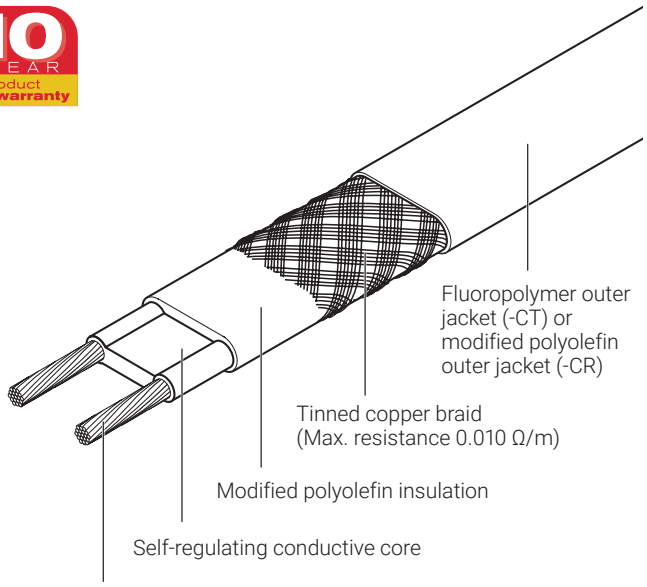
BTV

CONNECT AND PROTECT

Self-regulating Heating Cable

PRODUCT OVERVIEW

10 YEAR Product warranty



Electrical heat-tracing for frost protection without steam cleaning.
The nVent RAYCHEM BTV-family of self-regulating, parallel circuit heating cables is used for frost protection of pipes and vessels. It can also be used for process temperature maintenance up to 65°C.

Application

Traced surface type	Carbon steel Stainless steel Plastic Painted or unpainted metal
Chemical resistance	For organic corrosives: use -CT (fluoropolymer outer jacket) For mild inorganic solutions: use -CR (modified polyolefin outer jacket) For aggressive organics and corrosives consult your local nVent representative

Supply voltage

230 Vac (Contact your local nVent representative for data on other voltages)

PRODUCT SPECIFICATIONS

Product dimensions and weight

	3BTV2-CR 3BTV2-CT	5BTV2-CR 5BTV2-CT	8BTV-2-CR 8BTV-2-CT	10BTV2-CR 10BTV2-CT
Width x Thickness (nominal) mm	10.5 x 5.5		13.2 x 5.5	
Weight (g/m)	110		150	

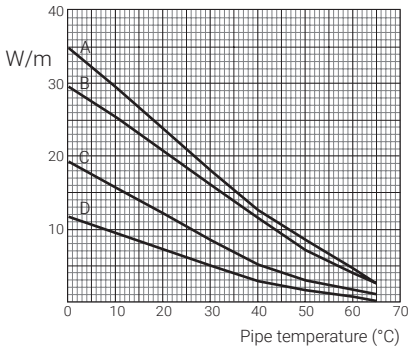
Technical details

Maximum maintain or continuous exposure temperature (power on/off)	65°C
Maximum intermittent exposure temperature (power on/off)	85°C Maximum cumulative exposure 1000 hours
Minimum installation temperature	–60°C
Minimum bend radius	–60°C ≤ T<–20°C: 35 mm –20°C ≤ T<–10°C: 30 mm –10°C ≤ T< 0°C: 25 mm 0°C ≤ T <+10°C: 20 mm T≥ +10°C: 12 mm

Thermal output rating

Nominal power output at 230 Vac on insulated steel pipes

A 10BTV2-CT
10BTV2-CR
B 8BTV-2-CT
8BTV-2-CR
C 5BTV2-CT
5BTV2-CR
D 3BTV2-CT
3BTV2-CR



	3BTV2-CR 3BTV2-CT	5BTV2-CR 5BTV2-CT	8BTV-2-CR 8BTV-2-CT	10BTV2-CR 10BTV2-CT
Nominal power output (W/m at 10°C)	9	16	25	29

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

Electrical protection sizing	Start-up temperature	Maximum heating cable length per circuit (m)			
16 A	–20°C	155	110	70	45
	+10°C	200	160	110	65
20 A	–20°C	195	140	90	55
	+10°C	200	160	125	85
25 A	–20°C	200	160	110	70
	+10°C	200	160	125	105
32 A	–20°C	200	160	125	90
	+10°C	200	160	125	110

The above numbers are for circuit length estimation only. For more detailed information please use the nVent RAYCHEM 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 ordinary area and hazardous area Zone 1 and Zone 2 (Gas), Zone 21 and Zone 22 (Dust).

Temperature classification
T6

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 description	3BTV2-CR	5BTV2-CR	8BTV-2-CR	10BTV2-CR
Part No. (*)	914279-000	414809-000	479821-000	677245-000
Part description	3BTV2-CT	5BTV2-CT	8BTV-2-CT	10BTV2-CT
Part No. (*)	469145-000	487509-000	008633-000	567513-000

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.

(*) Localized versions may exist with limited approvals and different part numbers. Contact your local sales representative

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