



RESISTANCE WELDING PRODUCTS

- ELECTRODES • HOLDERS • BAR STOCK • SEAM WELDING WHEELS • RINGS
- SPECIAL DIES • SHAFTS • BUSHINGS • CASTINGS
- FORGINGS • ELECTRODE MATERIALS

**Special electrodes, holders and dies for
resistance welding applications**

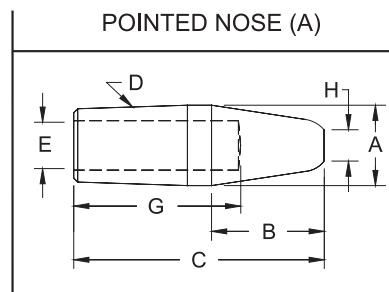
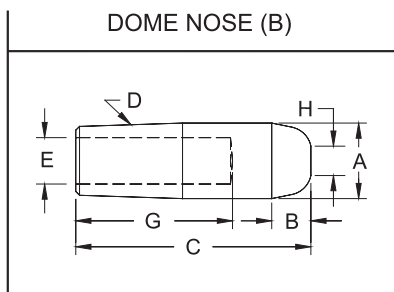
Continuously serving the resistance Welding Industry since 1929, CMW Inc. is an industry leader in the development, engineering and manufacturing of a variety of products. In addition, CMW offers a diversity of special metals for resistance welding applications. CMW's resistance welding products are engineered to provide the most effective materials commercially available to help achieve top quality welds. Experienced CMW engineers will aid you in the design and production of standard or special parts for your application to insure maximum efficiency from CMW's resistance welding products.

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STRAIGHT ELECTRODES



4 RW TAPER (D)			
CMW [®] 28	CMW [®] 3	CMW [®] 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	

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)			
CMW [®] 28	CMW [®] 3	CMW [®] 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	

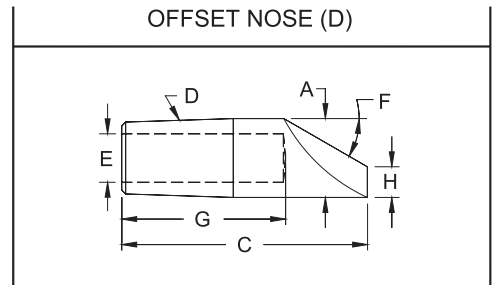
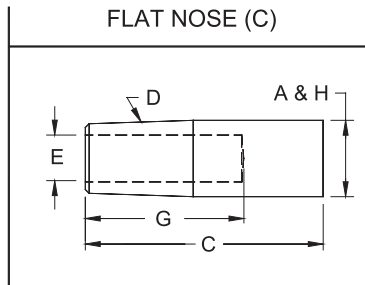
5 RW TAPER (D)			
CMW [®] 28	CMW [®] 3	CMW [®] 100	Nose Length B
Class 1	Class 2	Class 3	
1122	3122	5122	3/8
1123	3123	5123	
1124	3124	5124	
1125	3125	5125	
1126	3126	5126	
1127	3127	5127	
1128	3128	5128	
1129	3129	5129	
11212	31212	51212	
11214	31214	51214	
11216	31216	51216	
11218	31218	51218	
11220	31220	51220	
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)			
CMW [®] 28	CMW [®] 3	CMW [®] 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	
12222	32222	52222	1-1/8

*Electrodes of other tapers and alloys available upon request.

STRAIGHT ELECTRODES



4 RW TAPER (D)			
CMW [®] 28	CMW [®] 3	CMW [®] 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)				
CMW [®] 28	CMW [®] 3	CMW [®] 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)			
CMW [®] 28	CMW [®] 3	CMW [®] 100	Face Dia. H
Class 1	Class 2	Class 3	
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	

