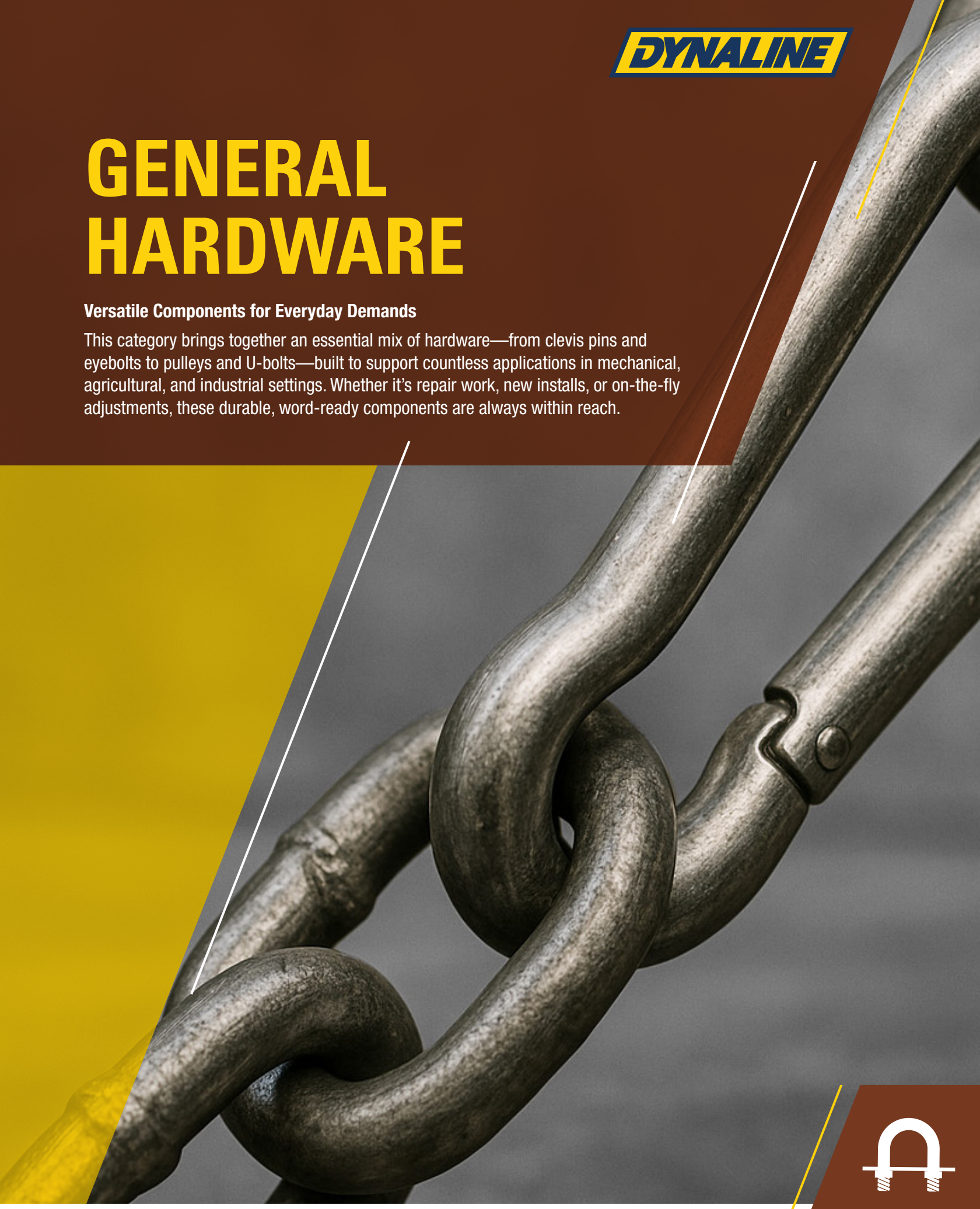
GENERAL HARDWARE

Versatile Components for Everyday Demands

This category brings together an essential mix of hardware—from clevis pins and eyebolts to pulleys and U-bolts—built to support countless applications in mechanical, agricultural, and industrial settings. Whether it's repair work, new installs, or on-the-fly adjustments, these durable, word-ready components are always within reach.



General Hardware

Table of Contents

A

Adjustable Clevis Pins 326
Aluminum Pulleys Display Board 304
Aluminum Snap Links 323
Aluminum Spring Snap 318

B

Baby Square Eye Snaps 321
Black Nylon Dock Rope Cleat 324
Bolt Snaps Swivel 320
Bronze Animal Snap Swivel 323
Bronze Bushings Display Board 306
Bull Snap Swivel 319

C

Cap Snap Swivel 319
Carabiner with Magnet 323
Clevis Pin Dynapaks 325
Clevis Pins 325
Cornice Hooks 311

D

Dog Lead Snap Swivel 319
Double Fixed - Die Cast Awning Pulleys 308
Double Hook with Swivel Eye
Steel Pulley Blocks (Deuer Type) 309
Double Swivel - Die Cast Awning Pulleys 308
Drawbar Spring 329
D-Rings 314

E

E Retainer Rings 331
External Retainer Rings (Basic) 333, 334
Eyebolts 312
Eyebolts & Rings Display Board 305
Eye Bull Snaps 322
Eye & Eye Turnbuckles 315
Eye & Eye Turnbuckles (Forged Steel) 317

F

Fixed Eye - Steel Pulley Blocks (Deuer Type) 309
Fixed - Steel Pulley Blocks 309
Flat Spring Snap - Simplex 322

G

Galvanized Dock Rope Cleat 324
General & Farm Hardware Gondola 304
General Hardware Bulk Rack 304
General Hardware Gondola 304
General Hardware Plan-O-Gram 305

H

Harness Ring 314
Heavy Duty D-Rings 314
Hook & Eye Turnbuckles (Forged Steel) 316
Hook & Eye Turnbuckles (Malleable Iron) 316
Hook & Eye Turnbuckles (Wire Formed Ends) 315
Hook & Hook Turnbuckles (Forged Steel) 317
Hook & Hook Turnbuckles (Wire Formed Ends) 315

I

Internal Retainer Rings 332, 333

J

Jaw & Jaw Turnbuckles (Forged Steel) 317

K

Keystock Bins 306

L

Lagscrew Eyebolts 312
Lever Snaps Swivel 322
Loop Snaps 320

M

Machinery Bushings 326
Machinery Bushings Display Board 304
Mounting Rings 314
Muffler Clamps Display Board 305

O

Open Decoy Snaps 321
Open Eye Snaps 320

P

Packaged Compression Springs 329, 330, 331
Packaged Extension Springs 327, 328, 329
Panic Snap 322
Pulley Blocks Display Board 305
Rectangular Keystock 324

Sizes are approximate. Specifications subject to change without notice.

R

Replacement Sheaves 310
Retainer Rings Display Board 306
Retainer Rings Tilt Bins 306

S

Safety Lanyard Snaps 318
Screw Hooks 311
Security Snaps Swivel 322
S-Hooks 311
Shoulder Eyebolts 312
Single Fixed - Die Cast Awning Pulleys 308
Single Hook - Steel Pulley Blocks (Deuer Type) 309
Single Swivel - Die Cast Awning Pulleys 308
Snaps Display Board 304, 305
Solid - Die Cast Aluminum Pulleys 307
Solid Snap Hook 319
Split Key Rings 314
Spoked - Die Cast Aluminum Pulleys 307
Springs Display Board - Retail Packaged 305
Springs - Expanded Selection 1 305
Springs - Expanded Selection 2 305
Spring Snap Swivel 321
Square Keystock 324
Stainless Steel Boat Snaps 318
Stainless Steel Bolt Snaps Swivel 318
Stainless Steel Security Snaps Swivel 318
Stainless Steel Snap Links 323
Stake Eye - Stake Rack Hardware 310
Stake Hooks - Stake Rack Hardware 310
Steel Snap Links 323
Step Keystock 324
Swivel Eye Snaps 319
Swivel Eye - Steel Pulley Blocks (Deuer Type) 309
Swivel Loop Snaps 321
Swivel Security Snaps 322
Swivel Snaps 321
Swivel - Steel Pulley Blocks 308

T

Tarp Hooks 311
Trigger Snaps Swivel 319
Turnbuckles Display Board - Forged Steel 305
Turnbuckles Display Board - General Purpose 304

U

U-Bolts Display Board 305
U-Bolts - Round 313
U-Bolts - Square 313

V

Variable Speed - Die Cast Aluminum Pulleys 307

W

Welded Steel Ring 314

Sizes are approximate. Specifications subject to change without notice.

DYNALINE GET IT DONE

Dynaline General Hardware Merchandisers

Dynaline offers merchandisers for almost every product. Merchandisers keep your stock organized, visible and easy to shop.

General & Farm Hardware Gondola

PART #	CONTENTS
02282K-G	General & Farm Hardware Gondola

Full Product Breakdown on Page 65

General Hardware Gondola

PART #	CONTENTS
01082K-G	General Hardware Gondola

Full Product Breakdown on Page 67

General Hardware Bulk Rack

PART #	CONTENTS
00034K	Full Bulk Rack

Full Product Breakdown on Page 69

✔ 00024 Compatible

Turnbuckles Display Board - General Purpose

PART #	CONTENTS
00416K	Full General Purpose Turnbuckles Display Board

Full Product Breakdown on Page 78

✔ 00024 Compatible

Snaps Display Board

PART #	CONTENTS
00447K	Full Snaps Display Board

Full Product Breakdown on Page 79

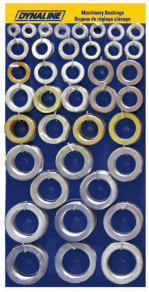
✔ 00024 Compatible

Aluminum Pulleys Display Board

PART #	CONTENTS
00335K	Full Aluminum Pulleys Display Board

Full Product Breakdown on Page 77

Sizes are approximate. Specifications subject to change without notice.



✔ 00024 Compatible

Machinery Bushings Display Board

PART #	CONTENTS
00235K	Full Machinery Bushings Display Board

Full Product Breakdown on Page 84

✔ 00024 Compatible

General Hardware Plan-O-Gram

PART #	CONTENTS
01081K	Full General Hardware Plan-O-Gram

Full Product Breakdown on Page 71

✔ 00024 Compatible

Eyebolts & Rings Display Board

PART #	CONTENTS
00611K	Full Eyebolts & Rings Display Board

Full Product Breakdown on Page 75

✔ 00024 Compatible

Springs Display Board - Retail Packaged

PART #	CONTENTS
00242K	Full Springs Display Board

Full Product Breakdown on Page 80

✔ 00024 Compatible

Snaps Display Board

PART #	CONTENTS
00448K	Full Snaps Display Board

Full Product Breakdown on Page 74

✔ 00024 Compatible

Pulley Blocks Display Board

PART #	CONTENTS
00334K	Full Pulley Blocks Display Board

Full Product Breakdown on Page 77

✔ 00024 Compatible

U-Bolts Display Board

PART #	CONTENTS
00612K	Full U-Bolts Display Board

Full Product Breakdown on Page 76

✔ 00024 Compatible

Springs - Expanded Selection 1

PART #	CONTENTS
00244K	Full Springs Display Board Expansion 1 for 00242K

Full Product Breakdown on Page 81

Sizes are approximate. Specifications subject to change without notice.

General Hardware

Display Boards • Tilt Bins Display • Keystock Bins

✔ 00024 Compatible

Springs - Expanded Selection 2

PART #	CONTENTS
00248K	Full Springs Display Board Expansion 2 for 00242K

Full Product Breakdown on Page 81

✔ 00024 Compatible

Turnbuckles Display Board - Forged Steel

PART #	CONTENTS
00417K	Full Forged Steel Turnbuckles Display Board

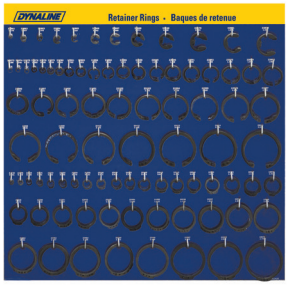
Full Product Breakdown on Page 78

✔ 00024 Compatible

Bronze Bushings Display Board

PART #	CONTENTS
00325K	Bronze Bushings Display Board

Full Product Breakdown on Page 79



✔ 00024 Compatible

Retainer Rings Display Board

PART #	CONTENTS
00245K	Full Retainer Rings Display Board

Full Product Breakdown on Page 82

Retainer Rings Tilt Bins

PART #	CONTENTS
00746K	Full Retainer Rings Tilt Bin Merchandiser. Dimensions: 23-5/8" x 2-1/2" x 26-1/2". Includes Tilt Bins, Assembly Hardware and Products.

