

Processo N°: 6701/2008

Certificado N°: 1157/2008

Identificação: Rosemount n/s 1925

Corrente: 0 mA

T(°C)	W	dT/dW	Inc.(mK)k=2
0	0,999 960	250,74	0,10
1	1,003 948	250,82	0,11
2	1,007 934	250,89	0,14
3	1,011 919	250,97	0,17
4	1,015 903	251,05	0,21
5	1,019 886	251,12	0,25
6	1,023 867	251,20	0,29
7	1,027 848	251,28	0,34
8	1,031 827	251,35	0,38
9	1,035 805	251,43	0,42
10	1,039 781	251,51	0,46
11	1,043 757	251,58	0,50
12	1,047 731	251,66	0,54
13	1,051 704	251,74	0,58
14	1,055 676	251,82	0,62
15	1,059 646	251,89	0,66
16	1,063 615	251,97	0,70
17	1,067 584	252,05	0,74
18	1,071 550	252,12	0,78
19	1,075 516	252,20	0,82
20	1,079 481	252,28	0,86
21	1,083 444	252,36	0,89
22	1,087 406	252,43	0,93
23	1,091 367	252,51	0,96
24	1,095 326	252,59	1,00
25	1,099 285	252,66	1,0
26	1,103 242	252,74	1,1
27	1,107 198	252,82	1,1
28	1,111 153	252,90	1,1
29	1,115 107	252,97	1,2
30	1,119 059	253,05	1,2
31	1,123 010	253,13	1,2
32	1,126 960	253,21	1,3
33	1,130 909	253,28	1,3
34	1,134 856	253,36	1,3
35	1,138 803	253,44	1,4
36	1,142 748	253,52	1,4
37	1,146 692	253,59	1,4
38	1,150 634	253,67	1,4
39	1,154 576	253,75	1,5
40	1,158 516	253,83	1,5
41	1,162 455	253,90	1,5
42	1,166 393	253,98	1,5

T(°C)	W	dT/dW	Inc.(mK)k=2
43	1,170 330	254,06	1,6
44	1,174 265	254,14	1,6
45	1,178 200	254,22	1,6
46	1,182 133	254,29	1,6
47	1,186 065	254,37	1,7
48	1,189 995	254,45	1,7
49	1,193 925	254,53	1,7
50	1,197 853	254,61	1,7
51	1,201 780	254,68	1,8
52	1,205 706	254,76	1,8
53	1,209 630	254,84	1,8
54	1,213 554	254,92	1,8
55	1,217 476	255,00	1,8
56	1,221 397	255,07	1,9
57	1,225 317	255,15	1,9
58	1,229 236	255,23	1,9
59	1,233 153	255,31	1,9
60	1,237 069	255,39	1,9
61	1,240 984	255,47	1,9
62	1,244 898	255,54	2,0
63	1,248 811	255,62	2,0
64	1,252 722	255,70	2,0
65	1,256 632	255,78	2,0
66	1,260 541	255,86	2,0
67	1,264 449	255,94	2,0
68	1,268 356	256,01	2,0
69	1,272 261	256,09	2,0
70	1,276 166	256,17	2,1
71	1,280 069	256,25	2,1
72	1,283 970	256,33	2,1
73	1,287 871	256,41	2,1
74	1,291 770	256,49	2,1
75	1,295 669	256,57	2,1
76	1,299 566	256,64	2,1
77	1,303 462	256,72	2,1
78	1,307 356	256,80	2,1
79	1,311 250	256,88	2,1
80	1,315 142	256,96	2,1
81	1,319 033	257,04	2,2
82	1,322 923	257,12	2,2
83	1,326 811	257,20	2,2
84	1,330 699	257,28	2,2
85	1,334 585	257,36	2,2

