Gades Sales Co. Inc.

TRAFFIC CONTROL SPECIALISTS
www.gadestraffic.com

472-83241

SIMS ELECTRICAL SERVICES
CITY OF WICHITA
LINCOLN & WEBB
JOB #: N/A

Material supplied for this project:

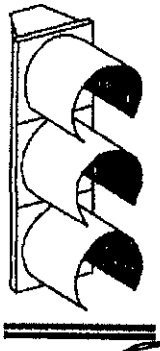
DESCRIPTION	MANUFACTURER	MODEL #
Vehicle Signals	Siemens / Eagle Traffic	SA Series
LED Lenses	Gelcore	RX11 Series
Pedestrian Signals	Siemens / Eagle Traffic	16" Poly Clamshell
LED Pedestrian Lens	Gelcore	PS7-CFF1-26A
Backplates	Neodesha Plastics	BP483
Mast Arm Bracket	Pelco Products, Inc.	AB125
Side-of-Pole Bracket	Pelco Products, Inc.	SE3148Y
Pushbutton	Pelco Products, Inc.	SE2087-1039
Street Name Signs	Gades Sales Company, Inc.	48"
Sign Bracket	Pelco Products, Inc.	AB0142
Video Camera	Iteris	Vantage Color Camera
Camera Bracket	Pelco Products, Inc.	AB0175-5-62
Video Processor	Iteris	Vantage Edge 2
Coax & Power Cable	Isotec	I59PVCC-00
Mast Arms & Poles	Valmont Industries	Various

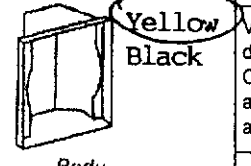
SIMS ELEC. SERVICE, INC.
1827 N. MOSLEY
WICHITA, KS 67214

P.O. BOX 9003 - WICHITA, KANSAS 67277 - (316) 943-1219 - FAX (316) 943-8829

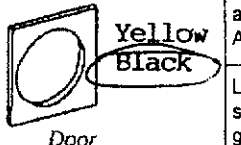
SIEMENS

EAGLE Vehicle Traffic Signals
Polycarbonate & Aluminum
Bulletin 1110





Body



Door


Cutaway Visor



Tunnel Visor

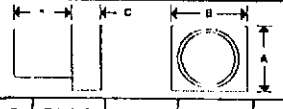

Full Circle Visor


Reflector

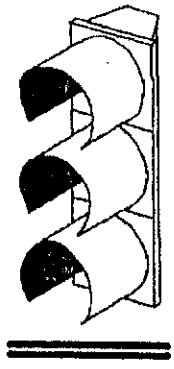
TRAFFIC SIGNAL SECTION SPECIFICATIONS

POLY SECTION	ALUMINUM SECTION
BODY - One piece poly unit with integral serrations on 5° increments in the end sections. Each body provides for mounting terminal blocks and attaching backplates.	BODY - One piece aluminum unit with integral serrations on 5° increments in the end sections. Each body provides for mounting terminal blocks and attaching backplates.
DOOR - One piece poly unit equipped with stainless steel hinge pins. Thumbscrews (SA) or wing nuts (SIG) hold the door against the body.	DOOR - One piece aluminum unit equipped with stainless steel hinge pins. Wing nuts hold the door against the body.
VISOR - One piece poly unit duralocked at four points to the door. Cutaway and tunnel forms are available. Poly and aluminum visors are interchangeable.	VISOR - One piece aluminum unit with slotted mounting holes. Cutaway, tunnel and full circle forms are available. Poly and aluminum visors are interchangeable.
REFLECTOR - Swing out unit available in aluminum treated with ALZAK finish or silvered glass.	REFLECTOR - Swing out unit available in aluminum treated with ALZAK finish or silvered glass.
LENSES - Conform to ITE specifications. Available in poly and glass.	LENSES - Conform to ITE specifications. Available in poly and glass.
LAMP - Not Supplied. (2-7/16" light center length for 8 inch and 2-7/16" or 3" light center length for 12 inch.)	LAMP - Not Supplied. (2-7/16" light center length for 8 inch and 2-7/16" or 3" light center length for 12 inch.)
LAMP SOCKET - Insulated, prefocused and may be rotated for positioning the lamp filament without using tools. Wiring is #18 or #16 AWG, strand.	LAMP SOCKET - Insulated, prefocused, and may be rotated for positioning the lamp filament without using tools. Wiring is #18 AWG, 19 strand, 600 V, 105 C per MIL-W-16878D and color coded (black for power and white for common).
GASKETS - Neoprene making the optical unit weather tight.	GASKETS - Neoprene making the optical unit weather tight.

*Visor
D = Cutaway
E = Tunnel
F = Full Circle



SECTION-SIZE/MATL	WEIGHT	DIM A	DIM B	DIM C	DIM D	DIM E	DIM F
8 inch Poly	3-3/8 lb.	10	10-1/4	5-1/2	7-1/8	7-1/8	N/A
12 inch Poly	6-1/2 lb.	14	14	7-1/16	9-5/8	9-5/8	N/A
8 inch Aluminum	6-1/4 lb.	10	10-1/4	5-1/2	8	8	8
12 inch Aluminum	10-1/4 lb.	14	14	5-1/2	9-1/2	11-1/4	11-1/4




Lens


Arrow Indications

- **Glass arrow** lenses have an ITE arrow on a black field. The lens may be rotated to provide left, right or vertical indications.

Available are:
8 Inch - Green
12 Inch - Red
12 Inch - Yellow
12 Inch - Green

- **Poly arrow** lens indications are generated by the use of a black alum ITE arrow mask. The mask may be rotated to provide left, right and vertical indications. Masks are also available for glass lens.

Available are:
12 Inch Mask

- **Special lenses** are available upon request.

Siemens ITS
Siemens Energy & Automation, Inc.
Business Unit Intelligent Transportation Systems

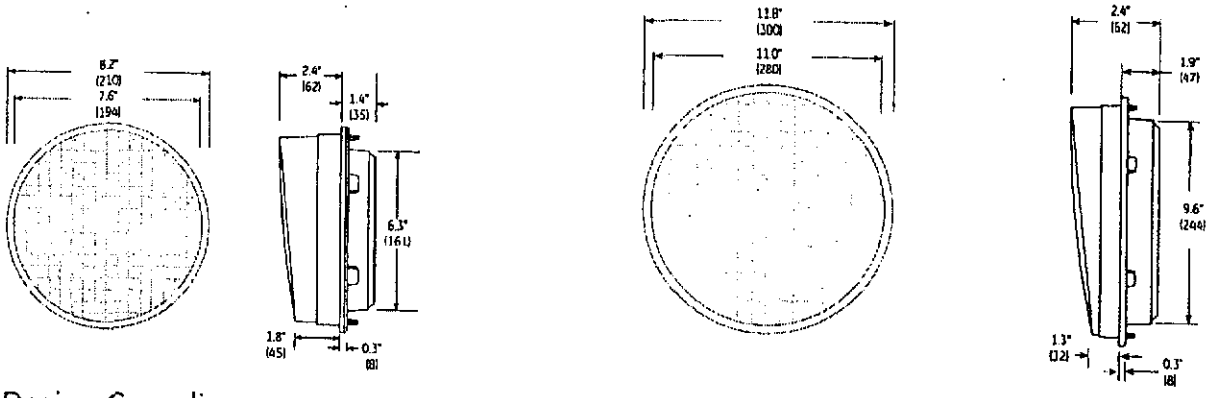
8004 Cameron Road · Austin, TX 78754
Ph: (512) 837-8310 · Fax: (512) 837-0196
http://www.itssiemens.com

RX11 LED Signal Modules

- 8 and 12 inch

Mechanical Outline

Dimensions in inches. (mm) indicates metric equivalent



Design Compliance

Test Type	Compliance
Luminous Intensity	ITE VTCSH-STD Part 2
Chromaticity	ITE VTCSH-STD Part 2
Moisture Resistance	NEMA STD 250 Type 4 - 1991
Mechanical Vibration	MIL-STD-883 Method 2007
Electronic Noise	FCC Title 47 Sub. B Sec 15[1]
Transient Voltage Protection	ITE VTCSH-STD Part 2
Controller Compatibility	NEMA TS-2-1992
Wiring	National Electric Code

[1] Class A

Operating Specifications

Parameter	Rating
Operating Temperature Range	-40 to + 74°C (-40 to +165°F)
Operating Voltage Range	80 to 135 V (60Hz AC)
Power Factor (PF)	> 90 %
Total Harmonic Distortion (THD)	< 20 %
Voltage Turn-off (VTO)	45 V
Lens & Shell Material	UV Stabilized Polycarbonate
Wiring	16 AWG, Color Coded with Strain Relief

Product Information

Model Number	Size (in)	AC Voltage	Power (W)	Wavelength (nm)	Maintained Intensity (Cd)
		Nominal	Nominal	Dominant	Minimum
DR4-RTFB-20A	8	120V - 60 Hz	5	626	133
DR4-YTFB-20A	8	120V - 60 Hz	13	589	267[2]
DR4-GTFB-20A	8	120V - 60 Hz	6	508	267
DR4-GCFB-20A	8	120V - 60 Hz	6	508	267
→ DR6-RTFB-20A	12	120V - 60 Hz	10	626	339
→ DR6-YTFB-20A	12	120V - 60 Hz	22	589	678[3]
DR6-GTFB-20A	12	120V - 60 Hz	12	508	678
→ DR6-GCFB-20A	12	120V - 60 Hz	12	508	678

Options:
- Q : Quick Connect
- S : Medium Base Socket
- F : In-line Fuse

Standard product equipped with spade connectors.
[2] Measured at +2.5°H -2.5°V, T_a = 25°C.
[3] Actual intensity less than ITE specification.

