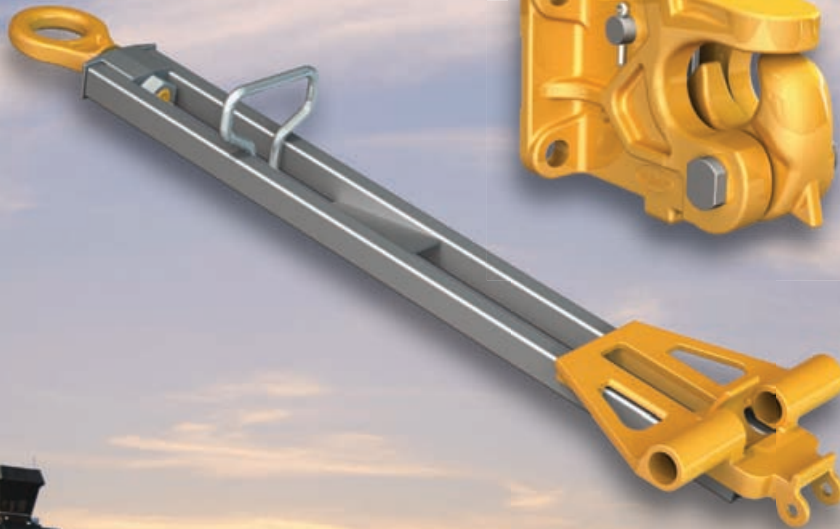


GROUND SUPPORT EQUIPMENT

COUPLING PRODUCTS



NEW
E-HITCH



PASSENGER AIR — AIR CARGO — MILITARY



SAF-HOLLAND Group

HOLLAND'S COUPLING STORY

EXPERIENCE – 100 Years in the Design and Manufacturing of Coupling Products

Founded in 1910, the 'Safety Release Clevis Company' introduced the safety release hitch for horse drawn plows. Following a move to Holland, Michigan, the company changed it's name to 'The Holland Hitch Company' where, in the 1930s, it introduced heavy-duty Pintle Hooks, Couplers and Drawbars for commercial transportation. Since then, HOLLAND Coupling Products have been installed on GSE world-wide, starting with aircraft tow tractors, then an ever increasing presence on other tow / towed GSE types.



INNOVATIVE PRODUCT SOLUTIONS – For Your Business

Several of our coupling types, primarily specialized Couplers, E-Hitches and Towbar, are designed specifically for GSE applications. That tradition continues with the launch of our new 3rd Generation E-Hitch and our improved 'Torsional Relief' Towbar.

We've redefined the common E-Hitch design with a very uncommon new product. We're pleased to introduce the Holland EH-3050 E-Hitch.



NEW

Holland eHitch™

See center spread for more information

With HOLLAND, it's all about SAFETY, RELIABILITY and SUPPORT

Our innovative new E-Hitch, like all HOLLAND coupling products, features:

- Product designed with ISO/TS-16949 certification process
- Dedicated R & D and Application Engineering teams
- Full engineering simulation, including FEA of assemblies to optimize product performance
- Dedicated Testing & Analysis facilities that are ISO/TS-16949, DOTARS, and EC certified
- Product safety features that exceed industry standards
- Extensive field testing with major airlines
- Stringent manufacturing standards and quality controls
- Sales and product support from a global organization



