

PROFESSIONAL PARTNER EDITION

NAVTEC[®]

Made By
Hayn Marine

HAYN ROD RIGGING

MANUFACTURER OF QUALITY HARDWARE



WWW.HAYN.COM

About Us:

Hayn has been engineering and manufacturing marine, architectural, and industrial rigging hardware since the late 1950's. Hayn's commitment to advanced automation, latest design technology, and manufacturing techniques give us a distinct advantage over our competitors. Hayn offers short lead-times for both our standard products as well as custom components. Hayn's corporate culture includes a highly specialized team that endlessly seeks opportunities for improvement to quality and product features, as well as customer service.

Product Traceability / Quality Control:

All Hayn products have full traceability including raw material certificates and certificates of conformity. Requirements for this documentation should be indicated at time of order. Hayn employs a comprehensive quality system that includes thorough review of any non-conformance of products, internal processes, etc.

Specifications:

Product specifications are subject to change without notice. Catalog images are representative of the product type/family and may not reflect the item purchased. Product drawings are available upon request which include the most recent and accurate information available.

Custom Rigging Products:

Hayn carries a comprehensive standard product offering. In the event that the products required for your rigging application differ from those that are standard catalog items, Hayn will produce custom components to your specifications. Please contact us for pricing and lead-times.



Customer Service:

Normal business hours are between 8:00 am and 5:30 pm EST Monday-Thursday and until 5:00pm EST on Friday. Hayn’s dedicated and knowledgeable sales team is available during those hours to answer your product questions and receive product orders. Specific application questions for your vessel should be directed to your preferred Rigger as they are your best source for this type of information. Please contact us for the authorized Hayn product dealer or rigger near you.

Wholesale Sales (Exclusively):

Hayn manufactures and distributes quality marine products exclusively for the rigging trade. All orders are strongly encouraged to exceed \$100 as a minimum. Possession of this catalog does not constitute an agreement to sell. Please contact us directly for an applicable Hayn Dealer or Rigger nearest you.

Ordering Methods Include:

E-mail – sales@hayn.com
Phone – 800-346-4296
Fax – 800-441-4296

Payment:

Payment terms are Net 30 Days for established accounts. All major Credit Cards are accepted. Prepayment or C.O.D. shipment is required for first time orders or until account terms are established. Past due accounts will transfer to C.O.D. status and are subject to a 1-1/2% finance charge added per month until the balance is paid in full. Payment discounts will not be allowed on invoices with account balances that are past due.

Freight:

All freight costs are the responsibility of the customer. Freight and insurance charges will be added to the invoice at time of shipment. All C.O.D. shipments are subject to an applicable transaction fee. All small package ground and air shipments can be shipped via UPS or FedEx. Larger shipments may be sent through a common carrier. Shipments with other carriers may incur additional charges.

Returns:

Special order or custom items may not be returnable. Only current version product inventory will be accepted for credit. Credit values are based on original invoice value. Product returned after 60 days from time of shipment is subject to a restocking charge of 10%. Product returned must have a Hayn issued RMA (Returned Merchandise Authorization) number.

Return address:

Hayn Enterprises
51 Inwood Road
Rocky Hill, CT 06067 USA

Attn: Returns Department – RMA# _____

Warranty:

Hayn Marine hardware manufactured by Hayn Enterprises, LLC is guaranteed at time of shipment to be free of defects in material and craftsmanship and only when used for the purpose intended. Hayn does not accept responsibility for product used in applications where safe working loads are exceeded, product has been improperly installed, and/or product has been modified.

Hayn makes no representations for suitability to a particular application.

Warranty is limited to repair or replacement, at Hayn’s discretion, of the warranted part only.

Hayn Enterprises, LLC does not, under any circumstance, assume responsibility for any incidental damages incurred in connection with the use of its products. All hardware manufactured by Hayn Enterprises, LLC carries a limited lifetime warranty.



Hayn Enterprises, LLC

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R505 NITRONIC 50 ROD

Nitronic 50 Rod - Straightened / Normal Finish

Hayn Part #	NAVTEC #	W - Rod Size	Rod Diameter	Minimum Breaking Strength / lbs.	Weight lbs. / Foot	Head Diameter (After Heading)
HYN-NR50-04	R505-004	-04	0.172 +/- .001	4,700	0.079	0.258 / 0.271
HYN-NR50-06	R505-006	-06	0.198 +/- .001	6,300	0.105	0.297 / 0.331
HYN-NR50-08	R505-008	-08	0.225 +/- .001	8,200	0.136	0.338 / 0.390
HYN-NR50-10	R505-010	-10	0.250 +/- .001	10,300	0.167	0.375 / 0.437
HYN-NR50-12	R505-012	-12	0.281 +/- .001	12,500	0.211	0.422 / 0.453
HYN-NR50-15	R505-015	-15	0.296 +/- .001	14,250	0.235	0.453 / 0.495
HYN-NR50-17	R505-017	-17	0.330 +/- .001	17,500	0.291	0.495 / 0.578
HYN-NR50-22	R505-022	-22	0.375 +/- .001	22,500	0.367	0.563 / 0.687
HYN-NR50-30	R505-030	-30	0.437 +/- .001	30,000	0.511	0.656 / 0.812
HYN-NR50-40	R505-040	-40	0.500 +/- .002	38,000	0.669	0.750 / 0.921
HYN-NR50-48	R505-048	-48	0.562 +/- .002	48,000	0.845	0.843 / 0.937
HYN-NR50-60	R505-060	-60	0.660 +/- .002	60,000	1.166	0.990 / 1.031

Nitronic 50 Rod - Straightened / High Polish Finish

Hayn Part #	W - Rod Size	Rod Diameter	Minimum Breaking Strength / lbs.	Weight lbs. / Foot	Head Diameter (After Heading)
HYN-NR50-04-HP	-04	0.172 +/- .001	4,700	0.079	0.258 / 0.271
HYN-NR50-06-HP	-06	0.198 +/- .001	6,300	0.105	0.297 / 0.331
HYN-NR50-08-HP	-08	0.225 +/- .001	8,200	0.136	0.338 / 0.390
HYN-NR50-10-HP	-10	0.250 +/- .001	10,300	0.167	0.375 / 0.437
HYN-NR50-12-HP	-12	0.281 +/- .001	12,500	0.211	0.422 / 0.453
HYN-NR50-15-HP	-15	0.296 +/- .001	14,250	0.235	0.453 / 0.495
HYN-NR50-17-HP	-17	0.330 +/- .001	17,500	0.291	0.495 / 0.578
HYN-NR50-22-HP	-22	0.375 +/- .001	22,500	0.367	0.563 / 0.687
HYN-NR50-30-HP	-30	0.437 +/- .001	30,000	0.511	0.656 / 0.812
HYN-NR50-40-HP	-40	0.500 +/- .002	38,000	0.669	0.750 / 0.921
HYN-NR50-48-HP	-48	0.562 +/- .002	48,000	0.845	0.843 / 0.937
HYN-NR50-60-HP	-60	0.660 +/- .002	60,000	1.166	0.990 / 1.031

NOTE:

The NAVTEC® trade name and Rod Rigging designs are the exclusive intellectual property of Hayn Enterprises, LLC.

Products detailed in this catalog are engineered from and are directly compatible with the NAVTEC® Rod Rigging product line and systems.

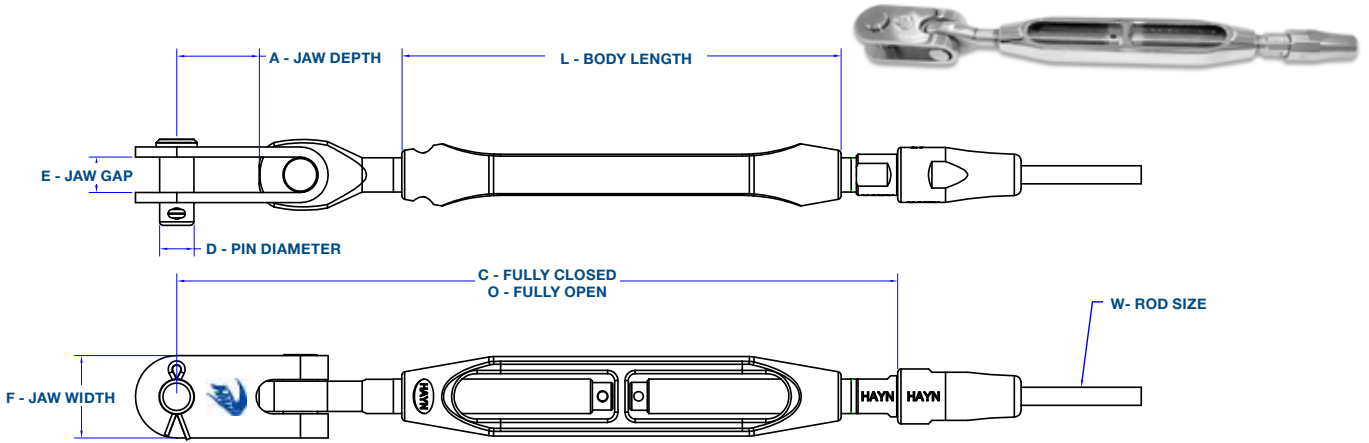
Contact Hayn for your authorized NAVTEC® reseller.

ROD RIGGING CATALOG

PART FEATURE LETTER DESIGNATION KEY

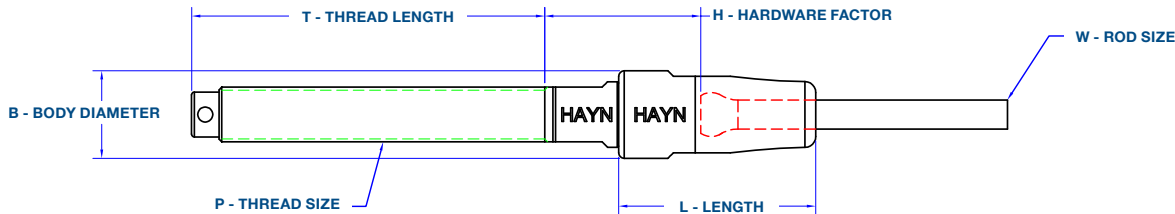
- A - Jaw Depth**
- B - Body Diameter**
- C - Fully Closed (Adjustment Range)**
- D - Pin or Hole Diameter**
- E - Jaw Gap**
- F - Jaw Width or Eye Width or Fork Diameter**
- G - Grip Length**
- H - Hardware Factor**
- HD - Head Diameter**
- HT - Head Thickness**
- J - Eye Width / Boss Width**
- L - Length**
- O - Fully Open (Adjustment Range)**
- P - Thread Size, Pitch, and Direction**
- R - Retaining Pin Hole**
- RAD - Radius**
- T - Thread Length**
- W - Rod Size**

N690 ROD TURNBUCKLE ASSEMBLY



Hayn Part #	NAVTEC #	W - Rod Size	P - Thread Size	D - Pin Ø	O - Open L	C - Closed L	L - Body	A - Jaw Depth	E - Jaw Gap	F - Jaw Width	Weight lbs.
HYN-RTBA-04X38	N690-041212	-04	3/8-24	3/8"	1'-0 1/8"	8 5/8"	5-1/2"	3/4"	3/8"	7/8"	0.70
HYN-RTBA-06X716	N690-061414	-06	7/16-20	7/16"	1'-1 3/16"	9 11/16"	5-7/8"	1-1/4"	7/16"	1-1/16"	1.14
HYN-RTBA-08X716	N690-081414	-08	7/16-20	7/16"	1'-1 5/16"	9 13/16"	5-7/8"	1-1/4"	7/16"	1-1/16"	1.21
HYN-RTBA-08X12	N690-081616	-08	1/2-20	1/2"	1'-2 1/2"	10 1/2"	6-1/2"	1-1/8"	1/2"	1-5/32"	1.63
HYN-RTBA-10X12	N690-101616	-10	1/2-20	1/2"	1'-2 3/4"	10 3/4"	6-1/2"	1-1/8"	1/2"	1-5/32"	1.63
HYN-RTBA-10X58	N690-102020	-10	5/8-18	5/8"	1'-6 1/8"	1'-1 1/8"	8"	1-1/2"	5/8"	1-1/2"	2.89
HYN-RTBA-12X12	N690-121616	-12	1/2-20	1/2"	1'-2 7/8"	10 7/8"	6-1/2"	1-1/8"	1/2"	1-5/32"	2.01
HYN-RTBA-12X58	N690-122020	-12	5/8-18	5/8"	1'-6 1/8"	1'-1 1/8"	8"	1-1/2"	5/8"	1-1/2"	3.08
HYN-RTBA-15X58	N690-152020	-15	5/8-18	5/8"	1'-6 1/8"	1'-1 1/8"	8"	1-1/2"	5/8"	1-1/2"	3.08
HYN-RTBA-17X58	N690-172020	-17	5/8-18	5/8"	1'-6 1/8"	1'-1 1/8"	8"	1-1/2"	5/8"	1-1/2"	3.07
HYN-RTBA-22X34	N690-222424	-22	3/4-16	3/4"	1'-10 1/8"	1'-4 1/8"	10"	1-7/8"	3/4"	1-7/8"	5.62
HYN-RTBA-30X78	N690-302828	-30	7/8-14	7/8"	2'-3 9/16"	1'-8 1/16"	1'-0 7/16"	2-7/8"	7/8"	2-3/8"	9.70
HYN-RTBA-40X1	N690-403232	-40	1 - 12	1.0"	2'-6 13/16"	1'-9 13/16"	1'-2 3/16"	2-5/8"	1.0"	2-1/2"	13.65
HYN-RTBA-48X118	N690-483636	-48	1-1/8 - 12	1-1/8"	2'-10 5/16"	2'-0 13/16"	1'-4"	2-3/4"	1-1/8"	2-3/4"	20.25
HYN-RTBA-60X114	N690-604040	-60	1-1/4 - 12	1-1/4"	3'-1 3/16"	2'-4 11/16"	1'-5 7/8"	3-7/8"	1-1/4"	3-1/4"	29.09

