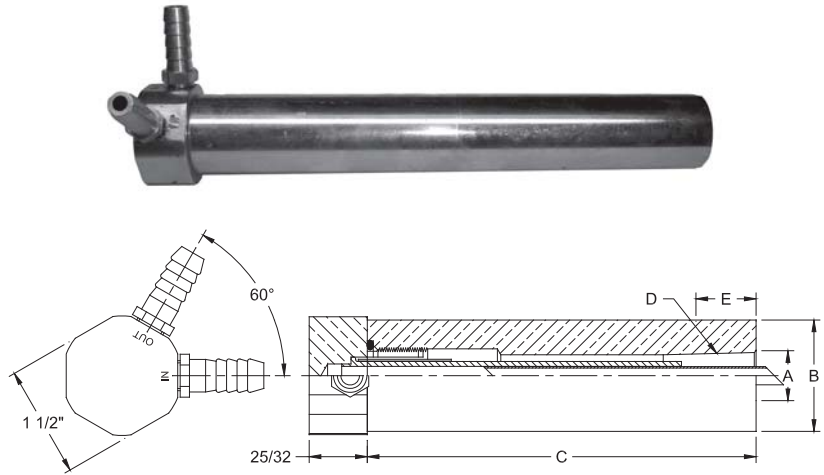


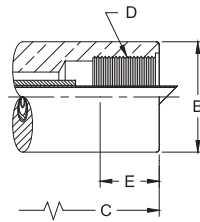


100 SERIES (NON-EJECTOR) WATER COOLED ELECTRODE HOLDER

| 100 SERIES TAPERED HOLDER | | | | | |
|--------------------------------------|--------------------|--------------------------|-----------------|------------|----------------------------------|
| Part No. Holder Assy. | Major Taper Dia. A | Barrel Dia. B | Barrel Length C | RW Taper D | Engagement With Std. Electrode E |
| 18-101 18-102 18-103 18-104 | .463 | 3/4 7/8 1 1-1/4 | 3 | 4 RW | 1/2 |
| 18-106 18-107 18-108 | .625 | 1 1-1/4 1-1/2 | | 5 RW | 3/4 |
| 18-111 18-112 18-113 18-114 | .463 | 3/4 7/8 1 1-1/4 | 8 | 4 RW | 1/2 |
| 18-116 18-117 18-118 | .625 | 1 1-1/4 1-1/2 | | 5 RW | 3/4 |
| 18-119 18-120 | .875 | 1-1/4 1-1/2 | 12 | 7 RW | 1-1/8 |
| 18-131 18-132 18-133 18-134 | .463 | 3/4 7/8 1 1-1/4 | | 4 RW | 1/2 |
| 18-136 18-137 18-138 | .625 | 1 1-1/4 1-1/2 | 5 RW | 3/4 | |



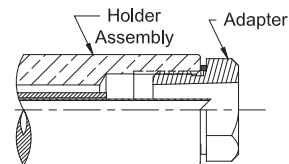
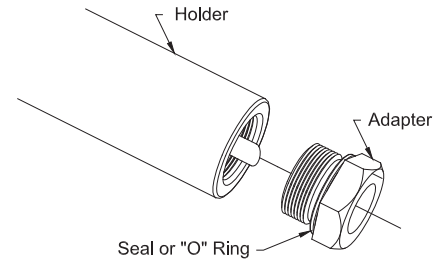
| 100 SERIES THREADED HOLDER | | | | |
|----------------------------|---------------------|-----------------|---------------|----------------------------------|
| Part No. Holder Assy. | Barrel Dia. B | Barrel Length C | Thread Size D | Engagement With Std. Electrode E |
| 18-169 18-170 18-171 | 1 1-1/4 1-1/2 | 8 | 5/8-18 | 9/16 |
| 18-172 18-173 18-174 | 1 1-1/4 1-1/2 | | 7/8-14 | 9/16 |
| 18-175 18-176 | 1-1/4 1-1/2 | 1-14 | 1-14 | 3/4 |



See available adapters in table below.

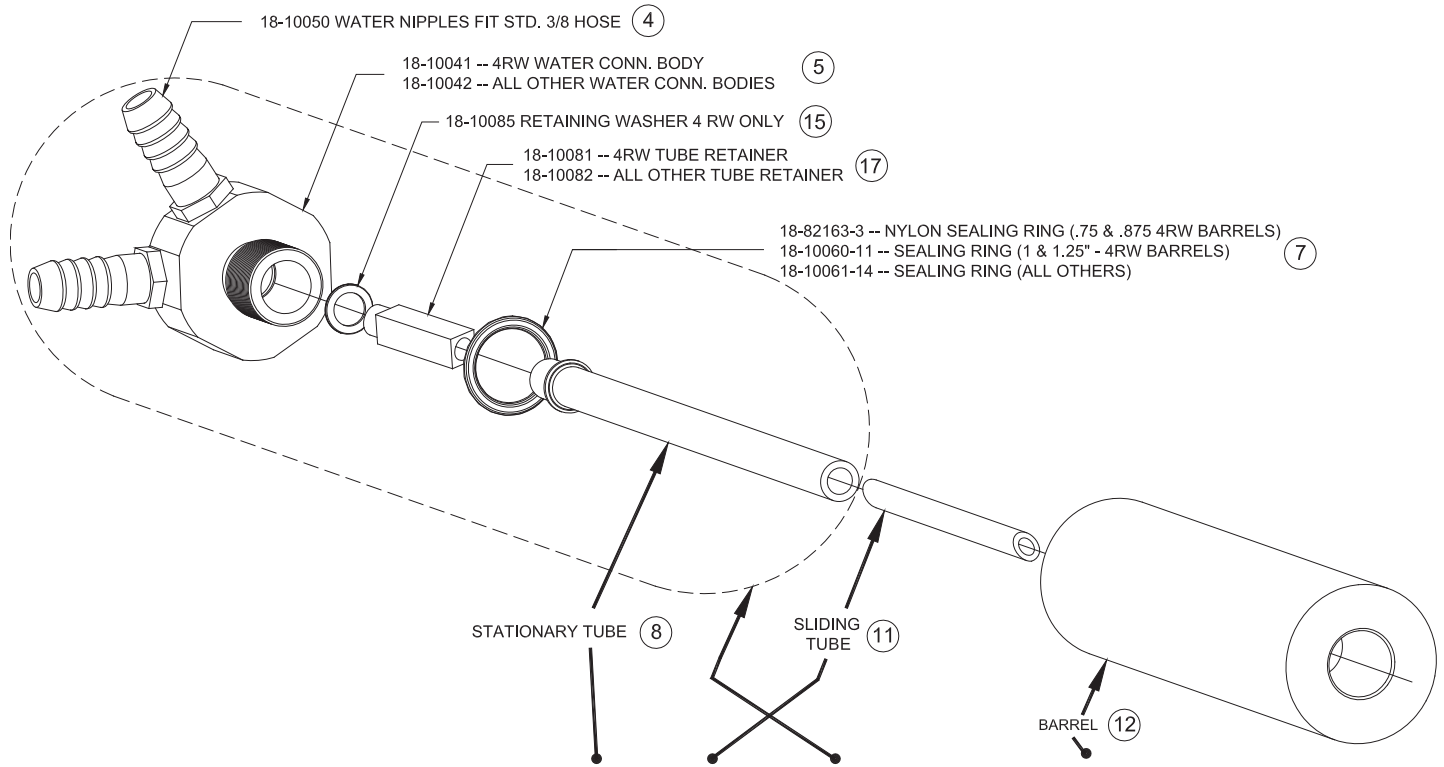
ADAPTERS USED WITH THREADED HOLDERS

| 100 SERIES THREADED HOLDER ADAPTERS | | | | | |
|-------------------------------------|----------|---|----------------------------|---|--|
| Holder Assembly No. | | Adapter Part No. | Page No. | Attachment Description | |
| 18-169 18-170 18-171 | Use with | 18-750 18-751 18-752 18-811 | 31 31 31 48 | 4 RW Female 5 RW Female 5/8-18 M. Thread #1 Size Nu-Twist® | |
| 18-172 18-173 18-174 | Use with | 18-770 18-771 | 31 31 | 4 RW Female 5 RW Female | May also be used with universal Adapters having 7/8-14 Male thread See page 46 |
| 18-175 18-176 | Use with | 18-785 18-786 18-7863 18-787 18-812 | 31 31 31 31 48 | 4 RW Female 5 RW Female 6 RW Female 7 RW Female #2 Size Nu-Twist® | May also be used with universal Adapters having 1-14 Male thread See page 46 |





100 SERIES (NON-EJECTOR) WATER COOLED ELECTRODE HOLDER



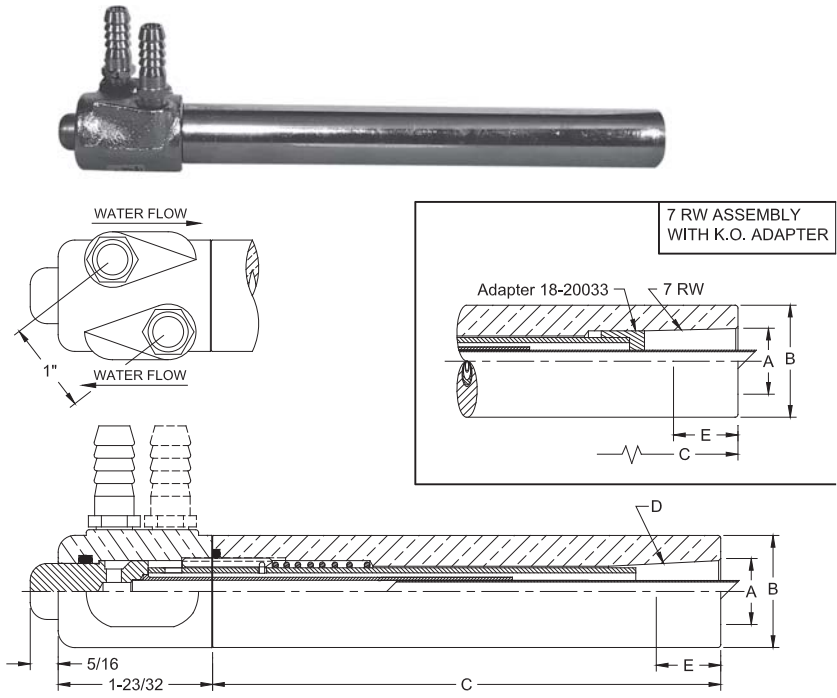
| Part No. Holder Assy. | Thread Or Taper | Barrel Length | Stationary Tube | Sliding Tube | Water Conn. HD. Sub-Assy. Include Parts: 4 5 7 8 15 17 | Barrel Diameter | Barrel |
|--------------------------------------|-----------------|---------------|-----------------|--------------|--|--------------------------|--|
| 18-101 18-102 18-103 18-104 | 4 RW | 3 | 18-10044-3 | 18-10046-3 | 18-10091-3 | 3/4 7/8 1 1-1/4 | 18-11110-3 18-11210-3 18-11310-3 18-11410-3 |
| 18-106 18-107 18-108 | 5 RW | 3 | 18-10045-3 | 18-10047-3 | 18-10092-3 | 1 1-1/4 1-1/2 | 18-11610-3 18-11710-3 18-11810-3 |
| 18-111 18-112 18-113 18-114 | 4 RW | 8 | 18-10044-8 | 18-10046-8 | 18-10091-8 | 3/4 7/8 1 1-1/4 | 18-11110-8 18-11210-8 18-11310-8 18-11410-8 |
| 18-116 18-117 18-118 | 5 RW | 8 | 18-10045-8 | 18-10047-8 | 18-10092-8 | 1 1-1/4 1-1/2 | 18-11610-8 18-11710-8 18-11810-8 |
| 18-119 18-120 | 7 RW | 8 | 18-10045-8 | 18-10047-8 | 18-10092-8 | 1-1/4 1-1/2 | 18-11910-8 18-12010-8 |
| 18-131 18-132 18-133 18-134 | 4 RW | 12 | 18-10044-12 | 18-10046-8 | 18-10091-12 | 3/4 7/8 1 1-1/4 | 18-11110-12 18-11210-12 18-11310-12 18-11410-12 |
| 18-136 18-137 18-138 | 5 RW | 12 | 18-10045-12 | 18-10047-8 | 18-10092-12 | 1 1-1/4 1-1/2 | 18-11610-12 18-11710-12 18-11810-12 |
| 18-169 18-170 18-171 | 5/8-18 | 8 | 18-10045-8 | 18-10047-8 | 18-10092-8 | 1 1-1/4 1-1/2 | 18-16910-8 18-17010-8 18-17110-8 |
| 18-172 18-173 18-174 | 7/8-14 | 8 | 18-10045-8 | 18-10047-8 | 18-10092-8 | 1 1-1/4 1-1/2 | 18-17210-8 18-17310-8 18-17410-8 |
| 18-175 18-176 | 1-14 | 8 | 18-10045-8 | 18-10047-8 | 18-10092-8 | 1-1/4 1-1/2 | 18-17510-8 18-17610-8 |



200 SERIES (EJECTOR) WATER COOLED ELECTRODE HOLDER

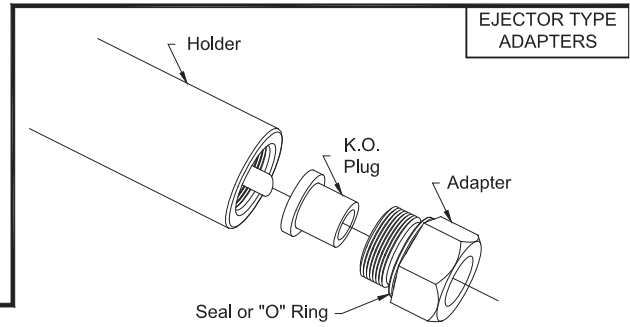
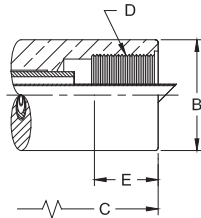
| 200 SERIES TAPERED HOLDER | | | | | |
|---------------------------|--------------------|---------------|-----------------|------------|-------------------------------|
| Part No. Holder Assy. | Major Taper Dia. A | Barrel Dia. B | Barrel Length C | RW Taper D | Engagement With Std. Elect. E |
| 18-201 | .463 | 3/4 | 3 | 4 RW | 1/2 |
| 18-202 | | 7/8 | | | |
| 18-203 | | 1 | | | |
| 18-204 | | 1-1/4 | | | |
| 18-206 | .625 | 1 | 8 | 5 RW | 3/4 |
| 18-207 | | 1-1/4 | | | |
| 18-208 | | 1-1/2 | | | |
| 18-211 | .463 | 3/4 | 12 | 4 RW | 1/2 |
| 18-212 | | 7/8 | | | |
| 18-213 | | 1 | | | |
| 18-214 | | 1-1/4 | | | |
| 18-216 | .625 | 1 | 8 | 5 RW | 3/4 |
| 18-217 | | 1-1/4 | | | |
| 18-218 | | 1-1/2 | | | |
| 18-219* | .875 | 1-1/4 | 18 | 5 RW | 1-1/8 |
| 18-220* | | 1-1/2 | | | |
| 18-231 | .463 | 3/4 | 12 | 4 RW | 1/2 |
| 18-232 | | 7/8 | | | |
| 18-233 | | 1 | | | |
| 18-234 | | 1-1/4 | | | |
| 18-236 | .625 | 1 | 8 | 5 RW | 3/4 |
| 18-237 | | 1-1/4 | | | |
| 18-238 | | 1-1/2 | | | |
| 18-236-18 | .625 | 1 | 18 | 5 RW | 3/4 |
| 18-237-18 | | 1-1/4 | | | |
| 18-238-18 | | 1-1/2 | | | |

*Must use knockout adapter 18-20033



| 200 SERIES THREADED HOLDER | | | | |
|----------------------------|---------------|-----------------|---------------|-------------------------------|
| Part No. Holder Assy. | Barrel Dia. B | Barrel Length C | Thread Size D | Engagement With Std. Elect. E |
| 18-272 | 1 | 8 | 7/8-14 | 9/16 |
| 18-273 | 1-1/4 | | | |
| 18-274 | 1-1/2 | | | |
| 18-275 | 1-1/4 | 1-14 | 1-14 | 3/4 |
| 18-276 | 1-1/2 | | | |

200 Series Threaded Holder can use Male Threaded to Female Taper Universal Adapters on page 46.

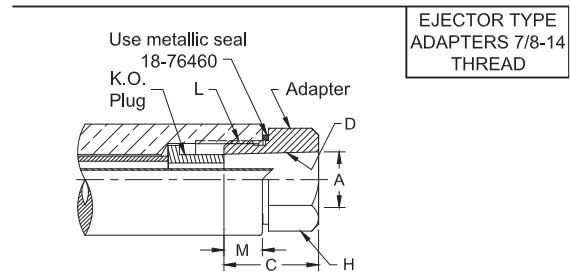


EJECTOR TYPE ADAPTERS

| EJECTOR TYPE ADAPTERS 7/8-14 THREAD | | | | | | | | |
|-------------------------------------|------------------|--------------|--------------|--------------------|-------------------|------------------|-----------------------|--------------------|
| Adapter Part No. | Male Thd. Size L | Female Taper | | Length Under Hd. M | Hex. Over Flats H | Overall Length C | Sealing Ring Part No. | K.O. Plug Part No. |
| | | Size D | Major Dia. A | | | | | |
| 18-7702 | 7/8-14 | 4 RW | .463 | 5/8 | 1 | 13/16 | 18-76460 | 18-78501 |
| 18-7712 | 7/8-14 | 5 RW | .625 | 1/2 | 1 | 1-1/16 | 18-76460 | 18-7712-3 |

Use with Threaded Ejector Holder to make Replaceable Taper Holders

| Part No. | Female Thd. Size | Barrel Dia. |
|----------|------------------|-------------|
| 18-272 | 7/8-14 | 1 |
| 18-273 | 7/8-14 | 1-1/4 |
| 18-274 | 7/8-14 | 1-1/2 |

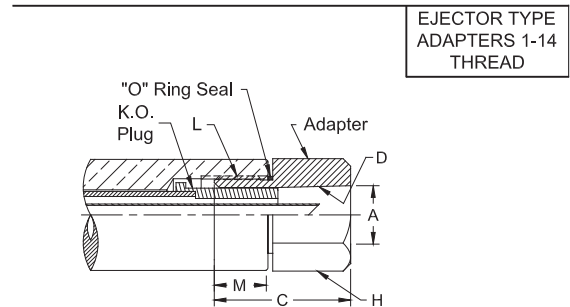


EJECTOR TYPE ADAPTERS 7/8-14 THREAD

| EJECTOR TYPE ADAPTERS 1-14 THREAD | | | | | | | | |
|-----------------------------------|------------------|--------------|--------------|--------------------|-------------------|------------------|-----------------------|--------------------|
| Adapter Part No. | Male Thd. Size L | Female Taper | | Length Under Hd. M | Hex. Over Flats H | Overall Length C | Sealing Ring Part No. | K.O. Plug Part No. |
| | | Size D | Major Dia. A | | | | | |
| 18-7852 | 1-14 | 4 RW | .463 | 9/16 | 1-1/4 | 13/16 | 18-10060-17 | 18-78501 |
| 18-7862 | 1-14 | 5 RW | .625 | 7/16 | 1-1/4 | 1-1/16 | 18-10060-17 | 18-7712-3 |
| 18-7864 | 1-14 | 6 RW | .750 | 3/4 | 1-1/4 | 1-3/4 | 18-10060-17 | 18-78650 |
| 18-7872 | 1-14 | 7 RW | .875 | 3/4 | 1-1/4 | 2-1/8 | 18-10060-17 | 18-78701 |

Use with Threaded Ejector Holder to make Replaceable Taper Holders

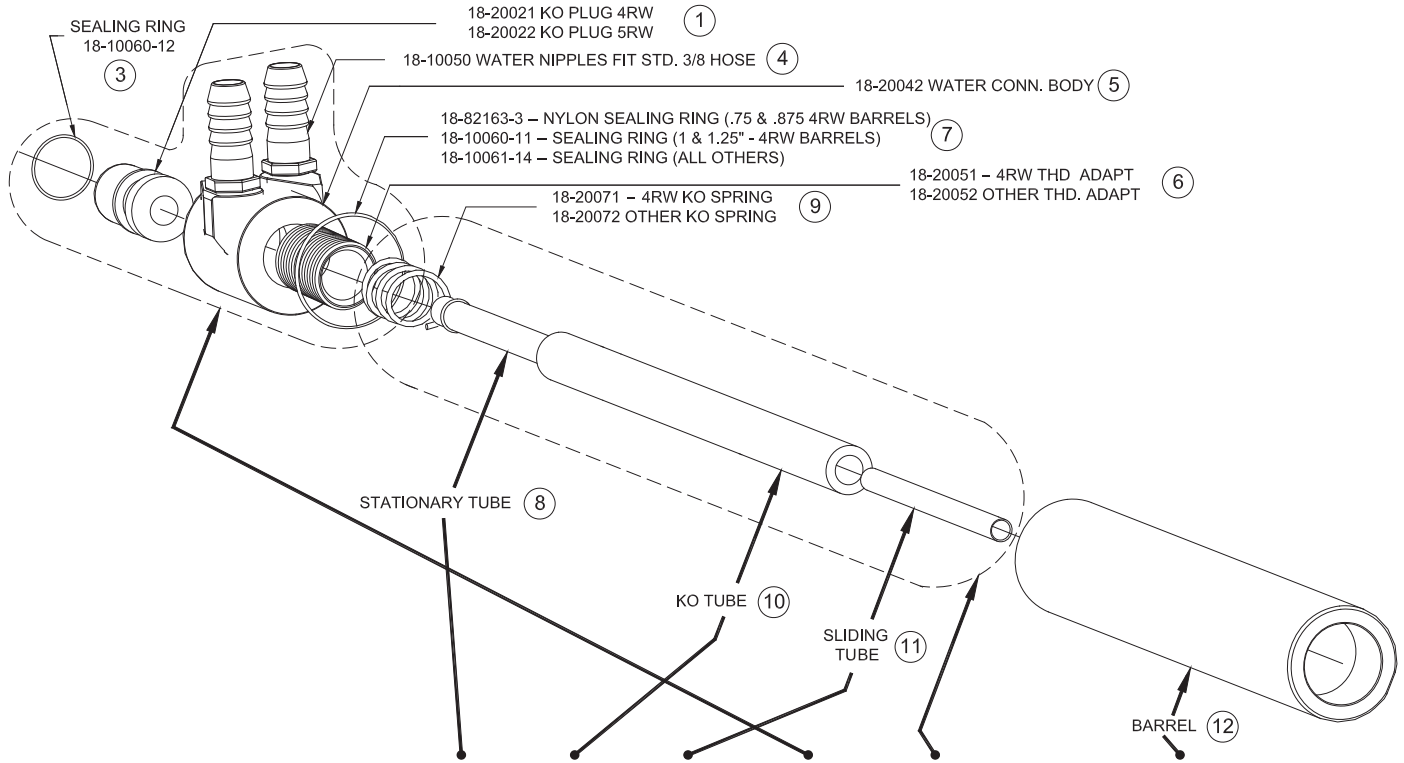
| Part No. | Female Thd. Size | Barrel Dia. |
|----------|------------------|-------------|
| 18-275 | 1-14 | 1-1/4 |
| 18-276 | 1-14 | 1-1/2 |



