A-61-05-05

SHROUDED HEADERS (Dual Row, Low Profile)

FEATURES

- Triple keying slots assure proper mating
- PLS mates with IDC socket connectors on 0.100" centers
- PLT mates with most standard sockets, including Crane's ATP Series
- Coined tails improve solder action
- MATE-RITE TIP prevents scraping of mating socket

		STANDARD PART DIMENSIONS	
MATING		**PLS Dual Row (Cable Version)**	**PLT Dual Row (Connector Version)**
P	POST "B"	0.240"/6,10mm	0.240"/6,10mm
INSULATOR BODY		**PLS Dual Row (Cable Version)**	**PLT Dual Row (Connector Version)**
W	WIDTH	0.360"/9,14mm	0.360"/9,14mm
D	DEPTH	0.260"/6,60mm	0.260"/6,60mm
H	HEIGHT	0.365"/9,27mm	0.365"/9,27mm
S	STANDOFF	0.015"/0,38mm	0.015"/0,38mm
I	INSIDE	(#POS./2 x 0.100") + 0.210"	(#POS./2 x 0.100") + 0.110"
O	OVERALL	(#POS./2 x 0.100") + 0.300"	(#POS./2 x 0.100") + 0.200"
PC TAIL		**PLS Dual Row (Cable Version)**	**PLT Dual Row (Connector Version)**
L	LENGTH	0.120"/3,05mm	0.120"/3,05mm

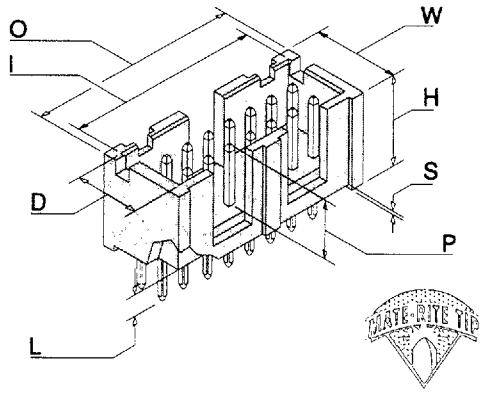
For other lengths, see Selected Options (next page)

POST CENTERLINE DIMENSIONS		**PLS Dual Row (Cable Version)**	**PLT Dual Row (Connector Version)**
C	Height above PC Bd.	0.130"/3,30mm	0.130"/3,30mm
B	Post Centerline to Insulator Body	0.365"/9,27mm	0.365"/9,27mm

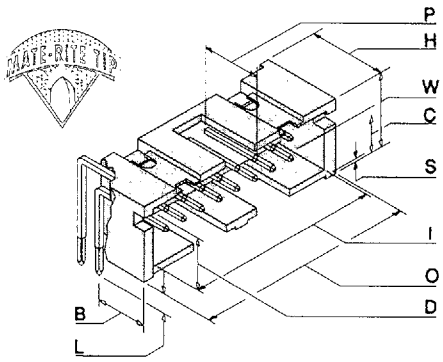
MATERIALS	
INSULATOR BODY	Glass Filled Polyester (UL94V-0)
POST	Phosphor Bronze

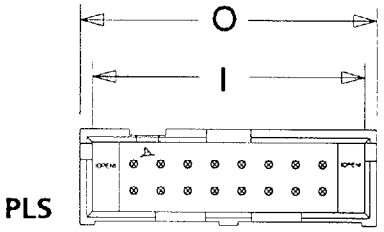
Specifications and Performance Data: Page 104

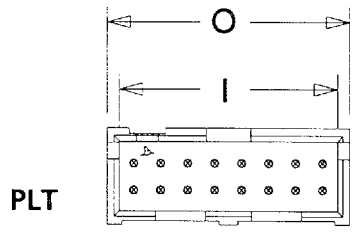
STRAIGHT (10 to 60 positions)



RIGHT ANGLE (10 to 60 positions)







CRANE CONNECTORS
4700 Smith Road • Cincinnati, Ohio 45212 • (513) 631-4700 • Fax # (513) 631-5700
1-800-676-7644

