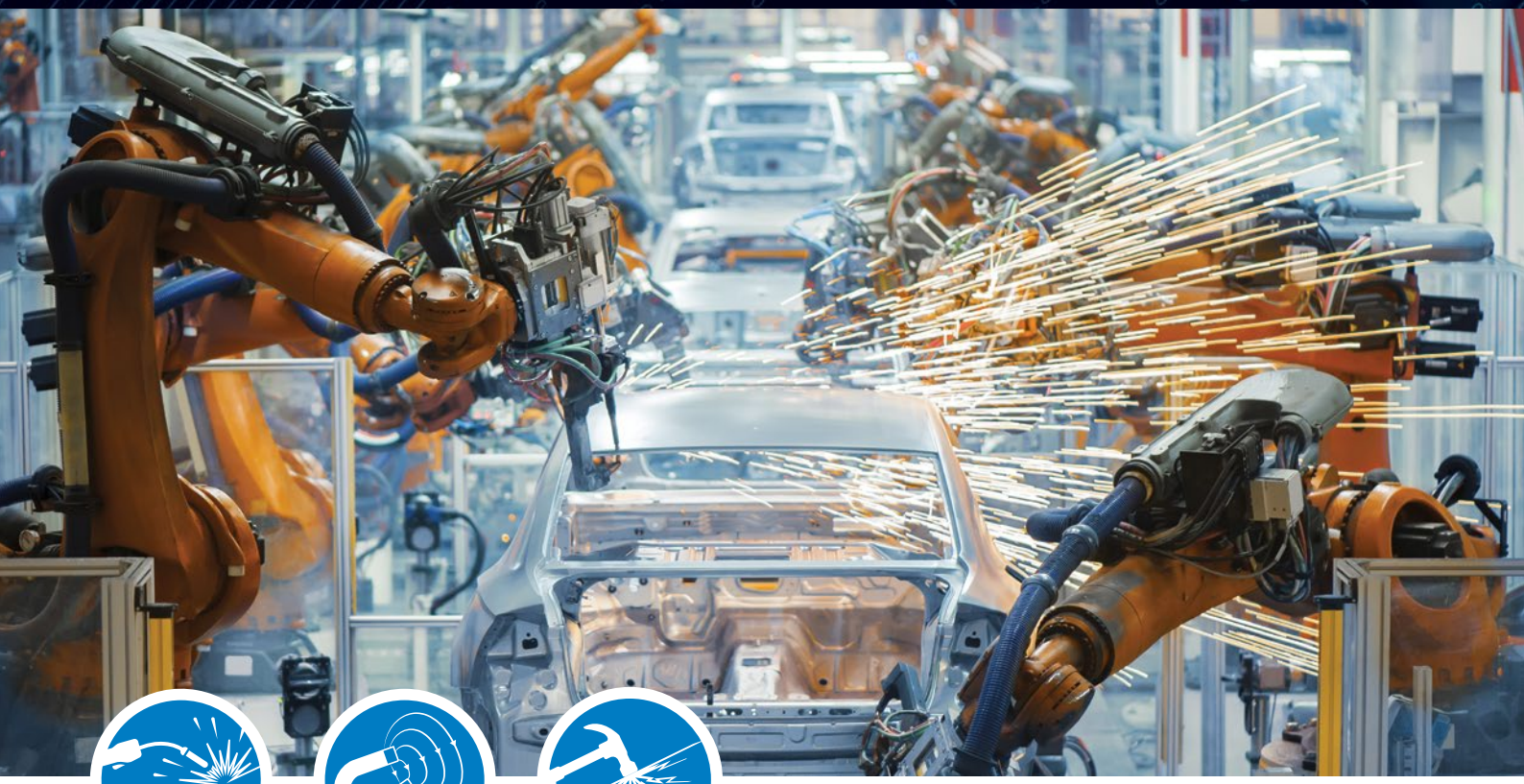
CONTRINEX
SENSORS SAFETY RFID



INDUCTIVE SENSORS

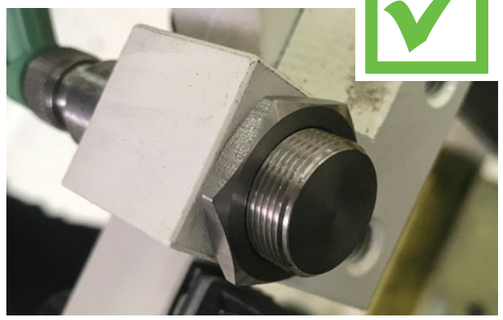
WELD-IMMUNE

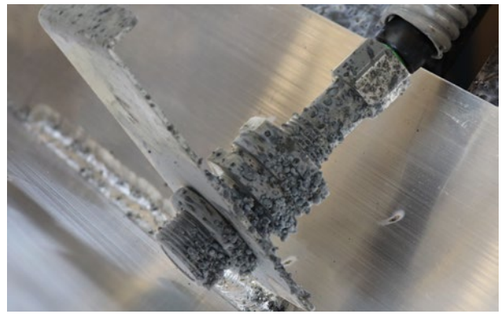
REVOLUTIONARY PROTECTION FOR LONG LIFE

- ✓ ANTI-SPATTER COATING
- ✓ WELD-FIELD IMMUNITY
- ✓ IMPACT RESISTANCE

A Swiss Company

REVOLUTIONARY PROTECTION



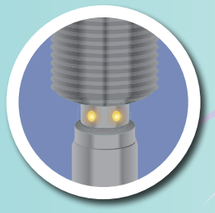


CHALLENGES

WELD SPATTER

- Reduced sensor performance
- Spatter accumulation
- Difficulty replacing sensors

MAGNETIC FIELDS



- Interference with inductive sensor
- False triggering
- Sensor output locking on

MOVING PARTS

- Mechanical impact with moving workpieces
- Damage to ferrite, electronics and housing
- Frequent machine downtime

SOLUTIONS

ANTI-SPATTER COATING

Activstone™ coating on all external surfaces resists weld spatter in spot, MIG and MAG applications. See page 4.

WELD-FIELD IMMUNITY