Distributed by:

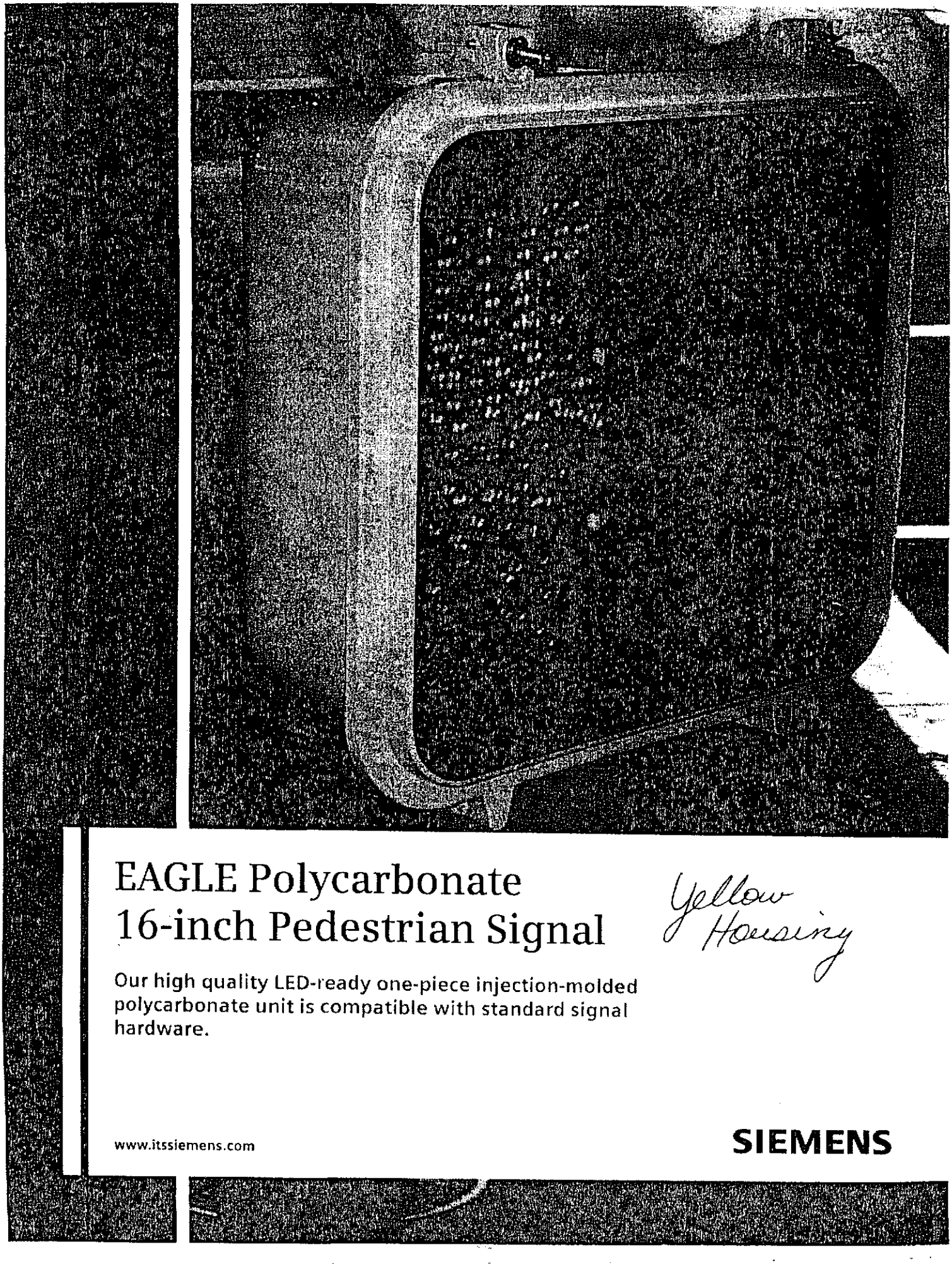
Products by GELcore

6180 Halle Drive • Valley View, Ohio 44125-4635

Americas P:216.606.6612 • F:216.606.6599 • www.gelcore.com • signals@gelcore.com

Publication No: SSUSRX1146ITE: 08/01/06 • GELcore LLC is a joint venture between GE Lighting and EMCORE Corporation

Information provided is subject to change without notice. All values are design or typical values when measured under laboratory conditions.
GELcore LLC markets and distributes the GE brand of LED products and uses the GE trademarks under license from the General Electric Company.



EAGLE Polycarbonate 16-inch Pedestrian Signal

Yellow Housing

Our high quality LED-ready one-piece injection-molded polycarbonate unit is compatible with standard signal hardware.

www.itssiemens.com

SIEMENS

The Polycarbonate 16-inch Pedestrian Signal is available in three different colors, though the eggcrate visor is only available in flat black.



The LED housing is a one-piece injection-molded polycarbonate, with two integrally-molded hinge lugs, screw slots, and openings at each end.

The openings will accommodate standard 1.5" pipe brackets, as well as our side-of-pole bracket. The top and bottom openings of the housing has an integrally-molded Shurlock boss. The radial angular grooves of the Shurlock boss provide 5° increment positioning of the signal to eliminate rotation or misalignment of the signal.

The housing is available with a knock-out plug at the top and bottom. This plug eliminates the need for additional hardware to close these openings when using a clamshell or post-top mounting bracket.

The swing-down-door is a single piece injection-molded polycarbonate, with two (2) hinge lugs molded on the bottom of the door, and two (2) latch points on the top. The door is attached to the bottom of the housing using two (2) cotter-less locking pins. Two (2) eye bolts and wing nuts on the top allow the door to be opened and closed without the need for special tools.

The egg crate visor option is designed to eliminate sun phantom and minimize damage to the LED.

The egg crate visor is inserted through the back side of the door and secured with screws, overlapping by 1/2 inch. It is sealed when the door is closed, which prevents light from escaping between the visor and the door.

The design of the LED housing provides for minimum weight with maximum rigidity and strength, meeting or exceeding ITE specifications.

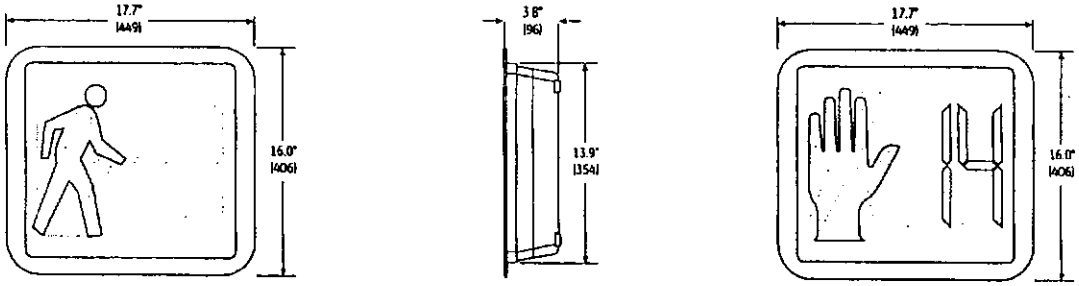
- **Standard Housing** – One-piece polycarbonate unit with serrations in 5° increments on the top and bottom. The housing is equipped with stainless steel cotter-less hinge pins and locking wing nut assemblies. Each housing has provisions for mounting two (2) 4-position terminal blocks.
- **Maintenance Housing** – Same as Standard Housing, but with five (5) mounting holes on one side to accommodate a clamshell mounting bracket. Hinge pins and eye-bolts may easily be removed without tools to reverse door, allowing clamshell mounting on either side, without additional holes or plugs.
- **Door** – One-piece polycarbonate door that can be used with a polycarbonate tunnel or eggcrate visor.
- **Visor** – Injection-molded polycarbonate eggcrate visor or formed polycarbonate tunnel visor, each secured to the door with stainless steel screws.
- **Lens** – The housing is designed to accommodate 16-inch LEDs.
- **Gasket** – The housing is design to work with a gasket supplied by LED manufacturer.
- **Positive Positioning** – Positive positioning and locking is achieved through the use of serrated brackets.
- **Mounting** – Housing is completely compatible with all standard signal hardware.

GT1™ LED Pedestrian Signals

- 16 x 18 inch module

Mechanical Outline

Dimensions in inches. (mm) indicates metric equivalent



Design Compliance

Test type	Compliance
Luminous intensity, Uniformity & Viewing Angles	ITE Pedestrian Traffic Control Signal Indications - Part 2: LED Pedestrian Traffic Signal Modules - March 2004 Sections 4.1.1, 4.1.2 & 4.1.3 (applies to: Hand & Person only)
Chromaticity	ITE PTCSI-STD Part 2 - March 2004
Moisture Resistance	MIL-STD-810F Procedure 1, Rain & Blowing Rain
Mechanical Vibration	MIL-STD-883 Test Method 2007
Electronic Noise	FCC Title 47 Sec 15 Sub. B[1]
Transient Voltage Protection	Sec. 2.1.6 NEMA TS 2-2003 Sec. 2.1.8 NEMA TS 2-2003
Controller Compatibility	NEMA TS-2-1992
Transient Suppression	Sec. 8.2 IEC 1000-4-5 & Sec. 6.1.2 ANSI/IEEE C62.41.2 - 2002, 3KV, 2 Ω Sec. 8.0 IEC 1000-4-12 & Sec. 6.1.1 ANSI/IEEE C62.41.2 - 2002, 6KV, 30 Ω
Wiring	National Electric Code
Sizing	MUTCD 2003, Section 4E.07, Countdown Numbers Minimum 9" Height & 7" Width

[1]Class A

Operating Specifications

Parameter	Rating
Operating Temperature Range*	-40 to +74°C (-40 to +165°F)
Operating Voltage Range	80 to 135 V (60Hz AC)
Power Factor (PF)	> 90 %
Total Harmonic Distortion (THD)	< 20 %
Voltage Turn-Off (VTO)	35 V
Start-up Time	< 75msec
Lens & Shell Material	UV Stabilized Polycarbonate
Wiring	16 AWG, Color Coded with Strain Relief
LED Color	Hand: Portland Orange Person: Lunar White
Default Mode	Hand only

* Performed in compliance with ITE test method described in the technical notes

Distributed by:

Product Information

Model Number	Dimensions		Symbol		AC Voltage	Power (W)			Beam Pattern	Minimum Luminous Intensity Cd/m²	
	Dimensions	Layout	Hand	Person	Nominal	Hand	Person	Countdown	Degrees	Hand/Digit	Person
PS7-CFF1-26A[2]	16 x 18 in	Overlay Countdown	Full	Full	120V - 60Hz	11	8	6	46	1400	2200

[2] Full MUTCD Compliance

Test Condition : T_a = 25°C. All values are design or typical values when measured under laboratory conditions

6180 Halle Drive • Valley View, Ohio, 44125-4635, USA
P: 216.606.6612 • F: 216.606.6599 • W: www.led.com • E: signals@led.com

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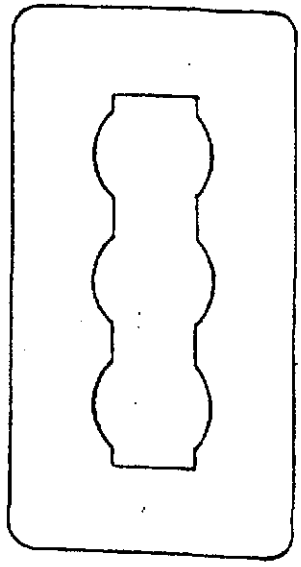
TRAF014-R032108

Gades Sales Co. Inc.

TRAFFIC CONTROL SPECIALISTS

VACUUMED FORMED PLASTIC BACKPLATE

Fabricated from .125" Black ABS Plastic. Front side has haircell finish with a smooth finish on the back. One piece construction designed to withstand wind up to 100 MPH. Furnished with all necessary hardware to attach to signal head.



