MLR420-1, MLR420-2, MLR430-1, MLR430-2, MLR430-3, MLR120, MLR157, MLT420-2, MLT430-2, MLT430-3

Кондуктометрический сигнализатор уровня со встроенной электроникой

GHM MESSTECHNIK

Технические характеристики

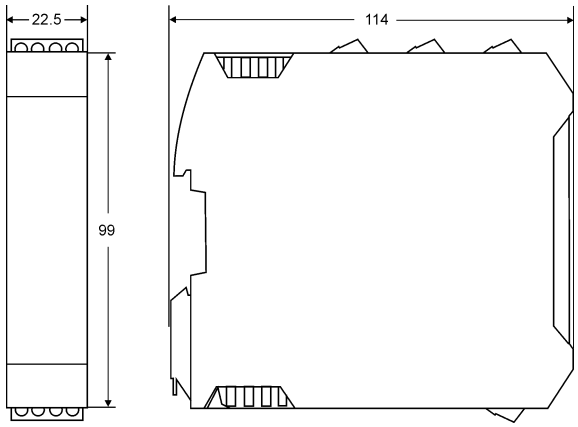
Conductive Point Level Switch MLR120

- **Processor controlled switching device**
- **Up to 2 electrodes or point sensors**
- **Sensitivity adjustable**
- **Switch-on delay adjustable**
- **Overfill monitoring acc. to §19 WHG (in preparation)**
- **Wide range power supply 18..230 V AC/DC**
- **2 alarm outputs, relay SPDT**
- **Case width 22.5 mm**
- **DIN rail mounting TS35**

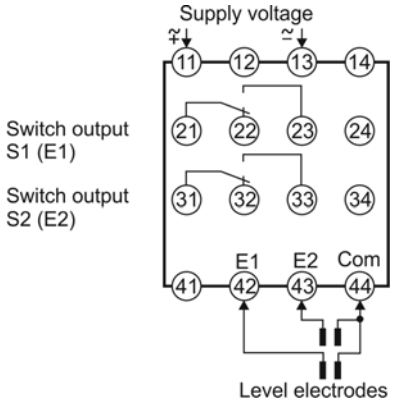
Technical data

Power supply	
Supply voltage	: 18..230 V AC/DC
Power consumption	: < 2 VA
Ambient temperature	: -10..55 °C
Storage temperature	: -40..+60 °C
Relative humidity	: < 95 %
Condensation	: not allowed
CE-conformity	: EN 61326:05/2007
Input	
Electrodes	: 2
Switching point	: 9 steps selectable from 0.05 kΩ..500 kΩ
Response time	: 1..10 s selectable
Min. media conductance	: > 2 µS
Measuring voltage	: < 5 V AC
Outputs	
2 relay SPDT	: < 250 V AC < 50 VA < 2 A, ohmic load < 100 V DC < 50 W < 2 A, ohmic load
Indicators	: LED green (operating) LED red (limit CH1 + CH2)
Case	: Polyamide (PA) 6.6, UL94V-0 DIN rail mounting TS35 acc. to DIN EN 60715
Weight	: approx. 200 g
Connection	: slide-in screw terminals with pressure plates 0.14..2.5 mm² (AWG 26..14)
Protection class	: IP20, acc. to BGV A3

Dimensions



Connection diagram



Ordering code

MLR120 - 1. - 2. - 3. - 4.

1.	**Measuring input**	
	0	2 electrodes
2.	**Output**	
	0	2 relay
3.	**Supply voltage**	
	0	18..230 V AC/DC
4.	**Options**	
	00	without option
	01	fast switching <50 ms

Conductive Point Level Switch MLR157

- **Processor controlled switching device**
- **Programming via Touch-Screen and USB interface**
- **Up to 4 electrodes or point level sensors**
- **Sensitivity programmable**
- **Switch-on delay programmable**
- **Temperature input RTD Pt100**
- **Wide range power supply 18..230 V AC/DC**
- **5 alarm outputs, relay SPDT and transistor**
- **Analog output 0/4..20 mA; 0/2..10 V DC**
- **Case width 50 mm**
- **DIN rail mounting TS35**

Technical data

Power supply

Supply voltage	:	18..230 V AC/DC
Power consumption	:	< 5 VA
Ambient temperature	:	-10..+55 °C
Storage temperature	:	-40..+60 °C
Relative humidity	:	< 95 %
Condensation	:	not allowed
CE-conformity	:	EN 61326:05/2007

