

Features & Benefits

QUALIFIED

MIL-DTL-26482H

Fully in accordance with the MIL spec requirements with solder type.

ROBUSTNESS

500 Mating Cycles

Equipped with a coupling ring made from high strength aluminum. The plug provides a minimum of 500 mating unmating cycles. The receptacle is equipped with rugged stainless steel bayonet pins.

OUTDOOR USING

Salt Spray 500 Hours

Designed to withstand climate ingress and exposure to salt spray or corrosive atmospheres while still maintaining mechanical, electrical functionality and RoHS compliance.

QUICK MATING

1/3 Bayonet Coupling

With only 1/3 twist of the bayonet coupling system, connectors are mated with audible "click" and tactile feel to confirm proper mating. These mating features eliminate uncertainty connection and reduce time and labor during installation.

FLEXIBILITY

Arrangements from 2 to 61 contacts

Power supply and signal transmission can be combined in a unique interconnect solution to reduce system complexity and minimize component/installation costs.

Receptacle range

Square flange receptacle type 00

Front view



Square flange receptacle with straight sealing gland backshell

00J



Page 22

Square flange receptacle with straight adaptor

00A/RA



Page 20

Square flange receptacle with straight cable clamp without grommet

00AC



Page 20

Square flange receptacle with straight sealing gland and cable clamp

00JC



Page 22

Square flange receptacle with removable straight backshell for heatshrink sleeving

00M/RM



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Cable in line receptacle type 01

Front view



Cable in line receptacle with straight sealing gland backshell

01J



Page 27

Cable in line receptacle with straight adaptor

01A/RA



Page 25

Cable in line receptacle with straight sealing gland and cable clamp

01JC



Page 27

Cable in line receptacle with straight cable clamp without grommet

01AC



Page 25

Cable in line receptacle with removable straight backshell for heatshrink sleeving

01M/RM



Page 28

Square flange receptacle type 02

Front view



Square flange receptacle not accepting backshell

02E/02R/02H



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Jam nut receptacle type 07

Front view



Jam nut receptacle with removable straight backshell for screen termination and heatshrink sleeving

07G/RG



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Jam nut receptacle not accepting backshell

07A/07H



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Jam nut receptacle with straight backshell for potting

07P/RP



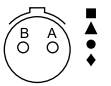

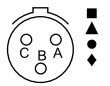
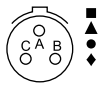
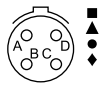



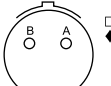
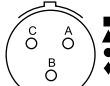

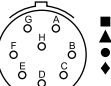
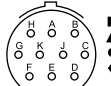

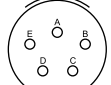
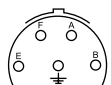




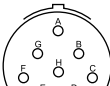
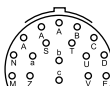

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Environmental connectors / Ordering information

Basic Series	851	00	E	8	3A	P	-	50	--
Shell type:									
00	square flange receptacle accepting backshells								
01	in line receptacle								
02	square flange receptacle not accepting backshells								
07	jam nut receptacle accepting backshells								
06	plug for use with straight backshells								
08	plug for use with 90° backshells								
36	shielded plug for use with straight backshells								
Backshell type:									
Solder Crimp									
A	RA	straight adaptor							
EC	RC	straight cable clamp for solder contacts							
EC	RC	90° cable clamp							
AC		straight cable clamp without grommet							
E	R	backnut							
G	RG	straight removable backshell for screen termination and heatshrink sleeving							
J		straight backshell with sealing gland							
JC		straight backshell with sealing gland and cable clamp							
L		long metallic adaptor and plastic cable gland - Shell size 08 to 16							
M	RM	square flange receptacle not accepting backshells							
NL		long metallic adaptor and plastic cable gland with spiral protector - Shell size 08 to 16							
NS		short metallic adaptor and plastic cable gland with spiral protector - Shell size 08 to 16							
P	RP	straight backshell for potting							
P	RP	90° backshell for potting							
S		short metallic adaptor and plastic cable gland - Shell size 08 to 16							
T	RT	straight backshell for heatshrink sleeving							
U	RU	short backshell for screen termination and heatshrink sleeving							
Z	RZ	straight adaptor for electrical pich access							
Shell size:									
8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24									
Contacts layout:									
see pages 14 & 15									
Contact type:									
P	male								
S	female								
Orientation:									
Normal (not included in part number). For others note: W, X, Y, Z - see table page 76									
Obligatory suffix									
B	crimp version without clip for layouts 8-2, 8-3, 8-4, & 12-14, gold plated all over the contact								
50	Crimp type contact: Gold plated, all sizes								
	Solder type contact:								
	- Size 20, gold plated active area, tin plated termination area, except for layouts 8-2, 8-3, 8-4, & 12-14 gold plated all over the contact								
	- Size 16 and mix layouts (size 20 & 16), gold plated all over the contact.								
51	solder type contact (only size 20, gold plated all over the contact)								
54	black zinc nickel plating (contacts as per suffix 50)								
57	black zinc nickel plating (contacts as per suffix 51)								
Specification (without specification: olive green cadmium plating)									
29	black anodized plating (solder type contacts)								
031	black anodized plating (crimp type contacts)								
44	nickel plating								
66	crimp version: delivered without backshell and conical ring								
	solder version: delivered without backshell, conical ring and grommet								