Full Product Breakdown on Page 83

00285

00255K

Keystock Bins

PART #	CONTENTS
00285	Keystock Bin Only. 8 Compartments. Made of Metal, Black Powder Coated Finish. Dimensions: 10" x 9-1/8" x 1-1/2".
00255K	Full Square Keystock Merchandiser. 37 Pieces,12" Long / 6 Part #s. Includes 00285 Keystock Bin.
00265K	Full Rectangular Keystock Merchandiser. 37 Pieces, 12" Long / 8 Part #s. Includes 00285 Keystock Bin.
00275K	Full Step Keystock Merchandiser. 16 Pieces, 12" Long / 8 Part #s. Includes 00285 Keystock Bin.

Full Product Breakdown on Pages 84 and 85

Sizes are approximate. Specifications subject to change without notice.

Solid - Die Cast Aluminum Pulleys

Single groove for 3L, 4L or “A” belts. Supplied with 5/16” x 1/2” UNC set screws.

PART #	OUTSIDE DIAMETER	BORE	KEYWAY
55400	1-1/2”	1/2”	No
55401	1-1/2”	5/8”	No
55402	2”	1/2”	No
55403	2”	5/8”	Yes
55404	2”	3/4”	Yes
55405	2-1/4”	1/2”	No
55406	2-1/4”	5/8”	Yes
55407	2-1/4”	3/4”	Yes
55408	2-1/2”	1/2”	No
55409	2-1/2”	5/8”	Yes
55410	2-1/2”	3/4”	Yes
55411	3”	1/2”	No
55412	3”	5/8”	Yes

PART #	OUTSIDE DIAMETER	BORE	KEYWAY
55413	3”	3/4”	Yes
55414	3-1/2”	1/2”	No
55415	3-1/2”	5/8”	Yes
55416	3-1/2”	3/4”	Yes
55417	4”	1/2”	No
55418	4”	5/8”	Yes
55419	4”	3/4”	Yes
55420	4-1/2”	1/2”	No
55421	4-1/2”	5/8”	Yes
55422	4-1/2”	3/4”	Yes
55423	5”	1/2”	No
55424	5”	5/8”	Yes
55425	5”	3/4”	Yes

Spoked - Die Cast Aluminum Pulleys

PART #	OUTSIDE DIAMETER	BORE	KEYWAY
55426	6”	1/2”	No
55427	6”	5/8”	Yes
55428	6”	3/4”	Yes
55429	7”	1/2”	No
55430	7”	5/8”	Yes
55431	7”	3/4”	Yes
55433	8”	5/8”	Yes
55434	8”	3/4”	Yes

Variable Speed - Die Cast Aluminum Pulleys

Solid type. For “A” & “B” belts. Opening the pulley increases the speed at which it rotates. Supplied with set screws.

PART #	OUTSIDE DIAMETER	BORE	KEYWAY
55490	3-1/4”	1/2”	No
55491	3-1/4”	5/8”	Yes
55492	3-1/4”	3/4”	Yes

Sizes are approximate. Specifications subject to change without notice.

Single Fixed - Die Cast Awning Pulleys

PART #	PULLEY DIAMETER	ROPE DIAMETER	EYE DIAMETER	W.L.L.
55900	3/4”	Up to 3/16”	3/16”	65 lb
55901	1”	Up to 1/4”	1/4”	110 lb
55902	1-1/4”	Up to 3/8”	3/8”	165 lb
55903	1-1/2”	Up to 3/8”	3/8”	220 lb
55904	2”	Up to 1/2”	1/2”	330 lb

Double Fixed - Die Cast Awning Pulleys

PART #	PULLEY DIAMETER	ROPE DIAMETER	EYE DIAMETER	W.L.L.
55906	3/4”	Up to 3/16”	3/16”	65 lb
55907	1”	Up to 1/4”	3/16”	110 lb
55908	1-1/2”	Up to 3/8”	3/8”	220 lb
55909	2”	Up to 1/2”	1/2”	330 lb

Single Swivel - Die Cast Awning Pulleys

PART #	PULLEY DIAMETER	ROPE DIAMETER	EYE DIAMETER	W.L.L.
55915	3/4”	Up to 3/16”	1/2”	65 lb
55916	1”	Up to 1/4”	7/16”	110 lb
55917	1-1/4”	Up to 3/8”	13/16”	165 lb
55918	1-1/2”	Up to 3/8”	13/16”	220 lb
55919	2”	Up to 1/2”	13/16”	330 lb

Double Swivel - Die Cast Awning Pulleys

PART #	PULLEY DIAMETER	ROPE DIAMETER	EYE DIAMETER	W.L.L.
55925	3/4”	Up to 3/16”	7/16”	65 lb
55926	1”	Up to 1/4”	7/16”	110 lb
55927	1-1/4”	Up to 3/8”	13/16”	165 lb
55928	1-1/2”	Up to 3/8”	13/16”	220 lb

Swivel - Steel Pulley Blocks

PART #	SHEAVE DIAMETER	LENGTH	ROPE DIAMETER	EYE DIAMETER	W.L.L.
55800	1-1/2”	3-1/2”	Up to 3/8”	3/8”	460 lb
55801	2”	4”	Up to 3/8”	3/8”	480 lb
55802	2-1/2”	4-1/2”	Up to 3/8”	3/8”	550 lb
55803	3”	4-3/4”	Up to 1/2”	3/8”	650 lb

Sizes are approximate. Specifications subject to change without notice.

Fixed - Steel Pulley Blocks

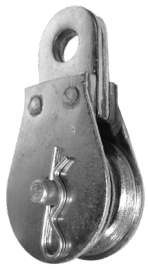
PART #	SHEAVE DIAMETER	LENGTH	ROPE DIAMETER	EYE DIAMETER	W.L.L.
55810	1-1/2”	3-1/4”	Up to 3/8”	1/2”	420 lb
55811	2”	3-3/4”	Up to 3/8”	1/2”	480 lb
55812	2-1/2”	4-1/4”	Up to 3/8”	1/2”	550 lb
55813	3”	4-3/4”	Up to 3/8”	3/4”	650 lb

Swivel Eye - Steel Pulley Blocks (Deuer Type)

PART #	DIAMETER	LENGTH	MAX. CABLE DIAMETER	EYE DIAMETER	W.L.L.
55850	1-1/2”	3-1/2”	3/16”	3/8”	460 lb
55851	2”	4-1/2”	3/16”	3/8”	480 lb
55852	2-1/2”	5”	1/4”	3/8”	550 lb
55853	3”	4-3/4”	1/4”	3/8”	650 lb

Fixed Eye - Steel Pulley Blocks (Deuer Type)

PART #	DIAMETER	LENGTH	MAX. CABLE DIAMETER	EYE DIAMETER	W.L.L.
55860	1-1/2”	3-1/4”	3/16”	1/2”	420 lb
55861	2”	3-3/4”	3/16”	1/2”	480 lb
55862	2-1/2”	4-1/4”	1/4”	1/2”	550 lb
55863	3”	4-3/4”	1/4”	3/4”	650 lb



Double Hook with Swivel Eye - Steel Pulley Blocks (Deuer Type)

PART #	DIAMETER	LENGTH	MAX. CABLE DIAMETER	W.L.L.
55870	1-1/2”	5”	3/16”	460 lb
55871	2”	5-1/2”	3/16”	480 lb
55872	2-1/2”	6”	1/4”	550 lb
55873	3”	7-1/2”	1/4”	650 lb

Single Hook - Steel Pulley Blocks (Deuer Type)

PART #	DIAMETER	LENGTH	MAX. CABLE DIAMETER	W.L.L.
55880	1-1/2”	5”	3/16”	460 lb
55881	2”	5-1/2”	3/16”	480 lb
55882	2-1/2”	6”	1/4”	550 lb
55883	3”	7-1/2”	1/4”	650 lb

Sizes are approximate. Specifications subject to change without notice.

Replacement Sheaves

For heavy duty pulley blocks. Bronze bushing bore.

PART #	FITS	SHEAVE DIAMETER	BORE SIZE	W.L.L.
55890	Deuer Type	1-1/2”	5/16”	460 lb
55891	Deuer Type	2”	5/16”	480 lb
55892	Deuer Type	2-1/2”	5/16”	550 lb
55893	Deuer Type	3”	5/16”	650 lb
55840	Heavy Duty	1-1/2”	5/16”	420 lb
55841	Heavy Duty	2”	5/16”	480 lb
55842	Heavy Duty	2-1/2”	5/16”	550 lb
55843	Heavy Duty	3”	7/16”	650 lb

Stake Hooks - Stake Rack Hardware

Ductile iron. Clear zinc plated finish. Rockwell hardness: 5.4 – 18 (HRC).

PART #	DESCRIPTION	PIN LENGTH	PIN DIAMETER
23050	Left-Hand	3”	9/16”
23051	Right-Hand	3”	9/16”
23052	Left-Hand	6”	9/16”
23053	Right-Hand	6”	9/16”

Stake Eye - Stake Rack Hardware

PART #	EYE INSIDE DIAMETER
23054	5/8”

Sizes are approximate. Specifications subject to change without notice.

S-Hooks

Clear zinc plated finish.

BAG PACKAGE		DYNAPAK PACKAGE			
PART #	PKG QTY	PART #	PKG QTY	WIRE DIAMETER	OVERALL LENGTH
66230	10	**96230**	10	0.093” (3/32”)	1”
66232	10	**96232**	10	0.105” (7/64”)	1-3/32”
66234	10	**96234**	10	0.120” (1/8”)	1-3/8”
66235	10	**96235**	10	0.162” (5/32”)	1-1/2”
66236	10	**96236**	6	0.141” (9/64”)	2-1/8”
66238	10	**96238**	6	0.250” (1/4”)	2-5/8”
66239	10	**96239**	6	0.188” (3/16”)	3”

Dynapak

Tarp Hooks

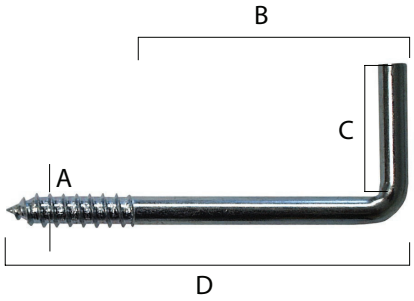
Zinc plated formed steel.

PART #	WIRE DIAMETER	OVERALL LENGTH	PKG QTY
66423	3/8”	3-1/2”	10
66424	1/4”	2-1/2”	10

Cornice Hooks

Clear zinc plated finish.

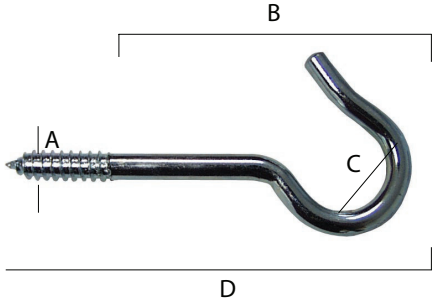
PART #	A	B	C	D	PKG QTY
65040	9/32”	1-3/4”	1”	3-1/16”	10
65041	3/16”	1-5/8”	7/8”	2-5/8”	10
65042	5/32”	1-3/8”	13/16”	2-1/4”	10
65043	1/8”	1-1/8”	11/16”	1-13/16”	10
65044	3/32”	3/4”	1/2”	1-3/8”	10



Screw Hooks

Clear zinc plated finish.

