



The TVI-S serie transmitters is designed for industrial use turning the value of temperature and/or humidity indicated by sensors into values of voltage 0-1 V, 0-5 V, 0-10 V (3 wires) or current 4-20mA (2 wires) (see schedule). The transmitters has a high accuracy and linearity, because of the use of new three terminals sensors that can be changed without losing the accuracy of the system.

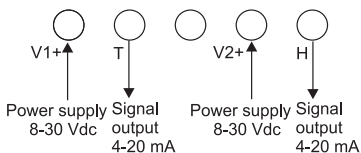
The transmitters can be supplied for different application (see schedule) in a sealed ABS casing, IP65 acc. to EN 60529, protection class I, acc. to EN 60335-1 and are suitable for liquid (only for temperature version), panel mounting and air ducts.

TECHNICAL FEATURES

- Power supply: see schedule
- Outputs: see schedule
- Scale: for humidity 0..100%rH (working range 10...90%r.h no condense.), for temperature see schedule.
- Accuracy: see schedule
- Temperature dependance of electronics (output 4-20 mA): 0,015°C/°C
- Humidity dependance on electronics (output 4-20 mA): 0,015% r.h./°C
- Room temperature: 0/+50°C
- Humidity: 10...90% r.h. with no condense
- Casing (figure 4): 132x88x70 mm

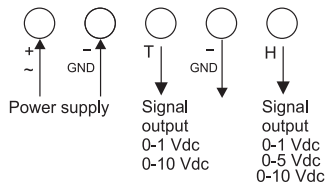
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ELECTRICAL WIRING



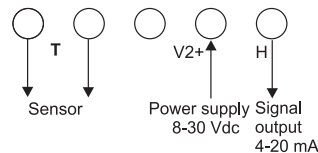
For a normal functioning the voltages between the connectors V1+ and T and between the connectors V2+ e H must never be below 8Vdc.
($R_L < 500 \text{ ohm}$ for power supply from 17 to 30Vdc
 $R_L < 50 \text{ ohm}$ for power supply from 8 to 17Vdc).

FIG. 1



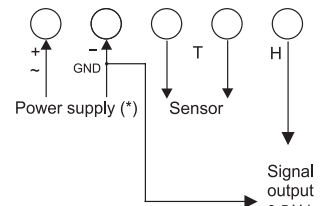
(*) See schedule next page
For 0-1V output, $R_L > 100 \text{ ohm}$
For 0-10V output, $R_L > 1000 \text{ ohm}$
For 0-5V output, $R_L > 500 \text{ ohm}$

FIG. 2



For a normal functioning the voltage betw connectors V2+ e H must never be below 8V.
($R_L < 500 \text{ ohm}$ for power supply from 17 to 30V
 $R_L < 50 \text{ ohm}$ for power supply from 8 to 17V)

FIG. 3



(*) See schedule next page
For 0-5V output, $R_L > 500 \text{ ohm}$

SCHEDULE

Range °C	Range % r.h.	Type	Power supply	Output	Accuracy	Diagram type figure	L	C	Q
-	0 ... 100	TVI - S011	8 - 30 Vdc	4-20 mA	5 % r.h.	1	●	●	
0/+50	-	TVI - S101	8 - 30 Vdc	4-20 mA	± 1°	1	●	●	●
0/+50	0 ... 100	TVI - S111	8 - 30 Vdc	4-20 mA	5 % r.h. ± 1°	1	●	●	
0/+50	0 ... 100	TVI - S511	8 - 30 Vdc	4-20 mA/NTC10K	5 % r.h. ± 1°	3	●	●	
0/+50	0 ... 100	TVI - S811	8 - 30 Vdc	4-20 mA/NTC1K8	5 % r.h. ± 1°	3	●	●	
0/+50	0 ... 100	TVI - S911	8 - 30 Vdc	4-20 mA/NTC10K4	5 % r.h. ± 1°	3	●	●	
-	0...100%	TVI - S014	16-40 Vdc 12-24 Vac	0-5 Vdc	5 % r.h.	2	●	●	
0/+50	0...100%	TVI - S514	16-40 Vdc 12-24 Vac	NTC10K/0-5Vdc	5 % r.h. ± 1°	4	●	●	
0/+50	0...100%	TVI - S814	16-40 Vdc 12-24 Vac	NTC1K8/0-5Vdc	5 % r.h. ± 1°	4	●	●	
0/+50	0...100%	TVI - S914	16-40 Vdc 12-24 Vac	NTC10K4/0-5Vdc	5 % r.h. ± 1°	4	●	●	
-30/+50	-	TVI - S201	8 - 30 Vdc	4-20 mA	± 1,5°	1	●	●	●
-10/+40	-	TVI - S301	8 - 30 Vdc	4-20 mA	± 1°	1	●	●	●
0/+100	-	TVI - S401	8 - 30 Vdc	4-20 mA	± 2°	1			●
-	0 ... 100	TVI - S012	10-40 Vdc 9-24 Vac	0-1 Vdc	5 % r.h.	2	●	●	
0/+50		TVI - S102	10-40 Vdc 9-24 Vac	0-1 Vdc	± 1°	2	●	●	●
0/+50	0 ... 100	TVI - S112	10-40 Vdc 9-24 Vac	0-1 Vdc	5 % r.h. ± 1°	2	●	●	
-30/+50	-	TVI - S202	10-40 Vdc 9-24 Vac	0-1 Vdc	± 1,5°	2	●	●	●
-10/+40	-	TVI - S302	10-40 Vdc 9-24 Vac	0-1 Vdc	± 1°	2	●	●	●
0/+100	-	TVI - S402	10-40 Vdc 9-24 Vac	0-1 Vdc	± 2°	2			●
-	0 ... 100	TVI - S013	16-40 Vdc 12-24 Vac	0-10 Vdc	5 % r.h.	2	●	●	
0/+50		TVI - S103	16-40 Vdc 12-24 Vac	0-10 Vdc	± 1°	2	●	●	●
0/+50	0 ... 100	TVI - S113	16-40 Vdc 12-24 Vac	0-10 Vdc	5 % r.h. ± 1°	2	●	●	
-30/+50	-	TVI - S203	16-40 Vdc 12-24 Vac	0-10 Vdc	± 1,5°	2	●	●	●
-10/+40	-	TVI - S303	16-40 Vdc 12-24 Vac	0-10 Vdc	± 1°	2	●	●	●
0/+100	-	TVI - S403	16-40 Vdc 12-24 Vac	0-10 Vdc	± 2°	2			●

