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## 參數符號對應表 Parameter & symbol contrast table

P = 功率Power (kW)	$\eta$ = 效率Efficiency	a = 軸向Axial
M = 扭力Torque (Nm)	$\gamma$ = 前置角Helix angle	s = 靜態Statical
n = 速度Speed (rpm)	f.s.= 工作系數Service factor	d = 動態Dynamic
i = 減速比Ratio	1 = 輸入軸Input shaft	max = 最大值
F = 負荷Load (N)	2 = 輸出軸Output shaft	min = 最小值
m = 重量Weight (kg)	r = 徑向Radial	

## 減速機的工作系數 Service factor

減速機的工作系數(f.s.)主要取決於減速機的運作條件，其決定因素為：

1. 減速機的負荷形式：A—B—C
2. 工作時間：小時 / 天(  $\Delta$  )
3. 開機頻率：次 / 小時(★)

減速機的三種負荷形式：

1. A：均等負荷  $f_a \leq 0.3$
2. B：中等負荷  $f_a \leq 3$
3. C：重量負荷  $f_a \leq 10$

$$F_a = J_e / J_m$$

- $J_e(\text{kgm}^2)$ ：在馬達軸心上的外圍轉動慣量
- $J_m(\text{kgm}^2)$ ：馬達的轉動慣量

注意：  $f_a > 10$  時請與技術服務部聯繫

The service factor(f.s.)depends on the operating conditions the gearbox is subjected to. Following parameters need to be take to select the right service factor.

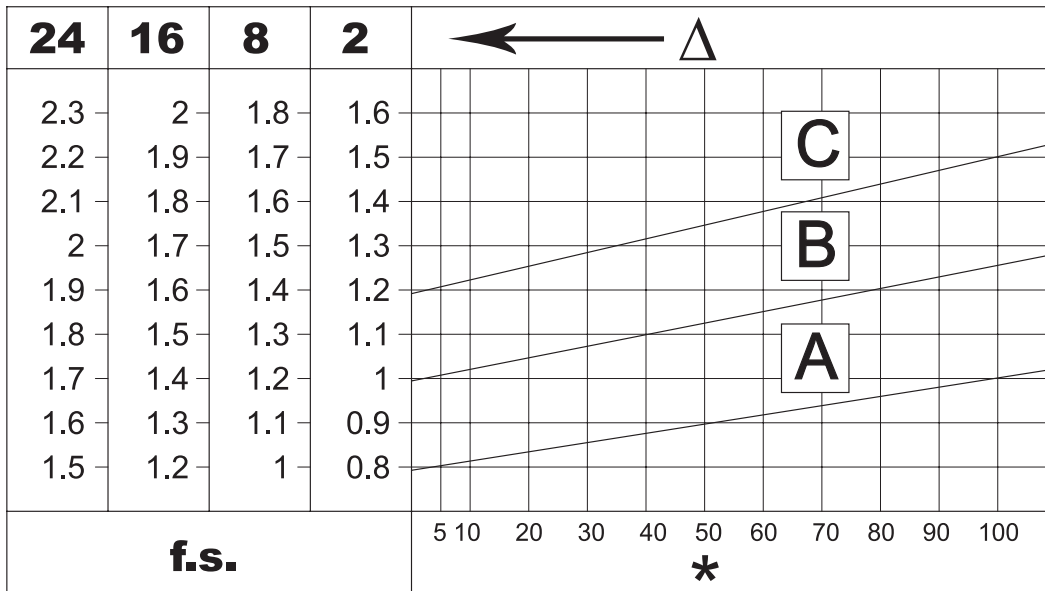
1. type of load of the operating machine A - B - C
2. length of daily operating time: hours/day(  $\Delta$  )
3. start-up frequency: starts/hour (★)

TYPE OF LOAD:

1. A-uniform,  $f_a \leq 0.3$
2. B-moderate shocks,  $f_a \leq 3$
3. C-heavy shocks,  $f_a \leq 10$

$$F_a = J_{ex} / J_m$$

- $J_{ex}(\text{kgm}^2)$  moment of the external inertia reduced at the drive shaft.
- $J_m(\text{kgm}^2)$  moment of inertia of motor.

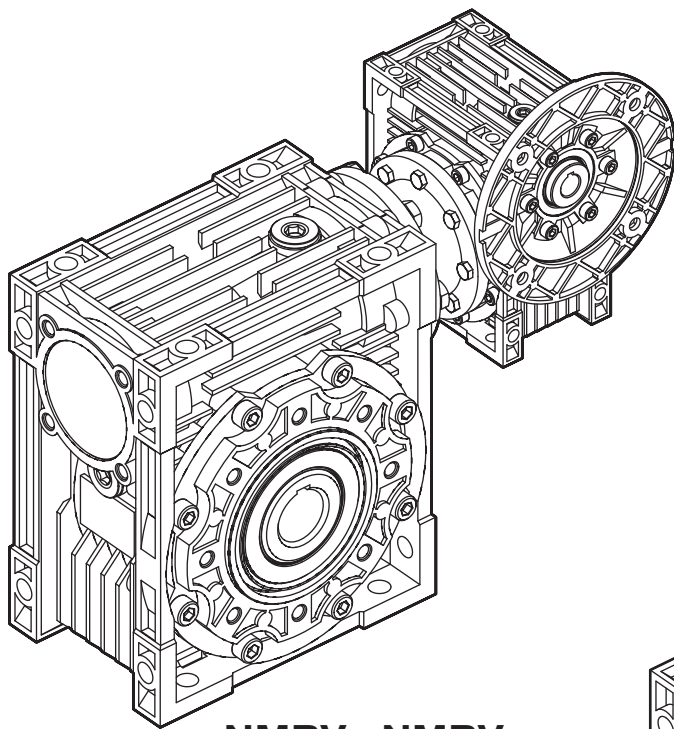


## 安裝注意事項

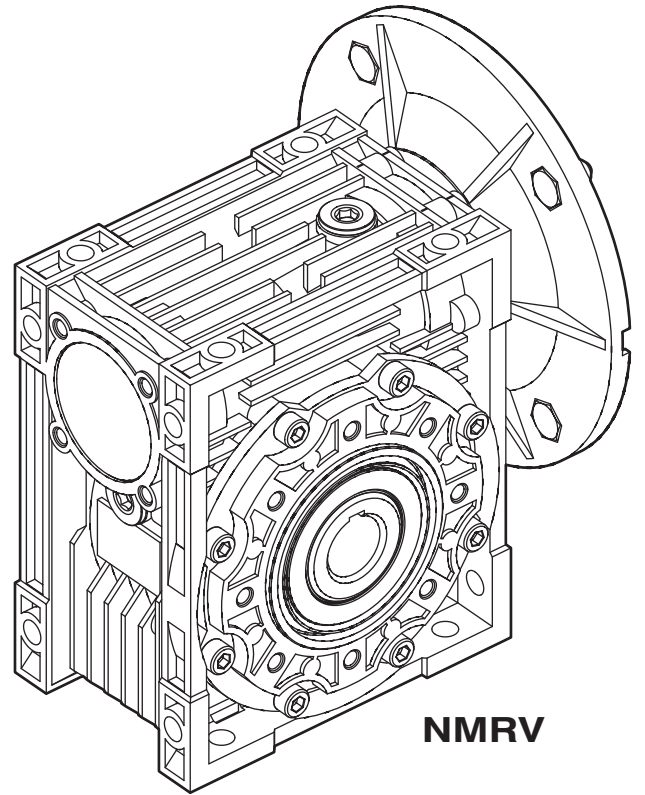
## To install the reduction unit it is necessary to note the following recommendations

- 減速機要平穩安裝，避免震動。
- 與機器裝配前，請檢查減速機的輸出軸的旋轉方向是否正確。
- 在減速機放置時間長達4~6個月情況下，應檢查密封圈是否因不浸潤在潤滑油中而與軸發生粘連或失去彈性，必要時更換密封圈。
- 安裝空心軸時，應採用專用力矩扳手。如果無該條件時，用戶可自行選用專用工具，但應確保軸向不受力，減速機可自由移動。
- 減速機應避免受日光直射和雨淋。
- 確保通風條件良好。
- 工作環境溫度低於-5° 或高於40° 時，請諮詢技術服務部。
- 皮帶盤,齒輪,聯軸器,軸等通過特殊螺紋孔裝于實心軸或空心軸,該螺紋孔可防止運作時損傷軸承和機件表面,應對機件表面作適當潤滑,以防鏽蝕和卡塞。
- 橡膠件和透氣孔不可上油漆。
- 安裝完畢後，取出油孔上的封口栓塞，換上透氣栓塞。
- 檢查油位高度。
- 如果減速機不連接電機時，請參考以下注意事項以確保正確連接：安裝於B5，B14
- 檢查軸與電機法蘭之公差是否符合基本標準。
- 清洗軸、中心孔和法蘭表面的汙跡及油漆。
- 安裝時避免減速機受力。
- 檢查馬達鍵槽的位置和偏差。
- 用潤滑油塗抹軸的表面，以防生鏽或卡塞。
- 開機時應分級起動，不能滿負荷起動。
- 裝配在電機下方的機件及材料易於受損，應採取適當的防範措施。
- The mounting on the machine must be stable to avoid any vibration.
- Check the correct direction of rotation of the reduction unit output shaft before fitting the unit to the machine.
- In the case of particularly lengthy of periods of storage (4-6 months) if the oil seal is not immersed in the lubricant inside recommended to change it since the rubber could stick to the shaft or even has lost the elasticity it needs to function properly
- For a shaft mounting, for reduction units with a hollow output shafts, use the torque arms motionclinic can supply. If it is n make sure that the constraint is axially free and with such as play as to ensure free movement to the reduction unit.
- Whenever possible, protect the reduction unit against solar radiation and bad weather.
- Ensure the motor cools correctly by assuring good passage of air from the fan side.
- In the case of ambient temperatures <-5° C and >+40° C contact motionclinic.
- The various parts ( pulleys, gear wheels, couplings, shafts, etc.) must be mounted on the solid or hollow shafts using special holes or other systems that anyhow ensure correct operation without risking damage to the bearings or external parts of the unit
- Painting must definitely not go over rubber parts and the holes on the breather plugs, if there are any.
- Taking out the seal embolism of the oilhole.
- Check the height of the oil level.
- Supposing the gear unit have not coupled with the motor, please pay attention to the following items to make sure rightly connection. Mounting to B5, B14
- Check whether the tolerance between the shaft and motor flange fit for the essential standard.
- Washing the dirt and the paint on the surfaces of the shaft, center bore and the flange.
- Mounting avoid the gear unit incur strength .
- Check the position and the decination of the motor keyslot.
- Lubricate the surfaces in contact to avoid seizure or oxidation.
- Starting must take place gradually, without immediately applying the maximum load.
- When there are parts objects or materials under the motor drive that can be damaged by even limited spillage of oil, special should be fitted.

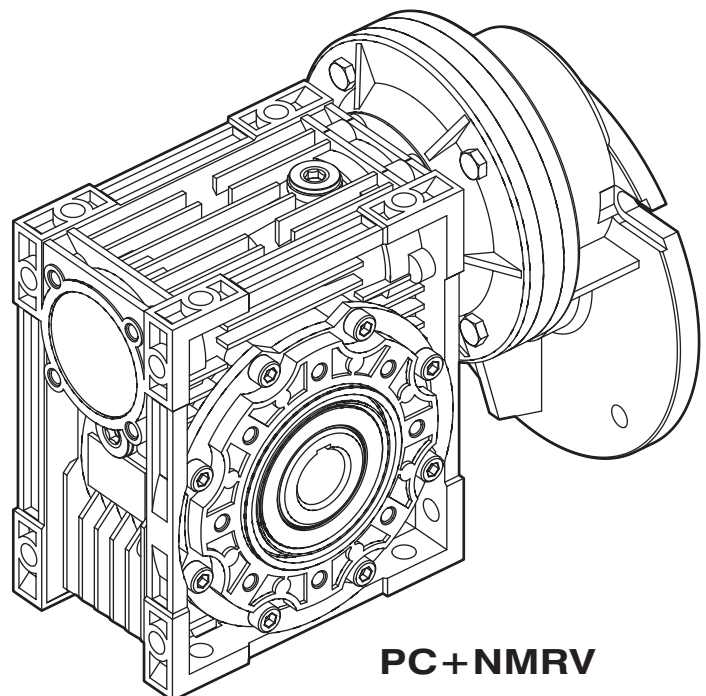
蝸輪減速機 Worm geared motors and worm gear units



**NMRV+NMRV**

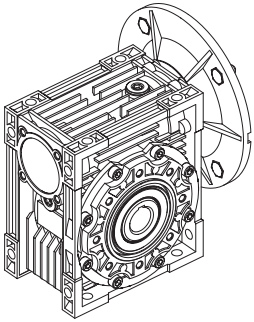
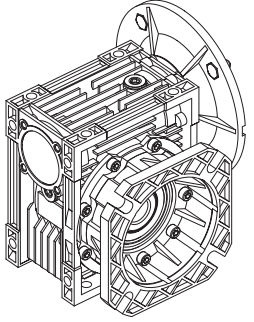
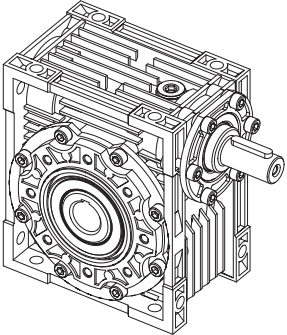
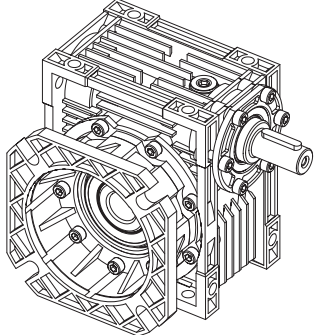
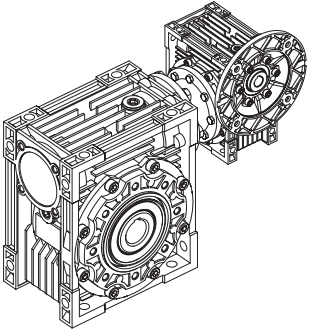
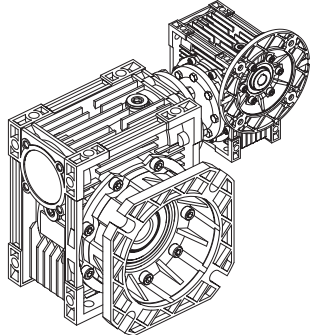
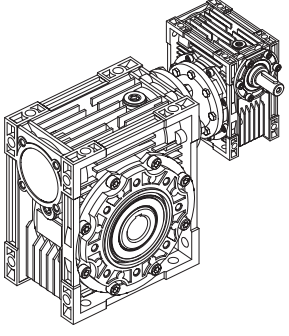
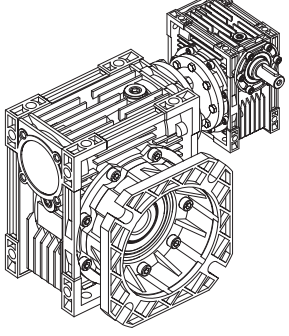
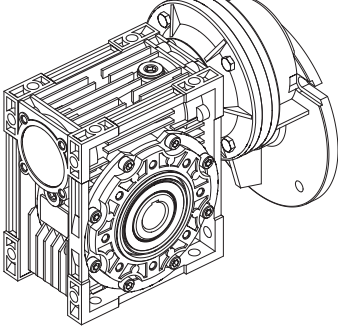
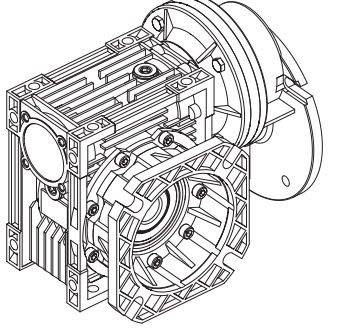


**NMRV**

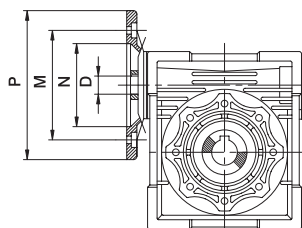


**PC+NMRV**

## 蝸輪減速機型號 Versions

	<p>NMRV 025-150</p>	<p>NMRV 025-150 F</p>	
	<p>NRV 025-150</p>	<p>NRV 025-150 F</p>	
	<p>NMRV-NMRV 025-130</p>	<p>NMRV-NMRV 025-130 F</p>	
	<p>NRV-NMRV 025-130</p>	<p>NRV-NMRV 025-130 F</p>	
	<p>PC-NMRV 063/040-090/130</p>	<p>PC-NMRV 063/040-090/130 F</p>	

## 輸入法蘭盤尺寸 Input flange Dimensions



NMRV	PAM IEC	P	M	N	D											
					5	7.5	10	15	20	25	30	40	50	60	80	100
025	56B14	80	65	50	9	9	9	9	9	-	9	9	9	9	-	-
030	63B5	140	115	95	11	11	11	11	11	11	11	11	11	-	-	-
	63B14	90	75	60	9	9	9	9	9	9	9	9	9	9	9	-
	56B5	120	100	80	-	-	-	-	-	-	-	-	9	9	9	9
	56B14	80	65	50	14	14	14	14	14	14	14	14	-	-	-	-
040	71B5	160	130	110	11	11	11	11	11	11	11	11	11	11	11	11
	71B14	105	85	70	-	-	-	-	-	-	-	-	9	9	9	9
	63B5	140	115	95	-	-	-	-	-	-	-	-	11	11	11	11
	63B14	90	75	60	19	19	19	19	19	19	19	19	-	-	-	-
050	56B5	120	100	80	14	14	14	14	14	14	14	14	14	14	14	14
	80B5	200	165	130	-	-	-	-	-	-	-	-	11	11	11	11
	80B14	120	100	80	-	-	-	-	-	-	-	-	14	14	14	14
	71B5	160	130	110	-	-	-	-	-	-	-	-	14	14	14	14
063	71B14	105	85	70	-	-	-	-	-	-	-	14	14	14	14	14
	90B5	200	165	130	-	24	24	24	24	24	24	-	-	-	-	-
	90B14	140	115	95	-	19	19	19	19	19	19	19	19	19	-	-
	80B5	200	165	130	-	-	-	-	-	-	-	-	14	14	14	14
	80B14	120	100	80	-	-	-	-	-	-	-	-	14	14	14	14
	71B5	160	130	110	-	-	-	-	-	-	-	-	14	14	14	14
075	71B14	105	85	70	-	-	-	-	-	-	-	-	14	14	14	14
	100/112B5	250	215	180	-	28	28	28	-	-	-	-	-	-	-	-
	100/112B14	160	130	110	-	24	24	24	24	24	24	24	-	-	-	-
	90B5	200	165	130	-	-	-	-	19	19	19	19	19	19	19	19
	90B14	140	115	95	-	-	-	-	-	-	-	-	14	14	14	14
	80B5	200	165	130	-	-	-	-	-	-	-	-	14	14	14	14
	80B14	120	100	80	-	-	-	-	-	-	-	-	19	19	19	19
090	71B5	160	130	110	-	-	-	-	-	-	-	-	14	14	14	14
	100/112B5	250	215	180	-	28	28	28	28	28	28	-	-	-	-	-
	100/112B14	160	130	110	-	24	24	24	24	24	24	24	24	24	-	-
	90B5	200	165	130	-	-	-	-	-	-	-	-	19	19	19	19
	90B14	140	115	95	-	-	-	-	-	-	-	-	19	19	19	19
	80B5	200	165	130	-	-	-	-	-	-	-	-	19	19	19	19
110	80B14	120	100	80	-	-	-	-	-	-	-	-	19	19	19	19
	132B5	300	265	230	-	38	38	38	38	-	-	-	-	-	-	-
	100/112B5	250	215	180	-	28	28	28	28	28	28	28	28	28	-	-
	90B5	200	165	130	-	-	-	-	-	24	24	24	24	24	24	24
130	80B5	200	165	130	-	-	-	-	-	-	-	-	-	-	19	19
	132B5	300	265	230	-	38	38	38	38	38	38	38	-	-	-	-
	100/112B5	250	215	180	-	-	-	-	-	28	28	28	28	28	28	28
150	90B5	200	165	130	-	-	-	-	-	-	-	-	-	-	24	24
	160B5	350	300	250	-	42	42	42	42	42	-	-	-	-	-	-
	132B5	300	265	230	-	-	-	-	38	38	38	38	38	38	-	-
150	100/112B5	250	215	180	-	-	-	-	-	-	-	-	28	28	28	28

## 蝸桿、蝸輪效率表 Mesh data

NRV	i	5	7.5	10	15	20	25	30	40	50	60	80	100
025	Z1	4	4	3	2	2		1	1	1	1		
	$\gamma$	30° 57'	25° 18'	19° 31'	13° 18'	10° 53'		6° 44'	5° 29'	4° 34'	3° 56'		
	mx	1.8	1.3	1.3	1.3	1		1.3	1	0.8	0.67		
	$\eta_d$	0.86	0.84	0.82	0.78	0.74		0.66	0.61	0.57	0.54		
	$\eta_s$	0.71	0.70	0.67	0.60	0.55		0.46	0.41	0.36	0.34		
030	Z1	4	4	3	2	2	1	1	1	1	1	1	
	$\gamma$	21° 48'	18° 50'	14° 21'	9° 40'	7° 44'	5° 34'	4° 52'	3° 53'	3° 11'	2° 46'	2° 07'	
	mx	2	1.44	1.44	1.44	1.1	1.7	1.44	1.1	0.88	0.75	0.56	
	$\eta_d$	0.86	0.84	0.81	0.76	0.72	0.67	0.64	0.58	0.54	0.50	0.44	
	$\eta_s$	0.71	0.66	0.62	0.54	0.50	0.43	0.39	0.35	0.31	0.27	0.23	
040	Z1	4	4	4	2	2	2	1	1	1	1	1	1
	$\gamma$	27° 24'	21° 48'	17° 31'	11° 18'	8° 58'	7° 41'	5° 42'	4° 30'	3° 51'	3° 17'	2° 32'	2° 05'
	mx	2.8	2	1.5	2	1.5	1.25	2	1.5	1.25	1.04	0.78	0.63
	$\eta_d$	0.88	0.86	0.85	0.81	0.77	0.74	0.69	0.64	0.61	0.57	0.51	0.47
	$\eta_s$	0.72	0.69	0.65	0.58	0.53	0.5	0.44	0.4	0.36	0.32	0.28	0.24
050	Z1	4	4	4	2	2	2	1	1	1	1	1	1
	$\gamma$	23° 49'	21° 48'	17° 42'	11° 18'	9° 04'	7° 36'	5° 42'	4° 33'	3° 49'	3° 17'	2° 33'	2° 04'
	mx	3.4	2.5	1.9	2.5	1.9	1.54	2.5	1.9	1.54	1.3	0.98	0.78
	$\eta_d$	0.87	0.86	0.84	0.8	0.77	0.74	0.7	0.65	0.61	0.57	0.51	0.49
	$\eta_s$	0.73	0.69	0.65	0.58	0.54	0.5	0.44	0.39	0.35	0.32	0.27	0.23
063	Z1		4	4	2	2	2	1	1	1	1	1	1
	$\gamma$		24° 31'	20° 19'	12° 50'	10° 29'	8° 44'	6° 30'	5° 17'	4° 23'	3° 47'	2° 59'	2° 25'
	mx		3.25	2.5	3.25	2.5	2	3.25	2.5	2	1.68	1.28	1.02
	$\eta_d$		0.87	0.86	0.82	0.8	0.77	0.73	0.69	0.65	0.61	0.56	0.5
	$\eta_s$		0.7	0.65	0.59	0.54	0.5	0.45	0.4	0.36	0.33	0.28	0.24
075	Z1		4	4	2	2	2	1	1	1	1	1	1
	$\gamma$		26° 33'	21° 48'	14° 02'	11° 18'	9° 37'	7° 07'	5° 42'	4° 50'	4° 05'	3° 15'	2° 40'
	mx		4	3	4	3	2.45	4	3	2.45	2	1.54	1.24
	$\eta_d$		0.88	0.87	0.84	0.81	0.79	0.75	0.71	0.68	0.64	0.59	0.54
	$\eta_s$		0.7	0.67	0.6	0.57	0.52	0.46	0.42	0.38	0.35	0.29	0.26
090	Z1		4	4	2	2	2	1	1	1	1	1	1
	$\gamma$		28° 20'	23° 26'	15° 05'	12° 14'	10° 37'	7° 40'	6° 11'	5° 21'	4° 36'	3° 36'	2° 57'
	mx		4.8	3.6	4.8	3.6	3	4.8	3.6	3	2.5	1.88	1.5
	$\eta_d$		0.89	0.88	0.85	0.83	0.81	0.77	0.74	0.71	0.68	0.62	0.58
	$\eta_s$		0.72	0.69	0.63	0.59	0.55	0.49	0.45	0.41	0.38	0.32	0.28
110	Z1		4	4	2	2	2	1	1	1	1	1	1
	$\gamma$		28° 17'	27° 35'	15° 03'	14° 38'	12° 37'	7° 39'	7° 26'	6° 23'	5° 31'	4° 23'	3° 38'
	mx		5.89	4.6	5.89	4.6	3.75	5.89	4.6	3.75	3.12	2.36	1.9
	$\eta_d$		0.89	0.88	0.85	0.84	0.83	0.78	0.77	0.74	0.71	0.66	0.62
	$\eta_s$		0.71	0.68	0.62	0.61	0.58	0.48	0.48	0.44	0.41	0.36	0.32
130	Z1		4	4	2	2	2	1	1	1	1	1	1
	$\gamma$		28° 46'	26° 15'	15° 21'	13° 51'	11° 49'	7° 48'	7° 01'	5° 58'	5° 12'	4° 05'	3° 25'
	mx		7	5.4	7	5.4	4.37	7	5.4	4.37	3.68	2.75	2.24
	$\eta_d$		0.9	0.88	0.86	0.85	0.83	0.79	0.77	0.74	0.71	0.67	0.63
	$\eta_s$		0.71	0.68	0.62	0.6	0.57	0.49	0.46	0.43	0.39	0.34	0.3
150	Z1		6	4	3	2	2	2	1	1	1	1	1
	$\gamma$		32° 09'	24° 35'	17° 27'	12° 53'	11° 19'	9° 50'	6° 32'	5° 43'	4° 57'	3° 55'	3° 14'
	mx		5.5	6,155	5.5	6,155	5	4,193	6,155	5	4,193	3,17	2,55
	$\eta_d$		0.91	0.9	0.88	0.86	0.84	0.83	0.78	0.76	0.73	0.68	0.64
	$\eta_s$		0.73	0.71	0.66	0.6	0.57	0.54	0.45	0.42	0.39	0.33	0.29

The helix is right-handed.  $\eta_d(1400)$ .....dynamic efficiency at  $n_1=1400$   $\eta_s$ .....static efficiency  
*i*.....ratio Z1:蝸桿牙口數  $\gamma$ :螺旋角 mx:模數

## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page
<b>0.06</b>	280	1.8	6.2	5	NMRV025	439	24
	186.7	2.6	4.2	7.5		503	
	140	3.4	3.5	10		553	
	93.3	4.9	2.5	15		633	
	70	6.1	2	20		697	
	46.7	8.2	1.6	30		798	
	35	10	1.3	40		878	
	28	12	0.9	50		946	
	23.3	14	0.7	60	1006		
	280	1.8	10.1	5	NMRV030	597	25
	186.7	2.6	6.9	7.5		683	
	140	3.4	5.4	10		752	
	93.3	4.7	3.8	15		861	
	70	6	3	20		948	
	56	7	3	25		1021	
	46.7	8	2.5	30		1085	
	35	9.7	1.9	40		1194	
	28	11	1.5	50	1286		
	23.3	13	1.3	60	1367		
	17.5	14	0.9	80	1504		
	14	25.1	1.3	100	NMRV025/030	1620	48
	9.3	32	0.9	150		1830	
	7	41	0.7	200		1830	
	5.6	44	0.8	250		1830	
4.7	59.1	1.2	300	NMRV025/040	3490	48	
3.5	71	0.9	400		3490		
2.8	82	0.7	500		3490		
2.3	101	0.6	600		3490		
1.9	116	0.5	750		3490		
1.6	143	0.5	900		3490		
1.2	171	0.4	1200		3490		
0.9	197	0.3	1500		3490		
0.8	217	0.3	1800		3490		
0.6	268	0.2	2400		3490		
0.5	324	0.2	3000		3490		
0.4	294	0.1	4000		3490		
0.3	356	0.1	5000	3490			
4.7	57.4	1.3	300	NMRV030/040	3490	48	
3.5	70	0.9	400		3490		
2.8	96	0.6	500		3490		
2.3	104	0.7	600		3490		
1.9	121	0.6	750		3490		
1.6	139	0.5	900		3490		
1.2	166	0.4	1200		3490		
0.9	196	0.4	1500		3490		
0.8	218	0.3	1800		3490		
0.58	261	0.2	2400		3490		
0.4	300	0.2	3200		3490		
0.4	279	0.1	4000		3490		
0.28	338	0.1	5000	3490			
1.6	141.3	1	900	NMRV030/050	4840	49	
1.2	169	0.7	1200		4840		
0.93	199	0.7	1500		4840		
0.78	222	0.7	1800		4840		
0.6	266	0.5	2400		4840		
0.5	307	0.4	3000		4840		
0.35	288	0.3	4000		4840		
0.29	311	0.3	4800		4840		



## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page		
<b>0.06</b>	0.9	203.5	1.1	1500	NMRV030/063	6270	49		
	0.78	225	0.9	1800		6270			
	0.58	276	0.8	2400		6270			
	0.47	319	0.7	3000		6270			
	0.35	306	0.6	4000		6270			
	0.28	360	0.4	5000		6270			
	0.6	330.4	1.1	2400	NMRV040/075	7380	49		
	0.47	377	0.8	3000		7380			
	0.35	355	0.7	4000		7380			
	0.28	419	0.5	5000		7380			
	0.5	405.9	1.4	3000	NMRV040/090	8180	50		
	0.35	365	1.3	4000		8180			
0.28	431	1	5000	8180					
<b>0.09</b>	280	2.7	4.1	5	NMRV025	439	24		
	186.7	3.9	2.8	7.5		503			
	140	5.1	2.4	10		553			
	93.3	7.3	1.6	15		633			
	70	9.2	1.3	20		697			
	46.7	12	1.1	30		798			
	35	15	0.9	40	878				
	280	2.7	6.7	5	NMRV030	597	25		
	186.7	3.9	4.6	7.5		683			
	140	5	3.6	10		752			
	93.3	7.1	2.5	15		861			
	70	9	2	20		948			
	56	10	2	25		1021			
	46.7	12	1.7	30		1085			
	35	14	1.2	40		1194			
	28	17	1	50		1286			
	23.3	19	0.9	60		1367			
	14	37.7	0.8	100		NMRV025/030		1620	48
	9.3	49	0.6	150				1830	
	7	62	0.5	200	1830				
	5.6	66	0.5	250	1830				
	4.7	75	0.4	300	1830				
	3.5	107	0.3	400	1830				
	2.8	115	0.3	500	1830				
	2.3	135	0.2	600	1830				
	1.9	151	0.2	750	1830				
	1.6	178	0.2	900	1830				
	1.2	212	0.1	1200	1830				
	0.9	247	0.1	1500	1830				
	0.78	304	0.1	1800	1830				
	0.58	340	0.1	2400	1830				
	0.47	405	0.1	3000	1830				
	28	19	2	50	NMRV040	2475	26		
	23.3	21	1.7	60		2630			
	17.5	26	1.3	80		2895			
	14	29	1	100		3118			
	4.7	87.6	0.8	300	NMRV030/040	3490	48		
	3.5	106.7	1.2	400	NMRV030/050	4840	49		
	2.8	123	1	500		4840			
	2.3	159	0.9	600		4840			
	1.9	185	0.8	750		4840			
	1.6	212	0.7	900		4840			
1.6	200	1	900	6270					
1.2	263	0.9	1200	NMRV030/063	6270	49			
0.93	305	0.7	1500		6270				

## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page
<b>0.09</b>	0.9	359.7	1.1	1500		7380	
	0.78	404	1	1800	NMRV040/075	7380	49
	0.58	496	0.7	2400		7380	
	0.5	608.9	0.9	3000		8180	
	0.35	548	0.8	4000	NMRV040/090	8180	50
<b>0.12</b>	280	3.6	5.1	5		597	
	186.7	5.2	3.4	7.5		683	
	140	6.7	2.7	10		752	
	93.3	9.5	1.9	15		861	
	70	12	1.5	20	NMRV030	948	25
	56	14	1.5	25		1021	
	46.7	16	1.3	30		1085	
	35	19	0.9	40		1194	
	28	23	0.8	50		1286	
	46.7	17.2	2.6	30		2087	
	35	21	1.9	40		2298	
	28	25	1.5	50	NMRV040	2475	26
	2.3	28	1.3	60		2630	
	17.5	34	1	80		2895	
	14	38	0.8	100		3118	
	19.1	41.5	1.2	75		2833	
	15.9	45	1.2	90		3011	
	11.9	56	0.9	120	PC063+NMRV040	3314	42
	9.5	64.6	0.7	150		3490	
	7.9	73	0.6	180		3490	
	23.3	29	2.3	60		3610	
	17.5	35	1.9	80	NMRV050	3973	27
	14	40	1.4	100		4280	
	9.5	66	1.3	146.7		4840	
	7.9	74	1.1	176		4840	
	6.0	85	0.8	234.6	PC063+NMRV050	4840	42
	4.8	96	0.7	293.3		4840	
	4.7	118.8	1.2	300		4840	
	3.5	142	0.9	400	NMRV030/050	4840	49
	2.8	164	0.7	500		4840	
	6.0	89	1.5	234.6		6270	
	4.8	101	1.2	293.3	PC063+NMRV063	6270	42
	2.8	171.2	1.3	500		6270	
2.3	208	1.1	600	NMRV030/063	6270	49	
1.9	241	0.9	750		6270		
1.6	324.9	1.2	900		7370		
1.2	399	0.9	1200	NMRV040/075	7380	49	
0.8	546.6	0.9	1800		8180		
0.58	695	0.9	2400	NMRV040/090	8180	50	
0.5	883.8	1.2	3000		10320		
0.35	784	1	4000	NMRV050/110	10320	50	
0.28	928	0.8	5000		10320		
<b>0.18</b>	280	5.3	3.4	5		597	
	186.7	7.8	2.3	7.5		683	
	140	10	1.8	10		752	
	93.3	14	1.3	15	NMRV030	861	25
	70	18	1	20		948	
	56	21	1	25		1021	
	46.7	24	0.8	30		1085	
	70	19.2	2	20		1824	
	56	23	1.7	25		1964	
	46.7	26	1.7	30	NMRV040	2087	26
	35	32	1.3	40		2298	

## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page
<b>0.18</b>	28	38	1	50	NMRV040	2475	26
	23.3	43	0.8	60		2630	
	19.1	62	0.8	73.3	PC063+NMRV040	2833	42
	15.9	69	0.8	88		3011	
	11.9	84	0.6	117.3		3314	
	35	32.9	2.3	40		3153	
	28	39	1.9	50	NMRV050	3397	27
	23.3	43	1.6	60		3610	
	17.5	52	1.2	80		3973	
	14	60	0.9	100		4280	
	19.1	62	1.4	73.3	PC063+NMRV050	3889	42
	15.9	70	1.5	88		4132	
	11.9	86	1.1	117.3		4548	
	9.5	99	0.9	146.7		4840	
	7.9	112	0.7	176		4840	
	6.0	129	0.6	234.6		4840	
	9.5	101	1.7	146.7	PC063+NMRV063	6270	42
	7.9	116	1.4	176		6270	
	6.0	135	1	234.6		6270	
	4.8	152	0.8	293.3		6270	
3.5	221.5	1	400	NMRV030/063	6270	49	
2.8	257	0.8	500		6270		
2.3	362	1.1	600	NMRV040/075	7380	49	
1.9	435	0.9	750		7380		
1.6	487	0.8	900		7380		
1.2	629.2	1	1200	NMRV040/090	8180	50	
0.93	735	0.8	1500		8180		
0.8	860.6	1.5	1800	NMRV050/110	10320	50	
0.58	1113	1.1	2400		10320		
<b>0.22</b>	280	6.5	2.8	5	NMRV030	597	25
	186.7	10	1.9	7.5		683	
	140	12	1.5	10		752	
	93.3	17	1	15		861	
	70	22	0.8	20		948	
	93.3	18.5	2.2	15	NMRV040	1657	26
	70	23	1.7	20		1824	
	56	28	1.4	25		1964	
	46.7	32	1.4	30		2087	
	35	39	1.1	40		2298	
	28	47	0.8	50		2475	
	28	47.3	1.5	50	NMRV050	3397	27
	23.3	53	1.3	60		3610	
	17.5	64	1	80		3973	
	19.1	76	1.2	73.3	PC063+NMRV050	3889	42
	15.9	84	1.2	88		4132	
	11.9	104	0.9	117.3		4548	
	9.5	123	1.4	146.7		6270	
	7.9	141	1.1	176		6270	
	4.7	210.5	1.1	300		NMRV030/063	
3.5	271	0.8	400	6270			
<b>0.25</b>	280	7.6	4.5	5	NMRV040	1149	26
	186.7	11	3.6	7.5		1315	
	140	14	2.8	10		1447	
	93.3	21	1.9	15		1657	
	70	27	1.5	20		1824	
	56	32	1.2	25		1964	
	46.7	36	1.3	30		2087	
	35	44	0.9	40		2298	

## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page	
<b>0.25</b>	70	26.9	2.7	20	NMRV050	2503	27	
	56	32	2.2	25		2696		
	46.7	37	2.3	30		2865		
	35	46	1.7	40		3153		
	28	54	1.4	50		3397		
	23.3	60	1.1	60		3610		
	17.5	72	0.9	80	3973			
	19.1	86	1	73.4	PC071+NMRV050	3889	43	
	15.9	96	1.1	88.1		4132		
	11.9	119	0.8	117.5		4548		
	28	56.3	2.4	50	NMRV063	4440	28	
	23.3	63	2	60		4719		
	17.5	78	1.6	80		5193		
	14	87	1.4	100		5595		
	19.1	89	1.8	73.4	PC071+NMRV063	5083	43	
	15.9	98	2	88.1		5401		
	11.9	123	1.5	117.5		5945		
	9.5	140	1.2	146.9		6270		
	7.9	161	1	176.3		6270		
	6.0	185.6	0.7	235		6270		
4.8	211	0.6	293.8	6270				
7	159.5	1.4	400	NMRV030/063	6270	49		
5.6	185	1.2	500		6270			
17.5	81.9	2.3	80	NMRV075	6130	29		
14	94	1.9	100		6603			
9.5	148	1.7	146.9	PC071+NMRV075	7380	43		
7.9	170	1.4	176.3		7380			
6.0	195	1.1	235		7380			
4.8	225	0.9	293.8		7380			
3.5	336.3	1.1	400		7380			
2.8	384	0.8	500	NMRV040/075	7380	49		
2.3	511.8	1.2	600	NMRV040/090	8180	50		
1.9	598	0.9	750		8180			
1.6	667	0.8	900		8180			
1.2	943	1.3	1200	NMRV050/110	10320	50		
0.93	1064	1.2	1500		10320			
0.78	1195	1.1	1800		10320			
0.6	1624	1	2400	NMRV063/130	13500	50		
0.47	1935	0.8	3000		13500			
0.35	2046	0.6	4000		13500			
0.28	2430	0.5	5000		13500			
280	11.2	3	5		NMRV040		1149	26
186.7	16	2.4	7.5	1315				
140	21	1.9	10	1447				
93.3	31	1.3	15	1657				
70	39	1	20	1824				
56	47	0.8	25	1964				
46.7	53	0.8	30	2087				
140	21.7	3.3	10	NMRV050		1987	27	
93.3	31	2.4	15			2274		
70	40	1.8	20			2503		
56	48	1.5	25		2696			
46.7	55	1.5	30		2865			
35	68	1.1	40		3153			
28	80	0.9	50		3397			
23.3	89	0.8	60	3610				
35	70.7	2.1	40	NMRV063	4122	28		
28	83	1.6	50		4440			

## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page
<b>0.37</b>	23.3	94	1.4	60		4719	
	17.5	115	1.1	80	NMRV063	5193	28
	14	129	0.9	100		5595	
	19.1	131	1.2	73.4		5083	
	15.9	145	1.4	88.1	PC071+NMRV063	5401	43
	11.9	182	1	117.5		5945	
	9.5	208	0.8	146.9		6270	
	23.3	98.4	2	60		5569	
	17.5	121	1.6	80	NMRV075	6130	29
	14	139	1.3	100		6603	
	19.1	135	1.8	73.4		6000	
	15.9	151	1.9	88.1		6375	
	11.9	188	1.5	117.5	PC071+NMRV075	7017	43
	9.5	218	1.1	146.9		7380	
	7.9	251	0.9	176.3		7380	
	4.7	405.5	1	300		7380	
	3.5	498	0.7	400	NMRV040/075	7380	49
	7.9	265	1.5	176.3		8180	
	6.0	312	1.1	235	PC071+NMRV090	8180	43
	4.8	363	0.9	293.8		8180	
	4.7	401.8	1.5	300		8180	
	3.5	523	1.2	400		8180	
	2.8	611	0.9	500	NMRV040/090	8180	50
	2.3	757	0.8	600		8180	
1.9	949.5	1.3	750		10320		
1.6	1079	1.2	900		10320		
1.2	1396	0.8	1200	NMRV050/110	10320	50	
0.9	1674.1	1.1	1500		13500		
0.78	1887	0.9	1800	NMRV063/130	13500	50	
<b>0.55</b>	280	16.7	2	5		1149	
	186.7	24	1.6	7.5		1315	
	140	32	1.3	10	NMRV040	1447	26
	93.3	46	0.9	15		1657	
	280	16.7	3.7	5		1577	
	186.7	25	2.9	7.5		1805	
	140	32	2.2	10		1987	
	93.3	46	1.6	15		2274	
	70	59	1.2	20	NMRV050	2503	27
	56	71	1	25		2696	
	46.7	81	1	30		2865	
	70	60.8	2.2	20		3272	
	56	73	1.8	25		3524	
	46.7	83	1.9	30		3745	
	35	105	1.4	40	NMRV063	4122	29
	28	124	1.1	50		4440	
	23.3	140	0.9	60		4719	
	19.1	196	0.8	73.4		5083	
	15.9	215	0.9	88.1	PC071+NMRV063	5401	43
	35	108.1	2	40		4865	
	28	129	1.6	50		5241	
	23.3	146	1.4	60		5569	
	17.5	180	1.1	80	NMRV075	6130	29
	14	206	0.9	100		6603	
19.1	201	1.2	73.4		6000		
15.9	229	1.3	88.1		6375		
11.9	279	1	117.5	PC071+NMRV075	7017	43	
18.7	205.4	1.2	75		6000		
15.6	230	1.3	90	PC080+NMRV075	6375	44	

## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page	
<b>0.55</b>	11.7	284	1	120	PC080+NMRV075	7017	44	
	9.3	332	0.8	150		7380		
	17.5	189.1	1.5	80	NMRV090	6783		30
	14	221	1.2	100		7306		
	15.6	239.7	2.3	90	PC080+NMRV090	7054		44
	11.7	297	1.6	120		7764		
	9.3	355	1.3	150		8180		
	7.8	398	1	180		8180		
	5.8	477	0.8	240		8180		
	17.5	201.1	2.6	80	NMRV110	8571		31
	14	236	2	100		9232		
	7.8	425.5	1.8	180	PC080+NMRV110	10320		44
	5.8	513	1.3	240		10320		
	4.7	597	1	300		10320		
	4.7	638.9	2	300		10320		
	3.5	826	1.4	400	NMRV050/110	10320		50
	2.8	984	1.1	500		10320		
	2.3	1181	1	600		10320		
	1.9	1411	0.9	750		10320		
2.8	995.5	1.6	500	13500				
1.9	1471	1.2	750	NMRV063/130	13500	50		
1.2	2132	0.8	1200		13500			
<b>0.75</b>	280	22.8	2.7	5	NMRV050	1577	27	
	186.7	34	2.1	7.5		1805		
	140	44	1.6	10		1987		
	93.3	63	1.2	15		2274		
	70	81	0.9	20		2503		
	93.3	63.7	2.2	15	NMRV063	2973	28	
	70	83	1.6	20		3272		
	56	100	1.3	25		3524		
	46.7	114	1.4	30		3745		
	35	143	1	40		4122		
	56	102.3	2	25	NMRV075	4160	29	
	46.7	117	2	30		4421		
	35	147	1.5	40		4865		
	28	177	1.2	50		5241		
	23.3	200	1	60		5569		
	18.7	280.1	0.9	75	PC080+NMRV075	6000	44	
	15.6	313	1	90		6375		
	28	184.2	1.8	50	NMRV090	5799	30	
	23.3	212	1.5	60		6163		
	17.5	258	1.1	80		6783		
	14	302	0.9	100		7306		
	15.6	326.9	1.7	90		7054		
	11.7	405	1.2	120	PC080+NMRV090	7764	44	
	9.3	483	0.9	150		8180		
	7.8	543	0.7	180		8180		
	17.5	274.2	1.9	80		8571		
	14	322	1.5	100	NMRV110	9232	31	
	11.7	429.8	2.2	120		9811		
	9.3	506	1.7	150	PC080+NMRV110	10320	44	
	7.8	580	1.3	180		10320		
	5.8	700	0.9	240		10320		
	4.7	871.2	1.5	300		10320		
	3.5	1126	1.1	400		10320		
5.8	712.2	1.4	240	PC080+NMRV130	13500	44		
4.7	813	1.1	300		13500			
2.8	1357.5	1.1	500		NMRV063/130		13500	50

## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page
<b>0.75</b>	2.3	1631	1	600		13500	
	1.9	2005	0.9	750	NMRV063/130	13500	50
	1.6	2283	0.8	900		13500	
<b>1.1</b>	186.7	49.5	2.6	7.5		2359	
	140	65	2	10		2597	
	93.3	93	1.5	15	NMRV063	2973	28
	70	122	1.1	20		3272	
	56	146	0.9	25		3524	
	46.7	167	1	30		3745	
	93.3	95.7	2.1	15		3509	
	70	123	1.7	20		3862	
	56	150	1.3	25	NMRV075	4160	29
	46.7	171	1.3	30		4421	
	35	216	1	40		4865	
	35	225.1	1.6	40		5383	
	28	270	1.3	50	NMRV090	5799	30
	23.3	311	1	60		6163	
	28	281.4	2.3	50		7328	
	23.3	324	1.9	60	NMRV110	7787	31
	17.5	402	1.3	80		8571	
	14	473	1	100		9232	
19	398	2.5	73.6		8298		
14.3	515	1.8	98.2		9133		
11.4	609	1.5	122.7	PC090+NMRV110	9838	44	
9.5	693	1.1	147.3		10320		
7.1	840	0.8	196.4		10320		
17.5	408.2	2.1	80		11210		
14	480	1.5	100	NMRV130	12076	32	
19	404	3.5	73.6		10853		
14.3	515	2.6	98.2		11945		
11.4	619	2	122.7	PC090+NMRV130	12868	44	
9.5	693	1.6	147.3		13500		
7.1	855	1.2	196.4		13500		
5.7	978	0.9	245.5		13500		
4.7	1312.1	1.3	300		13500		
3.5	1671	1	400	NMRV063/130	13500	50	
2.8	1991	0.8	500		13500		
<b>1.5</b>	186.7	67.5	1.9	7.5		2359	
	140	89	1.5	10		2597	
	93.3	127	1.1	15	NMRV063	2973	28
	70	166	0.8	20		3272	
	140	90	2.2	10		3065	
	93.3	130	1.5	15		3509	
	70	168	1.3	20	NMRV075	3862	29
	56	205	1	25		4160	
	46.7	233	1	30		4421	
	70	171.9	2.1	20		4273	
	56	210	1.6	25		4603	
	46.7	239	1.7	30		4891	
	35	307	1.2	40	NMRV090	5383	30
	28	368	0.9	50		5799	
	23.3	424	0.8	60		6163	
	35	319.2	2.2	40		6803	
	28	384	1.7	50		7328	
	23.3	442	1.4	60	NMRV110	7787	31
	17.5	548	0.9	80		8571	
	19	543	1.9	73.6		8298	
	14.3	703	1.3	98.2	PC090+NMRV110	9133	44

## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page
<b>1.5</b>	11.4	831	1.1	122.7	PC090+NMRV110	9838	44
	9.5	946	0.8	147.3		10320	
	17.5	556.6	1.5	80	NMRV130	11210	32
	14	655	1.1	100		12076	
	19	550	2.6	73.6	PC090+NMRV130	10853	44
	14.3	703	1.9	98.2		11945	
	11.4	845	1.5	122.7	PC090+NMRV130	12868	44
	9.5	998	1.1	147.3		13500	
	7.1	1165	0.8	196.4	PC090+NMRV130	13500	44
	4.7	1789.3	1	300		13500	
3.5	2279	0.7	400	NMRV063/130	13500	50	
<b>2.2</b>	186.7	100.2	1.8	7.5	NMRV075	2785	29
	140	132	1.5	10		3065	
	93.3	191	1	15		3509	
	186.7	101.3	2.9	7.5	NMRV090	3081	30
	140	134	2.3	10		3391	
	93.3	194	1.9	15		3882	
	70	252	1.4	20		4273	
	56	308	1.1	25		4603	
	46.7	351	1.2	30		4891	
	70	255.1	2.5	20		5399	
	56	315	2.2	25	5816		
	46.7	356	2	30	NMRV110	6181	31
	35	468	1.5	40		6803	
	28	563	1.2	50		7328	
	23.3	648	1	60	NMRV130	7787	32
	35	468.2	2.2	40		8897	
	28	563	1.7	50		9584	
	23.3	648	1.4	60	NMRV130	10185	32
	17.5	816	1	80		11210	
	28	570	2.5	50		13103	
23.3	657	1.9	60	NMRV150	13924	33	
17.5	816	1.4	80		15325		
14	960	1	100		16508		
<b>3</b>	186.7	136.6	1.4	7.5	NMRV075	2785	29
	140	180	1.1	10		3065	
	93.3	261	0.8	15		3509	
	186.7	138.1	2.1	7.5	NMRV090	3081	30
	140	182	1.7	10		3391	
	93.3	264	1.4	15		3882	
	70	344	1	20		4273	
	56	420	0.8	25		4603	
	46.7	479	0.9	30		4891	
	93.3	264	2.5	15		4905	
	70	348	1.9	20	5399		
	56	430	1.6	25	NMRV110	5816	31
	46.7	485	1.5	30		6181	
	35	638	1.1	40		6803	
	28	767	0.9	50	NMRV130	7328	32
	56	429.8	2.2	25		7607	
	46.7	491	2.1	30		8084	
	35	638	1.6	40	NMRV130	8897	32
	28	767	1.3	50		9584	
	23.3	884	1	60		10185	
17.5	1113	0.8	80	NMRV150	11210	33	
28	778	1.8	50		13103		
23.3	896	1.4	60		13924		
17.5	1113	1	80	NMRV150	15325	33	
14	1310	0.8	100		16508		
<b>4</b>	186.7	184.2	1.6	7.5	NMRV090	3081	30
	140	243	1.3	10		3391	
	93.3	352	1	15		3882	
	70	458	0.8	20	NMRV110	4273	31
	140	242.8	2.5	10		4285	
	93.3	352	1.9	15		4905	
70	464	1.4	20	NMRV110	5399	31	



## 性能參數表 Performance

P1 (kW)	n2 (1/min)	M2 (Nm)	f.s.	i	減速機型號 Type	Fr2 (N)	頁碼 Page
<b>4</b>	56	573	1.2	25	NMRV110	5816	31
	46.7	647	1.1	30		6181	
	56	573	1.6	25		7607	
	46.7	655	1.6	30	NMRV130	8084	
	35	851	1.2	40		8897	
	28	1023	1	50		9584	
	23.3	1179	0.8	60	NMRV150	10185	
	28	1037	1.4	50		13103	
	23.3	1195	1.1	60		13924	
17.5	1484	0.8	80		15325		
<b>4.8</b>	186.7	221	1.3	7.5	NMRV090	3081	30
	140	291	1.1	10		3391	
	93.3	422	0.9	15		3882	
	186.7	221	2.5	7.5	NMRV110	3893	
	140	291	2.1	10		4285	
	93.3	422	1.6	15		4905	
	70	557	1.2	20	NMRV130	5399	
	56	688	1	25		5816	
	56	687.6	1.4	25		7607	
	46.7	786	1.3	30	NMRV150	8084	
	35	1022	1	40		8897	
	28	1228	0.8	50		9584	
	28	1244	1.1	50	NMRV150	13103	
	23.3	1434	0.9	60		13924	
	186.7	253.2	2.2	7.5		NMRV110	
	140	334	1.8	10	4285		
	93.3	484	1.4	15	4905		
	70	638	1	20	NMRV130	5399	
140	333.9	2.5	10	5605			
93.3	490	1.9	15	6416			
70	645	1.4	20	NMRV150	7062		
56	788	1.2	25		7607		
46.7	900	1.2	30		8084		
35	1171	0.9	40	NMRV150	8897		
70	645	2	20		9654		
56	788	1.5	25		10400		
46.7	934	1.3	30	NMRV150	11051		
35	1171	1.3	40		12163		
28	1426	1	50		13103		
23.3	1643	0.8	60		13924		
<b>7.5</b>	186.7	345.3	1.6	7.5	NMRV110	3893	31
	140	455	1.3	10		4285	
	93.3	660	1	15		4905	
	186.7	349.2	2.1	7.5	NMRV130	5092	
	140	455	1.8	10		5605	
	93.3	668	1.4	15		6416	
	70	880	1	20	NMRV150	7062	
	56	1074	0.9	25		7607	
	46.7	1228	0.8	30		8084	
	35	1596	0.7	40	NMRV150	8897	
	70	880	1.5	20		9654	
	56	1074	1.1	25		10400	
	46.7	1274	0.9	30	NMRV150	11051	
	35	1596	1	40		12163	
	186.7	423.6	1.3	7.5		NMRV110	
	186.7	428.3	1.8	7.5	5092		
	140	559	1.5	10	5605		
	93.3	819	1.1	15	NMRV130	6416	
70	1079	0.8	20	7062			
56	1318	0.7	25	7607			
70	1079	1.2	20	NMRV150	9654		
56	1318	0.9	25		10400		
46.7	1563	0.8	30		11051		
35	1958	0.8	40		12163		
<b>11</b>	186.7	512	2.3	7.5	NMRV150	6962	33
	140	675	1.8	10		7663	
	93.3	990	1.3	15		8771	
	70	1291	1	20		9654	
	56	1576	0.8	25		10400	
	186.7	698	1.7	7.5		NMRV150	
140	921	1.3	10	7663			
93.3	1351	0.9	15	8771			
70	1760	0.7	20	9654			

## NRV 性能參數表 NRV Performance

(n1=1400)

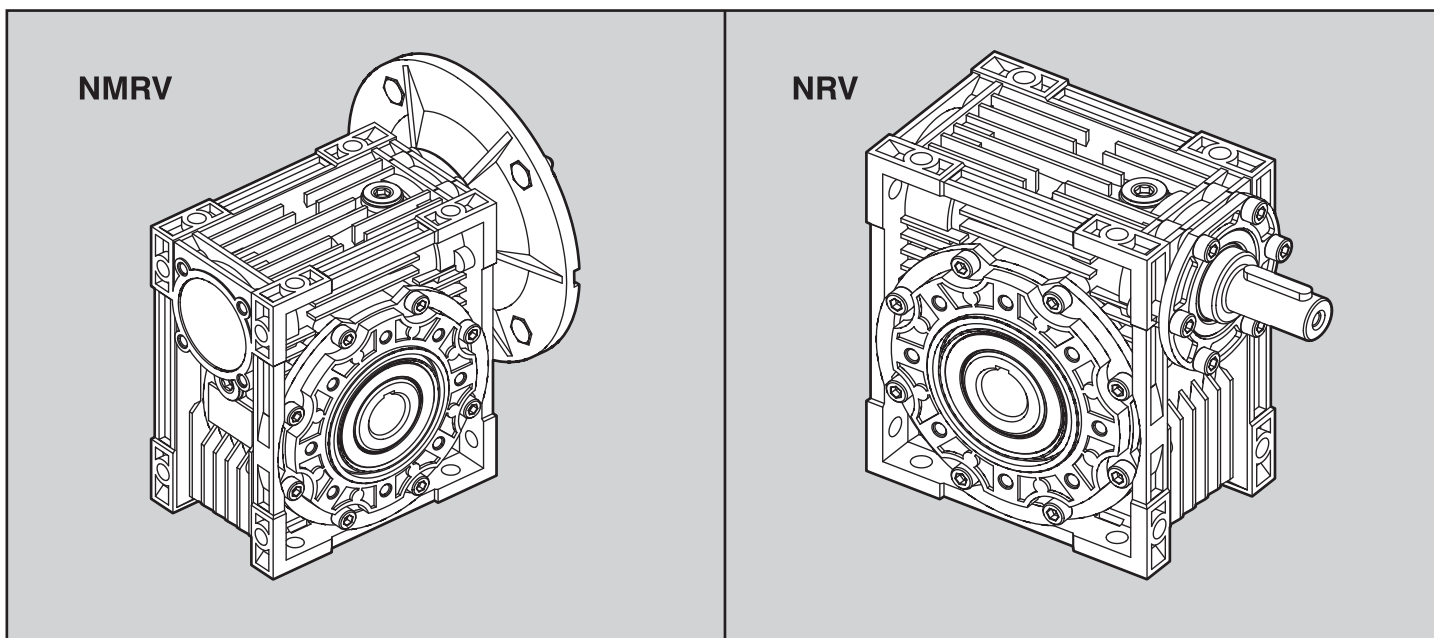
M2 (Nm)	i	P1 (KW)	n2 (1/min)	減速機型號 Type	Fr2 (N)	Fr1 (N)	頁碼 Page
18	5	0.6	280		597	150	
18	7.5	0.4	186.7		683	150	
18	10	0.3	140		752	169	
18	15	0.2	93.3		861	169	
18	20	0.2	70		948	190	
21	25	0.2	56	NRV030	1021	210	25
20	30	0.2	46.7		1085	210	
18	40	0.1	35		1194	210	
17	50	0.1	28		1286	210	
16	60	0.1	23.3		1367	210	
13	80	0.1	17.5		1504	210	
34	5	1.1	280		1149	250	
40	7.5	0.9	186.7		1315	294	
40	10	0.7	140		1447	331	
40	15	0.5	93.3		1657	331	
39	20	0.4	70		1824	350	
38	25	0.3	56	NRV040	1964	350	26
45	30	0.3	46.7		2087	350	
41	40	0.2	35		2298	350	
39	50	0.2	28		2475	350	
36	60	0.2	23.3		2630	350	
33	80	0.1	17.5		2895	350	
29	100	0.1	14		3118	350	
62	5	2	280		1577	350	
71	7.5	1.6	186.7		1805	401	
72	10	1.2	140		1987	490	
74	15	0.9	93.3		2274	490	
73	20	0.7	70		2503	490	
70	25	0.5	56	NRV050	2696	490	27
84	30	0.6	46.7		2865	490	
76	40	0.4	35		3153	490	
73	50	0.3	28		3397	490	
68	60	0.3	23.3		3610	490	
65	80	0.2	17.5		3973	490	
55	100	0.2	14		4280	490	
128	7.5	2.8	186.7		2359	500	
130	10	2.2	140		2597	571	
140	15	1.6	93.3		2973	615	
135	20	1.2	70		3272	667	
130	25	1	56		3524	700	
160	30	1.1	46.7	NRV063	3745	700	28
145	40	0.8	35		4122	700	
135	50	0.6	28		4440	700	
130	60	0.5	23.3		4719	700	
122	80	0.4	17.5		5193	700	
118	100	0.3	14		5595	700	
185	7.5	4.1	186.7		2785	700	
195	10	3.2	140		3065	830	
200	15	2.3	93.3		3509	851	
210	20	1.9	70		3862	980	
200	25	1.5	56		4160	980	
230	30	1.5	46.7	NRV075	4421	980	29
220	40	1.1	35		4865	980	
210	50	0.9	28		5241	980	
200	60	0.8	23.3		5569	980	
190	80	0.6	17.5		6130	980	
180	100	0.5	14		6603	980	

## NRV 性能參數表 NRV Performance

(n1=1400)

M2 (Nm)	i	P1 (KW)	n2 (1/min)		Fr2 (N)	Fr1 (N)	
290	7.5	6.3	186.7		3081	900	
310	10	5.1	140		3391	1082	
360	15	4.1	93.3		3882	1257	
355	20	3.1	70		4273	1270	
340	25	2.4	56		4603	1270	
410	30	2.6	46.7	NRV090	4891	1270	30
360	40	1.8	35		5383	1270	
340	50	1.4	28		5799	1270	
320	60	1.1	23.3		6163	1270	
285	80	0.8	17.5		6783	1270	
270	100	0.7	14		7306	1270	
552	7.5	12	186.7		3893	1200	
598	10	9.8	140		4285	1463	
656	15	7.5	93.3		4905	1604	
644	20	5.6	70		5399	1700	
679	25	4.7	56		5816	1700	
725	30	4.5	46.7	NRV110	6181	1700	31
702	40	3.3	35		6803	1700	
660	50	2.6	28		7328	1700	
616	60	2.1	23.3		7787	1700	
515	80	1.4	17.5		8571	1700	
483	100	1.1	14		9232	1700	
750	7.5	16.1	186.7		5092	1500	
820	10	13.5	140		5605	1845	
920	15	10.3	93.3		6416	2070	
910	20	7.8	70		7062	2100	
930	25	6.5	56		7607	2100	
1040	30	6.4	46.7	NRV130	8084	2100	32
1050	40	4.9	35		8897	2100	
980	50	3.8	28		9584	2100	
900	60	3.1	23.3		10185	2100	
840	80	2.3	17.5		11210	2100	
740	100	1.7	14		12076	2100	
1200	7.5	25.8	186.7		6962	1950	
1240	10	20.2	140		7663	2267	
1250	15	13.9	93.3		8771	2285	
1300	20	11.1	70		9654	2674	
1200	25	8.4	56		10400	2800	
1200	30	7.1	46.7	NRV150	11051	2800	33
1550	40	7.3	35		12163	2800	
1400	50	5.4	28		13103	2800	
1260	60	4.2	23.3		13924	2800	
1150	80	3.1	17.5		15325	2800	
1000	100	2.3	14		16508	2800	

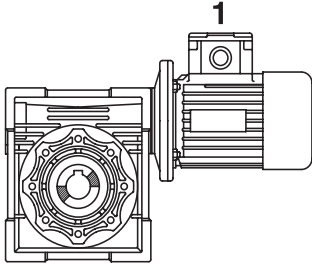
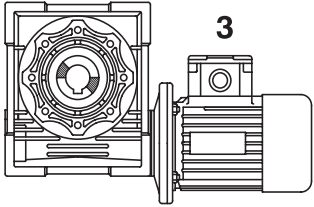
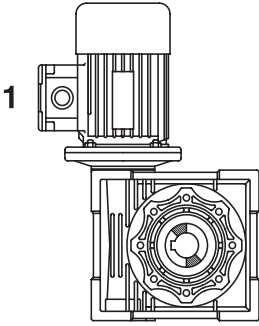
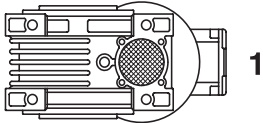
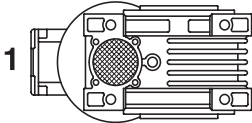
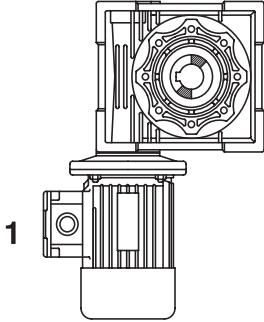
# NMRV / NRV



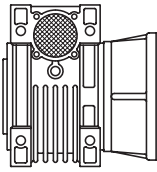
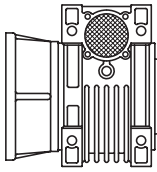
## NMRV型號標記 NMRV Model & marker

NMRV-063-30-VS-F1(FA)-AS-80B5-0.75kW-B3			
<b>NMRV</b>	蝸輪減速機 Worm geared motor	<b>PAM</b>	馬達連接盤 Fitted for motor coupling
<b>NRV</b>	蝸輪減速機 (配接輸入軸) Worm reduction unit	<b>0.75kW</b>	馬達功率 Electric motor power
<b>063</b>	蝸輪減速機中心距 Center distance	<b>F1(FA)</b>	輸出法蘭位置及型號 Output flange
<b>30</b>	減速比 Reduction ratio	<b>AB</b>	雙向輸出軸 Double output shaft
<b>VS</b>	雙向輸入軸 Double input shaft	<b>80B5</b>	馬達框號和安裝結構形式 Motor mounting facility
<b>AS</b>	單向輸出軸 Single output shaft	<b>B3</b>	安裝方式 Mounting position

