

DELPHI

Connection
Systems

*Bulls-Eye Subminiature
Circular Connectors*



Driving Tomorrow's Technology

Bulls-Eye

Subminiature Circular Connectors



Hit the target every time with our high density connectors that provide high quality and reliability.

Delphi Connection Systems provides the same high quality, high reliability and high density connectors that you have come to rely on when we were previously known as **Packard-Hughes Interconnect**.

Military, commercial, and industrial electronics systems benefit from Delphi's Bulls-Eye connector. The connector provides:

- high contact density (without a decrease in contact spacing),
- high density mounting,
- scoop-proof shell design for maximum protection,
- ease of assembly,
- low engagement forces, and
- the ability to withstand a 23,000 g force.

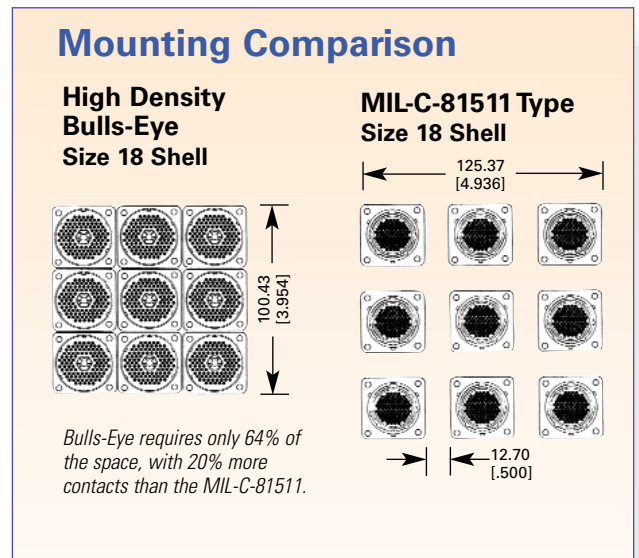
Bulls-Eye connectors offer other features and benefits. A unique retention system with a retaining clip on the contact provides maximum economy and improves field servicing time. A variety of contact body materials and finishes allow for increased versatility for each application. A wide selection of cable strain reliefs is available for potting versions. In addition, threaded rear shells are offered whenever cable strain reliefs are utilized.

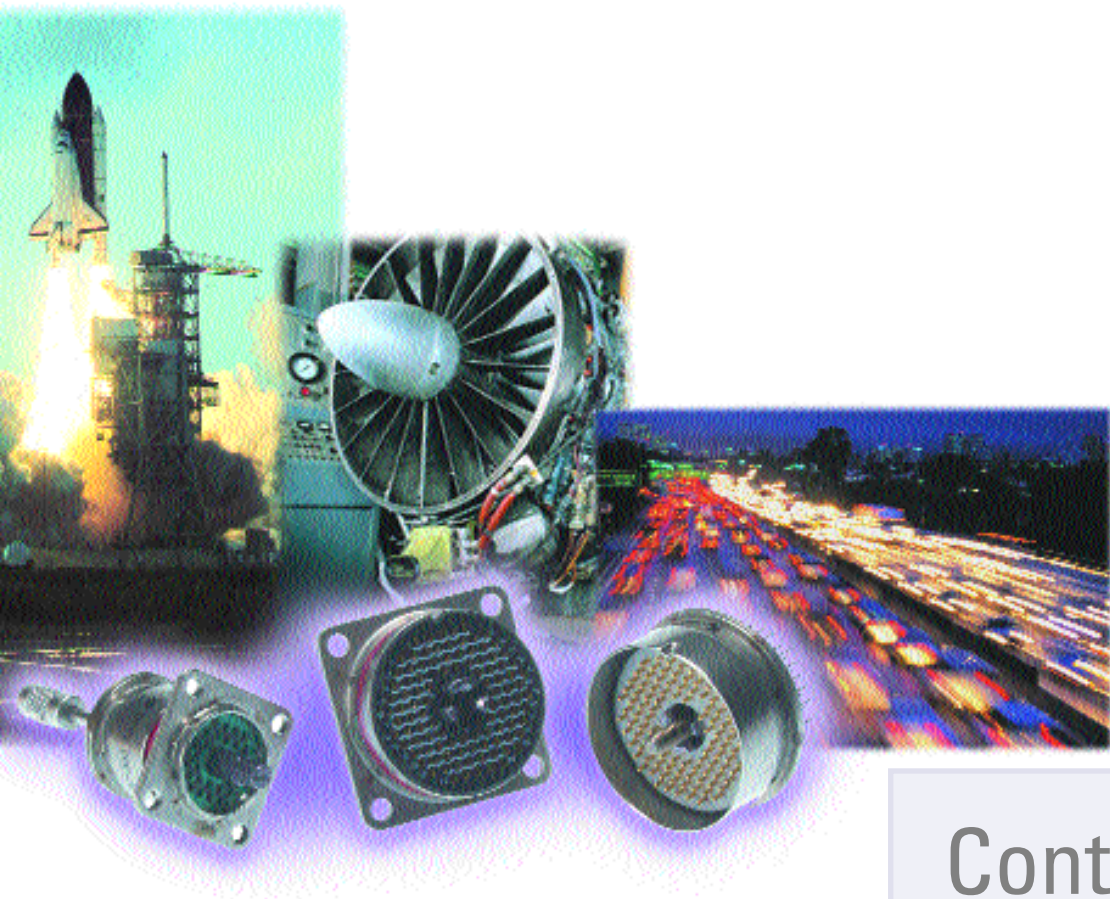
Exclusive Features

POLARHEX center jackscrew coupling helps assure alignment and provides positive polarization with a variety of polarizing positions that help prevent mismatching. The compactness of the POLARHEX center jackscrew coupling allows for the maximum number of contacts in the smallest utilized space. It also offers one of the highest contact densities and connector mounting densities in the industry.

High Density Mounting

The Bulls-Eye, in comparison with the MIL-C-81511 connector type mounted under the most lenient conditions, requires only 64% of the space, yet provides 20% more contacts with no decrease in contact spacing. For example, the Bulls-Eye connector accommodates 918, size 22 contacts, compared to the MIL-C-81511 that uses 765, size 22 contacts. Both utilize a size 18 shell and standard MIL-STD cutouts (*see comparison below*).





Bulls-Eye connectors are designed for applications requiring either cable or flange mounting configurations conforming to standard MIL-STD cutouts and mounting holes. Contact arrangements include: 14, 30, 48, 66, 72 and 102. Non-environmental and potting versions are available. The connectors are encased in a lightweight, stainless steel, wrap-around shell for maximum protection in a minimum profile.

Typical Applications

Delphi Connection Systems' Bulls-Eye connectors are designed for military, commercial and industrial applications. Typical applications include:

- Airborne equipment
- Ground support equipment
- Test equipment
- Traffic control systems
- Guidance control systems (missiles and space)

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Key Words:

- MIL-SPEC* — *Military Specification*
- MIL-STD* — *Military Standard*

Bulls-Eye General Information

Contact Performance Data

Size Gauge	0.35 mm ² [22 AWG]
Separation Forces	14.2 g minimum to 142 g maximum [0.5 oz. minimum to 5 oz. maximum]
Current Rating	3 amps
Resistance	25 mv. maximum
Crimp Tensile Strength	
Wire Size: 0.35 mm ² [22 AWG]	6.8 kg minimum [15 lbs.]
0.22 mm ² [24 AWG]	4.5 kg minimum [10 lbs.]
0.13 mm ² [26 AWG]	2.7 kg minimum [6 lbs.]

Contact/Connector Performance Data

Mating & Unmating Forces	
Shell Size: 8 through 14	0.23 N-m maximum jackscrew torque [2 in.lbs.]
16 and 18	0.57 N-m maximum jackscrew torque [5 in.lbs.]
Contact Retention	2.7 kg maximum [6 lbs.]

Connector Performance Data

Durability	500 cycles
Dielectric Strength:	
Sea Level	1,500 VAC RMS
21,336 m [70,000 ft.] altitude	375 VAC RMS
Thermal Shock (Operating Temperature)	-54°C to +125°C (-65°F to +257°F)
Insulation Resistance at 500 VDC	5,000 megohms minimum

Materials

Connector Body	Diallyl ortho phthalate, per ASTM D5948-96, Type SDG-F
Jackscrew	Corrosion resistant steel, Type UNS S30300 or S30323 per ASTM-A581 or ASTM-A582
Polarizing Boss	Aluminum alloy 7075-T6 per AMS-QQ-A-225/9
Shell	Corrosion resistant steel, Type 302 per ASTM-A666

Finishes

Jackscrew	Electrolytic polish per MIL-S-5002
Polarizing Boss	Anodize per MIL-A-8625, dyed gray
Shell	Passivated, per MIL-F-14072, finish E300

Bulls-Eye Ordering Nomenclature

BA 1 A 08 C 014 P N 000

Connector & Coupling Type

- BA** for Boss with Standard Jackscrew
- BB** for Boss Only
- BC** for Boss with Recessed Jackscrew
- BD** for Boss with Extended Jackscrew
- BG** for Boss with Guide Pin Hardware*

Shell Style

- 1** for Receptacle Shell, no Flange
- 2** for Receptacle Shell, with Mounting Flange
- 6** for Plug Shell, no Flange
- 9** for Plug Shell, with Mounting Flange

Class

- A** for Non-Environmental
- B** for Potting with Backshell Threads
- P** for Potting

Shell Size

- 08** for 14 Contacts
- 10** for 30 Contacts
- 12** for 48 Contacts
- 14** for 66 Contacts
- 16** for 72 Contacts
- 18** for 102 Contacts

Contacts

- For Connector without Contacts
- C** For Connector with Contacts: Pins = WP22Y22C300
Sockets = WS22Y22C300

When ordering Class **B** or **P** connectors, 5% spare contacts (2 minimum) and 15% sealing plugs, part number WD22N00D001 (3 minimum) are included in contact package.

Modifications, Variations

Contact factory for available modifications and variations.

