

UL- AND CSA-APPROVED CABLES



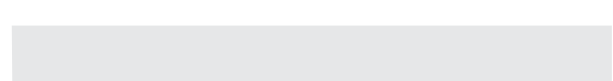
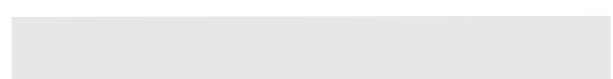
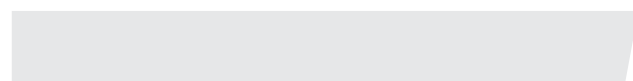
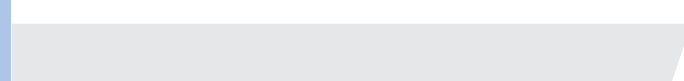
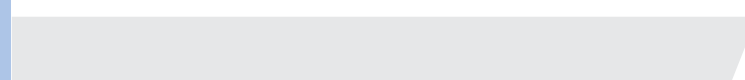
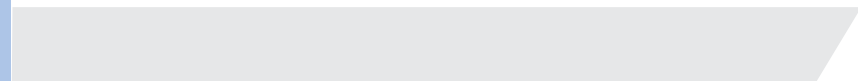
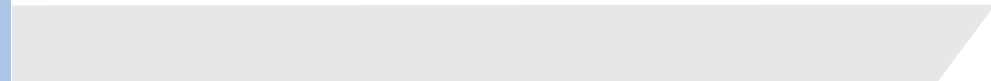
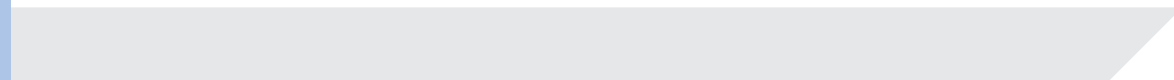
UL- AND CSA-APPROVED CABLES

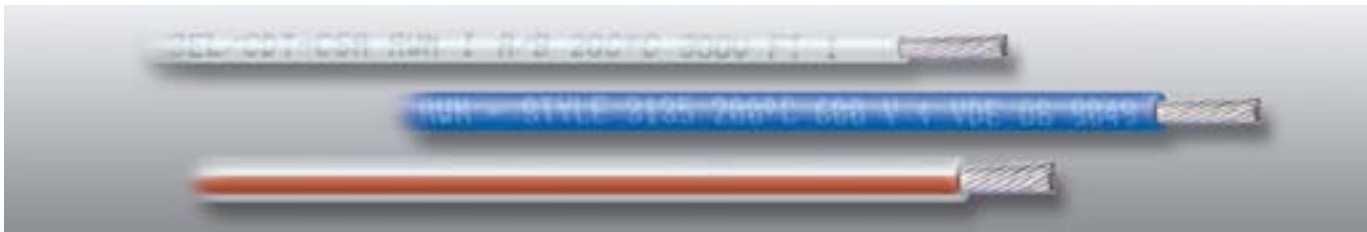
Products

*UL & CSA
Cables*

C O N T E N T S
C O N T E N T S

	Page
UL-approved cables	143-147
CSA-approved cables	148-149





UL approvals

Products

Style-No.	Insulation material	Temperature [°C]	Voltage [Volt]	Detailed information are available...
1164	PTFE	150	300	on page 16
1180	PTFE	200	300	on page 16
1198	PTFE	150	600	on page 16
1199	PTFE	200	600	on page 16
1212	PTFE	80	----	on page 16
1213	PTFE	105	----	on page 16
1226	FEP	80	----	on page 30
1227	FEP	105	----	on page 30
1330	FEP	200	600	on page 30
1331	FEP	150	600	on page 30
1332	FEP	200	300	on page 30
1333	FEP	150	300	on page 30
1354	Multi/Coax	60/80	30	on request
1371	PTFE	105	----	on page 16
1371	FEP	105	----	on page 30
1375	Multi/Coax	60/80	30	on request
1394	PTFE/PA	200	----	on request
1419	PTFE/PTFE	105	----	on request
1419	FEP/FEP	105	----	on request
1458	PTFE/PVC	105	300	on request
1458	FEP/PVC	105	300	on request
1508	ETFE	105	30	on page 44
1512	PTFE	105	----	on page 16
1513	ETFE	105	----	on page 44
1516	ETFE	105	----	on page 44
1517	ETFE	105	----	on page 44
1523	ETFE	105	----	on page 44
1524	PTFE/PTFE	105	30	on request
1524	FEP/FEP	105	30	on request
1538	PTFE	105	125	on page 16
1538	FEP	105	125	on page 30
1538	PFA	105	125	on page 47
1558	ETFE	125	----	on page 44
1559	PTFE/PTFE	105	30	on request
1559	FEP/FEP	105	30	on request
1577	PTFE	200	----	on page 16
1577	FEP	200	----	on page 30
1584	PTFE	200	1000	on page 16
1586	ETFE	105	----	on page 44
1591	FEP	150	300	on page 30
1592	FEP	200	300	on page 30
1595	Kynar	125	----	on request
1609	ETFE	105	125	on page 44
1610	ETFE	105	----	on page 44

