




Product Highlights

- Lensed low-angle diffused illumination
- Used to detect surface defects and edges on a variety of surfaces
- Available in four sizes: 50, 100, 180, and 280mm

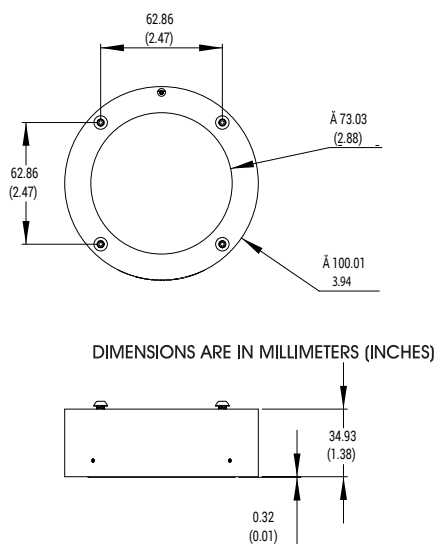


General Specifications

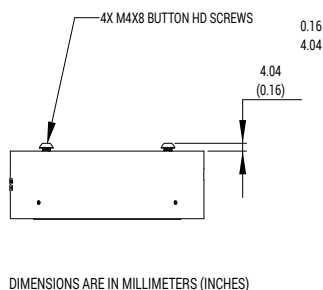
	Part Number	Color	24v Current (A)	All Other Controls (A Max)	Weight
Electrical Specifications	DF 196-050	625	n/a	0.16	83.9 g (2.96 oz)
		WHI, 455, 530	n/a	0.27	
		RGB	n/a	0.7	
	DF 196-100	625	0.7	0.32	263.1 g (9.3 oz)
		WHI, 455, 530	0.7	0.54	
		RGB	n/a	2.1	
	DF 196-180	625	1.25	0.58	521.6 g (18.4 oz)
		WHI, 455, 530	1.25	0.97	
		RGB	n/a	2.9	
	DF 196-280	625	1.25	0.58	780.2 g (27.5 oz)
		WHI, 455, 530	1.25	0.97	
		RGB	n/a	5.0	
Normal Operating Temperature	0 - 60°C				
Standard Cable Information	Up to 2 meters (80") long - 105°C rated PVC jacket, foil shield with drain.				
Photobiological Risk Factor IEC 62471	Group 1 (Low-Risk) Applicable Wavelengths: 455, 530, 625, RGB, WHI				
Compliance	  				
IP Rating	IP40				
Lumen Maintenance	L70 = 50,000 hours				

Mechanical Specifications

DF196-100 Shown Below



Part Number	Outer Diameter	Inner Diameter	Housing Thickness
DF196-050	49.9 (1.97)	31.6 (1.24)	29.9 (1.18)
DF196-100	100.0 (3.94)	73.0 (2.88)	34.9 (1.38)
DF196-180	179.9 (7.09)	152.9 (6.02)	34.9 (1.38)
DF196-280	280.9 (11.06)	254.0 (10.0)	34.9 (1.38)



For complete dimensions of all sizes please refer to the downloads tab on the DF196 product page on our website.

Part Number Key

Model	—	Size in mm	Spectral Wavelength	Connector/Control	—	Alternative Connector
DF196	—	XXX	XXX	XX	—	XXX
DF196		050 ²	(blue) 455	C1		M12 ¹
		100	(green) 530	C5		
		180	(red) 625	IC		
		280	(white) WHI	I3		
			(all color) RGB ³	I3S		
				24		
Ex: DF196-100WHI13 DF196-180RGBC1			¹ Available with IC, I3, I3S and 24v options only ² Not available with 24v option ³ Available with C1 option only			

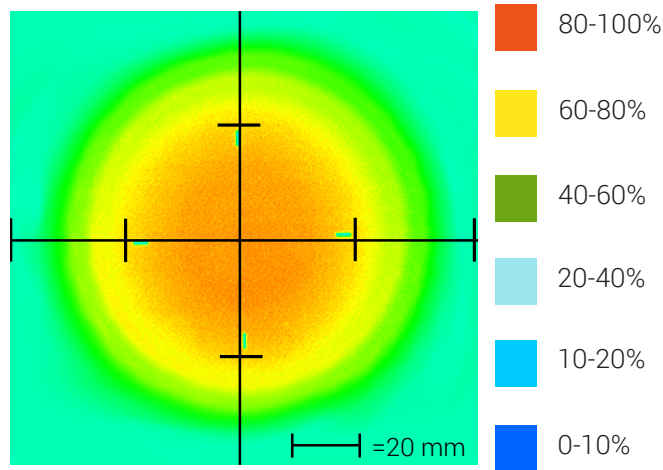
Stock Product: shipped within 3 days **Build to Order:** shipped within 2 weeks
 DF196-100WHI13

