D-M-E Internal Latch Lock

Precision control of mold plate operation





Internal Latch Lock Benefits and Selection Chart

D-M-E's Internal Latch Lock allows precision control of mold plate latching operation

D-M-E's unique internally-mounted latch lock mechanism adapts to a number of mold base sizes and plate thicknesses. It is available in three sizes to accommodate most standard D-M-E stripper plate mold bases. Two travel ranges and two center puller pin lengths are available for each

of the three latch lock sizes. Once installed,

D-M-E's internal latch locks control the sequence of one parting line opening after the first parting line has traveled a predetermined distance. After installation there are no adjustments that can be accidentally changed. The internal latch locks are most commonly used on D-M-E AX-Series stripper plate mold bases but can be used on other D-M-E stripper plate mold bases as well.

- Three diameter sizes to choose from 28 mm, 34 mm, and 45 mm depending on the size of the mold and the application
- Two travel ranges and two center puller pin lengths to choose from for each of the three sizes
- Hardened steel components for longer life
- Latching mechanism has built-in travel limitation
- When latch is released, latching cams hold released stripper plate in fully traveled position
- Easy set-up of timing for latching mechanism
- Internal installation avoids interferences with water line connectors and externally mounted components



U.S. Patent No. 5,494,435

D-M-E's internal latch lock allows control of the mold plate opening sequence on mold bases with stripper plates. It enables one plate or group of plates to be latched together while the first parting line opening occurs. Then, after a predetermined amount of travel, the latch lock releases the latched plate or group of plates for the remaining parting line or parting lines to open.

				INT	ERNAL	LATCH LO	CK SELECTI	ON CHART		
Basic Latch	Internal Latch Lock Assembly		T" Trav		je imum		uller Pin Options	Recommended Maximum Standard D-M-E	Maximum Re	
Size	Catalog Number	mm	in.	mm	in.	mm	in.	Mold Base Width	Static	Dynamic
	DKL-2811	5	.197	30	1.181	140	5.512			
28 mm Dia.	DKL-2812	3	.137	30	1.101	250	9.843			
	(Small) DKL-2821		1.181	55	2.165	140	5.512	11-7/8 in.	10 kN	100 kg
(0	DKL-2822	30 1.181		55		250	9.843			
0.4	DKL-3411	6	.236	41	1.614	160	6.299			
34 mm Dia.	DKL-3412	U	.230	41	1.014	280	11.024	16-1/2 in.	20 kN	200 144
(Medium)	DKL-3421	41	1.614	76	2.992	160	6.299	10-1/2 111.	ZU KIN	200 kg
,	DKL-3422	41	1.014	70	2.552	280	11.024			
	DKL-4511	12	.472	58	2.283	200	7.874			
45 mm Dia.	DKL-4512	12	.472	30	2.203	310	12.205	20.0/4:	20 1-11	200 1
(Large)	DKL-4521	58	2 202	104	4.004	200	7.874	23-3/4 in.	30 kN	380 kg
(==:1907	DKL-4522	28	2.283	104	4.094	310	12.205			

See page K-28.17 for information regarding an additional option that provides guided ejection and return of the ejector assembly with guided ejection and return sleeves.

Supplied to provide maximum travel with no cutoff. To reduce travel between maximum and minimum, cut off slotted travel limiting sleeve on threaded end only per installation data.

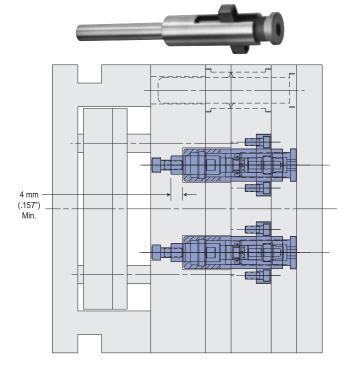
Center puller pin length ordered must be slightly longer than application requires. Moldmaker then cuts off as required. See installation data. A minimum of four assemblies are recommended per mold. However, for larger molds, thick plates, or an application where loads are near maximum, additional assemblies and/or next largest size assemblies may be required. An application must never exceed the maximum recommended load values. A balanced load must be maintained to avoid cocking and binding, which could cause severe overloading. Only one size latch lock assembly should be used in each mold base.

