



**BPO LIGHTING**  
*Hazardous Area Lighting*

# HAL HL



**Class 1 Division 2** 

## Key Features

- |                  |   |
|------------------|---|
| <b>FEATURES:</b> | Round Low Bay Area Light<br><b>Extremely</b> Rugged<br>Compact<br>High lm/W<br>BAA (Buy American Act) |
| <b>OPTIONS:</b>  | 2 Body Sizes (HL & HLL)<br>10 Mounting Styles<br>Military Grade Lens                                  |

# Compliance

UL 844 Hazardous Locations  
Class I Division 2 Groups A, B, C, D  
Class I Zone 2 Group IIB  
Class II Division 1 Groups E, F  
Class II Division 2 Groups E, F  
Class II Zone 20, 21, or 22 Group II B  
Class III  
UL 1598 Suitable for Wet Locations  
UL 1598A Marine Saltwater  
CSA C22.2 No. 250.0  
CSA C22.2 No. 137  
IP66  
1Ex d IIC T5 @-40°C to +55°C (-40°F to +131°F)



**(BAA)** Fully compliant with the Buy American Act, meeting the requirements for domestic manufacturing and material sourcing as outlined in 41 U.S.C. §§

# Applications

## Oil and Gas

Petroleum production and refining  
Petroleum loading, storage, transportation and retail  
Confined spaces with vapor accumulation  
LNG and LPG handling  
Oil tanker and shipping vessels  
Fuel system testing facilities

## Power Plants

Coal-fired power plants, including coal handling and storage areas  
Gas-fired power plants with fuel storage  
Nuclear power facilities in hazardous auxiliary areas  
Biomass or waste-to-energy plants with combustible dust risks

## Industrial

Industrials Storage Facility  
Paper mills, Sawmills and lumber yards  
Loading Docks Platforms  
Manufacturing plants for heavy industrial goods  
Warehouses handling flammable materials

## Waste Treatment

Wastewater Treatment Plants  
Pumping Stations  
Solid waste processing and incineration facilities  
Sewage treatment with methane gas risks  
Hazardous waste Recycling Centers

## Mining

Operations and service  
Underground mining tunnels with gas accumulation

## Chemical Industry

Chemical production, processing facilities and storage  
Solvent handling and mixing areas  
Chemical research labs with flammable substances

## Ocean, marine and aerospace

Ocean platform operation facilities and structure  
Marine & Saltwater Environments  
Aerospace clean room and production  
Ocean vessel operations  
Shipyards and dry docks  
Aircraft hangars with fuel vapors

## Metal treatment

Paint facilities  
Steel and aluminum factories  
Metal smelting, foundry and fabrication  
Welding and cutting areas with gas risks

## Military and Defense

Ammunition storage and handling  
Fuel depots and refueling stations  
Explosives manufacturing  
Vehicle maintenance bays in hazardous zones

## Food alcohol and Agriculture industry

Flour and fine particle production and storage  
Food and distilling production  
Grain storage elevators and silos  
Breweries and fermentation tanks  
Feed mills with dust risks  
Fertilizer production and storage

## Pharmaceutical Industry

Drug manufacturing and solvent handling  
Clean rooms with volatile compounds  
Pill coating and drying areas  
Research and development labs

