



 **DME[®] EZ-LATCH**
EZL & REZL LATCH LOCKS
Plate Control

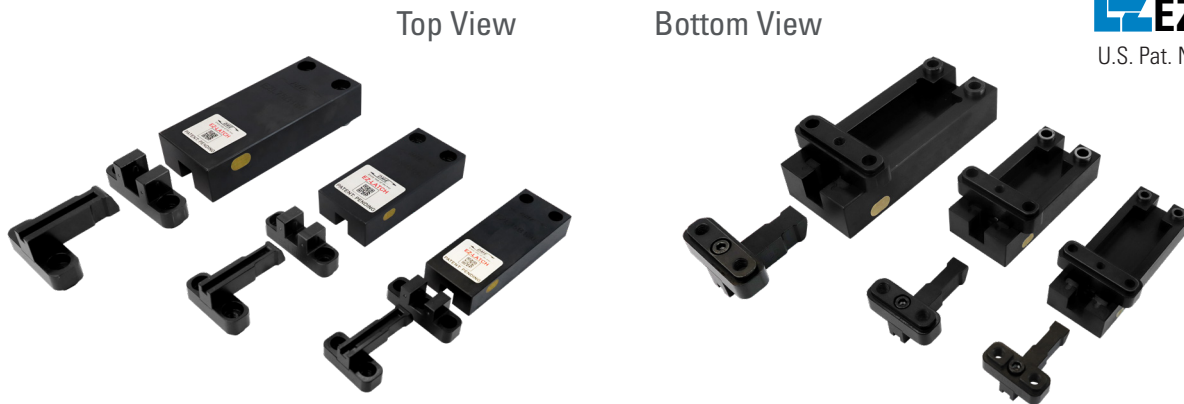
PREMIUM EXTERNAL LATCH LOCKS
PRECISION WITH EASE

DME EZ-LATCH LOCKS

PRECISE POSITIONING FOR A VARIETY OF DIFFERENT MOLDING APPLICATIONS

The easy and reliable solution to sequence your mold plates.

DME's EZ-LATCH is the first truly universal external latch lock system. Most locks on the market are designed only for specific applications and require additional machining before they are ready for use making it difficult to select the right latch lock to correctly sequence the plates. The DME EZ-LATCH Lock, with its modular capabilities, addresses this limitation and, through its patented mechanical design provides safer and longer lasting performance.



Three (3) different sizes to choose from depending on mold size.

Providing A Controlled Sequencing Solution For Mass Production Molds

The DME EZ-LATCH Lock is the easy solution for all plate control application including 3 plate molds, 2-stage ejection, early plate return, both stationary "cavity" and moving "core" side ejection (in place of high cost hydraulic cylinders).



NO SPRINGS

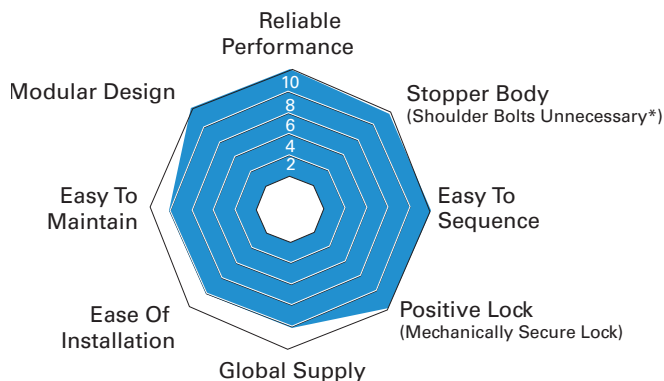
Unlike any other lock on the market, the DME EZ-LATCH Lock incorporates a positive mechanical lock avoiding the use of springs and/or friction devices a common source of product failure and even the occasional crashing of the tool. This safer solution provides a more consistent lock every cycle making it the preferred solution for mass production.

Designed For Ease of Installation

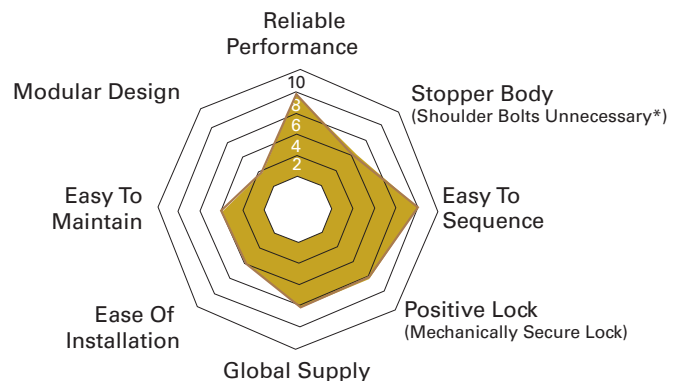
Its standard design makes it easy to install straight out of the box.



DME EZ-LATCH External Latch Locks



Competitor External Latch Locks



DME EZ-LATCH EXTERNAL LATCH LOCKS

Positive and Precise Positioning of Floating Plates

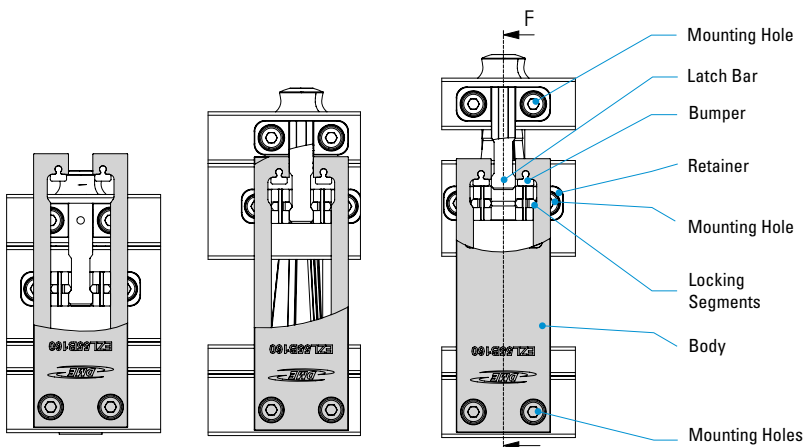
- Ideal for molds with floating plates, including stripper plates & 3-plate molds
- Floating plates are positively locked mechanically in place during mold opening and closing, preventing potential mold damage
- Reliable long-life performance through its unique design and use of nitride diffused material, avoiding coatings that can wear off during use
- Allows faster cycle times due to mechanical action vs. latch locks that rely on springs or friction to lock plates
- Simplifies mold design while improving design flexibility
- Designed and engineered to hold large loads while saving space inside the mold
- Optional long latch bar for greater stroke



