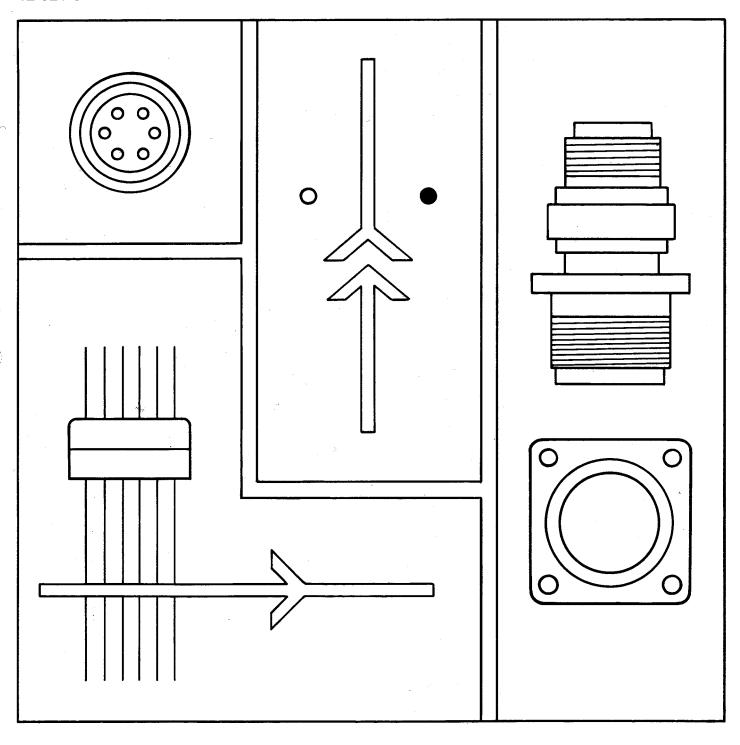
Amphenol® MS Modified Cylindrical Connectors

12-021-5



Amphenol _____

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* NOTE: This shell style is available in the 10-109000 series, which provides a longer backshell for customers requiring additional stripping distance, and also utlizes grounding screws on the clamping nut.

Should more information be required concerning the connectors covered in this publication, or if special application needs arise, please contact your nearest Amphenol sales office or Amphenol Corporation at the following address:

Amphenol Corporation Amphenol Aerospace 40–60 Delaware Avenue Sidney, New York 13838 Telephone: 607-563-5011 Fax: 607-563-5157

Amphenol Aerospace is an ISO 9001 Certified Manufacturer.

Amphenol[®] MS Modified Cylindrical Connectors

The Amphenol® MS Modified connector series has been established to supplement standard MS shell styles and provide a greater variety of styles for the electrical connector user.

The MS and MS Modified series offer the same insert arrangements and electrical ratings as illustrated and tabulated in the "Contacts and Arrangements" section of Amphenol Catalog 12-020. In addition, the MS Modified series is available with special arrangements, also shown in Catalog 12-020. Standard MS coupling threads and polarization are employed. Aluminum components are cadmium plated with either an olive drab chromate or clear chromate after treatment. Contacts are fabricated from high grade copper alloys and are generally silver plated. Size 16 and 12 socket contacts incorporate a closed entry design.

Also offered as an MS Modified type is the 10-214XXX series connector (see pages 14 to 21). This versatile series utilizes insertable crimp type contacts, and is designed to accommodate Navy controlled multi-conductor armored cable per MIL-C-915 or MIL-C-2194. Contacts are silver plated with a 30/50 micro-inch gold overplate. Application tooling is fully coordinated and available with the 10-214XXX series.



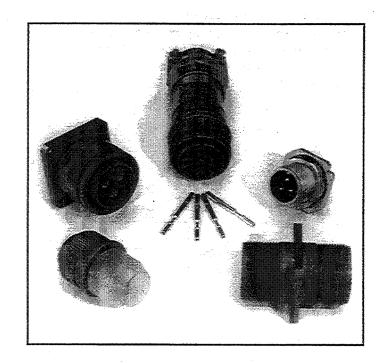
If the MS Modified connector desired is a 10-order number (for example, 10-720XX, page 3) use order information below. If the connector desired is not a 10-order number (for example, FP3106-XX, page 2) use the order information supplied on the bottom of the page covering that connector.

FOR 10- ORDER NUMBERS

(1) Select the desired base 10-order number. To this base number add desired contact arrangement from the "Contacts and Arrangements" section. Add "P" or "S" to specify pin or socket contacts. A complete order number for a 10-72008/40 wall mounting receptacle in shell size 18 with an MS arrangement of 18-1 with pin contacts and with the insert in the normal position is: 10-72018-1P

FOR ALTERNATE POSITIONING

(2) When an alternate position of the insert is required, this is indicated by adding another letter such as "W" to the ordering number listed in (1) above. When alternate insert location is desired, see alternate positioning page of Catalog 12-020, and then select from the tables at right the one letter that indicates both the kind of contacts and the insert location you require. Add this letter to the order number.



| PIN | CONTACTS |
|---------------|---------------------|
| MS Letters | Amphenoi® Letter |
| PW | G |
| PX | 1 |
| PY | К |
| PZ | М |

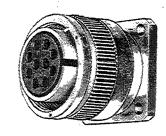
| soc | KET CONTACTS | |
|--------------|---------------------------------|--|
| MS Letter | Amphenol [®] Letter | |
| sw | Н | |
| SX | J | |
| SY | L | |
| SZ | N | |

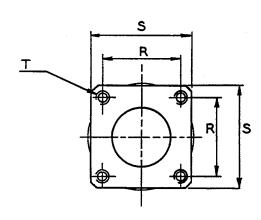
The order number for a 10-72008/40 wall mounting receptacle in shell size 18 with an MS arrangement of 18-1 with pin contacts and with the insert located in alternate position "W" would be: 10-72018-1G

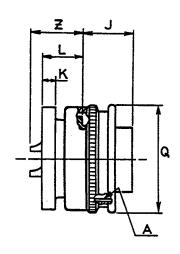
FP3106

flange mounting plug

- · For console type applications
- · Compatibility with MS receptacles
- Class A, general duty, specification MIL-C-5015
- Class C, pressurized, specification MIL-C-5015
- Olive drab chromate over cadmium finish (also clear chromate available)







For contact data see Catalog 12-020. All lockwire holes .045 Dia. Min.

| MS Shell Size | Order Number** Class A or C | A Thread Class 2B | ქ ±.005 | K ±.005 | L ±.020 | Q Dia. Max. | R ±.005 | \$ ±.020 | T Thread Class 2B | Z ±.045 |
|---------------------|-----------------------------------|-------------------------|------------|------------|------------|-------------------|------------|-------------|-------------------------|------------|
| 8S | FP3106-8S- | .5000-28UNEF | .531 | .125 | .438 | .732 | .562 | .781 | 4-40NC | .562 |
| 108 | FP3106-10S- | .6250-24NEF | .531 | .125 | .438 | .844 | .562 | .781 | 4-40NC | .562 |
| 10SL | FP3106-10SL- | .6250-24NEF | .531 | .126 | .438 | .946 | .562 | .781 | 4-40NC | .562 |
| 128 | FP3106-12S- | .7500-20UNEF | .531 | .156 | .438 | .987 | .812 | 1.062 | 4-40NC | .562 |
| 12 | FP3106-12- | .7500-20UNEF | .719 | .156 | .688 | .987 | .812 | 1.062 | 4-40NC | .812 |
| 148 | FP3106-14S- | .8750-20UNEF | .531 | .156 | .438 | 1.114 | .812 | 1.062 | 4-40NC | .562 |
| 14 | FP3106-14- | .8750-20UNEF | .719 | .156 | .688 | 1.114 | .812 | 1.062 | 4-40NC | .812 |
| 16S | FP3106-16S- | 1.0000-20UNEF | .531 | .156 | .438 | 1.226 | 1.000 | 1.312 | 6-32NC | .562 |
| 16 | FP3106-16- | 1.0000-20UNEF | .719 | .156 | .688 | 1.226 | 1.000 | 1.312 | 6-32NC | .812 |
| 18 | FP3106-18- | 1.1250-18NEF | .719 | .156 | .687 | 1.353 | 1.000 | 1.312 | 6-32NC | .812* |
| 20 | FP3106-20- | 1.2500-18NEF | .719 | .188 | .687 | 1.483 | 1.250 | 1.625 | 10-32NF | .812* |
| 22 | FP3106-22- | 1.3750-18NEF | .719 | .188 | .687 | 1.608 | 1.250 | 1.625 | 10-32NF | .812* |
| 24 | FP3106-24- | 1.5000-18NEF | .719 | .188 | .687 | 1.735 | 1.562 | 2.000 | 10-32NF | .812* |
| 28 | FP3106-28- | 1.7500-18NS | .719 | .188 | .687 | 1.971 | 1.562 | 2.000 | 10-32NF | .812* |
| 32 | FP3106-32- | 2.0000-18NS | .719 | .250 | .781 | 2.228 | 1.812 | 2.500 | 10-32NF | .812* |
| 36 | FP3106-36- | 2.2500-16UN | .719 | .250 | .781 | 2.483 | 1.812 | 2.500 | 10-32NF | .812* |
| 40 | FP3106-40- | 2.5000-16UN | .719 | .250 | .781 | 2.737 | 2.250 | 3.031 | 10-32NF | .812* |

Increase Z dimension, so marked (*), by .312 for size "0" contact only.

HOW TO ORDER

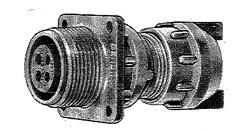
^{**} To order, select base number (Class A or C) and shell size; Add insert arrangement from "Contact and Arrangements" section, Catalog 12-020. Add P for pins or S for sockets. Example: FP3106A-18-1P or FP3106C-18-1P.

