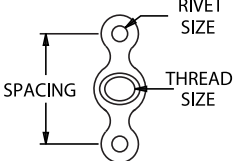
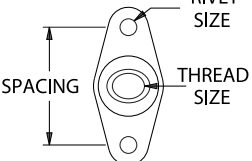
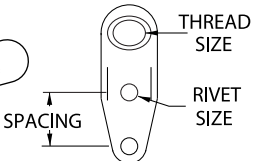
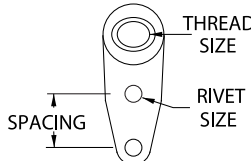
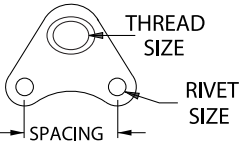
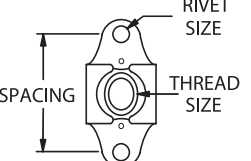
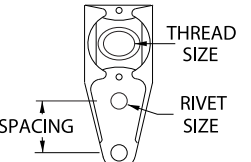
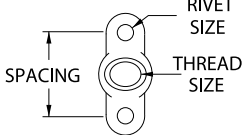
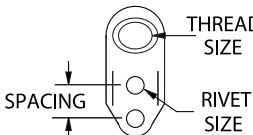
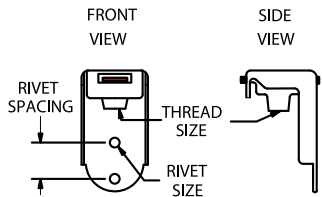
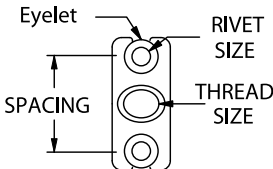
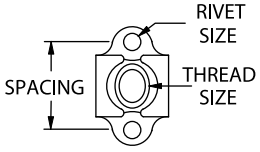
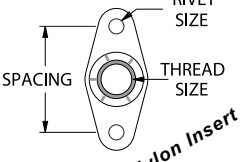
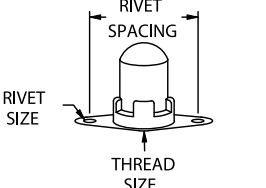
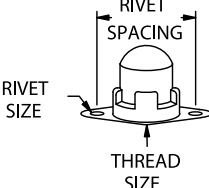
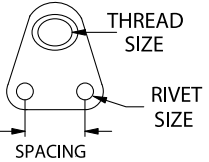


Nutplates

Visual Identification Chart

See Specification and Size Charts for Nutplates

 <p>MS21047 Steel, Fixed MS21048 Cres., Fixed</p>	 <p>MS21049 Steel, Fixed, Countersunk MS21050 Cres., Fixed, Countersunk</p>	 <p>MS21051 Steel, Fixed, Std Spacing, One Leg MS21052 Cres., Fixed, Std Spacing, One Leg</p>	
 <p>MS21053 Steel, Fixed, Countersunk, One Leg MS21054 Cres., Fixed, Countersunk, One Leg</p>	 <p>MS21055 Steel, Fixed, Std Spacing, Corner MS21056 Cres., Fixed, Std Spacing, Corner MS21057 Steel, Fixed, Countersunk, Corner MS21058 Cres., Fixed, Countersunk, Corner MS21073 Steel, Fixed, Mini Pattern, Corner MS21074 Cres., Fixed, Mini Pattern, Corner</p>	 <p>MS21059 Steel MS21060 Cres. Floating Type, Standard Spacing</p>	
 <p>MS21061 Steel, Floating, Std Spacing, One Leg MS21062 Cres., Floating, Std Spacing, One Leg</p>	 <p>MS21069 Steel, Miniature MS21070 Cres., Miniature</p>	 <p>MS21071 Steel, Mini, One Leg MS21072 Cres., Mini, One Leg</p>	
 <p>FRONT VIEW SIDE VIEW</p> <p>NAS1033 Steel, Floating, Right Angle</p>	 <p>MS21075-XXE Steel, Mini Floater, Eyelets MS21076-XXE Cres., Mini Floater, Eyelets</p>	 <p>MS21075-XXN Steel, Mini Floater, No Eyelets MS21076-XXN Cres., Mini Floater, No Eyelets</p>	
 <p>MS21078 Steel Nylon Ins, Std Spacing</p>	 <p>NAS1473 Self Sealing, Std Spacing</p>	 <p>NAS1474 Self Sealing, Mini Pattern</p>	 <p>MS21086 Steel, Side by Side Pattern MS21087 Cres., Side by Side Pattern</p>

Shaded areas are for reference only; ORDER PART NUMBERS IN UNSHADED AREAS ONLY !

