



каталог

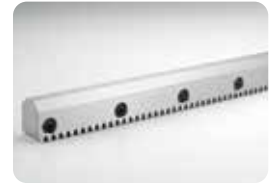
Зубчатые рейки и шестерни УУС

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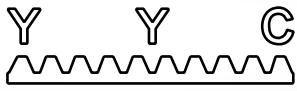
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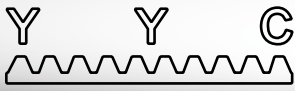
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齒條目錄 Content of Racks

型號 Code	材料 Material	齒條類型 Type	棒型 Shape	齒面處理 Teeth Treatment	硬度處理 Hardness	模數 Module	精度等級 Grade DIN	頁碼 Page
CSTGH-Q5	S45C	直齒齒條 Straight	四角棒 Tetragon	齒研 Teeth Ground	熱處理 Hardened HRC 50°-55°	2, 3, 4, 5	DIN 5	06
CSTGH-Q6	S45C	直齒齒條 Straight	四角棒 Tetragon	齒研 Teeth Ground	熱處理 Hardened HRC 50°-55°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 6	07
CSTGH-Q7	S45C	直齒齒條 Straight	四角棒 Tetragon	齒研 Teeth Ground	熱處理 Hardened HRC 50°-55°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 7	08
CSTM-Q8	S45C	直齒齒條 Straight	四角棒 Tetragon	精銑 Milled	無 Soft HRC 10°-12°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 8	09
CSTMQ-Q8	S45C	直齒齒條 Straight	四角棒 Tetragon	精銑 Milled	調質 Quenched HRC 18°-20°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 8	10
CSTMH-Q10	S45C	直齒齒條 Straight	四角棒 Tetragon	精銑 Milled	熱處理 Hardened HRC 50°-55°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 10	11
CHTGH-Q5	S45C	斜齒齒條 Helical	四角棒 Tetragon	齒研 Teeth Ground	熱處理 Hardened HRC 50°-55°	2, 3, 4, 5	DIN 5	12
CHTGH-Q6	S45C	斜齒齒條 Helical	四角棒 Tetragon	齒研 Teeth Ground	熱處理 Hardened HRC 50°-55°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 6	13
CHTGH-Q7	S45C	斜齒齒條 Helical	四角棒 Tetragon	齒研 Teeth Ground	熱處理 Hardened HRC 50°-55°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 7	14
CHTM-Q8	S45C	斜齒齒條 Helical	四角棒 Tetragon	精銑 Milled	無 Soft HRC 10°-12°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 8	15
CHTMQ-Q8	S45C	斜齒齒條 Helical	四角棒 Tetragon	精銑 Milled	調質 Quenched HRC 18°-20°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 8	16
CHTMH-Q10	S45C	斜齒齒條 Helical	四角棒 Tetragon	精銑 Milled	熱處理 Hardened HRC 50°-55°	1.5, 2, 3, 4, 5, 6, 8, 10, 12	DIN 10	17



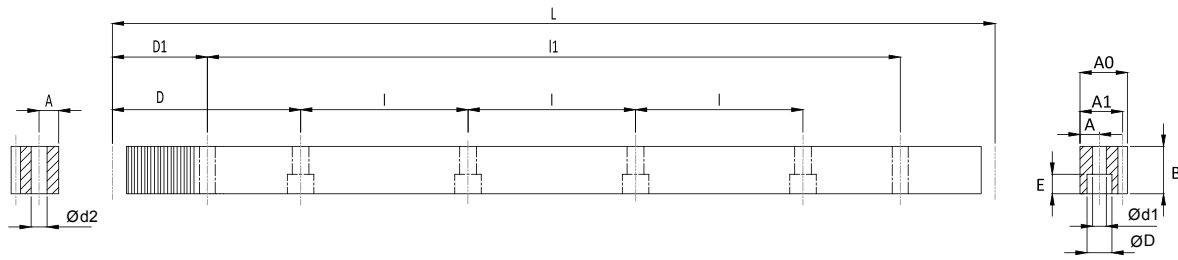
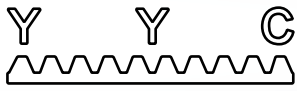
齒條型號說明 Rack Code Instruction



1st	2nd	3rd	4th	5th	6th	7th	8th
材料 Material	齒型 Type	棒型 Shape	齒面處理 Teeth Treatment	硬度處理 Hardness	模數 Module	長度 Length	等級 Grade
C	S	T	G	H	020	10	Q5
C= 中碳鋼	S=直齒 H=斜齒	T=四角棒	M=精銑 G=齒研	Q=調質 H=硬化處理	M1.5~M10	05=500mm 10=1000mm 15=1500mm 20=2000mm	Q=DIN Q5~Q10
C= S45C	S=Straight H=Helical	T=Tetragon	M=Milled G=Ground	H=Hardened Q=Quenched			

備註：長度、鑽孔、材質、表面處理(噴砂、磷酸鹽、研磨)等特殊需求，皆可客製。

Remarks: Lengths, holes, materials, surface treatments (sandblasted, phosphated, sides ground) and other requirements all could be customized.



單位 / Dimension : mm

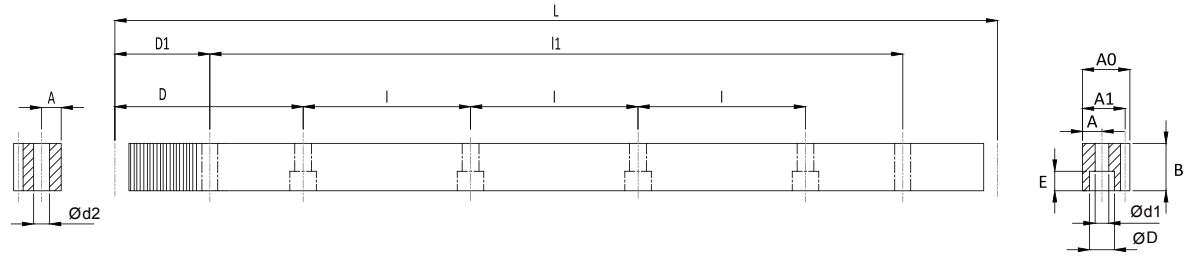
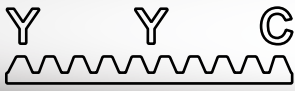
型號 Code	Q	模數 Module	L	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
CSTGH02010	-Q5	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	3.9
CSTGH03010	-Q5	3	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.10	7.7	5.8
CSTGH04010	-Q5	4	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.30	7.7	10.3
CSTGH05010	-Q5	5	1005.31	64	49	39	34	62.83	125.66	8	12	14	20	13	30.1	945.00	11.7	12.9

品質等級/Quality Grade
DIN 5

系列 CSTGH-Q5 直齒齒研齒條
材料 45C (中碳鋼)
硬度 HRC 50~55°
硬化處理後四面研磨與齒研
室溫在攝氏25°為準

總齒距誤差 / Total Pitch Error :
G_{Tf} / 1000 ≤ 0.026 mm

Series CSTGH-Q5 Straight Teeth Ground Racks
Material 45C (Medium Carbon Steel)
Hardness HRC 50~55°
Ground on all sides after hardening.
Room Temperature is 25°C



單位 / Dimension : mm

型號 Code	Q	模數 Module	L	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
CSTGH01510	-Q6	1.5	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.00	5.7	1.9
CSTGH02010	-Q6	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	3.9
CSTGH02020	-Q6	2	2010.62	320	24	24	22	62.83	125.66	16	8	7	11	7	31.3	1948.00	5.7	7.8
CSTGH03010	-Q6	3	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.10	7.7	5.8
CSTGH03020	-Q6	3	2035.75	216	29	29	26	63.62	127.23	16	9	10	15	9	34.4	1967.00	7.7	11.5
CSTGH04010	-Q6	4	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.30	7.7	10.3
CSTGH04020	-Q6	4	2010.62	160	39	39	35	62.83	125.66	16	12	10	15	9	37.5	1935.60	7.7	20.5
CSTGH05010	-Q6	5	1005.31	64	49	39	34	62.83	125.66	8	12	14	20	13	30.1	945.00	11.7	12.9
CSTGH05020	-Q6	5	2010.62	128	49	39	34	62.83	125.66	16	12	14	20	13	30.1	1950.40	11.7	25.8
CSTGH06010	-Q6	6	1017.88	54	59	49	43	63.62	127.23	8	16	18	26	17	31.4	955.00	15.7	19.7
CSTGH06020	-Q6	6	2035.75	108	59	49	43	63.62	127.23	16	16	18	26	17	31.4	1973.00	15.7	39.5
CSTGH08010	-Q6	8	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952.00	19.7	42.1
CSTGH08020	-Q6	8	2010.61	80	79	79	71	62.83	125.66	16	25	22	33	21	26.6	1957.40	19.7	84.2
CSTGH10010	-Q6	10	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.66	754.00	19.7	66.1
CSTGH12010	-Q6	12	1017.88	27	120	120	108	63.62	127.23	8	40	39	58	38	127.23	763.40	19.7	98.3

品質等級/Quality Grade
DIN 6

系列 CSTGH-Q6 直齒齒研齒條
材料 45C (中碳鋼)
硬度 HRC 50~55°
硬化處理後四面研磨與齒研

總齒距誤差/Total Pitch Error:

$GTf / 1000 \leq 0.036 \text{ mm}$

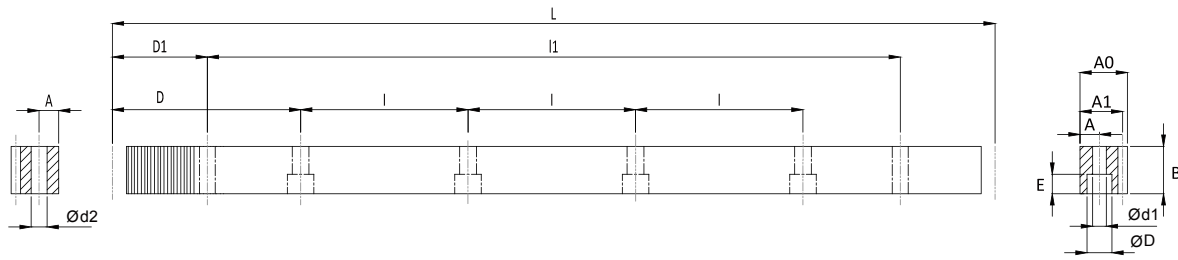
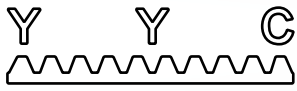
$GTf / 2000 \leq 0.047 \text{ mm } (\leq 0.024 / 1000 \text{ mm})$

Series CSTGH-Q6 Straight Teeth Ground Racks

Material 45C (Medium Carbon Steel)

Hardness HRC 50~55°

Ground on all sides after hardening.



單位 / Dimension : mm

型號 Code	Q	模數 Module	L	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
CSTGH01510	-Q7	1.5	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.00	5.7	1.9
CSTGH02010	-Q7	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	3.9
CSTGH02020	-Q7	2	2010.62	320	24	24	22	62.83	125.66	16	8	7	11	7	31.3	1948.00	5.7	7.8
CSTGH03010	-Q7	3	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.10	7.7	5.8
CSTGH03020	-Q7	3	2035.75	216	29	29	26	63.62	127.23	16	9	10	15	9	34.4	1967.00	7.7	11.5
CSTGH04010	-Q7	4	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.30	7.7	10.3
CSTGH04020	-Q7	4	2010.62	160	39	39	35	62.83	125.66	16	12	10	15	9	37.5	1935.60	7.7	20.5
CSTGH05010	-Q7	5	1005.31	64	49	49	34	62.83	125.66	8	12	14	20	13	30.1	945.00	11.7	12.9
CSTGH05020	-Q7	5	2010.62	128	49	49	34	62.83	125.66	16	12	14	20	13	30.1	1950.40	11.7	25.8
CSTGH06010	-Q7	6	1017.88	54	59	59	43	63.62	127.23	8	16	18	26	17	31.4	955.00	15.7	19.7
CSTGH06020	-Q7	6	2035.75	108	59	59	43	63.62	127.23	16	16	18	26	17	31.4	1973.00	15.7	39.5
CSTGH08010	-Q7	8	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952.00	19.7	42.1
CSTGH08020	-Q7	8	2010.61	80	79	79	71	62.83	125.66	16	25	22	33	21	26.6	1957.40	19.7	84.2
CSTGH10010	-Q7	10	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.66	754.00	19.7	66.1
CSTGH12010	-Q7	12	1017.88	27	120	120	108	63.62	127.23	8	40	39	58	38	127.23	763.40	19.7	98.3

品質等級/Quality Grade
DIN 7

系列 CSTGH-Q7 直齒齒研齒條
材料 45C (中碳鋼)
硬度 HRC 50~55°
硬化處理後四面研磨與齒研

總齒距誤差/Total Pitch Error:

$GTf/1000 \leq 0.048 \text{ mm}$

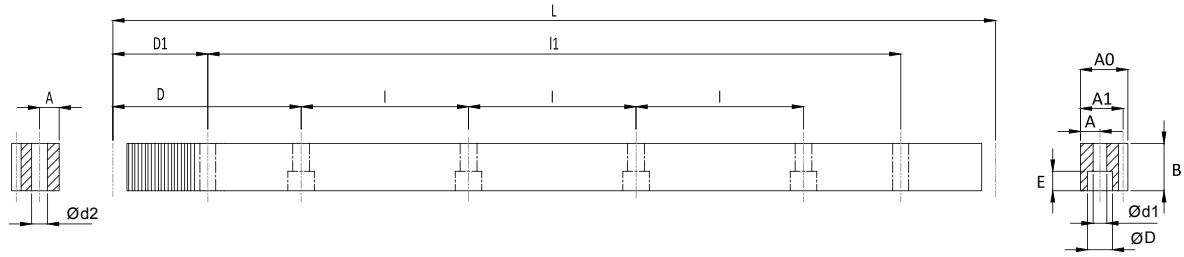
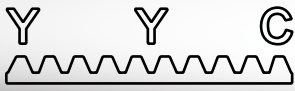
$GTf/2000 \leq 0.062 \text{ mm} (\leq 0.034/1000 \text{ mm})$

Series CSTGH-Q7 Straight Teeth Ground Racks

Material 45C (Medium Carbon Steel)

Hardness HRC 50~55°

Ground on all sides after hardening.



