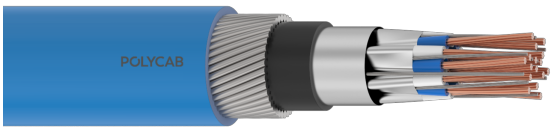
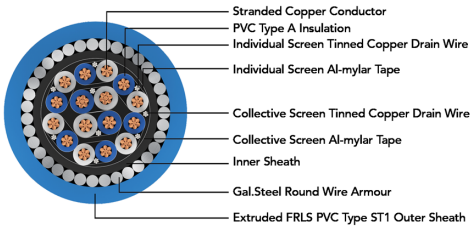
POLYCAB INSTRU 300 (ST) PiMF
Instrumentation cable PVC/PE Insulated Individual & Overall shielded 300V





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB INSTRU 300MP, Stranded copper conductor, PVC/PE insulated, Individual & 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 300MP 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
300 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
- Individual & 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: Black/Blue

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.

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POLYCAB
IDEAS. CONNECTED.

Weight & Dimension Data

300 VOLTS, MULTI PAIR, STR.COPPER, PVC/PE INSULATED, ALUMINIUM MYLAR TAPED INDIVIDUAL & 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 -PVC insulation	Nominal thickness of outer sheath	Nominal overall diameter	Approx. weight-PE insulation	Approx. weight - PVC insulation
Sqmm		mm	mm	mm	mm	Mm	Kg/Km	Kg/Km	mm	mm	Kg/Km	Kg/Km
0.5	2	0.26	0.9	0.9	1.4	13.2	300	305	0.9	8.6	79	83
0.5	4	0.26	1.0	0.9	1.4	14.8	385	390	1.0	10.2	130	135
0.5	5	0.26	1.0	0.9	1.4	15.7	430	440	1.0	11.1	155	165
0.5	6	0.26	1.0	0.9	1.4	16.7	480	490	1.0	12.1	180	190
0.5	8	0.26	1.1	0.9	1.5	18.6	580	590	1.1	13.8	230	245
0.5	10	0.26	1.1	0.9	1.5	20.4	670	680	1.1	15.6	280	300
0.5	12	0.26	1.2	0.9	1.5	21.1	730	750	1.2	16.3	330	350
0.5	16	0.26	1.2	1.25	1.6	23.8	1000	1030	1.2	18.1	420	445
0.5	18	0.26	1.3	1.25	1.6	24.9	1080	1120	1.3	19.2	470	500
0.5	19	0.26	1.3	1.25	1.6	24.9	1100	1140	1.3	19.2	490	530
0.5	20	0.26	1.3	1.25	1.7	26.2	1170	1210	1.3	20.3	520	550
0.5	24	0.26	1.4	1.25	1.7	28.6	1340	1390	1.4	22.7	620	660
0.5	30	0.26	1.4	1.25	1.7	30.0	1510	1570	1.4	24.1	750	800
0.5	37	0.26	1.5	1.25	1.8	32.3	1760	1830	1.5	26.2	910	980
0.75	2	0.26	1.0	0.9	1.4	14.1	345	350	1.0	9.5	98	100
0.75	4	0.26	1.0	0.9	1.4	15.7	435	440	1.0	11.1	155	165
0.75	5	0.26	1.0	0.9	1.5	16.9	495	500	1.0	12.1	185	195
0.75	6	0.26	1.1	0.9	1.5	18.2	560	570	1.1	13.4	225	238
0.75	8	0.26	1.1	0.9	1.5	19.8	660	680	1.1	15.0	280	300
0.75	10	0.26	1.2	0.9	1.6	22.3	790	810	1.2	17.3	350	370
0.75	12	0.26	1.2	1.25	1.6	23.5	970	1000	1.2	17.8	405	430
0.75	16	0.26	1.3	1.25	1.7	25.9	1180	1210	1.3	20.0	520	560
0.75	18	0.26	1.3	1.25	1.7	27.0	1260	1300	1.3	21.1	580	620
0.75	19	0.26	1.3	1.25	1.7	27.0	1290	1330	1.3	21.1	610	650
0.75	20	0.26	1.4	1.25	1.7	28.4	1370	1410	1.4	22.5	650	690
0.75	24	0.26	1.4	1.25	1.8	31.1	1570	1630	1.4	25.0	770	820
0.75	30	0.26	1.5	1.25	1.8	32.8	1800	1870	1.5	26.7	940	1000
0.75	37	0.26	1.6	1.25	1.9	35.3	2090	2170	1.6	29.0	1140	1220
1.0	2	0.26	1.0	0.9	1.4	14.8	365	370	1.0	10.2	110	115
1.0	4	0.26	1.0	0.9	1.4	16.5	475	485	1.0	11.9	180	190
1.0	5	0.26	1.1	0.9	1.5	18.0	560	570	1.1	13.2	225	235
1.0	6	0.26	1.1	0.9	1.5	19.2	620	640	1.1	14.4	260	275

