

# MODULAR

L Series

N Series



All products are available on 3D Config





L Series modular connectors employ a do-it-yourself system based on the building block principle. They offer a wide variety of combinations available in a single connector frame. Thus, the user is capable of selecting the connector that fulfills exact requirements with off-the-shelf components.

In this application, the low insertion and extraction forces of the Hypertac contact technology enable the user to assemble large numbers of contacts in a single connector that mates and unmates smoothly and easily.

- L Series can be built for the following:
- Rack and panel applications
  - Standard
  - With Jackscrews (standard and quick disconnect)
  - With floating mounting
- Cable applications
  - Hooded with rounded or flat cable clamps
  - With Jackscrews (standard and quick disconnect)
- Programming applications

L Series systems are composed of two elements: modules and frames.

Modules are the connector elements of the system. Various types of contacts are available such as signal, power and coaxial. The contacts are mounted in small plastic blocks. Crimp contacts are also available in plastic blocks that can be mounted individually or together into the frame. The width of each module block is designated in units.

Modules available with fixed contacts:

- 2 contacts at 200 Amps (Type P)
- 2 contacts at 50 Amps (Type M)
- 2 contacts at 25 Amps (Type C)
- 4 contacts at 16 Amps (Type N)
- 3 contacts at 15 Amps (Type B)
- 5 contacts at 8 Amps (Type A)
- 17 contacts at 8 Amps (Type D)
- 2 contacts at 5 Amps (Type E)
- 2 contacts high voltage (Type H)

Modules available with "Snap In" crimp contacts:

- 1 contact at 200 Amps (Type G)
- 1 contact at 100 Amps (Type K)
- 2 contacts at 25 and 50 Amps (Type U)
- 3 contacts at 25 Amps (Type V)
- 3 contacts at 15 Amps (Type S)
- 5 contacts at 8 Amps (Type R)
- 30 contacts at 4 Amps (Type W)
- 3 contacts coaxial (Type V)

The frames hold the modules in position. They range from a basic frame consisting of 2 side rails and 2 end caps to more complex versions with Jackscrews, hoods and cable clamps. All frames are available in numerous lengths to conform to almost any combination of modules.

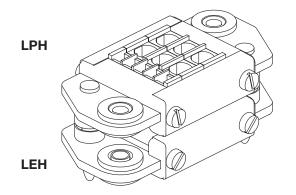
With the L Series, specially designed connectors can be purchased quickly and inexpensively, eliminating the extra cost and delay of custom tooling.



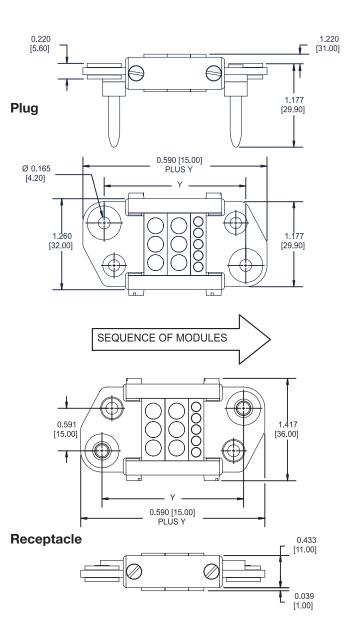


### Frame H

W File No.: UL E102195

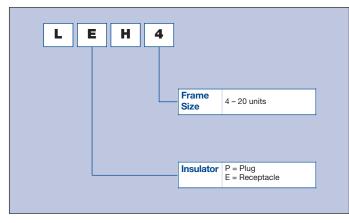


- Rack and panel with guides
- Float mounting 0.049 [1.25]<sup>2</sup> max. from center



Weight, Excluding Mo	odules			
Plug	1.9 oz. at 4 units 2.8 oz. at 20 units			
Receptacle	1.6 oz. at 4 units 2.5 oz. at 20 units			

# **Ordering Information**



NOTES:

See mounting dimensions.
 Available option: 0.125 inch float (use modification 398).

Dimensions are in inches [mm]

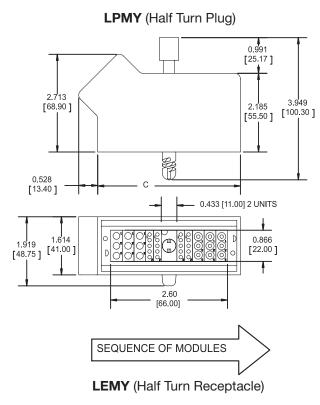
# **Mounting Dimensions**

Units	4	5	e	;		7		8	9
Y	1.969 [50.00]	2.185 [55.50				618 6.50]		2.835 72.00]	3.051 [77.50]
Units	10	11	1	2		13		14	15
Y	3.268 [83.00]	3.484 [88.50				917 9.50]		4.134 05.00]	4.350 [110.50]
Units	16	17	18	1	9	20		21	22
Y	4.567 [116.00]	4.784 [121.50]	5.00 [127.00]	5.2 [132		5.43 [138.0	-	5.650 (143.50)	5.866 (149.00)



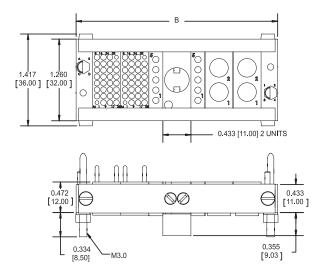
### Frame MY (Plastic Backshells)

- 180° quick turn
- Up to 300 signal contacts
- Adjustable cable clamp: 0.425 to 1.26 [11.50 to 32.00]
- > 5,000 mating cycles



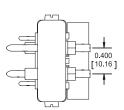
- 36 keying combinations
- Rugged black polycarbonate backshell
- Built-in pin protection
- 12, 15, 20 and 22 unit lengths

Number of	Dimensions						
Units	В	С					
12	3.11 [79.00]	3.315 [84.20]					
15	3.76 [95.50]	3.965 [100.70]					
20	4.843 [123.00]	5.047 [128.20]					
22	5.276 [134.00]	5.480 [139.20]					

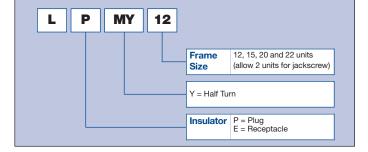


**NOTES:** 1) See mounting dimensions.

2) Half turn plug frame without hood available as LPMMY.



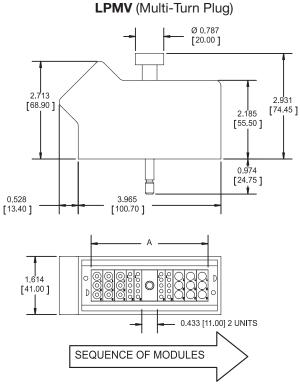
# **Ordering Information**





### Frame MV (Plastic Backshells)

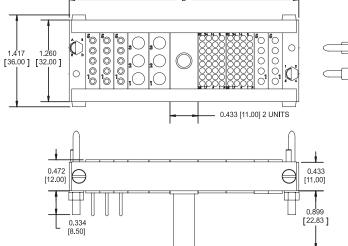
- 180° standard multi-turn
- Up to 300 signal contacts
- Adjustable cable clamp: 0.425 to 1.26 [11.50 to 32.00]
- > 5,000 mating cycles



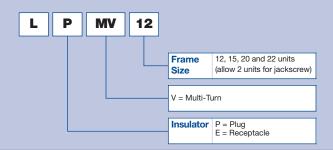
LEMV (Multi-Turn Receptacle)

- 36 keying combinations
- Rugged black polycarbonate backshell
- Built-in pin protection
- 12, 15, 20 and 22 unit lengths

Number of		Dimensions	
Units	А	В	С
12	2.598 [66.00]	3.11 [79.00]	3.315 [84.20]
15	3.248 [82.50]	3.76 [95.50]	3.965 [100.70]
20	4.331 [110.00]	4.843 [123.00]	5.047 [128.20]
22	4.764 [121.00]	5.276 [134.00]	5.480 [139.20]







NOTE:

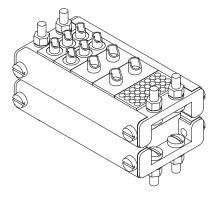
1) See mounting dimensions.

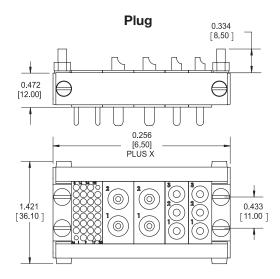


# **L** Series

### Frame A

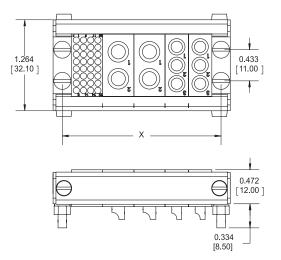
• Simple Rack and Panel





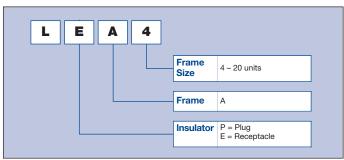


Receptacle



Weight, Excluding M	odules
A Plug	1.0 oz. at 4 units
Ariug	1.9 oz. at 20 units
A Recentedo	1.0 oz. at 4 units
A Receptacle	1.9 oz. at 20 units

# **Ordering Information**



**Mounting Dimensions** 

Units	4	5	6	7	8	9	10	11	12
х	1.122	1.338 [34.00]	1.555	1.771	1.988	2.205	2.421	2.638	2.854
	[28.50]	[34.00]	[39.50]	[45.00]	[50.50]	[56.00]	[61.50]	[67.00]	[72.50

Units	13	14	15	16	17	18	19	20
х					3.936 [100.00]			

Dimensions are in inches [mm]

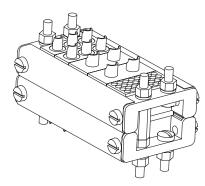
**NOTE:** See mounting dimensions.

