

CPA-K-306



- hydrostatic level transmitter
- submersible probe, diameter 17 mm
- nominal pressure: from 0...6 mH₂O up to 0...200 mH₂O
- output signals: 2-wire: 4...20 mA
- stainless steel probe
- ceramic sensor
- accuracy 0.5 % span
- suitable for hydrostatic level measurement e.g. in 3/4" pipes
- good linearity and long term stability
- optional: various cable materials



The slimline probe **CPA-K-306** with ceramic sensor has been especially designed for the continuous level measurement at confined space conditions. Permissible media are clean or slightly contaminated water and thin fluids. Different cable sheath materials are available in order to achieve maximum media compatibility.

PREFERRED AREAS OF USE ARE



Water

- level measurement at confined space conditions
- ground water monitoring
- depth or level measurement in wells
- drinking water abstraction
- level measurement in open and closed tanks

TECHNICAL DATA

Input pressure range										
Nominal pressure gauge	[bar]	0.6	1	1.6	2.5	4	6	10	16	20
Level	[mH ₂ O]	6	10	16	25	40	60	100	160	200
Overpressure	[bar]	2	2	4	4	10	10	20	40	40
Burst pressure ≥	[bar]	4	4	5	5	12	12	25	50	50
Max ambient pressure (housing)		40 bar								

Output signal / Supply	
2-wire	4 ... 20 mA / V _S = 12 ... 36 V _{DC}

Performance	
Accuracy	≤ ± 0.5 % span
Permissible load	R _{max} = [(V _S - V _{S min}) / 0.02 A] Ω
Influence effects	supply: 0.05 % span / 10 V load: 0.05 % span / kΩ
Response time	≤ 10 msec

¹ accuracy according to EN IEC 62828-2— limit point adjustment (non-linearity, hysteresis, repeatability)

Thermal effects (Offset and Span) / Permissible temperatures	
Thermal error	≤ ± 0.2 % span / 10 K in compensated range -25 ... 70 °C
Permissible temperatures	Medium/ electronics/ environment/ storage: -20 ... 80 °C *

*If the cable is intended for use in a smaller temperature range, the use of the probe is limited by this range.

Electrical protection ²	
Short-circuit protection	permanent
Reverse polarity protection	no damage, but also no function
Electromagnetic protection	emission and immunity according to EN 61326

² additional external overvoltage protection unit in terminal box KL 1 or KL 2 with atmospheric pressure reference available on request

Electrical connection			
Cable with sheath material ³	PVC	(-5 ... 70 °C)	grey (-25 ... 70 °C in fixed condition) Ø 7,4 mm
	PUR	(-25 ... 80 °C)	black (with drinking water certificate) Ø 7,4 mm
	FEP ⁴	(-25 ... 75 °C)	black Ø 7,4 mm others on request
Cable capacitance	signal line/shield also signal line/signal line: 160 pF/m		
Cable inductance	signal line/shield also signal line/signal line: 1 µH/m		
Bending radius	static installation: 10-fold cable diameter		
	dynamic application: 20-fold cable diameter		

³ shielded cable with integrated ventilation tube for atmospheric pressure reference

⁴ do not use freely suspended probes with an FEP cable if effects due to highly charging processes are expected



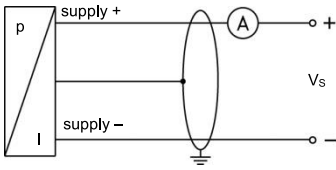
Level transmitters

Materials (media wetted)	
Housing	stainless steel 1.4404 (316L)
Seals	FKM
Diaphragm	ceramics Al ₂ O ₃ 96 %
Protection cap	POM-C
Cable sheath	PVC, PUR, FEP
Miscellaneous	
Current consumption	max. 25 mA
Weight	approx. 100 g (without cable)
Ingress protection	IP 68
CE-conformity	EMC Directive: 2014/30/EU

ELECTRICAL CONNECTION

Wiring diagram

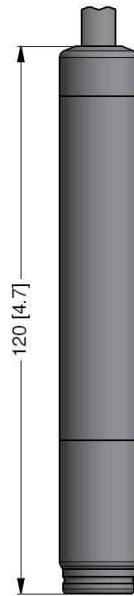
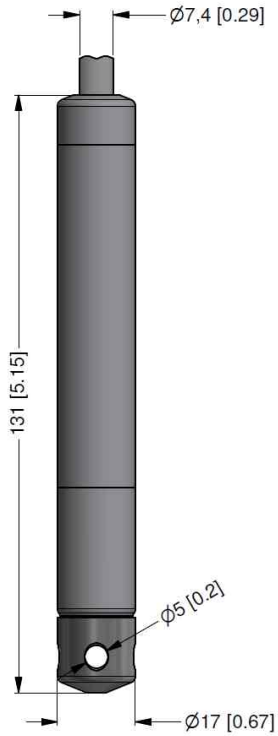
2-wire-system (current)



Pin configuration

Electrical connection	cable colours (IEC 60757)
Supply +	WH (white)
Supply -	BN (brown)
Shield	GNYE (green-yellow)

DIMENSION DRAWINGS




protection cap removable



Level transmitters

ACCESSORIES

Cable clamp		
Technical Data		
Suitable for	all probes with cable \varnothing 5.5 ... 10.5 mm	
Material	standard: steel, zinc plated optionally: stainless steel 1.4301 (304)	
Weight	approx. 160 g	
Ordering type	Ordering code	
Terminal clamp, of steel, zinc plated	1003440	
Terminal clamp, of stainless steel 1.4301 (304)	1000278	

ORDER CODE

CPA-K-306----------------

Pressure																				
in bar		3	7	0																
in H ₂ O		3	7	1																
Input	[mH ₂ O]	[bar]																		
	0 ... 6	0 ... 0,6			6	0	0	0												
	0 ... 10	0 ... 1			1	0	0	1												
	0 ... 16	0 ... 1,6			1	6	0	1												
	0 ... 25	0 ... 2,5			2	5	0	1												
	0 ... 40	0 ... 4			4	0	0	1												
	0 ... 60	0 ... 6			6	0	0	1												
	0 ... 100	0 ... 10			1	0	0	2												
	0 ... 160	0 ... 16			1	6	0	2												
	0 ... 200	0 ... 20			2	0	0	2												
Customer					9	9	9	9												
Housing material																				
Stainless steel 1.4404 (316 L)								1												
Customer								9												
Diaphragm material																				
Ceramic Al ₂ O ₃ 96 %									2											
Customer									9											
Output signal																				
4 ... 20 mA / 2-wire										1										
Customer										9										
Seals																				
Viton (FKM)											1									
Customer											9									
Accuracy																				
0,5 %												5								
Customer												9								
Electrical connection																				
PVC - cable (grey, \varnothing 7,4 mm, price for 1 m) ¹																				1
PUR - cable (black, \varnothing 7,4 mm, price for 1 m) ¹																				2
FEP - cable with PTFE sheath (black, \varnothing 7,4 mm, price for 1 m) ¹																				3
Customer																				9
Cable length																				
in m													9	9	9					
Special version																				
Standard																				0 0 0
Customer																				9 9 9
Accessories for submersible transmitter																				
Terminal clamp - zinc plated																				1003440
Terminal clamp - Stainless Steel 1.4301																				1000278
Mounting screw PG16 - plastic																				5002200

1 - shielded cable with integrated ventilation tube for atmospheric pressure reference

Manufacturer reserves the right to change sensor specifications without further notice.

