

## LDV15

### Lowering Device



Catalog Number	
Notes	Type

#### Construction

The lowering device shall consist of three main sub-assemblies; head frame, lowering ring and winch assembly. All material shall be of corrosive resistant nature including stainless steel, aluminum or galvanized steel unless otherwise specified. All fixtures utilized on the lowering device shall have passed an accelerated vibration test of at least 1G.

**Head Frame:** The head frame shall consist of one-piece welded assembly with hot dip galvanized finish after fabrication. All fasteners used for additional covers or other item shall be stainless steel. The head frame shall incorporate six hoist cable sheaves. The sheaves shall meet or exceed the requirements of the Wire Rope Technical Board. Wire rope cables that operate over the sheaves shall be 7 X 19 construction aircraft cable Ø3/16" or Ø1/4" diameter, as specified, either zinc coated or stainless steel.

**Top Latching:** Three one-piece cast aluminum latch barrels shall be provided on the head frame assembly. Each latch barrel shall be designed to hold the entire weight of the ring and luminaires.

**Ring Assembly:** The ring shall be fabricated of #7-gauge steel with a hot dip galvanized finish. The assembly shall include the appropriate number of luminaires mounting arm brackets fabricated from 2" pipe of sufficient strength to support the specified luminaire. The mounting arms shall be hot dip galvanized finished and shall bolt to the ring with stainless steel hardware.

**Self-centering ring assembly:** The centering system shall consist of roller contact, spring loaded, cast aluminum arms designed to protect the pole, luminaires, and lamps from damage during raising and lowering of the luminaire ring assembly. The centering system shall keep the ring concentric to the pole during the raising and lowering operation.

**Transition Assembly:** The transition assembly shall be designed to prevent misalignment of the three hoist cables. The wire rope cables shall be attached to the transition assembly with properly sized wire rope thimbles and factory swagged fittings. The attachment shall prevent the wire rope cable from untwisting under load.

**Branch Circuit Protection:** The assembly shall include a circuit breaker sized for the correct voltage and phasing supplied for the luminaire. A pigtail cord and plug shall be supplied from the circuit breaker assembly. The cord and plug shall match the main power cord of the lowering device system.

**Portable Winch and Drive Motor:** The portable winch assembly shall have an ultimate strength of five (5) times the lifted load. The winch shall include a 30:1 worm gear reduction and an internal drag brake on the input shaft to prevent free spooling of the winch drum. The portable drive motor assembly shall include a minimum 1hp heavy duty reversing type electric motor with a stalled torque at least twice that required to operate the lowering device. The motor shall drive the winch through a torque limiter coupling to limit the drive force on the hoist and winch cables. The torque limiter shall be factory pre-set. In addition, there shall be a backup shear pin designed to shear at a torque level between 50% and 100% over the torque limiter setting. The portable drive motor assembly shall have a 20 feet cord with drum switch for remote operation. The portable drive motor assembly shall be supplied with a step-down transformer to provide 120V to the motor.

#### Government Procurement

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to [www.acuitybrands.com/resources/buy-american](http://www.acuitybrands.com/resources/buy-american) for additional information.

#### Warranty

2-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

[www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application.

