

## PT100 - PT1000

Sonde di temperatura



PT100-PT1000  
Uscita Ohm, 2/3/4 fili  
Uscita analogica 4-20 mA  
Uscita cavo

### CARATTERISTICHE

<b>Sensore:</b>	termoresistenza al platino PT100-PT1000
<b>Accuratezza:</b>	Classe A $\pm 0,15^{\circ}\text{C}$ @ $0^{\circ}\text{C}$ - DIN EN 60751
<b>Sonda:</b>	in acciaio inox
<b>Testa:</b>	DIN B in alluminio presso fuso verniciato blu
<b>Esecuzione:</b>	IP 65 / NEMA 4X
<b>Temperatura di funzionamento:</b>	Con isolamento tradizionale da $-50$ a $300^{\circ}\text{C}$ (versione standard) Con isolamento minerale MgO da $-50$ a $500^{\circ}\text{C}$ Opzionale con campo minimo da $-200^{\circ}\text{C}$ a $200^{\circ}\text{C}$ (solo PT100)
<b>Diametro sonda:</b>	standard $\varnothing 6$ mm (altro disponibile)

### SPECIFICHE TECNICHE VERSIONE CON CAVO

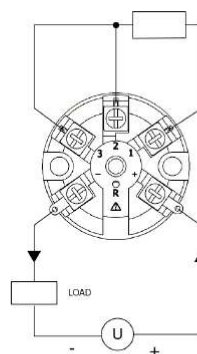
<b>Sensore:</b>	termoresistenza al platino PT100-PT1000
<b>Accuratezza:</b>	Classe A $\pm 0,15^{\circ}\text{C}$ @ $0^{\circ}\text{C}$ , DIN EN 60751
<b>Sonda:</b>	in acciaio inox
<b>Molla antipiega:</b>	Esecuzione IP 65 / NEMA 4X Cavo in gomma silconica, max $180^{\circ}\text{C}$ in TTS, max $300^{\circ}\text{C}$ Temperatura di funzionamento: con isolamento tradizionale da $-50$ a $300^{\circ}\text{C}$ , con isolamento minerale MgO da $-50$ a $500^{\circ}\text{C}$ e opzionale con campo minimo da $-200^{\circ}\text{C}$ a $200^{\circ}\text{C}$
<b>Diametro sonda:</b>	standard $\varnothing 6$ mm (altro disponibile)

## TRASMETTITORI

### SEM 206 P: (RTD 100 2-3 fili)

Trasmettitore configurabile da PC.  
Specifiche trasmettitore a 20°C e nelle condizioni nominali.

Alimentazione:	10-30 Vcc
Uscita analogica:	4-20 mA (2 fili)
Minimo span impostabile:	25°C
Errore di calibrazione:	0,2°C ±0,05% lettura
Temperatura ambiente di funzionamento:	da -40 a 85°C
Umidità relativa (senza condensa):	0-90%

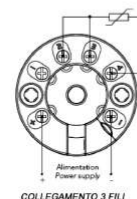
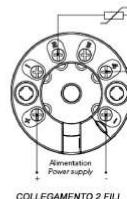


### TIXO 1 B: (RTD 100 2-3 fili)

Trasmettitore per zona EX (ATEX) configurabile da PC.  
Trasmettitore a 25°C e nelle condizioni nominali.



Alimentazione:	8-28 Vdc
Uscita analogica:	4-20 mA (2 fili)
Minimo span impostabile:	0°C PT-100 - 10°C
Errore di trasmissione:	≤ ±0,1% del f.s.
Temperatura ambiente di funzionamento:	da -40 a 85°C
Umidità relativa (senza condensa):	5-95%



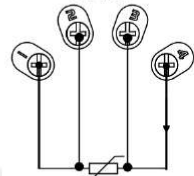
### TIXO 2 B: (RTD 100 - RTD 1000 - Ni 100 - Ni 1000 - Termocoppie)

Trasmettitore per zona EX (ATEX) galvanicamente isolato configurabile da PC.  
Trasmettitore a 25°C e nelle condizioni nominali.

