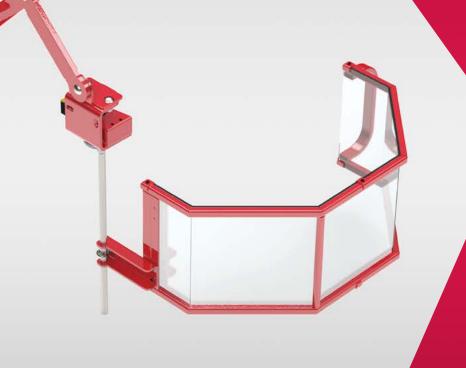


The Trusted Choice for Machine Safety



PATENT-PENDING **PROTECTOR**[™] SERIES SHIELDS









DELIVERING TRUSTED MACHINE SAFEGUARDING SOLUTIONS FOR ORGANIZATIONS WORKING WITH INDUSTRIAL MACHINERY

WHY SAFEGUARD?

According to Occupational Safety and Health Administration (OSHA) statistics, nearly 18,000 workers in metal fabricating plants suffer non-fatal injuries annually in the United States. Even with strict machine and operator safety regulations in place, unguarded hazardous machinery remains a major source of fatalities, amputations and other traumatic injuries in manufacturing plants. A recent survey showed an alarming 50 percent or more of metal fabricating machinery in the United States are not in compliance with the critical safety requirements for guarding outlined by OSHA and the American National Standards Institute (ANSI).

Since 1971, the Fortune 500 and many of North America's largest manufacturers have depended upon Rockford Systems for customized machine safeguarding solutions to bring their operations into compliance with today's OSHA regulations, ANSI, RIA and NFPA standards to ensure they are prepared for tomorrow's safety challenges.



Training and Education

Recommended For

Personnel in EH&S, Production/ Operations/ Maintenance, and Risk Management roles that need safeguarding training

Description

Seminars and webinars that teach people how to safeguard industrial machinery to be in compliance with OSHA regulations and ANSI/RIA/NFPA standards

Output / Result

Safeguarding Seminar Certificate

Machine Risk Assessment

Recommended For

Organizations with new and/or relocated metal working machines or automation cells that need hazard identification and risk scoring

Description

Identifies the task and associated hazards on machinery

Scores the risk level using the ANSI B11.0-2015 safety standard methods

Output / Result

Hazard Analysis Report

Machine Safeguarding Assessment

Recommended For

Organizations with new, old, refurbished and/or relocated metal working machines, robots or automation cells that need safeguarding solutions and associated costs

Description

Identifies the task and associated hazards on machinery

Recommends safeguarding solutions using the current OSHA regulations and ANSI/RIA/NFPA standards (or Corporate Standards where applicable)

Output / Result

Machine Safeguarding Assessment & Proposal

Engineered Integration Solutions

Recommended For

Included with Machine Safeguarding Assessment

Description

Delivers customized engineered and automated safety device interfaces or specialized controls for machines or robots

Output / Result

Customized build-to-spec solutions

OUR MISSION

Our aim is to enhance the long-term health and quality of life of workers in high-risk occupations, while improving the bottom line of the organizations we serve by increasing compliance, reducing risk, lowering costs, and improving productivity.

ROCKFORD SYSTEMS CAN HELP

At Rockford Systems, we are experts at machine quarding because it has been our sole focus for almost 50 years. We stand committed to the prevention of injuries and fatalities. We are here to help insurance agencies, academic institutions, and businesses, large and small, address machine safety challenges and to remove the burden of managing the growing legal complexity of OSHA and ANSI requirements from simple turnkey solutions, to more complex customized solutions.



Over 10.000 **Safeguarding Products**

Recommended For

Included with Machine Safeguarding Assessment

Description

Ensures that industrial machines and automation cells are fully safeguarded to OSHA regulations and ANSI/RIA/ NFPA standards

Includes shields, guards, presence sensing devices, controls, disconnects, starters, covers and more for all metal working machines

Output / Result

Compliant safeguarding solutions designed to reduce risk and improve worker safety

Expert Installation Services

Recommended For

Included with Machine Safeguarding Assessment

Description

OSHA and NFPA trained installers safely integrate safeguarding products into sophisticated machine controls and train operators on proper use

Output / Result

Quality Installation

Technical Support and In-Field Support

Recommended For

Included with all purchases and installations

Description

Every purchase is backed up with a professional, highly-trained team of **Technical Support Advisers**

In-Field Service Technicians are available for more complex troubleshooting and repairs

Output / Result

Post purchase support via phone, fax, online or onsite

Ongoing Compliance Validation

Recommended For

Organizations who have completed a guarding installation that seek ongoing compliance validation

Description

Ensures that safeguarding products are in place, working at optimal performance, and operators are using safeguarding solutions as designed and trained

Output / Result

Peace of mind inspection report, compliance with OSHA regulations and ANSI/RIA/NFPA standards



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There are basic safety requirements for safeguarding cutting and turning machines. These basic safety requirements include safeguarding, controls, disconnects, starters, covers, and other considerations. We have explained the basic safety requirements below and have arranged this catalog so you can make your safeguarding choices quickly and easily.

- 1. SAFEGUARDING: When safeguarding the point-of-operation on a cutting or turning machine, shields (barriers) can be installed between the hazard and the operator. These shields can deflect chips, sparks, and coolant that are generated at the point-of-operation.
- 2. CONTROLS: Most cutting and turning machines are directly driven by a motor. When the motor is turned on, the tool or workpiece rotates causing a point-of-operation hazard. When the motor is turned off, the tool or workpiece coasts to a stop and the hazard is eliminated. The basic requirement for controls is that all cutting and turning machines must have an emergency-stop device located within reach of the operator. Some of the motor stop/start operator stations offered in this catalog are equipped with an emergency-stop push button to meet this requirement. These emergency stop buttons can also be supplied separately.
- 3. DISCONNECTS: All cutting and turning machines must have a disconnecting means to shut off all pneumatic, electrical, and hydraulic power sources coming to the machine. It must be capable of being locked only in the off position to comply with OSHA 1910.306 (i) (4), applicable ANSI standards, and OSHA 29 CFR 1910.147 (lockout/tagout).
- 4. STARTERS: All cutting and turning machines must have a starter that will automatically drop out when the control voltage is lost to the machine. To restart the machine when power is restored, someone must start the motor with some type of overt action, for example, pressing the start push button. This prevents the machine from automatically restarting when the voltage is restored.
- 5. COVERS: All cutting and turning machines must have the mechanical power-transmission apparatuses covered (quarded) if below a 7' level from the floor or working platform. This includes motor shafts, belts, pulleys, chains, sprockets, gears, etc.
- 6. OTHER CONSIDERATIONS: Other auxiliary safeguarding equipment may be required to make cutting and turning machines as safe as possible.



OSHA PUBLICATIONS

When safeguarding cutting and turning machines, the general requirements that apply to these types of machines are in OSHA (Occupational Safety and Health Administration) Title 29 of the Code of Federal Regulations (CFR). These publications can be acquired by contacting:

U.S. Government Printing Office

P.O. Box 371954

Pittsburgh, PA 15250-7954

(202) 512-1800 • http://bookstore.gpo.gov

The following is a list:

- 7. An Act–Public Law 91-596, 91st Congress, S. 2193, December 29, 1970, Duties, Section 5(a)(1)(2)(b)
- OSHA 29 CFR sections that an employer (user) must comply with include:

1910.211 Definitions

1910.212 General requirements for all machines

1910.213 Woodworking machinery requirements

1910.215 Abrasive wheel machinery

1910.219 Mechanical power-transmission apparatus

OSHA 29 CFR 1910.147 The control of hazardous energy (lockout/tagout).

10. OSHA 29 CFR 1910.301-1910.399 Electrical

The basic OSHA standard, 29 CFR 1910.212, states that any machine that creates a hazard must be safeguarded to protect the operator and other employees. OSHA can also cite violations using other standards such as the ANSI (American National Standards Institute) B11 series.

ANSI Publications

B11-2008 General Safety Requirements

Common to ANSI B11 Machines

B11.6* Lathes

B11.9* Grinding Machines

B11.19* Performance Criteria for Safeguarding

B11.23* Machining Centers and CNC Milling, Drilling, and Boring Machines B11.24 Transfer Machines

B11.TR1 Ergonomic Guidelines

B11.TR3* Risk Assessment and Risk Reduction

B15.1 Mechanical Power Transmission Apparatus

01.1* Woodworking Machinery

*ANSI Standards for Cutting and Turning Machines

These standards can be purchased by contacting:

ANSI (American National Standards Institute, Inc.)

25 West 43rd Street, 4th Floor

New York, New York 10036

(212) 642-4900 • www.ansi.org

Other Publications

- 1. NFPA 79, Electrical Standard for Industrial Machinery
- 2. NEC (National Electrical Code) Handbook
- 3. NEMA (National Electrical Manufacturers Association)
- 4. Robotics Industry Association (RIA)

For additional safety information and assistance in devising, implementing or revising your safety program, please contact the machine manufacturer, your state and local safety councils, insurance carriers, national trade associations, and your state's occupational safety and health administration.

The shields (barriers) offered in this catalog are usually installed on drilling machines, lathes, milling machines, grinding machines, band saws, belt sanders, and disc sanders. Many of the shields can be used on other types of equipment including woodworking machines and robotics. Most of these shields are intended to deflect chips (swarf), sparks, splashing coolant, or lubricant away from the operator and other employees in the machine area. Shields provide visibility to the pointof-operation. Although these shields provide some degree of guarding for the operator, they cannot be considered guards. When using these shields, and before any of the shields illustrated in this catalog are moved from their normally applied position, power must always be turned off. In some cases, more than one type of shield per machine may be necessary to provide protection. For example, on lathes, a chuck shield may be required along with a cross shield where the tool comes into contact with the workpiece. This catalog offers several different types of shields. When considering shielding for your machines, be sure to choose the shield that fits your machining applications and still maintains current levels of productivity.

