




Product Highlights

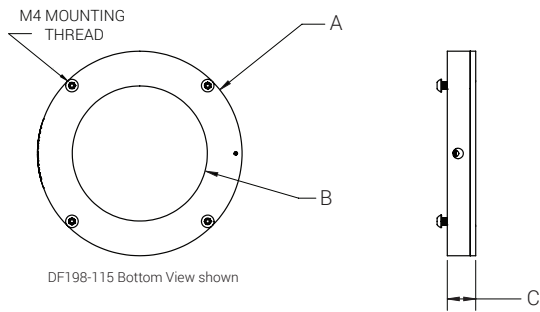
- Provides stable, diffuse, and even light source
- Used to evenly illuminate a variety of surfaces for color or defect detection
- Available in four sizes: 50mm, 115mm, 180mm, and 280mm
- Compatible with the DCS-400E & DCS-800E Quad Controllers



General Specifications

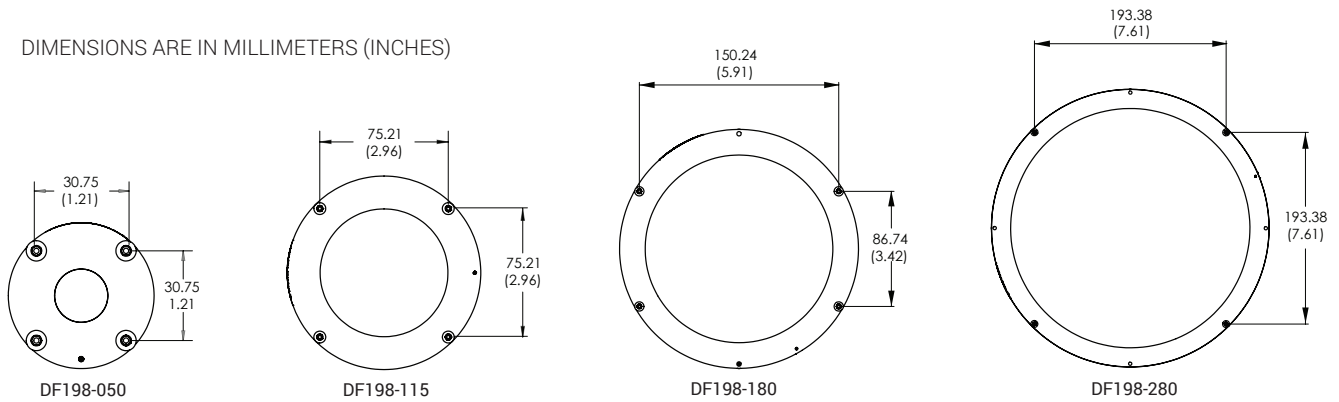
	Part Number	Color	24v Current (A)	All Other Controls (A Max)	Weight
Electrical Specifications	DF198-050	625	n/a	0.13	61.7 g (2.18 oz)
		WHI, 455, 530	n/a	0.22	
		RGB	n/a	0.65	
	DF198-115	625	0.32	0.32	128.8 g (4.54 oz)
		WHI, 455, 530	0.32	0.54	
		RGB	N/A	0.95	
	DF198-180	625	0.64	0.58	227.7 g (8.03 oz)
		WHI, 455, 530	0.64	0.97	
		RGB	N/A	2.55	
	DF198-280	625	0.96	0.58	358.3 g (12.64 oz)
		WHI, 455, 530	0.96	0.97	
		RGB	N/A	3.60	
Normal Operating Temperature	0 - 60°C				
Weight (Kg)	Varies by size				
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, WHI, RGB				
Compliance	  				
IP Rating	IP40				
Lumen Maintenance	L70 = 50,000 hours				

Mechanical Specifications



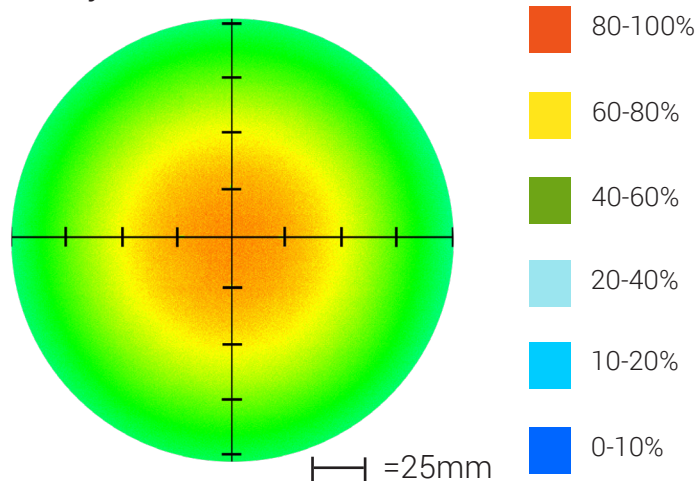
Part Number	(A) Outer Diameter	(B) Inner Diameter	(C) Height
DF198-050	50.0 (1.97)	18.3 (0.72)	14.1 (0.55)
DF198-115	113.3 (4.46)	74.9 (2.95)	15.7 (0.62)
DF198-180	180.0 (7.09)	141.9 (5.59)	15.7 (0.62)
DF198-280	280.0 (11.02)	241.4 (9.50)	15.7 (0.62)

DIMENSIONS ARE IN MILLIMETERS (INCHES)



