IDEC

SWD®
SAFETY WHEEL DRIVE

easier & safer

SAFETY ON BOARD

SWD
Safety Wheel Drive



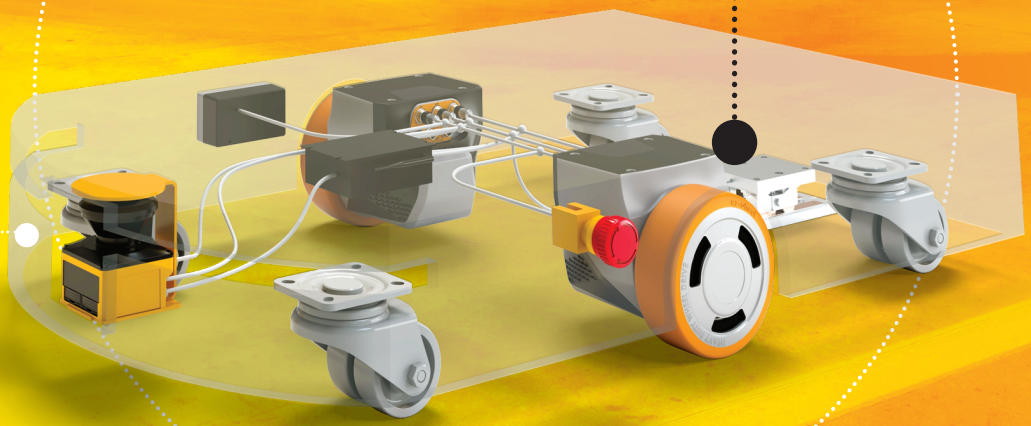
ez-wheel
The Electric Wheel

EZ-WHEEL SAS

THE SIMPLEST MOBILE ROBOT SET-UP EVER

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

SWD
Safety Wheel Drive



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

FIRST-CLASS SAFETY
- Suitable for collaborative robots
- ISO 3691-4 compliance

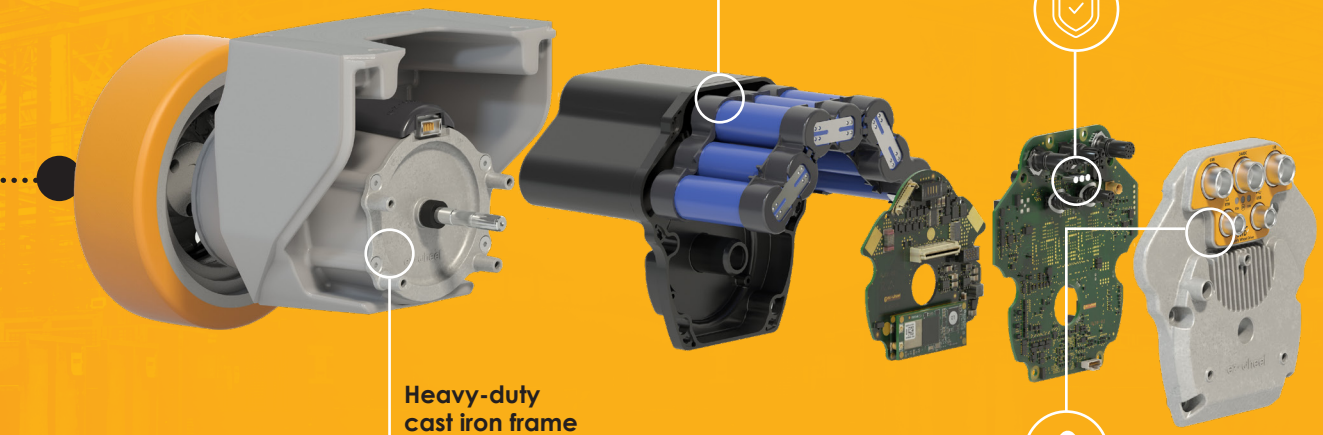
TIME SAVING
- Shorter engineering time
- Simplified certification process

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

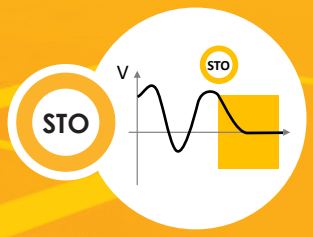


Heavy-duty cast iron frame

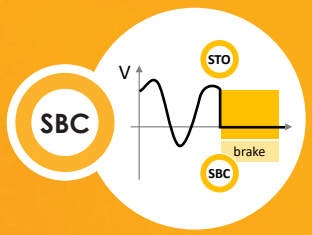
700 kg of vertical load
1 500 kg of load moved

Interfaces

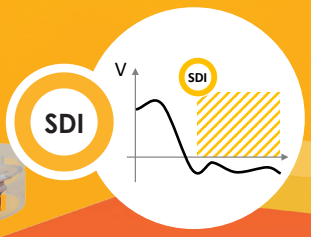
CANopen
safety
4 programmable safety inputs
2 STO inputs



Safe motor disconnection
when a stop is requested
STO up to SIL3/PLe



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

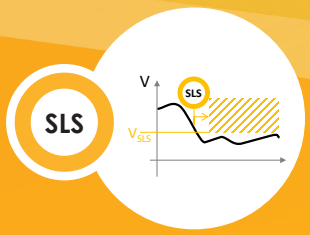


Safe direction control
in case of collision risk
SDI up to SIL2/PLd

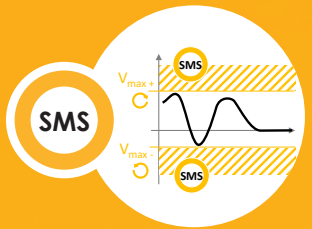




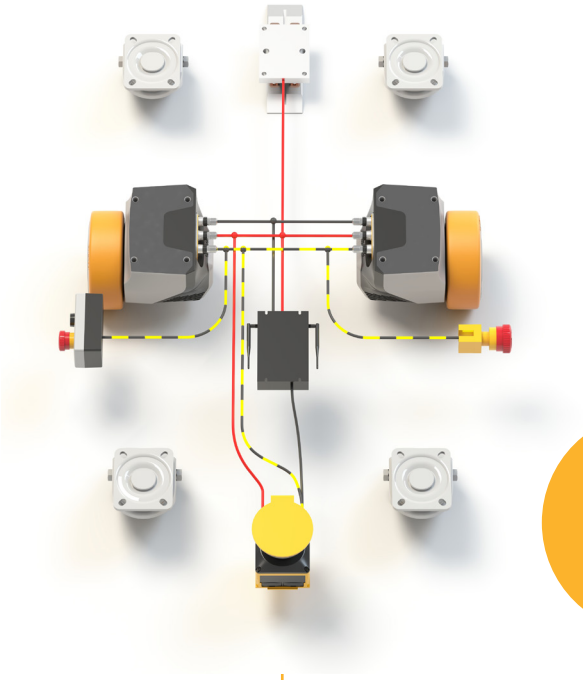
facilitates the compliance with ISO 3691-4



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



Safe maximum speed
to secure operating range
SMS up to SIL2/PLd



SWD
Safety Wheel Drive

SAFETY WHEEL DRIVES

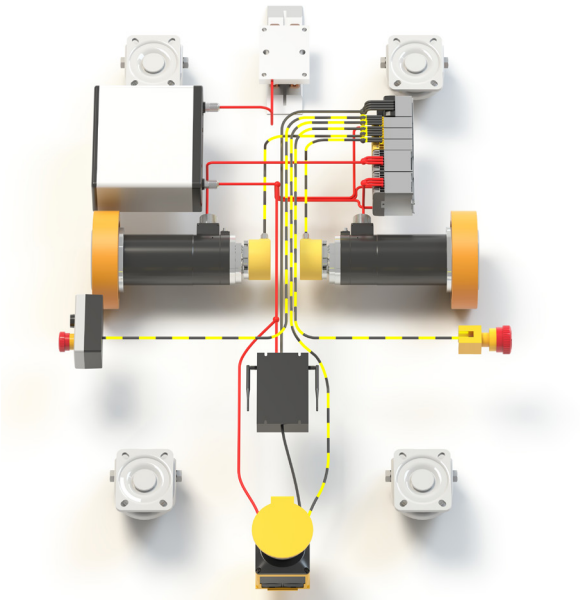
NAVIGATION PC

SAFETY LASER SCANNER

E-STOPS

VS

CONVENTIONAL SOLUTION



WHEELS
GEARBOXES
MOTORS
SAFETY ENCODERS

PLC
SAFETY PLC
RELAYS
MOTOR DRIVERS

BATTERY
CIRCUIT BRAKERS

NAVIGATION PC
SAFETY LASER SCANNER
E-STOPS



INDUSTRY



AUTOMOTIVE



LOGISTICS / RETAIL



FOOD PROCESSING



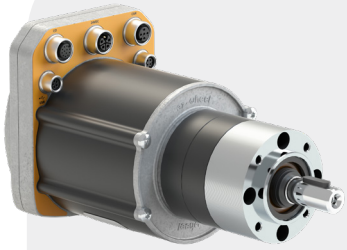
PHARMA / CHEMISTRY



MEDICAL

UNIQUE TECHNOLOGICAL BRICK FOR ALL INTRALOGISTICS NEEDS

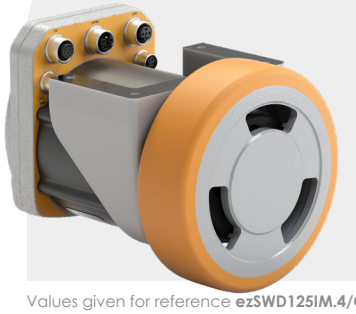
Drives and Wheel Drives with integrated safety



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**

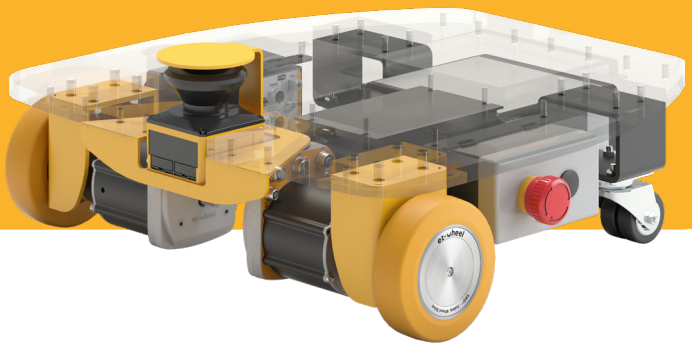


SWD® 150
Heavy duty wheel drive

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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