Contrinex sensors resist magnetic interference from medium-frequency weld fields, current up to 15 kA. See page 5.

IMPACT RESISTANCE

With one-piece stainless-steel housings and Condet® technology, Full Inox sensors offer maximum impact resistance. See page 6.

ACCESSORIES

For extensive protection, use Activstone™ coated mounting brackets, spatter-resistant cables and protective tubes.
Uncoated brackets are also available.
See pages 10 and 11.

ANTI-SPATTER COATING

HIGH PERFORMANCE CERAMIC

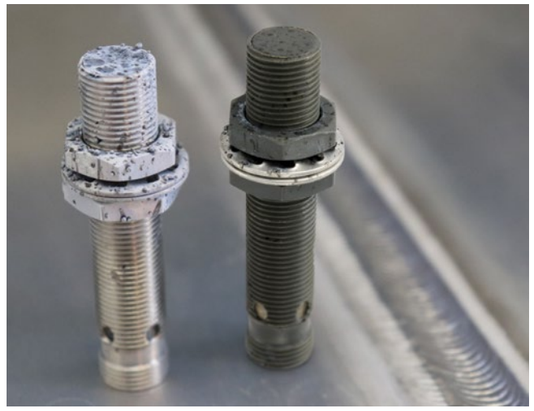
Contrinex Weld-Immune inductive sensors with ACTIVSTONE™ coating are exceptionally resistant to weld spatter. A high performance ceramic material forms a permanent, non-stick coating on all external surfaces of the sensor, including fixing nuts. The coating is exceptionally robust with excellent resistance in spot, MIG and MAG applications. Coated mounting brackets are also available.