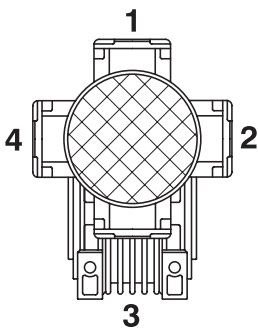
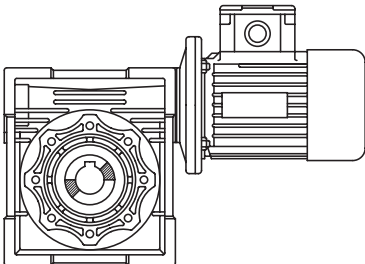
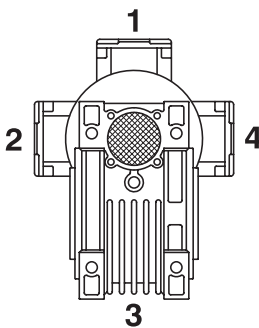
## 安裝方式 Mounting positions

<p><b>B3</b></p> 	<p><b>B8</b></p> 	<p><b>V5</b></p> 
<p><b>B6</b></p> 	<p><b>B7</b></p> 	<p><b>V6</b></p> 

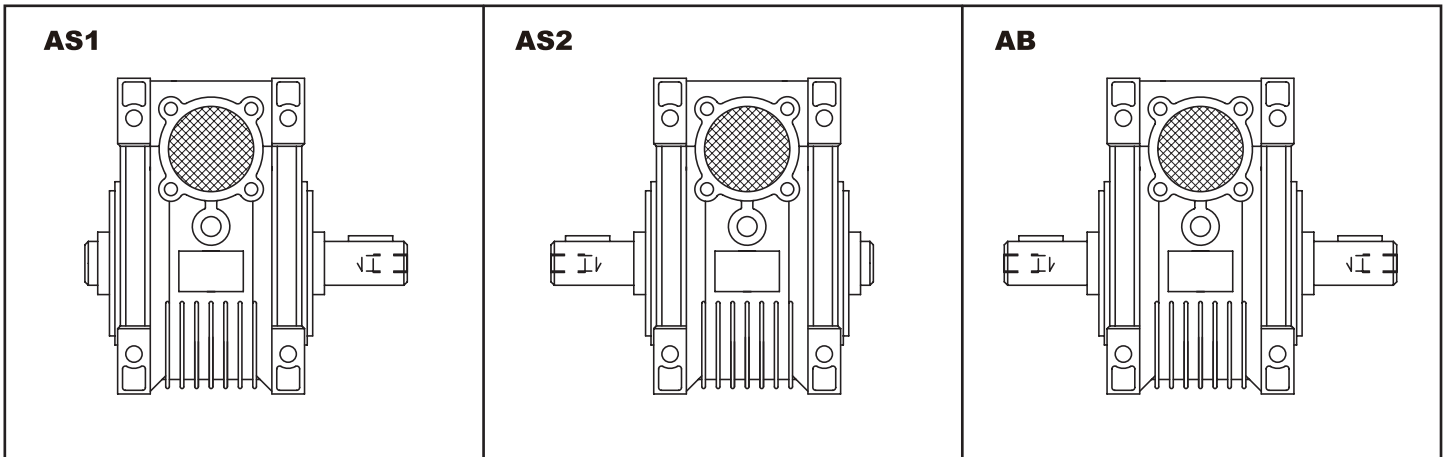
## 法蘭位置 Flange F-FL

<p><b>F1</b></p> 	<p><b>F2</b></p> 
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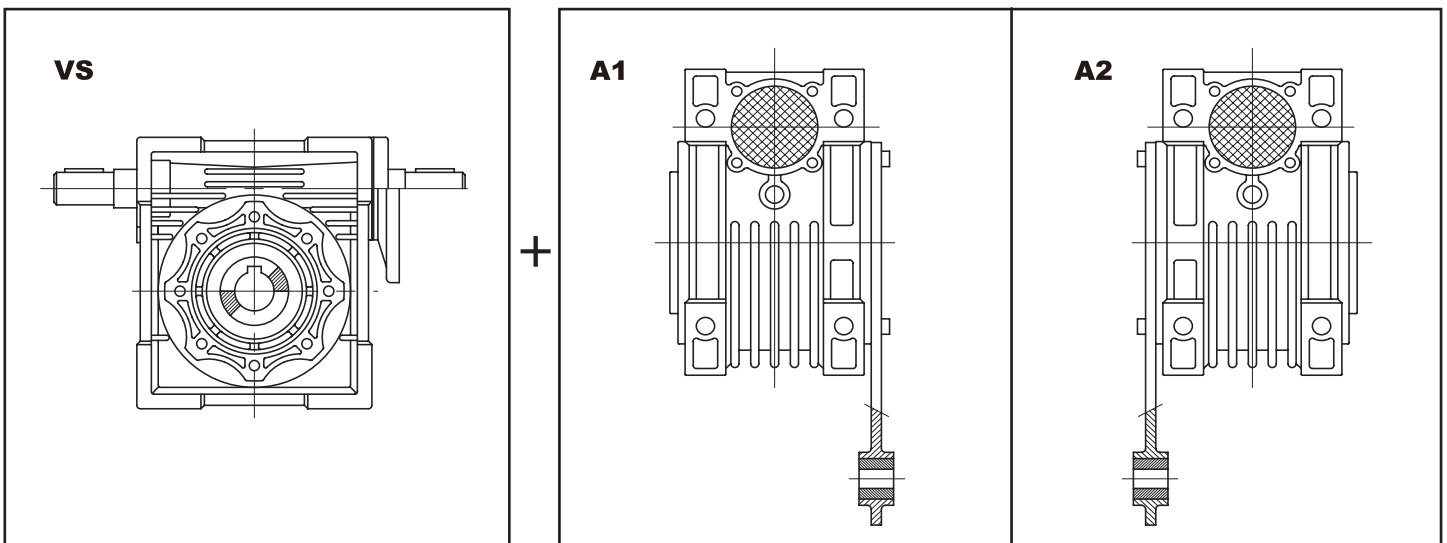
## 接線盒安裝方式 Pos. of terminal box

		
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### 輸出軸配置 Pos.of output shaft



### 雙向輸入軸 Double extension + 扭力臂配置 Pos.of torque arm

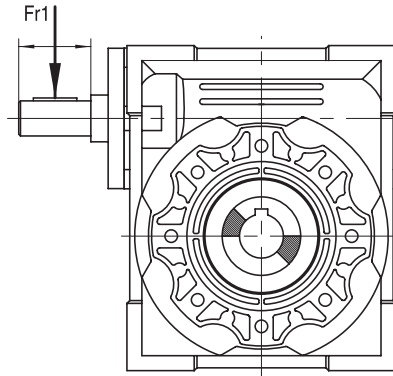


### 潤滑油的選用 Choice of lubricant

油量 (公升) Q.ty of oil in litres										
NMRV	025	030	040	050	063	075	090	110	130	150
B3								3	4.5	7
B8								2.2	3.3	5.1
B6-B7	0.02	0.04	0.08	0.15	0.30	0.55	1.00	2.5	3.5	5.4
V5								3	4.5	7
V6								2.2	3.3	5.1

	NMRV 025-090	NMRV 110-150
	Synthetic oil	Mineral oil
AGIP	TELIUM VSF 320	BLASIA 460
SHELL	TIVELA OIL S320	OMALA OIL460
ESSO	S220	SPARTAN EP460
MOBIL	GLYGOYLE 30	MOBILGEAR 634
CASTROL	ALPHASYN PG320	ALPHA MAX 460
BP	ENERGOL SG-XP320	ENERGOL GR-XP460

## 輸入軸容許徑向載荷 Applied mid-way along the input

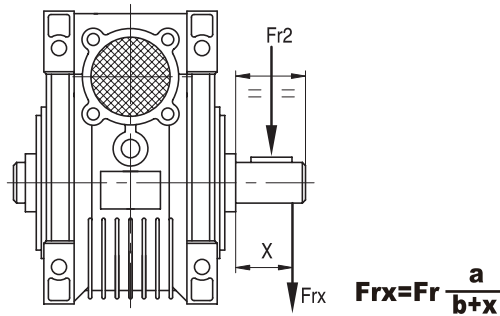


(N)

	NRV030	NRV040	NRV050	NRV063	NRV075	NRV090	NRV110	NRV130
<b>1400</b>	150	250	350	500	700	900	1200	1500
<b>900</b>	175	290	400	580	810	1040	1390	1740
<b>500</b>	210	350	490	700	980	1270	1700	2100

## 輸出軸容許徑向載荷 Applied mid-way along the output shaft

(N)

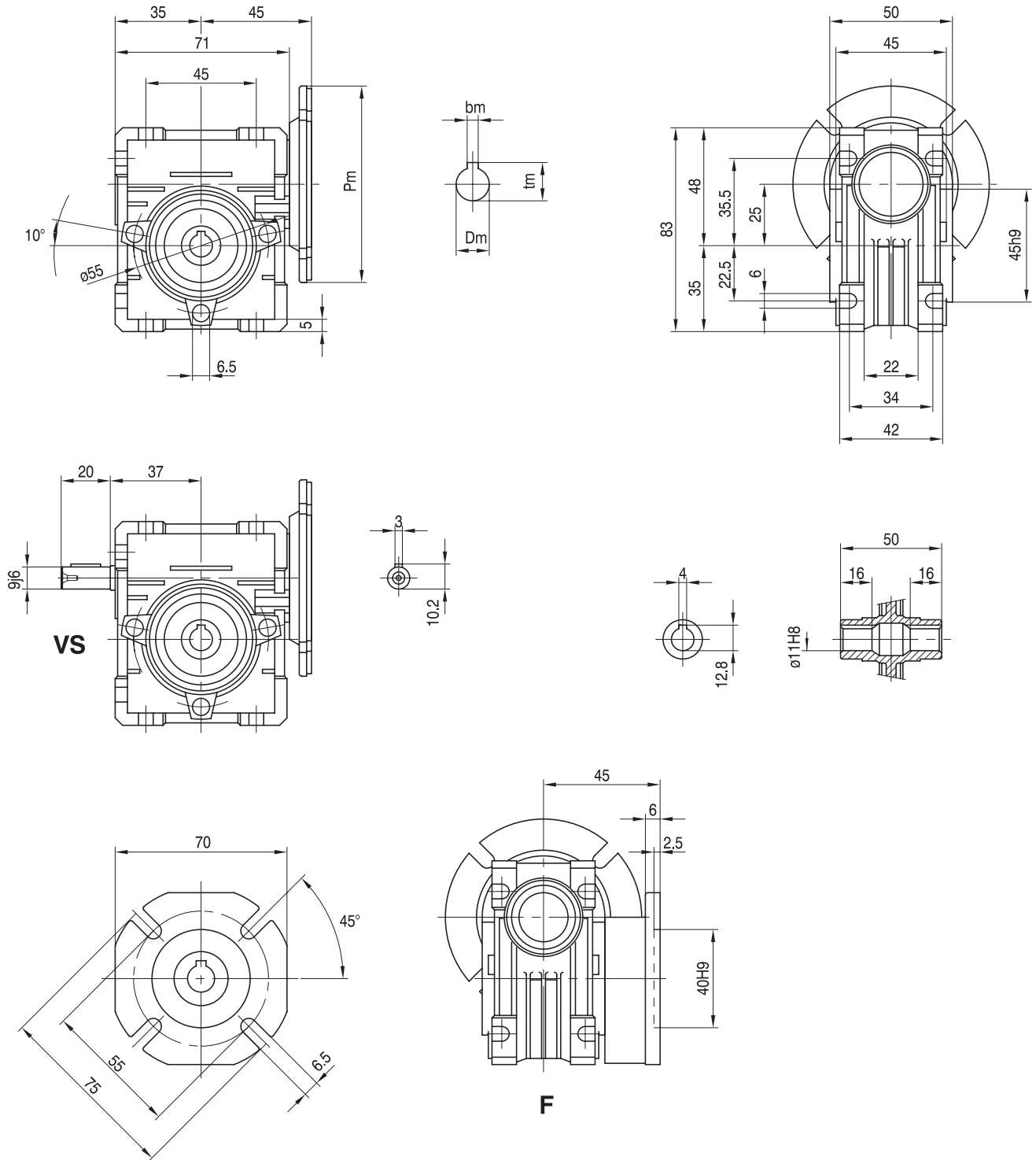


n2	NRV025	NRV030	NRV040	NRV050	NRV063	NRV075	NRV090	NRV110	NRV130
<b>400</b>	390	530	1020	1400	1830	2160	2390	3020	3950
<b>250</b>	460	620	1200	1650	2150	2520	2800	3530	4610
<b>150</b>	550	740	1420	1960	2540	2990	3310	4180	5470
<b>100</b>	630	850	1620	2250	2910	3430	3800	4790	6260
<b>60</b>	740	1000	1920	2660	3450	4060	4500	5680	7420
<b>40</b>	850	1150	2200	3050	3950	4650	5150	6500	8500
<b>25</b>	990	1350	2570	3570	4620	5440	6020	7600	9940
<b>10</b>	1350	1830	3490	4840	6270	7380	8180	10320	13500
<b>a</b>	50	65	84	101	120	131	162	191	203
<b>b</b>	38	50	64	76	95	101	122	151	163

- 表中的數值為作用於出力軸中點的許可載入力
- 當減速機為雙出軸時，折算到軸端的徑向合力不能超過表中規定的數值
- 當徑向力和軸向力同時施加時，最大許可的軸向推力為徑向力的1/5
- Above table is the allowed loading force on the midpoint of output shaft
- When the reducer is with double output shafts, the resultant radial power at the edge of shaft should not exceed the values specified as in above table
- the max allowed axial thrust is 1/5 of radial force while the radial force and axial force effected together

# 減速機外形尺寸 Dimensions

## NMRV025

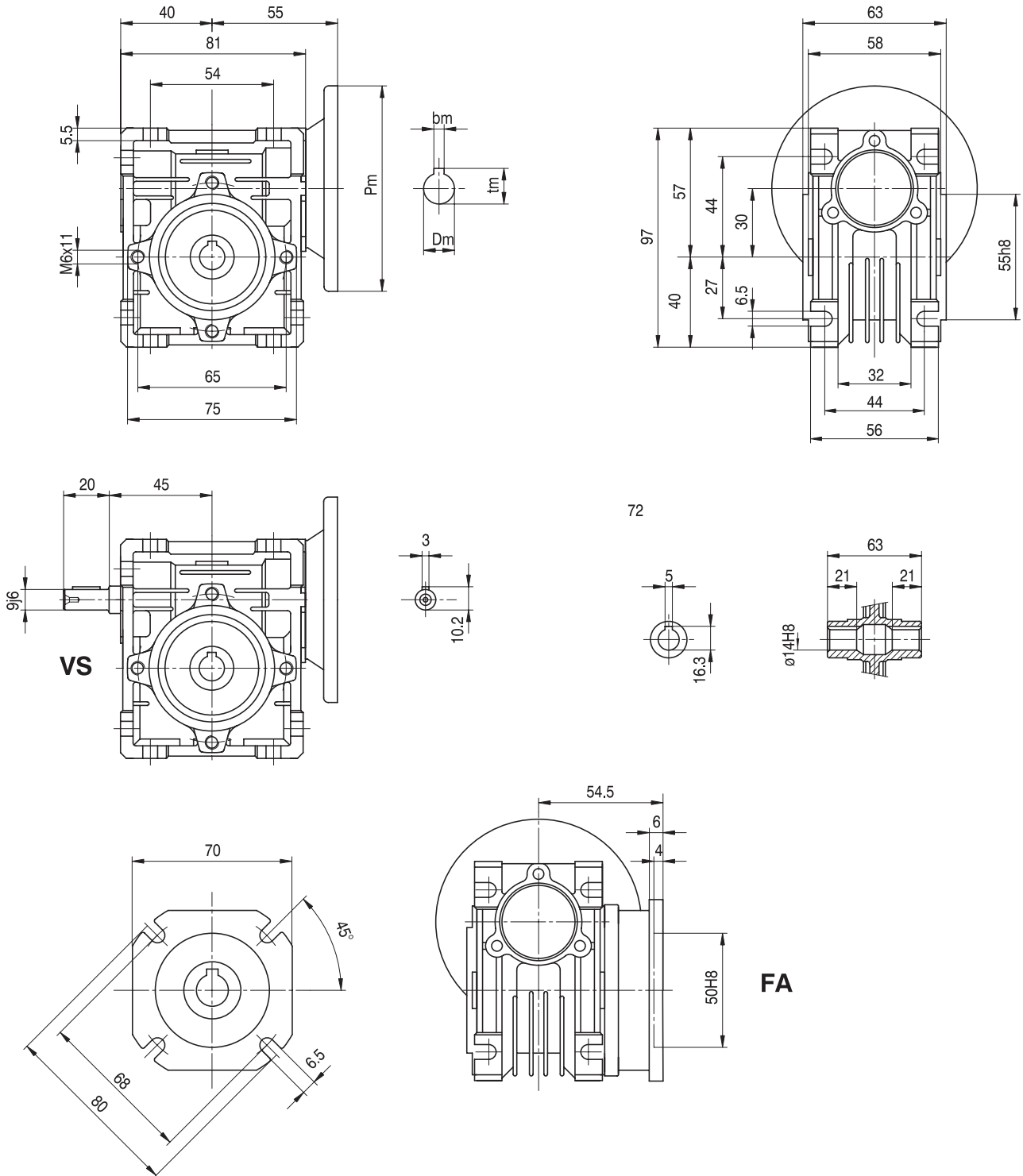


- 不含馬達重量為:0.7kg
- 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表
- Weight without motor:0.7kg
- For the dimensions concerning the motor connection area(Pm,Dm,bm,tm)please refer to the table shown at page 53



# 減速機外形尺寸 Dimensions

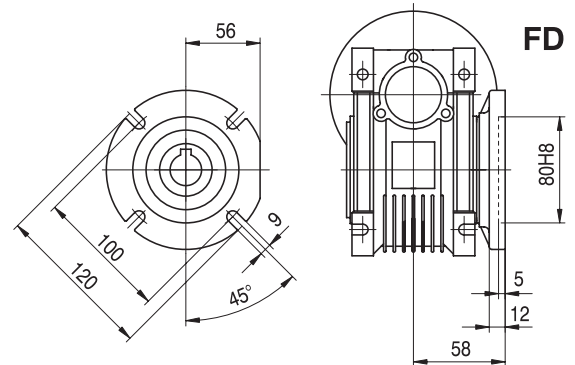
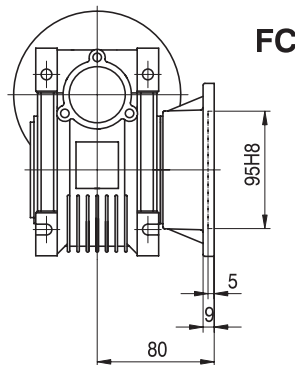
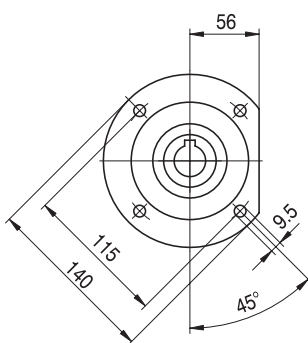
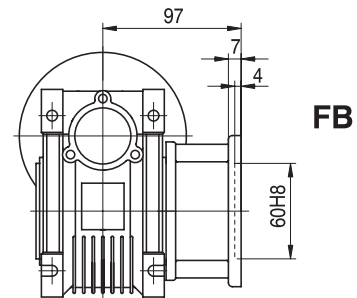
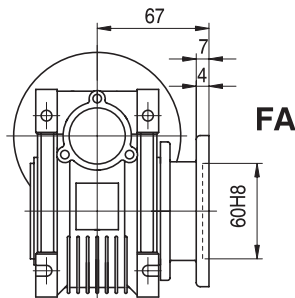
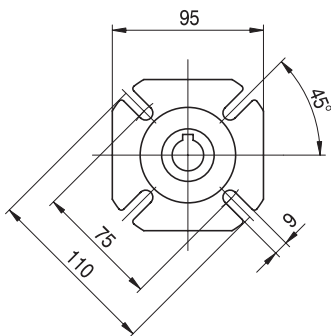
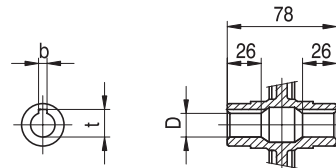
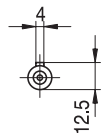
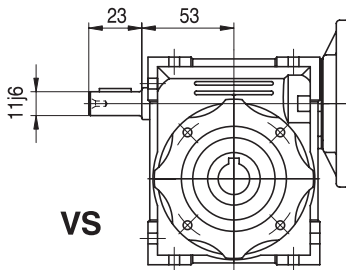
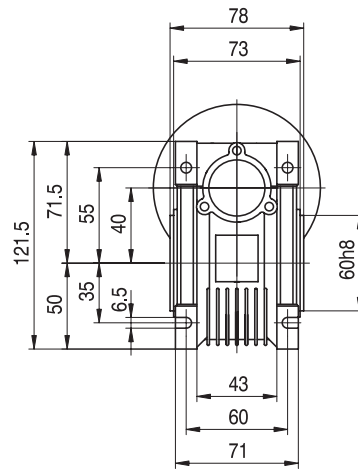
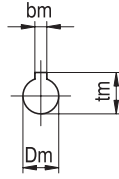
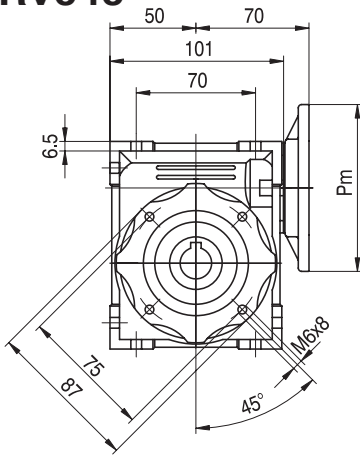
## NMRV030



- 不含馬達重量為: 1.2kg
- 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表
- Weight without motor: 1.2kg
- For the dimensions concerning the motor connection area(Pm,Dm,bm,tm) please refer to the table shown at page 53

# 減速機外形尺寸 Dimensions

## NMRV040



輸出軸孔徑/Output		
D H8	b	t
18	6	20.8
(19)	(6)	(21.8)

( ) 根據用戶要求訂製

● 不含馬達重量為:2.3kg

● 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表

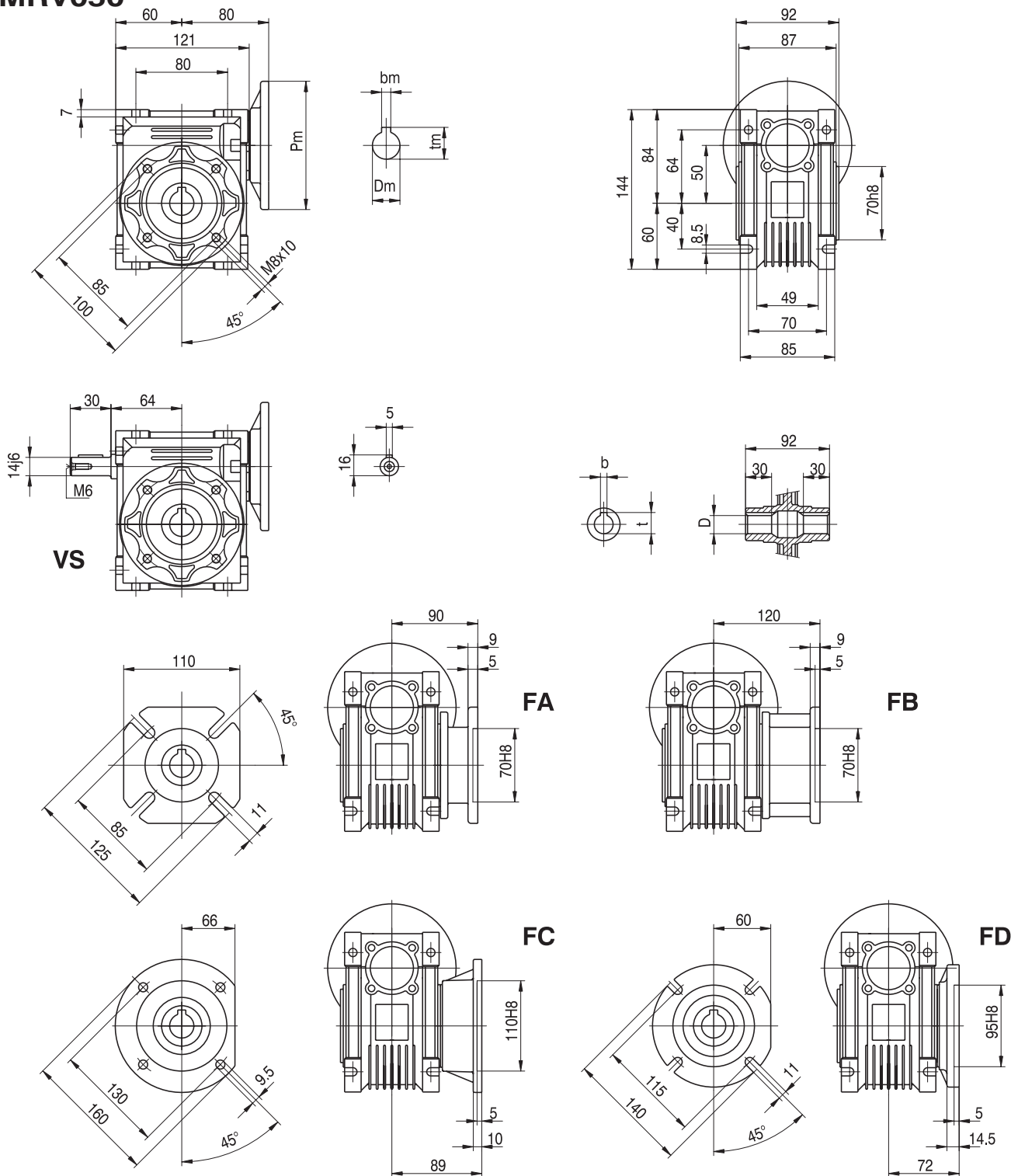
( ) Only on request

● Weight without motor:2.3kg

● for the dimensions concerning the motor connection area(Pm,Dm,bm,tm)please refer to the table shown at page 53

# 減速機外形尺寸 Dimensions

## NMRV050



輸出軸孔徑/Output		
D H8	b	t
25	8	28.3
(24)	(8)	(27.3)

( ) 根據用戶要求訂製

● 不含馬達重量為:3.5kg

● 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表

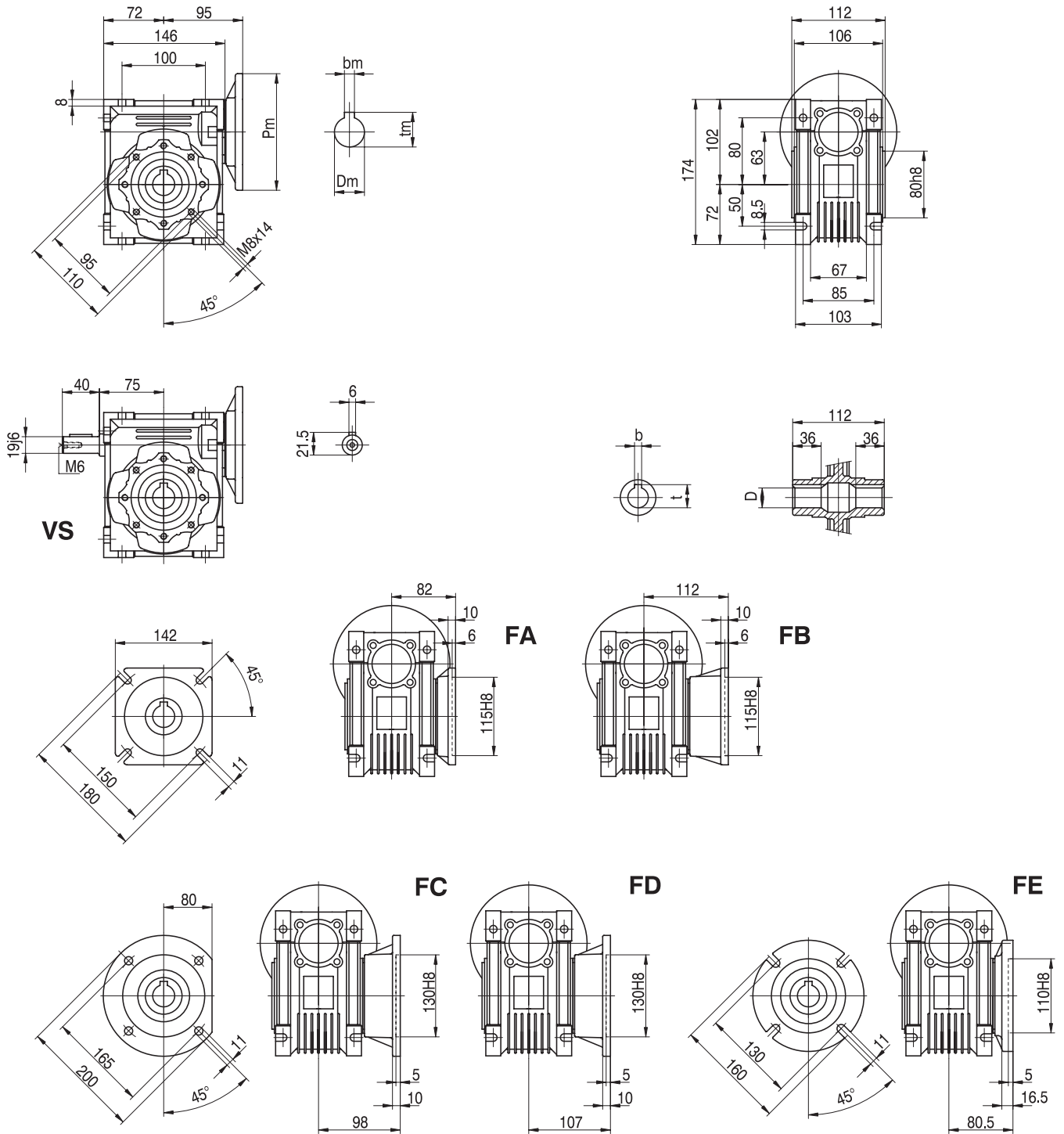
( ) Only on request

● Weight without motor:3.5kg

● for the dimensions concerning the motor connection area(Pm,Dm,bm,tm)please refer to the table shown at page 53

# 減速機外形尺寸 Dimensions

## NMRV063



( ) 根據用戶要求訂製

- 不含馬達重量為:6.2kg
- 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表

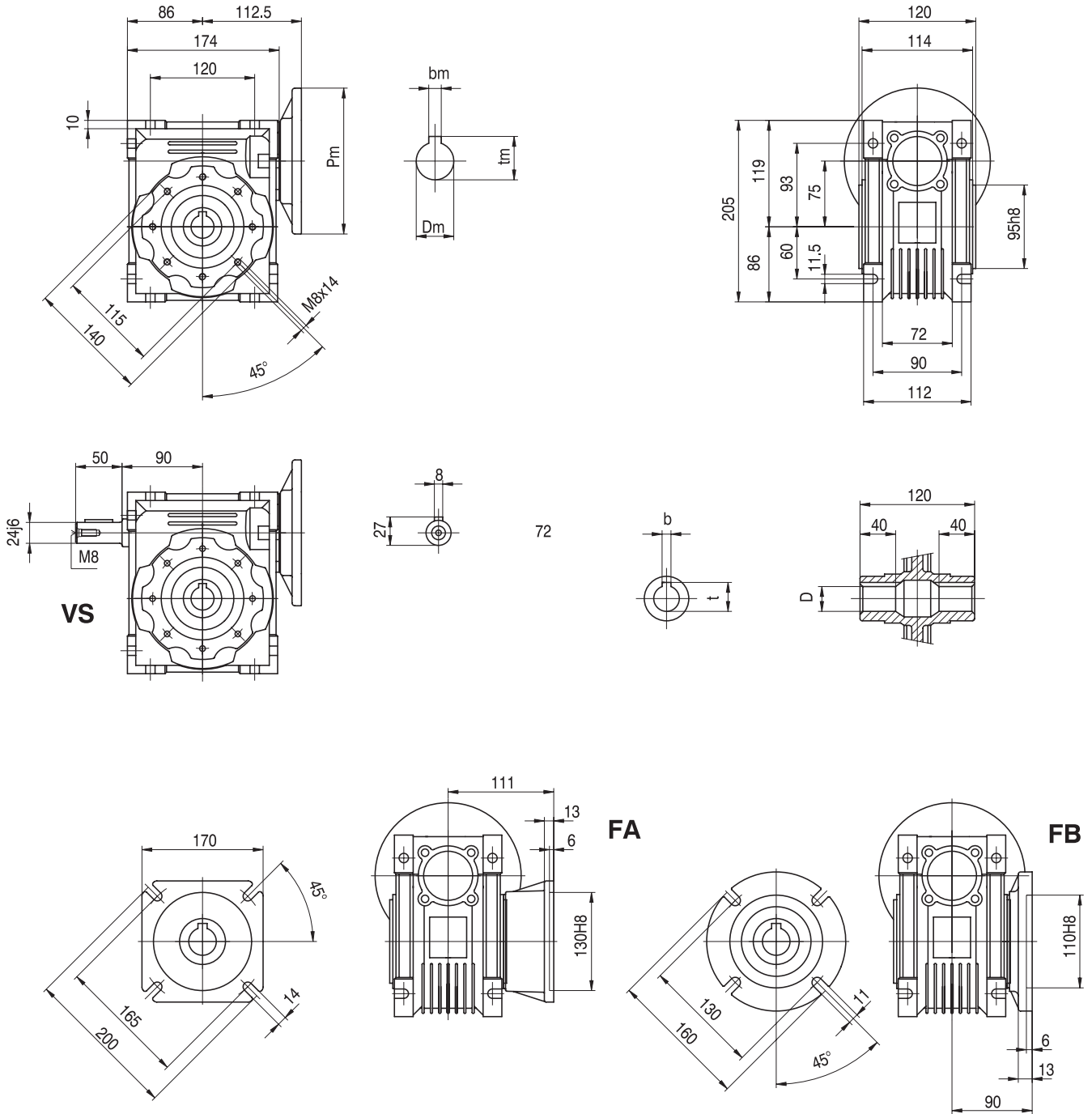
( ) Only on request

- Weight without motor:6.2kg
- for the dimensions concerning the motor connection area(Pm,Dm,bm,tm)please refer to the table shown at page 53