N090 ROD TURNBUCKLE STUD

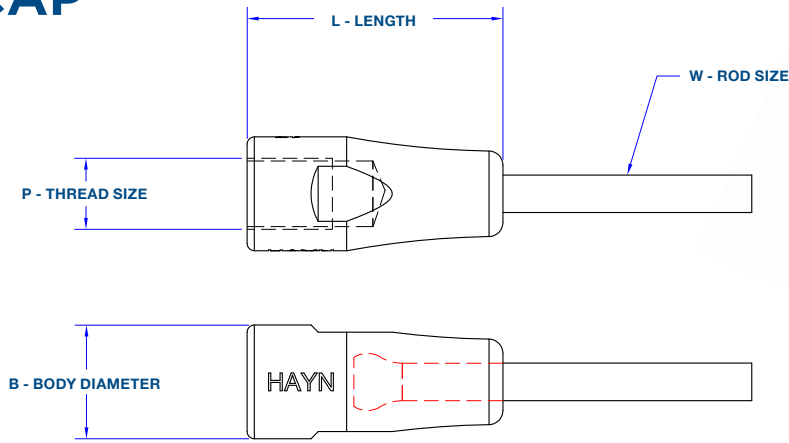


316 Stainless Steel

Hayn Part #	NAVTEC #	W-Rod Size	P-Thread Size	H-Hardware Factor	T-Thread Length	L-Length	B-Body Ø	Weight lbs.
HYN-RTBS-04X38	N090-0412	-04	3/8-24	1 3/16"	2 7/8"	1 3/8"	5/8"	0.17
HYN-RTBS-06X716	N090-0614	-06	7/16-20	1 3/8"	3"	1 3/8"	11/16"	0.25
HYN-RTBS-08X716	N090-0814	-08	7/16-20	1 5/8"	3"	1 5/8"	3/4"	0.32
HYN-RTBS-08X12	N090-0816	-08	1/2-20	1 5/8"	3 1/4"	1 5/8"	3/4"	0.37
HYN-RTBS-10X12	N090-1016	-10	1/2-20	1 5/8"	3 1/4"	1 5/8"	3/4"	0.37
HYN-RTBS-10X58	N090-1020	-10	5/8-18	1 7/8"	4"	2 1/4"	1"	0.56
HYN-RTBS-12X12	N090-1216	-12	1/2-20	1 7/8"	3 1/4"	2 1/4"	1"	0.75
HYN-RTBS-12X58	N090-1220	-12	5/8-18	1 3/4"	4"	2 1/4"	1"	0.75
HYN-RTBS-15X58	N090-1520	-15	5/8-18	1 3/4"	4"	2 1/4"	1"	0.75
HYN-RTBS-17X58	N090-1720	-17	5/8-18	1 13/16"	4"	2 1/4"	1"	0.74
HYN-RTBS-22X34	N090-2224	-22	3/4-16	2 1/4"	5"	2 3/4"	1 1/4"	1.40
HYN-RTBS-30X78	N090-3028	-30	7/8-14	2 7/16"	6"	3 7/32"	1 7/16"	2.25
HYN-RTBS-40X1	N090-4032	-40	1 - 12	3 5/16"	6 1/4"	3 5/8"	1 5/8"	3.25
HYN-RTBS-48X118	N090-4836	-48	1-1/8 - 12	3 7/8"	7"	4 1/8"	1 7/8"	4.78
HYN-RTBS-60X114	N090-6040	-60	1-1/4 - 12	4"	7 7/8"	4 1/2"	2"	6.89

Larger Sizes Available Upon Request

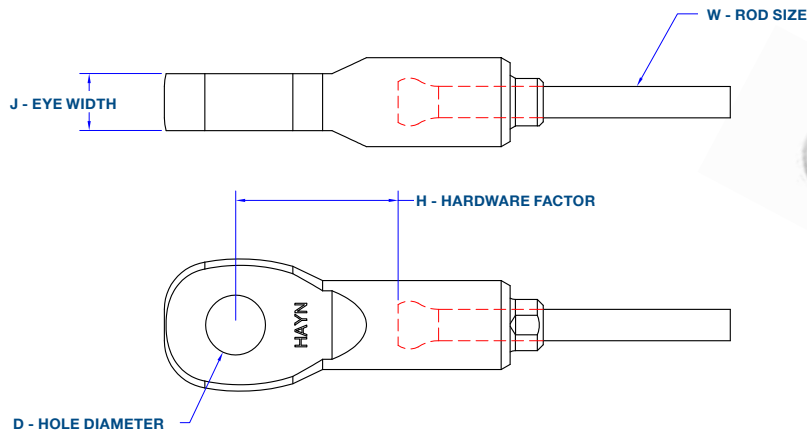
ROD CAP



316 Stainless Steel

Hayn Part #	W - Rod Size	B - Body Ø	P - Thread Size	L - Length	Weight lbs.
RODCAP-04X38	-04	5/8"	3/8-24	1 3/8"	0.07
RODCAP-06X716	-06	11/16"	7/16-20	1 5/8"	0.09
RODCAP-08X12	-08	3/4"	1/2-20	1 7/8"	0.13
RODCAP-10X12	-10	1"	1/2-20	1 7/8"	0.13
RODCAP-10X58	-10	1"	5/8-18	2 1/4"	0.31
RODCAP-12X58	-12	1"	5/8-18	2 1/4"	0.30
RODCAP-15X58	-15	1"	5/8-18	2 1/4"	0.30
RODCAP-17X58	-17	1"	5/8-18	2 1/4"	0.29
RODCAP-22X34	-22	1 1/4"	3/4-19	2 3/4"	0.57
RODCAP-30X78	-30	1 7/16"	7/8-14	3 7/32"	0.92
RODCAP-40X1	-40	1 5/8"	1.0-12	3 5/8"	1.28
RODCAP-48X118	-48	1 7/8"	1 1/8-12	4 1/8"	1.96
RODCAP-60X114	-60	2"	1 1/4-12	4 1/2"	2.55

G100 ROD EYE ASSEMBLY

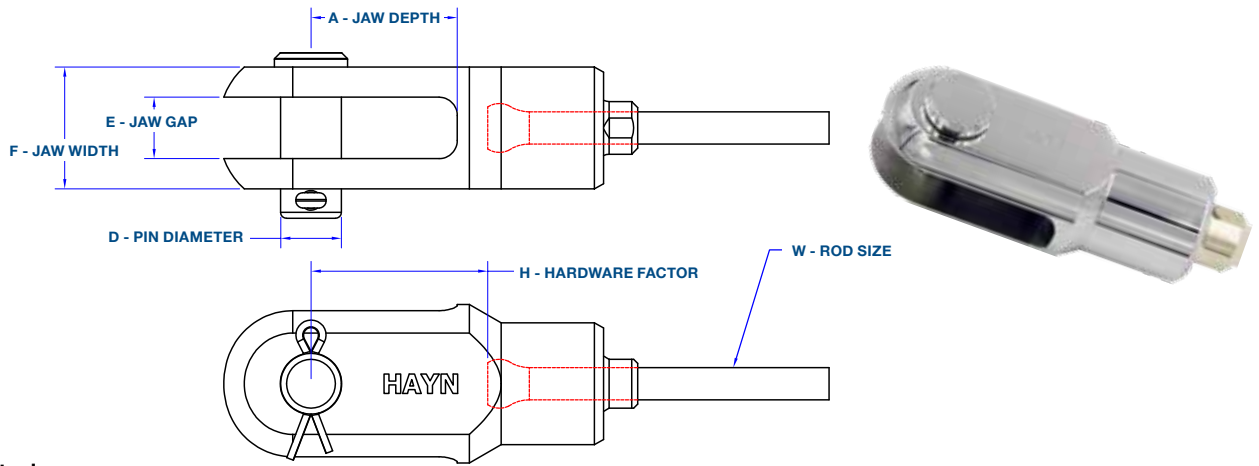


316 Stainless Steel

Hayn Part #	NAVTEC #	W - Rod Size	D - Hole Ø	J - Eye Width	H - Hardware Factor	Weight lbs.
HYN-RDE-04X38	G100-004	-04	3/8"	3/8"	1"	0.13
HYN-RDE-06X716	G100-006	-06	7/16"	7/16"	1 5/16"	0.23
HYN-RDE-08X12	G100-008	-08	1/2"	1/2"	1 7/16"	0.31
HYN-RDE-10X12	G100-010	-10	1/2"	1/2"	1 1/2"	0.31
HYN-RDE-12X58	G100-012	-12	5/8"	5/8"	1 11/16"	0.62
HYN-RDE-15X58	G100-015	-15	5/8"	5/8"	1 3/4"	0.62
HYN-RDE-17X58	G100-017	-17	5/8"	5/8"	1 11/16"	0.62
HYN-RDE-22X34	G100-022	-22	3/4"	3/4"	2 9/16"	1.06
HYN-RDE-30X78	G100-030	-30	7/8"	13/16"	2 3/8"	1.45
HYN-RDE-40X1	G100-040	-40	1"	15/16"	2 3/4"	2.22
HYN-RDE-48X118	G100-048	-48	1 1/8"	1 1/16"	3 5/32"	3.23
HYN-RDE-60X114	G100-060	-60	1 1/4"	1 7/32"	3 3/16"	4.85

Larger Sizes Available Upon Request

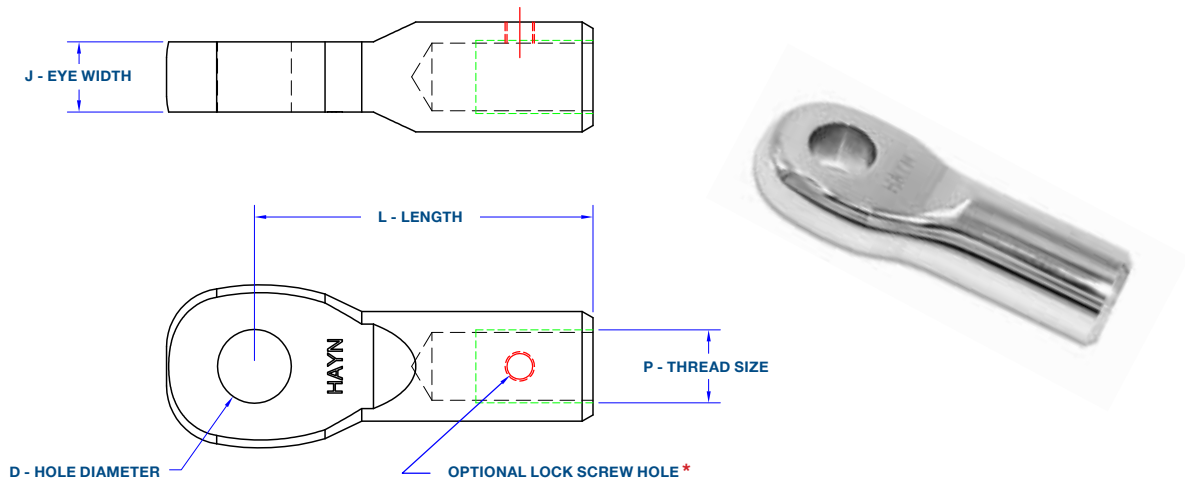
H120 ROD JAW ASSEMBLY



316 Stainless Steel

Hayn Part #	NAVTEC #	E200 Nose (Included)	W - Rod Size	D - Pin Ø	A - Jaw Depth	E - Jaw Gap	F - Jaw Width	H - Hardware Factor	Weight lbs.
HYN-RDJ-06X716	H120-141414	E200-006-14	-06	7/16"	7/8"	3/8"	3/4"	1 1/8"	0.23
HYN-RDJ-08X12	H120-161616	E200-008-16	-08	1/2"	1 11/32"	1/2"	1"	1 11/16"	0.55
HYN-RDJ-10X12	H120-161616	E200-010-16	-10	1/2"	1 11/32"	1/2"	1"	1 3/4"	0.55
HYN-RDJ-12X58	H120-202020	E200-012-20	-12	5/8"	1 1/2"	5/8"	1 1/4"	1 13/16"	1.01
HYN-RDJ-15X58	H120-202020	E200-015-20	-15	5/8"	1 1/2"	5/8"	1 1/4"	1 7/8"	1.01
HYN-RDJ-17X58	H120-202020	E200-017-20	-17	5/8"	1 1/2"	5/8"	1 1/4"	1 13/16"	1.01
HYN-RDJ-22X34	H120-242424	E200-022-24	-22	3/4"	1 1/2"	3/4"	1 3/8"	2 3/16"	1.37
HYN-RDJ-30X78	H120-282828	E200-030-28	-30	7/8"	1 5/8"	7/8"	1 5/8"	2 1/4"	2.14
HYN-RDJ-40X1	H120-323232	E200-048-32	-40	1"	1 7/8"	1"	1 7/8"	2 7/16"	3.03
HYN-RDJ-48X118	H120-363636	E200-048-36	-48	1 1/8"	2 1/4"	1 1/8"	2 1/4"	2 3/4"	5.14
HYN-RDJ-60X114	H120-404040	E200-060-40	-60	1 1/4"	2 3/8"	1 1/4"	2 3/8"	2 7/8"	6.64

