



RANGER PUMPS

Ranger, Inc.

**Manufacturer
of precision helical gear pumps
for a wide range of
industrial applications**

Made in the USA

Four series of versatile moving both low and

RANGER PUMP FEATURES

SMOOTH OPERATING HELICAL GEARS

- Heat treated ductile iron helical gears provide silent, efficient long service life.
- Finely keyed and machined gears are easily replaced by sliding on and off the mainshaft.
- Friction and vibration are kept at a minimum by careful machining of the meshing helical gears.

EXTENDED-LIFE WEARING SERVICES

- High lead bronze, iron or carbon bearings are available.
- Pumping gears are supported by four heavy duty sleeve bearings to prolong service life.
- Special machined grooves in the bearings allow both circulation and

lubrication for lower bearing temperatures.

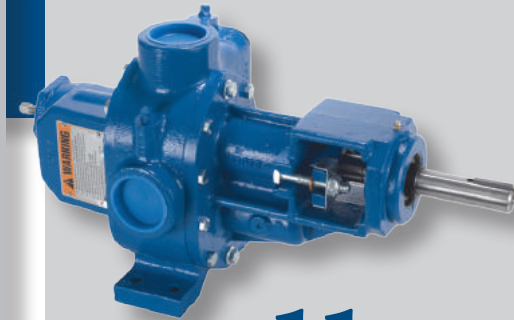
- Special outboard drive shaft bearing absorbs thrust loads and helps support external radial loads.

PRECISION GROUND SHAFTS

- Induction hardened bearing and packing surfaces on precision ground steel shafts extend pump life.
- Hardened stainless steel shafts are available for specific installations.

RUGGED CAST-IRON CASTINGS

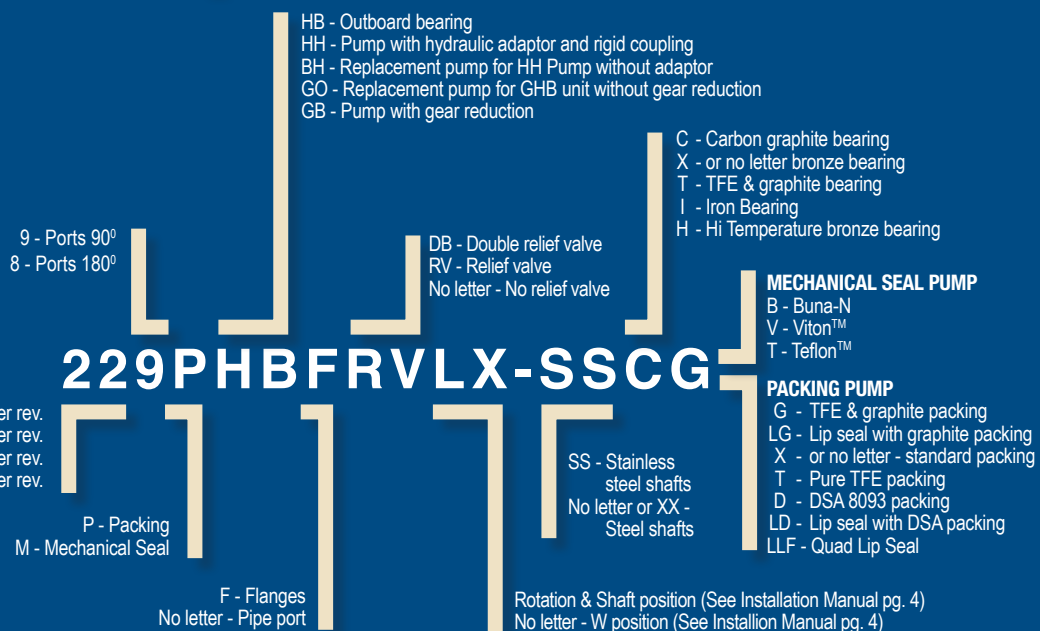
- Maximum pumping efficiency is gained from quality castings machined to high tolerances.
- Positive alignment of the faceplate case and backplate is insured by large hardened steel dowel pins.



SERIES 11

This series of Ranger pumps are designed to output .11 gallons per revolution at a maximum of 750 rpm and generate up to 80 gallons per minute. These pumps are offered in a 90°, 2" NPT tapped port model and a 180° model with 2" flanges.

Pump Identification Guide

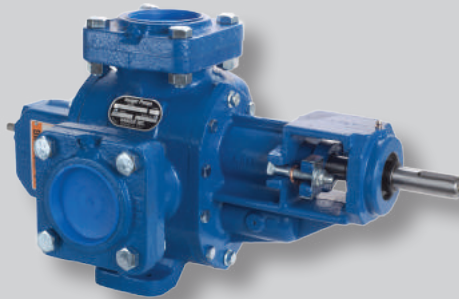


helical gear pumps for high viscosity liquids



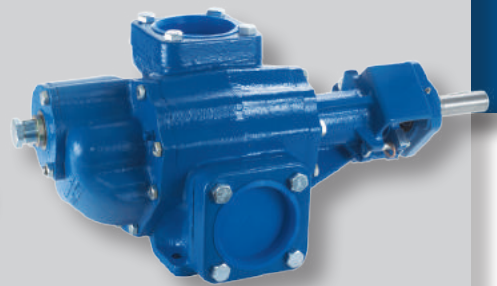
SERIES 17

This series of Ranger pumps are designed to output .17 gallons per revolution at a maximum of 750 rpm and generate up to 126 gallons per minute in a 90° model with 2" or 2.5" flanges and a 90° model with 2" NPT tapped ports.



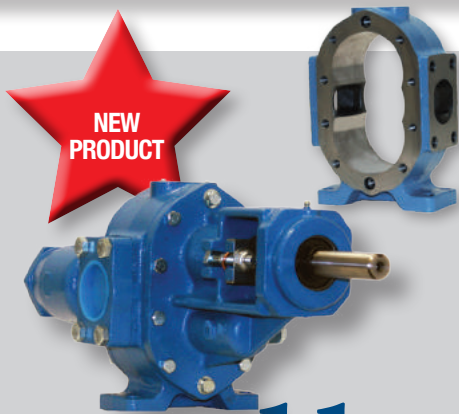
SERIES 22

This series of Ranger pumps are designed to output .22 gallons per revolution at a maximum of 750 rpm and generate up to 165 gallons per minute. These pumps are offered in 90° and 180° model with 3" and 4" flanges.