輸出軸孔徑/Output		
D H8	b	t
25	8	28.3
(28)	(8)	(31.3)

# 減速機外形尺寸 Dimensions

## NMRV075



輸出軸孔徑/Output		
D H8	b	t
28	8	31.3
(35)	(10)	(38.3)

( ) 根據用戶要求訂製

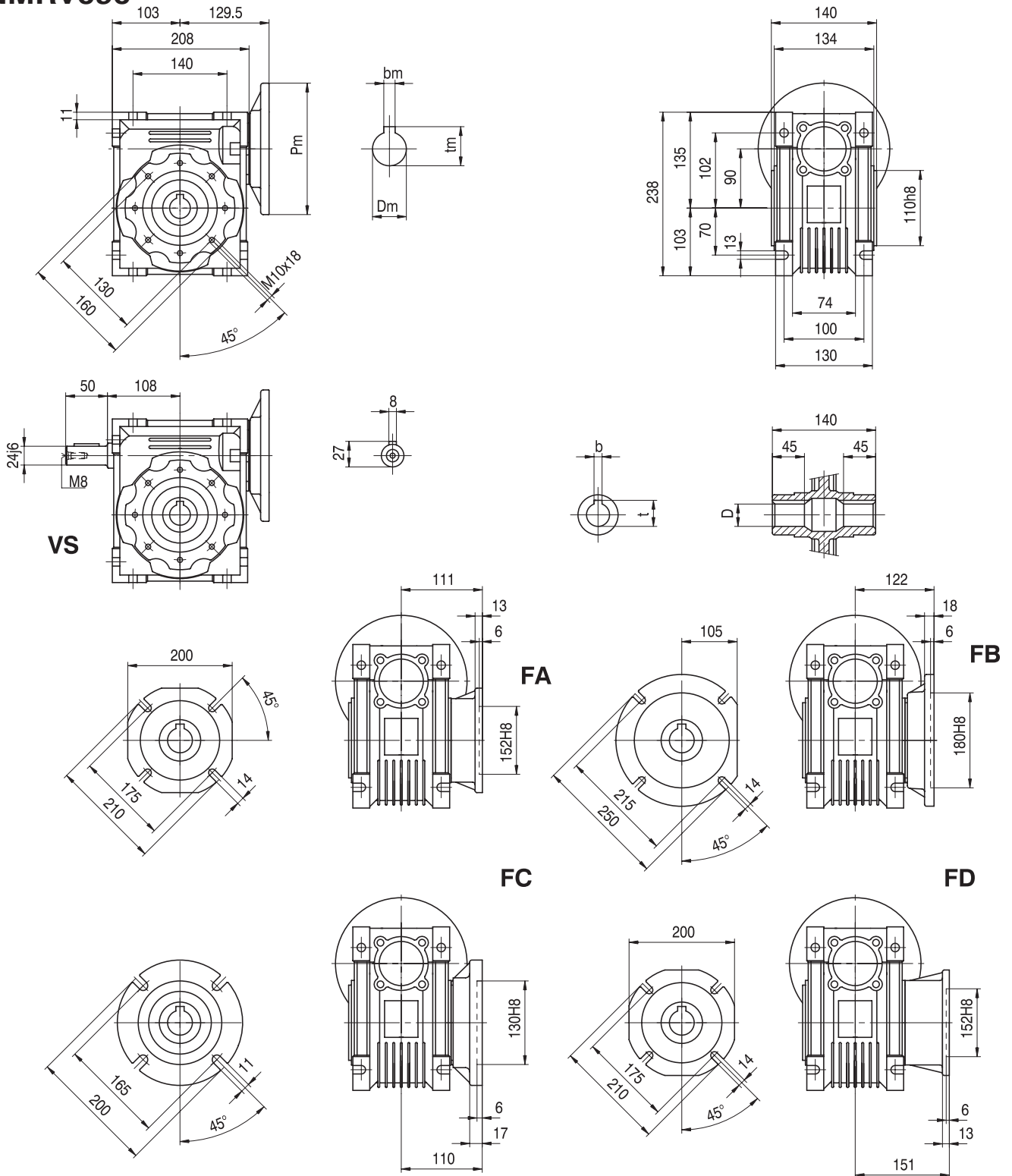
- 不含馬達重量為: 9kg
- 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表

( ) Only on request

- Weight without motor: 9kg
- for the dimensions concerning the motor connection area(Pm,Dm,bm,tm)please refer to the table shown at page 53

# 減速機外形尺寸 Dimensions

## NMRV090



( ) 根據用戶要求訂製

● 不含馬達重量為:13kg

● 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表

( ) Only on request

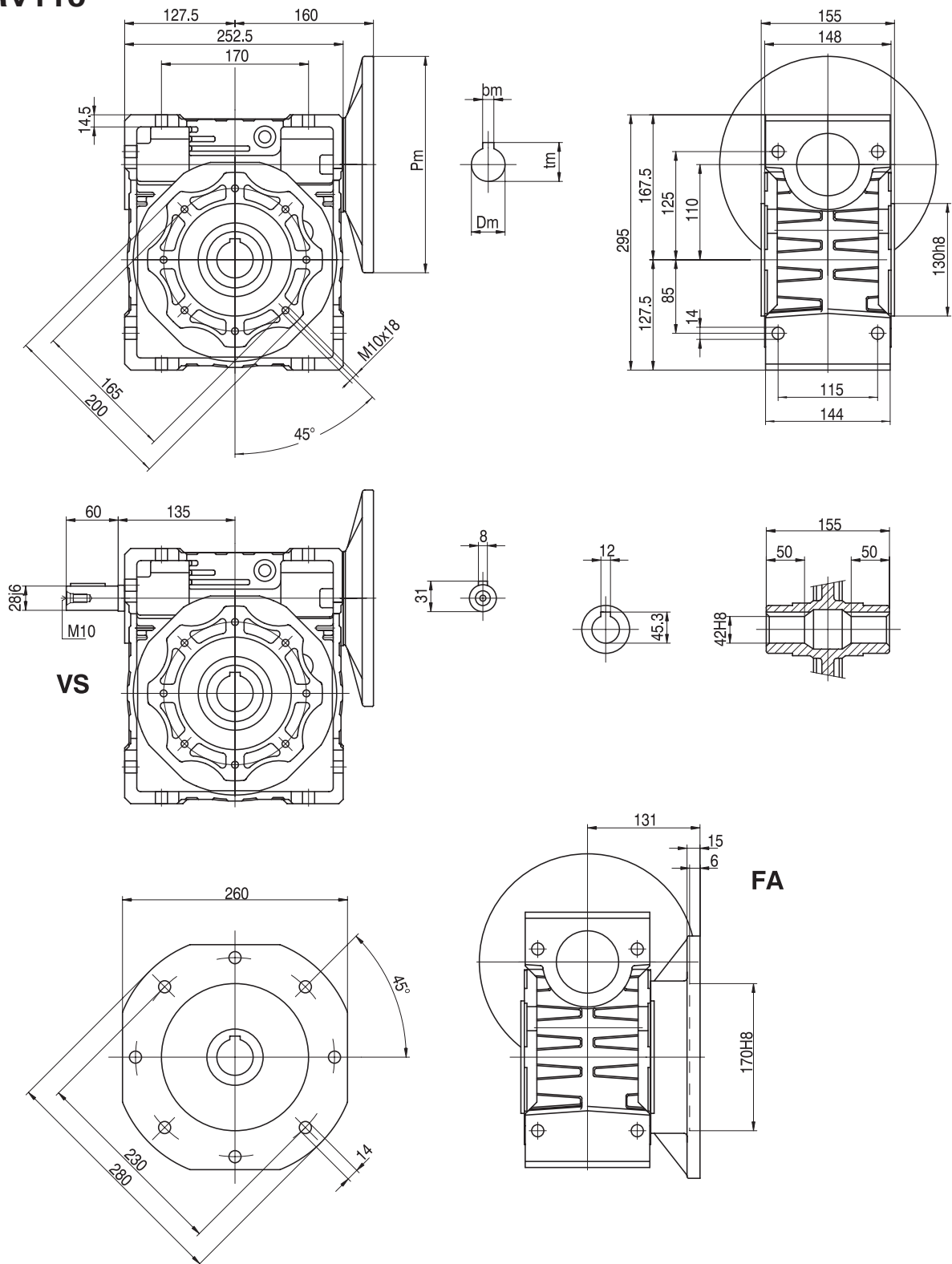
● Weight without motor:13kg

● for the dimensions concerning the motor connection area(Pm,Dm,bm,tm)please refer to the table shown at page 53

輸出軸孔徑/Output		
D H8	b	t
35	10	38.3
(38)	(10)	(41.3)

# 減速機外形尺寸 Dimensions

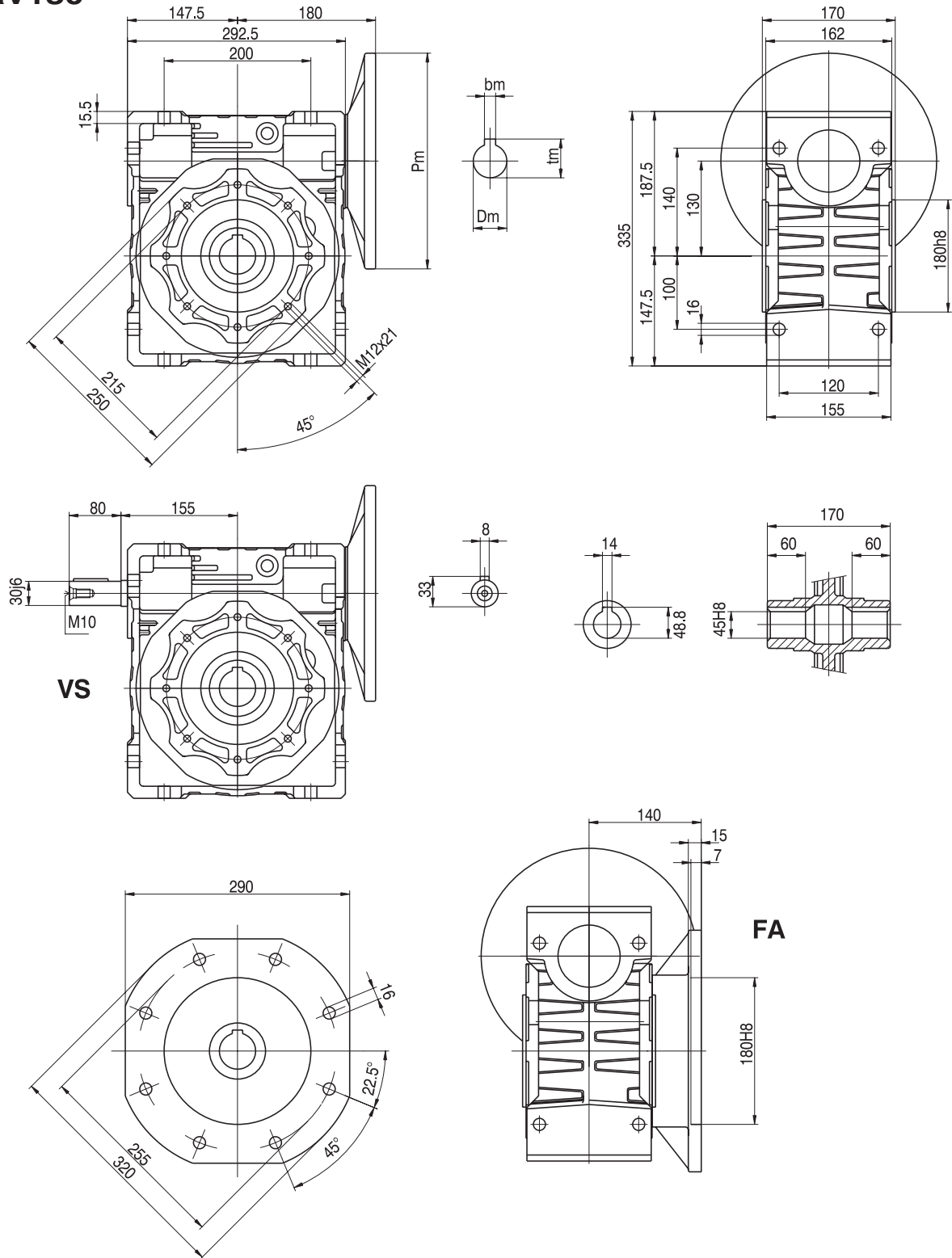
## NMRV110



- 不含馬達重量為:35kg
- 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表
- Weight without motor:35kg
- For the dimensions concerning the motor connection area(Pm,Dm,bm,tm)please refer to the table shown at page 53

# 減速機外形尺寸 Dimensions

## NMRV130

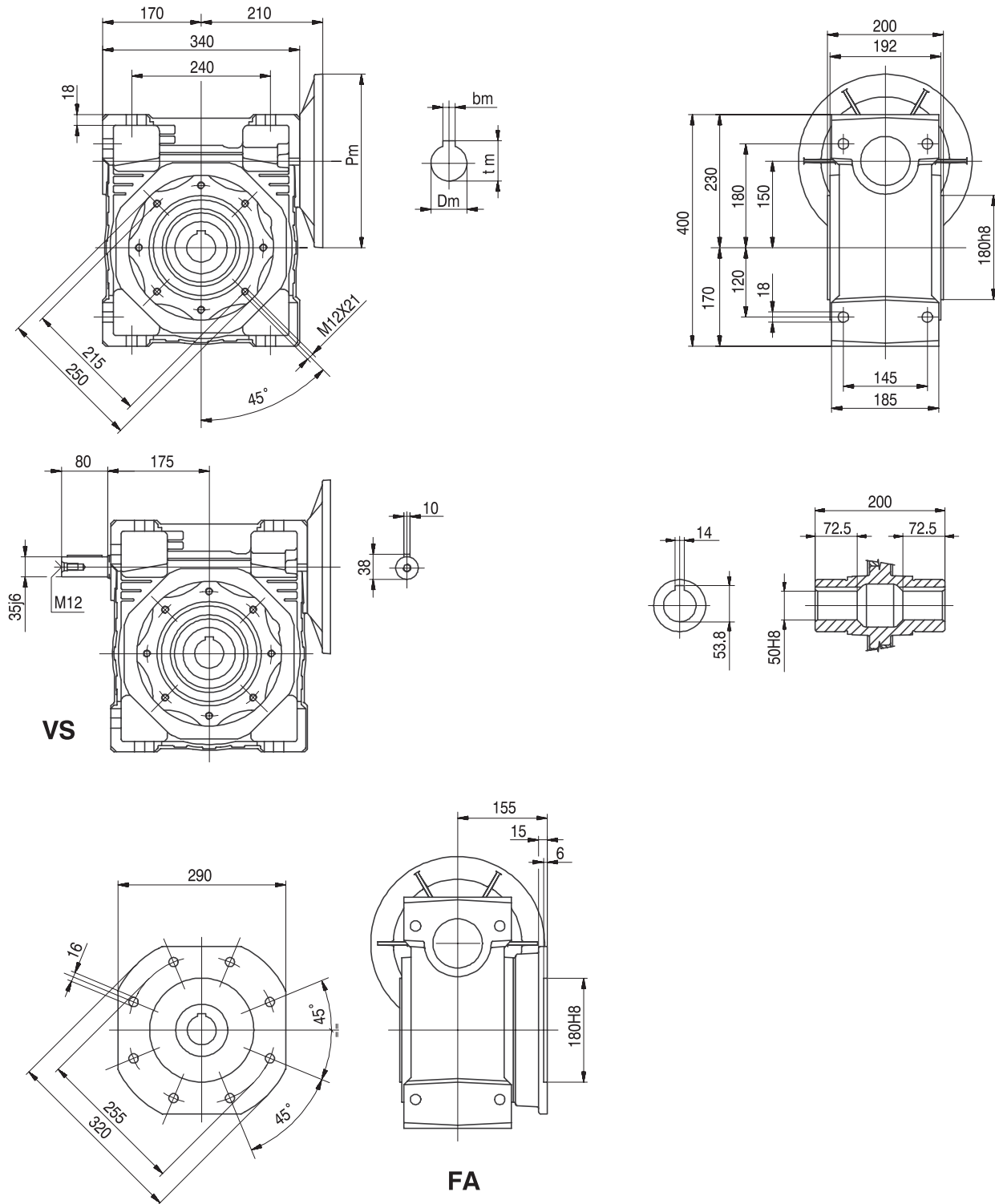


- 不含馬達重量為:48kg
- 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表
- Weight without motor:48kg
- For the dimensions concerning the motor connection area(Pm,Dm,bm,tm)please refer to the table shown at page 53



# 減速機外形尺寸 Dimensions

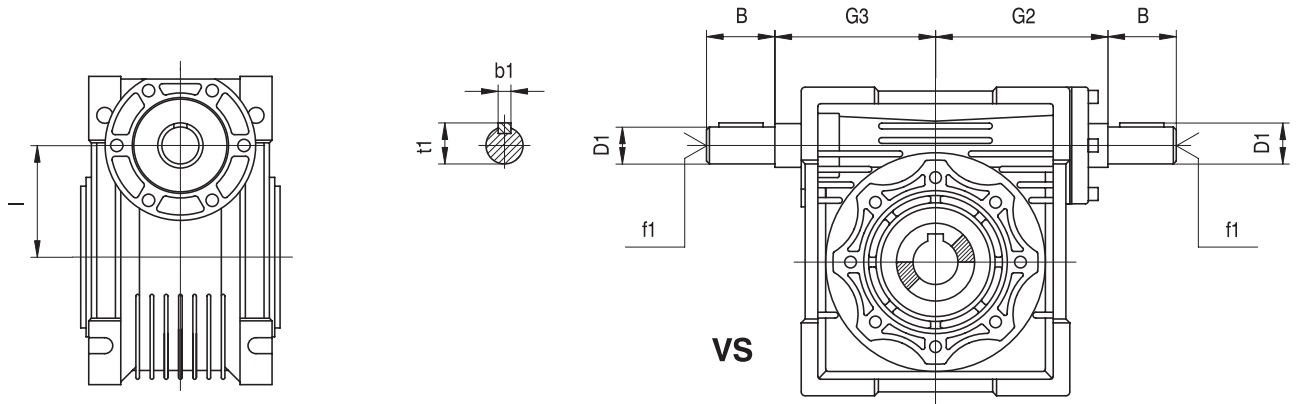
## NMRV150



- 不含馬達重量為: 84kg
- 輸入法蘭尺寸 (Pm,Dm,bm,tm) 參照第53頁圖表
- Weight without motor: 84kg
- For the dimensions concerning the motor connection area(Pm,Dm,bm,tm) please refer to the table shown at page 53

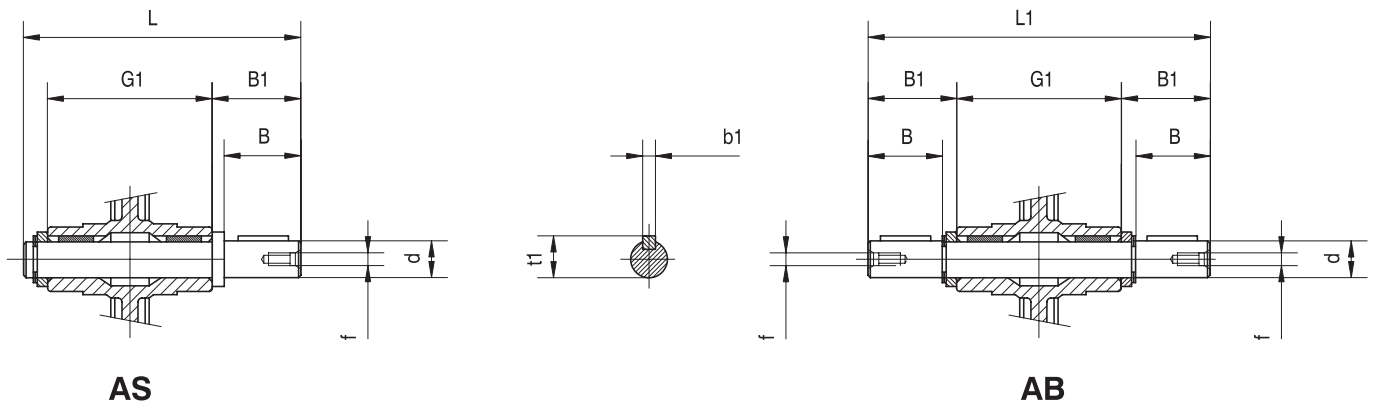
## NRV外形尺寸 NRV Dimensions

### NRV



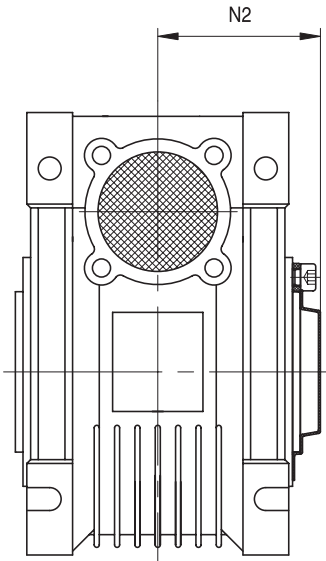
NRV	025	030	040	050	063	075	090	110	130	150
<b>B</b>	20	20	23	30	40	50	50	60	80	80
<b>D1</b>	9 j6	9 j6	11 j6	14 j6	19 j6	24 j6	24 j6	28 j6	30 j6	35 j6
<b>G2</b>	38	51	60	74	90	105	125	142	162	195
<b>G3</b>	37	45	53	64	75	90	108	135	155	175
<b>I</b>	25	30	40	50	63	75	90	110	130	150
<b>b1</b>	3	3	4	5	6	8	8	8	8	10
<b>f1</b>	-	-	-	M6	M6	M8	M8	M10	M10	M12
<b>t1</b>	10.2	10.2	12.5	16	21.5	27	27	31	33	38

## 輸出軸心外形尺寸 Low speed shafts Dimensions



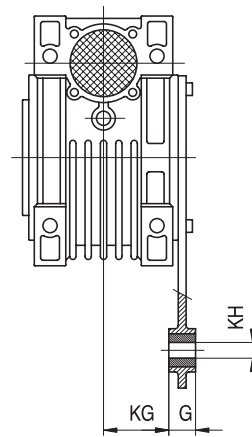
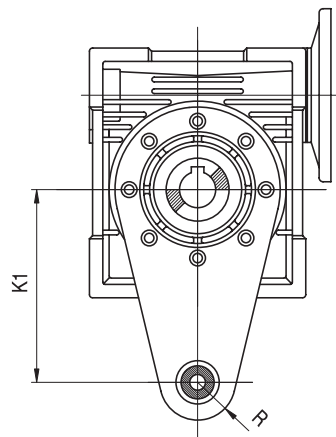
	d	B	B1	G1	L	L1	f	b1	t1
<b>025</b>	11g6 (9)	23 (25)	25.5 (30)	50	81 (85.5)	101	-	4 (3)	12.5 (10.2)
<b>030</b>	14g6	30	32.5	63	102	128	M6	5	16
<b>040</b>	18h6	40	43	78	128	164	M6	6	20.5
<b>050</b>	25h6	50	53.5	92	153	199	M10	8	28
<b>063</b>	25h6	50	53.5	112	173	219	M10	8	28
<b>075</b>	28h6	60	63.5	120	192	247	M10	8	31
<b>090</b>	35h6	80	84.5	140	234	309	M12	10	38
<b>110</b>	42h6	80	84.5	155	249	324	M16	12	45
<b>130</b>	45h6	80	85	170	265	340	M16	14	48.5
<b>150</b>	50h6	82	87	200	297	374	M16	14	53.5

## 外罩 Cover



	<b>N2</b>
<b>030</b>	42
<b>040</b>	50
<b>050</b>	58
<b>063</b>	69
<b>075</b>	74
<b>090</b>	86
<b>110</b>	94
<b>130</b>	102
<b>150</b>	113

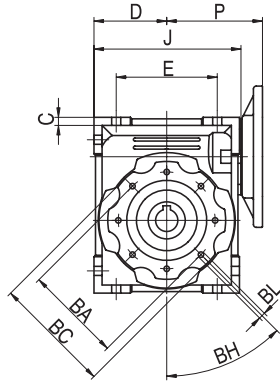
## 扭力臂 Torque arm



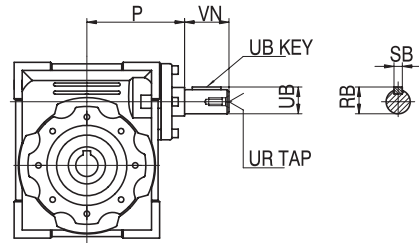
	<b>K1</b>	<b>G</b>	<b>KG</b>	<b>KH</b>	<b>R</b>
<b>025</b>	70	14	17.5	8	15
<b>030</b>	85	14	24	8	15
<b>040</b>	100	14	31.5	10	18
<b>050</b>	100	14	38.5	10	18
<b>063</b>	150	14	49	10	18
<b>075</b>	200	25	47.5	20	30
<b>090</b>	200	25	57.5	20	30
<b>110</b>	250	30	62	25	35
<b>130</b>	250	30	69	25	35
<b>150</b>	250	30	84	25	35

# NMRV英制系列 Inch series

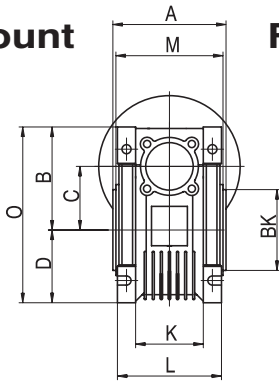
## NMRV



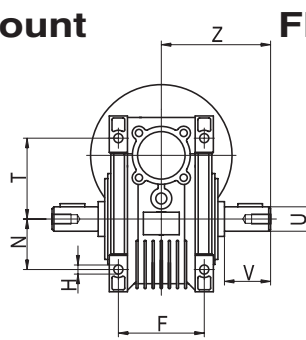
## NRV



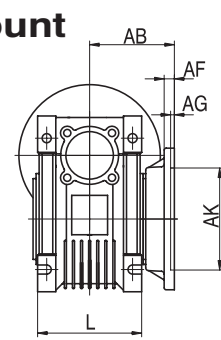
## Shaft Mount



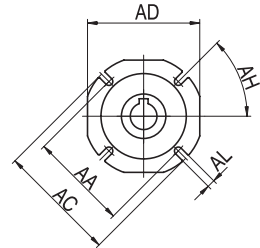
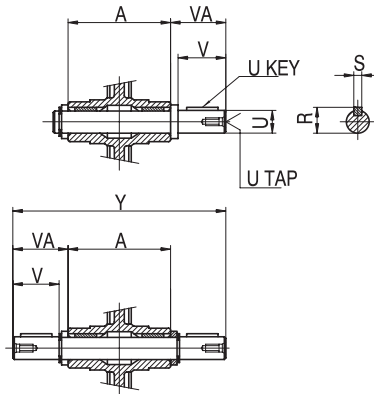
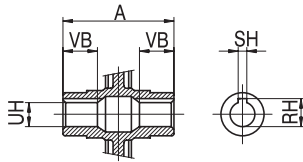
## Foot Mount



## Flange Mount



## Hollow Output Bore



## Output Shaft

## Output Flange

Hollow Output	030	040	050	063	075	090	110	130
RH	0.71	0.84	1.12	1.24	1.37	1.52	1.8	1.93
SH	0.188	0.188	0.25	0.25	0.25	0.313	0.375	0.375
UH	0.625 <sup>+0.001</sup> / <sub>0</sub>	0.75 <sup>+0.001</sup> / <sub>0</sub>	1 <sup>+0.001</sup> / <sub>0</sub>	1.125 <sup>+0.001</sup> / <sub>0</sub>	1.25 <sup>+0.001</sup> / <sub>0</sub>	1.375 <sup>+0.001</sup> / <sub>0</sub>	1.625 <sup>+0.001</sup> / <sub>0</sub>	1.75 <sup>+0.001</sup> / <sub>0</sub>
VB	0.83	1.14	1.28	1.42	1.56	1.77	1.97	2.24
Output Shaft	030	040	050	063	075	090	110	130
R	0.7	0.83	1.11	1.23	1.36	1.51	1.79	1.92
S	0.188	0.188	0.25	0.25	0.25	0.313	0.375	0.375
U	0.625 <sup>0</sup> / <sub>-0.0005</sub>	0.75 <sup>0</sup> / <sub>-0.0005</sub>	1 <sup>0</sup> / <sub>-0.0005</sub>	0 <sup>0</sup> / <sub>-0.0005</sub>	1.25 <sup>0</sup> / <sub>-0.0005</sub>	1.375 <sup>0</sup> / <sub>-0.0005</sub>	1.625 <sup>0</sup> / <sub>-0.0005</sub>	1.75 <sup>0</sup> / <sub>-0.0005</sub>
U KEY	0.1875x1.125	0.1875x1.5	0.25x1.5	0.25x1.875	0.25x2.25	0.3125x2.5	0.375x2.75	0.375x2.75
UT	1/4-20	1/4-20	3/8-16	3/8-16	1/2-13	1/2-13	5/8-11	5/8-11
V	1.57	1.97	1.97	2.36	2.76	3.15	3.54	3.54
VA	1.67	2.09	2.11	2.5	2.89	3.33	3.72	3.74
Y	5.82	7.25	7.84	9.41	10.5	12.17	13.54	14.17

## NMRV英制系列 Inch series

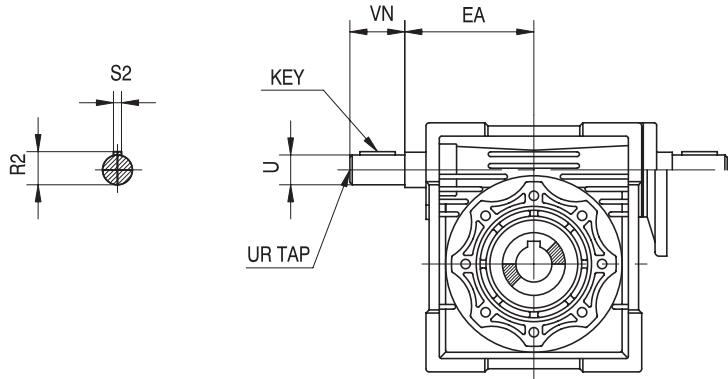
	030	040	050	063	075	090	110	130
<b>A</b>	2.48	3.07	3.62	4.41	4.72	5.51	6.1	6.69
<b>B</b>	2.24	2.81	3.31	4.02	4.69	5.31	6.59	7.38
<b>BA</b>	2.56	2.95	3.35	3.74	4.53	5.12	6.5	8.46
<b>BC</b>	2.95	3.43	3.94	4.33	5.51	6.3	7.87	9.84
<b>BH</b>	90°	45°	45°	45°	45°	45°	45°	45°
<b>BK</b>	2.165 <sup>0</sup> <sub>-0.0018</sub>	2.362 <sup>0</sup> <sub>-0.0018</sub>	2.756 <sup>0</sup> <sub>-0.0018</sub>	3.15 <sup>0</sup> <sub>-0.0021</sub>	3.74 <sup>0</sup> <sub>-0.0021</sub>	4.331 <sup>0</sup> <sub>-0.0021</sub>	5.118 <sup>0</sup> <sub>-0.0025</sub>	7.087 <sup>0</sup> <sub>-0.0025</sub>
<b>BL</b>	M6x11	M6x10	M8x10	M8x14	M8x14	M10x18	M10x18	M12x21
<b>C</b>	1.18	1.57	1.97	2.48	2.95	3.54	4.33	5.12
<b>D</b>	1.57	1.97	2.36	2.83	3.39	4.06	5.02	5.81
<b>E</b>	2.13	2.76	3.15	3.94	4.72	5.51	6.69	7.87
<b>F</b>	1.73	2.36	2.76	3.35	3.54	3.94	4.53	4.72
<b>G</b>	0.22	0.26	0.28	0.31	0.39	0.43	0.57	0.61
<b>H</b>	0.26	0.26	0.33	0.33	0.45	0.51	0.55	0.63
<b>J</b>	3.15	3.98	4.76	5.75	6.85	8.19	9.94	11.52
<b>K</b>	1.26	1.69	1.93	2.64	2.83	2.91	-	-
<b>L</b>	2.2	2.8	3.35	4.06	4.41	5.12	5.67	6.1
<b>M</b>	2.28	2.87	3.43	4.17	4.49	5.28	5.83	6.38
<b>N</b>	1.06	1.38	1.57	1.97	2.36	2.76	3.35	3.94
<b>O</b>	3.82	4.78	5.67	6.85	8.07	9.37	11.61	13.19
<b>P</b>	2.64	3.15	3.54	4.13	4.96	5.63	6.81	7.6
<b>Q</b>	0.83	2.36	2.91	3.54	4.13	4.92	5.59	6.38
<b>T</b>	1.73	2.17	2.52	3.15	3.66	4.02	4.92	5.51
<b>Z</b>	2.91	3.63	3.92	4.71	5.25	6.09	6.77	7.09

