



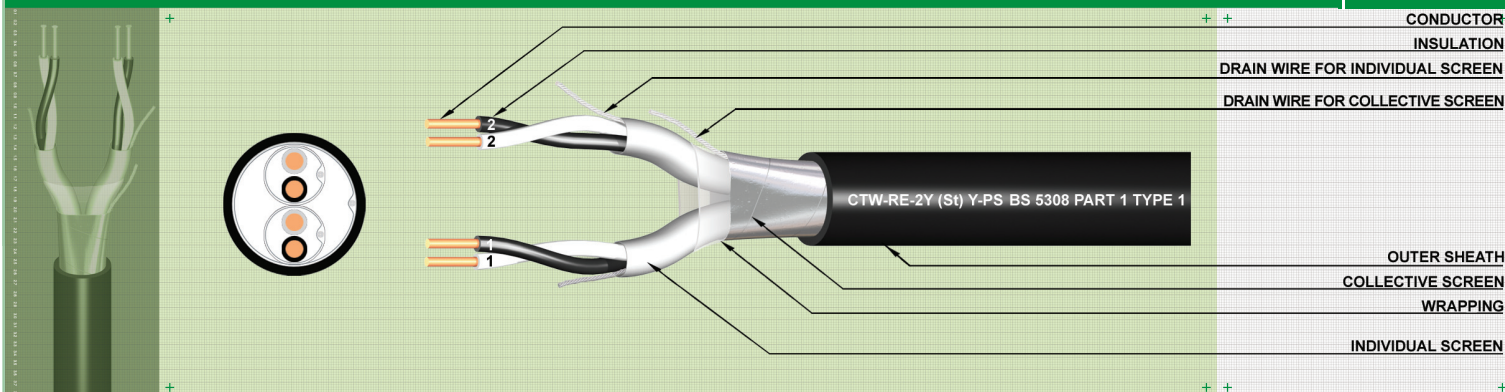
CHAROONG THAI WIRE & CABLE PUBLIC COMPANY LIMITED

CABLE TYPE : CTW-RE-2Y(ST)Y-PS

Standard : BS 5308 Part 1 Type 1

: Single pair & Multi pairs , PE Insulation, Individual & Collective Screen, PVC Sheath 300/500 V

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APPLICATION

For transmission of analog and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity. Not recommended for direct burial. For indoor and outdoor installation in dry and wet location on racks, in conduits.

CONSTRUCTION

Conductor : Plain annealed copper wire in according to BS 6360
 Insulation : Polyethene (PE) Type 03 in according to BS 6234
 Colour code : BLACK / WHITE with continuous print numbered on cores
 (Optional : According to BS 5038 Part 1)
 Individual Screen : Consisting of Aluminum foil in contact with Tinned-Cu drain wire 0.5 mm².
 Wrapping : At least 1 layer of polyester tape
 Collective screen : Consisting of Aluminum foil in contact with Tinned-Cu drain wire 0.5 mm².
 Outer sheath : Black polyvinyl choride (PVC) Type TM1 in according to BS 6746

OPTIONAL REQUEST

A special FR-PVC or Low Smoke Halogen Free (LSHF)
 * Flame retardant sheath can be supplied in accordance with BS4066 part 3
 * For LSHF only : BS 6425, BS 7622 , BS4066 part 3

TECHNICAL DATA

Flame retardant : BS 4066 part 1
 Temperature range : Maximum conductor operating temperature : +65 °C
 Minimum ambient temperature : -40 °C
 after installation and only when cable is in a fixed position
 Mimimum bending radius : 6 x Cable- ϕ

ABBREVIATIONS

CTW : Trade mark
 RE : Instrumentation cable
 2Y : PE insulation
 (ST) : Aluminum foil with tined-copper drain wire screening
 Y : PVC outer sheath
 PS : Pair screen

ELECTRICAL DATA AT 20°C

| DESCRIPTION | Character | Unit | Values | | | |
|------------------------------------|-----------|-------------------|-----------|--------------|-----------|--------------|
| Conductor size | nom. | mm ² | 0.5 solid | 0.5 flexible | 1.0 solid | 1.5 stranded |
| Conductor resistance | max. | Ω /km. | 36.8 | 39.7 | 18.4 | 12.3 |
| Insulation resistance | min. | M Ω -km. | 5,000 | 5,000 | 5,000 | 5,000 |
| Mutual capacitance at 1kHz | | | | | | |
| One pair and two pair | max. | nF/km. | 115 | 115 | 115 | 115 |
| Capacitance unbalance at 1 kHz | max. | pF/250m | 250 | 250 | 250 | 250 |
| L/R (ratio) | max. | μ H/ Ω | 25 | 25 | 25 | 40 |
| Test Voltage U_{rms} core : core | | V | 1,000 | 1,000 | 1,000 | 1,000 |
| U_{rms} core : screen | | V | 1,000 | 1,000 | 1,000 | 1,000 |
| Rate voltage U_0 / U | max. | V | 300/500 | 300/500 | 300/500 | 300/500 |



