



DASH NO.	A REF	B REF	C ±.010	D ±.010
MS9228-01	0.500	0.500	0.328	0.328
MS9228-02	0.500	0.625	0.328	0.453
MS9228-03	0.500	0.750	0.328	0.578
MS9228-04	0.500	0.875	0.328	0.703
MS9228-05	0.500	1.000	0.328	0.828
MS9228-06	0.500	1.250	0.328	1.078
MS9228-07	0.500	1.500	0.328	1.328
MS9228-08	0.500	1.750	0.328	1.578
MS9228-10	0.625	0.625	0.453	0.453
MS9228-11	0.625	0.750	0.453	0.578
MS9228-12	0.625	0.875	0.453	0.703
MS9228-13	0.625	1.000	0.453	0.828
MS9228-14	0.625	1.250	0.453	1.078
MS9228-15	0.625	1.500	0.453	1.328
MS9228-16	0.625	1.750	0.453	1.578
MS9228-20	0.750	0.750	0.578	0.578
MS9228-21	0.750	0.875	0.578	0.703
MS9228-22	0.750	1.000	0.578	0.828
MS9228-23	0.750	1.250	0.578	1.078
MS9228-24	0.750	1.500	0.578	1.328
MS9228-25	0.750	1.750	0.578	1.578
MS9228-30	0.875	0.875	0.703	0.703
MS9228-31	0.875	1.000	0.703	0.828
MS9228-32	0.875	1.250	0.703	1.078
MS9228-33	0.875	1.500	0.703	1.328
MS9228-34	0.875	1.750	0.703	1.578
MS9228-40	1.000	1.000	0.828	0.828
MS9228-41	1.000	1.250	0.828	1.078
MS9228-42	1.000	1.500	0.828	1.328
MS9228-43	1.000	1.750	0.828	1.578
MS9228-44	1.000	2.000	0.828	1.828

REQUIREMENTS:

1. MATERIAL: CORRISON RESISTANT STEEL IN ACCORDNACE WITH AMS 5504.
2. HEAT TREATMENT AND CLEANING: HEAT TREATMENT AND CLEANING IN ACCORDANCE WITH AMS 2550.
3. HARDNESS: 30-38 HRC.
4. DIMENSIONING AND TOLERANCING: DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14. 5M.
5. TOLERANCE: UNLESS OTHERWISE SPECIFIED, TOLERANCES SHALL BE FOR LINEAR DIMENSION ±.015, ANGULAR ±2°.
6. PART NUMBER: THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM THE TABLE.

EXAMPLE: MS9228 -02



NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. DO NOT USE UNASSIGNED PART NUMBERS.
3. REMOVE BURRS AND BREAK SHARP EDGES.

THIS CATALOG PAGE IS FOR REFERENCE ONLY. REQUEST A CERTIFIED UMPCO DRAWING FOR ACTUAL SPECIFICATIONS. ANY CONFLICT BETWEEN THIS DOCUMENT AND THE CERTIFIED DRAWING, THE CERTIFIED DRAWING WILL TAKE PRESEDENCE. IF THE DOCUMENT IS CONTROLLED BY ANY OTHER SOURCE THAN UMPCO, THE CERTIFIED DRAWING MUST BE PURCHASED THROUGH THAT ORGNIZATION.

**UMPCO, INC**  
CAGE CODE No. 18076

REV  
N/C  
01/30/09

**AS9228**

BRACKET, ANGLE 90°, .190 BOLT

PART NUMBER