Output Flange		AA	AB	AC	AD	AF	AG	AH	AK	AL
<b>030</b>	<b>FA</b>	2.68	2.15	3.15	2.76	0.24	0.16	45°	1.969 <sup>+0.0015</sup> <sub>0</sub>	0.26
<b>040</b>	<b>FA</b>	2.95	2.64	4.33	3.74	0.28	0.16	45°	2.362 <sup>+0.0018</sup> <sub>0</sub>	0.35
	<b>FB</b>	2.95	3.82	4.33	3.74	0.28	0.16	45°	2.362 <sup>+0.0018</sup> <sub>0</sub>	0.35
	<b>FC</b>	4.53	3.15	5.51	-	0.35	0.2	45°	3.74 <sup>+0.0021</sup> <sub>0</sub>	0.37
	<b>FD</b>	3.94	2.28	4.72	-	0.47	0.2	45°	3.15 <sup>+0.0018</sup> <sub>0</sub>	0.35
<b>050</b>	<b>FA</b>	3.35	3.54	4.92	4.33	0.35	0.2	45°	2.756 <sup>+0.0018</sup> <sub>0</sub>	0.43
	<b>FB</b>	3.35	4.72	4.92	4.33	0.35	0.2	45°	2.756 <sup>+0.0018</sup> <sub>0</sub>	0.43
	<b>FC</b>	5.12	3.5	6.3	-	0.39	0.2	45°	4.331 <sup>+0.0021</sup> <sub>0</sub>	0.37
	<b>FD</b>	4.53	2.83	5.51	-	0.57	0.2	45°	3.543 <sup>+0.0021</sup> <sub>0</sub>	0.43
<b>063</b>	<b>FA</b>	4.13	3.23	7.09	5.59	0.39	0.24	45°	4.528 <sup>+0.0021</sup> <sub>0</sub>	0.43
	<b>FB</b>	5.91	4.41	7.09	5.59	0.39	0.24	45°	4.528 <sup>+0.0021</sup> <sub>0</sub>	0.43
	<b>FC</b>	6.5	3.86	7.87	-	0.39	0.2	45°	5.118 <sup>+0.0025</sup> <sub>0</sub>	0.43
	<b>FD</b>	6.5	4.21	7.87	-	0.39	0.2	45°	5.118 <sup>+0.0025</sup> <sub>0</sub>	0.43
	<b>FE</b>	5.12	3.17	6.3	-	0.65	0.2	45°	4.331 <sup>+0.0021</sup> <sub>0</sub>	0.43
<b>075</b>	<b>FA</b>	6.5	4.37	7.87	6.69	0.51	0.24	45°	5.118 <sup>+0.0025</sup> <sub>0</sub>	0.55
	<b>FB</b>	5.12	3.54	6.3	-	0.51	0.24	45°	4.331 <sup>+0.0021</sup> <sub>0</sub>	0.55
<b>090</b>	<b>FA</b>	6.89	4.37	8.27	8.27	0.51	0.24	45°	5.984 <sup>+0.0025</sup> <sub>0</sub>	0.55
	<b>FB</b>	8.46	4.8	9.84	-	0.71	0.24	45°	7.087 <sup>+0.0025</sup> <sub>0</sub>	0.55
	<b>FC</b>	6.5	4.33	7.87	-	0.67	0.24	45°	5.118 <sup>+0.0025</sup> <sub>0</sub>	0.43
	<b>FD</b>	6.89	5.94	8.27	-	0.51	0.24	45°	5.984 <sup>+0.0025</sup> <sub>0</sub>	0.55
<b>110</b>	<b>FA</b>	9.06	5.16	11.02	10.24	0.59	0.24	45°	6.693 <sup>+0.0025</sup> <sub>0</sub>	0.55
	<b>FB</b>	9.06	7.09	11.02	10.24	0.59	0.24	45°	6.693 <sup>+0.0025</sup> <sub>0</sub>	0.55
<b>130</b>	<b>FA</b>	10.04	5.51	12.6	11.42	0.59	0.24	22.5°	7.087 <sup>+0.0025</sup> <sub>0</sub>	0.63

Input Flange	030	040	050	063	075	090	110	130
<b>SB</b>	0.094	0.125	0.188	0.188	0.188	0.188	0.25	0.25
<b>RB</b>	0.42	0.55	0.7	0.83	0.96	0.96	1.24	1.36
<b>UB</b>	0.375 <sup>0</sup> <sub>-0.0005</sub>	0.5 <sup>0</sup> <sub>-0.0005</sub>	0.625 <sup>0</sup> <sub>-0.0005</sub>	0.75 <sup>0</sup> <sub>-0.0005</sub>	0.875 <sup>0</sup> <sub>-0.0005</sub>	0.875 <sup>0</sup> <sub>-0.0005</sub>	1.125 <sup>0</sup> <sub>-0.0005</sub>	1.25 <sup>0</sup> <sub>-0.0005</sub>
<b>UB KEY</b>	0.094x0.875	0.125x0.875	0.1875x1.125	0.1875x1.5	0.1875x1.875	0.1875x1.875	0.25x2.25	0.25x2.5
<b>UR</b>	-	1/4-20	1/4-20	1/4-20	1/4-20	1/4-20	3/8-16	1/2-13
<b>VN</b>	1.18	1.18	1.58	1.97	2.36	2.36	2.76	3.15

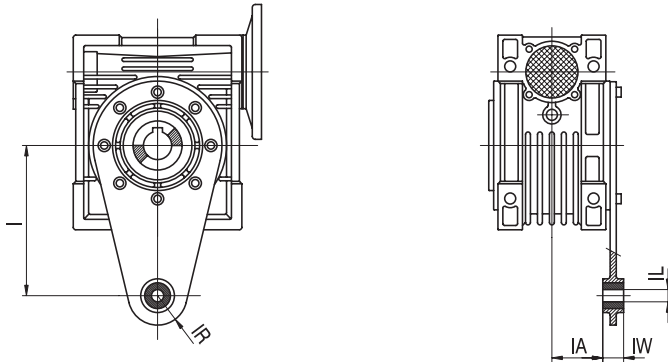
## NMRV英制系列 Inch series

### High Speed Extension Shaft



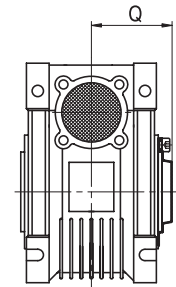
	EA	U	VN	UR	S2	R2	KEY	
							Length	Square
<b>030</b>	1.772	0.375 <sup>0</sup> <sub>-0.0005</sub>	1.18	-	0.093	0.42	0.875	0.094
<b>040</b>	2.087	0.5 <sup>0</sup> <sub>-0.0005</sub>	1.18	1/4-20	0.13	0.55	0.875	0.125
<b>050</b>	2.52	0.625 <sup>0</sup> <sub>-0.0005</sub>	1.58	1/4-20	0.19	0.7	1.125	0.188
<b>063</b>	2.953	0.75 <sup>0</sup> <sub>-0.0005</sub>	1.97	1/4-20	0.19	0.83	1.5	0.188
<b>075</b>	3.543	0.875 <sup>0</sup> <sub>-0.0005</sub>	2.36	1/4-20	0.19	0.96	1.875	0.188
<b>090</b>	4.252	0.875 <sup>0</sup> <sub>-0.0005</sub>	2.36	1/4-20	0.19	0.96	1.875	0.188
<b>110</b>	5.315	1.125 <sup>0</sup> <sub>-0.0005</sub>	2.76	3/8-16	0.25	1.24	2.25	0.25
<b>130</b>	6.102	1.25 <sup>0</sup> <sub>-0.0005</sub>	3.15	1/2-13	0.25	1.36	2.5	0.25

### Torque Arm



	I	IA	IL	IR	IW
<b>025</b>	2.76	0.69	0.31	0.59	0.55
<b>030</b>	3.35	0.94	0.31	0.59	0.55
<b>040</b>	3.94	1.24	0.39	0.71	0.55
<b>050</b>	3.94	1.52	0.39	0.71	0.55
<b>063</b>	5.91	1.93	0.39	0.71	0.55
<b>075</b>	7.87	1.87	0.79	1.18	0.98
<b>090</b>	7.87	2.26	0.79	1.18	0.98
<b>110</b>	9.84	2.44	0.98	1.38	1.18
<b>130</b>	9.84	2.72	0.98	1.38	1.18

### Portective Cover

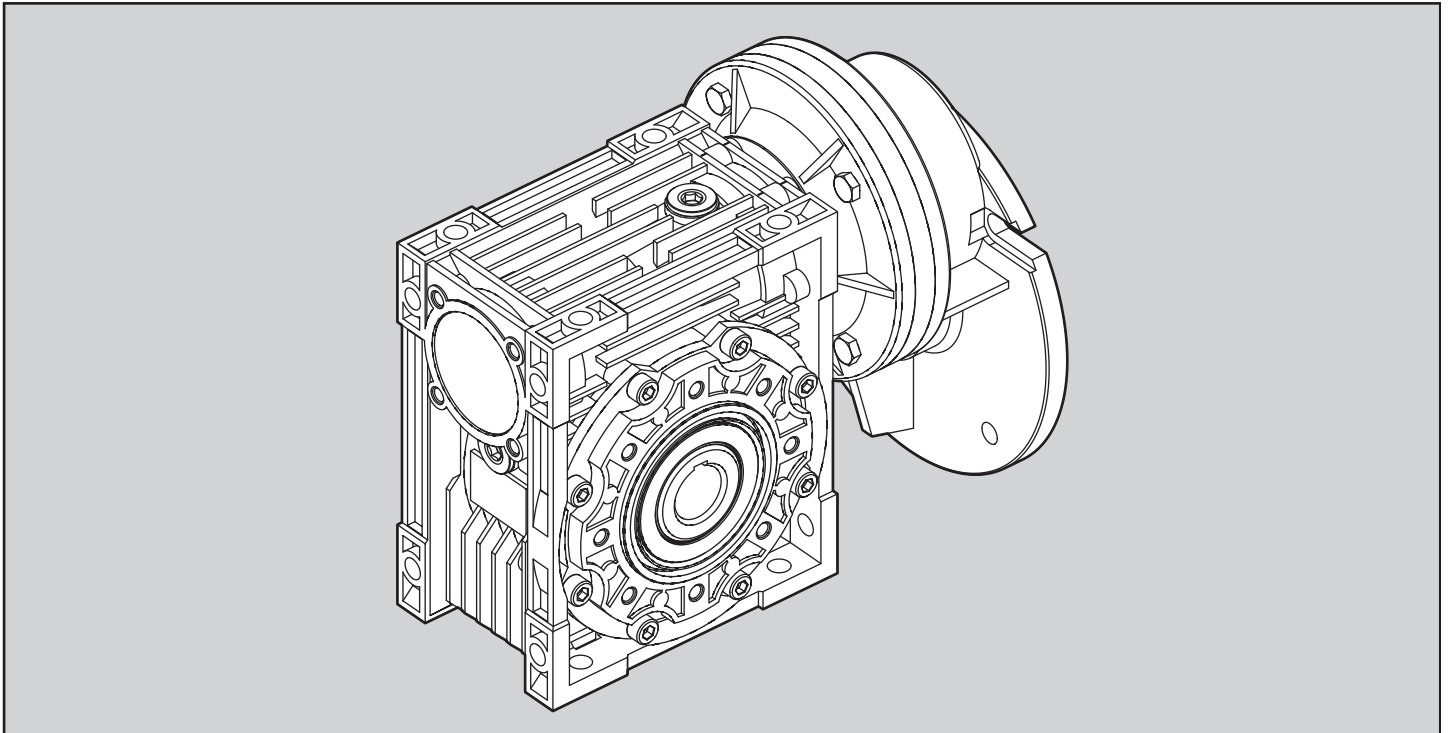


	Q
<b>030</b>	1.65
<b>040</b>	1.97
<b>050</b>	2.28
<b>063</b>	2.72
<b>075</b>	2.91
<b>090</b>	3.39
<b>110</b>	3.7
<b>130</b>	4.02

## NEMA Flange Availability

	NEMA Flange	Input Bore Diameter	Available Ratios											
			5	7.5	10	15	20	25	30	40	50	60	80	100
030	48C	0.5	●	●	●	●	●	●	●	●	●	●	●	
040	56C	0.625	●	●	●	●	●	●	●	●	●	●	●	●
050	56C	0.625	●	●	●	●	●	●	●	●	●	●	●	●
063	56C	0.625					●	●	●	●	●	●	●	●
	140TC	0.875		●	●	●	●	●	●	●				
075	56C	0.625									●	●	●	●
	140TC	0.875				●	●	●	●	●	●			
	180TC	1.125		●	●	●								
090	56C	0.625											●	●
	140TC	0.875						●	●	●	●	●		
	180TC	1.125		●	●	●	●	●	●	●				
110	140TC	0.875									●	●	●	●
	180TC	1.125					●	●	●	●	●	●		
	210TC	1.375		●	●	●	●							
130	140TC	0.875											●	●
	180TC	1.125							●	●	●	●	●	
	210TC	1.375		●	●	●	●	●	●	●				

# PC-NMRV



## PC-NMRV型號標記 PC-NMRV Model & marker

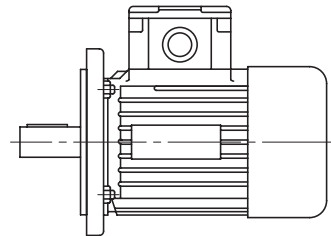
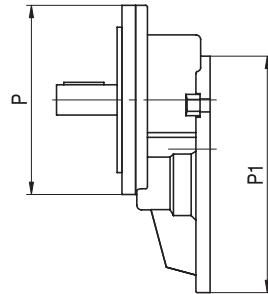
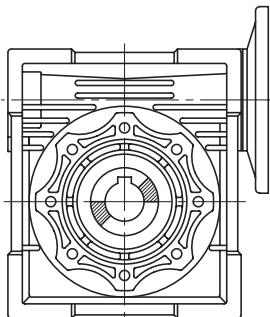
### PC-071-NMRV-063-30-VS-F1(FA)-AS-80B5-0.75kW-B3

<b>PC</b>	前段組合式減速機 Pre-stage helical module		
<b>071</b>	尺寸 Size	<b>PAM</b>	馬達聯接 Fitted for motor coupling
<b>NMRV</b>	蝸輪減速機 Worm geared motor	<b>0.75kW</b>	馬達功率 Electric motor power
<b>063</b>	蝸輪減速機中心距 Center distance	<b>F1(FA)</b>	輸出法蘭位置及型號 Output flange
<b>30</b>	減速比 Reduction ratio	<b>AB</b>	雙向輸出軸 Double output shaft
<b>VS</b>	雙向輸入軸 Double input shaft	<b>80B5</b>	馬達框號和安裝結構形式 Motor mounting facility
<b>AS</b>	單向輸出軸 Single output shaft	<b>B3</b>	安裝方式 Mounting position



## PC+NMRV組合方式 Combinations

	i	PC063		PC071		PC080			PC090		
		105/11	105/14	120/14	120/19	160/19	160/24	160/28	160/19	160/24	160/28
		i=3	i=3	i=3	i=3	i=3	i=3	i=3	i=2.45	i=2.45	i=2.45
040	25										
	30										
	40										
	50										
	60										
	80										
	100										
050	25										
	30										
	40										
	50										
	60										
	80										
	100										
063	25										
	30										
	40										
	50										
	60										
	80										
	100										
075	25										
	30										
	40										
	50										
	60										
	80										
	100										
090	25										
	30										
	40										
	50										
	60										
	80										
	100										
110	25										
	30										
	40										
	50										
	60										
	80										
	100										
130	25										
	30										
	40										
	50										
	60										
	80										
	100										

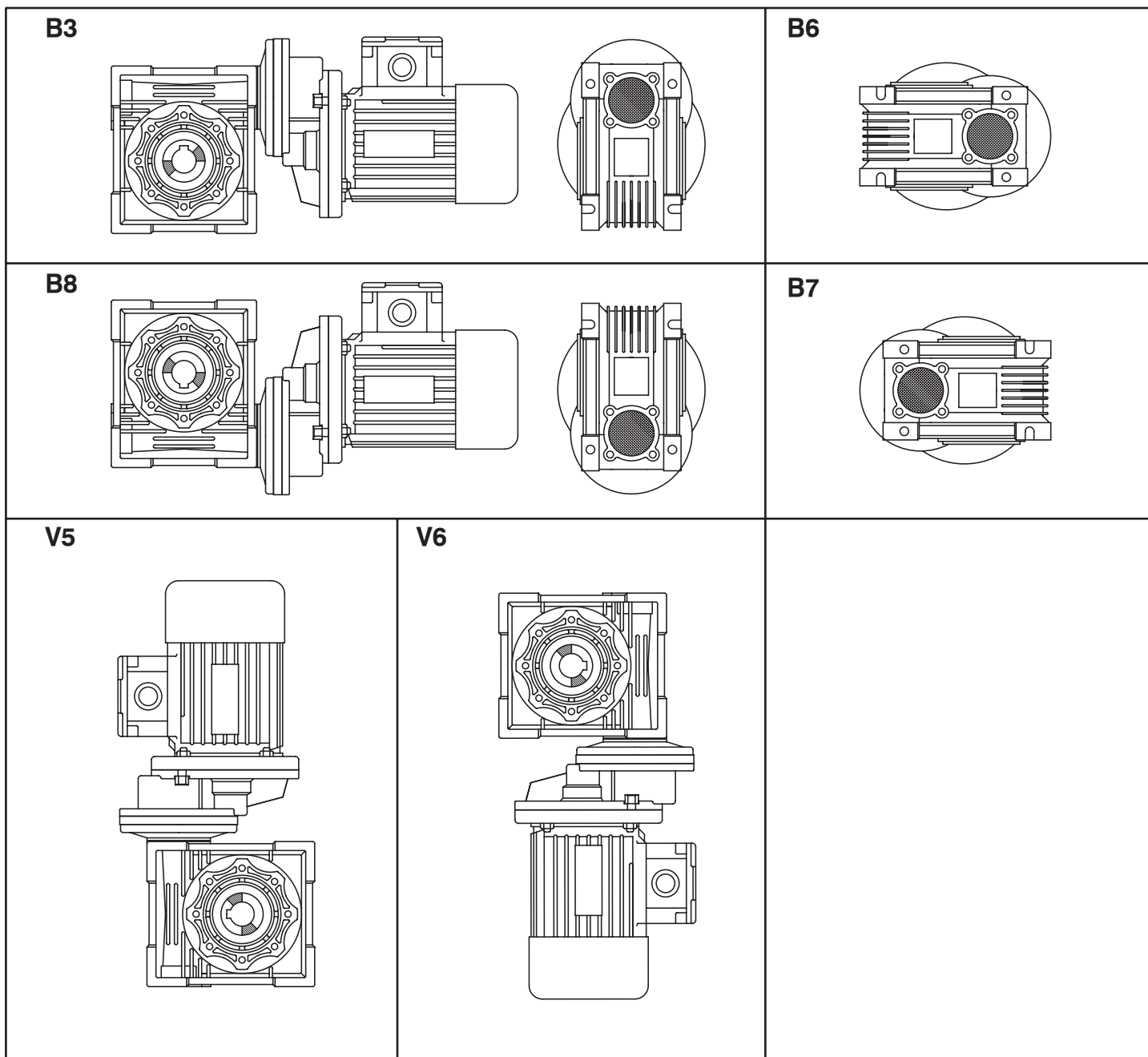


	P1	P	(P)
PC 063	63B5-140/11	105/11	(105/14)
PC 071	71B5-160/14	120/14	(120/19)
PC 080	80B5-200/19	160/19	(160/24)
			(160/28)
PC 090	90B5-200/24	160/24	(160/19)
			(160/28)

( ) 根據用戶要求訂製

( ) Only on request

## PC-NMRV安裝方式 Mounting positions



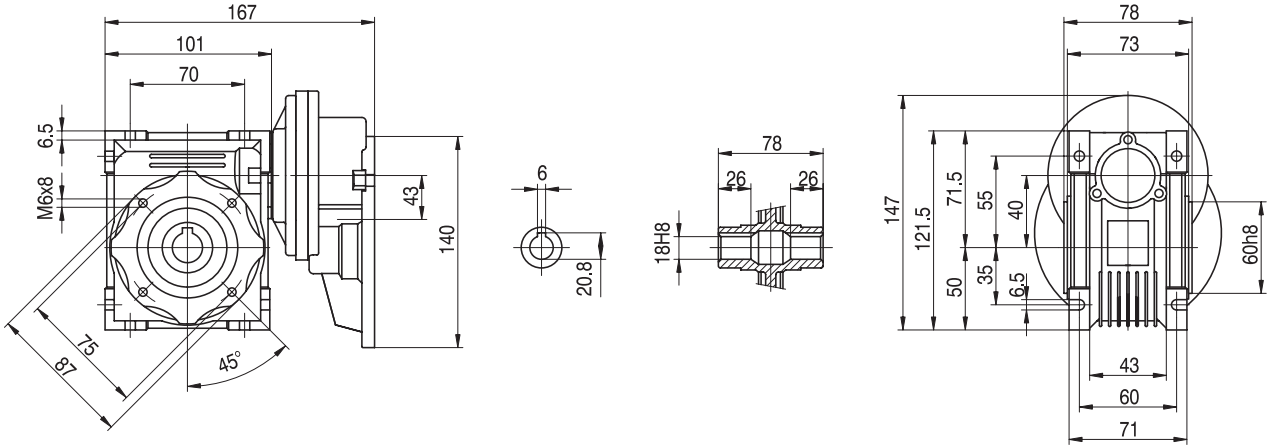
## 潤滑油的選用 Choice of lubricant

油量 (公升) Q.ty of oil in litres			
063	071	080	090
0.16	0.25	0.28	0.28

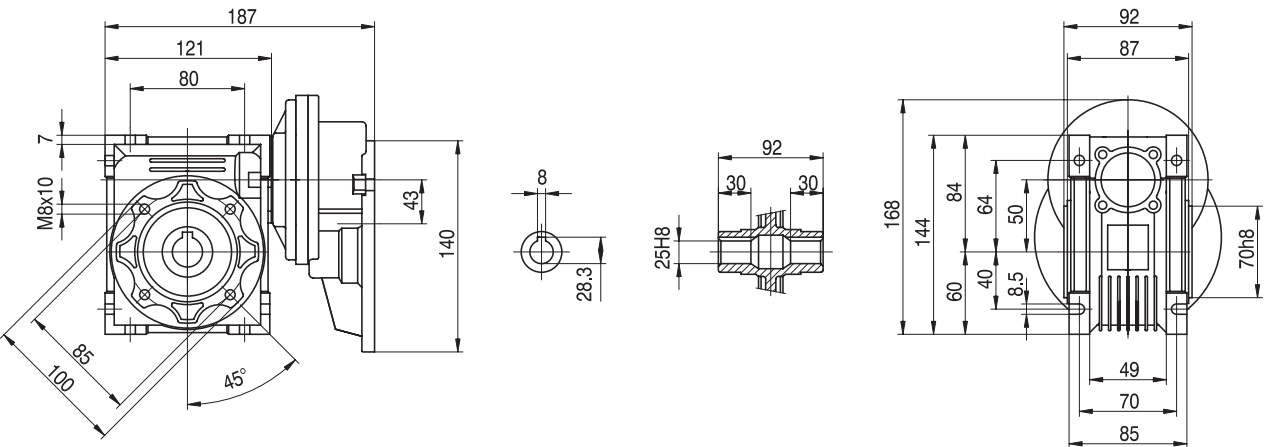
廠牌	油品型號
IP	TELIUM VSF
SHELL	TIVELA OIL SC320
AGIP	BLASIA S320
MOBIL	GLYGOYLE 30
CASTROL	ALPHASYN PG 320

