NLS LIGHTING

FORM AND FUNCTION
- Sleek, die-cast low profile housing
- Spec grade performance
- Engineered for optimum thermal management
- Reduces energy consumption and costs up to 65%

RELIABILITY
- IP66 Rated
- Silicone Optics
- IK10 Rated Optics

The innovative NV Flood Series is a high-powered, corrosion resistant, low copper, die-cast aluminum luminaire.

Thermal management is handled with a separate driver housing and LED light engine heat-sink.

Heat-sink cooling fins are designed with a thermal gap for longer LED/Driver life.

The NV-F1 comes in a single 16L configuration with 5 Kelvin color temperatures 2700K, 3000K, 3500K, 4000K and 5000K. 4 Static LED color options available for a splash of color.

Silicone optical distribution patterns include 15° Very Narrow Beam, 30° Narrow Beam, 55° Medium Beam, 85° Wide beam, 7X5 NEMA T2 Distribution, 7X6 T3 NEMA Distribution, Forward Throw NEMA 6X6 T4, and a Symmetrical NEMA 7X7 T5.

Mounting options include 1/2" NPT Knuckle Mount or Trunnion Mount. Knuckle Mount and Trunnion Mount are available with Stanchion Caps to fit over 2 3/8", 3" and 4" diameter Stanchions or Tenons. Other mounting options include Universal Magic Mount (UMM) and 4" Round J Box Mount (JBRT)(JBRK).

Glare control options include the House Side Shield(HSS), Egg Crate Louver Shield(ECL), Barn Doors(BAD), Angled Visor(AGV), Small and Large Snoot(SNS)(SNL).

Other options include Tamper Proof Hardware, 5 Conductor Dimming Leads.

APPLICATIONS INCLUDE:
- Sign Lighting
- Building Facades
- Landscape
- Wall Washing
- Up Lighting
- Security Lighting
- Residential
- Commercial
- Parking
- Flag Pole
- Merchandising
- Billboard
- Indirect Lighting
- Display Pad
- Transportation

IP66 Rated for any direction or angle of Flood Lighting.

BUY AMERICAN
To ensure the latest BAA/TAA Standards are being met, please select BAA in the options section, or contact the factory before placing an order and any NLS products requesting BAA, TAA, BABA, or BA.

PROUDLY MADE IN THE USA

| Project Name: | | | Type: | | |

NV-F1 ORDERING GUIDE

Cat#	Optics	# of LEDs	Watts	Kelvin	Volts
NVF Single Module **(NV-F1)**	15° **(15)** [6] **Very Narrow** 30° **(30)** **Narrow Beam** 55° **(55)** **Medium Beam** 85° **(85)** **Wide Beam** IES T2 / NEMA 7Hx5V **(T2)** IES T3 / NEMA 7Hx6V **(T3)** Forward Throw **(T4)** Symmetrical **(T5)**	16 **(16L)**	20W **(20W)** [1] 25W **(25W)** [1] 35W **(35W)** 45W **(45W)**	2700K, 80 CRI **(27K8)** [2] 3000K, 70 CRI **(30K7)** 3000K, 80 CRI **(30K8)** [2] 3500K, 80 CRI **(35K8)** 4000K, 70 CRI **(40K7)** 4000K, 80 CRI **(40K8)** [2] 5000K, 70 CRI **(50K7)** 5000K, 80 CRI **(50K8)** [2] Red 624-634nm **(RED)** [1] Amber 585-600nm **(AMBER)** [1, 8, 10, 11] Green 520-540nm **(GREEN)** [1] Royal Blue 440-460nm **(BLUE)** [1]	120-277 **(UNV)**

Mounting	Mounting Accessories		Glare Control Options	Color	Options
Knuckle Mount 1/2" NPT **(KM)** Trunnion Mount **(TM)** [3]	**Stanchion Caps** Stanchion Cap for Knuckle Mount **(KMS2)** *2 3/8" ID Stanchion Cap* Stanchion Cap for Knuckle Mount **(KMS3)** [4] *With 3" ID Stanchion Cap* Stanchion Cap for Knuckle Mount **(KMS4)** *With 4" ID Stanchion Cap* Stanchion Cap for Trunnion Mount **(TMS2)** *With 2 3/8" ID Stanchion Cap* Stanchion Cap for Trunnion Mount **(TMS3)** [4] *With 3" ID Stanchion Cap* Stanchion Cap for Trunnion Mount **(TMS4)** *With 4" ID Stanchion Cap*	**Stanchion Post** 12" Length **(STP12)** 24" Length **(STP24)** 36" Length **(STP36)** Custom Length **(STPX)** Universal Magic Mount **(UMM)** UMM Must be ordered with KM or TM 4" Round J-Box Mount for Trunnion **(JBRT)** 4" Round J-Box Mount for Knuckle **(JBRK)** No Mounting Accessories **(NA)**	Barn Doors **(BAD)** Egg Crate Louver **(ECL)** [6] Angled Visor **(AGV)** Snoot Short **(SNS)** Snoot Long **(SNL)** House Side Shield **(HSS)** No Glare Control **(NGC)**	Bronze Textured **(BRZ)** White Textured **(WHT)** Smooth White Gloss **(SWT)** Silver Metallic **(SVR)** Black Textured **(BLK)** Smooth Black Gloss **(SBK)** Graphite Textured **(GPH)** Grey Textured **(GRY)** Green Textured **(GRN)** Hunter Green Textured **(HGN)** Custom **(CS)**	Button Photocell **(PC)** [5] Tamper Proof Hardware **(TPH)** 5 Conductor Dimming Leads **(DL)** Marine Grade Finish **(MGF)** Buy American Act **(BAA)** [9] Trade Agreement Act **(TAA)** [9] Build America Buy American **(BABA)** [9] Custom Controls Integration **(CCI)** [7] No Options **(NA)**

NOTES:
1. Static Colors available up to 25 Watts
2. Consult Factory for Lead Time. Consult Factory for 90 CRI Requests.
3. Standard finish is stainless steel. Can be painted to match fixture
4. STP Must be ordered with KMS3 or TMS3
5. Universal Voltage 120-277
6. 15° Very Narrow Optic not available with Egg Crate Louver
7. Please contact Factory for Custom Control Integration requests (nLight, NX, WaveLinx, Crestron, DMX/RDM, Synapse, Casambi, Dali II, Avi-On, or other control systems)
8. Turtle Safe
9. Consult factory for all BAA/TAA/BABA requests
10. Consult Factory for Lead Time
11. Not Available above 1000mA

PRODUCT SPECIFICATIONS

CONSTRUCTION

Precision Die cast-aluminum housing for durability and consistency
Stainless Steel corrosion resistant external hardware
One-piece silicone gasket ensures IP-65 seal for electronics compartment

OPTICS

Silicone optics high photothermal stability and light output provides higher powered LEDs with minimized lumen depreciation LED life. UV and thermal stability with scratch resistance increases exterior application durability.

