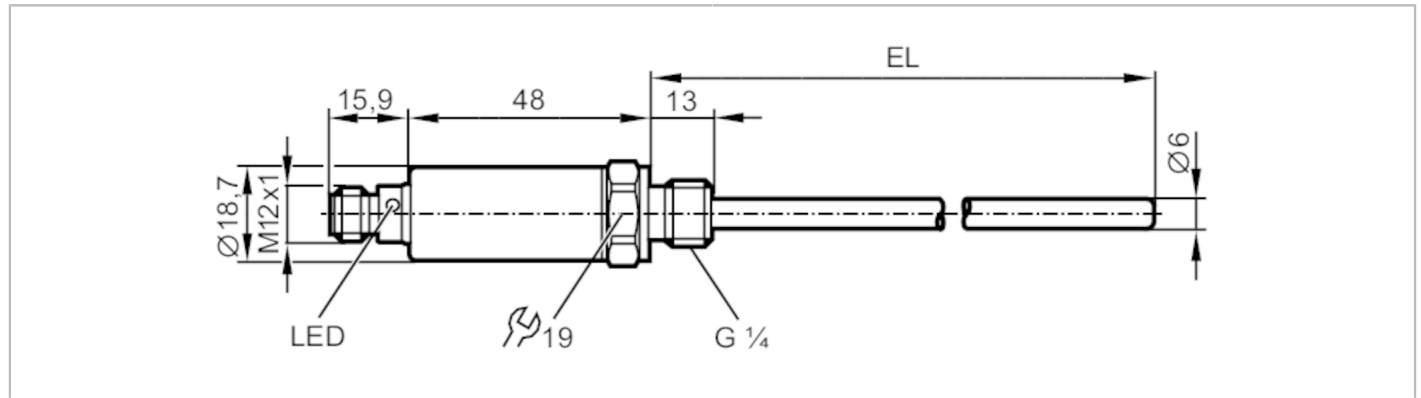


TA2105



Temperature transmitter

TA-025CLER14-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/4 external thread
Installation length EL [mm]	25
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	400 bar 40 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	12

TA2105



Temperature transmitter

TA-025CLER14-A-ZVG/US

Measuring range	[°C]	-50...150
Factory setting		-50...150 °C
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Function Function
		Generic Profiled Sensor Device identification Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs		Type of operation default
		DeviceID 377
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 20 g (10...2000 Hz)
MTTF	[years]	572
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	84
Housing		tubular
Dimensions	[mm]	Ø 18.7 / L = 88.9
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM
Tightening torque	[Nm]	35
Process connection		threaded connection G 1/4 external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	25
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks		MS = set measuring span

TA2105



Temperature transmitter

TA-025CLER14-A-ZVG/US

Pack quantity

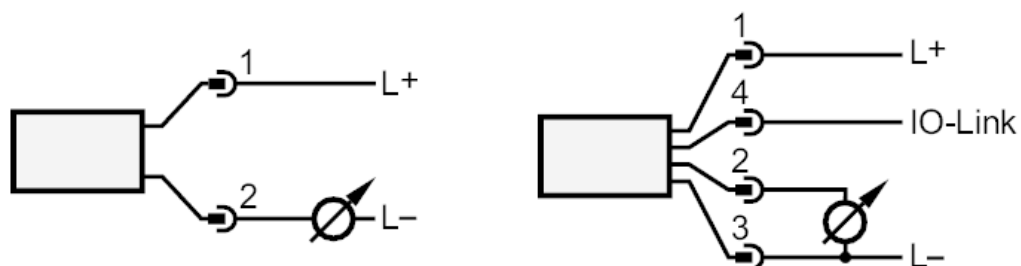
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

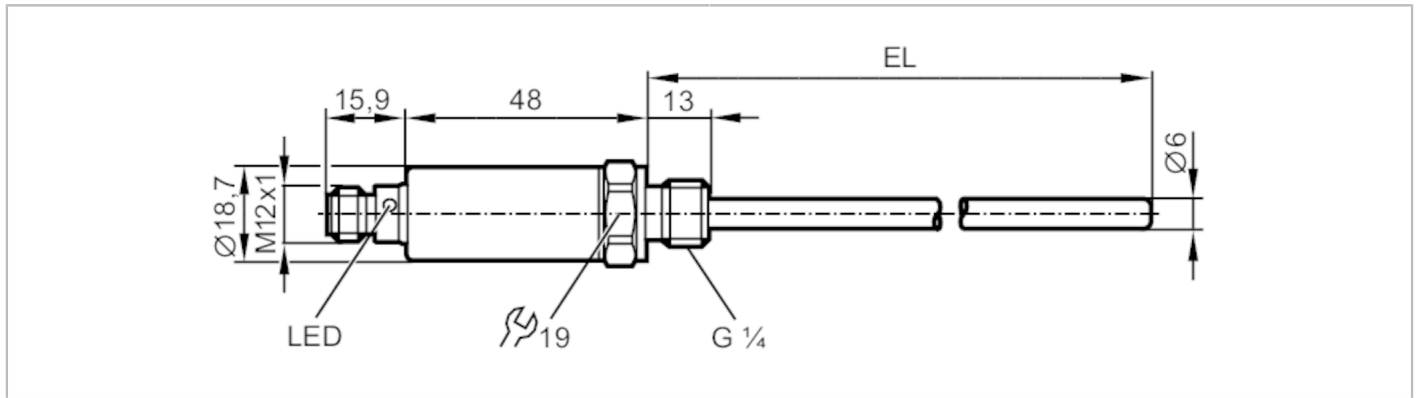


TA2115



Temperature transmitter

TA-050CLER14-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/4 external thread
Installation length EL [mm]	50

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	400 bar 40 MPa
Note on pressure rating	sensor
When mounted in adapters the specifications of the adapter data sheet apply.	

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
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Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

Measuring/setting range

Probe length L [mm]	37
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TA2115



Temperature transmitter

TA-050CLER14-A-ZVG/US

Measuring range	[°C]	-50...150	
Factory setting		-50...150 °C	
Resolution			
Resolution of analog output	[K]	0.04	
Accuracy / deviations			
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)	
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition 25 ± 5 °C)	
Reaction times			
Dynamic response T05 / T09	[s]	1 / 3	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
Min. process cycle time	[ms]	2.3	
Supported DeviceIDs		Type of operation	DeviceID
		default	377
Operating conditions			
Ambient temperature	[°C]	-25...80	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 68; IP 69K	
Tests / approvals			
EMC		DIN EN 61000-6-2	
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	572	
UL approval		UL approval number	K002
Mechanical data			
Weight	[g]	94	
Housing		tubular	
Dimensions	[mm]	Ø 18.7 / L = 113.9	
Material		stainless steel (1.4404 / 316L); PEI; FKM	
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM	
Tightening torque	[Nm]	35	
Process connection		threaded connection G 1/4 external thread	
Probe diameter	[mm]	6	
Installation length EL	[mm]	50	
Displays / operating elements			
Display		operating status	1 x LED, green
Remarks			
Remarks		MS = set measuring span	

TA2115



Temperature transmitter

TA-050CLER14-A-ZVG/US

Pack quantity

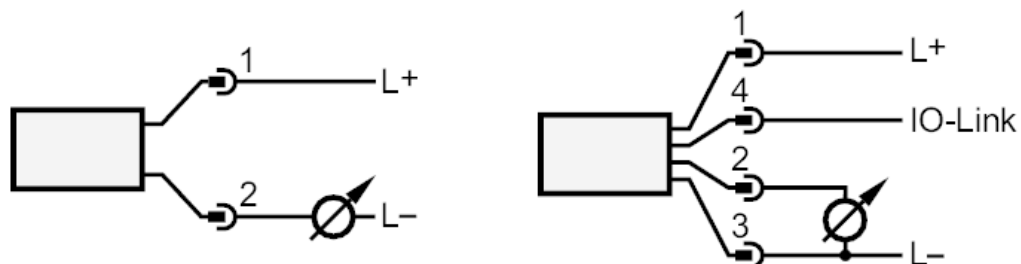
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

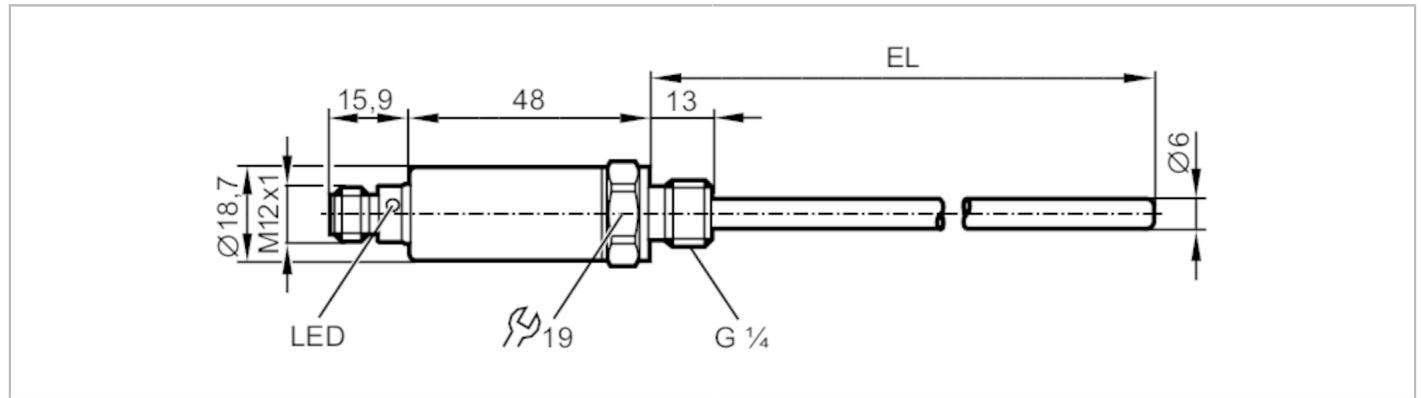


TA2135



Temperature transmitter

TA-100CLER14-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/4 external thread
Installation length EL [mm]	100
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	87

TA2135



Temperature transmitter

TA-100CLER14-A-ZVG/US

Measuring range	[°C]	-50...150
Factory setting		-50...150 °C
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	377
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC	DIN EN 61000-6-2	
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	572
UL approval	UL approval number	K002
Mechanical data		
Weight	[g]	96
Housing		tubular
Dimensions	[mm]	Ø 18.7 / L = 163.9
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM
Tightening torque	[Nm]	35
Process connection		threaded connection G 1/4 external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	100
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks		MS = set measuring span

TA2135



Temperature transmitter

TA-100CLER14-A-ZVG/US

Pack quantity

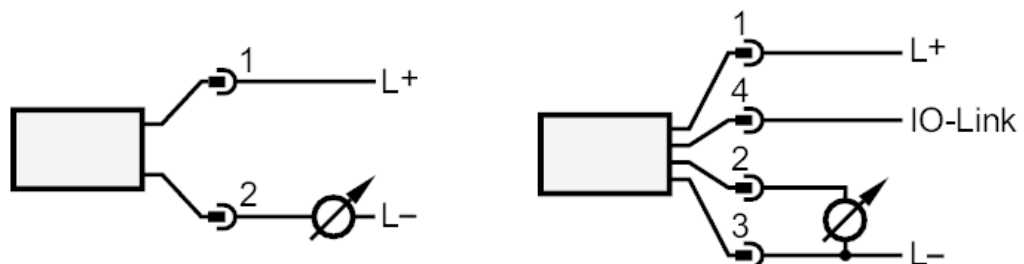
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

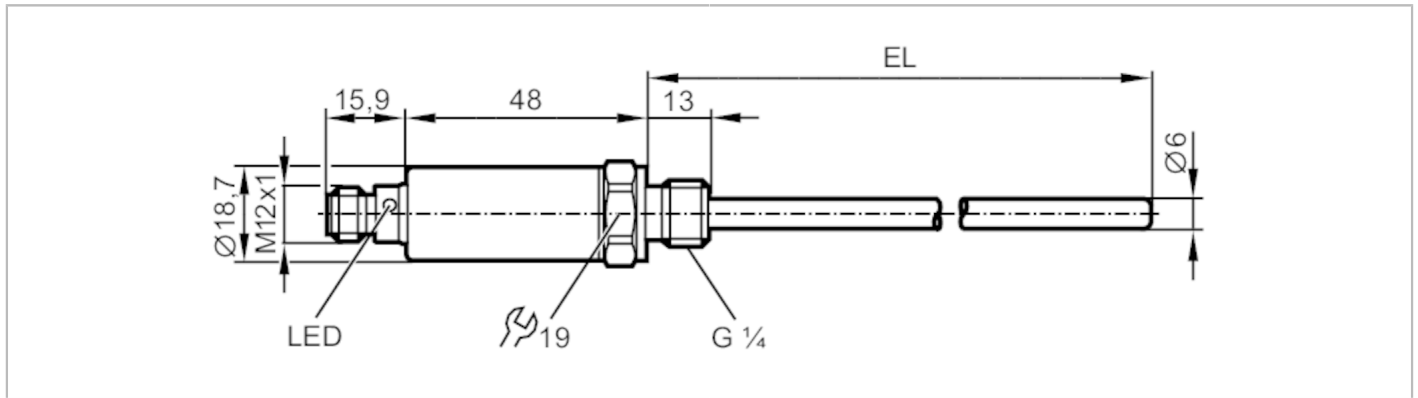


TA2145



Temperature transmitter

TA-150CLER14-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/4 external thread
Installation length EL [mm]	150

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor
When mounted in adapters the specifications of the adapter data sheet apply.	

