



FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

Rotronic AG Grindelstr. 6, 8303 Bassersdorf, Switzerland

HygroClip Ia-EX. Measuring Transducer.

IS / I, II, III / 1 / ABCDEFG / T6 – 12.0724.0001; IP66

a = C (2m Cable Sensor), D (200...1000 mm sensor tube), E (screw-in sensor with ½ " NPT or gas thread and sensor tube of max. 1000 mm) or W (150 mm room sensor).

Equipment Ratings:

Intrinsically Safe for use in Class I, II, III, Division 1, Groups A, B, C, D, E, F, and G; Temperature Code T6
Tambient = 40°C; IP 66 Hazardous (Classified) Locations.

Approved for:

Rotronic AG
Bassersdorf, Switzerland



This certifies that the equipment described has been found to comply with the following FM Approval Standards and other documents:

Class 3600	1998
Class 3610	1999
Class 3810	1989
Supplement # 1	1995

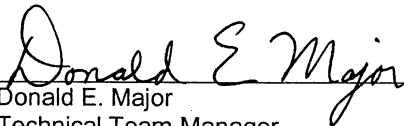
Original Project ID: 3015571

FM Approval Granted: November 26, 2003

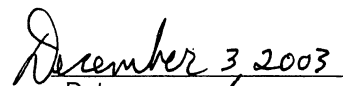
Subsequent Revision Reports / Date FM Approval Amended

Report Number	Date	Report Number	Date
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FM Global Technologies LLC



Donald E. Major
Technical Team Manager



Date

An  Enterprise

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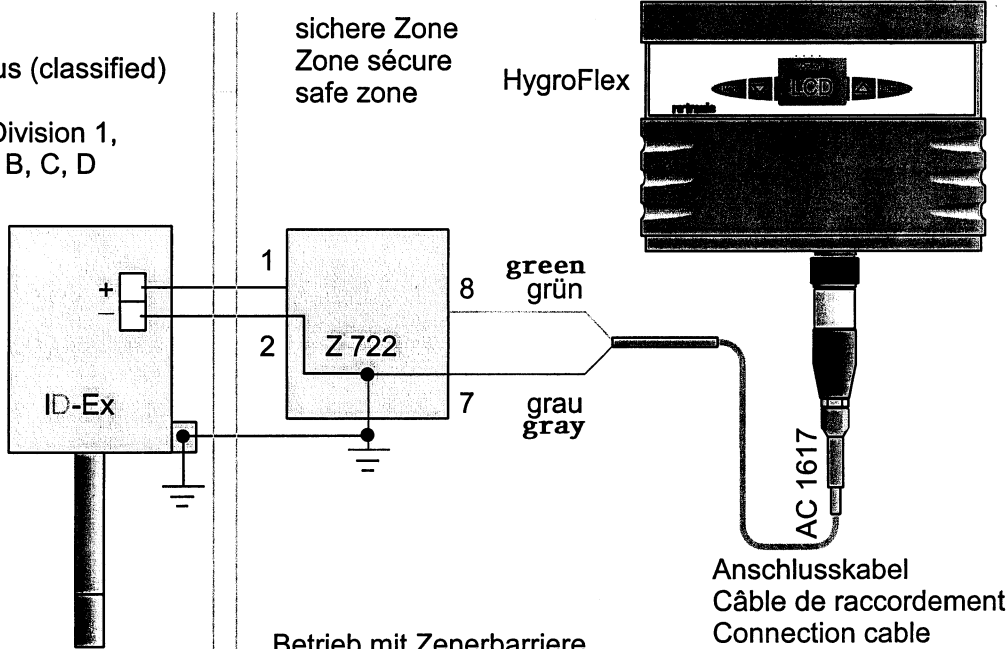


Re

Ex-Zone
Hazardous (classified)
Location
Class I, Division 1,
Group A, B, C, D

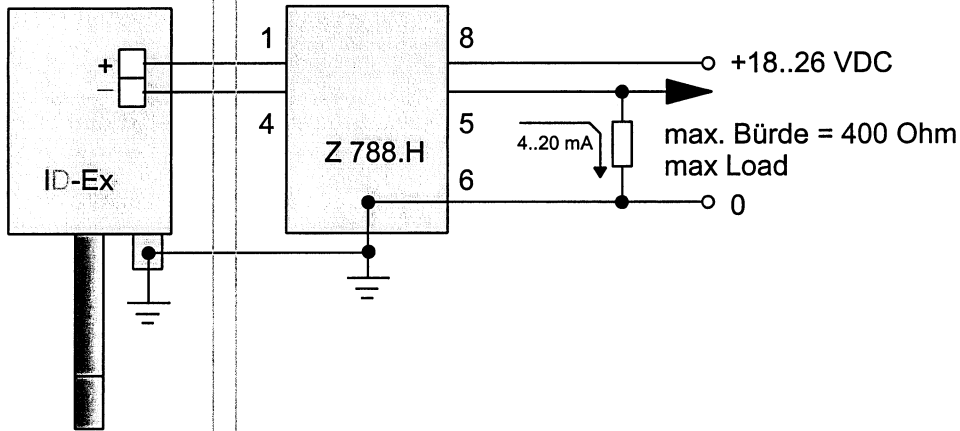
sichere Zone
Zone sécurée
safe zone

HygroFlex



x
x
x
x

Betrieb mit Zenerbarriere,
Operation avec barrière Zener,
operation with Zener barrier.
"Pepperl + Fuchs Typ Z 722"
Class I, Division 1, Groups A,B,C and D



