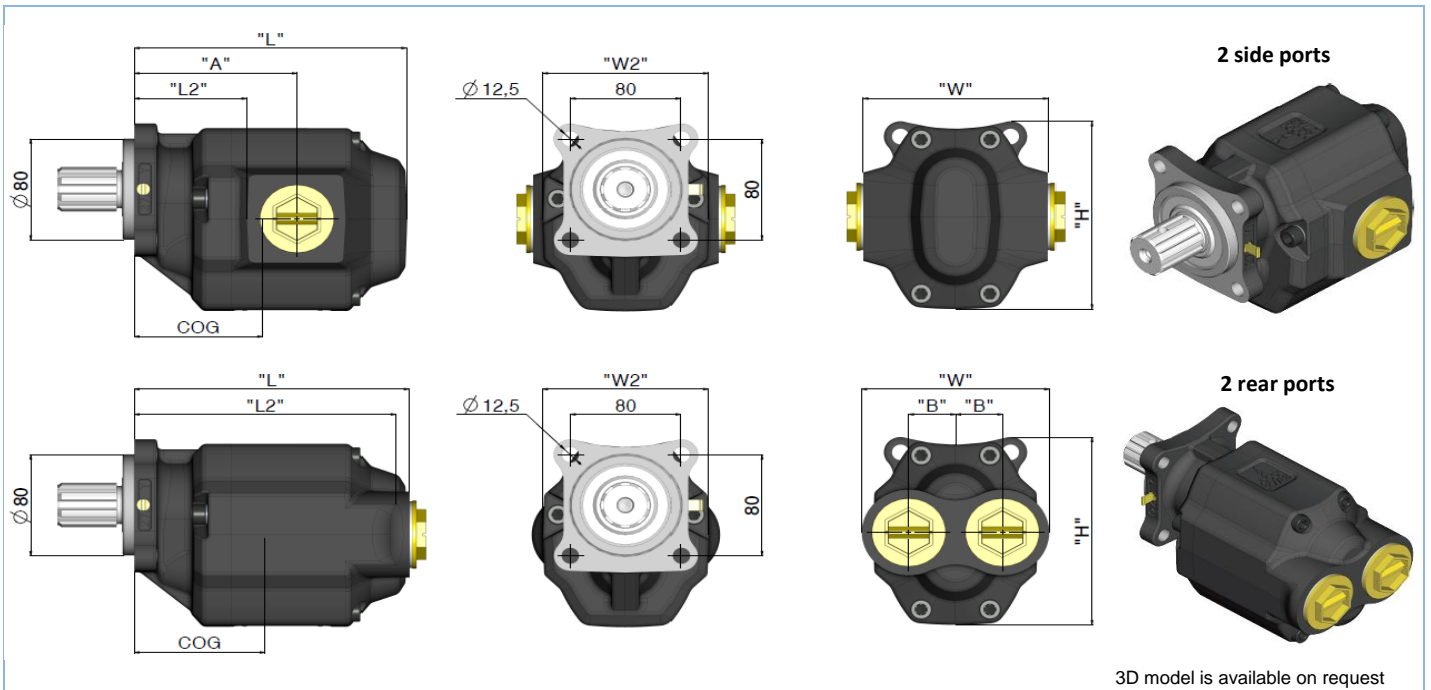


# HYVA GEAR PUMP



ALPHA Gear pump BI - 4H3  
Bi-rotational / Flange ISO 4 holes

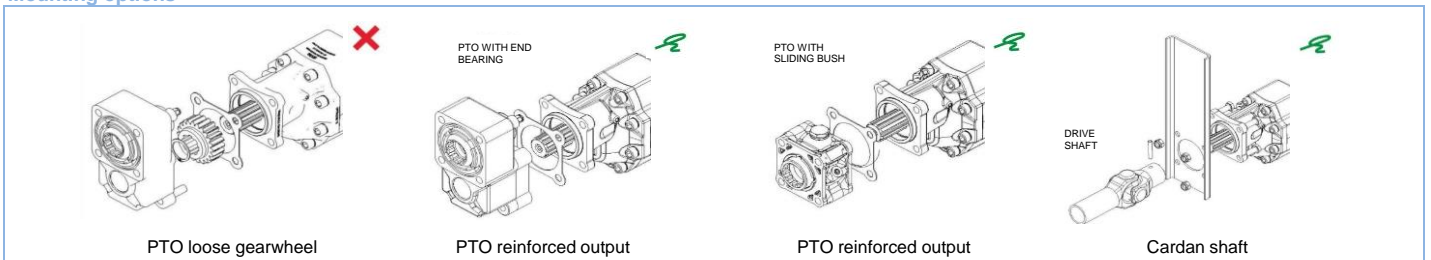


3D model is available on request

## Specifications

Type	85 cc	85 cc	105 cc	105 cc	
Part number	14571340	14571341	14571350	14571351	
Displacement per revolution	85,1	85,1	104,7	104,7	cc
Port configuration	2 side	2 rear	2 side	2 rear	
Shaft DIN 5462	8*32*36	8*32*36	8*32*36	8*32*36	mm
Inlet - straight internal thread	1 1/4	1 1/4	1 1/4	1 1/4	" BSP
Outlet - straight internal thread	1 1/4	1 1/4	1 1/4	1 1/4	" BSP
Minimum suction hose diameter	1 3/4	1 3/4	1 3/4	1 3/4	inch
Torque at 250 bar	385	385	473	473	Nm
p2: max. pressure for tipping applications	250	250	250	250	bar
p3: max. continuous pressure	230	230	230	230	bar
p1: max. peak pressure	255	255	255	255	bar
Flow at 2000 rpm	157	157	193	193	l/m
Max. speed at intermittent pressure	2500	2500	2250	2250	rpm
Min. speed at intermittent pressure	300	300	300	300	rpm
L: Length pump	184	187	196	199	mm
L2: Length before ports	81	178	81	190	mm
W: Width pump	134	136	134	136	mm
W2: Smaller width before ports	120	120	120	120	mm
H: Height pump	148,5	148,5	148,5	148,5	mm
A: Position side port	114		118		mm
B: Position rear port		34		34	mm
Mass	14	14	15	15	kg
Centre of gravity distance (COG)	87	89	93	95	mm
Oil temperature range	min / max -40 / 80	min / max -40 / 80	min / max -40 / 80	min / max -40 / 80	°C
Inlet pressure range (suction side)	min / max 0,7 / 3	min / max 0,7 / 3	min / max 0,7 / 3	min / max 0,7 / 3	bar
Recommended oil viscosity range	min / max 12 / 100	min / max 12 / 100	min / max 12 / 100	min / max 12 / 100	mm²/s
