# H2D SERIES

**HiRel Connectors High Density (H2D)** series product line is a smaller and lighter alternative to the standard MIL-DTL-38999 connectors. When space and weight are critical to our customer's applications, these High Density connectors provide the solution. All connectors within the H2DA series have an enhanced sealing grommet designed to protect the interior components from the harshest environmental conditions. The series is available with your choice of rear-release crimp contacts, solder cup or PC tail terminations. HiRel offers our H2D series with a heavy duty, double start ACME thread (H2DA<u>2</u>) in shell sizes 5-21\*. These H2D connectors feature standard and custom insert arrangements that contain contacts to accept #22 to #28 AWG wire.

\*HiRel's H2DA2\*-131 connector is only available in shell sizes 13 through 21.

H2DA2\* - 121 The H2DA2\*-121 and H2DA2\*-131 High H2DA2\* - 131 Density Self-Locking Plugs are equipped with a rear clamp band accessory.



Density Self-Locking Plugs are equipped with a rear clamp band accessory. HiRel has incorporated its **patented Self-Locking mechanism**, which has proven to stay locked under extreme vibration. The use of an integral band clamp saves space and weight by eliminating the need for a backshell. The **H2DA2\*-131** has incorporated a proprietary grounding ring installed giving this series enhanced EMI shielding.

#### H2DA2\*-211



The **H2DA2\*-211** High Density connector is an in-line receptacle that is equipped with a rear clamp band accessory. By eliminating the flange, the overall weight and size of the receptacle is reduced.

#### H2DA2\* - 222



The **H2DA2\*-222** High Density connector is a square flange receptacle designed with a threaded rear accessory. It has four holes that can be mounted and bolted to a panel and is able to accomodate a rear backshell.

### H2DA2\* - 231 H2DA2\* - 241



The **H2DA2\*-231 & 241** High Density Jam Nut receptacle is equipped with a rear clamp band accessory. **H2DA2\*-231** is supplied with a Spanner Nut while the **H2DA2\*-241** is outfitted with a Hex Nut.

## H2DA2\* - 122



The **H2DA2\*-122** is designed with a rear accessory thread that is compatible with an exterior backshell. HiRel has incorporated its *patented Self-Locking mechanism* into this plug, which has proven to stay locked under extreme vibration.

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## H2DA2\*-221



The **H2DA2\*-221** High Density connector is a square flange receptacle designed with a rear clamp band accessory. It has four holes that can be mounted and bolted to a panel.

## H2DA2\*-223



The **H2DA2\*-223** High Density Square Flange Receptacle has a potted rear with non-removable solder cup or PC tail contacts. It has four holes that can be mounted and bolted to a panel.

## H2DA2\* - 232 H2DA2\* - 242



The **H2DA2\*-232** & **H2DA2\*-242** High Density Jam Nut receptacle is equipped with a double start ACME thread and a rear threaded accessory. **H2DA2\*-232** is fitted with Spanner Nut while the **H2DA2\*-242** is furnished with a Hex Nut.

## H2D SERIES

Front face of pin insert, engagement side shown. Socket insert is mirror image of pictured.

	A B		$7 \xrightarrow{2} 0 \xrightarrow{2} 0 \xrightarrow{1} 0 \xrightarrow{2} 0 \xrightarrow{1} 0 \xrightarrow{1} 0 \xrightarrow{2} 0 \xrightarrow{1} 0 \xrightarrow{2} 0 \xrightarrow{1} 0 \xrightarrow{2} 0 \xrightarrow{1} 0 \xrightarrow{2} 0 \xrightarrow{2} 0 \xrightarrow{2} 0 \xrightarrow{1} 0 \xrightarrow{2} 0 0 $	$9^{2} \\ 3 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	$7 \xrightarrow{3} 6 6 \xrightarrow{1} 4$ $12 \xrightarrow{6} 6 \xrightarrow{6} 6 \xrightarrow{6} 8$ $16 \xrightarrow{6} 6 \xrightarrow{6} 6 \xrightarrow{1} 13$ $19 \qquad 17$	11 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 +
Insert Arrangement	05-003	06-007	07-010	08-013	09-019	10-026
No. of Contacts	3	7	10	13	19	26
Contact Size	#23	#23	#23	#23	#23	#23
DWV Voltage (VAC)	500	500	500	500	500	500
Current Rating (Amps)	5	5	5	5		

	$ \begin{array}{c} 9 \\ 15 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	8 7 12 6 5		$\begin{array}{c} 3 \\ 16 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ $	$\begin{array}{c} 4 & 1 \\ 19 & 0 & 0 & 0 & 0 & 0 \\ 28 & 0 & 0 & 0 & 0 & 0 & 0 \\ 38 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 38 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 47 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 57 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 57 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 57 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 66 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 75 & 85 & 82 & 82 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Insert Arrangement	13-037	13-	048	16-055	17-085	21-130
No. of Contacts	37	4	8	55	85	130
Contact Size	#23	#16	#23	#23	#23	#23
DWV Voltage (VAC)	500	1800	500	500	500	500
Current Rating (Amps)	5	13	5	5	5	5

Performance				
Operating Temperature	-65°C to +175°C (see below)			
Random Vibration	37g			
Shock	300G			
Gunfire Vibration	37g			

#### CONTACTS

Contact Pin:	Contact Socket:
Size 23	Size 23
0009-047-000 (22-24 AWG Wire)	0012-049-000 (22-24 AWG Wire)
0009-114-000 (26-28 AWG Wire)	0012-287-000 (26-28 AWG Wire)

#### Tools

Class	Material	Finish
С	Al	Anodize Black (up to +200° C)
F	Al	Low Stress Nickel (up to +200° C)
W	Al	Olive Drab Cadmium over Nickel
Т	Al	Nickel Teflon
Z	Al	Zinc Nickel
В	Ti	Nickel (up to +200° C)
К	Cres	Passivated (up to +200° C)
Ν	Cres	Nickel (up to +200° C)

For Space Grade Applications, add a "1" after the Class. Ex: Space Grade Titanium with Nickel plating = B1



Crimp Tool: Daniels P/N AFM-8 (M22520/2-01)

Positioner: Daniels P/N K-710A (Socket) Daniels P/N K-709A (Pin)

Insertion / Extraction Tool: P/N 08AT024-23 (Size 23)

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