Internal Latch Lock - Typical Application Design Guidelines

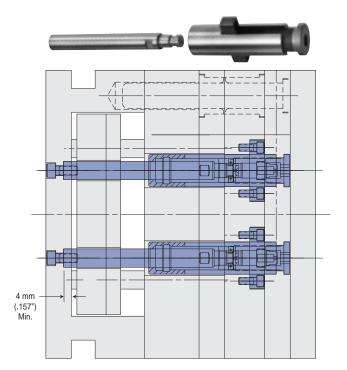
Basic selection and application design guidelines

- Select the appropriate internal latch lock size 28 mm diameter (small), 34 mm diameter (medium), or 45 mm diameter (large) based on the width of the mold base, as indicated in the chart on page K-28.11. However, large molds, thick plates or heavy load applications may require the next largest size assembly than is specified.
- 2. Select the appropriate travel range from the two choices for each size in the chart on page K-28.11. This selection is based on the specific application requirements for the amount of travel that must occur at one parting line prior to the latch being released. The total travel requirements are based on the amount needed for the application as explained above, plus 3 mm (.12") minimum additional allowance. This added 3 mm minimum will make sure the full required travel has occurred before the latch lock starts its releasing action.
- 3. Select the appropriate length for the center puller pin from the two choices for each size in the chart. The length of the pin is determined by the specific application including the mold base plate thicknesses, where the pin will be mounted, etc. If possible, the center puller pin should be mounted in the support plate. However, some applications require the center puller pin to be mounted in the bottom clamping plate. This will depend on the travel or the length of the split sleeve component which controls the travel and the plate thicknesses in the mold base.
- 4. The answers to the above items (1-3) should establish a specific catalog number assembly from the chart on page K-28.11.
- 5. A minimum of four assemblies are recommended per mold. However, for larger molds, thick plates, or an application where loads are near maximum, additional assemblies and/or next largest size assemblies may be required. An application must never exceed the maximum recommended load values. A balanced load must be maintained to avoid cocking and binding which could cause severe overloading. Only one size latch lock assembly should be used in each mold base.
- The center puller pin should be counterbored into its mounting plate 4 mm (.157") minimum for most applications, as shown in the drawings at right. This counterbore aligns the center puller pin with the other components in the assembly.
- 7. The most common applications for the latch locks are for the D-M-E AX-Series stripper plate mold bases. However, many other types of stripper plate mold bases can also be used with this internal plate latching mechanism. It is important to make sure that the leader pin lengths in all applications are long enough to fully engage the stripper plate through its full travel. The latch lock mechanism latches two plates together but is not intended to provide guidance. Instead, it relies on the leader pins in the mold for proper alignment and support of the actuated stripper plates.
- 8. In the fully latched position the internal latch lock mechanism will allow movement of approximately 0.4 mm (.016") for the 28 mm diameter and 34 mm diameter assemblies and approximately 0.5 mm (.020") for the 45 mm diameter assemblies.
- 9. Injection molding machine mold opening speed may have to be reduced in order to make sure that excessive shock loading does not occur.
- 10. The internal latch lock is not recommended for severe load applications.
- 11. The internal latch lock must not be exposed to temperatures that exceed 150°C (300°F) at any time.
- Lubricate all metal-to-metal contact areas initially and periodically as required. A good grade of moldmakers non-melting type grease for the appropriate temperature should be used.
- 13. An optional sleeve can be added to the latch lock that provides two additional functions. However, this optional sleeve is not required for the latch lock function. The optional sleeve can be added to incorporate guided ejection and/or normal ejector assembly return functions in the mold. Refer to page K-28.17 for specific information regarding this sleeve option.

U.S. Patent No. 5,494,435



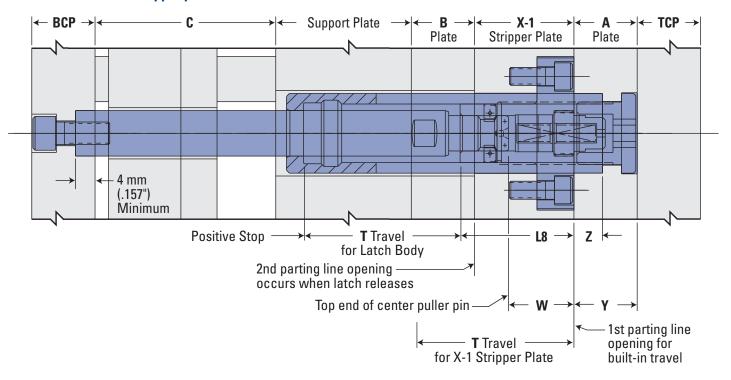
Internal latch lock application with center puller pins mounted in the support plate. This is typically done in applications where the travel is shorter and/or when mold plates are thicker. D-M-E AX-Series mold base is shown in this typical application.