Cadmium plating without specification

Layouts

Shell size	Contact #16 (Ø 1.6 mm)	Contact #20 (Ø 1.0 mm)	Mixed power
8		<p>8-2 2 contacts 2xØ1.0 (#20)</p>  <p>8-3 3 contacts 3xØ1.0 (#20)</p>  <p>8-3A/8-98 3 contacts 3xØ1.0 (#20)</p>  <p>8-33 3 contacts 3xØ1.0 (#20)</p>  <p>8-4 4 contacts 4xØ1.0 (#20)</p> 	
10		<p>10-6 6 contacts 6xØ1.0 (#20)</p>  <p>10-7 7 contacts 7xØ1.0 (#20)</p>  <p>10-98 6 contacts 6xØ1.0 (#20)</p> 	
12	<p>12-2 2 contacts 2xØ1.6 (#16)</p>  <p>12-3 3 contacts 3xØ1.6 (#16)</p>  <p>12-4 3 contacts +ground 4xØ1.6 (#16)</p> 	<p>12-8 8 contacts 8xØ1.0 (#20)</p>  <p>12-10 10 contacts 10xØ1.0 (#20)</p>  <p>12-14 14 contacts 14xØ1.0 (#20)</p> 	
14	<p>14-5 5 contacts 5xØ1.6 (#16)</p>  <p>14-7 6 contacts +ground 7xØ1.6 (#16)</p> 	<p>14-18 18 contacts 18xØ1.0 (#20)</p>  <p>14-19 19 contacts 19xØ1.0 (#20)</p> 	<p>14-12 12 contacts 8xØ1.0 (#20) 4xØ1.6 (#16)</p>  <p>14-15 15 contacts 14xØ1.0 (#20) 1xØ1.6 (#16)</p> 
16	<p>16-8 8 contacts 8xØ1.6 (#16)</p> 	<p>16-26 26 contacts 26xØ1.0 (#20)</p> 	<p>16-23 23 contacts 22xØ1.0 (#20) 1xØ1.6 (#16)</p> 

- Solder contact layouts (QPL)
- Solder contact layouts
- + Solder contact layouts without grommet
- ▲ Crimp contact layouts
- Hermetic version contact layouts
- ◆ PC tail contact layouts

Other layouts, please consult us

Environmental versions



Technical features

Materials

- **Shell:**
Environmental version : aluminium alloy
- Plating :
- olive green cadmium
- black anodised
- black zinc nickel
- nickel
- **Backshells:** Aluminum alloy
- **Cable glands:** Thermoplastic
- **Coupling ring:** Aluminum alloy
- **Spring washer:** Spring stainless steel
- **Insert:** Elastomeric soft neoprene
- **RoHS compliant & conforms to the Chinese standard SJ/T1166-2006 (Chinese RoHS equivalent)**



Electrical

- **Dielectric withstanding voltage:**
- At standard pressure: mated and unmated connectors
- 1500 Vrms between size 20 contacts (service 1)
- 2300 Vrms between size 16 contacts (service 2)
- 1500 Vrms between mixed size 20 and 16 contacts (service 1)

- At reduced pressure 10 mbar:
connectors mated and unmated
- 200 Vrms between size 20 contacts (service 1)
- 300 Vrms between size 16 contacts (service 2)
- **Insulation resistance**
≥ 5000 MΩ under 500 Vcc
- **Current rating per contact**
- Standard version:
Size 20 = 7.5 A / Size 16 = 13 A
- Hermetic version:
Size 20 = 5 A / Size 16 = 10 A
- **Contact resistance**
- Environmental version:
Size 20 ≤ 4 mΩ / Size 16 ≤ 3 mΩ
- Hermetic version:
Size 20 ≤ 30 mΩ / Size 16 ≤ 14 mΩ
- **Shielding effectiveness:**
70 dB to 5 MHz - 40 dB to 100 MHz

Environmental

- **Operating temperature:**
from -55°C to +125°C
- **Flammability rating:**
UL94 HB
- **Dynamic salt spray:**
per EIA-364-26
- 48 h nickel, zinc cobalt, zinc nickel
- 500 h black anodized version
- 500 h black zinc nickel version

- **Sealing:**
- Globally IP65 (unmated conditions)
- With J or JC backshell IP67 (mated conditions)
- With cable gland IP68 (mated conditions)
Under 10 meter of water during 48 hours
- Crimp contact version, 1 bar differential pressure, leakage ≤ 8 cm³/hr
- Solder contact version, 2 bar differential pressure, leakage ≤ 16 cm³/hr
- **Fluid resistance:**
- to MIL-DTL-26482G series 1 and NFC 93422 - HE 301 B code A
- Hydraulic fluids
- Lubricating oil

