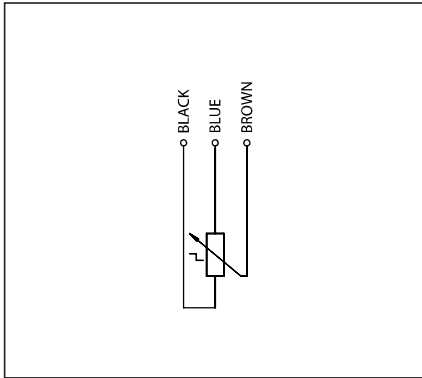
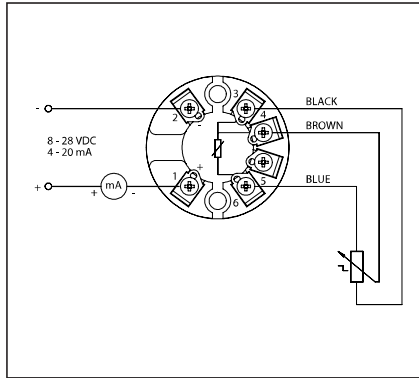


Bypass Level Indicator / Level transmitter

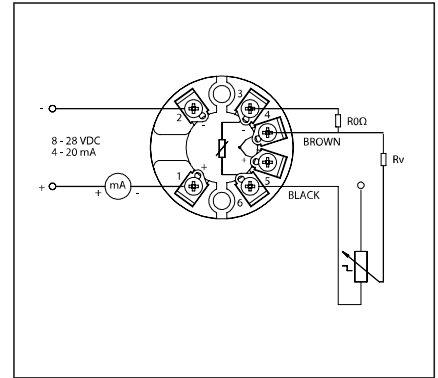
Connection diagram



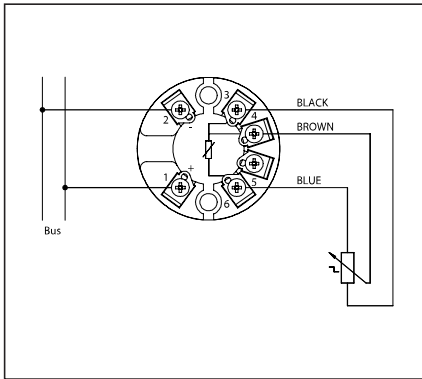
without Control unit



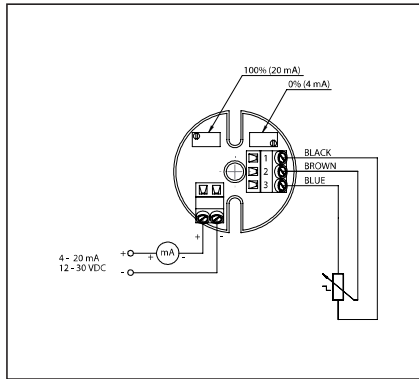
Control unit TP5343..



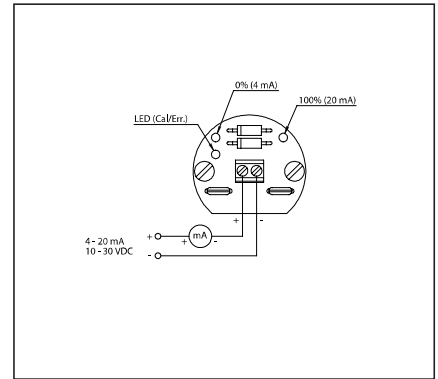
Control unit TD5335..



Control unit TP5350..



Control unit XT42SI Ex



Control unit magnetostrictive

Some further data according to chapter Control Units 1011

Approvals / Certificates



ATEX-Approval for accuracy K5.. / K10.. / K15..*

- | | | |
|-----------------------------------|-------------------------------------------------------|------------------------------------------------------|
| II 1/2G Ex c ia IIC T6 - T3 Ga/Gb | II 2G Ex c d IIC T6 - T4 Gb | II 2G Ex c d IIC T6 - T4 Gb |
| II 1/2G Ex c da IIC T6 - T4 Ga/Gb | II 2D Ex c tb IIIC T80°C - T190°C bzw. T125°C Db IP6X | II 2D Ex c tb IIIC T80°C - T95°C bzw. T125°C Db IP6X |