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T(°C)	W	dT/dW	Inc.(mK)k=2
86	1,338 470	257,44	2,2
87	1,342 354	257,51	2,2
88	1,346 237	257,59	2,2
89	1,350 118	257,67	2,2
90	1,353 999	257,75	2,2
91	1,357 878	257,83	2,2
92	1,361 756	257,91	2,2
93	1,365 632	257,99	2,2
94	1,369 508	258,07	2,2
95	1,373 382	258,15	2,2
96	1,377 255	258,23	2,2
97	1,381 127	258,31	2,2
98	1,384 998	258,39	2,2
99	1,388 867	258,47	2,2
100	1,392 736	258,55	2,2
101	1,396 603	258,63	2,2
102	1,400 469	258,71	2,2
103	1,404 334	258,79	2,2
104	1,408 197	258,87	2,2
105	1,412 060	258,95	2,2
106	1,415 921	259,03	2,2
107	1,419 781	259,11	2,1
108	1,423 640	259,19	2,1
109	1,427 497	259,27	2,1
110	1,431 354	259,35	2,1
111	1,435 209	259,43	2,1
112	1,439 063	259,51	2,1
113	1,442 916	259,59	2,1
114	1,446 768	259,67	2,1
115	1,450 618	259,75	2,1
116	1,454 467	259,83	2,1
117	1,458 315	259,91	2,1
118	1,462 162	259,99	2,1
119	1,466 008	260,07	2,0
120	1,469 853	260,15	2,0
121	1,473 696	260,23	2,0
122	1,477 538	260,31	2,0
123	1,481 379	260,39	2,0
124	1,485 219	260,47	2,0
125	1,489 058	260,55	2,0
126	1,492 895	260,63	2,0
127	1,496 731	260,71	1,9
128	1,500 566	260,79	1,9

T(°C)	W	dT/dW	Inc.(mK)k=2
129	1,504 400	260,87	1,9
130	1,508 233	260,96	1,9
131	1,512 064	261,04	1,9
132	1,515 894	261,12	1,9
133	1,519 724	261,20	1,9
134	1,523 551	261,28	1,9
135	1,527 378	261,36	1,8
136	1,531 204	261,44	1,8
137	1,535 028	261,52	1,8
138	1,538 851	261,60	1,8
139	1,542 673	261,68	1,8
140	1,546 494	261,77	1,8
141	1,550 314	261,85	1,7
142	1,554 132	261,93	1,7
143	1,557 949	262,01	1,7
144	1,561 765	262,09	1,7
145	1,565 580	262,17	1,7
146	1,569 394	262,25	1,7
147	1,573 207	262,33	1,7
148	1,577 018	262,42	1,6
149	1,580 828	262,50	1,6
150	1,584 637	262,58	1,6
151	1,588 445	262,66	1,6
152	1,592 251	262,74	1,6
153	1,596 057	262,82	1,6
154	1,599 861	262,91	1,6
155	1,603 664	262,99	1,6
156	1,607 466	263,07	1,5
157	1,611 267	263,15	1,5
158	1,615 066	263,23	1,5
159	1,618 865	263,31	1,5
160	1,622 662	263,40	1,5
161	1,626 458	263,48	1,5
162	1,630 253	263,56	1,5
163	1,634 046	263,64	1,5
164	1,637 839	263,72	1,5
165	1,641 630	263,81	1,5
166	1,645 420	263,89	1,5
167	1,649 209	263,97	1,5
168	1,652 997	264,05	1,5
169	1,656 783	264,13	1,5
170	1,660 568	264,22	1,5
171	1,664 353	264,30	1,5

TABLE 14 Type K Thermocouple
Temperature in Degrees Celsius (ITS-90)