Input

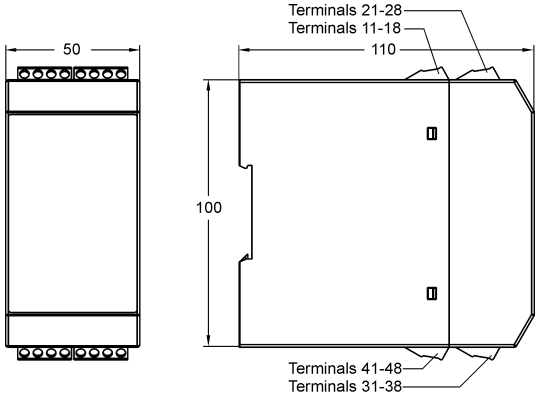
Electrodes	:	4
Switching point	:	selectable from 0.05 kΩ..500 kΩ
Response time	:	0.05..10 s programmable
Min. media conductance	:	> 2 µS
Measuring voltage	:	< 5 V AC
Ext. programming	:	via USB-interface

Output

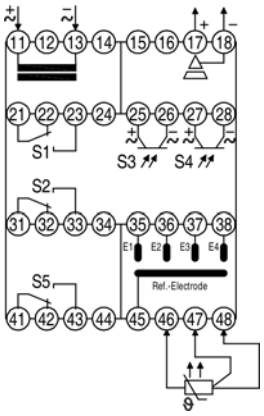
Switching outputs	:	3 x relay; 2 x electronic PNP/NPN
relay SPDT	:	< 250 V AC < 50 VA < 2 A ohmic load < 100 V DC < 50 W < 2 A ohmic load
Electronic	:	transistor PNP, max. 32 V DC, 50 mA
Analog output	:	0/4..20 mA burden ≤ 500 Ω, 0/2..10 V burden > 500 Ω, isolated output burden depending

Case	:	Polyamide (PA) 6.6, UL94V-0 DIN rail mounting TS35 acc. to DIN EN 60715
Weight	:	approx. 200 g
Connection	:	slide-in screw terminals with pressure plates 0.14..2.5 mm² (AWG 26..14)
Protection class	:	IP20, acc. to BGV A3

Dimensions



Connection diagram



Ordering code

MLR157 - 1. - 2. - 3. - 4.

1.	**Measuring input**	
	0	4 electrodes + 1 RTD Pt100
2.	**Outputs**	
	0	3 relay, 2 transistors
3.	**Supply voltage**	
	0	18..230 V AC/DC
4.	**Options**	
	00	without option

Conductive Point Level Switch MLR420-1

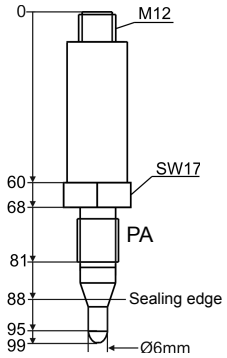
- **1 point level with switching output**
- **Process connection GHM*adapt* M12x1.5**
- **Round case, SS-type Ø 18 mm**
- **Flexible mounting: compact version**
- **No moving parts in the medium**
- **Sensitivity programmable**
- **Parameters programmable via GHM*ware* and adapter EYY120**
- **Isolation between sensor, case / supply, output**

Technical data

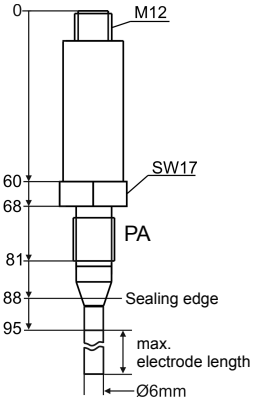
Compact version	
Supply voltage	: 18..30 V DC
Power consumption	: < 3 VA
CE-conformity	: EN 61326:05/2007
Ambient conditions	
Ambient temperature	: -20..+70 °C
Climatic class	: EN 60068-2-38
Vibration class	: EN 60068-2-6, GL test2
Certifications	
EHEDG certificate no.	: 28/2011
Input	: 1
Response time	: 0.05..10 s, programmable
Output	: NO / NC programmable
Electronic	: transistor PNP, max. 30 V DC / 100 mA
Electrical connection	: M12x1 plug
Isolation	: sensor system, case / supply, output
Case	: round case, SS-type Ø 18
Material	: 1.4305
Protection class	: IP67 / IP69K
Electrode	: 1
Electrode length	: 4..200 mm
Process temperature	: -20..+100 °C, 140 °C < 30 min CIP-/SIP-capable
Process pressure	: -1..+10 bar
Min. media conductance	: > 2µS
Process material	: 1.4404, PEEK, PFA-coated, FDA conform food safe acc. to EHEDG
Process connection	: compatible to standard hygienic threads M12x1.5
Stud torque	: 5..10 Nm

Dimensions

MLR420-1-1-A-0000-...

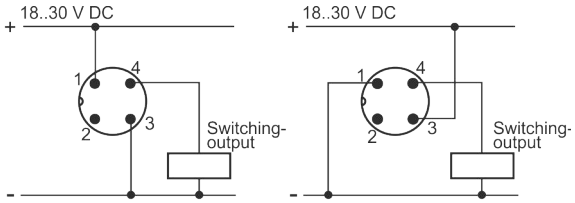


MLR420-1-1-A-...



