

4th GENERATION

Stand Alone Mounting or
NFPA Style Mounting Options

RLN SERIES ROD LOCKS

NEW COMPACT DESIGN FOR LONGER LIFE

1 BODY

Solid aluminum precision machined for accurate alignment. Black anodized for appearance and corrosion resistance.

2 LOCKING MECHANISM

Oversized, hardened and ground locking with antifriction amplification.

3 COIL SPRINGS

Heavy duty springs designed for long life.

4 LIP-TYPE PISTON SEALS

Pressure activated lip seal is wear compensated for effective sealing at rated pressures. The seal is internally lubricated, reducing friction and extending life.

5 HOUSING DESIGN

Provides for direct mounting or allows attaching of a choice of NFPA detachable mounts.

6 ROD WIPER

The wiper is designed to wipe off abrasive dust and contamination on the retract stroke to ensure long life for the seals, bearing and piston rod. The standard wiper is carboxylated nitrile and is internally lubricated to reduce friction and extend life.

7 ROD BEARING

The phenolic bearing provides maximum piston rod support, reduces friction and resists wear abrasion (galling and seizing). Factory preset for minimum backlash.

8 TIE RODS - (if capable)

Alloy steel, pre-stressed for maximum fatigue strength. Roll threaded for added strength on 1 1/2" - 6" bores.

This new 4th generation NFPA - Style AMLOK® Pneumatic Series RLN Rod Clamp has been developed as a solution to control problems inherent to pneumatics—over travel, drifting, bouncing and reverse traveling. The AMLOK® Power-Off Rod Clamp can be mounted to the NFPA cylinder of your choice, or as a stand alone unit to be used with no cylinder at all.

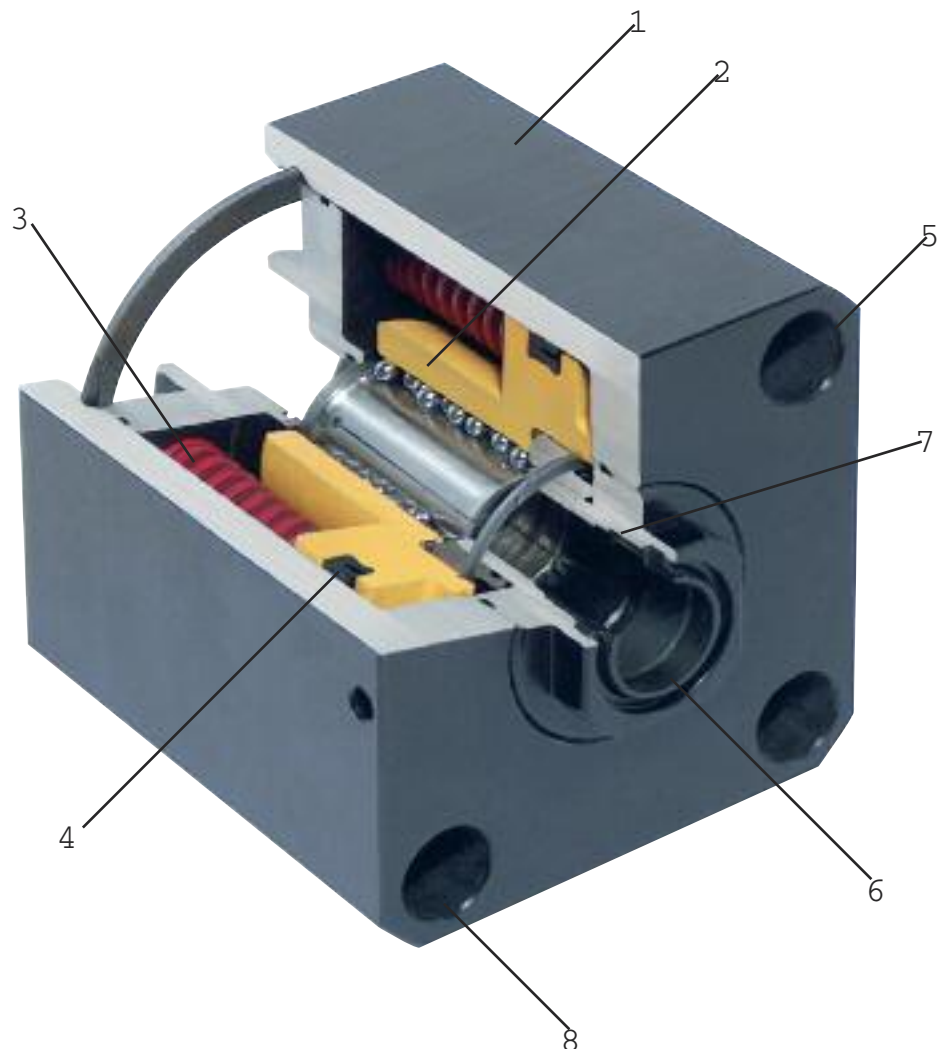
The AMLOK® has been designed with oversized components to withstand the most severe applications. For example, the contact area of the clamping collet is considerably greater than on similar units. The increased contact area reduces the pressure-per-square-inch on the rod, thereby extending service life.

The patented intensifier is a mechanical design, assuring a long service life. Since the clamping is accomplished through spring force, drifting caused by a lack of air pressure is not possible.

For hydraulic applications, please refer to our Type RCH AMLOK® catalog.

WARRANTY:

AMLOK® RLN units are warranted for a period of one (1) year from date of shipment, to be free from defects of materials and workmanship, provided said items are properly applied.



FEATURES

- No Rod Displacement on Engagement
- Large Clamping Surface
- Fast Response Time
- Extremely Low Backlash
- Spring Engaged Units
- Profile Matches NFPA Cylinder
- 4 bar (60 psi) release pressure

BENEFITS

- Precision Holding (0.002-0.003)
- Consistent Clamping Force
- High Cycle Rates and accuracy
- Holds Load During Power/Pressure Loss
- Compact Unit, Easy Integration
- Broad Applications

ROD LOCK OPTIONS:

- Stainless Housing
- Electroless Nickel Plated Housing
- Viton Seals
- Wiper Scraper
- Sealed Unit

The patented AMLOK® Type RLN consists of a anodized aluminum housing with a special piston and wedge locking mechanism actuated by a spring that mechanically locks the rod. This mechanically-operated intensifying mechanism increases the force created by the spring several times to guarantee quick and secure locking. The clamp is unlocked when air actuates the piston, which compresses the spring and releases the locking device.

