



SHACKLES

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VANGUARD STEEL LTD.

SHACKLES



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'Golden Pin'® Shackles

Over the past 30 years, Vanguard's 'Golden Pin'® Shackle has earned the reputation of 'top-of-the-line' products with manufactures name, Size, Indicated Load Carrying Capacity and Batch numbers for traceability, making them the preferred choice for all critical rigging applications. Golden Pin® is designed to meet the toughest industry standards. ASME B30.26. Quenched and tempered, and can meet DNV impact requirements of 42 joules (31ft.lbs) at -20 degrees C (-4 degrees F).



Screw Pin Anchor Shackles



Bolt Type Anchor Shackles



Screw Pin Chain Shackles

Features:

To assure total traceability and to exceed the requirements of ASME B30.26 'Golden Pin' shackles bodies are embossed with:

'Golden Pin' shackle Body's are embossed with:

- Vanguard or (VGD®)
- WLL (working load limit)
- Size
- Trace Code

'Golden Pin' shackles pins are stamped with:

- Vanguard I.D. (VGD®)
- Alloy Pin I.D.WLL (HS)
- Yellow chromated for instant recognition
- Trace Code

Warning:

- Do Not:**
- Exceed Working Load Limits
 - Exceed 120° Incline Angle
 - Re-Use Shackles or Pins which are Visibly Deformed
 - Use Shackles which are Worn in the Crown or Pin by more than 10% of Original Diameter
 - Use Screw Pin Shackles if the Pin can Roll Under Load
 - Proof Test Shackles Beyond 2x the Working Load Limit

'Golden Pin'® - Anchor Shackles

Meeting the performance requirements of:

U.S. Fed. Specs RR-C-271D, Type IV A, grade A, Class 2.

ASME B30.26

Premium Load Rated shackles

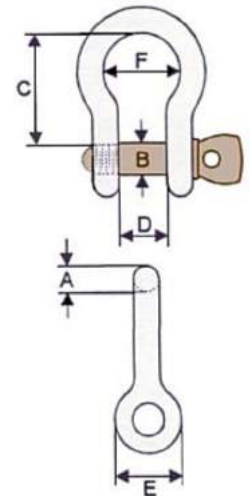
Pin and Bow are galvanized

Pin is then Gold Chromated

Quenched and tempered, and can meet DNV impact requirements of 42 joules (31ft.lbs) at -20 degrees C (-4 degrees F).



Size	Pin Diameter	Dimension Inches				WLL (Tons)	Weight (lbs)	Product Code
		A	B	C	D			
3/16"	1/4"	0.93	0.39	0.59	0.64	1/3	0.06	29020012
1/4"	5/16"	1.14	0.49	0.70	0.75	1/2	0.12	29020016
5/16"	3/8"	1.23	0.53	0.83	0.80	3/4	0.18	29020020
3/8"	7/16"	1.41	0.69	0.98	1.01	1	0.32	29020024
7/16"	1/2"	1.70	0.72	1.06	1.13	1-1/2	0.45	29020028
1/2"	5/8"	1.83	0.83	1.18	1.25	2	0.68	29020032
5/8"	3/4"	2.36	1.06	1.55	1.67	3-1/4	1.36	29020040
3/4"	7/8"	2.76	1.24	1.78	1.98	4-3/4	2.24	29020048
7/8"	1"	3.29	1.42	2.09	2.25	6-1/2	3.50	29020056
1"	1-1/8"	3.69	1.75	2.35	2.66	8-1/2	5.00	29020100
1-1/8"	1-1/4"	4.23	1.80	2.71	2.79	9-1/2	7.65	29020108
1-1/4"	1-3/8"	4.63	2.12	3.01	3.15	12	10.40	29020116
1-3/8"	1-1/2"	5.17	2.30	3.32	3.60	13-1/2	13.80	29020124
1-1/2"	1-5/8"	5.67	2.39	3.63	3.85	17	17.90	29020132
1-3/4"	2"	7.06	2.96	4.23	4.99	25	27.90	29020148
2"	2-1/4"	7.75	3.31	5.11	5.59	35	42.70	29020200
2-1/2"	2-3/4"	10.25	4.00	5.75	7.00	55	85.00	29020232



Safety Factor: **6**

WARNING: If the pin, after a 1/4 turn, remains hard to remove, there is a good chance that the shackle has been overloaded beyond the designed working load limit (WLL) and it, therefore, must be discarded.