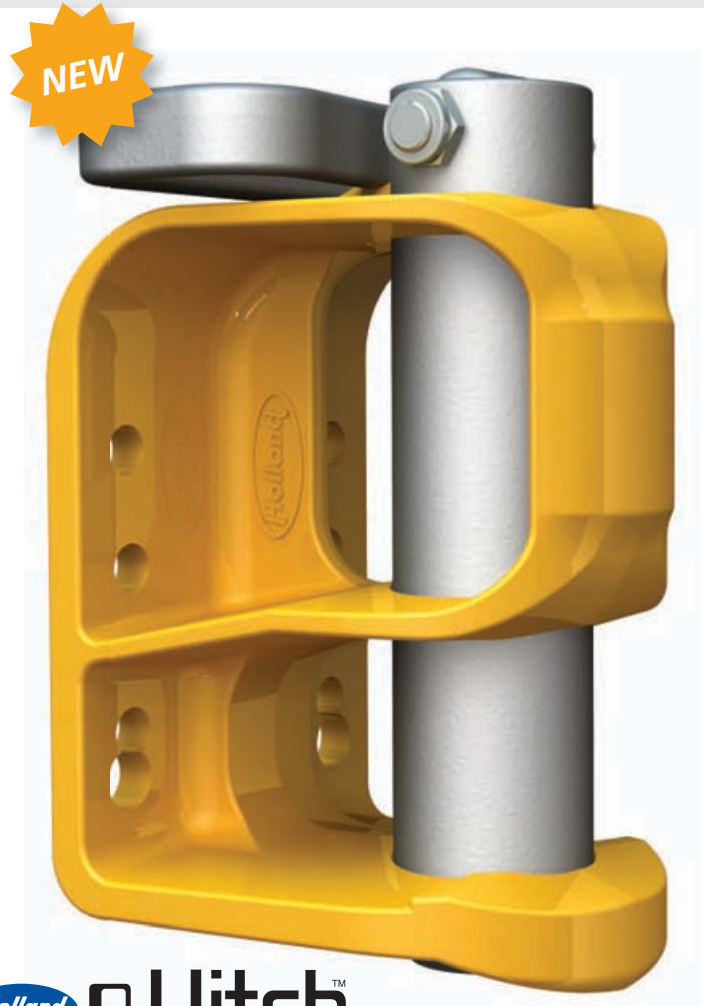
A REVOLUTION IN E-HITCH DESIGN

INTRODUCING A NEW COUPLING FROM HOLLAND THE EH-3050

- 30,000 lb. (13,610 kg) or 50,000 lb. (22,680 kg) Maximum Drawbar Pull, depending on mounting fasteners
- 500 lb. (227 kg) Maximum Vertical Load
- NATO 3" (76mm) Drawbar Eye Compatible

PATENT PENDING DESIGN

- High-strength, cast steel frame, pin and handle.
- Upper Pin Guard and an internally mounted spring helps protect the e-Hitch from impacts.
- The 2.125" (54mm) diameter steel pin minimizes towbar 'slop'. Pin wear is decreased due to its larger surface area and heat-treating to increase hardness.
- Throat area features a negative slope to minimize towbar 'chucking' (bouncing).
- Corrosion resistant coatings on all components. A choice of yellow or white powder coat frame is available.
 - EH-3050-13 Safety Yellow
 - EH-3050-14 White



Holland e-Hitch™

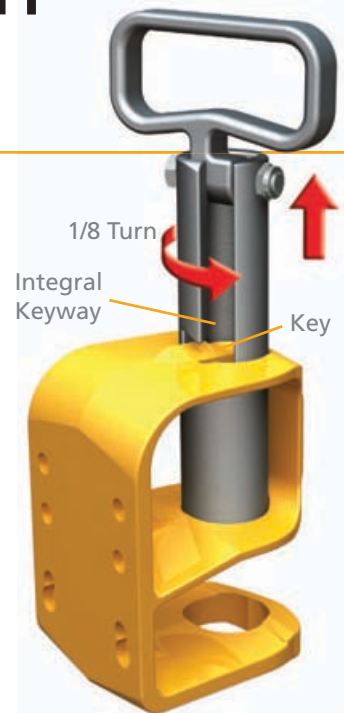
INTERNALLY MOUNTED PIN SPRING AND INTEGRAL KEYWAY FOR HANDS-FREE HOLD OPEN PIN POSITION



Steel spring is mounted inside the pin to protect it from impact damage.

Keyway is designed into the pin, and the key is designed into the frame. This eliminates the need to 'hunt' for the keyway when opening and closing.

The integral keyway also includes a 'hold-open' position via a 1/8-turn of the handle.



UNIQUE EH-3050 FEATURES

INTERCHANGEABLE HANDLE SETTINGS



FOLD-DOWN SETTING

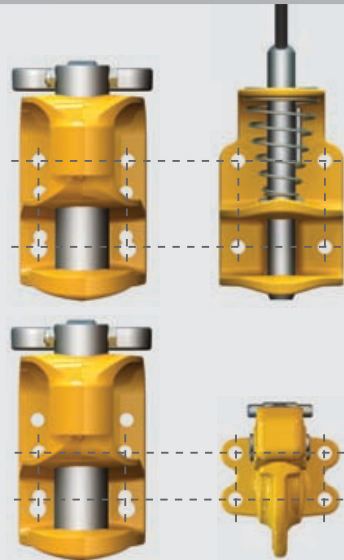
Allows the handle to fold down towards the rear of the frame

RIGID SETTING

The handle remains rigid and will not fold

Simply remove the handle from the pin, turn handle 180°, and reinstall for the other setting.