Catalog Number	Number of Signal Sections	Signal Size
BP193PO	3	8-8-8
BP433PO	3	12-8-8
BP435PO	5	8-8-8-12-12
BP481PO	1	12
BP483PO	3	12-12-12
BP484PO	4	12-12-12-12
BP485DHPO	5	12-12-12-12-12
BP485PO	5	12-12-12-12-12

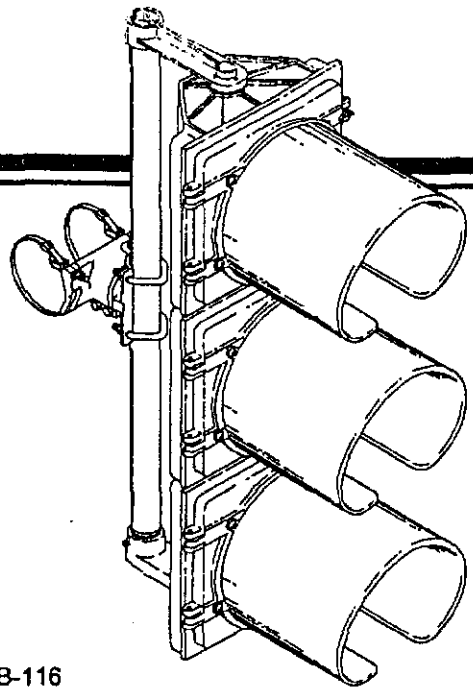
Manufactured by Neodesha Plastics

P.O. BOX 9003 • WICHITA, KANSAS 67277 • (316) 943-1219 • FAX (316) 943-8829
2555 W. ALAMO AVE. • LITTLETON, COLORADO 80120 • (303) 730-8710 • FAX (303) 730-8713

Astro-Brac®

BY
Pelco Products, Inc.

The most versatile signal mounting system available!



AB-116
STANDARD ASTRO-BRAC

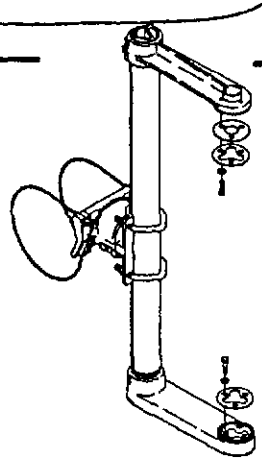
Designed to accommodate all traffic signals, except 3M. Standard 46" tube will fit all signal combinations from one 8" section up to three 12" sections. See other Astro-Brac Bulletins for complete details and specifications.

The Astro-Brac, in its various configurations, provides a truly universal system for mounting signals.

Included in this brochure are some of the most popular applications of this unique bracket. All can save countless labor hours. You will undoubtedly find other applications that will solve many more of your specific mounting problems!

The Astro-Brac is designed to facilitate the mounting of any size or combination of signals to any size and shape of mast arm or pole. This complete adjustability is not possible with other types of rigid mountings.

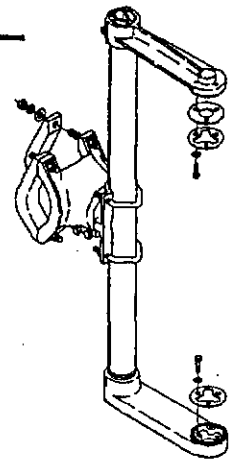
AB-125
CABLE MOUNT ASSY.



Same standard assembly as AB-116 except equipped with cable attaching assembly in lieu of stainless steel bands.

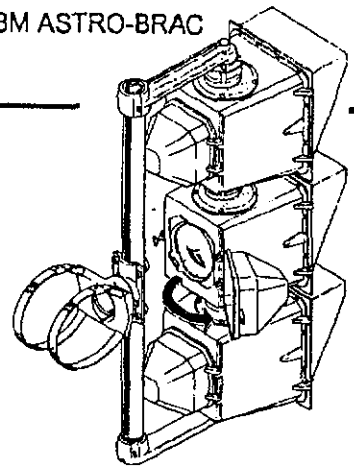
All Astro-Brac Assemblies can be equipped with Cable Clamp Kits in lieu of stainless steel bands.

AB-137
TENON MOUNT ASSY.



Same standard assembly as AB-116 except equipped with back clamp assembly to fit tubes from 1.9" O.D. to 4.5" O.D.

AB-103
3M ASTRO-BRAC

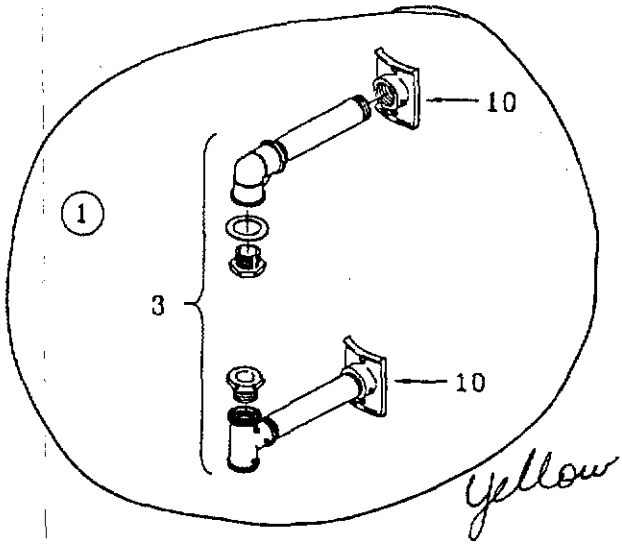


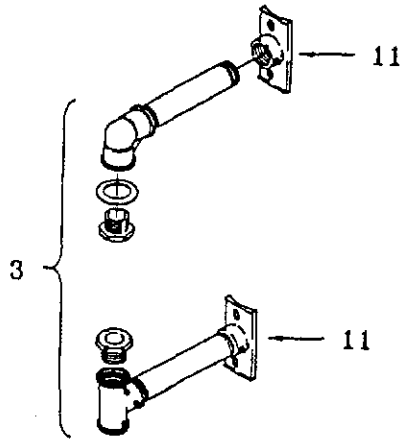
This bracket, with its "Extra Reach" 14" arms, was designed to allow the rigid, completely adjustable mounting of optically programmed 3M signals. Featuring all-axis adjustability to aid in initial aiming, plus the security of top and bottom rigid support to make sure it stays aimed.

GADES SALES COMPANY, INC
TRAFFIC CONTROL SPECIALISTS
P.O. BOX 9003
WICHITA, KANSAS 67277

ALUMINUM VERTICAL SIGNAL MOUNTINGS, 1 1,

PELCO PRODUCTS, INC.

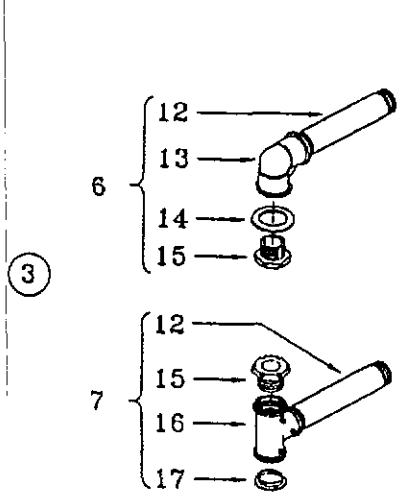


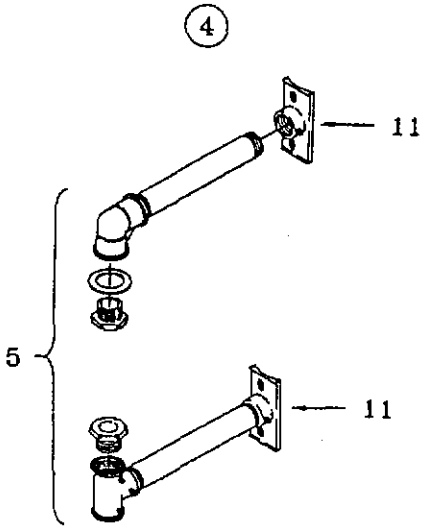


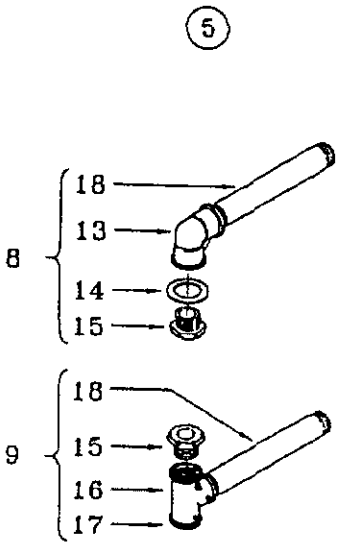
ITEM	DESCRIPTION	PART NO.
①	UPPER & LOWER ARM ASSEMBLY W/ HUBS FOR 1-WAY SIGNAL	SE-3148
②	UPPER & LOWER ARM ASSEMBLY W/UNIVERSAL HUBS FOR 1-WAY SIGNAL	SE-3215
③	UPPER & LOWER ARM ASSEMBLY FOR 1-WAY SIGNAL	SE-3036
④	UNIVERSAL UPPER & LOWER ARM ASSEMBLY FOR 1-WAY SIGNAL	SE-3214
⑤	UPPER & LOWER ARM ASSEMBLY FOR ICC PEDESTRIAN HEAD	SE-3146
6	UPPER ARM ASSY. FOR 1-WAY SIGNAL	SE-3000
7	LOWER ARM ASSY. FOR 1-WAY SIGNAL	SE-3001
8	UPPER ARM ASSY. FOR ICC PED HEAD	SE-3144
9	LOWER ARM ASSY. FOR ICC PED HEAD	SE-3145
10	HUB PLATE, LARGE POLE	SE-0357
11	HUB PLATE, UNIVERSAL	SE-4071
12	NIPPLE, 1 1/2" x 10"	SE-0436-10
13	SERRATED ELL	SE-0457
14	NEOPRENE GASKET	SE-0354
15	CAST NIPPLE	SE-0443
16	SERRATED TEE	SE-0458
17	FITTING CAP, 1 1/2"	SE-0304
18	NIPPLE, 1 1/2" x 12"	SE-0436-12

NOTE: SEE SECTION 3 FOR MISCELLANEOUS HUBS.

