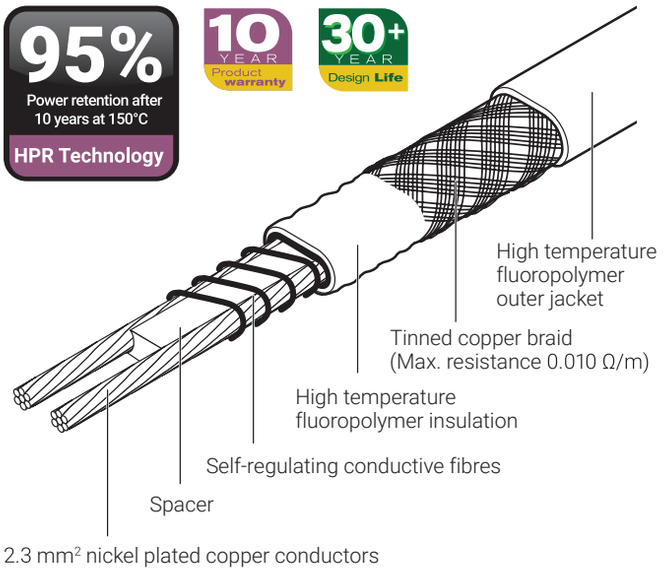
XTVR

Self-regulating heating cable

PRODUCT OVERVIEW



The nVent RAYCHEM XTVR self-regulating heating cable is designed for freeze protection or process temperature maintenance of pipes and vessels requiring high power output and exposure temperatures.

The XTVR heating cables can withstand temperatures up to 250°C and provide process temperature maintenance to 150°C (which may be subject to steam cleaning). The XTVR heating cable incorporates a high power retention (HPR) heating core. This innovative heating core technology and product design results in:

- Highly reliable power output for long operational life
- Ease of stripping, flexible and installation
- Seven wattage levels (at 230 Vac) for efficient heat trace designs and lower installation costs

Power retention: Minimum 95% after 10 years at maximum operating temperature of 150°C.

Certified for use in hazardous and ordinary areas and comes with a 10 year product warranty.

Design life: 30+ years of design life, depending on application.

Application

Traced surface type	Carbon steel Stainless steel Painted or unpainted metal
Chemical resistance	Organics and corrosives For aggressive organics and corrosives consult your local nVent representative

Supply Voltage

230 Vac (contact nVent for data on the other voltages 190 - 277 Vac)

PRODUCT SPECIFICATIONS

Product dimensions (mm)

Width x Thickness (nominal) mm	10.8 x 7.2
Weight (nominal)	164 g/m

RAYCHEM-DS-EU2174-XTVR-EN-2401

HENNLICH - ŽIJEME TECHNIKOU
o.z. MERES HENNLICH s.r.o.
Českolipská 9, 412 01 Litoměřice
Telefon: +420 416 711 200
E-mail: meres@hennlich.cz
www.hennlich.cz/meres