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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 -PVC insulation	Nominal thickness of outer sheath	Nominal overall diameter	Approx. weight- PE insulation	Approx. weight - PVC insulation
Sqmm		mm	mm	mm	mm	Mm	Kg/Km	Kg/Km	mm	mm	Kg/Km	Kg/Km
1.0	8	0.26	1.2	0.9	1.5	21.1	740	760	1.2	16.3	340	360
1.0	10	0.26	1.2	1.25	1.6	24.2	1010	1030	1.2	18.5	415	435
1.0	12	0.26	1.3	1.25	1.6	25.1	1100	1130	1.3	19.4	485	510
1.0	16	0.26	1.3	1.25	1.7	27.4	1320	1350	1.3	21.5	620	660
1.0	18	0.26	1.4	1.25	1.7	28.8	1440	1480	1.4	22.9	700	740
1.0	19	0.26	1.4	1.25	1.7	28.8	1470	1510	1.4	22.9	730	780
1.0	20	0.26	1.4	1.25	1.7	30.1	1540	1590	1.4	24.2	770	820
1.0	24	0.26	1.5	1.25	1.8	33.2	1790	1850	1.5	27.1	920	980
1.0	30	0.26	1.5	1.25	1.8	34.8	2040	2110	1.5	28.7	1120	1190
1.0	37	0.26	1.6	1.6	1.9	38.3	2590	2670	1.6	31.3	1360	1450
1.5	2	0.35	1.0	0.9	1.5	16.8	450	460	1.0	12.0	145	155
1.5	4	0.35	1.1	0.9	1.5	19.0	600	620	1.1	14.2	245	260
1.5	5	0.35	1.2	0.9	1.5	20.6	700	720	1.2	15.8	305	325
1.5	6	0.35	1.2	1.25	1.6	22.9	910	930	1.2	17.2	355	375
1.5	8	0.35	1.3	1.25	1.7	25.5	1100	1130	1.3	19.6	460	490
1.5	10	0.35	1.4	1.25	1.7	28.4	1300	1330	1.4	22.5	570	610
1.5	12	0.35	1.4	1.25	1.7	29.2	1410	1460	1.4	23.3	660	710
1.5	16	0.35	1.5	1.25	1.8	32.2	1700	1760	1.5	26.1	860	920
1.5	18	0.35	1.5	1.25	1.8	33.6	1840	1910	1.5	27.5	960	1030
1.5	19	0.35	1.5	1.25	1.8	33.6	1880	1950	1.5	27.5	1000	1070
1.5	20	0.35	1.6	1.6	1.9	36.4	2230	2300	1.6	29.4	1070	1140
1.5	24	0.35	1.7	1.6	2.0	40.0	2570	2660	1.7	32.8	1280	1370
1.5	30	0.35	1.8	1.6	2.0	42.2	2950	3060	1.8	35.0	1560	1680
1.5	37	0.35	1.9	1.6	2.1	45.5	3420	3560	1.9	38.1	1900	2040

For Cables of sizes or pairs 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