

**NOBODY HANDLES THE
PRESSURE BETTER.**

PRODUCT CATALOG

**OILFIELD SWIVELS
WATER WELL SWIVELS
SIDE INLET SWIVELS
POWER SWIVELS
WIRE LINE STRIPPERS
CIRCULATING HEADS
TONGS / LINKS / HOOKS**



General Notes on Swivels

Before a swivel is purchased, careful consideration should be given to size, capacity, requirements and speed at which it will be rotated. Other factors to be taken into account are overloading and shock loads.

The structural parts of all King Swivels, except Type J, are made of high-grade alloy steels. These parts are heat-treated to improve their qualities. Type J housings are made of aluminum alloy or nickel iron.

All parts are subject to stresses and have safety factors that provide very wide margins beyond the safe limits indicated in the rating tables. (Read the paragraphs dealing with bearings carefully.)

Overloads and Shock Loads

All swivels are frequently subjected to overloads and shock loads unless a much larger swivel is used than is normally required.

Common causes of overloads: using too long and too heavy strings of drill pipe and pulling on stuck pipe.

Shock loads result when the pipe is lifted suddenly. Severe shock loads are imposed when spudding gumbo off the bit. The worst shocks are delivered by rotary jars when used for loosening stuck drill pipe.

Selecting a Swivel

Before deciding on the type and size of swivel to purchase, consideration should be given to the paragraphs concerning overloads, shock loads and bearings.

When referring to the load capacity tables, it is best to select the next larger swivel than is indicated in the tabulation. This will provide some insurance against damage resulting from overloads, shock loads and increases in speed of rotation.

Too frequently a swivel is purchased to drill certain depths. The operator may try to drill deeper than anticipated. The swivel is overloaded as a result.

It is false economy of the worst sort to use a swivel that is too small for the job. Excessive cost of upkeep, plus shutdown time of the rig will soon amount to the added cost of a larger swivel.

Maintenance and Repairs

Like any other piece of equipment, a swivel should be kept in good repair. It is our rigid policy to give first attention to repair orders, and repair replacement parts are almost invariably shipped in the same day an order is received.

When a King Swivel is in need of repairs, other than packing, it should be returned to us if possible. We can usually repair it more economically than anyone else because we are able to reclaim many expensive parts that would otherwise be discarded.

The greatest advantage in returning your King Swivel to use for repair is the fact that when it is a factory job, the owner may feel assured that the various parts fit correctly and that adjustments are properly made.

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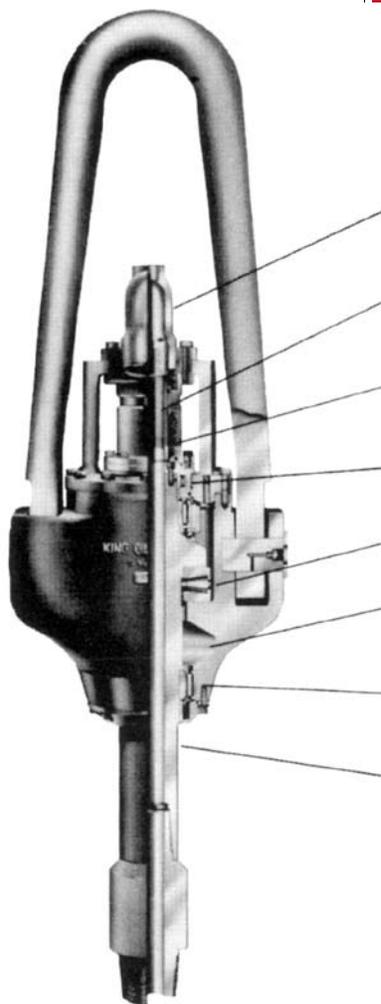
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Oilfield Swivels & Equipment

Swivel

10MB, 15MB, 25MB, 35MB, 50MB



GOOSENECK

Large watercourse and heavy walled for smooth flow and longevity.

WASHPIPE

Hardened and ground finished; "floating" to assure alignment with packing.

QUICK CHANGE PACKAGE

Replaceable cartridge without removing gooseneck.

SEAL

Double-acting upper and lower seal.

MAIN BEARING

Large tapered roller sized to API spec.

LUBRICATION

Large oil cavity and design assures all bearings are flooded with cool oil.

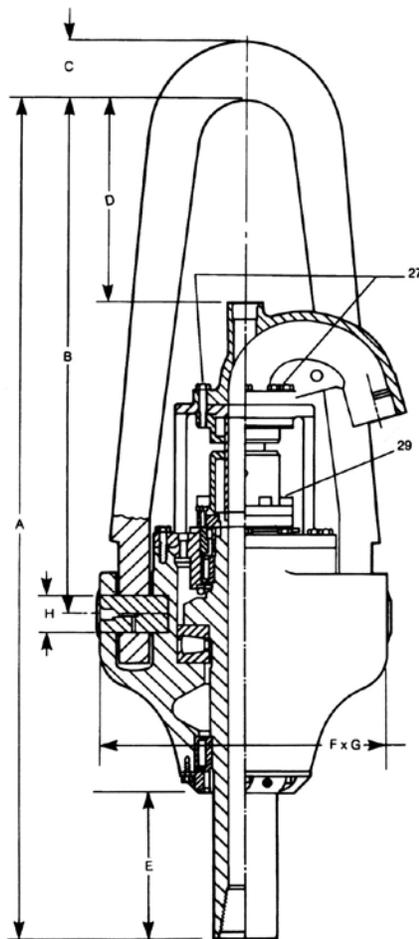
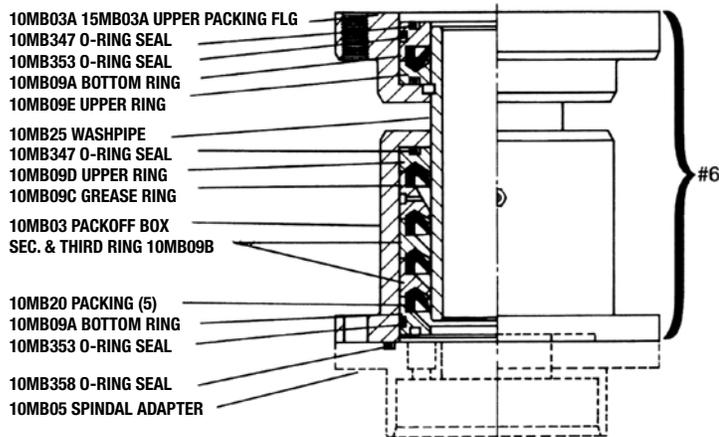
ALIGNMENT BEARINGS

Upper and lower straight roller widely spaced to insure stem alignment.

STEM

Forged, alloy steel for long life, extra long for re-threading.

Model	10MB	15MB	25MB	35MB	50MB
Static Capacity	120 Tons	150 Tons	300 Tons	400 Tons	550 Tons
Rotating Capacity 100 R.P.M. API	78 Tons	97 Tons	193 Tons	258 Tons	367 Tons
Working Pressure (P.S.I.)	5,000	5,000	5,000	5,000	5,000
Bail Diameter at Bend	4 1/4"	5"	5 3/4"	6 3/4"	7 1/2"
Bail Radius for Hook	4"	4 1/2"	4 1/2"	4 1/2"	4 1/2"
Hook Clearance	17 1/2"	20 1/16"	24"	24"	26"
Fluid Passage	3"	3"	3"	3"	3"
Gooseneck Connection	3" Female	4" Female	4" Female	4" Female	4" Female
Spindle Thread Connection	4 1/2" EUE 8 RD	4 1/2" API FH	5 1/2" API Reg.	6 5/8" API Reg.	6 5/8" API Reg.
Saver Sub Thread	4 1/2" API Reg.	6 5/8" API Reg.			
Washpipe Packing	Pressure Seal Lip Type				
Upthrust Bearing	Ball	Ball	Ball	Ball	Ball
Main Bearing	Tapered Roller				
Alignment Bearings	Straight Roller	Straight Roller	Straight Roller	Straight Roller	Straight Roller
Oil Capacity	2.5 gal.	4.5 gal.	7 gal.	10 gal.	11 gal.
Width	20"	26"	30 1/2"	35"	40 3/4"
Length Less Sub	69 1/2"	64 7/8"	93"	97 5/16"	103 11/16"
Weight Less Oil	1,950 lbs.	2,750 lbs.	3,960 lbs.	4,500 lbs.	5,900 lbs.



MB Swivel Packing Instructions' Removal

1. Bring swivel down to a safe working height, stop rotation and mud circulation.
2. Unscrew and remove the four (4) bolts, item #27. These are the bolts on the bail side of the bonnet.
3. Unscrew and remove the six (6) bolts, item #29.
4. Collapse packing assembly by prying the upper packing flange down, MB03A of packing box drawing.
5. Remove packing assembly, item #6.
6. Install new O-Ring, item #24.
7. Install new or refurbished packing assembly, item #6.
8. Install the four (4) bolts, item #27 and tighten equally and in opposing directions. ALWAYS TIGHTEN FIRST.
9. Pry the bottom half of the packing assembly down. Install and tighten the six (6) bolts, item #29.
10. Grease the packing through the jerk fitting of the MB03 packing box.
11. Close kelly cock and pressure test to 5,000 P.S.I. or less. Note: A pressure of greater than 1,000 P.S.I. is required to seat the single piece of packing in the upper packing flange. If this is not done, a leak could be present in the area of the upper packing flange.
12. If no leaks are present, begin drilling.

To Refurbish a Removed Packing Assembly

1. Disassemble the old packing assembly and clean all removed metal parts.
2. Inspect and replace all metal parts that are damaged and/or show excessive wear.
3. Install one piece of 10MB20 packing into the bottom ring, 10MB09A.
4. Install O-Ring, 10MB358 into outer O-Ring groove of this bottom ring.
5. Install two (2) pieces of 10MB20 packing into each one of the middle rings, 10MB09B.
6. Install packing into the grease ring, 10MB09C.
7. On a flat surface place the bottom ring, 10MB09A with packing up and install one of the middle rings, 10MB09B with packing up.
8. Install the other middle ring, 10MB09B with packing up.
9. Install the grease ring, 10MB09C with packing up.
10. Install the upper ring, 10MB09D.
11. Install one of the O-Rings, 10MB347 into the O-Ring groove in top upper ring, 10MB09D.
12. Slide the packing box, 15MB03 on this assembly.
13. Place the upper packing flange onto the top of the packing box.
14. Install the last piece of packing, 10MB20 into the bottom ring 10MB09E.
15. Install the upper lock ring, 10MB09E onto this bottom ring.
16. Install this assembly (bottom ring, packing and upper lock ring) onto the short side of the washpipe. Note: Check to make sure the extensions of the upper lock ring slip onto the flats provided on the washpipe, 10MB25.
17. Slide the washpipe with this assembly into the upper packing flange and through the assembled packing box.
18. Turn completed packing assembly on its side and install the O-Ring, 10MB347 into the O-Ring groove of the upper bottom ring and wire the packing assembly together. Store for future use.

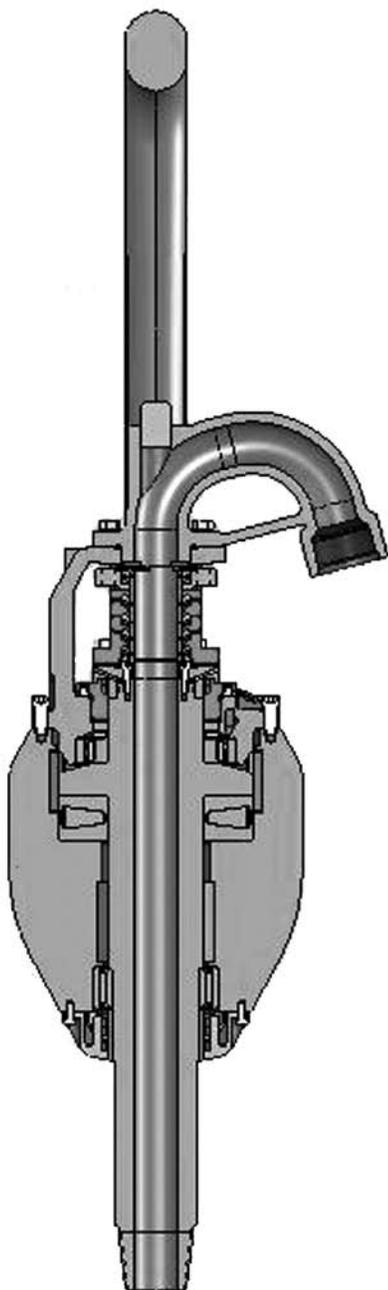
Note: All other services not included in the above are considered major repairs and should be done by an authorized service center.

Swivel Size (in inches)	A	B	C	D	E	F	G	H
10MB*	69 1/2	35	4 1/4	17 1/2	16 7/8	20	14	2 1/2
15MB	64 7/8	48 3/4	5	20 1/16	9 3/4	26	16 1/2	3 1/2
25MB	93	54 3/4	5 3/4	24 1/4	17 1/4	30 1/2	20 1/2	4
35MB	97 5/16	54 5/16	6 3/4	24	17 1/2	35	23 1/2	5

*10MB has bottom pin connection.

Swivel

6SX



Oilfield drilling operations require a swivel that can deliver dependable and sustained duty in severe, continuous operation. The 6SX Swivel is designed to exceed the demands and rigors imposed by oilfield drilling.

How does the 6SX Series meet such strenuous requirements?

The answer is found in the design. The 6SX Swivel is built from high-grade alloy steel which utilizes precision matched parts. All components are in strict accordance with API specifications.

Features and Benefits

Gooseneck

King 6SX Swivels feature a heavy-walled gooseneck which insures longevity and smooth flow of drilling fluids.

Washpipe

The "floating" Washpipe incorporated into the 6SX allows for extended life of the packing. Constructed from hardened steel, the Washpipe is situated in a quick-change packing capsule that virtually eliminates long downtime.

Bearings

Bearings play an integral part in the success of a drilling operation – it is why the King 6SX Swivel utilizes both an upper and lower alignment bearing (widely spaced) to capitalize on increased spindle alignment. The Upthrust Bearing is comprised of a ball type roller which is shimmed to insure proper clearance. Main bearings feature a large tapered roller (API rated). All bearings benefit from oil bath lubrication.

Fluid Passage

6SX Swivel are put into operation with a full 3" fluid passage allowing for increased circulation of drilling fluid.

Spindle

Spindles on the 6SX Swivels are extended to increased lengths to qualify for rethreading and furnished with API tool joints.

Weights and Dimensional Data

Static Capacity	Rated Capacity [@100 RPM (API)]	Working Pressure	Gooseneck Connection	Stem Connection	Saver Sub Connection	Estimated Weight
220 Tons	135 Tons	5000 PSI	4" Line Pipe Female	5 1/2" API REG Male	6 5/8" API REG Male	2,350 lbs.

Swivel

3MB

For Mineral Exploration - Deep Water Wells

The 3MB swivel is rugged, compact and dependable. Made of high-grade alloy steel, it has a high capacity proportionate to its weight. The packing unit consists of a stuffing box and Chevron V-Type packing. The entire packing assembly can be replaced within a few minutes without "breaking-out" any connection.

Built to "oil field standards," the swivel features an upper taper bearing, spherical roller main bearing and a lower radial ball bearing. A bearing adjusting nut is standard. This construction makes this swivel more dependable and more rugged than any existing swivel now offered by rig manufacturers.

Four large trunnion pins are provided for rigs equipped with pull-down yokes. Two-inch trunnion pins are standard. The 10 3/4" shoulder dimension of the pins allows replacement in existing rigs equipped with yokes.

Features in Brief

- Large watercourse to permit circulating more drilling fluid
- Oil lubrication of bearings
- Oil seals to retain fluid and protect bearings
- Bearing adjusting nut
- Chevron packing and washpipe easily changeable without breaking connections

Weight and Dimensional Data

Lower Connection (Kelly)	Weight lbs.	Length	Hose Connection	Diameter Watercourse*	Bail Opening
2 7/8" API IF LH pin	410	39 5/8"	3" NPT	2 1/8"	7" x 9"
3 1/2" API IF LH pin	410	39 5/8"	3" NPT	2 3/4"	7" x 9"

Capacity and Safety Data

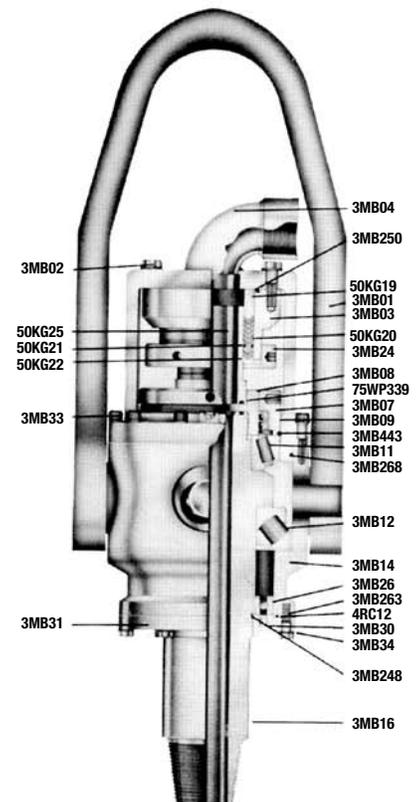
Capacity, lbs. at 100 R.P.M.	Static Load lbs.	Pulldown lbs.
60,000	100,000	30,000

Safe Depths (Feet) with Drill Pipe

2 3/8" 6.65 lbs.	2 7/8" 10.4 lbs.	3 1/2" 13.3 lbs.	4 1/2" 16.6 lbs.
8,500'	5,500'	4,000'	3,500'

Type 3MB Swivel and Parts

Part Number	Name of Part	Number Required	WT/lbs.
N3MB01	Bail	1	75
N3MB02	Packing Box Screws	4	1
N3MB03	Packing Box	1	12 1/2
N4RC250	Packing Box O-Ring	1	1/8
N3MB04	Bonnet	1	65
N3MB268	Lower Bonnet O-Ring	1	1/8
N3MB07	Upper Seal	2	1/2
N3MB08	Upper Bearing Nut	1	5
N3MB443	Adjusting Nut O-Ring	1	1/8
N3MB09	Bearing Adjusting Nut	1	7
N3MB11	Upper Bearing	1	12
N3MB12	Main Bearing	1	21
N3MB14	Bearing Housing	1	85
N3MB16	Swivel Stem	1	79
N50KG19	Packing Gland	1	2
N50KG20	Packing	1 set	1/2
N50KG21	Lantern Ring	1	1
N50KG22	Packing Seat Ring	1	1/2
N3MB24	Packing Adjusting Gland	1	8
N50KG25	Washpipe	1	5
N75WP339	Washpipe O-Ring	1	-
N4.5 SI26	Lower Alignment Bearing	1	4
N3MB27	Lower Seal	1	1/2
N3MB30R	Lower Bearing Nut	1	2 1/2
N3MB31	Lower Seal Box	1	9 1/2
N3MB263	Lower Seal Box O-Ring	1	1/8
N3MB33	Bonnet Socket Screws	10	1/2
N3MB34	Lower Seal Box Cap Screws	6	1/2
N3MB351	Lower Bearing Nut O-Ring	1	1/8



*Watercourse size depends on tool joint size.

Swivel

75WP



For drilling medium depth oil wells - for deep slim hole drilling - for the heavier work-over rigs - for drilling deep water wells

This swivel is sturdier than the other types of King Swivels, but like those other types it has a very high ratio of capacity to weight.

Foreign operators should find this swivel attractive because it can be more readily transported than other, heavier swivels having comparable capacity.

The 75WP Swivel is available with the conventional bail, or it will be furnished with an elevator shank in lieu of a bail.

Alloy steel is used throughout in the manufacture of this swivel, except that some minor parts are of bronze where that metal is more suitable.

The bearings are angular-contact type ball bearings. The thrust bearing is a unit of four bearings mounted tandem. These bearings are flush ground and matched at the factory to assure that each bearing will carry its share of the load. Reverse loads are absorbed by a single angular-contact bearing mounted opposed to the main thrust unit. The manner in which the bearings are mounted will provide ample radial stability for the swivel.

The swivel housing is provided with automatic grease seals. These seals retain the bearing lubricant. A good grade of ball bearing grease should be injected, with a grease gun, once or twice per location.

The packing unit consists of stuffing box, washpipe, Chevron V-Type packing, O-Rings, lantern rings and packing gland with zerk grease fitting which simplifies packing lubrication. The packing is quickly and easily adjusted by tightening the bronze adjusting ring. Repacking can be accomplished in a few minutes by this six-step procedure:

1. Rotate packing box to align with square on washpipe, raise packing box over washpipe squares, then rotate packing box (6) six turns to right to disengage washpipe.
2. Remove adjusting ring and unscrew washpipe.
3. Remove complete packing unit and washpipe.
4. Replace seat, packing, lantern rings and gland.
5. Replace washpipe and insert packing box with packing assembly.
6. Replace adjusting ring.