BENEFITS

There's a reason DME has added its new external latch locks to its **EZ** line of products:

- **EZ - to install**
- **EZ - to sequence (time) plates**
- **EZ - to use on thin plates**
- **EZ - used for all plate control needs**
- **EZ - to disassemble & maintain**
- **Does not use springs, stripper/shoulder bolts or friction components**

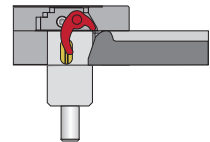


CONTROL YOUR PLATES

WITH THE DME EZ-LATCH LOCKING SYSTEM

3 KEYS TO SUCCESS

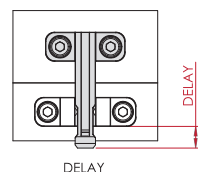
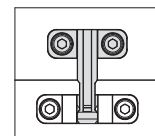
1
Mechanical strength



2
2-piece superior design

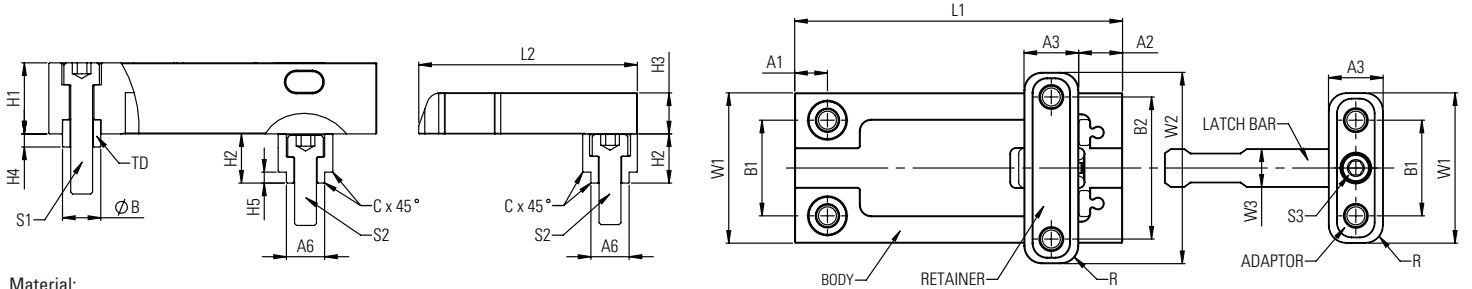


3
Built-in delay for ultra flexibility



PRODUCT SPECIFICATIONS

DME EZ-LATCH LOCKS: STANDARD LATCH BAR



Material:
 Body- Pre-hardened 5140 Steel Nitrided
 Latch Bar, Adapter & Retainer - H-13 +/-46HRC Nitrided

Series	W1	W2	W3	B1	B2	A1	A2	A3	A4	A5	H1	H2	H3	H4	R	C	S1	S2	S3	A6	ØB	H5
EZL45	45	60	12	28	45	10	14	18	122	10	22	15	12	4	5.5	1.5	M6X30	M6X20	M5X12	12	10	3
EZL55	55	70	14	35	52	12	16	20	130	12	26	18	15	5	6.5	1.5	M8X40	M8X25	M6X16	14	14	4
EZL75	75	90	20	48	65	15	20	26	185	15	36	20	20	5.0	8	2	M10X50	M10X30	M8X25	NA	18	NA

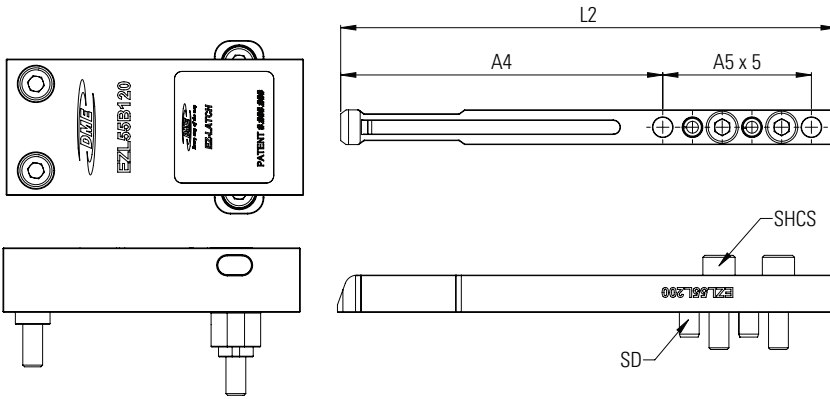
SERIES	BODY ASSEMBLY (Body, Adapter, Retainer & Tubular Dowel)		LATCH BAR		Complete Assembly (Body Assembly & Latch Bar)
	ITEM #	L1	ITEM #	L2	ASSEMBLY ITEM #
EZ45	EZL45B100	100	EZL45L50	50	EZL45B100L50
			EZL45L70	70	EZL45B100L70
			EZL45L90	90	EZL45B100L90
			EZL45L110	110	EZL45B100L110
	EZL45B130	130	EZL45L50	50	EZL45B130L50
			EZL45L70	70	EZL45B130L70
			EZL45L90	90	EZL45B130L90
			EZL45L110	110	EZL45B130L110
	EZL45B160	160	EZL45L50	50	EZL45B160L50
			EZL45L70	70	EZL45B160L70
			EZL45L90	90	EZL45B160L90
			EZL45L110	110	EZL45B160L110
EZ55	EZL55B120	120	EZL55L60	60	EZL55B120L60
			EZL55L80	80	EZL55B120L80
			EZL55L100	100	EZL55B120L100
			EZL55L120	120	EZL55B120L120
	EZL55B160	160	EZL55L60	60	EZL55B160L60
			EZL55L80	80	EZL55B160L80
			EZL55L100	100	EZL55B160L100
			EZL55L120	120	EZL55B160L120
	EZL55B200	200	EZL55L60	60	EZL55B200L60
			EZL55L80	80	EZL55B200L80
			EZL55L100	100	EZL55B200L100
			EZL55L120	120	EZL55B200L120
EZ75	EZL75B180	180	EZL75L100	100	EZL75B180L100
			EZL75L125	125	EZL75B180L125
			EZL75L150	150	EZL75B180L150
			EZL75L175	175	EZL75B180L175
	EZL75B230	230	EZL75L100	100	EZL75B230L100
			EZL75L125	125	EZL75B230L125
			EZL75L150	150	EZL75B230L150
			EZL75L175	175	EZL75B230L175
	EZL75B280	280	EZL75L100	100	EZL75B280L100
			EZL75L125	125	EZL75B280L125
			EZL75L150	150	EZL75B280L150
			EZL75L175	175	EZL75B280L175