Boss Polarizing Position

- | | |
|----------|----------|
| N | X |
| V | Y |
| W | Z |

Contact Style

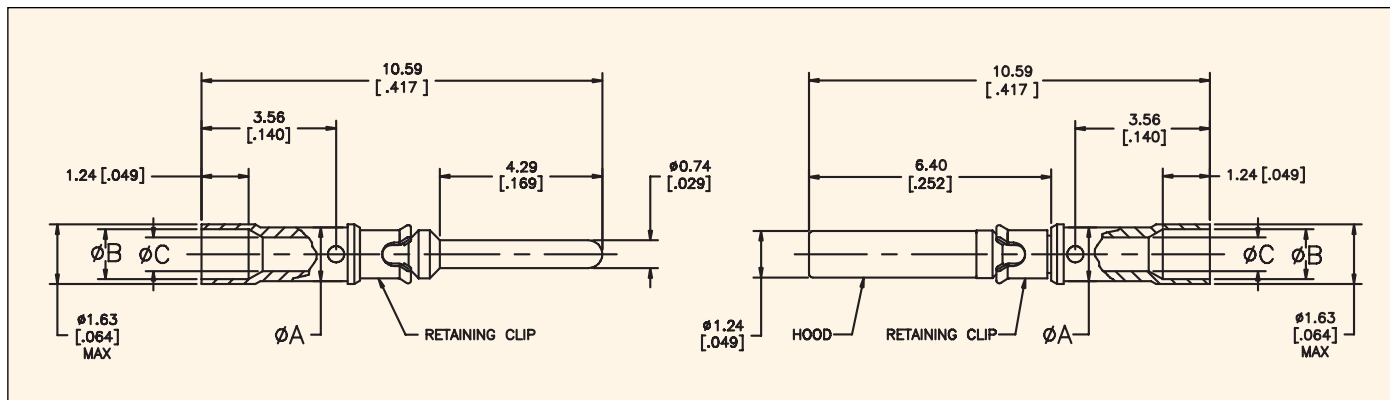
- P** for Pin
- S** for Socket

Insert Arrangement

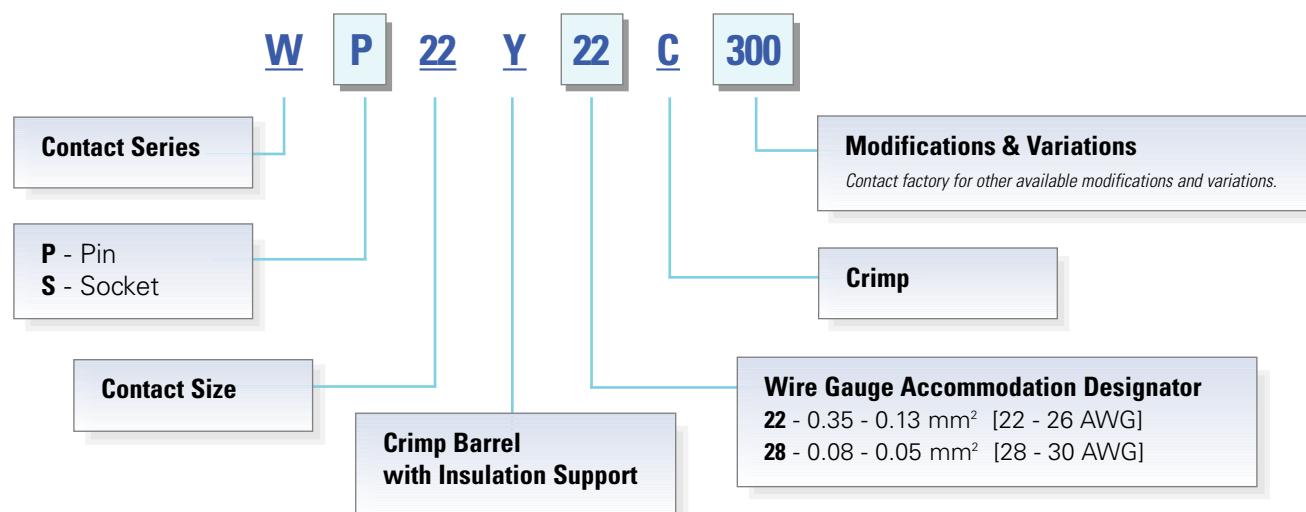
- | | |
|------------|------------|
| 014 | 066 |
| 030 | 072 |
| 048 | 102 |

*Consult factory for more details.

Size 22 Contacts – Crimp Style



Ordering Nomenclature



Crimp/Removable Contacts

Snap-in contacts feature a unique retaining clip for reliability and ease of maintenance for serviceability. The styles shown meet most material and finish requirements. Additional mechanical versions and plating materials are available. Contact the factory for further information.

Dimension Table

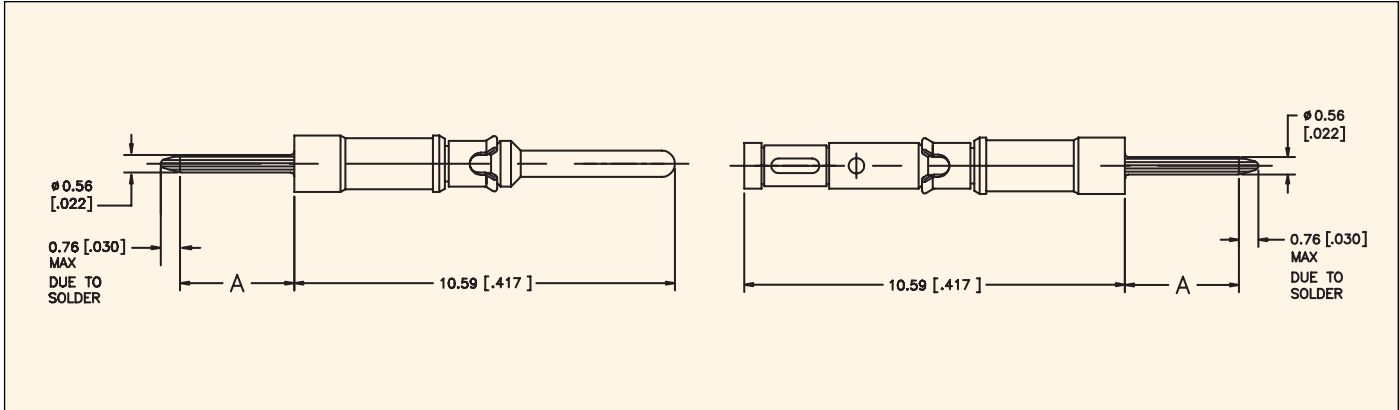
Wire Gauge Range	ØA ±0.08 [.003]	ØB ±0.08 [.003]	ØC ±0.08 [.003]
0.35 - 0.13 mm ² [22 - 26 AWG]	1.42 [.056]	1.32 [.052]	0.89 [.035]
0.08 - 0.05 mm ² [28 - 30 AWG]	0.99 [.039]	1.19 [.047]	0.48 [.019]

Materials and Finishes

Description	Material	Finish
Body	Copper Alloy	Gold Plate
Clip	Copper Alloy	Electroless Nickel, Gold Plate or None
Hood	Stainless Steel	Passivated

Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

Size 22 Contacts – Solder Style



Dip Solder

Solder-coated to the requirements of MIL-STD-202, Method 208B, these contacts are widely used for interconnection to multi-layer flex circuitry or printed circuit boards.

Ordering Nomenclature

Contact Type	Catalog Number	A ±0.13 [.005]
Pin	WP22N20S125	3.18 [.125]
Socket	WS22N20S125	
Pin	WP22N20S200	5.08 [.200]
Socket	WS22N20S200	
Pin	WP22N20S350	8.89 [.350]
Socket	WS22N20S350	
Pin	WP22N20S400	10.16 [.400]
Socket	WS22N20S400	

Tools

Tools are available from Koehlke Components, Inc.
(See page 19)