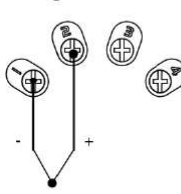


Alimentazione:	10-28 Vdc
Uscita analogica:	4-20 mA (2 fili)
Minimo span impostabile:	10°C (RTD) 50°C (TC)
Errore di trasmissione:	±0,1% del f.s.
Temperatura ambiente di funzionamento:	da -40 a 85°C
Umidità relativa (senza condensa):	5-95%

Collegamento 2-3-4 fili  
PT100



Collegamento TC



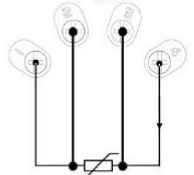
### TIXO 3 B: RTD 100 - RTD 1000 - Ni 100 - Ni 1000 - Termocoppie)

Trasmettitore per zona EX (ATEX) configurabile da PC.  
Trasmettitore a 25°C e nelle condizioni nominali.

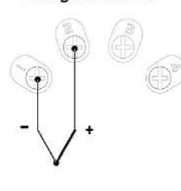


Alimentazione:	10-28 Vcc
Uscita analogica:	4-20 mA (2 fili) + protocollo HART
Minimo span impostabile:	10°C (RTD) 50°C (TC)
Errore di trasmissione:	≤ ±0,1% del f.s.
Temperatura ambiente di funzionamento:	da -40 a 85°C
Umidità relativa (senza condensa):	5-95%