NOTE: BODY SPECIAL ORDER IS AVAILABLE: ITEM#: SERIES+B+(L1); FOR EXAMPLE, SELECT EZL55, L1=150, ITEM#: EZL55B150
 LATCH BAR SPECIAL ORDER IS AVAILABLE: ITEM#: SERIES+L+(L2); FOR EXAMPLE, SELECT EZL55, L2=150, ITEM#: EZL55L150



PRODUCT SPECIFICATIONS

DME EZ-LATCH LOCKS: LONG LATCH BAR OPTION



Please reference drawing dimensions & chart on previous page for determining body selection

SERIES	BODY ASSEMBLY (Body, Adapter, Retainer & Tubular Dowel)		LATCH BAR		Complete Assembly (Body Assembly & Latch Bar)	
	ITEM #	L1	ITEM #	L2	ASSEMBLY ITEM #	FASTENERS
EZL45	EZL45B100	100	EZL45L180	180	EZL45B100L180	(2) M6 x 25 (2) SD6 x 25
	EZL45B130	130			EZL45B130L180	
	EZL45B160	160			EZL45B160L180	
EZL55	EZL55B120	120	EZL55L200	200	EZL55B120L200	(2) M8 x 30 (2) SD8 x 30
	EZL55B160	160			EZL55B160L200	
	EZL55B200	200			EZL55B200L200	
EZL75	EZL75B180	180	EZL75L275	275	EZL75B180L275	(2) M10 x 40 (2) SD10 x 40
	EZL75B230	230			EZL75B230L275	
	EZL75B280	280			EZL75B280L275	

NOTE: BODY SPECIAL ORDER IS AVAILABLE: ITEM#: SERIES+B+(L1); FOR EXAMPLE, SELECT EZL55, L1=150, ITEM#: EZL55B150
LATCH BAR SPECIAL ORDER IS AVAILABLE: ITEM#: SERIES+L+(L2); FOR EXAMPLE, SELECT EZL55, L2=150, ITEM#: EZL55L150

Sizing Guide

w1 (2PCS)	INTENDED MOLD SIZE	Sz	BACKLASH
45	250 x 250	2.0	0.2
55	450 x 450	2.5	
75	700 x 700	3	

Backlash - Clearance for segment

Sz- Switch Zone

Replacement Parts

ITEM NUMBER	DESCRIPTION	ITEM NUMBER	DESCRIPTION	ITEM NUMBER	DESCRIPTION
EZL45CAM-KIT	EZ-LATCH CAM KIT (1 CAM, 1 DOWEL & 2 BRASS PLUGS)	EZL45PSP	REPLACEMENT BUMPER/STOPPER FOR BODY (2 REQUIRED)	EZL45TD	TUBULAR DOWELS (BODY REPLACEMENT PART)
EZL55CAM-KIT		EZL55PSP		EZL55TD	
EZL75CAM-KIT		EZL75PSP		EZL75TD	



PRODUCT SPECIFICATIONS

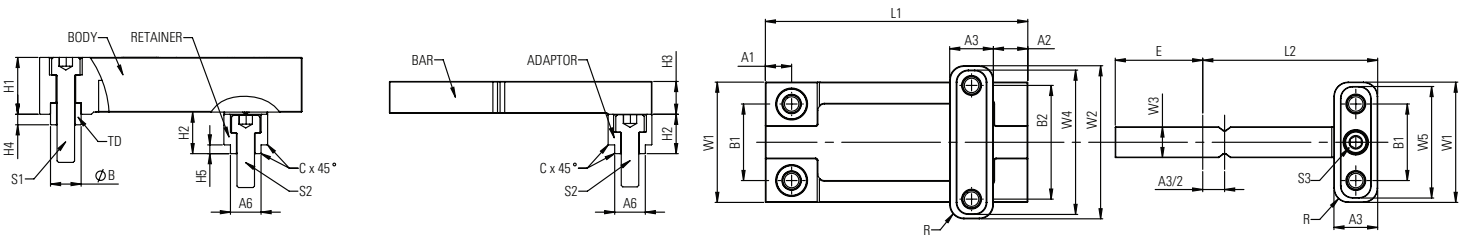
DME R-EZ-LATCH LOCKS:



DME R-EZ-LATCH LOCKS PROVIDES PRECISE POSITIONING FOR TWO STAGE MOLDING APPLICATIONS

The easy and reliable solution to sequence your mold plates.

DME's line of EZ-LATCH universal external latch lock system has been extended to include Reverse EZ-LATCH (R-EZ). All the same great features of EZ-LATCH in a simplified design which no longer requires the cam allowing a simplified installation and plate sequencing. R-EZ units are designed to allow precise control of plates in two stage applications with reduced travel. Just like the EZ-LATCH, R-EZ is ready to mount to your mold right out of the box with its modular capabilities and, through its patented mechanical design provides safer and longer lasting performance.



