2025

PSMRV系列
不鏽鋼蝸輪減速機
Stainless Steel Worm Gear Reducer

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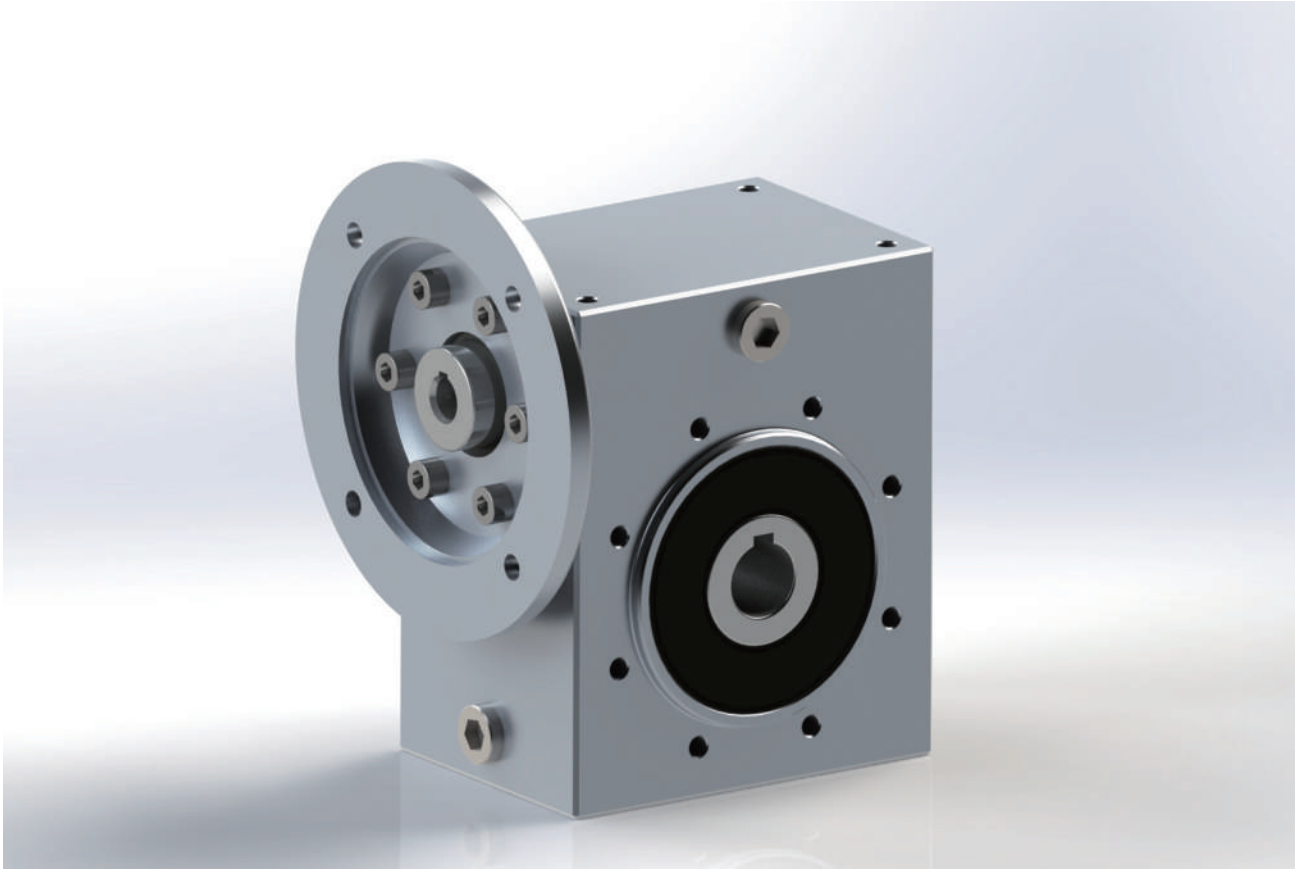
北工牌產品系列目錄

不鏽鋼蝸輪減速機產品代碼說明

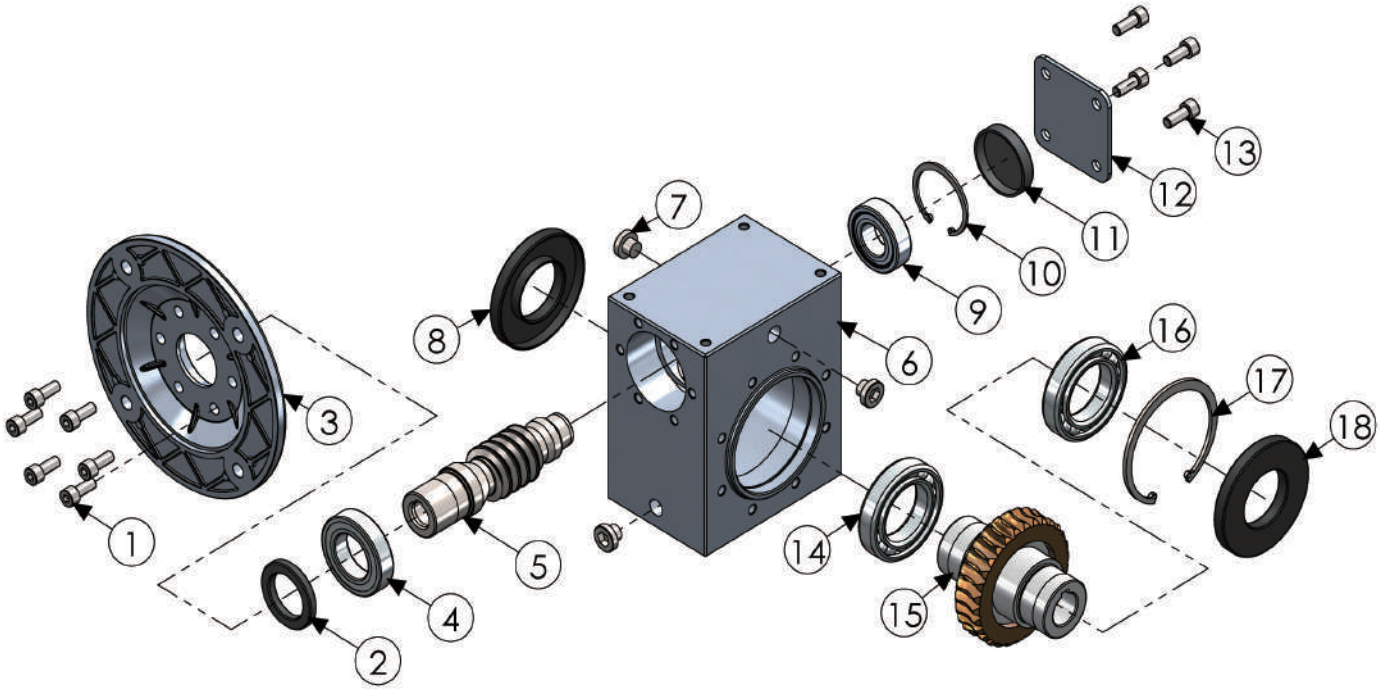
PSMRV	-	063	-	10	-	90	-	B5
(1)		(2)		(3)		(4)		(5)