DRILLING MACHINES

As with other cutting machines, the operator must be shielded from the rotating chuck and swarf that is produced by the drill bit. A wide variety of shields can be attached to the machine and used to protect this area. The ANSI standard for drilling machines is ANSI B11.8.

LATHES

There are three main safety considerations for lathes (engine, turret, etc.). One is the rotating chuck that could catch the operator's clothing, jewelry, hair, or hand and pull it into the machine. The second is the hazardous flying chips and splashing coolant that are generated at the point-of-operation (where the tool contacts the workpiece being machined). To protect these areas, two shields can be applied—one around a portion of the chuck and the other at the point-of-operation. Larger sliding shields can protect both areas, providing the workpiece is not too long. The third is the rotating transmission components that must be covered to prevent entanglement. The ANSI standard for lathes is ANSI B11.6.

MILLING MACHINES

The main safety consideration for milling machines is the swarf that is generated at the point-of-operation. Another safety concern is the tool cutter, which could catch operator's clothing, jewelry, hair, or any other part of the body. Usually on smaller mills, the operator and other employees in the machine area are protected by shields. These shields can be applied around the perimeter of the table or bed area or close to the cutter, depending on the size of the workpiece and the application. On larger milling machines, operators are sometimes protected by location; however, when working close to a cutting tool, operators must be protected from swarf. The ANSI standard for milling machines is ANSI B11.8.

GRINDING MACHINES

Shields are usually applied to grinding machines to protect the operator from chips (swarf), sparks, splashing coolant, or lubricant. Other safety concerns for grinders are the adjustment of the work rests and the adjustable tongues or ends of the peripheral members at the top of each wheel. Work rests shall be kept adjusted closely to the wheel with a maximum opening of 1/8". The distance between the wheel periphery and the adjustable tongue or the end of the peripheral member at the top shall never exceed ½". Grinding machines are covered by OSHA in 29 CFR 1910.215. The ANSI standards for grinding machines are B11.9 and B7.1.

BAND AND TABLE SAWS

Shields are applied to band saws and table saws to protect the operator from flying chips, splinters, and dust. As with other cutting machines, care must be taken around the moving blade of the machine. Avoid wearing loose clothing and jewelry; properly restrain long hair. Band saws and table saws for woodworking are covered by OSHA in 29 CFR 1910.212 and 1910.213. The ANSI standard for metal sawing machines is ANSI B11.10.

DISC/BELT SANDERS/GRINDERS

Shields can be applied to disc/belt sanders/grinders to protect the operator from flying chips, splinters, and dust. As with other machines with rotating parts, care must be taken around the point-of-operation. Avoid wearing loose clothing and jewelry; properly restrain long hair. Disc and belt sanders for woodworking are covered by OSHA in 29 CFR 1910.212 and 1910.213. The ANSI standards for grinding machines are B11.9 and B7.1.

LOCKOUT/TAGOUT

As stated in OSHA 29 CFR 1910.147 The control of hazardous energy (lockout/tagout): "(a)(1)(i) This standard covenergizing or start-up of the machines or equipment, or release of stored energy could cause injury to employees. This standard establishes minimum performance requirements for the control of such hazardous energy."

- 1. Unplug the machine and use an electrical plug lockout or use a disconnect switch with padlocks, lockouts, and tags.
- 2. Disconnect and ensure that all power sources are locked and tagged out.
- 3. Stored electrical energy must be bled to obtain zero energy state.
- 4. Use a volt meter to make sure all circuits are dead.

ELECTRICAL REQUIREMENTS NFPA 79, ELECTRICAL STANDARD FOR INDUSTRIAL MACHINERY

INCOMING SUPPLY CIRCUIT CONDUCTOR TERMINATIONS

Under 5.1.1, it states that "where practicable, the electrical equipment of a machine shall be connected to a single power supply circuit."

SUPPLY CIRCUIT DISCONNECTING (ISOLATING) MEANS

In 5.3.1.1, it states that a supply circuit disconnecting means shall be provided for each incoming supply circuit to a machine. According to 5.3.1.1.1, each disconnecting means shall be legibly marked to indicate its purpose. Under 5.3.1.3, "The supply circuit disconnecting means other than attachment plugs and receptacles shall be mounted within the control enclosure or immediately adjacent thereto. Exception: Externally mounted supply circuit disconnecting means, whether interlocked or not



interlocked with the control enclosure, supplying machines totaling 2hp or less shall be permitted to be mounted up to 6m (20ft) away from the enclosure providing that the disconnecting means is in sight from and readily accessible to the operator." Under 5.3.3, the disconnecting means shall be provided with permanent means for locking in the off position only (for other than attachment plugs). In accordance with 5.3.4.1, "The center of the grip of the operating handle of the disconnecting means, when in its highest position, shall not be more than 2.0 m (6ft 7in) above the floor. A permanent operating platform, readily accessible by means of a permanent stair or ladder, shall be considered as the floor for the purpose of this requirement." According to 5.3.2 (6), the supply circuit disconnecting means can be an attachment plug and receptacle (plug/ socket combination) for cord connection to motor loads totaling 2hp or less.

CONTROL CIRCUIT SUPPLY, VOLTAGE, AND PROTECTION

In 9.1.1.1, it states that "Control transformers shall be used for supplying the control circuits." According to 9.1.1.3, "Transformers shall not be required if the supply voltage does not exceed 120volts ac." In accordance with 9.1.2.1, "The ac voltage for control circuits shall not exceed 120 volts, ac single phase." According to 9.1.3, control circuits shall be provided with overcurrent protection.

OVERLOAD PROTECTION OF MOTORS

According to 7.3.1, "Overload devices shall be provided to protect each motor, motor controller, and branch-circuit conductor against excessive heating due to motor overloads or failure to start."

STOP FUNCTIONS

According to 9.2.2, "The three categories of stop functions shall be as follows:

- (1) Category 0 is an uncontrolled stop by immediately removing power to the machine actuators.
- (2) Category 1 is a controlled stop with power to the machine actuators available to achieve the stop then remove power when the stop is achieved.
- (3) Category 2 is a controlled stop with power left available to the machine actuators."

In 9.2.5.3.1, it states that "Each machine shall be equipped with a Category 0 stop." According to 9.2.5.3.2, "Category 0, Category 1, and/ or Category 2 stops shall be provided where indicated by an analysis of the risk assessment and the functional requirements of the machine. Category 0 and Category 1 stops shall be operational regardless of operating modes, and Category O shall take priority. Stop function shall operate by de-energizing that relevant circuit and shall override related start functions."

EMERGENCY STOP FUNCTIONS

In accordance with 9.2.5.4.1, emergency stop functions shall be designed to be initiated by a single human action. In addition to the requirements for stop, 9.2.5.4.1.1 states that "the emergency stop shall have the following requirements:

- (1) It shall override all other functions and operations in all modes.
- (2) Power to the machine actuators, which causes a hazardous condition(s), shall be removed as quickly as possible without creating other hazards (e.g., by the provision of mechanical means of stopping requiring no external power, by reverse current braking for a Category 1 stop).
- (3) The reset of the command shall not restart the machinery but only permit restarting."

In 9.2.5.4.1.2, it states that "Where required, provisions to connect additional emergency stop devices shall be provided." According to 9.2.5.4.1.3, "The emergency stop shall function as either a Category 0 or a Category 1 stop. The choice of the category of the emergency stop shall be determined by the risk assessment of the machine." In accordance with 9.2.5.4.1.4, "Where a Category 0 or Category 1 stop is used for the emergency stop function, it shall have a circuitry design (including sensors, logic, and actuators) according to the relevant risk as required by Section 4.1 and 9.4.1. Final removal of power to the machine actuators shall be ensured and shall be by means of electromechanical components. Where relays are used to accomplish a Category 0 emergency stop function, they shall be non-retentive relays.

Exception: Drivers, or solid state output devices, designed for safety related functions shall be allowed to be the final switching element. when designed according to relevant safety standards."

DEVICES FOR STOP AND EMERGENCY STOP

In accordance with 10.7.1.1, "Stop and emergency stop pushbuttons shall be continuously operable and readily accessible." According to 10.7.1.2, "Stop or emergency stop pushbuttons shall be located at each operator control station and at other locations where emergency stop is required."

In 10.7.2.1, it states that "The types of devices for emergency stop shall include, but are not limited to, the following:

- (1) Pushbutton-operated switches
- (2) Pull-cord-operated switches
- (3) Foot-operated switches without a mechanical guard
- (4) Push-bar-operated switches
- (5) Rod-operated switches"

According to 10.7.2.2, "Pushbutton-type devices for emergency stop shall be of the self-latching type and shall have direct opening operation." In accordance with 10.7.2.3, "Emergency stop switches shall not be flat switches or graphic representations based on software applications." For restoration of normal function after emergency switching off, 10.8.3 says that "It shall not be possible to restore an emergency switching off circuit until the emergency switching off circuit has been manually reset." According to 10.7.3, "Actuators of emergency stop devices shall

be colored RED. The background immediately around pushbuttons and disconnect switch actuators used as emergency stop devices shall be colored YELLOW. The actuator of a pushbutton-operated device shall be of the palm or mushroom-head type and shall effect an emergency stop when depressed. The RED/YELLOW color combination shall be reserved exclusively for emergency stop applications.

Exception: The RED/YELLOW color combination shall be permitted for emergency stop actuators in accordance with 10.8.4."

Under 10.8.5, "Where the supply disconnecting means is to be locally operated for emergency switching off, it shall be readily accessible and shall meet the color requirements of 10.8.4.1." According to 10.8.4.1, "Actuators of emergency switching off devices shall be colored RED. The background immediately around the device actuator shall be permitted to be colored YELLOW."

