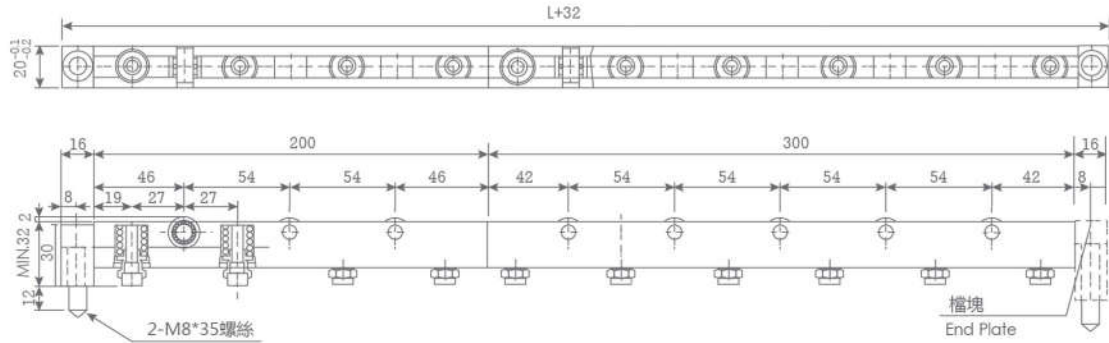


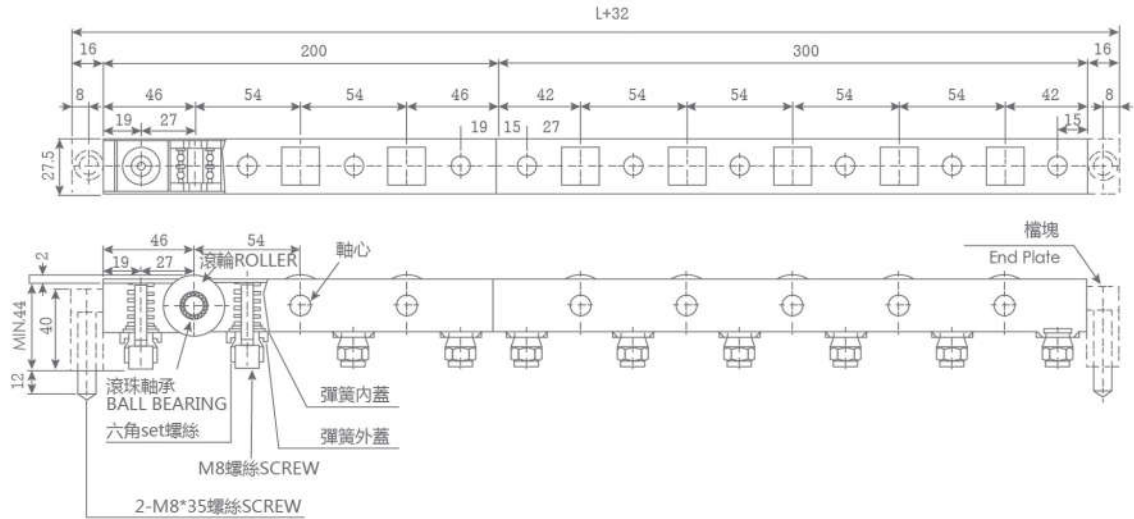
▼ 快速換模系統之DR/DU型彈簧式舉模器

SUNZUANT Q.D.C.S. DR / DU DIE LIFTER

◎ DR-22/ Model



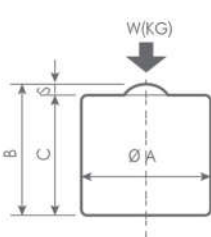
◎ DR-28/ Model



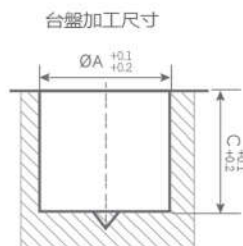
單一舉模器最大舉模力(kgf) / Maximum Lift Force per line(kgf)

規格(Model)	長度(L)																			
	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	
DR22	150	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	1275	1350	1425	1500	
DR28	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	