EJECTOR TYPE ADAPTERS 1-14 THREAD



200 SERIES (EJECTOR) WATER COOLED ELECTRODE HOLDER



| Part No. Holder Assy. | Thread Or Taper | Barrel Length | Stationary Tube 8 | K.O. Tube 10 | Sliding Tube 11 | Water Conn. HD. Sub-Assy. Include Parts: 1 3 4 5 6 7 | K.O. Tube Sub-Assy. Include Parts: 8 9 10 11 | Barrel Diameter | Barrel 12 |
|--------------------------------------|-----------------------|------------------|-------------------------|----------------------------|-----------------------|---|---|--------------------------|--|
| 18-201 18-202 18-203 18-204 | 4 RW | 3 | 18-10044-3 | 18-20031-3 | 18-10046-3 | 18-20091 | 18-20095-3 | 3/4 7/8 1 1-1/4 | 18-11110-3 18-11210-3 18-11310-3 18-11410-3 |
| 18-206 18-207 18-208 | 5 RW | 3 | 18-10045-3 | 18-20032-3 | 18-10047-3 | 18-20092 | 18-20096-3 | 1 1-1/4 1-1/2 | 18-11610-3 18-11710-3 18-11810-3 |
| 18-211 18-212 18-213 18-214 | 4 RW | 8 | 18-10044-8 | 18-20031-8 | 18-10046-8 | 18-20091 | 18-20095-8 | 3/4 7/8 1 1-1/4 | 18-11110-8 18-11210-8 18-11310-8 18-11410-8 |
| 18-216 18-217 18-218 | 5 RW | 8 | 18-10045-8 | 18-20032-8 | 18-10047-8 | 18-20092 | 18-20096-8 | 1 1-1/4 1-1/2 | 18-11610-8 18-11710-8 18-11810-8 |
| 18-219* 18-220* | 7 RW | 8 | 18-10045-8 | 18-20032-58 & 18-20033* | 18-10047-8 | 18-20092 | 18-20096-58 | 1-1/4 1-1/2 | 18-11910-8 18-12010-8 |
| 18-231 18-232 18-233 18-234 | 4 RW | 12 | 18-10044-12 | 18-20031-12 | 18-10046-8 | 18-20091 | 18-20095-12 | 3/4 7/8 1 1-1/4 | 18-11110-12 18-11210-12 18-11310-12 18-11410-12 |
| 18-236 18-237 18-238 | 5 RW | 12 | 18-10045-12 | 18-20032-12 | 18-10047-8 | 18-20092 | 18-20096-12 | 1 1-1/4 1-1/2 | 18-11610-12 18-11710-12 18-11810-12 |
| 18-236-18 18-237-18 18-238-18 | 5 RW | 18 | 18-10045-12 | 18-20032-18 | 18-10047-29 | 18-20092 | 18-20096-18 | 1 1-1/4 1-1/2 | 18-11610-18 18-11710-18 18-11810-18 |
| 18-272 18-273 18-274 | 7/8-14 | 8 | 18-10045-8 | 18-20032-8 | 18-10047-8 | 18-20092 | 18-20096-8 | 1 1-1/4 1-1/2 | 18-17210-8 18-17310-8 18-17410-8 |
| 18-275 18-276 | 1-14 | 8 | 18-10045-8 | 18-20032-8 | 18-10047-8 | 18-20092 | 18-20096-8 | 1-1/4 1-1/2 | 18-17510-8 18-17610-8 |

*Must use knockout adapter 18-20033



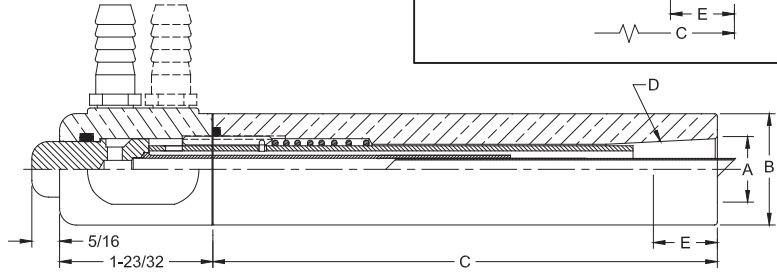
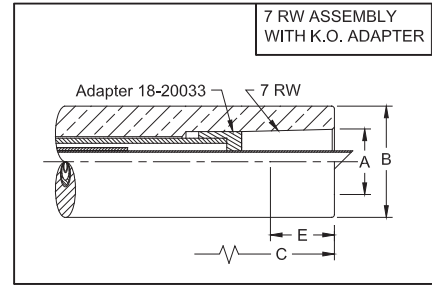
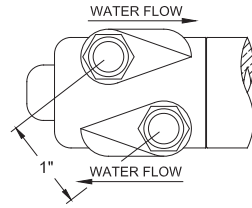
300 SERIES PREMIUM (EJECTOR) WATER COOLED ELECTRODE HOLDER

CMW Premium holder barrels are made from high strength CMW[®]3 material, centerless ground within .002" tolerance on diameter and nickel plated to resist wear and assure uniform contact resistance of a low magnitude



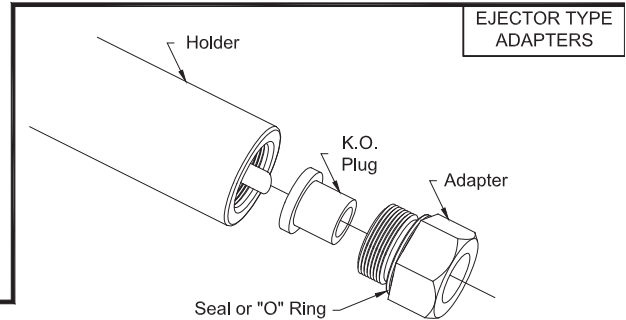
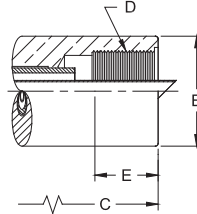
| 300 SERIES TAPERED HOLDER | | | | | |
|---------------------------|--------------------|----------------|-----------------|------------|-------------------------------|
| Part No. Holder Assy. | Major Taper Dia. A | Barrel Dia. B | Barrel Length C | RW Taper D | Engagement With Std. Elect. E |
| 18-317 18-318 | .625 | 1-1/4 1-1/2 | 8 | 5 RW | 3/4 |
| 18-319* 18-320* | .875 | 1-1/4 1-1/2 | | 7 RW | 1-1/8 |
| 18-337 18-338 | .625 | 1-1/4 1-1/2 | 12 | 5 RW | 3/4 |
| 18-339* 18-340* | .875 | 1-1/4 1-1/2 | | 7 RW | 1-1/8 |

*Must use knockout adapter 18-20033



| 300 SERIES THREADED HOLDER | | | | |
|----------------------------|----------------|-----------------|---------------|-------------------------------|
| Part No. Holder Assy. | Barrel Dia. B | Barrel Length C | Thread Size D | Engagement With Std. Elect. E |
| 18-372 18-373 | 1 1-1/4 | 8 | 7/8-14 | 9/16 |
| 18-375 18-376 | 1-1/4 1-1/2 | | 1-14 | 3/4 |

300 Series Threaded Holder can use Male Threaded to Female Taper Universal Adapters on page 46.



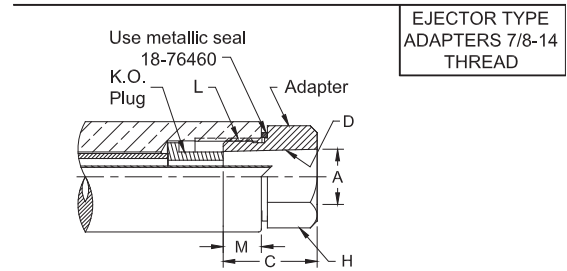
Note: These threaded holder barrels are the same as on 600 series holders on page 44.

EJECTOR TYPE ADAPTERS

| EJECTOR TYPE ADAPTERS 7/8-14 THREAD | | | | | | | | |
|-------------------------------------|------------------|--------------|------------|--------------------|-------------------|------------------|-----------------------|--------------------|
| Adapter Part No. | Male Thd. Size L | Female Taper | | Length Under Hd. M | Hex. Over Flats H | Overall Length C | Sealing Ring Part No. | K.O. Plug Part No. |
| | | Size D | Major Dia. | | | | | |
| 18-7702 | 7/8-14 | 4 RW | .463 | 5/8 | 1 | 13/16 | 18-76460 | 18-78501 |
| 18-7712 | 7/8-14 | 5 RW | .625 | 1/2 | 1 | 1-1/16 | 18-76460 | 18-7712-3 |

Use with Threaded Ejector Holder to make Replaceable Taper Holders

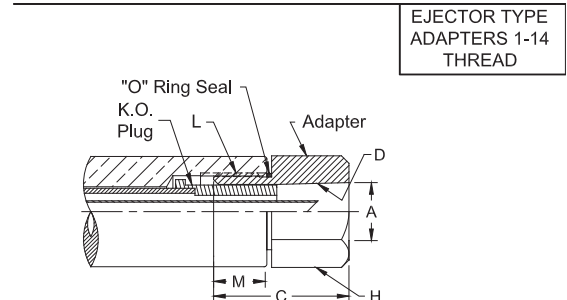
| Part No. | Female Thd. Size | Barrel Dia. |
|----------|------------------|-------------|
| 18-372 | 7/8-14 | 1 |
| 18-373 | 7/8-14 | 1-1/4 |



| EJECTOR TYPE ADAPTERS 1-14 THREAD | | | | | | | | |
|-----------------------------------|------------------|--------------|------------|--------------------|-------------------|------------------|-----------------------|--------------------|
| Adapter Part No. | Male Thd. Size L | Female Taper | | Length Under Hd. M | Hex. Over Flats H | Overall Length C | Sealing Ring Part No. | K.O. Plug Part No. |
| | | Size D | Major Dia. | | | | | |
| 18-7852 | 1-14 | 4 RW | .463 | 9/16 | 1-1/4 | 13/16 | 18-10060-17 | 18-78501 |
| 18-7862 | 1-14 | 5 RW | .625 | 7/16 | 1-1/4 | 1-1/16 | 18-10060-17 | 18-7712-3 |
| 18-7864 | 1-14 | 6 RW | .750 | 3/4 | 1-1/4 | 1-3/4 | 18-10060-17 | 18-78650 |
| 18-7872 | 1-14 | 7 RW | .875 | 3/4 | 1-1/4 | 2-1/8 | 18-10060-17 | 18-78701 |

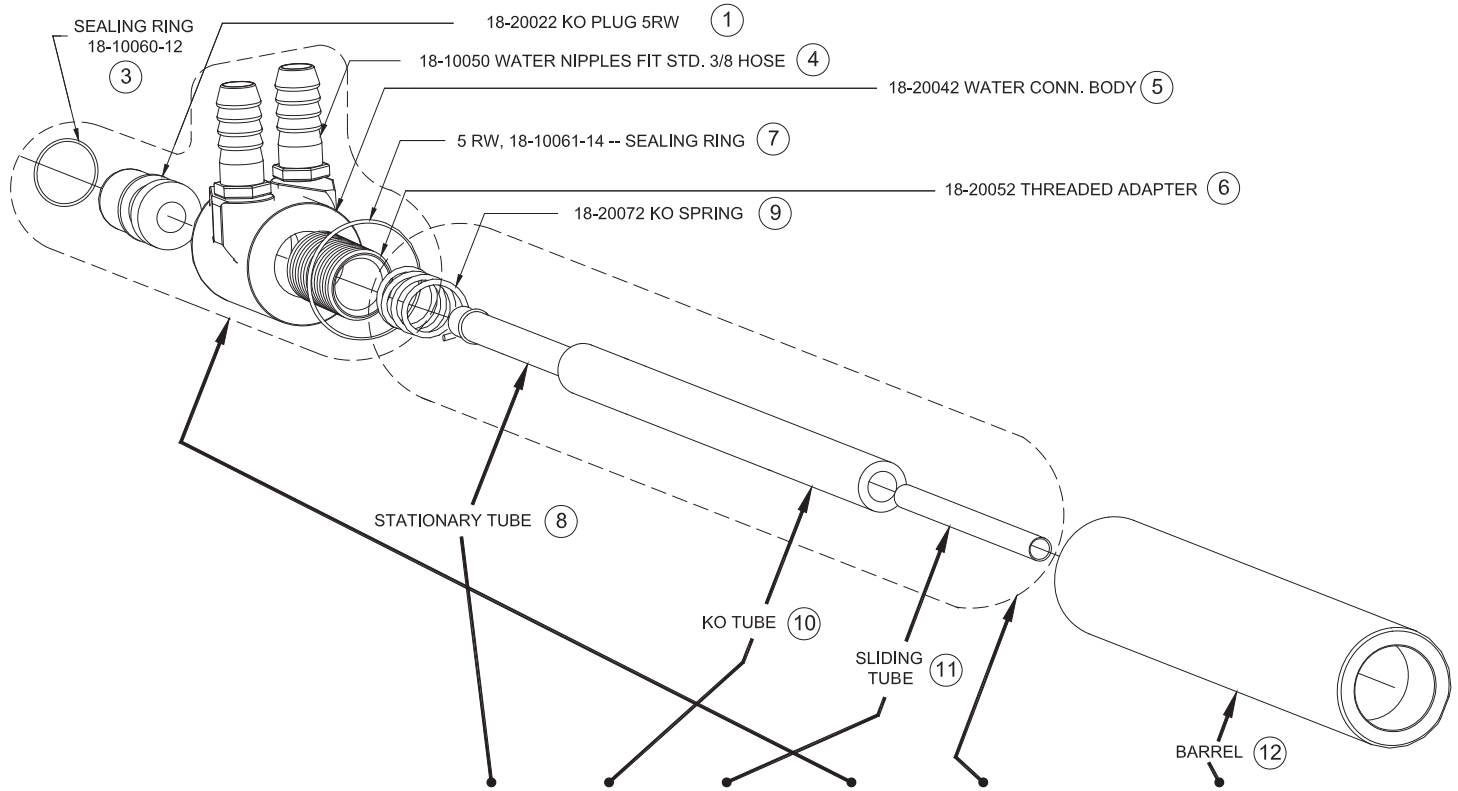
Use with Threaded Ejector Holder to make Replaceable Taper Holders

| Part No. | Female Thd. Size | Barrel Dia. |
|----------|------------------|-------------|
| 18-375 | 1-14 | 1-1/4 |
| 18-376 | 1-14 | 1-1/2 |





300 SERIES PREMIUM (EJECTOR) WATER COOLED ELECTRODE HOLDER



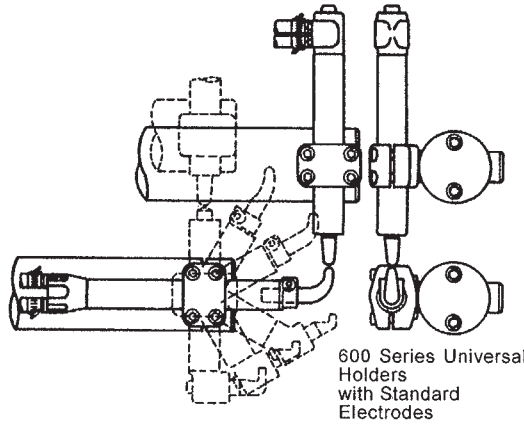
| Part No. Holder Assy. | Thread Or Taper | O.A.L | Stationary Tube 8 | K.O. Tube 10 | Sliding Tube 11 | Water Conn. HD. Sub-Assy. Include Parts: 1 3 4 5 6 7 | K.O. Tube Sub-Assy. Include Parts: 8 9 10 11 | Barrel Diameter | Barrel 12 |
|-----------------------|-----------------|-------|-------------------|----------------------------|-----------------|--|--|-----------------|----------------------------|
| 18-317 18-318 | 5 RW | 8 | 18-10045-8 | 18-20032-8 | 18-10047-8 | 18-20092 | 18-20096-8 | 1-1/4 1-1/2 | 18-31710-8 18-31810-8 |
| 18-319* 18-320* | 7 RW | 8 | 18-10045-8 | 18-20032-58 & 18-20033* | 18-10047-8 | 18-20092 | 18-20096-58 | 1-1/4 1-1/2 | 18-31910-8 18-32010-8 |
| 18-337 18-338 | 5 RW | 12 | 18-10045-12 | 18-20032-12 | 18-10047-8 | 18-20092 | 18-20096-12 | 1-1/4 1-1/2 | 18-31710-12 18-31810-12 |
| 18-339* 18-340* | 7 RW | 12 | 18-10045-12 | 18-20032-62 & 18-20033* | 18-10047-8 | 18-20092 | 18-20096-62 | 1-1/4 1-1/2 | 18-31910-12 18-32010-12 |
| 18-372 18-373 | 7/8-14 | 8 | 18-10045-8 | 18-20032-8 | 18-10047-8 | 18-20092 | 18-20096-8 | 1 1-1/4 | 18-37210-8 18-37310-8 |
| 18-375 18-376 | 1-14 | 8 | 18-10045-8 | 18-20032-8 | 18-10047-8 | 18-20092 | 18-20096-8 | 1-1/4 1-1/2 | 18-37510-8 18-37610-8 |

*Must use knockout adapter 18-20033

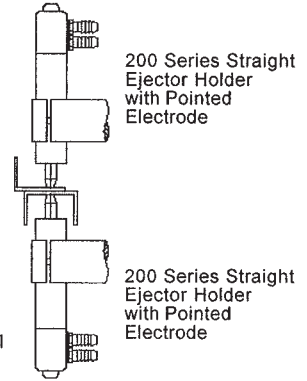


**COMBINATIONS OF CMW
HOLDERS, ADAPTERS AND
ELECTRODES CAN
PERFORM MOST RESISTANCE
WELDING APPLICATIONS**

Many of these combinations make possible welding operations that could have been done heretofore only by the use of "expensive and special" holders and electrodes. A few ideas of the many possible combinations are shown for your guidance.

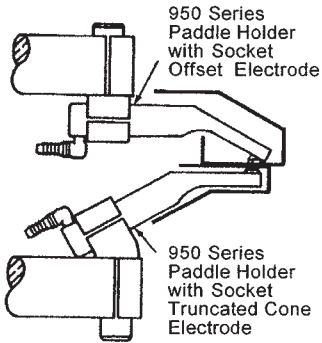


600 Series Universal Holders with Standard Electrodes



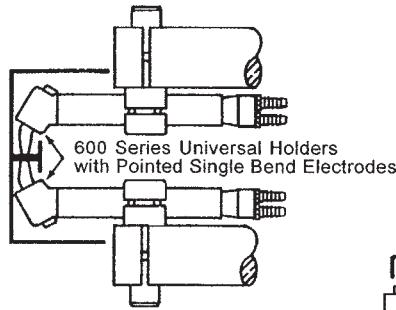
200 Series Straight Ejector Holder with Pointed Electrode

200 Series Straight Ejector Holder with Pointed Electrode

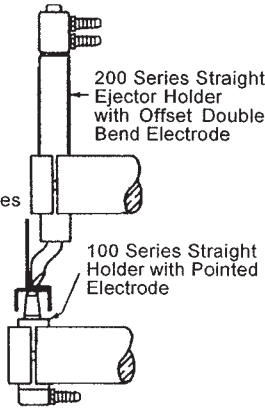


950 Series Paddle Holder with Socket Offset Electrode

950 Series Paddle Holder with Socket Truncated Cone Electrode

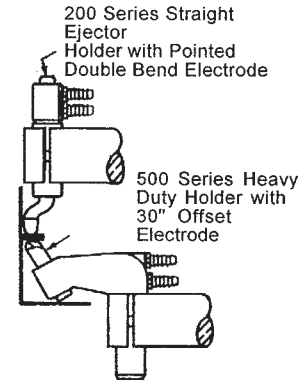


600 Series Universal Holders with Pointed Single Bend Electrodes



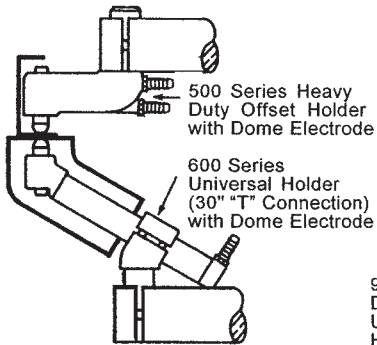
200 Series Straight Ejector Holder with Offset Double Bend Electrode

100 Series Straight Holder with Pointed Electrode



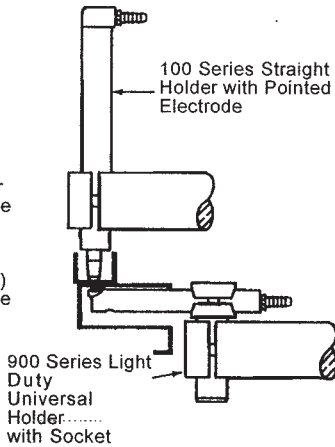
200 Series Straight Ejector Holder with Pointed Double Bend Electrode

500 Series Heavy Duty Holder with 30" Offset Electrode



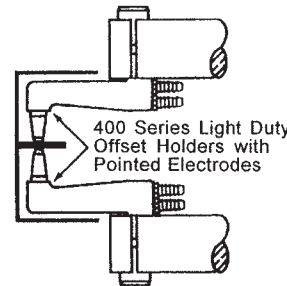
500 Series Heavy Duty Offset Holder with Dome Electrode