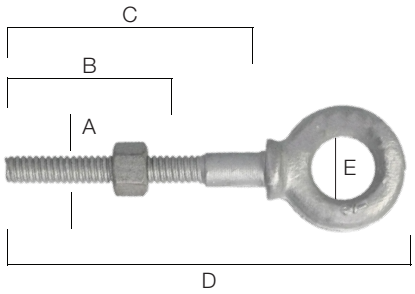
PART #	A	A (DECIMAL)	B	C	C (DECIMAL)	D	PKG QTY
65070	1/4”	0.25”	3-1/16”	1-1/32”	1.031”	4-5/16”	10
65071	7/32”	0.21”	3-3/16”	1”	1.000”	4-7/16”	10
65072	3/16”	0.19”	2-5/8”	27/32”	0.844”	3-7/8”	10
65073	5/32”	0.158”	2-1/8”	11/16”	0.688”	3-3/8”	10
65074	1/8”	0.138”	2-9/16”	1/2”	0.500”	2-9/16”	10
65075	7/64”	0.112”	2-1/16”	13/32”	0.406”	2-1/16”	10
65076	3/32”	0.086”	1-1/16”	9/32”	0.281”	1-11/16”	10
65077	5/64”	0.073”	3/4”	15/16”	0.938”	1-5/16”	10



Sizes are approximate. Specifications subject to change without notice.

Shoulder Eyebolts

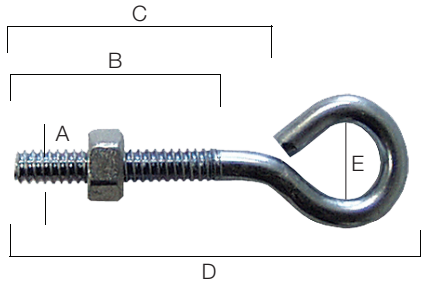
Forged steel. Galvanized finish. Supplied with nut. Sold individually.



PART #	A	B	C	D	E	W.L.L.
66100	1/4”	1-1/2”	2”	3”	1/2”	500 lb
66101	5/16”	1-1/2”	2-1/4”	3-1/2”	5/8”	800 lb
66102	3/8”	1-1/2”	2-1/2”	4”	3/4”	1,200 lb
66103	1/2”	1-1/2”	3-1/4”	5-1/4”	1”	2,200 lb
66104	5/8”	1-3/4”	4”	6-1/2”	1-1/4”	3,500 lb
66105	1/4”	2-1/2”	4”	5”	1/2”	500 lb
66106	5/16”	2-1/2”	4-1/4”	5-1/2”	5/8”	800 lb
66107	3/8”	2-1/2”	6”	7-1/2”	3/4”	1,200 lb
66108	1/2”	3”	6”	7-3/4”	1”	2,200 lb

Eyebolts

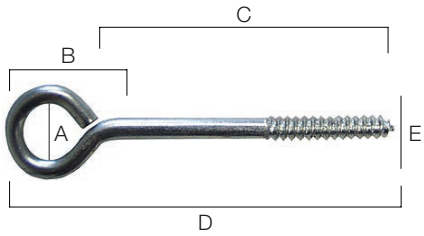
Wire Formed. Supplied with Nut. Zinc plated finish. UNC threading (coarse).



PART #	A	B	C	D	E	PKG QTY
65102	3/16”	1”	1-3/8”	2”	3/8”	10
65104	3/16”	1-5/8”	1-3/4”	2-1/2”	3/8”	10
65106	1/4”	1”	1”	2”	9/16”	10
65107	1/4”	1-3/8”	1-1/2”	2-1/2”	9/16”	10
65108	1/4”	1-3/4”	2”	3”	9/16”	10
65109	1/4”	2-3/4”	3”	4”	9/16”	10
65110	1/4”	3”	4”	5”	9/16”	10
65111	1/4”	3”	5”	6”	9/16”	10
65112	5/16”	1-3/4”	2”	3-1/4”	3/4”	10
65113	5/16”	2-3/16”	2-1/2”	4”	3/4”	10
65114	5/16”	3”	3-1/2”	5”	3/4”	10
65115	5/16”	3”	4-1/2”	6”	3/4”	10
65117	3/8”	2”	2-1/4”	4”	1”	10
65118	3/8”	3”	3-1/4”	5”	1”	10
65119	3/8”	3”	4-1/4”	6”	1”	10
65120	3/8”	3”	6-1/4”	8”	1”	10
65123	1/2”	3”	3-3/4”	6”	1-1/4”	10
65124	1/2”	3”	5-3/4”	8”	1-1/4”	10

Lagscrew Eyebolts

Clear zinc plated finish.



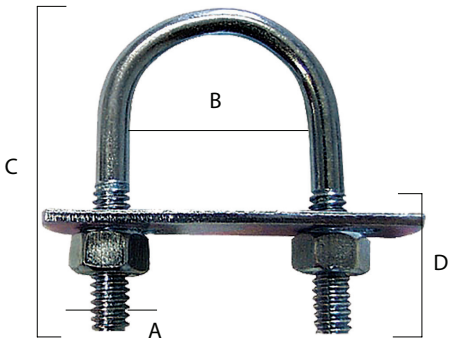
PART #	A	B	C	D	E	PKG QTY
65161	1/4”	1-5/16”	2-3/4”	3-3/4”	1/2”	10
65162	1/4”	1-7/8”	4”	5”	1/2”	10
65163	5/16”	1-7/8”	2-3/4”	4”	5/8”	10
65164	5/16”	1-7/8”	4-3/4”	6”	5/8”	10
65165	3/8”	1-15/16”	3”	4-1/2”	3/4”	10
65166	3/8”	2-7/8”	6-1/2”	8”	3/4”	10

Sizes are approximate. Specifications subject to change without notice.

U-Bolts - Round

Q235 Steel-Grade 2. Supplied with 3/32” mounting plate & nuts.
Clear zinc plated. 10 pieces per package. UNC threading (coarse).

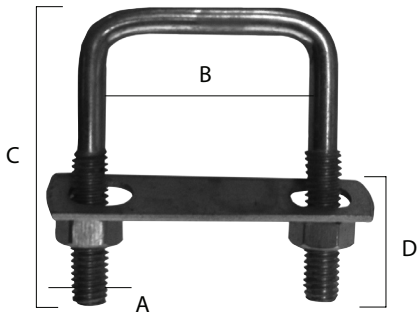
PART #	A	B	C	D	THREADS/IN.	PIPE
65140	1/4”	1-1/8”	2”	1”	20	3/4”
65141	1/4”	1-3/8”	2-3/4”	1-1/4”	20	1”
65142	1/4”	2”	3-1/2”	1-3/4”	20	1-1/2”
65143	5/16”	1-3/8”	2-1/2”	1”	18	1”
65144	5/16”	1-3/8”	3-11/16”	2-3/8”	18	1”
65145	5/16”	1-3/4”	3”	1-1/2”	18	1-1/4”
65146	5/16”	1-3/4”	4-3/16”	2-3/4”	18	1-1/4”
65147	5/16”	2”	3”	1-1/2”	18	1-1/2”
65148	5/16”	2”	3-3/4”	2-1/8”	18	1-1/2”
65149	5/16”	2-1/2”	3-1/2”	1-1/2”	18	2”
65150	5/16”	2-1/2”	4-3/16”	2-3/8”	18	2”
65151	3/8”	2-1/2”	3-5/8”	1-3/4”	16	2”
65152	3/8”	3”	4-1/8”	1-3/4”	16	2-1/2”
65153	3/8”	3-1/2”	4-5/8”	2”	16	3”



U-Bolts - Square

Q235 Steel-Grade 2. Supplied with 3/32” mounting plate & nuts.
Clear zinc plated. 5 pieces per package. UNC Threading (coarse)

PART #	A	B	C	D
65181	3/8”	2”	3”	1-1/2”
65182	3/8”	2”	5”	3”
65184	3/8”	4”	3”	1-1/2”
65185	3/8”	4”	5”	3”
65187	3/8”	6”	5”	3”
65188	3/8”	6”	7”	3-3/4”



Sizes are approximate. Specifications subject to change without notice.

65172

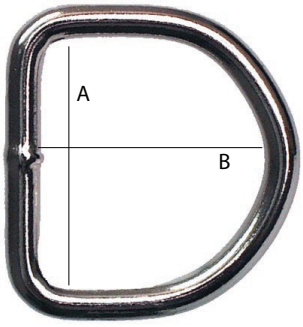
65177

65178

Mounting Rings

Clear zinc plated. 10 pieces per package.

PART #	DESCRIPTION	PIN DIAMETER	THREAD LENGTH	RING I.D.	ADDITIONAL INFORMATION
65172	4-1/4" Eyebolt Length	3/8"	2-1/2"	2"	Supplied with nut
65177	4-1/2" Lagscrew Eyebolt Length	5/16"	2"	2"	N/A
65178	2" x 1-9/16" Mounting Plate			2"	1/4" dia. mounting holes



D-Rings

PART #	WIRE DIAMETER	A	B	PKG QTY
66173	1/8"	1"	7/8"	10
66174	1/8"	1-1/8"	7/8"	10
66175	5/32"	1-5/16"	1"	10
66176	5/32"	1-5/8"	1-1/8"	10

Heavy Duty D-Rings

PART #	WIRE DIAMETER	A	B	PKG QTY
66178	5/16"	2"	1-3/4"	10
66179	3/8"	2"	1-7/8"	10

Split Key Rings

PART #	WIRE DIAMETER	INSIDE DIAMETER	OUTSIDE DIAMETER	PKG QTY
66180	0.066"	5/8"	3/4"	10
66182	0.075"	27/32"	1"	10
66184	0.087"	1-5/64"	1-1/4"	10

Harness Ring

PART #	WIRE DIAMETER	INSIDE DIAMETER	OUTSIDE DIAMETER	PKG QTY
66390	3/16"	1-1/4"	1-5/8"	5

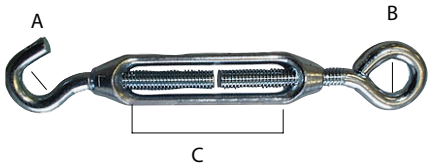
Welded Steel Ring

PART #	WIRE DIAMETER	INSIDE DIAMETER	OUTSIDE DIAMETER	W.L.L.	PKG QTY
66410	1/4"	1"	1-1/2"	200 lb	10
66411	5/16"	1-1/8"	1-3/4"	250 lb	10
66412	7/32"	1-9/16"	2"	200 lb	10

Sizes are approximate. Specifications subject to change without notice.

Hook & Eye Turnbuckles (Wire Formed Ends)

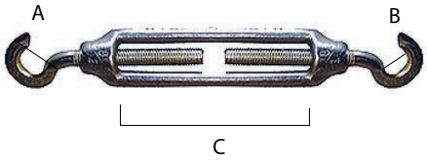
For light duty applications. Zinc die cast bodies. Zinc plated steel wire formed ends. 10 pieces per package.



PART #	THREAD	OVERALL LENGTH CLOSED	OVERALL LENGTH OPEN	A	B	C	W.L.L.	U.L.L.
66206	7/32”	4-1/2”	6-1/2”	3/8”	5/16”	2”	120 lb	350. lb
66207	1/4”	5-3/8”	7-11/16”	7/16”	3/8”	2-3/8”	190 lb	570 lb
66208	5/16”	6-1/2”	9-5/16”	7/16”	9/16”	2-13/16”	290 lb	875 lb
66209	3/8”	7-1/2”	10-5/8”	5/8”	9/16”	3-1/8”	375 lb	1,125 lb

Hook & Hook Turnbuckles (Wire Formed Ends)

For light duty applications. Zinc die cast bodies. Zinc plated steel wire formed ends. 10 pieces per package.



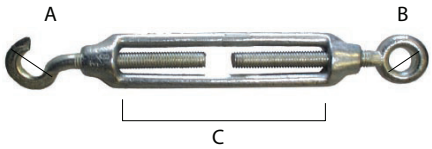
PART #	THREAD	OVERALL LENGTH CLOSED	OVERALL LENGTH OPEN	A, B	C	W.L.L.	U.L.L.
66216	7/32”	4-1/2”	6-1/2”	5/16”	2”	120 lb	350 lb
66217	1/4”	5-1/2”	7-9/16”	7/16”	2-3/8”	190 lb	570 lb
66218	5/16”	6-1/2”	9-1/4”	7/16”	2-13/16”	340 lb	1,020 lb
66219	3/8”	7”	10-5/8”	1/2”	3-1/8”	400 lb	1,200 lb

Eye & Eye Turnbuckles

For light duty applications. Zinc die cast bodies. Zinc plated steel wire formed ends. 10 pieces per package.