Insertion Tool

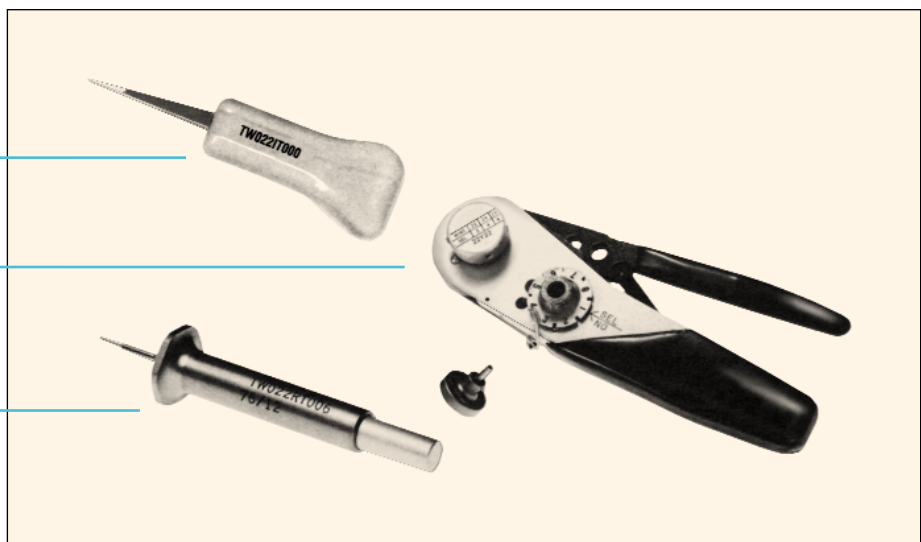
TW022IT000

Crimping Tool

Tool: M22520/2-01
Locator Stop: TLSW22

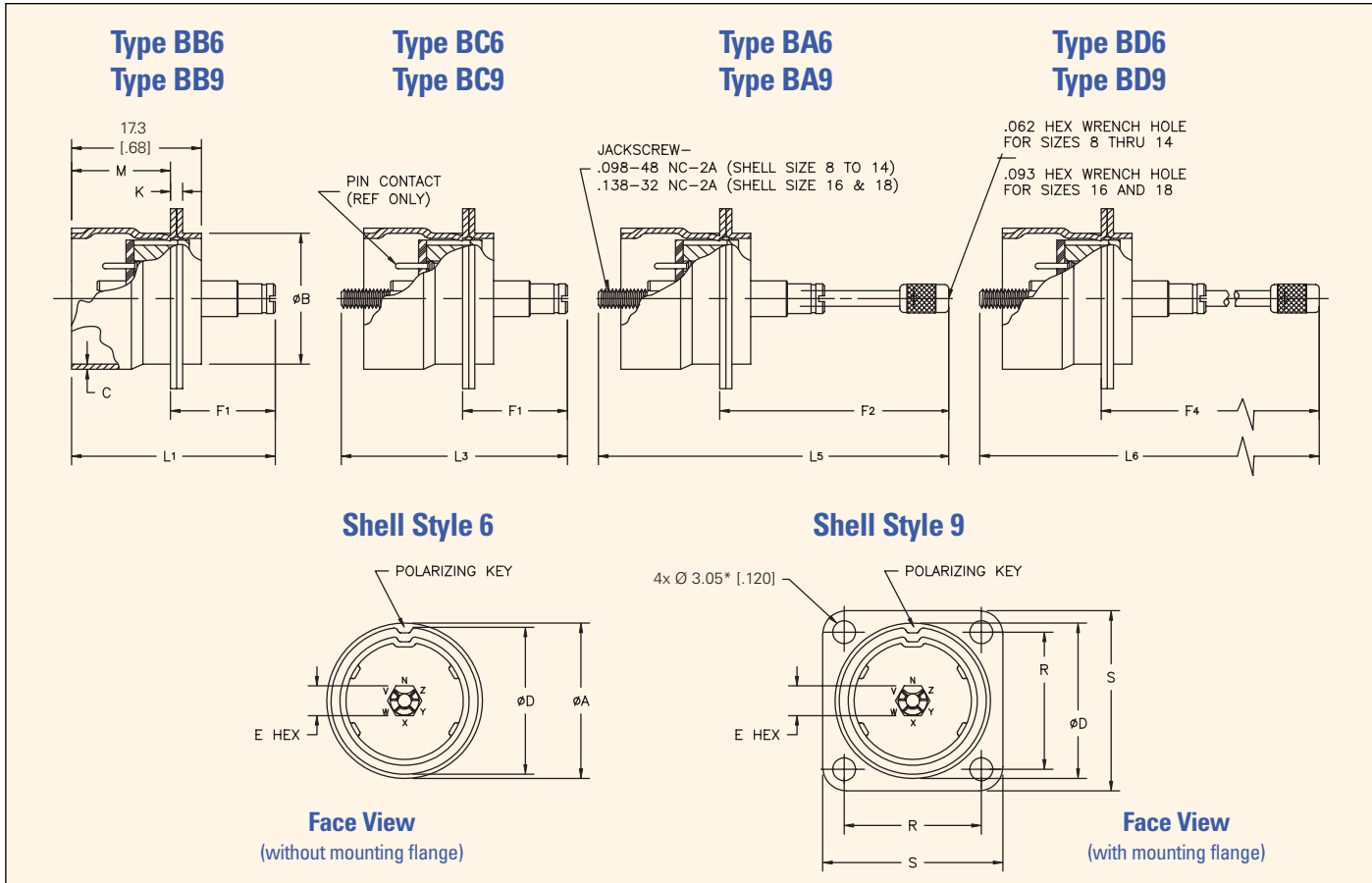
Removal Tool

TW022RT006



Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

Plug – Non-Environmental with Pin Insert



Millimeters

Shell Size	ØA ±0.38	ØB Max.	C ±0.13	ØD Max.	E	F1 Max.	F2 Max.	F4 Max.	K	L1 Max.	L3 Max.	L5 Max.	L6 Max.	M	R	S ±0.38
08	17.91	14.12	0.43	15.77	4.75	13.69	35.36	59.97	1.12	27.43	30.10	50.65	75.26	13.41	15.09	20.78
10	20.70	17.42	0.69	19.58	4.75	13.94	35.61	60.22	1.63	27.43	30.10	50.65	75.26	13.16	18.26	23.98
12	23.88	20.60	0.69	25.76	4.75	13.94	35.61	60.22	1.63	27.43	30.10	50.65	75.26	13.16	20.62	26.34
14	26.92	23.65	0.69	25.81	4.75	13.94	35.61	60.22	1.63	27.43	30.10	50.65	75.26	13.16	23.01	28.73
16	30.23	26.95	0.69	29.11	7.92	14.25	35.92	69.75	1.63	27.74	30.40	50.95	84.79	13.16	24.61	31.09
18	33.40	30.12	0.69	32.28	7.92	14.25	35.92	69.75	1.63	27.74	30.40	50.95	84.79	13.16	26.97	33.48

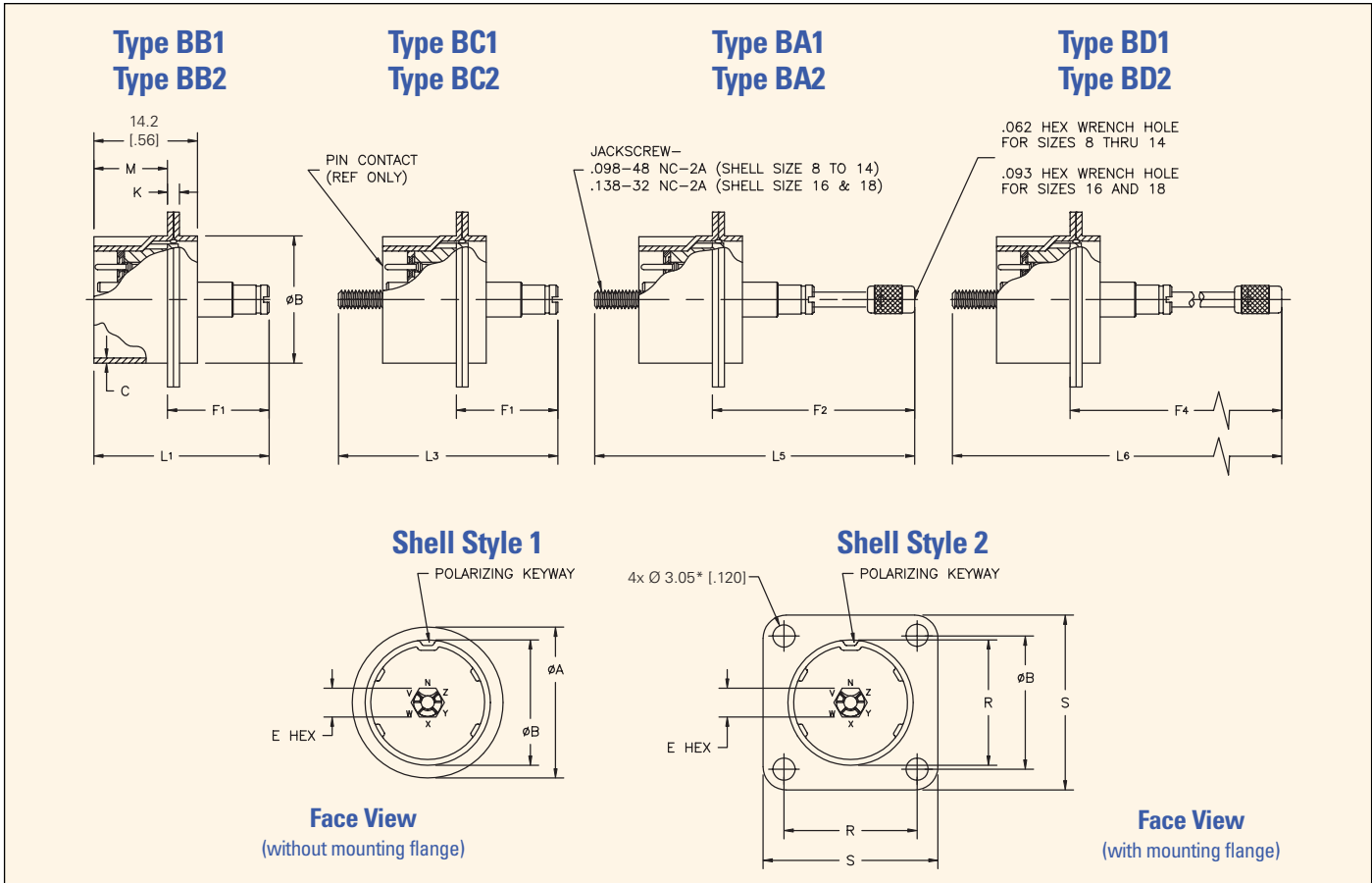
Inches

Shell Size	ØA ±.015	ØB Max.	C ±.005	ØD Max.	E	F1 Max.	F2 Max.	F4 Max.	K	L1 Max.	L3 Max.	L5 Max.	L6 Max.	M	R	S ±.015
08	.705	.556	.017	.621	.187	.539	1.392	2.361	.044	1.080	1.185	1.994	2.963	.528	.594	.818
10	.815	.686	.027	.771	.187	.549	1.402	2.371	.064	1.080	1.185	1.994	2.963	.518	.719	.944
12	.940	.811	.027	.896	.187	.549	1.402	2.371	.064	1.080	1.185	1.994	2.963	.518	.812	1.037
14	1.060	.931	.027	1.016	.187	.549	1.402	2.371	.064	1.080	1.185	1.994	2.963	.518	.906	1.131
16	1.190	1.061	.027	1.146	.312	.561	1.414	2.746	.064	1.092	1.197	2.006	3.338	.518	.969	1.224
18	1.315	1.186	.027	1.271	.312	.561	1.414	2.746	.064	1.092	1.197	2.006	3.338	.518	1.062	1.318

*Consult factory for other mounting hole variations.

Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

Receptacle – Non-Environmental with Pin Insert



Millimeters

Shell Size	ØA ±0.38	ØB Max.	C ±0.13	E	F1 Max.	F2 Max.	F4 Max.	K	L1 Max.	L3 Max.	L5 Max.	L6 Max.	M	R	S ±0.38
08	17.91	14.12	0.43	4.75	13.69	35.36	59.97	1.12	24.38	30.10	50.65	75.26	10.36	15.09	20.78
10	20.70	17.42	0.69	4.75	13.94	35.61	60.22	1.63	24.38	30.10	50.65	75.26	10.11	18.26	23.98
12	23.88	20.60	0.69	4.75	13.94	35.61	60.22	1.63	24.38	30.10	50.65	75.26	10.11	20.62	26.34
14	26.92	23.65	0.69	4.75	13.94	35.61	60.22	1.63	24.38	30.10	50.65	75.26	10.11	23.01	28.73
16	30.23	26.95	0.69	7.92	14.25	35.92	69.75	1.63	24.69	30.40	50.95	84.79	10.11	24.61	31.09
18	33.40	30.12	0.69	7.92	14.25	35.92	69.75	1.63	24.69	30.40	50.95	84.79	10.11	26.97	33.48

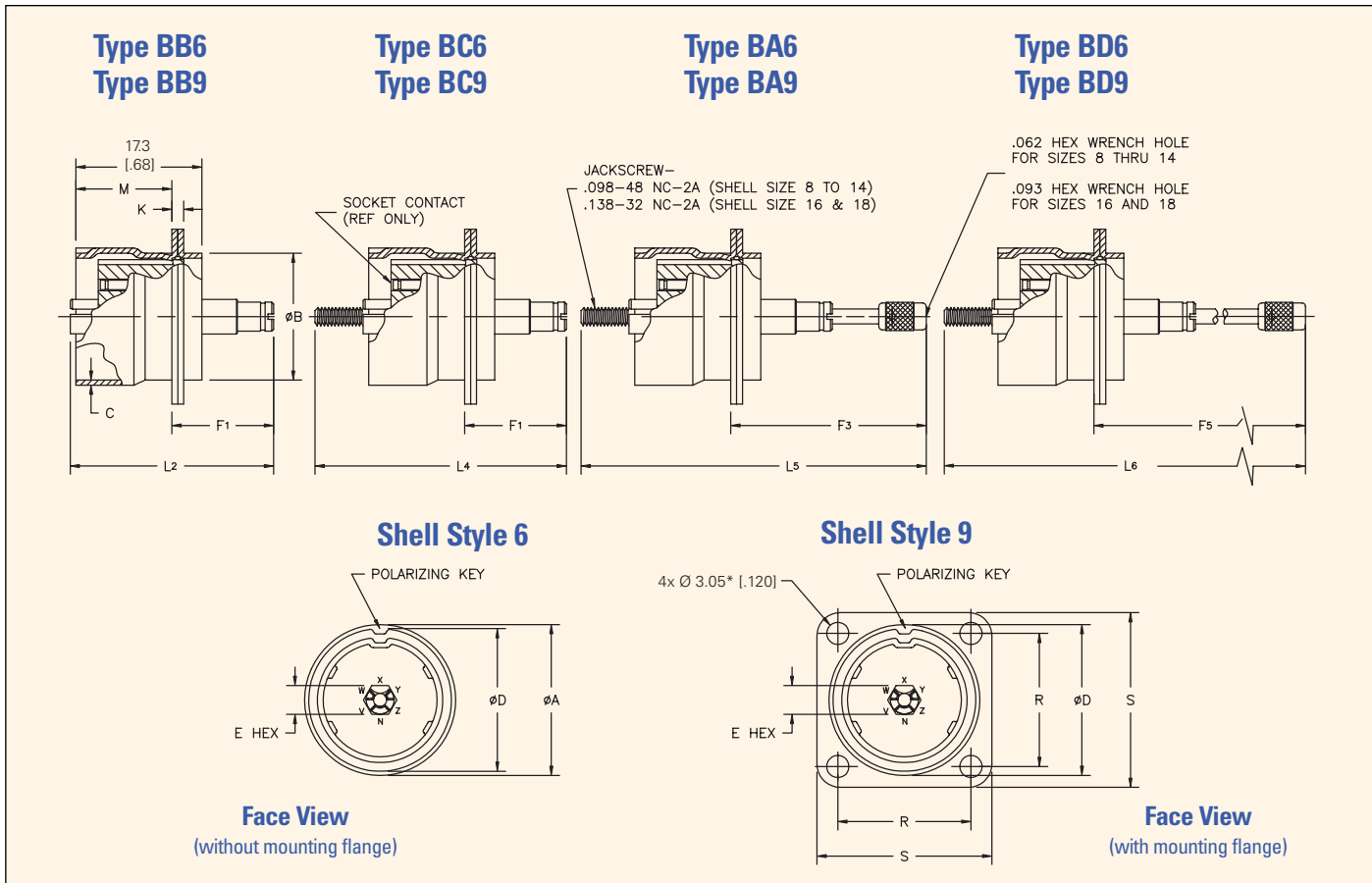
Inches

Shell Size	ØA ±.015	ØB Max.	C ±.005	E	F1 Max.	F2 Max.	F4 Max.	K	L1 Max.	L3 Max.	L5 Max.	L6 Max.	M	R	S ±.015
08	.705	.556	.017	.187	.539	1.392	2.361	.044	.960	1.185	1.994	2.963	.408	.594	.818
10	.815	.686	.027	.187	.549	1.402	2.371	.064	.960	1.185	1.994	2.963	.398	.719	.944
12	.940	.811	.027	.187	.549	1.402	2.371	.064	.960	1.185	1.994	2.963	.398	.812	1.037
14	1.060	.931	.027	.187	.549	1.402	2.371	.064	.960	1.185	1.994	2.963	.398	.906	1.131
16	1.190	1.061	.027	.312	.561	1.414	2.746	.064	.972	1.197	2.006	3.338	.398	.969	1.224
18	1.315	1.186	.027	.312	.561	1.414	2.746	.064	.972	1.197	2.006	3.338	.398	1.062	1.318

*Consult factory for other mounting hole variations.

Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

Plug – Non-Environmental with Socket Insert



Millimeters

Shell Size	ØA ±0.38	ØB Max.	C ±0.13	ØD Max.	E	F1 Max.	F3 Max.	F5 Max.	K	L2 Max.	L4 Max.	L5 Max.	L6 Max.	M	R	S ±0.38
08	17.91	14.12	0.43	15.77	4.75	13.69	30.99	55.60	1.12	27.89	34.47	50.65	75.26	13.41	15.09	20.78
10	20.70	17.42	0.69	19.58	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	13.16	18.26	23.98
12	23.88	20.60	0.69	25.76	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	13.16	20.62	26.34
14	26.92	23.65	0.69	25.81	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	13.16	23.01	28.73
16	30.23	26.95	0.69	29.11	7.92	14.25	31.55	65.38	1.63	28.19	34.77	50.95	84.79	13.16	24.61	31.09
18	33.40	30.12	0.69	32.28	7.92	14.25	31.55	65.38	1.63	28.19	34.77	50.95	84.79	13.16	26.97	33.48

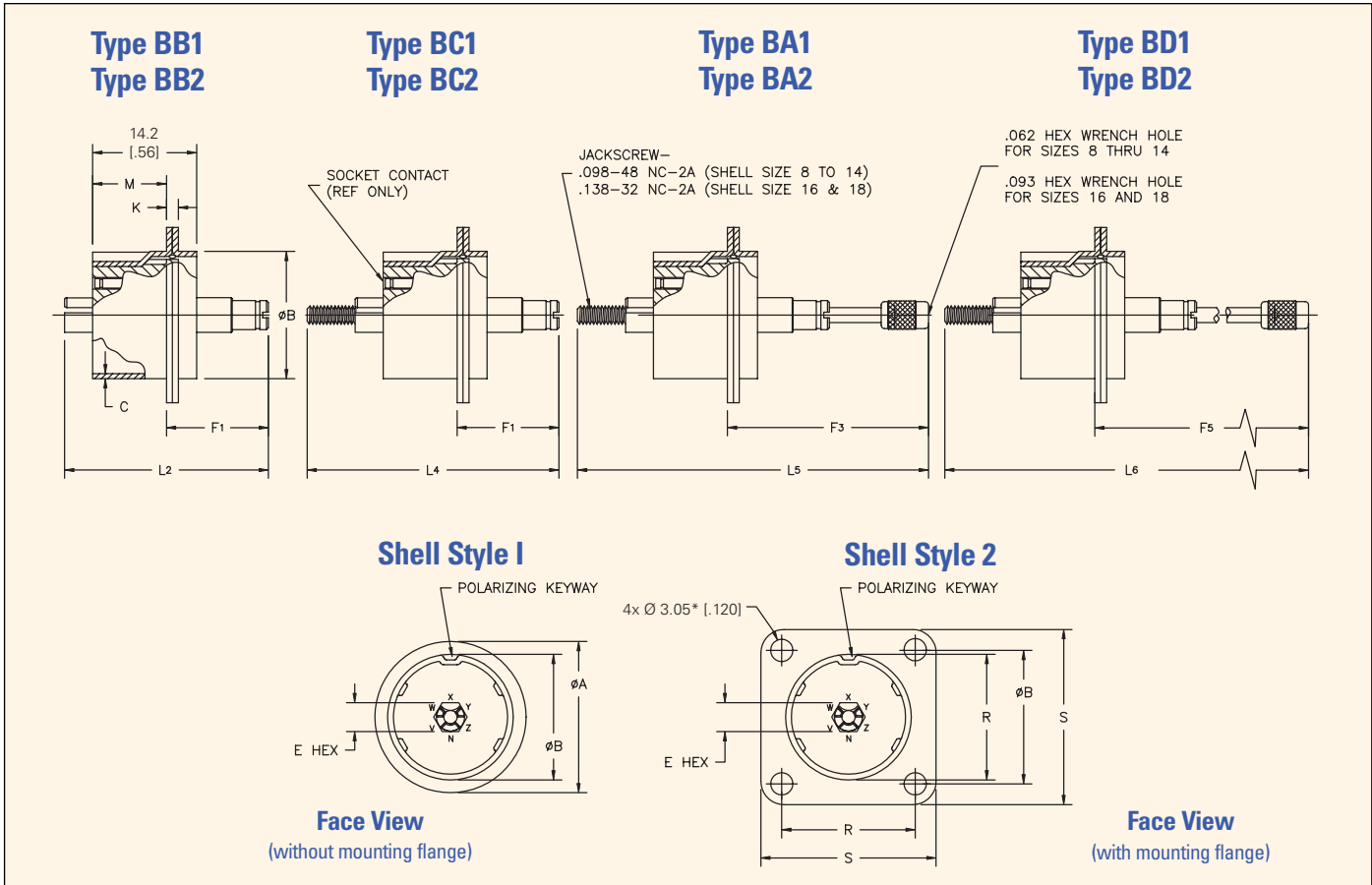
Inches

Shell Size	ØA ±.015	ØB Max.	C ±.005	ØD Max.	E	F1 Max.	F3 Max.	F5 Max.	K	L2 Max.	L4 Max.	L5 Max.	L6 Max.	M	R	S ±.015
08	.705	.556	.017	.621	.187	.539	1.220	2.189	.044	1.098	1.357	1.994	2.963	.528	.594	.818
10	.815	.686	.027	.771	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.518	.719	.944
12	.940	.811	.027	.896	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.518	.812	1.037
14	1.060	.931	.027	1.016	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.518	.906	1.131
16	1.190	1.061	.027	1.146	.312	.561	1.242	2.574	.064	1.110	1.369	2.006	3.338	.518	.969	1.224
18	1.315	1.186	.027	1.271	.312	.561	1.242	2.574	.064	1.110	1.369	2.006	3.338	.518	1.062	1.318

*Consult factory for other mounting hole variations.

