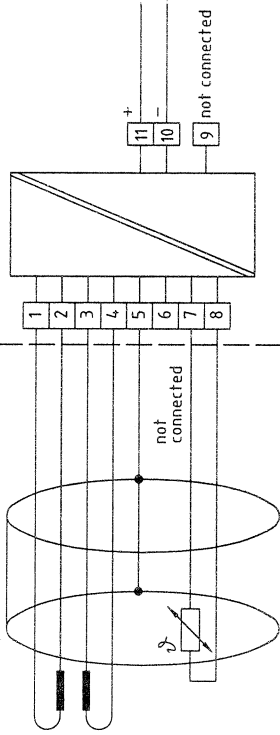


Measurement Loop

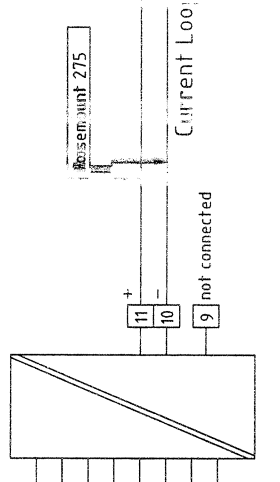
Hazardous Area Location
 IS Class I, Division 1, Groups A, B, C, D
 IS Class II, Division 1, Groups E, F, G
 IS Class III, Division 1
 IS Class I, Zone 0, Group IIC



Electrodeless Conductivity Sensor
 see Note 8 and 9

Hazardous Location Class II, Div 1

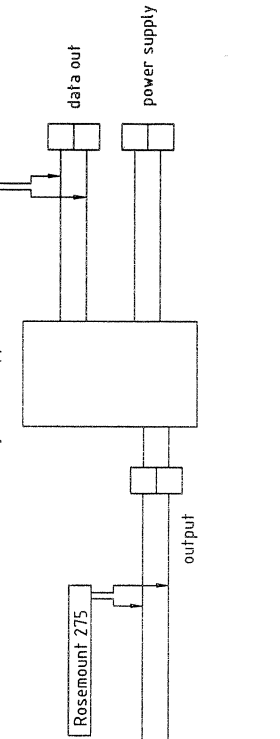
2-Wire Transmitter SI 792X E
 (intrinsically safe apparatus) and SI 792X T
 IS AIS Class I, Division 1, Groups A, B, C, D, T4, Entry, Type 2
 AIS Class I, II, III, Division 1, Groups A, B, C, D, E, F, G
 Class I, Zone 1, AEx ia [ia], Group IIC, T1, Entry, Type 2
 Tamb - 20 to + 55 °C



Non-Hazardous Location

Transmitter Power Supply
 associated apparatus
 Factory Mutual approved

HART®-HHT
 Rosemount 275



SI 792X E

Entity Parameters:

- Terminals 1, 2, 3, 4, 5, 6, 7 and 8
- $V_f, U_0 = 14 \text{ V}; I_f, I_0 = 66 \text{ mA}; P_f, P_0 = 230 \text{ mW}$
 Class I, Division 1, Groups A & B
- $C_a, C_0 = 1 \mu\text{F}; L_a, L_0 = 9.4 \text{ mH}$
 Class I & II, Division 1, Group C
- $C_a, C_0 = 3 \mu\text{F}; L_a, L_0 = 35 \text{ mH}$
 Class I, II, III Division 1, Group D
- $C_a, C_0 = 8 \mu\text{F}; L_a, L_0 = 70 \text{ mH}$
 Class I, Zone 0, IIA

Conductivity-Measuring Loop

Entity Parameters:

- Terminals 1, 2, 3, 4, 5 and 6
- $V_f, U_0 = 9 \text{ V}; I_f, I_0 = 63 \text{ mA}; P_f, P_0 = 140 \text{ mW}$
 Class I, Division 1, Groups A & B
- $C_a, C_0 = 4 \mu\text{F}; L_a, L_0 = 9.4 \text{ mH}$
 Class I & II, Division 1, Groups C & E
- $C_a, C_0 = 12 \mu\text{F}; L_a, L_0 = 35 \text{ mH}$
 Class I, II, III Division 1, Groups D, F & G
- $C_a, C_0 = 32 \mu\text{F}; L_a, L_0 = 70 \text{ mH}$
 Class I, Zone 0, IIA

Temp-Measuring Loop

Entity Parameters:

- Terminals 7 and 8
- $V_{oc}, U_0 = 5 \text{ V}; I_{sc}, I_0 = 3 \text{ mA}; P_{max}, P_0 = 4 \text{ mW}$
 Class I, Division 1, Groups A & B
- $C_a, C_0 = 2000 \mu\text{F}; L_a, L_0 = 1 \text{ H}$
 Class I & II, Division 1, Groups C & E
- $C_a, C_0 = 6000 \mu\text{F}; L_a, L_0 = 1 \text{ H}$
 Class I, II, III Division 1, Groups D, F & G
- $C_a, C_0 = 16000 \mu\text{F}; L_a, L_0 = 1 \text{ H}$
 Class I, Zone 0, IIA