Connection diagrams

M12 device plug, 4 pole



NO **NC**

Cable colors:
1 = brown, 2 = white, 3 = blue, 4 = black

Ordering code

MLR420 - 1. - 2. - 3. - 4. - 5. - 6. - 7.

1.	**Process connection (PA)**	
	1	M12x1.5
2.	**Number of electrodes**	
	1	1 electrode
3.	**Electrode type** (rod or cable)	
	A	rod
	B	cable (on request)
4.	**Electrode length [mm]**	
	0000	stub rod
	0200	200
	XXXX	customized length (on request)
5.	**Electrode surface**	
	0	uncoated (standard)
	1	PFA, black coated
6.	**Electrical connection**	
	0	M12 plug
7.	**Options**	
	00	without option

Accessory:
Programming adapter EYY120 see page Fehler: Referenz nicht gefunden

Conductive Point Level Switch MLR420-2

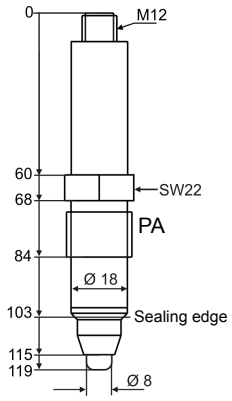
- **1 point level with switching output**
- **Process connection GHM*adapt* G ½**
- **Round case, SS-type Ø 18 mm**
- **Flexible mounting: compact version**
- **No moving parts in the medium**
- **Sensitivity programmable**
- **Parameters programmable via GHM*ware* and adapter EYY120**
- **Isolation between sensor, case / supply, output**

Technical data

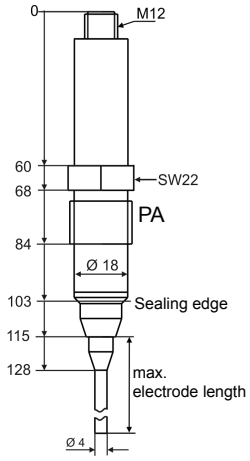
Compact version		
Supply voltage	:	18..30 V DC
Power consumption	:	< 3 VA
CE-conformity	:	EN 61326:05/2007
Ambient conditions		
Ambient temperature	:	-20..+70 °C
Climatic class	:	EN 60068-2-38
Vibration class	:	EN 60068-2-6, GL test2
Certifications		
EHEDG certificate no.	:	28/2011
Input	:	1
Response time	:	0.05..10 s, programmable
Output	:	NO / NC programmable
Electronic	:	transistor PNP, max. 30 V DC / 100 mA
Electrical connection	:	M12x1 plug
Isolation	:	sensor system, case / supply, output
Case	:	round case, SS-type Ø 18 mm
Material	:	1.4305
Protection class	:	IP67 / IP69K
Electrode	:	1
Electrode length	:	4..5000 mm
Process temperature	:	-20..+100 °C, 140 °C < 30 min CIP-/SIP-capable
Process pressure	:	-1..+10 bar
Min. media conductance	:	> 2µS
Process material	:	1.4404, PEEK, PFA-coated, FDA conform food safe acc. to EHEDG
Process connection	:	compatible to standard hygienic threads G ½
Stud torque	:	5..10 Nm

Dimensions

MLR420-2-1-A-0000-...

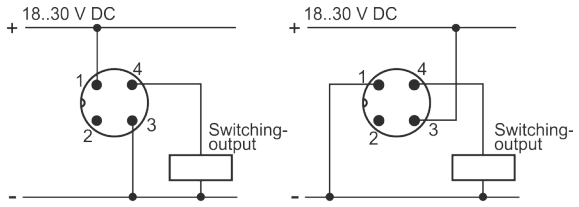


MLR420-2-1-A-...



Connection diagram

M12 device plug, 4 pole



NO **NC**

Cable colors:
1 = brown, 2 = white, 3 = blue, 4 = black

Ordering code

	1.	2.	3.	4.	5.	6.	7.
MLR420 -	☐	- ☐	- ☐	- ☐	- ☐	- ☐	- ☐

1.	**Process connection (PA)**	
	2	G ½
2.	**Number of Electrodes**	
	1	1 electrode
3.	**Electrode type** (rod or cable)	
	A	rod
	B	cable (on request)
4.	**Electrode length [mm]**	
	0000	stub rod
	0200	200
	0500	500
	1000	1000
	1500	1500
	2000	2000
	2500	2500
	3000	3000
	3500	3500
	4000	4000
	4500	4500
	5000	5000
	XXXX	customized length (on request)
5.	**Electrode surface**	
	0	uncotaed (standard)
	1	0200 PFA, black coated
		500 PFA, black coated
		1000 PFA, black coated
		1500 PFA, black coated
		2000 PFA, black coated
		customized length (on request)
6.	**Electrical connection**	
	0	M12 plug
7.	**Options**	
	00	without option