'Golden Pin' ® - Chain Shackles

Meeting the performance requirements of:

U.S. Fed. Specs RR-C-271D, Type IV A, grade A, Class 2.

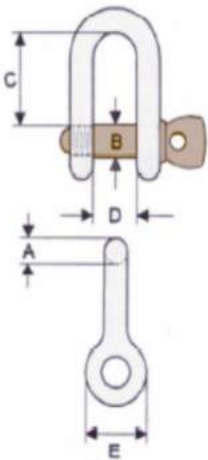
ASME B30.26

Premium Load Rated shackles

Pin and Bow are galvanized

Pin is then Gold Chromated

Quenched and tempered, and can meet DNV impact requirements of 42 joules (31ft.lbs) at -20 degrees C (-4 degrees F).



Size	Pin Diameter	Dimension Inches			WLL (Tons)	Weight (lbs)	Product Code
		C	D	E			
1/4"	5/16"	0.83	0.47	0.71	1/2	0.11	39120016
5/16"	3/8"	0.98	0.47	0.75	3/4	0.17	39120020
3/8"	7/16"	1.22	0.63	0.96	1	0.24	39120024
7/16"	1/2"	1.50	0.75	1.06	1-1/2	0.40	39120028
1/2"	5/8"	1.61	0.83	1.22	2	0.59	39130032
5/8"	3/4"	2.01	1.10	1.57	3-1/4	1.20	39120040
3/4"	7/8"	2.41	1.25	1.81	4-3/4	2.20	39120048
7/8"	1"	2.80	1.42	2.13	6-1/2	3.20	39120056
1"	1-1/8"	3.15	1.77	2.36	8-1/2	4.80	39120100
1-1/8"	1-1/4"	3.50	1.85	2.69	9-1/2	6.80	39120108
1-1/4"	1-3/8"	3.97	2.05	3.00	12	9.00	39120116
1-3/8"	1-1/2"	4.43	2.25	3.31	13-1/2	13.00	39120124
1-1/2"	1-5/8"	4.80	2.39	3.68	17	16.00	39120132
1-3/4"	2"	5.78	2.88	4.19	25	29.00	39120148
2"	2-1/4"	6.75	3.25	5.00	35	43.00	39120200

Safety Factor: 6

WARNING: If the pin, after a 1/4 turn, remains hard to remove, there is a good chance that the shackle has been overloaded beyond the designed working load limit (WLL) and it, therefore, must be discarded.

'Golden Pin'® - Bolt Type Anchor Shackles

Meeting the performance requirements of:

U.S. Fed. Specs RR-C-271D, Type IV A, grade A, Class 2.

ASME B30.26

Premium Load Rated shackles

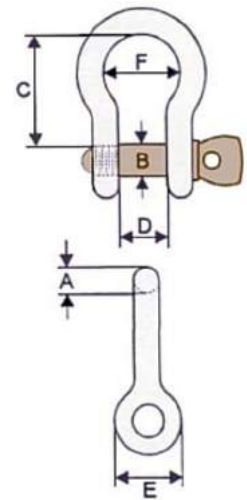
Pin and Bow are galvanized

Pin is then Gold Chromated

- Quenched and tempered, and can meet DNV impact requirements of 42 joules (31ft.lbs) at -20 degrees C (-4 degrees F).



