

Technical Information

No. FO 4815

Edition: 02/02 - subject to change

Supersedes: Initial Release 09/01

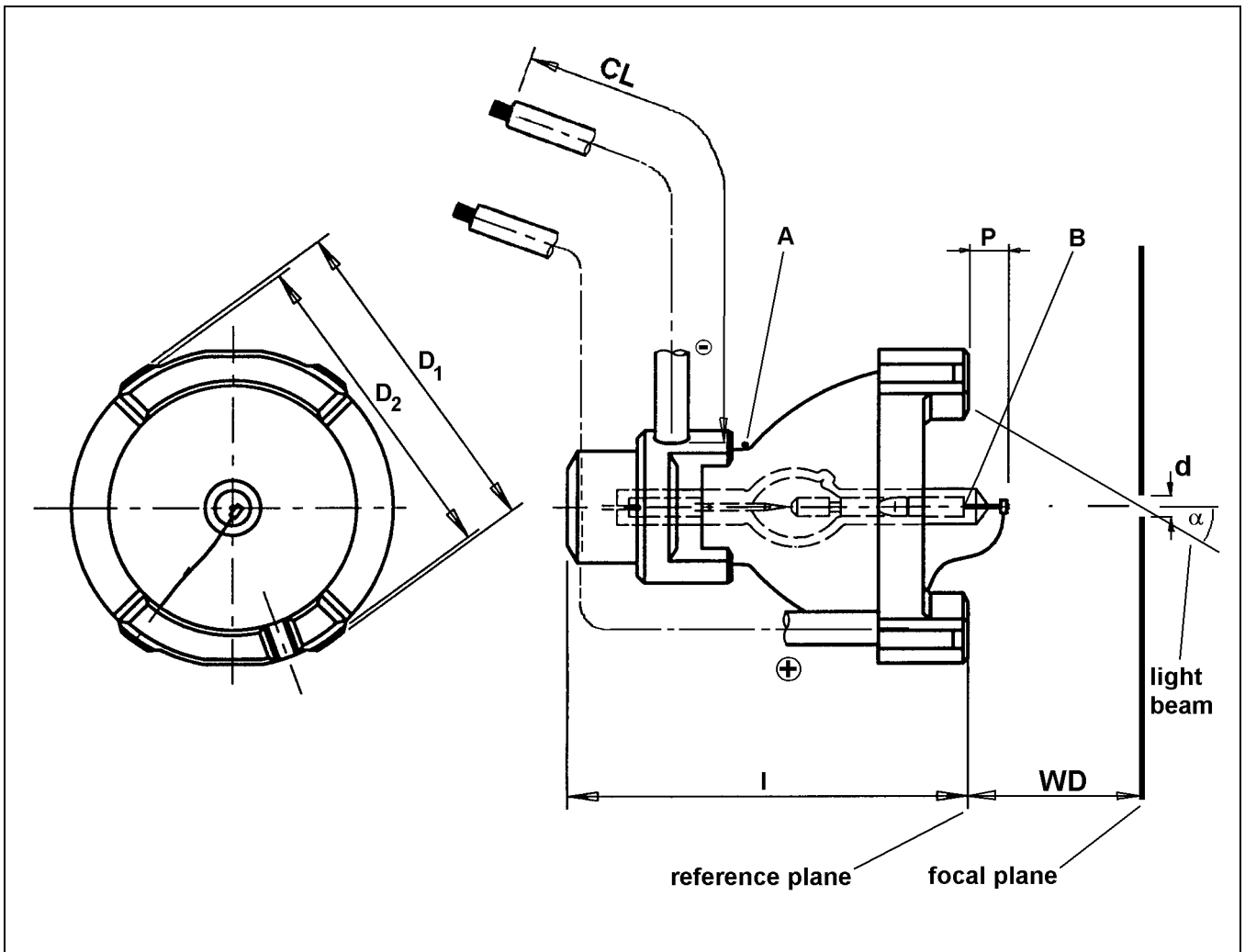
Status: valid

Xenon Short Arc Reflector Lamp

XBO[®] R 181 W/45C OFR

■ Product description

- Xenon discharge lamp for DC operation
- Short arc, high pressure
- Focusing reflector
- Dichroic coating for suppressed IR-output
- For light guides with up to 8 mm diameter
- Cable connection terminated with bare wires
- Ozone-free
- Hot re-strikeable



■ Technical data

Rated lamp current	A	12
Rated lamp wattage	W	180
Initial voltage range	V	12.8 – 14.8
Ignition voltage (cold/hot)	kV	max. 20 / max. 20
Colour temperature	K	approx. 6000
Colour rendering index	R _a	> 90

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Beam-to-axis angle α	deg	max. 22.4
Length l	mm	max. 81.5
Length p	mm	max. 9.0
Reflector diameter D_1	mm	max. \varnothing 67.0
Diameter D_2	mm	\varnothing 64.0 _{-0.3}
Cable length CL	mm	min. 200, each cable
Electrical connectors		Blank nickel-plated copper wires, snaked, total cross-section 6.2 mm ²

■ Performance data at rated current

Working distance WD	mm	45
Initial aperture lumens	lm	• min. 500 at $d = \varnothing$ 3 mm • min. 1100 at $d = \varnothing$ 5 mm
Declared service life ¹⁾	h	500

■ Mounting

Mounting		rim mounting; for details see Technical Information No. FO 4913
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■ Operation conditions

Burning position		horizontal $\pm 20^\circ$ (p 20)
Temperature at point A	°C	max. 250 allowed; 175 - 200 optimum
Temperature at point B	°C	max. 350 allowed; 200 - 250 optimum
Cooling		Forced cooling required; distribution and velocity of air flow to be chosen in such a way as to ensure proper temperatures at points A and B
Current operation range	A	11.75 - 12.25
Power operation range	W	min. 150, max. 210
Polarity		proper polarity to be observed

XBO[®] R 181 W/45C OFR can be operated either on a standard ballast or on an electronic power supply.

■ Additional documentation

- Guidelines for Mounting and Centering of Reflector Discharge Lamps (1); Technical Information No. FO 4913
- Guidelines for Power Supplies and Ignitors for Xenon Short Arc Lamps Photo Optics No. FO GL-3
- Cooling Scheme; Technical Information No. FO 4935

¹⁾ Operation time after which aperture lumens can decrease to 50% of initial value. Switching cycle 1 hour on, 1 hour off