



Mixed Signal & Power Connectors

Product description

Mixed power & signal PCB connector

Approvals

Qualified at a system level on both civil and military programs

Features

- Rugged design
- Signal & power contacts
- High reliability contacts

Markets

Mil/Aero Space, Marine, Rail & Industrial

HPW PART NUMBER CONFIGURATOR

PERFORMANCE/SPECIFICATION			
MATERIAL		CURRENT RATING	Size 22: 5 Amp Size 16: 15 Amp
Insulator	Polyphenylene sulphide	INSULATION	5 Gigohms minimum at 500Vdc
Contact pin & socket	Copper alloy	MECHANICAL ENDURANCE	In excess of 2000 operations
Socket wires	Beryllium copper	ENGAGEMENT/WITHDRAWAL FORCES	0.42 N (1.5 oz) nominal per contact
		TEMPERATURE RANGE	-55°C to +125°C
Guides	Stainless steel	VOLTAGE RATING	400 V dc or ac peak nominal (@sealevel)
Contact Plating	MIL-G-45204 gold plate	MALE PIN DIAMETER	Size 22: 0.75 mm nominal Size 16: 1.56 mm nominal
Contact Resistance	Size 22: 11.0 milliohms maximum Size 16: 4.5 milliohms maximum		

ORDERING INFORMATION



PREFIX

No. of CAVITIES
63, 92, 100, 107

CONTACT PLATING
U = See below
S = U Plating with tin dipped termination

CONTACT GENDER
M = Male
F = Female

CONTACT TERMINATION
0 = No contacts
C = Crimp bucket
X = Through board solder - 180°
B = Through board solder - 90°
M = Mixed
Note: not all combinations are available

STANDARD VARIATIONS

000 = Standard
0P0 = Back potting
Non Readable Code = Contact mix configuraion etc.

POLARISING/GUIDES

CA = Male jacking, polarised, free rotating
TA = Female jacking, polarised, vertical mount
NB = Male polarised, vertical mount
FE = Female polarised, vertical mount
FB = Female polarised, float mount
NC = Male polarised, transverse mount
FF = Female polarised, transverse mount

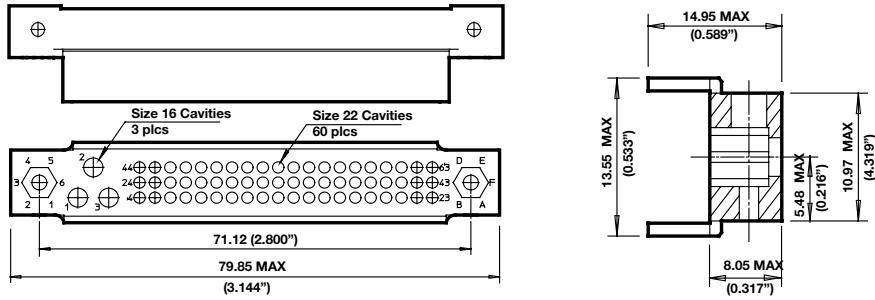
CONTACT PLATING FINISHES

Connector Finish Ordering Code	Description	Component	Component Finish Ordering Code	Conforms to	Plating Thickness*
U	Gold Plate	Socket	-/9	MIL-G-45204 (Type II, Grade C, Class 1)	1.27 µm gold plate 50 µin gold plate <i>minimum</i>
		Pin	-/7	MIL-G-45204 (Type II, Grade C, Class 1)	1.27 µm gold plate 50 µin gold plate <i>minimum</i>

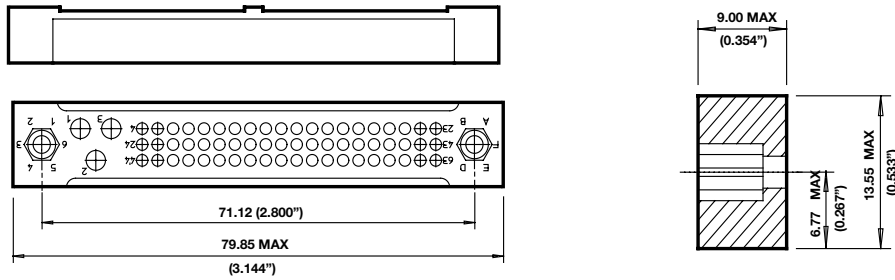
*PLATING THICKNESS
These values apply to mating surfaces.

