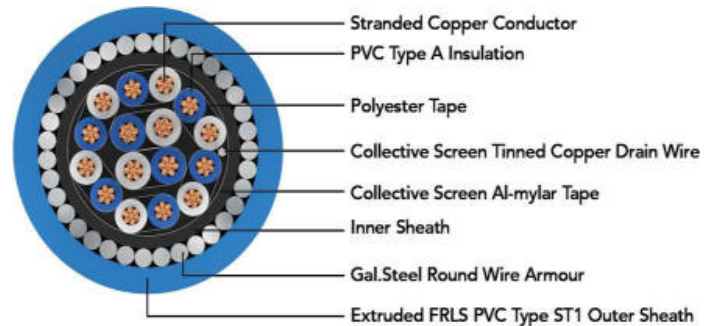
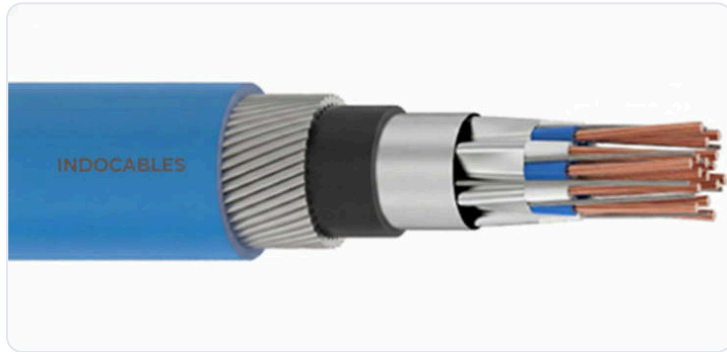


INSTRUMENTATION CABLE · INSTRU 500 P (ST) · 500 V

INDOCABLES INSTRU 500 P (ST)

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

VOLTAGE RATING 500 V	STANDARD EN 50288-7	CONDUCTOR 0.5 – 2.5 mm²	PAIRS 1 – 37	BENDING RADIUS 12 × OD
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Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES INSTRU 500 SINGLE & MP, 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 500 SINGLE & MP 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 Galvanised Steel Strip/Round as per EN 50288-7
- 06 Sheathed with Extruded PVC/LSZH to EN 50290-2-22/27

CHARACTERISTICS

Voltage Rating	500 V
Operation Temperature	Max.: PVC 70°C, HRPVC 85°C, XLPE 90°C, LDPE 60°C.
Bending Radius	12 x Overall diameter

CORE IDENTIFICATION

Pair	White & Blue for Pair
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

OUTSTANDING FEATURES


FLAME RETARDANT

LOW SMOKE EMISSION

LONG LIFE

STANDARD FOLLOWS

EN 50288-7

EN 50288-1

EN 60228

EN 50290-2-22/27

COMPLIANCE

 Conductor resistance
 EN 60228

 Insulation resistance
 EN 50288-7

 L/R Ratio
 EN 50288-7

 Mutual 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
 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



ORDERING & ITEM CODE

CODE STRUCTURE

IC · IN · PAIRS · SIZE · TC · PE · DESIGNATION · 0300 · EN50288P7 · 0SCR

IN Instrumentation line	SIZE sq.mm x 100	TC · PE Tinned copper, PE insulated	2YY · 2YWY Unarmoured · round wire armoured	0300 · 0SCR 300/500 V, overall screened
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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

