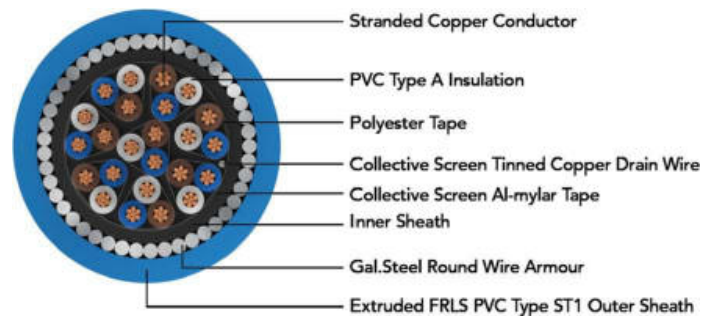
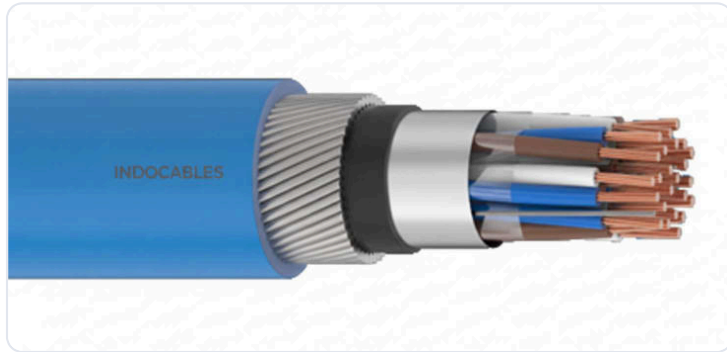


INSTRUMENTATION CABLE · INSTRU 300 T (ST) · 300 V

INDOCABLES INSTRU 300 T (ST)

INSTRUMENTATION CABLE, PVC/PE INSULATED, OVERALL SHIELDED — EN 50288-7

VOLTAGE RATING	STANDARD	CONDUCTOR	TRIADS	BENDING RADIUS
300 V	EN 50288-7	0.5 – 1.5 mm²	1 – 37	12 × OD



Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES INSTRU 300 SINGLE & MT, Stranded copper conductor, PVC/PE insulated, Overall, al-mylar shielded, armoured/unarmoured and PVC/LSZH sheathed cable confirming to BS EN 50288-7 are designed for transmission of analogue and digital signals in instrument and control systems. INDOCABLES INSTRU 300 SINGLE & MT cables are used for diverse applications within industrial process for control, communication, data & voice transmission in oil, gas & petrochemical industries, cement, steel, fertilizers etc.

CONSTRUCTION

- 01 Stranded Copper conductor as per EN 60228
- 02 Insulated with PVC/PE as per EN 50288-7
- 03 Collective screen Al/PET (Aluminium/Polyester tape) with drain wire of tinned Cu/ Tinned copper braiding.
- 04 Extruded inner sheath with PVC/LSZH to EN 50290-2-22/27
- 05 Armoured with Galvanized Steel Strip/Round as per EN 50288-7
- 06 Sheathed with Extruded PVC/LSZH to EN 50290-2-22/27

CHARACTERISTICS

Voltage Rating	300 V
Operation Temperature	Max.: PVC 70°C, HRPVC 85°C, XLPE 90°C, LDPE 60°C.
Bending Radius	12 x Overall diameter

CORE IDENTIFICATION

Triad	White, Blue & Brown for Triad
Outer sheath colour	Blue/Black


ISO 9001
 Cert. 99 100 22646 (TÜV SÜD)

ISI
 BIS CM/L 6200267409 (IS 7098 Pt-1)

RoHS
 Compliant

REACH
 Compliant

Make in India
 Manufactured in India

STANDARD FOLLOWS

EN 50288-7

EN 50288-1

EN 60228

EN 50290-2-22/27

COMPLIANCEConductor resistance
EN 60228Insulation resistance
EN 50288-7L/R Ratio
EN 50288-7Mutual capacitance
EN 50288-7**NOTES**

- Outer sheath also available with PE & FRLS on request.
- As per the application/identification requirement, other colour also available on request.

**ISO 9001**
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BIS CM/L 6200267409 (IS 7098 Pt-1)**RoHS**
Compliant**REACH**
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Manufactured in India

ORDERING & ITEM CODE

CODE STRUCTURE

IC · IN · TRIADS · SIZE · TC · PE · DESIGNATION · 0300 · EN50288P7 · OSCR

IN Instrumentation line	1T · SIZE Triad count, sq.mm × 100	TC · PE Tinned copper, PE insulated	2YY · 2YWY Unarmoured · round wire armoured	0300 · OSCR 300/500 V, overall screened
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REGISTERED ITEMS