Distribution patterns are designed to provide maximum light spread for short set backs when lighting signs and washing walls.

FINISH

3-5 mils electrostatic powder coat.
NLS' standard high-quality finishes prevent corrosion protects against and extreme environmental conditions

MARINE GRADE FINISH (MGF)—A multi-step process creating protective finishing coat against harsh environments.
• Chemically washed in a 5 stage cleaning system.
• Pre-baked
• Powder coated 3-5 mils of Zinc Rich Super Durable Polyester Primer.
• Oven Baked.
• Finished Powder Coating of Super Durable Polyester Powder Coat 3-5 mil thickness.

GLARE CONTROL OPTIONS

HOUSE SIDE SHIELDS (HSS)—House Side Shield (HSS) is designed for full property line cutoff.
BARN DOORS (BAD)—Field adjustable beam angle control.
EGG CRATE LOUVER (ECL)—Egg Crate Louver is for Extreme Glare Control. 15° Very Narrow Optic not available with Egg Crate Louver.
ANGLED VISOR (AGV)—Angled Visor is for minimal glare control.
SNOOT (SNS)(SNL)— Short and Long versions for full-cut off precision spot lighting.

MOUNTING OPTIONS

KNUCKLE MOUNT (KM)—1/2" NPT for direct mount to many options.
TRUNNION MOUNT (TM)—Optional Stainless Steel Cord Seal
STANCHION CAP—fits over 2 3/8", 3" or 4" Tenon or Stanchion
4" ROUND J BOX MOUNT (JBRT)(JBRK)—Knuckle or Trunnion
UNIVERSAL MAGIC MOUNT (UMM)—Allows Knuckle and Trunnion Mount for a single fixture and thru-conduit 1/2" or 3/4".
STANCHION POST— 3" O.D. Post for use with the KMS3 and TMS3 mounting options.

ADDITIONAL OPTIONS

TAMPER PROOF HARDWARE—Provided to protect the optical assembly and the driver compartment for vandal resistance.
5 CONDUCTOR DIMMING LEADS—Optional Dimming Leads exiting the fixture for external dimming control.

ELECTRICAL

• 120-277 Volts (UNV)
• 0-10V dimming driver
• Driver power factor at maximum load is ≥ .95, THD maximum load is 15%
• LED Drivers Ambient Temp. Min is -40°C and Ambient Temp. Max ranges from 50°C to 55°C and, in some cases, even higher. Consult the factory for revalidation by providing the fixture catalog string before quoting and specifying it
• All internal wiring UL certified for 600 VAC and 105°C
• All drivers, controls, and sensors housed in enclosed IP-65 compartment

LED

Lumileds Luxeon MX LED
CRI 70, 80, or 90
Color temperatures: 2700K 3000K, 3500K, 4000K, 5000K
Lumileds Luxeon CZ LED
Static Color Options: Red (Red 624-634nm), Green (520-540nm), Blue(440-460nm) and Amber (585-600nm)

WARRANTY

Five-year standard warranty

LISTINGS

Certified to UL 1598
UL 8750
CSA C22.2 No. 250.0
DesignLights Consortium® (DLC)
DesignLights Consortium Premium® (DLCP)
IP66 Rated
IP67 Rated Optics
IK10 Rated

BUY AMERICAN OPTION

While all of the NLS Lighting products listed in this document qualify for the Buy America(n) Act of 1933, we reserve the right to change our listings without notice.

The information provided above is for general informational purposes only. We encourage you to consult legal professionals for advice particular to your projects concerning BAA, TAA, BABA or Buy America.

Additional NLS Products that meet BAA, TAA standards can be found at the following link:

https://nlslighting.com/wp-content/uploads/cs/NLS_BuyAmerica(n).pdf

The information and specifications on this document are subject to change without any notification. All values are design, nominal, typical or prorated values when measured under internal and external laboratory conditions.

NLS LIGHTING
701 Kingshill Place, Carson, CA 90746
Call Us Today (310) 341-2037

PRODUCT SPECIFICATIONS

LED WATTAGE CHART	16L
425mA	20W
530mA	25W
700mA	35W
850mA	45W

NV-F1

PART NUMBER	15°	LM/W	30°	LM/W	55°	LM/W	85°	LM/W	7X5	LM/W	7X6	LM/W	T4	LM/W	T5	LM/W	W
NV-F1-16L-20W-27K8	2320	116	2160	108	2360	118	2444	122	2300	115	2320	116	2320	116	2300	115	20
NV-F1-16L-20W-30K7	2400	120	2240	112	2600	130	2693	135	2540	127	2580	129	2580	129	2540	127	20
NV-F1-16L-20W-35K8	2560	128	2320	116	2680	134	2776	139	2620	131	2640	132	2660	133	2620	131	20
NV-F1-16L-20W-40K7	2680	134	2440	122	2760	138	2859	143	2700	135	2720	136	2740	137	2700	135	20
NV-F1-16L-20W-50K7	2680	134	2440	122	2760	138	2859	143	2700	135	2720	136	2740	137	2700	135	20
NV-F1-16L-25W-27K8	2900	116	2700	108	2875	115	2978	119	2825	113	2850	114	2850	114	2825	113	25
NV-F1-16L-25W-30K7	3000	120	2800	112	3175	127	3288	132	3125	125	3150	126	3150	126	3125	125	25
NV-F1-16L-25W-35K8	3200	128	2900	116	3275	131	3392	136	3250	130	3250	130	3250	130	3225	129	25
NV-F1-16L-25W-40K7	3350	134	3025	121	3375	135	3496	140	3325	133	3350	134	3350	134	3300	132	25
NV-F1-16L-25W-50K7	3350	134	3175	127	3375	135	3496	140	3325	133	3350	134	3350	134	3300	132	25
NV-F1-16L-35W-27K8	4060	116	3780	108	3850	110	3988	114	3780	108	3815	109	3815	109	3780	108	35
NV-F1-16L-35W-30K7	4200	120	3920	112	4270	122	4423	126	4200	120	4235	121	4235	121	4165	119	35
NV-F1-16L-35W-35K8	4480	128	4060	116	4410	126	4568	131	4340	124	4375	125	4375	125	4305	123	35
NV-F1-16L-35W-40K7	4690	134	4235	121	4550	130	4713	135	4445	127	4480	128	4480	128	4445	127	35
NV-F1-16L-35W-50K7	4690	134	4445	127	4550	130	4713	135	4445	127	4480	128	4480	128	4445	127	35
NV-F1-16L-45W-27K8	5220	116	4860	108	4770	106	4940	110	4680	104	4680	104	4725	105	4680	104	45
NV-F1-16L-45W-30K7	5400	120	5040	112	5265	117	5453	121	5175	115	5220	116	5220	116	5130	114	45
NV-F1-16L-45W-35K8	5760	128	5220	116	5400	120	5593	124	5310	118	5355	119	5355	119	5310	118	45
NV-F1-16L-45W-40K7	6030	134	5445	121	5580	124	5779	128	5490	122	5490	122	5535	123	5445	121	45
NV-F1-16L-45W-50K7	6030	134	5445	121	5580	124	5779	128	5490	122	5490	122	5535	123	5445	121	45

