



ATNU SUGUNA

Heavy-duty technical catalogue

Dimensions (Inches)

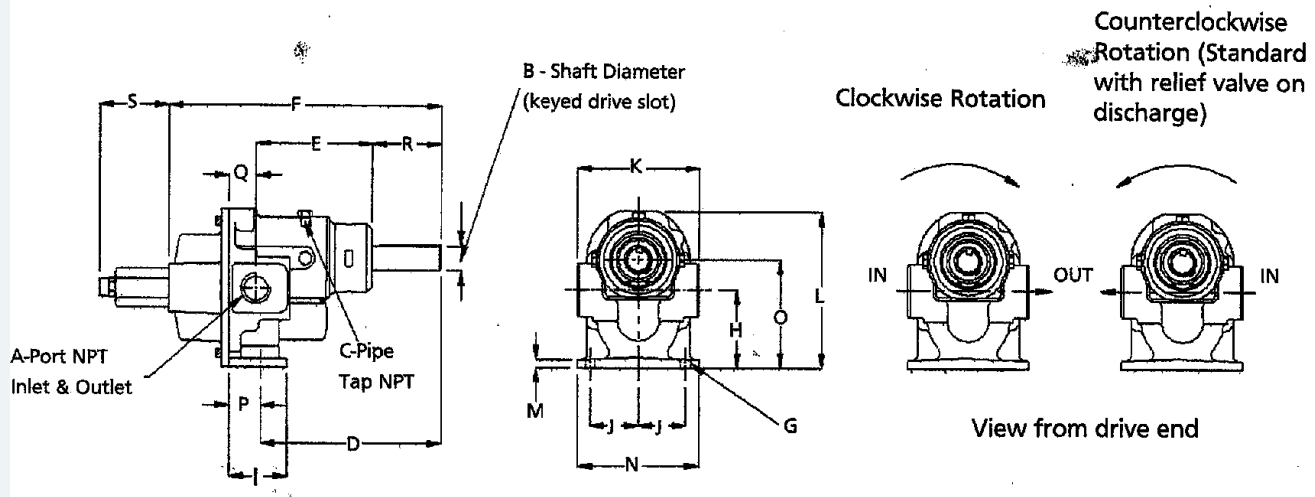


Figure 3

HEAVY-DUTY PEDESTAL ROTARY GEAR PUMPS

Bronze models: ABPH038 to ABPH125

Cast-iron models: ACPH038 to ACPH125

Self-priming, bidirectional positive-displacement pumps

Heavy-duty pedestal gear pumps for nearly pulseless flow. Ball-bearing shaft support permits pulley drive. All models include a pressure-relief valve that can be ported internally or externally.

Bronze

For water-based liquids. 304 stainless-steel shafts, Fortron PPS spur gears, brass/bronze wetted components, cellulose gasket, Buna-N, ceramic and carbon. Temperature range: -20 to 210°F (-29 to 99°C).

Cast iron

For oil-based liquids only. Steel spur gears and shafts; cast iron, steel, cellulose gasket, carbon, ceramic and Viton wetted components. Viton temperature range: 32 to 280°F (0 to 138°C).

Operating limits

- Maximum pressure: 125 psi.
- Maximum speed: 1725 rpm.
- Maximum viscosity with standard gears: 500 SSU at 1725 rpm.
- Maximum specific gravity: 1.1 at 125 psi; up to 1.6 at lower pressure and viscosity.
- Use only non-abrasive, particle-free liquids compatible with the wetted components.
- Reverse rotation is possible, but the relief-valve cover must be rotated 180° for the valve to protect the reversed discharge.

Size	NPT	RPM	Lift ft	Free GPM	HP	25 GPM	HP	50 GPM	HP	75 GPM	HP	100 GPM	HP	125 GPM	HP
038	3/8	1200	2.2	3.1	1/3	3.1	1/3	3.0	1/2	2.9	1/2	2.8	3/4	2.5	3/4
038		1440	2.9	3.8	1/2	3.8	1/2	3.7	3/4	3.6	3/4	3.5	1	3.3	1
038		1725	3.5	4.6	1/2	4.6	1/2	4.5	3/4	4.4	3/4	4.2	1	3.9	1
050	1/2	1200	5.7	4.7	1/2	4.6	1/2	4.5	3/4	4.4	3/4	4.2	1	3.8	1
050		1440	6.6	5.6	3/4	5.5	3/4	5.4	1	5.3	1	5.2	1 1/2	4.8	1 1/2
050		1725	7.9	6.7	3/4	6.6	3/4	6.5	1	6.4	1	6.2	1 1/2	5.8	1 1/2
075	3/4	1200	6.7	7.1	1/2	7.0	1/2	6.9	3/4	6.8	3/4	6.6	1	6.1	1
075		1440	10.3	8.6	3/4	8.5	3/4	8.4	1	8.3	1	8.1	1 1/2	7.7	1 1/2
075		1725	12.3	10.3	3/4	10.2	3/4	10.1	1	10.0	1	9.7	1 1/2	9.2	1 1/2
100	1	1200	9.3	13.6	1	13.5	1	13.4	1 1/2	13.2	1 1/2	12.8	2	12.3	2
100		1440	12.7	16.3	1 1/2	16.3	1 1/2	16.1	2	16.0	2	15.7	2	15.2	3
100		1725	15.2	19.6	1 1/2	19.5	1 1/2	19.3	2	19.2	2	18.8	2	18.2	3
125	1 1/4	1200	11.7	15.9	1	15.8	1	15.6	1 1/2	15.4	2	15.0	2	14.4	3
125		1440	16.3	19.7	1 1/2	19.6	1 1/2	19.4	2	19.3	2	19.0	3	18.5	3
125		1725	19.5	23.6	1 1/2	23.5	1 1/2	23.3	2	23.1	2	22.7	3	22.1	3

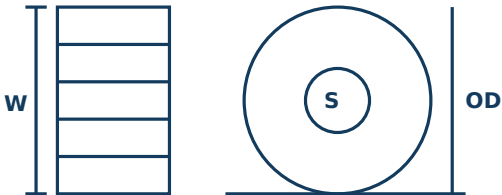
Each size applies to both ABPH bronze and ACPH cast-iron models. Suction lift requires wetted gears. Flow in GPM.

