

Základní hodnoty termoelektrického napětí [mV] - termočlánek "N" (NiCrSi-NiSi)

Dle ČSN EN 60584-1 (ITS-90) pro referenční teplotu 0 °C

°C	0	1	2	3	4	5	6	7	8	9	10	°C
-270	-4,345	-4,345	-4,344	-4,344	-4,343	-4,342	-4,341	-4,340	-4,339	-4,337	-4,336	-270
-260	-4,336	-4,334	-4,332	-4,330	-4,328	-4,326	-4,324	-4,321	-4,319	-4,316	-4,313	-260
-250	-4,313	-4,310	-4,307	-4,304	-4,300	-4,297	-4,293	-4,289	-4,285	-4,281	-4,277	-250
-240	-4,277	-4,273	-4,268	-4,263	-4,258	-4,254	-4,248	-4,243	-4,238	-4,232	-4,226	-240
-230	-4,226	-4,221	-4,215	-4,209	-4,202	-4,196	-4,189	-4,183	-4,176	-4,169	-4,162	-230
-220	-4,162	-4,154	-4,147	-4,140	-4,132	-4,124	-4,116	-4,108	-4,100	-4,091	-4,083	-220
-210	-4,083	-4,074	-4,066	-4,057	-4,048	-4,038	-4,029	-4,020	-4,010	-4,000	-3,990	-210
-200	-3,990	-3,980	-3,970	-3,960	-3,950	-3,939	-3,928	-3,918	-3,907	-3,896	-3,884	-200
-190	-3,884	-3,873	-3,862	-3,850	-3,838	-3,827	-3,815	-3,803	-3,790	-3,778	-3,766	-190
-180	-3,766	-3,753	-3,740	-3,728	-3,715	-3,702	-3,688	-3,675	-3,662	-3,648	-3,634	-180
-170	-3,634	-3,621	-3,607	-3,593	-3,578	-3,564	-3,550	-3,535	-3,521	-3,506	-3,491	-170
-160	-3,491	-3,476	-3,461	-3,446	-3,431	-3,415	-3,400	-3,384	-3,368	-3,352	-3,336	-160
-150	-3,336	-3,320	-3,304	-3,288	-3,271	-3,255	-3,238	-3,221	-3,205	-3,188	-3,171	-150
-140	-3,171	-3,153	-3,136	-3,119	-3,101	-3,084	-3,066	-3,048	-3,030	-3,012	-2,994	-140
-130	-2,994	-2,976	-2,958	-2,939	-2,921	-2,902	-2,883	-2,865	-2,846	-2,827	-2,808	-130
-120	-2,808	-2,789	-2,769	-2,750	-2,730	-2,711	-2,691	-2,672	-2,652	-2,632	-2,612	-120
-110	-2,612	-2,592	-2,571	-2,551	-2,531	-2,510	-2,490	-2,469	-2,448	-2,428	-2,407	-110
-100	-2,407	-2,386	-2,365	-2,344	-2,322	-2,301	-2,280	-2,258	-2,237	-2,215	-2,193	-100
-90	-2,193	-2,172	-2,150	-2,128	-2,106	-2,084	-2,062	-2,039	-2,017	-1,995	-1,972	-90
-80	-1,972	-1,950	-1,927	-1,905	-1,882	-1,859	-1,836	-1,813	-1,790	-1,767	-1,744	-80
-70	-1,744	-1,721	-1,698	-1,674	-1,651	-1,627	-1,604	-1,580	-1,557	-1,533	-1,509	-70
-60	-1,509	-1,485	-1,462	-1,438	-1,414	-1,390	-1,366	-1,341	-1,317	-1,293	-1,269	-60
-50	-1,269	-1,244	-1,220	-1,195	-1,171	-1,146	-1,122	-1,097	-1,072	-1,048	-1,023	-50
-40	-1,023	-0,998	-0,973	-0,948	-0,923	-0,898	-0,873	-0,848	-0,823	-0,798	-0,772	-40
-30	-0,772	-0,747	-0,722	-0,696	-0,671	-0,646	-0,620	-0,595	-0,569	-0,544	-0,518	-30
-20	-0,518	-0,492	-0,467	-0,441	-0,415	-0,390	-0,364	-0,338	-0,312	-0,286	-0,260	-20
-10	-0,260	-0,234	-0,209	-0,183	-0,157	-0,131	-0,104	-0,078	-0,052	-0,026	0,000	-10
0	0,000	0,026	0,052	0,078	0,104	0,130	0,156	0,182	0,208	0,235	0,261	0
10	0,261	0,287	0,313	0,340	0,366	0,393	0,419	0,446	0,472	0,499	0,525	10
20	0,525	0,552	0,578	0,605	0,632	0,659	0,685	0,712	0,739	0,766	0,793	20
30	0,793	0,820	0,847	0,874	0,901	0,928	0,955	0,983	1,010	1,037	1,065	30
40	1,065	1,092	1,119	1,147	1,174	1,202	1,229	1,257	1,284	1,312	1,340	40
