

KINGPINS

HOLLAND KINGPINS MEET OR EXCEED INDUSTRY
STANDARDS FOR QUALITY AND PRECISION



KINGPINS

The importance of a "safe" connection

Your fifth wheel and kingpin are two of the most important components on your trucks. That connection is the heart of your operation, and you need to know that it will be safe, reliable and consistent every time you hit the road. Since the 1930s, HOLLAND couplings have been designed and manufactured to be the industry's most innovative, safe and high quality tractor-trailer connection components, utilizing a precisely integrated "systems" approach that ensures that every HOLLAND kingpin will perform the right way, every time.

"Raising the bar" on kingpin performance standards

All HOLLAND kingpins must meet or exceed industry standards that define the boundaries of kingpin design, manufacture and use. The SAF-HOLLAND Performance Advantage continues to set the standard and "raise the bar," making HOLLAND kingpins the first choice of OEMs and fleets that are serious about trucking.

Precise metallurgy

HOLLAND kingpin performance is determined by carefully controlled metallurgical composition—as well as by shape and heat treatment—all tightly controlled throughout our manufacturing process. That is why SAF-HOLLAND specifies low alloy steels with balanced chemistry to provide the best combination of machinability, cost and heat-treatability with excellent strength, hardness, and impact resistant characteristics. All HOLLAND kingpins contain relatively high nickel and low carbon composition to ensure the best balance of properties.

Carefully-controlled manufacturing

At SAF-HOLLAND, we take quality control seriously. From the making of the steel to forging to delivery, SAF-HOLLAND tracks every aspect of manufacturing for every kingpin we make. All HOLLAND kingpins are manufactured following our three-step process:

– Precision steel specifications

Because the final forging can never be "cleaner" than the original steel, SAF-HOLLAND requires a specific level of cleanliness and chemical composition at the mill. The steel we use must consistently meet those standards, or we won't use it.

– Carefully monitored forging

The forging process is carefully specified and continually monitored. Before each forging is released, we conduct demanding dimensional control, magnetic particle and macro-etch tests to make certain surface conditions and grain flow meet our specifications.

– Precision, quality manufacturing

All forgings are carefully inspected prior to machining and then again at several stages throughout the manufacturing process. All HOLLAND kingpins must meet rigid SPC requirements in the machining process to ensure tight dimensional tolerance and consistency. All are carefully monitored in the heat treatment process to provide process uniformity and optimum structural integrity.



Kingpin Control Procedure

Production at Steel Mill	Chemistry, Steel Cleanliness
Forged Steel	Dimensional Shape, Grain Flow
Receiving Inspection	Grain Flow, Surface Cleanliness, Dimensions, Metallurgy
Manufacture of Kingpin	Dimensional Tolerance, Heat Treatment
Testing	Brinell, Magnetic Particle, Ultrasonic, Dimensional

DEMANDING TESTING



Because our customers depend on HOLLAND kingpins to keep their equipment on the road, our testing process is the most comprehensive and demanding in the world. Every HOLLAND kingpin must pass three major non-destructive test inspections prior to final SAF-HOLLAND approval.

- **100% Brinell hardness test**

Verifies the hardness level to a required depth within a defined hardness range.

- **100% magnetic particle test**

Confirms surface cleanliness and freedom from surface defects.

- **100% ultrasonic tests**

Ensures the integrity of the kingpin below the surface.



Color coded
upper coupler
plate thickness

Non destructive
test approvals
M = Mag Particle
U = Ultrasonic

Mfg. date



HOLLAND brand logo –
your assurance of quality

Part No.

Brinell
hardness test

Upper coupler
plate thickness

Machine
operator's initial



The value of HOLLAND kingpin technology

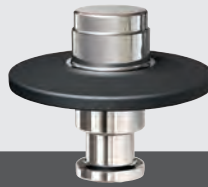
Trust takes years to earn, and minutes to lose. SAF-HOLLAND accepts the responsibility to engineer and manufacture kingpins that earn the trust of every customer.

The fact is, over 3.5 million HOLLAND kingpins have been manufactured in over 70 years.

Simply, HOLLAND kingpins perform day in, day out, because they are made only one way. The right way.