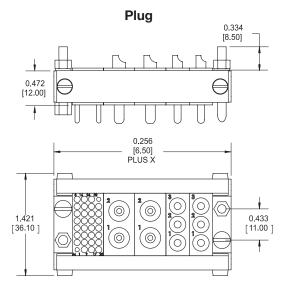




### Frame B

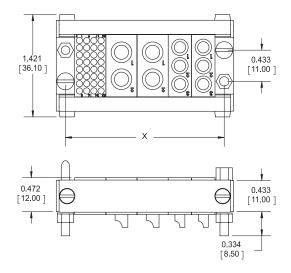
• Simple Rack and Panel with guides







Receptacle



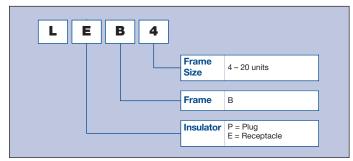
# **Mounting Dimensions**

Units	4	5	6	7	8	9	10	11	12
v	1.122	1.338	1.555	1.771	1.988	2.205	2.421	2.638	2.854
^	[28.50]	[34.00]	[39.50]	[45.00]	[50.50]	[56.00]	[61.50]	[67.00]	[72.50]

Unit	s 13	14	15	16	17	18	19	20
х		3.287 [83.50]						

Weight, Excluding Me	odules
B Plug	1.0 oz. at 4 units
Bridg	1.9 oz. at 20 units
B Decenteele	1.0 oz. at 4 units
B Receptacle	1.9 oz. at 20 units

# **Ordering Information**

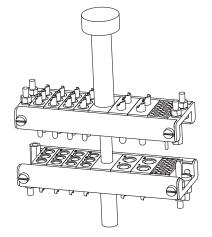


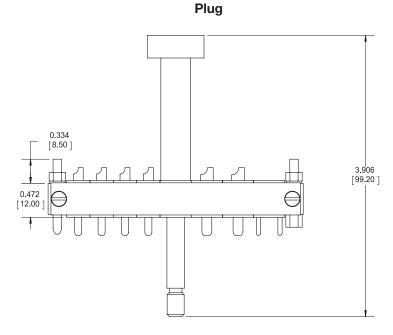


**L** Series

### **Frame BV**

• Rack and panel with guides and Jackscrew





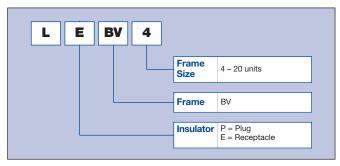
# **Mounting Dimensions**

Units	4	5	6	7	8	9	10	11	12
x	1.122	1.338	1.555	1.771	1.988	2.205	2.421	2.638	2.854
^	[28.50]	[34.00]	[39.50]	[45.00]	[50.50]	[56.00]	[61.50]	[67.00]	[72.50]

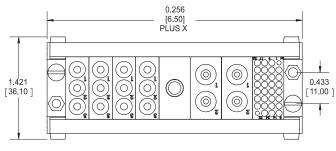
Units	13	14	15	16	17	18	19	20
x	3.070 [78.00]				3.936 [100.00]			

Weight, Excluding Modules				
BV Plug	4.7 oz. at 4 units			
BY Flug	5.6 oz. at 20 units			
BV Pagantagla	2.5 oz. at 4 units			
BV Receptacle	3.4 oz. at 20 units			

# **Ordering Information**

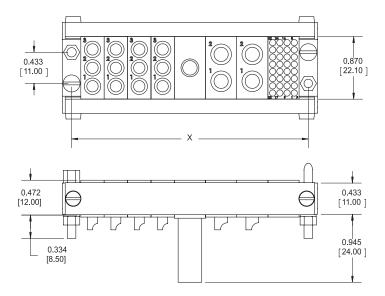


NOTE: See mounting dimensions.





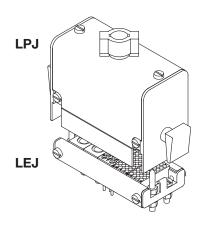
#### Receptacle

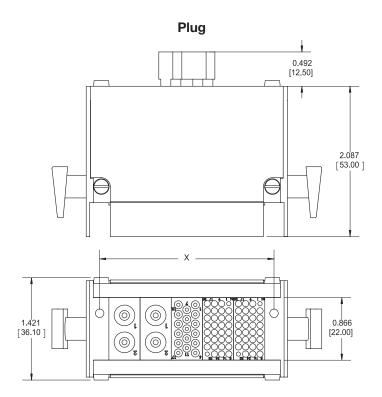




### Frame J (Metal Backshell)

- · Hooded connector with round cable clamp
- Alternate cable clamp locations available





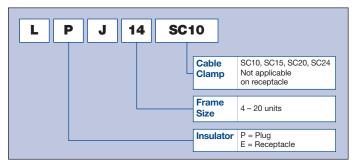
# **Mounting Dimensions**

U	Inits	4	5	6	7	8	9	10	11	12
	х	1.122 [28.50]	1.338 [34.00]	1.555 [39.50]	1.771 [45.00]	1.988 [50.50]	2.205 [56.00]	2.421 [61.50]	2.638 [67.00]	2.854 [72.50]

Un	its	13	14	15	16	17	18	19	20
)	(	3.070 [78.00]				3.936 [100.00]			4.586 [116.50]

Weight, Excluding Modules				
Plug	3.5 oz. at 4 units			
Filly	5.5 oz. at 20 units			
Pasantasia	1.2 oz. at 4 units			
Receptacle	2.1 oz. at 20 units			

# **Ordering Information**

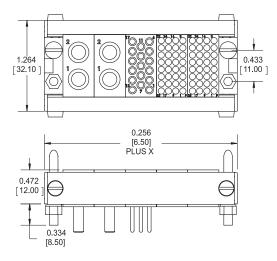


- Plugs with flat cable clamp available. Replace J in part number with K and cable clamp callout to SC33 [33mm] or SC50 [50mm].
   Plugs without cable clamp available. Replace J in part number with R and remove
- SC cable clamp callout.

Dimensions are in inches [mm]



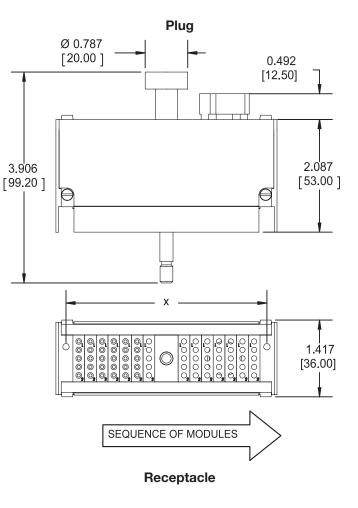
#### Receptacle





### Frame JV (Metal Backshell)

- Hooded connector with round cable clamp
- · Side and double openings also available by special order
- · Jackscrew extraction

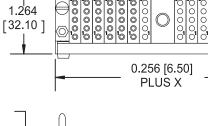




Units	4	5	6	7	8	9	10	11	12
х	1.122	1.338	1.555	1.771	1.988	2.205	2.421	2.638	2.854
	[28.50]	[34.00]	[39.50]	[45.00]	[50.50]	[56.00]	[61.50]	[67.00]	[72.50]

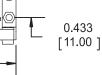
Unit	s 13	14	15	16	17	18	19	20
х		3.287 [83.50]			3.936 [100.00]			

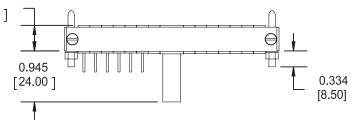
Weight, Excluding Modules					
Plug	1.9 oz. at 4 units				
Flug	2.8 oz. at 20 units				
Receptacle	1.6 oz. at 4 units				
neceptacie	2.5 oz. at 20 units				



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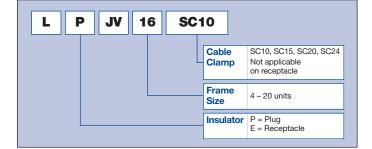


Dimensions are in inches [mm]

### 0.472 [12.00]

1.264

## **Ordering Information**



#### NOTES:

Plugs with flat cable clamp available. Replace J in part number with K and cable clamp callout to SC33 [33mm] or SC50 [50mm].
 Plugs without cable clamp available. Replace J in part number with R and remove Plugs without cable clamp available. Replace J in part number with R and remove

SC cable clamp callout.



Module A	Width: 1 Unit • Contacts: 5 Hypertac <sup>®</sup> Fixed Contacts • Ø 0.059 [1.50]							
8 Amp Contact Rating	Gender	Termination	Plating	Part Number				
Ø 0.079 [2.00] O.D. Ø 0.063 [1.60] I.D.	Female	Solder Cup up to 16 AWG	50µin gold	LAFSTAH				
$ \begin{array}{c c} & & & & & & & & & \\ \hline & & & & & & \\ \hline 0.346 \\ \hline [8.80] \\ \hline \\ $	Female	Straight Dip Solder	50µin gold	LAFDTAH				
$\begin{bmatrix} 0.630 \\ [16.00] \\ \hline 0.866 \\ [22.00] \\ \hline 0.512 \\ [13.00] \\ \hline 0.982 \\ \hline 0.$	Empty Block	_	_	ZLM005-001 (LAHT)				
	Male	Solder Cup up	10µin gold	LAMST				
Ø 0.079 [2.00] O.D. Ø 0.063 [1.60] I.D.		to 16 AŴG	50µin gold	LAMSTH				
	Male	Straight Dip Solder	10µin gold	LAMDT				
	ividio.	Straight Dip Golder	50µin gold	LAMDTH				

**W**<sup>®</sup> File No.: UL E102195

Crimp Termination: Crimp "R" modules intermate with "A" modules.

Plating Reference	
Male Pins:	10μin gold (min) over nickel 50μin gold (min) over nickel
Female Sockets:	50µin gold (min) over nickel on mating surface, gold flash over nickel on termination

#### NOTE:

If assembling the modules into a frame, two YHD0027 clips are required per module.

General Specifications					
Current Rating	8 Amps				
Contact Resistance	< 2.5 milliohms				
Extraction Force (Per Contact)	1.0 – 5.0 oz.				
Contact Life Cycles	> 100,000				
Breakdown Voltage	> 2000V RMS				
Dielectric Withstanding Voltage	1500V RMS				
Insulation Resistance	> 10 <sup>6</sup> megohms at 500 VDC				
Temperature Rating	-55° C to 125° C				
Insulator Material	Diallyl-phthalate				
Contact					
Material (Pin) (Socket)	Brass Beryllium copper wires and brass body				
Approximate Weight	M: 0.2 oz., F: 0.15 oz.				