Weight and Dimensional Data

Type Swivel	Weight	Length	Width	Bail Opening
75WP with 4 1/2" Connection	740 lbs.	65"	11 1/4"	8" x 18"
75WP with 6 5/8" Connection	800 lbs.	66"	11 1/4"	8" x 18"

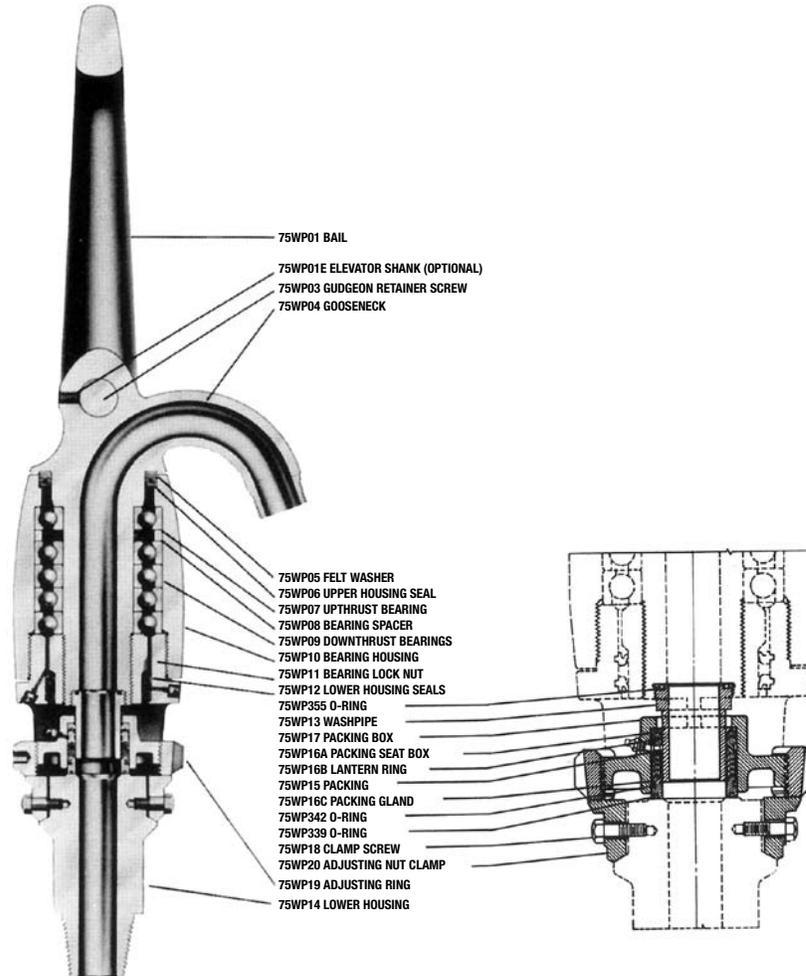
Type Swivel	Kelly Connection	Hose Connection	Inside Diameter Watercourse	Weight Boxed For Export
75WP with 4 1/2" Connection	4 1/2" API-LH	3" NPT	2 1/2"	920 lbs.
75WP with 6 5/8" Connection	6 5/8" API-LH	3" NPT	2 1/2"	980 lbs.

Capacity and Safety Data

Capacity, lbs. at 100 R.P.M.	Safe Load Limits, lbs.	2 7/8"	Safe Depths (Feet) with Drill Pipe 3 1/2"	4 1/2"
100,000	250,000	10.40 lbs. 9,200'	13.30 lbs. 6,000'	16.60 lbs. 5,000'

Swivel

75WP



Parts List for 75WP Swivel

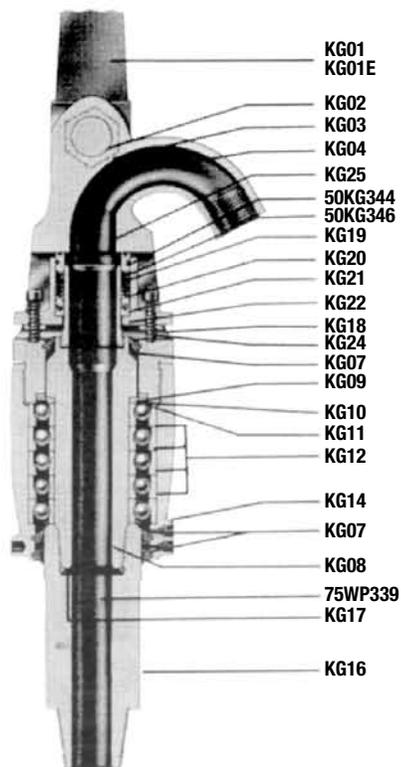
Part Number	Name of Part	Number Required	Net Weight Pounds	Spares for One Year Service
75WP	Swivel with 4 1/2" Pin Complete	..	740	
75WP	Swivel with 6 5/8" Pin Complete	..	800	
N75WP01A	Bail	1	126	
N75WP01E	Elevator Shank	1	135	
N75WP02	Bail Gudgeon Pin	1	13	
N75WP03	Gudgeon Retainer Screw	2	1/8 (2)	
N75WP04A	Gooseneck	1	166	
N75WP05	Felt Washer	1	1/16	1
N75WP06	Upper Housing Seal	1	3/4	1
N75WP07	Bearing	5	14	1
N75WP08	Bearing Spacer	1	3	1
N75WP10	Bearing Housing	1	134	
N75WP11	Bearing Adjust Nut	1	17	
N75WP12	Lower Housing Seal	2	1/2 (2)	2
N75WP13	Washpipe	1	4	5
N75WP335	O-Ring	1	1/16	2
N75WP14	Lower Housing	1	149	
N75WP15	Packing	1 set	1/2	10 sets
N75WP16A	Packing Seat Ring	1	1/2	2
N75WP16B	Lantern Ring	1	1	2
N75WP16C	Packing Gland	1	1 1/2	2
N75WP17	Packing Box	1	13	1
N75WP18	Clamp Screw	4	1 (4)	2
N75WP19	Adjusting Ring	1	17 1/3	1
N75WP339	O-Ring	1	1/16	2
N75WP20	Adjusting Nut Clamp	2	2 (2)	...
N75WP342	O-Ring	1	1/16	2

* When ordering Swivel with Elevator Shank, state size of elevator. Downthrust Bearings should always be replaced with a full matched set.

** Never renew one or two bearings in an old set.

Swivel

30KG, 40KG, 50KG, 60KG



For drilling relatively shallow oil wells, the deepest water wells, workover rigs, slim hole drilling and “drilling in” and coring oil wells by the reverse circulation method.

King 30, 40, 50, and 60KG Swivels provide the same oversize watercourse as the King XV series, and also feature a washpipe with adjustable Chevron V-Type packing.

They are streamlined and compactly constructed. They are made of high-grade alloy steel and have great capacities, proportionate to their weights.

The bearings are angular-contact type ball bearings. Weight of the drill pipe (downthrust) is carried on quadruplex units. The (4) four bearings in this unit are flush ground, on their faces and matched so that each bearing will support its share of the load.*

Reverse loads (upthrusts) are absorbed by a single bearing that is mounted opposed to the quadruplex unit. The type of bearings used and the manner in which they are mounted provide ample radial capacity to stabilize the swivels.

The packing unit consists of a stuffing box and Chevron V-Type packing.

These swivels can be repacked, within a few minutes, without “breaking out” any connection. The entire packing assembly can be replaced in 10 minutes or less. It is not necessary to remove any other part of the swivel to repack. This eliminates the possibility of thread-galling.

Because of the large oversize watercourse and packing arrangement, these swivels are ideally suited for both conventional and reverse circulation methods.

Features in Brief

- Oversize watercourses permit circulation of more drilling fluids.
- Multiple ball bearing units provide ample thrust and radial capacities.*
- Sealed housing protects the bearings and retains lubricant.
- Grease lubrication of the bearings is accomplished through a readily accessible fitting.
- Choice of conventional bail or elevator shank.
- Zerk fitting in stuffing box simplifies lubrication and greatly prolongs life of Chevron V-Type packing.
- Packing components and assemblies are interchangeable in types 30, 40, 50 and 60KG Swivels.

These swivels are furnished with a conventional bail or a plain elevator shank, at the option of the purchaser. Shanks, for use with more than one size elevator, will be furnished to order at an extra cost. Shanks can be furnished for use in connection with “bottleneck” elevators.

Kelly connection on the 30KG Swivel is 4 1/2”, 8-V, left-hand thread, 3/4” TPF drill pipe. This accommodates a 3” watercourse through the swivel.

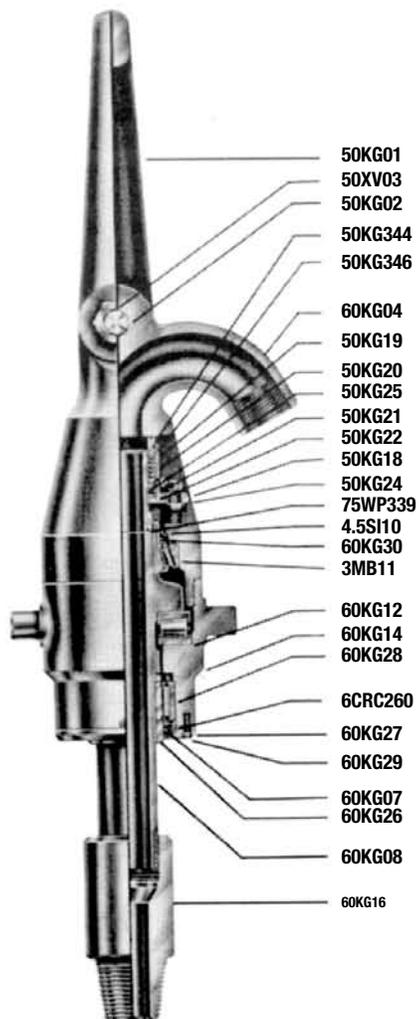
Kelly connection on the 40KG Swivel is 3 1/2” API specification, full hole pin, left hand thread. If a three-inch watercourse is required, through the swivel, a 4 1/2” left hand thread, drill pipe thread will be substituted for the tool joint pin at no extra charge.

Kelly connection on the 50KG and 60KG Swivels is 4 1/2” API, regular tool joint pin, left hand thread. If 3” watercourse is required, a 6 5/8” regular, left hand pin, will be furnished at extra cost.

When a swivel is purchased, an extra set of packing and a hardened and ground washpipe should be purchased. The swivel should never be in operation without these extra parts on hand.

These swivels are designed to operate efficiently at relatively high rotating speeds.

*The 60KG Swivel features tapered bearings.



30KG, 40KG, 50KG, 60KG

Capacity and Safety Data*

Type Swivel	Capacity, lbs. at 100 R.P.M.	Static Load Limit, lbs.	Safe Depths (Feet) with Drill Pipe			
			2 3/8" 6.65 lbs.	2 7/8" 10.4 lbs.	3 1/2" 13.3 lbs.	4 1/2" 16.6 lbs.
30KG	44,000*	95,000	6,400	4,000	3,400	2,600
40KG	54,000*	140,000	8,000	5,000	3,800	3,000
50KG	65,000	160,000	10,000	6,200	4,800	3,805
60KG	88,000	160,000				

(API Rating)

*Non oilfield rating.

Swivel Type	Lower (Kelly) Connection	Weight lbs.*	Length Overall	Working Length	Hose Conn.	Diameter Watercourse	Bail Opening
30KG	4 1/2" D.8-V, L.H., 3/4" TPF	225	45"	37"	3" NPT	3"	5" x 8" or 6" x 14"
40KG	3 1/2" API F.H. Pin, LH	347	57"	50"	3" NPT	2 1/2"	6" x 14"
40KG	4 1/2" D.8-V, L.H., 3/4" TPF	347	57"	50"	3" NPT	3"	6" x 14"
50KG	4 1/2" API Reg. Pin, LH	512	63"	55"	3" NPT	2 1/2"	7" x 16"
50KG	6 5/8" API Reg. Pin, LH	593	67"	59"	3" NPT	3"	7" x 16"
60KG	6 5/8" API Reg. Pin, LH	625	71"	59"	3" NPT	3"	7" x 16"

Parts List for Type KG King Swivels

Name of Part	Number Required	30KG			40KG			50KG		
		Part Number	Net Weight lbs.	Spares for One Year Service	Part Number	Net Weight lbs.	Spares for One Year	Part Number	Net Weight lbs.	Spares for One Year Service
Bail	1	N30KG01	26	...	N40KG01	52	...	N50KG01	74	...
Bail (6" x 14")	1	N32GA10	32	...	...	30	...	...	...	...
Elevator Shank	1	N30KG01E	48	...	N30KG01E*	62	...	N50KG01E	73	...
Bail Gudgeon Pin	1	N32GA11	6 1/4	...	N40KG02	11 3/4	...	N50KG02	14 1/2	...
Bail Pin Nuts	2	N32GA11 A	2 (2)	...	N50KG02A	3 (2)	...	N50KG02A	3 (2)	...
Gooseneck	1	N30KG04	64	...	N40KG04	87	...	N50KG04	129	...
Housing Seals	1	N30XV07	1/2	2	N4S07	1/2 (3)	3	N30XV07	1/4	1
Housing Seals	2	...	...	...	...	...	...	N50KG07	3/4 (2)	2
Bearing Spindle	1	N50KG08	18	...	N40KG08	23 1/2	...	N50KG08	39	...
Shield Seal	1	N30XV09	1/2	1	N30XV09	1/2	1	N50XV09	1/16	1
Bearing Shield	1	N30XV10	3/4	...	N30XV10	3/4	...	N50KG10	7/8	...
Bearing Retainer Wire	1	N30XV11	1/16	...	N30XV 11	1/16	...	N50KG11	1/8	...
Bearing	1 set	N30XV12	26 (4)	1 set	N30XV12	34 (5)	1 set	N50KG12	46 (5)	1 set
Bearing Housing	1	N30KG14	40	...	N40KG14	63	...	N50KG14A	85	...
Housing Lock Bolt	1	N50XV15	1/4	...	...	1/4	...	N50XV15	1/4	...
Spindle Thread Seal	1	N50KG17	1/8	...	N50KG17	1/8	...	N50KG17	1/8	...
O-Ring	1	N75WP339	1/8	2	N75WP339	1/8	2	N75WP339	1/8	2
O-Ring	1	N50KG344	1/8	2	N50KG344	1/8	2	N50KG344	1/8	2
O-Ring	1	N50KG346	1/8	2	N50KG346	1/8	2	N50KG346	1/8	2
Stuffing Box	1	N50KG18	12 1/4	1	N50KG18	1/8	1	N50KG18	12 1/4	1
Packing Gland	1	N50KG19	2	1	N50KG19	12 1/4	1	N50KG19	2	1
Packing	1 set	N50KG20	1/2	6 sets	N50KG20	1/2	6 sets	N50KG20	1/2	6 sets
Lantern Ring	1	N50KG21	1	1	N50KG21	1	1	N50KG21	1	1
Packet Seat Ring	1	N50KG22	1/2	1	N50KG22	1/2	1	N50KG22	1/2	1
Adjusting Lock Nut	2	N50KG23	1/4	...	N50KG23	1/4	...	N50KG23	1/4	...
Adjusting Screw	2	N50KG24	1/2	...	N50KG24	1/2	...	N50KG24	1/2	...
Washpipe	1	N50KG25	4 1/2	3	N50KG25	4 1/2	3	N50KG25	4 1/2	3

* 50KG requires one 30XV07 upper housing seal and two 50XV07 lower housing seals. ** Downthrust bearings should always be replaced with full matched sets.

Parts List for 60KG King Swivel

Part Number	Name of Part	Number Required	Net Weight lbs.	Spares for One Year Service	Part Number	Name of Part	Number Required	Net Weight lbs.	Spares for One Year Service
N50KG01A	Bail	1	75	-	N50KG20	Packing Set	1	1/2	6
N50KG02	Bail Pin	1	15	-	N50KG21	Lantern Ring	1	1	1
N50KG03	Bail Pin Nut	2	2 (2)	-	N50KG22	Packing Seat Ring	1	1/2	1
N60KG04	Gooseneck	1	130	-	N50KG24	Adjusting Screw w/Nuts	2	1 1/2 (2)	-
N60KG07	Housing Seal	1	1/4	1	N50KG25	Washpipe	1	4 1/2	3
N60KG08	Spindle	1	85	-	N60KG26	Lower Wear Sleeve	1	2 1/2	-
N4.5SI10	Housing Seal	1	1/4	1	N60KG27	Lower Oil Box	1	6	-
N3MB11	Upper Bearing	1	12	1	N60KG28	Lower Bearing	1	12	-
N60KG12	Main Bearing	1	25	1	N60KG29	Cap Screws	6	1 (6)	-
N60KG14	Bearing Housing	1	85	-	N60KG30	Upper Wear Ring	1	2	-
N60KG16	Lower Connection	1	76	-	N6CRC260	O-Ring (Oil Box)	1	1/4	1
N50KG18	Stuffing Box	1	12 1/4	1	N75WP339	O-Ring (Washpipe)	1	1/4	3
N50KG19	Packing Gland	1	2	1	N50KG344	O-Ring (Pkg. Gland)	1	1/4	2
					N50KG346	O-Ring (Pkg. Gland)	1	1/4	2

Swivel

32GA, 53GA



TYPE GA SWIVEL
PATENTED
WITH BALL

For drilling shallow oil wells, core drilling, slim hole drilling and working over oil wells

The GA Swivels have been popular for many years. They have proved to be rugged, dependable and durable. They are in use around the world for drilling shallow oil wells, exploration drilling, water well drilling and on lease service jobs.

The bearings are angular-contact type ball bearings. Weight of the drill pipe (downthrust) is carried on quadruplex units. The (4) four bearings are flush ground, on their faces and matched so that each bearing will support its share of the load.

Reverse loads (upthrust) are absorbed by a single bearing, in the 32GA, and a duplex set in the 53GA. These upthrust bearings are mounted opposed to the quadruplex units.

The type of bearings used and the manner in which they are mounted provide ample radial stability for the swivels.

These swivels are furnished with either a bail or elevator shank, at the option of the purchaser.

Features in Brief

- Packaging is often called Chevron V-Type.
- Washpipes are seamless alloy tubes, casehardened and ground.
- Grease lubrication for the packing.
- Multiple ball bearing units provide ample capacity.
- Oil bath lubrication for the bearings.
- Choice of bail or elevator shank.



WITH SHANK

Weights and Dimensional Data

Type	Weight lbs.	Length Overall	Working Length	Lower Conn., Drill Pipe Thread, LH	Hose Connections	Size Washpipe	Bail Openings
32GA	170	42"	35"	3 1/2" O.D., 8-V	2" NPT	1 1/2"	6" x 14"
53GA	340	52"	45"	4 1/2" O.D., 8-V	2 1/2" NPT	2"	7 1/2" x 18"

Capacity and Safety Data

Type Swivel	Capacity, lbs. at 100 R.P.M.	Static Load Limit, lbs.	Safe Depths (Feet) With Drill Pipe			
			2 3/8" 6.65 lbs.	2 7/8" 10.4 lbs.	3 1/2" 13.3 lbs.	4 1/2" 16.6 lbs.
32GA	39,000	80,000	3,900	2,600	2,000	
53GA	60,000	120,000	6,000	4,000	3,100	2,400

Parts List for Type 53GA King Swivel

Part Number	Name of Part	Number Required	Net Weight lbs.	Spares for One Year Service
53GA	Swivel Complete	...	340*	...
N53GA01	Gooseneck	1	70	...
N53GA02	Outer Housing	1	51	...
N53GA03	Bearing Housing	1	74	...
N53GA04	Housing Lock Nut	1	13 1/2	...
N53GA05	Packing Gland	1	4	1
N53GA06	Gland Bolts and Nuts	2 each	1 1/2 (2)	2
N53GA07	Lantern Ring	1	3/4	1
N53GA08	Packing	1 set	3/4	6 sets
N53GA09	Washpipe	1	6 1/4	3
N53GA10	Bail	1	53	...
N53GA10E	Elevator Shank**	1	65	...
N53GA11	Bail Gudgeon	1	10	...
N32GA11A	Gudgeon Retainer Nuts	2	1 1/8 (2)	...
N20XV09A	Felt Washer	1	1/32	1
N53GA14	Upper Housing Seal	1	1/2	1
N53GA15	Bearing***	1 set (6)	25	1 set
N53GA16	Bearing Spacer	1	1/2	...
N53GA18	Bearing Lock Nut	1	4 7/8	...
N53GA19	Lower Housing Seal	2	1 1/8 (2)	2

*Swivel boxed for export weighs approximately 410 lbs.

