

MEROL ENERGY SERVICES PRIVATE LIMITED

PNEUMATIC POWER SLIP

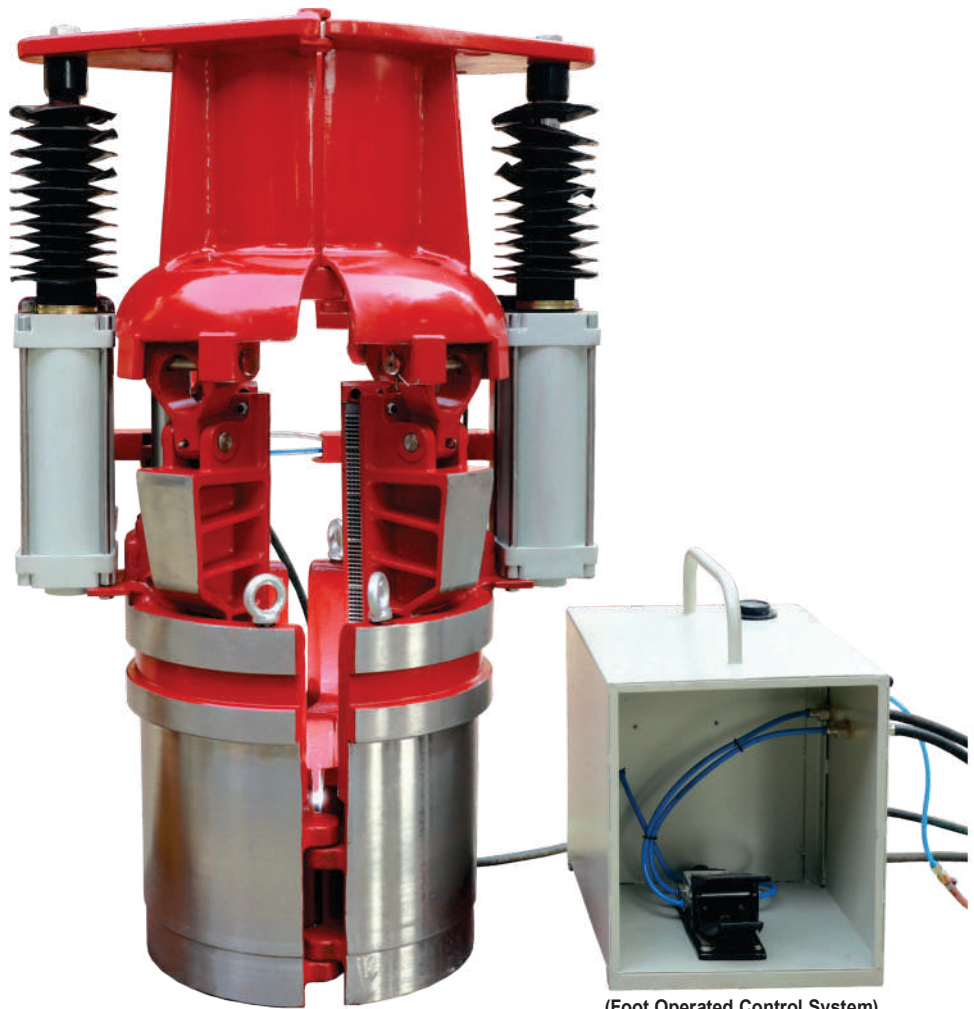
Model : ABPPS -27

We make Pneumatic Power Slip (ABPPS-27) is fully automatic remote controlled-air operated slip, designed to handle the Drill Pipe size tubing with slip ranging from 3½" to 5½" by changing inserts. Pneumatic Power Slip can be controlled either by hand or foot operated remote control valve. Power Slip is set by gravity plus applied air pressure and released by applied air pressure which eliminates the manual setting and lifting of slip.

Pneumatic Power Slip is suitable for 27-1/2" and 37- 1/2" to 49-1/2" Rotary Tables equipped with API standard Pin Drive Master Bushing.

Special Features :

- a) User-friendly design.
- b) Can be operated by single person.
- c) Can be controlled from safer distance.
- d) Solution for crew safety at rig floor.



