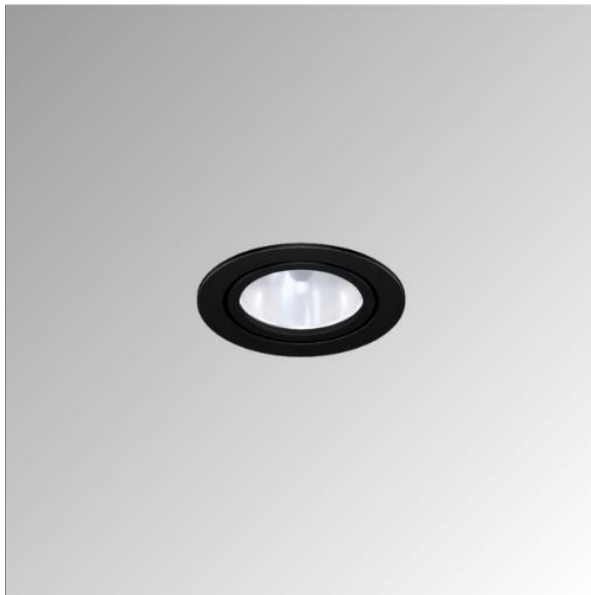


Freda


Installation
 Recessed

Housing Colours
 White RAL 9010
 Grey RAL 9006
 Black 9005

Construction
 Die-cast powder coated,
 aluminium reflector,
 remote PSU

Protection Class 2, IP20

Lighting control
 Phase, 1-10V, DALI,
 switched

Certification
 CE, UKCA

 Weight: 1 Kg Max
 Cutout: Dia. 102mm Ø

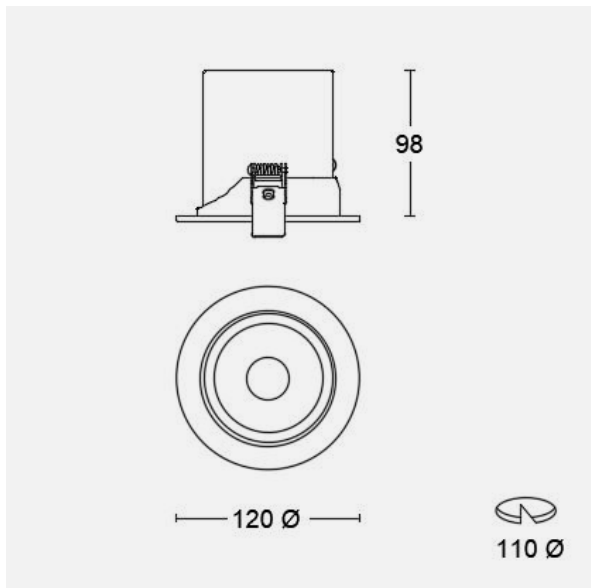
Light source
 High efficiency LED

Beam Angles
 Interchangeable reflectors
 Narrow 15°, Medium 23.8°
 Wide 33.3°, Extra Wide 56.9°

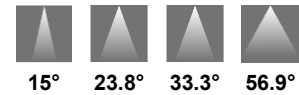
Luminous Efficacy
 Up to 151 lm/W
 TM-21: 10,000 hrs = 97.67%
 L80/B10: 55,000 = 90.98%

Light quality
 2700K, 3000K, 3500K, 4000K
 CRI ≥ Ra 90 and ≥ Ra 97 to special
 order. 3 DCM **

Lumen categories
 2000, 3200, 4200 lumens

Dimensions (mm)

Accessories

 Reflectors
 Sparkle ring white

Light distribution

Light output details

Luminaire Output-						
CRI/CCT	350mA		600mA		800mA	
	Total Watts	13.5	Total Watts	23.1	Total Watts	31.8
	Lm	Lm/W	Lm	Lm/W	Lm	Lm/W
927	1965	146	3159	137	4071	128
930	2005	149	3223	140	4154	131
935	2025	150	3255	141	4196	132
940	2045	151	3287	142	4237	133
Lumen Class	2000		3200		4200	

Description

Recessed down light; die-cast aluminium with powder coated surface available in three colours as standard, white, black and grey; remote mounted PSU; four beam angle options with interchangeable, high quality, vapour deposition coated aluminium faceted reflectors, narrow, medium, wide and extra wide; three light output class options, 2000, 3200, and 4200 lumens; CRI >90 Ra as standard and 98 Ra on special order basis; high efficiency LED module light source; lighting control Phase, 1-10V and DALI. Dim2warm on request. Construction from easily separable materials facilitate easy life-extending upgrades and recycling.

Freda

Product part number nomenclature and example:

Product part number	Product description
FRB3F2000N930WD1	Freda recessed down light, 2000 lumens, narrow beam, CRI ≥90, 3000K, White, DALI-Dim

Options:

FR	D	B3F	2000	N	9	30	W	D3
↓	↓	↓	↓	↓	↓	↓	↓	↓
Product Series	Function	LED Module	Lumen Category (Lumens)	Beam angle	CRI (Ra)	CCT (Kelvin)	Body colour *	Lighting control
FR = Freda	D = Down light	B3F	2000	N = Narrow	9 ≥ 90	27 = 2700K	W = White RAL9010	D1 = Phase
			3200	M = Medium		30 = 3000K	G = Grey RAL9006	D2 = 1-10V
			4200	W = Wide		35 = 3500K	B = Black RAL9005	D3 = DALI
				XW = Extra Wide		40 = 4000K		Blank = Non-Dim

* Custom colours and finishes available on special order basis