LONG-LIFE COATING FOR REDUCED SENSOR MAINTENANCE
ADVANTAGES OF ACTIVSTONE™ COATING

- Prevents weld-spatter accumulation
- Eases slag removal during maintenance
- High thermal resistance for increased longevity and reliability of sensor
- No delamination of coating when deformed
- Outstanding abrasion resistance
- Excellent impact resistance: no cracking or peeling

ANTI-SPATTER PERFORMANCE

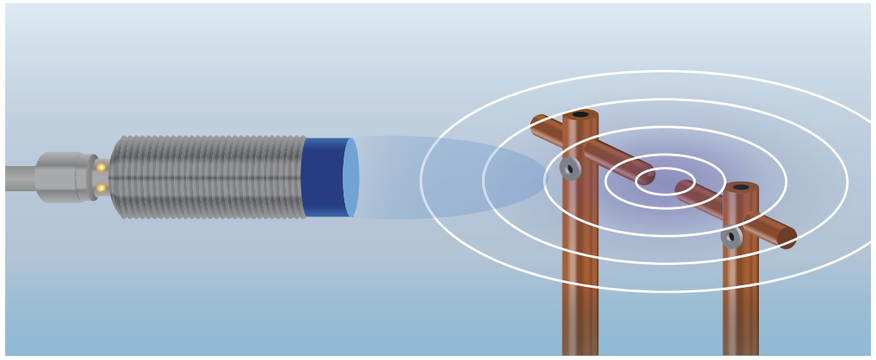
UNCOATED (L) VS COATED (R)



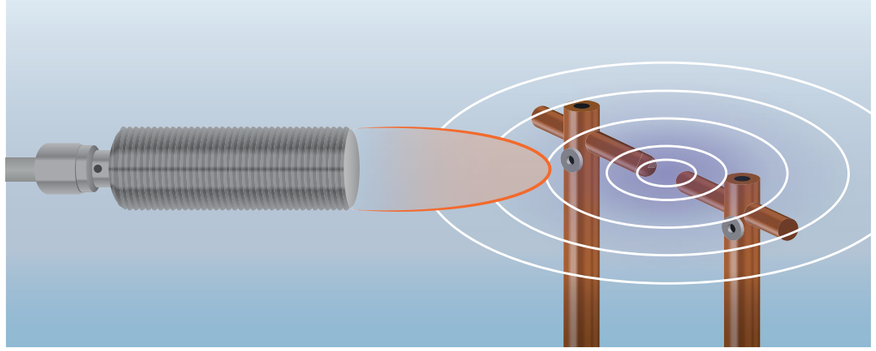
WELD-FIELD IMMUNITY

INTERFERENCE SUPPRESSION TECHNOLOGY

Magnetic fields from welding equipment can cause false triggering in inductive sensors. Weld-Immune sensors from the Full Inox and Classics technology families meet this challenge with special interference suppression technology. Sensors benefit from optimum detection sensitivity combined with immunity to magnetic interference from medium-frequency fields (current up to 15 kA).



Conventional inductive sensor without immunity: the magnetic field from welding equipment disrupts the sensor's own magnetic field



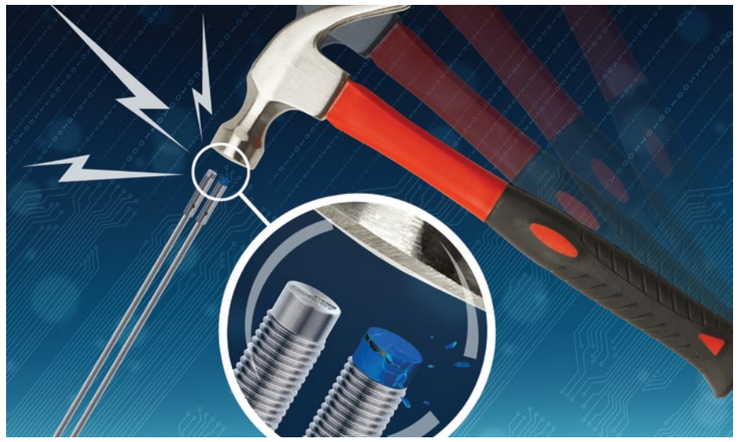
Contrinex inductive sensor with immunity: the magnetic field from welding equipment does not affect sensor performance

