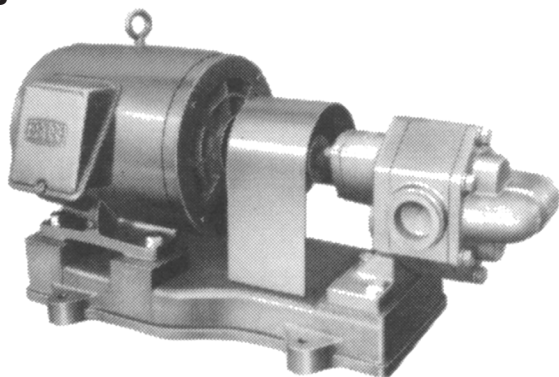


GEAR PUMPS

GP

GP



FEATURES

- **Compact style and light weight**
Adopting high speed and direct drive type, relieving traditional image of gear pumps
- **Large capacity with small power output**
- **Long life and high reliability**
Durability increased by adopting needle bearings and maintenance made easy by using bearings, requiring no oil supply
- **Quick delivery and low price**
- **Adjustable relief valve**

APPLICATIONS

- Supply oil for machinery
- Fuel transfer
- Low pressure transmission
- Oil burner injection

SPECIFICATIONS

Model	GPE	GPF	GPH
Liquid Quality Temperature Viscosity	B.C. heavy oil, turbine oil, etc 0 - 70 °C 7 - 500 centistoke	Heavy oil, turbine oil, etc 0 - 80 °C 5 - 500 centistoke	Heavy oil, turbine oil, etc 0 - 120 °C 5 - 260 centistoke
Suction & Discharge size	12 to 25mm ($\frac{3}{8}$ to 1 inch)	12 to 40mm ($\frac{3}{8}$ to 1 $\frac{1}{2}$ inches)	15 to 50mm ($\frac{1}{2}$ to 2 inches)
Discharge pressure	3kgf/cm ² (43PSI) {290kPa}	3 to 10kgf/cm ² (43 to 142PSI) {290 to 980kPa}	10 to 20kgf/cm ² (142 to 284PSI) {980 to 1960kPa}
Allowable suction pressure	-0.3 to +1.0kgf/cm ² (-43 to +142PSI) {-29 to +98kPa}	-0.5 to +1.0kgf/cm ² (-71 to +142PSI) {-49 to +98kPa}	-0.5 to +1.0kgf/cm ² (-71 to +142PSI) {-49 to +98kPa}
Temperature limit	70°C (158°F)	80°C (176°F)	120°C (248°F)
Viscosity range for motor with standard output & speed	7 to 500cSt {7 to 500mm ² /s}	5 to 500cSt {5 to 500mm ² /s}	5 to 260cSt {5 to 260mm ² /s}
Construction Shaft seal Bearing	Gland packing Needle bearing	Mechanical seal Needle bearing	Mechanical seal Needle bearing
Connection	Screw-in	Screw-in	Screw-in (15 - 25 GPH) JIS 20K flange (32 - 50 GPH)
Material (JIS) Casing Gear Shaft	FC200 S45C S45C	FC200 S45C S45C	FC200 SCM400 S35C

PERFORMANCE TABLE

Model GPE (Discharge pressure 3kgf/cm² {290kPa})

Size	Pipe connecting	Motor kW	50 Hz			60 Hz			Bearing size	Gland		Weight {Mass} kg	
			Max. Discharge pressure kgf/cm ² {kPa}	Capacity ℓ/min	Speed min ⁻¹	Max. Discharge pressure kgf/cm ² {kPa}	Capacity ℓ/min	Speed min ⁻¹		Kind	Shaft size	Bare pump	Pump w/motor & base
12	PT- $\frac{3}{8}$	0.2	3 {290}	7	1500	3 {290}	6	1800	8φ	Packing	8φ	2	18.4
15	PT- $\frac{1}{2}$	0.4	3 {290}	10	1500	3 {290}	12	1800	12φ	"	11φ	2.1	19.2
20	PT- $\frac{3}{4}$	0.4	3 {290}	20	1500	3 {290}	24	1800	12φ	"	11φ	2.4	21.4
25	PT-1	0.75	3 {290}	40	1500	3 {290}	48	1800	15φ	"	14φ	4	35.1

Model GPF (Discharge pressure 3~10kgf/cm² {290~980kPa})

12	PT- $\frac{3}{8}$	0.2	4 {390}	8.5	1500	4 {390}	10	1800	12φ (With inside ring)	Mechanical seal	12φ	3.1	20.1
		0.4	10 {980}	8.5	1500	10 {980}	10	1800				23.1	
15	PT- $\frac{1}{2}$	0.4	4 {390}	17	1500	4 {390}	21	1800	12φ (With inside ring)	"	12φ	3.4	22.4
		0.75	10 {980}	17	1500	10 {980}	21	1800				33.4	
20	PT- $\frac{3}{4}$	0.75	4 {390}	31	1500	4 {390}	37	1800	20φ (With inside ring)	"	20φ	6.0	37.3
		1.5	10 {980}	31	1500	10 {980}	37	1800				43.3	
25	PT-1	1.5	6 {590}	54	1500	6 {590}	65	1800	20φ (With inside ring)	"	20φ	6.3	44.3
		2.2	10 {980}	54	1500	10 {980}	65	1800				61.5	
32	PT-1 $\frac{1}{4}$	2.2	4 {390}	75	1500	4 {390}	90	1800	22φ (With inside ring)	"	22φ	11	68
		3.7	10 {980}	75	1500	10 {980}	90	1800				77.2	
40	PT-1 $\frac{1}{2}$	2.2	6 {590}	105	1500				22φ (With inside ring)	"	22φ	12	69
		3.7	10 {980}	105	1500							79	
		3.7				4 {390}	125	1800					79
		5.5				10 {980}	125	1800					116

Model GPH (Discharge pressure 10~20kgf/cm² {980~1960kPa})

15	PS- $\frac{1}{2}$	0.75	15 {1470}	14	1500	12 {1180}	18	1800	15φ (With inside ring)	Mechanical seal	14φ	7	31
		1.5	20 {1960}	13	1500	20 {1960}	16	1800				38	
20	PS- $\frac{3}{4}$	1.5	12 {1180}	36	1500	12 {1180}	43	1800	20φ (With inside ring)	"	14φ	8	39
		2.2	20 {1960}	34	1500	20 {1960}	41	1800				54	
25	PS-1	3.7	15 {1470}	70	1500	15 {1470}	85	1800	25φ (With inside ring)	"	22φ	12	60
		5.5	20 {1960}	69	1500	20 {1960}	84	1800				86	
32	32φ JIS 20kgf/cm ² Flange	5.5	15 {1470}	110	1500	12 {1180}	136	1800	25φ (With inside ring)	"	22φ	20	97
		7.5	20 {1960}	110	1500	20 {1960}	134	1800				112	
40	40φ JIS 20kgf/cm ² Flange	5.5				12 {1180}	142	1200	35φ (With inside ring)	"	30φ	29	123
		7.5	15 {1470}	174	1500	20 {1960}	139	1200				121	
50	50φ JIS 20kgf/cm ² Flange	11	20 {1960}	172	1500				40φ (With inside ring)	"	35φ	37	154
		15	15 {1470}	184	1000	15 {1470}	224	1200				191	
			20 {1960}	184	1000	20 {1960}	220	1200				37	241

* For larger gear pump, please refer to pg 69