HOW TO ORDER CRANE'S PLS/PLT SERIES

0.100" in. (2,54mm) Centers
0.025 in. (0,64mm) Sq. Mating Posts

		STANDARD PART NUMBER							OPTIONAL				
					-								
PRODUCT SERIES	Cable Version	**PLS**											
	Connector Version	**PLT**											
TOTAL NUMBER OF POSITIONS	DUAL		**10 - 60**										
See box below for sizes offered.													
NUMBER OF ROWS	DUAL			**D**									
TYPE OF HEADER	STRAIGHT				**S**								
	RIGHT ANGLE				**R**								
PLATING (See Page 106)	CHOOSE G, T, or M, H, L, F												
Due to the number of options, not all platings are stocked for all pin lengths. Contact factory for availability.													
MATING POST DATA	Mating Post Length	Min. Gold Plated Area					**B**						
	0.240"/6,10mm	0.180"/4,57mm											
TAIL (0.120"/3,05mm Standard)	COINED	0.028"/0,71mm DIAG						**R**					
	KINKED	0.028"/0,71mm DIAG						**K**					
	FINE LINE*	0.018"/0,46mm DIAG						**F**					
	SQUARE	0.025"/0,64mm SQ						**Q**					
*The FINE LINE option is not available in all pin lengths.													
SELECTED OPTIONS													
NOTE: LEAVE BLANK IF THE FOLLOWING DOESN'T APPLY.	ALIGNMENT POST (STRAIGHT ONLY)**								**H**				
	USE WITH "K" TAIL FOR STRADDLE MOUNT								**A**				
	OPTIONAL TAIL LENGTHS												
	0.090"									**T**	**0**	**9**	**0**
	0.165"									**T**	**1**	**6**	**5**
	0.220"									**T**	**2**	**2**	**0**
	0.300"									**T**	**3**	**0**	**0**

SIZES AVAILABLE		
	2 X 5	2 X 7
	2 X 8	2 X 10
NOTE: Other sizes may be available subject to minimum order levels. Contact factory for information.	2 X 12	2 X 13
	2 X 17	2 X 20
	2 X 25	2 X 30

**Alignment posts are molded into the insulator body. Contact factory for layout and dimensions.

Performance Specifications: PIN STRIP HEADERS

PRODUCT SERIES	PEG	TPEG	MPEG	FMPEG	DPEG	GPEG	GMPEG	LPEG	PLS PLT	MPLS MPLT	PGM	MPGM	DPGM	LPGM	PFF PFH	MPFF MPFH	PLF PLH	MPLF MPLH
PAGES	8 - 9 22 - 23 24 - 25	10 - 11	12 - 13 28 - 29	14 - 15	16 - 17	18 - 19 30 - 31	20 - 21	26 - 27	32 - 33	34 - 35	56 - 57 62 - 63 66 - 67	58 - 59 64 - 65	60 - 61	68 - 69	76 - 77 84 - 85 86 - 87	78 - 79 88 - 89	80 - 81	82 - 83 90 - 91
INSULATOR MATERIAL	Glass Filled (GF) Polyester				N / A	High Temp Thermoplastic		Glass Filled Polyester			High Temp Thermoplastic		N / A	High Temp Thermoplastic				
TEMPERATURE RANGE	- 55C to + 125C				N / A	- 65C to + 220C		- 55C to + 125C			- 65C to + 220C		N / A	- 65C to + 220C				
FLAMMABILITY RATING	All Crane Connector Products Are Rated At UL 94V-0																	
CONTACT MATERIAL	Phosphor Bronze																	
PLATING OPTIONS	G,T, or M,H,L,F										G,T, or H,L,F				G,F or T			
INSULATION RESISTANCE	50,000 Megohms				N / A	50,000 Megohms					5,000 Megohms		N / A	5,000 Megohms				
DWV (DIELECTRIC WITHSTANDING)	1500 VAC RMS				N / A	1500 VAC RMS					650 VAC RMS		N / A	650 VAC RMS				
CURRENT RATING	3 AMPS										1 AMP							

Recommended Plated Thru Hole Sizes - PIN STRIP HEADERS

PIN SIZE	DIA / DIAG	HOLE SIZE	USED ON
0.025" Square	0.034"	0.040" +/- 0.003"	PEG / MPEG / GPEG / TPEG / LPEG / FMPEG
0.025" Coined	0.030"	0.038" +/- 0.003"	PEG / MPEG / GPEG / TPEG / LPEG / FMPEG
0.025" Coined	0.030"	0.032" +/- 0.002"	DPEG
0.025" Fine Line	0.018"	0.023" +/- 0.003"	PEG / MPEG / GPEG / TPEG / LPEG / FMPEG
0.020" Square	0.025"	0.032" +/- 0.003"	PGM / MPGM / DPGM / LPGM
0.020" Rounded	0.020"	0.025" +/- 0.003"	PFF / PFH / MPFF / MPFH
0.018" Square	0.023"	0.030" +/- 0.003"	PFF / PFH / MPFF / MPFH
0.018" Round	0.018"	0.023" +/- 0.003"	PFF / PFH / MPFF / MPFH

Recommended Plated Thru Hole Sizes - BOARD MOUNT SOCKETS

PIN SIZE	HOLE SIZE	USED ON
0.030" x 0.016"	0.040" +/- 0.003"	ATP / ATL / MATP / MATL / ATS / ATT / GATT
0.028" x 0.009"	0.035" +/- 0.003"	ABS / ABH / BBP
0.031" x 0.011"	0.040" +/- 0.003"	ABT/BBP
0.020" x 0.008"	0.028" +/- 0.003"	ATM
0.025" x 0.025" SQ	0.040" +/- 0.003"	ATP / ATL / MATP / MATL

