

Isolated Gas Compression Pump

Extreme gas handling for pumping below a packer

APPLICATIONS

- Gaseous wells
- Low fluid-level wells
- Beneath a packer

BENEFITS

- Eliminates gas lock

FEATURES

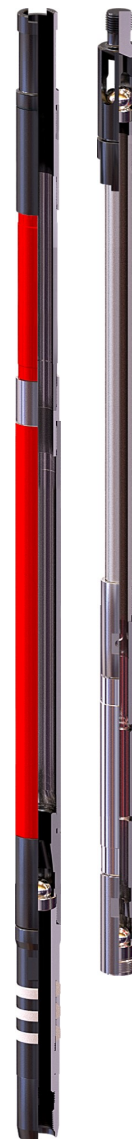
- Two plungers: thermal-sprayed mercury plunger and standard plunger
- Two heavy-walled barrels
- Two-stage traveling valve

The Don-Nan Isolated Gas Compression Pump is efficient at moving gas through the pump and is designed for pumping underneath a packer, which prevents gas from traveling up the casing annulus. Using two plungers and two barrels enables an extremely tight plunger-to-barrel fit throughout the assembly, resulting in precise gas transference. The extremely tight fit in this pump makes it suitable for use where little to no solids are present.

Design

The Isolated Gas Compression Pump's extremely rigid design extends the life of the entire rod lift system by effectively mitigating the effects of gas pound and lock. Taking the idea of a hollow valve rod a step further, this design instead uses a mercury plunger. Compared to a hollow valve rod, a mercury plunger has greater wall thickness and a thermal-sprayed coating for increased wear resistance and enhanced rigidity to eliminate buckling at the pump.

The double-valve configuration of this pump helps to provide maximum compression and extend valve lifespan. The open traveling valve cage at the top of the pump holds the hydrostatic pressure enabling the lower traveling valve to easily open, achieving more consistent fluid-fill and a decreased probability of gas interference.



*Isolated Gas
Compression Pump*

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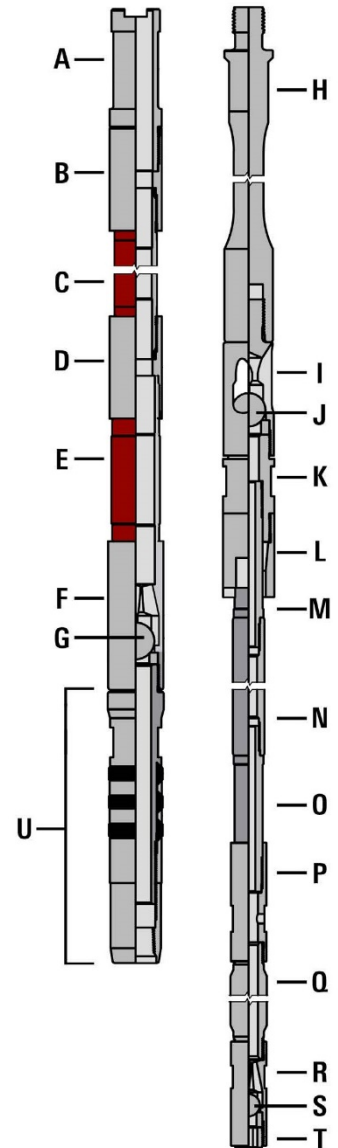
Isolated Gas Compression Pump Specifications

		Tubing x Pump Bore Size, in			
		2 3/8 x 1 1/4	2 3/8 x 1 1/2	2 7/8 x 1 3/4	2 7/8 x 2
Description	Item Req.	Part Number			
Stationary Assembly					
Guide, valve rod	A	GT122	GT132	GT24	GT24
Coupling, extension	B	EN1117-1.42	EN2117	EN3117	EN3117
Barrel, Upper	C	BT00027C	BT04027C	BT07027C	BT07027C
Bushing, barrel	D	1 EN1117-1.42	BB2117	EN3117	BB32
Barrel, lower	E	BT04207C	BT06207C	BT08207C	BT13207C
Cage, closed barrel	F	CF502	CF522	CF671-3	CF626
Valve, ball and seat	G	047 + 05	047 + 05	048 + 06	048 + 06
Traveling Assembly					
Lift Sub	H	38SB1	38SB1	38SB1	38SB1
Upper TV cage, open	I	CF441-1	CF441-1	CF641-1	CF641-1
Valve, ball and seat	J	047 + 04	047 + 04	049 + 06	049 + 06
Top Valve Pull Tube Adapter	K	BC11	BC21	BC42	BC42
Collet Bushing	L	NC542	NC642	NC742	NC742
Plunger Pin	M	80PP11-4	80PP22-4	80PP33-4	80PP33-4
Mercury Plunger	N	1 P1616M-2	P2616M-2	P3616M-2	P3616M-2
Plunger Pin	O	80PP11-4	80PP22-4	80PP33-4	80PP33-4
Coupling, plunger adapter	P	CT1114	CT3124	CT4134	CT4144
Plunger	Q	P215M-5	P315M-5	P415M-5	P615M-5
Lower TV cage, closed	R	CF211	CF311	CF411	CF511
Valve, ball and seat	S	042 + 02	044 + 03	046 + 04	047 + 05
Plug, seat	T	PS221	PS321	PS421	PS521
Seating Assembly					
API, 3-cup*	U	1 HD422-3	HD422-3	HD511-4	HD511-4

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.



BUILT TO LAST

Made to Perform

Headquarters

811 Willow Oak Dr,
Missouri City, TX 77489
(281) 495-1100

Midland Campus

3427 E Hwy 158,
Midland, TX 79706
(432) 967-5575

LUFKIN Don-Nan is an API 11AX certified manufacturer for
25 continuous years and counting.

Ref: 09042022

lufkin.com/donnan