

BM Series Cycloidal Pump

BMA-10A ... BMA-13A • BMB-1FS ... BMB-3FS

Cycloidal-rotor pump unit delivering 1.2 – 7.5 L/min of stable, low-pulsation flow for continuous or intermittent low-pressure circulating lubrication.

	DISCHARGE 1.2 – 7.5 L/min	MAX PRESSURE 5.0 kgf/cm²
	MAX SPEED 1800 – 3000 r/min	PORTS PT1/8 • PT1/4 • PT3/8

HOW IT WORKS

A simple cycloidal rotor set gives stable delivery and good self-absorption, and holds its characteristics at speed. That suits a circulating oil line — a bath, a spray, a return-fed slideway — rather than a metered circuit.

Delivered flow depends on drive speed, and is quoted at 1500 and 1800 r/min. Maximum pressure is 5.0 kgf/cm² on every model in both series.

SPECIFICATION

Type	Cycloidal-rotor oil pump
Theoretical displacement	0.8 – 4.5 cc/rev (BMA) • 1.16 – 2.5 cc/rev (BMB)
Discharge capacity	1.2 – 7.5 L/min, by model and speed
Max pressure	5.0 kgf/cm ²
Max rotary speed	1800 – 3000 r/min, by model
Entrance / outlet thread	PT1/8 • PT1/4 • PT3/8
Weight	0.55 kg (BMA) • 1.0 – 1.2 kg (BMB)
Duty	Low-pressure continuous or intermittent lubrication

BM SERIES CYCLOIDAL PUMP

AMAG-DS-BM-01 • SELECTION & ORDERING

MODEL SELECTION

MODEL	CC/REV	L/MIN @1500	L/MIN @1800	MAX PRESSURE	MAX SPEED	PORT THREAD	WEIGHT
BMA-10A	0.8	1.2	1.4	5.0 kgf/cm ²	3000 r/min	PT1/8	0.55 kg
BMA-11A	1.5	2.2	2.7	5.0 kgf/cm ²	2000 r/min	PT1/8 • 1/4	0.55 kg
BMA-12A	2.5	3.7	4.5	5.0 kgf/cm ²	1800 r/min	PT1/4	0.55 kg

MODEL	CC/REV	L/MIN @1500	L/MIN @1800	MAX PRESSURE	MAX SPEED	PORT THREAD	WEIGHT
BMA-13A	4.5	6.7	7.5	5.0 kgf/cm ²	1800 r/min	PT3/8	0.55 kg
BMB-1FS	1.16	1.74	2.08	5.0 kgf/cm ²	2000 r/min	PT1/4	1.0 kg
BMB-2FS	1.8	2.7	3.24	5.0 kgf/cm ²	2000 r/min	PT1/4	1.1 kg
BMB-3FS	2.5	3.75	4.5	5.0 kgf/cm ²	2000 r/min	PT1/4	1.2 kg

DIMENSIONS

Ask us for the dimensioned drawing before machining a mounting.

APPLICATIONS	SYSTEM PAIRING
Machine tool circulating lubrication	Suction strainer
Textile machinery	Pressure gauge and relief valve
Printing machinery	Copper or nylon main line to match port thread
Light machinery	

CHECK BEFORE ORDERING

5.0 kgf/cm² maximum. A BM cannot reach the action guarantee pressure of any metering distributor — it is not a substitute for a TZ or HL.

Max rotary speed falls as displacement rises. Check the speed limit for the frame you order against your drive.

ORDER THIS PART	EMAIL & WEB	WARRANTY
+91 73976 31796 WhatsApp the model code.	mail@amagcnc.com amagcnc.com	One year against manufacturing defect from date of invoice.

AMAG CNC Technology · No 604C, MTH Road, Mannurpet, Chennai, Tamil Nadu 600 050, India
Specifications are the manufacturer's and are subject to change without notice. AMAG-DS-BM-01 · Rev A · August 2026.