Size	Pin Diameter	Dimension Inches				WLL (Tons)	Weight (lbs)	Product Code
		C	D	E	F			
1/4"	5/16"	1.14	0.49	0.70	0.75	1/2	0.12	29140016
5/16"	3/8"	1.23	0.53	0.83	0.80	3/4	0.18	29140020
3/8"	7/16"	1.41	0.69	0.98	1.01	1	0.32	29140024
7/16"	1/2"	1.70	0.72	1.06	1.13	1-1/2	0.45	29140028
1/2"	5/8"	1.83	0.83	1.18	1.25	2	0.68	29140032
5/8"	3/4"	2.36	1.06	1.55	1.67	3-1/4	1.36	29140040
3/4"	7/8"	2.76	1.24	1.78	1.98	4-3/4	2.24	29140048
7/8"	1"	3.29	1.42	2.09	2.25	6-1/2	3.50	29140056
1"	1-1/8"	3.69	1.75	2.35	2.66	8-1/2	5.00	29140100
1-1/8"	1-1/4"	4.23	1.80	2.71	2.79	9-1/2	7.65	29140108
1-1/4"	1-3/8"	4.63	2.12	3.01	3.15	12	10.40	29140116
1-3/8"	1-1/2"	5.17	2.30	3.32	3.60	13-1/2	13.80	29140124
1-1/2"	1-5/8"	5.67	2.39	3.63	3.85	17	17.90	29140132
1-3/4"	2"	7.06	2.96	4.23	4.99	25	27.90	29140148
2"	2-1/4"	7.75	3.31	5.11	5.59	35	42.70	29140200
2-1/2"	2-3/4"	10.25	4.00	5.75	7.00	55	85.00	29140232
3"	3-1/4"	13.00	5.00	6.50	7.88	85	125.00	29140300



Safety Factor: 6

NOTE: Bolt-type shackles are recommended for long-term service installations as well as for applications where there is a possibility that the pin could rotate under load.

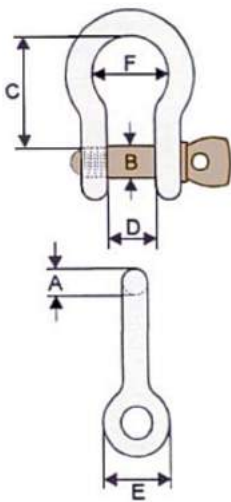
'Golden Pin'® - Super Anchor Shackles

Meeting the performance requirements of:
 U.S. Fed. Specs RR-C-271D, Type IV A, grade A, Class 2.
 ASME B30.26

Premium Load Rated shackles for corrosive environment.
 Pin and Bow are galvanized and then Powder Coated for
 added rust resistance and corrosion protection.



Discontinuing



Size	Pin Diameter	Dimension Inches				WLL (Tons)	Weight (lbs)	Product Code
		C	D	E	F			
3/8"	7/16"	1.41	0.69	0.98	1.01	1	0.32	29030024
7/16"	1/2"	1.70	0.72	1.06	1.13	1-1/2	0.45	29030028
1/2"	5/8"	1.83	0.83	1.18	1.25	2	0.68	29030032
5/8"	3/4"	2.36	1.06	1.55	1.67	3-1/4	1.36	29030040
3/4"	7/8"	2.76	1.24	1.78	1.98	4-3/4	2.24	29030048
7/8"	1"	3.29	1.42	2.09	2.25	6-1/2	3.50	29030056
1"	1-1/8"	3.69	1.75	2.35	2.66	8-1/2	5.00	29030100
1-1/8"	1-1/4"	4.23	1.80	2.71	2.79	9-1/2	7.65	29030108
1-1/4"	1-3/8"	4.63	2.12	3.01	3.15	12	10.40	29030116
1-3/8"	1-1/2"	5.17	2.30	3.32	3.60	13-1/2	13.80	29030124
1-1/2"	1-5/8"	5.67	2.39	3.63	3.85	17	17.90	29030132
1-3/4"	2"	7.06	2.96	4.23	4.99	25	27.90	29030148
2"	2-1/4"	7.75	3.31	5.11	5.59	35	42.70	29030200

Safety Factor: 6

WARNING: If the pin, after a 1/4 turn, remains hard to remove, there is a good chance that the shackle has been overloaded beyond the designed working load limit (WLL) and it, therefore, must be discarded.

'Silver Pin' ® - Anchor Shackles

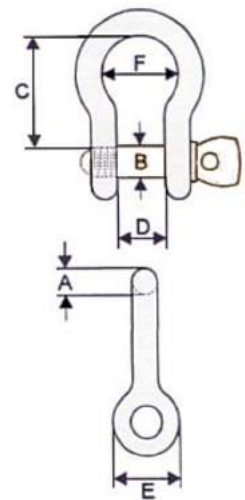
Meeting the performance requirements of:

U.S. Fed. Specs RR-C-271D, Type IV A, grade A, Class 2.

