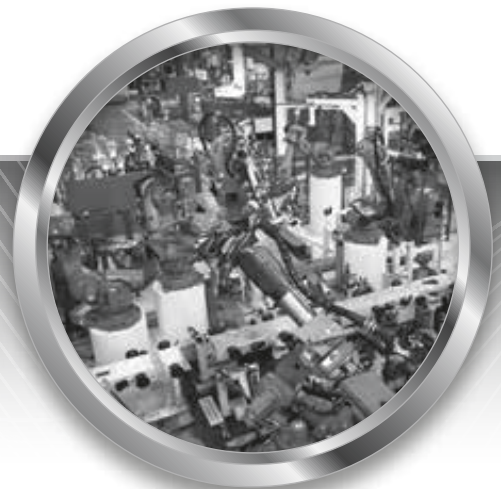
1-PIECE TITANIUM



SENSING DISTANCE	2 mm	2 mm	4 mm	8 mm	15 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	Uncoated: -25 °C - +100 °C / Black SpatterGuard™ Coated: -25 °C - +120 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	1-piece TC4 Titanium Face and Body				
UNCOATED PART NUMBERS					
DC 3-wire 10-30 V PNP - Open	ECS1-0802P-ACS3-100C-TC4	ECS1-0802P-ARU4-100C-TC4	ECS1-1204P-ARU4-100C-TC4	ECS1-1808P-ARU4-100C-TC4	ECS1-3015P-ARU4-100C-TC4
DC 3-wire 10-30 V PNP - Closed	ECS1-0802P-BCS3-100C-TC4	ECS1-0802P-BRU4-100C-TC4	ECS1-1204P-BRU4-100C-TC4	ECS1-1808P-BRU4-100C-TC4	ECS1-3015P-BRU4-100C-TC4
DC 3-wire 10-30 V NPN - Open	ECS1-0802N-ACS3-100C-TC4	ECS1-0802N-ARU4-100C-TC4	ECS1-1204N-ARU4-100C-TC4	ECS1-1808N-ARU4-100C-TC4	ECS1-3015N-ARU4-100C-TC4
DC 3-wire 10-30 V NPN - Closed	ECS1-0802N-BCS3-100C-TC4	ECS1-0802N-BRU4-100C-TC4	ECS1-1204N-BRU4-100C-TC4	ECS1-1808N-BRU4-100C-TC4	ECS1-3015N-BRU4-100C-TC4
DC 2-wire 10-60 V - Open	ECS1-0802C-ACS3-100C-TC4	ECS1-0802C-ARU4-100C-TC4	ECS1-1204C-ARU4-100C-TC4	ECS1-1808C-ARU4-100C-TC4	ECS1-3015C-ARU4-100C-TC4
AC 20-240 V - Open	N/A	N/A	ECS1-1204A-AUL3-100C-TC4	ECS1-1808A-AUL3-100C-TC4	ECS1-3015A-AUL3-100C-TC4
BLACK SPATTERGUARD™ SERIES PART NUMBERS					
DC 3-wire 10-30 V PNP - Open	ECS1-0802P-ACL3-PTFE-120C-WFI-TC4	ECS1-0802P-ARU4-PTFE-120C-WFI-TC4	ECS1-1204P-ARU4-PTFE-120C-WFI-TC4	ECS1-1808P-ARU4-PTFE-120C-WFI-TC4	ECS1-3015P-ARU4-PTFE-120C-WFI-TC4
DC 3-wire 10-30 V PNP - Closed	ECS1-0802P-BCL3-PTFE-120C-WFI-TC4	ECS1-0802P-BRU4-PTFE-120C-WFI-TC4	ECS1-1204P-BRU4-PTFE-120C-WFI-TC4	ECS1-1808P-BRU4-PTFE-120C-WFI-TC4	ECS1-3015P-BRU4-PTFE-120C-WFI-TC4
DC 3-wire 10-30 V NPN - Open	ECS1-0802N-ACL3-PTFE-120C-WFI-TC4	ECS1-0802N-ARU4-PTFE-120C-WFI-TC4	ECS1-1204N-ARU4-PTFE-120C-WFI-TC4	ECS1-1808N-ARU4-PTFE-120C-WFI-TC4	ECS1-3015N-ARU4-PTFE-120C-WFI-TC4
DC 3-wire 10-30 V NPN - Closed	ECS1-0802N-BCL3-PTFE-120C-WFI-TC4	ECS1-0802N-BRU4-PTFE-120C-WFI-TC4	ECS1-1204N-BRU4-PTFE-120C-WFI-TC4	ECS1-1808N-BRU4-PTFE-120C-WFI-TC4	ECS1-3015N-BRU4-PTFE-120C-WFI-TC4

NOTE: Specifications subject to change without notification.

TITANPROX™ SENSORS ARE MADE FROM ONE PIECE OF TITANIUM FOR THE STRONGEST AND MOST DURABLE SENSOR HOUSINGS AVAILABLE ON THE MARKET.



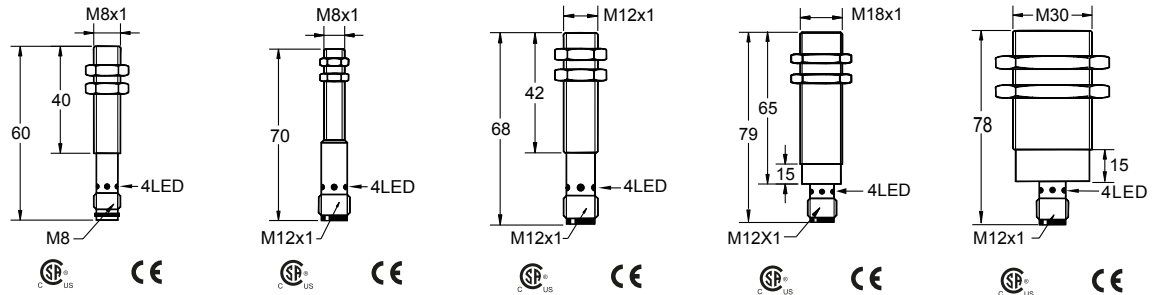
HTMTM
SENSORS



- HARSH DUTY SENSORS FOR WELDING ENVIRONMENTS
- 1-PIECE STAINLESS STEEL FACE AND BODY CONSTRUCTION
- PTFE COATED FOR WELD SPATTER RESISTANCE
- 100 °C RATED FOR HOT WELD CELLS
- EXTENDED RANGE FOR RELIABLE DETECTION
- AVAILABLE WITH PNP, NPN, AND AC OUTPUT FUNCTIONS