◎ 規格特性 / Specifications



	DU100	DU200
A	38 ⁺⁰ _{-0.05}	45 ⁺⁰ _{-0.05}
B	38	45
C	35 ⁺⁰ _{-0.05}	42 ⁺⁰ _{-0.05}
S	3	3
W	100Kgf	200Kgf



DU 滾珠彈簧式舉模器

尚川快速換模系統之DR型彈簧式舉模器

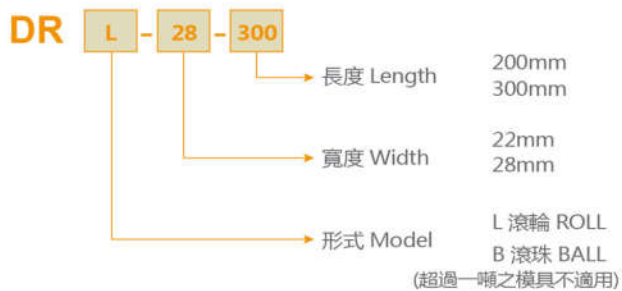
SUNZUANT Q.D.C.S. DR DIE LIFTER

DR型舉模器可藉由填隙片的增減，很容易的適用不同尺寸得“T”型槽成“U”型槽。

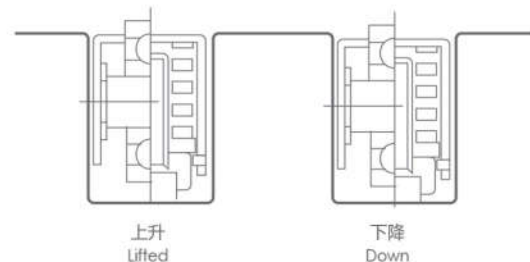
其基本長度有200mm與300mm兩種尺寸，經過搭配使用，可產生每100mm的總度變化。

These spring-loaded rollers easily fit to different-sized T-or U-slots on the bolster by adding the spacers to the side walls of the rollers.

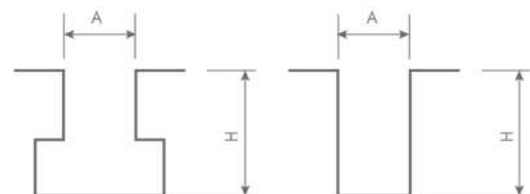
As rollers are available in standard lengths of 200mm and 300mm, any roller length can be constructed by combining these standard lengths in increments of 100mm.



◎ DR型結構與動作 / Construction and Action



◎ T/U槽尺寸 / T-slot / U-slot Dimensions



型號 Model	A	H
DR22	22	33~43
DR28	28	45~58



DR型基本尺寸特性 / Specifications				
基本型式 Specifications	寬度(mm) Width	長度(mm) Length	彈簧數量(pcs) Springs	單一彈簧舉模力(kgf) Lift Force
DRL22-200 / DRB22-200	22	200	4	37.5
DRL22-300 / DRB22-300	22	300	6	37.5
DRL28-200 / DRB28-200	28	200	4	75
DRL28-300 / DRB28-300	28	300	6	75

