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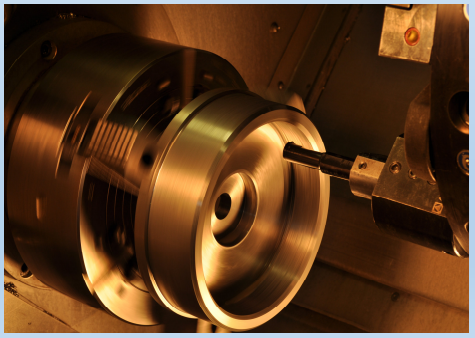


Comprehensive Hydraulic Solutions

ORBIT MOTOR

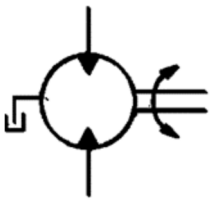
Friendly Intelligent Powerful !
Hydraulics

YUKEN INDIA LIMITED

Orbit Motor

Y-OMP-100 SERIES Orbit Motor

This is gerotor type hydro motor, of low speed with high torque output within a very compact design. YMP-100 series is widely used in construction, agriculture and machine tool areas.



Specifications

Type	Motor size	Geometric displacement	Max. speed		Max. torque		Max. output		Max. pressure drop	
		cm3	rpm		Nm		kW		bar	
			Cont.	Int	Cont.	Int	Cont.	Int	Cont.	Int
Y-OMP	**100**	**97.3**	**615**	**770**	**190**	**230**	**11**	**13**	**140**	**175**

Max. oil flow		Min. starting torque		Max. starting pressure	Min. speed
l/min		**Nm**		bar	rpm
Cont.	Int	at max. pressure drop cont.	at max. pressure drop int.		
60	**75**	**170**	**210**	**10**	**10**

