AMP Circular Plastic Connectors

• Lightweight, all-plastic connectors • CPC connectors made of UL recognized, high-grade black thermoplastic material • 94V-1 rated, heat-stabilized, fire-resistant, self-extinguishing • Two connector series for different connection needs: **Series 1** — Standard density applications with Multimate contacts. **Series 2** — High-density applications with size 20 DM and 20 DF contacts, .040" (1.02 mm) dia. • Available in panel-mount, chassis-mount and free hanging versions • Quick-connect/disconnect capability with thread assist, positive detent coupling • Built-in pin and socket protection. Plug or socket half can be "hot", depending on connector sex • 5-key polarization for proper mating of connector halves • Full complement of optional accessories
Note: *Contacts (pins and sockets) must be ordered separately.*

Component Diameter	
Arrangement/ Shell Size	Overall Dia. Inch (mm)
11	.942 (23.93)
13	1.070 (27.18)
17	1.315 (33.40)
23	1.743 (44.2)

Series 1 and 2

Square-Flange Receptacle

Standard Sex

Reverse Sex

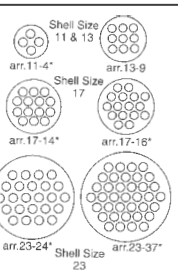
* Standard Sex (Plug/Socket)

† Reverse Sex (Plug/Pins)

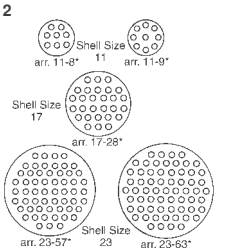
* **Standard Sex:** Pin contacts in receptacle housings; socket contacts in plug housings.

† **Reverse Sex:** Socket contacts in receptacle housings; pin contacts in plug housings.

Series 1



Series 2



Circular Plastic Connectors – Series 1 and 2 (Shell Only)

Shell Size	No. of Contacts	Sex	Description (Shell Only)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Series 1							
11	4	Rev.	Receptacle-Square Flanged	A1360-ND	1.39	1.30	206430-1
			Receptacle-Free Hanging	A1361-ND	1.39	1.30	206430-2
			Plug	A1357-ND	1.70	1.58	206429-1
		Std.	Receptacle-Square Flanged	A1301-ND	1.35	1.26	206061-1
			Receptacle-Free Hanging	A1351-ND	1.39	1.30	206153-1
			Plug	A1300-ND	1.68	1.56	206060-1
13	9	Std.	Receptacle-Square Flanged	A1303-ND	1.46	1.35	206705-1
			Receptacle-Free Hanging	A1352-ND	1.50	1.39	206705-2
			Plug	A1302-ND	1.85	1.71	206708-1
17	14	Rev.	Receptacle-Square Flanged	A1362-ND	1.54	1.43	206043-1
			Receptacle-Free Hanging	A1363-ND	1.95	1.81	206043-3
			Plug	A1358-ND	1.93	1.79	206044-1
17	16	Std.	Receptacle-Square Flanged	A1305-ND	1.54	1.43	206036-1
			Receptacle-Free Hanging	A1353-ND	1.54	1.43	206036-3
			Plug	A1304-ND	1.93	1.79	206037-1
23	24	Std.	Receptacle-Square Flanged	A1354-ND	1.93	1.79	206838-1
			Receptacle-Free Hanging	A1355-ND	2.60	2.42	206838-2
			Plug	A1350-ND	2.48	2.30	206837-1
23	37	Rev.	Receptacle-Square Flanged	A1364-ND	1.76	1.64	206306-1
			Receptacle-Free Hanging	A1365-ND	2.44	2.27	206306-2
			Plug	A1359-ND	2.21	2.06	206305-1
		Std.	Receptacle-Square Flanged	A1307-ND	1.76	1.64	206151-1
			Receptacle-Free Hanging	A1356-ND	1.93	1.79	206151-2
			Plug	A1306-ND	2.21	2.06	206150-1
Series 2							
11	8	Std.	Receptacle-Square Flanged	A1366-ND	2.54	2.36	205841-1
			Receptacle-Free Hanging	A1367-ND	2.52	2.34	205841-2
			Plug	A1368-ND	3.08	2.85	205838-1
		Rev.	Receptacle-Square Flanged	A1369-ND	2.58	2.40	206433-1
			Receptacle-Free Hanging	A1370-ND	2.58	2.40	206433-2
			Plug	A1371-ND	3.08	2.85	206434-1
11	9	Std.	Receptacle-Square Flanged	A1372-ND	2.50	2.32	206486-1
			Receptacle-Free Hanging	A1373-ND	2.58	2.40	206486-2
			Plug	A1374-ND	2.99	2.78	206485-1
17	28	Std.	Receptacle-Square Flanged	A1375-ND	2.75	2.55	205840-3
			Receptacle-Free Hanging	A1376-ND	3.24	3.01	206152-1
			Plug	A1377-ND	3.24	3.01	205839-3
		Rev.	Receptacle-Square Flanged	A1378-ND	2.67	2.47	206038-1
			Receptacle-Free Hanging	A1379-ND	3.28	3.04	206038-2
			Plug	A1380-ND	3.18	2.95	206039-1
23	57	Rev.	Receptacle-Square Flanged	A1381-ND	4.22	3.92	206438-1
			Receptacle-Free Hanging	A1382-ND	6.77	6.27	206438-2
			Plug	A1383-ND	4.37	4.05	206437-1
23	63	Std.	Receptacle-Square Flanged	A1384-ND	4.06	3.77	205843-1
			Receptacle-Free Hanging	A1385-ND	4.31	3.99	205843-2
			Plug	A1386-ND	4.33	4.01	205842-1