PART #	THREAD	OVERALL LENGTH CLOSED	OVERALL LENGTH OPEN	A, B	C	W.L.L.	U.L.L.
66226	3/16”	4-1/2”	6-1/2”	3/8”	2”	120 lb	350 lb
66227	1/4”	5-1/2”	7-9/16”	3/8”	2-3/8”	190 lb	570 lb
66228	5/16”	6-1/2”	9-1/4”	7/16”	2-3/4”	340 lb	1,020 lb
66229	3/8”	7”	10-5/8”	1/2”	3-1/8”	400 lb	1,200 lb

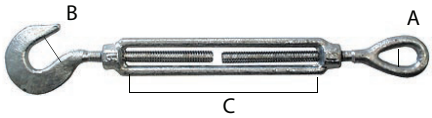
Sizes are approximate. Specifications subject to change without notice.



Hook & Eye Turnbuckles (Malleable Iron)

Malleable iron bodies and forged steel ends. Hot dipped galvanized finish.

PART #	THREAD	OVERALL LENGTH CLOSED	OVERALL LENGTH OPEN	A, B	C	W.L.L.	U.L.L.
66210	6mm	5-3/16”	8-1/16”	3/8”	2-3/4”	132 lb	396 lb
66211	8mm	6-1/2”	9-1/16”	7/16”	3-9/16”	264 lb	792 lb
66212	10mm	7-5/16”	10-1/4”	15/32”	3-3/4”	396 lb	1,188 lb
66213	12mm	10-7/16”	16”	19/32”	5-1/2”	726 lb	2,178 lb
66214	16mm	13-3/8”	19-11/16”	3/4”	7-1/8”	1,320 lb	3,960 lb
66215	20mm	15-3/4”	22-1/16”	1”	8-1/4”	1,980 lb	5,940 lb



Hook & Eye Turnbuckles (Forged Steel)

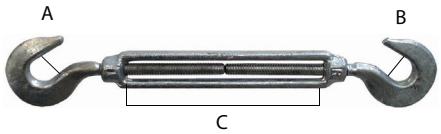
Forged steel bodies & ends. Hot dipped galvanized finish. Features a lock nut on each end. Meets Spec. FF-T791b, Type 1, Form 1, Class 6.

PART #	THREAD	OVERALL LENGTH CLOSED	OVERALL LENGTH OPEN	A	B	C	W.L.L.	U.L.L.
66820	1/4”	8”	12”	11/32”	7/16”	4	400 lb	2,000 lb
66821	5/16”	9-1/2”	13-1/2”	7/16”	1/2”	4-1/2”	700 lb	3,500 lb
66822	3/8”	12”	18”	17/32”	9/16”	6”	1,000 lb	5,000 lb
66823	1/2”	13-5/8”	20-5/8”	23/32”	11/16”	6”	1,500 lb	7,500 lb
66824	1/2”	16-5/8”	26-5/8”	23/32”	11/16”	9”	1,500 lb	7,500 lb
66825	1/2”	19-5/8”	32-5/8”	23/32”	11/16”	12”	1,500 lb	7,500 lb
66826	5/8”	15-1/2”	22-3/4”	7/8”	29/32”	6”	2,250 lb	11,250 lb
66827	5/8”	18-1/2”	28-3/4”	7/8”	29/32”	9”	2,250 lb	11,250 lb
66828	5/8”	21-1/2”	34-3/4”	7/8”	29/32”	12”	2,250 lb	11,250 lb
66829	3/4”	17-1/2”	25”		1”	6”	3,000 lb	15,000 lb
66880	3/4”	20-1/2”	31”		1”	9”	3,000 lb	15,000 lb
66881	3/4”	23-1/2”	31”		1”	12”	3,000 lb	15,000 lb

Sizes are approximate. Specifications subject to change without notice.

Hook & Hook Turnbuckles (Forged Steel)

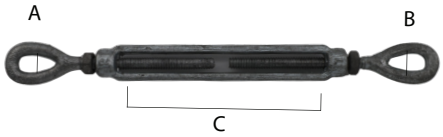
Forged steel bodies & ends. Hot dipped galvanized finish. Features a lock nut on each end. Meets Spec. FF-T791b, Type 1, Form 1, Class 5.



PART #	THREAD	OVERALL LENGTH CLOSED	OVERALL LENGTH OPEN	A, B	C	W.L.L.	U.L.L.
66800	1/4”	8”	12”	7/16”	4”	400 lb	2,000 lb
66801	5/16”	9-1/4”	13-3/4”	1/2”	4-1/2”	700 lb	3,500 lb
66802	3/8”	11-3/4”	17-3/4”	9/16”	6”	1,000 lb	5,000 lb
66803	1/2”	13-3/8”	20-3/8”	11/16”	6”	1,500 lb	7,500 lb
66804	1/2”	16-3/8”	26-3/8”	11/16”	9”	1,500 lb	7,500 lb
66805	1/2”	19-3/8”	32-3/8”	11/16”	12”	1,500 lb	7,500 lb
66806	5/8”	15-1/4”	22-1/2”	7/8”	6”	2,250 lb	11,250 lb
66807	5/8”	18-1/4”	28-1/2”	7/8”	9”	2,250 lb	11,250 lb
66808	5/8”	21-1/4”	34-1/2”	7/8”	12”	2,250 lb	11,250 lb
66809	3/4”	17-1/4”	24-3/4”	1”	6”	3,000 lb	15,000 lb
66810	3/4”	20-1/4”	30-3/4”	1”	9”	3,000 lb	15,000 lb
66811	3/4”	23-1/4”	36-3/4”	1”	12”	3,000 lb	15,000 lb

Eye & Eye Turnbuckles (Forged Steel)

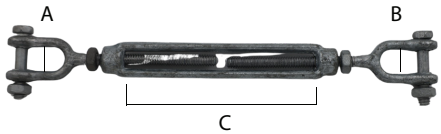
Forged steel bodies & ends. Hot dipped galvanized finish. Features a lock nut on each end. Meets Spec. FF-T791b, Type 1, Form 1, Class 4.



PART #	THREAD	OVERALL LENGTH CLOSED	OVERALL LENGTH OPEN	A, B	C	W.L.L.	U.L.L.
66830	1/4”	8-1/4”	12-1/4”	11/32”	4”	500 lb	2,500 lb
66831	5/16”	9-5/8”	14-1/8”	7/16”	4-1/2”	800 lb	4,000 lb
66832	3/8”	12-1/8”	18-1/8”	17/32”	6”	1,200 lb	6,000 lb
66833	1/2”	14”	21”	23/32”	6”	2,200 lb	11,000 lb

Jaw & Jaw Turnbuckles (Forged Steel)

Forged steel bodies & ends. Hot dipped galvanized finish. Features a lock nut on each end. Meets Spec. FF-T791b, Type 1, Form 1, Class 7.



PART #	THREAD	OVERALL LENGTH CLOSED	OVERALL LENGTH OPEN	A, B	C	W.L.L.	U.L.L.
66840	1/4”	8”	12”	7/16”	4”	500 lb	2,500 lb
66841	5/16”	9-1/2”	14”	1/2”	4-1/2”	800 lb	4,000 lb
66842	3/8”	11-3/8”	17-3/8”	17/32”	6”	1,200 lb	6,000 lb
66843	1/2”	13”	20”	21/32”	6”	2,200 lb	11,000 lb
66844	1/2”	16”	26”	21/32”	9	“2,200 lb	11,000 lb
66845	1/2”	19”	32”	21/32”	12”	2,200 lb	11,000 lb
66846	5/8”	14-7/8”	22-1/8”	25/32”	6”	3,500 lb	17,500 lb
66847	5/8”	17-7/8”	28-1/8”	25/32”	9”	3,500 lb	17,500 lb
66848	5/8”	20-7/8”	34-1/8”	25/32”	12”	3,500 lb	17,500 lb
66849	3/4”	16-5/8”	24-1/8”	15/16”	6”	5,200 lb	26,000 lb
66850	3/4”	19-5/8”	30-1/8”	15/16”	9”	5,200 lb	26,000 lb
66851	3/4”	22-5/8”	36-1/8”	15/16”	12”	5,200 lb	26,000 lb

Sizes are approximate. Specifications subject to change without notice.

Stainless Steel Bolt Snaps Swivel

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
64100	1/2”	9/32”	3-3/16”	5
64101	3/4”	11/32”	3-1/2”	5

Stainless Steel Security Snaps Swivel

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	W.L.L.	PKG QTY
64102	5/8”	3/8”	3-3/8”	100 lb	5
64103	3/4”	1/2”	3-7/8”	200 lb	5
64104	7/8”	1/2”	4-5/8”	300 lb	5

Stainless Steel Bolt Snaps

PART #	EYE INSIDE DIAMETER	OVERALL LENGTH	PKG QTY
64105	1/4”	1-7/8”	5
64106	3/8”	2-5/8”	5
64107	1/2”	3-7/8”	5

Stainless Steel Boat Snaps

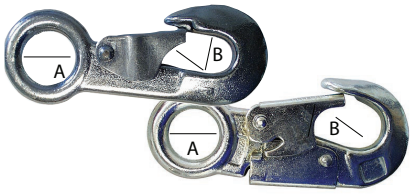
PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
64108	1/2”	1/4”	2”	5
64109	5/8”	7/16”	2-3/4”	5
64110	3/4”	9/16”	3-1/4”	5
64111	3/4”	5/8”	3-7/8”	5

Aluminum Spring Snap

Zinc plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
64112	1/2”	1/4”	2-3/8”	5

66137



66137S

Safety Lanyard Snaps

PART #	TYPE	A	B	W.L.L.	U.L.L.
66137	Single latch	1-1/16”	3/4”	1,000 lb	5,000 lb
66137S	Double latch	1-1/16”	1”	1,000 lb	5,000 lb

Sizes are approximate. Specifications subject to change without notice.

Bull Snap Swivel

Zinc die cast and nickel plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66330	1”	5/8”	4-1/8”	5

Solid Snap Hook

Forged steel.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66331	11/16”	5/8”	3-1/2”	5

Cap Snap Swivel

Zinc plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66332	1”	3/8”	3-5/8”	5

Swivel Eye Snaps

Zinc plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66334	3/4”	7/16”	3-1/4”	5
66335	7/8”	7/16”	3-1/2”	5

Dog Lead Snap Swivel

Zinc plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66336	3/8”	1/4”	2-1/2”	5

Trigger Snaps Swivel

Zinc plated.

66339

66349

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66339	5/8”	1/2”	2-1/2”	5
66344	3/4”	1/2”	2-3/4”	5
66348	3/4”	3/8”	2-1/2”	5
66349	3/4”	1”	3-1/2”	5
66350	3/4”	3/4”	3-7/8”	5

Sizes are approximate. Specifications subject to change without notice.

Bolt Snaps

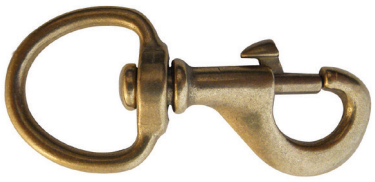
Zinc plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66340	1/2”	11/16”	3-3/8”	5
66343	1/2”	3/4”	3-1/2”	5
66354	1/4”	7/16”	2-1/8”	5
66342	3/8”	7/16”	3-1/2”	5

Bolt Snaps Swivel

Solid Brass.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66360	1/2”	9/16”	3”	5



Bolt Snaps Swivel

Brass.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66361	1”	1/2”	3-1/2”	5

Bolt Snaps Swivel

Nickel Plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66366	9/16”	3/4”	3-1/4”	5

Open Eye Snaps

Zinc Plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66341	13/16”	1/2”	3-9/16”	5

Loop Snaps

Zinc Plated.

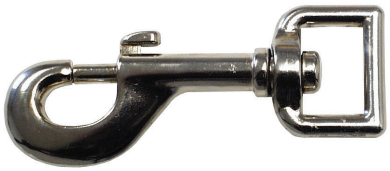
PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66346	3/4”	1/2”	3-1/8”	5
66347	1”	1/2”	2-15/16”	5

Sizes are approximate. Specifications subject to change without notice.