Material:

Body- Pre-hardened 5140 Steel Nitrided

Latch Bar, Adapter & Retainer - H-13 +/-46HRC Nitrided

Series	W1	W2	W3	B1	B2	A1	A2	A3	A4	A5	H1	H2	H3	H4	R	C	S1	S2	S3	A6	H5	ØB	E
REZL55	55	70	14	35	52	12	16	20	130	12	26	18	15	5	6.5	1.5	M8X40	M8X25	M6X16	14	4	14	40
REZL75	75	90	20	48	65	15	20	26	185	15	36	20	20	5.0	8	2	M10X50	M10X30	M8X25	NA	NA	18	50

SERIES	BODY ASSEMBLY (Body, Adapter, Retainer & Tubular Dowel)		LATCH BAR		Complete Assembly (Body Assembly & Latch Bar)
	ITEM #	L1	ITEM #	L2	ASSEMBLY ITEM #
REZL55	REZL55B120AS	120	REZL55L60E	60	REZL55B120L60E
			REZL55L80E	80	REZL55B120L80E
			REZL55L100E	100	REZL55B120L100E
			REZL55L120E	120	REZL55B120L120E
	REZL55B160AS	160	REZL55L60E	60	REZL55B160L60E
			REZL55L80E	80	REZL55B160L80E
			REZL55L100E	100	REZL55B160L100E
			REZL55L120E	120	REZL55B160L120E
	REZL55B200AS	200	REZL55L60E	60	REZL55B200L60E
			REZL55L80E	80	REZL55B200L80E
			REZL55L100E	100	REZL55B200L100E
			REZL55L120E	120	REZL55B200L120E
	REZL55B240AS	240	REZL55L60E	60	REZL55B240L60E
			REZL55L80E	80	REZL55B240L80E
			REZL55L100E	100	REZL55B240L100E
			REZL55L120E	120	REZL55B240L120E

NOTE: BODY SPECIAL ORDER IS AVAILABLE: ITEM#: SERIES+B+(L1)+E*; FOR EXAMPLE, SELECT REZL55, L1=150, ITEM#: REZL55B150E- HERE E SIGNIFIES STANDARD EXTENSION
 LATCH BAR SPECIAL ORDER IS AVAILABLE: ITEM#: SERIES+L+(L2)+E*; FOR EXAMPLE, SELECT REZL55, L2=150, ITEM#: REZL55L150E- HERE E SIGNIFIES STANDARD EXTENSION
 SPECIAL LATCH BAR EXTENSION IS AVAILABLE: ITEM#: SERIES+L+(L2)+E+(SPECIAL EXTENSION); FOR EXAMPLE, SELECT REZL55, L2=150, E=60, ITEM#: REZL55L150E60
 *STANDARD EXTENSIONS: E=40 FOR REZL55 AND E=50 FOR REZL75



PRODUCT SPECIFICATIONS

DME R-EZ-LATCH LOCKS: STANDARD LATCH BAR

Material:

Body- Pre-hardened 5140 Steel Nitrided

Latch Bar, Adapter & Retainer - H-13 +/-46HRC Nitrided

Series	W1	W2	W3	B1	B2	A1	A2	A3	A4	A5	H1	H2	H3	H4	R	C	S1	S2	S3	A6	H5	ØB	E
REZL55	55	70	14	35	52	12	16	20	130	12	26	18	15	5	6.5	1.5	M8X40	M8X25	M6X16	14	4	14	40
REZL75	75	90	20	48	65	15	20	26	185	15	36	20	20	5.0	8	2	M10X50	M10X30	M8X25	NA	NA	18	50

SERIES	BODY ASSEMBLY (Body, Adapter, Retainer & Tubular Dowel)		LATCH BAR		Complete Assembly (Body Assembly & Latch Bar)
	ITEM #	L1	ITEM #	L2	ASSEMBLY ITEM #
REZL75	REZL75B130AS	130	REZL75L100E	100	REZL75B130L100E
			REZL75L125E	125	REZL75B130L125E
			REZL75L150E	150	REZL75B130L150E
			REZL75L175E	175	REZL75B130L175E
	REZL75B180AS	180	REZL75L100E	100	REZL75B180L100E
			REZL75L125E	125	REZL75B180L125E
			REZL75L150E	150	REZL75B180L150E
			REZL75L175E	175	REZL75B180L175E
	REZL75B230AS	230	REZL75L100E	100	REZL75B230L100E
			REZL75L125E	125	REZL75B230L125E
			REZL75L150E	150	REZL75B230L150E
			REZL75L175E	175	REZL75B230L175E
	REZL75B280AS	280	REZL75L100E	100	REZL75B280L100E
			REZL75L125E	125	REZL75B280L125E
			REZL75L150E	150	REZL75B280L150E
			REZL75L175E	175	REZL75B280L175E
	REZL75B330AS	330	REZL75L100E	100	REZL75B330L100E
			REZL75L125E	125	REZL75B330L125E
			REZL75L150E	150	REZL75B330L150E
			REZL75L175E	175	REZL75B330L175E

NOTE: BODY SPECIAL ORDER IS AVAILABLE: ITEM#: SERIES+B+(L1)+E*; FOR EXAMPLE, SELECT REZL75, L1=150, ITEM#: REZL75B150E- HERE E SIGNIFIES STANDARD EXTENSION
 LATCH BAR SPECIAL ORDER IS AVAILABLE: ITEM#: SERIES+L+(L2)+E*; FOR EXAMPLE, SELECT REZL75, L2=150, ITEM#: REZL75L150E- HERE E SIGNIFIES STANDARD EXTENSION
 SPECIAL LATCH BAR EXTENSION IS AVAILABLE: ITEM#: SERIES+L+(L2)+E+(SPECIAL EXTENSION); FOR EXAMPLE, SELECT REZL75, L2=150, E=60, ITEM#: REZL75L150E60
 *STANDARD EXTENSIONS: E=40 FOR REZL55 AND E=50 FOR REZL75

Sizing Guide

w1 (2PCS)	INTENDED MOLD SIZE	Sz	BACKLASH
55	450 x 450	2.5	0.2
75	700 x 700	3	

Backlash - Clearance for segment
 Sz- Switch Zone

DME EZL APPLICATION EXAMPLE

3-PLATE CONTROL



Mounting Configuration

Latch Lock's Body: Mounting on the top clamp plate (fixed plate).

Latch Bar: Mounted on the B-plate.