REMOVABLE ROD EYE



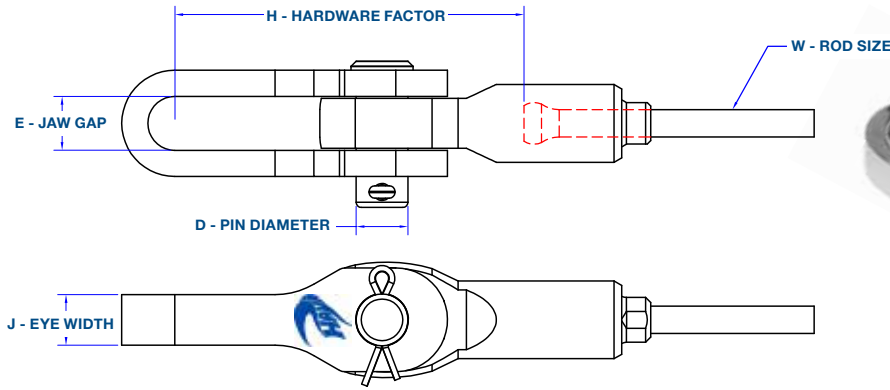
316 Stainless Steel

Hayn Part #	D - Hole Ø	P - Thread Size	L - Length	J - Eye Width	Weight lbs.
RODEYEX38	3/8"	3/8-24	1 3/4"	3/8"	0.12
RODEYEX716	7/16"	7/16-20	2"	7/16"	0.21
RODEYEX12	1/2"	1/2-20	2 5/16"	1/2"	0.28
RODEYEX58	5/8"	5/8-18	2 7/8"	5/8"	0.55
RODEYEX34	3/4"	3/4-16	3 5/8"	3/4"	0.54
RODEYEX78	7/8"	7/8-14	3 13/16"	13/16"	1.28
RODEYEX1	1"	1.0-12	4 5/16"	15/16"	1.97
RODEYEX118	1 1/8"	1 1/8-12	4 7/8"	1 1/16"	2.87
RODEYEX114	1 1/4"	1 1/4-12	5 1/2"	1 7/32"	4.26

* Please indicate at time of order.

Larger Sizes Available Upon Request

G200 HIGH FATIGUE ROD EYE

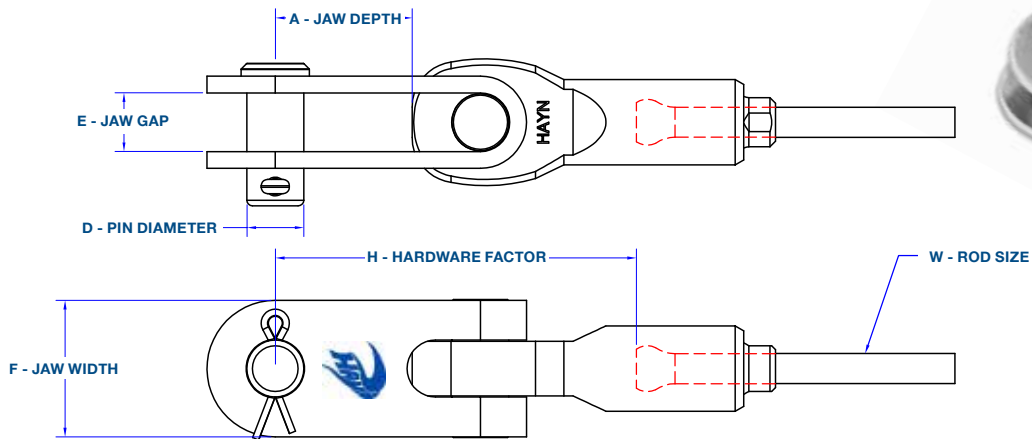


316 Stainless Steel

Hayn Part #	NAVTEC #	W - Rod Size	D - Pin Ø	E - Jaw Gap	J - Eye Width	H-Hardware Factor	Weight lbs.
HYN-HFE-04X38	G200-004	-04	3/8"	3/8"	3/8"	2 13/16"	0.28
HYN-HFE-06X716	G200-006	-06	7/16"	7/16"	7/16"	3 5/16"	0.46
HYN-HFE-08X12	G200-008	-08	1/2"	1/2"	1/2"	3 5/8"	0.66
HYN-HFE-10X12	G200-010	-10	1/2"	1/2"	1/2"	3 11/16"	0.66
HYN-HFE-12X58	G200-012	-12	5/8"	5/8"	5/8"	4 3/16"	1.28
HYN-HFE-15X58	G200-015	-15	5/8"	5/8"	5/8"	4 1/4"	1.28
HYN-HFE-17X58	G200-017	-17	5/8"	5/8"	5/8"	4 3/16"	1.28
HYN-HFE-22X34	G200-022	-22	3/4"	3/4"	3/4"	5 1/2"	2.17
HYN-HFE-30X78	G200-030	-30	7/8"	7/8"	7/8"	5 5/8"	3.11
HYN-HFE-40X1	G200-040	-40	1"	1"	1"	6 1/2"	4.68
HYN-HFE-48X118*	G200-048	-48	1 1/8"	1 1/8"	1 1/8"	7 1/4"	6.81
HYN-HFE-60X114*	G200-060	-60	1 1/4"	1 1/4"	1 1/4"	7 3/4"	9.82

* Does not qualify for standard discount structure.

H200 HIGH FATIGUE ROD TOGGLE JAW

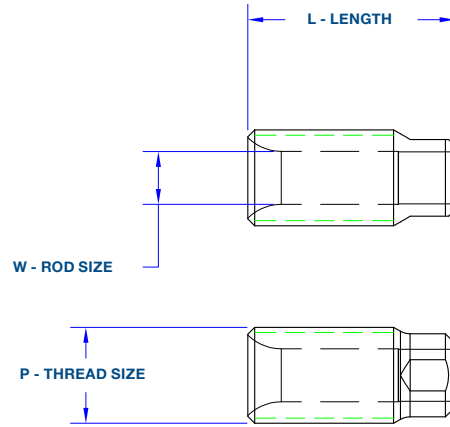


316 Stainless Steel

Hayn Part #	NAVTEC #	W - Rod Size	D - Pin Ø	E - Jaw Gap	A - Jaw Depth	F - Jaw Width	H-Hardware Factor	Weight lbs.
HYN-HFT-04X38	H200-004	-04	3/8"	3/8"	3/4"	29/32"	2 1/4"	0.26
HYN-HFT-06X716	H200-006	-06	7/16"	7/16"	1 7/32"	1 1/16"	3 1/16"	0.42
HYN-HFT-08X12	H200-008	-08	1/2"	1/2"	1 1/16"	1 5/32"	3 3/32"	0.58
HYN-HFT-10X12	H200-010	-10	1/2"	1/2"	1 1/16"	1 5/32"	3 5/32"	0.58
HYN-HFT-12X58	H200-012	-12	5/8"	5/8"	1 1/2"	1 1/2"	3 15/16"	1.16
HYN-HFT-15X58	H200-015	-15	5/8"	5/8"	1 1/2"	1 1/2"	4"	1.16
HYN-HFT-17X58	H200-017	-17	5/8"	5/8"	1 1/2"	1 1/2"	3 15/16"	1.16
HYN-HFT-22X34	H200-022	-22	3/4"	3/4"	1 13/16"	1 7/8"	5 9/32"	2.09
HYN-HFT-30X78	H200-030	-30	7/8"	7/8"	2 7/8"	2 3/8"	6 3/8"	3.65
HYN-HFT-40X1	H200-040	-40	1"	1"	2 9/16"	2 1/2"	6 5/8"	4.82
HYN-HFT-48X118	H200-048	-48	1 1/8"	1 1/8"	2 5/8"	2 3/4"	7 1/8"	8.03
HYN-HFT-60X114	H200-060	-60	1 1/4"	1 1/4"	3 13/16"	3 1/4"	8 9/16"	11.05

Larger Sizes Available Upon Request

E200 ROD NOSE - BRONZE



Bronze

Hayn Part #	NAVTEC #	W - Rod Size	P - Thread Size	L - Length	Weight lbs.
HYN-RN-04X38B	E200-004-12	-04	3/8-24	13/16"	0.01
HYN-RN-04X716B	E200-004-14	-04	7/16-20	13/16"	0.02
HYN-RN-06X716B	E200-006-14	-06	7/16-20	27/32"	0.02
HYN-RN-08X716B	E200-008-14	-08	7/16-20	1"	0.02
HYN-RN-08X12B	E200-008-16	-08	1/2-20	1 1/8"	0.03
HYN-RN-10X12B	E200-010-16	-10	1/2-20	1 1/16"	0.03
HYN-RN-10X58B	E200-010-20	-10	5/8-18	1 11/32"	0.07
HYN-RN-12X58B	E200-012-20	-12	5/8-18	1 11/32"	0.07
HYN-RN-15X58B	E200-015-20	-15	5/8-18	1 11/32"	0.06
HYN-RN-17X58B	E200-017-20	-17	5/8-18	1 11/32"	0.06
HYN-RN-22X34B	E200-022-24	-22	3/4-16	1 3/4"	0.12
HYN-RN-30X78B	E200-030-28	-30	7/8-14	2"	0.17
HYN-RN-40X1B	E200-040-32	-40	1.0-12	2 5/16"	0.25
HYN-RN-48X118B	E200-048-36	-48	1 1/8-12	2 1/2"	0.36
HYN-RN-60X114B	E200-060-40	-60	1 1/4-12	2 7/8"	0.59

E200 ROD NOSE - STAINLESS STEEL

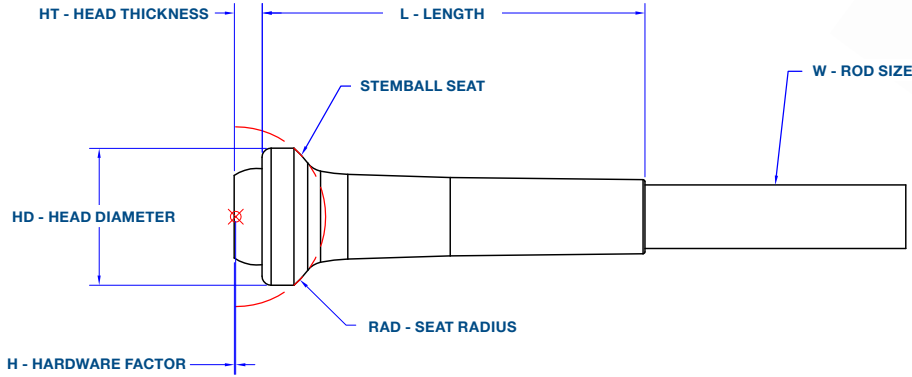


316 Stainless Steel

Hayn Part #	NAVTEC #	W - Rod Size	P - Thread Size	L - Length	Weight lbs.
HYN-RN-04X38S	E200S004-12	-04	3/8-24	13/16"	0.01
HYN-RN-04X716S	E200S004-14	-04	7/16-20	13/16"	0.02
HYN-RN-06X716S	E200S006-12	-06	7/16-20	27/32"	0.02
HYN-RN-08X12S	E200S008-16	-08	1/2-20	1 1/8"	0.03
HYN-RN-10X12S	E200S010-16	-10	1/2-20	1 1/16"	0.03
HYN-RN-12X58S	E200S012-20	-12	5/8-18	1 11/32"	0.07
HYN-RN-15X58S	E200S015-20	-15	5/8-18	1 11/32"	0.06
HYN-RN-17X58S	E200S017-20	-17	5/8-18	1 11/32"	0.06
HYN-RN-22X34S	E200S022-24	-22	3/4-16	1 3/4"	0.12
HYN-RN-30X78S	E200S030-28	-30	7/8-14	2"	0.17
HYN-RN-40X1S	E200S040-32	-40	1.0-12	2 5/16"	0.25
HYN-RN-48X118S	E200S048-36	-48	1 1/8-12	2 1/2"	0.36
HYN-RN-60X114S	E200S060-40	-60	1 1/4-12	2 7/8"	0.59