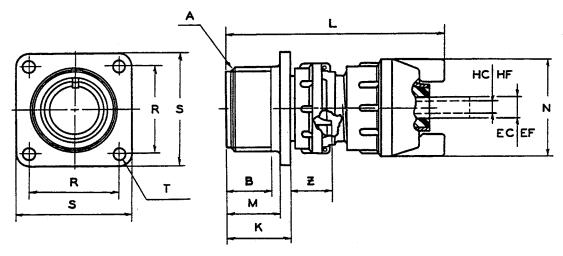
10-72008/40

wall mounting receptacle

- · For multi-conductor cable
- Sealing gaskets at all mating surfaces
- · Olive drab chromate over cadmium plate finish
- Axial compression type clamping nut provides strain relief and cable sealing

NOTE: This shell style is available in the 10-109000 series which provides a longer backshell for customers requiring additional stripping distance and also utilizes grounding screws on the clamping nut.





For contact data see Catalog 12-020.

All lockwire holes .045 Dia. Min. (adapter size 8 to 20 only).

NOTE: Available as an accessory, the MS3420A sleeving is represented by HC & HF dimensions. Tabulation appears on page 6.

| MS Shell Size | Order Number | A Thread Class 2A | B Min. Full Thd. | EF Free | EC Closed | K +.020 010 | L Max. | M +.010 000 | N Dia. Max. | R ±.005 | S ±.020 | T Dia. +.004 002 | Z +.050 060 |
|---------------------|-----------------|-------------------------|------------------------|------------|--------------|-------------------|-----------|-------------------|-------------------|------------|------------|------------------------|-------------------|
| 8S | 10-72008- | .5000-28UNEF | .391 | .219 | .027 | .672 | 2.179 | .562 | .807 | .594 | .875 | .120 | .422 |
| 10S | 10-72010- | .6250-24NEF | .391 | .219 | .027 | .672 | 2.202 | .562 | .807 | .719 | 1.000 | .120 | .422 |
| 10SL | 10-72011- | .6250-24NEF | .391 | .312 | .094 | .672 | 2.327 | .562 | .901 | .719 | 1.000 | .120 | .422 |
| 12S | 10-72012- | .7500-20UNEF | .450 | .312 | .094 | .672 | 2.202 | .562 | .901 | .812 | 1.094 | .120 | .422 |
| 12 | 10-72013- | .7500-20UNEF | .625 | .312 | .094 | .860 | 2.577 | .750 | .901 | .812 | 1.094 | .120 | .672 |
| 145 | 10-72014- | .8750-20UNEF | .450 | .438 | .230 | .672 | 2.202 | .562 | 1.026 | .906 | 1.188 | .120 | .422 |
| 14 | 10-72015- | .8750-20UNEF | .625 | .438 | .230 | .860 | 2.577 | .750 | 1.026 | .906 | 1.188 | .120 | .672 |
| 16S | 10-72016- | 1.0000-20UNEF | .450 | .531 | .316 | .672 | 2.202 | .562 | 1.119 | .969 | 1.281 | .120 | .422 |
| 16 | 10-72017- | 1.0000-20UNEF | .625 | .531 | .316 | .860 | 2.577 | .750 | 1.119 | .969 | 1.281 | .120 | .672 |
| 18 | 10-72018- | 1.1250-18NEF | .625 | .625 | .378 | .891 | 2.604 | .750 | 1.229 | 1.063 | 1.375 | .120 | .641* |
| 20 | 10-72020- | 1.2500-18NEF | .625 | .750 | .500 | .891 | 2.717 | .750 | 1.479 | 1.156 | 1.500 | .120 | .641* |
| 22 | 10-72022- | 1.3750-18NEF | .625 | .750 | .500 | .891 | 2.727 | .750 | 1.479 | 1.250 | 1.625 | .120 | .641* |
| 24 | 10-72024- | 1.5000-18NEF | .625 | .938 | .611 | .953 | 2.789 | .812 | 1.666 | 1.375 | 1.750 | .147 | .578* |
| 28 | 10-72028- | 1.7500-18NS | .625 | .938 | .611 | .953 | 3.007 | .812 | 1.666 | 1.562 | 2.000 | .147 | .578* |
| 32 | 10-72032- | 2.0000-18NS | .625 | 1.250 | .922 | 1.031 | 3.035 | .875 | 2.135 | 1.750 | 2.250 | .173 | .500* |
| 36 | 10-72036- | 2.2500-16UN | .625 | 1.375 | .922 | 1.031 | 3.302 | .875 | 2.260 | 1.938 | 2.500 | .173 | .500* |
| 40 | 10-72040- | 2.5000-16UN | .625 | 1.625 | 1.180 | 1.031 | 3.302 | .875 | 2.510 | 2.188 | 2.750 | .173 | .500* |

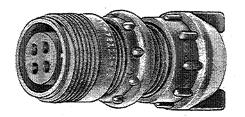
^{*} Increase Z dimension, so marked (*), by .312 for size "0" contact only.

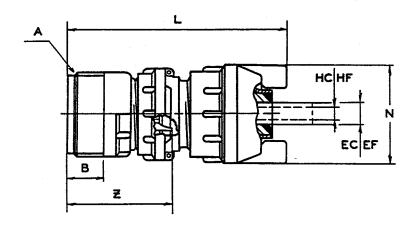
10-72108/40

cable connecting plug

- · For multi-conductor cable
- · Sealing gaskets at all mating surfaces
- · Olive drab chromate over cadmium plate finish
- Axial compression type clamping nut provides strain relief and cable sealing

NOTE: This shell style is available in the 10-109000 series which provides a longer backshell for customers requiring additional stripping distance and also utilizes grounding screws on the clamping nut.





For contact data see Catalog 12-020.

All lockwire holes .045 Dia. Min. (adapter size 8 to 20 only).

NOTE: Available as an accessory, the MS3420A sleeving is represented by HC & HF dimensions. Tabulation appears on page 6.

| MS Shell Size | Order Number | A Thread Class 2A | B Min. Full Thd. | EF Free | EC Closed | L Max. | N Dia. Max. | Z ±.040 |
|---------------------|-----------------|-------------------------|---------------------|------------|--------------|-----------|-------------------|------------|
| 8S | 10-72108- | .5000-28UNEF | .406 | .219 | .027 | 2.179 | .807 | 1.094 |
| 10S | 10-72110- | .6250-24NEF | .406 | .219 | .027 | 2.202 | .807 | 1.094 |
| 10SL | 10-72111- | .6250-24NEF | .406 | .312 | .094 | 2.327 | .901 | 1.094 |
| 128 | 10-72112- | .7500-20UNEF | .422 | .312 | .094 | 2.202 | .901 | 1.094 |
| 12 | 10-72113- | .7500-20UNEF | .656 | .312 | .094 | 2.577 | .901 | 1.532 |
| 148 | 10-72114- | .8750-20UNEF | .391 | .438 | .230 | 2.202 | 1.026 | 1.094 |
| 14 | 10-72115- | .8750-20UNEF | .625 | .438 | .230 | 2.577 | 1.026 | 1.532 |
| 16S | 10-72116- | 1.0000-20UNEF | .391 | .531 | .316 | 2.202 | 1.119 | 1.094 |
| 16 | 10-72117- | 1.0000-20UNEF | .625 | .531 | .316 | 2.577 | 1.119 | 1.532 |
| 18 | 10-72118- | 1.1250-18NEF | .625 | .625 | .378 | 2.604 | 1.229 | 1.532* |
| 20 | 10-72120- | 1.2500-18NEF | .625 | .750 | .500 | 2.717 | 1.479 | 1.532* |
| 22 | 10-72122- | 1.3750-18NEF | .625 | .750 | .500 | 2.727 | 1.479 | 1.532* |
| 24 | 10-72124- | 1.5000-18NEF | .625 | .938 | .611 | 2.789 | 1.666 | 1.532* |
| 28 | 10-72128- | 1.7500-18NS | .625 | .938 | .611 | 3.007 | 1.666 | 1.532* |
| 32 | 10-72132- | 2.0000-18NS | .625 | 1.250 | .922 | 3.035 | 2.135 | 1.532* |
| 36 | 10-72136- | 2.2500-16UN | .625 | 1.375 | .922 | 3.302 | 2.260 | 1.532* |
| 40 | 10-72140- | 2.5000-16UN | .625 | 1.625 | 1.180 | 3.302 | 2.510 | 1.532* |

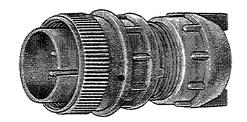
^{*} Increase Z dimension, so marked (*), by .312 for size "0" contact only.

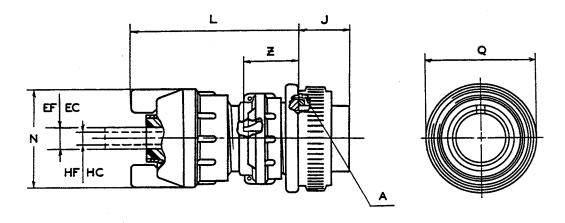
10-72608/40

straight plug

- For multi-conductor cable
- · Sealing gaskets at all mating surfaces
- · Olive drab chromate over cadmium plate finish
- Axial compression type clamping nut provides strain relief and cable sealing

NOTE: This shell style is available in the 10-109000 series which provides a longer backshell for customers requiring additional stripping distance and also utilizes grounding screws on the clamping nut.





For contact data see Catalog 12-020.

All lockwire holes .045 Dia. Min. (adapter size 8 to 20 only).

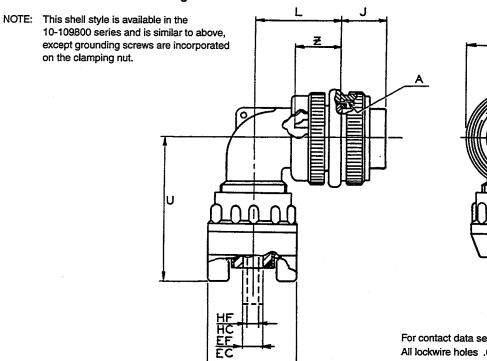
NOTE: Available as an accessory, the MS3420A sleeving is represented by HC & HF dimensions. Tabulation appears on page 6.

