

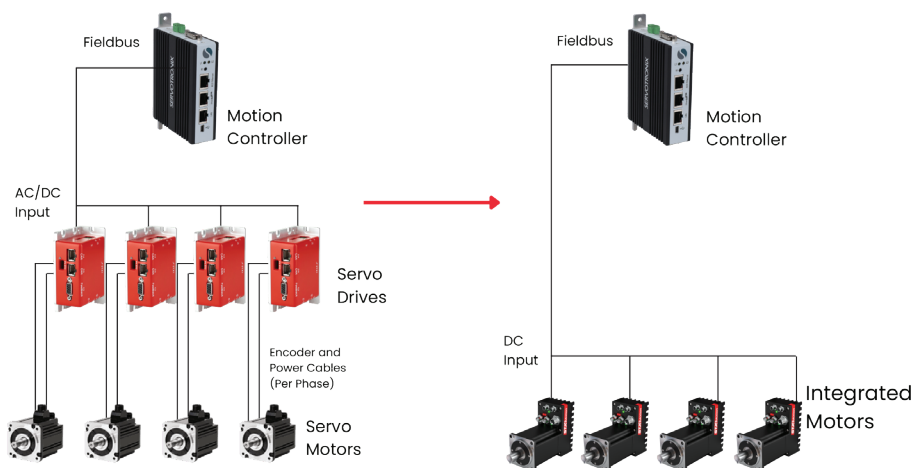
TiM Integrated Servo Motors

TiM integrated servo motor is a cost effective and flexible solution, ideal for applications with limited control cabinet space and a decentral machine architecture. With its high power density and compact size, TiM enables space-saving machine designs and ultimately cabinet-less machines.

Integrated components reduce cost, space and machine complexity

In a decentral machine architecture, wiring and assembly time can be reduced thus enabling significant cost savings for machine builders. Integrated motors that combine the drive, control and power electronics also free up space and reduce the heat generated inside the cabinet. The TiM integrated servo motor comes with I/Os for easy wiring of distributed signals as well as CANopen and EtherCAT communication ports.

From Centralized to Decentralized Motion Architecture



Supporting multiple types of motor feedback

TiM motors support absolute single turn and absolute multi turn encoders. With these feedbacks and STO functional safety TiM meet the full range of resolution and safe operation requirements of diverse applications.

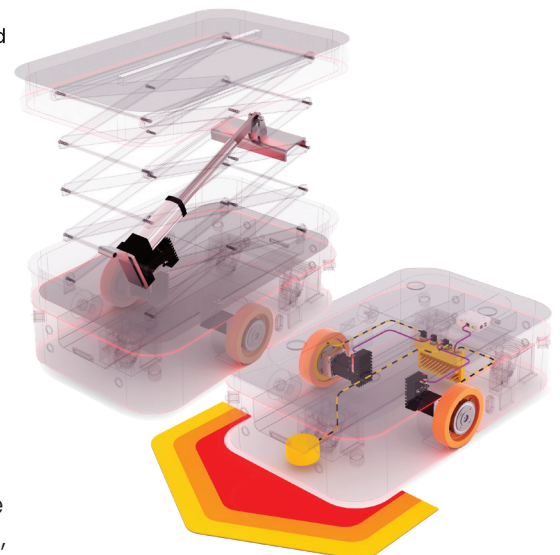
Connectivity to safety control

The STO SIL3, Cat 3, PL e safety function can be connected to a master PLC / motion controller and / or to a safety controller. Two additional non-safe encoders can be connected from the motor to the safety controller (e.g. Flexi Mobile from SICK) for safe motion monitoring, minimizing the complexity of the AGV design.



Key benefits

- Frame size: 60 - 80 mm
- 200 to 800 W rated output power
- 48 VDC bus voltage
- Fieldbus: CANopen, EtherCAT
- Feedback types: Absolute single turn, absolute multi turn
- Optional holding brake
- 3 digital inputs, 1 digital outputs
- Front and back connector mounting
- IP54 protection class (IP65 optional)
- STO functional safety (SIL 3/PL e)
- CE and cUL certifications



Rating and dimensions

Model	Flange Size (mm)	Length (with brake) (mm)	Voltage (VDC)	Power (W)	Rated Current (Arms)	Rated Torque (Nm)	Rated Speed (rpm)	Max. Speed (rpm)
IM1- 60S	60	104.30 (121.30)	48	200	6.5	0.64	3,000	5,400
IM1- 60M	60	124.30 (141.30)	48	400	12.0	1.27	3,000	5,000
IM1- 80S	80	113.25 (143.25)	48	480	14.6	1.53	3,000	5,100
IM1 - 80M	80	130.25 (160.25)	48	800	22.6	2.55	3,000	4,800

Communication:

CANopen
EtherCAT

Motor feedback:

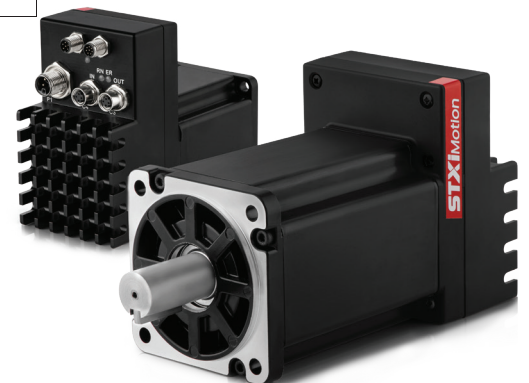
Absolut single turn
Absolut multi turn

Digital I/Os:

3 x Input
1 x Output

Ordering information

	IM1	-	60S	4	3	2	5	EC	20	0	00
Integrated (Servo) Motor											
Frame Size and Length											
60S			Flange 60 mm Short (200 W)								
60M			Flange 60 mm Medium (400 W)								
80S			Flange 80 mm Short (480 W)								
80M			Flange 80 mm Medium (800 W)								
DC Bus Voltage											
4			48 VDC								
Rated Speed											
3			3000								
Shaft											
2			Keyway								
Connector and Protection Class											
1			Connector front mounting IP 54								
5			Connector back mounting IP 54								
Communication											
CO			CANopen								
EC			EtherCAT								
Feedback											
20			Absolute Single turn 21 bit								
Brake											
0			No brake								
B			With brake								
Option											
00											



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