600 Series Universal Holder (30" "T" Connection) with Dome Electrode

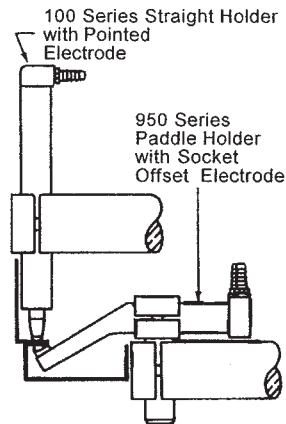


100 Series Straight Holder with Pointed Electrode

900 Series Light Duty Universal Holder with Socket

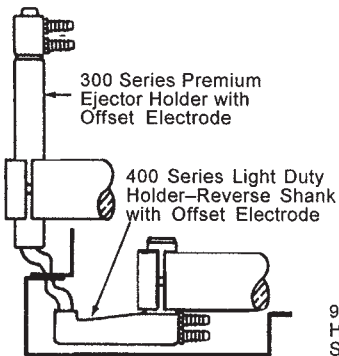


400 Series Light Duty Offset Holders with Pointed Electrodes



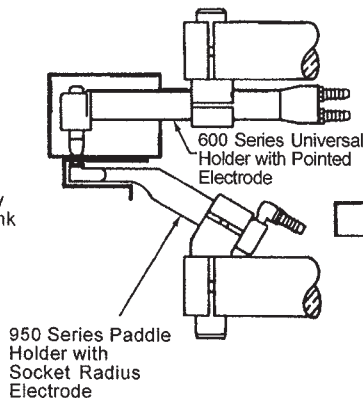
100 Series Straight Holder with Pointed Electrode

950 Series Paddle Holder with Socket Offset Electrode



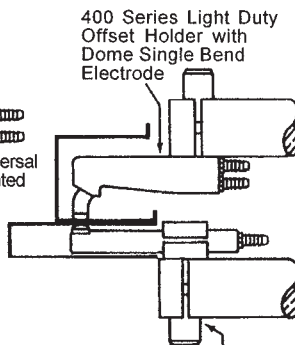
300 Series Premium Ejector Holder with Offset Electrode

400 Series Light Duty Holder-Reverse Shank with Offset Electrode



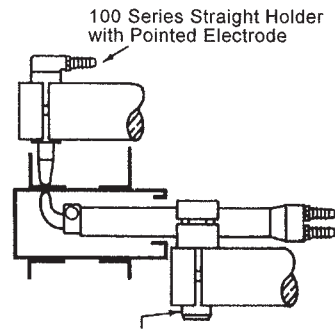
600 Series Universal Holder with Pointed Electrode

950 Series Paddle Holder with Socket Radius Electrode



400 Series Light Duty Offset Holder with Dome Single Bend Electrode

900 Series Light Duty Universal Holder with Socket Radius Electrode

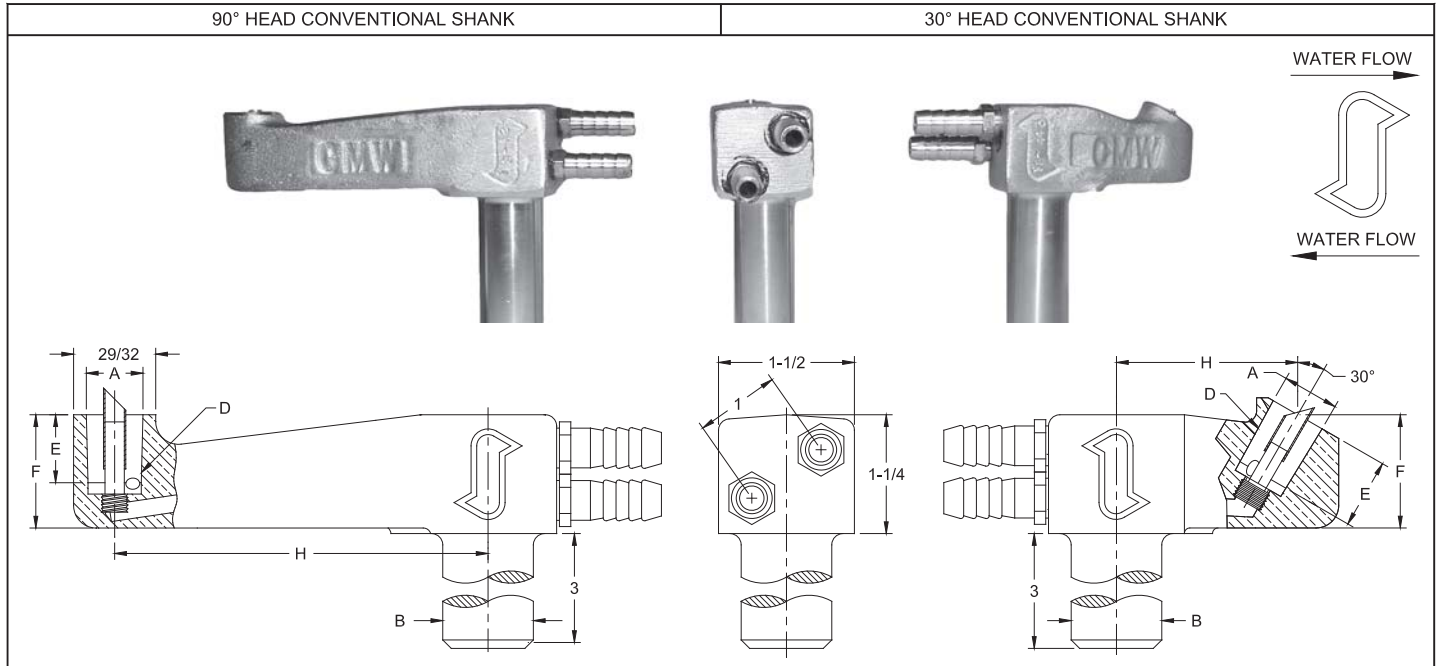


100 Series Straight Holder with Pointed Electrode

600 Series Universal Holder with Single Bend Electrode



400 SERIES OFFSET (NON-EJECTOR) WATER COOLED ELECTRODE HOLDERS



| 400 SERIES OFFSET HOLDER (CONVENTIONAL SHANK 90°) | | | | | | |
|---|---------------------|---------------|------------|-----------------------------|---------------|----------|
| Part No. Holder Assy. | Major Taper Dia. A* | Shank Dia. B* | RW Taper D | Engagement With Electrode E | Head Height F | Offset H |
| 18-402 | .463 | 7/8 | 4 RW | 1/2 | 1-1/16 | 2 |
| 18-403 | | 1 | | | | |
| 18-404 | | 1-1/4 | | | | |
| 18-407 | .625 | 7/8 | 5 RW | 3/4 | 1-1/4 | 2 |
| 18-408 | | 1 | | | | |
| 18-409 | | 1-1/4 | | | | |
| 18-422 | .463 | 7/8 | 4 RW | 1/2 | 1-1/16 | 4 |
| 18-423 | | 1 | | | | |
| 18-424 | | 1-1/4 | | | | |
| 18-428 | .625 | 1 | 5 RW | 3/4 | 1-1/4 | 4 |
| 18-429 | | 1-1/4 | | | | |

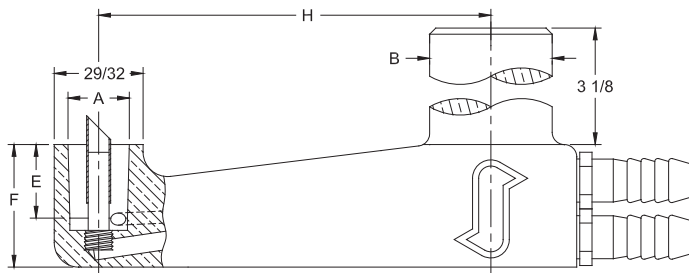
| 400 SERIES OFFSET HOLDER (CONVENTIONAL SHANK 30°) | | | | | | |
|---|---------------------|---------------|------------|-----------------------------|---------------|----------|
| Part No. Holder Assy. | Major Taper Dia. A* | Shank Dia. B* | RW Taper D | Engagement With Electrode E | Head Height F | Offset H |
| 18-442 | .463 | 7/8 | 4 RW | 1/2 | 1 | 2 |
| 18-443 | | 1 | | | | |
| 18-444 | | 1-1/4 | | | | |
| 18-448 | .625 | 1 | 5 RW | 3/4 | 1-1/4 | 2 |
| 18-449 | | 1-1/4 | | | | |
| 18-462 | .463 | 7/8 | 4 RW | 1/2 | 1 | 4 |
| 18-463 | | 1 | | | | |
| 18-464 | | 1-1/4 | | | | |
| 18-468 | .625 | 1 | 5 RW | 3/4 | 1-1/4 | 4 |
| 18-469 | | 1-1/4 | | | | |

*Other shank diameters and lengths or tapers available on special order

*Other shank diameters and lengths or tapers available on special order

400 SERIES OFFSET (NON-EJECTOR) WATER COOLED ELECTRODE HOLDERS

90° HEAD REVERSE SHANK

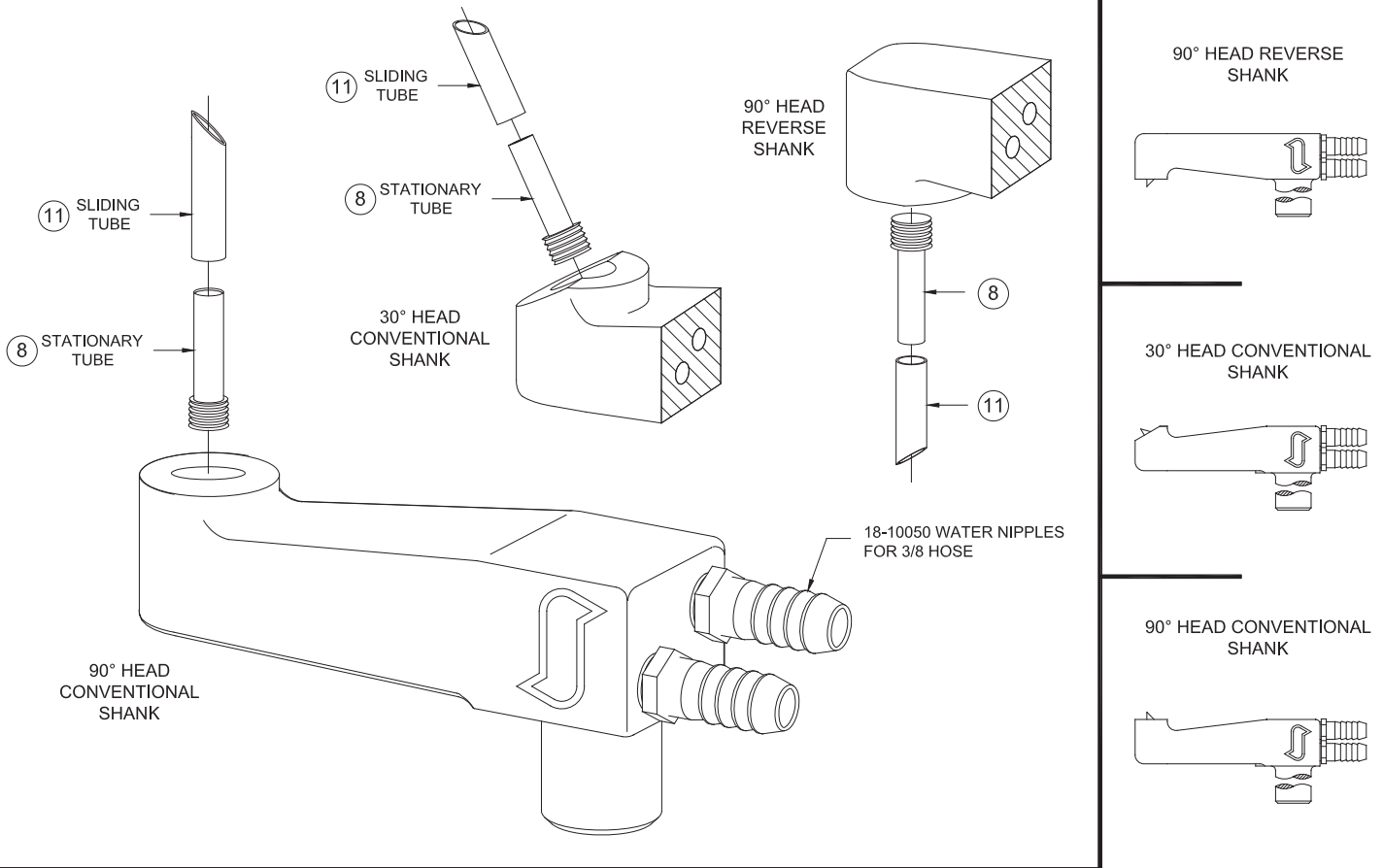


| 400 SERIES OFFSET HOLDER (REVERSE SHANK 90°) | | | | | | |
|--|---------------------|---------------|------------|-----------------------------|---------------|----------|
| Part No. Holder Assy. | Major Taper Dia. A* | Shank Dia. B* | RW Taper D | Engagement With Electrode E | Head Height F | Offset H |
| 18-433 | .463 | 1 | 4 RW | 1/2 | 1-1/16 | 4 |
| 18-439 | .625 | 1-1/4 | 5 RW | 3/4 | 1-1/4 | 4 |

*Other shank diameters and lengths or tapers available on special order



400 SERIES OFFSET (NON-EJECTOR) REPLACEMENT PARTS

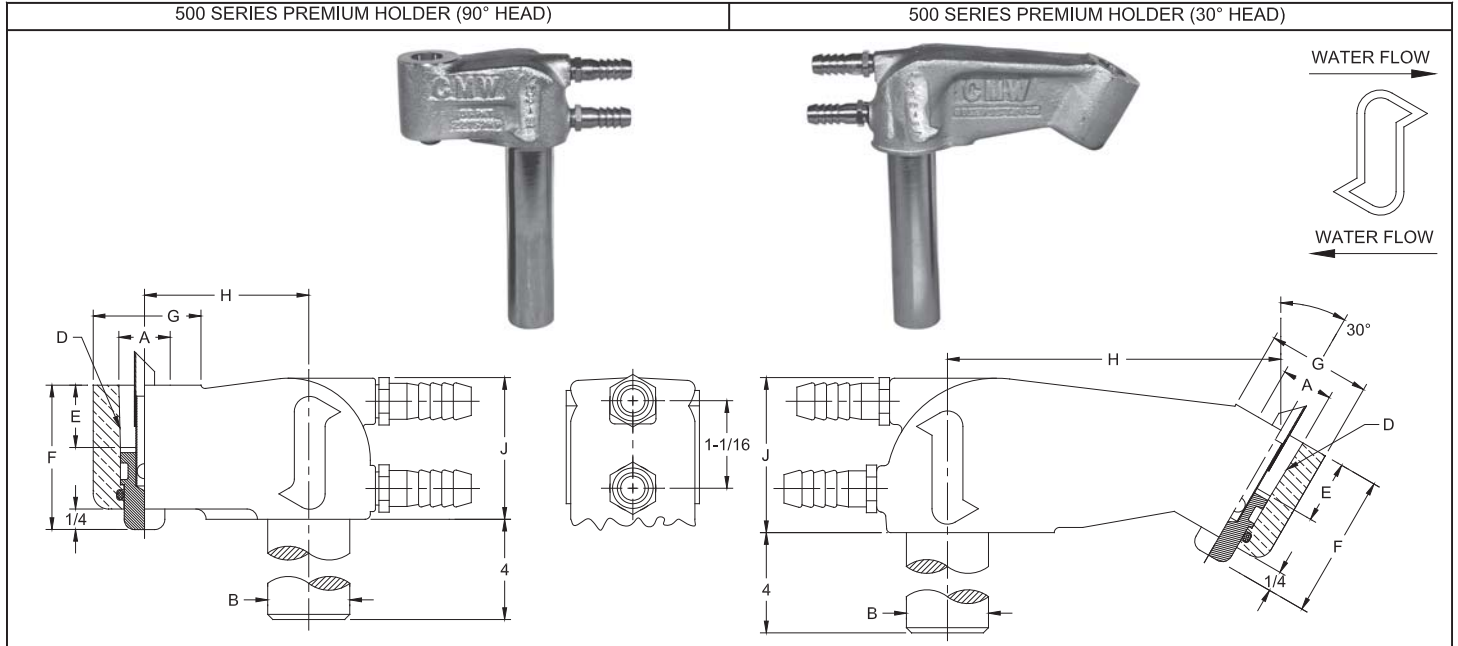


| Part No. Holder Assy. | Taper | Angle Of Head | Stationary Tube 8 | Sliding Tube 11 | Shank Dia. |
|-----------------------|-------|---------------|-------------------|-----------------|------------|
| 18-402 | 4 RW | 90° | 18-40041-1 | 18-40043-1 | 7/8 |
| 18-403 | | | | | 1 |
| 18-404 | | | | | 1-1/4 |
| 18-407 | 5 RW | 90° | 18-40041-1 | 18-40043-2 | 7/8 |
| 18-408 | | | | | 1 |
| 18-409 | | | | | 1-1/4 |
| 18-422 | 4 RW | 90° | 18-40041-1 | 18-40043-1 | 7/8 |
| 18-423 | | | | | 1 |
| 18-424 | | | | | 1-1/4 |
| 18-433* | | | | | 1 |
| 18-428 | 5 RW | 90° | 18-40041-1 | 18-40043-2 | 1 |
| 18-429 | | | | | 1-1/4 |
| 18-439* | | | | | 1-1/4 |
| 18-442 | 4 RW | 30° | 18-40041-1 | 18-40043-1 | 7/8 |
| 18-443 | | | | | 1 |
| 18-444 | | | | | 1-1/4 |
| 18-448 | 5 RW | 30° | 18-40041-1 | 18-40043-2 | 1 |
| 18-449 | | | | | 1-1/4 |
| 18-462 | 4 RW | 30° | 18-40041-1 | 18-40043-1 | 7/8 |
| 18-463 | | | | | 1 |
| 18-464 | | | | | 1-1/4 |
| 18-468 | 5 RW | 30° | 18-40041-1 | 18-40043-2 | 1 |
| 18-469 | | | | | 1-1/4 |

*Reverse shank



500 SERIES PREMIUM (EJECTOR) WATER COOLED OFFSET HOLDERS



| 500 SERIES PREMIUM HOLDER (90° HEAD) | | | | | | | | |
|--------------------------------------|---------------------|---------------------|------------|-----------------------------|---------------|-------------|----------|------------------|
| Part No. Holder Assy. | Major Taper Dia. A* | Shank Dia. B* | RW Taper D | Engagement With Electrode E | Head Height F | Head Dia. G | Offset H | Head Thickness J |
| 18-502 18-503 18-504 | .625 | 1 1-1/4 1-1/2 | 5 RW | 3/4 | 1-13/16 | 1-1/4 | 2 | 1-23/32 |
| 18-505 18-506 | .875 | 1-1/4 1-1/2 | 7 RW | 1-1/8 | 2-7/32 | 1-1/2 | 2 | 1-23/32 |
| 18-522 18-523 18-524 | .625 | 1 1-1/4 1-1/2 | 5 RW | 3/4 | 1-13/16 | 1-1/4 | 4 | 1-7/8 |
| 18-525 18-526 | .875 | 1-1/4 1-1/2 | 7 RW | 1-1/8 | 2-7/32 | 1-1/2 | 4 | 1-7/8 |

| 500 SERIES PREMIUM HOLDER (30° HEAD) | | | | | | | | |
|--------------------------------------|---------------------|---------------------|------------|-----------------------------|---------------|-------------|----------|------------------|
| Part No. Holder Assy. | Major Taper Dia. A* | Shank Dia. B* | RW Taper D | Engagement With Electrode E | Head Height F | Head Dia. G | Offset H | Head Thickness J |
| 18-562 18-563 18-564 | .625 | 1 1-1/4 1-1/2 | 5 RW | 3/4 | 1-13/16 | 1-5/16 | 4 | 1-7/8 |
| 18-565 18-566 | .875 | 1-1/4 1-1/2 | 7 RW | 1-1/8 | 2-7/32 | 1-9/16 | 4 | 1-7/8 |

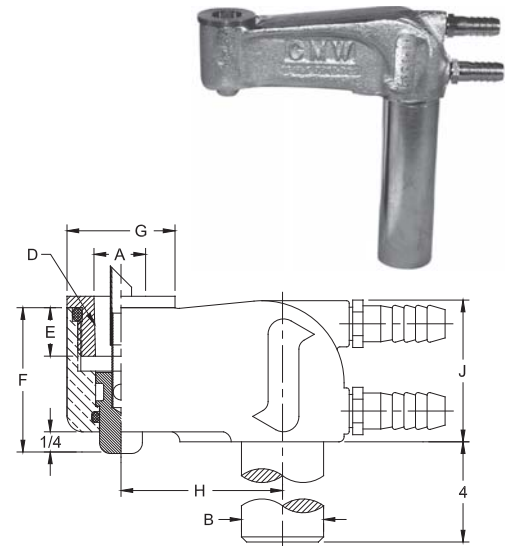
*Other shank diameters and lengths or tapers available on special order