SWITCHING INSENSITIVE TO MAGNETIC FIELDS
ADVANTAGES OF INTERFERENCE SUPPRESSION TECHNOLOGY

- Immunity to magnetic interference from welding environment
- Suppression specific to medium-frequency weld fields, current up to 15 kA
- Factory-optimized detection sensitivity
- Ideal for automated welding cells in the automotive industry
- Suitable for environments with similar magnetic fields
- Reliable, proven technology

FULL INOX TECHNOLOGY

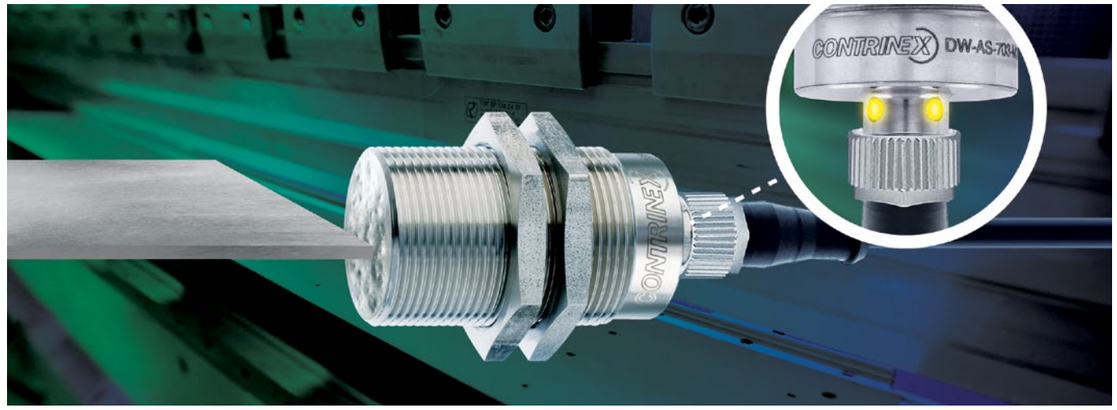
Sensors with Full Inox technology are ideal for the harshest welding environments. A one-piece housing in stainless steel V2A/AISI 303 provides excellent chemical and mechanical resistance, withstanding extreme abrasion, shocks and vibration. Due to the Condet® operating principle, sensors operate reliably even after repeated impacts.



Full functionality even after extreme impact: Condet® technology ensures reliable switching, even when impact damage to the ferrite is severe

HIGH PERFORMANCE AND EXTREME DURABILITY
ADVANTAGES OF CONDET® OPERATING PRINCIPLE

- Long sensor life due to robust housing and electronics
- Long operating distances reduce risk of impact from moving parts
- Condet® technology ensures reliable switching, even when impact damage to the ferrite is severe
- One-piece, stainless-steel housing
- Resistance to harsh cleaning methods (including impacts)
- Sensitivity unaffected by weld spatter, metal dust or chips
- Factor 1 on steel and aluminum
- Sealed housing IP68 and IP69K



		FULL INOX (SERIES 700)	
		FULL INOX HOUSING + DOUBLE OPERATING DISTANCE	
		COATED	UNCOATED
			
KEY FEATURES	Weld-spatter resistance p. 4	✓	
	Magnetic-field immunity p. 5	✓	✓
	Impact resistance p. 6	✓	✓
	Long operating distance p. 6	✓	✓
	Factor 1 on steel and aluminum p. 6	✓	✓
SIZE	M8	✓	✓
	M12	✓	✓
	M18	✓	✓
	M30	✓	✓
	C23	✓	
CONNECTIVITY	Connector M12, 4-pin	✓	✓
	Pigtail M12, 3-pin	✓	✓
ENCLOSURE RATING	IP67	✓	✓
	IP68	✓	✓
	IP69K	✓	✓
HOUSING	Embeddable	✓	✓
	One-piece stainless steel housing	✓	✓