Internal latch lock application with center puller pin mounted in the bottom clamping plate. This is typically done in applications where the travel is longer and/or when mold plates are thinner. (Some applications may require a thicker than standard bottom clamping plate.) D-M-E AX-Series mold base is shown in this typical application.

Set-Up Dimensional Information

D-M-E AX-Series stripper plate mold base is shown

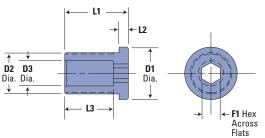


	IMPORTANT SET-UP DIMENSIONS (Refer to Drawing Above)													
Basic Latch	Internal Latch Lock Assembly			(1) Range		Body for Ca	L8 Body for Cam Fingers Length Dimension		W ⁽²⁾ Center Puller Pin		(3) ig Plate	Z ⁽⁴⁾ C'Bore Depth in		
Size	Catalog Number	Mini mm	imum in.	Max mm	imum in.	Length Di	mension in.	Set-Up Di	mensions in.	Thicknes	s Range in.	Mountir	ig Plate in.	
28 mm	DKL-2811 DKL-2812	5	.197	30	1.181		1.575	± 0.1	±.004	22	.866	+0.04	+.0016 0000	
Dia. (Small)	DKL-2821 DKL-2822	30	1.181	55	2.165	40	1.373	23	.906	to 35	to 1.378	10	.3937	
34 mm Dia.	DKL-3411 DKL-3412	6	.236	41	1.614	- 51	2.008	±0.1	±.004	27 to	1.063	+0.04 -0	+.0016 0000	
(Medium)	DKL-3421 DKL-3422	41	1.614	76	2.992	31	2.000	32	1.260	47.6	1.875	12	.4724	
45 mm Dia.	DKL-4511 DKL-4512	12	.472	58	2.283	- 68	2.677	±0.1	±0.1 ±.004	.004 35	1.375 to	+0.04 -0	+.0016 0000	
(Large)	DKL-4521 DKL-4522	58	2.283	104	4.094	00	2.077	43	1.693	to 60	2.375	16	.6299	

- (1) Supplied to provide maximum travel with no cutoff. To reduce travel between maximum and minimum, cut off slotted travel limiting sleeve on threaded end only per installation data. Cut off to no less than minimum travel; maintain close tolerances per installation data.
- (2) This set-up dimension is critical and must be maintained as specified to properly locate pin and cam body to latch. Dimension W is from top of X-1 stripper plate to top end of center puller pin. See installation data for additional information.
- (3) "Y" mounting plate dimension will be the "A" plate for AX-Series stripper plate mold bases.
- (4) This counterbore depth is critical and must be maintained as specified to locate split sleeve, cam body, and pin to latch.

Component Dimensional Information

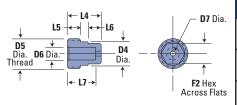
Assembly Retaining Screw



Basic	Internal Latch		ASSEMBLY RETAINING SCREW										
Latch Size	Lock Assembly Catalog Number	Component Catalog No.	D1 Dia.	D2 Thread	D3 Dia.	L1 Length	L2 Length	L3 Length	F1 Hex Across Flats				
28 mm Dia.	DKL-2811, DKL-2812,	DKL-2011	28	M22x1.25	13.5	34	5	26	10	mm			
(Small)	DKL-2821 & DKL-2822	DKL-2011	1.102	None	.531	1.339	.197	1.024	.394	in.			
34 mm Dia.	DKL-3411, DKL-3412,	DVI 2011	33	M26x1.5	16	46	6	35	12	mm			
(Medium)	DKL-3421 & DKL-3422	DKL-3011	1.299	None	.630	1.811	.236	1.378	.472	in.			
45 mm Dia.	DKL-4511, DKL-4512,	DKL-4011	42	M34x1.5	18.4	59	10	42	14	mm			
(Large)	DKL-4521 & DKL-4522	DKL-4011	1.654	None	.724	2.323	.394	1.654	.551	in.			

