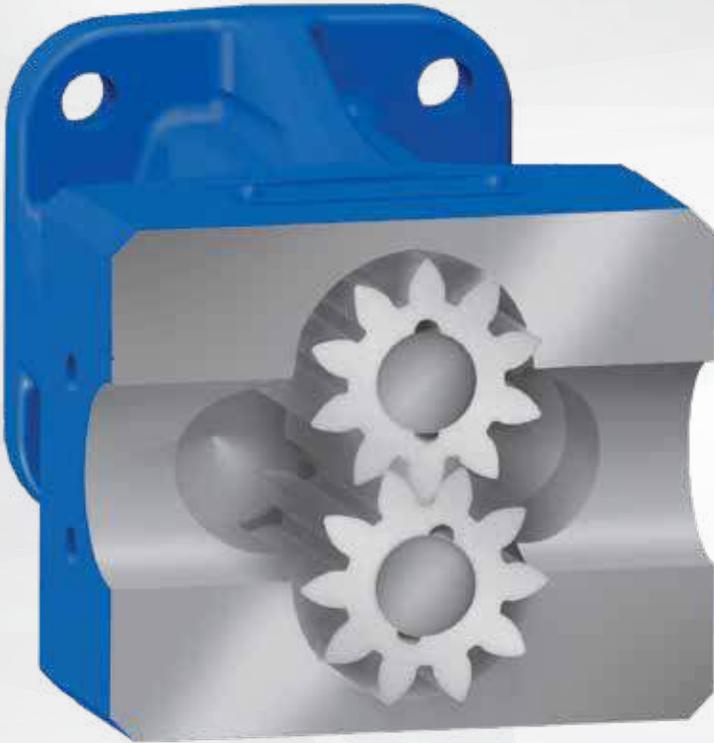
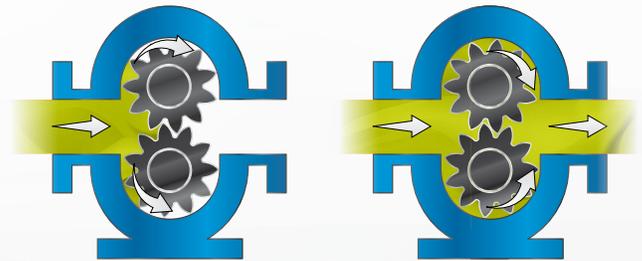


EXTERNAL GEAR PUMPS



WHY? The external gear pump is the ultimate solution for high pressure pumping.

- Bearing support on both sides of the gears enables differential pressures to 500 PSI (34 BAR), or Intermittent to 2,500 PSI (170 BAR)
- Motor speed operation eliminates cost of speed reducer
- Eliminates lubrication – no external axial or radial bearing required in most applications



TYPICAL APPLICATIONS

Common external gear pump applications include, but are not limited to:

- Various fuel oils & lube oils
- Chemical additive & polymer metering
- Chemical mixing & blending (double pump)
- Industrial & mobile hydraulic applications
- Low volume transfer or application

MATERIALS OF CONSTRUCTION & CONFIGURATION OPTIONS

Externals (Head, Casing, Bracket)

Iron, ductile iron

Internals (Shafts)

Steel

Internals (Gears)

Steel

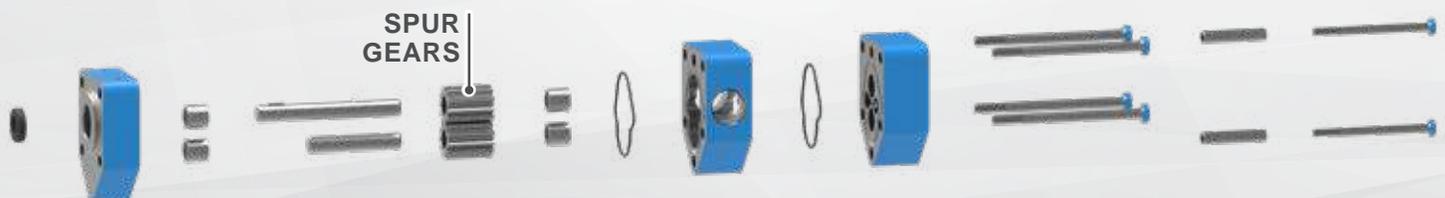
Bushings (Sleeve Bearings)