** State size of elevator when ordering shank.

***Downthrust bearings should always be replaced by full matched sets. Never renew one or two bearings in an old set.

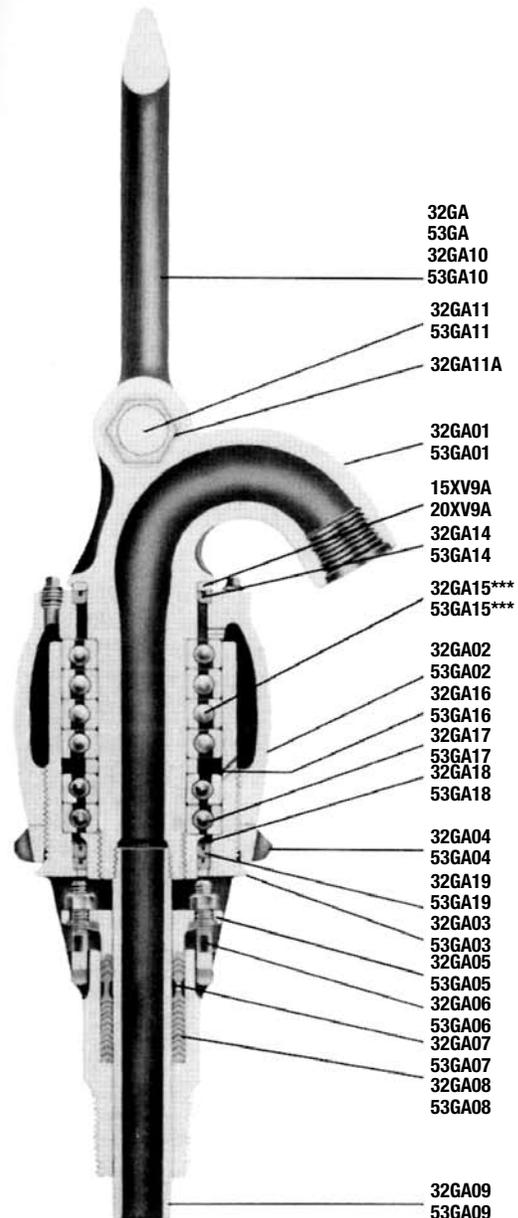
Parts List for Type 32GA King Swivel

Part Number	Name of Part	Number Required	Net Weight lbs.	Spares for One Year Service
32GA	Swivel Complete	...	170*	...
N32GA01	Gooseneck	1	37 1/2	...
N32GA02	Outer Housing	1	24	...
N32GA03	Bearing Housing	1	34	...
N32GA04	Housing Lock Nut	1	5	...
N32GA05	Packing Gland	1	2 5/8	1
N32GA06	Gland Bolts and Nuts	2 each	1 (2)	2
N32GA07	Lantern Ring	1	1/2	1
N32GA08	Packing	1 set	3/8	6 sets
N32GA09	Washpipe	1	3 7/8	3
N32GA10	Bail	1	32	...
N32GA10E	Elevator Shank**	1	46	...
N32GA11	Bail Gudgeon	1	6 1/2	...
N32GA11A	Gudgeon Retainer Nuts	2	1 (2)	...
N15XV9A	Felt Washer	1	1/32	1
N32GA14	Upper Housing Seal	1	3/8	1
N32GA15	Bearing***	1 set (5)	12	1 set
N32GA16	Bearing Spacer	1	3/8	...
N32GA18	Bearing Lock Nut	1	3 1/4	...
N32GA19	Lower Housing Seal	1	3/8	1

*Swivel boxed for export weighs approximately 220 lbs.

** State size of elevator when ordering shank.

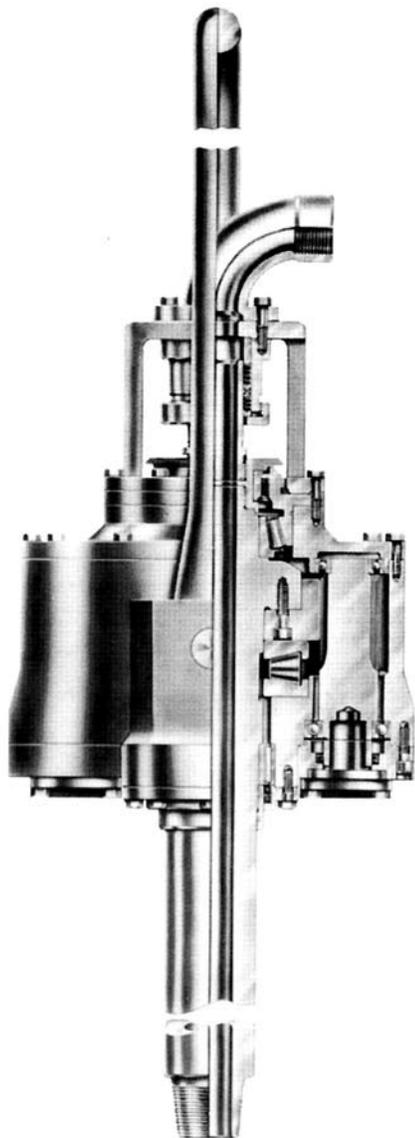
***Downthrust bearings should always be replaced by full matched sets. Never renew one or two bearings in an old set.



The bearings in the 32GA and 53GA Swivel should be lubricated with a medium weight oil of good quality. Packing boxes are equally equipped with a grease fitting and packing should be lubricated often with water pump grease.

Power Swivel

15PS



Features in Brief

- Maximum working pressure is insured by multi-ring, pressure sealing, Chevron V-Type, adjustable packing. Interior design provides all bearings and gears with a flood of oil.
- Spherical roller, main bearings and radial lower bearing give stability and durability.
- Rotating parts are driven by a high pressure, dependable, gear-type motor through a single reduction spur gear pinion.
- Two extensions of the bail pins are provided for torque arms.
- Ease of maintenance is designed into swivel and drive, no special tools are required.

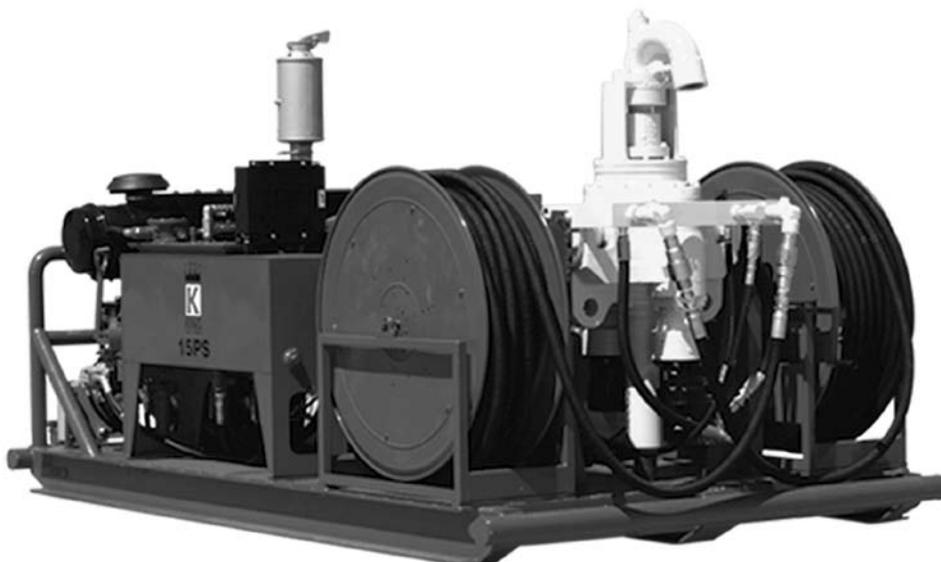
Swivel Specifications

Static Hook Capacity	150 Tons
Dynamic Capacity	97 Tons @ 100 R.P.M.
Spindle Connection*	4 1/2" API Reg. (RH) Pin
Spindle Bore	2 5/8" I.D.
Gooseneck Connection	3" API Line Pipe Box
Maximum Working Pressure	5,000 P.S.I.
Washpipe Packing	Floating type Multi-Ring, Pressure Sealing Type
Lubrication	Oil Bath
Fluid Motor	Two gear Type, 3,000/5,000 P.S.I. continuous working pressure
Torque Arms	Extension of Bail Pins or Bolted on Type
Gear Ratio Spur Gear Pinions	Single Reduction of 4.311 with Dual
Hydraulic Connectors	Quick Disconnects, Optional

*Other tool joints can be furnished per customer's request.

Hydraulic Specifications

Rated Continuous Flow & Pressure	90 G.P.M. @ 3,000 P.S.I. or 45 G.P.M. @ 5,000 P.S.I.
Maximum Speed	160 R.P.M.
Maximum Torque	10,790 ft. lbs.



Features in Brief

- Maximum working pressure is insured by multi-ring, pressure sealing, V-type, adjustable packing.
- Interior design provides all bearings and gears with a flood of oil.
- Spherical roller, main bearings and radial lower bearing give stability and durability.
- Rotating parts are driven by a high pressure, dependable, gear-type motor through a single reduction spur gear pinion.
- Two extensions of the bail pins are provided for torque arms.
- Ease of maintenance is designed into swivel and drive, no special tools are required.

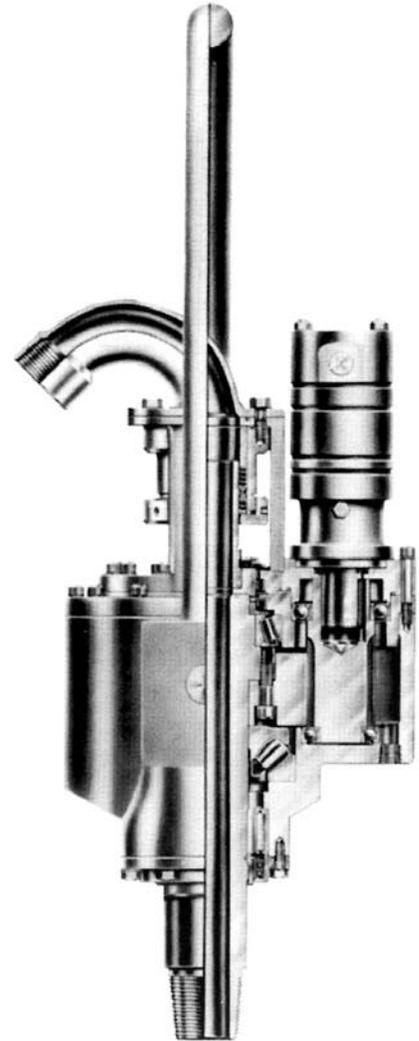
Specifications

Static Hook Load	85 Tons
Dynamic Hook Load	55 Tons @ 100 R.P.M.
Spindle Connection*	3 1/2" API I.F. (RH) Pin
Spindle Bore	2 3/4" I.D.
Gooseneck Connection	3" API Line Pipe Box
Maximum Working Pressure	3,000 P.S.I.
Washpipe Packing	Multi-Ring, Pressure Sealing Type
Lubrication	Oil Bath
Fluid Motor	One gear type, 3,000 P.S.I. continuous working pressure, 10% intermittent duty pressure to 3,500 P.S.I. two speed motor
Torque Arms	Two-Extension of bail pins
Gear Ratio	Single Reduction of 3.62:1 with single spur gear pinion
Hydraulic Connections	Pressure Port 1 5/16" 12 UNC-3B Str.
Quick Disconnects Optional	

*Other tool joints can be furnished per customer's request.

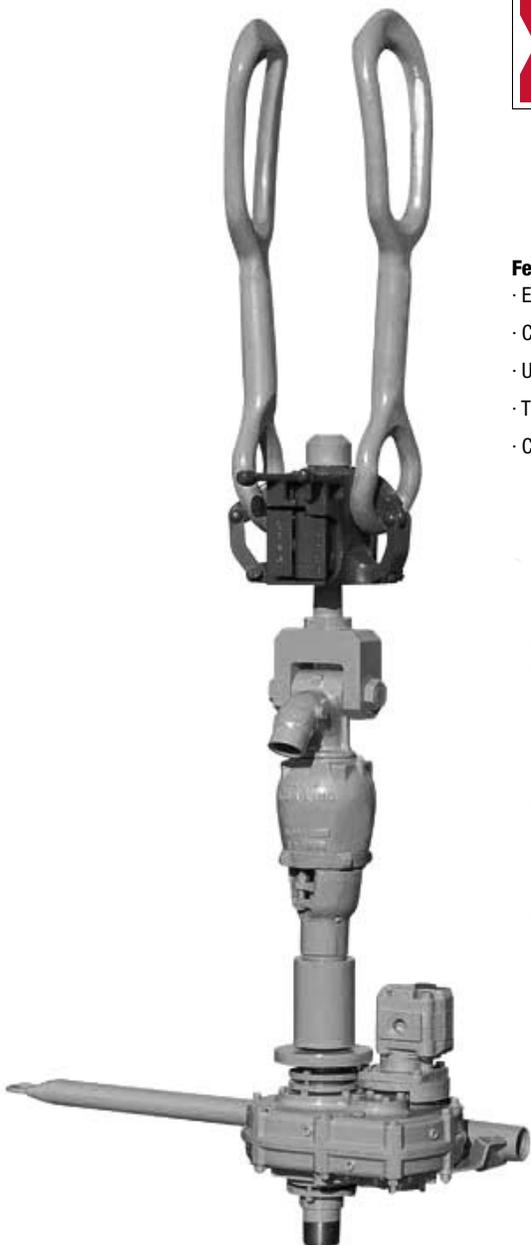
Performance

Rated Continuous Flow & Pressure	45 G.P.M. @ 3,000 P.S.I.
Maximum Speed @ Rated Flow & Pressure	to 190 R.P.M.
Maximum Torque @ Rated Flow & Pressure	5,249 ft. lbs.



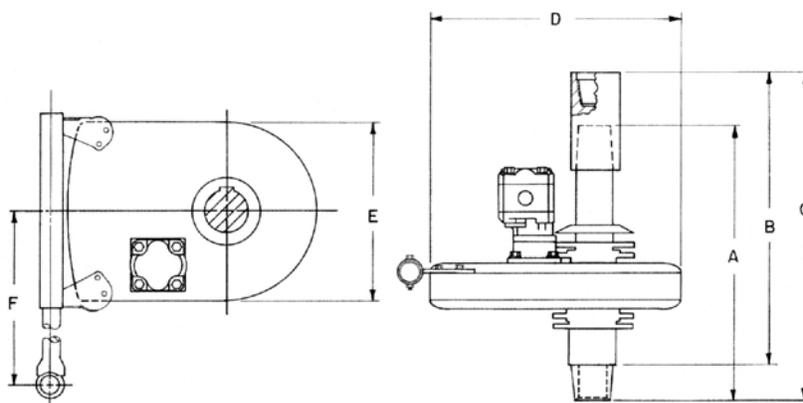
Power Sub

515V, 615V



Features in Brief

- Economical way to rotate your string of pipe for drilling and milling of light jobs at shallower depths
- Combination of Power Sub with King's long time proven swivels make a match for small to medium jobs
- Utilizes the hydraulics of the rig or like equipment on location
- The Power Sub and swivel can be the tool to save the expense and unnecessary equipment
- Can be combined with hydraulic power united to be self contained for quick and easy application



Model	DIMENSIONS						Top Sub Threads	Lower Quill Threads
	A	B	C	D	E	F		
515 V	18"	19 1/8"	23 1/8"	18 5/16"	13 1/8"	36	3 1/2 API 8V LH 4 1/2 API 8V LH (OPT)	2 7/8 EUE 8RD RH
615 V	20"	24 1/4"	27 1/4"	28 1/4"	20 1/4"	36	4 1/2 API REG LH 4 1/2 API 8V LH (OPT)	3 1/2 EUE 8RD RH

Dimensional Data

Model	Gear Box Ratio	HYD. Motor Porting	Weight Dry, lbs.	MIN Fluid Passage	MAX Static Load Rating, lbs.	MAX Torque	MAX Quill Speed
515 V	15.38:1	1 5/8-12 SAE O-RING PORT	263	1 1/2"	63,000	1410 FT-LB @ 2000 PSI	130 RPM @ 36 GPM
615 V	15.33:1	1 1/2 SAE O-RING PORT	362	2"	110,000	2478 FT-LB @ 2000 PSI	130 RPM @ 60 GPM

Circulating Heads

4SC, 5SC, 7SC

Fire wire coring, sidewall coring, sampling and well logging

These units have ample thrust and radial bearing capacities to withstand continuous rotation over long periods of time. Bearings are grease lubricated and enclosed in an alloy steel housing. A short, compact design requires minimum space.

Connections

Lower connection: 4 1/2" API IF RH PIN*
 Upper connection: 4" female line pipe*
 Hose connection: 3" female line pipe*

**Other connections available at customer request.*

Weights and Dimensions

Model	Overall Length	Fluid Passage	Working Pressure	Weight lbs.	Export Weight lbs.
4SC	25 3/4"	3"	3,000 P.S.I.	175	230
5SC	34"	3"	6,000 P.S.I.	185	245
7SC	40"	2 3/4"	10,000 P.S.I.	460	500

Parts List 4SC

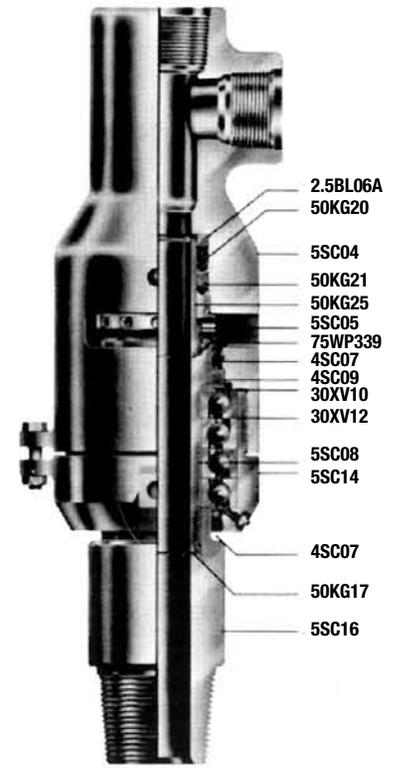
Part No.	Name of Part	Number Required	Weight lbs.	Spares for One Year Service
N4SC04	Body	1	70	-
N30XV05	Packing	2	1/4 (2)	4
N4SC06	Wear Bushing	1	1	1
N4SC07	Housing Seal	2	1/2 (2)	2
N4SC08	Bearing Spindle	1	18	-
N4SC09	Felt Seal	1	1/4	1
N4SC10	Bearing Shield	1	1/2	-
N4SC12	Bearings	4	4	4
N4SC14	Bearing Housing	1	18	-
N50KG15	Housing Lock Bolt	1	1/2	-
N4SC16	Lower Connection	1	50	-
N50KG17	Spindle Thread Seal	1	1/4	1

Parts List 5SC

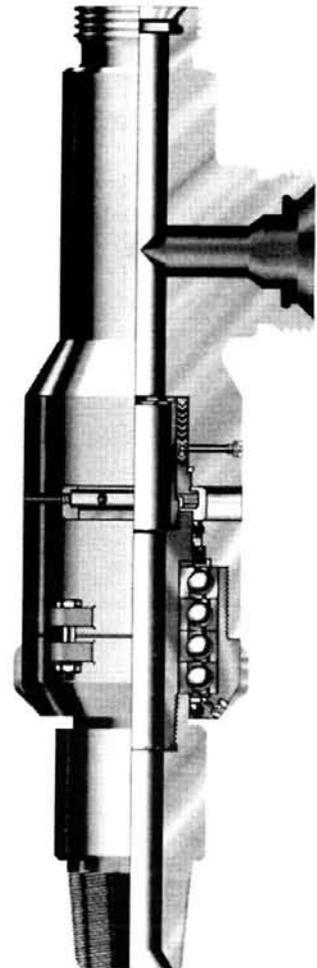
Part No.	Name of Part	Number Required	Weight lbs.	Spares for One Year Service
N5SC01	Body	1	75	-
N2.5 BL06	Packing Nut	1	4	-
N2.5BL06A	Packing Seat Ring	1	1/8	2
N4SC07	Housing Seal	2	1/2 (2)	2
N5SC08	Bearing Spindle	1	22	-
N30XV09	Shield Seal	1	1/2	1
N30XV10	Bearing Shield	1	3/4	-
N30XV12	Bearings	4	4	4
N5SC14	Bearing Housing	1	45	-
N50KG15	Housing Lock Bolt	1	1/4	-
N5SC16	Lower Connection	1	50	-
N50KG17	Spindle Thread Seal	1	1/4	1
N50KG20	Packing	1	1/2	2
N50KG21	Lantern Ring	1	1	1
N50KG25	Washpipe	1	4 1/2	2
N75WP339	O-Ring	1	-	2

Parts List 7SC

Part No.	Name of Part	Number Required	Weight lbs.	Spares for One Year Service
N7SC04	Body	1	75	-
N2.5 BL06	Packing Nut	1	4	-
N2.5BL06A	Packing Seat Ring	1	1/8	2
N4SC07	Housing Seal	2	1/2 (2)	2
N5SC08	Bearing Spindle	1	22	-
N30XV09	Shield Seal	1	1/2	1
N30XV10	Bearing Shield	1	3/4	-
N30XV12	Downthrust Bearing	4	4	4
N5SC14	Bearing Housing	1	45	-
N50KG15	Housing Lock Bolt	1	1/4	-
N5SC16	Lower Connection	1	50	-
N50KG17	Spindle Thread Seal	1	1/4	1
N50KG20	Packing	1	1/2	2
N50KG21	Lantern Ring	1	1	1
N50KG25	Washpipe	1	4 1/2	2
N75WP339	O-Ring	1	-	2



MODEL 5SC



MODEL 7SC

AR (Auto-Releasing) Wire Line Strippers

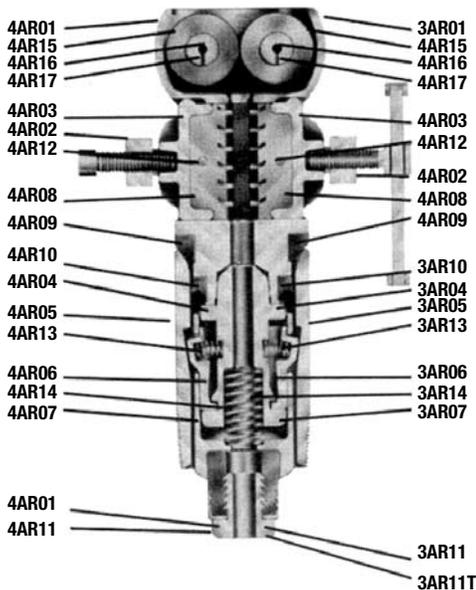
3AR, 4AR

For swabbing, tubing, wire line coring, sidewall sampling and well logging

A safe efficient and economical tool for keeping the derrick clean and dry while swabbing or pulling line wire cores and for other operations where a wire line is being run in and out of a well.