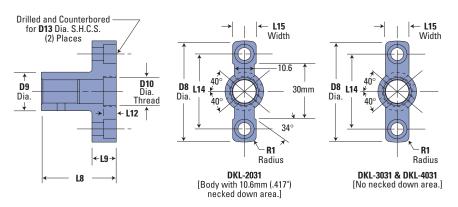
Cut-off length on thread end only per installation data

Spring Retainer



Basic	Internal Latch				SPRI	NG RE	TAINE	R				
Latch Size	Lock Assembly Catalog Number	Component Catalog No.	D4 Dia.	D5 Thread	D6 Dia.	D7 Dia.	L4 Length	L5 Length	L6 Length	L7 Length	F2 HEX. Across Flats	
28 mm Dia.	DKL-2811, DKL-2812,	DKL-2021	12.6	M16x1	6.8	2.6	18	7	7	15	11	mm
(Small)		DKL-2021	.496	None	.268	.102	.709	.276	.276	.591	.433	in.
34 mm Dia.	DKL-3411, DKL-3412,	DKL-3021	15	M19x1	8.3	3	21	8	8	17	13	mm
(Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3021	.591	None	.327	.118	.827	.315	.315	.669	.512	in.
45 mm Dia.	DKL-4511, DKL-4512,	DKL-4021	17.2	M24x1	10	3.5	25	10	9	21	15	mm
(Large)	DKL-4521 & DKL-4522	DKL-4021	.677	None	.394	.138	.984	.394	.354	.827	.591	in.

Body for Cam Fingers (Body Only Without Cam Fingers)



Basic	Internal Latch	BODY FOR CAM FINGERS														
Latch Size	Lock Assembly Catalog Number	Component Catalog No.	D8 Dia.	D9 Dia.	D10 Thread	L8 Length	L9 Length	L12 Length	L14 Length	L15 Width	R1 Radius	Mou Drill Dia.	nting Hole C'Bore Dia.	C'Bore	S.H.C.S. D13 S.H.C.S.	
28 mm Dia. (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2031	54 2.126	20.6 .811	M16x1 None	40 1.575	13 .512	.276	40 1.575	12.6 .496	2.5	6.8	10.4 .409	6.8	M6x1 1/4-20	m
34 mm Dia. (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422	DKL-3031	60 2.362	24.4	M19x1 None	51 2.008	15 .591	8 .315	46 1.811	12.6 .496	2.5	6.8	10.4	6.8	M6x1 1/4-20	n
45 mm Dia. (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522	DKL-4031	78 3.071	32.4 1.276	M24x1 None	68 2.677	20 .787	10 .394	60 2.362	17 .669	.157	8.4 .331	13.7 .539	8.5 .335	M8x1.25 5/16-18	-

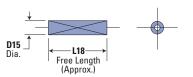
Do not alter body in any way

Use either metric or inch socket head cap screws

Note

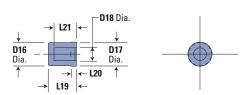
Component Dimensional Information

Spring for Holding Pin



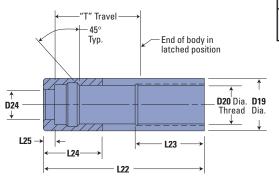
Basic	Internal Latch	SPRING F	OR HO	LDING PIN	
Latch Size	Lock Assembly Catalog Number	Component Catalog No.	D15 Dia.	L18 Free Length	
28 mm Dia.	DKL-2811, DKL-2812,	DKL-2041	6.5	56	mm
(Small)	DKL-2821 & DKL-2822	DKL-2041	.256	2.20	in.
34 mm Dia.	DKL-3411, DKL-3412,	DKL-3041	8	70	mm
(Medium)	DKL-3421 & DKL-3422	DKL-3041	.315	2.76	in.
45 mm Dia.	mm Dia. DKL-4511, DKL-4512,		9.7	90	mm
(Large) Di	DKL-4521 & DKL-4522	DKL-4041	.382	3.54	in.