**Other high humidity, high dust, high temperature and vapor locations**

# Specifications

Wattage	36W	60W
OPTICAL		
Lumen Output	5200 lm (GM) 4900 lm (XPC)	8700 lm (GM) 8100 lm (XPC)
Lumens Per Watt	140 lm/W (GM) 135 lm/W (XPC)	135 lm/W (GM) 130 lm/W (XPC)
Color Temperature: CCT	5000K (standard), 3000-5000K options	
CRI (Color Rendering Index)	> 70	
Beam Angle	120°	
Light Source	Samsung LEDs / R1	
ENVIRONMENTAL		
Ambient Operating Temperature	-40°C to +55°C (-40°F to +131°F)	-40°C to +45°C (-40°F to +113°F)
Temperature Code	T5 (+55°C), T6 (+50°C)	T6 (+45°C)
MECHANICAL		
Housing Material	Copper free aluminum alloy	
Lens Diffuser	<b>G</b> : Borosilicate glass <b>GM</b> : Tempered borosilicate glass <b>XPC</b> : Extreme polycarbonate lens (Military lens)	
Hardware	Marine grade stainless steel	
Finish	Polyester powder coat finish	
Mounting	<b>SB</b> : Swivel Bracket <b>PM</b> : Pendant Mount <b>SAB</b> : Stanchion Mount 25° <b>SSB</b> : Stanchion Mount 90° <b>WAB</b> : Wall Mount 25° <b>WMB</b> : Wall Mount 90° <b>CMB</b> : Ceiling Mount <b>EMB</b> : Eye-Bolt Mount <b>SBB</b> : Swivel Bracket <b>PMB</b> : Pendant Mount	
Cable Entry	Classified for CID2 nickel plated brass adapter from M20 to 3/4" with 6' of wire	
Warranty	5 Year Standard Warranty	

## ELECTRICAL

Lifespan	L70> 70,000 Operational Hours @ 25°C L70> 40,000 Operational Hours @ 55°C	L70> 100,000 Operational Hours @ 25°C L70> 50,000 Operational Hours @45°C
Input Frequency	50/60Hz	
Power Factor	> 0.95	
THD (Total Harmonic Distortion)	< 30%	<20%
LED Driver	Custom made 20-277VAC, 230-370VDC	MeanWell 90-295 VAC/127-417VDC
LED Driver Protection	Short circuit, over temperature, over voltage	Short circuit, over temperature,
Surge Protection	1kV	2kV
Inrush Current	27A	45A

## Ordering Logic

ORDER EXAMPLE: HAL HL SB GM RV 120 5K 36W

(1) Product	(2) Product Category	(3) Mounting	(4) Lens
HAL	HL - Hazardous Location Rated Body (36W)  HLL - Hazardous Location Rated Extra-Large Body (36/60W)	SB - Swivel Bracket (S) PM - Pendant Mount  SAB - Stanchion Mount 25° SSB - Stanchion Mount 90°  WAB - Wall Mount 25° WMB - Wall Mount 90°  CMB - Ceiling Mount EMB - Eye-Bolt Mount SBB - B-type Swivel Bracket PMB - B-type Pendant Mount	G - Borosilicate Glass GM - Borosilicate Glass and Mesh Guard  XPC - Extreme Polycarbonate Lens
(5) Voltage	(6) Optics	(7) Kelvin	(8) Wattage
RV - 120-277VAC	120 - 120°	3K - 3000 K 4K - 4000 K 5K - 5000 K(S)	36W (GM 5,200lm/XPC 4,900lm) 60W (GM 8,700lm/XPC 8,100lm)

(S) Standard



# Accessories



**CMB - Ceiling**



**SSB - Pedant**



**WAB - Pedant**



**PMB - Pedant**



**SAB - Pedant**



**PMB - Pedant**



**YMB - Pedant**



**WMB - Pedant**

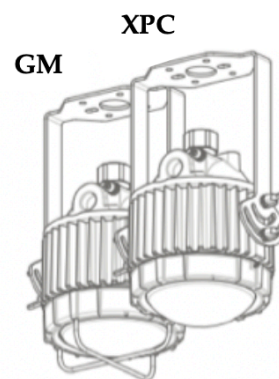
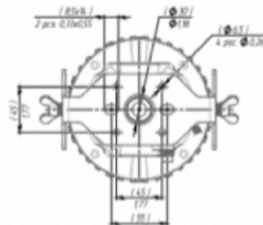
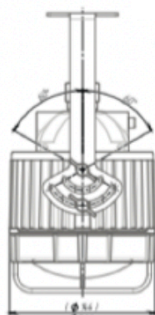
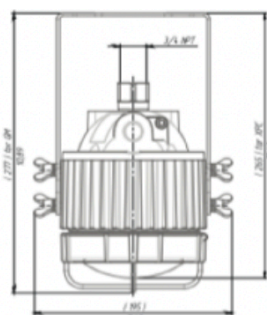
## Product Dimensions

