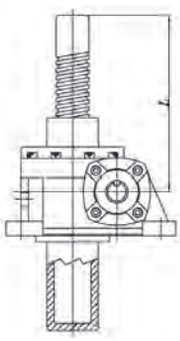
螺旋昇降機 Worm Gear Liner Actuator (Screw Jack)

- 容許彎曲負荷值
  Bending Tolerance Factor ---------- D01
- 蝸輪昇降機產品代碼說明 及 安裝方式
  Product Codes of Worm Gear Liner Actuator (SCREW JACK) & Mounting Positions ----- D02
- 螺桿端型式 及 行程總長對應表
  Screw rod end type & Stroke length calculate table---------- D03~D04
- 保護管計算表 及 直結馬力對應表
  Protecting pipe calculate & Input Flange Table ---------- D05
- 入力軸馬力與負載 及 昇降速度關係
  Loading and speed of lifting for Input horse power ---------- D06
- 技術參考資料
  Engineering Information ---------- D07
- 蝸輪減速機尺寸規範
  Worm Gear Linear Actuator (Screw Jack) series dimension ---------- D08~D17

容許彎曲負荷值
Bending Tolerance Factor

各種型號及負荷方式與有關牙桿長度以及容許彎曲負荷計算可參考下列各表及計算公式
Types,screws,tolerancerange as following tables

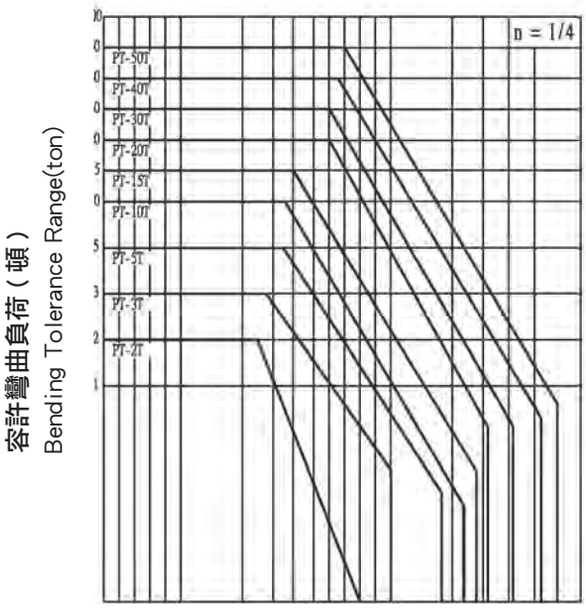
$Pcr = n\pi^2E(k/l)^2 \cdot A \cdot \alpha$		
n	軸端支承因數 Supporting factor on shaft end	1/4,1,,2
E	縱向彈性模數 Lengthwise elastic modulus	$(2.1x10^4 kgf/mm^2)$
K	最小輔助半徑 Minimum auxiliary radius	K = d1 / 4
d1	螺紋底直徑 Bottom diameter of the thread	19.9~81
L	軸支承長度 Shaft supporting length, as demand	視需求 As repuire
A	舉昇螺桿之螺紋底直徑的斷面積 Cross-section square measure of the thread bottom diameter of the screw rod	$A = \pi (d1)^2 / 4$
α	安全係數 Safe factor	α =0.25



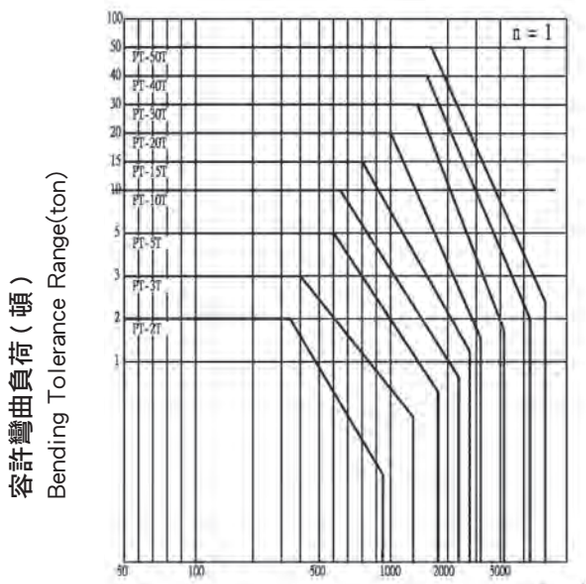
螺紋底直徑 (d1)：

Bottom diameter of the thread(d1)

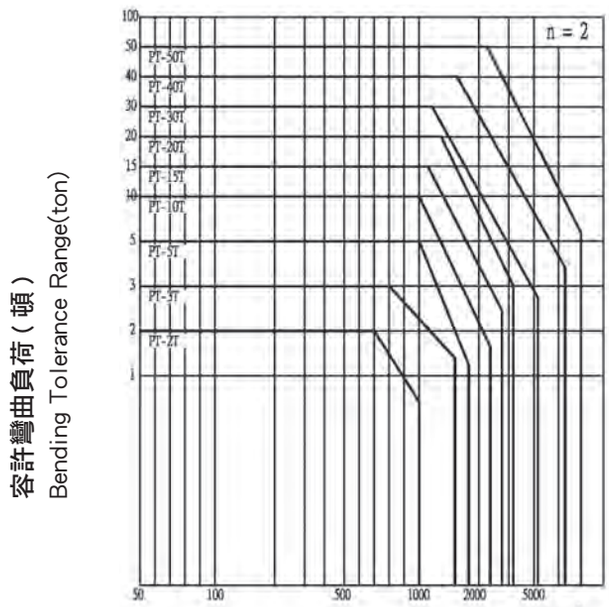
PT-01 - (19.9)
PT-02 - (19.9)
PT-03 - (25.2)
PT-05 - (31.5)
PT-10 - (35.9)
PT-15 - (42.3)
PT-20 - (53.0)
PT-30 - (63.7)
PT-50 - (81.0)



軸支承長度 (mm)Shaft supporting length(mm)
千斤頂固定 - 軸端游離
Fix by a jack - free shaft end



軸支承長度 (mm)Shaft supporting length(mm)
千斤頂固定 - 軸端支承
Supported by a jack - supported at the end of shaft



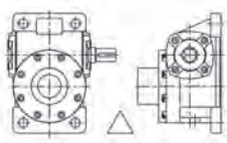
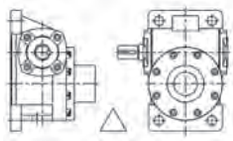
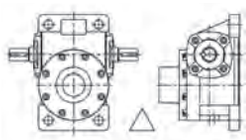
軸支承長度 (mm)Shaft supporting length(mm)
千斤頂固定 - 頂板固定
Fix by a jack - fixed at the top plate

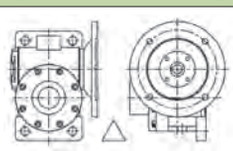
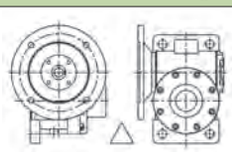
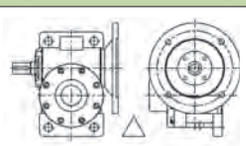
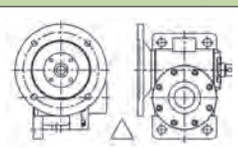
蝸輪昇降機產品代碼說明及安裝方式
Product Codes of Worm Gear Liner Actuator (SCREW JACK) & Mounting Positions

PT	-	05	-	E	-	S	-	SAR	-	1/24	-	400	-	N
昇降器 Linear		(1)		(2)		(3)		(4)		(5)		(6)		(7)

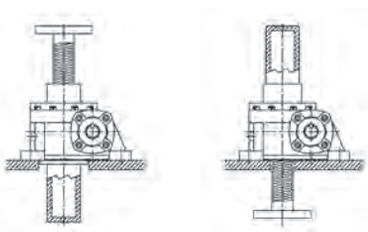
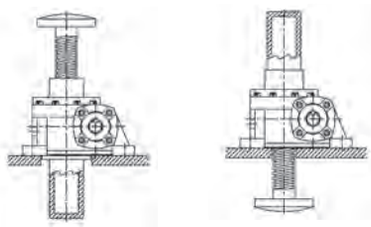
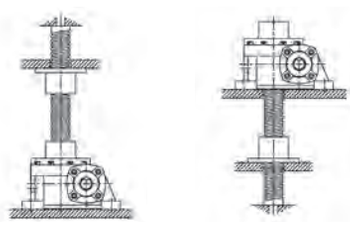
	(1) 型號 Type	(2) 安裝方式 Mounting position	(3) 螺桿端形式 Screw rod end type	(4) 入力形式 Power-input type	(5) 減速比 Ratio	(6) 行程 Stroke	(7) 保護管 Protecting pipe
說明 Description PT	01 15 02 20 03 30Y 05 30 10 50	A B C D E F	R- 平口式 R Plain end type S- 牙口式 S tooth end type H- 栓孔式 H bolt hole type T- 頂板式 T top plate type	SB SAR SAL MCR MCL MDR MDL	詳細速比請參照 D05 頁 Refer to the page D05	請客戶依需求選配 Suitable for customers	N 無 N non P 裝配 P equipped

