

# IML MOTORS

by  **Physis**

*A creative heart  
for intelligent  
technology*

 **osai**

COMPUTER NUMERICAL CONTROL

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**Flexible Automation**

History and future

# Bringing technology and intelligence to motion control

OSAlcnc and Physis have come together to enhance the Open Control product line with a wide range of IML Motors.

Since its foudation in 2001, Physis has been dedicating to the innovation and industrialization of electrical drive technologies, offering servo products and solutions in the motion control and energy conversion application fields.

Today the company stands as an integrated and innovative high-tech enterprise, bringing together R&D, production, and sales.

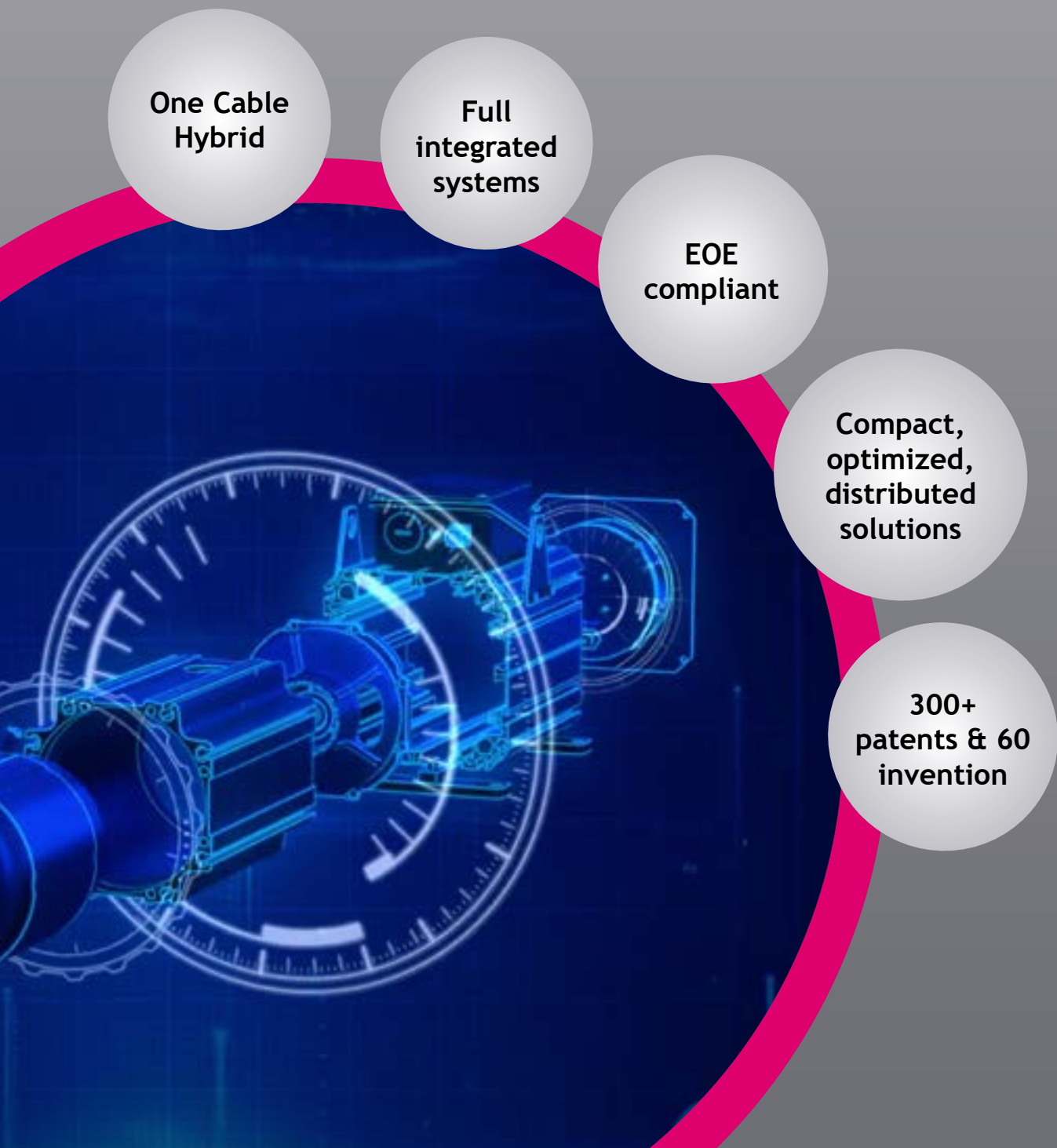
**One Cable  
Hybrid**

**Full  
integrated  
systems**

**EOE  
compliant**

**Compact,  
optimized,  
distributed  
solutions**

**300+  
patents & 60  
invention**



# IML Motors & Servo Drive Brushless

## *High-level motion control applications with cabinet free technology*

IML motor with integrated electronics offers maximum control and power in a compact space. With the integration of the drive directly on the motor, the machine architecture is simplified: reduced wiring, minimal cabinet dimension, linear machine design, optimized machine assembly process.

The brushless motors are available with a wide range of torque and motor flange dimensions, in order to fulfill various customer's requirements. The IML motor line is continuously expanding, allowing for customization of both the motor and electronics.

## Main Features

- Daisy chain connection
- Communication protocol: EtherCAT COE - EOE supported
- Device profile DS402, interpolated mode, positioning, homing, Touch probe input
- Safety: STO 2 channel - SIL 3 Level
- Feedback sensor: Heidenhain sensor single or multi-turn with external battery
- IP65 protection
- Brake Option available
- Near-by installation available

## Applications

- Glass, Stone, Wood
- Metal Sheet
- Textile
- Dosing, Weighing
- Printing, Paper Converting
- Packaging
- Food, Beverage
- Robotics



GENERAL ARCHITECTURE



EtherCAT Slaves

# Motor Characteristics

Motor Model	Flange Diam.	Power	Speed	Nominal Torque	Max Torque
<b>IML 04</b>	60 mm	400 W	4000 RPM	0.77 Nm	4 Nm
<b>IML 05</b>	80 mm	800 W	4000 RPM	2.89 Nm	9 Nm
<b>IML 06</b>	115 mm	1980 W	4000 RPM	4.73 Nm	15 Nm
<b>IML 06+</b>	115 mm	2500 W	4000 RPM	6.82 Nm	16 Nm
<b>IML 07</b>	130 mm	1800 W	1500 RPM	11.5 Nm	35 Nm

# IML PSU Unit Configuration

PSU Model	Supply Voltage	Rated Power	Peak Power	EtherCAT
<b>PSU.40</b>	400 VAC input 400 VDC output	4 KW	10 KW	•
<b>PSU.80</b>	400 VAC input 400 VDC output	8 KW	20 KW	•



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