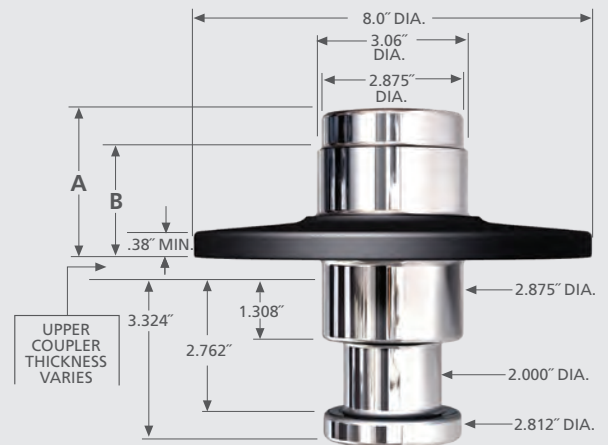


Double Spool Series



2" SAE KINGPINS

MODEL	STEEL ALLOY	BRINELL HARDNESS (BHN)	UPPER COUPLER THICKNESS	HOLES	DIMENSIONS	
					A	B
KP-T-880-C	8630H	302-363	.25"	No	2.88"	2.12"
KP-T-880-E	8630H	302-363	.31"	No	2.88"	2.12"
KP-T-880	8630H	302-363	.38"	No	2.88"	2.12"
KP-T-880-B	8630H	302-363	.50"	No	2.88"	2.12"
KP-T-880-1-C	8630H	302-363	.25"	No	2.00"	1.50"
KP-T-880-1-E	8630H	302-363	.31"	No	2.00"	1.50"
KP-T-880-1	8630H	302-363	.38"	No	2.00"	1.50"
KP-T-880-1-B	8630H	302-363	.50"	No	2.00"	1.50"
KP-AAR-880-C	4320H or 4718H	380-420	.25"	No	2.88"	2.12"
KP-AAR-880-E	4320H or 4718H	380-420	.31"	No	2.88"	2.12"
KP-AAR-880	4320H or 4718H	380-420	.38"	No	2.88"	2.12"
KP-AAR-880-B	4320H or 4718H	380-420	.50"	No	2.88"	2.12"

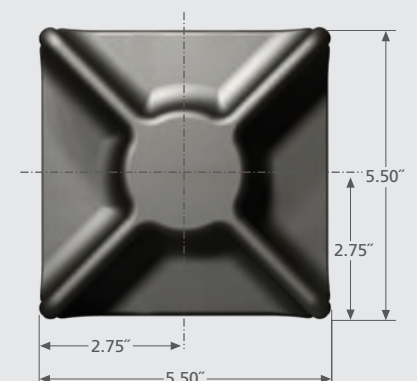


Cruciform Series



2" SAE KINGPINS

MODEL	STEEL ALLOY	BRINELL HARDNESS (BHN)	UPPER COUPLER THICKNESS	DIMENSIONS			
				A	B	C	D
KP-T-3-C	8630H	302-363	.25"	1.558"	3.012"	3.574"	1.937"
KP-T-4	8630H	302-363	.38"	1.683"	3.137"	3.699"	3.625"
KP-T-4-C	8630H	302-363	.25"	1.558"	3.012"	3.574"	3.625"
KP-T-4-E	8630H	302-363	.31"	1.620"	3.074"	3.636"	3.625"
KP-T-5-C	8630H	302-363	.25"	1.558"	3.012"	3.574"	2.44"
KP-AAR-3	4718H or 4320H	380-420	.38"	1.683"	3.137"	3.699"	1.937"
KP-AAR-3-C	4718H or 4320H	380-420	.25"	1.558"	3.012"	3.574"	1.937"
KP-AAR-3-E	4718H or 4320H	380-420	.31"	1.620"	3.074"	3.636"	1.937"
KP-AAR-4	4718H or 4320H	380-420	.38"	1.683"	3.137"	3.699"	3.625"
KP-AAR-4-C	4718H or 4320H	380-420	.25"	1.558"	3.012"	3.574"	3.625"
KP-AAR-5	4718H or 4320H	380-420	.38"	1.683"	3.137"	3.699"	2.437"
KP-AAR-5-C	4718H or 4320H	380-420	.25"	1.558"	3.012"	3.574"	2.437"
KP-AAR-5-E	4718H or 4320H	380-420	.31"	1.620"	3.074"	3.636"	2.437"



THE HOLLAND ADVANTAGE

All HOLLAND Kingpins Deliver:

High impact resistance

Proper alloy selection and heat treatment provide the best balance of hardness and impact resistance without brittleness, even at low temperatures.

