

ASBDM24 | ASBDM48 Belt Divert Module Kit

1 or 2
BLDC
Motors

Ultra low
profile

External
Motor
Driven

MDR
Driven

24 V
160 Watt

48 V
160 Watt

Intended Use

All AS customers have free access to our designs for conveying modules which they can use to create their own belt and roller conveyor modules.

AS belt divert modules are used to divert/merge products up to 35 kg per module.

- Carton and Plastic Boxes
- Plastic Crates and Totes
- Bags and Envelopes
- Poly Bags
- Odd packages

Designed for the future

AS belt divert modules can be used with our in-house developed components in order to meet today's and tomorrow's application areas.

Operational specifications and state of the art features.

- Standard transportation up to 1.2 m/s
- High speed applications up to 2.5 m/s
- Multiprotocol onboard chip
- Preventive maintenance en advanced analytics



Scope of delivery

The scope of delivery defines the required components in order to create a working application, it is advised to consult our website for training material to choose what components you need for your application or what kits are available.

| Components | Details | Specifications | Values | Scope | |
|------------|-------------------|---------------------------------|-----------------------------------|------------|--------------|
| 1 | AS MDR EM | Motor Driven Roller | Belt Pulley MDR | 80 Watt | Included |
| 2 | Tension rollers | Zinc plated steel rollers | Belt Pulley Slaverollers | 50 x 15 mm | Included |
| 3 | PU Belt | Low friction Black PU Belt | 1.2 mm guided PU Belt, single ply | 1.2 mm PU | Included |
| 4 | Conveyor Frame | Aluminum and steel parts | Black/ Clear Anodized Aluminum | - | Included |
| 5 | Support rollers | Zinc plated steel rollers | non driven slave rollers | 30 x 15 mm | Included |
| 6 | AS Dual or Quatro | Dual or Quatro Motor controller | See ASD2448 or ASQ2448 datasheet | - | Not Included |
| 7 | Emergency Cable | 3 pin Snap-in | 2x M8 male | - | Not Included |
| 8 | 24V or 48V PSU | 24V 10A or 48V 5A Powersupply | 240 Watt advised | - | Not Included |



Technical Specifications

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| | 24 VDC Motors | 48 VDC Motors |
|-----------------------------------|---|-----------------------------|
| Input voltage (Rated) | 24 VDC 4A range 18 -28 VDC | 48VDC 2A range 42 -54 VDC |
| Starting Current | 4.5 A at 24 VDC | 3.0 A at 48 VDC |
| Power Consumption (Rated) | 80 W with 1 motor 160 W with 2 motors | |
| Motor Connector | M8 5-pin Snap-in[1x] | |
| Sensor Connector | M12 4-Pin | |
| Emergency Connector | No Emergency | |
| Motor Types | ASMDR or ASEM | ASMDR or ASEM |
| Roller Types | Poly-V Round Belt Timing Belt Flat Belt | |
| Certifications | CE ETL ¹ | |
| Ambient Temperature | Operation 0 to +40 C° Transport -20 to +80 C° | |
| Protection Rate | IP 54 IP 65 (on request) ² | |
| Installation Altitude | Max +1000 m from sea level | |
| Standard Configuration | 1.2 m/s max at 35 kg per zone [500 RPM @ 50 mm roller] ³ | |
| High Speed Configuration | 2.5 m/s max at 25 kg per zone [1000 RPM @ 50 mm roller] ⁴ | |
| Available sizes configurations | 420 - 450 620 - 650 820 - 850 1020 - 1050 | |
| Available material configurations | Powder Coated Steel Frame Zinc plated rollers Stainless steel rollers | |
| Dimensions LxWxH | 620 x 620 x 128 mm [Varies according to configuration] | |
| Weight | 15 kg [Varies according to configuration] | |

Additional information

1. Contact us for information about applications in countries that require ETL listed components.
2. Please contact us if your application requires IP 65 protection rate, or other requirements.
3. Standard belt divert module application up to 1.2 m/s and 35 kg per meter require only 1 motor per module
4. High speed belt divert module applications up to 35 kg per meter may require 2 motors per module
5. Using other non AS core components might affect the performance of the belt divert module