單位 / Dimension : mm

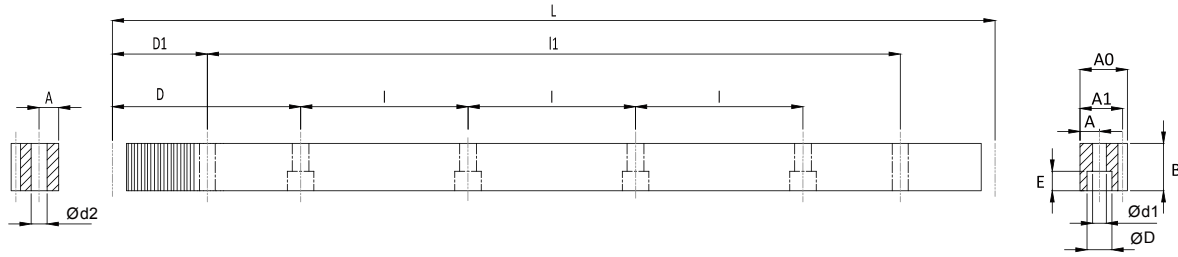
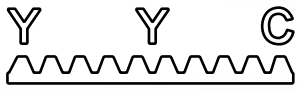
型號 Code	模數 Module	L	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG	
CSTM01510	-Q8	1.5	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.00	5.7	1.9
CSTM02010	-Q8	2	1005.31	160	25	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	4.1
CSTM02020	-Q8	2	2010.62	320	25	24	22	62.83	125.66	16	8	7	11	7	31.3	1948.00	5.7	8.1
CSTM03010	-Q8	3	1017.88	108	30	29	26	63.62	127.23	8	9	10	15	9	34.4	949.10	7.7	5.9
CSTM03020	-Q8	3	2035.75	216	30	29	26	63.62	127.23	16	9	10	15	9	34.4	1967.00	7.7	11.9
CSTM04010	-Q8	4	1005.31	80	40	39	35	62.83	125.66	8	12	10	15	9	37.5	930.30	7.7	10.5
CSTM04020	-Q8	4	2010.62	160	40	39	35	62.83	125.66	16	12	10	15	9	37.5	1935.60	7.7	21.0
CSTM05010	-Q8	5	1005.31	64	49	39	34	62.83	125.66	8	12	14	20	13	30.1	945.00	11.7	12.9
CSTM05020	-Q8	5	2010.62	128	49	39	34	62.83	125.66	16	12	14	20	13	30.1	1950.40	11.7	25.8
CSTM06010	-Q8	6	1017.88	54	59	49	43	63.62	127.23	8	16	18	26	17	31.4	955.00	15.7	19.7
CSTM06020	-Q8	6	2035.75	108	59	49	43	63.62	127.23	16	16	18	26	17	31.4	1973.00	15.7	39.5
CSTM08010	-Q8	8	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952.00	19.7	42.1
CSTM08020	-Q8	8	2010.61	80	79	79	71	62.83	125.66	16	25	22	33	21	26.6	1957.40	19.7	84.2
CSTM10010	-Q8	10	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.66	754.00	19.7	66.1
CSTM12010	-Q8	12	1017.88	27	120	120	108	63.62	127.23	8	40	39	58	38	127.23	763.40	19.7	98.3

品質等級/Quality Grade
DIN 8

總齒距誤差/Total Pitch Error:
G_{Tf} /1000 ≤ 0.06 mm
G_{Tf} /2000 ≤ 0.08 mm

系列 CSTM-Q8 直齒精銑齒條
材料 45C (中碳鋼)
硬度 HRC 10~12°

Series CSTM-Q8 Straight Milled Racks
Material 45C (Medium Carbon Steel)
Hardness HRC 10~12°



單位 / Dimension : mm

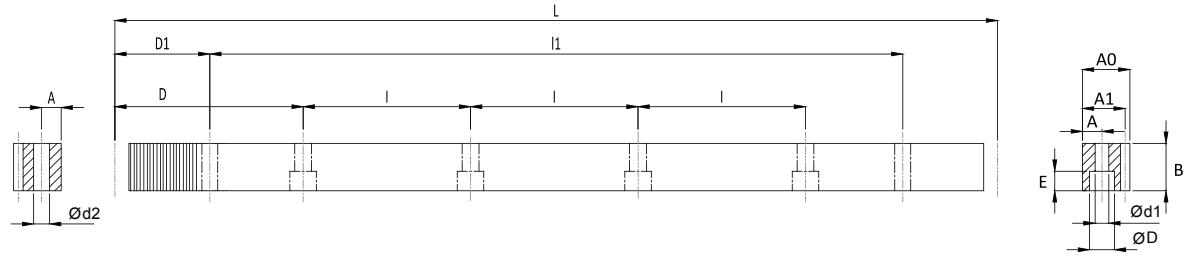
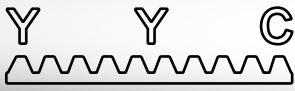
型號 Code	Q	模數 Module	L	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
CSTMQ01510	-Q8	1.5	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.00	5.7	1.9
CSTMQ02010	-Q8	2	1005.31	160	25	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	4.1
CSTMQ02020	-Q8	2	2010.62	320	25	24	22	62.83	125.66	16	8	7	11	7	31.3	1948.00	5.7	8.1
CSTMQ03010	-Q8	3	1017.88	108	30	29	26	63.62	127.23	8	9	10	15	9	34.4	949.10	7.7	5.9
CSTMQ03020	-Q8	3	2035.75	216	30	29	26	63.62	127.23	16	9	10	15	9	34.4	1967.00	7.7	11.9
CSTMQ04010	-Q8	4	1005.31	80	40	39	35	62.83	125.66	8	12	10	15	9	37.5	930.30	7.7	10.5
CSTMQ04020	-Q8	4	2010.62	160	40	39	35	62.83	125.66	16	12	10	15	9	37.5	1935.60	7.7	21.0
CSTMQ05010	-Q8	5	1005.31	64	49	39	34	62.83	125.66	8	12	14	20	13	30.1	945.00	11.7	12.9
CSTMQ05020	-Q8	5	2010.62	128	49	39	34	62.83	125.66	16	12	14	20	13	30.1	1950.40	11.7	25.8
CSTMQ06010	-Q8	6	1017.88	54	59	49	43	63.62	127.23	8	16	18	26	17	31.4	955.00	15.7	19.7
CSTMQ06020	-Q8	6	2035.75	108	59	49	43	63.62	127.23	16	16	18	26	17	31.4	1973.00	15.7	39.5
CSTMQ08010	-Q8	8	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952.00	19.7	42.1
CSTMQ08020	-Q8	8	2010.61	80	79	79	71	62.83	125.66	16	25	22	33	21	26.6	1957.40	19.7	84.2
CSTMQ10010	-Q8	10	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.66	754.00	19.7	66.1
CSTMQ12010	-Q8	12	1017.88	27	120	120	108	63.62	127.23	8	40	39	58	38	127.23	763.40	19.7	98.3

品質等級/Quality Grade
DIN 8

總齒距誤差/Total Pitch Error:
GTf /1000 ≤0.06 mm
GTf /2000 ≤0.08 mm

系列 CSTMQ-Q8 直齒調質齒條
材料 45C (中碳鋼)
硬度 HRC 18~20°

Series CSTMQ-Q8 Straight Quenched Racks
Material 45C (Medium Carbon Steel)
Hardness HRC 18~20°



單位 / Dimension : mm

型號 Code	模數 Module	齒數 No. of Teeth	L	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	l1	ød2	KG
CSTMH01510	-Q10	1.5	999.03	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.00	5.7	1.9
CSTMH02010	-Q10	2	1005.31	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	4.1
CSTMH02020	-Q10	2	2010.62	320	24	24	62.83	125.66	16	8	7	11	7	31.3	1948.00	5.7	8.1
CSTMH03010	-Q10	3	1017.88	108	29	29	63.62	127.23	8	9	10	15	9	34.4	949.10	7.7	5.9
CSTMH03020	-Q10	3	2035.75	216	29	29	63.62	127.23	16	9	10	15	9	34.4	1967.00	7.7	11.9
CSTMH04010	-Q10	4	1005.31	80	39	39	62.83	125.66	8	12	10	15	9	37.5	930.30	7.7	10.3
CSTMH04020	-Q10	4	2010.62	160	39	39	62.83	125.66	16	12	10	15	9	37.5	1935.60	7.7	20.5
CSTMH05010	-Q10	5	1005.31	64	49	39	62.83	125.66	8	12	14	20	13	30.1	945.00	11.7	12.9
CSTMH05020	-Q10	5	2010.62	128	49	39	62.83	125.66	16	12	14	20	13	30.1	1950.30	11.7	25.8
CSTMH06010	-Q10	6	1017.88	54	59	49	63.62	127.23	8	16	18	26	17	31.4	955.00	15.7	19.7
CSTMH06020	-Q10	6	2035.75	108	59	49	63.62	127.23	16	16	18	26	17	31.4	1973.00	15.7	39.5
CSTMH08010	-Q10	8	1005.31	40	79	79	62.83	125.66	8	25	22	33	21	26.6	952.00	19.7	42.1
CSTMH10010	-Q10	10	1005.31	32	99	99	62.83	125.66	8	32	33	48	32	125.7	754.00	19.7	66.1

品質等級/Quality Grade
DIN 10

總齒距誤差/Total Pitch Error:
 $GTf / 1000 \leq 0.15 \text{ mm}$

系列 CSTMH-Q10 直齒硬化齒條

材料 45C (中碳鋼)

硬度 HRC 50~55°

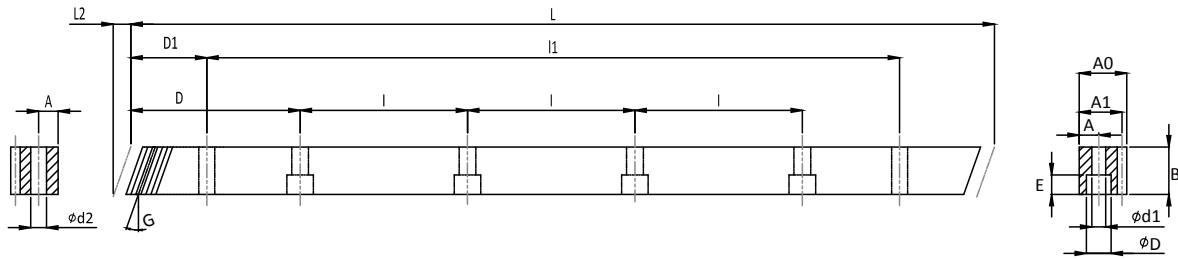
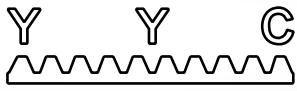
高週波後，側面有黑痕，可另增表面處理(噴砂、磷酸鹽、表面研磨)以美化表面。

Series CSTMH-Q10 Straight Hardened Racks

Material 45C (Medium Carbon Steel)

Hardness HRC 50~55°

After Hardening, there are black traces on sides. It could be beautified by extra surface treatment (sandblasted, phosphated, surface ground) on request.



單位 / Dimension : mm

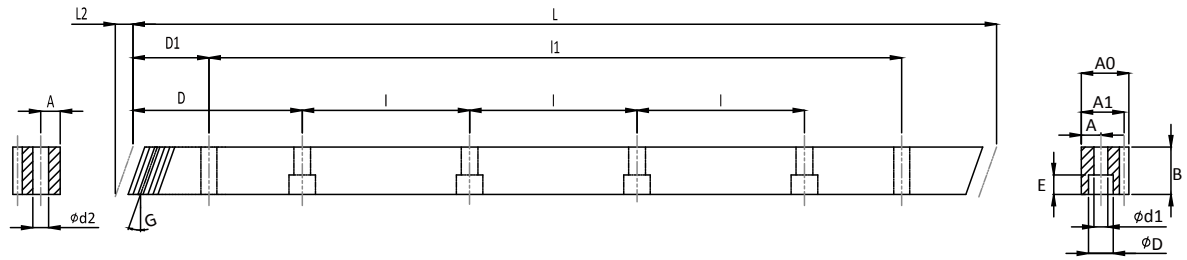
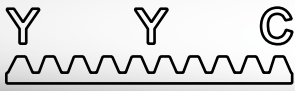
型號 Code	Q	模數 Module	L	L2	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
CHTGH02010	-Q5	2	1000.00	8.50	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.60	5.7	3.9
CHTGH03010	-Q5	3	1000.00	10.30	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.00	7.7	5.7
CHTGH04010	-Q5	4	1000.00	13.80	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.40	7.7	10.2
CHTGH05010	-Q5	5	1000.00	17.40	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.00	11.7	12.8

品質等級/Quality Grade
DIN 5

系列 CHTGH-Q5 斜齒齒研齒條
材料 45C (中碳鋼)
右旋角 19°31'42"
硬度 HRC 50~55°
硬化處理後四面研磨與齒研
室溫在攝氏25°為準

總齒距誤差 / Total Pitch Error :
Gtf /1000 ≤0.026 mm

Series CHTGH-Q5 Helical Teeth Ground Racks
Material 45C (Medium Carbon Steel)
Right Hand Angle 19°31'42"
Hardness HRC 50~55°
Ground on all sides after hardening.
Room Temperature is 25°C



單位 / Dimension : mm

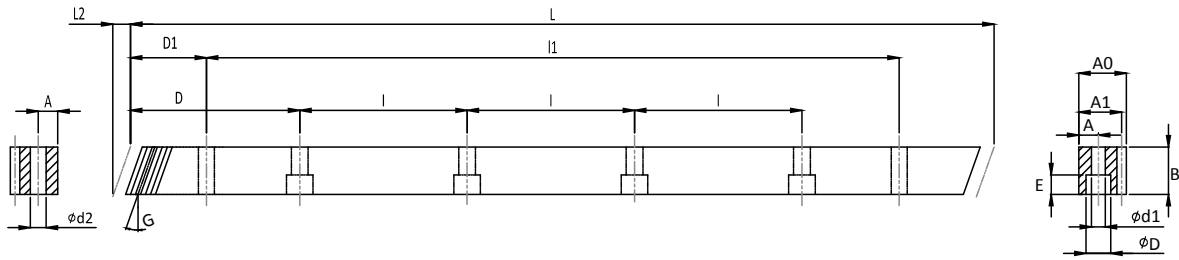
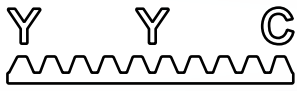
型號 Code	Q	模數 Module	L	L2	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	l1	ød2	KG
CHTGH01510	-Q6	1.5	1000.00	6.00	200	17	17	15.5	62.5	125	8	7	6	9.5	7	31.7	936.60	5.7	1.9
CHTGH02010	-Q6	2	1000.00	8.50	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.60	5.7	3.9
CHTGH02020	-Q6	2	2000.00	8.50	300	24	24	22	62.5	125	16	8	7	11	7	31.7	1936.60	5.7	7.7
CHTGH03010	-Q6	3	1000.00	10.30	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.00	7.7	5.7
CHTGH03020	-Q6	3	2000.00	10.30	200	29	29	26	62.5	125	16	9	10	15	9	35.0	1930.00	7.7	11.3
CHTGH04010	-Q6	4	1000.00	13.80	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.40	7.7	10.2
CHTGH04020	-Q6	4	2000.00	13.80	150	39	39	35	62.5	125	16	12	10	15	9	33.3	1933.40	7.7	20.4
CHTGH05010	-Q6	5	1000.00	17.40	60	49	49	34	62.5	125	8	12	14	20	13	37.5	925.00	11.7	12.8
CHTGH05020	-Q6	5	2000.00	17.40	120	49	49	34	62.5	125	16	12	14	20	13	37.5	1925.00	11.7	25.6
CHTGH06010	-Q6	6	1000.00	20.90	50	59	59	43	62.5	125	8	16	18	26	17	37.5	925.00	15.7	19.4
CHTGH06020	-Q6	6	2000.00	20.90	100	59	59	43	62.5	125	16	16	18	26	17	37.5	1925.00	15.7	38.8
CHTGH08010	-Q6	8	960.00	28.00	36	79	79	71	60.0	120	8	25	22	33	21	120	720.00	19.7	40.2
CHTGH08020	-Q6	8	1920.00	28.00	72	79	79	71	60.0	120	16	25	22	33	21	120	1680.00	19.7	80.4
CHTGH10010	-Q6	10	1000.00	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125	750.00	19.7	65.7
CHTGH12010	-Q6	12	1000.00	42.56	25	120	120	108	40.0	125	8	40	39	58	38	125	750.00	19.7	96.6

品質等級/Quality Grade
DIN 6

總齒距誤差/Total Pitch Error:
GTf /1000 ≤0.036 mm
GTf /2000 ≤0.047 mm (≤0.024/1000 mm)

系列 CHTGH-Q6 斜齒齒研齒條
材料 45C (中碳鋼)
右旋角 19°31'42"
硬度 HRC 50~55°
硬化處理後四面研磨與齒研

Series CHTGH-Q6 Helical Teeth Ground Racks
Material 45C (Medium Carbon Steel)
Right Hand Angle 19°31'42"
Hardness HRC 50~55°
Ground on all sides after hardening.