"FLEX-MOUNT" BOLT PATTERN



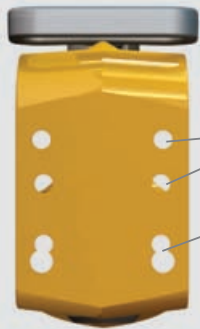
E-HITCH

EH-20
EH-40

PINTLE HOOKS

BH-200RN8
BH-50mmRN
PH-10RP
PH-T-60-AOL-8
PH-30RP

EH-3050 bolt pattern is interchangeable with the above HOLLAND models.



VARIABLE FOUR (4) BOLT MOUNTING PATTERN

Use only Grade 8 bolts.

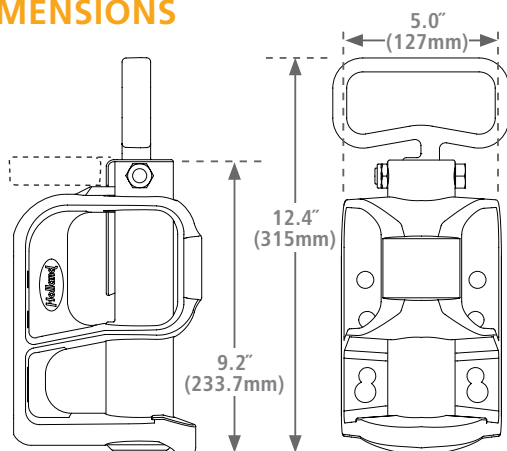
Two 1/2" bolts are required for all installations in either the top or middle rows.

Two bolts are required in the bottom row.

For 30,000 lb. (13,610 kg) MDBP installation, use upper slot sized for 1/2" bolts.

For 50,000 lb. (22,680 kg) MDBP installation, use lower slot sized for 5/8" bolts.