HPW STANDARD INSULATORS

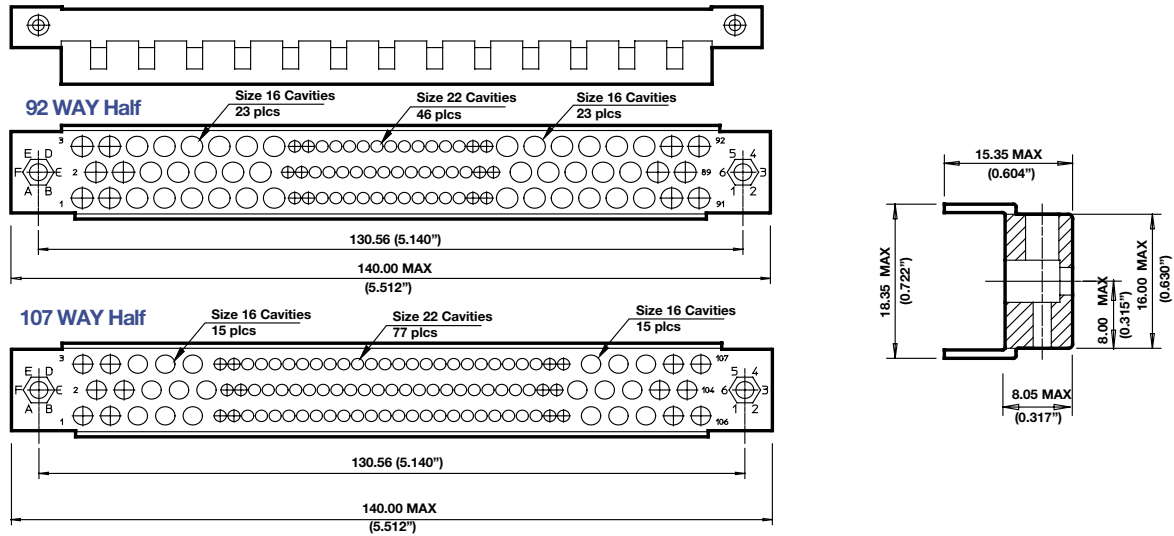
63 WAY Male Half



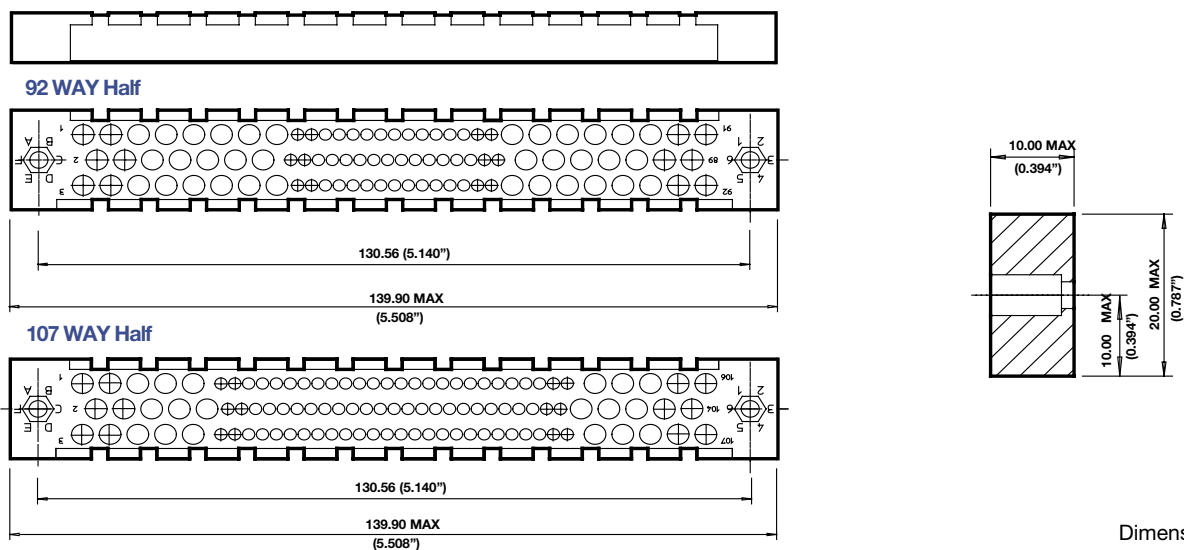
63 WAY Female Half



92;107 WAY Male Halves



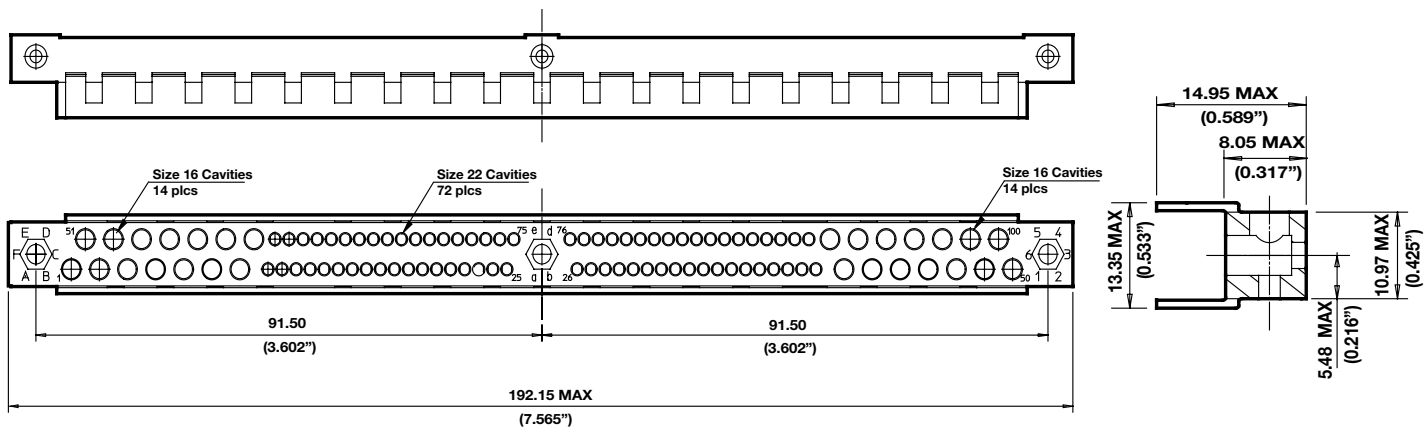
92;107 WAY Female Halves



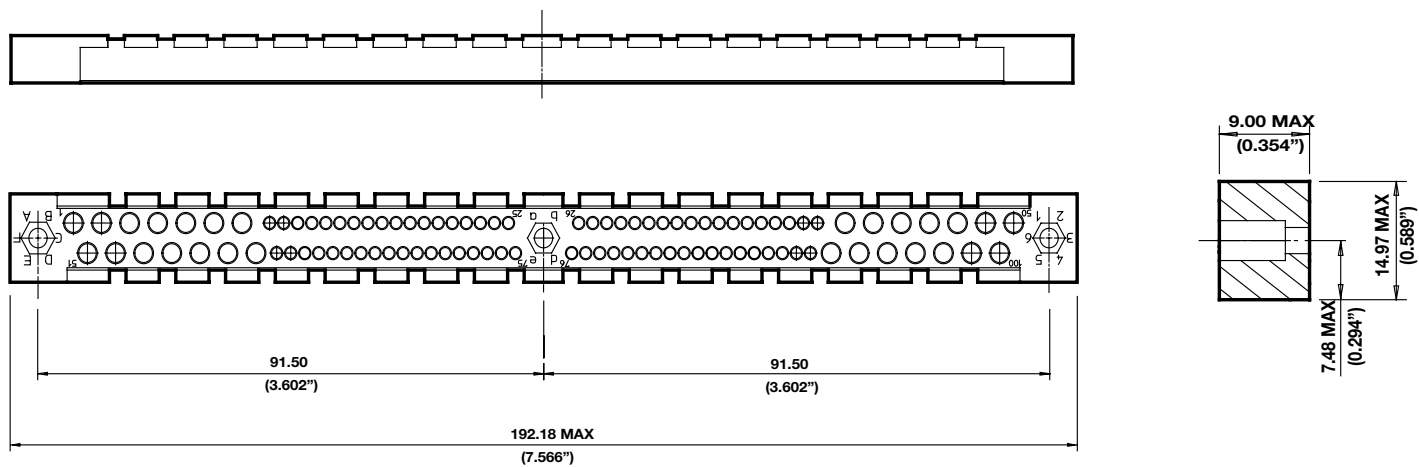
Dimensions are in mm

HPW STANDARD INSULATORS / TOOLING

100 WAY Male Half



100 WAY Female Half



Tooling

	Crimp Tool (Mil Specification)	Positioner	Extraction Tool	Insertion Tool
Size 22 Contacts	M22520/2-01	HPW-501	HPW-521	Pair of Non-ferrous Tweezers
Size 16 Contacts	M22520/1-01	HPW-502	HPW-512	Pair of Non-ferrous Tweezers

Dimensions are in mm

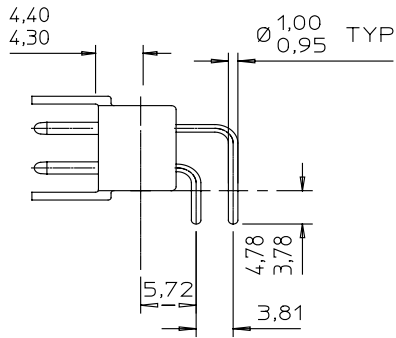
HPW STANDARD PCB TERMINATIONS

MALE HALF

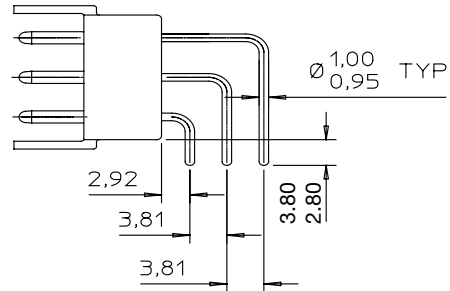
TERMINATION B: Through Board Solder 90°

Size 16

63 Way & 100 Way

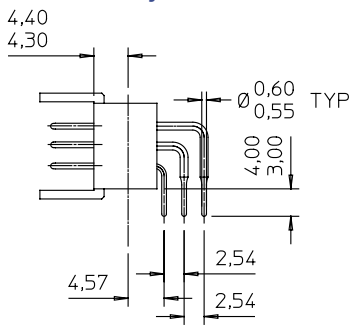


92 Way & 107 Way

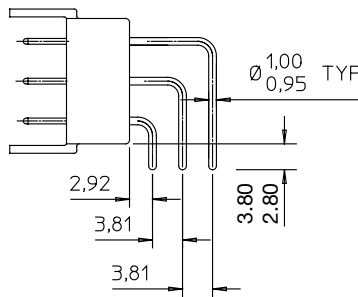


Size 22

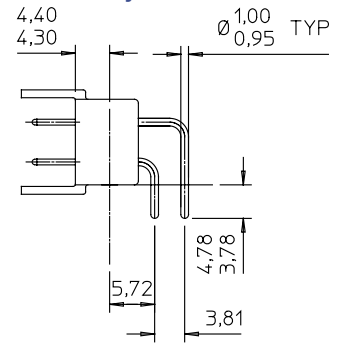
63 Way



92 Way & 107 Way



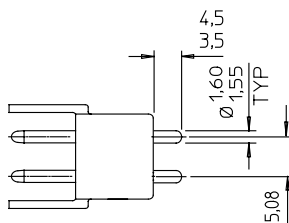
100 Way



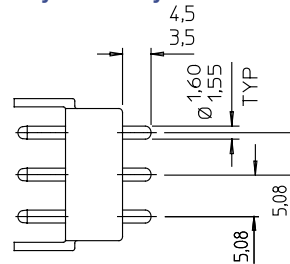
TERMINATION X: Through Board Solder 180°