NV-F1 With Glare Control 15° Optic

PART NUMBER	15° Snoot Long	Lm/W	15° Snoot Short	Lm/W	WATTS
NV-F1-16L-20W-27K8	2000	100	2240	112	20
NV-F1-16L-20W-30K7	2060	103	2320	116	20
NV-F1-16L-20W-35K8	2140	107	2400	120	20
NV-F1-16L-20W-40K7	2220	111	2500	125	20
NV-F1-16L-20W-50K7	2360	118	2600	130	20
NV-F1-16L-25W-27K8	2500	100	2800	112	25
NV-F1-16L-25W-30K7	2575	103	2900	116	25
NV-F1-16L-25W-35K8	2675	107	3000	120	25
NV-F1-16L-25W-40K7	2775	111	3125	125	25
NV-F1-16L-25W-50K7	2950	118	3250	130	25
NV-F1-16L-35W-27K8	3500	100	3920	112	35
NV-F1-16L-35W-30K7	3605	103	4060	116	35
NV-F1-16L-35W-35K8	3745	107	4200	120	35
NV-F1-16L-35W-40K7	3885	111	4375	125	35
NV-F1-16L-35W-50K7	4130	118	4550	130	35
NV-F1-16L-45W-27K8	4500	100	5040	112	45
NV-F1-16L-45W-30K7	4635	103	5220	116	45
NV-F1-16L-45W-35K8	4815	107	5400	120	45
NV-F1-16L-45W-40K7	4995	111	5625	125	45
NV-F1-16L-45W-50K7	5310	118	5850	130	45

NV-F1 With Glare Control 30° Optic							
PART NUMBER	30° Egg Crate Louver	LM/W	30° Snoot Long	Lm/W	30° Snoot Short	Lm/W	WATTS
NV-F1-16L-20W-27K8	1680	84	1700	85	2060	103	20
NV-F1-16L-20W-30K7	1740	87	1760	88	2160	108	20
NV-F1-16L-20W-35K8	1800	90	1820	91	2240	112	20
NV-F1-16L-20W-40K7	1880	94	1900	95	2320	116	20
NV-F1-16L-20W-50K7	1980	99	2000	100	2440	122	20
NV-F1-16L-25W-27K8	2100	84	2125	85	2575	103	25
NV-F1-16L-25W-30K7	2175	87	2200	88	2700	108	25
NV-F1-16L-25W-35K8	2250	90	2275	91	2800	112	25
NV-F1-16L-25W-40K7	2350	94	2375	95	2900	116	25
NV-F1-16L-25W-50K7	2475	99	2500	100	3050	122	25
NV-F1-16L-35W-27K8	2940	84	2975	85	3605	103	35
NV-F1-16L-35W-30K7	3045	87	3080	88	3780	108	35
NV-F1-16L-35W-35K8	3150	90	3185	91	3920	112	35
NV-F1-16L-35W-40K7	3290	94	3325	95	4060	116	35
NV-F1-16L-35W-50K7	3465	99	3500	100	4270	122	35
NV-F1-16L-45W-27K8	3780	84	3825	85	4635	103	45
NV-F1-16L-45W-30K7	3915	87	3960	88	4860	108	45
NV-F1-16L-45W-35K8	4050	90	4095	91	5040	112	45
NV-F1-16L-45W-40K7	4230	94	4275	95	5220	116	45
NV-F1-16L-45W-50K7	4455	99	4500	100	5490	122	45

PRODUCT SPECIFICATIONS

EPA	NV-F1
	.23

Weight	NV-F1
	3.1 LBS

Lumen Maintenance Data							
Ambient Temperature	Drive Current	L90 Hours*	L70 Hours**	30,000 Hours*	50,000 Hours*	60,00 Hours*	100,000 Hours**
25°C	Up to 700mA	58,000	173,000	95.7%	91.6%	89.6%	82.1%
	850mA	48,000	143,000	94.3%	89.5%	87.2%	78.5%
*Reported extrapolations per IESNA TM-21			**Projected extrapolations per IESNA TM-21				
Lumen Maintenance Data (For Static Colors, Please Contact Factory)							

LED KELVIN RANGE
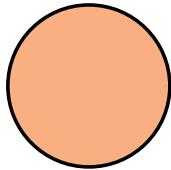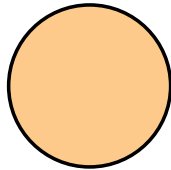
2700K 80 CRI   **3000K 70 CRI**   **3500K 80 CRI**   **4000K 70 CRI**   **5000K 70 CRI**
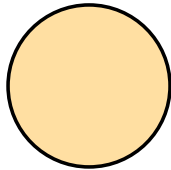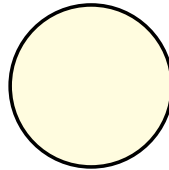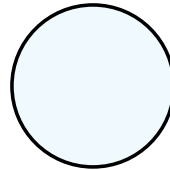
STATIC COLOR LED
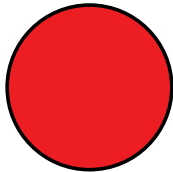
RED
624-634 nm
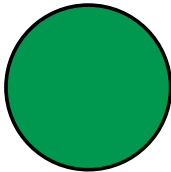
GREEN
520-540 nm
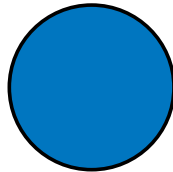
ROYAL BLUE
440-460nm
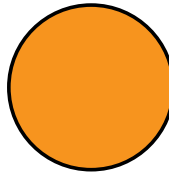
AMBER
585-600 nm