VDE Tested Connectors – Series 1 (Shell Only)

Designed to meet requirements of VDE as shown in DIN Specification 57627. Recognized under the Component Program of UL for 600VAC & 600VDC service, File No. E28476. Certified by CSA, File No. LR7189.

Shell Size	No. of Contacts	Sex	Description (Shell Only)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Series 1							
13	7	Std.	Receptacle-Square Flanged	A1635-ND	2.50	2.32	211401-1
			Plug	A1638-ND	2.26	2.09	211399-1
		Rev.	Receptacle-Square Flanged	A1641-ND	2.17	2.02	211398-1
			Plug	A1644-ND	2.58	2.40	211400-1
17	9	Std.	Receptacle-Square Flanged	A1636-ND	2.28	2.11	211767-1
			Plug	A1639-ND	2.99	2.78	211766-1
		Rev.	Receptacle-Square Flanged	A1642-ND	2.52	2.34	211769-1
			Plug	A1645-ND	2.69	2.49	211768-1
23	19	Std.	Receptacle-Square Flanged	A1637-ND	2.97	2.76	211771-1
			Plug	A1640-ND	3.63	3.37	211770-2
		Rev.	Receptacle-Square Flanged	A1643-ND	2.52	2.34	211773-1
			Plug	A1646-ND	3.03	2.82	211772-1

Sealed Connectors – Series 1 (Shell Only)

Sealed CPC connectors are designed to meet the requirements of UL, CSA, and VDE for environmentally sealed connectors used in industrial applications. **Operating Temperature Range:** -50°C - 125°C. **Voltage Rating:** 600 V (AC or DC), **Contacts:** 13 amps., single contact rating at 30°C T-Rise. **Flammability Rating:** UL 94V-0 rated. **Sealing Capability:** Per IP66 and IP67. **Housing Material:** Black, high strength, impact resistant thermoplastic. **Seal:** Gray Elastomer. **Fluid Resistance:** Diesel fuel, gear and engine fuel, gasoline, anti-freeze, hydraulic fluid, water.

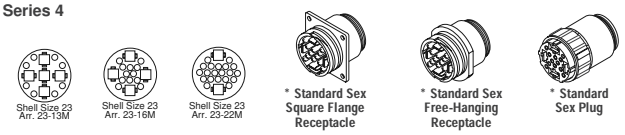
Shell Size	No. of Contacts	Sex	Description (Shell Only)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Series 1							
11	4	Rev.	Square Flange Free-Hanging	A1675-ND	2.58	2.40	206430-3
				A1676-ND	5.68	5.27	206430-4
13	9	Std.	Square Flange Free-Hanging	A1669-ND	2.58	2.40	206705-3
				A1670-ND	2.64	2.46	206705-4
17	14	Rev.	Square Flange Free-Hanging	A1677-ND	2.64	2.46	206043-4
				A1678-ND	6.11	5.67	206043-5
17	16	Std.	Square Flange Free-Hanging	A1671-ND	3.14	2.91	206036-4
				A1672-ND	2.73	2.53	206036-5
23	24	Std.	Square Flange Free-Hanging	A1673-ND	3.20	2.97	206838-3
				A1674-ND	3.77	3.50	206838-4

Circular Plastic Connectors – Series 3 and 4 (Shell Only)

Note: *Contacts (pins and sockets) must be ordered separately.*

Series 3

Series 4

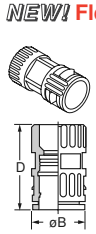


* Standard Sex: Pin contacts in receptacle housings; socket contacts in plug housings.
† Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.