Larger Sizes Available Upon Request

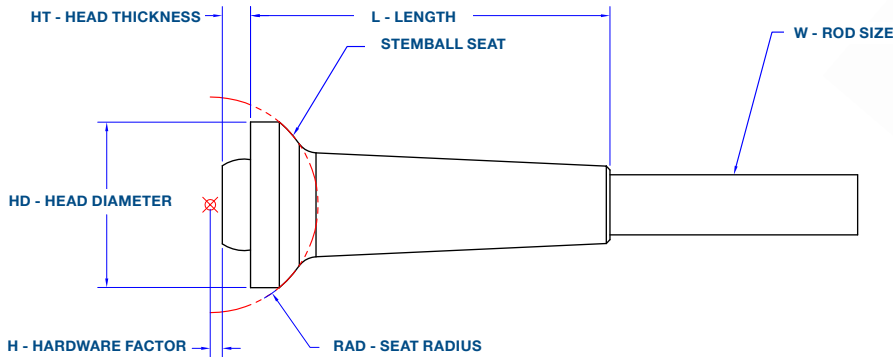
F235 ROD STEMBALL - MICRO



Nitronic 50

Hayn Part #	NAVTEC #	W - Rod Size	RAD - Seat Radius	L - Length	HD - Head Ø	HT-Head Thickness	H - Hardware Factor	Weight lbs.
HYN-MSB-04	F235-004	-04	1/4"	1.04"	0.38"	0.09"	0.00"	0.005
HYN-MSB-06	F235-006	-06	9/32"	1.20"	0.43"	0.107"	1/32"	0.010
HYN-MSB-08	F235-008	-08	5/16"	1.36"	0.49"	0.133"	1/16"	0.012
HYN-MSB-10	F235-010	-10	11/32"	1.51"	0.54"	0.124"	1/64"	0.015
HYN-MSB-12	F235-012	-12	25/64"	1.70"	0.60"	0.146"	5/64"	0.024
HYN-MSB-15	F235-015	-15	13/32"	1.79"	0.64"	0.159"	1/32"	0.028
HYN-MSB-17	F235-017	-17	15/32"	2.00"	0.72"	0.128"	0.00"	0.036
HYN-MSB-22	F235-022	-22	17/32"	2.27"	0.81"	0.150"	0.00"	0.054
HYN-MSB-30	F235-030	-30	5/8"	2.65"	0.95"	0.170"	0.00"	0.085
HYN-MSB-40	F235-040	-40	11/16"	3.00"	1.08"	0.200"	0.00"	0.127
HYN-MSB-48	F235-048	-48	25/32"	3.40"	1.22"	0.215"	1/32"	0.186
HYN-MSB-60	F235-060	-60	15/16"	3.99"	1.43"	0.181	0.00"	0.307

F220 ROD STEMBALL - TAPERED

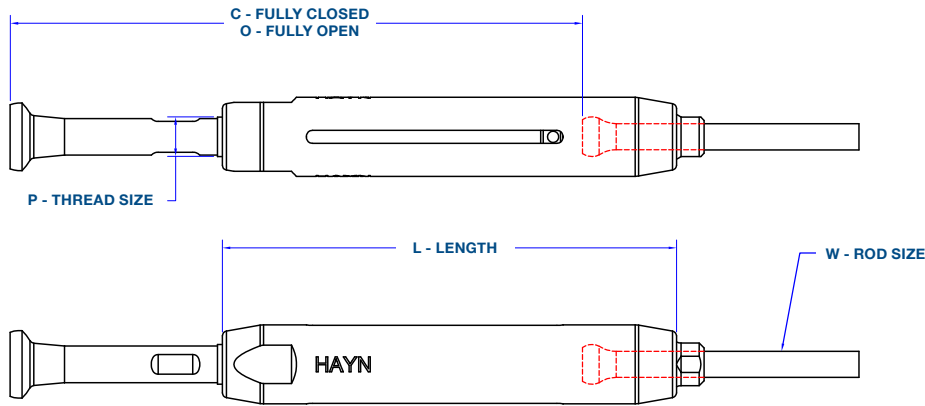


316 Stainless Steel

Hayn Part #	NAVTEC #	W - Rod Size	RAD - Seat Radius	L - Length	HD - Head Ø	HT-Head Thickness	H - Hardware Factor	Weight lbs.
HYN-TSB-04	F220-004	-04	5/16"	1.04"	0.48"	0.092"	1/16"	0.012
HYN-TSB-06	F220-006	-06	11/32"	1.19"	0.55"	0.116"	0.00"	0.019
HYN-TSB-08	F220-008	-08	7/16"	1.35"	0.68"	0.127"	1/32"	0.034
HYN-TSB-10	F220-010	-10	7/16"	1.50"	0.68"	0.100"	1/16"	0.036
HYN-TSB-12	F220-012	-12	1/2"	1.69"	0.77"	0.146"	0.00"	0.053
HYN-TSB-15	F220-015	-15	19/32"	1.78"	0.91"	0.159"	1/16"	0.073
HYN-TSB-17	F220-017	-17	19/32"	1.98"	0.91"	0.183"	1/16"	0.093
HYN-TSB-22	F220-022	-22	21/32"	2.25"	1.03"	0.151"	1/16"	0.128
HYN-TSB-30	F220-030	-30	3/4"	2.62"	1.19"	0.206"	1/16"	0.188
HYN-TSB-40	F220-040	-40	7/8"	3.03"	1.38"	0.200"	1/8"	0.293
HYN-TSB-48	F220-048	-48	1"	3.41"	1.53"	0.215"	1/8"	0.444
HYN-TSB-60	F220-060	-60	1 1/16"	4"	1.66"	0.181"	1/16"	0.534

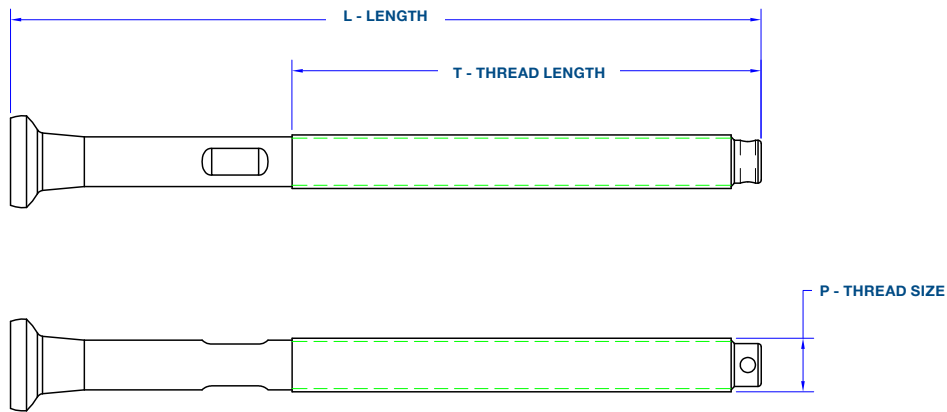
Larger Sizes Available Upon Request

C651 TIP TURNBUCKLE ASSEMBLY



Hayn Part #	NAVTEC #	W - Rod Size	P - Thread Size	O - Fully Open	C - Fully Closed	L - Length	Weight lbs.
HYN-RTT-04X516	C651-004-10B	-04	5/16-24	6 3/4"	4 5/8"	4"	0.38
HYN-RTT-06X516	C651-006-10B	-06	5/16-24	6 3/4"	4 5/8"	4"	0.38
HYN-RTT-08X516	C651-008-10B	-08	5/16-24	6 3/4"	4 5/8"	4"	0.38
HYN-RTT-10X38	C651-010-12B	-10	3/8-24	8 1/2"	6 1/8"	4 3/4"	0.49
HYN-RTT-12X716	C651-012-14B	-12	7/16-20	9 1/2"	6 3/4"	5 1/4"	0.83
HYN-RTT-15X12	C651-015-16B	-15	1/2-20	10 1/4"	7 1/4"	5 3/4"	1.14
HYN-RTT-17X12	C651-017-16B	-17	1/2-20	10 1/4"	7 1/4"	5 3/4"	1.14
HYN-RTT-22X58	C651-022-16B	-22	5/8-18	1'-2 1/4"	10 5/8"	8 3/16"	2.10
HYN-RTT-30X58	C651-030-16B	-30	5/8-18	1'-2 1/4"	10 5/8"	8 3/16"	2.71
HYN-RTT-40X78	C651-040-28B	-40	7/8-14	1'-3 3/8"	11 7/16"	8 1/2"	4.70
HYN-RTT-48X78	C651-048-28B	-48	7/8-14	1'-3 1/8"	11 3/16"	8 1/2"	4.70
HYN-RTT-60X1	C651-060-32B	-60	1.0-12	1'-4 1/8"	12"	8 3/4"	6.20

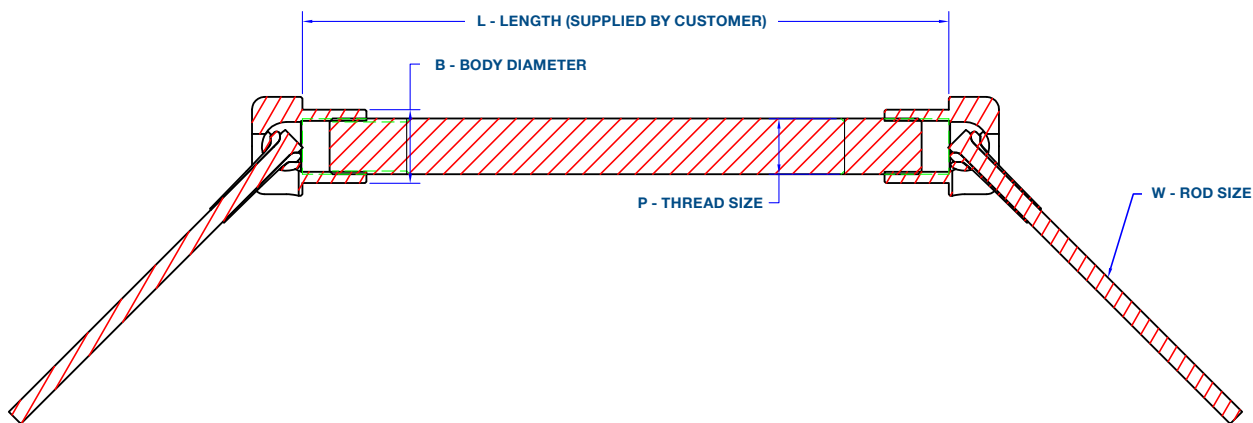
D340 ROD TIP TURNBUCKLE SCREW



Nitronic 50

Hayn Part #	NAVTEC #	P - Thread Size	L - Length	T - Thread Length	Weight lbs.
HYN-BHS-S516	D340-S08	5/16-24	4 7/16"	3"	0.09
HYN-BHS-S38	D340-S10	3/8-24	5 7/8"	3 3/4"	0.15
HYN-BHS-S716	D340-S14	7/16-20	6 1/2"	4 3/8"	0.25
HYN-BHS-S12	D340-S16	1/2-20	7"	4 3/8"	0.36
HYN-BHS-S58	D340-S20	5/8-18	10 3/8"	6 1/2"	0.91
HYN-BHS-S78	D340-S2428	7/8-14	11"	6 9/16"	1.92
HYN-BHS-S1	D340-S2832	1.0-12	11 3/4"	6 5/16"	2.67

K150 MICRO STEMBALL TANGS



Hayn Part #	NAVTEC #	W - Rod Size	B - Body Ø	P - Thread Size	L - Length
HYN-MSBT-04	K150-004	-04	3/4"	9/16-18	4" Minimum
HYN-MSBT-06	K150-006	-06	13/16"	5/8-18	4" Minimum
HYN-MSBT-08	K150-008	-08	15/16"	3/4-16	4" Minimum
HYN-MSBT-10	K150-010	-10	1"	3/4-16	6" Minimum
HYN-MSBT-12	K150-012	-12	1 3/16"	7/8-14	6" Minimum
HYN-MSBT-15	K150-015	-15	1 5/16"	1.0-12	6" Minimum
HYN-MSBT-17	K150-017	-17	1 5/16"	1.0-12	6" Minimum
HYN-MSBT-22	K150-022	-22	1 1/2"	1 1/8-12	6" Minimum
HYN-MSBT-30	K150-030	-30	1 7/8"	1 3/8-12	6" Minimum
HYN-MSBT-40	K150-040	-40	2 1/16"	1 1/2-12	8" Minimum
HYN-MSBT-48	K150-048	-48	2 1/4"	1 5/8-12	8" Minimum
HYN-MSBT-60	K150-060	-60	2 5/8"	1 7/8-12	8" Minimum

Assembly includes 2 caps, 2 cup washers, 2 micro stemballs, and 1 tie bar.

