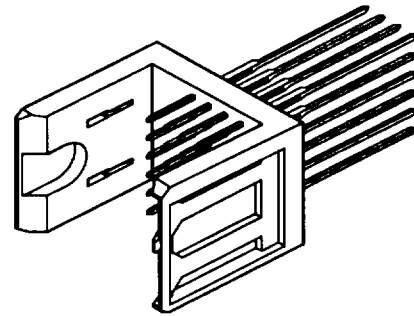


METRAL™ Press Fit Signal Header

Features

- Modular without loss of position
- Available in 12, 24, 48, and 96 mm module sizes
- Provides 24, 48, 96, and 192 I/Os in 4 x 6, 4 x 12, 4 x 24, and 4 x 48 configurations
- Pin length options for sequencing
- Rear plug-up/wire wrap capability
- 16 mm minimum circuit pack spacing



Technical Specifications


Parameter	Specification
Contact: Spacing Type Base Metal Finishes: Contact Surfaces Compliant Section	2 mm x 2 mm (0.079 in. x 0.079 in.) 0.5 mm (0.020 in.) Square Pin Phosphor Bronze Au (multiple thicknesses) or GXT™ Solder
Available Pin Lengths: mm (dimension A) in.	5.00 5.75 6.50 7.00 7.25 8.25 0.197 0.226 0.256 0.276 0.285 0.325
Available Exit Side Lengths: mm (dimension B) in.	4.3 13.7 17.1 0.169 0.539 0.673
Insulator Material Flammability Operating Temperature	Liquid Crystal Polymer (LCP), Glass-filled, Natural Color UL 94V-0, Oxygen Index = 37 -55°C to +85°C
Withstanding Voltage	1000 V rms (minimum)
Insertion Force (pin into backplane) Retention Force (pin in backplane)	100 N (22.5 lbs) per Pin (maximum) 33.4 N (7.5 lbs) per Pin (minimum)
Durability	200 Insertion/Extraction Cycles (minimum)
Max. Recommended* Current	1 A per Contact


* Based on a 30°C temperature rise, all contacts (up to a 4 x 6 module) carrying the same current, and free convection cooling.

Connecting Products

- METRAL Right Angle Signal Receptacle, pg. 9

Approvals and Certifications

 File No. E90508

 File No. LR46923

Application Services and Machines

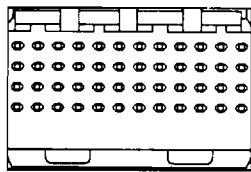
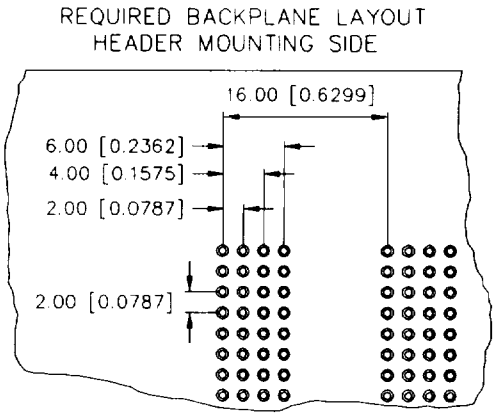
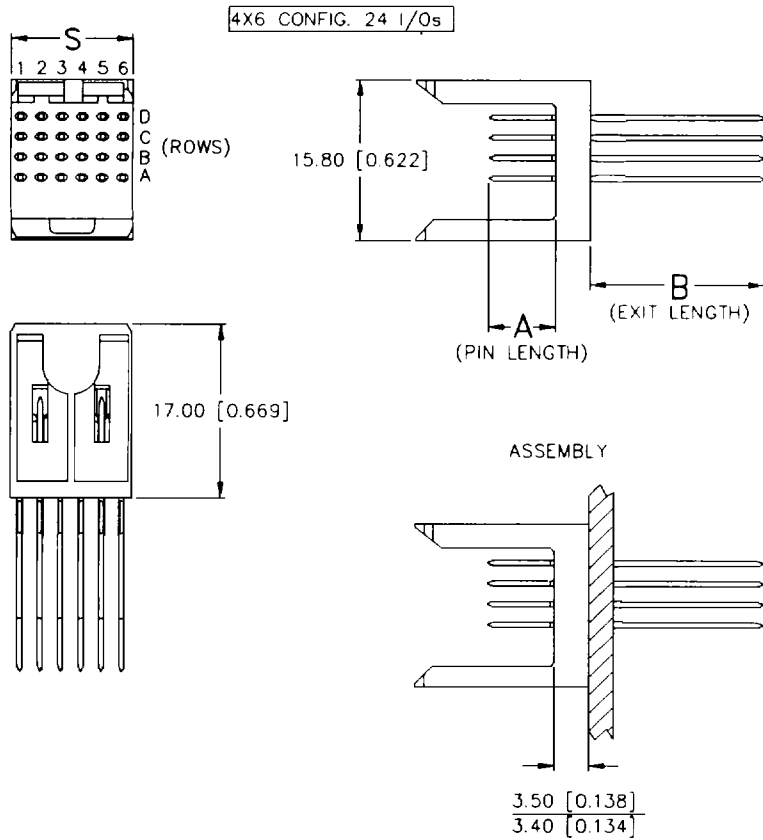
- Assembled backplanes, pg. 115
- Press Blocks and Related Hardware, pg. 123
- Shelf Level Backplane Repair Kit, MT370, pg. 127
- Wire Wrap Tools (Cooper Industries:
XE15145 - bit, 511274 - sleeve)