ORDERING INFORMATION

Example: LDV15 1C 06ARM HMLED4LUM P4 KPHASE 100 FS LR

Prefix		Number of Circuitry		Quantity of Luminaires		Luminaire Series		Performance Package		
LDV15	A Top Latching, Centering Arm Unit	1C	One Circuit	02ARM	Two (2) Luminaires per pole	ACP1LEDLUM	AEL LED Floodlight (Yoke Mount Only)	P10	ACP1LED ACP2LED	
		2C	Two Circuit	03ARM	Three (3) Luminaires per pole	ACP2LEDLUM	AEL LED Floodlight (Yoke Mount Only)	P20	ACP1LED ACP2LED	
				04ARM	Four (4) Luminaires per pole			P30	ACP1LED ACP2LED	
				05ARM	Five (5) Luminaires per pole	MGLEDLUM	Mongoose LED Roadway (Arm Mount Only)	P40	ACP1LED ACP2LED	
				06ARM	Six (6) Luminaires per pole			P50	ACP1LED ACP2LED	
				07ARM	Seven (7) Luminaires per pole	PLLEDLUM	Large Predator Floodlight LED (Yoke Mount Only)	P1	HMLED4 MGLED PLLED PMLED	
				08ARM	Eight (8) Luminaires per pole	PMLEDLUM	Medium Predator Floodlight LED (Yoke Mount Only)	P2	HMLED4 MGLED PLLED PMLED	
				09ARM	Nine (9) Luminaires per pole			P3	HMLED4 MGLED PLLED PMLED	
				10ARM	Ten (10) Luminaires per pole	HMLED4LUM	Hight Mast LED 4	P4	HMLED4 MGLED PLLED PMLED	
				12ARM				Twelve (12) Luminaires per pole	P5	HMLED4 MGLED PLLED PMLED
									P6	HMLED4 MGLED PLLED PMLED
						P7	HMLED4 MGLED PLLED PMLED			

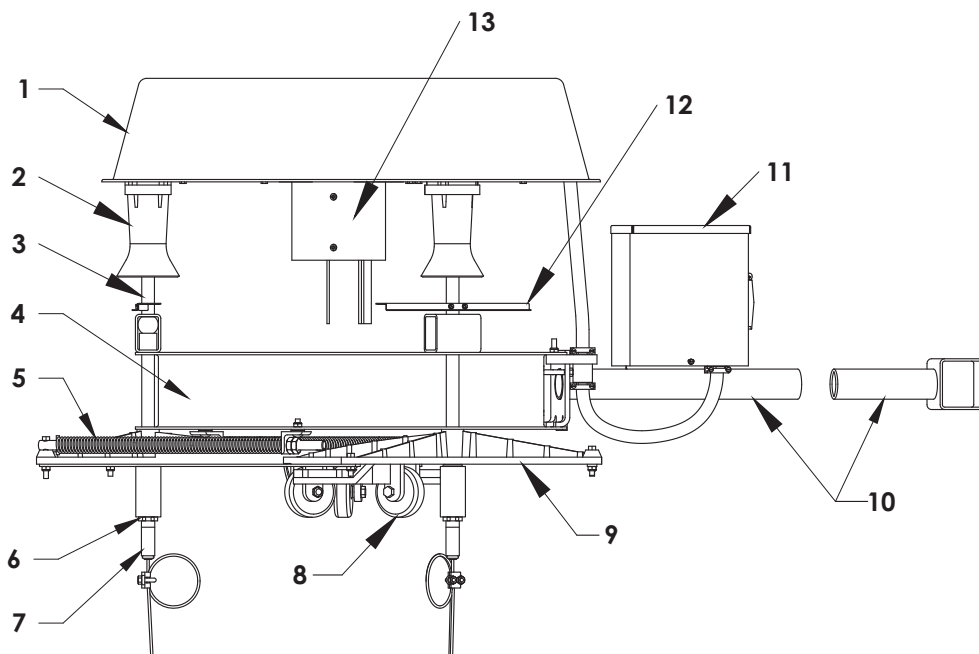
Voltage, Phasing and Frequency	Pole Height	Cable Type	Options
APHASE    120V Single Phase 60HZ <sup>1</sup>	50    50 Feet <sup>5</sup> 15M    15 Meters <sup>5</sup>	EG    Galvanized Ø3/16" diameter Hoisting Cables	LACB    Lightning Arrestor on Circuit Breaker Enclosure in Pole Base
BPHASE    120V/208V 3 Phase 4 Wire 60HZ <sup>2</sup>	60    60 Feet <sup>5</sup> 20M    20 Meters <sup>5</sup>	FS    Stainless Steel Ø3/16" diameter Hoisting Cables	LAJB    Lightning Arrestor on Ring Junction Box
CPHASE    208V Single Phase 60HZ	70    70 Feet <sup>5</sup> 25M    25 Meters <sup>5</sup>		PR    Photocontrol Receptacle on Ring Junction Box <sup>3,4</sup>
DPHASE    208V 3 Phase 60HZ	80    80 Feet <sup>5</sup> 30M    30 Meters <sup>5</sup>		LR    Lightning Rod
EPHASE    240V Single Phase Line to Line 60HZ	90    90 Feet <sup>5</sup> 35M    35 Meters <sup>5</sup>		9249    LD Leveling Block Assembly
FPHASE    240V Single Phase Line to Neutral 60HZ	100    100 Feet <sup>5</sup>		
GPHASE    277V Single Phase 60HZ	110    110 Feet <sup>5</sup>		
HPHASE    277/480V 3 Phase 4 Wire 60HZ Luminaires are 277V <sup>2</sup>	120    120 Feet <sup>5</sup>		
JPHASE    347/600V 3 Phase 4 Wire 60HZ <sup>2</sup>			
KPHASE    480V Single Phase 60HZ			
LPHASE    480V 3 Phase 60HZ			

