



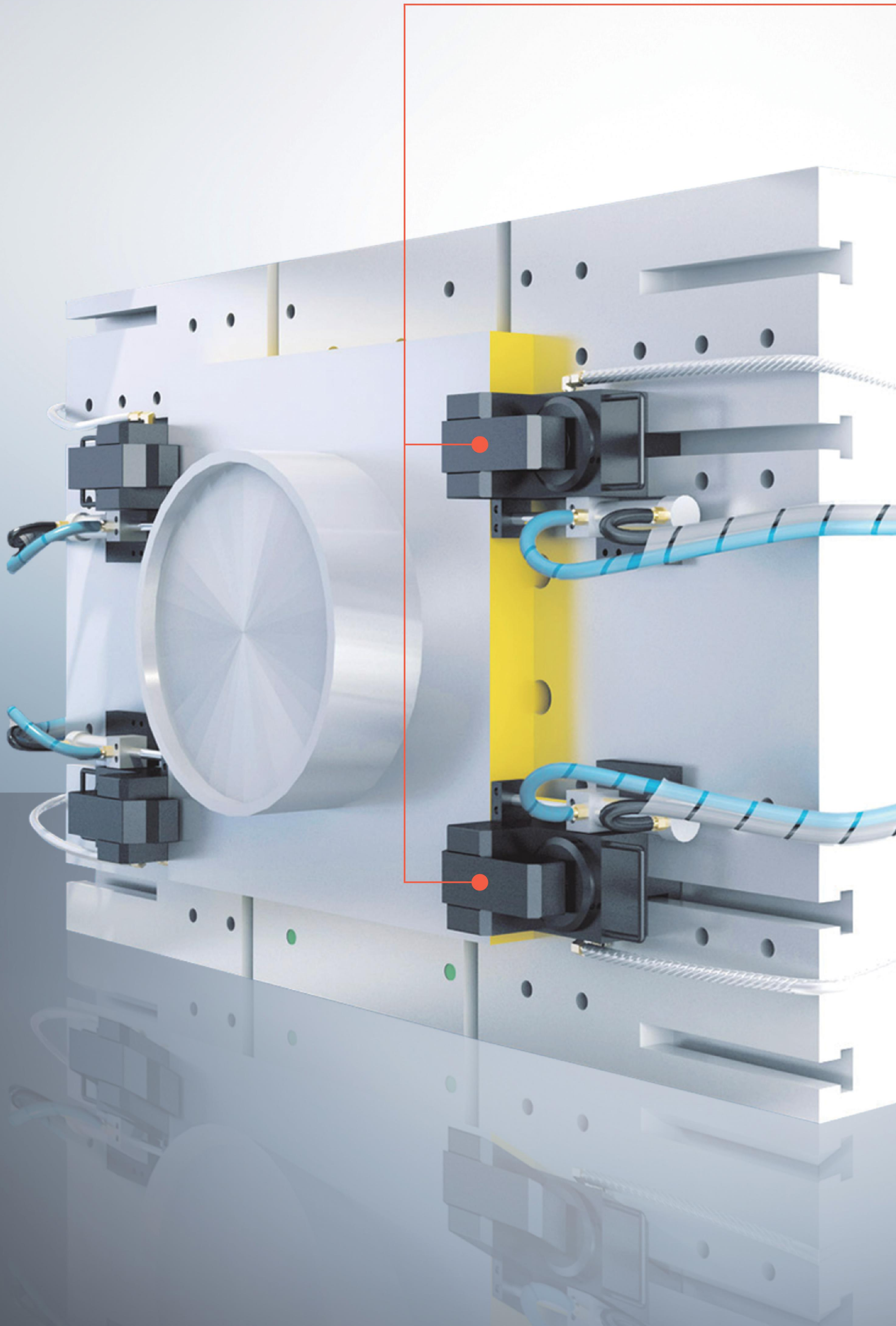
FORWELL™

For Injection Molding Machines & Die Casting Machines

射出機壓鑄機快速換模系統 Quick Mold Change System

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快速換模系統元件組成 QMCS Units Introduction



夾模器 Die Clamp Series

可分TY, TYN, TY-BS, TY-C, TD, TFH, TFL, THL八種夾模器，詳述於第10~17、21頁。

For details, refer to pages 10~17, 21.

TY, TYN, TY-BS, TY-C, TD, TFH, TFL, THL Die Clamp.