### HAL-HL-SB 36W

Swivel Bracket

Fixture Weight: GM 8.16 lb [3.7 kg]

XPC 7.29 lb [3.3 kg]

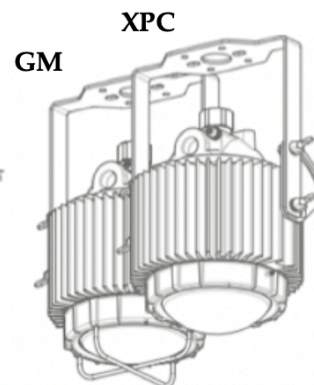
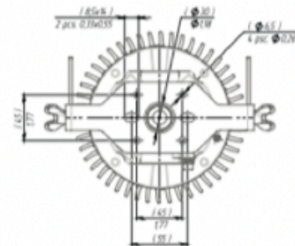
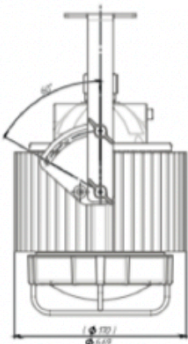
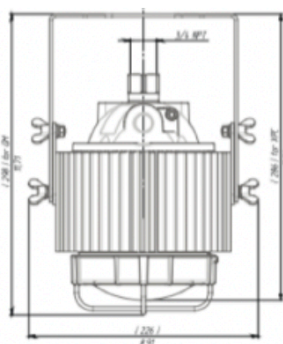


### HAL-HL-SB 60W

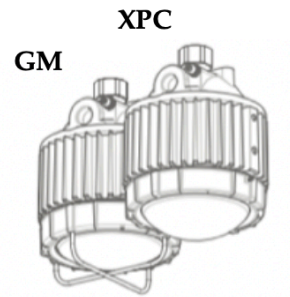
Swivel Bracket

Fixture Weight: GM 12.15 lb [5.5 kg]

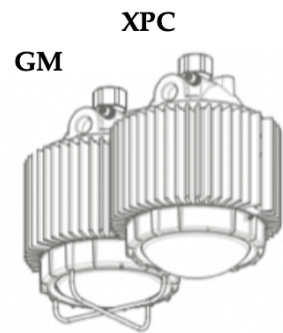
XPC 11.33 lb [5.1 kg]



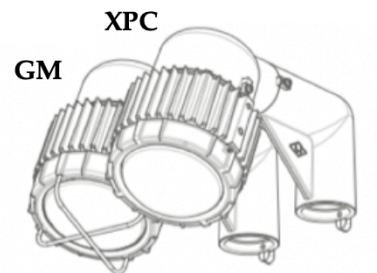
Fixture Weight: GM 6.97 lb [3.2 kg]  
XPC 6.17 lb [2.8 kg]



Fixture Weight: GM 10.67 lb [4.9 kg]  
XPC 9.85 lb [4.5 kg]



Fixture Weight: GM 9.90 lb [4.5 kg]  
XPC 9.08 lb [4.1 kg]

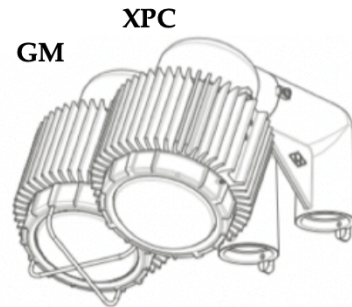
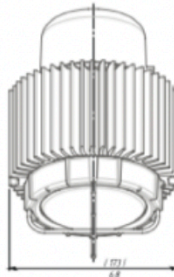
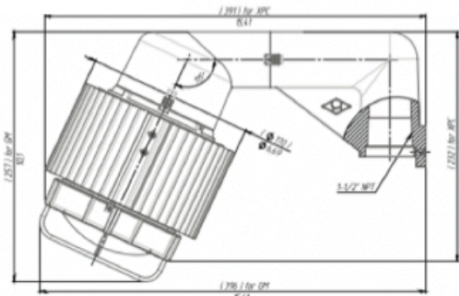


