


## 2. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 2069 X

(Translation)

Equipment: Level transmitter, types M... or MC420...

Marking:  II 1/2 G or II 2 G EEx ia IIB T4 or EEx ia IIA T4

Manufacturer: MTS Sensor Technologie GmbH & Co.KG

Address: Auf dem Schüffel 9  
58513 Lüdenscheid  
Germany

### Description of supplements and modifications

The level transmitter of type M... or MC420... may also be operated in the hazardous area according to the test documents listed in section 3 of the test report.

The modifications concern the mechanical construction as well as the "Electrical data".

All other data remain without changes.

For assignment between maximum permissible ambient temperature and supplied power reference is made to the table below.

### Electrical data

Supply and data circuits (Loop 1 and 2)	type of protection Intrinsic Safety	EEx ia IIB or EEx ia IIA EEx ib IIB or EEx ib IIA
	Only for connection to certified intrinsically safe circuits .	

Maximum values per circuit:

$U_i = 28 \text{ V}$   
 $I_i = 118 \text{ mA}$   
 $C_i$  negligibly low  
 $L_i = 0.2 \text{ mH}$

power $P_i$	ambient temperature at the electronics
1.3 W	- 20 ... +40 °C
1.2 W	- 20 ... +60 °C
1.0 W	- 20 ... +80 °C

For applications requiring category-1 apparatus, the medium process pressure and the medium temperature shall range from 0.8 to 1.1 bar or -20 to +60 °C, respectively. If the actual conditions at the measuring sensor deviate from the above conditions, it shall be taken into consideration that the measuring sensor shows no self-heating (not even in case of a failure) and that the owner is responsible for safe operation of the system as regards the pressure/temperature conditions of the media used. The manufacturer's specifications shall be considered in the process.

All other data remain without changes.

### Special conditions

1. Since the supply and data circuits of the level transmitters are earthed under field conditions, equipotential bonding shall be provided along the supply and data circuit cable runs, both within and outside the hazardous area. The housing of the level transmitter series of type M... or MC420... shall be included in the equipotential bonding system.
2. When equipped with plastic floats, the level transmitters may only be used in hazardous areas requiring category-1 apparatus of equipment group IIA.

Test report: PTB Ex 03-23075

Zertifizierungsstelle Explosionsschutz

By order:

Dr.-Ing. U. Johannsmeyer  
Regierungsdirektor



Braunschweig, January 20, 2004