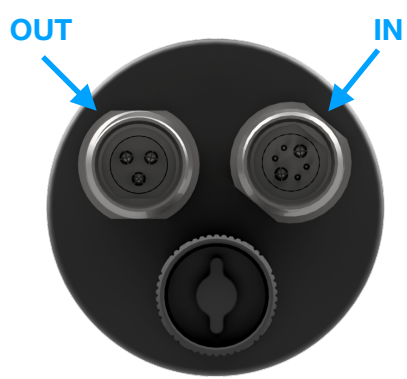
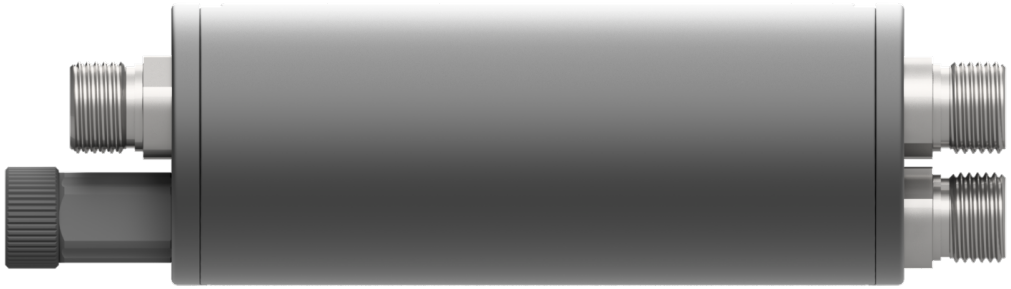
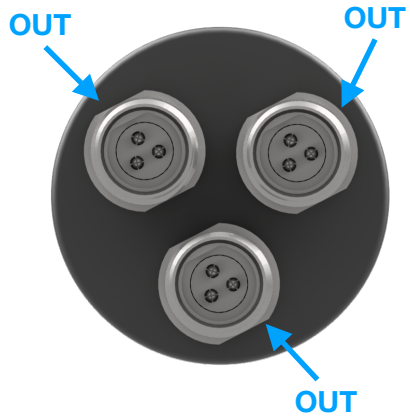
UNDERWATER JUNCTION BOX – 1 to 8 LIGHTS USER GUIDE

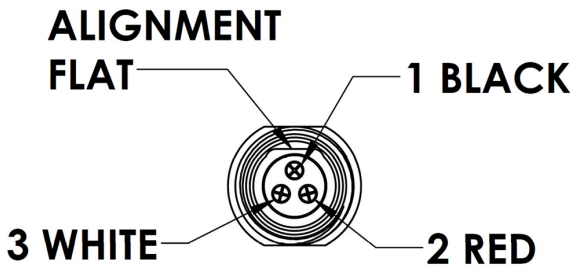
This Underwater Lighting Junction Box distributes power and dimming control to up to eight subsea lamps from a single 6-pin hybrid connector. The hybrid input accepts a 9–48 V DC supply at up to 20 A on its power pins, and four PWM dimming signals from an external controller on its four signal pins. Power is passed through unchanged to four 4-pin lighting ports, each carrying the supply voltage and one of the PWM signals, and each driving a pair of lamps in parallel. The input voltage must not exceed 48 V DC.



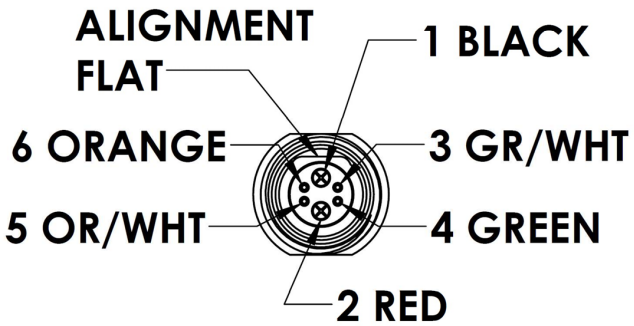




3-PIN POWER



6-PIN HYBRID



Parameter	Value
Depth rating	1000 m
Dimensions / weight	Ø50×177.5 mm - 460g in air / 180 g in seawater
Power pass-through	20A total max. shared across outputs.
Connectors	4×3-pin POWER - COB-113P0-SS 1x6-Pin HYBRID COB-116H0-R1
Operating temperature	-40 °C to +85 °C

PWM / POWER Pinout IN:

PIN	FUNCTION	COLOR
1	GND IN / PWM GND	BLACK
2	9-48V VCC	RED
3	PWM 1	GREEN WHITE
4	PWM 2	WHITE
5	PWM 3	ORANGE WHITE
6	PWM 4	ORANGE

LIGHTS Pinout OUT:

PIN	FUNCTION	COLOR
1	GND OUT	BLACK
2	9-48V VCC OUT	RED
3	PWM OUT	WHITE