### HAL-HL-SAB 60W

Stanchion Mount 25°

Fixture Weight: GM 13.60 lb [6.2 kg]

XPC 12.78 lb [5.8 kg]

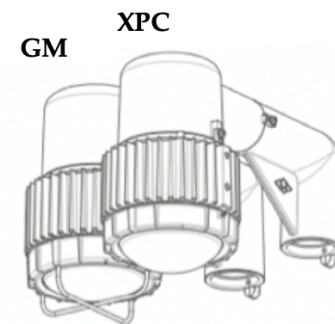
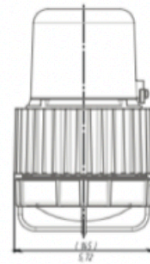
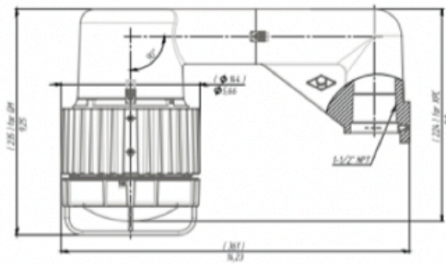


### HAL-HL-SSB 36W

Stanchion Mount 90°

Fixture Weight: GM 10.41 lb [4.7 kg]

XPC 9.59 lb [4.4 kg]

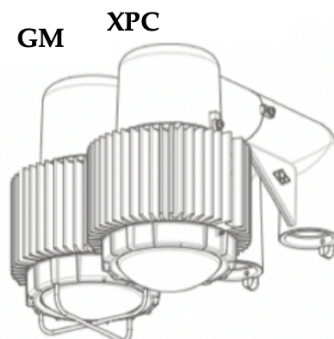
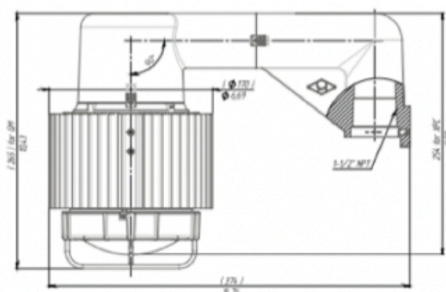


### HAL-HL-SSB 60W

Stanchion Mount 90°

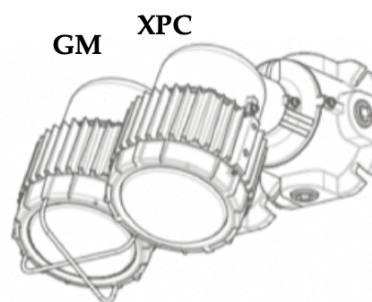
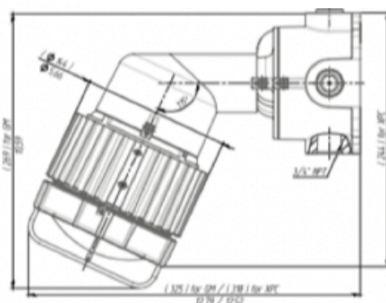
Fixture Weight: GM 14.11 lb [6.4 kg]

XPC 13.27 lb [6.0 kg]

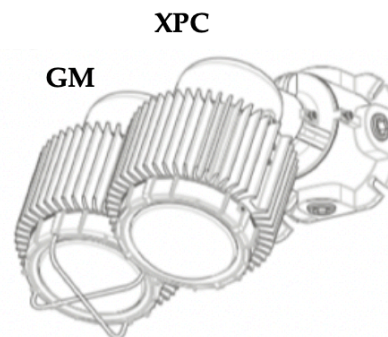
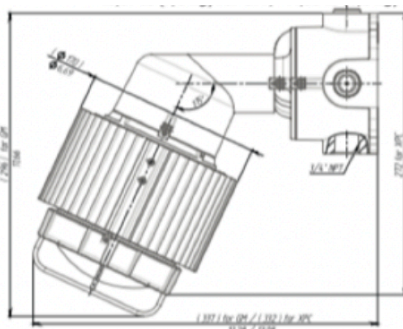