Type of protection intrinsic safety Ex ia IIC passive multi-pole device	$U_i \leq 30 \text{ V}$	$I_i \leq 150 \text{ mA}$
Type of protection intrinsic safety Ex ia IIC with built-in separately certified measuring transducer		see appropriate special certificate
Type of protection intrinsic safety Ex ia IIC switch or temperature switch	$I_i \leq 100 \text{ mA}$	
Type of protection intrinsic safety Ex ia IIC temperature sensor	$U_N \leq 28 \text{ V}$	$I_i \leq 100 \text{ mA}$ $P_i \leq 700 \text{ mW}$
Type of protection "flameproof enclosure" passive multi-pole device	$U_N \leq 30 \text{ VDC/AC}$	$I_N \leq 150 \text{ mA}$
Type of protection "flameproof enclosure" temperature switch / sensor	$U_N \leq 100 \text{ VDC/AC}$	$I_N \leq 300 \text{ mA}$ $P_{SN} \leq 1 \text{ W}$ $P_{FN} \leq 700 \text{ mW}$

ATEX-Approval for accuracy K1..*

II 2G Ex ia IIB/IIC T6 - T1 Gb	II 2G Ex d IIC T4		
Type of protection intrinsic safety Ex ia IIC	$U_i \leq 30 \text{ V}$	$I_i \leq 200 \text{ mA}$	$P_i \leq 1000 \text{ mW}$
Temperature class	T6	T5	T4 - T2
Ambient temperature(T_a)	-40°C ... 40°C	-40°C ... 55°C	-40°C ... 85°C

The bypass level indicator are based on a modular design and can be arranged individually.

Type key page 236 - 241

* = The approval is dependent on the equipment combination

Type ALF/..N/../-M..

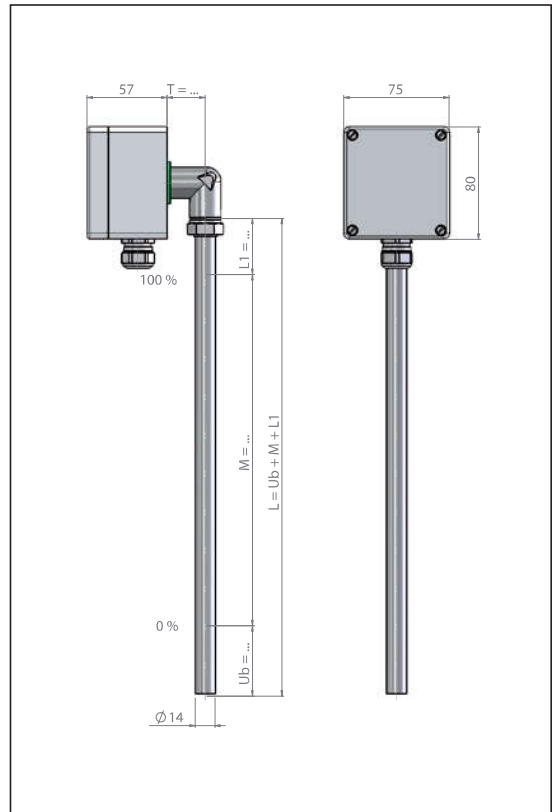
Electrical connection:	Aluminium anodized
Cable entry:	M20 x 1,5
Ingress protection class:	IP 65
Ambient temperature:	-40°C ... 100°C
Level transmitter tube material quality:	Stainless steel
Mounting:	T-shaped sliding block or tension strap
Minimum measures (Liquid ≤ 200°C):	T: 27 mm / L1: 40 mm / Ub: 50 mm
Minimum measures (Liquid > 200°C):	T: 100 mm / L1: 40 mm / Ub: 50 mm

Accuracy	
Accuracy:	5 / 10 / 15 mm
Ambient temperature / ATEX Exia:	
- K5 / K10 / K15:	-30°C ... 130°C
- K5HTF / K10HTF / K15HTF:	-40°C ... 200°C / -40°C ... 180°C
- K5HT / K10HT / K15HT:	-40°C ... 250°C / -40°C ... 180°C

Option control unit / Page 276	
Control unit:	<ul style="list-style-type: none"> - Programmable - Hart-programmable / SIL2 - Profibus PA - Foundation Fieldbus

Approvals / Certificates

ABS / ATEX / BV / EAC / GL / LR



Type ALDA/..N/../EXDG-M..