Options (continued)							
FAA1120	FAA Single Aircraft Warning Light 120V <sup>3</sup>	FAA2120	FAA Double Aircraft Warning Light 120V <sup>3</sup>	FWC02	Fixed Wireway Cover on Ring for 2 Luminaires. Not available with FAA.	FWCFAA02	Fixed Wireway Cover on Ring for 2 Luminaires with FAA Option. <sup>6</sup>
FAA1208	FAA Single Aircraft Warning Light 208V <sup>3</sup>	FAA2208	FAA Double Aircraft Warning Light 208V <sup>3</sup>	FWC03	Fixed Wireway Cover on Ring for 3 Luminaires. Not available with FAA.	FWCFAA03	Fixed Wireway Cover on Ring for 3 Luminaires with FAA Option. <sup>6</sup>
FAA1240	FAA Single Aircraft Warning Light 240V <sup>3</sup>	FAA2240	FAA Double Aircraft Warning Light 240V <sup>4</sup>	FWC04	Fixed Wireway Cover on Ring for 4 Luminaires. Not available with FAA.	FWCFAA04	Fixed Wireway Cover on Ring for 4 Luminaires with FAA Option. <sup>6</sup>
FAA1277	FAA Single Aircraft Warning Light 227V <sup>3</sup>	FAA2277	FAA Double Aircraft Warning Light 277V <sup>3</sup>	FWC05	Fixed Wireway Cover on Ring for 5 Luminaires. Not available with FAA.	FWCFAA06	Fixed Wireway Cover on Ring for 6 Luminaires with FAA Option. <sup>6</sup>
FAA1480	FAA Single Aircraft Warning Light 480V <sup>3</sup>	FAA2480	FAA Double Aircraft Warning Light 480V <sup>3</sup>	FWC06	Fixed Wireway Cover on Ring for 6 Luminaires. Not available with FAA.	FWCFAA08	Fixed Wireway Cover on Ring for 8 Luminaires with FAA Option. <sup>6</sup>
				FWC07	Fixed Wireway Cover on Ring for 7 Luminaires. Not available with FAA.	FWCFAA09	Fixed Wireway Cover on Ring for 9 Luminaires with FAA Option. <sup>6</sup>
				FWC08	Fixed Wireway Cover on Ring for 8 Luminaires. Not available with FAA.	FWCFAA10	Fixed Wireway Cover on Ring for 10 Luminaires with FAA Option. <sup>6</sup>
				FWC09	Fixed Wireway Cover on Ring for 9 Luminaires. Not available with FAA.		
				FWC10	Fixed Wireway Cover on Ring for 10 Luminaires. Not available with FAA.		
				FWC12	Fixed Wireway Cover on Ring for 12 Luminaires. Not available with FAA.		

