

RHB API Insert Pumps

RHBC and RHBM standard sucker rod pumps

APPLICATIONS

- Deep wells
- Low- to high-fluid-level wells

BENEFITS

- Highly adaptable
- Accommodates high fluid volumes

FEATURES

- Heavy-walled barrel
- Bottom hold-down
- Universally accepted design

RHB API insert pumps are heavy-walled, stationary barrel, bottom hold-down pumps recognized by API as a standard design. These pumps are recommended for depths of 8,000 ft [2,438.4 m] or greater when there is little chance of sand accumulation. If sand is an issue, nonstandard accessories such as a top seal can be used to prevent a stuck pump.

These pumps can also be modified for use as a stroke-through pump to release sand and other material. To minimize damage to the plunger and barrel, a grooved-body plunger is often used to catch and carry the sand away from those components.

Seating options on this pump include mechanical or cup types suitable for high temperatures and mechanical types for simplified well maintenance. A mechanical hold-down does not require repair unless major damage has occurred, whereas cups should be replaced every time the pump is unset. Both hold-down types follow the same procedure of setting and unsetting by placing the weight of the sucker rods down on the pump or lifting up.

Enhance operational flexibility and extend the life of your rod lift system

Schlumberger offers a range of tools and specialty products engineered to address common problems such as rodstring wear and damage due to gas interference, erosion, or insufficient fluid levels. These products provide greater flexibility during operations and can extend the life of the rod lift system.

Sand specialty products

- Prevent a stuck pump scenario caused by solids accumulation around the hold-down with a top seal.
- Proactively reduce particulate collection near the hold-down with a sand shield, which uses rubberized fins to act as a barrier against solids.
- Direct solids away from the pump barrel, maintain downhole pump integrity, and extend run life with the sand diverter.
- Keep particulate matter from settling and sticking the pump and greatly reduce the adverse effects of corrosive fluid by using the bottom discharge valve.

Gas specialty products

- Stabilize and protect the valve rod during the pump stroke with a carbide insert valve rod guide.

PumpTrak system

- Continuously improve operations with the PumpTrak* web-based pump service tracking system, which serves as a repository of detailed service information including service history, installation and pull date, days in use, and failure and cost analysis.



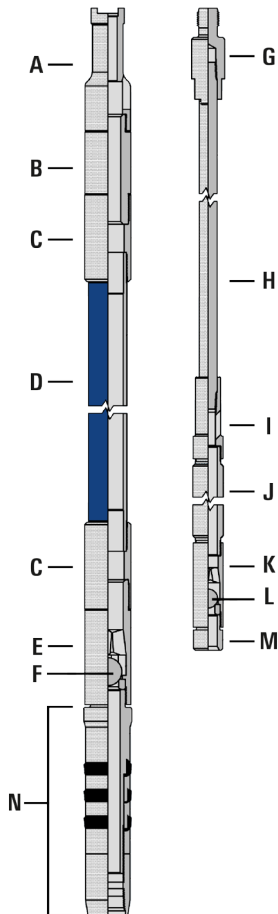
RHB API insert pump.

RHB API Insert Pumps

Stationary-Barrel, Bottom-Anchor, Cup-Type Hold-Down

Description	Item	Req.	Tubing × Pump Bore Size, in [mm]					
			1 ⁹ / ₁₀ × 1 ¹ / ₁₆ [48.260 × 26.988]	2 ³ / ₈ × 1 ¹ / ₁₆ [60.325 × 26.988]	2 ³ / ₈ × 1 ¹ / ₄ [60.325 × 31.750]	2 ⁷ / ₈ × 1 ¹ / ₂ [73.025 × 38.100]	2 ⁷ / ₈ × 1 ³ / ₄ [73.025 × 45.450]	3 ¹ / ₂ × 2 ¹ / ₄ [88.900 × 57.150]
			Part Number					
Stationary Assembly								
Guide, valve rod	A	1	GR111	GR211	GR211	GR321	GR321	GR431
Connector, upper barrel	B		C101	C222	C222	C332	C332	C443
Coupling, extension	C	2	EN014	EN214	EN214	EN314	EN414	EN514
Barrel, heavy wall	D		BT0016C	BT0116C	BT0416C	BT0716C	BT0816C	BT1416C
Cage, closed barrel	E	1	CF32	CF42	CF42	CF62	CF62	CF82
Valve, ball and seat	F		045 + 03	047 + 04	047 + 04	049 + 06	049 + 06	051 + 07
Traveling Assembly								
Bushing, valve rod	G		BR1-1-D	BR1-1-D	BR1-1-D	BR2-1-D	BR2-1-D	BR3-1-D
Rod, valve	H		VR1-142	VR1-191	VR1-191	VR2-191	VR2-191	VR3-190
Coupling, plunger adapter	I		PA11	PA11	PA21	PA320	PA42	PA630
Plunger	J	1	P114-3	P114-3	P214-3	P314-3	P414-3	P714-3
Cage, closed plunger	K		CF11	CF11	CF21	CF31	CF41	CF61
Valve, ball and seat	L		041 + 01	041 + 01	043 + 02	045 + 03	047 + 04	049 + 06
Plug, seat	M		PS11	PS11	PS21	PS31	PS41	PS61
Seating Assembly								
API, 3-cup*	N	1	HM31	HM41	HM41	HM51	HM51	GR4310

Barrel, barrel extensions, plunger, and valve rod must all be specified in length.
All components may be specified by material and coating type.
*API mechanical type seating assembly also available.



slb.com/rodlift

Schlumberger