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DKS 1625 Series Maximum Security Operators and Barriers



Specifications

- Product: Maximum Security Operators & Barriers
- Designed for: Limited (Class III) and Restricted (Class IV) maximum security applications

- Gate Operator Series: 9500 Series
- Barrier Series: 1620 Series Lane Barriers, 1625 Series Wedge Barriers

9500 Series Operators

The 9500 series operators are specifically designed for very large vehicular gates used in maximum security applications. Follow these guidelines for proper usage:

- Do not use in Residential (Class I) or Commercial (Class II) applications.
- Install with external entrapment prevention devices (Type B1 or Type B2) to protect all hazard areas.
- Minimum Gate Length: Adjust gate speed based on the model to ensure safe operation.

1620 Series Lane Barriers & 1625 Series Wedge Barriers

The lane and wedge barriers serve different purposes. Here's how to use them effectively:

- 1620 Lane Barriers: Not crash-rated, link to a 1603-580 lane barrier operator.
- 1625 Wedge Barriers: Crash-rated, link to a 1602-590 operator.

Vertical Lift Gates & Barrier Gate Operators

For vertical lift gates and barrier gate operators, ensure proper entrapment protection as per the UL 325 Standard for Safety:

- Vertical Lift Gates: Require two means of entrapment protection in the down cycle.
- Barrier Gate Operators: Install with precautions based on proximity to rigid objects.

Product Reference Guide - June 2025.

Maximum Security Operators & Barriers

Date	Page	Comment
6-1-25	All	Reference guide published.

	PRODUCT REFERENCE GUIDE

Maximum Security Operators & Barriers

Maximum Security Gate Operators

9500 series operators are designed to operate very large vehicular gates used in Limited (Class III) and Restricted (Class IV) maximum security applications only. These operators must never be used in Residential (Class I) or Commercial (Class II) applications, or in any application where the gate is operated by the General Public.

These operators must be installed with external entrapment prevention devices, Type B1 (non-contact) or Type B2

(contact), or a combination of both to ensure all entrapment hazard areas are protected. 9500 Series operators require a minimum of one (1) Type B1 AND one (1) Type B2 in EACH direction of travel. Refer to the Installation Manual for important safety information.

Minimum Gate Length

The 9500 Series operators have variable speed capability, which allows the user to adjust the speed of the gate. On most operators, the speed can be set for speeds up to 2 Ft/sec, and on certain models, the gate speed can be set up to 4 Ft/sec. When using these higher speeds, there is a time factor to consider during the start-up and the slowdown of the gate. For this reason, you will see a minimum gate length on operators designed to move a gate at higher speeds.

1620 Series Lane Barriers

1620 Lane Barriers are NOT crash rated. They are intended to provide a formidable barrier to help prevent passenger cars and light-duty pickup trucks from breaching a parking arm operator system. These barriers are not a stand-alone product, they are designed to be mechanically linked to a 1603-580 lane barrier operator.

1625 Series Wedge Barriers

1625 Wedge Barriers are crash rated to the ASTM F2656-23 standard. Wedge barriers are intended to provide a formidable barrier to help prevent passenger cars and light-duty pickup trucks (up to 5,070 Lbs) from breaching a standard parking arm operator system. These barriers are not a stand-alone product, they are designed to be mechanically linked to a 1602-590 operator.

UL 325 – February 2023

Requirements mandated by the safety standard (UL 325) require that DKS gate operators be listed to require that photo-beams and contact edges used for entrapment protection must be monitored. Entrapment protection must be provided for the gate system where the risk of entrapment exists. The gate operator will not run without one or more external entrapment protection devices installed in each direction of travel. Check the gate operator installation manual for a list of external entrapment protection devices that can be used with DKS gate operator products.

The August 2018 update to the safety standard requires that a minimum of two independent means of entrapment protection must be provided, in each direction of travel, where the risk of entrapment exists. The actual number of external devices required is dependent on the gate system layout and the number of entrapment areas that will need to be protected. Installers will have to identify all potential areas where the risk of entrapment exists and how best to protect those areas. For example, some gates may require two (or more) external devices in each direction of travel to protect all potential areas of entrapment. 9500 Series operators require a minimum of one (1) Type B1 AND one (1)

Type B2 in EACH direction of travel.