Shell Size	No. of Contacts	Sex	Description (Shell Only)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Series 1							
17	3	Std.	Receptacle-Square Flanged	A1681-ND	2.17	2.02	206036-2
			Receptacle-Free Hanging	A1683-ND	2.17	2.02	206207-1
			Plug	A1685-ND	2.81	2.61	206037-2
		Rev.	Receptacle-Square Flanged	A16015-ND	2.17	2.02	206425-1
			Receptacle-Free Hanging	A16017-ND	2.93	2.72	206425-2
			Plug	A16019-ND	3.87	3.60	206426-1
23	7	Std.	Receptacle-Square Flanged	A1682-ND	3.34	3.10	206137-1
			Receptacle-Free Hanging	A1684-ND	3.42	3.18	206137-2
			Plug	A1686-ND	3.08	2.85	206136-1
		Rev.	Receptacle-Square Flanged	A16016-ND	2.69	2.49	206227-1
			Receptacle-Free Hanging	A16018-ND	3.71	3.44	206227-2
			Plug	A16020-ND	3.14	2.91	206226-1
Series 4							
23	13	Std.	Receptacle-Square Flanged	A16029-ND	3.98	3.69	211825-1
			Receptacle-Free Hanging	A16032-ND	3.32	3.08	211825-2
			Plug	A16035-ND	5.92	5.50	211824-1
23	16	Std.	Receptacle-Square Flanged	A16030-ND	2.58	2.40	207486-1
			Receptacle-Free Hanging	A16033-ND	3.71	3.44	207486-2
			Plug	A16036-ND	3.01	2.80	207485-1
23	22	Std.	Receptacle-Square Flanged	A16031-ND	2.52	2.34	206613-1
			Receptacle-Free Hanging	A16034-ND	3.44	3.20	206613-3
			Plug	A16037-ND	3.59	3.33	206612-1

NEW! Flexible Tubing Connectors

To be used with all circular plastic connectors



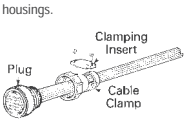
Characteristics: • One-piece plastic quick screw connection with UNEF-inner thread • **Material:** High-quality, impact resistant plastic material (PA); Sealing: Santoprene® • **Properties:** Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions • **Temperature Range:** From approx. -30 °C up to +100 °C • **Color:** Black

Shell Size	Trade Size Tubing Outer – Dia.	Inner Thread UNEF	Dimensions (mm) Largest Outer øB	Dimensions (mm) Total Length D	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
11	0.51" (13.0mm)	5/8" - 24	20.6	36.6	A16102-ND	1.90	1.83	1-969807-2
13	0.62" (15.8mm)	3/4" - 20	23.6	41.7	A16103-ND	1.98	1.91	1-969809-3
17	0.83" (21.2mm)	15/16" - 20	30.1	50.3	A16104-ND	2.42	2.33	1-969811-4
23	1.12" (28.5mm)	1" - 20	37.0	54.0	A16105-ND	3.55	3.41	1-969813-5

NOTE: Must also be used with Flexible Corrugated Tubing (AMP #s 969789-2, 969789-3, 969789-4 & 969789-5).

Cable Clamps – Plastic Shell

Cable clamps are used to prevent excessive strain on cable or wire from being transmitted to the contacts inside the connector housings.



Shell Size	Cable Outer Dia.	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
11	8.36mm	A1330-ND	2.30	2.18	206062-1
13	11.51mm	A1331-ND	2.32	2.20	206966-1
17	11.51mm	A1332-ND	2.32	2.20	206070-1
23	17.86mm	A1334-ND	2.39	2.27	206138-1
11	11.51mm	A1687-ND	2.30	2.18	206358-1
13	17.86mm	A1688-ND	2.43	2.31	207008-1
17	17.86mm	A1689-ND	2.58	2.45	206322-1
23	28.58mm	A1690-ND	3.04	2.88	206512-1
23	28.58mm	A16061-ND*	3.81	3.54	207774-1

* Self-Centering

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