



Product Description

ML

Mixed Light lamps

Benefits

- Direct retrofit for incandescent lamps
- Higher efficacy and lifetime than incandescent

Features

- High-pressure mercury tube in series with a tungsten filament
- Runs on mains voltage without additional gear
- Combines a continuous spectrum from the incandescent source and a line spectrum from the high-pressure mercury source

Application

- Public outdoor lighting, car parks, workshops, garages and shops

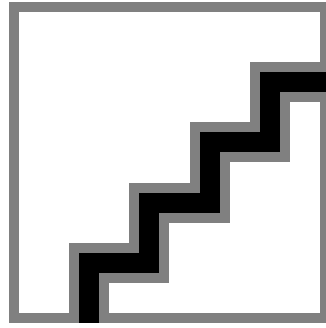
Warnings and Safety

- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

Versions

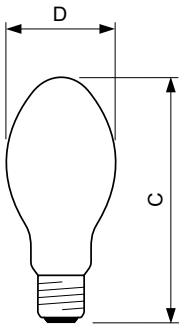


E27



E39/E40

Dimensional drawing



Product	D (max)	C (max)
ML 250W E27 225-235V 1SL/12	91 mm	212 mm
ML 160W E27 220-230V SG 1CT/24	76 mm	172 mm
MLL 160W 220V E27 24PK	76 mm	172 mm
ML 250W E27 220-230V SG SLV/12	91 mm	212 mm
ML 500W E40 225-235V HG 1SL/6	122 mm	290 mm
ML 160W E27 225-235V SG 1SL/24	76 mm	173 mm
ML 100W E27 225-235V SG 1SL/24	71 mm	155 mm
ML 250W E40 220-230V 1SL/12	91 mm	226 mm
ML 500W E40 220-230V 1SL/6	122 mm	290 mm

Controls and Dimming	
Dimmable	No
General Information	
Operating Position	VBU/VBD30
Luminaire Design Requirements	
Bulb Temperature (Max)	350 °C
Mechanical and Housing	
Bulb Finish	Coated glass

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)	Mercury (Hg) Content (Nom)
928090056891	ML 100W E27 225-235V SG 1SL/24	100 kWh	E	6.2 mg
928095056891	ML 160W E27 225-235V SG 1SL/24	160 kWh	C	13 mg

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)	Mercury (Hg) Content (Nom)
928096056892	ML 250W E27 225-235V 1SL/12	291 kWh	C	16.3 mg
928488700091	ML 250W E27 220-230V SG SLV/12	250 kWh	C	14 mg

Order Code	Full Product Name	Energy	Energy	Mercury
		Consumption	Efficiency	(Hg)
		kWh/1000 h	Label (EEL)	Content
928601008912	MLL 160W 220V E27 24PK	181 kWh	C	12 mg
928601008988	ML 160W E27 220-230V SG 1CT/24	181 kWh	C	12 mg
928096257291	ML 250W E40 220-230V 1SL/12	286 kWh	C	14 mg

Order Code	Full Product Name	Energy	Energy	Mercury
		Consumption	Efficiency	(Hg)
		kWh/1000 h	Label (EEL)	Content
928097056822	ML 500W E40 225-235V HG 1SL/6	500 kWh	B	48.9 mg
928097057791	ML 500W E40 220-230V 1SL/6	550 kWh	B	46 mg

Operating and Electrical

Order Code	Full Product Name	Lamp Current (EM) (Max)	Lamp Current (EM) (Min)	Lamp Current (EM) (Nom)	Voltage (Nom)	Power (Rated) (Nom)
928090056891	ML 100W E27 225-235V SG 1SL/24	-	-	0.47 A	230 V	104.0 W
928095056891	ML 160W E27 225-235V SG 1SL/24	-	-	0.74 A	230 V	165.0 W
928096056892	ML 250W E27 225-235V 1SL/12	1.205 A	1.075 A	1.14 A	230 V	265.0 W
928488700091	ML 250W E27 220-230V SG SLV/12	-	-	1.18 A	225 V	260.0 W
928601008912	MLL 160W 220V E27 24PK	0.8 A	0.72 A	0.76 A	225 V	165.0 W
928601008988	ML 160W E27 220-230V SG 1CT/24	0.8 A	0.72 A	0.76 A	225 V	165.0 W
928096257291	ML 250W E40 220-230V 1SL/12	1.27 A	1.13 A	1.2 A	225 V	260.0 W
928097056822	ML 500W E40 225-235V HG 1SL/6	-	-	2.29 A	230 V	500.0 W
928097057791	ML 500W E40 220-230V 1SL/6	2.44 A	2.20 A	2.32 A	225 V	500.0 W