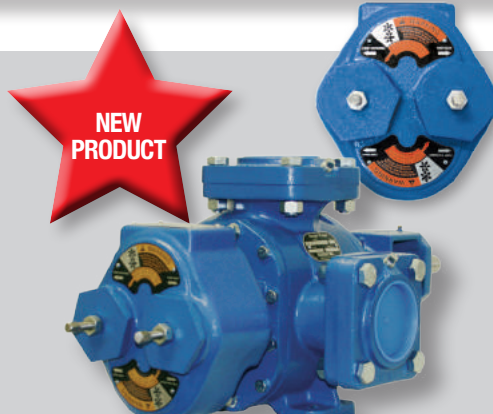
SERIES 48

This series of Ranger pumps are designed to output .52 gallons per revolution at a maximum of 900 rpm and generate up to 460 gallons per minute. These pumps are offered in a 90° model with 3" or 4" flanges.



SERIES 11
180° Ported Housing

Ranger now offers the 11 series with 180° ports and 2" NPT flanges. This is a good choice when your plumbing does not accommodate the 90° port model. It is available with the standard RV, Double RV and plain endplate. It is also available with the HB, HH and GB models.



Bi-Rotational Double Relief Valve

Ranger now offers a double relief valve for our series 11, 17 and 22 that will provide protection in both shaft rotations. The double relief will continue to protect from overpressure even when the shaft rotation is changed and the pumps flow is reversed. The double relief is field adjustable and works similar to the standard RV.



SERIES 48
Gear Reduction

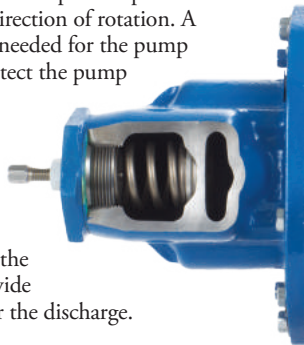
Ranger now offers an integrated gear reduction unit for the 48 series. It is available in a 4.26:1, 4.88:1 and 5.66:1 ratio. Please refer to page 7 for additional information.

Ranger pumps can Blending • Mixing • Trans Gasoline • Resins • Oil

Field Adjustable Relief Valve

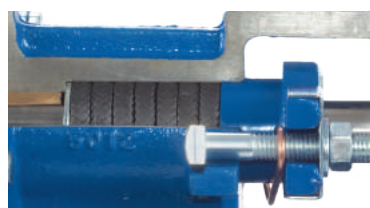
The relief valve will provide protection in only one direction of rotation. A relief valve is needed for the pump system to protect the pump from over-pressures.

The valves can be positioned to either side of the pump to provide protection for the discharge.



*See Installation, Operation and Maintenance manual for details.

Stuffing Box



Ranger pumps can be supplied as standard with stuffing box. They can be easily converted from packing to a lip seal or mechanical seal. Several types of packing are available for various applications: for example - high temperatures.

Quad Lip Seal



Ranger pumps can be supplied with a Quad Lip Seal as shown above. This can be easily converted from the Quad Lip Seal to packing only or a mechanical seal.

Key Components

Pumps come standard with fiber case gaskets (**Max 230°F/110°C). For temperature up to 450°F/232°C, we offer optional aluminum gaskets.

Various types of seals are available including packing, lip seals or mechanical seals.

Heat treated ductile Iron gears are accurately machined for quiet, efficient operation and long life.

Carbon steel relief valve springs come standard or optional stainless steel spring. Various springs are available for a wide range of operation duties.

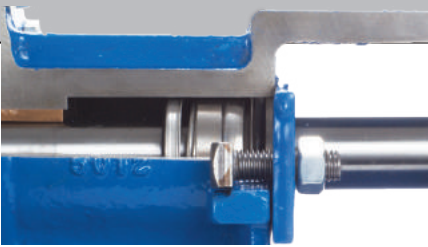
Four heavy duty sleeve bearings give positive support to pumping gears and ensure long, efficient service.

A large outboard bearing is furnished on all HB model pumps that support the drive shaft on applications with side loads.

The steel shafts are induction hardened in the bearing and packing areas and are precision ground to exacting standards for maximum life. Hardened stainless steel shafts are available.

Can be engineered for Transfer • Solvents • Molasses • Asphalt • Chemicals

Mechanical Seal



Ranger pumps can be supplied as standard with a single mechanical seal. They can be easily converted from a mechanical seal to packing or lipseal. Several types of seals are available (Buna-N, Viton™ and Teflon™) for various applications, for example: high temperatures or corrosive conditions. Contact Ranger for application assistance.

Standard Fitted Materials of Construction

PART	STANDARD MATERIALS	OPTIONS
Housing & Backplates	ASTMA48 Class 30 Cast Iron	
Gears	Ductile Iron	
Shafts	Carbon Steel	440 Stainless Steel
Bearing Bushings	Bronze	Carbon, Iron, TFE/ Graphite
R.V. Parts	Carbon Steel	Stainless Steel
Gaskets	Fiber	Aluminum
Hardware	Zinc Plated Steel	