METALHEAD™ SENSORS WITH SPATTERGUARD™ SPECIFICATIONS



SENSING DISTANCE	2 mm	2 mm	4 mm	8 mm	15 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +100 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	1-piece Face and Body - PTFE Coated Stainless Steel				
PART NUMBERS					
WELD FIELD IMMUNE PNP - Open	WCS1-0802P-ACS3-PTFE-100C	WCS1-0802P-ARU4-PTFE-100C	WCS1-1204P-ARU4-PTFE-100C	WCS1-1808P-ARU4-PTFE-100C	WCS1-3015P-ARU4-PTFE-100C
DC 3-wire 10-30 V PNP - Open	ECS1-0802P-ACS3-PTFE-100C	ECS1-0802P-ARU4-PTFE-100C	ECS1-1204P-ARU4-PTFE-100C	ECS1-1808P-ARU4-PTFE-100C	ECS1-3015P-ARU4-PTFE-100C
DC 3-wire 10-30 V PNP - Closed	ECS1-0802P-BCS3-PTFE-100C	ECS1-0802P-BRU4-PTFE-100C	ECS1-1204P-BRU4-PTFE-100C	ECS1-1808P-BRU4-PTFE-100C	ECS1-3015P-BRU4-PTFE-100C
DC 3-wire 10-30 V NPN - Open	ECS1-0802N-ACS3-PTFE-100C	ECS1-0802N-ARU4-PTFE-100C	ECS1-1204N-ARU4-PTFE-100C	ECS1-1808N-ARU4-PTFE-100C	ECS1-3015N-ARU4-PTFE-100C
DC 3-wire 10-30 V NPN - Closed	ECS1-0802N-BCS3-PTFE-100C	ECS1-0802N-BRU4-PTFE-100C	ECS1-1204N-BRU4-PTFE-100C	ECS1-1808N-BRU4-PTFE-100C	ECS1-3015N-BRU4-PTFE-100C
DC 2-wire 10-60 V - Open	ECS1-0802C-ACS3-PTFE-100C	ECS1-0802C-ARU4-PTFE-100C	ECS1-1204C-ARU4-PTFE-100C	ECS1-1808C-ARU4-PTFE-100C	ECS1-3015C-ARU4-PTFE-100C
AC 20-240 V - Open	N/A	N/A	ECS1-1204A-AUL3-PTFE-100C	ECS1-1808A-AUL3-PTFE-100C	ECS1-3015A-AUL3-PTFE-100C

Short body versions available upon request.

NOTE: Specifications subject to change without notification.

METALHEAD™ SENSORS WITH SPATTERGUARD™ ARE THE BEST CHOICE FOR AUTOMATED WELD CELLS WHERE A MORE DURABLE SENSOR IS REQUIRED TO REDUCE DOWNTIME.



HIGH TEMPERATURE WELD FIELD IMMUNE
METALHEAD™ SENSORS

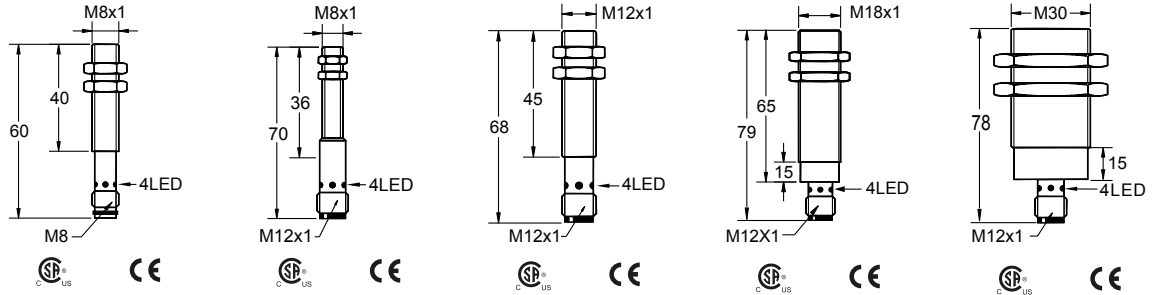
HTMTM
SENSORS



- HARSH DUTY SENSORS FOR WELDING ENVIRONMENTS
- 1-PIECE STAINLESS STEEL OR TITANIUM FACE AND BODY CONSTRUCTION
- BLACK SPATTERGUARD™ COATING FOR WELD SPATTER RESISTANCE
- 120 °C RATED FOR HOT WELD CELLS
- EXTENDED RANGE FOR RELIABLE DETECTION
- WELD FIELD IMMUNE CIRCUITRY



HIGH TEMPERATURE WELD FIELD IMMUNE METALHEAD™ SENSORS SPECIFICATIONS



SENSING DISTANCE	2 mm	2 mm	4 mm	8 mm	15 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +120 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	1-piece Face and Body - Black SpatterGuard™ Coated Titanium or Stainless Steel				

TITANIUM SERIES PART NUMBERS

DC 3-wire 10-30 V PNP - Open	ECS1-0802P-ACL3-PTFE-120C-WFI-TC4	ECS1-0802P-ARU4-PTFE-120C-WFI-TC4	ECS1-1204P-ARU4-PTFE-120C-WFI-TC4	ECS1-1808P-ARU4-PTFE-120C-WFI-TC4	ECS1-3015P-ARU4-PTFE-120C-WFI-TC4
DC 3-wire 10-30 V PNP - Closed	ECS1-0802P-BCL3-PTFE-120C-WFI-TC4	ECS1-0802P-BRU4-PTFE-120C-WFI-TC4	ECS1-1204P-BRU4-PTFE-120C-WFI-TC4	ECS1-1808P-BRU4-PTFE-120C-WFI-TC4	ECS1-3015P-BRU4-PTFE-120C-WFI-TC4
DC 3-wire 10-30 V NPN - Open	ECS1-0802N-ACL3-PTFE-120C-WFI-TC4	ECS1-0802N-ARU4-PTFE-120C-WFI-TC4	ECS1-1204N-ARU4-PTFE-120C-WFI-TC4	ECS1-1808N-ARU4-PTFE-120C-WFI-TC4	ECS1-3015N-ARU4-PTFE-120C-WFI-TC4
DC 3-wire 10-30 V NPN - Closed	ECS1-0802N-BCL3-PTFE-120C-WFI-TC4	ECS1-0802N-BRU4-PTFE-120C-WFI-TC4	ECS1-1204N-BRU4-PTFE-120C-WFI-TC4	ECS1-1808N-BRU4-PTFE-120C-WFI-TC4	ECS1-3015N-BRU4-PTFE-120C-WFI-TC4

