

CPA-K-807



- hydrostatic level transmitter for aggressive media
- submersible probe, diameter 35 mm
- nominal pressure: from 0...4 mH₂O up to 0...100 mH₂O
- output signals: 2-wire: 4...20 mA
- ceramic sensor
- plastic probe
- accuracy 0.5 % span
- excellent long term stability
- optional: various kinds of cables and seals



The plastic submersible probe **CPA-K-807** is designed for continuous level measurement for waste water or and different aggressive media.

Basic element of the plastic submersible probe is the flush mounted ceramic sensor, which makes cleaning easier when solid parts of the medium deposit on it. Different cable and elastomer materials are available in order to achieve maximum media compatibility.

PREFERRED AREAS OF USE ARE

Sewage

waste water treatment
water recycling
dumpsite

Aggressive media

most of acids and lyes

TECHNICAL DATA

Input pressure range									
Nominal pressure gauge	[bar]	0.4	0.6	1	1.6	2.5	4	6	10
Level	[mH ₂ O]	4	6	10	16	25	40	60	100
Overpressure	[bar]	1	2	2	4	4	10	10	20
Burst pressure	[bar]	2	4	4	5	5	12	12	25
max. ambient pressure (housing)	20 bar								
Output signal / Supply									
Standard	2-wire: 4 ... 20 mA / V _S = 8 ... 32 V _{DC}								
Performance									
Accuracy ¹	± 0.5 % span								
Permissible load	R _{max} = [(V _S – V _{S min}) / 0.02 A] W								
Influence effects	supply: 0.05 % span / 10 V load: 0.05 % span / kW								
Long term stability	± 0.1 % span / year								
Response time	< 10 msec								
¹ accuracy according to EN IEC 62828-2 – limit point adjustment (non-linearity, hysteresis, repeatability)									
Thermal effects (Offset and Span)									
Thermal error	± 0.2 % span / 10 K in compensated range -25 ... 70 °C								
Permissible temperatures									
Permissible temperatures	medium/ electronics/ environment/ storage: -20 ... 80 °C *								
<i>*If the cable is intended for use in a smaller temperature range, the use of the probe is limited by this range.</i>									
Electrical protection ²									
Short-circuit protection	permanent								
Reverse polarity protection	no damage, but also no function								
Electromagnetic compatibility	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						
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 cable with integrated air 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									

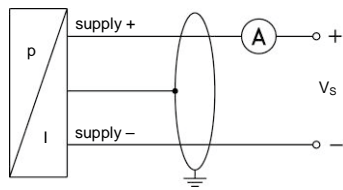


Materials (media wetted)	
Housing	PP-H
Seals	FKM / EPDM / FFKM
Diaphragm	ceramics Al ₂ O ₃ 96 %
Cable sheath	PVC, PUR, FEP
Miscellaneous	
Current consumption	max. 25 mA
Weight	approx. 200 g (without cable)
Ingress protection	IP 68
CE-conformity	EMC Directive: 2014/30/EU

ELECTRICAL CONNECTION

Wiring diagram

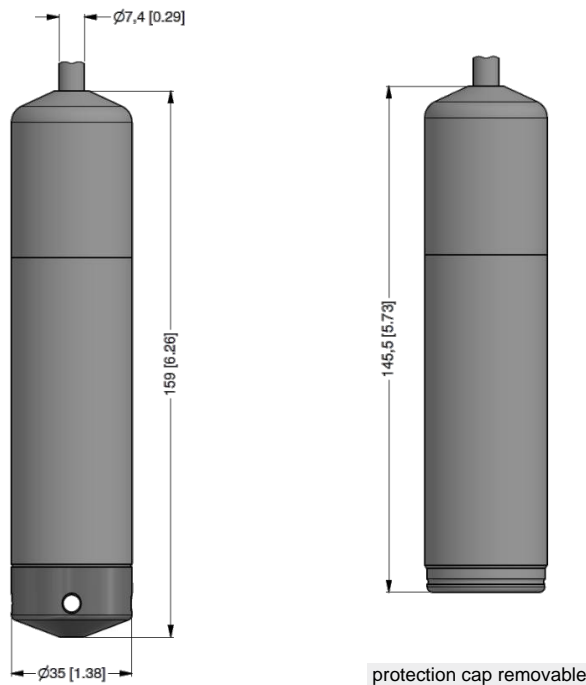
2-wire-system (current)



Pin configuration

Electrical connection	cable colours (DIN 47100)
Supply +	wh (white)
Supply -	bn (brown)
Shield	gn/ye (green / yellow)

DIMENSION DRAWINGS



ORDER CODE

ORDER CODE _____

CPA-K-807-

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Electrical connection						
PVC - cable (grey, Ø 7,4 mm, price for 1 m) ¹	1					
PUR - cable (black, Ø 7,4 mm, price for 1 m) ¹	2					
FEP - cable with PTFE sheath (black, Ø 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
2 - maximum length of PVC cable – 25 m, PUR, FEP, TPE – 40 m

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