

Instrumentation Cables

INFORM@X®

Cable description:

P50-P56 cables are intrinsically safe electrically to as 2380.7 & AS 2381.7. Construction design standard according to EN 50288-7. Instrumentation cables are used in a broad range of operational conditions, they are primarily allocated to control applications where optimal protection from electrical noise is required. These cables can be used for digital and analogue data transmission at 110V In PLC and SCADA systems.

P50 Instrumentation - Overall Screen (CS)

Product Code	Pairs	Nominal O.D		Min. Bending Radius		Max. Pulling Tension		Approx. Mass	
		Plain	SWA	Plain	SWA	Plain	SWA	Plain	SWA
		mm	mm	mm	mm	N	N	kg/km	kg/km
P5001CS	1	6.8	-	41	-	70	-	55	-
P5002CS	2	10.3	14.4	62	173	140	1390	121	344
P5004CS	4	11.8	16.6	71	200	280	2060	162	516
P5006CS	6	14.0	18.8	84	226	420	2520	196	631
P5008CS	8	14.4	19.3	87	231	560	2950	256	679
P5010CS	10	17.5	23.1	105	277	700	3360	304	972
P5012CS	12	18.0	23.6	108	284	840	4010	344	1031
P5016CS	16	19.9	25.6	120	307	1120	5060	431	1178
P5020CS	20	22.1	27.7	132	332	1400	6180	519	1343
P5024CS	24	25.0	30.6	150	367	1680	6960	634	1544
P5036CS	36	28.5	35.0	171	420	2520	9450	882	2153

P50 Instrumentation - Element And Overall Screen (ESCS)

Product Code	Pairs	Nominal O.D		Min. Bending Radius		Max. Pulling Tension		Approx. Mass	
		Plain	SWA	Plain	SWA	Plain	SWA	Plain	SWA
		mm	mm	mm	mm	N	N	kg/km	kg/km
P5002ESCS	2	11.5	15.6	69	187	140	1550	146	391
P5004ESCS	4	13.3	18.1	80	218	280	2310	200	598
P5006ESCS	6	16.4	21.4	98	256	420	2890	266	772
P5008ESCS	8	16.8	21.7	101	261	560	3390	312	831
P5010ESCS	10	19.7	25.3	118	304	700	4170	384	1129
P5012ESCS	12	20.3	25.9	122	311	840	4980	437	1203
P5016ESCS	16	22.5	28.2	135	338	1120	5900	551	1393
P5020ESCS	20	25.4	31.1	153	373	1400	6860	691	1618
P5024ESCS	24	28.3	34.7	170	417	1680	8000	814	2084
P5036ESCS	36	32.4	39.3	194	471	2520	11160	1141	2626

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P51 Instrumentation - Overall Screen (CS)

Product Code	Pairs	Nominal O.D		Min. Bending Radius		Max. Pulling Tension		Approx.Mass	
		Plain	SWA	Plain	SWA	Plain	SWA	Plain	SWA
		mm	mm	mm	mm	N	N	kg/km	kg/km
P5102ES	1 Pair	8.1	12.4	48	149	210	1390	85	265
P5103ES	1 Triple	8.5	12.9	51	155	315	1480	107	309

P53 Instrumentation - Overall Screen (CS)

Product Code	Triples	Nominal O.D		Min. Bending Radius		Max. Pulling Tension		Approx.Mass	
		Plain	SWA	Plain	SWA	Plain	SWA	Plain	SWA
		mm	mm	mm	mm	N	N	kg/km	kg/km
P5304CS	4	13.4	18.2	80	219	420	2520	212	610
P5306CS	6	16.5	21.5	99	258	630	3150	297	803
P5312CS	12	20.1	25.7	121	309	1260	5450	471	1233
P5316CS	16	22.3	28.0	134	335	1680	6570	596	1435
P5336CS	36	32.1	38.9	192	467	3780	13480	1249	2698

P53 Instrumentation - Element And Overall Screen (ESCS)