Maximum wear resistance

Through proper alloy selection and a carefully controlled hardening process, HOLLAND kingpins provide exceptional wear for years of dependable service.

Optimum strength and fatigue resistance

Ultimate strength and yield characteristics meet all SAE and TTMA performance requirements.

Ease of installation

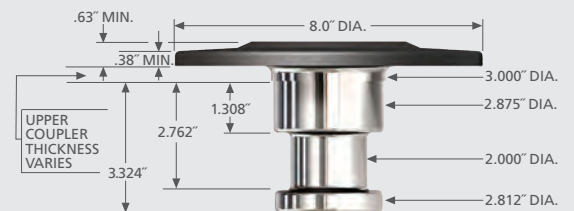
The alloys SAF-HOLLAND uses offer excellent welding characteristics for easy installation or replacement.

Mushroom Series



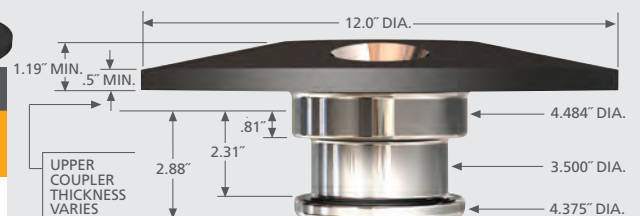
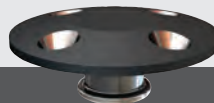
2" SAE KINGPINS

MODEL	STEEL ALLOY	BRINELL HARDNESS	UPPER COUPLER THICKNESS	HOLES
KP-T-809-CF	8630H	302-363	.25"	No
KP-T-809-EF	8630H	302-363	.31"	No
KP-T-809-F	8630H	302-363	.38"	No
KP-T-809-BF	8630H	302-363	.50"	No
KP-T-809-AF	8630H	302-363	.63"	No
KP-T-809-GF	8630H	302-363	.75"	No
KP-T-809-C	8630H	302-363	.25"	8 equally spaced .53" holes on 6.75" diameter for plug welding
KP-T-809-E	8630H	302-363	.31"	
KP-T-809	8630H	302-363	.38"	
KP-T-809-B	8630H	302-363	.50"	
KP-T-809-A	8630H	302-363	.63"	
KP-T-809-G	8630H	302-363	.75"	



3.5" SAE KINGPINS

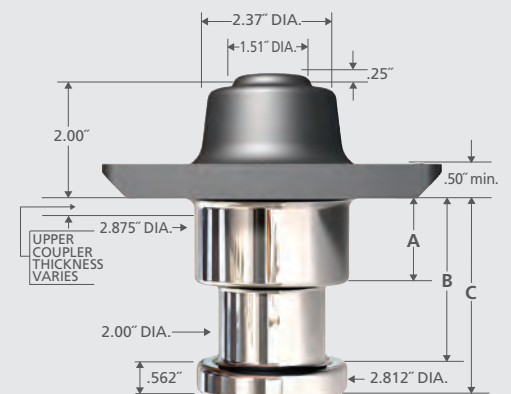
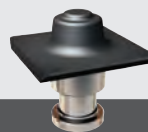
MODEL	STEEL ALLOY	BRINELL HARDNESS	UPPER COUPLER THICKNESS	HOLES
KP-T-847	8630H	302-363	.38"	4 equally spaced 1.25" holes on 8.50" diameter for plug welding
KP-T-847-B	8630H	302-363	.50"	
KP-T-847-F	8630H	302-363	.38"	No
KP-T-847-BF	8630H	302-363	.50"	No



'L' Series

2" SAE KINGPINS

MODEL	STEEL ALLOY	BRINELL HARDNESS	UPPER COUPLER THICKNESS	DIMENSIONS		
				A	B	C
KP-AAR-L	4320H or 4718H	380-420	.38"	1.683"	3.137"	3.699"
KP-AAR-L-C	4320H or 4718H	380-420	.25"	1.558"	3.012"	3.574"
KP-AAR-L-E	4320H or 4718H	380-420	.31"	1.620"	3.074"	3.636"