Collegamento 2-3-4 fili  
PT100

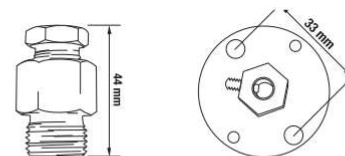


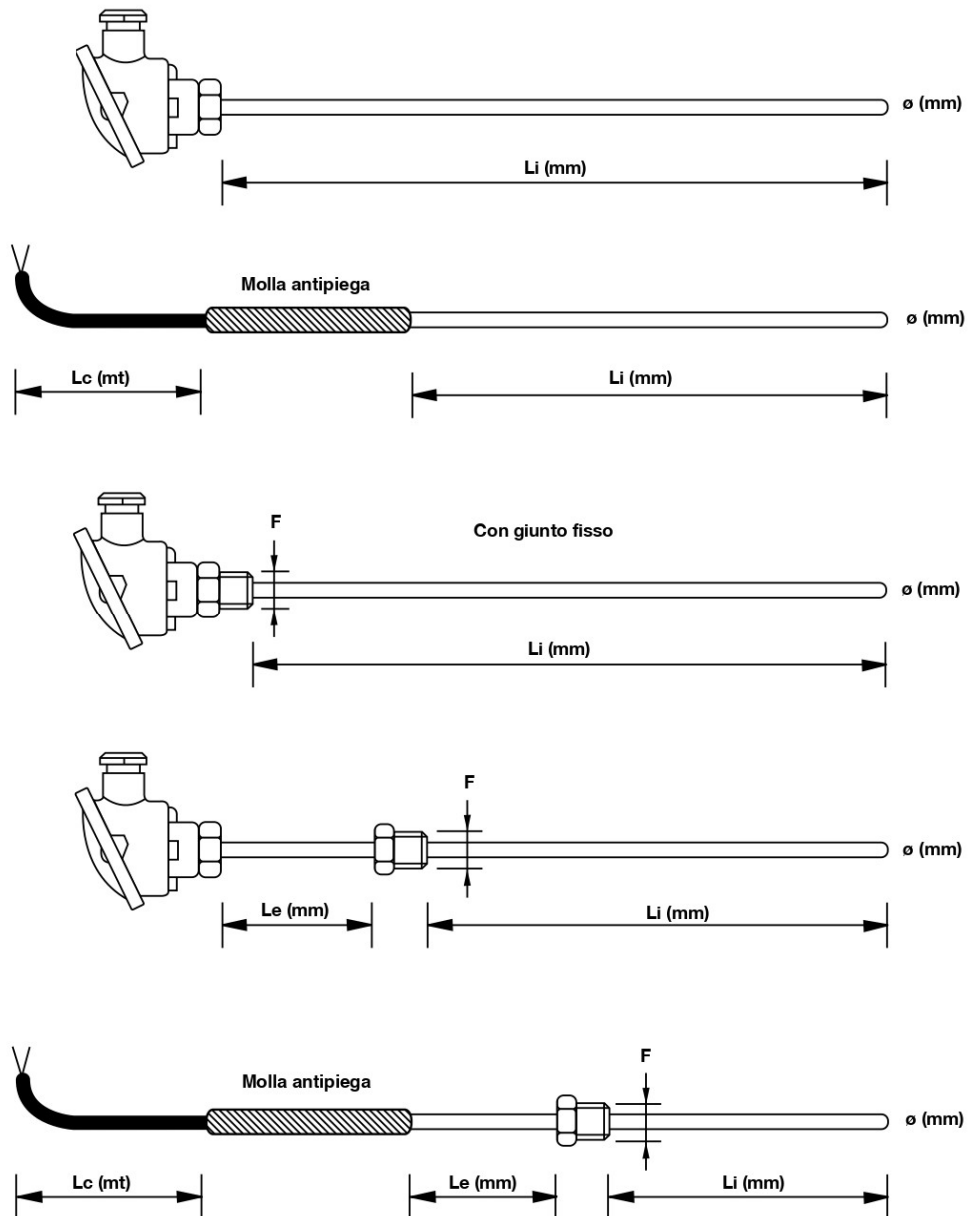
Collegamento TC



## ACCESSORI

MS1/2G:	raccordo scorrevole a compressione
Materiali:	in acciaio inox 316
Attacco lato processo:	1/2" gas maschio 1/2" NPT maschio 1/4" NPT maschio
Lunghezza:	44 mm
FL-6-SS:	flangetta scorrevole per sonde diametro 6 mm
Materiale:	acciaio inox
Interasse fori di fissaggio:	33 mm