Holding Pin for Cams

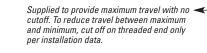


Basic	Internal Latch		HOLD	ING PI	N FOR	CAMS	;		
Latch Size	Lock Assembly Catalog Number	Component Catalog No.	D16 Dia.	D17 Dia.	D18 Dia.	L19 Length	L20 Length	L21 Length	
28 mm Dia.	DKL-2811, DKL-2812,	DKL-2051	12.3	12.9	6.8	15	3	12	mm
(Small)	DKL-2821 & DKL-2822	DIKL-2031	.484	.508	.268	.591	.118	.472	in.
34 mm Dia.	DKL-3411, DKL-3412,	DKL-3051	14.4	15.4	8.3	23	5	19.5	mm
(Medium)	DKL-3421 & DKL-3422	DKL-3031	.567	.606	.327	.906	.197	.768	in.
45 mm Dia.	DKL-4511, DKL-4512,	DKL-4051	19.4	20.4	10	32	7	28	mm
(Large)	DKL-4521 & DKL-4522	DKL-4031	.764	.803	.394	1.260	.276	1.102	in.

Slotted Travel Limiting Sleeve



Basic	Internal Latch	SLOT	TED TRAVEL	LIMITING SLI	EVE	
Latch	Lock Assembly	Component	"T" Travel Range – I	Minimum to Maximum	L22 Length	
Size	Catalog Number	Catalog No.	mm	in.	mm	in.
28 mm Dia.	DKL-2811 & DKL-2812	DKL-2071	5 to 30	.197 to 1.181	86	3.386
(Small)	DKL-2821 & DKL-2822	DKL-2072	30 to 55	1.181 to 2.165	111	4.370
34 mm Dia.	DKL-3411 & DKL-3412	DKL-3071	6 to 41	.236 to 1.614	111	4.370
(Medium)	DKL-3421 & DKL-3422	DKL-3072	41 to 76	1.614 to 2.992	146	5.748
45 mm Dia.	DKL-4511 & DKL-4512	DKL-4071	12 to 58	.472 to 2.283	152	5.984
(Large)	DKL-4521 & DKL-4522	DKL-4072	58 to 104	2.283 to 4.094	198	7.795



Basic	Internal Latch	SLOTTED TRAVEL LIMITING SLEEVE									
Latch Size	Lock Assembly Catalog Number	Component Catalog No.	D19 Dia.	D20 Dia. Thread	D24 Dia.	L23 Length	L24 Length	L25 Length	L28 Slot		
28 mm Dia.	DKL-2811, DKL-2812,	DKL-2071 &	28	M22x1.25	16	37	31.5	6	10.8	mm	
(Small)	DKL-2821 & DKL-2822	DKL-2072	1.1024	None	.630	1.457	1.240	.236	.425	in.	
34 mm Dia.	DKL-3411, DKL-3412,	DKL-3071 &	34	M26x1.5	19	49	41	7	12.8	mm	
(Medium)	DKL-3421 & DKL-3422	DKL-3072	1.3386	None	.748	1.929	1.614	.276	.504	in.	
45 mm Dia.	DKL-4511, DKL-4512,	DKL-4071 &	45	M34x1.5	26	65	56	10	17.3	mm	
(Large)	DKL-4521 & DKL-4522	DKL-4072	1.7717	None	1.024	2.559	2.205	.394	.681	in.	

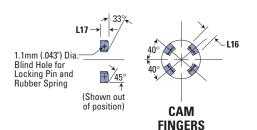
Note:

L28 Slot Width

Component Dimensional Information

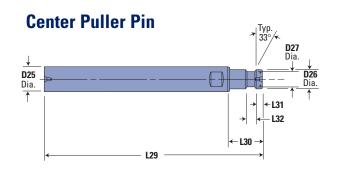
Cam Finger Replacement Kit

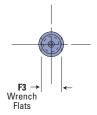
With (4) Cam Fingers, (6) Locking Pins, and (6) Rubber Springs*



Basic	Internal Latch	CAM FINGE	CAM FINGER REPLACEMENT KIT						
Latch Size	Lock Assembly Catalog Number	Component Set Catalog No.	L16 Width	L17 Thick					
28 mm Dia.	DKL-2811, DKL-2812,	DKL-2062	5.8	4.2	mm				
(Small)	DKL-2821 & DKL-2822	DKL-2002	.228	.165	in.				
34 mm Dia.	DKL-3411, DKL-3412,	DKL-3062	7.2	4.8	mm				
(Medium)	DKL-3421 & DKL-3422	DKL-3002	.283	.189	in.				
45 mm Dia.	DKL-4511, DKL-4512,	DKL-4062	9	6	mm				
(Large)	rge) DKL-4521 & DKL-4522		.354	.236	in.				