STAINLESS SERIES PART NUMBERS

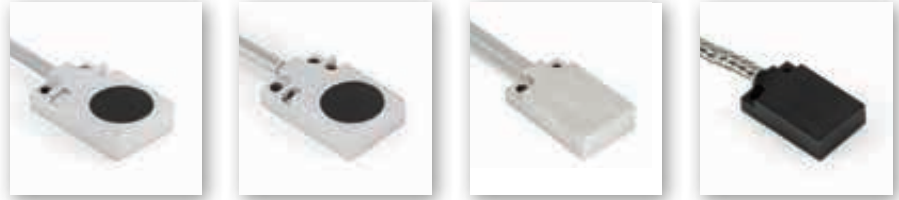
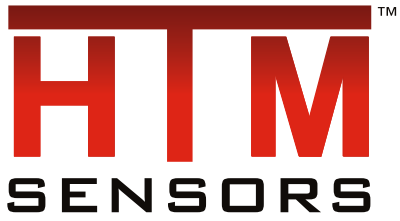
DC 3-wire 10-30 V PNP - Open	ECS1-0802P-ACL3-PTFE-120C-WFI	ECS1-0802P-ARU4-PTFE-120C-WFI	ECS1-1204P-ARU4-PTFE-120C-WFI	ECS1-1808P-ARU4-PTFE-120C-WFI	ECS1-3015P-ARU4-PTFE-120C-WFI
DC 3-wire 10-30 V PNP - Closed	ECS1-0802P-BCL3-PTFE-120C-WFI	ECS1-0802P-BRU4-PTFE-120C-WFI	ECS1-1204P-BRU4-PTFE-120C-WFI	ECS1-1808P-BRU4-PTFE-120C-WFI	ECS1-3015P-BRU4-PTFE-120C-WFI
DC 3-wire 10-30 V NPN - Open	ECS1-0802N-ACL3-PTFE-120C-WFI	ECS1-0802N-ARU4-PTFE-120C-WFI	ECS1-1204N-ARU4-PTFE-120C-WFI	ECS1-1808N-ARU4-PTFE-120C-WFI	ECS1-3015N-ARU4-PTFE-120C-WFI
DC 3-wire 10-30 V NPN - Closed	ECS1-0802N-BCL3-PTFE-120C-WFI	ECS1-0802N-BRU4-PTFE-120C-WFI	ECS1-1204N-BRU4-PTFE-120C-WFI	ECS1-1808N-BRU4-PTFE-120C-WFI	ECS1-3015N-BRU4-PTFE-120C-WFI

Short body versions available upon request.

NOTE: Specifications subject to change without notification.

WELD FIELD IMMUNE METALHEAD™ SENSORS WITH BLACK SPATTERGUARD™ ARE THE BEST CHOICE FOR AUTOMATED WELD CELLS WHERE A MORE DURABLE SENSOR IS REQUIRED TO REDUCE DOWNTIME.





- FIXED MOUNT SENSORS FOR EASY MOUNTING
- RELIABLE SENSING DISTANCE
- NOW AVAILABLE IN METALHEAD™ VERSIONS
- AVAILABLE WITH METALBRAID OR PRE-INSTALLED SILICONE TUBING
- AVAILABLE WITH SPATTERGUARD™ COATING FOR WELDING AREAS
- AVAILABLE IN M8 OR M12 CONNECTORS OR PRE-WIRED



METALHEAD™ FLATPACK SENSORS SPECIFICATIONS



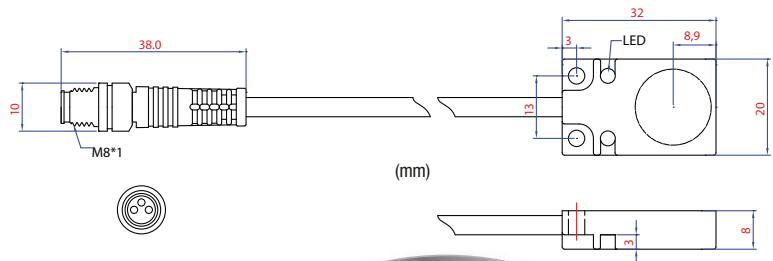
DIMENSIONS	20 mm x 32 mm x 8 mm				
SENSING DISTANCE	8 mm				
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +100 °C				
HOUSING MATERIAL	PTFE Coated Brass Housing / PBT Sensing Face		1-Piece Stainless Steel Face and Body	1-Piece PTFE Coated Stainless Steel Face and Body	
CABLE JACKET		Factory Pre-Installed High Temperature Silicone Jacket		Cut Resistant Braided Stainless Steel Cable Jacket	Factory Pre-Installed High Temperature Silicone Fiberglass Jacket
PNP - N/O - 0.3 m Pigtail M12	EQM1-2008P-A3U0.3/P12-PTFE-100C	EQM1-2008P-A3U0.3/P12-PTFE-100C-S	EQS1-2008P-A3U0.3/P12-100C	EQS1-2008P-A3U0.3/P12-PTFE-100C-HD	EQS1-2008P-A3U0.3/P12-PTFE-100C-WD
PNP - N/O - 0.7 m Pigtail M12	EQM1-2008P-A3U0.7/P12-PTFE-100C	EQM1-2008P-A3U0.7/P12-PTFE-100C-S	EQS1-2008P-A3U0.7/P12-100C	EQS1-2008P-A3U0.7/P12-PTFE-100C-HD	EQS1-2008P-A3U0.7/P12-PTFE-100C-WD
PNP - N/O - 0.3 m Pigtail M8	EQM1-2008P-A3U0.3/P8-PTFE-100C	EQM1-2008P-A3U0.3/P8-PTFE-100C-S	EQS1-2008P-A3U0.3/P8-100C	EQS1-2008P-A3U0.3/P8-PTFE-100C-HD	EQS1-2008P-A3U0.3/P8-PTFE-100C-WD
PNP - N/O - 0.7 m Pigtail M8	EQM1-2008P-A3U0.7/P8-PTFE-100C	EQM1-2008P-A3U0.7/P8-PTFE-100C-S	EQS1-2008P-A3U0.7/P8-100C	EQS1-2008P-A3U0.7/P8-PTFE-100C-HD	EQS1-2008P-A3U0.7/P8-PTFE-100C-WD
NPN - N/O - 0.3 m Pigtail M12	EQM1-2008N-A3U0.3/P12-PTFE-100C	EQM1-2008N-A3U0.3/P12-PTFE-100C-S	EQS1-2008N-A3U0.3/P12-100C	EQS1-2008N-A3U0.3/P12-PTFE-100C-HD	EQS1-2008N-A3U0.3/P12-PTFE-100C-WD
NPN - N/O - 0.7 m Pigtail M12	EQM1-2008N-A3U0.7/P12-PTFE-100C	EQM1-2008N-A3U0.7/P12-PTFE-100C-S	EQS1-2008N-A3U0.7/P12-100C	EQS1-2008N-A3U0.7/P12-PTFE-100C-HD	EQS1-2008N-A3U0.7/P12-PTFE-100C-WD
NPN - N/O - 0.3 m Pigtail M8	EQM1-2008N-A3U0.3/P8-PTFE-100C	EQM1-2008N-A3U0.3/P8-PTFE-100C-S	EQS1-2008N-A3U0.3/P8-100C	EQS1-2008N-A3U0.3/P8-PTFE-100C-HD	EQS1-2008N-A3U0.3/P8-PTFE-100C-WD
NPN - N/O - 0.7 m Pigtail M8	EQM1-2008N-A3U0.7/P8-PTFE-100C	EQM1-2008N-A3U0.7/P8-PTFE-100C-S	EQS1-2008N-A3U0.7/P8-100C	EQS1-2008N-A3U0.7/P8-PTFE-100C-HD	EQS1-2008N-A3U0.7/P8-PTFE-100C-WD

NOTE: Specifications subject to change without notification.

