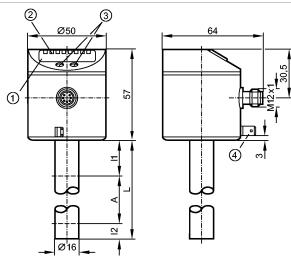
Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.

efector160

LK8123



LK0472B-B-00KVPKG/US Level sensors



- 1: 4-digit alphanumeric display
- 2: LEDs
- 3: Programming buttons
- 4: Housing connection (flat-pin connector 6.3 mm following DIN 46244)

[mA]





Product characteristics

Electronic level sensor

Quick disconnect

Probe length: L = 472 mm

3 operating outputs (OUT1...OUT3)

1 overflow output (OUT-OP)

Indication of the level as a 8-4-2-1 binary code

4-digit alphanumeric display

Application

Application		Hydrous coolants, oils, water, media similar to water
Cannot be used for:		extremely conductive and adhering media, granulates and bulk materials, acids and
		alkalis, food and electroplating applications
Dielectric constant medium		> 2
Medium temperature oil		
- Continuous	[°C]	070
- Short time	[°C]	090
Medium temperature water and		
hydrous media	[°C]	035 (LK8123 + E43101: 060) **)
Medium temperature coolant		
emulsions	[°C]	035 (LK8123 + E43101: 060) **)
Maximum speed of the change	of	
level [mm/s]	200
Electrical data		
Electrical design		DC PNP
Operating voltage	[V]	1830 DC

< 60

Ш

yes

Outputs

Current consumption

Reverse polarity protection

Protection class

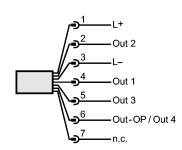
Output		3 operating outputs (OUT1OUT3) 1 overflow output (OUT-OP)
		Indication of the level as a 8-4-2-1 binary code
Output function		3 x normally open / closed programmable (OUT1OUT3);
Output function		1 x normally open / closed programmable (OUT-OP)
Current rating	[mA]	200
Voltage drop	[V]	< 2.5
Short-circuit protection	[v]	thermal, pulsed
Overload protection		- · · · · · · · · · · · · · · · · · · ·
Measuring / setting range		yes
Probe length L	[mm]	472
Active range A		390
	[mm]	
Inactive range I1 / I2	[mm]	53 / 30
Setting range	[[[]	40, 200
Set point, SP	[mm]	40390
Reset point, rP	[mm]	35385
in steps of	[mm]	5
Hysteresis	[mm]	5
Overflow switch point OP	[mm]	139 - 163 - 188 - 212 - 236 - 261 - 285 - 310 - 334 - 358 - 383 - 407
Hysteresis OP	[mm]	3
Accuracy / deviations		
Deviations (% of value of me	asuring ran	ge)
Switch point accuracy		± 5
Repeatability		± 2
Reaction times		
Power-on delay time	[s]	3
Software / programming		
Programming options		hysteresis / window function; N.O. / N.C; position of SP/rP; position of OP; OP
		adjustment; medium adjustment; offset; display unit; switching mode / binary mode
Environment		
Ambient temperature	[°C]	060
Ambient temperature Storage temperature		060 -2580
Ambient temperature	[°C]	060
Ambient temperature Storage temperature	[°C]	060 -2580
Ambient temperature Storage temperature Maximum vessel pressure	[°C]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007)
Ambient temperature Storage temperature Maximum vessel pressure Protection	[°C]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007)
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals	[°C]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals	[°C]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC	[°C]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals	[°C]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC	[°C]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance	[°C]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V DIN EN 60068-2-29: 15 g (11 ms)
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V DIN EN 60068-2-29: 15 g (11 ms) DIN EN 60068-2-6 5 g (102000 Hz)
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V DIN EN 60068-2-29: 15 g (11 ms) DIN EN 60068-2-6 5 g (102000 Hz)
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF Mechanical data	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V DIN EN 60068-2-29: 15 g (11 ms) DIN EN 60068-2-6 5 g (102000 Hz) 201
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF Mechanical data Materials (wetted parts)	[°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V DIN EN 60068-2-29: 15 g (11 ms) DIN EN 60068-2-6 5 g (102000 Hz) 201
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF Mechanical data Materials (wetted parts) Housing materials	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD:
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF Mechanical data Materials (wetted parts) Housing materials Weight	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD:
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF Mechanical data Materials (wetted parts) Housing materials Weight Displays / operating element	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V DIN EN 60068-2-29: 15 g (11 ms) DIN EN 60068-2-6 5 g (102000 Hz) 201 PP Stainless Steel (304S15); FKM; NBR; PBT; PC; PEI; PP; TPE / V 0.402
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF Mechanical data Materials (wetted parts) Housing materials Weight Displays / operating element	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD:
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF Mechanical data Materials (wetted parts) Housing materials Weight Displays / operating element	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V DIN EN 60068-2-29: 15 g (11 ms) DIN EN 60068-2-6 5 g (102000 Hz) 201 PP Stainless steel (304S15); FKM; NBR; PBT; PC; PEI; PP; TPE / V 0.402 Display unit 2 x LED green Switching status 4 x LED yellow
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF Mechanical data Materials (wetted parts) Housing materials Weight Displays / operating element	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V DIN EN 60068-2-29: 15 g (11 ms) DIN EN 60068-2-6 5 g (102000 Hz) 201 PP stainless steel (304S15); FKM; NBR; PBT; PC; PEI; PP; TPE / V 0.402 Display unit 2 x LED green Switching status 4 x LED yellow Measured values 4-digit alphanumeric display Programming 4-digit alphanumeric display
Ambient temperature Storage temperature Maximum vessel pressure Protection Tests / approvals EMC Shock resistance Vibration resistance MTTF Mechanical data Materials (wetted parts) Housing materials Weight Displays / operating element Display	[°C] [°C] [bar]	060 -2580 0.5 (mounted with mounting accessories E43001 - E43007) IP 67 EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V DIN EN 60068-2-29: 15 g (11 ms) DIN EN 60068-2-6 5 g (102000 Hz) 201 PP Stainless steel (304S15); FKM; NBR; PBT; PC; PEI; PP; TPE / V 0.402 Display unit 2 x LED green Switching status 4 x LED yellow Measured values 4-digit alphanumeric display

LK8123 - Electronic level sensor - eclass: 27371813 / 27-37-18-13

Output configuration in switching mode: OUT1...OUT3 = operating outputs OUT-OP = overflow output



Output configuration in binary mode: OUT1...OUT4 = 8-4-2-1 binary code for level



Remarks

CULus - Class 2 source required

n.c. = not connected

***) for water and hydrous media with temperatures > 35 °C install the
unit into a climatic tube
(order no. E43101)

Pack quantity

[piece]

ifm efector, inc. • 1100 Atwater Drive • Malvern • PA 19355 — We reserve the right to make technical alterations without prior notice. — US — LK8123 — 28.05.2015 Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.