GADES SALES COMPANY, INC.
TRAFFIC CONTROL SPECIALISTS
P.O. BOX 9003
WICHITA, KANSAS 67277





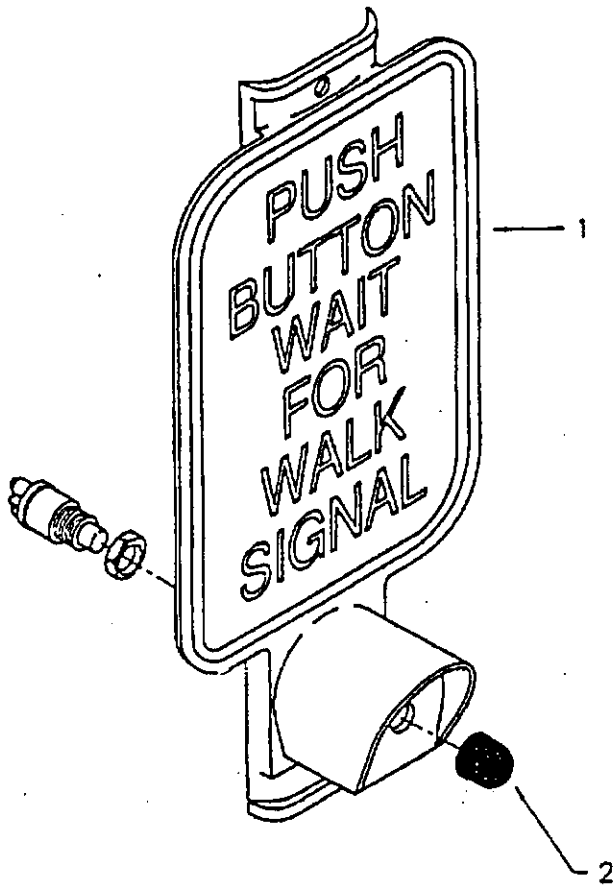


SPECIFICATIONS SHEET

pelco
PELCO PRODUCTS, INC.
320 E. W. 18TH EDMOND, OKLAHOMA 73013 (405) 340-3434 FAX (405) 340-3435

AGENCY:	REF.: CAST PUSH BUTTON STATION ASSY., 5" x 7-3/4" W/ HEAVY TENSION SWITCH "PUSH BUTTON WAIT FOR WALK SIGNAL"	PELCO NO.: SE-2087-1039

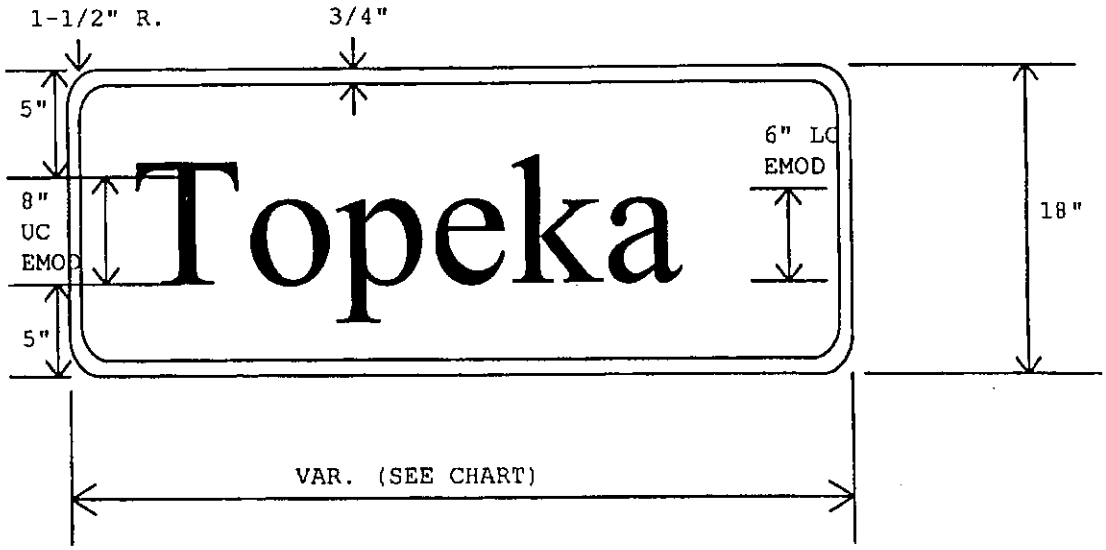
ATTN: Terry



MATERIAL COATING LEGEND	
COATING	CODE
Alodine	ALO
Brass	BRS
Chrome	CHR
Galvanized	GLV
No Coating	PNC
Zinc, Bright	ZN1
Zinc, Yellow	ZN2
Zinc, Ultra-Seal	ZN3
Painted	PXX

*NOTE: ALODINE W/ PAINTED RAISED LEGEND & BORDER (P02 SEMI-GLOSS BLACK).

ITEM	PELCO PART NO.	DESCRIPTION	COAT	QTY
	SE-2087-1039	CAST PUSH BUTTON STATION ASSY., 5" x 7-3/4" "PUSH BUTTON WAIT FOR WALK SIGNAL"		
1	SE-6035-1039	CAST PUSH BUTTON STATION, 5" x 7-3/4" "PUSH BUTTON WAIT FOR WALK SIGNAL"	*	1
2	SE-0265	HEAVY TENSION SWITCH W/ BOOT, 5/8"-32"	PNC	1



LEGEND	LENGTH	QTY
Webb	48"	1

OVERHEAD STREET NAME SIGNS SHALL BE TYPE 5052-H38 ALUMINUM ALLOY 0.125" THICK. THE SIGN FACES SHALL BE DIRECT APPLIED WHITE ENCLOSED LENS HIGH PERFORMANCE REFLECTIVE LEGEND AND BORDERS ON A GREEN ENCLOSED LENS HIGH PERFORMANCE REFLECTIVE SHEETING BACKGROUND. THE GREEN SHEETING SHALL CONFORM TO FEDERAL COLOR STANDARD 595A, COLOR NO. 14109. COPY SIZE FOR THE LEGENDS SHALL BE AS FOLLOWS: SERIES "E" MODIFIED - 8" UPPER CASE W/6" LOWER CASE FOR NAMES, NUMERALS AND SW, ST, AVE. THE LEGEND SHALL BE CENTERED ON SIGN FACE. THE BORDER SIZE SHALL BE 3/4" WIDE. ALL CORNERS ON SIGN BLANKS SHALL BE ROUNDED.

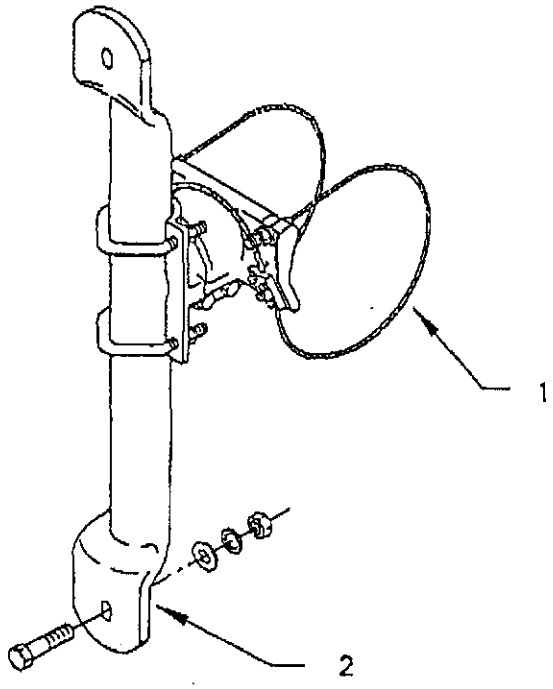
SPECIFICATIONS SHEET

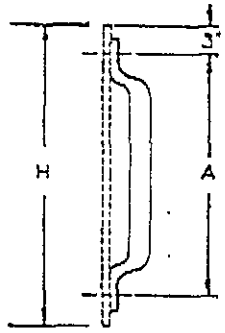
PELCO PRODUCTS, INC.
320 S. W. 18TH EDMOND, OKLAHOMA 73013 (405) 340-3434 FAX (405) 340-2435

AGENCY:
GADES SALES COMPANY, INC.
TRAFFIC CONTROL SPECIALISTS
P.O. BOX 9009
WICHITA, KANSAS 67277

REF.:
ASTRO-SIGN-BRAC W/ CABLE MOUNT

PELCO NO.:
AB-0142-A-L





MOUNTING DIMENSIONS	
H	A
24"	18"
30"	24"
36"	30"
42"	36"
48"	42"
54"	48"
66"	60"
72"	66"

MATERIAL COATING LEGEND	
COATING	CODE
Aladine	A
Black Phosphate	BP
Galvanized	G
Hot Dipped	HG
Stainless Steel	SS
Zinc	Z1
Zinc, Yellow	Z2
Painted	P

NOTE: ONE AB-0105 IS REQUIRED PER 16 SQ. FT. OF SIGN.
STANDARD CABLE LENGTHS ARE 62" & 84".

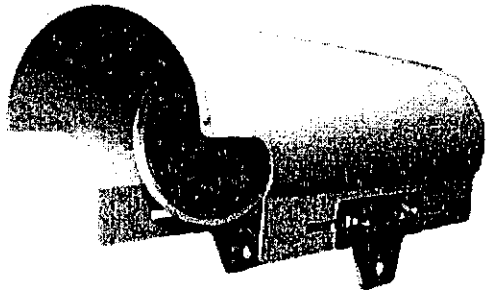
ITEM	PELCO PART NO.	DESCRIPTION	COAT	QTY
	AB-0142-A-L	ASTRO-SIGN-BRAC W/ CABLE MOUNT (-A = "A" DIMENSION, -L = CABLE LENGTH)		1
1	AB-3009-L	ASTRO-BRAC CLAMP KIT, CABLE MOUNT (-L = CABLE LENGTH)	A	1
2	AB-0283-A	SIGN MOUNTING BRAC W/ 5/16"-18 HARDWARE KIT (-A = "A" DIMENSION, SLOT CTC)	A	1

3/19/92

Roadway Sensors

Vantage® RZ4 Camera

[Optimized for traffic video detection]



The Vantage® Camera offers the best all-round performance for the capture of vehicles in a variety of lighting and weather conditions. Most video detection systems require a clean and stable video signal to function correctly. In contrast to other CCTV type cameras, the Vantage camera delivers a constant and regulated video signal that is easily processed by the Vantage video detection systems.

The camera assembly is sealed in a weather-resistant enclosure specifically designed for outdoor use. To prevent sun glare and to protect the housing from the weather elements, the camera is fitted with a moveable sunshield to allow the camera to be pointed in any direction. The sunshield also extends beyond the front of the camera housing to protect the housing glass from rain and the formation of icicles that could hinder the view of the camera.

The camera housing incorporates an adjustable mounting bracket that allows the camera to be positioned correctly. The mounting bracket is pre-drilled for easy attachment to a variety of poles and other street fixtures simplifying installation and set up.

The camera is virtually maintenance-free with no active moving parts. To prevent the build up of condensation and ice on the lens glass, the camera housing is fitted with a heater that ensures a clear view at all times.