PUSHBUTTON ACTUATORS

According to 10.2.1, "Pushbutton actuators used to initiate a stop function shall be of the extended operator or mushroom-head type." As stated in 10.2.2.1, "The preferred color of start or on shall be GREEN, except that BLACK, WHITE, or GRAY shall be permitted. RED shall not be used for start or on." In 10.2.2.2, it states that "the preferred color for stop or off shall be RED, except that BLACK, WHITE, or GRAY shall be permitted. GREEN shall not be used for stop or off." According to 10.2.2.6, "Pushbuttons that cause movement when pressed and stop movement when they are released (e.g.,jogging) shall be BLACK, WHITE, GRAY, or BLUE, with a preference for BLACK." In accordance with 10.2.3.1, "A legend shall be provided for each operator interface device to identify its function and shall be located so that it can be easily read by the machine operator from the normal operator position. The legends shall be durable and suitable for the operating environment."

START DEVICES

According to 10.6, "Actuators used to initiate a start function or the movement of machine elements (e.g., slides, spindles, carriers) shall be constructed and mounted to minimize inadvertent operation." Protection Against Supply Interruption or Voltage Reduction and Subsequent Restoration Under 7.5.1, "Where a supply interruption or a voltage reduction can cause a hazardous condition or damage to the machine or to the work in progress, undervoltage protection shall be provided (e.g., to switch off the machine) at a predetermined voltage level." For restarting, 7.5.3 states that "Upon restoration of the voltage or upon switching on the incoming supply, automatic or unintentional restarting of the machine shall be prevented when such a restart causes a hazardous condition."

PROTECTIVE INTERLOCKS

In 9.3.6, it states that "Where doors or guards have interlocked switches used in circuits with safety related functions, the interlocking devices shall be listed, have either positive (direct) opening operation, or provide similar reliability and prevent the operation of the equipment when the doors or guards are open (difficult to defeat or bypass)." Under 9.3.1, "The reclosing or resetting of an interlocking safeguard shall not initiate machine motion or operation that results in a hazardous condition."



SELECTING A PROTECTOR SERIES SHIELD

To create a PROTECTOR Series Shield, determine the 14-digit configurated part number by following directions 1 - 6 and use the information in the PART NUMBERING SYSTEM CHART (see next page).

- 1 The first 3 characters will always be RSS (Rockford Systems Shields)
- 2 The first 3 digits will determine the type and size of the shield and LED lighting option
- 3 Digit 4 will determine the shield mount
- 4 The next 4 digits will determine the shield arm type, pivot, reach and interlock option
- 5 The next 2 digits will determine the shield offset
- 6 The last digit will determine with enclosure (interface type), depending upon the LED and interlock options selected:

If you have selected no LED, then you should select "No Enclosure" (0)

If you have selected LED and no interlock, then you should select "Lighted – Non-Interlocked Enclosure" (1)

If you have selected LED and interlock, then you should select "Lighted - Interlocked Enclosure" (2)

If you have selected LED and interlock and monitoring, then you should select "Lighted - Interlocked & Monitored Enclosure" (3)

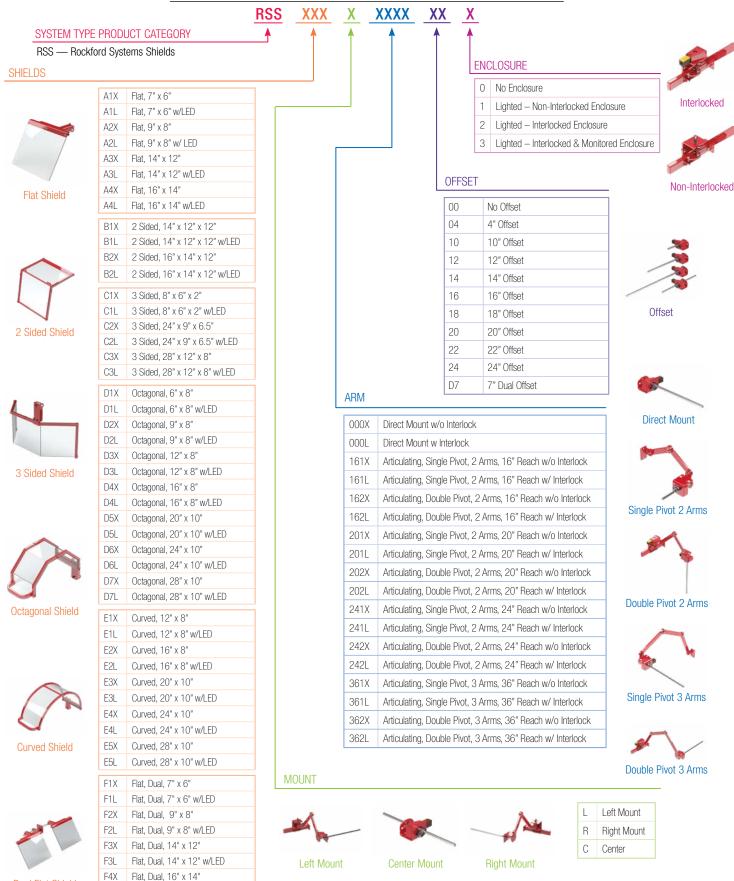
LED Lighting?	Interlock?	Monitored?	Group 6 Option
NO	NO	NO	0
YES	NO	NO	1
NO	YES	NO	0
YES	YES	NO	2
YES	YES	YES	3

PART NUMBER EXAMPLE

RSSA1LL000X101 - Shield, Flat, 7" x 6" with LED, Left Mount, Direct Mount without Interlock, 10" Offset, Lighted - Non-Interlocked Enclosure

PROTECTOR™ SERIES SHIELDS PART NUMBERING CHART

Reference the catalog or website for dimensional drawings for all shields shown below.



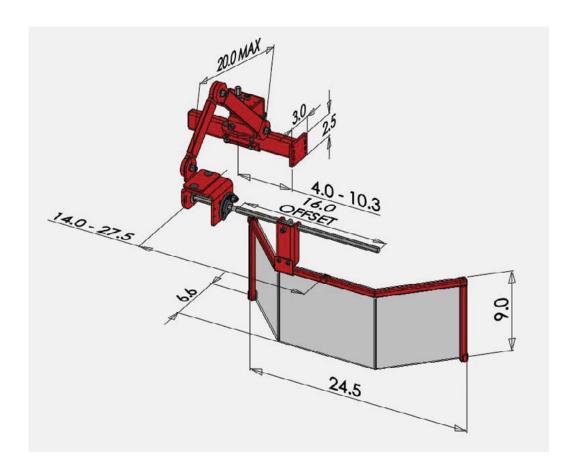
Dual Flat Shield

F4L

Flat, Dual, 16" x 14" w/LED



3-Sided Shield, 24" x 9" x 6.5", Left Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset Other Sizes Available



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSC2XL202X160	RSSC2LL202X161	RSSC2XL202L160	RSSC2LL202L162	RSSC2LL202L163
Shield	3 Sided				
Mount	Left	Left	Left	Left	Left
Arm	Articulating, Double Pivot, 2 Arms				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	22 lb	27 lb	23 lb	28 lb	29 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



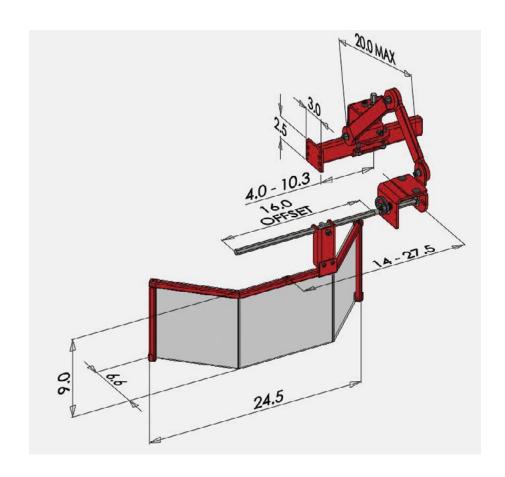
RSSC2XL202X160 | RSSC2LL202X161



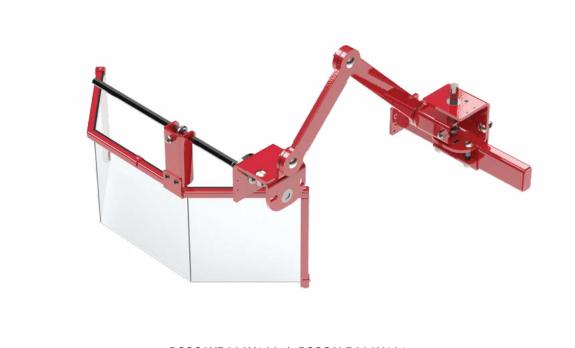
RSSC2XL202L160 | RSSC2LL202L162 | RSSC2LL202L163



3 Sided Shield, 24" x 9" x 6.5", Right Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSC2XR202X160	RSSC2LR202X161	RSSC2XR202L160	RSSC2LR202L162	RSSC2LR202L163
Shield	3 Sided 24" x 9" x 6.5"	3 Sided 24" x 9" x 6.5"	3 Sided 24" x 9" x 6.5"	3 Sided 24" x 9" x 6.5"	3 Sided 24" x 9" x 6.5"
Mount	Right	Right	Right	Right	Right
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach	Articulating, Double Pivot, 2 Arms, 20" Reach	Articulating, Double Pivot, 2 Arms, 20" Reach	Articulating, Double Pivot, 2 Arms, 20" Reach	Articulating, Double Pivot, 2 Arms, 20" Reach
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	22 lb	27 lb	23 lb	28 lb	29 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