Maximum Pump Ratings

125 PSI (862 KPA) maximum inlet and discharge pressure

750 RPM maximum for 11, 17 & 22 series.
(See speed vs. viscosity curve for maximum RPM).

900 RPM maximum for 48 series.
(See speed vs. viscosity curve for maximum RPM).

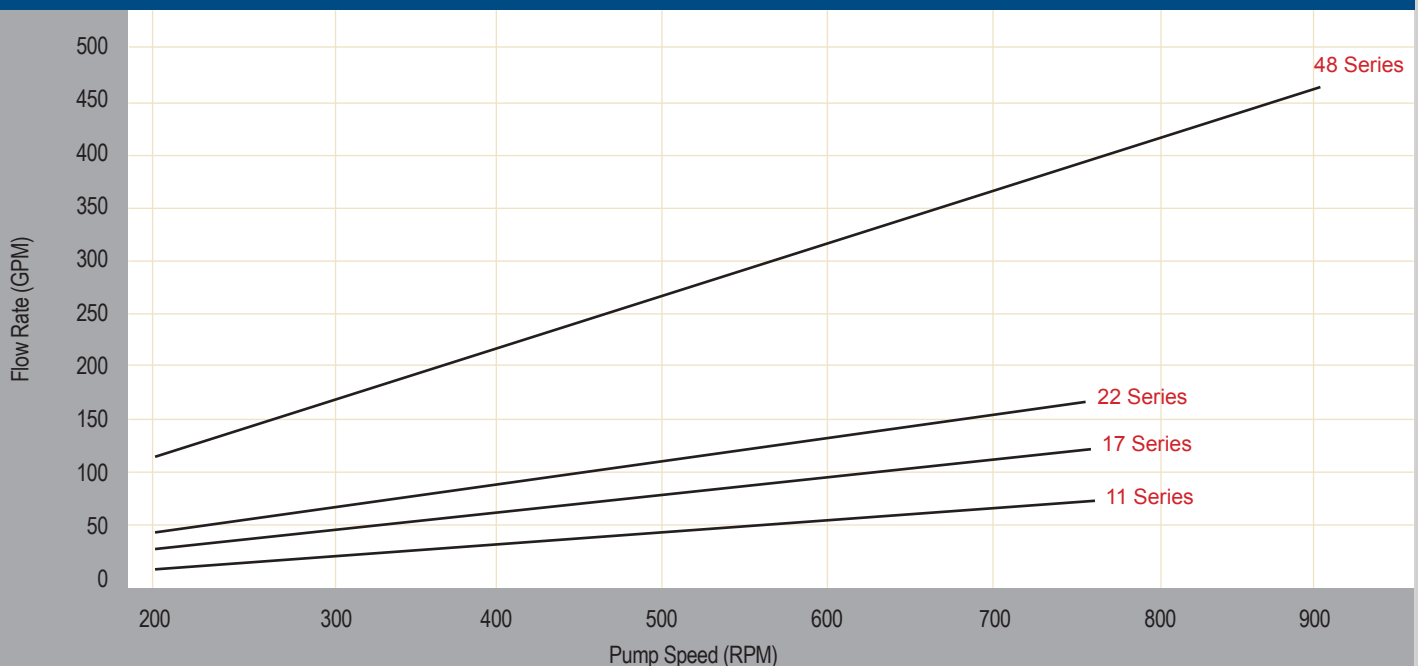
350°F (177°C) maximum temperature for standard packing.

500°F (260°C) Maximum temperature for TFE/Graphite

212°F(100°C) maximum temperature for BUNA-N mechanical seal

400°F (204°C) maximum temperature for Viton mechanical seal

Theoretical Capacity



Close-coupled gear reduction option



This series of Ranger pumps is designed to operate at reduced motor speeds. This allows the pump to operate equally well for both high and low viscosity liquids. Low pump speeds also increase pump life. Ranger gear boxes are self contained with oil lubricated anti-friction bearings and hardened steel gears standard for maximum service life. A common gear box has three interchangeable gear ratios that fit

the 11, 17 and 22 Series pumps.

The charts on this page are intended as a guide only. All application factors including temperature, liquid characteristics and inlet conditions must be considered to select the correct pump and reduction speed. Speeds shown for the 48 Series are for reference only, contact Ranger Pumps for more information.

Typical Liquids/Viscosity List

30 to 100 SSU

- Alcohols
- Gasoline
- Turpentine

100 to 250 SSU

- SAE #5 Oil
- Corn Oil
- Olive Oil

250 to 800 SSU

- SAE #10 Oil
- Soybean Oil
- Light Crude

800 to 2,500 SSU

- SAE #20-30 Oil
- Paint Primer
- Spar Varnish

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SERIES	RPM		250 RPM				290 RPM				360 RPM		
	PSI	SSU	30	100	1000	10,000	30	100	1000	10,000	30	100	1000
11	25	GPM	25	26	27	27	29	30	31	31	37	38	39
		HP	.7	.7	.9	1.3	.9	.9	1.2	1.5	1.1	1.1	1.4
	50	GPM	23	25	27	27	27	29	31	31	35	37	39
		HP	1.1	1.1	1.3	1.7	1.3	1.3	1.5	1.9	1.7	1.7	2.0
	100	GPM		23	26	27		27	30	31		35	38
		HP		1.9	2.1	2.5		2.2	2.4	3.0		2.8	3.1
17	125	GPM	22	26	27		26	30	31		34	38	
		HP		2.2	2.4	2.8		2.7	2.9	3.5		3.3	3.6
	25	GPM	38	40	41	42	45	47	48	49	57	59	60
		HP	.8	.8	1.1	1.8	1.0	1.0	1.3	2.2	1.2	1.2	1.8
	50	GPM	33	38	41	42	40	45	48	49	52	57	60
		HP	1.4	1.4	1.7	2.4	1.6	1.6	1.9	2.8	2.1	2.1	2.7
22	100	GPM		34	40	41		41	47	48	49	53	59
		HP		2.6	2.9	3.6		3.0	3.3	4.2	3.8	3.8	4.4
	125	GPM			39	41			46	48	49	51	58
		HP			3.4	4.1			4.0	4.9	4.6	4.6	5.2
	25	GPM	52	53	55	55	60	61	63	63	76	77	79
		HP	1.1	1.1	1.4	1.9	1.3	1.3	1.7	2.5	2.0	2.0	2.6
48	50	GPM	50	52	54	55	58	60	62	63	74	76	78
		HP	2.0	2.0	2.3	2.8	2.3	2.3	2.6	3.4	3.1	3.1	3.7
	100	GPM	44	50	53	55	52	58	61	63	68	74	77
		HP	3.5	3.5	3.8	4.3	4.2	4.2	4.5	5.3	5.4	5.4	6.0
	125	GPM		49	53	55	50	57	61	63	66	73	77
		HP		4.2	4.5	5.0	5.2	5.2	5.5	6.3	6.5	6.5	7.1
	RPM	203 RPM				235 RPM				270 RPM			
	PSI	SSU	30	100	1000	10,000	30	100	1000	10,000	30	100	1000
25	GPM	94	97	101	103	111	114	118	120	129	132	136	
	HP	2.5	2.8	3.2	3.8	3.0	3.4	3.9	4.6	3.7	3.9	4.7	
50	GPM			93	99		103	110	116		121	128	
	HP			4.7	5.3		5.1	5.6	6.3		5.9	6.7	
100	GPM				88				105				
	HP				8.5				10.0				
125	GPM								101				
	HP								11.7				

NEW

Gear Ratios for GB Units

Series	Motor RPM	Gear Ratio	Pump RPM	Maximum Permissible HP
11-22	1150	4.60:1	250	5.5
		3.94:1	290	6.5
		3.20:1	360	8.0
11-22	1750	4.60:1	380	8.5
		3.94:1	445	10.0
		3.20:1	545	10.0
11-22	3450*	4.60:1	750	10.0
48	1150	5.66:1	203	8.5
		4.88:1	235	10.0
		4.26:1	270	11.0
48	1750	5.66:1	309	13.0
		4.88:1	360	15.0
		4.26:1	410	15.0
48	3450*	5.66:1	609	15.0

Note: Do not exceed maximum allowable HP shown. Series 11 - .11 gallons per revolution, Series 17 - .17 gallons per revolution, Series 22 - .22 gallons per revolution, Series 48 - .52 gallons per revolution. *3450 RPM motors are used in handling low viscosity lubricating liquids.