SIZE	PAIRS	UNARMoured · 2YY		ARMoured · 2YWY	
0.5	1	IC1005419	IC-IN-1P-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005421	IC-IN-1P-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	1	IC1005423	IC-IN-1P-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005425	IC-IN-1P-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	1	IC1005427	IC-IN-1P-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005429	IC-IN-1P-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	1	IC1005431	IC-IN-1P-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005433	IC-IN-1P-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	2	IC1005435	IC-IN-2P-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005437	IC-IN-2P-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	2	IC1005439	IC-IN-2P-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005441	IC-IN-2P-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	2	IC1005443	IC-IN-2P-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005445	IC-IN-2P-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	2	IC1005447	IC-IN-2P-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005449	IC-IN-2P-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	4	IC1005451	IC-IN-4P-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005453	IC-IN-4P-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	4	IC1005455	IC-IN-4P-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005457	IC-IN-4P-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	4	IC1005459	IC-IN-4P-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005461	IC-IN-4P-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	4	IC1005463	IC-IN-4P-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005465	IC-IN-4P-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	6	IC1005467	IC-IN-6P-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005469	IC-IN-6P-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	6	IC1005471	IC-IN-6P-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005473	IC-IN-6P-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	6	IC1005475	IC-IN-6P-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005477	IC-IN-6P-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	6	IC1005479	IC-IN-6P-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005481	IC-IN-6P-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	8	IC1005483	IC-IN-8P-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005485	IC-IN-8P-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	8	IC1005487	IC-IN-8P-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005489	IC-IN-8P-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	8	IC1005491	IC-IN-8P-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005493	IC-IN-8P-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	8	IC1005495	IC-IN-8P-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005497	IC-IN-8P-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	12	IC1005499	IC-IN-12P-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005501	IC-IN-12P-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	12	IC1005503	IC-IN-12P-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005505	IC-IN-12P-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	12	IC1005507	IC-IN-12P-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005509	IC-IN-12P-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	12	IC1005511	IC-IN-12P-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005513	IC-IN-12P-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	16	IC1005515	IC-IN-16P-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005517	IC-IN-16P-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	16	IC1005519	IC-IN-16P-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005521	IC-IN-16P-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	16	IC1005523	IC-IN-16P-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005525	IC-IN-16P-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	16	IC1005527	IC-IN-16P-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005529	IC-IN-16P-00150-TC-PE-2YWY-0300-EN50288P7-OSCR
0.5	24	IC1005531	IC-IN-24P-00050-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005533	IC-IN-24P-00050-TC-PE-2YWY-0300-EN50288P7-OSCR
0.75	24	IC1005535	IC-IN-24P-00075-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005537	IC-IN-24P-00075-TC-PE-2YWY-0300-EN50288P7-OSCR
1.0	24	IC1005539	IC-IN-24P-00100-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005541	IC-IN-24P-00100-TC-PE-2YWY-0300-EN50288P7-OSCR
1.5	24	IC1005543	IC-IN-24P-00150-TC-PE-2YY-0300-EN50288P7-OSCR	IC1005545	IC-IN-24P-00150-TC-PE-2YWY-0300-EN50288P7-OSCR

DRAFT

Item codes are held in the Indo Cables item master and are quoted exactly as listed. 2.5 mm², and the 5 / 10 / 18 / 19 / 20 / 30 / 37 pair sizes shown in the dimension table, are not yet registered — their codes follow the same structure and are issued by the Item Master Steward on request. PVC-insulated and strip-armoured variants are not registered under this line.

WEIGHT & DIMENSION DATA

500 VOLTS, SINGLE & MULTI PAIR, 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 0.44 mm

ARMOURED CABLES					UNARMOURED CABLES					
NO. OF PAIR	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	10.6	210	210	0.9	6.2	44	47
2	0.9	0.9	1.4	13.5	300	310	0.9	8.9	71	77
4	1.0	0.9	1.4	15.2	380	390	1.0	10.6	110	125
5	1.0	0.9	1.4	16.1	415	430	1.0	11.5	130	145
6	1.1	0.9	1.5	17.6	480	500	1.1	12.8	155	175
8	1.1	0.9	1.5	19.1	550	570	1.1	14.3	195	220
10	1.2	0.9	1.5	21.2	650	680	1.2	16.4	240	270
12	1.2	0.9	1.6	22.0	700	740	1.2	17.0	275	310
16	1.2	1.25	1.6	24.5	940	990	1.2	18.8	340	390
18	1.3	1.25	1.6	25.8	1020	1080	1.3	20.1	385	445
19	1.3	1.25	1.6	25.8	1040	1100	1.3	20.1	400	460
20	1.3	1.25	1.7	27.1	1100	1170	1.3	21.2	420	485
24	1.4	1.25	1.7	29.6	1260	1330	1.4	23.7	510	580
30	1.4	1.25	1.8	31.2	1410	1510	1.4	25.1	600	700
37	1.5	1.25	1.8	33.4	1610	1730	1.5	27.3	730	850

AREA OF CONDUCTOR 0.75 SQ MM

Min. thickness of insulation 0.44 mm

ARMOURED CABLES					UNARMOURED CABLES					
NO. OF PAIR	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	11.1	225	225	0.9	6.7	51	55
2	1.0	0.9	1.4	14.4	335	345	1.0	9.8	89	97
4	1.0	0.9	1.4	16.0	420	435	1.0	11.4	135	150
5	1.1	0.9	1.5	17.5	490	510	1.1	12.7	170	185
6	1.1	0.9	1.5	18.6	540	560	1.1	13.8	195	215
8	1.2	0.9	1.5	20.5	640	670	1.2	15.7	250	280
10	1.2	1.25	1.6	23.5	870	910	1.2	17.8	305	340
12	1.2	1.25	1.6	24.1	930	970	1.2	18.4	345	390
16	1.3	1.25	1.7	26.5	1110	1170	1.3	20.6	445	500
18	1.3	1.25	1.7	27.7	1190	1250	1.3	21.8	495	560
19	1.3	1.25	1.7	27.7	1210	1280	1.3	21.8	510	580
20	1.4	1.25	1.7	29.1	1290	1360	1.4	23.2	550	620
24	1.5	1.25	1.8	32.1	1500	1590	1.5	26.0	660	750
30	1.5	1.25	1.8	33.6	1670	1780	1.5	27.5	790	900
37	1.6	1.6	1.9	37.0	2140	2270	1.6	30.0	960	1090



