

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 Interconnects

Goes from 9 to 187 contacts!



- Aluminum
- Composite
- Stainless Steel
- Sealed
- Filtered

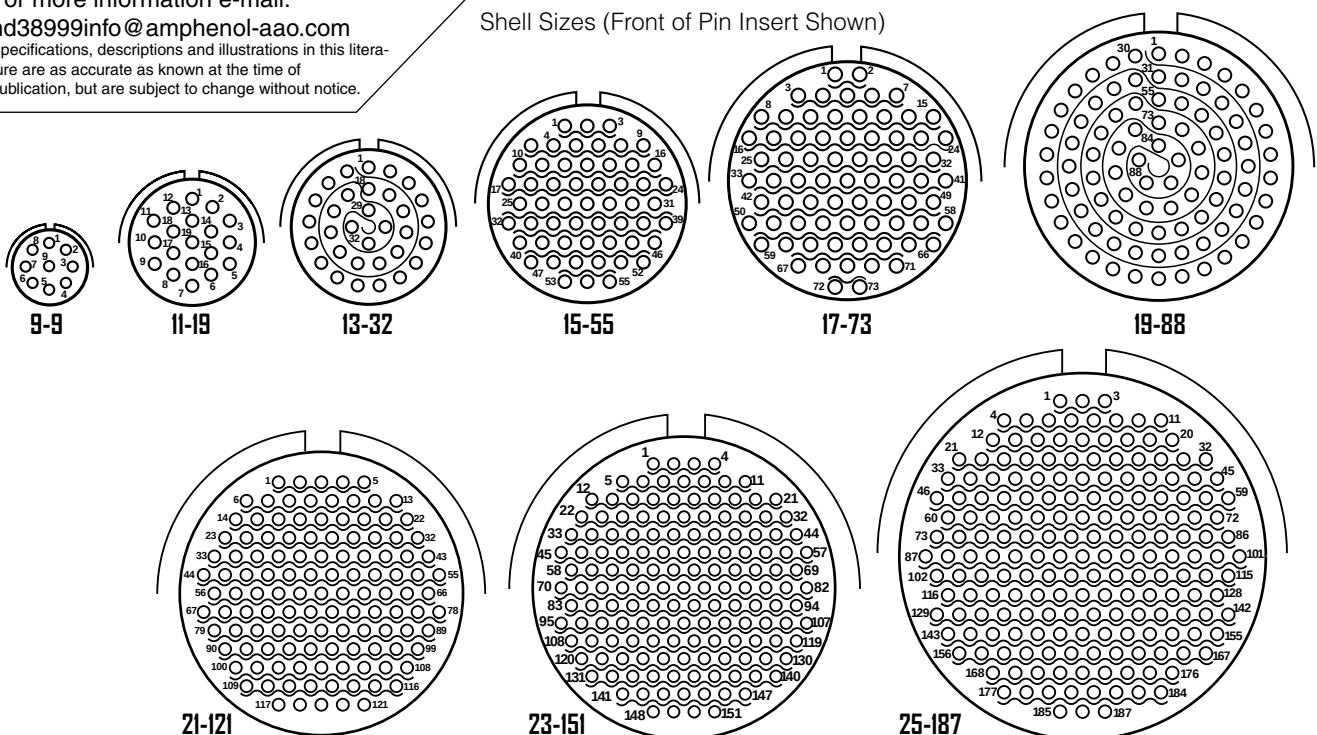


For more information e-mail:

hd38999info@amphenol-aao.com

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

Shell Sizes (Front of Pin Insert Shown)



Front of
Pin Insert Shown.

III
II
I
SJT

26482
Matrix 2

83723 III
Matrix
Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others

38999

III
II
I
SJT

CRIMP CONTACT SIZE

SAE AS39029, 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

Crimp Tool - Daniels M22520/2-01

Size 23 Pins 10-597331-735

Positioner - Daniels M22520/2-13 - Pins

Sealing Plugs 10-405996-222 (M27488-22-2)

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

26482

Matrix 2

83723 III

Matrix Pyle

5015

Crimp Rear Release Matrix

26500 Pyle

Printed Circuit Board

EMI Filter Transient

Fiber Optics

High Speed Contacts

Options Others

Easy Steps to build a part number... HD38999



1. Connector Type	2. Shell Styles	3. Service Class	4. Shell Size - Insert arrangement	5. Contact Type	6. Alternate Positions	7. 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 ⁶
ZN	Zinc-Nickel Alternative to Cadmium corrosion resistant, 500 hour salt spray, Conductive, -65°C to +175°C

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 5. Select a Contact Type

	Designates
P	Pin contacts
S	Socket contacts

Step 6. Select an Alternate Position

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

Shell Size	Key & keyway arrangement identification letter	AR ⁶ or AP ⁶ BSC	BR ⁶ or BP ⁶ BSC	CR ⁶ or CP ⁶ BSC	DR ⁶ or DP ⁶ 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	E	91	131	197	240
	N*	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
17 and 19	D	119	146	176	298
	E	51	141	184	242
	N*	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
21, 23, and 25	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	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 7. Select a PCB Contacts

Pin	Socket	Designates
P1	S1	PCB tail stickout .100" nominal +/- .040 inch
P15	S15	PCB tail stickout .150" nominal +/- .040 inch
P2	S2	PCB tail stickout .200" nominal +/- .040 inch
P25	S25	PCB tail stickout .250" nominal +/- .040 inch