**Notes**

- 1 Single Circuit. P4 LED available with to and including 10 luminaires per pole.  
 Single Circuit. HMLED4 P4 LED available with up to and including 9 luminaires per pole.  
 Single Circuit. HMLED4 P5 LED available with up to and including 8 luminaires per pole.  
 Single Circuit. HMLED4 P6 LED available with up to and including 8 luminaires per pole.  
 Single Circuit. HMLED4 P7 LED available with up to and including 8 luminaires per pole.  
 Single Circuit. MGLED P7 LED available with up to and including 10 luminaires per pole.  
 Single Circuit. PLLED P5 LED available with up to and including 10 luminaires per pole.  
 Double Circuit. HMLED4 P6 LED available with up to and including 10 luminaires per poles.  
 Double Circuit. HMLED4 P7 LED available with up to and including 2,3,4,7,8,9 and 10 luminaires per pole.
- 2 Double Circuit. Not available with Double Circuits
- 3 Customer can order only one FAA Aircraft Warning Light per Lowering Device.  
 FAA Aircraft Warning Light operates on the lower system voltage entering the pole. Example If system voltage entering pole is 277/480V, then the FAA transformer operates off of 277V.  
 FAA Aircraft Warning Light operation is ON and OFF with luminaires. When ordered with Photo Control Receptacle Option, warning light in wired through receptacle. For alternate operation, or separate circuit, contact PSG.
- 4 PR Photo Control Receptacle. Not available with JPHASE 347/600V. Single Circuit 1 all luminaires are controlled by photo control receptacle photocell and contactor. For double circuit 2, half of the luminaires are controlled by photo control receptacle photocell and contactor for an even number of luminaires. For an odd number of luminaires, one less than half luminaires are controlled. Photo Control Receptacle operates on the higher system voltage entering the pole. If system voltage is 277/480V, then the receptacle operates off of 480V. Photocell provided by customer operates on the higher system voltage entering the pole.
- 5 If customer has voltage drop specifications, contact PSG. Voltage drop on pole power cord due to the pole height is not calculated on standard lowering devices. When customer specifications require that the pole power cord may not exceed specified voltage drop, with the pole height must be reduced or the gauge of the power cord must be increased. Contact PSG.
- 6 FWCFAA is not available with 05ARM, 07ARM, 12ARM.

## TYPE 15 HEADFRAME AND RING ASSEMBLY



EPA = 5.62 SQUARE FEET

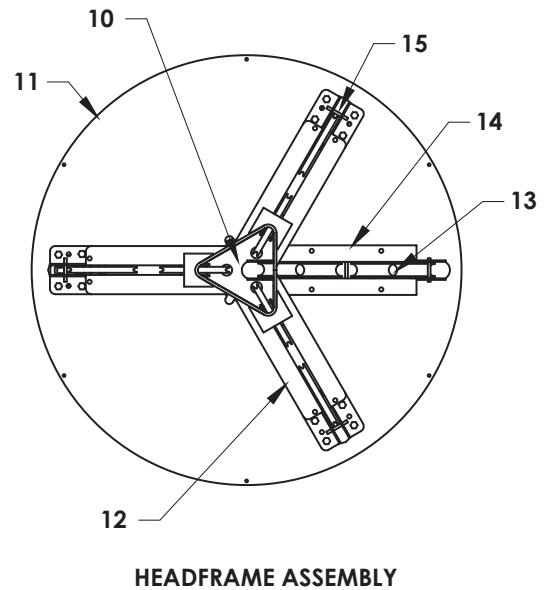
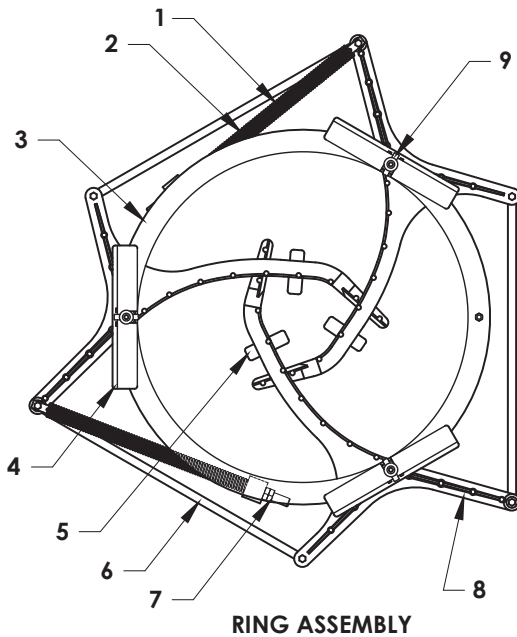
WEIGHT = 250 POUNDS