入力形式 Input shaft direction

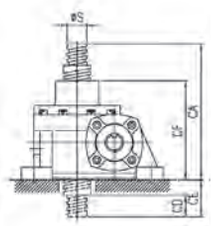
R 右側 Right	L 左側 Left	SB ・雙入力 Double input shafts
		
MC ・直結單入 Direct input shaft		MD ・直結雙入 Direct Double input shafts

R 法蘭右側 Right Right side of the flange	L 法蘭左側 Left Left side of the flange	R 法蘭右側 Right Right side of the flange	L 法蘭左側 Left Left side of the flange
			

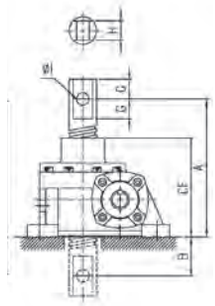
安裝方式 Mounting position

以舉昇量使螺桿接頭不致轉動 Fix the screw rod connect with lift force	以楔子固定昇降螺桿使之不致轉動 （螺桿上下位移，不旋轉） Fix the screw rod connect with wedge (Screw rod can up and down but cannot rotate)	螺桿旋轉 - 活動螺帽必須與昇降機件接合 昇降機件應於固定使之一致轉動 Screw rod rotate-Outer movable nut must connect with actuator components and actuator components must be fixed to make it rotating as an unity
 (A) 直立式 Vertical type (B) 倒立式 Upside down type	 (C) 鎖定直立式 Lock vertical type (D) 鎖定倒立式 Lock upside down type	 (E) 旋轉直立式 Rotating vertical type (F) 旋轉倒立式 Rotating upside down type

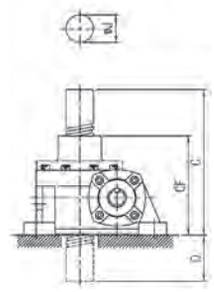
螺桿端型式及行程總長對應表
Screw rod end type & Stroke length calculate table



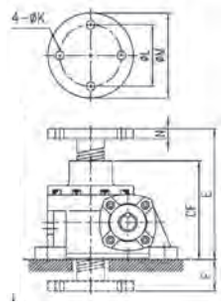
S 型【牙口式】
S type【Tooth end type】



H 型【栓孔式】
H type【Bolt hole type】



R 型【平口式】
R type【Plain end type】

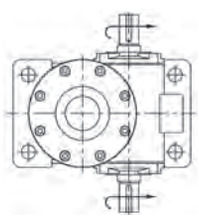


T 型【頂板式】
T type【Top plate type】

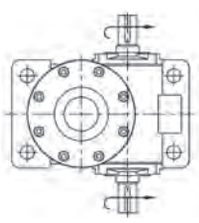
型號 Type	A	B	C	CA	CD	CE	CF	D	E	F	G	H	I	J	K	L	M	N	S	
PT-01	110	55	145	130	28	40	90	55	115	25	20	16	12	1"	12	70	90	10	M16*P2	5/8"-18NF
PT-02	130	55	165	150	28	40	110	55	135	25	20	16	12	1"	12	70	90	10	M16*P2	5/8"-18NF
PT-03	155	65	165	180	32	50	130	65	160	30	25	20	14	1 1/4"	12	80	100	13	M22*P2.5	7/8"-14NF
PT-05	155	65	195	180	35	50	130	65	160	30	25	25	16	1 1/2"	12	90	115	13	M27*P3	1 1/8"-12NF
PT-10	200	95	225	220	40	60	160	65	200	40	32	32	20	1 3/4"	14	100	140	16	M30*P3.5	1 1/4"-12NF
PT-15	200	95	225	220	45	60	170	65	210	50	32	36	24	2"	18	110	150	20	M36*P4	1 1/2"-12NF
PT-20	240	114	250	260	55	80	180	70	235	55	35	44	26	2 1/2"	21	125	180	25	M45*P4.5	1 3/4"-12NF
PT-30(Y)	280	135	285	290	65	80	210	75	275	65	44	58	35	3"(Ø75)	21	140	190	28	M56*P5.5	2 1/4"-12NF

旋向與昇降關係參考圖
Reference drawings for the relationship between rotating direction and up-and-down movement

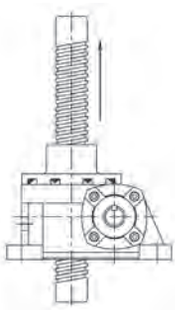
右旋 Right rotation



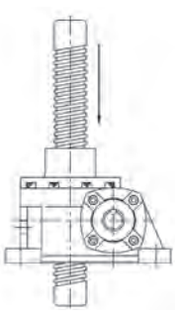
左旋 Lift rotation



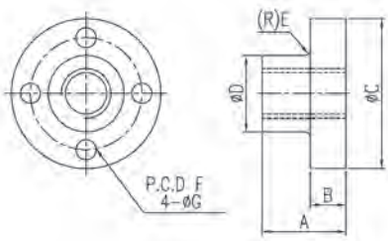
方牙向上
Square tooth upward



方牙向下
Square tooth downward



活動螺帽參考尺寸
Movable nut dimension



型號 Type	A	B	C	D	E	F	G
PT-01	38	16	76	38	4	57	12
PT-02	38	16	76	38	4	57	12
PT-03	44	18	94	48	4	72	14
PT-05	50	20	114	58	5	86	14
PT-10	75	32	134	68	5	100	18
PT-15	85	35	150	78	5	115	18
PT-20	100	40	180	90	5	135	21
PT-30(Y)	120	50	190	100	5	145	21
PT-50	150	60	230	130	5	180	24

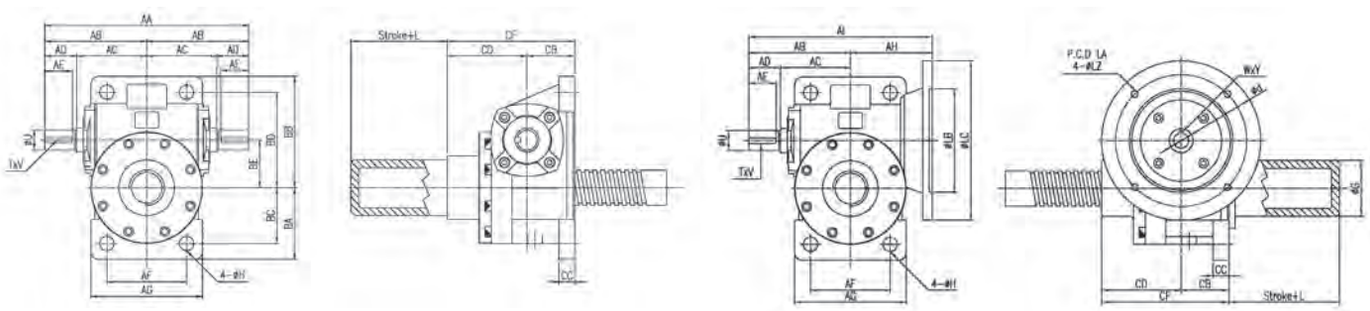
螺桿端型式及行程總長對應表
Screw rod end type & Stroke length calculate table

型號 Type	直徑 Diameter 英吋 (Inch)	螺距 Thread pitch (mm)	螺桿端 S 型 S type screw rod end (mm)		螺桿端 H 型 H type screw rod end (mm)	
			機身 +CE+ 行程 = 螺桿總長 Machine length +CE+ stroke = total length of screw rod	螺桿總長 -CE= 牙長 Total length of screw rod-CE = tooth length	機身 +B+G+ 行程 = 螺桿總長 Machine length+B+G+ stroke = total length of screw rod	螺桿總長 -B-G= 牙長 Total length of screw rod -B-G = tooth length
PT-02	1"	P=5	110+40+300=450	450-40=410	110+55+20+300=485	480-55-20=410
PT-03	1 1/4"	P=6	130+50+300=480	480-50=430	130+65+25+300=520	520-65-25=430
PT-05	1 1/2"	P=6	130+50+300=480	480-50=430	130+65+25+300=520	520-65-25=430
PT-10	1 3/4"	P=8	160+60+300=520	520-60=460	160+95+32+300=587	587-95-32=460
PT-15	2"	P=8	170+60+300=530	520-60=460	170+95+32+300=597	587-95-32=460
PT-20	2 1/2"	P=10	180+80+300=560	560-80=480	180+114+35+300=629	629-144-35=480
PT-30	3"	P=12	210+80+300=590	590-80=510	210+135+44+300=689	689-135-44=510
PT-30Y	Ø 75mm	P=12	220+80+300=600	600-80=520	220+135+44+300=699	699-135-44=520
PT-50	4"	P=20	315+120+300=735	735-120=615	315+165+64+300=844	844-165-64=615