單位 / Dimension : mm

型號 Code	Q	模數 Module	L	L2	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	l1	ød2	KG
CHTGH01510	-Q7	1.5	1000.00	6.00	200	17	17	15.50	62.5	125	8	7	6	9.5	7	31.7	936.60	5.7	1.9
CHTGH02010	-Q7	2	1000.00	8.50	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.60	5.7	3.9
CHTGH02020	-Q7	2	2000.00	8.50	300	24	24	22	62.5	125	16	8	7	11	7	31.7	1936.60	5.7	7.7
CHTGH03010	-Q7	3	1000.00	10.30	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.00	7.7	5.7
CHTGH03020	-Q7	3	2000.00	10.30	200	29	29	26	62.5	125	16	9	10	15	9	35.0	1930.00	7.7	11.3
CHTGH04010	-Q7	4	1000.00	13.80	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.40	7.7	10.2
CHTGH04020	-Q7	4	2000.00	13.80	150	39	39	35	62.5	125	16	12	10	15	9	33.3	1933.40	7.7	20.4
CHTGH05010	-Q7	5	1000.00	17.40	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.00	11.7	12.8
CHTGH05020	-Q7	5	2000.00	17.40	120	49	39	34	62.5	125	16	12	14	20	13	37.5	1925.00	11.7	25.6
CHTGH06010	-Q7	6	1000.00	20.90	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.00	15.7	19.4
CHTGH06020	-Q7	6	2000.00	20.90	100	59	49	43	62.5	125	16	16	18	26	17	37.5	1925.00	15.7	38.8
CHTGH08010	-Q7	8	960.00	28.00	36	79	79	71	60.0	120	8	25	22	33	21	120	720.00	19.7	40.2
CHTGH08020	-Q7	8	1920.00	28.00	72	79	79	71	60.0	120	16	25	22	33	21	120	1680.00	19.7	80.4
CHTGH10010	-Q7	10	1000.00	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125	750.00	19.7	65.7
CHTGH12010	-Q7	12	1000.00	42.56	25	120	120	108	40.0	125	8	40	39	58	38	125	750.00	19.7	96.6

品質等級/Quality Grade

DIN 7

系列 CHTGH-Q7 斜齒齒研齒條

材料 45C (中碳鋼)

右旋角 19°31'42"

硬度 HRC 50~55°

硬化處理後四面研磨與齒研

總齒距誤差/Total Pitch Error:

$GTf / 1000 \leq 0.048 \text{ mm}$

$GTf / 2000 \leq 0.062 \text{ mm} (\leq 0.034 / 1000 \text{ mm})$

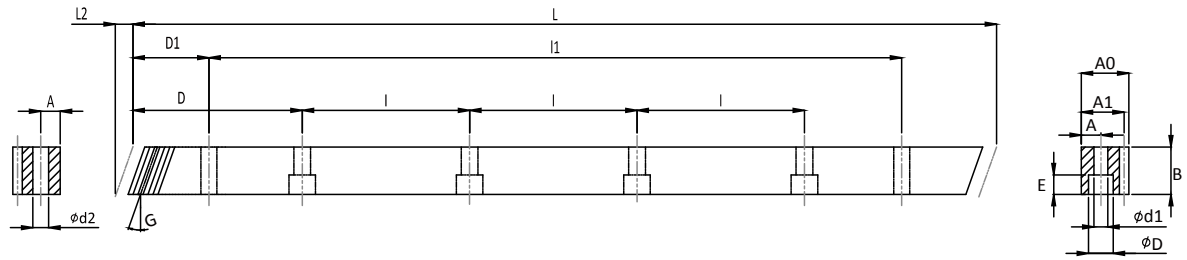
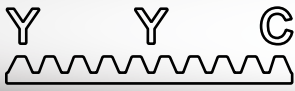
Series CHTGH-Q7 Helical Teeth Ground Racks

Material 45C (Medium Carbon Steel)

Right Hand Angle 19°31'42"

Hardness HRC 50~55°

Ground on all sides after hardening.



單位 / Dimension : mm

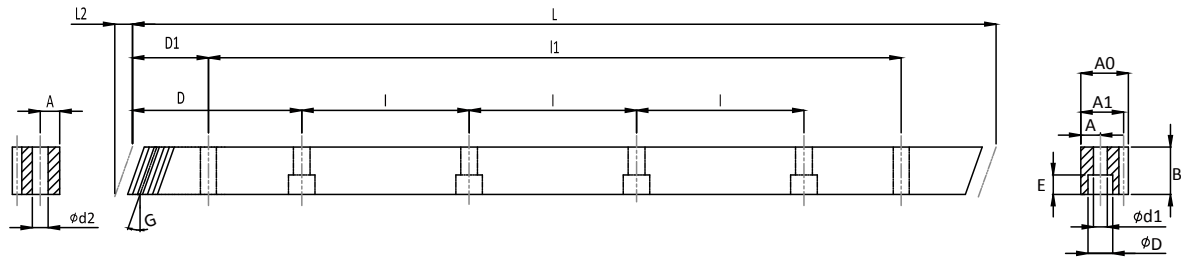
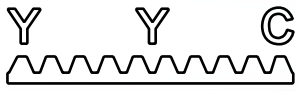
型號 Code	Q	模數 Module	L	L2	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
CHTM01510	-Q8	1.5	1000	6.00	200	17	17	15.5	62.5	125	8	7	6	9.5	7	31.7	936.6	5.70	1.9
CHTM02010	-Q8	2	1000	8.90	150	25	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.70	4.0
CHTM02020	-Q8	2	2000	8.90	300	25	24	22	62.5	125	16	8	7	11	7	31.7	1936.6	5.70	8.1
CHTM03010	-Q8	3	1000	10.60	100	30	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.70	5.8
CHTM03020	-Q8	3	2000	10.60	200	30	29	26	62.5	125	16	9	10	15	9	35.0	1930.0	7.70	11.7
CHTM04010	-Q8	4	1000	14.20	75	40	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.70	10.5
CHTM04020	-Q8	4	2000	14.20	150	40	39	35	62.5	125	16	12	10	15	9	33.3	1933.4	7.70	20.9
CHTM05010	-Q8	5	1000	17.40	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.0	11.70	12.8
CHTM05020	-Q8	5	2000	17.40	120	49	39	34	62.5	125	16	12	14	20	13	37.5	1925.0	11.70	25.6
CHTM06010	-Q8	6	1000	20.90	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.70	19.4
CHTM06020	-Q8	6	2000	20.90	100	59	49	43	62.5	125	16	16	18	26	17	37.5	1925.0	15.70	38.8
CHTM08010	-Q8	8	960	28.00	36	79	79	71	60.0	120	8	25	22	33	21	120.0	720.0	19.70	40.2
CHTM08020	-Q8	8	1920	28.00	72	79	79	71	60.0	120	16	25	22	33	21	120.0	1680.0	19.70	80.4
CHTM10010	-Q8	10	1000	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125.0	750.0	19.70	65.7

品質等級/Quality Grade
DIN 8

總齒距誤差/Total Pitch Error:
GTf /1000 ≤ 0.06 mm
GTf /2000 ≤ 0.08 mm

系列 CHTM-Q8 斜齒精銑齒條
材料 45C (中碳鋼)
右旋角 19°31'42"
硬度 HRC 10~12°

Series CHTM-Q8 Helical Milled Racks
Material 45C (Medium Carbon Steel)
Right Hand Angle 19°31'42"
Hardness: Soft HRC 10~12°



單位 / Dimension : mm

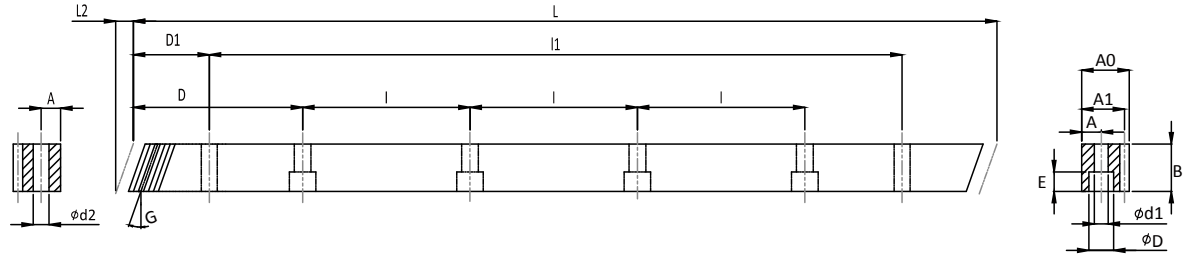
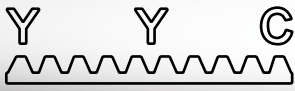
型號 Code	Q	模數 Module	L	L2	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
CHTMQ01510	-Q8	1.5	1000	6.00	200	17	17	15.5	62.5	125	8	7	6	9.5	7	31.7	936.6	5.7	1.9
CHTMQ02010	-Q8	2	1000	8.90	150	25	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	4.0
CHTMQ02020	-Q8	2	2000	8.90	300	25	24	22	62.5	125	16	8	7	11	7	31.7	1936.6	5.7	8.1
CHTMQ03010	-Q8	3	1000	10.60	100	30	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	5.8
CHTMQ03020	-Q8	3	2000	10.60	200	30	29	26	62.5	125	16	9	10	15	9	35.0	1930.0	7.7	11.7
CHTMQ04010	-Q8	4	1000	14.20	75	40	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	10.5
CHTMQ04020	-Q8	4	2000	14.20	150	40	39	35	62.5	125	16	12	10	15	9	33.3	1933.4	7.7	20.9
CHTMQ05010	-Q8	5	1000	17.40	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	12.8
CHTMQ05020	-Q8	5	2000	17.40	120	49	39	34	62.5	125	16	12	14	20	13	37.5	1925.0	11.7	25.6
CHTMQ06010	-Q8	6	1000	20.90	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	19.4
CHTMQ06020	-Q8	6	2000	20.90	100	59	49	43	62.5	125	16	16	18	26	17	37.5	1925.0	15.7	38.8
CHTMQ08010	-Q8	8	960	28.00	36	79	79	71	60.0	120	8	25	22	33	21	120.0	720.0	19.7	40.2
CHTMQ08020	-Q8	8	1920	28.00	72	79	79	71	60.0	120	16	25	22	33	21	120.0	1680.0	19.7	80.4
CHTMQ10010	-Q8	10	1000	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125.0	750.0	19.7	65.7

品質等級/Quality Grade
DIN 8

系列 CHTMQ-Q8 斜齒調質齒條
材料 45C (中碳鋼)
右旋角 19°31'42"
硬度 HRC 18~20°

總齒距誤差/Total Pitch Error:
GTf /1000 ≤0.06 mm
GTf /2000 ≤0.08 mm

Series CHTMQ-Q8 Helical Quenched Racks
Material 45C (Medium Carbon Steel)
Right Hand Angle 19°31'42"
Hardness: Soft HRC 18~20°



單位 / Dimension : mm

型號 Code	Q	模數 Module	L	L2	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
CHTMH01510	-Q10	1.5	1000	6.00	200	17	17	15.5	62.5	125	8	7	6	9.5	7	31.7	936.6	5.7	1.9
CHTMH02010	-Q10	2	1000	8.50	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	3.9
CHTMH02020	-Q10	2	2000	8.50	300	24	24	22	62.5	125	16	8	7	11	7	31.7	1936.6	5.7	7.7
CHTMH03010	-Q10	3	1000	10.30	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	5.7
CHTMH03020	-Q10	3	2000	10.30	200	29	29	26	62.5	125	16	9	10	15	9	35.0	1930.0	7.7	11.3
CHTMH04010	-Q10	4	1000	13.80	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	10.2
CHTMH04020	-Q10	4	2000	13.80	150	39	39	35	62.5	125	16	12	10	15	9	33.3	1933.4	7.7	20.4
CHTMH05010	-Q10	5	1000	17.40	60	49	49	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	12.8
CHTMH05020	-Q10	5	2000	17.40	120	49	49	34	62.5	125	16	12	14	20	13	37.5	1925.0	11.7	25.6
CHTMH06010	-Q10	6	1000	20.90	50	59	59	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	19.4
CHTMH06020	-Q10	6	2000	20.90	100	59	59	43	62.5	125	16	16	18	26	17	37.5	1925.0	15.7	38.8
CHTMH08010	-Q10	8	960	28.00	36	79	79	71	60.0	120	8	25	22	33	21	120.0	720.0	19.7	40.2
CHTMH08020	-Q10	8	1920	28.00	72	79	79	71	60.0	120	16	25	22	33	21	120.0	1680.0	19.7	80.4
CHTMH10010	-Q10	10	1000	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125.0	750.0	19.7	65.7
CHTMH12010	-Q10	12	1000	42.56	25	120	120	108	40.0	125	8	40	39	58	38	102.5	750.0	19.7	96.6

品質等級/Quality Grade
DIN 10

總齒距誤差/Total Pitch Error:
 $GTf / 1000 \leq 0.15 \text{ mm}$

系列 CHTMH-Q10 斜齒硬化齒條

材料 45C (中碳鋼)

右旋角 19°31'42"

硬度 HRC 50~55°

高週波後，側面有黑痕，可另增表面處理(噴砂、磷酸鹽、表面研磨)以美化表面。

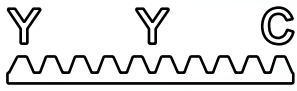
Series CHTMH-Q10 Helical Hardened Racks

Material 45C (Medium Carbon Steel)

Right Hand Angle 19°31'42"

Hardness: Soft HRC 50~55°

After Hardening, there are black traces on sides. It could be beautified by extra surface treatment (sandblasted, phosphated, surface ground) on request.

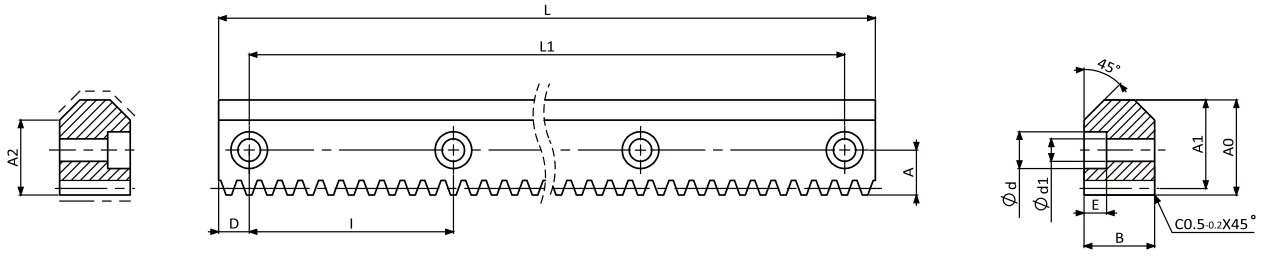
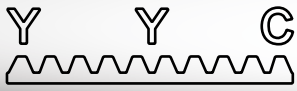


導軌齒條目錄 Content of Guideway Racks

型號 Code	材料 Material	齒條齒型 Type	齒條齒型 Type	棒型 Shape	齒面處理 Teeth Treatment	硬度處理 Hardness	周節 CP	精度等級 Grade DIN	頁碼 Page
MSVGH-CP	SCM440	直齒 Straight	V型導軌齒條 V Type Guideway Rack	六角棒 Hexgan	齒研 Teeth Ground	熱處理 Hardened HRC 53°-58°	5, 7.5, 10	DIN 6	19
MNVGH-00	SCM440	N/A	V型導軌 V Type Guideway	六角棒 Hexgan	研磨 Ground	熱處理 Hardened HRC 53°-58°	N/A	DIN 6	20
MSTGH-CP	SCM440	直齒 Straight	平軌齒條 Guideway Rack	四角棒 Tetragon	齒研 Teeth Ground	熱處理 Hardened HRC 53°-58°	5, 7.5, 10	DIN 6	21
MNTGH-00	SCM440	N/A	平面導軌 Guideway	四角棒 Tetragon	研磨 Ground	熱處理 Hardened HRC 53°-58°	N/A	DIN 6	22

