

LED MINI-FLOOD & LED MINI-CYLINDER SPOTLIGHT



Trac 12® LED Mini-Flood

Trac 12® LED Mini-Cylinder Spotlight

Flex 12® LED Mini-Cylinder Spotlight



Leading the Industry

Juno Lighting Group is leading the way in LED product innovation, technology, quality and service. But don't just take our word for it. For the past two years, Juno Trac 12® LED Lighting and Recessed LED Downlights were respectively named 2008 and 2009 EC&M Product of the Year Category Winners. Experience for yourself what all of the hype is about and what makes Juno Lighting Group a true industry leader.



Leading with green.


EcoLEDgy is our way of highlighting the eco-friendly nature of our advanced LED fixtures. All are mercury free and use as little as 15% of the energy consumed by incandescent light sources. Combine the reduced energy requirements of LEDs with their incredible 50,000 hour service life, and you can slash your operating expenditures dramatically. A 10% reduction in energy costs can boost net profit margins by as much as 16%*.

Juno Lighting Group's LED fixtures cover a broad range of applications including recessed downlighting, track, linear, and under-cabinet lighting. So if you want to go with the leader, save the planet and save some green, too ... think Juno EcoLEDgy.


*Based on U.S. EPA estimates, ENERGY STAR for Retail, www.energystar.gov/index.cfm?c=retail.bus_retail



Trac 12 LED Mini-Flood shown in white



Trac 12 LED
Mini-Cylinder
shown in black



LED Advantages:

- Small size – smaller package size, better aesthetics, miniature scale for tighter applications, less obtrusive
- Reduced heat – no forward infrared radiation, better for lighting temperature sensitive objects, safer to touch, improved comfort, reduced HVAC needs
- No UV – better for lighting UV sensitive objects (art, apparel, etc.), colors will not fade
- Long 50,000 hour life reduces/eliminates maintenance – no lamps to change for over 10 years*, LEDs do not burn out – their light output declines over time – so there are no “dark” fixtures
- Energy savings – up to 85% less energy used vs. halogen equivalents, lower operating costs, good for the bottom line, good for the environment
- Dimmability – allows lighting customization, light output can be tuned to optimum visual comfort, adapts to environmental or time-of-day conditions
- Even illumination – improved visual comfort, more effective lighting = increased sales in retail applications

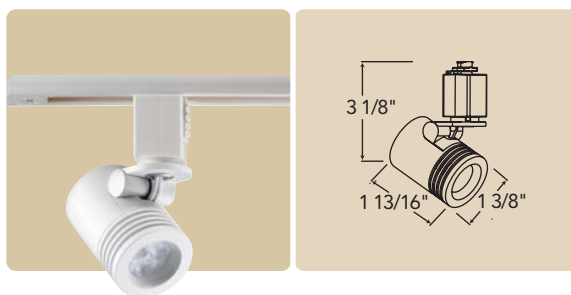
* At 12 hours per day operation

Trac 12® & Flex 12® LED Mini-Cylinder Spotlights

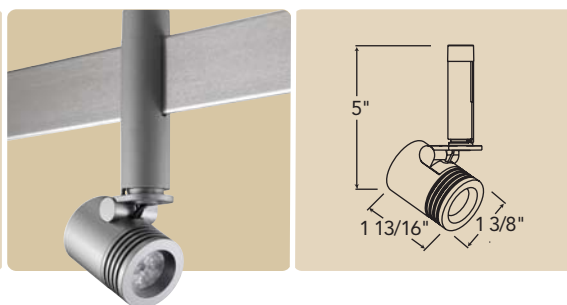
The Trac 12® & Flex 12® LED Mini-Cylinder Spotlights offer effective accent lighting in a miniature, energy-efficient package. They approximate the light output and distribution of 20W MR11 halogen lamps, utilizing approximately $\frac{1}{3}$ of the energy and providing more than 10 times the rated life. Unlike conventional incandescent light sources, LEDs have no heat and no UV in their beam – this makes them an ideal choice when illuminating

heat-sensitive or UV-sensitive objects. Available in 2700K, 3000K and 4100K color temperatures, the white-light LED Mini-Cylinder Spotlights are compatible with standard Trac 12 and Flex 12 systems operating with 12V AC transformers approved for use with Juno LED products. These spotlights can be placed anywhere along the trac, which can be cut-to-length during installation, making the LED Mini-Spots an economical and flexible accent lighting choice.

