

Preface

Specifications for screw and nut thread are per approved engineering standards. Within the part number of this scheme is the actual thread kind and thread specification. Also, within the part number is the actual screw length by known incremental.

There are many screw cap formations and many drive types. Not all are listed here. One may be added depending on requirement. Otherwise deem it as **Other** in the category **5600-000** of the EZAL part numbering scheme. *

Numbers and letters placed as code to complete ID of fastener are not listed in any engineering standards book.

At first glance, the fastener part number scheme may appear complex. But after understanding its formulation, it works out quite well. Those people who do not agree are people who haven't spent one month in the storeroom kitting parts or have spent two weeks straight counting the inventory in the storeroom. Thus, their nay vote is baseless.

In essence, that part number identifies the fastener of what it actually is. An arbitrary number does not.

Storeroom people won't need a computer to quickly kit fasteners. Because eventually, they will memorize the part number formulation. Smart!

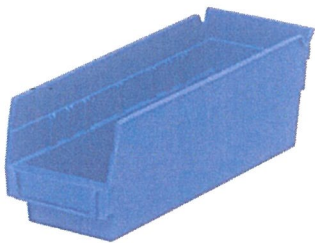
* [EZAL Part Numbering Scheme](#) book

Table of Contents

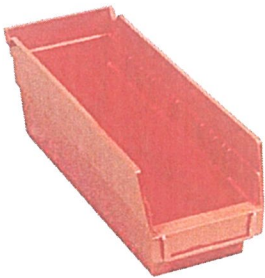
Imperial –
Screws, Nuts, Washers



Metric –
Screws, Nuts, Washers



General Hardware –
Set Collars, Springs, etc.



Fastener Info @ Back

Locker Solutions @ Back

Galling @ Back

Machine Screw, Imperial ASME / ASTM

Part Number Scheme

1. Cap Formation

Ltr.		No.
HX	hexagon	11
SK	socket	13
FT	flat	15
PN	pan	17
BT	button	19
RD	round	21
TR	truss	23
FL	fillister	25
SS *	socket (set screw)	27
SQ *	square (set screw)	29
OV	oval	31
SB	shoulder bolt	33
CR	carriage	35
HW	hex w/ washer	39
IN	hex, indented	41
ST	hex, self-tap	43

2. Drive Type

	No.
hexagon (N/A)	0
Allen	A
slot	1
Phillips	2
combination	3
socket, square hole	4
socket, Torx hole	6
spanner (N/A)	7
one way	9
N/A	X

Combine Cap Formation No. and Drive Type No.

See No. 6A. and 6B. Examples

* SS and SQ are for cup point only.

3A. Thread Spec

+ thrd = No.

#0-80 NF	080
#1-64 NC	164
#1-72 NF	172
#2-56 NC	256
#2-64 NF	264
#3-48 NC	348
#3-56 NF	356
#4-40 NC	440
#4-48 NF	448
#6-32 NC	632
#6-40 NF	640
#8-32 NC	832
#8-36 NF	836

3B. Thread Spec

Nom dia / 1/16" + thrd = No.

#10-24 NC	0324
#10-32 NF	0332
1/4-20 NC	0420
1/4-28 NF	0428
5/16-18 NC	0518
5/16-24 NF	0524
3/8-16 NC	0616
3/8-24 NF	0624
7/16-14 NC	0714
7/16-20 NF	0720
1/2-13 NC	0813
1/2-20 NF	0820
9/16-12 NC	0912
9/16-18 NF	0918
5/8-11 NC	1011
5/8-18 NF	1018
3/4-10 NC	1210
3/4-16 NF	1216
7/8-9 NC	1409
7/8-14 NF	1414
1-8 NC	1608
1-14 NF	1614

3C. Thread Spec

Nom dia / 1/16" + thrd = **No.**

1-1/8-7 NC	1807
1-1/8-12 NF	1812
1-1/4-7 NC	2007
1-1/4-12 NF	2012
1-3/8-6 NC	2206
1-3/8-12 NF	2212
1-1/2-6 NC	2406
1-1/2-12 NF	2412
1-3/4-5 NC	2805
1-3/4-8 BUN	2808
2-4.5 NC	3205
2-8 BUN	3208
2-1/4-4.5 NC	3605
2-1/4-8 BUN	3608
2-1/2-4 NC	4004
2-1/2-8 BUN	4008

4A. Length *

2 place decimal = **No.**

1/16	.0625	006
1/8	.125	013
3/16	.1875	019
1/4	.250	025
5/16	.3125	031
3/8	.375	038
7/16	.4375	044
1/2	.500	050
9/16	.5625	056
5/8	.625	063
11/16	.6875	069
3/4	.750	075
13/16	.8125	081
7/8	.875	088
15/16	.9375	094

* Round off decimal and place
0 at beginning as place holder.

