

Part No: P2T1CS

Description: The ENGELEC BS 5308 Part 2 Type 1 un-armoured collectively (overall) screen are generally use for indoor installation and suitable for wet and damp areas. 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.



Construction

Conductor	Annealed or tinned copper, sizes: 0.5mm ² , 0.75mm ² and 1.5mm ² to BS 6360
Insulation	PVC (polyvinyl chloride), type T11 to BS 6746
Pairing	Two insulated conductors uniformly twisted together with a lay not exceeding 100mm
Colour code	See technical information
Binder tape	PETP transparent tape
Collective screen	Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm ²
Outer sheath	PVC Sheath, type TM 1 or type 6 to BS 6746
Sheath colour	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** : 6 x overall diameter.

Conductor Area Size	mm ²	0.5	0.75	1.0	1.5	
Conductor resistance max	ohm/km	39.7	26.5	18.4	12.3	
Insulation resistance min	Mohm/km	25	25	25	25	
Max. Mutual Capacitance: pair or adjacent cores	pF/m	250	250	250	250	
Capacitance between any core or screen max.	pF/m	400	400	400	400	
Max. L/R Ratio for adjacent cores(Inductance/Resistance)	μH/ohm	25	25	35	40	
Test voltage	Core to core	V	1000	1000	1000	1000
	Core to screen	V	1000	1000	1000	1000
Rated voltage max	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 _{CA} (EN50575:2014+A1:2016)

Dimension Parameter

Engelec Cable Part Number	No. of Pairs	Nominal Conductor C.S.A.	Nominal Thickness of Insulation	Nominal Thickness of Sheath	Nominal Dia. of Cable	Approx. Weight
		mm ²	mm	mm	mm	kg/km
P2T1CS01P05X	1	0.5	0.6	1.3	10.6	260
P2T1CS02P05X	2	0.5	0.6	1.3	11.5	305
P2T1CS05P05X	5	0.5	0.6	1.5	17.2	610
P2T1CS10P05X	10	0.5	0.6	1.6	22.2	1060
P2T1CS15P05X	15	0.5	0.6	1.7	25.8	1330
P2T1CS20P05X	20	0.5	0.6	1.8	28.5	1800
P2T1CS30P05X	30	0.5	0.6	1.9	33.4	1980
P2T1CS50P05X	50	0.5	0.6	2.1	41.6	3070
P2T1CS01P75X	1	0.75	0.6	1.3	11.1	305
P2T1CS02P75X	2	0.75	0.6	1.4	12.3	360
P2T1CS05P75X	5	0.75	0.6	1.5	19.3	820
P2T1CS10P75X	10	0.75	0.6	1.7	25	1250
P2T1CS15P75X	15	0.75	0.6	1.8	27.9	1600
P2T1CS20P75X	20	0.75	0.6	1.8	31.2	1800
P2T1CS30P75X	30	0.75	0.6	2	37.6	2570
P2T1CS50P75X	50	0.75	0.6	2.3	47.3	3800
P2T1CS01P15X	1	1.5	0.6	1.4	12.1	360
P2T1CS02P15X	2	1.5	0.6	1.4	13.4	460
P2T1CS05P15X	5	1.5	0.6	1.6	21.3	1040
P2T1CS10P15X	10	1.5	0.6	1.8	27.7	1610
P2T1CS15P15X	15	1.5	0.6	1.9	31.6	2060
P2T1CS20P15X	20	1.5	0.6	2	35	2630
P2T1CS30P15X	30	1.5	0.6	2.1	41.9	3460
P2T1CS50P15X	50	1.5	0.6	2.4	52.8	5520

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

Conductor Option

Conductor Area Size	mm ²	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