General Information (1/2)

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20% Failures	Life To 50% Failures	Life To 5%	LSF 12000 h	LSF 16000 h
			Failures (Nom)	(Nom)	(Nom)	Failures (Nom)	Rated	Rated
928090056891	ML 100W E27 225-235V SG 1SL/24	E27	3000 h	5000 h	8000 h	-	-	-
928095056891	ML 160W E27 225-235V SG 1SL/24	E27	3000 h	5000 h	8000 h	-	-	-
928096056892	ML 250W E27 225-235V 1SL/12	E27	-	5000 h	10000 h	2000 h	40 %	25 %
928488700091	ML 250W E27 220-230V SG SLV/12	E27	3000 h	5000 h	8000 h	-	-	-
928601008912	MLL 160W 220V E27 24PK	E27	-	7000 h	13000 h	2000 h	-	-
928601008988	ML 160W E27 220-230V SG 1CT/24	E27	-	7000 h	13000 h	2000 h	-	-
928096257291	ML 250W E40 220-230V 1SL/12	E40	-	5000 h	10000 h	2000 h	-	-
928097056822	ML 500W E40 225-235V HG 1SL/6	E40	3000 h	5000 h	8000 h	-	-	-
928097057791	ML 500W E40 220-230V 1SL/6	E40	-	5000 h	10000 h	2000 h	-	-

General Information (2/2)

Order Code	Full Product Name	LSF	LSF	LSF	LSF	LSF	Order Code	Full Product Name	LSF	LSF	LSF	LSF	LSF
		2000 h	20000 h	4000 h	6000 h	8000 h			Rated	Rated	Rated	Rated	Rated
928090056891	ML 100W E27 225-235V SG 1SL/24	93 %	-	85 %	70 %	50 %	928488700091	ML 250W E27 220-230V SG SLV/12	93 %	-	85 %	70 %	50 %
928095056891	ML 160W E27 225-235V SG 1SL/24	93 %	-	85 %	70 %	50 %	928601008912	MLL 160W 220V E27 24PK	-	-	-	-	-
928096056892	ML 250W E27 225-235V 1SL/12	95 %	12 %	85 %	72 %	60 %	928601008988	ML 160W E27 220-230V SG 1CT/24	-	-	-	-	-

Order Code	Full Product Name	LSF	LSF	LSF	LSF	LSF
		2000 h Rated	20000 h Rated	4000 h Rated	6000 h Rated	8000 h Rated
928096257291	ML 250W E40 220-230V 1SL/12	-	-	-	-	-
928097056822	ML 500W E40 225-235V HG 1SL/6	93 %	-	85 %	70 %	50 %

Order Code	Full Product Name	LSF	LSF	LSF	LSF	LSF
		2000 h Rated	20000 h Rated	4000 h Rated	6000 h Rated	8000 h Rated
928097057791	ML 500W E40 220-230V 1SL/6	-	-	-	-	-

Light Technical (1/3)

Order Code	Full Product Name	Chromaticity	Chromaticity	Correlated Color Temperature (Nom)	Color Rendering Index (Nom)	LLMF 12000 h Rated	LLMF 16000 h Rated	LLMF 2000 h Rated
		Coordinate X (Nom)	Coordinate Y (Nom)					
928090056891	ML 100W E27 225-235V SG 1SL/24	385	391	4000 K	-	-	-	-
928095056891	ML 160W E27 225-235V SG 1SL/24	371	380	4200 K	65	-	-	-
928096056892	ML 250W E27 225-235V 1SL/12	402	382	3400 K	63	72 %	67 %	90 %
928488700091	ML 250W E27 220-230V SG SLV/12	373	385	4200 K	-	-	-	-
928601008912	MLL 160W 220V E27 24PK	399	380	3600 K	63	-	-	-
928601008988	ML 160W E27 220-230V SG 1CT/24	399	380	3600 K	63	-	-	-
928096257291	ML 250W E40 220-230V 1SL/12	403	382	3400 K	63	-	-	-
928097056822	ML 500W E40 225-235V HG 1SL/6	376	401	4200 K	50	-	-	-
928097057791	ML 500W E40 220-230V 1SL/6	396	387	3700 K	50	-	-	-