The Vantage Camera has been optimized for use in outdoor conditions specifically for the viewing of traffic flows at the intersection, on the highway, on bridges or in tunnels. The camera's image is normally adjusted to view up to 4 or 5 lanes of traffic. Other uses for video detection include: Ramp Metering, Pedestrian Detection, Red Light Enforcement as well as Bicycle Detection. It all depends upon where and how you position the Vantage Camera.

Installation and Configuration

The Vantage camera has been designed to simplify and reduce the time needed to install and configure the unit on a pole or other fixture. The camera housing is supplied sealed from the factory with two connectors on the rear edge. Water-tight plugs are easily assembled on site to ensure rapid connection and long term use. Once the camera is mounted using the supplied camera bracket, the camera needs to be focused and zoomed to achieve the correct field of view. This is performed using the Vantage Lens Adjustment Module (LAM) as illustrated on this information sheet. The LAM must be used to access the camera controls which are secured within the camera housing thus maintaining the watertight seal.

Features

- Camera
  - Color or monochrome image sensors available
  - Latest CCD Sensing element and DSP technology
  - Electronic shutter and auto iris lens
  - Auto focus with manual override
- Camera Housing
  - Sealed housing to IP67 specification
  - Integrated adjustable sunshield
  - Auto-sensing power supply – 115/240 VAC 50/60 Hz
  - Internal heater with proportional power control
  - Integrated mounting bracket
  - Separate connectors for power and video
- Options
  - DC power for solar or battery applications
  - 2.4Ghz wireless operation
  - Junction Box adapter for field terminations

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Benefits

- Optimized for outdoor traffic situations that aids video detection
- Integrated mounting brackets reduce installation and setup time
- Connectors located on back faceplate simplifies cable connection
- Proportional power-controlled internal heater prevents ice and condensation resulting in improved video detection performance in adverse weather conditions.

Typical Applications

- Intersection flow control
- Ramp metering
- Traffic data collection
- Bicycle detection
- Traveler information system input
- Temporary and construction zone vehicle detection replacement
- Moving or wrong way motion detection
- Automatic Incident Detection (AID) in tunnels and on bridges

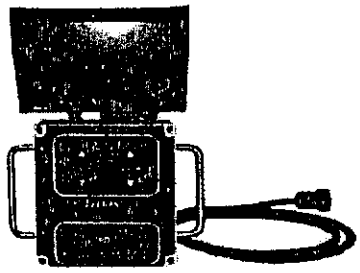
Vantage Family Products

- Machine Vision Processor modules
- Input and Output Extension modules
- Communications modules
- Video detector rack systems

The camera produces color or monochrome images of roadway scenes for detection of vehicle traffic. Camera is mounted tilted down 20°, or more, below horizontal to avoid direct view of sun or horizon.

Vantage LAM Option

The LAM (Lens Adjustment Module) is an easy-to-use hand held device that allows field adjustment of the camera settings. The unit is available in NTSC or PAL format, and can be used with or without a monitor.



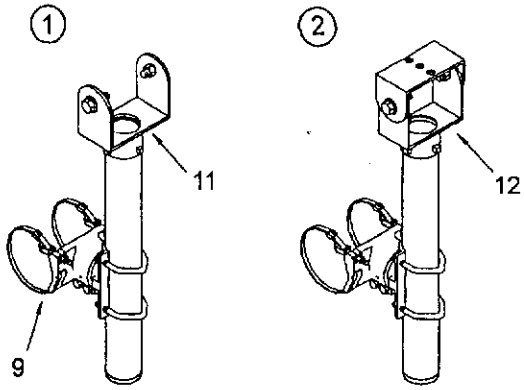
Technical Specifications

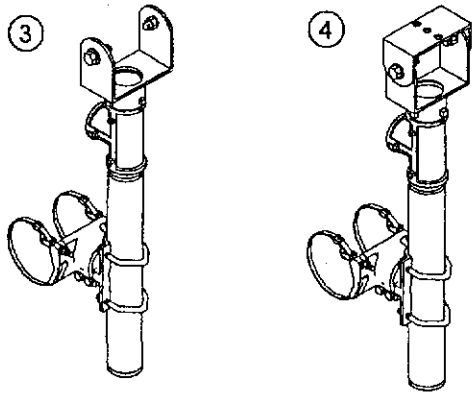
Imager	768 x 494 effective pixels
	470 TV lines minimum
	Automatic white balance
	>50 dB S/N ratio
	.1 lux capable
Lens	Focal length and focus adjustable through connector at rear of housing for a horizontal field of view ranging from 5.4° wide to 50.7° wide
Connections	BNC connector for video at rear of housing.
	Power connector for line power, DC input, neutral, and safety ground at rear of housing.
Physical	
Weight	5.7 pounds (2.6 Kg), including camera, lens, housing, sunshield, and mounting bracket
Dimensions	17" (43.2cm) long x 5" (12.7cm) diameter (without mounting bracket)
Environment	
Temperature	–31° F to +140° F (–35° C to +60° C)
Humidity	0% to 100%
Vibration	0.5G, 3 axes, 5-30 Hz
Power	
Standard	115/230 VAC (45W max.) 50/60 Hz
Option	12V DC (30W max.)

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ISO 9001

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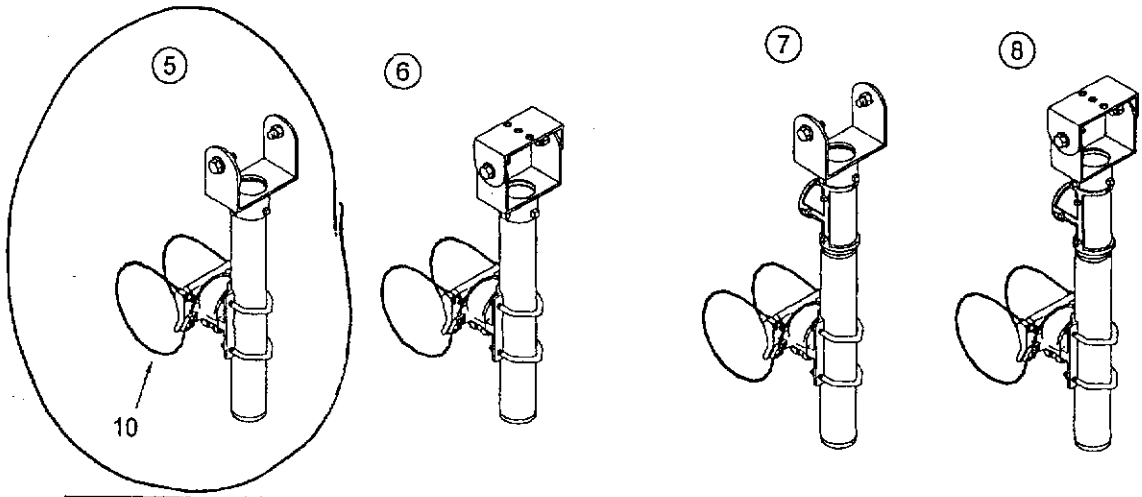


ITEM 1-4 OPTIONS
TUBE LENGTH: 23", 37", 46", or 74"
BAND LENGTH: 29", 36", 42", 48", or 56"
STAINLESS UPGRADE
PAINT

ITEM	DESCRIPTION	PART NO.
	VIDEO DETECTION CAMERA BRACKET	
	Extended Tilt & Pan:	
(1)	Band Mount, 1-Piece	AB-0170
(2)	Band Mount, 2-Piece	AB-0172
(3)	Band Mount w/ Service Wire Outlet, 1-Piece	AB-0177
(4)	Band Mount w/ Service Wire Outlet, 2-Piece	AB-0173
(5)	Cable Mount, 1-Piece	AB-0175
(6)	Cable Mount, 2-Piece	AB-0169
(7)	Cable Mount w/ Service Wire Outlet, 1-Piece	AB-0166
(8)	Cable Mount w/ Service Wire Outlet, 2-Piece	AB-0164
	ASTRO-BRAC CLAMP KIT:	
9	Band Mount	AB-3004
10	Cable Mount	AB-3009
	CAMERA MOUNTING BRACKET:	
11	1-Piece, Alum.	SH-0514
12	2-Piece, Alum.	SH-0515

Notes:

1. All assemblies are supplied standard with stainless steel fasteners. Stainless steel upgrade shall include stainless clamp screw kit where applicable.
2. 1-piece bracket for mounting Iteris, Odetics, or Econolite Solo Pro type cameras. 2-piece bracket for mounting Burle type cameras.
3. Camera mount assemblies are available with Stellar Series Clamp Kits. To order, use prefix AS with part number.
4. Please specify options when ordering.



ITEM 5-8 OPTIONS
TUBE LENGTH: 23", 37", 46", or 74"
CABLE LENGTH: 62", 84", or 98"
PAINT

Roadway Sensors

Vantage Edge®2

[A machine vision processor that delivers superior performance in adverse weather conditions]

The Vantage Edge2 processor is a key component in the family of Vantage video detection solutions. The module combines state-of-the-art technology with sophisticated algorithms to deliver dependable vehicle detection required for today's complex transportation systems. The Edge2 processor features single, dual or quad video inputs to maximize configuration efficiencies for intersection control, highway monitoring and ramp metering flow control applications.

The processor module is complimented by multiple Input/Output and Extension Modules that provide flexible and expandable solutions to meet the needs of larger and more complex intersection configurations. The Edge2 processor module and its associated expansion modules fit into standard detector racks to simplify installation and setup. All modules are designed as a simple and cost-effective replacement for the inductive loop amplifier module configuration.

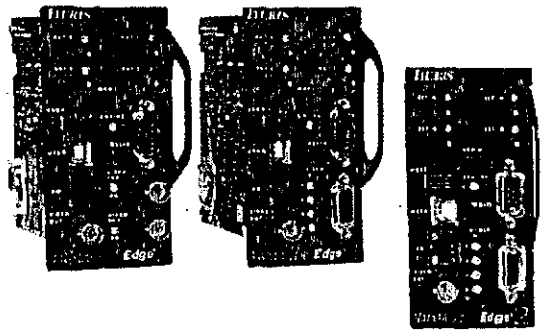
Optionally, all processor and output detector cards can be inserted into the Vantage rack system allowing for greater flexibility over individual configurations and for better operational control.

The Edge2 processor and all of its associated modules can be completely configured by using a mouse and video monitor only, eliminating the need for expensive laptops or PDA devices.

Installation and Configuration

The Edge2 processor card is hot swappable and is easy to set up and configure. All you need is a mouse to configure virtual zone operation for intersection, highway monitoring or ramp metering operations. Configuration is performed through the user-friendly menu system built in to the Edge2 processor. Virtual zones can be configured for presence, delay, extension, or count functions. Count, Speed, Occupancy (CSO) detection zones provide traffic count, speed, occupancy, and classification data. Incident detection zones can be set up to identify slow moving or stopped vehicles, vehicles traveling in the wrong direction, highway congestion or other customized event conditions. Data is stored in the processor that can be retrieved using the Vantage Remote Access Software (VRAS).