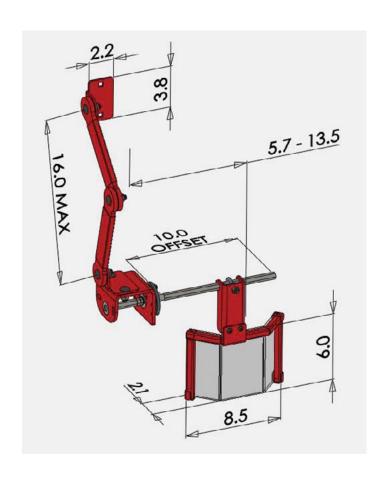
RSSC2XR202X160 | RSSC2LR202X161



RSSC2XR202L160 | RSSC2LR202L162 | RSSC2LR202L163



3 Sided Shield, 8" x 6" x 2", Left Mount, Articulating, Single Pivot, 2 Arms, 16" Reach, 10" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSC1XL161X100	RSSC1LL161X101	RSSC1XL161L100	RSSC1LL161L102	RSSC1LL161L103
Shield	3 Sided 8" x 6" x 2"				
Mount	Left	Left	Left	Left	Left
Arm	Articulating, Single Pivot, 2 Arms, 16" Reach				
Offset	10"	10"	10"	10"	10"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	11 lb	16 lb	12 lb	17 lb	18 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



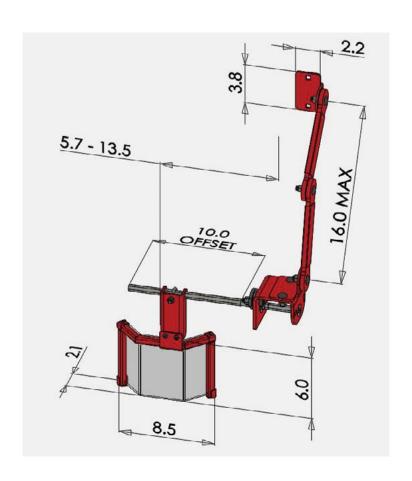
RSSC1XL161X100 | RSSC1LL161X101



RSSC1XL161L100 | RSSC1LL161L102 | RSSC1LL161L103



3 Sided Shield, 8" x 6" x 2", Right Mount, Articulating, Single Pivot, 2 Arms, 16" Reach, 10" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSC1XR161X100	RSSC1LR161X101	RSSC1XR161L100	RSSzC1LR161L102	RSSC1LR161L103
Shield	3 Sided 8" x 6" x 2"				
Mount	Right	Right	Right	Right	Right
Arm	Articulating, Single Pivot, 2 Arms, 16" Reach				
Offset	10"	10"	10"	10"	10"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	11 lb	16 lb	12 lb	17 lb	18 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



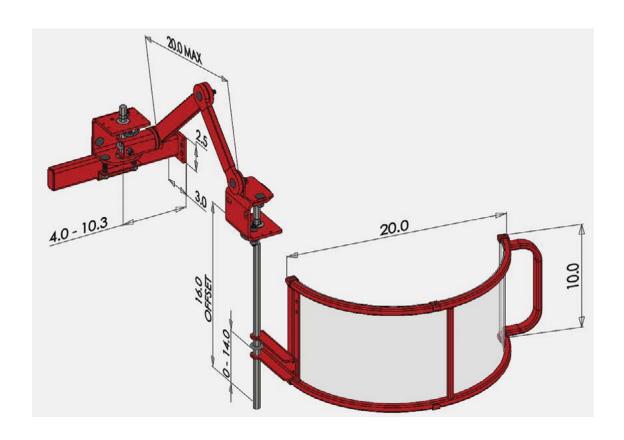
RSSC1XR161X100 | RSSC1LR161X101



RSSC1XR161L100 | RSSC1LR161L102 | RSSC1LR161L103



Curved Shield, 20" x 10", Left Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSE3XL202X160	RSSE3LL202X161	RSSE3LL202X161	RSSE3LL202L162	RSSE3LL202L163
Shield	Curved 20" x 10"	Curved 20" x 10"	Curved 20" x 10"	Curved 20" x 10"	Curved 20" x 10"
Mount	Left	Left	Left	Left	Left
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	23 lb	28 lb	24 lb	29 lb	30 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



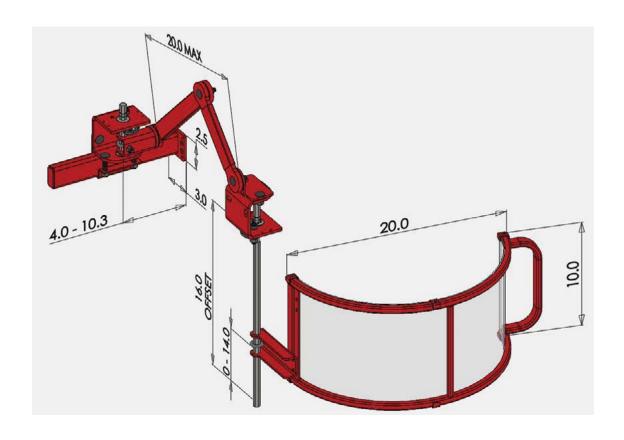
RSSE3XL202X160 | RSSE3LL202X161



RSSE3LL202X161 | RSSE3LL202L162 | RSSE3LL202L163



Curved, Shield 20" x 10", Right Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSE3XL202X160	RSSE3LL202X161	RSSE3XL202L160	RSSE3LL202L162	RSSE3LL202L163
Shield	Curved 20" x 10"	Curved 20" x 10"	Curved 20" x 10"	Curved 20" x 10"	Curved 20" x 10"
Mount	Right	Right	Right	Right	Right
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	23 lb	28 lb	24 lb	29 lb	30 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



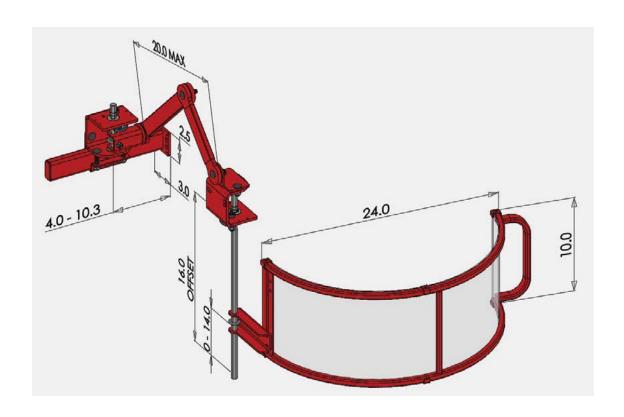
RSSE3XL202X160 | RSSE3LL202X161



RSSE3XL202L160 | RSSE3LL202L16 | RSSE3LL202L163



Curved Shield, 24" x 10", Left Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSE4XL202X160	RSSE4LL202X161	RSSE4XL202L160	RSSE4LL202L162	RSSE4LL202L163
Shield	Curved 24" x 10"				
Mount	Left	Left	Left	Left	Left
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	24 lb	29 lb	25 lb	30 lb	31 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



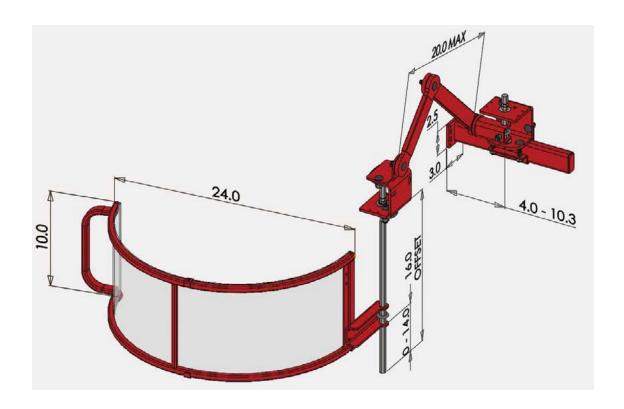
RSSE4XL202X160 | RSSE4LL202X161



RSSE4XL202L160 | RSSE4LL202L162 | RSSE4LL202L163



Curved Shield, 24" x 10", Right Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSE4XR202X160	RSSE4LR202X161	RSSE4XR202L160	RSSE4LR202L162	RSSE4LR202L163
Shield	Curved 24" x 10"	Curved 24" x 10"	Curved 24" x 10"	Curved 24" x 10"	Curved 24" x 10"
Mount	Right	Right	Right	Right	Right
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	24 lb	29 lb	25 lb	30 lb	31 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



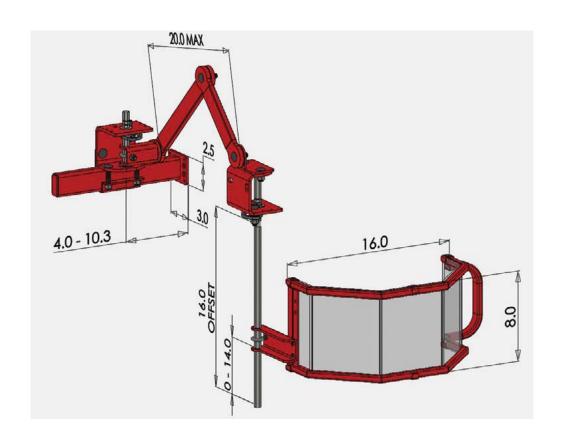
RSSE4XR202X160 | RSSE4LR202X161



RSSE4XR202L160 | RSSE4LR202L162 | RSSE4LR202L163



Octagonal Shield, 16" x 8", Left Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD4XL202X160	RSSD4LL202X161	RSSD4XL202L160	RSSD4LL202L162	RSSD4LL202L163
Shield	Octagonal 16" x 8"				
Mount	Left	Left	Left	Left	Left
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	22 lb	27 lb	23 lb	28 lb	29 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