4B. Length

Whole no. + 2 place dec = **No.**

1	1.00	100
1-1/8	1.13	113
1-1/4	1.25	125
1-3/8	1.38	138
1-1/2	1.50	150
1-5/8	1.63	163
1-3/4	1.75	175
1-7/8	1.88	188
2	2.00	200
2-1/4	2.25	225
2-1/2	2.50	250
2-3/4	2.75	275
3	3.00	300
3-1/4	3.25	325
3-1/2	3.50	350
3-3/4	3.75	375
4	4.00	400
4-1/4	4.25	425
4-1/2	4.50	450
4-3/4	4.75	475
5	5.00	500

For longer screws continue pattern.

Machine Screw, Imperial ASME / ASTM

Part Number Scheme

5A. Material/Grade

	No.
grade 2 *	2
grade 5 *	5
grade 8 *	8
grade 9 *	9
alloy	AY
H-D galvanized	HG
stainless steel, 18-8 *	18
stainless steel, 316	31
stainless steel, 410	41

5B. Material/Grade

	No.
brass	BR
silicon bronze	SB
aluminum 2024-T4	24
aluminum 6061-T6	61
plastic, nylon	NY
plastic, polycarbonate	PC
ceramic	CR

* As option, insert letter at end of no.—

Z = zinc (clear)

Y = zinc (yellow)

B = black oxide

C = chrome

Machine Screw, Imperial ASME / ASTM

Part Number Scheme

6A. Examples

Begin with S

PN, Phil, #8-32 NC x .50, stn stl, 18-8
S-172-832-050-18
HX, 1/4-20 NC x 1.00, grade 5, zinc
S-110-0420-100-5Z
FT, Phil, 5/16-24 NF x 1.25, stn stl, 316
S-152-0524-125-31
SK, 3/8-16 NC x 1.50, grade 5, blk ox
S-13A-0616-150-5B
SB, .50 OD x 1.00 LGTH, alloy
S-33A-050-100-AY *

* For shoulder bolt apply shoulder diameter and length instead of thread size.

6B. Examples

Begin with S

RD, Slot, #10-32 NF x .63, brass
S-211-0332-063-BR
BT, Skt, 1/4-20 NC x .88, grade 5, yellow zinc
S-19A-0420-088-5Y
HX, 3/4-10 NC x 2.00, grade 8, blk ox
S-110-1210-200-8B
SS, #10-24 NC x .38, grade 8, blk ox
S-27A-0324-038-8B
CR, 1/4-20 NC x 1.00, grade 2, zinc
S-35X-0420-100-2Z

NOTE: If it's not possible to apply this machine screw P/N scheme—

Go to – 5600-000 Mach Screw, Other

Examples:

- Hole through cap for safety wire
- Left hand thread
- Full thread as option
- Other point for set screw
- Nyloc patch
- Other material

Screw, page 6 *

1. Cap Formation	2. Drive Type	3. Thread Spec	4. Length	5. Material/Grade
pan	Phillips	#8-32 NF	.50	stn stl, 18-8
17	2	832	050	18