All Vantage processor and output modules interface directly with NEMA TS-1 and TS-2, Type 170/2070 ATC controllers and cabinet wiring schema.



Features

- Available in single, dual or quad video inputs
- Extension modules in 2, 4 or 32 channel configurations
- Fits into Type 170/2070 input files, NEMA TS-1 and TS-2 detector racks
- Easy to use menu interface
- Need only a mouse and monitor to configure
- Auto senses input voltage (+12 or +24 VDC)
- High intensity LEDs for easier viewing of status conditions
- Up to 24 virtual zones per video input
- Up to 24 outputs per video input
- Virtual zones can be assigned with Boolean logic for greater control
- Fail-safe outputs for video loss, low contrast and equipment failure
- Non-volatile memory data storage
- Self test on power up
- RS-232 serial port for ease of remote access and maintenance

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Benefits

- Plug and play operation enables use of existing detector rack thereby extending the life of the con troller and cabinet equipment
- Simple to use interface reduces training time and improves productivity levels
- Ease of set up and minimal lane closure time reduces manpower cost and keeps traffic flowing during equipment installation
- Expandable and modular system allows for optimal configuration that helps to reduce cost while preserv ing room for incremental growth

Typical Applications

- Intersection flow control
- Ramp metering
- Traffic data collection
- Bicycle detection
- Traveler information system input
- Temporary and construction zone vehicle detection replacement
- Moving or wrong way motion detection
- Automatic Incident Detection (AID) in tunnels and on bridges

Vantage Family Products

- Machine Vision Processor modules
- Input and Output Extension modules
- Communications modules
- Flexible and expandable detector rack systems
- Cameras optimized for video detection applications

Technical Specifications

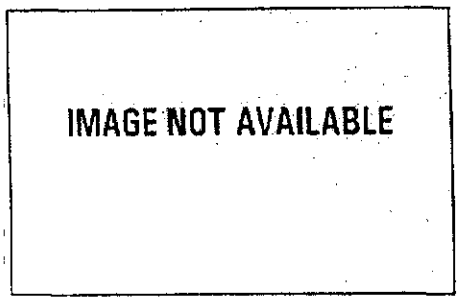
Power	• 12 or 24 VDC, 7W maximum
	• Consumption
	◦ @12VDC - 490mA
	◦ @24VDC - 280mA
Video	• Input type
	◦ NTSC, PAL
	◦ 75Ohm 1 Vpp
	• 1 input channel
	◦ Single BNC connector
	• 2 input channel
	◦ Dual BNC connector
	• 4 input channel
	◦ DB15 video input connector (cable supplied)
	• Output – All models
	◦ Single BNC connector
Communications	• RS-232 serial port
	• USB port for pointer control
Detector I/O	• Outputs (open collector +24VDC nominal 50mA)
	◦ 4 on rear edge of module
	• Inputs
	◦ 4 on rear edge of module
Status Indicators	• 4 LEDs indicate output detection state
	• 4 LEDs indicate video source
Environmental	• -35°F to +165°F (-37°C to +74°C)
	• 0% to 95% humidity non-condensing
	• 0.5G, 3 axes, 5-30Hz vibration tested
	• 10G in all 3 axes for shock testing
Mechanical	• 7" L x 4.5" H x 2.31" W. (17.78cm x 11.43cm x 5.86cm)
	• 0.8lb (.363Kg)
Warranty	• 3 years limited warranty
Regulatory	• NEMA TS-2 compliant
	• FCC part 15, Class A

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TÜV RHEIN ISO 9001

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Composite Cable



Approvals: N/A

Applications: Iterls Traffic Control

Temperature: -20°C to 75°C

Voltage: 600 Volt

Insulation: Component 1: PE
Component 2: PVC

Shield: Component 1: Tinned Copper
Component 2:

Jacket: Black PE

Color Code Black, White, Green

Specifications

Part #	Jacket (Type, Thickness)	Jacket O.D.	Copper Weight Lbs/MFT	Weight Per MFT (lbs)
I59PVCC-00	PE, .030"	.592"	59.86	168

Component 1

Conductor (Type, DCR)	Insulation (Type, Thickness)	Shield (Type, DCR)	Jacket (Type, Thickness, OD)	Nominal Capacitance pF/ft.*	pF/m**
20 AWG Solid BC 10.2 Ω/MFT 33.1 Ω/MFT	Solid PE , .198"	98% TC Braid x 2 1.1 Ω/MFT 3.6 Ω/MFT	PE, .035" .304"	20.9	68.7

Attenuation

Frequency MHz	Nominal Attenuation (dB/100ft)	Nominal Attenuation (dB/100m)	Frequency MHz	Nominal Attenuation (dB/100ft)	Nominal Attenuation (dB/100m)
1	0.14	0.46	135	2.58	8.46
3.58	0.47	1.54	143	2.62	8.59
5	0.54	1.77	180	2.79	9.15
7	0.62	2.03	270	4.36	14.30
10	0.68	2.23	360	4.98	16.33
67.5	2.02	6.63	540	6.68	21.91
71.5	2.10	6.89	720	7.82	25.65
100	2.50	8.20	1000	9.18	30.11

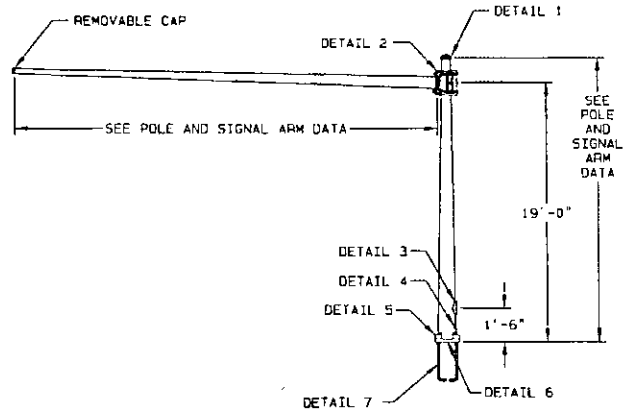
Component 2

Conductor (Type, DCR)	# of Conductors	Insulation (Type, Thickness)	Jacket (Type, Thickness)	Jacket (Type, O.D.)
16 AWG 19/29 BC 4.0 Ω/MFT	3	PVC, .030"	PVC Pressure with tape & Fillers .040"	.340"

Additional Notes:

*Capacitance Between Conductors
**Capacitance Between One Conductor and the Other Connected to the Shield

While every effort is made to insure the product specifications on this web site and all other collateral (i.e. catalogs, printed materials) are current, they are subject to change without notification.

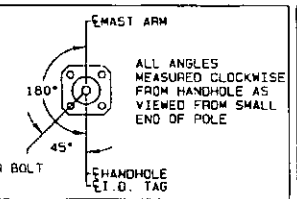


NOTE:
1. THE RETROFIT CLAMP BACK HALF WILL BE SIZED AS NECESSARY TO FIT THE POLE AND ARM CONNECTIONS.
2. 1" I.D. GROMMETS WILL BE SUPPLIED FOR 1.38" DIA WIRE ENTRANCE HOLES AT EACH SIGNAL LOCATION. HOLES TO BE FIELD DRILLED BY OTHERS.

MATERIAL DATA

COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)	COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
TAPERED TUBES	A595 GR.A OR A572	55	SIG. ARM CONN. BOLTS	A325**	
POLE BASE	A36	36	ANCHOR BOLTS	F1554 GR.55	55
SIMPLEX PLATES	A36	36			
RETRO FIT CLAMP	A36	36			
GALVANIZING	A123 & A153				

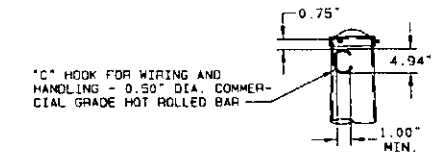
**LUBRICATE IN FIELD IF NECESSARY



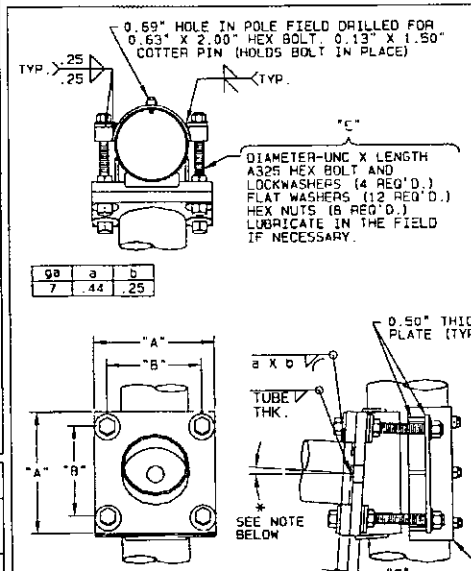
RADIAL INDEX

DESIGN CRITERIA:
1994 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.

DESIGN WIND SPEED:
80 MPH ISOTACH



DETAIL 1 — POLE TOP



QTY	a	b
7	.44	.25

NOTE:
RISE IN SIMPLEX PLATES VARIES PER POLE BASE DIA. AND LOADS ON MAST ARMS.

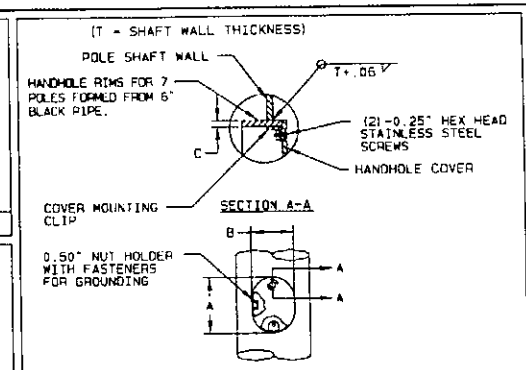
NOTE:
ALL GUSSETS ARE 0.25" THICK WITH 0.25" FILLET WELDS.

