

VOYAGER 200XL

VOYAGER 200 XL is BM Group Polytec S.p.a. AGV project. Its purpose is to **automate and optimize transport of heavy load and pallets**. Its **payload of 2000 kg** lets our AGV be able to transport loads without any other safety measure, even in crowded environment.



GENERAL CARACTERISTICS

Type	Autonomous Guided Vehicle (AGV)
Use	Transport for indoor logistic
Color	Black RAL 9005 / Orange RAL 2004

MECHANICAL CARACTERISTICS

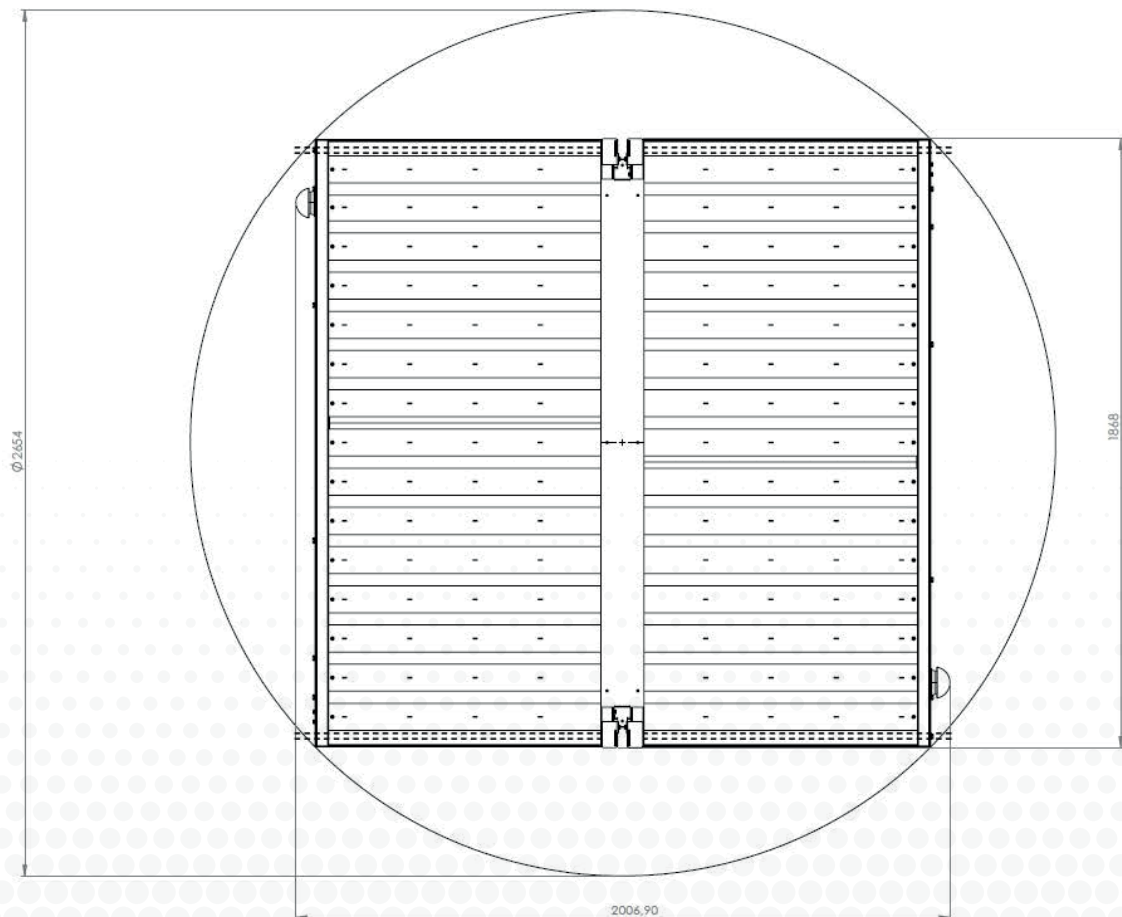
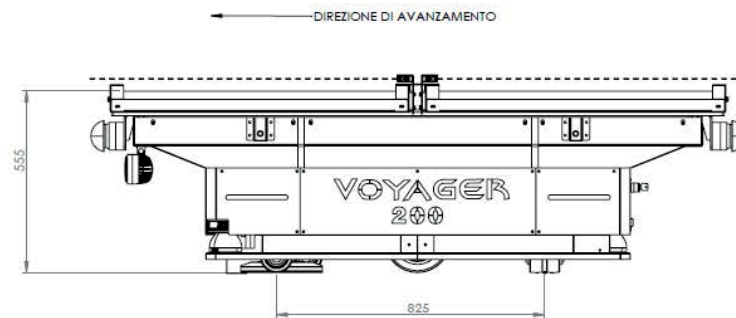
Length (mm)	2006
Width (mm)	1868
Height (mm)	555
Weight (kg)	785
Ground clearance (mm)	40
Load surface (mm)	2 x 800 x 1600

PAYLOAD

Payload (Kg)	2000
--------------	------

ROLLER CONVEYOR (OPTIONAL)

Maximum conveyor load (kg)	200
Maximum transport speed @max load (mm/s)	500
Conveyor power (W)	30



NAVIGATION GUIDANCE

Navigation type	Optical line tracking (PGV100 Pepperl Fuchs)
Positioning precision (mm)	± 20 (With optimal environment fixed references) (*)
Angular precision (°)	± 2 (*)
Maximum speed (m/s)	0,8
Maximum obstacle height (mm)	25
Minimum width (rotation in place) (mm)	2800
Minimum corridor width (kg)	2300

(*) Depending on RFID application and customer layout needs

BATTERY & RECHARGE

Battery type	LiNMC
Rated Voltage (VDC)	44,4
Capacity (Ah)	100
Available energy (kWh)	4,440 (100 Ah @ 44,4V)
Fast Recharge capacity	1 C (100 A)
Standard Recharge capacity	0,5 C (50 A)
BMS (Battery management system)	CAN OPEN communication enables charging only if communication with Battery charger is active
Cycle life	≥2000 at 80% Depth Of Discharge
Charger connection type	Contacts plate (Battery charger on board)
Charger power (kW)	1.5 (48V 33A rated)
Charger connection	230Vac (Customizable for different market)
Recharge time (min)	< 180 (10% - 90%)
Autonomy	8h (continuous movement @ full load)

ENVIRONMENT

Ambient temperature (°C)	-5 ÷ 45 (Rated performance @ 25° C)
Humidity	10-95% without condensation
Type of environment	Indoor

SAFETY

Laser Scanner	2 safety laser scanner SICK Nanoscan3
Safety area covered	360° up to 3m distance - 64 different programmable safety areas
STO	Safety Torque Off integrated on traction wheels drives
Emergency buttons	Double emergency button

CONFORMITY

Industrial vehicles standard	EN 3691-4, EN IEC 62046
------------------------------	-------------------------

CONNECTIVITY

Fieldbus	CANopen fieldbus for battery management
WiFi connection	IEEE 802.11 a/b/g/h/n, 2,4/5 GHz all country certified