***N/C versions available, change A to B in part #

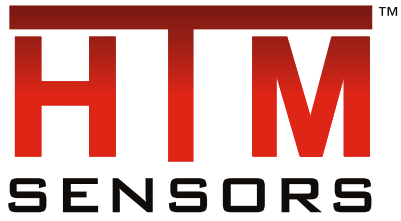
***Pre-wired versions available, change P8 or P12 to cable length, ie. 2 m, 5 m

***AC and DC 2-wire models may be available



METALHEAD™ FLATPACK SENSORS OFFER A RELIABLE SENSING RANGE WITH EASY MOUNTING AND LONG LASTING PERFORMANCE WITH A STEEL FACE AND DURABLE CABLE OPTIONS.





- FIXED MOUNT SENSORS FOR EASY MOUNTING
- RELIABLE SENSING DISTANCE
- NOW AVAILABLE IN METALHEAD™ VERSIONS
- AVAILABLE WITH METALBRAID OR PRE-INSTALLED SILICONE TUBING
- AVAILABLE WITH SPATTERGUARD™ COATING FOR WELDING AREAS
- AVAILABLE IN M8 OR M12 CONNECTORS OR PRE-WIRED



METALHEAD™ FLATPACK SENSORS SPECIFICATIONS

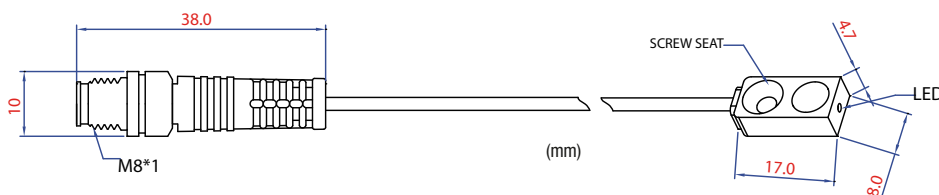


DIMENSIONS	8 mm x 17 mm x 4.7 mm				
SENSING DISTANCE	2 mm				
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +100 °C				
HOUSING MATERIAL	PTFE Coated Brass Housing with Plastic Sensing Face		1-Piece Stainless Steel Body and Sensing Face		
CABLE MATERIAL	Oil Resistant PUR Cable	Oil Resistant PUR Cable	Oil Resistant PUR Cable	Oil Resistant PUR Cable	Oil Resistant PUR Cable
CABLE JACKET		Factory Pre-Installed High Temperature Silicone Jacket		Cut Resistant Braided Stainless Steel Cable Jacket	Factory Pre-Installed High Temperature Silicone Fiberglass Jacket
PNP - N/O - 0.3 m Pigtail M12	MQM1-8802P-A3U0.3/P12-PTFE-100C	MQM1-8802P-A3U0.3/P12-PTFE-100C-WD	MQS1-8802P-A3U0.3/P12-PTFE-100C	MQS1-8802P-A3U0.3/P12-PTFE-100C-HD	MQS1-8802P-A3U0.3/P12-PTFE-100C-WD
PNP - N/O - 0.7 m Pigtail M12	MQM1-8802P-A3U0.7/P12-PTFE-100C	MQM1-8802P-A3U0.7/P12-PTFE-100C-WD	MQS1-8802P-A3U0.7/P12-PTFE-100C	MQS1-8802P-A3U0.7/P12-PTFE-100C-HD	MQS1-8802P-A3U0.7/P12-PTFE-100C-WD
PNP - N/O - 0.3 m Pigtail M8	MQM1-8802P-A3U0.3/P8-PTFE-100C	MQM1-8802P-A3U0.3/P8-PTFE-100C-WD	MQS1-8802P-A3U0.3/P8-PTFE-100C	MQS1-8802P-A3U0.3/P8-PTFE-100C-HD	MQS1-8802P-A3U0.3/P8-PTFE-100C-WD
PNP - N/O - 0.7 m Pigtail M8	MQM1-8802P-A3U0.7/P8-PTFE-100C	MQM1-8802P-A3U0.7/P8-PTFE-100C-WD	MQS1-8802P-A3U0.7/P8-PTFE-100C	MQS1-8802P-A3U0.7/P8-PTFE-100C-HD	MQS1-8802P-A3U0.7/P8-PTFE-100C-WD
NPN - N/O - 0.3 m Pigtail M12	MQM1-8802N-A3U0.3/P12-PTFE-100C	MQM1-8802N-A3U0.3/P12-PTFE-100C-WD	MQS1-8802N-A3U0.3/P12-PTFE-100C	MQS1-8802N-A3U0.3/P12-PTFE-100C-HD	MQS1-8802N-A3U0.3/P12-PTFE-100C-WD
NPN - N/O - 0.7 m Pigtail M12	MQM1-8802N-A3U0.7/P12-PTFE-100C	MQM1-8802N-A3U0.7/P12-PTFE-100C-WD	MQS1-8802N-A3U0.7/P12-PTFE-100C	MQS1-8802N-A3U0.7/P12-PTFE-100C-HD	MQS1-8802N-A3U0.7/P12-PTFE-100C-WD
NPN - N/O - 0.3 m Pigtail M8	MQM1-8802N-A3U0.3/P8-PTFE-100C	MQM1-8802N-A3U0.3/P8-PTFE-100C-WD	MQS1-8802N-A3U0.3/P8-PTFE-100C	MQS1-8802N-A3U0.3/P8-PTFE-100C-HD	MQS1-8802N-A3U0.3/P8-PTFE-100C-WD
NPN - N/O - 0.7 m Pigtail M8	MQM1-8802N-A3U0.7/P8-PTFE-100C	MQM1-8802N-A3U0.7/P8-PTFE-100C-WD	MQS1-8802N-A3U0.7/P8-PTFE-100C	MQS1-8802N-A3U0.7/P8-PTFE-100C-HD	MQS1-8802N-A3U0.7/P8-PTFE-100C-WD

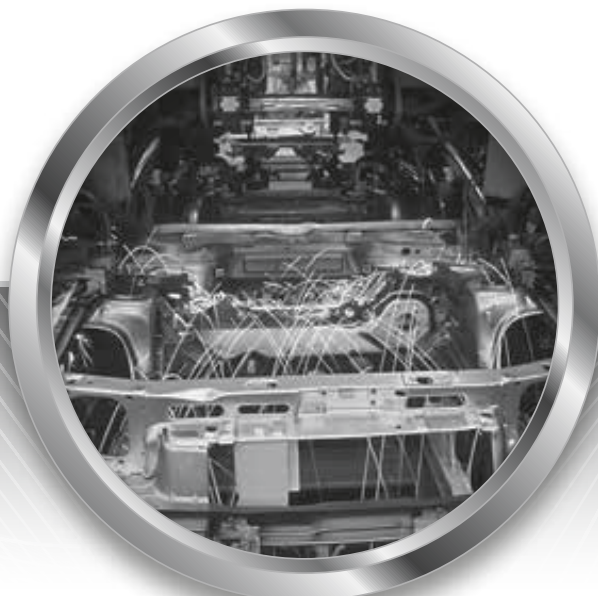
NOTE: Specifications subject to change without notification.