Swivel Loop Snaps

Nickel Plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66352	3/4”	3/8”	3-1/4”	5
66353	1”	3/8”	3-1/4”	5



Open Decoy Snaps

Zinc Die Cast.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66355	1/2”	1/4”	2-1/2”	5

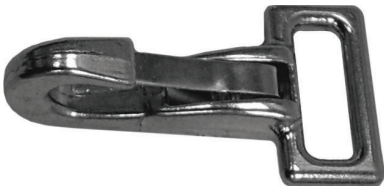
Spring Snap Swivel

Zinc Die Cast.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66351	1”	7/16”	3-1/8”	5

Baby Square Eye Snaps

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66365	5/8”	1/4”	1-7/8”	5



Swivel Snaps

Zinc Plated.

PART #	EYE INSIDE DIAMETER	SNAP EYE	OVERALL LENGTH	PKG QTY
66367	1/2”	--	2”	5
66368	5/8”	--	2-7/16”	5
66369	3/4”	--	2-5/8”	5
66370	1”	--	3”	5

Nickel Plated.

PART #	EYE INSIDE DIAMETER	SNAP EYE	OVERALL LENGTH	PKG QTY
66372	3/8”	11/16”	2-3/8”	5

Sizes are approximate. Specifications subject to change without notice.

Lever Snaps Swivel

Nickel Plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66374	5/8”	1/2”	3-1/4”	5
66375	3/4”	7/16”	3-1/2”	5
66376	1”	3/8”	3-1/2”	5
66377	1-1/8”	9/16”	4-7/16”	5

Security Snaps Swivel

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66380	7/8”	9/16”	3-7/8”	5
66381	1-1/8”	9/16”	5-1/8”	5

Swivel Security Snaps

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66394	1”	1”	4-1/8”	5

Panic Snap

Zinc Plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66338	1/2”	1”	4-1/16”	5

Eye Bull Snaps

Nickel Plated.

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66385	3/4”	9/16”	3-3/4”	5

Flat Spring Snap - Simplex

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66356	11/16”	5/16”	4-3/8”	5
66387	1/2”	1/4”	2-3/4”	5

Sizes are approximate. Specifications subject to change without notice.

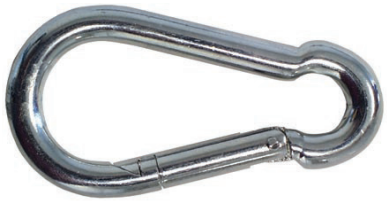
Bronze Animal Snap Swivel

PART #	EYE INSIDE DIAMETER	GAP	OVERALL LENGTH	PKG QTY
66392	1”	9/16”	4-1/2”	5

Steel Snap Links

Formed steel with clear zinc plated finish.

PART #	WIRE DIAMETER	GAP	LENGTH	W.L.L.	U.L.L.	PKG QTY
66419	3/16”	1/4”	2”	220 lb	550 lb	10
66420	1/4”	5/16”	2-3/8”	260 lb	650 lb	10
66421	5/16”	3/8”	3-1/8”	500 lb	1,250 lb	10
66422	3/8”	1/2”	4”	770 lb	1,925 lb	10
66425	7/16”	5/8”	4-3/4”	900 lb	2,250 lb	5
66426	1/2”	3/4”	5-3/8”	1,200 lb	3,000 lb	5



Aluminum Snap Links

For decorative and light applications. Multi-coloured.

PART #	WIRE DIAMETER	GAP	LENGTH	PKG QTY
66427	3/16”	1/2”	1-5/16”	10
66428	1/4”	5/8”	2-7/16”	10
66429	5/16”	7/8”	3-1/8”	10

Stainless Steel Snap Links

304 Stainless steel material.

PART #	WIRE DIAMETER	GAP	LENGTH	W.L.L.	PKG QTY
64070	3/16”	1/4”	1-15/16”	100 lb	5
64071	1/4”	5/16”	2-3/8”	140 lb	5
64072	5/16”	3/8”	3-1/8”	250 lb	5
64073	3/8”	1/2”	4”	400 lb	5

Carabiner with Magnet

PART #	BASE DIAMETER	GAP	BREAKAWAY CAPACITY	MATERIAL
66700	1-1/4”	9/16”	75 lbs	Stainless Steel #304

Sizes are approximate. Specifications subject to change without notice.

Galvanized Dock Rope Cleat

PART #	DESCRIPTION	PKG QTY
12262	Galvanized Steel Material, 6”	5

Black Nylon Dock Rope Cleat

PART #	DESCRIPTION	PKG QTY
12264	Rugged Black Nylon Construction, 4”	5

Square Keystock

Supplied in 12” lengths only. Carbon steel. Zinc plated finish. Thickness tolerance ± 0.1 mm; length tolerance ± 0.3 mm.

PART #	WIDTH	HEIGHT	QTY
22750	1/8”	1/8”	Pkg of 5
22751	3/16”	3/16”	Pkg of 5
22752	1/4”	1/4”	Pkg of 5
22753	5/16”	5/16”	Pkg of 5
22754	3/8”	3/8”	Pkg of 5
22755	7/16”	7/16”	Pkg of 5

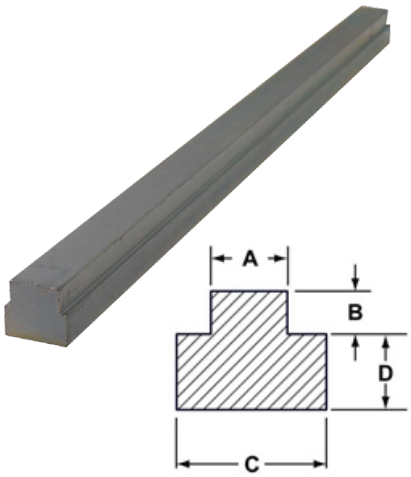
PART #	WIDTH	HEIGHT	QTY
22756	1/2”	1/2”	Pkg of 5
22758	5/8”	5/8”	Pkg of 2
22760	3/4”	3/4”	Pkg of 2
22761	7/8”	7/8”	Pkg of 1
22763	1”	1”	Pkg of 1

Rectangular Keystock

Supplied in 12” lengths only. Carbon steel. Zinc plated finish. Thickness tolerance ± 0.1 mm; length tolerance ± 0.1 mm.

PART #	WIDTH	HEIGHT	QTY
22782	1/4”	3/16”	Pkg of 5
22785	1/4”	5/16”	Pkg of 5
22786	1/4”	3/8”	Pkg of 5
22789	5/16”	3/8”	Pkg of 5

PART #	WIDTH	HEIGHT	QTY
22791	3/8”	7/16”	Pkg of 5
22792	3/8”	1/2”	Pkg of 5
22795	7/16”	1/2”	Pkg of 5
22796	1/2”	5/8”	Pkg of 2



Step Keystock

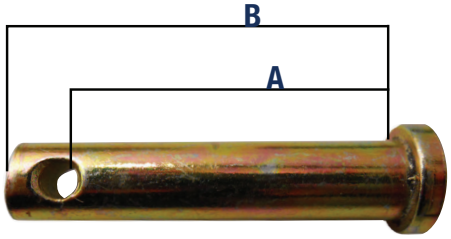
Supplied in 12” lengths only. Carbon steel. Zinc plated finish. Thickness tolerance ± 0.1 mm; length tolerance ± 0.1 mm.

PART #	A	B	C	D	QTY
22821	3/16”	3/32”	1/4”	3/32”	Pkg of 2
22822	1/4”	1/8”	5/16”	1/8”	Pkg of 2
22823	1/4”	1/8”	3/8”	3/16”	Pkg of 2
22824	5/16”	5/32”	3/8”	3/16”	Pkg of 2
22825	3/8”	3/16”	7/16”	5/32”	Pkg of 2
22826	3/8”	3/16”	1/2”	3/16”	Pkg of 2
22827	7/16”	5/32”	1/2”	1/4”	Pkg of 2
22828	1/2”	1/4”	5/8”	5/16”	Pkg of 2

Sizes are approximate. Specifications subject to change without notice.

Clevis Pins

Yellow zinc dichromate finish. Hole is 1/4” from end of pin. Package quantity 10 pieces. Made of C1020 steel*.



PART #	PIN DIAMETER	HOLE DIAMETER (MM)	A	B
22500	1/4”	2.6	1”	1-1/4”
22501	1/4”	2.6	1-1/4”	1-1/2”
22502	1/4”	2.6	1-1/2”	1-3/4”
22503	1/4”	2.6	1-3/4”	2”
22504	1/4”	2.6	2”	2-1/4”
22505	1/4”	2.6	2-1/4”	2-1/2”
22509	5/16”	3.5	1”	1-1/4”
22510	5/16”	3.5	1-1/4”	1-1/2”
22511	5/16”	3.5	1-1/2”	1-3/4”
22512	5/16”	3.5	1-3/4”	2”
22513	5/16”	3.5	2”	2-1/4”
22514	5/16”	3.5	2-1/4”	2-1/2”
22518	3/8”	3.8	1”	1-1/4”
22519	3/8”	3.8	1-1/4”	1-1/2”
22520	3/8”	3.8	1-1/2”	1-3/4”
22521	3/8”	3.8	1-3/4”	2”
22522	3/8”	3.8	2”	2-1/4”

PART #	PIN DIAMETER	HOLE DIAMETER (MM)	A	B
22523	3/8”	3.8	2-1/4”	2-1/2”
22528	7/16”	3.8	1-1/4”	1-1/2”
22529	7/16”	3.8	1-1/2”	1-3/4”
22530	7/16”	3.8	1-3/4”	2”
22531	7/16”	3.8	2”	2-1/4”
22532	7/16”	3.8	2-1/4”	2-1/2”
22536	1/2”	3.8	1”	1-1/4”
22537	1/2”	3.8	1-1/4”	1-1/2”
22538	1/2”	3.8	1-1/2”	1-3/4”
22539	1/2”	3.8	1-3/4”	2”
22540	1/2”	3.8	2”	2-1/4”
22541	1/2”	3.8	2-1/4”	2-1/2”

Clevis Pin Dynapaks

PART #	CONTENTS	QTY	PIN DIAMETER	USABLE LENGTH
92500	**22500**	Pkg of 5	1/4”	1”
92502	**22502**	Pkg of 5	1/4”	1-1/2”
92504	**22504**	Pkg of 5	1/4”	2”
92509	**22509**	Pkg of 5	5/16”	1”
92511	**22511**	Pkg of 5	5/16”	1-1/2”
92513	**22513**	Pkg of 5	5/16”	2”
92518	**22518**	Pkg of 3	3/8”	1”
92520	**22520**	Pkg of 3	3/8”	1-1/2”
92522	**22522**	Pkg of 3	3/8”	2”
92529	**22529**	Pkg of 2	7/16”	1-1/2”
92538	**22538**	Pkg of 2	1/2”	1-1/2”
92540	**22540**	Pkg of 2	1/2”	2”

*1020 is a general purpose, low tensile, low hardenability carbon steel, generally supplied in the cold drawn or turned and polished condition, with a typical tensile strength range 410 - 790 MPa, and Brinell hardness range 119-235. Characterized by excellent weldability, very good machinability with reasonable strength and very good ductility.

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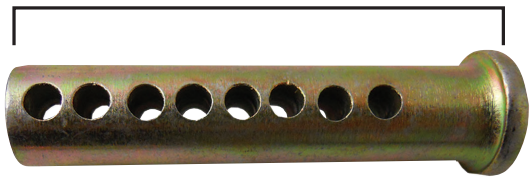

Adjustable Clevis Pins

A quick replacement pin, the universal clevis pin features a series of holes making it adaptable to varying lengths. Use the diameter that fits your application and cut off the excess length. Easily replaces bolts, cotter pins or rivets on all types of equipment. Yellow zinc dichromate finish. First pin hole is 1/4” from the end of the pin.

PART #	PIN DIAMETER	HOLE DIAMETER (MM)	OVERALL LENGTH	QTY
22545	1/4”	2.6	2”	Pkg of 5
22546	5/16”	3.5	2”	Pkg of 5
22547	3/8”	3.8	2”	Pkg of 5
22548	7/16”	3.8	2”	Pkg of 5
22549	1/2”	3.8	2”	Pkg of 5
22550	7/16”	3.8	2-1/2”	Pkg of 5
22551	1/2”	3.8	2-1/2”	Pkg of 5
22552	7/16”	3.8	3”	Pkg of 5
22553	1/2”	3.8	3”	Pkg of 5
22554	5/8”	3.8	3”	Pkg of 5
22555	3/4”	3.8	3”	Pkg of 5

Machinery Bushings

Machinery bushings reduce wear between moving parts, prevent marring of fine finishes and can be used as spacers for sprockets, pulleys and gears on new or old equipment. Made of low carbon, mild steel with plain finish.