Size 16

63 Way & 100 Way

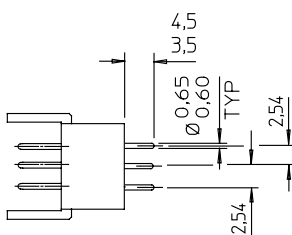


92 Way & 107 Way

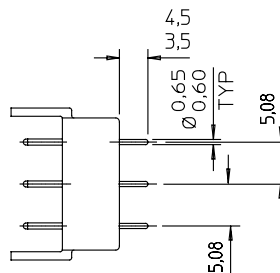


Size 22

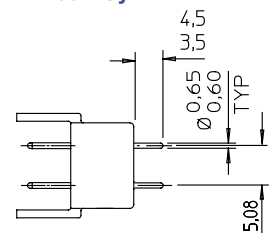
63 Way



92 Way & 107 Way



100 Way



Dimensions are in mm

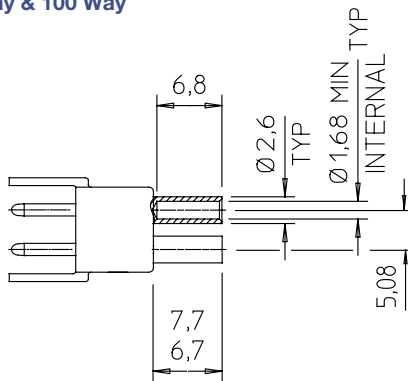
HPW STANDARD PCB TERMINATIONS

MALE HALF

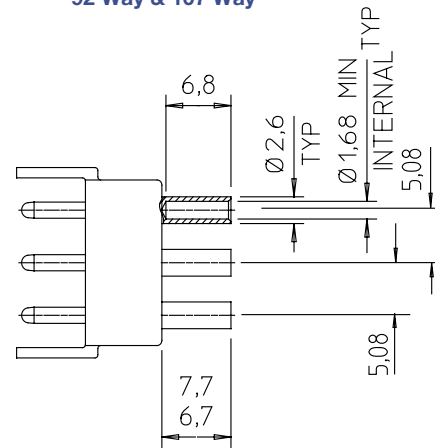
TERMINATION C: Crimp Bucket

Size 16

63 Way & 100 Way

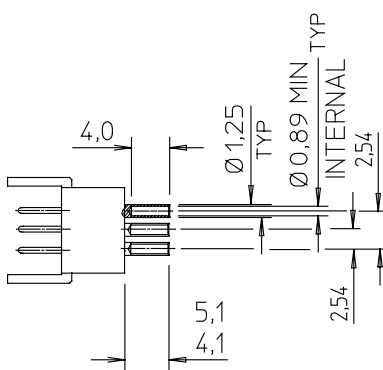


92 Way & 107 Way

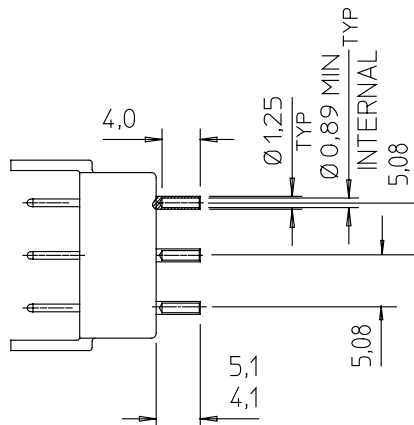


Size 22

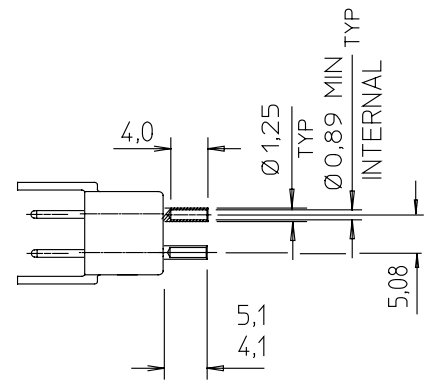
63 Way



92 Way & 107 Way



100 Way



Dimensions are in mm

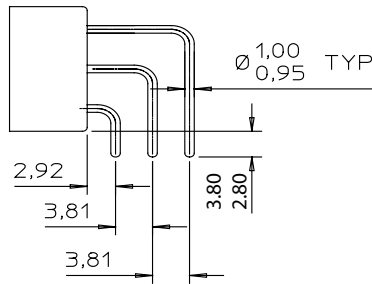
HPW STANDARD PCB TERMINATIONS

FEMALE HALF

TERMINATION B: Through Board Solder 90°

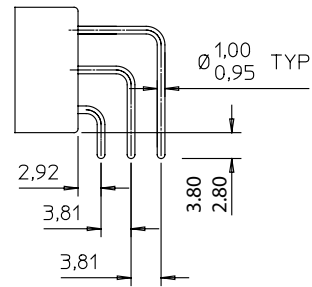
Size 16

92 Way & 107 Way



Size 22

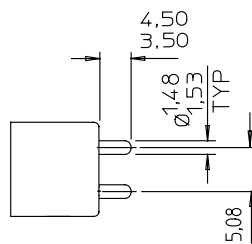
92 Way & 107 WAY



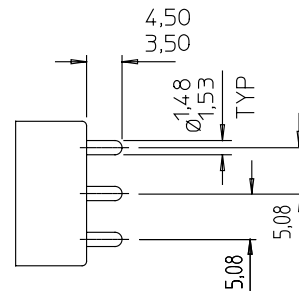
TERMINATION X: Through Board Solder 180°

Size 16

63 Way & 100 Way

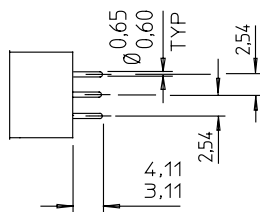


92 Way & 107 Way

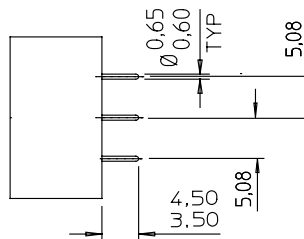


Size 22

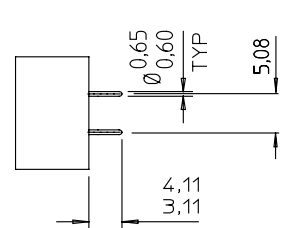
63 Way



92 Way & 107 Way



100 Way



Dimensions are in mm

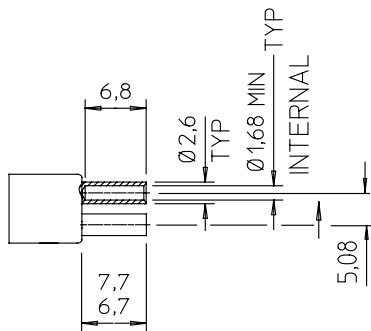
HPW STANDARD PCB TERMINATIONS

FEMALE HALF

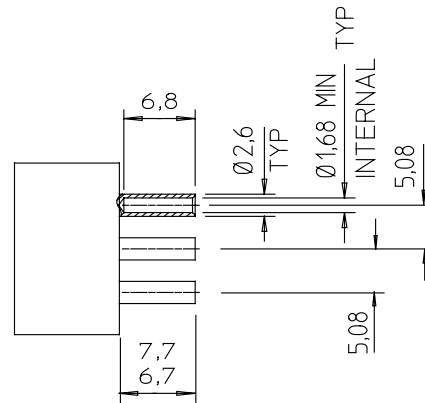
TERMINATION C: Crimp Bucket

Size 16

63 Way & 100 Way

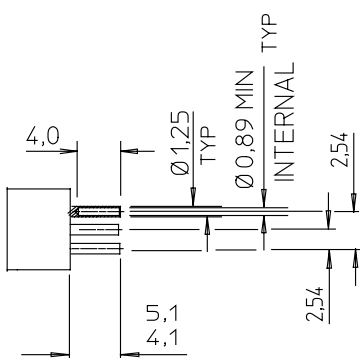


92 Way & 107 Way

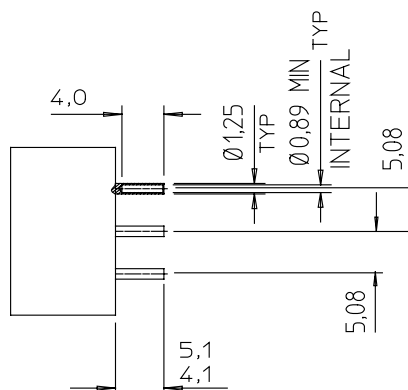


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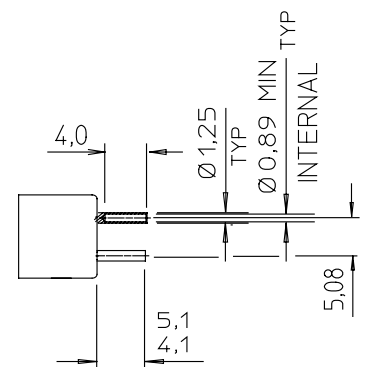
63 Way



92 Way & 107 Way



100 Way



Dimensions are in mm

HPW STANDARD GUIDES MALE/FEMALE

MALE GUIDE INDEX

Style CA	Jacking, free rotating;	Polarised;	Vertical mounting;
Style NB		Polarised;	Vertical mounting;
Style NC	Bracket (92; 107 Way only)	Polarised;	Transverse mounting;

FEMALE GUIDE INDEX

Style FB	Float;	Polarised;	Vertical mounting;
Style FE		Polarised;	Vertical mounting;
Style FF	Bracket;	Polarised;	Transverse mounting;
Style TA	Jack Socket;	Polarised;	Vertical mounting;