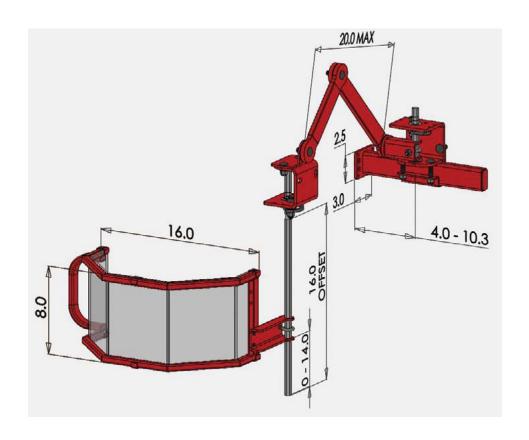
RSSD4XL202X160 | RSSD4LL202X161



RSSD4XL202L160 | RSSD4LL202L162 | RSSD4LL202L163



Octagonal Shield, 16" x 8", Right Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD4XR202X160	RSSD4LR202X161	RSSD4XR202L160	RSSD4LR202L162	RSSD4LR202L163
Shield	Octagonal 16" x 8"				
Mount	Right	Right	Right	Right	Right
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	22 lb	27 lb	23 lb	28 lb	29 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



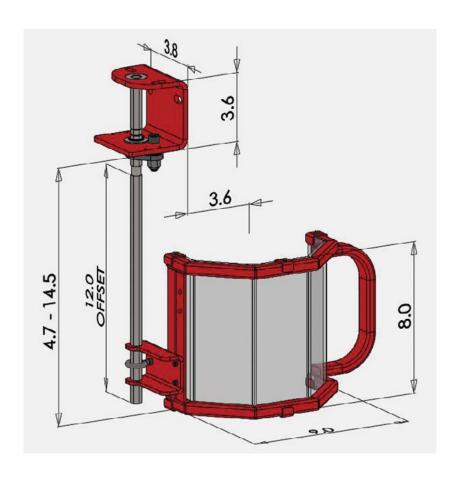
RSSD4XR202X160 | RSSD4LR202X161



RSSD4XR202L160 | RSSD4LR202L162 | RSSD4LR202L163



Octagonal Shield, 9" x 8", Left Mount, Direct Mount, 12" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD2XL000X120	RSSD2LL000X121	RSSD2LL000L120	RSSD2LL000L122	RSSD2LL000L123
Shield	Octagonal 9" x 8"				
Mount	Left	Left	Left	Left	Left
Arm	Direct Mount				
Offset	12"	12"	12"	12"	12"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	8 lb	13 lb	9 lb	14 lb	15 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



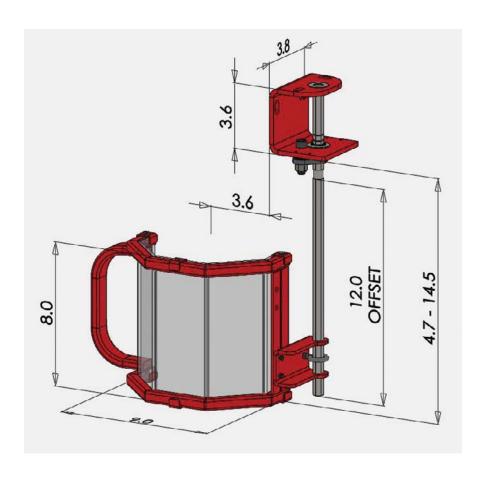
RSSD2XL000X120 | RSSD2LL000X121



RSSD2LL000L120 | RSSD2LL000L122 | RSSD2LL000L123



Octagonal Shield, 9" x 8", Right Mount, Direct Mount, 12" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD2XR000X120	RSSD2LR000X121	RSSD2LR000L120	RSSD2LR000L122	RSSD2LR000L123
Shield	Octagonal 9" x 8"				
Mount	Right	Right	Right	Right	Right
Arm	Direct Mount				
Offset	12"	12"	12"	12"	12"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	8 lb	13 lb	9 lb	14 lb	15 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



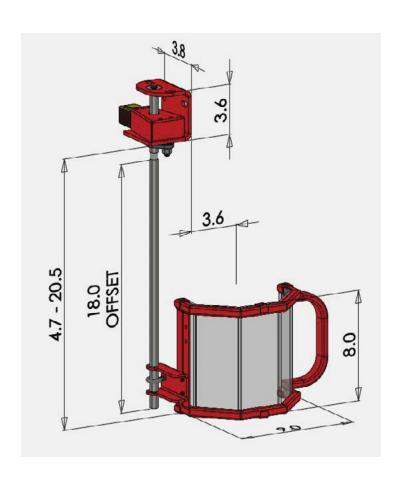
RSSD2XR000X120 | RSSD2LR000X121



RSSD2LR000L120 | RSSD2LR000L122 | RSSD2LR000L123



Octagonal Shield, 9" x 8", Left Mount, Direct Mount, 18" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD2XL000L180	RSSD2LL000X181	RSSD2XL000L180	RSSD2LL000L182	RSSD2LL000L183
Shield	Octagonal 9" x 8"				
Mount	Left	Left	Left	Left	Left
Arm	Direct Mount				
Offset	18"	18"	18"	18"	18"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	9 lb	14 lb	10 lb	15 lb	16 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2

SAFETY SHIELD FOR SMALL TO MEDIUM MILLS AND DRILLS



RSSD2XL000L180 | RSSD2LL000X181

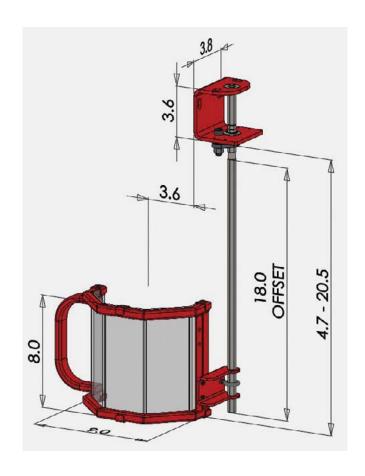


RSSD2XL000L180 | RSSD2LL000L182 | RSSD2LL000L183



SAFETY SHIELD FOR SMALL TO MEDIUM MILLS AND DRILLS

Octagonal Shield, 9" x 8", Right Mount, Direct Mount, 18" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD2XR000X180	RSSD2LR000X181	RSSD2XR000L180	RSSD2LR000L182	RSSD2LR000L183
Shield	Octagonal 9" x 8"				
Mount	Right	Right	Right	Right	Right
Arm	Direct Mount				
Offset	18"	18"	18"	18"	18"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	9 lb	14 lb	10 lb	15 lb	16 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2

SAFETY SHIELD FOR SMALL TO MEDIUM MILLS AND DRILLS



RSSD2XR000X180 | RSSD2LR000X181

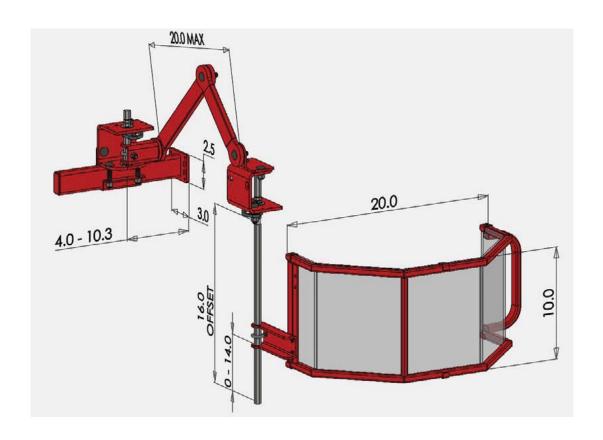


RSSD2XR000L180 | RSSD2LR000L182 | RSSD2LR000L183



SAFETY SHIELD FOR LARGE MILLS AND DRILLS

Octagonal Shield, 20" x 10", Left Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD5XL202X160	RSSD5LL202X161	RSSD5XL202L160	RSSD5LL202L162	RSSD5LL202L163
Shield	Octagonal 20" x 10"				
Mount	Left	Left	Left	Left	Left
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	24 lb	29 lb	25 lb	30 lb	31 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2

SAFETY SHIELD FOR LARGE MILLS AND DRILLS



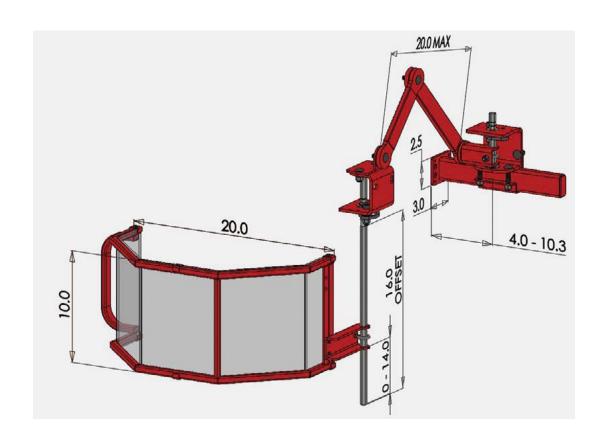
RSSD5XL202X160 | RSSD5LL202X16



RSSD5XL202L160 | RSSD5LL202L162 | RSSD5LL202L163



Octagonal Shield, 20" x 10", Right Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD5XR202X160	RSSD5LR202X161	RSSD5XR202L160	RSSD5LR202L162	RSSD5LR202L163
Shield	Octagonal 20" x 10"				
Mount	Right	Right	Right	Right	Right
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	24 lb	29 lb	25 lb	30 lb	31 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



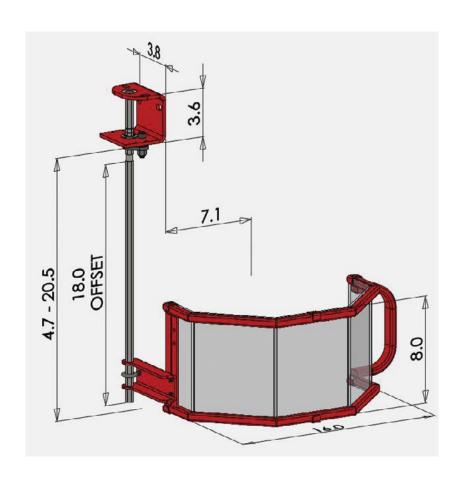
RSSD5XR202X160 | RSSD5LR202X161



RSSD5XR202L160 | RSSD5LR202L162 | RSSD5LR202L163



Octagonal Shield, 16" x 8", Left Mount, Direct Mount, 18" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD4XL000X180	RSSD4LL000X181	RSSD4XL000L180	RSSD4LL000L182	RSSD4LL000L183
Shield	Octagonal 16" x 18"				
Mount	Left	Left	Left	Left	Left
Arm	Direct Mount				
Offset	18"	18"	18"	18"	18"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	10 lb	15 lb	11 lb	16 lb	17 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



