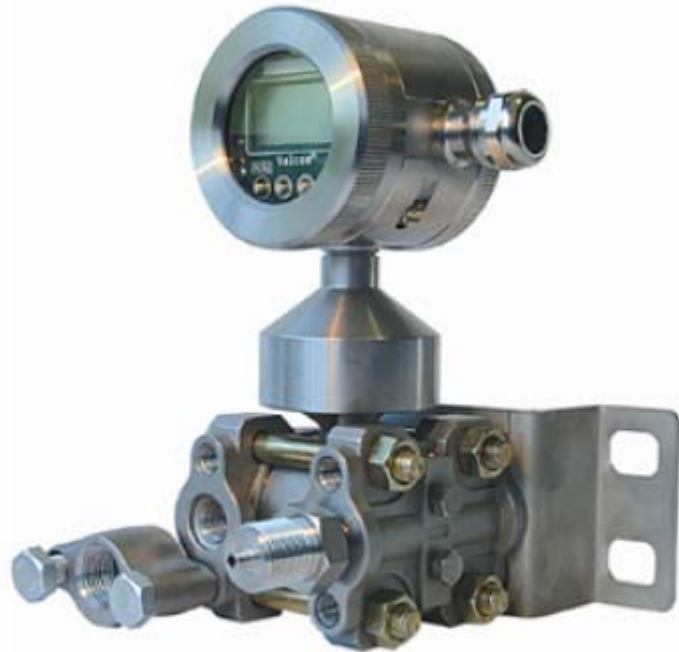


# SMART – HART® ELECTRONIC DIFFERENTIAL TRANSMITTERS

T7K-01 DATA SHEET 1 of 2



## Series T7K



*T7D-K series includes differential pressure electronic transmitters with capacitive cell featured by all AISI316L St.St. execution and 340° rotating head. Electronics is available in the following executions:*

- Smart type with 4-20mA and HART® protocol output, complete with digital display and push buttons for local configuration.
- Smart type with 4-20mA and HART® protocol output, without digital display and push buttons (remote configuration through HART® communicators).

## APPLICATION FIELDS

*T7D-K series transmitters are used in industrial applications to measure differential pressures of liquids, gas and vapours, to measure relative or differential level of liquids and flow. Instrument's body is designed to sustain static pressures up to 140 / 400 bar (14 / 40 MPa). They can be supplied complete with seals and capillary. Our technical office is at your disposal for special applications.*

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T7K-01 DATA SHEET 2 of 2

## TECHNICAL FEATURES

- Supply: 12÷35Vdc
- Output: 4÷20mA SMART-HART® rev. 6.0 (2 wire system)
- Accuracy:  $\leq \pm 0.25\%$  /  $\pm 0.1\%$ FS (\*)
- Temperature zero drift:  $\leq \pm 0.01\%$ FS/°C (\*)
- Span thermal drift:  $\leq \pm 0.01\%$ FS/°C (\*)
- Max load 600ohm with HART®
- Long term stability:  $\leq \pm 0.1\%$ FS per year
- Elevation / suppression: 100%FS
- Damping: 0.2...10 sec
- Static pressure influence:  $\leq 0.15\%$ FS or 1mbar / 100bar whichever is greater
- Operating temperature range: -40÷85°C
- Storage temperature : -50÷90°C
- Protection rating IP67
- CE marking

Notes (\*): Unless otherwise stated, performance specifications are given at maximum span and in standard conditions as reported in IEC 60770-1. Accuracy and drifts are given for instruments with integral sensor and diaphragm; they may vary according to the seal/sensor type.

## ORDERING CODE

CODE	DESCRIPTION		
	<b>TYPE OF INSTRUMENT</b>		
N	AISI 316 housing, 2 covers		
9	AISI 316 housing, 1 cover		
6	AISI 304 housing, 1 cover		
	<b>TYPE OF MEASUREMENT</b>		
D	Differential		
	<b>TYPE OF SENSOR</b>		
IK	Integrated capacitive sensor		
SK	Remote capacitive sensor		
	<b>MEASURING RANGE [bar]</b>		
	<b>MINIMUM SPAN</b>	<b>MAXIMUM SPAN</b>	<b>MAX STATIC PRESSURE</b>
01	0÷0,00125	0÷0,075	25
01a	0÷0,00125	0÷0,075	140
02	0÷0,06	0÷0,4	140
03	0÷0,3	0÷1,8	140
04	0÷1,2	0÷7	140
04a	0÷1,2	0÷7	400
05	0÷3,5	0÷20	140
05a	0÷3,5	0÷20	400
06	0÷12	0÷70	140
06a	0÷12	0÷70	400
	<b>HOUSING MATERIAL:</b>		
AR	AISI 316 St St (bottom connection T7N/T79)		
BR	AISI 304 St St (bottom connection T76)		
	<b>PROCESS CONNECTIONS</b>		
00	2 threads ¼" NPT-F		
01	2 oval flanges with threads ½" NPT-F		
01a	2 capillary welded connections		
01c	2 turnable nipples M24x1,5 M		
71	Flange DN80 PN10 (+ side)		
73	Flange 3" ANSI 150 RF (+ side)		
	<b>DIAPHRAGM MATERIAL</b>		
A	AISI 316		
	<b>PROCESS GASKETS :</b>		
T	PTFE (Teflon)		
V	FPM (Viton)		
	<b>WETTED PARTS MATERIAL :</b>		
A	AISI 316		
	<b>ELECTRIC CONNECTIONS:</b>		
C	DIN connector 43650 PG9 (only T76 housing)		
PG13	St St cable gland PG13 cable ø 8 + 12 mm (std)		
PG9	St St cable gland PG9 cable ø 5+8 mm		
R12	St St nipple G ½" NPT-F		
R20	St St nipple M20 x 1,5 F		
	<b>OUTPUT SIGNAL:</b>		
1	4-20 mA 2 wires SMART + HART® protocol		
4	4-20 mA 2 wires SMART		
	<b>INDICATOR:</b>		
D2	Digital indicator and push buttons		
	<b>OPTIONS / ACCESSORIES:</b>		
ATX2	ATEX EX II 1GD EExia IIC T6/T5 IP65		
E	TAG transcription		
MAN3	3 valves manifold – ½" NPT-F connections		
STOD	St. St. bracket for wall mounting		
STP	Steel bracket for 2" pipe mounting		
STUB	St. St. bracket for 2" pipe mounting		