(1) 機型	PSMRV 入力法蘭式						
(2-1) 減速機型號	30	40	50	63	75	90	
	不鏽鋼外殼						
(3) 減速比	1/7.5、1/10、1/15、1/20、1/25、1/30、1/40、1/50、1/60、1/80、1/100						
(4) 馬達框號	IEC56	IEC63	IEC71	IEC80	IEC90	IEC100	IEC112
(5) 法蘭框號	B5 / B14	B5 / B14	B5 / B14	B5 / B14	B5 / B14	B5 / B14	B5 / B14

不鏽鋼蝸輪減速機產品

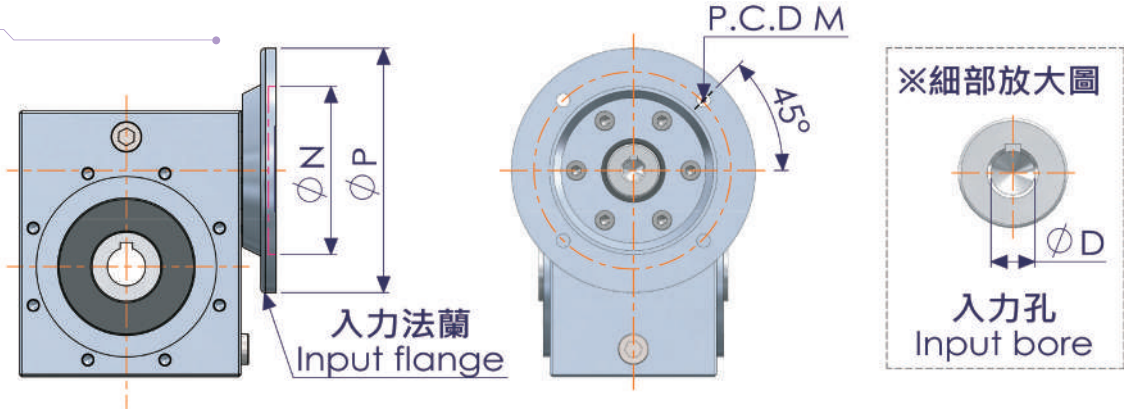


系統分解圖



序號	名稱	材質	Name	序號	名稱	材質	Name
1	內六角螺絲	SUS304	Screws	10	孔用扣環	S45C	Circlip for hole
2	油封	VITON	Oil seal	11	油封蓋	VITON	Seal cover
3	人力法蘭	SUS304	Input flange	12	保護蓋	SUS304	Cover
4	軸承	軸承鋼	Bearing	13	內六角螺絲	SUS304	Screws
5	蝸桿	SUS304	Worm shaft	14	軸承	軸承鋼	Bearing
6	外殼	SUS304	Housing	15	蝸輪	錫青銅	Worm gear
7	透氣塞頭	SUS304	Oil plug	16	軸承	軸承鋼	Bearing
8	油封	VITON	Oil seal	17	孔用卡簧	S45C	Circlip for hole
9	軸承	軸承鋼	Bearing	18	油封	VITON	Oil seal

不鏽鋼蝸輪減速機機型選配表



電機法蘭安裝尺寸 Motor flange mounting dimensions

PSMRV	馬力 (HP)	PAM IEC	入力法蘭 (mm)			入力孔 (mm)										
			N	M	P	D										
						7.5	10	15	20	25	30	40	50	60	80	100
30	1/4	63B5	95	115	140	11	11	11	11	11	11	11	11			
	1/4	63B14	60	75	90	11	11	11	11	11	11	11	11			
	1/8	56B5	80	100	120	9	9	9	9	9	9	9	9	9	9	
	1/8	56B14	50	65	80	9	9	9	9	9	9	9	9	9	9	
40	1/2	71B5	110	130	160	14	14	14	14	14	14	14	14	14	14	
	1/2	71B14	70	85	105	14	14	14	14	14	14	14	14	14	14	
	1/4	63B5	95	115	140	11	11	11	11	11	11	11	11	11	11	11
	1/4	63B14	60	75	90	11	11	11	11	11	11	11	11	11	11	11
	1/8	56B5	80	100	120	9	9	9	9	9	9	9	9	9	9	
50	1	80B5	130	165	200	19	19	19	19	19	19	19				
	1	80B14	80	100	120	19	19	19	19	19	19	19				
	1/2	71B5	110	130	160	14	14	14	14	14	14	14	14	14		
	1/2	71B14	70	85	105	14	14	14	14	14	14	14	14	14		
	1/4	63B5	95	115	140	11	11	11	11	11	11	11	11	11	11	11
63	2	90B5	130	165	200	24	24	24	24	24	24	24				
	2	90B14	95	115	140	24	24	24	24	24	24	24				
	1	80B5	130	165	200	19	19	19	19	19	19	19	19	19		
	1	80B14	80	100	120	19	19	19	19	19	19	19	19	19		
	1/2	71B5	110	130	160	14	14	14	14	14	14	14	14	14	14	14
	1/2	71B14	70	85	105	14	14	14	14	14	14	14	14	14	14	14
75	3(5)	100(112)B5	180	215	250	28	28	28	28	28	28	28	28			
	3(5)	100(112)B14	110	130	160	28	28	28	28	28	28	28	28			
	2	90B5	130	165	200	24	24	24	24	24	24	24	24	24	24	
	2	90B14	95	115	140	24	24	24	24	24	24	24	24	24	24	
	1	80B5	130	165	200	19	19	19	19	19	19	19	19	19	19	19
	1	80B14	80	100	120	19	19	19	19	19	19	19	19	19	19	19
90	3(5)	100(112)B5	180	215	250	28	28	28	28	28	28	28	28			
	3(5)	100(112)B14	110	130	160	28	28	28	28	28	28	28	28			
	2	90B5	130	165	200	24	24	24	24	24	24	24	24	24	24	
	2	90B14	95	115	140	24	24	24	24	24	24	24	24	24	24	
	1	80B5	130	165	200	19	19	19	19	19	19	19	19	19	19	19
	1	80B14	80	100	120	19	19	19	19	19	19	19	19	19	19	19