Accessory:
Programming adapter EYY120

Product Information

Hygienic designed

Conductive Point Level Switch MLR430-1

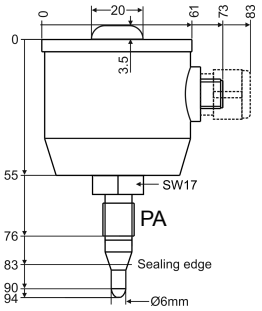
- **1 limit level with 3 switch outputs, free configurable**
- **Process connection GHM*adapt* M12x1.5**
- **Round case, SS-type Ø 59 mm**
- **Flexible mounting: compact version**
- **No moving parts in the medium**
- **Sensitivity programmable**
- **Parameter programmable via GHM*ware* and internal Mini-USB Interface**
- **Isolation between sensor system, case / supply, output**
- **Wide range LED indicator**

Technical data

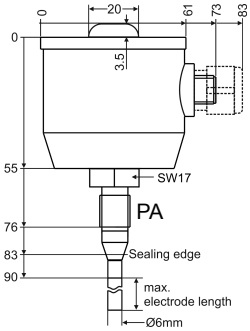
Compact version		
Supply voltage	:	18..30 V DC
Power consumption	:	< 3 VA
CE-conformity	:	EN 61326:05/2007
Ambient conditions		
Ambient temperature	:	-20..+70 °C
Climatic class	:	EN 60068-2-38
Vibration class	:	EN 60068-2-6, GL test2
Certifications		
EHEDG certificate no.	:	28/2011
Input	:	1
Response time	:	0.05..10 s, programmable
Output	:	NO / NC programmable
3 x Electronic	:	transistor PNP, max. 30 V DC / 100 mA
Electrical connection	:	M12x1 plug or cable gland M16x1.5 Polyamide (PA) or SS-type 1.4305
Isolation	:	sensor system, case / supply, output
LED indicator	:	red/green programmable
Case	:	round case, SS-type Ø 59 mm
Material	:	1.4305
LED-cap	:	Acrylic glass (PMMA)
Protection class	:	IP67 / IP69K
Electrode	:	1
Electrode length	:	4..200 mm
Process temperature	:	-20..+100 °C, 140 °C < 30 min CIP-/SIP-capable
Process pressure	:	-1..+10 bar
Min. media conductance	:	> 2µS
Process material	:	1.4404, PEEK, PFA-coated, FDA conform food safe acc. to EHEDG
Process connection	:	compatible to standard hygienic threads M12x1.5
Stud torque	:	5..10 Nm

Dimensions

MLR430-1-1-A-0000-...

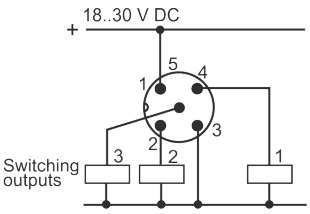


MLR430-1-1-A-...

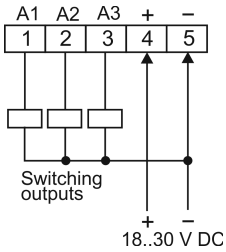


Connection diagram

M12 device plug, 5 pole



internal terminal strip



Cable colors:
1 = brown, 2 = white, 3 = blue, 4 = black, 5 = gray

Ordering code

MLR430 - 1. - 2. - 3. - 4. - 5. - 6. - 7.

1.	**Process connection (PA)**	
	1	M12x1.5
2.	**Number of electrodes**	
	1	1 electrode
3.	**Electrode type** (rod or cable)	
	A	rod
	B	cable (on request)
4.	**Electrode length [mm]**	
	0000	stub rod
	0200	200
	XXXX	customized length (on request)
5.	**Electrode surface**	
	0	uncoated (standard)
	1	PFA, black coated
6.	**Electrical connection**	
	0	M12 plug
	1	cable gland PA
	2	cable gland 1.4305
7.	**Options**	
	00	without option
	Accessory	
	ACI211	USB-Connection cable