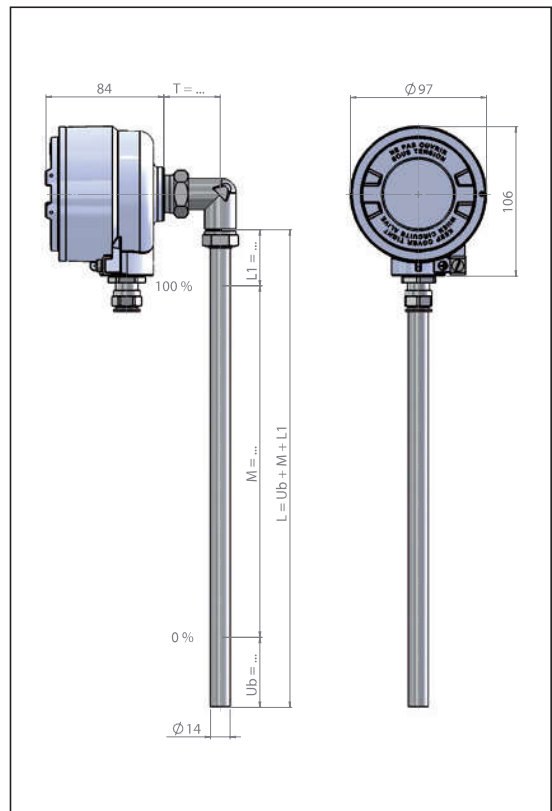
Electrical connection:	Aluminium coated RAL 9006
Cable entry:	M20 x 1,5
Ingress protection class:	IP 68
Ambient temperature:	-40°C ... 100°C
Level transmitter tube material quality:	Stainless steel
Mounting:	T-shaped sliding block or tension strap
Minimum measures (Liquid ≤ 200°C):	T: 50 mm / L1: 40 mm / Ub: 50 mm
Minimum measures (Liquid > 200°C):	T: 100 mm / L1: 40 mm / Ub: 50 mm

Accuracy	
Accuracy:	5 / 10 / 15 mm
Ambient temperature	
- K5 / K10 / K15:	-30°C ... 120°C
- K5HTF / K10HTF / K15HTF:	-40°C ... 120°C
- K5HT / K10HT / K15HT:	-40°C ... 120°C

Option control unit / Page 276	
Control unit:	<ul style="list-style-type: none"> - Programmable - Hart-programmable / SIL2 - Profibus PA - Foundation Fieldbus

Approvals / Certificates

ABS / ATEX / BV / EAC / GL / LR



The bypass level indicator are based on a modular design and can be arranged individually.
Type key page 236 - 241

Bypass Level Indicator / Level transmitter

Type

DAALA/..V/..-M..

Electrical connection:	Aluminium anodized
Cable entry:	M20 x 1.5
Ingress protection class:	IP 65
Ambient temperature:	-40°C ... 60°C
Display:	4-digit LED display in red / Free scaling
Current input:	4 ... 20 mA
Level transmitter tube material quality:	Stainless steel
Mounting:	T-shaped sliding block or tension strap
Minimum measures (Liquid ≤ 200°C):	T: 50 mm / L1: 40 mm / Ub: 50 mm
Minimum measures (Liquid > 200°C):	T: 100 mm / L1: 40 mm / Ub: 50 mm

Accuracy:	5 / 10 / 15 mm
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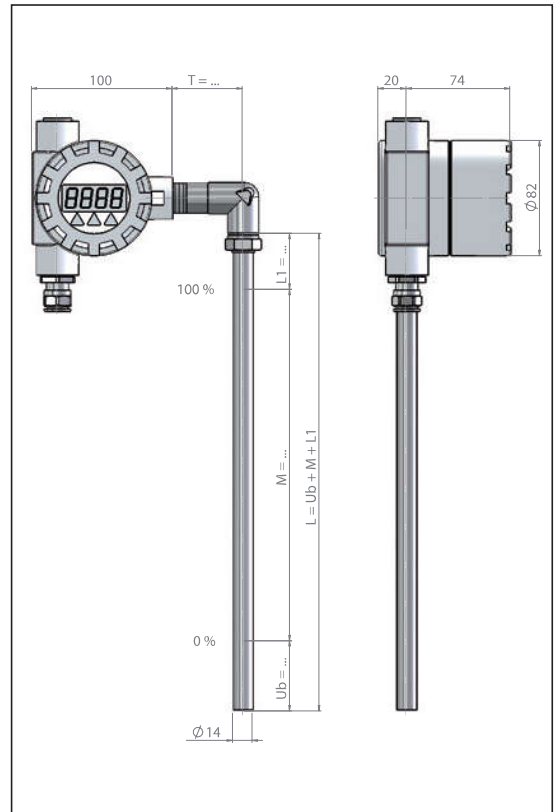
Ambient temperature	
- K5 / K10 / K15:	-30°C ... 130°C
- K5HTF / K10HTF / K15HTF:	-40°C ... 200°C
- K5HT / K10HT / K15HT:	-40°C ... 250°C

Option control unit / Page 276

Control unit:	<ul style="list-style-type: none"> - Programmable - Hart-programmable / SIL2 - Profibus PA - Foundation Fieldbus
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Approvals / Certificates

EAC



Type

DAAVDA/..V/../EXDG-M..