Since the locking of the AMLOK® is accomplished mechanically by a spring and unlocked by air pressure, loss of air pressure will cause the unit to lock.

The holding force depends upon the rod and piston diameter. The available holding forces can be multiplied by adding additional AMLOK® clamps to the same rod.

AMLOKS® are designed for locking reciprocating motions only. **To lock rotary motions, contact the factory.**

NOTE:

If these units are to be used as safety or braking devices, please consult the factory.



When attached to cylinders, longer cylinder rods must be specified to allow for the length of the AMLOK®. See "L+V" dimension in the chart.

If a hollow rod must be clamped, contact Advanced Machine for guidelines.

Recommended rod tolerances are cited on page 5. For maximum life, the rod should be hard chrome or surface-hardened with surface finish of about 32 micro inches. Avoid nicks and burrs which could damage the wiper and bearings.

The contact surfaces and bores to which the AMLOK® is clamped must be square and concentric to each other

within .002" T.I.R. to avoid binding of the rod or excess wear. The rod must fully engage the clamping device at all times.

NOTE: AMLOK® Rod Clamps can be an integral part of your housing. We can provide mating components for your special applications. When side loads are acting on the cylinder rod, make sure that the rod is guided sufficiently in bearings to avoid excessive side loads on the locking mechanism. This is especially important at higher cylinder rod speeds.

For special mountings or higher holding forces, please consult the factory.

STANDARD SPECIFICATIONS

- NFPA Mounting Styles
- Tie Rod Design - One Piece Solid Body
- Maximum Operating Pressure - 160 PSI Air (11 bar)
Required Release Pressure - 60 PSI Air (6 bar)
Operating Media - Filtered Compressed Air
- Operating Temperature
 - Standard 10°F to + 180°F (+12°C to +82°C)
 - Optional 10°F to + 250°F (+12°C to +121°C)
- Holding Force - Axial holding forces were established after 2,000,000 fatigue test cycles
- Minimum linear movement may occur after clamp is fully engaged (.002" - .003")

ROD LOCK OPERATION SPECIFICS

- Holds with consistent force in both directions
- Can be mounted in any position
- Release pressure can range from 4-8 bar (60 psi min. - 120 psi max.)
- The Buna-N seals are rated to 100°C (212°F)
- Operating temperature range from 0.5°C-66°C (33°F-150°F). Units are capable of intermittent use at temperatures up to 100°C (212°F)
Consult factory for extreme applications.



AMLOK® RLN attached to NFPA cylinder with CMF1 mounting flange and custom pressure check valve.

REQUIREMENTS FOR OPTIMAL PERFORMANCE

AMLOK® RLN Series rodlocks must be used in an application that meets the following specifications:

- Suitable for infrequent dynamic braking (emergency stops) when used with hardened shaft material and proper cylinder and motion control circuits. Repeated dynamic stops may cause rod wear, reduce holding forces and reduce life.
- Requires dry, clean, pressure regulated air
- Does not require lubrication
- Rated holding force corresponds to static load conditions. Slipping may occur if rated value is exceeded and may cause rod damage.
- Rod must be clean and dry to maintain optimum holding force.
- Cylinder pilot must mate properly with rod lock seal for food service washdown rating.
- Rod material requirements:
 - Standard NFPA cylinder rod
 - Hard chrome plate recommended
 - Rod diameter +0.00"/-0.003"
 - Surface finish hard chrome plate

APPLICATIONS

The new AMLOK® RLN Series Rod Lock design can be sealed. Suitable for food and washdown applications. Other common applications include:

- n Machine Tool Applications
- n Scissor-lift Tables
- n Test and Positioning Equipment
- n Amusement Ride Equipment
- n Printing and Paper Handling Equipment
- n Theatrical Equipment (Platforms)
- n Assembly and Test Equipment



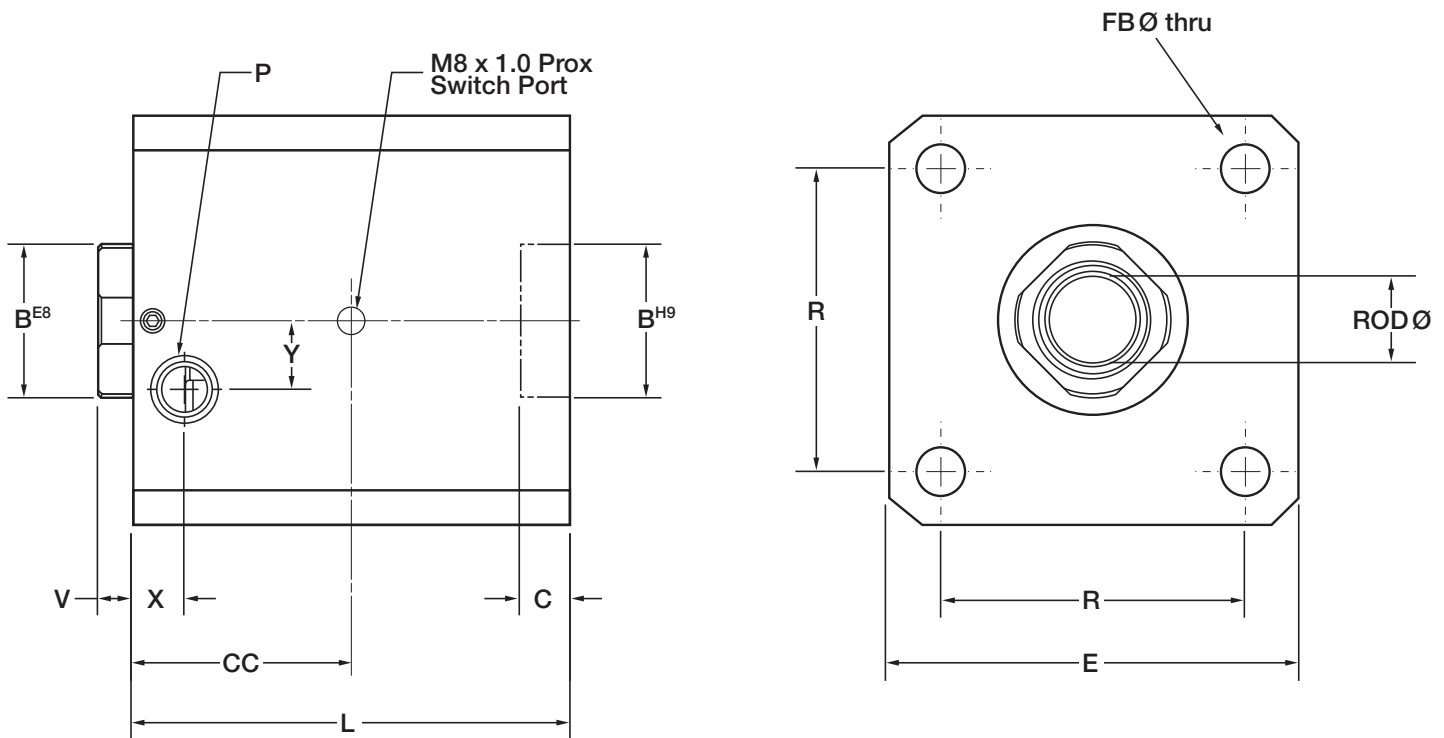
Pneumatic Amlok functional considerations and recommended release circuit for Amlok rod clamps.

