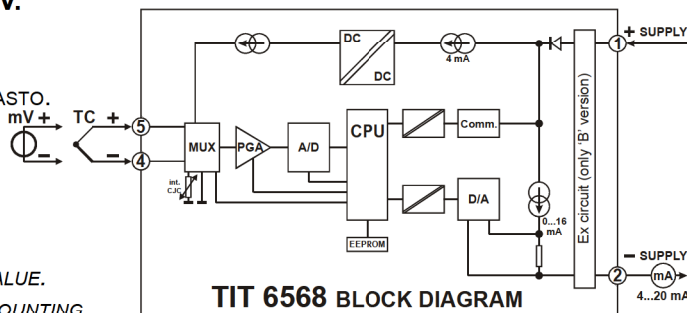


TRASMETTITORE PROGRAM. ISOLATO a 2-FILI 2-WIRE PROGRAM. ISOLATED TRANSMITTER

TIT 6568

- **INGRESSO PER TERMOCOPPIE E mV.**
- **ELEVATA PRECISIONE DI MISURA.**
- **ISOLAMENTO GALVANICO.**
- **VALORE D'USCITA Progr. PER GUASTO.**
- **PER MONTAGGIO IN TESTA DIN B**
- ♦ **TC AND mV INPUT.**
- ♦ **HIGH MEASUREMENT ACCURACY.**
- ♦ **GALVANIC ISOLATION.**
- ♦ **PROGRAMMABLE SENSOR ERROR VALUE.**
- ♦ **FOR DIN FORM B SENSOR HEAD MOUNTING.**



Subject to change without notice.

GENERALITA'

Applicazioni:

- Misura di temperatura linearizzata per segnali da termocoppie.
- Convertire segnale in mV in segnale analogico in corrente 4...20 mA.

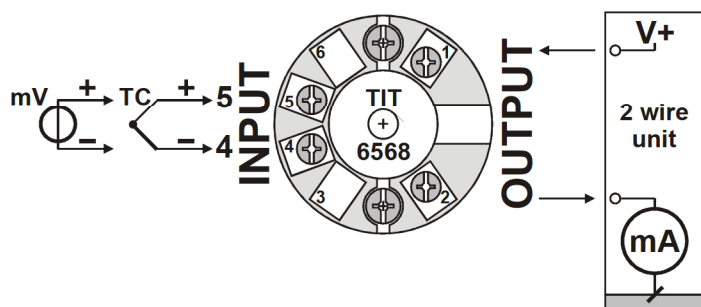
Caratteristiche tecniche:

- Programmazione rapida del TIT 6568 per tutti i campi di temperatura.
- Compensazione giunto freddo (CJC) con sensore di temperatura.
- Verifica continua dei parametri critici memorizzati.

Installazione e montaggio:

- Per testa sonde DIN B o montaggio a barra DIN con accessorio.

COLLEGAMENTO - APPLICATION



GENERAL DETAILS

Application:

- Linearised temperature measurement with TC sensor.
- Amplification of bipolar mV signals to a 4...20 mA signal.

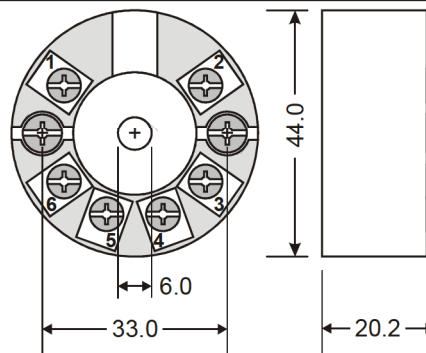
Technical characteristics:

- Within a few seconds the user can program TIT 6568 to measure.
- Cold junction compensation (CJC) with built-in temperature sensor.
- Continuous check of vital stored data for safety reasons.

Mounting / installation:

- For DIN form B sensor head or DIN rail mounting with special fitting.

DIMENSIONI - DIMENSIONAL DETAIL



CARATTERISTICHE TECNICHE

Supply voltage, DC	7,2...35V (A) 7,2...28V (B)
Internal consumption	25 mW...0.8 W
Voltage drop	7.2 V _{DC}
Isolation voltage, test / operation	1.5 kV _{AC} / 50 V _{AC}
Warm-up time	5 min.
Communications interface	Loop Link
Signal / noise ratio	Min. 60 dB
Response time (programmable)	1...60 s
EEProm error check	< 3.5 s
Signal dynamics, input	18 bit
Signal dynamics, output	16 bit
Calibration temperature	20...28°C
Accuracy, the greater of general and basic values:	

General values		
Input type	Absolute accuracy	Temp. coefficient
All	≤ ±0.05% of span	≤ ±0.01% of span / °C

Basic values		
Input type	Basic accuracy	Temp. coefficient
Volt (mV)	≤ ±10 μV	≤ ±1 μV/°C
TC: E, J, K, L, N, T, U	≤ ±1°C	≤ ±0.05°C/°C
TC: B, R, S, W3, W5, LR	≤ ±2°C	≤ ±0.2°C/°C

Effect of supply voltage variation	< 0.005% of span / V _{DC}
Vibration	IEC 60068-2-6 Test FC
Lloyd's specification no. 1	4 g / 2...100 Hz
Max. wire size	1 x 1.5 mm ² stranded wire
Operating Temperature - Humidity	-40...+85°C <95% RH (n.c.)
Dimensions	Ø 44 x 20.2 mm
Protection degree (encl. / terminal)	IP68 / IP00
Weight	50 g

TECHNICAL SPECIFICATIONS

Electrical specifications, input:

Max. offset	50% of selec. max. value
Voltage input: Measurement range	-12...150 mV
Min. span	5 mV
Input resistance	10 M
TC input: Cold junction comp.	≤ ±1.0°C

TC	Min temp.	Max temp.	Min span	Standard
B	+400°C	+1820°C	200°C	IEC584
E	-100°C	+1000°C	50°C	IEC584
J	-100°C	+1200°C	50°C	IEC584
K	-180°C	+1372°C	50°C	IEC584
L	-100°C	+ 900°C	50°C	DIN 43710
N	-180°C	+1300°C	100°C	IEC584
R	-50°C	+1760°C	200°C	IEC584
S	-50°C	+1760°C	200°C	IEC584
T	-200°C	+ 400°C	50°C	IEC584
U	-200°C	+ 600°C	75°C	DIN 43710
W3	0°C	+2300°C	200°C	ASTM E988-90
W5	0°C	+2300°C	200°C	ASTM E988-90
LR	-200°C	+ 800°C	50°C	GOST 3044-84

Current output:

Signal range	4...20 mA
Min. signal range	16 mA
Updating time	440 ms
Load resistance	≤ (V _{supply} - 7.2) / 0.023 [ohm]

Sensor error detection:

Programmable	3.5...23 mA
NAMUR NE43 Up / Down scale	23 mA / 3.5 mA
EMC immunity influence:	< ±0.5% of span

Extended EMC immunity:

NAMUR NE 21, A criterion, burst	< ±1% of span
Observed authority requirements: EMC 2004/108/EC	
Emission and immunity	EN 61326-, EN 50014, EN 50020
ATEX 94/9/EC, EN 50284, IEC 61241-0, and IEC 61241-11	