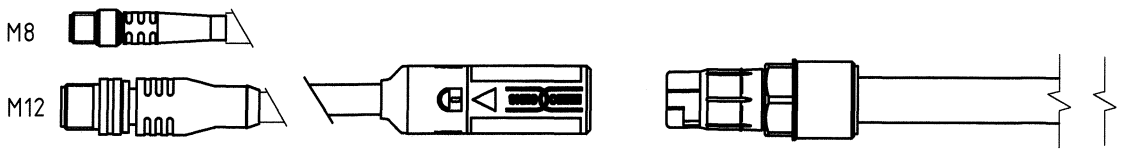
Inductive Sensor-Cable Connection System Memosens

Hazardous Locations
IS for ClassI, Division 1, Groups A, B, C and D; Class I, Zone 0, AEx ia IIC (US)
IS for ClassI, Division 1, Groups A, B, C and D; Class I, Zone 0, Ex ia IIC (CA)
NIFW for Class I, Division 2, Groups A, B, C and D; Class I, Zone 2, IIC.

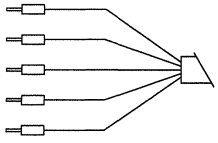
Installation Notes for hazardous Locations Class I, Zone 0, 1, 2, Div 1, 2
Installation shall be in accordance with the National or Canadian Electrical Code as applicable.

Consisting of: Measuring Cable and Sensor



Ferrules

Power supply	+ BN
RS485 (A)	GN
RS485 (B)	YE
Power supply (GND)	- WH
Shield	CL



max length: CA/MS-***X**: 330 ft./100 m, CA/MS-***X**-L: 9.5 ft./2.9 m

Electrical parameters:

The Memosens Sensors must be used with a Memosens Cable CA/MS-***X**, CA/MS-***X**-L or an approved Cable type identical in hardware and function.

The Memosens Cable can be connected to a Transmitter with an intrinsically safe output with
V0 ≤ V0max, I0 ≤ I0max, P0 ≤ P0max, Ci ≤ Cimax, Li ≤ Limax
like the approved Knick Memosens Transmitters for hazardous Locations from the Protos, Stratos or Portavo series.

Transmitter entity parameters shall not exceed (linear output characteristic):

V0max	I0max	P0max	Cimax	Limax
5.1 V	130 mA	166 mW	15 µF	95 µH

Transmitter entity parameters shall not exceed (trapezoid output characteristic):

V0max	I0max	P0max	Cimax	Limax
5.04 V	80 mA	112 mW	14.1 µF	237.2 µH

Verteiler: KB (1x)

Zul. Abweichungen für Maße ohne Toleranzangabe

Maßstab

Control Drawing

	Datum	Name
Bearb.	07.12.2016	dam
Gepr. (KB)	24.07.18	ach
Freigabe	06.08.18	[illegible]

Benennung: Inductive Sensor-Cable Connection System Memosens

Schutzvermerk nach ISO16016 beachten.

Knick Elektronische Messgeräte GmbH & Co. KG

Zeichnungsnummer: 214.410-240

Blatt 1 / 2 Bl.

Nr.	Änderungen	Datum	Bearb.	FGL KON
2	Ambiente Temp.	04.07.18	dam	
1	C/US Texte	05.04.18	dam	

Thermal Parameters:

Memosens Cable Type	Temperature Class	Ambient Temperature Range
CA/MS-***X**	T4	-15 °C ≤ Ta ≤ +100 °C
	T6	-15 °C ≤ Ta ≤ +70 °C
CA/MS-***X**-L	T6	-10 °C ≤ Ta ≤ +50 °C

Memosens Sensor Type	Temperature Class	Ambient Temperature Range	max. Process Temp.
SE5**X**-*MS*	T3	-20 °C ≤ Ta ≤ +100 °C	+135 °C
SE7**X/*-*MS*	T4	-20 °C ≤ Ta ≤ +100 °C	+120 °C
	T6	-20 °C ≤ Ta ≤ +70 °C	+70 °C
SE604X-MS****	T3	-20 °C ≤ Ta ≤ +100 °C	+135 °C
SE605*-XMS****	T4	-20 °C ≤ Ta ≤ +100 °C	+115 °C
SE6**X-**MS****-***/***	T6	-20 °C ≤ Ta ≤ +65 °C	+65 °C
SE736X/*-NMS*	T3	-5 °C ≤ Ta ≤ +100 °C	+135 °C
SE737X/*-NMS*	T4	-5 °C ≤ Ta ≤ +100 °C	+120 °C
	T6	-5 °C ≤ Ta ≤ +70 °C	+70 °C

Specific Conditions of Use:

The Measuring Cable type CA/MS-***X** or type CA/MS-***X**-L and its connecting head must be protected from electrostatic charging, if installed in Zone 0 or Division 1.
The Memosens Sensors may only be used in the ambient temperature range specified for the temperature class.
The Memosens Sensors may not be operated in electrostatically critical processing conditions.
Intense vapour or dust flows directly impacting on the connection system must be avoided.
Metallic process connection parts have to be mounted at the mounting location electrostatically conductive (< 1 MΩ)
Valid for Sensor type SE604X-MS****, SE605*-XMS****, SE6**X-**MS****-***/*** and SE7**X/*-*MS*.
The Sensor may only be used in liquid media with a conductivity of at least 10 nS/cm.

Nr.	Änderungen	Datum	Bearb.	FGL KON
1	Ambient Temp.	04.07.18	dam	
1	C/US Texte	05.04.18	dam	

Verteiler:
KB (1x)

Zul. Abweichungen für Maße ohne Toleranzangabe

	Datum	Name
Bearb.	07.12.2016	dam
Gepr. (KB)	24.07.18	cul
Freigabe	06.08.18	RBrad

Schutzvermerk nach ISO16016 beachten.

Knick
Elektronische Messgeräte GmbH & Co. KG

Maßstab

Control Drawing

Benennung: Inductive Sensor-Cable Connection System Memosens

Zeichnungsnummer: 214.410-240

Blatt: 2

2 Bl.