For Additional Information, Contact Your AT&T Representative or Call 1-800-372-2447

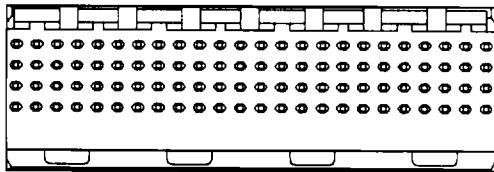
METRAL Press Fit Signal Header

Outline Drawings

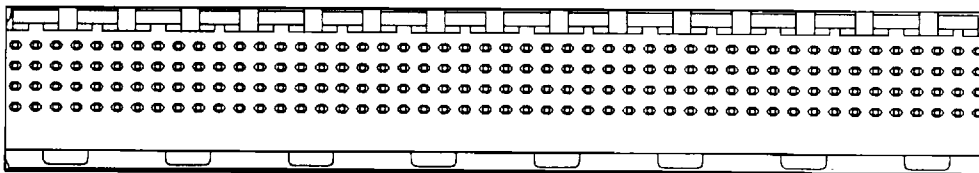
Dimensions mm [in.]



4X12 CONFIG. (48 I/Os)



4X24 CONFIG. (96 I/Os)



4X48 CONFIG. (192 I/Os)

PRESS-FIT HOLES	
FINISHED HOLE DIAMETER	0.65 - 0.80 [0.026 - 0.031]
DRILLED HOLE DIAMETER	0.81 - 0.86 [0.032 - 0.034]
RECOMMENDED DRILL BIT DIAMETER	0.85 mm
COPPER PLATING	0.025 - 0.065 [0.001 - 0.003]
SOLDER PLATING (OPTIONAL)	0.005 - 0.015 [0.0002 - 0.0006]

Ordering Information

METRAL Press Fit Headers offer many options as part of the standard product. The complete device code is a five-digit base followed by a three-digit dash number, e.g., 70232-116, 88925-121, or more generically #####-XYZ. For device codes 70232, 70233, 70234, and 70235, the available pin length options are 5.00 mm, 5.75 mm, 6.50 mm, and 7.25 mm. For device codes 88925, 88926, 88927, and 88928, the available pin lengths include all of the above plus 7.00 mm and 8.25 mm.