UL & CSA
Cables



UL approvals

Style-No.	Insulation material	Temperature [°C]	Voltage [Volt]	Detailed information are available...
1643	ETFE	150	300	on page 44
1644	ETFE	150	600	on page 44
1659	PTFE	250	600	on page 16
1666	FEP/FEP	150	300	on request
1667	FEP/FEP	150	600	on request
1668	FEP/FEP	200	300	on request
1669	FEP/FEP	200	600	on request
1671	ETFE	150	300	on page 44
1694	PTFE/PTFE	80	----	on request
1694	FEP/FEP	80	----	on request
1707	PFA	200	30	on page 47
1708	PFA	200	----	on page 47
1709	PFA	200	300	on page 47
1710	PFA	200	600	on page 47
1716	PTFE/PTFE	150	150	on request
1716	FEP/FEP	150	150	on request
1716	PFA/PFA	150	150	on request
1723	PTFE	200	----	on page 17
1723	FEP	200	----	on page 31
1726	PFA	250	300	on page 47
1727	PFA	250	600	on page 47
1736	FEP/FEP	150	300	on request
1737	FEP/FEP	150	600	on request
1738	FEP/FEP	200	300	on request
1739	FEP/FEP	200	600	on request
1745	Multi/Coax	90	30	on request
1746	PTFE	200	125	on page 17
1814	ETFE	150	150	on page 44
1815	PTFE	250	300	on page 17
1828	ETFE	150	300	on page 44
1829	ETFE	150	600	on page 45
1835	PTFE/PTFE	150	600	on request
1835	FEP/FEP	150	600	on request
1847	FEP	105	30	on request
1848	FEP/heating cable	150	300	on request
1848	FEP/heating cable	200	300	on request
1849	FEP/heating cable	150	600	on request
1849	FEP/heating cable	200	600	on request
1857	PFA	150	150	on page 47
1858	PFA	150	300	on page 47
1859	PFA	150	600	on page 47
1860	PFA	200	150	on page 47



UL approvals

Products

Style-No.	Insulation material	Temperature [°C]	Voltage [Volt]	Detailed information are available...
1882	PFA	250	150	on page 47
1883	PFA/PFA	200	150	on request
1883	PFA/PFA	250	150	on request
1884	PFA/PFA	200	300	on request
1884	PFA/PFA	250	300	on request
1885	PFA/PFA	200	600	on request
1885	PFA/PFA	250	600	on request
1886	PFA/PFA	150	300	on request
1887	FEP	150	600	on page 31
2688	PI	105	300	on request
2747	FEP/Multi	150	300	on request
2748	FEP/Multi	150	600	on request
2749	FEP/Multi	200	300	on request
2750	FEP/Multi	200	600	on request
2796	PTFE/PTFE	80	----	on request
2796	FEP/FEP	80	----	on request
2825	FEP/Twin	105	30	on request
2894	FEP/Multi	150	300	on request
2895	FEP/Multi	200	300	on request
2990	PTFE/PVC	80	30	on request
2990	FEP/PVC	80	30	on request
2990	PFA/PVC	80	30	on request
2990	PVC/PVC	80	30	on request
3066	Silicone	200	600	on page 62
3067	Silicone/glass fibre	200	600	on page 68
3068	Silicone/glass fibre	150	300	on page 68
3069	Silicone/glass fibre	150	600	on page 68
3070	Silicone/glass fibre	150	600	on page 68
3071	Silicone/glass fibre	200	600	on page 68
3074	Silicone/glass fibre	200	600	on page 68
3075	Silicone/glass fibre	200	600	on page 68
3076	Silicone/glass fibre	150	300	on page 68
3077	Silicone	150	300	on page 62
3078	Silicone	150	300	on page 62
3099	Silicone	150	300	on page 62
3100	Silicone/glass fibre	150	600	on page 68
3101	Silicone/glass fibre	150	600	on page 68
3113	Silicone/glass fibre	150	600	on page 68
3115	Silicone/glass fibre	150	300	on page 68
3122	Silicone	200	300	on page 62
3123	Silicone	150	600	on page 62
3125	Silicone/glass fibre	200	600	on page 68