Color	Dominant or Peak Wavelength Range (nm)	
	Minimum	Maximum
Amber	585	600

DIMENSIONAL DRAWINGS

KNUCKLE MOUNT
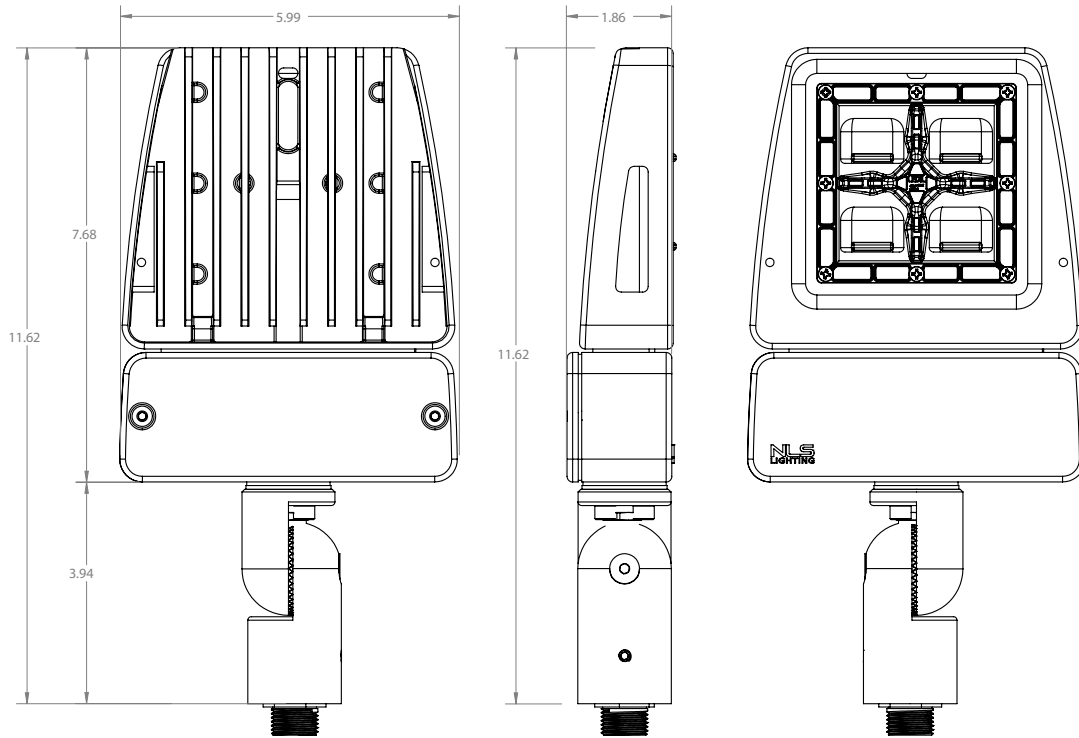
TRUNNION MOUNT
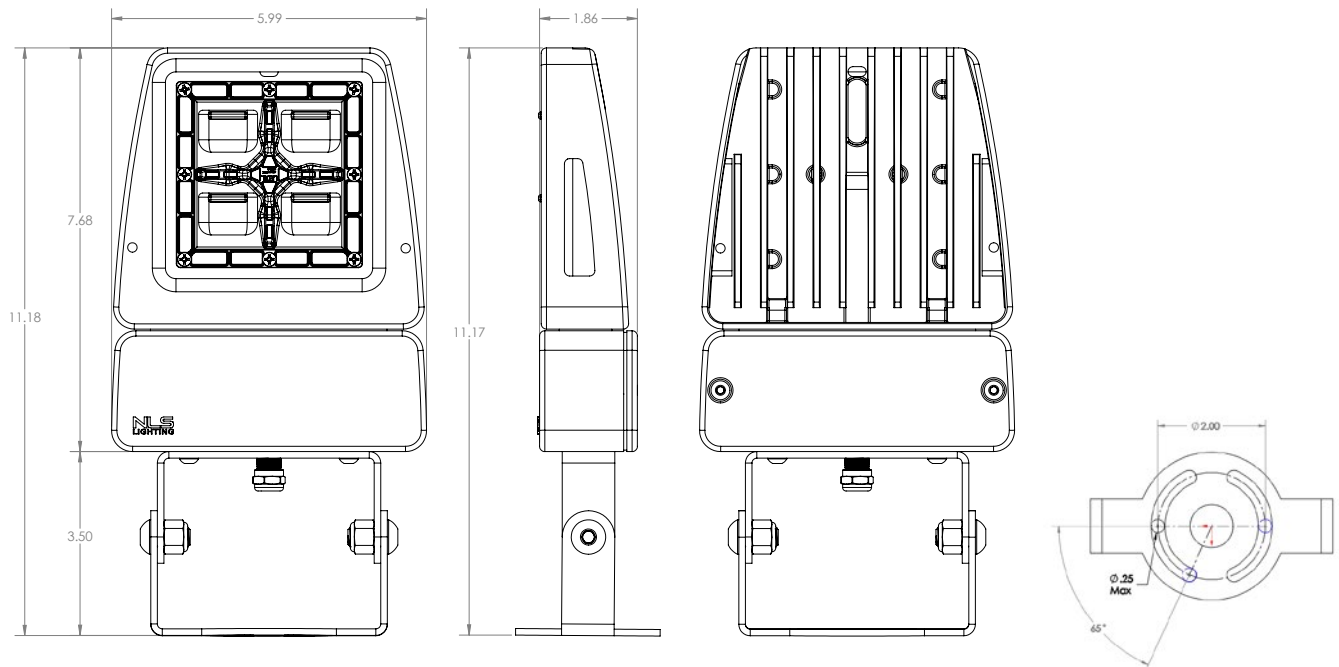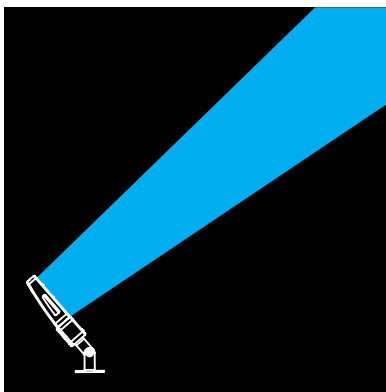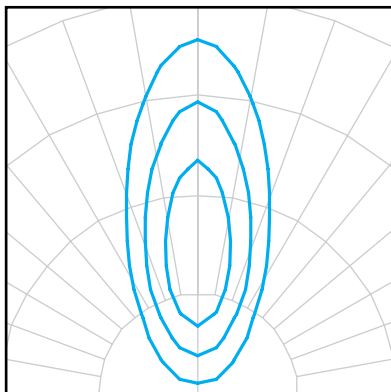
15° Very Narrow Beam Optic