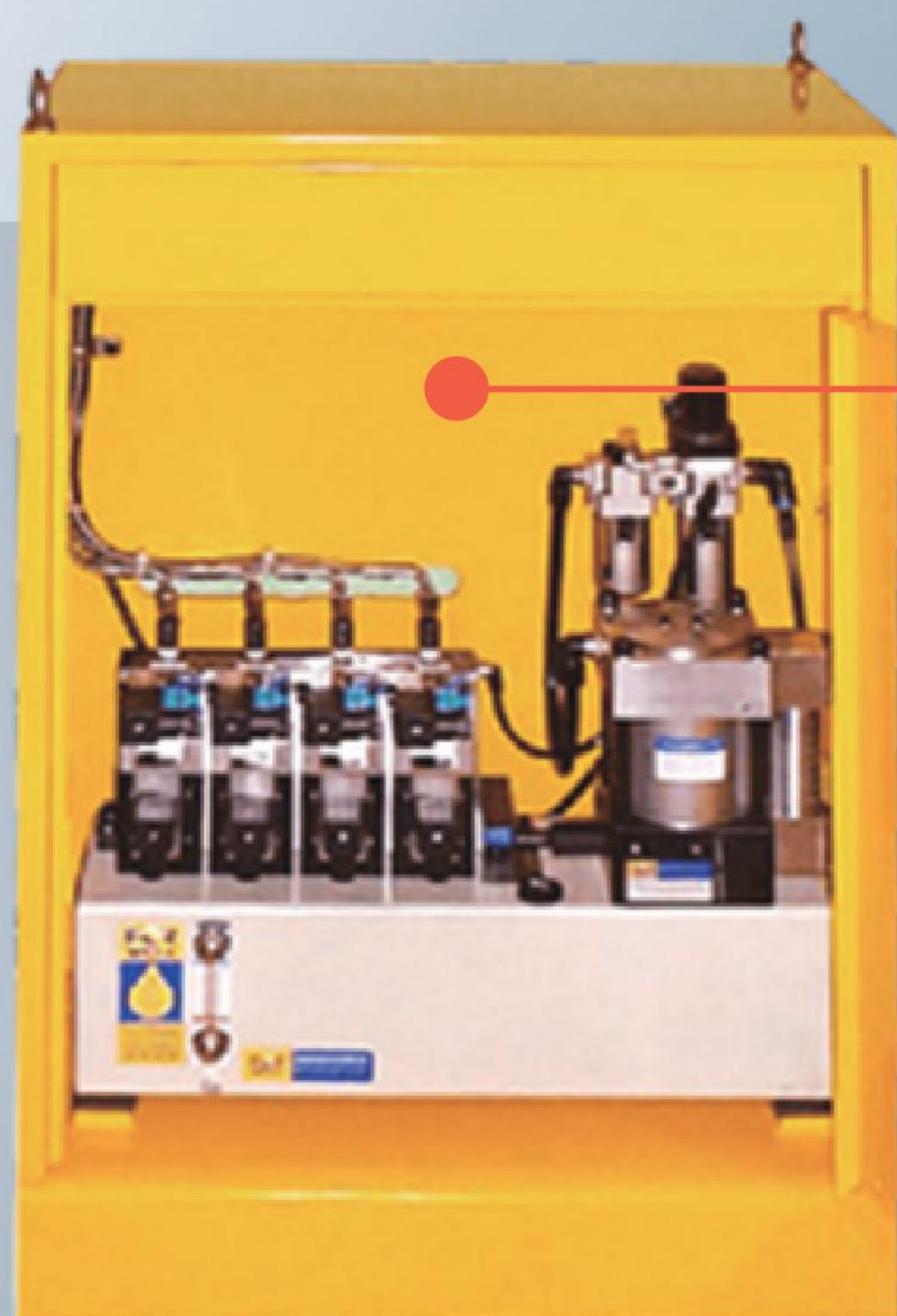
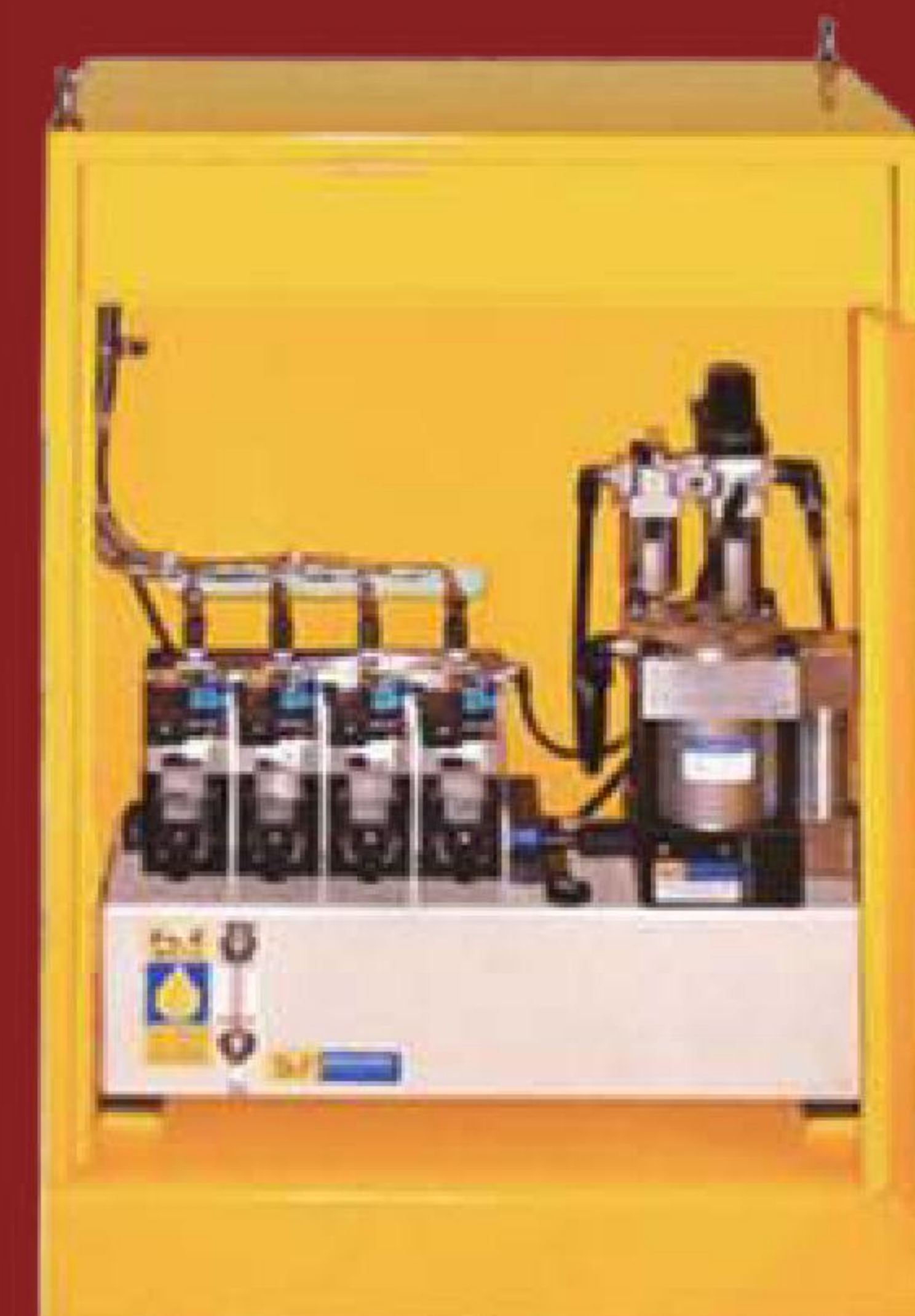
電氣箱 Electrical System



