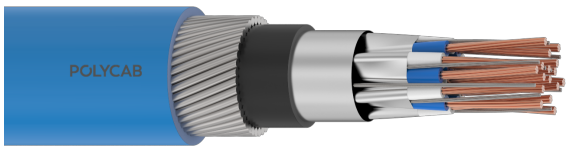
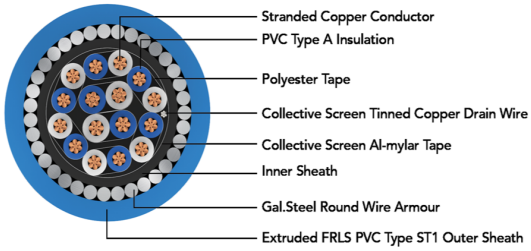
POLYCAB INSTRU 500 P (ST)
Instrumentation cable PVC/PE Insulated Overall shielded





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB 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. POLYCAB 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.

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

CONSTRUCTION

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

Core Identification
White & Blue for Pair

Outer sheath colour: Blue/Black

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

OUR ACCREDITATIONS

APPROVAL

NOTES

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

POLYCAB INSTRU 500 P (ST)
Instrumentation cable PVC/PE Insulated Overall shielded

POLYCAB
IDEAS. CONNECTED.

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	No.of pair	Min. thickness of insulation	ARMOURED CABLES						UNARMOURED CABLES			
			Nominal thickness of inner sheath	Diameter of G.I. armour wire	Nominal thickness of outer Sheath	Nominal Overall diameter	Approx. weight - PE insulation	Approx. weight of PVC Insulation	Nominal thickness of outer sheath	Nominal overall diameter	Approx. weight - PE insulation	Approx. weight of PVC Insulation
Sqmm		mm	mm	mm	mm	mm	kg/km	kg/km	mm	mm	kg/km	kg/km
0.5	1	0.44	0.9	0.9	1.3	10.6	210	210	0.9	6.2	44	47
0.5	2	0.44	0.9	0.9	1.4	13.5	300	310	0.9	8.9	71	77
0.5	4	0.44	1.0	0.9	1.4	15.2	380	390	1.0	10.6	110	125
0.5	5	0.44	1.0	0.9	1.4	16.1	415	430	1.0	11.5	130	145
0.5	6	0.44	1.1	0.9	1.5	17.6	480	500	1.1	12.8	155	175
0.5	8	0.44	1.1	0.9	1.5	19.1	550	570	1.1	14.3	195	220
0.5	10	0.44	1.2	0.9	1.5	21.2	650	680	1.2	16.4	240	270
0.5	12	0.44	1.2	0.9	1.6	22.0	700	740	1.2	17.0	275	310
0.5	16	0.44	1.2	1.25	1.6	24.5	940	990	1.2	18.8	340	390
0.5	18	0.44	1.3	1.25	1.6	25.8	1020	1080	1.3	20.1	385	445
0.5	19	0.44	1.3	1.25	1.6	25.8	1040	1100	1.3	20.1	400	460
0.5	20	0.44	1.3	1.25	1.7	27.1	1100	1170	1.3	21.2	420	485
0.5	24	0.44	1.4	1.25	1.7	29.6	1260	1330	1.4	23.7	510	580
0.5	30	0.44	1.4	1.25	1.8	31.2	1410	1510	1.4	25.1	600	700
0.5	37	0.44	1.5	1.25	1.8	33.4	1610	1730	1.5	27.3	730	850
0.75	1	0.44	0.9	0.9	1.3	11.1	225	225	0.9	6.7	51	55
0.75	2	0.44	1.0	0.9	1.4	14.4	335	345	1.0	9.8	89	97
0.75	4	0.44	1.0	0.9	1.4	16.0	420	435	1.0	11.4	135	150
0.75	5	0.44	1.1	0.9	1.5	17.5	490	510	1.1	12.7	170	185
0.75	6	0.44	1.1	0.9	1.5	18.6	540	560	1.1	13.8	195	215
0.75	8	0.44	1.2	0.9	1.5	20.5	640	670	1.2	15.7	250	280
0.75	10	0.44	1.2	1.25	1.6	23.5	870	910	1.2	17.8	305	340
0.75	12	0.44	1.2	1.25	1.6	24.1	930	970	1.2	18.4	345	390
0.75	16	0.44	1.3	1.25	1.7	26.5	1110	1170	1.3	20.6	445	500
0.75	18	0.44	1.3	1.25	1.7	27.7	1190	1250	1.3	21.8	495	560
0.75	19	0.44	1.3	1.25	1.7	27.7	1210	1280	1.3	21.8	510	580
0.75	20	0.44	1.4	1.25	1.7	29.1	1290	1360	1.4	23.2	550	620
0.75	24	0.44	1.5	1.25	1.8	32.1	1500	1590	1.5	26.0	660	750
0.75	30	0.44	1.5	1.25	1.8	33.6	1670	1780	1.5	27.5	790	900
0.75	37	0.44	1.6	1.6	1.9	37.0	2140	2270	1.6	30.0	960	1090