*** N/C versions available, change A to B in part #

*** Pre-Wired versions available, change P8 to cable length, ie. 2 m, 5 m



METALHEAD™ FLATPACK SENSORS OFFER A RELIABLE SENSING RANGE WITH EASY MOUNTING AND LONG LASTING PERFORMANCE WITH A STEEL FACE AND DURABLE CABLE OPTIONS.



HIGH TEMPERATURE
METALHEAD™ FLATPACK SENSORS

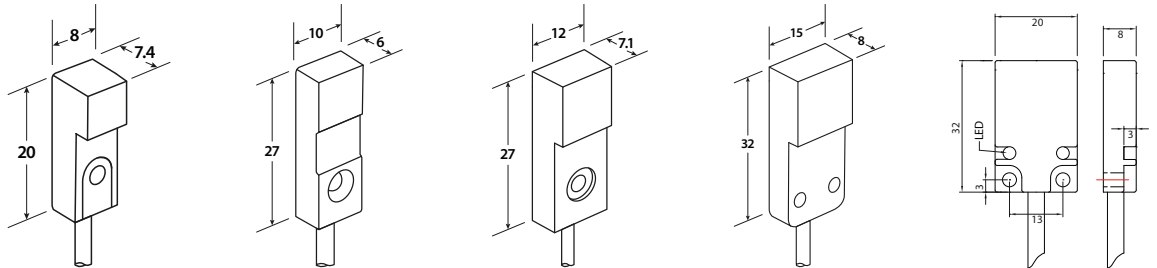
HTMTM
SENSORS



- FIXED MOUNT SENSORS FOR EASY MOUNTING
- RELIABLE SENSING DISTANCE
- 1-PIECE STAINLESS STEEL HOUSINGS OFFER DURABILITY WITH A FIXED SENSING RANGE
- 120 °C WITH HIGH TEMPERATURE CABLE JACKETS FOR WELDING ENVIRONMENTS
- BLACK SPATTERGUARD™ COATING TO REPEL WELD SPATTER
- AVAILABLE IN M8 AND M12 CONNECTORS OR PRE-WIRED



HIGH TEMPERATURE METALHEAD™ FLATPACK SENSORS SPECIFICATIONS



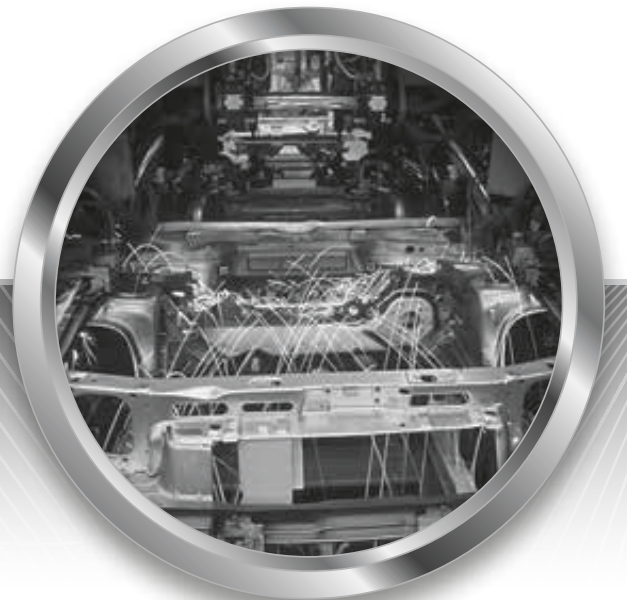
DIMENSIONS (mm)	8 W X 7.4 H x 20 L	10 W x 6 H x 27 L	12 W x 7.1 H x 27 L	15 W x 8 H x 32 L	20 W x 8 H x 32 L
SENSING DISTANCE	1.5 mm	3 mm	4 mm	4 mm	8 mm
OPERATING VOLTAGE	10-30 V DC				
OPERATING TEMPERATURE	-25 °C - +120 °C				
HOUSING MATERIAL	1-Piece Black SpatterGuard™ Coated Stainless Steel Face and Body				
CABLE JACKET	Factory Pre-Installed High Temperature Silicone Fiberglass Jacket				
PART NUMBERS					
PNP - N/O - 0.3 m Pigtail M8	MQS1-881.5P-A3U0.3/P8-PTFE-120C-WD	MQS1-1003P-A3U0.3/P8-PTFE-120C-WD	MQS1-1204P-A3U0.3/P8-PTFE-120C-WD	MQS1-1504P-A3U0.3/P8-PTFE-120C-WD	EQS1-2008P-A3U0.3/P8-PTFE-120C-WD
PNP - N/O - 0.3 m Pigtail M12	MQS1-881.5P-A3U0.3/P12-PTFE-120C-WD	MQS1-1003P-A3U0.3/P12-PTFE-120C-WD	MQS1-1204P-A3U0.3/P12-PTFE-120C-WD	MQS1-1504P-A3U0.3/P12-PTFE-120C-WD	EQS1-2008P-A3U0.3/P12-PTFE-120C-WD

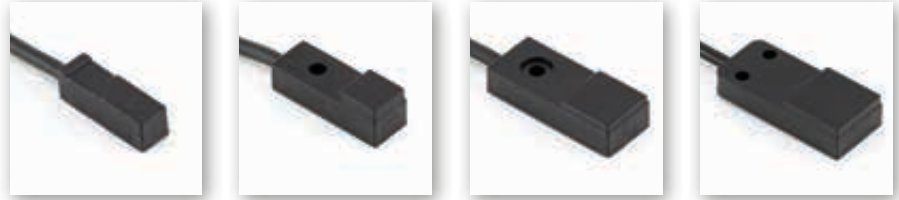
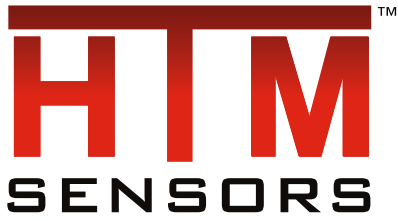
NOTE: Specifications subject to change without notification.

***N/C versions available, change A to B in part #

***Pre-wired versions available, change 0.3/P8 or 0.3/P12 to cable length, ie. 2, 5.

HIGH TEMPERATURE METALHEAD™ FLATPACK SENSORS OFFER A RELIABLE SENSING RANGE WITH EASY MOUNTING AND LONG LASTING PERFORMANCE DUE TO A STEEL FACE AND DURABLE CABLE OPTIONS.