Trac 12 LED Mini-Cylinder



Flex 12 LED Mini-Cylinder



Specifications

LED Lumileds LUXEON Rebel LEDs provide outstanding reliability, performance and color quality/consistency

- Miniature package consumes only 6W but generates more than 200 usable lumens
- Available in spot, narrow flood and flood beam spreads
- Warm 2700K and 3000K or higher-efficiency, cooler 4100K white phosphor high performance LEDs offer choices for a variety of applications
- Precise color binning for superior color consistency
- All color temperatures provide 85 CRI typical

Housing Precision machined aluminum and die cast aluminum construction

- Versatile 90° aiming and 360° horizontal coverage eliminates aiming dead spots

Trac & System Components Compatible with all Juno Trac 12 or Trac 12/25 or Flex 12 trac and monopoints

- Refer to specification sheet D3.1.0 for Trac 12 system information
- Refer to specification sheet D3.1.1 for Trac 12/25 system information
- Refer to specification sheets D5.1.0 thru D5.1.4 for Flex 12 system information

Transformers/Drivers Compatible with all 12VAC transformers approved for use with Juno LED products

- Lower power consumption enables the use of fewer transformers than comparable halogen installations
- Refer to specification sheet D3.1.3 or D3.1.8 for Trac 12 transformer compatibility
- Refer to specification sheet D3.1.6 or D3.1.8 for Trac 12/25 transformer compatibility
- Refer to specification sheet D5.4.1 for Flex 12 transformer compatibility

Dimming May be dimmed with dimmers tested and qualified by Juno for use with a non-resistive LED load

- Color temperature remains constant over dimming range
- Consult transformer specification sheets or factory for additional dimming information

Warranty Warranty period is 3-years from date of purchase

Labels UL/cUL listed

Energy-Efficient

accent lighting
at your fingertips



Actual size

Ordering Information

Make product selections and build your model number

Fixture Style	Color Temperature	Beam Spread	Finish
TL114LED Trac 12 LED Mini-Cylinder	2K 2700K	SP Spot	WH White (Trac 12 only)
	3K 3000K	NFL Narrow Flood	BL Black (Trac 12 only)
	4K 4100K	FL Flood	SL Silver
TF114LED Flex 12 LED Mini-Cylinder			

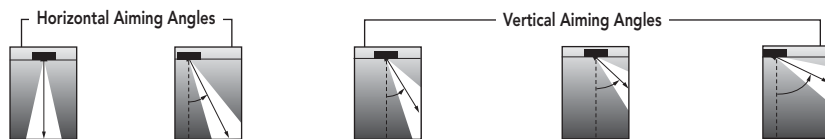
Quick Jack versions are available for use on Juno line voltage trac systems and Alfa QJ track and MonoPoints with LED-compatible transformers – consult factory for details.

Ordering Example: TL114-3K-NFL-WH

Product specifications subject to change without notice.

Photometric Data

CBCP • Centerbeam candlepower
FC • Footcandles at beam center (aim point)