Model : ABPPS-27
Figure No. 33

The unit consists of five major assemblies as under:

1. TopCover Assembly:

The Top Cover is designed in two halves. Two air cylinders are connected to the Top Cover with a ball floating joint fitted with hex-head screws. Top Cover Assembly is mounted on four slip hangers with pins.

2. Slip Assembly:

Four Slip Segments of 16½" grip length for gripping the tubular sizes are dressed with 48 nos. Inserts, 4 nos. Insert Retaining Ring and 8 nos. Allen screw.

3. Bowl Assembly:

The Bowl Assembly consists of two halves connected with a bowl hinge pin to enable the installation and removal of the Power Slip from the Master Bushing. Bowl Assembly is provided with four numbers of Coil Spring Cartridges.

4. Air Cylinders Assembly:

Assembly consists of two Air Cylinders connected with a Top Cover with the help of floating joints. Air Cylinder helps to lift the Top Cover Assembly along with the slip assembly.

5. Control System:

The Control System consists of a filter/regulator, inline (pilot operated) valve, hand operated pilot valve, quick exhaust valve and miscellaneous connecting hoses and fittings. Control System can be operated by Hand Control or Foot Pedal Control System.

Part List of Pneumatic Power Slip

S. No.	P/N	Description	Qty. Per Unit
1.	PPS - 21	Top Cover	1 No.
2.	PPS - 22	Hose Guard	1 set
3.	PPS - 23	Hex Head Screw	2 No.
4.	PPS - 24	Air Cylinder	2 No.
5.	PPS - 25	Floating Joint	2 No.
6.	PPS - 26	Bellow	2 No.
7.	PPS - 27	Quick Exhaust Valve	4 No.
8.	PPS - 28	Slip Hanger	4 No.
9.	PPS - 29	Slip Hanger Top Pin w/Cotter Pin	4 No.
10.	PPS - 30	Slip Hanger Bottom Pin w/Cotter Pin	4 No.
11.	PPS - 31	5½" Slip Segment to handle 4½" – 5½" Drill Pipe	4 No.
12.	PPS - 32	4½" Slip Segment to handle 3½" – 4½" Drill Pipe	4 No.
13.	PPS - 33	Spring Cartridge	4 No.
14.	PPS - 34	Slip Bowl (One set of Two pcs.)	1 set
15.	PPS - 35	Bowl Hinge Pin	1 No.
16.	PPS - 36	Brass Bush	4 No.
17.	PPS - 37	Pneumatic Control System	1 No.
18.	PPS - 38	Pneumatic Hose Unit consists of Hoses, Couplings with Connectors	1 No.
19.	PPS - 39	Foot Pedal to operate remote control valve	1 No.
20.	PPS - 40	Lever to operate remote control valve	1 No.
21.	PPS - 41	Lifting Sling (Four Hooks Type).	1 No.
22.	5163	Inserts to handle 3½" Drill Pipe for Slip Body Size 4½" (One set consists of 08 no. of Inserts)	04 Set
23.	5163-B	Inserts (Taper Design) to handle 3½" Drill Pipe for Slip Body Size 4½" (One set consists of 04 no. of Inserts)	04 Set
24.	5164	Inserts to handle 4" Drill Pipe for Slip Body Size 4½" (One set consists of 08 no. of Inserts)	04 Set
25.	5164-B	Inserts (Taper Design) to handle 4" Drill Pipe for Slip Body Size 4½" (One set consists of 04 no. of Inserts)	04 Set
26.	5165	Inserts to handle 4½" Drill Pipe for Slip Body Size 4½" (One set consists of 12 no. of Inserts)	04 Set
27.	5168	Inserts to handle 4½" Drill Pipe for Slip Body Size 5½" (One set consists of 08 no. of Inserts)	04 Set
28.	5168-B	Inserts (Taper Design) to handle 4½" Drill Pipe for Slip Body Size 5½" (One set consists of 04 no. of Inserts)	04 Set
29.	5169	Inserts to handle 5" Drill Pipe for Slip Body Size 5½" (One set consists of 08 no. of Inserts)	04 Set
30.	5169-B	Inserts (Taper Design) to handle 5" Drill Pipe for Slip Body Size 5½" (One set consists of 04 no. of Inserts)	04 Set
31.	5170	Inserts to handle 5½" Drill Pipe for Slip Body Size 5½" (One set consists of 12 no. of Inserts)	04 Set