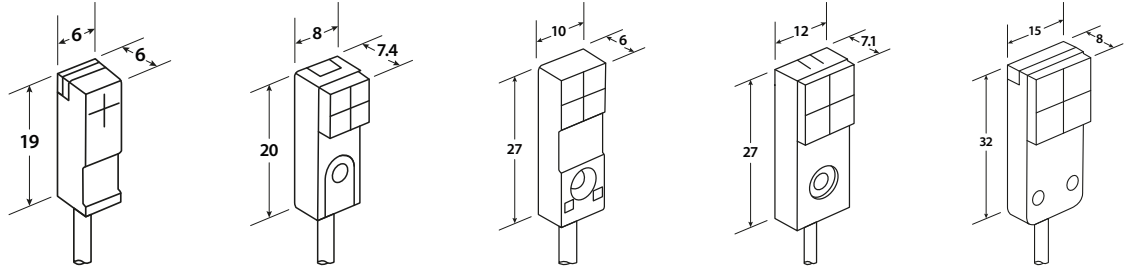
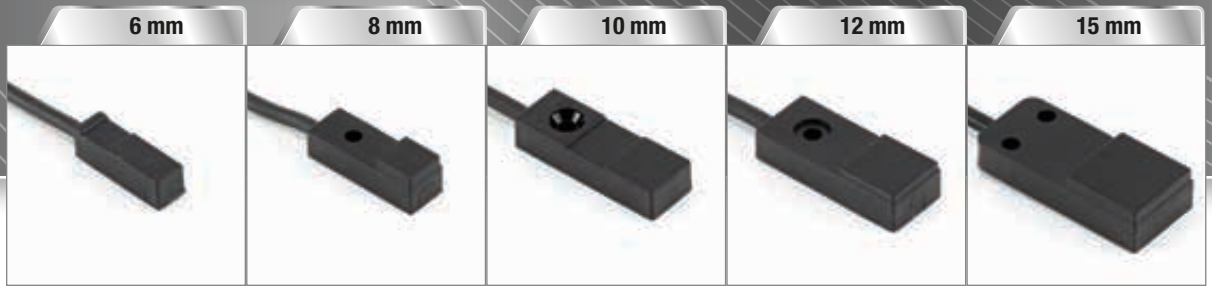




- MINIATURE PROXIMITY SENSORS FOR TIGHT MOUNTING SPACES
- IDEAL FOR USE IN STAMPING DIES FOR IN-DIE SENSING
- MOUNTING HOLE PROVIDES EASY INSTALLATION
- FIXED MOUNT SENSORS OFFER REPEATABLE INSTALLATION DISTANCE
- 5 m CABLE OR PIGTAIL CONNECTOR VERSIONS AVAILABLE FROM STOCK
- AVAILABLE IN PNP, NPN AND DC 2-WIRE OUTPUT FUNCTIONS



MINI FIXED-MOUNT SENSORS SPECIFICATIONS

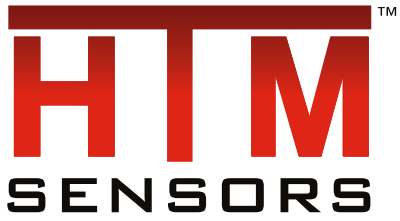


DIMENSIONS (mm)	6 W x 6 H x 19 L	8 W x 7.4 H x 20 L	10 W x 6 H x 27 L	12 W x 7.1 H x 27 L	15 W x 8 H x 32 L
SENSING DISTANCE	1.5 mm	2.5 mm	2 mm	2 mm	4 mm
PART NUMBERS					
DC 3-wire 10-30 V PNP - Open	MQP2-661.2P-A3L5F	MQP2-882.5P-A3L5F	MQP2-1002P-A3L5F	MQP2-1202P-A3L5F	MQP2-1504P-A3L5F
DC 3-wire 10-30 V PNP - Closed	MQP2-661.2P-B3L5F	MQP2-882.5P-B3L5F	MQP2-1002P-B3L5F	MQP2-1202P-B3L5F	MQP2-1504P-B3L5F
DC 3-wire 10-30 V NPN - Open	MQP2-661.2N-A3L5F	MQP2-882.5N-A3L5F	MQP2-1002N-A3L5F	MQP2-1202N-A3L5F	MQP2-1504N-A3L5F
DC 3-wire 10-30 V NPN - Closed	MQP2-661.2N-B3L5F	MQP2-882.5N-B3L5F	MQP2-1002N-B3L5F	MQP2-1202N-B3L5F	MQP2-1504N-B3L5F
DC 2-wire 10-60 V - Open	MQP2-661.2C-A3L5F	MQP2-882.5C-A3L5F	MQP2-1002C-A3L5F	MQP2-1202C-A3L5F	MQP2-1504C-A3L5F
DC 2-wire 10-60 V - Closed	MQP2-661.2C-B3L5F	MQP2-882.5C-B3L5F	MQP2-1002C-B3L5F	MQP2-1202C-B3L5F	MQP2-1504C-B3L5F

NOTE: Specifications subject to change without notification.

MINI FIXED-MOUNT SENSORS ARE IDEAL FOR TIGHT SPACES AND FOR APPLICATIONS THAT REQUIRE A REPEATABLE MOUNTING PLACEMENT.

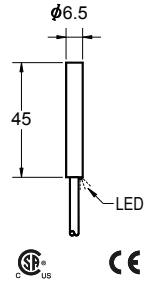
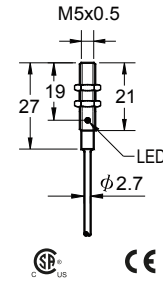
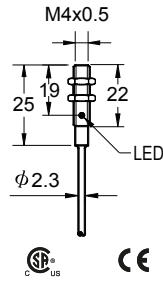
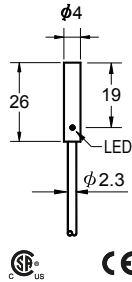
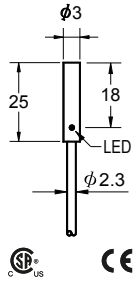




- MINIATURE SENSORS FOR SENSING METAL OBJECTS IN SMALL SPACES
- IDEAL FOR APPLICATIONS WHERE THE PART PLACEMENT IS REPEATABLE AND TIGHT IN TOLERANCE
- IDEAL FOR APPLICATIONS WHERE A SMALL SENSING DISTANCE IS REQUIRED FOR RELIABLE DETECTION
- AVAILABLE IN ANY PRE-WIRED CABLE LENGTH OR PIGTAILED CABLE LENGTH
- AVAILABLE IN M8 QUICK-CONNECT FOR EASY INSTALLATION
- MOST MODELS AVAILABLE IN EXTENDED RANGE OR LONG RANGE VERSIONS



MINIATURE INDUCTIVE PROXIMITY SENSORS SPECIFICATIONS



SENSING DISTANCE	0.8 mm	0.8 mm	1 mm	1 mm	1 mm
OPERATING VOLTAGE	10-30 VDC				
OPERATING TEMPERATURE	-25 °C - +70 °C				
MOUNTING STYLE	Shielded				
HOUSING MATERIAL	Stainless Steel / PBT Sensing Face				