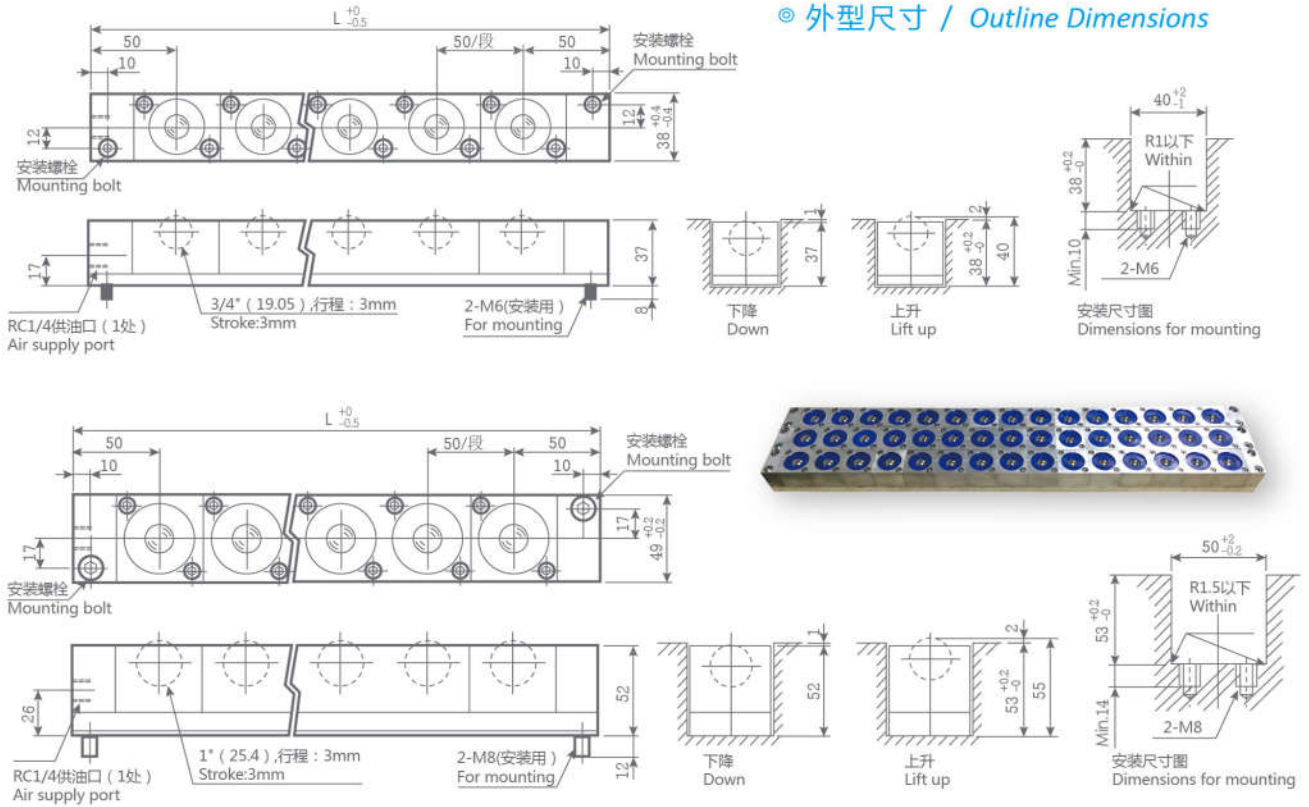
▼ 尚川快速换模系统之气动滚珠举模器

SUNZUANT Q.D.C.S. BALL LIFTER

PDB气动滚珠举模器是由高精度万向滚珠和气缸组合而成，安装在工作台上，通过气体将模具举起，在360°的水平方向上移动和旋转，是一款既省力又经济易用的举模器。

PDB type ball lifter is an economical and user-friendly labor saving device consisting of precision machined ball transfer units with air cylinder, which lifts object from the table and transfer or turn it in any horizontal direction

◎ 外型尺寸 / Outline Dimensions



举模器全长 Over all length of ball lifter L(mm)	重量 Weight		球数 No.of balls	供给压力在0.5Mpa时，滚珠的许用载荷 KN(kgf) Allowable load (per ball)																		
	PDB 38	PDB 50D		承载滚珠数量 (Nb) Minimum number of loaded ball																		
	1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
100	0.57	0.80	1	0.41 (42)																		
150	0.86	1.20	2	0.6 (61)	0.82 (84)																	
200	1.14	1.60	3	1.24 (127)	1.20 (122)	1.23 (126)																
250	1.43	2.00	4	2.49 (254)	1.79 (183)	1.65 (168)																
300	1.71	2.40	5	3.73 (381)	2.39 (244)	2.06 (210)																
350	2.00	2.80	6	4.98 (508)	2.99 (305)	2.47 (252)	2.06 (210)															
400	2.28	3.20	7	6.22 (635)	3.59 (366)	2.88 (294)	2.47 (252)	2.06 (210)														
450	2.57	3.60	8	7.47 (762)	4.19 (427)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)													
500	2.85	4.00	9	8.71 (889)	4.78 (488)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)												
550	3.14	4.42	10	9.96 (1016)	5.38 (549)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)											
600	3.42	4.80	11	11.2 (1143)	5.98 (610)	4.53 (462)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)										
650	3.71	5.20	12	12.4 (1270)	6.58 (671)	4.94 (504)	4.53 (462)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)									
700	3.99	5.60	13	13.7 (1397)	7.18 (732)	5.35 (546)	4.94 (504)	4.53 (462)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)								
750	4.28	6.00	14	14.9 (1524)	7.77 (793)	5.76 (588)	5.35 (546)	4.94 (504)	4.53 (462)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)							
800	4.56	6.40	15	16.2 (1651)	8.37 (854)	6.18 (630)	5.76 (588)	5.35 (546)	4.94 (504)	4.53 (462)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)						
850	4.85	6.80	16	17.4 (1778)	8.97 (915)	6.59 (672)	6.18 (630)	5.76 (588)	5.35 (546)	4.94 (504)	4.53 (462)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)					
900	5.13	7.20	17	18.7 (1905)	9.57 (976)	7.00 (714)	6.59 (672)	6.18 (630)	5.76 (588)	5.35 (546)	4.94 (504)	4.53 (462)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)				
950	5.42	7.60	18	19.9 (2032)	10.2 (1037)	7.41 (756)	7.00 (714)	6.59 (672)	6.18 (630)	5.76 (588)	5.35 (546)	4.94 (504)	4.53 (462)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)			
1000	5.70	8.00	19	21.2 (2159)	10.8 (1098)	7.82 (798)	7.41 (756)	7.00 (714)	6.59 (672)	6.18 (630)	5.76 (588)	5.35 (546)	4.94 (504)	4.53 (462)	4.12 (420)	3.70 (378)	3.29 (336)	2.88 (294)	2.47 (252)	2.06 (210)		