Dash Number Definitions

X	Y	Z
Plating Parameters	Exit Side Length (Dim. B)	Connecting Length (Dim. A)
1 denotes 0.8 μm Au 2 denotes 2.0 μm Au 3 denotes 1.3 μm Au 9 denotes 0.8 μm GXT*	1 or 4 or 7 denotes stub 2 or 5 or 8 denotes intermediate 3 or 6 or 9 denotes long See below for values	0 to 9: as shown on the next page

* Palladium Nickel Alloy with Gold Flash.

The table above provides for many options; the dimensions for a few are shown below. For the standard headers, only one pin style is permitted per row, up to a maximum of 4 different pin styles per header. The examples shown below are of the simplest type using only one pin style for all four rows. A list of device codes and their corresponding ordering numbers (comcodes) for the 0.8 μm Au plating is provided on the next two pages.

0.8 μm Au Plating: Range of Options

Device Code	Configuration	Dimension S		Dimension A (all rows)		Dimension B	
		mm	in.	mm	in.	mm	in.
70232-115	4 x 6	11.95	0.470	6.50	0.256	4.3	0.169
70233-126	4 x 12	23.95	0.943	5.75	0.226	13.7	0.539
70234-139	4 x 24	47.95	1.888	7.25	0.285	17.1	0.673
70235-125	4 x 48	95.95	3.778	6.50	0.256	13.7	0.539
88925-121	4 x 6	11.95	0.470	8.25	0.325	13.7	0.539
88926-111	4 x 12	23.95	0.943	8.25	0.325	4.3	0.169
88927-132	4 x 24	47.95	1.888	7.00	0.276	17.1	0.673
88928-131	4 x 48	95.95	3.778	8.25	0.325	17.1	0.673

For additional codes and ordering information, see the next two pages.

Packaging: Antistatic Plastic Tubes

Configuration	Minimum Order Quantity*	Quantity per Full Box
4 x 6	96	240
4 x 12	96	120
4 x 24	60	60
4 x 48	30	30

* Order in multiples of the minimum order or full box quantities.

METRAL Press Fit Signal Header

Ordering Information

12 mm Header Modules, 24 I/Os, (4 x 6): 0.8 μ m Au Plating

Stub Pin: Dimension B = 4.3 mm (0.169 in.)

Device Code	Ordering Number (comcode)	Dimension A							
		Row D		Row C		Row B		Row A	
		mm	in.	mm	in.	mm	in.	mm	in.
70232-110	106740939	5.00	0.197	5.75	0.226	5.75	0.226	6.50	0.256
70232-111	106421241	5.00	0.197	5.00	0.197	5.00	0.197	5.00	0.197
70232-112	106421720	5.00	0.197	5.00	0.197	5.00	0.197	6.50	0.256
70232-113	106422207	6.50	0.256	5.75	0.226	5.75	0.226	6.50	0.256
70232-114	106422686	7.25	0.285	6.50	0.256	6.50	0.256	7.25	0.285
70232-115	106423171	6.50	0.256	6.50	0.256	6.50	0.256	6.50	0.256
70232-116	106423106	5.75	0.226	5.75	0.226	5.75	0.226	5.75	0.226
70232-117	106424278	6.50	0.256	5.75	0.226	5.75	0.226	5.00	0.197
70232-118	106424286	6.50	0.256	5.00	0.197	5.00	0.197	5.00	0.197
70232-119	106740947	7.25	0.285	7.25	0.285	7.25	0.285	7.25	0.285
88925-111	106423924	8.25	0.325	8.25	0.325	8.25	0.325	8.25	0.325
88925-112	106423916	7.00	0.276	7.00	0.276	7.00	0.276	7.00	0.276
88925-113	106740996	8.25	0.325	7.00	0.276	7.00	0.276	8.25	0.325

Identical pin arrangements (dimension A) as described above are also provided in exit length styles of intermediate and long. Device codes and ordering numbers are provided below.

Intermediate: Dim. B = 13.7 mm (0.539 in.)

Device Code	Ordering Number (comcode)
70232-120	106740954
70232-121	106421407
70232-122	106421886
70232-123	106422363
70232-124	106423528
70232-125	106423536
70232-126	106422918
70232-127	106424294
70232-128	106424302
70232-129	106740962
88925-121	106423940
88925-122	106423932
88925-123	106741010

Long: Dim. B = 17.1 mm (0.673 in.)