K150 TANG / C651 TURNBUCKLE COMBINATION

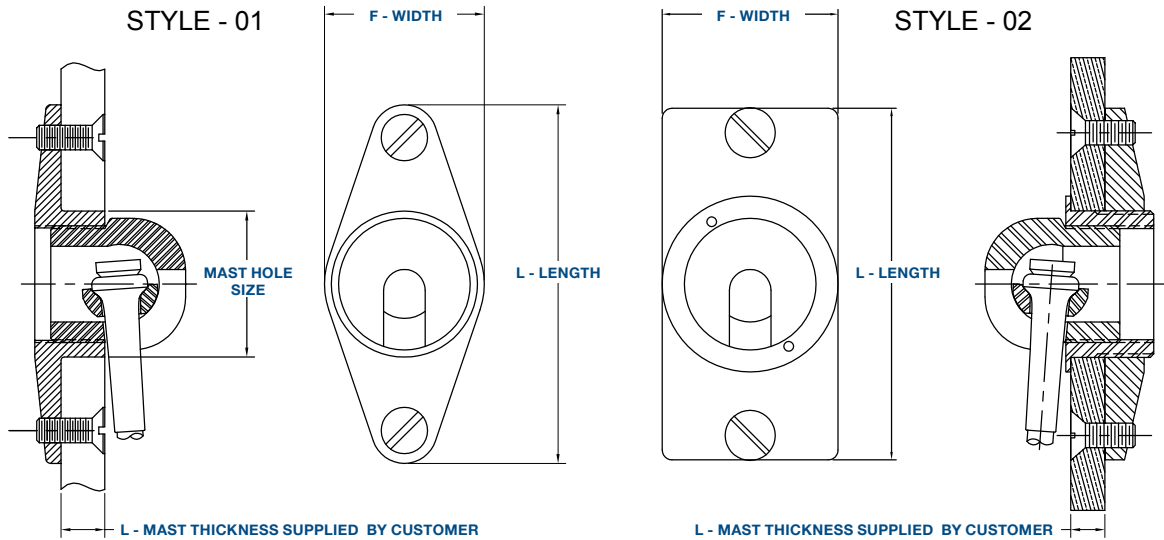
Based on the K150 design system, works with cup washer for use with tip turnbuckles. Commonly used on jumper assemblies.

Hayn Part #	NAVTEC #	W - Rod Size	C651 Tip Turnbuckle Part #	Cup Washer Part #
HYN-K150-004S08	K150-004S08	-04	C651-004-08B	K151-02-004S08
HYN-K150-006S10	K150-006S10	-06	C651-006-10B	K151-02-006S10
HYN-K150-008S10	K150-008S10	-08	C651-008-10B	K151-02-0082
HYN-K150-010S12	K150-010S12	-10	C651-010-12B	K151-02-010S12
HYN-K150-012S14	K150-012S14	-12	C651-012-14B	K151-02-012S14
HYN-K150-017S16	K150-017S16	-15	C651-015-16B	K151-02-017S16
HYN-K150-017S16	K150-017S16	-17	C651-017-16B	K151-02-017S16
HYN-K150-030S20	K150-030S20	-22	C651-022-20B	K151-02-030S20
HYN-K150-030S20	K150-030S20	-30	C651-030-20B	K151-02-030S20
HYN-K150-048S24	K150-048S24	-40	C651-0402428B	K401-02-482
HYN-K150-048S24	K150-048S24	-48	C651-0482428B	K401-02-482
HYN-K150-060S28	K150-060S28	-60	C651-0602832B	K151-02-060S28

Assembly includes 2 caps, 2 cup washers, and 1 tie bar.

Larger Sizes Available Upon Request

K550 MICRO STEMBALL TANGS



Hayn Part #	NAVTEC # 316SS BP	Hayn Part #	NAVTEC # Alloy BP	W - Rod Size	Mast Hole Size	01 L - Length	01 F - Width	02 L - Length	02 F - Width
HYN-MSBT-06-01	K550-006-01	HYN-MSBT-06-02	K550-006-02	-06	1.250"	2.81"	1.38"	2.88"	1.63"
HYN-MSBT-08-01	K550-008-01	HYN-MSBT-08-02	K550-008-02	-08	1.250"	2.81"	1.38"	2.88"	1.63"
HYN-MSBT-10-01	K550-010-01	HYN-MSBT-10-02	K550-010-02	-10	1.375"	3.32"	1.50"	3.38"	1.63"
HYN-MSBT-12-01	K550-012-01	HYN-MSBT-12-02	K550-012-02	-12	1.375"	3.32"	1.50"	3.38"	1.63"
HYN-MSBT-15-01	K550-015-01	HYN-MSBT-15-02	K550-015-02	-15	1.375"	3.32"	1.50"	3.38"	1.63"
HYN-MSBT-17-01	K550-017-01	HYN-MSBT-17-02	K550-017-02	-17	1.875"	4.59"	2.00"	4.50"	2.25"
HYN-MSBT-22-01	K550-022-01	HYN-MSBT-22-02	K550-022-02	-22	1.875"	4.59"	2.00"	4.50"	2.25"
HYN-MSBT-30-01	K550-030-01	HYN-MSBT-30-02	K550-030-02	-30	2.188"	5.12"	2.38"	5.13"	2.50"
HYN-MSBT-40-01	K550-040-01	HYN-MSBT-40-02	K550-040-02	-40	2.500"	5.73"	2.73"	5.75"	3.00"
HYN-MSBT-48-01	K550-048-01	HYN-MSBT-48-02	K550-048-02	-48	3.00"	6.37"	3.28"	6.38"	3.50"
HYN-MSBT-60-01	K550-060-01	HYN-MSBT-60-02	K550-060-02	-60	3.125"	7.22"	3.41"	7.50"	4.00"

Suffix 01 - Assembly includes 1 cap, 1 cup washer, and 1 backing plate.

Suffix 02 - Assembly includes 1 cap, 1 cup washer, 1 clamp bushing, and 1 alloy backing plate.

Note: Suffix 02 Backing plates supplied un-hardcoated and without mounting holes.

K550 TANG / C651 TURNBUCKLE COMBINATION

The K550 and C651 can be integrated together to provide micro-adjustment, greater articulation, and resistance to wear.

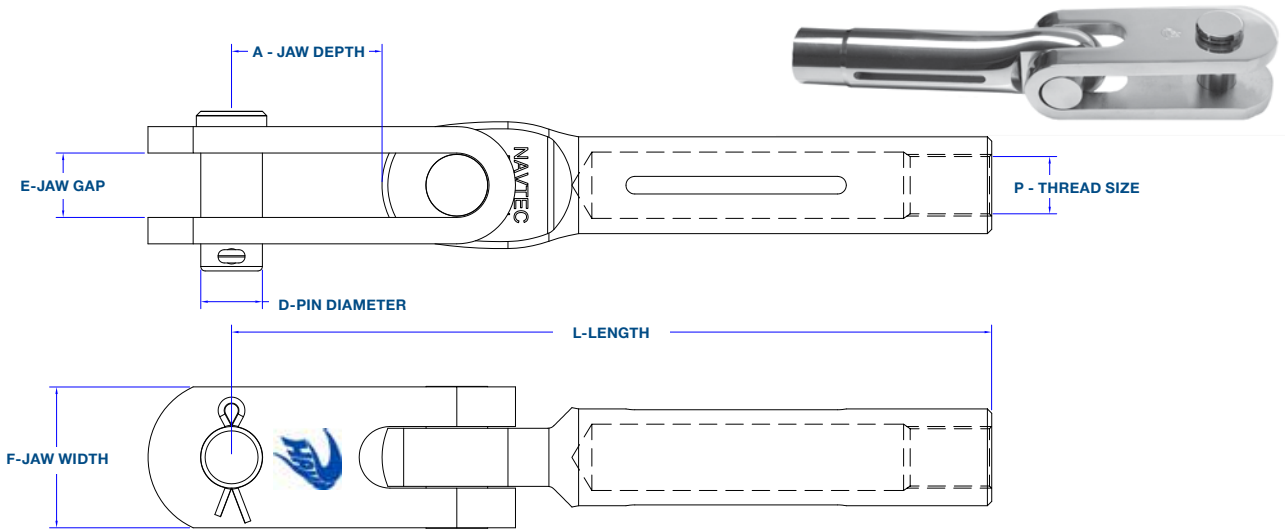
Hayn Part #	NAVTEC #	W - Rod Size	C651 Tip Turnbuckle Part #	Cup Washer Part #
HYN-K550-004S08	K550-008S08	-04	C651-004-08B	K551-02-008S08
HYN-K550-006S08	K550-008S10	-06	C651-006-10B	K151-02-0082
HYN-K550-008S10	K550-008S10	-08	C651-008-10B	K151-02-0082
HYN-K550-010S12	K550-012S12	-10	C651-010-12B	K151-02-0121
HYN-K550-012S14	K550-012S14	-12	C651-012-14B	K151-02-012S14
HYN-K550-017S16	K550-022S16	-15	C651-015-16B	K151-02-022S16
HYN-K550-017S16	K550-022S16	-17	C651-017-16B	K151-02-022S16
HYN-K550-030S20	K550-030S20	-22	C651-022-20B	K151-02-030S20
HYN-K550-030S20	K550-030S20	-30	C651-030-20B	K151-02-030S20
HYN-K550-048S24	K550-048S24	-40	C651-0402428B	K401-02-482
HYN-K550-060S28	K550-048S24	-48	C651-0482428B	K401-02-482
HYN-K550-060S28	K550-060S28	-60	C651-0602832B	K151-02-060S28

Assembly includes 1 cap, 1 cup washer, and 1 stainless backing plate.

Suffix 02 from above listing available upon request.

Larger Sizes Available Upon Request

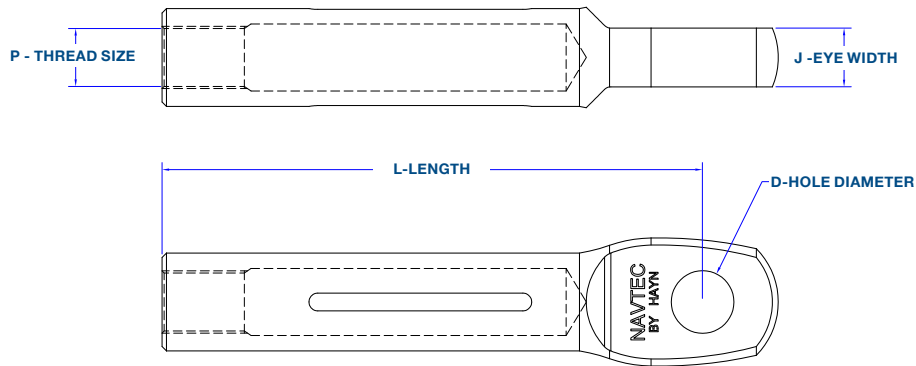
D531 & D530 ROD EYE END WITH TOGGLE



316 Stainless Steel

D531 Left Hand Part #	NAVTEC #	D530 Right Hand Part #	NAVTEC #	Use with Rod Size	P-Thread Size	D-Pin Ø	A-Jaw Depth	E-Jaw Gap	L-Length	F-Jaw Width
HYN-RT-516X38L	D531-1012	HYN-RT-516X38R	D530-1012	-04	5/16-24	3/8"	1.04"	5/16"	4.59"	3/4"
HYN-RT-38X716L	D531-1214	HYN-RT-38X716R	D530-1214	-06	3/8-24	7/16"	1.09"	3/8"	5.19"	1.0"
HYN-RT-716X12L	D531-1416	HYN-RT-716X12R	D530-1416	-08	7/16-20	1/2"	1.12"	7/16"	6.32"	1.0"
HYN-RT-12X12L	D531-1616	HYN-RT-12X12R	D530-1616	-10	1/2-20	1/2"	1.39"	1/2"	6.69"	1-1/4"
HYN-RT-12X58L	D531-1620	HYN-RT-12X58R	D530-1620	-12	1/2-20	5/8"	1.43"	1/2"	6.69"	1-3/8"
HYN-RT-58X58L	D531-2020	HYN-RT-58X58R	D530-2020	-15 / -17	5/8-18	5/8"	1.61"	5/8"	7.71"	1-5/8"
HYN-RT-34X34L	D531-2424	HYN-RT-34X34R	D530-2424	-22	3/4-16	3/4"	1.74"	3/4"	9.81"	2.0"
HYN-RT-78X78L	D531-2828	HYN-RT-78X78R	D530-2828	-30	7/8-14	7/8"	2.16"	7/8"	10.80"	2.0"
HYN-RT-1X1L	D531-3232	HYN-RT-1X1R	D530-3232	-40	1.0-12	1.0"	2.53"	1.0"	11.84"	2-1/2"
HYN-RT-118X118L	D531-3636	HYN-RT-118X118R	D530-3636	-48	1-1/8 - 12	1-1/8"	2.82"	1-1/8"	12.66"	2-1/2"
HYN-RT-114X114L	D531-4040	HYN-RT-114X114R	D530-4040	-60	1-1/4 - 12	1-1/4"	3.60"	1-1/4"	13.87"	3.0"