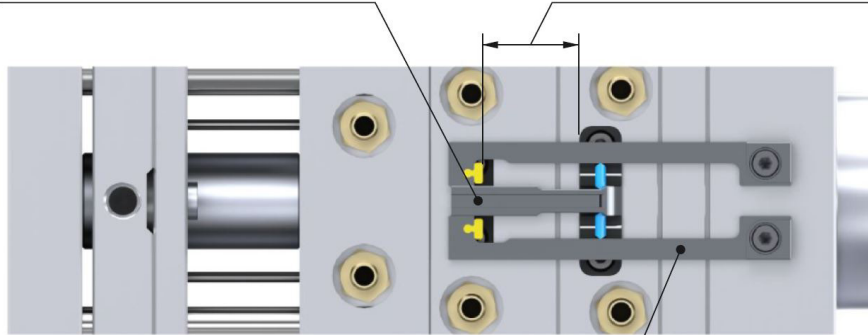
Retainer: Mounted on the A-plate, connected to the runner plate with a stripper bolt.

This setup allows precise 3-plate control during the parting line opening. Initially, the B-Plate and A-Plate move together for the designated stroke (S1) to effectively strip the runner from the part. Following this coordinated movement, the B-Plate disengages from the A-Plate, allowing the parting line to open. This sequence of actions can provide accurate control and efficient separation of the runner and part, which can enhance the overall efficiency of the molding process.

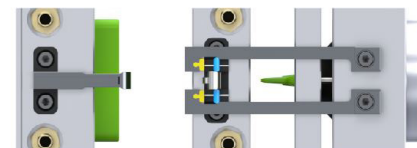
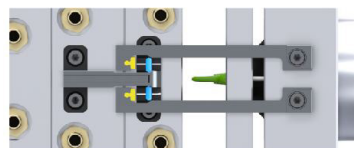
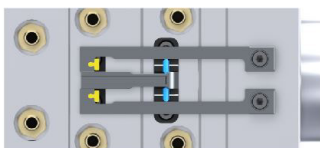
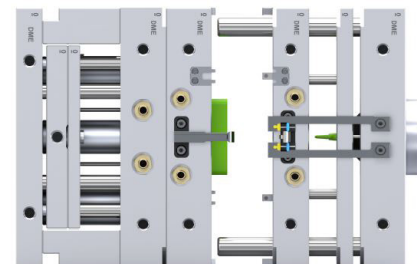
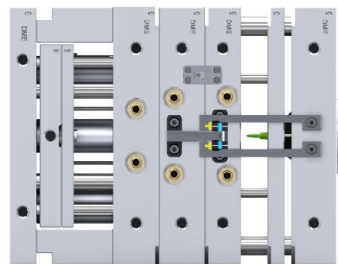
EZL SELECTION TIPS

Select the Latch Bar length best suited for mounting on the B-plate.

Set stroke S1 and select appropriate Latch Bar length and Latch Body length.



Select the body length best suited for mounting on the top clamp plate.



MOLD CLOSE

OPEN 1

OPEN 2

DME R-EZL APPLICATION EXAMPLE

2-STAGE EJECTION - BOTTOM LAST PLATE CONTROL



Mounting Configuration

Latch Lock's Body: Mounting on the bottom ejector plate.

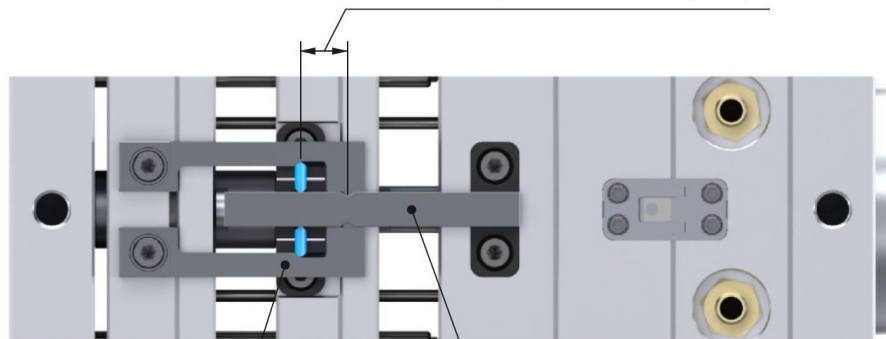
Latch Bar: Mounted on the support plate (fixed plate).

Retainer: Mounted on the top ejector plate.

This setup allows precise control over the two-stage ejection process (bottom last). Initially, both ejector plates, spaced apart, move together for the designated stroke (S1). This synchronized movement is particularly important when lifters mounted on the top ejector plate need to disengage undercuts before the part can be ejected. After completing the initial stroke, the bottom ejector plate continues to move independently for the final stroke required to eject the part.

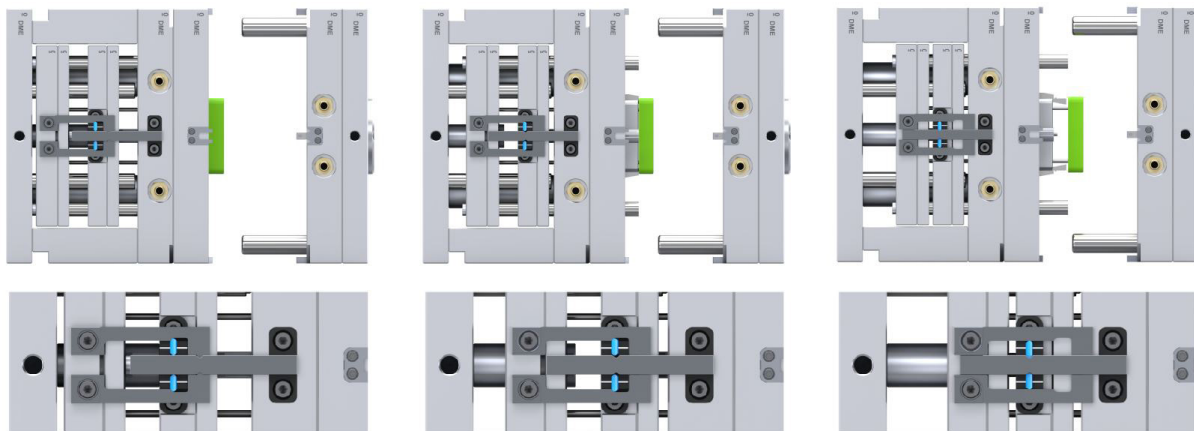
R-EZL SELECTION TIPS

Set stroke S1 and select appropriate Latch Bar length and Latch Body length.