Entry Parameters
Ui = 28V, li = 195mA,
Pi = 830mW,
Ci = 11nF, Li = 0

Betrieb mit Zenerbarriere,
Operation avec barrière Zener,
operation with Zener barrier.
"Pepperl + Fuchs Typ Z 788.H"
Class I, Division 1, Groups A,B,C and D

x
x
x
x

Verwendung in : HygroclipEX

Revisions-Stand : Version : 7 Datum : 19.11.03 Ersteller : P.Sax Freigabe : 19.11.03 Löw
Dok.Verz. : p:\mp\canvas Ungültig, Datum : Visum : auf Server :

Re

Bemerkungen:

- Beachten Sie die Installationsvorschriften EN 60079-14 und EN 50281-1-2 .
- Der Erdungswiderstand zwischen Zenerbarriere und Erdungselektrode darf 1Ω (Ohm) nicht übersteigen.
- Die maximale Betriebsspannung der angeschlossenen Geräte im Nicht Ex-Bereich darf 250 V nicht überschreiten.
- Max. Kabellänge zwischen eigensicherem Messumformer und Hygroflex = 200m.

x

Remarque:

- Respectez les prescriptions d'installations EN 60079-14 et EN 50281-1-2.
- La résistance entre la barrière Zener et l'électrode de terre ne doit pas excéder 1Ω (Ohm).
- La tension maximale des instruments branchées dans la zone non-Ex ne doit pas excéder 250V.
- Longueur max. entre le transmetteur intrinsèque et l'exploitation du signal = 200m.

x

Note:

- Respect the installation-regulation of the National Electrical Code (ANSI / NFPA 70).
- The grounding resistance between Zener barrier and grounding electrode must not exceed 1Ω (Ohm).
- The maximum line-tension of the instruments in the non-Ex zone must not exceed 250V.
- Installation should be in accordance with ANSI / ISA RPR.06.01 .
 "Installation of Intrinsically safe system" , for Hazardous (Classified) Location and the National Electrical Code.
- Max. cable length between intrinsically safe transmitter and signal working up = 200m.

x

x

x

x

x

x

Konfiguration des Ausgangssignals
 Configuration de la sortie
 Output configuration

Funktion
 Fonction
 Function

Digital

- DIO (%rh + °C)

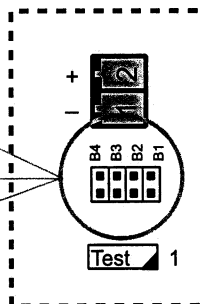


Analog

- %rh



- °C



Verwendung in : HygroclipEX			
Revisions-Stand : Version : 7	Datum : 19.11.03	Ersteller : P.Sax	Freigabe : 19.11.03 Löw
Dok.Verz. : p:\mp\canvas	Ungültig, Datum :	Visum :	auf Server :

TYPENSCHILDER HYGROCLIP Ex

PTB

FM Global



II 2G EEx ia IIC T6

0102 II 1G EEx ia IIC T5

Nr. PTB 01 ATEX 2180

 FM APPROVED Class I, Division I, Groups A,B,C,D	Entry Parameters
	Ui = 28V
	Ii = 195mA
	Pi = 830mW
	Ci = 11nF
Li = 0	
T6 - In accordance with installation drawing 12.0724.0001	

ROTRONIC AG

HYGROCLIP IC-1-EX

rotronic ag www.rotronic.com	ART NO HYGROCLIP IC-1-EX	 CH-8303 Bassersdorf
	POWER: 10-28VDC	
	OUT: 4-20mA	
	Baujahr: 2003	
	SERIE NO 26581 001	

HYGROCLIP ID-EX

rotronic ag www.rotronic.com	ART NO HYGROCLIP ID-EX	 CH-8303 Bassersdorf
	POWER: 10-28VDC	
	OUT: 4-20mA / DIO 4-10mA	
	Baujahr: 2002	
	SERIE NO 25747 001	

HYGROCLIP IE-1-EX

rotronic ag www.rotronic.com	ART NO HYGROCLIP IE-1-EX	 CH-8303 Bassersdorf
	POWER: 10-28VDC	
	OUT: 4-20mA	
	Baujahr: 2002	
	SERIE NO 26746 001	

HYGROCLIP IW-EX

rotronic ag www.rotronic.com	ART NO HYGROCLIP IW-EX	 CH-8303 Bassersdorf
	POWER: 10-28VDC	
	OUT: 4-20mA / DIO 4-10mA	
	Baujahr: 2002	
	SERIE NO 25770 001	

ROSE Edelstahlgehäuse

II 2G/2D EEx ia IIC T6		
Dat.: 03.06.03	PTB 00ATEX1052	
Typ: 30 151000		
Proc. No.: 0096091		
T 85° C	IP 66	

Verwendung in :	HYGROCLIP Ex		
Revisions-Stand :	Version :2	Datum :25.08.03	Ersteller :JW Freigabe :25.08.03 LÖ
Dok.Verz. : k:\mre\canvas	Ungültig, Datum :	Visum :	auf Server :