- 18 Gauge (l = light) = 0.042/0.054, 3/64”
- 14 Gauge (m = medium) = 0.068/0.082, 5/64”
- 10 Gauge (h = heavy) = 0.126/0.142, 1/8”
- Tolerances - O.D. +0.010/0.010 I.D. +0.010 / -0.000

REFERENCE CHART AVAILABLE
See end of catalogue

PART #	INDUSTRY #	INSIDE DIAMETER	OUTSIDE DIAMETER	GAUGE	QTY
22700	M-16L	9/16”	1”	18	Pkg of 10
22701	M-18L	5/8”	1-1/8”	18	Pkg of 10
22702	M-18M	5/8”	1-1/8”	14	Pkg of 10
22703	M-20L	3/4”	1-1/4”	18	Pkg of 10
22704	M-20M	3/4”	1-1/4”	14	Pkg of 10
22705	M-20H	3/4”	1-1/4”	10	Pkg of 10
22706	M-22L	7/8”	1-3/8”	18	Pkg of 10
22707	M-22M	7/8”	1-3/8”	14	Pkg of 10
22708	M-24L	1”	1-1/2”	18	Pkg of 10
22709	M-24M	1”	1-1/2”	14	Pkg of 10
22710	M-24H	1”	1-1/2”	10	Pkg of 10
22711	M-28L	1-1/8”	1-3/4”	18	Pkg of 10
22712	M-28M	1-1/8”	1-3/4”	14	Pkg of 10
22713	M-28H	1-1/8”	1-3/4”	10	Pkg of 10
22714	M-30L	1-1/4”	1-7/8”	18	Pkg of 10
22715	M-30M	1-1/4”	1-7/8”	14	Pkg of 10
22716	M-30H	1-1/4”	1-7/8”	10	Pkg of 10
22717	M-34L	1-3/8”	2-1/8”	18	Pkg of 10
22718	M-34M	1-3/8”	2-1/8”	14	Pkg of 10
22719	M-34H	1-3/8”	2-1/8”	10	Pkg of 10

PART #	INDUSTRY #	INSIDE DIAMETER	OUTSIDE DIAMETER	GAUGE	QTY
22720	M-36L	1-1/2”	2-1/4”	18	Pkg of 10
22721	M-36M	1-1/2”	2-1/4”	14	Pkg of 10
22722	M-36H	1-1/2”	2-1/4”	10	Pkg of 10
22723	M-38M	1-5/8”	2-3/8”	14	Pkg of 10
22724	M-38H	1-5/8”	2-3/8”	10	Pkg of 10
22725	M-40M	1-3/4”	2-1/2”	14	Pkg of 10
22726	M-40H	1-3/4”	2-1/2”	10	Pkg of 10
22727	M-46M	1-7/8”	2-7/8”	14	Pkg of 10
22728	M-46H	1-7/8”	2-7/8”	10	Pkg of 10
22729	M-48M	2”	3”	14	Pkg of 10
22730	M-48H	2”	3”	10	Pkg of 10
22731	M-50M	2-1/8”	3-1/8”	14	Pkg of 10
22732	M-50H	2-1/8”	3-1/8”	10	Pkg of 10
22733	M-52M	2-1/4”	3-1/4”	14	Pkg of 10
22734	M-52H	2-1/4”	3-1/4”	10	Pkg of 10
22735	M-54M	2-3/8”	3-3/8”	14	Pkg of 10
22736	M-54H	2-3/8”	3-3/8”	10	Pkg of 10
22737	M-56M	2-1/2”	3-1/2”	14	Pkg of 10
22738	M-56H	2-1/2”	3-1/2”	10	Pkg of 10

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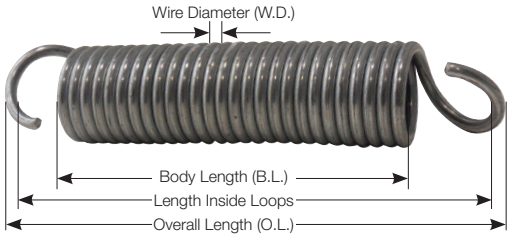
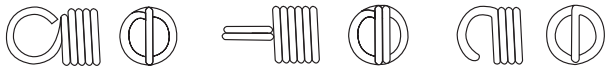


Extension Spring Ends:



B Full loop from centre C Double full loop D Machine loop

Packaged Extension Springs

ASTM A227, A228 or A764. Carbon spring steel zinc plated finish.

PART #	REFERENCE #	WIRE DIAMETER	OUTSIDE DIAMETER	OVERALL LENGTH	BODY LENGTH	MAX. STRETCH	LOAD RATE (LB/IN)	MAX LOAD (LB)	END TYPE	PKG QTY
24001	C-1	0.015”	0.125”	1.5”	1.25”	2”	0.65	1.4	Loop	2
24005	C-5	0.02”	0.156”	1.5”	1.188”	1.7”	1.50	2.7	Loop	2
24013	C-13	0.023”	0.218”	1.5”	1.064”	2.4”	1.10	2.9	Loop	2
24019	C-19	0.035”	0.25”	1.5”	1”	1.1”	6.40	8.4	Loop	2
24023	C-23	0.025”	0.281”	1.5”	0.938”	3.4”	0.74	2.8	Loop	2
24025	C-25	0.02”	0.312”	1.5”	0.876”	7.7”	0.17	1.4	Loop	2
24029	C-29	0.028”	0.343”	1.5”	0.814”	3.2”	0.81	3.6	Loop	2
24031	C-31	0.028”	0.437”	1.5”	0.626”	4.4”	0.54	2.5	Loop	2
24033	C-33	0.047”	0.437”	1.5”	0.626”	1.6”	6.20	11	Loop	2
24051	C-51	0.014”	0.125”	1.875”	1.625”	3.3”	0.35	1.3	Loop	2
24055	C-55	0.02”	0.156”	1.875”	1.563”	2.7”	1.10	2.2	Loop	2
24063	C-63	0.023”	0.218”	1.875”	1.439”	3.4”	0.79	2.9	Loop	2
24067	C-67	0.02”	0.25”	1.875”	1.375”	6.4”	0.25	1.7	Loop	2
24069	C-69	0.035”	0.25”	1.875”	1.375”	1.5”	4.70	8.4	Loop	2
24073	C-73	0.025”	0.281”	1.875”	1.313”	2.8”	0.54	4.7	Loop	2
24077	C-77	0.025”	0.344”	1.875”	1.189”	6.8”	0.31	2.3	Loop	2
24081	C-81	0.028”	0.437”	1.875”	1”	7.8”	0.30	2.5	Loop	2
24083	C-83	0.047”	0.437”	1.875”	1”	2.3”	4.30	11	Loop	2
24103	C-103	0.018”	0.125”	2.5”	2.25”	2.2”	0.96	2.5	Loop	2
24105	C-105	0.02”	0.156”	2.5”	2.188”	3”	0.81	2.7	Loop	2
24111	C-111	0.025”	0.187”	2.5”	2.126”	2.5”	1.50	4.2	Loop	2
24115	C-115	0.016”	0.25”	2.5”	2”	15”	0.50	0.87	Loop	2
24117	C-117	0.02”	0.25”	2.5”	2”	9”	0.17	1.7	Loop	2
24119	C-119	0.035”	0.25”	2.5”	2”	2.1”	3.50	8.4	Loop	2
24131	C-131	0.028”	0.437”	2.5”	1.626”	13”	0.18	2.5	Loop	2
24133	C-133	0.047”	0.437”	2.5”	1.665”	3.4”	3.00	11	Loop	2
24135	C-135	0.062”	0.437”	2”	1.126”	0.87”	17.00	19	Loop	2
24139	C-139	0.054”	0.437”	3.5”	2.626”	2.5”	4.00	12	Loop	2
24141	C-141	0.072”	0.625”	2.5”	1.375”	1.5”	10.00	19	Loop	2
24143	C-143	0.054”	0.562”	3”	1.875”	3.4”	2.30	9.2	Loop	2
24155	C-155	0.028”	0.312”	3”	2.375”	7.8”	0.41	3.5	Loop	2
24157	C-157	0.025”	0.25”	3.25”	2.75”	6.4”	0.44	3.1	Loop	2
24161	C-161	0.034”	0.437”	2.75”	1.875”	5.9”	5.00	3.3	Loop	2
24163	C-163	0.047”	0.437”	3.5”	2.626”	3.6”	2.00	8.4	Loop	2
24165	C-165	0.08”	0.5”	1.625”	0.625”	2”	66.00	35	Loop	2
24171	C-171	0.105”	0.75”	2”	0.5”	2.59”	92	60	Hook	2
24173	C-173	0.105”	0.75”	2.25”	0.75”	3”	68	60	Hook	2
24175	C-175	0.105”	0.75”	2.437”	0.9375”	3.3”	47	50	Hook	2

Sizes are approximate. Specifications subject to change without notice.

Packaged Extension Springs Continued

PART #	REFERENCE #	WIRE DIAMETER	OUTSIDE DIAMETER	OVERALL LENGTH	BODY LENGTH	MAX. STRETCH	LOAD RATE (LB/IN)	MAX LOAD (LB)	END TYPE	PKG QTY
24177	C-177	0.105”	0.75”	2.625”	1.125”	3.625”	38	50	Hook	2
24179	C-179	0.072”	0.562”	2.875”	1.75”	4.475”	11	22	Loop	2
24181	C-181	0.072”	0.625”	3.25”	2”	5.6”	6.4	19	Loop	2
24183	C-183	0.047”	0.562”	4”	2.91”	11.6”	0.76	6.5	Loop	2
24185	C-185	0.062”	0.75”	3.5”	2”	9”	1.7	11	Loop	2
24187	C-187	0.105”	0.75”	2.875”	1.375”	N/A	39	60	Hook	2
24189	C-189	0.105”	0.75”	3.125”	1.625”	4.3”	33	50	Hook	2
24191	C-191	0.105”	0.75”	3.75”	2.25”	6”	26	50	Hook	2
24193	C-193	0.034”	0.375”	4”	3.25”	11.3”	0.47	3.9	Loop	2
24205	C-205	0.034”	0.25”	5”	4.5”	8.5”	1.4	6	Loop	2
24209	C-209	0.028”	0.375”	4.5”	3.75”	18”	0.15	2.9	Loop	2
24215	C-215	0.041”	0.375”	3.75”	3”	7.5”	1.4	6.5	Loop	2
24219	C-219	0.041”	0.468”	4.5”	3.564”	13”	0.54	5.2	Loop	2
24221	C-221	0.062”	0.5”	4.5”	3.5”	7.7”	4.1	16	Loop	2
24223	C-223	0.072”	0.5”	5”	4”	7.3”	8.2	25	Loop	2
24227	C-227	0.091”	0.687”	4.75”	3.875”	7.25”	11	35	Hook	2
24231	C-231	0.072”	0.562”	6”	4.876”	9.8”	4.6	22	Loop	2
24233	C-233	0.034”	0.25”	6”	5.5”	10.3”	1.1	6	Loop	2
24235	C-235	0.028”	0.312”	6”	5.375”	21”	0.23	3.9	Loop	2
24239	C-239	0.047”	0.375”	6.5”	5.75”	11.5”	1.6	10	Loop	2
24243	C-243	0.054”	0.625”	6.5”	5.25”	17.5”	0.65	8.3	Loop	2
24251	C-251	0.105”	1.125”	16”	13.75”	38”	1.2	31	Hook	1
24253	C-253	0.054”	0.562”	16.5”	15.375”	41.5”	0.32	9.2	Double loop closed	1
24257	C-257	0.091”	0.812”	4.5”	3.375”	7.8”	7.1	29	Hook	2
24259	C-259	0.12”	0.812”	4”	2.375”	1.3”	39	66	Hook	2
24261	C-261	0.12”	1.062”	5.5”	3.375”	9.7”	9.5	49	Hook	1
24263	C-263	0.091”	0.875”	6”	4.875”	11.6”	3.9	26	Hook	1
24265	C-265	0.105”	1.062”	7”	4.875”	14.5”	3.7	33	Hook	1
24267	C-267	0.162”	1.25”	6.5”	4”	9.5”	26	100	Hook	1
24269	C-269	0.135”	1”	7”	5”	10”	18	75	Double Loop Closed	1
24271	C-271	0.08”	1.062”	8.5”	6.375”	27.5”	0.69	15	Hook	1
24273	C-273	0.148”	1.125”	8.5”	6.25”	12.9”	15	87	Hook	1
24275	C-275	0.091”	1.125”	7.5”	6.312”	20.5”	1.3	20	Hook	1
24277	C-277	0.091”	0.65”	6.5”	5.5”	10.5”	5.9	31	Hook	1
24281	C-281	0.062”	0.375”	5.5”	5”	7.4”	8.9	23	Loop	2
24285	C-285	0.035”	0.375”	5”	4.25”	16”	0.43	5.4	Loop	2
24287	C-287	0.032”	0.312”	5”	4.375”	14.8”	0.48	5.2	Loop	2
24289	C-289	0.035”	0.312”	5”	4.375”	12.4”	0.79	6.6	Loop	2
24293	C-293	0.062”	0.375”	6.75”	6”	2.5”	6.8	23	Loop	1
24301	C-301	0.135”	1.5”	11.5”	8.5”	26.5”	2.7	47	Double Loop Closed	1
24303	C-303	0.105”	1”	12”	10”	24”	2.4	35	Hook	1
24307	C-307	0.135”	1.062”	12”	9.875”	19”	7.7	69	Hook	1
24311	C-311	0.041”	0.437”	10.25”	9.375”	27”	0.28	5.5	Loop	1
24313	C-313	0.047”	0.5”	8.5”	7.5”	22.5”	0.46	7.2	Loop	1
24315	C-315	0.047”	0.437”	8.5”	7.626”	18”	0.73	8.4	Loop	1
24317	C-317	0.091”	0.625”	8.5”	7.25”	12.3”	7.7	39	Loop	1
24319	C-319	0.054”	0.562”	8.5”	7.376”	20”	0.64	9.2	Loop	1
24321	C-321	0.062”	0.625”	8.5”	7.75”	19.5”	0.95	13	Loop	1