*Other shank diameters and lengths or tapers available on special order

500 SERIES PREMIUM (EJECTOR) WATER COOLED ELECTRODE HOLDERS WITH THREADED ADAPTERS

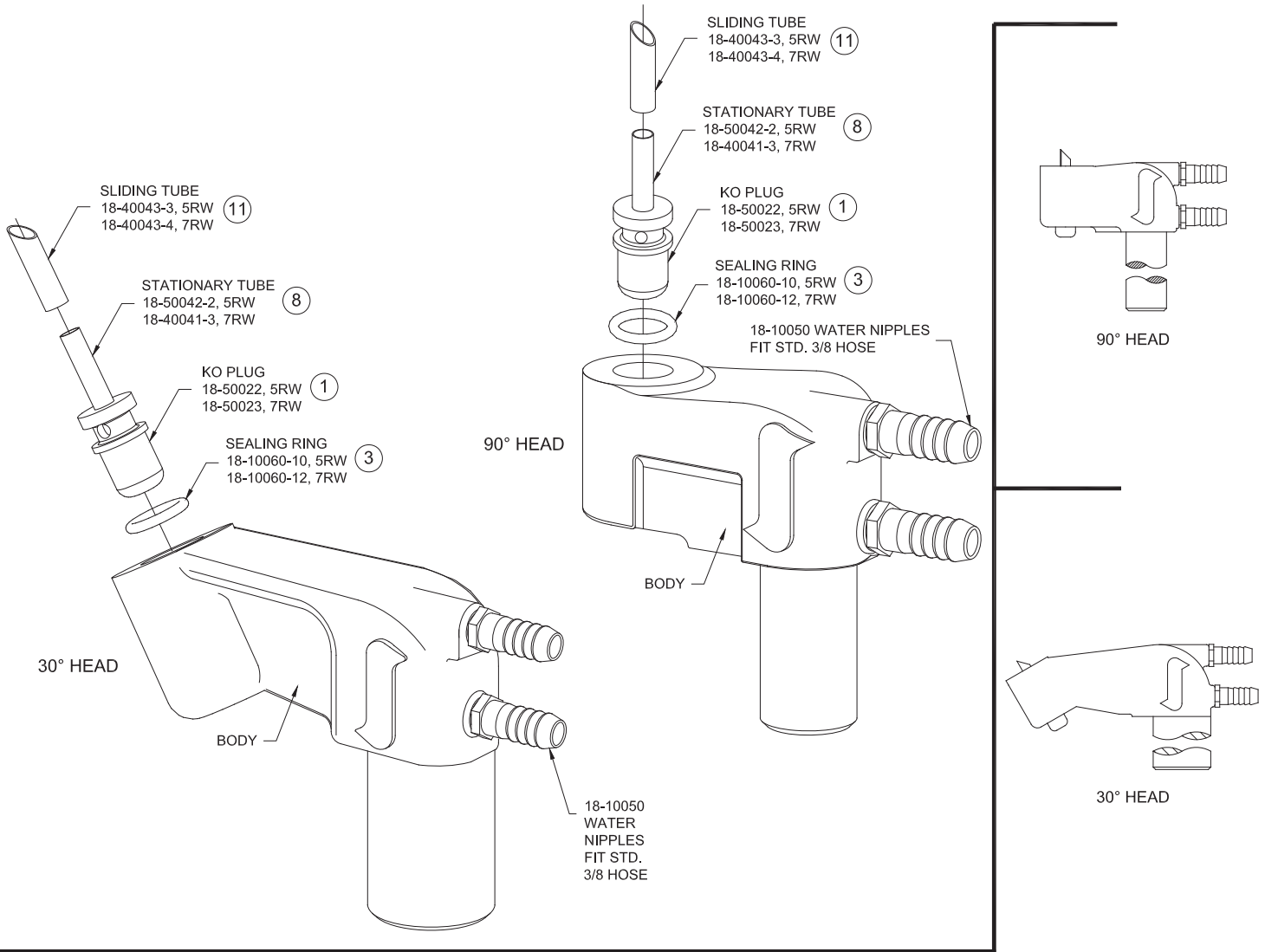
| 500 SERIES PREMIUM HOLDER WITH THREADED ADAPTERS | | | | | | | | | | |
|--|------------|---------------------|---------------|--------------|-----------------------------|--------------------|-------------|----------|------------------|---------------------------|
| Part No. Holder Assy. | Head Angle | Major Taper Dia. A* | Shank Dia. B* | RW Taper D | Engagement With Electrode E | Head Height F | Head Dia. G | Offset H | Head Thickness J | Part No. Threaded Adapter |
| 18-5035 18-5036 | 90° | .625 .750 | 1-1/4 | 5 RW 6 RW | 3/4 7/8 | 1-13/16 1-15/16 | 1-1/4 | 2 | 1-23/32 | 18-7875 18-7876 |
| 18-5045 18-5046 | 90° | .625 .750 | 1-1/2 | 5 RW 6 RW | 3/4 7/8 | 1-13/16 1-15/16 | 1-1/4 | 2 | 1-23/32 | 18-7875 18-7876 |
| 18-5235 18-5236 | 90° | .625 .750 | 1-1/4 | 5 RW 6 RW | 3/4 7/8 | 1-13/16 1-15/16 | 1-1/4 | 4 | 1-7/8 | 18-7875 18-7876 |
| 18-5245 18-5246 | 90° | .625 .750 | 1-1/2 | 5 RW 6 RW | 3/4 7/8 | 1-13/16 1-15/16 | 1-1/4 | 4 | 1-7/8 | 18-7875 18-7876 |
| 18-5635 18-5636 | 30° | .625 .750 | 1-1/4 | 5 RW 6 RW | 3/4 7/8 | 1-13/16 1-15/16 | 1-1/4 | 4 | 1-7/8 | 18-7875 18-7876 |
| 18-5645 18-5646 | 30° | .625 .750 | 1-1/2 | 5 RW 6 RW | 3/4 7/8 | 1-13/16 1-15/16 | 1-1/4 | 4 | 1-7/8 | 18-7875 18-7876 |

*Other shank diameters and lengths or tapers available on special order





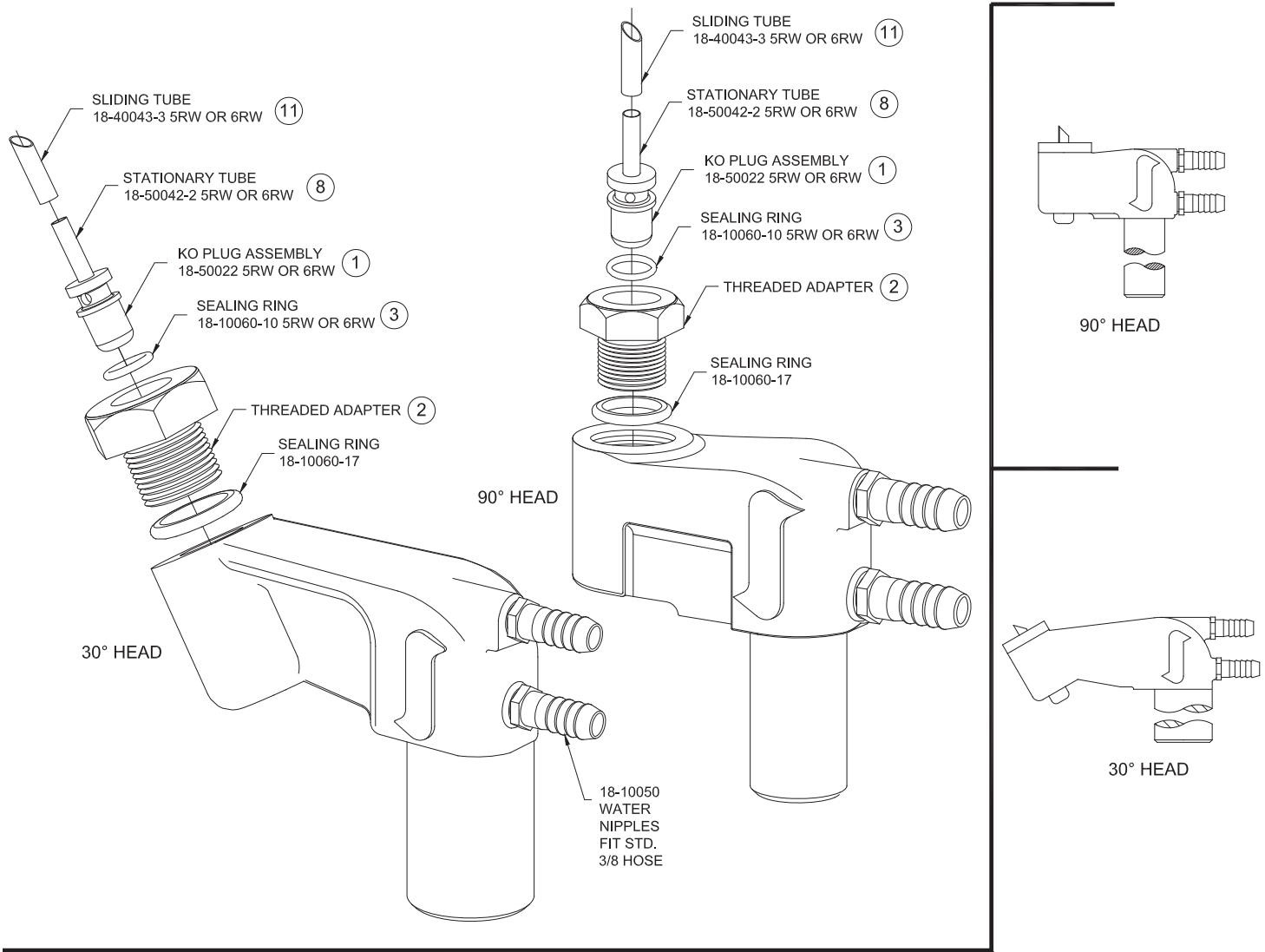
500 SERIES PREMIUM (EJECTOR) WATER COOLED OFFSET HOLDERS



| Part No. Holder Assy. | Taper | Angle Of Head | KO Plug 1 | Sealing Ring 3 | Stationary Tube 8 | Sliding Tube 11 | Shank Dia. |
|-----------------------------|-------|---------------------|--------------|----------------------|-------------------------|-----------------------|---------------------|
| 18-502 18-503 18-504 | 5 RW | 90° | 18-50022 | 18-10060-10 | 18-50042-2 | 18-40043-3 | 1 1-1/4 1-1/2 |
| 18-505 18-506 | 7 RW | 90° | 18-50023 | 18-10060-12 | 18-40041-3 | 18-40043-4 | 1-1/4 1-1/2 |
| 18-522 18-523 18-524 | 5 RW | 90° | 18-50022 | 18-10060-10 | 18-50042-2 | 18-40043-3 | 1 1-1/4 1-1/2 |
| 18-525 18-526 | 7 RW | 90° | 18-50023 | 18-10060-12 | 18-40041-3 | 18-40043-4 | 1-1/4 1-1/2 |
| 18-562 18-563 18-564 | 5 RW | 30° | 18-50022 | 18-10060-10 | 18-50042-2 | 18-40043-3 | 1 1-1/4 1-1/2 |
| 18-565 18-566 | 7 RW | 30° | 18-50023 | 18-10060-12 | 18-40041-3 | 18-40043-4 | 1-1/4 1-1/2 |



500 SERIES PREMIUM (EJECTOR) WATER COOLED OFFSET HOLDERS WITH THREADED ADAPTER



| Part No. Holder Assy. | Taper | Angle Of Head | KO Plug ** 1 | Sealing Ring 3 | Stationary Tube 8 | Sliding Tube 11 | Shank Dia. | Threaded Adapter* 2 |
|-----------------------------|--------------|---------------------|--------------------|----------------------|-------------------------|-----------------------|---------------|---------------------------|
| 18-5035 18-5036 | 5 RW 6 RW | 90° | 18-50022 | 18-10060-10 | 18-50042-2 | 18-40043-3 | 1-1/4 | 18-7875 18-7876 |
| 18-5045 18-5046 | 5 RW 6 RW | 90° | 18-50022 | 18-10060-10 | 18-50042-2 | 18-40043-3 | 1-1/2 | 18-7875 18-7876 |
| 18-5235 18-5236 | 5 RW 6 RW | 90° | 18-50022 | 18-10060-10 | 18-50042-2 | 18-40043-3 | 1-1/4 | 18-7875 18-7876 |
| 18-5245 18-5246 | 5 RW 6 RW | 90° | 18-50022 | 18-10060-10 | 18-50042-2 | 18-40043-3 | 1-1/2 | 18-7875 18-7876 |
| 18-5635 18-5636 | 5 RW 6 RW | 30° | 18-50022 | 18-10060-10 | 18-50042-2 | 18-40043-3 | 1-1/4 | 18-7875 18-7876 |
| 18-5645 18-5646 | 5 RW 6 RW | 30° | 18-50022 | 18-10060-10 | 18-50042-2 | 18-40043-3 | 1-1/2 | 18-7875 18-7876 |

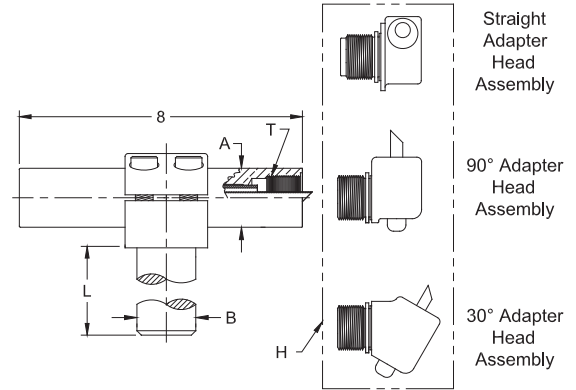
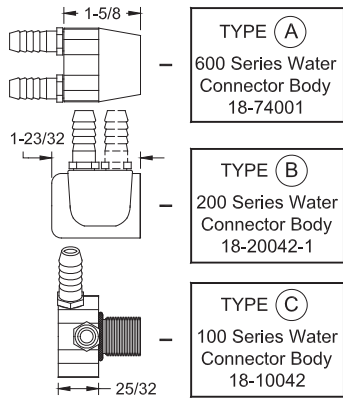
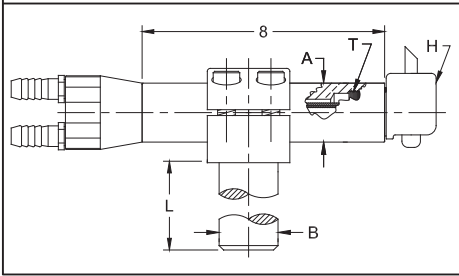
* Threaded adapter includes sealing ring 18-10060-17

** KO Plug assembly includes stationary tube 18-50042-2



600 SERIES UNIVERSAL WATER COOLED ELECTRODE HOLDERS

EXAMPLE: This is shown with standard 90° adapter head and 600 series water connector body 18-74001 "Type A"



*Standard holders include type "A" water connector, types "B" and "C" available on request
See page 46 for adapter head details and page 47 for additional "T" connector information.

| 600 SERIES UNIVERSAL HOLDER (90° ADAPTER HEAD) | | | | | | | |
|--|-------|---------------|--------------|----------------|--------------|----------------------|------|
| Part No. Holder Assy.* | Taper | Barrel Dia. A | Shank Dia. B | Shank Length L | Head Assy. H | Barrel Thread Size T | |
| 18-601 18-603 | 4 RW | 1 | 7/8 | 3 | 18-764 | 7/8-14 | |
| 18-605 18-607 | | 1-1/4 | 1-1/4 | 3-1/2 | 18-764 | 7/8-14 | |
| 18-611 18-613 | 5 RW | 1 | 7/8 | 3 | 18-766 | 7/8-14 | |
| 18-615 18-617 | | 1-1/4 | 1-1/4 | 3-1/2 | 18-766 | 7/8-14 | |
| 18-651 18-657 | | 1-1/4 | 1-1/4 | 3-1/2 | 18-780 | 1-14 | |
| 18-655 18-653 | | 1-1/2 | 1-1/4 | 4 | 18-780 | 1-14 | |
| 18-661 18-665 18-663 | | 7 RW | 1-1/4 | 1-1/4 | 3-1/2 | 18-782 | 1-14 |
| | | | 1-1/2 | 1-1/4 | 4 | | |

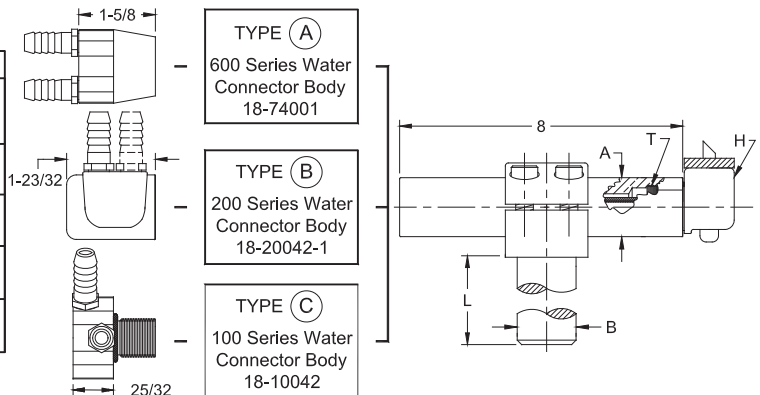


| 600 SERIES UNIVERSAL HOLDER (STRAIGHT ADAPTER HEAD) | | | | | | |
|---|-------|---------------|--------------|----------------|--------------|----------------------|
| Part No. Holder Assy.* | Taper | Barrel Dia. A | Shank Dia. B | Shank Length L | Head Assy. H | Barrel Thread Size T |
| 18-621 18-622 | 4 RW | 1 | 7/8 | 3 | 18-768 | 7/8-14 |
| 18-623 18-671 | | 1-1/4 | 1-1/4 | 3-1/2 | 18-768 | 7/8-14 |
| 18-624 18-674 | | 1-1/4 | 1-1/2 | 4 | 18-768 | 7/8-14 |
| 18-672 18-673 | 5 RW | 1-1/4 | 1-1/2 | 4 | 18-784 | 1-14 |
| | | 1-1/2 | 1-1/2 | 4 | | |

| 600 SERIES UNIVERSAL HOLDER (30° ADAPTER HEAD) | | | | | | | |
|--|-------|---------------|--------------|----------------|--------------|----------------------|------|
| Part No. Holder Assy.* | Taper | Barrel Dia. A | Shank Dia. B | Shank Length L | Head Assy. H | Barrel Thread Size T | |
| 18-602 18-604 | 4 RW | 1 | 7/8 | 3 | 18-765 | 7/8-14 | |
| 18-606 18-608 | | 1-1/4 | 1-1/4 | 3-1/2 | 18-765 | 7/8-14 | |
| 18-612 18-614 | 5 RW | 1 | 7/8 | 3 | 18-767 | 7/8-14 | |
| 18-616 18-618 | | 1-1/4 | 1-1/4 | 3-1/2 | 18-767 | 7/8-14 | |
| 18-652 18-658 | | 1-1/4 | 1-1/4 | 3-1/2 | 18-781 | 1-14 | |
| 18-656 18-654 | | 1-1/2 | 1-1/4 | 4 | 18-781 | 1-14 | |
| 18-662 18-666 18-664 | | 7 RW | 1-1/4 | 1-1/4 | 3-1/2 | 18-783 | 1-14 |
| | | | 1-1/2 | 1-1/4 | 4 | | |
| | 1-1/2 | | 1-1/2 | 4 | | | |

600 SERIES UNIVERSAL WATER COOLED ELECTRODE HOLDER (THREADED ADAPTER HEAD)

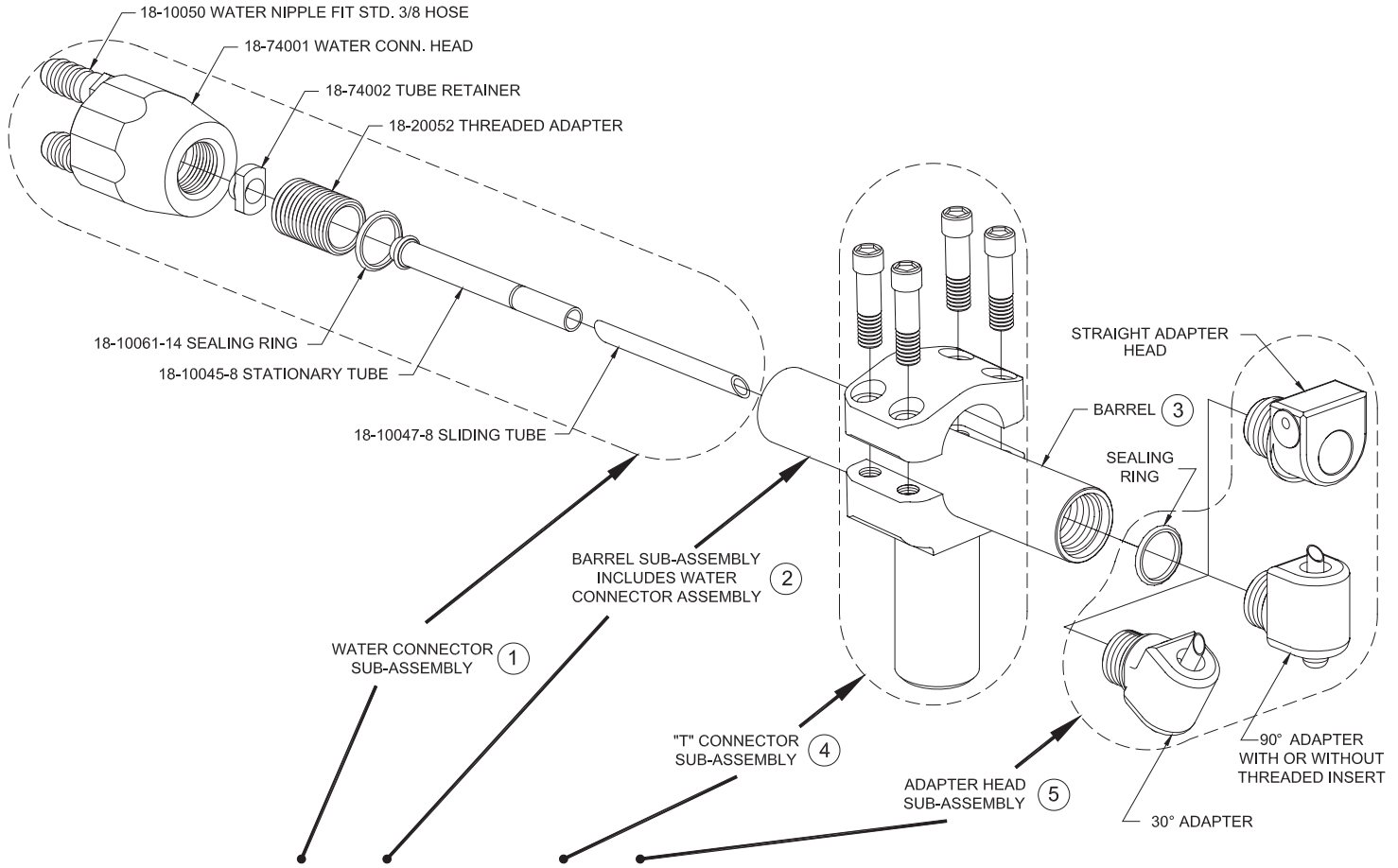
| 600 SERIES UNIVERSAL HOLDER (THREADED ADAPTER HEAD) | | | | | | | |
|---|-------|------------|---------------|--------------|----------------|--------------|----------------------|
| Part No. Holder Assy.* | Taper | Head Angle | Barrel Dia. A | Shank Dia. B | Shank Length L | Head Assy. H | Barrel Thread Size T |
| 18-6515 18-6535 | 5 RW | 90° | 1-1/4 | 1-1/4 | 3-1/2 | 18-7805 | 1-14 |
| 18-6525 18-6545 | | 30° | 1-1/4 | 1-1/4 | 3-1/2 | 18-7815 | 1-14 |
| 18-6516 18-6536 | 6 RW | 90° | 1-1/4 | 1-1/4 | 3-1/2 | 18-7806 | 1-14 |
| 18-6526 18-6546 | | 30° | 1-1/4 | 1-1/4 | 3-1/2 | 18-7816 | 1-14 |



