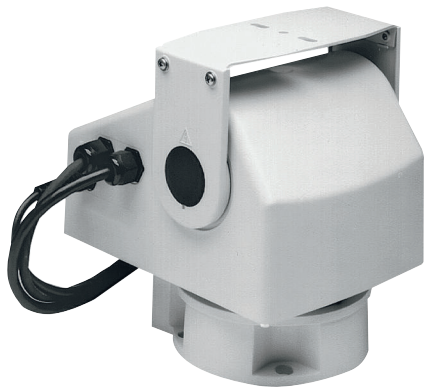


LTC 9420 Series Outdoor Pan/Tilts

www.boschsecurity.com



BOSCH
Invented for life



- ▶ Maximum Load: 10 kg (22 lb)
- ▶ Low Profile, Compact Size
- ▶ Feed-through Wiring
- ▶ 100% Duty Cycle Motors
- ▶ Upright or Inverted Operation

The LTC 9420 Series Weatherproof Pan/Tilts are low profile, compact units constructed with corrosion resistant hardware. Featuring feed-through wiring for lens and camera power, video, and external sync connections, these remote positioning devices are rated for a maximum load of 10 kg (22 lb) and are fully system compatible with CCD cameras, lenses, and housing combinations

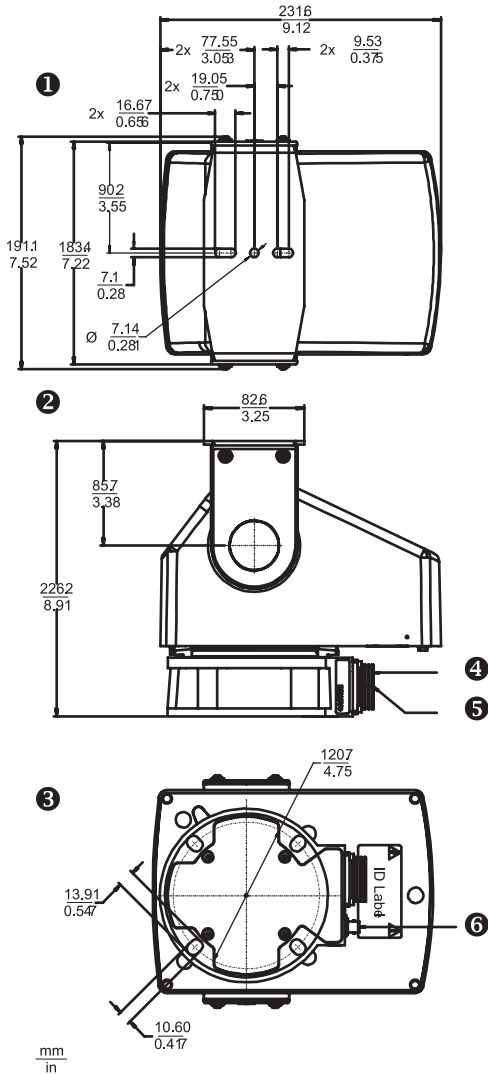
The 100% duty cycle motors permit continuous operation on all models. Low speed worm drives and flexible motor mounts offer quiet, smooth motion. The use of impedance and overload protected motors, long life limit switches, and permanently lubricated bearings reduce maintenance and provide reliable operation.

Installation/configuration notes

Certifications and approvals

Product Regulatory Compliance

Electromagnetic Compatibility (EMC)	Complies with FCC Part 15, ICES-003, and CE regulations
Product Safety	Complies with CE regulations, UL, CSA, EN, and IEC Standards



Dimensional Outline

- 1 Top view
- 2 Side view
- 3 Bottom view
- 4 Ground screw (on other side of multipin connector)
- 5 Multipin connector
- 6 BNC Connector

Technical specifications

Electrical

Model No. ¹⁾	Rated Motor Voltage	Operational Voltage Range
Standard Models -0° to 345°		
LTC9420/60	110 VAC, 60 Hz	108 to 132 VAC
LTC9420/20	24 VAC, 60 Hz	21.6 to 26.4 VAC
LTC9420/10	24 VAC, 50 Hz	21.6 to 26.4 VAC

LTC 9420/50	220 VAC, 50 Hz	207 to 253 VAC
Pre-position Models -0° to 345°		
LTC9420/61	110 VAC, 60 Hz	108 to 132 VAC
LTC9420/21	24 VAC, 60 Hz	21.6 to 26.4 VAC
LTC9420/11	24 VAC, 50 Hz	21.6 to 26.4 VAC
LTC9420/51	220 VAC, 50 Hz	207 to 253 VAC

Connectors:

Power	Via 24-pin connector on base through to 3-conductor cable on pan head
Lens and Accessories	Via 24-pin connector on base through to 10-conductor cable on pan head
Video	Via BNC connector on base through to Flying Lead coax on pan head
Ground	Screw connection for grounding on base

Recommended Maximum Cable Lengths:

Model	Wire Size		Distance	
	mm ²	AWG	Feet	Meters
24 VAC	0.5	20	140	43
	1	18	230	70
	1.5	16	360	110
	2.5	14	590	180
115 VAC	0.5	20	940	287
	1	18	2200	671
	1.5	16	3500	1067
	2.5	14	5500	1677
230 VAC	0.5	20	9000	2744
	1	18	13400	4085
	1.5	16	21200	6463
	2.5	14	33300	10152
	2.5	14	54400	16585

1) The total power for all models, with both motors running, is 24 W.