SI 792X T

Entity Parameters:

- Terminals 1, 2, 3, 4, 5, 6, 7 and 8
- $V_f, U_0 = 8 \text{ V}; I_f, I_0 = 102.5 \text{ mA}; P_f, P_0 = 129 \text{ mW}$
 Class I, Division 1, Groups A & B
- $C_a, C_0 = 8.4 \mu\text{F}; L_a, L_0 = 4 \text{ mH}$
 Class I & II, Division 1, Group C
- $C_a, C_0 = 100 \mu\text{F}; L_a, L_0 = 17 \text{ mH}$
 Class I, II, III Division 1, Group D
- $C_a, C_0 = 1000 \mu\text{F}; L_a, L_0 = 32 \text{ mH}$
 Class I, Zone 0, IIA

Conductivity-Measuring Loop

Entity Parameters:

- Terminals 1, 2, 3, 4, 5 and 6
- $V_f, U_0 = 8 \text{ V}; I_f, I_0 = 99 \text{ mA}; P_{max}, P_0 = 124 \text{ mW}$
 Class I, Division 1, Groups A & B
- $C_a, C_0 = 8.4 \mu\text{F}; L_a, L_0 = 4 \text{ mH}$
 Class I & II, Division 1, Groups C & E
- $C_a, C_0 = 100 \mu\text{F}; L_a, L_0 = 17 \text{ mH}$
 Class I, II, III Division 1, Groups D, F & G
- $C_a, C_0 = 1000 \mu\text{F}; L_a, L_0 = 32 \text{ mH}$
 Class I, Zone 0, IIA

Temp-Measuring Loop

Entity Parameters:

- Terminals 7 and 8
- $V_{oc}, U_0 = 5 \text{ V}; I_{sc}, I_0 = 3.5 \text{ mA}; P_{max}, P_0 = 5 \text{ mW}$
 Class I, Division 1, Groups A & B
- $C_a, C_0 = 100 \mu\text{F}; L_a, L_0 = 1 \text{ H}$
 Class I & II, Division 1, Groups C & E
- $C_a, C_0 = 1000 \mu\text{F}; L_a, L_0 = 1 \text{ H}$
 Class I, II, III Division 1, Groups D, F & G
- $C_a, C_0 = 1000 \mu\text{F}; L_a, L_0 = 1 \text{ H}$
 Class I, Zone 0, IIA

NOTES:

- $V_{max}, U_i > V_{oc}, V_f, \text{ or } U_0$
 $I_{max}, I_i > I_{sc}, I_f, \text{ or } I_0$
 $C_i + C \text{ cable} < C_a \text{ or } C_0$
 $L_i + L \text{ cable} < L_a \text{ or } L_0$
 $P_{max} > P_0$
- Installation must be in accordance with the National Electrical Code
- Associated apparatus must be FM Approved and must be used in an FM Approved configuration. Use of the Rosemount Model 275 Communicator in Zones is not an FM Approved configuration. The control drawing for the associated apparatus must be followed when installing this equipment.
- Control equipment connected to the associated apparatus must not use or generate more than 250 V.
- The intrinsically safe equipment connecting to 1, 2, 3, 4, 5, 6 and 7, 8 must be FM Approved or be simple apparatus (a device which will neither generate nor store more than 1.2 V, 0.1 A, 25 mW or 20 mJ).
- No revisions to drawing without prior FM Approval.
- Use of the Rosemount Model 275 Communicator is FM Approved for Division use only, see note 3. When using the Rosemount Model 275 Communicator in the loop between the associated apparatus and the SI 792X E, SI 792X T resp. 2-Wire Transmitter, the maximum loop inductance must be less than the marked L_a or the associated apparatus to account for the Isc from the Model 275 Communicator. Refer to the Rosemount Installation Drawing 00275-0081 to determine the allowable loop inductance.
- Transmitter SI 792X E, for use with sensors 3705E2T, 3706E2T, 3708E2T, 3725E2T, 3726E2T, 3727E2T, 3728E2T
 Transmitter SI 792X T, for use with sensor SIPAN IND Ex Model 7MAZ200-8E*
- The Sensors should only be used in solutions with a conductivity $> 1 \text{ ns/cm}$

HACH

Verfeiler: FUL (Zr)	Zul. Abweichungen für Maße ohne Toleranzangabe	Oberfläche		Mei\stab Halbzeig
		ISO 2768 - m	Name	
	Bearb.	05.12.06	d(00)	
	Gepr.(KON)			
	Freigebe(FGL)			
	Schwermetalle nach ISO 1006 beachten			
	Zeichnungsnummer			
	control drawing FM			
	SI 792X E, SI 792X T			
	194.320-230			
Nr. AE	Datum	Beibehält/FGL KON		Ersetzt durch: