



GRUPO SYPEISA

REPRESENTACIONES









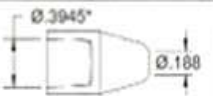


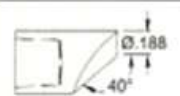
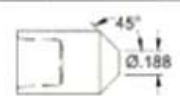
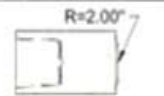



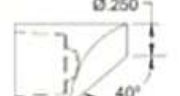

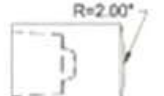
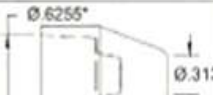




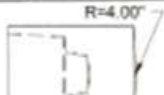
**Visitanos en :
www.sypeisa.com.mx**

These economical, quick change caps are made of long-lasting, highly-efficient **DSI**®28, **DSI**®3, and **DSI**®328 copper alloys, precision manufactured to exacting tolerances in a wide range of standard configurations or to your special requirements for use on **DSI** shanks.

DSI FEMALE CAP ELECTRODES

- See pages 12 for Shanks







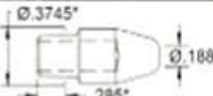



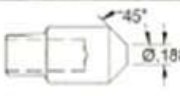
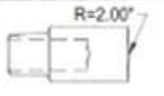





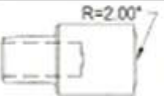


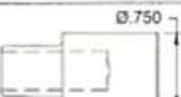


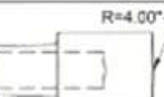
ALL DIMENSIONS MARKED WITH AN (*) ARE COMMON TO EACH CAP IN A HORIZONTAL LINE.

						
	POINTED (A)	DOME (B)	FLAT (C)	OFFSET (D)	TRUNCATED (E)	RADIUS (F)
Cap Taper RW #4 Diameter .500* Length .840* DSI ®28 DSI ®3 DSI ®328	 $\varnothing .3945^*$ $\varnothing .188$	 $\varnothing .188$	 $\varnothing .500$	 $\varnothing .188$ 40°	 45° $\varnothing .188$	 $R=2.00^*$
Cap Taper RW #5 Diameter .625* Length .880* DSI ®28 DSI ®3 DSI ®328	 $\varnothing .4951^*$ $\varnothing .250$	 $\varnothing .188$	 $\varnothing .625$	 $\varnothing .250$ 40°	 45° $\varnothing .250$	 $R=2.00^*$
Cap Taper RW #6 Diameter .750* Length 1.000* DSI ®28 DSI ®3 DSI ®328	 $\varnothing .6255^*$ $\varnothing .313$	 $\varnothing .250$	 $\varnothing .750$	 $\varnothing .313$ 45°	 45° $\varnothing .313$	 $R=4.00^*$

DSI MALE CAP ELECTRODES

- See pages 13 for Shanks

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

						
	POINTED (A)	DOME (B)	FLAT (C)	OFFSET (D)	TRUNCATED (E)	RADIUS (F)
Cap Taper RW #4 Diameter .500* Length 1.125* DSI ®28 DSI ®3 DSI ®328	 $\varnothing .3745^*$ $\varnothing .188$ $.285^*$	 $\varnothing .188$	 $\varnothing .500$	 $\varnothing .188$ 40°	 45° $\varnothing .188$	 $R=2.00^*$
Cap Taper RW #5 Diameter .625* Length 1.250* DSI ®28 DSI ®3 DSI ®328	 $\varnothing .4145^*$ $\varnothing .250$ $.390^*$	 $\varnothing .188$	 $\varnothing .625$	 $\varnothing .250$ 40°	 45° $\varnothing .250$	 $R=2.00^*$
Cap Taper RW #6 Diameter .750* Length 1.625* DSI ®28 DSI ®3 DSI ®328	 $\varnothing .5005^*$ $\varnothing .313$ $.500^*$	 $\varnothing .250$	 $\varnothing .750$	 $\varnothing .313$ 45°	 45° $\varnothing .313$	 $R=4.00^*$

The **DSI GCAP®** electrode is the answer to welding galvanized steels. The GCAP's® revolutionary design, and precision manufacturing from **DSI** Engineering provides for no sticking from the very first weld. GCAP® electrode nuggets meet or exceed industry standards for high quality welds from the first weld through the life of the cap. This cap design made from R.W.M.A. class 2 material eliminates brass build-up by literally rolling the brass away. You will use







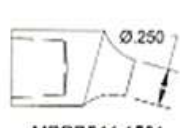

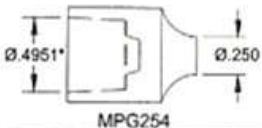
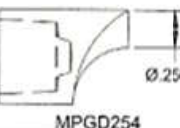
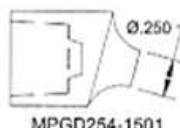

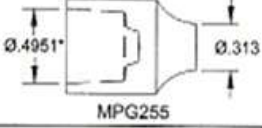

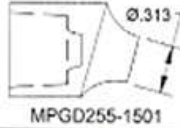





less electric power (up to 25% less) and still achieve superior welds due to GCAP® design. Productivity will increase with up to 10 times more welds without dressing.

For best use of **DSI GCAPs®**, a stepper program is recommended. Consult **DSI** application engineering.
 U.S. Patent 49,954,687; 5,015,816; 5,126,528.
 Other patents pending.

- See pages 12 for Shanks
 - See page 71 for suggested weld schedules

DSI FEMALE GCAP® ELECTRODES





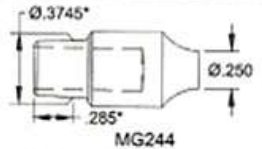
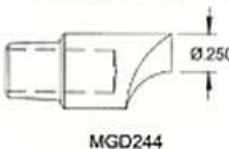
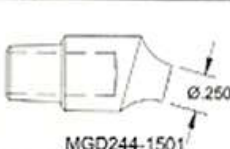
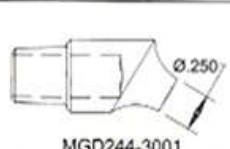
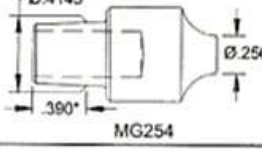
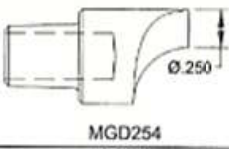
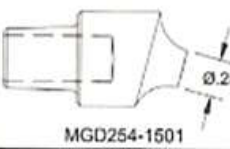
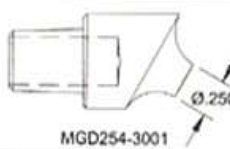
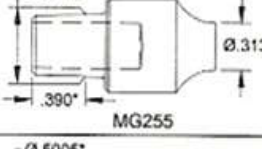
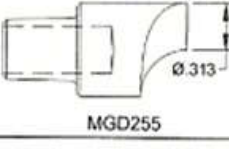
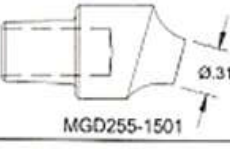
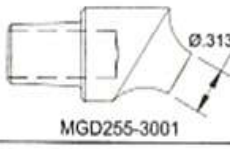
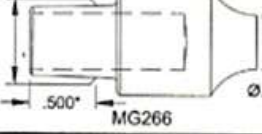
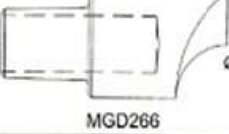
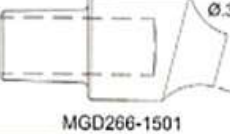

ALL DIMENSIONS MARKED WITH AN (*) ARE COMMON TO EACH CAP IN A HORIZONTAL LINE.

				
	STRAIGHT	OFFSET	OFFSET 15°	OFFSET 30°
Cap Taper RW #4 Diameter .500* Length .840* DSI®3	 MPG244	 MPGD244	 MPGD244-1501	 MPGD244-3001
Cap Taper RW #5 Diameter .625* Length .880* DSI®3	 MPG254	 MPGD254	 MPGD254-1501	 MPGD254-3001
Cap Taper RW #5 Diameter .625* Length .880* DSI®3	 MPG255	 MPGD255	 MPGD255-1501	 MPGD255-3001
Cap Taper RW #6 Diameter .750* Length 1.000* DSI®3	 MPG266	 MPGD266	 MPGD266-1501	 MPGD266-3001

- See pages 13 for Shanks
 - See page 71 for suggested weld schedules

DSI MALE GCAP® ELECTRODES

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

				
	STRAIGHT	OFFSET	OFFSET 15°	OFFSET 30°
Cap Taper RW #4 Diameter .500* Length 1.125* DSI®3	 MG244	 MGD244	 MGD244-1501	 MGD244-3001
Cap Taper RW #5 Diameter .625* Length 1.250* DSI®3	 MG254	 MGD254	 MGD254-1501	 MGD254-3001
Cap Taper RW #5 Diameter .625* Length 1.250* DSI®3	 MG255	 MGD255	 MGD255-1501	 MGD255-3001
Cap Taper RW #6 Diameter .750* Length 1.625* DSI®3	 MG266	 MGD266	 MGD266-1501	 MGD266-3001

These economical, quick change caps are made of long lasting, highly efficient **DSI[®]28**, **DSI[®]3**, **DSI[®]328** copper alloy, precision manufactured to exacting tolerances in a wide range of standard configurations or to your special requirements.

DSI FEMALE ASIAN CAP ELECTRODES

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



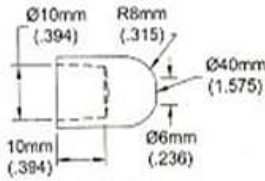
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ASIAN TYPE (R)

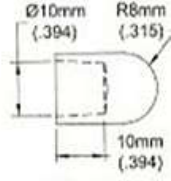
ASIAN TYPE (F)

ASIAN TYPE (E)

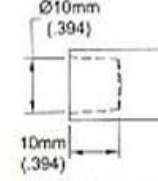
Taper 1:9.6
Dia. 13mm (.512)*
Length 20mm (.787)*



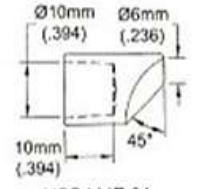
MPB141Z-01
MPB241-01
MPB241Z-04



MPB141Z-02
MPB241-02
MPB241Z-07



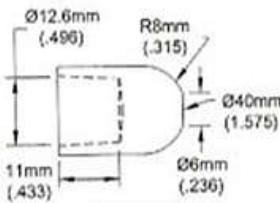
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MPC241-01
MPC241Z-02



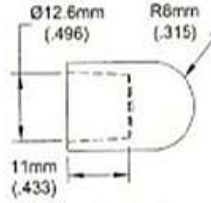
MPD141Z-01
MPD241-02
MPD241Z-02

DSI[®]28
DSI[®]3
DSI[®]328

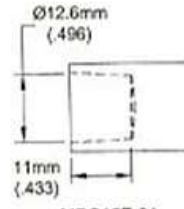
Taper 1:9.6
Dia. 16mm (.625)*
Length 23mm (.906)*



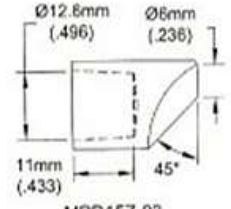
MPB15Z-11
MPB25-14
MPB25Z-19



MPB15Z-12
MPB25-18
MPB25Z-20



MPC15Z-01
MPC25-02
MPC25Z-05







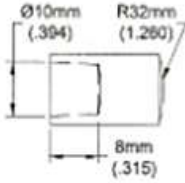
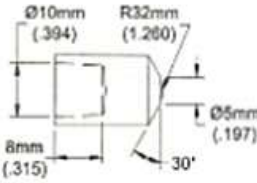
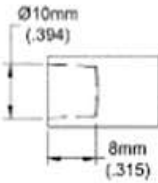
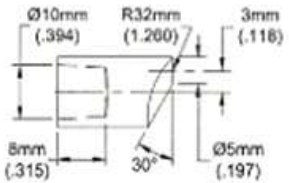
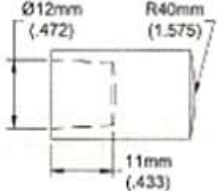
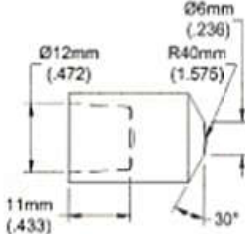
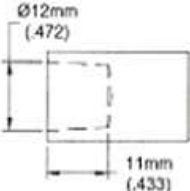
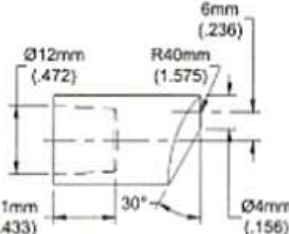
MPD15Z-03
MPD25-05
MPD25Z-04

DSI[®]28
DSI[®]3
DSI[®]328

These economical, quick change caps are made of long lasting, highly efficient **DSI[®]328** copper alloy, precision manufactured to exacting tolerances in a wide range of standard configurations or to your special requirements.




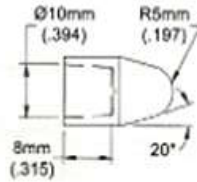
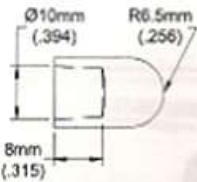
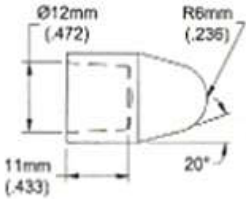
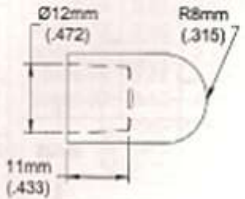
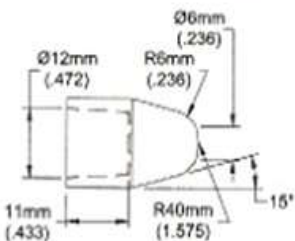
DSI FEMALE METRIC-ISO 5821 CAP ELECTRODES

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

	 METRIC TYPE (A)	 METRIC TYPE (B)	 METRIC TYPE (C)	 METRIC TYPE (D)
<p>Taper 1:10 Dia. 13mm (.512)* Length 18mm (.709)*</p> <p>DSI[®]328</p>	 <p>Ø10mm (.394) R32mm (1.260) 8mm (.315)</p> <p>MPF241Z-01</p>	 <p>Ø10mm (.394) R32mm (1.260) 8mm (.315) 30° Ø5mm (.197)</p> <p>MPE241Z-01</p>	 <p>Ø10mm (.394) 8mm (.315)</p> <p>MPC241Z-01</p>	 <p>Ø10mm (.394) R32mm (1.260) 3mm (.118) 8mm (.315) 30° Ø5mm (.197)</p> <p>MPD241Z-01</p>
<p>Taper 1:10 Dia. 16mm (.625)* Length 20mm (.787)*</p> <p>DSI[®]328</p>	 <p>Ø12mm (.472) R40mm (1.575) 11mm (.433)</p> <p>MPF25Z-01</p>	 <p>Ø12mm (.472) R40mm (1.575) 11mm (.433) 30° Ø6mm (.236)</p> <p>MPE25Z-02</p>	 <p>Ø12mm (.472) 11mm (.433)</p> <p>MPC25Z-02</p>	 <p>Ø12mm (.472) R40mm (1.575) 6mm (.236) 11mm (.433) 30° Ø4mm (.156)</p> <p>MPD25Z-02</p>

DSI FEMALE METRIC-ISO 5821 CAP ELECTRODES

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

	 METRIC TYPE (E)	 METRIC TYPE (F)	 METRIC TYPE (G)
<p>Taper 1:10 Dia. 13mm (.512)* Length 18mm (.709)*</p> <p>DSI[®]328</p>	 <p>Ø10mm (.394) R5mm (.197) 8mm (.315) 20°</p> <p>MPA241Z-01</p>	 <p>Ø10mm (.394) R6.5mm (.256) 8mm (.315)</p> <p>MPB241Z-01</p>	<p>No Standard Available</p>
<p>Taper 1:10 Dia. 16mm (.625)* Length 20mm (.787)*</p> <p>DSI[®]328</p>	 <p>Ø12mm (.472) R6mm (.236) 11mm (.433) 20°</p> <p>MPA25Z-03</p>	 <p>Ø12mm (.472) R8mm (.315) 11mm (.433)</p> <p>MPB25Z-03</p>	 <p>Ø12mm (.472) R6mm (.236) 6mm (.236) 11mm (.433) R40mm (1.575) 15°</p> <p>MPA25Z-09</p>

DSI shanks are precision manufactured from **DSI** #3 class 2 material to provide a high quality mount for cap type electrodes. They are designed for high strength and electrical conductivity.

*These shanks are shown with a blind water hole for cap replacement without shutting off water. Shanks with through water holes are available, by adding "TH" to the basic part number. Example: MP30212TH.

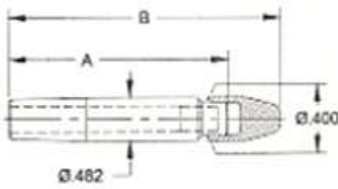
- See pages 8 & 9 for **DSI** standard nose and GCAP® electrode caps

SHANKS FOR FEMALE CAP ELECTRODES



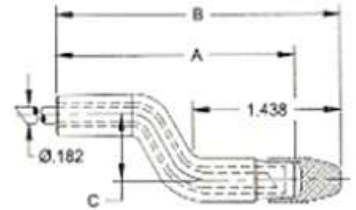
SHANKS FOR FEMALE CAPS WITH #4 RW TAPERS

Part No.	A	B
MP3012	1.25	1.75
MP3013	1.50	2.00
MP3014	1.75	2.25
MP3015	2.00	2.50
MP3016	2.25	2.75
MP3017	2.50	3.00
MP3018	2.75	3.25
MP3019	3.00	3.50
MP30112	3.25	3.75
MP30114	3.50	4.00
MP30116	3.75	4.25
MP30118	4.00	4.50



BENT OFFSET SHANKS FOR FEMALE CAPS WITH #4 RW TAPERS

Part No.	A	B	C
MP3019-08	2.62	3.28	0.50
MP3019-12	2.56	3.22	0.75
MP30112-12	2.81	3.47	0.75
MP30112-16	2.37	3.03	1.00
MP30116-16	2.87	3.53	1.00
MP30116-20	2.60	3.28	1.25

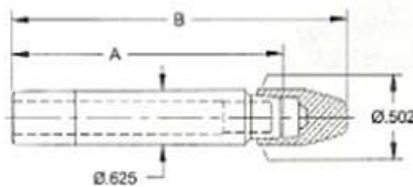


Bent Dimensions for Reference Only



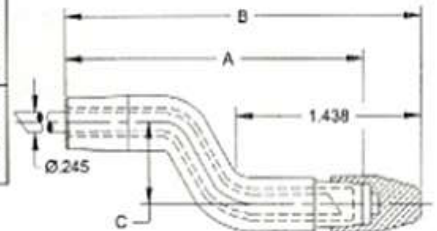
SHANKS FOR FEMALE CAPS WITH #5 RW TAPERS

Part No.	A	B
MP3023	1.46	2.00
MP3024	1.71	2.25
MP3025	1.96	2.50
MP3026	2.21	2.75
MP3027	2.46	3.00
MP3028	2.71	3.25
MP3029	2.96	3.50
MP30212	3.21	3.75
MP30214	3.46	4.00
MP30216	3.71	4.25
MP30218	3.96	4.50
MP30220	4.21	4.75
MP30222	4.46	5.00



BENT OFFSET SHANKS FOR FEMALE CAPS WITH #5 RW TAPERS

Part No.	A	B	C
MP3029-08	2.58	3.20	0.50
MP3029-12	2.60	3.12	0.75
MP30212-12	2.77	3.44	0.75
MP30212-16	2.33	3.00	1.00
MP30214-12	3.00	3.66	0.75
MP30214-16	2.81	3.48	1.00
MP30216-16	2.83	3.49	1.00
MP30216-20	2.77	3.43	1.25

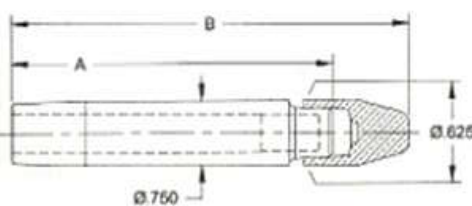


Bent Dimensions for Reference Only



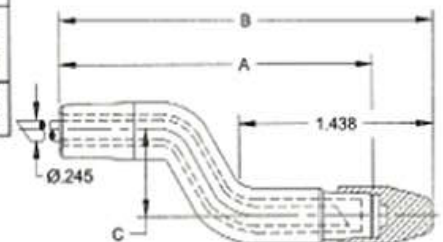
SHANKS FOR FEMALE CAPS WITH #6 RW TAPERS

Part No.	A	B
MP3044	1.64	2.25
MP3045	1.89	2.50
MP3046	2.14	2.75
MP3047	2.39	3.00
MP3048	2.64	3.25
MP3049	2.89	3.50
MP30412	3.14	3.75
MP30414	3.39	4.00
MP30416	3.64	4.25
MP30418	3.89	4.50
MP30420	4.14	4.75
MP30422	4.39	5.00



BENT OFFSET SHANKS FOR FEMALE CAPS WITH #6 RW TAPERS

Part No.	A	B	C
MP3049-08	2.69	3.30	0.50
MP30412-12	2.81	3.42	0.75
MP30414-12	2.94	3.55	0.75
MP30416-16	3.06	3.67	1.00
MP30420-20	3.25	3.86	1.25



Bent Dimensions for Reference Only

DSI shanks are precision manufactured from DSI®3 class 2 material to provide a high quality mount for cap type electrodes. They are designed for high strength and electrical conductivity.

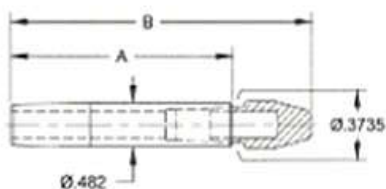
SHANKS FOR MALE CAP ELECTRODES

- See pages 8 & 9 for DSI standard nose and GCAP® electrode caps



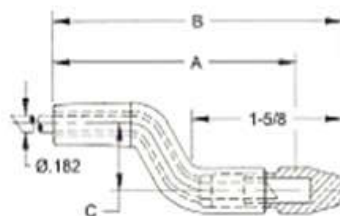
SHANKS FOR MALE CAPS WITH #4 RW TAPERS

Part No.	A	B
3012	1.25	1.88
3013	1.50	2.12
3014	1.75	2.38
3015	2.00	2.62
3016	2.25	2.88
3017	2.50	3.12
3018	2.75	3.38
3019	3.00	3.62
30112	3.25	3.88
30114	3.50	4.12
30116	3.75	4.38
30118	4.00	4.62



BENT OFFSET SHANKS FOR MALE CAPS WITH #4 RW TAPERS

Part No.	A	B	C
3019-08	2.62	3.37	0.50
3019-12	2.56	3.31	0.75
30112-12	2.81	3.56	0.75
30112-16	2.37	3.12	1.00
30116-16	2.87	3.62	1.00
30116-20	2.62	3.37	1.25

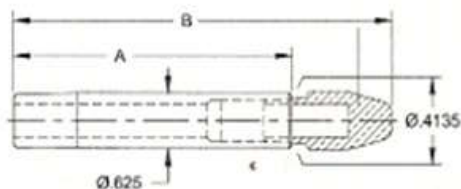


Bent Dimensions for Reference Only



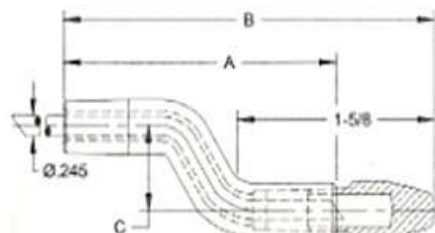
SHANKS FOR MALE CAPS WITH #5 RW TAPERS

Part No.	A	B
3022	1.25	2.00
3023	1.50	2.25
3024	1.75	2.50
3025	2.00	2.75
3026	2.25	3.00
3027	2.50	3.25
3028	2.75	3.50
3029	3.00	3.75
30212	3.25	4.00
30214	3.50	4.25
30216	3.75	4.50
30218	4.00	4.75
30220	4.25	5.00
30222	4.50	5.25



BENT OFFSET SHANKS FOR MALE CAPS WITH #5 RW TAPERS

Part No.	A	B	C
3028-08	2.37	3.12	0.50
3028-12	2.31	3.06	0.75
30212-12	2.81	3.56	0.75
30212-16	2.37	3.12	1.00
30214-12	3.06	3.81	0.75
30214-16	2.62	3.37	1.00
30214-20	2.37	3.12	1.25
30216-16	2.87	3.62	1.00
30216-20	2.62	3.37	1.25

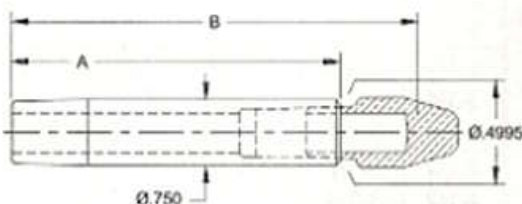


Bent Dimensions for Reference Only



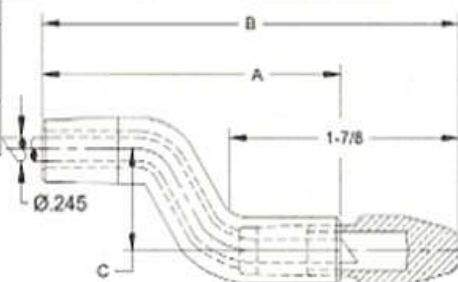
SHANKS FOR MALE CAPS WITH #6 RW TAPERS

Part No.	A	B
3043	1.50	2.62
3044	1.75	2.88
3045	2.00	3.12
3046	2.25	3.38
3047	2.50	3.62
3048	2.75	3.88
3049	3.00	4.12
30412	3.25	4.38
30414	3.50	4.62
30416	3.75	4.88
30418	4.00	5.12
30420	4.25	5.38
30422	4.50	5.62



BENT OFFSET SHANKS FOR MALE CAPS WITH #6 RW TAPERS

Part No.	A	B	C
30412-08	2.62	3.75	0.50
30412-12	2.56	3.69	0.75
30414-12	2.75	3.88	0.75
30416-16	2.87	4.00	1.00
30420-20	3.12	4.25	1.25

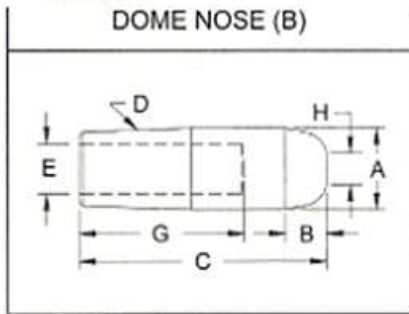


Bent Dimensions for Reference Only

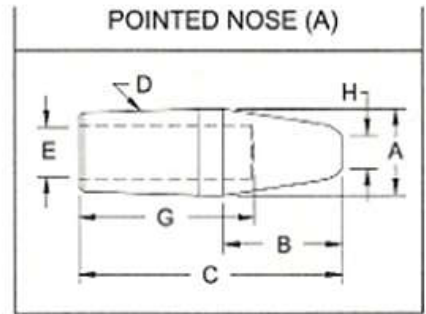
STRAIGHT ELECTRODES



DOME NOSE (B)



POINTED NOSE (A)



4 RW TAPER (D)			
DSI [®] 28	DSI [®] 3	DSI [®] 100	Nose Length B
Class 1	Class 2	Class 3	
1111	3111	5111	13/64
1112	3112	5112	1/4
1113	3113	5113	1/4
1114	3114	5114	1/4
1115	3115	5115	
1116	3116	5116	
1117	3117	5117	1/4
1118	3118	5118	
1119	3119	5119	
11112	31112	51112	1/4
11114	31114	51114	
11116	31116	51116	
11118	31118	51118	1/4

COMMON DIMENSIONS				
Face Dia. H	Major Dia. A	Water Hole Dia. E	Overall Length C	Hole Depth G
3/16	.482	9/32	1	5/8
			1-1/4	3/4
			1-1/2	1
			1-3/4	1-1/4
			2	1-1/2
			2-1/4	1-3/4
			2-1/2	2
			2-3/4	2-1/4
			3	2-1/2
			3-1/4	2-3/4
			3-1/2	3
			3-3/4	3-1/4
4	3-1/2			

4 RW TAPER (D)			
DSI [®] 28	DSI [®] 3	DSI [®] 100	Nose Length B
Class 1	Class 2	Class 3	
1211	3211	5211	3/8
1212	3212	5212	3/8
1213	3213	5213	5/8
1214	3214	5214	3/4
1215	3215	5215	
1216	3216	5216	
1217	3217	5217	3/4
1218	3218	5218	
1219	3219	5219	
12112	32112	52112	3/4
12114	32114	52114	
12116	32116	52116	
12118	32118	52118	3/4

5 RW TAPER (D)			
DSI [®] 28	DSI [®] 3	DSI [®] 100	Nose Length B
Class 1	Class 2	Class 3	
1122	3122	5122	3/8
1123	3123	5123	
1124	3124	5124	
1125	3125	5125	
1126	3126	5126	
1127	3127	5127	
1128	3128	5128	
1129	3129	5129	
11212	31212	51212	
11214	31214	51214	
11216	31216	51216	
11218	31218	51218	
11220	31220	51220	1-1/8
11222	31222	51222	

COMMON DIMENSIONS				
Face Dia. H	Major Dia. A	Water Hole Dia. E	Overall Length C	Hole Depth G
1/4	.625	3/8	1-1/4	3/4
			1-1/2	3/4
			1-3/4	1
			2	1-1/4
			2-1/4	1-1/2
			2-1/2	1-3/4
			2-3/4	2
			3	2-1/4
			3-1/4	2-1/2
			3-1/2	2-3/4
			3-3/4	3
			4	3-1/4
4-1/4	3-1/2			
4-1/2	3-3/4			

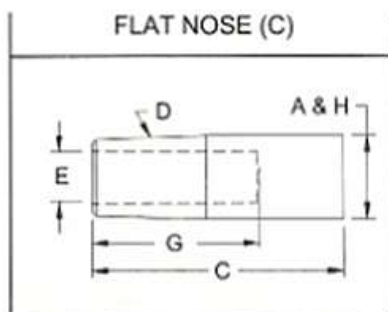
5 RW TAPER (D)			
DSI [®] 28	DSI [®] 3	DSI [®] 100	Nose Length B
Class 1	Class 2	Class 3	
1222	3222	5222	1/2
1223	3223	5223	3/4
1224	3224	5224	3/4
1225	3225	5225	1-1/8
1226	3226	5226	
1227	3227	5227	
1228	3228	5228	1-1/8
1229	3229	5229	
12212	32212	52212	
12214	32214	52214	1-1/8
12216	32216	52216	
12218	32218	52218	
12220	32220	52220	1-1/8
12222	32222	52222	

*Electrodes of other tapers and alloys available upon request.

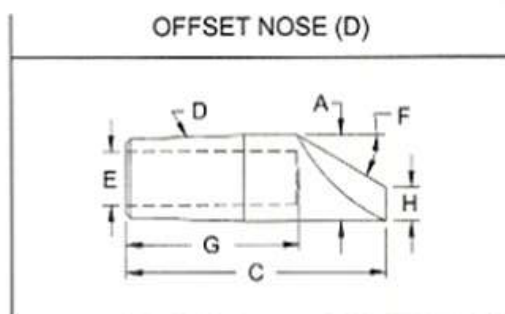
STRAIGHT ELECTRODES



FLAT NOSE (C)



OFFSET NOSE (D)



4 RW TAPER (D)			
DSI [®] 28	DSI [®] 3	DSI [®] 100	Face Dia. H
Class 1	Class 2	Class 3	
1311	3311	5311	.482
1312	3312	5312	
1313	3313	5313	
1314	3314	5314	
1315	3315	5315	
1316	3316	5316	
1317	3317	5317	
1318	3318	5318	
1319	3319	5319	
13112	33112	53112	
13114	33114	53114	
13116	33116	53116	
13118	33118	53118	

COMMON DIMENSIONS			
Major Dia. A	Water Hole Dia. E	Overall Length C	Hole Depth G
.482	9/32	1	5/8
		1-1/4	3/4
		1-1/2	1
		1-3/4	1-1/4
		2	1-1/2
		2-1/4	1-3/4
		2-1/2	2
		2-3/4	2-1/4
		3	2-1/2
		3-1/4	2-3/4
		3-1/2	3
		3-3/4	3-1/4
4	3-1/2		

4 RW TAPER (D)				
DSI [®] 28	DSI [®] 3	DSI [®] 100	Nose Angle F	Face Dia. H
Class 1	Class 2	Class 3		
1411	3411	5411	45°	3/16
1412	3412	5412	40°	
1413	3413	5413	30°	
1414	3414	5414	30°	
1415	3415	5415		
1416	3416	5416		
1417	3417	5417	30°	
1418	3418	5418		
1419	3419	5419		
14112	34112	54112	30°	
14114	34114	54114		
14116	34116	54116		
14118	34118	54118		

5 RW TAPER (D)			
1322	3322	5322	5/8
1323	3323	5323	
1324	3324	5324	
1325	3325	5325	
1326	3326	5326	
1327	3327	5327	
1328	3328	5328	
1329	3329	5329	
13212	33212	53212	
13214	33214	53214	
13216	33216	53216	
13218	33218	53218	
13220	33220	53220	
13222	33222	53222	

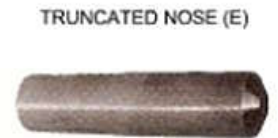
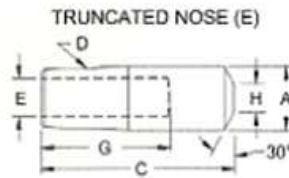
COMMON DIMENSIONS			
Major Dia. A	Water Hole Dia. E	Overall Length C	Hole Depth G
.625	3/8	1-1/4	3/4
		1-1/2	3/4
		1-3/4	1
		2	1-1/4
		2-1/4	1-1/2
		2-1/2	1-3/4
		2-3/4	2
		3	2-1/4
		3-1/4	2-1/2
		3-1/2	2-3/4
		3-3/4	3
		4	3-1/4
4-1/4	3-1/2		
4-1/2	3-3/4		

5 RW TAPER (D)				
DSI [®]	DSI [®]	DSI [®]	Nose Angle	Face Dia. H
Class 1	Class 2	Class 3		
1422	3422	5422	40°	1/4
1423	3423	5423	40°	
1424	3424	5424	30°	
1425	3425	5425	30°	
1426	3426	5426		
1427	3427	5427		
1428	3428	5428	30°	
1429	3429	5429		
14212	34212	54212		
14214	34214	54214	30°	
14216	34216	54216		
14218	34218	54218		
14220	34220	54220		
14222	34222	54222		

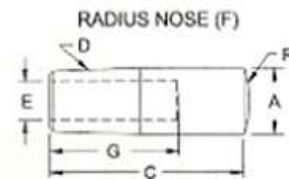
*Electrodes of other tapers and alloys available upon request.

STRAIGHT ELECTRODES

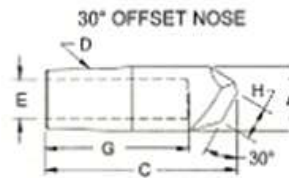
TRUNCATED (E)									
DSI [®] 28	DSI [®] 3	DSI [®] 100	Major Dia. A	Overall Length C	Taper D	Hole Depth G	Face Dia. H	Water Hole Dia. E	
Class 1	Class 2	Class 3							
1712	3712	5712	.482	1-1/4	4RW	3/4	3/16	9/32	
1713	3713	5713		1-1/2		1			
1715	3715	5715		2		1-1/2			
1717	3717	5717	.625	2-1/2	5RW	2	1/4	3/8	
1718	3718	5718		2-3/4		2-1/4			
1723	3723	5723	.625	1-1/2	5RW	3/4	1/4	3/8	
1725	3725	5725		2		1-1/4			
1727	3727	5727		2-1/2		1-3/4			
1729	3729	5729		3		2-1/4			
17218	37218	57218		4		3-1/4			



RADIUS (F)									
DSI [®] 28	DSI [®] 3	DSI [®] 100	Major Dia. A	Overall Length C	Taper D	Hole Depth G	Spherical Radius R	Water Hole Dia. E	
Class 1	Class 2	Class 3							
1523	3523	5523	.482	1-1/2	5RW	3/4	2	3/8	
1525	3525	5525		2		1-1/4			
1527	3527	5527		2-1/2		1-3/4			
1529	3529	5529	.625	3	5RW	2-1/4	10	3/8	
15218	35218	55218		4		3-1/4			
1623	3623	5623	.625	1-1/2	5RW	3/4	10	3/8	
1625	3625	5625		2		1-1/4			
1627	3627	5627		2-1/2		1-3/4			
1629	3629	5629		3		2-1/4			
16218	36218	56218		4		3-1/4			
1825	3825	5825	.625	2	5RW	1-1/4	3	3/8	
1829	3829	5829		3		2-1/4			
1925	3925	5925	.625	2	5RW	1-1/4	4	3/8	
1929	3929	5929		3		2-1/4			



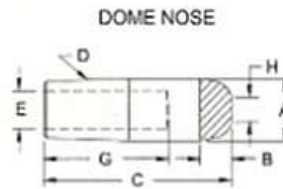
30° OFFSET									
DSI [®] 28	DSI [®] 3	Major Dia. A	Overall Length C	Taper D	Hole Depth G	Face Dia. H	Water Hole Dia. E		
Class 1	Class 2								
16-2491	16-2494	.482	2	4RW	1-1/2	1/4	9/32		
16-2492	16-2495	.625	2-1/2	5RW	2	3/8	3/8		
16-2493	16-2496	.875	3	7RW	2-1/4	1/2	1/2		



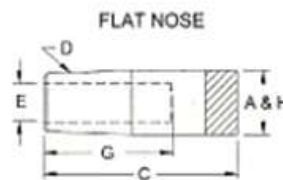
- See page 6 for Metric conversions, & See page 7 for Taper dimensions

DSI ELECTRODES[®] FACED STRAIGHT ELECTRODES

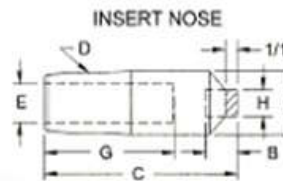
DSI ELECTRODES [®] DOME NOSE									
10W3 Face	100M Face	100W Face	Major Dia. A	Nose Length B	Overall Length C	Taper D	Hole Depth G	Face Dia. H	Water Hole Dia. E
611050	811050	911050	.482	3/16	2	4RW	1-1/2	1/8	9/32
612050	812050	912050	.625	1/4		5RW			3/8



DSI ELECTRODES [®] FLAT NOSE									
Major Dia. A	Nose Length B	Overall Length C	Taper D	Hole Depth G	Face Dia. H	Water Hole Dia. E			
631050	831050	931050	.482	3/16	2	4RW	1-1/2	.482	9/32
632030	832050	932050	.625	1/4	1-1/2	5RW	1	5/8	3/8
632050				2	1-1/2	2	1-1/2		
632070				2-1/2	2	5/8			
16-1353				2-1/2					
633050	833050	933050	.875	1/4	2	7RW	1-1/2	7/8	1/2



DSI [®] CENTERED INSERT NOSE									
Major Dia. A	Nose Length B	Overall Length C	Taper D	Hole Depth G	Face Dia. H	Water Hole Dia. E			
871050	971050	.482	3/8	2	4RW	1-1/2	3/16	9/32	
872050	972050	.625	3/8	2	5RW	1-1/4	1/4	3/8	



- Electrodes of other tapers and alloys available upon request. For other DSI ELECTRODES[®] materials see page 5 and for other recommended uses see the chart on page 76. Electrodes faced with material other than those shown on this page are available to special order.

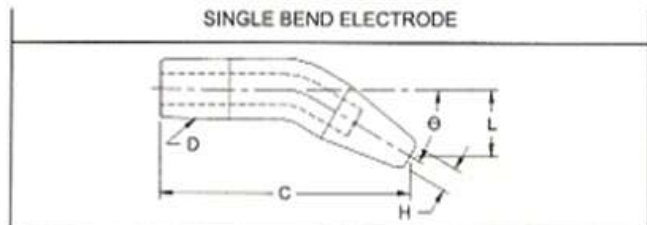
DSI's 3 single bend electrodes are cold formed from full hard straight electrodes, and have properties superior to those obtained by casting or hot forging methods. Cooling tubes are bent in place, if requested, to provide water flow as near to the welding face as in the case of straight electrodes. These extra values assure you a more efficient, less costly electrode for gun welders and special offset welding applications.

Furnished with water tubes as specials to your order. Other nose types available to order. For dimensions not shown here see straight electrode (round water hole) measurements on page 14, 15, & 16. DSI's 28 material available on special order.

SINGLE BEND ELECTRODES



SINGLE BEND ELECTRODE

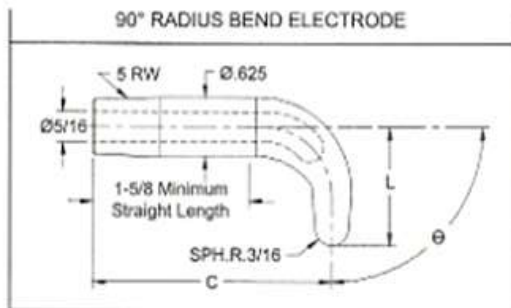


PART No.	Reference Length to ζ of Face C	Taper D	Offset ζ of Taper to ζ of Face L	Bend Angle θ	Bend Weld Face Dia. H	
3214-04-15	1-11/16	4 RW	1/4	15°	3/16	
3219-04-15	2-15/16		1/4			
32118-13-15	3-7/8		13/16			
3225-04-15	1-7/8	5 RW	1/4		30°	1/4
3229-04-15	2-7/8		1/4			
32218-10-15	3-13/16		5/8			
3215-07-30	1-7/8	4 RW	7/16	60°		3/16
3219-07-30	2-7/8		7/16			
32118-23-30	3-5/8		1-7/16			
3226-09-30	2-1/16	5 RW	9/16		75°	1/4
32212-09-30	3-1/16		9/16			
32220-24-30	3-13/16		1-1/2			
3215-10-45	1-11/16	4 RW	5/8	90°		3/16
32112-12-45	2-7/8		3/4			
32118-33-45	3-1/8		2-1/16			
3228-17-45	2-1/4	5 RW	1-1/16		15°	1/4
32214-17-45	3		1-1/16			
32220-33-45	3-3/8		2-1/16			
3218-23-60	2	4 RW	1-7/16	30°		3/16
32116-23-60	3		1-7/16			
32118-40-60	2-5/8		2-1/2			
32212-25-60	2-3/8	5 RW	1-9/16		45°	1/4
32218-25-60	3-1/8		1-9/16			
32220-38-60	3		2-3/8			
32216-35-75	2-5/16	5 RW	2-3/16	60°		3/16
32220-37-75	2-11/16		2-5/16			
32220-43-75	2-3/8		2-11/16			

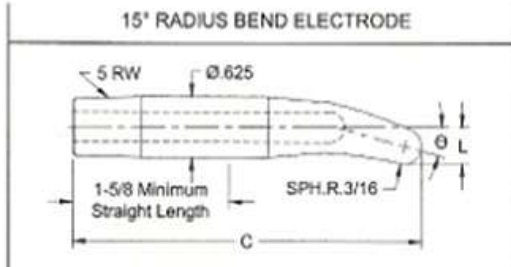
Bend dimensions are for reference only



90° RADIUS BEND ELECTRODE



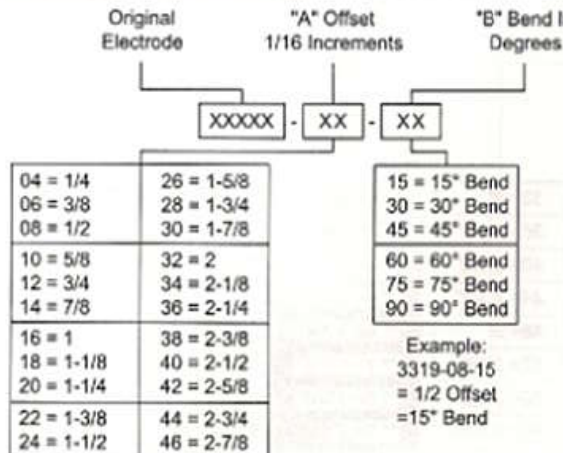
15° RADIUS BEND ELECTRODE



PART No.	O.A.L. C	Offset ζ of Taper to Top of Radius L	Bend Angle θ
16-26015	3-11/16	3/8	15°
16-26030	3-5/8	33/64	30°
16-26045	3-1/2	43/64	45°
16-26060	3-3/8	27/32	60°
16-26075	3-7/64	1-1/32	75°
16-26090	2-13/16	1-1/4	90°

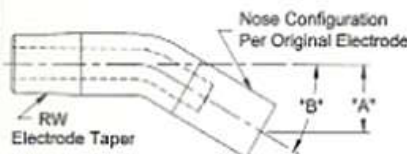
Radius bend electrodes are designed for use with 18-768 & 18-784 straight universal adapters shown on page 46.

- See page 6 for Metric Conversion
- See page 7 for Taper Dimensions



SINGLE BEND ELECTRODE CODING SYSTEM

For electrodes not listed

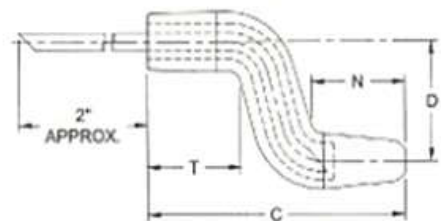


Offset D	Taper Size	Nose End N	Taper End T	Dome, Pointed & Flat, O.A.L. C	Pointed Nose Part No.
1/2	4 RW	3/4	7/8	2	321-0832-23
		3/4	7/8	2-1/2	321-0840-23
		2	7/8	3-1/4	321-0852-93
	5 RW	1	1	2-1/2	322-0840-44
		1	1	2-3/4	322-0844-44
		2	1	3-1/2	322-0852-44 322-0858-94
3/4	4 RW	3/4	7/8	2	321-1232-23
		3/4	7/8	2-1/2	321-1240-23
		2	7/8	3-1/2	321-1256-93
	5 RW	1	1	2-3/4	322-1244-44
		1	1	3	322-1248-44
		2	1	3-1/2	322-1256-94
1	4 RW	3/4	7/8	2-1/4	321-1636-23
		3/4	7/8	2-3/4	321-1644-23
		1-3/4	7/8	3-1/4	321-1652-83
		3/4	7/8	3-1/2	321-1656-23
	5 RW	1	1	2-3/4	322-1644-44
		1-3/4	1	3-1/2	322-1648-44 322-1656-44 322-1658-84
1-1/4	4 RW	3/4	7/8	2-1/2	321-2040-23
		3/4	7/8	3	321-2048-23
		1-1/2	7/8	3	321-2048-73
	5 RW	1	1	2-3/4	322-2044-44
		1	1	3-1/4	322-2052-44
		1-1/2	1	3-1/2	322-2056-44 322-2056-74 322-2056-84
1-1/2	5 RW	1	1	2-3/4	322-2444-44
1-3/4	5 RW	1-1/4	1	3	322-2448-64
		1-1/4	1	3	322-2844-44 322-2848-64

DOUBLE BEND ELECTRODES

DSI double bend electrodes are cold formed from full hard straight electrodes, and have properties superior to those obtainable by casting or hot forging methods. Cooling tubes, unless otherwise specified are bent in place to provide coolant flow near the welding face as in the case of straight electrodes. These extra values assure you of longer electrode life, longer runs between dressings, and highest weld quality. **DSI** #3 material is standard for these electrodes. **DSI** #28, **DSI** #100, available on special order.

DOUBLE BEND POINTED NOSE

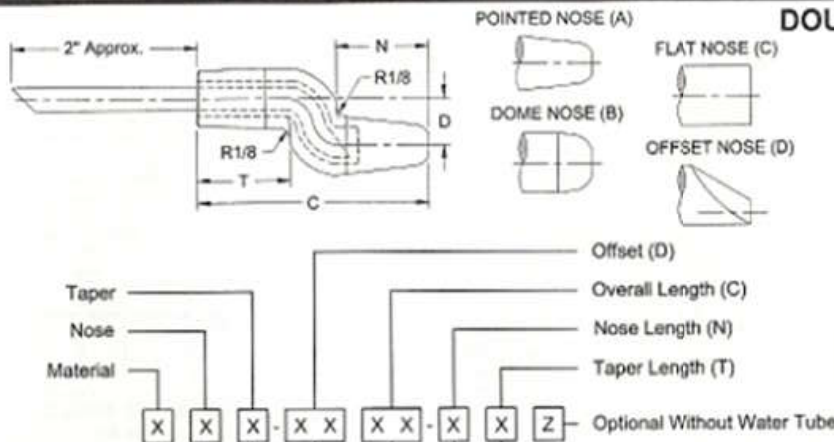


Bent dimensions are for reference only



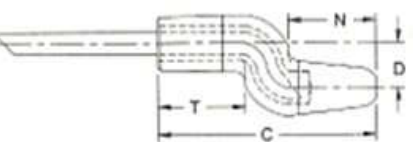
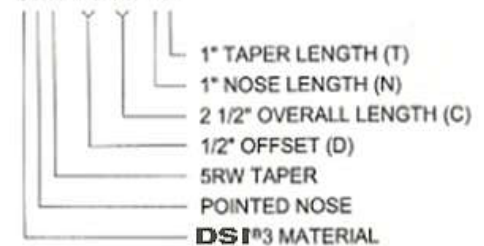
Water Tube Sizes:
4RW = .182 O.D.
5RW = .245 O.D.

DOUBLE BEND ELECTRODE CODING SYSTEM



EXAMPLE:

322-0840-44



BENT DIMENSIONS REFERENCE ONLY

1= DSI #28	1= DOME	1= 4RW 1MT	08= 1/2"	32= 2"	2= 3/4"
3= DSI #3	2= *POINTED	2= 5RW 2MT	12= 3/4"	36= 2 1/4"	3= 7/8"
5= DSI #100	3= FLAT		16= 1"	40= 2 1/2"	4= 1"
*Standard	4= OFFSET		20= 1 1/4"	44= 2 3/4"	** 5= 1 1/8"
			24= 1 1/2"	48= 3"	** 6= 1 1/4"
			28= 1 3/4"	52= 3 1/4"	** 7= 1 1/2"
				56= 3 1/2"	** 8= 1 3/4"
				60= 3 3/4"	** 9= 2"

- See Page 6 for Metric Conversion
- See Page 7 for Taper Dimensions

Water Tube Sizes:
4RW = .182 O.D.
5RW = .245 O.D.

**May not be a stock item

Standard 4RW nose length = 3/4"

Standard 4RW taper length = 7/8"

Standard 5RW nose & taper length = 1"

FEATURES AND SPECIFICATIONS

- Very strong bend electrodes for higher force applications

- Bent & Offset electrodes are for hard to reach locations

- Long lasting heavy duty electrodes

- Works with all industry standard holders

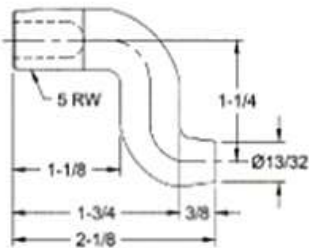
- Use with 4 & 5 R.W.M.A Holders

- Bent dimensions are for reference only

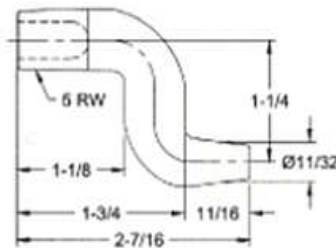
- Electrical conductivity up to 85% IACS for cold formed crank electrodes

- Rockwell hardness up to 83 HRB for cold formed crank electrodes

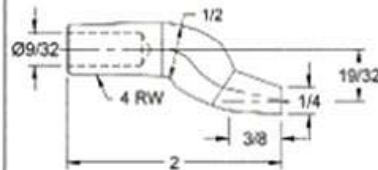
CRANK ELECTRODES - COLD FORMED



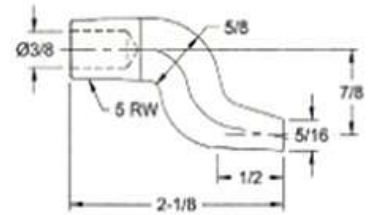
16-38661 **DSI***3
COLD FORMED*



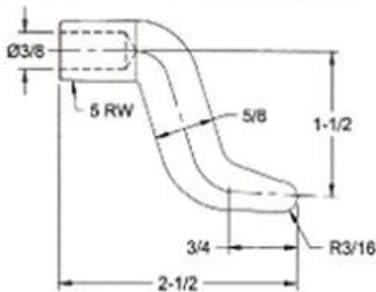
16-38666 **DSI***3
COLD FORMED*



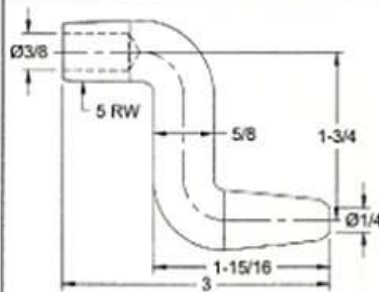
16-3870 **DSI***3
COLD FORMED*



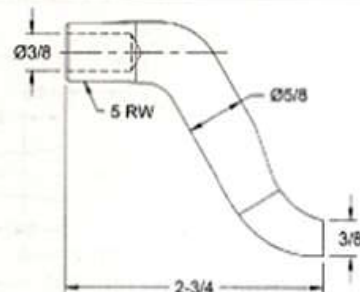
16-3871 **DSI***3
COLD FORMED*



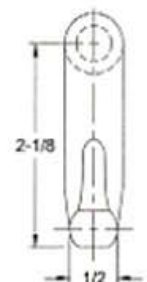
16-38351 **DSI***3
COLD FORMED*



16-38352 **DSI***3
COLD FORMED*



16-38353 **DSI***3
COLD FORMED*



*Optional materials / **DSI***28 and **DSI***100 available on special order

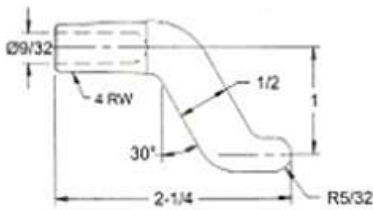
FEATURES AND SPECIFICATIONS

- Very strong bend electrodes for higher force applications
- Offset electrodes are for hard to reach locations
- Long lasting heavy duty electrodes

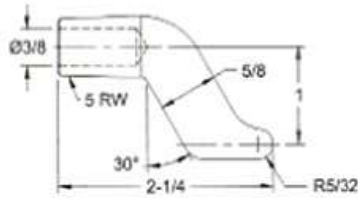
- Can be used in many job shop applications
- Works with all industry standard holders
- Use with 4 & 5 R.W.M.A Holders

- Electrical conductivity up to 80% IACS for castings & forged crank electrodes
- Rockwell hardness up to 70 HRB for castings & forged crank electrodes

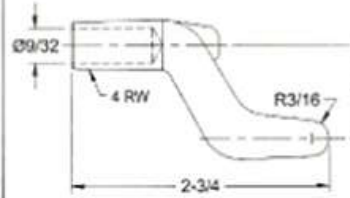
CRANK ELECTRODES - CASTING, FORGED



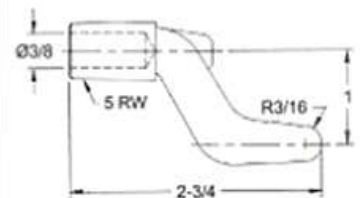
16-3835 **DSI #3**
CASTING



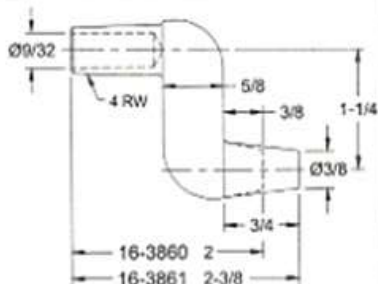
16-3836 **DSI #3**
CASTING



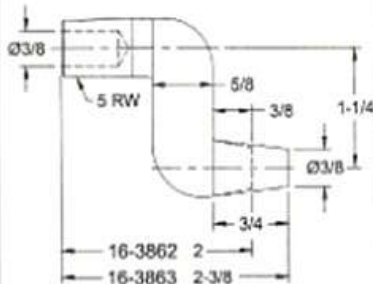
16-3837 **DSI #3**
CASTING



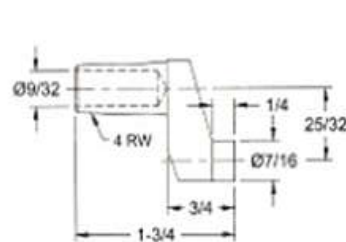
16-3838 **DSI #3**
CASTING



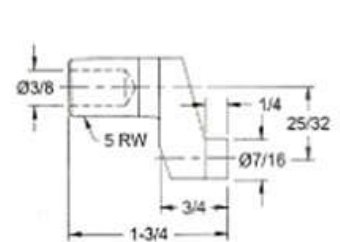
DSI #3
FORGED



DSI #3
FORGED



16-3873 **DSI #3**
CASTING



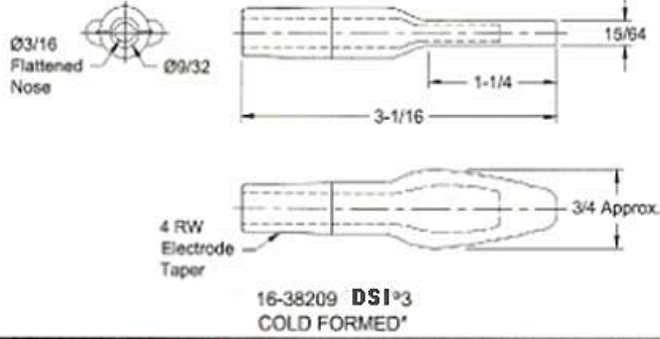
16-3874 **DSI #3**
CASTING

- See page 6 for
Metric Conversions
- See page 7 for
Taper Dimensions

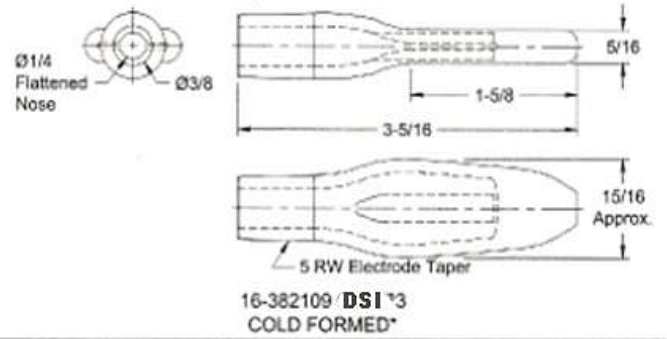
SPADE ELECTRODES



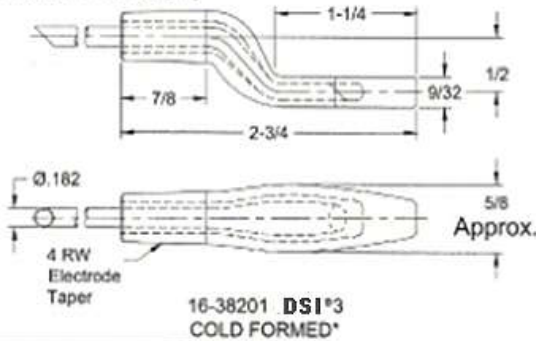
Bent Dimensions for Reference Only



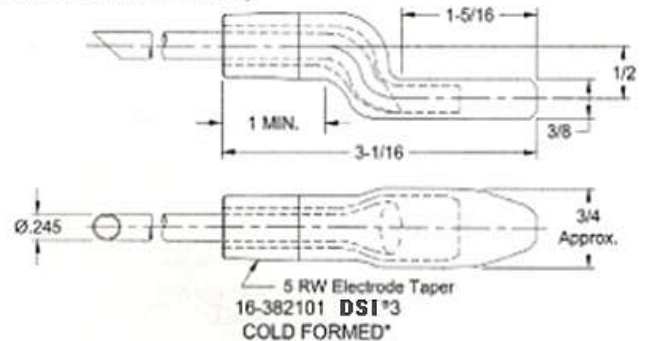
Bent Dimensions for Reference Only



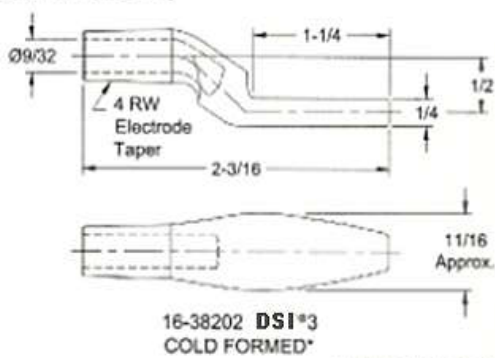
Bent Dimensions for Reference Only



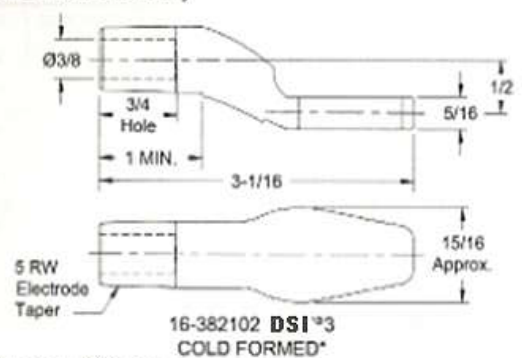
Bent Dimensions for Reference Only



Bent Dimensions for Reference Only

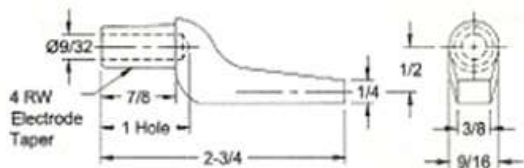


Bent Dimensions for Reference Only

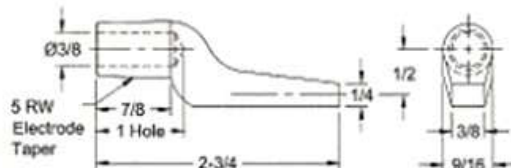


*Optional material available on special order: DSI*28 & DSI*100

GUN ELECTRODES



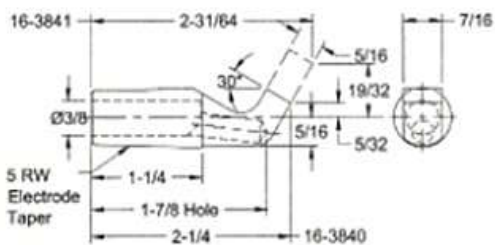
16-3820 **DSI*3**
CASTING



16-3821 **DSI*3**
CASTING



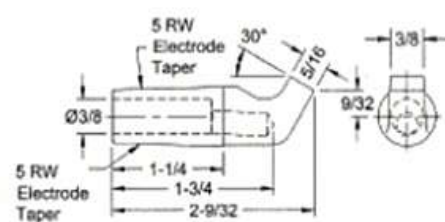
Bent Dimensions for Reference Only



16-3840 & 16-3841 **DSI*3**
COLD FORMED*

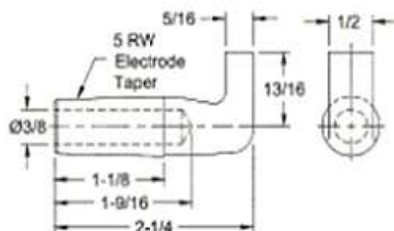


Bent Dimensions for Reference Only



16-3847 **DSI*3**
COLD FORMED*

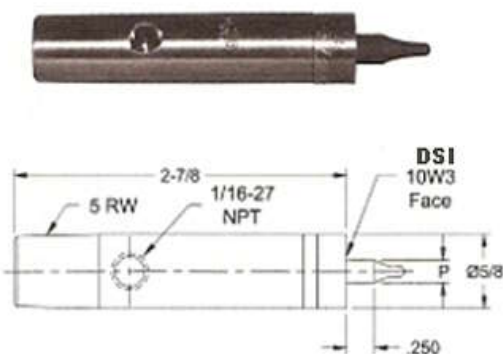
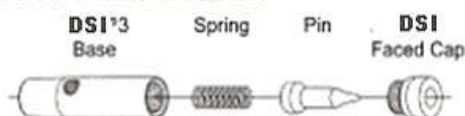
*Optional material **DSI*28** & **DSI*100** available on special order.



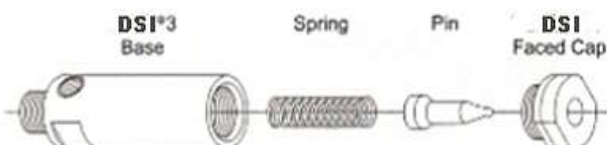
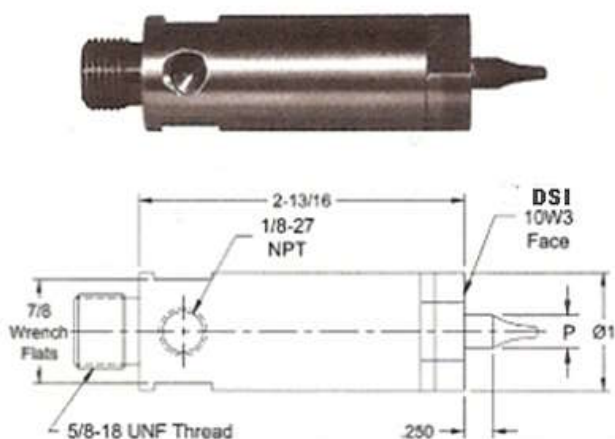
16-382120 **DSI*3**
CASTING

- See page 6 for
Metric Conversions
- See page 7 for
Taper Dimensions

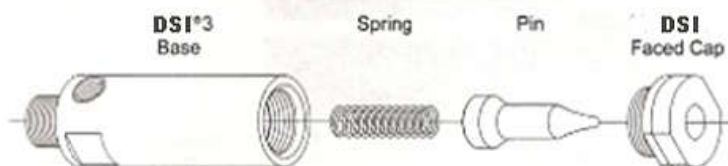
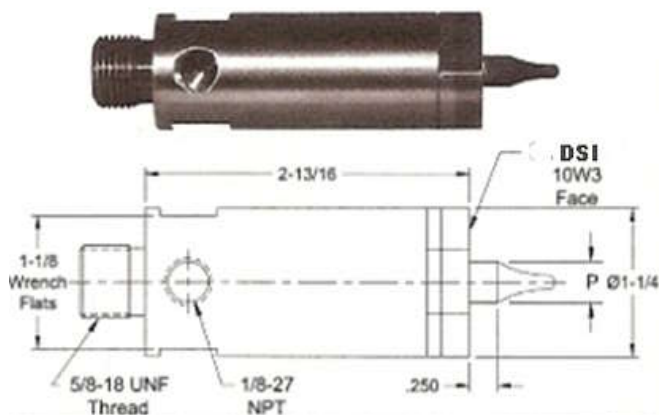
CHAMELEON/MAX-LIFE™ NUT WELDING ELECTRODES



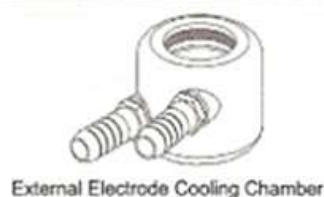
Nut Welding Assemblies	Nut Thread Size	Pin Dia. P	DSI*3 Base	Spring	Ceramic Coated Stainless Steel Pin	DSI Faced Cap
16-37725-04	#4	.142	16-37325	16-950078-01	16-950064-04	16-37725-C04
16-37725-05	#5	.158	16-37325	16-950078-01	16-950064-05	16-37725-C05
16-37725-06	#6	.173	16-37325	16-950078-01	16-950064-06	16-37725-C06
16-37725-M4	4MM	.187	16-37325	16-950078-01	16-950064-M4S	16-37725-CM4
16-37725-08	#8	.198	16-37325	16-950078-01	16-950064-08	16-37725-C08
16-37725-10	#10	.220	16-37325	16-950078-01	16-950064-10	16-37725-C10
16-37725-M5	5MM	.226	16-37325	16-950078-01	16-950064-M5S	16-37725-CM5
16-37725-12	#12	.250	16-37325	16-950078-01	16-950064-12	16-37725-C12
16-37725-M6	6MM	.266	16-37325	16-950078-01	16-950064-M6S	16-37725-CM6
16-37725-25	.250	.283	16-37325	16-950078-01	16-950064-25	16-37725-C25



Nut Welding Assemblies	Nut Thread Size	Pin Dia. P	DSI*3 Base	Spring	Ceramic Coated Stainless Steel Pin	DSI Faced Cap
16-37825-M4	4MM	.187	16-37825	16-950065-01	16-950064-M4	16-37825-CM4
16-37825-M5	5MM	.226	16-37825	16-950065-01	16-950064-M5	16-37825-CM5
16-37825-M6	6MM	.266	16-37825	16-950065-01	16-950064-M6	16-37825-CM6
16-37825-M7	7MM	.305	16-37825	16-950065-01	16-950064-M7	16-37825-CM7
16-37825-M8	8MM	.344	16-37825	16-950065-01	16-950064-M8	16-37825-CM8
16-37825-M9	9MM	.384	16-37825	16-950065-01	16-950064-M9	16-37825-CM9



Nut Welding Assemblies	Nut Thread Size	Pin Dia. P	DSI*3 Base	Spring	Ceramic Coated Stainless Steel Pin	Faced Cap
16-37826-M10	10MM	.423	16-37826	16-950065-01	16-950064-M10	16-37826-CM10
16-37826-M11	11MM	.463	16-37826	16-950065-01	16-950064-M11	16-37826-CM11
16-37826-M12	12MM	.502	16-37826	16-950065-01	16-950064-M12	16-37826-CM12
16-37826-M14	14MM	.581	16-37826	16-950065-01	16-950064-M14	16-37826-CM14



Electrode Dia.	Cooling Chamber Part No.	Tapered Adapter Part No.
5/8	18-1340	--
1	18-1342	18-7741
1-1/4	18-1343	18-7742

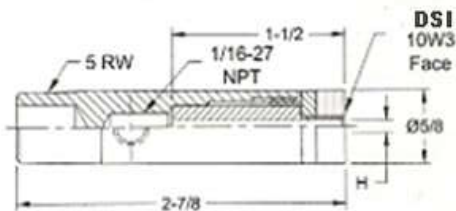


- Electrode Assemblies 16-37825-XX and 16-37826-XXX may be used with 5/8-18 threaded holders 18-169, 18-170, 18-171, shown on page 32

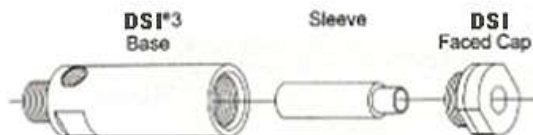
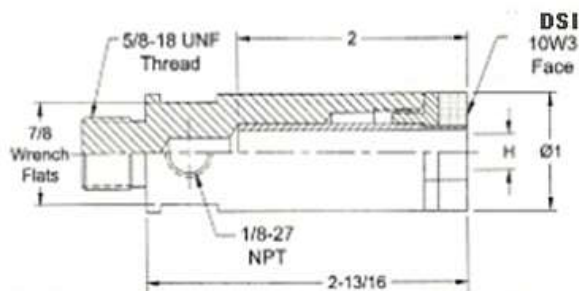
- Electrode Assemblies 16-37825-XX and 16-37826-XXX may be used with Platen Mounted holders (page 61) by using adapter 18-7743 shown on page 31

All dimensions are in inches unless otherwise noted

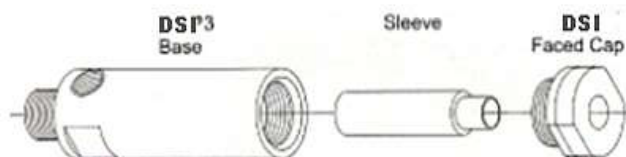
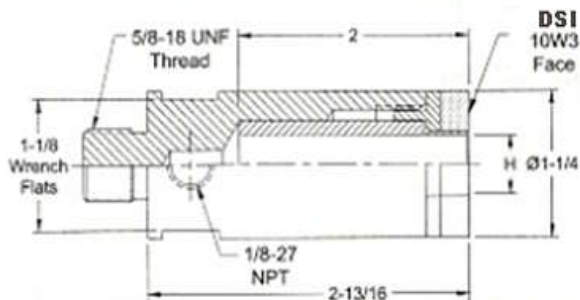
CHAMELEON/MAX-LIFE™ STUD WELDING ELECTRODES



Stud Welding Assemblies	Screw Thread Size	Sleeve I.D. H	DSI³ Base	Ceramic Coated Stainless Steel Sleeve	DSI Faced Cap
16-37325-116	#4	.116	16-37325	16-953116	16-37325-C116
16-37325-132	#5	.132	16-37325	16-953132	16-37325-C132
16-37325-140	#6	.140	16-37325	16-953140	16-37325-C140
16-37325-169	#8	.169	16-37325	16-953169	16-37325-C169
16-37325-169	4MM	.169	16-37325	16-953169	16-37325-C169
16-37325-191	#10	.191	16-37325	16-953191	16-37325-C191
16-37325-204	5MM	.204	16-37325	16-953204	16-37325-C204
16-37325-220	#12	.220	16-37325	16-953220	16-37325-C220
16-37325-243	6MM	.243	16-37325	16-953243S	16-37325-C243
16-37325-254	.250	.254	16-37325	16-953254S	16-37325-C254



Stud Welding Assemblies	Screw Thread Size	Sleeve I.D. H	DSI³ Base	Ceramic Coated Stainless Steel Sleeve	DSI Faced Cap
16-37525-243	6MM	.243	16-37825	16-953243	16-37525-C243
16-37525-254	.250	.254	16-37825	16-953254	16-37525-C254
16-37525-320	.312	.320	16-37825	16-953320	16-37525-C320
16-37525-320	8MM	.320	16-37825	16-953320	16-37525-C320
16-37525-380	.375	.380	16-37825	16-953380	16-37525-C380

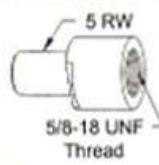


Stud Welding Assemblies	Screw Thread Size	Sleeve I.D. H	DSI³ Base	Ceramic Coated Stainless Steel Sleeve	DSI Faced Cap
16-37526-399	10MM	.399	16-37526	16-953399	16-37526-C399
16-37526-444	.438	.444	16-37526	16-953444	16-37526-C444
16-37526-477	12MM	.477	16-37526	16-953477	16-37526-C477
16-37526-502	.500	.502	16-37526	16-953502	16-37526-C502
16-37526-630	.625	.630	16-37526	16-953630	16-37526-C630



External Electrode Cooling Chamber

Electrode Dia.	Cooling Chamber Part No.	Tapered Adapter Part No.
5/8	18-1340	--
1	18-1342	18-7741
1-1/4	18-1343	18-7742



Tapered Adapter

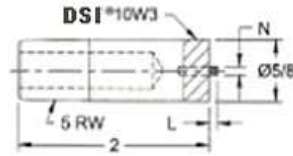
- Electrode Assemblies 16-37525-XXX and 16-37526-XXX may be used with 5/8-18 threaded holders 18-169, 18-170, 18-171, shown on page 32

- Electrode Assemblies 16-37525-XXX and 16-37526-XXX may be used with Platen Mounted holders (page 61) by using adapter 18-7743 shown on page 31

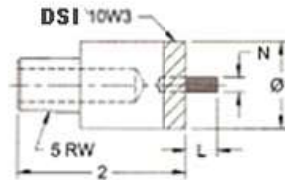
SELF-PILOTING NUT WELDING ELECTRODES



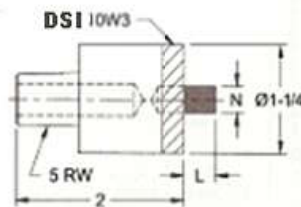
PART No.	Taper Size	Pin Dia. N	For Nut Thread Size	Pin Length L
16-3764-04	5 RW	.082	#4	.093
16-3764-05		.093	#5	
16-3764-06		.100	#6	
16-3764-M3.5		.107	3.5 MM	
16-3764-M4	5 RW	.123	4.0 MM	.156
16-3764-08		.129	#8	
16-3764-10		.143	#10	
16-3764-M5		.156	5.0 MM	



PART No.	Taper Size	Pin Dia. N	For Nut Thread Size	Pin Length L
16-3765-12	5 RW	.166	#12	.375
16-3765-M6		.189	6.0 MM	
16-3765-25		.192	1/4	
16-3765-M7		.223	7.0 MM	
16-3765-M8	5 RW	.252	8.0 MM	.375
16-3765-31		.257	5/16	
16-3765-M9		.291	9.0 MM	



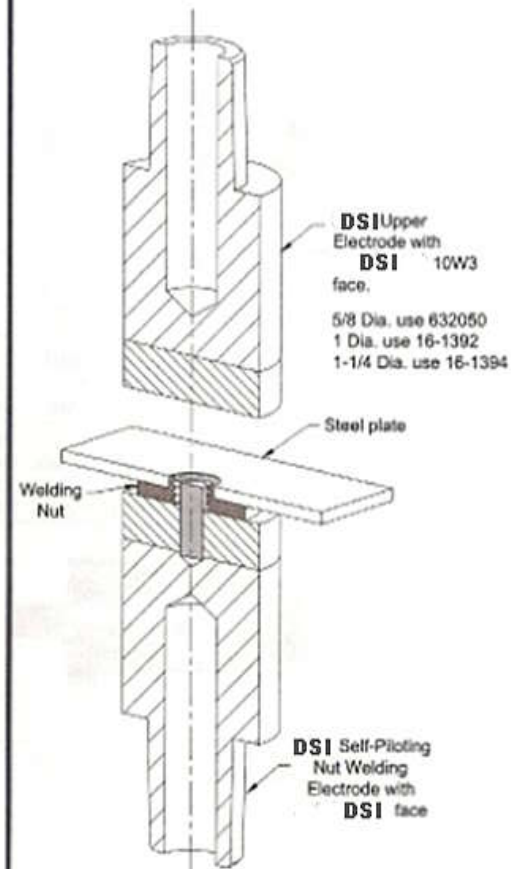
PART No.	Taper Size	Pin Dia. N	For Nut Thread Size	Pin Length L
16-3766-38	5 RW	.306	3/8	.375
16-3766-M10		.320	10 MM	
16-3766-M11		.359	11 MM	
16-3766-44		.361	7/16	
16-3766-M12	5 RW	.388	12 MM	.375
16-3766-50		.415	1/2	
16-3766-M14		.455	14 MM	



FEATURES AND SPECIFICATIONS

- **DSI** 10W3 faced **DSI** #3 material
- Insulated pin made of anodized aluminum
- Pins are treated to 55 HRC for wear resistance
- Use with tapered electrode holders
- Use with flat faced electrodes

TYPICAL SET-UP FOR SELF PILOTING NUTS

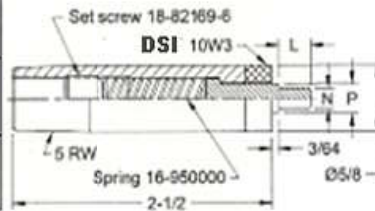


- See page 6 for Metric conversions
- See page 7 for Taper dimensions

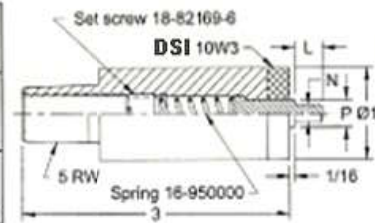
NON-PILOTING NUT WELDING ELECTRODES



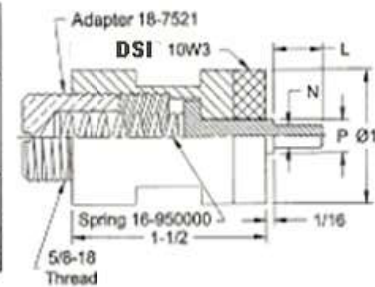
PART No.	Taper or Thd. Size	Pin Dia. N	Pilot Length L	Pilot Dia. P	For Nut Thd. Size N	Pin Part No.
16-3774-04		.082		.142	#4	16-950001-04
16-3774-05		.093		.158	#5	16-950001-05
16-3774-06		.100		.173	#6	16-950001-06
16-3774-08	5RW	.129	.312	.198	#8	16-950001-08
16-3774-10		.143		.220	#10	16-950001-10
16-3774-M6		.186		.250	6MM	16-950001-M6



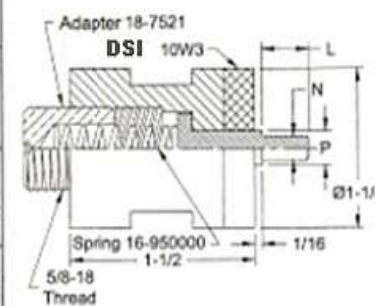
PART No.	Taper or Thd. Size	Pin Dia. N	Pilot Length L	Pilot Dia. P	For Nut Thd. Size N	Pin Part No.
16-3775-12		.166		.250	#12	16-950001-12
16-3775-M6		.186		.250	6MM	16-950001-M6
16-3775-25		.192		.283	1/4	16-950001-25
16-3775-M8	5RW	.252	.312	.283	8MM	16-950001-M8
16-3775-31		.257		.345	5/16	16-950001-31
16-3775-M10		.322		.347	10MM	16-950001-M10



PART No.	Taper or Thd. Size	Pin Dia. N	Pilot Length L	Pilot Dia. P	For Nut Thd. Size N	Pin Part No.
16-3785-12		.166		.250	#12	16-950002-12
16-3785-M6		.186		.269	6MM	16-950002-M6
16-3785-25		.192		.283	1/4	16-950002-25
16-3785-M8	5/8-18	.252	.375	.348	8MM	16-950002-M8
16-3785-31		.257		.345	5/16	16-950002-31
16-3785-M10		.320		.427	10MM	16-950002-M10
16-3785-M11		.359		.466	11MM	16-950002-M11
16-3785-M12		.388		.470	12MM	16-950002-M12



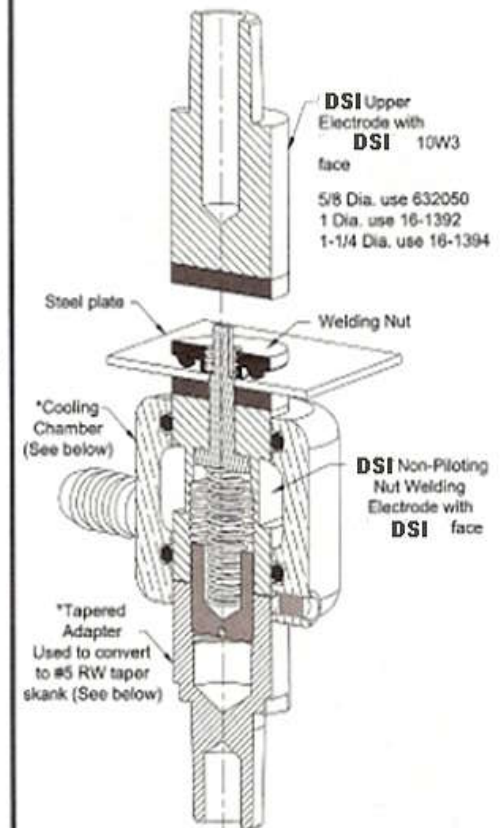
PART No.	Taper or Thd. Size	Pin Dia. N	Pilot Length L	Pilot Dia. P	For Nut Thd. Size N	Pin Part No.
16-3786-12		.166		.250	#12	16-950002-12
16-3786-M6		.186		.269	6MM	16-950002-M6
16-3786-25		.192		.283	1/4	16-950002-25
16-3786-M8		.252		.348	8MM	16-950002-M8
16-3786-31	5/8-18	.257	.375	.345	5/16	16-950002-31
16-3786-38		.306		.408	3/8	16-950002-38
16-3786-M10		.320		.427	10MM	16-950002-M10
16-3786-M11		.359		.466	11MM	16-950002-M11
16-3786-44		.361		.470	7/16	16-950002-44
16-3786-M12		.388		.470	12MM	16-950002-M12
16-3786-50		.415		.533	1/2	16-950002-50



FEATURES AND SPECIFICATIONS

- **DSI 10W3** faced **DSI** [®]3 material
- Insulated pin made of anodized aluminum
- Insulated pins are treated to 55 HRC for wear resistance
- Use with tapered electrode holders
- Use with flat faced electrodes
- Accepts external cooling chambers

TYPICAL SET-UP FOR NON PILOTING NUTS



*For additional information on cooling chamber and tapered adapter see page 27

Electrode assemblies 18-3785-XX and 18-3786-XX may be used with 5/8-18 threaded holders 18-169, 18-170, 18-171

FEATURES AND SPECIFICATIONS

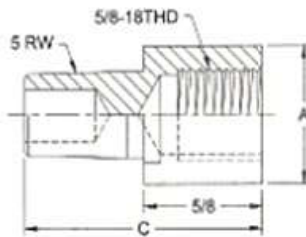
- Cooling Chamber recommended for additional cooling capacity on internally cooled applications
- Cooling Chamber is designed to provide supplementary cooling in special, hard to cool applications

- Securely sealed and locked in position with allen head set screw
- Tapered Adapter converts 5/8-18 thread to 5 RW tapers
- Use with Stud/Nut welding applications

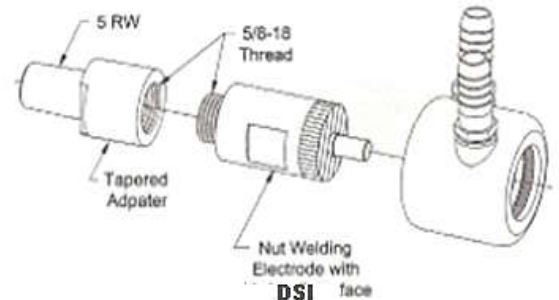
WELDING ELECTRODE ACCESSORIES



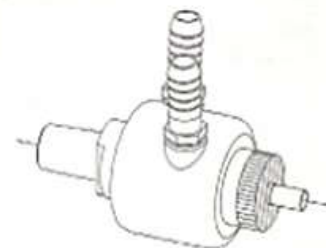
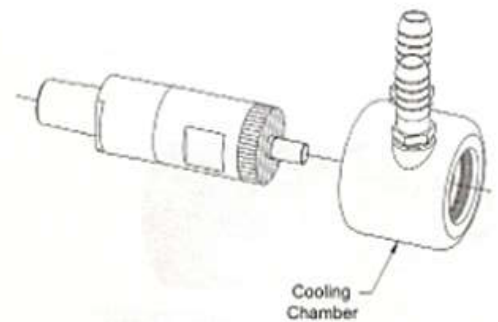
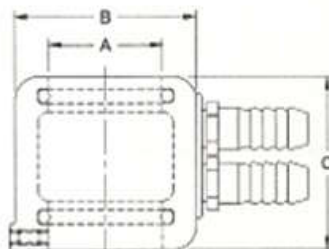
TAPERED ADAPTER			
Part No.	To Fit Dia. Electrode A	Taper	Overall Length C
18-7741	1	5 RW	1-3/4
18-7742	1-1/4	5 RW	1-3/4



TAPERED ADAPTER CONVERSION FROM 5/8-18 THREAD TO 5 RW TAPER



COOLING CHAMBER			
Part No.	To Fit Dia. Electrode A	O.D. B	Overall Length C
18-1340	5/8	1-1/4	1-1/2
18-1341	7/8	1-1/2	1-1/2
18-1342	1	1-3/4	1-1/2
18-1343	1-1/4	2	1-7/8

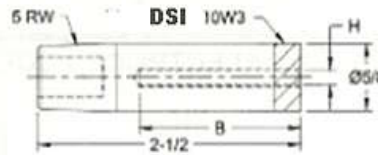


ASSEMBLED CONVERSION

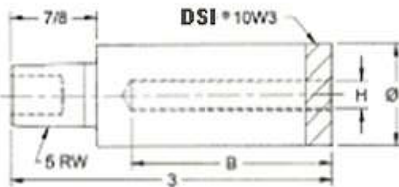
STUD WELDING ELECTRODES



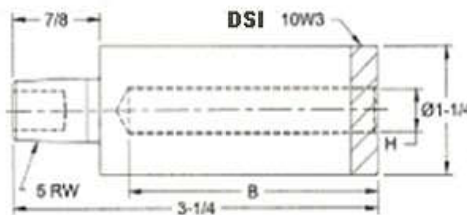
Assembled Electrode Part Number			Insulation I.D. H	Screw Thread Size
Depth B				
.375	.750	1.125	.116 .132	#4 #5
16-3724-1161	16-3724-1162	16-3724-1163		
16-3724-1321	16-3724-1322	16-3724-1323		
.500	1.000	1.500	.140 .150 .157 .169	#6 -- -- #8
16-3724-1401	16-3724-1402	16-3724-1403		
16-3724-1501	16-3724-1502	16-3724-1503		
16-3724-1571	16-3724-1572	16-3724-1573		
16-3724-1691	16-3724-1692	16-3724-1693		
.750	1.500	--	.191 .220 .254	#10 #12 #20
16-3724-1911	16-3724-1912			
16-3724-2201	16-3724-2202			
16-3724-2541	16-3724-2542			



Assembled Electrode Part Number		Insulation I.D. H	Screw Thread Size
Depth B			
.750	1.500	.254	.250
16-3725-2541	16-3725-2542		
1.000	2.000	.277 .317 (8MM) .339 .365 .380	-- .312 -- -- --
16-3725-2771	16-3725-2772		
16-3725-3171	16-3725-3172		
16-3725-3391	16-3725-3392		
16-3725-3651	16-3725-3652		
16-3725-3801	16-3725-3802		



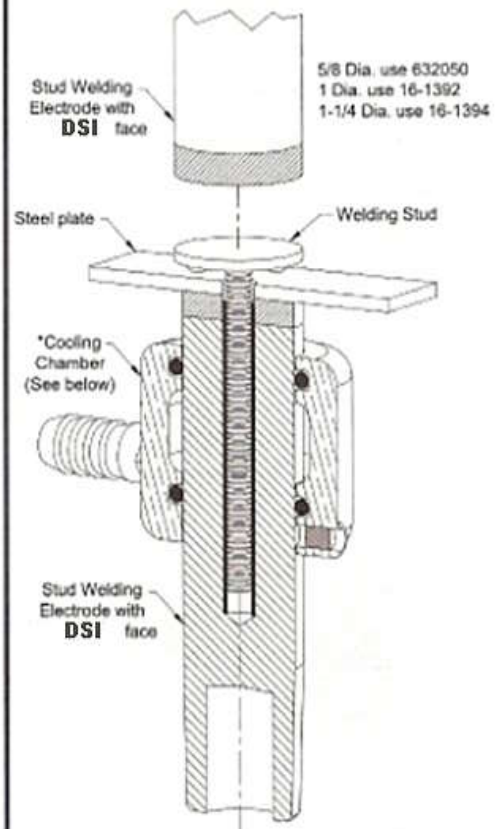
Assembled Electrode Part Number		Insulation I.D. H	Screw Thread Size
Depth B			
1.000	2.000	.401 .427 .444 .502	-- -- .437 .500
16-3726-4011	16-3726-4012		
16-3726-4271	16-3726-4272		
16-3726-4441	16-3726-4442		
16-3726-5021	16-3726-5022		
1.000	2.000	.552 .630 .676 .801	-- .625 -- --
16-3726-5521	16-3726-5522		
16-3726-6301	16-3726-6302		
16-3726-6761	16-3726-6762		
16-3726-8011	16-3726-8012		



FEATURES AND SPECIFICATIONS

- DSI 10W3 faced DSI *3 material
- Insulated sleeve made of anodized aluminum
- Insulated sleeve are treated to 55 HRC both I.D. & O.D. for wear resistance
- Use with tapered electrode holders
- Use with flat faced electrodes
- Accepts external Cooling Chambers

TYPICAL SET-UP FOR STUD WELDING



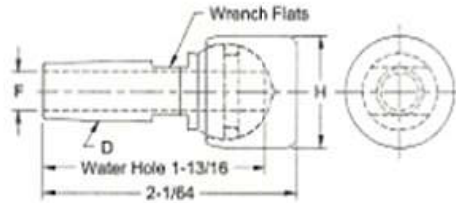
*For additional information on cooling chamber see page 27

Electrode Dia.	Cooling Chamber
5/8	18-1340
1	18-1342
1-1/4	18-1343

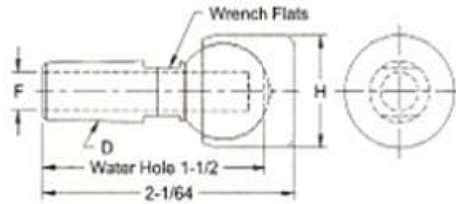
SWIVEL HEAD BACK-UP ELECTRODES

Standard material: Shank - **DSI[®]3**
 Cap - **DSI[®]3**
 Optional material available on special order:
 Cap- **DSI[®]100, DSI ELECTRODE** facing

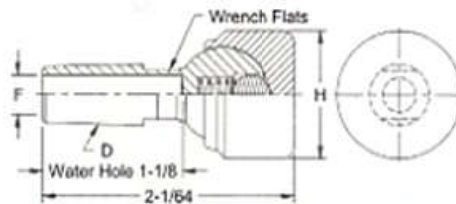
PART No.	Taper D	Water Hole Dia. F	Face Dia. H	Type
16-2304	4 RW	9/32	7/8	Thru hole with "O" ring
16-2305	5 RW	3/8		
16-2302	4 RW	9/32	1	
16-2303	5 RW	3/8		
16-2300	4 RW	9/32	1-1/4	
16-2301	5 RW	3/8		
16-2306	5 RW	3/8	1-1/2	



PART No.	Taper D	Water Hole Dia. F	Face Dia. H	Type
16-2314	4 RW	9/32	7/8	Blind hole
16-2315	5 RW	3/8		
16-2312	4 RW	9/32	1	
16-2313	5 RW	3/8		
16-2310	4 RW	9/32	1-1/4	
16-2311	5 RW	3/8		
16-2316	5 RW	3/8	1-1/2	

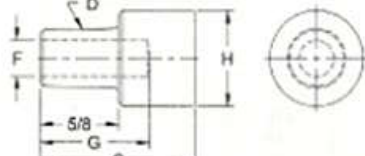


PART No.	Taper D	Water Hole Dia. F	Face Dia. H	Type
16-23129	4 RW	9/32	1	Blind hole with spring and ball
16-23139	5 RW	3/8		
16-23109	4 RW	9/32	1-1/4	
16-23119	5 RW	3/8		
16-23169	4 RW	9/32	1-1/2	
16-23179	5 RW	3/8		

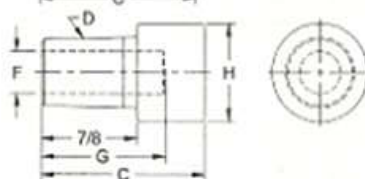


LARGE DIAMETER FLAT FACED BACK-UP ELECTRODES

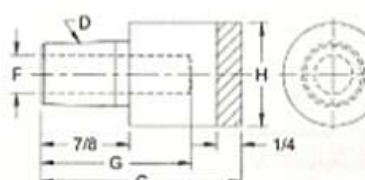
PART No.	Weld Face Material	O.A.L. C	Taper D	Water Hole		Weld Face Dia. H
				Dia. F	Depth G	
16-3012	DSI[®]3	1-1/4	4 RW	9/32	7/8	3/4
16-3010						1
16-3030						1-1/4



PART No.	Weld Face Material	O.A.L. C	Taper D	Water Hole		Weld Face Dia. H
				Dia. F	Depth G	
16-3021	DSI[®]3	1-1/2	5 RW	3/8	1-1/8	7/8
16-3020						1
16-3040						1-1/4
16-3050						1-1/2

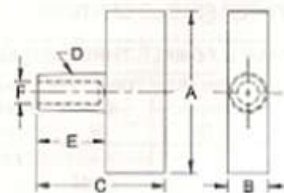


PART No.	Weld Face Material	O.A.L. C	Taper D	Water Hole		Weld Face Dia. H
				Dia. F	Depth G	
16-1392	DSI[®] 10W3	2	5 RW	3/8	1-1/2	1
16-1393						1
16-1394						1-1/4
16-1395						1-1/4
						5/8

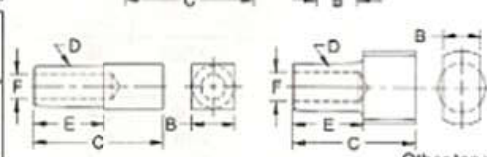


SQUARE & RECTANGULAR FACED BACK-UP ELECTRODES

PART No.	Weld Face Material	O.A.L. C	Taper D	Shank Length E	Water Hole Dia. F	Weld Face	
						Lgth. A	Width B
16-382158	DSI[®]3 Casting	1-5/8	4 RW	7/8	9/32	1-1/2	1/2
16-3111						2	5/8
16-382160						1-1/2	1/2
16-3121						2	5/8

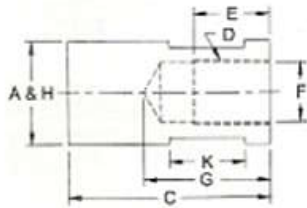


PART No.	Weld Face Material	O.A.L. C	Taper D	Shank Length E	Water Hole Dia. F	Weld Face	
						Lgth. A	Width B
16-3110	DSI[®]3 Cold Formed	1-1/2	4 RW	13/16	9/32	1/2	1/2
16-3120						5/8	5/8
16-384110						15/16	1/2

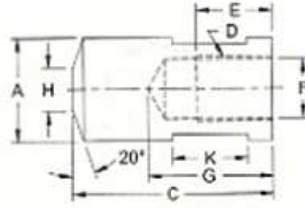


Other tapers and alloys available to special order

THREADED ELECTRODES



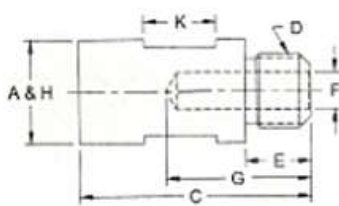
FEMALE FLAT



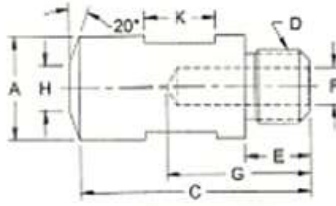
FEMALE TRUNCATED

DSI®3 FEMALE THREADED ELECTRODES

DSI®3 PART No.	Type	O.A.L. C	Thread D	Major Dia. A	Thread Depth E	Water Hole Depth G	Water Hole Dia. F	Over Wrench Flats	Wrench Flat Length K	Welding Face Dia. H
336508	Female Flat	2	5/8-18	1	3/4	1-1/4	37/64	7/8	3/4	1
336510				1-1/4	3/4			1-1/4		
336512				1-1/2	7/8			1-1/2		
326508	Female Truncat.	2	5/8-18	1	3/4	1-1/4	37/64	7/8	3/4	3/8
326510				1-1/4	3/4			1/2		
326512				1-1/2	7/8			5/8		



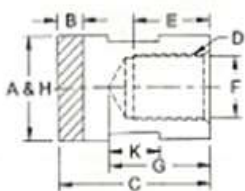
MALE FLAT



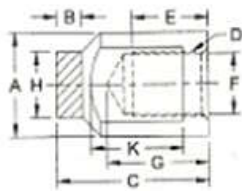
MALE TRUNCATED

DSI®3 MALE THREADED ELECTRODES

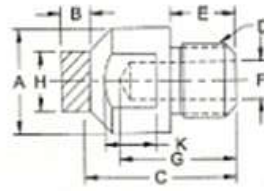
DSI®3 PART No.	Type	O.A.L. C	Thread D	Major Dia. A	Thread Depth E	Water Hole Depth G	Water Hole Dia. F	Over Wrench Flats	Wrench Flat Length K	Welding Face Dia. H
330507	Male Flat	2	5/8-18	7/8	9/16	1-1/4	5/16	3/4	5/8	7/8
330508			5/8-18	1	9/16		5/16	7/8	5/8	1
335506			5/8-11	3/4	15/32		5/16	5/8	1/2	3/4
335507			5/8-11	7/8	15/32		5/16	3/4	3/4	7/8
335508			3/4-10	1	5/8		3/8	7/8	7/8	1
335510	3/4-10	1-1/4	5/8	3/8	1	3/4	1-1/4			
335512	7/8-9	1-1/2	3/4	1/2	1-1/4	7/8	1-1/2			
325506	Male Truncat.	2	5/8-11	3/4	15/32	1-1/4	5/16	5/8	1/2	1/4
325507			5/8-11	7/8	15/32		5/16	3/4	5/8	5/16
325508			3/4-10	1	5/8		3/8	5/8	5/8	3/8
325510			3/4-10	1-1/4	5/8		3/8	1	3/4	1/2



DSI FACED FEMALE FLAT



DSI FACED FEMALE CENTERED



DSI FACED MALE CENTERED

DSI FACED MALE & FEMALE THREADED ELECTRODES

DSI 10W3 PART No.	Type	O.A.L. C	Thread D	Major Dia. A	Thread Depth E	Water Hole Depth G	Water Hole Dia. F	Over Wrench Flats	Wrench Flat Length K	Welding Face Dia. H	DSI Thickness B
636308	Female Flat	1-1/2	5/8-18	1	3/4	1	37/64	7/8	1/2	1	1/4
636310				1-1/4	3/4			1	1/2	1-1/4	
636312				1-1/2	7/8			1-1/2			
626308	Female Centered	1-1/2	5/8-18	1	3/4	1	37/64	7/8	13/16	5/8	1/4
626310				1-1/4	3/4			1	11/16	5/8	
620307	Male Centered	1-1/2	5/8-18	7/8	9/16	1	5/16	3/4	3/4	1/2	1/4
625206		1-1/4	5/8-11	3/4	15/32	7/8	5/16	5/8	3/4	1/2	3/16
625308		1-5/8	3/4-10	1	5/8	1-3/16	3/8	7/8	7/8	5/8	1/4

FEMALE FLAT



FEMALE TRUNCATED



MALE FLAT



MALE TRUNCATED



DSI FACED FEMALE FLAT



DSI FACED FEMALE CENTERED

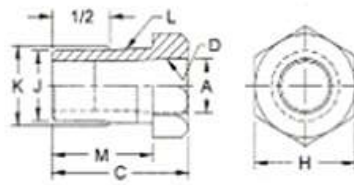


DSI FACED MALE CENTERED

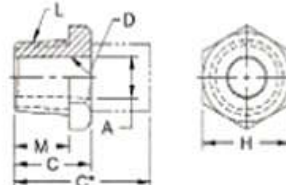


ADAPTERS

MALE TAPER TO FEMALE TAPER ADAPTERS								
Adapter Part No.	Male Taper			Female Taper		Length Under Head M	Hex. Over Flats H	Overall Length C
	Size L	Minor Dia. J	Dia. at 1/2 K	Size D	Major Dia. A			
18-741	5 RW	.588	.613	4 RW	.463	7/8	7/8	1-3/16
18-742	7 RW	.819	.844	5 RW	.625	1-3/16	1	1-1/2
18-7414	6 RW	.706	.731	5 RW	.625	7/8	1	1-3/16
18-7415	4 RW	.438	.463	5 RW	.625	5/8	7/8	1-3/4
18-7416	5 RW	.588	.613	6 RW	.750	7/8	1	2-1/4

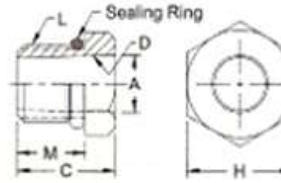


MALE PIPE THREAD TO FEMALE TAPER ADAPTERS						
Adapter Part No.	Male Thd. Size L	Female Taper		Length Under Head M	Hex. Over Flats H	Overall Length C
		Size D	Major Dia. A			
18-746-07	1/2-14 pipe	4 RW	.463	5/8	1	7/8
18-747-07	1/2-14 pipe	5 RW	.625	5/8	1	7/8
18-7465-07	1/2-14 pipe	5 RW Male Cap	.414	9/16	7/8	7/8
18-748-06	5/8-14 pipe	4 RW	.463	9/16	1	3/4
18-749-06	5/8-14 pipe	5 RW	.625	9/16	1	3/4
18-756-09	3/4-14 pipe	4 RW	.463	7/8	1-1/4	1-1/8
18-757-09	3/4-14 pipe	5 RW	.625	7/8	1-1/4	1-1/8
18-7576-09	3/4-14 pipe	6 RW	.750	7/8	1-1/4	1-1/8



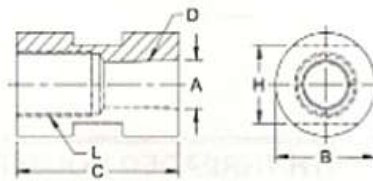
*Adapters of longer lengths available in 1/8" increments upon request

MALE THREAD TO FEMALE TAPER ADAPTERS							
Adapter Part No.	Male Thd. Size L	Female Taper		Length Under Head M	Hex or Dia. Over. Flats H	Overall Length C	Sealing Ring Part No.
		Size D	Major Dia. A				
18-750	5/8-18	4 RW	.463	9/16	7/8 Hex	13/16	18-10060-11
18-751	5/8-18	5 RW	.625	9/16	1 Hex	1-11/16	18-10060-11
18-755*	3/4-10	5 RW	.625	9/16	1 Dia.	1-9/16	18-10060-12
18-770	7/8-14	4 RW	.463	5/8	1 Hex	13/16	18-76460
18-771	7/8-14	5 RW	.625	5/8	1 Hex	13/16	18-76460
18-7743	1-14	5/8-18 Thd.	-	5/8	1-1/4 Hex	1	18-10060-17
18-785	1-14	4 RW	.463	9/16	1-1/4 Hex	13/16	18-10060-17
18-786	1-14	5 RW	.625	9/16	1-1/4 Hex	13/16	18-10060-17
18-7863	1-14	6 RW	.750	3/4	1-1/4 Hex	1-3/4	18-10060-17
18-787	1-14	7 RW	.875	3/4	1-1/4 Hex	2-1/8	18-10060-17
18-7875	1-14	5 RW	.625	9/16	1-1/4 Dia.	11/16	18-10060-17
18-7876	1-14	6 RW	.750	5/8	1-1/4 Dia.	7/8	18-10060-17



*This part has 3/4" wrench flats

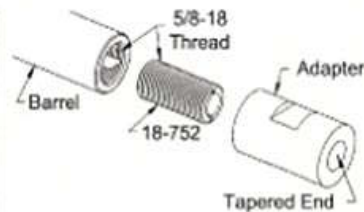
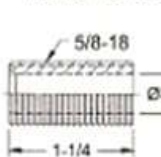
FEMALE THREAD TO FEMALE TAPER ADAPTERS						
Adapter Part No.	Female Thd. Size L	Female Taper		Outside Dia. B	Over Wrench Flats H	Overall Length C
		Size D	Major Dia. A			
18-753	5/8-18	4 RW	.475	1	3/4	1-5/8
18-754	5/8-18	5 RW	.625	1	3/4	1-5/8
18-7591	3/4-10	4 RW	.463	1-1/4 Hex.	1-1/4	1-3/4
18-7592	3/4-10	5 RW	.625	1-1/4 Hex.	1-1/4	1-3/4



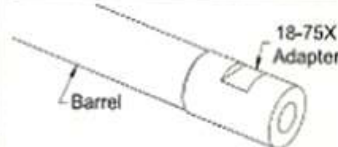
See page 6 for Metric Conversions
See page 7 for Taper Dimensions
See page 34 for ejector type adapters

CONVERSION FROM 5/8-18 THREAD INTO 4, 5, 6, RW TAPER

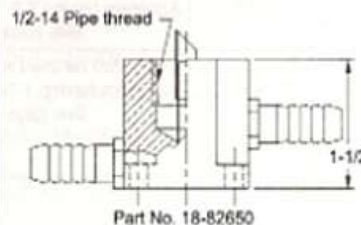
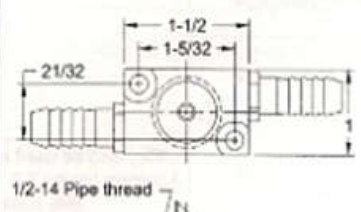
Part No. 18-752



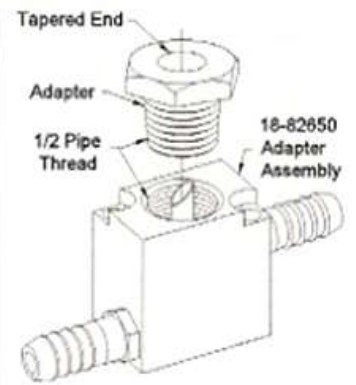
Threaded adapter used with tapered adapter to convert holder to use tapered electrodes.



CONVERSION FROM THREADED ADAPTER INTO 4, 5, 6, RW TAPER

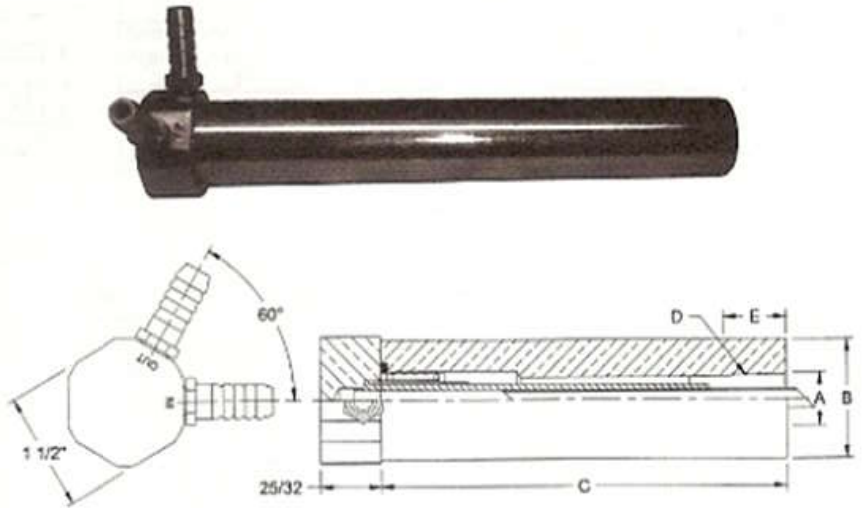


Part No. 18-82650

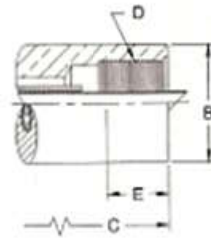


100 SERIES (NON-EJECTOR) WATER COOLED ELECTRODE HOLDER

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



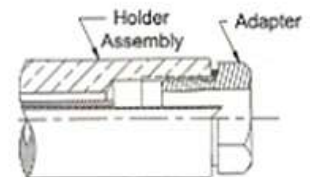
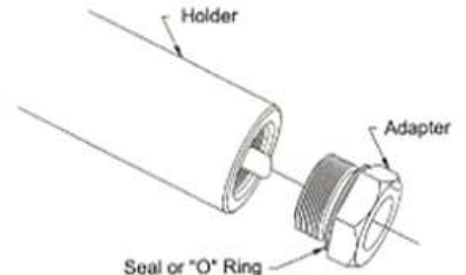
100 SERIES THREADED HOLDER				
Part No. Holder Assy.	Barrel Dia. B	Barrel Length C	Thread Size D	Engagement With Std. Electrode E
18-169	1	8	5/8-18	9/16
18-170	1-1/4			
18-171	1-1/2			
18-172	1	8	7/8-14	9/16
18-173	1-1/4			
18-174	1-1/2			
18-175	1-1/4	8	1-14	3/4
18-176	1-1/2			



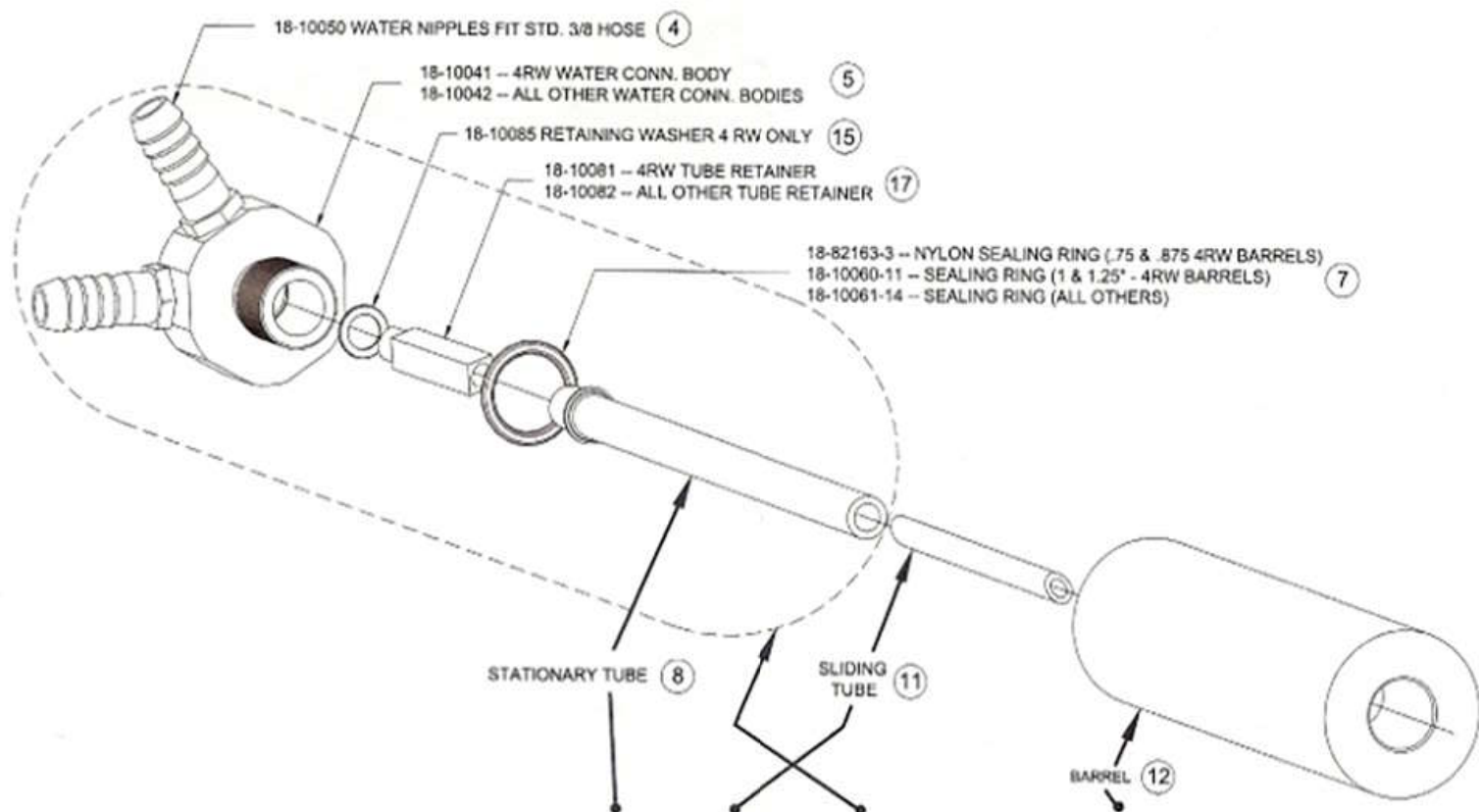
See available adapters in table below.

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	4 RW Female	
		31	5 RW Female	
		31	5/8-18 M. Thread	
		48	#1 Size Nu-Twist*	
18-172 18-173 18-174	Use with 18-770 18-771	31	4 RW Female	May also be used with universal Adapters having 7/8-14 Male thread See page 46
		31	5 RW Female	
18-175 18-176	Use with 18-785 18-786 18-7863 18-787 18-812	31	4 RW Female	May also be used with universal Adapters having 1-14 Male thread See page 46
		31	5 RW Female	
		31	6 RW Female	
		31	7 RW Female	
		48	#2 Size Nu-Twist*	



100 SERIES (NON-EJECTOR) WATER COOLED ELECTRODE HOLDER



Part No. Holder Assy.	Thread Or Taper	Barrel Length	Stationary Tube 8	Sliding Tube 11	Water Conn. HD. Sub-Assy. Include Parts: 4 5 7 8 15 17	Barrel Diameter	Barrel 12
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

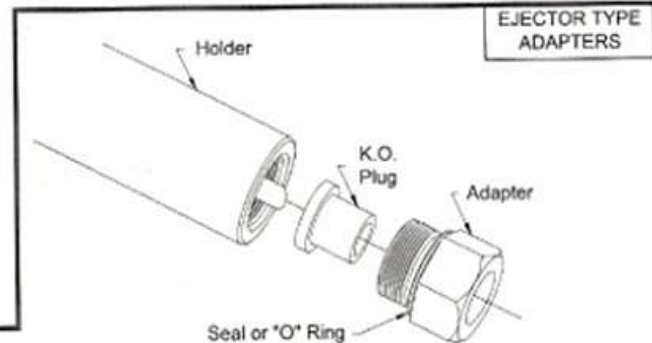
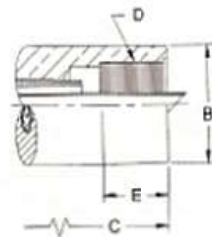
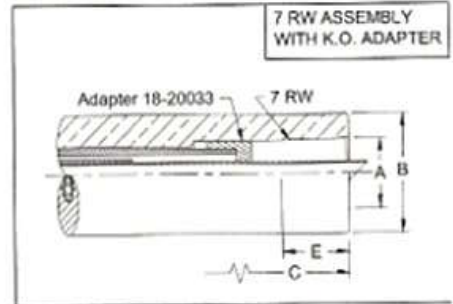
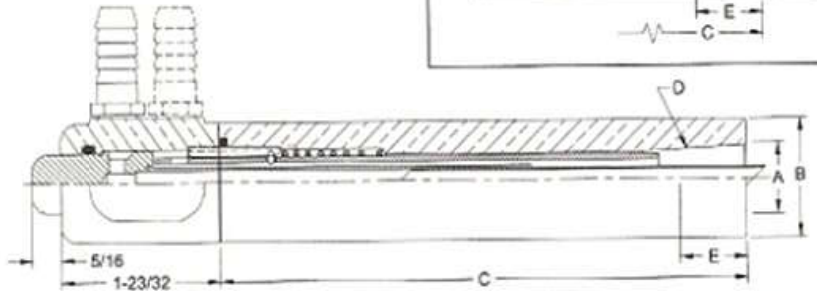
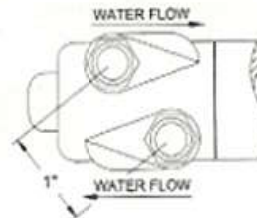
200 SERIES (EJECTOR) WATER COOLED ELECTRODE HOLDER

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	18	5 RW	3/4
18-217		1-1/4			
18-218		1-1/2			
18-219*	.875	1-1/4	18	5 RW	3/4
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	18	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		1-14	3/4
18-274	1-1/2			
18-275	1-1/4	8	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.

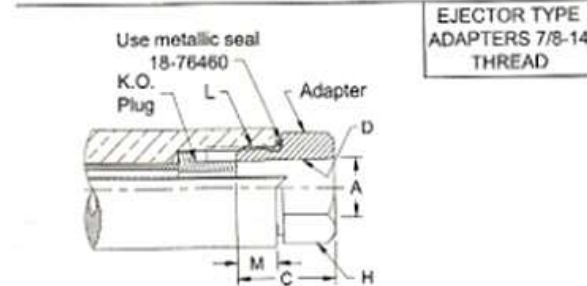


EJECTOR TYPE ADAPTERS

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

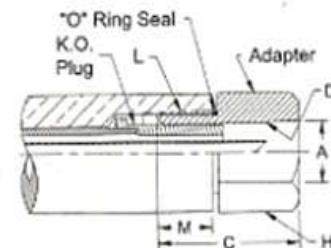
Part No.	Female Thd. Size	Barrel Dia.
18-272	7/8-14	1
18-273	7/8-14	1-1/4
18-274	7/8-14	1-1/2



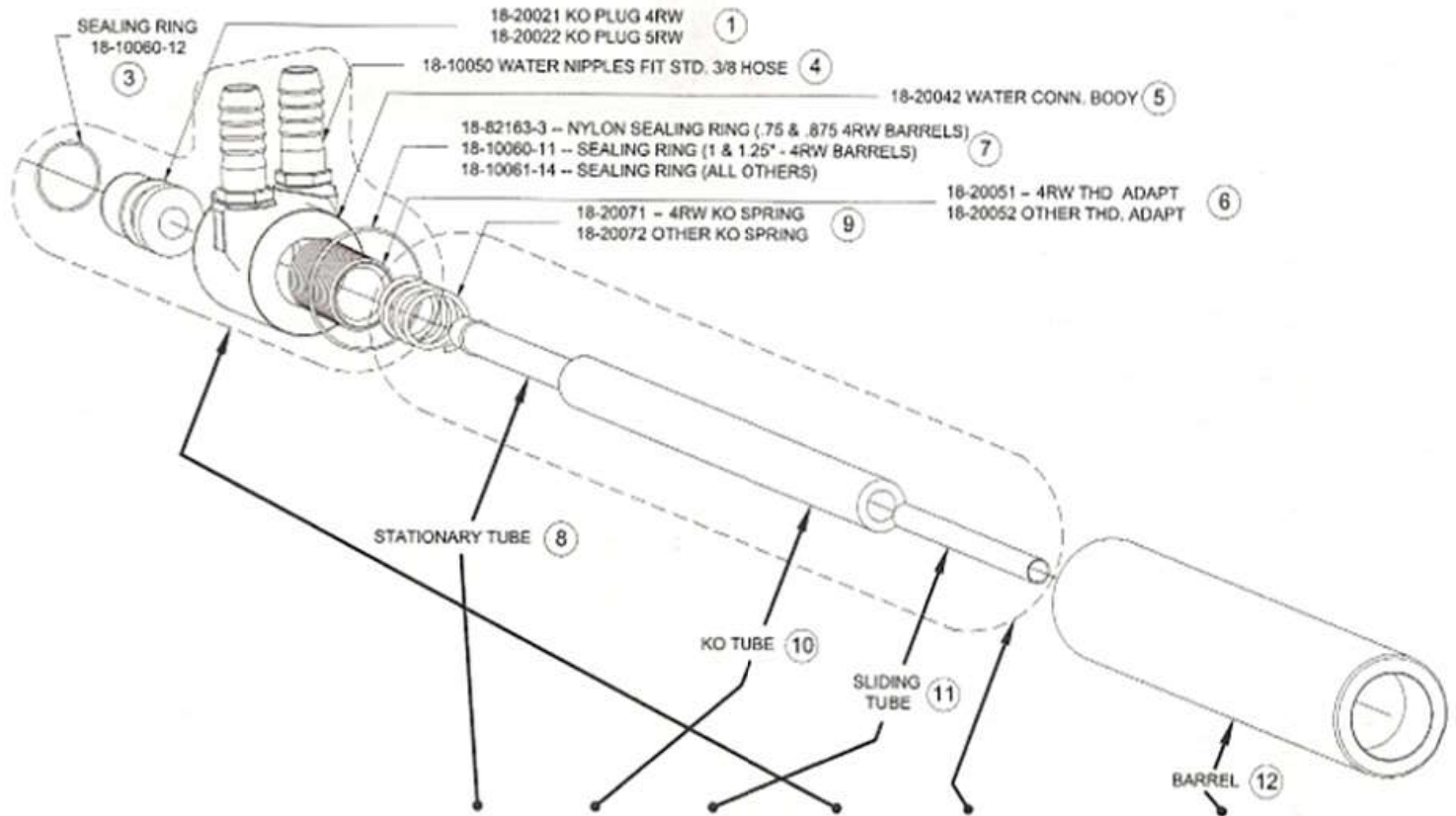
EJECTOR TYPE ADAPTERS 1-14 THREAD								
Adapter Part No.	Male Thd. Size L	Female Taper		Length Under Hd. M	Hex. Over Flats H	Overall Length C	Sealing Ring Part No.	K.O. Plug Part No.
		Size D	Major Dia. A					
18-7852	1-14	4 RW	.463	9/16	1-1/4	13/16	18-10060-17	18-78501
18-7862	1-14	5 RW	.625	7/16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



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

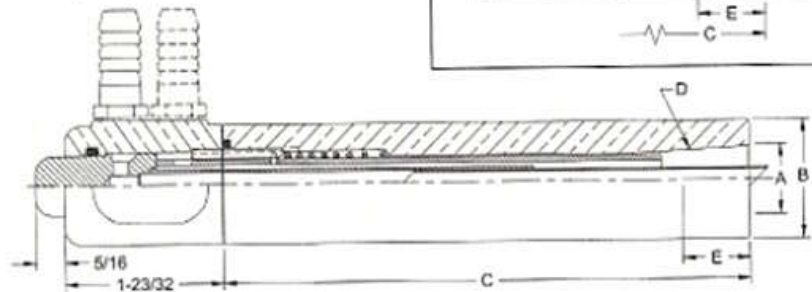
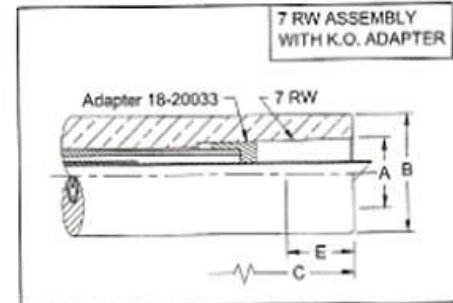
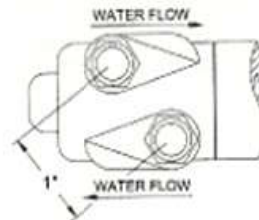
300 SERIES PREMIUM (EJECTOR) WATER COOLED ELECTRODE HOLDER

DSI Premium holder barrels are made from high strength **DSI**® 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

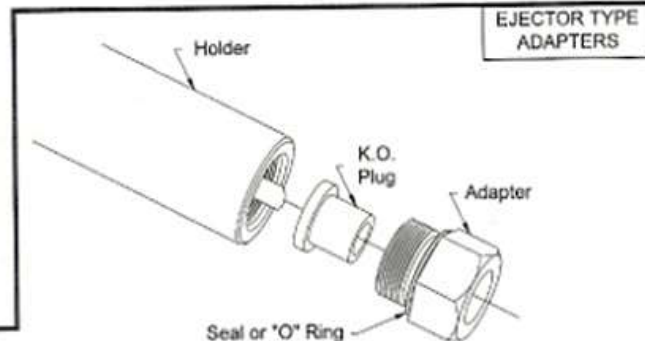
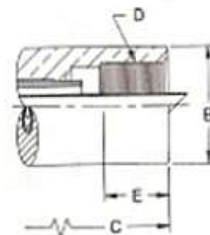
*Must use knockout adapter 18-20033



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.

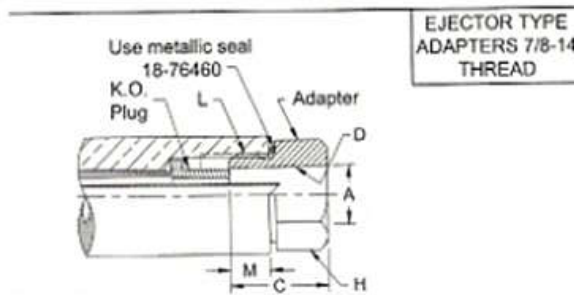


EJECTOR TYPE ADAPTERS

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

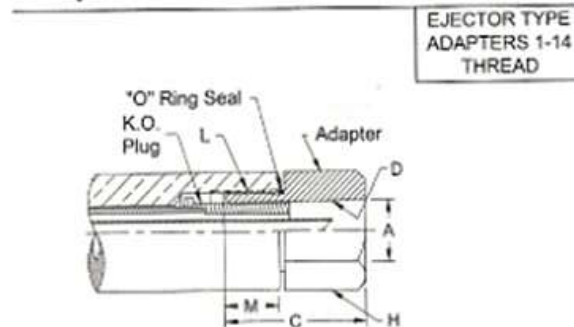
Part No.	Female Thd. Size	Barrel Dia.
18-372	7/8-14	1
18-373	7/8-14	1-1/4



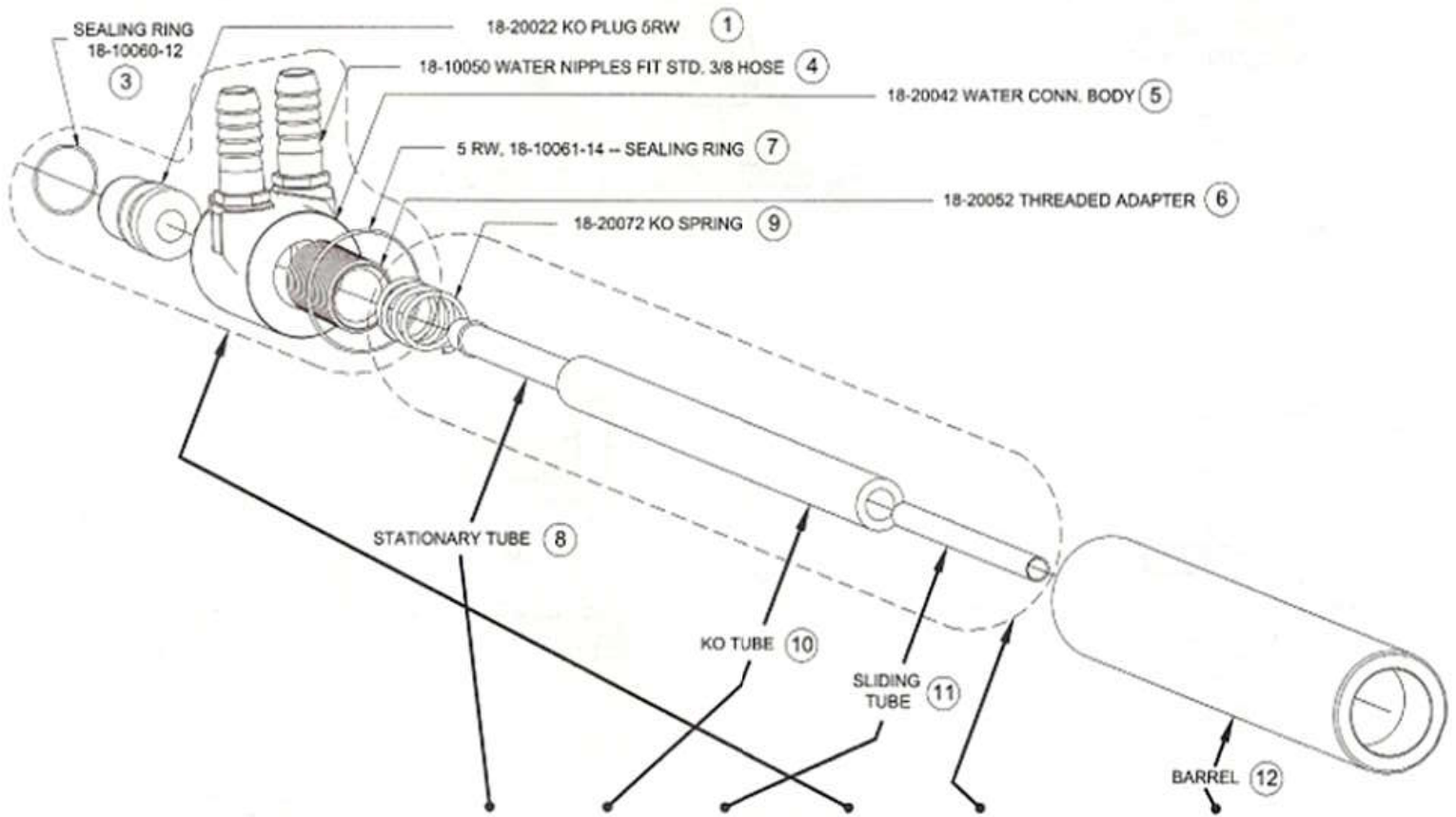
EJECTOR TYPE ADAPTERS 1-14 THREAD								
Adapter Part No.	Male Thd. Size L	Female Taper		Length Under Hd. M	Hex. Over Flats H	Overall Length C	Sealing Ring Part No.	K.O. Plug Part No.
		Size D	Major Dia.					
18-7852	1-14	4 RW	.463	9/16	1-1/4	13/16	18-10060-17	18-78501
18-7862	1-14	5 RW	.625	7/16	1-1/4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

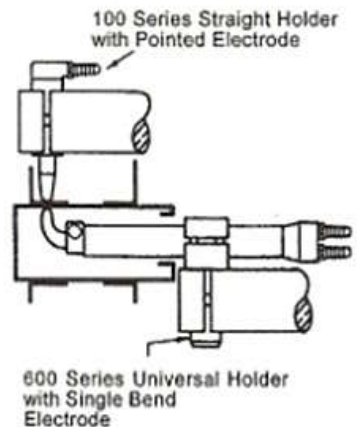
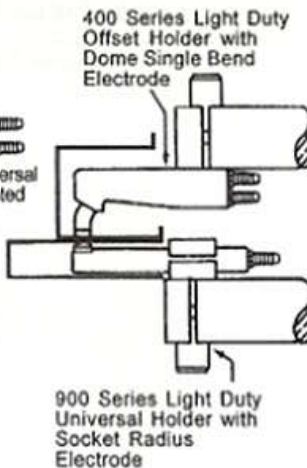
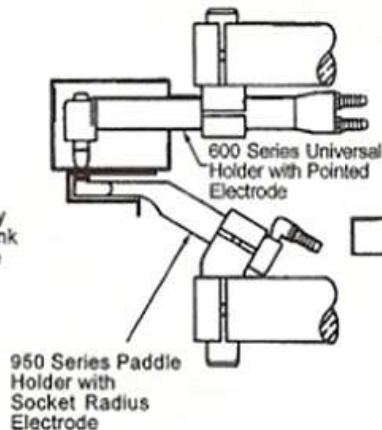
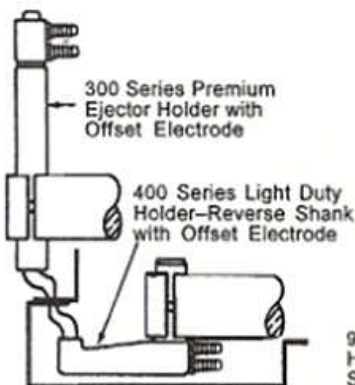
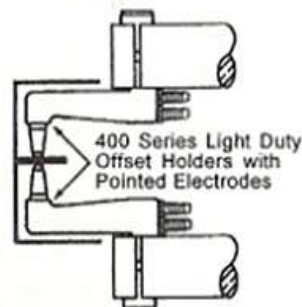
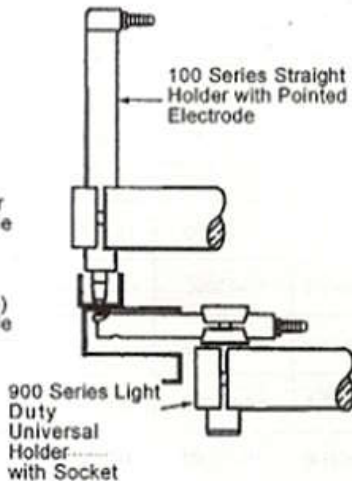
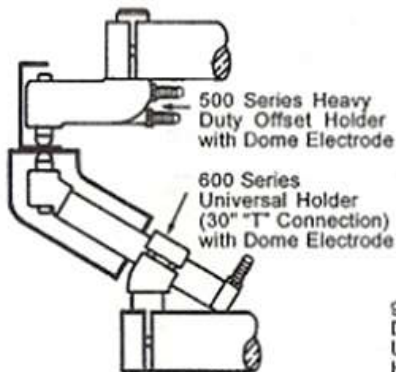
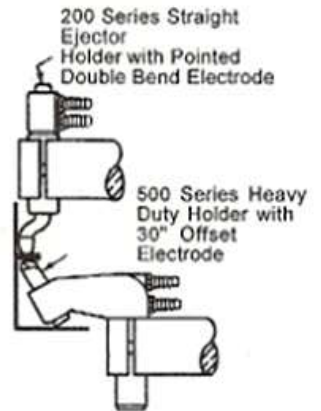
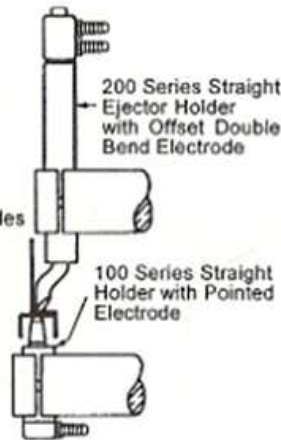
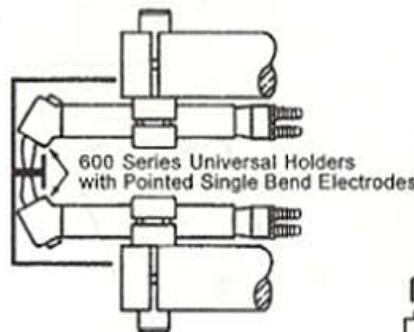
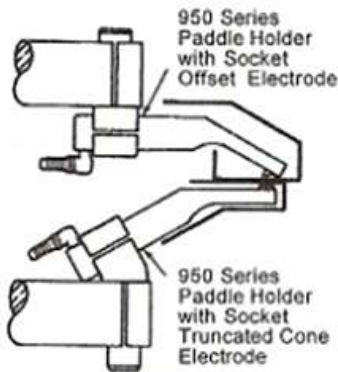
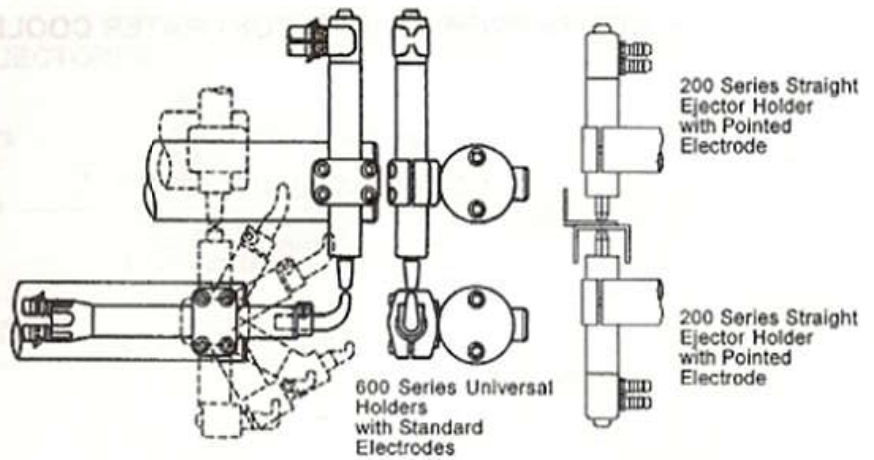


Part No. Holder Assy.	Thread Or Taper	O.A.L.	Stationary Tube 8	K.O. Tube 10	Sliding Tube 11	Water Conn. HD. Sub-Assy. Include Parts: 1 3 4 5 6 7	K.O. Tube Sub-Assy. Include Parts: 8 9 10 11	Barrel Diameter	Barrel 12
18-317 18-318	5 RW	8	18-10045-8	18-20032-8	18-10047-8	18-20092	18-20096-8	1-1/4 1-1/2	18-31710-8 18-31810-8
18-319* 18-320*	7 RW	8	18-10045-8	18-20032-68 & 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

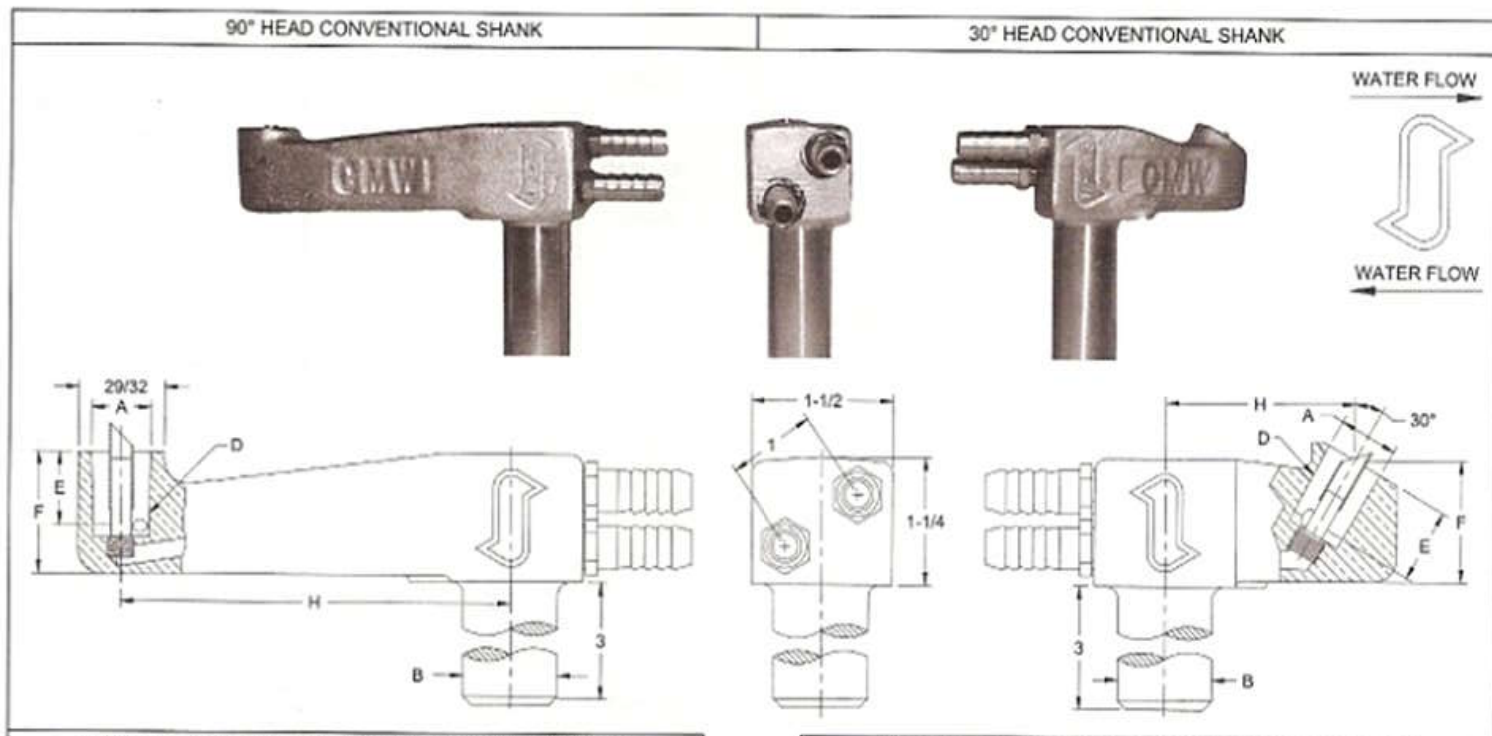
*Must use knockout adapter 18-20033

COMBINATIONS OF DSI 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.



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				

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

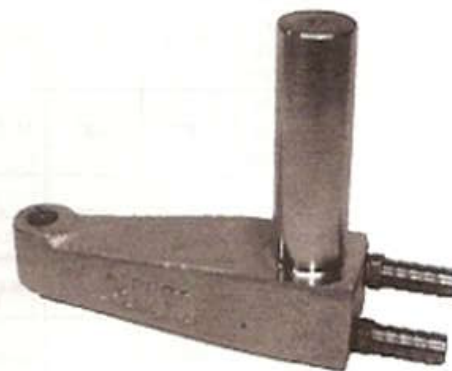
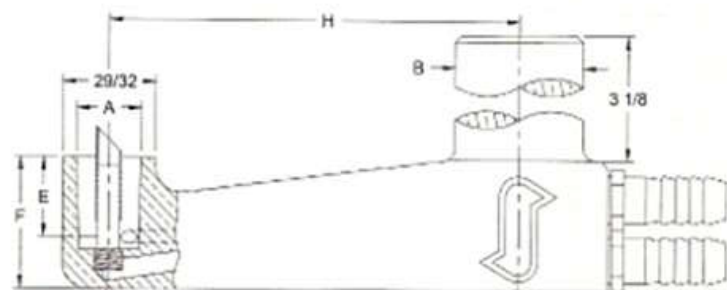
400 SERIES OFFSET HOLDER (CONVENTIONAL SHANK 30°)

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

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

90° HEAD REVERSE SHANK

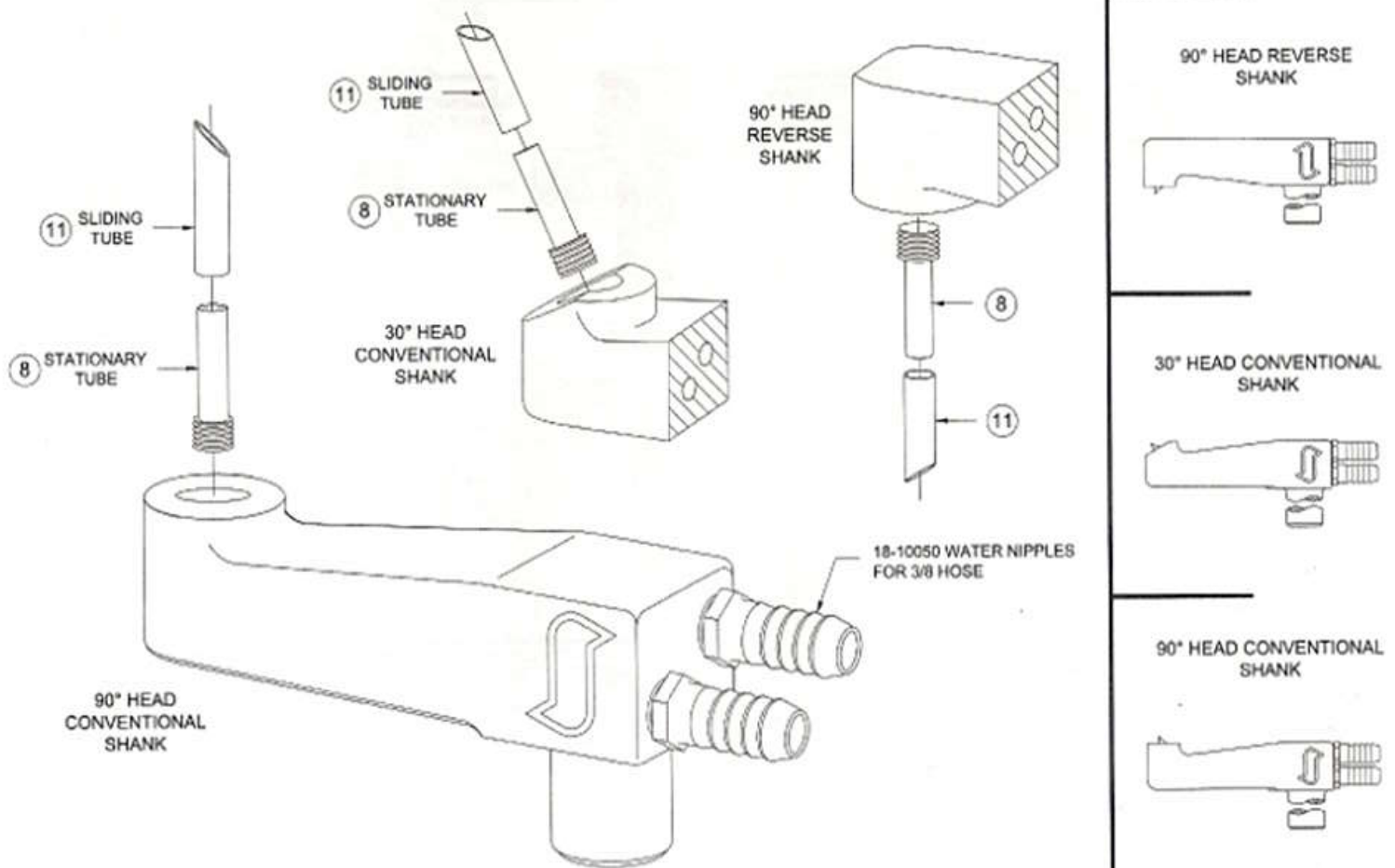


400 SERIES OFFSET HOLDER (REVERSE SHANK 90°)

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