Carbon, silicon carbide, needle bearings

Shaft Seal

Lip seal, component mechanical seal, sealless magnetic couplings

KEY PUMPING ELEMENTS



The External Gear Pump with spur gears offers higher pressures and unique abilities to supply multi-section specialty pumps with one driver.

ADVANTAGES

Higher Pressure Capabilities

With shaft support on both sides of the gears

Multi-Section Pumps

Use one motor for multiple pumping applications, blending liquids, or splitting flows to different uses

Shaft Seal Options

Including lip seal, component mechanical seal and sealless mag drive options

Compact, Close-Coupled Options

For motor speed operation or with gearmotors

Smooth, Non-Pulsing Flow

For accurate flow measurement

Reliable & Easy to Maintain

With only two moving parts

One Shaft Seal

More reliable and lower cost than two used on timed lobe and screw pumps

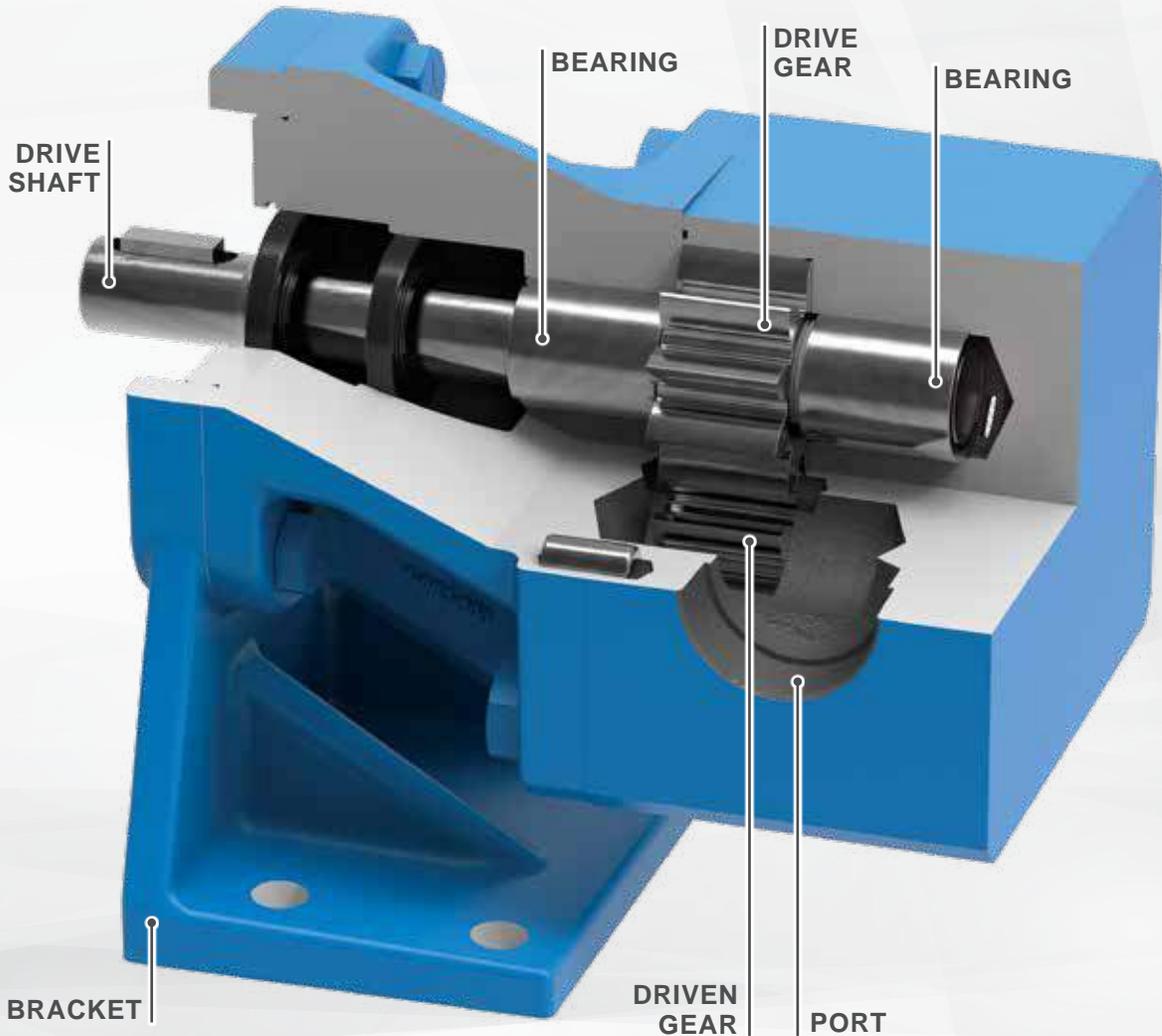
PERFORMANCE

Flow Range
to 190 GPM (719 LPM)

Viscosity
28 to 1,000,000 SSU (1 to 250,000 cSt)
With special construction

Pressure
to 500 PSI (34 BAR)
Intermittent to 2,500 PSI (170 BAR)

Temperature
-40°F to +450°F (-40°C to +230°C)
With special construction





FLOW RANGE
to 190 GPM
(719 LPM)



PRESSURE
to 500 PSI
(34 BAR)



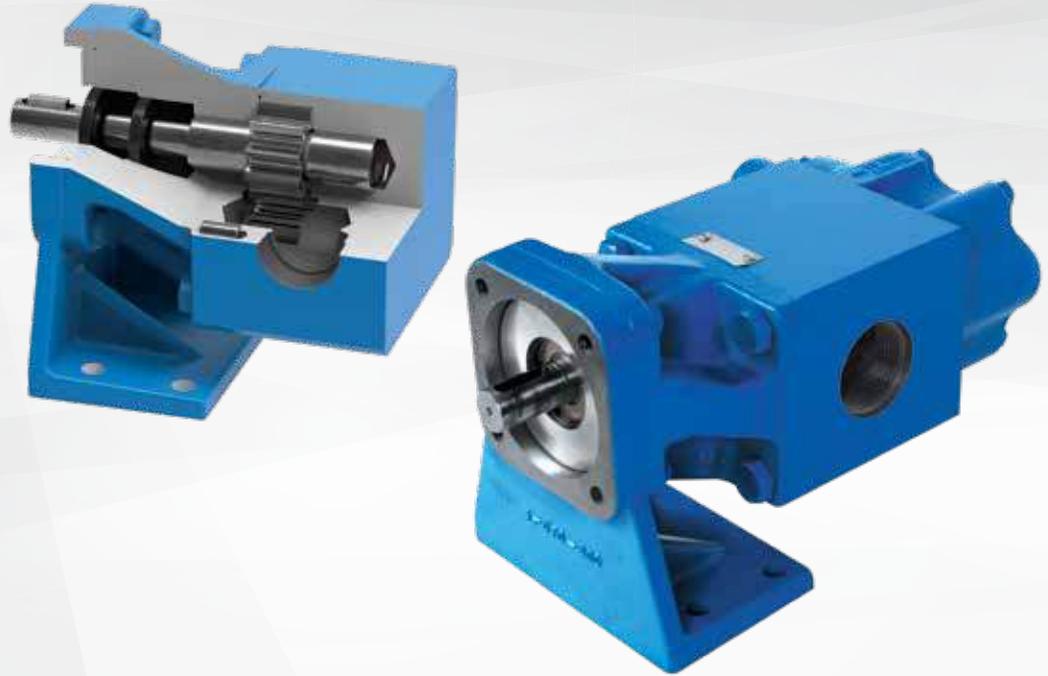
TEMPERATURE
-40°F to +450°F
(-40°C to +230°C)