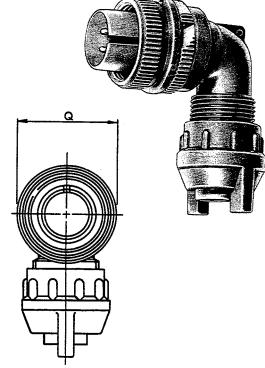
| MS Shell Size | Order Number | A Thread Class 2B | EF Free | EC Closed | J ±.005 | L Max. | N Dia. Max. | Q Dia. | Z ±.045 |
|---------------------|-----------------|-------------------------|------------|--------------|------------|-----------|-------------------|-----------|------------|
| 88 | 10-72608- | .5000-28UNEF | .219 | .027 | .531 | 1.648 | .807 | .750 | .562 |
| 10S | 10-72610- | .6250-24NEF | .219 | .027 | .531 | 1.671 | .807 | .875 | .562 |
| 10SL | 10-72611- | .6250-24NEF | .312 | .094 | .531 | 1.785 | .901 | .946 | .562 |
| 12S | 10-72612- | .7500-20UNEF | .312 | .094 | .531 | 1.671 | .901 | 1.000 | .562 |
| 12 | 10-72613- | .7500-20UNEF | .312 | .094 | .719 | 1.858 | .901 | 1.000 | .812 |
| 148 | 10-72614- | .8750-20UNEF | .438 | .230 | .531 | 1.671 | 1.026 | 1.125 | .562 |
| 14 | 10-72615- | .8750-20UNEF | .438 | .230 | .719 | 1.858 | 1.026 | 1.125 | .812 |
| 16S | 10-72616- | 1.0000-20UNEF | .531 | .316 | .531 | 1.671 | 1.119 | 1.250 | .562 |
| 16 | 10-72617- | 1.0000-20UNEF | .531 | .316 | .719 | 1.858 | 1.119 | 1.250 | .812 |
| 18 | 10-72618- | 1.1250-18NEF | .625 | .378 | .719 | 1.885 | 1.229 | 1.344 | .812* |
| 20 | 10-72620- | 1.2500-18NEF | .750 | .445 | .719 | 1.998 | 1.479 | 1.469 | .812* |
| 22 | 10-72622- | 1.3750-18NEF | .750 | .445 | .719 | 2.008 | 1.479 | 1.594 | .812* |
| 24 | 10-72624- | 1.5000-18NEF | .938 | .611 | .719 | 2.071 | 1.666 | 1.719 | .812* |
| 28 | 10-72628- | 1.7500-18NS | .938 | .611 | .719 | 2.289 | 1.666 | 1.969 | .812* |
| 32 | 10-72632- | 2.0000-18NS | 1.250 | .922 | .719 | 2.316 | 2.135 | 2.219 | .812* |
| 36 | 10-72636- | 2.2500-16UN | 1.375 | .922 | .719 | 2.583 | 2.260 | 2.470 | .812* |
| 40 | 10-72640- | 2.5000-16UN | 1.625 | 1.180 | .719 | 2.583 | 2.510 | 2.719 | .812* |

^{*} Increase Z dimension, so marked (*), by .312 for size "0" contact only.

10-72808/40 90° plug

- For multi-conductor cable
- Sealing gaskets at all mating surfaces
- Olive drab chromate over cadmium plate finish
- Axial compression type clamping nut provides strain relief and cable sealing





For contact data see Catalog 12-020. All lockwire holes .045 Dia. Min.

NOTE: Available as an accessory, the MS3420A sleeving is represented by HC & HF dimensions. Tabulation appears below.

| MS Shell Size | Order Number | A Thread Class 2B | EF Free | EC Closed | J ±.005 | L Max. | N Dia. Max. | Q Dia. | U Max. | Z ±.045 |
|---------------------|-----------------|-------------------------|------------|--------------|------------|-----------|-------------------|-----------|-----------|------------|
| 88 | 10-72808- | .5000-28UNEF | .219 | .027 | .531 | .927 | .807 | .750 | 1.550 | .562 |
| 108 | 10-72810- | .6250-24NEF | .219 | .027 | .531 | .927 | .807 | .875 | 1.550 | .562 |
| 10SL | 10-72811- | .6250-24NEF | .312 | .094 | .531 | .951 | .901 | .946 | 1.613 | .562 |
| 128 | 10-72812- | .7500-20UNEF | .312 | .094 | .531 | .956 | .901 | 1.000 | 1.613 | .562 |
| 12 | 10-72813- | .7500-20UNEF | .312 | .094 | .719 | 1.143 | .901 | 1.000 | 1.613 | .812 |
| 148 | 10-72814- | .8750-20UNEF | .438 | .230 | .531 | 1.020 | 1.026 | 1.125 | 1.675 | .562 |
| 14 | 10-72815- | .8750-20UNEF | .438 | .230 | .719 | 1.207 | 1.026 | 1.125 | 1.675 | .812 |
| 168 | 10-72816- | 1.0000-20UNEF | .531 | .316 | .531 | 1.146 | 1.119 | 1.250 | 1.738 | .562 |
| 16 | 10-72817- | 1.0000-20UNEF | .531 | .316 | .719 | 1.333 | 1.119 | 1.250 | 1.738 | .812 |
| 18 | 10-72818- | 1.1250-18NEF | .625 | .378 | .719 | 1.395 | 1.229 | 1.344 | 1.859 | .812* |
| 20 | 10-72820- | 1.2500-18NEF | .750 | .500 | .719 | 1.598 | 1.479 | 1.469 | 2.034 | .812* |
| 22 | 10-72822- | 1.3750-18NEF | .750 | .500 | .719 | 1.598 | 1.479 | 1.594 | 1.971 | .812* |
| 24 | 10-72824- | 1.5000-18NEF | .938 | .611 | .719 | 1.786 | 1.666 | 1.719 | 2.096 | .812* |
| 28 | 10-72828- | 1.7500-18NS | .938 | .611 | .719 | 1.786 | 1.666 | 1.969 | 2.159 | .812* |
| 32 | 10-72832- | 2.0000-18NS | 1.250 | .922 | .719 | 2.020 | 2.135 | 2.219 | 2.546 | .812* |
| 36 | 10-72836- | 2.2500-16UN | 1.375 | .922 | .719 | 2.145 | 2.260 | 2.470 | 2.766 | .812* |
| 40 | 10-72840- | 2.5000-16UN | 1.625 | 1.180 | .719 | 2.270 | 2.510 | 2.719 | 2.922 | .812* |

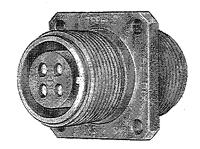
| * | Increase Z dimension, | so marked (| * |), by | .312 for size "0" contact | only. |
|---|-----------------------|-------------|---|-------|---------------------------|-------|
|---|-----------------------|-------------|---|-------|---------------------------|-------|

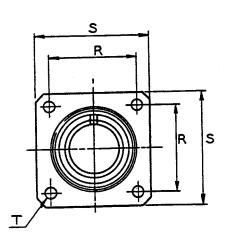
| MS Shell Size | Sleeve Order Number | HF Free | HC Close d |
|-------------------|------------------------|------------|------------------|
| 8S & 10S | MS3420-3A | .125 | .000 |
| 10SL, 12 & 12S | MS3420-4A | .219 | .010 |
| 14 & 14S | MS3420-4A | .219 | .020 |
| | MS3420-6A | .312 | .114 |
| 16 & 16S | MS3420-6A | .312 | .085 |
| | MS3420-8A | .438 | .222 |
| 18 | MS3420-6A | .312 | .085 |
| | MS3420-10A | .438 | .200 |
| 20 & 22 | MS3420-8A | .438 | .177 |
| | MS3420-12A | .541 | .270 |
| 24 & 28 | MS3420-8A | .438 | .186 |
| | MS3420-12A | .541 | .260 |
| | MS3420-16A | .750 | .433 |
| 32 | MS3420-12A | .541 | .273 |
| | MS3420-16A | .750 | .442 |
| | MS3420-20A | .938 | .620 |
| 36 | MS3420-16A | .750 | .358 |
| | MS3420-18A | .938 | .504 |
| | MS3420-24A | 1.125 | .682 |
| 40 | MS3420-16A | .750 | .368 |
| | MS3420-20A | .938 | .514 |
| | MS3420-28A | 1.250 | .816 |

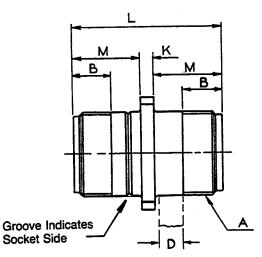
TBF

thru-bulkhead receptacle

- Pin and socket double-ended contacts
- Insert rotations viewed from socket end
- Olive drab chromate over cadmium plate finish
- For pressure tight feed-thru of circuits on bulkheads or panels