Electrical connection:	Stainless steel electropolished
Cable entry:	M20 x 1,5
Ingress protection class:	IP 68
Ambient temperature:	-40°C ... 60°C
Display:	4-digit LED display in red / Free scaling
Current input:	4 ... 20 mA
Level transmitter tube material quality:	Stainless steel
Mounting:	T-shaped sliding block or tension strap
Minimum measures (Liquid ≤ 200°C):	T: 50 mm / L1: 40 mm / Ub: 50 mm
Minimum measures (Liquid > 200°C):	T: 100 mm / L1: 40 mm / Ub: 50 mm

Accuracy:	5 / 10 / 15 mm
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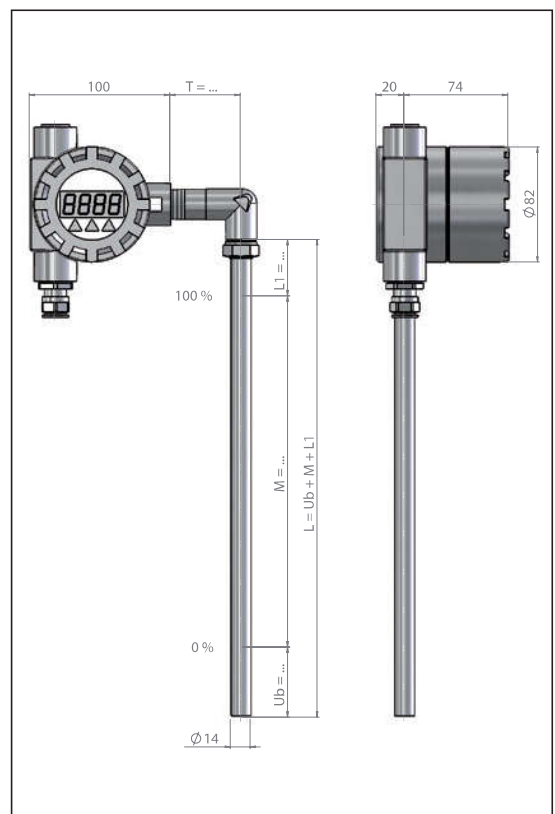
Ambient temperature	
- K5 / K10 / K15:	-30°C ... 130°C (Exd 120°C)
- K5HTF / K10HTF / K15HTF:	-40°C ... 180°C (Exd 120°C)
- K5HT / K10HT / K15HT:	-40°C ... 180°C (Exd 120°C)

Option control unit / Page 276

Control unit:	<ul style="list-style-type: none"> - Programmable - Hart-programmable / SIL2 - Profibus PA - Foundation Fieldbus
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Approvals / Certificates

ATEX / EAC



The bypass level indicator are based on a modular design and can be arranged individually.

Type key page 236 - 241

Type **AVA/..V/..-M..**

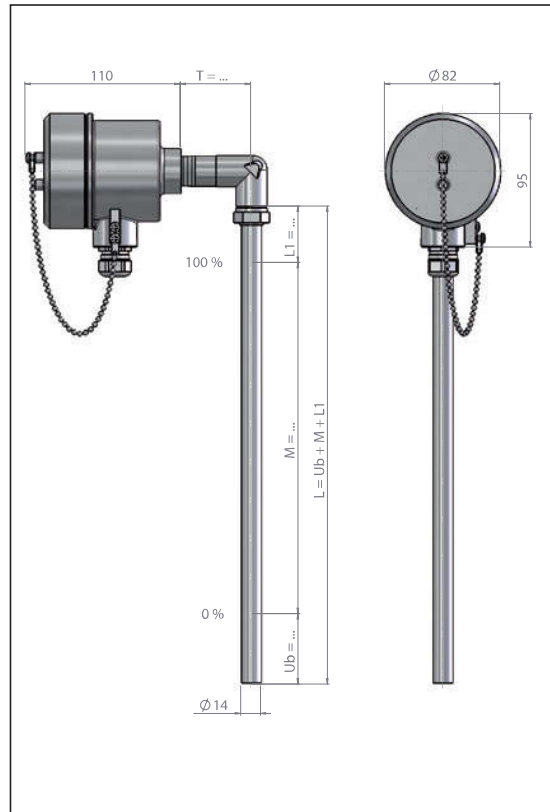
Electrical connection:	Stainless steel A4 (SS316)
Cable entry:	M20 x 1.5
Ingress protection class:	IP 67
Ambient temperature:	-40°C ... 85°C
Level transmitter tube material quality:	Stainless steel
Mounting:	T-shaped sliding block or tension strap
Minimum measures (Liquid ≤ 200°C):	T: 50 mm / L1: 40 mm / Ub: 50 mm
Minimum measures (Liquid > 200°C):	T: 100 mm / L1: 40 mm / Ub: 50 mm

