



### Main Features

- Pressure ranges: from 0...3 to 0...500 bar and pressure ranges from -1...+1 to -1...+10 bar
- Output signal 4...20mA 2-wires / 0,1...5,1Vdc / 0,1...10,1Vdc / 0...5Vdc / 0...10Vdc / 1...5Vdc / 1...10Vdc
- Protection level: IP65/IP67
- Material in contact: AISI 430F and 17-4PH
- Available with a variety of process connections, both standard and custom

TK transmitters are based on the thick film extensimetric. Thanks to highly stable electronic components, these transmitters can be used in applications requiring long-distance signal transmission or in smart control systems. TK pressure transmitters are designed mainly measuring pressure in oil, air, and hydraulic circuits. They can also be used in the technical and process measurement fields.

### TECHNICAL DATA

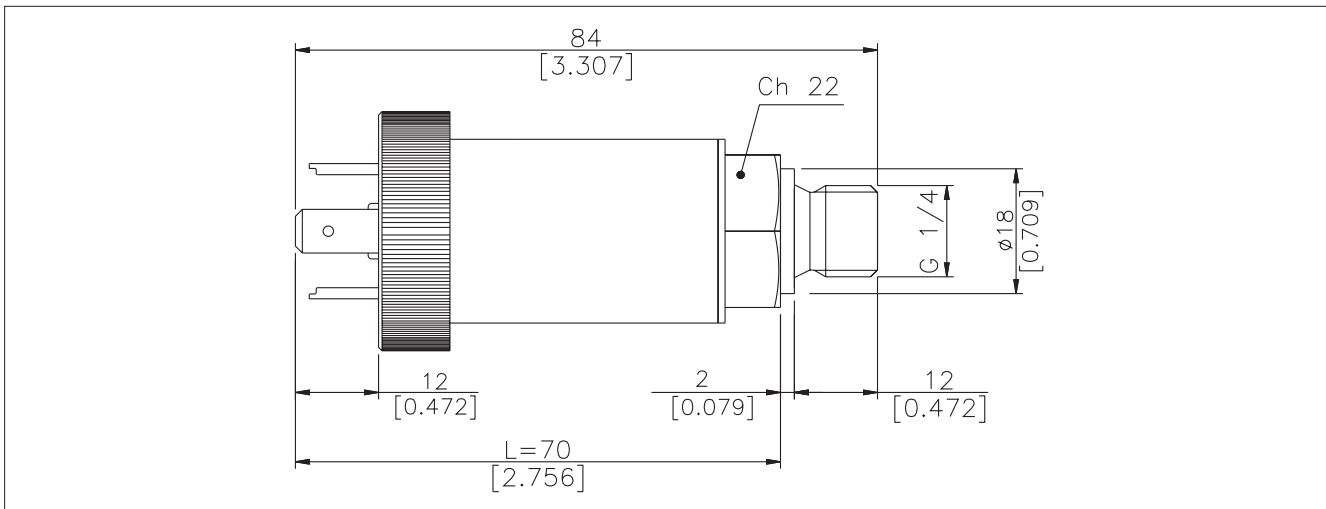
	VOLTAGE	CURRENT
Output signal Sensor class (1) (included linearity and Hysteresis)	H 0,3%FSO / M 0,6%FSO	
Measurement range	from 0...3 bar to 0...500 bar from -1...+1 bar to -1...+10 bar	
Max. applicable pressure (without decay) (2)	See table	
Resistance to bursting (3)	See table	
Max. input on power supply	13mA	32mA
Isolation resistance at 50Vdc	> 1000MΩ	
Max. allowed load	1mA	See diagram
Response time (10...90%FSO)	< 1msec	
Power supply	Outputs BMPR 10...30Vdc Outputs CNQ 15...30Vdc	10...30Vdc
Output noise (RMS 10-400 Hz)	0,05% FS	
Output short circuit protection and reverse power polarity	YES	
Output pulse overvoltage protection	YES	NO
Compensated temperature range	-10...+70°C (+14...+158°F)	
Admitted field of temperature fluid	-40...+105°C (-40...+221°F)	
Storage temperature range	-40...+125°C (-40...+257°F)	
Thermal drift in compensated range (zero - sens.)	< 0,2%FSO / 10°K typical	
Materials in contact with measurement fluid	Inox 1.4540 1.4016	
Outer case materials	AISI 304 stainless steel, nylon 66F35VO	
Protection level	IP65 / IP67	
CE conformity	89/336/EWG interferences emissions and immunity (see EN61326)	
Mechanical shock	IEC 68-2-6 100g/1ms	
Resistance to the vibrations	IEC 68-2-6 20g max at 15-2000Hz	
Weight	~ 110g	