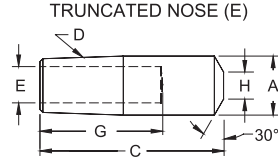
COMMON DIMENSIONS			
Major Dia. A	Water Hole Dia. E	Overall Length C	Hole Depth G
.625	3/8	1-1/4	3/4
		1-1/2	3/4
		1-3/4	1
		2	1-1/4
		2-1/4	1-1/2
		2-1/2	1-3/4
		2-3/4	2
		3	2-1/4
		3-1/4	2-1/2
		3-1/2	2-3/4
		3-3/4	3
		4	3-1/4
4-1/4	3-1/2		
4-1/2	3-3/4		

5 RW TAPER (D)				
CMW [®] 28	CMW [®] 3	CMW [®] 100	Nose Angle F	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

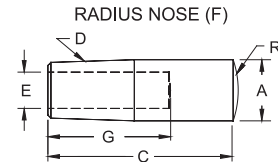
TRUNCATED (E)								
CMW® 28	CMW® 3	CMW® 100	Major Dia. A	Overall Length C	Taper D	Hole Depth G	Face Dia. H	Water Hole Dia. E
Class 1	Class 2	Class 3						
1712	3712	5712	.482	1-1/4	4RW	3/4	3/16	9/32
1713	3713	5713		1-1/2		1		
1715	3715	5715		2		1-1/2		
1717	3717	5717		2-1/2		2		
1718	3718	5718		2-3/4		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		



TRUNCATED NOSE (E)



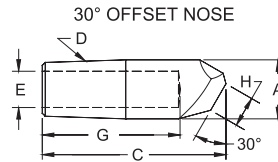
RADIUS (F)								
CMW® 28	CMW® 3	CMW® 100	Major Dia. A	Overall Length C	Taper D	Hole Depth G	Spherical Radius R	Water Hole Dia. E
Class 1	Class 2	Class 3						
1523	3523	5523	.625	1-1/2	5RW	3/4	2	3/8
1525	3525	5525		2		1-1/4		
1527	3527	5527		2-1/2		1-3/4		
1529	3529	5529		3		2-1/4		
15218	35218	55218		4		3-1/4		
1623	3623	5623		1-1/2		3/4		
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		2		1-1/4	3	
1829	3829	5829		3		2-1/4		
1925	3925	5925	2	1-1/4	4			
1929	3929	5929	3	2-1/4				



RADIUS NOSE (F)



30° OFFSET								
CMW® 28	CMW® 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	



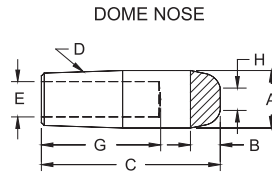
30° OFFSET NOSE



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

ELKONITE® AND ELKON® FACED STRAIGHT ELECTRODES

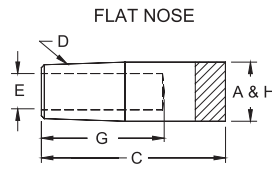
ELKONITE® AND ELKON® DOME NOSE									
Elkonite® 10W3 Face	Elkon® 100M Face	Elkon® 100W Face	Major Dia. A	Nose Length B	Overall Length C	Taper D	Hole Depth G	Face Dia. H	Water Hole Dia. E
611050	811050	911050	.482	3/16	2	4RW	1-1/2	1/8	9/32
612050	812050	912050	.625	1/4		5RW			3/8



DOME NOSE



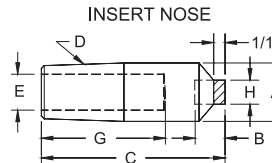
ELKONITE® AND ELKON® FLAT NOSE									
631050	831050	931050	Major Dia. A	Nose Length B	Overall Length C	Taper D	Hole Depth G	Face Dia. H	Water Hole Dia. E
631050	831050	931050	.482	3/16	2	4RW	1-1/2	.482	9/32
632030	832050	932050	.625	1/4	1-1/2	5RW	1	5/8	3/8
632050				2	1-1/2		1-1/2		
632070				2-1/2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



FLAT NOSE



ELKON® CENTERED INSERT NOSE								
871050	971050	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



INSERT NOSE



- Electrodes of other tapers and alloys available upon request. For other ELKONITE® and ELKON® 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.