Select the body length best suited for mounting on the bottom ejector plate.

Select the Latch Bar length best suited for mounting on the support plate.



MOLD OPEN

EJECTION - STAGE 1

EJECTION- STAGE 2

DME R-EZL APPLICATION EXAMPLE

2-STAGE EJECTION - TOP LAST PLATE CONTROL



Mounting Configuration

Latch Lock's Body: Mounting on the bottom clamp plate (fixed plate).

Latch Bar: Mounted on the top ejector plate.

Retainer: Mounted on the bottom ejector plate.

This setup allows precise plate control over the two-stage ejection process (top last). Initially, both ejector plates, placed together, move for the designated stroke (S1). This synchronized movement is particularly important when lifters mounted on the bottom ejector plate need to disengage undercuts before the part can be ejected. After completing the initial stroke, the top ejector plate continues to move independently for the final stroke required to eject the part.

R-EZL SELECTION TIPS

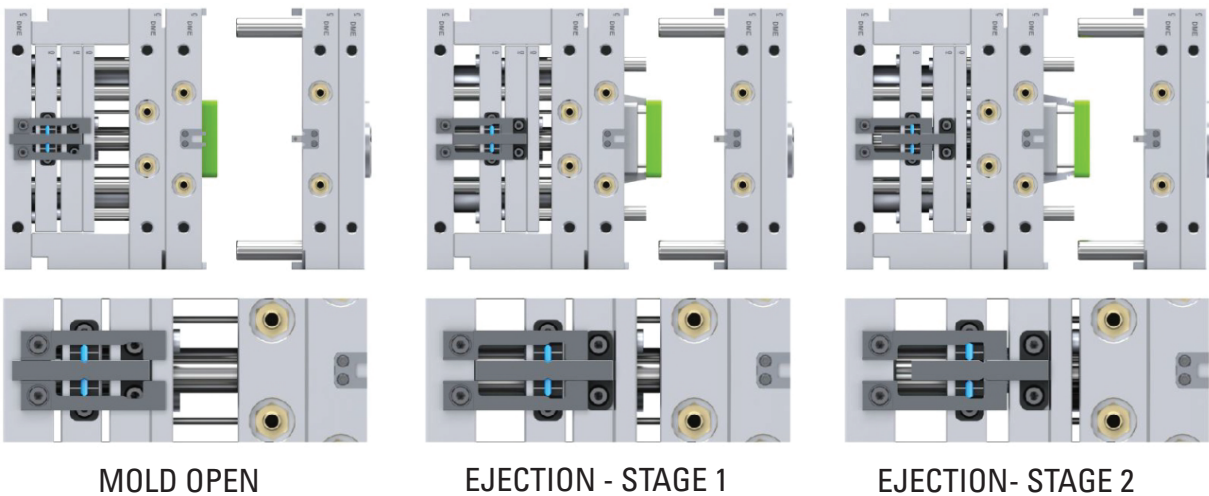
E - Standard Latch Bar extension.
Larger extensions are available for larger second stroke.

Set stroke S1 and select appropriate
Latch Bar length and Latch Body length.



Select the body length best suited for
mounting on the bottom clamp plate.

Select the Latch Bar length best suited
for mounting on the top ejector plate.



MOLD OPEN

EJECTION - STAGE 1

EJECTION - STAGE 2

DME R-EZL APPLICATION EXAMPLE

BOTTOM LAST - STRIPPER PLATE AND EJECTOR PIN EJECTION



Mounting Configuration

Latch Lock's Body: Mounting on the ejector plate.

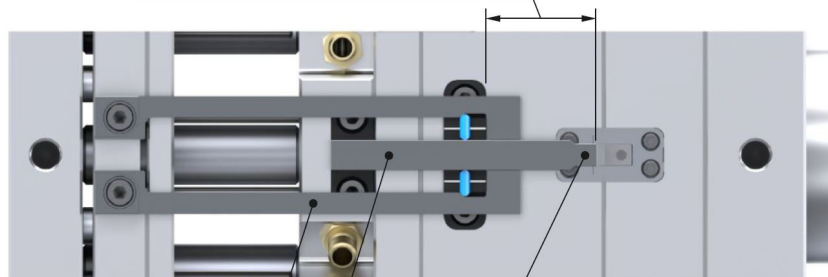
Latch Bar: Mounted on the support plate (fixed plate).

Retainer: Mounted on the B-plate (stripper plate).

This setup ensures precise control of both the B Plate (stripper plate) and the ejector plate. Initially, these plates move together for the designated stroke (S1). This synchronized motion is especially vital in applications involving a collapsible core, where the core must collapse before the part is ejected. After this initial stroke, the ejector plate moves independently for the final stroke needed to eject the part using the ejector pins, ensuring a clean and efficient ejection process.

R-EZL SELECTION TIPS

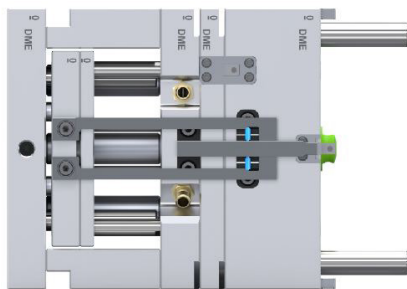
Set stroke S1 and select appropriate Latch Bar length and Latch Body length.



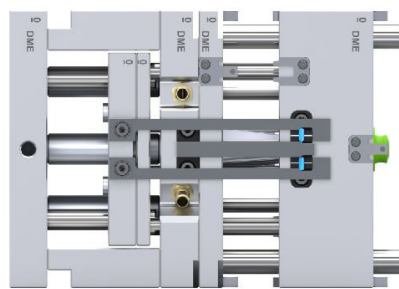
Select the body length best suited for mounting on the ejector plate.

Select the Latch Bar length best suited for mounting on the support plate.

