HART





CRI-P-340

- differential pressure transmitter for process industry
- differential pressure: from 0...60 mbar up to 0...20 bar
- output signals: 2-wire: 4...20 mA
- HART® communication
- stainless steel sensor
- accuracy 0.075 % span
- static over pressure 400 bar
- two chamber aluminium die cast case
- output signal: linear or square root extraction
- optional: integrated display and operating

The intelligent CRI-P-340 transmi er is designed for measurement of di eren al pressure in industrial processes of all produc on branches. It has an excellent long-term stability.

With the use of the square root output signal can be the steam and gasflowin orifice plates and speed probes measured.

PREFERRED AREAS OF USE ARE



Oil and gas industry



Chemical and petrochemical industry



Energy Industry



Food and beverage



Paper Industry

TECHNICAL DATA

Sensor type	В	С	D	Е
Di erential pressure range dp	60 mbar	400 mbar	2.5 bar	20 bar
Setting limits (offset and span in this range freely adjustable)	-60 60 mbar	-400 400 mbar	-2.5 2.5 bar	-20 20 bar
Lowest permissible span	2 mbar	4 mbar	25 mbar	200 mbar
Permissible static pressure optional	160 bar -	160 bar 400 bar	160 bar 400 bar	160 bar 400 bar
Rangeability TD (with respect to the di erential pressure range dp)	30:1	100:1	100:1	100:1

Output signal / Supply		
Standard	2-wire: 4 20 mA with HART®-communication Vs = 12 2	
Performance	·	
Accuracy	turn-down 10:1: ± 0.075 % span turn-down > 10:1: ± [0.0075 x turn-down] % span with turn-down = nominal pressure range / adjusted range	
Influence supply	0.001 % span / 10 V	
Influence static pressure	type B: \pm [0.06 mbar + 0.075 % of the adjusted range] / 160 bar type C: \pm [0.2 mbar + 0.05 % of the adjusted range] / 160 bar type D: \pm [1.25 mbar + 0.05 % of the adjusted range] / 160 bar type E: \pm [10 mbar + 0.05 % of the adjusted range] / 160 bar	
Influence installation position	max. 400 Pa (can be compensated by zero-point correction)	
Long term stability	type B: ± (0.2 % x di erential pressure range dp) / year at reference conditions type C - E: ± (0.1 % x di erential pressure range dp) / year at reference conditions	
Permissible load	without LC-display: $R_{max} = [(Vs - 12 V) / 0.023 A]$ with LC-display: $R_{max} = [(Vs - 15 V) / 0.023 A]$ HART®-communication: $R = 230 \dots 600$	
Response time	type B: approx. 0.4 sec type C: approx. 0.2 sec type D: approx. 0.2 sec type E: approx. 0.1 sec	
Damping	electronic: 0.1 60 sec plus response time	

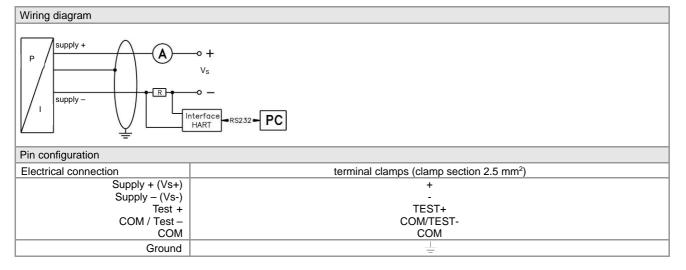




Thermal e ects (O set and Spa	n)		
Temperature range -20 +65°C	type B: ± [0.30 x turn-down + 0.20] % of the adjust	ed rangel	
iomporatare range 20 m rec c	type C - E: ± [0.20 x turn-down + 0.20] % of the adjusted range]		
Temperature range -4020°C	type B: ± [0.30 x turn-down + 0.20] % of the adjusted range]		
and +65 +100°C	1	9.	
Permissible temperatures	type of E. E [o.Eo x tall down for to] // or the da		
Environment/storage	without display: -40 85 °C		
Environment/storage		°C without function)	
Media wetted parts		ormation: +125 °C short time, max. 30 min.)	
Wicala Welled Parts	(ormation: +125 °C short time, max. 30 min.)	
Electrical protection	Indotolabe oii40 100 C (iiii	officiality in the street of t	
•	normanant		
Short-circuit protection	permanent		
Reverse polarity protection	no damage, but also no function		
Electromagnetic compatibility	emission and immunity according to EN 61326		
Mechanical stability			
Vibration		cording to DIN EN 60068-2-6	
Shock	100 g / 1 msec ac	cording to DIN EN 60068-2-27	
Materials			
Pressure port	stainless steel 1.4401 (316)		
Housing	aluminium die cast, powder-coated		
Viewing glass	laminated safety glass		
Seals (media wetted)	FKM / EPDM		
Diaphragm	standard: stainless steel 1.4435 (316 L) option: Hastelloy® C-276 (2.4819)		
Media wetted parts	pressure port, seals, diaphragm		
Filling fluids	silicon oil		
Miscellaneous	·		
Display (optionally)	LC display, visible range 32.5 x 22.5 mm; 5-digit 7-segment main display, digit height 8 mm, range of indication ±9999; 8-digit 14-segment additional display, digit height 5 mm; 52-segment bargraph; accuracy 0.1% ± 1 digit		
Ingress protection	IP 67		
Installation position	any		
Weight	min. 3500 g		
Current consumption	approx. 21 mA	<u> </u>	
Operational life	> 100 x 10 ⁶ cycles		
CE-conformity	EMC Directive: 2014/30/EU		
Connections			
Electrical connection	terminal clamps in clamping chamber with cable gl	and M20x1.5 (for cable-Ø 5 up to 14 mm)	
For mechanical connection	internal threads 7/16-20 UNF (connecting screws a	no mot month of all Process A	