Module R	1	Width: 1 Uni			c <sup>®</sup> "Snap In" C ed by itself or	Crimp Contacts • Ø in a frame	0.059 [1.50]
8 Amp Contact Rating	Gender Wire		Dimensions		Plating	Part Number	Replacement
	Gender	Gauge	ID	OD	Flating	Fait Nulliber	Contacts
		18-22	0.057 [1.45]	0.104 [2.65]	50µin gold	LRF1	YSK015-013AH
	Female	24-26	0.022 [0.56]	0.076 [1.93]	50µin gold	LRF2	YSK015-009AH
0.280 0 0 [7.10] MAX.	remale	16	0.071 [1.80]	0.108 [2.75]	50µin gold	LRF3	YSK015-014AH
		14	0.079 [2.00]	0.122 [3.10]	50µin gold	LRF4	YSK015-045AH
$\begin{array}{c} 0.630\\ 16.00\\ 16.00\\ 0.217\\ 15.50\\ 0.157\\ 14.00\\ 0.866\\ 22.00\\ 0.522\\ 0.$	Empty Block	_	_	_	_	ZLR005-001 (LRH)	_
		18-22	0.057	0.104	10µin gold	LRM1	YPN015-009RG
Ø 0.058 [1.48] 0.291 [7.40]			[1.45]	[2.65]	50µin gold	LRM1H	YPN015-009RH
		24-26	0.022	0.076	10µin gold	LRM2	YPN015-004RG
	Male	24-20	[0.56]	[1.93]	50µin gold	LRM2H	YPN015-004RH
	Iviale	10	0.071	0.108	10µin gold	LRM3	YPN015-010G
		16	[1.80]	[2.75]	50µin gold	LRM3H	YPN015-010H
ID OD 0.213 [5.40]			0.079	0.122	10µin gold	LRM4	YPN015-033RG
		14	[2.00]	[3.10]	50µin gold	LRM4H	YPN015-033RH

**N**<sup>®</sup> File No.: UL E102195

Solder Cup and Straight Dip Termination: "A" modules intermate with "R" modules.

Accessories	
Crimp Tool Crimp Positioner:	AF8
Style 1 and 3	TP592
Style 2	TP655
Style 4	TP1128
Insertion/Extraction Tool	S0150.01

Plating Reference	
Male Pins:	10μin gold (min) over nickel 50μin gold (min) over nickel
Female Sockets:	50µin gold (min) over nickel on mating surface, gold flash over nickel on termination

General Spo	ecifications	
Current Rating		8 Amps
Contact Resista	nce	< 2.5 milliohms
Extraction Force	e (Per Contact)	1.0 – 5.0 oz.
Contact Life Cyc	cles	> 100,000
Breakdown Volta	age	> 1600V RMS
Dielectric Withstanding Voltage		1200V RMS
Insulation Resistance		> 10 <sup>4</sup> megohms at 500 VDC
Temperature Ra	ting	-55° C to 105° C
Insulator Materia	al	Nylon
Contact Material	(Pin) (Socket)	Brass Beryllium copper wires and brass body
Approximate We	eight	M: 0.22 oz., F: 0.16 oz.



Module B	Width: 1.5 Units • Contacts: 3 Hypertac® Fixed Contacts • Ø 0.098 [2.50]			
15 Amp Contact Rating	Gender	Termination	Plating	Part Number
Ø 0.138 [3.50] O.D. Ø 0.102 [2.60] I.D. Ø 0.102 [2.60] I.D. 0.177 [4.50]	Female	Female Solder Cup up to 12 AWG		LBFSTAH
	Female	Straight Dip Solder	50µin gold	LBFDTAH
0.512 [13.00] 0.315 [8.00] 0.315 [8.00] 0.864 (21.95] 0.512 [13.00]	Empty Block	_	_	ZLM003-001 (LBHT)
	Male	Solder Cup up	10µin gold	LBMST
	Maic	to 12 AWG	50µin gold	LBMSTH
Ø 0.097 [2.47] [	Male	Straight Dip Solder	10µin gold	LBMDT
Ø 0.098 [2.50] [9.00]	maie	Straight Dip Coldor	50µin gold	LBMDTH

**File No.: UL E102195** 

Crimp Termination: "S" modules intermate with "B" modules.

Plating Reference	
Male Pins:	10µin gold (min) over nickel 50µin gold (min) over nickel
Female Sockets:	50µin gold (min) over nickel on mating surface, gold flash over nickel on termination

#### **General Specifications**

_		
Current Rating	15 Amps	
Contact Resistance	< 1 milliohms	
Extraction Force (Per Contact)	3.0 – 25.0 oz.	
Contact Life Cycles	> 100,000	
Breakdown Voltage	> 1600V RMS	
Dielectric Withstanding Voltage	1200V RMS	
Insulation Resistance	> 10 <sup>6</sup> megohms at 500 VDC	
Temperature Rating	-55° C to 125° C	
Insulator Material	Diallyl-phthalate	
Contact		
Material (Pin) (Socket)	Brass Beryllium copper wires and brass body	
Approximate Weight	M: 0.35 oz., F: 0.25 oz.	

**NOTE:** If assembling the modules into a frame, two YHD0027 clips are required per module.



Module S	Width: 1.5 Units • Contacts: 3 Hypertac <sup>®</sup> "Snap In" Crimp Contacts • Ø 0.098 [2.50] Can be mounted by itself or in a frame										Ø 0.098 [2.50]
15 Amp Contact Rating	Gender	Wire Dimens		nsions Plating		Part Number	Replacement Contacts				
		Gauge	ID	OD							
	Female	18-22	0.059 [1.50]	0.122 [3.10]	50µin gold	LSF1	YSK025-003AH				
		13-14	0.077 [1.95]	0.122 [3.10]	50µin gold	LSF2	YSK025-004AH				
		12	0.100 [2.54]	0.150 [3.81]	50µin gold	LSF4	YSK025-013AH				
$\begin{array}{c} \bullet & 0.512 \\ \bullet & 0.256 \\ \bullet & 0.324 \\ \hline 0.324 \\ \hline 0.324 \\ \hline 0.324 \\ \hline 0.866 \\ \bullet & 0.866 \\ \bullet & 0.866 \\ \hline 0.522 \\ \hline 0.522 \\ \hline 0.522 \\ \hline 0 \\ \hline 0.866 \\ \hline 122.00 \\ \hline 0 \\ $	Empty Block	_	_	_	_	ZLS003-002 (LSH)	_				
Ø 0.097		18-22	0.059	0.122	10µin gold	LSM1	YPN025-002G				
	[7.50] 1	18-22	[1.50]	[3.10]	50µin gold	LSM1H	YPN025-002H				
		13-14	0.077	0.122	10µin gold	LSM2	YPN025-003G				
	IVIAIE	13-14	[1.95]	[3.10]	50µin gold	LSM2H	YPN025-003H				
		12	0.100	0.150	10µin gold	LSM4	YPN025-011RG				
		12	[2.54]	[3.81]	50µin gold	LSM4H	YPN0255-011RH				

**N**<sup>®</sup> File No.: UL E102195

Solder Cup and Straight Dip Termination: "B" modules intermate with "S" modules.

Accessories	
Crimp Tool	
Crimp Positioner Insertion/Extraction Tool	

Plating Reference	
Male Pins:	10μin gold (min) over nickel 50μin gold (min) over nickel
Female Sockets:	50µin gold (min) over nickel on mating surface, gold flash over nickel on termination

### **General Specifications**

Current Rating	15 Amps	
Contact Resistance	< 1.5 milliohms	
Extraction Force (Per Contact)	3.0 – 28.3 oz.	
Contact Life Cycles	> 100,000	
Breakdown Voltage	> 2000V RMS	
Dielectric Withstanding Voltage	1500V RMS	
Insulation Resistance	> 10 <sup>4</sup> megohms at 500 VDC	
Temperature Rating	-55° C to 105° C	
Insulator Material	Nylon	
Contact Material (Pin) (Socket)	Brass Beryllium copper wires and brass body	
Approximate Weight	M: 0.23 oz., F: 0.35 oz.	



Module C&M	Width: 2 Units • Contacts: 2 Hypertac <sup>®</sup> Fixed Contacts • Ø 0.138 [3.50]				
25 or 50 Amp Contact Rating	Gender	Termination	Plating	Rating Amps	Part Number
$ \begin{array}{c} C = \emptyset \ 0.138 \ [3.50] \\ M = \emptyset \ 0.177 \ [4.50] \\ \blacksquare \end{array} \begin{array}{c} \bullet \\ M = \emptyset \ 0.193 \ [4.90] \\ \blacksquare \end{array} $	Female	Solder Cup up to 10 AWG	50µin gold	25	LCFSTAH
		Solder Cup up to 8 AWG		50	LMFSTAH
Ø 0.138 [3.50]	Female	Straight Dip	50µin gold	25	LCFDTAH
		Solder	suµin goia	50	LMFDTAH
0.374 [9.50] 0.425 [10.80] 0.512 [13.00] 0.980 [24.90] 0.864 [21.95]	Empty Block	_	_	_	ZLM002-001 (LCHT)
C = 0.256 (6.50) M = 0.335 (8.50)		Solder Cup up to 10 AWG	10µin gold	25	LCMST
	Male		50µin gold		LCMSTH
	Maic	Solder Cup up	10µin gold		LMMST
M=Ø 0.177 [4.50] C=Ø 0.177 [4.50] M=Ø 0.193 [4.90]		to 8 AWG	50µin gold		LMMSTH
Ø 0.137 [3.48] C = 0.256 [6.50] M = 0.335 [8.50]		Male Straight Dip Solder	10µin gold	- 25	LCMDT
	Male		50µin gold	20	LCMDTH
	IVIAIC		10µin gold	50	LMMDT
Ø 0.138 [3.50]			50µin gold		LMMDTH

**W** File No.: UL E102195

Crimp Termination: "U" modules intermate with "C" and "M" modules.

Plating Reference	
Male Pins:	10μin gold (min) over nickel 50μin gold (min) over nickel
Female Sockets:	50µin gold (min) over nickel on mating surface, gold flash over nickel on termination

### **General Specifications**

Current Rating	C: 25 Amps M: 50 Amps
Contact Resistance	$C:<0.8\ m\Omega \qquad M:\ 0.40\ m\Omega$
Extraction Force (Per Contact)	C: 4.0 – 32.0 oz. M: 4.0 – 40.0 oz.
Contact Life Cycles	> 100,000
Breakdown Voltage	> 3000V RMS
Dielectric Withstanding Voltag	ge 2250V RMS
Insulation Resistance	> 10 <sup>6</sup> megohms at 500 VDC
Temperature Rating	-55° C to 125° C
Insulator Material	Diallyl-phthalate
Contact	
Material (Pin) (Socket)	Brass Beryllium copper wires and brass body
Approximate Weight	M: 0.44 oz., F: 0.31 oz.

#### NOTE:

If assembling the modules into a frame, two YHD0027 clips are required per module.