氣動泵組合 Power Unit

以氣動方式作動，出力為油壓，詳見第8~9頁。

For details, refer to page 8~9.



射出成型機、壓鑄機快速換模系統標準型式選用表

Q. M. C. S. Typical Sections by Injection Molding Machines & Die Casting Machines

射出成型機、壓鑄機快速換模系統標準形式選用表

Q.M.C.S. typical sections for injection molding machines & die casting machines.

機台能力 TON	夾模器 CLAMP					氣動泵組合 PUMP MODEL	建議模板厚度 PLATE THICKNESS		建議T槽尺寸 T-SLOT SIZE				
	活動側 MOVING	數量 PCS	固定側 FIXED	數量 PCS	總夾模力 TOTAL		活動側 MOVING	固定側 FIXED	A	B	C	D	
~ 150	TY-2	4	TY-2	4	16TON	FP6308U-□-□C	35	35	22	37	16	24±0.25	
~ 250	TY-4	4	TY-4	4	32TON	FP1014 U-□-□C	40	40	28	48	20	28±0.25	
~ 350	TY-6	4	TY-6	4	48TON								
~ 550	TY-10	4	TY-10	4	80TON								
~ 850	TY-16	4	TY-16	4	128TON								
~ 1000	TY-16	6	TY-16	6	192TON		50	50	28	48	23		
~ 1300	TY-25	4	TY-25	4	200TON								
~ 1600	TY-25	6	TY-25	6	300TON				36	56	25		
~ 2500	TY-25	8	TY-25	8	400TON								
~ 3000	TY-50	6	TY-50	6	600TON				48	80	36		48±0.25

模板 Mold Plate	換模方式 Mold Change	使用之夾模方式 Clamping Type	條件、特徵 Condition . Character
不能統一情形時 Not United	吊車(垂直放入) Crane (Vertical Installation)	移動式夾模器 Movable Clamp	必須在盤面上加T溝，或者安裝T溝板 T-slot Required
可以統一情形時 United	吊車(垂直放入) Crane (Vertical Installation)	固定式移動式夾模器 Fixed & Movable Clamp	夾模器固定於盤面或在盤面上移動 Clamps Fixed or Handled on Plate
	台車(水平放入) Cart (Horizontal Installation)	固定式夾模器 Fixed Clamp	將輸送滾輪(或滑軌)安裝於盤面。必須有台車或模具交換台，換模時間極短，作業最簡單，亦可全自動化。 Install roller or sliding rail on the plate. Use cart or mold exchange table for mold change, this shortens change duration and simplifies operation. Fully - automated model is available.