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
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Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

Measuring/setting range

Probe length L [mm]	137
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TA2145



Temperature transmitter

TA-150CLER14-A-ZVG/US

Measuring range	[°C]	-50...150	
Factory setting		-50...150 °C	
Resolution			
Resolution of analog output	[K]	0.04	
Accuracy / deviations			
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)	
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition 25 ± 5 °C)	
Reaction times			
Dynamic response T05 / T09	[s]	1 / 3	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
Min. process cycle time	[ms]	2.3	
Supported DeviceIDs		Type of operation	DeviceID
		default	377
Operating conditions			
Ambient temperature	[°C]	-25...80	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 68; IP 69K	
Tests / approvals			
EMC		DIN EN 61000-6-2	
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	572	
UL approval		UL approval number	K002
Mechanical data			
Weight	[g]	108	
Housing		tubular	
Dimensions	[mm]	Ø 18.7 / L = 213.9	
Material		stainless steel (1.4404 / 316L); PEI; FKM	
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM	
Tightening torque	[Nm]	35	
Process connection		threaded connection G 1/4 external thread	
Probe diameter	[mm]	6	
Installation length EL	[mm]	150	
Displays / operating elements			
Display		operating status	1 x LED, green
Remarks			
Remarks		MS = set measuring span	

TA2145



Temperature transmitter

TA-150CLER14-A-ZVG/US

Pack quantity

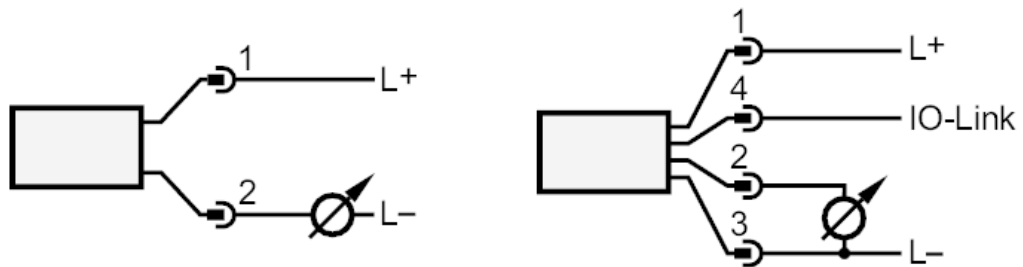
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

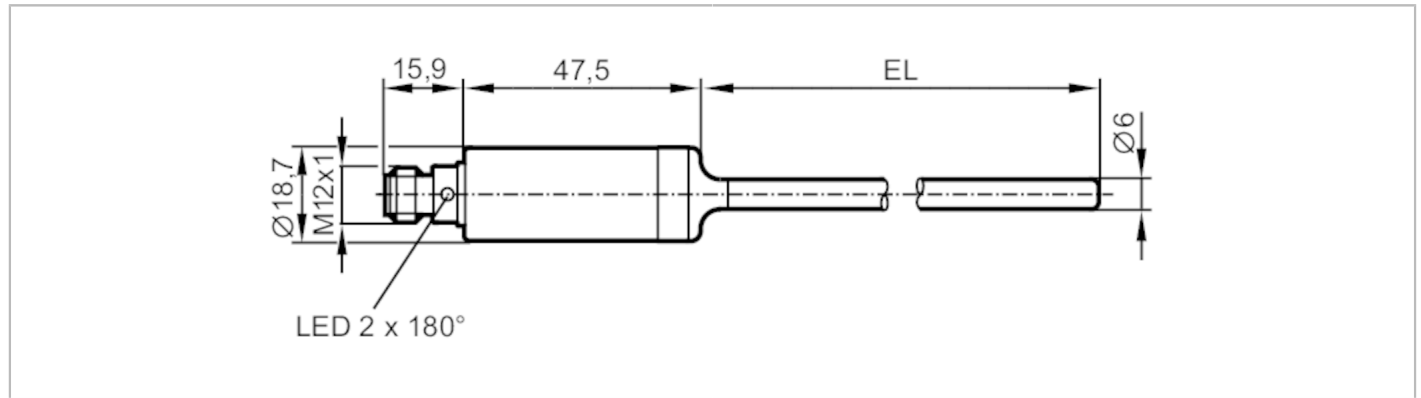


TA2212



Temperature transmitter

TA-050CLE06-- /US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...200
Communication interface	IO-Link
Process connection	Clamp fitting Ø 6 mm
Installation length EL [mm]	50

Application

Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)	
Media	liquids and gases	
Pressure rating	160 bar	16 MPa
Vacuum resistance	-1000 mbar	-0.1 MPa

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)	
Current consumption [mA]	< 50	
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time [s]	2	

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
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Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

Measuring/setting range

Probe length L [mm]	50
Measuring range [°C]	-50...200
Factory setting	0...200 °C

TA2212



Temperature transmitter

TA-050CLE06- - /US

Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	$\pm 0,3 + (\pm 0,1 \% MS)$
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition $25 \pm 5 \text{ }^\circ\text{C}$)
Reaction times		
Dynamic response T05 / T09	[s]	< 0,5 / < 2
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs		Type of operation DeviceID
		default 446
Operating conditions		
Ambient temperature	[°C]	-25...80
Note on ambient temperature		at medium temperature: < 160 °C
		-25...60 °C
		at medium temperature: < 200 °C
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
		DIN EN 61000-6-3
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 10 g (10...2000 Hz)
MTTF	[years]	232
Note on approval		Factory certificate available as download at www.factory-certificate.ifm
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	102.5
Housing		tubular
Dimensions	[mm]	$\varnothing 18.7 / L = 113.4$
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L) electropolished
Process connection		Clamp fitting $\varnothing 6 \text{ mm}$
Surface characteristics Ra/Rz of the wetted parts		$Ra < 0.8 \text{ } \mu\text{m}$
Probe diameter	[mm]	6
Installation length EL	[mm]	50

TA2212



Temperature transmitter

TA-050CLE06- - /US

Remarks

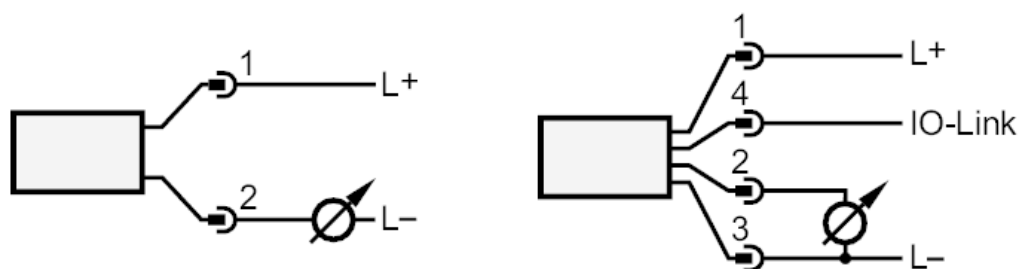
Remarks	MS = set measuring span The values for accuracy apply to flowing water.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



Connection

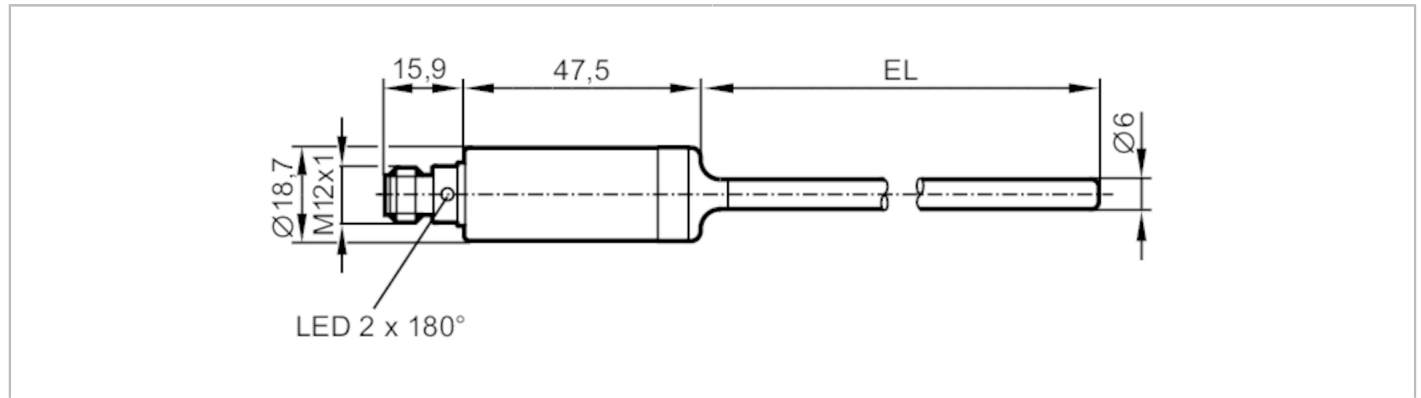


TA2232



Temperature transmitter

TA-100CLE06- - /US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...200
Communication interface	IO-Link
Process connection	Clamp fitting Ø 6 mm
Installation length EL [mm]	100
Application	
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	160 bar / 16 MPa
Vacuum resistance	-1000 mbar / -0.1 MPa
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	2
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	100
Measuring range [°C]	-50...200
Factory setting	0...200 °C

TA2232



Temperature transmitter

TA-100CLE06- - /US

Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	$\pm 0,3 + (\pm 0,1 \% MS)$
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition $25 \pm 5 \text{ }^\circ\text{C}$)
Reaction times		
Dynamic response T05 / T09	[s]	< 0,5 / < 2
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs		Type of operation DeviceID
		default 446
Operating conditions		
Ambient temperature	[°C]	-25...80
Note on ambient temperature		at medium temperature: < 160 °C
		-25...60 °C
		at medium temperature: < 200 °C
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
		DIN EN 61000-6-3
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 10 g (10...2000 Hz)
MTTF	[years]	232
Note on approval		Factory certificate available as download at www.factory-certificate.ifm
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	155.5
Housing		tubular
Dimensions	[mm]	$\varnothing 18.7 / L = 163.4$
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L) electropolished
Process connection		Clamp fitting $\varnothing 6 \text{ mm}$
Surface characteristics Ra/Rz of the wetted parts		$Ra < 0.8 \text{ } \mu\text{m}$
Probe diameter	[mm]	6
Installation length EL	[mm]	100

TA2232



Temperature transmitter

TA-100CLE06- - /US

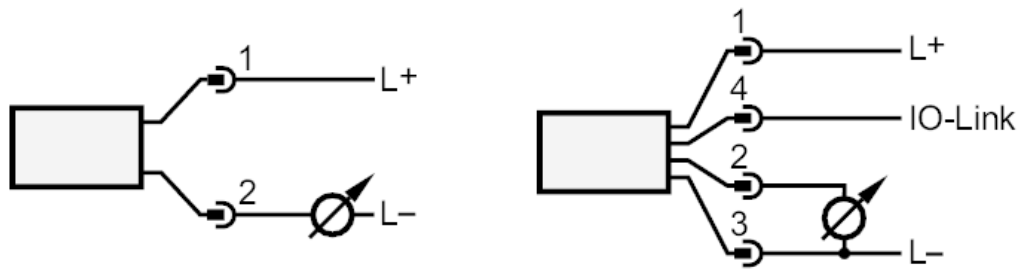
Remarks	
Remarks	MS = set measuring span The values for accuracy apply to flowing water.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



Connection

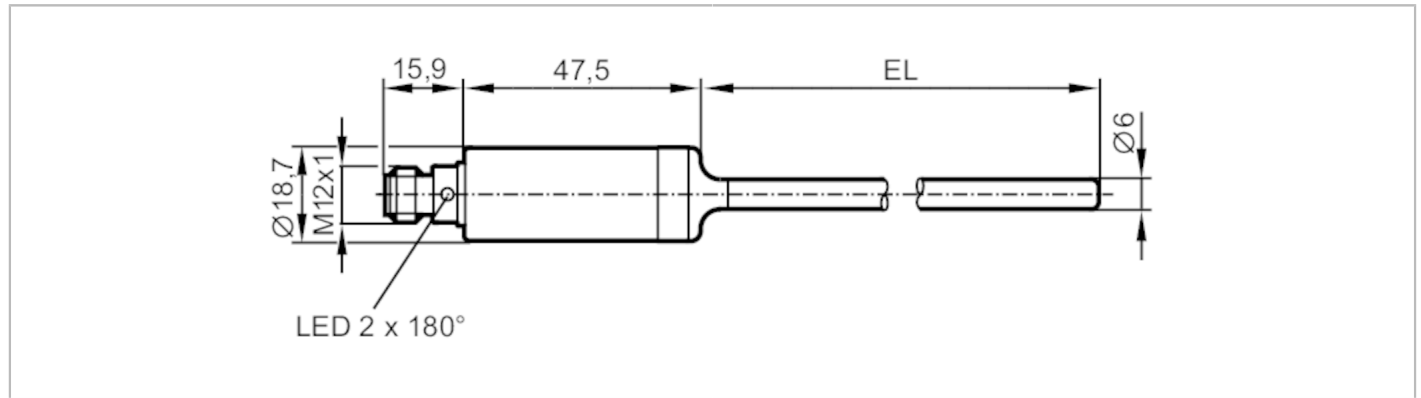


TA2241



Temperature transmitter

TA-150CLE06- - /US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...200
Communication interface	IO-Link
Process connection	Clamp fitting Ø 6 mm
Installation length EL [mm]	150

Application

Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)	
Media	liquids and gases	
Pressure rating	160 bar	16 MPa
Vacuum resistance	-1000 mbar	-0.1 MPa

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)	
Current consumption [mA]	< 50	
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time [s]	2	

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

Measuring/setting range

Probe length L [mm]	150
Measuring range [°C]	-50...200
Factory setting	-10...150 °C