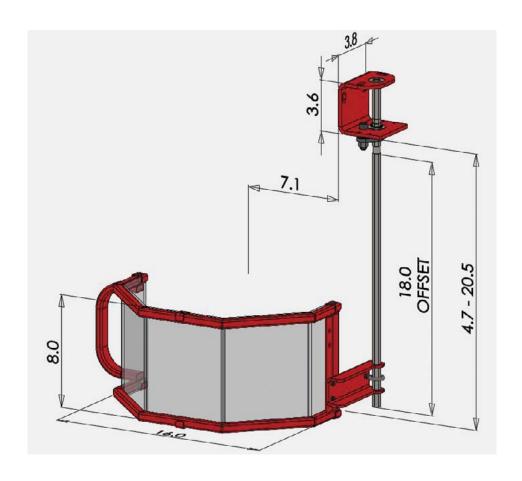
RSSD4XL000X180 | RSSD4LL000X181



RSSD4XL000L180 | RSSD4LL000L182 | RSSD4LL000L183



Octagonal Shield, 16" x 8", Right Mount, Direct Mount, 18" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD4XR000X180	RSSD4LR000X181	RSSD4XR000L180	RSSD4LR000L182	RSSD4LR000L183
Shield	Octagonal 16" x 8"				
Mount	Right	Right	Right	Right	Right
Arm	Direct Mount				
Offset	18"	18"	18"	18"	18"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	10 lb	15 lb	11 lb	16 lb	17 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



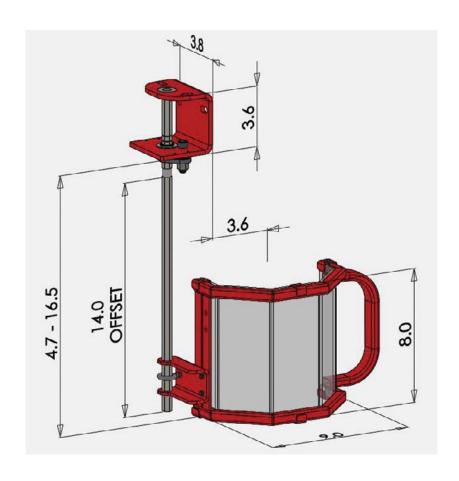
RSSD4XR000X180 | RSSD4LR000X181



RSSD4XR000L180 | RSSD4LR000L182 | RSSD4LR000L183



Octagonal Shield, 9" x 8", Left Mount, Direct Mount, 14" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD2XL000X140	RSSD2LL000X141	RSSD2XL000L140	RSSD2LL000L142	RSSD2LL000L143
Shield	Octagonal 9" x 8"				
Mount	Left	Left	Left	Left	Left
Arm	Direct Mount				
Offset	14"	14"	14"	14"	14"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	8 lb	13 lb	9 lb	14 lb	15 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



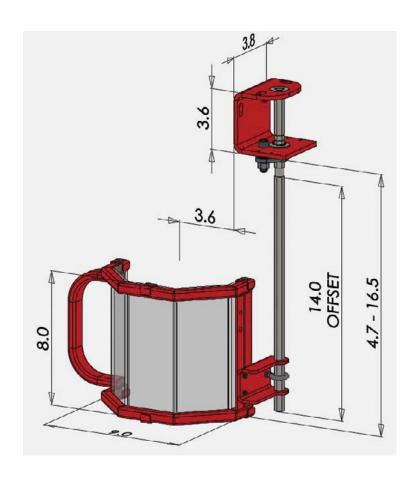
RSSD2XL000X140 | RSSD2LL000X141



RSSD2XL000L140 | RSSD2LL000L142 | RSSD2LL000L143



Octagonal Shield, 9" x 8", Right Mount, Direct Mount, 14" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD2XR000X140	RSSD2LR000X141	RSSD2XR000L140	RSSD2LR000L142	RSSD2LR000L143
Shield	Octagonal 9" x 8"				
Mount	Right	Right	Right	Right	Right
Arm	Direct Mount				
Offset	14"	14"	14"	14"	14"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	8 lb	13 lb	9 lb	14 lb	15 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



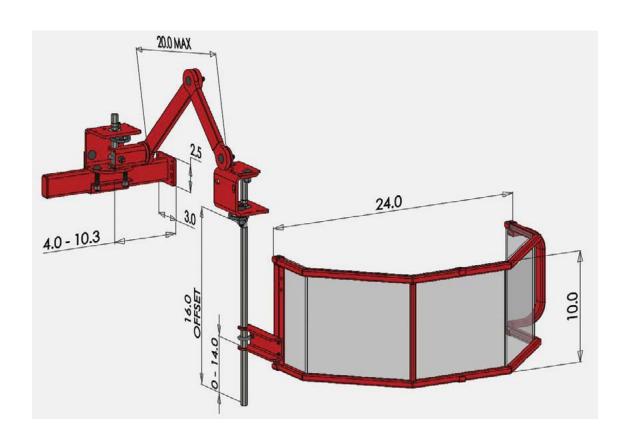
RSSD2XR000X140 | RSSD2LR000X141



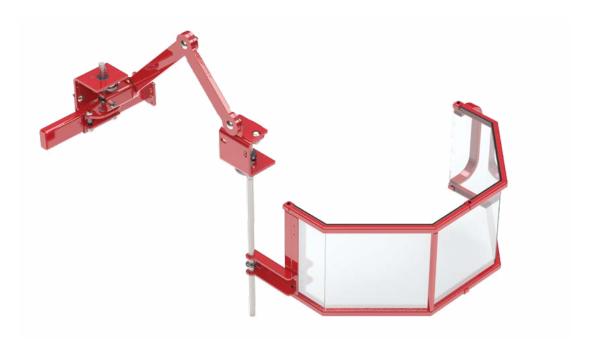
RSSD2XR000L140 | RSSD2LR000L142 | RSSD2LR000L143



Octagonal Shield, 24" x 10", Left Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD6XL202X160	RSSD6LL202X161	RSSD6XL202L160	RSSD6LL202L162	RSSD6LL202L163
Shield	Octagonal 24" x 10"				
Mount	Left	Left	Left	Left	Left
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	26 lb	31 lb	27 lb	32 lb	33 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



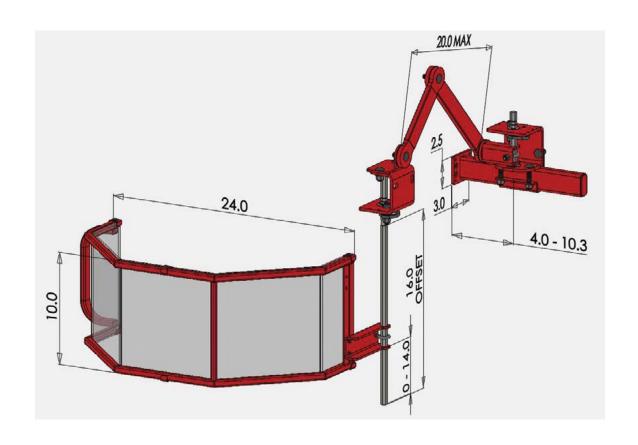
RSSD6XL202X160 | RSSD6LL202X161



RSSD6XL202L160 | RSSD6LL202L162 | RSSD6LL202L163



Octagonal Shield, 24" x 10", Right Mount, Articulating, Double Pivot, 2 Arms, 20" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSD6XR202X160	RSSD6LR202X161	RSSD6XR202L160	RSSD6LR202L162	RSSD6LR202L163
Shield	Octagonal 24" x 10"				
Mount	Right	Right	Right	Right	Right
Arm	Articulating, Double Pivot, 2 Arms, 20" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	26 lb	31 lb	27 lb	32 lb	33 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



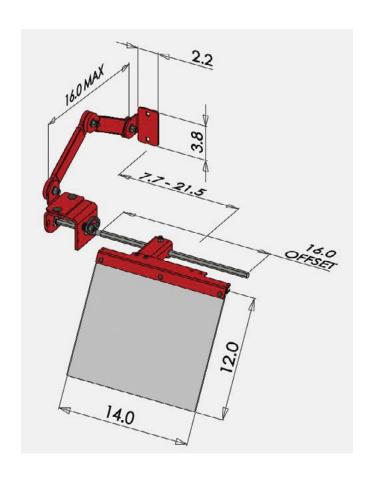
RSSD6XR202X160 | RSSD6LR202X161



RSSD6XR202L160 | RSSD6LR202L162 | RSSD6LR202L163



Flat Shield, 14" x 12", Left Mount, Articulating, Single Pivot, 2 Arms, 16" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSA3XL161X160	RSSA3LL161X161	RSSA3XL161L160	RSSA3LL161L162	RSSA3LL161L163
Shield	Flat 14" x 12"				
Mount	Left	Left	Left	Left	Left
Arm	Articulating, Single Pivot, 2 Arms, 16" Reach				
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	13 lb	18 lb	14 lb	19 lb	20 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