Light Technical (2/3)

Order Code	Full Product Name	LLMF	LLMF	LLMF	LLMF	Lumen	Lumen	Lumen	Lumen	Luminous
		20000 h Rated	4000 h Rated	6000 h Rated	8000 h Rated	Maintenance 2000 h (Min)	Maintenance 2000 h (Nom)	Maintenance 5000 h (Min)	Maintenance 5000 h (Nom)	Efficacy (rated) (Nom)
928090056891	ML 100W E27 225-235V SG 1SL/24	-	-	-	-	80 %	85 %	75 %	78 %	10.0 lm/W
928095056891	ML 160W E27 225-235V SG 1SL/24	-	-	-	-	80 %	90 %	75 %	85 %	17 lm/W
928096056892	ML 250W E27 225-235V 1SL/12	62 %	83 %	79 %	77 %	85 %	90 %	70 %	80 %	20.4 lm/W
928488700091	ML 250W E27 220-230V SG SLV/12	-	-	-	-	80 %	85 %	75 %	78 %	22 lm/W
928601008912	MLL 160W 220V E27 24PK	-	-	-	-	82 %	87 %	78 %	83 %	19 lm/W
928601008988	ML 160W E27 220-230V SG 1CT/24	-	-	-	-	82 %	87 %	78 %	83 %	19 lm/W
928096257291	ML 250W E40 220-230V 1SL/12	-	-	-	-	85 %	90 %	70 %	80 %	21 lm/W
928097056822	ML 500W E40 225-235V HG 1SL/6	-	-	-	-	80 %	85 %	75 %	85 %	26 lm/W
928097057791	ML 500W E40 220-230V 1SL/6	-	-	-	-	85 %	90 %	70 %	80 %	26 lm/W

Light Technical (3/3)

Order Code	Full Product Name	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)
928090056891	ML 100W E27 225-235V SG 1SL/24	-	1000 lm
928095056891	ML 160W E27 225-235V SG 1SL/24	-	3200 lm
928096056892	ML 250W E27 225-235V 1SL/12	-	5400 lm
928488700091	ML 250W E27 220-230V SG SLV/12	5000 lm	5500 lm

Order Code	Full Product Name	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)
928601008912	MLL 160W 220V E27 24PK	2850 lm	3150 lm
928601008988	ML 160W E27 220-230V SG 1CT/24	2850 lm	3150 lm
928096257291	ML 250W E40 220-230V 1SL/12	5000 lm	5500 lm
928097056822	ML 500W E40 225-235V HG 1SL/6	-	13000 lm
928097057791	ML 500W E40 220-230V 1SL/6	12500 lm	13000 lm

Mechanical and Housing

Order Code	Full Product Name	Bulb Material	Bulb Shape
928090056891	ML 100W E27 225-235V SG 1SL/24	Soft Glass	B70
928095056891	ML 160W E27 225-235V SG 1SL/24	Soft Glass	BF75
928096056892	ML 250W E27 225-235V 1SL/12	Soft Glass	ED90
928488700091	ML 250W E27 220-230V SG SLV/12	Soft Glass	BD90
928601008912	MLL 160W 220V E27 24PK	Soft Glass	E75

Order Code	Full Product Name	Bulb Material	Bulb Shape
928601008988	ML 160W E27 220-230V SG 1CT/24	Soft Glass	E75
928096257291	ML 250W E40 220-230V 1SL/12	Hard Glass	ED90
928097056822	ML 500W E40 225-235V HG 1SL/6	Hard Glass	ED120
928097057791	ML 500W E40 220-230V 1SL/6	Hard Glass	ED120

Color Rendering Diagrams