There is an exception for swing gates and vertical lift gates regarding the minimum of two entrapment protection devices in each direction of travel. For example, if on a swing gate system, there is no potential for entrapment in the opening direction, then only the closing direction will require a minimum of two means of entrapment protection.

Installers will have to determine if any entrapment hazards exist in the opening direction,

and if so, then those areas will have to be protected with external devices.

Vertical lift gates require two means of entrapment protection in the down cycle but will only require one means of entrapment protection in the up cycle. Model 1175 is considered to be a vertical lift gate operator for entrapment protection means requirements.

Barrier gate operators that are installed in such a way that the barrier arm does not come closer than 16 inches to a rigid object are not required to protect against entrapment.

The table below shows the minimum entrapment protection requirements for each type of gate operator in the scope of the UL 325 Standard for Safety.

	Opening	Closing
Horizontal Slide Gate	2	2
Horizontal Swing Gate	2*	2*
Vertical Pivot Gate	2	2
Vertical Lift Gate	1	2
Horizontal Bifold Gate	2	2

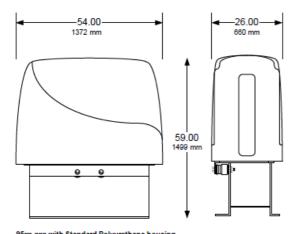
^{*} For a horizontal swing gate operator, at least two independent entrapment protection means are required in each direction of travel. Except if there is no entrapment zone in one direction of travel, only one means of entrapment protection is required in that direction of travel; however, the other direction must have two independent entrapment protection means.

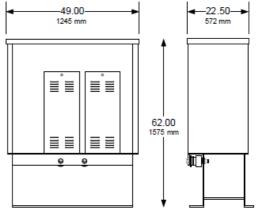
9500 Series

Heavy-Duty Maximum Security Slide Gate Operators

- Plug-in Loop Detector Ports
- Built-in power and reset switches

- Two 115 VAC convenience outlets
- Partial open / anti-tailgate feature
- Variable Speed
- 20-feet minimum gate width (6.1m)
- Gate tracker data output
- Selectable stop/ reverse function





JJAA-AAA	with	atanuaru	rolyuletilalie	illousing

95xx-xxx with optional 10ga. Steel housing

M od el	C ha in	Spe ed V aria ble	Maximum Gate Wei ght1	Max imu m G ate Len gth	Mini mu m G ate Len gth	Clas s of Oper ation 2	Vol tag e V AC	H P	Ge arb ox Rat io	Mag neti c Br ake	Po we r O utl ets	Lo op Po rts 3
95 50	#1 00	1-2 Ft/se c .36 m/se c	15,000 (6 803 Kg) L b4 9,000 (40 82 Kg) Lb 5	160 Ft 48m	20 Ft 6.1 m	III, I V	208 , 230 , 46 0	5	30:	Opti on	2	2

95 55	#1 00	1-2 Ft/se c .36 m/se c	15,000 (6 803 Kg) L b4 9,000 (40 82 Kg) Lb 5	160 Ft 48m	20 Ft 6.1 m	III, I V	208 , 230 , 46 0	5	10:	Sta ndar d	2	2
95 70	#1 00	1-2 Ft/se c .36 m/se c	25,000 (1 1,339 Kg) Lb4 15,000 (6 803 Kg) L b5	160 Ft 48m	20 Ft 6.1 m	III, I V	208 , 230 , 46 0	7. 5	30:	Opti	2	2
95 75	#1 00	1-2 Ft/se c .36 m/se c	25,000 (1 1,339 Kg) Lb4 15,000 (6 803 Kg) L b5	160 Ft 48m	20 Ft 6.1 m	III, I V	208 , 230 , 46 0	7. 5	10:	Sta ndar d	2	2
95 90	#1 00	1-2 Ft/se c .36 m/se c	28,000 (1 2,700 Kg) Lb4 16,800 (7 620 Kg) L b5	160 Ft 48m	20 Ft 6.1 m	III, I V	208 , 230 , 46 0	10	30:	Opti	2	2

95 95	#1 00	1-2 Ft/se c .36 m/se c	28,000 (1 2,700 Kg) Lb4 16,800 (7 620 Kg) L b5	160 Ft 48m	20 Ft 6.1 m	III, I V	208 , 230 , 46 0	10	10: 1	Sta ndar d	2	2	
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- 1. Assumes the gate to be in good mechanical condition, running on a level plane.
- 2. III = Limited Access; IV = Restricted Access.
- 3. Plug-in loop detector ports; open and reverse. DoorKing plug-in loop detectors only.
- 4. When using 3Ø power.
- 5. When using 1Ø power.

