



SERIES 3700

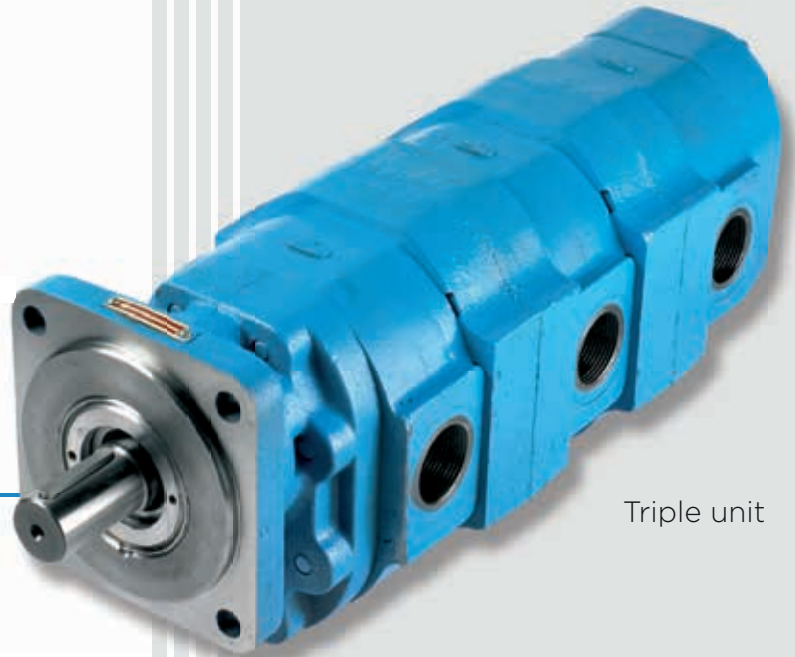
Interchangeable with
Parker Commercial
37X Series

ATEX  assessed
Baseefa 10ATEX0002DRR 
IP50

DATA SHEET
R3700

Roller Bearing Gear Pumps and Motors

- Single or multiple units available.
- Displacement 25 cc/rev to 150 cc/rev.
- Minimum operating speed 600 rpm.
- Maximum operating speed 2400 rpm.
- Maximum continuous operating pressure 2250 psi (155 bar).*1
- Cast iron construction.
- Double bearing options available for side load applications.



Triple unit

Mounting Flange Options:

SAE 'B' 2 bolt, SAE 'B' 4 bolt, SAE 'C' 2 bolt,
SAE 'C' 4 bolt, pad mount.

Drive Shaft Options:

SAE 'C' 14 tooth, SAE 'C' keyed, 1.1/8" keyed,
1.1/4" keyed.

Various Porting Options:

BSP, SAE, NPT, JIC (ODT).

*1 Only available in 25, 37 and 50cc.

Performance and Dimensions overleaf



Please discuss your application with our sales engineers

Recommended Operating Conditions:

Fluid viscosity, normal operating conditions
16 to 220 cst.

Fluid temperature should not exceed 65° C.

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).

Series 3700 Pumps and Motors

PERFORMANCE DATA

Pump Performance

						Input Speed - rpm							
						1000		1500		1800			
Output- L/min/igpm - Input-Kw/Horsepower ▶						Output	Input	Output	Input	Output	Input		
Gear widths - code	Gear widths - inches	Displacement - cc/rev	Maximum continuous working pressure-bar/psi	05	1/2	25	155/2250	21 / 4.6	8 / 10	33 / 7.3	11 / 15	41 / 9.0	14 / 18
				07	3/4	37	155/2250	32 / 7.0	11 / 15	50 / 11.0	17 / 23	61 / 13.4	20 / 27
				10	1	50	155/2250	42 / 9.3	15 / 20	66 / 14.5	23 / 30	81 / 17.8	27 / 36
				12	1.1/4	62	138/2000	53 / 11.7	18 / 24	83 / 18.3	27 / 36	102 / 22.5	33 / 44
				15	1.1/2	75	138/2000	66 / 14.5	21 / 28	102 / 22.5	32 / 43	124 / 27.3	39 / 52
				17	1.3/4	87	138/2000	79 / 17.4	25 / 33	121 / 26.7	37 / 49	147 / 32.4	44 / 59
				20	2	100	138/2000	91 / 20.0	27 / 36	139 / 30.6	41 / 55	168 / 37.0	50 / 66
				22	2.1/4	112	138/2000	104 / 22.9	31 / 41	158 / 34.8	47 / 62	190 / 41.9	56 / 75
				25	2.1/2	125	138/2000	116 / 25.6	35 / 46	175 / 38.5	51 / 69	211 / 46.5	62 / 82
				30	3	150	138/2000	138 / 30.4	42 / 56	207 / 45.6	63 / 84	249 / 54.8	76 / 101

• Flows quoted are at test pressures of 138 bar/2000 psi, using 32cSt oil at 65° C.