Module U	Width: 2 Units • Contacts: 2 Hypertac <sup>®</sup> "Snap In" Crimp Contacts • Ø 0.138 [3.50] Can be mounted by itself or in a frame						138 [3.50]	
25 or 50 Amp Contact Rating	Gender	Wire Gauge	Dimer ID	nsions OD	Plating	Rating Amps	Part Number	Replacement Contacts
		20-22	0.059 [1.50]	0.122 [3.10]	50µin gold	25	LUF1	YSK035-009AH
		16-18	0.077 [1.95]	0.122 [3.10]	50µin gold	25	LUF2	YSK035-010AH
	Female	12-14	0.112 [2.85]	0.161 [4.10]	50µin gold	25	LUF3	YSK035-011AH
		6	0.217 [5.50]	0.285 [7.25]	50µin gold	50	LUF4	YSK035-030AH
		8-10	0.177 [4.50]	0.217 [5.50]	50µin gold	50	LUF5	YSK035-028AH
$\begin{array}{c} 0.374 \\ [9.50] \\ \hline \\ 0.950 \\ \hline \\ 0.906 \\ \hline \\ (23.00] \\ \hline \\ 0.866 \\ \hline \\ (22.00] \\ \hline \\ (2.65] \\ \hline \\ (2.65] \\ \hline \\ (1.140 \\ \hline \\ (28.95] \\ \hline \\ \end{array}$	Empty Block	_	_	_	_	_	ZLS002-001 (LUH)	_
0.005	20-2	20-22	0.059 [1.50]	0.122 [3.10]	10µin gold 50µin gold	25	LUM1 LUM1H	YPN035-005G YPN035-005H
Ø 0.137			0.050	0.122	10µin gold	- 25	LUM1H	YPN035-005H YPN035-006G
		16-18			50µin gold		LUM2H	YPN035-006H
			0.112	0.161	10µin gold		LUM3	YPN035-007G
	Male	12-14	[2.85]	[4.10]	50µin gold	25	LUM3H	YPN035-007H
			6 0.217 [5.50]	0.285	10µin gold		LUM4	YPN035-025RG
		6		[7.25]	50µin gold	50	LUM4H	YPN035-025RH
[ [] [o./2]		0.40	0.177	0.177 0.217	10µin gold		LUM5	YPN035-023RG
		8-10	[4.50]	[5.50]	50µin gold	50	LRM5H	YPN035-023RH

**N**<sup>®</sup> File No.: UL E102195

Solder Cup and Straight Dip Termination: "C" and "M" modules intermate with "U" modules.

Accessories	
Crimp Tool	
Style 1, 2, 3, 5	T1264
Style 4	T712
Crimp Positioner:	
Style 1, 2, 3	SP612
Style 4	T758
Style 5	T1559
Insertion/Extraction Tool	S0350.01

Plating Reference	
Male Pins:	10μin gold (min) over nickel 50μin gold (min) over nickel
Female Sockets:	50µin gold (min) over nickel on mating surface, gold flash over nickel on termination

General Specifications				
Current Rating		25 or 50 Amps		
Contact Resist	ance	< 0.8 milliohms		
Extraction Ford	e (Per Contact)	4.0 – 35.0 oz.		
Contact Life Cy	cles	> 100,000		
Breakdown Voltage		> 2800V RMS		
Dielectric With	standing Voltage	2100V RMS		
Insulation Resi	stance	> 10 <sup>4</sup> megohms at 500 VDC		
Temperature R	ating	-55° C to 105° C		
Insulator Mater	rial	Nylon		
Contact Material (Pin) (Socket)		Brass Beryllium copper wires and brass body		
Approximate W	/eight	M: 0.45 oz., F: 0.29 oz.		

Dimensions are in inches [mm]

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Module D	Width: 2 Units • Contacts: 17 Hypertac <sup>®</sup> Fixed Contacts • Ø 0.047 [1.20]					
8 Amp Contact Rating	Gender	Termination	Plating	Part Number		
0.051 0.177 [4.50]	Female	Solder Cup Up to 20 AWG	50µin gold	LDFSTAH		
	Female	Straight Dip Solder	50µin gold	LDFDTAH		
$\begin{bmatrix} 0.118 \\ (3.00] \\ 0.236 \\ (6.00] \end{bmatrix} \xrightarrow{0.067} \xrightarrow{0.134} \\ \hline 0.067 \\ (1.70] \\ \hline 0.067 \\ (1.70] \\ \hline 0.067 \\ (3.40] \\ \hline 0.423 \\ (10.75] \\ \hline 10.75 \end{bmatrix}$	Empty Block Male	_	_	ZLM017-001 (LDMHT)		
$\begin{bmatrix} 0.067 \\ 1.70 \end{bmatrix} = \begin{bmatrix} 0.134 \\ 3.40 \end{bmatrix}$ $\begin{bmatrix} 1.70 \\ 0.236 \\ 6.00 \end{bmatrix} = \begin{bmatrix} 0.067 \\ 0.423 \\ 0.20000 \\ 0.0000 \\ 0.0000 \\ 0.1075 \end{bmatrix}$	Empty Block Female	_	_	ZLM017-002 (LDFHT)		
	Male	Solder Cup Up	10µin gold	LDMST		
ID Ø 0.051 [1.30] 0.177 OD Ø 0.063 [1.60] [4.50]	maio	to 20 AWG	50µin gold	LDMSTH		
	Mela	Stroight Die Solder	10µin gold	LDMDT		
Ø 0.047 [1.19] -+  +- 0.354 [9.00]	Male	Straight Dip Solder	50µin gold	LDMDTH		

**File No.: UL E102195** 

Plating Reference	9
Male Pins:	10µin gold (min) over nickel 50µin gold (min) over nickel
Female Sockets:	50µin gold (min) over nickel on mating surface, gold flash over nickel on termination

#### **General Specifications**

Current Rating		8 Amps		
Contact Resistance		< 3.0 milliohms		
Extraction Ford	e (Per Contact)	1.0 – 4.5 oz.		
Contact Life Cy	vcles	> 100,000		
Breakdown Vol	tage	> 1800V RMS		
Dielectric Withstanding Voltage		1350V RMS		
Insulation Resistance		> 10 <sup>6</sup> megohms at 500 VDC		
Temperature Rating		-55° C to 125° C		
Insulator Mater	ial	Diallyl-phthalate		
Contact				
Material	(Pin)	Brass		
	(Socket)	Beryllium copper wires and brass body		
Approximate W	leight	M: 0.31 oz., F: 0.45 oz.		

**NOTE:** If assembling the modules into a frame, two YHD0027 clips are required per module.





Module W	Width: 2 Units • Contacts: 30 Hypertac <sup>®</sup> Removable Contacts • Ø 0.024 [0.6 Can be mounted by itself or in a frame				ð 0.024 [0.60]		
4 Amp Contact Rating	Gender	Termination	Dimer ID	nsions OD	Plating	Part Number	Replacement Contacts
SOLDER CUP CRIMP I.D - I.D - O.D - O.D		Crimp 18-20 AWG	0.055 [1.39]	0.071 [1.80]	50µin gold	LWFRRTAH	YSK006-089AH
	Female	Crimp 22–26 AWG	0.035 [0.90]	0.051 [1.30]	50µin gold	LWFRTAH	YSK006-011AH
		Solder Cup 26 AWG	0.039 [1.00]	0.057 [1.45]	50µin gold	LWFSTAH	YSK006-010AH
0.982 [24.95] 0.512 [13.00] 0.864 0.700	Female Empty Block		_	_	_	LWFH)	_
	0.100 [2.54] 23 [1.50] [1.50]	0.260 [6.60] ••••••••••••••••••••••••••••••••••••	_	_	_	ZLM030-001 (LWMHT)	_
ALLALA		Crimp	0.055	0.071	10µin gold	LWMRRT	YPN006-158G
		18-20 AWG	[1.39]	[1.80]	50µin gold	LWMRRTH	YPN006-158H
	Mala	Crimp	0.035	0.051	10µin gold	LWMRT	YPN006-021G
	Male	22-26 AWG	[0.90]	[1.30]	50µin gold	LWMRTH	YPN006-021H
		Solder Cup	0.039	0.057	10µin gold	LWMST	YPN006-020G
		26 AWG	[1.00]	[1.45]	50µin gold	LWMSTH	YPN006-020H

#### Accessories

Crimp Tool	AFM8
Crimp Positioner	K547
Insertion Tool	
Extraction Tool	T1866

Plating Reference	
Male Pins:	10µin gold (min) over nickel 50µin gold (min) over nickel
Female Sockets:	50µin gold (min) over nickel on mating surface, gold flash over nickel on termination

NOTES:
1) Females: Guide holes in position 1 and 32.
2) Males: Guide pins in position 1 and 32.
3) If assembling the modules into a frame, two YHD0027 clips are required per module.

General Specifications			
Current Rating	4 Amps		
Contact Resistance	< 5 milliohms		
Extraction Force (Per Contact)	0.5 – 2.0 oz.		
Contact Life Cycles	> 100,000		
Breakdown Voltage	> 2200 VAC		
Dielectric Withstanding Voltage	1650 VAC		
Insulation Resistance	10 <sup>9</sup> megohms at 500 VDC		
Temperature Rating	-55° C to 125° C		
Insulator Material	Polyphelylene sulfide		
Contact Material (Pin) (Socket)	Brass Beryllium copper wires and brass body		



Module V	Width: 1.5 Units • Contacts: 3 Hypertac <sup>®</sup> Contacts (on both signal and ground) Can be both mounted by itself or in a frame				
Coax	Gender	Termination	Part Number	Replacement Contacts	
0.441 [11.20]	Female	Crimp Coaxial for RG316	LVFRTAH	YCX0315-002AH	
	i entale	Crimp Coaxial for RG316DB	LVFR1TAH	YCX0315-019AH	
	Female	Solder Coaxial for RG405 or T-Flex 405	LVFSTAH	YCX0315-001AH	
	Male	Crimp Coaxial for RG316	LVMRH	YCX0315-004H	
	Wale	Crimp Coaxial for RG316DB	LVMR1TH	YCX0315-018H	
	Male	Solder Coaxial for RG405 or T-Flex 405	LVMSTH	YCX0315-003H	

**N**<sup>®</sup> File No.: UL E102195

Accessories
For Inner Conduction Crimping
Crimp Tool:
Crimp Positioner:
For Outer Conduction Crimping
Crimp Tool:
Die Set: T1958 or T2019 for RG316DB
Contact Removal Tool:

Cabling Instructions								
Crimp (R)	) and (R1)	Solder (S)						
Cable	RG315 and RG316DB	RG405	T-Flex 405					
Socket	S50302	S50301	S50307					
Pin	S50304	S50303	S50308					
Please request specs from our customer service department.								

