

ASRA Right Angle Sorter

BLDC
Motors

up to
1.800
Packages
per hour

Plug and
Play

AS DUAL
& QUATRO

24 V
240 Watt

48 V
240 Watt

Intended Use

Automation Supply has developed a Right Angle Sorter module that allows sorting at moderate speeds, at 90 degrees. By using our motors and controllers it is truly plug and play.

Common applications

- Vertical Sorting
- Multi-level conveyors
- Workstations
- Mezzanine transport

Designed for the future

AS Right Angle Sorter modules are developed in order to meet today's and tomorrow's application areas.

Operational specifications and state of the art features.

- Upgradable firmware
- Belt and Wheel Cartridges
- Custom sizes possible



Scope of delivery

Our Right Angle Sorter requires the below components to function correctly, you are however free to use other components if they are compatible with our technology platform. Variations may change scope of delivery.

	Information	Specifications	Details	
1	AS Controller	2x AS Dual 1x AS Quatro + RTE	Controls motors and I.O.s + Lift	240 Watt max Included
2	Lift and Divert Module	Lifts and divert products 90 degrees	24 VDC, rotation + transport	Based on size Included
3	Roller Bed	Transport products in main flow	1 MDR + Slaverollers	- Included
4	Control Box	Control Box for I.O. control	Controls and powers RA Sorter	- Included
5	24V or 48V PSU	24V 10A or 48V 5A Power Supply	240 Watt advised	- Not Included

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Technical Specifications

ASRA | Right Angle Sorter

Required Controllers	AS Dual or AS Quatro in combination with RTE Controller for lift ¹
Power Input Rollers and Belts	24 VDC 12A
Power consumption (Rated)	240 W
Motor Connector Roller en Belts	5-pin M8 Snap-in connector ²
Motor Connector Lift	6-pin M8 Screw-in connector ³
Sensor Connector	4-pin M8 [4x] ⁴
Emergency connector	Yes 3-pin Snap-in connector
Overvoltage protection	Only in combination with AS DUAL and AS QUATRO controllers
Protection rate	IP 54
Motor types	AS MDR AS External Motor AS Lift Motor ⁵
Drive types	HTD5M for Lifting Poly-V for transportation Timing belt for diverting
Certifications	CE ETL
Minimum and Maximum Speed	Min Speed 0.1 m/s Max Speed 1.3 m/s ⁶
Standard Configuration	1.240 products per hour at 35kg 600 x 480 x 240 mm
High Speed Configuration	1.800 products per hour at 25kg 480 x 480 x 240 mm
Sortable items	Cartons Plastic Crates Bags
Minimum item size	150 x 150 mm
Minimum and Maximum item weight	Minimum item weight: 100g Maximum item weight: 35kg ⁷