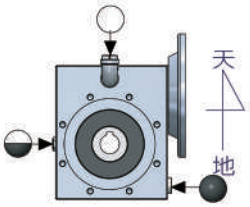
※ 性能參數亦可參考 PNMRV 資料

不鏽鋼蝸輪減速機安裝方式

○ 透氣蓋與加油孔　◒ 油鏡　● 排油栓

臥式安裝

B3



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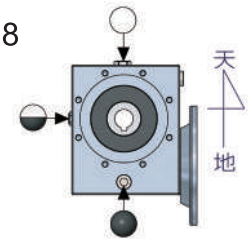

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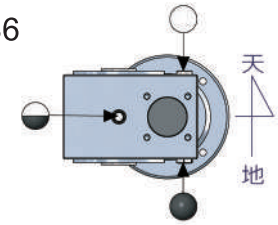
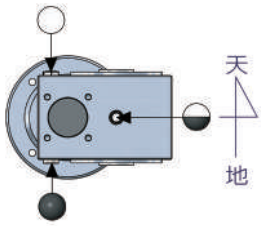
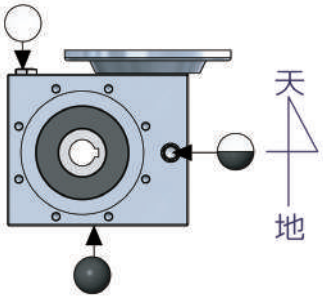


B7

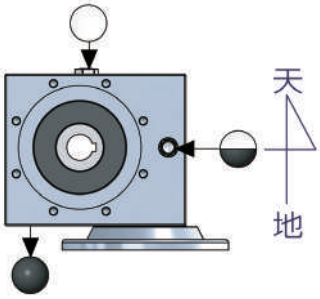


立式安裝

V5



V6



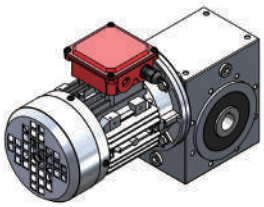
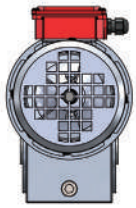
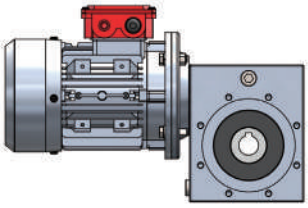
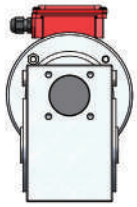
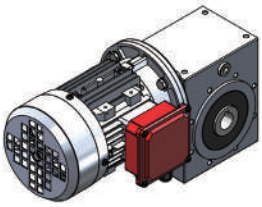
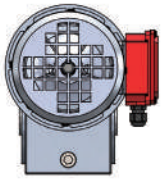
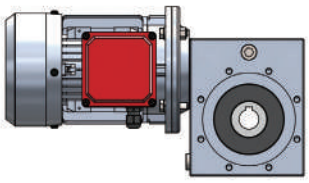
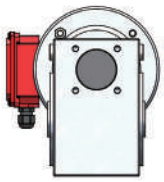
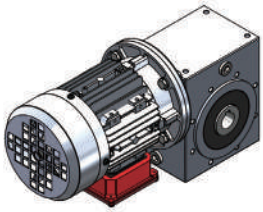
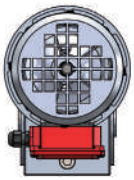
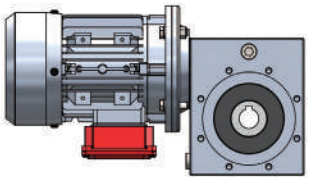
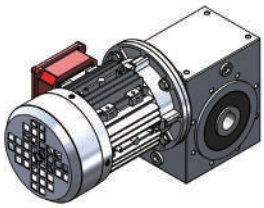
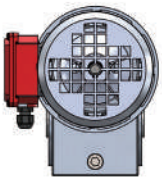
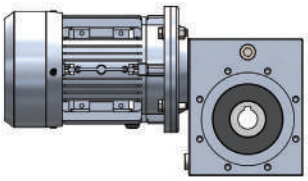
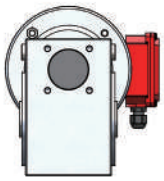
各安裝型式所對應之加油量

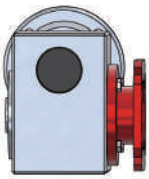
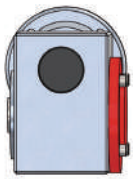
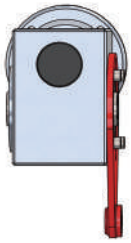
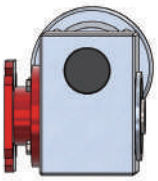
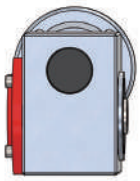
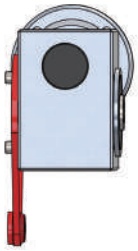
減速機型號		030#	040#	050#	060#	075#	090#
潤滑用油 單位:(公升)	B3	0.04	0.08	0.15	0.30	0.55	1.00
	B6/B7	0.04	0.08	0.15	0.30	0.55	1.00
	B8	0.04	0.08	0.15	0.30	0.55	1.00
	V5	0.04	0.08	0.15	0.30	0.55	1.00
	V6	0.04	0.08	0.15	0.30	0.55	1.00

