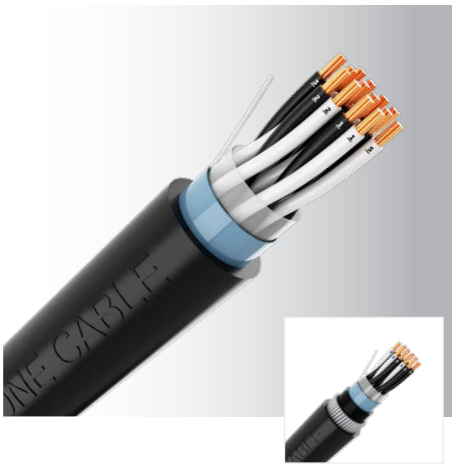
Instrumentation Cables

KEYSTONE CABLE
tel (65) 6367 0107 fax (65) 6365 2963
www.keystone-cable.com

500V Pair(s) or Triad(s)
PVC Insulated, Overall Screen, Unarmoured & Armoured, PVC Sheathed Cable
Description: CU/PVC/OS/PVC-UV or CU/PVC/OS/PVC/SWA/PVC-UV
Model Code: POP-UV or POPSP-UV



Application :	This cable is used in machines, measuring instruments, and control systems for the transmission of analogue and digital signals.	
Voltage rating :	500V	
Construction :	Plain annealed copper (IEC 60228 Class 2), PVC insulated, twisted pair(s) or triad(s), overall screen (aluminium/polyester tape with tinned copper drain wire), unarmoured or galvanized steel wire armoured, UV resistant PVC sheathed cable	
Insulation colour :	Pair(s)	: Black, White (or with numbering)
	Triad(s)	: Red, Black, White (or with numbering)
Sheath colour :	Black (other colour upon request)	
	Blue (for intrinsically safe system upon request)	
Specification :	BS EN 50288-7, IEC 60332-1-2	
	IEC 60332-3 (upon request)	
Operating temperature :	70˚C	

No. of Pair(s)/ Triad(s)	Conductor		Insulation	Unarmoured Cable			Armoured Cable		
	Nominal Area	No./Diam. of Strand	Thickness	Part No.	Approx. Overall Diam.	Approx. Weight	Part No.	Approx. Overall Diam.	Approx. Weight
	(mm^2)	(no./mm)	(mm)		(mm)	(kg/km)		(mm)	(kg/km)
1P	0.5	7/0.31	0.6	**041P3600**	7.3	70	**041P3601**	12.0	280
2P				**042P3600**	10.1	120	**042P3601**	15.2	395
4P				**044P3600**	12.0	170	**044P3601**	16.9	490
6P				**046P3600**	14.4	235	**046P3601**	19.7	620
8P				**048P3600**	16.1	295	**048P3601**	21.5	705
10P				**040P3600**	18.4	360	**040P3601**	24.4	970
12P				**04BP3600**	18.9	400	**04BP3601**	25.2	1050
16P				**04FP3600**	21.0	490	**04FP3601**	27.2	1205
20P				**04KP3600**	23.5	605	**04KP3601**	29.9	1410
24P				**04RP3600**	26.2	725	**04RP3601**	33.2	1815
36P				**04P23600**	30.1	1000	**04P23601**	37.4	2255
1T				**041T3600**	7.4	80	**041T3601**	12.4	300
2T				**042T3600**	11.6	150	**042T3601**	16.7	460
4T				**044T3600**	13.4	220	**044T3601**	18.6	575
6T				**046T3600**	16.0	310	**046T3601**	21.4	730
10T				**040T3600**	20.5	485	**040T3601**	26.8	1180
12T				**04BT3600**	21.5	550	**04BT3601**	27.7	1280
16T				**04FT3600**	23.7	690	**04FT3601**	29.1	1500
24T				**04RT3600**	29.6	1025	**04RT3601**	36.8	2255

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Model Code: POP-UV or POPSP-UV