Model	RPM	NPT	Body	Gear	Gasket	Bushing	Shaft / keys	Relief parts	O-rings / seals
ABPH038	1725	3/8	Bronze	Fortron	Cellulose	CG	304 SS	304 SS	Buna-N
ABPH050	1725	1/2	Bronze	Fortron	Cellulose	CG	304 SS	304 SS	Buna-N
ABPH075	1725	3/4	Bronze	Fortron	Cellulose	CG	304 SS	304 SS	Buna-N
ABPH100	1725	1	Bronze	Fortron	Cellulose	CG	304 SS	304 SS	Buna-N
ABPH125	1725	1 1/4	Bronze	Fortron	Cellulose	CG	304 SS	304 SS	Buna-N
ACPH038	1725	3/8	CI	Steel	Cellulose	CI	Steel	Steel	Viton
ACPH050	1725	1/2	CI	Steel	Cellulose	CI	Steel	Steel	Viton
ACPH075	1725	3/4	CI	Steel	Cellulose	CI	Steel	Steel	Viton
ACPH100	1725	1	CI	Steel	Cellulose	CI	Steel	Steel	Viton
ACPH125	1725	1 1/4	CI	Steel	Cellulose	CI	Steel	Steel	Viton

Fortron = PPS (polyphenylene sulfide); CG = carbon graphite; CI = cast iron. Mechanical seal faces are 304 SS and carbon on ceramic.

Gear part numbers and dimensions

Size	PPS gear	Steel gear	OD	Width W	Shaft S
038	GR001	GR006	1.50	0.75	0.50
050	GR002	GR007	1.75	0.88	0.63
075	GR003	GR008	1.75	1.25	0.63
100	GR004	GR009	2.33	1.25	0.79
125	GR005	GR010	2.33	1.50	0.79



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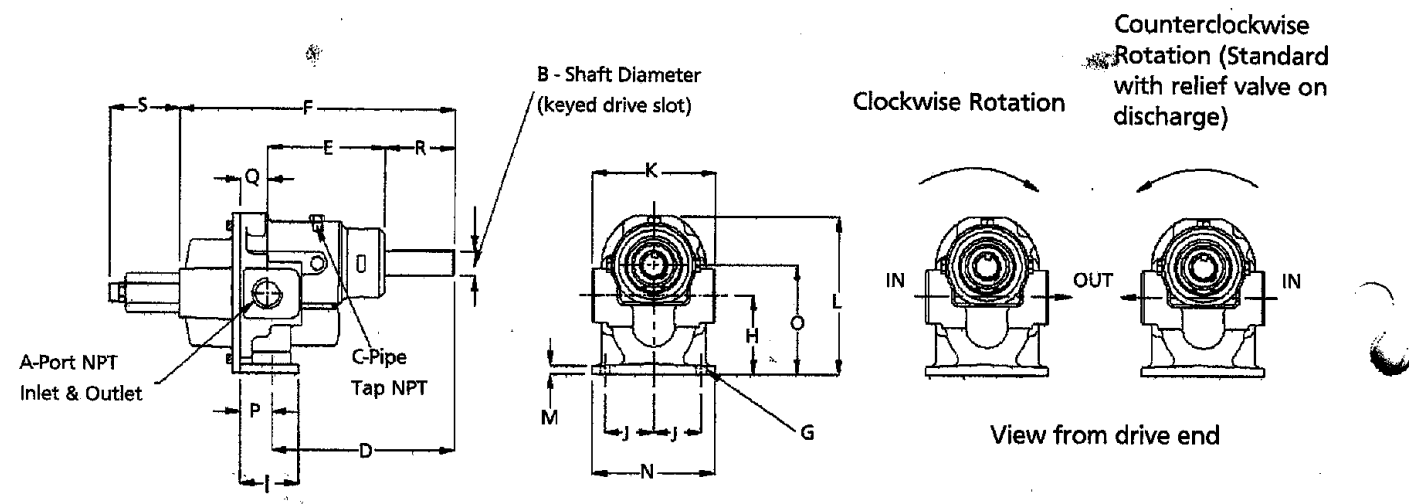


Figure 3

Size	A NPT	B	C NPT	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
038	3/8	0.500	1/8	3.91	2.70	6.38	0.281	1.71	1.26	1.130	2.73	3.42	0.25	2.94	2.36	0.81	0.520	1.50	2.90
050	1/2	0.625	1/8	4.66	2.90	7.11	0.391	1.88	1.26	1.440	3.26	3.75	0.26	3.63	2.63	0.75	0.625	1.88	2.93
075	3/4	0.625	1/8	5.03	3.18	7.48	0.391	1.88	1.26	1.440	3.26	3.75	0.26	3.63	2.63	0.75	0.625	1.88	2.94
100	1	0.750	1/8	5.79	3.60	8.46	0.391	2.56	1.74	1.625	4.00	5.13	0.26	4.00	3.56	0.94	0.880	2.25	3.16
125	1 1/4	0.750	1/8	6.04	3.69	8.70	0.391	2.56	1.74	1.625	4.06	5.13	0.26	4.00	3.56	0.94	1.040	2.25	3.17

Dimensions in inches. A and C are female NPT ports. Rotation is viewed from the drive end; counterclockwise is standard with the relief valve on discharge.