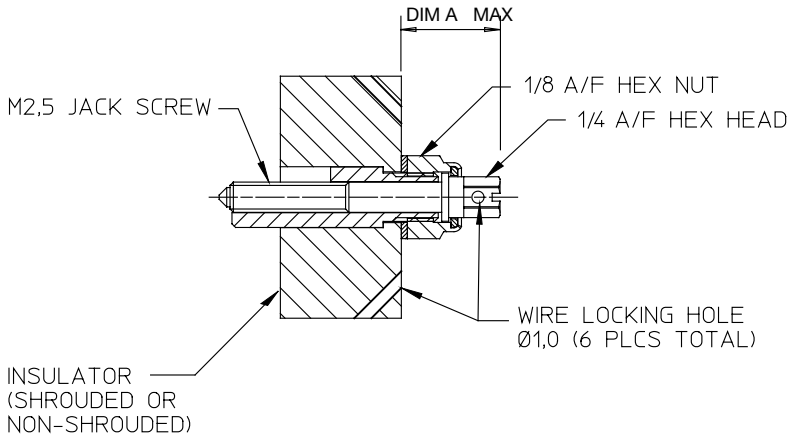
MALE GUIDES

	CA	NB	NC
FEMALE GUIDES	FB		
	FE		
	FF		
	TA		

Dimensions are in mm

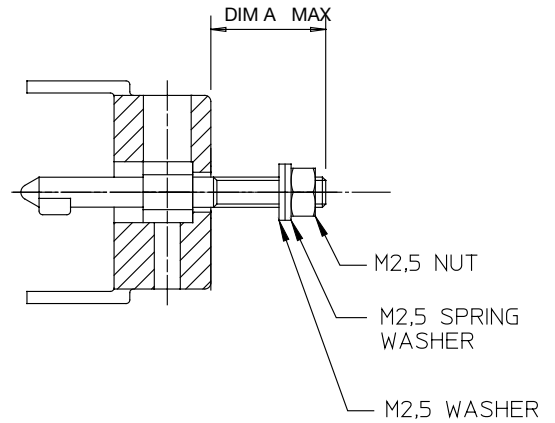
HPW STANDARD GUIDES MALE

Style CA (92; 107 Way) Jacking Polarised, Free Rotating



Style	Dim A Max (Mated)	Dim A Max (Free)
CA	8.60 0.339"	8.25 0.325"

Style NB (63; 92; 100; 107 Way) Polarised, Vertical Mount

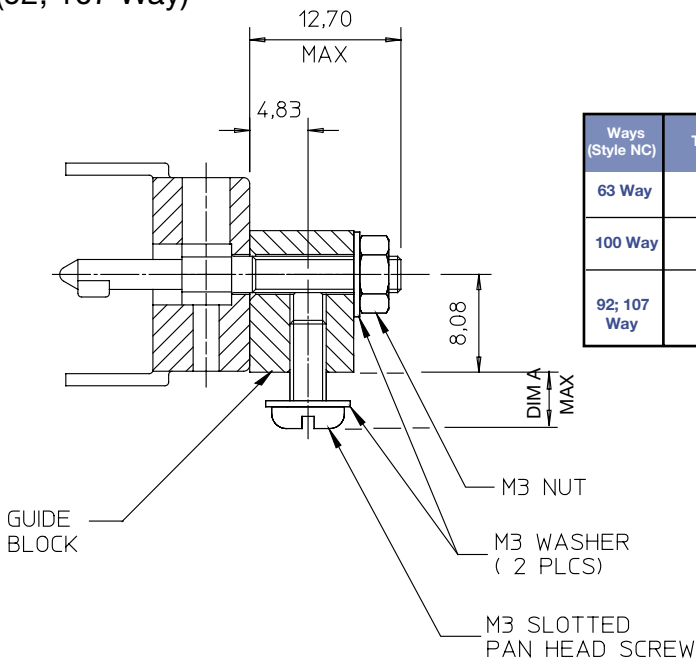


Style	Board Thickness Max	Dim A Max
NB	5.60 0.220"	9.75 0.384"

Style NC

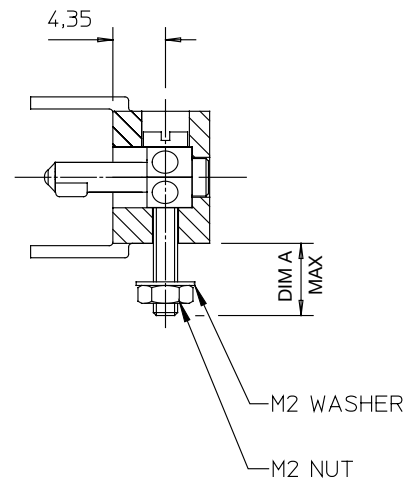
Polarised, Transverse Mount

(92; 107 Way)



Ways (Style NC)	Board Thickness Max	Dim A Max
63 Way	2.00 0.079	5.40 0.213"
100 Way	5.00 0.197"	8.40 0.331"
92; 107 Way	3.10 0.122"	5.50 0.217"

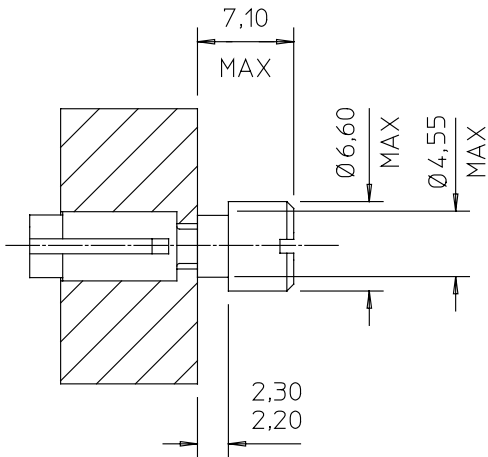
(63; 100 Way)



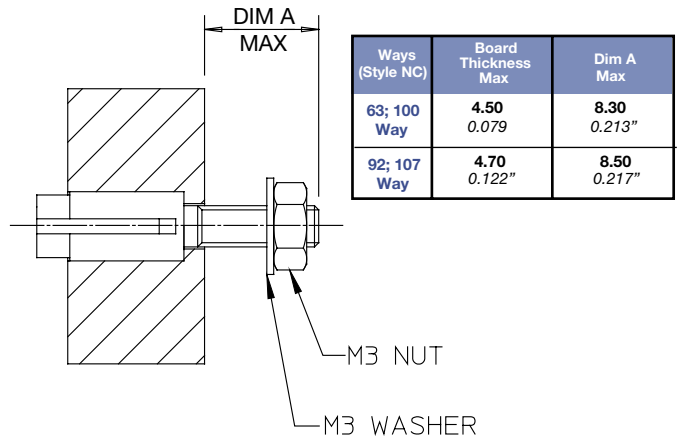
Dimensions are in mm

HPW STANDARD GUIDES FEMALE

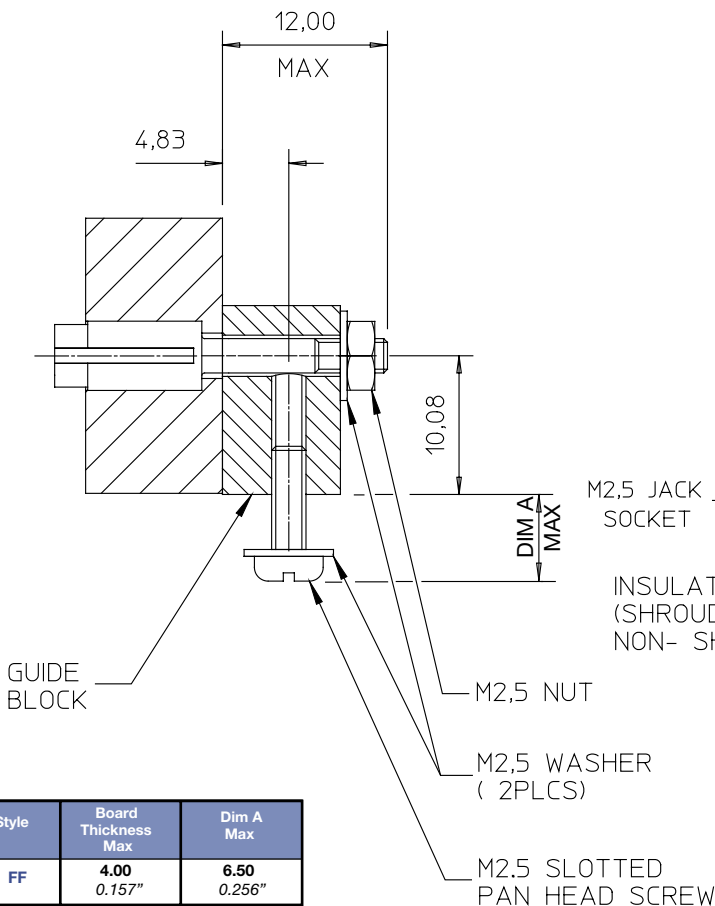
Style FB (92;107 Way)
Polarised Float Mount Socket, Vertical



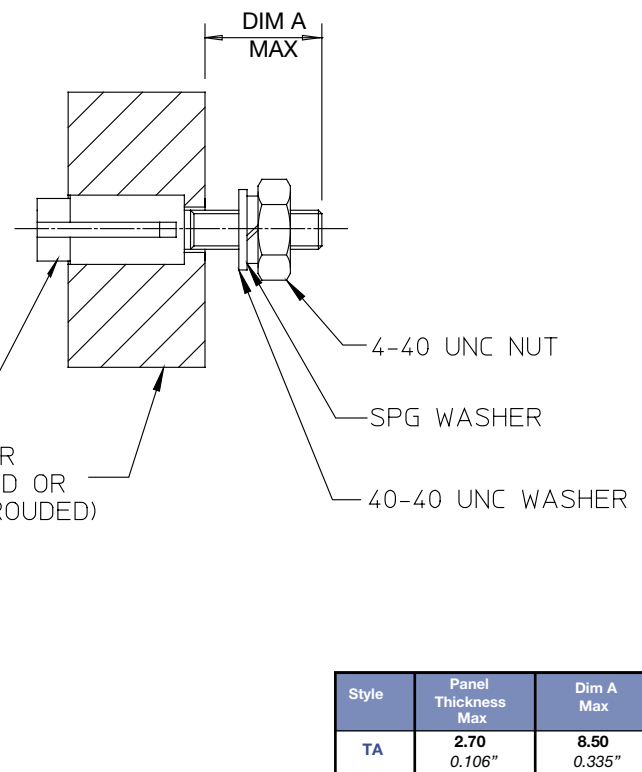
Style FE (63; 92; 100; 107 Way)
Polarised Socket, Vertical Mount