UL & CSA
Cables



UL approvals

Style-No.	Insulation material	Temperature [°C]	Voltage [Volt]	Detailed information are available...
3126	Silicone/glass fibre	200	600	on page 68
3127	Silicone/glass fibre	150	600	on page 68
3128	Silicone/glass fibre	150	600	on page 68
3132	Silicone	150	300	on page 62
3133	Silicone	150	600	on page 62
3134	Silicone	150	600	on page 62
3135	Silicone	200	600	on page 62
3136	Silicone	150	300	on page 62
3137	Silicone	150	600	on page 62
3138	Silicone	150	600	on page 62
3139	Silicone	200	600	on page 62
3140	Silicone	150	300	on page 62
3141	Silicone	150	600	on page 62
3142	Silicone	150	600	on page 62
3143	Silicone	200	600	on page 62
3144	Silicone/glass fibre	200	600	on page 69
3145	Silicone/glass fibre	200	600	on page 69
3146	Silicone/glass fibre	150	300	on page 69
3147	Silicone	150	300	on page 62
3171	Silicone	105	600	on page 62
3172	Silicone/glass fibre	200	600	on page 69
3207	Silicone/glass fibre	150	600	on page 69
3208	Silicone/glass fibre	150	600	on page 69
3209	Silicone/glass fibre	200	600	on page 69
3210	Silicone/glass fibre	150	600	on page 69
3211	Silicone	150	300	on page 63
3212	Silicone	150	600	on page 63
3213	Silicone	150	600	on page 63
3214	Silicone	150	600	on page 63
3215	Silicone	150	600	on page 63
3216	Silicone	150	600	on page 63
3232	Silicone	105	300	on page 63
3240	Silicone	200	600	on page 63
3241	Silicone	200	300	on page 63
3251	Silicone	250	600	on page 63
3252	Silicone/glass fibre	250	600	on page 69
3253	Silicone	250	300	on page 63
3254	Silicone/glass fibre	250	300	on page 69
3268	Silicone	200	600	on page 63
3278	Silicone/glass fibre	150	600	on page 69
3512	Silicone	200	600	on page 63
3513	Silicone	200	600	on page 63



UL approvals

Products

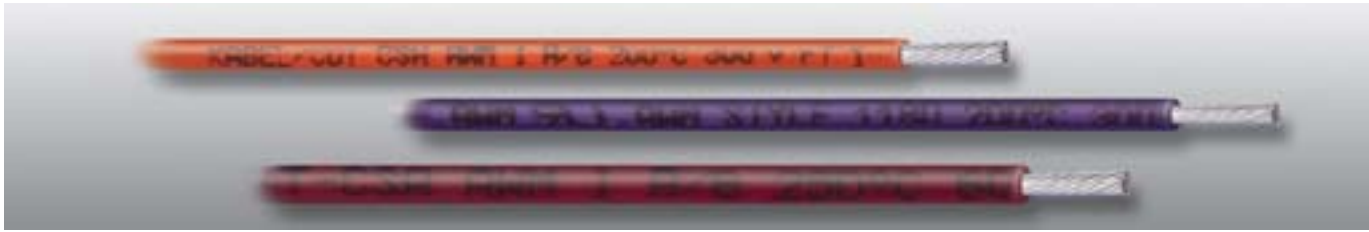
Style-No.	Insulation material	Temperature [°C]	Voltage [Volt]	Detailed information are available...
3580	Silicone	150	1000	on page 63
4476	Silicone-cable with copper screen	150	600	on page 87
4476	Silicone-cable with copper screen	200	600	on page 87
5107	Mica/TGL	200	600	on request
5107	Mica/TGL	450	600	on request
5108	Mica/TGL	250	600	on request
5127	PTFE/glass fibre	250	600	on request
5128	Mica/TGL	450	300	on request
5134	Mica/TGL	250	300	on request
5180	PTFE/glass fibre	250	300	on request
5181	PTFE/glass fibre	250	600	on request
5259	PTFE/glass fibre	250	600	on request
5259	Mica/TGL	250	600	on request
10086	ETFE	150	600	on page 45
10086	ETFE	200	600	on page 45
10109	ETFE	150	300	on page 45
10109	ETFE	200	300	on page 45
10125	ETFE	150	300	on page 45
10126	ETFE	150	600	on page 45
10203	FEP	150	1000	on page 31
10203	FEP	200	1000	on page 31
20121	PFA/Multi	80	30	on request
20223	PFA/Multi	200	150	on request
20223	PFA/Multi	250	150	on request
20224	PFA/Multi	200	300	on request
20224	PFA/Multi	250	300	on request
20225	PFA/Multi	200	600	on request
20225	PFA/Multi	250	600	on request
20229	FEP/Multi	150	300	on request
20230	FEP/Multi	150	600	on request
20231	FEP/Multi	150	----	on request
20469	FEP/PVC	80	30	on request