POLYCAB INSTRU 500 P (ST)
Instrumentation cable PVC/PE Insulated Overall shielded

POLYCAB
IDEAS. CONNECTED.

Area of conductor	No.of pair	Min. thickness of insulation	ARMOURED CABLES						UNARMOURED CABLES			
			Nominal thickness of inner sheath	Diameter of G.I. armour wire	Nominal thickness of outer Sheath	Nominal Overall diameter	Approx. weight - PE insulation	Approx. weight of PVC Insulation	Nominal thickness of outer sheath	Nominal overall diameter	Approx. weight - PE insulation	Approx. weight of PVC Insulation
Sqmm		mm	mm	mm	mm	mm	kg/km	kg/km	mm	mm	kg/km	kg/km
1.0	1	0.44	0.9	0.9	1.3	11.4	240	240	0.9	7.0	58	62
1.0	2	0.44	1.0	0.9	1.4	15.0	365	375	1.0	10.4	105	110
1.0	4	0.44	1.0	0.9	1.4	16.7	460	480	1.0	12.1	160	180
1.0	5	0.44	1.1	0.9	1.5	18.3	540	560	1.1	13.5	200	220
1.0	6	0.44	1.1	0.9	1.5	19.5	590	620	1.1	14.7	230	255
1.0	8	0.44	1.2	0.9	1.5	21.5	710	740	1.2	16.7	300	330
1.0	10	0.44	1.2	1.25	1.6	24.7	970	1010	1.2	19.0	365	405
1.0	12	0.44	1.3	1.25	1.6	25.5	1050	1100	1.3	19.8	425	475
1.0	16	0.44	1.3	1.25	1.7	27.9	1250	1310	1.3	22.0	540	610
1.0	18	0.44	1.4	1.25	1.7	29.4	1360	1430	1.4	23.5	610	680
1.0	19	0.44	1.4	1.25	1.7	29.4	1390	1460	1.4	23.5	640	710
1.0	20	0.44	1.4	1.25	1.8	30.9	1480	1560	1.4	24.8	670	750
1.0	24	0.44	1.5	1.25	1.8	33.8	1700	1790	1.5	27.7	800	900
1.0	30	0.44	1.6	1.25	1.9	35.9	1950	2070	1.6	29.6	980	1100
1.0	37	0.44	1.6	1.6	1.9	39.0	2420	2570	1.6	32.0	1170	1320
1.5	1	0.44	0.9	0.9	1.3	12.0	265	270	0.9	7.6	71	76
1.5	2	0.44	1.0	0.9	1.4	16.0	415	420	1.0	11.4	130	135
1.5	4	0.44	1.1	0.9	1.5	18.3	550	570	1.1	13.5	215	235
1.5	5	0.44	1.1	0.9	1.5	19.6	630	650	1.1	14.8	255	280
1.5	6	0.44	1.2	0.9	1.5	21.2	710	740	1.2	16.4	305	335
1.5	8	0.44	1.2	1.25	1.6	24.1	970	1010	1.2	18.4	390	425
1.5	10	0.44	1.3	1.25	1.7	27.0	1170	1210	1.3	21.1	485	530
1.5	12	0.44	1.3	1.25	1.7	27.8	1270	1320	1.3	21.9	560	620
1.5	16	0.44	1.4	1.25	1.8	30.6	1520	1600	1.4	24.5	730	800
1.5	18	0.44	1.5	1.25	1.8	32.2	1660	1740	1.5	26.1	820	900
1.5	19	0.44	1.5	1.25	1.8	32.2	1690	1780	1.5	26.1	850	940
1.5	20	0.44	1.5	1.25	1.8	33.7	1790	1890	1.5	27.6	900	990
1.5	24	0.44	1.6	1.6	1.9	37.9	2280	2400	1.6	30.9	1080	1190
1.5	30	0.44	1.7	1.6	2.0	40.2	2630	2770	1.7	33.0	1320	1460
1.5	37	0.44	1.8	1.6	2.0	43.1	3010	3180	1.8	35.9	1600	1770
2.5	1	0.53	1.0	0.9	1.4	13.6	330	340	1.0	9.0	100	105
2.5	2	0.53	1.1	0.9	1.5	18.4	520	540	1.1	13.6	185	200
2.5	4	0.53	1.2	0.9	1.6	21.1	730	750	1.2	16.1	315	340
2.5	5	0.53	1.2	1.25	1.6	23.4	950	980	1.2	17.7	380	415

