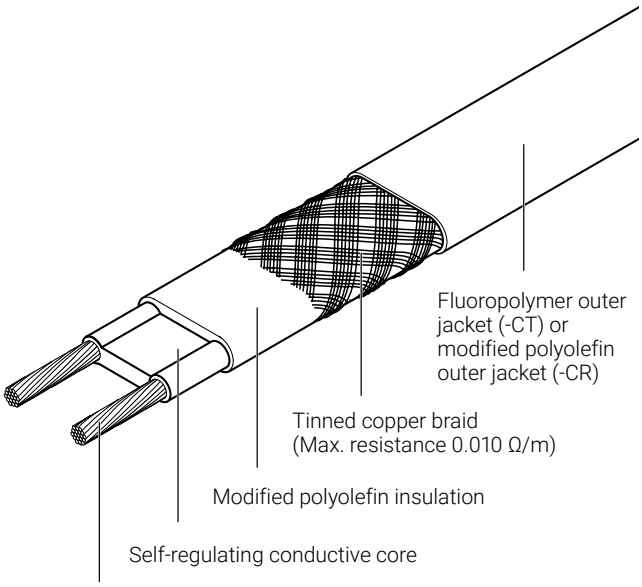
BTV

nVent RAYCHEM

SELFREGULATING HEATING CABLE



HEATING CABLE CONSTRUCTION

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

Area classification	Hazardous, Zone 1, Zone 2 (Gas), Zone 21, Zone 22 (Dust) Ordinary
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)

APPROVALS*

The BTV heating cables are approved for use in hazardous areas by PTB and Baseefa Ltd. PTB 09 ATEX 1115 X & Baseefa06ATEX0183X
Ⓔx II 2 G Ex e II T6 & Ⓔx II 2 D Ex tD A21 IP66 T80°C
IECEx PTB 09.0056X & IECEx BAS 06.0043X
Ex e II T6 & Ex tD A21 IP66 T80°C

The BTV heating cables are approved by DNV for use on ships and mobile offshore units.
DNV Certificate No. DNV-GL TAE00000TU

EAC Ex
TC RU C-BE.МЮ62.B.00054/18
1Ex e IIC T6 Gb X 1Ex e mb II C T6 Gb X
Ex tb IIIC T80°C Db X Ex tb mb IIIC T80°C Db X
Ta -60°C...+56°C IP66
ООО "ТехИмпорт"

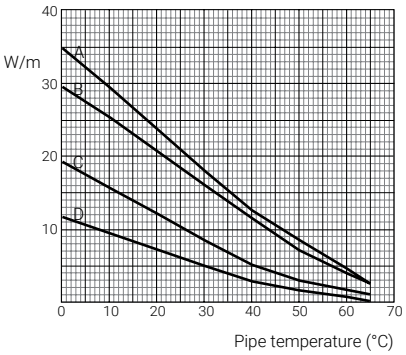
SPECIFICATIONS

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
Temperature classification	T6
Minimum installation temperature	–60°C
Minimum bend radius	at 20°C: 13 mm at –60°C: 35 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

PRODUCT DIMENSIONS (NOMINAL) AND WEIGHT

Thickness (mm)	5.5	5.5	5.5	5.5
Width (mm)	10.5	10.5	15.4	15.4
Weight (g/m)	110	110	153	153

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 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.

ORDERING DETAILS

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

North America
Tel +1.800.545.6258
Fax +1.800.527.5703
thermal.info@nVent.com

Europe, Middle East, Africa
Tel +32.16.213.502
Fax +32.16.213.604
thermal.info@nVent.com

Asia Pacific
Tel +86.21.2412.1688
Fax +86.21.5426.3167
cn.thermal.info@nVent.com

Latin America
Tel +1.713.868.4800
Fax +1.713.868.2333
thermal.info@nVent.com

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