Accuracy	
Accuracy:	5 / 10 / 15 mm
Ambient temperature / ATEX Exia:	
- K5 / K10 / K15:	-30°C ... 130°C
- K5HTF / K10HTF / K15HTF:	-40°C ... 200°C / -40°C ... 180°C
- K5HT / K10HT / K15HT:	-40°C ... 250°C / -40°C ... 180°C

Option control unit / Page 276	
Control unit:	<ul style="list-style-type: none"> - Programmable - Hart-programmable / SIL2 - Profibus PA - Foundation Fieldbus

Approvals / Certificates

ABS / ATEX / BV / EAC / GL / LR



Type **AVM/..V/..-M..**

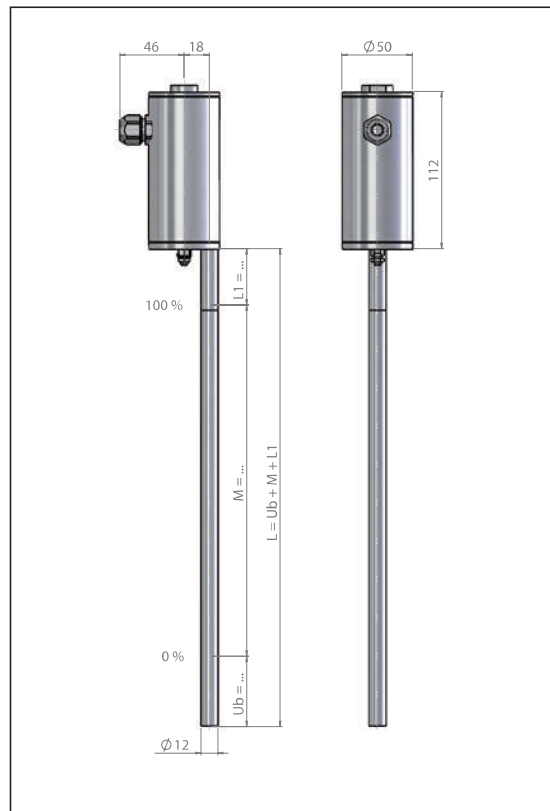
Electrical connection:	Stainless steel A4 (SS316)
Cable entry:	M16 x 1.5
Ingress protection class:	IP 68
Ambient temperature:	-40°C ... 85°C / ATEX temperature p. 276
Level transmitter tube material quality:	Stainless steel
Mounting:	T-shaped sliding block or tension strap
Minimum measures:	L1: 40 mm / Ub: 50 mm

Accuracy	
Accuracy:	0,2 mm
Ambient temperature / ATEX Exia:	
- K1:	-40 ... 125°C / ATEX temperature p. 276
- K1HT:	-40 ... 250°C / ATEX temperature p. 276
- K1HHT:	-40 ... 450°C / ATEX temperature p. 276

Control unit	
- MST / MSTB:	<ul style="list-style-type: none"> - Programmable 4 ... 20 mA, 10 ... 30 VDC
- MSTH / MSTHB:	<ul style="list-style-type: none"> - Hart-programmable 4 ... 20 mA, 10 ... 30 VDC

Approvals / Certificates

ATEX / EAC / IECEX / SIL2



The bypass level indicator are based on a modular design and can be arranged individually.

Type key page 236 - 241

Bypass Level Indicator / Level transmitter

Type

AVDM/..V/../EXDG-M..