EMF in Millivolts												Reference Junctions at 0°C											
°C	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10												
THERMOELECTRIC VOLTAGE IN MILLIVOLTS																							
-270	-6.458																						
-260	-6.441	-6.444	-6.446	-6.448	-6.450	-6.452	-6.453	-6.455	-6.456	-6.457	-6.458												
-250	-6.404	-6.408	-6.413	-6.417	-6.421	-6.425	-6.429	-6.432	-6.435	-6.438	-6.441												
-240	-6.344	-6.351	-6.358	-6.364	-6.370	-6.377	-6.382	-6.388	-6.393	-6.399	-6.404												
-230	-6.262	-6.271	-6.280	-6.289	-6.297	-6.306	-6.314	-6.322	-6.329	-6.337	-6.344												
-220	-6.158	-6.170	-6.181	-6.192	-6.202	-6.213	-6.223	-6.233	-6.243	-6.252	-6.262												
-210	-6.035	-6.048	-6.061	-6.074	-6.087	-6.099	-6.111	-6.123	-6.135	-6.147	-6.158												
-200	-5.891	-5.907	-5.922	-5.936	-5.951	-5.965	-5.980	-5.994	-6.007	-6.021	-6.035												
-190	-5.730	-5.747	-5.763	-5.780	-5.797	-5.813	-5.829	-5.845	-5.861	-5.876	-5.891												
-180	-5.550	-5.569	-5.588	-5.606	-5.624	-5.642	-5.660	-5.678	-5.695	-5.713	-5.730												
-170	-5.354	-5.374	-5.395	-5.415	-5.435	-5.454	-5.474	-5.493	-5.512	-5.531	-5.550												
-160	-5.141	-5.163	-5.185	-5.207	-5.228	-5.250	-5.271	-5.292	-5.313	-5.333	-5.354												
-150	-4.913	-4.936	-4.960	-4.983	-5.006	-5.029	-5.052	-5.074	-5.097	-5.119	-5.141												
-140	-4.669	-4.694	-4.719	-4.744	-4.768	-4.793	-4.817	-4.841	-4.865	-4.889	-4.913												
-130	-4.411	-4.437	-4.463	-4.490	-4.516	-4.542	-4.567	-4.593	-4.618	-4.644	-4.669												
-120	-4.138	-4.166	-4.194	-4.221	-4.249	-4.276	-4.303	-4.330	-4.357	-4.384	-4.411												
-110	-3.852	-3.882	-3.911	-3.939	-3.968	-3.997	-4.025	-4.054	-4.082	-4.110	-4.138												
-100	-3.554	-3.584	-3.614	-3.645	-3.675	-3.705	-3.734	-3.764	-3.794	-3.823	-3.852												
-90	-3.243	-3.274	-3.306	-3.337	-3.368	-3.400	-3.431	-3.462	-3.492	-3.523	-3.554												
-80	-2.920	-2.953	-2.986	-3.018	-3.050	-3.083	-3.115	-3.147	-3.179	-3.211	-3.243												
-70	-2.587	-2.620	-2.654	-2.688	-2.721	-2.755	-2.788	-2.821	-2.854	-2.887	-2.920												
-60	-2.243	-2.278	-2.312	-2.347	-2.382	-2.416	-2.450	-2.485	-2.519	-2.553	-2.587												
