

SB – M8 Sensor Junction Box

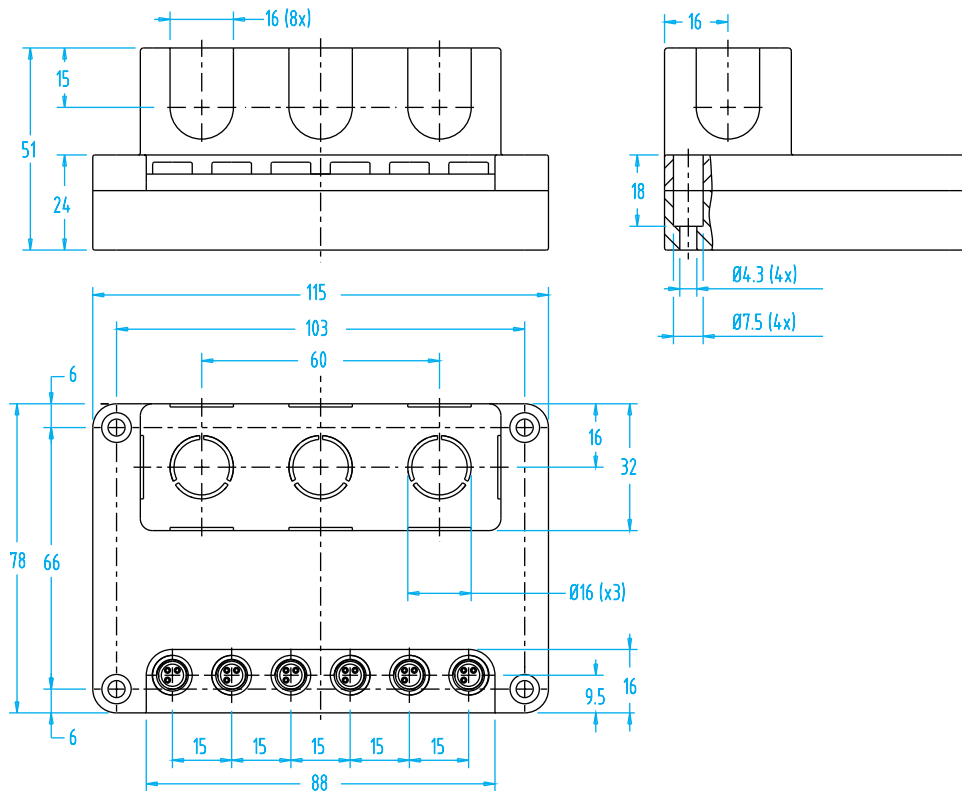
- 3-pin M8x1 direct connection only.
- Connect different types of sensors individually or in a series.
- Signals can be converted (PNP to NPN & NPN to PNP).
- I/O may be PNP = sourcing, NPN = sinking, or dry contact.
- Several boxes may be connected in a series to accommodate additional sensors.
- LED indicators allow for easy troubleshooting.
- Regenerates signals & protects contacts.
- Optional M8 male cabling connectors available.
- Strain reliefs provided.



Sensor Junction Box

Quick#	Part#	Description	Weight	Price
7283	SB6B	6 Input Relay Box	193g	\$179.00

Note: Only M8 connectors having 3 pins can be use with this junction box.



Cut long sensor cables to the desired length. These connectors have terminal screws so it easy to make custom lengths. Cutting long cables reduces the overall EOAT weight and helps prevent coils from snagging.

Use the Male version (Q# 7285) when connecting to the SB6B Sensor Box.

M8 Cables for Sensor Junction Box SB6B

Quick#	Part#	Description	Length	Weight	Price
7335	GSE-CS180-M81	M8x1 3-pole Straight	1m	37g	\$16.30
7336	GSE-CS180-M82	M8x1 3-pole Straight	2m	64g	\$17.50
7337	GSE-CS90-M81	M8x1 3-pole 90°	1m	38g	\$16.30
7338	GSE-CS90-M82	M8x1 3-pole 90°	2m	65g	\$17.50

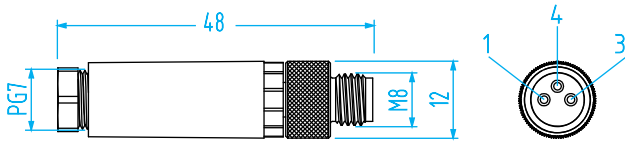
SB – M8 Sensor Junction Box



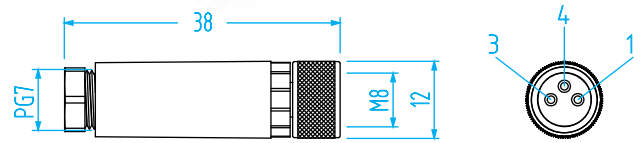
- 1. Direct connection with M8x1 3-Pin cables only
- 2. PNP/NPN/2-wire inputs selectable by sliding switches
- 3. Short circuit protection with auto-fuse and RED led indicator

- 4. PNP/NPN/relay outputs selectable by sliding switches
- 5. Easy push terminals for outputs, no tools required

#7285 - Male M8 Connector

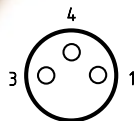


#7284 - Female M8 Connector



M8 Connectors for Sensor Junction Box SB6B

Quick#	Part#	Description	Weight	Price
7285	CMGM800300	3-pin Male M8 Connector used to connect to SB6B sensor box	11g	\$13.47
7284	CFGM800300	3-pin Female M8 Connector	11g	\$13.47



NEW

This coupler takes two PNP signals and joins them together in series to create one output when both sensors are activated. Contact EMI's engineering department for more information.