Conductive Point Level Switch MLT430-2

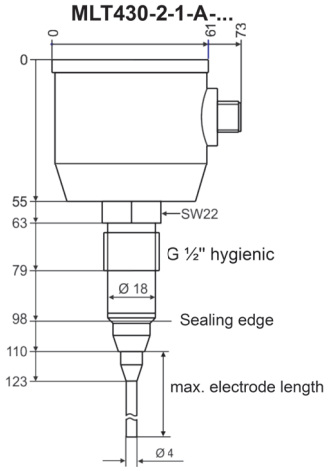
Member of GHM GROUP

Hygienic Design

FDA

GHMware

Dimensions



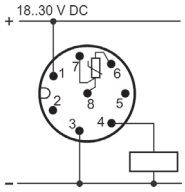
- **1 point level with 3 switch outputs, freely configurable**
- **integrated RTD Pt100 sensor**
- **Process connection GHM*adapt* G ½" hygienic**
- **Round case, stainless steel type Ø 59 mm**
- **Flexible mounting: compact version**
- **No moving parts in the medium**
- **Sensitivity programmable**
- **Parameters programmable with GHM*ware* via USB interface**
- **Isolation between sensor system, case / supply, output**
- **Wide range LED indicator**
- **Electrode cannot be shortened afterwards**

Technical data

Compact version	
Supply voltage	: 18..30 V DC
Power consumption	: < 3 VA
CE-conformity	: EN 61326-1:2013
Ambient conditions	
Ambient temperature	: -20..+70 °C
Climatic class	: EN 60068-2-38:2009
Vibration class	: EN 60068-2-6:2008, GL Test 2
Input	: 1
Response time	: 0.05..10 s, programmable
Output	: NO / NC programmable
3 x Electronic	: transistor PNP, max. 30 V DC / 100 mA
Electrical connection	: M12 plug
Isolation	: sensor system, case / supply, output
LED indicator	: red/green programmable
Case	: round case, stainless steel type Ø 59 mm
Material	: 1.4305
LED-cap	: Acrylic glass (PMMA)
Protection class	: IP67 / IP69K
Electrode	: 1
Electrode length	: 15..1000 mm
Process temperature	: -20..+100 °C, 140 °C < 30 min CIP-/SIP-capable
Temperature sensor	: RTD Pt100, class A
Process pressure	: -1..+10 bar
Min. media conductance	: > 2µS
Process material	: 1.4404, PEEK, FDA conform conform regulation 1935/2004 & 10/2011
Process connection	: G ½" hygienic
Stud torque	: 5..10 Nm

Connection diagrams

M12 device plug, 8-pole



Cable colors:

1 = white, 3 = green	: supply voltage
4 = yellow	: output
6 = pink, 7 = blue, 8 = red	: Pt100 sensor

Order code

MLR430 - 1. - 2. - 3. - 4. - 5. - 6. - 7. - 8.

1.	**Process connection**	
	2	G ½" hygienic
2.	**Number of electrodes**	
	1	1 electrode
3.	**Electrode type**	
	A	rod
	B	rope (on request)
4.	**Electrode length [mm]**	
	0015	15 (min. length)
	0200	200
	0500	500
	1000	1000
5.	**Electrode surface**	
	0	uncoated
6.	**Electrical connection**	
	0	M12 plug
7.	**Options**	
	00	without option
8.	**Certificate DIN EN 10204, indicate only when required**	
	WZ2.2	factory certification 2.2

	Accessories	
	ACI211	USB programming cable for MLx43x
	ACH113	8-pole hygienic connection cable, straight
	ACH123	8-pole hygienic connection cable, angular

Conductive Point Level Switch MLR430-3

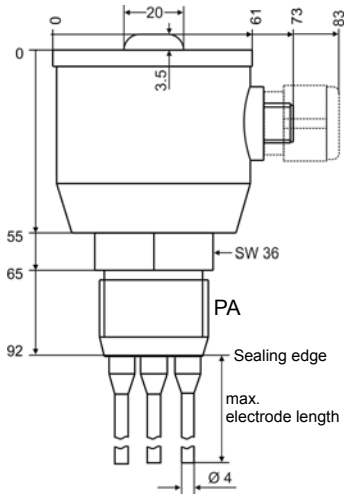
- **4 point levels with 3 switch outputs, free configurable**
- **Process connection GHM*adapt* G 1**
- **Round case, SS-type Ø 59 mm**
- **Flexible mounting: compact version**
- **No moving parts in the medium**
- **Sensitivity programmable**
- **Parameter programmable via GHM*ware* and internal Mini-USB Interface**
- **Isolation between sensor system, case / supply, output**
- **Wide range LED indicator**