SIZE	TRIAD	UNARMoured · 2YY		ARMoured · 2YWY	
0.5	1	IC1005547	IC-IN-1T-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005549	IC-IN-1T-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	1	IC1005551	IC-IN-1T-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005553	IC-IN-1T-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	1	IC1005555	IC-IN-1T-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005557	IC-IN-1T-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	1	IC1005559	IC-IN-1T-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005561	IC-IN-1T-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	2	IC1005563	IC-IN-2T-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005565	IC-IN-2T-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	2	IC1005567	IC-IN-2T-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005569	IC-IN-2T-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	2	IC1005571	IC-IN-2T-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005573	IC-IN-2T-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	2	IC1005575	IC-IN-2T-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005577	IC-IN-2T-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	4	IC1005579	IC-IN-4T-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005581	IC-IN-4T-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	4	IC1005583	IC-IN-4T-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005585	IC-IN-4T-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	4	IC1005587	IC-IN-4T-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005589	IC-IN-4T-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	4	IC1005591	IC-IN-4T-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005593	IC-IN-4T-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	8	IC1005595	IC-IN-8T-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005597	IC-IN-8T-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	8	IC1005599	IC-IN-8T-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005601	IC-IN-8T-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	8	IC1005603	IC-IN-8T-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005605	IC-IN-8T-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	8	IC1005607	IC-IN-8T-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005609	IC-IN-8T-00150-TC-PE-2YWY-0300-EN50288P7-OSCR

DRAFT

The item master registers 1, 2, 4 and 8 triad in 0.5 / 0.75 / 1.0 / 1.5 sq mm — the 32 codes above, quoted exactly as listed and all still at DRAFT status. The 5, 6, 10, 12, 14, 16, 19, 20, 24, 30 and 37 triad sizes in the dimension table are not registered; their codes follow the same structure (IC-IN-<n>T-<size>-TC-PE-2YY|2YWY-0300-EN50288P7-OSCR) and are issued by the Item Master Steward on request. PVC-insulated and strip-armoured variants are not registered under this line.



ISO 9001
Cert. 99 100 22646 (TÜV SÜD)



ISI
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RoHS
Compliant



REACH
Compliant



Make in India
Manufactured in India

WEIGHT & DIMENSION DATA

300 VOLTS, SINGLE & MULTI TRIAD, STR.COPPER, PVC/PE INSULATED, ALUMINIUM MYLAR TAPED OVERALL SHIELDED, ARMOURED AND UNARMOURED INSTRUMENTATION CABLES AS PER EN 50288-7

AREA OF CONDUCTOR 0.5 SQ MM

Min. thickness of insulation 0.26 mm

ARMOURED CABLES						UNARMOURED CABLES				
NO. OF TRIAD	INNER SHEATH MM	G.I. ARMOUR WIRE MM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
1	0.8	0.9	1.3	9.9	190	195	0.8	5.5	42	45
2	0.9	0.9	1.3	12.8	285	290	0.9	8.4	76	81
4	1.0	0.9	1.4	14.5	375	385	1.0	9.9	120	135
5	1.0	0.9	1.4	15.4	415	430	1.0	10.8	145	160
6	1.0	0.9	1.4	16.4	460	475	1.0	11.8	170	185
8	1.1	0.9	1.5	18.2	560	580	1.1	13.4	220	140
10	1.1	0.9	1.5	19.9	640	670	1.1	15.1	265	190
12	1.1	0.9	1.5	20.4	690	720	1.1	15.6	300	335
14	1.1	0.9	1.5	21.2	750	790	1.1	16.4	345	380
16	1.2	0.9	1.6	22.6	840	880	1.2	17.6	390	435
19	1.2	0.9	1.6	23.5	920	970	1.2	18.5	450	500
20	1.2	1.25	1.6	25.3	1100	1160	1.2	19.6	475	530
24	1.3	1.25	1.7	27.8	1280	1340	1.3	21.9	570	640
30	1.3	1.25	1.7	29.1	1430	1510	1.3	23.2	690	770
37	1.4	1.25	1.7	31.2	1640	1750	1.4	25.3	840	940

AREA OF CONDUCTOR 0.75 SQ MM

Min. thickness of insulation 0.26 mm

ARMOURED CABLES						UNARMOURED CABLES				
NO. OF TRIAD	INNER SHEATH MM	G.I. ARMOUR WIRE MM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
1	0.8	0.9	1.3	10.4	210	210	0.8	6.0	52	55
2	0.9	0.9	1.4	13.8	330	340	0.9	9.2	95	100
4	1.0	0.9	1.4	15.5	430	440	1.0	10.9	160	170
5	1.0	0.9	1.4	16.5	480	500	1.0	11.9	190	205
6	1.1	0.9	1.5	18.0	560	580	1.1	13.2	225	245
8	1.1	0.9	1.5	19.6	660	680	1.1	14.8	285	310
10	1.2	0.9	1.5	21.7	770	810	1.2	16.9	355	390
12	1.2	0.9	1.6	22.5	850	890	1.2	17.5	410	450
14	1.2	1.25	1.6	24.1	1050	1100	1.2	18.4	470	510
16	1.2	1.25	1.6	25.1	1150	1200	1.2	19.4	530	580
19	1.3	1.25	1.6	26.4	1270	1330	1.3	20.7	620	680
20	1.3	1.25	1.7	27.8	1360	1420	1.3	21.9	650	720
24	1.4	1.25	1.7	30.4	1560	1640	1.4	24.5	780	860
30	1.4	1.25	1.8	32.0	1780	1880	1.4	25.9	950	1040
37	1.5	1.25	1.8	34.3	2060	2180	1.5	28.2	1150	1270

