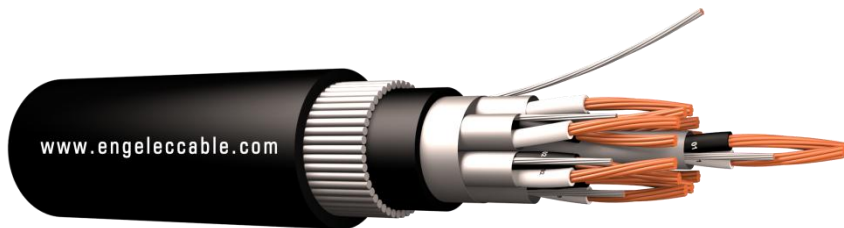


Part No: P2T2ICS

Description: The ENGELEC armoured versions (Part 2 Type 2) individually and 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

Conductor	Annealed or tinned copper, sizes: 0.5mm ² and 0.75mm ² multi-stranded(Class 5), 1.5mm ² multi-stranded(Class 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	Multipair cables:See technical information
Individual screen	Aluminium/polyester tape is applied over each pair metallic side down in contact with tinned copper drain wire, 0.5mm ²
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
Inner Sheath	PVC (polyvinyl chloride), type TM 1 to BS 6746
Armour	Galvanized steel wire armour
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** : 12 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 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 ²	mm	mm	mm	mm	mm	mm	kg/km
P2T2ICS02P05X	2	0.5	0.6	0.8	10.6	0.9	1.3	15	505
P2T2ICS05P05X	5	0.5	0.6	1.1	14.3	0.9	1.5	19.1	830
P2T2ICS10P05X	10	0.5	0.6	1.2	19.1	1.25	1.6	24.8	1420
P2T2ICS15P05X	15	0.5	0.6	1.3	22.2	1.6	1.7	28.8	1570
P2T2ICS20P05X	20	0.5	0.6	1.3	25.3	1.6	1.8	32.1	2040
P2T2ICS30P05X	30	0.5	0.6	1.5	30.6	1.6	1.9	37.6	2610
P2T2ICS50P05X	50	0.5	0.6	1.7	38.9	2	2.1	47.1	4270
P2T2ICS02P75X	2	0.75	0.6	0.8	11.5	0.9	1.4	16.1	545
P2T2ICS05P75X	5	0.75	0.6	1.2	15.7	1.25	1.5	21.2	1005
P2T2ICS10P75X	10	0.75	0.6	1.3	20.9	1.6	1.7	27.5	1400
P2T2ICS15P75X	15	0.75	0.6	1.3	24.2	1.6	1.8	31	1750
P2T2ICS20P75X	20	0.75	0.6	1.5	27.9	1.6	1.8	34.7	2300
P2T2ICS30P75X	30	0.75	0.6	1.7	33.8	2	2	41.8	2460
P2T2ICS50P75X	50	0.75	0.6	2	43.1	2.5	2.3	52.7	4800
P2T2ICS02P15X	2	1.5	0.6	0.9	13	0.9	1.4	17.6	800
P2T2ICS05P15X	5	1.5	0.6	1.2	17.5	1.25	1.6	23.2	1290
P2T2ICS10P15X	10	1.5	0.6	1.3	23.5	1.6	1.8	30.3	1990
P2T2ICS15P15X	15	1.5	0.6	1.5	27.6	1.6	1.9	34.6	2590
P2T2ICS20P15X	20	1.5	0.6	1.5	31.3	1.6	2	38.5	3310
P2T2ICS30P15X	30	1.5	0.6	1.7	38	2	2.1	46.2	4380
P2T2ICS50P15X	50	1.5	0.6	2	48.5	2.5	2.4	58.3	6260

Remark: 'X' 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
Conductor Class 5	No. x mm	24/0.2	24/0.2	32/0.2	30/0.25

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 factors.