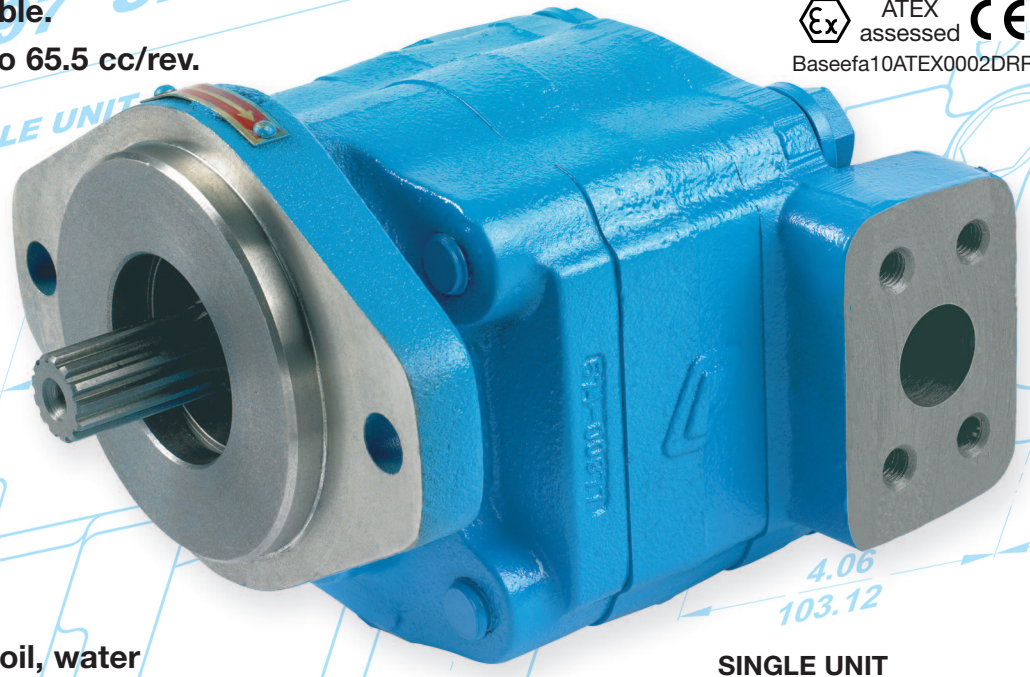




# Series 197

## Bushing Pumps and Motors

- Single or multiple units available.
- Piggyback options available.
- Displacement 16 cc/rev to 65.5 cc/rev.
- Gear widths 1/2" to 2".
- Minimum operating speed 600 rpm.
- Maximum continuous operating speed 2400 rpm.
- Maximum continuous operating pressure 4500 psi (310 bar).
- Drive shaft PL factor: Integral up to 10000, Continental 6000.
- Cast iron construction.
- Compatible with mineral oil, water glycol, invert emulsion and fire resistant fluid.




 ATEX assessed  
  
 Baseefa10ATEX0002DRR

### Mounting Flange Options:

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

### Drive Shaft Options:

6 tooth, SAE 'A' 9 tooth, 11 tooth, SAE 'B' 13 tooth, SAE 'BB' 15 tooth, SAE 'C' 14 tooth, SAE 'B' keyed, SAE 'BB' keyed, 3/4" keyed, 1 1/8" keyed, SAE 'C' keyed, 1:8 taper European Group III.

### Various Porting Options:

BSP, SAE, NPT, JIC (ODT).

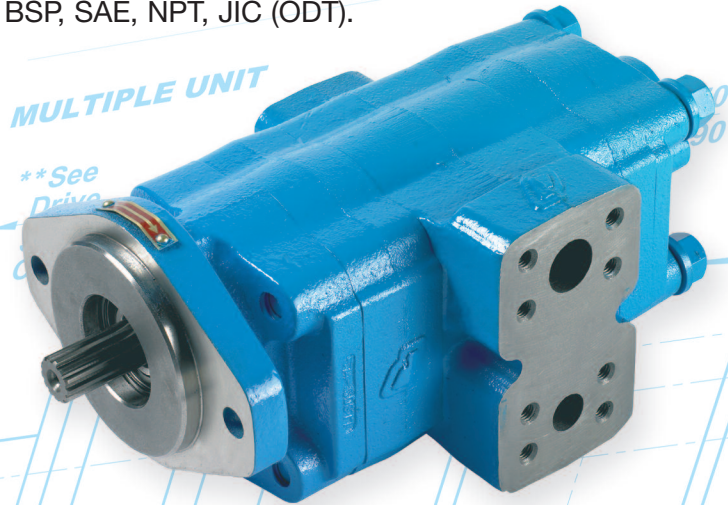
### Recommended Operating Conditions:

Fluid viscosity, normal operating conditions 9 to 220 cst.