Construction Advantages

Positive shaft and gear support with four internal bearings

Dowel pins insure positive pump alignment

Hardened gears and shafts for long service life

Integral speed reducer available as option

Field adjustable relief valve available

Fabrication options include Base, Coupling and Drives

2,500 to 8,000 SSU

- SAE #40 Oil
- Heavy Turbine Oil
- Enamel Paint

8,000 to 25,000 SSU

- SAE #50 Oil
- Ink
- Heavy Crude

25,000 to 75,000 SSU

- Asphalt
- Shampoo
- Gear Lube

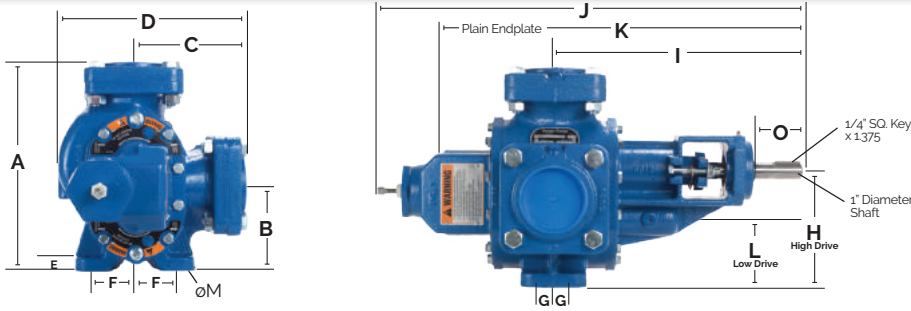
75,000 to 300,000 SSU

- Tar
- Molasses
- Chocolate

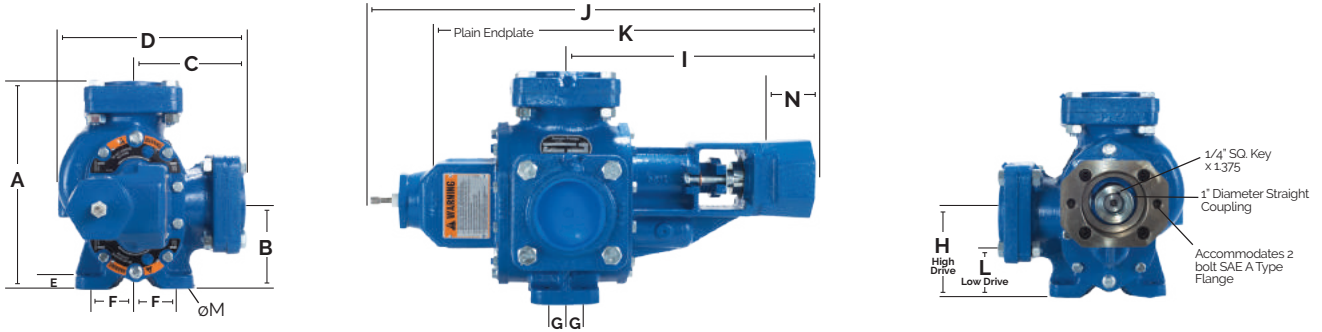
0.000	380 RPM				445 RPM				545 RPM				750 RPM			
	30	100	1000	10,000	30	100	1000	10,000	30	100	1000	10,000	30	100	1000	10,000
39	40	41	42	42	47	48	49		58	59	60		80	81	82	
2.2	1.1	1.1	1.5	2.3	1.4	1.4	2.0		1.9	1.9	2.7		2.8	2.8	3.8	
39	38	40	42	42	45	47	49		56	58	60		78	80	82	
2.8	1.7	1.7	2.1	2.9	2.1	2.1	2.6		2.7	2.7	3.5		3.9	3.9	4.9	
39	33	38	41	42	40	45	48		51	56	59		73	78	81	
3.9	2.9	2.9	3.3	4.1	3.5	3.5	4.0		4.4	4.4	5.2		6.3	6.3	7.3	
39		37	41	42		44	48		48	55	59		70	77	81	
4.4		3.5	3.9	4.7		4.2	4.7		5.4	5.4	6.2		7.5	7.5	8.5	
61	60	62	63	64	71	73	74		88	90	91		123	125	126	
3.0	1.3	1.3	1.9	3.3	1.7	1.7	2.5		2.3	2.3	3.6		3.5	3.5	6.0	
61	55	60	63	64	66	71	74		83	88	91		118	123	126	
3.9	2.3	2.3	2.9	4.3	2.9	2.9	3.7		3.8	3.8	4.9		5.4	5.4	7.9	
60	52	56	62	63	63	67	73		80	84	90		115	119	125	
5.6	4.2	4.2	4.8	6.2	5.0	5.0	5.8		6.3	6.3	7.6		9.0	9.0	11.5	
60	52	54	61	63	63	65	72		80	82	89		115	117	124	
6.4	5.0	5.0	5.6	7.0	6.0	6.0	6.8		7.5	7.5	8.8		10.8	10.8	13.3	
79	80	81	83	83	94	95	97		116	117	119		162	163	165	
3.9	2.2	2.2	3.0	4.3	2.7	2.7	3.5		3.2	3.2	4.4		5.1	5.1	7.2	
79	78	80	82	83	92	94	96		114	116	118		161	162	164	
5.0	3.3	3.3	4.1	5.4	4.1	4.1	4.9		4.8	4.8	6.0		7.3	7.3	9.4	
79	72	78	81	83	86	92	95		108	114	117		154	160	163	
7.3	5.7	5.7	6.5	7.8	6.6	6.8	7.6		8.2	8.2	9.4		12.0	12.0	14.1	
79	70	77	81	83	84	91	95		106	113	117		152	159	163	
8.4	6.9	6.9	7.7	9.0	8.3	8.3	9.1		10.2	10.2	11.4		14.7	14.7	16.8	
	309 RPM				360 RPM				410 RPM				609 RPM			
0,000	30	100	1000	10,000	30	100	1000	10,000	30	100	1000	10,000	30	100	1000	10,000
138	149	152	156	158	176	179	183	185	202	205	209	211	305	308	312	314
5.7	4.4	4.7	5.7	6.9	5.4	5.9	7.0	8.5	6.3	6.8	8.4	10.3	10.9	12.0	16.8	19.7
134	133	141	148	154	160	168	175	181	186	194	201	207	286	297	304	310
7.7	6.8	7.1	8.1	9.3	8.0	8.5	9.6	11.1	9.5	10.0	11.6	13.5	15.4	16.5	19.3	24.2
123			132	143			159	170			185	196		266	288	299
11.1			12.7	13.9			15.1	16.6			17.7	19.6		25.6	28.4	33.3
119				139				166			176	192			279	295
14.0				16.2				19.2			20.8	22.7			32.9	37.3

