

# high mast®

## applications

Freight terminals  
Industrial parks  
Car parks  
Railway sidings  
Airports  
Docks  
Motorways and  
Interchanges

The Holophane High Mast® system is easily the most sophisticated on the market. Flexible, functional and completely safe, the system can be used with a choice of three different luminaire types offering total flexibility of light distribution, including cut-off options. The latched raise and lower system utilises heavy duty stainless steel cables in conjunction with three continuous contact iris action guide arms on the lowering ring, allowing all maintenance to be carried out at ground level using a portable power tool connected to the mast supply. The extended remote control facility permits the operator to stand up to six metres from the base of the column.



**features and benefits**

- Precise light control
  - > Maximum efficiency & low glare
- Choice of light distributions
  - > Maximum efficiency and uniformity for any application
- Minimal upward light option
  - > 'Night time friendly'
- Versatile mounting arrays
  - > Flexibility
- Safe dependable raise and lower system
  - > Ground level maintenance
- Remote control portable power tool
  - > Easy maintenance
- Positive fail-safe latching
  - > Eliminates tension on hoisting cables

**lamp types included**

- 400W - 1000W metal halide
- 400W - 1000W high pressure sodium (various)

**IP rating**

IP65 

**approvals**

Complies with EN60598



Seattle floodlight



Symmetrical cut-off lantern



Symmetrical with back light shield



Asymmetrical cut-off lantern

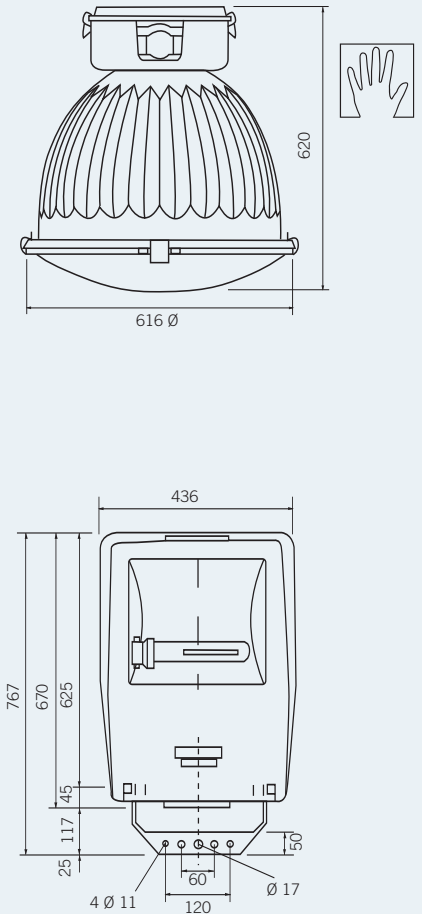
## specification

### HMC - cut off version

The luminaire shall consist of a two piece die-cast aluminium control gear housing, gasket sealed and suitable for a wide choice of high intensity discharge lamps. The optical assembly shall offer a choice of cut-off light distributions by means of a precision-moulded aluminium reflector complete with a hinged clear tempered glass door secured by four stainless steel hand-activated latches ensuring an IP rating of 65. The luminaire complies with EN60598 on all products HMC/HMP and be mounted by means of a side arm and mounting clamp.

### HMF - seattle floodlight version

The luminaire shall consist of a two piece die cast aluminium body and door frame with a maximum depth of 190mm, housing all integral control gear for a variety of high intensity discharge lamps. The body and door frame shall be hinged and sealed together by a closed cell silicon gasket and secured by a single tool free latch, ensuring an IP rating of 66 is maintained. The optical assembly shall consist of a pre-anodised aluminium reflector and fully tempered clear front glass sealed to the door frame. The luminaire complies with EN60598 and be mounted by means of a spigot adaptor or stirrup bracket for variable mounting orientations. A range of bracketry and columns are available with a wide choice of options and accessories.