Technical data

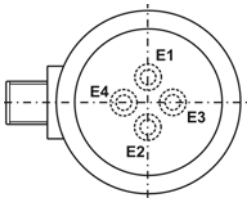
Compact version	
Supply voltage	: 18..30 V DC
Power consumption	: < 3 VA
CE-conformity	: EN 61326:05/2007
Ambient conditions	
Ambient temperature	: -20..+70 °C
Climatic class	: EN 60068-2-38
Vibration class	: EN 60068-2-6, GL test2
Certifications	
EHEDG certificate no.	: 28/2011
Input	: 1..4
Response time	: 0.05..10 s, programmable
Output	: NO / NC programmable
3 x Electronic	: transistor PNP, max. 30 V DC, 100 mA
Electrical connection	: M12x1 plug or cable gland M16x1.5 Polyamide (PA) or SS-type 1.4305
Isolation	: sensor system, case / supply, output
LED indicator	: red/green programmable
Case	: round case, SS-type Ø 59 mm
Material	: 1.4305
LED-cap	: Acrylic glass (PMMA)
Protection class	: IP67 / IP69K
Electrode	: max. 4
Electrode length	: 15..5000 mm
Process temperature	: -20..+100 °C, 140 °C < 30 min CIP-/SIP-capable
Process pressure	: -1..+10 bar
Min. media conductance	: > 2µS
Process material	: 1.4404, PEEK, PFA-coated, FDA conform food safe acc. to EHEDG
Process connection	: compatible to standard hygienic threads G 1
Stud torque	: 10..20 Nm

Dimensions

MLR430-3-4-A-...

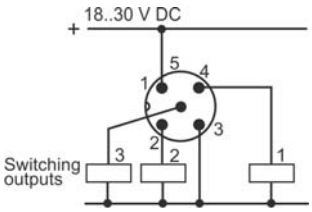


Position of electrodes

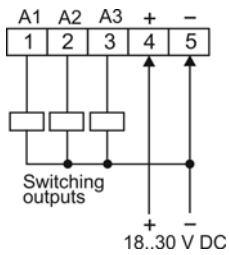


Connection diagrams

M12 device plug, 5 pole



internal terminal strip



Cable colors:
1 = brown, 2 = white, 3 = blue, 4 = black, 5 = gray

Ordering code

	1.	2.	3.	4.	5.	6.	7.
MLR430 -	☐	- ☐	- ☐	- ☐	- ☐	- ☐	- ☐

1.	**Process connection (PA)**	
	3	G 1
2.	**Number of electrodes**	
	2	2 electrodes
	3	3 electrodes
	4	4 electrodes
3.	**Electrode type** (rod or cable)	
	A	rod
	B	cable (on request)
4.	**Electrode length [mm]**	
	0200	200
	0500	500
	1000	1000
	1500	1500
	2000	2000
	2500	2500
	3000	3000
	3500	3500
	4000	4000
	4500	4500
	5000	5000
	XXXX	customized length (on request)
5.	**Electrode surface**	
	0	uncoated (standard)
	1	0200 PFA, black coated
		0500 PFA, black coated
		1000 PFA, black coated
		1500 PFA, black coated
		2000 PFA, black coated
		customized length (on request)
6.	**Electrical connection**	
	0	M12 plug
	1	cable gland PA, M16x1.5
	2	cable gland V2A (1.4305) M16x1.5
7.	**Options**	
	00	without option
	Accessories	
	AMD 100	Spacer for multirod sensors
	ACI211	USB-Connection cable

Conductive Point Level Switch MLT420-2

Member of GHM GROUP

Hygienic Design

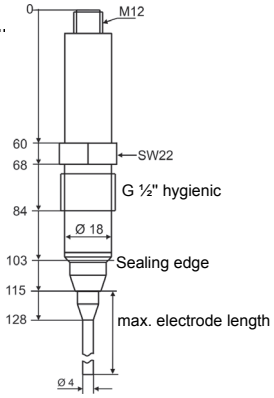
- **1 point level with switching output**
- **integrated RTD Pt100 sensor isolated**
- **Process connection GHM*adapt* G ½" hygienic**
- **Round case, stainless steel type Ø 18 mm**
- **Flexible mounting: compact version**
- **No moving parts in the medium**
- **Sensitivity programmable**
- **Parameters programmable with GHM*ware* via USB programming adapter EYY120**
- **Isolation between sensor, case / supply, output**
- **Electrode cannot be shortened afterwards**

Technical data

Compact version		
Supply voltage	:	18..30 V DC
Power consumption	:	< 3 VA
CE-conformity	:	EN 61326-1:2013
Ambient conditions		
Ambient temperature	:	-20..+70 °C
Climatic class	:	EN 60068-2-38:2009
Vibration class	:	EN 60068-2-6:2008, GL Test 2
Input	:	1
Response time	:	0.05..10 s, programmable
Output	:	NO / NC programmable
Electronic	:	transistor PNP, max. 30 V DC / 100 mA
Electrical connection	:	M12 plug 8-pole
Isolation	:	sensor system, case / supply, output
Case	:	round case, stainless steel type Ø 18 mm
Material	:	1.4305
Protection class	:	IP67 / IP69K
Electrode	:	1
Electrode length	:	15..1000 mm
Temperature sensor	:	RTDv Pt100 class A, isolated
Process temperature	:	-20..+100 °C, 140 °C < 30 min CIP-/SIP-capable
Process pressure	:	-1..+10 bar
Min. media conductance	:	> 2µS
Process material	:	1.4404, PEEK, PFA-coated, FDA conform conform regulation 1935/2004 & 10/2011
Process connection	:	G ½" hygienic
Stud torque	:	5..10 Nm