FSO = Full Scale Output (output signal at rated pressure)  
1 BFSL (Best Fit Straight Line) method

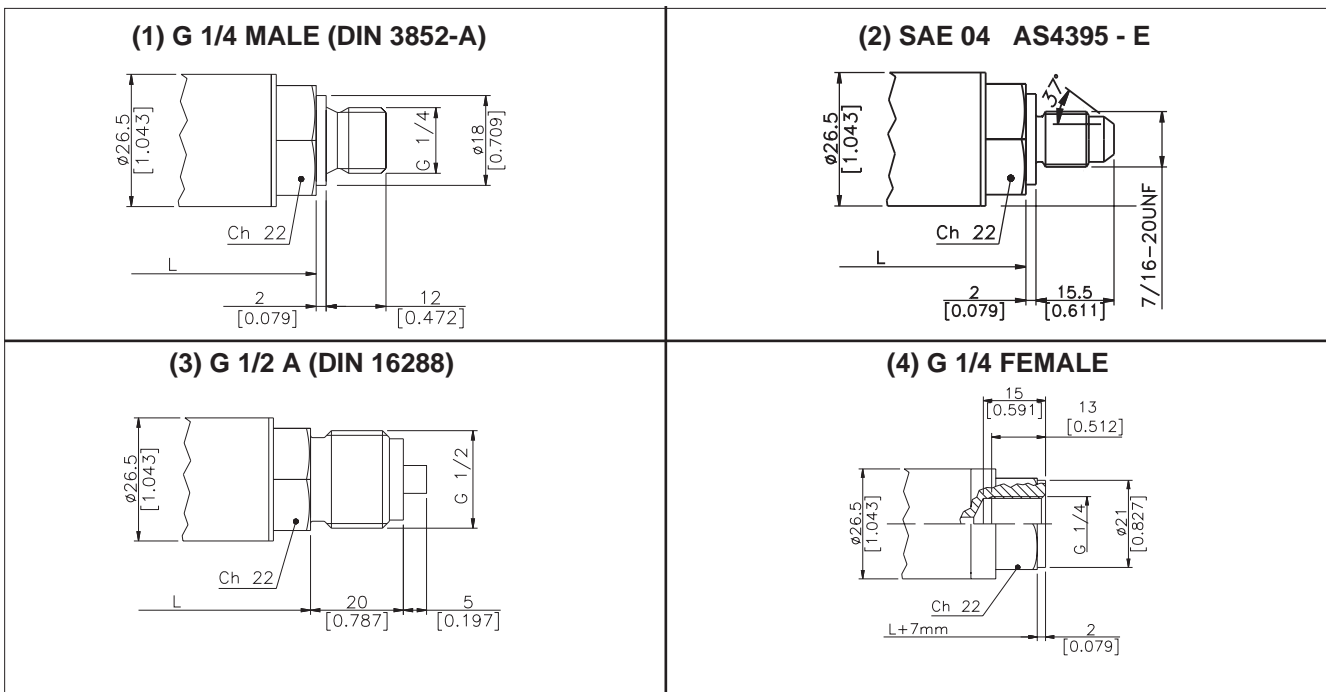
2 tested for more than 1000 strokes with single duration < 2msec.  
3 tested for more than 100 strokes with single duration < 2msec.