The 15° Optic is used for very specific spot lighting. Spot Lighting a statue, a monument, or a piece of art. The NV Floods can be used indoors and outdoors. Pair the 15° Optic with the following Glare Control Options for more dramatic effect. Snoot Short (SNS), Snoot Long (SNL) and the Barn Doors (BAD). These Glare Control Options help reduce glare and focus the viewing angles. 15° Very Narrow Optic not available with Egg Crate Louver.
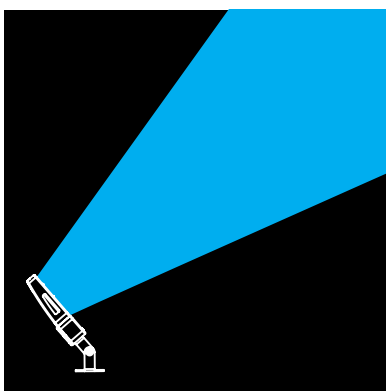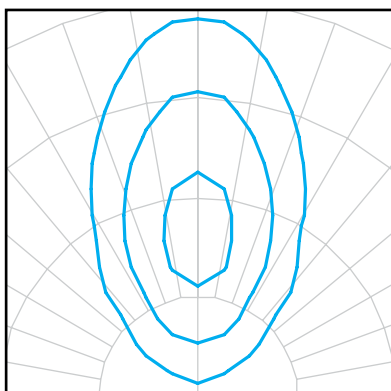
30° Narrow Beam Optic

The 30° Optic is used for larger objects and for spot and accent lighting. The 30° is perfect for Flag Lighting, Facade Lighting and great for showcasing Car Dealerships, display pads. Pair the 30° Optic with the following Glare Control Options for more dramatic effect. Snoot Short (SNS), Snoot Long (SNL), or Egg Crate Louvers (ECL). These Glare Control Options help reduce glare and focus the viewing angle.
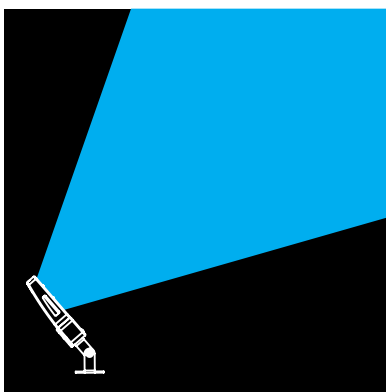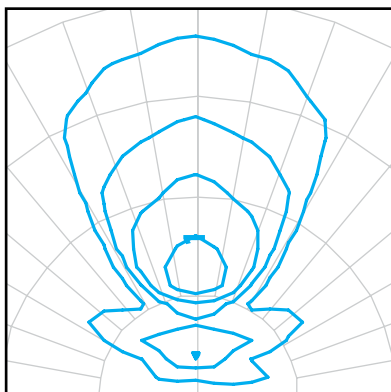
55° Medium Beam Optic

The 55° Optic is used for larger objects, flood lighting. The 55° is perfect for Facade Lighting, Landscape and general flood lighting. Pair the 55° Optic with the following Glare Control Options for more dramatic effect. Snoot Short (SNS), Angled Visor (AGV), These Glare Control Options help reduce glare and focus the beam angles.
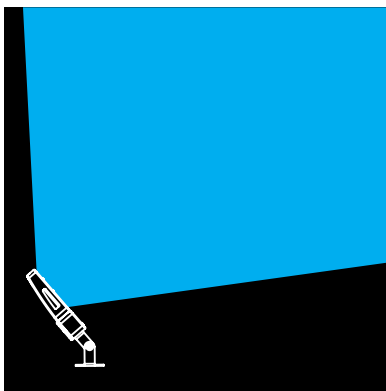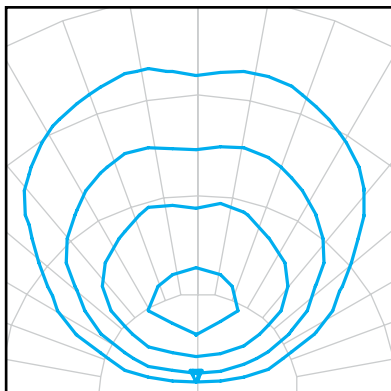
85° Wide Flood Optic

The 85° Optic is used for large area and accent lighting. The 85° is perfect for Security Lighting, general flood lighting and area lighting. Pair the 85° Optic with the following Glare Control Options for more dramatic effect. Snoot Small (SNS), Angled Visor (AGV), These Glare Control Options help reduce glare and shield unnecessary light.
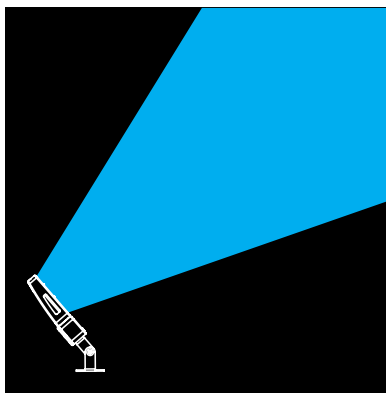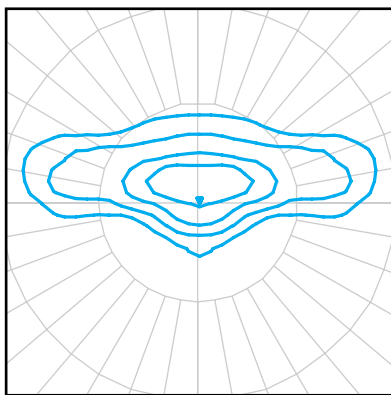
NEMA 7X5 T2 Flood Optic