導軌齒條型號說明 Guideway Rack Code Instruction

1st	2nd	3rd	4th	5th	6th	7th	8th
材料 Material	齒型 Type	棒型 Shape	齒面處理 Teeth Treatment	硬度處理 Hardness	周節 Circular Pitch	長度 Length	等級 Grade
M	S/H	V/T	G	H	CP	10	Q6
M=SCM440	S=直齒 H=斜齒 S=Straight H=Helical	V=V型棒 T=四角棒(平面) V=V Type Bar T=Tetragon Bar	G=齒研/研磨 G=Teeth Ground /Ground	H=硬化處理 H=Hardened	CP=周節 CP=Circular Pitch	CP5=1030 CP7.5=1230 CP10=1230	Q=DIN



單位 / Dimension : mm

型號 Code	序號 No	Q	周節 CP	L	L1	模數 Module	B	A0	A1	D	I	A	ϕd	$\phi d1$	E	A2	KG
MSVGH-CP 050 10	1	-Q6	5	1030	1000	1.5915	14.5	24.5	22.91	15	100	11.5	11	7	6.8	20.0	2.2
MSVGH-CP 050 10	2	-Q6	5	1030	1000	1.5915	19.5	29.5	27.91	15	100	14.0	15	9	9	23.5	3.5
MSVGH-CP 075 12	1	-Q6	7.5	1230	1200	2.3873	24.7	33.0	30.61	15	100	14.5	15	9	9	25.2	5.8
MSVGH-CP 100 12	1	-Q6	10	1230	1200	3.1831	34.6	46.6	43.42	15	100	18	18	11	11	36.7	11.7

系列MSVGH-CP-Q6 直齒V型齒研導軌齒條

材料 SCM440 (鉻鉬合金鋼)

硬度 HRC 53~58°

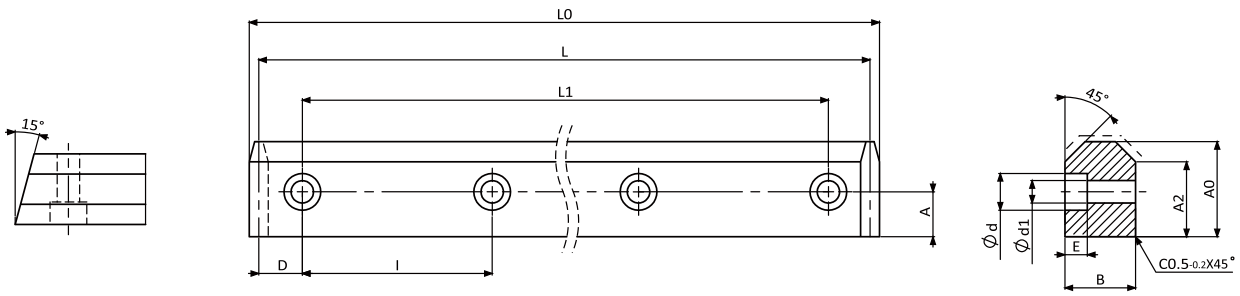
硬化處理後六面研磨與齒研

Series MSVGH-CP-Q6 Straight V Type Ground Guideway Racks

Material SCM440 (Chromium Molybdenum Alloy Steel)

Hardness HRC 53~58°

6 Sides Ground and Teeth Ground after hardening.

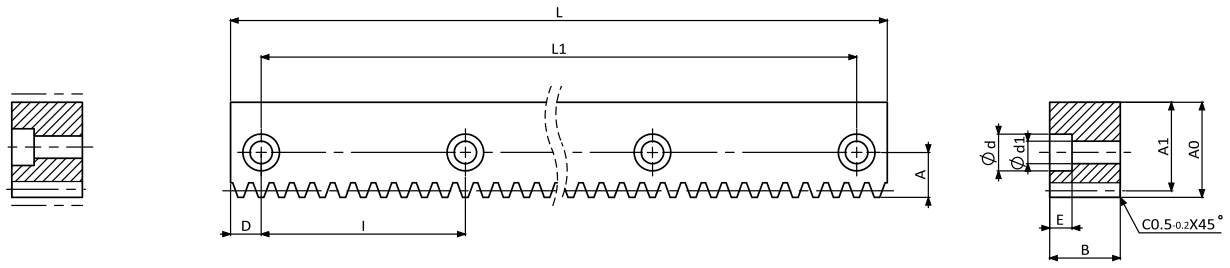
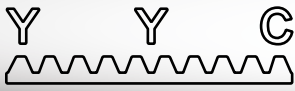


單位 / Dimension : mm

型號 Code	序號 No	Q	L0	L	L1	B	A0	D	I	ød	ød1	E	A2	KG
MNVGH-00	1	-Q6	1033.89	1030	1000	14.5	24.5	15	100	11	7	6.8	20.0	2.3
MNVGH-00	2	-Q6	1035.23	1030	1000	19.5	29.5	15	100	15	9	9	23.5	3.6
MNVGH-00	3	-Q6	1236.62	1230	1200	24.7	33.0	15	100	15	9	9	25.2	6.3
MNVGH-00	4	-Q6	1239.27	1230	1200	34.6	46.6	15	100	18	11	11	36.7	12.5

系列MNVGH-00-Q6 V型研磨導軌
材料 SCM440 (鉻鉬合金鋼)
硬度 HRC 53~58°
硬化處理後六面研磨

Series MNVGH-00-Q6 V Type Ground Guideway
Material SCM440 (Chromium Molybdenum Alloy Steel)
Hardness HRC 53~58°
6 Sides Ground after hardening.



單位 / Dimension : mm

型號 Code	序號 No	Q	周節 CP	L	L1	模數 Module	B	A0	A1	D	I	A	ød	ød1	E	KG
MSTGH-CP 050 10	1	-Q6	5	1030	1000	1.5915	14.5	24.5	22.91	15	100	11.5	11	7	6.8	2.2
MSTGH-CP 050 10	2	-Q6	5	1030	1000	1.5915	19.5	29.5	27.91	15	100	14.0	15	9	9	3.5
MSTGH-CP 075 12	1	-Q6	7.5	1230	1200	2.3873	24.7	33.0	30.61	15	100	14.5	15	9	9	5.8
MSTGH-CP 100 12	1	-Q6	10	1230	1200	3.1831	34.6	46.6	43.42	15	100	18	18	11	11	11.7

系列MSTGH-CP-Q6 齒研平軌齒條

材料 SCM440 (鉻鉬合金鋼)

硬度 HRC 53~58°

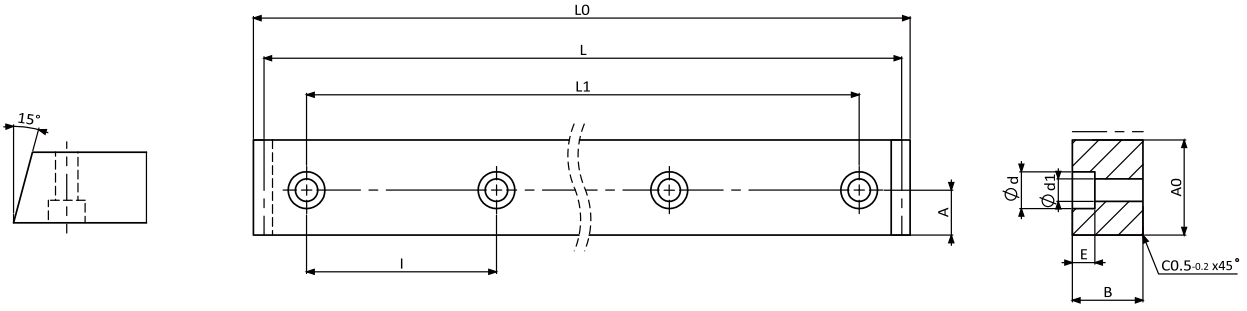
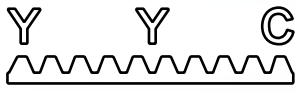
硬化處理後四面研磨與齒研

Series MSTGH-CP-Q6 Ground Guideway Racks

Material SCM440 (Chromium Molybdenum Alloy Steel)

Hardness HRC 53~58°

4 Sides Ground and Teeth Ground after hardening.

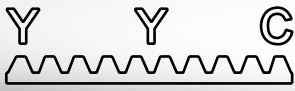


單位 / Dimension : mm

型號 Code	序號 No	Q	L0	L	L1	B	A0	D	I	ød	ød1	E	KG
MNTGH-00	1	-Q6	1033.89	1030	1000	14.5	24.5	15	100	11	7	6.8	2.5
MNTGH-00	2	-Q6	1035.23	1030	1000	19.5	29.5	15	100	15	9	9	4.0
MNTGH-00	3	-Q6	1236.62	1230	1200	24.7	33.0	15	100	15	9	9	6.8
MNTGH-00	4	-Q6	1239.27	1230	1200	34.6	46.6	15	100	18	11	11	13.4

系列MNTGH-00-Q6 研磨平面導軌
 材料 SCM440 (鉻鉬合金鋼)
 硬度 HRC 53~58°
 硬化處理後四面研磨

Series MNTGH-00-Q6 Ground Guideway
 Material SCM440 (Chromium Molybdenum Alloy Steel)
 Hardness HRC 53~58°
 4 Sides Ground after hardening.



齒輪目錄
Content of Pinions

型號 Code	材料 Material	齒輪類型 Type	齒面處理 Teeth Treatment	硬度處理 Hardness	模數 Module	精度等級 Grade DIN	頁碼 Page
CSGH-Q6	S45C	直齒齒輪 Straight	齒研 Teeth Ground	HRC 50~55°	2, 3, 4, 5, 6, 8	DIN 6	25~30
CSGH-Q7	S45C	直齒齒輪 Straight	齒研 Teeth Ground	HRC 50~55°	2, 3, 4, 5, 6, 8	DIN 7	31~36
CSM-Q8	S45C	直齒齒輪 Straight	精銑 Milled	無 Soft	1, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	DIN 8	37~45
CSMH-Q10	S45C	直齒齒輪 Straight	精銑 Milled	HRC 50~55°	1, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	DIN 10	46~54
CHGH-Q6	S45C	斜齒齒輪 Helical	齒研 Teeth Ground	HRC 50~55°	1.5, 2, 3, 4, 5, 6, 8, 10	DIN 6	55~59
CHGH-Q7	S45C	斜齒齒輪 Helical	齒研 Teeth Ground	HRC 50~55°	1.5, 2, 3, 4, 5, 6, 8, 10	DIN 7	60~64
CHM-Q8	S45C	斜齒齒輪 Helical	精銑 Milled	無 Soft	1.5, 2, 3, 4, 5, 6, 8, 10	DIN 8	65~69
CHMH-Q10	S45C	斜齒齒輪 Helical	精銑 Milled	HRC 50~55°	1.5, 2, 3, 4, 5, 6, 8, 10	DIN 10	70~74
MHFGH-Q6	SCM440	斜齒法蘭齒輪 Helical Flange	齒研 Teeth Ground	HRC 50~55°	2, 3, 4, 5	DIN 6	75

齒輪型號說明
Pinion Code Instruction



1st	2nd	3rd	4th	5th	6th	7th	8th
材料 Material	齒型 Type	系列 Series	齒面處理 Teeth Treatment	硬度處理 Hardness	模數 Module	齒數 No of Teeth	等級 Grade
C	S	(F)	G	H	020	21	Q6
C= 中碳鋼 M=合金鋼	S=直齒 H=斜齒	F=法蘭式	M=精銑 G=齒研	H=硬化處理	M1.5~M10	16~95	Q=DIN Q6~Q10
C= S45C M=SCM440	S=Straight H=Helical	F=Flange	M=Milled G=Ground	H=Hardened			

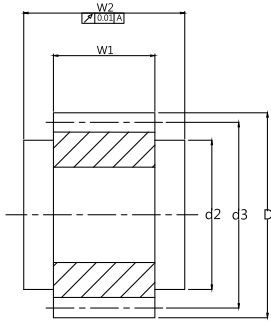
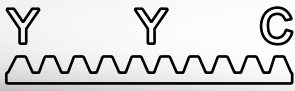


圖1/Fig1.

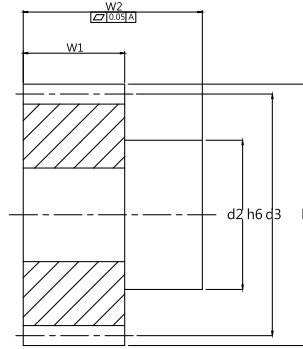
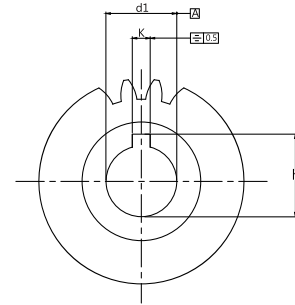


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CSGH 020 16 1	1	-Q6	16	15	25	32	36	28	30	5	17.3	0.1
CSGH 020 18 1	1	-Q6	18	15	30	36	40	28	30	5	17.3	0.2
CSGH 020 18 2	1	-Q6	18	20	25	36	40	28	30	6	22.8	0.2
CSGH 020 20 1	1	-Q6	20	15	25	40	44	28	30	6	17.8	0.2
CSGH 020 20 2	1	-Q6	20	19	30	40	44	28	30	6	21.8	0.2
CSGH 020 20 3	2	-Q6	20	19	30	40	44	28	56	6	21.8	0.2
CSGH 020 20 4	1	-Q6	20	20	30	40	44	28	30	6	22.8	0.2
CSGH 020 20 5	1	-Q6	20	22	30	40	44	28	30	6	24.8	0.2
CSGH 020 20 6	2	-Q6	20	22	36	40	44	28	56	6	24.8	0.3
CSGH 020 22 1	1	-Q6	22	15	25	44	48	28	30	5	17.3	0.3
CSGH 020 22 2	1	-Q6	22	19	30	44	48	28	30	6	21.8	0.3
CSGH 020 22 3	2	-Q6	22	19	30	44	48	28	56	6	21.8	0.3
CSGH 020 22 4	1	-Q6	22	20	30	44	48	28	30	6	22.8	0.3
CSGH 020 22 5	2	-Q6	22	22	36	44	48	28	56	6	24.8	0.3
CSGH 020 22 6	1	-Q6	22	22	30	44	48	28	30	6	24.8	0.3
CSGH 020 22 7	1	-Q6	22	25	36	44	48	28	30	8	28.3	0.2
CSGH 020 25 1	2	-Q6	25	16	30	50	54	28	54	5	18.3	0.3
CSGH 020 25 2	1	-Q6	25	19	30	50	54	28	30	6	21.8	0.3
CSGH 020 25 3	2	-Q6	25	19	30	50	54	28	56	6	21.8	0.3
CSGH 020 25 4	1	-Q6	25	20	30	50	54	28	30	6	22.8	0.4
CSGH 020 25 5	1	-Q6	25	22	30	50	54	28	30	6	24.8	0.3
CSGH 020 25 6	2	-Q6	25	22	36	50	54	28	56	6	24.8	0.4
CSGH 020 25 7	1	-Q6	25	25	36	50	54	28	30	8	28.3	0.3
CSGH 020 25 8	1	-Q6	25	30	45	50	54	28	30	8	33.3	0.3
CSGH 020 28 1	1	-Q6	28	19	30	56	60	28	30	6	21.8	0.5
CSGH 020 28 2	2	-Q6	28	19	30	56	60	28	56	6	21.8	0.5
CSGH 020 28 3	1	-Q6	28	20	30	56	60	28	30	6	22.8	0.5
CSGH 020 28 4	1	-Q6	28	22	30	56	60	28	30	6	24.8	0.3
CSGH 020 28 5	2	-Q6	28	22	36	56	60	28	56	6	24.8	0.3
CSGH 020 28 6	1	-Q6	28	25	36	56	60	28	30	8	28.3	0.4
CSGH 020 28 7	1	-Q6	28	30	45	56	60	28	30	8	33.3	0.4
CSGH 020 28 8	2	-Q6	28	30	50	56	60	28	60	8	33.3	0.4
CSGH 020 28 9	1	-Q6	28	35	48	56	60	28	30	10	38.3	0.3
CSGH 020 32 1	2	-Q6	32	16	30	64	68	28	54	5	18.3	0.6

品質等級

DIN 6

系列 CSGH-Q6 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CSGH-Q6 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

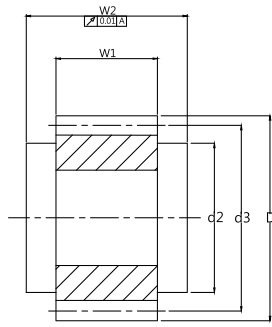
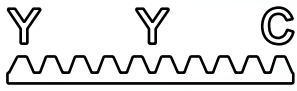


圖1/Fig1.