Fixture	Beam Type	Beam Spread°	CBCP	0°		30°			30°			45°				60°								
				MH	FC	L	W	FC	L	W	D	FC	X	L	W	FC	X	L	W	D	FC	X	L	W
TF114LED-3K-SP TL114LED-3K-SP Spot	SP	16°	1292	2	323	0.6	0.6	210	0.8	0.6	1	162	1.7	1.2	0.6	457	1.0	0.6	0.4	2	210	1.2	0.8	0.6
				4	81	1.1	1.1	52	1.5	1.3	2	40	3.5	2.4	1.1	114	2.0	1.1	0.8	3	93	1.7	1.1	1.0
				6	36	1.7	1.7	23	2.3	1.9	3	18	5.2	3.6	1.7	51	3.0	1.7	1.2	4	52	2.3	1.5	1.3
				8	20	2.2	2.2	13	3.0	2.6	4	10	6.9	4.8	2.2	29	4.0	2.3	1.6	5	34	2.9	1.9	1.6
				10	13	2.8	2.8	8	3.8	3.2	5	6	8.7	6.0	2.8	18	5.0	2.9	2.0	6	23	3.5	2.3	1.9
TF114LED-3K-NFL TL114LED-3K-NFL Narrow Flood	NFL	22°	764	2	191	0.8	0.8	124	1.0	0.9	1	96	1.7	1.8	0.8	270	1.0	0.8	0.5	1	496	0.6	0.5	0.4
				4	48	1.6	1.6	31	2.1	1.8	1.5	42	2.6	2.6	1.2	120	1.5	1.2	0.8	2	124	1.2	1.0	0.9
				6	21	2.3	2.3	14	3.1	2.7	2	24	3.5	3.5	1.6	68	2.0	1.6	1.1	3	55	1.7	1.6	1.3
				8	12	3.1	3.1	8	4.2	3.6	2.5	15	4.3	4.4	1.9	43	2.5	2.0	1.4	4	31	2.3	2.1	1.8
				10	8	3.9	3.9	5	5.2	4.5	3	11	5.2	5.3	2.3	30	3.0	2.4	1.6	5	20	2.9	2.6	2.2
TF114LED-3K-FL TL114LED-3K-FL Flood	FL	38°	340	2	85	1.4	1.4	55	1.9	1.6	0.5	170	0.9	2.1	0.7	481	0.5	0.8	0.5	1	221	0.6	1.0	0.8
				3	38	2.1	2.1	25	2.9	2.4	1	43	1.7	4.3	1.4	120	1.0	1.6	1.0	2	55	1.2	1.9	1.6
				4	21	2.8	2.8	14	3.8	3.2	1.5	19	2.6	6.4	2.1	53	1.5	2.3	1.5	3	25	1.7	2.9	2.4
				5	14	3.4	3.4	9	4.8	4.0	2.0	11	3.5	8.6	2.8	30	2.0	3.0	1.9	4	14	2.3	3.8	3.2
				6	9	4.1	4.1	6	5.7	4.8	2.5	7	4.3	10.7	3.4	19	2.5	3.9	2.4	5	9	2.9	4.8	4.0

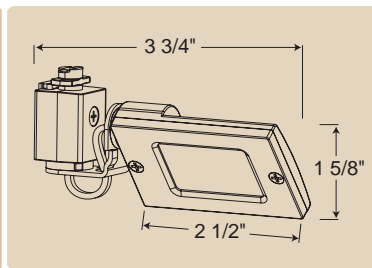
For 2700K fixtures, use 0.95 multiplier; for 4100K fixtures, use 1.11 multiplier to prorate FC data.
The beam spread in degrees and the beam "L" and "W" in the following tables are computed at 50% of centerbeam candlepower and represent areas of "effective illumination."

Trac 12® LED Mini-Flood

The Trac 12® LED Mini-Flood offers effective flood and task lighting in a low-profile, energy-efficient package. It approximates the lumen output and light distribution of a 20W halogen flood, utilizing less than 25% of the energy and providing a rated life of 50,000 hours. Unlike conventional incandescent light sources, LEDs have no heat and no UV in their beam – this makes them an ideal choice when illuminating heat-sensitive or UV-sensitive objects. Available in 3000K and 4100K color temperatures, the

white-light Trac 12 LED Mini-Flood is compatible with standard Trac 12 and Trac 12/25 systems with 12V AC transformers approved for use with Juno LED products. The fixture can be installed anywhere along the custom length trac and it can rotate and aim in any direction. The Trac 12 LED Mini-Flood fixture is a versatile linear lighting choice that can also be used within display cases and cabinets, providing a crisp, uniform wash of light over illuminated objects.