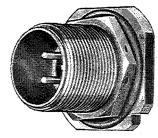
| MS Shell Size | TBF Order Number* | A Thread Class 2A | B Min. Full Thread | D Max. Panel Thickness | K Ref. | L ±.015 | M +.000 010 | R ±.005 | \$ ±.020 | T Dia. +.004 002 |
|---------------------|-------------------------|-------------------------|--------------------------|------------------------------|-----------|------------|-------------------|------------|-------------|---------------------------|
| 88 | TBF-8S-XXPS | .5000-28UNEF | .406 | .266 | .141 | 1.563 | .711 | .594 | .875 | .120 |
| 108 | TBF-10S-XXPS | .6250-24NEF | .406 | .266 | .141 | 1.563 | .711 | .719 | 1.000 | .120 |
| 128 | TBF-12S-XXPS | .7500-20UNEF | .406 | .266 | .141 | 1.563 | .711 | .812 | 1.094 | .120 |
| 12 | TBF-12-XXPS | .7500-20UNEF | .625 | .312 | .155 | 2.125 | .985 | .812 | 1.094 | .120 |
| 148 | TBF-14S-XXPS | .8750-20UNEF | .406 | .266 | .141 | 1.563 | .711 | .906 | 1.188 | .120 |
| 143 | TBF-14-XXPS | .8750-20UNEF | .625 | .312 | .155 | 2.125 | .985 | .906 | 1.188 | .120 |
| 16S | TBF-16S-XXPS | 1.0000-20UNEF | .406 | .266 | .141 | 1.563 | .711 | .969 | 1.281 | .120 |
| | TBF-16-XXPS | 1.0000-20UNEF | .625 | .312 | .155 | 2.125 | .985 | .969 | 1.281 | .120 |
| 16 | | 1.1250-18NEF | .625 | .312 | .155 | 2.125 | .985 | 1.062 | 1.375 | .120 |
| 18 | TBF-18-XXPS | 1.2500-18NEF | .625 | .312 | .155 | 2.125 | .985 | 1.156 | 1.500 | .120 |
| 20 | TBF-20-XXPS | | | | .155 | 2.125 | .985 | 1,250 | 1.625 | .120 |
| 22 | TBF-22-XXPS | 1.3750-18NEF | .625 | .312 | | | | | 1.750 | .147 |
| 24 | TBF-24-XXPS | 1.5000-18NEF | .625 | .312 | .155 | 2.125 | .985 | 1.375 | | |
| 28 | TBF-28-XXPS | 1.7500-18NS | .625 | .312 | .155 | 2.125 | .985 | 1.562 | 2.000 | .147 |
| 32 | TBF-32-XXPS | 2.0000-18NS | .625 | .312 | .155 | 2.125 | .985 | 1.750 | 2.250 | .173 |
| 36 | TBF-36-XXPS | 2.2500-16UN | .625 | .312 | .155 | 2.125 | .985 | 1.938 | 2.500 | .173 |
| 40 | TBF-40-XXPS | 2.5000-16UN | .625 | .312 | .155 | 2.125 | .985 | 2.188 | 2.750 | .173 |

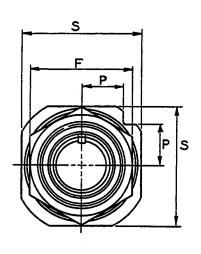
HOW TO ORDER

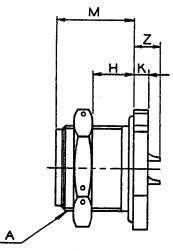
^{*} To order, replace "XX" with insert arrangement from "Contacts and Arrangements" section of Catalog 12-020. For example: TBF-18-1PS. To order a rotation, an example part number would be: TBF-18-1PSW.

10-74108/28 (sealed) 10-74708/40 (pressurized) jam nut receptacle

- For open bench wiring of harness
- "O" ring gasket provided on flange
- 10-741XX provides less than 1.3 x 10⁻⁶ cubic foot/hour air leakage at 15 psi differential
- 10-747XX provides less than 1 cu. in./hour air leakage at 35 psi differential
- Clear chromate over cadmium plate finish







For contact data see Catalog 12-020. All lockwire holes .045 Dia. Min.

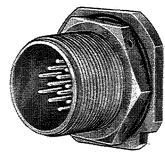
| MS Shell Size | Order Number** 10-741XX | Order Number** 10-747XX | A Thread | F Hex | H Panel Thickness | | к | м | P | s | z |
|---------------------|-------------------------------|-------------------------------|---------------|----------|-------------------------|------|-------|-------|-------|-------|-------|
| | (Sealed) | (Pressurized) | Class 2A | ±.016 | Min. | Max. | ±.005 | ±.010 | ±.010 | ±.010 | ±.045 |
| 88 | 10-74108- | 10-74708- | .5000-28UNEF | .688 | .094 | .267 | .156 | .812 | .309 | .875 | .281 |
| 108 | 10-74110- | 10-74710- | .6250-24NEF | .812 | .094 | .267 | .156 | .812 | .354 | 1.000 | .281 |
| 10SL | 10-74111- | 10-74711- | .6250-24NEF | .812 | .094 | .267 | .156 | .812 | .354 | 1.000 | .281 |
| 128 | 10-74112- | 10-74712- | .7500-20UNEF | .938 | .094 | .267 | .156 | .812 | .397 | 1.125 | .281 |
| 12 | 10-74113- | 10-74713- | .7500-20UNEF | .938 | .094 | .392 | .156 | 1.188 | .397 | 1.125 | .344 |
| 148 | 10-74114- | 10-74714- | .8750-20UNEF | 1.062 | .094 | .204 | .156 | .812 | .442 | 1.250 | .281 |
| 14 | 10-74115- | 10-74715- | .8750-20UNEF | 1.062 | .094 | .329 | .156 | 1.188 | .442 | 1.250 | .344 |
| 16S | 10-74116- | 10-74716- | 1.0000-20UNEF | 1.250 | .094 | .204 | .156 | .812 | .486 | 1.375 | .281 |
| 16 | 10-74117- | 10-74717- | 1.0000-20UNEF | 1.250 | .094 | .329 | .156 | 1.188 | .486 | 1.375 | |
| 18 | 10-74118- | 10-74718- | 1.1250-18NEF | 1.312 | .094 | .297 | .188 | 1.156 | .575 | 1.625 | .344 |
| 20 | 10-74120- | 10-74720- | 1.2500-18NEF | 1.500 | .094 | .297 | .188 | 1.156 | .619 | 1.750 | .375* |
| 22 | 10-74122- | 10-74722- | 1.3750-18NEF | 1.562 | .094 | .297 | .188 | 1.156 | .633 | | .375* |
| 24 | 10-74124- | 10-74724- | 1.5000-18NEF | 1.750 | .094 | .360 | .188 | 1.219 | | 1.875 | .375* |
| 28 | 10-74128- | 10-74728- | 1.7500-18NS | 2.000 | .094 | .360 | .188 | | .707 | 2.000 | .312* |
| 32 | | 10-74732 | 2.0000-18NS | 2.188 | .094 | | | 1.219 | .795 | 2.250 | .312* |
| 36 | | 10-74736- | 2.2500-16UN | | | .392 | .219 | 1.250 | .884 | 2.500 | .281* |
| 40 | | | | 2.438 | .094 | .329 | .219 | 1.250 | .972 | 2.750 | .281* |
| 70 | | 10-74740- | 2.5000-16UN | 2.812 | .094 | .329 | .219 | 1.250 | 1.060 | 3.000 | .281* |

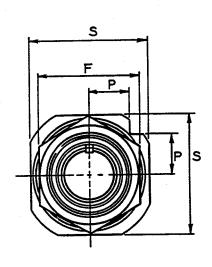
^{*} Increase Z dimension, so marked (*), by .312 for size "0" contact only.

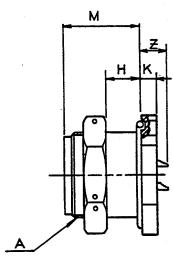
^{**} To order O.D. chromate, change 10-prefix to 71-prefix.

10-87308/40 jam nut receptacle

- For thin wall or panels
- "O" ring gasket provided on flange
- Olive drab chromate over cadmium plate finish







For contact data see Catalog 12-020. All lockwire holes .045 Dia. Min.

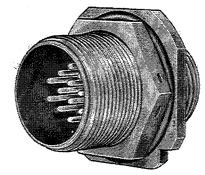
| MS Shell | Order | A Thread | 1100 | | к | м | Р | s | z | |
|-------------|-----------|---------------|-------|------|------|-------|-------|-------|-------|-------|
| Size | Number | Class 2A | ±.016 | Min. | Max. | ±.005 | ±.010 | ±.010 | ±.010 | ±.045 |
| 88 | 10-87308- | .5000-28UNEF | .688 | .000 | .204 | .156 | .812 | .309 | .875 | .281 |
| 108 | 10-87310- | .6250-24NEF | .812 | .000 | .204 | .156 | .812 | .354 | 1.000 | .281 |
| 10SL | 10-87311- | .6250-24NEF | .812 | .000 | .204 | .156 | .812 | .354 | 1.000 | .281 |
| 12S | 10-87312- | .7500-20UNEF | .938 | .000 | .204 | .156 | .812 | .397 | 1.125 | .281 |
| 12 | 10-87313- | .7500-20UNEF | .938 | .000 | .329 | .156 | 1.188 | .397 | 1.125 | .344 |
| 148 | 10-87314- | .8750-20UNEF | 1.062 | .000 | .142 | .156 | .812 | .442 | 1.250 | .281 |
| 14 | 10-87315- | .8750-20UNEF | 1.062 | .000 | .267 | .156 | 1.188 | .442 | 1.250 | .344 |
| 16S | 10-87316- | 1.0000-20UNEF | 1.250 | .000 | .142 | .156 | .812 | .486 | 1.375 | .281 |
| 16 | 10-87317- | 1.0000-20UNEF | 1.250 | .000 | .267 | .156 | 1.188 | .486 | 1.375 | .344 |
| 18 | 10-87318- | 1.1250-18NEF | 1.312 | .000 | .235 | .188 | 1.156 | .575 | 1.625 | .375* |
| 20 | 10-87320- | 1,2500-18NEF | 1.500 | .000 | .235 | .188 | 1.156 | .619 | 1.750 | .375* |
| 22 | 10-87322- | 1,3750-18NEF | 1.562 | .000 | .235 | .188 | 1.156 | .663 | 1.875 | .375* |
| 24 | 10-87324- | 1,5000-18NEF | 1.750 | .000 | .298 | .188 | 1.219 | .707 | 2.000 | .312* |
| 28 | 10-87328- | 1.7500-18NS | 2.000 | .000 | .298 | .188 | 1.219 | .795 | 2.250 | .312* |
| 32 | 10-87332- | 2.0000-18NS | 2.188 | .000 | .329 | .219 | 1.250 | .884 | 2.500 | .281* |
| 36 | 10-87336- | 2.2500-16UN | 2.438 | .000 | .298 | .219 | 1.250 | .972 | 2.750 | .281* |
| 40 | 10-87340- | 2.5000-16UN | 2.812 | .000 | .298 | .219 | 1.250 | 1.060 | 3.000 | .281* |

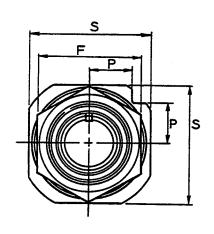
^{*} Increase Z dimension, so marked (*), by .312 for size "0" contact only.