型號 Type	直徑 Diameter 英吋 (Inch)	螺距 Thread pitch (mm)	螺桿端 R 型 R type screw rod end (mm)		螺桿端 T 型 T type screw rod end (mm)	
			機身 +D+ 行程 = 螺桿總長 Machine length+D+stroke = length of screw rod	螺桿總長 -D= 牙長 Total length of screw rod-D = tooth length	機身 +F+ 行程 = 螺桿總長 Machine length+F+stroke = total length of screw rod	螺桿總長 -F= 牙長 Total length of screw rod-F = tooth length
PT-2	1"	P=5	110+55+300=465	465-55=410	110+25+300=435	435-25=410
PT-3	1 1/4"	P=6	130+65+300=495	495-65=430	130+30+300=460	460-30=430
PT-5	1 1/2"	P=6	130+65+300=495	495-65=430	130+30+300=460	460-30=430
PT-10	1 3/4"	P=8	160+65+300=525	525-65=460	160+40+300=500	500-40=460
PT-15	2"	P=8	170+65+300=535	525-65=460	170+50+300=520	500-50=460
PT-20	2 1/2"	P=10	180+70+300=550	550-70=480	180+55+300=535	535-55=480
PT-30	3"	P=12	210+75+300=585	585-75=510	210+65+300=575	575-65-=510
PT-30Y	Ø 75 mm	P=12	220+75+300=595	595-75=520	220+65+300=585	585-65-=520
PT-50	4"	P=20	315+114+300=729	729-114=615	315+75+300=690	690-75=615

保護管計算表及直結馬力對照表
Protecting pipe calculate and Input Flange Table

型號 Type	PT-1	PT-2	PT-3	PT-5	PT-10	PT-15	PT-20	PT-30	PT-30Y	PT-50
方螺紋直徑 螺距 Shaft diameter	1" ACME P=5	1" ACME P=5	1 1/4" ACME P=6	1 1/2" ACME P=6	1 3/4" ACME P=8	2" ACME P=8	2 1/2" ACME P=10	3" ACME P=12	Ø75 ACME P=12	4" ACME P=20
減速比 Ratio	1/5 1/10 1/20	1/5 1/10 1/20	1/6 1/12 1/24	1/6 1/12 1/24	1/8 1/16 1/32	1/8 1/16 1/32	1/10 1/20 1/40	1/12 1/18 1/36	1/12 1/18 1/36	1/10 1/20 1/40
AA	140	170	220	220	256	264	316	390	390	522
AB	70	85	110	110	128	132	158	195	195	261
AC	40	55	70	70	88	92	108	130	130	196
AD	30	30	40	40	40	40	50	65	65	65
AE	25	25	35	35	35	35	45	55	55	60
AF	80	66	80	90	100	110	140	160	190	*
AG	102	90	110	120	140	150	180	210	230	*
AH	*	75	100	101	103	113	128	140	152.5	240
AI	*	160	210	211	231	245	286	335	347.5	501
BA	44	50	57	60	90	90	95	115	110	*
BB	74	85	98	110	140	140	155	180	200	261
BC	32	38	42	45	70	70	75	90	85	*
BD	62	73	83	95	120	120	135	155	175	235
BE	30	35	40	50	60	60	70	80	100	135
CB	38	40	50	50	60	60	70	80	85	110
CC	13	15	18	18	20	20	25	30	30	32
CD	52	70	80	80	100	100	110	130	135	130
CF	90	110	130	130	160	170	180	210	220	320
ØD	34.2	42.9	42.9	48.8	60.8	60.8	76.6	*	*	*
ØG	48.8	48.8	60.8	63.5	89	89	102.1	*	*	*
ØU	14	15	18	18	25	25	28	32	32	48
T*V	5*3	5*3	5*3	5*3	7*4	7*4	7*4	10*5	10*5	12*5
L	Stroke + 30（行程如上 30mm）									
ØLA	*	130	130	130	165	165	165	215	215	265
ØLB	*	110	110	110	130	130	130	180	180	230
ØLC	*	160	160	160	200	200	200	250	250	300
ØLZ	*	M8*P1.25	M8*P1.25	M8*P1.25	M10*P1.5	M10*P1.5	M10*P1.5	M12*P1.75	M12*P1.75	M16*P2.0
Ød W*Y 直結馬力 HP	*	Ø11 5*2.3 1/4HP	Ø14 5*2.3 1/2HP	Ø14 5*2.3 1/2HP	Ø19 6*2.8 1HP Ø19 6*2.8 1HP Ø24 8*3.3 2HP Ø24 8*3.3 2HP		Ø24 8*3.3 2HP	Ø28 8*3.3 3HP	Ø28 8*3.3 3HP	Ø38 10*3.3 7-1/2HP
H	9	12	12	14	18	18	18	22	22	22



入力軸馬力與負載及昇降速度關係
Loading and speed of lifting for input Horse power

I.H：INPUT HP	W：LOAD (kg)	V：LIFTING SPEED(mm/min)
I.H：輸入馬力 (HP)	W：舉昇負荷 (kg)	V：舉昇速度 (mm/min)

型號 Type	方螺紋 Square thread 直徑 Diameter 螺距 Thread pitch	減速比 Ratio	機械效率 Efficiency	1800 R.P.M 入力回轉數 Input rotation/ per minute			1500 R.P.M 入力回轉數 Input rotation/ per minute			1200 R.P.M 入力回轉數 Input rotation/ per minute			900 R.P.M 入力回轉數 Input rotation/ per minute			600 R.P.M 入力回轉數 Input rotation/ per minute			300 R.P.M 入力回轉數 Input rotation/ per minute		
				I.H	W	V	I.H	W	V	I.H	W	V	I.H	W	V	I.H	W	V	I.H	W	V
PT-1	Ø1" ACME P=5	1/5	17.5	0.66	170	1800	0.59	200	1500	0.48	210	1200	0.41	230	900	0.42	240	600	0.22	250	300
		1/10	16.9	0.45	170	900	0.37	200	750	0.35	210	600	0.3	230	450	0.22	240	300	0.11	250	150
		1/20	13	0.31	220	450	0.34	240	375	0.29	250	300	0.19	260	225	0.16	260	150	0.08	270	75
PT-2	Ø1" ACME P=5	1/5	21	0.95	220	1800	0.87	240	1500	0.89	280	1200	0.86	370	900	0.63	410	600	0.32	410	300
		1/10	19.5	0.51	220	900	0.47	240	750	0.48	280	600	0.38	300	450	0.34	410	300	0.23	540	150
		1/20	11.5	0.52	260	450	0.51	300	375	0.52	370	300	0.52	490	225	039	540	150	0.2	540	75
PT-3	Ø1 1/4" ACME P=6	1/6	20.9	1.34	280	1800	1.28	320	1500	1.21	340	1200	1.24	510	900	1.15	730	600	0.57	730	300
		1/12	20.8	0.91	390	900	0.88	430	750	0.83	510	600	0.79	660	450	0.64	810	300	0.32	810	150
		1/24	18	0.53	390	450	0.51	430	375	0.48	510	300	0.46	660	225	0.37	810	150	0.19	810	75
PT-5	Ø1 1/2" ACME P=6	1/6	19	1.89	370	1800	1.75	410	1500	1.68	470	1200	1.58	600	900	1.19	680	600	0.74	830	300
		1/12	18	1.5	540	900	1.39	600	750	1.33	730	600	1.19	850	450	0.8	850	300	0.46	1000	150
		1/24	17	1.06	730	450	0.98	810	375	0.94	960	300	0.75	1020	225	0.57	1150	150	0.28	1150	75
PT-10	Ø1 3/4" ACME P=8	1/8	18	2.89	520	1800	2.69	580	1500	2.52	660	1200	2.33	850	900	2.26	1220	600	1.78	1920	300
		1/16	17	1.53	520	900	1.42	580	750	1.33	660	600	1.29	880	450	1.2	1220	300	0.94	1920	150
		1/32	16	1.09	680	450	1.02	770	375	0.94	900	300	0.88	1110	225	0.85	1620	150	0.67	2550	75
PT-15	Ø2" ACME P=8	1/8	19	2.74	510	1800	2.54	580	1500	2.39	660	1200	2.21	850	900	2.14	1220	600	1.68	1920	300
		1/16	18	1.44	510	900	1.34	580	750	1.26	660	600	1.22	880	450	1.13	1220	300	0.89	1920	150
		1/32	17	1.03	680	450	0.96	770	375	0.88	900	300	0.85	1110	225	0.8	1620	150	0.63	2550	75
PT-20	Ø2 1/2" ACME P=10	1/10	15.5	3.61	560	1800	3.98	730	1500	3.35	830	1200	3.16	980	900	2.88	1340	600	2.11	1940	300
		1/20	16.5	1.94	640	900	1.87	750	750	1.82	900	600	1.7	1110	450	1.56	1530	300	1.13	2210	150
		1/40	15	1.6	960	450	1.56	1110	375	1.49	1340	300	1.47	1750	225	1.28	2280	150	0.96	3320	75
PT-30	Ø3" ACME P=12	1/12	14.9	4.97	730	1800	4.81	850	1500	4.65	1050	1200	4.36	1300	900	4.03	1790	600	2.86	2550	300
		1/18	13.9	3.65	770	900	3.68	920	1000	6.52	1090	800	3.36	1390	600	3.01	1870	400	2.14	2660	200
		1/36	13	2.26	880	450	2.22	1020	500	2.19	1240	400	2	1560	300	1.85	2150	200	1.64	3810	100
PT-50	Ø4" ACME P=20	1/10	13	12.9	830	3600	12.5	980	3000	11.7	1130	2400	12.3	1600	1800	11.2	2170	1200	7.95	3060	600
		1/20	11.9	7.9	940	1800	7.84	1110	1500	7.39	1300	1200	7.65	1810	900	6.95	2470	600	4.9	3470	300
		1/40	10.9	5.6	1220	900	5.35	1390	750	5.02	1620	600	5.37	2320	450	4.77	3110	300	3.36	4360	150