The Type II (T2) distribution is used for narrow pathways and trails, narrow entrances of shopping centers, parking lots and office complex's.
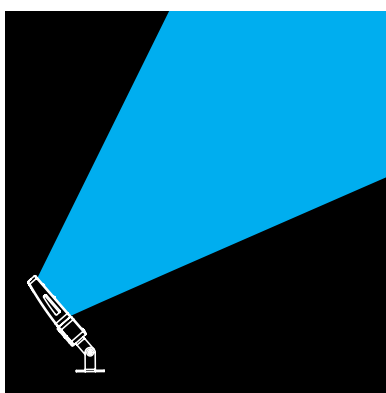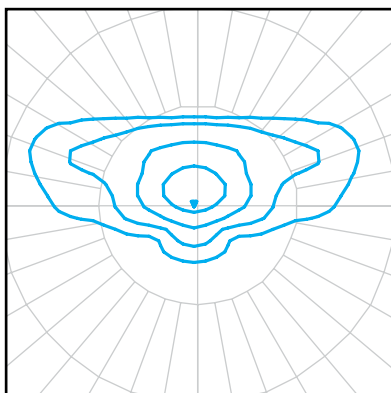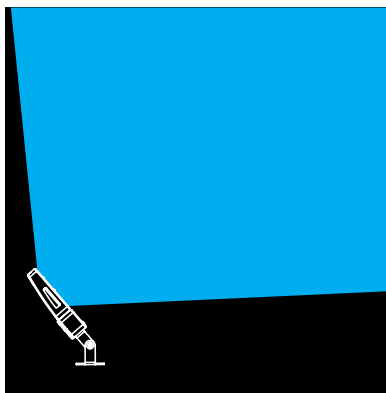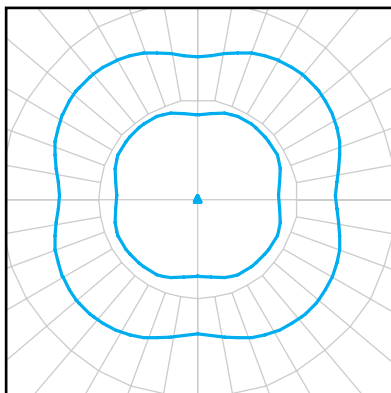
NEMA 7X6 T3 Flood Optic

The Type III (T3) distribution is meant for roadway lighting, general parking areas and other areas where a larger area of lighting is required. Type III lighting needs to be placed to the side of the area, allowing the light to project outward and fill the area. This produces a filling light flow.
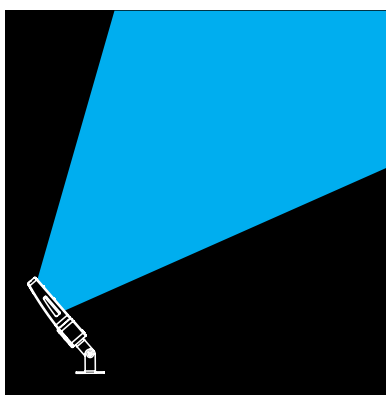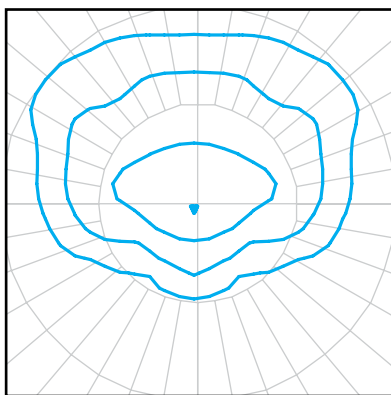
NEMA 6X6 Forward Throw T4 Flood Optic

The Type IV (T4) distribution produces a semicircular light meant for mounting on the sides of buildings and walls. It is best for illuminating the perimeter of parking areas and businesses. The intensity of the Type IV lighting has the same intensity at angles from 90° to 270°.

NEMA 7X7 Symmetrical T5 Flood Optic

The Type V (T5) produces a symmetrical distribution that has the same intensity at all angles. This distribution has a uniform symmetry of candlepower that is essentially the same at all lateral angles. It is meant for large, commercial parking lot lighting as well as areas where sufficient, evenly distributed light is necessary
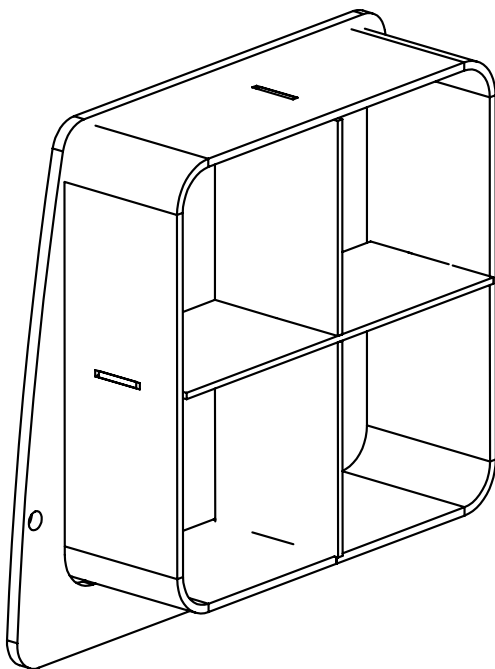
GLARE CONROL OPTIONS
BARN DOORS (BAD)
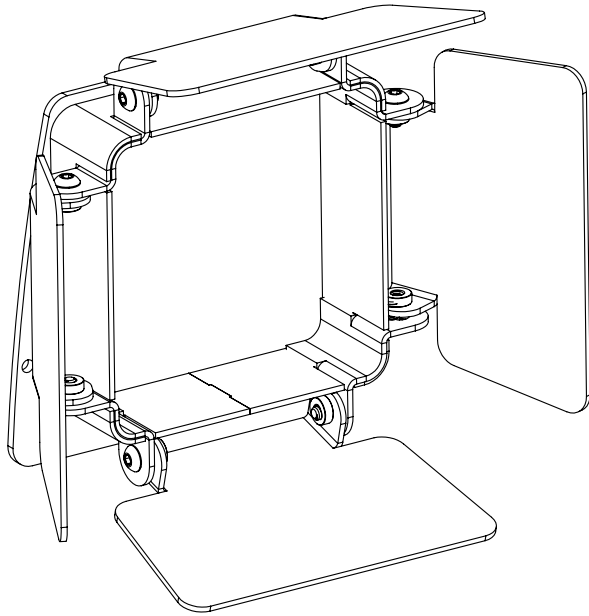
Barn Doors (BAD)