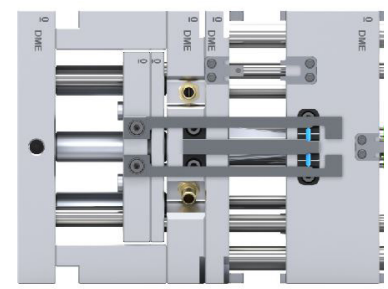
Latch bar extension not required. Use stripper bolt with stroke of $S1+1\text{mm}$ for safety.



MOLD OPEN



EJECTION - STAGE 1



EJECTION- STAGE 2

DME R-EZL APPLICATION EXAMPLE

BOTTOM LAST - FOR COLLAPSIBLE CORE WITH INSERT ON TOP



Mounting Configuration

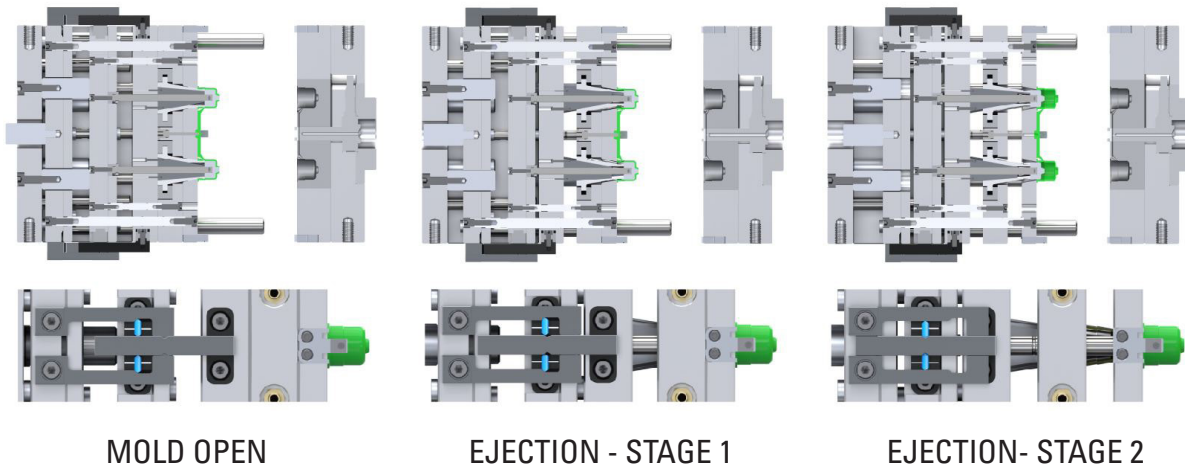
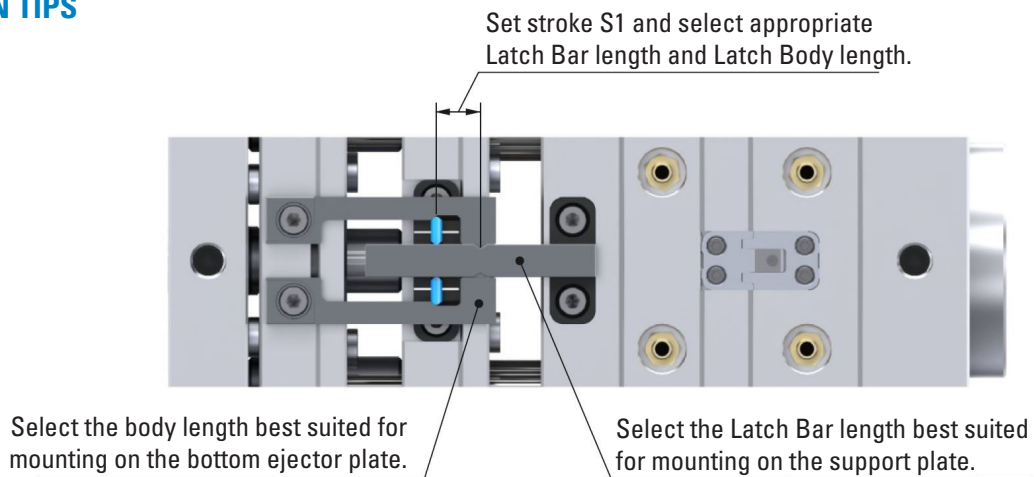
Latch Lock's Body: Mounting on the bottom ejector plate, linked to the stripper plate.

Latch Bar: Mounted on the support plate (fixed plate).

Retainer: Mounted on the top ejector plate, linked to the B-plate.

This setup ensures precise control of the plates, crucial for efficient part ejection in molds with collapsible cores with an insert on top. Initially, both the bottom ejector plate (linked to the stripper plate) and the top ejector plate (linked to the B plate) move together for a designated stroke (S1). This synchronized movement is essential in applications with a collapsible core, where the core must collapse before ejecting the part. After this initial stroke, the stripper plate continues to move independently for the final stroke needed to eject the part, facilitating a clean and effective ejection process.

R-EZL SELECTION TIPS



SPECIAL APPLICATIONS - S-CORE MOLD BASE

R-EZL FOR S-CORE MOLD BASE (NO EJECTOR BOX)