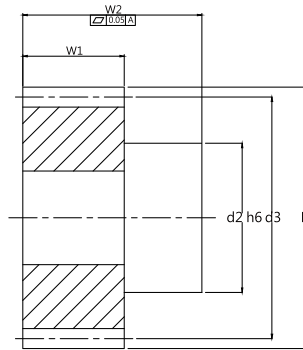
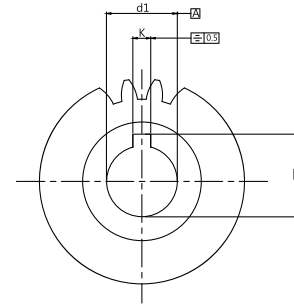


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CSGH 020 32 2	1	-Q6	32	20	30	64	68	28	30	6	22.8	0.6
CSGH 020 32 3	1	-Q6	32	22	30	64	68	28	30	6	24.8	0.4
CSGH 020 32 4	2	-Q6	32	22	36	64	68	28	56	6	24.8	0.6
CSGH 020 32 5	1	-Q6	32	25	36	64	68	28	30	8	28.3	0.6
CSGH 020 32 6	1	-Q6	32	30	45	64	68	28	30	8	33.3	0.6
CSGH 020 32 7	2	-Q6	32	30	50	64	68	28	60	8	33.3	0.6
CSGH 020 32 8	2	-Q6	32	32	55	64	68	28	65	10	35.3	0.5
CSGH 020 32 9	1	-Q6	32	35	48	64	68	28	30	10	38.3	0.5
CSGH 020 36 1	1	-Q6	36	20	30	72	76	28	30	6	22.8	0.8
CSGH 020 36 2	1	-Q6	36	25	36	72	76	28	30	8	28.3	0.8
CSGH 020 36 3	1	-Q6	36	30	45	72	76	28	30	8	33.3	0.7
CSGH 020 36 4	1	-Q6	36	35	48	72	76	28	30	10	38.3	0.7
CSGH 020 36 5	2	-Q6	36	40	62	72	76	28	65	12	43.3	0.5
CSGH 020 36 6	1	-Q6	36	45	58	72	76	28	30	14	48.8	0.6
CSGH 020 40 1	1	-Q6	40	15	36	80	84	28	30	5	17.3	1.0
CSGH 020 40 2	1	-Q6	40	20	30	80	84	28	30	6	22.8	1.0
CSGH 020 40 3	1	-Q6	40	25	36	80	84	28	30	8	28.3	1.0
CSGH 020 40 4	1	-Q6	40	30	45	80	84	28	30	8	33.3	1.0
CSGH 020 40 5	2	-Q6	40	32	55	80	84	28	65	10	35.3	0.9
CSGH 020 40 6	1	-Q6	40	35	48	80	84	28	30	10	38.3	0.9
CSGH 020 40 7	2	-Q6	40	40	62	80	84	28	65	12	43.3	0.7
CSGH 020 40 8	1	-Q6	40	45	58	80	84	28	30	14	48.8	0.8
CSGH 020 40 9	2	-Q6	40	45	68	80	84	28	65	14	48.8	1.3
CSGH 020 45 1	1	-Q6	45	20	30	90	94	28	30	6	22.8	1.3
CSGH 020 45 2	1	-Q6	45	25	36	90	94	28	30	8	28.3	1.2
CSGH 020 45 3	1	-Q6	45	35	48	90	94	28	30	10	38.3	1.2
CSGH 020 45 4	1	-Q6	45	45	58	90	94	28	30	14	48.8	1.1
CSGH 020 50 1	1	-Q6	50	20	30	100	104	28	30	6	22.8	1.6
CSGH 020 50 2	1	-Q6	50	25	36	100	104	28	30	8	28.3	1.5
CSGH 020 50 3	1	-Q6	50	35	48	100	104	28	30	10	38.3	1.5
CSGH 020 50 4	1	-Q6	50	45	58	100	104	28	30	14	48.8	1.4
CSGH 020 50 5	2	-Q6	50	45	68	100	104	28	65	14	48.8	2.0
CSGH 020 56 1	1	-Q6	56	25	36	112	116	28	30	8	28.3	1.9
CSGH 020 56 1	1	-Q6	56	35	48	112	116	28	30	10	38.3	1.8

品質等級

DIN 6

系列 CSGH-Q6 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CSGH-Q6 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

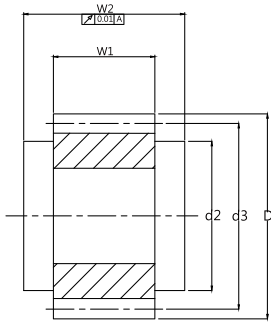
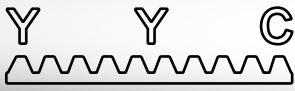


圖1/Fig1.

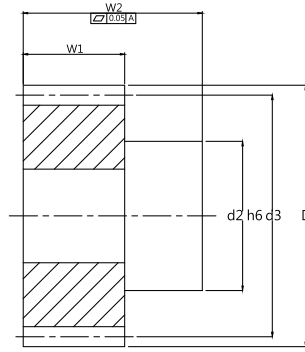
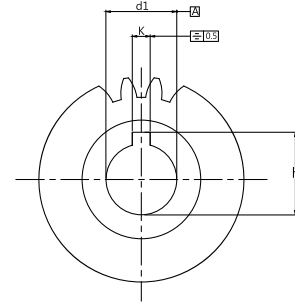


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	齒數 No. of Teeth	模數 3 Module 3	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
CSGH 030 18 1	1	-Q6	18	25	36	54	60	28	30	8	28.3	0.4
CSGH 030 20 1	1	-Q6	20	25	36	60	66	28	30	8	28.3	0.5
CSGH 030 20 2	1	-Q6	20	30	45	60	66	28	30	8	33.3	0.5
CSGH 030 20 3	1	-Q6	20	35	48	60	66	28	30	10	38.3	0.5
CSGH 030 22 1	2	-Q6	22	22	36	66	72	28	56	6	24.8	0.8
CSGH 030 22 2	1	-Q6	22	25	36	66	72	28	30	8	28.3	0.6
CSGH 030 22 3	2	-Q6	22	25	44	66	72	28	60	8	28.3	0.9
CSGH 030 22 4	1	-Q6	22	30	45	66	72	28	30	8	33.3	0.6
CSGH 030 22 5	2	-Q6	22	32	55	66	72	28	65	10	35.3	1.1
CSGH 030 22 6	2	-Q6	22	30	50	66	72	28	60	8	33.3	0.9
CSGH 030 22 7	1	-Q6	22	35	48	66	72	28	30	10	38.3	0.6
CSGH 030 22 8	2	-Q6	22	35	55	66	72	28	65	10	38.3	0.9
CSGH 030 22 9	2	-Q6	22	40	62	66	72	28	65	12	43.3	1.1
CSGH 030 25 1	1	-Q6	25	25	36	75	81	28	30	8	28.3	0.9
CSGH 030 25 2	1	-Q6	25	30	45	75	81	28	30	8	33.3	0.9
CSGH 030 25 3	2	-Q6	25	32	55	75	81	28	65	10	35.3	1.3
CSGH 030 25 4	1	-Q6	25	35	48	75	81	28	30	10	38.3	0.9
CSGH 030 25 5	2	-Q6	25	40	62	75	81	28	65	12	43.3	1.3
CSGH 030 25 6	1	-Q6	25	45	58	75	81	28	30	14	48.8	0.7
CSGH 030 28 1	2	-Q6	28	22	36	84	90	28	56	6	24.8	1.4
CSGH 030 28 2	1	-Q6	28	25	36	84	90	28	30	8	28.3	1.2
CSGH 030 28 3	2	-Q6	28	25	44	84	90	28	60	8	28.3	1.4
CSGH 030 28 4	1	-Q6	28	30	45	84	90	28	30	8	33.3	1.2
CSGH 030 28 5	2	-Q6	28	30	50	84	90	28	60	8	33.3	1.4
CSGH 030 28 6	2	-Q6	28	32	55	84	90	28	65	10	35.3	1.5
CSGH 030 28 7	1	-Q6	28	35	48	84	90	28	30	10	38.3	1.0
CSGH 030 28 8	2	-Q6	28	35	55	84	90	28	65	10	38.3	1.5
CSGH 030 28 9	2	-Q6	28	40	62	84	90	28	65	12	43.3	1.5

品質等級

DIN 6

系列 CSGH-Q6 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CSGH-Q6 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

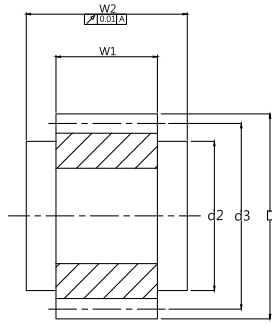
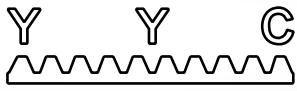


圖1/Fig1.

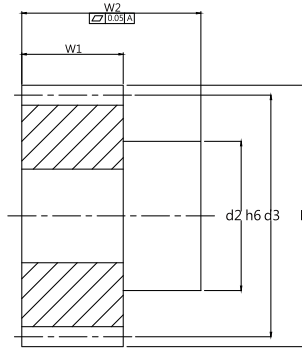
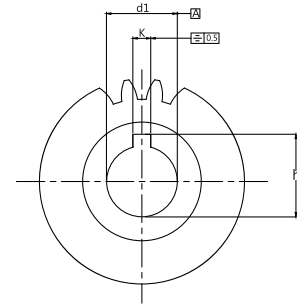


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 3 Module 3												
CSGH 030 28 10	1	-Q6	28	45	58	84	90	28	30	14	48.8	0.9
CSGH 030 28 11	2	-Q6	28	45	68	84	90	28	65	14	48.8	1.5
CSGH 030 32 1	1	-Q6	32	25	36	96	102	28	30	8	28.3	1.6
CSGH 030 32 3	1	-Q6	32	30	45	96	102	28	30	8	33.3	1.5
CSGH 030 32 3	2	-Q6	32	32	55	96	102	28	65	10	35.3	1.9
CSGH 030 32 4	1	-Q6	32	35	48	96	102	28	30	10	38.3	1.5
CSGH 030 32 5	2	-Q6	32	40	62	96	102	28	65	12	43.3	1.9
CSGH 030 32 6	1	-Q6	32	45	58	96	102	28	30	14	48.8	1.3
CSGH 030 32 7	1	-Q6	32	60	80	96	102	28	30	18	64.4	1.1
CSGH 030 36 1	1	-Q6	36	25	36	108	114	28	30	8	28.3	1.9
CSGH 030 36 2	1	-Q6	36	35	48	108	114	28	30	10	38.3	1.9
CSGH 030 36 3	1	-Q6	36	45	58	108	114	28	30	14	48.8	1.8
CSGH 030 36 4	2	-Q6	36	45	68	108	114	28	65	14	48.8	2.2
CSGH 030 36 5	1	-Q6	36	60	80	108	114	28	30	18	64.4	1.5
CSGH 030 40 1	1	-Q6	40	25	36	120	126	28	30	8	28.3	2.4
CSGH 030 40 2	1	-Q6	40	35	48	120	126	28	30	10	38.3	2.4
CSGH 030 40 3	1	-Q6	40	45	58	120	126	28	30	14	48.8	2.2
CSGH 030 40 4	1	-Q6	40	60	80	120	126	28	30	18	64.4	1.9
CSGH 030 45 1	1	-Q6	45	25	36	135	141	28	30	8	28.3	3.0
CSGH 030 45 2	1	-Q6	45	35	48	135	141	28	30	10	38.3	2.6
CSGH 030 45 3	1	-Q6	45	45	58	135	141	28	30	14	48.8	2.4
CSGH 030 45 4	1	-Q6	45	60	80	135	141	28	30	18	64.4	2.5
CSGH 030 50 1	1	-Q6	50	35	48	150	156	28	30	10	38.3	3.6
CSGH 030 50 2	1	-Q6	50	45	58	150	156	28	30	14	48.8	3.6
CSGH 030 56 1	1	-Q6	56	45	58	168	174	28	30	14	48.8	4.4
CSGH 030 63 1	1	-Q6	63	45	58	189	195	28	30	14	48.8	5.5
CSGH 030 63 2	1	-Q6	63	60	80	189	195	28	30	18	64.4	5.5

品質等級

DIN 6

系列 CSGH-Q6 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CSGH-Q6 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

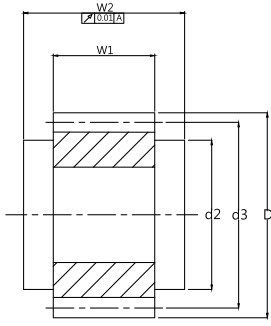
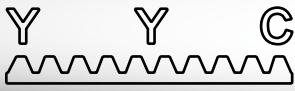


圖1/Fig1.

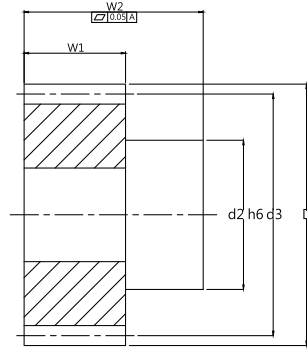
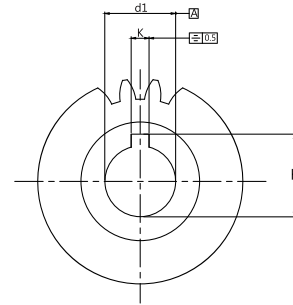


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	齒數 No. of Teeth	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 4 Module 4												
CSGH 040 20 1	2	-Q6	20	32	55	80	88	40	75	10	35.3	1.8
CSGH 040 20 2	1	-Q6	20	35	52	80	88	40	50	10	38.3	1.4
CSGH 040 20 3	2	-Q6	20	35	55	80	88	40	75	10	38.3	1.8
CSGH 040 20 4	1	-Q6	20	45	65	80	88	40	50	14	48.8	1.3
CSGH 040 20 5	2	-Q6	20	40	62	80	88	40	75	12	43.3	1.8
CSGH 040 22 1	1	-Q6	22	35	52	88	96	40	50	10	38.3	1.8
CSGH 040 22 2	1	-Q6	22	45	65	88	96	40	50	14	48.8	1.6
CSGH 040 22 3	2	-Q6	22	45	68	88	96	40	75	14	48.8	2.0
CSGH 040 25 1	2	-Q6	25	32	55	100	108	40	75	10	35.3	2.6
CSGH 040 25 2	1	-Q6	25	35	52	100	108	40	50	10	38.3	2.3
CSGH 040 25 3	2	-Q6	25	35	55	100	108	40	75	10	38.3	2.6
CSGH 040 25 4	2	-Q6	25	40	62	100	108	40	75	12	43.3	2.6
CSGH 040 25 5	1	-Q6	25	45	65	100	108	40	50	14	48.8	2.0
CSGH 040 25 6	2	-Q6	25	55	80	100	108	40	80	16	59.3	2.6
CSGH 040 28 1	1	-Q6	28	35	52	112	120	40	50	10	38.3	3.0
CSGH 040 28 2	1	-Q6	28	45	65	112	120	40	50	14	48.8	2.8
CSGH 040 28 3	2	-Q6	28	45	68	112	120	40	75	14	48.8	3.0
CSGH 040 32 1	1	-Q6	32	35	52	128	136	40	50	10	38.3	3.8
CSGH 040 32 2	1	-Q6	32	45	65	128	136	40	50	14	48.8	3.8
CSGH 040 32 3	2	-Q6	32	55	80	128	136	40	80	16	59.3	4.0
CSGH 040 32 4	2	-Q6	32	75	110	128	136	40	100	20	79.9	5.0
CSGH 040 40 1	1	-Q6	40	45	65	160	168	40	50	14	48.8	6.0
CSGH 040 40 2	1	-Q6	40	60	80	160	168	40	50	18	64.4	5.8
CSGH 040 40 3	2	-Q6	40	75	110	160	168	40	100	20	79.9	7.2

