



ViStar Series Heavy-Duty Pan-and-Tilt Drives

- 35 lb (16 kg) load rating, fixed speed; 25 lb (11 kg), variable speed
- Rugged weatherproof sand cast aluminum construction
- Designed for ease of installation and service
- Preset position, continuous rotation and autopan models available
- Excellent preset accuracy

The ViStar Pan-and-Tilt Drive is a weatherproof unit capable of operating with loads up to 35 pounds (16 kg) [variable-speed model is 25 lb (11 kg)]. The heavy-duty motors are constructed with hardened-steel gear trains that never require user maintenance. All-weather protection is provided by “O” rings and gasket seals.

The fixed-speed unit has an input voltage of 24 VAC and the variable speed unit uses 24 VDC; the pan-and-tilt may be operated directly by an appropriate control; when greater operating distances are required, a combination of a control and a relay box or a digital receiver may be used.

Six model variations are available, three fixed speed, two variable speed, and one fixed speed with autopan. The standard version is Model VIST35 (standard speed). The preset versions, Models VIST35-P and VIST25-VP, come equipped with a preset position potentiometer and must be used with an appropriate control. The VIST35-RP and VIST25-VRP allow continuous rotation and preset. The VIST35-AP allows autopan operation. Refer to Table 1 for model descriptions. The term ViStar is used to refer to all models unless specifically stated otherwise.

Notes: SUPERSEDES PRODUCT SPECIFICATION 940-802


Model	Product Code	Description
VIST35 	5849	Standard fixed speed
VIST35-P	5849-03	Fixed speed with presets
VIST35-RP	5849-05	Fixed speed with presets and continuous rotation
VIST35-AP	6476	Fixed speed with autopan
VIST25-VP	5850-03	Variable speed with presets
VIST25-VRP	5850-05	Variable speed with presets and continuous rotation

Table 1: Models, Product Codes and Descriptions

Pan-and-Tilt	Control	Wire Size (AWG) Annealed Copper	Maximum Distance ft (m)
VIST35, VIST35-P, VIST35-RP, VIST35-AP	Any Vicon 24-VAC hardwired control or receiver	20 18 16 14	360 (110) 560 (170) 900 (275) 1420 (433)
VIST25-VP, VIST25-VRP	V1305R-DC	20	250 (76.2)*

*Because the VIST25 has DC motors, the maximum speed of the motor is proportional to the input voltage. As operating distance increases, input voltage is reduced, causing slower speeds.

Table 2: Maximum Operating Distances

**TECHNICAL SPECIFICATIONS
DIVISION 13 - SPECIAL CONSTRUCTION
SECTION 137__ - SECURITY CCTV SYSTEM**

SECURITY SYSTEM

PART 2 - PRODUCTS

2.01 GENERAL

- A. All equipment and materials used shall be standard components, regularly manufactured, regularly utilized in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in actual use.
- C. All systems and components shall be provided with the availability of a toll free 24-hour technical support phone number from the manufacturer. The phone number shall allow for immediate technical assistance for either the dealer/installer or the end user at no charge.
- D. All systems and components shall be provided with an explicit manufacturer warranty.

2.02 WEATHERPROOF PAN-AND-TILT DRIVE

- A. The pan-and-tilt drive shall be a weatherproof type and shall be available in a fixed speed and variable-speed version. The fixed-speed models shall have a load rating of 35 lb (16 kg); the variable-speed models shall have a load rating of 25 lb (11 kg). Versions with preset position operation, continuous rotation and autopan shall also be available.
- B. The load rating shall be based on a moment-arm distance of 6.3 inches (16 cm) from the center of gravity of the load to the center of tilt rotation. Torque rating for the fixed-speed models shall be 110 lb-in (12.4 N-m) in the pan mode and 220 lb-in. (24.9 N-m) in the tilt mode; torque rating for the variable-speed models shall be 79 lb-in. (8.9 N-m) in the pan mode and 158 lb-in. (17.9 N-m) in the tilt mode. Maximum horizontal travel shall be 360° for the standard version, 320° for the preset version, and unlimited pan for the continuous rotation version and maximum vertical travel shall be +26 to -85°. Pan speed shall be 6°/sec and tilt speed shall be 3°/sec for the fixed-speed versions and up to 48°/sec pan and 24°/sec tilt for the variable-speed version. Motors shall be thermal overload protected. Braking shall be internal to motor by design. No external braking shall be used. Pan limit stops shall be externally adjustable.
- C. The weatherproof pan-and-tilt drive shall have the following mechanical specifications:
 - 1. **Mounting:** Base, three mounting hole patterns.
Camera/housing: three tray slots.
 - 2. **Dimensions:** Height: 10.7-in. (272 mm); RP version: 12.7 in. (323 mm).
Width: 8.4-in. (213 mm).
Depth: 7.5-in. (191 mm).
Base: 6.1 in. × 6.1 in (160 mm × 160 mm).
 - 3. **Weight:** 16-lb. (7.3 kg).
 - 4. **Construction:** Sand cast aluminum housing. All parts corrosion-protected steel, stainless steel or aluminum
 - 5. **Finish:** Light gray textured polyurethane paint, black accents.
 - 6. **Bearings:** Life-lubricated rolling contact ball bearings.
 - 7. **Gears:** Steel.
 - 8. **Seals:** "O" ring and gasket seals for all-weather environmental protection.
- D. The operating ambient temperature range shall be -30 to +120° F (-34 to +49° C) without the heater option and -60 to 120° F (-51 to 49° C) with the heater option.
- E. Input voltage shall be 24 VAC, 50/60 Hz for the fixed-speed model and 24 VDC for the variable-speed model. Normal operating current for the fixed-speed version shall be 600 mA for pan and 618 mA for tilt; normal operating current for the variable speed version shall be 380 mA for pan and 1.1 A for tilt (measured at rated load); operating current for the heaters shall be 1.04 A. Limit and reversing switches shall have a 5 A, 10-million cycle rating.