VISCOSITY
28 to 1,000,000 SSU
(1 to 250,000 cSt)

SPUR GEAR PRODUCT LINE

CAST OR DUCTILE IRON CONSTRUCTION*



FEATURES & BENEFITS

- Needle bearings provide high pressure capabilities, sleeve bearing options available
- Close-coupled motor mount or foot bracket options to match space or motor requirements
- Double pump configurations offer two flow rates operating from a single power source, reducing equipment costs

TYPICAL APPLICATIONS

- Pipeline Injection
- Pipeline Sampling
- Oil Polishing
- High Pressure Lubrication
- Hydraulics

PERFORMANCE

MODELS			SPECIFICATIONS						
Lip Seal	Mechanical Seal	Mag Drive	Nominal Flow Range At 1750 RPM		Continuous Pressure		Intermittent Pressure		Standard Ports
			GPM	LPM	PSI	BAR	PSI	BAR	Size, Inches
SG-0417	SG-40417	—	0.06	0.23	500	34	750	52	0.375
SG-0418	SG-40418	—	0.14	0.53	500	34	1,250	86	0.375
SG-0425	SG-40425	—	0.18	0.68	500	34	1,500	103	0.375
SG-0470	SG-40470	—	0.5	1.89	500	34	1,500	103	0.375
SG-0518 ①	SG-40518	SG-80518	0.7	2.6	500	34	1,500	103	0.5
SG-0525 ①	SG-40525	SG-80525	1	3.8	500	34	2,500	172	0.5
SG-0535 ①	SG-40535	SG-80535	1.4	5.3	500	34	2,500	172	0.5
SG-0550 ①	SG-40550	SG-80550	2	7.6	500	34	2,500	172	0.5
SG-0570 ①	SG-40570	SG-80570	2.8	10.6	500	34	1,800	124	0.5
SG-0510 ①	SG-40510	SG-80510	4	15.1	500	34	1,250	86	0.5
SG-0514 ①	SG-40514	SG-80514	5.6	21.2	500	34	900	62	0.75
SG-0519 ①	SG-40519	SG-80519	7.6	28.8	200	14	400	28	0.75
SG-0528 ①	SG-40528	SG-80528	11.2	42.4	100	7	200	14	0.75
SG-0729	SG-40729	—	2.8	10.6	500	34	2,500	172	1
SG-0741	SG-40741	SG-80741	4	15.1	500	34	2,500	172	1
SG-0758	SG-40758	SG-80758	5.6	21.2	500	34	2,500	172	1
SG-0782	SG-40782	SG-80782	8	30.3	500	34	2,250	155	1
SG-0711	SG-40711	SG-80711	11.2	42.4	500	34	1,600	110	1
SG-0716	SG-40716	SG-80716	16	61	500	34	1,100	75	1
SG-0722	SG-40722	SG-80722	22	83	500	34	1,600	110	1.50 X 1.25
SG-0732	SG-40732	SG-80732	32	121	500	34	1,100	75	1.50 X 1.25
SG-1009 ②	SG-41009 ②	—	16	61	500	34	2,500	172	1
SG-1013 ②	SG-41013 ②	SG-81013 ②	25	95	500	34	1,900	131	1.5
SG-1026 ②	SG-41026 ②	SG-81026 ②	50	189	500	34	1,000	69	2
SG-1420 ②	SG-41420 ②	SG-81420 ②	70	265	500	34	1,100	76	2
SG-1436 ②	SG-41436 ②	SG-81436 ②	125	473	290	20	580	40	3
SG-1456 ②	SG-41456 ②	SG-81456 ②	190	719	190	13	380	26	4

Integral pressure relief valve standard (single pump).