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

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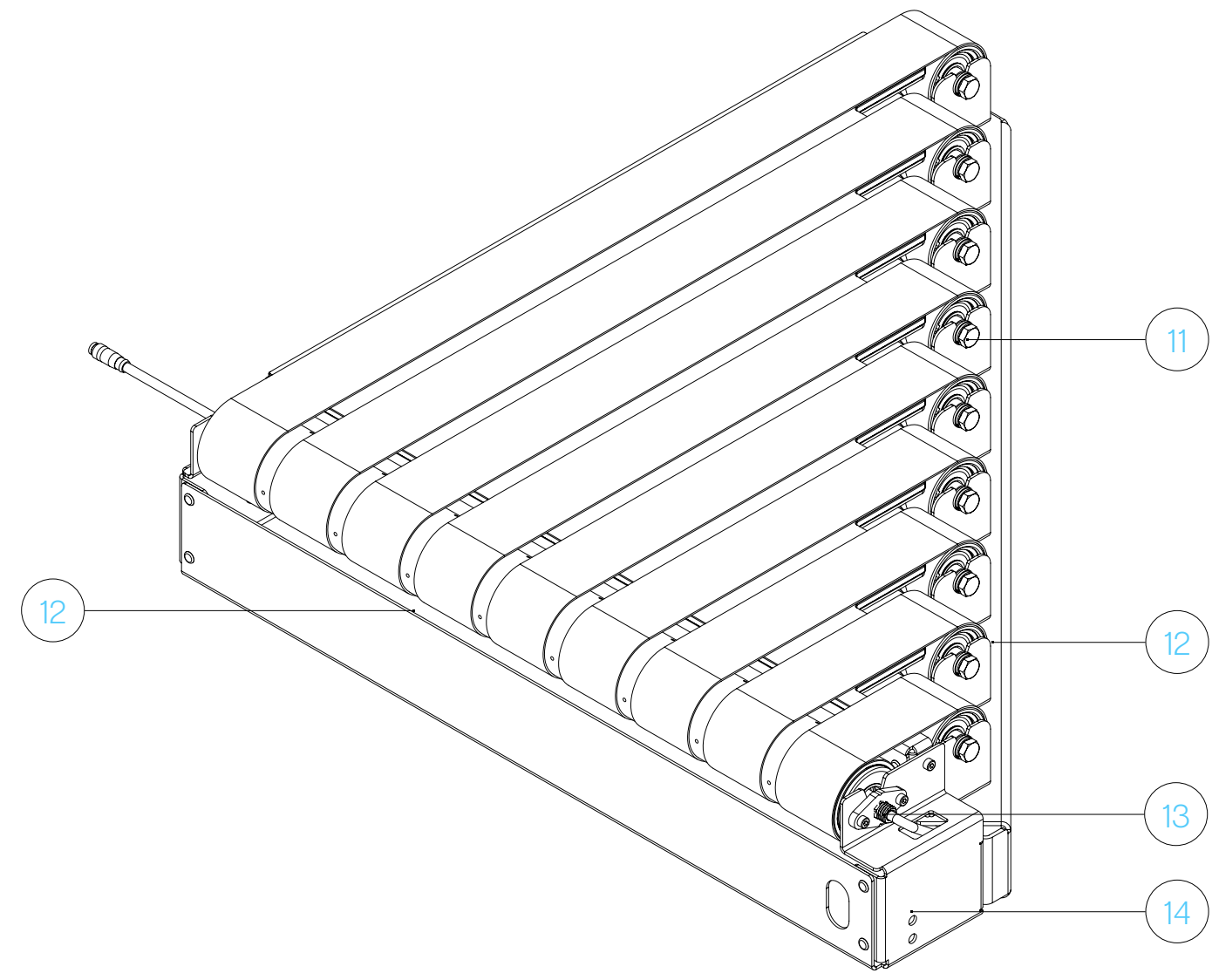
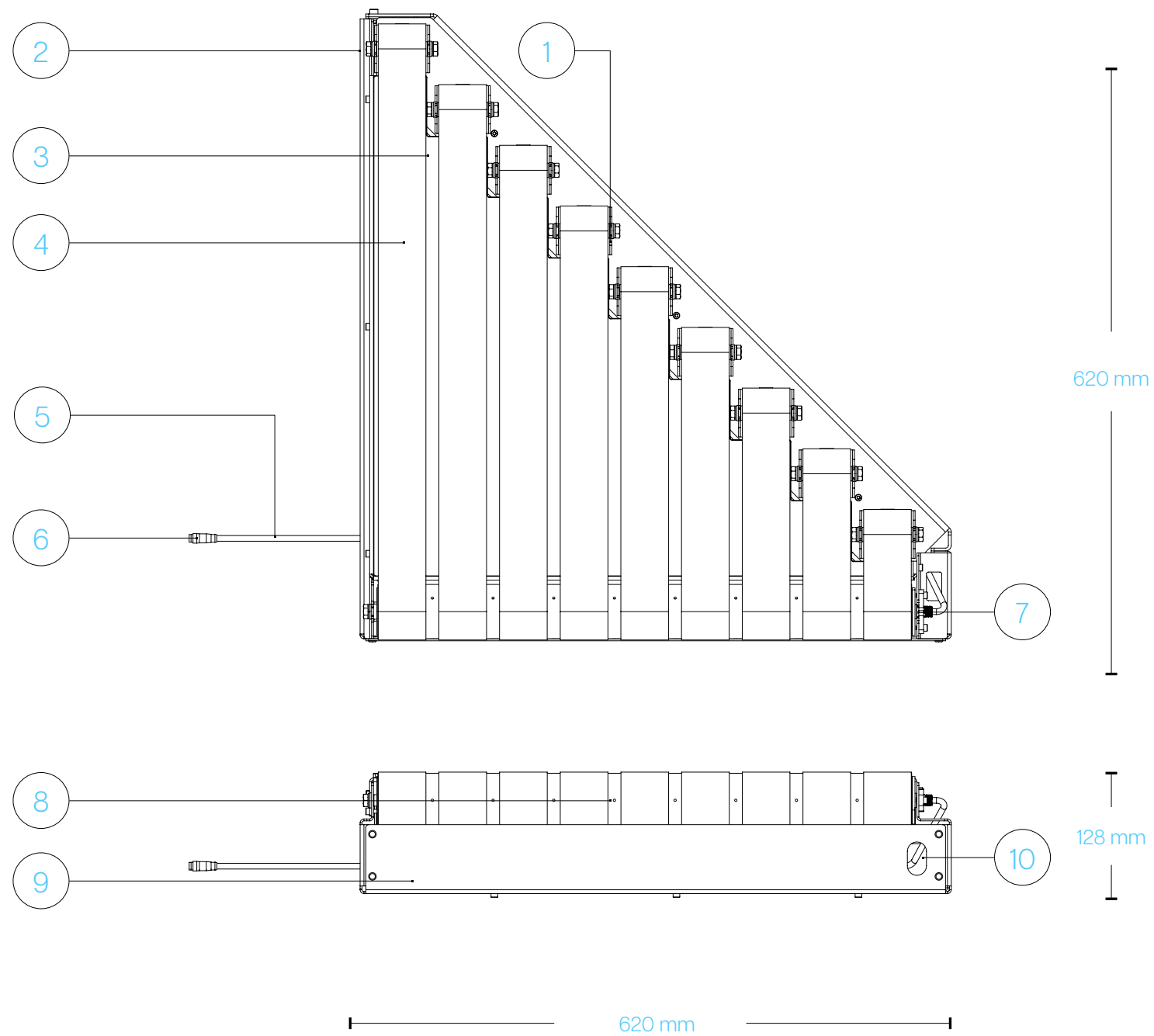
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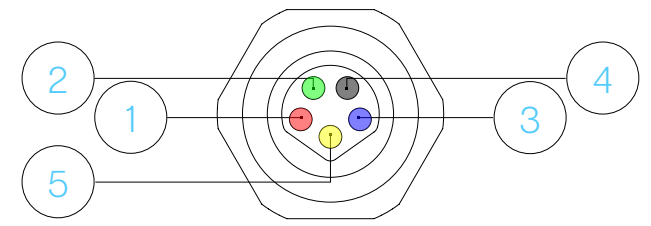