-50	-1.889	-1.925	-1.961	-1.996	-2.032	-2.067	-2.103	-2.138	-2.173	-2.208	-2.243												
-40	-1.527	-1.564	-1.600	-1.637	-1.673	-1.709	-1.745	-1.782	-1.818	-1.854	-1.889												
-30	-1.156	-1.194	-1.231	-1.268	-1.305	-1.343	-1.380	-1.417	-1.453	-1.490	-1.527												
-20	-0.778	-0.816	-0.854	-0.892	-0.930	-0.968	-1.006	-1.043	-1.081	-1.119	-1.156												
-10	-0.392	-0.431	-0.470	-0.508	-0.547	-0.586	-0.624	-0.663	-0.701	-0.739	-0.778												
0	0.000	-0.039	-0.079	-0.118	-0.157	-0.197	-0.236	-0.275	-0.314	-0.353	-0.392												
°C	0	1	2	3	4	5	6	7	8	9	10												
0	0.000	0.039	0.079	0.119	0.158	0.198	0.238	0.277	0.317	0.357	0.397												
10	0.397	0.437	0.477	0.517	0.557	0.597	0.637	0.677	0.718	0.758	0.798												
20	0.798	0.838	0.879	0.919	0.960	1.000	1.041	1.081	1.122	1.163	1.203												
30	1.203	1.244	1.285	1.326	1.366	1.407	1.448	1.489	1.530	1.571	1.612												
40	1.612	1.653	1.694	1.735	1.776	1.817	1.858	1.899	1.941	1.982	2.023												
50	2.023	2.064	2.106	2.147	2.188	2.230	2.271	2.312	2.354	2.395	2.436												
60	2.436	2.478	2.519	2.561	2.602	2.644	2.685	2.727	2.768	2.810	2.851												
70	2.851	2.893	2.934	2.976	3.017	3.059	3.100	3.142	3.184	3.225	3.267												
80	3.267	3.308	3.350	3.391	3.433	3.474	3.516	3.557	3.599	3.640	3.682												
90	3.682	3.723	3.765	3.806	3.848	3.889	3.931	3.972	4.013	4.055	4.096												
100	4.096	4.138	4.179	4.220	4.262	4.303	4.344	4.385	4.427	4.468	4.509												
110	4.509	4.550	4.591	4.633	4.674	4.715	4.756	4.797	4.838	4.879	4.920												
120	4.920	4.961	5.002	5.043	5.084	5.124	5.165	5.206	5.247	5.288	5.328												
130	5.328	5.369	5.410	5.450	5.491	5.532	5.572	5.613	5.653	5.694	5.735												
140	5.735	5.775	5.815	5.856	5.896	5.937	5.977	6.017	6.058	6.098	6.138												
150	6.138	6.179	6.219	6.259	6.299	6.339	6.380	6.420	6.460	6.500	6.540												
160	6.540	6.580	6.620	6.660	6.701	6.741	6.781	6.821	6.861	6.901	6.941												
170	6.941	6.981	7.021	7.060	7.100	7.140	7.180	7.220	7.260	7.300	7.340												
180	7.340	7.380	7.420	7.460	7.500	7.540	7.579	7.619	7.659	7.699	7.739												
190	7.739	7.779	7.819	7.859	7.899	7.939	7.979	8.019	8.059	8.099	8.138												

