

Bushing Pumps, Motors and Flow Dividers

- Single or multiple units available.
- Displacement 16 cc/rev to 65 cc/rev.
- Minimum operating speed 600 rpm.
- Maximum operating speed 2400 rpm.
- Maximum continuous operating pressure 4500 psi (310 bar). *1
- Cast iron construction.
- Compatible with mineral oil, water glycol, invert emulsion and fire resistant fluid.
- Piggyback options available

Mounting Flange Options:

SAE 'A' 2 bolt, SAE 'B' 2 bolt, SAE 'B' 4 bolt,
SAE 'C' 4 bolt,
European 4 bolt Group III. *2

Drive Shaft Options:

SAE 'A' 9 tooth, SAE 'B' 13 tooth, SAE 'BB' 15 tooth
SAE 'C' 14 tooth, SAE 'B' keyed, SAE 'BB' keyed,
1.1/8" keyed, SAE 'C' keyed, 1:8 taper European
Group III. *2

Various Porting Options:

BSP, SAE, NPT, JIC (ODT).

*1 Only available in 16cc and 25cc models

*2 Only available in 25cc, 32cc, 41cc and 49cc models

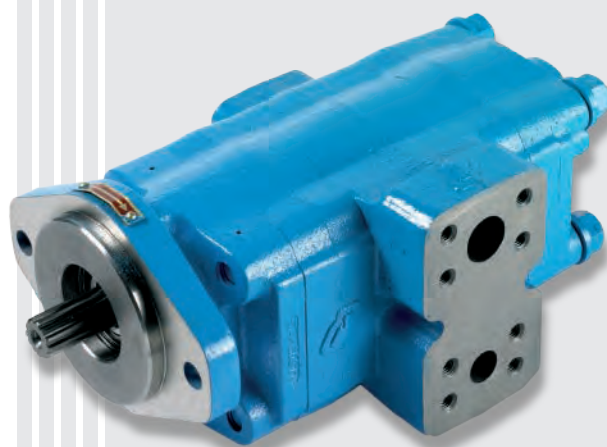
Performance and Dimensions overleaf



Please discuss your application with our sales engineers



Single unit



Tandem unit

Recommended Operating Conditions:

Fluid viscosity, normal operating conditions
9 to 220 cst.

Fluid temperature should not exceed 82° C
for mineral oil or 57° C for water glycol.

Recommended system oil cleanliness should
be equal to or better than ISO4406 19/17/14.

Inlet pressure; for best operation with
mineral oil, pressure should not exceed minus
0.237 bar (7 in HG) or with water glycol,
minus 0.101 bar (3 in HG).

Series 197 Pumps, Motors and Flow Dividers

PERFORMANCE DATA

Pump Performance

Pump Performance						Input Speed - rpm						
						1000		1500		1800		
Output- L/min/igpm - Input-Kw/Horsepower ▶						Output	Input	Output	Input	Output	Input	
Gear widths - code	05	Gear widths - inches	1/2	16	Maximum continuous working pressure-bar/psi	310/4500	13 / 2.9	7 / 9	22 / 4.7	10 / 13	27 / 5.8	12 / 16
	07		3/4	25		310/4500	20 / 4.4	11 / 14	32 / 7.1	15 / 20	40 / 8.8	18 / 24
	10		1	32		275/4000	27 / 5.8	15 / 20	43 / 9.5	20 / 27	53 / 11.7	24 / 32
	12		1.1/4	41		275/4000	34 / 7.5	19 / 25	56 / 12.4	25 / 34	68 / 14.8	30 / 40
	15		1.1/2	49		258/3750	42 / 9.2	22 / 29	67 / 14.7	30 / 40	80 / 17.6	36 / 48
	17		1.3/4	57		241/3500	49 / 10.7	26 / 34	78 / 17.1	35 / 46	94 / 20.7	43 / 57
	20		2	65		224/3250	56 / 12.3	28 / 37	90 / 19.8	39 / 52	109 / 23.9	47 / 63

• Flows quoted are at test pressure of 207 bar/3000 psi, using 32cSt oil at 65° C.

• When using water based fluids, the maximum continuous working pressure is reduced please consult sales department.