最少承载滚珠个数需要按照最恶劣的使用条件计算得出
The minimum number "Nb" should be calculated assuming worst case conditions

$$Nb = \frac{LD}{50} - 1 \quad (LD \text{ 为模具引出之长度，即移进移出方向})$$

▼ 快速換模系統之DL型油壓式舉模器(滾輪型)

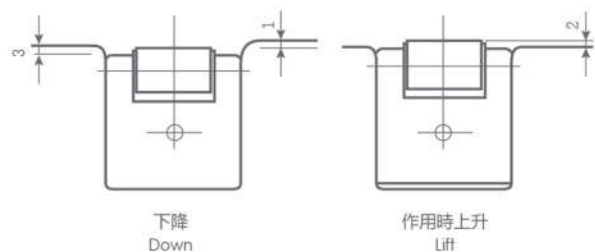
SUNZUANT Q.D.C.S. DL DIE LIFTER(ROLLER TYPE)

DL型油壓式舉模器以油壓方式舉模，有強力舉模能力適合模具重量變化差異大時使用。

The hydraulic DL DIE LIFTER withstands heavy load weights and abuse. The scrap guard/scrapers keep the roller surfaces free from scraps. The rollers are arrayed in closer pitches to prevent damage to the bottom of heavy dies.

The height of the roller can be adjusted by removing some of the built-in shims with different thicknesses.

DL滾輪油壓式舉模器



◎ 特性規格 / Specifications

基本型式 Basic Model	DL28	DL50
單一缸體舉模力(tons) Lifting Force per Cylinder tons	0.5	1.1
工作油壓(kgf/cm ²) Working Hydraulic Pressure	250	250
總上升行程(mm) Total Stroke mm	3	3
單一缸體容油量(cc.) One Cylinder Capacity cc	0.6	1.4
每個滾輪的最大載模能力 Roller Max. Load Cap(kg)		
模具材質 SS41	80	200
Die Material S45C	140	350



▼ 快速換模系統之DL型油壓式舉模器(滾輪型)