技術參考資料
Engineering information

Formula A【 公式 A 】 V = (N x P) / i			
V：昇降速度 (mm/min) V：Lifting speed	N：入力迴轉速 (R.P.M) N：Input revolutions per minute	P：螺桿牙距 (mm) P：Thread pitch	i：減速比 i：Ratio
Formula B【 公式 B 】HP = (W x V / 1000) / (75 x 60 x η)			
HP：額定馬力 (HP) HP：Horsepower	W：昇降荷重 (Kg) W：Weight load	V：昇降速度 (mm/min) V：Lifting speed	η：機械效率 η：Efficiency
Formula C【 公式 C 】 HP = (T x N) / 716.2			
HP：額定馬力 (HP) HP：Horsepower	T：傳動扭矩 (Kg-M) T：Torque	N：入力迴轉速 (R.P.M) N：Input revolutions per minute	

表 U ※ 使用安全係數表 Table U Safe Factor Table

負荷性質 Load Type	使用範例 Example	使用安全係數 Safety Factor
均一負荷 Uniform	輸送帶轉換設備 ・ 閥門開關設備等 Conveyor , Valve System	1.0~1.3
中度衝擊 Medium Shock	各類昇降、橫移等移動設備 Left , down , move system	1.3~1.5
重度衝擊 Heavy Shock	各型壓延滾輪位置間隙調整定位 Orienta , locate system	1.5~3.0

表 G ※ 連動係數表 Gang Factor Table

連動數 (台) Amount	2	4	6	8
連動係數 Gang Factor	0.9	0.8	0.7	0.7

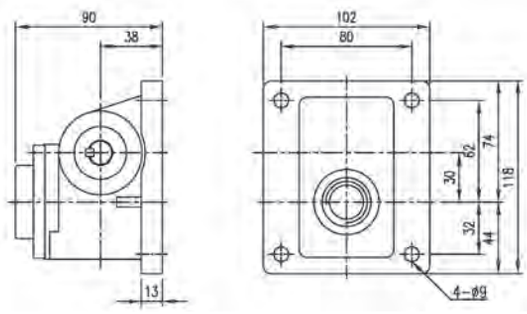
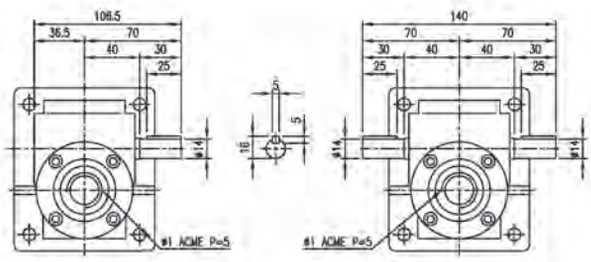
※ 計算範例 Example

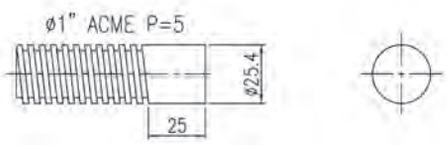
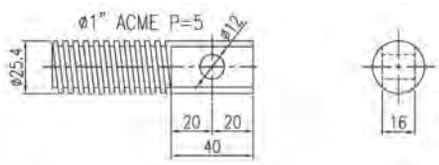
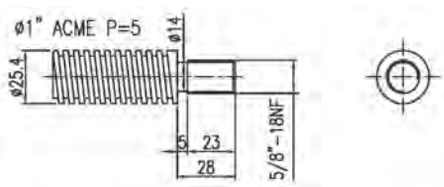
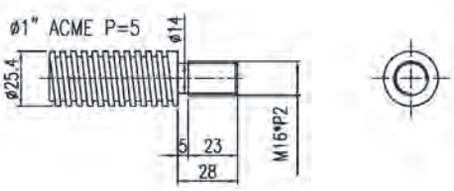
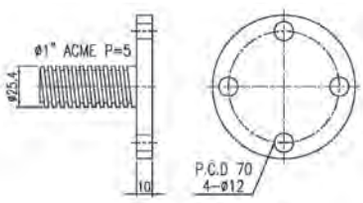
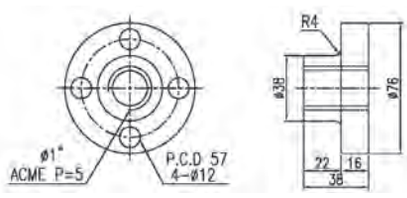
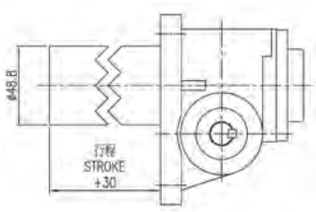
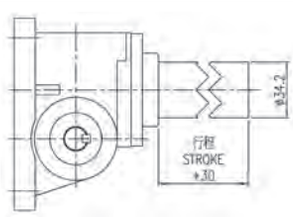
條件：負載荷重 6 公噸，昇降速度 450 mm / min，四點同步平面昇降。
試算：
從 表 (U) 可得知使用安全系速數值為 1.3，舉昇負荷為 (6,000 Kg / 4) X 1.3 = 1,950 Kg
從 頁 (D06) 舉昇負荷得知，選用 PT-20、螺桿直徑 Φ 63.5 MM、螺距 P = 10 MM
從上述數值帶入：
【 公式 A 】 減速比 (i) = (N X P) / V = (1,800 X 10) / 450 = 40
【 公式 B 】 馬力 (HP) = (W X V / 1,000) / (75 X 60 X η) = (6,000 X 450 / 1,000) / (75 X 60 X 0.15) = 4.0 HP
參考使用安全係數 表 (U)，安全係數值為 1.3，故 4 X 1.5 = 5.2 HP
參考連動系數表 表 (G)，連動系數值為 0.8， 5.2 / 0.8 = 6.5 HP
選擇最接近之市售馬力，故選擇 7.5 HP X 4 P 馬達。

Condition：LOAD 6,000 Kg , V (Move Speed) = 450 mm / min , 4 points uniform load and left.
Calculate：
Refer to table U, the S.F. is 1.3 , the loading is (6,000 Kg / 4) X 1.3 = 1,950 Kg
Refer to Page D06, select PT-20、Screw rod diameter Φ 63.5 MM、Screw rod thread pitch = 10 MM
Use above data into Formula A & B：
【 Formula A 】 Ratio (i) = (N X P) / V = (1,800 X 10) / 450 = 40
【 Formula B 】 HP = (W X V / 1,000) / (75 X 60 X η) = (6,000 X 450 / 1,000) / (75 X 60 X 0.15) = 4.0 HP
Refer to table U，S.F. is 1.3，get 4 X 1.5 = 5.2 HP
Refer to table G，Gang Factor is 0.8， 5.2 / 0.8 = 6.5 HP
We select the HP is 7.5HP X 4 P.

螺旋昇降器 Worm Gear Linear Actuator (Screw Jack)

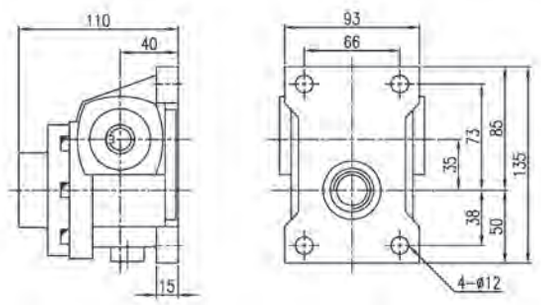
PT-01	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/5、1/10、1/20	Ø1"	P = 5	

機身尺寸 - Case Dimension	標準式 -Standard Type	
	單入力 - 右側 -SAR Single input shaft-right side	雙入力 -SB Double input shafts
		

牙桿型式 (Ø 1" ACME P = 5) – Screw Rod End Type			
R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】		S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type		B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	

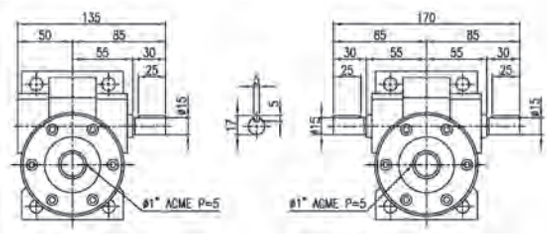
PT-02	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/5 、1/10 、1/20	Ø1"	P = 5	