PART#	Supersedures / Notes	Spacing Chart	Pattern	Material	Plating	Max Temp	Rated Tensile
MS21047 (XX)	AN362F, AN366F, NAS680A, NAS1023A	A	Standard, Fixed	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21048 (XX)	AN362CW, AN366CW, NAS680C, NAS1023C	A	Standard, Fixed	Cres.	Silver	800 Deg	125 Ksi.
MS21049 (XX)	AN361, AN373F, NAS681A / Sizes 8-32 thru 5/16-24	A	Std, Fixed, C/S	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21050 (XX)	AN361C, NAS681C / Sizes 8-32 thru 5/16-24	A	Std, Fixed, C/S	Cres.	Silver	800 Deg	125 Ksi.
MS21051 (XX)	NAS682A, NAS1025A	C	Std, Fixed, 1 Leg	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21052 (XX)	NAS682C, NAS1025C	C	Std, Fixed, 1 Leg	Cres.	Silver	800 Deg	125 Ksi.
MS21053 (XX)	NAS683A / Sizes 8-32 Thru 5/16-24	C	Fixed, C/S, 1 Leg	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21054 (XX)	NAS683C / Sizes 8-32 Thru 5/16-24	C	Fixed, C/S, 1 Leg	Cres.	Silver	800 Deg	125 Ksi.
MS21055 (XX)	NAS684A, NAS1027A	D	Std, Fixed, Corner	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21056 (XX)	NAS684C, NAS1027C	D	Std, Fixed, Corner	Cres.	Silver	800 Deg	125 Ksi.
MS21057 (XX)	NAS685A / Sizes 8-32 Thru 5/16-24	D	Fixed, Corner, C/S	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21058 (XX)	NAS685C / Sizes 8-32 Thru 5/16-24	D	Fixed, Corner, C/S	Cres.	Silver	800 Deg	125 Ksi.
MS21059 (XX)	NAS686A, NAS1031A	A	Standard, Floater	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21060 (XX)	NAS686C, NAS1031C	A	Standard, Floater	Cres.	Silver	800 Deg	125 Ksi.
MS21061 (XX)	NAS687A, NAS1032A	C	Std, Floater, 1 Leg	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21062 (XX)	NAS687C, NAS1032C	C	Std, Floater, 1 Leg	Cres.	Silver	800 Deg	125 Ksi.
MS21069 (XX)	NAS697A	B	Fixed, Mini	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21070 (XX)	NAS697C	B	Fixed, Mini	Cres.	Silver	800 Deg	125 Ksi.
MS21071 (XX)	NAS699A	E	Fixed, Mini, 1 Leg	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21072 (XX)	NAS699C	E	Fixed, Mini, 1 Leg	Cres.	Silver	800 Deg	125 Ksi.
MS21073 (XX)	NAS699A	F	Fixed, Mini, Corner	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21074 (XX)	NAS699C	F	Fixed, Mini, Corner	Cres.	Silver	800 Deg	125 Ksi.
MS21075 (XX)	NAS1068A	B	Mini, Floater	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21076 (XX)	NAS1068C	B	Mini, Floater	Cres.	Silver	800 Deg	125 Ksi.
MS21078-(XX)	Nylon Locking Element / NAS1023N	A	Standard, Fixed	Steel / Nylon	Cadmium II	250 Deg	125 Ksi.
MS21086 (XX)	NAS1067A / Sizes 8-32 Thru 3/8-24	G	Side by Side	Steel	CAD II / Black Moly	450 Deg	125 Ksi.
MS21087 (XX)	NAS1067C / Sizes 8-32 Thru 3/8-24	G	Side by Side	Cres.	Silver	800 Deg	125 Ksi.
NAS1033A (XX)	Available in 6-32, 8-32, 10-32	N/A	Right Angle, Floater	Steel & Cres.	Nut-Cad, Cage None	450 Deg	125 Ksi.
NAS1473A (XX)	Available in 8-32 thru 5/16-24	A	Std, Self Sealing	Steel	Cadmium II	225 Deg	125 Ksi.
NAS1474A (XX)	Available in 4-40 thru 1/4-28	H	Mini, Self Sealing	Steel	Cadmium II	225 Deg	125 Ksi.

Nutplate Selection Chart

Nutplates

Spacing Charts / Size Charts / Part Number Examples

Please refer to VISUAL IDENTIFICATION chart and SELECTION chart on previous pages to assist in determining the proper PART #.

Rivet Spacing Chart "A"	
Nut Threads Dia. - Pitch	Rivet Spacing
4-40 Thru 10-32	.688
1/4-28 Thru 3/8-24	1.00

Rivet Spacing Chart "D"	
Nut Threads Dia. - Pitch	Rivet Spacing
4-40 Thru 10-32	.486
1/4-28 Thru 3/8-24	.707

Rivet Spacing Chart "G"	
Nut Threads Dia. - Pitch	Rivet Spacing
8-32 Thru 1/4-28	.219
5/16-24 Thru 3/8-24	1.00

Rivet Spacing Chart "B"	
Nut Threads Dia. - Pitch	Rivet Spacing
4-40	.406
6-32	.437
8-32	.469
10-32	.500
1/4-28	.562
5/16-24	.718
3/8-24	.828

Rivet Spacing Chart "E"	
Nut Threads Dia. - Pitch	Rivet Spacing
4-40 Thru 10-32	.219
1/4-28 Thru 3/8-24	.269

Rivet Spacing Chart "H"	
Nut Threads Dia. - Pitch	Rivet Spacing
4-40 Thru 10-32	.590
1/4-28	.752

Rivet Spacing Chart "C"	
Nut Threads Dia. - Pitch	Rivet Spacing
4-40 Thru 3/8-24	.312

Rivet Spacing Chart "F"	
Nut Threads Dia. - Pitch	Rivet Spacing
4-40	.287
6-32	.308
8-32	.331
10-32	.354
1/4-28	.398
5/16-24	.508
3/8-24	.585

Thread Sizes (XX)	
Dash #	Dia. - Pitch
04	4-40
06	6-32
08	8-32
3	10-32
4	1/4-28
5	5/16-24
6	3/8-24

Kits Available

MS21059 L 08 K

Part # Prefix

Thread Size

Lubricant
(L) = Black Moly / (-) = None

Rivet Hole Style
K = Dimpled, Blank = Not

Dimpled rivet holes are NOT available for the following part numbers: MS21075, MS21076, NAS1033, NAS1473, NAS1474.

Rivet size is 3/32 for nutplates sizes 4-40 thru 1/4-28. Rivet size is 1/8" for nutplates sizes 5/16-24 and 3/8-24.

If Black Moly is used with Corrosion Resistant nutplates the maximum temperature is 450 degrees F.