### General Specifications COAXTAC™

Nominal Impedance	50 ohms
Frequency Range	DC 3 GHz with RG316 DC 18 GHz with RG405
Temperature Rating	-55° C to 125° C
Materials	Brass, beryllium copper PTFE Fluorocarbon
Finishes Center Contacts and Housings Wire	Gold over nickel over copper Gold over nickel
Electrical (Based on RG405 Semi Rigid Cable) Voltage Standing Wave Ratio RF Transmission Loss Insulation Resistance Dielectric Withstanding Voltage	(DC to 3 GHz) 1.20:1 max. (3 GHz to 18 GHz) 1.50:1 max. 0.50 dB at 18 GHz 5,000 megohms min. 500V RMS
Contact Resistance Inner Contact Outer Contact	8 milliohms max. 2 milliohms max.
Mechanical Extraction Force Per Contact Connector Life Cycles	1.5 – 6.0 oz. max., 3.0 oz. average > 25,000 cycles



Module V	Width: 1.5 Units • Contacts: 3 Hypertac <sup>®</sup> Contacts Can be mounted by itself or in a frame						
25 Amp Power	Gender	Termination	Part Number	Replacement Contacts			
	Female	Crimp 25 Amps (Free Air) 17 Amps (Bundled) 12-14 AWG	LVFP1TAH	YSK025-031AH			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Female Empty Block	_	ZLV003-001 (LVFHT)	_			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Male Empty Block	_	ZLV003-002 (LVMHT)	_			
	Male	Crimp 25 Amps (Free Air) 17 Amps (Bundled) 12-14 AWG	LVMP1TH	YPN025-024H			

File No.: UL E102195

Accessories	
Crimp Tool	M309
Crimp Positioner:	T1981
Extraction Tool	T1982

Plating Reference	
Male Pins:	10μin gold (min) over nickel 50μin gold (min) over nickel
Female Sockets:	50µin gold (min) over nickel on mating surface, gold flash over nickel on termination

#### **General Specifications Current Rating** 25 Amps (Free Air) 17 Amps (Bundled) < 1.5 milliohms **Contact Resistance** Extraction Force (Per Contact) 3.0 – 17.0 oz. **Contact Life Cycles** > 100,000 Breakdown Voltage 1600 VAC **Dielectric Withstanding Voltage** 1200 VRMS Insulation Resistance 10<sup>4</sup> megohms at 500 VDC **Temperature Rating** -55° C to 105° C Insulator Material Nylon Contact (Pin) Material Brass (Socket) Beryllium copper wires and brass body Approximate Weight M: 0.32 oz., F: 0.34 oz.

NOTE:

Contact shipped unassembled.

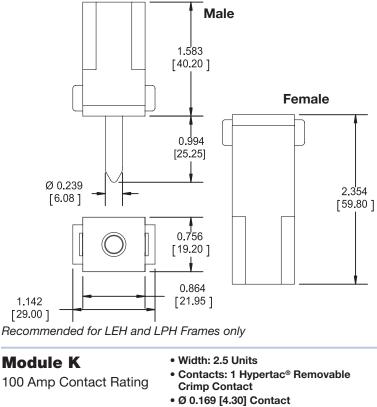
**L** Series

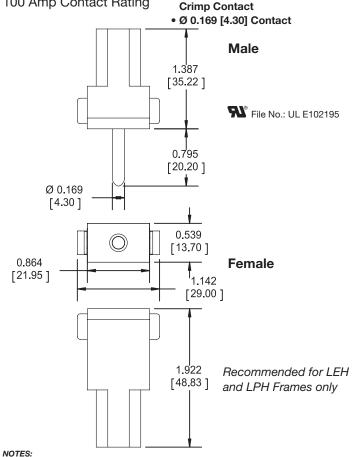


### **Module G**

Width: 3.5 Units • Contacts: 1 Hypertac® Removable Crimp Contact • Ø 0.239 [6.08] Contact

200 Amp Contact Rating File No.: UL E102195

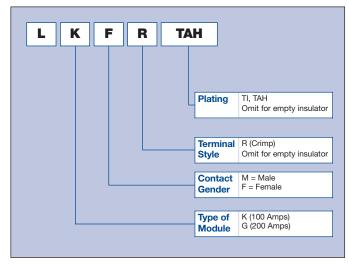




General Specifications								
Insulators	Module G	Module K						
Width	3.5 Units	2.5 Units						
Breakdown Voltage	> 1500V RMS							
Dielectric Withstanding Voltage	1100V RMS							
Insulation Resistance	> 10 <sup>6</sup> megohms at 500 VDC	;						
Insulator Material	Polyphthalamide							
Contacts								
Life Cycle	100,000 Cycles							
Diameter	0.239 [6.08]	0.169 [4.30]						
Current Rating	200 amperes	100 amperes						
Resistance	< 0.20 milliohms	< 0.35 milliohms						
Extraction Force (Per Contact)	80.0 – 160.0 oz.	15.0 – 90.0 oz.						
Material (Pin) (Socket)	Copper Beryllium copper wires cop	per tail; brass body						
Plating Reference	TI = 30μin gold over nickel ( TAH = 50μin gold over nicke gold flash over nickel on ten	l on mating surface,						
Reference "L" (Strip Length)	0.709 [18.00]	0.591 [15.00]						
Barrel I.D.	0.445 [11.30]	0.283 [7.20]						
Conductor Size	# 1/0 AWG	# 4 AWG						
Replacement Pins	YPN0612-021RI	YPN043-016RI						
Replacement Sockets	YSK0612-015AH	YSK043-101AH						

Accessories						
Crimp Tool	T1501	T1501				
Mounting Bracket	T1551	T1551				
Crimp Positioner	T1536	T1535				
Extraction Tool	T1500	T1507				

# **Ordering Information**

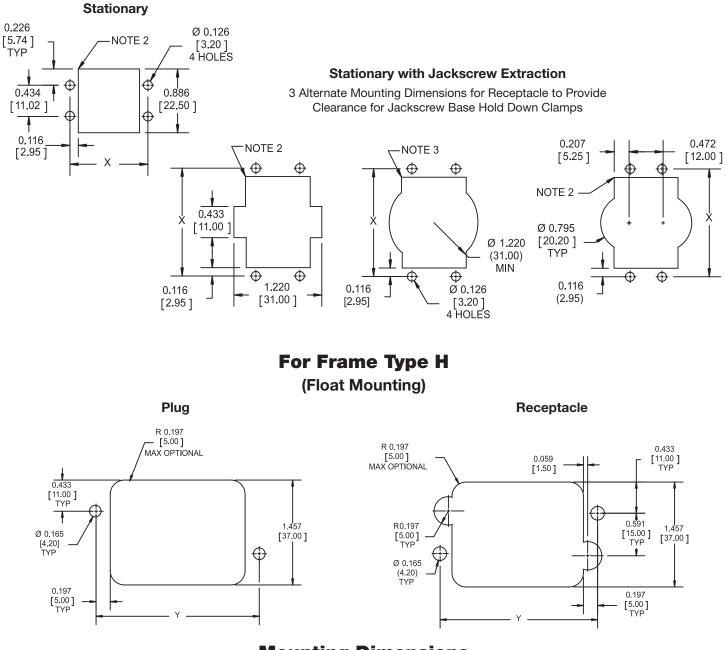


1) Contacts shipped unassembled. 2) Approved for 180 Amps by CSA for 30° C temperature rise.



# Mounting Dimensions

For Frame Types A, B, BV, J, JV, K, KV, R and RV



# **Mounting Dimensions**

Units	4	5	6	7	8	9	10	11	12	13
х	1.122 [28.50]	1.338 [34.00]	1.555 [39.50]	1.771 [45.00]	1.988 [50.50]	2.205 [56.00]	2.421 [61.50]	2.638 [67.00]	2.854 [72.50]	3.070 [78.00]
Y	1.969 [50.00]	2.185 [55.50]	2.402 [61.00]	2.618 [66.50]	2.835 [72.00]	3.051 [77.50]	3.268 [83.00]	3.484 [88.50]	3.701 [94.00]	3.917 [99.50]

Units	14	15	16	17	18	19	20	21	22
х	3.287 [83.50]	3.504 [89.00]	3.720 [94.50]	3.936 [100.00]	4.153 [105.50]	4.370 [111.00]	4.586 [116.50]	4.803 [122.00]	5.019 [127.50]
Y	4.134 [105.00]	4.350 [110.50]	4.567 [116.00]	4.784 [121.50]	5.00 [127.00]	5.217 [132.50]	5.433 [138.00]	5.650 (143.50)	5.866 (149.00)

NOTES:

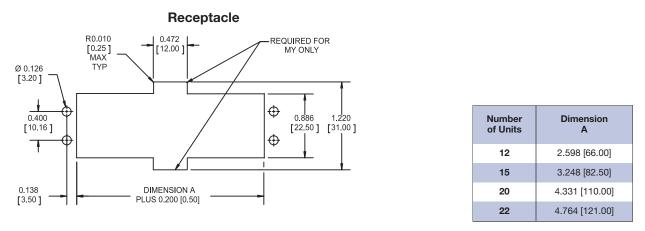
1) 59.0 oz. in torque for mounting.

2) 0.010 [0.25] maximum radius typical.



## **Mounting Dimensions**

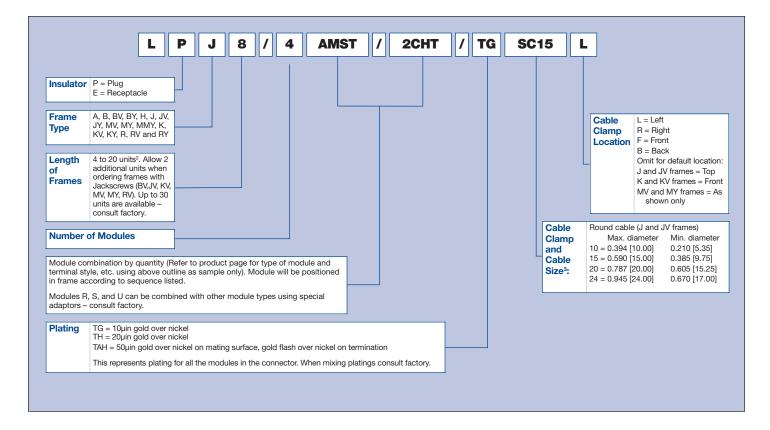
For Frame Types MV and MY



The L Series connectors are engineered for quick and easy use. Standard frames will be shipped completely assembled with the selected modules mounted.