No. of Pair(s)/ Triad(s)	Conductor		Insulation	Unarmoured Cable			Armoured Cable		
	Nominal Area	No./Diam. of Strand	Thickness	Part No.	Approx. Overall Diam.	Approx. Weight	Part No.	Approx. Overall Diam.	Approx. Weight
	(mm²)	(mm)	(mm)		(mm)	(kg/km)		(mm)	(mm)
1P	0.75	7/0.37	0.6	**051P3600**	7.5	75	**051P3601**	12.6	295
2P				**052P3600**	11.0	135	**052P3601**	16.2	430
4P				**054P3600**	12.8	200	**054P3601**	17.9	540
6P				**056P3600**	15.5	280	**056P3601**	20.7	685
8P				**058P3600**	17.6	355	**058P3601**	22.7	810
10P				**050P3600**	19.6	425	**050P3601**	25.8	1095
12P				**05BP3600**	20.4	480	**05BP3601**	26.4	1165
16P				**05FP3600**	22.7	605	**05FP3601**	29.0	1385
20P				**05KP3600**	25.5	740	**05KP3601**	32.4	1795
24P				**05RP3600**	28.4	890	**05RP3601**	35.5	2080
36P				**05P23600**	32.6	1245	**05P23601**	39.8	2595
1T				**051T3600**	8.0	90	**051T3601**	12.8	315
2T				**052T3600**	12.3	175	**052T3601**	17.4	500
4T				**054T3600**	14.6	270	**054T3601**	19.9	655
6T				**056T3600**	17.3	375	**056T3601**	22.6	825
10T				**050T3600**	22.2	595	**050T3601**	28.7	1350
12T				**05BT3600**	23.0	670	**05BT3601**	29.3	1450
16T				**05FT3600**	25.7	855	**05FT3601**	32.6	1920
24T				**05RT3600**	32.0	1265	**05RT3601**	39.4	2615
1P	1	7/0.43	0.6	**061P3600**	7.9	85	**061P3601**	12.7	310
2P				**062P3600**	11.7	155	**062P3601**	16.8	470
4P				**064P3600**	13.6	235	**064P3601**	18.7	585
6P				**066P3600**	16.4	330	**066P3601**	21.6	745
8P				**068P3600**	18.6	410	**068P3601**	24.5	1030
10P				**060P3600**	21.0	505	**060P3601**	27.0	1200
12P				**06BP3600**	22.0	575	**06BP3601**	27.9	1305
16P				**06FP3600**	24.3	720	**06FP3601**	30.4	1535
20P				**06KP3600**	27.2	885	**06KP3601**	34.2	2010
24P				**06RP3600**	30.3	1070	**06RP3601**	37.2	2315
36P				**06P23600**	34.6	1495	**06P23601**	42.8	3230
1T				**061T3600**	8.3	100	**061T3601**	13.2	335
2T				**062T3600**	12.9	200	**062T3601**	18.1	540
4T				**064T3600**	15.3	305	**064T3601**	20.6	725
6T				**066T3600**	18.6	445	**066T3601**	24.4	1055
10T				**060T3600**	23.8	700	**060T3601**	29.9	1510
12T				**06BT3600**	24.6	795	**06BT3601**	30.8	1630
16T				**06FT3600**	27.4	1020	**06FT3601**	34.5	2165
24T				**06RT3600**	34.2	1520	**06RT3601**	42.2	3230

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Model Code: POP-UV or POPSP-UV