Optical Performance

Intensity Distribution

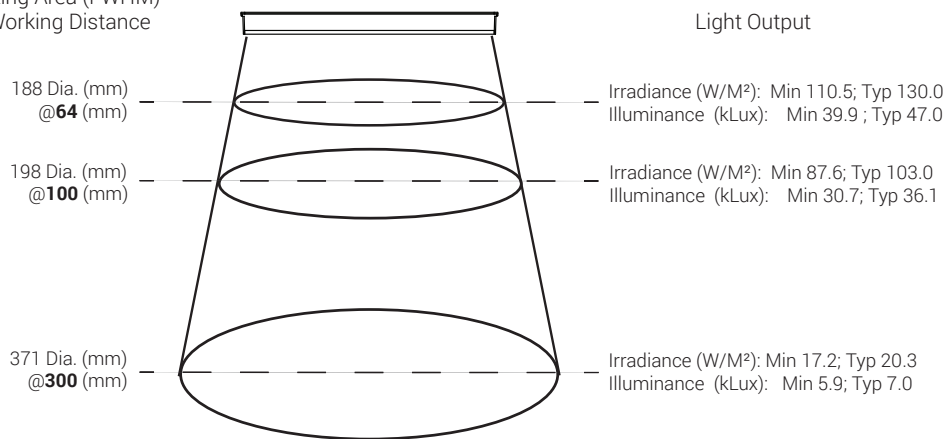


Optical measurement taken using DF198-180WHI3 @ 100mm

Area of Illuminance & Intensity for DF198-180WHI3

Working Area (FWHM)
@ Working Distance

Light Output



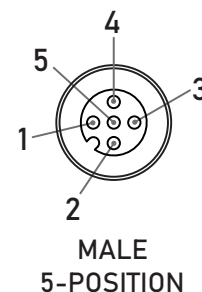
Area of Illuminance & Intensity for All DF198-WHI

Part Number	Working Distance (mm)	Irradiance (klux)	Illuminance (W/m ²)	FWHM Diameter (mm)
DF198-050	12.7	703.0	223.0	33.0
	100	37.2	12.3	101.6
	300	4.2	1.5	340.4
DF198-115	50	94.2	32.7	116.8
	100	42.6	14.6	142.2
	300	5.9	2.1	317.5
DF198-180	64	130.0	47.0	188.0
	100	103.0	36.1	198.1
	300	20.3	7.0	370.8
DF198-280	100	62.5	22.7	315.0
	200	41.4	14.5	340.4
	300	23.8	8.2	403.9

Operation and Wiring

ICS 2 (IC)			ICS 3 (I3 & I3S)			24 VOLT		
PIN (M12)	FUNCTION	WIRE COLOR	PIN (M12)	FUNCTION	WIRE COLOR	PIN (M12)	FUNCTION	WIRE COLOR
1	24V DC	BROWN	1	24V DC	BROWN	1	24V DC	BROWN
2	0-10V ANALOG CONTROL	WHITE	2	SHIELD	WHITE	2	N/A	WHITE
3	DC GND	BLUE	3	DC GND	BLUE	3	DC GND	BLUE
4	GLO	BLACK	4	PNP/ACTIVE HIGH TRIGGER	BLACK	4	N/A	BLACK
5	N/A	GRAY	5	0-10V ANALOG CONTROL	GRAY	5	N/A	GRAY

Optional M12 Pinout



Part Number Key

Model	—	Size (mm)	Spectral Wavelength	Connector/Control	—	Alternative Connector
DF198	—	XXX	XXXX	XX	—	XXX
DF198		050 ⁴ 115 180 280	455 (royal blue) 530 (green) 625 (red) WHI (white) RGB ³ RGBW ⁵	C1 C5 Q1 Q4 IC I3 I3S 24 ²		M12 ¹
Ex: DF198-115WHI3 DF198-180625C1		¹ Available with IC, I3, I3S and 24v options only ² The 24v version will have a lower output intensity by ~10-15% and operate at a temp ~10-15% higher than other options ³ Available with C1 connector only ⁴ Not available with 24v option ⁵ Available with Q1 connector only				

Stock Product: *shipped within 3 days* **Build to Order:** *shipped within 2 weeks*
 DF198-115WHI3

Connector | Control

C1 CONNECTOR For use with: DCS-100E & DCS-103E Strobe/Continuous Controllers Ordered Separately	C5 CONNECTOR For use with: Pulsar 320 High Power Strobe Only Controller Ordered Separately	Q1 CONNECTOR For use with: DCS-400E & DCS-800E Sequenced Strobe/Continuous Controllers Ordered Separately	Q4 CONNECTOR For use with: DCS-400E & DCS-800E Sequenced Strobe/Continuous Controllers Ordered Separately
ICS 2 (IC) In-line Continuous Controller Included 24V Power Supply Required Flying/Tinned Leads	ICS 3 (I3) In-line Strobe/Continuous Controller Included Default On 24V Power Supply Required Flying/Tinned Leads	ICS 3S (I3S) In-line Strobe/Continuous Controller Included Default Off 24V Power Supply Required Flying/Tinned Leads	24 VOLT Flying/Tinned Leads No Control Features Powered with: 24V Power Supply

Note:

Selecting a **Q1 connection** will result in 1 ring light operating on 4 channels for independent quadrant control used in photometric stereo applications.

Selecting a **Q4 connection** will result in 4 ring lights wired to 1 connector, each ring light operating on a single channel.

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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