### **Ordering Information<sup>1</sup>**

The length of the frame is computed by multiplying the module units buy the module quantity and totaling the results. If half unit spacers are required order LFH1 (Delete "L" in assembly part number).



#### NOTES:

 When part number exceeds 24 characters a special abbreviated part number will be assigned at the time of order.

2) Frames MV and MY available in 12, 15, 20 and 22 units only.

3) There may be some limitations on cable clamp sizes in connectors of shorter length. Consult factory.





N Series mini-modular connectors employ a do-ityourself system based on the building block principle. They offer a variety of combinations available in a single connector frame. Thus, the user is capable of selecting the connector that fulfills exact requirements with off-the-shelf components.

In this application, the low insertion and extraction forces of the Hypertac contact technology enable the user to assemble large numbers of contacts in a single connector that mates and unmates smoothly and easily.

N Series connectors can be built for the following:

- · Rack and panel applications
  - Standard
  - With keying system
  - With locking system
  - With floating mounting
- Cable applications
  - Hooded with rounded or flat cable security clamps
  - With Jackscrews
- Programming applications

The system is composed of two basic elements: module and frames.

Modules are the connector elements of the system. Two types of contacts are available: signal and power. The contacts are housed in small plastic blocks. All contacts are removable for easy assembly and repair. The width of each module block is designated in units.

The frames hold the modules in position. They range from a basic frame consisting of two side rails and two end caps to more complex versions with Jackscrews, hoods and cable clamps. All frames are available in various lengths to conform to almost any combination of modules. Although any length is possible, Hypertronics suggests ordering one of the standard lengths for optimum delivery and price.

With the N Series, specially designed connectors can be purchased quickly and inexpensively, eliminating the extra cost and delay of custom tooling.



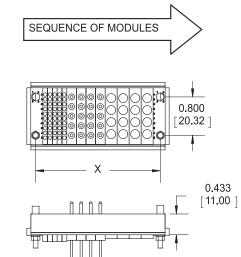
### Frame B up to 775 contacts

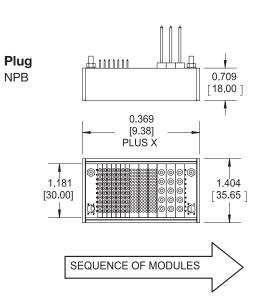
- Single row, rack and panel with keying
- Built-in pin protection

Receptacle

NEB

- 36 possible keying arrangements
- Standard sizes: 7, 11, 15, 19, 23, 27, 31 and 35 unit lengths
- Up to 35 contacts on 0.100 x 0.100 [2.54 x 2.54] centers





Units	7	11	15	19	23	27	31	35
х				2.200 [55.88]				3.800 [96.52]



### Frame BV up to 720 contacts

- Jackscrew extractor
- 36 possible keying arrangements
- Accepts 22 to 28 AWG wires
- Single row, rack and panel with keys

- Standard sizes: 7, 11, 15, 19, 23, 27, 31 and 35 unit lengths
- Up to 320 contacts on 0.100 x 0.100 [2.54 x 2.54] centers

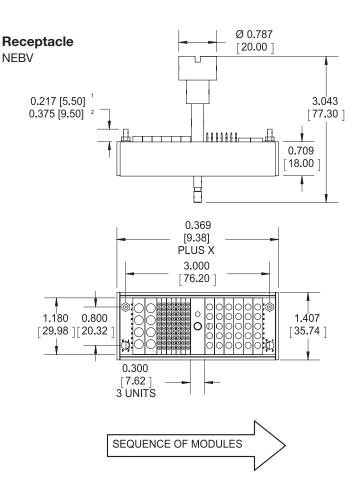
SEQUENCE OF MODULES

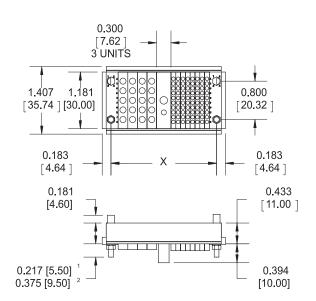
Built-in pin protection

Plug

NPBV

Allow 3 units for Jackscrew





Units	7	11	15	19	23	27	31	35
X	1.000 [25.40]	1.400 [35.56]		2.200 [55.88]				

NOTES:

1) Standard length for printed circuit boards.

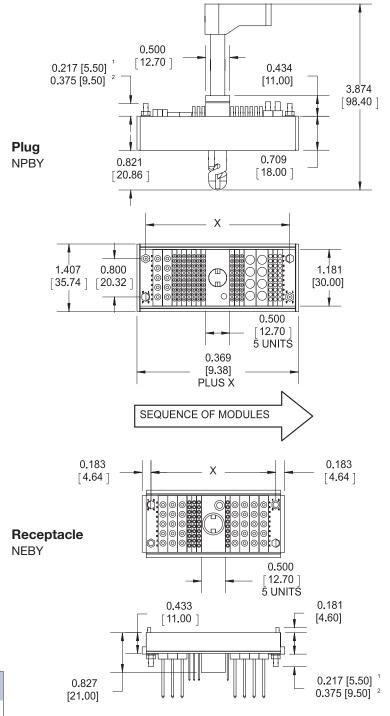
For thicker chassis specify longer studs with modification 470.

3) Frames shown at 50 percent scale.



### Frame BY up to 900 contacts

- 180° quick turn jack provides greater than 15,000 mating cycles
- Great for test equipment, burn-in stands, security systems, and medical equipment
- Less than 1 second mating/unmating operation
- Crimp, solder cup, dip solder, and Wire Wrap® terminations
- · Wiping action pin and sockets
- Provides 20 to 400 contacts in a single mating
- 4 or 9 ampere contacts mixed to your needs
- Built-in pin protection
- Standard frame sizes: 11, 15, 19, 23, 27, 31, 35 and 45 unit lengths



U	Inits	11	15	19	23	27	31	35	45
	x	1.400 [35.56]	1.800 [45.72]	2.200 [55.88]	2.600 [66.04]	3.000 [76.20]	3.400 [86.36]	3.800 [96.52]	4.800 [121.92]

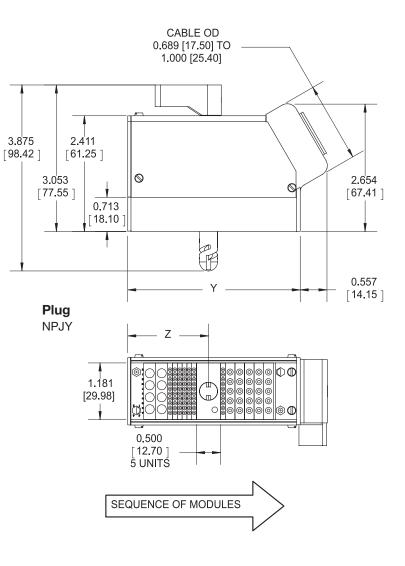
NOTES:

- 1) Standard length for printed circuit boards.
- 2) For thicker chassis specify longer studs with modification 479.
- Protective dust cover part number: ZMP0025-XX (XX = number of units).
   Frames shown at 50 percent scale.



### Frame JY up to 900 contacts

- 180° quick turn jack provides greater than 15,000 mating cycles
- Great for test equipment, burn-in stands, security systems, and medical equipment
- Less than 1 second mating/unmating operation
- Crimp, solder cup, dip solder, and Wire Wrap<sup>®</sup> terminations
- Wiping action pin and sockets
- Provides 20 to 400 contacts in a single mating
- 4 or 9 ampere contacts mixed to your needs
- Built-in pin protection
- Standard frame sizes: 11, 15, 19, 23, 27, 31, 35 and 45 unit lengths
- Adjustable Cable Clamp: 0.452 [11.50] to 1.260 [32.00]



Units	11	15	19	23	27	31	35	45
Y	1.993	2.393	2.794	3.194	3.594	4.000	4.393	5.400
	[50.64]	[60.80]	[70.96]	[81.12]	[91.28]	[101.44]	[111.60]	[137.16]
z	0.884	1.084	1.284	1.484	1.684	1.884	2.084	2.500
	[22.47]	[27.55]	[32.63]	[37.71]	[42.79]	[47.87]	[52.95]	[63.50]

NOTES:

1) Frame JY mates with NEBY.

Protective dust cover part number: ZMP0025-XX (XX = number of modules).

3) Frames shown at 50 percent scale.

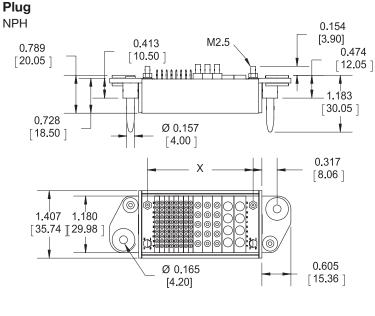
# N Series Mini Modules



### Frame H up to 775 contacts

- Float mounting with heavy duty guides
- Max. radial play 0.049 [1.254] from centers
- Single row, rack and panel with keying
- Built-in pin protection
- 36 possible keying combinations
- Standard sizes: 7, 11, 15, 19, 23, 27, 31 and 35 unit lengths
- Up to 350 contacts on 0.100 x 0.100 [2.54 X 2.54] centers

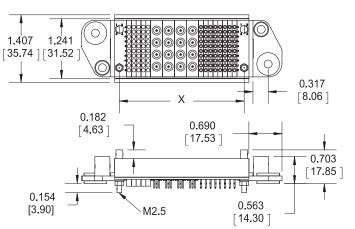
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File No.: E102195
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### Receptacle

NEH

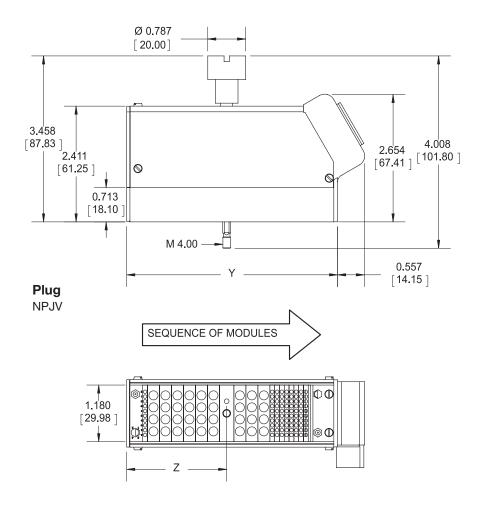


Units	11	15	19	23	27	31	35
х	1.400	1.800	2.200	2.600	3.000	3.400	3.800
	[35.56]	[45.72]	[55.88]	[66.04]	[76.20]	[86.36]	[96.52]



### Frame JV plug up to 775 contacts

- Hooded with cable clamp
- Jackscrew extractor
- Single row, rack and panel with keying
- Built-in pin protection
- 36 possible keying combinations
- Standard sizes: 11, 15, 19, 23, 27, 31 and 35 unit lengths
- Up to 350 contacts on 2.54 x 2.54 centers
- Jackscrew uses 3 units
- Adjustable cable clamp will hold 80 to 320 conductors of 22 to 28 AWG; adjusts 0.452 to 1.260 [11.50 to 32.00] min.
- Up to 320 contacts on 0.100 x 0.100 [2.54 x 2.54] centers



Units	11	15	19	23	27	31	35
Y	1.993	2.393	2.794	3.194	3.594	4.000	4.393
	[50.64]	[60.80]	[70.96]	[81.12]	[91.28]	[101.44]	[111.60]
z	0.884	1.084	1.284	1.484	1.684	1.884	2.084
	[22.47]	[27.55]	[32.63]	[37.71]	[42.79]	[47.87]	[52.95]

NOTES:

1) Frame JV mates with NEBV or NEPJY.