Features in Brief

- A positive latch arrangement will not release by accident or a surge of pressure in well.
- A sure release mechanism – operated by the rope socket striking the bottom of the stripper.
- A rubber shock absorber to cushion the blow of the rope socket when the stripper is released.
- Non-sparking materials minimize the fire hazard.
- Roller wire line guides on hardened steel pins, with Alemite grease nipples.
- Side openings for inserting the wire line packing rubbers. This is an aid to repacking and permits repacking when the line is in the hole.
- The packing is self-centering and does not require the compression screws to be evenly adjusted.
- The compression screws may be unscrewed enough to relax the packing, if no fluid or pressure is present, while line is being run. This method has minimum upkeep and conserves rubber. At no time should the screws be tightened unduly.
- A self-sealing packing ring seals between the stripper and latch collar. A cushion of rubber is provided to set on the latch collar.
- Convenient handholds are an aid to easy handling.



General Data 3AR and 4AR Wire Line Strippers

Type Stripper	Overall Length	Max. Size Wire Line	Inside Diam. (Max. Bore)	Weight	Collar Thread (Line Pipe)	Length Above Collar Thread
3AR	17 1/2"	5/8"	3"	43 lbs.	3" Male	14 1/2"
4AR	18 1/4"	3/4"	3 5/16"	54 lbs.	4" Male	14 1/2"

Parts List for Type 3AR Wire Line Stripper

Part Number	Name of Part	Number Required	New Weight lbs.	Spares for One Year Service
3AR	Wire Line Stripper, complete	..	43*	..
N3AR01	Body	1	11 7/8	..
N4AR01	Yoke	1	6 1/4	..
N4AR02V	Vise Type Screw	1	7/8	..
N4AR03	Stripper Rubber Holders	2	3 3/4 (2)	..
N3AR04	Latch Dog Mandrel	1	3 1/4	..
N3AR05	Latch Collar	1	9 3/4	..
N3AR06	Latch Dogs	4	1 1/8 (4)	4
N3AR07	Latch Cage	1	2 3/4	..
N4AR08	Stripper Rubbers**	1 set (2)	5/8	20 sets
N3AR09	Cushion Rubber	1	3/8	1
N3AR10	Latch Collar Seal Ring	1	1/4	2
N4AR11	Line Wear Bushing	1	5/8	3
N4AR11T	Wear Bushing Threaded for Trip Bar - 1 1/2" NPT	1	2 1/4	2
N4AR12	Packing Retainer Pins	2	1/8 (2)	2
N3AR13	Latch Dog Springs	4	1/16	4
N3AR14	Latch Cage Spring	1	1/8	1
N4AR15	Line Guide Rollers	2	1 7/8 (2)	4
N4AR16	Roller Pins	2	7/8 (2)	2
N4AR17	Roller Pin Bushings	2	5/8 (2)	2

Parts List for Type 4AR Wire Line Stripper

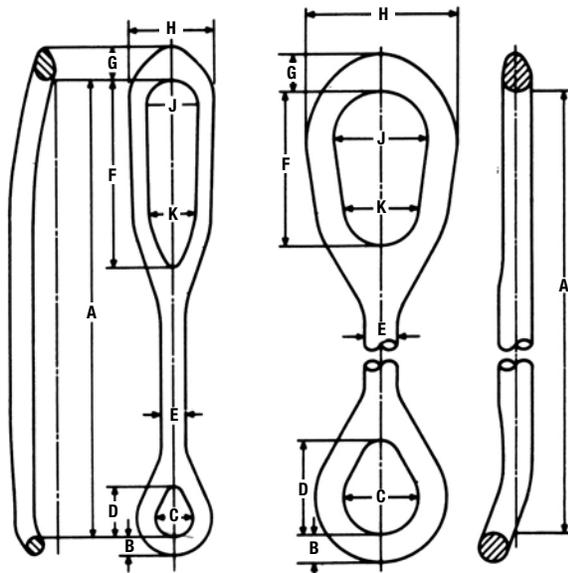
Part Number	Name of Part	Number Required	New Weight lbs.	Spares for One Year Service
4AR	Wire Line Stripper, complete	..	52*	..
N4AR01	Body	1	13 3/4	..
N4AR02V	Yoke	..	.....	..
N4AR02V	Vise Type Screw	1	7/8	..
N4AR03	Stripper Rubber Holders	2	3 3/4 (2)	..
N4AR04	Latch Dog Mandrel	1	4	..
N4AR05	Latch Collar	1	13 1/2	..
N4AR06	Latch Dogs	4	1 5/8 (4)	4
N4AR07	Latch Cage	1	3 5/8	..
N4AR08	Stripper Rubbers**	1 set (2)	5/8	20 sets
N4AR09	Cushion Rubber	1	5/8	1
N4AR10	Latch Collar Seal Ring	1	1/4	2
N4AR11T	Line Wear Bushing	1	3/4	3
N4AR11T	Wear Bushing Threaded for Trip Bar - 1 1/2" NPT	1	1 5/8	2
N4AR12	Packing Retainer Pins	2	1/8 (2)	2
N4AR13	Latch Dog Springs	4	1/8 (4)	4
N4AR14	Latch Cage Spring	1	1/4	1
N4AR15	Line Guide Rollers	2	1 7/8 (2)	4
N4AR16	Roller Pins	2	7/8 (2)	2
N4AR17	Roller Pin Bushings	2	5/8 (2)	2

Note: Parts having 4AR numbers interchange on 3AR and 4AR Strippers.

* Strippers complete, boxed for export, weigh approximately: 3AR, 75 lbs. 4AR, 85 lbs.
 **When ordering stripper rubbers, specify size of line to be used.

Elevator Link Weight & Dimensional Data

Elevator Links



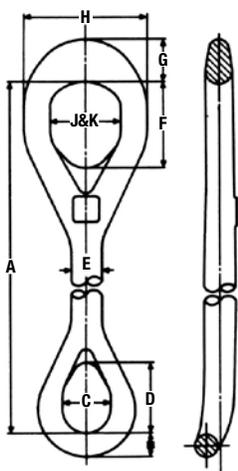
King Oil Tool's forged steel alloy elevator links are especially designed for long life and safety.

Each weldless link is forged from a single steel billet, heat treated for strength and durability and magnafluxed for integrity, then matched in sets to maintain elevator balance. Links 3 1/2" by 2 3/4" are designed for intermediate to deep drilling and workover, rated 500 ton and 350 ton per set.

Links rated at 250 tons are available in 2 1/4" stock in two-lengths – 108" for drilling and 96" for workover. Rated at 150 tons per set, 1 3/4" links are available in 84", 72", 60", 48" and 36" lengths for shallow drilling, tubing work and portable rigs.

Links rated at 65 tons per set are furnished in 1 1/2" stock and 36" and 30" lengths for water well drilling, mineral exploration and shallow drilling.

Dimensions (in inches)

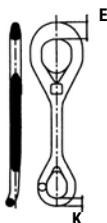


Size Dimensions	2 3/4 x 132	2 3/4 x 108	2 3/4 x 96	2 1/4 x 108	2 1/4 x 96	1 3/4 x 84	1 3/4 x 72	1 3/4 x 60	1 3/4 x 48	1 3/4 x 36
A	132	108	96	108	96	84	72	60	48	36
B	2 3/4	2 3/4	2 3/4	2 1/4	2 1/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4
C	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	4	4	4	4	4
D	8	8	8	8	8	6	6	6	6	6
E	3 1/2	3 1/2	3 1/2	2 7/8	2 7/8	2 7/8	2 7/8	2 7/8	2 7/8	2 7/8
F	10	10	10	10	10	13 1/8	13 1/8	13 1/8	13 1/8	13 1/8
G	5	5	5	5	5	3 9/16	3 9/16	3 9/16	3 9/16	3 9/16
H	14	14	14	14	14	8 3/4	8 3/4	8 3/4	8 3/4	8 3/4
J	8	8	8	8	8	5	5	5	5	5
K	8	8	8	8	8	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
Wt. Lbs. Per Set	1,000	870	800	610	550	330	290	245	245	165
Rates Ton Per Set	350	350	350	250	250	150	150	150	150	150

Additional lengths and sizes available on request.

Wear Capacity

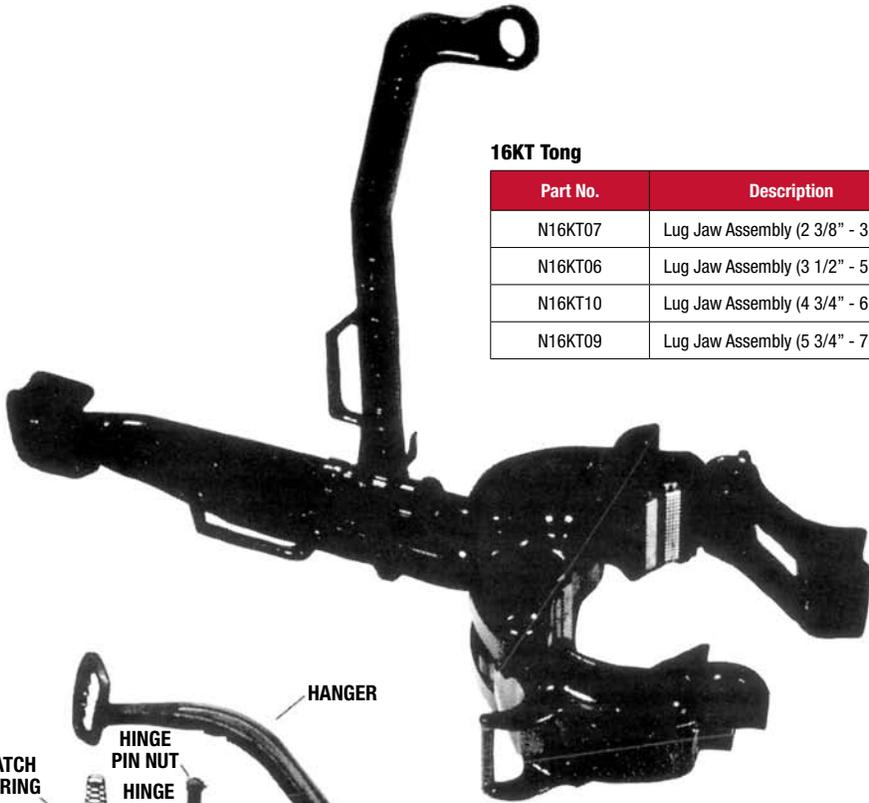
3 1/2", 2 3/4" & 2 1/4" SIZE



Upper Eye Link Size										Lower Eye Link Size									
1 1/2		1 3/4		2 1/4		2 3/4		3 1/2		1 1/2		1 3/4		2 1/4		2 3/4		3 1/2	
Dim E		Dim E		Dim E		Dim E		Dim E		Dim K		Dim K		Dim K		Dim K		Dim K	
In	Tons	In	Tons	In	Tons	In	Tons	In	Tons	In	Tons	In	Tons	In	Tons	In	Tons	In	Tons
2	65	1 7/8	150	5	250	5	350	6	500	1 1/2	65	1 3/4	150	2 1/4	250	2 3/4	350	3 1/2	500
1 5/16	57	1 13/16	129	4 3/4	250	4 3/4	298	5 3/4	430	1 7/16	59	1 5/8	130	2 1/8	220	2 5/8	319	3 3/8	465
1 7/8	55	1 3/4	125	4 1/2	250	4 1/2	280	5 1/2	410	1 3/8	55	1 9/16	120	2 1/16	210	2 1/2	290	3 1/4	430
1 3/4	50	1 5/8	116	4 1/4	250	4 1/4	263	5 1/4	385	1 5/16	49	1 17/32	114	2	198	2 3/8	250	3 1/8	395
1 5/8	46	1 1/2	105	4	245	4	245	5	365	1 1/4	45	1 1/2	111	1 7/8	173	2 5/16	245	3	365

KT Manual Tongs

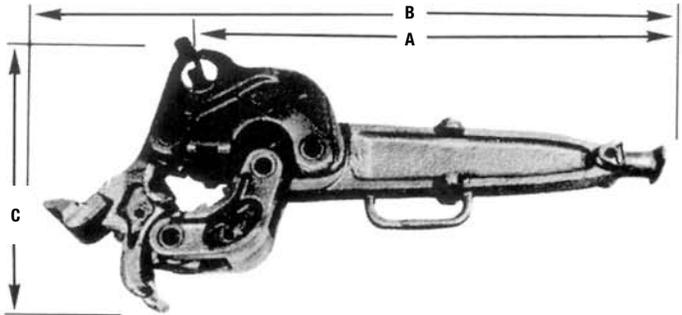
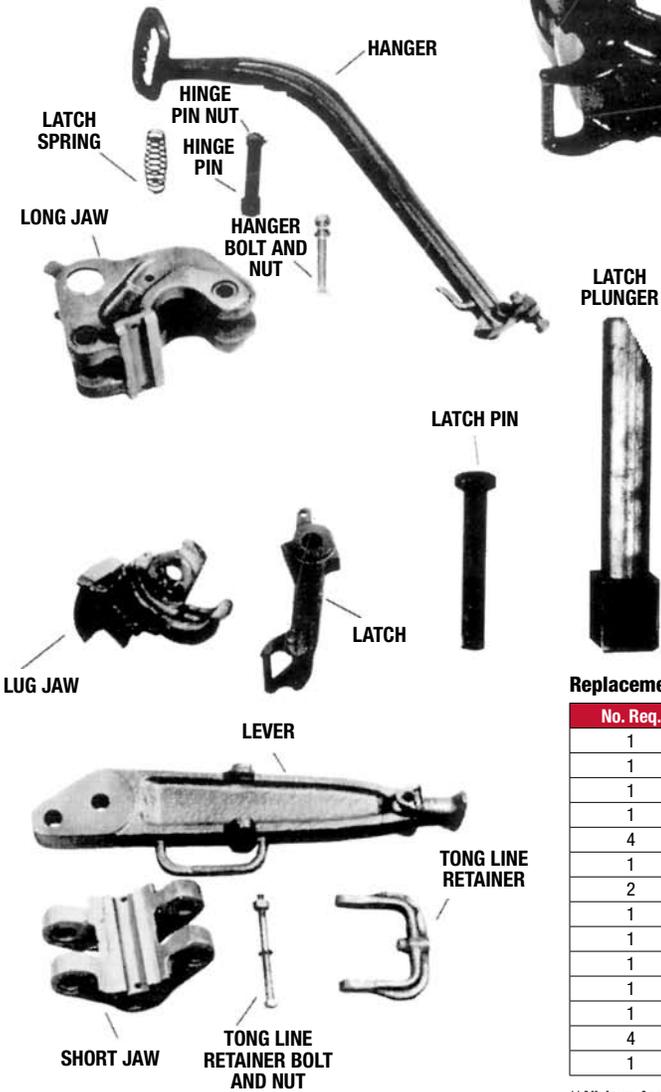
16KT Tong



16KT Tong

16,000 ft. lbs.

Part No.	Description	Torque (ft. lbs.)
N16KT07	Lug Jaw Assembly (2 3/8" - 3 1/2")	16,000
N16KT06	Lug Jaw Assembly (3 1/2" - 5")	16,000
N16KT10	Lug Jaw Assembly (4 3/4" - 6 1/4")	16,000
N16KT09	Lug Jaw Assembly (5 3/4" - 7")	16,000



Dimensional Data

Model	Type Lever	A	B	C
16KT	Std.	27"	33"	14"

Replacement Parts 16KT Tong

No. Req.	Part Name	Part No.	Wt. lbs.-ozs.
1	Lever Assembly	N16KT01	29-4
1	Tong Line Retainer	N16KT08	2-0
1	Tong Line Retainer Bolt Assembly	N16KT16	0-8
1	Long Jaw Assembly**	N16KT03A	27-0
4	Die Retainer Pin	N16KT03A	0-1
1	Short Jaw Assembly**	N16KT50	15-0
2	Tong Die	N16KT50	0-8
1	Latch	N16KT04	8-12
1	Latch Plunger	N16KT11	0-8
1	Latch Plunger Pin	N16KT13	0-1
1	Hanger Assembly	N16KT02	14-8
1	Hanger Bolt Assembly	N16KT17	0-6
4	Hinge Pin	N16KT12	01-4
1	Latch Spring	N16KT15	0-2

**All Jaws Assemblies include Cotter Pins.

Groundwater Swivels & Equipment

Swivel

1J, 2J



For drilling shot holes in marshes and jungles, for drilling household water wells, for use on light hydraulic rigs and small jetting rigs

These swivels incorporate materials best suited to the purposes. The parts are finished with the same care, and to the same precision requirements as our larger models.

The bearings are duplex, angular-contact type, mounted back to back. They are sealed in the housings, and provision is made for lubricating by means of a grease gun.

The housing parts are made of aluminum alloy castings for seismograph rigs and of nickel-iron for water well rigs.

The U-bolt bails are made of alloy steel and are heat-treated. The spindles and lower connections are also high grade steel.

The packing units consist of two molded, composition rubber rings. A hardened wear ring (wear bushing) is interposed between the rubber rings.

Weights and Dimensional Data

Type Swivel	Length, Inches	WT/lbs.		Lower Conn., NPT *	Hose Connection	Inside Diameter Watercourse
		Aluminum	Iron			
1J	13	10	15	1" or 1 1/4"	1" female NPT or 1 1/4" male NPT	7/8" or 1 1/8"
2J	14	14	21	1 1/2" or 2"	1 1/2" NPT	1 1/2"

* Special connections, at additional cost, furnished on order.

Type J swivels, safe depths at 100 R.P.M.

1J, safe depth: 500 feet with 1 1/4" standard weight pipe.

2J, safe depth: 500 feet with 2" standard weight pipe.

Parts List for Type 1J Swivel

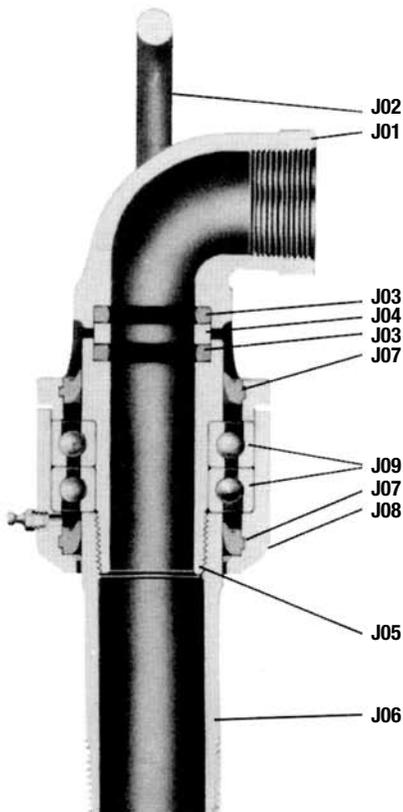
Part Number	Name of Part	Number Required	Weight		Spares for One Year Service
			lbs.	ozs.	
N1J01A	Gooseneck (Aluminum)	1	1	9	-
N1J01	Gooseneck (Iron)	1	4	2	-
N1J02	Bail w/Nuts	1	1	10	-
N1J03	Packing	2	-	1/4	6
N1J04	Wear Bushing	1	-	3	1
N1J05	Bearing Spindle	1	1	2	-
N1J06	Lower Connection	1	1	8	-
N1J07	Housing Seal	2	-	1	2
N1J08A	Bearing Housing (Aluminum)	1	1	8	-
N1J08	Bearing Housing (Iron)	1	4	-	-
N1J09	Bearings	2	1	11	2

Parts List for Type 2J Swivel

N2J01A	Gooseneck (Aluminum)	1	2	2	-
N2J01	Gooseneck (Iron)	1	5	10	-
N2J02	Bail w/Nuts	1	2	1	-
N2J03	Packing	2	-	1/2	6
N2J04	Wear Bushing	1	-	4	1
N2J05	Bearing Spindle	1	2	-	-
N2J06	Lower Connection	1	2	7	-
N2J07	Housing Seal	2	-	1 1/2	2
N2J08A	Bearing Housing (Aluminum)	1	2	-	-
N2J08	Bearing Housing (Iron)	1	5	8	-
N2J09	Bearings	2	2	4	2

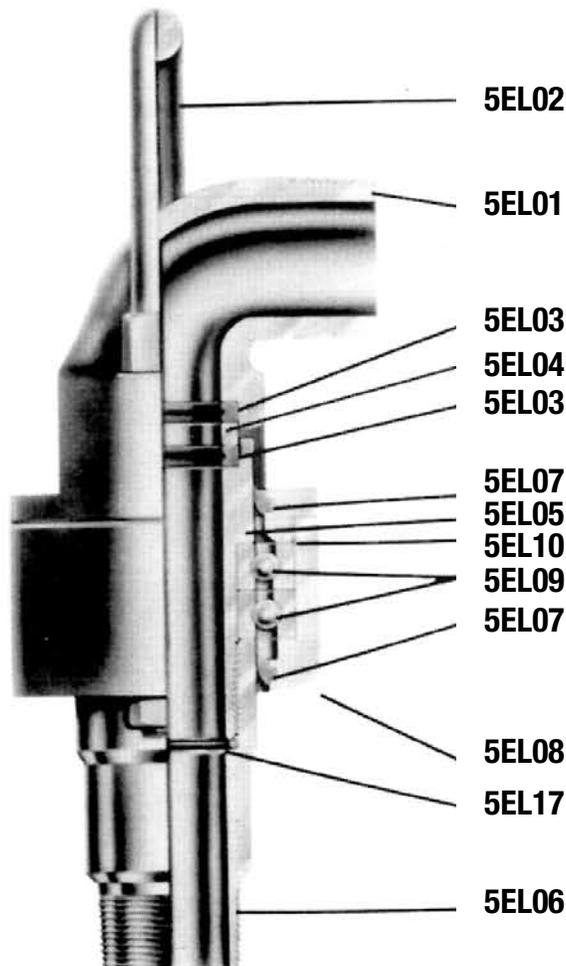
To Renew Packing

1. Screw top nuts up one-half inch on bail.
2. Separate gooseneck from housing one-half inch.
3. Remove packings and wear bushing.
4. Insert new packings and wear bushings.
5. Screw nuts back tight.