*Standard holders include type "A" water connector, types "B" and "C" available on request



600 SERIES UNIVERSAL WATER COOLED OFFSET HOLDERS



| Part No. Holder Assy. | Taper | Angle Of Head | Water Conn. Assy. 1 | Barrel Assy. 2 | Barrel 3 | "T" Conn. Assy. * 4 | Adapter Head Assy.* 5 | |
|-----------------------|-------|---------------|---------------------|----------------|------------|---------------------|-----------------------|------------------|
| 18-601 18-602 | 4 RW | 90° | 18-74000-8 | 18-701 | 18-37210-8 | 18-725 | 18-764 18-765 | |
| 18-603 18-604 | | 30° | | | | | | |
| 18-605 18-606 | | 90° | 18-74000-8 | 18-702 | 18-37310-8 | 18-727 | 18-764 18-765 | |
| 18-607 18-608 | | 30° | | | | | | |
| 18-611 18-612 | 5 RW | 90° | 18-74000-8 | 18-701 | 18-37210-8 | 18-725 | 18-766 18-767 | |
| 18-613 18-614 | | 30° | | | | | | |
| 18-615 18-616 | | 90° | 18-74000-8 | 18-702 | 18-37310-8 | 18-727 | 18-766 18-767 | |
| 18-617 18-618 | | 30° | | | | | | |
| 18-621 18-622 | | STR. STR. | 18-74000-8 | 18-701 | 18-37210-8 | 18-725 18-726 | 18-768 | |
| 18-623 18-624 | | STR. STR. | | | | | | |
| 18-651 18-652 | | 90° | 18-74000-8 | 18-702 | 18-37310-8 | 18-727 | 18-768 | |
| 18-657 18-658 | | 30° | | | | | | |
| | | | | | 18-704 | 18-37510-8 | 18-727 | 18-780 18-781 |

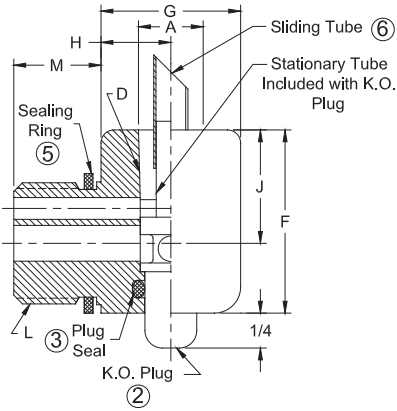
| Part No. Holder Assy. | Taper | Angle Of Head | Water Conn. Assy.* 1 | Barrel Assy. 2 | Barrel 3 | "T" Conn. Assy. * 4 | Adapter Head Assy.* 5 |
|-----------------------|-----------|---------------|----------------------|------------------|--------------------------|---------------------|-----------------------|
| 18-655 18-656 | 5 RW | 90° | 18-74000-8 | 18-705 | 18-37610-8 | 18-728 | 18-780 18-781 |
| 18-653 18-654 | | 30° | | | | | |
| 18-671 18-672 | | STR. STR. | 18-74000-8 | 18-704 18-705 | 18-37510-8 18-37610-8 | 18-727 18-729 | 18-784 |
| 18-673 18-674 | | STR. STR. | | | | | |
| 18-6515 18-6525 | 5 RW THD. | 90° | 18-74000-8 | 18-704 | 18-37510-8 | 18-727 | 18-7805 18-7815 |
| 18-6535 18-6545 | | 30° | | | | | |
| 18-6516 18-6526 | 6 RW THD. | 90° | 18-74000-8 | 18-704 | 18-37510-8 | 18-727 | 18-7806 18-7816 |
| 18-6536 18-6546 | | 30° | | | | | |
| 18-661 18-662 | 7 RW | 90° | 18-74000-8 | 18-704 | 18-37510-8 | 18-727 | 18-782 18-783 |
| 18-665 18-666 | | 30° | | | | | |
| 18-663 18-664 | | 90° | 18-74000-8 | 18-705 | 18-37610-8 | 18-729 | 18-782 18-783 |
| | | 30° | | | | | |

* See page 46 for adapter head details and page 47 for additional "T" connector information.

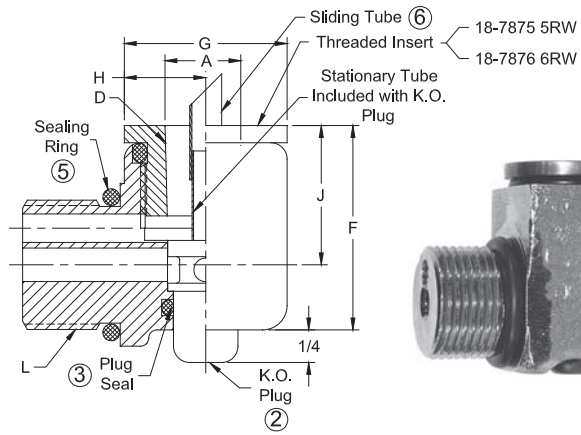


MALE THREAD TO FEMALE TAPER UNIVERSAL ADAPTERS

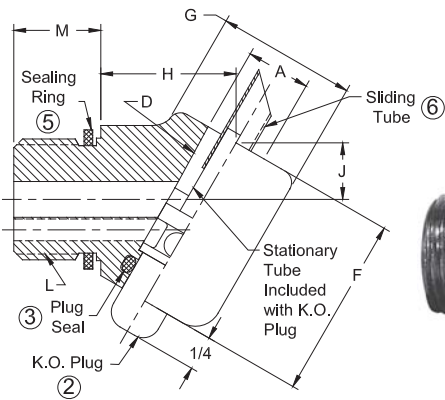
MALE THREAD TO FEMALE TAPER 90° TYPE



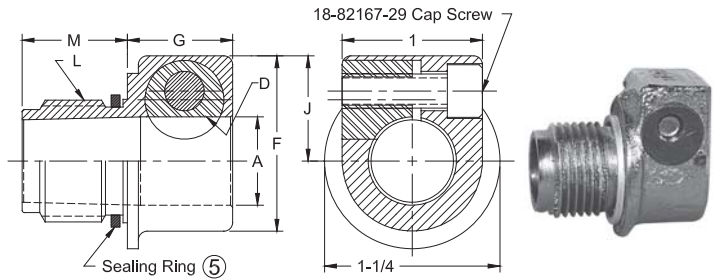
MALE THREAD TO FEMALE TAPER 90° TYPE (ADAPT WITH INSERT)



MALE THREAD TO FEMALE TAPER 30° TYPE



MALE THREAD TO FEMALE TAPER STRAIGHT TYPE



MALE THREAD TO FEMALE TAPER UNIVERSAL ADAPTERS

| Adapter Part No. | Adapter Angle | Male Thread | | Female Taper | | Overall Head Height F | Head Diameter or Length G | End Barrel to C.L. of Taper H | C.L. Barrel to C.L. of Taper J | K.O. Plug Part No. 2 | K.O. Plug Seal Ring Part No. 3 | Sealing Ring Part No. 5 | Sliding Tube Part No. 6 |
|------------------|---------------|------------------|-------------|-----------------|-----------------|--------------------------|------------------------------|----------------------------------|-----------------------------------|-------------------------|-----------------------------------|----------------------------|----------------------------|
| | | Thread Size L | Length M | Taper Size D | Major Dia. A | | | | | | | | |
| 18-764 | 90° | 7/8-14 | 9/16 | 4 RW | .463 | 1-9/16 | 1 | 19/32 | 13/16 | 18-50021 | 18-10060-8 | 18-76460 | 18-50041-1 |
| 18-765 | 30° | 7/8-14 | 9/16 | 4 RW | .463 | 1-9/16 | 1 | 1-1/16 | 15/32 | 18-50021 | 18-10060-8 | 18-76460 | 18-50041-1 |
| 18-766 | 90° | 7/8-14 | 9/16 | 5 RW | .625 | 1-13/16 | 1 | 19/32 | 1-1/16 | 18-50022 | 18-10060-10 | 18-76460 | 18-40043-3 |
| 18-767 | 30° | 7/8-14 | 9/16 | 5 RW | .625 | 1-13/16 | 1-1/16 | 1-11/32 | 53/64 | 18-50022 | 18-10060-10 | 18-76460 | 18-40043-3 |
| 18-768 | Str. | 7/8-14 | 9/16 | 5 RW | .625 | 1-1/4 | 3/4 | -- | 3/4 | -- | -- | 18-76460 | -- |
| 18-780 | 90° | 1-14 | 3/4 | 5 RW | .625 | 1-13/16 | 1-1/4 | 21/32 | 1-1/16 | 18-50022 | 18-10060-10 | 18-10060-17 | 18-40043-3 |
| 18-781 | 30° | 1-14 | 3/4 | 5 RW | .625 | 1-13/16 | 1-5/16 | 1-3/8 | 13/16 | 18-50022 | 18-10060-10 | 18-10060-17 | 18-40043-3 |
| 18-784 | Str. | 1-14 | 3/4 | 5 RW | .625 | 1-1/4 | 3/4 | -- | 3/4 | -- | -- | 18-10060-17 | -- |
| 18-782 | 90° | 1-14 | 3/4 | 7 RW | .875 | 2-3/16 | 1-1/2 | 25/32 | 1-3/16 | 18-50023 | 18-10060-12 | 18-10060-17 | 18-40043-4 |
| 18-783 | 30° | 1-14 | 3/4 | 7 RW | .875 | 2-3/16 | 1-9/16 | 1-3/8 | 13/16 | 18-50023 | 18-10060-12 | 18-10060-17 | 18-40043-4 |
| 18-7805* | 90° | 1-14 | 3/4 | 5 RW | .625 | 1-13/16 | 1-1/4 | 21/32 | 1-1/16 | 18-50022 | 18-10060-10 | 18-10060-17 | 18-40043-3 |
| 18-7815* | 30° | 1-14 | 3/4 | 5 RW | .625 | 1-13/16 | 1-5/16 | 1-3/8 | 13/16 | 18-50022 | 18-10060-10 | 18-10060-17 | 18-40043-3 |
| 18-7806* | 90° | 1-14 | 3/4 | 6 RW | .750 | 1-15/16 | 1-1/4 | 21/32 | 1-3/16 | 18-50022 | 18-10060-10 | 18-10060-17 | 18-40043-3 |
| 18-7816* | 30° | 1-14 | 3/4 | 6 RW | .750 | 1-15/16 | 1-5/16 | 1-7/16 | 59/64 | 18-50022 | 18-10060-10 | 18-10060-17 | 18-40043-3 |

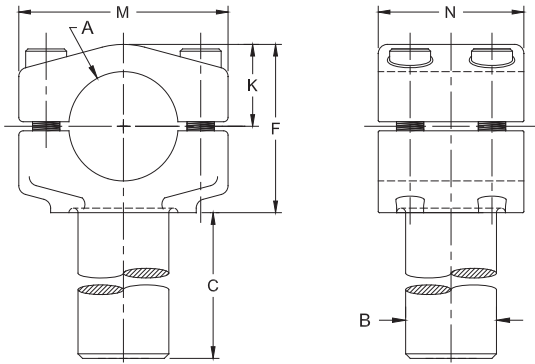
*These adapters have threaded inserts 18-7875 (5RW) or 18-7876 (6RW) taper



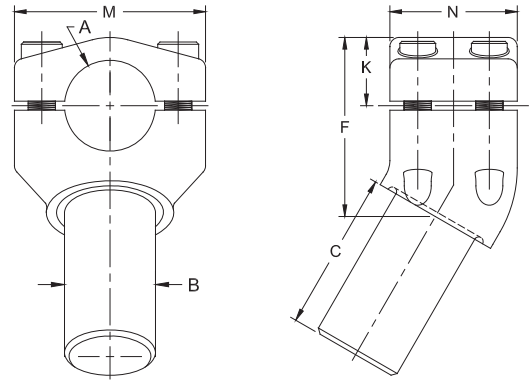
"T" CONNECTORS FOR HOLDERS

90° HEAVY DUTY "T" CONNECTORS

30° HEAVY DUTY "T" CONNECTORS



Available as cast
CMW[®]353
material



HEAVY DUTY 90° "T" CONNECTORS

| "T" Connector Assy. No. | Hole Dia. A | Shank Dia. B* | Shank Length C | Head Height F | Hole C.L. Over Top K | Length M | Width N | Number of Bolts |
|-------------------------|----------------|---------------|----------------|---------------|----------------------|----------------|------------|-----------------|
| 18-725 18-726 | 1 | 7/8 1 | 3 | 1-3/4 | 3/4 | 2-5/16 | 1-1/2 | 2 Bolt |
| 18-727 18-728 | 1-1/4 1-1/2 | 1-1/4 | 3-1/2 4 | 2 2-5/16 | 15/16 1-1/8 | 2-5/8 2-7/8 | 1-3/4 2 | 4 Bolt |
| 18-729 18-730 | 1-1/2 1-1/4 | 1-1/2 | 4 | 2-5/16 | 1-1/8 | 2-7/8 | 2 | 4 Bolt |

HEAVY DUTY 30° "T" CONNECTORS

| "T" Connector Assy. No. | Hole Dia. A | Shank Dia. B | Shank Length C | Head Height F | Hole C.L. Over Top K | Length M | Width N | Number of Bolts |
|-------------------------|----------------|----------------|----------------|--------------------|----------------------|----------------|------------|-----------------|
| 18-731 18-732 | 1 | 7/8 1 | 3 | 2 | 3/4 | 2-5/16 | 1-1/2 | 2 Bolt |
| 18-733 18-734 | 1-1/4 1-1/2 | 1-1/4 1-1/2 | 3-1/2 4 | 2-13/32 2-47/64 | 15/16 1-1/8 | 2-5/8 2-7/8 | 1-3/4 2 | 4 Bolt |

These 30° "T" Connectors may be interchanged with the 90° universal type "T" Connectors. See page 38 for suggested setups.

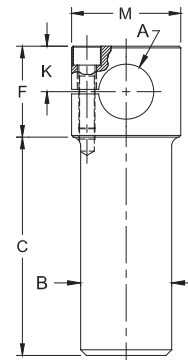
"T" Connectors of other shank diameters and lengths may be ordered upon request.

Available as cast CMW[®]3 material

SMALL BARREL 90° "T" CONNECTORS

| "T" Connector Assy. No. | Hole Dia. A | Shank Dia. B | Shank Length C | Head Height F | Hole C.L. Over Top K | Dia. M | Number of Bolts |
|----------------------------|-------------|---------------------|----------------|---------------|----------------------|--------|-----------------|
| 18-720 18-721 | 3/4 | 3/4 7/8 | 3 | 1-1/4 | 5/8 | 1-1/2 | 1 Bolt |
| 18-722 18-723 18-724 | | 1 1-1/4 1-1/2 | | | | | |

"T" Connectors of other shank diameters and lengths may be ordered upon request.





800 SERIES "NU-TWIST"® ADAPTERS

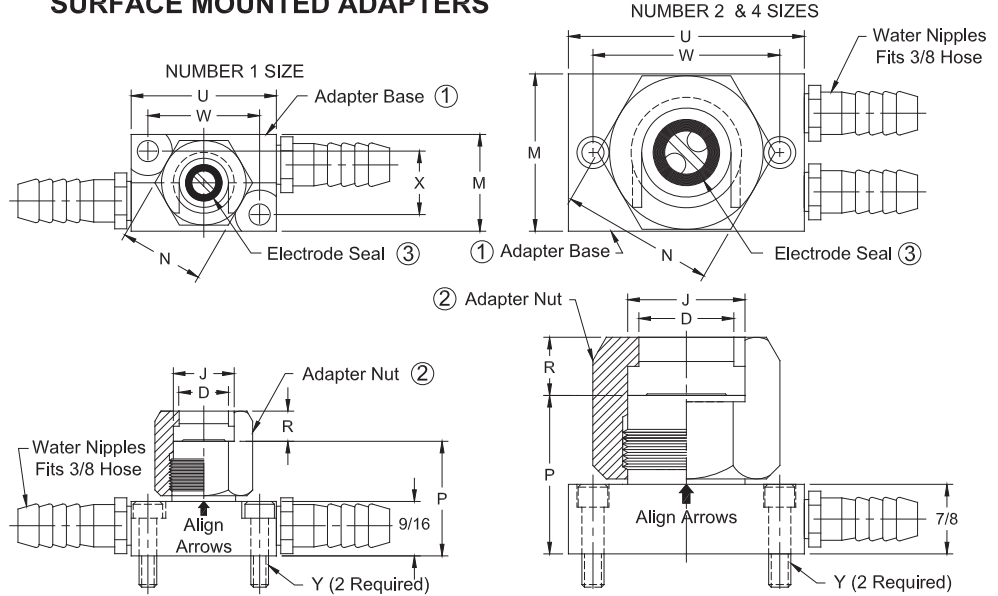
CMW "NU-TWIST"® FEATURES

1. Hex locking nut may be tightened or loosened effectively by hand or wrench for easy replacement of electrodes.
2. "O" ring seals provide water tight connections.
3. Double groove construction in bore or locking nut accurately aligns and locks the

electrode in position with a maximum of a turn and one half.

4. Through use of baffles in adapters and in electrodes over 1" long efficient cooling is effectively achieved.
5. All components are of corrosion-resistant alloys.
6. Maintenance costs are unusually low.
7. Adapter bases are CMW®3 material.

SURFACE MOUNTED ADAPTERS



| 800 SERIES "NU-TWIST"® SURFACE MOUNTED | | | | | | | | | | | |
|--|------------------|--------------|-------|-------|-------|---------|------|-------|--------|-------|-----------------|
| Size | Adapter Part No. | Adapter Size | | | | | | | | | |
| | | D | J | M | N | P | R | U | W | X | Y |
| 1 | 18-801 | 1/2 | 5/8 | 1 | 7/8 | 1-1/4 | 1/4 | 1-1/2 | 1-5/32 | 21/32 | No. 10-24 Scr. |
| 2 | 18-802 | 15/16 | 1-1/8 | 1-1/2 | 1-1/2 | 1-13/16 | 7/16 | 2-1/2 | 2 | -- | No. 1/4-20 Scr. |
| 4 | 18-804 | 1-7/16 | 1-5/8 | 2 | 2 | 1-13/16 | 7/16 | 3 | 2-3/8 | -- | No. 1/4-20 Scr. |

| REPLACEMENT PARTS | | | | |
|-------------------|---------------|----------------|---------------|-------------------|
| Adapter Part No. | Water Nipples | Adapter Base 1 | Adapter Nut 2 | Electrode Seals 3 |
| 18-801 | | 18-80110 | 18-80150 | 18-10060-5 |
| 18-802 | 18-10050 | 18-80210 | 18-80250 | 18-10060-1 |
| 18-804 | | 18-80410 | 18-80450 | 18-10061-14 |

For replacement parts see page 49

800 SERIES "NU-TWIST"® THREADED ADAPTERS & MOUNTING INFORMATION

May use with 100, 200, and 300 series holders to make "NU-TWIST"® holders

NUMBER 1 SIZE

① Adapter Base ② Adapter Nut ③ Electrode Seal

NUMBER 2 & 4 SIZES

Mounting Seal ① Adapter Base ② Adapter Nut ③ Electrode Seal

| 800 SERIES "NU-TWIST"® THREADED | | | | | | | | | |
|---------------------------------|------------------|--------------|-------|-------|-------|--------|------|------|------------|
| Size | Adapter Part No. | Adapter Size | | | | | | | |
| | | D | J | M | N | P | R | S | T (Thread) |
| 1 | 18-811 | 1/2 | 5/8 | 1 | 7/8 | 15/16 | 1/4 | 9/16 | 5/8-18 |
| 2 | 18-812 | 15/16 | 1-1/8 | 1-1/2 | 1-1/2 | 1-5/16 | 7/16 | 3/4 | 1-14 |
| 4 | 18-814 | 1-7/16 | 1-5/8 | 2 | 2 | 1-5/16 | 7/16 | 3/4 | 1-1/2-12 |