① SG-05 models available with UL 343 listing for fuel oil.

② SG-10 & SG-14 models are standard with Ductile Iron construction only.

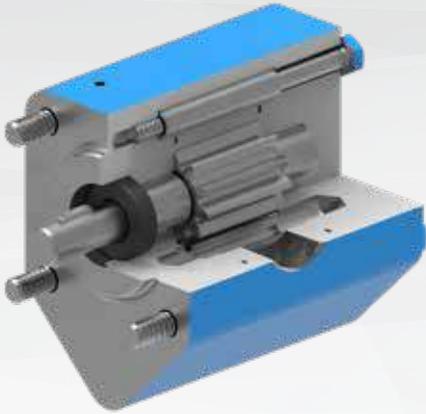
* SG-05 & SG-07 models also available in Ductile Iron construction (SGN)

Refer to Appendix B on page 33 for more information on seals and porting.



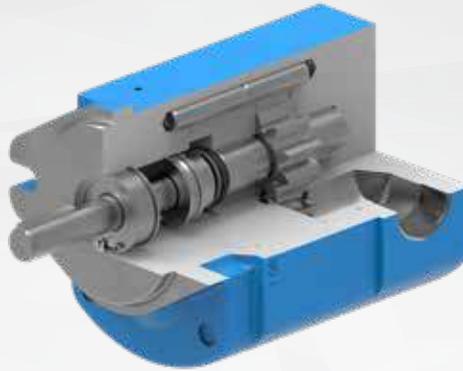
DID YOU KNOW?

With small displacements and fine gear teeth, these pumps are not only good at high pressures, but also make excellent metering pumps. In fact, the 0417 size dispenses only 0.13 mL with each shaft revolution.



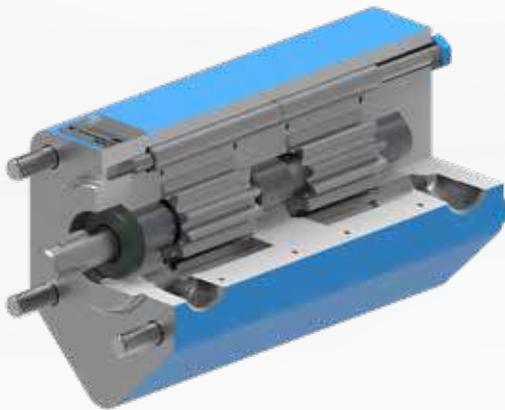
Lip Seal (SG-0514)

- Wide range of viscosities
- Economical option for clean lubricating liquids
- Needle bearings as standard



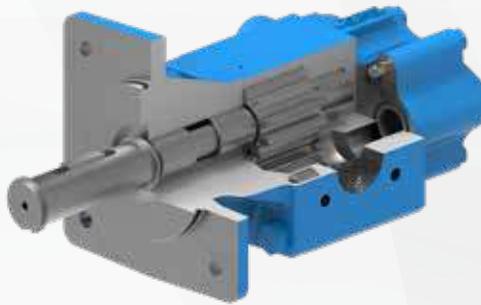
Mechanical Seal (SG-40782)

- Used for thin liquids
- Carbon graphite bearings as standard



Double Pump (SG-051414)

- Configurations offer two flow rates operating from a single power source, reducing equipment costs



Sealless Mag Drive (SG-81026)

- Sealless technology to eliminate seal leakage at pressures to 500 PSI (34 Bar)



PORTING

- Opposite (180°)
- NPT
- SAE O-Ring
- SAE Flange

SEALING

- Lip Seal
- Component Mechanical Seal
- Sealless Mag Drive

MOUNTING

- Foot Mount (with Footed Bracket)
- Motor Mount Bracket to IEC & NEMA Motors (Close-Coupled)
- Vertical Mount

OPTIONS

- Double Pump

DRIVES



Refer to Appendix A on page 32 for more information on drives.

Note: Product images may not reflect standard construction.