# PC+NMRV外形尺寸 Dimensions

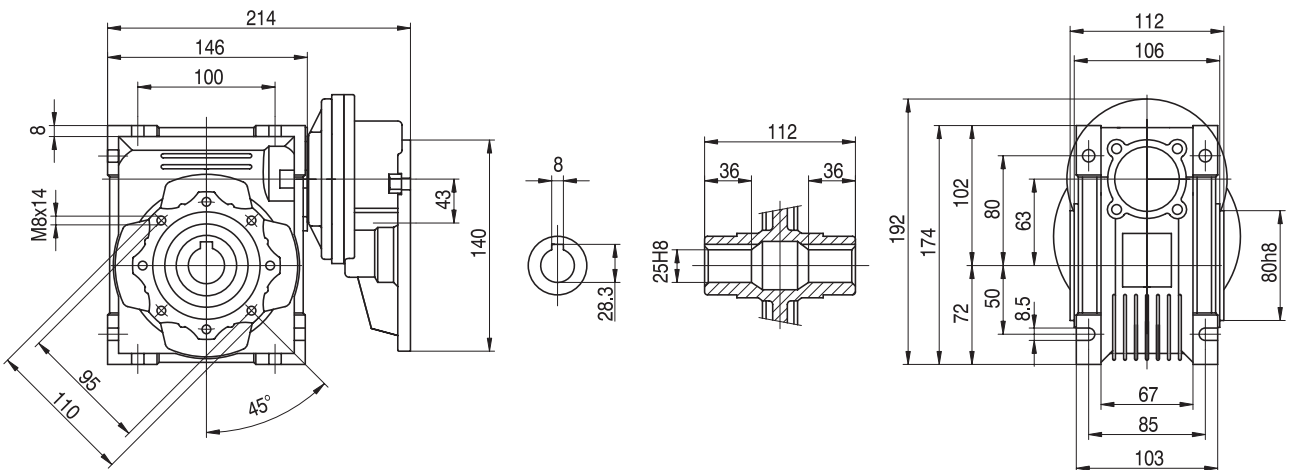
## PC 063 - NMRV 040



## PC 063 - NMRV 050

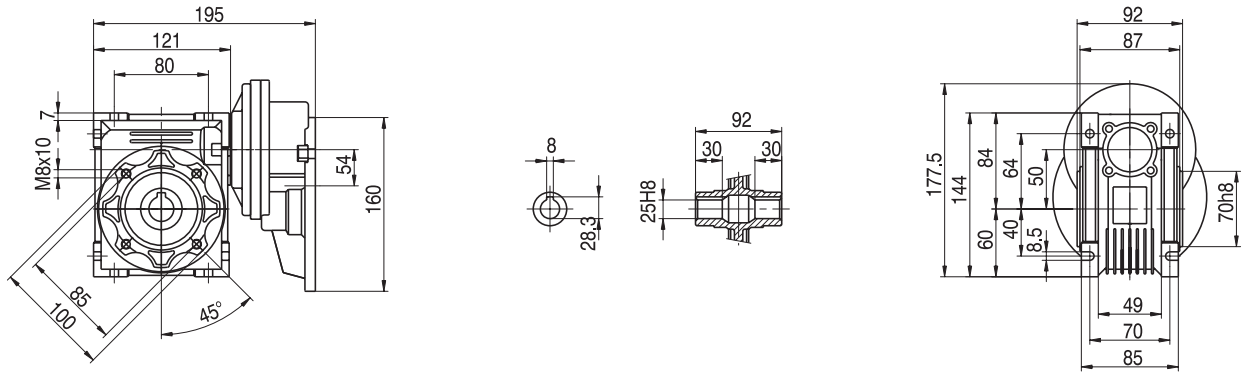


## PC 063 - NMRV 063

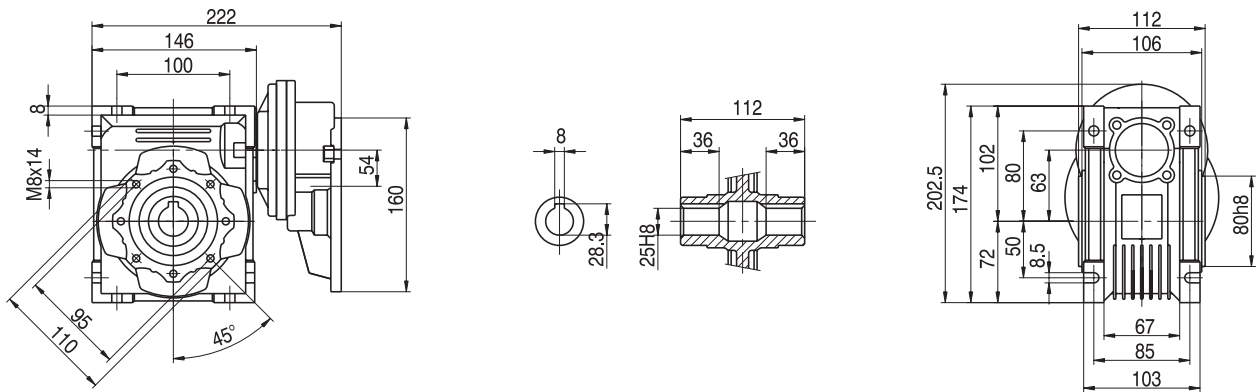


**PC+NMRV外形尺寸 Dimensions**

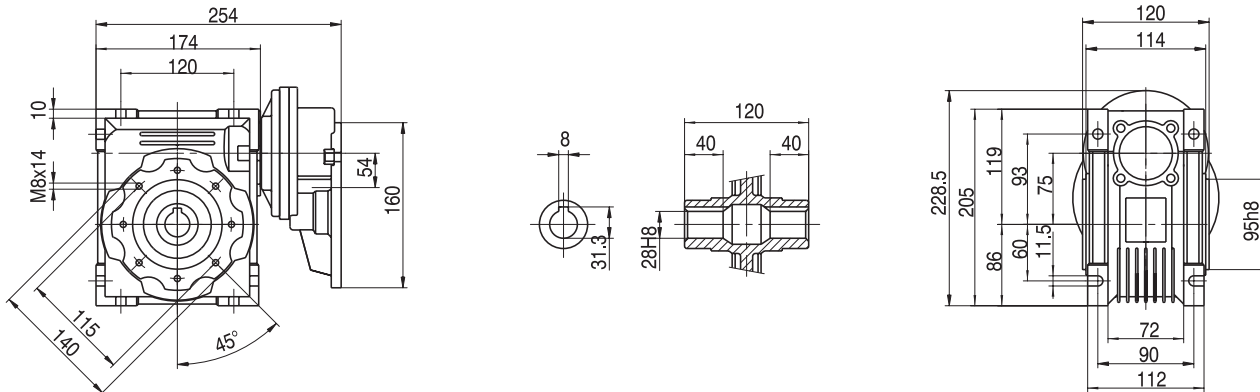
**PC 071 - NMRV 050**



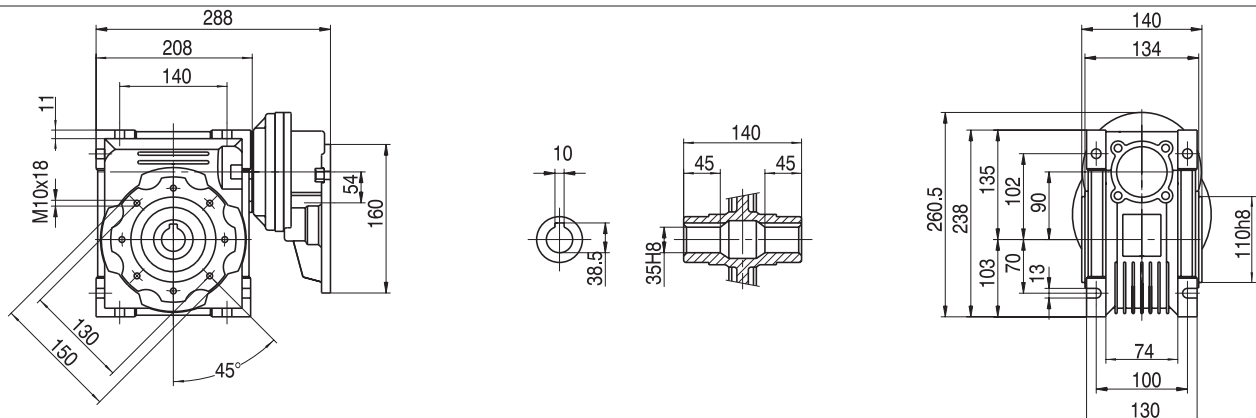
**PC 071 - NMRV 063**



**PC 071 - NMRV 075**

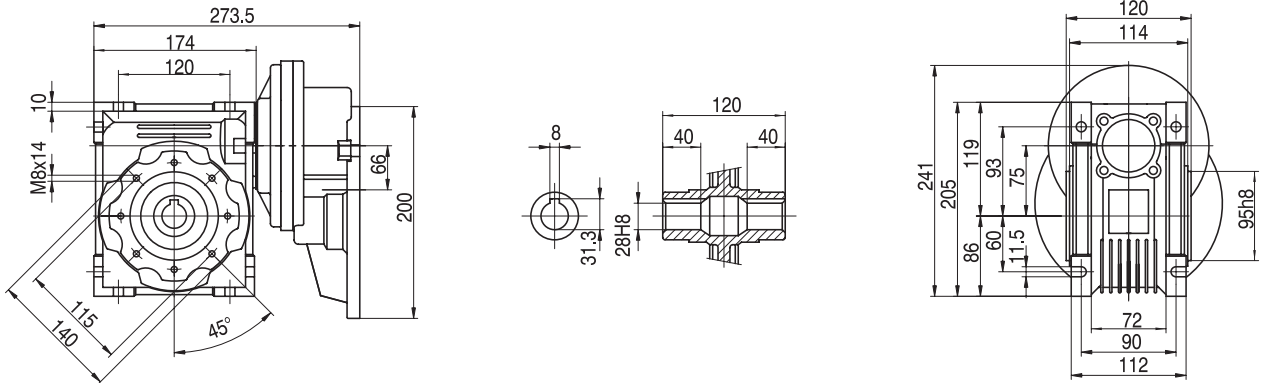


**PC 071 - NMRV 090**

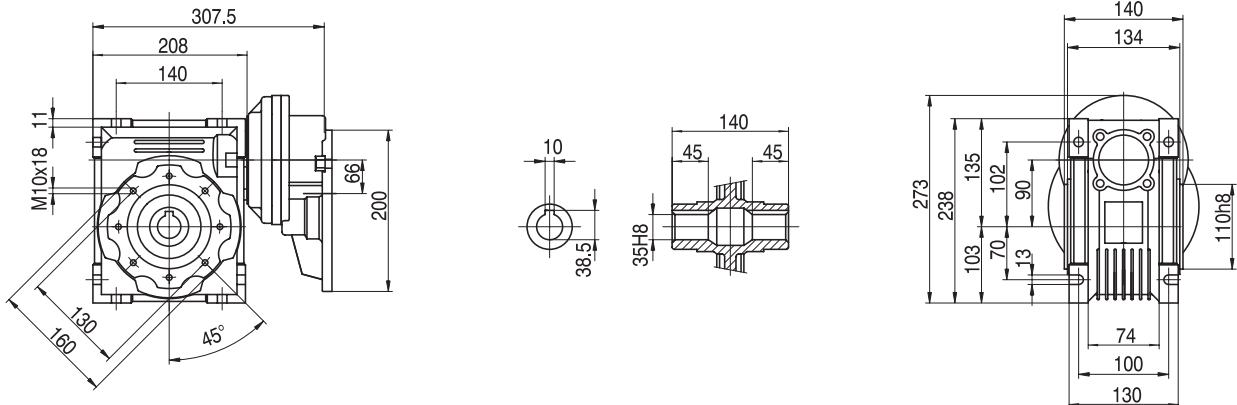


## PC+NMRV外形尺寸 Dimensions

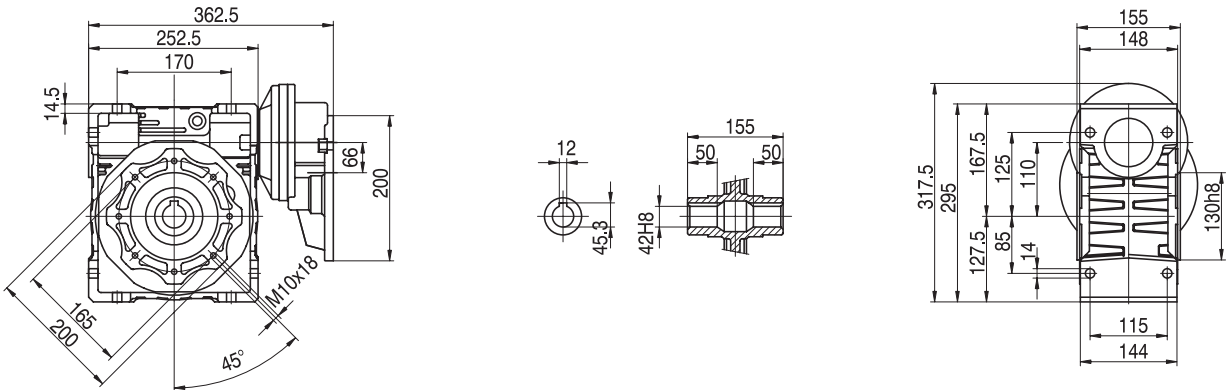
### PC 080 - NMRV 075



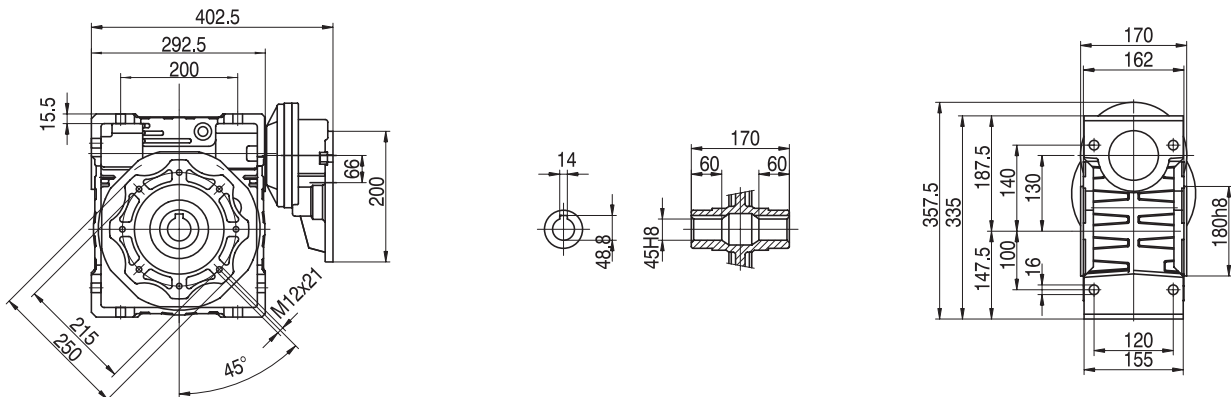
### PC 080 - NMRV 090



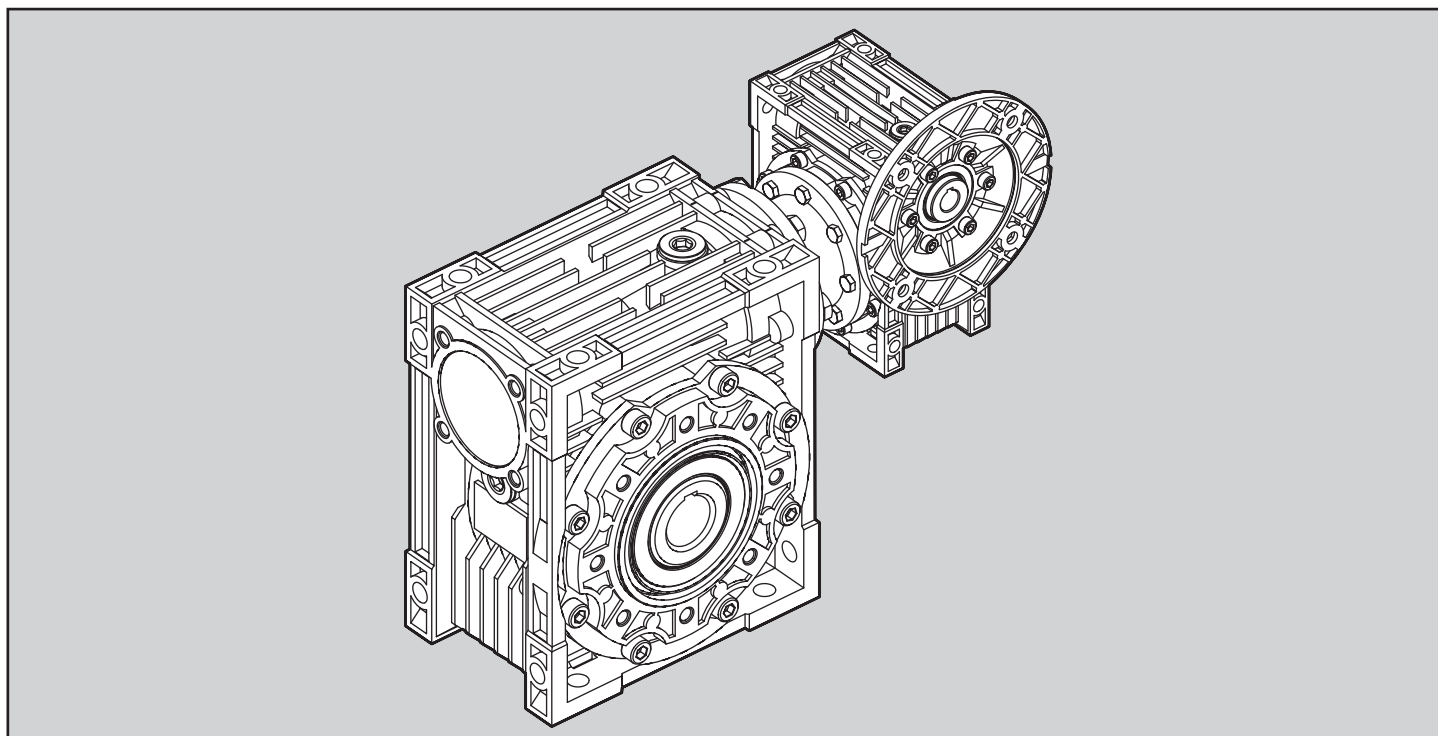
### PC 080(090) - NMRV 110



### PC 080(090) - NMRV 130



## NMRV-NMRV

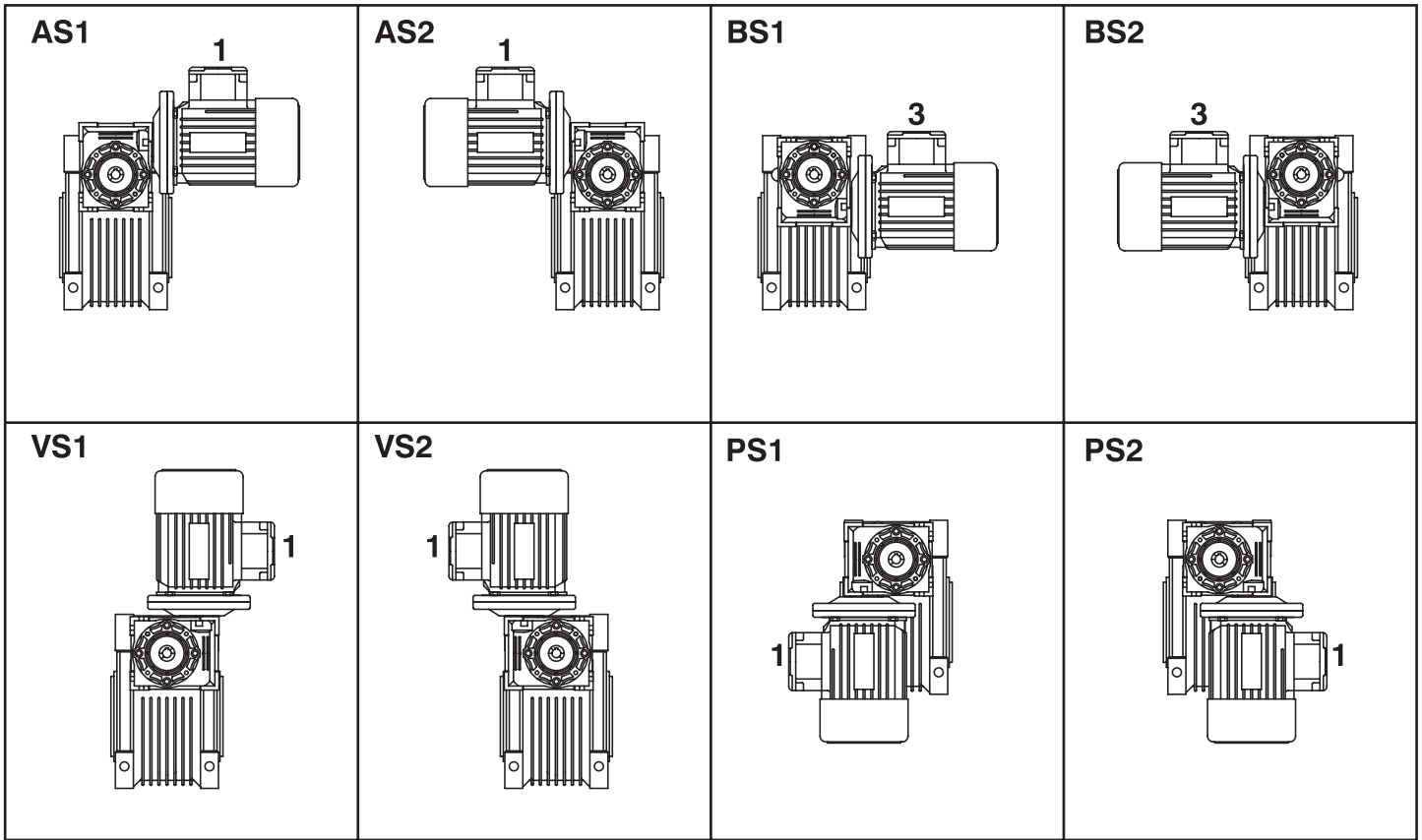


### NMRV-NMRV型號標記 Model & marker

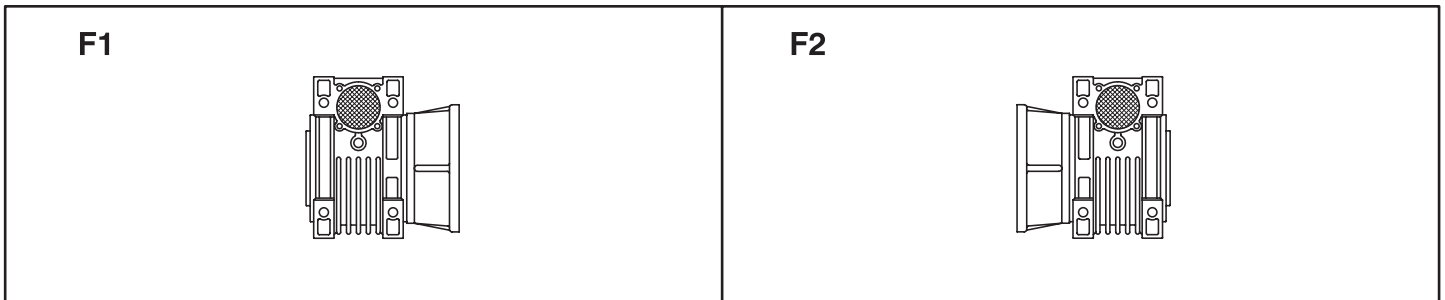
#### NMRV-040/090-500-VS-F1(FA)-AS-80B5-0.75kW-AS1

<b>NMRV+NMRV</b>	雙蝸輪減速機 Combined worm geared motor	<b>PAM</b>	聯接馬達 Fitted for motor coupling
<b>NRV+NMRV</b>	配輸入軸雙蝸輪減速機 Combined worm reduction unit	<b>0.75kW</b>	馬達功率 Electric motor power
<b>040/090</b>	蝸輪減速機中心距 Center distance	<b>F1(FA)</b>	輸出法蘭位置及型號 Output flange
<b>500</b>	減速比 Reduction ratio	<b>AB</b>	雙向輸出軸 Double output shaft
<b>VS</b>	雙向輸入軸 Double input shaft	<b>80B5</b>	馬達框號和安裝結構形式 Motor mounting facility
<b>AS</b>	單向輸出軸 Single output shaft	<b>AS1</b>	安裝方式 Mounting position

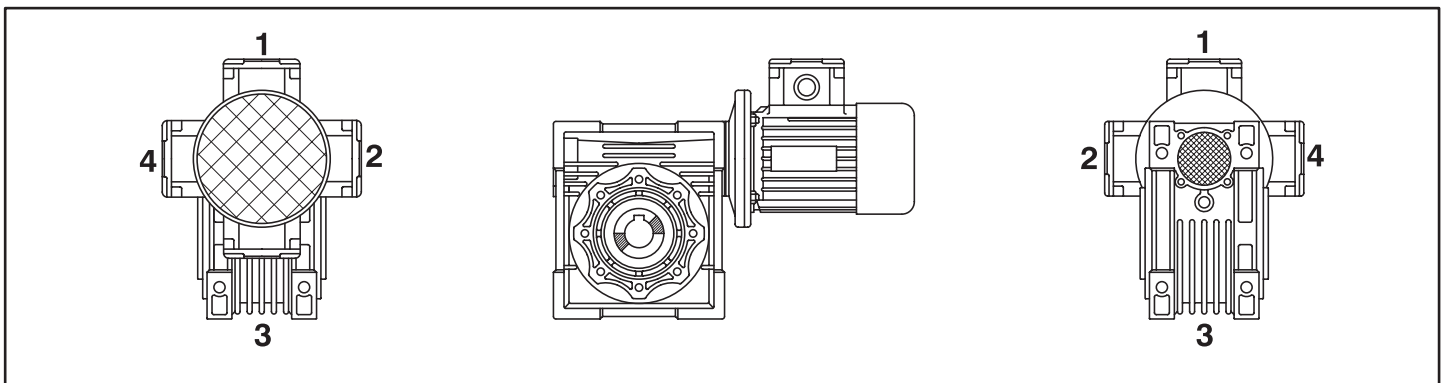
## NMRV-NMRV安裝方式 Mounting positions



## 法蘭位置 Flange F-FL



## 接線盒安裝方式 Pos. of terminal box



## NMRV-NMRV參數表 Parameter table

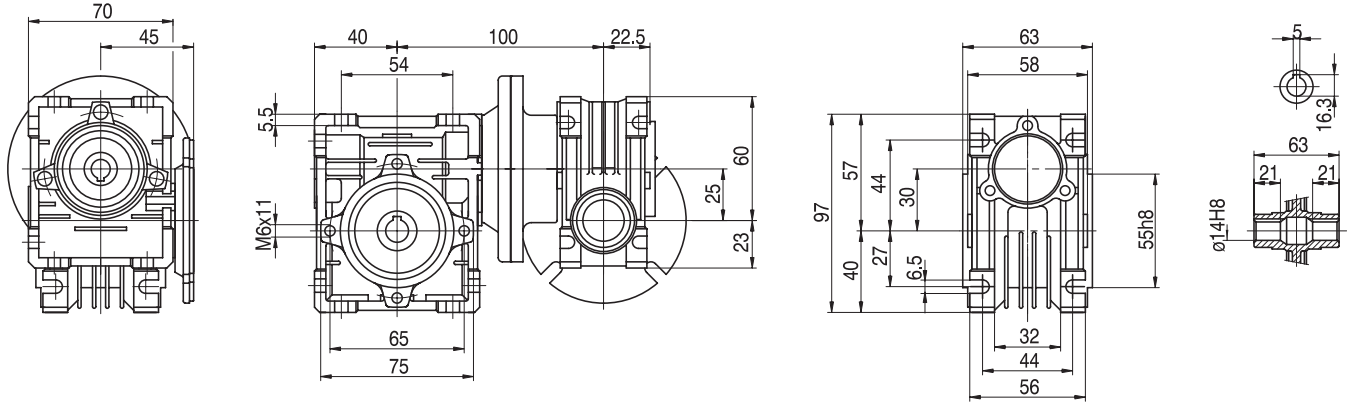
\*n1=1400rpm

	i	n2	kW1	M2 (Nm)	i1	i2
<b>NRV 030/040</b>	300	4.7	0.08	73	10	30
	400	3.5	0.06	65	10	40
	500	2.8	0.04	61	20	25
	600	2.3	0.04	73	20	30
	750	1.9	0.04	73	25	30
	900	1.6	0.03	73	30	30
	1200	1.2	0.02	65	30	40
	1500	0.9	0.02	73	50	30
	1800	0.8	0.02	73	60	30
	2400	0.58	0.01	65	60	40
	3200	0.4	0.01	65	80	40
	4000	0.4	0.01	33	50	80
5000	0.28	0.01	29	50	100	
<b>NRV 030/050</b>	300	4.7	0.15	145	10	30
	400	3.5	0.1	124	10	40
	500	2.8	0.09	120	10	50
	600	2.3	0.08	145	20	30
	750	1.9	0.07	145	25	30
	900	1.6	0.06	145	30	30
	1200	1.2	0.04	124	30	40
	1500	0.93	0.04	145	50	30
	1800	0.78	0.04	145	60	30
	2400	0.6	0.03	124	60	40
	3000	0.5	0.02	120	60	50
	4000	0.35	0.02	82	50	80
4800	0.29	0.02	82	60	80	
<b>NRV 030/063</b>	300	4.7	0.24	230	7.5	40
	400	3.5	0.19	230	10	40
	500	2.8	0.15	216	10	50
	600	2.3	0.13	230	15	40
	750	1.9	0.11	216	15	50
	900	1.6	0.09	198	15	60
	1200	1.2	0.08	230	30	40
	1500	0.93	0.06	216	30	50
	1800	0.78	0.05	198	30	60
	2400	0.58	0.05	230	60	40
	3000	0.47	0.04	216	60	50
	4000	0.35	0.03	172	50	80
5000	0.28	0.02	150	50	100	
<b>NRV 040/075</b>	300	4.7	0.36	390	10	30
	400	3.5	0.27	360	10	40
	500	2.8	0.21	320	10	50
	600	2.3	0.19	390	20	30
	750	1.9	0.16	390	25	30
	900	1.6	0.14	390	30	30
	1200	1.2	0.11	360	30	40
	1500	0.93	0.1	390	50	30
	1800	0.78	0.09	390	60	30
	2400	0.58	0.07	360	60	40
	3000	0.47	0.05	320	60	50
	4000	0.35	0.04	250	50	80
5000	0.28	0.03	230	50	100	
<b>NRV 040/090</b>	300	4.7	0.56	610	7.5	40
	400	3.5	0.43	610	10	40
	500	2.8	0.34	560	10	50
	600	2.3	0.3	610	15	40
	750	1.9	0.23	560	15	50
	900	1.6	0.19	505	15	60
	1200	1.2	0.17	610	30	40
	1500	0.93	0.14	560	30	50
	1800	0.78	0.11	505	30	60
	2400	0.58	0.11	610	60	40
	3000	0.47	0.08	560	60	50
	4000	0.35	0.08	460	50	80
5000	0.28	0.06	410	50	100	
<b>NRV 050/110</b>	300	4.7	0.95	1100	10	30
	400	3.5	0.69	1030	10	40
	500	2.8	0.56	1000	10	50
	600	2.3	0.48	1030	15	40
	750	1.9	0.43	1100	25	30
	900	1.6	0.38	1100	30	30
	1200	1.2	0.27	1030	30	40
	1500	0.93	0.28	1100	50	30
	1800	0.78	0.23	1100	60	30
	2400	0.58	0.17	1030	60	40
	3000	0.47	0.14	1000	60	50
	4000	0.35	0.12	780	50	80
5000	0.28	0.09	710	50	100	
<b>NRV 063/130</b>	300	4.7	1.48	1760	10	30
	400	3.5	1.09	1650	10	40
	500	2.8	0.86	1550	10	50
	600	2.3	0.76	1650	15	40
	750	1.9	0.66	1760	25	30
	900	1.6	0.58	1760	30	30
	1200	1.2	0.43	1650	30	40
	1500	0.93	0.39	1760	50	30
	1800	0.78	0.35	1760	60	30
	2400	0.58	0.25	1650	60	40
	3000	0.47	0.2	1550	60	50
	4000	0.35	0.15	1220	50	80
5000	0.28	0.11	1100	50	100	