UL & CSA
Cables



CSA approvals

Insulation materials	AWG	Temperature [°C]	Voltage [Volt]	Detailed information are available on...		
PTFE	28 - 16	150	150	page 18		
	28 - 16	200	150			
	28 - 16	250	150			
	28 - 16 14 - 10 8 - 2 1 - 4/0	200	300			
	28 - 16 14 - 10 8 - 2 1 - 4/0	200	600			
	28 - 16 14 - 10 8 - 2 1 - 4/0	200	1000			
	28 - 16 14 - 10 8 - 2 1 - 4/0	250	300			
	28 - 16 14 - 10 8 - 2 1 - 4/0	250	600			
	28 - 16 14 - 10 8 - 2 1 - 4/0	250	1000			
	FEP	32 - 16	150		150	page 32
		32 - 10	180		300	
		32 - 10 8 - 2 1 - 4/0	180		600	
		32 - 16 14 - 12 10 8 - 2 1 - 4/0	150	300		
	32 - 16 14 - 12 10 8 - 2 1 - 4/0	150	600			
	32 - 12 10 8 - 2	150	1000			



CSA approvals

Products

Insulation materials	AWG	Temperature [°C]	Voltage [Volt]	Detailed information are available on...	
Silicone	1 - 4/0	200	300	page 64	
	32 - 16				
	14 - 12				
	10				
	8 - 2				
	1 - 4/0				
	32 - 24	200	600		
	22 - 12				
	10				
	8 - 2				
	1 - 4/0	200	1000		
	32 - 12				
10					
8 - 2					
1 - 4/0	150	300	page 70		
32 - 16					
14 - 12					
10					
8 - 2					
1 - 4/0					
32 - 16				150	600
14 - 12					
10					
8 - 2					
1 - 4/0				150	1000
32 - 12					
10					
8 - 2					
1 - 4/0	200	300			
32 - 16					
14 - 12					
10					
8 - 2					
1 - 4/0					
32 - 24	200	600			
22 - 12					
10					
8 - 2					
1 - 4/0	200	1000			
32 - 12					
10					
8 - 2					
1 - 4/0					

UL & CSA
Cables

pay attention to CSA specifications.

HEW-THERM® Heating cables and tapes:

Years ago, the only way of heating products in pipes or containers was through warm water or steam. Nowadays, this function is provided by electric heating systems.

The advantages of electric heating systems, e.g. the exact adjustable heat output, the economic use of electric energy as well as no need of maintenance even after a long period of using an electric operated heating system, lead to predatory competition between "steam" and "electric energy".

The classic purposes of heating cables are frost protection, temperature extension and temperature maintenance. Modern connection systems simplify the application of electric heating systems on pipes and containers even within hazardous areas.

The continuous development of new conductor and insulation materials enables an exact adaptation to temperature and corrosion resistance. Fluoropolymer materials such as PTFE, PFA and FEP combine both properties in an almost classical way by a temperature range up to 300°C and an excellent chemical resistance. By the use of Silicone Rubber up to an operation temperature of 180°C high flexibility is ensured.

In addition to all heating cables HEW-KABEL/CDT offers the matching accessories for the manufacturing of prefabricated heating systems.

According to the latest national and international standards, this conception allows an installation in hazardous areas. In combination with tools from HEW-Therm® program, maximum operation safety is ensured.