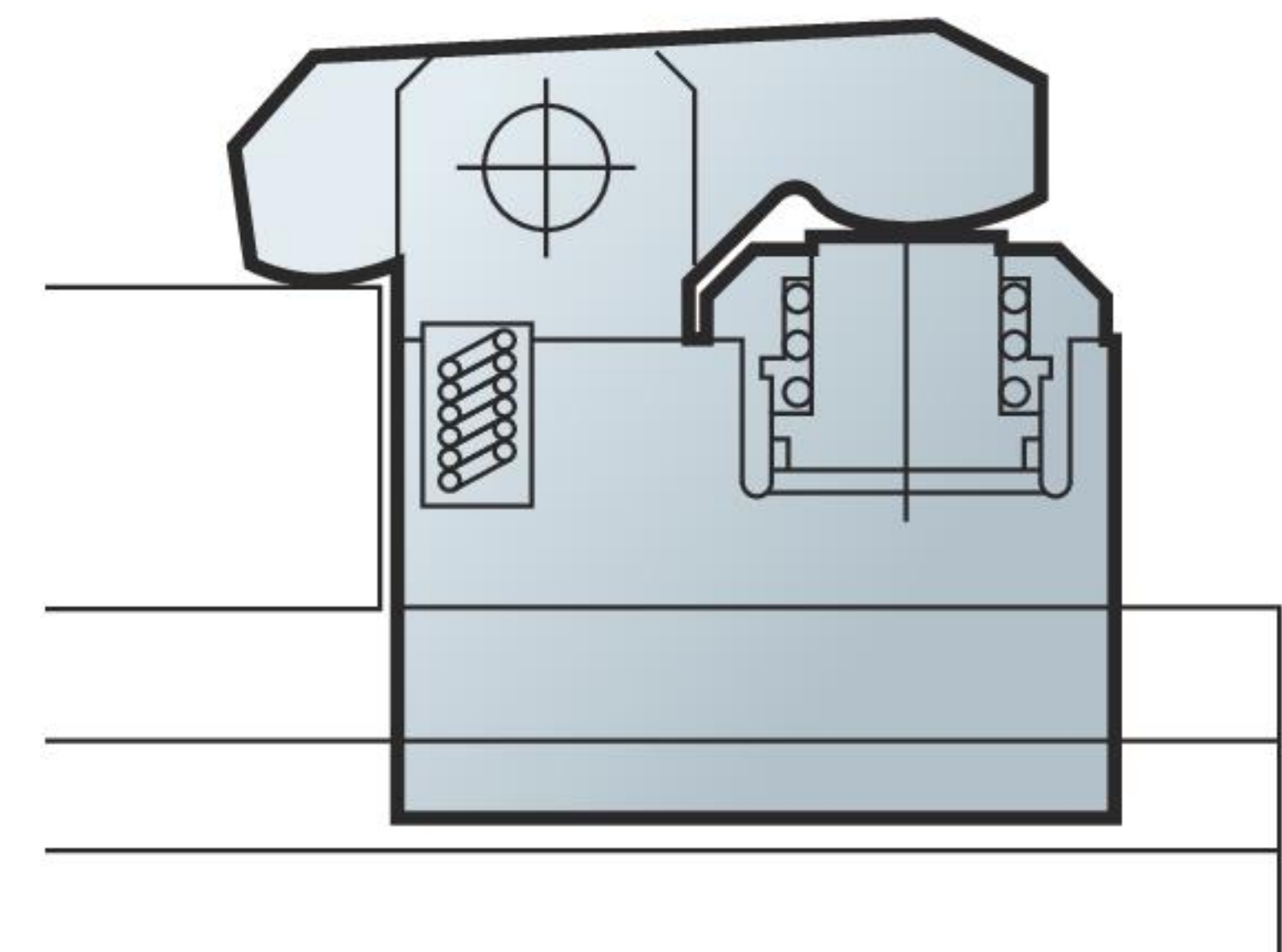
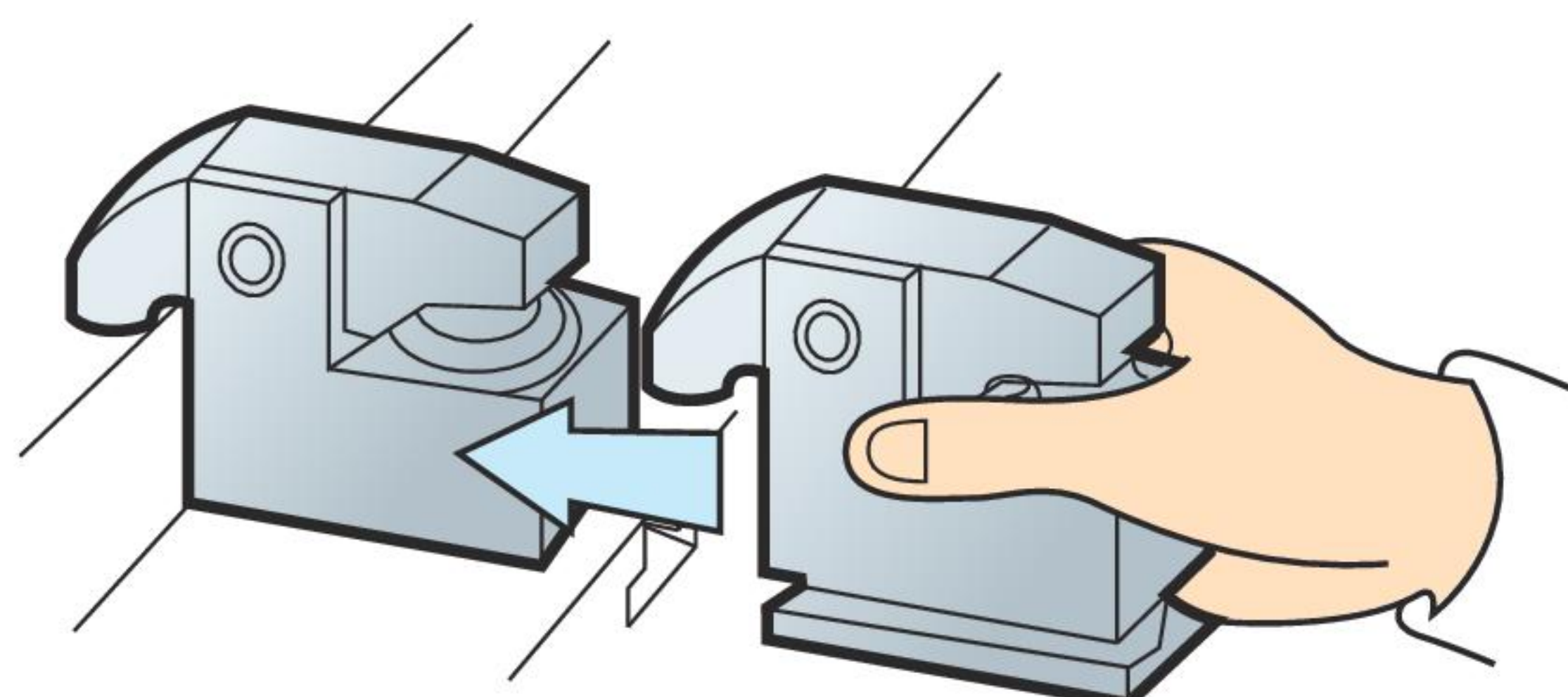
TY 夾模器 Die Clamp