Swivel

5EL, 5PEL*



For drilling shallow to medium depth water wells and for use on light to medium hydraulic rigs

For deeper wells and heavier load capacities that cannot be accommodated by the King 2J Swivel. The bearings are duplex, angular-contact type, mounted back to back. They are sealed in the housings, which are designed to permit lubrication with a grease gun.

Spindles and lower connections are also of high grade steel. Packing consists of two molded, composition rubber rings. A hardened wear ring (wear bushing) is interposed between the rubber rings.

**Note: Type 5PEL (not shown) is similar in construction to the 5EL except for its gooseneck, which is similar to the PXV.*

Weight and Dimensional Data

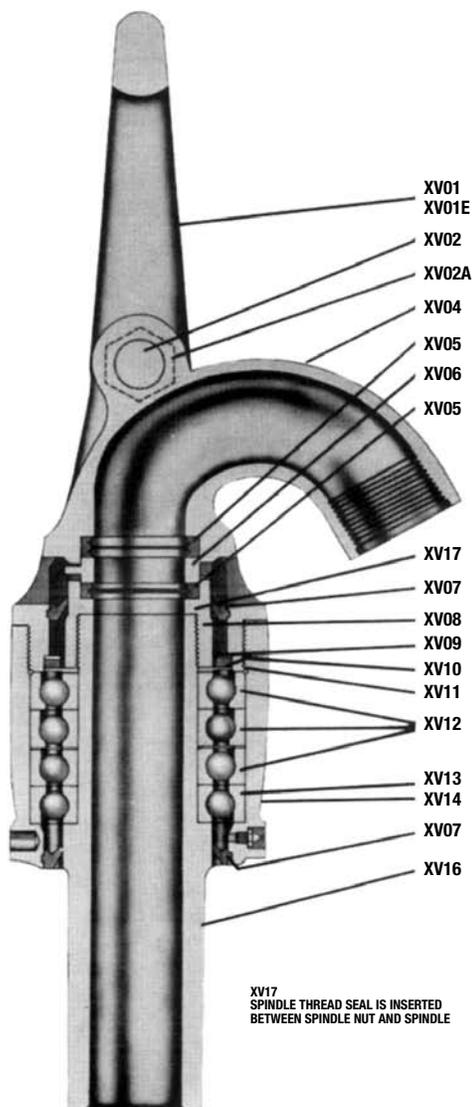
Length	Weight	Lower Connection, NPT	Hose Connection	Diameter Watercourse
16 1/4"	35 lbs.	2" LH or RH	2" NPT	2"

Parts List for Type 5EL Swivel

Part Number	Name of Part	Number Required	Ibs.	ozs.
N5EL01	Gooseneck	1	10	12
N5EL02	Bail w/Nuts	1	5	4
N5EL03	Packing	2	..	..
N5EL04	Wear Bushing	1	..	4
N5EL05	Spindle	1	2	8
N5EL06	Lower Connection	1	4	..
N5EL07	Housing Seal	2	..	2
N5EL08	Bearing Housing	1	8	..
N5EL09	Bearings	2	3	8
N5EL17	Spindle Thread Seal	1	..	2
N5PEL01	Gooseneck	1	11	12

Swivel

10XV, 15XV, 20XV, 25XV, 30XV



Light swivels for circulating large volumes of fluid, for drilling water wells, geophysical drilling and core drilling

These (5) five sizes of XV Swivels were designed to fulfill a need for small, light-duty swivels that would facilitate the circulation of more drilling fluid than conventional models. They are short, compact and require little space.

These swivels, except the 10XV, can be equipped with elevator shanks. The bearings are angular-contact type ball bearings. Weight of the drill pipe (downthrust) is carried on a triplex unit.

The (3) three bearings in this unit are flush ground on the faces and matched so that each bearing will support its share of the load.

Reverse loads (upthrust) are absorbed by a single bearing that is mounted opposed to the triplex unit.

The type of bearings and the manner in which they are mounted provide ample radial capacity and stabilize the swivels.

The packing unit consists of two molded, composition rubber rings. An extremely hard wear ring (wear bushing) is placed between the two rubber rings. These rubber rings and the wear bushing replace the washpipes and stuffing boxes that are used in conventional swivels.

These swivels can be repacked, within a few minutes, without "breaking out" any connections. Adjustment of the packing is not required and no means of adjustment is provided.

The 10XV Swivel is applicable to small water well, geophysical and core drilling rigs. This swivel has a stiff bail.

The 15XV Swivel is suited to medium size water well, geophysical and core drilling rigs.

The 20XV Swivel operates efficiently on medium and large water wells, large core drilling and geophysical drilling rigs.

The 30XV Swivel is ideal for large water well rigs and is extremely useful when reaming down for pit and underreaming, prior to graveling operations. Centrifugal pumps are frequently used for circulating through this swivel.

This swivel is not recommended for high-speed rotation because the large diameter packing may fail due to generation of frictional heat.

Instructions for Lubricating

There is a grease fitting set in a recess, near the bottom of the bearing housing. This fitting is to lubricate the bearings.

Use only a good grade of neutral mineral grease that is free of all substances such as graphite or mica. Either soda soap base or lime soap base greases are satisfactory.

Lubricate every 2-3 hours of operation. If too much grease is used, the excess will squeeze out past the upper housing seal.

A slight amount of grease may be thrown from the swivel when new and after each time it is lubricated. This is of no consequence.

Features in Brief

- Oversize watercourses permit circulation of more drilling fluids.
- Molded rubber composition packaging eliminates the usual stuffing boxes.
- Hardened wear bushings eliminate conventional washpipes.
- Packaging and wear bushings are quickly renewable.
- Multiple ball bearing units provide ample thrust and radial capacities.
- Sealed housings protect the bearings and retain lubricant.
- Grease lubrication of the bearings is accomplished through a readily accessible fitting.
- Choice of conventional bail or elevator shank.

To Repack Swivel

1. Remove housing lock bolt, XV15.
 2. Unscrew bearing housing, XV14, (5) five turns off gooseneck, XV04. This is a left hand thread. Do not back off more than (5) five threads.
 3. Remove two packings, XV05, and wear bushing, XV06.
 4. Insert new parts.
 5. Screw housing back tight, then replace lock bolt.
- This completes repacking.

Note: Trunnion pins can be added to use on pull down rigs.

10XV, 15XV, 20XV, 25XV, 30XV

Parts List for Type 10XV Swivel

Part Number	Name of Part	Number Required	WT/lbs. Each	Spares for One Year Service
N10XV04	Gooseneck	1	17	...
N10XV05	Packing	2	1/8 (2)	8
N10XV06	Wear Bearing	1	1/4	2
N10XV07	Housing Seal	2	1/4 (2)	2
N10XV08	Spindle Nut	1	2	...
N10XV09	Shield Seal	1	1/8	...
N10XV10	Bearing Shield	1	1/4	...
N10XV11	Bearing Retainer Wire	1	1/16	...
N10XV12	Bearing**	1 set (4)	4 1/8	1 set
N10XV14	Bearing Housing	1	9 1/2	...
N10XV15	Housing Lock Bolt	1	1/8	...
N10XV16	Spindle	1	7	...
N10XV17	Spindle Thread Seal	1	...	2

Parts List for Type 15XV Swivel

N15XV01	Bail	1	16	...
N15XV01E	Elevator Shank*	1	32	...
N15XV02	Bail Gudgeon Pin	1	3	...
N15XV03	Bail Pin Nuts	2	1 (2)	...
N15XV04	Gooseneck	1	28	...
N15XV05	Packing	2	1/4 (2)	8
N15XV06	Wear Bushing	1	1/2	2
N15XV07	Housing Seal	2	3/8 (2)	2
N15XV08	Spindle Nut	1	3 1/2	...
N15XV09	Shield Seal	1	1/4	1
N15XV10	Bearing Shield	1	3/8	...
N15XV11	Bearing Retainer Wire	1	1/8	...
N15XV12	Bearing**	1 set (4)	7 1/2 (3)	1 set
N15XV14A	Bearing Housing	1	16	...
N15XV15	Housing Lock Bolt	1	1/4	...
N15XV16	Spindle	1	15	...
N15XV17	Spindle Thread Seal	1	...	2

Parts List for Type 20XV Swivel

N20XV01	Bail	1	21	...
N20XV01E	Elevator Shank*	1	38	...
N20XV02	Bail Gudgeon Pin	1	4	...
N20XV11A	Bail Pin Nuts	2	1 (2)	...
N20XV04	Gooseneck	1	43	...
N20XV05	Packing	2	1/4 (2)	8
N20XV06	Wear Bushing	1	1	2
N20XV07	Housing Seal	2	1/2 (2)	2
N20XV08	Spindle Nut	1	4 1/2	...
N20XV09	Shield Seal	1	3/8	1
N20XV10	Bearing Shield	1	1/2	...
N20XV11	Bearing Retainer Wire	1	1/8	...
N20XV12	Bearing**	1 set (4)	9 3/4 (3)	1 set
N20XV14	Bearing Housing	1	28	...
N20XV15	Housing Lock Bolt	1	1/4	...
N20XV16	Spindle	1	28	...
N20XV17	Spindle Thread Seal	1	...	2

Type XV Swivels Weight and Dimensional Data

Type Swivel	Weight lbs.*	Length Overall	Working Length	Lower Conn., Drill Pipe Thread, LH	Hose Connection	Diameter Watercourse	Bail Opening
10XV	40	21"	17"	2 3/8" O.D., 8-V	1 1/2" NPT	1 1/2"	2 1/8" x 2 3/8"
15XV	95	32"	27"	2 7/8" O.D., 8-V	2" NPT	2"	3 3/4" x 8"
20XV	155	34"	29"	3 1/2" O.D., 8-V	2 1/2" NPT	2 1/2"	4 1/4" x 8"
30XV	205	39"	33"	4 1/2" O.D., 8-V	3" NPT	3"	5" x 8" or 6" x 14"

*Swivels, boxed for export, weigh approximately: 10XV, 70 lbs.; 15XV, 140 lbs.; 20XV, 200 lbs. 30XV, 260 lbs.

Capacity and Safety Data

Type Swivel	Capacity, lbs. at 100 R.P.M.	Static Load Limit, lbs.	Safe Depth (Feet) With Drill Pipe			
			2 3/8" 6.65 lbs.	2 7/8" 10.4 lbs.	3 1/2" 31.3 lbs.	4 1/2" 16.6 lbs.
10XV	15,000	30,000	1,500	...	...	...
15XV	27,000	50,000	2,700	1,800	...	...
20XV	36,000	70,000	3,600	2,400	1,800	...
30XV	50,000	90,000	5,000	3,300	2,600	2,100

Parts List for Type 25XV Swivel (For Parts Only)

Part Number	Name of Part	Number Required	WT/lbs. Each	Spares for One Year Service
N20XV01	Bail	1	21	...
N20XV01E	Elevator Shank*	1	38	...
N20XV02	Bail Gudgeon Pin	1	4	...
N20XV03	Bail Pin Nuts	2	1 (2)	...
N20XV04	Gooseneck	1	43	...
N20XV05	Packing	2	1/4 (2)	8
N20XV06	Wear Bushing	1	1	2
N20XV07	Housing Seal	2	1/2 (2)	2
N20XV08	Spindle Nut	1	4 1/2	...
N20XV09	Shield Seal	1	1/2	...
N20XV10	Bearing Shield	1	1/2	...
N20XV11	Bearing Retainer Wire	1	1/8	...
N20XV12	Bearing**	1 set (5)	16	1 set
N25XV14	Bearing Housing	1	33	...
	Housing Lock Bolt	1	1	...
N25XV16	Spindle	1	32	...
N20XV17	Spindle Thread Seal	1	1/8	2

Parts List for Type 30XV Swivel

N30XV01	Bail	1	26	...
N30XV01E	Elevator Shank*	1	71	...
N30XV02	Bail Gudgeon Pin	1	6 1/2	...
N30XV02A	Bail Pin Nuts	2	1 (2)	...
N30XV04	Gooseneck	1	56	...
N30XV05	Packing	2	1/4 (2)	8
N30XV06	Wear Bushing	1	2	2
N30XV07	Housing Seal	2	1/2 (2)	2
N30XV08	Spindle Nut	1	6	...
N30XV09	Shield Seal	1	1/2	...
N30XV10	Bearing Shield	1	3/4	...
N30XV11	Bearing Retainer Wire	1	1/8	...
N30XV12	Bearing**	1 set (4)	24	1 set
N30XV14	Bearing Housing	1	42	...
N30XV15	Housing Lock Bolt	1	1/4	...
N30XV16	Spindle	1	37	...
N50KG17	Spindle Thread Seal	1	...	2

* When ordering elevator shank, state size of elevator.

**Downthrust Bearings, when being renewed, should be replaced with full matched sets. Never renew one or two bearings in an old set.

Swivel

10PXV, 15PXV, 20PXV, 25PXV, 30PXV



Illustration represents one possible configuration. The swivel can be equipped with trunnion pins to fit rig requirements.

For rigs equipped with mechanical pulldown

The bearings are angular-contact type ball bearings. Weight of the drill pipe (downthrust) is carried on a duplex unit. The (2) two bearings in this unit are flush ground on the faces, and matched so that each bearing will support its share of the load.

Reverse loads (upthrust) are absorbed by double bearings that are mounted opposed to the downthrust unit.

The type of bearings and the manner in which they are mounted provide ample radial capacity to stabilize the swivels.

The packing unit consists of (2) two molded, composition rubber rings. An extremely hard wear ring (wear bushing) is placed between the two rubber rings. These rubber rings and the wear bushing replace the washpipes and stuffing boxes that are used in conventional swivels.

These swivels can be repacked, within a few minutes, without "breaking out" any connections. Adjustment of the packing is not required and no means of adjustment is provided.

The 10PXV Swivel is applicable to small water well, geophysical and core drilling rigs.

The 15PXV Swivel is suited to medium size water well, geophysical and core drilling rigs.

The 20PXV Swivel operates efficiently on medium and large water wells, large core drilling and geophysical drilling rigs.

The 30PXV Swivel is ideal for large water well rigs, and is extremely useful when reaming down for pit and underreaming, prior to graveling operations. Centrifugal pumps are frequently used for circulating through this swivel.

This swivel is not recommended for high speed rotation, because the large diameter packing may fail, due to generation of frictional heat.

Features in Brief

- Oversize watercourses permit circulation of more drilling fluids.
- Molded rubber composition packing eliminates the usual stuffing boxes.
- Hardened wear bushings eliminate conventional washpipes.
- Packing and wear bushings are quickly renewable.
- Multiple ball bearing units provide ample thrust and radial capacities.
- Sealed housings protect the bearings and retain lubricant.
- Grease lubrication of the bearings is accomplished through a readily accessible fitting.

Instructions for Lubricating

There is a grease fitting set in a recess, near the bottom of the bearing housing. This fitting is to lubricate the bearings.

Use only a good grade of neutral mineral grease that is free of all substances such as graphite or mica. Either soda soap base or lime soap base greases are satisfactory.

Lubricate every 2-3 hours of operation. If too much grease is used, the excess will squeeze out past the upper housing seal.

A slight amount of grease may be thrown from the swivel when new and after each time it is lubricated. This is of no consequence.

Pulldown Yokes

Yokes are made of steel. The ends are left unfinished unless the customer can furnish sufficient information to enable us to make the yoke to fit the mast.

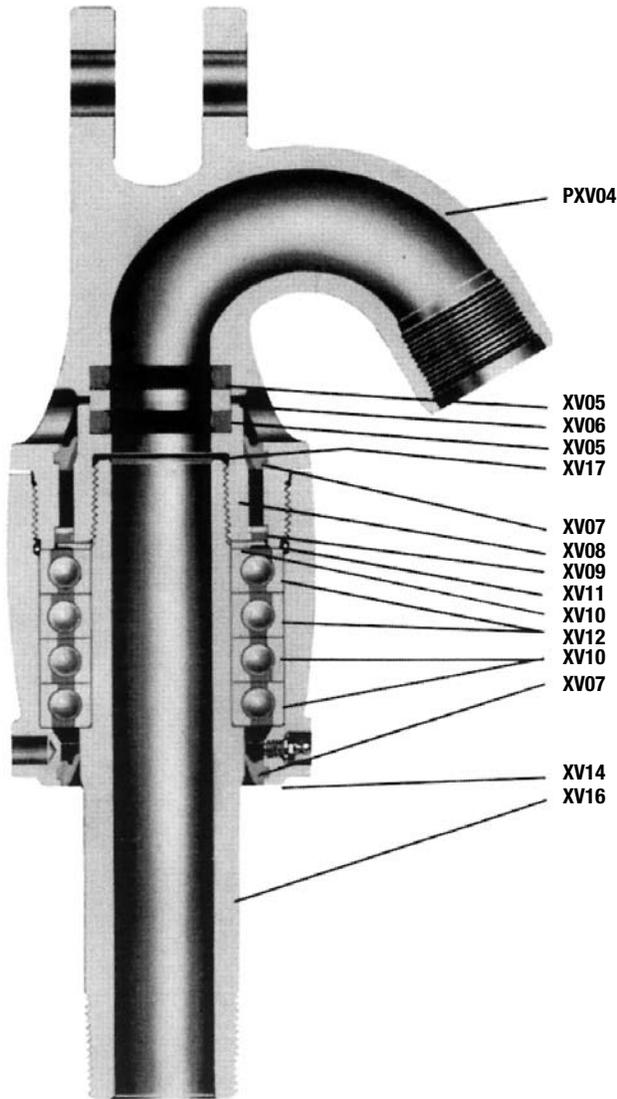
Weights and Dimensional Data

Type Swivel	Weight lbs.	Length Overall	Working Length	Lower Conn., Drill Pipe Thread, LH	Hose Connection	Diameter Watercourse
15PXV	95	29"	24"	2 7/8" O.D. 8-V	2" NPT	2"
20PXV	125	31"	26"	3 1/2" O.D. 8-V	2 1/2" NPT	2 1/2"
30PXV	185	35"	30"	4 1/2" O.D. 8-V	3" NPT	3"

Capacities and Safety Data

Type Swivel	Capacity, lbs. at 100 R.P.M.	Safe Load Limit, lbs.	Safe Depths (Feet) With Drill Pipe		
			2 3/8" 6.65 lbs.	2 7/8" 10.4 lbs.	3 1/2" 13.3 lbs.
15PXV	20,000	30,000	2,100	1,300	-
20PXV	27,000	40,000	2,700	1,800	1,400
30PXV	32,000	50,000	3,200	2,400	2,200

10PXV, 15PXV, 20PXV, 25PXV, 30PXV



Parts List for Type 30PXV Swivel

Part Number	Name of Part	Number Required	Net Weight lbs.	Spares for One Year Service
N30PXV02	Yoke Pin	1	5	...
N32GA11A	Yoke Pin Nut	2	1 1/2 (2)	...
N30PXV04	Gooseneck	1	53	...
N30XV05	Packing	2	1/4	8
N30XV06	Wear Bushing	1	2	2
N30XV07	Housing Seal	2	1/2 (2)	2
N30XV08	Spindle Nut	1	6	...
N30XV09	Shield Seal	1	1/2	...
N30XV10	Bearing Shield	1	3/4	...
N30XV11	Bearing Retainer Wire	1	1/8	...
N30XV12	Bearing*	4	16	1 set
N30XV14	Bearing Housing	1	42	...
N30XV15	House Lock Bolt	1	1/2	...
N30XV16	Spindle	1	37	...
N50KG17	Spindle Thread Seal	1	1/8	2

* When bearings are renewed, replace with a new matched pair. Do not renew one bearing in an old pair. 20PXV, 25PXV and 30PXV Swivels can be furnished with trunnion pins (similar to KM series) at additional cost.