It is important to consider that the Amlok rod lock is a power off locking device. During every operational cycle, the 3-way valve is actuated electrically and pressure releases the locking mechanism. When power fails, emergency stop, etc. pressure is lost (dropped) and the locking mechanism secures the rod.

When pressure is not sufficiently constant (drops below recommended releases pressure) the spring operated locking mechanism begins to engage the rod, (shaft) and develops (full) stated holding force at “0” psi.

It is therefore important to isolate the release circuit from inadvertent pressure drops when release is via check valve in the inlet to the release valve see recommended circuit above.

AMLOK® RLN NFPA BASIC TECHNICAL DATA



AMLOK ROD CLAMP TECHNICAL DATA

AMLOK Type- RLN	Rod Dia. [in]	Bore Dia. [in]	Axial Holding Force [lbf]	B [in]	C [in]	D [in]	FL [in]	E [in]	FB [in]	L [in]	P [in]	R [in]	V [in]	X [in]	Y [in]	Weight [lb]
RLN-063150	0.625	1.500	200	1.125	0.375	0.422	0.896	1.98	0.281	3.05	1/8 NPT	1.430	0.63	0.60	0.25	3.0
RLN-063200	0.625	2.000	400	1.125	0.375	0.515	1.031	2.48	0.343	3.06	1/8 NPT	1.840	0.63	0.50	0.38	4.0
RLN-063250	0.625	2.500	650	1.125	0.375	0.515	1.031	2.98	0.343	3.18	1/8 NPT	2.190	0.63	0.50	0.50	5.0
RLN-100200	1.000	2.000	300	1.500	0.563	0.515	1.031	2.48	0.343	3.75	1/8 NPT	1.840	0.63	0.31	0.38	3.5
RLN-100250	1.000	2.500	450	1.500	0.563	0.515	1.031	2.98	0.343	3.65	1/8 NPT	2.190	0.63	0.38	0.50	5.0
RLN-100325	1.000	3.250	950	1.500	0.563	0.719	1.281	3.725	0.406	4.00	1/4 NPT	2.760	0.89	0.56	0.00	8.0
RLN-100400	1.000	4.000	1550	1.500	0.563	0.719	1.281	4.48	0.406	4.00	1/4 NPT	3.320	0.89	0.56	0.00	13.5
RLN-100500	1.000	5.000	2150	1.500	0.563	0.844	1.500	5.48	0.531	4.00	1/4 NPT	4.100	0.89	0.56	0.00	17.5
RLN-138325	1.375	3.250	950	2.000	0.625	0.719	1.281	3.725	0.406	4.00	1/4 NPT	2.760	0.89	0.56	0.00	8.1
RLN-138400	1.375	4.000	1550	2.000	0.625	0.719	1.281	4.48	0.406	4.00	1/4 NPT	3.320	0.89	0.56	0.00	12.0
RLN-138500	1.375	5.000	1950	2.000	0.625	0.844	1.500	5.48	0.531	4.00	1/4 NPT	4.100	0.89	0.56	0.00	18.0
RLN-138600	1.375	6.000	2650	2.000	0.625	0.844	1.500	6.48	0.531	4.50	1/4 NPT	4.880	1.00	0.56	0.00	24.5
RLN-175600	1.750	6.000	2450	2.375	0.750	0.844	1.500	6.48	0.531	4.50	1/4 NPT	4.880	1.00	0.56	0.00	22.5

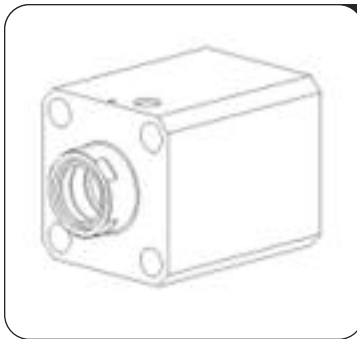
AMLOK ROD CLAMP PART NUMBERING SYSTEM

RLN XXX XXX X XXX X XX						
AMLOK Series	Rod Size: X.XX (inches)	Equivalent Cylinder Bore Size: X.XX (inches)	Type: C = Cylinder Mount S = Stand Alone* Blank = no hardware	Mounting Style (See pages 8-11)	Seal Material: Blank = Standard Nitrile V = Viton (optional)	Surface Coatings: Blank = Standard Black Anodized EN = Electroless Nickel (optional) SS = Stainless Steel (optional)

* Stand-alone unit contains wipers and rod bearings on each end.

NOTE: For direct replacement of RCN style rod lock, please consult factory.

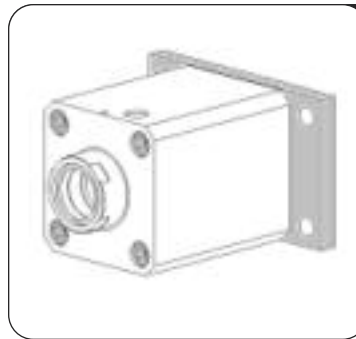
RLN NFPA MOUNTING OVERVIEW



MXO / SN : No Mount

Rod lock housing contains 4 through holes.