S-172-832-050-18

Nut, page 11

1. Thread Spec	2. Nut Type	3. Nut Height	4. Material/Grade	Finish
#8-32 NC	plain	full	grade 2	zinc, clear
0832	31	F	2	Z

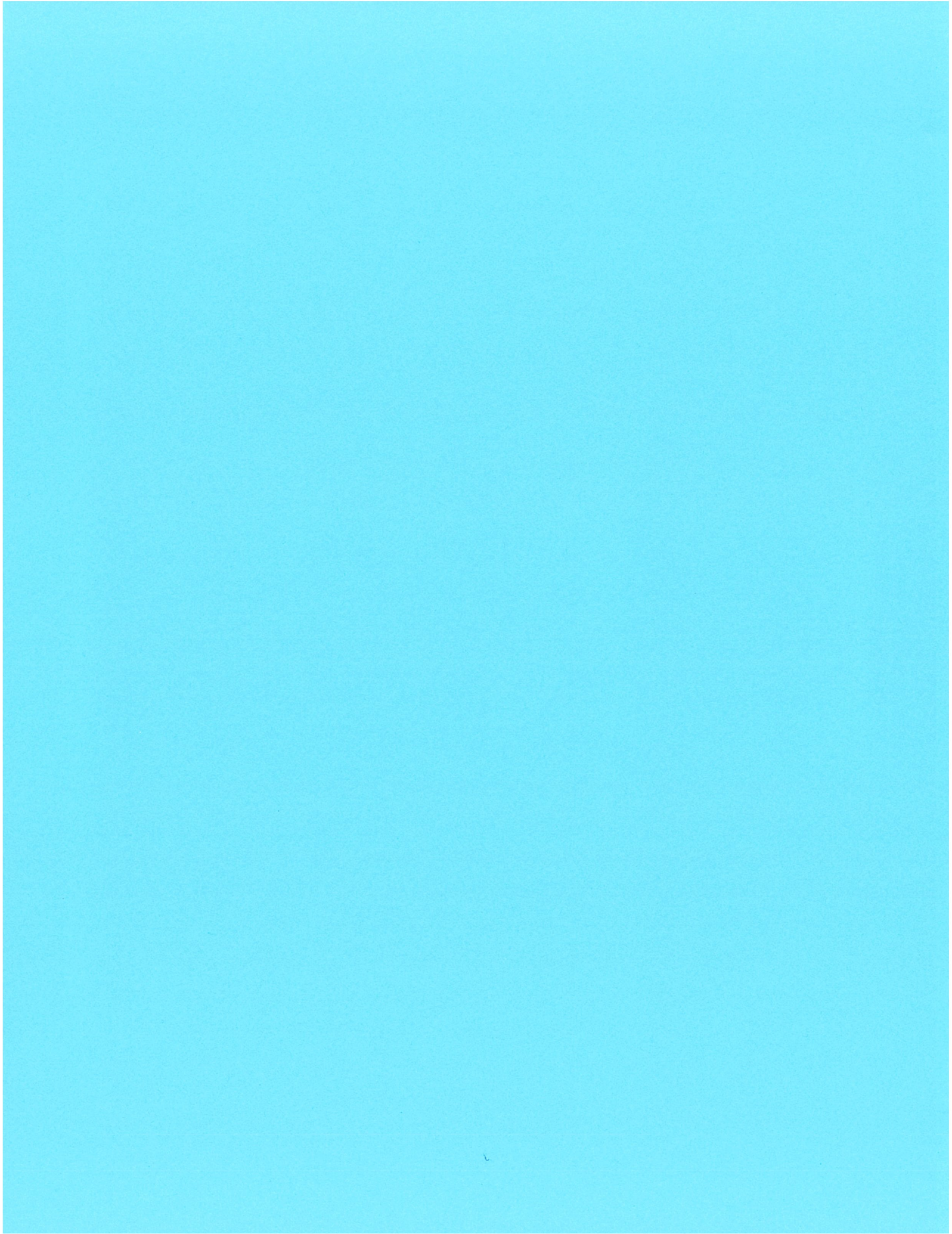
N-0832-31F-2Z

Washer, page 15

1. Washer Type	2. Flat Washer Class	3. For Screw Size	4. Material/Grade	Finish
plain flat	USS	#8	grade 2	zinc, clear
11	US	X8	2	Z

W-11US-X8-2Z

* A screw may require a finish spec even though the column is omitted here.