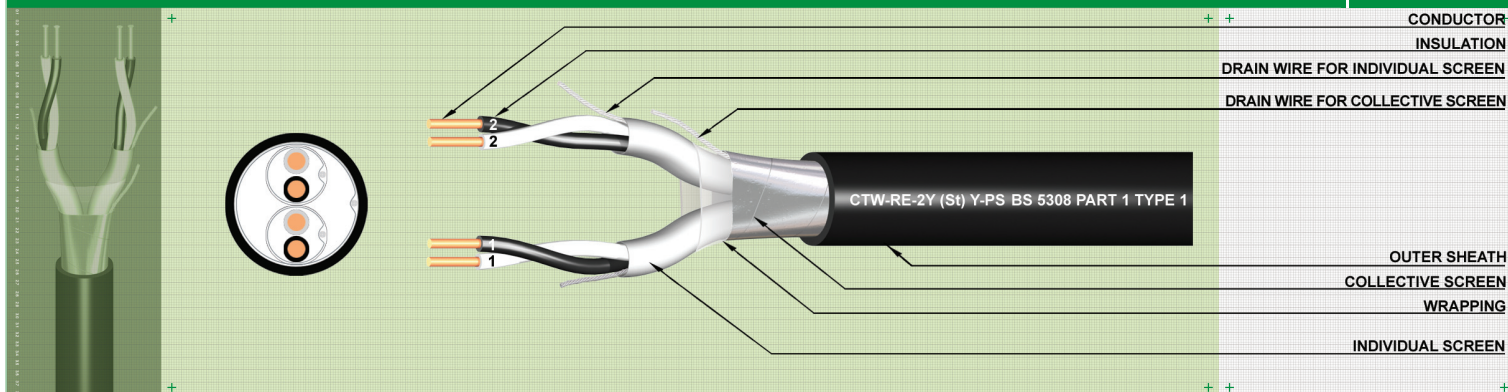
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CABLE TYPE : CTW-RE-2Y(ST)Y-PS

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APPLICATION

For transmission of analog and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity
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| Product code | Number of pairs | Nominal radial thickness of insulation m m | Nominal radial thickness of outer sheath m m | Overall diameter (approx.) m m | Cable weight (approx.) kg/km | Standard packing m/R |
|---|-----------------|--|--|--------------------------------|------------------------------|----------------------|
| Conductor 0.5 sq.mm. (1/0.8mm.) Class 1 | | | | | | |
| T41270002 | 2 | 0.5 | 0.9 | 9.7 | 90 | 1,000 |
| T41270005 | 5 | 0.5 | 1.2 | 13.0 | 180 | 1,000 |
| T41270010 | 10 | 0.5 | 1.2 | 16.9 | 310 | 1,000 |
| T41270015 | 15 | 0.5 | 1.3 | 19.7 | 440 | 1,000 |
| T41270020 | 20 | 0.5 | 1.3 | 22.3 | 560 | 1,000 |
| T41270030 | 30 | 0.5 | 1.5 | 27.1 | 820 | 1,000 |
| T41270050 | 50 | 0.5 | 2.0 | 35.0 | 1,370 | 1,000 |
| Conductor 0.5 sq.mm. (16/0.2mm.) class 5 | | | | | | |
| T41280002 | 2 | 0.6 | 1.1 | 11.2 | 110 | 1,000 |
| T41280005 | 5 | 0.6 | 1.2 | 14.5 | 200 | 1,000 |
| T41280010 | 10 | 0.6 | 1.3 | 19.3 | 350 | 1,000 |
| T41280015 | 15 | 0.6 | 1.5 | 22.6 | 510 | 1,000 |
| T41280020 | 20 | 0.6 | 1.5 | 25.7 | 620 | 1,000 |
| T41280030 | 30 | 0.6 | 1.7 | 31.0 | 895 | 1,000 |
| T41280050 | 50 | 0.6 | 2.2 | 39.9 | 1,535 | 1,000 |
| Conductor 1.0 sq.mm. (1/1.3mm.) class 1 | | | | | | |
| T41180002 | 2 | 0.6 | 1.1 | 11.9 | 135 | 1,000 |
| T41180005 | 5 | 0.6 | 1.2 | 15.4 | 250 | 1,000 |
| T41180010 | 10 | 0.6 | 1.3 | 20.5 | 450 | 1,000 |
| T41180015 | 15 | 0.6 | 1.5 | 24.1 | 675 | 1,000 |
| T41180020 | 20 | 0.6 | 1.7 | 27.7 | 875 | 1,000 |
| T41180030 | 30 | 0.6 | 2.0 | 33.7 | 1,290 | 1,000 |
| T41180050 | 50 | 0.6 | 2.2 | 42.5 | 2,055 | 1,000 |
| Conductor 1.5 sq.mm. (7/0.53mm.) class 2 | | | | | | |
| T41200002 | 2 | 0.6 | 1.2 | 13.6 | 180 | 1,000 |
| T41200005 | 5 | 0.6 | 1.3 | 17.7 | 340 | 1,000 |
| T41200010 | 10 | 0.6 | 1.5 | 23.9 | 635 | 1,000 |
| T41200015 | 15 | 0.6 | 1.7 | 28.0 | 915 | 1,000 |
| T41200020 | 20 | 0.6 | 1.7 | 34.7 | 1,165 | 1,000 |
| T41200030 | 30 | 0.6 | 2.0 | 38.6 | 1,725 | 1,000 |
| T41200050 | 50 | 0.6 | 2.2 | 48.9 | 2,770 | 1,000 |