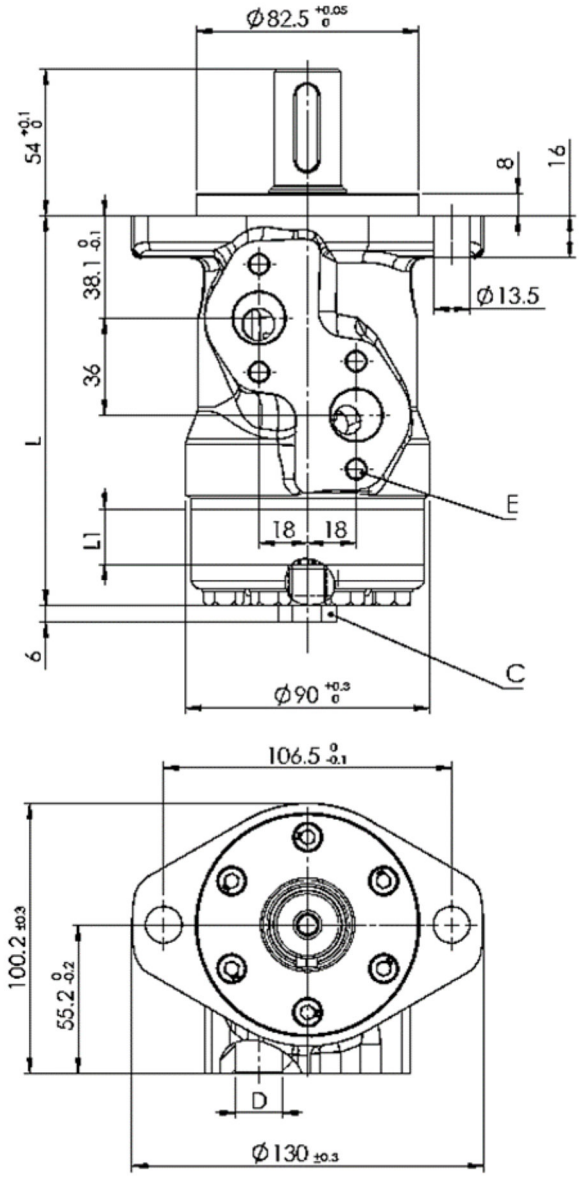
Model Number Designation

Y-OMP	**-100**	**-S**	**-1**	**-P**	**-V**	**-RL**	**3080**
Series	**Size**	**Shaft**	**Mounting**	**Port**	**Seal**	**Direction of rotation (Viewed from Shaft Side)**	**Design no.& Std.**
Y-OMP	100	S: Straight Shaft with key way	1: Ø 82.5 mm Spigot	**P**: BSPF Port	**B**: Nitrile	**RL**: Clockwise Or counter clockwise	**30:** Design Number **80**: Design Number

General Arrangement

- **Y-OMP-100-S-P-V-RL-3080**

  Side port version with 2hole oval mounting flange (A2 – flange)



C: Drain connection D: G 1/2; 15mm deep

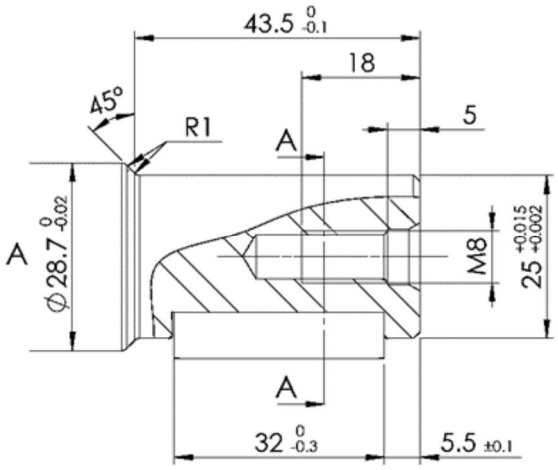
G1/4; 12mm deep

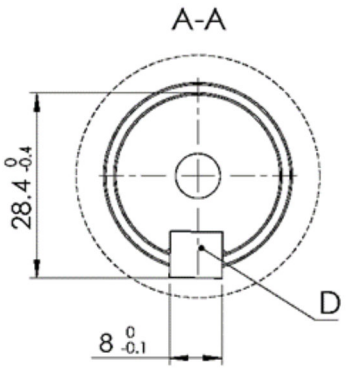
E: M8; 13mm deep

Type	Max. L (mm)	L_1 (mm)
YOMP 100	138.5	13.0

Orbit Motor

Shaft:





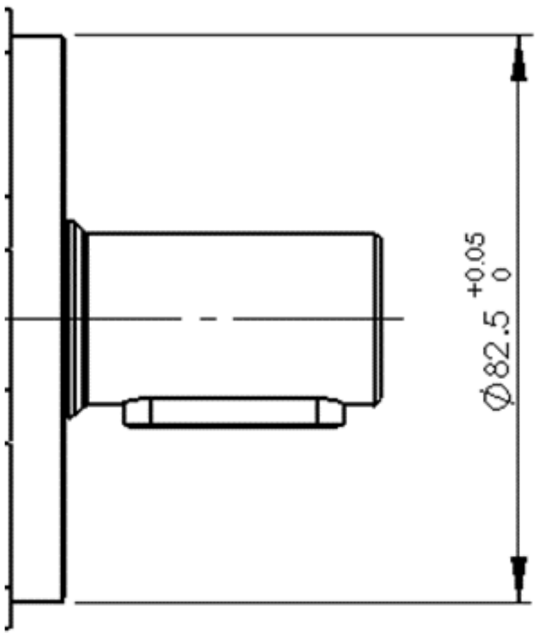
A= Cylinder shaft 25mm

D = Parallel Key

A8 * 7 * 32

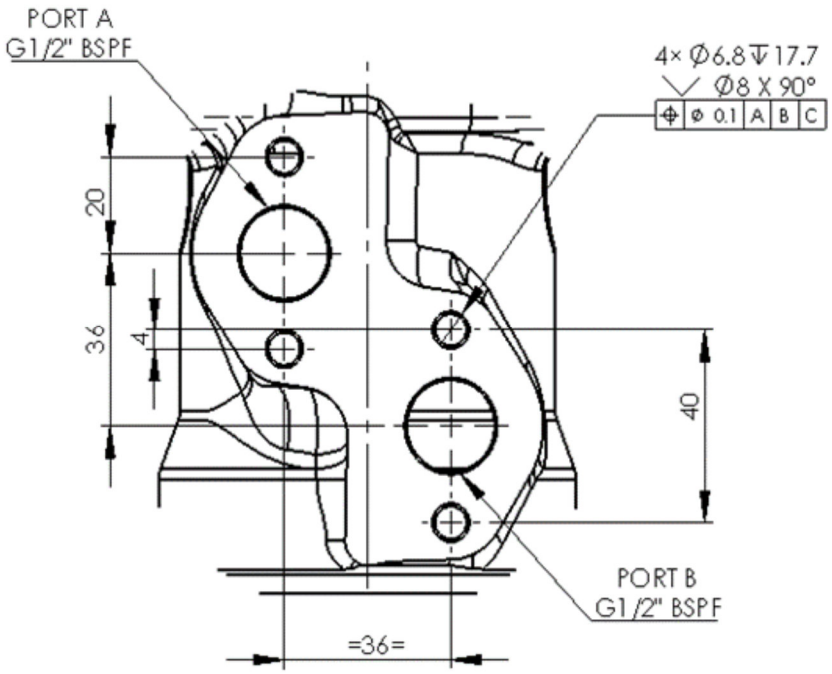
Mounting Details

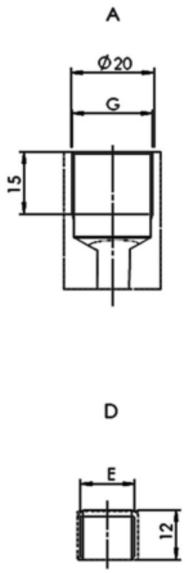
1: Ø 82.5 mm Spigot



Ports

- **P: BSPF Port**





A: G main port

G: ISO 228/1 – G1/2

D: G drain port

E: ISO 228/1 – G1/4

Seals

Shaft seal: 42 × 28.56 × 5.5 mm

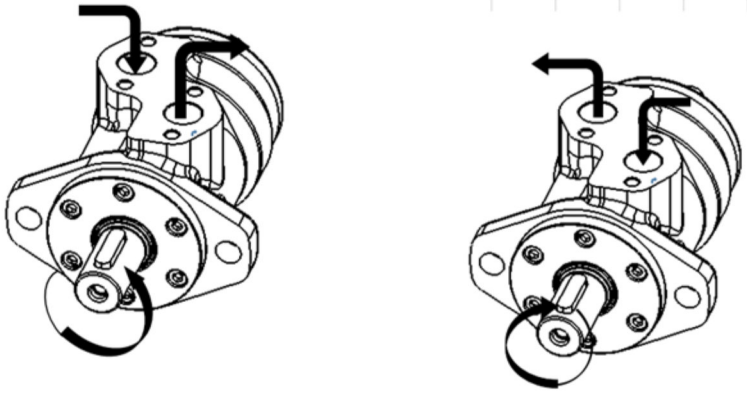
Dust seal: 35 × 28.5 × 3 mm

Oil flow in drain line

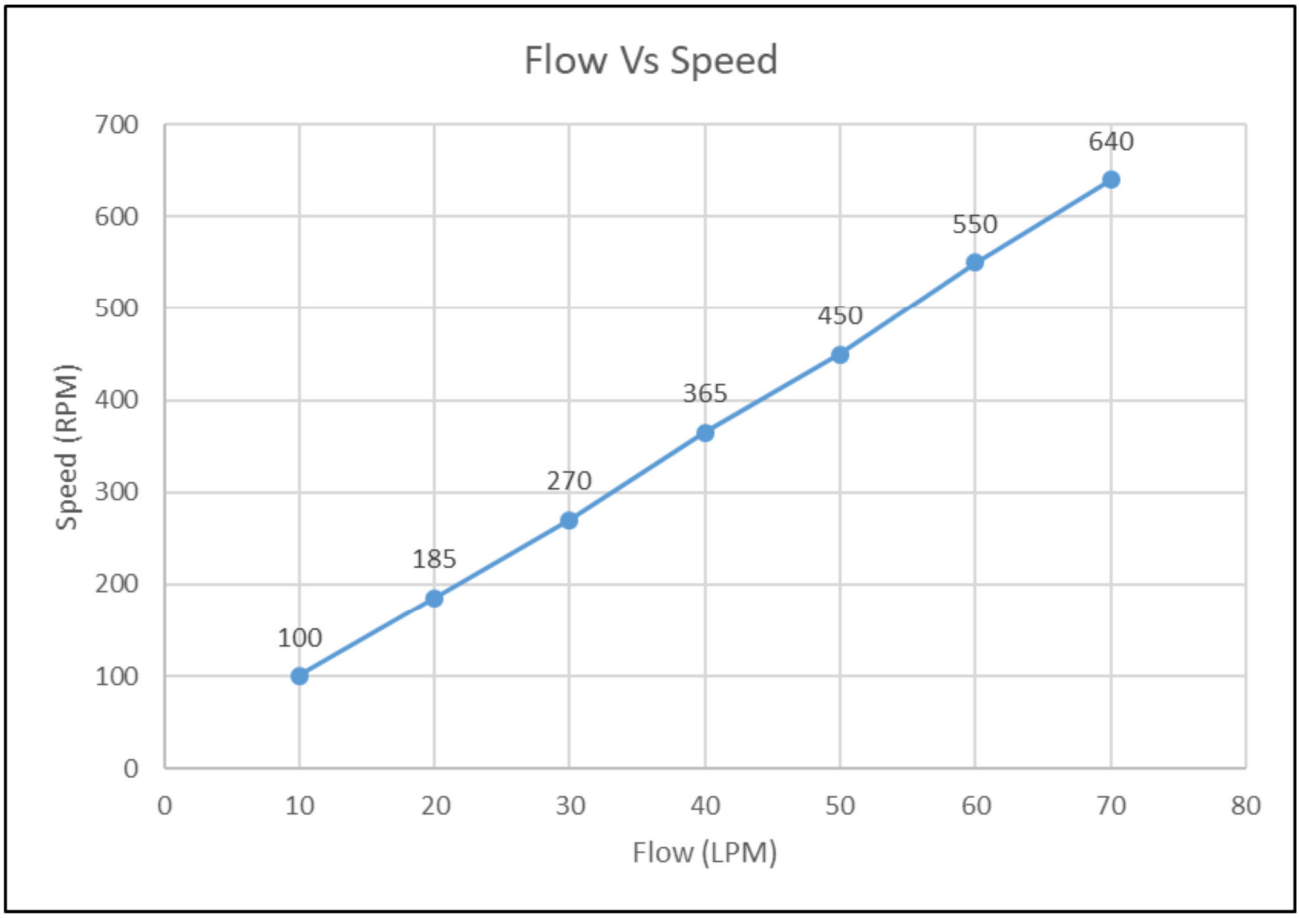
The table shows the max. oil flow in the drain line at a return pressure less than 5 – 10bar.

Pressure drop bar	Viscosity mm^2/s	Oil flow in drain line l/min
100	20	2.5
	35	1.8

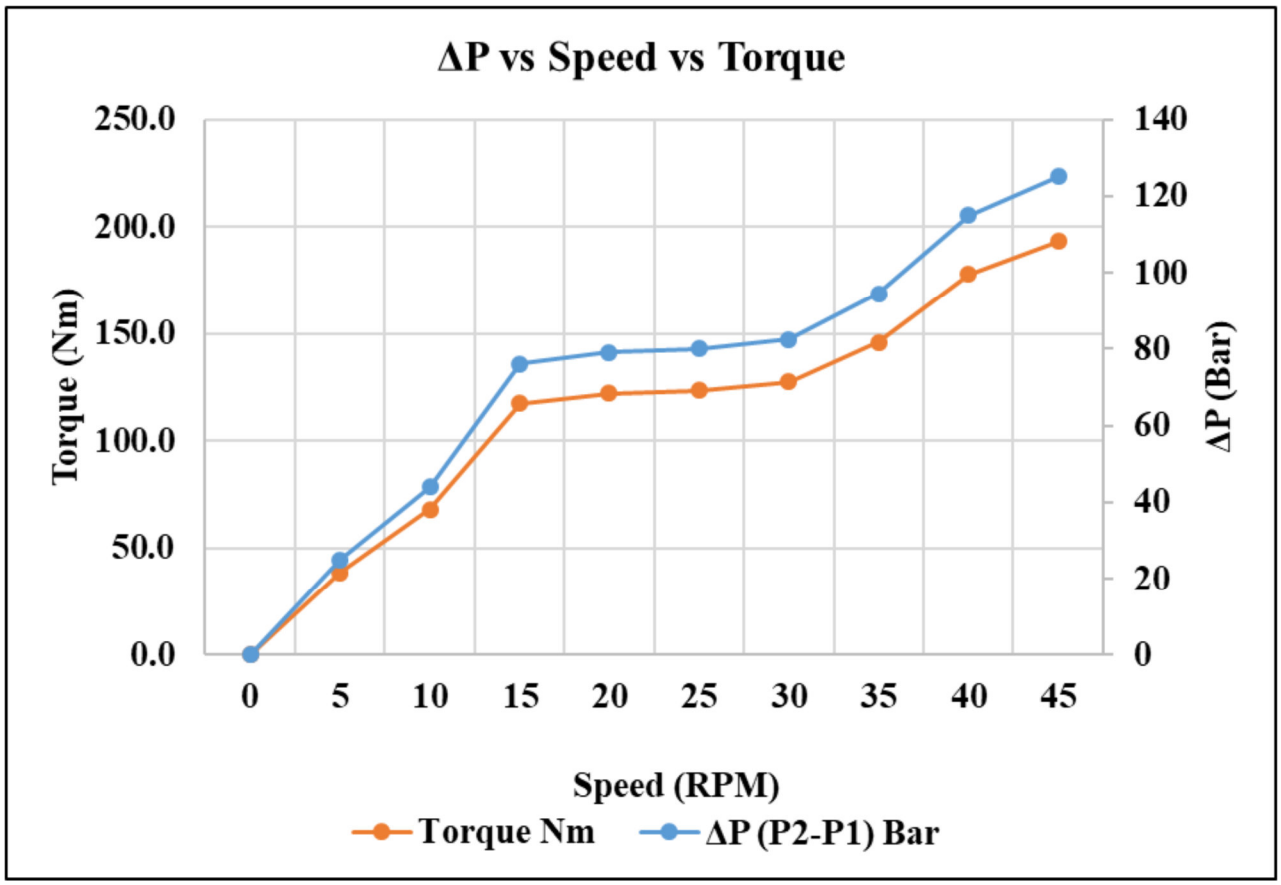
Direction of shaft rotation



Typical performance characteristics:



Orbit Motor



Orbit Motor Formulas:

$$Theoretical\ Torque = \frac{Flow\ (LPM) X\ Pressure (Bar)(cc/\ rev) X\ 1}{RPM\ (rev/min)}$$

$$Theoretical\ Flow(LMP) = \frac{Motor\ Speed\ (rev\ /min)\ X\ Motor\ Displacement\ (cc/rev)}{1000}$$