此型夾模器以槓桿原理作用，夾持模沿，並不需"U"溝因此有更寬廣的適用範圍。

As the lever-type clamp does not require a U-slot on the die shoe, it could be used in a wider range of applications. The base of the clamp is machined to fit the T-slot on the bolster. The flange-mount model clamp may be bolted onto the bolster. The automatic slider model makes remote control possible.



* 多國專利
Granted Global Patents



結構剖面 / Construction

特性規格 Specifications

型號 Model	單位	TY-1	TY-2	TY-4	TY-6	TY-10	TY-16	TY-25	TY-35
夾持力(於油壓 250Kg /cm ²) Tons Clamping Force (at 250kgf/cm ²)	tons	1	2	4	6.3	10	16	25	35
全部行程 (X) Full Stroke	mm	6	7	7	8	8	8	8	8
夾模行程 (Y) Clamping Stroke	mm	3	2	3	4	3	3	3	3
安全行程 (Z) Extra Stroke	mm	3	5	4	4	5	5	5	5
夾模器缸體容量 (全行程) Cylinder Capacity at Full Stroke	cc	2	6.5	13.2	22.3	37	61	93	133

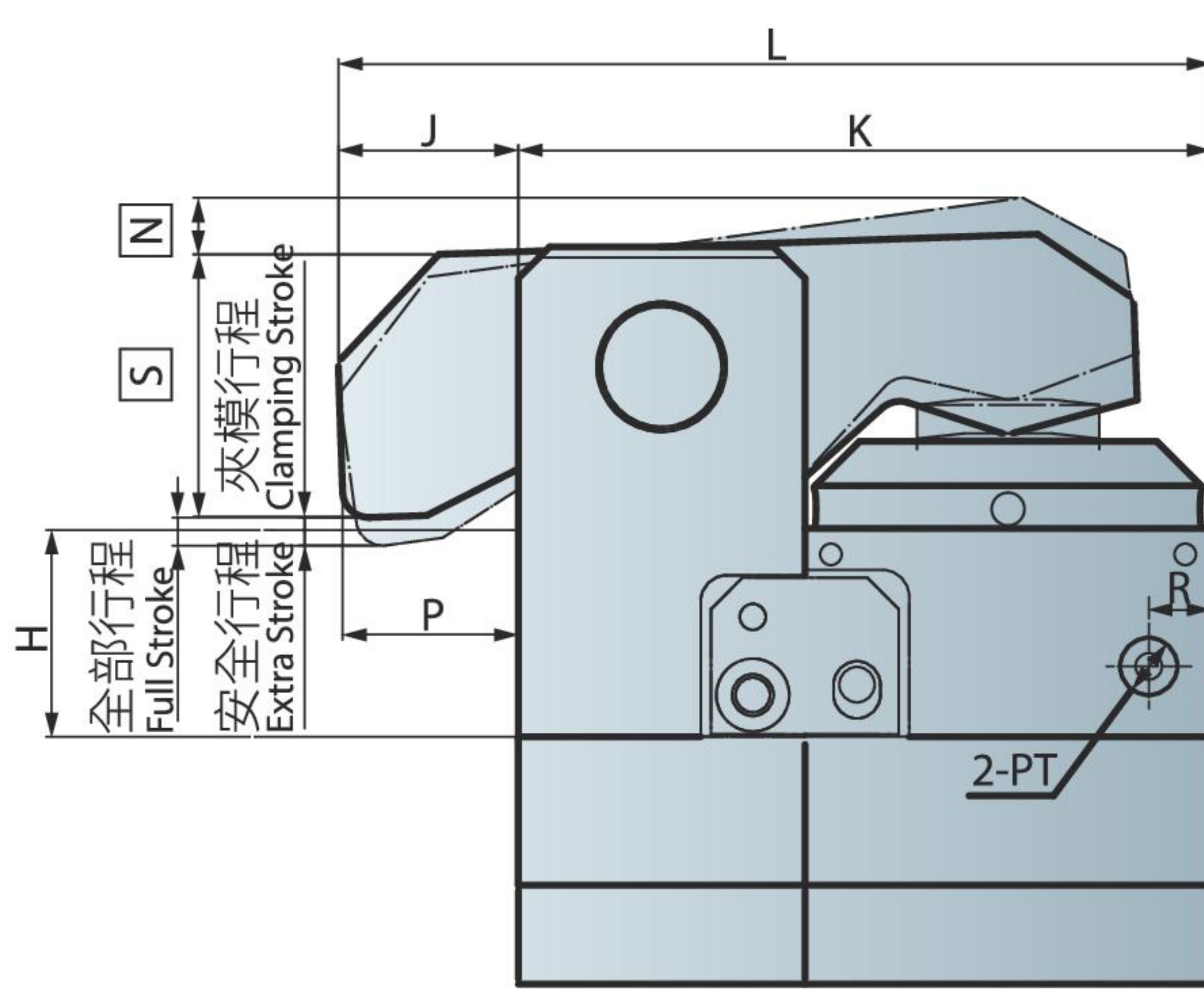
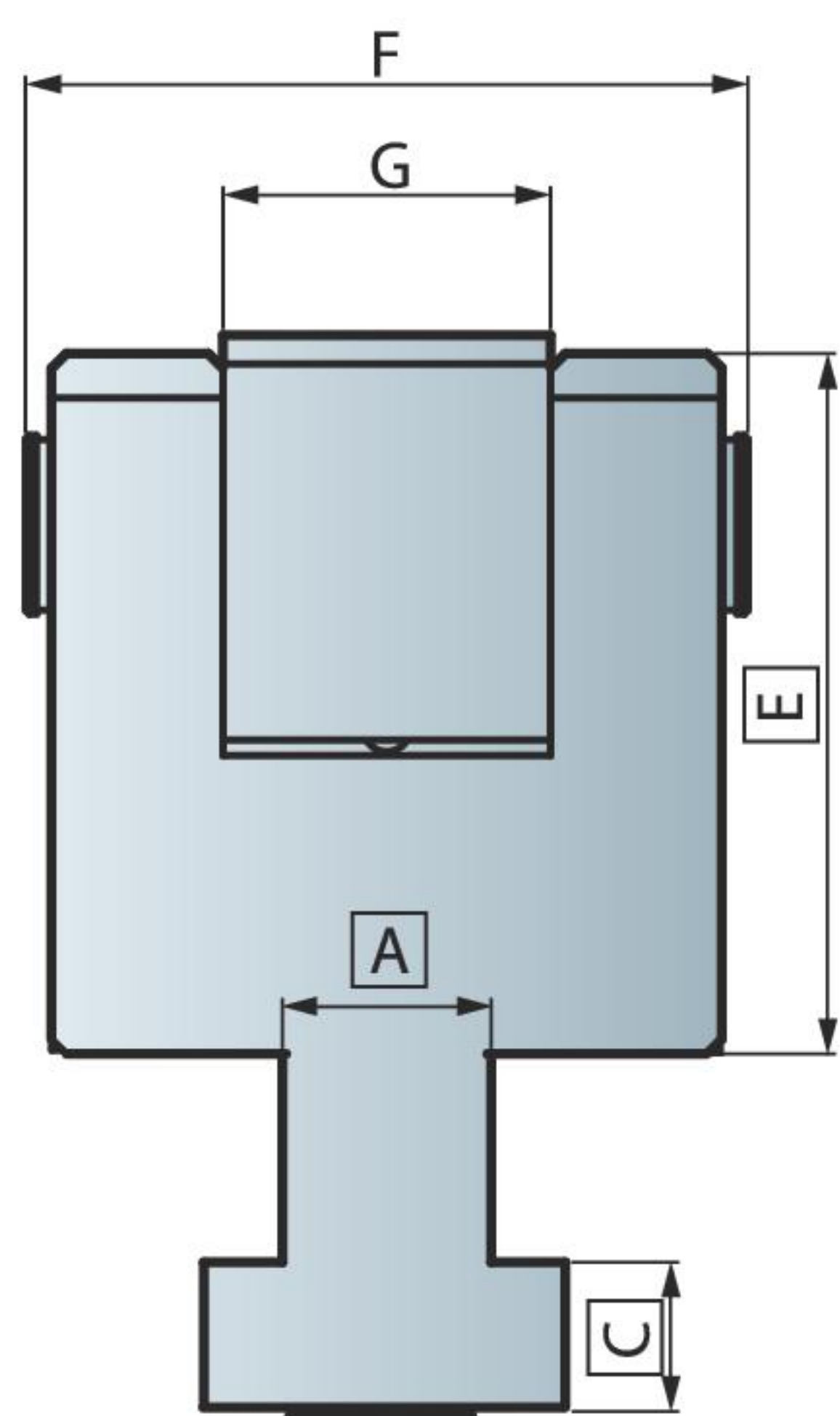
註1：安全行程為全部行程與夾模行程之差值，為特別的安全預留量。

Extra Stroke is the difference between full stroke and clamping stroke with extra space for safe operation.