Premium Load Rated shackles
Pin and Bow are galvanized



Size	Pin Diameter	Dimension Inches				WLL (Tons)	Weight (lbs)	Product Code
		C	D	E	F			
A	B	C	D	E	F			
3/16"	1/4"	0.93	0.39	0.59	0.64	1/3	0.06	29025012
1/4"	5/16"	1.14	0.49	0.70	0.75	1/2	0.12	29025016
5/16"	3/8"	1.23	0.53	0.83	0.80	3/4	0.18	29025020
3/8"	7/16"	1.41	0.69	0.98	1.01	1	0.32	29025024
7/16"	1/2"	1.70	0.72	1.06	1.13	1-1/2	0.45	29025028
1/2"	5/8"	1.83	0.83	1.18	1.25	2	0.68	29025032
5/8"	3/4"	2.36	1.06	1.55	1.67	3-1/4	1.36	29025040
3/4"	7/8"	2.76	1.24	1.78	1.98	4-3/4	2.24	29025048
7/8"	1"	3.29	1.42	2.09	2.25	6-1/2	3.50	29025056
1"	1-1/8"	3.69	1.75	2.35	2.66	8-1/2	5.00	29025100
1-1/8"	1-1/4"	4.23	1.80	2.71	2.79	9-1/2	7.65	29025108
1-1/4"	1-3/8"	4.63	2.12	3.01	3.15	12	10.40	29025116
1-3/8"	1-1/2"	5.17	2.30	3.32	3.60	13-1/2	13.80	29025124
1-1/2"	1-5/8"	5.67	2.39	3.63	3.85	17	17.90	29025132
1-3/4"	2"	7.06	2.96	4.23	4.99	25	27.90	29025148
2"	2-1/4"	7.75	3.31	5.11	5.59	35	42.70	29025200
2-1/2"	2-3/4"	10.25	4.00	5.75	7.00	55	85.00	29025232

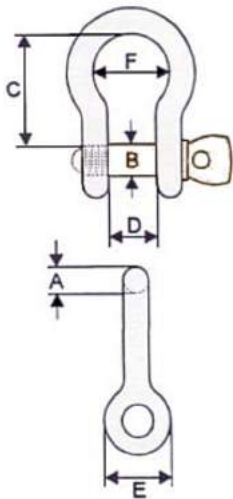


Safety Factor: 6

WARNING: If the pin, after a 1/4 turn, remains hard to remove, there is a good chance that the shackle has been overloaded beyond the designed working load limit (WLL) and it, therefore, must be discarded.

Non-Rated Anchor Shackles

An economical alternative for a wide range of uses.
 No WLL indicated, must never be used for lifting applications.



Size	Pin Diameter	Dimension Inches				Weight (lbs)	Product Code
A	B	C	D	E	F		
3/16"	1/4"	0.93	0.39	0.59	0.64	0.06	29465012
1/4"	5/16"	1.14	0.49	0.70	0.75	0.12	29465016
5/16"	3/8"	1.23	0.53	0.83	0.80	0.18	29465020
3/8"	7/16"	1.41	0.69	0.98	1.01	0.32	29465024
7/16"	1/2"	1.70	0.72	1.06	1.13	0.45	29465028
1/2"	5/8"	1.83	0.83	1.18	1.25	0.68	29465032
5/8"	3/4"	2.36	1.06	1.55	1.67	1.36	29465040
3/4"	7/8"	2.76	1.24	1.78	1.98	2.24	29465048
7/8"	1"	3.29	1.42	2.09	2.25	3.50	29465048
1"	1-1/8"	3.69	1.75	2.35	2.66	5.00	29465100

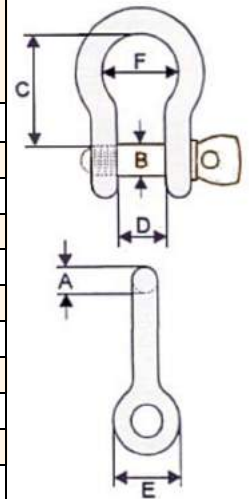
WARNING: Made entirely from C-1010 Carbon Steel, These shackles are NOT intended for use critical application and are not guaranteed in terms of any load bearing capacity.