TA2241



Temperature transmitter

TA-150CLE06- - /US

Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	$\pm 0,3 + (\pm 0,1 \% MS)$
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition $25 \pm 5 \text{ }^\circ\text{C}$)
Reaction times		
Dynamic response T05 / T09	[s]	< 0,5 / < 2
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs		Type of operation DeviceID
		default 847
Operating conditions		
Ambient temperature	[°C]	-25...80
Note on ambient temperature		at medium temperature: < 160 °C
		-25...60 °C
		at medium temperature: < 200 °C
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
		DIN EN 61000-6-3
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 10 g (10...2000 Hz)
MTTF	[years]	334
Note on approval		Factory certificate available as download at www.factory-certificate.ifm
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	156.5
Housing		tubular
Dimensions	[mm]	$\varnothing 18.7 / L = 213.4$
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L) electropolished
Process connection		Clamp fitting $\varnothing 6 \text{ mm}$
Surface characteristics Ra/Rz of the wetted parts		$Ra < 0.8 \text{ } \mu\text{m}$
Probe diameter	[mm]	6
Installation length EL	[mm]	150

TA2241



Temperature transmitter

TA-150CLE06- - /US

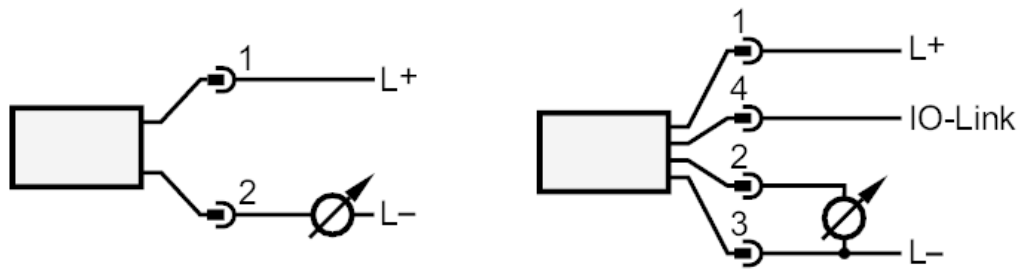
Remarks	
Remarks	MS = set measuring span The values for accuracy apply to flowing water.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



Connection

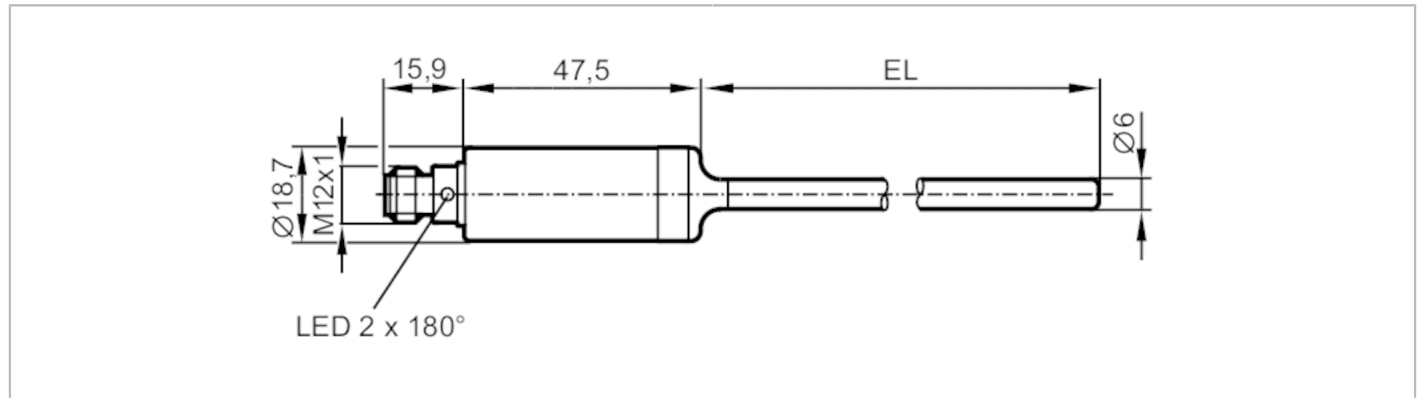


TA2242



Temperature transmitter

TA-150CLE06-- /US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...200
Communication interface	IO-Link
Process connection	Clamp fitting Ø 6 mm
Installation length EL [mm]	150

Application

Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)	
Media	liquids and gases	
Pressure rating	160 bar	16 MPa
Vacuum resistance	-1000 mbar	-0.1 MPa

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)	
Current consumption [mA]	< 50	
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time [s]	2	

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

Measuring/setting range

Probe length L [mm]	150
Measuring range [°C]	-50...200
Factory setting	0...200 °C

TA2242



Temperature transmitter

TA-150CLE06- - /US

Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	$\pm 0,3 + (\pm 0,1 \% MS)$
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition $25 \pm 5 \text{ }^\circ\text{C}$)
Reaction times		
Dynamic response T05 / T09	[s]	< 0,5 / < 2
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	446
Operating conditions		
Ambient temperature	[°C]	-25...80
Note on ambient temperature		at medium temperature: < 160 °C
		-25...60 °C
		at medium temperature: < 200 °C
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	10 g (10...2000 Hz)
MTTF	[years]	232
Note on approval		Factory certificate available as download at www.factory-certificate.ifm
UL approval	UL approval number	K002
Mechanical data		
Weight	[g]	161
Housing		tubular
Dimensions	[mm]	$\varnothing 18.7 / L = 213.4$
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L) electropolished
Process connection		Clamp fitting $\varnothing 6 \text{ mm}$
Surface characteristics Ra/Rz of the wetted parts		$Ra < 0.8 \text{ } \mu\text{m}$
Probe diameter	[mm]	6
Installation length EL	[mm]	150

TA2242



Temperature transmitter

TA-150CLE06- - /US

Remarks

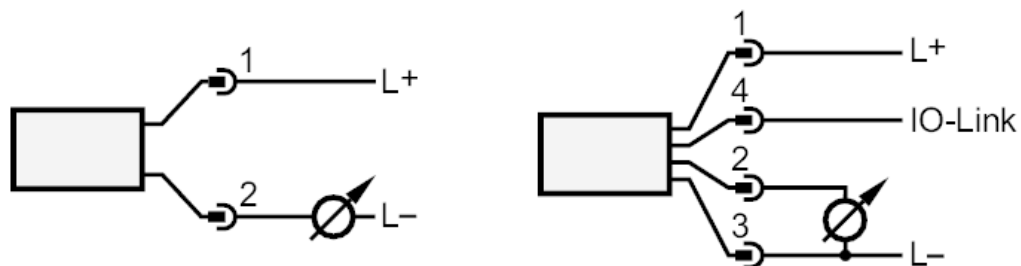
Remarks	MS = set measuring span The values for accuracy apply to flowing water.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



Connection

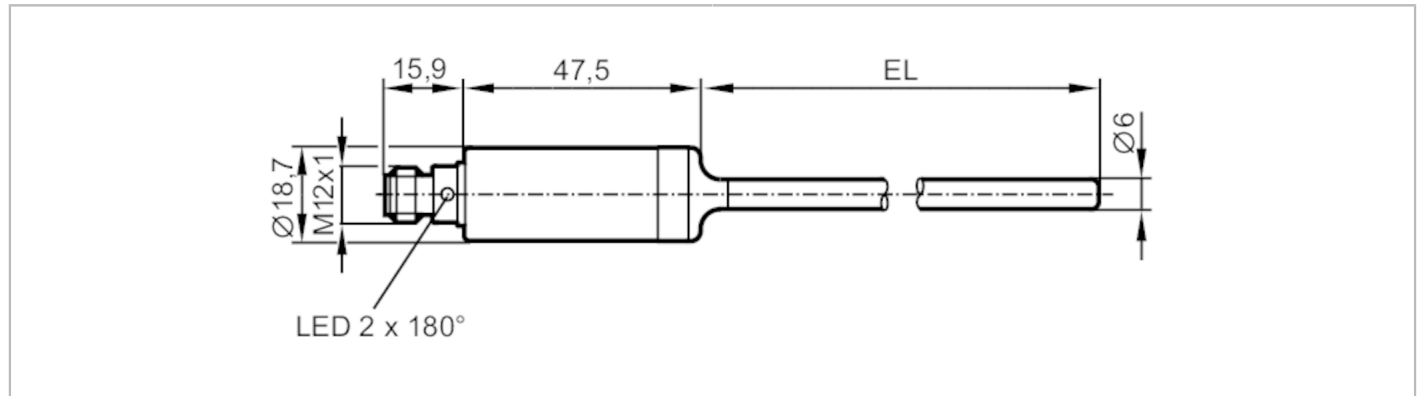


TA2247



Temperature transmitter

TA-150CLE06- - /US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...200
Communication interface	IO-Link
Process connection	Clamp fitting Ø 6 mm
Installation length EL [mm]	150
Application	
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating [bar]	160
Vacuum resistance	-1000 mbar -0.1 MPa
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	2
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	300
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	150
Measuring range [°C]	-50...200
Factory setting	0...100 °C

TA2247



Temperature transmitter

TA-150CLE06- - /US

Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	$\pm 0,3 + (\pm 0,1 \% MS)$
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition $25 \pm 5 \text{ }^\circ\text{C}$)
Reaction times		
Dynamic response T05 / T09	[s]	< 0,5 / < 2
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	693
Operating conditions		
Ambient temperature	[°C]	-25...80
Note on ambient temperature		at medium temperature: < 160 °C
		-25...60 °C
		at medium temperature: < 200 °C
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	10 g (10...2000 Hz)
MTTF	[years]	324
Note on approval		Factory certificate available as download at www.factory-certificate.ifm
UL approval	UL approval number	K002
Mechanical data		
Weight	[g]	161.5
Housing		tubular
Dimensions	[mm]	$\varnothing 18.7 / L = 213.4$
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L) electropolished
Process connection		Clamp fitting $\varnothing 6 \text{ mm}$
Surface characteristics Ra/Rz of the wetted parts		$Ra < 0.8 \text{ } \mu\text{m}$
Probe diameter	[mm]	6
Installation length EL	[mm]	150

TA2247



Temperature transmitter

TA-150CLE06- - /US

Remarks

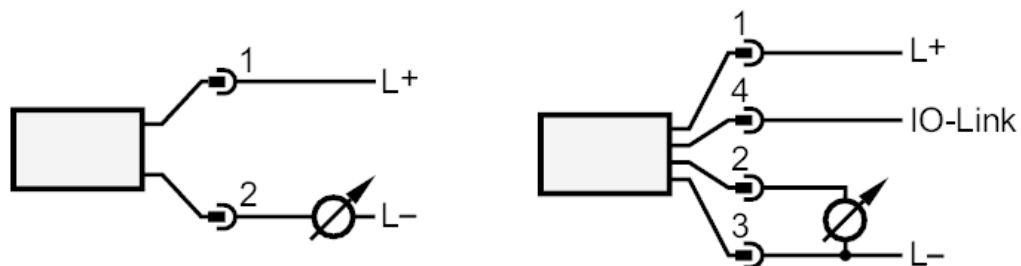
Remarks	MS = set measuring span The values for accuracy apply to flowing water.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



Connection

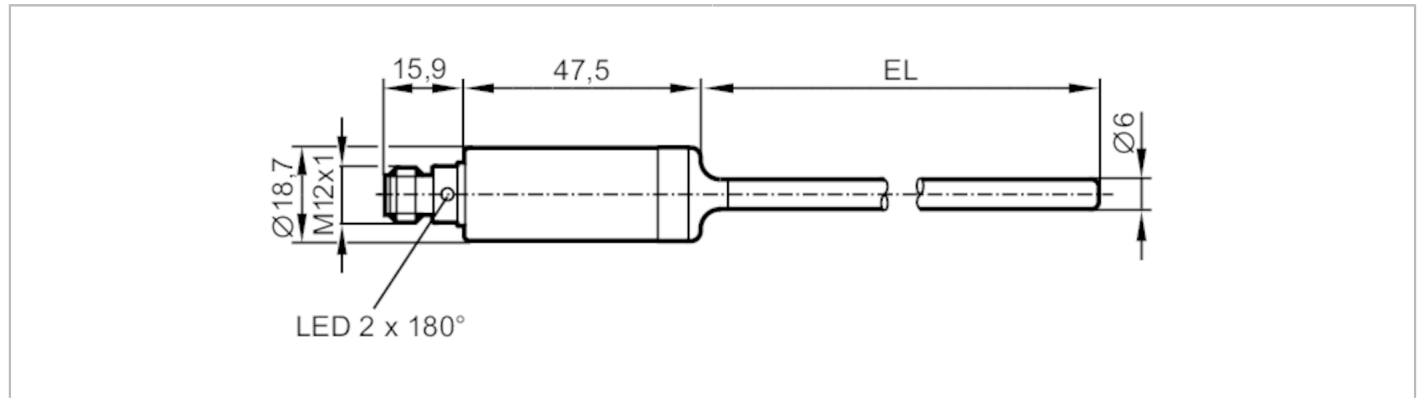


TA2262



Temperature transmitter

TA-250CLE06-- /US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...200
Communication interface	IO-Link
Process connection	Clamp fitting Ø 6 mm
Installation length EL [mm]	250

Application

Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)	
Media	liquids and gases	
Pressure rating	160 bar	16 MPa
Vacuum resistance	-1000 mbar	-0.1 MPa

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)	
Current consumption [mA]	< 50	
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time [s]	2	

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

Measuring/setting range

Probe length L [mm]	250
Measuring range [°C]	-50...200
Factory setting	0...200 °C

