

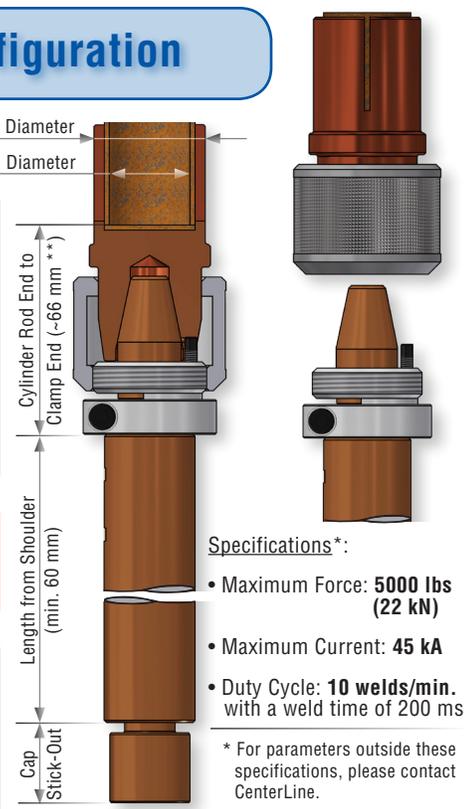
# Quick Change Electrode Configuration

**1 Quick Change Barrel**

Barrel Clamp Diameter:	1 3/8"	OR	1 3/8"
Cylinder Rod Diameter:	3/4"		1"
Part Number:	606-17982		408-44768

**2 Quick Change Clamp**

Part Number: 408-44601



- Specifications\*:**
- Maximum Force: **5000 lbs. (22 kN)**
  - Maximum Current: **45 kA**
  - Duty Cycle: **10 welds/min.** with a weld time of 200 ms
- \* For parameters outside these specifications, please contact CenterLine.  
\*\* For reference only.

**3 Quick Change Adapter**

**Adapter Type**  
 Straight Adapter = SA (with tapered end)  
 Water Proof Thread Adapter = WPTA (with threaded end)

**Quick Change**

**Port Thread Type**  
 1/8" BSPT = BT  
 1/8" BSPP = BP  
 1/8" NPT = NT

**Adapter Diameter**  
 for SA: N = Ø 1 1/8"  
 E = Ø 30 mm  
 for WPTA: N = Ø 1 1/4"  
 E = Ø 32 mm

**Length from Shoulder (measured in mm. Minimum 60 mm)**  
 Example: If this length is 60 mm, the number in this field will be 060.

**Taper Code**  
 1316 ISO 1/10 4E RWMA SHANK 4C RWMA CAP  
 1620 5E RWMA SHANK 5C RWMA CAP  
 2025 6E RWMA SHANK 6C RWMA CAP

**Thread Code**  
 87S = for 7/8"-14 thread  
 10S = for 1"-12 thread

**Code Example:** WPTA QC BP E 10S 060

**Note:** For recommended water fittings when opting for BT or BP, see **6** on page 5.

**4 Water Tube**

**Water Tube = CLT | 1900 | 12**

**Water Tube Type**  
 CLT

**Tube Length Increments**  
 12

**Tube Length Increments (total length of tube, measured in 1/8" increments.)**  
 To determine the number of 1/8" increments (for the length of the water tube), apply the following formula: "Length from Shoulder" x 0.315 - 7 (see the Quick Change Adapter part numbering system above for the "Length from Shoulder"). Then, round the result to the closest whole number and write that number in the current field.  
 Example (considering "Length from Shoulder" = 60 mm, as above): 60 x 0.315 - 7 = 18.9 - 7 = 11.9. Rounded up, the number in this field will be 12, as the length of tube would be 12 increments of 1/8".

**5 Backup Electrode**

For various configurations see the pages that follow. These configurations can include: **Backup Electrode** only, **Backup Electrode and Hex Adapter**, or **Hex Electrode** only.

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**Straight Adapter**  
See *Quick Change Adapter* on page 1.

5.1

**Backup Electrode**  
See *Backup Electrode* below.

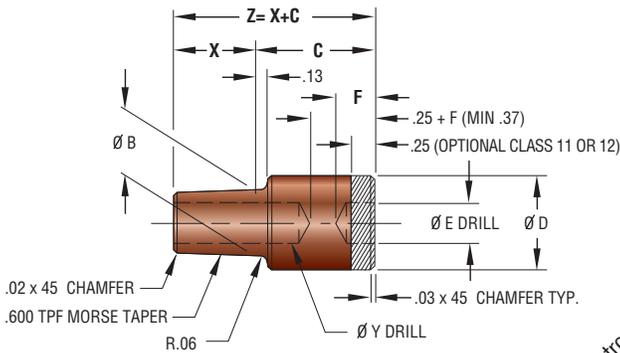
Water Proof Thread Adapter

Water Proof Thread Adapter

Hex Adapter

Hex Electrode

Backup Electrode



**Backup Electrode**

RWMA Taper	B	X	Y
3E	.375	.500	9/32
4E	.463	.500	9/32
5E	.625	.750	3/8
6E	.750	.875	7/16
7E	.875	1.125	1/2
4C	.375	.285	9/32
5C	.415	.390	5/16
6C	.501	.500	3/8
7C	.613	.500	1/2

Note: All dimensions are in inches.

**BE | 2 | 5E | 08 | 10 | 23 | 063 | 11**

**Electrode Identifier**  
Backup Electrode = BE

**RWMA Alloy Class**  
Class 2 RWMA Material = 2  
Class 3 RWMA Material = 3  
Zirconium = Z

**(ØB) RWMA Taper**  
(Use RWMA Taper from chart above)

**(C) Stickout Length**  
(measured in number of 1/8" increments, 3 increments minimum)  
Stickout Length = 0.375" (or 3 increments x 1/8") = 03  
Stickout Length = 1" (or 8 increments x 1/8") = 08

**(ØD) Weld Face Diameter**  
(measured in number of 1/8" increments.  
Minimum Weld Face Diameter is RWMA Taper diameter)  
Weld Face Diameter = 0.375" (or 3 increments x 1/8") = 03  
Weld Face Diameter = 1.25" (or 10 increments x 1/8") = 10

**Optional Weld Face**  
11 = Class 11 RWMA Alloy Weld Face  
12 = Class 12 RWMA Alloy Weld Face  
Leave blank for no *Optional Weld Face*.

**Clearance Hole Depth in Weld Face (F)**  
(2 decimals, measured in inches. 3 characters field)  
Example: If the Clearance Hole Depth is 0.63", the number in this field will be 063.  
Use 000 for no clearance hole.

**Clearance Hole Diameter in Weld Face (ØE)**  
(2 decimals, measured in inches. 2 characters field)  
Example: If the Clearance Hole Diameter is 0.23", the number in this field will be 23.  
Use 00 for no clearance hole.

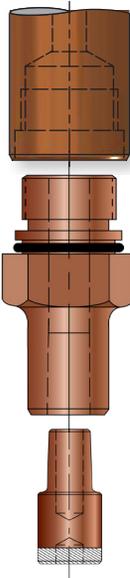
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5.2



Straight Adapter

Backup Electrode



Water Proof Thread Adapter

Hex Adapter

Backup Electrode



Water Proof Thread Adapter

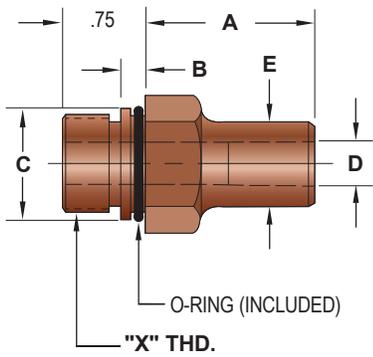
Hex Electrode

See Quick Change Adapter on page 1.

See Hex Adapter below.

See Backup Electrode on page 2.

Hex Adapter



TAPER NO.	D	Minimum A		
		7/8-14	1-12	1-1/4-12
#4RW	0.463	0.25	0.25	0.25
#5RW	0.625	0.25	0.25	0.25
#6RW	0.750	1.13	0.25	0.25
#7RW	0.875	1.38	1.25	0.25

THREAD	"X"	B	C	HEX	O-RING	E
7/8-14	87	0.25	1	1-1/4	SLORD-117	1.22
1-12	10	0.25	1.13	1-1/4	SLORD-119	1.22
1-1/4-12	12	0.25	1.38	1-1/2	SLORD-123	1.47

Note: All dimensions are in inches.

**CL | HA | 87 | 5 | E | 10**

- CenterLine Specials
- Group: Hex Adapter = HA
- (X) Thread: For 7/8"-14 thread = 87, For 1"-12 thread = 10
- Taper (Y): #4RW = 4, #5RW = 5, #6RW = 6, #7RW = 7
- Adapter Type (A): E = Electrode Adapter, C = Cap Adapter
- Length (measured in number of 1/8" increments): Example: If Length = 1.25" (or 10 increments x 1/8") = 10

3

Straight Adapter

Water Proof Thread Adapter

Water Proof Thread Adapter

See Quick Change Adapter on page 1.

5.3

Backup Electrode

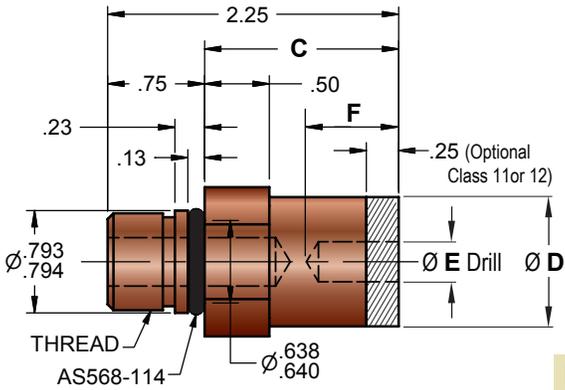
Hex Adapter

Hex Electrode

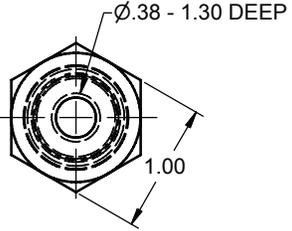
See Hex Electrode below.

Backup Electrode

Hex Electrode



HE | 3 | 87S | 12 | 08 | 31 | 062 | 11



Hex Electrode

RWMA Alloy Class

Class 2 RWMA Material = 2  
Class 3 RWMA Material = 3

Thread

For 7/8"-14 thread = 87S  
For 1"-12 thread = 10S

(C) Stickout Length

(measured in number of 1/8" increments, 4 increments minimum)

Stickout Length = 0.5" (or 4 increments x 1/8") = 04

Stickout Length = 1.5" (or 12 increments x 1/8") = 12

(ØD) Weld Face Diameter

(measured in number of 1/8" increments)

Weld Face Diameter = 0.375" (or 3 increments x 1/8") = 03

Weld Face Diameter = 1" (or 8 increments x 1/8") = 08

Optional Weld Face

11 = Class 11 RWMA Alloy Weld Face  
Leave blank for no *Optional Weld Face*.

Clearance Hole Depth in Weld Face (F)

(2 decimals, measured in inches. 3 characters field)

Example: If the Clearance Hole Depth is 0.62", the number in this field will be 062.

Use 000 for no clearance hole.

Clearance Hole Diameter in Weld Face (ØE)

(2 decimals, measured in inches. 2 characters field)

Example: If the Clearance Hole Diameter is 0.31", the number in this field will be 31.

Use 00 for no clearance hole.

6

A

**Set of two (2) Compression Fittings, 90°**  
Part Number: 608-69137



**Coupling Plug, with female thread**  
Part Number: 100-51118



**Coupling Socket, with male thread**  
Part Number: 100-51119



**Coupling Socket, with female thread**  
Part Number: 100-51120

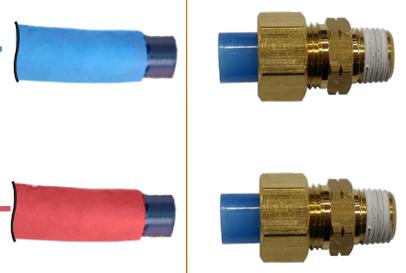


**Coupling Plug, with male thread**  
Part Number: 100-51117



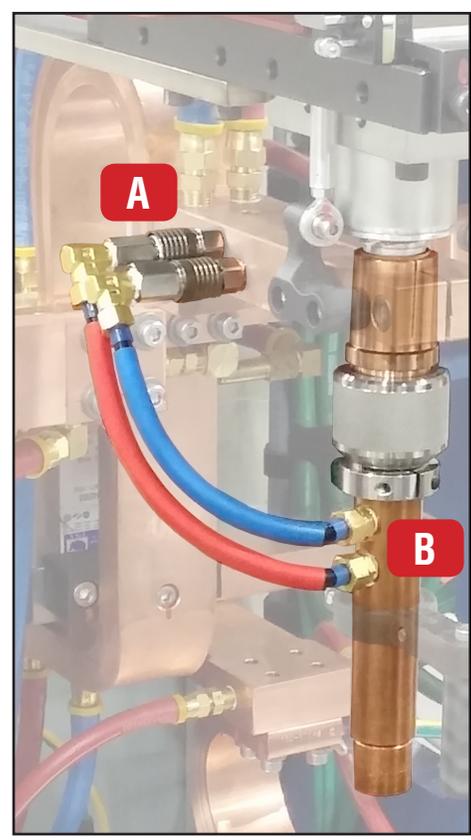
B

**Set of two (2) Compression Fittings, straight**  
Part Number: 608-69136



CenterLine recommends using fire-resistant (anti-spatter) tubing, sized 8mm x 5mm.

(Example: SMC FR Tube - TRBU0805 8x5)



Note: For all part numbers on this page, the threads are R 1/8" (1/8" BSPT).