^{*}Two extra locking pins and rubber springs are included.





Basic	Internal Latch	CENTER	PULLE	LER PIN		
Latch	Lock Assembly	Component	L29 Length			
Size	Catalog Number	Catalog No.	mm	in.		
28 mm Dia.	DKL-2811 & DKL-2821	DKL-2081	140	5.512		
(Small)	DKL-2812 & DKL-2822	DKL-2082	250	9.843		
34 mm Dia.	DKL-3411 & DKL-3421	DKL-3081	160	6.299		
(Medium)	DKL-3412 & DKL-3422	DKL-3082	280	11.024		
45 mm Dia.	DKL-4511 & DKL-4521	DKL-4081	200	7.874		
(Large)	DKL-4512 & DKL-4522	DKL-4082	310	12.205		

Cutoff on large diameter end only per installation data

Note:

All dimensions shown for components are intended for drawing layout purposes only and in some cases have been rounded off. These dimensions are not intended to be used for the manufacturing of any components. Also, where the same diameter dimension is shown for parts that fit together, the tolerances create the appropriate clearance or fit.

Basic	Internal Latch				C	ENTER	PULL	ER PIN			
Latch Size	Lock Assembly Catalog Number	Component Catalog No.	D25 Dia.	D26 Dia.	D27 Dia.	L30 Length	L31 Length	L32 Length	F3 Across Flats	D28 Tap – Rec.	
28 mm Dia.	DKL-2811, DKL-2812,	DKL-2081 &	16	12.4	9.8	21	4	6.7	13	M8x1.25	mm
(Small)	DKL-2821 & DKL-2822	DKL-2082	.6299	.488	.386	.827	.157	.264	.512	5/16-18	in.
34 mm Dia.	DKL-3411, DKL-3412,	DKL-3081 &	19	14.5	11.7	24	4.6	7.6	15	M10x1.5	mm
(Medium)	DKL-3421 & DKL-3422	DKL-3082	.7480	.571	.461	.945	.181	.299	.591	3/8-16	in.
45 mm Dia.	DKL-4511, DKL-4512,	DKL-4081 &	26	19.5	15.9	31	5.5	9.5	22	M12x1.75	mm
(Large)	DKL-4521 & DKL-4522	DKL-4082	1.0236	.768	.626	1.220	.217	.374	.866	1/2-13	in.

Use either metric or inch tap and socket head cap screw (tap after pin cutoff)

Replacement Components

Basic Latch Size	Internal Latch Lock	Center P	uller F	Pin	Slotted Travel Limiting Sleeve			Component Catalog Numbers										
	Assembly Catalog No.							Assembly Retaining Screw	Spring	Body for Cam Fingers	Body for Cam Fingers	Cam Finger	Spring for	Holding Pin for				
		Component	L17 Length			"T" Travel Range			Retainer	Without	With (4)	Replacement	Holding					
		Catalog No.	mm	in.	Catalog No.	mm	in.	001044		Cam Fingers	Cam Fingers	Kit	Pin	Cams				
28 mm Dia. (Small)	DKL-2811	DKL-2081	140	5.512	DKL-2071	5 to	.197 to											
	DKL-2812	DKL-2082	250	9.843	DKL-20/1	30	1.181	DKL-2011	DKL-2021	DKL-2031	DKL-2032	DKL-2062	DKL-2041	DKL-2051				
	DKL-2821	DKL-2081	140	5.512	DKL-2072	30 to	1.181 to			DRE 2001	DICE 2002	DRE 2002	DILL ZOTT	DILL 2001				
	DKL-2822	DKL-2082	250	9.843	DKL-2072	55	2.165											
34 mm Dia. (Medium)	DKL-3411	DKL-3081	160	6.299	DKL-3071	6 to	.236 to											
	DKL-3412	DKL-3082	280	11.024	DICE-3071	41	1.614	DKL-3011	DKL-3021	DKL-3031	DKL-3032	DKL-3062	DKL-3041	DKL-3051				
	DKL-3421	DKL-3081	160	6.299	DKL-3072	41 to	1.614 to	DILE COTT		DICE COOT	DIE GOOZ	DILE GOOZ	DILL OUT	DILL COOT				
	DKL-3422	DKL-3082	280	11.024	DKL-3072	76	2.992											
45 mm Dia. (Large)	DKL-4511	DKL-4081	200	7.874	DKL-4071	12 to	.472 to											
	DKL-4512	DKL-4082	310	12.205	DICE-4071	58	2.283	DKL-4011	DKL-4021	DKL-4031	DKL-4032	DKL-4062	DKL-4041	DKL-4051				
	DKL-4521	DKL-4081	200	7.874	DKL-4072	58 to	2.283 to	2.12 1011		2.12 1001	2.12 1002	5.12 1002	2.12 1011	2.12 1001				
	DKL-4522	DKL-4082	310	12.205	DIXL-4072	104	4.094											