Models to choose:

L = duct version, with 200 mm PVC tube (max temperature 85°C)

C = room version, with 100 mm PVC tube (max temperature 85°C)

Q = version with 120 mm brass pocket for immersion

F = version with 200 mm milled brass pocket for air ducts

Warnings:

Each single operation done on the unit, either installation or maintenance, must be done without main supply on the unit and external loads. Such operations are permitted only by skilled workers. There is no responsibility for possible damages caused by an inadequate installation and/or by removed or exchanged security devices.

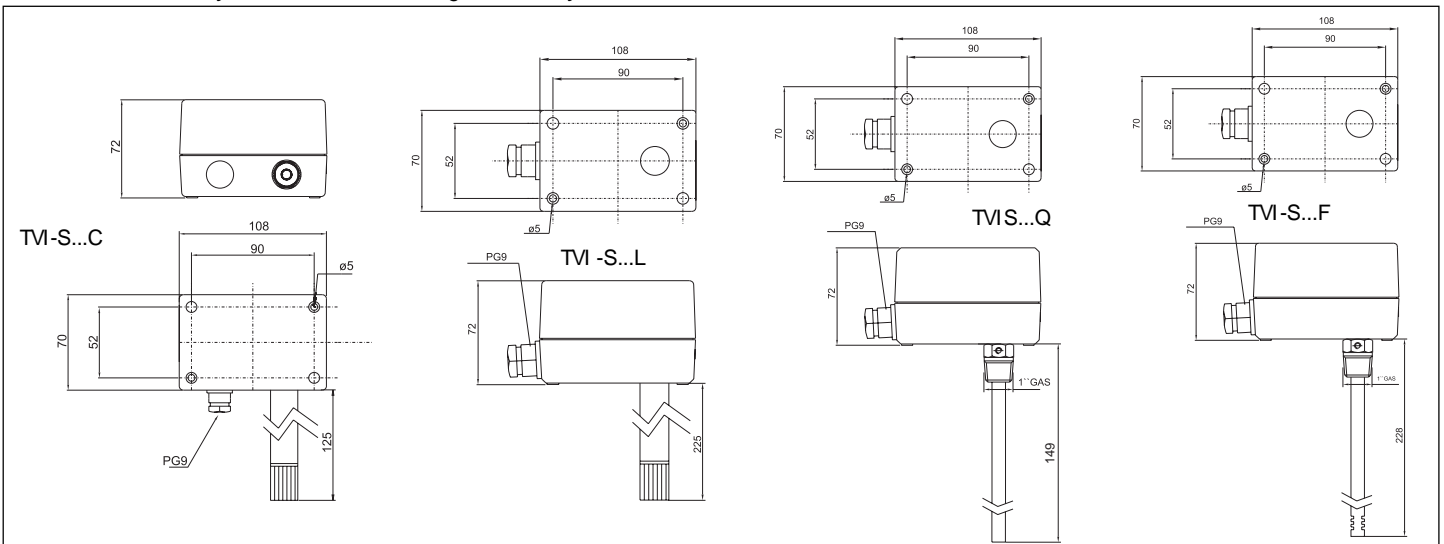


Figure 4