PRESSURE RANGE	3	4	5	6	7	10	16	20	25	30	50	60	100	160	200	250	350	400	500
Maximum applicable pressure (without decay)	6	8	10	12	14	20	32	40	50	60	100	120	200	320	400	500	700	800	1000
Resistance to bursting	12	16	20	24	28	40	64	80	100	120	200	240	400	640	800	1000	1200	1200	1200

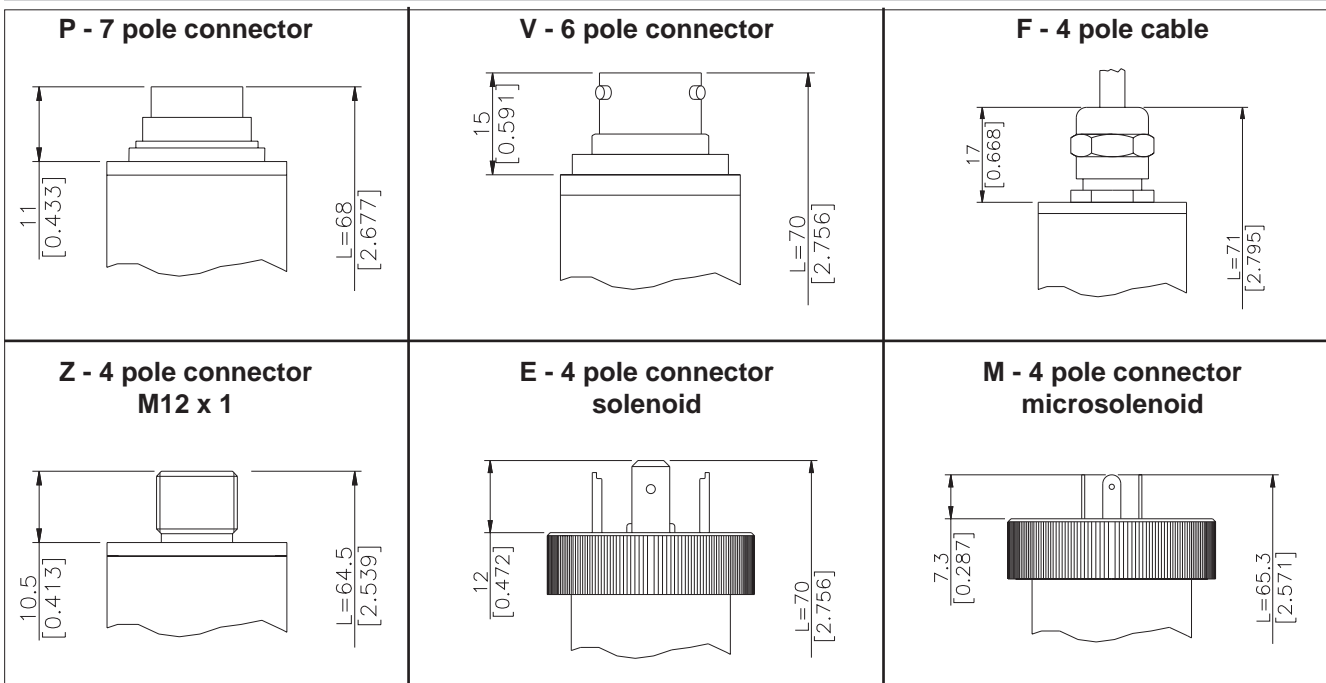
## MECHANICAL DIMENSIONS



## PROCESS CONNECTIONS

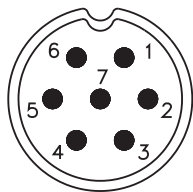


## ELECTRICAL CONNECTIONS



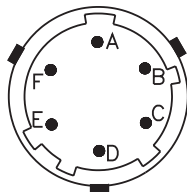
## ELECTRICAL CONNECTIONS - Connectors

### P - 7-pole connector



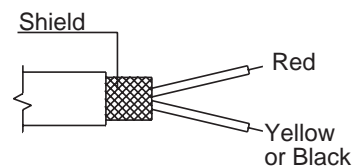
Male connector 09-127-09-07  
Protection IP67

### V - 6-pole connector



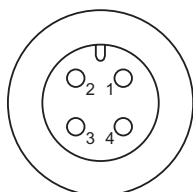
Male connector VPT02A10-6PT2  
Protection IP66