## HMF luminaire technical data

Mast Reference	Height (m)	Wind Speed (m/s)	Effective Protected Area (m <sup>2</sup> )	Mast System Weight (kg)	Maximum Over Turning Moment (kNm)*	Vertical Load (kN)	Horizontal Shear at Ground Level (kN)
HMF.400XT.04.15..	15	52	1.44	485	103.4	9.27	9.13
HMF.400XT.06.15.	15	52	1.84	85	103.4	9.27	9.13
HMF.400XT.08.15..	15	52	2.15	485	103.4	9.27	9.13
HMF.400CDMT3.04.15..	15	52	1.44	485	103.4	9.27	9.13
HMF.400CDMT3.06.15..	15	52	1.84	85	103.4	9.27	9.13
HMF.400CDMT3.08.15..	15	52	2.15	485	103.4	9.27	9.13
HMF.600XT.04.15..	15	52	1.44	485	103.4	9.27	9.13
HMF.600XT.06.15..	15	52	1.84	85	103.4	9.27	9.13
HMF.600XT.08.15..	15	52	2.15	485	103.4	9.27	9.13
HMF.400XT.04.20..	20	52	1.44	627	175.9	10.43	11.94
HMF.400XT.06.20..	20	52	1.86	27	175.9	10.43	11.94
HMF.400XT.08.20..	20	52	2.15	627	175.9	10.43	11.94
HMF.400CDMT3.04.20..	20	52	1.44	627	175.9	10.43	11.94
HMF.400CDMT3.06.20..	20	52	1.86	27	175.9	10.43	11.94
HMF.400CDMT3.08.20..	20	52	2.15	627	175.9	10.43	11.94
HMF.600XT.04.20..	20	52	1.44	627	175.9	10.43	11.94
HMF.600XT.06.20..	20	52	1.86	27	175.9	10.43	11.94
HMF.600XT.08.20..	20	52	2.15	627	175.9	10.43	11.94
HMF.400XT.04.25..	25	52	1.44	1087	274.7	14.75	15.84
HMF.400XT.06.25..	25	52	1.8	1087	274.7	14.75	15.84
HMF.400XT.08.25..	25	52	2.15	1087	274.7	14.75	15.84
HMF.400CDMT3.04.25..	25	52	1.44	1087	274.7	14.75	15.84
HMF.400CDMT3.06.25..	25	52	1.8	1087	274.7	14.75	15.84
HMF.400CDMT3.08.25..	25	52	2.15	1087	274.7	14.75	15.84
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HMF.600XT.06.25..	25	52	1.8	1087	274.7	14.75	15.84
HMF.600XT.08.25..	25	52	2.15	1087	274.7	14.75	15.84
HMF.400XT.04.30..	30	52	1.44	1584	415.7	19.32	21.54
HMF.400XT.06.30..	30	52	1.8	1584	415.7	19.32	21.54
HMF.400XT.08.30..	30	52	2.15	1584	415.7	19.32	21.54
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HMF.600XT.08.30..	30	52	2.15	1584	415.7	19.32	21.54

## HMC luminaire technical data

Mast Reference	Height (m)	Wind Speed (m/s)	Effective Protected Area (m <sup>2</sup> )	Mast System Weight (kg)	Maximum Over Turning Moment (kNm)*	Vertical Load (kN)	Horizontal Shear at Ground Level (kN)
HMC.400XT.04.15..	15	52	0.97	485	103.4	9.27	9.13
HMC.400XT.06.15..	15	52	1.26	485	103.4	9.27	9.13
HMC.400XT.08.15..	15	52	1.56	485	103.4	9.27	9.13
HMC.400XT.09.15..	15	52	1.71	485	103.4	9.27	9.13
HMC.400XT.10.15..	15	52	1.86	485	103.4	9.27	9.13
HMC.400XT.12.15..	15	52	2.15	485	103.4	9.27	9.13
HMC.400CDMT3.04.15..	15	52	0.97	485	103.4	9.27	9.13
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HMC.400CDMT3.10.15..	15	52	1.86	485	103.4	9.27	9.13
HMC.400CDMT3.12.15..	15	52	2.15	485	103.4	9.27	9.13
HMC.1000ST.04.15..	15	52	0.97	485	103.4	9.27	9.13
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HMC.1000MVT.04.15..	15	52	0.97	485	103.4	9.27	9.13
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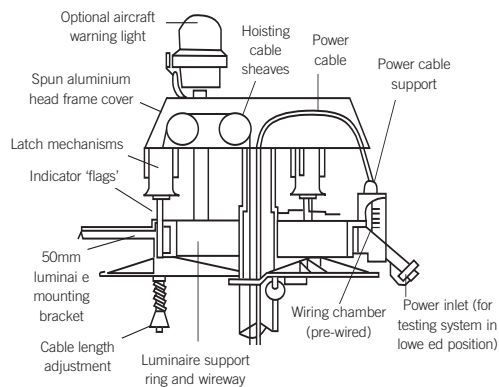
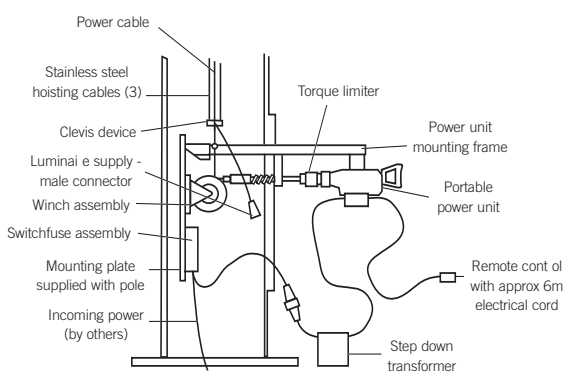
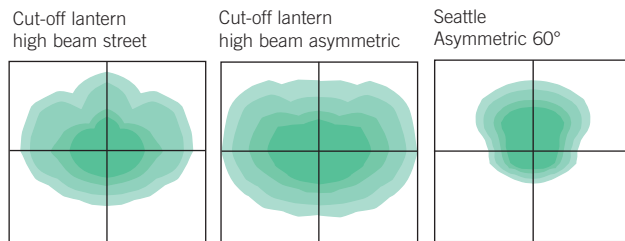
**headframe & mast specification**