TA2262



Temperature transmitter

TA-250CLE06-- /US

Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	$\pm 0,3 + (\pm 0,1 \% MS)$
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition $25 \pm 5 \text{ }^\circ\text{C}$)
Reaction times		
Dynamic response T05 / T09	[s]	< 0,5 / < 2
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	446
Operating conditions		
Ambient temperature	[°C]	-25...80
Note on ambient temperature		at medium temperature: < 160 °C -25...60 °C at medium temperature: < 200 °C
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	10 g (10...2000 Hz)
MTTF	[years]	334
Note on approval		Factory certificate available as download at www.factory-certificate.ifm
UL approval	UL approval number	K002
Mechanical data		
Weight	[g]	174
Housing		tubular
Dimensions	[mm]	$\varnothing 18.7 / L = 313.4$
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		Clamp fitting $\varnothing 6 \text{ mm}$
Surface characteristics Ra/Rz of the wetted parts		$Ra < 0.6 \text{ } \mu\text{m}$
Probe diameter	[mm]	6
Installation length EL	[mm]	250

TA2262



Temperature transmitter

TA-250CLE06-- /US

Remarks

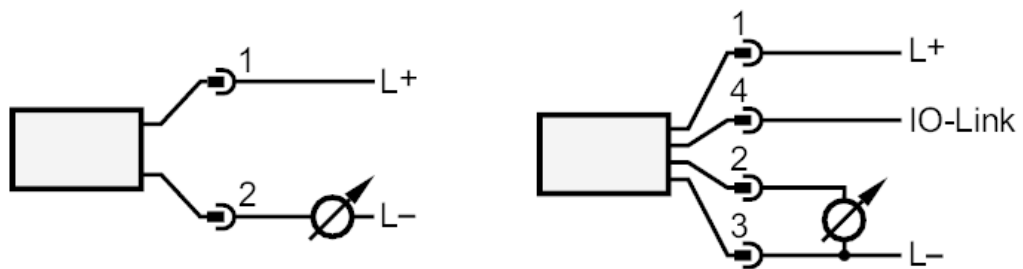
Remarks	MS = set measuring span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



Connection

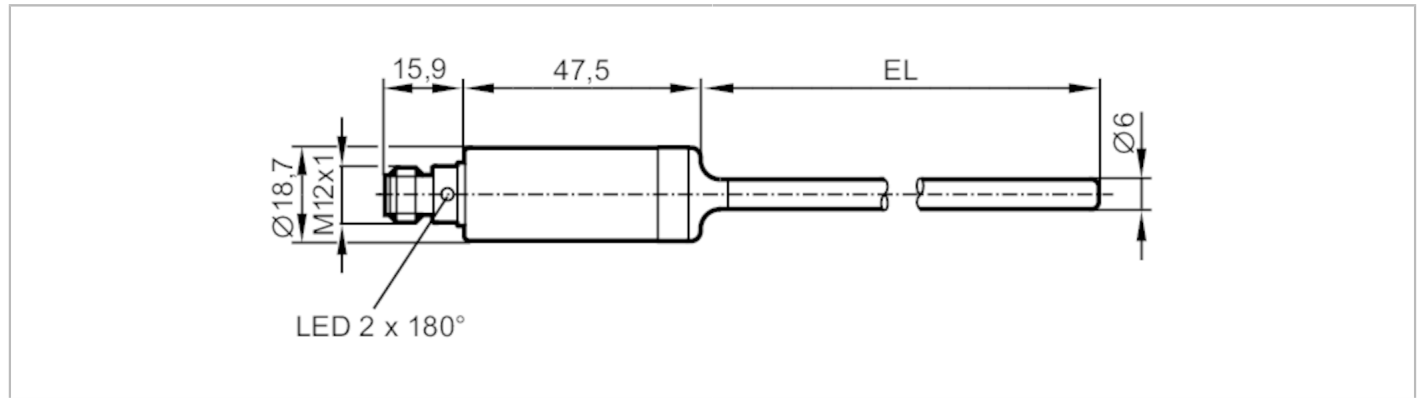


TA2292



Temperature transmitter

TA-350CLE06-- /US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...200
Communication interface	IO-Link
Process connection	Clamp fitting Ø 6 mm
Installation length EL [mm]	350

Application

Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)	
Media	liquids and gases	
Pressure rating	160 bar	16 MPa
Vacuum resistance	-1000 mbar	-0.1 MPa

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)	
Current consumption [mA]	< 50	
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time [s]	2	

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

Measuring/setting range

Probe length L [mm]	350
Measuring range [°C]	-50...200
Factory setting	0...200 °C

TA2292



Temperature transmitter

TA-350CLE06-- /US

Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	$\pm 0,3 + (\pm 0,1 \% MS)$
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition $25 \pm 5 \text{ }^\circ\text{C}$)
Reaction times		
Dynamic response T05 / T09	[s]	< 0,5 / < 2
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	446
Operating conditions		
Ambient temperature	[°C]	-25...80
Note on ambient temperature		at medium temperature: < 160 °C
		-25...60 °C
		at medium temperature: < 200 °C
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	10 g (10...2000 Hz)
MTTF	[years]	334
Note on approval		Factory certificate available as download at www.factory-certificate.ifm
UL approval	UL approval number	K002
Mechanical data		
Weight	[g]	213.7
Housing		tubular
Dimensions	[mm]	$\varnothing 18.7 / L = 413.4$
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		Clamp fitting $\varnothing 6 \text{ mm}$
Surface characteristics Ra/Rz of the wetted parts		$Ra < 0.6 \text{ } \mu\text{m}$
Probe diameter	[mm]	6
Installation length EL	[mm]	350

TA2292



Temperature transmitter

TA-350CLE06-- /US

Remarks

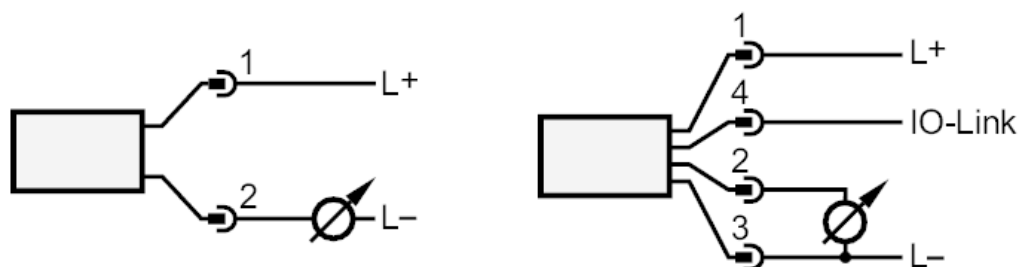
Remarks	MS = set measuring span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



Connection

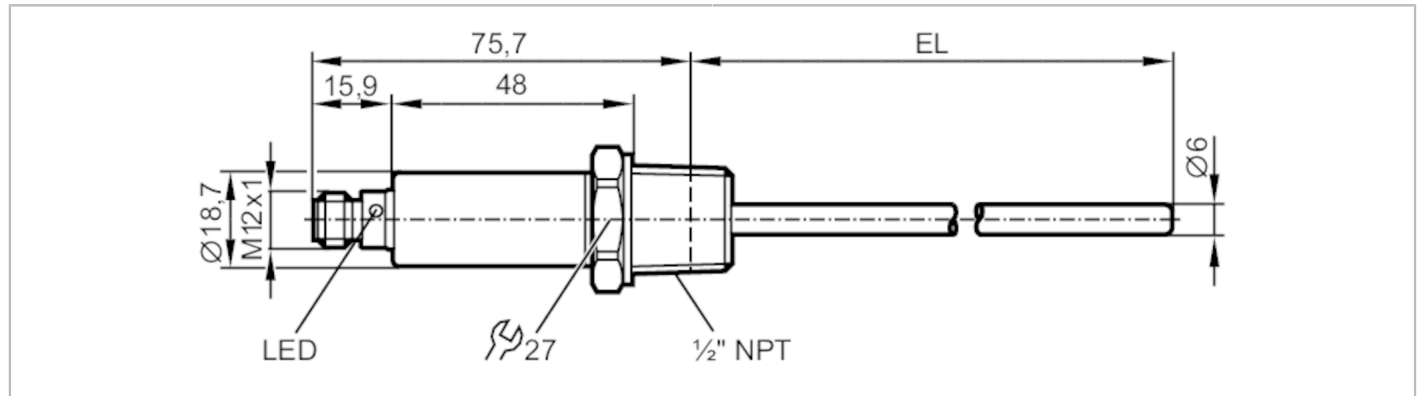


TA2303



Temperature transmitter

TA-030FLEN12-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°F]	-58...302
Communication interface	IO-Link
Process connection	threaded connection 1/2" NPT external thread
Installation length EL [mm]	30

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	400 bar 40 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
MAWP (for applications according to CRN) [bar]	350

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

TA2303



Temperature transmitter

TA-030FLEN12-A-ZVG/US

Measuring/setting range		
Probe length L	[mm]	26.8
Measuring range	[°F]	-58...302
Factory setting		0...300 °F
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs		Type of operation default
		DeviceID 378
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 20 g (10...2000 Hz)
MTTF	[years]	572
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	113.55
Housing		tubular
Dimensions	[mm]	Ø 18.7 / L = 105.7
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		threaded connection 1/2" NPT external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	30
Displays / operating elements		
Display	operating status	1 x LED, green

TA2303



Temperature transmitter

TA-030FLEN12-A-ZVG/US

Remarks

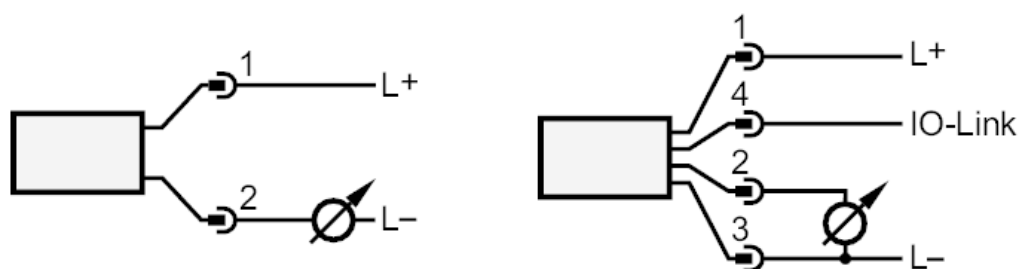
Remarks	MS = set measuring span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

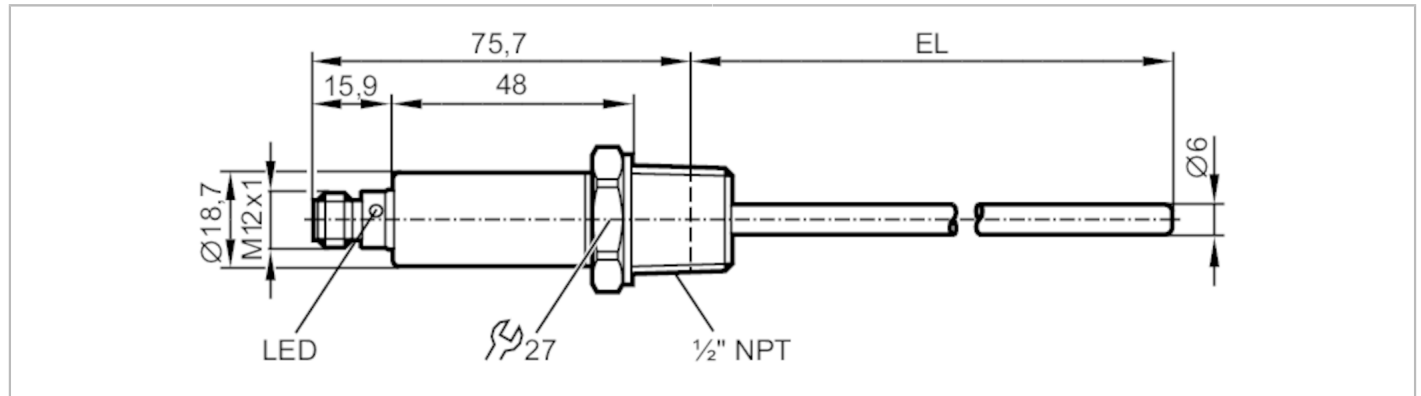


TA2313



Temperature transmitter

TA-050FLEN12-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°F]	-58...302
Communication interface	IO-Link
Process connection	threaded connection 1/2" NPT external thread
Installation length EL [mm]	50
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor
	When mounted in adapters the specifications of the adapter data sheet apply.
MAWP (for applications according to CRN) [bar]	300
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

TA2313



Temperature transmitter

TA-050FLEN12-A-ZVG/US

Measuring/setting range		
Probe length L	[mm]	46.8
Measuring range	[°F]	-58...302
Factory setting		0...300 °F
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs		Type of operation default
		DeviceID 378
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 20 g (10...2000 Hz)
MTTF	[years]	572
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	132.5
Housing		tubular
Dimensions	[mm]	Ø 18.7 / L = 125.7
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		threaded connection 1/2" NPT external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	50
Displays / operating elements		
Display	operating status	1 x LED, green

TA2313



Temperature transmitter

TA-050FLEN12-A-ZVG/US

Remarks

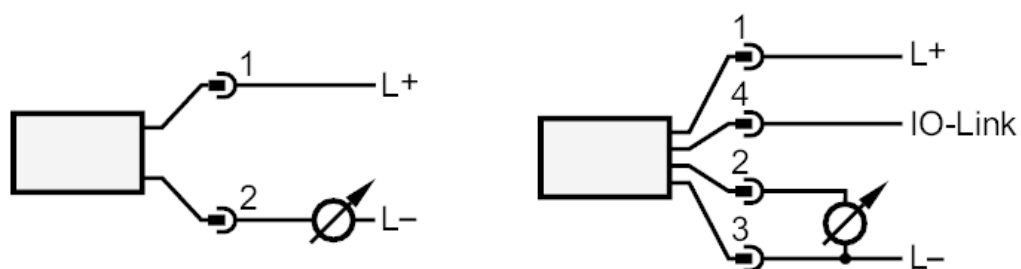
Remarks	MS = set measuring span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

