

easier & safer

SAFETY_{ON} BOARD

SWD
Safety Wheel Drive



 **ez-wheel**
The Electric Wheel

EZ-WHEEL SAS

THE SIMPLEST MOBILE ROBOT SET-UP EVER

SWD® technology disrupts AGVs and AMRs architecture thanks to its unique level of integration



COST REDUCTION

- Up to 50% less components
- Simpler and faster assembly



TIME SAVING

- Shorter engineering time
- Simplified certification process



FIRST-CLASS SAFETY

- Suitable for collaborative robots
- ISO 3691-4 compliance



MODULAR ARCHITECTURE

- Freedom of integration
- Flexible and scalable

Rechargeable battery
Li-ion 24V high power

Autonomy and ease of integration

Safe motor control and safety encoder integrated

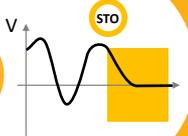
Heavy-duty cast iron frame

700 kg of vertical load
1 500 kg of load moved

Interfaces
CANopen
safety

4 programmable safety inputs
2 STO inputs

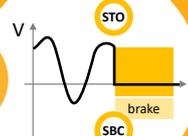
STO



Safe motor disconnection

when a stop is requested
STO up to SIL3/PLe

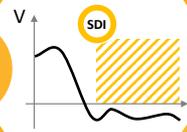
SBC



Safe brake control

to ensure a lockout
SBC or SBU (unlock) up to SIL2/PLd

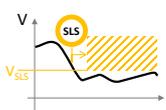
SDI



Safe direction control

in case of collision risk
SDI up to SIL2/PLd

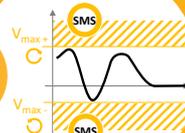
SLS



Safely limited speed

to prevent hazardous situations
SLS (8 levels) or SLSa (asymmetric)
up to SIL2/PLd

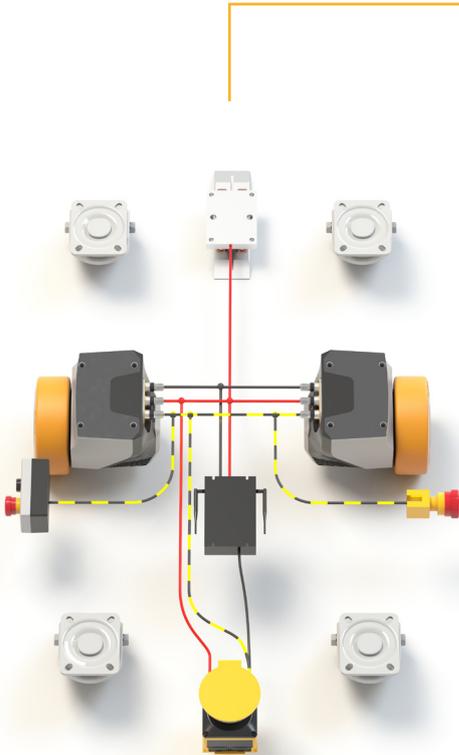
SMS



Safe maximum speed

to secure operating range
SMS up to SIL2/PLd





SAFETY WHEEL DRIVES

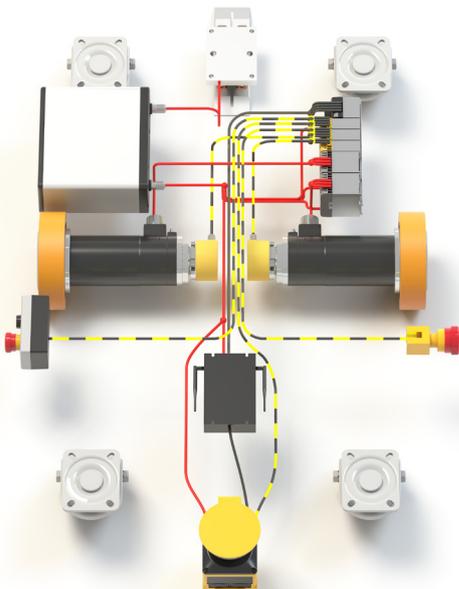
NAVIGATION PC

SAFETY LASER SCANNER

E-STOPS

VS

**CONVENTIONAL
SOLUTION**



**WHEELS
GEARBOXES
MOTORS
SAFETY ENCODERS**

**PLC
SAFETY PLC
RELAYS
MOTOR DRIVERS**

**BATTERY
CIRCUIT BREAKERS**

**NAVIGATION PC
SAFETY LASER SCANNER
E-STOPS**



INDUSTRY



AUTOMOTIVE



LOGISTICS / RETAIL



FOOD PROCESSING



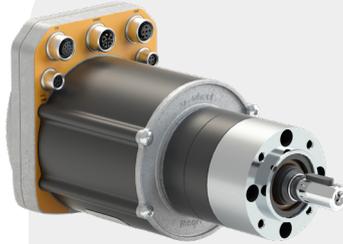
PHARMA / CHEMISTRY



MEDICAL

UNIQUE TECHNOLOGICAL BRICK FOR ALL INTRALOGISTICS NEEDS

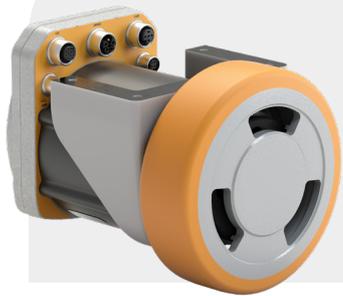
Drives and Wheel Drives with integrated safety



SWD® Core Gear motor

Peak torque	37 Nm
Nominal power	185 W
Speed range	0 to 130 rpm

Values given for reference ezSWDcore.14/C



SWD® 125 Medium duty wheel drive

Diameter	125 mm
Peak pushing effort	20 daN 500 kg moved
Max vertical load	250 kg
Speed range	0 to 11 km/h

Values given for reference ezSWD125IM.4/C

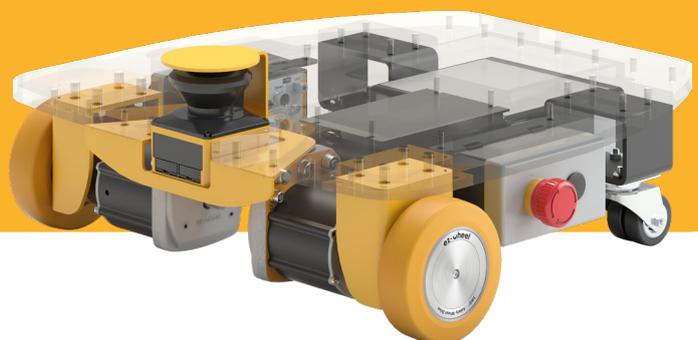


SWD® 150 Heavy duty wheel drive

Diameter	150 mm
Peak pushing effort	60 daN 1 500 kg moved
Max vertical load	700 kg
Speed range	0 to 3.7 km/h

Values given for reference ezSWD150IH.14/C-x

Discover datasheets, manuals, product options, software support and our pre-packaged kits to accelerate the development of your mobile robot and much more!





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