## TABELLA DI CONVERSIONE PER TERMORESISTENZE PT100 IN ACCORDO ALLE NORME IEC 751

### Relazione tra resistenza e temperatura

	0	-1	-2	-3	-4	-5	-6	-7	-8	-9
<b>-200</b>	18,493									
<b>-190</b>	22,803	22,374	21,944	21,514	21,083	20,653	20,221	19,790	19,358	18,926
<b>-180</b>	27,078	26,652	26,226	25,799	25,372	24,945	24,517	24,089	23,661	23,232
<b>-170</b>	31,320	30,897	30,474	30,051	29,627	29,203	28,779	28,354	27,929	27,504
<b>-160</b>	35,531	35,111	34,691	34,271	33,850	33,429	33,008	32,587	32,165	31,742
<b>-150</b>	39,714	39,297	38,879	38,462	38,044	37,626	37,208	36,789	36,370	35,951
<b>-140</b>	43,869	43,455	43,040	42,625	42,210	41,795	41,379	40,963	40,547	40,130
<b>-130</b>	47,999	47,587	47,175	46,763	46,350	45,937	45,524	45,111	44,697	44,283
<b>-120</b>	52,106	51,696	51,286	50,876	50,466	50,055	49,645	49,234	48,822	48,411
<b>-110</b>	56,190	55,783	55,375	54,967	54,559	54,151	53,742	53,333	52,924	52,515
<b>-100</b>	60,254	59,849	59,443	59,037	58,631	58,225	57,818	57,412	57,005	56,598
<b>-90</b>	64,299	63,895	63,491	63,087	62,683	62,279	61,874	61,469	61,065	60,659
<b>-80</b>	68,325	67,923	67,521	67,119	66,717	66,314	65,911	65,508	65,105	64,702
<b>-70</b>	72,335	71,934	71,534	71,134	70,733	70,332	69,931	69,530	69,128	68,727
<b>-60</b>	76,328	75,930	75,531	75,132	74,733	74,333	73,934	73,534	73,135	72,735
<b>-50</b>	80,307	79,910	79,512	79,115	78,717	78,319	77,921	77,523	77,125	76,727
<b>-40</b>	84,271	83,875	83,479	83,083	82,687	82,291	81,894	81,498	81,101	80,704
<b>-30</b>	88,222	87,828	87,433	87,038	86,643	86,248	85,853	85,458	85,063	84,667
<b>-20</b>	92,160	91,767	91,374	90,980	90,587	90,193	89,799	89,405	89,011	88,617
<b>-10</b>	96,086	95,694	95,302	94,910	94,517	94,125	93,732	93,339	92,946	92,553
<b>0</b>	100,000	99,609	99,218	98,827	98,436	98,045	97,653	97,262	96,870	96,478
<b>10</b>	103,902	103,511	103,120	102,730	102,339	101,949	101,558	101,168	100,777	100,387
<b>20</b>	107,793	107,403	107,013	106,623	106,233	105,843	105,453	105,063	104,673	104,283
<b>30</b>	111,672	111,282	110,892	110,502	110,112	109,722	109,332	108,942	108,552	108,162
<b>40</b>	115,539	115,149	114,759	114,369	113,979	113,589	113,199	112,809	112,419	112,029
<b>50</b>	119,395	118,999	118,603	118,207	117,811	117,415	117,019	116,623	116,227	115,831
<b>60</b>	123,237	122,837	122,437	122,037	121,637	121,237	120,837	120,437	120,037	119,637
<b>70</b>	127,072	126,667	126,262	125,857	125,452	125,047	124,642	124,237	123,832	123,427
<b>80</b>	130,893	130,483	130,073	129,663	129,253	128,843	128,433	128,023	127,613	127,203
<b>90</b>	134,702	134,287	133,872	133,457	133,042	132,627	132,212	131,797	131,382	130,967
<b>100</b>	138,500	138,079	137,658	137,237	136,816	136,395	135,974	135,553	135,132	134,711
<b>110</b>	142,286	141,859	141,432	141,005	140,578	140,151	139,724	139,297	138,870	138,443
<b>120</b>	146,061	145,628	145,195	144,762	144,329	143,896	143,463	143,030	142,597	142,164
<b>130</b>	149,824	149,385	148,946	148,507	148,068	147,629	147,190	146,751	146,312	145,873
<b>140</b>	153,575	153,131	152,687	152,243	151,799	151,355	150,911	150,467	150,023	149,579
<b>150</b>	157,315	156,865	156,415	155,965	155,515	155,065	154,615	154,165	153,715	153,265
<b>160</b>	161,043	160,588	160,133	159,678	159,223	158,768	158,313	157,858	157,403	156,948
<b>170</b>	164,760	164,300	163,840	163,380	162,920	162,460	162,000	161,540	161,080	160,620
<b>180</b>	168,465	168,000	167,535	167,070	166,605	166,140	165,675	165,210	164,745	164,280
<b>190</b>	172,158	171,688	171,218	170,748	170,278	169,808	169,338	168,868	168,398	167,928
<b>200</b>	175,840	175,365	174,890	174,415	173,940	173,465	172,990	172,515	172,040	171,565
<b>210</b>	179,510	179,030	178,550	178,070	177,590	177,110	176,630	176,150	175,670	175,190
<b>220</b>	183,168	182,683	182,198	181,713	181,228	180,743	180,258	179,773	179,288	178,803
<b>230</b>	186,815	186,325	185,835	185,345	184,855	184,365	183,875	183,385	182,895	182,405
<b>240</b>	190,451	190,000	189,549	189,098	188,647	188,196	187,745	187,294	186,843	186,392
<b>250</b>	194,074	193,618	193,162	192,706	192,250	191,794	191,338	190,882	190,426	189,970
<b>260</b>	197,686	197,225	196,764	196,303	195,842	195,381	194,920	194,459	194,000	193,539
<b>270</b>	201,287	200,821	200,355	199,889	199,423	198,957	198,491	198,025	197,559	197,093
<b>280</b>	204,876	204,405	203,934	203,463	202,992	202,521	202,050	201,579	201,108	200,637
<b>290</b>	208,453	208,000	207,547	207,094	206,641	206,188	205,735	205,282	204,829	204,376
<b>300</b>	212,019	211,561	211,103	210,645	210,187	209,729	209,271	208,813	208,355	207,897
<b>310</b>	215,573	215,111	214,649	214,187	213,725	213,263	212,801	212,339	211,877	211,415
<b>320</b>	219,115	218,648	218,181	217,714	217,247	216,780	216,313	215,846	215,379	214,912
<b>330</b>	222,646	222,175	221,704	221,233	220,762	220,291	219,820	219,349	218,878	218,407
<b>340</b>	226,166	225,691	225,216	224,741	224,266	223,791	223,316	222,841	222,366	221,891
<b>350</b>	229,673	229,193	228,713	228,233	227,753	227,273	226,793	226,313	225,833	225,353
<b>360</b>	233,169	232,684	232,199	231,714	231,229	230,744	230,259	229,774	229,289	228,804
<b>370</b>	236,654	236,164	235,674	235,184	234,694	234,204	233,714	233,224	232,734	232,244
<b>380</b>	240,127	239,632	239,137	238,642	238,147	237,652	237,157	236,662	236,167	235,672
<b>390</b>	243,588	243,088	242,588	242,088	241,588	241,088	240,588	240,088	239,588	239,088
<b>400</b>	247,038	246,533	246,028	245,523	245,018	244,513	244,008	243,503	243,000	242,495
<b>410</b>	250,476	249,966	249,456	248,946	248,436	247,926	247,416	246,906	246,396	245,886
<b>420</b>	253,902	253,387	252,872	252,357	251,842	251,327	250,812	250,297	249,782	249,267