All 9500 Series operators come standard with the polyurethane housing. The 10-gauge. Steel housing is optional.

All orders for 9500 Series operators must be coordinated through the Regional Sales Manager. DoorKing order entry personnel will not enter the order into our manufacturing system until the RSM has approved the order. Distributors must place orders through their RSM to confirm pricing.

For any product that requires modification to meet project specifications, written instructions and specifications are required from the contractor before production begins.

Operators will not run without external entrapment protection devices connected to the controller board. A minimum of two (one in each direction of travel) is required. See the installation manual for more information.

These operators are built to order and are not in finished goods inventory. Expect up to four weeks' lead time for delivery of these products. Operators come standard with the polyurethane housing. 10-gauge steel housing is optional.

95×0 Operators - 30:1 Gearbox

- VF AC Drive Assembly 30:1 Gearbox.
- 1Ø or 3Ø power. 3Ø power requires a 4001-101 transformer.

9Specify 550

- 9550-380 5 HP, 208V2
- 9550-381 5 HP, 230V2
- 9550-382 5 HP, 460V

9570

- 9570-380 7.5 HP, 208V2
- 9570-381 7.5 HP, 230V2
- 9570-382 7.5 HP, 460V

9590

- 9590-380 10 HP, 208V2
- 9590-381 10 HP, 230V2
- 9590-382 10 HP, 460V

Options 95×0 Operators Only

- 9550-206 Steel Housing w/Access Door1
- 4001-101 Transformer2
- 2601-440 Magnetic Brake3
- 2601-441 Magnetic Brake4
- Replaces the polyurethane housing with a 10-gauge steel housing. Includes manual gate operation and access door.A
- 2. 4001-101 transformer is required if the source power is 208 or 230 volts single-phase.
- 3. Use with 7.5 and 10 HP units.
- 4. Use with 5 HP units

95×5 Operators 10:1 Gearbox

- VF AC Drive Assembly Magnetic Brake 10:1 Gearbox.
- Specify 1Ø or 3Ø power. 3Ø power requires a 4001-101 transformer.

9555

- 9555-380 5 HP, 208V2
- 9555-381 5 HP, 230V2
- 9555-382 5 HP, 460V

9575

- 9575-380 7.5 HP, 208V2
- 9575-381 7.5 HP, 230V2
- 9575-382 7.5 HP, 460V

9595

- 9595-380 10 HP, 208V2
- 9595-381 10 HP, 230V2
- 9595-382 10 HP, 460V

Options 95×5 Operators Only

- 9550-205 Steel Housing1
- 4001-101 Transformer2
- 1. Replaces the polyurethane housing with a 10-gauge steel housing.A
- 2. 4001-101 transformer is required if the source power is 208 or 230 volts single-phase.

Accessories

Chain

2601-272 #100 Chain, 20-Ft (6 m)

Accessories

- 2601-270 Chain Tray kit 10-Ft (3 m)
- 1601-197 Heater Kit 208/230 VAC1
- 1601-198 Heater Kit 480 VAC1
 - 1. Use if the temperature routinely falls below 10°F (-12°C).

Entrapment Protection (required) Devices

Use Type B1 (non-contact) and/or Type B2 (contact) entrapment protection devices to protect all areas where the risk of entrapment exists – see Section A1, pages 46-47.

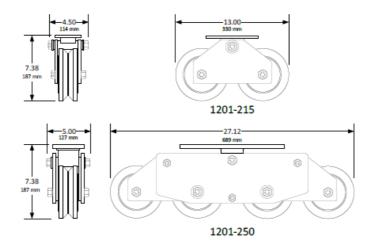
Operator will not run without external entrapment protection devices connected to the controller board. Minimum of two (one in each direction of travel) is required. See installation manual for more information.