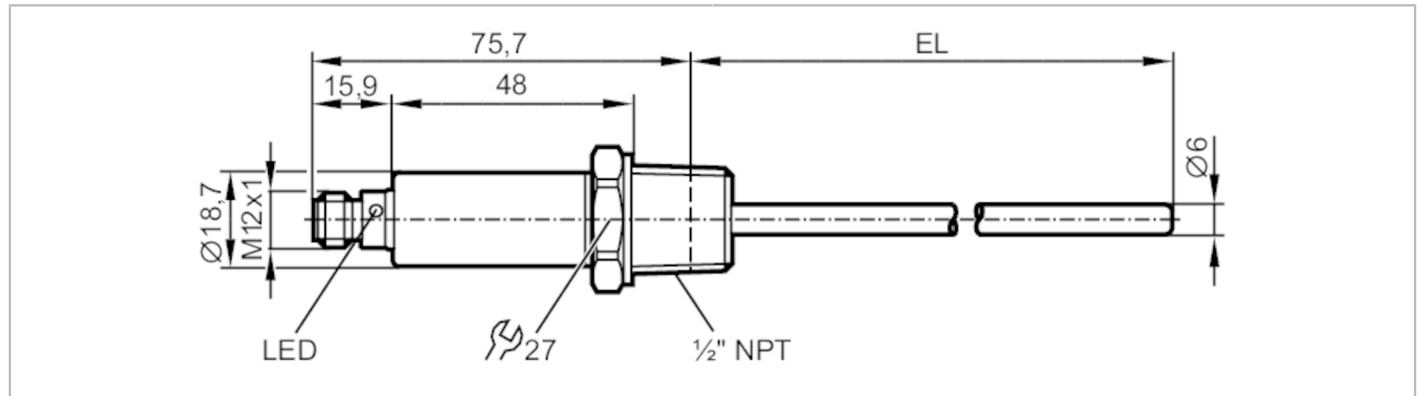


TA2333



Temperature transmitter

TA-100FLEN12-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°F]	-58...302
Communication interface	IO-Link
Process connection	threaded connection 1/2" NPT external thread
Installation length EL [mm]	100

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor
	When mounted in adapters the specifications of the adapter data sheet apply.
MAWP (for applications according to CRN) [bar]	300

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

TA2333

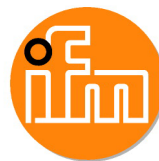


Temperature transmitter

TA-100FLEN12-A-ZVG/US

Measuring/setting range		
Probe length L	[mm]	96.8
Measuring range	[°F]	-58...302
Factory setting		0...300 °F
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation default	DeviceID 378
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC	DIN EN 61000-6-2	
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	572
UL approval	UL approval number	K002
Mechanical data		
Weight	[g]	134.5
Housing		tubular
Dimensions	[mm]	Ø 18.7 / L = 175.7
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		threaded connection 1/2" NPT external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	100
Displays / operating elements		
Display	operating status	1 x LED, green

TA2333



Temperature transmitter

TA-100FLEN12-A-ZVG/US

Remarks

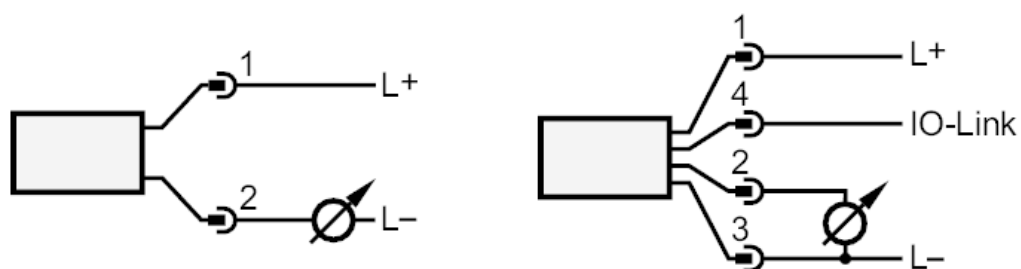
Remarks	MS = set measuring span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

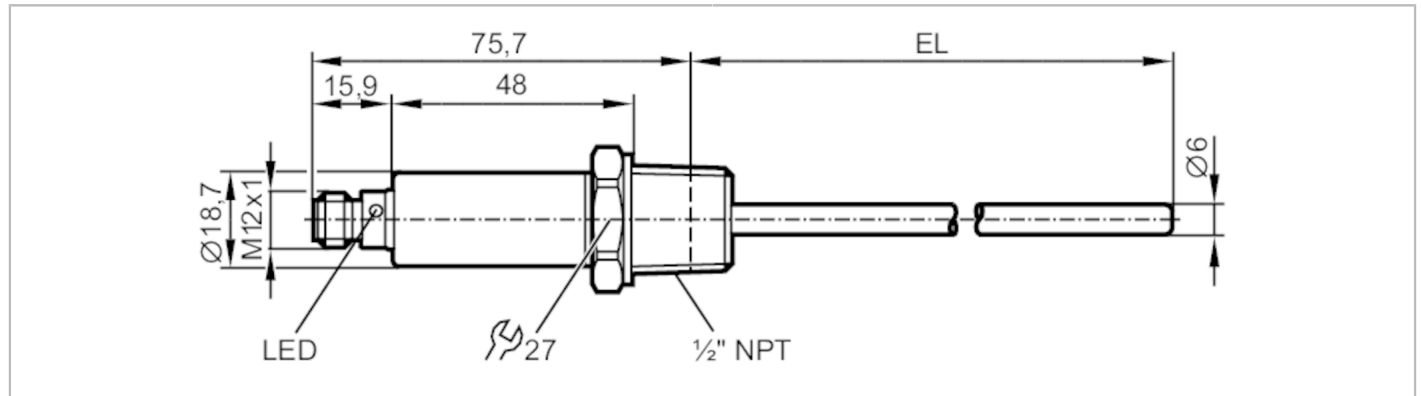


TA2343



Temperature transmitter

TA-150FLEN12-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°F]	-58...302
Communication interface	IO-Link
Process connection	threaded connection 1/2" NPT external thread
Installation length EL [mm]	150

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
MAWP (for applications according to CRN) [bar]	300

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

TA2343



Temperature transmitter

TA-150FLEN12-A-ZVG/US

Measuring/setting range		
Probe length L	[mm]	146.8
Measuring range	[°F]	-58...302
Factory setting		0...300 °F
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs		Type of operation default
		DeviceID 378
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 20 g (10...2000 Hz)
MTTF	[years]	572
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	148
Housing		tubular
Dimensions	[mm]	Ø 18.7 / L = 225.7
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		threaded connection 1/2" NPT external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	150
Displays / operating elements		
Display	operating status	1 x LED, green

TA2343



Temperature transmitter

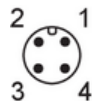
TA-150FLEN12-A-ZVG/US

Remarks

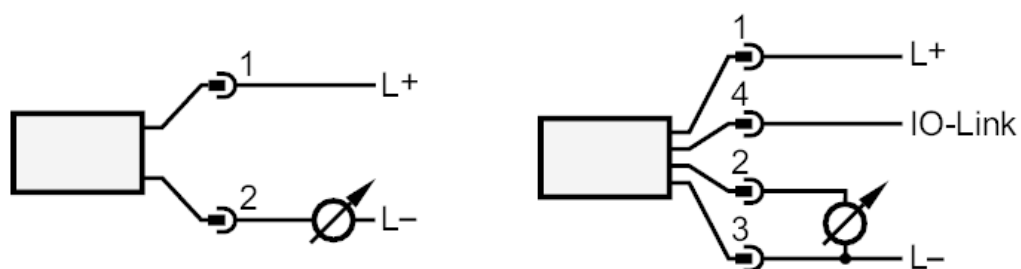
Remarks	MS = set measuring span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

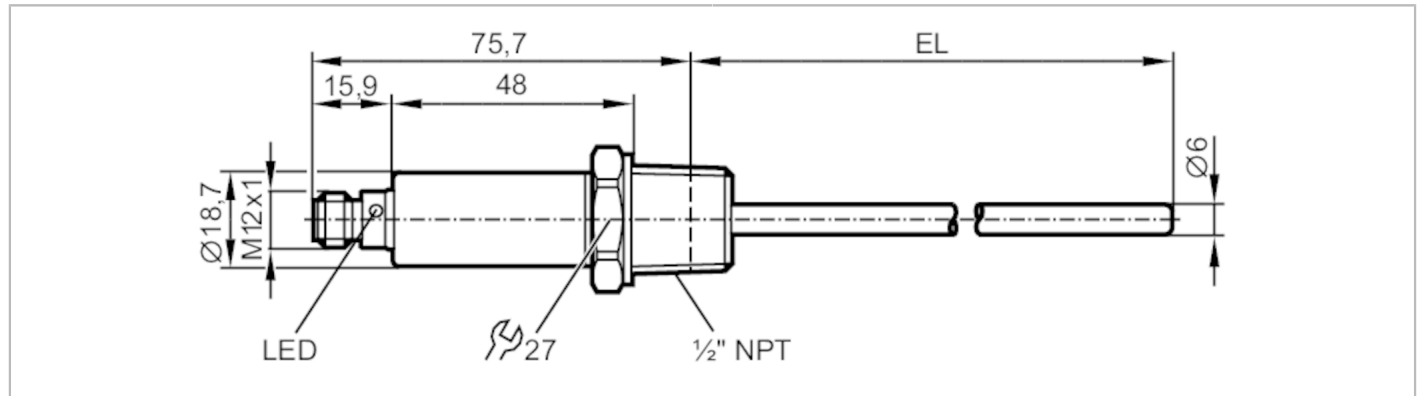


TA2345



Temperature transmitter

TA-150CLEN12-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection 1/2" NPT external thread
Installation length EL [mm]	150

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	160 bar 16 MPa
Note on pressure rating	sensor
When mounted in adapters the specifications of the adapter data sheet apply.	

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

Measuring/setting range

Measuring range [°C]	-50...150
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TA2345



Temperature transmitter

TA-150CLEN12-A-ZVG/US

Factory setting	-50...150 °C	
Resolution		
Resolution of analog output [K]	0.04	
Accuracy / deviations		
Precision analog output [K]	± 0,3 + (± 0,1 % MS)	
Temperature coefficient [% of the span / 10 K]	0,1; (In case of deviation from the reference condition 25 ± 5 °C)	
Reaction times		
Dynamic response T05 / T09 [s]	1 / 3	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time [ms]	2.3	
Supported DeviceIDs	Type of operation	DeviceID
	default	377
Operating conditions		
Ambient temperature [°C]	-25...80	
Storage temperature [°C]	-40...100	
Protection	IP 67; IP 68; IP 69K	
Tests / approvals		
EMC	DIN EN 61000-6-2	
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF [years]	320	
UL approval	UL approval number	K002
Mechanical data		
Weight [g]	149	
Dimensions [mm]	Ø 18.7 / L = 225.7	
Material	stainless steel (1.4404 / 316L); PEI; FKM	
Materials (wetted parts)	stainless steel (1.4404 / 316L)	
Process connection	threaded connection 1/2" NPT external thread	
Probe diameter [mm]	6	
Installation length EL [mm]	150	
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks	MS = set measuring span	
Pack quantity	1 pcs.	

TA2345



Temperature transmitter

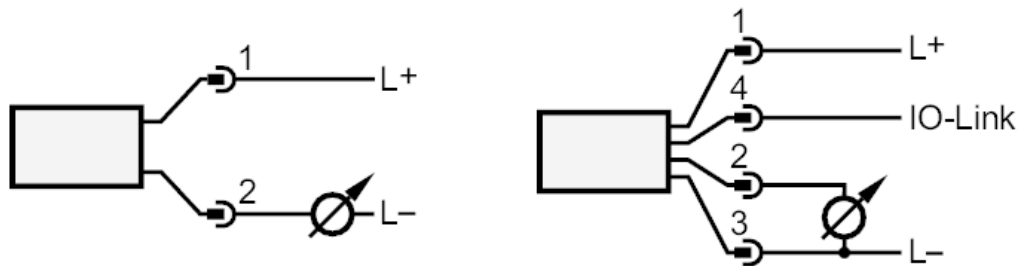
TA-150CLEN12-A-ZVG/US

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

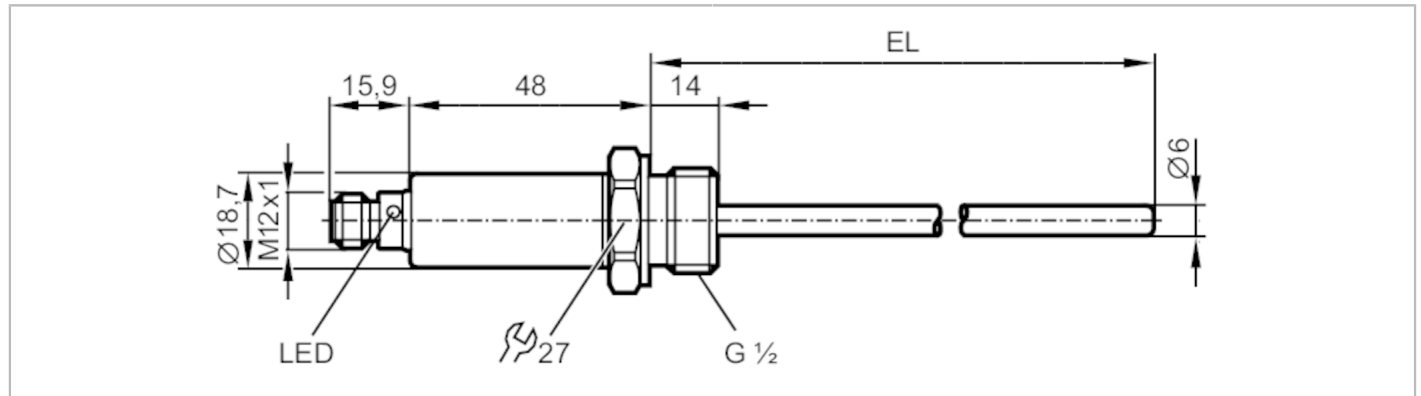


TA2405



Temperature transmitter

TA-030CLER12-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/2 external thread
Installation length EL [mm]	30
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	400 bar 40 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	16