品質等級
DIN 6

系列 CSGH-Q6 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade
DIN 6

Series CSGH-Q6 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

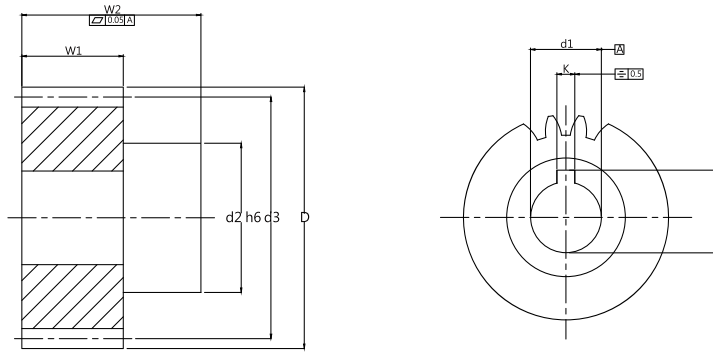
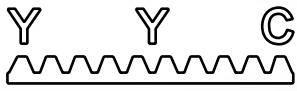


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 5 Module 5												
CSGH 050 21 1	2	-Q6	21	45	68	105	115	50	85	14	48.8	3.8
CSGH 050 21 2	2	-Q6	21	55	80	105	115	50	90	16	59.3	3.8
CSGH 050 25 1	2	-Q6	25	45	68	125	135	50	85	14	48.8	5.2
CSGH 050 25 2	2	-Q6	25	55	80	125	135	50	90	16	59.3	5.2
CSGH 050 25 3	2	-Q6	25	75	110	125	135	50	110	20	79.9	4.8
模數 6 Module 6												
CSGH 060 21 1	2	-Q6	21	55	80	126	138	60	100	16	59.3	5.6
CSGH 060 21 2	2	-Q6	21	75	110	126	138	60	120	20	79.9	4.7
CSGH 060 25 1	2	-Q6	25	55	80	150	162	60	100	16	59.3	8.0
CSGH 060 25 2	2	-Q6	25	75	110	150	162	60	120	20	79.9	7.1
模數 8 Module 8												
CSGH 080 20 1	2	-Q6	20	75	110	160	176	80	140	20	79.9	12.0
CSGH 080 20 2	2	-Q6	20	85	125	160	176	80	145	22	90.4	12.0

品質等級

DIN 6

系列 CSGH-Q6 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CSGH-Q6 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

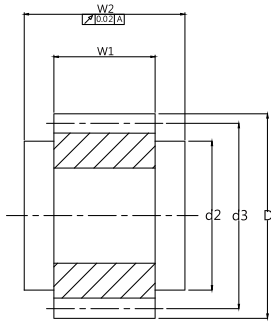
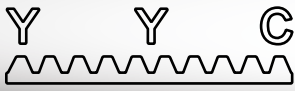


圖1/Fig.1.

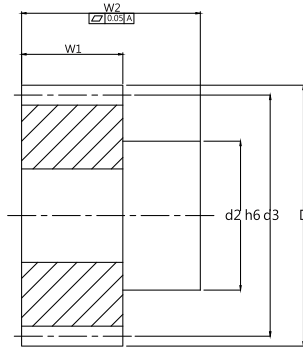
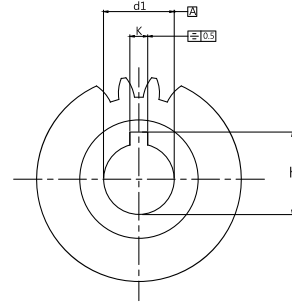


圖2/Fig.2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d_{1H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CSGH 020 16 1	1	-Q7	16	15	25	32	36	28	30	5	17.3	0.1
CSGH 020 18 1	1	-Q7	18	15	30	36	40	28	30	5	17.3	0.2
CSGH 020 18 2	1	-Q7	18	20	25	36	40	28	30	6	22.8	0.2
CSGH 020 20 1	1	-Q7	20	15	25	40	44	28	30	6	17.8	0.2
CSGH 020 20 2	1	-Q7	20	19	30	40	44	28	30	6	21.8	0.2
CSGH 020 20 3	2	-Q7	20	19	30	40	44	28	56	6	21.8	0.2
CSGH 020 20 4	1	-Q7	20	20	30	40	44	28	30	6	22.8	0.2
CSGH 020 20 5	1	-Q7	20	22	30	40	44	28	30	6	24.8	0.2
CSGH 020 20 6	2	-Q7	20	22	36	40	44	28	56	6	24.8	0.3
CSGH 020 22 1	1	-Q7	22	15	25	44	48	28	30	5	17.3	0.3
CSGH 020 22 2	1	-Q7	22	19	30	44	48	28	30	6	21.8	0.3
CSGH 020 22 3	2	-Q7	22	19	30	44	48	28	56	6	21.8	0.3
CSGH 020 22 4	1	-Q7	22	20	30	44	48	28	30	6	22.8	0.3
CSGH 020 22 5	2	-Q7	22	22	36	44	48	28	56	6	24.8	0.3
CSGH 020 22 6	1	-Q7	22	22	30	44	48	28	30	6	24.8	0.3
CSGH 020 22 7	1	-Q7	22	25	36	44	48	28	30	8	28.3	0.2
CSGH 020 25 1	2	-Q7	25	16	30	50	54	28	54	5	18.3	0.3
CSGH 020 25 2	1	-Q7	25	19	30	50	54	28	30	6	21.8	0.3
CSGH 020 25 3	2	-Q7	25	19	30	50	54	28	56	6	21.8	0.3
CSGH 020 25 4	1	-Q7	25	20	30	50	54	28	30	6	22.8	0.4
CSGH 020 25 5	1	-Q7	25	22	30	50	54	28	30	6	24.8	0.3
CSGH 020 25 6	2	-Q7	25	22	36	50	54	28	56	6	24.8	0.4
CSGH 020 25 7	1	-Q7	25	25	36	50	54	28	30	8	28.3	0.3
CSGH 020 25 8	1	-Q7	25	30	45	50	54	28	30	8	33.3	0.3
CSGH 020 28 1	1	-Q7	28	19	30	56	60	28	30	6	21.8	0.5
CSGH 020 28 2	2	-Q7	28	19	30	56	60	28	56	6	21.8	0.5
CSGH 020 28 3	1	-Q7	28	20	30	56	60	28	30	6	22.8	0.5
CSGH 020 28 4	1	-Q7	28	22	30	56	60	28	30	6	24.8	0.3
CSGH 020 28 5	2	-Q7	28	22	36	56	60	28	56	6	24.8	0.3
CSGH 020 28 6	1	-Q7	28	25	36	56	60	28	30	8	28.3	0.4
CSGH 020 28 7	1	-Q7	28	30	45	56	60	28	30	8	33.3	0.4
CSGH 020 28 8	2	-Q7	28	30	50	56	60	28	60	8	33.3	0.4
CSGH 020 28 9	1	-Q7	28	35	48	56	60	28	30	10	38.3	0.3
CSGH 020 32 1	2	-Q7	32	16	30	64	68	28	54	5	18.3	0.6

品質等級

DIN 7

系列 CSGH-Q7 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CSGH-Q7 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

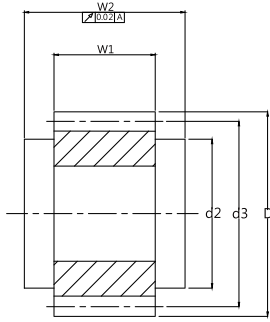
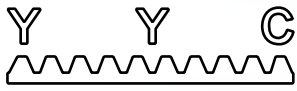


圖1/Fig1.

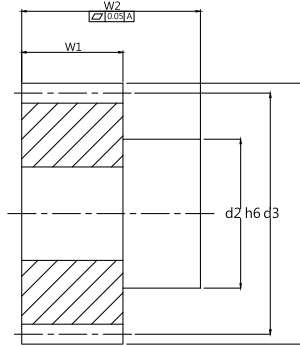
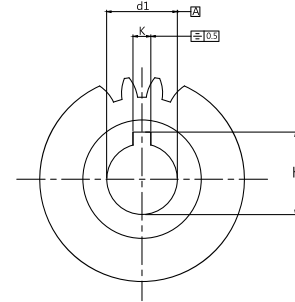


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CSGH 020 32 2	1	-Q7	32	20	30	64	68	28	30	6	22.8	0.6
CSGH 020 32 3	1	-Q7	32	22	30	64	68	28	30	6	24.8	0.4
CSGH 020 32 4	2	-Q7	32	22	36	64	68	28	56	6	24.8	0.6
CSGH 020 32 5	1	-Q7	32	25	36	64	68	28	30	8	28.3	0.6
CSGH 020 32 6	1	-Q7	32	30	45	64	68	28	30	8	33.3	0.6
CSGH 020 32 7	2	-Q7	32	30	50	64	68	28	60	8	33.3	0.6
CSGH 020 32 8	2	-Q7	32	32	55	64	68	28	65	10	35.3	0.5
CSGH 020 32 9	1	-Q7	32	35	48	64	68	28	30	10	38.3	0.5
CSGH 020 36 1	1	-Q7	36	20	30	72	76	28	30	6	22.8	0.8
CSGH 020 36 2	1	-Q7	36	25	36	72	76	28	30	8	28.3	0.8
CSGH 020 36 3	1	-Q7	36	30	45	72	76	28	30	8	33.3	0.7
CSGH 020 36 4	1	-Q7	36	35	48	72	76	28	30	10	38.3	0.7
CSGH 020 36 5	2	-Q7	36	40	62	72	76	28	65	12	43.3	0.5
CSGH 020 36 6	1	-Q7	36	45	58	72	76	28	30	14	48.8	0.6
CSGH 020 40 1	1	-Q7	40	15	36	80	84	28	30	5	17.3	1.0
CSGH 020 40 2	1	-Q7	40	20	30	80	84	28	30	6	22.8	1.0
CSGH 020 40 3	1	-Q7	40	25	36	80	84	28	30	8	28.3	1.0
CSGH 020 40 4	1	-Q7	40	30	45	80	84	28	30	8	33.3	1.0
CSGH 020 40 5	2	-Q7	40	32	55	80	84	28	65	10	35.3	0.9
CSGH 020 40 6	1	-Q7	40	35	48	80	84	28	30	10	38.3	0.9
CSGH 020 40 7	2	-Q7	40	40	62	80	84	28	65	12	43.3	0.7
CSGH 020 40 8	1	-Q7	40	45	58	80	84	28	30	14	48.8	0.8
CSGH 020 40 9	2	-Q7	40	45	68	80	84	28	65	14	48.8	1.3
CSGH 020 45 1	1	-Q7	45	20	30	90	94	28	30	6	22.8	1.3
CSGH 020 45 2	1	-Q7	45	25	36	90	94	28	30	8	28.3	1.2
CSGH 020 45 3	1	-Q7	45	35	48	90	94	28	30	10	38.3	1.2
CSGH 020 45 4	1	-Q7	45	45	58	90	94	28	30	14	48.8	1.1
CSGH 020 50 1	1	-Q7	50	20	30	100	104	28	30	6	22.8	1.6
CSGH 020 50 2	1	-Q7	50	25	36	100	104	28	30	8	28.3	1.5
CSGH 020 50 3	1	-Q7	50	35	48	100	104	28	30	10	38.3	1.5
CSGH 020 50 4	1	-Q7	50	45	58	100	104	28	30	14	48.8	1.4
CSGH 020 50 5	2	-Q7	50	45	68	100	104	28	65	14	48.8	2.0
CSGH 020 56 1	1	-Q7	56	25	36	112	116	28	30	8	28.3	1.9
CSGH 020 56 1	1	-Q7	56	35	48	112	116	28	30	10	38.3	1.8

品質等級

DIN 7

系列 CSGH-Q7 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CSGH-Q7 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

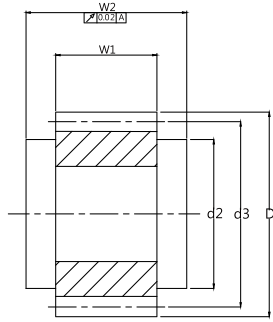
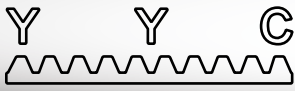


圖1/Fig.1.

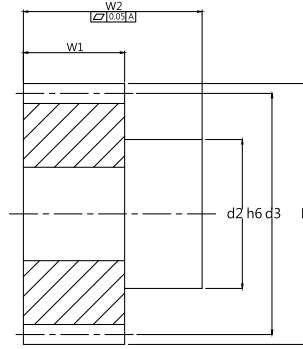
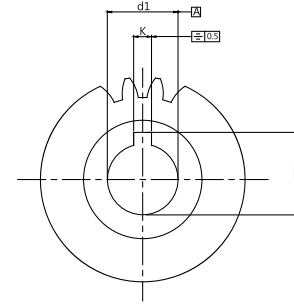


圖2/Fig.2.



單位 / Dimension : mm

型號 Code	圖 Fig.	齒數 No. of Teeth	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 3 Module 3												
CSGH 030 18 1	1	-Q7	18	25	36	54	60	28	30	8	28.3	0.4
CSGH 030 20 1	1	-Q7	20	25	36	60	66	28	30	8	28.3	0.5
CSGH 030 20 2	1	-Q7	20	30	45	60	66	28	30	8	33.3	0.5
CSGH 030 20 3	1	-Q7	20	35	48	60	66	28	30	10	38.3	0.5
CSGH 030 22 1	2	-Q7	22	22	36	66	72	28	56	6	24.8	0.8
CSGH 030 22 2	1	-Q7	22	25	36	66	72	28	30	8	28.3	0.6
CSGH 030 22 3	2	-Q7	22	25	44	66	72	28	60	8	28.3	0.9
CSGH 030 22 4	1	-Q7	22	30	45	66	72	28	30	8	33.3	0.6
CSGH 030 22 5	2	-Q7	22	32	55	66	72	28	65	10	35.3	1.1
CSGH 030 22 6	2	-Q7	22	30	50	66	72	28	60	8	33.3	0.9
CSGH 030 22 7	1	-Q7	22	35	48	66	72	28	30	10	38.3	0.6
CSGH 030 22 8	2	-Q7	22	35	55	66	72	28	65	10	38.3	0.9
CSGH 030 22 9	2	-Q7	22	40	62	66	72	28	65	12	43.3	1.1
CSGH 030 25 1	1	-Q7	25	25	36	75	81	28	30	8	28.3	0.9
CSGH 030 25 2	1	-Q7	25	30	45	75	81	28	30	8	33.3	0.9
CSGH 030 25 3	2	-Q7	25	32	55	75	81	28	65	10	35.3	1.3
CSGH 030 25 4	1	-Q7	25	35	48	75	81	28	30	10	38.3	0.9
CSGH 030 25 5	2	-Q7	25	40	62	75	81	28	65	12	43.3	1.3
CSGH 030 25 6	1	-Q7	25	45	58	75	81	28	30	14	48.8	0.7
CSGH 030 28 1	2	-Q7	28	22	36	84	90	28	56	6	24.8	1.4
CSGH 030 28 2	1	-Q7	28	25	36	84	90	28	30	8	28.3	1.2
CSGH 030 28 3	2	-Q7	28	25	44	84	90	28	60	8	28.3	1.4
CSGH 030 28 4	1	-Q7	28	30	45	84	90	28	30	8	33.3	1.2
CSGH 030 28 5	2	-Q7	28	30	50	84	90	28	60	8	33.3	1.4
CSGH 030 28 6	2	-Q7	28	32	55	84	90	28	65	10	35.3	1.5
CSGH 030 28 7	1	-Q7	28	35	48	84	90	28	30	10	38.3	1.0
CSGH 030 28 8	2	-Q7	28	35	55	84	90	28	65	10	38.3	1.5
CSGH 030 28 9	2	-Q7	28	40	62	84	90	28	65	12	43.3	1.5

品質等級

DIN 7

系列 CSGH-Q7 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CSGH-Q7 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

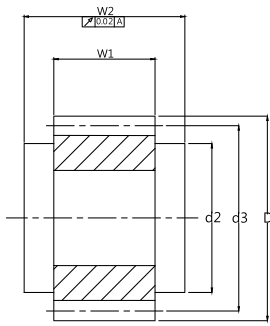
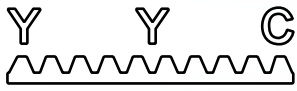


圖1/Fig1.