Sizes are approximate. Specifications subject to change without notice.

Packaged Extension Springs Continued

PART #	REFERENCE #	WIRE DIAMETER	OUTSIDE DIAMETER	OVERALL LENGTH	BODY LENGTH	MAX. STRETCH	LOAD RATE (LB/IN)	MAX LOAD (LB)	END TYPE	PKG QTY
24323	C-323	0.08”	0.625”	8.5”	7.25”	14”	3.9	27	Loop	1
24325	C-325	0.062”	0.875”	8.5”	6.75”	32”	0.33	8.8	Hook	1
24329	C-329	0.105”	0.875”	8.5”	6.75”	14”	5.4	41	Hook	1
24333	C-333	0.135”	0.875”	9”	7.25”	12”	20	87	Hook	1
24337	C-337	0.12”	1”	8.5”	6.5”	13”	7.7	52	Hook	1
24339	C-339	0.148”	1.25”	10”	8.5”	16.5”	9.2	77	Hook	1

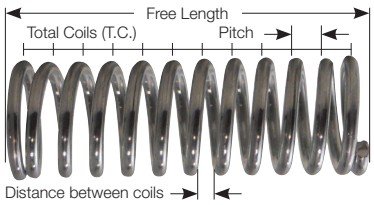
Drawbar Spring

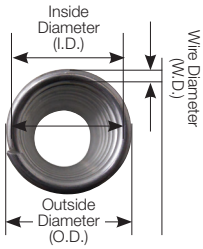
ASTM A227, A228 or A764. Carbon spring steel zinc plated finish

PART #	REFERENCE #	WIRE DIAMETER	OUTSIDE DIAMETER	OVERALL LENGTH	LOAD RATE (LB/IN)	MAX. LOAD (LB)
24900	4001	0.227”	1-9/16”	7-3/4”	152.78	330.31

Packaged Compression Springs

S.A.E. 1060-1090 spring steel. Phosphate and oil finish. Retail package with UPC barcode label.





PART #	REFERENCE #	WIRE DIAMETER	OUTSIDE DIAMETER	OVERALL LENGTH	SOLID HEIGHT	TOTAL COILS	LOAD RATE (LB/IN)	MAX. LOAD (LB)	PKG QTY
24500	C-500	0.023”	0.156”	0.562”	0.28	11	19.00	4.5	6
24510	C-510	0.035”	0.25”	0.5”	0.26	7	42.00	6.2	6
24516	C-516	0.011”	0.156”	1”	0.14	12	0.73	0.57	6
24520	C-520	0.016”	0.187”	0.875”	0.27	16	1.30	0.81	6
24526	C-526	0.028”	0.187”	1”	0.48	17	15.00	6.3	6
24530	C-530	0.02”	0.218”	1”	0.24	11	3.30	2.2	6
24532	C-532	0.013”	0.187”	1”	0.14	10	0.99	0.78	6
24550	C-550	0.016”	0.187”	1”	0.2	12	2.00	1.3	6
24554	C-554	0.02”	0.25”	1”	0.2	9	2.80	1.9	6
24556	C-556	0.026”	0.312”	0.625”	0.18	7	7.00	3.1	6
24562	C-562	0.035”	0.25”	1”	0.46	12	21.00	8.9	6
24566	C-566	0.032”	0.375”	0.75”	0.22	6	7.70	3.2	6
24570	C-570	0.014”	0.125”	1.375”	0.34	27	1.60	1.4	6
24576	C-576	0.016”	0.156”	1.375”	0.35	21	1.80	1.6	6
24578	C-578	0.013”	0.187”	1.375”	0.18	12	0.71	0.78	6
24580	C-580	0.028”	0.187”	1.375”	0.65	23	11.00	6.3	6
24582	C-582	0.016”	0.187”	1.375”	0.26	15	1.40	1.3	6
24600	C-600	0.02”	0.218”	1.375”	0.31	15	2.40	2.2	4
24604	C-604	0.023”	0.218”	1.375”	0.39	16	3.90	3.3	4
24608	C-608	0.02”	0.25”	1.375”	0.25	12	2.00	1.9	4

Sizes are approximate. Specifications subject to change without notice.

Packaged Compression Springs Continued

PART #	REFERENCE #	WIRE DIAMETER	OUTSIDE DIAMETER	OVERALL LENGTH	SOLID HEIGHT	TOTAL COILS	LOAD RATE (LB/IN)	MAX. LOAD (LB)	PKG QTY
24612	C-612	0.028”	0.281”	1.375”	0.43	15	4.40	4.1	4
24614	C-614	0.041”	0.312”	1.25”	0.62	15	17.00	8.3	4
24624	C-624	0.041”	0.375”	1.125”	0.46	10	13.00	7	4
24632	C-632	0.041”	0.437”	1.062”	0.36	8	11.00	6.1	4
24650	C-650	0.013”	0.218”	1.75”	0.247	18	0.29	0.44	4
24652	C-652	0.028”	0.218”	1.375”	0.53	18	8.10	5.5	4
24660	C-660	0.016”	0.312”	1.75”	0.2	12	0.39	0.61	4
24664	C-664	0.047”	0.343”	1.5”	0.71	15	23.00	11	4
24668	C-668	0.026”	0.375”	1.5”	0.26	10	1.70	2.2	4
24672	C-672	0.035”	0.375”	1.75”	0.54	16	3.70	4.2	4
24676	C-676	0.032”	0.437”	2.125”	0.39	12	2.00	2.8	4
24680	C-680	0.047”	0.312”	2”	1.14	24	18.00	12	4
24690	C-690	0.041”	0.437”	2.25”	0.67	16	4.90	6.1	2
24692	C-692	0.041”	0.625”	1.5”	0.37	9	3.40	3.8	2
24700	C-700	0.062”	0.5”	1”	0.54	8	45.00	17	2
24702	C-702	0.054”	0.562	1”	0.38	7	16	9.5	2
24704	C-704	0.041”	0.5”	1.5”	0.45	10	5.3	5.4	2
24706	C-706	0.072”	0.562”	1.375”	0.74	10	45	22	2
24712	C-712	0.091”	0.687”	1.25”	0.75	8	89	35	2
24714	C-714	0.062”	0.375”	2.25”	1.46	22	34	22	2
24720	C-720	0.062”	0.5”	1.75”	0.85	14	24	17	2
24722	C-722	0.047”	0.5”	2”	0.635	13	7.19	N/A	2
24724	C-724	0.054”	0.437”	2”	0.89	16	16	13	2
24730	C-730	0.047”	0.406”	2.75”	1.12	23	7.3	9.7	2
24736	C-736	0.072”	0.5”	2.75”	1.48	19	28	25	2
24740	C-740	0.08”	0.625”	2.5”	1.14	14	32	27	2
24742	C-742	0.054”	0.625”	2.75”	0.77	14	5.8	9.1	2
24750	C-750	0.08”	0.75”	2”	0.78	10	25	23	2
24752	C-752	0.08”	0.937”	2”	0.67	8	17	19	2
24756	C-756	0.041”	0.718”	3.5”	0.47	11	1.5	3.8	2
24766	C-766	0.054”	0.562”	3”	0.96	17	6.3	10	2
24768	C-768	0.105”	0.812”	2.25”	1.26	11	54.94	N/A	2
24782	C-782	0.08”	0.625”	3”	1.34	16	26	27	2
24792	C-792	0.105”	0.875”	3”	1.39	14	34	43	2
24802	C-802	0.148”	1.375”	4.375”	1.83	13	36	72	1
24806	C-806	0.148”	1.5”	3.25”	1.26	9	43	67	1
24814	C-814	0.135”	1.375”	2.5”	0.98	8	48	55	1
24818	C-818	0.12”	1.125”	4”	1.72	13	26	48	2
24822	C-822	0.148”	0.937”	4”	2.63	12	89	103	2
24826	C-826	0.12”	1”	3.5”	1.71	15	36	54	2
24830	C-830	0.12”	1.125”	3”	1	10	22	34	2
24832	C-832	0.12”	1”	3”	1.41	12	45	54	2
24834	C-834	0.12”	1.187”	2.75”	1.2	9	35	46	2
24836	C-836	0.08”	0.875”	4”	1.28	15	9	20	2
24838	C-838	0.08”	0.75”	3.5”	1.38	16	14	23	2
24850	C-850	0.091”	0.625”	5”	2.64	29	29	38	2
24856	C-856	0.091”	0.75”	6”	2.78	30	13	32	2
24858	C-858	0.072”	0.687”	6”	2.16	29	6.2	18	2

Sizes are approximate. Specifications subject to change without notice.

Packaged Compression Springs Continued

PART #	REFERENCE #	WIRE DIAMETER	OUTSIDE DIAMETER	OVERALL LENGTH	SOLID HEIGHT	TOTAL COILS	LOAD RATE (LB/IN)	MAX. LOAD (LB)	PKG QTY
24864	C-864	0.091”	0.875”	6”	2.18	23	9.3	28	1
24874	C-874	0.12”	1.375”	6”	1.08	14	13	40	1
24878	C-878	0.08”	0.625”	9”	3.72	45	8.4	27	1
24892	C-892	0.162”	1.125”	7”	4	24	49	111	1

What are retainer rings?

Retainer Rings are precision engineered components that are designed to be applied on shafts or in bores and provide a shoulder that accurately positions, locates and retains other parts of an assembly. Many different types of retainer rings have been developed over the years, each a solution to a specific problem. Different types of rings are available to solve issues such as tolerance take-up, clearance diameter, thrust load capacity, flexible installation, rpm capacity, impact loading, non-removable lock-rings, groove-less push-on fastening and radial installation.

As an engineering concept, the retainer ring is still relatively young and has certainly not yet reached it’s peak of utilization as a retainer device.

How are retainer rings used?

Retainer Rings work by creating a shoulder that can hold components in place. The retainer shoulder is created when the ring attaches itself to the bore or shaft, typically by snapping into a groove. Ordinarily (however not always) a groove is dug into the shaft or bore, and this groove becomes the seat for the retainer ring.

Retainer rings are designed such that their contact diameter has some interference fit with the groove in which they fit. This creates a “snug” fit between the ring and groove. The term used to describe the amount of interference fit is “cling”.

Cling causes the retainer ring to fit tightly and securely against its groove bottom. Without cling a ring would have a loose fit and would “rattle” in its groove. This lack of cling would decrease the retention capacity of the ring because a “cling-less” ring is free to move radially, creating weak retention points that will ultimately cause the assembly to fail.

