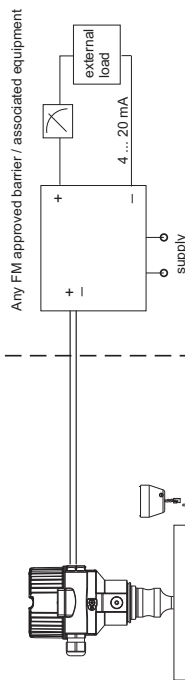


**Non hazardous location**

Hazardous location  
Class I, Div. 1, 2, Groups A, B, C, D  
Class I, Zone 0, IIC  
AEx ia IIC T6  
Class II, Div. 1, 2, Groups E, F, G  
Class III



Option:  
separate housing

Entity parameter:  
Vmax = 30 VDC  
Imax = 300 mA  
Pmax = 1 W  
Ci ≤ 10 nF  
Li = 0

Areas of application:  
The compact instruments are suitable for use in areas subject to explosion caused by gases, vapours or mists.

Table: Permissible ambient temperature and temperature code:

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

option for Ta min: -50 °C

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

Single Seal	Model	Limited to:
		MWPP*
	LHC-M51	400 (5800 psi)
	PPC-M51	40 (580 psi)
		Process Temperature**
		-40°C...+100°C
		-40°C...+125°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!

**Intrinsically safe installation**  
intrinsically safe (entity), Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G  
Hazardous Location Installation

- Control room equipment may not use or generate over 250 V.
- Use Factory Mutual Entity-approved intrinsic safety barrier with Voc or Vi ≤ Vmax, Isc or Ii ≤ Imax, Ca ≥ Ci + Ccable, La ≥ Li + Lcable.  
Barrier must be incapable of delivering more than 1 Watt to a matched load.  
Transmitter entity parameters are as follows: Vmax = 30 VDC  
I max = 300 mA  
Ci ≤ 10 nF  
Li = 0  
For T-code see table
- 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.

**Division 2 and Zone 2 Installation**

- Nonincendive Class I, Div. 2, Groups A, B, C, D  
Hazardous Location Installation (not for separated 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  
Max. ambient temperature: 70°C
  - Warning: Explosion Hazard. Do not disconnect equipment unless power has been switched off for the time known to be non hazardous.  
Warning: Substitution of Components may impair suitability for Class I, Div. 2.

9. 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 Vmax ≥ Voc or Vi, Ca ≥ Ci + Ccable, La ≥ Li + Lcable.  
Transmitter parameters are as follows: Vmax = 45 VDC; Ci ≤ 10 nF; Li = 0;  
I max = see note 10  
Max. ambient temperature: 70°C

10. For these current controlled circuit, the parameter Imax is not required and need not to be aligned with parameter Isc and it of the associated nonincendive field wiring apparatus or associated apparatus.

**Class II, III Installation**

DIP for Class II, III, Div. 1, Groups E, F, G  
Hazardous Location Installation (not for separated housing, not for PPC-M51 with flushmounted process connections)

- 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.

**Functional ratings:**

These ratings do not supersede Hazardous Location values.  
Unom ≤ 45 VDC  
Inom = 4...20 mA (max. 25 mA)

FM Control Drawing no. 116-0389

Dieses Dokument enthält sicherheitsrelevante Angaben. Es darf nicht ohne Absprache mit dem Normenfachmann (NE Ex) geändert werden!  
This document contains safety-relevant information. It must not be altered without the authorization of the norm expert (NE Ex)!

CONFIDENTIAL acc. to ISO 16016 Only valid as long as released in EDM or with a valid production documentation! date: 2014 March 04

**PF** PEPPERL+FUCHS Control Drawing - FM  
P+F Global PPC-M51, LHC-M51 4...20mA HART

16-990FM-12A sheet: 1 of 4

116-0389

LHC-M51, PPC-M51 4 ... 20 mA HART  
FM control drawing



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