For replacement parts see page 49

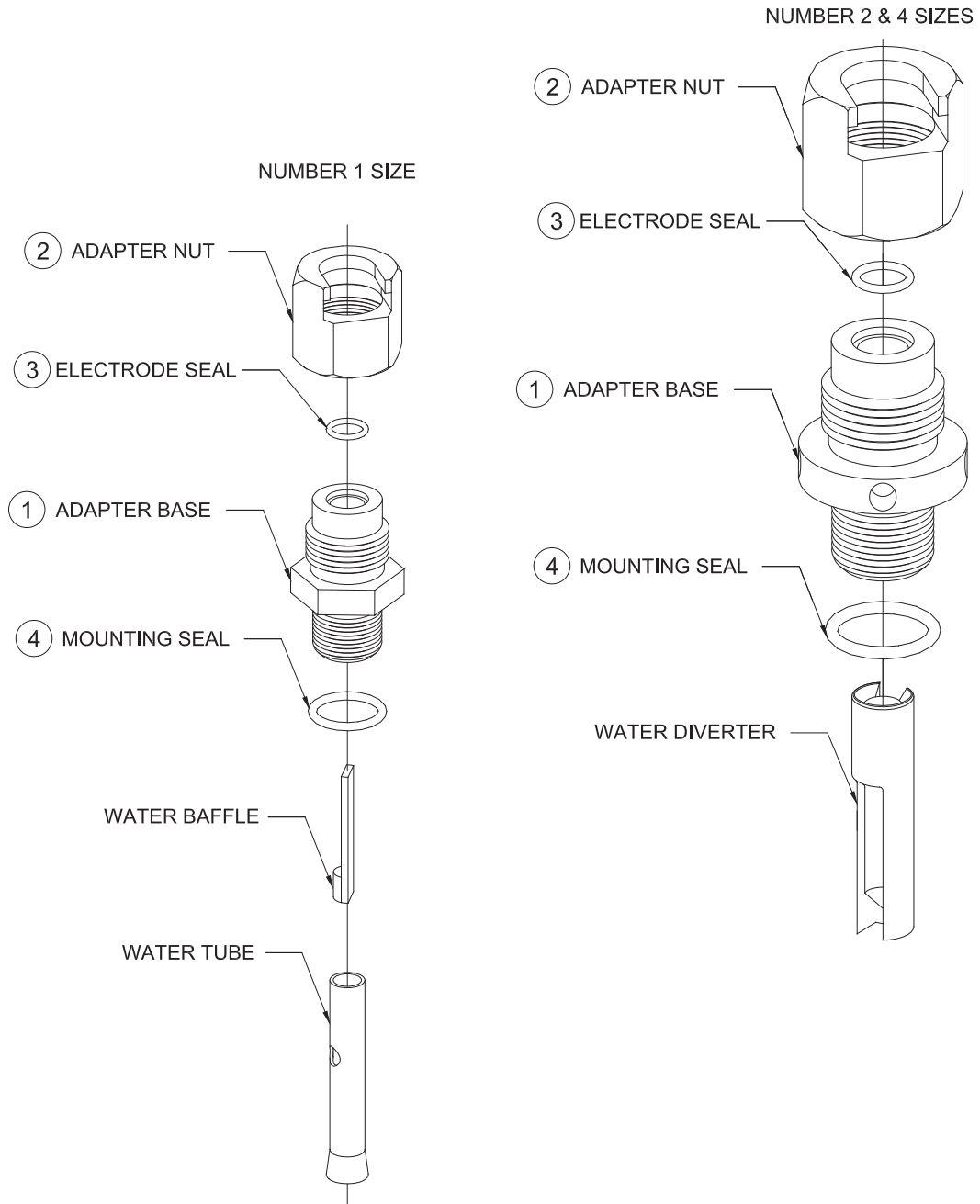
NUMBER 1 SIZE

NUMBER 2 & 4 SIZES

| MOUNTING INFORMATION FOR THREADED ADAPTERS | | | | | | | |
|--|------------------------|---------------|----------------|---------------------|---------------|-------------|----------|
| Size | Thd. Adapter Assy. No. | C'bore Dia. A | C'bore Depth B | Thread Depth Min. C | Tube Height E | Tube Dia. F | Thread T |
| 1 | 18-811 | .750 | .083 | 5/8 | 3/8 | .244 | 5/8-18 |
| 2 | 18-812 | 1.126 | .113 | 13/16 | 15/16 | .244 | 1-14 |
| 4 | 18-814 | 1.626 | .173 | 13/16 | 15/16 | .375 | 1-1/2-12 |



800 SERIES "NU-TWIST"[®] THREADED ADAPTERS

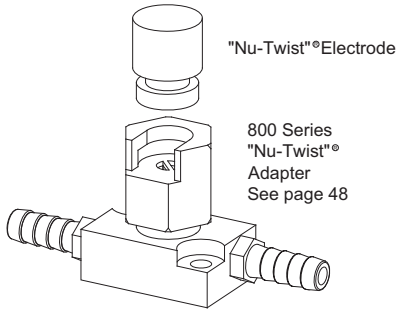


| Adapter Assembly Part No. | Adapter Base* 1 | Adapter Nut 2 | Electrode Seal 3 | Mounting Seal 4 |
|---------------------------|-----------------|---------------|------------------|-----------------|
| 18-811 | 18-81110 | 18-80150 | 18-10061-5 | 18-10060-11 |
| 18-812 | 18-81210 | 18-80250 | 18-10061-10 | 18-10060-17 |
| 18-814 | 18-81410 | 18-80450 | 18-10061-14 | 18-10060-25 |

* Adapter base includes water tube & baffel or water diverter



"NU-TWIST"® ELECTRODES



"Nu-Twist"® Electrode

800 Series "Nu-Twist"® Adapter
See page 48

- No tapers or threads
- Can be extracted with a simple turn of hexagon locking nut
- Any contour in electrode face can be located or relocated in a given position
- Water circulated to end of electrode for maximum cooling
- Silver plated contact surfaces on electrode and base for maximum conductivity
- Provides a simple, low-cost electrode for most applications
- Electrodes shown can be modified with contours to provide faces required for most resistance welding applications

| FLAT FACE "NU-TWIST"® ELECTRODE | | | | TYPE 0 FLAT & 0 TRUNCATED "NU-TWIST"® ELECTRODE | | | | | | | | |
|---------------------------------|----------|-----------------------------|---------|---|---------------------|---------------------|------------------------|----------------------|-----------------------|--------------------------|------------------------------|--|
| Size | Type | Electrode Part No. CMW°3 | CMW°100 | Body Dia. H | Weld Face Dia. A | Overall Length C | Adapter Clearance E | Water Hole Dia. F | Water Hole Depth G | Electrode Seat Dia. J | Elect. Ext. From Adapt. K | |
| 1 | 0 Flat | 338750 | 538750 | 1/2 | 1/2 | 3/4 | -- | 1/4 | 3/8 | .625 | 1/2 | |
| | | 338030 | 538030 | 1/2 | 1/2 | 1-1/2 | -- | 1/4 | 1-1/8 | .625 | 1-1/4 | |
| 1 | 0 Trunc. | 378750 | 578750 | 1/2 | 1/4 | 3/4 | -- | 1/4 | 3/8 | .625 | 1/2 | |
| | | 378030 | 578030 | 1/2 | 1/4 | 1-1/2 | -- | 1/4 | 1-1/8 | .625 | 1-1/4 | |
| 1 | Flat | 338751 | 538751 | 5/8 | 5/8 | 3/4 | 5/16 | 1/4 | 3/8 | .625 | 1/2 | |
| | | 338031 | 538031 | 5/8 | 5/8 | 1-1/2 | 5/16 | 1/4 | 1-1/8 | .625 | 1-1/4 | |
| 2 | Flat | 338012 | 538012 | 1-1/4 | 1-1/4 | 1 | 5/8 | 1/2 | 1/2 | 1.125 | 1/2 | |
| | | 338052 | 538052 | 1-1/4 | 1-1/4 | 2 | 5/8 | 1/2 | 1-1/2 | 1.125 | 1-1/2 | |
| 4 | Flat | 338014 | 538014 | 1-3/4 | 1-3/4 | 1 | 5/8 | 3/4 | 1/2 | 1.625 | 1/2 | |
| | | 338054 | 538054 | 1-3/4 | 1-3/4 | 2 | 5/8 | 3/4 | 1-1/2 | 1.625 | 1-1/2 | |

Special face contours, lengths and diameters available on special order

THREADED SOCKET(OR BUTTON) ELECTRODES

(USE WITH 900 AND 950 SERIES HOLDERS ON PAGE 51)

ALL DIMENSIONS WITH AN (*) ARE COMMON TO EACH CAP IN A HORIZONTAL LINE.



FLAT FACE



TRUNCATED FACE



RADIUS FACE



OFFSET FACE



30° OFFSET FACE

| FLAT FACE | TRUNCATED FACE | RADIUS FACE | OFFSET FACE | 30° OFFSET FACE |
|--|--|--|--|--|
| <p>CMW°28 18-970 CMW°3 18-980 CMW°100 18-990</p> | <p>CMW°28 18-971 CMW°3 18-981 CMW°100 18-991</p> | <p>CMW°28 18-972 CMW°3 18-982 CMW°100 18-992</p> | <p>CMW°28 18-973 CMW°3 18-983 CMW°100 18-993</p> | <p>CMW°28 18-974 CMW°3 18-984 CMW°100 18-994</p> |

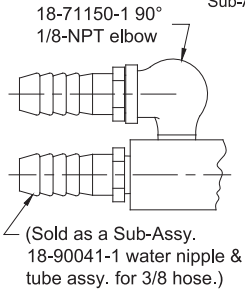
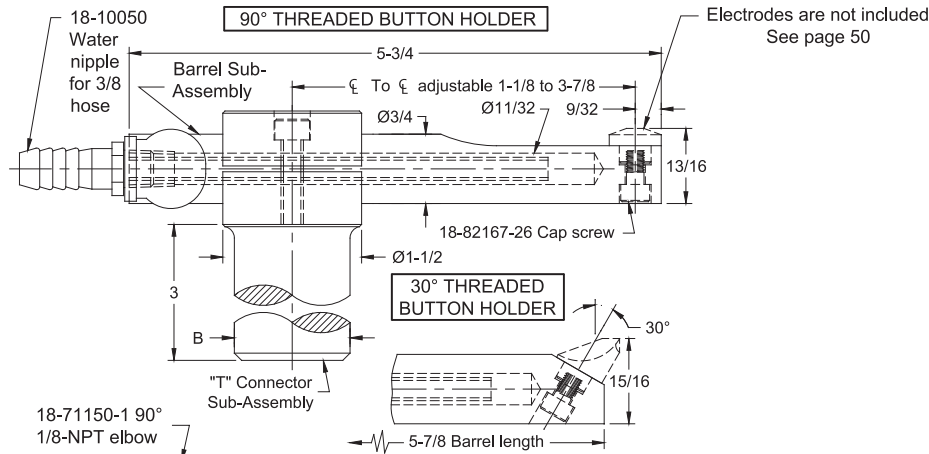
MALE THREADED BUTTON ELECTRODES

CMW shall supply a variety of nose configurations (examples shown below) made to your specifications. These electrodes are available in CMW°100, CMW°28 and CMW°3 materials to meet your various applications. Threads in both Unified (inch) or metric sizes can be supplied.



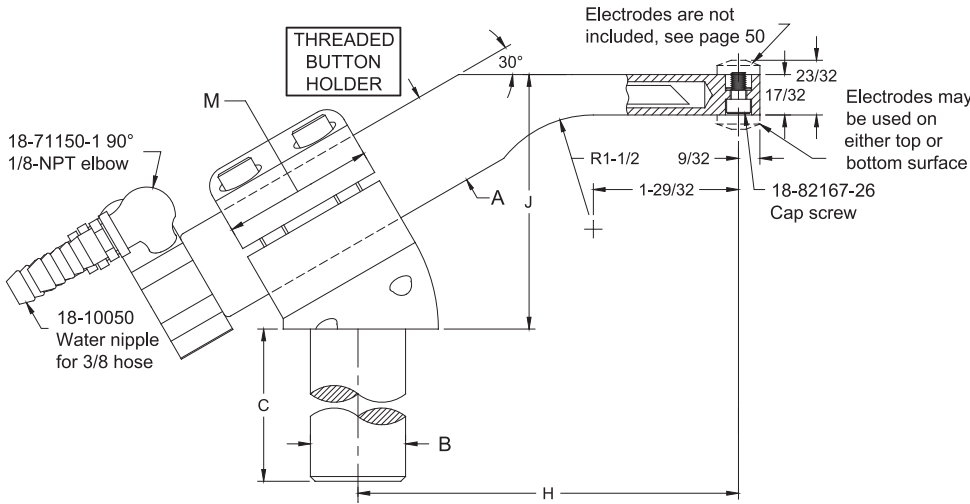


900 SERIES LIGHT DUTY WATER COOLED UNIVERSAL HOLDER

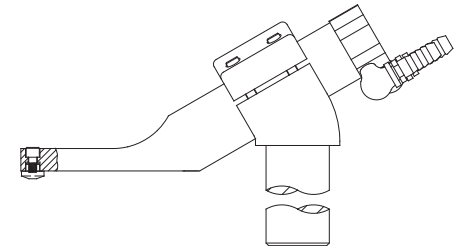


| Holder Type | Holder Assembly Part No. | Holder Angle | Shank Dia. B | Barrel Sub-Assy. | Barrel | "T" Conn. |
|-----------------|--------------------------|--------------|--------------|------------------|------------|-----------|
| Threaded Button | 18-901 | 90° | 3/4 | 18-709 | 18-70910-1 | 18-720 |
| | 18-902 | 30° | 3/4 | 18-710 | 18-71010-1 | 18-720 |
| | 18-903 | 90° | 7/8 | 18-709 | 18-70910-1 | 18-721 |
| | 18-904 | 30° | 7/8 | 18-710 | 18-71010-1 | 18-721 |
| | 18-905 | 90° | 1 | 18-709 | 18-70910-1 | 18-722 |
| | 18-906 | 30° | 1 | 18-710 | 18-71010-1 | 18-722 |
| | 18-907 | 90° | 1-1/4 | 18-709 | 18-70910-1 | 18-723 |
| | 18-908 | 30° | 1-1/4 | 18-710 | 18-71010-1 | 18-723 |
| | 18-909 | 90° | 1-1/2 | 18-709 | 18-70910-1 | 18-724 |
| | 18-900 | 30° | 1-1/2 | 18-710 | 18-71010-1 | 18-724 |

950 SERIES WATER COOLED PADDLE HOLDERS FOR THREADED BUTTON ELECTRODES



| Holder Type | Holder Assembly Part No. | Barrel Dia. A | Shank Dia. B | Shank Length C | Offset Range H | Height Range J | Width M | Barrel Sub-Assy. | "T" Conn. |
|-----------------|--------------------------|---------------|--------------|----------------|-------------------|------------------|---------|------------------|-----------|
| Threaded Button | 18-952 | 1 | 7/8 | 3 | 3-3/8 to 5-3/32 | 2-1/16 to 3-1/16 | 1-1/2 | 18-713 | 18-731 |
| | 18-953 | 1 | 1 | 1 | | | | 18-713 | 18-732 |
| | 18-954 | 1-1/4 | 1-1/4 | 3-1/2 | 4 to 5-23/32 | 2-3/4 to 3-3/4 | 1-3/4 | 18-714 | 18-733 |
| | 18-955 | 1-1/2 | 1-1/2 | 4 | 4-7/32 to 5-15/16 | 2-7/8 to 3-7/8 | 2 | 18-715 | 18-734 |
| | | | | | | | | | |



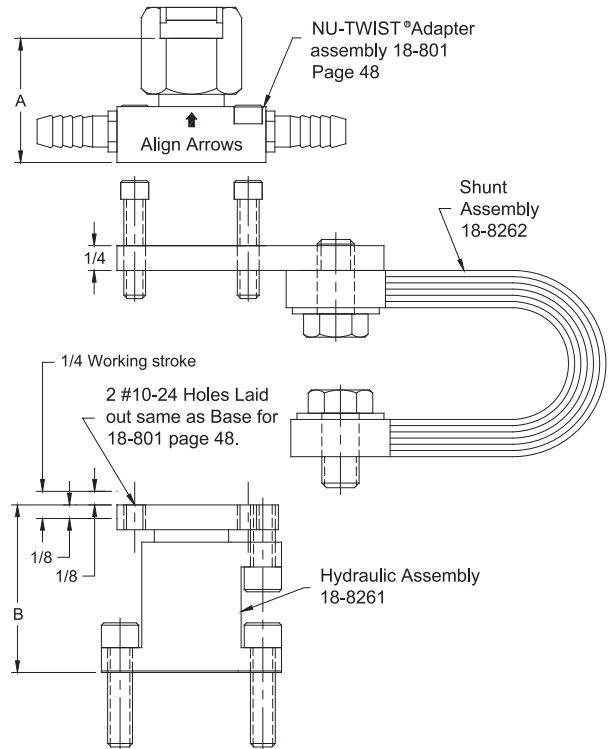
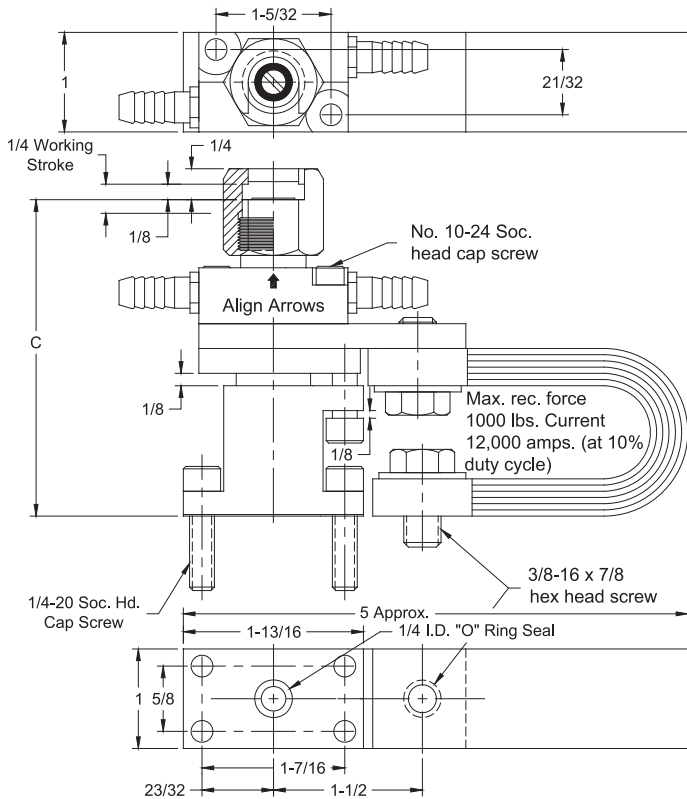
VIEW IS SHOWING BARREL SUB-ASSY AND ELECTRODE REVERSED IN SHANK



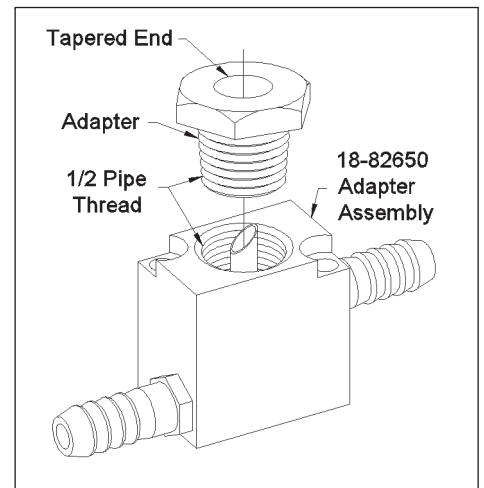
HYDRAULIC EQUALIZING ADAPTERS AND ASSEMBLIES

CMW Hydraulic Equalizing adapter units are used to equalize the weld force when two or more welds are required simultaneously. The equalizing action is developed in a closed hydraulic system - and is accomplished by hydraulically interconnecting two or more units. We recommend using fire resistant hydraulic fluid compatible with BUNA "N" such as HOUGHTO-SAFE #620, 1120 or equivalent. Consult your local industrial lubricant distributor.

18-826 #1 SIZE UNIT WITH NU-TWIST® SHOWN



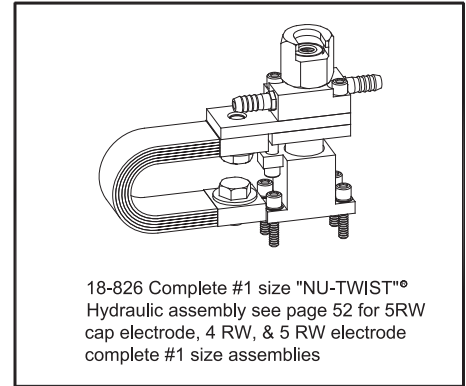
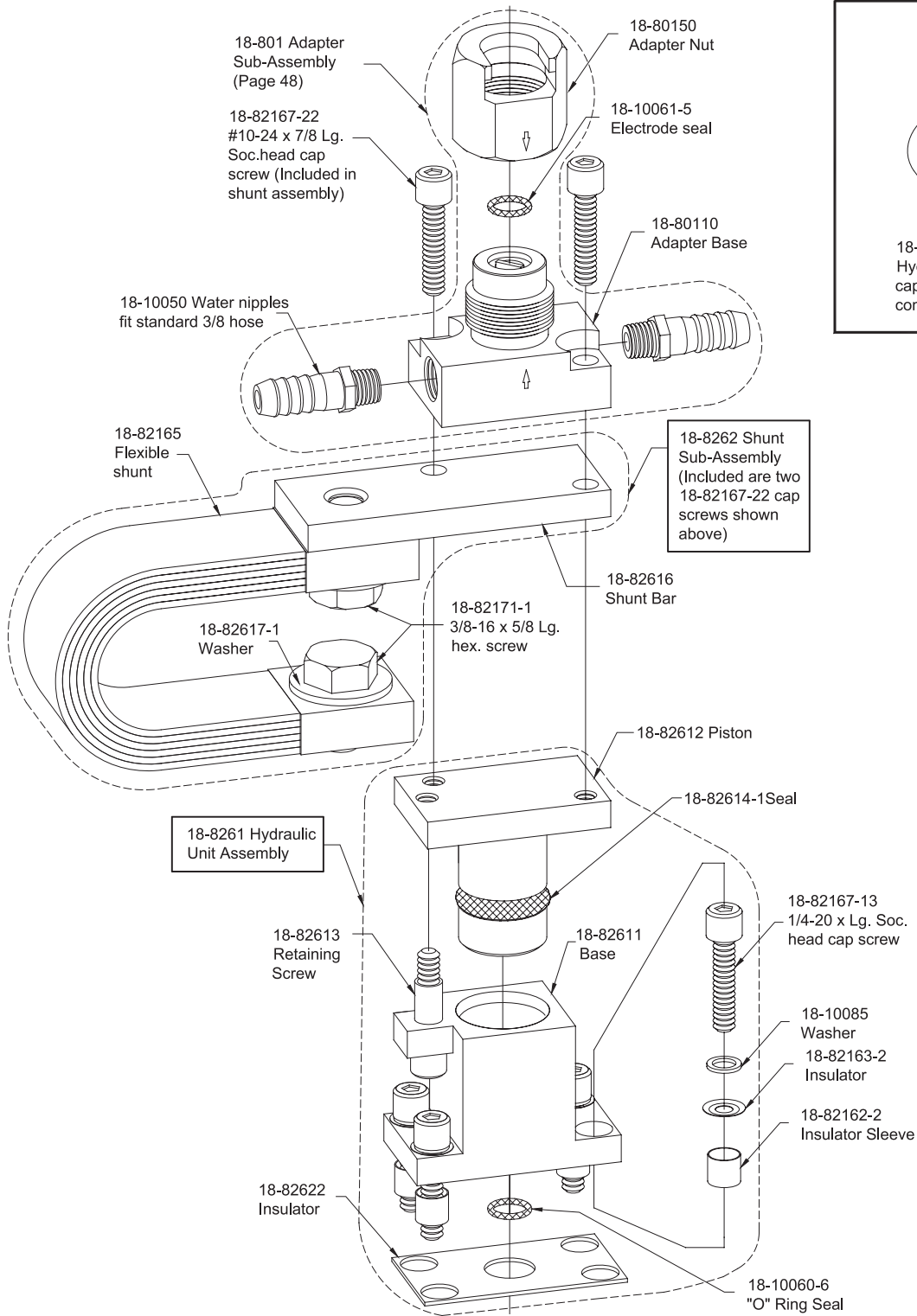
| Complete Unit Part No. | Unit Size. | Electrode Attachment | Included Tapered Adapters | Height A | Mean Height B | Mean Electrode Engagement Height C |
|------------------------|------------------|----------------------|---------------------------|----------|---------------|------------------------------------|
| 18-826 | #1 | NU-TWIST® | -- | 1-1/4 | | 3-13/64 |
| 18-82650 | #1 | 1/2-14 Pipe Thd. | -- | 1-1/2 | | 3-29/64 |
| 18-82651 | #1 with adapters | 5 RW Male cap | 18-7465-07 | 1-59/64 | 1-43/64 | 3-7/8 |
| 18-82652 | | 4 RW | 18-746-07 | 1-51/64 | | 3-3/4 |
| 18-82653 | | 5 RW | 18-747-07 | 1-51/64 | | 3-3/4 |