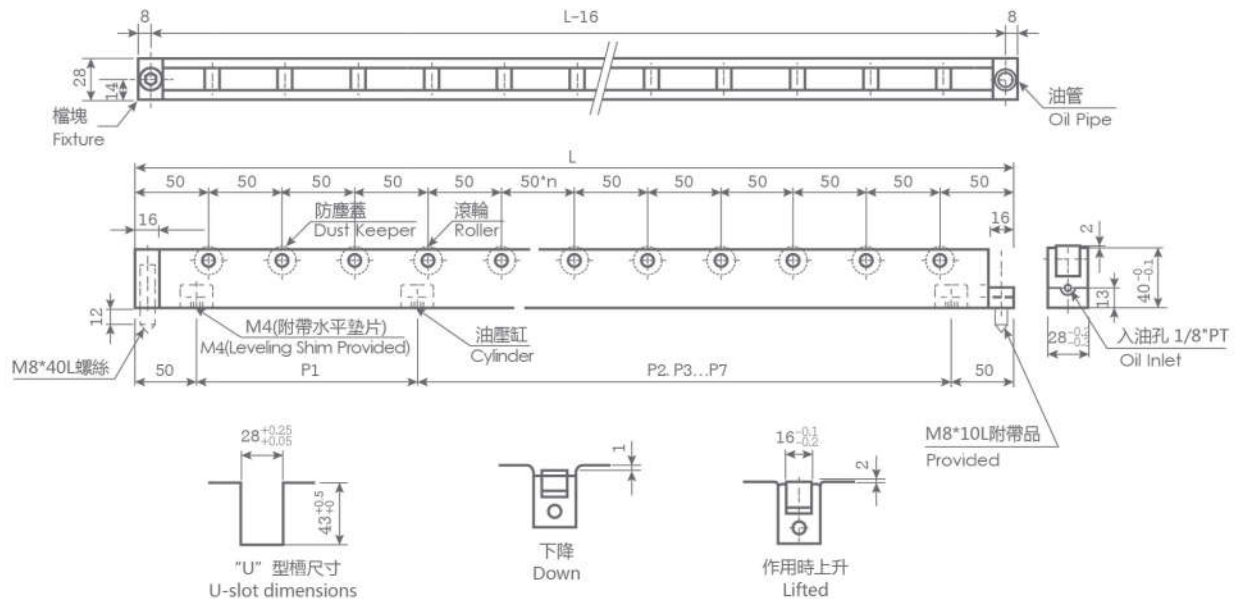
SUNZUANT Q.D.C.S. DL DIE LIFTER (ROLLER TYPE)

DL型油壓式舉模器以油壓方式舉模，有強力舉模能力適合模具重量變化差異大時使用。

The hydraulic DL DIE LIFTER withstands heavy load weights and abuse. The scrap guard/scrapers keep the roller surfaces free from scraps. The rollers are arrayed in closer pitches to prevent damage to the bottom of heavy dies.

The height of the roller can be adjusted by removing some of the built-in shims with different thicknesses.

◎ DL-28 / Model



規格(Model)	長度(L) Overall	滾輪數 Roller O'ty	載模能力(kgf) Load Cap		油壓缸(kg) Lift Cylinder		油壓缸距離(mm) Lift Cylinder Pitch							
			SS41	S45C	丁數Pcs	舉模力(kgf) Lift Cylinder	P1	P2	P3	P4	P5	P6	P7	
DL28-400	400	7	640	1120	2	1000	300							
DL28-500	500	9	720	1260	3	1500	90	310						
DL28-600	600	11	800	1400	4	2000	100	340	60					
DL28-700	700	13	880	1540	4	2000	150	350	100					
DL28-800	800	15	960	1680	5	2500	95	95	390	120				
DL28-900	900	17	1040	1820	5	2500	110	110	410	170				
DL28-1000	1000	19	1120	1960	6	3000	130	130	420	110	110			
DL28-1100	1100	21	1200	2110	6	3000	120	120	460	150	150			
DL28-1200	1200	23	1280	2240	7	3500	300	200	200	150	150	100		
DL28-1300	1300	25	1360	2380	7	3500	150	150	300	300	150	150		
DL28-1400	1400	27	1440	2520	8	4000	350	250	200	150	150	100	100	
DL28-1500	1500	29	1520	2660	8	4000	350	350	200	150	150	100	100	

※ 註：SS41, S45C為模具材質，訂購時，如有下料孔請附台盤藍圖。

SS41, S45C is die material. When you purchase, please attach bolster plate diagram for correct size of waste material hole at the bottom.