DETAIL 2 — SIGNAL ARM ATTACHMENT

SIGNAL ARM ATTACHMENT DATA

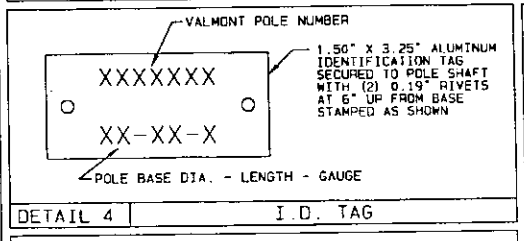
ITEM NO.	"A"	"B"	"C"	"D"	"E"
1	14.75"	12.00"	1.50"	1.50"	1.00"-8 UNC X **

**BOLT LENGTH TO BE DETERMINED AFTER RETRO-CLAMP IS SIZED

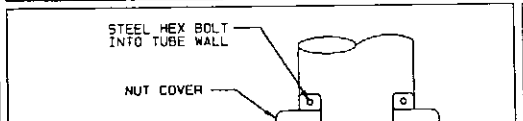


POLE GA.	A	B	C
7	7.56"	5.19"	0.280"

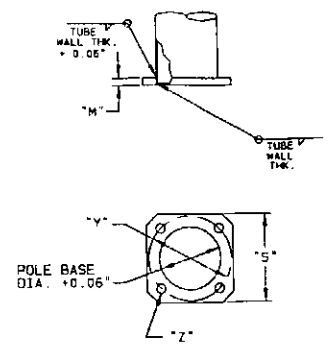
DETAIL 3 — HANDHOLE



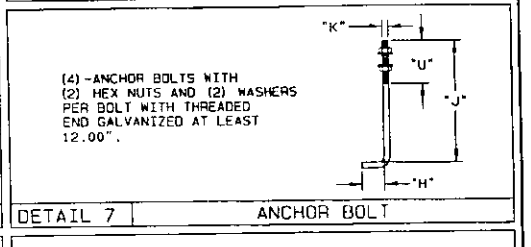
DETAIL 4 — I.D. TAG



DETAIL 5 — NUT COVER



DETAIL 6 — POLE BASE



DETAIL 7 — ANCHOR BOLT

ALTHOUGH RARE, VIBRATIONS SEVERE ENOUGH TO CAUSE DAMAGE CAN OCCASIONALLY OCCUR IN STRUCTURES OF ALL TYPES. BECAUSE THEY ARE INFLUENCED BY MANY INTERACTING VARIABLES, VIBRATIONS ARE GENERALLY UNPREDICTABLE. THE USER'S MAINTENANCE PROGRAM SHOULD INCLUDE OBSERVATION FOR EXCESSIVE VIBRATION AND EXAMINATION FOR ANY STRUCTURAL DAMAGE OR BOLT LOOSENING. THE VALMONT WARRANTY SPECIFICALLY EXCLUDES FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE PRODUCT.

VIBRATION DISCLAIMER

POLE AND SIGNAL ARM DATA

ITEM	QTY.	POLE SERIES	POLE TYPE	POLE TUBE: BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THK. (IN)	POLE BASE: SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	HOLE / SLOT "Z" (IN)	ANCHOR BOLT: DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)	SIGNAL ARM TUBE: FIXED END DIA. (IN)	FREE END DIA. (IN)	GAUGE OR THICK (IN)	SPAN (FT)
1	1	WICH	1	11.00	6.20	20.00	7	17.00	16.00	1.50	1.75	1.50	54.00	6.00	8.00	8.00	4.36	7	26.00

REV	DRAWN BY-DATE	CHECK BY-DATE	DESCRIPTION
	MAW2 11/02/09	MAW2 11/03/09	

SOLD TO: GADES SALES COMPANY, INC.
SHIP TO: SIMS ELECTRICAL SERVICES
P.O. #: 0039264
AGENT: POWER EQUIPMENT SALES CO., INC.

JOB: CITY OF WICHITA, KS
LINCOLN AND WEBB

TITLE: TRAFFIC SIGNAL STRUCTURES

VALMONT INDUSTRIES, INC. RESERVES THE RIGHT TO INSTALL VARIOUS, ENGINEER APPROVED, MATERIAL HANDING ACCOMMODATIONS TO FACILITATE THE MANUFACTURING PROCESS.

valmont
Valley, NE 68064
(402) 359-2201

ORDER NUMBER: 109928-P1
PAGE NUMBER: 1 OF 1
DRAWING NUMBER: KS109928P1
REV

INTERNATIONAL MUNICIPAL SIGNAL SPECIFICATION NO 19-1
FALCON FINE WIRE AND WIRE PRODUCTS, INC
2401 Discovery Blvd - Rockwall, TX
800-744-7230

DESCRIPTION	FALCON PART NUMBER	STR	INSULATION THICKNESS	JACKET THICKNESS	NOM OD	VOLTAGE RATING	TEMP. RATING
14/2C 19-1 IMSA SOL BC	98021419-1-00	SOL BC	.025	.045	.322	600 V	75 C
14/2C 19-1 IMSA STR BC	980214X19-1-00	7/.0242 BC	.025	.045	.340	600 V	75 C
14/3C 19-1 IMSA SOL BC	98031419-1-00	SOL BC	.025	.045	.339	600 V	75 C
14/3C 19-1 IMSA STR BC	980314X19-1-00	7/.0242 BC	.025	.045	.358	600 V	75 C
14/4C 19-1 IMSA SOL BC	98041419-1-00	SOL BC	.025	.045	.369	600 V	75 C
14/4C 19-1 IMSA STR BC	980414X19-1-00	7/.0242 BC	.025	.045	.390	600 V	75 C
14/5C 19-1 IMSA SOL BC	98051419-1-00	SOL BC	.025	.045	.402	600 V	75 C
14/5C 19-1 IMSA STR BC	980514X19-1-00	7/.0242 BC	.025	.045	.426	600 V	75 C
14/7C 19-1 IMSA SOL BC	98071419-1-00	SOL BC	.025	.045	.435	600 V	75 C
14/7C 19-1 IMSA STR BC	980714X19-1-00	7/.0242 BC	.025	.045	.463	600 V	75 C
14/9C 19-1 IMSA SOL BC	98091419-1-00	SOL BC	.025	.060	.538	600 V	75 C
14/9C 19-1 IMSA STR BC	980914X19-1-00	7/.0242	.025	.060	.569	600 V	75 C
14/10C 19-1 IMSA SOL BC	98101419-1-00	SOL BC	.025	.060	.580	600 V	75 C
14/10C 19-1 IMSA STR BC	981014X19-1-00	7/.0242	.025	.060	.616	600 V	75 C
14/12C 19-1 IMSA SOL BC	98121419-1-00	SOL BC	.025	.060	.597	600 V	75 C
14/12C 19-1 IMSA STR BC	981214X19-1-00	7/.0242 BC	.025	.060	.635	600 V	75 C
14/16C 19-1 IMSA SOL BC	98161419-1-00	SOL BC	.025	.060	.660	600 V	75 C
14/16C 19-1 IMSA STR BC	981614X19-1-00	7/.0242	.025	.060	.702	600 V	75 C
14/20C 19-1 IMSA SOL BC	98201419-1-00	SOL BC	.025	.060	.737	600 V	75 C
14/20C 19-1 IMSA STR BC	982014X19-1-00	7/.0242	.025	.060	.779	600 V	75 C
12/2C 19-1 IMSA SOL BC	98021219-1-00	SOL BC	.025	.045	.376	600 V	75 C
12/2C 19-1 IMSA STR BC	980212X19-1-00	7/.0242	.025	.045	.400	600 V	75 C
12/3C 19-1 IMSA STR BC	98031219-1-00	SOL BC	.025	.045	.397	600 V	75 C
12/3C 19-1 IMSA STR BC	980312X19-1-00	7/.0242	.025	.045	.423	600 V	75 C
12/4C 19-1 IMSA STR BC	98041219-1-00	SOL BC	.025	.045	.434	600 V	75 C
12/4C 19-1 IMSA STR BC	980412X19-1-00	7/.0242	.025	.045	.463	600 V	75 C
12/5C 19-1 IMSA STR BC	98051219-1-00	SOL BC	.025	.045	.475	600 V	75 C
12/5C 19-1 IMSA STR BC	980512X19-1-00	7/.0242	.025	.045	.507	600 V	75 C
12/7C 19-1 IMSA STR BC	98071219-1-00	SOL BC	.025	.045	.547	600 V	75 C
12/7C 19-1 IMSA STR BC	980712X19-1-00	7/.0242	.025	.045	.583	600 V	75 C
12/9C 19-1 IMSA STR BC	98091219-1-00	SOL BC	.025	.060	.635	600 V	75 C
12/9C 19-1 IMSA STR BC	980912X19-1-00	7/.0242	.025	.060	.678	600 V	75 C
12/10C 19-1 IMSA STR BC	98101219-1-00	SOL BC	.025	.060	.688	600 V	75 C
12/10C 19-1 IMSA STR BC	981012X19-1-00	7/.0242	.025	.060	.736	600 V	75 C
12/12C 19-1 IMSA STR BC	98121219-1-00	SOL BC	.025	.060	.710	600 V	75 C
12/12C 19-1 IMSA STR BC	981212X19-1-00	7/.0242	.025	.060	.759	600 V	75 C
12/16C 19-1 IMSA STR BC	98161219-1-00	SOL BC	.025	.060	.787	600 V	75 C
12/16C 19-1 IMSA STR BC	981612X19-1-00	7/.0242	.025	.060	.843	600 V	75 C
12/20C 19-1 IMSA STR BC	98201219-1-00	SOL BC	.025	.060	.922	600 V	75 C
12/20C 19-1 IMSA STR BC	982012X19-1-00	7/.0242	.025	.060	.970	600 V	75 C

GENERAL CONSTRUCTION

Bare copper conductors, polyethylene insulation and black PVC jacket. Indent printed. 600 volts for use in underground conduit or as an aerial cable, supported by a messenger, or for installation in raceways in buildings (not including trays) either as fire or traffic signal cable suitable for wet or dry locations. Twisted with an overall moisture resistant tape applied at least 10% of its width. Lay lengths are as noted in the IMSA Specification book. Non wicking, non metallic moisture resistant fillers are used when needed.

CONDUCTORS

The conductors shall be specified by the purchaser as to solid or stranded bare copper. Before insulating, conform to ASTM Designation B-3 latest revision. Stranded conductors

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INTERNATIONAL MUNICIPAL SIGNAL SPECIFICATION NO 19-1
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meet the physical requirements specified in ASTM Designation B-174 latest revision except for those that the dimensions and allowed variations are not appropriate. The conductors meet the Direct Current Resistance listed in table A/1 & A/2 using the table set up for maximum DCR per Table B. Tested per UL Standard 1581, method 220.

TABLE A/1

Nominal D C Resistance in OHMS/1000 FT at 20 degrees C of Solid Conductor

Conductor	Solid Copper Uncoated	Coated
14AWG	2.57 Ohms/1000ft	2.67 Ohms/1000ft

TABLE A/2

Nominal D C Resistance in OHMS/1000 FT at 20 degrees C of Stranded Conductor

Conductor	Uncoated	Coated B	Coated C
14AWG	2.63	2.73	2.79

TABLE B

Table For Establishing Maximum D C Resistance Per Unit Length of Completed Cable

Cable Type	Maximum D C Resistance
Single Conductor	Table A Value plus 2%
Multiple Conductor Cables and Twisted	Table A Value plus 2% plus one of the following:
Assemblies of Single Conductor Cables	2%-One layer of Conductors (R Max=Rx1.02x1.02) 3%-More than one layer of Conductors (R Max=Rx1.02x1.03) 4%-Pairs or other precabled units (R Max=Rx1.02x1.04)

CONDUCTOR INSULATION

The Polyethylene insulation is extruded concentrically around the conductor.
After application to the conductors, the insulation conforms with requirements stated for Class 30 Thermoplastic Polyethylene compound in UL Standard 62 (ANSI 33.1) with the exception of the temperature for the cold bend test is -55 +/- 2 degree C. The insulation after application to the conductors complies with the requirements in UL Standard 83 Tested to withstand, without breakdown the application a 60 Hertz or 3000 Hertz, 7500 volt spark test.

