

RHA API Insert Pumps

RHAC and RHAM standard sucker rod pumps

APPLICATIONS

- Sandy wells
- Low fluid-level wells
- Gassy or foamy wells
- Shallow- to moderate-depth wells

BENEFITS

- Allows full submersion in fluid
- Greater depth capability than RWA API insert pump

FEATURES

- Heavy-walled barrel
- Top anchor hold-down
- Universally accepted design

RHA API insert pumps are heavy-walled, stationary barrel, top anchor pumps recognized by API as a standard design. These pumps are suitable for moderate depths with high sand fallback on well shutdown. Fluid dispersion directly above the seat nipple prevents the pump from becoming stuck in such a situation.

The heavy-walled barrel is less sensitive to pressure and therefore may be run slightly deeper than the otherwise similar thin-walled RWA API insert pumps.

Seating options on this pump include mechanical or cup types suitable for high temperatures and mechanical types to simplify 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 by placing the weight of the sucker rods down on the pump and unsetting by lifting them up.

This pump can be further optimized by selecting the metallurgy and coating of various components to maximize pump life in specific well conditions.

Enhance operational flexibility and extend the life of your rod 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

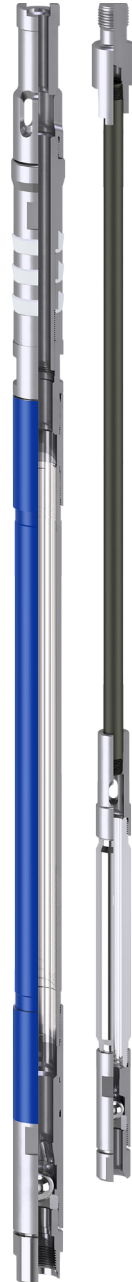
- Direct solids away from the pump barrel, maintain downhole pump integrity, and extend run life with the sand diverter.

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.
- Track why and how a failure occurred with insights into well properties and actively address its existing challenges by replacing the pump with a fit-for-purpose solution.



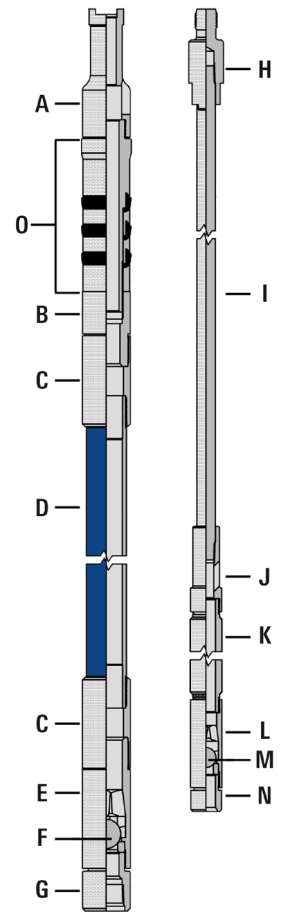
RHA API insert pump.

RHA API Insert Pumps

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

Description	Item	Req.	Tubing × Pump Bore Size, in			
			2 ³ / ₈ × 1 ¹ / ₄	2 ⁷ / ₈ × 1 ¹ / ₂	2 ⁷ / ₈ × 1 ³ / ₄	3 ¹ / ₂ × 2 ¹ / ₄
Stationary Assembly						
Guide, valve rod	A	1	GR211	GR311	GR321	GR4310
Connector	B		BS2-3	BS3-4	BS3-4	BS4-5
Coupling, extension	C	2	EN214	EN314	EN414	EN514
Barrel, heavy wall	D		BT0416C	BT0716C	BT0816C	BT1416C
Cage, closed barrel	E	1	CF42	CF62	CF62	CF82
Valve, ball and seat	F		047 + 02	049 + 06	049 + 06	051 + 07
Bushing, seat, barrel cage	G		BS2-3	BS3-4	BS3-4	BS4-5
Traveling Assembly						
Bushing, valve rod	H		BR1-1-D	BR1-1-D	BR2-1-D	BR3-1-D
Rod, valve	I		VR1-196	VR1-197	VR2-196	VR3-196
Coupling, plunger adapter	J		PA21	PA310	PA42	PA630
Plunger	K	1	P214-3	P314-3	P414-3	P714-3
Cage, closed plunger	L		CF21	CF31	CF41	CF61
Valve, ball and seat	M		043 + 02	045 + 03	047 + 04	049 + 06
Plug, seat	N		PS21	PS31	PS41	PS61
Seating Assembly						
API, 3-cup [†]	O	1	HM41	HM51	HM51	HM61

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.



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