Style FF (92;107 Way)
Polarised Socket, Transverse Mount



Style TA (92;107 Way)
Polarised Jack Socket, Vertical Mount

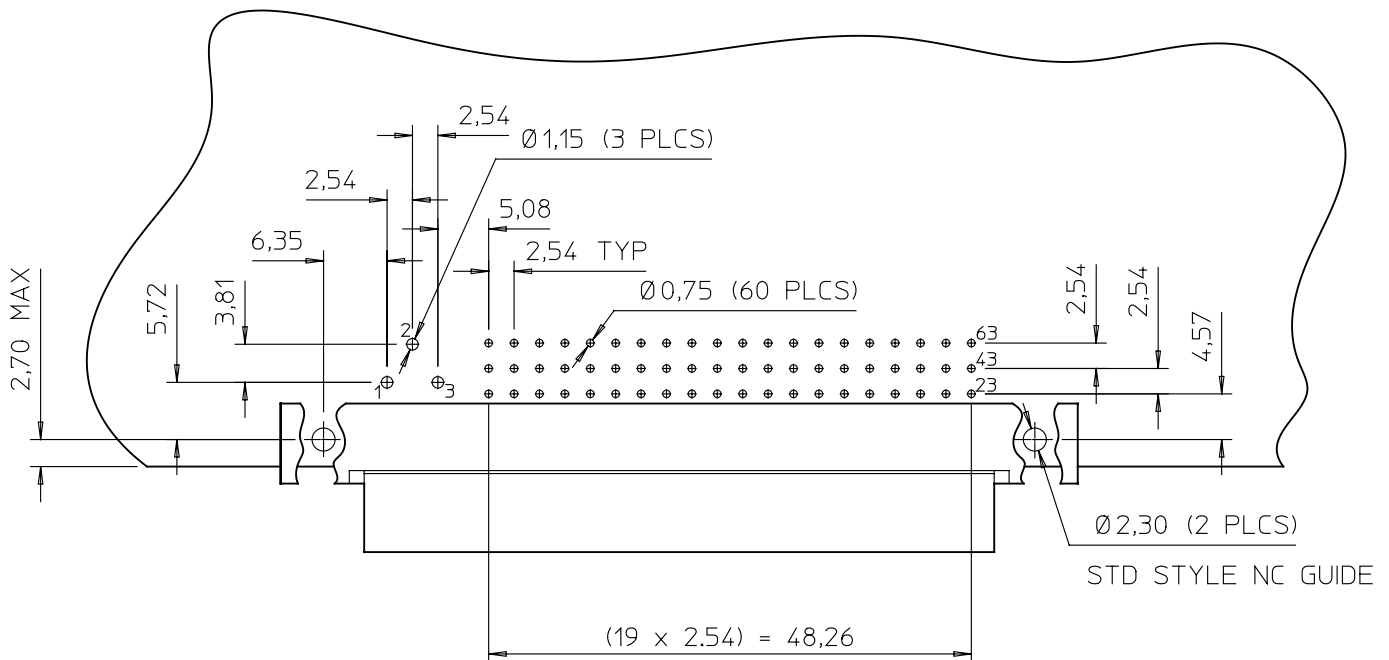


Dimensions are in mm

HPW PCB STANDARD 90° PREPARATIONS DETAILS

63 WAY 90° PCB LAYOUT

MALE

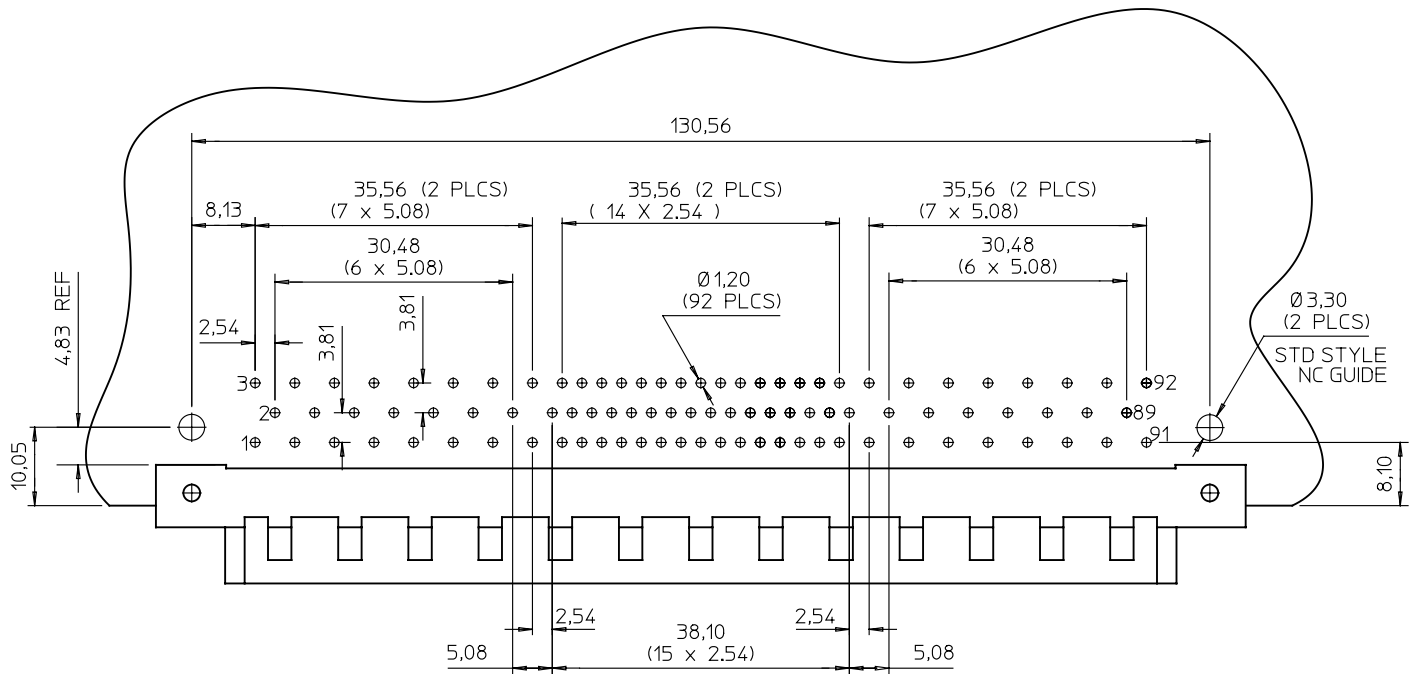


Dimensions are in mm

HPW PCB STANDARD 90° PREPARATIONS DETAILS

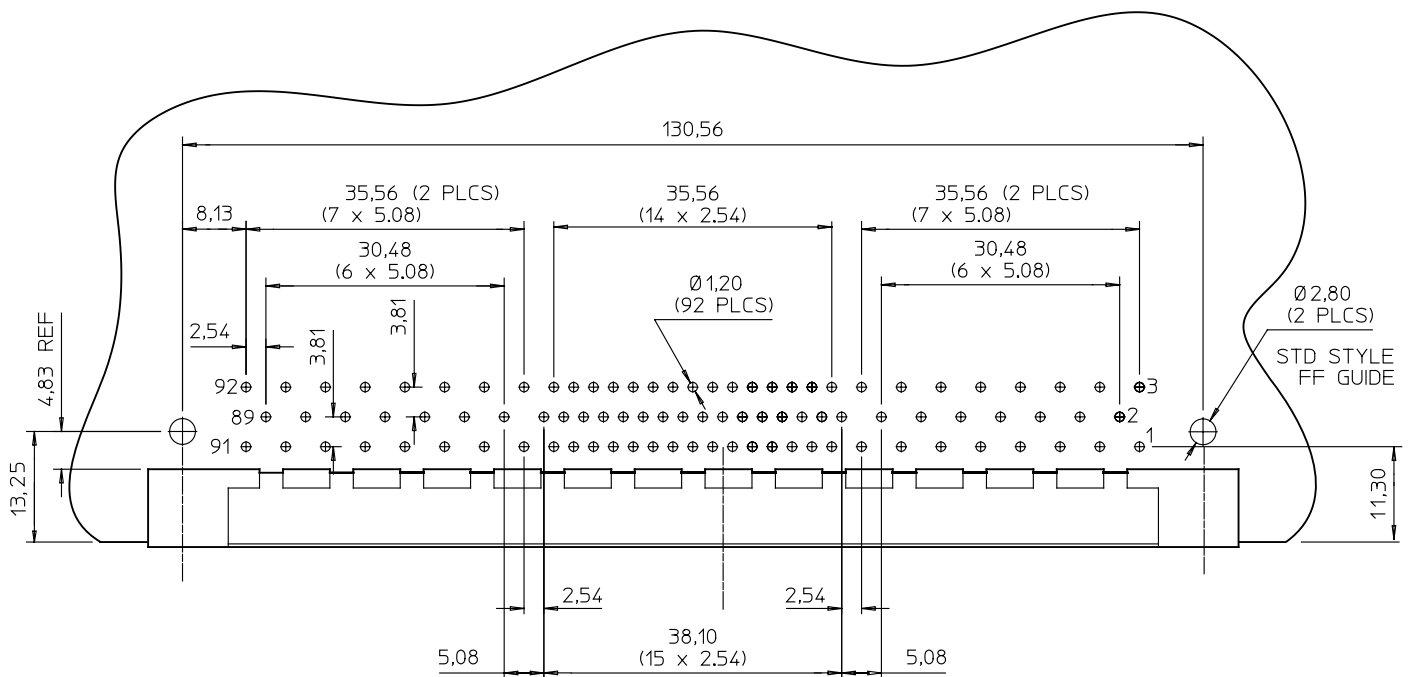
