

USHIO

MR-16 REFLECTOR LAMPS

EUROSTAR™ 12 VOLT SERIES



12V DICHOIC MR-16 LAMPS FOR GENERAL LIGHTING

Have you ever seen a lighting application where the MR-16 lamps range from pink to orange and green? That is because the lamps have inferior reflector coatings. USHIO's Eurostar™ reflector utilizes a multilayer titanium oxide coating which is much more durable than the standard dichroic coatings. The thickness and application of these coatings ensure that they do not crack or peel under the stress of high temperatures. Our Eurostar™ MR-16's maintain color from lamp to lamp and throughout the life of the lamp.

Inferior lamps display uneven and inaccurate beam patterns. Beam accuracy and uniformity is controlled by proper alignment of the lamp filament within the reflector. USHIO focuses the lamp filament inside the reflector, thereby optimizing the lamp's specified beam pattern, light intensity, and beam uniformity.

Available in: 10W, 20W, 35W, 50W and 75W in spot, narrow flood, flood, and wide flood beam spreads

FEATURES & BENEFITS

- Long Life — Up to 5000 hours average
- Excellent center-to-edge uniformity
- High quality Titanium Oxide coating
- Axial filament for precise beam control
- Dimmable
- Crisp white Halogen light
- UV-cut Halogen capsule
- Base type GU5.3

APPLICATIONS

- Museums and Galleries
- Retail Shops
- Accent Lighting
- Offices and Commercial Areas
- Restaurants

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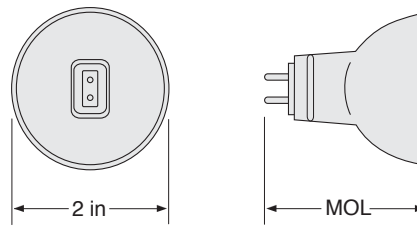
12V EUROSTAR™

GU5.3 Base

C-8 Filament

Universal Burn Position

CHARACTERISTICS & SPECIFICATIONS



Watts (W)	Ushio Ordering Code	Ushio Lamp Code	MOL (in)	Color Temp (K)	Beam Angle	Beam Spread	Luminous Intensity (cd)	Avg Life (h)
10	1001107	JR12V-10W/NFL21	1.77	2800	21°	Narrow Flood	600	1200
10	1001108	JR12V-10W/NFL21/FG	1.78	2800	21°	Narrow Flood	600	1200
10	1003154	JR12V-10W/FL32	1.77	2800	32°	Flood	400	1200
20	1000366	ESX, JR12V-20W/SP12	1.77	2950	12°	Spot	3500	5000
20	1000370	ESX/FG, JR12V-20W/SP12/FG	1.78	2950	12°	Spot	3500	5000
20	1000028	BBF, JR12V-20W/NFL24	1.77	2950	24°	Narrow Flood	1200	5000
20	1000037	BBF/FG, JR12V-20W/NFL24/FG	1.78	2950	24°	Narrow Flood	1200	5000
20	1000000	BAB, JR12V-20W/FL36	1.77	2950	36°	Flood	600	5000
20	1000014	BAB/FG, JR12V-20W/FL36/FG	1.78	2950	36°	Flood	600	5000
20	1000001	BAB/60, JR12V-20W/WFL60	1.77	2950	60°	Wide Flood	270	5000
20	1000004	BAB/60/FG, JR12V-20W/WFL60/FG	1.78	2950	60°	Wide Flood	270	5000
35	1000548	FMT, JR12V-35W/SP12	1.77	2950	12°	Spot	6000	5000
35	1000551	FMT/FG, JR12V-35W/SP12/FG	1.78	2950	12°	Spot	6000	5000
35	1000552	FMV, JR12V-35W/NFL24	1.77	2950	24°	Narrow Flood	2300	5000
35	1000559	FMV/FG, JR12V-35W/NFL24/FG	1.78	2950	24°	Narrow Flood	2300	5000
35	1000564	FMW, JR12V-35W/FL36	1.77	2950	36°	Flood	1300	5000
35	1000573	FMW/FG, JR12V-35W/FL36/FG	1.78	2950	36°	Flood	1300	5000
35	1000565	FMW/60, JR12V-35W/WFL60	1.77	2950	60°	Wide Flood	510	5000
35	1000566	FMW/60/FG, JR12V-35W/WFL60/FG	1.78	2950	60°	Wide Flood	510	5000
50	1000416	EXT, JR12V-50W/SP12	1.77	3000	12°	Spot	11000	5000
50	1000419	EXT/FG, JR12V-50W/SP12/FG	1.78	3000	12°	Spot	11000	5000
50	1000424	EXZ, JR12V-50W/NFL24	1.77	3000	24°	Narrow Flood	3600	5000
50	1000430	EXZ/FG, JR12V-50W/NFL24/FG	1.78	3000	24°	Narrow Flood	3600	5000
50	1000398	EXN, JR12V-50W/FL36	1.77	3000	36°	Flood	2000	5000
50	1000405	EXN/FG, JR12V-50W/FL36/FG	1.78	3000	36°	Flood	2000	5000
50	1000589	FNV, JR12V-50W/WFL60	1.77	3000	60°	Wide Flood	850	5000
50	1000592	FNV/FG, JR12V-50W/WFL60/FG	1.78	3000	60°	Wide Flood	850	5000
75	1000451	EYF, JR12V-75W/SP12	1.77	3000	12°	Spot	13000	5000
75	1000452	EYF/FG, JR12V-75W/SP12/FG	1.78	3000	12°	Spot	13000	5000
75	1000454	EYJ/EZZ, JR12V-75W/NFL24	1.77	3000	24°	Narrow Flood	4800	5000
75	1000455	EYJ/EZZ/FG, JR12V-75W/NFL24/FG	1.78	3000	24°	Narrow Flood	4800	5000
75	1000444	EYC, JR12V-75W/FL36	1.77	3000	36°	Flood	2700	5000
75	1000447	EYC/FG, JR12V-75W/FL36/FG	1.78	3000	36°	Flood	2700	5000
75	1000445	EYC/60, JR12V-75W/WFL60	1.77	3000	60°	Wide Flood	1220	5000
75	1000446	EYC/60/FG, JR12V-75W/WFL60/FG	1.78	3000	60°	Wide Flood	1220	5000