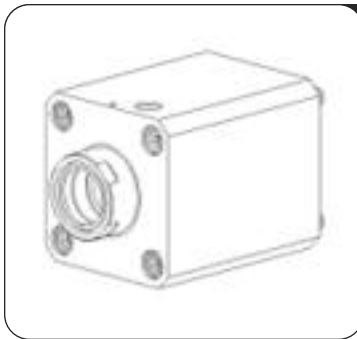
* SXXX = Stand Alone additional rod bearing and wiper supplied



CMF2 : Cylinder Mount

Assembly contains:

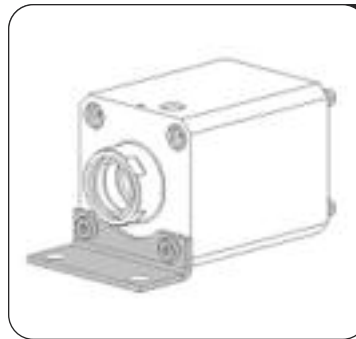
- 1 Rod Lock
- 1 Rear Flange
- 4 Sleeve Nuts
- 4 Tie Rods



CMXO : Cylinder Mount

Kit contains:

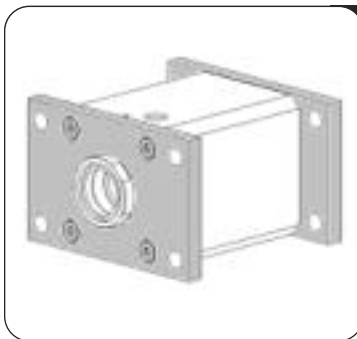
- 1 Rod Lock
- 4 Sleeve Nuts
- 4 Tie Rods



CMS1 : Cylinder Mount

Kit contains:

- 1 Rod Lock
- 1 Angle Bracket
- 4 Sleeve Nuts
- 4 Tie Rods
- 4 SHCS

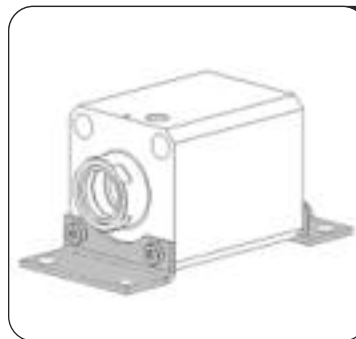


**SA : Stand Alone
CA : Cylinder Mount**

Assembly contains:

- 1 Rod Lock
- 1 Front Flange
- 1 Rear Flange
- 4 Sleeve Nuts
- 4 Tie Rods
- 4 SHCS

* SXXX = Stand Alone additional rod bearing and wiper supplied

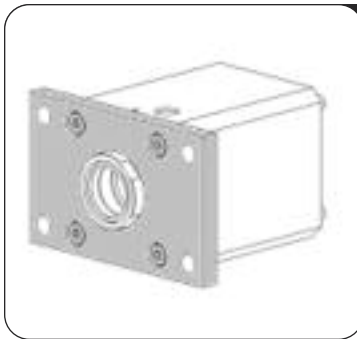


SMS1 : Stand Alone

Assembly contains:

- 1 Rod Lock
- 2 Angle Brackets
- 2 Sleeve Nuts
- 2 Tie Rods
- 2 SHCS
- 2 Hex Nuts

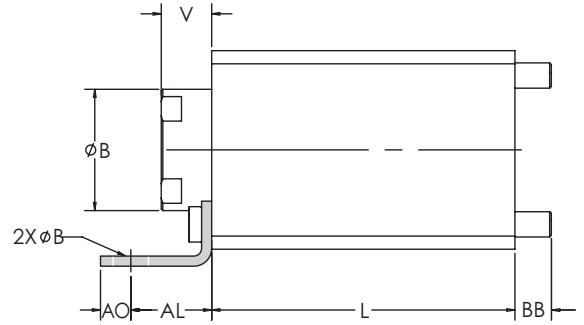
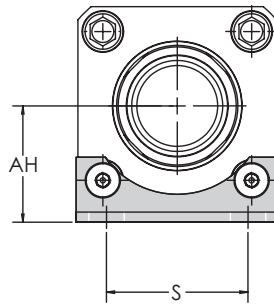
* SXXX = Stand Alone additional rod bearing and wiper supplied



SMF1 : Stand Alone / CMF1 : Cylinder Mount

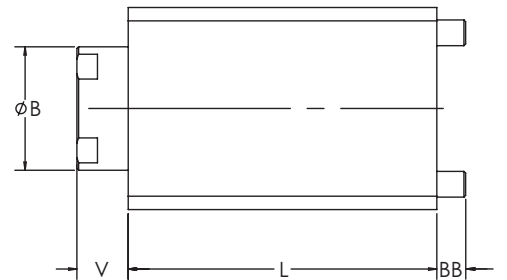
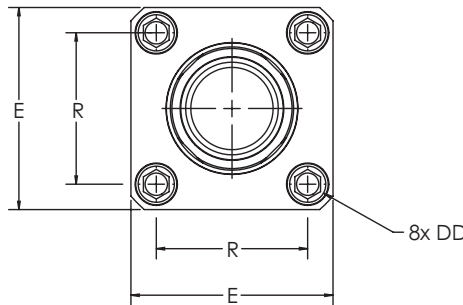
<p>SMF1 Assembly contains:</p> <ul style="list-style-type: none"> 1 Rod Lock 1 Front Flange 4 Sleeve Nuts 4 Tie Rods 4 SHCS 4 Hex Nuts <p>* SXXX = Stand Alone additional rod bearing and wiper supplied</p>	<p>CMF1 Kit contains:</p> <ul style="list-style-type: none"> 1 Rod Lock 1 Front Flange 4 Sleeve Nuts 4 Tie Rods 4 SHCS 4 Hex Nuts
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MOUNTING DIMENSIONS CMS1 - CYLINDER MOUNT



RLN - XXX XXX CMS1	AMLOK Type - RLN	Rod Dia. [in]	Bore Dia. [in]	L [in]	AO [in]	AL [in]	AH [in]	S [in]	V [in]	Weight [lb]	BB [in]
CYLINDER MOUNT Front Flange Mount - CMS1 (NFPA Style MS1) Ships as a kit	RLN-063150	0.625	1.500	3.050	0.375	1.000	1.187	1.250	0.625	1.51	.35
	RLN-063200	0.625	2.000	3.060	0.375	1.000	1.437	1.750	0.627	2.72	.35
	RLN-063250	0.625	2.500	3.180	0.375	1.000	1.625	2.250	0.623	3.54	.35
	RLN-100200	1.000	2.000	3.750	0.375	1.000	1.437	1.750	0.623	2.74	.35
	RLN-100250	1.000	2.500	3.650	0.375	1.000	1.625	2.250	0.632	3.75	.35
	RLN-100325	1.000	3.250	4.000	0.500	1.250	1.937	2.750	0.865	6.42	.60
	RLN-100400	1.000	4.000	4.000	0.500	1.250	2.238	3.500	0.875	9.66	.60
	RLN-100500	1.000	5.000	4.000	0.625	1.375	2.738	4.250	0.875	14.89	.60
	RLN-138325	1.375	3.250	4.000	0.500	1.250	1.937	2.750	0.875	6.62	.60
	RLN-138400	1.375	4.000	4.000	0.500	1.279	2.238	3.500	0.871	9.75	.60
	RLN-138500	1.375	5.000	4.000	0.625	1.375	2.738	4.250	0.866	14.54	.60
	RLN-138600	1.375	6.000	4.500	0.625	1.375	3.235	5.250	1.000	21.24	.70
RLN-175600	1.750	6.000	4.500	0.625	1.375	3.235	5.250	1.000	21.84	.70	

