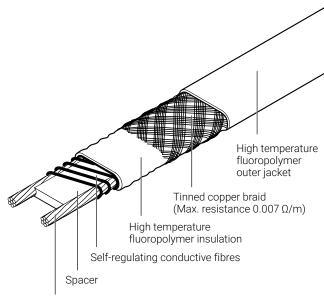


# SELF-REGULATING HEATING CABLE &



2.3 mm<sup>2</sup> nickel plated copper conductors

#### **HEATING CABLE CONSTRUCTION**

Electrical heat-tracing for process temperature maintenance applications up to 150°C which may be subject to steam cleaning.

The nVent RAYCHEM KTV family of self-regulating, parallel circuit heating cables is used for process temperature maintenance of pipes and vessels.

It can also be used for frost protection of large pipes and for applications requiring high temperature exposure capability.

# **APPLICATION**

| Area classification | Hazardous, Zone 1, Zone 2 (Gas), Zone 21, Zone 22 (Dust)<br>Ordinary                                   |
|---------------------|--|
| Traced surface type | Carbon steel<br>Stainless steel<br>Painted or unpainted metal  |
| Chemical resistance | Organics and corrosives 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 KTV heating cables are approved for use in hazardous areas by PTB and Baseefa Ltd.

PTB 09 ATEX 1117 X & Baseefa06ATEX0186X

IECEX PTB 09.0058X & IECEX BAS 06.0046X

Ex e II 226°C (T2) & Ex tD A21 IP66 T226°C

The KTV heating cables are approved by DNV for use on ships and mobile off shore units. DNV Certificate No. DNV-GL TAE00000TV



TC RU C-BE.MIO62.B.00054/18

1Ex e IIC 226°C (T2) Gb X 1Ex e mb IIC 226°C (T2) Gb X

Ex tb IIIC T226°C Db X Ex tb mb IIIC T226°C Db X

Ta -60°C...+56°C IP66

OOO "ТехИмпорт"

RAYCHEM-DS-EU1383-KTV-EN-1911 nVent.com | 1

#### **SPECIFICATIONS**

| Maximum maintain or continuous exposure temperature (power on) | 150°C   |
|--|---|
| Maximum intermittent exposure temperature (power on/off)       | 250°C (*) Maximum cumulative exposure 1000 hours (*) The 250°C rating applies to all products printed "MAX INTERMITTENT EXPOSURE 250C".   |
| Temperature classification                                     | T2  |
| Based on systems approach*                                     | T3-T6 * nVent RAYCHEM KTV heat-tracing cables are approved for the listed temperature classifications by using the principles of stabilized design (as per system classification approach) or the use of a temperature limiting device. Use TraceCalc design software or contact nVent. |
| Minimum installation temperature                               | -60°C   |
| Minimum bend radius  | at 20°C: 26 mm<br>at –60°C: 51 mm   |

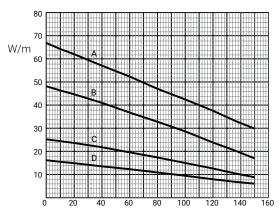
## THERMAL OUTPUT RATING

Nominal power output at 230 Vac on insulated steel pipes

A 20KTV2-CT B 15KTV2-CT

C 8KTV2-CT

D 5KTV2-CT



Pipe temperature (°C)

|   | 5KTV2-CT | 8KTV2-CT | 15KTV2-CT | 20KTV2-CT |  |  |
|---|----------|----------|-----------|-----------|--|--|
| Nominal power output (W/m at 10°C)      | 16       | 25       | 47        | 66        |  |  |
| PRODUCT DIMENSIONS (NOMINAL) AND WEIGHT |          |          |           |           |  |  |
| Thickness (mm)                          | 7.6      | 7.6      | 7.6       | 7.6       |  |  |
| Width (mm)                              | 13.3     | 13.3     | 13.3      | 13.3      |  |  |
| Weight (g/m)                            | 250      | 250      | 250       | 250       |  |  |

#### MAXIMUM CIRCUIT LENGTH BASED ON TYPE 'C' CIRCUIT BREAKERS ACCORDING TO EN 60898

| Electrical protection sizing | Start-up<br>temperature | Maximum he | Maximum heating cable length per circuit (m) |     |     |  |
|------------------------------|-------------------------|------------|--|-----|-----|--|
| 16 A                         | -20°C                   | 130        | 95   | 60  | 40  |  |
|                              | +10°C                   | 145        | 105  | 65  | 45  |  |
| 25 A                         | -20°C                   | 205        | 150  | 90  | 65  |  |
|                              | +10°C                   | 230        | 165  | 100 | 75  |  |
| 32 A                         | -20°C                   | 230        | 180  | 115 | 85  |  |
|                              | +10°C                   | 230        | 180  | 130 | 95  |  |
| 40 A                         | -20°C                   | 230        | 180  | 130 | 105 |  |
|                              | +10°C                   | 230        | 180  | 130 | 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.

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### **ORDERING DETAILS**

| Part description | 5KTV2-CT   | 8KTV2-CT   | 15KTV2-CT  | 20KTV2-CT  |
|------------------|------------|------------|------------|------------|
| Part No.         | P000001679 | P000001681 | P000001683 | P000001685 |

### **COMPONENTS**

nVent RAYCHEM 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.

## **North America**

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## **Latin America**

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