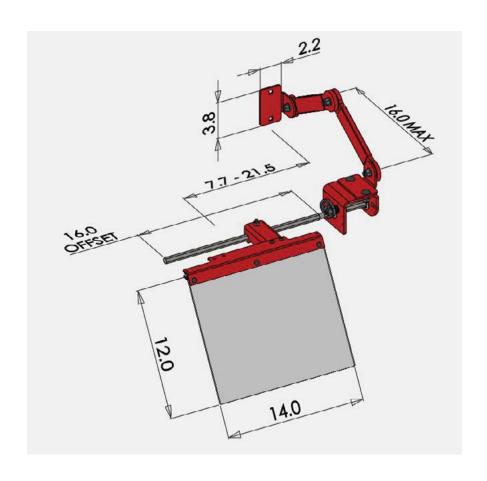
RSSA3XL161X160 | RSSA3LL161X161



RSSA3XL161L160 | RSSA3LL161L162 | RSSA3LL161L163



Flat Shield, 14" x 12", Right Mount, Articulating, Single Pivot, 2 Arms, 16" Reach, 16" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSA3XR161X160	RSSA3LR161X161	RSSA3XR161L160	RSSA3LR161L162	RSSA3LR161L163
Shield	Flat 14" x 12"	Flat 14" x 12"	Flat 14" x 12"	Flat 14" x 12"	Flat 14" x 12"
Mount	Right	Right	Right	Right	Right
Arm	Articulating, Single Pivot, 2 Arms, 16" Reach	Articulating, Single Pivot, 2 Arms, 16" Reach			
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	13 lb	18 lb	14 lb	19 lb	20 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



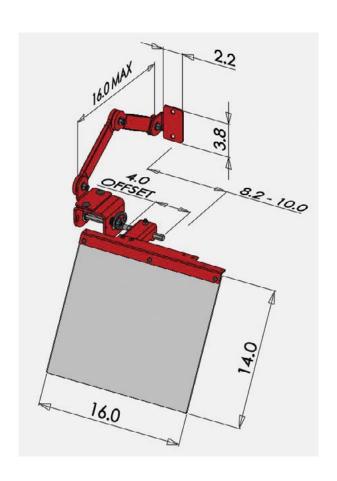
RSSA3XR161X160 | RSSA3LR161X161



RSSA3XR161L160 | RSSA3LR161L162 | RSSA3LR161L163



Shield, 16" x 14", Left Mount, Articulating, Single Pivot, 2 Arms, 16" Reach, 4" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSA4XL161X040	RSSA4LL161X041	RSSA4XL161L040	RSSA4LL161L042	RSSA4LL161L043
Shield	Flat 16" x 14"	Flat 16" x 14"	Flat 16" x 14"	Flat 16" x 14"	Flat 16" x 14"
Mount	Left	Left	Left	Left	Left
Arm	Articulating, Single Pivot, 2 Arms, 16" Reach	Articulating, Single Pivot, 2 Arms, 16" Reach			
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	13 lb	18 lb	14 lb	19 lb	20 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



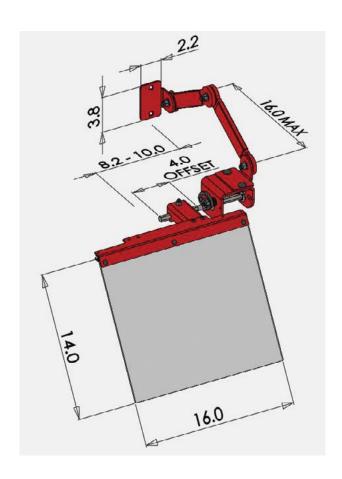
RSSA4XL161X040 | RSSA4LL161X041



RSSA4XL161L040 | RSSA4LL161L042 | RSSA4LL161L043



Flat Shield, 16" x 14", Right Mount, Articulating, Single Pivot, 2 Arms, 16" Reach, 4" Offset



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSA4XR161X040	RSSA4LR161X041	RSSA4XR161L040	RSSA4LR161L042	RSSA4LR161L043
Shield	Flat 16" x 14"	Flat 16" x 14"	Flat 16" x 14"	Flat 16" x 14"	Flat 16" x 14"
Mount	Right	Right	Right	Right	Right
Arm	Articulating, Single Pivot, 2 Arms, 16" Reach	Articulating, Single Pivot, 2 Arms, 16" Reach			
Offset	16"	16"	16"	16"	16"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	13 lb	18 lb	14 lb	19 lb	20 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2



RSSA4XR161X040 | RSSA4LR161X041

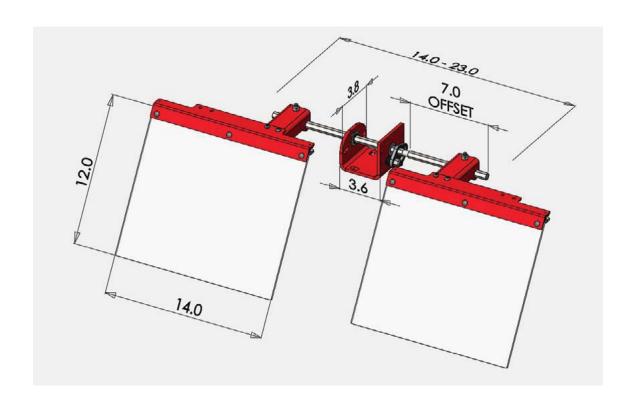


RSSA4XR161L040 | RSSA4LR161L042 | RSSA4LR161L043



SAFETY SHIELD FOR MEDIUM GRINDERS

Double Flat Shield, 14" x 7", Center Direct Mount



	Basic	LED	Interlock	Interlock + LED	Ultimate
Part Number	RSSA3XL000XD70	RSSA3LL000XD71	RSSA3XL000LD70	RSSA3LL000LD72	RSSA3LL000LD73
Shield	Double Flat 14" x 7"				
Mount	Center	Center	Center	Center	Center
Arm	Direct Mount				
Offset	7"	7"	7"	7"	7"
LED	No	Yes	No	Yes	Yes
Interlock	No	No	Yes	Yes	Yes
Monitoring	No	No	No	No	Yes
Weight	13 lb	18 lb	14 lb	19 lb	20 lb
CAT	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2

SAFETY SHIELD FOR MEDIUM GRINDERS



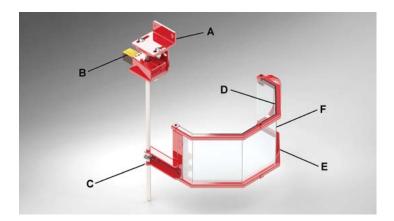
RSSA3XL000XD70 | RSSA3LL000XD71



RSSA3XL000LD70 | RSSA3LL000LD72 | RSSA3LL000LD73



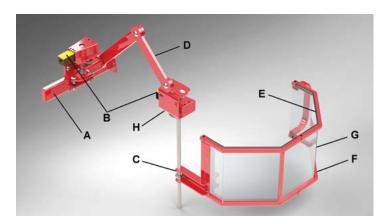
SHIELDS FOR DRILLS



Available in a variety of sizes, shapes and customizable options, Protector Shields for drills protect the operator from direct frontal contact with rotating spindle parts, flying debris and coolants/lubricants.

- A 1/4" steel mounting/pivot bracket with ball bearings vertical or horizontal mounting 120° rotation
- B Safety-rated microswitch (optional) mounted in tamper-resistant steel enclosures 1 NO, 1 NC contacts
- C Adjustable shield-mounting clamp in 7GA steel allows for radial and axial position adjustment
- D Available built-in LED lighting lights your work, indicates available Interlock status
- E Heavy 14GA steel formed and welded shield frame with durable powder coat finish
- F 3/16" thick polycarbonate shock-proof & oil-resistant shield

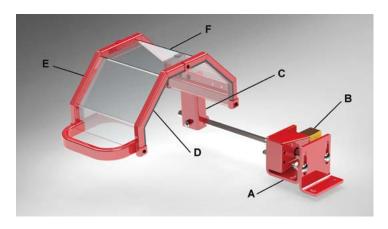
SHIELDS FOR MILLS

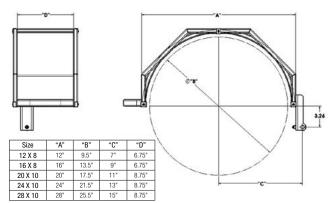


Available in a variety of sizes, shapes and customizable options, Protector Shields for mills protect the operator from direct frontal contact with rotating spindle parts, flying debris and coolants/lubricants.

- A Sturdy, tubular steel mounting post with leveling taps– provides 8" of adjustment
- B Safety-rated microswitches (optional) mounted in tamper-resistant steel enclosures 1 NO, 1 NC contacts
- C Adjustable shield-mounting clamp in 7GA steel allows for radial and axial position adjustment
- D Tubular steel Articulating arms with anti-slip discs 2 & 3 segments available for a reach of 16"-36"
- E Available built-in LED lighting lights your work, indicates available Interlock status
- F Heavy 14GA steel formed and welded shield frame with durable powder coat finish
- G 3/16" thick polycarbonate shock-proof & oil-resistant shield
- H 1/4" steel pivot/switch bracket with ball bearings vertical or horizontal mounting 120° rotation

SHIELDS FOR LATHES

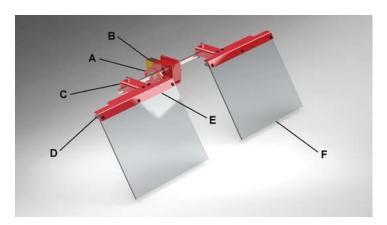




Available in a variety of sizes, shapes and customizable options, Protector Shields for lathes prevents the operator from direct contact with rotating chuck and helps in containing the lubricant/collant and working swarfs.

- A 1/4" steel mounting/pivot bracket with ball bearings vertical or horizontal mounting 120° rotation
- B Safety-rated microswitch (optional) mounted in tamper-resistant steel enclosures 1 NO, 1 NC contacts
- C Adjustable shield-mounting clamp in 7GA steel allows for radial and axial position adjustment
- D Available built-in LED lighting lights your work, indicates available Interlock status
- E Heavy 14GA steel formed and welded shield frame with durable powder coat finish
- F 3/16" thick polycarbonate shock-proof & oil-resistant shield

SHIELDS FOR GRINDERS



Available in a variety of sizes, shapes and customizable options, Protector Shields for grinders prevents the operator from the projection of sparks and emery.