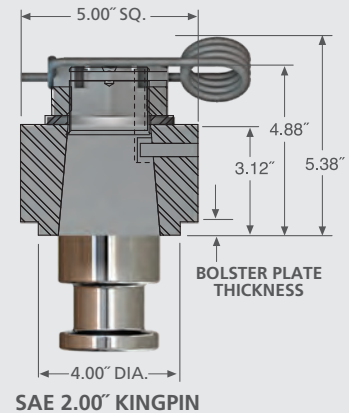


Removable Series



2" & 3.5" SAE KINGPINS

HOUSING SIZE	MODEL		BOLSTER PLATE THICKNESS	KINGPIN SIZE	STEEL ALLOY	
	HOUSING WITH KINGPIN	HOUSING WITH PLUG			KINGPIN	HOUSING
5" Sq.	KP-0427	KP-0438	.25"	2"	4140	1018
5" Sq.	KP-0428	KP-0439	.31"	2"	4140	1018
5" Sq.	KP-0412	KP-0440	.38"	2"	4140	1018
5" Sq.	KP-0429	KP-0441	.50"	2"	4140	1018
6" Sq.	KP-0413	KP-0444	.38"	2"	4140	1018
6" Sq.	KP-0414	KP-0444	.38"	3.5"	4140	1018
6" Sq.	KP-0432	KP-0445	.50"	2"	4140	1018
6" Sq.	KP-0433	KP-0445	.50"	3.5"	4140	1018



HOLLAND Removable Series

2" and 3.5" SAE Kingpin Installations

Applications

- **Repositionable Kingpins**
 - Switch between 2-position kingpin settings on trailer to accommodate swing clearances.
- **Interchangeable Kingpins**
 - Switch between 2" and 3.5" kingpins to accommodate fifth wheels.

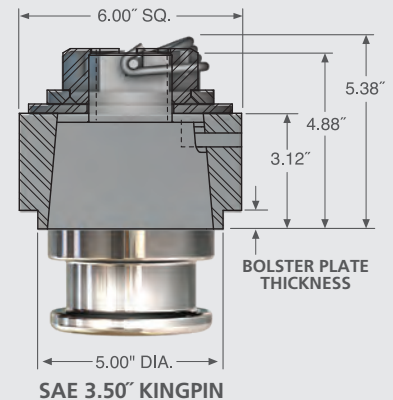
Features

- 5" weld-in housing for 2" kingpin applications.
 - A single 2" kingpin is interchangeable between all 5" housings.
 - .25" / .31" / .38" / .50" bolster plate thicknesses are designed into the housing.
- 6" weld-in housing for interchangeable 2" and 3.5" kingpins.
 - A single 2" and a single 3.5" kingpin are interchangeable between all 6" housings.
 - .38" / .50" bolster plate thicknesses are designed into housing.
- Close tolerance, tapered engagement between housing and kingpin for a firm, secure installation.
- Dowel pin, mounted in housing, holds kingpin in place during installation and removal, and prevents kingpin rotation.
- When kingpin is removed, plugs are available to protect housing from dirt and debris.

Quality

- Weld-in housings are manufactured from AISI 1020 alloy steel for strength and weldability.
- Kingpins are manufactured from AISI 4140 alloy steel, quenched and tempered for wear resistance and strength, hardened to 269-302 BHN.
- Kingpins are 100% Brinell hardness tested, magnetic particle tested, and ultrasound tested.

For additional specification detail, refer to document XL-KP103.

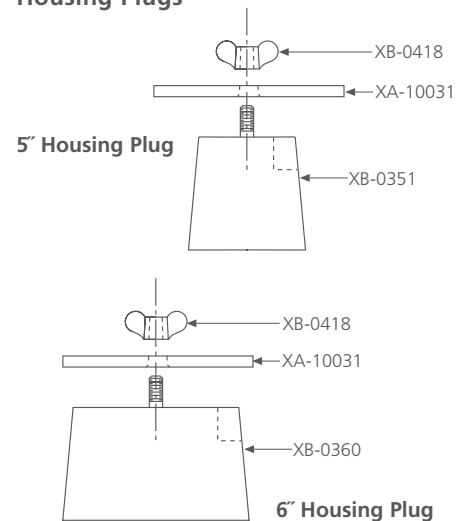


Replacement Parts

Kingpins

- XA-0407** 2" for 5" Housing
- XA-0411** 2" for 6" Housing
- XA-0409** 3.5" for 6" Housing