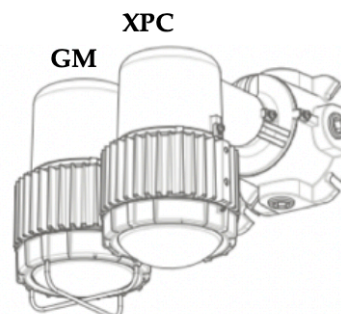
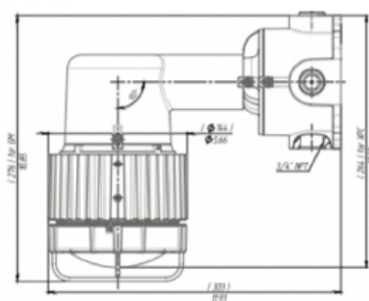
Fixture Weight: GM 11.68 lb [5.3 kg]  
XPC 10.87 lb [4.9 kg]



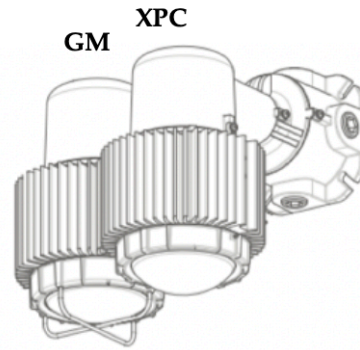
Fixture Weight: GM 15.37 lb [7.0 kg]  
XPC 14.55 lb [6.6 kg]



Fixture Weight: GM 12.17 lb [5.5 kg]  
XPC 11.38 lb [5.2 kg]



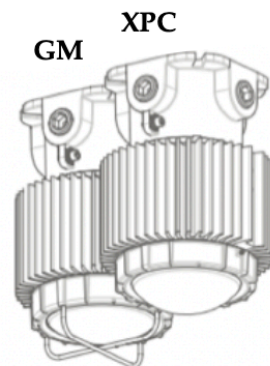
Fixture Weight: GM 15.87 lb [7.2 kg]  
XPC 15.06 lb [6.8 kg]



Fixture Weight: GM 9.66 lb [4.4 kg]  
XPC 8.84 lb [4.0 kg]



Fixture Weight: GM 13.36 lb [6.1 kg]  
XPC 12.54 lb [5.7 kg]



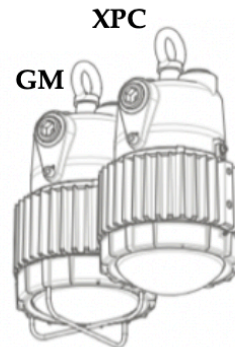
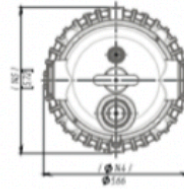
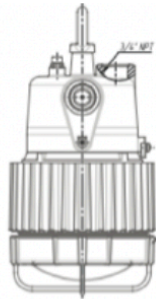
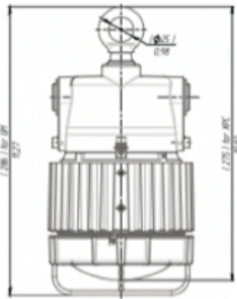


### HAL-HL-EMB 36W

Eye-Bolt Mount

Fixture Weight: GM 8.71 lb [4.0 kg]

XPC 7.91 lb [3.6 kg]