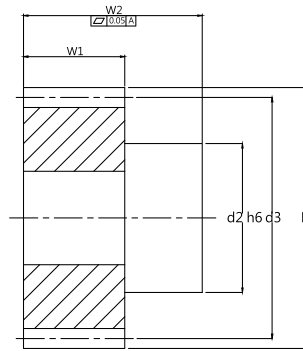
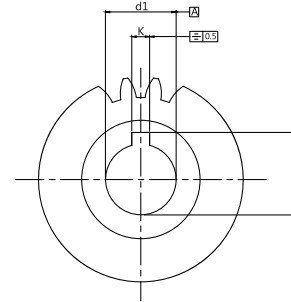


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 3 Module 3												
CSGH 030 28 10	1	-Q7	28	45	58	84	90	28	30	14	48.8	0.9
CSGH 030 28 11	2	-Q7	28	45	68	84	90	28	65	14	48.8	1.5
CSGH 030 32 1	1	-Q7	32	25	36	96	102	28	30	8	28.3	1.6
CSGH 030 32 3	1	-Q7	32	30	45	96	102	28	30	8	33.3	1.5
CSGH 030 32 3	2	-Q7	32	32	55	96	102	28	65	10	35.3	1.9
CSGH 030 32 4	1	-Q7	32	35	48	96	102	28	30	10	38.3	1.5
CSGH 030 32 5	2	-Q7	32	40	62	96	102	28	65	12	43.3	1.9
CSGH 030 32 6	1	-Q7	32	45	58	96	102	28	30	14	48.8	1.3
CSGH 030 32 7	1	-Q7	32	60	80	96	102	28	30	18	64.4	1.1
CSGH 030 36 1	1	-Q7	36	25	36	108	114	28	30	8	28.3	1.9
CSGH 030 36 2	1	-Q7	36	35	48	108	114	28	30	10	38.3	1.9
CSGH 030 36 3	1	-Q7	36	45	58	108	114	28	30	14	48.8	1.8
CSGH 030 36 4	2	-Q7	36	45	68	108	114	28	65	14	48.8	2.2
CSGH 030 36 5	1	-Q7	36	60	80	108	114	28	30	18	64.4	1.5
CSGH 030 40 1	1	-Q7	40	25	36	120	126	28	30	8	28.3	2.4
CSGH 030 40 2	1	-Q7	40	35	48	120	126	28	30	10	38.3	2.4
CSGH 030 40 3	1	-Q7	40	45	58	120	126	28	30	14	48.8	2.2
CSGH 030 40 4	1	-Q7	40	60	80	120	126	28	30	18	64.4	1.9
CSGH 030 45 1	1	-Q7	45	25	36	135	141	28	30	8	28.3	3.0
CSGH 030 45 2	1	-Q7	45	35	48	135	141	28	30	10	38.3	2.6
CSGH 030 45 3	1	-Q7	45	45	58	135	141	28	30	14	48.8	2.4
CSGH 030 45 4	1	-Q7	45	60	80	135	141	28	30	18	64.4	2.5
CSGH 030 50 1	1	-Q7	50	35	48	150	156	28	30	10	38.3	3.6
CSGH 030 50 2	1	-Q7	50	45	58	150	156	28	30	14	48.8	3.6
CSGH 030 56 1	1	-Q7	56	45	58	168	174	28	30	14	48.8	4.4
CSGH 030 63 1	1	-Q7	63	45	58	189	195	28	30	14	48.8	5.5
CSGH 030 63 2	1	-Q7	63	60	80	189	195	28	30	18	64.4	5.5

品質等級

DIN 7

系列 CSGH-Q7 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CSGH-Q7 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

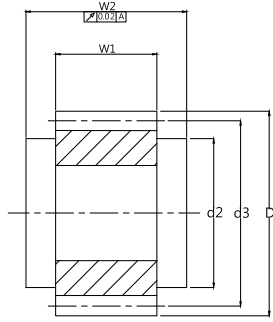
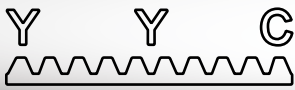


圖1/Fig1.

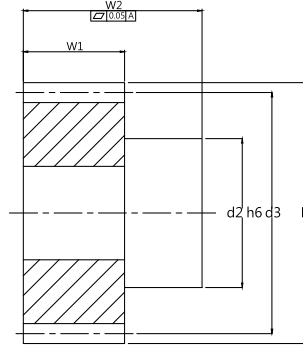
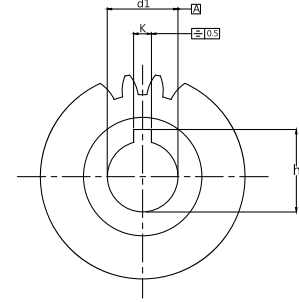


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	齒數 No. of Teeth	d_{1H6}	d_2	d_3	D	w1	w2	k	h	KG	
模數 4 Module 4												
CSGH 040 20 1	2	-Q7	20	32	55	80	88	40	75	10	35.3	1.8
CSGH 040 20 2	1	-Q7	20	35	52	80	88	40	50	10	38.3	1.4
CSGH 040 20 3	2	-Q7	20	35	55	80	88	40	75	10	38.3	1.8
CSGH 040 20 4	1	-Q7	20	45	65	80	88	40	50	14	48.8	1.3
CSGH 040 20 5	2	-Q7	20	40	62	80	88	40	75	12	43.3	1.8
CSGH 040 22 1	1	-Q7	22	35	52	80	88	40	50	10	38.3	1.8
CSGH 040 22 2	1	-Q7	22	45	65	80	88	40	50	14	48.8	1.6
CSGH 040 22 3	2	-Q7	22	45	68	80	88	40	75	14	48.8	2.0
CSGH 040 25 1	2	-Q7	25	32	55	100	108	40	75	10	35.3	2.6
CSGH 040 25 2	1	-Q7	25	35	52	100	108	40	50	10	38.3	2.3
CSGH 040 25 3	2	-Q7	25	35	55	100	108	40	75	10	38.3	2.6
CSGH 040 25 4	2	-Q7	25	40	62	100	108	40	75	12	43.3	2.6
CSGH 040 25 5	1	-Q7	25	45	65	100	108	40	50	14	48.8	2.0
CSGH 040 25 6	2	-Q7	25	55	80	100	108	40	80	16	59.3	2.6
CSGH 040 28 1	1	-Q7	28	35	52	112	120	40	50	10	38.3	3.0
CSGH 040 28 2	1	-Q7	28	45	65	112	120	40	50	14	48.8	2.8
CSGH 040 28 3	2	-Q7	28	45	68	112	120	40	75	14	48.8	3.0
CSGH 040 32 1	1	-Q7	32	35	52	128	136	40	50	10	38.3	3.8
CSGH 040 32 2	1	-Q7	32	45	65	128	136	40	50	14	48.8	3.8
CSGH 040 32 3	2	-Q7	32	55	80	128	136	40	80	16	59.3	4.0
CSGH 040 32 4	2	-Q7	32	75	110	128	136	40	100	20	79.9	5.0
CSGH 040 40 1	1	-Q7	40	45	65	160	168	40	50	14	48.8	6.0
CSGH 040 40 2	1	-Q7	40	60	80	160	168	40	50	18	64.4	5.8
CSGH 040 40 3	2	-Q7	40	75	110	160	168	40	100	20	79.9	7.2

品質等級
DIN 7

系列 CSGH-Q7 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade
DIN 7

Series CSGH-Q7 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

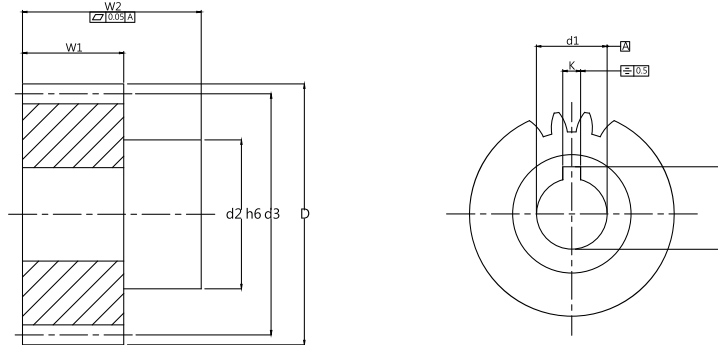
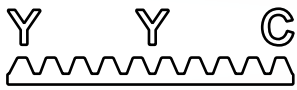


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 5 Module 5												
CSGH 050 21 1	2	-Q7	21	45	68	105	115	50	85	14	48.8	3.8
CSGH 050 21 2	2	-Q7	21	55	80	105	115	50	90	16	59.3	3.8
CSGH 050 25 1	2	-Q7	25	45	68	125	135	50	85	14	48.8	5.2
CSGH 050 25 2	2	-Q7	25	55	80	125	135	50	90	16	59.3	5.2
CSGH 050 25 3	2	-Q7	25	75	110	125	135	50	110	20	79.9	4.8
模數 6 Module 6												
CSGH 060 21 1	2	-Q7	21	55	80	126	138	60	100	16	59.3	5.6
CSGH 060 21 2	2	-Q7	21	75	110	126	138	60	120	20	79.9	4.7
CSGH 060 25 1	2	-Q7	25	55	80	150	162	60	100	16	59.3	8.0
CSGH 060 25 2	2	-Q7	25	75	110	150	162	60	120	20	79.9	7.1
模數 8 Module 8												
CSGH 080 20 1	2	-Q7	20	75	110	160	176	80	140	20	79.9	12.0
CSGH 080 20 2	2	-Q7	20	85	125	160	176	80	145	22	90.4	12.0

品質等級

DIN 7

系列 CSGH-Q7 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CSGH-Q7 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

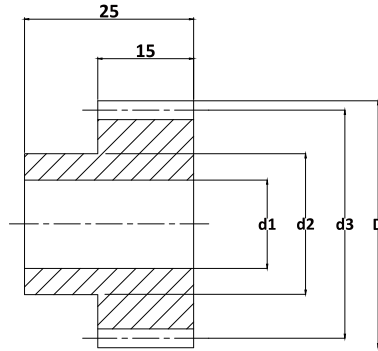
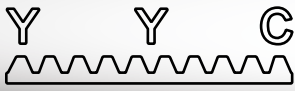


圖1/Fig1.

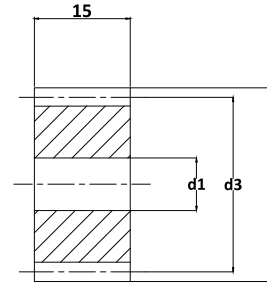


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d_{1H6}	d2	d3	D	w1	w2	k	h	KG
模數 1 Module 1												
CSM 010012 1	1	-Q8	12	6	9	12.0	14.0	*	*	*	*	0.1
CSM 010013 1	1	-Q8	13	6	9	13.0	15.0	*	*	*	*	0.1
CSM 010014 1	1	-Q8	14	6	11	14.0	16.0	*	*	*	*	0.1
CSM 010015 1	1	-Q8	15	6	12	15.0	17.0	*	*	*	*	0.1
CSM 010016 1	1	-Q8	16	6	12	16.0	18.0	*	*	*	*	0.1
CSM 010017 1	1	-Q8	17	6	14	17.0	19.0	*	*	*	*	0.1
CSM 010018 1	1	-Q8	18	6	15	18.0	20.0	*	*	*	*	0.1
CSM 010019 1	1	-Q8	19	6	15	19.0	21.0	*	*	*	*	0.1
CSM 010020 1	1	-Q8	20	6	16	20.0	22.0	*	*	*	*	0.1
CSM 010021 1	1	-Q8	21	6	16	21.0	23.0	*	*	*	*	0.1
CSM 010022 1	1	-Q8	22	6	18	22.0	24.0	*	*	*	*	0.1
CSM 010023 1	1	-Q8	23	6	18	23.0	25.0	*	*	*	*	0.1
CSM 010024 1	1	-Q8	24	9	20	24.0	26.0	*	*	*	*	0.1
CSM 010025 1	1	-Q8	25	9	20	25.0	27.0	*	*	*	*	0.1
CSM 010030 1	1	-Q8	30	9	20	30.0	32.0	*	*	*	*	0.1
CSM 010035 1	1	-Q8	35	9	25	35.0	37.0	*	*	*	*	0.2
CSM 010038 1	1	-Q8	38	9	25	38.0	40.0	*	*	*	*	0.2
CSM 010040 1	1	-Q8	40	9	25	40.0	42.0	*	*	*	*	0.2
CSM 010045 1	1	-Q8	45	9	30	45.0	47.0	*	*	*	*	0.3
CSM 010048 1	1	-Q8	48	9	30	48.0	50.0	*	*	*	*	0.3
CSM 010050 1	1	-Q8	50	9	30	50.0	52.0	*	*	*	*	0.3
CSM 010057 1	1	-Q8	57	9	40	57.0	59.0	*	*	*	*	0.4
CSM 010060 1	1	-Q8	60	9	40	60.0	62.0	*	*	*	*	0.4
CSM 010076 1	2	-Q8	76	10	*	76.0	78.0	*	*	*	*	0.6
CSM 010080 1	2	-Q8	80	10	*	80.0	82.0	*	*	*	*	0.6
CSM 010095 1	2	-Q8	95	10	*	95.0	97.0	*	*	*	*	0.9
CSM 010100 1	2	-Q8	100	10	*	100.0	102.0	*	*	*	*	1.0
CSM 010114 1	2	-Q8	114	10	*	114.0	116.0	*	*	*	*	1.2

品質等級
DIN 8

系列 CSM-Q8 直齒齒輪
材料 45C (中碳鋼)

Quality Grade
DIN 8

Series CSM-Q8 Straight Soft Pinions
Material 45C (Medium Carbon Steel)

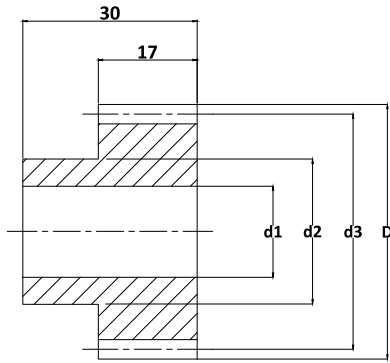
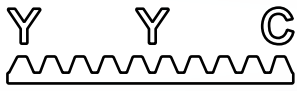


圖1/Fig1.

