

Passive Cable Duct Motor Module for Itoh Denki drives (PM500ME/XE/XP, PM605ME/XE/XP)

The module is optimized for connecting two light barriers with integrated accumulating roller conveyor logic and requires no controller or programming.



(Figure similar)

Setting the speed and rotation direction using DIL slide switches

Optional sensor supply through integrated self-resetting

For automated conveying with zero pressure accumulation in conjunction with special sensors, such as Wenglor OPT244.



| Figure | Type | Drive ⁽¹⁾ | Number of drives | Line protection fuse ⁽²⁾ | Flat design, montage in cable duct possible | Inputs digital | Outputs digital | Outputs analog | Input voltage (sensor supply) ⁽³⁾ | Output voltage (actuator supply) ⁽⁴⁾ | Article No. |
|--------|---------------------------------|---|------------------|-------------------------------------|---|-------------------|-----------------|----------------|--|---|---------------|
| | passive cable duct motor module | Itoh Denki (PM500ME/XE/XP, PM605ME/XE/XP) | 2 | yes | yes | 2 x light barrier | 2 | – | out of AUX | out of AUX | BW3452 |

⁽¹⁾ **Itoh Denki (PM500ME/XE/XP, PM605ME/XE/XP):**

Motor module to control 24 V motorized rollers Itoh Denki Serie Power Moller® 500ME/XE/XP and Serie Power Moller® 605ME/XE/XP.

⁽²⁾ **yes, separately for each motor, 3,5 A (slow-blow fuse):**

In the motor module UL approved fuses are placed before each of the motor supply connections. A short circuit in the motor causes this fuse to blow, protecting the connection cable between the module and motor.

After blowing the fuse the module is no longer functional and needs to be replaced. The characteristics of the fuse must be checked against the motor data before using the module.

The protection circuit in the module allows a very simple protection of the motor cables. The fuse for the cable protection is a slow-blow one; without short circuit the robust behavior of the module remains.

⁽³⁾ **Input voltage (sensor supply):**

Inputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, inputs shall not be connected to earth or to external potential.

⁽⁴⁾ **Output voltage (actuator supply):**

Outputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, outputs shall not be connected to earth or to external potential.

| | |
|---|---|
| Article No. | BW3452 |
| Connection | |
| AUX connection | M8 |
| Periphery connection | 2 x M8 cable sockets, straight, 5 poles + 1 x M8 cable plug, straight, 5 poles + 2 x M8 cable sockets, straight, 4 poles |
| AUX | |
| Operating voltage | 24 V (18 ... 30V) |
| Max. current consumption | 6 A continuously, 11 A peak |
| Input | |
| Number | 2 x light barrier |
| Power supply | internal (AUX) or external switching using slide switches |
| Internal fuse | 2 A, self-resetting |
| Switching threshold | $U_{in} < 5 \text{ V}$ (low) $U_{in} > 15 \text{ V}$ (high) |
| Settings | |
| Settings | <ul style="list-style-type: none"> • 10-pole DIL switch for each motor for speed selection • 2-pole DIL switch for changing motor direction of rotation • Slide switch for turning sensor supply on/off (Default: Off) |
| Output | |
| Overvoltage tolerated by reaction (AUX) | 35 V resistant brake resistor compatible |
| Motor supply | out of AUX, 3 A continuously, 5,5 A max. |
| Line protection fuse | yes, separately for each motor, 3.5 AT, at 7 A (200%) release between 1 s and 120 s, fuse UL certified |
| Display | |
| LED M1, M2 (yellow) | state of outputs M1, M2 (Start/Stop) |
| LED Sensor Supply (green) | On: Sensor supply is enabled on this module (supply on I1) Off: Sensor supply is disabled (sensor chain is powered from another module) |
| LED AUX (green) | on: 24 V _{DC} AUX off: no 24 V _{DC} AUX |
| Environment | |
| Applied standards | EN 61000-6-2 EN 61000-6-4 EN60529 |
| Operating altitude | max. 2000 m |
| Ambient temperature | -5 °C ... +40 °C (no condensation permitted) (-5 °C ... +55 °C at max. 4,4 A current consumption) |
| Storage temperature | -25 °C ... +85 °C |
| Housing | plastic, screw mounting |
| Pollution degree | 2 |
| Protection category | IP54 |
| Weight | module: 200 g |
| Dimensions (W / H / D) in mm | module: 90 / 60 / 18 |

Configuration BW3452

| SPEED 1/2 | | Motor 1/2 (analog voltages) | Position of the DIP switches for speed (Speed1/2), rotation direction (DIR1/2) and sensor supply (INT/EXT) |
|-----------|--|-----------------------------|--|
| 10 | | 10 V | |
| 9 | | 8,5 V | |
| 8 | | 7,5 V | |
| 7 | | 6,5 V | |
| 6 | | 5,5 V | |
| 5 | | 4,5 V | |
| 4 | | 3,5 V | |
| 3 | | 2,5 V | |
| 2 | | 1,5 V | |
| 1 | | 0 V | |

Notice!
Only **one** DIP switch at a time may be in the "ON" position in each of the 10x switch blocks (SPEED1/2)

Configuration BW3452

| DIR | |
|-----|-------------------|
| 1 | Direction motor 1 |
| 2 | Direction motor 2 |

Configuration BW3452

| INT/EXT | Sensor supply internal/external |
|---------|---------------------------------|
| | |

Connections M8 BW3452

| Connections M8 BW3452 | | | Pins | | | | |
|-----------------------|-------------------|--------------|-----------------------------------|------------------------|------------------------|--------------------------|--------|
| Connection | Name / Number | Cable length | 1 | 2 | 3 | 4 | 5 |
| | M1 | 43 cm | 24 V _{ext} out | Direction (DIR1) | 0 V _{ext} out | Start/Stop (Sensor 1 IN) | SPEED1 |
| | M2 | 43 cm | 24 V _{ext} out | Direction (DIR2) | 0 V _{ext} out | Start/Stop (Sensor 2 IN) | SPEED2 |
| | AUX _{in} | 13 cm | 24 V _{ext} in | 24 V _{ext} in | 0 V _{ext} in | 0 V _{ext} in | n.c. |
| | I1 | 9 cm | 24 V _{ext} out (INT/EXT) | n.c. | 0 V _{ext} out | Sensor 1 IN | - |
| | I2 | 9 cm | n.c. | n.c. | 0 V _{ext} out | Sensor 2 IN | - |