Machine Nut, Metric SI

Part Number Scheme

3A. Thread Spec, Course

Nom dia + thrd = **No.**

M 0.9 x .23	0.9-023
M 1 x .25	01-025
M 1.1 x .25	1.1-025
M 1.2 x .25	1.2-025
M 1.4 x .30	1.4-030
M 1.6 x .35	1.6-035
M 1.8 x .35	1.8-035
M 1.7 x .35	1.7-035
M 2 x .40	02-040
M 2.2 x .45	2.2-045
M 2.5 x .45	2.5-045
M 3 x .50	03-050
M 3.5 x .60	3.5-060
M 4 x 0.70	04-070
M 4.5 x .75	4.5-075

3B. Thread Spec, Course

Nom dia + thrd = **No.**

M 5 x 0.80	05-080
M 6 x 1.00	06-100
M 7 x 1.00	07-100
M 8 x 1.25	08-125
M 9 x 1.25	09-125
M 10 x 1.50	10-150
M 11 x 1.50	11-150
M 12 x 1.75	12-175
M 14 x 2.00	14-200
M 16 x 2.00	16-200
M 18 x 2.50	18-250
M 20 x 2.50	20-250
M 22 x 2.50	22-250
M 24 x 3.00	24-300
M 27 x 3.00	27-300
M 30 x 3.50	30-350
M 33 x 3.50	33-350
M 36 x 4.00	36-400
M 39 x 4.00	39-400
M 42 x 4.50	42-450
M 45 x 4.50	45-450
M 48 x 5.00	48-500

3C. Thread Spec, Course

Nom dia + thrd = **No.**

M 52 x 5.00	52-500
M 56 x 5.50	56-550
M 60 x 5.50	60-550
M 64 x 6.00	64-600
M 68 x 6.00	68-600

DO NOT COPY

4A. Thread Spec, Fine

Nom dia + thrd = **No.**

M 0.5 x .013	0.5-013
M 0.6 x 0.15	0.6-015
M 0.7 x 0.18	0.7-018
M 0.8 x 0.20	0.8-020
M 1.0 x 0.20	1.0-020
M 1.2 x 0.20	1.2-020
M 1.4 x 0.20	1.4-020
M 1.6 x 0.20	1.6-020
M 1.8 x 0.20	1.8-020
M 2 x 0.25	02-025
M 2.2 x 0.25	2.2-025
M 2.5 x 0.35	2.5-035
M 3 x 0.35	03-035
M 3.5 x 0.35	3.5-035
M 4 x 0.50	04-050
M 4.5 x 0.50	4.5-050
M 5 x 0.50	05-050
M 5.5 x 0.50	5.5-050

4B. Thread Spec, Fine

Nom dia + thrd = **No.**

M 6 x 0.75	06-075
M 7 x 0.75	07-075
M 8 x 0.75	08-075
M 8 x 1.00	08-100
M 9 x 0.75	09-075
M 9 x 1.00	09-100
M 10 x 0.75	10-075
M 10 x 1.00	10-100
M 10 x 1.25	10-125
M 11 x 0.75	11-075
M 11 x 1.00	11-100
M 12 x 1.00	12-100
M 12 x 1.25	12-125
M 12 x 1.50	12-150
M 14 x 1.00	14-100
M 14 x 1.25	14-125
M 14 x 1.50	14-150
M 15 x 1.00	15-100
M 15 x 1.50	15-150
M 16 x 1.00	16-100
M 16 x 1.50	16-150

Machine Nut, Metric SI

Part Number Scheme

4C. Thread Spec, Fine

Nom dia + thrd = **No.**

M 17 x 1.00	17-100
M 17 x 1.50	17-150
M 18 x 1.00	18-100
M 18 x 1.50	18-150
M 18 x 2.00	18-200
M 20 x 1.00	20-100
M 20 x 1.50	20-150
M 20 x 2.00	20-200
M 22 x 1.00	22-100
M 22 x 1.50	22-150
M 22 x 2.00	22-200
M 24 x 1.00	24-100
M 24 x 1.50	24-150
M 24 x 2.00	24-200
M 25 x 1.00	25-100
M 25 x 1.50	25-150
M 25 x 2.00	25-200
M 27 x 1.00	27-100
M 27 x 1.50	27-150
M 27 x 2.00	27-200
M 28 x 1.00	28-100
M 28 x 1.50	28-150

4D. Thread Spec, Fine

Nom dia + thrd = **No.**

M 28 x 2.00	28-200
M 30 x 1.00	30-100
M 30 x 1.50	30-150
M 30 x 2.00	30-200
M 30 x 3.00	30-300
M 32 x 1.50	32-150
M 32 x 2.00	32-200
M 33 x 1.00	33-100
M 33 x 2.00	33-200
M 33 x 3.00	33-300
M 35 x 1.50	35-150
M 35 x 2.00	35-200
M 36 x 1.50	36-150
M 36 x 2.00	36-200
M 36 x 3.00	36-300
M 39 x 1.50	39-150
M 39 x 2.00	39-200
M 39 x 3.00	39-300
M 40 x 1.50	40-150
M 40 x 2.00	40-200
M 40 x 3.00	40-300