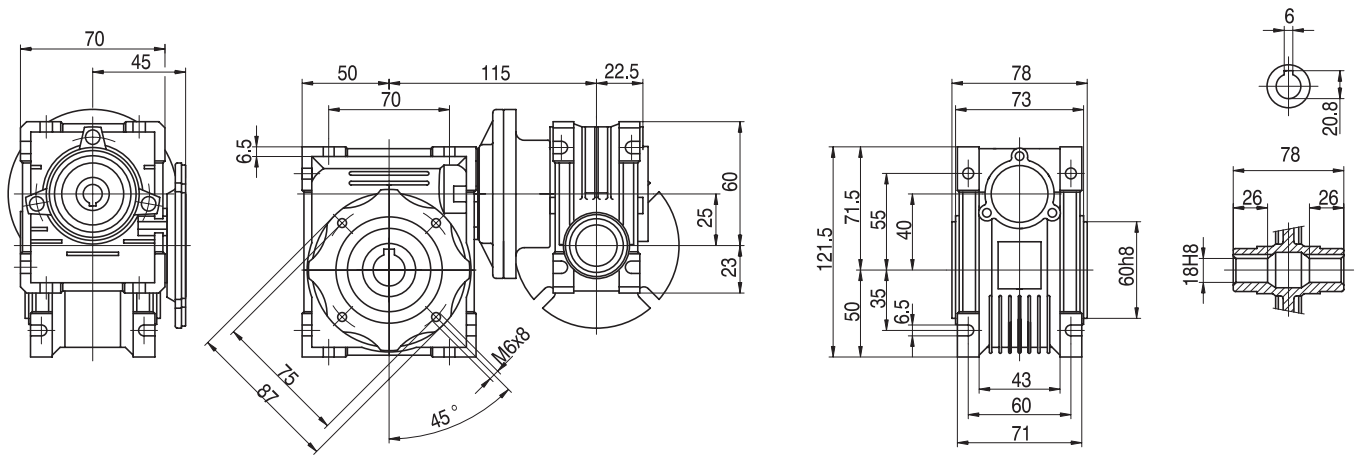


## NMRV-NMRV外形尺寸 Dimensions

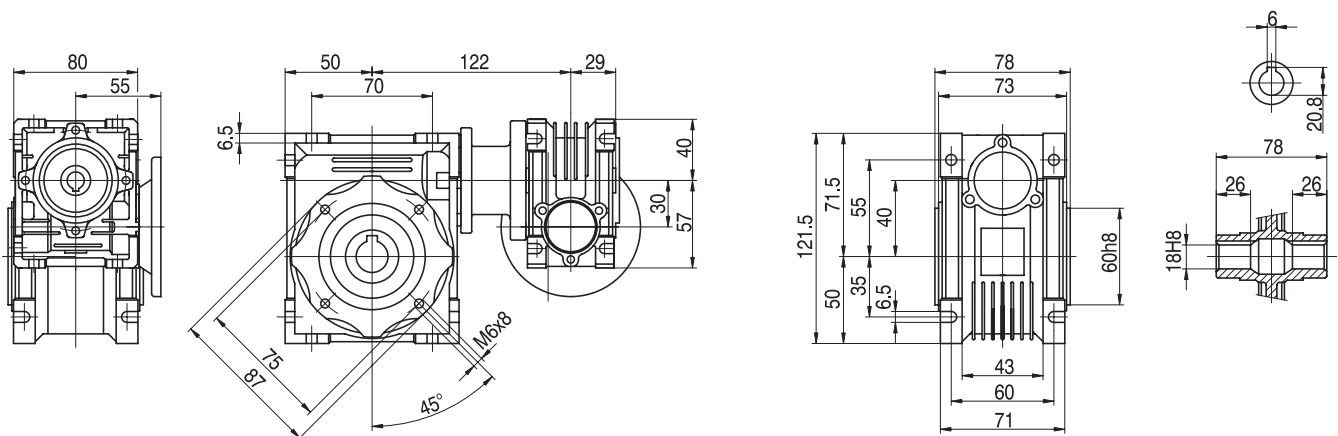
### NMRV 025 - NMRV 030



### NMRV 025 - NMRV 040

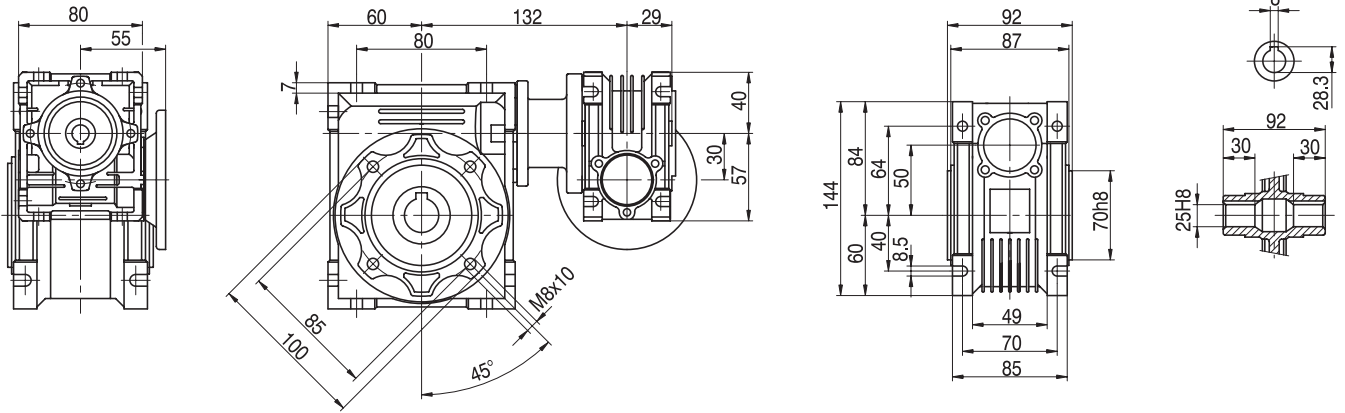


### NMRV 030 - NMRV 040

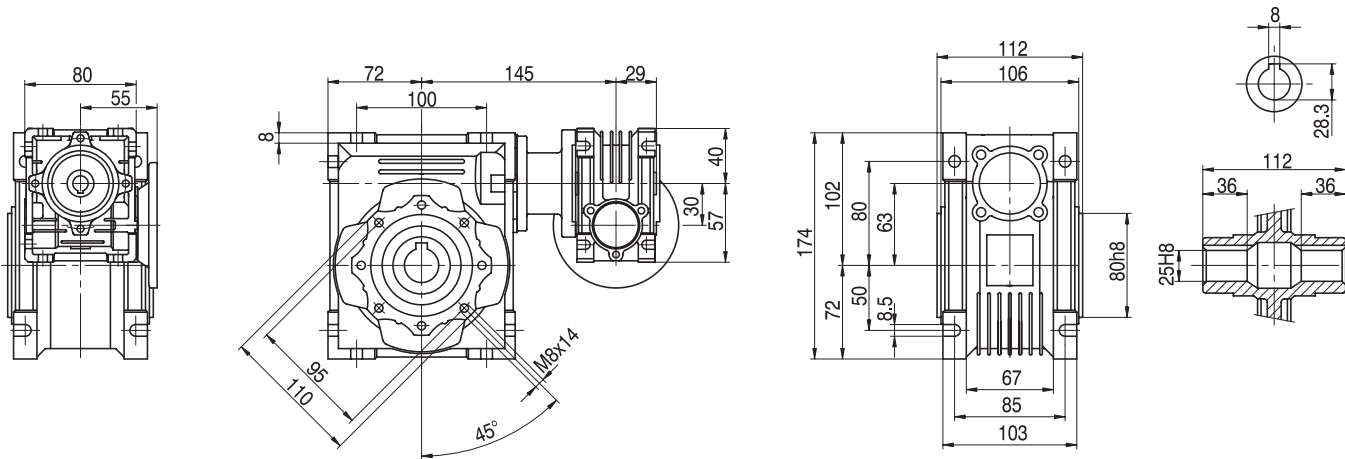


**NMRV-NMRV外形尺寸 Dimensions**

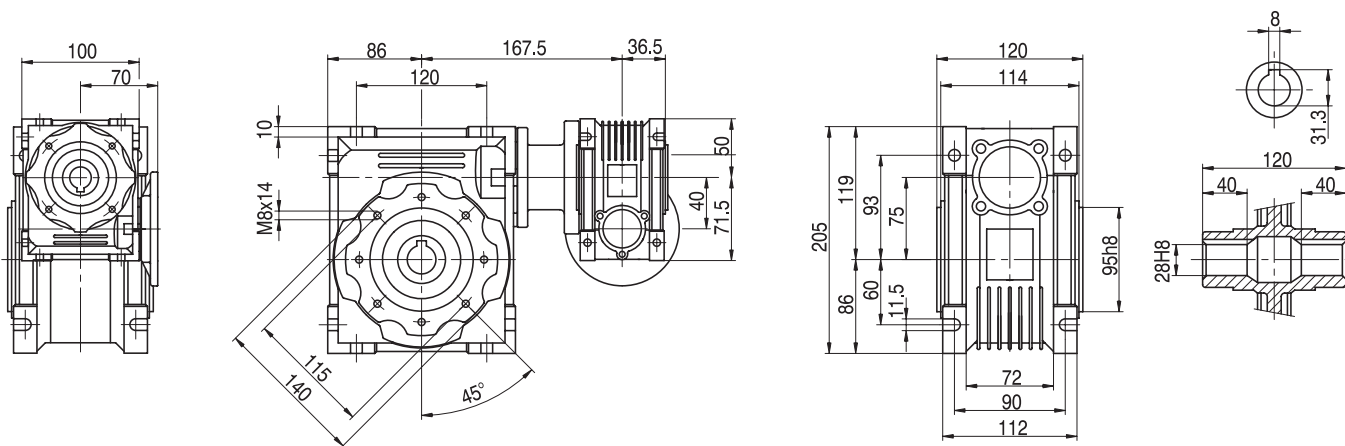
**NMRV 030 - NMRV 050**



**NMRV 030 - NMRV 063**

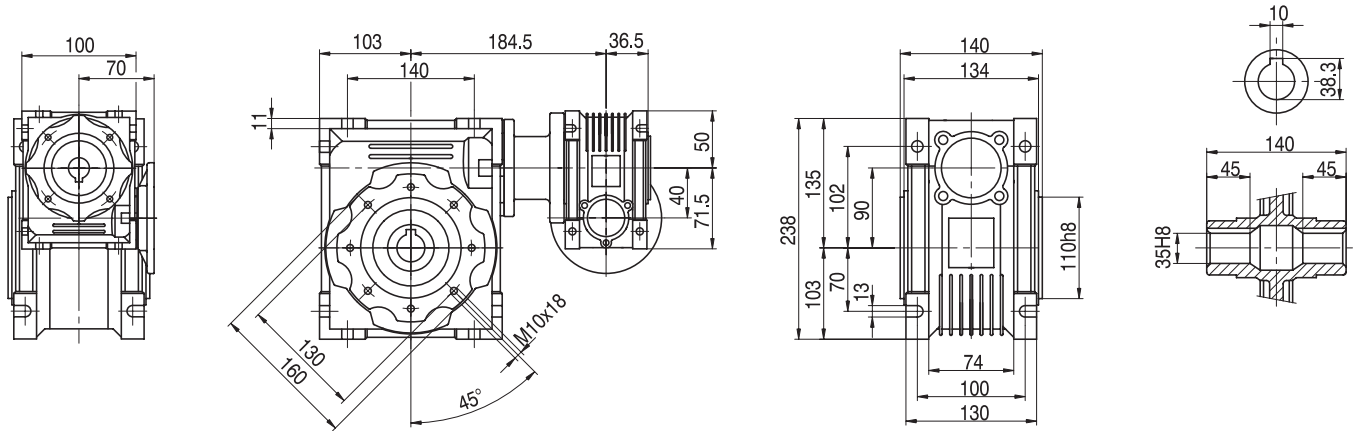


**NMRV 040 - NMRV 075**

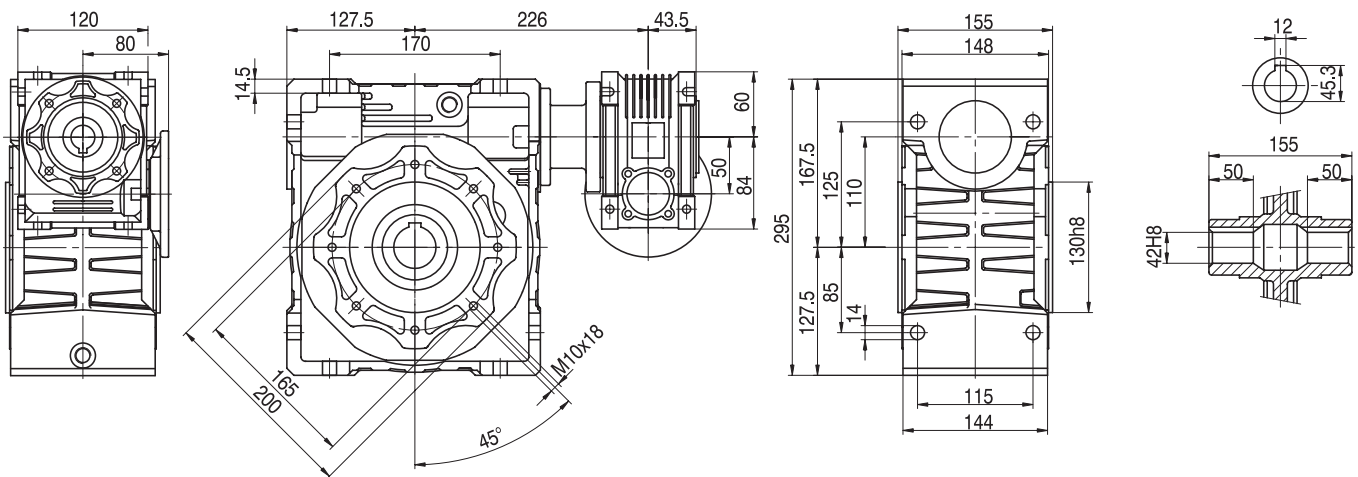


## NMRV-NMRV外形尺寸 Dimensions

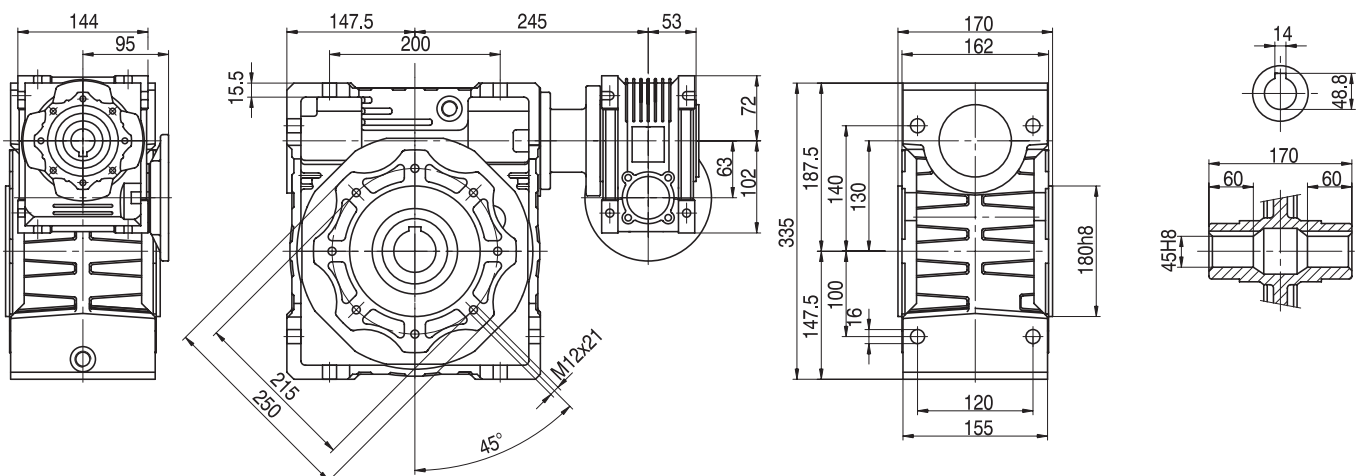
### NMRV 040 - NMRV 090



### NMRV 050 - NMRV 110

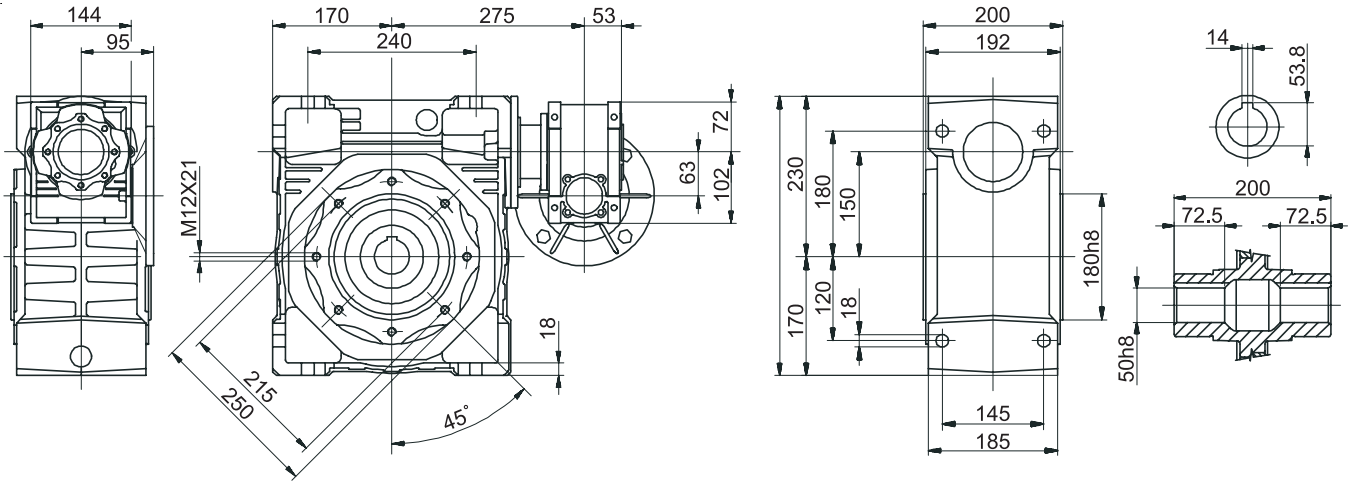


### NMRV 063 - NMRV 130

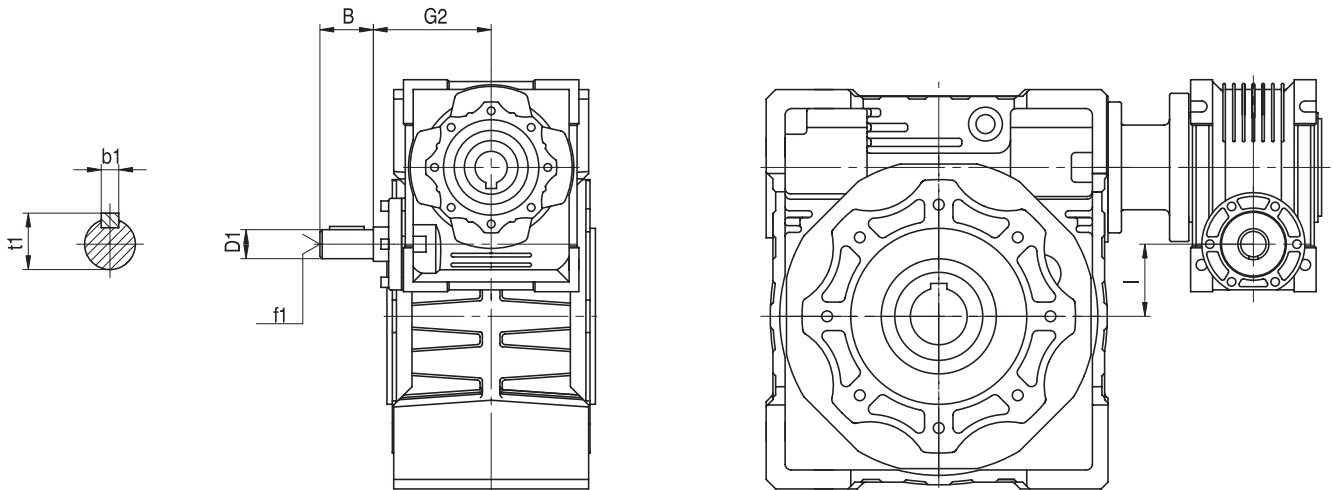


## NRV-NMRV 外形尺寸 Dimensions

### NMRV 063 - NMRV 150

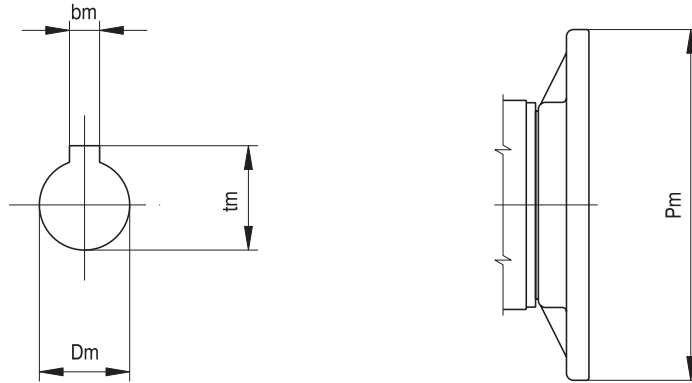


## NRV-NMRV 外形尺寸 Dimensions



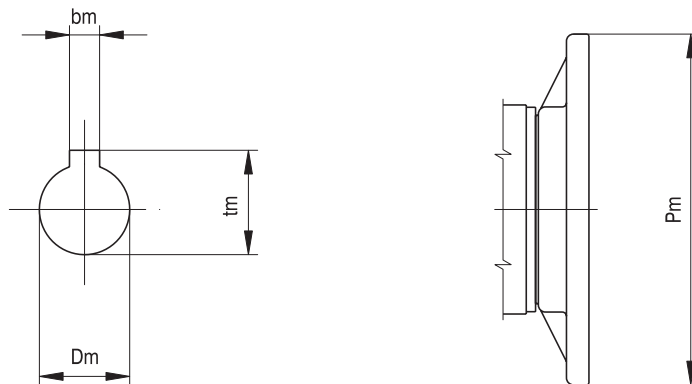
NRV-NMRV	030-040	030-050	030-063	040-075	040-090	050-110	063-130	063-150
<b>B</b>	20	20	20	23	23	30	40	40
<b>D1</b>	9 j6	9 j6	9 j6	11 j6	11 j6	14 j6	19 j6	19 j6
<b>G2</b>	51	51	51	60	60	74	90	90
<b>l</b>	10	20	33	35	50	50	67	87
<b>b1</b>	3	3	3	4	4	5	6	6
<b>f1</b>	-	-	-	-	-	M6	M6	M6
<b>t1</b>	10.2	10.2	10.2	12.5	12.5	16	21.5	21.5

## PAM B5外形尺寸 Dimensions



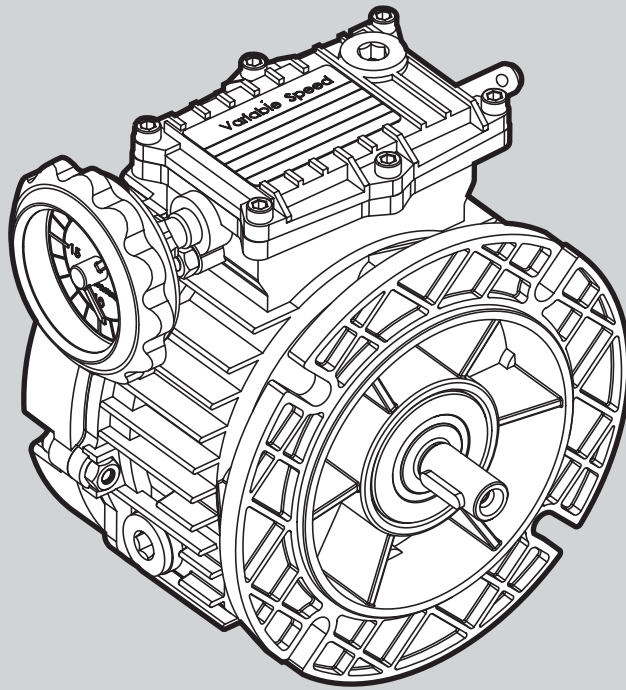
B5	IEC										
	056	063	071	080	090	100	112	132	160	180	200
Pm	120	140	160	200	200	250	250	300	350	350	400
Dm	9	11	14	19	24	28	28	38	42	48	55
bm	3	4	5	6	8	8	8	10	12	14	16
tm	10.4	12.8	16.3	21.8	27.3	31.3	31.3	41.3	45.3	51.8	59.3

## PAM B14外形尺寸 Dimensions

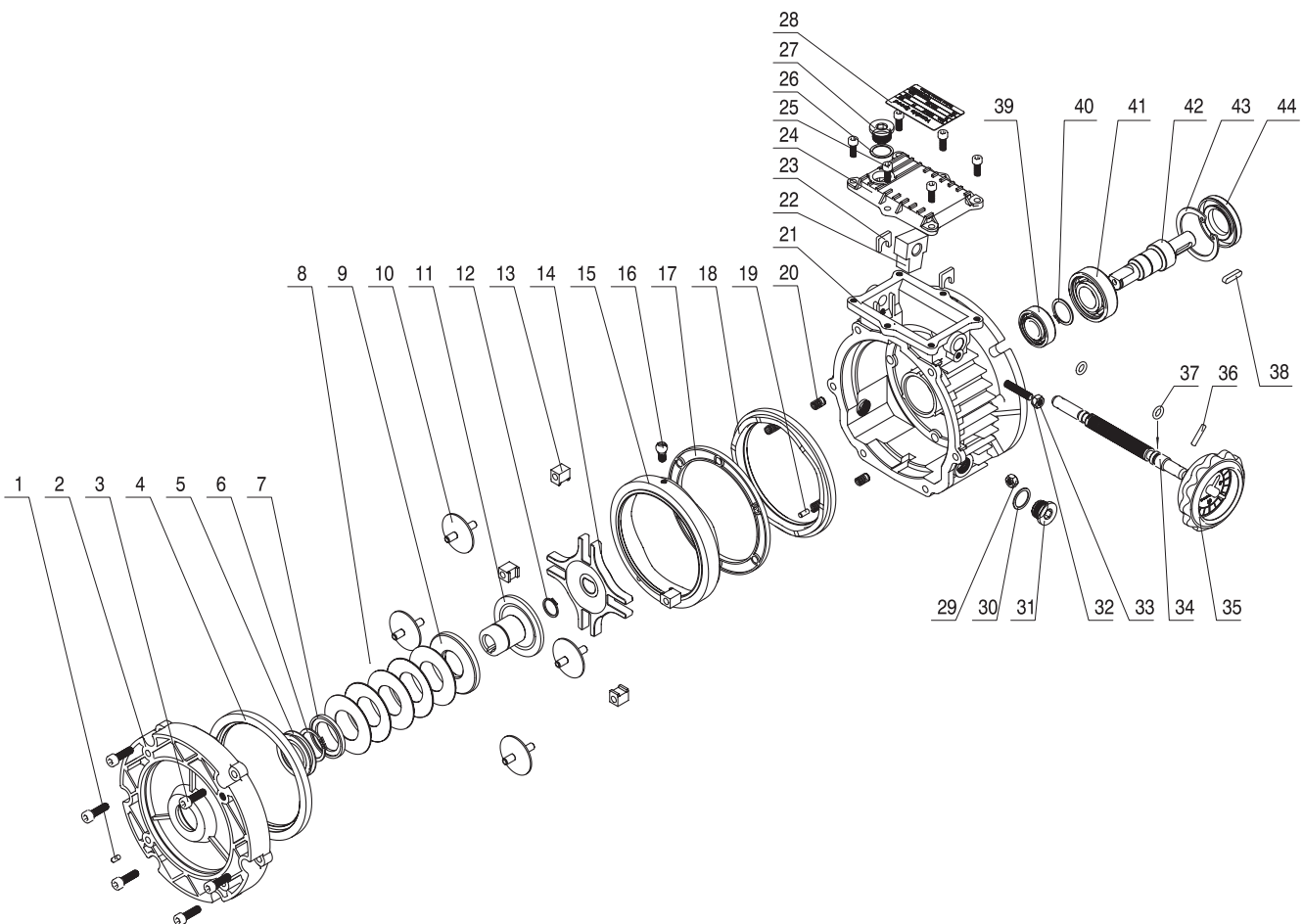


B14	IEC								
	056	063	071	080	090	100	112	132	
Pm	80	90	105	120	140	160	160	200	
Dm	9	11	14	19	24	28	28	38	
bm	3	4	5	6	8	8	8	10	
tm	10.4	12.8	16.3	21.8	27.3	31.3	31.3	41.3	

無段變速機 Variator



結構分解圖 Structural breakdown drawing



## 型號標記 Model & marker

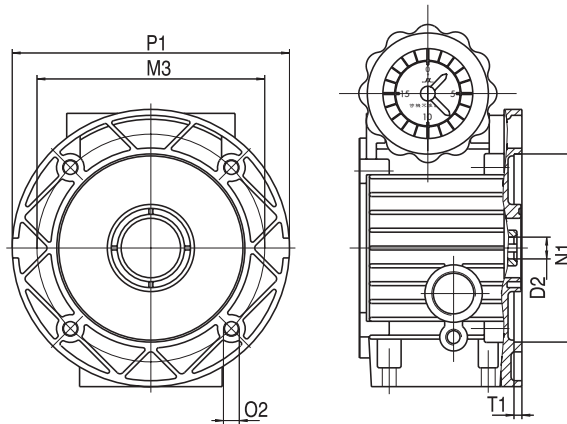
**TXF 005 - B3**



## 特性表 Performance

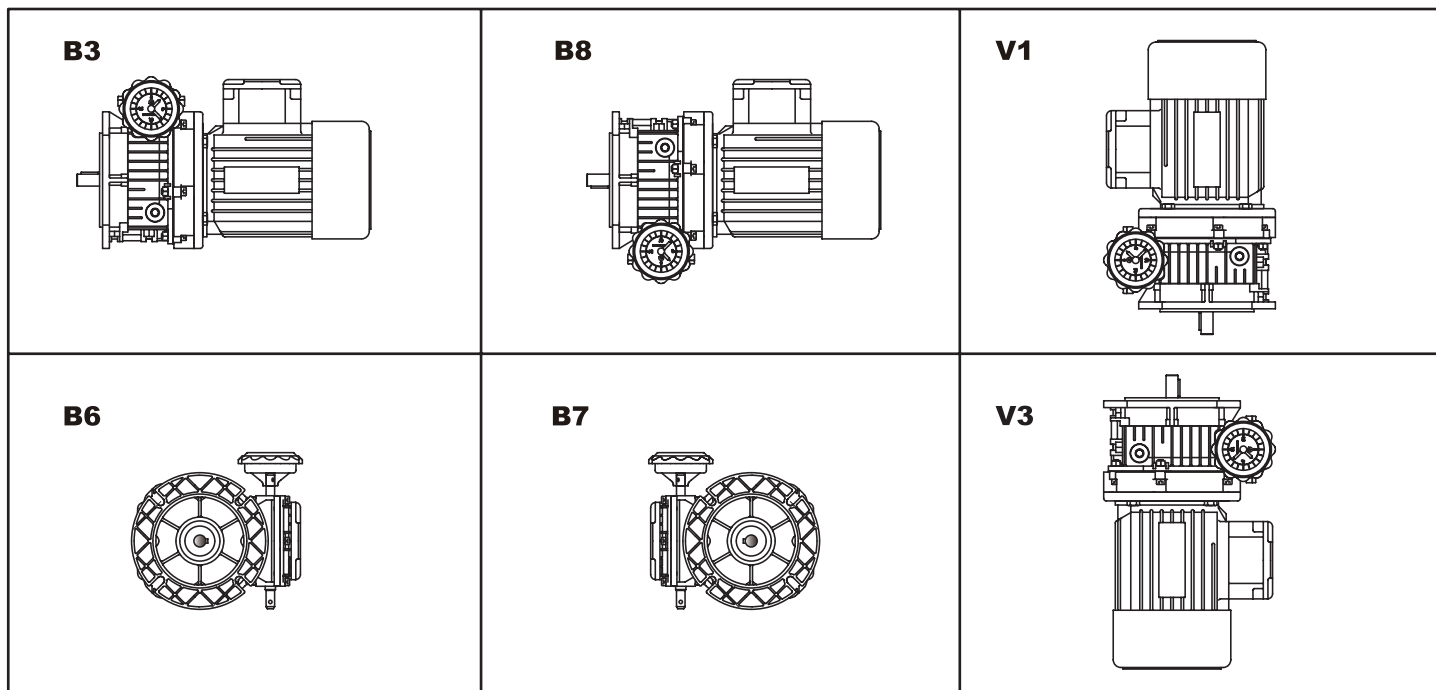
n1	馬達功率	TK/TKF/TXF	n2 max	n2 min	M2 min	M2 max	滑差率 %	溫升 < °C
1400	0.18KW/4P	002	880	170	1.5	3	3-3.8	46
	0.37KW/4P	005	1000	170	3	6	3-8.8	46
	0.75KW/4P	010	1000	170	6	12	3-8.8	46
	1.5KW/4P	020	950	165	12	24	3-8.8	46
	2.2KW/4P	030	1000	200	18	36	3-8.8	46
	4KW/4P	050	1000	200	32	64	3-8.8	46
	5.5KW/4P	100	1000	200	45	90	3-8.8	50
	7.5KW/4P	100	1000	200	59	118	3-8.8	50

## 馬達安裝尺寸 Motor hicky



TK/TKF/TXF	PAM IEC	P1	N1(H8)	M3	O2	D2(F7)	T1
<b>002</b>	63B5	140	95	115	M8	11	5
<b>005</b>	71B5	160	110	130	M8	14	5
<b>010</b>	80B5	200	130	165	M10	19	6
<b>020</b>	90B5	200	130	165	M10	24	6
<b>030</b>	100B5	250	180	215	M12	28	6
<b>050</b>	112B5						
<b>100</b>	132B5	300	230	265	M12	38	6

## 安裝方式 Mounting



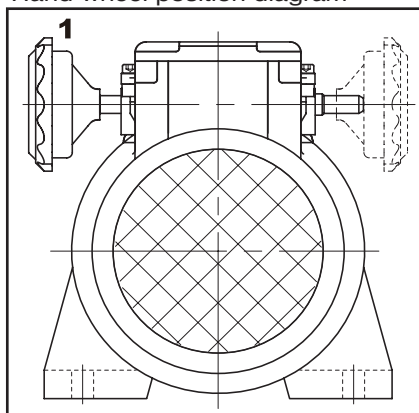
## 油量表 Choice of lubricant

TK/TKF	B3-B6-B7	B8-V1-V3
002	0.12	0.26
005	0.15	0.75
010	0.42	1.7
020	0.4	2.6
030	1.1	5.5
050	1.1	5.5
100	2.07	9

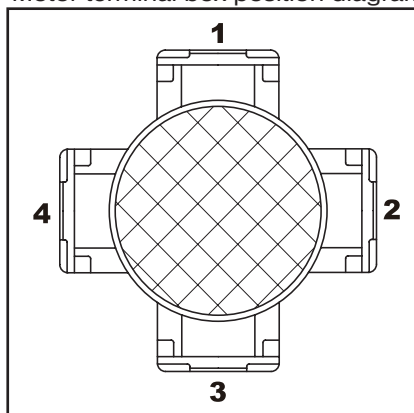
TXF	B3-B6-B7	B8-V1-V3
002	0.1	0.25
005	0.13	0.4
010	0.33	0.75

廠牌	油品型號
IP	TRANSMISSION V.E.
IP	A.T.F. DEXRON FLUID
AGIP	A.T.F. DEXRON
SHELL	A.T.F. DEXRON
ESSO	A.T.F. DEXRON
CHEVRON	A.T.F. DEXRON
FINA	A.T.F. DEXRON
MOBIL	MOBIL A.T.F 220
CASTROL	TQ DEXRON II
BP	AUTRAN DX

手輪位置圖  
Hand-wheel position diagram

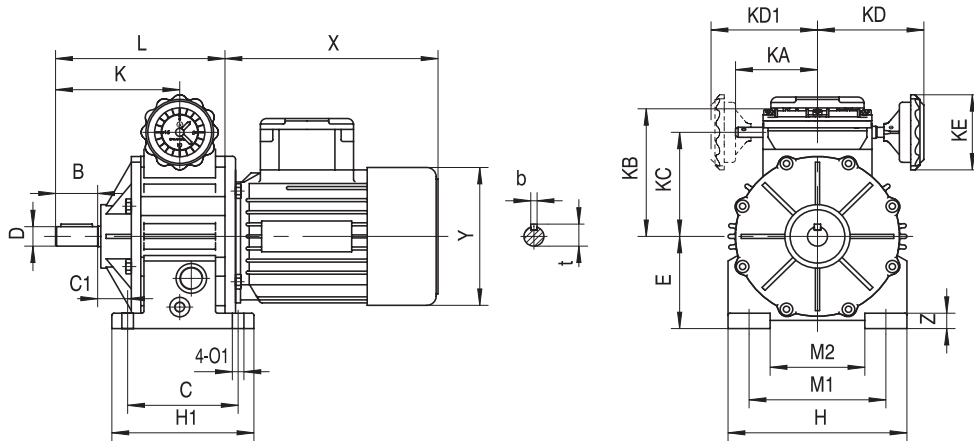


馬達結線盒位置圖  
Motor terminal box position diagram



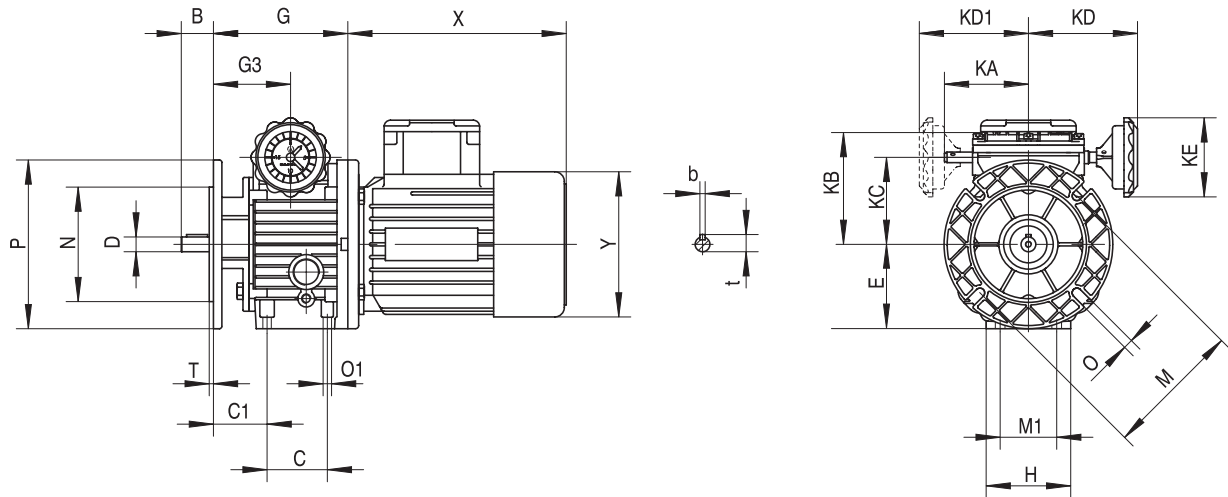


### B3外形尺寸 Dimensions for B3 model



TYPE	B	D(j6)	C	C1	E	H	H1	K	L	M1	M2	O1	KA	KB	KC	KD	KD1	KE	b	t	X	Y	Z
TK002	23	11	105	17.5	80	145	120	87.5	135.5	110	71	9	71	111	78	110	110	85	4	12.5	200	120	10
TK005	30	14	104	20	93	149	125	104	140	120	96	9	71	123	90	110	110	85	5	16	227	141	10
TK010	40	19	125	26	113	190	150	125.5	179	160	135	11	79	140	107	120	120	110	6	21.5	268	160	15
TK020	50	24	115	53.5	123	241	150	165	238	190	143	13	-	144	122	150	-	110	8	27	290	195	18
TK030	60	30	230	25	150	300	270	191	268	245	190	14	-	188	150	160	-	110	8	33	320	215	25
TK050	60	30	230	25	150	300	270	191	268	245	190	14	-	188	150	160	-	110	8	33	340	240	25
TK100	70	35	250	33	200	365	290	201	319	315	245	18	-	-	192	194	-	110	10	38	435	275	30