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Receptacle – Non-Environmental with Socket Insert



Millimeters

Shell Size	ØA ±0.38	ØB Max.	C ±0.13	E	F1 Max.	F3 Max.	F5 Max.	K	L2 Max.	L4 Max.	L5 Max.	L6 Max.	M	R	S ±0.38
08	17.91	14.12	0.43	4.75	13.69	30.99	55.60	1.12	27.89	34.47	50.65	75.26	10.36	15.09	20.78
10	20.70	17.42	0.69	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	10.11	18.26	23.98
12	23.88	20.60	0.69	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	10.11	20.62	26.34
14	26.92	23.65	0.69	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	10.11	23.01	28.73
16	30.23	26.95	0.69	7.92	14.25	31.55	65.38	1.63	28.19	34.77	50.95	84.79	10.11	24.61	31.09
18	33.40	30.12	0.69	7.92	14.25	31.55	65.38	1.63	28.19	34.77	50.95	84.79	10.11	26.97	33.48

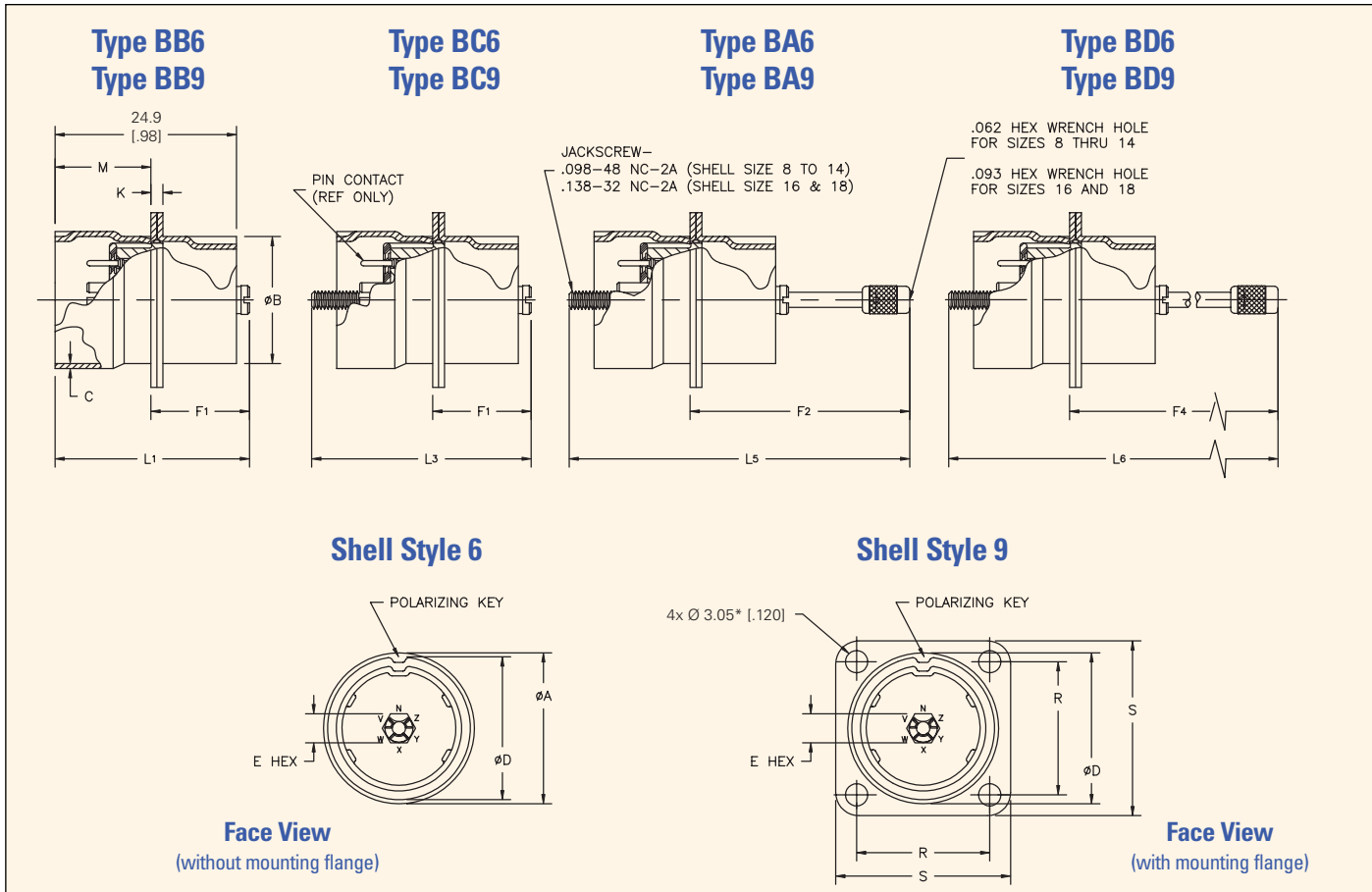
Inches

Shell Size	ØA ±.015	ØB Max.	C ±.005	E	F1 Max.	F3 Max.	F5 Max.	K	L2 Max.	L4 Max.	L5 Max.	L6 Max.	M	R	S ±.015
08	.705	.556	.017	.187	.539	1.220	2.189	.044	1.098	1.357	1.994	2.963	.408	.594	.818
10	.815	.686	.027	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.398	.719	.944
12	.940	.811	.027	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.398	.812	1.037
14	1.060	.931	.027	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.398	.906	1.131
16	1.190	1.061	.027	.312	.561	1.242	2.574	.064	1.110	1.369	2.006	3.338	.398	.969	1.224
18	1.315	1.186	.027	.312	.561	1.242	2.574	.064	1.110	1.369	2.006	3.338	.398	1.062	1.318

*Consult factory for other mounting hole variations.

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Plug – Potting with Pin Insert



Millimeters

Shell Size	ØA ±0.38	ØB Max.	C ±0.13	ØD Max.	E	F1 Max.	F2 Max.	F4 Max.	K	L1 Max.	L3 Max.	L5 Max.	L6 Max.	M	R	S ±0.38
08	17.91	14.12	0.43	15.77	4.75	13.69	35.36	59.97	1.12	27.43	30.10	50.65	75.26	13.41	15.09	20.78
10	20.70	17.42	0.69	19.58	4.75	13.94	35.61	60.22	1.63	27.43	30.10	50.65	75.26	13.16	18.26	23.98
12	23.88	20.60	0.69	22.76	4.75	13.94	35.61	60.22	1.63	27.43	30.10	50.65	75.26	13.16	20.62	26.34
14	26.92	23.65	0.69	25.81	4.75	13.94	35.61	60.22	1.63	27.43	30.10	50.65	75.26	13.16	23.01	28.73
16	30.23	26.95	0.69	29.11	7.92	14.25	35.92	69.75	1.63	27.74	30.40	50.95	84.79	13.16	24.61	31.09
18	33.40	30.12	0.69	32.28	7.92	14.25	35.92	69.75	1.63	27.74	30.40	50.95	84.79	13.16	26.97	33.48