Loops and Loop Detectors

See Section A1, page 4,8 for a complete list of all loop detectors, prefabricated loops, PS, and loop accessories available.

Slide Gate Accessories

The tandem and quad wheel assemblies are designed for extremely heavy gates. The tandem and quad assemblies distribute the gate weight across a wider area of the gate track. A critical component of these very heavy gates is the track that the gate rolls on. The track must be of a hardened material capable of supporting these extreme weights.



Heavy-Duty V-Wheel Assemblies

6- Inch (152 mm) Heavy-Duty Tandem V-Wheel Assembly is rated for 7,000 lb (3,175 Kg). Maximum gate weight is 14,000 lb (6,350 Kg) – two (2) assemblies required per gate. With this configuration, each wheel (4 total) is supporting 3,500 lb (1,587 Kg).

1201-250

6- Inch (152 mm) Heavy-Duty Quad V-Wheel Assembly

Assembly is rated for 14,000 lb (6,350 Kg). Maximum gate weight is 28,000 lb (12,700 Kg) – two (2) assemblies required per gate. With this configuration, each wheel (8 total) is supporting 3,500 lb (1,587 Kg).

Heavy-Duty Replacement V-Wheel

1202-000

6- Inch (152 mm) Heavy-Duty Replacement V-Wheel

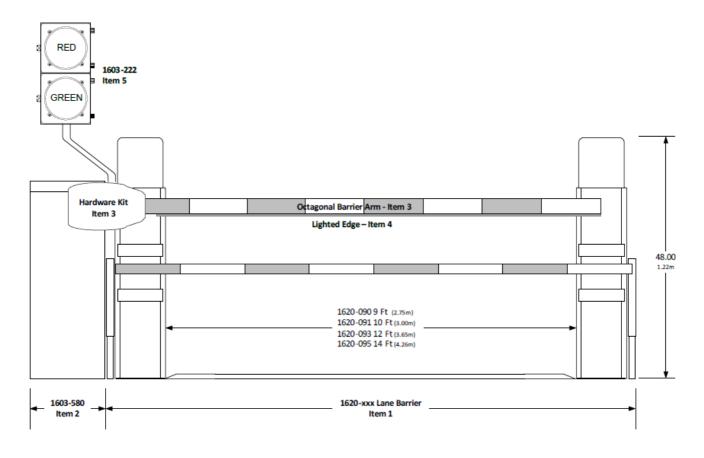
• 3500 Lb. (1587 Kg) maximum weight

1620 Lane Barrier – Red

Traffic Control Automated Barrier

• The 1620 Lane Barrier is NOT a crash-rated device. It is intended to provide a formidable barrier to help prevent passenger cars and light-duty pickup trucks from breaching the standard parking arm operator system. These lane barriers are not a stand-alone product, they are designed to be mechanically linked to and connected to the 1603-580 lane barrier operator. Required items: 1620-xxx lane barrier, 1603-580 lane barrier operator, and octagonal aluminum arm components are ordered separately.

Caution: Installation and use of lane barriers in areas that are subject to freezing weather with potential for snow and ice accumulation is not recommended.



		Overall Dimensions (Item 1 + Item 2)					
P/N	Lane Opening	Height	Width	Depth			
1620-090	9 Ft.	48 ln.	13 Ft., 6 In.	5 Ft.			
1620-091	10 Ft.	48 ln.	14 Ft., 6 In.	5 Ft.			
1620-093	12 Ft.	48 ln.	16 Ft., 6 In.	5 Ft.			
1620-095	14 Ft.	48 In.	18 Ft., 6 In.	5 Ft.			

- 1. The 1620 Lane Barrier IS NOT a stand-alone product. It must be used with the 1603-580 Lane Barrier Operator.
- 2. 1620 Lane Barrier is not crash-rated.
- 3. Traffic signal kit (1603-222) MUST be installed with the 1620 system.
- 4. Must use octagonal barrier arm (1601-555 or 1601-567) and 8080-096 Red/Green Reverse Edge Kit with this lane barrier.
- 5. Lane barrier anchor posts are finished in gloss cardinal red.
- 6. Designed for use with passenger cars and light trucks.