### B5外形尺寸 Dimensions for B5 model



TYPE	B	D(j6)	C	G	G3	E	H	M	M1	N	O	O1	P	T	C1	KA	KB	KC	KD	KD1	KE	b	t	X	Y	Z
TKF/TF002	23	11	50	112.5	64.5	70	72	115	60	95	9	M6	140	3.5	46	71	111	78	110	110	85	4	12.5	200	120	10
TKF/TF005	30	14	40	110	74	80	90	130	77	110	9	M8	160	3.5	53	71	123	90	110	110	85	5	16	227	141	10
TKF/TF010	40	19	58	139	85.5	100	98	165	84	130	11	M8	200	3.5	60	79	140	107	120	120	110	6	21.5	268	160	15
TKF020	50	24	-	188	115	126	241	165	-	130	11	-	200	3.5	-	-	144	122	150	-	110	8	27	290	195	18
TKF030	60	30	-	208	131	150	270	265	-	230	15	-	300	4	-	-	188	150	160	-	110	8	33	320	215	25
TKF050	60	30	-	208	131	150	270	265	-	230	15	-	300	4	-	-	188	150	160	-	110	8	33	340	240	25
TKF100	70	35	-	244	131	200	-	300	-	250	19	-	350	5	-	-	-	192	194	-	110	10	38	435	275	30

## 三相感應電動機 Electric Motors

Motor-type	P <sub>N</sub>		n <sub>N</sub> min <sup>-1</sup>	I <sub>N</sub> 400 V A	M <sub>N</sub> Nm	$\frac{M_S}{M_N}$	$\frac{M_{max}}{M_N}$	$\frac{I_S}{I_N}$	COS <sub>φ</sub>	η %	Weight Kg(B3)	
	kW	CV										
<b>2極 2 Poles (3000 min<sup>-1</sup>)</b>												
<b>230 V/400 V/50 HZ</b>												
56 B	2	0,12	0,16	2750	0,45	0,40	1,8	2,0	4	0,70	55	3,4
63 B	2	0,25	0,33	2790	0,72	0,87	2,2	2,2	5,5	0,76	66	4,4
63 C	2	0,30	0,50	2720	0,75	0,87	2,2	2,2	5,5	0,76	66	4,6
71 A	2	0,37	0,5	2760	0,95	1,29	2,2	2,2	6	0,80	73,5	6,2
71 B	2	0,55	0,75	2800	1,33	1,92	2,2	2,3	6	0,82	75,5	6,5
71 C	2	0,75	1	2820	1,74	2,54	2,3	2,4	6	0,83	76	6,5
80 A	2	0,75	1	2820	1,74	2,54	2,3	2,4	6	0,85	76,5	8,6
80 B	2	1,1	1,5	2830	2,50	3,70	2,3	2,4	6	0,85	77	10
80 C	2	1,5	2	2840	3,10	5,02	2,4	2,6	6	0,85	78,5	12,5
90 S	2	1,5	2	2840	3,10	5,02	2,4	2,6	6	0,85	78,5	13
90 L	2	2,2	3	2840	4,70	7,37	2,4	2,6	6	0,86	81	15
90 LL	2	3,0	4	2870	6,10	10,0	2,2	2,4	6,5	0,88	82,7	16
100 L	2	3,0	4	2870	6,10	10,0	2,2	2,4	7	0,88	82,6	20,5
100 LB	2	4,0	5,5	2880	7,80	13,4	2,3	2,4	7	0,88	85,5	26
112 M	2	4,0	5,5	2880	7,80	13,4	2,3	2,4	7	0,88	85,5	28
112 MC	2	5,5	7,5	2880	10,50	13,5	2,3	2,4	6,7	0,88	85,5	34
132 S	2	5,5	7,5	2900	10,50	18	2,2	2,3	7,5	0,88	86	40
132 SB	2	7,5	10	2900	14,10	25	2,2	2,3	7,5	0,88	87,3	44
132 SC	2	9	12	2900	16,40	30,5	2,2	2,3	7,5	0,88	87,5	63
132 L	2	11	15	2900	20,20	36	2,2	2,3	7,5	0,89	88	65

<b>4極 4 Poles (1500 min<sup>-1</sup>)</b>												
<b>230 V/400 V/50 HZ</b>												
56 B	4	0,09	0,12	1380	0,35	0,61	1,8	2,0	4	0,73	50	3,4
63 B	4	0,18	0,25	1320	0,62	1,25	1,8	2,0	4	0,73	58	4,5
63 C	4	0,22	0,30	1290	0,65	1,60	1,8	2,0	4	0,73	58	4,8
71 A	4	0,25	0,34	1350	0,8	1,80	2,2	2,3	6	0,71	67	6,1
71 B	4	0,37	0,50	1380	1,1	2,67	2,2	2,3	6	0,72	69,5	6,7
71 C	4	0,55	0,75	1370	1,7	3,90	2,7	2,7	5,5	0,66	71,3	7,1
80 A	4	0,55	0,75	1400	1,5	3,89	2,2	2,4	6	0,73	73,5	8,9
80 B	4	0,75	1	1380	1,95	5,30	2,3	2,5	6	0,75	75,5	9,6
80 D	4	1,1	1,5	1380	2,8	7,70	2,2	2,3	5,5	0,77	78	11,9
90 S	4	1,1	1,5	1395	2,8	7,53	2,2	2,4	6	0,78	78	12,5
90 L	4	1,5	2	1395	3,6	10,27	2,2	2,5	6	0,79	79	15
90 LL	4	1,85	2,5	1400	4,7	13	2,7	2,8	5,4	0,76	79	17,1
100 LA	4	2,2	3	1420	4,8	15,06	2,2	2,4	7	0,82	81	19,5
100 LB	4	3	4	1425	6,4	20,32	2,2	2,4	7	0,81	82,6	23
112 M	4	4	5,5	1430	8,3	27,10	2,2	2,4	7	0,82	84,5	29
112 MC	4	5,5	7,5	1430	11	33,2	2,2	2,2	6,8	0,82	85	35
132 S	4	5,5	7,5	1440	11,2	36	2,3	2,3	7	0,83	85,7	43,5
132 M	4	7,5	10	1440	14,8	49	2,3	2,3	7	0,84	87	53,5
132 MB	4	9	12	1450	18,1	60	2,3	2,6	7	0,84	86	55
132 L	4	11	15	1450	21,4	70	2,2	2,6	7	0,84	86,7	75,6

<b>6極 6 Poles (1000 min<sup>-1</sup>)</b>												
<b>230 V/400 V/50 HZ</b>												
63 B	6	0,12	0,15	900	0,5	1,27	1,8	1,8	4	0,6	55	5
71 A	6	0,18	0,25	870	0,75	1,94	1,4	2	4	0,66	56	6,4
71 B	6	0,25	0,34	870	0,90	2,69	1,4	2	4	0,68	59	6,5
80 A	6	0,37	0,50	900	1,15	3,86	2	2,2	4	0,70	62	8,5
80 B	6	0,55	0,75	905	1,60	5,74	2	2,2	4	0,72	65	9,2
90 S	6	0,75	1	910	2,20	7,78	2	2,2	5,5	0,70	72,5	12
90 L	6	1,1	1,5	915	3,10	11,42	2	2,2	5,5	0,72	73,5	14
100 L	6	1,5	2	930	3,70	15,49	2,1	2,2	6	0,74	77,5	22
112 M	6	2,2	3	940	5,20	22,24	2,2	2,2	6	0,74	80,5	29
132 S	6	3	4	960	7	30	2,1	2,1	6,6	0,76	81,5	38
132 M	6	4	5,5	960	9,1	40	2,1	2,1	6,6	0,76	82	45
132 MB	6	5,5	7,5	960	12,1	55	2,1	2,1	6,6	0,77	84	54

P<sub>N</sub> nominal power [KW]

$\frac{M_S}{M_N}$  starting torque / nominal torque ratio

n<sub>N</sub> nominal speed [min<sup>-1</sup>]

$\frac{M_{max}}{M_N}$  maximum torque / nominal torque ratio

I<sub>N</sub> nominal current [A]

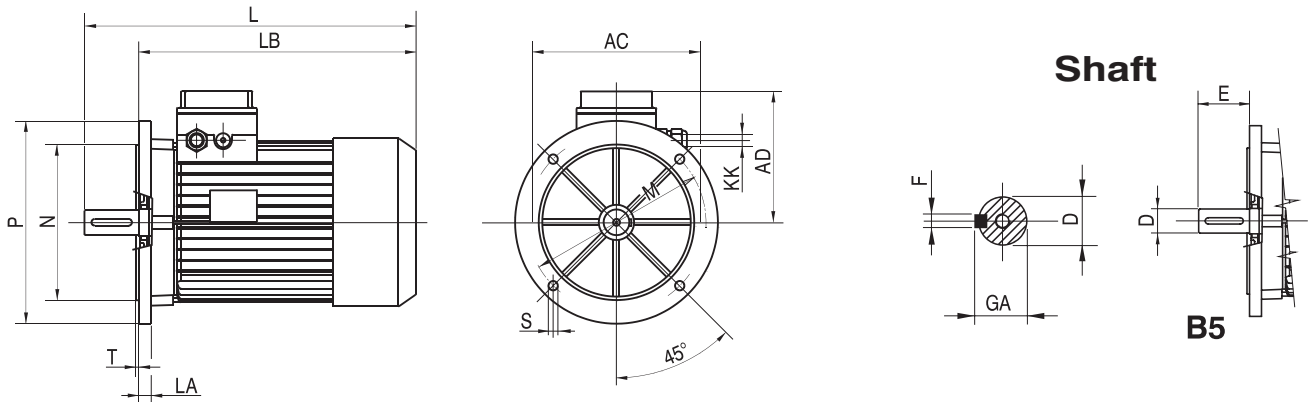
$\frac{I_S}{I_N}$  starting current / nominal current ratio

M<sub>N</sub> nominal torque [Nm]

η nominal efficiency in %

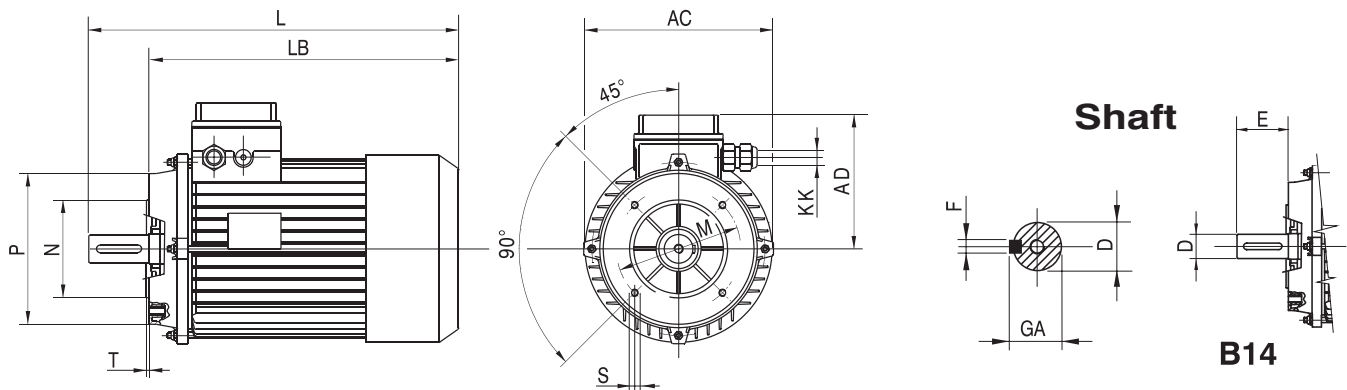
COS<sub>φ</sub> nominal power factor

## B5馬達尺寸圖 Electric Motors Dimensions



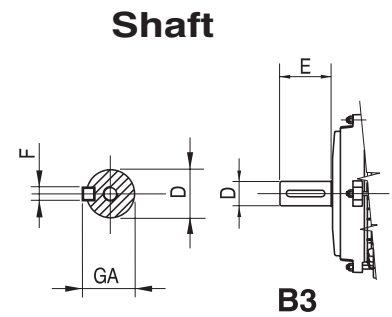
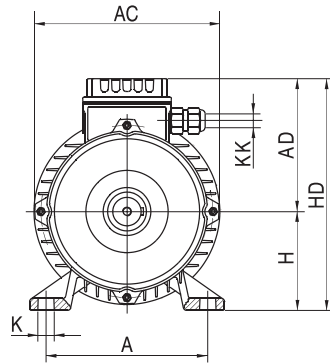
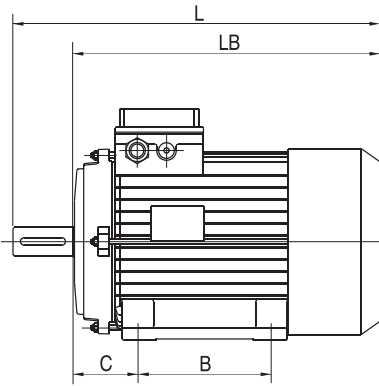
Motor	Overall dim.					Flange B5						Shaft			
	AC	AD	L	LB	KK	M	Nj6	P	LA	S( $\phi$ )	T	D( $\phi$ )	E	F	GA
56	110	96	189	169	M16x1,5	100	80	120		7	3	9 M4	20	3	10,2
63	122	99	218	195	M16x1,5	115	95	140	10	9	3	11 M4	23	4	12,5
71	145	125	255	225	M20x1,5	130	110	160	10	10	3,5	14 M5	30	5	16
80	165	135	295	255	M20x1,5	165	130	200	13	12	3,5	19 M6	40	6	21,5
90 S	185	145	310	260	M25x1,5	165	130	200	13	12	3,5	24 M8	50	8	27
90 L	185	145	335	285	M25x1,5	165	130	200	13	12	3,5	24 M8	50	8	27
100	215	170	380	320	M25x1,5	215	180	250	15	15	4	28 M10	60	8	31
112	240	180	400	340	M25x1,5	215	180	250	15	15	4	28 M10	60	8	31
132 S	275	210	470	390	M25x1,5	265	230	300	15	15	4	38 M12	80	10	41
132 M	275	210	510	430	M25x1,5	265	230	300	15	15	4	38 M12	80	10	41

## B14馬達尺寸圖 Electric Motors Dimensions



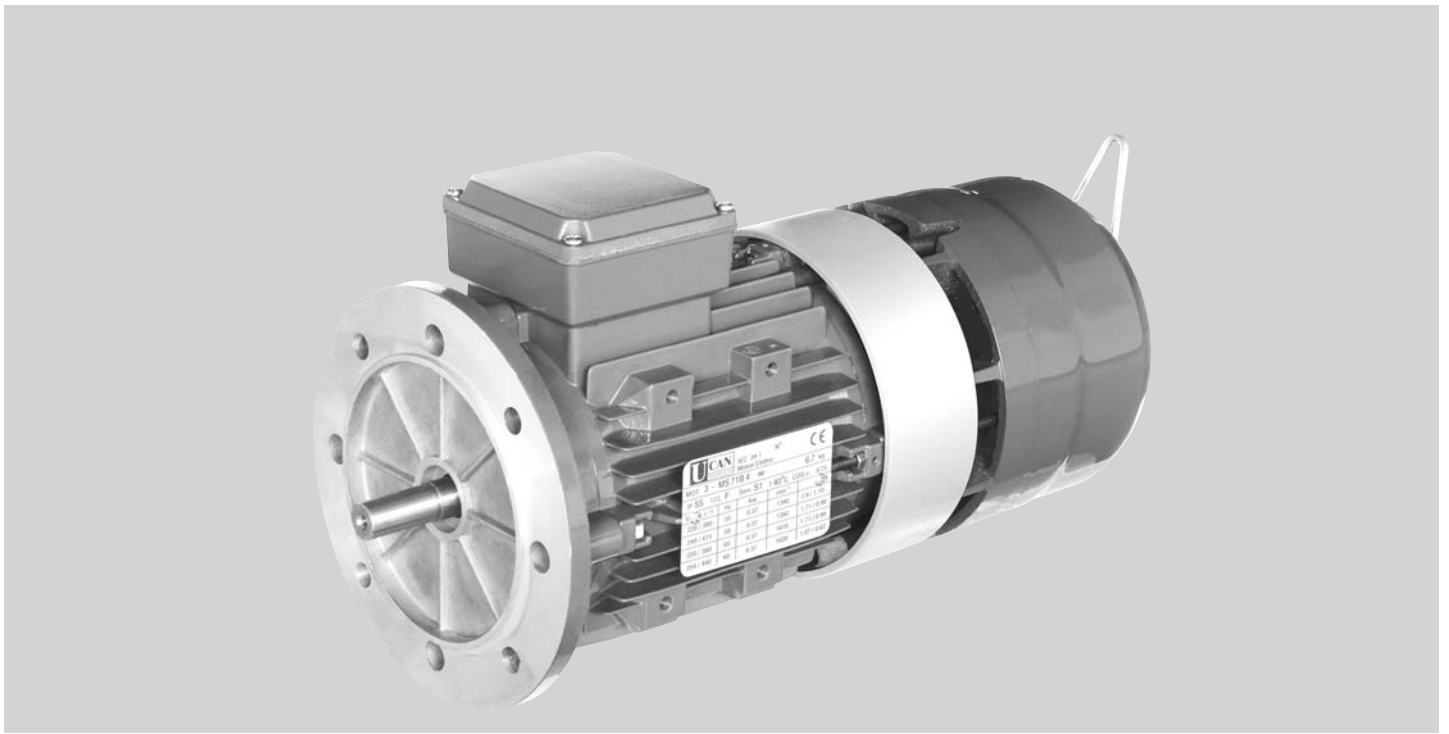
Motor	Overall dim.					Flange B14						Shaft			
	AC	AD	L	LB	KK	M	Nj6	P	S( $\phi$ )	T	D( $\phi$ )	E	F	GA	
56	110	96	189	169	M16x1,5	65	50	80	M5	3	9 M4	20	3	10,2	
63	122	99	218	195	M16x1,5	75	60	90	M5	3	11 M4	23	4	12,5	
71	145	125	255	225	M20x1,5	85	70	105	M6	3	14 M5	30	5	16	
80	165	135	295	255	M20x1,5	100	80	120	M6	3	19 M6	40	6	21,5	
90 S	185	145	310	260	M25x1,5	115	95	140	M8	3	24 M8	50	8	27	
90 L	185	145	335	285	M25x1,5	115	95	140	M8	3	24 M8	50	8	27	
100	215	170	380	320	M25x1,5	130	110	160	M8	4	28 M10	60	8	31	
112	240	180	400	340	M25x1,5	130	110	160	M8	4	28 M10	60	8	31	
132 S	275	210	470	390	M25x1,5	165	130	200	M10	5	38 M12	80	10	41	
132 M	275	210	510	430	M25x1,5	165	130	200	M10	5	38 M12	80	10	41	

## B3馬達尺寸圖 Electric Motors Dimensions



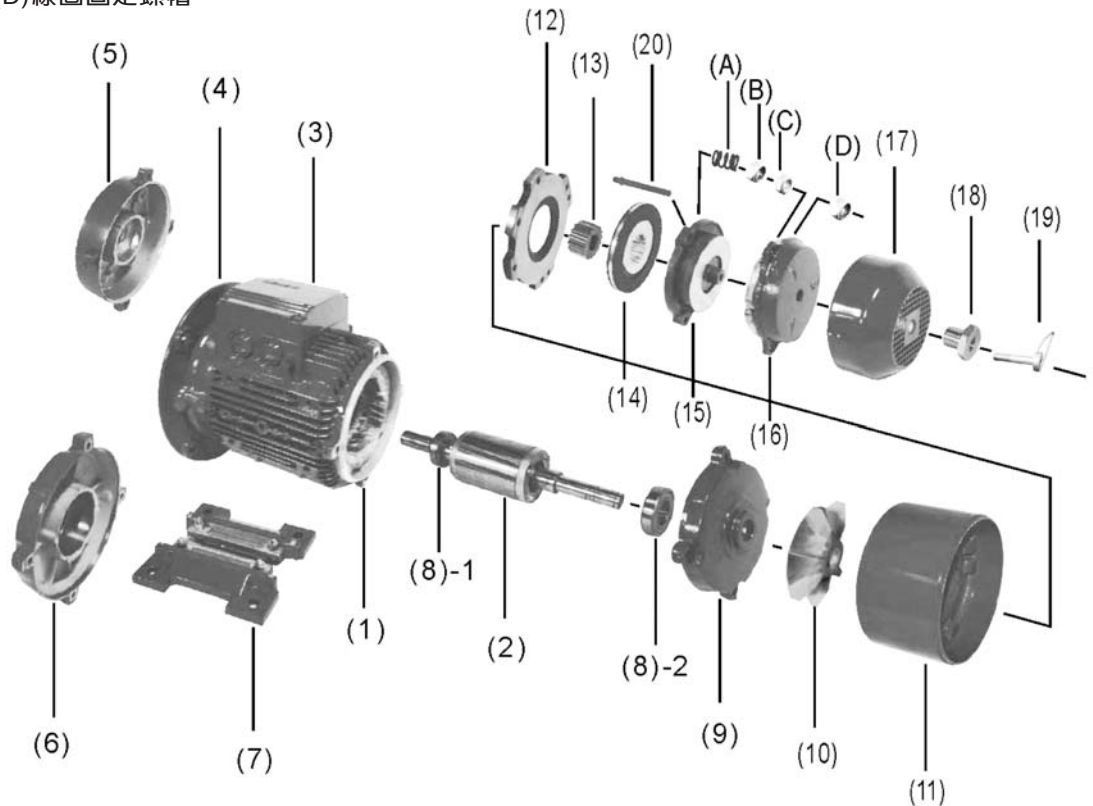
Motor	Overall dim.					Feet B3						Shaft			
	AC	AD	L	LB	KK	A	B	C	K	H	HD	D(ø)	E	F	GA
<b>56</b>	110	96	189	169	M16x1,5	90	71	36	7	56	152	9 M4	20	3	10,2
<b>63</b>	122	99	218	195	M16x1,5	100	80	40	7	63	162	11 M4	23	4	12,5
<b>71</b>	145	125	255	225	M20x1,5	112	90	45	7	71	185	14 M5	30	5	16
<b>80</b>	165	135	295	255	M20x1,5	125	100	50	10	80	215	19 M6	40	6	21,5
<b>90 S</b>	185	145	310	260	M25x1,5	140	100	56	10	90	235	24 M8	50	8	27
<b>90 L</b>	185	145	335	285	M25x1,5	140	125	56	10	90	235	24 M8	50	8	27
<b>100</b>	215	170	380	320	M25x1,5	160	140	63	12	100	255	28 M10	60	8	31
<b>112</b>	240	180	400	340	M25x1,5	190	140	70	12	112	285	28 M10	60	8	31
<b>132 S</b>	275	210	470	390	M25x1,5	216	140	89	12	132	345	38 M12	80	10	41
<b>132 M</b>	275	210	510	430	M25x1,5	216	178	89	12	132	345	38 M12	80	10	41

# 剎車馬達 Brake Motor



## 零件結構圖 Structural breakdown drawing

- (1) 電機線圈
- (2) 轉子
- (3) 接線盒
- (4) B5端蓋
- (5) B14端蓋
- (6) B3端蓋
- (7) B3腳座
- (8) 軸承
- (9) 後端蓋
- (10) 散熱風扇
- (11) 風罩鋁座
- (12) 剎車底板
- (13) 來令片齒輪
- (14) 來令片
- (15) 電樞板
- (16) 電磁線圈
- (17) 保護罩
- (18) 保護罩螺絲
- (19) 剎車釋放把手
- (20) 剎車組固定螺絲
- (A) 制動彈簧
- (B) 調壓螺帽
- (C) 間隙調整螺帽
- (D) 線圈固定螺帽



## UCAN 剎車馬達

UCAN剎車馬達為三相感應電動機，以電磁方式配合 彈簧、剎車來令片、電樞版(剎車鐵片)及電磁線圈，裝置於馬達後端之安全剎車，當電源切斷後可達到精確、迅速的剎車。其電磁線圈採用多電壓設計，並擁有強大的剎車轉矩。此系列剎車馬達是為針對自動化工業需求而設計製造的，特別適用於昇降機械、輸送機械、工具製造機、自動化機械、紡織業、陶瓷工業、包裝機械、以及需要精確、迅速剎車動作的場合。

### 剎車馬達特性：

1. 手動釋放：當提供之電源切斷後，可手動釋放剎車，並可轉動馬達出力軸，作為調校機械用。
2. 剎車來令片：與馬達軸心之配合採用高密度配合，於剎車狀況下馬達軸心的擺動間隙達成最小。  
摩擦來令片是由高摩擦係數和長壽命的材料製成，剎車次數可高達1000000次後，方需調整剎車間隙。
3. 防護等級：採用IP54、防塵、防水及油污。
4. 絕緣等級：剎車器電磁線圈採用H等級的絕緣材料，可耐180°C高溫。  
馬達採用F級的絕緣，B級溫升，可耐155°C高溫。
5. IEC國際規格、替換性高。
6. 適用於變頻器使用，但馬達和剎車器之電源須分開供給，並可依需求提供雙出力軸、加裝強制冷卻風扇和譯碼器。
7. 多電壓設計：適用於50HZ/220/230/380/400/415V  
60HZ/220/240/265/380/440/460V

### 產品簡介：

UCAN剎車馬達可分BM及BA二種系列。

BM系列：56框號~132框號(0.09KW~11KW)，採用DC電磁剎車線圈。

BA系列：71框號~132框號(0.37KW~11KW)，採用AC電磁剎車線圈。

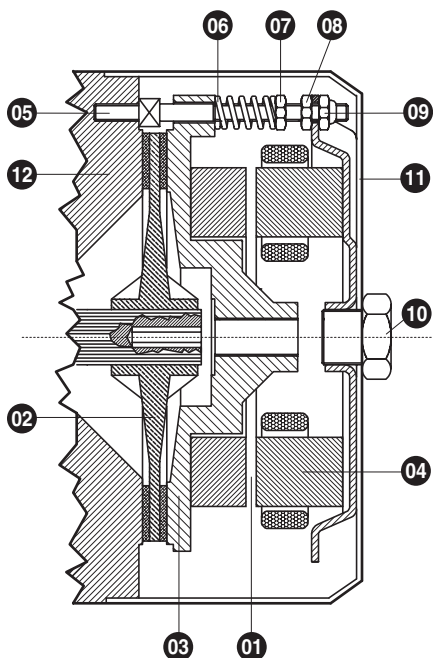
### 最大剎車轉矩及剎車間隙：BA系列AC剎車

馬達框號 Motor	71	80	90	100	112	132
最大剎車轉矩 (Nm)	14	20	35	50	80	150
功 率 W-20°C	15	20	20	25	25	35
標準剎車間隙 (mm)	0.2	0.2	0.2	0.3	0.3	0.4
最大容許間隙 (mm)	0.4	0.5	0.5	0.7	0.7	1

當間隙超過上表之最大容許間隙數值，將會造成電磁吸力降低，影響到剎車的釋放及制動時間。

### 剎車間隙調整：

由於剎車來令片屬於磨耗品，剎車器使用一段時間後必須調整電樞板和剎車線圈之間間隙，以確保最佳之剎車效率。

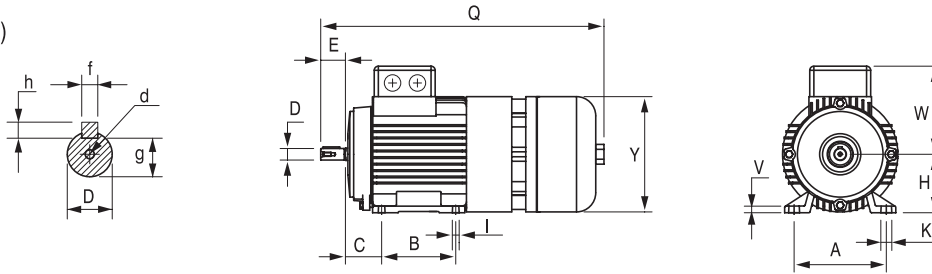


- |              |           |
|--------------|-----------|
| 01.間隙        | 07.調壓螺帽   |
| 02.剎車來令片     | 08.調整間隙螺帽 |
| 03.電樞板(剎車鐵片) | 09.線圈固定螺帽 |
| 04.電磁線圈      | 10.風罩固定螺帽 |
| 05.固定螺絲      | 11.風罩     |
| 06.制動彈簧      | 12.剎車底板   |

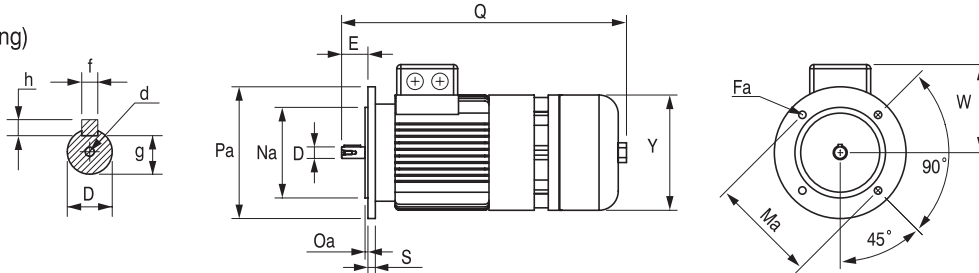
1. 間隙調整:先將(09)放鬆再將(08)往內放鬆，將間隙量規插入(01)中，調整(09)至間隙量規卡緊後將(08)鎖緊，將量規抽出即可。
2. 剎車扭力調整:可調整(07)使得(06)壓縮增加彈簧力量增加制動扭力或放鬆降低彈簧壓力，取得緩和的制動效果。

## BA series 71-132 dimensions

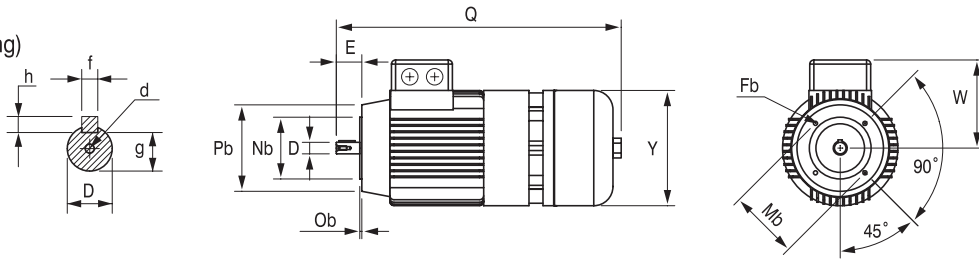
B3 (Foot Mounting)



B5 (Flange Mounting)



B14 (Face Mounting)



Dimension	BA71	BA80	BA90S	BA90L	BA100L	BA112M	BA132S	BA132M
<b>A</b>	112	125	140	140	160	190	216	216
<b>B</b>	90	100	100	125	140	140	140	178
<b>C</b>	45	50	56	56	63	70	89	89
<b>D</b>	14	19	24	24	28	28	38	38
<b>d</b>	M5	M6	M8	M8	M10	M10	M12	M12
<b>E</b>	30	40	50	50	60	60	80	80
<b>Fa</b>	9.5	11.5	11.5	11.5	14	14	14	14
<b>Fb</b>	M6	M6	M8	M8	M8	M8	M10	M10
<b>f</b>	5	6	8	8	8	8	10	10
<b>g</b>	11	15.5	20	20	24	24	33	33
<b>H</b>	71	80	90	90	100	112	132	132
<b>h</b>	5	6	7	7	7	7	8	8
<b>I</b>	7	10	10	10	12	12	12	12
<b>K</b>	10.5	14	14	14	16	16	22	22
<b>Ma</b>	130	165	165	165	215	215	265	265
<b>Mb</b>	85	100	115	115	130	130	165	165
<b>Na</b>	110	130	130	130	180	180	230	230
<b>Nb</b>	70	80	95	95	110	110	130	130
<b>Oa</b>	3.5	3.5	3.5	3.5	4	4	4	4
<b>b</b>	2.5	3	3	3	3.5	3.5	3.5	3.5
<b>Pa</b>	160	200	200	200	250	250	300	300
<b>Pb</b>	105	120	140	140	160	160	200	200
<b>Q</b>	344	380	412	436	487	505	606	644
<b>S</b>	10	12	12	12	14	14	15	15
<b>V</b>	8	9.5	10.5	10.5	12.5	13.5	16	16
<b>W</b>	109	112	120	120	139	156	185	185
<b>Y</b>	145	160	180	180	196	218	265	265

**Notes :** Cable glands are M16 on size 71 / M20 on size 80 up to 112 / M25 on size 132