

PIPELINE INJECTION PUMP

RATED TO 1,500 PSI

BUSHINGS

GEAR CASINGS

DRIVER GEAR

BRACKET

HEAD

DRIVEN GEAR

MOUNTING BRACKET

SAE 4-BOLT

FEATURES & BENEFITS:

Modular Port Design

- Standard 180° ports with weld neck adapters to accommodate the flange of your choice
- Port design allows for multiple interchangeable flange options
- Common Port Location (CPL) feature allows for installation of lower flowrate pumps when well production decreases without welding or piping modifications

Compact Footprint

- 7' unit length on largest pump and motor assembly
- Motor speed operation eliminates the need for gear reducers or belt drives
- Units include small, rigid formed steel baseplate complete with spacer coupling and coupling guard

PERFORMANCE:

CONTACT THE VIKING

PUMP SPECIALISTS:

PUMP PIPELINE INJECTION

Pump Model	Ports*	Nominal Flow @ 750PSI (1,775 rpm) on 4 cP			Nominal Flow @ 1,500PSI (1,775 rpm) on 4 cP			Max Continuous Pressure	Max Recommended Temperature	Approximate Shipping Weight (Pump Only)
Ductile Iron	Inch	GPM	BPH	BPD	GPM	ВРН	BPD	PSI	Deg. F	Lbs.
GP-41013	2" SAE	22	32	760	20	29	683	1500	350	61
GP-41026	2" SAE	44	63	1,520	40	57	1,366	1500	350	85
GP-41415	2" SAE	46	66	1,587	40	57	1,366	1500	350	170
GP-41420	2" SAE	60	85	2,045				750	350	170
GP-41430	2" SAE	94	134	3,208	81	116	2,779	1500	350	270
GP-41440	3" SAE	120	172	4,138				750	350	284
GP-41445	3" SAE	141	201	4,833	122	175	4,202	1500	350	395
GP-41455	3" SAE	168	240	5,760				750	350	403
GP-41460	4"	182	260	6,230	- 1	-	-	750	350	447

^{* 2&}quot; and 3" SAE ports use J518 Code 61 SAE flange ports. 4" port uses 3000 Series square flange.

Ben Leonard [[

BLeonard@idexcorp.com (618) 416-5830 **Office** (618) 340-3062 **Mobile**

Doug Carlisle

DCarlisle@idexcorp.com (720) 920-9627 **Office** (303) 475-6997 **Mobile**

Austin Harriman

AHarriman@idexcorp.com (210) 850-0187 **Mobile**



THE VIKING PUMP ADVANTAGE, COMPARED TO:

Other External Gear Pumps

- Lower price for equivalent performance
- Less potential leak paths
 - Only one mechanical seal
 - Fewer pump sections and static seals
- Fluid-lubricated bushings eliminate the need for external lubrication

Progressing Cavity Pumps

- Lower price for equivalent performance
- Significant space and weight savings
 - Smaller skid footprint and lower shipping costs
- More resistant to damage from running dry
 - Running a PC pump dry results in rotor and or stator replacement
- Less space required for maintenance
 - PC pumps need more than double the assembly length to replace the rotor and stator

Reciprocating Pumps

- Lower total cost of ownership
 - Smooth flow eliminates the need for pulsation dampeners
 - Motor-speed operation eliminates the need for belt drives
 - Compact design results in a smaller skid and reduced shipping costs
- Multiple sealing options
 - Large selection of seals to accommodate individual application requirements
 - Leak detection solutions available
- Higher pressure capability
- Simple design
- Reduced maintenance
 - No check valves or seats to replace
 - No lube oil or oil changes required
 - No belt drives to service and maintain
 - No pulsation dampeners to maintain
- Significant space and weight savings
 - Smaller skid footprint and lower shipping costs

Centrifugal H-Pumps

- Significant space and weight savings
 - Smaller skid footprint, especially at higher differential pressures
 - Lower shipping costs
 - No additional cradle supports, which can complicate alignment
- Positive displacement flow
 - Smooth, linear flow characteristics
 - Better suited for variable flow and pressure applications
 - No need for complex control valves to keep the pump operating in the optimal spot on the performance curve
- Durability
 - Larger drive shaft and less distance between shaft supports
 - Simple design with fewer moving parts

VIKING PUMP'S COMMERCIAL ADVANTAGES:

- Over 107 years of experience in the pump industry
- Extensive distribution network and direct OEM channel ensure fast and knowledgeable service
- USA based, vertically integrated manufacturing:
 Products are produced from our own foundry, machine shop,
 test and assembly stands, and shipping department,
 all located in Cedar Falls, IA
- Part of IDEX Corporation, a \$2 billion corporation

SUCCESS STORIES:

Anadarko Petroleum

- Long time user of another gear pump and progressing cavity pumps
- Had reliability issues and excessive pump failure
- Purchased 100 pipeline injection pumps for an expansion project
- They were so pleased, that they retrofitted an additional 60 pumps in the field
- Viking is their LACT pipeline injection pump supplier of choice now

Summit Midstream

- Used another gear pump and progressing cavity pumps
- Purchased approximately 30 Viking pipeline injection pumps
- Viking helped trouble shoot an issue with an oversized charge pump from another manufacturer in the field
- Viking is now their LACT pipeline injection pump supplier of choice

Enable Midstream

- Historically used a competitor's gear pump, and have had excessive pump failures
- Problem: LACTs sometimes experience pump failures in less than 100 barrels of volume
- Their worst LACT was experiencing failures on a regular basis, so Viking was invited to offer a solution
- Viking provided a LACT pipeline injection pump that was placed in their most problematic LACT
 - Competitor's pump lasted a few days
 - Viking Pump has been running successfully for a few months without any indications of reduced performance
- Enable has placed many Viking units to replace previous gear pump LACT units and continue to replace field installed LACT pipeline injection pumps with Viking product

Saddle Butte Pipeline

- Used a progressing cavity
- Purchased 60 Viking pipeline injection pumps
- Felt that our pumps were just as reliable as their existing solution, significantly less expensive, and offered a significantly reduced footprint

Tesoro

- Purchased 215 Viking pipeline injection pumps in 2014 and 2015
- Pumps have been operating reliably since installation

Customer references available upon request