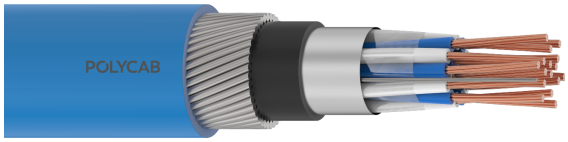
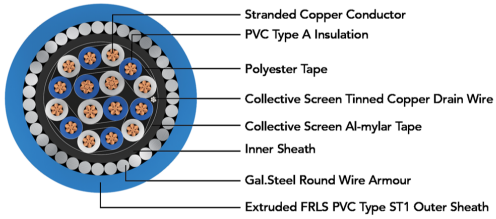
POLYCAB INSTRU 300 P (ST)
SINGLE & MP Instrumentation cable PVC/PE Insulated Overall shielded 300V





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB INSTRU 300 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 300 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
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
- 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, 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 diameter over armour	Nominal overall diameter	Approx. weight-PE insulation	Approx. weight -PVC insulation	Nominal thickness of outer sheath	Nominal overall diameter	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	1	0.26	0.8	0.9	6.99	9.6	175	180	0.8	5.2	35	37
0.5	2	0.26	0.9	0.9	9.37	12.0	255	260	0.9	7.6	60	64
0.5	4	0.26	0.9	0.9	10.54	13.4	315	320	0.9	8.8	89	97
0.5	5	0.26	1.0	0.9	11.52	14.4	355	365	1.0	9.8	110	120
0.5	6	0.26	1.0	0.9	12.35	15.2	395	405	1.0	10.6	125	135
0.5	8	0.26	1.0	0.9	13.61	16.5	450	465	1.0	11.9	155	170
0.5	10	0.26	1.1	0.9	15.34	18.4	530	550	1.1	13.6	195	215
0.5	12	0.26	1.1	0.9	15.79	18.8	580	600	1.1	14.0	220	245
0.5	16	0.26	1.1	0.9	17.29	20.3	660	690	1.1	15.5	280	305
0.5	18	0.26	1.1	0.9	18.13	21.2	710	740	1.1	16.4	305	340
0.5	19	0.26	1.1	0.9	18.13	21.2	720	760	1.1	16.4	320	355
0.5	20	0.26	1.2	0.9	19.25	22.5	790	820	1.2	17.5	345	380
0.5	24	0.26	1.2	1.25	21.82	25.1	1020	1060	1.2	19.4	405	445
0.5	30	0.26	1.3	1.25	23.16	26.4	1150	1200	1.3	20.7	490	550
0.5	37	0.26	1.3	1.25	24.81	28.3	1310	1380	1.3	22.4	590	650
0.75	1	0.26	0.8	0.9	7.41	10.1	190	195	0.8	5.7	42	44
0.75	2	0.26	0.9	0.9	10.05	12.9	290	295	0.9	8.3	73	78
0.75	4	0.26	1.0	0.9	11.57	14.4	365	375	1.0	9.8	120	125
0.75	5	0.26	1.0	0.9	12.45	15.3	410	420	1.0	10.7	140	150
0.75	6	0.26	1.0	0.9	13.39	16.2	455	465	1.0	11.6	160	175
0.75	8	0.26	1.1	0.9	15.0	18.0	540	560	1.1	13.2	210	225
0.75	10	0.26	1.1	0.9	16.72	19.8	620	650	1.1	15	255	275
0.75	12	0.26	1.1	0.9	17.22	20.3	680	700	1.1	15.5	290	315
0.75	16	0.26	1.2	0.9	19.11	22.4	810	850	1.2	17.4	375	410
0.75	18	0.26	1.2	1.25	20.75	24.0	1000	1040	1.2	18.3	415	455
0.75	19	0.26	1.2	1.25	20.75	24.0	1020	1060	1.2	18.3	435	475
0.75	20	0.26	1.2	1.25	21.79	25.0	1070	1110	1.2	19.3	455	500
0.75	24	0.26	1.3	1.25	24.01	27.5	1240	1290	1.3	21.6	550	600
0.75	30	0.26	1.4	1.25	25.57	29.0	1410	1470	1.4	23.1	670	730
0.75	37	0.26	1.4	1.25	27.42	30.9	1600	1680	1.4	25	800	880
1.0	1	0.26	0.8	0.9	7.77	10.4	205	210	0.8	6.0	49	51
1.0	2	0.26	0.9	0.9	10.65	13.5	315	320	0.9	8.9	86	91
1.0	4	0.26	1.0	0.9	12.28	15.1	405	415	1.0	10.5	145	150

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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 diameter over armour	Nominal overall diameter	Approx. weight-PE insulation	Approx. weight -PVC insulation	Nominal thickness of outer sheath	Nominal overall diameter	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	5	0.26	1.0	0.9	13.24	16.1	455	465	1.0	11.5	170	180
1.0	6	0.26	1.0	0.9	14.27	17.1	510	520	1.0	12.5	195	210
1.0	8	0.26	1.1	0.9	16.02	19.1	610	630	1.1	14.3	255	275
1.0	10	0.26	1.1	0.9	17.90	20.9	710	740	1.1	16.1	310	335
1.0	12	0.26	1.2	0.9	18.65	21.7	780	810	1.2	16.9	365	395
1.0	16	0.26	1.2	1.25	21.20	24.4	1060	1100	1.2	18.7	465	510
1.0	18	0.26	1.2	1.25	22.23	25.5	1140	1190	1.2	19.8	520	560
1.0	19	0.26	1.2	1.25	22.23	25.5	1170	1210	1.2	19.8	540	590
1.0	20	0.26	1.3	1.25	23.6	26.8	1250	1290	1.3	21.1	580	630
1.0	24	0.26	1.3	1.25	25.9	29.3	1430	1490	1.3	23.4	680	740
1.0	30	0.26	1.4	1.25	27.5	30.9	1630	1700	1.4	25.0	840	910
1.0	37	0.26	1.5	1.25	29.7	33.3	1900	1990	1.5	27.2	1020	1110
1.5	1	0.35	0.9	0.9	8.97	11.6	255	260	0.9	7.2	67	71
1.5	2	0.35	1.0	0.9	12.49	15.3	390	400	1.0	10.7	120	130
1.5	4	0.35	1.1	0.9	14.47	17.5	530	540	1.1	12.7	205	220
1.5	5	0.35	1.1	0.9	15.66	18.7	590	610	1.1	13.9	245	260
1.5	6	0.35	1.1	0.9	16.93	20.0	660	680	1.1	15.2	285	305
1.5	8	0.35	1.2	0.9	19.04	22.3	810	830	1.2	17.3	370	400
1.5	10	0.35	1.3	1.25	22.28	25.5	1090	1120	1.3	19.8	460	495
1.5	12	0.35	1.3	1.25	22.96	26.4	1200	1240	1.3	20.5	530	580
1.5	16	0.35	1.4	1.25	25.45	28.9	1430	1490	1.4	23.0	690	750
1.5	18	0.35	1.4	1.25	26.70	30.20	1540	1610	1.4	24.3	770	830
1.5	19	0.35	1.4	1.25	26.70	30.20	1580	1650	1.4	24.3	800	870
1.5	20	0.35	1.5	1.25	28.30	32.0	1690	1770	1.5	25.9	850	930
1.5	24	0.35	1.5	1.25	31.2	34.8	1930	2020	1.5	28.7	1010	1100
1.5	30	0.35	1.6	1.6	33.8	37.7	2440	2550	1.6	30.7	1240	1350
1.5	37	0.35	1.7	1.6	36.5	40.6	2820	2960	1.7	33.4	1510	1640

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

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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