Additional information

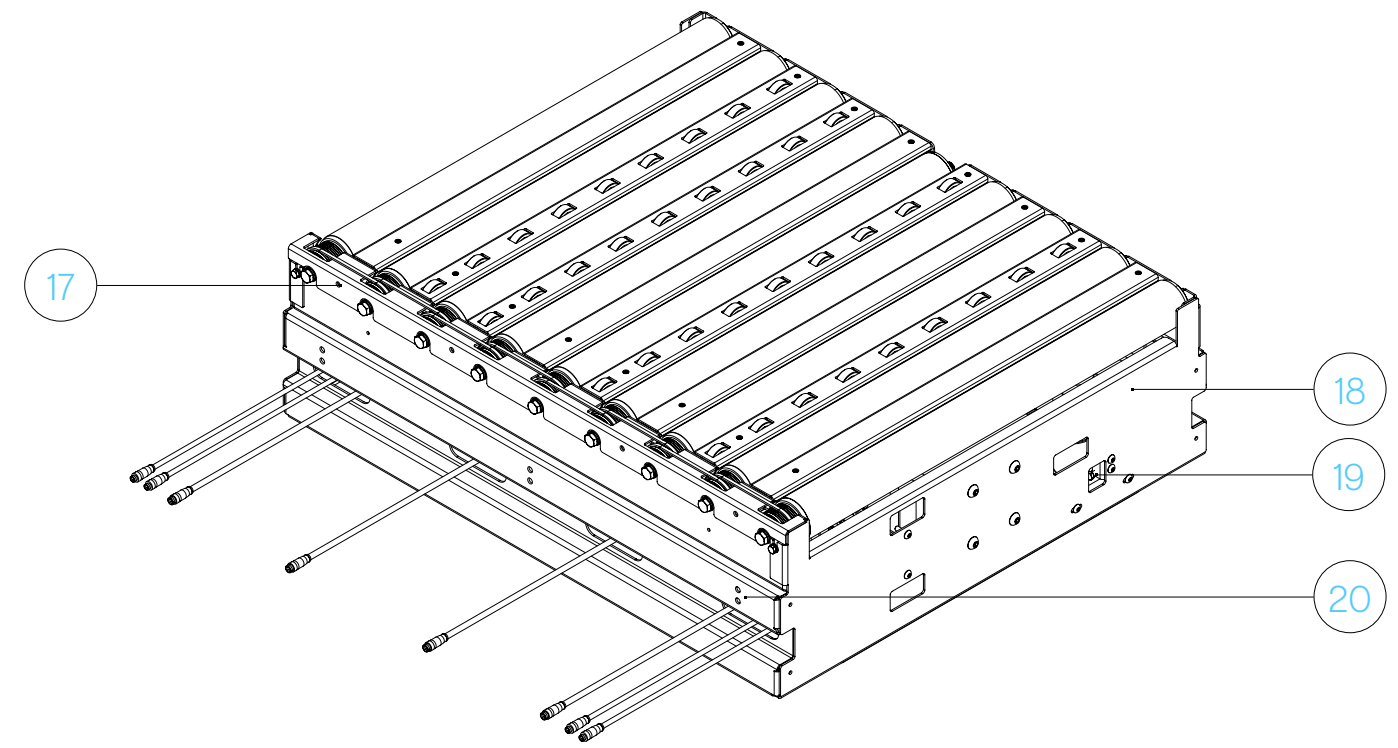
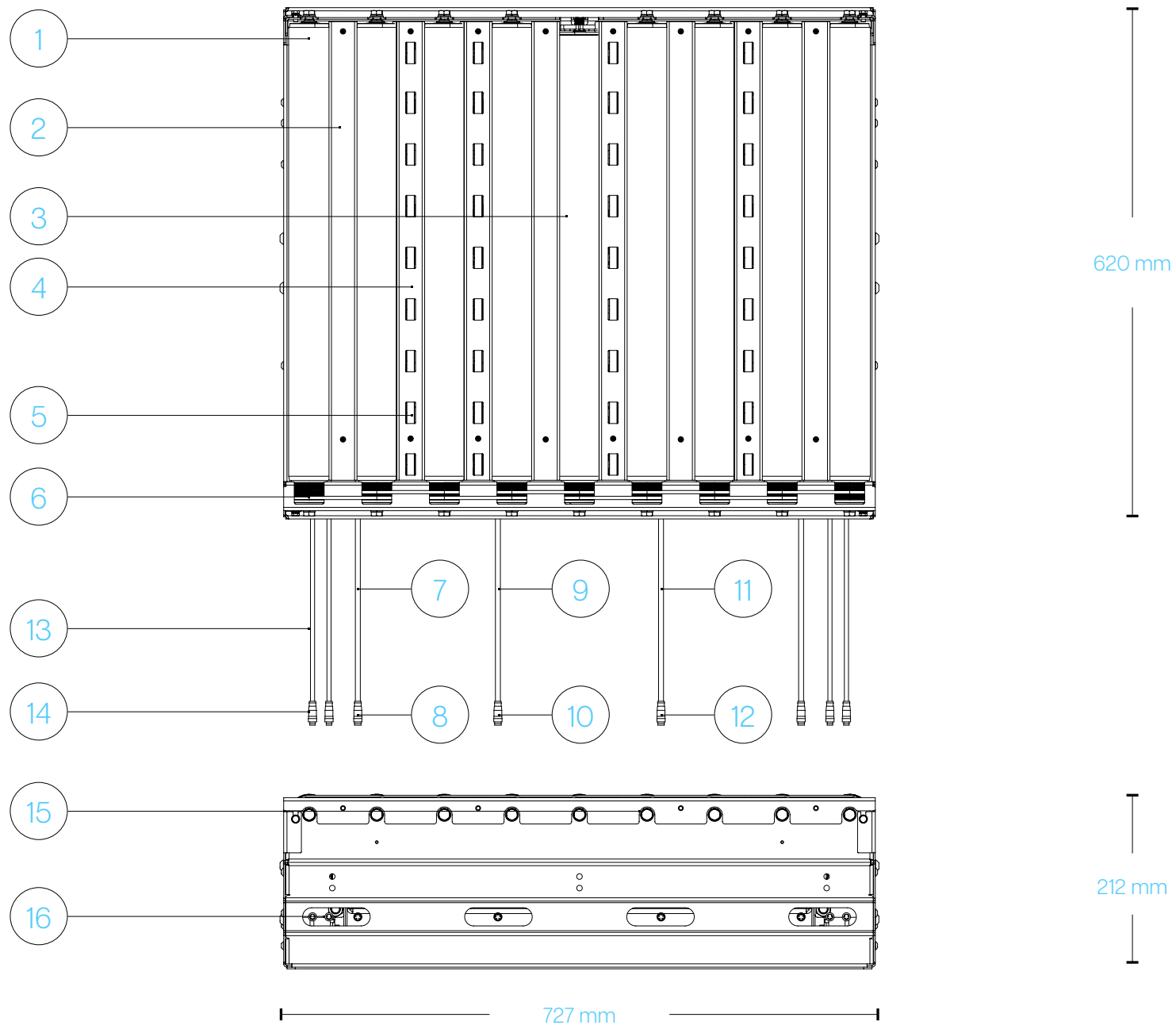
1. Rollers and belt can be controlled externally with other supplier controllers such that support analog 0 - 10 V, based on a M8 5-pin snap-in connector. The Lift motors are controlled by the supplied RTE controller with built-in lift functionalities to control the lift action with only I.O.'s. See the datasheet of the ASMDR2448 for more information.
2. The motor for the Rollers and Belts are ASMDRs or ASEM motors that are based on analog 0 - 10 V on a M8 5-pin snap-in connector.
3. The motor for the Lifts is based on a M8 6-pin screw connector which is designed for Lift applications and works seamless with the RTE controller that is designed for this function.
4. These sensors are lift sensors that are connected to the RTE controller to check the top and bottom position of the diverting action.
5. The AS S4 Motor cannot be bought separately since it is an integrated component of the Lift module inside the RA Sorter.
6. Min and maximum speed can vary based on application and chosen motor types, contact our sales team for the right requirements for your system.
7. The maximum weight of the RA Sorter for diverting actions can be increased up to 80 kg by dimensioning the right motors.

Please visit our website for the latest 3D CAD drawings and variations in dimensions/ configurations.

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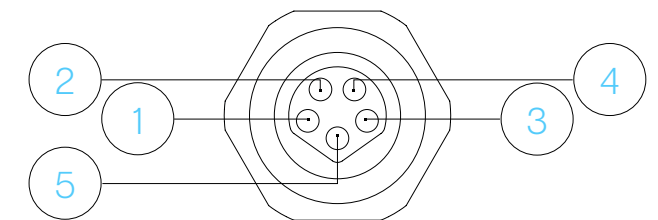
Description	Details	Description	Details
1 Slave Roller	Plastic Poly-V Slave roller	11 Divert Motor Cable	6 mm PU Cable
2 Dummy Cartridge	2 mm powder coated steel	12 Divert Motor Cable Connector	M8 5P Male
3 MDR Poly-V	ASMDR24V	13 Lift Sensor Cable	6 mm PU Cable
4 Divert Cartridge	2 mm powder coated steel	14 Lift Sensor Connector	M8 4P Male
5 Cartridge wheel	Black Nylon	15 Slave Roller mounting	M12x15 bolt
6 Poly-V Belt	2PJ	16 Cable Outlet	40 x 20 mm
7 Lift Motor Cable	6 mm PU Cable	17 Fingerguard	2 mm powder coated steel
8 Lift Motor Connector	M8 5P Male	18 Sheet metal Casing	2 mm powder coated steel
9 Rollers Motor Cable	6 mm PU Cable	19 Lift Motor Tensioner + Lift Motor	ASEM24V
10 Rollers Motor Connector	M8 5P Male	20 Module Mounting holes	M8x1.25

Connection Specifications

Motor Connectors



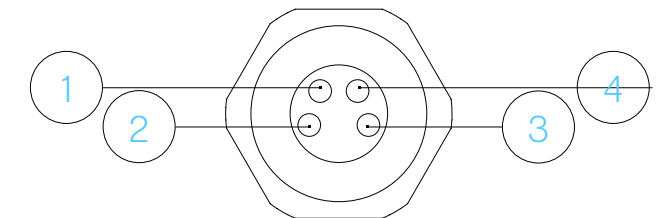
1. 24 V / 48 V | Red | 0.32 mm²
2. Direction | Green | 0.25 mm²
3. GND | Blue | 0.32 mm²
4. Error/ Pulse | Black | 0.25 mm²
5. Speed | Yellow | 0.25 mm²



Sensor Connectors



1. 24V
2. GND
3. Sig 1
4. Sig 2



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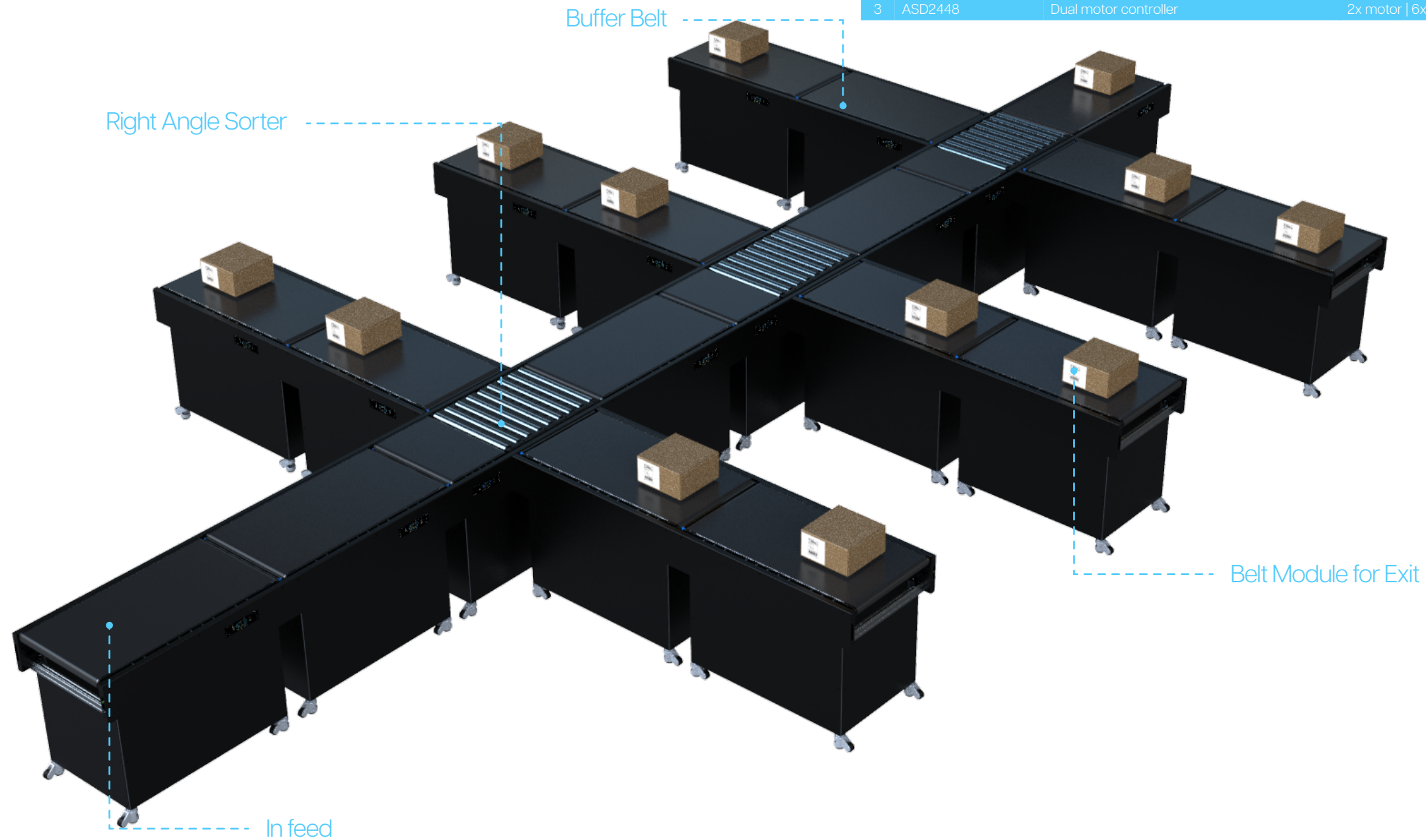
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Example application: Modular Sorting System
Learn more on www.automationsupply.nl

* In feed and sorting strategy to be processed by WMS system of end-customer

Required Components and Modules

	Information	Specifications
1	ASRA Right Angle Sorter	Sorts up to 1.800 Packages per hour @ 35 kg
2	ASBM Belt Module	Transport weights up to 35 kg @ 1.25 m/s
3	ASD2448 Dual motor controller	2x motor 6x I.O. 1x Power in 2x Emergency



Disclaimer

AS and AS partners are not responsible for integration and usage of our products outside of the specified application range, technical specifications and in combination with third party components.

Images may differ from the actual product due to our continuous product improvement.



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