Mechanical

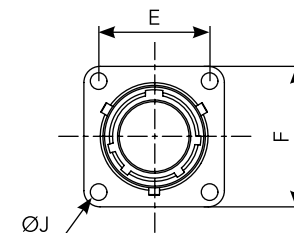
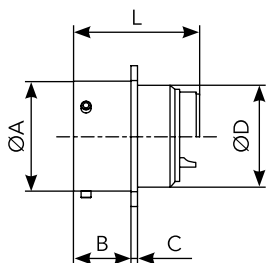
- **Durability:**
500 matings and unmatings per MIL-DTL-26482H
- **Vibration resistance:**
10-2000 Hz, acceleration 15 g test procedure per EIA-364-28
- **Thermal shock:**
5 cycles, 30 min. from -55°C to 125°C per EIA-364-32
- **Mechanical shock:**
50 g, 11 ms period per EIA-364-27

Environmental connectors

Square flange receptacle not accepting backshell

Cross reference

02 E	HE 301 B 02 E
	MS 3112 E
	VG 95328 H
02 R	HE 301 B 02 R
	MS 3122 E
	VG 95328 C

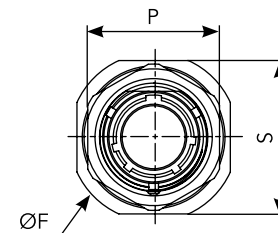
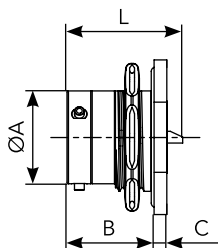


Shell size	Part numbers		L max		A	B max	C max	D max	E	F max	J
	solder contacts	crimp contacts	solder	crimp							
8	851 02 E 8.. P _S . 50..	851 02 R 8.. P _S . 50..	25.18	32.35	12.03	11.70	1.32	10.84	15.09	20.99	3.13
10	851 02 E 10.. P _S . 50..	851 02 R 10.. P _S . 50..	25.10	32.35	15.01	11.70	1.32	13.99	18.26	24.19	3.13
12	851 02 E 12.. P _S . 50..	851 02 R 12.. P _S . 50..	25.10	32.35	19.07	11.70	1.32	17.37	20.62	26.54	3.13
14	851 02 E 14.. P _S . 50..	851 02 R 14.. P _S . 50..	25.10	32.35	22.25	11.70	1.32	20.57	23.00	28.89	3.13
16	851 02 E 16.. P _S . 50..	851 02 R 16.. P _S . 50..	25.10	32.35	25.42	11.70	1.32	23.72	24.61	31.29	3.13
18	851 02 E 18.. P _S . 50..	851 02 R 18.. P _S . 50..	25.10	32.35	28.60	11.70	1.32	26.69	26.97	33.69	3.13
20	851 02 E 20.. P _S . 50..	851 02 R 20.. P _S . 50..	26.67	33.95	31.77	14.35	2.15	29.89	29.36	36.89	3.13
22	851 02 E 22.. P _S . 50..	851 02 R 22.. P _S . 50..	26.67	33.95	34.95	14.35	2.15	33.04	31.75	39.99	3.13
24	851 02 E 24.. P _S . 50..	851 02 R 24.. P _S . 50..	26.67	33.95	38.12	15.20	2.15	36.24	34.92	43.15	3.81

Jam nut receptacle not accepting backshell

Cross reference

07 A	HE 301 B 07 A
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Shell size	Part numbers		L max		A	B max	C max	F max	P max	S max
	solder contacts	crimp contacts	solder	crimp						
8	851 07 A 8.. P _S . 50..	-	25.18	-	12.03	17.90	2.64	26.94	19.29	23.94
10	851 07 A 10.. P _S . 50..	-	25.10	-	15.01	17.90	2.64	30.14	22.38	26.94
12	851 07 A 12.. P _S . 50..	-	25.10	-	19.07	17.90	2.64	34.94	27.13	31.74
14	851 07 A 14.. P _S . 50..	-	25.10	-	22.25	17.90	2.64	38.04	30.33	34.94
16	851 07 A 16.. P _S . 50..	-	25.10	-	25.42	17.90	2.64	41.24	33.48	38.24
18	851 07 A 18.. P _S . 50..	-	25.10	-	28.60	17.90	2.64	44.44	36.68	41.34
20	851 07 A 20.. P _S . 50..	-	26.67	-	31.77	22.45	3.44	49.14	39.83	46.04
22	851 07 A 22.. P _S . 50..	-	26.67	-	34.95	22.45	3.44	52.24	43.03	49.24
24	851 07 A 24.. P _S . 50..	-	26.67	-	38.12	23.30	3.44	55.54	46.18	52.74

Note: all dimensions are in mm