3-cable M8 Coupler - PNP ONLY

Quick#	Part#	Description	Weight	Price
7401	CMGM8CFGM8X2Y	1x 3 Pin Male 2x 3 Pin Female	14g	\$33.74

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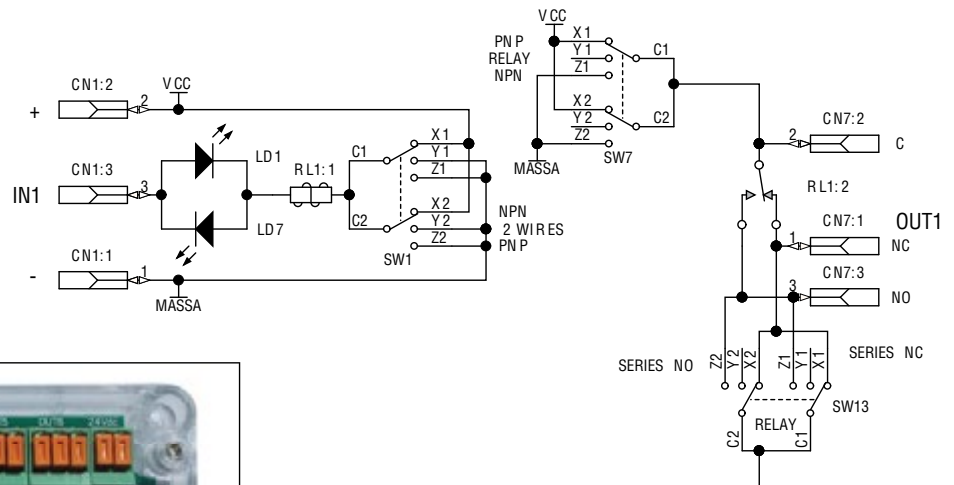
Terminal box with Direct Connection - Functioning

After the inputs have been connected (Grey Area) as shown on the circuit board you must use the switch to select the Inputs signal type (Brown Area). Then use switch to define if you want to convert the input signals in NO/NC series or parallel outputs (Blue area). Use switch also to select the Output signal (PNP; NPN; relay) (Red Area) through a relay circuit so as to avoid the voltage drop. When the selection is completed, the Outputs (Yellow Area) are to be cabled.

Power supply: 24 V dc ($\pm 10\%$)

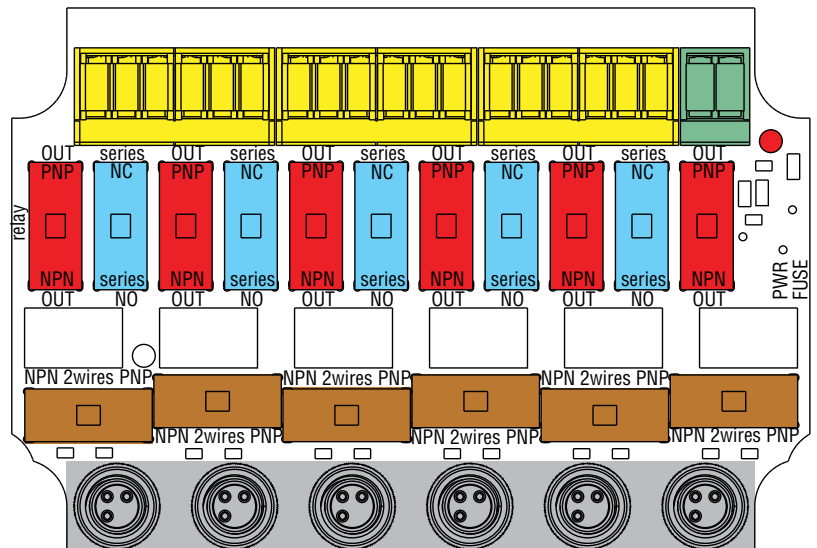
Inputs: Maximum 6 PNP, NPN or dry contact (NO or NC) (GREY AREA) determined by switch position (BROWN AREA).

Outputs: 1 up to 6 PNP, NPN or dry contact (NO) outputs (YELLOW AREA) determined by switch position (RED AREA).



Color legend:

- Green = 24V dc (+/- 10%)
- Gray = Sensor input area
- Brown = Jumper selector for input sensor type
- Red = Jumper selector for desired output
- Blue = Jumper selector for Series connections (NO = Normally Open) or (NC = Normally Closed)
- Yellow = Output area
- Green Rectangle= Jumper



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Application Example

Power supply

24 V dc (±10%)

Inputs

- 2 NPN INPUTS (IN1/IN4)
- 2 PNP INPUTS (IN3/IN6)
- 2 DRY CONTACT (IN2/IN5)

Outputs

- 1 PNP OUTPUT SERIES (OUT3)
- 1 NPN OUTPUT SERIES (OUT6)