PART NUMBERS - 2 m CABLE VERSION

DC 3-wire PNP - NO	FCU1-D0301P-A3U2	FCU1-D0401P-A3U2	FCU1-0401P-A3U2	FCU1-0501P-A3U2	FCU1-D0601P-A3U2
DC 3-wire PNP - NC	FCU1-D0301P-B3U2	FCU1-D0401P-B3U2	FCU1-0401P-B3U2	FCU1-0501P-B3U2	FCU1-D0601P-B3U2
DC 3-wire NPN - NO	FCU1-D0301N-A3U2	FCU1-D0401N-A3U2	FCU1-0401N-A3U2	FCU1-0501N-A3U2	FCU1-D0601N-A3U2
DC 3-wire NPN - NC	FCU1-D0301N-B3U2	FCU1-D0401N-B3U2	FCU1-0401N-B3U2	FCU1-0501N-B3U2	FCU1-D0601N-B3U2

0.3 m Cable to M8 3-Pin Connector

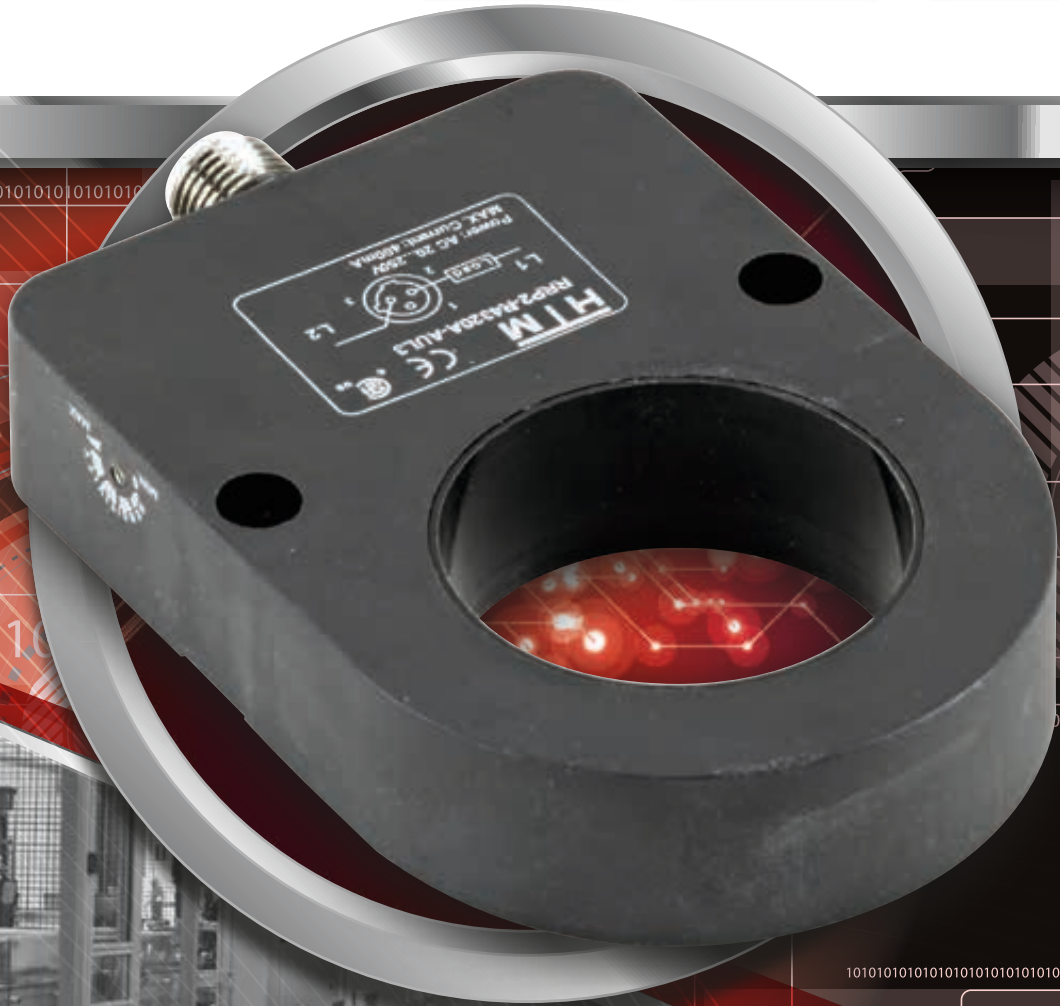
DC 3-wire PNP - NO	FCU1-D0301P-A3U0.3/P8	FCU1-D0401P-A3U0.3/P8	FCU1-0401P-A3U0.3/P8	FCU1-0501P-A3U0.3/P8	FCU1-D0601P-A3U0.3/P8
DC 3-wire PNP - NC	FCU1-D0301P-B3U0.3/P8	FCU1-D0401P-B3U0.3/P8	FCU1-0401P-B3U0.3/P8	FCU1-0501P-B3U0.3/P8	FCU1-D0601P-B3U0.3/P8
DC 3-wire NPN - NO	FCU1-D0301N-A3U0.3/P8	FCU1-D0401N-A3U0.3/P8	FCU1-0401N-A3U0.3/P8	FCU1-0501N-A3U0.3/P8	FCU1-D0601N-A3U0.3/P8
DC 3-wire NPN - NC	FCU1-D0301N-B3U0.3/P8	FCU1-D0401N-B3U0.3/P8	FCU1-0401N-B3U0.3/P8	FCU1-0501N-B3U0.3/P8	FCU1-D0601N-B3U0.3/P8

NOTE: Specifications subject to change without notification.

MINIATURE INDUCTIVE PROXIMITY SENSORS ARE PERFECT FOR TIGHT SPACES AND FOR MACHINES THAT REQUIRE A TIGHT SENSING TOLERANCE TO DETECT OBJECTS.



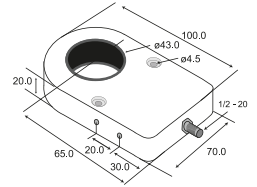
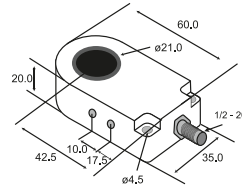
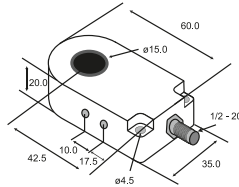
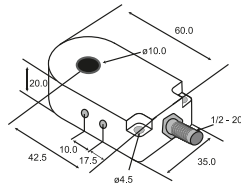
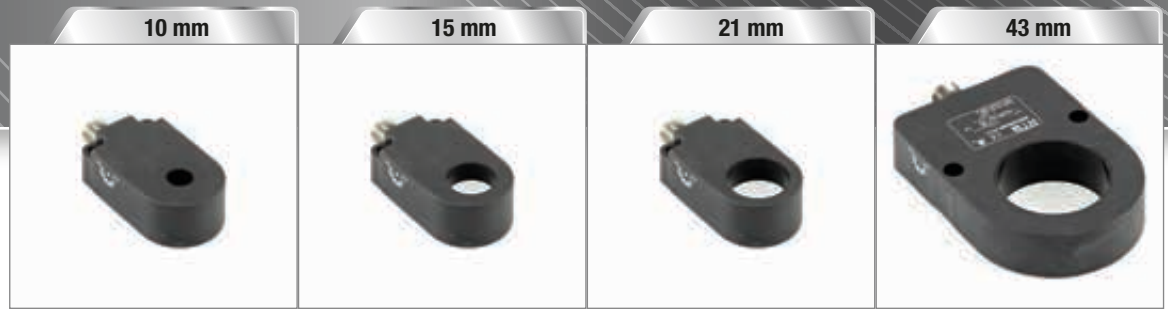
HTMTM
SENSORS