Parts List for Type 10PXV Swivel (For Parts Only)

Part Number	Name of Part	Number Required	Net Weight lbs.	Spares for One Year Service
N10PXV02	Yoke Pin	1	1	...
N10PXV03	Yoke Pin Nut	2	1/2 (2)	...
N10XV05	Packing	2	1/8 (2)	8
N10XV06	Wear Bushing	1	1/4	2
N10XV07	Housing Seal	2	1/4 (2)	2
N10XV08	Spindle Nut	1	2	...
N10XV09	Shield Seal	1	1/8	1
N10XV10	Bearing Shield	1	1/4	...
N10XV11	Bearing Retainer Wire	1	1/16	...
N10XV12	Bearing*	4	6	4
N10XV14	Bearing Housing	1	9 1/2	...
N10XV15	House Lock Bolt	1	1/8	...
N10XV16	Spindle	1	7	...
N10XV17	Spindle Thread Seal	1	...	2

Parts List for Type 15PXV Swivel

Part Number	Name of Part	Number Required	Net Weight lbs.	Spares for One Year Service
N15PXV02	Yoke Pin	1	1	...
N15XV03	Yoke Pin Nut	2	1 (2)	...
N15PXV04	Gooseneck	1	24	...
N15XV05	Packing	2	1/4 (2)	8
N15XV06	Wear Bushing	1	3/4	2
N15XV07	Housing Seal	2	3/8 (2)	2
N15XV08	Spindle Nut	1	3 1/2	...
N15XV09	Shield Seal	1	1/4	1
N15XV10	Bearing Shield	1	3/8	...
N15XV11	Bearing Retainer Wire	1	1/8	...
N15XV12	Bearing*	4	10	4
N15XV14	Bearing Housing	1	16	...
N50KG15	House Lock Bolt	1	1/4	...
N15XV16	Spindle	1	15	...
N15XV17	Spindle Thread Seal	1	...	2

Parts List for Type 20PXV Swivel

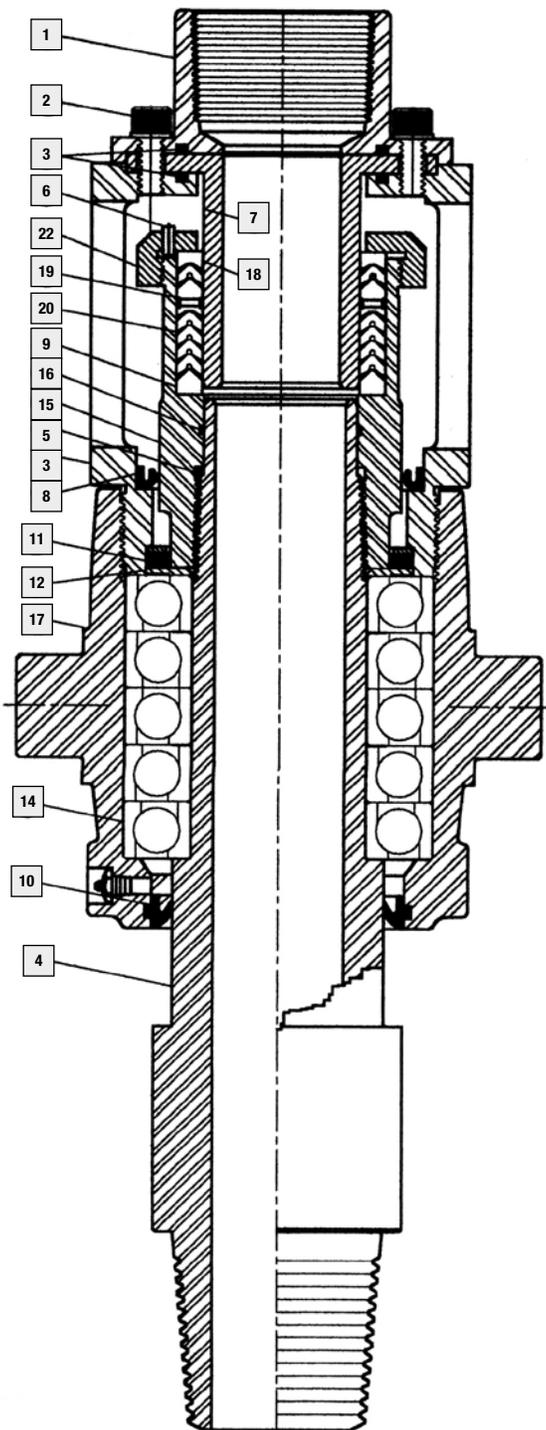
Part Number	Name of Part	Number Required	Net Weight lbs.	Spares for One Year Service
N20PXV02	Yoke Pin	1	3	...
N30XV02	Yoke Pin Nut	2	1 1/2 (2)	...
N20PXV04	Gooseneck	1	38	...
N20XV05	Packing	2	1/4 (2)	8
N20XV06	Wear Bushing	1	1	2
N20XV07	Housing Seal	2	3/8 (2)	2
N20XV08	Spindle Nut	1	4 1/2	...
N20XV09	Shield Seal	1	3/8	1
N20XV10	Bearing Shield	1	1/2	...
N20XV11	Bearing Retainer Wire	1	1/8	...
N20XV12	Bearing*	4	13	4
N20XV14	Bearing Housing	1	28	...
N50KG15	House Lock Bolt	1	1/4	...
N20XV16	Spindle	1	22	...
N20XV17	Spindle Thread Seal	1	...	2

Parts List for Type 25PXV Swivel (For Parts Only)

Part Number	Name of Part	Number Required	Net Weight lbs.	Spares for One Year Service
N20PXV02	Yoke Pin	1	3	...
N30XV02	Yoke Pin Nut	2	1 1/2 (2)	...
N20PXV04	Gooseneck	1	42	...
N20XV05	Packing	2	1/4 (2)	8
N20XV06	Wear Bushing	1	1	2
N20XV07	Housing Seal	2	3/8 (2)	2
N20XV08	Spindle Nut	1	4 1/2	...
N20XV09	Shield Seal	1	3/8	...
N20XV10	Bearing Shield	1	1/2	...
N20XV11	Bearing Retainer Wire	1	1/8	...
N20XV12	Bearing*	5	20	5
N25XV14	Bearing Housing	1	33	...
N50KG15	House Lock Bolt	1	1	...
N20XV16	Spindle	1	32	...
N20XV17	Spindle Thread Seal	1	1/8	2

Swivel with Adjustable Packing

25HPA



25HPA Features

- (4) 2" Trunnion Pins
- 2 3/8" Watercourse
- Lower connection per customer order
- 1,500 P.S.I. working pressure

25HPA Options

- 7 1/2" Shoulder to shoulder (IR)
- 8 5/16" Shoulder to shoulder (Failing)
- With or without bail
- Gooseneck options

Straight Up

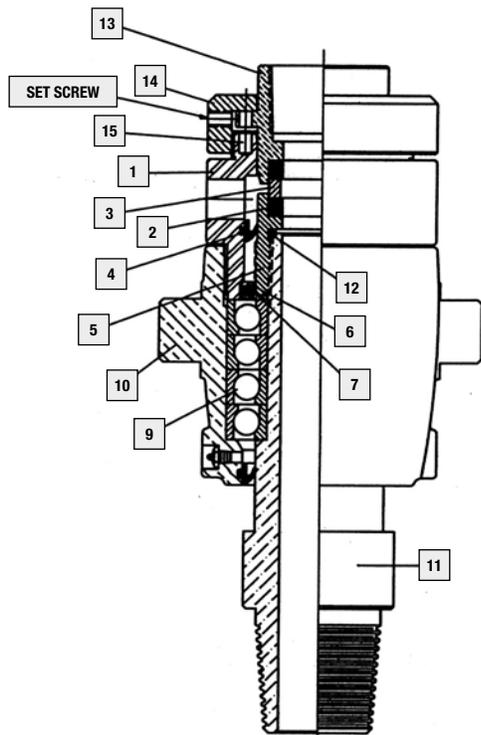
- 90 Out
- 30 Down

25HPA Swivel

Item #	Description	Part Number
1	Gooseneck	N25HPA02
2	Gooseneck Screws	N25HPA02A
3	Bonnet	N25HPA04
4	Spindle (5 Brg.)	N25HPA16JELHP
5	Packing Box	N25HPA18
6	Packing Box Set Screws	N25HPA18A
7	Washpipe	N25HPA25
8	Upper Housing Seal	N25HPA07
9	Packing Adapter	N20HPA13
10	Housing Seal	N20XV07
11	Shield Seal	N20XV09
12	Bearing Shield	N20XV10
13	BRG Retaining Wire	N20XV11
14	Bearing	N20XV12
15	Spindle Thread Seal	N20XV17
16	O-Ring (Wear Bushing)	N25WG233
17	Bearing Housing	N25PXV14ETWS
18	Packing Seat Ring	N75WP16A
19	Lantern Ring	N75WP16E
20	Packing Set	N75WP15
21	O-Ring (Packing Gland)	N75WP342
22	Packing Adjusting Nut	N25HPA20

Swivel with Adjustable Packing

20XVA

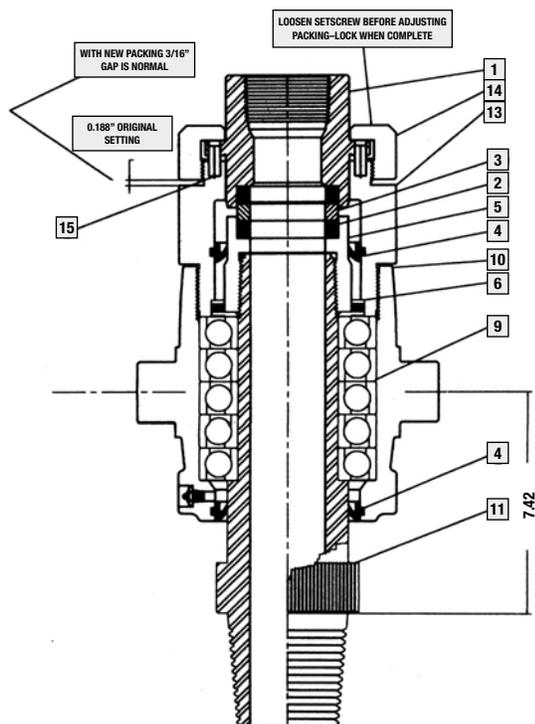


20XVA Swivel

Item #	Description	Part Number
1	Adjustable Gooseneck	N20TXV04
2	Packing Rings	N20XV05
3	Wear Bushing	N20XV06
4	Housing Seal	N20XV07
5	Spindle Nut	N20XV08
6	Seal Shield	N20XV09
7	Bearing Shield	N20XV10
8	Bearing Retaining Wire	N20XV11
9	Bearing	N20XV12
10	Bearing Housing	N20PXV14ETWS
11	Spindle (3.5 IF, LH Pin)	N20XV16JELHP
12	Spindle Thread Seal	N20XV17
13	Packing Adjusting Gland	N20TXV19
14	Packing Adjusting Nut	N25HPA20
15	Dowell Pin for 20TXV	M074

Swivel with Adjustable Packing

25XVA

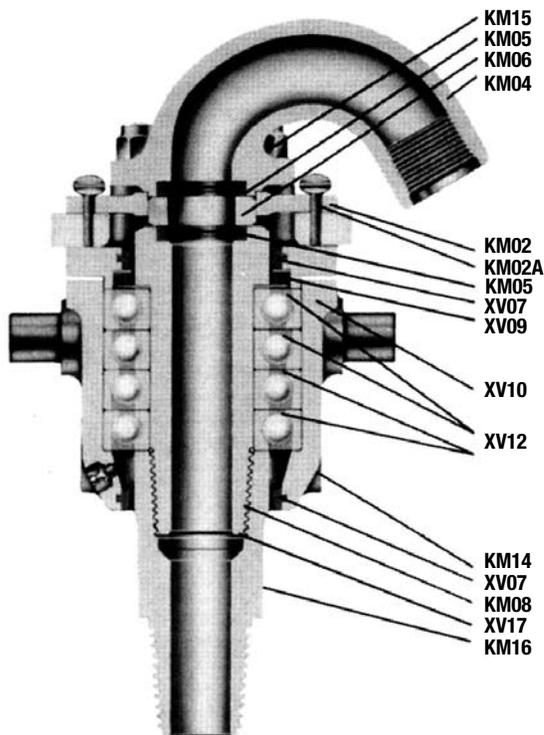


25XVA Swivel

Item #	Description	Part Number
1	Adjustable Gooseneck	N20TXV04
2	Packing Rings	N20XV05
3	Wear Bushing	N20XV06
4	Housing Seal	N20XV07
5	Spindle Nut	N20XV08
6	Seal Shield	N20XV09
7	Bearing Shield	N20XV10
8	Bearing Retaining Wire	N20XV11
9	Bearing	N20XV12
10	Bearing Housing	N20PXV14ETWS
11	Spindle (3.5 IF, LH Pin)	N20XV16JELHP
12	Spindle Thread Seal	N20XV17
13	Packing Adjusting Gland	N20TXV19
14	Packing Adjusting Nut	N25HPA20
15	Dowell Pin for 20TXV	M074

Swivel

2KM, 10KM, 15KM



For drilling rigs equipped with chain or cable pulldown means

These swivels are intended primarily as replacements on popular makes of pulldown type rigs.

Bails and pull-down yokes are not normally furnished with these swivels. These parts can usually be removed from the old swivels and fitted to the KM Swivel type.

Bails will be furnished, when required, on receipt of adequate specifications.

The bearings are angular-contact ball bearings. They are mounted, in multiple units, so as to absorb thrust loads in either direction. They have ample radial capacity to stabilize the swivels properly.

The packing unit consists of two molded, composition rubber rings. An extremely hard wear ring (wear bushing) is interposed between the packing rings. These packing elements can be renewed within a very few minutes.

The 2KM Swivel is for small geophysical and water well rigs.

The 10KM Swivel is for medium size geophysical, water well and core drilling rigs. The 15KM Swivel is ideally suited to fairly large geophysical, water well and core drilling rigs.

King Swivels are light in weight in comparison to other makes of swivels.

Parts List for Type 10KM Swivel

Part Number	Name of Part	No. Req'd	WT/lbs. Each	Spares for One Year Service
N10KM01	Bail (Furnished to Order Only)	-	-	-
N10KM02	Wear Bushing Retainer	1	3	1
N10KM02A	Wear Bushing Retainer Screw	4	1/16 (2)	-
N10KM04	Gooseneck	1	30	-
N10KM05	Packing	2	1/4 (2)	8
N10KM06	Wear Bushing	1	1	2
N15XV07	Housing Seal	2	3/8 (2)	2
N10KM08	Bearing Spindle	1	10	-
N15XV09	Shield Seal	1	1/8	1
N15XV10	Bearing Shield	1	1/4	-
N15XV12	Bearings*	4	10	4
N10KM14	Bearing Housing	1	24	-
N10KM15	Bonnet Studs and Nuts	4 ea.	3 (4)	-
N10KM16	Lower Connection	1	11	-
N15XV17	Spindle Thread Seal	1	-	1

Parts List for Type 15KM Swivel

N15KM01	Bail (Furnished to Order Only)	1	-	-
N15KM02	Wear Bushing Retainer	1	3	-
N10KM02A	Wear Bushing Retainer Screw	4	1/16 (2)	-
N15KM04	Gooseneck	1	24	-
N15KM05	Packing	2	1/8 (2)	8
N15KM06	Wear Bushing	1	1	2
N15XV07	Housing Seal	2	1/4 (2)	2
N15KM08	Bearing Spindle	1	10	-
N15XV09	Shield Seal	1	1/8	1
N15XV10	Bearing Shield	1	1/4	-
N15XV12	Bearings*	5	13	5
N15KM14	Bearing Housing	1	29	-
N10KM15	Bonnet Studs and Nuts	4 ea.	3 (4 ea.)	-
N15KM16	Lower Connection	1	11	-
N15XV17	Spindle Thread Seal	1	-	1

Weights and Dimensional Data

Type Swivel	Weight, lbs.	Length Overall*	Lower (Kelly) Connection L.H. Tool Pin or L.H. Drill Pipe Thread	Hose Connection	Diam. Water Course
2KM	40	15"	N-Rod; Mayhew 200 or 2 3/8" O.D., 8-V	1 1/2" NPT	1 1/2"
10KM	70	18"	2 3/8" API Reg.; Mayhew 1,000 or 2 7/8" O.D., 8-V	1 1/2" NPT	1 1/2"
15KM	80	19 1/2"	2 7/8" O.D., 8-V, Drill Pipe	2" NPT	2"

*Length does not include bail.

Capacities and Safety Data

Type Swivel	Capacity, lbs. at 100 R.P.M.	Static Load Limit, lbs.	Safe Depths (Feet) With Drill Pipe	
			2 3/8" 6.65 lbs.	2 7/8" 10.4 lbs.
2KM	10,000	20,000	1,000	-
10KM	18,000	30,000	1,800	1,200
15KM	27,000	30,000	2,700	1,800

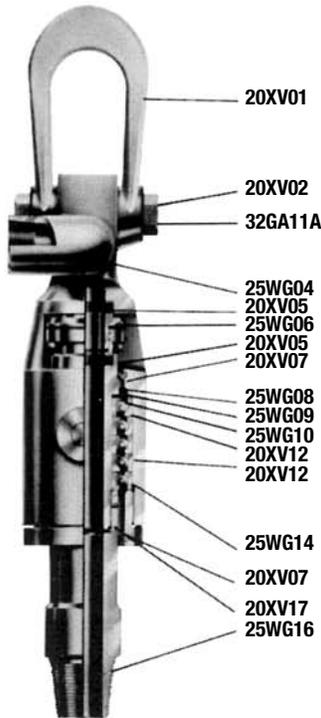
Parts List for Type 2KM Swivel

Part Number	Name of Part	No. Req'd	WT/lbs. Each	Spares for One Year Service
N2KM01	Bail (Furnished to Order Only)	-	-	-
N2KM02	Wear Bushing Retainer	1	1 1/2	1
N2KM02A	Wear Bushing Retainer Screw w/ Nut	2	1/16 (2)	-
N2KM04	Gooseneck	1	16	-
N2KM05	Packing	2	1/8 (2)	8
N2KM06	Wear Bushing	1	3/4	2
N10XV07	Housing Seal	2	1/4 (2)	2
N2KM08	Bearing Spindle	1	5	-
N10XV09	Shield Seal	1	1/8	1
N10XV10	Bearing Shield	1	1/4	-
N10XV12	Bearings*	4	6	4
N2KM14	Bearing Housing	1	10	-
N2KM15	Bonnet Studs and Nuts	4 ea.	2 (4)	-
N2KM16	Lower Connection	1	5	-
N2KM17	Spindle Thread Seal	1	-	1

*When bearings are renewed, replace with a new matched set. Do not replace one bearing in an old set. Be sure that bearings have flush ground faces.

Swivel

25WG



Capacity and Safety Data

Type Swivel	Capacity lbs. at 100 R.P.M.	Static Load	Pulldown Capacity at 100 R.P.M.
25WG	36,000	75,000	30,000

Parts List for Type 25WG Swivel

Part Number	Name of Part	No. Req'd	Net Weight lbs.	Spares for One Year. Service
N20XV01	Bail	1	21	-
N20XV01E	Elevator Shank	1	38	-
N20XV02	Bail Gudgeon Pin	1	4	-
N32GA11A	Bail Pin Nut	2	1 (2)	-
N25WG04	Body	1	85	-
N20XV05	Packing	2	1/4 (2)	8
N25WG06	Wear Bushing	1	2	1
N20XV07	Housing Seal	2	1/2 (2)	2
N25WG08	Spindle	1	14	-
N20XV09	Shield Seal	1	3/8	1
N20XV10	Bearing Shield	1	1/2	-
N20XV12	Bearing	5	17	5
N25WG14	Bearing Housing	1	14	-
N20XV16	Lower Connection	1	17 1/2	-
N20XV17	Spindle Thread Seal	1	-	1
N25WG18	Housing Lock Seal	1	1/4	-
N25WG233	Wear Bushing O-Ring	2	1/4	2

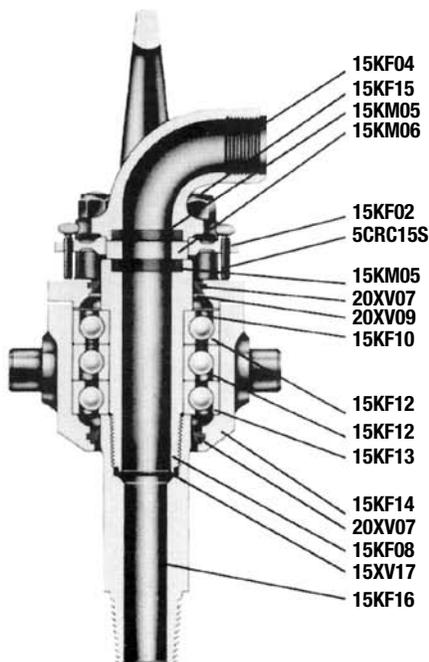
Note: Bearings should be replaced with a matched set.

To Repack Swivel

Screw the (3) three hold screws down until the wear bushing assembly comes together. Remove assembly through window. Remove old packing rings, insert new ones, reinstall bushing and tighten hold screws until proper adjustment is obtained. As packing wears, tighten screws evenly to obtain full life of packing.

Swivel

15KF



Weight And Dimensional Data

Length	Weight	Lower Connection	Hose Connection	Diameter Watercourse
25 1/2"	114 lbs.	2 3/8" API I.F. Tool Joint	2" NPT	1 3/4"

Capacity and Safety Data

Capacity lbs. at 100 R.P.M.	Static Load Limits lbs.	Safe Depths (Feet) With Drill Pipe	
		2 3/8" 6.65 lbs.	2 7/8" 10.4 lbs.
27,000	31,000	2,700	1,800

Parts List for 15KF Swivel

Part Number	Name of Part	No. Req'd	Net Weight lbs.	ozs.
N15KF02	Wear Bushing Retainer	1	1	12
N5CRC15S	Wear Bushing Retainer Screw	2	-	2
N15KF04	Gooseneck	1	32	-
N15KM05	Packing	2	-	2
N15KM06	Wear Bushing	1	1	-
N20XV07	Housing Seal	2	-	6
N15KF08	Bearing Spindle	1	8	12
N20XV09	Shield Seal	1	-	6
N15KF10	Bearing Shield	1	1/2	-
N15KF12	Bearing	3	18	-
N15KF14	Bearing Housing	1	32	-
N15KF15	Bonnets Studs and Nuts	4	2	2
N15KF16	Lower Connection	1	16	-
N15XV17	Spindle Thread Seal	1	-	-

The swivel measures 8 5/16" from end to end of the trunnion pin, 1 9/32" from the shoulder to the pin end; and it has a 2" diameter on the trunnion pin, or to specification.