The Barn Doors is field adjustable beam angle control. Laser cut precision formed aluminum construction. Powder Coated flat black as standard. The **(BAD)** is field installable.
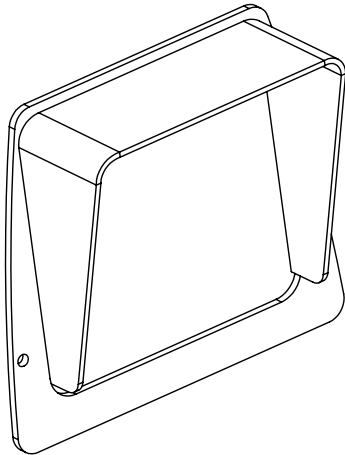
### EGG CRATE LOUVER (ECL)

Egg Crate Louver (ECL)

The Egg Crate Louver is designed for Extreme Glare Control. Laser cut precision formed aluminum construction. Powder Coated flat black as standard. The **(ECL)** is field installable. 15° Very Narrow Optic not available with Egg Crate Louver.

ANGLED VISOR (AGV)

Angled Visor (AGV)

The Angled Visor is designed for minimal glare control. Laser cut precision formed aluminum construction. Powder Coated flat black as standard. The **(AGV)** is field installable.

SNOOT (SNS) (SNL)
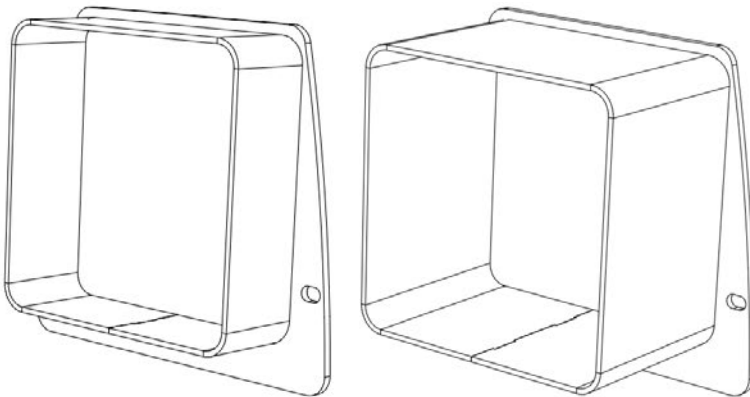
Snoot (SNS) (SNL)

Snoot in short or long options for full-cut off precision spot lighting. Laser cut precision formed aluminum construction. Powder Coated flat black as standard. The **(SNS)** & **(SNL)** is field installable.

HOUSE SIDE SHIELD (HSS)
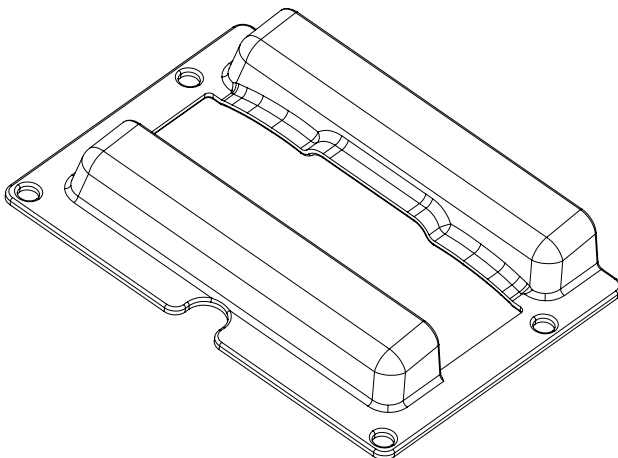
House Side Shield (HSS)

House Side Shield **(HSS)** is designed for stringent property line cutoff. Injection Molded Glass Filled Nylon, standard finish is black.

FIXTURE OPTIONS
BUTTON PHOTOCELL
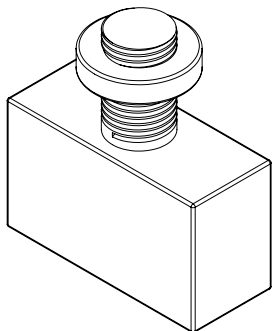
Button Type Photo Cell (PC)

Photo Cell for dusk to dawn operation.

MARINE GRADE FINISH

Powder Coat Finish
3-5 mil Powder Coat

Primer Layer
3-5 mil Zinc Rich
Super Durable Polyester Primer

Prepared Casting
Chemically washed in multi Step 5 stage
cleaning process

Marine Grade Finish (MGF)

The **(MGF)** is a multi step process.
Chemically washed in a 5 stage cleaning
system. Pre-baked. Powder coated 3-5 mils
of Zinc Rich Super Durable Polyester Primer.
Oven Baked.
Finished Powder Coating of Super Durable
Polyester Powder Coat 3-5 mil thickness.

TAMPER PROOF HARDWARE
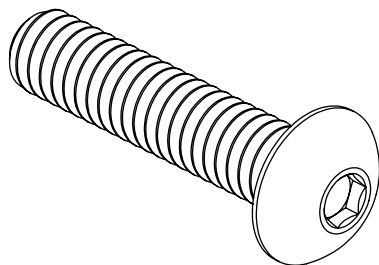
Tamper Proof Hardware (TPH)

316 Stainless Steel Button Head Hex Drive
Screws. Provided to protect the optical
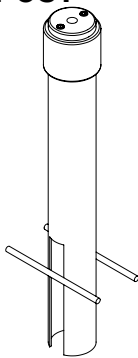assembly and the driver compartment for
vandal resistance.