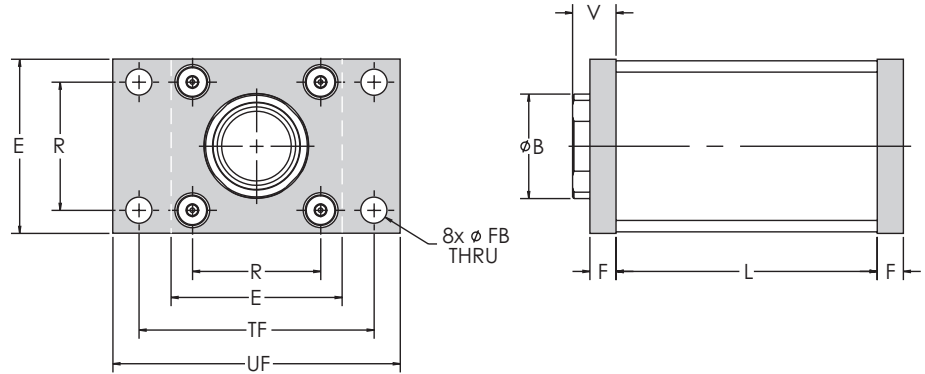
MOUNTING DIMENSIONS CMXO - CYLINDER MOUNT



RLN - XXX XXX CMXO	AMLOK Type - RLN	Rod Dia. [in]	Bore Dia. [in]	L [in]	E [in]	R [in]	DD Thread	V [in]	Weight [lb]	BB [in]
CYLINDER MOUNT (NFPA Style MXO for cylinder mounting) Ships as a kit	RLN-063150	0.625	1.500	3.050	0.375	1.430	1/4-28	0.625	1.24	.35
	RLN-063200	0.625	2.000	3.060	0.375	1.840	5/16-24	0.627	2.06	.35
	RLN-063250	0.625	2.500	3.180	0.375	2.190	5/16-24	0.623	2.98	.35
	RLN-100200	1.000	2.000	3.750	0.375	1.840	5/16-24	0.623	2.23	.35
	RLN-100250	1.000	2.500	3.605	0.375	2.190	5/16-24	0.632	3.20	.35
	RLN-100325	1.000	3.250	4.000	0.500	2.760	3/8-24	0.865	5.31	.60
	RLN-100400	1.000	4.000	4.000	0.500	3.320	3/8-24	0.875	8.47	.60
	RLN-100500	1.000	5.000	4.000	0.625	4.100	1/2-20	0.875	12.43	.60
	RLN-138325	1.375	3.250	4.000	0.500	2.760	3/8-24	0.875	5.62	.60
	RLN-138400	1.375	4.000	4.000	0.500	3.320	3/8-24	0.871	9.03	.60
	RLN-138500	1.375	5.000	4.000	0.625	4.100	1/2-20	0.866	12.78	.60
	RLN-138600	1.375	6.000	4.500	0.625	4.880	1/2-20	1.000	18.84	.70
RLN-175600	1.750	6.000	4.500	0.625	4.880	1/2-20	1.000	19.55	.70	

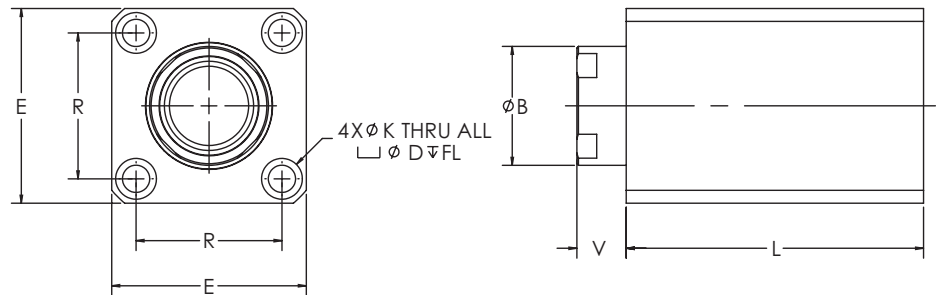
MOUNTING DIMENSIONS

MOUNTING DIMENSIONS SA - STAND ALONE



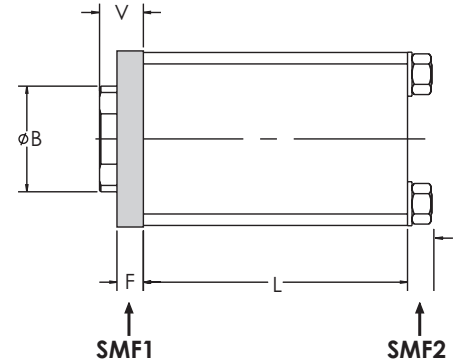
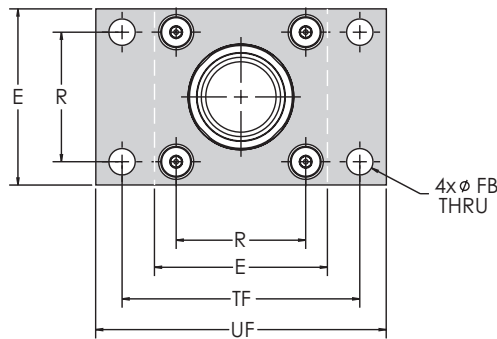
RLN - XXX XXX SA X XX	AMLOK Type - RLN	Rod Dia. [in]	Bore Dia. [in]	L [in]	E [in]	UF [in]	F [in]	FB Dia. [in]	TF [in]	R [in]	V [in]	Weight [lb]
STAND ALONE	RLN-063150	0.625	1.500	3.050	1.980	3.375	0.375	0.312	2.750	1.430	0.63	2.62
Front Flange Mount (NFPA Style MF1 and MF2) Ships assembled Includes rod bearings and wipers on both ends.d * SXXX = Stand Alone additional rod bearing and wiper supplied	RLN-063200	0.625	2.000	3.060	2.480	4.125	0.375	0.375	3.375	1.840	0.63	4.31
	RLN-063250	0.625	2.500	3.180	2.980	4.625	0.375	0.375	3.875	2.190	0.63	6.02
	RLN-100200	1.000	2.000	3.750	2.480	4.125	0.375	0.375	3.375	1.840	0.63	4.37
	RLN-100250	1.000	2.500	3.650	2.980	4.625	0.375	0.375	3.875	2.190	0.63	6.10
	RLN-100325	1.000	3.250	4.000	3.725	5.500	0.625	0.437	4.687	2.760	0.89	12.60
	RLN-100400	1.000	4.000	4.000	4.480	6.250	0.625	0.437	5.437	3.320	0.89	18.46
	RLN-100500	1.000	5.000	4.000	5.480	7.625	0.625	0.562	6.625	4.100	0.89	27.89
	RLN-138325	1.375	3.250	4.000	5.500	3.725	0.625	0.437	4.687	2.760	0.89	12.42
	RLN-138400	1.375	4.000	4.000	4.480	6.250	0.625	0.437	5.437	3.320	0.89	18.54
	RLN-138500	1.375	5.000	4.000	5.480	7.625	0.625	0.562	6.625	4.100	0.89	27.48
	RLN-138600	1.375	6.000	4.500	6.480	8.625	0.750	0.562	7.628	4.880	1.00	42.18
	RLN-175600	1.750	6.000	4.500	6.480	8.625	0.750	0.562	7.625	4.880	1.00	42.52