潤滑油種類

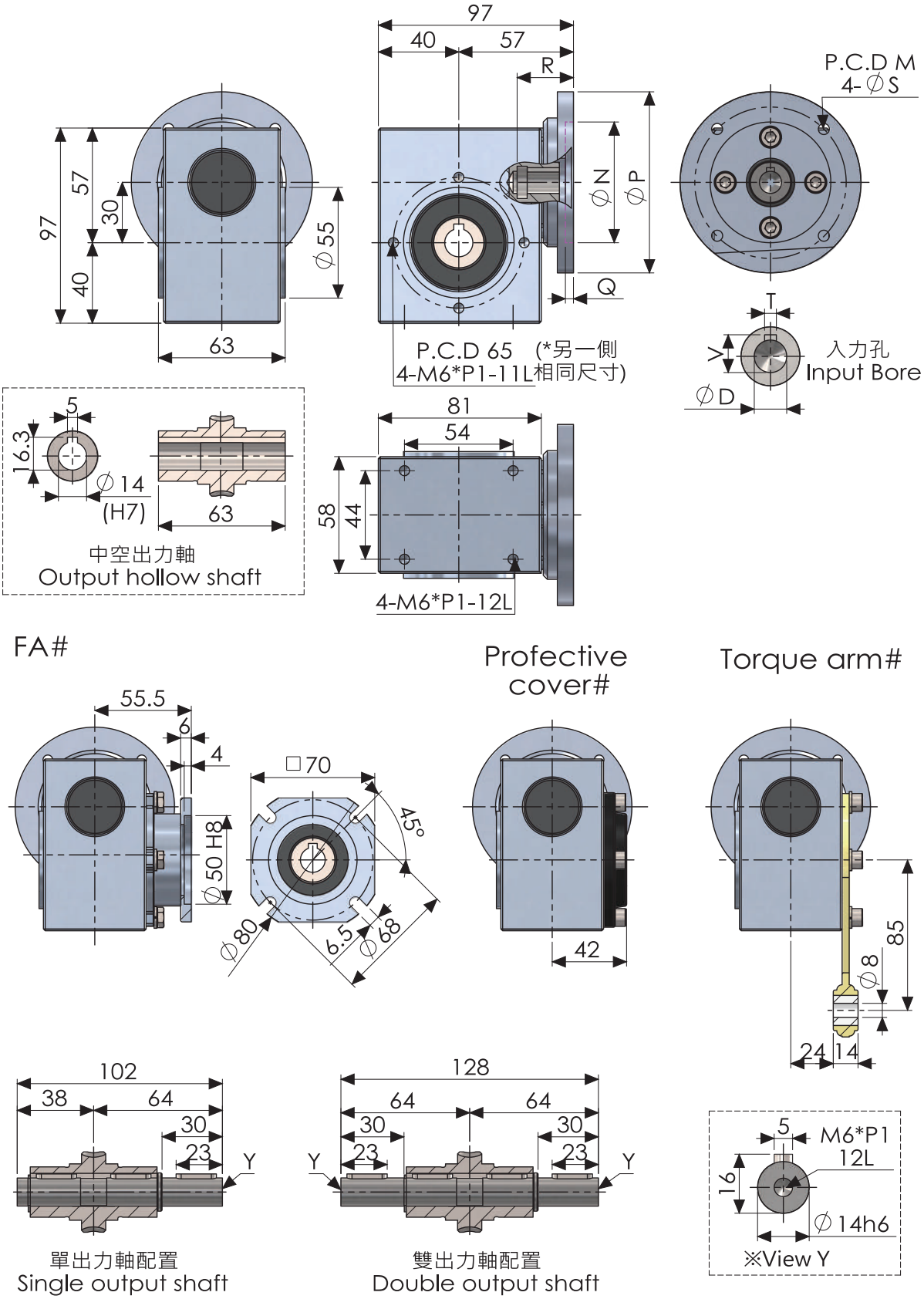
減速機型號	030#~075#		090#	
潤滑油	全合成機油		礦物油	
環境溫度	-25℃ ~ 50℃	-25℃ ~ 50℃	-5℃ ~ 40℃	-15℃ ~ 40℃
ISO	VG320	VG320	VG460	VG320
AGIP	TELUM	MELLANAOIL 320	BLASIA 460	BLASIA 220
SHELL	TIVELA OIL SC320	OMALA OIL 320	OMALA OIL 460	OMALA OIL 220
ESSO	S220	S220	SPARTAN EP 460	SPARTAN EP 220
MOBIL	GLYGOYLE 30	MOBIL GEAR 320	MOBIL GEAR 634	MOBIL GEAR 630
CASTROL	ALPHASYN PG 320	ALPHASYN PG 320	ALPHA MAX 460	ALPHA MAX 220
BP	ENERGOL SG-XP 320	ENERGOL SG-XP 320	ENETGOL SG-XP 460	ENETGOL SG-XP 220

不鏽鋼蝸輪減速機安裝方式

馬達接線盒位置				
方位 1 pos.1				
方位2 pos.2				
方位3 pos.3				
方位4 pos.4				

	出力法蘭	防塵蓋	扭力臂
方位D pos.D			
方位S pos.S			

安裝尺寸 / PSMRV30#



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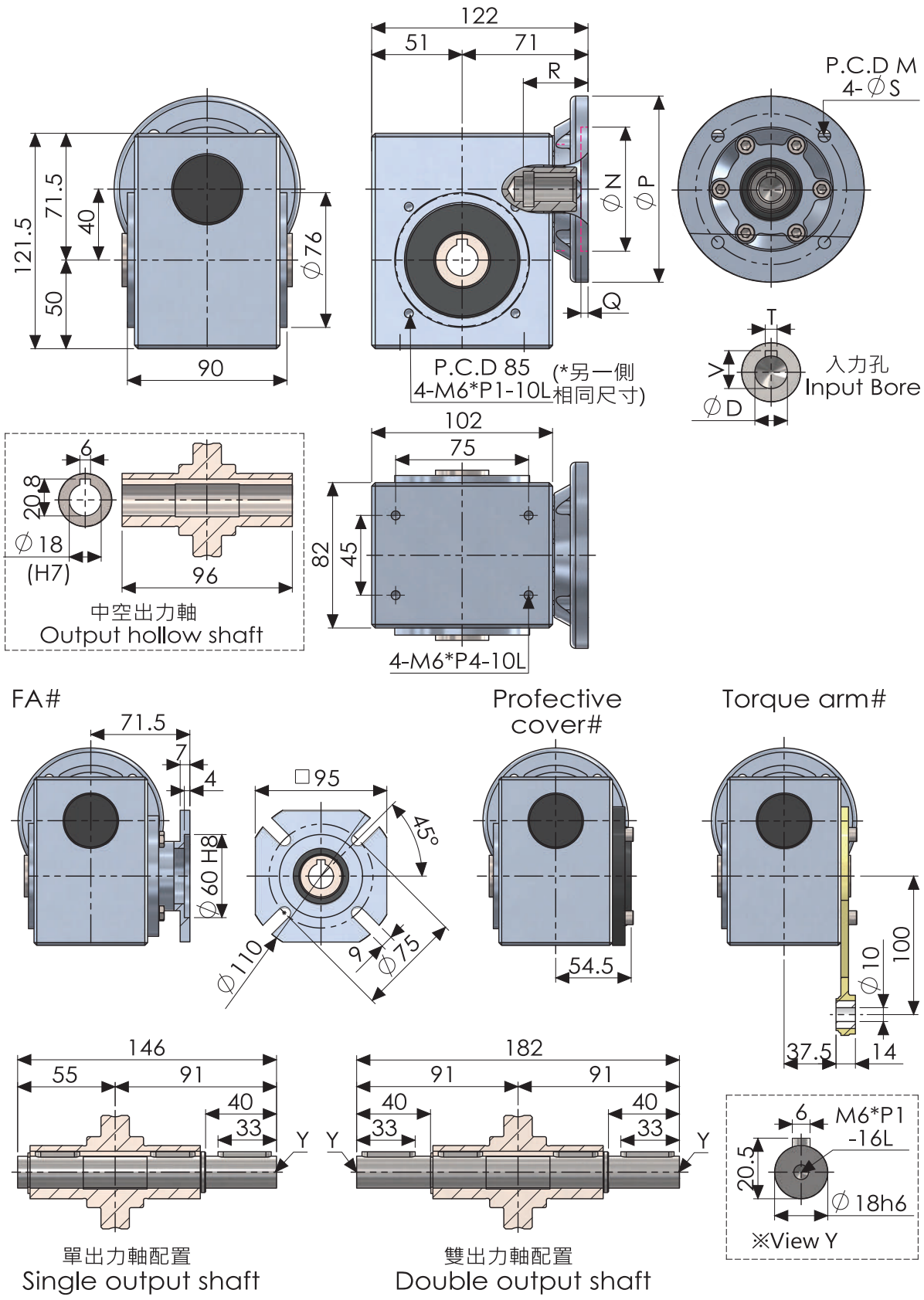