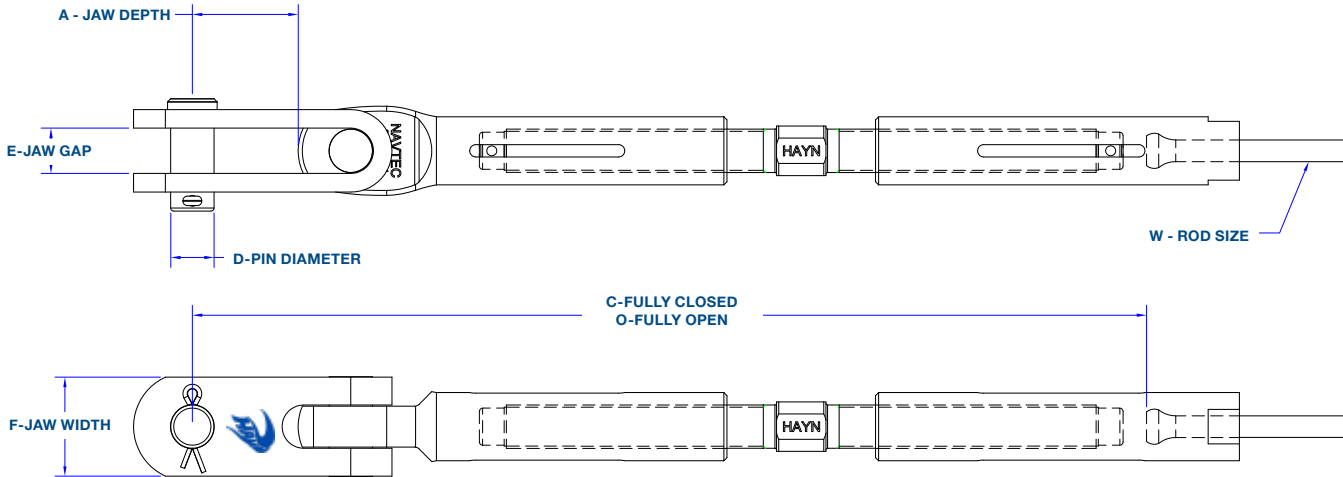
D541 & D540 ROD EYE END



316 Stainless Steel

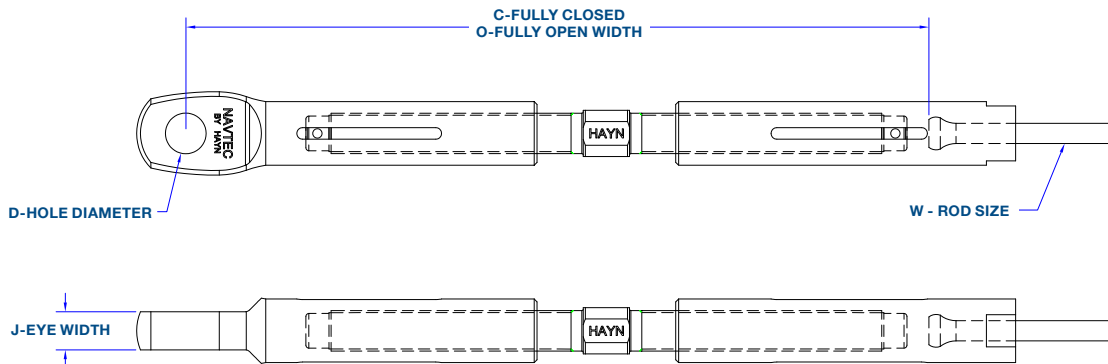
D541 Left Hand Part #	NAVTEC #	D540 Right Hand Part #	NAVTEC #	Use with Rod Size	P-Thread Size	D-Hole Ø	J-Eye Width	L-Length
HYN-RE-516X516L	D541-1010	HYN-RE-516X516R	D540-1010	-04	5/16-24	5/16"	0.28"	3.18"
HYN-RE-38X38L	D541-1212	HYN-RE-38X38R	D540-1212	-06	3/8-24	3/8"	0.34"	3.57"
HYN-RE-12X12L	D541-1616	HYN-RE-12X12R	D540-1616	-8 / -10 / -12	1/2-20	1/2"	0.47"	4.64"
HYN-RE-58X58L	D541-2020	HYN-RE-58X58R	D540-2020	-15 / -17	5/8-18	5/8"	0.59"	5.43"
HYN-RE-34X34L	D541-2424	HYN-RE-34X34R	D540-2424	-22	3/4-16	3/4"	0.72"	7.19"
HYN-RE-78X78L	D541-2828	HYN-RE-78X78R	D540-2828	-30	7/8-14	7/8"	0.83"	7.60"
HYN-RE-1X1L	D541-3232	HYN-RE-1X1R	D540-3232	-40	1.0-12	1.0"	0.90"	8.22"
HYN-RE-118X118L	D541-3636	HYN-RE-118X118R	D540-3636	-48	1-1/8 - 12	1-1/8"	0.98"	8.66"
HYN-RE-114X114L	D541-4040	HYN-RE-114X114R	D540-4040	-60	1-1/4 - 12	1-1/4"	1.15"	8.87"

C550 ROD TURNBUCKLE W/ TOGGLE



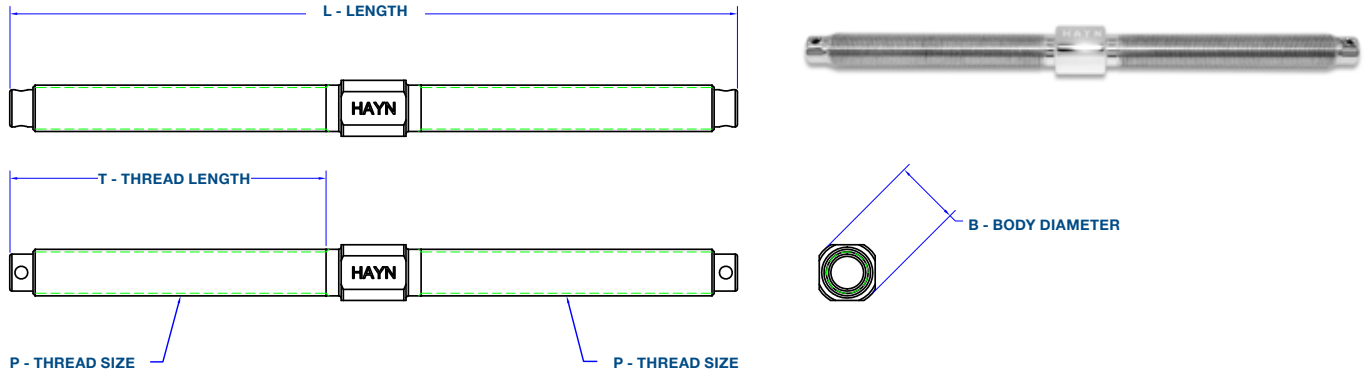
Hayn Part #	NAVTEC #	Use with Rod Size	P-Thread Size	D-Pin Ø	A-Jaw Depth	E-Jaw Gap	O-Open L	C-Closed L	F-Jaw Width
HYN-RA-04X38	C550-041012	-04	5/16-24	3/8"	1.04"	5/16"	11.57"	8.29"	3/4"
HYN-RA-06X716	C550-061214	-06	3/8-24	7/16"	1.09"	3/8"	12.90"	9.33"	1.0"
HYN-RA-08X12	C550-081416	-08	7/16-20	1/2"	1.12"	7/16"	14.12"	10.01"	1.0"
HYN-RA-10X12	C550-101616	-10	1/2-20	1/2"	1.39"	1/2"	16.15"	11.84"	1-1/4"
HYN-RA-12X58	C550-121620	-12	1/2-20	5/8"	1.43"	1/2"	16.15"	11.84"	1-3/8"
HYN-RA-15X58	C550-152020	-15	5/8-18	5/8"	1.61"	5/8"	18.92"	13.82"	1-5/8"
HYN-RA-17X58	C550-172020	-17	5/8-18	5/8"	1.61"	5/8"	18.92"	13.82"	1-5/8"
HYN-RA-22X34	C550-222424	-22	3/4-16	3/4"	1.74"	3/4"	22.16"	16.81"	2.0"
HYN-RA-30X78	C550-302828	-30	7/8-14	7/8"	2.16"	7/8"	24.67"	18.55"	2.0"
HYN-RA-40X1	C550-403232	-40	1.0-12	1.0"	2.53"	1.0"	26.40"	20.29"	2-1/2"
HYN-RA-48X118	C550-483636	-48	1-1/8 - 12	1-1/8"	2.82"	1-1/8"	27.51"	21.39"	2-1/2"
HYN-RA-60X114	C550-604040	-60	1-1/4 - 12	1-1/4"	3.60"	1-1/4"	30.64"	23.10"	3.0"

C560 ROD TURNBUCKLE



Hayn Part #	NAVTEC #	W-Rod Size	P-Thread Size	D-Hole Ø	J-Eye Width	O-Open L	C-Closed L
HYN-RM-04X516	C560-041012	-04	5/16-24	5/16"	1.04"	10.30"	6.80"
HYN-RM-06X38	C560-061214	-06	3/8-24	3/8"	1.09"	11.40"	7.24"
HYN-RM-08X716	C560-081414	-08	7/16-20	7/16"	1.12"	12.60"	7.86"
HYN-RM-10X12	C560-101616	-10	1/2-20	1/2"	1.39"	14.30"	9.17"
HYN-RM-12X12	C560-121616	-12	1/2-20	1/2"	1.43"	14.30"	9.17"
HYN-RM-15X58	C560-152020	-15	5/8-18	5/8"	1.61"	16.70"	10.70"
HYN-RM-17X58	C560-172020	-17	5/8-18	5/8"	1.61"	16.70"	10.70"
HYN-RM-22X34	C560-222424	-22	3/4-16	3/4"	1.74"	19.40"	12.90"
HYN-RM-30X78	C560-302828	-30	7/8-14	7/8"	2.16"	21.70"	14.50"
HYN-RM-40X1	C560-403232	-40	1.0-12	1.0"	2.53"	23.20"	15.60"
HYN-RM-48X114	C560-483636	-48	1-1/8 - 12	1-1/8"	2.82"	24.00"	16.40"
HYN-RM-60X114	C560-604040	-60	1-1/4 - 12	1-1/4"	3.60"	24.60"	16.80"

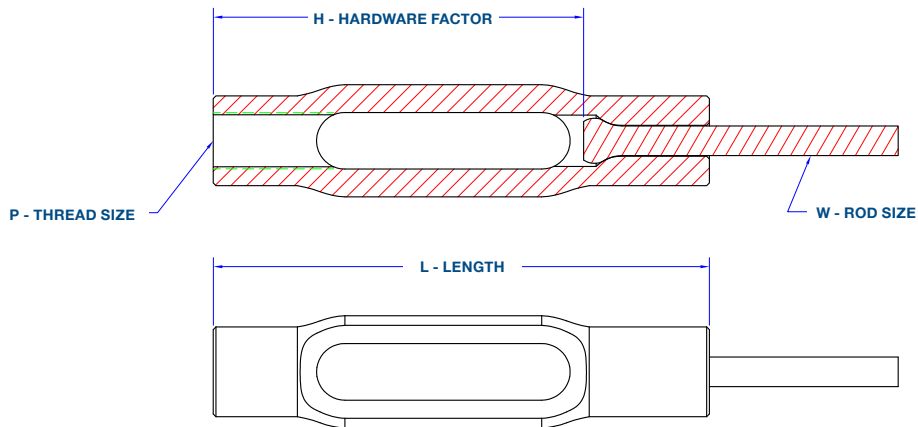
D320 ROD TURNBUCKLE CENTER SCREW



Bronze - Chrome Plated

Short Part #	NAVTEC #	L - Length	Weight lbs.	Long Part #	NAVTEC #	L - Length	Weight lbs.	P - Thread Size	T-Thread Length	B - Body Ø
HYN-CS-S38	D320-S12	6 3/4"	0.18	HYN-CS-L38	D320-L12	9 5/16"	0.30	3/8-24	3"	1/2"
HYN-CS-S716	D320-S14	7 3/8"	0.27	HYN-CS-L716	D320-L14	9 7/8"	0.44	7/16-20	3 1/4"	5/8"
HYN-CS-S12	D320-S16	8 3/8"	0.40	HYN-CS-L12	D320-L16	11 7/8"	0.68	1/2-20	3 5/8"	5/8"
HYN-CS-S58	D320-S20	9 3/4"	0.75	HYN-CS-L58	D320-L20	1'-2 1/8"	1.30	5/8-18	4 1/4"	7/8"
HYN-CS-S34	D320-S24	11 1/2"	1.28	HYN-CS-L34	D320-L24	1'-4 1/2"	1.87	3/4-16	5"	1"
HYN-CS-S78	D320-S28	1'-1"	1.92	HYN-CS-L78	D320-L28	1'-5"	2.87	7/8-14	5 3/4"	1 1/8"
HYN-CS-S1	D320-S32	1'-2 1/8"	3.22	HYN-CS-L1	D320-L32	1'-10 1/8"	5.05	1.0-12	6 1/4"	1 1/4"
HYN-CS-S118	D320-S36	1'-2 3/4"	4.10	HYN-CS-L118	D320-L36	1'-10 3/4"	6.43	1 1/8-12	6 1/2"	1 1/2"
HYN-CS-S114	D320-S40	1'-3 1/4"	4.77	HYN-CS-L114	D320-L40	1'-11 1/4"	8.35	1 1/4-12	6 3/4"	1 5/8"