AREA OF CONDUCTOR 1.0 SQ MM

Min. thickness of insulation 0.26 mm

ARMoured CABLES							UNARMoured CABLES			
NO. OF TRIAD	INNER SHEATH MM	G.I. ARMOUR WIRE MM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
1	0.9	0.9	1.3	10.9	235	240	0.9	6.5	64	68
2	1.0	0.9	1.4	14.6	370	380	1.0	10.0	120	125
4	1.0	0.9	1.4	16.3	485	500	1.0	11.7	195	205
5	1.0	0.9	1.5	17.6	560	570	1.0	12.8	230	250
6	1.1	0.9	1.5	18.9	630	650	1.1	14.1	280	300
8	1.1	0.9	1.5	20.7	750	780	1.1	15.9	355	385
10	1.2	0.9	1.6	23.2	900	940	1.2	18.2	440	480
12	1.2	1.25	1.6	24.6	1110	1150	1.2	18.9	510	560
14	1.3	1.25	1.6	25.7	1230	1280	1.3	20.0	590	640
16	1.3	1.25	1.7	27.1	1350	1410	1.3	21.2	670	730
19	1.3	1.25	1.7	28.2	1500	1560	1.3	22.3	780	840
20	1.4	1.25	1.7	29.7	1590	1660	1.4	23.8	830	900
24	1.4	1.25	1.8	32.5	1830	1920	1.4	26.4	980	1070
30	1.5	1.25	1.8	34.3	2110	2220	1.5	28.2	1200	1310
37	1.6	1.25	1.9	37.0	2470	2600	1.6	30.7	1470	1600

AREA OF CONDUCTOR 1.5 SQ MM

Min. thickness of insulation 0.35 mm

ARMoured CABLES							UNARMoured CABLES			
NO. OF TRIAD	INNER SHEATH MM	G.I. ARMOUR WIRE MM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
1	0.9	0.9	1.3	12.0	280	285	0.9	7.6	86	91
2	1.0	0.9	1.4	16.5	455	465	1.0	11.9	160	170
4	1.1	0.9	1.5	18.9	630	650	1.1	14.1	280	300
5	1.1	0.9	1.5	20.3	720	750	1.1	15.5	335	365
6	1.1	0.9	1.6	22.1	840	870	1.1	17.1	400	435
8	1.3	1.25	1.6	25.2	1150	1190	1.3	19.5	520	570
10	1.3	1.25	1.7	28.1	1350	1410	1.3	22.2	640	700
12	1.4	1.25	1.7	29.1	1500	1560	1.4	23.2	760	820
14	1.4	1.25	1.7	30.3	1640	1720	1.4	24.4	870	940
16	1.5	1.25	1.8	32.1	1830	1910	1.5	26.0	990	1080
19	1.5	1.25	1.8	33.5	2030	2140	1.5	27.4	1150	1250
20	1.5	1.25	1.8	35.1	2140	2250	1.5	29.0	1210	1320
24	1.7	1.6	2.0	39.8	2760	2890	1.7	32.6	1470	1600
30	1.7	1.6	2.0	41.8	3140	3310	1.7	34.6	1780	1950
37	1.8	1.6	2.1	45.1	3670	3880	1.8	37.7	2170	2380

For Cables of sizes or triad not listed above the product data is available on request Dimensions & Weights are representative figures and may vary

ISO 9001
Cert. 99 100 22646 (TÜV SÜD)

ISI
BIS CM/L 6200267409 (IS 7098 Pt-1)

RoHS
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REACH
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Make in India
Manufactured in India

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FLAGGED 0.5 sq mm, unarmoured, approx. weight PVC insulation: 8 triad reads 140 kg/km and 10 triad reads 190 kg/km — both below their own PE figures (220 and 265) and out of sequence with the rows around them, where the PVC column runs above PE throughout. Reproduced here exactly as written — confirm before quoting. Separately, the electrical parameter table below carries a 2.5 sq mm row that has no counterpart in the dimension tables above.

ELECTRICAL PARAMETER

AREA OF CONDUCTOR	MAX. DC RESISTANCE AT 20°C — PLAIN WIRES	MAX. DC RESISTANCE AT 20°C — METAL COATED WIRES	INSULATION RESISTANCE (PVC)	INSULATION RESISTANCE (PE/XLPE)	MUTUAL CAPACITANCE	L/R RATIO
Sq mm	Ohm/km	Ohm/km	MΩ/Km	MΩ/Km	nF/Km	μH/Ω
0.5	36	36.7	10	1000	< 250	< 25
0.75	24.5	24.8	10	1000	< 250	< 25
1	18.1	18.2	10	1000	< 250	< 25
1.5	12.1	12.2	10	1000	< 250	< 40
2.5	7.41	7.56	10	1000	< 250	< 60

OUTSTANDING FEATURES



FLAME RETARDANT



LOW SMOKE EMISSION



LONG LIFE