▼ 快速換模系統之DL型油壓式舉模器(滾輪型)

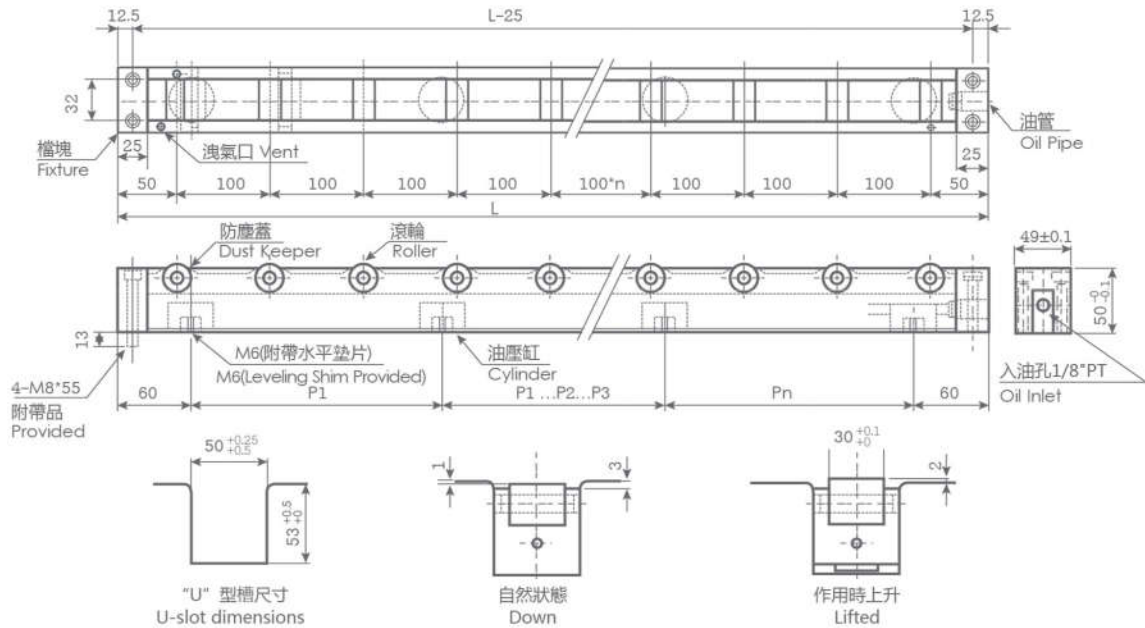
SUNZUANT Q.D.C.S. DL DIE LIFTER(ROLLER TYPE)

DL型油壓式舉模器以油壓方式舉模，有強力舉模能力適合模具重量變化差異大時使用。

The hydraulic DL DIE LIFTER withstands heavy load weights and abuse. The scrap guard/scrapers keep the roller surfaces free from scraps. The rollers are arrayed in closer pitches to prevent damage to the bottom of heavy dies.

The height of the roller can be adjusted by removing some of the built-in shims with different thicknesses.

◎ DL-50 / Model



規格(Model)	長度(L) Overall	滾輪數 Roller O'ty	載模能力(kgf) Load Cap		油壓缸(kg) Lift Cylinder		油壓缸距離(mm) Lift Cylinder Pitch							
			SS41	S45C	丁數Pcs	舉模力(kgf) Lift Cylinder	P1	P2	P3	P4	P5	P6	P7	
DL50-400	400	4	1000	1750	2	2200	280							
DL50-500	500	5	1200	2100	2	2200	90	290						
DL50-600	600	6	1400	2450	3	3300	90	330	60					
DL50-700	700	7	1600	2800	3	3300	140	340	100					
DL50-800	800	8	1800	3150	4	4400	170	390	120					
DL50-900	900	9	2000	3500	4	4400	210	400	170					
DL50-1000	1000	10	2200	3850	5	5500	125	125	410	220				
DL50-1100	1100	11	2400	4200	5	5500	150	150	400	380				
DL50-1200	1200	12	2600	4550	5	5500	150	150	400	380				
DL50-1300	1300	13	2800	4900	6	6600	150	150	200	400	280			
DL50-1400	1400	14	3000	5250	6	6600	150	150	200	400	380			
DL50-1500	1500	15	3200	5600	7	7700	150	150	200	300	300	280		
DL50-1600	1600	16	3400	5950	7	7700	100	150	250	400	300	280		
DL50-1700	1700	17	3600	6300	8	8800	100	100	150	250	300	300	380	
DL50-1800	1800	18	3800	6650	8	8800	100	100	150	250	300	300	480	

※ 註：SS41, S45C為模具材質，訂購時，如有下料孔請附台盤藍圖。

SS41, S45C is die material. When you purchase, please attach bolster plate diagram for correct size of waste material hole at the bottom.