The weatherproof fixed-speed pan-and-tilt drive shall be Vicon Industries model VIST35; the preset version shall be Vicon Industries model VIST35-P; the continuous rotation version shall be Vicon Industries model VIST35-RP; the autopan version shall be Vicon Industries model VIST35-AP. The weatherproof variable-speed pan-and-tilt drive preset version shall be Vicon Industries model VIST25-VP; the continuous rotation version shall be Vicon Industries model VIST25-VRP.

Vicon Product Facts		Model No: ViStar Series	Product Code: Refer to Table 1	SEC: 2	SPEC: 940	REV: 603
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Technical Information

ELECTRICAL

Input Voltage: VIST35 Series: 24 VAC, 50/60 Hz.
VIST25 Series: 24 VDC.

Power Consumption: VIST35: 14.4 W pan; 14.9 W tilt.
VIST25: 8.4 W pan; 24.2 W, tilt.

Heat Equivalent: VIST35: 1.7 btu/min (0.4 kg-cal/min).
VIST25: 1.9 btu/min (0.5 kg-cal/min).
Note: These figures represent the conversion of 100% of the electrical energy to heavy. Actual percentage of the heat generated will be less and will vary from product to product. These figures are provided as an aid in determining the extent of cooling required for an installation.

Normal Operating

Current: VIST35: 600 mA @ 24 VAC, pan;
618 mA @ 24 VAC, tilt.
Total: 1.2 A.
VIST25: 380 mA @ 24 VDC, pan;
1.1 A @ 24 VDC, tilt.
Total: 1.5 A.
Maximum value at rated load.

Slip Ring

Current/Voltage: 2A/210 VDC, Or 1/4 A/148 VAC.

Limit Switches: 5 A, 10-million cycle rating.

Cable Requirements: Standard models: 8-conductor, unshielded.
Preset models: 13-conductor, unshielded.
Autopan model: 14-conductor, unshielded.
Continuous Rotation models: 25-conductor, unshielded and video cable.

OPERATIONAL

Angular Travel: Pan: VIST35, 360° maximum;
VIST35-P/VIST25-VP; 320°;
VIST35-RP/VIST25-VRP; unlimited pan.
Tilt: +26° to -85°.

Limit Stops: Externally adjustable.

Speed: VIST35:
Pan: 6°/sec.
Tilt: 3°/sec.
VIST25:
Pan: 1-48°/sec.
Tilt: 1-24°/sec.

Operating Distances: Refer to Table 2.

Load Rating: VIST35 Series: 35 lb (16 kg).
VIST25 Series: 25 lb (11 kg).
Based on center of gravity to center of tilt rotation distance of 6.3 in. (160 mm).

Preset Accuracy: VIST35 Series: $\pm 2^\circ$.
VIST25 Series: $\pm 1^\circ$.

Torque: VIST35 Series:
Pan: 110 lb-in. (12.4 N-m).
Tilt: 220 lb-in. (24.9 N-m).
VIST25 Series:
Pan: 79 lb-in. (8.9 N-m).
Tilt: 158 lb-in. (17.9 N-m).

Braking: Internal to motor by design. No external braking used. VIST25 also has a built-in dynamic braking circuit.

Overload Protection: Motors may be stalled without danger of thermal overload.

Duty Cycle: Pan: continuous.
Tilt: continuous.

Backlash: Pan: $\pm 0^\circ 30'$.
Tilt: $\pm 0^\circ 30'$.

MECHANICAL

Dimensions: Height: 10.7 in. (272 mm).
RP Version: 12.7 in. (323 mm),
Width: 8.4 in. (213 mm).
Depth: 7.5 in. (191 mm).
Base: 6.1 in. x 6.1 in.
(160 mm x 160 mm).

Weight: 16 lb (7.3 kg).

Construction: Sand cast aluminum housing. All parts corrosion-protected steel, stainless steel, or aluminum.

Finish: Light gray textured polyurethane paint, black accents.

Bearings: Life-lubricated rolling contact ball bearings.

Gears: Steel.

Seals: "O" ring and gasket seals for all-weather environmental protection.

Mounting: Base: three mounting hole patterns to accommodate a variety of mounting configurations.
Camera/housing: three tray slots accommodate a variety of mounting patterns.

Shipping Dimensions: Height: 11.25 in. (286 mm).
RP Version: 13.25 in. (337 mm).
Width: 15.75 in. (400 mm).
Depth: 12.1 in. (307 mm).

Shipping Weight: 18 lb (8.2 kg).

Shipping Volume: 1.2 ft³ (0.03 m³).

ENVIRONMENTAL

Operating Temperature Range: -30 to 120° F (-34 to 49° C).

Storage Temperature Range: -40 to 150° F (-40 to 65° C).

Storage Humidity: Up to 90% relative, noncondensing.

Wind: Up to 80 mph.

IP Rating: IP66.