機身尺寸 - Case Dimension



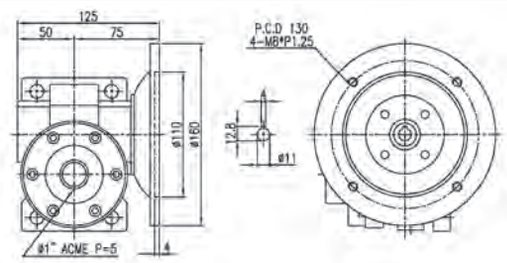
標準式 -Standard Type

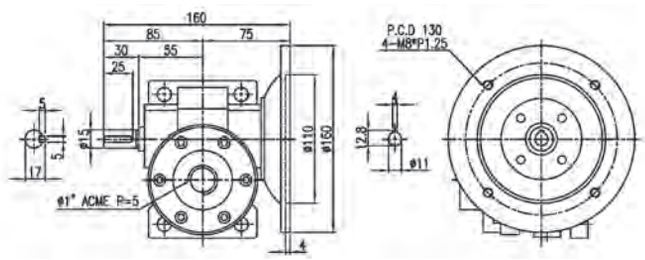
單入力 - 右側 -SAR Single input shaft-right side	雙入力 -SB Double input shafts



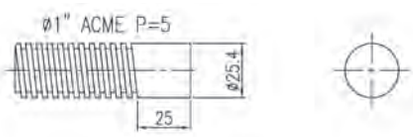
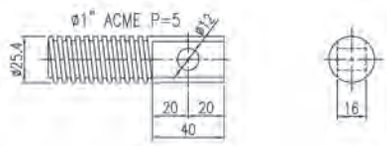
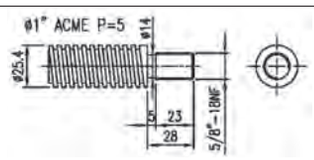
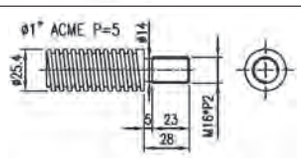
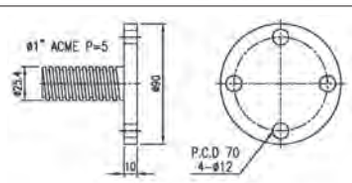
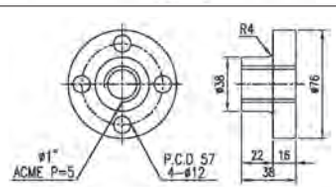
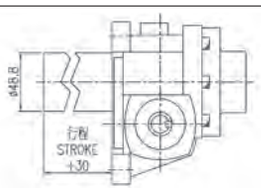
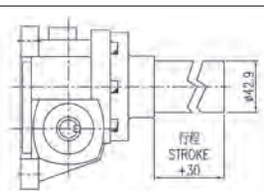
直結式 -Flange Type

單入力 - 右側 -MCR single direct input right side	雙入力 - 右側 -MDR Double direct input right side





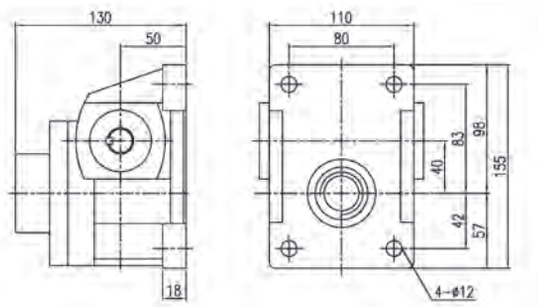
牙桿型式 (Ø 1" ACME P = 5) – Screw Rod End Type

R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】		S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type		B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	

螺旋昇降器 Worm Gear Linear Actuator (Screw Jack)

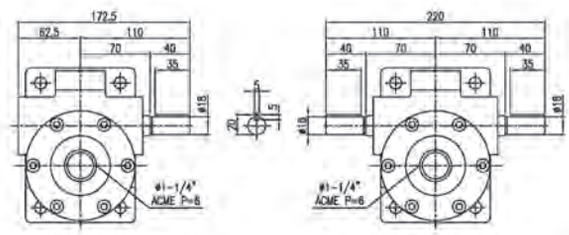
PT-03	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/6 、1/12 、1/24	Ø 1-1/4"	P = 6	

機身尺寸 - Case Dimension



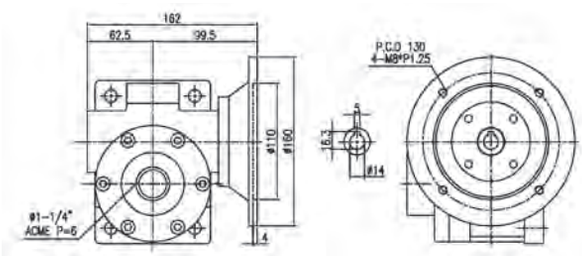
標準式 -Standard Type

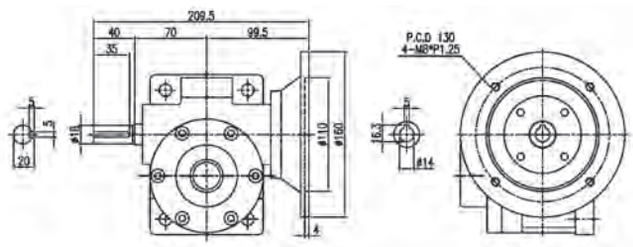
單入力 - 右側 -SAR Single input shaft-right side	雙入力 -SB Double input shafts



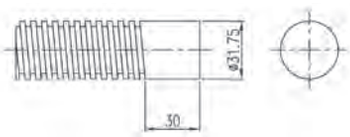
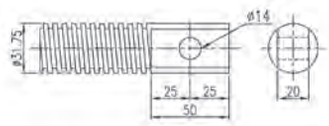
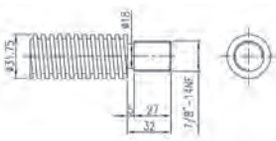
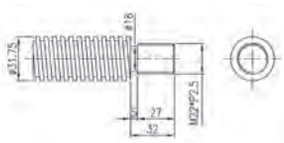
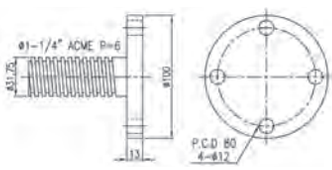
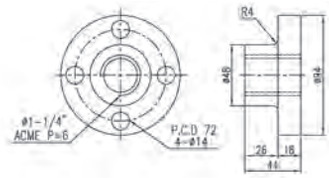
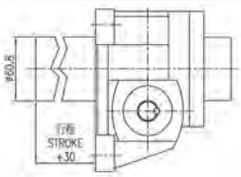
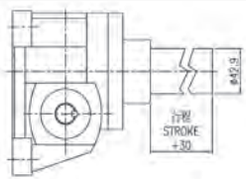
直結式 -Flange Type

單入力 - 右側 -MCR single direct input right side	雙入力 - 右側 -MDR Double direct input right side



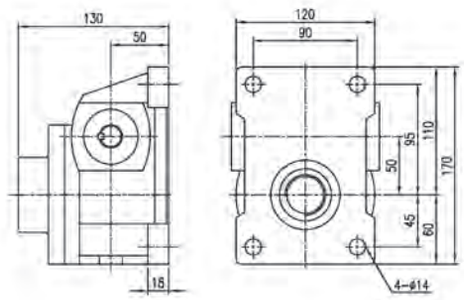


牙桿型式 (Ø 1-1/4" ACME P = 6) – Screw Rod End Type

R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】		S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type		B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	

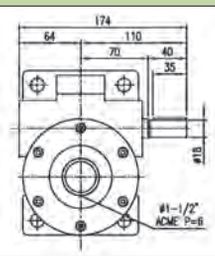
PT-05	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/6 、1/12 、1/24	Ø 1-1/2"	P = 6	