DIMENSIONS



SIMPLE DESIGN FOR EASY PART REPLACEMENT

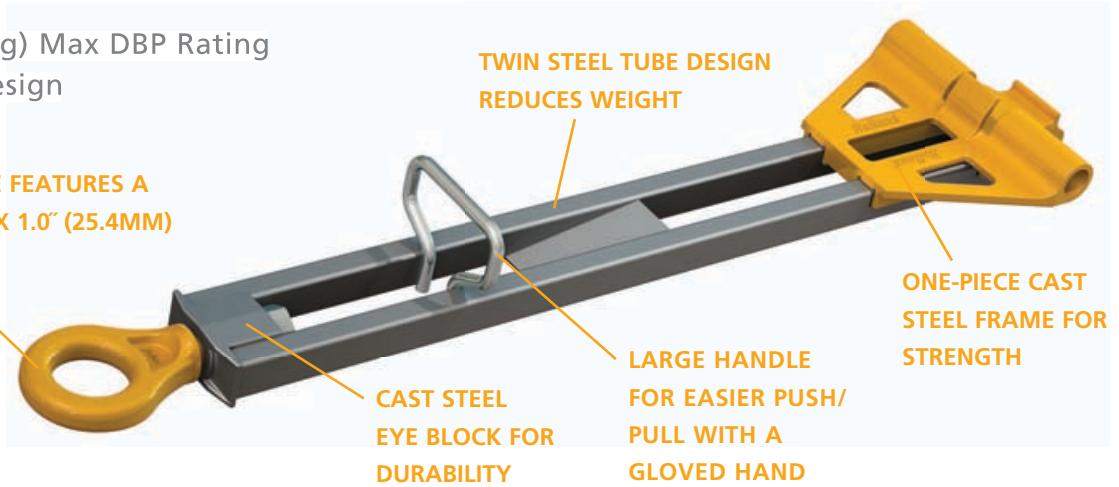


HOLLAND TOWBAR

'TORSIONAL RELIEF' TOWBAR

- 20,000 lb. (9,070 kg) Max DBP Rating
- Patent Pending Design

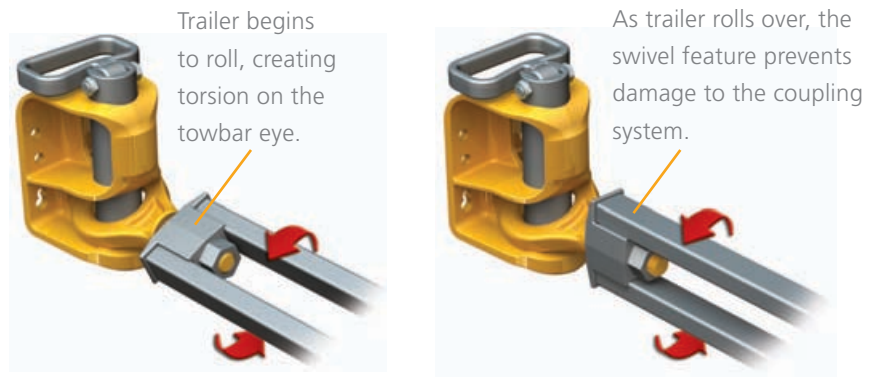
FORGED STEEL EYE FEATURES A 2.5" (63.5MM) I.D. X 1.0" (25.4MM) CROSS-SECTION



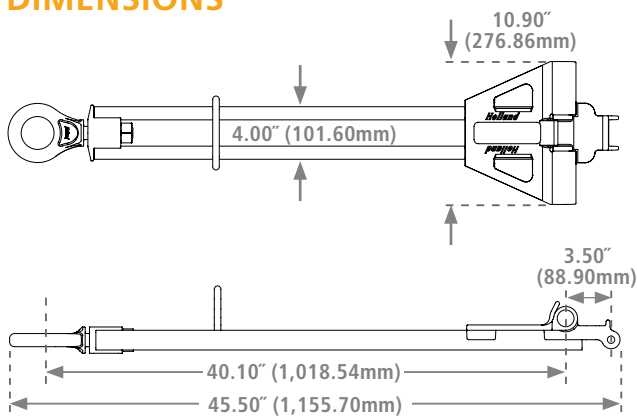
HOLLAND'S EXCLUSIVE 'TORSIONAL RELIEF' FEATURE

In the event of a trailer or cart roll-over, the towbar eye will swivel due to torsional load transmitted by the towbar. This 'torsional relief' feature helps prevent damage to the coupling system.

Following the incident, the towbar eye can be reset to its operating position without removing the towbar from the cart.



DIMENSIONS



HOLLAND DRAWBARS

LUNETTES – WELD-ON

DB-010EJ1 (Unpainted)

Eye - 2.88" (73.15mm) I.D. x
1.0" (25.4mm) Cross-Section

Max. Drawbar Pull 10,000 lb. (4,540 kg)
Max. Vertical Load 2,000 lb. (910 kg)



When used with hinged tongue trailers, where maximum vertical load does not exceed 500 lb. (227 kg), the MDBP is 20,000 lb. (9,070 kg).

DB-020FK1 (Unpainted)

NATO Eye - 3.00" (76.20mm) I.D. x
1.63" (41.40mm) Cross-Section

Max. Drawbar Pull 20,000 lb. (9,070 kg)
Max. Vertical Load 4,000 lb. (1,810 kg)



When used with hinged tongue trailers, where maximum vertical load does not exceed 500 lb. (227 kg), the MDBP is 40,000 lb. (18,140 kg).

DRAWBARS – BOLT-ON (SHANK MOUNT)

DB-1250-3

Eye - 2.50" (63.50mm) I.D. x
1.25" (31.75mm) x 1.50" (38.10mm)
Cross-Section

Max. Drawbar Pull 15,000 lb. (6,800 kg)
Max. Vertical Load 3,000 lb. (1,360 kg)
National (NATO) Stock # 2540-01-461-9306



When used with hinged tongue trailers, where maximum vertical load does not exceed 500 lb. (227 kg), the MDBP is 50,000 lb. (22,680 kg).