Product Code	Triples	Nominal O.D		Min. Bending Radius		Max. Pulling Tension		Approx.Mass	
		Plain	SWA	Plain	SWA	Plain	SWA	Plain	SWA
		mm	mm	mm	mm	N	N	kg/km	kg/km
P5304ESCS	4	15.2	19.5	91	234	420	2920	266	680
P5306ESCS	6	18.1	23.7	109	285	630	3940	346	1034
P5308ESCS	8	18.6	24.2	112	291	840	4980	399	1105
P5312ESCS	12	22.6	28.2	135	338	1260	6470	562	1405
P5316ESCS	16	25.5	31.2	153	374	1680	8050	739	1683
P5336ESCS	36	36.2	43.1	217	517	3780	15360	1504	3140

P55 Instrumentation - Overall Screen (CS)

Product Code	Pairs	Nominal O.D		Min. Bending Radius		Max. Pulling Tension		Approx.Mass	
		Plain	SWA	Plain	SWA	Plain	SWA	Plain	SWA
		mm	mm	mm	mm	N	N	kg/km	kg/km
P5502CS	2	12.4	17.3	75	207	420	1900	193	547
P5504CS	4	14.5	19.3	87	231	840	2700	272	686
P5506CS	6	17.9	23.5	107	282	1260	3430	373	1059
P5508CS	8	18.4	24.0	110	288	1680	4360	436	1141
P5510CS	10	21.6	27.2	130	327	2100	5320	536	1340
P5512CS	12	22.3	27.9	134	335	2520	5950	617	1458

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P55 Instrumentation - Element And Overall Screen (ESCS)

Product Code	Pairs	Nominal O.D		Min. Bending Radius		Max. Pulling Tension		Approx. Mass	
		Plain	SWA	Plain	SWA	Plain	SWA	Plain	SWA
		mm	mm	mm	mm	N	N	kg/km	kg/km
P5502ESCS	2	13.3	18.1	80	217	420	2140	215	589
P5504ESCS	4	16.7	21.6	100	260	840	3090	331	803
P5506ESCS	6	19.9	25.6	120	307	1260	4200	426	1173
P5508ESCS	8	20.4	26.1	123	313	1680	5360	501	1266
P5510ESCS	10	24.5	30.2	147	362	2100	6180	640	1546
P5512ESCS	12	25.3	31.0	152	372	2520	6960	736	1662

P56 Instrumentation - Overall (Cs) Or Element And Overall Screen (ESCS)

Product Code	Pairs	Nominal O.D		Min. Bending Radius		Max. Pulling Tension		Approx. Mass	
		Plain	SWA	Plain	SWA	Plain	SWA	Plain	SWA
		mm	mm	mm	mm	N	N	kg/km	kg/km
P5604CS	4	17.1	22.0	102	264	1260	1260	390	868
P5606CS	6	20.4	26.1	122	313	1890	1890	512	1272
P5612CS	12	25.4	31.1	153	373	3780	3780	957	1816
P5604ESCS	4	18.3	24.0	110	288	1260	1260	425	1073
P5606ESCS	6	22.0	27.6	132	332	1890	1890	556	1380
P5612ESCS	12	28.1	34.5	168	414	3780	3780	989	2234

Electrical Characteristics - P31 Data

Cable Type	Units	P50 CS	P50 ESCS	P51 ES	P53 CS	P53 ESCS	P55 CS	P55 ESCS	P56 CS
Conductor Size	mm	0.5	0.5	1.5	0.5	0.5	1.5	1.5	1.5
Conductor Resistance at 20°C	ohms/100m	3.84	3.84	1.36	3.84	3.84	1.36	1.36	1.36
Insulation Resistance at 20°C	mohms/km	10	10	10	10	10	10	10	10
Max Continuous Current Rating	A	3.2	3.2	12	3.2	3.2	12	12	12
Max D.C. Voltage Withstand	kV	3	3	3	3	3	3	3	3
Capacitance of pairs	pF/m	250	250	250	-	-	250	250	-
Capacitance Unbalanced between pairs	pF/100m	100	100	-	-	-	100	100	-
L/R Ratio	μH/ohms	25	25	40	25	25	40	40	40