

ALPHA GEAR PUMP BI-4H5, Bi-directional / Flange ISO 4 holes



Specifications

Туре		35cc	50cc	65cc	
Part number		14571420	14571415	14571410	
Displacement		34.22	51.33	65.3	cc/rev
Port configuration		2 rear	2 rear	2 rear	
Flange standard		ISO 7653-D	ISO 7653-D	ISO 7653-D	
Shaft DIN-ISO 14		8*32*36	8*32*36	8*32*36	mm
Inlet - straight internal thread		1 1/4"	1 1/4"	1 1/4"	BSP
Outlet - straight internal thread		1 1/4"	1 1/4"	1 1/4"	BSP
Recommended suction hose diameter		1 1/2"	1 1/2"	1 3/4"	inch
Torque at pressure "p2"		160	230	270	Nm
p2 : Max. pressure for tipping application		280	280	250	bar
p3 : Max. continuous pressure		260	260	230	bar
p1 : Max. peak pressure		300	300	255	bar
L : Length of pump		180	191	200	mm
W : Width of pump		136	136	136	mm
H : Height of pump		148.5	148.5	148.5	mm
A : Position of rear port		34	34	34	mm
Mass		11.5	12.6	13.4	kg
Centre of gravity distance (COG)		92.5	98.5	103.4	mm
Max. Torque		330	330	330	Nm
Max. speed at intermittent pressure*		2500	2500	2500	rpm
Min. speed at intermittent pressure		300	300	300	rpm
Oil temperature range min	/ max	-40/80	-40/80	-40/80	°C
Inlet pressure range (suction side) min	/ max	0.7/3	0.7/3	0.7 / 3	bar
Recommended oil viscosity range min	/ max	12/100	12/100	12/100	mm²/s
Max. starting viscosity*		1500	1500	1500	mm²/s
Min. filtration		16	16	16	μm
Recommended oil cleanliness		8-NAS 1638	8-NAS 1638	8-NAS 1638	
Noise level at 1000 rpm and 100 bar		65	65	65	dB
Leak indicator included with the pump		Yes	Yes	Yes	

^{* 2500} rpm for oil viscosity up to 100 cSt. 1000 rpm for cold start (1500 cSt).



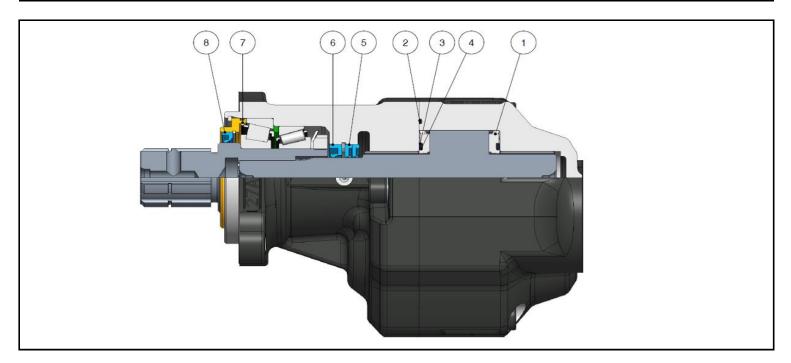
Technical notes

• Recommended oil is mineral based; for other fluids contact our engineering department • Mentioned filtration is for tipper applications only • To avoid cavitation, suction hose must be kept as short and straight as possible and oil viscosity should be respected at all operating temperatures • Painted black (RAL9005) • Leak indicator kit included and to be fitted with hose opening facing side or down

Related documentation

Mounting instructions: PUM-0038 Repair instructions: PUM-0039 Oil specifications: OIL-0011

Spare parts

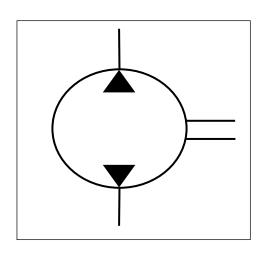


Spare parts

	Туре	35cc	50cc	65cc
	Seal kit (pos: 2, 3, 4, 5, 6, 7 & 8)	02460013	02460013	02460013
1	Thrust plate (x2)	02259400	02259400	02259400
2	O-ring	See seal kit	See seal kit	See seal kit
3	Thrust plate seal (x2)	See seal kit	See seal kit	See seal kit
4	Thrust plate back-up ring (x2)	See seal kit	See seal kit	See seal kit
5	Shaft seal (x2)	See seal kit	See seal kit	See seal kit
6	Shaft seal	See seal kit	See seal kit	See seal kit
7	O-ring	See seal kit	See seal kit	See seal kit
8	Shaft seal	See seal kit	See seal kit	See seal kit
9	Leak indicator kit	02470180	02470180	02470180

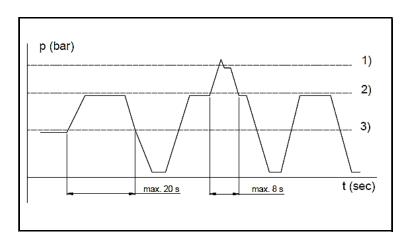
 $^{^{}st}$ Leak indicator included with the pump

Hydraulic symbol pump



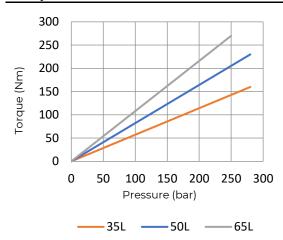


Pressure Definition



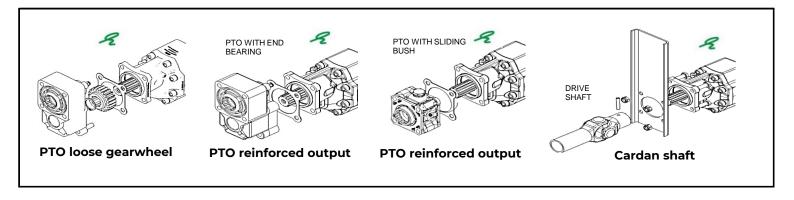
- p 1) Peak pressure
- p 2) Intermittent pressure e.g. tipping applications
- p 3) Continuous Pressure

Torque - Pressure characteristics



* PTO output torque must be higher than the torque required by the pump

Mounting options



Subject to change without notice,

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