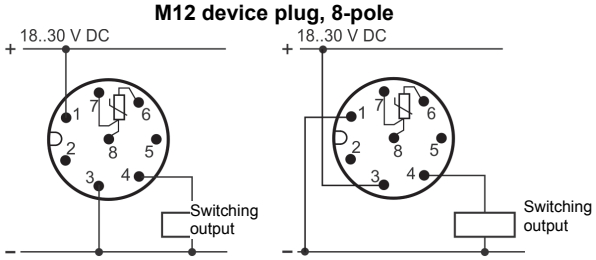
Dimensions

MLT420-2-1-A-...



Connection diagram

M12 device plug, 8-pole



Cable colors:

1 = white, 3 = green	: supply voltage
4 = yellow	: output
6 = pink, 7 = blue, 8 = red	: Pt100 sensor

Order code

MLT420 - 1. - 2. - 3. - 4. - 5. - 6. - 7. - 8.

1.	**Process connection**	
	2	G ½" hygienic
2.	**Number of Electrodes**	
	1	1 electrode
3.	**Electrode type**	
	A	rod
4.	**Electrode length [mm]**	
	0015	15 (min. electrode length)
	0040	40
	0200	200
	0500	500
	1000	1000
5.	**Electrode surface**	
	0	uncoated (standard)
6.	**Electrical connection**	
	0	M12 plug
7.	**Options**	
	00	without option
8.	**Certificate DIN EN 10204, indicate only when required**	
	WZ2.2	factory certification 2.2

	Accessories	
	EYY120	USB programming adapter for MLx42x
	ACH113	8-pole hygienic connection cable, straight
	ACH123	8-pole hygienic connection cable, angular

Conductive Point Level Switch MLT430-2

Member of GHM GROUP

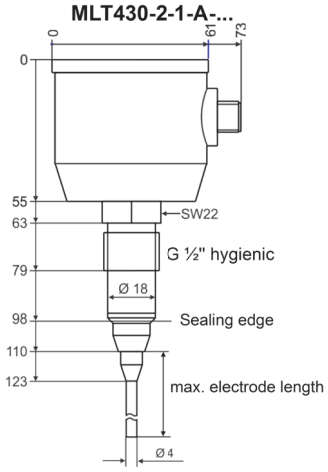
Hygienic Design

- **1 point level with 3 switch outputs, freely configurable**
- **integrated RTD Pt100 sensor**
- **Process connection GHM*adapt* G ½" hygienic**
- **Round case, stainless steel type Ø 59 mm**
- **Flexible mounting: compact version**
- **No moving parts in the medium**
- **Sensitivity programmable**
- **Parameters programmable with GHM*ware* via USB interface**
- **Isolation between sensor system, case / supply, output**
- **Wide range LED indicator**
- **Electrode cannot be shortened afterwards**

Technical data

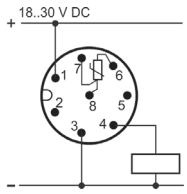
Compact version	
Supply voltage	: 18..30 V DC
Power consumption	: < 3 VA
CE-conformity	: EN 61326-1:2013
Ambient conditions	
Ambient temperature	: -20..+70 °C
Climatic class	: EN 60068-2-38:2009
Vibration class	: EN 60068-2-6:2008, GL Test 2
Input	: 1
Response time	: 0.05..10 s, programmable
Output	: NO / NC programmable
3 x Electronic	: transistor PNP, max. 30 V DC / 100 mA
Electrical connection	: M12 plug
Isolation	: sensor system, case / supply, output
LED indicator	: red/green programmable
Case	: round case, stainless steel type Ø 59 mm
Material	: 1.4305
LED-cap	: Acrylic glass (PMMA)
Protection class	: IP67 / IP69K
Electrode	: 1
Electrode length	: 15..1000 mm
Process temperature	: -20..+100 °C, 140 °C < 30 min CIP-/SIP-capable
Temperature sensor	: RTD Pt100, class A
Process pressure	: -1..+10 bar
Min. media conductance	: > 2µS
Process material	: 1.4404, PEEK, FDA conform conform regulation 1935/2004 & 10/2011
Process connection	: G ½" hygienic
Stud torque	: 5..10 Nm

Dimensions



Connection diagrams

M12 device plug, 8-pole



Cable colors:

1 = white, 3 = green	: supply voltage
4 = yellow	: output
6 = pink, 7 = blue, 8 = red	: Pt100 sensor

Order code

MLR430 - 1. - 2. - 3. - 4. - 5. - 6. - 7. - 8.