2) Protective dust cover part number: YHD0369-XX (XX = number of units).

3) Frames shown at 50 percent scale.

# **N Series Mini Modules**



### **Module H**

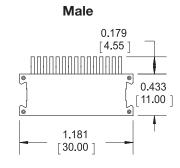
Width: 2 Units • Contacts: 45 Crimp Contacts • Ø 0.016 [0.40] Contact

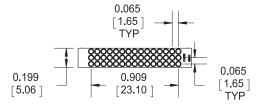
#### **Replacement Contacts:**

- Crimp 26-28 AWG
- Wire strip length: 0.122 [3.10]
- Male pin: YPN004-010H
- Female socket: YSK004-020AH

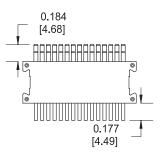
#### Accessories

- Crimp tool: AFM8 or M22520/2-01
- Crimp positioner: Socket = T1974 Pin: = T1973
- Insertion tool: T1970









## **Ordering Information**

N H F	R	ТАН		
		Plat	ing T, TH, TAH	
		Terr	nination R	
			tact M = Male	
l		Gen		•

General Specificati	ons			
Current Rating	1 Amp			
Contact Resistance	< 8 milliohms			
Extraction Force (Per Contact)	0.3 – 1.6 oz.			
Contact Life Cycles	100,000			
Breakdown Voltage	> 750V RMS			
Dielectric Withstanding Voltage	> 500V RMS			
Insulation Resistance	> 10 <sup>3</sup> megohms at 500 VDC			
Temperature Rating	-55° C to 125 °C			
Insulator	Nylon, 25% glass			
Contact Material: (Pin) (Socket)	Phosphor bronze Beryllium copper wires and brass body			
Plating Reference	T = 10µin gold (min) over nickel TH = 50µin gold (min) over nickel TAH = 50µin gold (min) over nickel on mating surface, gold flash over nickel on termination			

#### NOTES:

- For empty block, order ZNH045-001.
   Male contacts are shrouded in the insulator, female mounts
- Male contacts are shrouded in the insulator, female mounts in the plug frame are suggested.

3) Crimp contacts will be shipped unassembled.



### Module K

#### Width: 1 Unit • Contacts: 10 Hypertac® Removable Signal Contacts • Ø 0.024 [0.60] Contact

#### **Termination Style**

#### Ref. H2

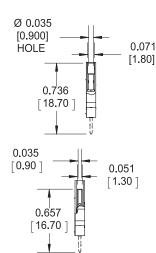
- Double crimp 22 AWG wire
- Stripped back 0.146 [3.70]
- Male pin: YPN006-019
- Female socket: YSK006-009

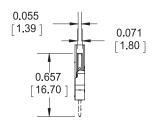
### Ref. R

- Crimp 22 AWG wire
- Stripped back 0.173 [4.40]
- Male pin: YPN006-021
- Female socket: YSK006-011ANH
- Dimension A: Ø 0.035 [0.90]
- Dimension B: Ø 0.051 [1.30]

### Ref. RR

- Crimp 18-20AWG wire
- Stripped back 0.173 [4.40]
- Male pin: YPN006-158
- Female socket: YSK006-089
- Dimension A: Ø 0.055 [1.39]
- Dimension B: Ø 0.71 [1.80]





0.055

[1.40]

0.697 [17.70] 0.039

[ 1.00 ]

HOLE

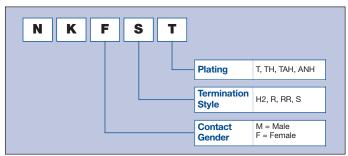
### Ref. S

- Solder cup 22 AWG
- Male pin: YPN006-020
- Female socket: YSK006-010

### **Accessories**

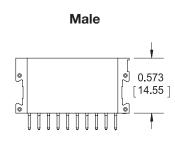
- Crimp tool: AFM8
- Crimp positioner: K547
- Extraction tool: S/DEM1.0060

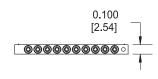
# **Ordering Information**

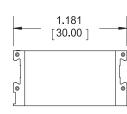


#### NOTES:

- 1) For empty block, order ZNK010-001.
- 2) Contacts will be shipped unassembled 3) Crimping instructions: Doc. number 550063.







Female

General Specifica	ations			
Current Rating	4 Amps			
Contact Resistance	< 5 milliohms			
Extraction Force (Per Contact)	0.5 – 2.0 oz.			
Contact Life Cycles	100,000			
Breakdown Voltage	> 1400V RMS			
Dielectric Withstanding Voltage	> 1050V RMS			
Insulation Resistance	> 10 <sup>5</sup> megohms at 500 VDC			
Temperature Rating	-55° C to 105° C			
Insulator	Glass filled nylon			
Contact Material: (Pin) (Socket)	Phosphor bronze Beryllium copper wires and brass body			
Plating Reference	Male Pins:       T = 10µin gold over nickel         TH = 50µin gold over nickel         Female Sockets:         TAH = 50µin gold over nickel         on mating surface, gold flash         over nickel on termination         ANH = 50µin gold over nickel on         mating surface, nickel over         copper flash on socket body         components, gold flash over         nickel on termination			

# N Series Mini Modules



### **Module P**

Width: 1 Unit • Contacts: 10 Hypertac® Removable Signal Contacts • Ø 0.024 [0.60] Contact

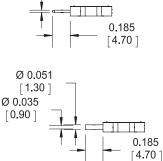
#### **Termination Style**

#### Ref. D

- Straight solder dip
- Male pin: YPN006-047H
- Female socket: YSK006-032ANH

### Ref. R

- Crimp 22 to 26 AWG
- Stripped back 0.173 [4.40]
- Male pin: YPN006-025H
- Female socket: YSK006-015ANH

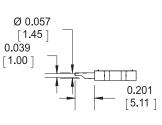


Ø 0.024

[0.60]



- Solder cup up to 22 AWG
- Stripped back 0.118 [3.00]
- Male pin: YPN006-026H
- Female socket: YSK006-016ANH



0.024 [0.61]

SQUARE

0.992 [25.20]

### Ref. Y

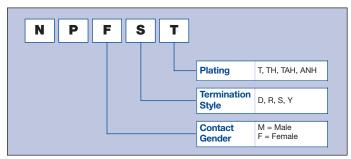
- Wire Wrap<sup>®</sup>
- Male pin: YPN006-046H
- Female socket: YSK006-031AH

### Accessories

- Crimp tool: AFM8
- Crimp positioner: K623
- Extraction tool: S/DEM1.0060

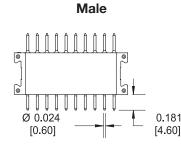
**N**<sup>®</sup> File No.: UL E102195

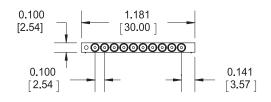
# **Ordering Information**

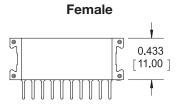


#### NOTES:

- 1) For empty block, order ZNP010-001.
- 2) Contacts will be shipped unassembled.
   3) Crimping instructions: Doc. number 550063.







General Specifications					
Current Rating	4 Amps				
Contact Resistance	< 5 milliohms				
Extraction Force (Per Contact)	0.5 – 2.0 oz.				
Contact Life Cycles	100,000				
Breakdown Voltage	> 1400V RMS				
Dielectric Withstanding Voltage	> 1050V RMS				
Insulation Resistance	> 10 <sup>3</sup> megohms at 500 VDC				
Temperature Rating	-55° C to 105° C				
Insulator	Glass filled nylon				
Contact Material: (Pin) (Socket)	Brass Beryllium copper wires and brass body				
Plating Reference	Male Pins:       T = 10µin gold over nickel         TH = 50µin gold over nickel         Female Sockets:         TAH = 50µin gold over nickel         on mating surface, gold flash         over nickel on termination         ANH = 50µin gold over nickel on         mating surface, nickel over         copper flash on socket body         components, gold flash over         nickel on termination				



### Module T

#### Width: 2 Units • Contacts: 5 Hypertac® Removable Signal Contacts • Ø 0.059 [1.50] Contact

Male

**Female** 

0.440 [11.17]

0.512

**General Specifications** 

[13.00

Ø 0.059

[1.50]

0.256 6.50

0.200

5.08

60

1.181

[30.00]

0.191

[4.84]

0.200

[5.08]

Ø 0.075 [1.90]

Ø 0.108

[2.74]

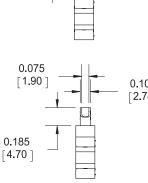
#### **Termination Style**

#### Ref. R

- Crimp 14, 16, 18 and 20 AWG
- Wire stripped back 0.285 [7.20]
- Male pin: YPN015-016H
- Female socket: YSK015-025AH

### Ref. S

- Solder cup up to 13 AWG
- Male pin: YPN015-017H
- Female socket: YSK015-026AH



0.285

[7.24]

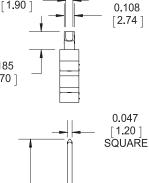
### Ref. V

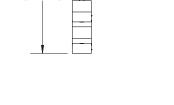
- Wire Wrap®
- Male pin: YPN015-018H
- Female socket: YSK015-027AH