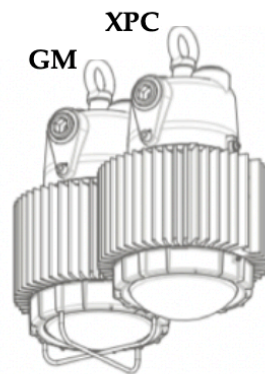
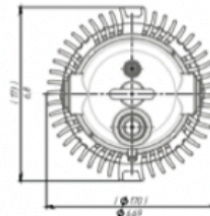
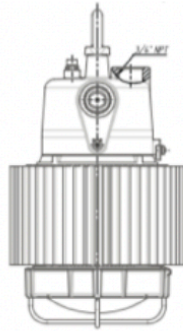
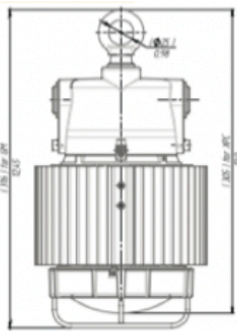


### HAL-HL-EMB 60W

Eye-Bolt Mount

Fixture Weight: GM 12.41 lb [5.7 kg]

XPC 11.60 lb [5.3 kg]

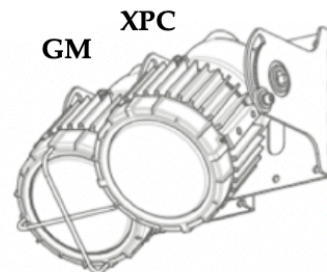
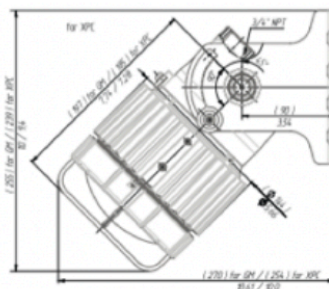
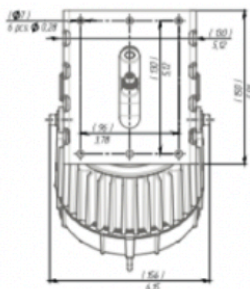


### HAL-HL-SBB 36W

Swivel Bracket

Fixture Weight: GM 10.60 lb [4.8 kg]

XPC 9.79 lb [4.4 kg]

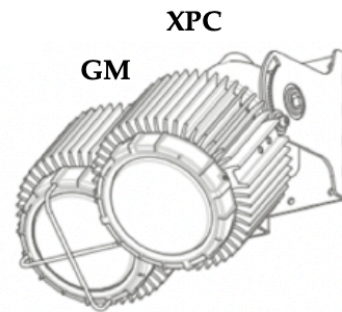
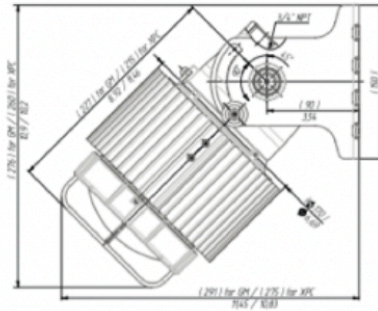
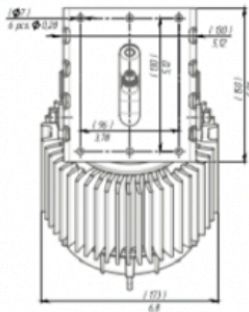


### HAL-HL-SBB 60W

Swivel Bracket

Fixture Weight: GM 14.29 lb [6.5 kg]

XPC 13.49 lb [6.1 kg]

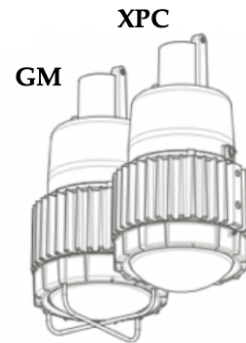
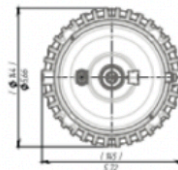
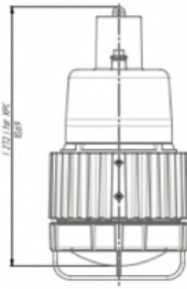
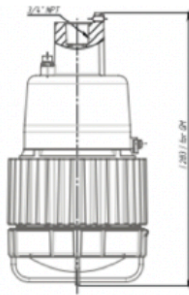


### HAL-HL-PMB 36W

Pendant Mount

Fixture Weight: GM 8.28 lb [3.8 kg]