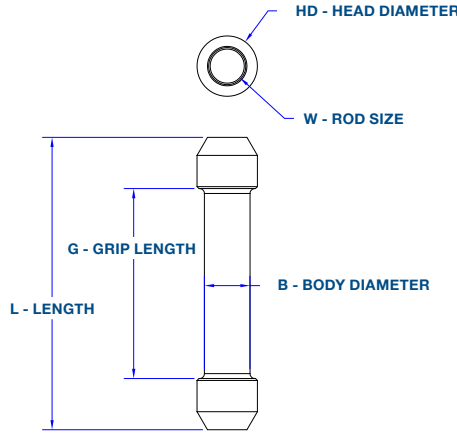
D500 ROD BODY



316 Stainless Steel

Hayn Part #	NAVTEC #	W-Rod Size	P-Thread Size	L-Length	H-Hardware Factor
HYN-RB-04X516	D500-004-10	-04	5/16-24	3-3/16"	2-5/8"
HYN-RB-06X38	D500-006-12	-06	3/8-24	3-5/8"	2-7/8"
HYN-RB-08X716	D500-008-14	-08	7/16-20	3-15/16"	3.0"
HYN-RB-10X12	D500-010-16	-10	1/2-20	4-9/16"	3-9/16"
HYN-RB-12X12	D500-012-16	-12	1/2-20	4-9/16"	3-7/16"
HYN-RB-15X58	D500-015-20	-15	5/8-18	5-1/2"	4-1/8"
HYN-RB-17X58	D500-017-20	-17	5/8-18	5-1/2"	4-1/8"
HYN-RB-22X34	D500-022-24	-22	3/4-16	6-1/2"	4-15/16"
HYN-RB-30X78	D500-030-28	-30	7/8-14	7-3/8"	5-1/2"
HYN-RB-40X1	D500-040-32	-40	1.0-12	8-1/8"	6-1/16"
HYN-RB-48X118	D500-048-36	-48	1-1/8 - 12	8-3/4"	6-1/4"
HYN-RB-60X114	D500-060-40	-60	1-1/4 - 12	8-15/16"	6-7/16"

ROD SPREADER BEND



316 Stainless Steel

Hayn Part #	W - Rod Size	B - Body Ø	G - Grip Length	L - Length	HD - Head Ø	Weight lbs.
HYN-SBEND-04	-04	5/16"	1 1/8"	1 3/4"	7/16"	0.03
HYN-SBEND-06	-06	5/16"	1 3/16"	1 7/8"	7/16"	0.03
HYN-SBEND-08	-08	11/32"	1 3/16"	2"	1/2"	0.05
HYN-SBEND-10	-10	25/64"	1 5/16"	2 1/4"	9/16"	0.07
HYN-SBEND-12	-12	25/64"	1 31/32"	2 7/8"	9/16"	0.07
HYN-SBEND-15	-15	7/16"	1 31/32"	2 29/32"	5/8"	0.09
HYN-SBEND-17	-17	15/32"	1 15/16"	3 1/32"	5/8"	0.10
HYN-SBEND-22	-22	1/2"	2 3/32"	3 1/4"	3/4"	0.14
HYN-SBEND-30	-30	19/32"	2 3/8"	3 3/4"	7/8"	0.22
HYN-SBEND-40	-40	21/32"	2 11/16"	4 1/4"	1"	0.34
HYN-SBEND-48	-48	23/32"	3 1/16"	4 13/16"	1 1/8"	0.43
HYN-SBEND-60	-60	7/8"	3 9/16"	5 9/16"	1 5/16"	0.74

L200 ALUMINUM ROD SPREADER BEND

NAVTEC spreader bends cover and protect the rod rigging that passes over the spreader tip. They are ideally suited to masts where shroud-spreader angle change is between 1 and 15 degrees.

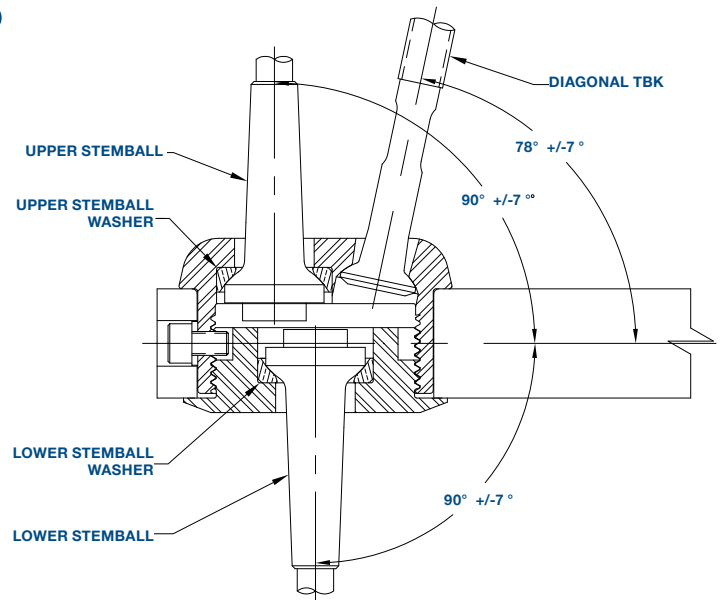
Aluminum Alloy

Hayn Part #	NAVTEC #	W - Rod Size	B - Body Ø	G - Grip Length	L - Length	HD - Head Ø
HYN-L200-04-24	L200-004-24	-04	0.30"	0.75"	1.30"	0.50"
HYN-L200-04-32	L200-004-32	-04	0.30"	1.00"	1.55"	0.50"
HYN-L200-06-28	L200-006-28	-06	0.36"	0.88"	1.41"	0.63"
HYN-L200-06-32	L200-006-32	-06	0.36"	1.00"	1.53"	0.63"
HYN-L200-06-48	L200-006-48	-06	0.36"	1.50"	2.03"	0.63"
HYN-L200-08-32	L200-008-32	-08	0.42"	1.00"	1.98"	0.69"
HYN-L200-08-40	L200-008-40	-08	0.42"	1.25"	2.23"	0.69"
HYN-L200-08-64	L200-008-64	-08	0.42"	2.00"	2.98"	0.69"
HYN-L200-10-32	L200-010-32	-10	0.42"	1.00"	1.98"	0.69"
HYN-L200-10-40	L200-010-40	-10	0.42"	1.25"	2.23"	0.69"
HYN-L200-10-64	L200-010-64	-10	0.42"	2.00"	2.98"	0.69"
HYN-L200-12-40	L200-012-40	-12	0.48"	1.25"	2.15"	0.75"
HYN-L200-12-48	L200-012-48	-12	0.48"	1.50"	2.40"	0.75"
HYN-L200-12-64	L200-012-64	-12	0.48"	2.00"	2.90"	0.75"
HYN-L200-15-48	L200-015-48	-15	0.50"	1.50"	2.46"	0.75"
HYN-L200-15-64	L200-015-64	-15	0.50"	2.00"	2.96"	0.75"
HYN-L200-17-48	L200-017-48	-17	0.55"	1.50"	2.50"	0.75"
HYN-L200-17-56	L200-017-56	-17	0.55"	1.75"	2.75"	0.75"
HYN-L200-17-64	L200-017-64	-17	0.55"	2.00"	3.00"	0.75"
HYN-L200-22-56	L200-022-56	-22	0.60"	1.75"	3.10"	1.00"
HYN-L200-22-64	L200-022-64	-22	0.60"	2.00"	3.35"	1.00"
HYN-L200-30-48	L200-030-64	-30	0.60"	2.00"	3.15"	1.00"

L400 SPREADER TIP CUP

NAVTEC spreader tipcups are engineered for weight reduction and enduring strength. The range of product sizes and designs provides a solution for sailboats of any length.

The L400 is ideal for smaller vessels 30-foot length over all range. Two piece modular design will accept most rod combinations up to -15 rod.



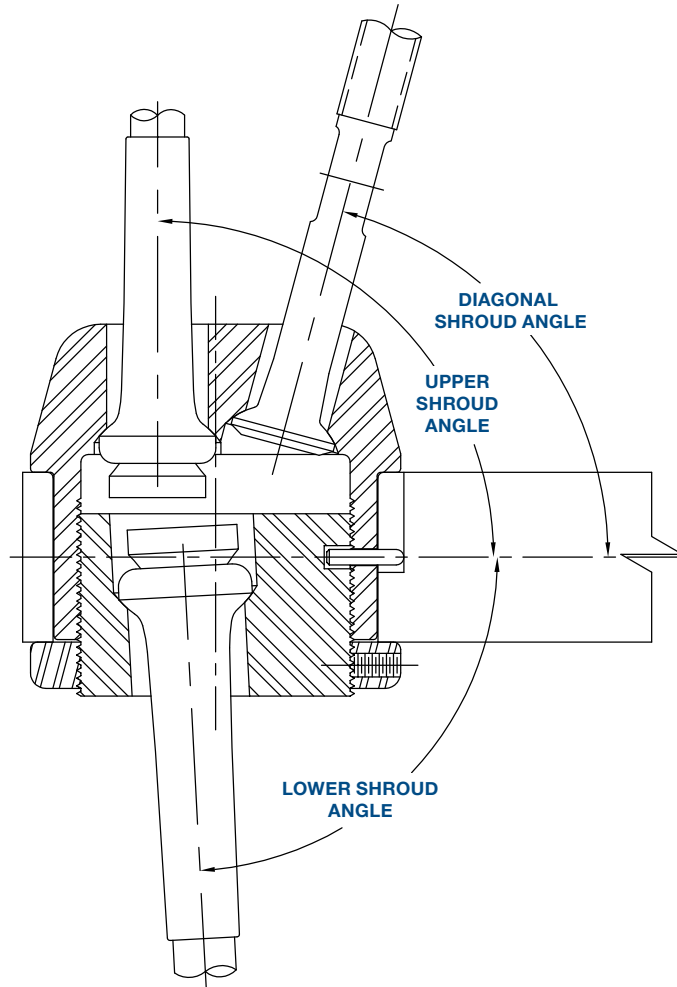
Lower Rod Size	Lower Stemball Part #	Lower Washer Part #	Upper Rod Size	Upper Stemball Part #	Upper Washer Part #	Diagonal Rod Size	Diagonal Turnbuckle Part #
-04	HYN-TSB-04	L401-03-041	-04	HYN-TSB-04	L401-03-041	-04	HYN-RTT-04X516
-06	HYN-TSB-06	L401-03-061	-04	HYN-TSB-04	L401-03-041	-04	HYN-RTT-04X516
			-06	HYN-TSB-06	L401-03-061	-04	HYN-RTT-04X516
			-06	HYN-TSB-06	L401-03-061	-06	HYN-RTT-06X516
-08	HYN-TSB-08	L401-03-101	-04	HYN-TSB-04	L401-03-041	-04	HYN-RTT-04X516
			-06	HYN-TSB-06	L401-03-061	-04	HYN-RTT-04X516
			-06	HYN-TSB-06	L401-03-061	-06	HYN-RTT-06X516
			-08	HYN-TSB-08	L401-03-101	-04	HYN-RTT-04X516
			-08	HYN-TSB-08	L401-03-101	-06	HYN-RTT-06X516
			-08	HYN-TSB-08	L401-03-101	-08	HYN-RTT-08X516
-10	HYN-TSB-10	L401-03-101	-04	HYN-TSB-04	L401-03-041	-04	HYN-RTT-04X516
			-06	HYN-TSB-06	L401-03-061	-04	HYN-RTT-04X516
			-06	HYN-TSB-06	L401-03-061	-06	HYN-RTT-06X516
			-08	HYN-TSB-08	L401-03-101	-04	HYN-RTT-04X516
			-08	HYN-TSB-08	L401-03-101	-06	HYN-RTT-06X516
			-08	HYN-TSB-08	L401-03-101	-08	HYN-RTT-08X516
			-10	HYN-TSB-10	L401-03-101	-04	HYN-RTT-04X516
			-10	HYN-TSB-10	L401-03-101	-06	HYN-RTT-06X516
-12	HYN-TSB-12	L401-03-122	-06	HYN-TSB-06	L401-03-061	-04	HYN-RTT-04X516
			-06	HYN-TSB-06	L401-03-061	-06	HYN-RTT-06X516
			-08	HYN-TSB-08	L401-03-101	-04	HYN-RTT-04X516
			-08	HYN-TSB-08	L401-03-101	-06	HYN-RTT-06X516
			-08	HYN-TSB-08	L401-03-101	-08	HYN-RTT-08X516
			-10	HYN-TSB-10	L401-03-101	-04	HYN-RTT-04X516
			-10	HYN-TSB-10	L401-03-101	-06	HYN-RTT-06X516
			-10	HYN-TSB-10	L401-03-101	-08	HYN-RTT-08X516
-15	HYN-MSB-12	L401-03-122	-08	HYN-MSB-12	L401-03-122	-04	HYN-RTT-04X516
			-08	HYN-MSB-12	L401-03-122	-06	HYN-RTT-06X516
			-08	HYN-MSB-12	L401-03-122	-08	HYN-RTT-08X516
			-10	HYN-TSB-10	L401-03-101	-04	HYN-RTT-04X516
			-10	HYN-TSB-10	L401-03-101	-06	HYN-RTT-06X516
			-10	HYN-TSB-10	L401-03-101	-08	HYN-RTT-08X516

One L400-001 tipcup assembly includes tipcup plug, body, and locking screw (no washers). Tapered stemballs, micro stemballs, and L401-03-XXX washers are sold separately.