MOUNTING DIMENSIONS MXO / SN - STAND ALONE



RLN - XXX XXX MXO X XX RLN - XXX XXX SN X XX	AMLOK Type - RLN	Rod Dia. [in]	Bore Dia. [in]	L [in]	E [in]	R [in]	V [in]	TF [in]	UF [in]	Weight [lb]
MXO OR STAND ALONE	RLN-063150	0.625	1.500	3.050	1.980	1.430	0.63	2.750	3.375	1.24
No mounting hardware included * SXXX = Stand Alone additional rod bearing and wiper supplied	RLN-063200	0.625	2.000	3.060	2.480	1.840	0.63	3.375	4.125	2.06
	RLN-063250	0.625	2.500	3.180	2.980	2.190	0.63	3.875	4.625	2.98
	RLN-100200	1.000	2.000	3.750	2.480	1.840	0.63	3.375	4.125	2.23
	RLN-100250	1.000	2.500	3.650	2.980	2.190	0.63	3.875	4.625	3.20
	RLN-100325	1.000	3.250	4.000	3.725	2.760	0.89	4.687	5.500	5.31
	RLN-100400	1.000	4.000	4.000	4.480	3.320	0.89	5.437	6.250	8.47
	RLN-100500	1.000	5.000	4.000	5.480	4.100	0.89	6.625	7.625	12.43
	RLN-138325	1.375	3.250	4.000	3.725	2.760	0.89	4.687	5.500	5.62
	RLN-138400	1.375	4.000	4.000	4.480	3.320	0.89	5.437	6.250	9.03
	RLN-138500	1.375	5.000	4.000	5.480	4.100	0.89	6.625	7.625	12.78
	RLN-138600	1.375	6.000	4.500	6.480	4.880	1.00	7.628	8.625	18.84
	RLN-175600	1.750	6.000	4.500	6.480	4.880	1.00	7.625	8.625	19.55

MOUNTING DIMENSIONS SMF1 AND SMF2 - STAND ALONE



RLN - XXX XXX SMF1 X XX
RLN - XXX XXX SMF2 X XX

STAND ALONE

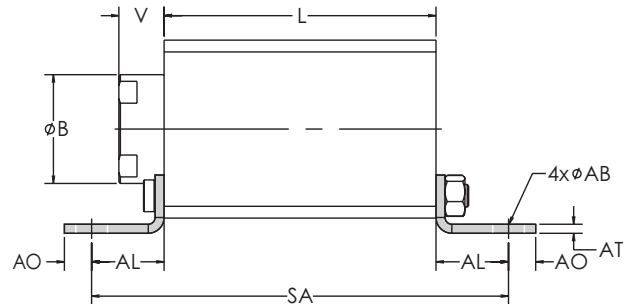
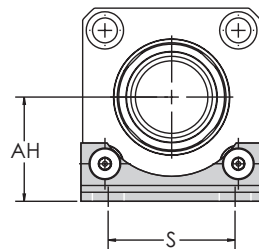
Front Flange Mount - SMF1
(NFA Style MF1)
Ships assembled

Rear Flange Mount - SMF2
(NFA Style MF2)
Ships assembled

* SXXX = Stand Alone additional
rod bearing and wiper supplied

AMLOK Type - RLN	Rod Dia. [in]	Bore Dia. [in]	L [in]	E [in]	UF [in]	F [in]	FB Dia. [in]	TF [in]	R [in]	V [in]	Weight [lb]
RLN-063150	0.625	1.500	3.050	1.980	3.375	0.375	0.312	2.750	1.430	0.63	2.11
RLN-063200	0.625	2.000	3.060	2.480	4.125	0.375	0.375	3.375	1.840	0.63	3.40
RLN-063250	0.625	2.500	3.180	2.980	4.625	0.375	0.375	3.875	2.190	0.63	4.72
RLN-100200	1.000	2.000	3.750	2.480	4.125	0.375	0.375	3.375	1.840	0.63	3.54
RLN-100250	1.000	2.500	3.650	2.980	4.625	0.375	0.375	3.875	2.190	0.63	4.88
RLN-100325	1.000	3.250	4.000	3.725	5.500	0.625	0.437	4.687	2.760	0.89	9.42
RLN-100400	1.000	4.000	4.000	4.480	6.250	0.625	0.437	5.437	3.320	0.89	13.97
RLN-100500	1.000	5.000	4.000	5.480	7.625	0.625	0.562	6.625	4.100	0.89	21.05
RLN-138325	1.375	3.250	4.000	5.500	3.725	0.625	0.437	4.687	2.760	0.89	9.51
RLN-138400	1.375	4.000	4.000	4.480	6.250	0.625	0.437	5.437	3.320	0.89	14.29
RLN-138500	1.375	5.000	4.000	5.480	7.625	0.625	0.562	6.625	4.100	0.89	20.89
RLN-138600	1.375	6.000	4.500	6.480	8.625	0.750	0.562	7.628	4.880	1.00	31.15
RLN-175600	1.750	6.000	4.500	6.480	8.625	0.750	0.562	7.625	4.880	1.00	31.86