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12V EUROSTAR™

CHARACTERISTICS & SPECIFICATIONS

ø[ft]	H[ft]	E[fc]
0.69	3.3	325
1.68	8.0	55
2.52	12.0	24
5.04	24.0	6.1
7.56	36.0	2.7
10.09	48.0	1.5
12.60	60.0	0.98
12°	ESX	20W

ø[ft]	H[ft]	E[fc]
0.69	3.3	557
1.68	8.0	95
2.52	12.0	42
5.04	24.0	10.5
7.56	36.0	4.6
10.09	48.0	2.6
12.60	60.0	1.6
12°	FMT/FRB	35W

ø[ft]	H[ft]	E[fc]
0.69	3.3	1022
1.68	8.0	174
2.52	12.0	77
5.04	24.0	19.3
7.56	36.0	8.5
10.09	48.0	4.8
12.60	60.0	3
12°	EXT	50W

ø[ft]	H[ft]	E[fc]
0.69	3.3	1208
1.68	8.0	205
2.52	12.0	91
5.04	24.0	22
7.56	36.0	10.1
10.09	48.0	5.7
12.60	60.0	3.6
12°	EYF	75W

ø[ft]	H[ft]	E[fc]
1.41	3.3	111
3.4	8.0	18.8
5.1	12.0	8.4
10.2	24.0	2.1
15.3	36.0	0.9
20.4	48.0	0.5
25.5	60.0	0.3
24°	BBF	20W

ø[ft]	H[ft]	E[fc]
1.41	3.3	214
3.4	8.0	36
5.1	12.0	16
10.2	24.0	4.04
15.3	36.0	1.7
20.4	48.0	1.0
25.5	60.0	0.6
24°	FMV/FRA	35W

ø[ft]	H[ft]	E[fc]
1.41	3.3	334
3.4	8.0	57
5.1	12.0	25
10.2	24.0	6.3
15.3	36.0	2.8
20.4	48.0	1.6
25.5	60.0	1
24°	EXZ	50W

ø[ft]	H[ft]	E[fc]
1.41	3.3	446
3.4	8.0	75.8
5.1	12.0	33.7
10.2	24.0	8.4
15.3	36.0	3.7
20.4	48.0	2.1
25.5	60.0	1.3
24°	EYJ/EZZ	75W

ø[ft]	H[ft]	E[fc]
1.25	3.3	56
1.48	4.0	38.1
2.96	8.0	9.52
4.44	12.0	4.23
5.9	16.0	2.38
8.8	24.0	1.05
11.8	32.0	0.59
12.6	34.0	0.52
13.3	36.0	0.47
14.8	40.0	0.38
21°	JR12V-10W/NFL	10W