TA2405



Temperature transmitter

TA-030CLER12-A-ZVG/US

Measuring range	[°C]	-50...150	
Factory setting		-50...150 °C	
Resolution			
Resolution of analog output	[K]	0.04	
Accuracy / deviations			
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)	
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition 25 ± 5 °C)	
Reaction times			
Dynamic response T05 / T09	[s]	1 / 3	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
Min. process cycle time	[ms]	2.3	
Supported DeviceIDs		Type of operation	DeviceID
		default	377
Operating conditions			
Ambient temperature	[°C]	-25...80	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 68; IP 69K	
Tests / approvals			
EMC		DIN EN 61000-6-2	
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]		572
UL approval		UL approval number	K002
Mechanical data			
Weight	[g]	122.5	
Housing		tubular	
Dimensions	[mm]	Ø 18.7 / L = 93.9	
Material		stainless steel (1.4404 / 316L); PEI; FKM	
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM	
Tightening torque	[Nm]	45	
Process connection		threaded connection G 1/2 external thread	
Probe diameter	[mm]	6	
Installation length EL	[mm]	30	
Displays / operating elements			
Display		operating status	1 x LED, green
Remarks			
Remarks		MS = set measuring span	

TA2405



Temperature transmitter

TA-030CLER12-A-ZVG/US

Pack quantity

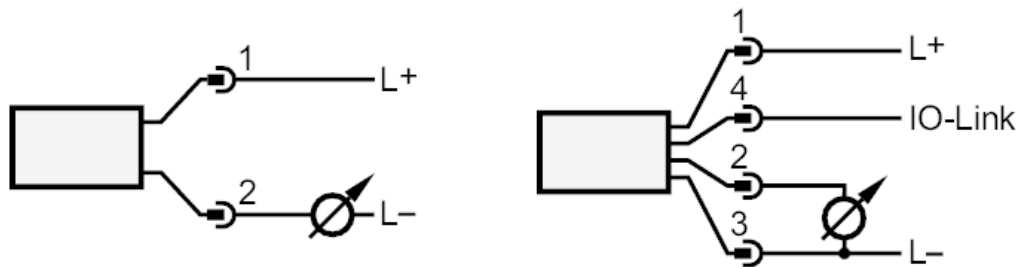
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

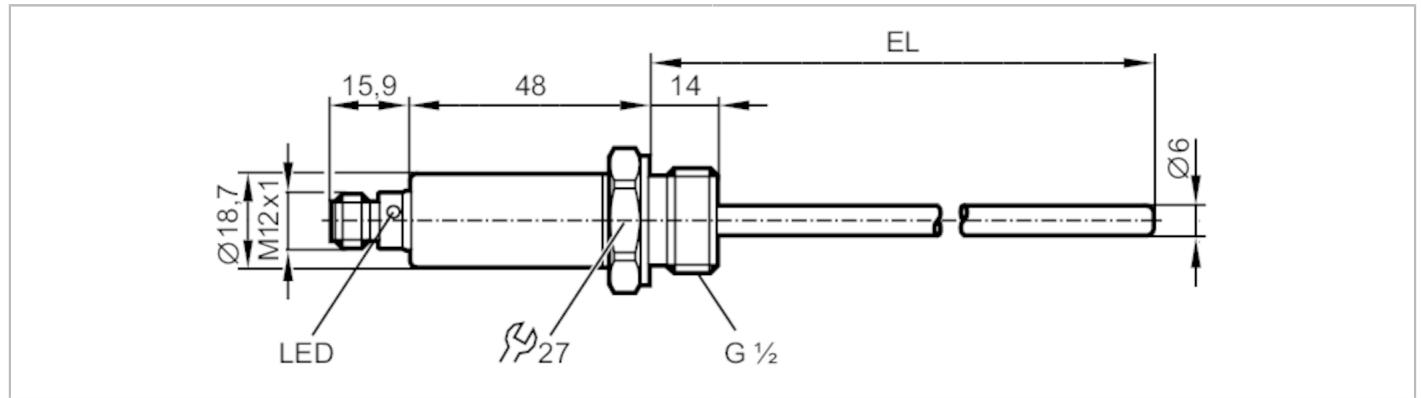


TA2415



Temperature transmitter

TA-050CLER12-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/2 external thread
Installation length EL [mm]	50
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	36

TA2415



Temperature transmitter

TA-050CLER12-A-ZVG/US

Measuring range	[°C]	-50...150	
Factory setting		-50...150 °C	
Resolution			
Resolution of analog output	[K]	0.04	
Accuracy / deviations			
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)	
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition 25 ± 5 °C)	
Reaction times			
Dynamic response T05 / T09	[s]	1 / 3	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
Min. process cycle time	[ms]	2.3	
Supported DeviceIDs		Type of operation	DeviceID
		default	377
Operating conditions			
Ambient temperature	[°C]	-25...80	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 68; IP 69K	
Tests / approvals			
EMC		DIN EN 61000-6-2	
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	572	
UL approval		UL approval number	K002
Mechanical data			
Weight	[g]	116.8	
Housing		tubular	
Dimensions	[mm]	Ø 18.7 / L = 113.9	
Material		stainless steel (1.4404 / 316L); PEI; FKM	
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM	
Tightening torque	[Nm]	45	
Process connection		threaded connection G 1/2 external thread	
Probe diameter	[mm]	6	
Installation length EL	[mm]	50	
Displays / operating elements			
Display		operating status	1 x LED, green
Remarks			
Remarks		MS = set measuring span	

TA2415



Temperature transmitter

TA-050CLER12-A-ZVG/US

Pack quantity

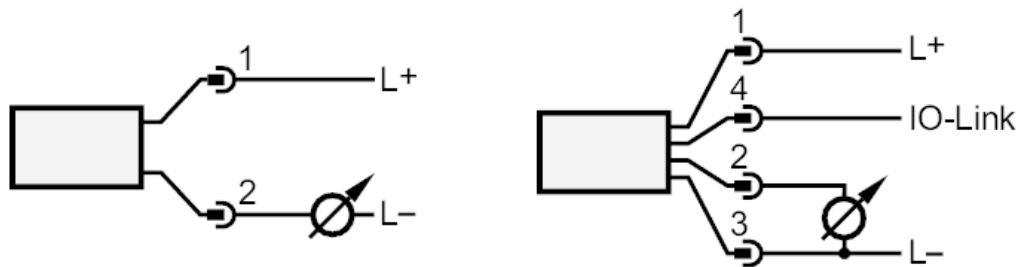
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

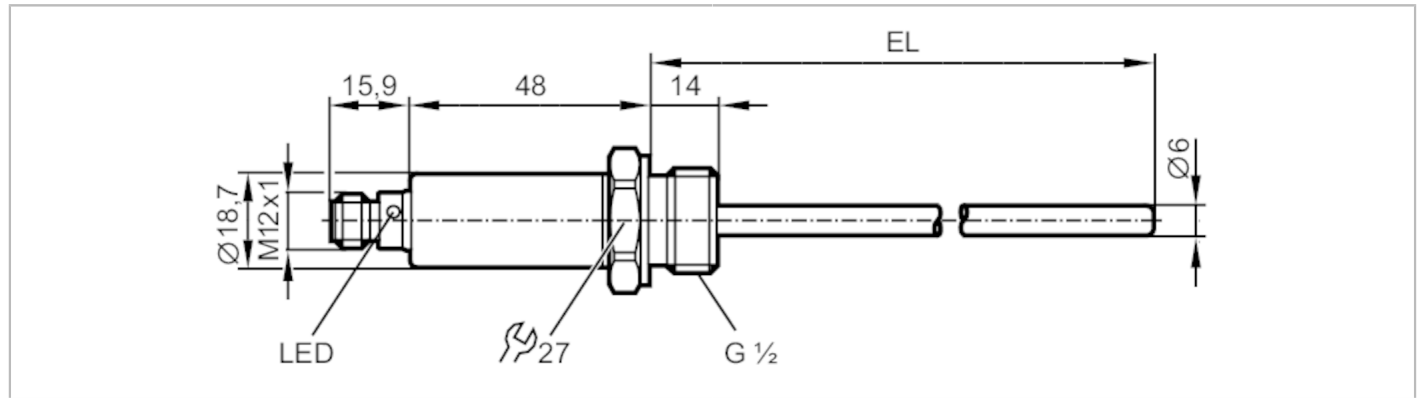


TA2417



Temperature transmitter

TA-050CLER12-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/2 external thread
Installation length EL [mm]	50
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	36

TA2417



Temperature transmitter

TA-050CLER12-A-ZVG/US

Measuring range	[°C]	-50...150
Factory setting		0...100 °C
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	559
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27
Vibration resistance		DIN IEC 68-2-6
MTTF	[years]	230
UL approval		UL approval number
		K002
Mechanical data		
Weight	[g]	126.5
Housing		tubular
Dimensions	[mm]	Ø 18.7 / L = 113.9
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM
Tightening torque	[Nm]	45
Process connection		threaded connection G 1/2 external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	50
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks		MS = set measuring span

TA2417



Temperature transmitter

TA-050CLER12-A-ZVG/US

Pack quantity

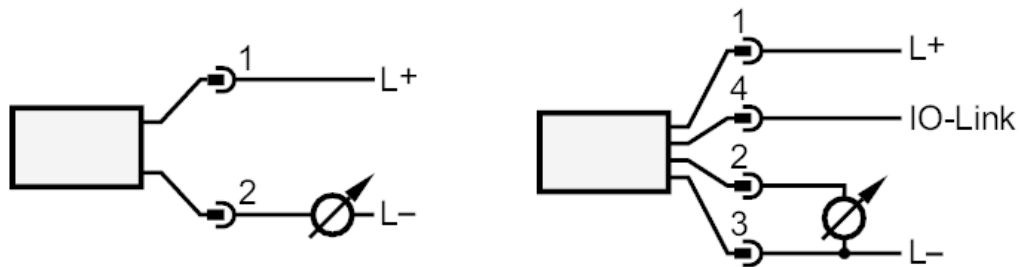
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

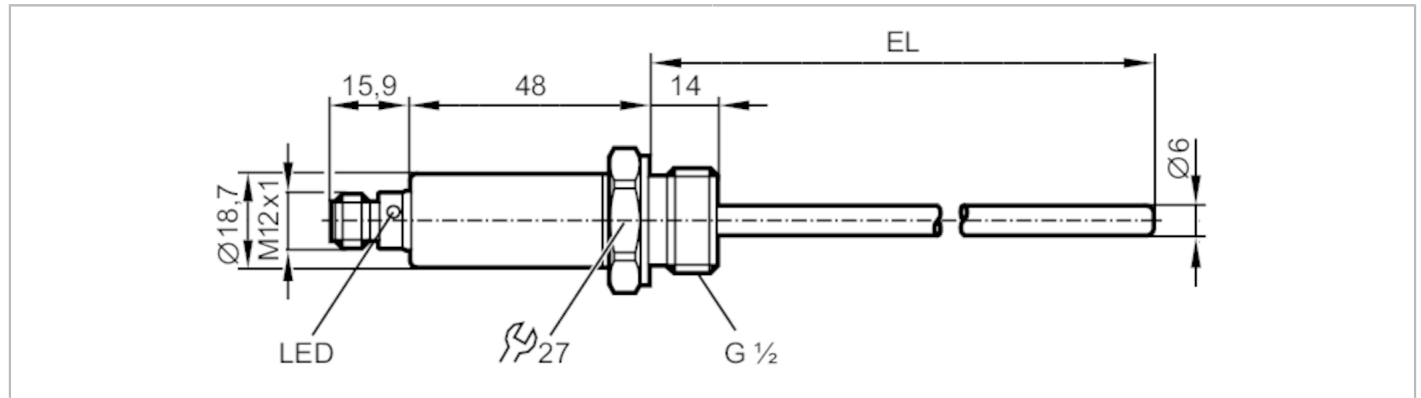


TA2435



Temperature transmitter

TA-100CLER12-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/2 external thread
Installation length EL [mm]	100
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	86

TA2435



Temperature transmitter

TA-100CLER12-A-ZVG/US

Measuring range	[°C]	-50...150	
Factory setting		-50...150 °C	
Resolution			
Resolution of analog output	[K]	0.04	
Accuracy / deviations			
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)	
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition 25 ± 5 °C)	
Reaction times			
Dynamic response T05 / T09	[s]	1 / 3	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
Min. process cycle time	[ms]	2.3	
Supported DeviceIDs		Type of operation	DeviceID
		default	377
Operating conditions			
Ambient temperature	[°C]	-25...80	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 68; IP 69K	
Tests / approvals			
EMC		DIN EN 61000-6-2	
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	572	
UL approval		UL approval number	K002
Mechanical data			
Weight	[g]	134.5	
Housing		tubular	
Dimensions	[mm]	Ø 18.7 / L = 163.9	
Material		stainless steel (1.4404 / 316L); PEI; FKM	
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM	
Tightening torque	[Nm]	45	
Process connection		threaded connection G 1/2 external thread	
Probe diameter	[mm]	6	
Installation length EL	[mm]	100	
Displays / operating elements			
Display		operating status	1 x LED, green
Remarks			
Remarks		MS = set measuring span	