- RING SENSORS FOR METAL PARTS DETECTION
- 4 SIZES AVAILABLE FROM 10 mm TO 43 mm
- CONVENIENT SIDE SCREW MOUNTING
- IDEAL FOR WELD WIRE DETECTION, OR SMALL PARTS DETECTION
- AVAILABLE IN AC OR DC, NPN OR PNP OUTPUTS WITH OR WITHOUT TIMING FUNCTION
- AVAILABLE IN M12 QUICK-CONNECT OR PRE-WIRED VERSIONS



INDUCTIVE RING PROXIMITY SENSORS SPECIFICATIONS



Min. Target Size	D=3 mm; L=6 mm	D=9 mm; L=18 mm	D=6 mm; L=12 mm	D=9 mm; L=18 mm
PART NUMBERS				
DC 3-wire 10-30 V NPN N.O.	RRP2-R1020N-ARU4	RRP2-R1520N-ARU4	RRP2-R2120N-ARU4	RRP2-R4320N-ARU4
DC 3-wire 10-30 V NPN N.C.	RRP2-R1020N-BRU4	RRP2-R1520N-BRU4	RRP2-R2120N-BRU4	RRP2-R4320N-BRU4
DC 3-wire 10-30 V PNP N.O.	RRP2-R1020P-ARU4	RRP2-R1520P-ARU4	RRP2-R2120P-ARU4	RRP2-R4320P-ARU4
DC 3-wire 10-30 V PNP N.C.	RRP2-R1020P-BRU4	RRP2-R1520P-BRU4	RRP2-R2120P-BRU4	RRP2-R4320P-BRU4
AC 2-wire 20-250 V N.O.	RRP2-R1020A-AUL3	RRP2-R1520A-AUL3	RRP2-R2120A-AUL3	RRP2-R4320A-AUL3
AC 2-wire 20-250 V N.C.	RRP2-R1020A-BUL3	RRP2-R1520A-BUL3	RRP2-R2120A-BUL3	RRP2-R4320A-BUL3

NOTE: Specifications subject to change without notification.

INDUCTIVE RING SENSORS OFFER THE RELIABLE SENSING OF METAL PARTS, WIRES, AND OBJECTS, WHERE THE PARTS ARE MOVING THROUGH AN AREA AND NEED TO BE DETECTED.



HTMTM
SENSORS



- EXTRA LONG DISTANCE FIXED MOUNT SENSING
- REPLACE COMMON LIMIT SWITCH FOOTPRINTS FOR EASY MOUNTING
- 5-WAY ROTATING HEAD TO SENSE FROM THE TOP, FRONT OR SIDES
- AC OR DC MODELS WITH QUICK-CONNECTORS OR WITH A CONDUIT WIRING OPTION



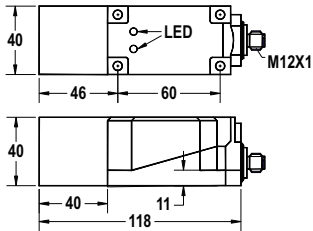
LIMIT SWITCH STYLE PROXIMITY SENSORS SPECIFICATIONS



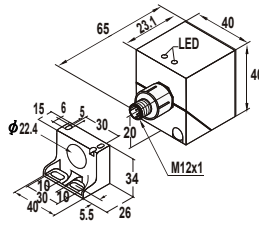
MOUNTING STYLE	Shielded	Unshielded	Shielded	Unshielded	Shielded	Unshielded
SENSING DISTANCE	15 mm	30 mm	15 mm	30 mm	15 mm	30 mm
OPERATING VOLTAGE	10-30 V DC					
OPERATING TEMPERATURE	-25 °C to +75 °C					
HOUSING MATERIAL	PBT					
CONNECTION	M12 4-PIN				Terminal Chamber	
PART NUMBERS						
PNP Normally Open	FQP1-4015P-ARU4	FQP2-4030P-ARU4	FQP1-4015P-ARS4	FQP2-4030P-ARS4		
AC N.O./N.C Selectable					FQP1-4015A-C4L	FQP2-4030A-C4L

NPN versions available. Change P to N in part number. Ex. FQP1-4015P-ARU4 to FQP1-4015N-ARU4

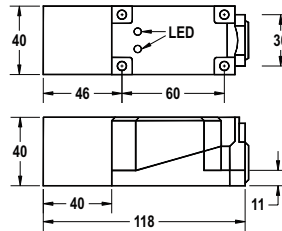
FQP1-4015P-ARU4 / FQP2-4030P-ARU4



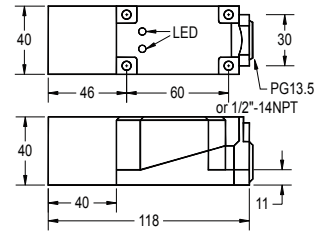
FQP1-4015P-ARS4 / FQP2-4030P-ARS4



FQP1-4015P-C4L

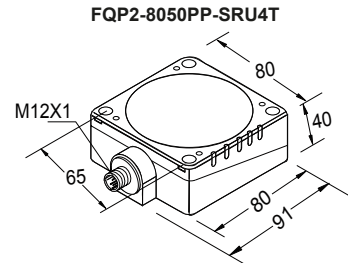


FQP2-4030P-C4L



DIMENSIONS	80 x 40 x 91 mm
SENSING DISTANCE	50 mm
OPERATING VOLTAGE	10-30 V DC
OPERATING TEMPERATURE	-25 °C to +75 °C
HOUSING MATERIAL	PBT
CONNECTION	M12 4-PIN
PART NUMBERS	
PNP Normally Open	FQP2-8050PP-SRU4T

NPN versions available. Change P to N in part number.



NOTE: Specifications subject to change without notification.

LIMIT SWITCH STYLE PROXIMITY SENSORS PROVIDE EXTRA LONG NON-CONTACT SENSING DISTANCES TO RELIABLY DETECT METAL OBJECTS. THESE SENSORS COMMONLY REPLACE LIMIT SWITCHES WITH SIMILAR MOUNTING FOOTPRINTS.

