

# Expo LED

## Three-phase and single-phase electrified track

Variable beam spotlight for indoor applications, particularly suitable in the retail sector and for exhibitions or shows. Body in die-cast aluminium with large LED source cooling flaps. This device can be installed on either tri-phase or single-phase electrified rail, and the track adapter is mechanically compatible with the majority of commercially-available systems. The device is equipped with an optic with a beam aperture angle of 24° as standard, but optics with beam angles of 16° and 40° are also available on request.



### GENERAL CHARACTERISTICS

**Equivalent Power\*** 70, 150 W

**Power supply SD Version:**

93–265 V<sub>AC</sub> 50/60 Hz 176–250 V<sub>DC</sub>

**ED Version:** 230 V<sub>AC</sub> ±10 % 50 Hz

**Standard** EN 60598-1, EN 60598-2-1, EN 60598-2-22 (fundamental requirements), EN 62471 (Photobiological hazard)

**Protection grade** IP40

**Working temp.** -20 ÷ +40 °C

**Mounting** three-phase and single-phase electrified track

**Diffuser** Tempered glass 3 mm thick

**Housing** Polyester powder coated die-cast aluminium RAL 9010 white

**Optic** mirror finished aluminium (24° supplied, 8°, 16° e 40° to be ordered separately)

**Driver SD Version:** Electronic SD (cos φ ≥ 0.96), with intelligent dimming  
**ED Version:** Electronic ED (cos φ ≥ 0.95)

**MTBF Control gear\*\*** 80 000 h

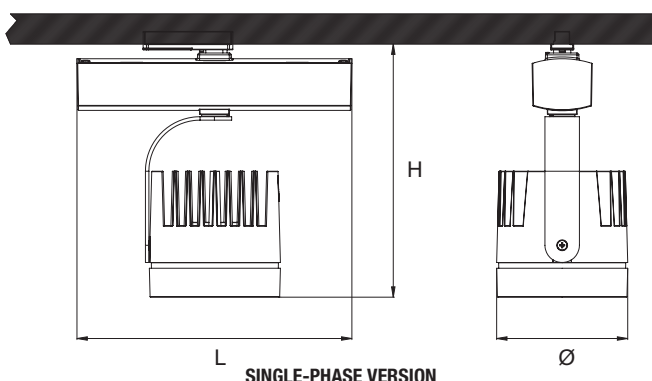
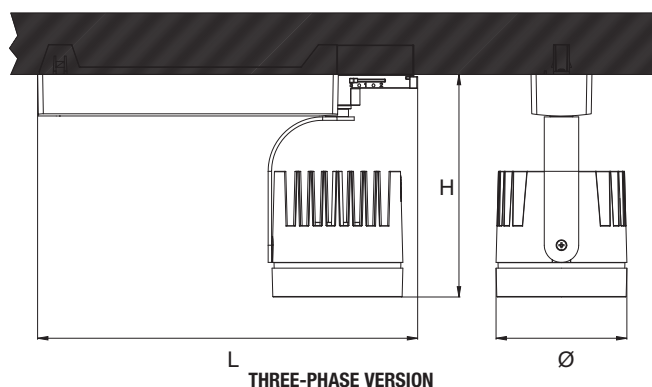
**Luminous flux** >60 000 h (1× 150) (L80B20)

**maintenance\*\*** >70 000 h (1× 70) (L80B20)

**Colour deviation** 3 SDCM

\* Equivalent power for comparison with metal halide fixtures

\*\* At environmental reference temperature of 25 °C



Version	• Dimensions (mm) •			Weight kg
	L	Ø	H	
Three-phase	331	114	194	1.2
Single-phase	239	114	221	1.2

## Accessories

to be ordered separately

Order code Description

**1230** LENSES EXPO LED 16°

**1231** LENSES EXPO LED 40°

**1236** REFLEKTOR EXPO LED 8°

## Building automation



to be ordered separately

Order code Description

**20102** BUILDING AUTOMATION CENTRAL UNIT

**20124** BUILDING AUTOMATION CENTRAL UNIT WIFI

**20104** 2 INPUT INTERFACE – RADIO TRANSMITTER

**15022** BUILDING AUTOMATION RADIO MODULE

## Expo LED

Eco Driver

Power* W	Order code	Description	LED Power W	Colour Temp. K	Colour rendering	Power consumption max W	N° LEDs	Flux of LEDs lm (Tj=25°C)	Flux of fixture lm	lm/W	Energy Class	Packaging
<b>THREE-PHASE VERSION</b>												
1× 70	<b>R170ED24</b>	EXPO LED BTRF 1X70 24ED 3K	20	3 000	≥80	24	1 COB	3 300	3 000	125	A++	1/1
1× 150	<b>R1150ED24</b>	EXPO LED BTRF 1X150 24ED 3K	33	3 000	≥80	37	1 COB	5 000	4 500	120	A++	1/1
<b>SINGLE-PHASE VERSION</b>												
1× 70	<b>R170MFED24</b>	EXPO LED BMF 1X70 24ED 3K	20	3 000	≥80	24	1 COB	3 300	3 000	125	A++	1/1
1× 150	<b>R1150MFED24</b>	EXPO LED BMF 1X150 24ED 3K	33	3 000	≥80	37	1 COB	5 000	4 500	120	A++	1/1