Device Code	Ordering Number (comcode)
70232-130	106740970
70232-131	106421563
70232-132	106422041
70232-133	106422520
70232-134	106423544
70232-135	106423551
70232-136	106423569
70232-137	106424310
70232-138	106424328
70232-139	106740988
88925-131	106423965
88925-132	106423957
88925-133	106741028

For Additional Information, Contact Your AT&T Representative or Call 1-800-372-2447

Ordering Information

24 mm - 96 mm headers: 0.8 μm Au Plating

Identical pin arrangements (dim. A) and exit lengths (dim. B) for 24 mm headers (48 I/Os, 4 x 12), device codes 70233 and 88926, 48 mm headers (96 I/Os, 4 x 24), device codes 70234 and 88927, and 96 mm headers (192 I/Os, 4 x 48), device codes 70235 and 88928, are also provided. Device codes and ordering numbers (comcodes) for these sizes in the 0.8 μm Au plating are listed below. For device codes and ordering numbers for additional platings see Index C.

24 mm Modules (48 I/Os)	
Device Code	Comcode
70233-110	106740848
70233-111	106421258
70233-112	106421738
70233-113	106422215
70233-114	106422694
70233-115	106423395
70233-116	106422926
70233-117	106424757
70233-118	106424765
70233-119	106740855
88926-111	106423981
88926-112	106423973
88926-113	106740905
70233-120	106740863
70233-121	106421415
70233-122	106421894
70233-123	106422371
70233-124	106423577
70233-125	106423585
70233-126	106422934
70233-127	106424773
70233-128	106424781
70233-129	106740871
88926-121	106424005
88926-122	106423999
88926-123	106740913
70233-130	106740889
70233-131	106421571
70233-132	106422058
70233-133	106422546
70233-134	106423593
70233-135	106423601
70233-136	106423619
70233-137	106424799
70233-138	106424807
70233-139	106740897
88926-131	106424021
88926-132	106424013
88926-133	106740921

48 mm Modules (96 I/Os)	
Device Code	Comcode
70234-110	106741036
70234-111	106421266
70234-112	106421746
70234-113	106422223
70234-114	106422702
70234-115	106423403
70234-116	106422942
70234-117	106425234
70234-118	106425242
70234-119	106741044
88927-111	106424047
88927-112	106424039
88927-113	106741093
70234-120	106741051
70234-121	106421423
70234-122	106421902
70234-123	106422389
70234-124	106423627
70234-125	106423635
70234-126	106422959
70234-127	106425259
70234-128	106425267
70234-129	106741069
88927-121	106424062
88927-122	106424054
88927-123	106741119
70234-130	106741077
70234-131	106421589
70234-132	106422066
70234-133	106422538
70234-134	106423643
70234-135	106423650
70234-136	106423668
70234-137	106425275
70234-138	106425283
70234-139	106741085
88927-131	106424088
88927-132	106424070
88927-133	106741127

96 mm Modules (192 I/Os)	
Device Code	Comcode
70235-110	106741135
70235-111	106421274
70235-112	106421753
70235-113	106422231
70235-114	106422710
70235-115	106423163
70235-116	106422967
70235-117	106425713
70235-118	106425721
70235-119	106741143
88928-111	106424104
88928-112	106424096
88928-113	106741200
70235-120	106741150
70235-121	106421431
70235-122	106421910
70235-123	106422397
70235-124	106423676
70235-125	106423684
70235-126	106422975
70235-127	106425739
70235-128	106425747
70235-129	106741168
88928-121	106424120
88928-122	106424112
88928-123	106741218
70235-130	106741184
70235-131	106421597
70235-132	106422074
70235-133	106422553
70235-134	106423692
70235-135	106423700
70235-136	106423718
70235-137	106425754
70235-138	106425762
70235-139	106741192
88928-131	106424146
88928-132	106424138
88928-133	106741226