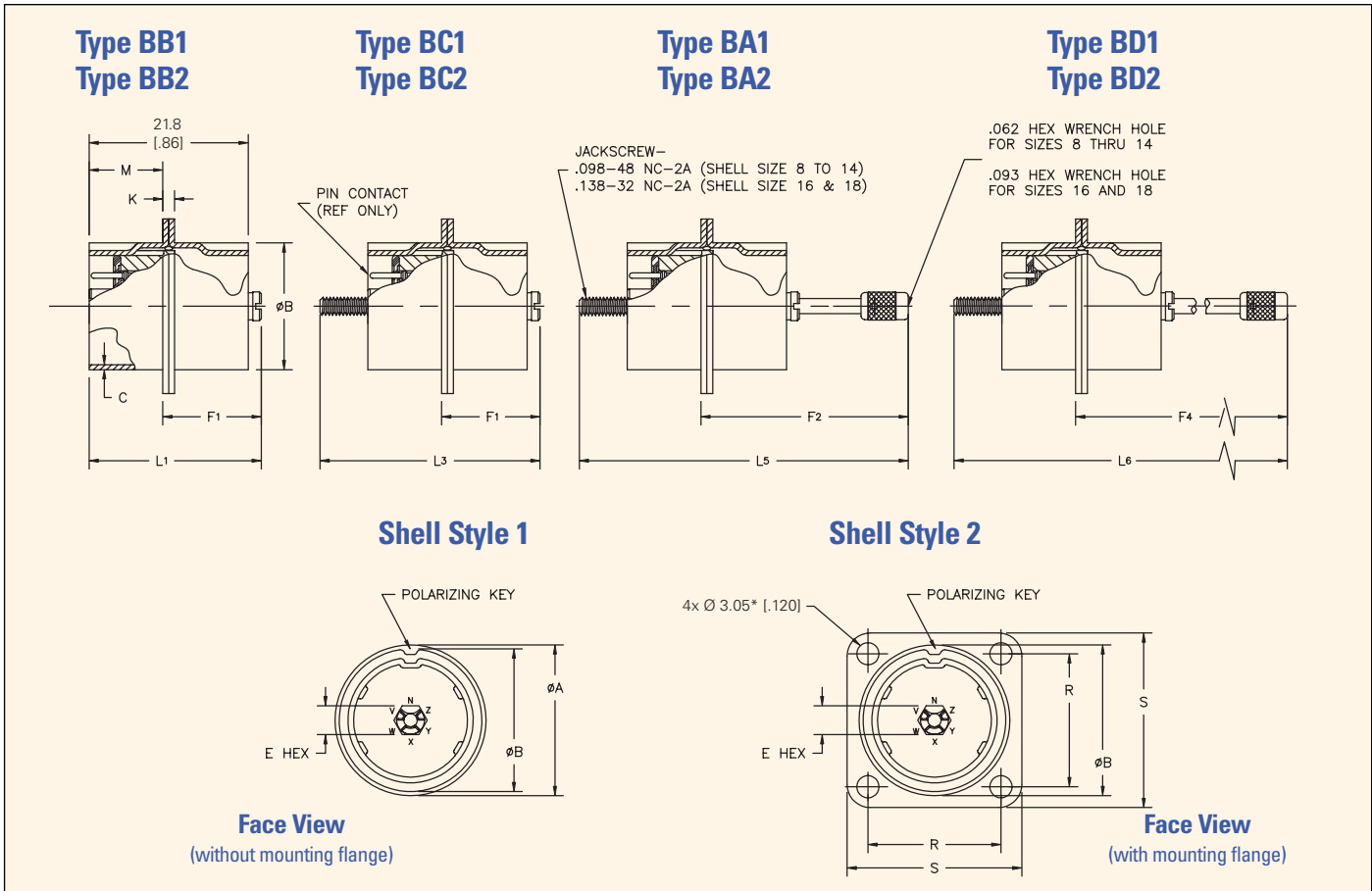
Inches

Shell Size	ØA ±0.015	ØB Max.	C ±0.005	ØD Max.	E	F1 Max.	F2 Max.	F4 Max.	K	L1 Max.	L3 Max.	L5 Max.	L6 Max.	M	R	S ±0.015
08	.705	.556	.017	.621	.187	.539	1.392	2.361	.044	1.080	1.185	1.994	2.963	.528	.594	.818
10	.815	.686	.027	.771	.187	.549	1.402	2.371	.064	1.080	1.185	1.994	2.963	.518	.719	.944
12	.940	.811	.027	.896	.187	.549	1.402	2.371	.064	1.080	1.185	1.994	2.963	.518	.812	1.037
14	1.060	.931	.027	1.016	.187	.549	1.402	2.371	.064	1.080	1.185	1.994	2.963	.518	.906	1.131
16	1.190	1.061	.027	1.146	.312	.561	1.414	2.746	.064	1.092	1.197	2.006	3.338	.518	.969	1.224
18	1.315	1.186	.027	1.271	.312	.561	1.414	2.746	.064	1.092	1.197	2.006	3.338	.518	1.062	1.318

*Consult factory for other mounting hole variations.

Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

Receptacle – Potting with Pin Insert



Millimeters

Shell Size	ØA ±0.38	ØB Max.	C ±0.13	E	F1 Max.	F2 Max.	F4 Max.	K	L1 Max.	L3 Max.	L5 Max.	L6 Max.	M	R	S ±0.38
08	17.91	14.12	0.43	4.75	13.69	35.36	59.97	1.12	24.38	30.10	50.65	75.26	10.36	15.09	20.78
10	20.70	17.42	0.69	4.75	13.94	35.61	60.22	1.63	24.38	30.10	50.65	75.26	10.11	18.26	23.98
12	23.88	20.60	0.69	4.75	13.94	35.61	60.22	1.63	24.38	30.10	50.65	75.26	10.11	20.62	26.34
14	26.92	23.65	0.69	4.75	13.94	35.61	60.22	1.63	24.38	30.10	50.65	75.26	10.11	23.01	28.73
16	30.23	26.95	0.69	7.92	14.25	35.92	69.75	1.63	24.69	30.40	50.95	84.79	10.11	24.61	31.09
18	33.40	30.12	0.69	7.92	14.25	35.92	69.75	1.63	24.69	30.40	50.95	84.79	10.11	26.97	33.48

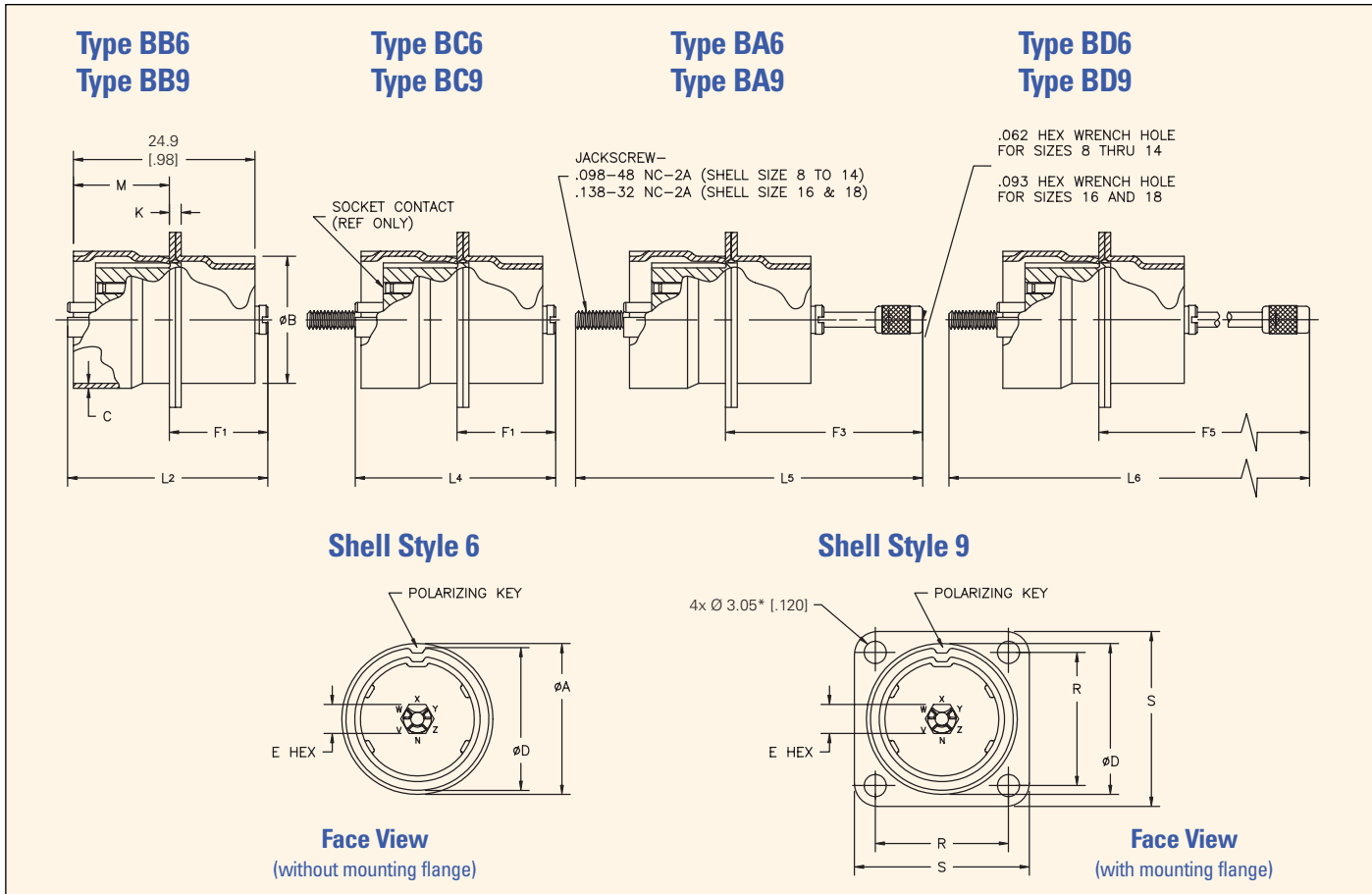
Inches

Shell Size	ØA ±.015	ØB Max.	C ±.005	E	F1 Max.	F2 Max.	F4 Max.	K	L1 Max.	L3 Max.	L5 Max.	L6 Max.	M	R	S ±.015
08	.705	.556	.017	.187	.539	1.392	2.361	.044	.960	1.185	1.994	2.963	.408	.594	.818
10	.815	.686	.027	.187	.549	1.402	2.371	.064	.960	1.185	1.994	2.963	.398	.719	.944
12	.940	.811	.027	.187	.549	1.402	2.371	.064	.960	1.185	1.994	2.963	.398	.812	1.037
14	1.060	.931	.027	.187	.549	1.402	2.371	.064	.960	1.185	1.994	2.963	.398	.906	1.131
16	1.190	1.061	.027	.312	.561	1.414	2.746	.064	.972	1.197	2.006	3.338	.398	.969	1.224
18	1.315	1.186	.027	.312	.561	1.414	2.746	.064	.972	1.197	2.006	3.338	.398	1.062	1.318

*Consult factory for other mounting hole variations.

Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

Plug – Potting with Socket Insert



Millimeters

Shell Size	ØA ±0.38	ØB Max.	C ±0.13	ØD Max.	E	F1 Max.	F3 Max.	F5 Max.	K	L2 Max.	L4 Max.	L5 Max.	L6 Max.	M	R	S ±0.38
08	17.91	14.12	0.43	15.77	4.75	13.69	30.99	55.60	1.12	27.89	34.47	50.65	75.26	13.41	15.09	20.78
10	20.70	17.42	0.69	19.58	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	13.16	18.26	23.98
12	23.88	20.60	0.69	22.76	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	13.16	20.62	26.34
14	26.92	23.65	0.69	25.81	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	13.16	23.01	28.73
16	30.23	26.95	0.69	29.11	7.92	14.25	31.55	65.38	1.63	28.19	34.77	50.95	84.79	13.16	24.61	31.09
18	33.40	30.12	0.69	32.28	7.92	14.25	31.55	65.38	1.63	28.19	34.77	50.95	84.79	13.16	26.97	33.48