PERFORMANCE / TEST SPECIFICATIONS

QUALITY	
Quality Program Requirements	ISO 9001
Military Specifications - Connectors	MIL-C-55302D
Sampling Procedures and Tables for Inspection	MIL-STD-105
Quality Assurance Terms and Conditions	MIL-STD-109
Calibration Systems Requirements	MIL-STD-45662A
Inspection System Requirements	MIL-I-45208A
INSULATOR	
Plastic Material Specification	
Molding Plastics, Polyester,Thermoplastic	MIL-M-24519
Tests For Flammability	UL94V-O
UL Temperature Index	UL746B
Limiting Oxygen Index	ASTM D2863
Plastic Material Applied Tests	
Dielectric Strength, Short Term	ASTM D149
Dielectric, Constant	ASTM D150
Izod Impact Strength	ASTM D256
DC Resistance (Volume Resistivity)	ASTM D257
Arc Resistance	ASTM D495
Water Absorption	ASTM D570
Test for Tensile Strength	ASTM D638
Heat Deflection Temperature	ASTM D648
Compressive Strength	ASTM D695
Coefficient of Linear Thermal Expansion	ASTM D696
Shear Strength of Plastics	ASTM D732
Rockwell Hardness R-scale	ASTM D785
Flexural Strength of Plastics	ASTM D790
Specific Gravity and Density of Plastics	ASTM D792
Mold Shrinkage Flow	ASTM D995
Outgassing Test	ASTM E-595-84

CONTACTS	
Material Specifications	
Phosphor Bronze	QQ-B-750/ASTM B159
Copper and Copper Alloy 770	ASTM B122
General Specifications	
General Specifications for Contacts	MIL-C-39029D
POSTS	
Wire, Phosphor Bronze	QQ-B-750/ASTM B159
PLATING	
Outer Plating Specifications	
Gold - Type II, Grade C	MIL-G-45204
Tin/Lead	MIL-P-81728A
Under Plating Specifications	
Nickel	QQ-N-290
Copper	MIL-C-14550
Palladium Nickel	MIL-P-45209
Plating Applied Tests	
Coating Thickness (X-Ray Fluorescence)	ASTM-A-754-79
ASSEMBLY	
Testing Specifications	
Test Methods for Electrical Connectors	MIL-STD-1344A
Test Methods for Electrical and Electronic Components	MIL-STD-202
Connections, Electrical, Solderless, Wrapped	MIL-STD-1130B
Environmental Test Methods	MIL-STD-810
Packaging Specifications	
Connector, Preparations For Delivery Of	MIL-C-55330
Marking of Electronic Parts	MIL-STD-1285B
Marking for Shipment and Storage	MIL-STD-129
Identification Marking of US Military Property	MIL-STD-130
Bar Coding Symbology	MIL-STD-11898

Crane uses the above test methods in full or in part to determine compliance of its parts and materials to internal and customer supplied specifications.

PLATING SPECIFICATIONS		CONTACT AREA Inches (Millimeters)	PC TAIL Inches (Millimeters)	UNDERPLATE Inches (Millimeters)
G	Selective	15µ"(0,00038) gold	100µ"(0,00254) tin/lead - min.	50µ"(0,00127) nickel - min.
T	Tin/Lead	100µ"(0,00254) tin/lead	100µ"(0,00254) tin/lead - min.	50µ"(0,00127) nickel - min.
M	Selective	50µ"(0,00127) gold	100µ"(0,00254) tin/lead - min.	50µ"(0,00127) nickel - min.
H	Selective	30µ"(0,00076) gold	100µ"(0,00254) tin/lead - min.	50µ"(0,00127) nickel - min.
L	Selective	10µ"(0,00025) gold	100µ"(0,00254) tin/lead - min.	50µ"(0,00127) nickel - min.
F	Selective	3µ"(0,00008) gold	100µ"(0,00254) tin/lead - min.	50µ"(0,00127) nickel - min.

STANDARD TAIL OPTIONS ON .100" PIN STRIP HEADERS			
R	K	F	Q
COINED	KINKED	FINE LINE	SQUARE
The standard "R" option provides a coined tail improving solder action while making insertion easier.	The "K" option provides a kinked tail, reducing unwanted movement on the PC Board.	The "F" option combines an 0.018" rounded tail with an 0.025" square post. The fine line feature allows more traces between holes.	The "Q" option provides a 0.025" square tail for use in wire wrap applications.

STANDARDS

	ISO 9001
UL File No. E120111 (N)	Crane Connectors File No. A-3620
Recognized to U.S. and Canadian requirements under the Component Recognition Program of Underwriters Laboratories Inc.	Registered by UL to ISO9001 under UL's accreditation by Raad voor de Certificatie (RvC), the Dutch Council for Certification.