



DB-F

Trasmettitori di temperatura ed umidità industriali *Industrial temperature and humidity transmitters*

FUNZIONE:

Rilevamento e trasduzione di temperatura ed umidità in valori di tensione, corrente o resistivi (solo temperatura):

- 0...1 Vcc o 0...10 Vcc, 3 fili;
- 4...20 mA, 2 fili;
- NTC 10K.

Applicazioni:

Ideali per applicazioni di tipo industriale con montaggio in canali d'aria o di liquidi (solo nella versione in temperatura) o con montaggio su pannello o parete.

FUNCTION:

Temperature and humidity measure and transmission in voltage, current or resistive (only temperature) values:

- 0...1 Vdc or 0...10 Vdc, 3 wires;
- 4...20 mA, 2 wires;
- NTC 10K.

Applications:

Designed for industrial applications with air or liquid (only for temperature version) duct mounting or panel/wall mounting.

Scala Range °C	Scala Range u.r. / r.h.	Tipo Type	Alimentazione Power supply	Uscita Output	Precisione Accuracy	Schema elettrico Wiring diagram Figura / figure	L (*)	C (*)	Q (*)
-	0...100%	DB-F011	8 - 30 Vdc	4-20 mA	5 % r.h.	1	●	●	
0...+50	0...100%	DB-F111	8 - 30 Vdc	4-20 mA	5 % r.h. ± 1°	1	●	●	
0...+50	0...100%	DB-F511	8 - 30 Vdc	4-20 mA/NTC10K	5 % r.h. ± 1°	3	●	●	
-30...+50	-	DB-F201	8 - 30 Vdc	4-20 mA	± 1,5°	1	●	●	●
0...+100	-	DB-F401	8 - 30 Vdc	4-20 mA	± 2°	1	●	●	●
-	0...100%	DB-F012	10-40 Vdc 9-24 Vac	0-1 Vdc	5 % r.h.	2	●	●	
0...+50	0...100%	DB-F112	10-40 Vdc 9-24 Vac	0-1 Vdc	5 % r.h. ± 1°	2	●	●	
-30...+50	-	DB-F202	10-40 Vdc 9-24 Vac	0-1 Vdc	± 1,5°	2	●	●	●
0...+100	-	DB-F402	10-40 Vdc 9-24 Vac	0-1 Vdc	± 2°	2	●	●	●
-	0...100%	DB-F013	16-40 Vdc 12-24 Vac	0-10 Vdc	5 % r.h.	2	●	●	
0...+50	0...100%	DB-F113	16-40 Vdc 12-24 Vac	0-10 Vdc	5 % r.h. ± 1°	2	●	●	
-30...+50	-	DB-F203	16-40 Vdc 12-24 Vac	0-10 Vdc	± 1,5°	2	●	●	●
0...+100	-	DB-F403	16-40 Vdc 12-24 Vac	0-10 Vdc	± 2°	2	●	●	●

Legenda (*):

L versione da canale con tubo in PVC da 200 mm
C versione da ambiente con tubo in PVC da 100 mm
Q versione con guaina in ottone ad immersione da 120 mm

Legend (*):

L duct version, with 200 mm PVC tube
C room version, with 100 mm PVC tube
Q version with 120 mm brass pocket for liquid immersion

CARATTERISTICHE TECNICHE

Alimentazione: vds tabella
Sensori: temperatura: NTC 10K
 umidità: a stato solido (polimeri capacitivi)
Uscite: vds tabella
Potenza ass.: < 1 W
Scale di misura: vds tabella
Temp. ambiente: 0...+50 °C
Umid. ambiente: 10...90 % u.r. (senza condensa)
Stoccaggio: -20...+70 °C
Contenitore: ABS stagno
Dimensioni: 132 x 88 x 70 mm
Protezione: IP65, classe I

Influenza della temperatura sull'elettronica:

uscita 4...20 mA (temperatura): 0.015 °C/°C
 uscita 4...20 mA (umidità): 0.015 %u.r./°C

Limiti di carico:

uscita 4...20 mA
 - alimentazione 8...17 Vcc: $R_L < 50 \text{ Ohm}$
 - alimentazione 17...30 Vcc: $R_L < 500 \text{ Ohm}$
 uscita 0...1 Vcc: $R_L > 100 \text{ Ohm}$
 uscita 0...10 Vcc: $R_L > 1000 \text{ Ohm}$