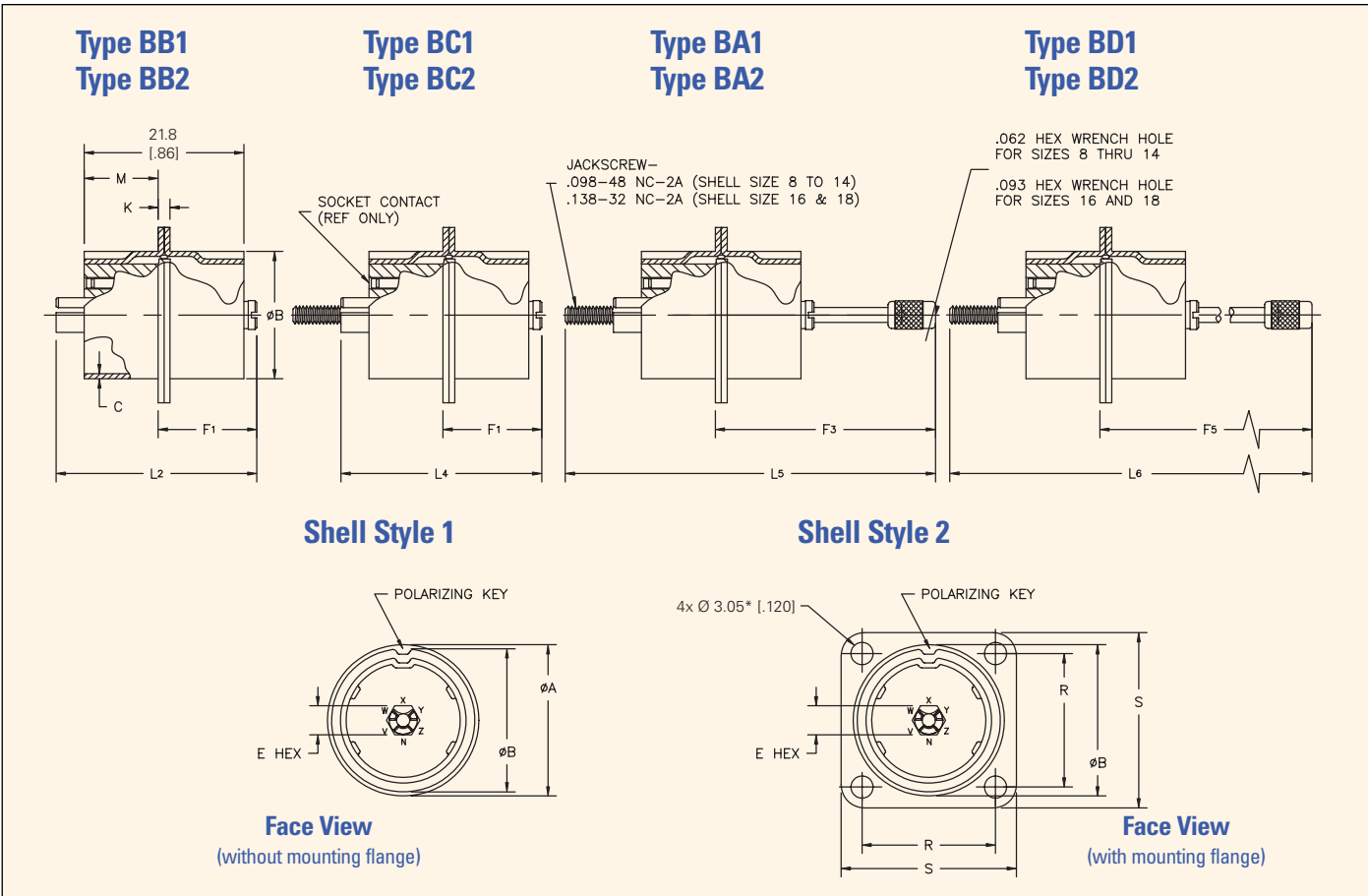
Inches

Shell Size	ØA ±0.015	ØB Max.	C ±0.005	ØD Max.	E	F1 Max.	F3 Max.	F5 Max.	K	L2 Max.	L4 Max.	L5 Max.	L6 Max.	M	R	S ±0.015
08	.705	.556	.017	.621	.187	.539	1.220	2.189	.044	1.098	1.357	1.994	2.963	.528	.594	.818
10	.815	.686	.027	.771	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.518	.719	.944
12	.940	.811	.027	.896	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.518	.812	1.037
14	1.060	.931	.027	1.016	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.518	.906	1.131
16	1.190	1.061	.027	1.146	.312	.561	1.242	2.574	.064	1.110	1.369	2.006	3.338	.518	.969	1.224
18	1.315	1.186	.027	1.271	.312	.561	1.242	2.574	.064	1.110	1.369	2.006	3.338	.518	1.062	1.318

*Consult factory for other mounting hole variations.

Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

Receptacle – Potting with Socket Insert



Millimeters

Shell Size	ØA ±0.38	ØB Max.	C ±0.13	E	F1 Max.	F3 Max.	F5 Max.	K	L2 Max.	L4 Max.	L5 Max.	L6 Max.	M	R	S ±0.38
08	17.91	14.12	0.43	4.75	13.69	30.99	55.60	1.12	27.89	34.47	50.65	75.26	10.36	15.09	20.78
10	20.70	17.42	0.69	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	10.11	18.26	23.98
12	23.88	20.60	0.69	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	10.11	20.62	26.34
14	26.92	23.65	0.69	4.75	13.94	31.24	55.85	1.63	27.89	34.47	50.65	75.26	10.11	23.01	28.73
16	30.23	26.95	0.69	7.92	14.25	31.55	65.38	1.63	28.19	34.77	50.95	84.79	10.11	24.61	31.09
18	33.40	30.12	0.69	7.92	14.25	31.55	65.38	1.63	28.19	34.77	50.95	84.79	10.11	26.97	33.48

Inches

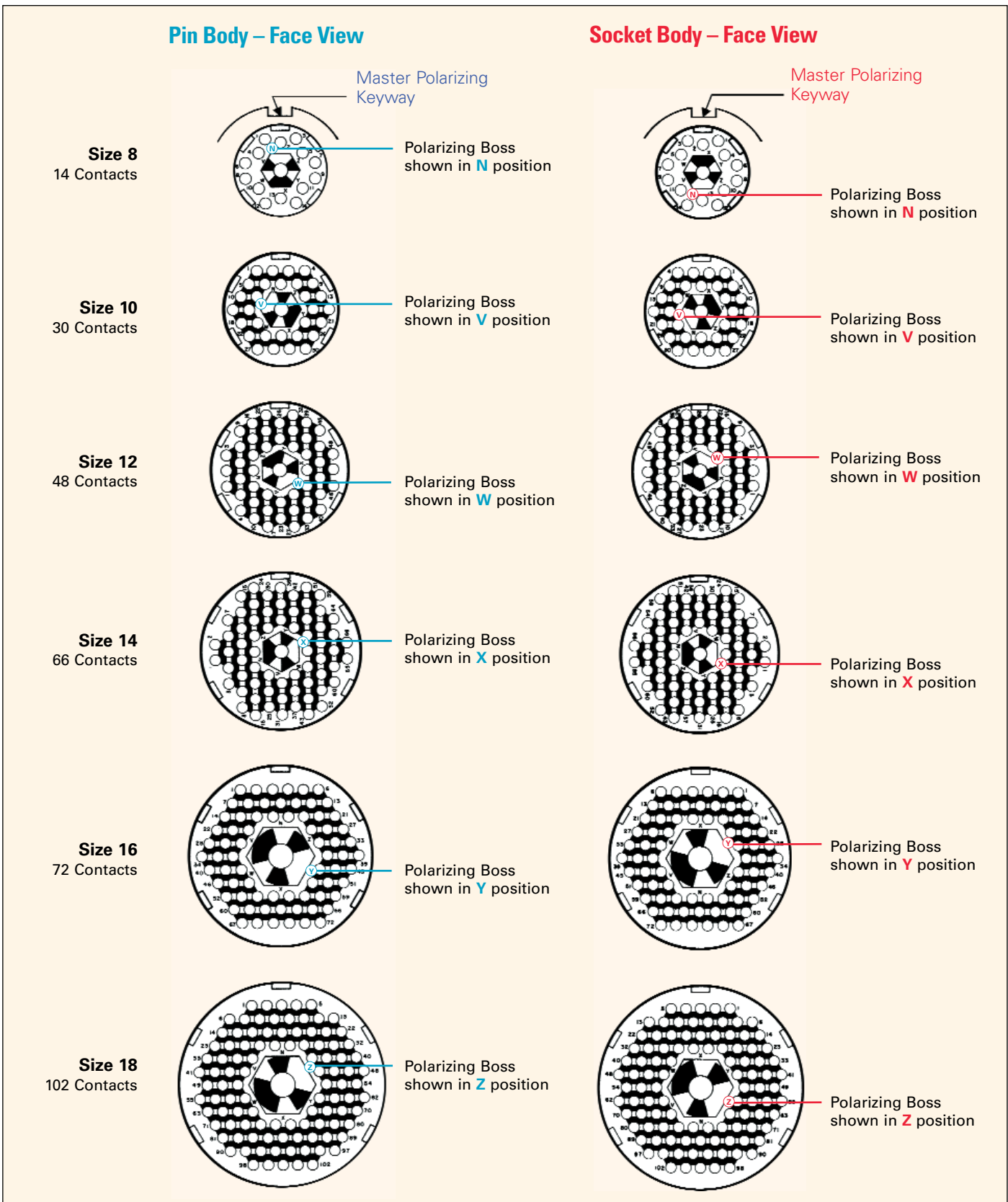
Shell Size	ØA ±0.015	ØB Max.	C ±0.005	E	F1 Max.	F3 Max.	F5 Max.	K	L2 Max.	L4 Max.	L5 Max.	L6 Max.	M	R	S ±0.015
08	.705	.556	.017	.187	.539	1.220	2.189	.044	1.098	1.357	1.994	2.963	.408	.594	.818
10	.815	.686	.027	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.398	.719	.944
12	.940	.811	.027	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.398	.812	1.037
14	1.060	.931	.027	.187	.549	1.230	2.199	.064	1.098	1.357	1.994	2.963	.398	.906	1.131
16	1.190	1.061	.027	.312	.561	1.242	2.574	.064	1.110	1.369	2.006	3.338	.398	.969	1.224
18	1.315	1.186	.027	.312	.561	1.242	2.574	.064	1.110	1.369	2.006	3.338	.398	1.062	1.318

*Consult factory for other mounting hole variations.