11, 17, 22 SERIES - 90° PORTS

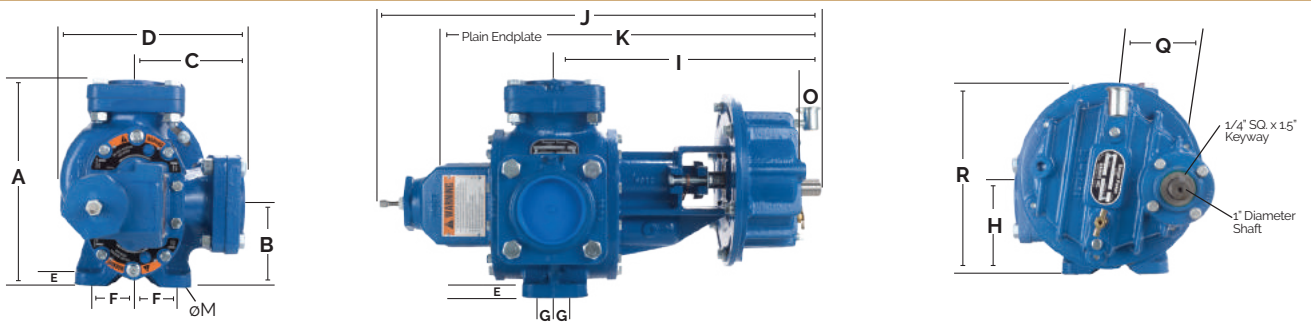
OUTBOARD BEARING - HB



HYDRAULIC - HH



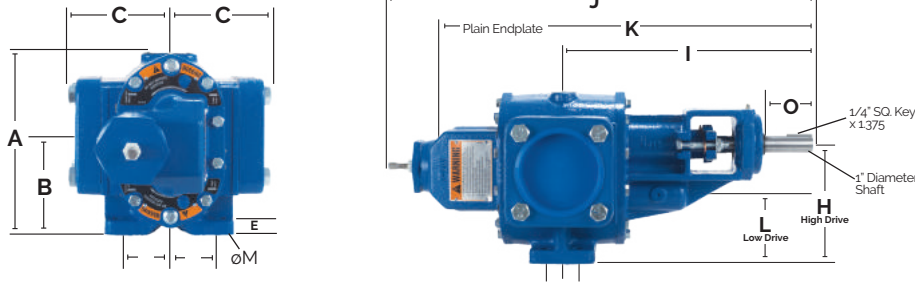
GEAR REDUCTION - GB



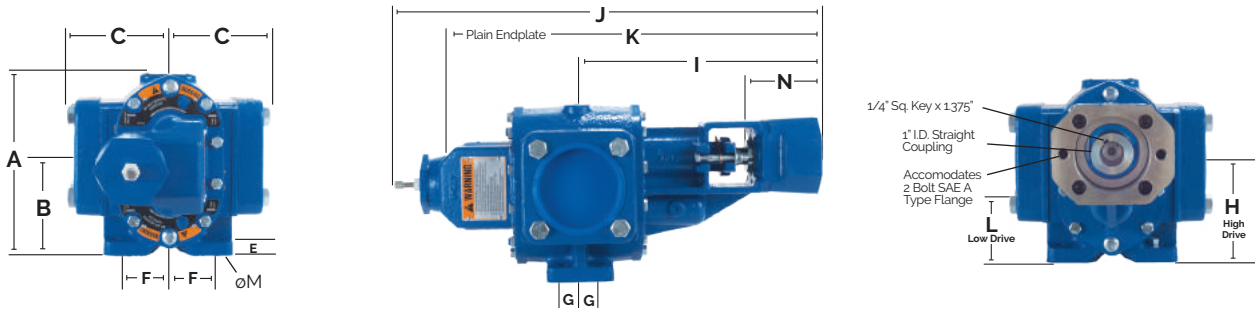
		11, 17, 22 SERIES-90°																	PORTS	
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Q	R		
119	HB & HBRV	in	10.75	5.00	3.63	7.63	0.75	2.75	0.88	6.44	13.50	22.88	21.25	3.65	0.56		3.75			2" NPT TAPPED
		mm	273	127	92	194	19	70	22	164	343	581	540	93	14		95			
	HBF & HBFRV	in	11.52	5.00	4.30	8.30	0.75	2.75	0.88	6.44	13.50	22.88	21.25	3.65	0.56		3.75			2" NPT FLANGE STANDARD 2.5" NPT FLANGE OPTIONAL
		mm	51	127	109	211	19	70	22	164	343	581	540	93	14		95			
	HH & HHRV	in	10.75	5.00	3.63	7.63	0.75	2.75	0.88	6.44	11.84	21.00	17.50	3.65	0.56	2.72				2" NPT TAPPED
		mm	273	127	92	194	19	70	22	164	301	533	445	93	14	69				
179	HHF & HHFRV	in	11.52	5.00	4.30	8.30	0.75	2.75	0.88	6.44	11.84	21.00	17.50	3.65	0.56	2.72				2" NPT FLANGE STANDARD 2.5" NPT FLANGE OPTIONAL
		mm	293	127	109	211	19	70	22	164	301	533	445	93	14	69				
	GB & GBRV	in	10.75	5.00	3.63	7.63	0.75	2.75	0.88	6.44	14.81	23.88	20.52	3.65	0.56		1.75	3.52	11.63	2" NPT TAPPED
		mm	273	127	92	194	19	70	22	164	376	607	521	93	14		44	89	295	
	GBF & GBFRV	in	11.52	5.00	4.30	8.30	0.75	2.75	0.88	6.44	14.87	23.88	20.52	3.65	0.56		1.75	3.52	11.63	2" NPT FLANGE STANDARD 2.5" NPT FLANGE OPTIONAL
		mm	293	127	109	211	19	70	22	164	376	607	521	93	14		44	89	295	
229	HB & HBRV	in	10.75	5.00	3.63	7.75	0.75	2.75	0.88	6.44	13.71	23.63	22.00	3.65	0.56		3.00			2" NPT TAPPED
		mm	273	127	92	197	19	70	22	164	348	600	559	93	14		76			
	HBF & HBFRV	in	11.63	5.00	4.25	8.25	0.75	2.75	0.88	6.44	13.71	23.63	20.12	3.65	0.56		3.00			2" NPT FLANGE STANDARD 2.5" NPT FLANGE OPTIONAL
		mm	295	127	108	210	19	70	22	164	348	600	511	93	14		76			
	HH & HHRV	in	10.75	5.00	3.63	7.75	0.75	2.075	0.88	6.44	12.60	22.50	19.00	3.65	0.56	2.72				2" NPT TAPPED
		mm	273	127	92	197	19	70	22	164	320	572	483	93	14	69				
229	HHF & HHFRV	in	11.63	5.00	4.25	8.25	0.75	2.75	0.88	6.44	12.60	22.50	19.00	3.65	0.56	2.72				2" NPT FLANGE STANDARD 2.5" NPT FLANGE OPTIONAL
		mm	295	127	108	210	19	70	22	164	320	572	483	93	14	69				
	GB & GBRV	in	10.75	5.00	3.63	7.75	0.75	2.75	0.88	6.44	15.54	25.36	22.00	3.65	0.56		1.75	3.52	11.63	2" NPT TAPPED
		mm	273	127	92	197	19	70	22	164	395	644	559	93	14		44	89	295	
	GBF & GBFRV	in	11.52	5.00	4.30	8.30	0.75	2.75	0.88	6.44	15.54	25.36	22.00	3.65	0.56		1.75	3.52	11.63	2" NPT FLANGE STANDARD 2.5" NPT FLANGE OPTIONAL
		mm	295	127	108	210	19	70	22	164	395	644	559	93	14		35	89	295	
229	HBF & HBFRV	in	12.25	5.00	6.50	11.00	0.75	2.75	0.88	6.44	14.50	25.00	21.50	3.65	0.56		3.00			3" NPT FLANGE STANDARD 4" NPT FLANGE OPTIONAL
		mm	311	127	165	279	19	70	22	164	368	635	546	93	14		76			
	HHF & HHFRV	in	12.25	5.00	6.50	11.00	0.75	2.75	0.88	6.44	13.40	24.00	20.50	3.65	0.56	2.72				3" NPT FLANGE STANDARD 4" NPT FLANGE OPTIONAL
		mm	311	127	165	279	19	70	22	164	340	610	521	93	14	69				
229	GBF & GBFRV	in	12.25	5.00	6.50	11.63	0.75	2.75	0.88	6.44	16.38	27.00	23.50	3.65	0.56		1.75	3.52	11.63	3" NPT FLANGE STANDARD 4" NPT FLANGE OPTIONAL
		mm	311	127	165	295	19	70	22	164	416	686	597	93	14		44	89	295	