Optional Guided Ejection and Return Sleeves

Add guided ejection and return pin functions to Internal Latch Lock mechanism with the optional sleeve

The optional Guided Ejection and Return Sleeves, although not required for the Internal Latch Lock, can add two functions to the mold base that are typically required in most molds. These optional sleeves can add guided ejection and ejector assembly return functions to the mold base. Additionally,

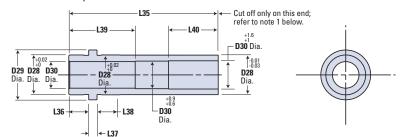
assembly return functions to the mold base. Additionally, these added functions fall within the space requirements of the plate latching mechanism. However, these optional

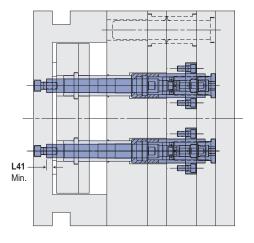


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sleeves do not create an early ejection return system that is occasionally required in some applications.

- Sleeves can add guided ejection function to mold base along with plate latching mechanism
- Sleeves can replace function of return pins in mold base for most applications using the plate latching mechanism
- Sleeves fit around the center puller pin of the plate latching mechanism and are mounted in the ejector assembly, thus eliminating the need for additional mold space usually required for the guided ejection and return pin functions





Basic	Internal Latch	OPTIONAL SLEEVES – GUIDED EJECTION AND RETURN SLEEVE DIMENSIONS																				
Latch	Lock Assembly	Component	L35 Length		D28 Dia.		D29 Dia.		D30 Dia.		L36 Length		L37 Thickness		L38 Length		L39 Length				L41 Min.	
Size	Catalog Number	Catalog No.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
28 mm Dia. (Small)	DKL-2811, DKL-2812, DKL-2821 & DKL-2822	DKL-2101 DKL-2102		3.543 5.512		.9449	30	1.181	16	.630	12	.472	5	.197	14	.55	40	1.57	30	1.18	12	.472
34 mm Dia. (Medium)	DKL-3411, DKL-3412, DKL-3421 & DKL-3422			4.331 6.299		1.1024	35	1.378	19	.748	14	.551	6	.236	16	.63	50	1.97	35	1.38	15	.591
45 mm Dia. (Large)	DKL-4511, DKL-4512, DKL-4521 & DKL-4522			5.512 7.874	38	1.4961	46	1.811	26	1.024	18	.709	8	.315	20	.79	70	2.76	40	1.57	20	.787

Notes:

- Choose the appropriate length sleeve so that it can be cut off to a length that will fully return the ejector assembly. See installation data.
- The center puller pins must support and guide the sleeves, as well as the ejector assembly. The pins must have sufficient bearing surface contact as specified by dimension "L41" minimum.
- Additional bearing surface contact for the center puller pins may require a thicker bottom clamping plate or the addition of another plate to the bottom of the mold for some applications. See installation data.
- 4. A minimum of four assemblies are typically recommended per mold. However, for larger molds, thick plates, or an application where loads are near maximum, additional assemblies and/or next largest size assemblies may be required. An application must never exceed the maximum recommended load values. A balanced load must be maintained to avoid cocking and binding which could cause severe overloading. Only one size latch lock assembly should be used in each mold base.



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