2) Values calculated at 20° C (68° F) using stranded tinned copper wire common ground (neutral), and with both pan and tilt motors operating simultaneously.

Mechanical

Mounting These units are designed for either upright or inverted installations to 345°. To maintain weatherproof integrity when mounting outdoors in an inverted position, the unit must be installed in a weather-proof enclosure (e.g., weatherproof domed housing) or a protected outside to 345° area. They can only be mounted upright or inverted; never horizontally.

Pan Range (Movement in horizontal plane)

Pan Speed	7°/sec
Tilt (Movement in vertical plane)	
	+30° to -90° against the horizontal
Tilt Speed	3.5°/sec
Maximum Load	149 kg-cm (129 lb-in.) torque or 10 kg (22 lb) at a distance of 63.5 mm (2.5 in.) from the center of mass of the camera/lens/housing assembly to the center of the tilt table
Construction	Cast aluminum base and yoke, corrosion resistant plastic cover
Finish	Light gray
Dimensions	See Dimensional Outline
Weight	6.67 kg (14.7 lb)

Environmental

Temperature	
Operating	-30°C to +60°C (-22°F to +140°F)
Storage	-40°C to +60°C (-40°F to +140°F)
Vibration	3 g swept sine wave, 15 Hz to 2000 Hz
Shock	50 g, 11 ms, 1/2 sine
Enclosure	Tested to IP54 requirements. UL 50 Type 3/ NEMA-3 design (upright mounting)

Ordering information

LTC 9420/10 Weatherproof Standard Pan/Tilts

Max. load 10 kg, 24 VAC, 50 Hz, feed-through wiring
Order number **LTC 9420/10**

LTC 9420/11 Weatherproof Pre-position Pan/Tilts

Max. load 10 kg, 24 VAC, 50 Hz, feed-through wiring
Order number **LTC 9420/11**

LTC 9420/12 Weatherproof Continuous Pan Pan/Tilts

Max. load 10 kg, 24 VAC, 50 Hz, feed-through wiring
Order number **LTC 9420/12**

LTC 9420/13 Weatherproof Continuous Pan Models with Pre-position

Max. load 10 kg, 24 VAC, 50 Hz, feed-through wiring
Order number **LTC 9420/13**

LTC 9420/20 Weatherproof Standard Pan/Tilts

Max. load 10 kg, 24 VAC, 60 Hz, feed-through wiring
Order number **LTC 9420/20**

LTC 9420/21 Weatherproof Pre-position Pan/Tilts

Max. load 10 kg, 24 VAC, 60 Hz, feed-through wiring
Order number **LTC 9420/21**

LTC 9420/22 Weatherproof Continuous Pan Pan/Tilts

Max. load 10 kg, 24 VAC, 60 Hz, feed-through wiring
Order number **LTC 9420/22**

LTC 9420/23 Weatherproof Continuous Pan Models with Pre-position

Max. load 10 kg, , 24 VAC, 60 Hz, feed-through wiring
Order number **LTC 9420/23**

LTC 9420/50 Weatherproof Standard Pan/Tilts

Max. load 10 kg, 230 VAC, 50 Hz, feed-through wiring
Order number **LTC 9420/50**

LTC 9420/51 Weatherproof Pre-position Pan/Tilts

Max. load 10 kg, 230 VAC, 50 Hz, feed-through wiring
Order number **LTC 9420/51**

LTC 9420/60 Weatherproof Standard Pan/Tilts

Max. load 10 kg, 120 VAC, 60 Hz, feed-through wiring
Order number **LTC 9420/60**

LTC 9420/61 Weatherproof Pre-position Pan/Tilts

Max. load 10 kg, 120 VAC, 60 Hz, feed-through wiring
Order number **LTC 9420/61**

Accessories

LTC 9214/00 Versatile Mount

for 14-inch, 90.6 kg (200 lb) max load upright, light gray finish
Order number **LTC 9214/00**

LTC 9224/00 Versatile Mount

for 24-inch, 90.6 kg (200 lb) max load upright, light gray finish
Order number **LTC 9224/00**

LTC 9216/00 Versatile Mount

for 16-inch, 45.3 kg (100 lb) max load, light gray finish
Order number **LTC 9216/00**

LTC 9222/00 Versatile Mount

for 22-inch, 90.6 kg (200 lb) max load, light gray finish
Order number **LTC 9222/00**

LTC 9227/00 Versatile Mount

for LTC 9216 and LTC 9222/00 , 45.3 kg (100 lb) max load, adjustable head, light gray finish
Order number **LTC 9227/00**

LTC 9228/00 Versatile Mount

for LTC 9216/00 and LTC 9222/00 wall mounts, 45.3 kg (100 lb) max load, flange bracket
Order number **LTC 9228/00**

LTC 9225/00 Pole Mount

45.3 kg (100 lb) max load, pole mount, light gray finish
Order number **LTC 9225/00**

LTC 9226/00 Versatile Mount

for LTC 9216 and LTC 9222, 45.3 kg (100 lb) max load, corner mount bracket, light gray finish
Order number **LTC 9226/00**

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