Another key factor is the width of the groove. The groove width is slightly larger than the rings thickness, thus creating a snug axial fit. The tight axial fit along with the cling to the groove bottom create a rigid shoulder which can retain thrust loads.

PART #	INDUSTRY #	SHAFT DECIMAL	SHAFT FRACTION	RING OUTSIDE DIAMETER	RING THICKNESS	GROOVE DIAMETER	GROOVE DEPTH	GROOVE WIDTH	WEIGHT (LB)/100 PCS
22860	12	0.125	1/8”	0.23	0.015	0.10	0.02	0.02	0.0087
22861	18	0.188	3/16”	0.335	0.025	0.15	0.02	0.029	0.029
22862	25	0.25	1/4”	0.527	0.025	0.21	0.02	0.029	0.076
22863	31	0.312	5/16”	0.5	0.025	0.25	0.03	0.029	0.057
22864	37	0.375	3/8”	0.66	0.035	0.30	0.04	0.039	0.15
22865	43	0.438	7/16”	0.687	0.035	0.34	0.05	0.039	0.15
22866	50	0.5	1/2”	0.8	0.042	0.40	0.05	0.046	0.25
22867	62	0.625	5/8”	0.94	0.042	0.49	0.07	0.046	0.32
22868	75	0.75	3/4”	1.12	0.05	0.58	0.09	0.056	0.58
22869	87	0.875	7/8”	1.3	0.05	0.68	0.10	0.056	0.76
22870	98	0.984	1”	1.5	0.05	0.84	0.08	0.056	0.92
22871	118	1.188	1-3/16”	1.626	0.062	1.08	0.05	0.068	1.13
22872	137	1.375	1-3/8”	1.875	0.062	1.23	0.07	0.068	1.54

REFERENCE CHART AVAILABLE
See end of catalogue

E Retainer Rings

The universally used radially assembled circlip for shafts. The groove is gripped by 3 tabs. Applications in vehicle construction, optical and electronic industry, and light mechanical industry. Cross reference to 1000, 1500, 5133, ms-16633 series. S.A.E. 1060-1090 Spring steel. Phosphate & oil finish. 10 pieces per pkg.

Sizes are approximate. Specifications subject to change without notice.

REFERENCE CHART AVAILABLE
See end of catalogue

Internal Retainer Rings

The universally applicable rings for shafts and bores. Applications in all branches of industry and machine, instrument and vehicle construction. Cross reference to 1300, 3000, 5000, HO, MS-16625 series. S.A.E. 1060-1090 Spring steel. Phosphate and oil finish.

PART #	INDUSTRY #	BORE (DECIMAL)	BORE (FRACTION)	RING OUTSIDE DIAMETER	RING THICKNESS	GROOVE DIAMETER	GROOVE DEPTH	GROOVE WIDTH	PKG QTY
22873	25	0.25	1/4”	0.28	0.015	0.27	0.01	0.02	10
22874	31	0.312	5/16”	0.346	0.015	0.33	0.01	0.02	10
22875	37	0.375	3/8”	0.415	0.025	0.40	0.01	0.029	10
22876	43	0.438	7/16”	0.482	0.025	0.46	0.01	0.029	10
22878	50	0.5	1/2”	0.548	0.035	0.53	0.02	0.039	10
22879	56	0.562	9/16”	0.62	0.035	0.60	0.02	0.039	10
22880	62	0.625	5/8”	0.694	0.035	0.67	0.02	0.039	10
22881	68	0.688	11/16”	0.763	0.035	0.73	0.02	0.039	10
22882	75	0.75	3/4”	0.831	0.035	0.80	0.02	0.039	10
22884	87	0.875	7/8”	0.971	0.042	0.93	0.03	0.046	10
22885	93	0.938	15/16”	1.041	0.042	1.00	0.03	0.046	10
22886	100	1	1”	1.111	0.042	1.07	0.03	0.046	10
22888	106	1.062	1-1/16”	1.18	0.05	1.13	0.03	0.056	10
22889	112	1.125	1-1/8”	1.249	0.05	1.20	0.04	0.056	10
22890	118	1.188	1-3/16”	1.319	0.05	1.26	0.04	0.056	10
22891	125	1.25	1-1/4”	1.388	0.05	1.33	0.04	0.056	10
22892	131	1.312	1-5/16”	1.456	0.05	1.40	0.04	0.056	10
22893	137	1.375	1-3/8”	1.526	0.05	1.46	0.04	0.056	10
22894	143	1.438	1-7/16”	1.596	0.05	1.53	0.05	0.056	10
22895	150	1.5	1-1/2”	1.66	0.05	1.59	0.05	0.056	10
22896	156	1.562	1-9/16”	1.734	0.062	1.66	0.05	0.068	10
22897	162	1.625	1-5/8”	1.804	0.062	1.73	0.05	0.068	10
22900	175	1.75	1-3/4”	1.942	0.062	1.86	0.05	0.068	10
22901	181	1.812	1-13/16”	2.012	0.062	1.92	0.06	0.068	10
22902	187	1.875	1-7/8”	2.072	0.062	1.99	0.06	0.068	10
22903	193	1.938	1-15/16”	2.141	0.062	2.06	0.06	0.068	10
22904	200	2	2”	2.21	0.062	2.12	0.06	0.068	10
22905	206	2.062	2-1/16”	2.28	0.078	2.19	0.06	0.086	5
22906	212	2.125	2-1/8”	2.35	0.078	2.25	0.06	0.086	5
22907	225	2.25	2-1/4”	2.49	0.078	2.38	0.07	0.086	5
22908	237	2.375	2-3/8”	2.63	0.078	2.52	0.07	0.086	5
22909	244	2.44	2-7/16”	2.702	0.078	2.58	0.07	0.086	5
22910	250	2.5	2-1/2”	2.775	0.078	2.65	0.07	0.086	5
22911	262	2.625	2-5/8”	2.91	0.093	2.78	0.08	0.103	5
22912	268	2.688	2-11/16	“2.98	0.093	2.85	0.08	0.103	5
22913	275	2.75	2-3/4”	3.05	0.093	2.91	0.08	0.103	5
22914	281	2.812	2-13/16”	3.121	0.093	2.98	0.08	0.103	5
22915	287	2.875	2-7/8”	3.191	0.093	3.05	0.09	0.103	2
22916	300	3	3”	3.325	0.093	3.18	0.09	0.103	2
22917	325	3.25	3-1/4”	3.623	0.109	3.45	0.1	0.12	2

Sizes are approximate. Specifications subject to change without notice.

Internal Retainer Rings Continued

PART #	INDUSTRY #	BORE (DECIMAL)	BORE (FRACTION)	RING OUTSIDE DIAMETER	RING THICKNESS	GROOVE DIAMETER	GROOVE DEPTH	GROOVE WIDTH	PKG QTY
22918	350	3.5	3-1/2”	3.89	0.109	3.71	0.11	0.12	2
22919	400	4	4”	4.424	0.109	4.24	0.12	0.12	2
22920	450	4.5	4-1/2”	4.94	0.109	4.74	0.12	0.12	2
22921	500	5	5”	5.485	0.109	5.26	0.13	0.12	2
22922	550	5.5	5-1/2”	6.066	0.125	5.77	0.14	0.139	2
22923	600	6	6”	6.62	0.125	6.27	0.14	0.139	2

External Retainer Rings (Basic)

The universally applicable rings for shafts and bores. Applications in all branches of industry and machine, instrument and vehicle construction. Cross reference to 1300, 3000, 5000, HO, MS-16625 series. S.A.E. 1060-1090 spring steel. Phosphate and oil finish.

REFERENCE CHART AVAILABLE
See end of catalogue

PART #	INDUSTRY #	SHAFT DECIMAL	SHAFT FRACTION	RING OUTSIDE DIAMETER	RING THICKNESS	GROOVE DIAMETER	GROOVE DEPTH	GROOVE WIDTH	PKG QTY
22924	18	0.188	3/16”	0.168	0.015	0.18	0.01	0.018	10
22925	25	0.25	1/4”	0.225	0.025	0.23	0.01	0.029	10
22926	31	0.312	5/16”	0.281	0.025	0.29	0.01	0.029	10
22928	37	0.375	3/8”	0.338	0.025	0.35	0.01	0.029	10
22929	43	0.438	7/16”	0.395	0.025	0.41	0.01	0.029	10
22931	50	0.5	1/2”	0.461	0.035	0.47	0.02	0.039	10
22932	56	0.562	9/16”	0.521	0.035	0.53	0.02	0.039	10
22933	59	0.594	19/32”	0.55	0.035	0.56	0.02	0.039	10
22934	62	0.625	5/8”	0.579	0.035	0.59	0.02	0.039	10
22935	66	0.672	43/64”	0.621	0.035	0.63	0.02	0.039	10
22936	68	0.688	11/16”	0.635	0.042	0.65	0.02	0.046	10
22937	75	0.75	3/4”	0.693	0.042	0.70	0.02	0.046	10
22938	81	0.812	13/16”	0.751	0.042	0.76	0.03	0.046	10
22939	87	0.875	7/8”	0.81	0.042	0.82	0.03	0.046	10
22940	93	0.938	15/16”	0.867	0.042	0.88	0.03	0.046	10
22942	100	1	1”	0.925	0.042	0.94	0.03	0.046	10
22944	106	1.062	1-1/16”	0.982	0.05	1.00	0.03	0.056	10
22945	112	1.125	1-1/8”	1.041	0.05	1.06	0.03	0.056	10
22946	118	1.188	1-3/16”	1.098	0.05	1.12	0.04	0.056	10
22947	125	1.25	1-1/4”	1.156	0.05	1.18	0.04	0.056	10
22948	131	1.312	1-5/16”	1.214	0.05	1.23	0.04	0.056	10
22949	137	1.375	1-3/8”	1.272	0.05	1.29	0.04	0.056	10
22950	143	1.438	1-7/16”	1.333	0.05	1.35	0.04	0.056	10

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External Retainer Rings (Basic) Continued

PART #	INDUSTRY #	SHAFT DECIMAL	SHAFT FRACTION	RING OUTSIDE DIAMETER	RING THICKNESS	GROOVE DIAMETER	GROOVE DEPTH	GROOVE WIDTH	PKG QTY
22951	150	1.5	1-1/2”	1.387	0.05	1.41	0.05	0.056	10
22952	156	1.562	1-9/16”	1.446	0.062	1.47	0.05	0.068	10
22953	162	1.625	1-5/8”	1.503	0.062	1.53	0.05	0.068	10
22954	168	1.688	1-11/16”	1.56	0.062	1.59	0.05	0.068	10
22955	175	1.75	1-3/4”	1.618	0.062	1.65	0.05	0.068	10
22956	187	1.875	1-7/8”	1.735	0.062	1.77	0.05	0.06	10
22957	196	1.969	1-31/32”	1.819	0.062	1.86	0.06	0.068	10
22958	200	2	2”	1.85	0.062	1.89	0.06	0.068	10
22960	212	2.125	2-1/8”	1.964	0.078	2	0.06	0.086	5
22962	225	2.25	2-1/4”	2.081	0.078	2.12	0.07	0.086	5
22963	237	2.375	2-3/8”	2.197	0.078	2.24	0.07	0.086	5
22964	243	2.438	2-7/16”	2.255	0.078	2.3	0.07	0.086	5
22965	250	2.5	2-1/2”	2.313	0.078	2.36	0.07	0.086	5
22966	262	2.625	2-5/8”	2.428	0.078	2.48	0.07	0.086	5
22967	275	2.75	2-3/4”	2.543	0.093	2.6	0.07	0.103	2
22968	287	2.875	2-7/8”	2.659	0.093	2.72	0.08	0.1	2
22970	300	3	3”	2.775	0.093	2.84	0.08	0.1	2
22971	350	3.5	3-1/2”	3.237	0.109	3.32	0.09	0.12	2
22972	400	4	4”	3.7	0.109	3.79	0.1	0.12	2
22973	450	4.5	4-1/2”	4.223	0.109	4.31	0.1	0.12	2
22974	500	5	5”	4.692	0.109	4.79	0.11	0.12	2
22975	600	6	6”	5.631	0.125	5.75	0.13	0.139	2

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