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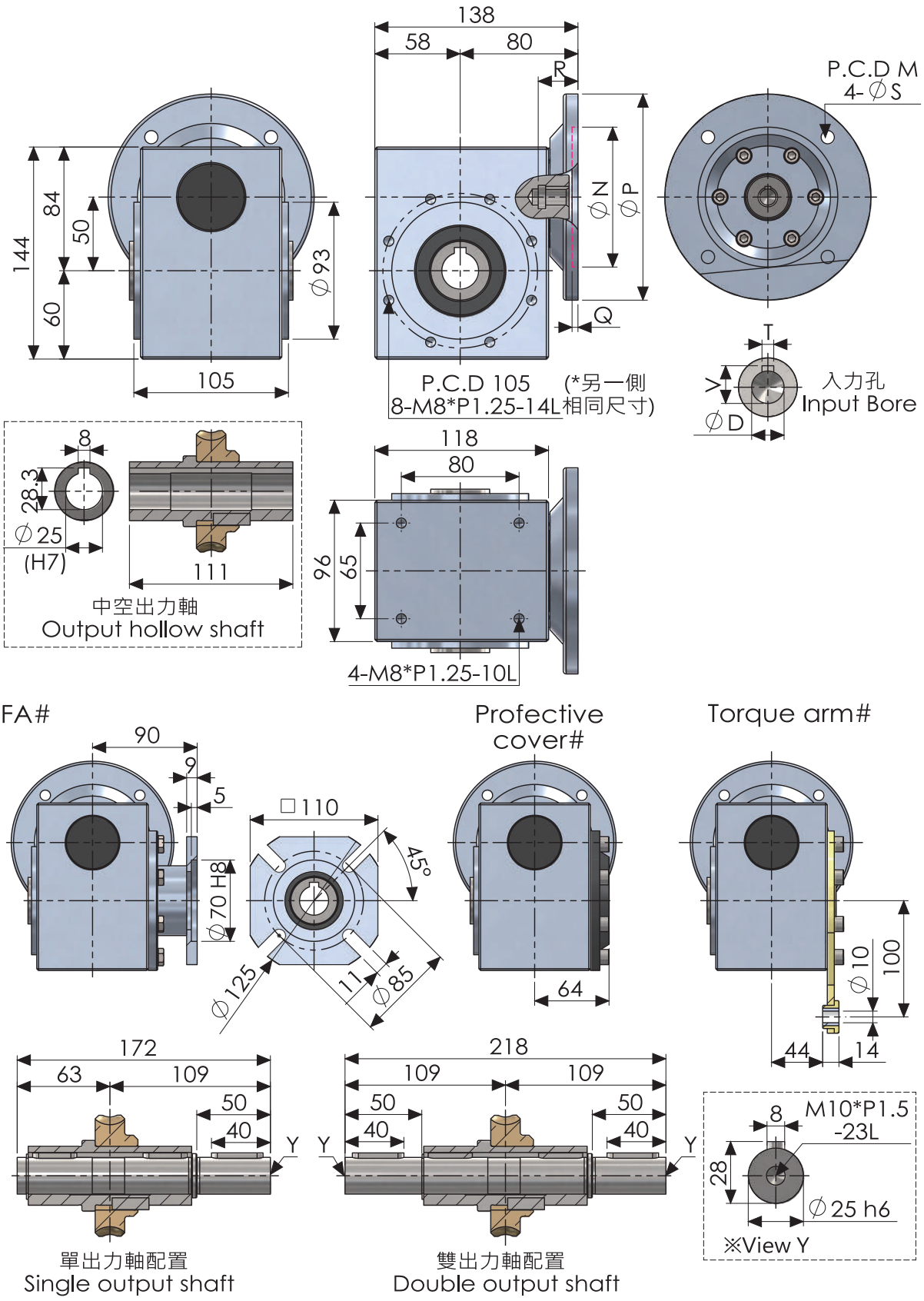