The Holophane High Mast System shall consist of a headframe mounting ring, for luminaire/floodlight mounting, winch assembly and suitably rated switchfuse mounted in the mast base, complete with foundation set. Holophane recognises the importance to provide full technical support and to provide all necessary information when selecting High Mast. Please refer to your local Holophane sales engineer for full details.

**safe, dependable raise and lower system**

The luminaire mounting ring is raised and lowered by means of 3 heavy-duty stainless steel cables. Ring stability throughout the raise/lower operation is ensured by three continuous contact iris action guide arms, allowing safe operation of the raise and lower system in up to 48km/hr (Force 7) winds.

**light distributions**



**headframe & mast specification**

cont.

**positive fail-safe latching**

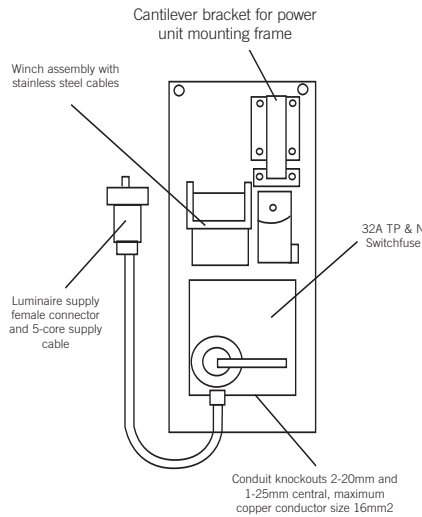
Whilst the luminaire ring is 'docked' at the top of the column, its weight is supported by three fail-safe latch mechanisms. In this position, the stainless steel cables are totally stress-free, ensuring long cable life. Indicator 'flags' automatically turn during the latching process, providing a visible signal to the operator on the ground that the mechanism is securely locked.

**remote control power tool**

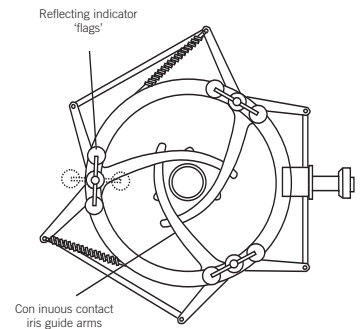
The luminaire supply is disconnected at ground level and used to energise the power tool. This isolates the luminaires prior to lowering. The power tool easily engages with the winch situated in the base of each column. A single power tool can service a complete site. They permits the operator to stand up to 6 metres from the base of the column.

**ground level maintenance**

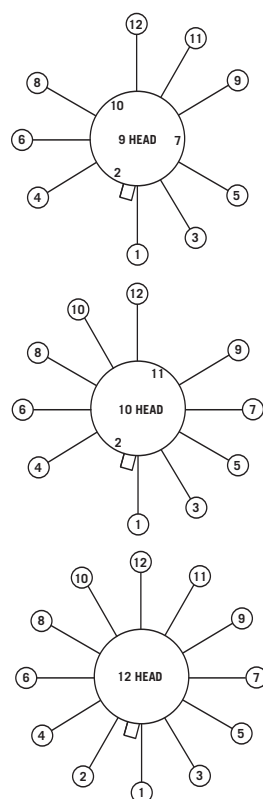
A weatherproof power socket mounted on the luminaire ring enables the system to be energised and tested at ground level. The normal mast electrical supply is used for this purpose without the requirement for additional extension cables. There is no electromechanical disconnect at the top of the column and therefore all maintenance is carried out at ground level.



