

# HD38999

High Density

## A connector that has the connections...

The HD38999 family of connectors was designed to work with existing mil-specified 38999 shells. To the end users familiar with standard 38999 connectors, this family of high density connectors will look, feel, and perform just like the mil-qualified connectors. Utilizing an existing mil-qualified 39029 size 23 contact and mil-qualified shells, the new system will be, in many cases, a drop-in connector. Even though the HD38999 has 30% more contacts, it still performs to minimum electrical requirements of standard 38999 connectors.



# High Density



- Aluminum
- Composite
- Stainless Steel



- Sealed
- Filtered

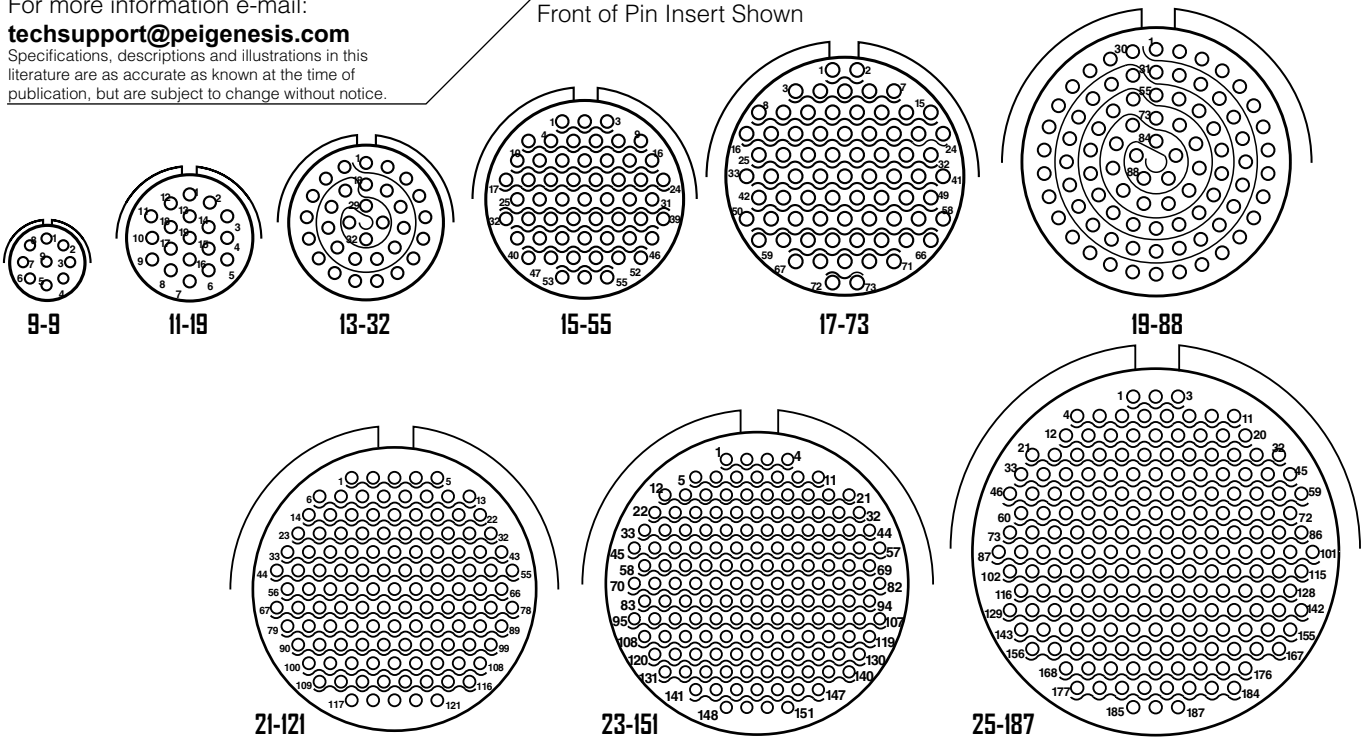
## Goes from 9 to 187 contacts!

For more information e-mail:

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Specifications, descriptions and illustrations in this literature are as accurate as known at the time of publication, but are subject to change without notice.