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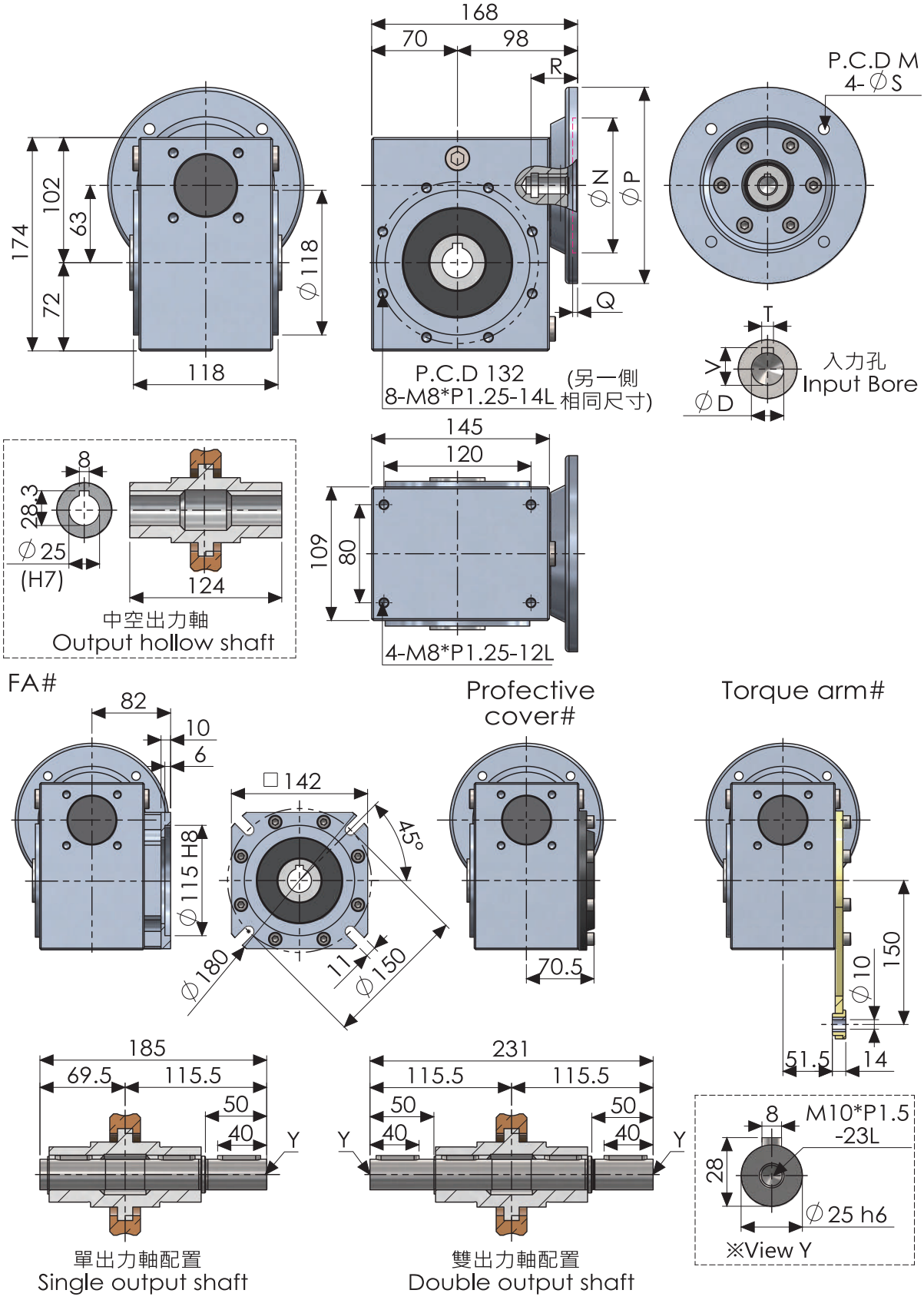

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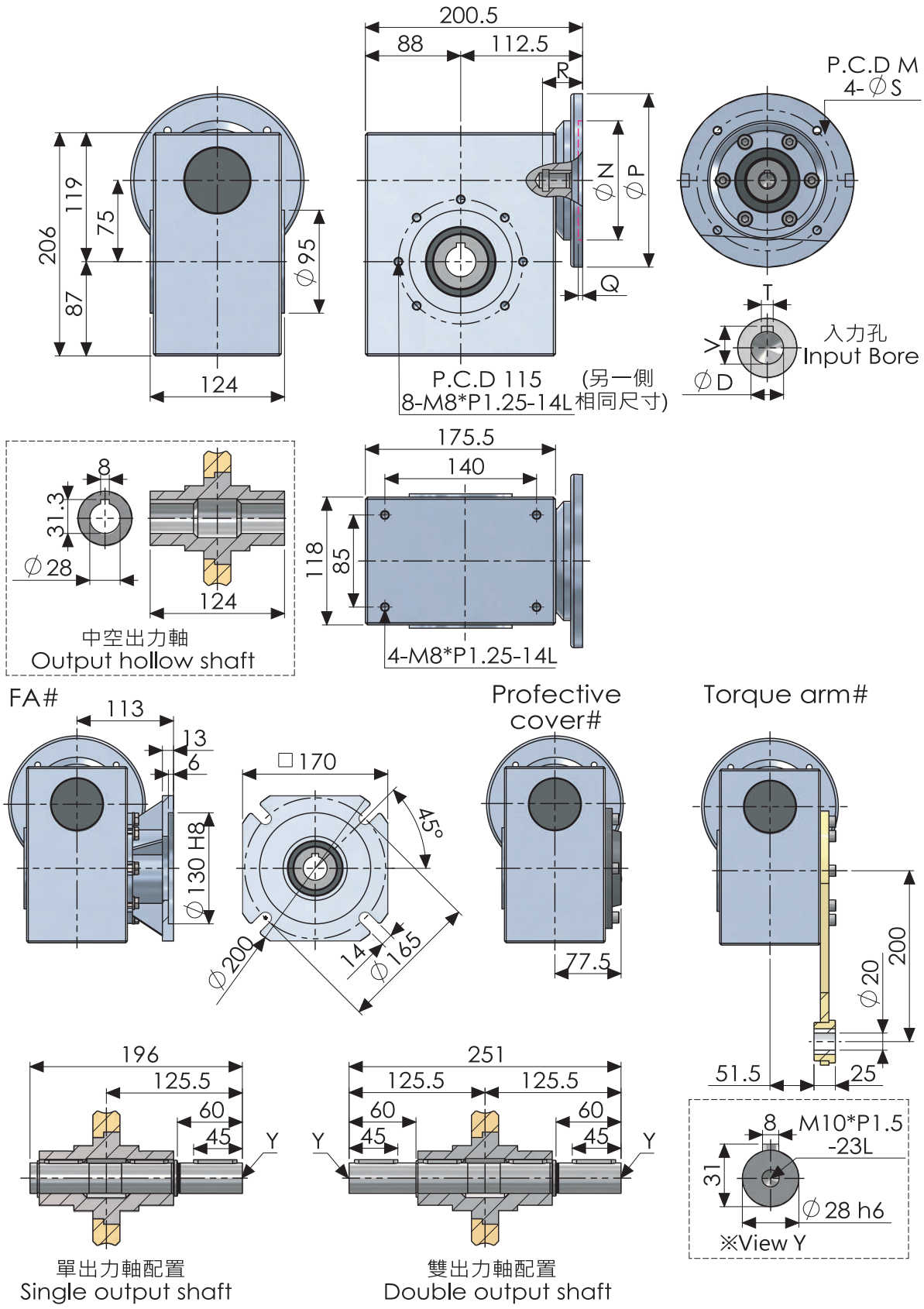