AREA OF CONDUCTOR 1.0 SQ MM

Min. thickness of insulation 0.44 mm

ARMoured CABLES						UNARMoured CABLES				
NO. OF PAIR	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	11.4	240	240	0.9	7.0	58	62
2	1.0	0.9	1.4	15.0	365	375	1.0	10.4	105	110
4	1.0	0.9	1.4	16.7	460	480	1.0	12.1	160	180
5	1.1	0.9	1.5	18.3	540	560	1.1	13.5	200	220
6	1.1	0.9	1.5	19.5	590	620	1.1	14.7	230	255
8	1.2	0.9	1.5	21.5	710	740	1.2	16.7	300	330
10	1.2	1.25	1.6	24.7	970	1010	1.2	19.0	365	405
12	1.3	1.25	1.6	25.5	1050	1100	1.3	19.8	425	475
16	1.3	1.25	1.7	27.9	1250	1310	1.3	22.0	540	610
18	1.4	1.25	1.7	29.4	1360	1430	1.4	23.5	610	680
19	1.4	1.25	1.7	29.4	1390	1460	1.4	23.5	640	710
20	1.4	1.25	1.8	30.9	1480	1560	1.4	24.8	670	750
24	1.5	1.25	1.8	33.8	1700	1790	1.5	27.7	800	900
30	1.6	1.25	1.9	35.9	1950	2070	1.6	29.6	980	1100
37	1.6	1.6	1.9	39.0	2420	2570	1.6	32.0	1170	1320

AREA OF CONDUCTOR 1.5 SQ MM

Min. thickness of insulation 0.44 mm

ARMoured CABLES						UNARMoured CABLES				
NO. OF PAIR	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	265	270	0.9	7.6	71	76
2	1.0	0.9	1.4	16.0	415	420	1.0	11.4	130	135
4	1.1	0.9	1.5	18.3	550	570	1.1	13.5	215	235
5	1.1	0.9	1.5	19.6	630	650	1.1	14.8	255	280
6	1.2	0.9	1.5	21.2	710	740	1.2	16.4	305	335
8	1.2	1.25	1.6	24.1	970	1010	1.2	18.4	390	425
10	1.3	1.25	1.7	27.0	1170	1210	1.3	21.1	485	530
12	1.3	1.25	1.7	27.8	1270	1320	1.3	21.9	560	620
16	1.4	1.25	1.8	30.6	1520	1600	1.4	24.5	730	800
18	1.5	1.25	1.8	32.2	1660	1740	1.5	26.1	820	900
19	1.5	1.25	1.8	32.2	1690	1780	1.5	26.1	850	940
20	1.5	1.25	1.8	33.7	1790	1890	1.5	27.6	900	990
24	1.6	1.6	1.9	37.9	2280	2400	1.6	30.9	1080	1190
30	1.7	1.6	2.0	40.2	2630	2770	1.7	33.0	1320	1460
37	1.8	1.6	2.0	43.1	3010	3180	1.8	35.9	1600	1770

AREA OF CONDUCTOR 2.5 SQ MM

Min. thickness of insulation 0.53 mm

ARMoured CABLES							UNARMoured CABLES			
NO. OF PAIR	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	1.0	0.9	1.4	13.6	330	340	1.0	9.0	100	105
2	1.1	0.9	1.5	18.4	520	540	1.1	13.6	185	200
4	1.2	0.9	1.6	21.1	730	750	1.2	16.1	315	340
5	1.2	1.25	1.6	23.4	950	980	1.2	17.7	380	415
6	1.3	1.25	1.7	25.5	1090	1130	1.3	19.6	455	495
8	1.4	1.25	1.7	28.2	1300	1350	1.4	22.3	590	640
10	1.5	1.25	1.8	31.6	1560	1620	1.5	25.5	730	800
12	1.5	1.25	1.8	32.5	1700	1780	1.5	26.4	850	930
16	1.6	1.6	1.9	36.6	2270	2370	1.6	29.6	1100	1210
18	1.7	1.6	2.0	38.7	2490	2610	1.7	31.5	1240	1360
19	1.7	1.6	2.0	38.7	2540	2670	1.7	31.5	1300	1420
20	1.7	1.6	2.0	40.6	2680	2820	1.7	33.4	1370	1500
24	1.9	1.6	2.1	44.9	3150	3310	1.9	37.5	1650	1810
30	1.9	1.6	2.2	47.4	3610	3810	1.9	39.8	2000	2200
37	2.1	2.0	2.3	52.1	4570	4810	2.1	43.5	2460	2700

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

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