TECHNICAL FEATURES

Power supply: see schedule
Sensors: temperature: NTC 10K
 humidity: solid state (polymer capacitive)
Output: see schedule
Power cons.: < 1 W
Measure range: see schedule
Working temp.: 0...+50 °C
Working hum.: 10...90 % r.h. (non condensing)
Storage: -20...+70 °C
Housing: ABS sealed
Size: 132 x 88 x 70 mm
Protection: IP65, class I

Temperature dependance of electronics:

4...20 mA temperature output: 0.015 °C/°C
 4...20 mA humidity output: 0.015 % r.h./°C

Load limits:

output 4...20 mA
 - power supply 8...17 Vdc: $R_L < 50 \text{ Ohm}$
 - power supply 17...30 Vdc: $R_L < 500 \text{ Ohm}$
 output 0...1 Vdc: $R_L > 100 \text{ Ohm}$
 output 0...10 Vdc: $R_L > 1000 \text{ Ohm}$

COLLEGAMENTI ELETTRICI

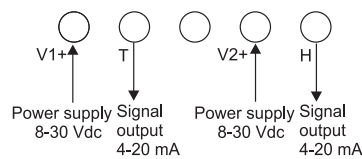


fig. 1

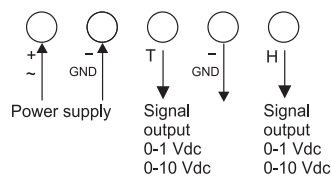


fig. 2

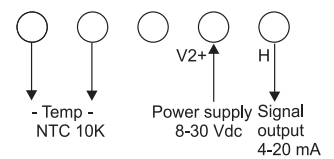


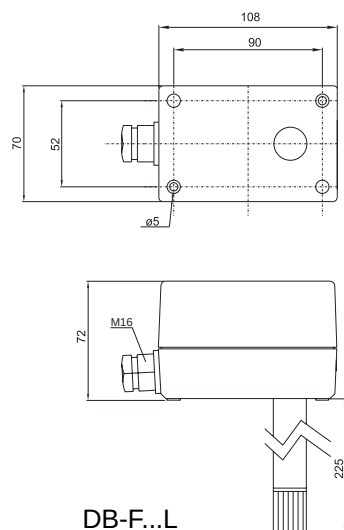
fig. 3

Schemi di collegamento riferiti ai diversi modelli riportati nella tabella.

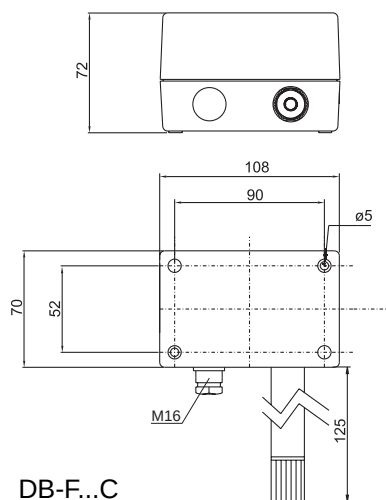
Per un corretto funzionamento, le tensioni tra i morsetti V1+ e T e tra i morsetti V2+ e H non devono essere inferiori a 8 Vcc.

Wiring diagrams referred to the different models in the schedule.

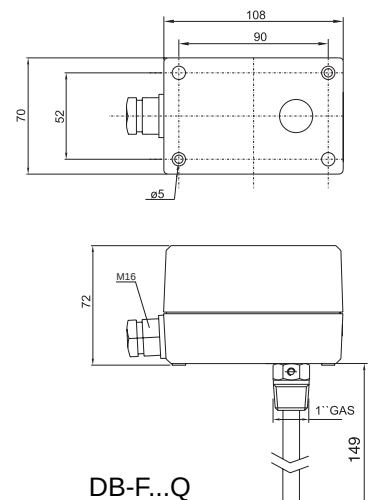
For a correct operating the voltage between the connectors V1+ and T and between the connectors V2+ and H must never be under than 8 Vdc.



DB-F...L



DB-F...C



DB-F...Q