Trac 12 LED Mini-Flood



Specifications

LED Citizen Electronics package using Nichia LEDs provides outstanding reliability, performance and color quality/consistency

- Consumes only 4.4W but generates up to 217 lumens, yielding a fixture efficacy of up to 49 lumens per watt
- Cooler operation results in better comfort for close proximity task lighting
- Warm 3000K or higher-efficiency, cooler 4100K white phosphor high performance LEDs offer choices for a variety of applications
- Precise color binning for superior color consistency
- 70+ CRI

Housing Precision die cast aluminum housing with clear thermoplastic lens

- Versatile 180° aiming and 360° horizontal coverage eliminates aiming dead spots

Trac & System Components Compatible with all Juno Trac 12 and Trac 12/25 trac

- Refer to specification sheet D3.1.0 for Trac 12 system information
- Refer to specification sheet D3.1.1 for Trac 12/25 system information

Transformers/Drivers Compatible with all 12VAC transformers approved for use with Juno LED products

- Lower power consumption enables the use of fewer transformers than comparable halogen installations
- Refer to specification sheet D3.1.3 or D3.1.8 for Trac 12 transformer compatibility
- Refer to specification sheet D3.1.6 or D3.1.8 for Trac 12/25 transformer compatibility

Dimming May be dimmed with dimmers tested and qualified by Juno for use with a non-resistive LED load

- Color temperature remains constant over dimming range
- Consult transformer specification sheets or factory for additional dimming information

Warranty Warranty period is 3-years from date of purchase

Labels UL/cUL listed

Big Illumination in a small package



Ordering Information

Make product selections and build your model number

Fixture Style	Color Temperature	Finish
TL103LED	Trac 12 LED	3K 3000K
	Mini-Flood	4K 4100K
		WH White BL Black SL Silver

Ordering Example: TL103LED-3K-WH

Product specifications subject to change without notice.

Cabinetry Lighting Guidelines

Over Cabinets Trac 12, using TL103LEDs spaced 12" on-center, generally provides excellent indirect lighting. For lower-level mood lighting, use TL103LEDs with wider lamp spacing. Placing the fixture at the front edge of the cabinet top will project light into the space and illuminate any displayed objects. Locate top of lamp even with top edge of cove molding to prevent a harsh shadow line.

Under Cabinets Placing Juno Trac 12 at the front lip of the cabinet conceals the fixture from view, minimizes veiling reflections, and provides maximum light on the working area of the countertop.

Footcandles on Horizontal Work Surface*

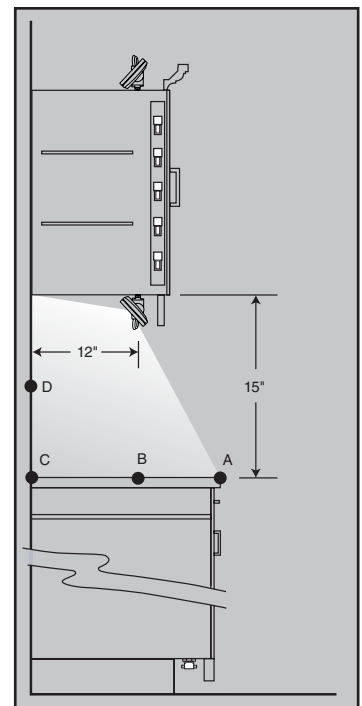
Catalog Number	Color Temperature	O.C. Spacing	Footcandles			
			A	B	C	D
TL103LED-3K	3000K	12"	31	78	48	38
TL103LED-4K	4100K	12"	36	89	55	44

Performance Data

Catalog Number	Input Voltage	Watts	Lumens (Nominal)	Efficacy (LPW)	Rated Life (Hours)
TL103LED-3K	12.0V	4.4W	192	44	50,000
TL103LED-4K	12.0V	4.4W	217	49	50,000

Performance data, including Rated Life, is based on measurements of an individual fixture operating in a 25°C ambient. In practice, multiple fixtures used in a system will average slightly lower power consumption due to voltage drop within the system. *Photometrics taken with LED Mini-Flood in a horizontal position. Rotate fixture to achieve desired lighting affect. **Note:** Shiny countertops may cause lamp image reflections. For operation at 11.5 volts multiply Lumens by 0.94

Cabinetry Lighting Guidelines





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Recessed and Trac Lighting

indy
Architectural Recessed Lighting

AccuLite
Commercial and Industrial Lighting

AcuLux
Precision Recessed Lighting

Navilite
Exit and Emergency Lighting

DanaLite
Architectural Linear Lighting

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