No. of Pair(s)/ Triad(s)	Conductor		Insulation	Unarmoured Cable			Armoured Cable		
	Nominal Area	No./Diam. of Strand	Thickness	Part No.	Approx. Overall Diam.	Approx. Weight	Part No.	Approx. Overall Diam.	Approx. Weight
	(mm²)	(mm)	(mm)		(mm)	(kg/km)		(mm)	(mm)
1P	1.5	7/0.53	0.6	**071P3600**	8.6	100	**071P3601**	13.7	340
2P				**072P3600**	12.6	185	**072P3601**	17.8	525
4P				**074P3600**	15.1	295	**074P3601**	20.5	695
6P				**076P3600**	18.1	420	**076P3601**	24.1	1025
8P				**078P3600**	20.2	525	**078P3601**	26.4	1215
10P				**070P3600**	23.1	650	**070P3601**	29.4	1445
12P				**07BP3600**	23.9	740	**07BP3601**	30.3	1550
16P				**07FP3600**	26.6	945	**07FP3601**	33.9	2055
20P				**07KP3600**	29.8	1170	**07KP3601**	37.1	2420
24P				**07RP3600**	33.4	1410	**07RP3601**	41.5	3085
36P				**07P23600**	38.4	2005	**07P23601**	46.8	3955
1T				**071T3600**	9.2	125	**071T3601**	14.2	380
2T				**072T3600**	14.5	250	**072T3601**	19.8	640
4T				**074T3600**	16.8	405	**074T3601**	22.1	835
6T				**076T3600**	20.2	570	**076T3601**	26.4	1255
10T				**070T3600**	26.1	920	**070T3601**	33.2	1990
12T				**07BT3600**	27.0	1050	**07BT3601**	34.2	2175
16T				**07FT3600**	30.3	1355	**07FT3601**	37.4	2605
24T				**07RT3600**	37.8	2035	**07RT3601**	46.4	3960
1P	2.5	7/0.67	0.7	**081P3600**	10.0	135	**081P3601**	15.1	420
2P				**082P3600**	15.0	260	**082P3601**	20.2	660
4P				**084P3600**	17.8	420	**084P3601**	24.0	1025
6P				**086P3600**	21.3	600	**086P3601**	27.7	1320
8P				**088P3600**	24.2	770	**088P3601**	30.6	1585
10P				**080P3600**	27.6	960	**080P3601**	34.8	2105
12P				**08BP3600**	28.6	1095	**08BP3601**	35.7	2285
16P				**08FP3600**	32.0	1410	**08FP3601**	39.4	2745
20P				**08KP3600**	35.8	1745	**08KP3601**	44.2	3565
24P				**08RP3600**	40.1	2115	**08RP3601**	48.7	4160
36P				**08P23600**	45.4	3010	**08P23601**	56.2	5905
1T				**081T3600**	10.7	175	**081T3601**	15.9	470
2T				**082T3600**	16.9	355	**082T3601**	22.2	800
4T				**084T3600**	20.0	580	**084T3601**	26.2	1255
6T				**086T3600**	24.2	840	**086T3601**	30.5	1655
10T				**080T3600**	31.3	1360	**080T3601**	38.6	2670
12T				**08BT3600**	32.4	1560	**08BT3601**	39.7	2915
16T				**08FT3600**	36.4	2045	**08FT3601**	44.6	3870
24T				**08RT3600**	45.5	3045	**08RT3601**	55.4	5885

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Table 1 : Electrical Characteristics

Test Item \ Material	PVC	XLPE	PE
A.C. Voltage Test (kV/1 minute)	2	2	2
Minimum Insulation Resistance (MΩ·km)	10	1000	1000
Maximum Mutual Capacitance (nF/km)	250	150	150
Maximum Capacitance Unbalance (pF/500m)	-	500	500
Maximum Inductance (mH/km)	1.0	1.0	1.0

Table 2 : Maximum Inductance to Resistance Ratio (L/R)

Cross-sectional Area	L/R Ratio
(mm^2)	(μH/Ω)
0.5	25
0.75	25
1	25
1.5	40
2.5	60

Table 3 : Conductor Construction Reference

Class \ Cross-Sectional Area (mm^2)	0.5	0.75	1	1.5	2.5
	No./Diam of Strand (no./mm)				
Class 1	1/0.80	1/0.97	1/1.13	1/1.38	1/1.78
Class 2	7/0.31	7/0.37	7/0.43	7/0.53	7/0.67
Class 5	16/0.20	24/0.20	32/0.20	30/0.25	50/0.25

Note : For conductor resistance, please refer to Table 13 (Page 72)