5 CONDUCTOR DIMMING LEADS
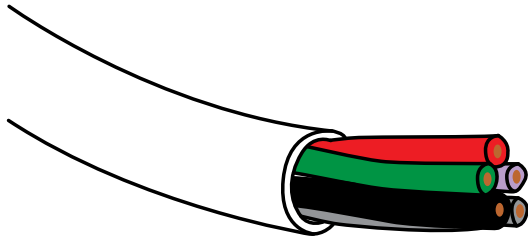
5 Conductor Dimming Leads (DL)

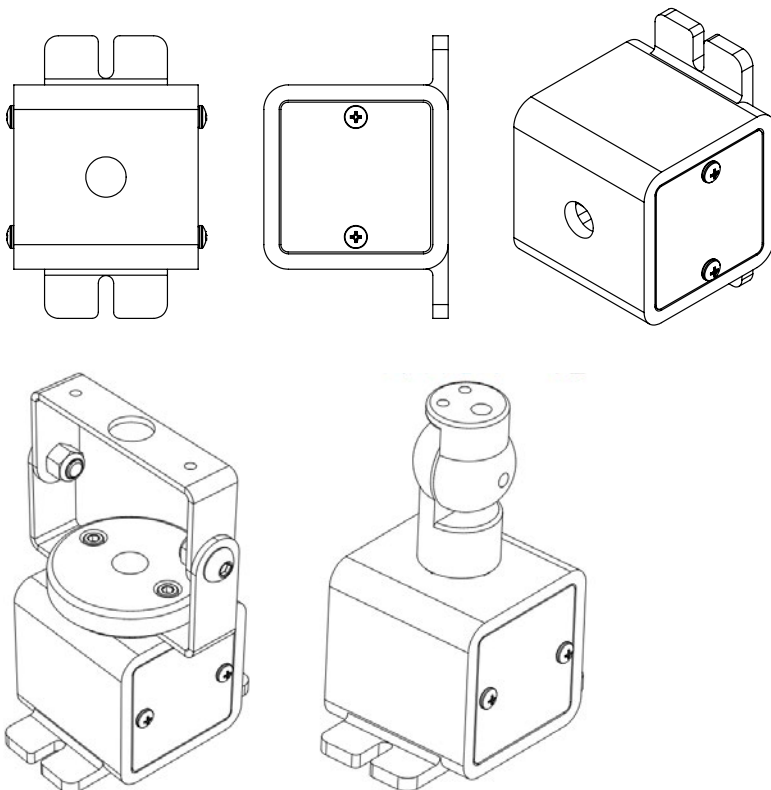Optional Dimming Leads exiting the fixture for external dimming control.

STANCHION POST

Stanchion Post (STP)

3" O.D. Post for use with the KMS3 and TMS3 mounting options. Available in 12", 24" and 36" lengths. Consult factory for additional offerings.
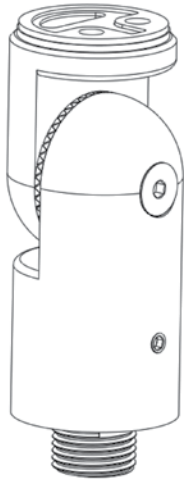
UNIVERSAL MAGIC MOUNT

Universal Magic Mount (UMM)

The **(UMM)** allows Knuckle and Trunnion Mount for a single fixture and thru-conduit 1/2" or 3/4". The **(UMM)** was designed for universal mounting to walls, ceilings, trees, poles, parapets, and eaves.

NLS LIGHTING

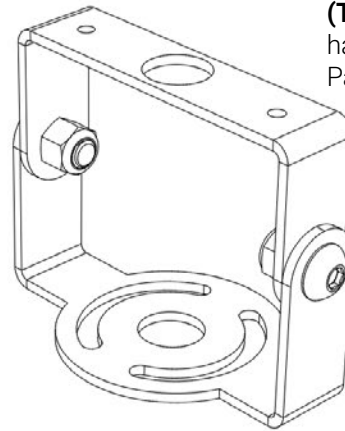701 Kingshill Place, Carson, CA 90746
Call Us Today (310) 341-2037

nlslighting.com

MOUNTING OPTIONS

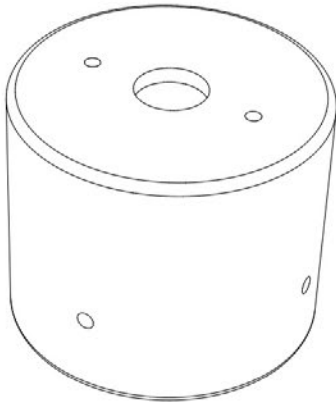### KNUCKLE MOUNT 1/2" NPT (KM)

(KM) Knuckle Mount has a 1/2" NPT nipple.

TRUNNION MOUNT (TM)

(TM) Trunnion Mount has a universal Mounting Pattern.
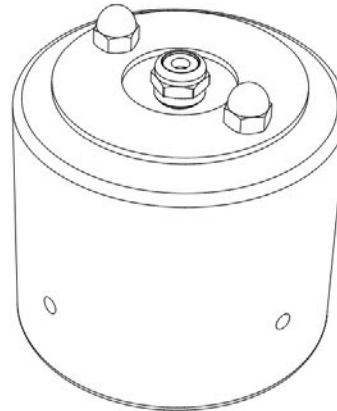
STANCHION CAP FOR KNUCKLE MOUNT

(KMS2) Stanchion Cap fits over a 2 3/8" O.D. Tenon.

(KMS3) Stanchion Cap fits over a 3" O.D. Tenon.

(KMS4) Stanchion Cap fits over a 4" O.D. Tenon.
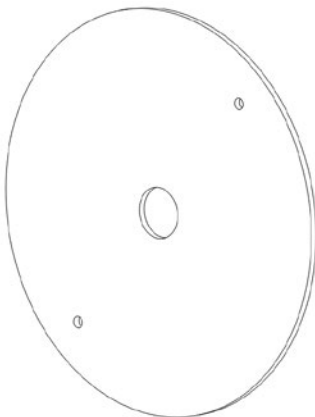
STANCHION CAP FOR TRUNION MOUNT

(TMS2) Stanchion Cap fits over a 2 3/8" O.D. Tenon.

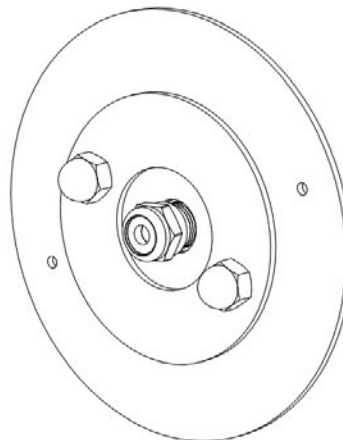**(TMS3)** Stanchion Cap fits over a 3" O.D. Tenon.

(TMS4) Stanchion Cap fits over a 4" O.D. Tenon.

4" ROUND JBOX KNUCKLE MOUNT (JBRK)

(JBRK) 4" Round J-Box cover plate mount.

4" ROUND JBOX TRUNNION MOUNT (JBRT)

(JBRT) 4" Round J-Box cover plate mount.