4F. Thread Spec, Fine

Nom dia + thrd = **No.**

M 42 x 1.50	42-150
M 42 x 2.00	42-200
M 42 x 3.00	42-300
M 45 x 1.50	45-150
M 45 x 2.00	45-200
M 45 x 3.00	45-300
M 45 x 4.00	45-400
M 48 x 1.50	48-150
M 48 x 2.00	48-200
M 48 x 3.00	48-300
M 48 x 4.00	48-400
M 50 x 1.50	50-150
M 50 x 2.00	50-200
M 50 x 3.00	50-300
M 52 x 1.50	52-150
M 52 x 2.00	52-200
M 52 x 3.00	52-300
M 52 x 4.00	52-400

2. Nut Type

		No.
P	plain	31
N	nyloc	33
X	flexloc	35
C	center lock	37
O	coneloc	39
Y	2 way	41
FP	flange, plain	43
FS	flange, serrated	45
FN	flange, nyloc	47
W	castellated	49
H	heavy, 2-H	51
U	coupling	53
S	square	55

3. Nut Height

	No.
full	F
jam	J
thin	T
high	H
N/A	X

Combine Thread Spec No. and
Nut Type No.

See No. 5A. and 5B. Examples

4A. Property/Class

	No.
class 4 *	4
class 5 *	5
class 6 *	6
class 8 *	8
class 9 *	9
class 10 *	10
class 12 *	12
H-D galvanized	HG
stainless steel, A2 *	A2
stainless steel, A4 *	A4

4B. Property/Class

	No.
brass	BR
silicon bronze	SB
aluminum 2024-T4	24
aluminum 6061-T6	61
plastic, nylon	NY
plastic, polycarbonate	PC
ceramic	CR

* As option, insert letter at end of no.—

Z = zinc (clear)

Y = zinc (yellow)

B = black oxide

C = chrome

Machine Nut, Metric SI

5A. Examples

Insert N and M as shown.

M4 .70, plain, full, class 4, zinc
N-M04-070-31F-4Z
M6 1.00, plain, jam, class 8, zinc
N-M06-100-31J-8Z
M8 1.25, flexloc, full, stn stl, A4
N-M08-125-35F-A4
M10 1.50, nyloc, jam, class 8, zinc
N-M10-150-33J-8Z
M14 2.00, castle, full, class 8, chrome
N-M14-200-49F-8C

Part Number Scheme

5B. Examples

Insert N and M as shown.

M5 .80 plain, full, brass
N-M05-080-31F-BR
M10 1.50, flange, plain, class 8, yellow zinc
N-M10-150-43F-8Y
M20 2.50, heavy, full, class 10, blk ox
N-M20-250-51F-10B
M3.50 .60, plain, full, plastic, nylon
N-M3.5-060-31F-NY
M6 1.00, plain, thin, stn stl, A2
N-M06-100-31T-A2

NOTE: If it's not possible to apply this Nut P/N scheme—

Go to – 5600-000 Nut, Other

Examples:

- Acorn & Cap
- Thumb & Wing
- Weld
- Left hand thread
- Other material

Screw, page 25 *

1. Cap Formation	2. Drive Type	3. Thread Spec	4. Length	5. Property/Class
pan	Phillips	M 4 x .70	12	stn stl, A2
17	2	M04-070	012	A2

S-172-M04-070-012-A2

Nut, page 33

1. Thread Spec	2. Nut Type	3. Nut Height	4. Property/Class	Finish
M 4 x .70	plain	full	class 4	zinc, clear
0832	31	F	4	Z

N-M04-070-31F-4Z

Washer, page 37

1. Washer Type	2. Flat Washer Class	3. For Screw Size	4. Property/Class	Finish
plain flat	USS	M4	class A	zinc, clear
11	US	M4	A	Z

W-11US-M4-AZ

* A screw may require a finish spec even though the column is omitted here.