**DOMOTIC  
RADIO  
MODULE**

OPTIONAL MODULES TO EXTEND BEGHELLI SD TO RADIO CONTROL OR DALI / 1-10V SYSTEMS AND EMERGENCY



**SINGLE-PHASE VERSION**



**8°, 16°, 40° REFLECTOR**

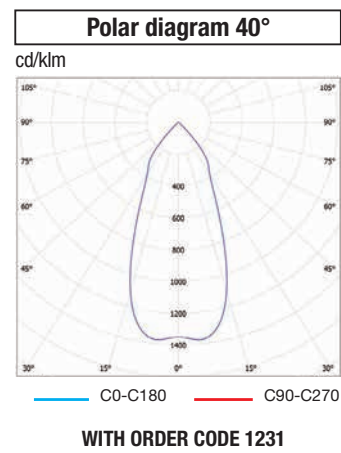
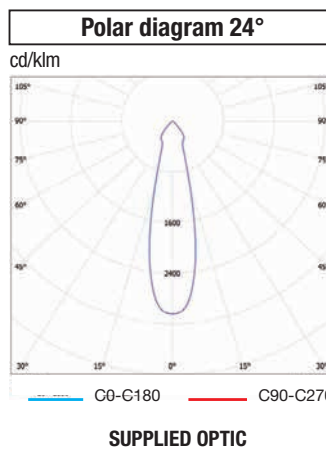
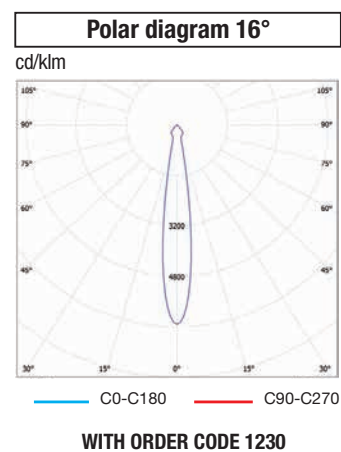
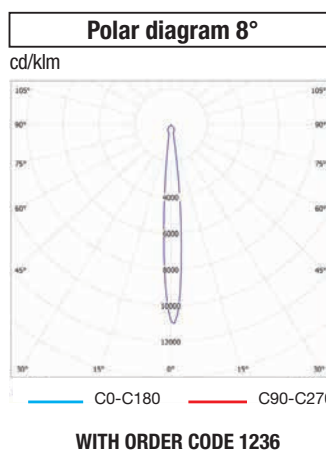


- 1236** REFLEKTOR EXPO LED 8°
- 1230** EXPO LED 16° REFLECTOR
- 1231** EXPO LED 40° REFLECTOR

**Efficiency and dimming**

The increase in luminous efficacy (lm/W) and the useful life of the device may vary significantly according to the degree to which it is dimmed. Assuming an average level of 50% of the luminous flux, the following results are obtained with the Expo LED:

- Dimming** **50 %**
- Device duration** **+40 %**
- Luminous efficiency** **+15 %**



**SPECIAL VARIANTS: COLOUR TEMPERATURE ON REQUEST, COLOUR RENDERING ≥90**  
Contact the Beghelli sales network

**Expo LED**

SmartDriver

Power* W	Order code	Description	LED Power W	Colour Temp. K	Colour rendering	Power consumption max W	N°LEDs	Flux of LEDs lm (Tj=25°C)	Flux of fixture lm	lm/W	Energy Class	Packaging
<b>THREE-PHASE VERSION</b>												
1× 70	<b>R170SD24</b>	EXPO LED BTRF 1X70 24SD 3K	21	3 000	≥80	26	1 COB	3 400	3 100	119	A++	1/1
1× 150	<b>R1150SD24</b>	EXPO LED BTRF 1X150 24SD 3K	38	3 000	≥80	43	1 COB	5 500	5 000	116	A++	1/1
<b>SINGLE-PHASE VERSION</b>												
2× 70	<b>R170MFSD24</b>	EXPO LED BMF 1X70 24SD 3K	21	3 000	≥80	26	1 COB	3 400	3 100	119	A++	1/1
2× 150	<b>R1150MFSD24</b>	EXPO LED BMF 1X150 24SD 3K	38	3 000	≥80	43	1 COB	5 500	5 000	116	A++	1/1

DECORATIVE