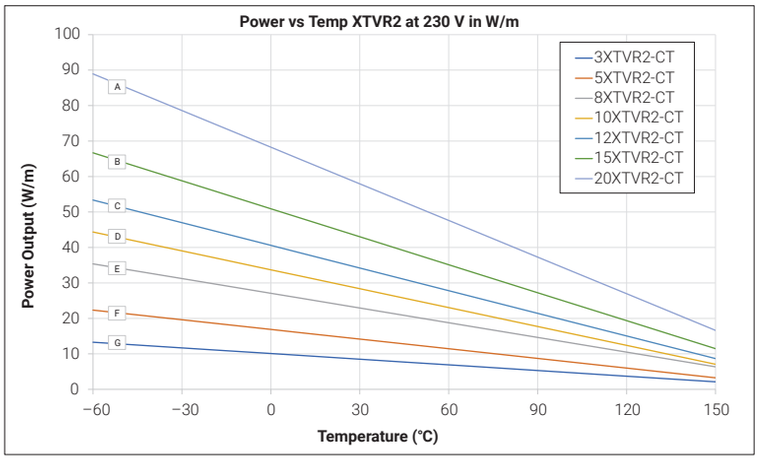
Technical details

Maximum continuous operating temperature (energized)	150°C
Maximum intermittent exposure temperature (energized/de-energized)	250°C Maximum cumulative exposure 2000 hours
Minimum installation temperature	–60°C
Minimum bend radius	–60°C ≤ T<–20°C: 51 mm –20°C ≤ T<–10°C: 35 mm –10°C ≤ T< 0°C: 25 mm 0°C ≤ T <+10°C: 20 mm T≥ +10°C: 12 mm
Design life	30 years or more depending on appliation (contact nVent for more details)
Power retention	Minimum 95% after 10 years of maximum operating temperature of 150°C

Thermal output rating

Nominal power output at 230 Vac on insulated steel pipes

Part Description	"Nominal power output (W/m at 10°C)"	See chart
20XTVR2-CT	64	A
15XTVR2-CT	48	B
12XTVR2-CT	38	C
10XTVR2-CT	32	D
8XTVR2-CT	25	E
5XTVR2-CT	16	F
3XTVR2-CT	9	G



Maximum circuit length based on type 'C' circuit breakers according to EN 60898

		Electrical protection sizing / Maximum heating cable length per circuit (m)				
	Start-up Temp.	16 A	20 A	25 A	32 A	40 A
3XTVR2-CT	10°C	193	241	290	290	290
	0°C	182	228	285	290	290
	–20	165	206	258	290	290
	–40	151	188	235	290	290
5XTVR2-CT	10	144	180	221	221	221
	0	136	170	213	221	221
	–20	123	154	192	221	221
	–40	112	140	175	221	221
8XTVR2-CT	10	104	130	162	171	171
	0	99	123	154	171	171
	–20	89	112	140	171	171
	–40	82	102	128	164	171
10XTVR2-CT	10	89	111	139	151	151
	0	84	105	131	151	151
	–20	76	95	119	151	151
	–40	69	87	108	139	151
12XTVR2-CT	10	77	96	120	135	135
	0	73	91	113	135	135
	–20	66	82	103	131	135
	–40	60	75	94	120	135

	Start-up Temp.	Electrical protection sizing / Maximum heating cable length per circuit (m)				
		16 A	20 A	25 A	32 A	40 A
15XTVR2-CT	10	57	72	90	115	120
	0	54	68	85	109	120
	−20	49	62	77	99	120
	−40	45	56	70	90	113
20XTVR2-CT	10	45	57	71	91	101
	0	43	54	67	86	96
	−20	39	49	61	78	88
	−40	36	45	56	72	83

The above numbers are for circuit length estimation only. For more detailed information please use the nVent TraceCalc software or Contact your local nVent representative. nVent requires the use of a 30 mA residual current device to provide maximum safety and protection from fire. Where design results in higher leakage current, the preferred trip level for adjustable devices is 30 mA above any inherent capacitive leakage characteristic of the heater as specified by the trace heater supplier or alternatively, the next common available trip level for non adjustable devices, with a maximum of 300 mA. All safety aspects need to be proven.

APPROVALS

For use in ordinary and hazardous area Zone 1 and Zone 2 (Gas), Zone 21 and Zone 22 (Dust)

Temperature classification

T3: unconditional (20XTVR2-CT up to Max 240 VAC)
T6 ...T4: nVent RAYCHEM XTVR is approved for the listed temperature classifications by using the principles of stabilized design or controlled limited design. Use TraceCalc design software or contact nVent.

Product certification

More details about product certification, approvals and conditions of safe use are available in the installation manual for Self-regulating and Power limiting heating cable systems at www.nVent.com/RAYCHEM

ORDERING INFORMATION

Part No.	Description
2000003070	XTV-3XTVR2-CT
2000003072	XTV-5XTVR2-CT
2000003073	XTV-8XTVR2-CT
2000003075	XTV-10XTVR2-CT

Part No.	Description
2000003076	XTV-12XTVR2-CT
2000003078	XTV-15XTVR2-CT
2000003080	XTV-20XTVR2-CT

Components

nVent offers a full range of components for power connections, splices and end seals.
These components must be used to ensure proper functioning of the product and compliance with electrical requirements.