TABLE 22 Type T Thermocouple
Temperature in Degrees Celsius (ITS-90)

EMF in Millivolts							Reference Junctions at 0°C				
°C	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10
THERMOELECTRIC VOLTAGE IN MILLIVOLTS											
-270	-6.258										
-260	-6.232	-6.236	-6.239	-6.242	-6.245	-6.248	-6.251	-6.253	-6.255	-6.256	-6.258
-250	-6.180	-6.187	-6.193	-6.198	-6.204	-6.209	-6.214	-6.219	-6.223	-6.228	-6.232
-240	-6.105	-6.114	-6.122	-6.130	-6.138	-6.146	-6.153	-6.160	-6.167	-6.174	-6.180
-230	-6.007	-6.017	-6.028	-6.038	-6.049	-6.059	-6.068	-6.078	-6.087	-6.096	-6.105
-220	-5.888	-5.901	-5.914	-5.926	-5.938	-5.950	-5.962	-5.973	-5.985	-5.996	-6.007
-210	-5.753	-5.767	-5.782	-5.795	-5.809	-5.823	-5.836	-5.850	-5.863	-5.876	-5.888
-200	-5.603	-5.619	-5.634	-5.650	-5.665	-5.680	-5.695	-5.710	-5.724	-5.739	-5.753
-190	-5.439	-5.456	-5.473	-5.489	-5.506	-5.523	-5.539	-5.555	-5.571	-5.587	-5.603
-180	-5.261	-5.279	-5.297	-5.316	-5.334	-5.351	-5.369	-5.387	-5.404	-5.421	-5.439
-170	-5.070	-5.089	-5.109	-5.128	-5.148	-5.167	-5.186	-5.205	-5.224	-5.242	-5.261
-160	-4.865	-4.886	-4.907	-4.928	-4.949	-4.969	-4.989	-5.010	-5.030	-5.050	-5.070
-150	-4.648	-4.671	-4.693	-4.715	-4.737	-4.759	-4.780	-4.802	-4.823	-4.844	-4.865
-140	-4.419	-4.443	-4.466	-4.489	-4.512	-4.535	-4.558	-4.581	-4.604	-4.626	-4.648
-130	-4.177	-4.202	-4.226	-4.251	-4.275	-4.300	-4.324	-4.348	-4.372	-4.395	-4.419
-120	-3.923	-3.949	-3.975	-4.000	-4.026	-4.052	-4.077	-4.102	-4.127	-4.152	-4.177
-110	-3.657	-3.684	-3.711	-3.738	-3.765	-3.791	-3.818	-3.844	-3.871	-3.897	-3.923
-100	-3.379	-3.407	-3.435	-3.463	-3.491	-3.519	-3.547	-3.574	-3.602	-3.629	-3.657
-90	-3.089	-3.118	-3.148	-3.177	-3.206	-3.235	-3.264	-3.293	-3.322	-3.350	-3.379
-80	-2.788	-2.818	-2.849	-2.879	-2.910	-2.940	-2.970	-3.000	-3.030	-3.059	-3.089
-70	-2.476	-2.507	-2.539	-2.571	-2.602	-2.633	-2.664	-2.695	-2.726	-2.757	-2.788
-60	-2.153	-2.186	-2.218	-2.251	-2.283	-2.316	-2.348	-2.380	-2.412	-2.444	-2.476
-50	-1.819	-1.853	-1.887	-1.920	-1.954	-1.987	-2.021	-2.054	-2.087	-2.120	-2.153
-40	-1.475	-1.510	-1.545	-1.579	-1.614	-1.648	-1.683	-1.717	-1.751	-1.785	-1.819
-30	-1.121	-1.157	-1.192	-1.228	-1.264	-1.299	-1.335	-1.370	-1.405	-1.440	-1.475
-20	-0.757	-0.794	-0.830	-0.867	-0.904	-0.940	-0.976	-1.013	-1.049	-1.085	-1.121
-10	-0.383	-0.421	-0.459	-0.496	-0.534	-0.571	-0.608	-0.646	-0.683	-0.720	-0.757
0	0.000	-0.039	-0.077	-0.116	-0.154	-0.193	-0.231	-0.269	-0.307	-0.345	-0.383
°C	0	1	2	3	4	5	6	7	8	9	10
0	0.000	0.039	0.078	0.117	0.156	0.195	0.234	0.273	0.312	0.352	0.391
10	0.391	0.431	0.470	0.510	0.549	0.589	0.629	0.669	0.709	0.749	0.790
20	0.790	0.830	0.870	0.911	0.951	0.992	1.033	1.074	1.114	1.155	1.196
30	1.196	1.238	1.279	1.320	1.362	1.403	1.445	1.486	1.528	1.570	1.612
40	1.612	1.654	1.696	1.738	1.780	1.823	1.865	1.908	1.950	1.993	2.036
50	2.036	2.079	2.122	2.165	2.208	2.251	2.294	2.338	2.381	2.425	2.468
60	2.468	2.512	2.556	2.600	2.643	2.687	2.732	2.776	2.820	2.864	2.909
70	2.909	2.953	2.998	3.043	3.087	3.132	3.177	3.222	3.267	3.312	3.358
80	3.358	3.403	3.448	3.494	3.539	3.585	3.631	3.677	3.722	3.768	3.814
90	3.814	3.860	3.907	3.953	3.999	4.046	4.092	4.138	4.185	4.232	4.279