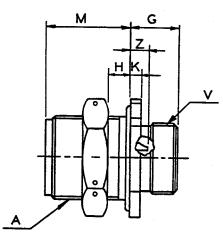
10-87408/40

jam nut receptacle

- · For thin wall or panels
- "O" ring gasket provided on flange
- · Back skirt with threads for accessories
- Olive drab chromate over cadmium plate finish







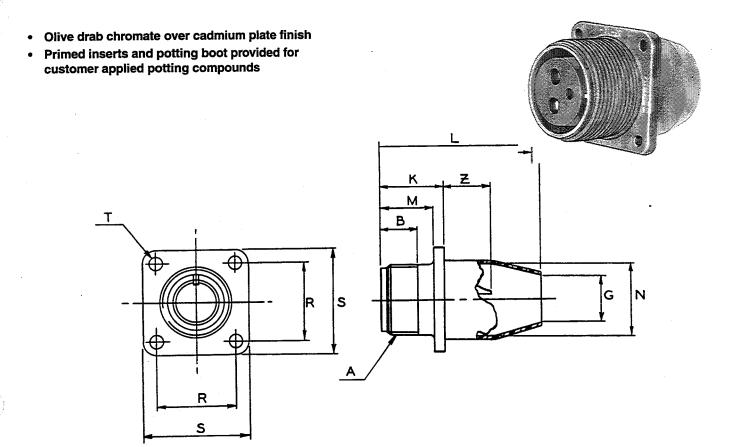
For contact data see Catalog 12-020. All lockwire holes .045 Dia. Min.

Insert arrangements containing size 0, 4 and 8 contacts are not available.

| MS Sheli | Order | A Thread | F Hex | G | H Panel Thickness | | K | M | P | s | v | |
|-------------|-----------|---------------|----------|-------|-------------------------|------|-------|-------|-------|-------|--------------------|------------|
| Size | Number | Class 2A | ±.016 | ±.015 | Min. | Max. | ±.005 | ±.010 | ±.010 | ±.010 | Thread Class 2A | Z ±.045 |
| 105 | 10-87410- | .6250-24NEF | .812 | .525 | .000 | .197 | .125 | .806 | .354 | 1.000 | .5000-28UNEF | .288 |
| 10SL | 10-87411- | .6250-24NEF | .812 | .525 | .000 | .197 | .125 | .806 | .354 | 1.000 | .6250-24NEF | .288 |
| 12S | 10-87412- | .7500-20UNEF | .938 | .525 | .000 | .197 | .125 | .806 | .397 | 1.124 | .6250-24NEF | .288 |
| 12 | 10-87413- | .7500-20UNEF | .938 | .713 | .000 | .197 | .125 | 1.055 | .397 | 1.124 | .6250-24NEF | .477 |
| 14S | 10-87414- | .8750-20UNEF | 1.062 | .525 | .000 | .199 | .125 | .869 | .442 | 1.150 | .7500-20UNEF | .225 |
| 14 | 10-87415- | .8750-20UNEF | 1.062 | .713 | .000 | .134 | .125 | 1.055 | .442 | 1.250 | .7500-20UNEF | .477 |
| 168 | 10-87416- | 1.0000-20UNEF | 1.250 | .525 | .000 | .199 | .125 | .869 | .486 | 1.376 | .8750-20UNEF | .225 |
| 16 | 10-87417- | 1.0000-20UNEF | 1.250 | .713 | .000 | 134 | .125 | 1.055 | .486 | 1.376 | .8750-20UNEF | .477 |
| 18 | 10-87418- | 1.1250-18NEF | 1.312 | .729 | .000 | .134 | .156 | 1.055 | .575 | 1.625 | 1.0000-20UNEF | .477 |
| 20 | 10-87420- | 1.2500-18NEF | 1.500 | .729 | .000 | .134 | .156 | 1.055 | .619 | 1.750 | 1.1250-18NEF | .477 |
| 22 | 10-87422- | 1.3750-18NEF | 1.562 | .729 | .000 | .134 | .156 | 1.055 | .663 | 1.875 | 1,2500-18NEF | .477 |
| 24 | 10-87424- | 1.5000-18NEF | 1.750 | .745 | .000 | .167 | .172 | 1.088 | .707 | 2.000 | 1.3750-18NEF | .443 |
| 28 | 10-87428- | 1.7500-18NS | 2.000 | .745 | .000 | .167 | .172 | 1.088 | .795 | 2.250 | 1.6250-18NEF | .443 |
| 32 | 10-87432- | 2.0000-18NS | 2.188 | .761 | .000 | .135 | .188 | 1.056 | .884 | 2.500 | 1.8750-16NEF | .477 |
| 36 | 10-87436- | 2.2500-16UN | 2.438 | .761 | .000 | .166 | .188 | 1.118 | .972 | 2.750 | 2.0625-16N | .414 |
| 40 | 10-87440- | 2.5000-16UN | 2.812 | .761 | .000 | .166 | .188 | 1.118 | 1.060 | 3.000 | 2.3125-16N | .414 |

SC00P

wall mounting receptacle



For contact data see Catalog 12-020.

NOTE:

Size "0" contacts must be individually sleeved. Use vinyl tubing, or equivalent, of suitable length and diameter.

| MS Shell Size | Order Number** | A Thread Class 2A | B Min. Full Thd. | G Dia. | K +.020 010 | L Max. | M +.010 000 | N Dia, +.010 000 | R ±.005 | S ±.031 | T Dia. +.004 002 | Z +.050 060 |
|---------------------|-------------------|-------------------------|------------------------|-----------|-------------------|-----------|-------------------|---------------------------|------------|------------|---------------------------|-------------------|
| 8S | SC00P-8S- | .5000-28UNEF | .391 | .288 | .672 | 1.375 | .562 | .516 | .594 | .875 | .120 | .422 |
| 10S | SC00P-10S- | .6250-24NEF | .391 | .359 | .672 | 1.375 | .562 | .609 | .719 | 1.000 | .120 | .422 |
| 12S | SC00P-12S- | .7500-20UNEF | .450 | .484 | .672 | 1.375 | .562 | .766 | .812 | 1.094 | .120 | .422 |
| 12 | SC00P-12- | .7500-20UNEF | .625 | .484 | .860 | 1.789 | .750 | .766 | .812 | 1.094 | .120 | .672 |
| 148 | SC00P-14S- | .8750-20UNEF | .450 | .609 | .672 | 1.375 | .562 | .844 | .906 | 1.188 | .120 | .422 |
| 14 | SC00P-14- | .8750-20UNEF | .625 | .609 | .860 | 1.781 | .750 | .844 | .906 | 1.188 | .120 | .672 |
| 16S | SC00P-16S | 1.0000-20UNEF | .450 | .734 | .672 | 1.375 | .562 | .969 | .969 | 1.281 | .120 | .422 |
| 16 | SC00P-16- | 1.0000-20UNEF | .625 | .734 | .860 | 1.781 | .750 | .969 | .969 | 1.281 | .120 | .672 |
| 18 | SC00P-18- | 1.1250-18NEF | .625 | .859 | .891 | 1.812 | .750 | 1.094 | 1.063 | 1.375 | .120 | .641* |
| 20 | SC00P-20- | 1.2500-18NEF | .625 | .984 | .891 | 1.812 | .750 | 1.219 | 1.156 | 1.500 | .120 | .641* |
| 22 | SC00P-22- | 1.3750-18NEF | .625 | 1.109 | .891 | 1.812 | .750 | 1.344 | 1.250 | 1.625 | .120 | .641* |
| 24 | SC00P-24- | 1.5000-18NEF | .625 | 1.234 | .953 | 1.812 | .812 | 1.469 | 1.375 | 1.750 | .147 | .578* |
| 28 | SC00P-28- | 1.7500-18NS | .625 | 1.427 | .953 | 1.812 | .812 | 1.719 | 1.562 | 2.000 | .147 | .578* |
| 32 | SC00P-32- | 2.0000-18NS | .625 | 1.708 | 1.031 | 1.828 | .875 | 2.000 | 1.750 | 2.250 | .173 | .500* |
| 36 | SC00P-36- | 2.2500-16UN | .625 | 1.895 | 1.031 | 1.828 | .875 | 2.219 | 1.938 | 2.500 | .173 | .500* |
| 40 | SC00P-40- | 2.5000-16UN | .625 | 2.130 | 1.031 | 1.828 | .875 | 2.469 | 2.188 | 2.750 | .173 | .500* |

^{*} Increase Z dimension, so marked (*), by .312 for size "0" contact only.

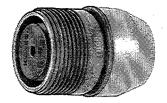
HOW TO ORDER

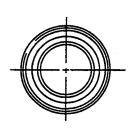
^{**} To order, select base number above; add insert arrangement from "Contact and Arrangements" section, Catalog 12-020; add P for pins or S for sockets. Example: SC00P-18-1P

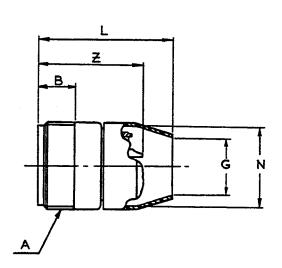
SC01P

cable connecting plug

- Olive drab chromate over cadmium plate finish
- Primed inserts and potting boot provided for customer applied potting compounds







For contact data see Catalog 12-020.

