

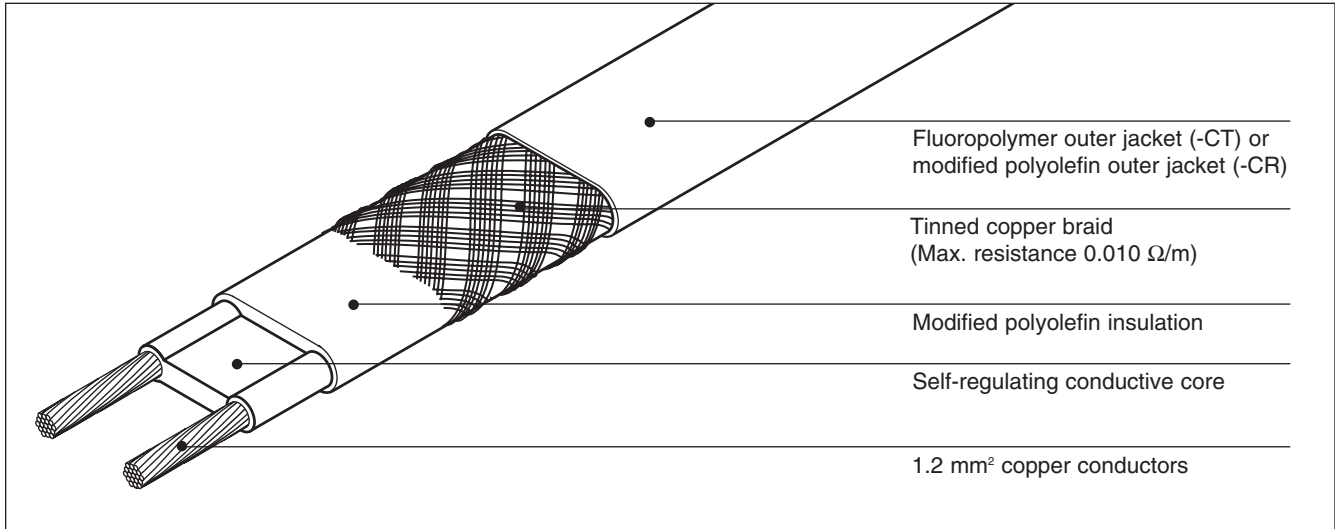
Self-regulating heating cables

Electrical trace-heating for frost protection without steam cleaning.

The 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.

Heating cable construction



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 Tyco Thermal Controls representative

Supply voltage	230 Vac (Contact your local Tyco Thermal Controls representative for data on other voltages)
----------------	--

Approvals

The BTV heating cables are approved for use in hazardous areas by PTB and Baseefa 2001 Ltd.



II 2 G/D EEx e(m) II T6 IP66 T80°C
PTB 98 ATEX 1102 X



II 2 GD EExe II T6
BAS98ATEX2338X

The BTV heating cables are approved by DNV for use on ships and mobile off shore units. DNV Certificate No. E-5121
They are also VDE approved.

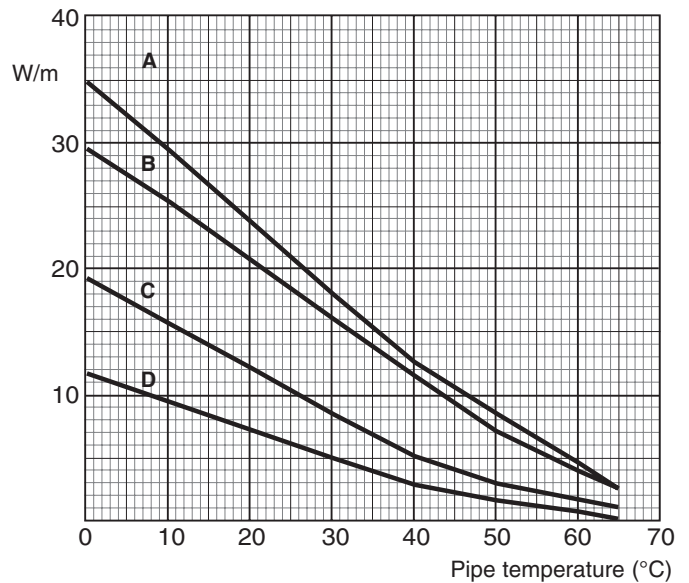
Specifications

Maximum exposure temperature (Continuous power on)	65°C
Maximum exposure temperature (Intermittent power on)	85°C Maximum cumulative exposure 1000 hours
Temperature classification	T6 in accordance with European Standard EN 50 014
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 8BTV2-CT
8BTV2-CR
- C 5BTV2-CT
5BTV2-CR
- D 3BTV2-CT
3BTV2-CR



	3BTV2-CR 3BTV2-CT	5BTV2-CR 5BTV2-CT	8BTV2-CR 8BTV2-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)			
		3BTV2-CR	5BTV2-CR	8BTV2-CR	10BTV2-CR
16A	-20°C	155	110	70	45
	+10°C	200	160	110	65
20A	-20°C	195	140	90	55
	+10°C	200	160	125	85
25A	-20°C	200	160	110	70
	+10°C	200	160	125	105
32A	-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 Tyco Thermal Controls TraceCalc software or contact your local Tyco Thermal Controls representative.

Tyco Thermal Controls requires the use of a 30 mA residual current device to provide maximum safety and protection from fire. Where design results in a higher leakage current, a maximum 300 mA residual current device may be used. All safety aspects need to be proven.

Ordering details

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

Components

Tyco Thermal Controls 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.