WARNING! LTL Carriers are now charging additional fees for any shipment that is eight (8) feet in length or greater. These fees can be substantial.

Traffic Control Automated Barrier

- 1620 Lane Barrier system components are ordered à la carte. Besides the lane barrier (ITEM 1), the lane barrier operator (ITEM 2), the octagonal arm assembly (ITEM 3), the lighted edge (ITEM 4), the traffic signal (ITEM 5), andthe the pedestrian protection (ITEM 6) must also be ordered to complete the system.
- Lane barrier components are finished in Gloss Cardinal Red. 1603-580 lane barrier operator is finished in Gloss White.

ITEM 1: 1620 Lane Barrier1 - Cardinal Red

- 1620-090 Lane Opening 9 Ft (2.75m)
- 1620-091 Lane Opening 10 Ft (3.00m)
- 1620-093 Lane Opening 12 Ft (3.65m)
- 1620-095 Lane Opening 14 Ft (4.26m)
 - 1. The width shown is the distance between the post anchors.

ITEM 2: Lane Barrier Operator

- 1603-580 Lane Barrier Operator
- 2600-266 High Voltage Kit1
 - 1. Allows the operator to be powered from 208, 230, or 460 VAC.

ITEM 3: Octagonal Arm Components

- 1601-555 Arm 14 Ft (4.27 m)
- 1601-567, 2-piece1
- 1601-235 Hardware Kit2
 - 1. Ships in an 8-ft (2.4m) long box to reduce shipping cost.
 - 2. Required.

ITEM 4: Lighted Edges

- 8080-306 Reverse Edge 6 Ft Lighted1,2
- 8080-309 Reverse Edge 9 Ft Lighted1,2
- 8080-096 Reverse Edge 12 Ft Lighted1,2
 - 1. LED Green (Up) and Red (Down)
 - 2. The edge must be at least 2-Ft shorter than the overall arm length.

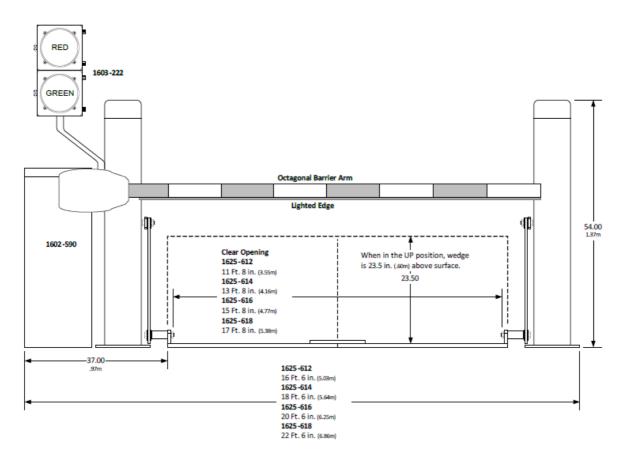
ITEM 5: Traffic Signal

- 1603-222 Traffic Signal 12 VDC w/35" Post
- ITEM 6: Pedestrian Protection
- 8080-057 Photo-Reflective Beam
- 9411-010 Loop Detector

Crash Rated Traffic Control Automated Wedge

The 1625 Wedge Barrier is crash rated to the ASTM F2656-20 standard. Wedges are
intended to provide a formidable barrier to help prevent passenger cars and light-duty
pickup trucks from breaching a standard parking arm operator system. These wedge
barriers are not a stand-alone product, they are designed to be mechanically linked to
and connected to a 1602-590 operator.

Caution: Installation and use of wedge barriers in areas that are subject to freezing weather with potential for snow and ice accumulation is not recommended.