• 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

				Output Speed - rpm					
				800	1000	1400	1800		
Gear widths - code	Gear widths - inches	Input flow. Output hp & torque	10	1	Output Kw / hp	17.5 / 10.0	9.5 / 12.5	13.0 / 17.0	15.0 / 20.0
			Output Nm / in.lb	90.5 / 800	89.5 / 790	87.0 / 770	80.0 / 710		
			Input l.min / igpm	51.0 / 11.0	62.5 / 13.5	81.0 / 18.0	104.0 / 23.0		
			15	1.1/2	Output Kw / hp	12.0 / 16.0	15.0 / 20.0	20.0 / 26.5	24.5 / 32.5
			Output Nm / in.lb	143.5 / 1270	141.5 / 1250	137.0 / 1210	129.5 / 1145		
			Input l.min / igpm	73.5 / 16.0	89.0 / 19.5	119.0 / 26.0	151.0 / 33.0		
			20	2	Output Kw / hp	16.5 / 22.0	20.5 / 27.5	27.0 / 36.0	33.5 / 45.0
			Output Nm / in.lb	198.0 / 1750	194.5 / 1720	189.5 / 1675	180.5 / 1595		
			Input l.min / igpm	100.0 / 22.0	121.0 / 26.5	159.0 / 35.0	206.0 / 44.0		
			25	2.1/2	Output Kw / hp	21.5 / 28.5	34.5 / 46.0	45.5 / 61.0	48.0 / 64.0
			Output Nm / in.lb	253.0 / 2240	250.0 / 2210	246.5 / 2180	237.5 / 2100		
			Input l.min / igpm	121.0 / 26.5	147.5 / 32.5	196.5 / 43.0	247.0 / 54.5		
30	3	Output Kw / hp	26.5 / 35.5	32.5 / 43.5	43.5 / 58.5	54.5 / 73.0			
Output Nm / in.lb	316.5 / 2800	314.0 / 2780	306.0 / 2710	290.0 / 2560					
Input l.min / igpm	140.0 / 30.5	170.0 / 37.5	230.0 / 50.5	291.0 / 64.0					

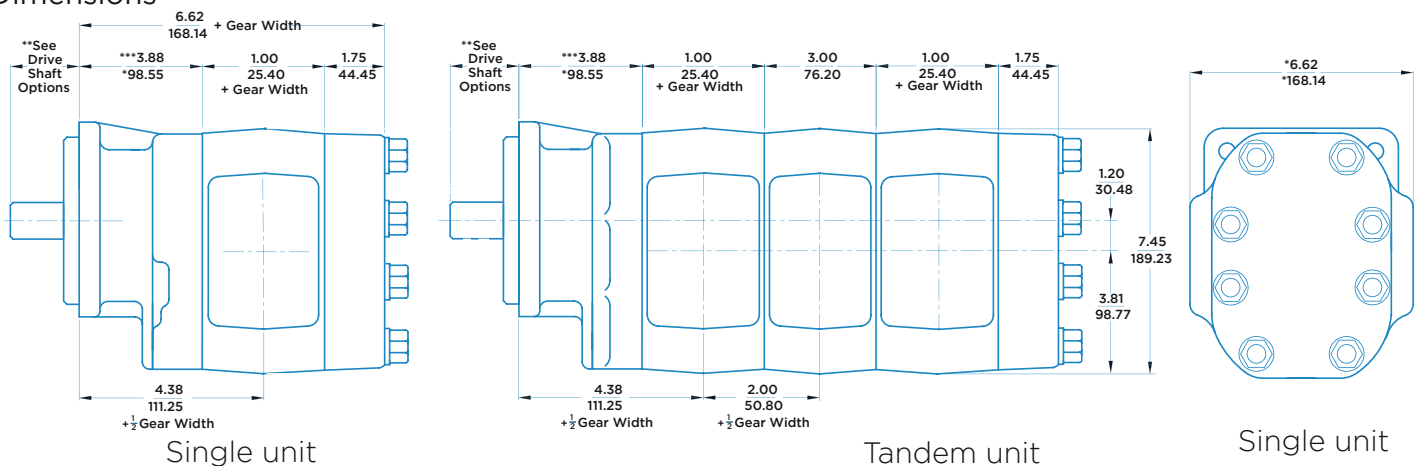
* These gear widths are the popular sizes for motor configurations but any of the gear widths listed in the Pump Data table can be supplied.

Weights (approximate)

Gear widths (ins)	1/2	3/4	1	1.1/4	1.1/2	1.3/4	2	2.1/4	2.1/2	3
Single unit (kg)	24.0	24.5	25.5	26.5	27.5	28.5	29.5	31.0	32.5	35.5

For multiple unit weights, please consult our sales department

Dimensions



* 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.

***For double bearing option, dimensions are 5.75 / 146.05



HYDRAULIC ENGINEERS

Unit 20 Silver Court, Intercity Way, Bramley, Leeds, West Yorkshire LS13 4LY. UK.
Tel: +44 (0) 113 2361367 Email: sales@hydra-perm.co.uk web: www.hydra-perm.co.uk