NOTE:

Size "0" contacts must be individually sleeved. Use vinyl tubing, or equivalent, of suitable length and diameter.

| MS Shell Size | Order Number** | A Thread Class 2A | B Min. Full Thd. | G Dia. | L Max. | N Dia. +.010 000 | Z ±.040 |
|---------------------|-------------------|-------------------------|------------------------|-----------|-----------|---------------------------|------------|
| 8S | SC01P-8S- | .5000-28UNEF | .406 | .288 | 1.350 | .516 | 1.094 |
| 10S | SC01P-10S- | .6250-24NEF | .406 | .359 | 1.375 | .609 | 1.094 |
| 10SL | SC01P-10SL- | .6250-24NEF | .406 | .484 | 1.351 | .766 | 1.094 |
| 128 | SC01P-12S- | .7500-20UNEF | .422 | .484 | 1.375 | .766 | 1.094 |
| 12 | SC01P-12- | .7500-20UNEF | .656 | .484 | 1.827 | .766 | 1.532 |
| 148 | SC01P-14S- | .8750-20UNEF | .391 | .609 | 1.375 | .844 | 1.094 |
| 14 | SC01P-14- | .8750-20UNEF | .625 | .609 | 1.827 | .844 | 1.532 |
| 16S | SC01P-16S- | 1.0000-20UNEF | .391 | .734 | 1.375 | .969 | 1.094 |
| 16 | SC01P-16- | 1.0000-20UNEF | .625 | .734 | 1.827 | .969 | 1.532 |
| 18 | SC01P-18- | 1.1250-18NEF | .625 | .859 | 1.827 | 1.094 | 1.532* |
| 20 | SC01P-20- | 1.2500-18NEF | .625 | .984 | 1.827 | 1.219 | 1.532* |
| 22 | SC01P-22- | 1.3750-18NEF | .625 | 1.109 | 1.827 | 1.344 | 1.532* |
| 24 | SC01P-24- | 1.5000-18NEF | .625 | 1.234 | 1.827 | 1.469 | 1.532* |
| 28 | SC01P-28- | 1.7500-18NS | .625 | 1.427 | 1.827 | 1.719 | 1.532* |
| 32 | SC01P-32- | 2.0000-18NS | .625 | 1.708 | 1.827 | 2.000 | 1.532* |
| 36 | SC01P-36- | 2.2500-16UN | .625 | 1.895 | 1.827 | 2.219 | 1.532* |
| 40 | SC01P-40- | 2.5000-16UN | .625 | 2.130 | 1.827 | 2.469 | 1.532* |

^{*} Increase Z dimension, so marked (*), by .312 for size "0" contact only. HOW TO ORDER

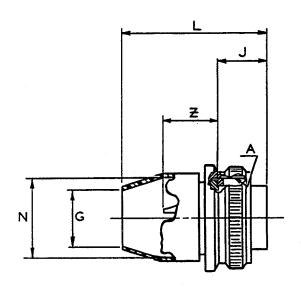
^{**} To order, select base number above; add insert arrangement from "Contact and Arrangements" section,
Catalog 12-020; add P for pins or S for sockets.

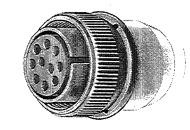
Example: SC01P-18-1P

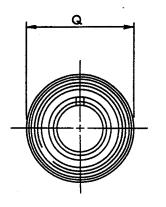
SC06P

straight plug

- · Olive drab chromate over cadmium plate finish
- Primed inserts and potting boot provided for customer applied potting compounds







For contact data see Catalog 12-020.

NOTE

Size "0" contacts must be individually sleeved. Use vinyl tubing, or equivalent, of suitable length and diameter.

| MS Shell Size | Order Number** | A Thread Class 2B | G Dia. | J ±.005 | L Max. | N Dia. +.010 000 | Q Dia. Max. | Z ±.045 |
|---------------------|-------------------|-------------------------|-----------|------------|-----------|---------------------------|-------------------|------------|
| 88 | SC06P-8S- | .5000-28UNEF | .288 | .531 | 1.449 | .516 | .760 | .562 |
| 10S | SC06P-10S- | .6250-24NEF | .359 | .531 | 1.449 | .609 | .885 | .562 |
| 128 | SC06P-12S- | .7500-20UNEF | .484 | .531 | 1.449 | .766 | 1.010 | .562 |
| 12 | SC06P-12- | .7500-20UNEF | .484 | .719 | 1.901 | .766 | 1.010 | .812 |
| 148 | SC06P-14S- | .8750-20UNEF | .609 | .531 | 1.449 | .844 | 1.135 | .562 |
| 14 | SC06P-14- | .8750-20UNEF | .609 | .719 | 1.901 | .844 | 1.135 | .812 |
| 16S | SC06P-16S- | 1.0000-20UNEF | .734 | .531 | 1.449 | .969 | 1.260 | .562 |
| 16 | SC06P-16- | 1.0000-20UNEF | .734 | .719 | 1.901 | .969 | 1.260 | .812 |
| 18 | SC06P-18- | 1.1250-18NEF | .859 | .719 | 1.901 | 1.094 | 1.354 | .812* |
| 20 | SC06P-20- | 1.2500-18NEF | .984 | .719 | 1.901 | 1.219 | 1.479 | .812* |
| 22 | SC06P-22- | 1.3750-18NEF | 1.109 | .719 | 1.901 | 1.344 | 1.604 | .812* |
| 24 | SC06P-24- | 1.5000-18NEF | 1.234 | .719 | 1.901 | 1.469 | 1.729 | .812* |
| 28 | SC06P-28- | 1.7500-18NS | 1.427 | .719 | 1.901 | 1.719 | 1.979 | .812* |
| 32 | SC06P-32- | 2.0000-18NS | 1.708 | .719 | 1.901 | 2.000 | 2.229 | .812* |
| 36 | SC06P-36- | 2.2500-16UN | 1.895 | .719 | 1.901 | 2.219 | 2.479 | .812* |
| 40 | SC06P-40- | 2.5000-16UN | 2.130 | .719 | 1.901 | 2.469 | 2.729 | .812* |

 $^{^{\}star}$ Increase Z dimension, so marked (*), by .312 for size "0" contact only. HOW TO ORDER

NOTE: Consult Amphenol, Sidney, NY for availability of shell size 10SL.

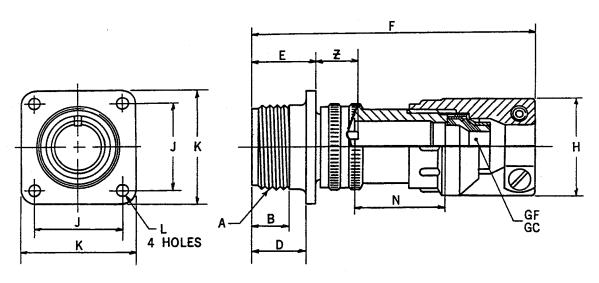
^{**} To order, select base number above; add insert arrangement from "Contact and Arrangements" section, Catalog 12-020; add P for pins or S for sockets. Example: SC06P-18-1P

10-214008/40

wall mounting receptacle

- Crimp contacts
- Multi-conductor jacket cable
- Sealing gaskets at all mating surfaces
- · Olive drab chromate over cadmium finish





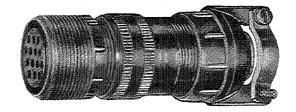
| MS Shell Size | Order Number | A Thread Class 2A | B Min. Full Thd. | D +.010 000 | E +.020 010 | F Max. | GF Free Dia. | GC Closed Dia. | H Max. | J ±.005 | K | L. Dia. +.004 002 | N ±.031 | Z +.050 060 |
|---------------------|-----------------|-------------------------|---------------------------|-------------------|-------------------|-----------|--------------------|----------------------|-----------|------------|--------|----------------------------|------------|-------------------|
| 8S | 10-214008- | .5000-28UNEF | .391 | .562 | .672 | 3.005 | .219 | .027 | .812 | .594 | .875 | .120 | 1.068 | .469 |
| 108 | 10-214010 | .6250-24NEF | .391 | .562 | .672 | 3.005 | .219 | .027 | .812 | .719 | 1.000 | .120 | 1.068 | .469 |
| 10SL | 10-214011- | .6250-24NEF | .391 | .562 | .672 | 3.005 | .312 | .094 | .906 | .719 | 1.000 | .120 | 1.068 | .469 |
| 12S | 10-214012- | .7500-20UNEF | .625 | .562 | .672 | 3.005 | .312 | .094 | .906 | .812 | 1.094 | .120 | 1.068 | .469 |
| 12 | 10-214013- | .7500-20UNEF | .625 | .750 | .860 | 3.437 | .312 | .094 | .906 | .812 | 1.094 | .120 | 1.125 | .672 |
| 148 | 10-214014- | .8750-20UNEF | .450 | .562 | .672 | 3.005 | .438 | .230 | 1.031 | .906 | 1.188 | .120 | 1.068 | .469 |
| 14 | 10-214015- | .8750-20UNEF | .625 | .750 | .860 | 3.437 | .438 | .230 | 1.031 | .906 | 1.188 | .120 | 1.125 | .672 |
| 16S | 10-214016- | 1.0000-20UNEF | .450 | .562 | .672 | 3.005 | .531 | .316 | 1.125 | .969 | 1.281 | .120 | 1.068 | .469 |
| 16 | 10-214017- | 1.0000-20UNEF | .625 | .750 | .860 | 3.437 | .531 | 316 | 1.125 | .969 | 1.281 | .120 | 1.125 | .672 |
| 18 | 10-214018- | 1.1250-18NEF | .625 | .750 | .891 | 3.515 | .625 | .378 | 1.234 | 1.063 | 1.375 | .120 | 1.125 | .641 |
| 20 | 10-214020- | 1.2500-18NEF | .625 | .750 | .891 | 3.780 | .750 | .445 | 1.484 | 1.156 | 1.500 | .120 | 1.375 | .641 |
| 22 | 10-214022- | 1.3750-18NEF | .625 | .750 | .891 | 4.030 | .750 | .445 | 1.484 | 1.250 | 1.625 | .120 | 1.625 | .641 |
| 24 | 10-214024- | 1.5000-18NEF | .625 | .812 | .953 | 4.452 | .938 | .611 | 1.671 | 1.375 | 1.750 | .147 | 1.875 | .578 |
| 28 | 10-214028- | 1.7500-18NS | .625 | .812 | .953 | 4.874 | .938 | .611 | 1.671 | 1.562 | 2.000 | .147 | 2.297 | .578 |
| 32 | 10-214032- | 2.0000-18NS | .625 | .875 | 1.031 | 5.374 | 1.250 | .922 | 2.188 | 1.750 | 2.250 | .173 | 2.547 | .500 |
| 36 | 10-214036- | 2.2500-16UN | .625 | .875 | 1.031 | 5.827 | 1.375 | .922 | 2.344 | 1.938 | 2.500 | .173 | 2.797 | .500 |
| 40 | 10-214040- | 2.5000-16UN | .625 | .875 | 1.031 | 6.077 | 1.625 | 1.180 | 2.594 | 2.188 | 2.750 | .173 | 3.047 | .500 |
| 44 | 10-214044- | 2.7500-16UN | .625 | .875 | 1.031* | 6.500 | 1.875 | 1.427 | 2.812 | 2.375 | 3.000* | .173 | 3.563 | .750 |