Electrical connection:	Stainless steel A4 (SS316)
Cable entry:	M20 x 1,5
Ingress protection class:	IP 68
Ambient temperature:	ATEX temperature page 276
Level transmitter tube material quality:	Stainless steel
Mounting:	T-shaped sliding block or tension strap
Minimum measures:	L1: 40 mm / Ub: 50 mm

Accuracy

Accuracy: 0,2 mm

Ambient temperature
- K1:

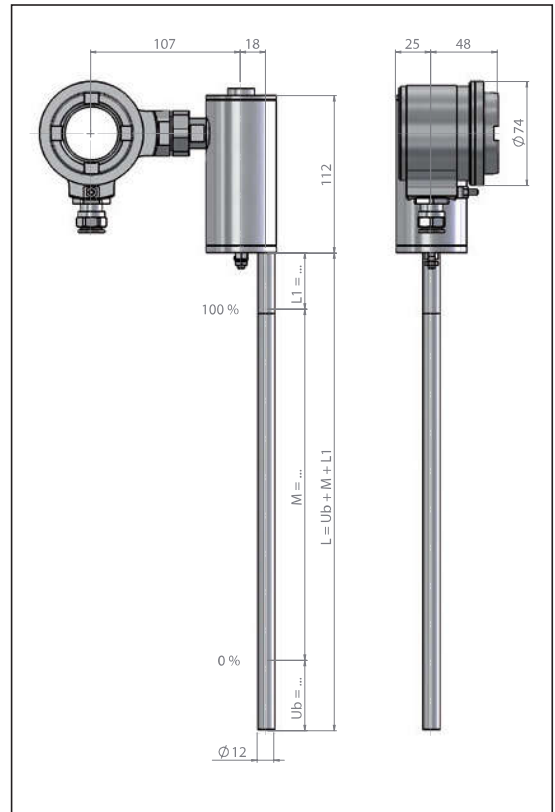
ATEX temperature page 276

Control unit

- MSTB:	- Programmable 4 ... 20 mA, 10 ... 30 VDC
- MSTHB:	- Hart-programmable 4 ... 20 mA, 10 ... 30 VDC

Approvals / Certificates

ATEX / EAC / IECEX / SIL2



Type

DAAVDM/..V/../EXDG-M..

Electrical connection:	Stainless steel A4 (SS316)
Cable entry:	M20 x 1,5
Ingress protection class:	IP 68
Ambient temperature:	ATEX temperature page 276
Level transmitter tube material quality:	Stainless steel
Mounting:	T-shaped sliding block or tension strap
Minimum measures:	L1: 40 mm / Ub: 50 mm

Accuracy

Accuracy: 0,2 mm

Ambient temperature
- K1:

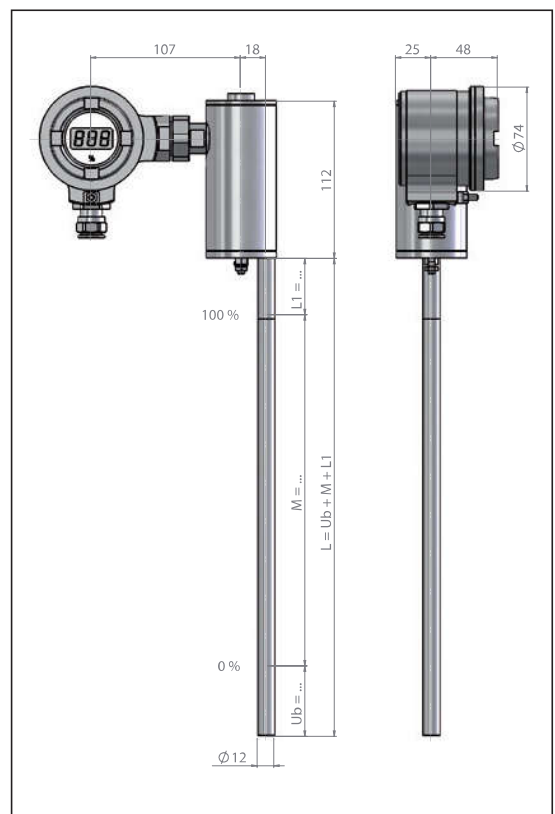
ATEX temperature page 276

Control unit

- MSTB:	- Programmable 4 ... 20 mA, 10 ... 30 VDC
- MSTHB:	- Hart-programmable 4 ... 20 mA, 10 ... 30 VDC

Approvals / Certificates

ATEX / EAC / IECEX / SIL2



The bypass level indicator are based on a modular design and can be arranged individually.

Type key page 236 - 241