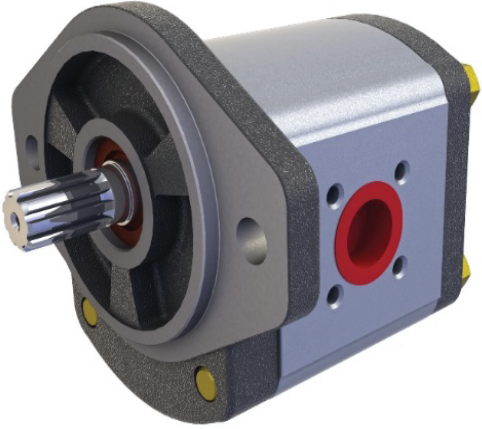
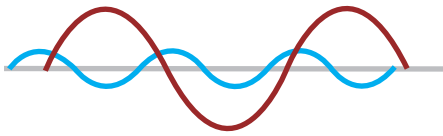


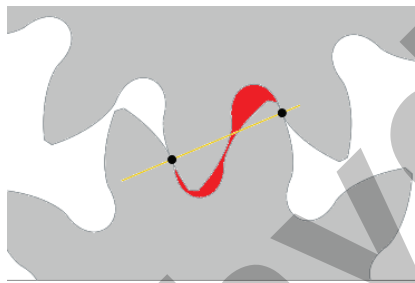
## 1PS LOW NOISE PUMP SERIES



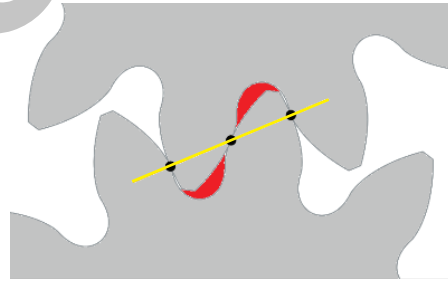
- 97% volumetric efficiency
- Reduced outlet pressure ripples by 75%
- Wide speed range
- Improved mechanical noise
- Reduced trapped oil volume
- Dual flank contact gears



- Pressure ripple - Standart Gear Design
- Pressure ripple - 1PS Gear Design



Standard Gear Design



1PS Gear Design

Gear pumps produce high frequency pressure ripples giving rise to remarkable 'flow rate ripples' in suction and impulsion chambers. Flow rate ripples induce significant vibration amplitudes during operation. Generally, excitation of the vibration is the main source of noise in most hydraulic systems. Therefore, with dual-flank contact system, the pressure ripples of 1PS Low Noise Series Pumps are reduced by 75% compared to standard designs. 1PS dual-flank series offers high performance and low noise and ripple levels with new developed 12 teeth gear design.

Pump Type	Displacement (cm <sup>3</sup> /rev)	Max. Rated Pressure (bar)	Intermittent Pressure (bar)	Peak Pressure (bar)	Max.– Min. Speed (rpm)
1PS040	4.0	250	280	300	600-4000
1PS061	6.1	250	280	300	600-4000
1PS082	8.2	250	280	300	600-4000
1PS095	9.5	250	280	300	600-3500
1PS119	11.9	250	280	300	600-3500
1PS140	14.0	250	280	300	600-3000
1PS168	16.8	250	280	300	500-3000
1PS192	19.2	250	280	300	500-3000
1PS229	22.9	210	240	270	500-3000
1PS250	25.0	190	225	265	500-2500
1PS281	28.1	170	200	265	500-2300
1PS310	31.0	140	180	220	500-2000

### Features

- Low noise, low pressure ripple and high efficiency gear design
- Displacement range from 4.0 cm<sup>3</sup>/rev to 31.0 cm<sup>3</sup>/rev
- Max. rated pressure 250 bar
- Max. speed 4000 rpm
- Designed with aluminum body, cast iron flanges and covers
- Optional sectional sealing for multiple pumps
- SAE, European, DIN and ISO flange, port and shaft options

### Benefits

- Low noise and low pressure ripple
- High efficiencies
- Multiple units
- Custom design

### Applications

- Steering and lift systems of electric trucks
- Light and heavy commercial vehicles
- Warehouse lift trucks
- Electric counterbalanced lift trucks
- Mobile equipments, telehandler
- Agricultural machines and mini loaders
- Hydraulic platforms
- Earth moving machines
- General industrial machines
- On Road / Off Road electric vehicles

Please contact the marketing and sales department for displacements above 16.8cc.  
Please contact the marketing and sales department for cast iron body types.