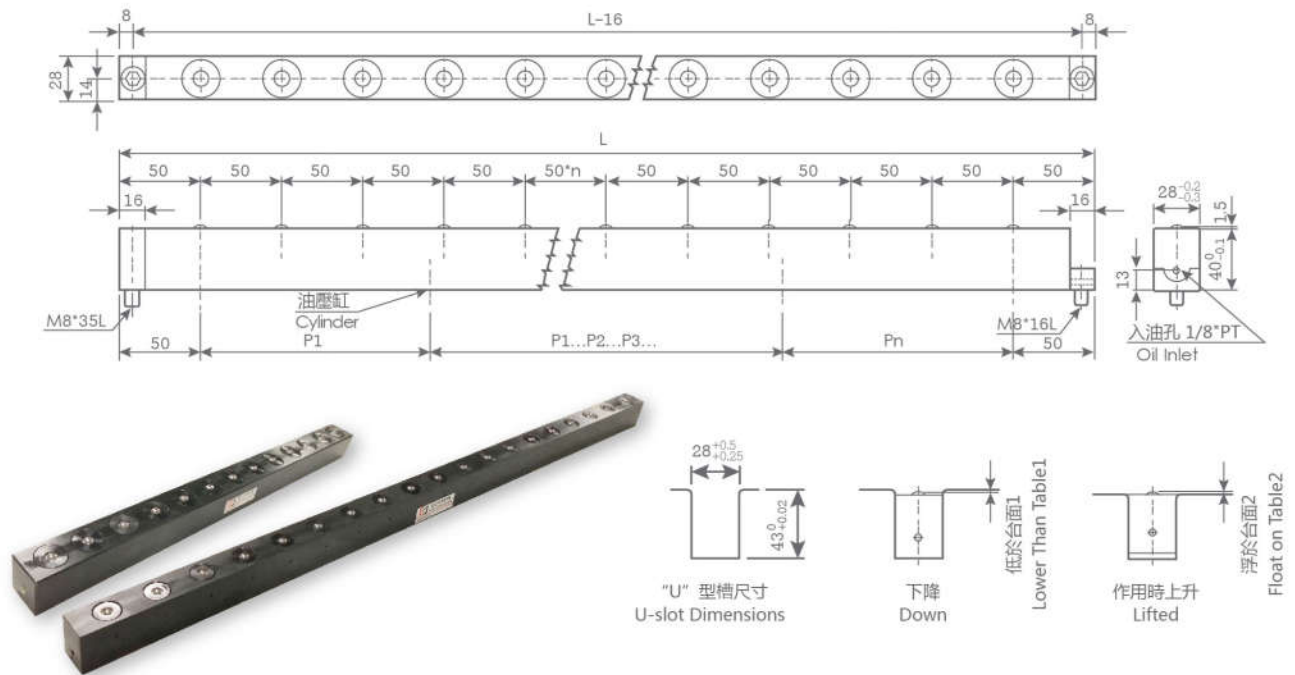
▼ 快速換模系統之DB型油壓式舉模器(滾珠型)

SUNZUANT Q.D.C.S. DB DIE LIFTER (BALL TYPE)

DB型油壓式舉模器利用萬向滾珠的方式，適合前後左右移動模具時使用。

The hydraulic DB DIE LIFTER employs universal bearings for superior forward and reverse, left and right motion of molds in and out of press machines.

◎ DB-28 / Model



規格(Model)	長度(L) Overall	滾珠數 Ball O'ty	油壓缸(kg)Lift Cylinder		油壓缸距離(mm)Lift Cylinder Pitch							
			丁數Pcs	舉模力(kgf) Lift Cylinder	P1	P2	P3	P4	P5	P6	P7	
DB28-400	400	7	2	1000	300							
DB28-500	500	9	3	1500	90	310						
DB28-600	600	11	4	2000	100	340	60					
DB28-700	700	13	4	2000	150	350	100					
DB28-800	800	15	5	2500	95	95	390	120				
DB28-900	900	17	5	2500	110	110	410	170				
DB28-1000	1000	19	6	3000	130	130	420	110	110			
DB28-1100	1100	21	6	3000	120	120	460	150	150			
DB28-1200	1200	23	7	3500	300	200	200	150	150	100		
DB28-1300	1300	25	7	3500	150	150	300	300	150	150		
DB28-1400	1400	27	8	4000	350	250	200	150	150	100	100	
DB28-1500	1500	29	8	4000	350	350	200	150	150	100	100	