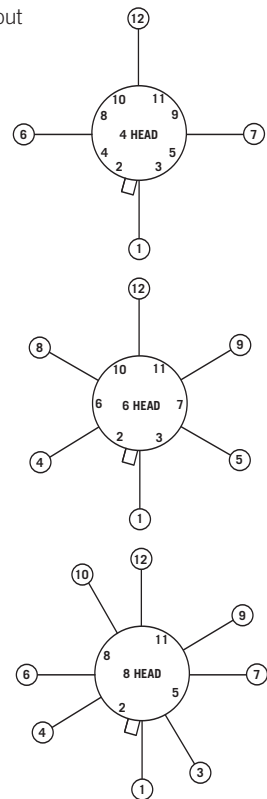
Switchfuse & Winch Assemblies



Mounting Ring Top View



luminaire layout





ordering details : luminaire

Code						
NHMC	High Mast Cut-off (Full) Lantern					
	Code	Lamp Type				
	.400XT	400W Clear high output HPS lamp (E40) base				
	.400CDMT3	400W Clear 3000K horizontal ceramic metal halide (E40) base				
	.1000ST	1000W Clear standard HPS lamp (E40) base				
	.1000MVT	1000W MV Clear 4000K unprotected metal halide lamp (E40) base				
	Code	Luminaires per Mast				
	.04	4 Heads				
	.06	6 Heads				
	.08	8 Heads				
	.09	9 Heads				
	.10	10 Heads				
	.12	12 Heads				
	Code	Mast Height				
	.15	15 metres				
	.20	20 metres				
	.25	25 metres				
	.30	30 metres				
	Code	Light Distribution				
	.LA	Low beam asymmetric				
	.HA	High beam asymmetric				
	.LN	Low beam street				
	.HN	High beam street				
	.LS	Low beam symmetric				
	.MS	Medium beam symmetric				
	.HS	High beam symmetric				
	Code	Options				
	.C	Enhanced paint finish				
Example	NHMC	.1000ST	.08	.30	.HN	.C

Note: Other voltages available on request. Timed ignitors available on request. For photocell and aircraft warning light options please refer to Holophane.

luminaire accessories

order separately for on-site installation by others

Code	
HMS.FS15	Foundation set for 15 metre mast
HMS.FS20	Foundation set for 20 metre mast
HMS.FS25	Foundation set for 25 metre mast
HMS.FS30	Foundation set for 30 metre mast
HMS.PT1	Power Tool (only one required per site)

## ordering details : luminaire



## Code

NHMF High Mast Seattle Floodlight\*

Code	Lamp Type Supplied
.400XT	400W Clear high output HPS lamp (E40) base
.600XT	600W Clear high output HPS lamp (E40) base
.400CDMT3	400W Clear 3000K horizontal ceramic metal halide (E40) base

Code	Luminaires per Mast
.04	4 Heads
.06	6 Heads
.08	8 Heads

Code	Mast Height
.15	15 metres
.20	20 metres
.25	25 metres
.30	30 metres

Code	Distribution
.AY	42° Asymmetric
.AY60	60° Asymmetric

Example	Code	Lamp Type Supplied	Luminaires per Mast	Mast Height	Distribution
	NHMF	.400XT	.08	.20	.AY60

\* Luminaire finished in black, with 60mm post-top spigot as standard. Note: Other voltages available on request.

## luminaire accessories

order separately for on-site installation by others

## Code

<b>HMS.FS15</b>	Foundation Set for 15 metre Mast
<b>HMS.FS20</b>	Foundation Set for 20 metre Mast
<b>HMS.FS25</b>	Foundation Set for 25 metre Mast
<b>HMS.FS30</b>	Foundation Set for 30 metre Mast
<b>HMS.PT1</b>	Power Tool (only one required per site)
<b>HMS.T4</b>	Template for 15 metre Mast
<b>HMS.T5</b>	Template for 20 metre Mast
<b>HMS.T6</b>	Template for 25 metre Mast
<b>HMS.T7</b>	Template for 30 metre Mast
<b>HMS.WH1</b>	Winch Handle