Connector | Control Options

C1 Connector	C5 Connector	ICS 2 (IC)	ICS 3 (I3)	ICS 3S (I3S)	24
For use with: DCS Series Controllers	For use with: Pulsar 320 Strobe Controller.	Continuous in-line controller Powered with: 24V power supply	Combination strobe/continuous in-line controller Powered with: 24V power supply	Default-OFF strobe/continuous in-line controller Powered with: 24V power supply	Flying/tinned leads Powered with: 24V power supply

Optical Performance

Intensity Distribution

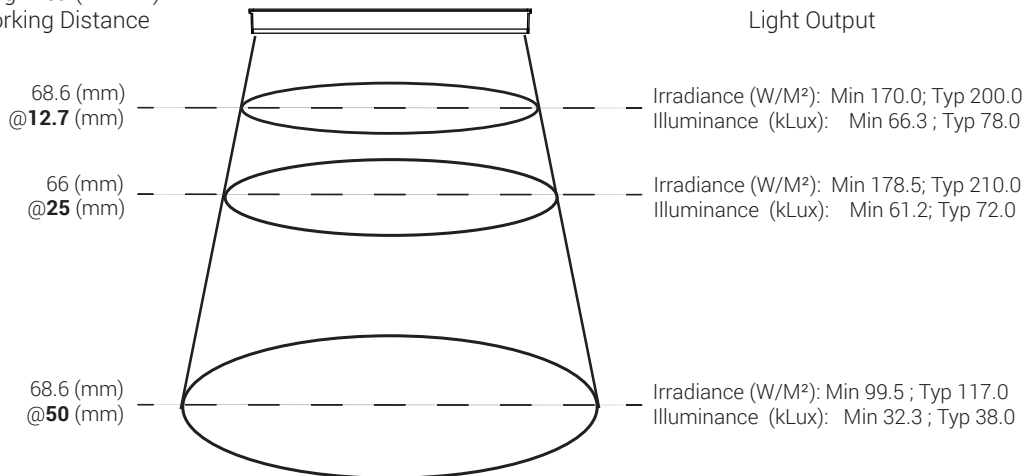


Optical measurement taken using DF196-100WHI3 @ 25mm

Area of Illuminance & Intensity for DF196-100WHI

Working Area (FWHM)
@ Working Distance

Light Output



Area of Illuminance & Intensity for All DF196-WHI3

Part Number	Working Distance (mm)	Irradiance (klux)	Illuminance (W/m ²)	FWHM Diameter (mm)
DF196-050	6.5	550	194	30.5
	20	300	90.2	35.6
DF196-100	12.7	200	78	68.6
	25	210	72	66.0
	50	117	38	68.6
DF196-180	50	134	46.5	134.6
	125	43.6	14.5	172.7
	190	17.9	5.9	254
DF196-280	75	47	17.2	228.6
	200	17.3	5.8	279.4
	300	7.4	2.5	431.8

Operation and Wiring

ICS 2 (IC)

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	0-10 VDC Analog Control	White
3	GND	Blue
4	GLO	Black
5	N/A	Gray

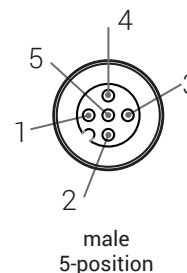
ICS 3 (I3 and I3S)

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	Reserved	White
3	GND	Blue
4	PNP/Active High Trigger	Black
5	0-10 VDC Analog Control	Gray

24 Volt

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	N/A	White
3	-24 VDC	Blue
4	N/A	Black
5	N/A	Gray

Optional M12 Pinout



Warranty Information

Every Advanced illumination, Inc. (Ai) product is thoroughly inspected and tested before leaving the factory. Products are warranted to be free of defects in workmanship and materials for a period of two years from the original date of purchase. Should a defect develop during this period, please contact Ai Customer Service or your Ai distributor for a Return Merchandise Authorization (RMA), and return the complete product, freight prepaid, to Ai. If a defect is found, Ai will - at our discretion - repair or replace the product without charge. Ai claims no liability for any implied warranties, including "merchantability" and "fitness for a specific purpose."

Electromagnetic Compatibility

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC) as stated in the product specifications. These requirements and limits are designed to provide reasonable protection against harmful interference only when the product is operated in its intended industrial electromagnetic environment. To minimize the potential for electromagnetic interference or unacceptable performance degradation, install and use this product in strict accordance with the instructions in the product documentation.

Customer Service

For information on existing orders, or to make an order adjustment, contact us Monday through Friday 8:00 am to 5:00 pm, ET or send an email to orders@advill.com.

Company Information

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