SENSOR OVERVIEW

FULL INOX (SERIES 700)

FULL INOX HOUSING + DOUBLE OPERATING DISTANCE

COATED

UNCOATED

PART REFERENCE	HOUSING SIZE	HOUSING LENGTH (mm)	OPERATING DISTANCE (mm)		SWITCHING FREQUENCY (Hz)	POLARITY	OUTPUT	CONNECTOR TYPE	HOUSING MATERIAL	SENSING FACE MATERIAL
DW-AS-703-M8-697	M8	60.0	3		15	PNP	N.O.	M12 4-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-701-M8-696	M8	45.0	3		15	NPN	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-703-M8-696	M8	45.0	3		15	PNP	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AS-703-M12-697	M12	60.0	6		15	PNP	N.O.	M12 4-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-701-M12-696	M12	50.0	6		15	NPN	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-703-M12-696	M12	45.0	6		15	PNP	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AS-703-M18-697	M18	63.5	10		15	PNP	N.O.	M12 4-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-701-M18-696	M18	50.0	10		15	NPN	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-703-M18-696	M18	50.0	10		15	PNP	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AS-703-M30-697	M30	63.5	16		15	PNP	N.O.	M12 4-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-703-M30-696	M30	63.5	16		15	PNP	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-701-M30-696	M30	63.5	16		15	NPN	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-703-C23-696	C23	8	7		15	PNP	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-701-C23-696	C23	8	7		15	NPN	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AS-703-M8-694	M8	60.0	3		15	PNP	N.O.	M12 4-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-701-M8-695	M8	45	3		15	NPN	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-703-M8-695	M8	45	3		15	PNP	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AS-703-M12-673	M12	60.0	6		15	PNP	N.O.	M12 4-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-701-M12-692	M12	50.0	6		15	NPN	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-703-M12-695	M12	50.0	6		15	PNP	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AS-703-M18-673	M18	63.5	10		15	PNP	N.O.	M12 4-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-701-M18-692	M18	50.0	10		15	NPN	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-703-M18-695	M18	50.0	10		15	PNP	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AS-703-M30-673	M30	63.5	16		15	PNP	N.O.	M12 4-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-703-M30-695	M30	63.5	16		15	PNP	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A
DW-AV-701-M30-695	M30	63.5	16		15	NPN	N.O.	Pigtail M12 3-pin	Stainless steel V2A	Stainless steel V2A

PROTECTION BEYOND THE SENSOR

Reduce downtime with accessories that protect the surrounding installation against the challenges of welding environments. Mounting brackets with ACTIVSTONE™ coating resist accumulation of weld spatter and so reduce the need for cleaning. A special range of stainless-steel mounting brackets offers exceptionally high mechanical and chemical resistance.

MOUNTING BRACKETS

		PART REFERENCE	MATERIAL	DIMENSIONS (mm)	COMPATIBLE WITH: SENSOR SIZE M8	M12	M18	M30	CLASSICS SERIES 600	FULL INOX SERIES 700
COATED		ASU-0041-120	Steel	L = 38.1 W = 34.9 H = 19.05		✓			✓	✓
		ASU-0041-180	Steel	L = 38.1 W = 38.1 H = 25.4			✓		✓	✓
		ASU-0041-300	Steel	L = 44.45 W = 59.94 H = 38.1				✓	✓	✓
UNCOATED		ASU-3012-080	Stainless steel	SW17 L = 32.4	✓					✓
		ASU-3012-120	Stainless steel	SW22 L = 33.8		✓				✓
		ASU-3012-180	Stainless steel	SW30 L = 33.8			✓			✓