11, 17, 22 SERIES - 180° PORTS

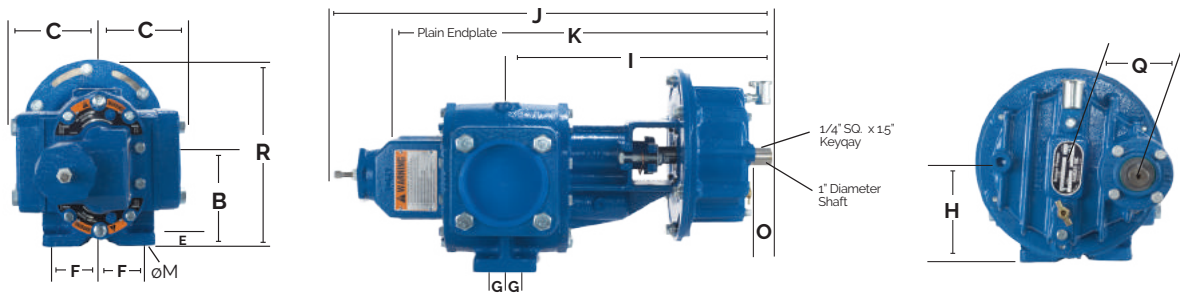
OUTBOARD BEARING - HB



HYDRAULIC - HH



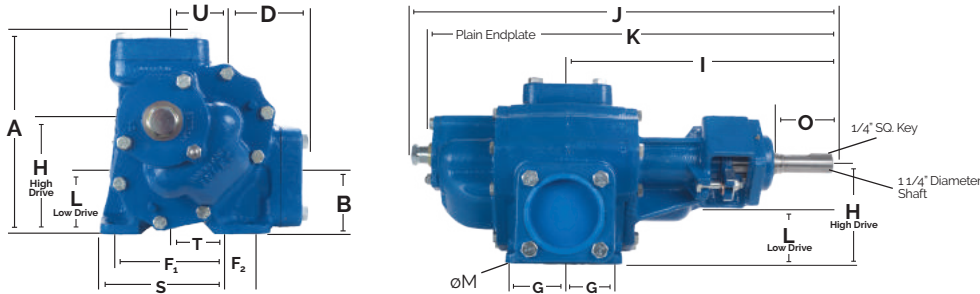
GEAR REDUCTION - GB



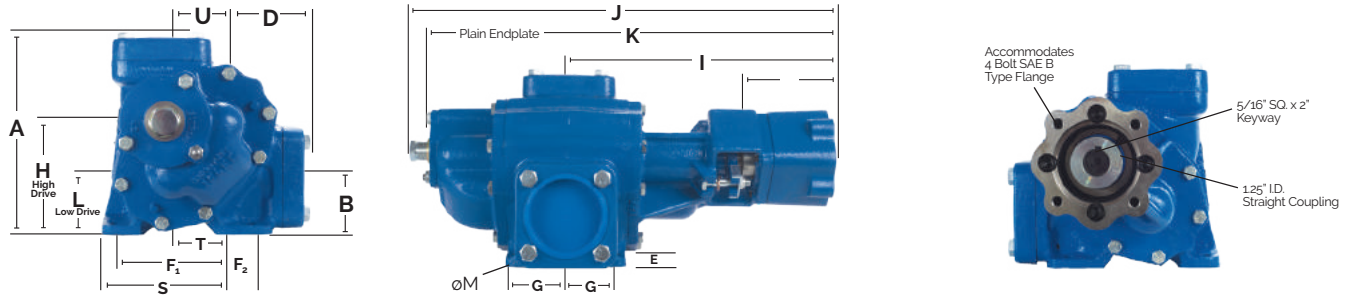
11, 17, 22 SERIES-180°		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Q	R	PORTS	
118	HBF & HBFRV	in	9.50	5.00	4.14	8.28	0.75	2.75	0.88	6.44	13.50	22.88	21.25	3.65	0.56		3.75			2" NPT FLANGE STANDARD
		mm	241	127	105	210	19	70	22	164	343	581	540	93	14		95			
	HHF & HHFRV	in	9.50	5.00	4.14	8.28	0.75	2.75	0.88	6.44	11.84	21.00	17.50	3.65	0.56	2.72				2" NPT FLANGE STANDARD
		mm	241	127	105	210	19	70	22	164	301	533	445	93	14	69				
	GBF & GBFRV	in	9.50	5.00	4.14	8.28	0.75	2.75	0.88	6.44	14.81	23.88	20.52	3.65	0.56		1.75	3.52	11.63	2" NPT FLANGE STANDARD
		mm	241	127	105	210	19	70	22	164	376	607	521	93	14		44	89	295	
228	HBF & HBFRV	in	9.44	5.00	4.75	9.50	0.75	2.75	0.88	6.44	14.50	25.00	21.50	3.65	0.56		3.00			4" NPT FLANGE STANDARD
		mm	240	127	121	241	19	70	22	164	368	635	546	93	14		76			3" NPT FLANGE OPTIONAL
	HHF & HHFRV	in	9.44	5.00	4.75	9.50	0.75	2.75	0.88	6.44	13.40	24.00	20.50	3.65	0.56	2.72				4" NPT FLANGE STANDARD