### F - 2 pole cable



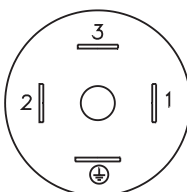
Shielded cable 2x0,25 - 2m. (output E)  
Protection IP65

### Z - 4-pole male connector M12 x 1



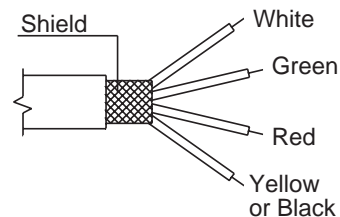
4 pole series 713 male connector  
Protection IP67

### E - 4 pole solenoid connector M - 4 pole microsolenoid connector



Solenoid 400 DIN 46350A - ISO4400  
Protection IP65  
Microsolenoid 400 DIN 46350B - ISO4400  
Protection IP65

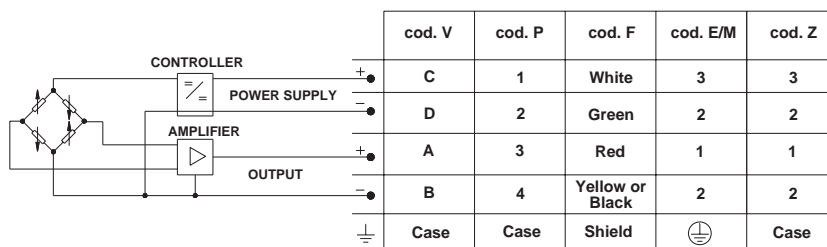
### F - 4 pole cable



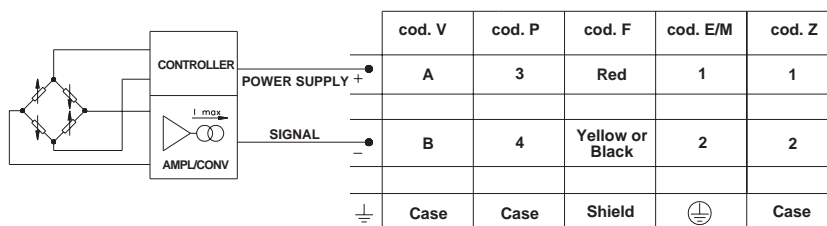
Shielded cable 4x0,25 - 2m  
Protection IP65

## ELECTRICAL CONNECTIONS - connection diagrams

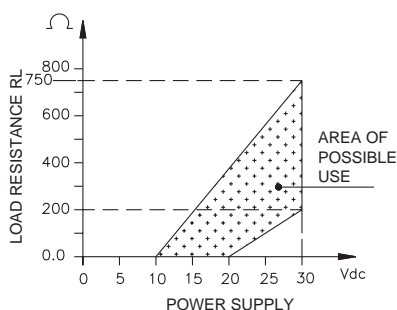
### OUTPUT AMPLIFIED IN VOLTAGE - mod. B/C/M/N/P/Q/R



### OUTPUT AMPLIFIED IN CURRENT - mod. E



### LOAD DIAGRAM (Current output)



## ACCESSORIES ON REQUEST

<b>Connectors</b>		<b>Connection M</b>	
<b>Connection E</b>		Connector 3 poles + ground DIN43650B ISO4400 <b>CON 008</b>	
Connector 3 poles + ground DIN43650A ISO4400 <b>CON 006</b>		Prot. IP65	
Prot. IP65		<b>Connection P</b>	
<b>Connection Z</b>		Female cable connector Prot. IP67 <b>CON 321</b>	
Connector 4 poles <b>CON 293</b>		<b>Connection V</b>	
Prot. IP65		Female cable connector Prot. IP66 <b>CON 300</b>	