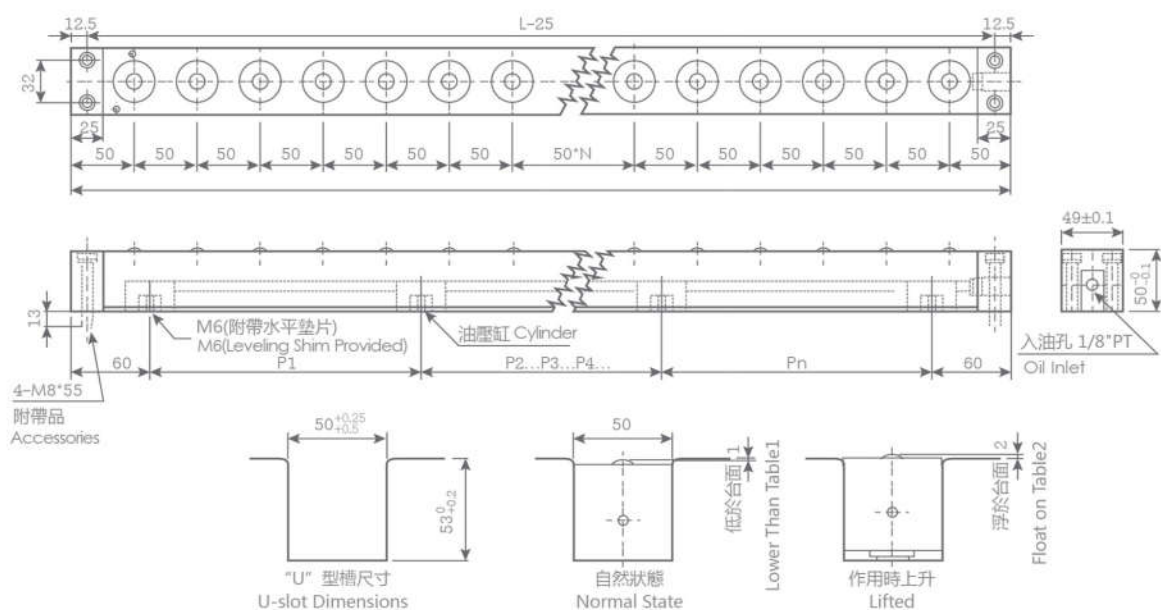
▼ 快速換模系統之DB型油壓式舉模器(滾珠型)

SUNZUANT Q.D.C.S. DB DIE LIFTER (BALL TYPE)

DB型油壓式舉模器利用萬向滾珠的方式，適合前後左右移動模具時使用。

The hydraulic DB DIE LIFTER employs universal bearings for superior forward and reverse, left and right motion of molds in and out of press machines.

◎ DB-50 / Model



規格(Model)	長度(L) Overall	滾輪數 Roller O'ty	油壓缸(kg) Lift Cylinder		油壓缸距離(mm) Lift Cylinder Pitch							
			丁數Pcs	舉模力(kgf) Lift Cylinder	P1	P2	P3	P4	P5	P6	P7	
DB50-400	400	7	2	2200	280							
DB50-500	500	9	3	3300	90	290						
DB50-600	600	11	4	4400	90	330	60					
DB50-700	700	13	4	4400	140	340	100					
DB50-800	800	15	4	4400	170	390	120					
DB50-900	900	17	4	4400	210	400	170					
DB50-1000	1000	19	5	5500	125	125	410	220				
DB50-1100	1100	21	5	5500	150	150	400	380				
DB50-1200	1200	23	5	5500	150	150	400	380				
DB50-1300	1300	25	6	6600	150	150	200	400	280			
DB50-1400	1400	27	6	6600	150	150	200	400	380			
DB50-1500	1500	29	7	7700	150	150	200	300	300	280		
DB50-1600	1600	31	7	7700	100	150	250	400	300	280		
DB50-1700	1700	33	8	8800	100	100	150	250	300	300	380	
DB50-1800	1800	35	8	8800	100	100	150	250	300	300	480	