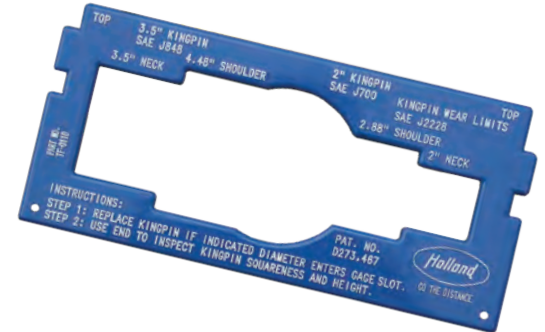
Housing Plugs



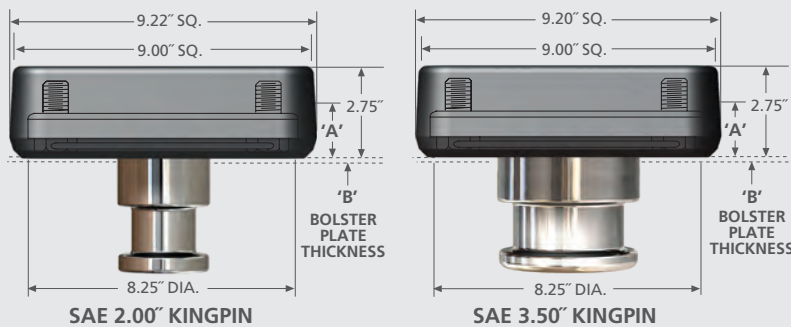
Replaceable Series



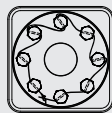
Kingpin Gauge TF-0110



2" & 3.5" SAE KINGPINS						
MODEL	BOLSTER PLATE 'B'	KINGPIN SIZE	STEEL KINGPIN	ALLOY HOUSING	BRINELL HARDNESS (BHN)	COUNTER BORE 'A'
KP-0880	.25"	2"	8630H	4130H	302-363	1.56"
KP-0881	.31"	2"	8630H	4130H	302-363	1.50"
KP-0882	.38"	2"	8630H	4130H	302-363	1.44"
KP-0883	.50"	2"	8630H	4130H	302-363	1.31"
KP-0884	.38"	3.5"	8630H	4130H	302-363	1.44"
KP-0885	.50"	3.5"	8630H	4130H	302-363	1.31"



SECURED IN PLACE WITH
EIGHT .75\"/>



HOLLAND Replaceable Series

2" and 3.5" SAE Kingpin Installations

Applications

- Fast, economical kingpin replacement.
- Interchangeable 2" and 3.5" kingpin sizes.

Features

- Four weld-in housings for .25", .31", .38", and .50" bolster plate thicknesses.
- A single 2" and a single 3.5" kingpin are interchangeable between all housings.
- Secure kingpin installation featuring eight .75" Grade 8 bolts with safety lock wired bolt heads.

Quality

- Weld-in housings are manufactured from AISI 4130H alloy steel for strength and weldability.
- Kingpins are forged from AISI 8630H alloy steel and hardened to 302-363 BHN.
- Kingpins are 100% Brinell hardness tested, magnetic particle tested, and ultrasound tested.

For additional specification detail, refer to document number XL-KP104-01.

Replacement Parts

Kingpins

- RK-0676** 2" for all Housings, Includes RK-0882
RK-0677 3.5" for all Housings, Includes RK-0882

Fastener Kit

- RK-0882** Bolts (8) and wire lock (1) kit
 (Bolts feature drilled heads and thread lock patch)

Routine inspection of kingpins is just as important as the inspection of its fifth wheel mating partner. The HOLLAND Kingpin Gauge is a simple and easy to use tool for indicating undersized 2" and 3-1/2" SAE kingpins in need of replacement because of wear. This multi-purpose gauge can be used to check the length and straightness of the kingpin, and check the flatness of the bolster plate. The economical HOLLAND kingpin gauge is readily available from your local dealer or distributor.



Measure the Shoulder



Measure the Neck



Measure the Length



TRAILER AXLES AND
SUSPENSION SYSTEMS



COUPLING AND
LIFTING SYSTEMS



SUSPENSIONS FOR
TRUCKS AND BUSES



SUSPENSIONS AND
AXLE SYSTEMS



BUS AIR SUSPENSION
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