		mm	240	127	121	241	19	70	22	164	340	610	521	93	14	69				3" NPT FLANGE OPTIONAL
	GBF & GBFRV	in	9.44	5.00	4.75	9.50	0.75	2.75	0.88	6.44	16.38	27.00	23.50	3.65	0.56		1.75	3.52	11.63	4" NPT FLANGE STANDARD
		mm	240	127	121	241	19	70	22	164	416	686	597	93	14		44	89	295	3" NPT FLANGE OPTIONAL

48 SERIES ANGLED GEAR PUMPS

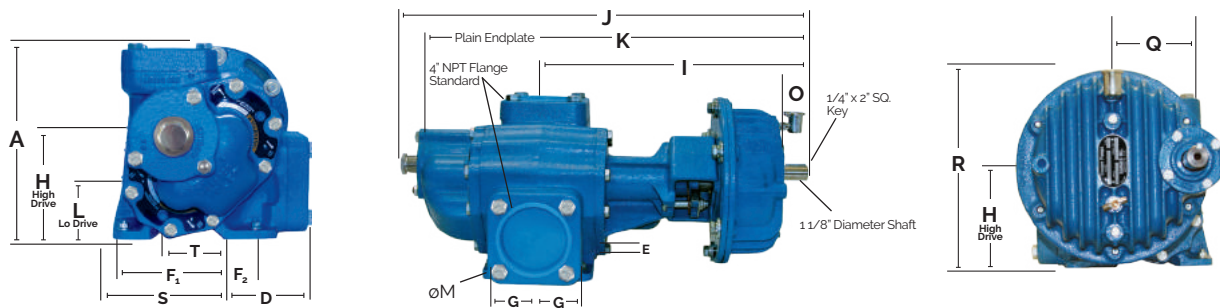
OUTBOARD BEARING - HB



HYDRAULIC - HH



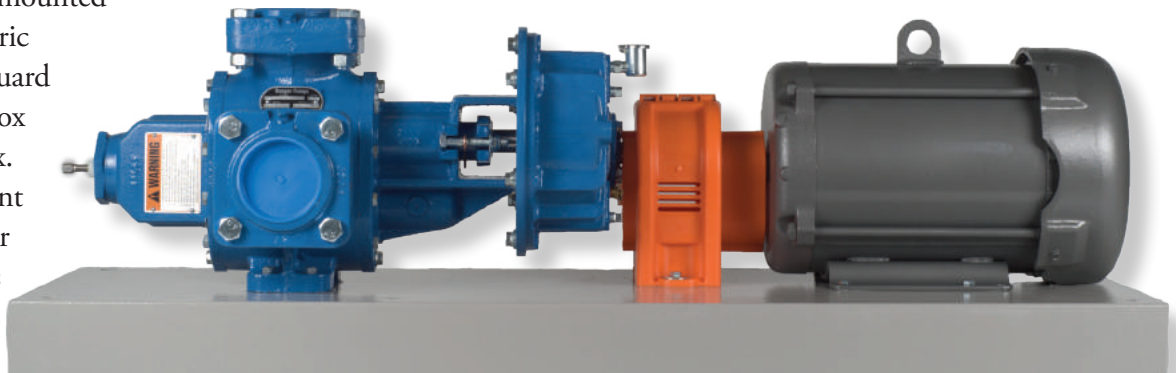
GEAR REDUCTION - GB



489 ANGLED GEAR		A	B	D	E	F ₁	F ₂	H	I	J	K	L	M	N	O	Q	R	S	T	U	PORTS	
489	HBF & HBFRV	in	11.54	3.15	5.53	0.63	6.09	1.90	6.40	17.55	28.00	27.25	3.75	0.75		4.08			6.89	2.65	3.25	4\"/>
		mm	293	80	140	16	155	48	163	446	711	692	95	19		104			175	67	83	
	HHF & HHFRV	in	11.54	3.15	5.53	0.63	6.09	1.90	6.40	16.35	27.00	26.00	3.75	0.75	3.75				6.89	2.65	3.25	
		mm	293	80	140	16	155	48	163	415	686	660	95	19	95				175	67	83	
	GBF & GBFRV	in	11.54	3.15	5.53	0.63	6.09	1.90	6.40	22.27	29.55	28.63	3.75	0.75		2.87	4.188	12.04	6.89	2.65		
		mm	293	80	140	16	155	48	163	566	751	727	95	19		73	106	306	175	67		