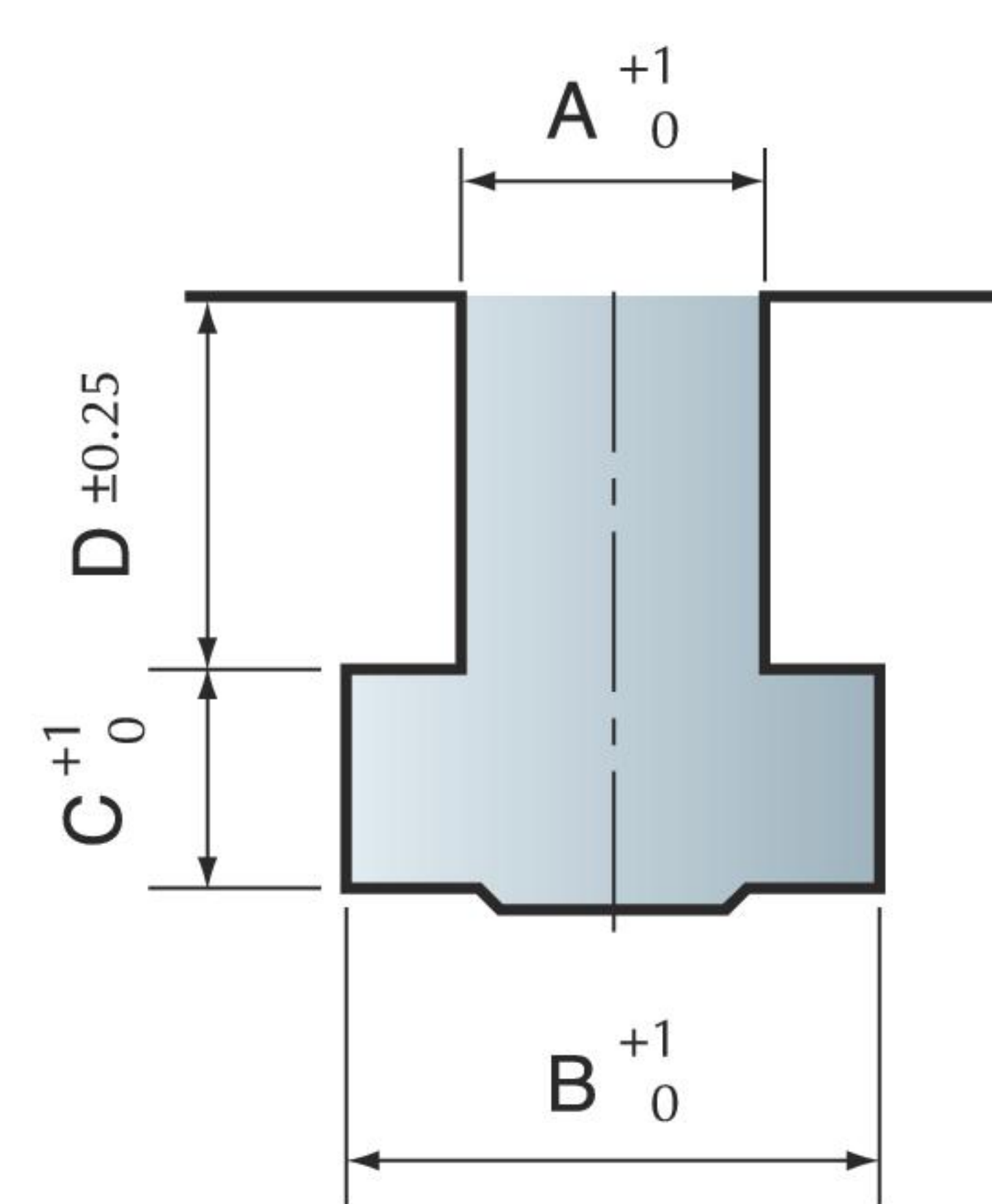
註2：作業溫度0~70°C

Working temperature 0~70°C

外型尺寸 Outline Dimensions



"T"槽尺寸 T Slot Dimensions



型號 Model	min. E	F	G	J	K	L	max. N	P	R	min. S	PT	min. C	min. A
TY-1	49.5	46	20	15	58	73	10	10	34	16.5	1/8	7	10
TY-2	59	63	28	22	85	107	10	12.5	48	27	1/8	9.5	12.5
TY-4	85	87	40	25	120	145	10	16	12	32	1/4	12	15
TY-6	94	97	44	29.5	133	162.5	11	20	12	40	1/4	14	19
TY-10	105	110	50	28	165	193	11	20	19	53	1/4	16.5	23
TY-16	120	130	60	30	200	230	12	20	25	67	1/4	19	27
TY-25	133	150	73	30	240	270	13	20	30	81	1/4	22	32
TY-35	143	170	80	30	280	310	15	20	30	90	1/4	25	35

型號 Model	A	B	C	D	選用泵浦 Power Unit
TY-1	22	37	16	24	FP6308U-4-4C
TY-2	22	37	16	24	
TY-4	22	37	16	24	
TY-6	28	48	20	28	
TY-10	28	48	20	28	FP1014U-4-4C
TY-16	28	48	23	28	
TY-25	36	56	25	28	
TY-35	40	70	30	40	

註：模沿厚度(h)及T槽 (A.B.C.D.) 尺寸如為既有(特殊)尺寸，請於訂購時確認之。

Before purchasing, please verify mold edge thickness (h) and check if the T slot (A.B.C.D.) is of standard dimensions. Special dimensions need to be confirmed.