Max. starting viscosity	750	750	750	750	mm²/s
Min. filtration	25	25	25	25	µm
Noise level at 1000 rpm and 100 bar	65	65	66	66	dB

## Mounting options



## Technical notes

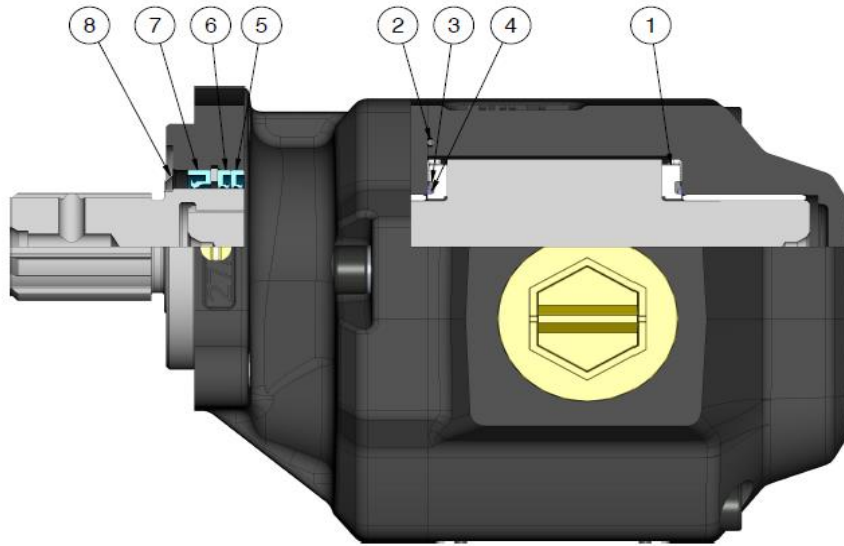
• Recommended oil is mineral based; for other fluids contact our engineering department • Mentioned filtration is for tipper applications only • To avoid cavitation, suction hose must be kept as short and straight as possible and oil viscosity should be respected at all operating temperatures • Painted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

## Related documentation

Mounting instructions: included in the box

Oil specifications: OIL-0011

[www.hyva.com](http://www.hyva.com)

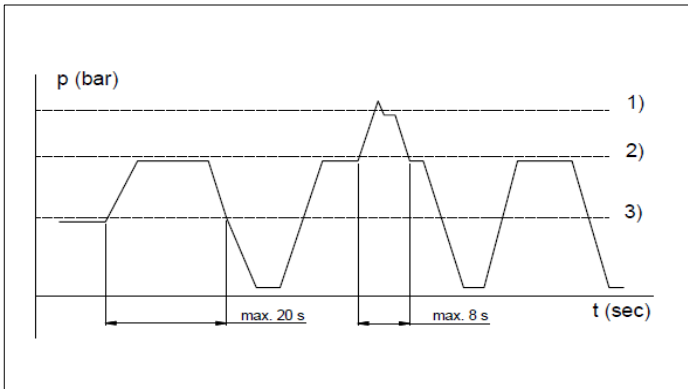


### Spare parts

	Description	85 cc	105 cc
	Seal kit (parts: 2, 3, 4, 5, 6, 7 & 8)	02460015	02460015
1	Thrust plate	02259408	02259408
2	O-ring	n.a; see seal kit	n.a; see seal kit
3	Seal thrust plate	n.a; see seal kit	n.a; see seal kit
4	Back-up ring thrust plate	n.a; see seal kit	n.a; see seal kit
5	Shaft seal	n.a; see seal kit	n.a; see seal kit
6	Shaft seal	n.a; see seal kit	n.a; see seal kit
7	Shaft seal	n.a; see seal kit	n.a; see seal kit
8	Nilos ring	n.a; see seal kit	n.a; see seal kit
	Leak indicator kit*	02470180	02470180

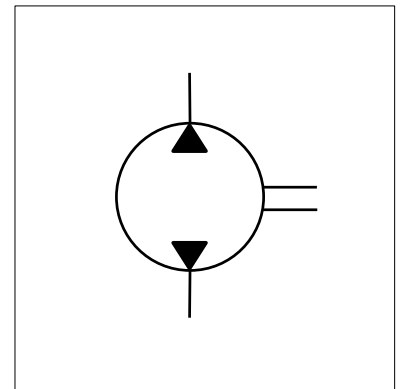
\* leak indicator kit is included with the pump

### Pressure definition



### Hydraulic symbol pump

- p 1)** Peak Pressure
- p 2)** Intermittent Pressure  
f.e. tipping applications
- p 3)** Continuous Pressure



### Torque - Pressure characteristics