L500 SPREADER TIP CUPS

NAVTEC spreader tipcups are engineered for weight reduction and enduring strength. The range of product sizes and designs provides a solution for sailboats of any length.

The L500 incorporates NAVTEC micro stemballs for superior fatigue resistance. Fits completely inside the spreader to reduce sail chafe. Three-piece design ensures ease of installation and maintenance.



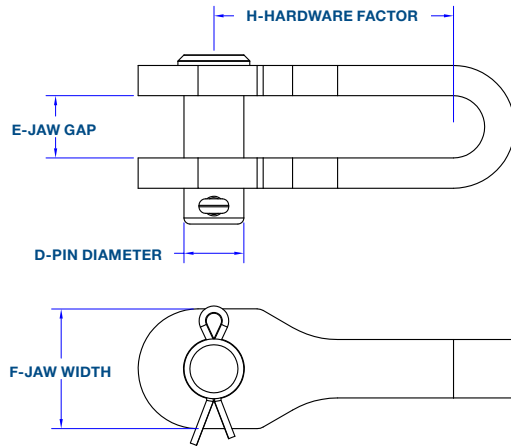
Hayn Part #	Lower Rod Size	Upper Rod Size	Diagonal Rod Size	Lower Shroud Angle	Upper Shroud Angle	Diagonal Shroud Angle
L500-XXYYZZ01	-XX	-YY	-ZZ	87° +/-3°	90° +/-3°	75° +/-3°
L500-XXYYZZ02	-XX	-YY	-ZZ	87° +/-3°	90° +/-3°	80° +/-3°
L500-XXYYZZ03	-XX	-YY	-ZZ	87° +/-3°	90° +/-3°	70° +/-3°
L500-XXYYZZ04	-XX	-YY	-ZZ	90° +/-3°	90° +/-3°	75° +/-3°
L500-XXYYZZ05	-XX	-YY	-ZZ	90° +/-3°	90° +/-3°	80° +/-3°
L500-XXYYZZ06	-XX	-YY	-ZZ	90° +/-3°	90° +/-3°	70° +/-3°
L500-XXYYZZ07	-XX	-YY	-ZZ	84° +/-3°	90° +/-3°	75° +/-3°
L500-XXYYZZ08	-XX	-YY	-ZZ	84° +/-3°	90° +/-3°	80° +/-3°
L500-XXYYZZ09	-XX	-YY	-ZZ	84° +/-3°	90° +/-3°	70° +/-3°
L500-XXYYZZ10	-XX	-YY	-ZZ	OUT OF RANGE	OUT OF RANGE	OUT OF RANGE
L500-XXYYZZ11	-XX	-YY	-ZZ	OF STANDARD	OF STANDARD	OF STANDARD
-----				ANGLES FROM	ANGLES FROM	ANGLES FROM
L500-XXYYZZ99	-XX	-YY	-ZZ	81° - 93°	87° - 93°	67° - 83°

Lower Rod Size - "XX" represents the lower vertical rod dash size (22, 30, 40, 48, 60, 76 etc...)

Upper Rod Size - "YY" represents the upper vertical rod dash size (22, 30, 40, 48, 60, 76 etc...)

Diagonal Rod Size - "ZZ" represents the diagonal tip turnbuckle screw size (10, 12, 14, 16, 20, 24 etc...)

J100 STRAP STYLE EYE JAW TOGGLE (STANDARD CLEVIS STYLE PIN)

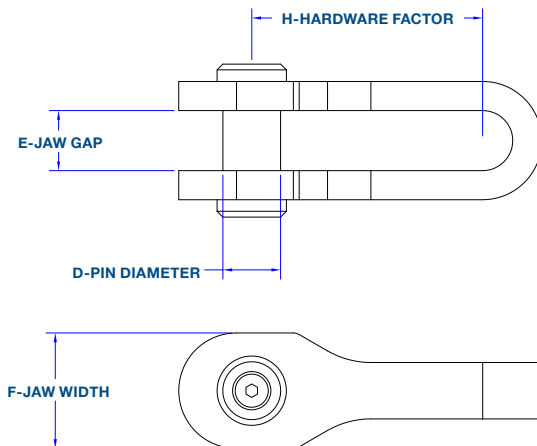


316 Stainless Steel

Part #	NAVTEC #	D-Pin Ø	E-Jaw Gap	F-Jaw Width	H-Hardware Factor	Weight lbs.
EJT38	J100-1212	3/8"	3/8"	3/4"	1 13/16"	0.15
EJT716	J100-1414	7/16"	7/16"	1"	2"	0.23
EJT12	J100-1616	1/2"	1/2"	1"	2 3/16"	0.35
EJT58	J100-2020	5/8"	5/8"	1 1/4"	2 1/2"	0.66
EJT34	J100-2424	3/4"	3/4"	1 1/2"	2 7/8"	1.11
EJT78	J100-2828	7/8"	15/16"	2"	3 5/16"	1.66
EJT1	J100-3232	1"	1"	2"	3 11/16"	2.46
EJT1-18	J100-3636	1 1/8"	1 1/8"	2 1/2"	4 1/8"	3.53
EJT1-14	J100-4040	1 1/4"	1 1/4"	2 1/2"	4 1/2"	4.96
EJT1-38	J100-4444	1 3/8"	1 3/8"	2 3/4"	5 5/8"	6.50
EJT1-12	J100-4848	1 1/2"	1 1/2"	3 1/4"	5 3/4"	9.70
EJT1-34	J100-5656	1 3/4"	1 3/4"	3 1/2"	7 3/16"	14.10

Larger sizes and "Pin Diameter" to "Jaw Gap" combinations available upon request.

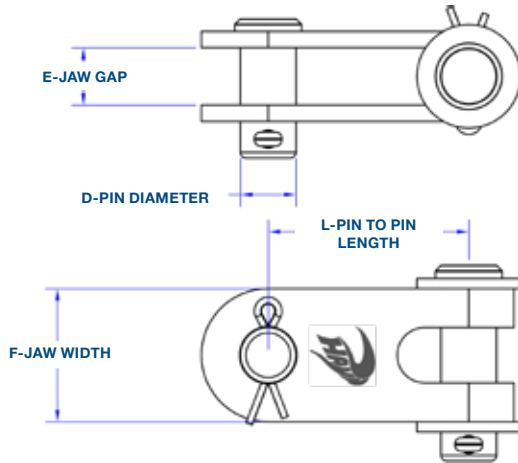
STRAP STYLE EYE JAW TOGGLE (DOUBLE HEAD CLEVIS STYLE PIN)



316 Stainless Steel

Hayn Part #	D-Pin Ø	E-Jaw Gap	F-Jaw Width	H-Hardware Factor	Weight lbs.
EJT38-DHCP	3/8"	3/8"	3/4"	1 13/16"	0.14
EJT716-DHCP	7/16"	7/16"	1"	2"	0.22
EJT12-DHCP	1/2"	1/2"	1"	2 3/16"	0.34
EJT58-DHCP	5/8"	5/8"	1 1/4"	2 1/2"	0.65
EJT34-DHCP	3/4"	3/4"	1 1/2"	2 7/8"	1.08
EJT78-DHCP	7/8"	15/16"	2"	3 5/16"	1.61
EJT1-DHCP	1"	1"	2"	3 11/16"	2.52

J200 DOUBLE JAW TOGGLE

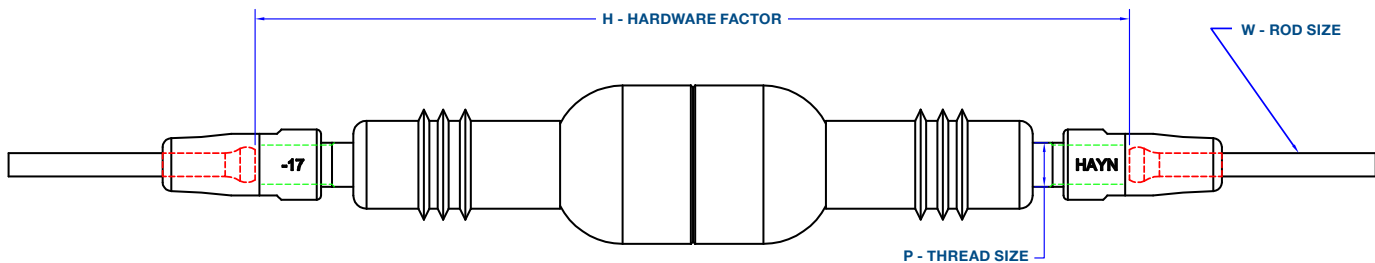


316 Stainless Steel

Hayn Part #	NAVTEC #	D-Pin Ø	L-Pin to Pin	E-Jaw Gap	F-Jaw Width	Weight lbs.
14DJT	--	1/4"	7/8"	1/4"	21/32"	0.07
516DJT	J200-1010	5/16"	31/32"	5/16"	3/4"	0.11
38DJT	J200-1212	3/8"	1 1/4"	3/8"	29/32"	0.17
716DJT	J200-1414	7/16"	1 3/4"	7/16"	1 1/16"	0.24
12DJT	--	1/2"	1 11/16"	1/2"	1 5/32"	0.41
12DJT-X	J200-1616	1/2"	2"	1/2"	1 5/32"	0.47
58DJT	J200-2020	5/8"	2 1/4"	5/8"	1 1/2"	0.79
58DJT-X	--	5/8"	2 1/2"	5/8"	1 1/2"	0.83
34DJT	J200-2424	3/4"	2 11/16"	3/4"	1 7/8"	1.44
34DJT-X	--	3/4"	3"	3/4"	1 7/8"	1.49
34DJT-XXX	--	3/4"	3 13/16"	3/4"	1 7/8"	1.53
78DJT	J200-2828	7/8"	4"	7/8"	2 3/8"	2.77
1DJT	J200-3232	1"	3 7/8"	1"	2 1/2"	3.47
118DJT	J200-3636	1 1/8"	4"	1 1/8"	2 3/4"	5.45
114DJT	J200-4040	1 1/4"	5 3/8"	1 1/4"	3 1/4"	6.49

Larger sizes and "Pin Diameter" to "Jaw Gap" combinations available upon request.

ROD RIGGING INSULATOR



Hayn Part #	NAVTEC #	Rod Cap Part #	W - Rod Size	P - Thread Size	H - Hardware Factor	Weight lbs.
RIRR-08X12	P100-10A	RODCAP-08X12	-08	1/2-20	9 7/8"	1.53
RIRR-10X12	P100-10A	RODCAP-10X12	-10	1/2-20	9 3/4"	2.36
RIRR-12X58	P100-10A	RODCAP-12X58	-12	5/8-18	12 5/16"	4.24
RIRR-15X58	P100-17A	RODCAP-15X58	-15	5/8-18	12 5/16"	4.24
RIRR-17X58	P100-17A	RODCAP-17X58	-17	5/8-18	12 5/16"	4.24
RIRR-22X34	P100-22A	RODCAP-22X34	-22	3/4-16	12 5/8"	5.4
RIRR-30X78	P100-30A	RODCAP-30X78	-30	7/8-14	14 7/8"	6.62

Insulator manufactured in the UK by Petersen Stainless. Hayn part # includes rod caps. When referring to the NAVTEC part #, please specify the rod size for proper cap selection.

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