Mounting Configuration

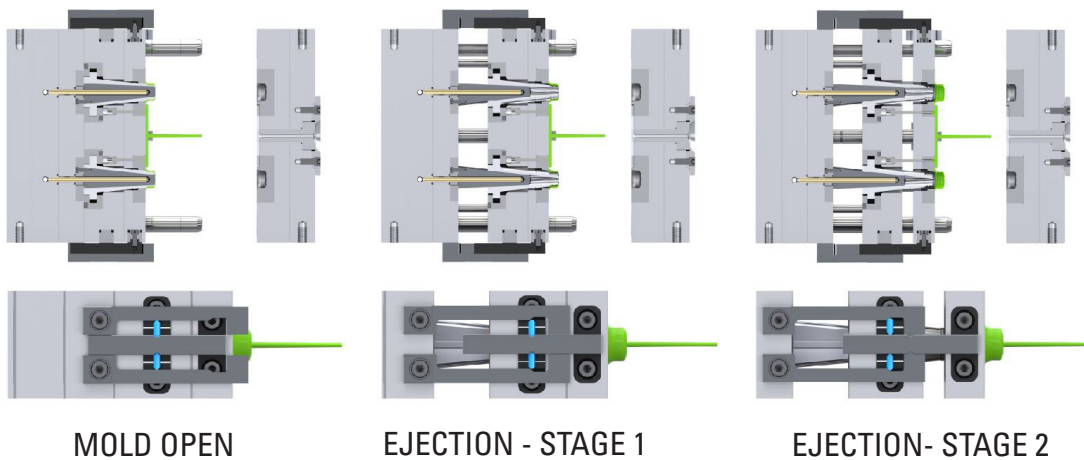
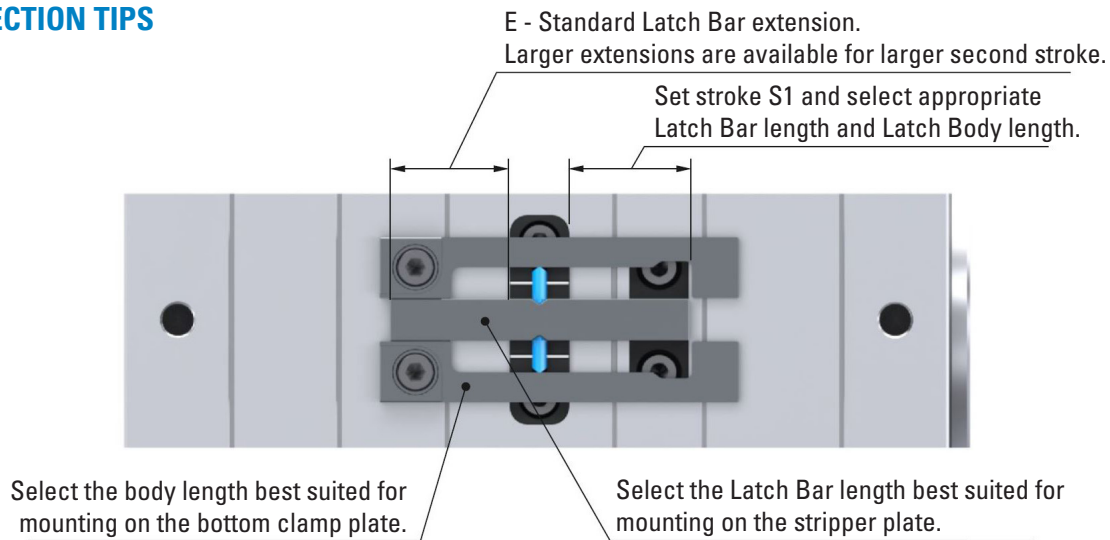
Latch Lock's Body: Mounting on the bottom clamp plate (fixed plate).

Latch Bar: Mounted on the stripper plate.

Retainer: Mounted on the B-plate.

This setup provides precise plate control essential for successful part ejection in S-Core Mold Bases (No Ejector Box). Initially, the stripper plate and B plate move together for a designated stroke (S1). This synchronized movement is crucial in applications with S-Core molds, where the core needs to collapse before the part is ejected. After this initial stroke, the stripper plate moves independently for the final stroke required to eject the part, ensuring efficient and effective ejection.

R-EZL SELECTION TIPS



SPECIAL APPLICATIONS - DURA CORE MOLD BASE

DC LATCH LOCK FOR DURA CORE MOLD BASE (FOUR PLATE CONTROL)



Mounting Configuration

Latch Lock's Body: Mounted on the bottom clamp (fixed plate).

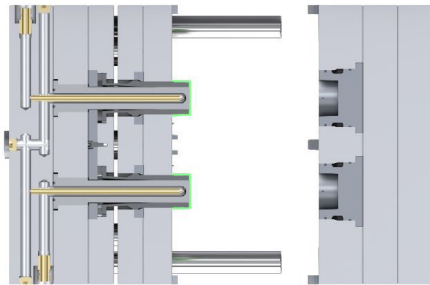
Latch Bar: Mounted on the stripper plate.

Main Retainer: Mounted on the B-plate.

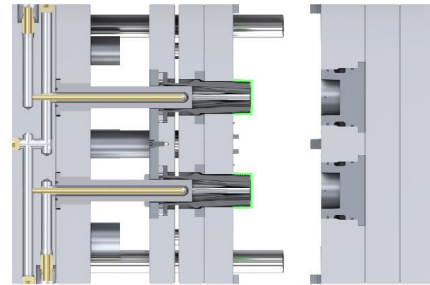
Second Retainer: Mounted on the floating safety ring plate, located between the B-plate and the stripper plate

This setup provides precise four plate control, essential for effective part ejection in the Dura Core Mold Base. Initially, the stripper plate, safety ring plate, and B plate move together for a designated stroke (S1). Subsequently, only the stripper plate and B plate continue moving together for a short distance to ensure the core's collapse. Finally, the stripper plate moves independently for the final stroke required to eject the part, ensuring a smooth and efficient ejection process.

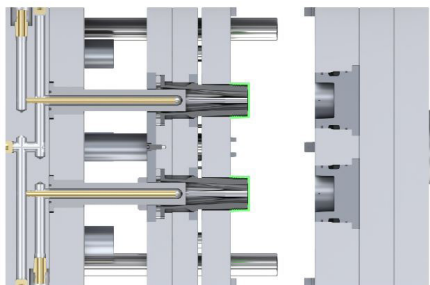
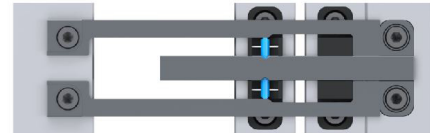
PART EJECTION STAGES



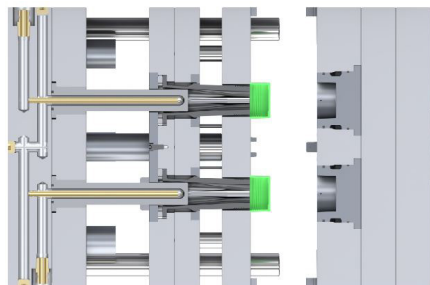
MOLD OPEN



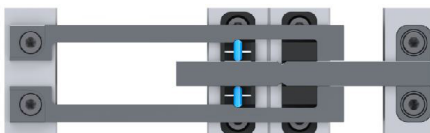
EJECTION - STAGE 1



EJECTION - STAGE 2



EJECTION - STAGE 3



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