DB-1249-2H

NATO Eye - 3.00" (76.20mm) I.D. x
1.63" (41.40mm) Cross-Section

Max. Drawbar Pull 45,000 lb. (20,410 kg)
Max. Vertical Load 9,000 lb. (4,080 kg)

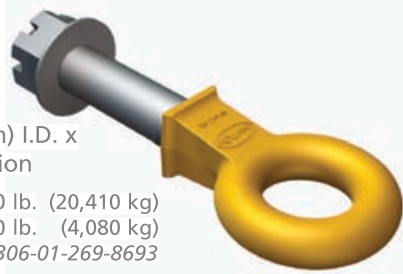


When used with hinged tongue trailers, where maximum vertical load cannot exceed 500 lb. (227 kg), the MDBP is 85,000 lb. (38,560 kg).

DB-1249-49

NATO Eye - 3.00" (76.20mm) I.D. x
1.63" (41.40mm) Cross-Section

Max. Drawbar Pull 45,000 lb. (20,410 kg)
Max. Vertical Load 9,000 lb. (4,080 kg)
National (NATO) Stock # 5306-01-269-8693



When used with hinged tongue trailers, where maximum vertical load does not exceed 500 lb. (227 kg), the MDBP is 85,000 lb. (38,560 kg).



DRAWBARS – BOLT-ON (BAR & FLANGE MOUNT)

DB-1228-1

Eye - 2.50" (63.50mm) I.D. x
1.25" (31.75mm) x 1.50" (38.10mm)
Cross-Section

Max. Drawbar Pull 20,000 lb. (9,070 kg)
Max. Vertical Load 4,000 lb. (1,810 kg)



When used with hinged tongue trailers, where maximum vertical load does not exceed 500 lb. (227 kg), the MDBP is 60,000 lb. (27,220 kg).

DB-1238

NATO Eye - 3.00" (76.20mm) I.D. x
1.63" (41.40mm) Cross-Section

Max. Drawbar Pull 22,000 lb. (9,980 kg)
Max. Vertical Load 4,500 lb. (2,040 kg)
National (NATO) Stock # 2540-01-192-4699



When used with hinged tongue trailers, where maximum vertical load does not exceed 500 lb. (227 kg), the MDBP is 70,000 lb. (31,750 kg).

DB-030DQ1

Eye - 2.50" (63.50mm) I.D. x
1.25" (31.75mm) x 1.50" (38.10mm)
Cross-Section

Max. Drawbar Pull 30,000 lb. (13,610 kg)
Max. Vertical Load 6,000 lb. (2,720 kg)



When used with hinged tongue trailers, where maximum vertical load does not exceed 500 lb. (227 kg), the MDBP is 38,000 lb. (17,240 kg).

DB-040DQ1

Eye - 2.50" (63.50mm) I.D. x
1.25" (31.75mm) x 1.50" (38.10mm)
Cross-Section

Max. Drawbar Pull 40,000 lb. (18,140 kg)
Max. Vertical Load 8,000 lb. (3,630 kg)



When used with hinged tongue trailers, where maximum vertical load does not exceed 500 lb. (227 kg), the MDBP is 60,000 lb. (27,200 kg).

NOTE: HOLLAND drawbars are supplied from factory with standard black paint finish.

HOLLAND PINTLE HOOKS

For drawbar / towbar eye dimensions 2.38" (60.45mm) to 3" (76.20mm) I.D. with 1.25" (31.75mm) to 1.63" (41.40mm) diameter cross-section (NATO 3" / 76mm compliant).

PH-10RP41*

with FastLatch™

PH-10RP43*

(White) with FastLatch™

Max. Drawbar Pull 10,000 lb. (4,540 kg)
Max. Vertical Load 2,000 lb. (910 kg)



BH-200RN41*

2" Ball Dia. with FastLatch™

BH-50mmRN41*

50mm Ball Dia. with FastLatch™

Max. Drawbar Pull - Hook 20,000 lb. (9,070 kg)
Max. Vertical Load - Hook 4,000 lb. (1,810 kg)
Max. Drawbar Pull - Ball 10,000 lb. (4,450 kg)
Max. Vertical Load - Ball 1,000 lb. (454 kg)



* Available with a Tethered Lock Pin - replace '41' / '43' with '51' / '53' - or - '11' with '21' in the part number.