Stainless Steel Anchor Shackles

T-316 Stainless Steel for corrosion resistance and durability
Bright polished



Size	Dimension Inches							WLL (Tons)	Weight (lbs)	Proof Load (lbs)	Product Code
	A	B	C	D	E	F	G				
3/16"	0.19	0.25	0.88	0.38	0.56	0.60	1.47	1/4	0.06	1,103	39130012
1/4"	0.25	0.31	1.13	0.47	0.61	0.78	1.84	1/4	0.12	1,103	39130016
5/16"	0.31	0.38	1.22	0.53	0.75	0.84	2.09	1/3	0.18	1,470	39130020
3/8"	0.38	0.44	1.44	0.66	0.91	1.03	2.49	1/2	0.32	2,205	39130024
7/16"	0.44	0.50	1.69	0.75	1.06	1.16	2.91	2/3	0.45	2,940	39130028
1/2"	0.50	0.63	1.88	0.81	1.19	1.31	3.28	1.00	0.68	4,410	39130032
5/8"	0.63	0.75	2.38	1.06	1.50	1.69	4.19	1-1/2	1.36	6,615	39130040
3/4"	0.75	0.88	2.81	1.25	1.81	2.00	4.97	2-1/4	2.24	11,025	39130048
7/8"	0.88	1.00	3.31	1.44	2.09	2.28	5.83	3.00	3.50	13,230	39130056
1"	1.00	1.13	3.75	1.69	2.38	2.69	6.56	4.00	5.00	17,640	39130100





General Warnings

All Vanguard rigging products are sold with the express understanding that both the purchaser and the end user are thoroughly familiar with the safe, proper and acceptable applications of the products.

It is the responsibility of the end user to establish proper safety programs and to provide thorough training for all personnel prior to use. The training programs must meet any federal/provincial/state/local code requirements, existing plant/site safety rules and regulations, and all instructions provided in the applicable section of this catalogue.

Product failure can occur due to abuse, misapplication, lack of maintenance, use by unqualified personnel and improper inspection prior to use. **Any failure of rigging products may result in property damage, personal injury and even death!!!!**

Standards

There are numerous government and industrial standards that cover rigging products. This catalogue makes no attempt to reference all of them; it references to the standards that are most frequently asked about.

Working Load Limit (WLL) – Safe Working Load (SWL)

The Working Load Limits shown in this catalogue are applicable to products that are new or “in as new” condition. The Working Load Limits ratings refer to the maximum amount of force or load that the rigging product can carry under normal working/environmental conditions. The Working Load Limits and Design Factor can be affected by wear, misuse, overloading, shock loading, side loading, corrosion, deformation, product alteration and other use conditions. Inspection of rigging products prior to use is required to determine whether the product continues to meet the assigned WLL provided in this catalogue, should be used at a reduced rating or removed from service.

The WLL rating must never be exceeded!!!!



General information disclaimer

The contents contained in this publication are for general information only.

Although every effort has been made to assure the accuracy of the information at time of print, persons who use the Catalog should note that ratings, laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication.

Vanguard Steel Ltd. assumes no liability for Catalog errors or omissions.

It is the responsibility of each person who uses this Catalog to ascertain current information that pertains to the individual lifting program, particularly with regard to satisfactory safety compliance requirements. Check your Provincial and Local safety standards before any operation or lift is attempted.

It is the responsibility of the person/operator to frequently search for updated reference information.

Do not use lesser than matching Grade components for any lifting application !

Do not use Slings, Chains or Accessories with signs of wear or deformation !

Inspections - Each day before being used, the sling and all fastenings and attachments shall be inspected for damage or defects by a competent person designated by the employer. Additional inspections shall be performed during sling use where service conditions warrant. Damaged or defective slings shall be immediately removed from service.

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