	Lane Openi	Overall Dime	Crash Rati		
P/N	ng	Height	Width	Depth	ng
1625-612	11 Ft., 8 In.	54 ln.	16 Ft., 6 In.	5 Ft., 8 In.	PU-30-P1
1625-614	13 Ft., 8 In.	54 ln.	18 Ft., 6 In.	5 Ft., 8 In.	PU-30-P2
1625-616	15 Ft., 8 In.	54 ln.	20 Ft., 6 In.	5 Ft., 8 In.	PU-30-P2
1625-618	17 Ft., 8 In.	54 ln.	22 Ft. 6 In.	5 Ft., 8 In.	PU-30-P2

- 1. 1625 Wedge Barriers ARE NOT a stand-alone product. They must be used with a 1602-590 Operator.
- 2. Traffic signal kit (1603-222) MUST be installed with the 1625 system.
- 3. Use 14 Ft. arm with 12 and 14 Ft. wedges and 17 Ft. arm with 16 and 18 Ft. wedges (17 Ft. arm can be used with the 14 Ft. wedge if desired).
- 4. Wedge barrier is finished in gloss cardinal red.
- 5. Designed for use with passenger cars and light trucks, and will stop a vehicle up to

5,070 lbs at 30 MPH when installed per the manufacturer's installation instructions.

WARNING! LTL Carriers are now charging additional fees for any shipment that is eight (8) feet in length or greater. These fees can be substantial.

Traffic Control Automated Wedge

- 1625 Wedge Barrier system components are ordered à la carte. Besides the wedge barrier (ITEM 1), the wedge barrier operator (ITEM 2), the octagonal arm assembly (ITEM 3), the lighted edge (ITEM 4), the traffic signal (ITEM 5), and the pedestrian protection (ITEM 6) must also be ordered to complete the system.
- Wedge barrier components are finished in Gloss Cardinal Red. 1602 operator is finished in Gloss White.

ITEM 1: 1625 Lane Barrier1 - Cardinal Red

- 1625-612 Lane Opening 12 Ft (3.65m)
- 1625-614 Lane Opening 14 Ft (4.26m)
- 1625-616 Lane Opening 16 Ft (4.87m)
- 1625-618 Lane Opening 18 Ft (5.48m)
 - 1. The width shown is the distance between the post anchors.

ITEM 2: Operator

- 1602-590 Operator
- 2600-266 High Voltage Kit1
- 2. Allows the operator to be powered from 208, 230, or 460 VAC.

ITEM 3: Octagonal Arm Components

- 1601-555 Arm 14 Ft (4.27 m)
- 1601-567, 2-piece1
- 1602-303 3 Ft (.91 m) Arm Extension2
- 1601-235 Hardware Kit3
 - 1. Ships in an 8-ft (2.4m) long box to reduce shipping cost.
 - 2. Use with 14, 16, and 18 ft wedges.

3. Required.

ITEM 4: Lighted Edges

- 8080-096 Reverse Edge 12 Ft Lighted1
- 8080-315 Reverse Edge 15 Ft (4.57 m) Lighted2
 - 1. LED Green (Up) and Red (Down)
 - 2. Use with 17 Ft. arms.

ITEM 5: Traffic Signal

1603-222 Traffic Signal 12 VDC w/35" Post

ITEM 6: Pedestrian Protection

- 8080-057 Photo-Reflective Beam
- 9411-010 Loop Detector

FAQs

What type of gates are suitable for the 9500 Series Operators?

The 9500 Series Operators are suitable for very large vehicular gates used in Limited (Class III) and Restricted (Class IV) maximum security applications only.

Do I need additional entrapment prevention devices for the operators?

Yes, the operators must be installed with external entrapment prevention devices, Type B1 and Type B2, to ensure all hazard areas are protected.

Are the 1625 Series Wedge Barriers crash-rated?

Yes, the 1625 Wedge Barriers are crash rated to the ASTM F2656-23 standard.

Documents / Resources



DKS 1625 Series Maximum Security Operators and Barriers [pdf]

Installation Guide

9500 Series, 1620 Series, 1625 Series, 1625 Series Maximum Security O perators and Barriers, Maximum Security Operators and Barriers, Securit y Operators and Barriers, Operators and Barriers, Barriers

References

- User Manual
- DKS
- ◆ 1620 Series, 1625 Series, 1625 Series Maximum Security Operators and Barriers, 9500 Series, Barriers, DKS, Maximum Security Operators and Barriers, Operators and Barriers, Security Operators and Barriers

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