機身尺寸 - Case Dimension

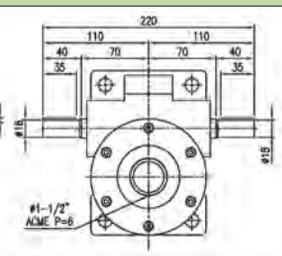


標準式 -Standard Type

單入力 - 右側 -SAR
Single input shaft-right side

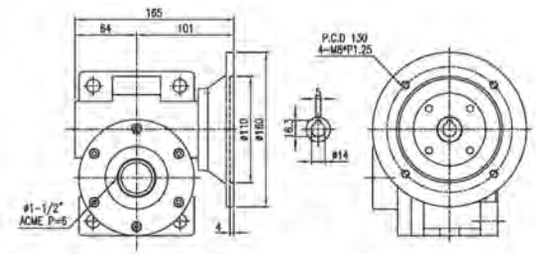


雙入力 -SB
Double input shaft

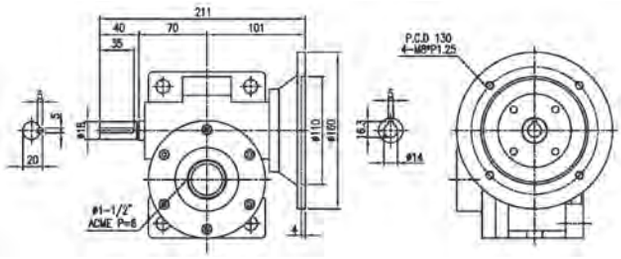


直結式 -Flange Type

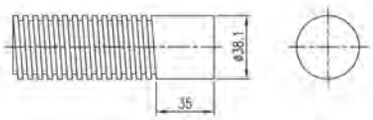
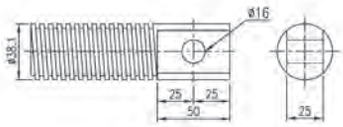
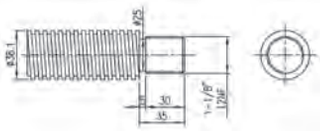
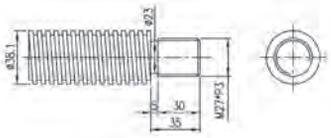
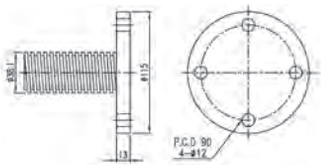
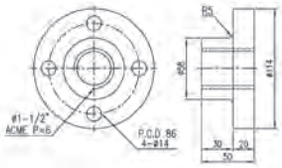
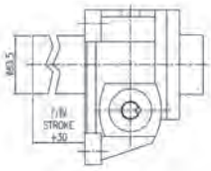
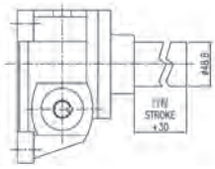
單入力 - 右側 -MCR
single direct input right side



雙入力 - 右側 -MDR
Double direct input right side



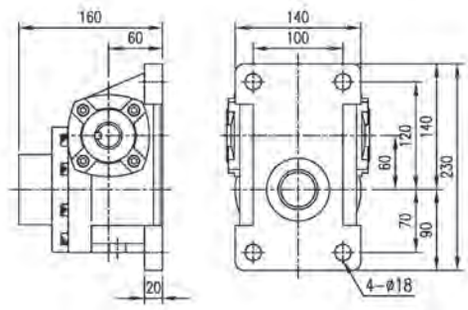
牙桿型式 (Ø 1-1/2" ACME P = 6) – Screw Rod End Type

R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】		S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type		B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	

螺旋昇降器 Worm Gear Linear Actuator (Screw Jack)

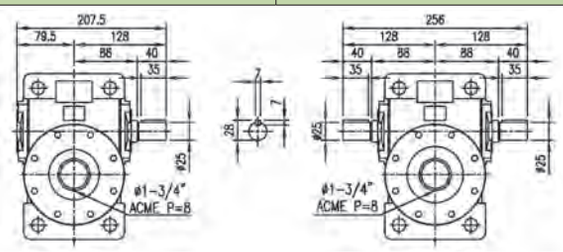
PT-10	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/8 、1/16 、1/32	Ø 1-3/4"	P = 8	

機身尺寸 - Case Dimension



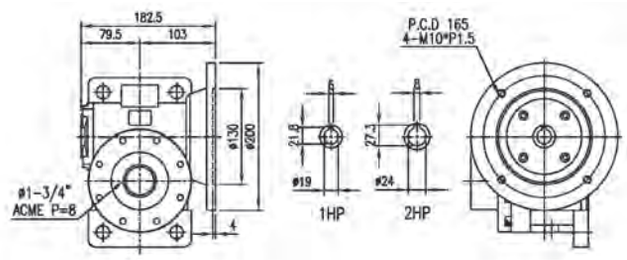
標準式 -Standard Type

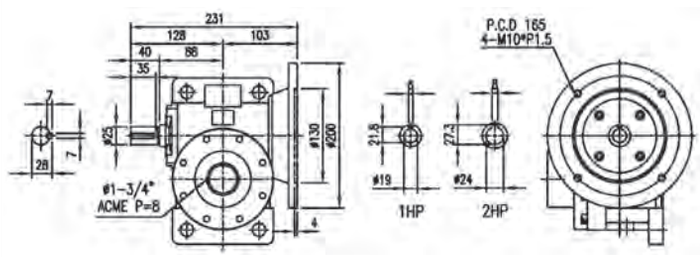
單入力 - 右側 -SAR Single input shaft-right side	雙入力 -SB Double input shafts



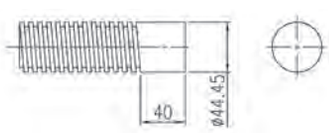
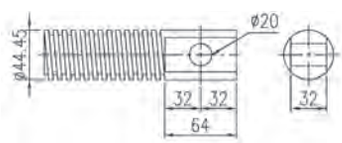
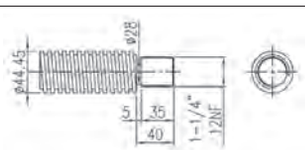
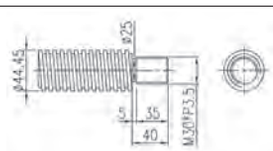
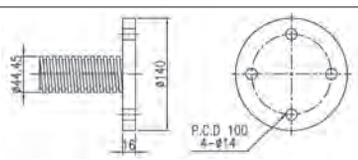
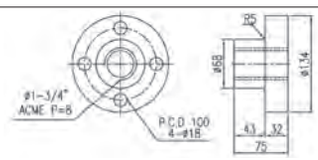
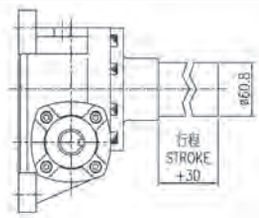
直結式 -Flange Type

單入力 - 右側 -MCR single direct input right side	雙入力 - 右側 -MDR Double direct input right side



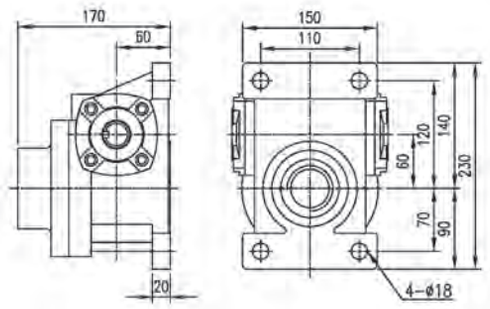


牙桿型式 (Ø 1-3/4" ACME P = 8) – Screw Rod End Type

R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】		S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type		B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	

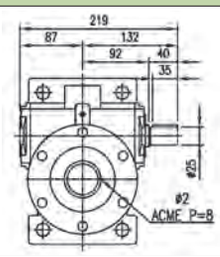
PT-15	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/8 、1/16 、1/32	Ø 2″	P = 8	

機身尺寸 - Case Dimension

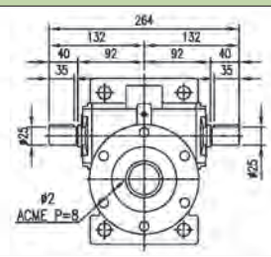


標準式 -Standard Type

單入力 - 右側 -SAR
Single input shaft-right side

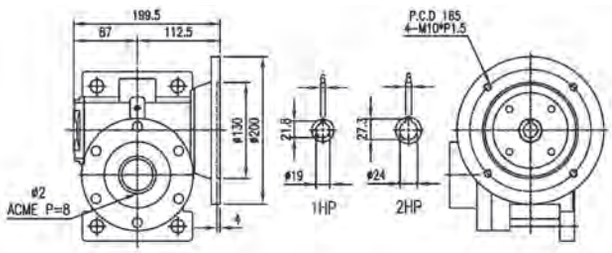


雙入力 -SB
Double input shafts

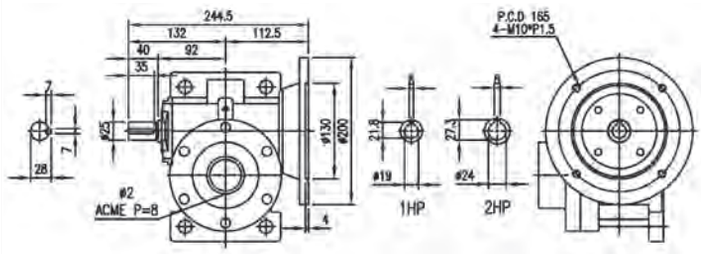


直結式 -Flange Type

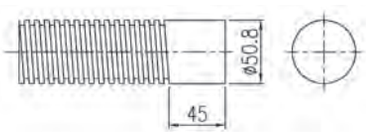
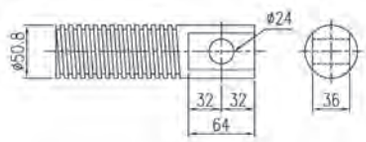
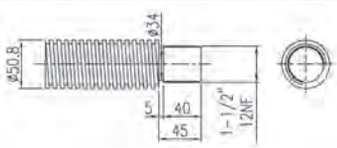
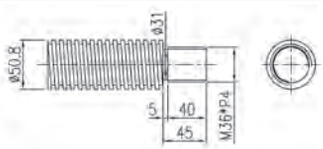
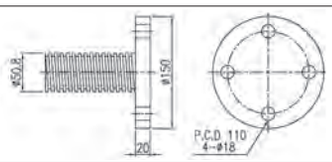
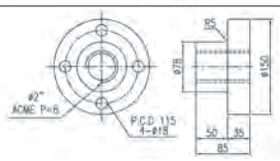
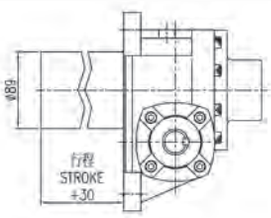
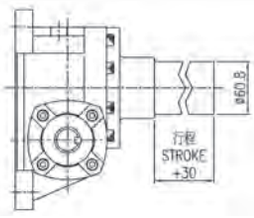
單入力 - 右側 -MCR
single direct input right side