• Performance data is derived from tests conducted to simulate working conditions Continuous operation at maximum performance may compromise unit life

If in doubt when specifying, please consult our sales department

Motor Performance

Motor Performance					Output Speed - rpm				
					900	1200	1500	1800	
Gear widths - code	10	*Gear widths - inches	Input flow, Output hp & torque	Output Kw / hp	10.8 / 14.4	14.4 / 19.1	17.9 / 23.8	21.3 / 28.4	
				Output Nm / in.lb	114.1 / 1010	113.6 / 1005	113.0 / 1000	112.4 / 995	
				Input l.min / igpm	38.0 / 8.4	49.0 / 10.8	59.0 / 13.0	69.0 / 15.2	
	12			1.1/4	Output Kw / hp	13.6 / 18.1	18.1 / 24.1	22.4 / 29.9	26.8 / 35.7
					Output Nm / in.lb	143.5 / 1270	142.9 / 1265	141.8 / 1255	141.2 / 1250
					Input l.min / igpm	47.0 / 10.4	59.0 / 13.0	72.0 / 15.9	85.0 / 18.7
	15			1.1/2	Output Kw / hp	16.4 / 21.8	21.8 / 29.0	27.0 / 36.1	32.3 / 43.0
					Output Nm / in.lb	172.9 / 1530	172.3 / 1525	171.2 / 1515	170.0 / 1505
					Input l.min / igpm	55.0 / 12.1	70.0 / 15.4	85.0 / 18.7	101.0 / 22.2
	17	1.3/4		Output Kw / hp	17.9 / 23.8	23.7 / 31.6	29.5 / 39.3	35.1 / 46.8	
				Output Nm / in.lb	188.1 / 1665	187.6 / 1660	186.4 / 1650	185.3 / 1640	
				Input l.min / igpm	63.0 / 13.9	81.0 / 17.8	99.0 / 21.8	116.0 / 25.6	
	20	2		Output Kw / hp	19.0 / 25.3	25.1 / 33.5	31.2 / 41.7	37.3 / 49.7	
				Output Nm / in.lb	200.0 / 1770	198.9 / 1760	197.7 / 1750	196.6 / 1740	
				Input l.min / igpm	72.0 / 15.9	92.0 / 20.3	112.0 / 24.7	132.0 / 29.1	

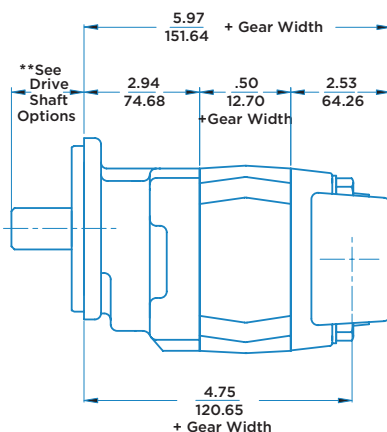
* These gear widths are the popular sizes for motor configurations but any of the gear widths listed in the Pump Data table can be supplied.

Weights (approximate)

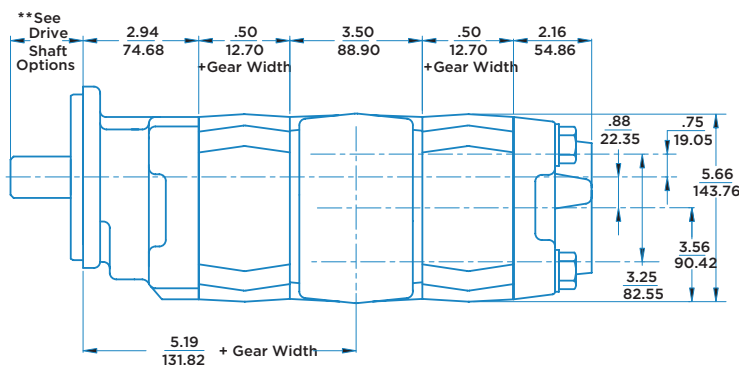
Gear widths (ins)	1/2	3/4	1	1.1/4	1.1/2	1.3/4	2
Single unit (kg)	15.8	16.2	16.8	17.2	17.7	18.4	19.0

For multiple unit weights, please consult our sales department

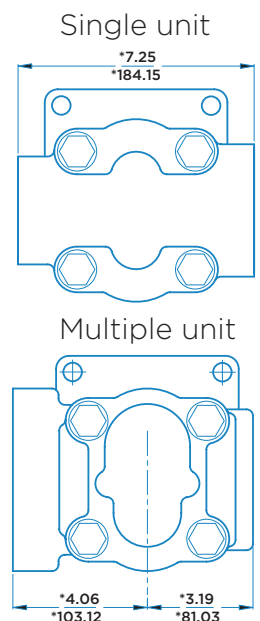
Dimensions



Single unit



Tandem unit



* Standard port arrangement, dimension will change with the type of port
 ** Dimensional information for mounting flange and shaft options are shown on the attached Data Sheet FS100.



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