TYN 夾模器 Die Clamp



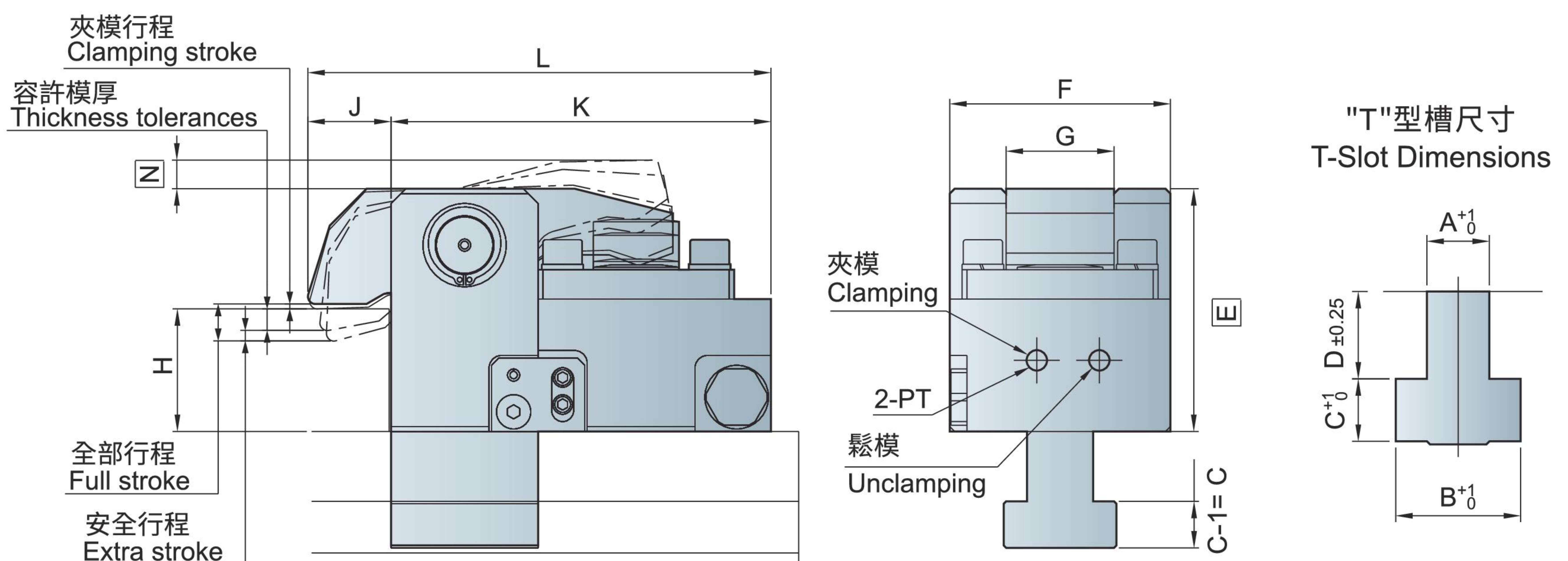
此型夾模器自帶逆止閥，入油後可維持保壓狀態，採用復動式油壓缸設計，需同時操控二油壓迴路來完成鬆模及夾模，缸體防水防塵，大幅提高使用壽命。全部行程高於TY型夾模器，可容許更寬廣的模具厚度。

The characteristics of this double-action clamp are hydraulic pressure keeping, longer stroke, water proof and dirt proof cylinder design. It requires two hydraulic circuits to control clamping and unclamping. The lifetime is much longer.

特性規格 Specifications

型號 Model	Unit	TYN-4	TYN-6	TYN-10	TYN-16	TYN-25
夾持力 (於油壓250kg/cm ²) Clamping Force (at 250kg/cm ²)	tons	4	6	10	16	25
全部行程 Full Stroke	mm	13	14.5	14.5	14.5	15
夾模行程 Clamping Stroke	mm	2	2	2	2	2
容許模厚 Thickness Tolerances	mm	7.5	8.5	8.5	8.5	9
安全行程 Extra Stroke	mm	3.5	4	4	4	4
夾模器缸體容量(全行程) Cylinder Capacity at Full Stroke	cc.	26.2	44	63	105.5	180.6

外型尺寸 Dimensions



型號 Model	min. E	F	G	J	K	L	max. N	PT	min. C	A	B	C	D	選用泵浦 Power Unit
TYN-4	90	80	40	29	135	164	10	1/8	12	22	37	16	24	FP6308U-□-□
TYN-6	99	90	44	34	155	189	11	1/8	14	28	48	20	28	
TYN-10	113	100	50	34	185	219	12	1/4	16.5	28	48	20	28	FP1014U-□-□
TYN-16	125	120	60	34	215	249	12	1/4	19	28	48	23	28	
TYN-25	138	140	73	34	255	289	13	1/4	22	36	56	25	28	