HYDRAULIC EQUALIZING ADAPTERS AND ASSEMBLIES

18-826 COMPLETE #1 SIZE "NU-TWIST"® ASSEMBLY

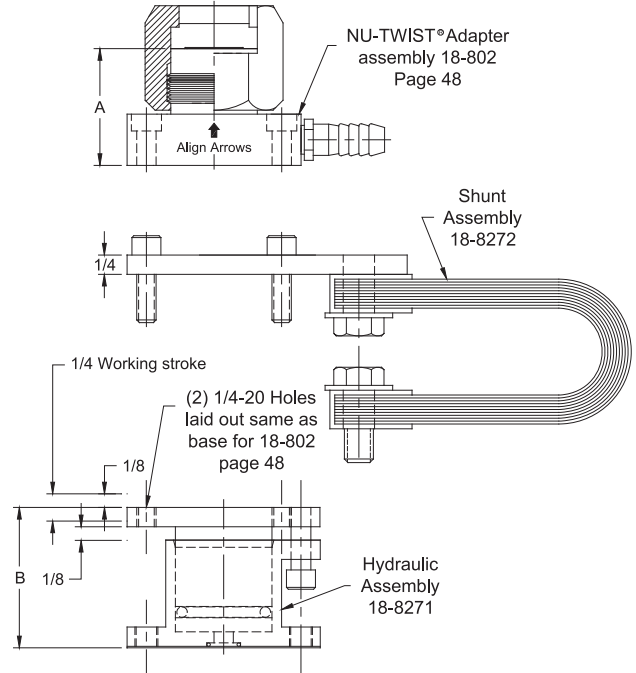
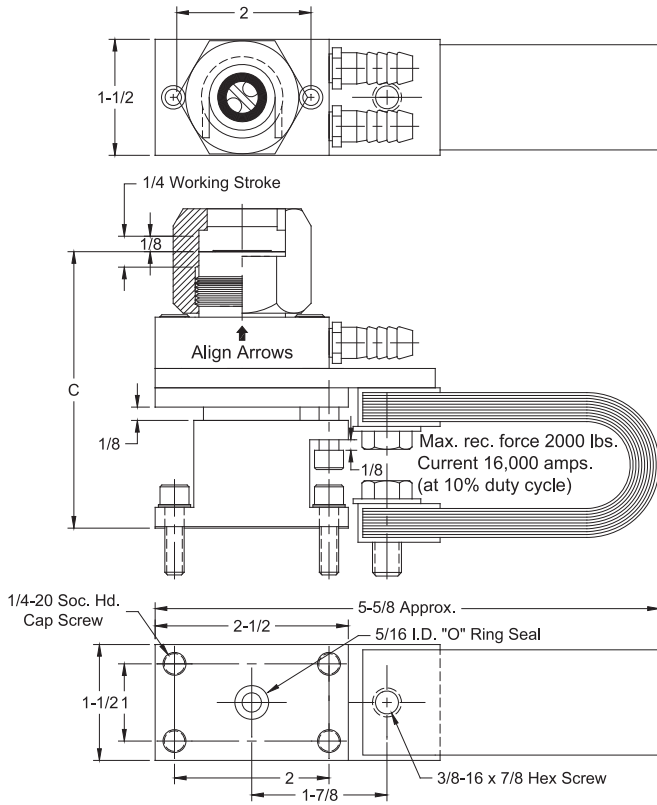




HYDRAULIC EQUALIZING ADAPTERS AND ASSEMBLIES

CMW Hydraulic Equalizing adapter units are used to equalize the weld force when two or more welds are required simultaneously. The equalizing action is developed in a closed hydraulic system - and is accomplished by hydraulically interconnecting two or more units. We recommend using fire resistant hydraulic fluid compatible with BUNA "N" such as HOUGHTO-SAFE #620, 1120 or equivalent. Consult your local industrial lubricant distributor.

18-827 #2 SIZE UNIT WITH "NU-TWIST"® SHOWN

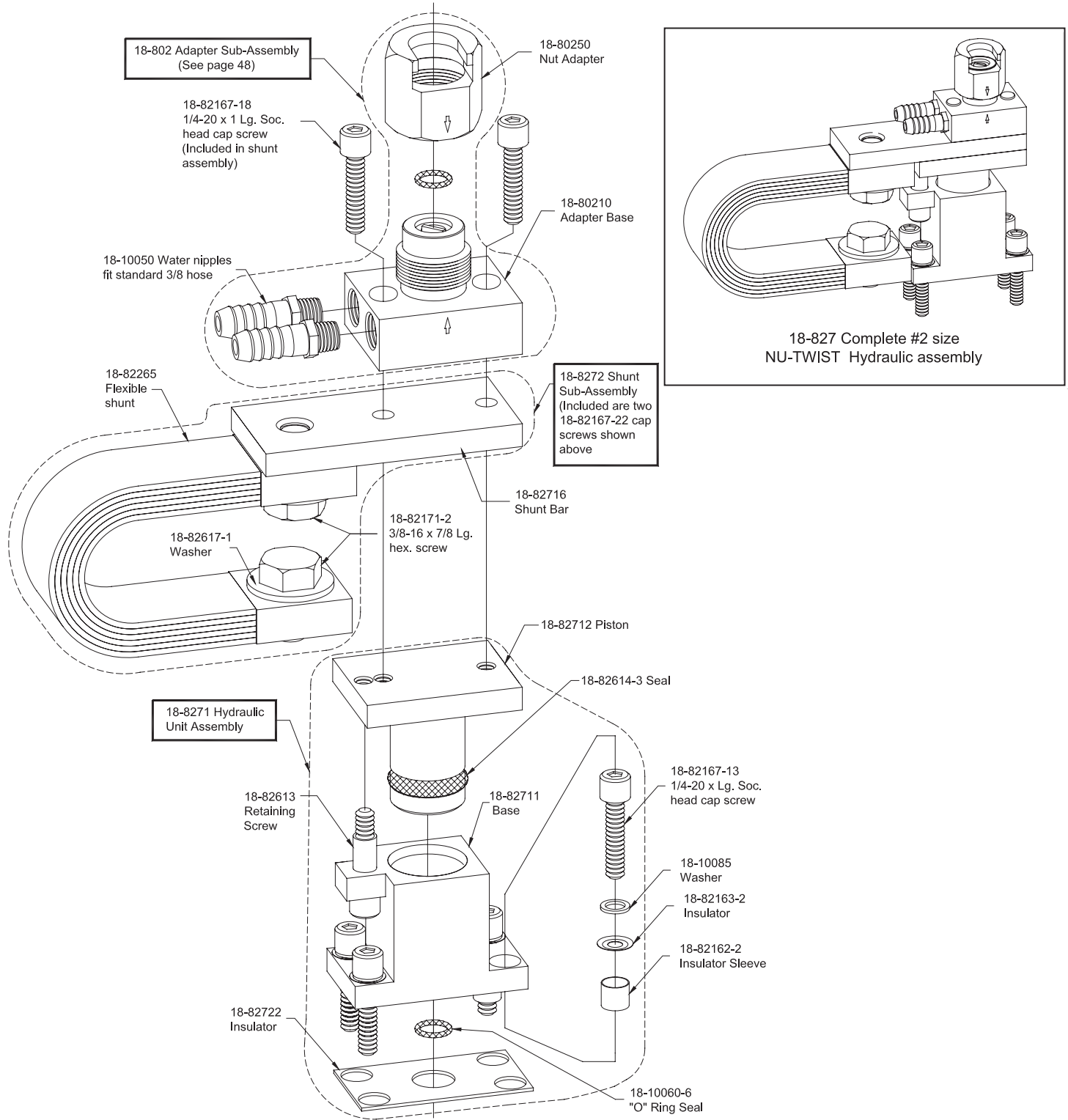


| Complete Unit Part No. | Unit Size. | Electrode Attachment | Height A | Mean Height B | Mean Electrode Base Height C |
|------------------------|------------|----------------------|----------|---------------|------------------------------|
| 18-827 | #2 | NU-TWIST | 1-13/16 | 1-49/64 | 3-53/64 |



HYDRAULIC EQUALIZING ADAPTERS AND ASSEMBLIES

18-827 COMPLETE #2 SIZE "NU-TWIST"® ASSEMBLY

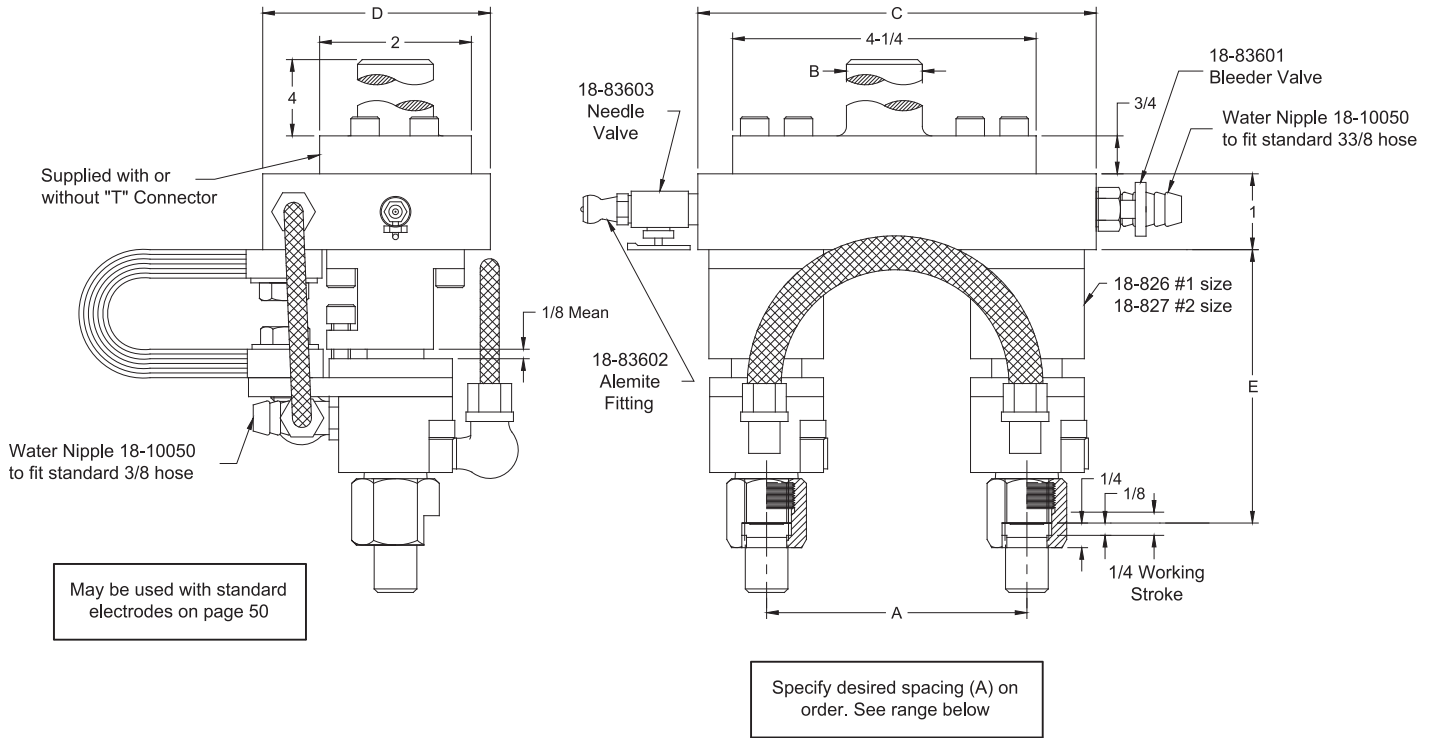




FIXED UNIT HYDRAULIC EQUALIZING ASSEMBLIES

CMW Hydraulic Equalizing adapter units are used to equalize the weld force when two or more welds are required simultaneously. The equalizing action is developed in a closed hydraulic system - and is accomplished by hydraulically interconnecting two or more units. We recommend using fire resistant hydraulic fluid compatible with BUNA "N" such as HOUGHTO-SAFE #620, 1120 or equivalent. Consult your local industrial lubricant distributor.

TWO #1 OR #2 SIZE HYDRAULIC UNITS MOUNTED TO CUSTOMER'S DESIRED ELECTRODE SPACING.*



| Assembly Unit Part No. | Unit Size | "T" Connector Shank Dia. B | Base Plate Length C | Base Plate Width D | Spacing* (Specify on Order) A | Max. Recommended Weld force Per Electrode LBS | Mean Height to Electrode Base E |
|------------------------|-----------|----------------------------|---------------------|--------------------|-------------------------------|---|---------------------------------|
| 18-846 18-84601-01 | #1 | None | 6 | 3 | 1-1/32" to 5" | 1000 (12,000 Amps @ 10% duty cycle) | 3-13/64 |
| 18-84601-02 | | 1-1/4" | | | | | |
| 18-84601-03 | | 1-1/2" | | | | | |
| 18-847 18-84701-01 | #2 | None | 7-1/2 | 3-1/2 | 1-3/4" to 6" | 2000 (16,000 Amps @ 10% duty cycle) | 3-61/64 |
| 18-84701-02 | | 1-1/4" | | | | | |
| 18-84701-03 | | 1-1/2" | | | | | |

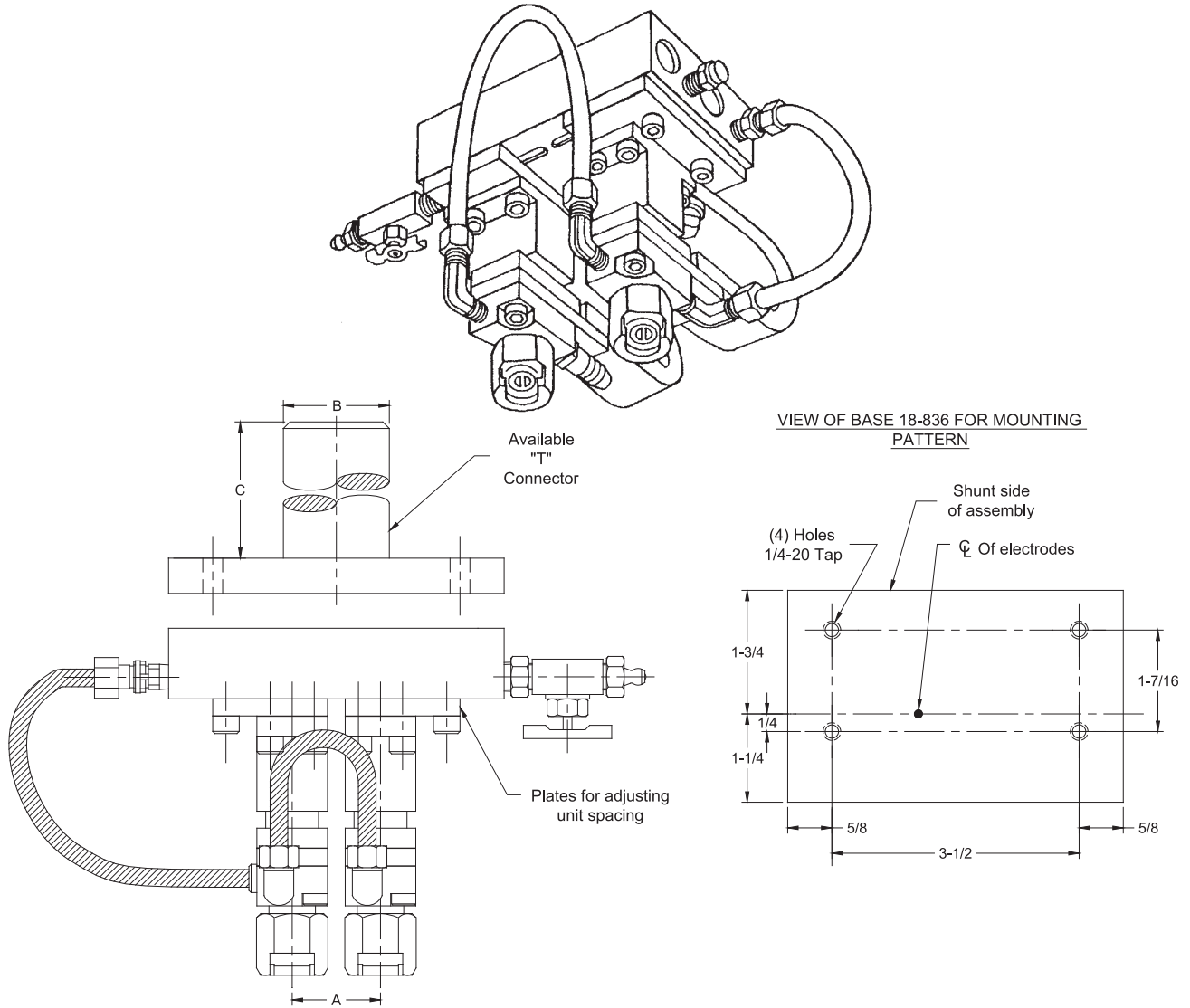
Note:

- Multiple units of 2-8 can also be supplied on custom designed base plates with or without "T" Connectors.
- Units may be modified with adapters for RW tapered caps and electrodes



ADJUSTABLE HYDRAULIC EQUALIZING ASSEMBLY 18-836

Part No. 18-836 (shown below) is a typical assembly using two 18-826 assemblies set up as a complete self-contained unit for making two spot welds at one time. **This unit is so arranged as to allow the center distances to be readily adjusted from 1-3/32" centers to 2-1/4" centers or by rearrangement of the same parts centers may be adjusted from 2-1/4" to 3-1/2"**. This setup also include facilities for filling and bleeding the hydraulic units. "T" Mounting 18-83614 is available to order for assembly 18-836. We recommend using fire resistant hydraulic fluid compatible with BUNA "N" such as HOUGHTO-SAFE #620, 1120 or equivalent. Consult your local industrial lubricant distributor.



| Assembly Part No. | Hydraulic Unit Size | Electrode Attachment *** | Adjustable Spacing Range A | "T" Connector | Max. Recommended Weld force Per Electrode LBS |
|-------------------|---------------------|--------------------------|----------------------------------|---------------|---|
| 18-836 | #1 | #1 NU-TWIST® | 1-1/32 - 2-1/4 2-1/4 - 3-1/2* | NONE | 1000 (12000 AMPS @ 10% Duty Cycle) |

| Available | Dia. B | Length C |
|-------------|--------|----------|
| 18-83614-01 | ** | 4 |
| 18-83614-03 | ** | ** |

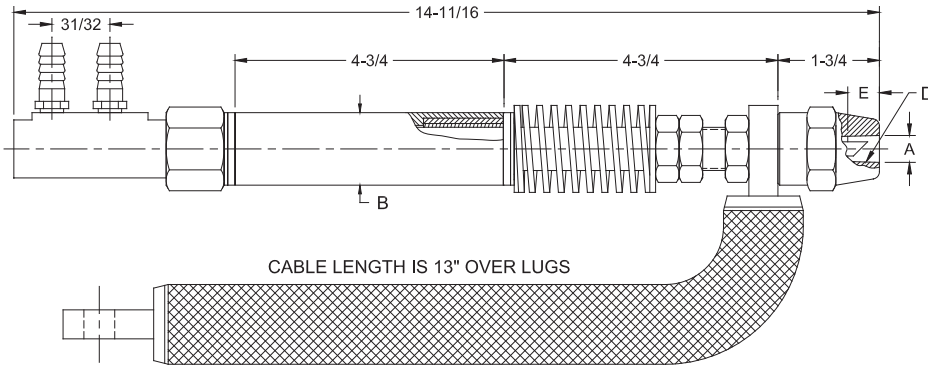
* Partial disassembly, rearrangement of plates, and bleeding of unit will be necessary to switch centerline ranges.

** Customer must specify dimensions desired.

*** Other attachments available on request



1100 SERIES ADJUST-A-PRESSURE WATER COOLED LOW INERTIA ELECTRODE HOLDERS



Like other low-inertia holders the heavy duty Adjust-A-Pressure Holders are used for multiple spot and projection welding, and are excellent for indirect welding when mounted in the Adjust-A-Angle Adapter.

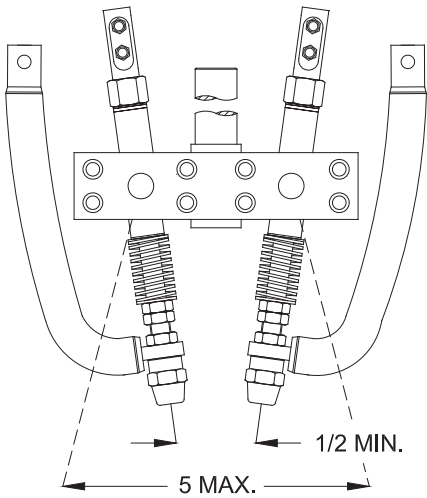
Electrical current is conducted through heavy flexible cables and holder is installed to prevent any damaging effects to the spring mechanism. Light duty springs supplied to order.

| Part No. Holder Assy.* | Major Taper Dia. A | Barrel Dia. B | Taper D | Standard Electrode Taper Engagement E | Pressure Range (Pounds) |
|------------------------|--------------------|---------------|---------|---------------------------------------|-------------------------|
| 18-1101 | .463 | 1-1/4 | 4 RW | 1/2 | to 500 |
| 18-1102 | .625 | | 5 RW | 3/4 | |
| 18-1103 | .463 | 1-1/2 | 4 RW | 1/2 | |
| 18-1104 | .625 | | 5 RW | 3/4 | |

* Standard holder uses 18-110006-1 spring. A heavy duty holder is available with spring 18-110006-2 for pressure to 1000 lbs.