CONDUCTOR COLOR CODING

1- BLACK
2- WHITE
3- RED
4- GREEN
5- ORANGE
6- BLUE
7- WHITE/BLACK
8- RED/BLACK
9- GREEN/BLACK
10- ORANGE/BLACK
11- BLUE/BLACK
12- BLACK/WHITE

(This color code will be used unless noted as different in each individual State's specification)

JACKET

Polyvinyl Chloride compound listed in UL's "List of Acceptable Sunlight Resistant PVC Compounds" are extruded tightly over taped conductors and complies with requirements specified for class II PVC in UL's Standard 62 (ASNI C33.1) The method of measurement for the jacket to determine thickness is in accordance with UL62(ANSI C33.1)

IDENTIFICATION

Indent print at least every two feet on the outer jacket: "FALCON FINE WIRE IMSA 19-1 600VOLTS 2004" (the year changes with the calendar)

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INTERNATIONAL MUNICIPAL SIGNAL SPECIFICATION NO 19-1
FALCON FINE WIRE AND WIRE PRODUCTS, INC
2401 Discovery Blvd - Rockwall, TX
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PACKAGING AND MARKING FOR SHIPMENT

Good condition reels with drum diameters sufficient to prevent damage.
Each end of the wire will be spooled with each end out for testing, then sealed to protect against any injury
The wire will the then be wrapped and strapped to skid for protection.
The out side of each reel with be clearly marked as followed:

Falcon Fine Wire
"Part Number"
IMSA 19-1 ___AWG ___COND STRANDED OR SOLID COPPER (which ever applies) 600V
_____ "reel length"

INSPECTION AND TESTING

Inspection and test will be made by Falcon Fine Wire during process of manufacturing and prior to shipment leaving our facility.
We will furnish, upon request to the purchaser a certified report of test done on final product

TEST

Each finished conductor will meet test requirement as mentioned in "Insulation" paragraph. All failures will be scrapped.
One sample will be taken from each 10,000 foot run. If that sample fails to meet the requirement of this spec, then two additional samples will be taken and tested. The lot will be found acceptable if we find that the two new samples test good, if they are all bad then the lot will be rejected.

GUARANTEE

We warranty our product for one year from date of shipment and will replace any length of wire found to be defective in workmanship or material provided it was handled and installed correctly.

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GALVITE® Rigid Steel Conduit — Dimensions and Weights

Size	Diameters, In.		Weight, Lbs. Per 100 Ft.	Feet Per Bundle	Standard Lifts		Threads Per Inch
	External	Internal			Feet	Weight, Lbs.	
½	0.840	0.622	80.3	100	2500	2008	14
¾	1.050	0.824	106.4	50	2000	2128	14
1	1.315	1.049	154.4	50	1250	1930	11½
1¼	1.660	1.380	203.7	30	900	1833	11½
1½	1.900	1.610	251.0	30	800	2008	11½
2	2.375	2.067	338.0	—	600	2028	11½
2½	2.875	2.469	541.0	—	370	2002	8
3	3.500	3.068	706.0	—	300	2118	8
3½	4.000	3.548	849.0	—	250	2123	8
4	4.500	4.026	1003.0	—	200	2006	8
5	5.563	5.047	1343.0	—	150	2015	8
6	6.625	6.065	1798.0	—	*	*	8

*Shipped loose.

Conduit is furnished in nominal 10' lengths, threaded both ends, with coupling screwed on one end and thread protector on the other. Conduit is always designated by its nominal inside diameter. All dimensions and weights shown above are nominal.

NOTE: Applicable tolerances: length ± ¼" (± 6.35 mm) — without coupling

OUTSIDE DIAMETER:

For trade sizes through 2": ± 0.015" (± 0.38 mm)

For trade sizes 2½" through 4": ± 0.025" (± 0.64 mm)

For trade sizes 5" and 6": ± 1%

GALVITE Conduit (Color Code — End Caps by Size)

Product	Size, In.	Color Code
GALVITE Rigid Conduit	¼" sizes	Red
	½" sizes	Black
	1" sizes	Blue

LTV Steel Tubular Products

P.O. Box 1000

12/21/95 THU 09:34 [TX/RX NO 9281]

DATA SHEET

GALVITE® Rigid Steel Conduit

Strong, rigid, safe

GALVITE® Rigid Steel Conduit from LTV Steel offers the highest available strength, rigidity, ductility, system safety and protection. This product is suitable for the most demanding industrial/commercial building and construction service, in both indoor and outdoor environments.

LTV Steel produces GALVITE from high-quality, American-made carbon steel and certifies its domestic manufacture. Integrated Process Control throughout steel melting, strip rolling, forming and welding operations assures consistent properties, accurate sizes and excellent surface quality.

Product features

GALVITE is free from "burnt" or hard spots in the metal. Welds are smooth, strong and sound. The uniformity of metal composition and size assures easier threading and bending. The inside surface is smooth, clean and free from burns and rough spots, enhancing wire pulling.

GALVITE is hot-dipped galvanized inside and out. This tightly adhering finish doesn't chip, peel or flake off even under bending tests more severe than required by specification or encountered in normal installation. A secondary chromate treatment is applied over the galvanizing to extend surface protection.

GALVITE is readily formed and joined. Next to bendability, connecting ease is perhaps the feature most sought by those who work with rigid conduit. GALVITE threads are metallized with zinc to provide added corrosion protection. When short lengths are cut on the job, the ductility and uniformity make cutting and threading easier, an important source of installation economy.

Availability

Manufactured by the Electric Resistance Welded (ERW) process, GALVITE conduit is processed from high-quality domestic coils of flat rolled steels. It is produced in the nominal sizes and weights listed on the reverse side, and is furnished in 10′ lengths with a coupling on one end.

GALVITE is supplied with color-coded end caps for easier size identification and thread protection.

Quality

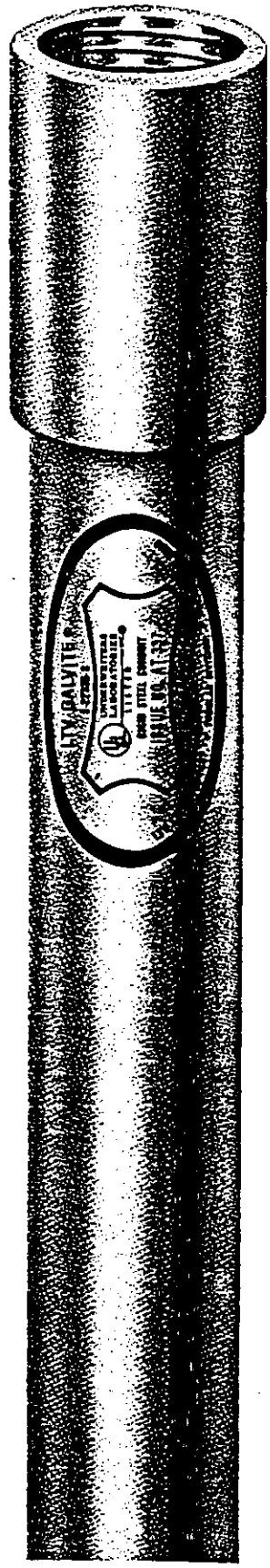
LTV Steel's Integrated Process Control system ensures GALVITE and other products meet the highest standards for quality and consistency. Continuous monitoring and the use of statistical process controls minimize variability throughout processing and allow for constant evaluation of product and process for refinement and improvement.

GALVITE is tested and inspected during manufacture for conformance to UL-6 and ANSI Specification C80.1.

Technical support

LTV Steel Tubular Products Company offers expert technical support to conduit customers. For information or assistance, write to the address listed on the reverse side.

SIMS ELECTRIC SERVICE, INC.
1827 NORTH MOSLEY
WICHITA, KANSAS 67214



GALVITE® Rigid Steel Conduit

472-83241 Closed 7/11

AFFIDAVIT

STATE OF KANSAS \
- SS.
County of Sedgwick /

Mark Fletchall, of lawful age, being first duly sworn, deposeth and saith: That he is Record Clerk of The Wichita Eagle, a daily newspaper published in the City of Wichita, County of Sedgwick, State of Kansas, and having a general paid circulation on a daily basis in said County, which said newspaper has been continuously and uninterruptedly published in said County for more than one year prior to the first publication of the notice hereinafter mentioned, and which said newspaper has been entered as second class mail matter at the United States Post Office in Wichita, Kansas, and which said newspaper is not a trade, religious or fraternal publication and that a notice of a true copy is hereto attached was published in the regular and entire Morning issue of said The Wichita Eagle for _1_ issues - ~~weeks~~, that the first publication of said notice was

made as aforesaid on the **23rd** of

September A.D. **2009**, with

subsequent publications being made on the following dates:

SCANNED

LEGAL PUBLICATION

PUBLISHED IN THE WICHITA EAGLE ON SEPTEMBER 23, 2009 (2983740)

SEALED PROPOSALS

Notice is hereby given that bids will be received at the office of the Purchasing Manager, up to 10:00 a.m., Friday, October 2, 2009 for the following project:

Install traffic signal pole for westbound traffic to serve Harrison 3rd Addition at Lincoln & Webb Road

472-83241

Lump Sum Bid Items

Traffic Signalization	1 LS
Wheelchair Ramp	1 ea

All bids received will thereafter be publicly opened, read aloud and considered by the Board of Bids and Contracts. All work to be done under the direction and supervision of the City Manager and according to plans and specifications on file in the office of the City Engineer. Bidders will be required to enclose a bid bond in the amount of five per cent (5%) with each as a guarantee of good faith. The Wichita City Council reserves the right to reject any and all bids.

Dated at Wichita, Kansas, September 16, 2009

Karen Sublett, City Clerk

This information and any addenda is also available on the City's Web Page at: http://ep.wichita.gov/

And affiant further says that he has personal knowledge of the statements above set forth and that they are true.

Mark Fletchall

Subscribed and sworn to before me this

23rd day of September, 2009

LINDA D. TOON
Notary Public - State of Kansas
My Appt. Expires 3-13-2013

Linda D. Toon

Notary Public Sedgwick County, Kansas

Printer's Fee : **$18.60**