ø[ft]	H[ft]	E[fc]
2.13	3.3	56
2.6	4.0	38
5.1	8.0	9.5
7.7	12.0	4.2
10.4	16.0	2.4
15.5	24.0	1
20.7	32.0	0.6
22	34.0	0.5
23	36.0	0.4
25	40.0	0.3
36°	BAB	20W

ø[ft]	H[ft]	E[fc]
2.13	3.3	121
2.6	4.0	82
5.1	8.0	20
7.7	12.0	9
10.4	16.0	5
15.5	24.0	2
20.7	32.0	1.3
22	34.0	1.1
23	36.0	1
25	40.0	0.8
36°	FMW	35W

ø[ft]	H[ft]	E[fc]
2.13	3.3	186
2.6	4.0	126
5.1	8.0	31
7.7	12.0	14
10.4	16.0	8
15.5	24.0	3.5
20.7	32.0	2
22	34.0	1.7
23	36.0	1.5
25	40.0	1.2
36°	EXN	50W

ø[ft]	H[ft]	E[fc]
2.13	3.3	251
2.6	4.0	170
5.1	8.0	42
7.7	12.0	19
10.4	16.0	10
15.5	24.0	4.7
20.7	32.0	2.6
22	34.0	2.3
23	36.0	2.1
25	40.0	1.7
36°	EYC	75W

ø[ft]	H[ft]	E[fc]
1.97	3.3	37
2.29	4.0	25.1
4.58	8.0	6.29
6.88	12.0	2.79
9.17	16.0	1.57
13.7	24.0	0.69
18.3	32.0	0.39
19.4	34.0	0.34
20.6	36.0	0.31
22.9	40.0	0.25
32°	JR12V-10W/FL	10W

ø[ft]	H[ft]	E[fc]
3.77	3.3	25
4.6	4.0	17
9.2	8.0	14.2
13.8	12.0	1.8
18.5	16.0	1.1
17.7	24.0	0.5
36	32.0	0.3
39	34.0	0.23
41	36.0	0.21
46	40.0	0.17
60°	BAB/60	20W

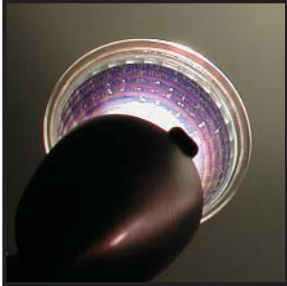
ø[ft]	H[ft]	E[fc]
3.77	3.3	47
4.6	4.0	32
9.2	8.0	8
13.8	12.0	3.5
18.5	16.0	2
27.7	24.0	0.8
36	32.0	0.5
39	34.0	0.4
41	36.0	0.3
46	40.0	0.31
60°	FMW/60	35W

ø[ft]	H[ft]	E[fc]
3.77	3.3	79
4.6	4.0	54
9.2	8.0	13
13.8	12.0	6
18.5	16.0	3.3
27.7	24.0	1.5
36	32.0	0.8
39	34.0	0.7
41	36.0	0.6
46	40.0	0.5
60°	FNV	50W

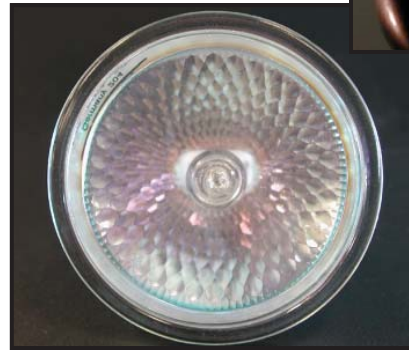
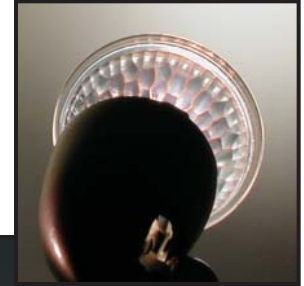
ø[ft]	H[ft]	E[fc]
3.77	3.3	79
4.6	4.0	77
9.2	8.0	19
13.8	12.0	8.5
18.5	16.0	4.8
27.7	24.0	2.1
36	32.0	1.2
39	34.0	1
41	36.0	0.9
46	40.0	0.7
60°	EYC/60	75W

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EUROSTAR™ There is a difference...



Brand X – Standard dichroic reflector
C-6 filament
Coating has cracked and degraded after
only 3000 hours



USHIO – Titanium Oxide multilayer coating
C-8 filament
Coating remains clean and intact
throughout its 5000 hour life rating



Brand X – Uneven beam pattern, low
color temperature, green color and
low output



USHIO – Total beam uniformity, white
Halogen light and higher output



Eurostar™ lamps are manufactured under
ISO 9001 guidelines ensuring quality and
security for the purchaser

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