Front of Pin Insert Shown



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# The Core Mil Group

## CRIMP CONTACT SIZE

SAE 39029, SIZE 23

## WIRE BARREL RANGES/CURRENT CAPABILITY

22 AWG	5.0 AMPS
24 AWG	3.0 AMPS
26 AWG	2.0 AMPS
28 AWG	1.5 AMPS

## CRIMP BARREL DIAMETER

(Inches) .034-.036

## CRIMP BARREL

Depth (Inches).151-.155

Note: Wire insulation diameter greater than 0.045 inches is too large for the extraction tool to work properly. Connector damage is possible.

### Contact Part Numbers

Size 23 Sockets 10-597330-735

Size 23 Pins 10-597331-735

Sealing Plugs 10-405996-222 (MS27488-22-2)

Crimp Tool – Daniels M22520/2-01

Positioner – Daniels M22520/2-13 – Pins

Daniels M22520/2-16 – Sockets

Insertion/Removal Tool - Glenair 809-088

Temperature Range:  
-65C to 175C

Insulation Resistance:  
5000 megohms min. @ 500 VDC 25C

Dielectric Withstanding Voltage:  
1000 VRMS @ Sea level

## Easy Steps to build a part number... HD38999



1.	2.	3.	4.	5.	6.	7.
Connector Type	Shell Styles	Service Class	Shell Size – Insert arrangement	Contact Type	Alternate Positions	PCB Options
(P)TV	06	RW	23-151	P	B	(P25)

### Step 1. Select a Connector Type

	Designates
TV	Tri-Start Series Connector
TVP	Back panel mounted receptacle
(P)	Potted version

### Step 2. Select a Shell Style

	Designates
00	Wall mount receptacle
01	Line receptacle
06	Straight plug
07	Jam nut receptacle

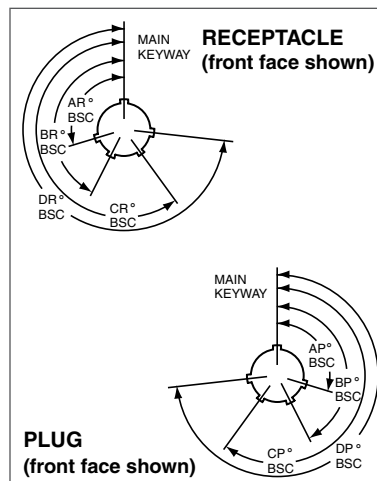
### Step 3. Select a Service Class

	Designates
RF	Electroless nickel plated aluminum, optimum EMI shielding effectiveness -65dB @ 10GHz specification min., 48 hour salt spray, 175°C
RW	Corrosion resistant olive drab cadmium plate aluminum, 500 hour extended salt spray, EMI -50dB @ 10GHz specification min., 175°C
RK	Corrosion resistant stainless steel, plus 500 hour salt spray resistance, EMI -45 dB @ 10 GHz specification min., 175°C
DT	Durmalon plated, alternative to Cadmium. Corrosion resistant, 500 hour extended salt spray, EMI -50dB @ 10GHz specification min. without CR <sup>6</sup>

### Step 4. Select a Shell Size – Insert Arrangement

Shell Sizes are MIL-DTL-38999, Series III, plus newer High Density insert arrangements

Shell Size	Insert Arrangement	Shell Size	Insert Arrangement
9 – 9		19 – 88	
11 – 19		21 – 121	
13 – 32		23 – 151	
15 – 55		25 – 187	
17 – 73			



### Step 6. Select an Alternate Position

A, B, C, D, E, blank for normal

Shell Size	Key & keyway arrangement identification letter	AR° or AP° BSC	BR° or BP° BSC	CR° or CP° BSC	DR° or DP° BSC
9	N*	105	140	215	265
	A	102	132	248	320
	B	80	118	230	312
	C	35	140	205	275
	D	64	155	234	304
11, 13, and 15	N*	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
17 and 19	N*	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
21, 23, and 25	N*	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272

A plug with a given rotation letter will mate with a receptacle with the same rotation letter. The angles for a given connector are the same whether it contains pins or sockets. Inserts are not rotated in conjunction with the master key/keyway.

### Step 5. Select a Contact Type

	Designates
P	Pin contacts
S	Socket contacts

### Step 7. Select a PCB Contacts

	Designates
P1	PCB tail stickout .100" nominal +/- .040 inch
P15	PCB tail stickout .150" nominal +/- .040 inch
P2	PCB tail stickout .200" nominal +/- .040 inch
P25	PCB tail stickout .250" nominal +/- .040 inch



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