Latch Safety - Latch component and latch function should be checked for condition at regular intervals. A pintle hook style coupling should not be used in applications where the latch may be damaged by direct impacts, including bumper over-ride. In applications where latch damage will occur, an alternative coupling design, such as an E-Hitch or coupler, is recommended.

Contact SAF-HOLLAND for additional pintle hook styles and capacities.

PH-30RP41*

with FastLatch™

National (NATO) Stock #2540-01-389-2221

PH-30RP43*

(White) with FastLatch™

Max. Drawbar Pull 30,000 lb. (13,610 kg)
Max. Vertical Load 6,000 lb. (2,720 kg)



PH-T-60-AOL-8

National (NATO) Stock #2540-00-835-9039

PH-T-60-S11240

(White)

Max. Drawbar Pull 30,000 lb. (13,610 kg)
Max. Vertical Load 6,000 lb. (2,720 kg)



HOLLAND COUPLERS

Automatic close and lock when drawbar / towbar is inserted into the coupler - manual release to open.

For drawbar / towbar eye dimensions 2.5" (63.50mm) to 3" (76.20mm) I.D. with 1.25" (31.75mm) to 1.63" (41.40mm) diameter cross-section (NATO 3" / 76mm compliant).

PRIMARY LOCK ONLY

CP-400-GSE

CP-400-CA

National (NATO) Stock #2540-00-768-7455

Max. Drawbar Pull 30,000 lb. (13,610 kg)
Max. Vertical Load 7,500 lb. (3,400 kg)



PRIMARY AND SECONDARY LOCKS

CP-400-H

Max. Drawbar Pull 30,000 lb. (13,610 kg)
Max. Vertical Load 7,500 lb. (3,400 kg)



CP-360

National (NATO) Stock #2540-01-213-7842

Max. Drawbar Pull 52,000 lb. (23,590 kg)
Max. Vertical Load 3,000 lb. (1,360 kg)



PRIMARY AND SECONDARY LOCKS WITH TETHERED LOCK PIN

CP-360-S01340

National (NATO) Stock # 2540-01-205-8577

Max. Drawbar Pull 52,000 lb. (23,590 kg)
Max. Vertical Load 3,000 lb. (1,360 kg)



This Part Number includes additional quality tests:

1. Magnetic Particle test of latch, jaw and body.
2. Brinell Hardness test of latch, jaw and body.
3. 60,000 lb. (27,220kg) Static Drawbar Load Test of complete assembly. Upon successful test completion, components / assembly are metal stamped for certification.

NOTE: HOLLAND coupling products are supplied from factory with standard black paint finish. Some models are available with white finish, as indicated above.





SAF's legacy started in 1881 when Paul Zill, a blacksmith from Keilberg, Germany developed the Zill two-way plow for the agricultural industry. Mr. Zill's blacksmith shop expanded into a small family operation as popularity for his plow grew and agricultural axles were added to the product line. Time passed - and the family operation evolved to become Otto Sauer Achsen Fabrik (SAF), a leader in the design and manufacture of integrated axle and suspension systems for commercial trailers.

Similar to SAF, Holland's legacy also started in the agricultural industry in 1910 with the introduction of a safety release hitch for horse drawn plows. Founding father, Gerrit Den Besten, began the "Safety Release Clevis Company" in Corsica, South Dakota. The company found new market opportunities in the automotive industry and moved operations to Holland, Michigan. Renamed The Holland Hitch Company, the family owned business grew into a global supplier in the commercial transportation industry.

Today - these two historical companies are together as SAF-HOLLAND, a global leader in the design, manufacture, and distribution of quality engineered components, systems, and services to the commercial vehicle industry.

SAF-HOLLAND specializes in coupling, lifting, and suspension systems for trucks, buses, tractors, and trailers. SAF-HOLLAND products are sold and serviced under the SAF and Holland brand names from over 4,600 distributor and OEM locations around the world.



From fifth wheel rebuild kits to suspension bushing repair kits, SAF-HOLLAND Original Parts are the same quality components used in the original component assembly. SAF-HOLLAND Original Parts are tested and designed to provide maximum performance and durability. Will-fits, look-alikes or, worse yet, counterfeit parts will only limit the performance potential and could possibly void SAF-HOLLAND's warranty. Always be sure to spec SAF-HOLLAND Original Parts when servicing your SAF-HOLLAND product.

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