雙入力 - 右側 -MDR
Double direct input right side



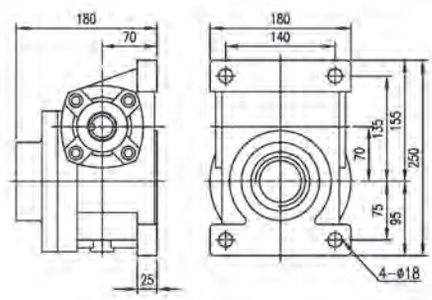
牙桿型式 (Ø 2" ACME P = 8) – Screw Rod End Type

R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】		S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type		B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	

螺旋昇降器 Worm Gear Linear Actuator (Screw Jack)

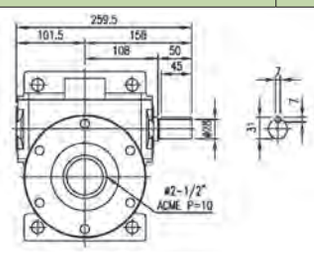
PT-20	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/10、1/20、1/40	Ø 2-1/2"	P = 10	

機身尺寸 - Case Dimension

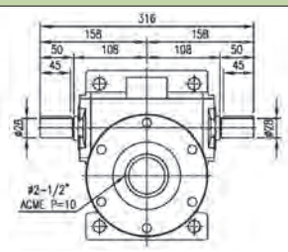


標準式 -Standard Type

單入力 - 右側 -SAR
Single input shaft-right side

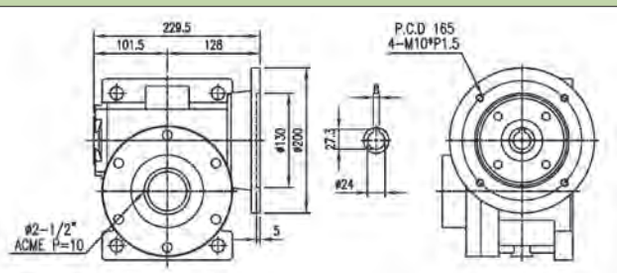


雙入力 -SB
Double input shafts

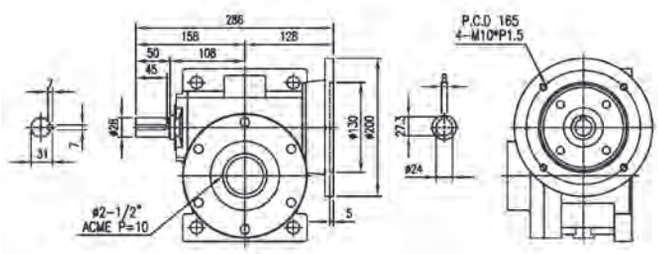


直結式 -Flange Type

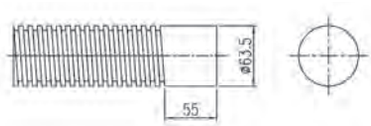
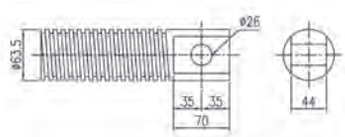
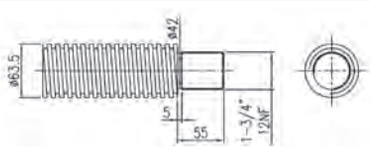
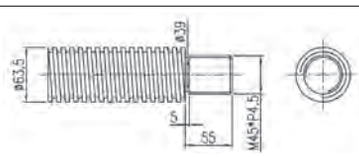
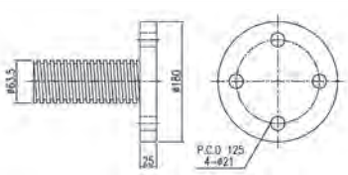
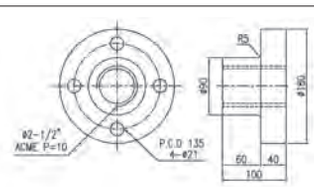
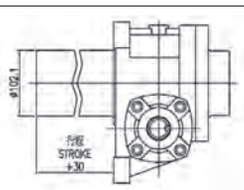
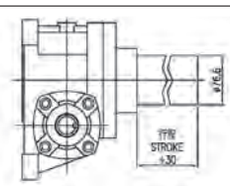
單入力 - 右側 -MCR
single direct input right side



雙入力 - 右側 -MDR
Double direct input right side

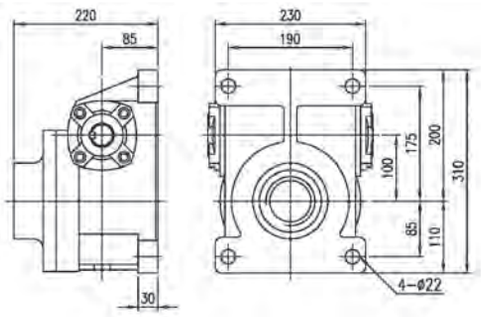


牙桿型式 (Ø 2-1/2" ACME P = 10) – Screw Rod End Type

R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】		S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type		B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	

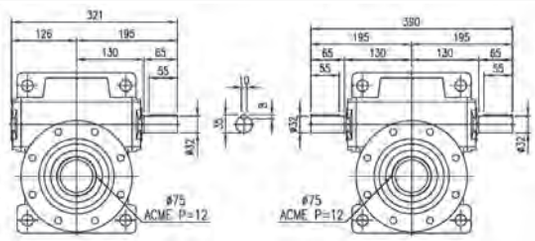
PT-30Y	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/12、1/18、1/36	Ø 75	P = 12	

機身尺寸 - Case Dimension



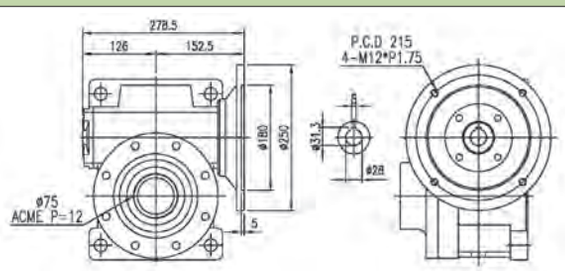
標準式 -Standard Type

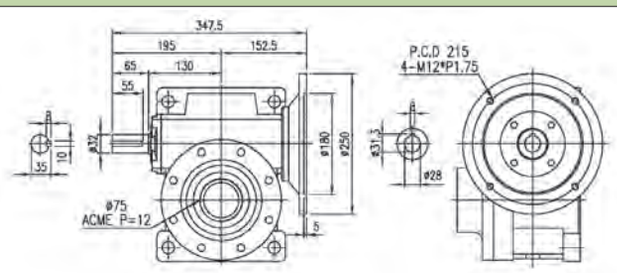
單入力 - 右側 -SAR Single input shaft-right side	雙入力 -SB Double input shafts



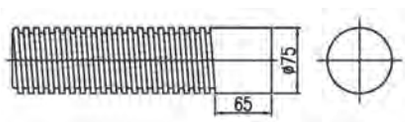
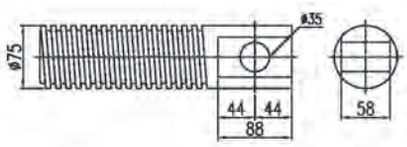
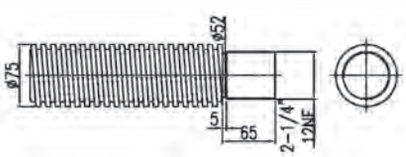
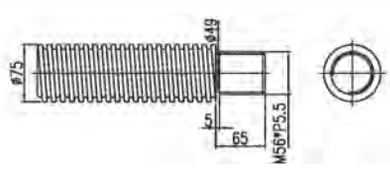
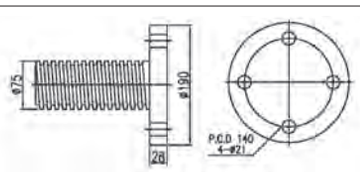
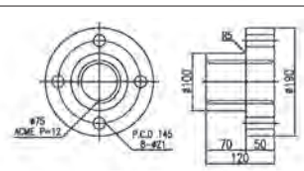
直結式 -Flange Type

單入力 - 右側 -MCR single direct input right side	雙入力 - 右側 -MDR Double direct input right side