Rotating Head

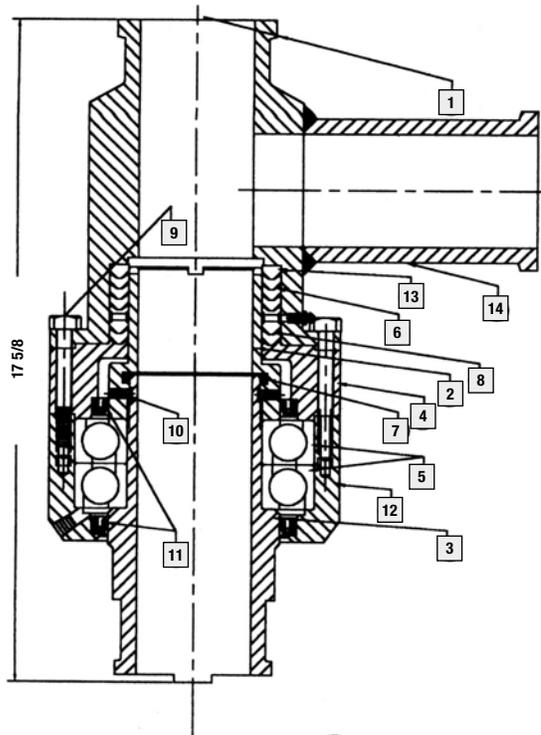
3APE

The 3APE rotating head was designed as a rotating head, not as a load carrying swivel. This unit was designed for pressures exceeding 250 P.S.I., up to 1,500 P.S.I. and is equipped with Chevron V-Type packing and a hardened and ground washpipe.

Two zerk fittings are provided on the 3BL14 bearing housing for bearing lubrication, and on the APE gooseneck for packing lubrication. A good grade of molybdenum base grease is recommended.

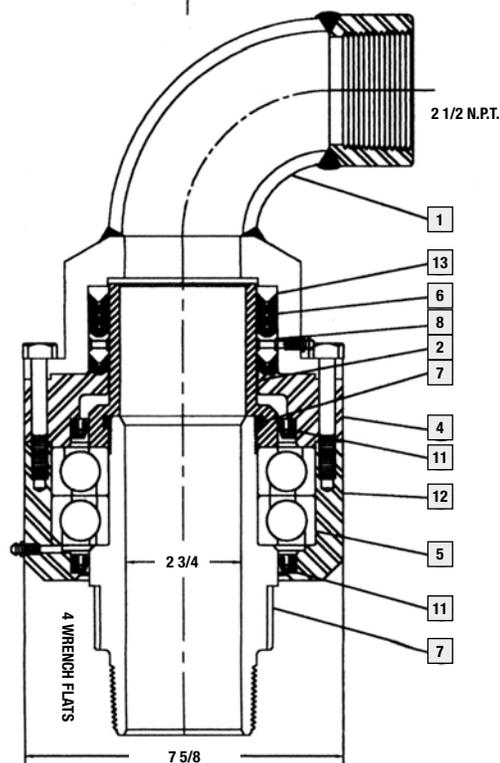
3APE Rotating Head

Item #	Description	Part Number
1	Gooseneck	N3APE01
2	Washpipe	N3APE25
3	Stem	N3APE07
4	Adapter Plate	N3APE04
5	Bearing (2)	N3BL12
6	Packing Set (4 Rings)	N50KG20
7	O-Ring	N3BL340
8	Lantern Ring	N50KG21
9	Stud (10)	B038C350HNNB
10	Set Screw (2)	B025C025XXXS
11	Grease Seal (2)	N3APE10
12	Bearing Housing	N3APE05
13	Packing Adapter	N2.5BL06A
14	Side Connector	N3APE01A



3APE Rotating Head

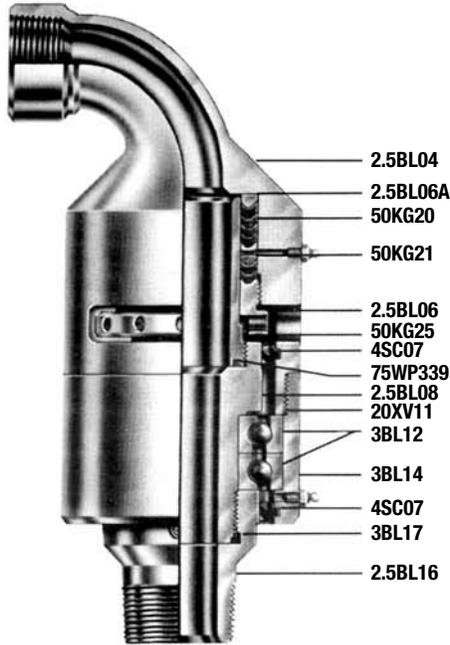
Item #	Description	Part Number
1	Gooseneck	N3APE01S
2	Washpipe	N3APE25
3	Stem	N3APE0707ALHP
4	Adapter Plate	N3APE04
5	Bearing (2)	N3BL12
6	Packing Set (4 Rings)	N50KG20
7	O-Ring	N3BL340
8	Lantern Ring	N50KG21
9	Stud (10)	B038C350HNNB
10	Set Screw (2)	B025C025XXXS
11	Grease Seal (2)	N3APE10
12	Bearing Housing	N3APE05
13	Packing Adapter	N2.5BL06A



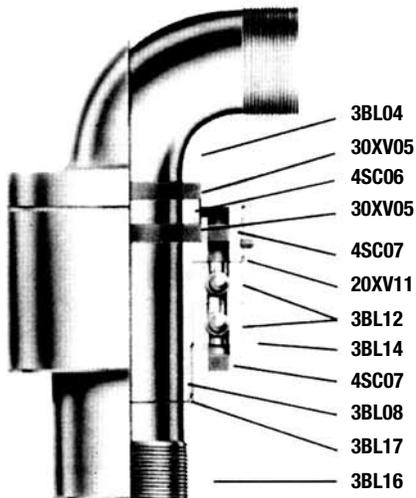
W/3" N.P.T. THD L.H. PIN

Rotating Head

Model 2.5BL, Model 3BL



MODEL 2.5BL



MODEL 3BL

For Top-head Drive Drilling Rigs

These rotating heads are designed for large volumes of air or fluid needed on top-head drive rigs.

Precision bearings provide ample thrust and radial load capacity and are grease lubricated.

Short, compact design requires a minimum of space.

The 2.5BL Head is designed for high pressure.

The 3BL Head is designed for low pressure.

Weights and Dimensional Data

Type Head	Length Inches	Weight lbs.	Lower Conn.* Box or Pin	Hose Conn.	Diameter Watercourse
2.5BL	18"	70	2 1/2" or 3" NPT	2 1/2"	2 1/2" Max
3BL	18"	65	2 1/2" or 3" NPT	3"	3" Max

*Lower connection per customer spec.; specify RH or LH box or pin.

Parts List 2.5BL

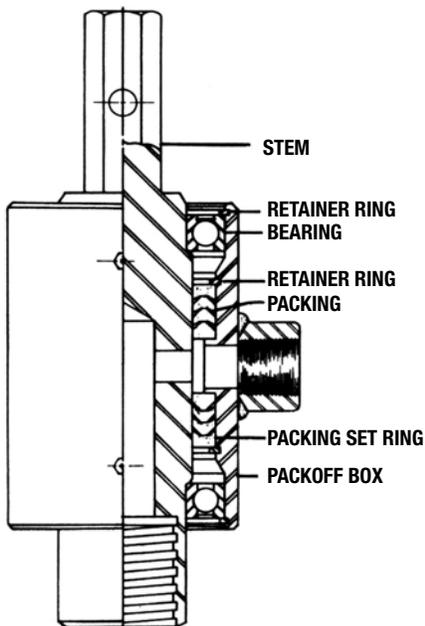
Part Number	Name of Part	Number Required	Weight lbs.	ozs.	Spares for One Year Service
N2.5BL04	Gooseneck	1	18	0	-
N2.5BL06	Packing Nut	1	1	2	-
N2.5BL06A	Packing Seat Ring	1	0	4	3
N4SC07	Housing Seal	2	0	4	2
N2.5BL08	Spindle	1	8	0	-
N20XV11	Bearing Retainer Wire	1	0	2	1
N3BL12	Bearing	2	6	0	2
N3BL14	Bearing Housing	1	10	0	-
N2.5BL16	Lower Connection	1	15	0	-
N3BL17	Spindle Thread Seal	1	0	4	1
N50KG20	Packing	1 set	0	8	6
N50KG21	Lantern Ring	1	1	0	1
N50KG25	Washpipe	1	4	8	3
N75WP339	O-Ring	1	0	1	3

Parts List 3BL

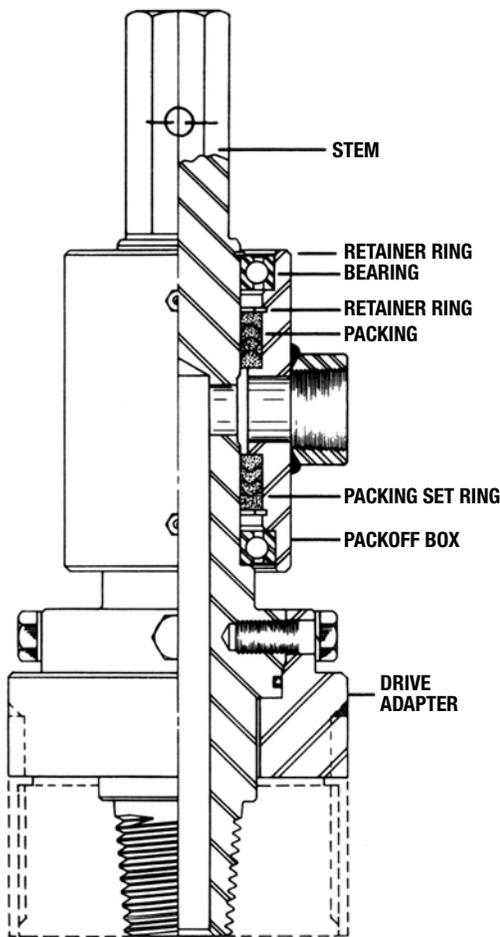
Part Number	Name of Part	Number Required	Weight lbs.	ozs.	Spares for One Year Service
N3BL04	Gooseneck	1	18	0	-
N4SC06	Wear Bushing	1	1	0	1
N30XV05	Packing	2	0	4	4
N4SC07	Housing Seal	2	0	4	2
N3BL08	Spindle	1	8	0	-
N20XV11	Retainer Wire	1	0	4	-
N3BL12	Bearing	2	12	0	2
N3BL14	Bearing Housing	1	10	0	-
N3BL16	Lower Connection	1	15	0	-
N3BL17	Spindle Seal	1	0	4	1

Side-Inlet Swivel

HAW/HNW, IFDC



HAW/HNW SWIVEL



IF-DC SWIVEL

HAW/HNW

These swivels fill the need when conventional swivels cannot be used.

These side-feed swivels feature grease-lubricated, pressure-energized, non-adjustable Chevron V-Type packing and upper and lower ball bearings for radical loads. They are suitable for air or mud drilling.

Although designed for many hours of drilling, these swivels can be easily repacked in the field for extended service.

Weights and Dimensional Data

	Length	Width	Weight lbs.	Upper Connection	Lower Connection	Water-course	Hose Connection
HAW	13-1/2"	4"	22	1 5/8" HEX	AW BOX	5/8"	1" NPT
HAW	14-1/16"	5"	35	1 5/8" OR 2" HEX	NW BOX	1-3/8"	1-1/4" NPT

Parts Lists

Part No.	Name	Requires	Part No.	Name	Requires
HAW 1-01	Stem, AW RH Box	1	HNW-01	Stem, NW RH Box	1
HAW 1-04	Packoff Housing	1	HNW-04	Packoff Housing	1
HAW 1-05	Packing Set	2	HNW-05	Packing Set	2
HAW 1-26	Bearings	2	75WP-16A	Packing Seat Ring	2
HAW 1-325	Packing Retainer	2	HNW-26	Bearings	2
HAW 1-354	Bearing Retainer	2	HNW-400W	Packing Retainer	2
			HNW-433W	Bearing Retainer	2

IFDC

The IFDC Swivel is designed for wet augering or grouting without moving the rig. A semi-finished, bolt-on adapter accepts drive caps 4 1/4" through 6 1/2".

Weights and Dimensional Data

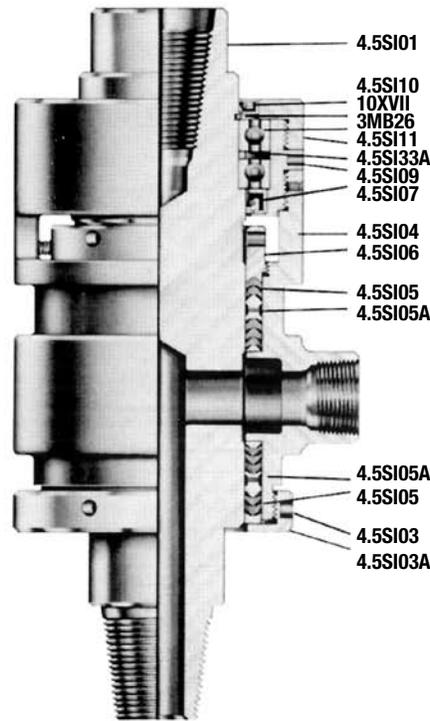
	Length	Width	Weight lbs.	Upper Connection	Lower Connection	Water-course	Hose Connection
IFDC	20 7/8"	7 1/2"	85	2" HEX	2-3/8" IF RHP	1-3/8"	1-1/2" NPT

Parts Lists

Part No.	Name	Requires	Part No.	Name	Requires
IFDC01FE	Stem, 2-3/8" IF RH Pin	1	NWDC275W	Bearing Retainer	1
NWDC04	Packoff Housing	1	NWDC375W	Packing Retainer	1
NWDC05	Packing Set	2	IFDC45	Drive Cap Adapter	1
NHNW26	Bearings	2	10MB347	O-Ring Adapter	1

Side-Inlet Swivel

4.5SI



These swivels are manufactured and designed to fill a need when conventional swivels are not practical or applicable. Side inlet swivels find a wide application when using hydraulic, top-head drive rigs. Mounted below the hydraulic assembly, they prevent contamination of hydraulic fluid caused by leakage in conventional swivels. Auger rigs can be converted to circulating, rotary drilling rigs.

When drilling with large diameter pipe, this swivel can be mounted below the existing swivel to provide more air or drilling fluid as required. These units are ideal for dual-tube drilling on lost circulation holes. The upper and lower connections can be furnished with pin, box or flange.

Features in Brief

- Compact design for use on short mast rigs.
- Sealed bearings give ample load capacity.
- Adjustable Chevron V-Type packing easily replaceable.

Weight and Dimensional Data

Length Inches	Width	Weight	Connections*	Watercourse Diameter	Hose Connection
22 3/4"	8 5/16"	230 lbs.	3 1/2 API Reg. RH	1 1/2"	2"

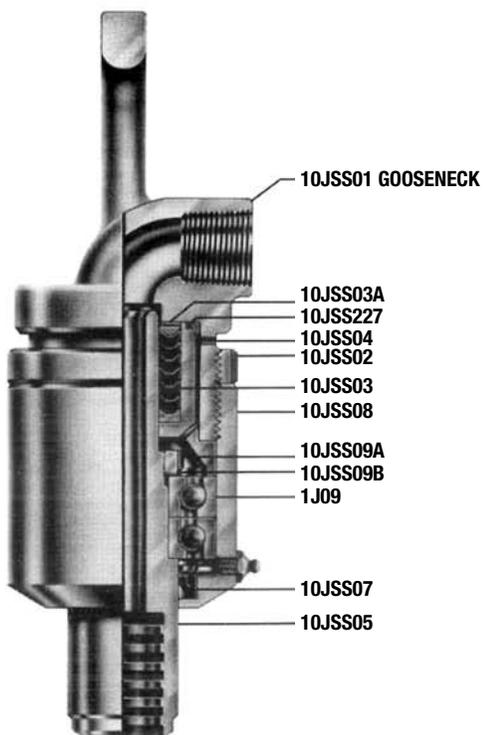
*Consult factory for other connections.

Parts List for Type 4.5 Side Inlet Swivel

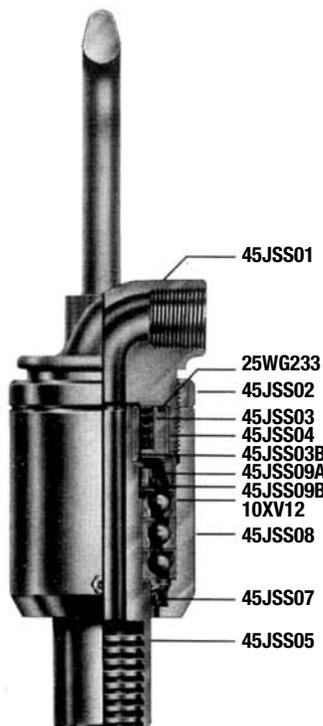
Part Number	Name of Part	Number Required	Weight lbs.	Spares for One Year
N4.5SI01	Spindle Stem	1	110	
N4.5SI03	Lower Adjusting Gland	1	4	
N4.5SI03A	Lower Adjusting Gland Ring	1	1	2
N4.5SI04	Packoff Housing	2	45	
N4.5SI05416	Packing Set	2	1/2	8
N4.5SI05A	Lantern Ring	1	1/2	4
N4.5SI06	Upper Adjusting Nut	1	4	
N4.5SI07	Lower Grease Seal	1	1	2
N4.5SI09	Bearing Housing	1	20	
N4.5SI10	Upper Housing Seal	1	1	1
N4.5SI11	Bearing Housing Cap	1	5	
N10XV11	Bearing Retainer Wire	1		1
N4.5SI26	Bearing	2	10	2
N4.5SI33A	Bearing Spacer	1	1	1

Coring Swivel

10JSS, 45JSS



MODEL 10JSS



MODEL 45JSS

For Core Drilling and High-Speed Drilling

These swivels are designed for high drilling speeds. The bearings are flush ground, high angular contact, giving exceptional thrust and radial stability. They are sealed in the housing and are grease lubricated. The packing is non-adjustable, Chevron V-Type, selected for high-speed applications.

Weights and Dimensional Data

Model	Length Inches	Weight lbs.	Lower Connection	Hose Connection	Watercourse
10JSS	12 3/8"	20	AW	1"	5/8"
45JSS	15 1-4"	27	NW	1 1/4"	1 3/8"

Capacity (Non-Rotating)

10JSS 10,000 lbs.
45JSS 45,000 lbs.