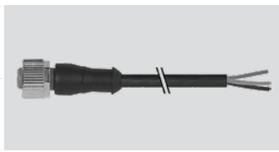
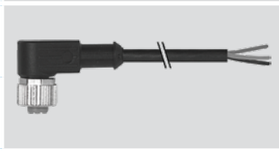
ACCESSORIES OVERVIEW

SPATTER-RESISTANT CONNECTING CABLES AND PROTECTIVE TUBES

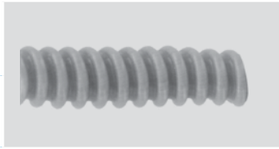
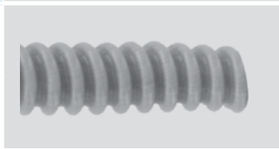
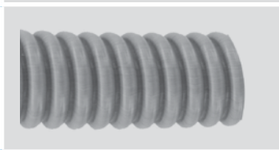
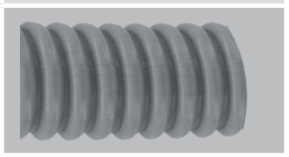
For optimal protection use the long-life cables in spatter-resistant PUR and the high-temperature, spatter-resistant protective tubes to enhance machine availability.

The cables are compatible with all sensors listed on page 8 and 9.

CABLES

	PART REFERENCE	SOCKET: SIZE	PINS	CONFIG.	CABLE: MATERIAL	LENGTH
	S12-3FUG-020-NNWN	M12	3	straight	PUR	2 m
	S12-3FUG-050-NNWN	M12	3	straight	PUR	5 m
	S12-3FUW-020-NNWN	M12	3	right angle	PUR	2 m
	S12-3FUW-050-NNWN	M12	3	right angle	PUR	5 m
	S12-3FUG-020-NNWN-12MG	M12	3	straight	PUR	2 m + M12 plug
	S12-3FUG-050-NNWN-12MG	M12	3	straight	PUR	5 m + M12 plug

PROTECTIVE TUBES

	PART REFERENCE	MATERIAL	INNER DIAMETER	OUTER DIAMETER	LENGTH
	ATP-0000-010	PTFE	3.5 mm	6 mm	1 m
	ATP-0000-100	PTFE	3.5 mm	6 mm	10 m
	ATP-0001-010	PTFE	6.5 mm	10 mm	1 m
	ATP-0001-100	PTFE	6.5 mm	10 mm	10 m
	ATP-0002-100	PTFE	13 mm	17.5 mm	10 m
	ATP-0003-100	PTFE	19 mm	23.5 mm	10 m







WHY CHOOSE US

- ✓ Leader for sensors and systems in the most challenging operating conditions
- ✓ Partner of the welding industry for over 20 years
- ✓ Building industrial experience since 1972
- ✓ Widest IO-Link portfolio – ready for Industry 4.0 for over 6 years
- ✓ Most reliable sensors on the market with best temperature compensation and high quality materials
- ✓ Technical mastery of key elements – own ASIC development
- ✓ Global sales network with solution-oriented application support
- ✓ Impeccable Swiss quality for our products and systems

WHAT WE OFFER

- ✓ 6 production sites for fast, worldwide availability
- ✓ 3 logistic hubs for fast delivery even for special products
- ✓ International Customer Services
- ✓ Long-standing experience in product customization and brand labelling
- ✓ Vigorous lab testing, pre-shipment inspections and compliance with market standards

KEY DATES

1999 Inductive sensors with world's most robust full-metal housing, thanks to Condet® technology

2013 Contrinex suppression-circuit technology for inductive sensors in welding applications

2019 Weld spatter-resistant coating for sensors and accessories

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Terms of delivery and right to change design reserved.

HEADQUARTERS

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