MOUNTING DIMENSIONS SMS1 - STAND ALONE



RLN - XXX XXX SMS1 X XX

STAND ALONE

Front Flange Mount - SMS1
(NFA Style MS1)
Ships assembled

* SXXX = Stand Alone additional
rod bearing and wiper supplied

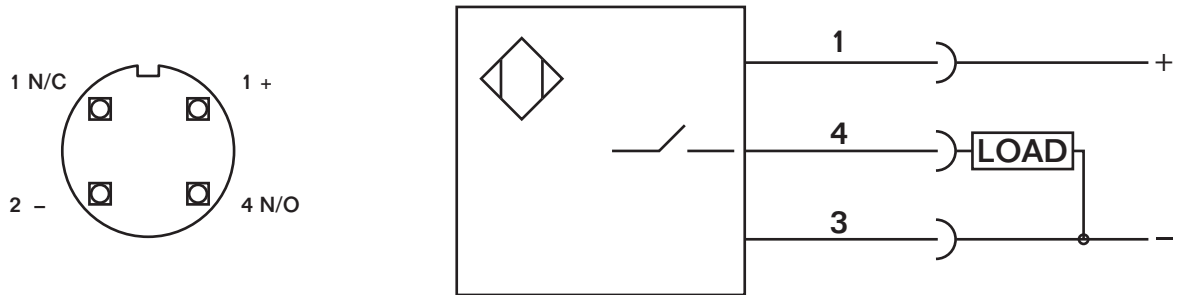
AMLOK Type - RLN	Rod Dia. [in]	Bore Dia. [in]	L [in]	AO [in]	AL [in]	AH [in]	AT [in]	S [in]	SA [in]	AB [in]	V [in]	Weight [lb]
RLN-063150	0.625	1.500	3.050	0.375	1.000	1.187	0.125	1.250	5.050	0.437	0.625	1.60
RLN-063200	0.625	2.000	3.060	0.375	1.000	1.437	0.125	1.750	5.060	0.437	0.627	2.59
RLN-063250	0.625	2.500	3.180	0.375	1.000	1.625	0.125	2.250	5.175	0.437	0.623	3.59
RLN-100200	1.000	2.000	3.750	0.375	1.000	1.437	0.125	1.750	5.750	0.437	0.623	2.76
RLN-100250	1.000	2.500	3.650	0.375	1.000	1.625	0.125	2.250	5.650	0.437	0.632	3.82
RLN-100325	1.000	3.250	4.000	0.500	1.250	1.937	0.125	2.750	6.500	0.562	0.865	6.42
RLN-100400	1.000	4.000	4.000	0.500	1.250	2.238	0.125	3.500	6.500	0.562	0.875	9.73
RLN-100500	1.000	5.000	4.000	0.625	1.375	2.738	0.188	4.250	6.750	0.687	0.875	15.23
RLN-138325	1.375	3.250	4.000	0.500	1.250	1.937	0.125	2.750	6.500	0.562	0.875	6.73
RLN-138400	1.375	4.000	4.000	0.500	1.279	2.238	0.125	3.500	6.500	0.562	0.871	10.31
RLN-138500	1.375	5.000	4.000	0.625	1.375	2.738	0.188	4.250	6.750	0.687	0.866	15.30
RLN-138600	1.375	6.000	4.500	0.625	1.375	3.235	0.188	5.250	7.250	0.812	1.000	21.77
RLN-175600	1.750	6.000	4.500	0.625	1.375	3.235	0.188	5.250	7.250	0.812	1.000	22.47

PROXIMITY SWITCH

The new RLN series Amlok provides for optional proximity switch.

WIRING CONNECTIONS

PNP normally open



PROXIMITY SWITCH SETTING INSTRUCTIONS

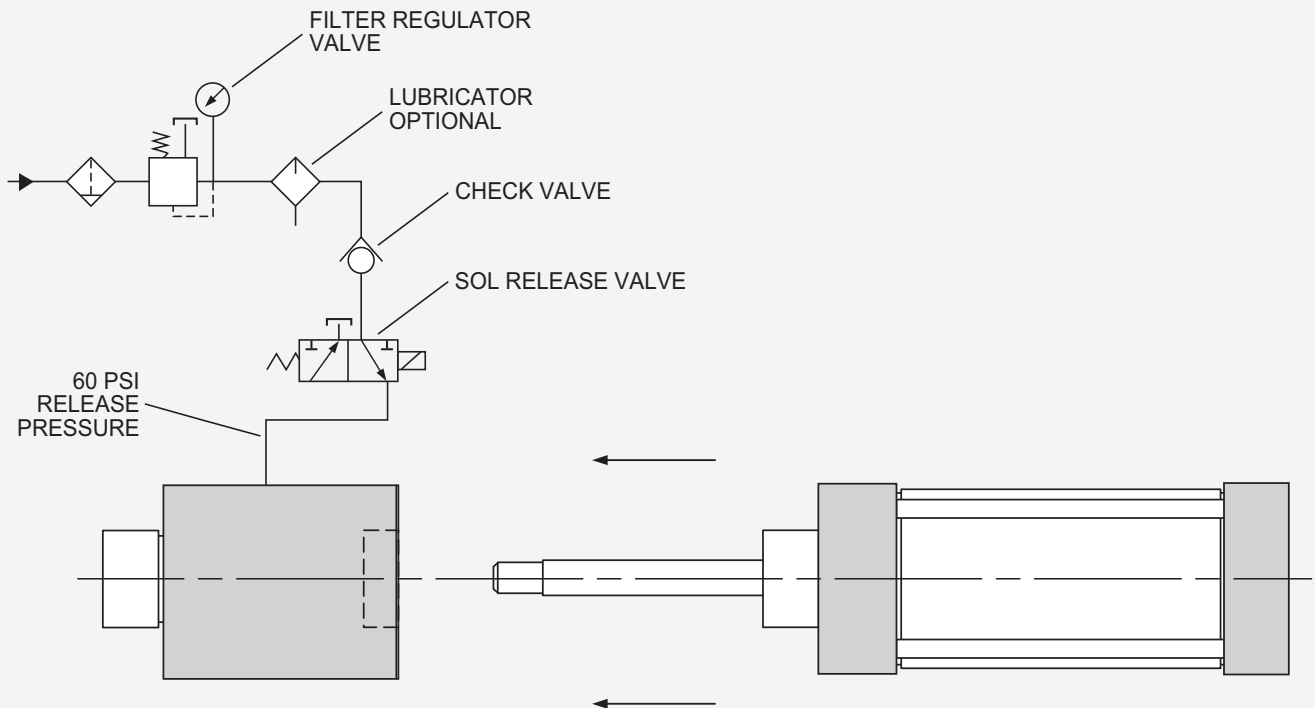
1. Set the AMLOK® to the unclamped 'pressure applied' position.
2. Screw the proximity switch (with jam nuts) into the designated M 8 x 1 proximity switch hole, until it contacts the position flange.
3. Unscrew (back off) the proximity switch approximately 3/4 turn. While holding the proximity switch in the set position, tighten the locking nut using 15 ft/lbs of torque. Final adjustment may be necessary to achieve desired results.
4. With the electrical power in the off position, connect the electrical wiring per the wiring diagram supplied with the switch. After the electrical power has been turned on, the proximity switch should indicate that the AMLOK® in the unclamped position.