92 WAY 90° PCB LAYOUT

MALE



92 WAY 90° PCB LAYOUT

FEMALE

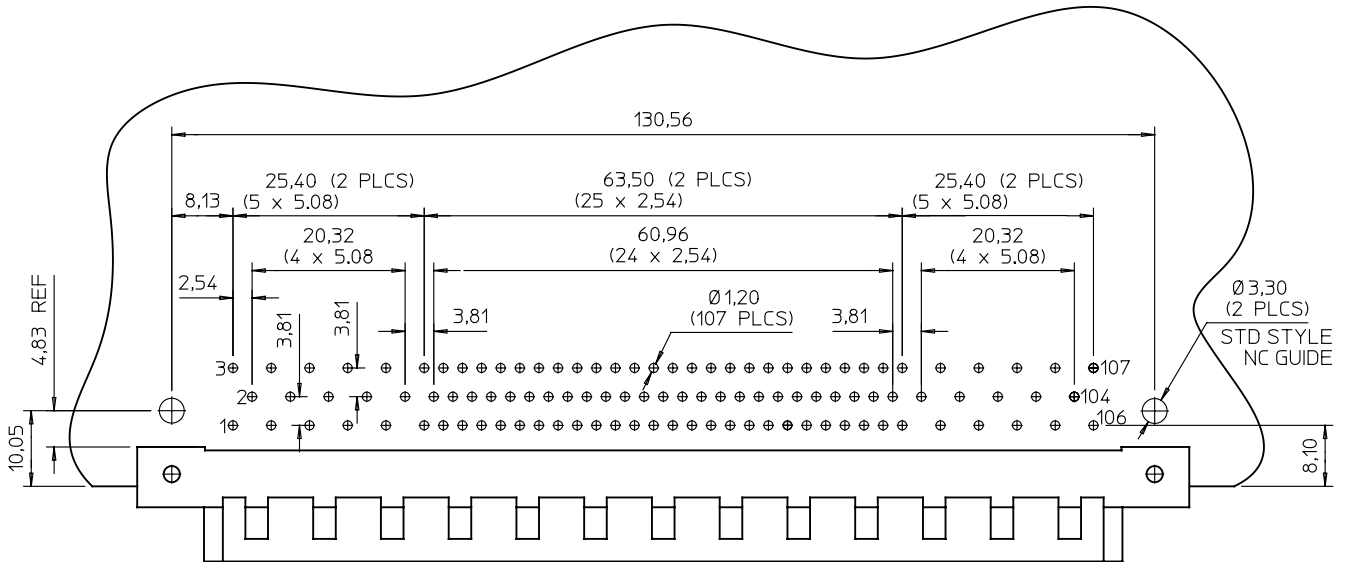


Dimensions are in mm

HPW PCB STANDARD 90° PREPARATIONS DETAILS

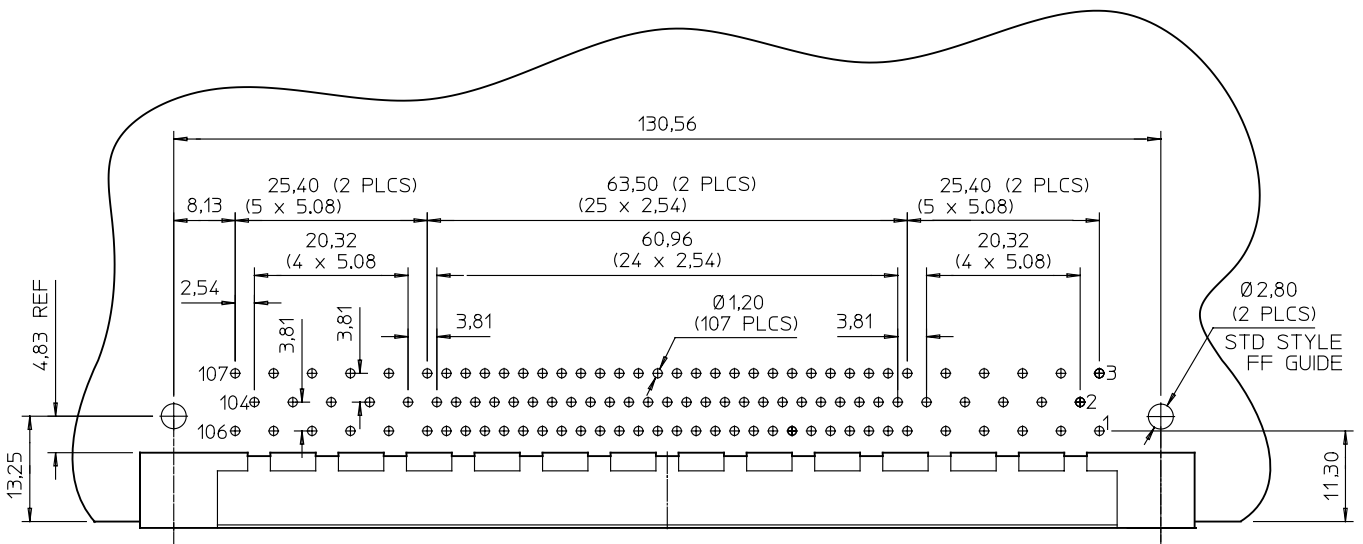
107 WAY 90° PCB LAYOUT

MALE



107 WAY 90° PCB LAYOUT

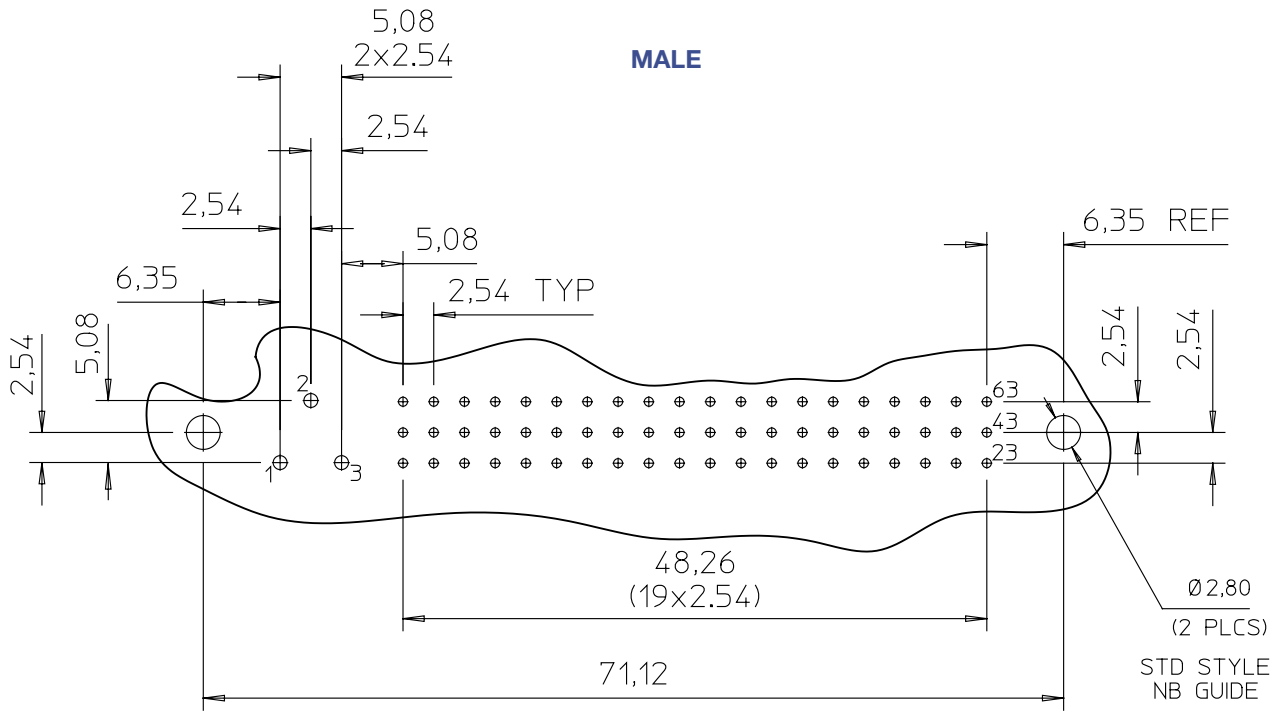
FEMALE



Dimensions are in mm

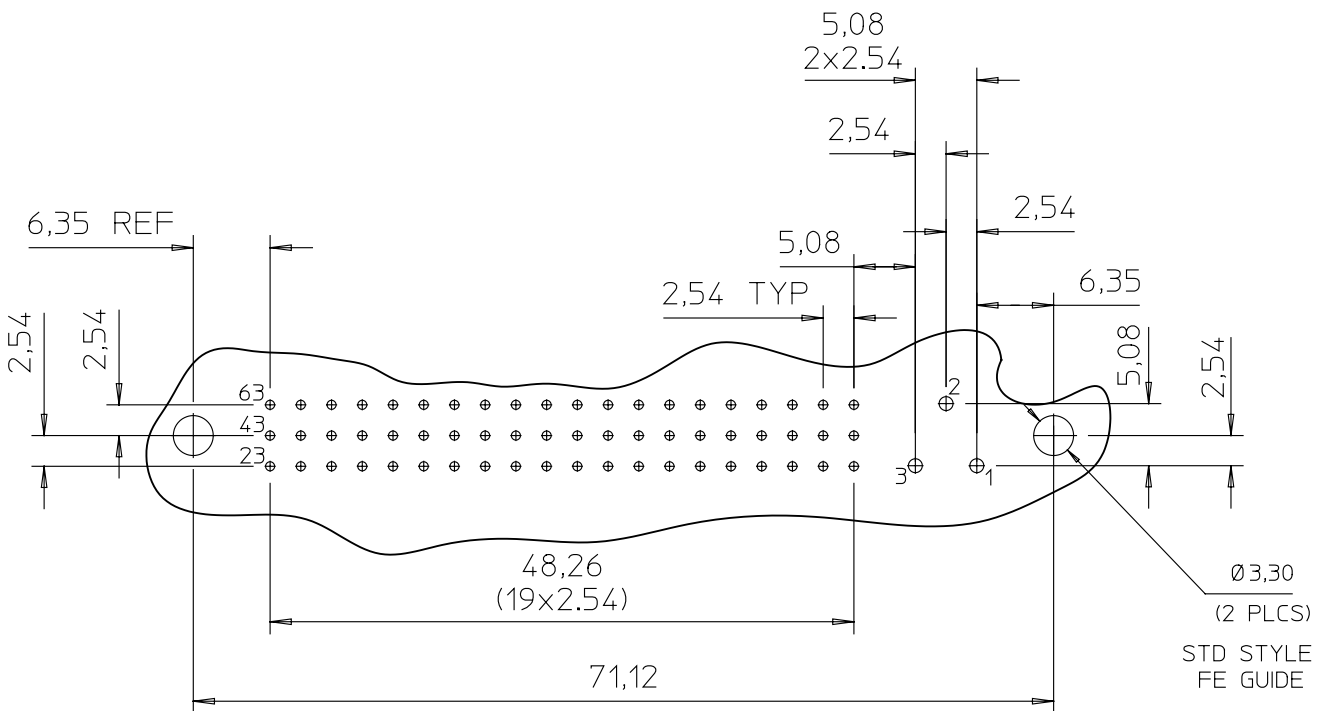
HPW PCB STANDARD 180° PREPARATIONS DETAILS