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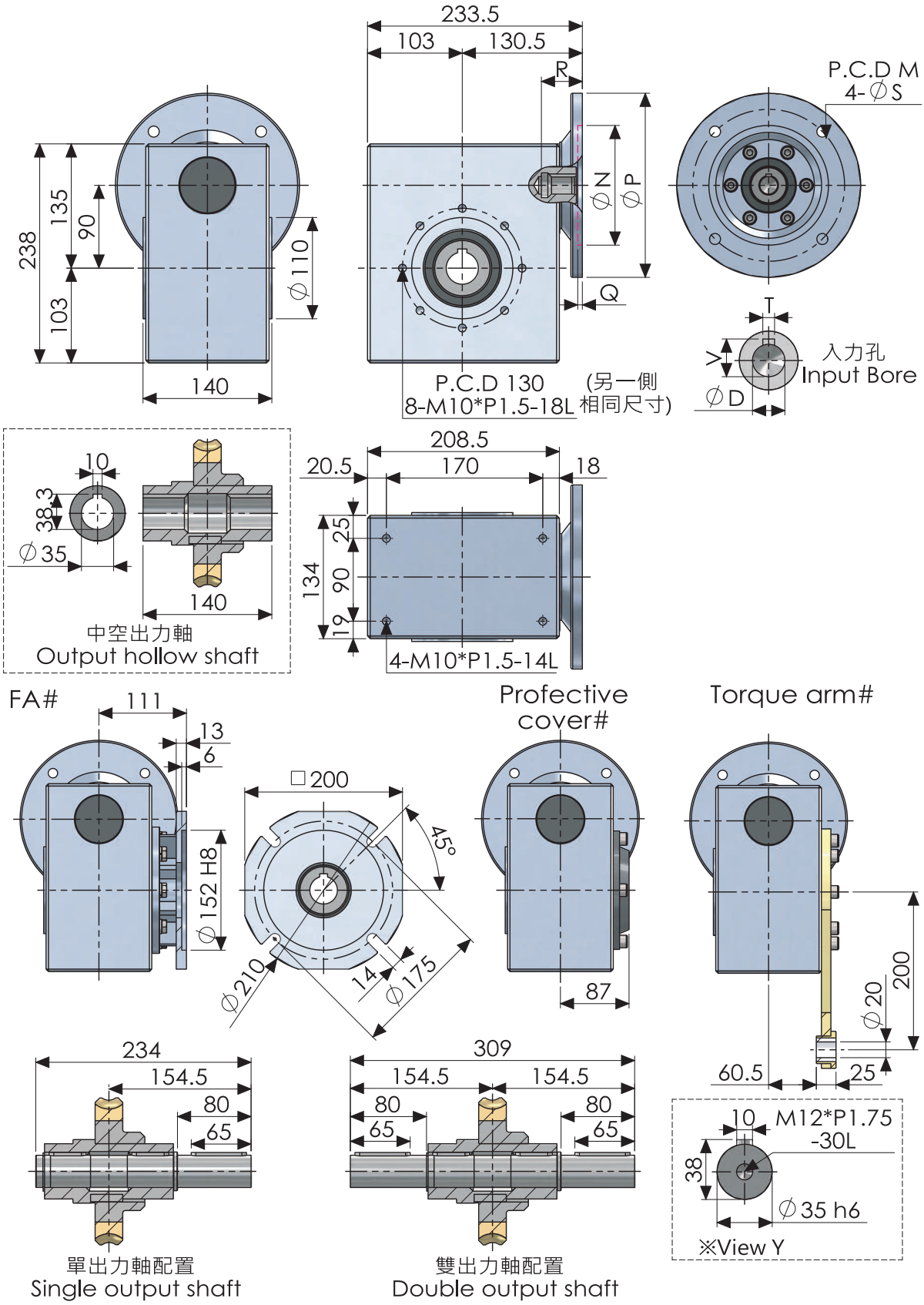
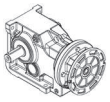
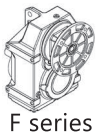
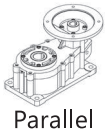
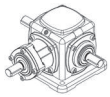
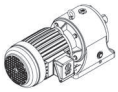
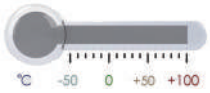
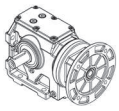
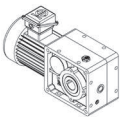
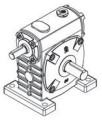
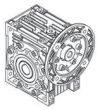
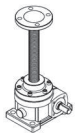


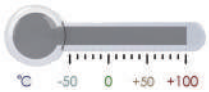
油品使用說明

類型	R series helical gear reducer	K series helical gear reducer	F series helical gear reducer	Parallel shaft gear reducer	Miter bevel gear reducer	planetary gear reducer	Gear reducer
齒輪減速機							

油品適用環境溫度 	DIN (ISO)	ISO, NLGI	Mobil	Shell	bp	KLÜBER LUBRICATION	TEXACO	Castrol Tribol	Castrol Optimol	FUCHS	TOTAL
-15℃ ~+40℃	CLP(CC)	VG220	Mobilgear 660 XP220	Shell Omala S2 G 220	BP Energol GR-XP 220	Kluberoil GEM 1-220 N	Meropa 220	Tribol 1100/220	Optigear BM 220	Renolin CLP 220	Carter EP 220
-20℃ ~+80℃	CLP PG	VG220	Mobil Glygoyle 220	Shell Omala S4 WE 220	BP Enersyn SG-XP 220	Klubersynth GH 6-220	Synlube CLP220	Tribol 800/220	Optiflex A 200	Renolin PG220	Carter SY 220
-20℃ ~+60℃	CLP HC	VG220	Mobil SHC630	Shell Omala S4 GX 220	-	Klubersynth GEM 4-220 N	Pinnacle EP 220	Tribol 1510/220	Optigear Synthetic X 220	Renolin Unisyn CLP 220	Carter SH 220
-40℃ ~+40℃	CLP HC	VG150	Mobil SHC629	Shell Omala S4 GX 150	-	Klubersynth GEM 4-150N	Pinnacle EP 150	-	Optigear Synthetic X 150	Renolin Unisyn CLP 150	Carter SH 150
-20℃ ~+25℃	CLP(CC)	VG150	Mobilgear 660 XP150	Shell Omala S2 G 150	BP Energol GR-XP 150	Kluberoil GEM 1-150N	Meropa 150	Tribol 1100/150	Optigear BM100	Renolin CLP 150	Carter EP 150
-40℃ ~+20℃	CLP HC	VG68	Mobil SHC626	Shell Omala S4 GX 68	-	-	-	-	-	Renolin Unisyn CLP 68	-
-20℃ ~+0℃	CLP HC	VG32	Mobil SHC624	-	-	Kulber summit HySyn FG-32	cetus PAO 46	-	Optilieb HY 32	Renolin Unisyn OL 32	Decnis SH 32

油品使用說明

類型					
蝸輪減速機	S series helical gear reducer	Shaft mounted gear reducer	Worm gear reducer	Aluminum alloy worm gear reducer	Worm gear linear actuator(Screw jack)