Connection Specifications

| Description | Details | Description | Details |
|-------------------------|-----------------------|--------------------------|--------------------------|
| 1 Idler Roller mounting | M8x15 bolt | 8 MDR + Belt Guides | 24 VDC or 48 VDC |
| 2 Idler Roller | Aluminum Idler Roller | 9 Rollerbed Frame A | 2 mm powder coated steel |
| 3 Slide Bed | 3 mm HDPE Black | 10 Cable Outlet | 40 x 20 mm |
| 4 Strip Belt guided | 1.2 mm PU belt Black | 11 Rollerbed Frame B | 2 mm powder coated steel |
| 5 Motor Cable | 6 mm PU Cable | 12 Belt tensioner | 2x M5x25 2x m6x10 |
| 6 Motor Connector | M8 5P Male | 13 MDR Torque bracket | 4 mm, 2x m4x6 |
| 7 MDR mounting axis | Hex 11, M12x1,75 | 14 Module Mounting holes | M8x1,25 |

Motor Connector

- 1. 24 V/ 48 V | Red | 0.34 mm²
- 2. Direction | Green | 0.25 mm²
- 3. GND | Blue | 0.34 mm²
- 4. Error/ Pulse | Black | 0.25 mm²
- 5. Speed | Yellow | 0.25 mm²



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Example application: Merge Application

AS Belt Divert and Merge Modules are used to feed product into mainstream by means of connected conveyors under and an angle. Belts are applied when odd and low friction products need to be processed.



Required Components and Modules

| | | Information | Specifications |
|---|---------|------------------------------|---|
| 1 | ASBM | Belt Module | Transport weights up to 35 kg @ 1.25 m/s |
| 2 | ASBDM | Belt Divert and Merge 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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