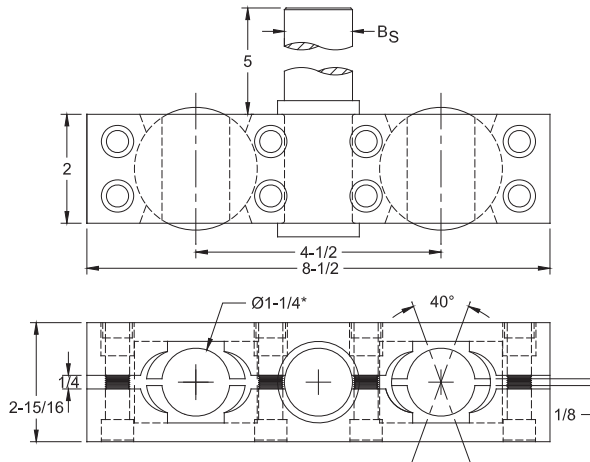
For additional holder information and replacement parts see page 59.

1150 SERIES ADJUST-A-ANGLE ADAPTERS



1100 SERIES HOLDERS ASSEMBLED IN 1150 SERIES ADAPTER

1150 SERIES ADJUST-A-ANGLE ADAPTERS ARE ADAPTABLE FOR USE WITH SPRING TYPE LOW INERTIA HOLDERS 1100 SERIES AS WELL AS STRAIGHT HOLDERS 100, 200, AND 300 SERIES.

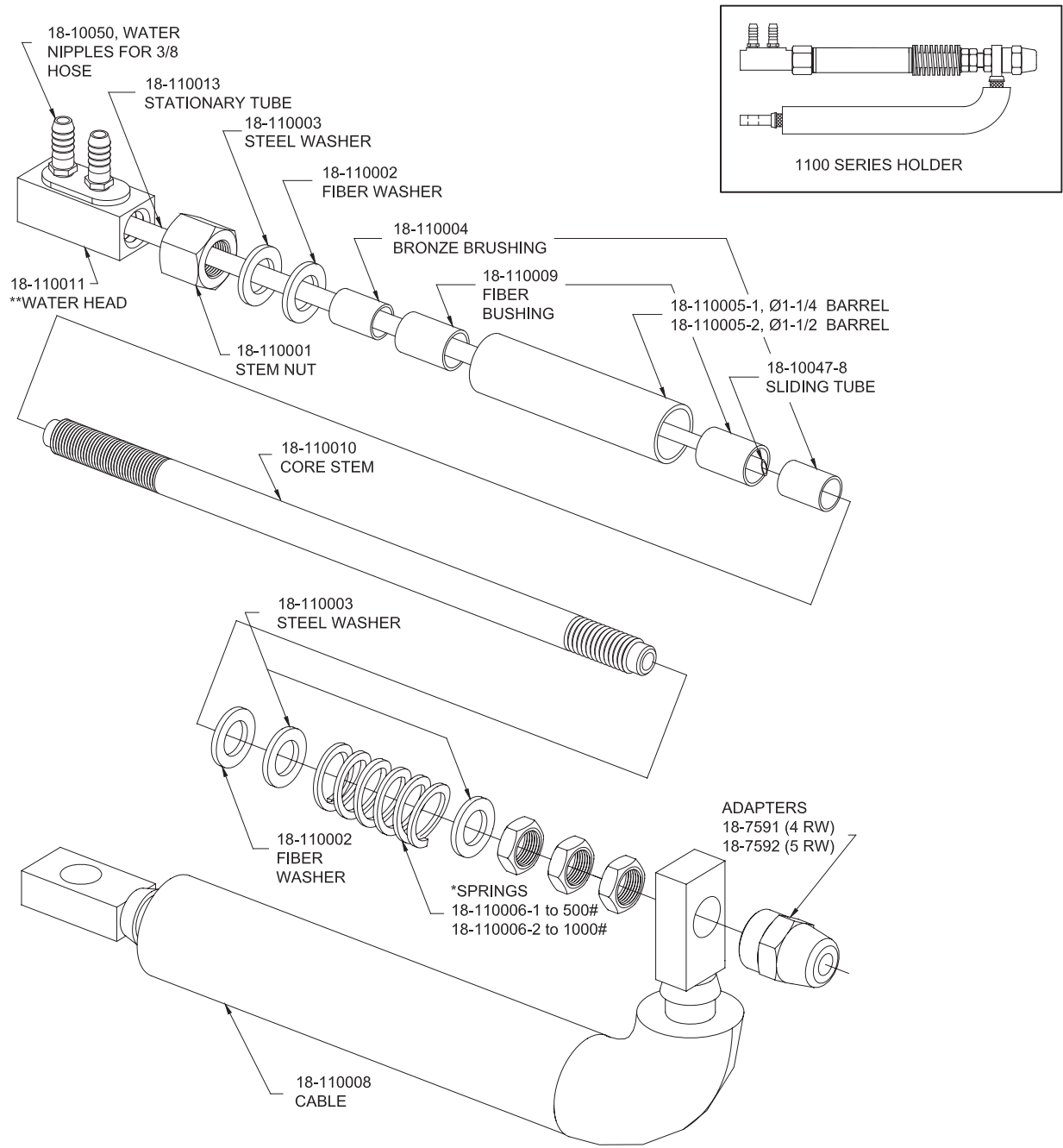


| Adapter Assembly Part No. | Shank Dia. B _S |
|---------------------------|---------------------------|
| 18-1154 | 1 |
| 18-1155 | 1-1/4 |
| 18-1156 | 1-1/2 |

* Adapters for barrel sizes other than 1-1/4 dia. available as special order



1100 SERIES ADJUST-A-PRESSURE WATER COOLED LOW INERTIA ELECTRODE HOLDERS



** INCLUDES 18-110013, 18-10050, 18-10047-8
 * SPRINGS: 500# SPRING IS PAINTED BLUE; 1000# SPRING IS PAINTED YELLOW

| Part No. Holder Assy.* | Barrel | Adapter | Adjust -A- Angle Adapters |
|------------------------|-------------|--------------------|---------------------------------------|
| 18-1101 18-1102 | 18-110005-1 | 18-7591 18-7592 | Select from 1150 Series Chart page 58 |
| 18-1103 18-1104 | 18-110005-2 | 18-7591 18-7592 | Special order |

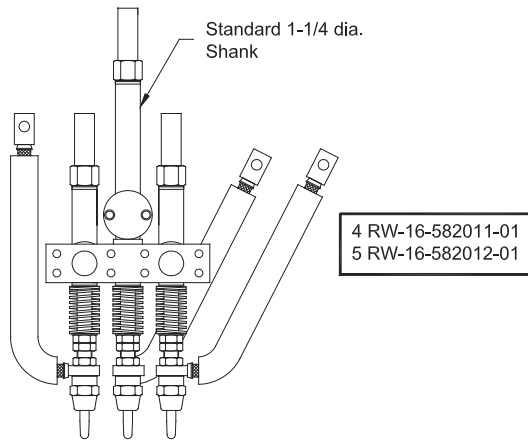
* See page 58 for more information



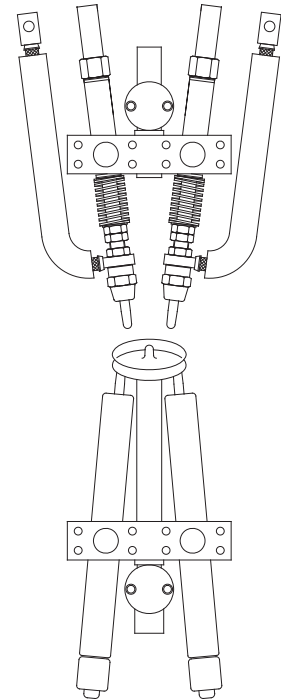
APPLICATION SHEET FOR TYPICAL MULTIPLE SPOT WELDING SETUPS

Typical Set Up For
 3 Spots at a time in Parallel

- 1 CMW Std. 1150 Series Adapter
- 2 CMW Std. 1100 Series Holders
- 1 CMW Special 1100 Series Holder

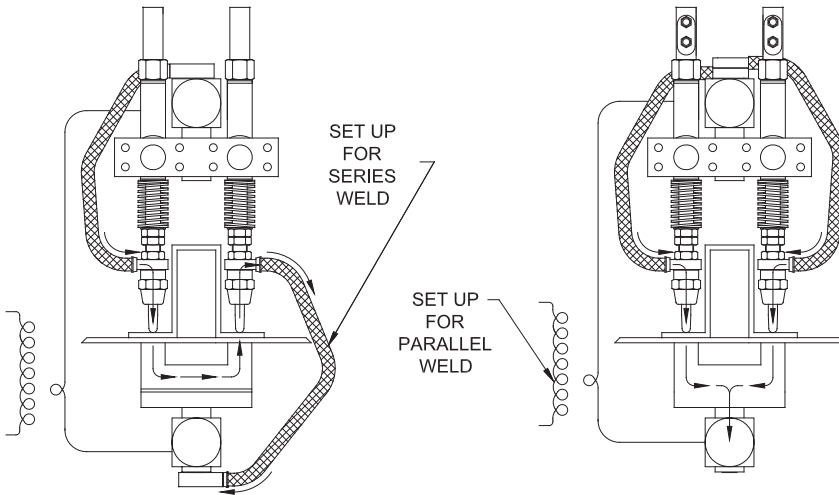


Typical Set Up For
 2 spots simultaneously
 in parallel



Upper
 2-1100 Series Holders
 1-1150 Series Adapter

Lower
 2-100,200 or 300 Series Holders
 1-1150 Series Adapter with special
 center shank



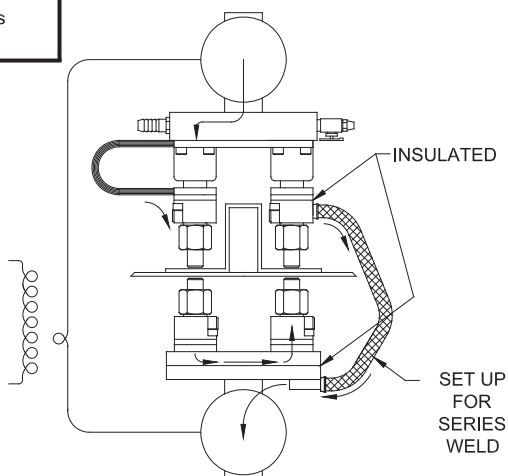
Contact Factory

All above items
 priced and made
 to special order

Illustrations
 only

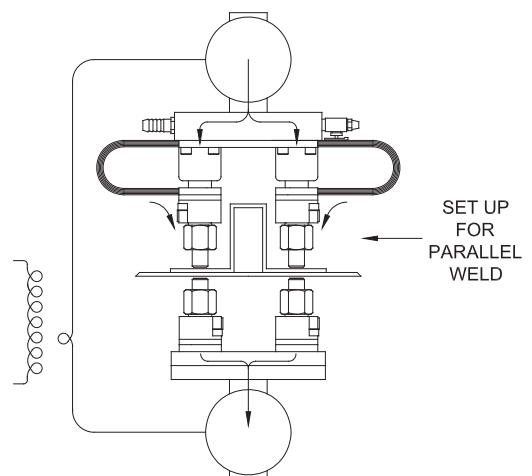
TYPICAL SET UP OF 800 SERIES "NU-TWIST"® UNITS

For dual spot welding using hydraulic "Nu-Twist"® Pressure equalizing subassemblies
 and surface mounted adapters as basic building blocks



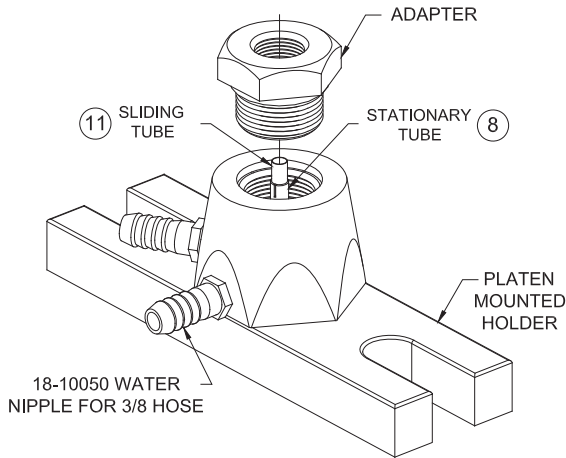
Upper
 two
 18-826
 hydraulic
 unit assemblies
 mounted on
 fixed centers
 (See Pages
 52, 53, 56)

Lower
 two
 18-801
 surface
 mounted
 "Nu-Twist"®
 Adapters
 (See page 48)

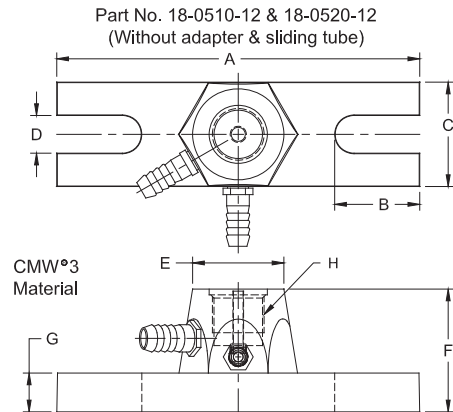
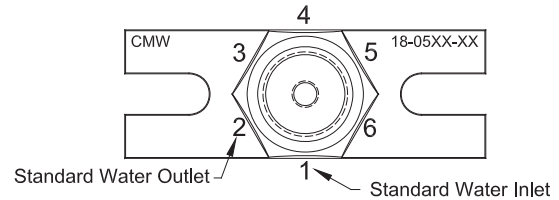




PLATEN MOUNTED ELECTRODE HOLDERS



The CMW Platen Mounted Holder, as shown below, has the inlet water nipple at position #1 and the outlet water nipple at position #2, any other combinations may be special ordered by changing the last two digits of the part number. The first of the last two digits indicates the location of the inlet nipple and the second digit indicates the location of the outlet nipple. Example; part No. 18-0510-56 would place the inlet water nipple at position #5 and the outlet water nipple at position #6.



| Order one of each for your application | | Order as required | | | | Overall Length A | Slot Depth B | Width C | Slot Width D | Top Dia. E | Overall Height F | Base Height G | Thread H |
|--|------------------|-------------------|-------------------|---|-----------------|------------------|--------------|---------|--------------|------------|------------------|---------------|----------|
| Holder Part No. | Adapter Part No. | Attachment Type | Stationary Tube 8 | Sliding Tube 11 | Sliding Length | | | | | | | | |
| 18-0510-12 | 18-785 | 4RW | 18-40041-5 | 18-50041-3 18-50041-2 | 1-3/8 2-1/2 | 4-1/4 | 1 | 1-1/2 | 1/2 | 1-23/64 | 2-1/8 | 1/2 | 1-14 UNF |
| 18-0520-12 | 18-785 | 4RW | 18-40041-5 | 18-50041-3 18-50041-2 | 1-3/8 2-1/2 | 7 | 1-5/8 | 2 | 3/4 | 1-49/64 | 2-3/8 | 3/4 | |
| 18-0510-12 | 18-786 | 5RW | 18-40041-5 | 18-40043-11 18-40043-5 18-40043-9 | 1-3/8 2 4 | 4-1/4 | 1 | 1-1/2 | 1/2 | 1-23/64 | 2-1/8 | 1/2 | |
| 18-0520-12 | 18-786 | 5RW | 18-40041-5 | 18-40043-11 18-40043-5 18-40043-9 | 1-3/8 2 4 | 7 | 1-5/8 | 2 | 3/4 | 1-49/64 | 2-3/8 | 3/4 | |
| 18-0510-12 | 18-7863 | 6RW | 18-40041-5 | 18-40043-14 18-40043-9 | 2-1/8 4 | 4-1/4 | 1 | 1-1/2 | 1/2 | 1-23/64 | 2-1/8 | 1/2 | |
| 18-0520-12 | 18-7863 | 6RW | 18-40041-5 | 18-40043-14 18-40043-9 | 2-1/8 4 | 7 | 1-5/8 | 2 | 3/4 | 1-49/64 | 2-3/8 | 3/4 | |
| 18-0510-12 | 18-787 | 7RW | 18-40041-5 | 18-40043-15 18-40043-9 | 2-3/8 4 | 4-1/4 | 1 | 1-1/2 | 1/2 | 1-23/64 | 2-1/8 | 1/2 | |
| 18-0520-12 | 18-787 | 7RW | 18-40041-5 | 18-40043-15 18-40043-9 | 2-3/8 4 | 7 | 1-5/8 | 2 | 3/4 | 1-49/64 | 2-3/8 | 3/4 | |
| 18-0510-12 | 18-812 | #2 SIZE Nu-Twist® | 18-40041-5 | - | - | 4-1/4 | 1 | 1-1/2 | 1/2 | 1-23/64 | 2-1/8 | 1/2 | |
| | 18-7743** | 5/8-18 THD. | | | | | | | | | | | |
| 18-0520-12 | 18-812 | #2 SIZE Nu-Twist® | 18-40041-5 | - | - | 7 | 1-5/8 | 2 | 3/4 | 1-49/64 | 2-3/8 | 3/4 | |
| | 18-7743** | 5/8-18 THD. | | | | | | | | | | | |

**Adapter for 1" dia. & 1-1/4 dia. Chameleon/Max-Life™ projection welding electrodes and 18-811 #1 size threaded "NU-TWIST"® adapter.

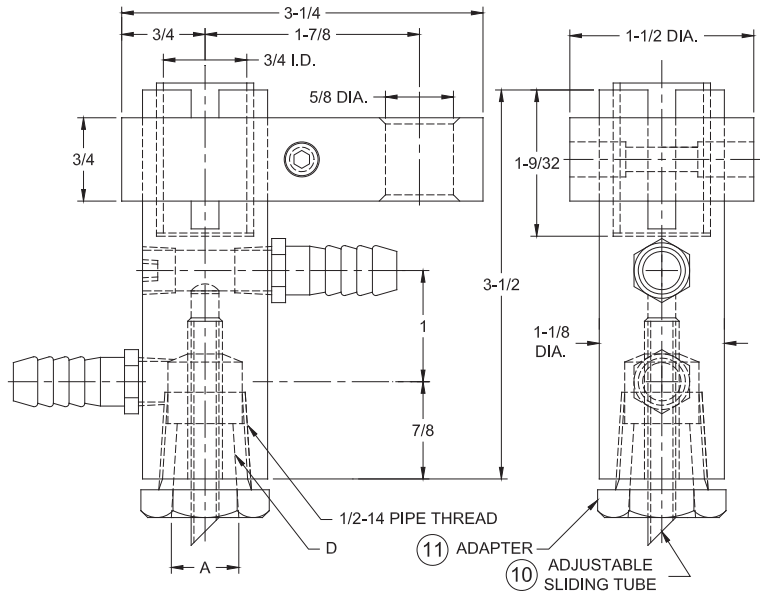
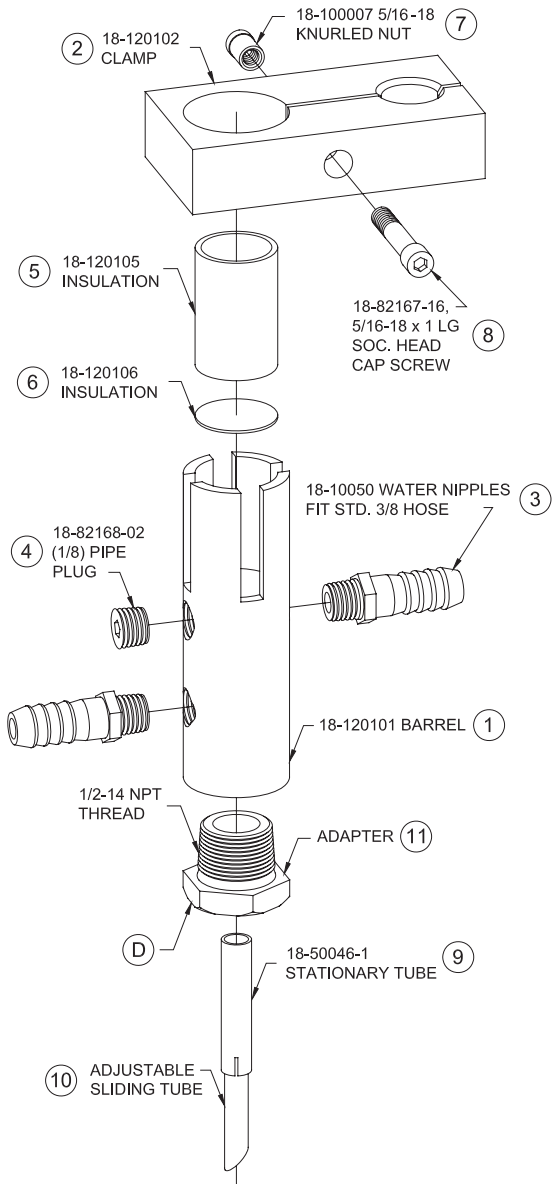


MULTI-SPOT WELDER ELECTRODE ADAPTERS

CMW electrode adapters for multispot air or hydraulic pistons are supplied with 3/4 diameter straight piston rod ends. These adapters are equipped with means for attaching the welding cable from the transformer and the water hoses to the inlet and outlet water connections.

These adapters are available in four basic assemblies as shown in the table.

MULTI-SPOT WELDER ELECTRODE ADAPTER REPLACEMENT PARTS



| Part No. Assembly | Major Tape Dia. A | Attachment Type D | Adjustable Sliding tube 10 | Adapter Part No. 11* |
|-------------------|-------------------|-------------------|----------------------------|----------------------|
| 18-1201 | -- | 1/2-14 NPT | 18-10046-23 | -- |
| 18-1202 | .414 | 5 RW Male cap | -- | 18-7465-07 |
| 18-1203 | .463 | 4 RW | 18-10046-23 | 18-746-07 |
| 18-1204 | .625 | 5 RW | 18-10046-23 | 18-747-07 |

All assemblies include items 1, 2, 3, 4, 5, 6, 7, 8, and 9.

* See page 31 for adapter details.