DIAMETER OF ASSEMBLY WITH LUMINAIRES VARIES FROM 8 TO 11 FEET

**PARTS LIST:**

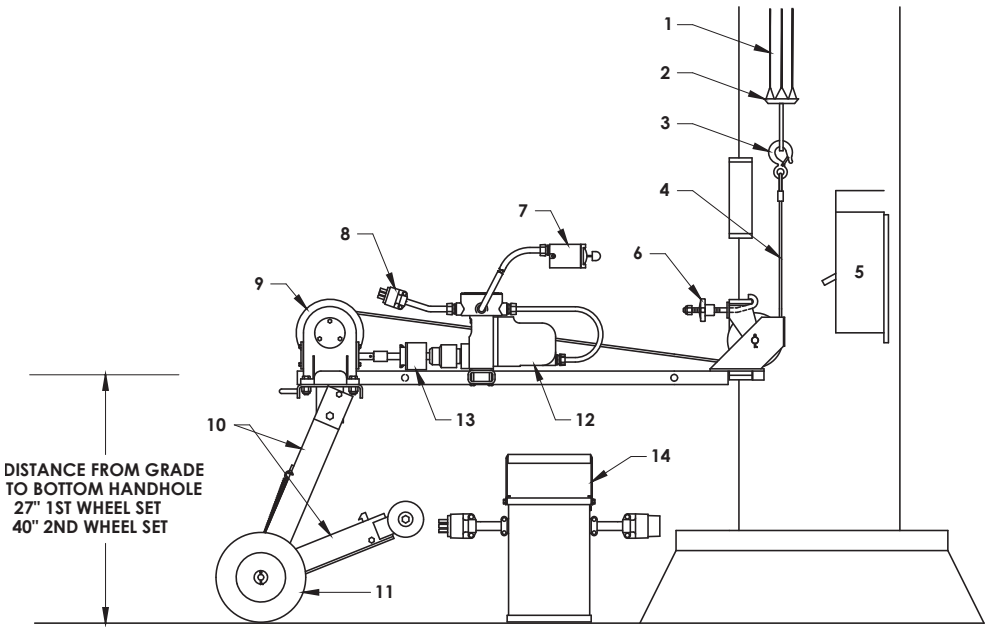
1. SPUN COPPER FREE ALUMINUM COVER
2. CAST HIGH STRENGTH COPPER FREE ALUMINUM LATCH BARREL
3. STAINLESS STEEL LATCH PIN
4. GALVANIZED STEEL LUMINAIRE RING
5. STAINLESS STEEL CENTERING SPRING
6. STEEL ADJUSTMENT NUT
7. STRANVISE WIRE ROPE GRIP
8. NON-MARKING GUIDE ARM ROLLER
9. CAST ALUMINUM IRIS GUIDE ARM
10. GALVANIZED LUMINAIRE MOUNTING ARMS, LUMINAIRE TYPE DEPENDENT
11. JUNCTION BOX
12. REFLECTING LATCH INDICATOR
13. GALVANIZED HEADFRAME, SLIPFITS A 4.63 TO 4.75 O.D. POLE TOP OR TENON