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

Fluid cleanliness, 10 micron filter with Beta 200 rating is recommended.

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).



Performance and Dimensions overleaf

Please discuss your application with our sales engineers.

# Series 197 Bushing Pumps and Motors

## PERFORMANCE DATA

### Pump Performance

| Output- L/min/igpm – Input-Kw/Horsepower ▶ |                      |                       |   |        |       | Input Speed – rpm |          |           |         |           |         |            |         |
|--|----------------------|-----------------------|---|--------|-------|-------------------|----------|-----------|---------|-----------|---------|------------|---------|
|  |                      |                       |   |        |       | 1000              |          | 1500      |         | 1800      |         |            |         |
| Gear widths – code                         | Gear widths – inches | Displacement – cc/rev | Maximum continuous working pressure – bar/psi | Output | Input | Output            | Input    | Output    | Input   |           |         |            |         |
|  |                      |                       |   | 05     | 1/2   | 16                | 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 |

### Motor Performance

|                    |    |                    | Input flow, Output hp & torque | Output Speed – rpm |              |              |              |
|--------------------|----|--------------------|--------------------------------|--------------------|--------------|--------------|--------------|
|                    |    |                    |                                | 900                | 1200         | 1500         | 1800         |
| Gear widths – code | 10 | 1                  | 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 |              |

- Flows quoted are at test pressure of 207 bar/3000 psi, using 32cSt oil at 65 deg 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.*

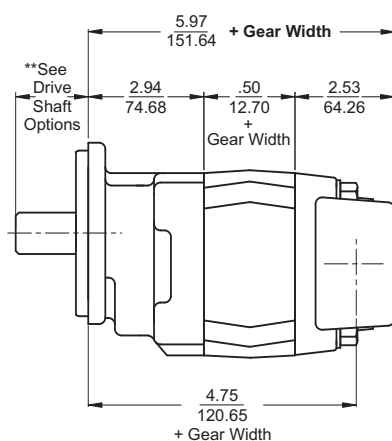
\* These gear widths are the popular sizes for motor configurations but any of the gear widths listed in the Pump Performance table can be supplied.

## WEIGHTS (approximate)

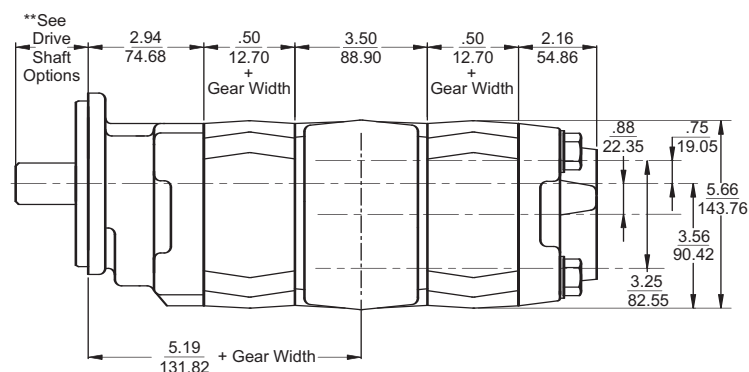
| Gear widths (ins) | 1/2  | 3/4  | 1    | 1.1/4 | 1.1/2 | 1.3/4 | 2    |
|-------------------|------|------|------|-------|-------|-------|------|
| Single unit (kg)  | 15.8 | 16.2 | 16.8 | 17.2  | 17.7  | 18.4  | 19.0 |

For multiple unit weights, please consult our sales department.

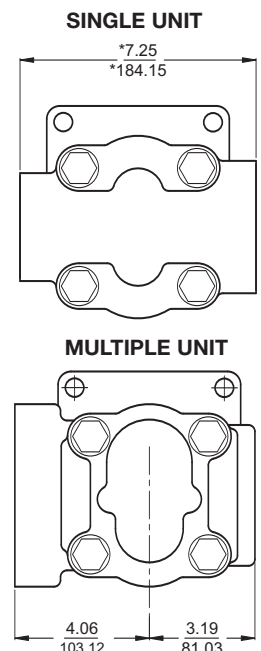
## DIMENSIONS



SINGLE UNIT



MULTIPLE UNIT



\*Standard port arrangement, dimension will change with type of port.

\*\*Dimensional information for mounting flange and shaft options are shown on the attached Data Sheet FS100.



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