Note: Insure that the electrical power has been turned off before making adjustments. The locking nut should be tightened to a maximum of 15 ft/lbs. of torque to prevent damage to the internal components of the switch.

- If sealing unit for food or chemical service also include optional sealing ring.

RLN ASSEMBLY INSTRUCTIONS

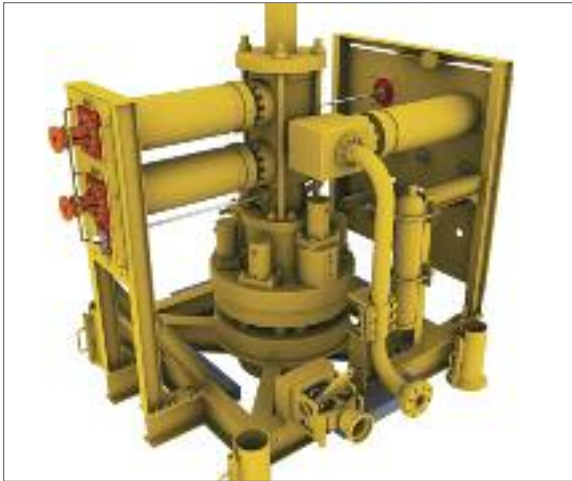
1. Read Assembly Instructions and Caution Label on unit.
2. Connect a flexible hose to the pressure port of the AMLOK®, apply air pressure to release the clamping mechanism and slide the AMLOK® over the rod to be clamped.
3. Align the mounting holes and port hole to the proper location.
4. Release pressure.
5. Bolt AMLOK® to cylinder or housing.
6. Pressurize the AMLOK® to the specified release pressure.
7. Release and pressurize several times. With the specified pressure the rod should move freely through the AMLOK®.
8. If the rod does not move freely, check the squareness of the housing and cylinder contact surface and correct if necessary.



CAUTION

Minimum of 60 psi must be maintained on release port when there is no shaft in unit.

APPLICATION EXAMPLES



Sub-sea oilfield tree



Position and hold application



Cylinder test stand



Material handling and measuring system



Lift Gate lock and hold



Theater stage lift

RLI ROD LOCKS

ISO 6431 STYLE HYDRAULIC ROD CLAMPS

The AMLOK® RLI is the ISO 6431 variation of AME's fourth-generation power-off rod lock - the culmination of 14 years of manufacturing and marketing pneumatic and hydraulic rod locks.

- Profiled to match ISO 6431 Cylinder
- Fast Response time
- Extremely low backlash
- Power-off clamping
- Double acting

Visit www.ame.com/RLI for more info.



RCH ROD LOCKS

NFPA STYLE HYDRAULIC ROD CLAMPS

The AMLOK® Rod Clamp has been developed to provide power-off clamping of rods and shafts.

The type RCH Rod Clamps are actuated by a spring/collet mechanism and unclamped by hydraulic pressure. These rod clamps are designed to clamp components after the motion has stopped and to hold the position securely as long as the forces do not exceed the table values. For braking applications, contact the factory.

Visit www.ame.com/RCH for more info.



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- No ratchet needed
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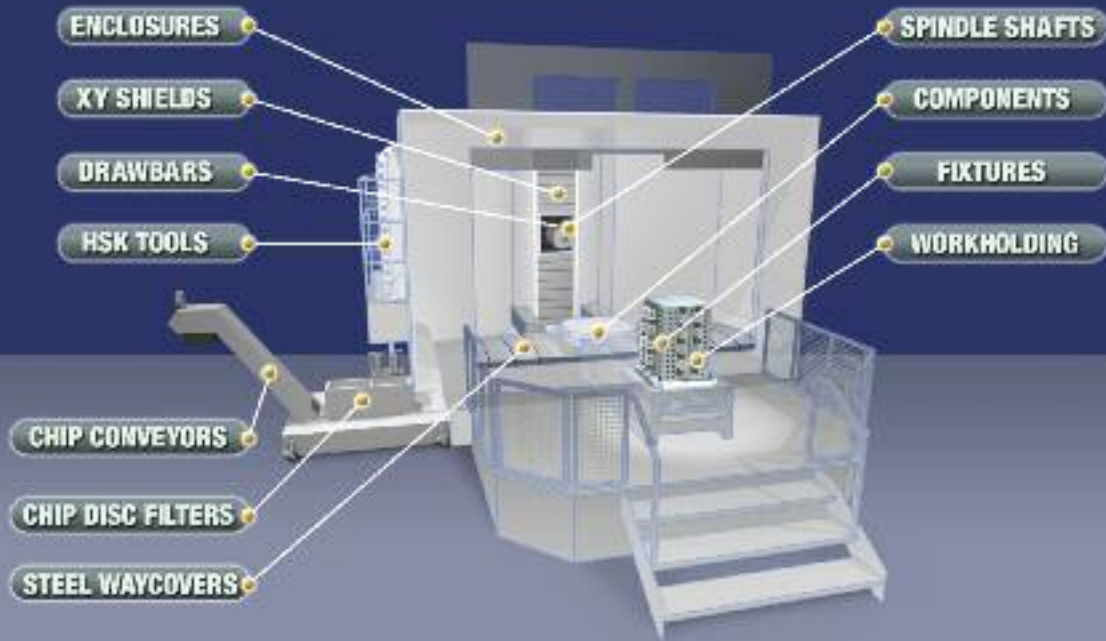
Safety Catchers are used where personal protection and accident prevention must be provided against failure of lifting members in an area where loads or tools are raised. Protection is needed if a hydraulic or pneumatic pressure system fails, for example, or if a rope, chain, belt, or toothed drive breaks.

Visit www.ame.com/SITEMA for more info.



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