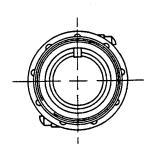
^{*} Noted dimensions have tolerance ±.020

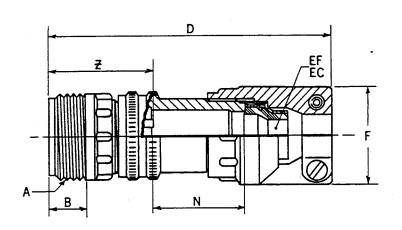
10-214108/40

cable connecting plug

- · Crimp contacts
- Multi-conductor jacket cable
- Sealing gaskets at all mating surfaces
- · Olive drab chromate over cadmium finish







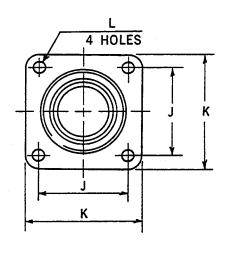
| MS Shell Size | Order Number | A Thread Class 2A | B Min. Full Thd | D Max. | EF Free Dia. | EC Closed Dia. | F Max. | N ±.031 | Z ±.040 |
|---------------------|-----------------|-------------------------|-----------------------|-----------|--------------------|----------------------|-----------|------------|------------|
| 88 | 10-214108- | .5000-28UNEF | .406 | 3.005 | .219 | .027 | .812 | 1.068 | 1.141 |
| 108 | 10-214110- | .6250-24NEF | .406 | 3.005 | .219 | .027 | .812 | 1.068 | 1.141 |
| 10SL | 10-214111- | .6250-24NEF | .406 | 3.005 | .312 | .094 | .906 | 1.068 | 1.141 |
| 12S | 10-214112- | .7500-20UNEF | .422 | 3.005 | .312 | .094 | .906 | 1.068 | 1.141 |
| 12 | 10-214113- | .7500-20UNEF | .656 | 3.437 | .312 | .094 | .906 | 1.125 | 1.532 |
| 148 | 10-214114- | .8750-20UNEF | .391 | 3.005 | .438 | .230 | 1.031 | 1.068 | 1.141 |
| 14 | 10-214115- | .8750-20UNEF | .625 | 3.437 | .438 | .230 | 1.031 | 1.125 | 1.532 |
| 16S | 10-214116- | 1.000-20UNEF | .391 | 3.005 | .531 | .316 | 1.125 | 1.068 | 1.141 |
| 16 | 10-214117- | 1.0000-20UNEF | .625 | 3.437 | .531 | .316 | 1.125 | 1.125 | 1.532 |
| 18 | 10-214118- | 1.1250-18NEF | .625 | 3.515 | .625 | .378 | 1.234 | 1.125 | 1.532 |
| 20 | 10-214120- | 1.2500-18NEF | .625 | 3.780 | .750 | .445 | 1.484 | 1.375 | 1.532 |
| 22 | 10-214122- | 1.3750-18NEF | .625 | 4.030 | .750 | .445 | 1.484 | 1.625 | 1.532 |
| 24 | 10-214124- | 1.5000-18NEF | .625 | 4.452 | .938 | .611 | 1.671 | 1.875 | 1.532 |
| 28 | 10-214128- | 1.7500-18NS | .625 | 4.874 | .938 | .611 | 1.671 | 2.297 | 1.532 |
| 32 | 10-214132- | 2.0000-18NS | .625 | 5.374 | 1.250 | .922 | 2.188 | 2.547 | 1.532 |
| 36 | 10-214136- | 2.2500-16UN | .625 | 5.827 | 1.375 | .922 | 2.344 | 2.797 | 1.532 |
| 40 | 10-214140- | 2.5000-16UN | .625 | 6.077 | 1.625 | 1.180 | 2.594 | 3.047 | 1.532 |
| 44 | 10-214144- | 2.7500-16UN | .625 | 6.625 | 1.875 | 1.427 | 2.763 | 3.563 | 1.782 |

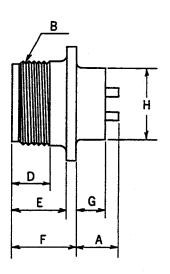
10-214208/40

box mounting receptacle

- Crimp contacts
- · Olive drab chromate over cadmium finish





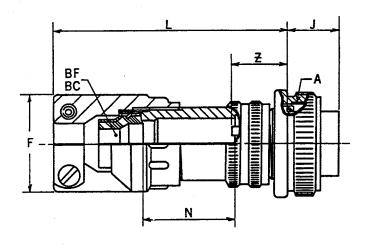


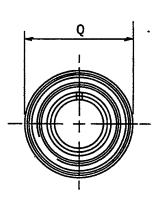
| MS Sheli Size | Order Number | A +.050 060 | B Thread Class 2A | D Min. Fuli Thd. | E +.010 000 | F +.020 010 | G +.000 010 | H Dia. +.010 000 | J ±.005 | ĸ | L Dia. +.004 002 |
|---------------------|-----------------|-------------------|-------------------------|------------------------|-------------------|-------------------|-------------------|---------------------------|------------|-------|---------------------------|
| - 88 | 10-214208- | .469 | .5000-28UNEF | .391 | .562 | .672 | .297 | .375 | .594 | .875 | .120 |
| 10S | 10-214210- | .469 | .6250-24NEF | .391 | .562 | .672 | .297 | .500 | .719 | 1.000 | .120 |
| 10SL | 10-214211- | .469 | .6250-24NEF | .391 | .562 | .672 | .297 | .625 | .719 | 1.000 | .120 |
| 128 | 10-214212- | .469 | .7500-20UNEF | .450 | .562 | .672 | .297 | .625 | .812 | 1.094 | .120 |
| 12 | 10-214213- | .672 | .7500-20UNEF | .625 | .750 | .860 | .484 | .625 | 812 | 1.094 | .120 |
| 14S | 10-214214- | .469 | .8750-20UNEF | .450 | .562 | .672 | .297 | .750 | .906 | 1.188 | .120 |
| 14 | 10-214215- | .672 | .8750-20UNEF | .625 | .750 | .860 | .484 | .750 | .906 | 1.188 | .120 |
| 16S | 10-214216- | .469 | 1.0000-20UNEF | .450 | .562 | .672 | .297 | .875 | .969 | 1.281 | .120 |
| 16 | 10-214217- | .672 | 1.0000-20UNEF | .625 | .750 | .860 | .484 | .875 | .969 | 1.281 | .120 |
| 18 | 10-214218- | .641 | 1.1250-18NEF | .625 | .750 | .891 | .453 | 1.000 | 1.063 | 1.375 | .120 |
| 20 | 10-214220- | .641 | 1.2500-18NEF | .625 | .750 | .891 | .453 | 1.125 | 1.156 | 1.500 | .120 |
| 22 | 10-214222- | .641 | 1.3750-18NEF | .625 | .750 | .891 | .453 | 1.250 | 1.250 | 1.625 | .120 |
| 24 | 10-214224- | .578 | 1.5000-18NEF | .625 | .812 | .953 | .453 | 1.375 | 1.375 | 1.750 | .147 |
| 28 | 10-214228- | .578 | 1.7500-18NS | .625 | .812 | .953 | .453 | 1.625 | 1.562 | 2.000 | .147 |
| 32 | 10-214232- | .500 | 2.0000-18NS | .625 | .875 | 1.031 | .438 | 1.875 | 1.750 | 2.250 | .173 |
| 36 | 10-214236- | .500 | 2.2500-16UN | .625 | .875 | 1.031 | .438 | 2.062 | 1.938 | 2.500 | .173 |
| 40 | 10-214240- | .500 | 2.5000-16UN | .625 | .875 | 1.031 | .438 | 2.312 | 2.188 | 2.750 | .173 |
| 44 | 10-214244- | .718 | 2.7500-16UN | .625 | .875 | 1.063 | .546 | 2.594 | 2.375 | 3.000 | .173 |

10-214608/40 straight plug

- Crimp contacts
- Multi-conductor jacket cable
- Sealing gaskets at all mating surfaces
- · Olive drab chromate over cadmium finish