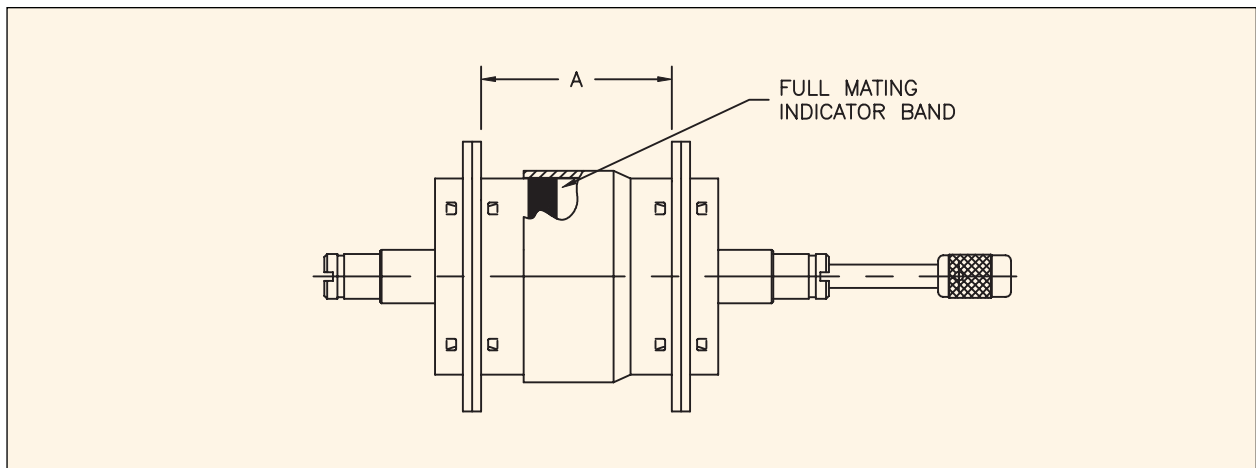
Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

Insert Arrangements and Polarizations

To polarize connector, boss is mounted in the insert with largest opening adjacent to desired position.



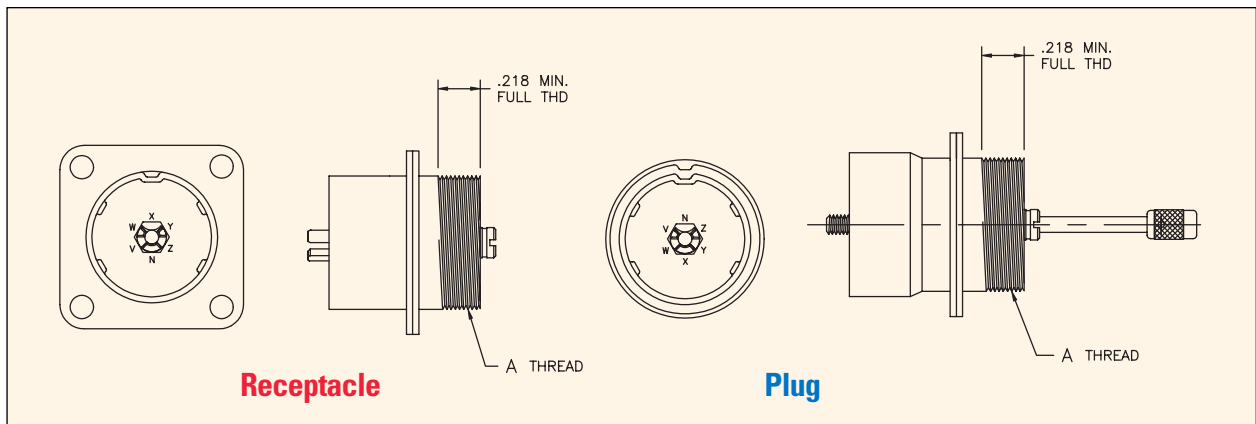
Bulls-Eye – Mated Pair



Shell Size	A ±0.51 [.020]
08	17.45 [.687]
10 thru 18	16.94 [.667]

Threaded Rear Shell (Class B)

Consult factory for strain relief or backshell hardware, if required.

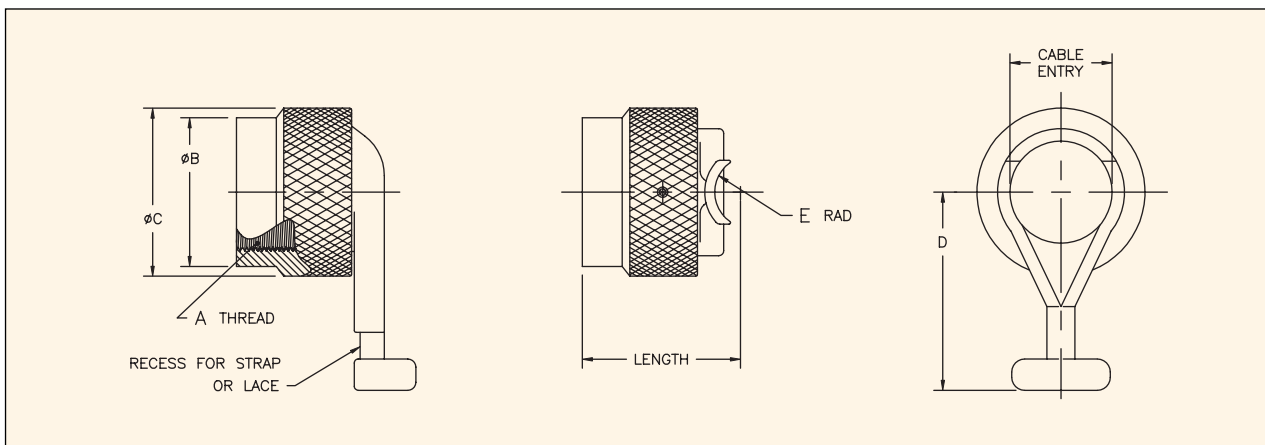


Shell Size	A Thread
08	.543-36 UNS-2A
10	.683-36 UNS-2A
12	.806-36 UNS-2A
14	.914-36 UNS-2A
16	1.052-36 UNS-2A
18	1.177-36 UNS-2A

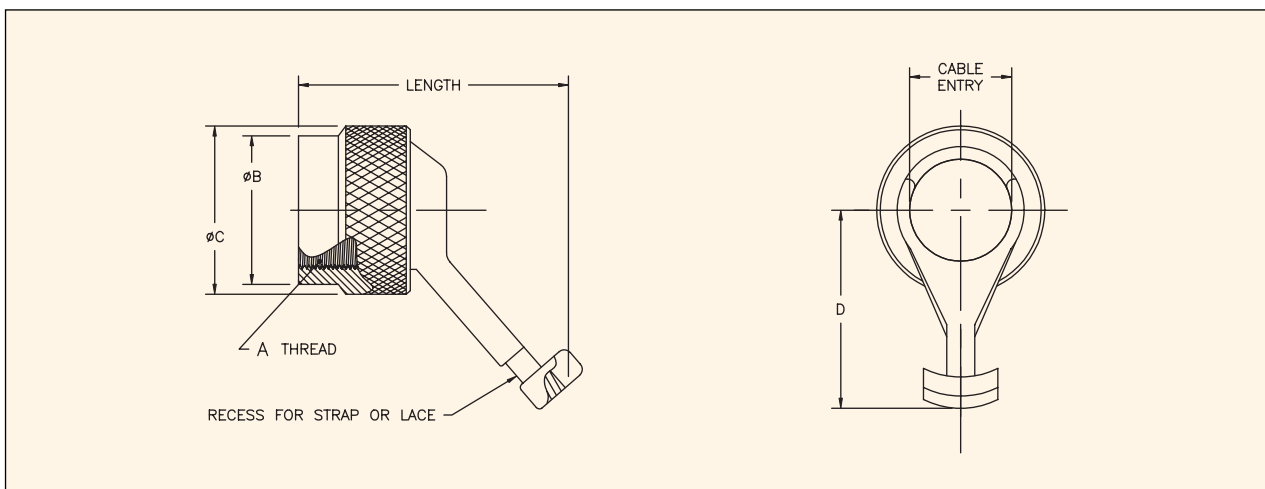
Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

Strain Relief

Order Bulls-Eye threaded rear shell when strain relief or backshell is required*



Shell Size	A Thread	ØB	ØC	D	E Radius	Length	Cable Entry
08	.5435-36 UNS-2B	15.32 [.603]	18.0 [.71]	23.6 [.93]	4.57 [.180]	20.1 [.79]	10.2 [.40]
10	.6830-36 UNS-2B	18.87 [.743]	21.3 [.84]	25.2 [.99]	4.57 [.180]	20.1 [.79]	13.0 [.51]
12	.8060-36 UNS-2B	22.00 [.866]	24.9 [.98]	28.7 [1.31]	6.53 [.257]	22.1 [.87]	16.3 [.64]
14	.9145-36 UNS-2B	24.74 [.974]	28.5 [1.12]	34.5 [1.36]	6.53 [.257]	22.1 [.87]	19.3 [.76]
16	1.0525-36 UNS-2B	28.27 [1.113]	33.3 [1.31]	36.8 [1.45]	8.13 [.320]	24.1 [.95]	21.6 [.85]
18	1.1770-36 UNS-2B	31.42 [1.237]	36.6 [1.44]	38.1 [1.50]	9.83 [.387]	25.9 [1.02]	24.9 [.98]



Shell Size	A Thread	ØB	ØC	D	Length	Cable Entry
08	.5435-36 UNS-2B	15.32 [.603]	18.0 [.71]	20.32 [.800]	33.8 [1.33]	10.2 [.40]
10	.6830-36 UNS-2B	18.87 [.743]	21.3 [.84]	21.84 [.860]	33.8 [1.33]	13.0 [.51]
12	.8060-36 UNS-2B	22.00 [.866]	24.9 [.98]	27.94 [1.100]	46.5 [1.83]	16.3 [.64]
14	.9145-36 UNS-2B	24.74 [.974]	28.5 [1.12]	29.46 [1.160]	46.5 [1.83]	19.3 [.76]
16	1.0525-36 UNS-2B	28.27 [1.113]	33.3 [1.31]	31.75 [1.250]	49.0 [1.93]	21.6 [.85]
18	1.1770-36 UNS-2B	31.42 [1.237]	36.6 [1.44]	32.87 [1.294]	50.6 [1.99]	24.9 [.98]

*Consult factory for suppliers.

Dimensions shown are for reference only. Unless otherwise specified, dimensions are in millimeters and [inches].

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