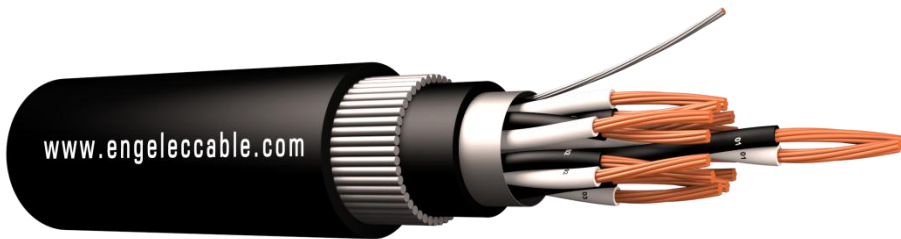


**Part No:** P1T2CS

**Description:** The ENGELEC armoured BS 5308 cable Part 1 Type 2 collectively screen are generally used when the risk of mechanical damage is increased. The galvanized steel wire armoring provides excellent protection. Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services, Also used for the interconnection of electrical equipment and instruments, typically in chemical or petrochemical industry. The armored versions are generally use for outdoor installation for direct burial or installed in the duct and suitable for wet and damp areas.



### Construction

<b>Conductor</b>	Annealed or tinned copper, sizes: 0.5mm <sup>2</sup> , 0.75mm <sup>2</sup> and 1.5mm <sup>2</sup> to BS 6360
<b>Insulation</b>	PE (XLPE)
<b>Pairing</b>	Two insulated conductors uniformly twisted together with a lay not exceeding 100mm
<b>Colour code</b>	Multipair cables: See technical information
<b>Binder tape</b>	PETP transparent tape
<b>Collective screen</b>	Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm <sup>2</sup>
<b>Inner Sheath</b>	PVC (polyvinyl chloride), type TM 1 to BS 6746
<b>Armour</b>	Galvanized steel wire armour
<b>Outer sheath</b>	PVC Sheath, type TM 1 or type 6 to BS 6746
<b>Sheath colour</b>	Black or blue



### Mechanical and Electrical Properties

\* **Operating temperature** : -20°C up to + 70°C( fixed installation) ; -10°C to +50°C( flexed operation ).

\* **Minimum bending radius** : 12 x overall diameter.

Conductor Area Size	mm <sup>2</sup>	0.5	0.75	1.0	1.5	
<b>Conductor resistance max</b>	ohm/km	39.7	26.5	18.4	12.3	
<b>Insulation resistance min</b>	Mohm/km	25	25	25	25	
<b>Max. Mutual Capacitance: pair or adjacent cores</b>	pF/m	250	250	250	250	
<b>Capacitance between any core or screen max.</b>	pF/m	400	400	400	400	
<b>Max. L/R Ratio for adjacent cores(Inductance/Resistance)</b>	μH/ohm	25	25	35	40	
<b>Test voltage</b>	<b>Core to core</b>	V	1000	1000	1000	1000
	<b>Core to screen</b>	V	1000	1000	1000	1000
<b>Rated voltage max</b>	V	300/500	300/500	300/500	300/500	

### Standards

RoHS Compliance :	Yes	UV Resistance :	Good, ISO 4892-3†
CE Compliant :	Yes (2014/35/EU)	Weather Resistance :	Good, ISO 4892-3†
Manufactured in accordance to :	BS 5308, BS 6746, IEC 60331-1	CPR Classification	F <sub>ca</sub> (EN50575:2014+A1:2016)

### Dimension Parameter

Engelec Cable Part Number	No. of Pairs	Nominal Conductor CSA	Nominal Thickness of Insulation	Nominal Thickness of bedding	Nominal Dia. over Bedding	Nominal Thickness of Armour	Nominal Thickness of Sheath	Nominal Dia. of Cable	Approx. Weight
		mm <sup>2</sup>	mm	mm	mm	mm	mm	mm	kg/km
P1T2CS01P05X	1	0.5	0.6	0.8	6.2	0.9	1.3	10.6	260
P1T2CS02P05X	2	0.5	0.6	0.8	7.1	0.9	1.3	11.5	305
P1T2CS05P05X	5	0.5	0.6	1.1	12.4	0.9	1.5	17.2	610
P1T2CS10P05X	10	0.5	0.6	1.2	16.5	1.25	1.6	22.2	1060
P1T2CS15P05X	15	0.5	0.6	1.3	19.2	1.6	1.7	25.8	1330
P1T2CS20P05X	20	0.5	0.6	1.3	21.7	1.6	1.8	28.5	1800
P1T2CS30P05X	30	0.5	0.6	1.5	26.4	1.6	1.9	33.4	1980
P1T2CS50P05X	50	0.5	0.6	1.7	33.4	2	2.1	41.6	3070
P1T2CS01P75X	1	0.75	0.6	0.8	6.7	0.9	1.3	11.1	305
P1T2CS02P75X	2	0.75	0.6	0.8	7.7	0.9	1.4	12.3	360
P1T2CS05P75X	5	0.75	0.6	1.2	13.8	1.25	1.5	19.3	820
P1T2CS10P75X	10	0.75	0.6	1.3	18.4	1.6	1.7	25	1250
P1T2CS15P75X	15	0.75	0.6	1.3	21.1	1.6	1.8	27.9	1600
P1T2CS20P75X	20	0.75	0.6	1.5	24.4	1.6	1.8	31.2	1800
P1T2CS30P75X	30	0.75	0.6	1.7	29.6	2	2	37.6	2570
P1T2CS50P75X	50	0.75	0.6	2	37.4	2.5	2.3	47.3	3800
P1T2CS01P15X	1	1.5	0.6	0.8	7.5	0.9	1.4	12.1	360
P1T2CS02P15X	2	1.5	0.6	0.9	8.8	0.9	1.4	13.4	460
P1T2CS05P15X	5	1.5	0.6	1.2	15.6	1.25	1.6	21.3	1040
P1T2CS10P15X	10	1.5	0.6	1.3	20.9	1.6	1.8	27.7	1610
P1T2CS15P15X	15	1.5	0.6	1.5	24.6	1.6	1.9	31.6	2060
P1T2CS20P15X	20	1.5	0.6	1.5	27.8	1.6	2	35	2630
P1T2CS30P15X	30	1.5	0.6	1.7	33.7	2	2.1	41.9	3460
P1T2CS50P15X	50	1.5	0.6	2	43	2.5	2.4	52.8	5520

Remark: 'X' means IEC60228 conductor class, customized for class 1 or class 2 or class 5.

### Conductor Option

Conductor Area Size	mm <sup>2</sup>	0.5	0.75	1.0	1.5
Conductor Class 1	No. x mm	1/0.8	1/0.98	1/1.13	1/1.38
Conductor Class 2	No. x mm	7/0.3	7/0.37	7/0.43	7/0.50

### Pair Identify

- Number marking : Pair color black and white, printed since from number '1', '2', '3', '4' .....
- Color marking :

Pair Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Wire A	White	White	White	White	White	Red	Red	Red	Red	Red	Black	Black	Black	Black	Black	Yellow	Yellow	Yellow	Yellow	Yellow	Blue/White	Blue/White	Blue/White	Blue/White	Blue/White
Wire B	Blue	Orange	Green	Brown	Grey	Blue	Orange	Green	Brown	Grey	Blue	Orange	Green	Brown	Grey	Blue	Orange	Green	Brown	Grey	Blue	Orange	Green	Brown	Grey

\* Information and images on this datasheet are intended for guidance only and products may vary due to technical improvements and commercial factor