## TYPE 15 HEADFRAME AND RING ASSEMBLY

**PARTS LIST:**

1. STAINLESS STEEL CENTERING COMPRESSION SPRING
2. SOLID ALUMINUM GUIDE ROD
3. GALVANIZED STEEL LUMINAIRE RING
4. REFLECTING LATCH INDICATOR
5. NON-MARKING GUIDE ARM ROLLER
6. ALUMINUM GUIDE ARM CONNECTING BRACKET
7. GUIDE ARM ADJUSTMENT NUT
8. CAST ALUMINUM IRIS GUIDE ARM
9. STAINLESS STEEL LATCH PIN
10. STEEL CABLE / CORD SEPARATOR WELDED IN SLIPFITTER
11. STEEL HEADFRAME PLATE
12. STEEL HOIST CABLE BRACKET
13. ACETAL RESIN CORD ROLLERS
14. STEEL POWER CORD ROLLER BRACKET
15. STEEL HOIST CABLE SHEAVE

TYPE 15 PORTABLE WINCH AND POWER UNIT



**PARTS LIST:**

- 1. Ø3/16" DIAMETER HOIST CABLES, GALVANIZED OR STAINLESS STEEL
- 2. TRANSITION PLATE ZINC ELECTROPLATE FINISH
- 3. 3/ 4 TON EYEHOOK
- 4. Ø1/4" DIAMETER WINCH CABLE, GALVANIZED OR STAINLESS STEEL
- 5. CIRCUIT BREAKER AND ENCLOSURE
- 6. HAND KNOB/SUPPORT BRACKET FOR ATTACHING TO POLE HANDHOLE
- 7. REVERSING DRUM SWITCH
- 8. PLUG TO MATE WITH POLE BASE CORD OR TRANSFORMER
- 9. WINCH, 30:1 GEAR RATIO WITH INTERNAL DRAG BRAKE
- 10. LEG BRACKET AND EXTENSION LEG BRACKET
- 11. SEMI-PNEUMATIC BALL BEARING WHEEL
- 12. 3/ 4", 120V, REVERSING MOTOR
- 13. TORQUE LIMITER
- 14. STEPDOWN TRANSFORMER ASSEMBLY FROM [ ] 480V [ ] 277V [ ] 240V [ ] 208V TO 120V

**LDG/LDS Portable Winch and Driver Motor Unit**  
**ORDERING INFORMATION**

**Example:** LDS 1C KPHASE 30A

Prefix		Number of Circuitry		Voltage, Phasing and Frequency		Amperage	
LDG	Portable Winch and Drive Motor Unit with Ø1/4" diameter Galvanized Winch Cable	1C	One Circuit	APHASE	120V Single Phase 60HZ	30A	30 amps
		2C	Two Circuit	BPHASE	120V/208V 3 Phase 4 Wire 60HZ	50A	50 amps
LDS	Portable Winch and Drive Motor Unit with Ø1/4" diameter Stainless Steel Winch Cable			CPHASE	208V Single Phase 60HZ	100A	100 amps
				DPHASE	208V 3 Phase 60HZ		
				EPHASE	240V Single Phase Line to Line 60HZ		
				FPHASE	240V Single Phase Line to Neutral 60HZ		
				GPHASE	277V Single Phase 60HZ		
				HPHASE	277/480V 3 Phase 4 Wire 60HZ		
				JPHASE	347/600V 3 Phase 4 Wire 60HZ		
				KPHASE	480V Single Phase 60HZ		
				LPHASE	480V 3 Phase 60HZ		
Maximum pole height 120 feet (35 meters) Leveling blocks included with unit.							

Note: Drive Motor operate on the higher system voltage entering the pole. Example: If system voltage entering the pole is 277/480V, then the Drive Motor's transformer operates off of 480V.