XPC 7.47 lb [3.4 kg]

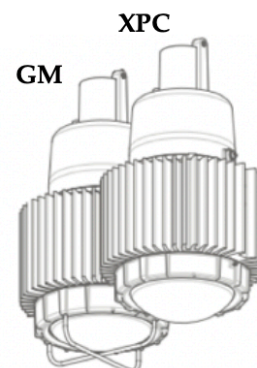
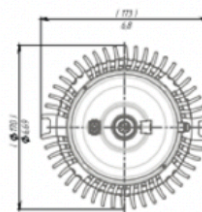
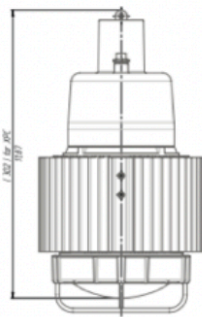
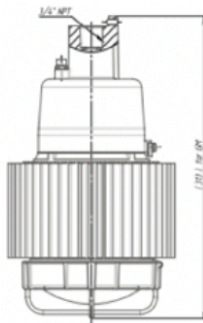


### HAL-HL-PMB 60W

Pendant Mount

Fixture Weight: GM 11.97 lb [5.4 kg]

XPC 11.15 lb [5.0 kg]



# Packaging Information

	36W		60W	
	GM	XPC	GM	XPC
Pieces	1		1	
Fixture Dimensions	See Product Dimensions Drawing		See Product Dimensions Drawing	
Net Fixture Weight	6.97 LBS (3.2 KG) Swivel Bracket 8.16 lb (3.7 kg) Pendant Mount 6.97 lb (3.2 kg) Stanchion Mount 25° 9.90 lb (4.5 kg) Stanchion Mount 90° 10.41 lb (4.7 kg) Wall Mount 25° 11.68 lb (5.3 kg) Wall Mount 90° 12.17 lb (5.5 kg) Ceiling Mount 9.66 lb (4.4 kg) Eye-Bolt Mount 8.71 lb (4.0 kg) Swivel Bracket 10.60 lb (4.8 kg) Pendant Mount 8.28 lb (3.8 kg)	6.17 LBS (2.8 KG) Swivel Bracket 7.29 lb (3.3 kg) Pendant Mount 6.17 lb (2.8 kg) Stanchion Mount 25° 9.08 lb (4.1 kg) Stanchion Mount 90° 9.59 lb (4.4 kg) Wall Mount 25° 10.87 lb (4.9 kg) Wall Mount 90° 11.38 lb (5.2 kg) Ceiling Mount 8.84 lb (4.0 kg) Eye-Bolt Mount 7.91 lb (3.6 kg) Swivel Bracket 9.79 lb (4.4 kg) Pendant Mount 7.47 lb (3.4 kg)	10.67 LBS (4.9 KG) Swivel Bracket 12.15 lb (5.5 kg) Pendant Mount 10.67 lb (4.9 kg) Stanchion Mount 25° 13.60 lb (6.2 kg) Stanchion Mount 90° 14.11 lb (6.4 kg) Wall Mount 25° 15.37 lb (7.0 kg) Wall Mount 90° 15.87 lb (7.2 kg) Ceiling Mount 13.36 lb (6.1 kg) Eye-Bolt Mount 12.41 lb (5.7 kg) Swivel Bracket 14.29 lb (6.5 kg) Pendant Mount 11.97 lb (5.4 kg)	9.85 LBS (4.5 KG) Swivel Bracket 11.33 lb (5.1 kg) Pendant Mount 9.85 lb (4.5 kg) Stanchion Mount 25° 12.78 lb (5.8 kg) Stanchion Mount 90° 13.27 lb (6.0 kg) Wall Mount 25° 14.55 lb (6.6 kg) Wall Mount 90° 15.06 lb (6.8 kg) Ceiling Mount 12.54 lb (5.7 kg) Eye-Bolt Mount 11.60 lb (5.63 kg) Swivel Bracket 13.49 lb (6.1 kg) Pendant Mount 11.15 lb (5.0 kg)