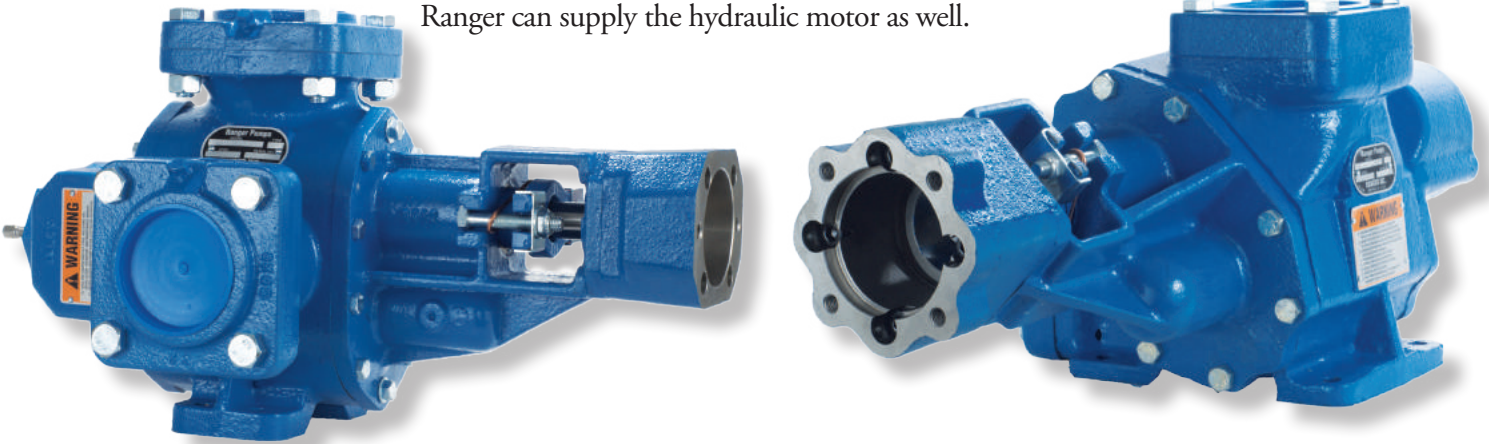
Mounted Pump Systems

Ranger pumps can be mounted on a base with an electric motor, coupling and guard with an integral gear box or stand alone gear box. There are many different options that can deliver a wide range of gallons per minute.

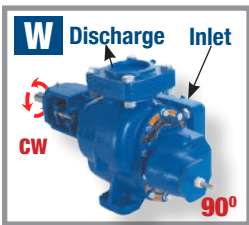


HYDRAULIC PUMPS

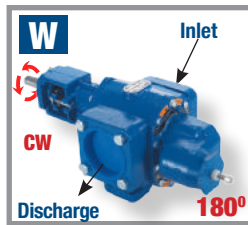
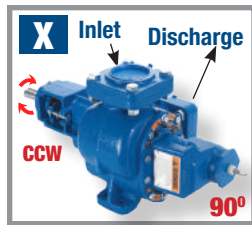
All of the Ranger 11, 17, 22 and 48 series pumps can be supplied with a hydraulic motor adaptor. The adaptor and rigid coupling to connect the pump and hydraulic motor are included in the hydraulic package. Upon request, Ranger can supply the hydraulic motor as well.



Identifying Direction of Rotation Mounting

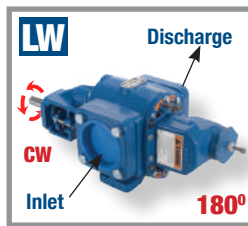
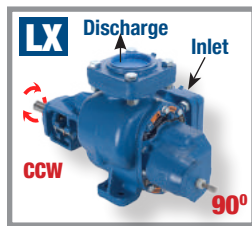
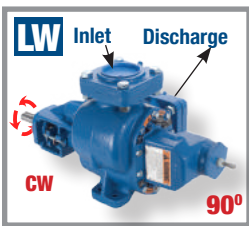


Ranger's standard configuration



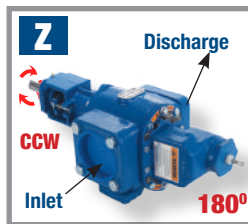
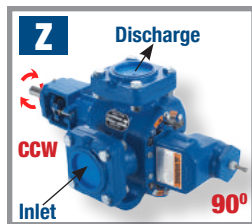
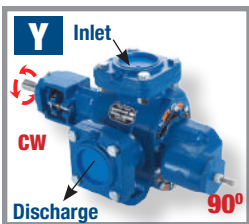
Hi-Drive Pumps

W: Clockwise Rotation
X: Counterclockwise Rotation
Y: Clockwise Rotation
Z: Counterclockwise Rotation



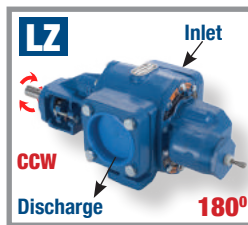
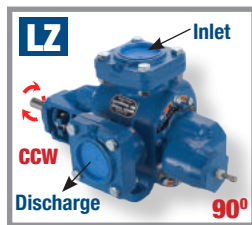
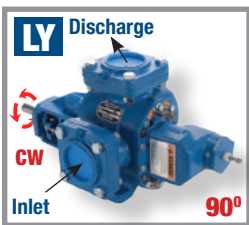
Lo-Drive Pumps

LW: Clockwise Rotation
LX: Counterclockwise Rotation
LY: Clockwise Rotation
LZ: Counterclockwise Rotation



Pump Rotation

Pumping rotation is determined when facing the drive shaft. These diagrams will serve as a helpful basis for you to determine the direction of rotation wanted according to your piping system. *Example:*



WARNING: Read installation, operation and maintenance Manual before installing, performing maintenance or operating a Ranger pump.

COMPANY Company History

Ranger pumps are built in the USA from parts made in the USA. We are proud of our history of providing our customers with the highest quality helical gear pumps for over 33 years.

Ranger Pumps is a privately held corporation that was founded in 1989 in Memphis, Tennessee. The company has become a national supplier serving customers in all 50 states and numerous countries around the world.

Customer Service

We consider customer service to be a high priority. We are proud of the fact that when you call our offices you will talk to a knowledgeable representative who understands all aspects of our business, not a voice mail message.

Quality Assurance

All of our products are built to exacting standards and are tested to be sure they work before they go out the door.



Shipping

Memphis, Tennessee is a major distribution center hub in the United States. We are able to ship quickly with short lead times to virtually anywhere in the world.

Investing in Our Product

We are constantly adding new equipment and processes. We have recently added a state-of-the-art coordinate measuring machine that allows us to make more accurate parts, thus insuring a very high quality end product.

Made in the USA

We are extremely proud of the fact that all Ranger castings are poured and machined in the USA. All Ranger gears, shafts, bushings and packings are made in the USA. All major Ranger components are made in the USA.

Pumps Are Our Business

We specialize in the manufacture of precision helical gear pumps. Our vision is focused very closely on these specific products, outstanding customer service, with on-time delivery and excellent technical support.

Competitively Priced Products

Ranger pumps performance meets or exceeds the competition in every way. We are careful to be sure that our quality exceeds our competitors while providing an outstanding value on every pump we manufacture.



Ranger, Inc.

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