

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:** Universal Multi Voltage
93–265 V_{AC} 50/60 Hz 176–250 V_{DC}
ED Version: 230 V_{AC} ±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)

MTFB Control gear** 80 000 h

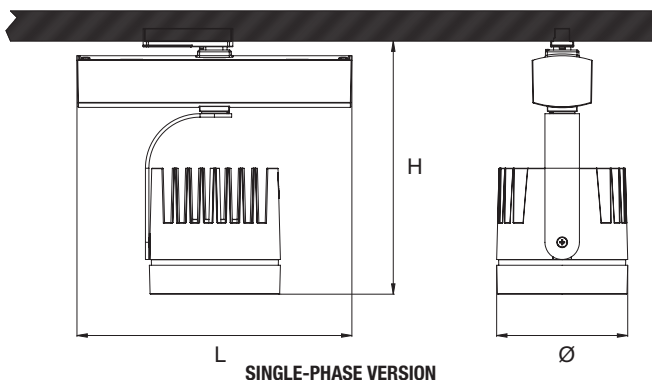
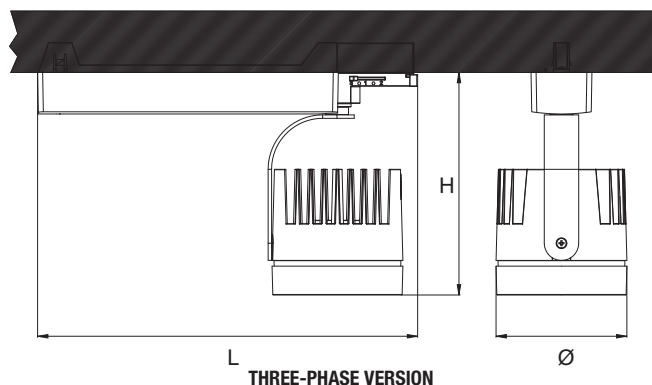
Luminous flux >60 000 h (1× 150) (L80B20)

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
THREE-PHASE VERSION												
1× 70	R170ED24	EXPO LED BTRF 1X70 24ED 3K	20	3 000	≥80	24	1 COB	3 300	3 000	125	A++	1/1
1× 150	R1150ED24	EXPO LED BTRF 1X150 24ED 3K	33	3 000	≥80	37	1 COB	5 000	4 500	120	A++	1/1
SINGLE-PHASE VERSION												
1× 70	R170MFED24	EXPO LED BMF 1X70 24ED 3K	20	3 000	≥80	24	1 COB	3 300	3 000	125	A++	1/1
1× 150	R1150MFED24	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



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 SD 50 %
Device duration +40 %
Luminous efficiency +15 %

16°, 40° REFLECTOR

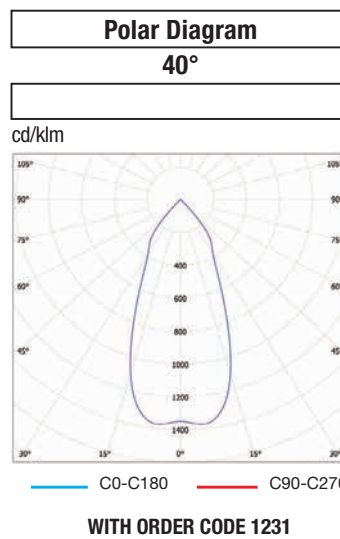
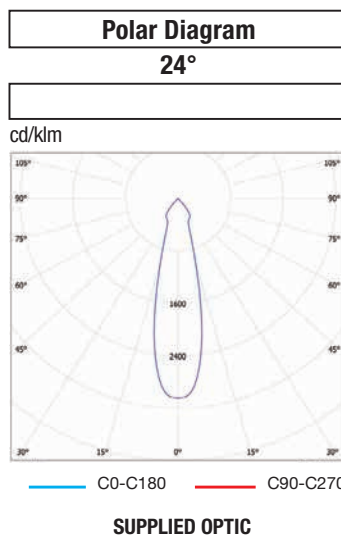
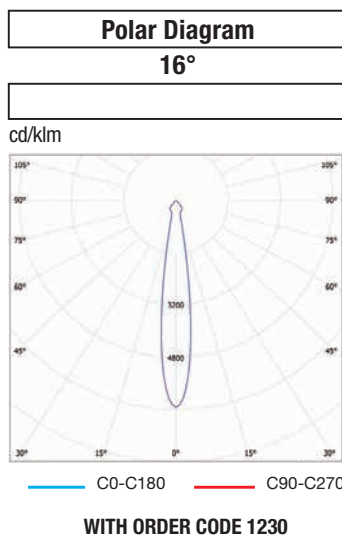


1230 EXPO LED 16° REFLECTOR

1231 EXPO LED 40° REFLECTOR

DECORATIVE

SINGLE-PHASE VERSION



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

Expo LED

SmartDriver **SD**

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THREE-PHASE VERSION												
1× 70	R170SD24	EXPO LED BTRF 1X70 24SD 3K	21	3 000	≥80	26	1 COB	3 400	3 100	119	A++	1/1
1× 150	R1150SD24	EXPO LED BTRF 1X150 24SD 3K	38	3 000	≥80	43	1 COB	5 500	5 000	116	A++	1/1
SINGLE-PHASE VERSION												
2× 70	R170MFSD24	EXPO LED BMF 1X70 24SD 3K	21	3 000	≥80	26	1 COB	3 400	3 100	119	A++	1/1
2× 150	R1150MFSD24	EXPO LED BMF 1X150 24SD 3K	38	3 000	≥80	43	1 COB	5 500	5 000	116	A++	1/1