63 WAY 180° PCB LAYOUT



63 WAY 180° PCB LAYOUT

FEMALE

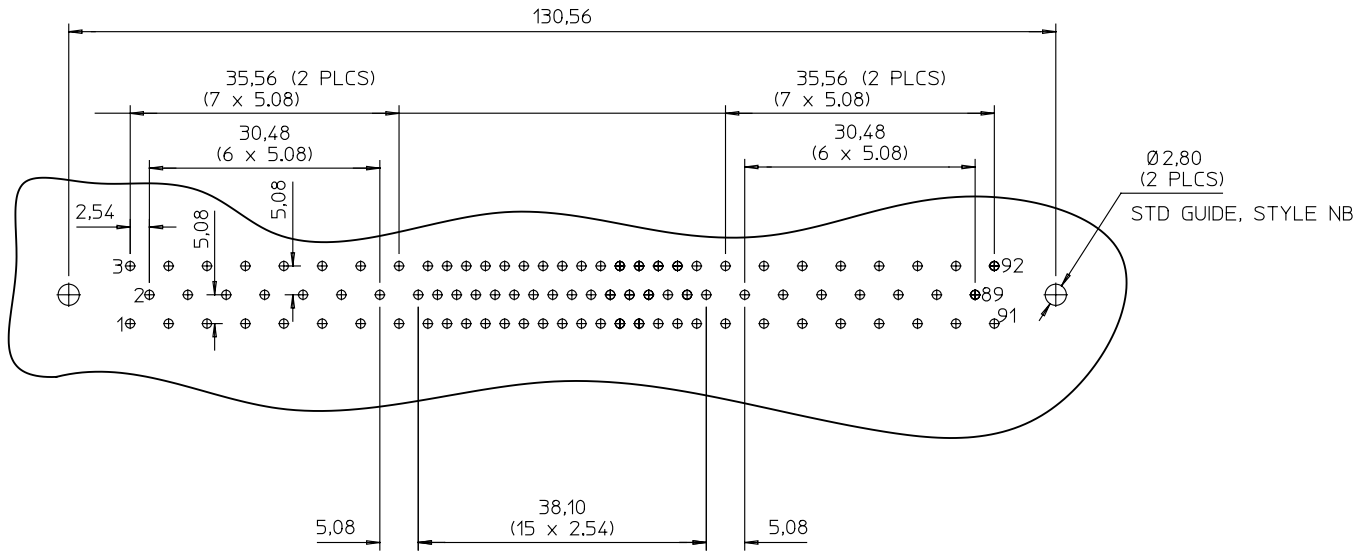


Dimensions are in mm

HPW PCB STANDARD 180° PREPARATIONS DETAILS

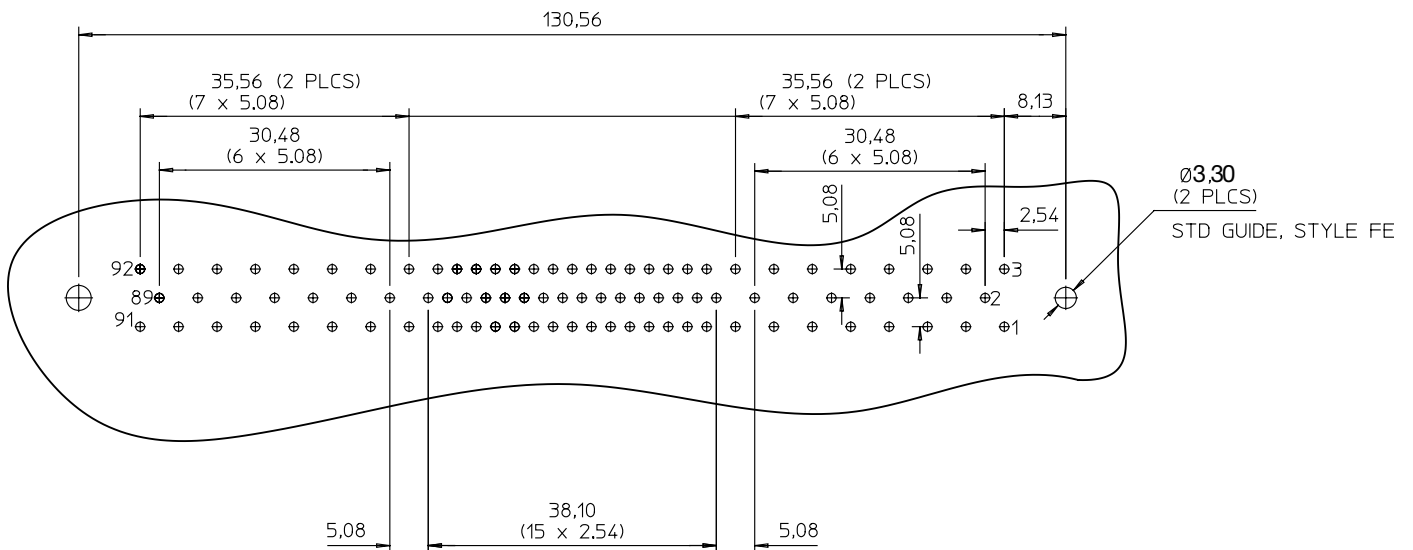
92 WAY 180° PCB LAYOUT

MALE



92 WAY 180° PCB LAYOUT

FEMALE

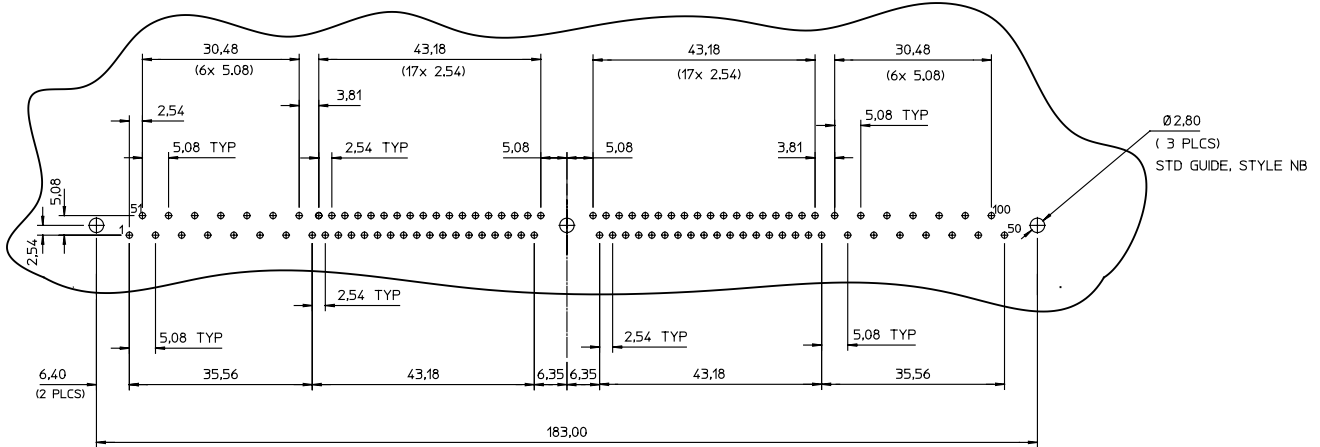


Dimensions are in mm

HPW PCB STANDARD 180° PREPARATIONS DETAILS