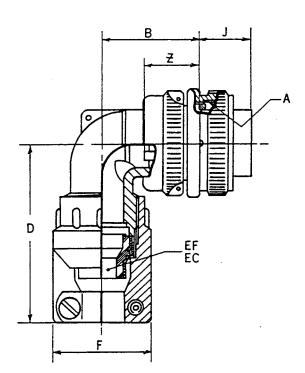


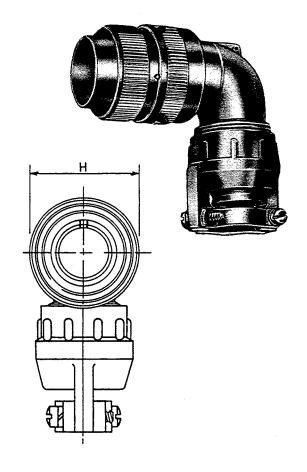
| MS Sheli Size | Order Number | A Thread Class 2B | BF Free Dia. | BC Closed Dia. | F Max. | J ±.005 | L Max. | N ±.031 | Q Dia. Max. | Z ±.045 |
|---------------------|-----------------|-------------------------|--------------------|----------------------|-----------|------------|-----------|------------|-------------------|------------|
| 8S | 10-214608- | .5000-28UNEF | .219 | .027 | .812 | .531 | 2.474 | 1.068 | .741 | .609 |
| 108 | 10-214610- | .6250-24NEF | .219 | .027 | .812 | .531 | 2.474 | 1.068 | .869 | .609 |
| 10SL | 10-214611- | .6250-24NEF | .312 | .094 | .906 | .531 | 2.474 | 1.068 | .946 | .609 |
| 12S | 10-214612- | .7500-20UNEF | .312 | .094 | .906 | .531 | 2.474 | 1.068 | .995 | .609 |
| 12 | 10-214613- | .7500-20UNEF | .312 | .094 | .906 | .719 | 2.718 | 1.125 | .995 | .812 |
| 148 | 10-214614- | .8750-20UNEF | .438 | .230 | 1.031 | .531 | 2.474 | 1.068 | 1.123 | .609 |
| 14 | 10-214615- | .8750-20UNEF | .438 | .230 | 1.031 | .719 | 2.718 | 1.125 | 1.123 | .812 |
| 16S | 10-214616- | 1.000-20UNEF | .531 | .316 | 1.125 | .531 | 2.474 | 1.068 | 1.250 | .609 |
| 16 | 10-214617- | 1.0000-20UNEF | .531 | .316 | 1.125 | .719 | 2.718 | 1.125 | 1.250 | .812 |
| 18 | 10-214618- | 1.1250-18NEF | .625 | .378 | 1.234 | .719 | 2.797 | 1.125 | 1.333 | .812 |
| 20 | 10-214620- | 1.2500-18NEF | .750 | .445 | 1.484 | .719 | 3.061 | 1.375 | 1.461 | .812 |
| 22 | 10-214622- | 1.3750-18NEF | .750 | .445 | 1.484 | .719 | 3.311 | 1.625 | 1.588 | .812 |
| 24 | 10-214624- | 1.5000-18NEF | .938 | .611 | 1.671 | .719 | 3.734 | 1.875 | 1.715 | .812 |
| 28 | 10-214628- | 1.7500-18NS | .938 | .611 | 1.671 | .719 | 4.156 | 2.297 | 1.968 | .812 |
| 32 | 10-214632- | 2.0000-18NS | 1.250 | .922 | 2.188 | .719 | 4.655 | 2.547 | 2.209 | .812 |
| 36 | 10-214636- | 2.2500-16UN | 1.375 | .922 | 2.344 | .719 | 5.108 | 2.797 | 2.463 | .812 |
| 40 | 10-214640- | 2.5000-16UN | 1.625 | 1.180 | 2.594 | .719 | 5.358 | 3.047 | 2.718 | .812 |
| 44 | 10-214644- | 2.7500-16UN | 1.875 | 1.427 | 2.812 | .719 | 5.875 | 3.563 | 3.084 | 1.063 |

10-214808/40

90° plug

- Crimp contacts
- Multi-conductor jacket cable
- Sealing gaskets at all mating surfaces
- · Olive drab chromate over cadmium finish





For contact data see Catalog 12-020.

| MS Shell Size | Order Number | A Thread Class 2B | B Max. | D Max. | EF Free Dia. | EC Closed Dia. | F Max. | H Dia. Max. | J ±.005 | Z ±.045 |
|---------------------|-----------------|-------------------------|-----------|-----------|--------------------|----------------------|-----------|-------------------|------------|------------|
| 8S | 10-214808- | .5000-28UNEF | .927 | 1.729 | .219 | .027 | .812 | .741 | .531 | .609 |
| 108 | 10-214810- | .6250-24NEF | .927 | 1.729 | .219 | .027 | .812 | .869 | .531 | .609 |
| 10SL | 10-214811- | .6250-24NEF | .976 | 1.792 | .312 | .094 | .906 | .946 | .531 | .609 |
| 12\$ | 10-214812- | .7500-20UNEF | .956 | 1.792 | .312 | .094 | .906 | .995 | .531 | .609 |
| 12 | 10-214813- | .7500-20UNEF | 1.143 | 1.792 | .312 | .094 | .906 | .995 | .719 | .812 |
| 14S | 10-214814- | .8750-20UNEF | 1.020 | 1.854 | .438 | .230 | 1.031 | 1.123 | .531 | .609 |
| 14 | 10-214815- | .8750-20UNEF | 1.207 | 1.854 | .438 | .230 | 1.031 | 1.123 | .719 | .812 |
| 16S | 10-214816- | 1.000-20UNEF | 1.146 | 1.917 | .531 | .316 | 1.125 | 1.250 | .531 | .609 |
| 16 | 10-214817- | 1.0000-20UNEF | 1.333 | 1.917 | .531 | .316 | 1.125 | 1.250 | .719 | .812 |
| 18 | 10-214818- | 1.1250-18NEF | 1.395 | 2.090 | .625 | .378 | 1.234 | 1.333 | .719 | .812 |
| 20 | 10-214820- | 1.2500-18NEF | 1.598 | 2.166 | .750 | .445 | 1.484 | 1.461 | .719 | .812 |
| 22 | 10-214822- | 1.3750-18NEF | 1.629 | 2.228 | .750 | .445 | 1.484 | 1.588 | .719 | .812 |
| 24 | 10-214824- | 1.5000-18NEF | 1.786 | 2.463 | .938 | .611 | 1.671 | 1.715 | .719 | .812 |
| 28 | 10-214828- | 1.7500-18NS | 1.786 | 2.526 | .938 | .611 | 1.671 | 1.968 | .719 | .812 |
| 32 | 10-214832- | 2.0000-18NS | 2.020 | 3.026 | 1.250 | .922 | 2.188 | 2.209 | .719 | .812 |
| 36 | 10-214836- | 2.2500-16UN | 2.150 | 3.291 | 1.375 | .922 | 2.344 | 2.463 | .719 | .812 |
| 40 | 10-214840- | 2.5000-16UN | 2.270 | 3.447 | 1.625 | 1.180 | 2.594 | 2.718 | .719 | 812 |
| 44 | 10-214844- | 2.7500-16UN | 2.770 | 5.196 | 1.875 | 1.427 | 2.812 | 3.084 | .719 | 1.063 |

Accessories and Application Tools

10-214XXX series

Accessories

CLAMP ASSEMBLY



90° ASSEMBLY







| Shell Size |
|---------------|
| 8S |
| 10S |
| 10SL |
| 12S |
| 12 |
| 148 |
| 14 |
| 16S |
| 16 |
| 18 |
| 20 |
| 22 |
| 24 |
| 28 |
| 32 |
| 36 |
| 40 |
| 44 |

| Clamp Assembly Order Number |
|-----------------------------------|
| 10-350349-103 |
| 10-350349-103 |
| 10-350349-123 |
| 10-350349-123 |
| 10-350349-123 |
| 10-350349-143 |
| 10-350349-143 |
| 10-350349-163 |
| 10-350349-163 |
| 10-350349-183 |
| 10-350349-203 |
| 10-350349-203 |
| 10-350349-243 |
| 10-350349-243 |
| 10-350349-323 |
| 10-350349-363 |
| 10-350349-403 |
| 10-350349-443 |

| Adapter Assembly Order Number |
|-------------------------------------|
| 10-101393-83 |
| 10-101393-103 |
| 10-101393-123 |
| 10-101393-123 |
| 10-101393-133 |
| 10-101393-143 |
| 10-101393-153 |
| 10-101393-163 |
| 10-101393-173 |
| 10-101393-183 |
| 10-329290-203 |
| 10-329290-223 |
| 10-329290-243 |
| 10-329290-283 |
| 10-329290-323 |
| 10-329290-363 |
| 10-329290-403 |
| 10-329290-443 |

| 90° Elbow | |
|--------------------------|--|
| Assembly Order Number | |
| 10-36055-83 | |
| | |
| 10-36055-103 | |
| 10-36055-123 | |
| 10-36055-123 | |
| 10-36055-133 | |
| 10-36055-143 | |
| 10-36055-153 | |
| 10-36055-163 | |
| 10-36055-173 | |
| 10-36055-183 | |
| 10-36055-203 | |
| 10-36055-223 | |
| 10-36055-243 | |
| 10-36055-283 | |
| 10-36055-323 | |
| 10-36055-363 | |
| 10-36055-403 | |
| 10-248975-443 | |

NOTE: The MS3420 sleeve and 10-40450 flange gasket are also available as accessories, but are not included as part of the 10-214XXX assembly. See sleeve tabulation on page 6. See Catalog 12-020 for data on sleeve or gasket.

Application Tools

The chart at right provides information on application tools for crimping, inserting and removing contacts incorporated in 10-214XXX series connectors. There is a possibility that crimping tools other than those listed here are, or in the future will be, available for this specific application.

Complete instructions for providing reliable crimped wire to contact terminations and inserting contacts in the 10-214XXX series connector are available in publication L-757.

| Crimping Tool | Positioner/ Turret | Contact Size | Contact Style | Insertion Tool | Removal Tool |
|------------------|-----------------------|-----------------|------------------|-------------------|-------------------------------------|
| M22520/1-01 | * | 16 | Pin & Socket | 11-7345 | 11-8250 Kit |
| M22520/1-01 | * | 12 | Pin & Socket | 11-7082 | 11-8250 Kit |
| ** | ** | 8 | Pin & Socket | 11-8220 | 11-8250 Kit |
| ** | ** | 4 | Pin & Socket | 11-7365-4† | Pin 11-7370-4† Socket 11-7674-2† |
| ** | ** | 0 | Pin & Socket | 11-7365-5† | Pin 11-7370-5† Socket 11-7674-3† |

- * Use Daniels Turret TH29-1 or Astro Tool Co. Turret 616266.
- ** For appropriate crimp tool and positioner refer to Pico Crimping Tool Co.
- † Indicates tools used with Arbor Press 11-7364.

Mouser Electronics

Authorized Distributor

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<u>Amphenol</u>: 10-87328-21P