## EXTENSION CABLES

6-pin connector with 8m (25ft) cable	<b>C08WLS</b>	<table border="1"> <thead> <tr> <th colspan="2">Cable color code</th> </tr> <tr> <th>Conn.</th> <th>wire</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Red</td> </tr> <tr> <td>B</td> <td>Yellow/Black</td> </tr> <tr> <td>C</td> <td>White</td> </tr> <tr> <td>D</td> <td>Green</td> </tr> <tr> <td>E</td> <td>Blue</td> </tr> <tr> <td>F</td> <td>Orange</td> </tr> </tbody> </table>	Cable color code		Conn.	wire	A	Red	B	Yellow/Black	C	White	D	Green	E	Blue	F	Orange
Cable color code																		
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A	Red																	
B	Yellow/Black																	
C	White																	
D	Green																	
E	Blue																	
F	Orange																	
6-pin connector with 15m (50ft) cable	<b>C15WLS</b>																	
6-pin connector with 30m (100ft) cable	<b>C30WLS</b>																	
Other lengths	<b>consult factory</b>																	

## ORDER CODE

Pressure transmitter **TK**

OUTPUT SIGNAL	
<b>Standard</b>	
0,1 ... 10,1 Vdc	<b>C</b>
4...20 mA	<b>E</b>
0...10 Vdc	<b>N</b>
<b>On request</b>	
0,1 ... 5,1 Vdc	<b>B</b>
0 ... 5 Vdc	<b>M</b>
1 ... 5 Vdc	<b>P</b>
1 ... 10 Vdc	<b>Q</b>
1 ... 6 Vdc	<b>R</b>

PROCESS CONNECTIONS	
<b>Standard</b>	
G 1/4 gas male (DIN 3852-A)	<b>1</b>
SAE 04 AS4395-E	<b>2</b>
G 1/2A (DIN 16288)	<b>3</b>
<b>On request</b>	
G 1/4 gas male (DIN 3852-E)	<b>E</b>
G 1/4 gas female	<b>4</b>
1/8-27 NPT female	<b>5</b>
1/4 - 18 NPT female	<b>6</b>
1/4 - 18 NPT male	<b>7</b>
M14 x 1,5 male	<b>8</b>
1/8 - 27 NPT male	<b>9</b>
M12 x 1,5 male	<b>R</b>

ELECTRICAL CONNECTIONS	
<b>Standard</b>	
4-pole connector solenoid	<b>E</b>
4 pole shielded cable	<b>F</b>
4 pole connector M12 x 1	<b>Z</b>
<b>On request</b>	
4-pole connector microsolenoid	<b>M</b>
7 pole connector	<b>P</b>
6 pole connector	<b>V</b>

Mechanical and/or electrical characteristics differing from standard may be arranged on request.

RESPONSE TIME	
<b>V</b>	Fast

PRECISION CLASS	
<b>H</b>	0,3% FSO
<b>M</b>	0,6% FSO

PRESSURE RANGE		
	bar	psi
<b>N01U</b>	-1..+1 *	<b>V15U</b> -15..+15
<b>N02U</b>	-1..+2 *	<b>V03D</b> -15..+30
<b>N03U</b>	-1..+3 *	<b>V05D</b> -15..+50
<b>N05U</b>	-1..+5	<b>V75U</b> -15..+75
<b>N01D</b>	-1..+10	<b>V01C</b> -15..+100
<b>B03U</b>	0..3	<b>P05D</b> 0..50
<b>B04U</b>	0..4	<b>P75U</b> 0..75
<b>B05U</b>	0..5	<b>P01C</b> 0..100
<b>B06U</b>	0..6	<b>P15D</b> 0..150
<b>B07U</b>	0..7	<b>P25D</b> 0..250
<b>B01D</b>	0..10	<b>P03C</b> 0..300
<b>B16U</b>	0..16	<b>P05C</b> 0..500
<b>B02D</b>	0..20	<b>P75D</b> 0..750
<b>B25U</b>	0..25	<b>P01M</b> 0..1000
<b>B03D</b>	0..30	<b>P15C</b> 0..1500
<b>B04D</b>	0..40	<b>P25C</b> 0..2500
<b>B05D</b>	0..50	<b>P03M</b> 0..3000
<b>B06D</b>	0..60	<b>P05M</b> 0..5000
<b>B01C</b>	0..100	<b>P75C</b> 0..7500
<b>B16D</b>	0..160	
<b>B02C</b>	0..200	
<b>B25D</b>	0..250	
<b>B35D</b>	0..350	
<b>B04C</b>	0..400	
<b>B05C</b>	0..500	

\* only M class

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice

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**GEFRAN**

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