50	1,340	1,368	1,395	1,423	1,451	1,479	1,507	1,535	1,563	1,591	1,619	50
60	1,619	1,647	1,675	1,703	1,732	1,760	1,788	1,817	1,845	1,873	1,902	60
70	1,902	1,930	1,959	1,988	2,016	2,045	2,074	2,102	2,131	2,160	2,189	70
80	2,189	2,218	2,247	2,276	2,305	2,334	2,363	2,392	2,421	2,450	2,480	80
90	2,480	2,509	2,538	2,568	2,597	2,626	2,656	2,685	2,715	2,744	2,774	90
100	2,774	2,804	2,833	2,863	2,893	2,923	2,953	2,983	3,012	3,042	3,072	100
110	3,072	3,102	3,133	3,163	3,193	3,223	3,253	3,283	3,314	3,344	3,374	110
120	3,374	3,405	3,435	3,466	3,496	3,527	3,557	3,588	3,619	3,649	3,680	120
130	3,680	3,711	3,742	3,772	3,803	3,834	3,865	3,896	3,927	3,958	3,989	130
140	3,989	4,020	4,051	4,083	4,114	4,145	4,176	4,208	4,239	4,270	4,302	140
150	4,302	4,333	4,365	4,396	4,428	4,459	4,491	4,523	4,554	4,586	4,618	150
160	4,618	4,650	4,681	4,713	4,745	4,777	4,809	4,841	4,873	4,905	4,937	160
170	4,937	4,969	5,001	5,033	5,066	5,098	5,130	5,162	5,195	5,227	5,259	170
180	5,259	5,292	5,324	5,357	5,389	5,422	5,454	5,487	5,520	5,552	5,585	180
190	5,585	5,618	5,650	5,683	5,716	5,749	5,782	5,815	5,847	5,880	5,913	190
200	5,913	5,946	5,979	6,013	6,046	6,079	6,112	6,145	6,178	6,211	6,245	200
210	6,245	6,278	6,311	6,345	6,378	6,411	6,445	6,478	6,512	6,545	6,579	210
220	6,579	6,612	6,646	6,680	6,713	6,747	6,781	6,814	6,848	6,882	6,916	220
230	6,916	6,949	6,983	7,017	7,051	7,085	7,119	7,153	7,187	7,221	7,255	230
240	7,255	7,289	7,323	7,357	7,392	7,426	7,460	7,494	7,528	7,563	7,597	240
250	7,597	7,631	7,666	7,700	7,734	7,769	7,803	7,838	7,872	7,907	7,941	250
260	7,941	7,976	8,010	8,045	8,080	8,114	8,149	8,184	8,218	8,253	8,288	260
270	8,288	8,323	8,358	8,392	8,427	8,462	8,497	8,532	8,567	8,602	8,637	270
280	8,637	8,672	8,707	8,742	8,777	8,812	8,847	8,882	8,918	8,953	8,988	280
290	8,988	9,023	9,058	9,094	9,129	9,164	9,200	9,235	9,270	9,306	9,341	290
300	9,341	9,377	9,412	9,448	9,483	9,519	9,554	9,590	9,625	9,661	9,696	300
310	9,696	9,732	9,768	9,803	9,839	9,875	9,910	9,946	9,982	10,018	10,054	310
320	10,054	10,089	10,125	10,161	10,197	10,233	10,269	10,305	10,341	10,377	10,413	320
330	10,413	10,449	10,485	10,521	10,557	10,593	10,629	10,665	10,701	10,737	10,774	330
340	10,774	10,810	10,846	10,882	10,918	10,955	10,991	11,027	11,064	11,100	11,136	340
350	11,136	11,173	11,209	11,245	11,282	11,318	11,355	11,391	11,428	11,464	11,501	350
360	11,501	11,537	11,574	11,610	11,647	11,683	11,720	11,757	11,793	11,830	11,867	360
370	11,867	11,903	11,940	11,977	12,013	12,050	12,087	12,124	12,160	12,197	12,234	370
380	12,234	12,271	12,308	12,345	12,382	12,418	12,455	12,492	12,529	12,566	12,603	380
390	12,603	12,640	12,677	12,714	12,751	12,788	12,825	12,862	12,899	12,937	12,974	390
400	12,974	13,011	13,048	13,085	13,122	13,159	13,197	13,234	13,271	13,308	13,346	400
410	13,346	13,383	13,420	13,457	13,495	13,532	13,569	13,607	13,644	13,682	13,719	410
420	13,719	13,756	13,794	13,831	13,869	13,906	13,944	13,981	14,019	14,056	14,094	420