- A 1/4" steel mounting/pivot bracket with ball bearings vertical or horizontal mounting 120° rotation
- B Safety-rated microswitch (optional) mounted in tamper-resistant steel enclosures 1 NO, 1 NC contacts
- C Adjustable shield-mounting clamps in 7GA steel allow for radial and axial position adjustment
- D Available built-in LED lighting light your work, indicate available Interlock status
- E Heavy 10GA steel formed top frames with durable powder coat finish
- F 3/16" thick polycarbonate shock-proof & oil-resistant shields



PROTECTOR™

SERIES SHIELDS

TECHNICAL SPECIFICATIONS LIGHTED JBOX – RELAY

Ratings	
Assembly NEMA	Type 1, 2, 3R
Assembly Ambient Storage/Transport Range - Min	Minimum: -25 C
Assembly Ambient Storage/Transport Range - Max	Maximum: -55 C
Assembly Ambient Working Range - Min	Minimum: -25 C
Assembly Ambient Working Range - Max	Maximize: 70 C
Enclosure Mounting Type	Molded Mounting Feet
LED Voltage	24VDC
LED Lumens - Red	19 Lm./ft.
LED Lumens - White	262 Lm./ft.
LED Wattage - Red	3.29/ft.
LED Wattage - White	4.67/ft.
LED Chips Count	36/ft.
LED Environment	Outdoor / Wet Location / IP65
Power Supply Output Power	60W
Power Supply Output Voltage	24VDC
Power Supply Output Current	2.5A
Power Supply Input Voltage	85 - 305V
	Universal Input 110/230vac
Safety Output Voltage / Amperage	30-250 vac/VDC @ 6A

REGULATIONS & CERTIFICATIONS	
CCC084 - TERMINAL	CSA, UL94 - V0, IEC 60947-7-1
CCC086 - GROUND TERMINAL	CSA, UL94 - V0, IEC 60947-7-2
CCY055 - DIN RAIL	acc. to EN 60715, IEC / EN
CCY117 - END STOP	UL 94 - V2
CCY118 - END PLATE	UL 94 - V0
FYS028 - CORD GRIP	UL/CSA
KCM047 - ENCLOSURE	UL 50/50E, CSA 94.1/94.2, CSA C22.2 No.85, CSA C22.2 No.40, UL 94V-0, UL 746C
RYL152 - POWER SUPPLY	EN 60335, IT AV EN/UL/IEC 62368-1
RFC157FP - SAFETY RELAY	EN50205 EN61810-1; TUV SUD; UL/c-UL File No. E55996; UL508 CSA C22.2 No.14
LEDRWXXXX - LED STRIP	UL Listed 2108

PROTECTOR™ SERIES SHIELDS

TECHNICAL SPECIFICATIONS LIGHTED JBOX – TOGGLED

Ratings	
Assembly NEMA	Type 1, 2, 3R
Assembly Ambient Storage/Transport Range - Min	Minimum: -25 C
Assembly Ambient Storage/Transport Range - Max	Maximum: -55 C
Assembly Ambient Working Range - Min	Minimum: -25 C
Assembly Ambient Working Range - Max	Maximize: 70 C
Enclosure Mounting Type	Molded Mounting Feet
LED Voltage	24VDC
LED Lumens - Red	19 Lm./ft.
LED Lumens - White	262 Lm./ft.
LED Wattage - Red	3.29/ft.
LED Wattage - White	4.67/ft.
LED Chips Count	36/ft.
LED Environment	Outdoor / Wet Location / IP65
Power Supply Output Power	60W
Power Supply Output Voltage	24VDC
Power Supply Output Current	2.5A
Power Supply Input Voltage	85 - 305V
	Universal Input 110/230vac

REGULATIONS & CERTIFICATIONS	
CCC084 - TERMINAL	CSA, UL94 - V0, IEC 60947-7-1
CCC086 - GROUND TERMINAL	CSA, UL94 - V0, IEC 60947-7-2
CCY055 - DIN RAIL	acc. to EN 60715, IEC / EN
CCY117 - END STOP	UL 94 - V2
CCY118 - END PLATE	UL 94 - V0
FYS028 - CORD GRIP	UL/CSA
KCM047 - ENCLOSURE	UL 50/50E, CSA 94.1/94.2, CSA C22.2 No.85, CSA C22.2 No.40, UL 94V-0, UL 746C
RYL152 - POWER SUPPLY	EN 60335, IT AV EN/UL/IEC 62368-1
TSSPST - TOGGLE SWITCH	IEC/EN 60947-5-1IEC/EN 60947-5-1; UL 508; CAN/CSA-C22.2 No. 14-18 and No. 94.2-15; EC marking
LEDRWXXXX - LED STRIP	UL Listed 2108



PROTECTOR™

SERIES SHIELDS

TECHNICAL SPECIFICATIONS

LIGHTED JBOX – MONITORED

Ratings	
Assembly NEMA	Type 1, 2, 3R
Assembly Ambient Storage/Transport Range - Min	Minimum: -25 C
Assembly Ambient Storage/Transport Range - Max	Maximum: 55 C
Assembly Ambient Working Range - Min	Minimum: -25 C
Assembly Ambient Working Range - Max	Maximize: 70 C
Enclosure Mounting Type	Molded Mounting Feet
LED Voltage	24VDC
LED Lumens - Red	19 Lm./ft.
LED Lumens - White	262 Lm./ft.
LED Wattage - Red	3.29/ft.
LED Wattage - White	4.67/ft.
LED Chips Count	36/ft.
LED Environment	Outdoor / Wet Location / IP65
Power Supply Output Power	60W
Power Supply Output Voltage	24VDC
Power Supply Output Current	2.5A
Power Supply Input Voltage	85 - 305V
	Universal Input 110/230vac
Safety Output Voltage / Amperage	17-250 vac/VDC @ 8A

REGULATIONS & CERTIFICATIONS	
CCC084 - TERMINAL	CSA, UL94 - V0, IEC 60947-7-1
CCC086 - GROUND TERMINAL	CSA, UL94 - V0, IEC 60947-7-2
CCY055 - DIN RAIL	acc. to EN 60715, IEC / EN
CCY117 - END STOP	UL 94 - V2
CCY118 - END PLATE	UL 94 - V0
FYS028 - CORD GRIP	UL/CSA
KCM047 - ENCLOSURE	UL 50/50E, CSA 94.1/94.2,CSA C22.2 No.85, CSA C22.2 No.40, UL 94V-0, UL 746C
RYL152 - POWER SUPPLY	EN 60335, IT AV EN/UL/IEC 62368-1
RFT159 - MONITORING RELAY	EN/IEC 60947-5-1, EN/IEC 60204-1, EN/ISO 13850, EN 1088/ISO 14119, UL, BG, CSA
LEDRWXXXX - LED STRIP	UL Listed 2108

TERMS AND CONDITIONS OF SALE PRICES

A. Prices specified include no federal, state, local, use, occupational, foreign, or other tax. Taxes, if applicable, will be added to the invoice. Unless otherwise stated, all prices are in U.S. dollars.

B. The prices include our regular packaging only. Any special packaging requested by the customer, including special protection for export shipment, will be at the customer's expense, and the cost of such special packaging shall be in addition to the prices quoted.

PAYMENT TERMS: Net in 30 days for equipment and net in 10 days for installation, service, and machine safeguarding assessments (with approved credit). Machine safeguarding seminar fees are due at the time of service. A 1½% monthly service charge (18% a year) will be added to past-due accounts.

CREDIT POLICY: Customers with established credit may purchase for immediate processing of orders. Customers not previously established with us or suitably rated by D&B must apply for open-account status. Orders received without suitable credit information must be prepaid in full before shipment. MasterCard, Visa, and American Express credit cards are accepted.

MINIMUM ORDER: Our minimum order is \$25.00. Orders received for less than \$25.00 will be subject to a service charge to bring the total to \$25.00.

CANCELLATION FEE: Orders that are canceled prior to shipment may be subject to a cancellation fee if the products are nonstock, custom, special, or built to order.

SHIPPING AND HANDLING: Parcels are normally shipped prepaid via our carrier of choice with the charges added to the invoice, but they can also be sent collect or via consignee billing against the customer's account. Truck shipments are normally shipped collect, but they can also be shipped prepaid with the charges added to the invoice via our carrier of choice. A handling charge will be added to all invoices except for customer-pickup orders.

INSURANCE: All shipments are insured for the standard amount provided by the carrier. Additional insurance may be purchased at the customer's expense.

RISK OF LOSS: Unless otherwise agreed upon, all equipment will be shipped FOB shipping point. Title and risk of loss will pass to the customer upon delivery to the carrier at the point of shipment. Transportation will be at the customer's risk and expense, and any claim for loss or damage in transit must be made directly against the carrier.

RETURNED MERCHANDISE: Returned merchandise must be authorized by Rockford Systems in advance, at which time an RMA (return materials authorization) number will be issued. No returned merchandise will be accepted unless accompanied by an RMA number and this RMA number plainly identified on the outside of the shipping container. Material returned without this RMA number will be refused by our receiving department. All returned shipments must be prepaid. The minimum restocking charge will be 25% for any material not found to be defective. Such merchandise must be in original condition and unused in order to qualify for credit. Custom, special, or built-to-order items may not qualify for any credit; however, they may be returned for modification, if needed, which may be at an additional cost. No returns for credit will be considered more than 30 days from the date of shipment.

LIMITED WARRANTY: Rockford Systems, LLC, warrants that this product will be free from defects in material and workmanship for a period of 12 months from the date of shipment thereof.



PROTECTOR™ SERIES SHIELDS

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NOTES





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