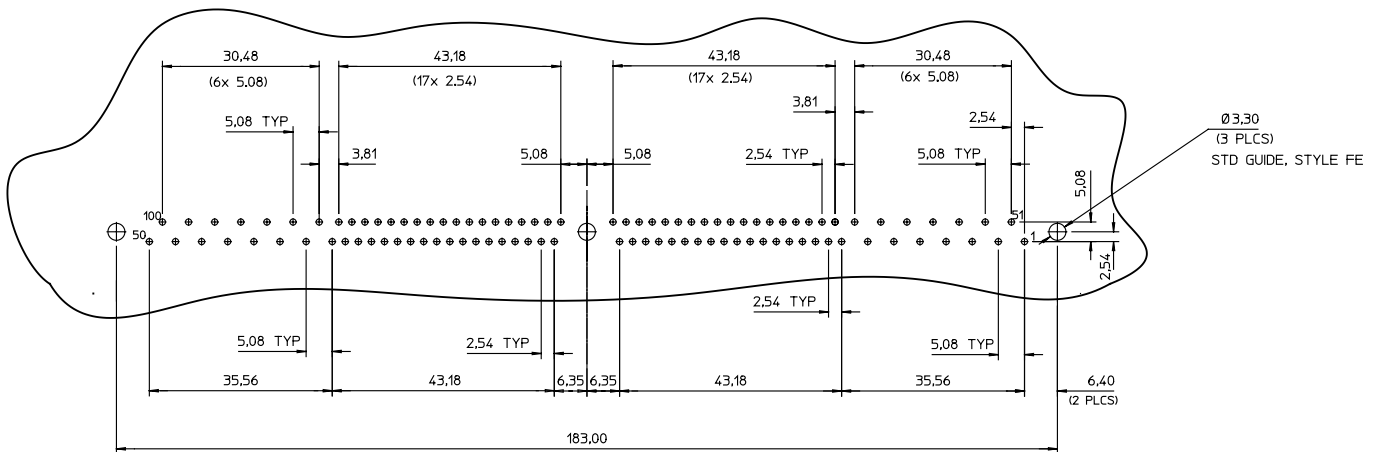
100 WAY 180° PCB LAYOUT

MALE



100 WAY 180° PCB LAYOUT

FEMALE

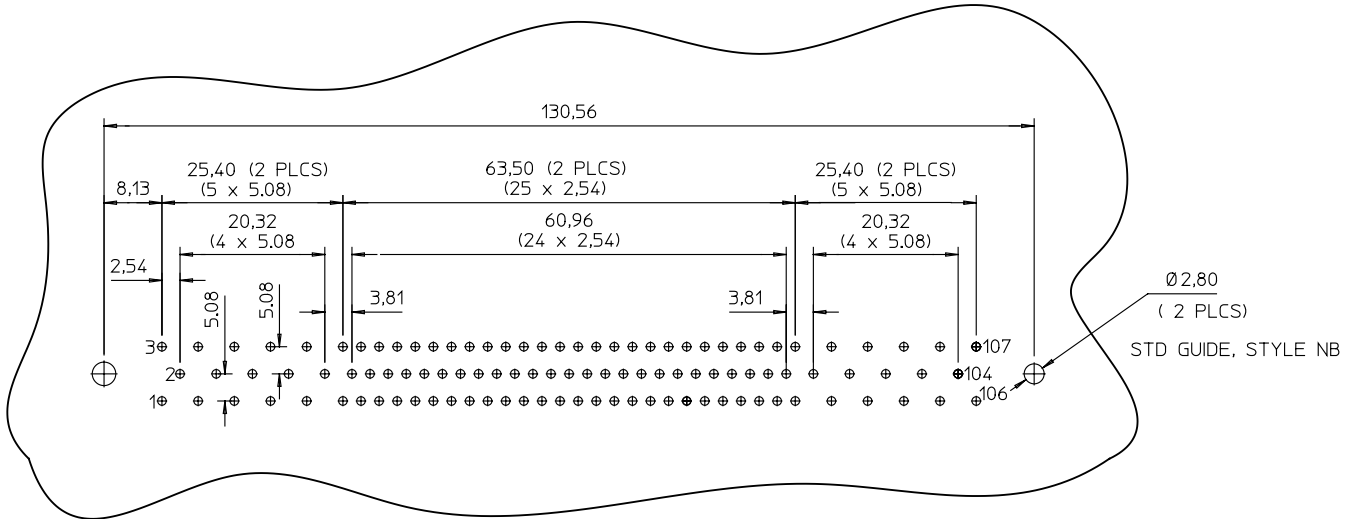


Dimensions are in mm

HPW PCB STANDARD 180° PREPARATIONS DETAILS

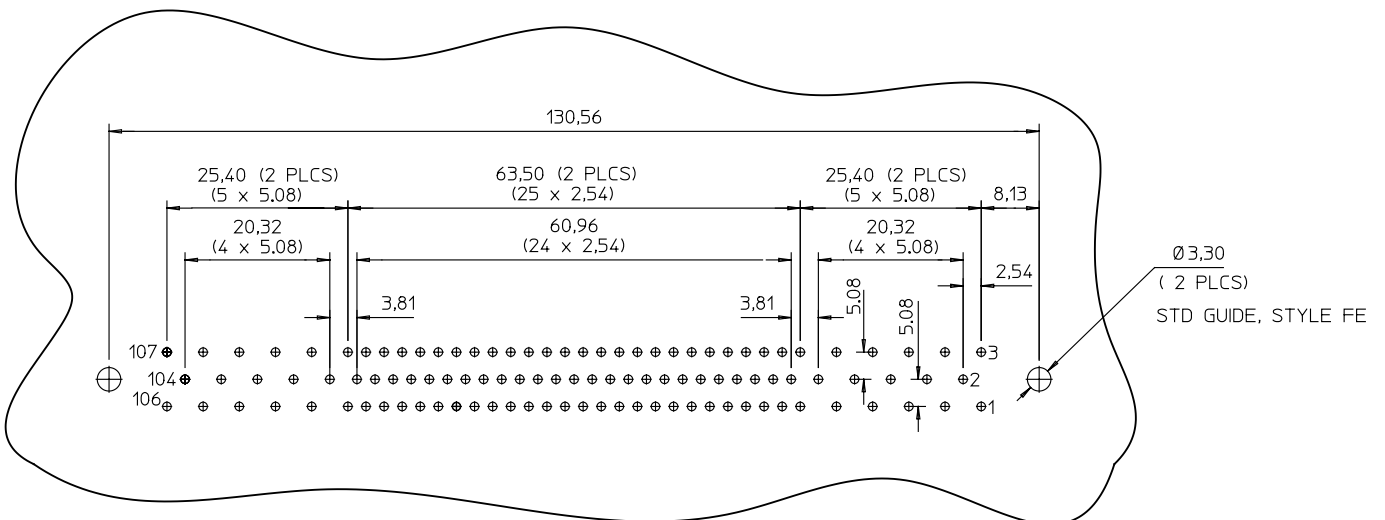
107 WAY 180° PCB LAYOUT

MALE



107 WAY 180° PCB LAYOUT

FEMALE



Dimensions are in mm