Parts List for Type 10JSS Swivel

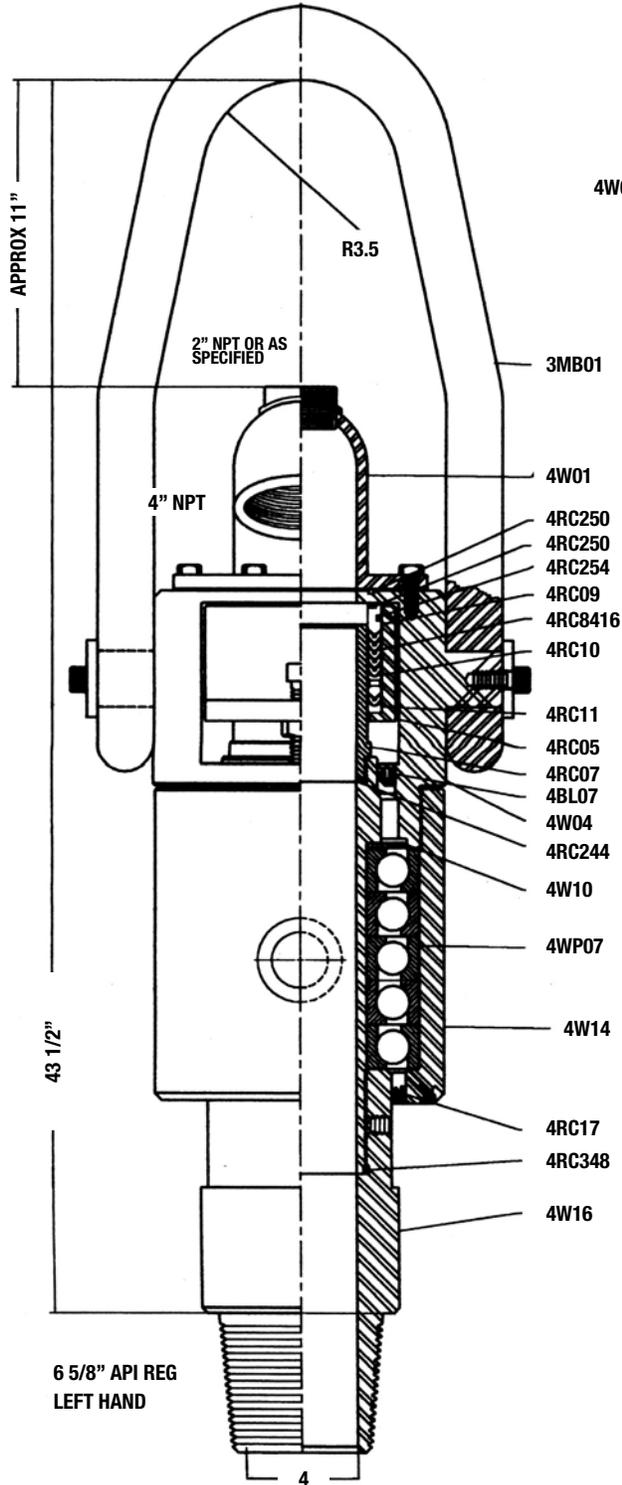
Part Number	Name of Part	Number Required	Weight		Spares for One Year Service
			lbs.	ozs.	
N10JSS01	Gooseneck	1	4	2	-
N10JSS02	Lock Nut	1	0	8	-
N10JSS03	Packing Set	1	0	4	6
N10JSS03A	Packing Spring	1	0	0	6
N10JSS04	Packing Box	1	0	8	2
N10JSS05	Spindle	1	1	2	1
N10JSS07	Housing Seal	1	0	1	2
N10JSS08	Bearing Housing	1	4	0	-
N1J09	Bearing	2	1	11	2
N10JSS09A	Bearing Lock Nut	1	0	4	1
N10JSS09B	Bearing Lock Washer	1	0	2	1
N10JSS0227	O-Ring	1	0	0	6

Parts List for Type 45JSS Swivel

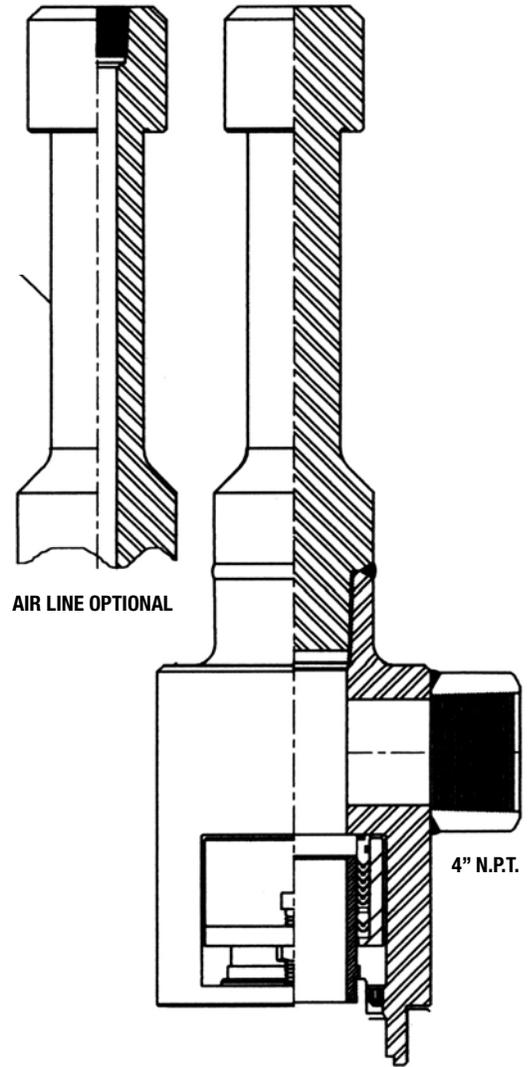
Part Number	Name of Part	Number Required	Weight		Spares for One Year Service
			lbs.	ozs.	
N45SS01	Gooseneck	1	2	2	-
N45SS-02	Lock Nut	1	0	8	-
N45SS03	Packing Set	1	0	5	6
N45JSS03B	Wear Sleeve	1	0	5	2
N45JSS04	Packing Box	1	0	8	2
N45JSS05	Spindle	1	2	0	1
N45JSS07	Housing Beal	1	-	-	1
N45JSS08	Bearing Housing	1	5	8	-
N45JSS09A	Bearing Lock Nut	1	0	2	1
N45JSS09B	Bearing Lock Washer	1	0	6	1
N10XV12	Bearing	3	4	2	-
N26WG233	O-Ring	1	0	0	6

Swivel Assembly

4W



4W01ES ELEVATOR SHANK



4W Swivel

Item #	Description	Part Number
1	Gooseneck	N4W01
2	Packing Seat Ring	N4RC11
3	O-Ring (2)	N4RC250
4	O-Ring	N4RC254
5	O-Ring	N4RC244
6	Gland	N4RC09
7	Packing Set	N4RC8416
8	Lantern Ring	N4RC10
9	Stuffing Box	N4RC05
10	Bearing (set of 5)	N4WP07
11	Bearing Housing	N4W14D
12	Washpipe	N4RC07
13	Upper Seal	N4BL07
14	Bonnet	N4W04
15	Bearing Shield	N4W10
16	Lower Housing	N4RC17
17	O-Ring Spindle Thread Seal	N4RC34B
18	Lower Connection	N4W16
19	Bail	N3MB01

Swivel

5KCOS

For drilling shallow to medium depth water wells and for use on light to medium hydraulic rigs. For conventional or reverse circulation; also for pile-driving operations.

The King 5KCOS is a husky, compact swivel with an unrestricted fluid passage 5" in diameter for extra circulation.

Bearings are (2) two-row tapered roller type with more than ample thrust and radial capacity. Bearings are protected by automatic seals, which retain the lubricant and exclude abrasive substances.

The packing unit consists of Chevron V-Type rings and washpipe. The packing unit can be renewed, in a very few minutes, without breaking out any of the swivel connections.

The hose connection is 5" national pipe thread, furnished straight out or at a downward angle – 90 degrees to right or left - as specified. The Kelly Connection (bottom thread) is normally 6" national pipe thread, left hand. Other threading furnished on order.

Housing parts are flanged and bolted together with 12, 1" bolts. The bail has a stop to limit its swing to approximately 60 degrees from its normal position.

Weight and Dimensional Data

Type Swivel	Weight lbs.	Length	Working Length	Water-course	Bail Opening
5 KCOS-with 6 5/8" O.D. NPT LH	512	41"	34"	5"	6" x 8"

Hose Connection: 5" NPT

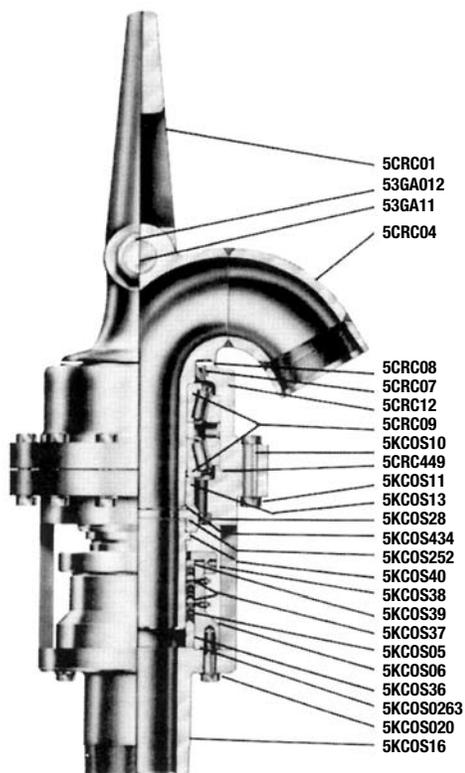
Lower Connection: 6" NPT Left Hand Pin

Capacity and Safety Data

Capacity lbs. at 70 R.P.M.	Static Load Limit lbs.	Safe Depth with Drill Pipe
35,000	150,000	6 5/8" - 25.20 lbs. @ 1,500'

5KCOS Parts List

Part Number	Name of Part	No. Required	Weight lbs.	Spares for One Year Service
N5CRC01	Bail	1	47	
N53GA12	Bail Pin	1	10	
N53GA11	Bail Pin Nut	2	3/4	
N5CRC04	Gooseneck	1	95	
N5KCOS05	Packing	1	1	6
N5KCOS06	Packing Box	1	17	2
N5CRC07	Upper Housing Seal	1	1/8	2
N5CRC08	Felt Washer	1	1/8	2
N5CRC09	Bearing Assembly	1	64	
N5KCOS10	Housing Stud	8	1	
N5KCOS11	Stud Nut	8	1	
N5CRC12	Bearing Housing	1	89	
N5KCOS13	Spindle Nut	1	20	
N5KCOS16	Lower Housing	1	187	
N5KCOS434	Spindle Thread Seal	1	1/8	1
N5KCOS20	Gooseneck Screws	6	1/4	
N5KCOS28	Lower Housing Seal	1	1/8	2
N5KCOS36	Packing Gland	1	2	3
N5KCOS37	Lantern Ring	2	2	1
N5KCOS38N	Adjusting Gland	1	6	1
N5KCOS39	Packing Seat Ring	1	1	1
N5KCOS40	Washpipe	1	10	3
N5KCOS252	O-Ring (Washpipe)	1	1/16	3
N5KCOS263	O-Ring (Packing Box)	1	1/16	3
N5CRC449	O-Ring (Housing)		1/16	1



For drilling irrigation holes and pile-driving operations, either conventional or reverse circulation.

Features in Brief

- Flexible bail
- 6" watercourse
- Chevron V-Type packing assembly permits easy field replacement and adjustment
- Lower alignment bearing
- 2" coupling on top of gooseneck
- Short, compact
- Extended bail pins serve as guides

Weight and Dimensional Data

Type Swivel	Weight lbs.	Length	Hose Connection	Lower Connection
6CRC	775	.....	6" NPT	6 1/2" mod. LH tool joint*

*With beveled sub for welding to Kelly Connection.

Capacity and Safety Data

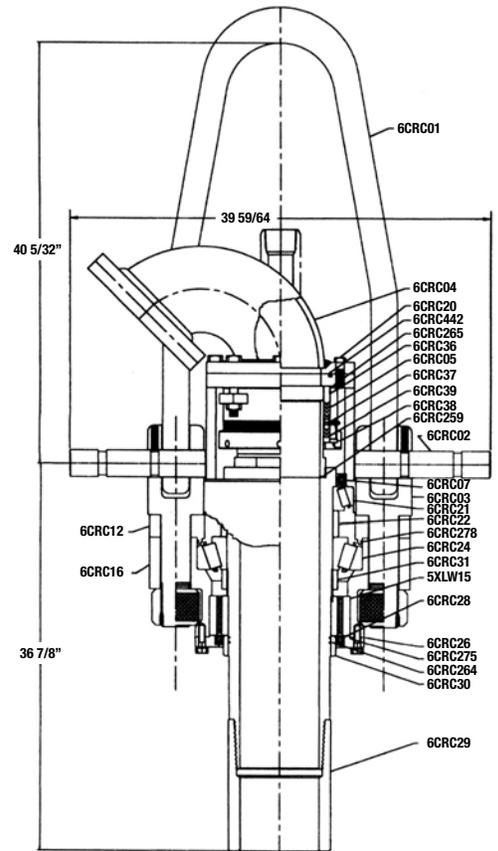
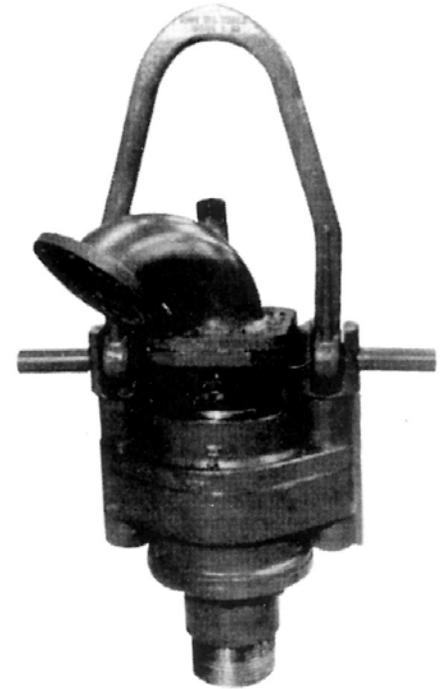
Capacity at 100 R.P.M.	Static Load Limit
35,000 lbs.	100,000 lbs.

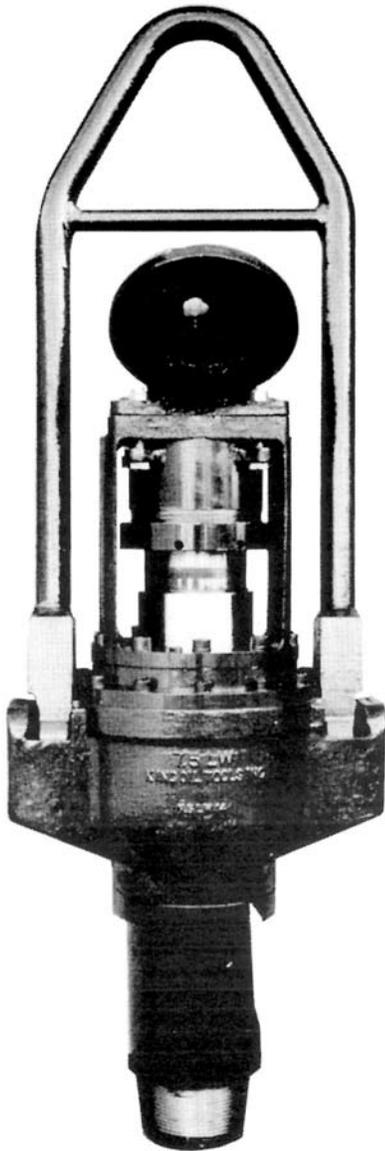
6-CRC Parts List

Part Number	Name of Part	No. Req'd.	Spares for One Year Service
N6CRC01	Bail	1	..
N6CRC02	Bail Pin	2	..
N6CRC03	Bail Bolt with Nuts	2	..
N6CRC04	Gooseneck	1	..
N6CRC05	Packing	1 set	6
N6CRC06	Packing Box	1	1
N6CRC07	Oil Seal	2	2
N6CRC08	Spindle Stem	1	..
N6CRC12	Upper Housing	1	..
N6CRC16	Lower Housing	1	..
N6CRC20	Gooseneck Screws	8	..
N6CRC21	Upper Bearing	1	1
N6CRC22	Bearing Spacer	1	..
N6CRC23	Shim Set	1	..
N6CRC24	Main Bearing	1	1
N5XLW15	Alignment Bearing	1	1
N6CRC26	Oil Seal Box	1	..
N6CRC27	Oil Box Screws	8	..
N6CRC28	Lower Oil Seal	1	1
N6CRC29	Adapter Sub	1	..
N6CRC30	Seal Wear Ring	1	..
N6CRC31	Bearing Hold Down Nut	1	..
N6CRC265	O-Ring Packing Box	11	..
N6CRC36	Packing Gland	1	1
N6CRC37	Lantern Ring	1	1
N6CRC38	Adjusting Gland	1	1
N6CRC39	Packing Seat Ring	1	1
N6CRC40	Washpipe	1	2
N6CRC259	O-Ring Washpipe	1	1
N6CRC264	O-Ring Spindle	2	..
N6CRC275	O-Ring Oil Box	1	..
N6CRC278	O-Ring Housing	1	..
N6CRC442	O-Ring Gooseneck to Bonnet	1	..

Repacking Instructions

- Loosen the (4) four gooseneck hold-down screws in the packing box.
- Insert spanner wrench on washpipe by rotating spindle stem to right.
- Remove packing assembly, through window, and replace spent packing O-Rings and washpipe if necessary.
- Install assembly in gooseneck window and tighten washpipe by using spanner wrench and rotating spindle to left.
- Tighten gooseneck screws on packing box and continue drilling.





Swivel

7.5LW

Heavy-duty, large-watercourse swivels designed for big-hole mine drilling for deepest water wells

The LW Swivels are manufactured with rugged construction. They are made with the largest watercourses in the King line, built for highly efficient operation in drilling large irrigation water wells and large holes for the mining industry and for offshore piling operations and elevator shafts.

Features in Brief

- Oversize watercourse permits circulation of more drilling fluids.
- Oil bath lubrication assures longer, trouble-free service.
- Chevron V-Type packing-washpipe is easily renewed without “breaking out” gooseneck.
- Compact construction fits standard rigs.
- Available with top hanger for hanging inner tube for dual purpose drilling.

Specifications

Static Load	400,000 lbs.
Bearing Capacity @ 20 R.P.M.	300,000 lbs.
Radius of Bail at Hook	4 3/4"
* Hook Clearance	15"
Minimum Fluid Passage	7.5"
Hose Connection - Line Pipe	8" x 150 lb. Flange
Lower Pin	7.5" Modified L.H.
Washpipe Packing	Chevron V-Type
Upper Bearing	Tapered Roller
Center Bearing	Spherical Roller Thrust
Lower Bearing	Straight Roller
Lubrication	Oil Bath
Width at Trunnions	30"
Length Overall Less Sub	7'6"

*This clearance may be varied per customer specifications.

Speciality Products

“King Stuff” GS143 Hydrocarbon Thread Compound



Technical Data

Color	Green
Odor	Nil
Temperature Range	-40 degrees F to +500 degrees F
Flash Point	440 degrees F
Dropping Point, F (ASTM D217)	None
Type Oil	Synthetic
Thickener	Fumed Silicate
Consistency, Cone Penetration (ASTM D217)	200 to 300
Oil Separation, % Weight Loss (ASTM D1742)	5 max
Oxidation Stability (ASTM D942) 100 hours, P.S.I. drop	10 max
Rust Preventive Test (ASTM D1743)	No. 2
Elastomer Compatibility Test, % Max (Federal Test Standard No. 792a. Method 3603 except substitute grease for oil specified.)	29
Corrosion Inhibitor	Conventional Imadazoline Derivate
E.P. Additive	Ester Type, containing no phosphorous, sulfur or metal salt

General Composition

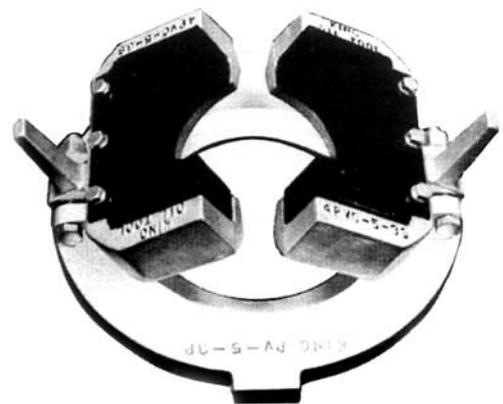
Ricinus Oil / Fluorontated Polytetrafluorethylene / Silica / E.P. Additive, Corrosion Inhibitor / Color

Call for complete lab analysis per EPA procedures.

Speciality Products

KPVC Slips

- Eliminate pipe vises, 2 x 4s, belts, slings
- Economical, faster – sets pipe easily and quickly
- Lightweight structural aluminum – only 20 lbs.
- Wide 13” base with 7” center hole
- Same base plate for 2”, 3”, 4”, and 5” pipe
- Same slip bodies for 2”, 3” and 4” pipe. Replace urethane inserts only.
- Separate slip body for 5” pipe



Parts Lists

Part Number	Name	Requires	Part No.	Name	Requires
KSA4PV53P	Base Plate	1	KSA4PV54.5	4 1/2” Inserts	2 (1 set)
KSA4PV53S	Slip Bodies	2 (1 set)	KSA4PV55S	Slip Bodies (for 5” Inserts)	2 (1 set)
KSA4PV53	2” Inserts	2 (1 set)	KSA4PV55	5” Inserts	2 (1 set)
KSA4PV53	3” Inserts	2 (1 set)	KSA4PV56	Insert Bolts	6
KSA4PV54	4” Inserts	2 (1 set)	KSA4PV57	Body Bolts & Nuts	2

Western® Compatibility Chart

Our Model Replaces	Western Type Models	King Can Supply
1J	1JW	Complete swivel and all replacement parts
2J	2JW	Complete swivel and all replacement parts
5EL	3JW	Complete swivel and all replacement parts
5PEL	3JW	All internal parts
3BL	3DJ	Complete swivel and all replacement parts
2.5BL	3DJ/5JW	All internal parts
HAW	6RG	Complete swivel and all replacement parts
HNW	12RG	Complete swivel and all replacement parts
4.5SI	4.5RG	Complete swivel and all replacement parts
10XV	10XVW	All internal parts
10PXV	10XVW	All internal parts
15XV	15WX	Complete swivel and all replacement parts
15PXV	15WX	All internal parts
20XV	20WX	Complete swivel and all replacement parts
20PXV	20WX/20WIR	Most swivels and all replacement parts
30XV	30WX	Complete swivel and all replacement parts
30PXV	30WX	Some swivels and all internal parts
2KM	2WM	Most internal parts
10KM	10WM	All internal parts
15KM	15WM	Complete swivel and all replacement parts
25WG	25WGW/20WX	Most internal parts
15KF	15KFW/15WM	Most internal parts
30KG	30PG	Complete swivel and all replacement parts
40KG	40PG	Complete swivel and all replacement parts
50KG	50PG	Complete swivel and all replacement parts
60KG	40PG	All packing box parts
3MB	3MBW	All packing box parts and seals
32GA	32GAW	All internal parts
53GA	53GAW	All internal parts
75WP	75WPW	Most internal parts and packing box parts
4W	4RCW/4WW	Most internal parts
6CRC	6WC	All packing box parts
7.5LW	7.5LWW	Most packing box parts
10MB	10MBW	Most packing box parts
4SX	4SXW	Washpipe and packing
6SX	6SXW	Washpipe and packing

King Oil Tools supplies replacement parts for the units noted in this sales literature. Products described herein are manufactured by King Oil Tools. These replacement parts are in no way sponsored by or authorized by the original equipment manufacturer. Western is a registered trade name for Western Rubber & Manufacturing.



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