#### Accessories

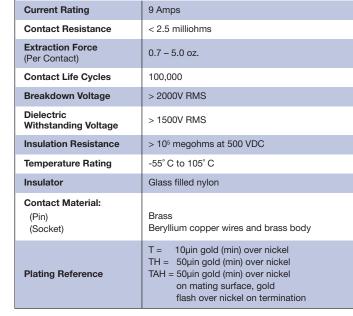
- Crimp tool: AFM8
- Crimp positioner: TP687
- Extraction tool: S/DEM5.0150

File No.: UL E102195





1.362 34.60



Dimensions are in inches [mm]

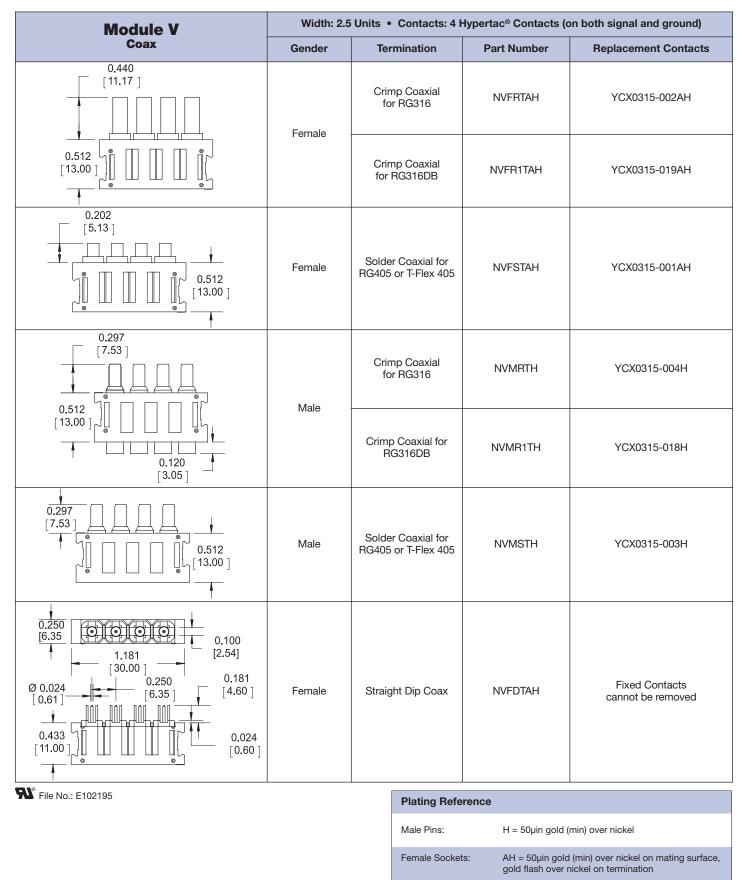
# **Ordering Information**

ΝΤ	F	S	T		
				Plating	T, TH, TAH
				Termination Style	R, S, V
				Contact Gender	M = Male F = Female

#### NOTES:

- 1) For empty block, order ZNT005-001.
- 2) Crimp contacts will be shipped unassembled. 3) Wire Wrap is a trademark of Gardner Denver.







Accessories
For Inner Conduction Crimping         AFM8           Crimp Positioner:         T1957           For Outer Conduction Crimping         HX3           Crimp Tool:         HX3           Die Set:         T1958 for RG316 or T2019 for RG316DB           Contact Removal Tool:         T1982

Cabling Instructions					
Crimp (R)	) and (R1)	Sold	er (S)		
Cable	RG316 and RG316DB	RG405	T-Flex 405		
Socket	S50302	S50301	S50307		
Pin	S50304	S50303	S50308		
Please request space from our customer service department					

Please request specs from our customer service department.

W<sup>®</sup> File No.: E102195

General Specifications - COAXTAC™					
Nominal Impedance	50 ohms				
Frequency Range	DC 3 GHz with RG316 DC 18 GHz with RG405				
Temperature Rating	-55° C to 125° C				
Materials	Brass, beryllium copper PTFE Fluorocarbon				
Finishes					
Center Contacts and Housings	Gold over nickel over copper				
Wire	Gold over nickel				
Electrical (based on RG405 Semi Rigid Cable)					
Voltage Standing Wave Ratio	(DC to 3GHz) 1.20:1 max. (3GHz to 18GHz) 1.50:1 max.				
<b>RF</b> Transmission Loss	0.50 dB at 18 GHz				
Insulation Resistance	5,000 megohms min.				
Dielectric Withstanding Voltage	500V RMS				
Contact Resistance					
Inner Contact	8 milliohms max.				
Outer Contact	2 milliohms max.				
Mechanical					
Extraction Force (Per Contact)	1.5 – 6.0 oz. max., 3.0 oz. average				
Connector Durability	> 25,000 cycles				



Module V	Width: 2.5 Units • Contacts: 4 Hypertac <sup>®</sup> Contacts • Can be mounted by itself or in a frame.			
25 Amp Power	Gender	Termination	Part Number	Replacement Contacts
	Female	Crimp 25 Amps (Free Air) 17 Amps (Bundled) 12-14 AWG	NVFP1TAH*	YSK025-031AH
$\begin{array}{c c} & & & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$	Female Empty Block	_	NVFH	_
0.250 [6.35] 0.250 [6.35] 0.250 0.250 [6.35] 0.250 [6.35] 0.250 [6.35] 0.250 [6.35] 0.250 [6.35] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [19.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.05] 0.250 [10.00] 0.512 [10.00]	Male Empty Block	_	NVMH	_
0.512 [13.00] 0.119 [3.03]	Male	Crimp 25 Amps (Free Air) 17 Amps (Bundled) 12-14 AWG	NVMP1TH*	YPN025-024H

### W File No.: E102195

* Plating Reference				
Male Pins:	H = 50µin gold (min) over nickel			
Female Sockets:	AH = 50µin gold (min) over nickel on mating surface, gold flash over nickel on termination			
Accessories				
Crimp ToolM309 Crimp PositionerT1981 Extraction ToolT1982				
NOTE: Contacts shipped unasser	nbled.			

General Specifications			
Current Rating (Bundled)	25 Amps (Free Air) 17 Amps (Bundled)		
Contact Resistance (milliohms)	< 1.5 milliohms		
Extraction Force	3.0 – 17.0 oz.		
Contact Life Cycles	100,000		
Breakdown Voltage	> 1600V RMS		
Dielectric Withstanding Voltage	1200V RMS		
Insulation Resistance	> 10 <sup>4</sup> megohms at 500 VDC		
Temperature Rating	-55° C to 105° C		
Insulator Material	Nylon		
Contact Material	Beryllium copper wires and brass		
Approximate Weight	M: 0.32 oz., F: 0.34 oz.		



Frame

Units

9

11

15

19

23

27

31

35

45

**Mounting Dimensions** 

Х

1.000

[25.40]

1.400

[35.65]

1.800

[45.72]

2.200

[55.88]

2.600

[66.04]

3.000

[76.20]

3.400

[86.36]

3.800

[96.52]

4.800

[121.92]

Υ

5.800

[147.32]

5.800

[147.32]

5.800

[147.32]

5.800

[147.32]

5.800

[147.32]

5.800

[147.32]

5.800

[147.32]

5.800

[147.32]

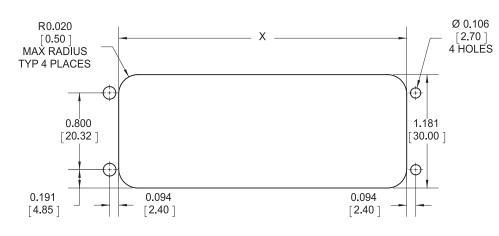
5.800

[147.32]

# **Mounting Dimensions**

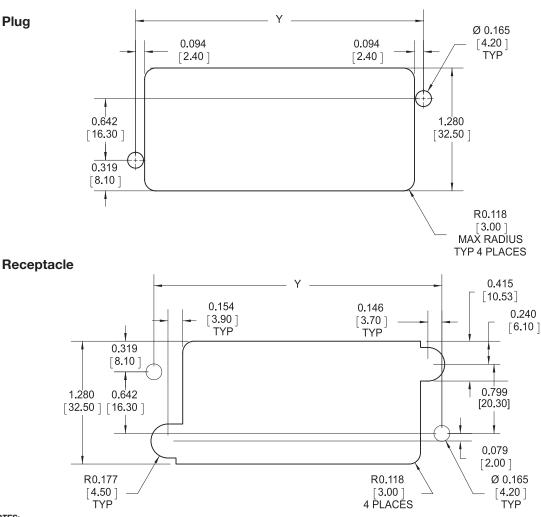
### **For Single Row Frame**

Frames: B, BV, BY, JV and JY



### Frame H

Float Mounting



#### NOTES:

1) 59.0 oz. in. torque for mounting.

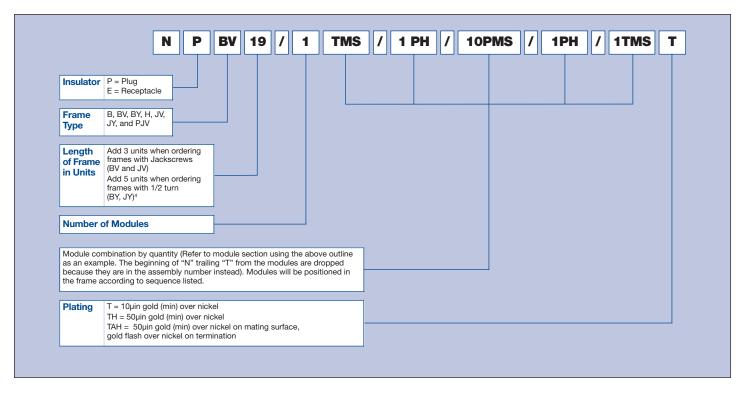
2) Refer to individual frame type for standard length.



N Series connectors are engineered for quick and easy use. Standard housings will be shipped completely assembled with the modules you select mounted.

# **Ordering Information**

The length of the frame is computed by multiplying the number of module units by the module quantity and totaling the results. If a half spacer is required, LFH1 can be used. Assign "FH1" in part number scheme below.



NOTES:

1) When part number exceeds 24 characters, please consult factory for special (abbreviated) part number.

The plug frame has a built in pin shroud (sockets may be used in plug frames, but not recommended).
 See receptacle for sequence of modules.

4) Consult factory when ordering straight dip solder tails with jacking version. Special cut out and modification - 872 is required.