1.	**Process connection**	
	2	G ½" hygienic
2.	**Number of electrodes**	
	1	1 electrode
3.	**Electrode type**	
	A	rod
	B	rope (on request)
4.	**Electrode length [mm]**	
	0015	15 (min. length)
	0200	200
	0500	500
	1000	1000
5.	**Electrode surface**	
	0	uncoated
6.	**Electrical connection**	
	0	M12 plug
7.	**Options**	
	00	without option
8.	**Certificate DIN EN 10204, indicate only when required**	
	WZ2.2	factory certification 2.2

	Accessories	
	ACI211	USB programming cable for MLx43x
	ACH113	8-pole hygienic connection cable, straight
	ACH123	8-pole hygienic connection cable, angular

Conductive Point Level Switch MLT430-3

Member of GHM GROUP

Conductive Level

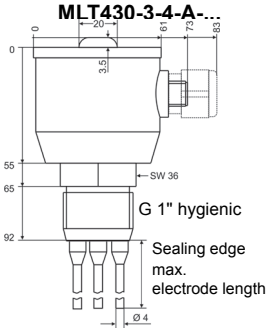
- **4 point levels with 3 switch outputs, freely configurable**
- **integrated RTD Pt100, isolated**
- **Process connection GHM*adapt* G 1" hygienic**
- **Round case, stainless steel type Ø 59 mm**
- **Flexible mounting: compact version**
- **No moving parts in the medium**
- **Sensitivity programmable**
- **Parameter programmable with GHM*ware* via USB interface**
- **Isolation between sensor system, case / supply, output**
- **Wide range LED indicator**
- **Electrode E2 cannot be shortened afterwards**

Technical data

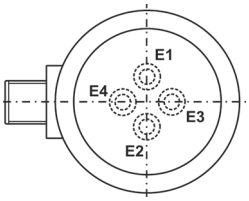
Compact version	
Supply voltage	: 18..30 V DC
Power consumption	: < 3 VA
CE-conformity	: EN 61326-1:2013
Ambient conditions	
Ambient temperature	: -20..+70 °C
Climatic class	: EN 60068-2-38:2009
Vibration class	: EN 60068-2-6:2008, GL Test 2
Input	: 1..4
Response time	: selectable from 0.05..10 s
Output	: NO / NC programmable
3 x Electronic	: transistor PNP, max. 30 V DC, 100 mA
Electrical connection	: M12 plug, 8-pole
Isolation	: sensor system, case / supply, output
LED indicator	: red/green programmable
Case	: round case, stainless steel type Ø 59 mm
LED-cap	: Acrylic glass (PMMA)
Material	: 1.4305
Protection class	: IP67 / IP69K
Electrode	: max. 4
Electrode length	: 15..1000 mm
Temperature sensor	: Pt100 class A, isolated
Process temperature	: -20..+100 °C, 140 °C < 30 min CIP-/SIP-capable
Process pressure	: -1..+10 bar
Min. media conductance	: > 2µS
Process material	: 1.4404, PEEK, FDA conform conform regulation 1935/2004 & 10/2011
Process connection	: G 1" hygienic
Stud torque	: 10..20 Nm

Dimensions

MLT430-3-4-A-...



Position of electrodes

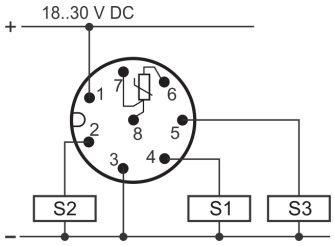


E2 = Rod with integr. Pt100 Sensor

Note:
Electrode cannot be shortened afterwards.

Connection diagrams

M12 device plug, 8-pole



S1..S3 switching outputs

Cable colors:

1 = white, 3 = green	: Supply voltage
2 = brown, 4 = yellow, 5 = grey	: Outputs S1 , S2, S3
6 = pink, 7 = blue, 8 = red	: Pt100 sensor

Order code

MLT430 - 1. - 2. - 3. - 4. - 5. - 6. - 7. - 8.

1.	**Process connection**	
	3	G 1" hygienic
2.	**Number of electrodes**	
	2	2 electrodes
	3	3 electrodes
	4	4 electrodes
3.	**Electrode type**	
	A	rod
4.	**Electrode length [mm]**	
	0015	15 (min. length)
	0200	200
	0500	500
	1000	1000
5.	**Electrode surface**	
	0	uncoated
6.	**Electrical connection**	
	0	M12 plug
7.	**Options**	
	00	without option
8.	**Certificate DIN EN 10204, indicate only when required**	
	WZ2.2	factory certification 2.2

	Accessories	
	AMD100	Spacer for multi-rod sensors
	ACI211	USB programming cable for MLx43x
	ACH113	8-pole hygienic connection cable, straight
	ACH123	8-pole hygienic connection cable, angular

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