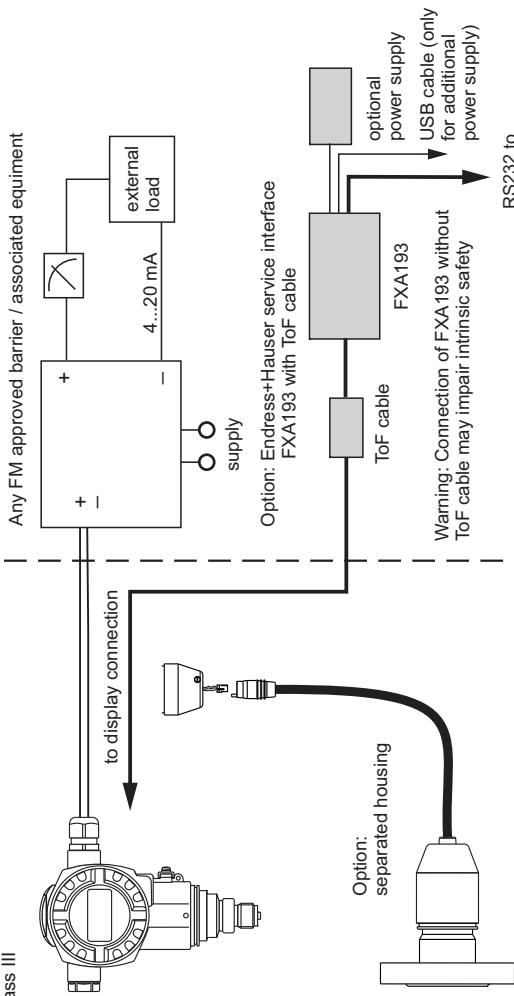


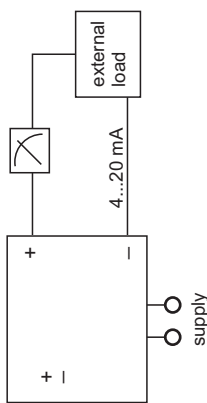
### Hazardous location

Class I, Div. 1, 2, Groups A, B, C, D  
 Class I, Zone 0, IIC  
 Class II, Div. 1, 2, Groups E, F, G  
 Class III

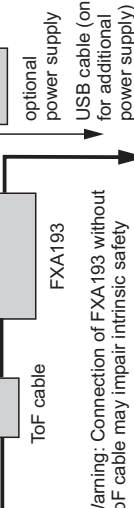


### Non-hazardous location

Any FM approved barrier / associated equipment



Option: Endress+Hauser service interface  
 FXA193 with ToF cable



Warning: Connection of FXA193 without  
 ToF cable may impair intrinsic safety

RS232 to  
 PC-connection

Table: Permissible ambient temperature and temperature code:

Temperature code	Permissible ambient temperature, electronic compartment
T6	-40°C...+40°C
T4	-40°C...+70°C

option for Ta min: -50°C

### Functional ratings:

These ratings do not supersede  
 Hazardous Location values  
 $I_{nom} \leq 45$  VDC  
 $I_{nom} = 4...20$  mA (max. 25 mA)

The devices are FM certified as Single Seal or Dual Seal per ANSI/ISA 12.27.01 as tabulated below; therefore installation of external secondary seals is not required.

Dual Seal	Model	Media	Annunciation in case of primary seal failure	
			Annunciation method	Pressure range for effective annunciation min MWP*
Single Seal	PMP71, PMP75, PMC71 (without separate housing; pressure range < 200 bar (2900 psi))	gas	audible	PMP: 200 bar (2900 psi) PMC: 60 bar ( 870 psi)
		liquid	audible/visible	1.0 bar (14.5 psi)
Single Seal	PMP71, PMP75 (with separate housing) PMC71 (with separate housing)	Limited to		
		MWP*	Process temperature**	
		400 bar (5800 psi)	-40°C...+100°C	
Single Seal	PMP71, PMP75 (with separate housing) PMC71 (with separate housing)	Process temperature**		
		400 bar (5800 psi)	-40°C...+100°C	

\* Limitations of the Maximum Working Pressure (MWP) are marked on the nameplate and must be considered!

\*\* Limitations of the process temperature range depending on the used version are specified in the applicable technical information of the manufacturer and must be considered! PMP75 allows higher process temperatures depending on the used diaphragm seal. This is allowable provided the above specified process temperatures are guaranteed at the sensor close to the enclosure (location of primary seal) for these types.

### Intrinsically safe installation

Intrinsically safe (entity), Class I, II, III, Div. 1, Group A, B, C, D, E, F, G  
 Hazardous Location Installations

- Control room equipment may not use or generate over 250 V.
- Use Factory Mutual Entity-approved intrinsic safety barrier with  $V_{oc}$  or  $V_i \leq V_{max}$ ,  $I_{sc}$  or  $I_i \leq I_{max}$ ,  $C_a \geq C_i + C_{cable}$ ,  $L_a \geq L_i + L_{cable}$ .  
 Barrier must be incapable of delivering more than 1 Watt to a matched load.  
 Transmitter entity parameters are as follows:  $V_{max} = 30$  VDC  
 $I_{max} = 200$  mA  
 $C_i \leq 11.8$  nF  
 $L_i \leq 225$   $\mu$ H ('electronic' option code A, B, C)  
 or  $L_i = 0$  ('electronic' option code D, E, F)  
 For T-code = see table

3. Installation should be in accordance with ANSI/ISA RP-12.06.01, "Installation of intrinsically safe systems for hazardous (classified) locations and the National Electrical Code (ANSI/NFPA 70).

- Warning: Substitution of Components may impair intrinsic safety.
- Intrinsic safety barrier manufacturer's installation drawing must be followed, when installing this equipment: The configuration of the intrinsic safety barrier(s) must be FMRC approved.
- Use supply wires suitable for 5°C above surrounding ambient.
- Avoid electrostatic charging of plastic surfaces, plastic process connections or coatings.

### Division 2 and Zone 2 installation

Nonincendive Class I, Div. 2, Group A, B, C, D  
 Hazardous Location Installation (not for separate housing)

- Installation shall be in accordance with NEC using threaded conduits or other wiring methods in accordance with articles 500 to 510.  
 Intrinsic safety barrier not required  
 Max. supply voltage 45 VDC  
 For T-code see table

9. Warning: Explosion hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.

10. Nonincendive field wiring installation  
 The Nonincendive Field Wiring Circuit Concept allows interconnection of nonincendive field wiring apparatus with associated nonincendive field wiring apparatus or associated apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when  $V_{max} \geq V_{oc}$  or  $V_i$ ,  $C_a \geq C_i + C_{cable}$ ,  $L_a \geq L_i + L_{cable}$ .

Transmitter parameters are as follows:  $V_{max} = 45$  VDC;  $C_i \leq 11.8$  nF;  
 $L_i \leq 225$   $\mu$ H ('electronic' option code A, B, C) or  $L_i = 0$  ('electronic' option code D, E, F)  
 $I_{max} =$  see note 11.

11. For these current controlled circuit, the parameter  $I_{max}$  is not required and need not to be aligned with parameter  $I_{sc}$  and it of the associated nonincendive field wiring apparatus or associated apparatus.

### Class II, III installation

DIP for Class II and III, Div. 1, Group E, F, G  
 Hazardous Location Installation (not for separate housing)

- Installation of transmitter wiring according to NEC using threaded conduits or other wiring methods in accordance with articles 500 to 510.
- Use a dust tight seal at the conduit entry.