油品適用環境溫度 	DIN (ISO)	ISO, NLGI	Mobil	Shell	bp	KLÜBER LUBRICATION	TEXACO	Castrol Tribol	Castrol Optimol	FUCHS	TOTAL
0℃ ~+40℃	CLP(CC)	VG680	Mobilgear 660 XP 680	Shell Omala S2 G 680	BP Energol GR-XP 680	Kluberoil GEM 1-680 N	Meropa 680	Tribol 1100/680	Optigear BM 680	Renolin SEW 680	Carter EP 680
-20℃ ~+80℃	CLP PG	VG680	Mobil Glygoyle 680	Shell Omala S4 WE 680	BP Enersyn SG-XP 680	Klubersynth GH 6-680	Synlube CLD 680	Tribol 800/680	Optiflex A 680	Renolin PG 680	-
-20℃ ~+60℃	CLP HC	VG460	Mobil SHC 634	Shell Omala S4 GX 460	-	Klubersynth GEM 4-460N	Pinnacle EP 460	-	Optigear Synthetic X460	Renolin Unisyn CLP 460	Carter SH460
-40℃ ~+30℃	CLP HC	VG150	Mobil SHC 629	Shell Omala S4 GX 150	-	Klubersynth GEM 4-150N	-	Pinnacle EP 150	Optigear Synthetic X 150	Renolin Unisyn CLP 150	Carter SH 150
-20℃ ~+10℃	CLP(CC)	VG150	Mobilgear 600 XP 150	Shell Omala S2 G 150	BP Energol GR-XP 150	Klubersynth GEM 1-150 N	Meropa 150	Tribol 1100/150	Optigear BM 150	Renolin CLP 150	Carter EP 150
-20℃ ~+40℃	CLP PG	VG220	Mobil Glygoyle 220	ShelL Omala S4 WE 220	BP Enersyn SG-XP 220	Klubersynth GH 6-220	Synlube CLP 220	Tribol 800/220	Optiflex A 220	Renolin PG 220	Carter SY 220
-40℃ ~+20℃	CLP HC	VG 68	Mobil SHC626	Shell Omala S4 GX 68	-	-	-	-	-	Renolin Unisyn CLP 68	-
-40℃ ~+0℃	CLP HC	VG32	Mobil SHC 624	-	-	Kluber-Summit HySyn FG-32	Cetus PAO 46	-	Alphasyn T32	Renolin Unisyn OL 32	Dacnis SH 32

減速機負載特徵表

<A> 均勻負載　<B>中等沖擊負載　<C> 強烈沖擊負載

風機類	負載類別	起重機類	負載類別
風機(軸向與徑向)	A	轉臂式起重傳動齒輪裝置	B
冷卻塔風扇	B	卷揚機齒輪傳動裝置	A
引風機	B	吊桿起落齒輪傳動裝置	B
螺旋活塞式風機	B	轉向齒輪傳動裝置	B
蝸輪式風機	A	行走齒輪傳動裝置	C
建築機械類	**負載類別**	**塑料機器類**	**負載類別**
混泥土攪拌機	B	壓光機	B
卷揚機	B	擠壓機	B
路面建築機器	B	螺旋壓出機	B
鑽孔機	B	混合機	B
化工機械類	**負載類別**	**石料&陶土料加工機械類**	**負載類別**
攪拌機（液體）	A	球磨機	B
攪拌機（半液體）	B	擠壓料碎機	C
離心機（重型）	B	破碎機	C
離心機（輕型）	A	壓碎機	C
冷卻混筒	B	錘料碎機	C
乾燥滾筒	B	轉爐	C
攪拌機	B	筒型磨機	C
壓縮機類	**負載類別**	**洗衣類**	**負載類別**
活塞式壓縮機	C	滾筒	B
渦輪式壓縮機	B	洗衣機	B
水處理設備類	**負載類別**	**水處理設備類**	**負載類別**
鼓風機	B	螺桿泵	B

減速機負載特徵表

傳送運輸機類	負載類別	挖泥機類	負載類別
平板傳送機	B	鼓式傳送機	C
平衡秤升降器	B	鼓式轉動機	C
槽式傳送機	B	挖泥頭	C
帶式傳送機（大件）	C	機動絞車	B
帶式傳送機（碎料）	B	泵	B
鼓式麵粉傳送機	A	泵轉動齒輪傳動裝置	B
鏈式傳送機	B	行走齒輪傳動裝置(履帶)	C
環式傳送機	B	行走齒輪傳動裝置(鐵軌)	B
貨物升降機	B	泵類	負載類別
卷揚機	B	離心泵(稀液體)	A
連桿式傳送機	B	離心泵(半液體)	B
載入升降機	B	活塞泵	C
螺旋式傳送機	B	柱塞泵	C
鋼帶式傳送機	B	壓力泵	C
鏈式槽型傳送機	B		
絞車運輸機	B		
製紙機類	負載類別	食品工業機械類	負載類別
壓光機	C	灌注及裝箱機器	A
多層紙板機	C	甘蔗壓榨機	A
乾燥滾筒	C	甘蔗切斷機	B
上光滾筒	C	甘蔗粉碎機	C
攪漿機	C	攪拌機	B
攪漿擦碎機	C	醬狀物吊筒	B
吸水滾	C	包裝機	A
潮紙滾壓機	C	糖和甜菜切斷機	B
吸水滾壓機	C	糖和甜菜清洗機	B
威羅機	C		

減速機負載特徵表

金屬滾軋機類	負載類別	金屬加工機床類	負載類別
鋼環剪斷機	C	動力軸	A
鏈式輸送機	B	鍛造機	C
冷軋機	C	鍛錘	C
連鑄成套運送機	B	機床與附助裝置	A
冷床	B	機床與主要傳動裝置	B
剪料機頭	C	金屬刨床	C
交叉轉彎輸送機	B	板材矯直機床	C
除鏽機	C	沖床	C
重型和中型板軋機	C	沖壓機床	C
棒材切軋機	C	剪床	B
棒材轉運機類	B	薄板彎曲機床	B
棒材堆料機	B	發動及轉換器類	負載類別
推床	B	頻率轉換器	C
剪板機	C	發動機	C
板材擺升降台	B	焊接發動機	C
軋輥調整裝置	B	石油工業機械類	負載類別
輥式矯直機	B	輸油管油泵	B
軋鋼機輥道（重型）	C	轉子鑽井設備	C
軋鋼機輥道（輕型）	B	木料加工機床	負載類別
薄板軋機	C	剝皮機	C
修整剪切機	B	刨床	B
焊管機	C	鋸床	C
焊管機（帶材與線材）	B	木材加工機床	A
線材拉拔機	B		

減速機負載特徵表

橡膠機械類	負載類別	紡織機械類	負載類別
壓光機	B	送料機	B
擠壓機	C	織布機	B
混合攪拌機	B	印染機	B
捏合機	B	精制筒	B
滾壓機	C	威羅機	B

NOTE: