

ASM

Rugged Brushless PMAC motors

Inmotion is a premier global supplier of PMAC-motors and related products to the vehicle industry. With the new ASM range of low voltage motors, Inmotion sets a new benchmark for quality and reliability, ease of adaptation, and cost of ownership.

ASM is a family of motors with power levels from 600 W to 2 kW for system voltages between 12V and 120V. The ASM is designed with fly-by wire steering and accessory applications in mind which makes it an ideal choice for most battery-powered electric vehicles.

Product Features

- **Best in class quality and reliability**, achieved through superior design and world class manufacturing processes
- **Rugged design** suitable for the demanding environment of vehicles. Protected against ingress of dust and water
- **Customizable mechanical interface** The ASM motors can easily be adapted for different gearboxes, pumps or other mechanical interfaces
- **Sin/Cos position feedback** Sin/Cos feedback is included as the standard type of motor position feedback
- **Dual Sin/Cos position feedback.** For safety critical applications such as fly-by wire steering the ASM motors has a redundant dual Sin/Cos position feedback option
- **High torque density** Small dimensions but high performance makes the ASM motors easy to fit also in tight spaces
- **Very high efficiency** The PMAC-motor design gives superior efficiency compared to DC, PMDC and induction motors. The ASM motors are specifically designed to give high efficiency over a wide usable speed and torque range, and not only at a single load point
- **Available with gearbox** Inmotion can supply the ASM motors complete with a wide variety of gearboxes. Please refer to the ASM Gear Motor datasheet for further information



Performance

ASM Model	500 rpm		2 200 rpm		3 000 rpm		
	Rated torque (S2 2 min) Nm	Rated torque (S2 1 h) Nm	Rated torque (S2 2 min) Nm	Rated torque (S2 1 h) Nm	Rated torque (S2 2 min) Nm	Rated torque (S2 1 h) Nm	Power (W) S2 60 min
ASM103	5.5	2.8	5.3	2.3	5.2	2.0	630
ASM106	10.9	4.8	10.6	4.0	10.4	3.8	1 200
ASM109	16.4	6.8	15.9	6.1	15.7	4.7	1 475
ASM112	21.8	9.2	21.2	7.8	20.4	5.9	1 850
ASM115	27.3	11	26.4	8.6	21.9	6.8	2 150

Dimensions

ASM Model	A (mm)
ASM103	91
ASM106	121
ASM109	151
ASM112	181
ASM115	211

Interface	B (mm)
IEC-71	126
IEC-80	140