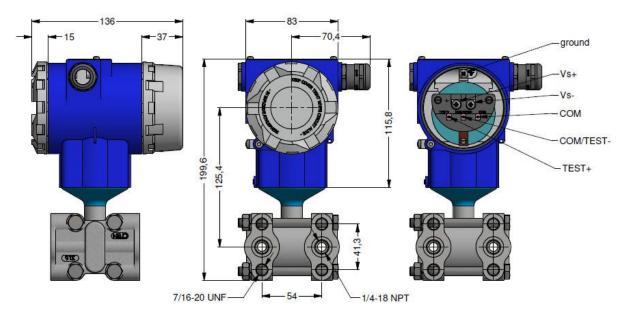
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ELECTRICAL CONNECTION





DIMENSION DRAWINGS



- * without display and operating module marked dimensions decrease by 22 mm
- ² aluminium die cast case is horizontally rotatable

ACCESSORIES

Process connection (not part of delivery)	
Туре	Ordering code
blinding plug (external thread) ¼" – 18 NPT	5002322
blinding plug with venting (external thread) ¼" – 18 NPT	1003217
screw 7/16" UNF X 1 3/4" A2 (4 pcs needed), the screw is only used to connect the valve set	1004639

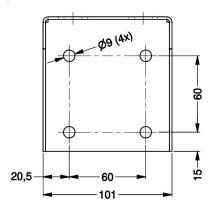
Universal holder

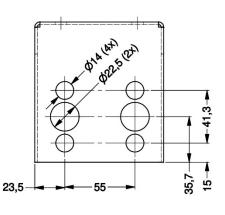
Weight	550 g
Material	black steel
Ordering code	5029224

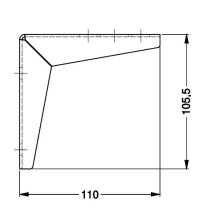




Dimensions (in mm)







ORDER CODE

	CRI-P-340
Input	
0 60 mbar	0 6 0 0
0 400 mbar	4 0 0 0
0 2,5 bar	2 5 0 1
0 20 bar	2 0 0 2
-60 60 mbar	S 0 6 0
-400 400 mbar	S 4 0 0
-2,5 2,5 bar	S 2 5 2
Customer	1
Maximum static pressure	
160 bar	1
400 bar (P _N 0.4 bar)	4
Display	·
Without local indicator	AN
With LC multiple function indicator	A O
Output signal	
HART® - 4 20 mA / 2-wire	н
Customer	9
Accuracy	
0,1 %	1
0,1 % including Calibration Certificate	P
0,075 %	17
0,075 % including Calibration Certificate	P1
Electrical connection	
Terminal clamp	A K 0
Mechanical connection	
1/4" NPT internal thread	N 5 6 9 9 9
Customer	9 9 9
Diaphragm material	
Stainless steel 1.4435 (316L)	1
Hastelloy® C-276 (2.4819)	H
Customer	9
Seals	
Viton (FKM)	1 1
EPDM	3
PTFE	4
Special version	
Standard	0 0 0
Square root output signal - active	1 9 0

Optional accesories	
Process connection	
Blinding plug 1/4" NPT (external thread)	5002322
Blinding plug with venting 1/4" NPT (external thread)	1003217
Screw 7/16" UNF (4 pcs needed), the screw is only used to connect the valve set	1004639
Diaphragm Seal	
Capillary tube	
Capillary tube armoured	
Flange with integral extended diaphragm	
Extension length up to 100 mm	
Extension length between 100 - 200 mm	
Mechanical connection	
Flange DN 25/PN 40 DIN 2501 (without seals)	
Flange DN 40/PN 40 DIN 2501 (without seals)	
Flange DN 50/PN 40 DIN 2501 (without seals)	
Flange DN 80/PN 16 DIN 2501 (without seals)	
Flange DN 100/PN 16 DIN 2501 (without seals)	
Customer	
Mounting bracket	
Universal holder for CRI-P-340	5029224
Factory Calibration Certificate	

Table of measured values - printed on Warranty Certificate

!!! When you make an order it is necessary to fill the questionnaire for transmitters with separators!!! Manufacturer reserves the right to change sensor specifications without further notice.