TA2435



Temperature transmitter

TA-100CLER12-A-ZVG/US

Pack quantity

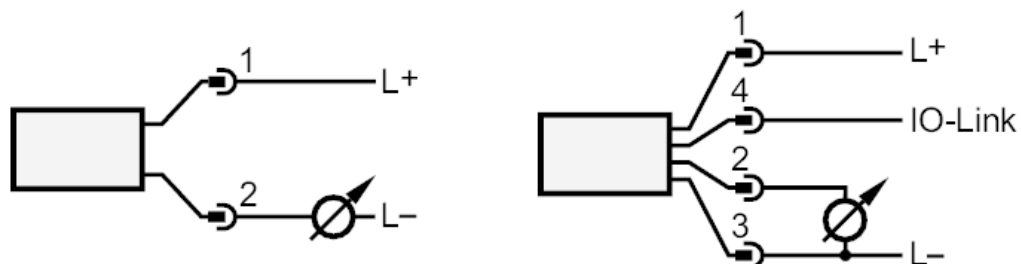
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

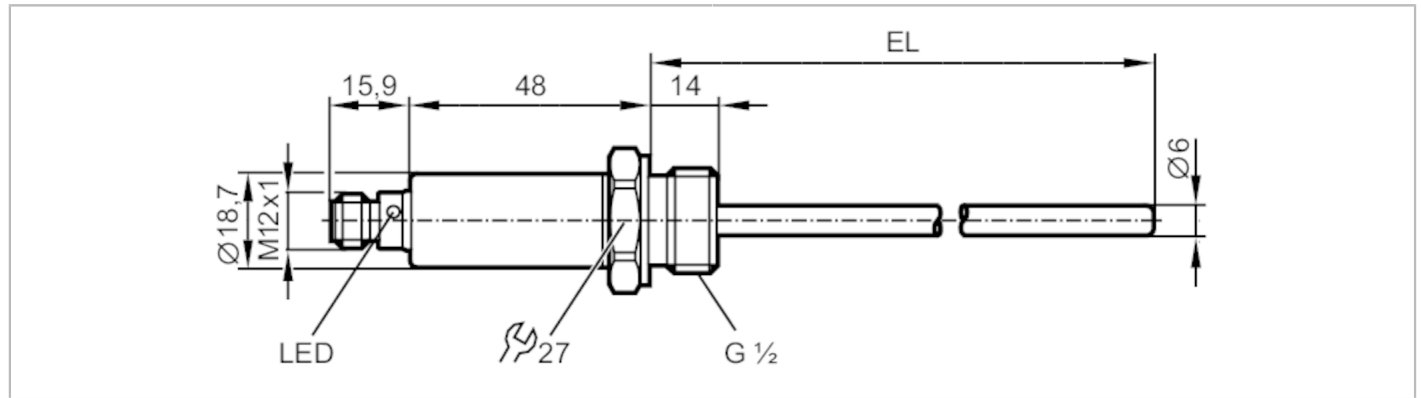


TA2437



Temperature transmitter

TA-100CLER12-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/2 external thread
Installation length EL [mm]	100
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	160 bar 16 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	86

TA2437



Temperature transmitter

TA-100CLER12-A-ZVG/US

Measuring range	[°C]	-50...150
Factory setting		0...100 °C
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	559
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC	DIN EN 61000-6-2	
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	230
UL approval	UL approval number	K002
Mechanical data		
Weight	[g]	131
Housing		tubular
Dimensions	[mm]	Ø 18.7 / L = 163.9
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM
Tightening torque	[Nm]	45
Process connection		threaded connection G 1/2 external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	100
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks		MS = set measuring span

TA2437



Temperature transmitter

TA-100CLER12-A-ZVG/US

Pack quantity

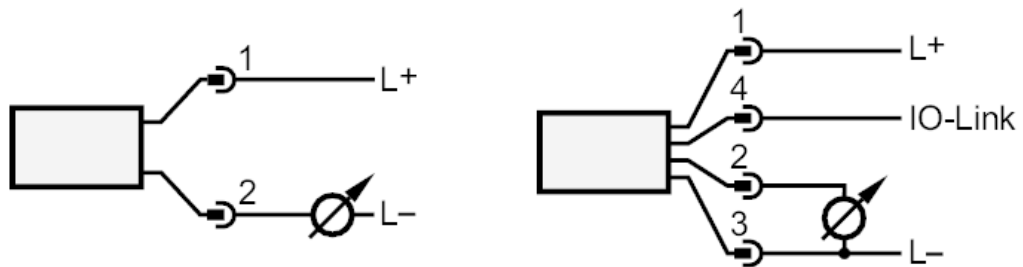
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

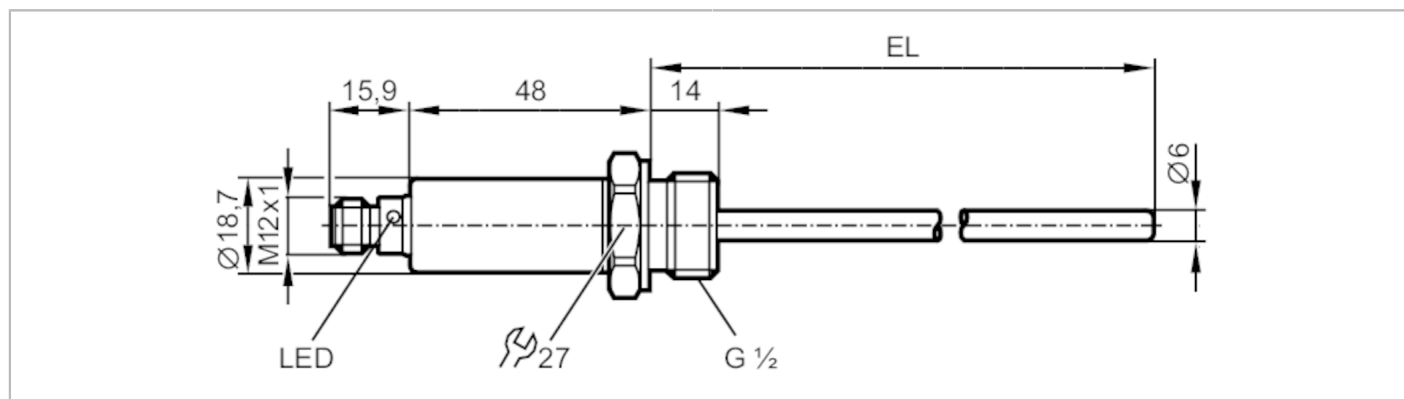


TA2445



Temperature transmitter

TA-150CLER12-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/2 external thread
Installation length EL [mm]	150

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor
When mounted in adapters the specifications of the adapter data sheet apply.	

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

Measuring/setting range

Probe length L [mm]	136
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TA2445



Temperature transmitter

TA-150CLER12-A-ZVG/US

Measuring range	[°C]	-50...150	
Factory setting		-50...150 °C	
Resolution			
Resolution of analog output	[K]	0.04	
Accuracy / deviations			
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)	
Temperature coefficient	[% of the span / 10 K]	0,1; (In case of deviation from the reference condition 25 ± 5 °C)	
Reaction times			
Dynamic response T05 / T09	[s]	1 / 3	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
Min. process cycle time	[ms]	2.3	
Supported DeviceIDs		Type of operation	DeviceID
		default	377
Operating conditions			
Ambient temperature	[°C]	-25...80	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 68; IP 69K	
Tests / approvals			
EMC		DIN EN 61000-6-2	
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	572	
UL approval		UL approval number	K002
Mechanical data			
Weight	[g]	136.3	
Housing		tubular	
Dimensions	[mm]	Ø 18.7 / L = 213.9	
Material		stainless steel (1.4404 / 316L); PEI; FKM	
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM	
Tightening torque	[Nm]	45	
Process connection		threaded connection G 1/2 external thread	
Probe diameter	[mm]	6	
Installation length EL	[mm]	150	
Displays / operating elements			
Display		operating status	1 x LED, green
Remarks			
Remarks		MS = set measuring span	

TA2445



Temperature transmitter

TA-150CLER12-A-ZVG/US

Pack quantity

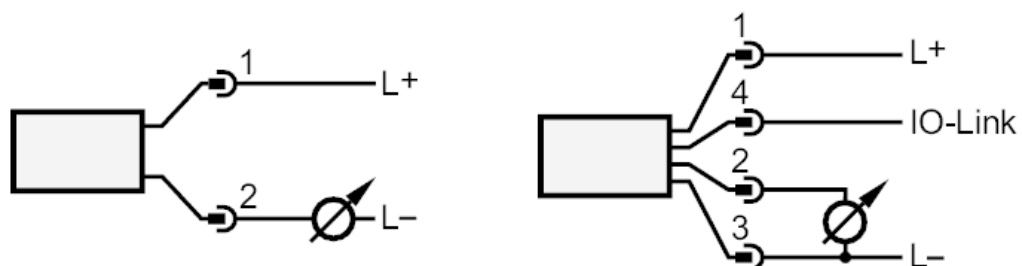
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

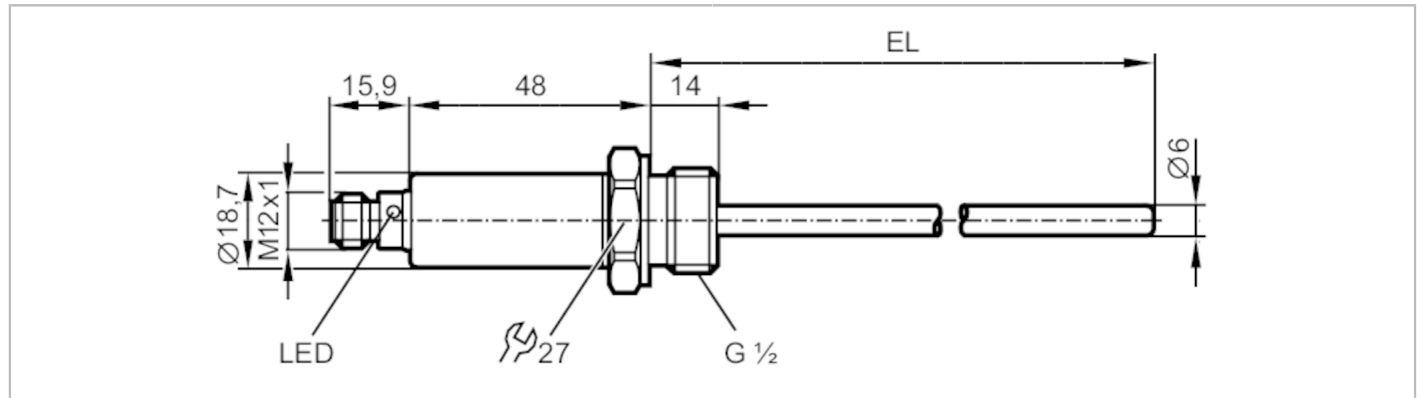


TA2447



Temperature transmitter

TA-150CLER12-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°C]	-50...150
Communication interface	IO-Link
Process connection	threaded connection G 1/2 external thread
Installation length EL [mm]	150
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	160 bar 16 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	136

TA2447



Temperature transmitter

TA-150CLER12-A-ZVG/US

Measuring range	[°C]	-50...150
Factory setting		0...100 °C
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation default	DeviceID 559
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 20 g (10...2000 Hz)
MTTF	[years]	346
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	147.5
Housing		tubular
Dimensions	[mm]	Ø 18.7 / L = 213.9
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM
Tightening torque	[Nm]	45
Process connection		threaded connection G 1/2 external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	150
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks		MS = set measuring span

TA2447



Temperature transmitter

TA-150CLER12-A-ZVG/US

Pack quantity

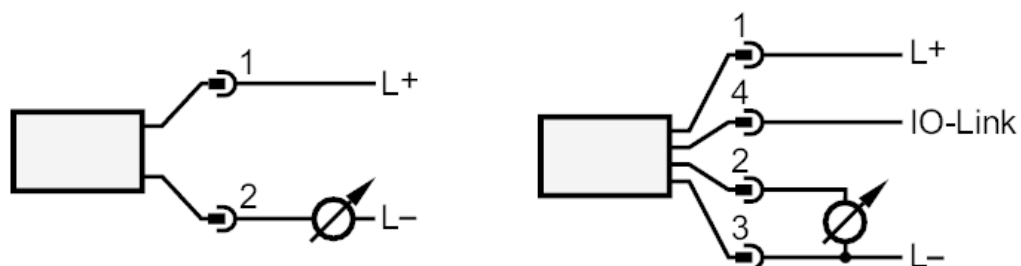
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

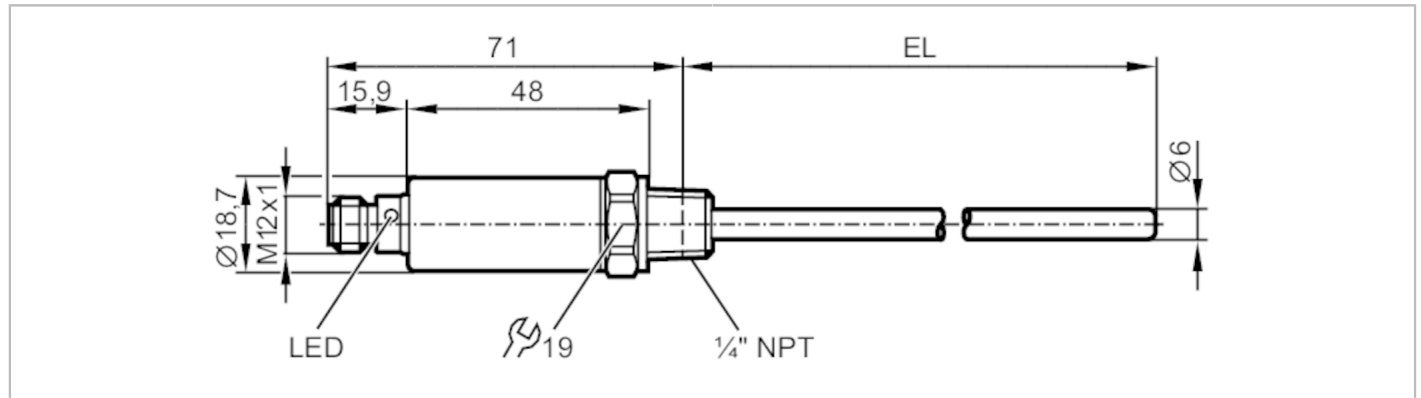


TA2603



Temperature transmitter

TA025FLEN14-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°F]	-58...302
Communication interface	IO-Link
Process connection	threaded connection 1/4" NPT external thread
Installation length EL [mm]	25