Základní hodnoty termoelektrického napětí - termočlánek "N"

°C	0	1	2	3	4	5	6	7	8	9	10	°C
1130	41,223	41,260	41,298	41,336	41,374	41,411	41,449	41,487	41,525	41,562	41,600	1130
1140	41,600	41,638	41,675	41,713	41,751	41,788	41,826	41,864	41,901	41,939	41,976	1140
1150	41,976	42,014	42,052	42,089	42,127	42,164	42,202	42,239	42,277	42,314	42,352	1150
1160	42,352	42,390	42,427	42,465	42,502	42,540	42,577	42,614	42,652	42,689	42,727	1160
1170	42,727	42,764	42,802	42,839	42,877	42,914	42,951	42,989	43,026	43,064	43,101	1170
1180	43,101	43,138	43,176	43,213	43,250	43,288	43,325	43,362	43,399	43,437	43,474	1180
1190	43,474	43,511	43,549	43,586	43,623	43,660	43,698	43,735	43,772	43,809	43,846	1190
1200	43,846	43,884	43,921	43,958	43,995	44,032	44,069	44,106	44,144	44,181	44,218	1200
1210	44,218	44,255	44,292	44,329	44,366	44,403	44,440	44,477	44,514	44,551	44,588	1210
1220	44,588	44,625	44,662	44,699	44,736	44,773	44,810	44,847	44,884	44,921	44,958	1220
1230	44,958	44,995	45,032	45,069	45,105	45,142	45,179	45,216	45,253	45,290	45,326	1230
1240	45,326	45,363	45,400	45,437	45,474	45,510	45,547	45,584	45,621	45,657	45,694	1240
1250	45,694	45,731	45,767	45,804	45,841	45,877	45,914	45,951	45,987	46,024	46,060	1250
1260	46,060	46,097	46,133	46,170	46,207	46,243	46,280	46,316	46,353	46,389	46,425	1260
1270	46,425	46,462	46,498	46,535	46,571	46,608	46,644	46,680	46,717	46,753	46,789	1270
1280	46,789	46,826	46,862	46,898	46,935	46,971	47,007	47,043	47,079	47,116	47,152	1280
1290	47,152	47,188	47,224	47,260	47,296	47,333	47,369	47,405	47,441	47,477	47,513	1290

$$U_T = \text{tab}(t_M) - \text{tab}(t_S)$$

U_T ... napětí na termočlátku [mV]

t_M ... měřená teplota [°C]

t_S ... srovnávací teplota [°C]

$\text{tab}()$... hodnota v tabulce pro určitou teplotu a určitý typ termočlátku [°C]