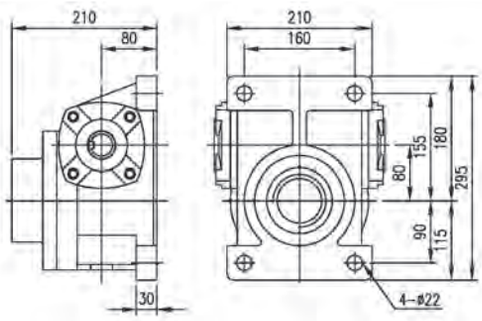
牙桿型式 (Ø 75" ACME P = 12) – Screw Rod End Type

R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】		S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type	詳細尺寸請電洽業務 Please check your sales to get more information	B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	詳細尺寸請電洽業務 Please check your sales to get more information

螺旋昇降器 Worm Gear Linear Actuator (Screw Jack)

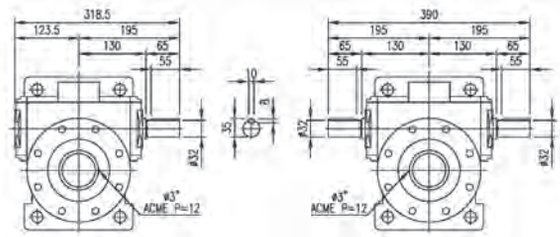
PT-30	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/12、1/18、1/36	Ø 3″	P = 12	

機身尺寸 - Case Dimension



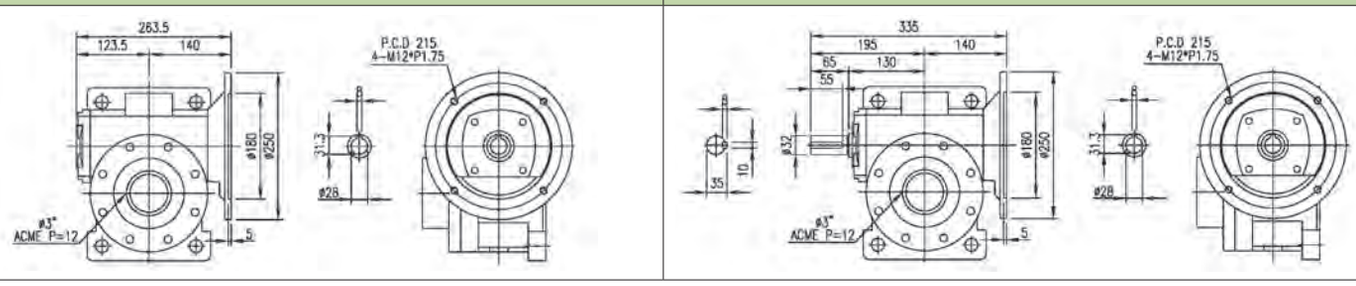
標準式 -Standard Type

單入力 - 右側 -SAR Single input shaft-right side	雙入力 -SB Double input shafts

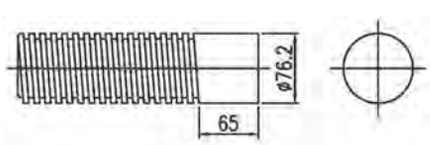
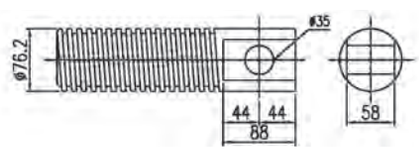
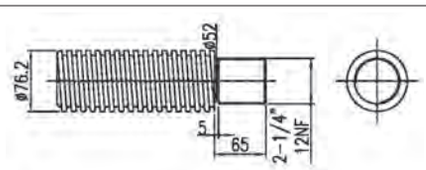
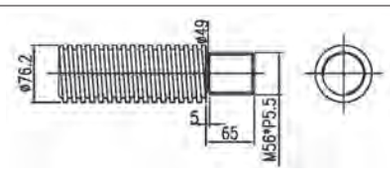
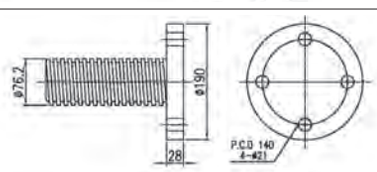
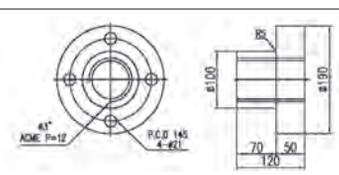


直結式 -Flange Type

單入力 - 右側 -MCR single direct input right side	雙入力 - 右側 -MDR Double direct input right side

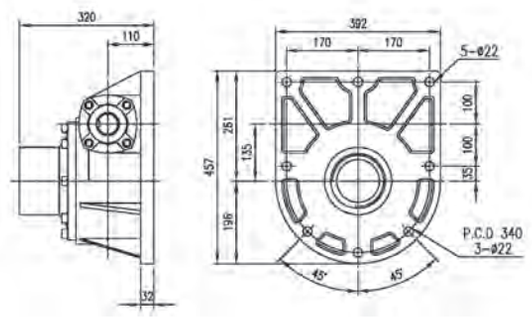


牙桿型式 (Ø 3" ACME P = 12) – Screw Rod End Type

R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】		S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type	詳細尺寸請電洽業務 Please check your sales to get more information	B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	詳細尺寸請電洽業務 Please check your sales to get more information

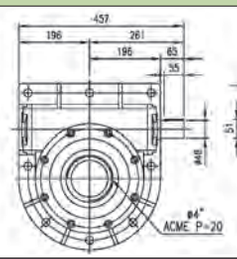
PT-50	減速比 Ratio	螺桿直徑 Screw rod diameter (Inch)	螺桿螺距 Screw rod thread pitch (mm)	
	1/10 、1/20 、1/40	Ø 4"	P = 20	

機身尺寸 - Case Dimension

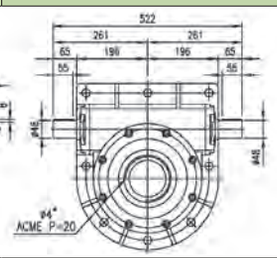


標準式 -Standard Type

單入力 - 右側 -SAR
Single input shaft-right side

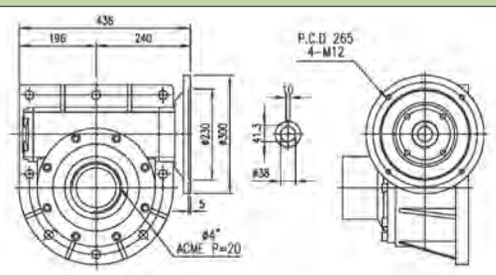


雙入力 -SB
Double input shafts

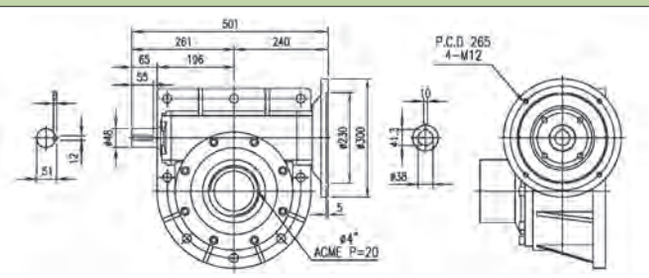


直結式 -Flange Type

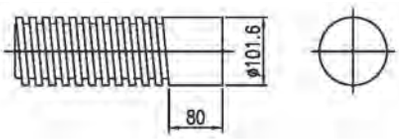
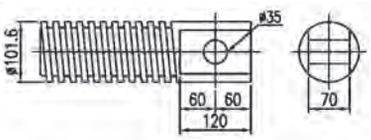
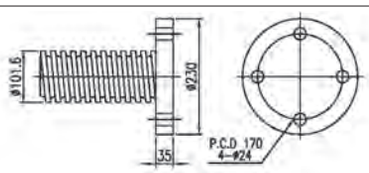
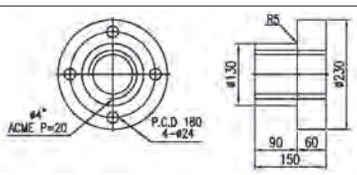
單入力 - 右側 -MCR
single direct input right side



雙入力 - 右側 -MDR
Double direct input right side



牙桿型式 (Ø 4" ACME P = 20) – Screw Rod End Type

R 型 - R Type 平口式 Plain end type		H 型 -H Type 栓孔式 Bolt hole type	
S 型 - S Type 牙口式 - 英制牙 Tooth end type 【 Inch 】	詳細尺寸請電洽業務 Please check your sales to get more information	S 型 - S Type 牙口式 - 公制牙 Tooth end type 【 mm 】	詳細尺寸請電洽業務 Please check your sales to get more information
T 型 -T Type 頂盤式 Top plate type		活動螺帽 Movable nut	
A 式 - A Type 保護管直立式 Protecting pipe Vertical type	詳細尺寸請電洽業務 Please check your sales to get more information	B 式 -B Type 保護管倒立式 Protecting pipe Upside down type	詳細尺寸請電洽業務 Please check your sales to get more information