POLYCAB INSTRU 500 P (ST)
Instrumentation cable PVC/PE Insulated Overall shielded

Area of conductor	No.of pair	Min. thickness of insulation	ARMOURED CABLES						UNARMOURED CABLES			
			Nominal thickness of inner sheath	Diameter of G.I. armour wire	Nominal thickness of outer Sheath	Nominal Overall diameter	Approx. weight - PE insulation	Approx. weight of PVC Insulation	Nominal thickness of outer sheath	Nominal overall diameter	Approx. weight - PE insulation	Approx. weight of PVC Insulation
Sqmm		mm	mm	mm	mm	mm	kg/km	kg/km	mm	mm	kg/km	kg/km
2.5	6	0.53	1.3	1.25	1.7	25.5	1090	1130	1.3	19.6	455	495
2.5	8	0.53	1.4	1.25	1.7	28.2	1300	1350	1.4	22.3	590	640
2.5	10	0.53	1.5	1.25	1.8	31.6	1560	1620	1.5	25.5	730	800
2.5	12	0.53	1.5	1.25	1.8	32.5	1700	1780	1.5	26.4	850	930
2.5	16	0.53	1.6	1.6	1.9	36.6	2270	2370	1.6	29.6	1100	1210
2.5	18	0.53	1.7	1.6	2.0	38.7	2490	2610	1.7	31.5	1240	1360
2.5	19	0.53	1.7	1.6	2.0	38.7	2540	2670	1.7	31.5	1300	1420
2.5	20	0.53	1.7	1.6	2.0	40.6	2680	2820	1.7	33.4	1370	1500
2.5	24	0.53	1.9	1.6	2.1	44.9	3150	3310	1.9	37.5	1650	1810
2.5	30	0.53	1.9	1.6	2.2	47.4	3610	3810	1.9	39.8	2000	2200
2.5	37	0.53	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 of conductor at 20°C Plain wires	Max. DC resistance of conductor at 20°C Metal coated wires	Insulation resistance (PVC)	Insulation resistance (PE/XLPE)	Mutual capacitance	Inductance to resistance ratio(L/R)
Sqmm	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