Exploded View of Pneumatic Power Slip

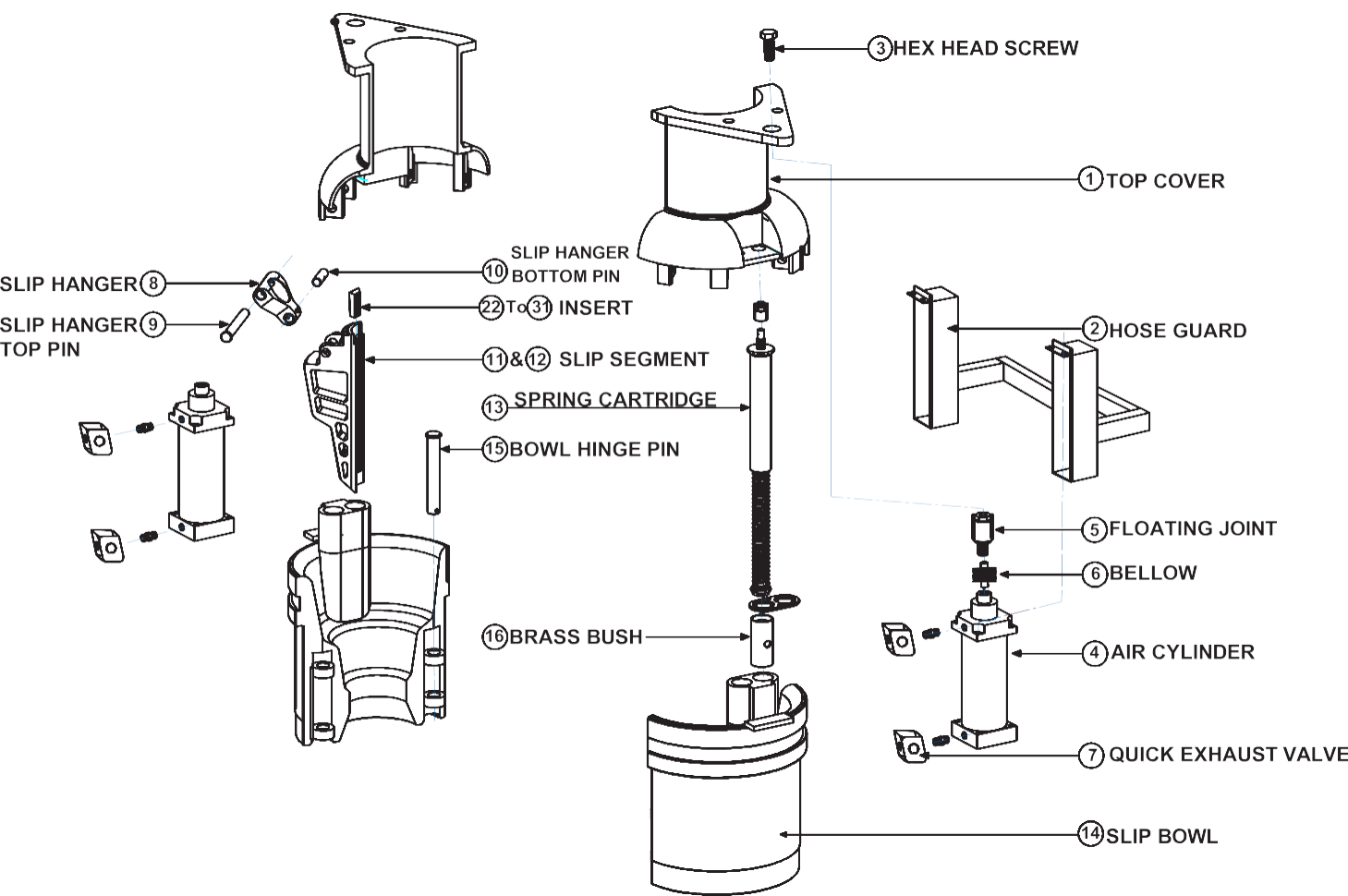


Figure No. 34