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	400 bar 40 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
MAWP (for applications according to CRN) [bar]	400

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

TA2603



Temperature transmitter

TA025FLEN14-A-ZVG/US

Measuring/setting range		
Probe length L	[mm]	17.1
Measuring range	[°F]	-58...302
Factory setting		0...300 °F
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
		Function Device identification
		Function Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs		Type of operation default
		DeviceID 378
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 20 g (10...2000 Hz)
MTTF	[years]	572
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	87.5
Dimensions	[mm]	Ø 18.7 / L = 96
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		threaded connection 1/4" NPT external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	25
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks		MS = set measuring span

TA2603



Temperature transmitter

TA025FLEN14-A-ZVG/US

Pack quantity

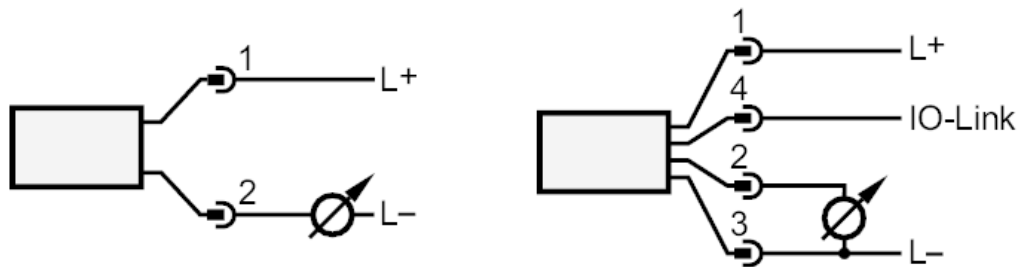
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

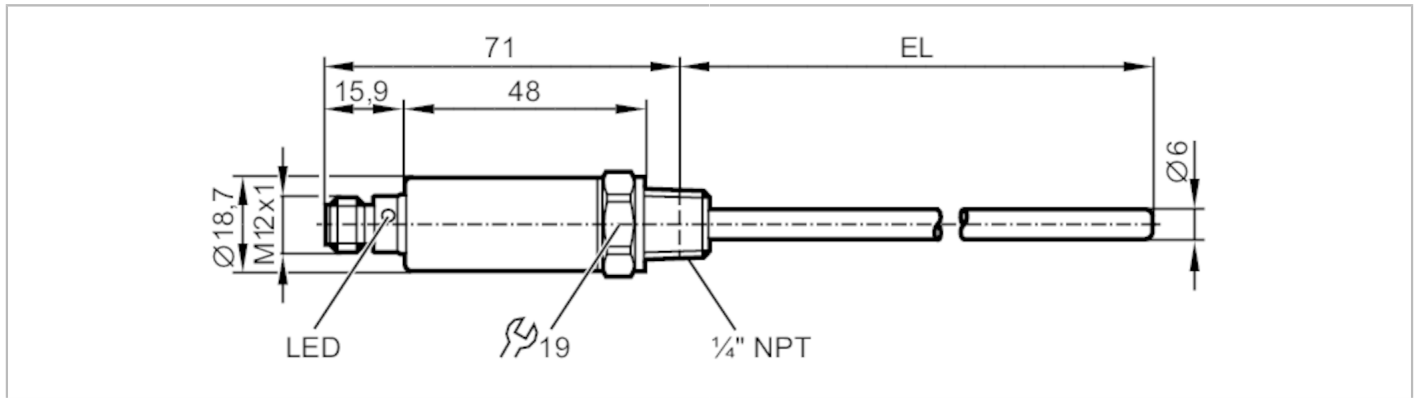


TA2613



Temperature transmitter

TA050FLEN14-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°F]	-58...302
Communication interface	IO-Link
Process connection	threaded connection 1/4" NPT external thread
Installation length EL [mm]	50

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	400 bar 40 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
MAWP (for applications according to CRN) [bar]	400

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

TA2613



Temperature transmitter

TA050FLEN14-A-ZVG/US

Measuring/setting range		
Probe length L	[mm]	42.1
Measuring range	[°F]	-58...302
Factory setting		0...300 °F
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation default	DeviceID 378
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 20 g (10...2000 Hz)
MTTF	[years]	572
UL approval	UL approval number	K002
Mechanical data		
Weight	[g]	92
Dimensions	[mm]	Ø 18.7 / L = 121
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		threaded connection 1/4" NPT external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	50
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks		MS = set measuring span

TA2613



Temperature transmitter

TA050FLEN14-A-ZVG/US

Pack quantity

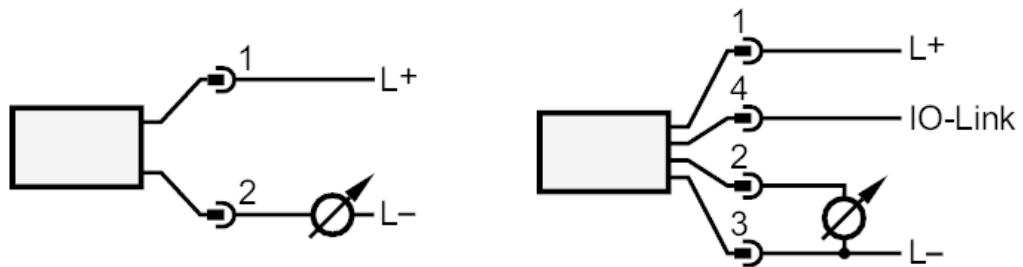
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

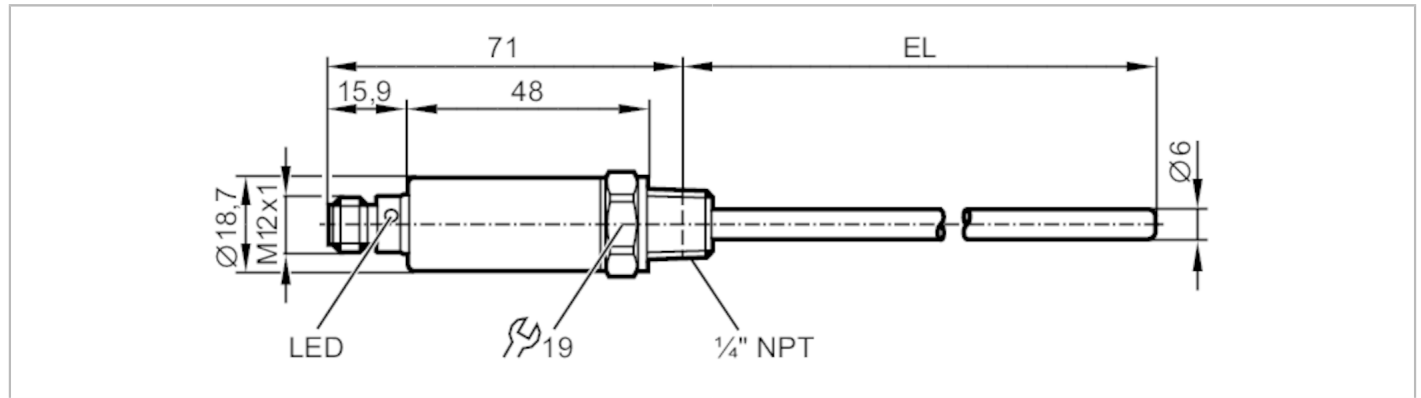


TA2633



Temperature transmitter

TA100FLEN14-A-ZVG/US



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°F]	-58...302
Communication interface	IO-Link
Process connection	threaded connection 1/4" NPT external thread
Installation length EL [mm]	100

Application

Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.
MAWP (for applications according to CRN) [bar]	300

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 1
------------------------------	-----------------------------

Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

TA2633



Temperature transmitter

TA100FLEN14-A-ZVG/US

Measuring/setting range		
Probe length L	[mm]	92.1
Measuring range	[°F]	-58...302
Factory setting		0...300 °F
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation default	DeviceID 378
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 20 g (10...2000 Hz)
MTTF	[years]	572
UL approval	UL approval number	K002
Mechanical data		
Weight	[g]	99
Dimensions	[mm]	Ø 18.7 / L = 171
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		threaded connection 1/4" NPT external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	100
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks		MS = set measuring span

TA2633



Temperature transmitter

TA100FLEN14-A-ZVG/US

Pack quantity

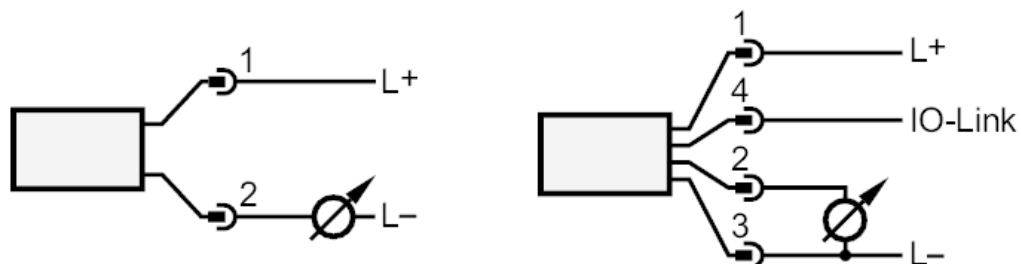
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

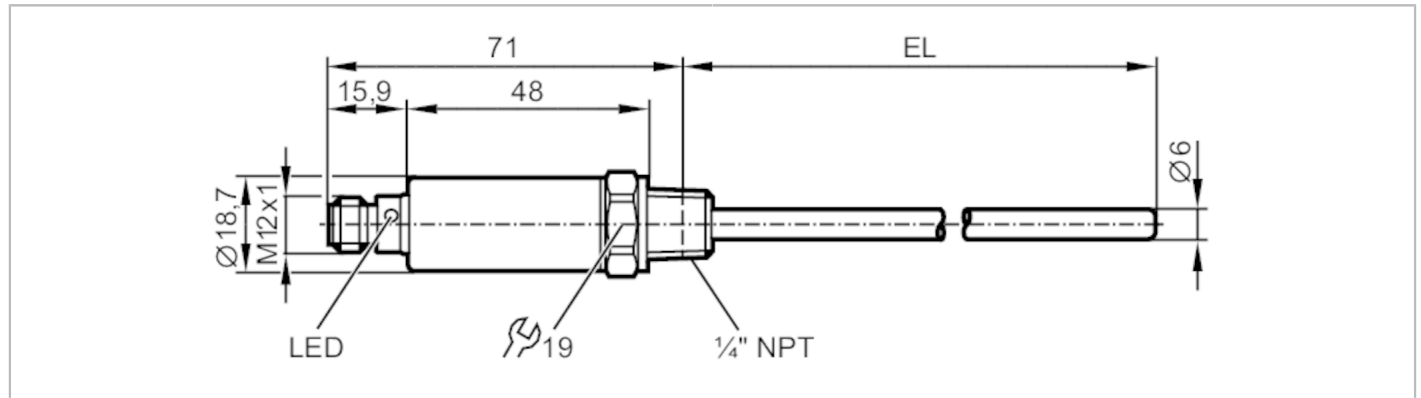


TA2643



Temperature transmitter

TA150FLEN14-A-ZVG/US



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 1
Measuring range [°F]	-58...302
Communication interface	IO-Link
Process connection	threaded connection 1/4" NPT external thread
Installation length EL [mm]	150
Application	
Special feature	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	300 bar 30 MPa
Note on pressure rating	sensor
	When mounted in adapters the specifications of the adapter data sheet apply.
MAWP (for applications according to CRN) [bar]	300
Electrical data	
Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 1
Outputs	
Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	250; ((18...19 V); 19...32 V: 300 Ω)
Short-circuit protection	yes
Overload protection	yes

TA2643



Temperature transmitter

TA150FLEN14-A-ZVG/US

Measuring/setting range		
Probe length L	[mm]	142.1
Measuring range	[°F]	-58...302
Factory setting		0...300 °F
Resolution		
Resolution of analog output	[K]	0.04
Accuracy / deviations		
Precision analog output	[K]	± 0,3 + (± 0,1 % MS)
Temperature coefficient [% of the span / 10 K]		0,1; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
Profiles		Smart Sensor - SSP 0 Generic Profiled Sensor
		Function Device identification
		Function Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs		Type of operation default
		DeviceID 378
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 68; IP 69K
Tests / approvals		
EMC		DIN EN 61000-6-2
Shock resistance		DIN IEC 68-2-27 50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6 20 g (10...2000 Hz)
MTTF	[years]	572
UL approval		UL approval number K002
Mechanical data		
Weight	[g]	102.45
Dimensions	[mm]	Ø 18.7 / L = 221
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		threaded connection 1/4" NPT external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	150
Displays / operating elements		
Display	operating status	1 x LED, green
Remarks		
Remarks		MS = set measuring span

TA2643



Temperature transmitter

TA150FLEN14-A-ZVG/US

Pack quantity

1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