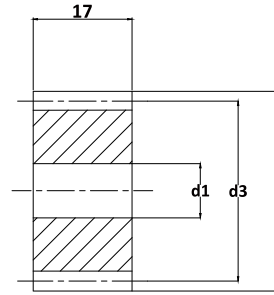


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 1.5 Module 1.5												
CSM 015 012 1	1	-Q8	12	6	14	18.0	21.0	*	*	*	*	0.1
CSM 015 013 1	1	-Q8	13	6	14	19.5	22.5	*	*	*	*	0.1
CSM 015 014 1	1	-Q8	14	6	16	21.0	24.0	*	*	*	*	0.1
CSM 015 015 1	1	-Q8	15	6	18	22.5	25.5	*	*	*	*	0.1
CSM 015 016 1	1	-Q8	16	6	18	24.0	27.0	*	*	*	*	0.1
CSM 015 017 1	1	-Q8	17	9	20	25.5	28.5	*	*	*	*	0.1
CSM 015 018 1	1	-Q8	18	9	20	27.0	30.0	*	*	*	*	0.1
CSM 015 019 1	1	-Q8	19	9	20	28.5	31.5	*	*	*	*	0.1
CSM 015 020 1	1	-Q8	20	9	25	30.0	33.0	*	*	*	*	0.1
CSM 015 021 1	1	-Q8	21	9	25	31.5	34.5	*	*	*	*	0.1
CSM 015 022 1	1	-Q8	22	9	25	33.0	36.0	*	*	*	*	0.1
CSM 015 023 1	1	-Q8	23	9	25	34.5	37.5	*	*	*	*	0.2
CSM 015 024 1	1	-Q8	24	9	25	36.0	39.0	*	*	*	*	0.2
CSM 015 025 1	1	-Q8	25	9	25	37.5	40.5	*	*	*	*	0.2
CSM 015 030 1	1	-Q8	30	9	30	45.0	48.0	*	*	*	*	0.2
CSM 015 035 1	1	-Q8	35	9	40	52.5	55.5	*	*	*	*	0.2
CSM 015 038 1	1	-Q8	38	9	40	57.0	60.0	*	*	*	*	0.4
CSM 015 040 1	1	-Q8	40	9	40	60.0	63.0	*	*	*	*	0.4
CSM 015 045 1	1	-Q8	45	12	50	67.5	70.5	*	*	*	*	0.6
CSM 015 048 1	1	-Q8	48	12	50	72.0	75.0	*	*	*	*	0.7
CSM 015 050 1	1	-Q8	50	12	50	75.0	78.0	*	*	*	*	0.8
CSM 015 057 1	1	-Q8	57	12	60	85.5	88.5	*	*	*	*	1.0
CSM 015 060 1	1	-Q8	60	12	60	90.0	93.0	*	*	*	*	1.2
CSM 015 076 1	2	-Q8	76	16	*	114.0	117.0	*	*	*	*	1.4
CSM 015 080 1	2	-Q8	80	16	*	120.0	123.0	*	*	*	*	1.5
CSM 015 095 1	2	-Q8	95	20	*	142.5	145.5	*	*	*	*	2.1

品質等級

DIN 8

系列 CSM-Q8 直齒齒輪

材料 45C (中碳鋼)

Quality Grade

DIN 8

Series CSM-Q8 Straight Soft Pinions

Material 45C (Medium Carbon Steel)

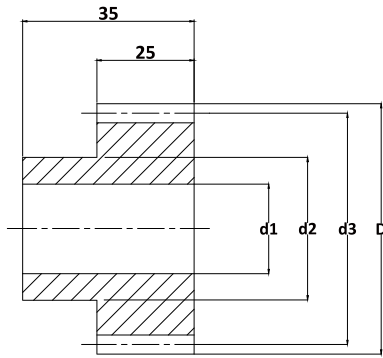
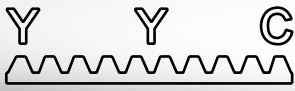


圖1/Fig1.

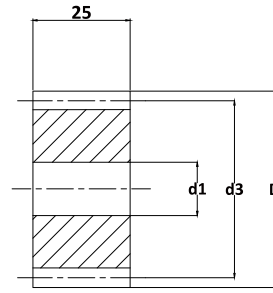


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CSM 020 012 1	1	-Q8	12	9	18	24.0	28.0	*	*	*	*	0.1
CSM 020 013 1	1	-Q8	13	9	19	26.0	30.0	*	*	*	*	0.1
CSM 020 014 1	1	-Q8	14	9	19	28.0	32.0	*	*	*	*	0.1
CSM 020 015 1	1	-Q8	15	9	24.5	30.0	34.0	*	*	*	*	0.2
CSM 020 016 1	1	-Q8	16	9	25	32.0	36.0	*	*	*	*	0.2
CSM 020 017 1	1	-Q8	17	9	25	34.0	38.0	*	*	*	*	0.2
CSM 020 018 1	1	-Q8	18	9	25	36.0	40.0	*	*	*	*	0.2
CSM 020 019 1	1	-Q8	19	9	25	38.0	42.0	*	*	*	*	0.2
CSM 020 020 1	1	-Q8	20	9	30	40.0	44.0	*	*	*	*	0.2
CSM 020 021 1	1	-Q8	21	9	30	42.0	46.0	*	*	*	*	0.3
CSM 020 022 1	1	-Q8	22	9	30	44.0	48.0	*	*	*	*	0.3
CSM 020 023 1	1	-Q8	23	9	30	46.0	50.0	*	*	*	*	0.3
CSM 020 024 1	1	-Q8	24	12	35	48.0	52.0	*	*	*	*	0.4
CSM 020 025 1	1	-Q8	25	12	35	50.0	54.0	*	*	*	*	0.4
CSM 020 028 1	1	-Q8	28	12	40	56.0	60.0	*	*	*	*	0.5
CSM 020 030 1	1	-Q8	30	12	40	60.0	64.0	*	*	*	*	0.5
CSM 020 032 1	1	-Q8	32	12	40	64.0	68.0	*	*	*	*	0.6
CSM 020 035 1	1	-Q8	35	12	50	70.0	74.0	*	*	*	*	0.7
CSM 020 036 1	1	-Q8	36	12	50	72.0	76.0	*	*	*	*	0.9
CSM 020 038 1	1	-Q8	38	12	50	76.0	80.0	*	*	*	*	1.0
CSM 020 040 1	1	-Q8	40	12	50	80.0	84.0	*	*	*	*	1.0
CSM 020 045 1	1	-Q8	45	12	60	90.0	94.0	*	*	*	*	1.3
CSM 020 048 1	1	-Q8	48	15	70	96.0	100.0	*	*	*	*	1.5
CSM 020 050 1	1	-Q8	50	15	70	100.0	104.0	*	*	*	*	1.6
CSM 020 056 1	1	-Q8	56	15	70	112.0	116.0	*	*	*	*	1.9
CSM 020 057 1	1	-Q8	57	15	70	114.0	118.0	*	*	*	*	2.0
CSM 020 060 1	1	-Q8	60	15	70	120.0	124.0	*	*	*	*	2.4
CSM 020 076 1	2	-Q8	76	20	*	152.0	156.0	*	*	*	*	2.8
CSM 020 080 1	2	-Q8	80	20	*	160.0	164.0	*	*	*	*	3.1
CSM 020 095 1	2	-Q8	95	20	*	190.0	194.0	*	*	*	*	4.4

品質等級

DIN 8

系列 CSM-Q8 直齒齒輪

材料 45C (中碳鋼)

Quality Grade

DIN 8

Series CSM-Q8 Straight Soft Pinions

Material 45C (Medium Carbon Steel)

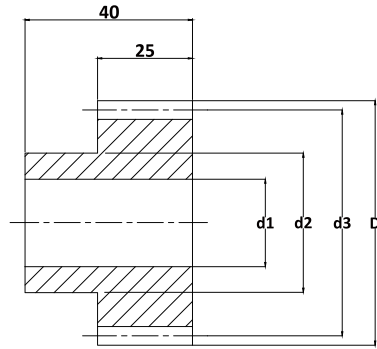
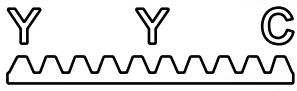


圖1/Fig1.

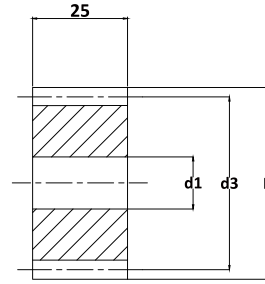


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2.5 Module 2.5												
CSM 025 012 1	1	-Q8	12	9	20	30.0	35.0	*	*	*	*	0.2
CSM 025 013 1	1	-Q8	13	9	20	32.5	37.5	*	*	*	*	0.2
CSM 025 014 1	1	-Q8	14	9	25	35.0	40.0	*	*	*	*	0.2
CSM 025 015 1	1	-Q8	15	9	25	37.5	42.5	*	*	*	*	0.3
CSM 025 016 1	1	-Q8	16	9	30	40.0	45.0	*	*	*	*	0.3
CSM 025 017 1	1	-Q8	17	9	30	42.5	47.5	*	*	*	*	0.4
CSM 025 018 1	1	-Q8	18	9	35	45.0	50.0	*	*	*	*	0.4
CSM 025 019 1	1	-Q8	19	12	35	47.5	52.5	*	*	*	*	0.4
CSM 025 020 1	1	-Q8	20	12	35	50.0	55.0	*	*	*	*	0.5
CSM 025 021 1	1	-Q8	21	12	35	52.5	57.5	*	*	*	*	0.5
CSM 025 022 1	1	-Q8	22	12	40	55.0	60.0	*	*	*	*	0.5
CSM 025 023 1	1	-Q8	23	12	40	57.5	62.5	*	*	*	*	0.6
CSM 025 024 1	1	-Q8	24	12	40	60.0	65.0	*	*	*	*	0.7
CSM 025 025 1	1	-Q8	25	12	45	62.5	67.5	*	*	*	*	0.8
CSM 025 030 1	1	-Q8	30	12	50	75.0	80.0	*	*	*	*	1.0
CSM 025 035 1	1	-Q8	35	12	60	87.5	92.5	*	*	*	*	1.5
CSM 025 038 1	1	-Q8	38	12	60	95.0	100.0	*	*	*	*	1.7
CSM 025 040 1	1	-Q8	40	12	70	100.0	105.0	*	*	*	*	1.8
CSM 025 045 1	1	-Q8	45	15	70	112.5	117.5	*	*	*	*	2.4
CSM 025 048 1	1	-Q8	48	15	80	120.0	125.0	*	*	*	*	2.8
CSM 025 050 1	1	-Q8	50	15	80	125.0	130.0	*	*	*	*	2.9
CSM 025 057 1	1	-Q8	57	15	90	142.5	147.5	*	*	*	*	3.7
CSM 025 060 1	1	-Q8	60	15	90	150.0	155.0	*	*	*	*	4.0
CSM 026 076 2	2	-Q8	76	20	*	190.0	195.0	*	*	*	*	
CSM 027 080 2	2	-Q8	80	25	*	200.0	205.0	*	*	*	*	6.1
CSM 028 095 2	2	-Q8	95	25	*	237.5	242.5	*	*	*	*	

品質等級

DIN 8

系列 CSM-Q8 直齒齒輪

材料 45C (中碳鋼)

Quality Grade

DIN 8

Series CSM-Q8 Straight Soft Pinions

Material 45C (Medium Carbon Steel)

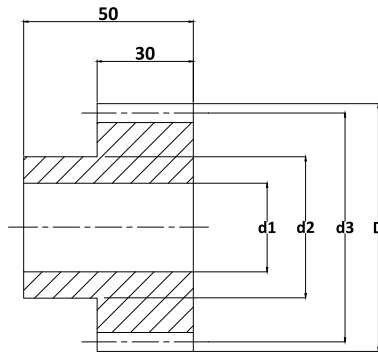
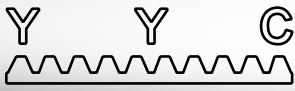


圖1/Fig1.

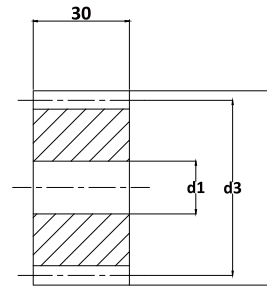


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	齒數 No. of Teeth	d_{1H6}	d2	d3	D	w1	w2	k	h	KG
模數 3 Module 3											
CSM030012 1	1	-Q8 12	14	25	36	42	*	*	*	*	0.3
CSM030013 1	1	-Q8 13	14	25	39	45	*	*	*	*	0.3
CSM030014 1	1	-Q8 14	14	25	42	48	*	*	*	*	0.3
CSM030015 1	1	-Q8 15	14	35	45	51	*	*	*	*	0.4
CSM030016 1	1	-Q8 16	14	35	48	54	*	*	*	*	0.5
CSM030017 1	1	-Q8 17	14	42	51	57	*	*	*	*	0.7
CSM030018 1	1	-Q8 18	14	45	54	60	*	*	*	*	0.7
CSM030019 1	1	-Q8 19	14	45	57	63	*	*	*	*	0.8
CSM030020 1	1	-Q8 20	14	45	60	66	*	*	*	*	0.8
CSM030021 1	1	-Q8 21	14	45	63	69	*	*	*	*	0.9
CSM030022 1	1	-Q8 22	14	50	66	72	*	*	*	*	1.1
CSM030023 1	1	-Q8 23	14	50	69	75	*	*	*	*	1.1
CSM030024 1	1	-Q8 24	14	50	72	78	*	*	*	*	1.2
CSM030025 1	1	-Q8 25	14	60	75	81	*	*	*	*	1.4
CSM030027 1	1	-Q8 27	14	60	81	87	*	*	*	*	1.6
CSM030028 1	1	-Q8 28	14	60	84	90	*	*	*	*	1.7
CSM030030 1	1	-Q8 30	14	60	90	96	*	*	*	*	1.8
CSM030032 1	1	-Q8 32	14	60	96	102	*	*	*	*	2.0
CSM030035 1	1	-Q8 35	14	80	105	111	*	*	*	*	2.7
CSM030036 1	1	-Q8 36	14	80	108	114	*	*	*	*	2.8
CSM030038 1	1	-Q8 38	14	80	114	120	*	*	*	*	3.0
CSM030040 1	1	-Q8 40	14	80	120	126	*	*	*	*	3.3
CSM030045 1	2	-Q8 45	20	*	135	141	*	*	*	*	3.3
CSM030048 1	2	-Q8 48	20	*	144	150	*	*	*	*	3.8
CSM030050 1	2	-Q8 50	25	*	150	156	*	*	*	*	4.1
CSM030052 1	2	-Q8 52	25	*	156	162	*	*	*	*	4.5
CSM030056 1	2	-Q8 56	25	*	168	174	*	*	*	*	5.3
CSM030060 1	2	-Q8 60	25	*	180	186	*	*	*	*	6.0
CSM030076 1	2	-Q8 76	25	*	228	234	*	*	*	*	9.6
CSM030080 1	2	-Q8 80	25	*	240	246	*	*	*	*	
CSM030095 1	2	-Q8 95	25	*	285	291	*	*	*	*	15.0

品質等級

DIN 8

系列 CSM-Q8 直齒齒輪

材料 45C (中碳鋼)

Quality Grade

DIN 8

Series CSM-Q8 Straight Soft Pinions

Material 45C (Medium Carbon Steel)

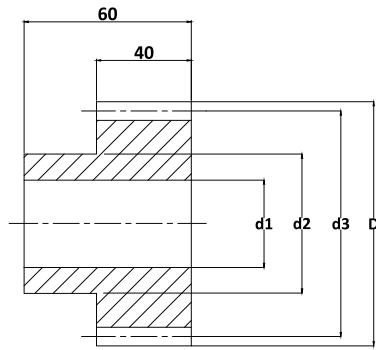
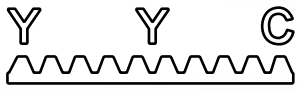


圖1/Fig1.

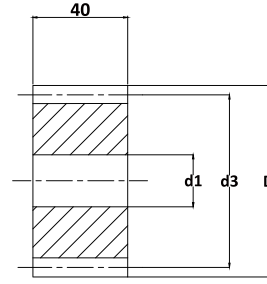


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 4 Module 4												
CSM040012 1	1	-Q8	12	16	35	48	56	*	*	*	*	0.6
CSM040013 1	1	-Q8	13	16	35	52	60	*	*	*	*	0.7
CSM040014 1	1	-Q8	14	16	45	56	64	*	*	*	*	0.9
CSM040015 1	1	-Q8	15	16	45	60	68	*	*	*	*	1.0
CSM040016 1	1	-Q8	16	16	45	64	72	*	*	*	*	1.1
CSM040017 1	1	-Q8	17	16	50	68	76	*	*	*	*	1.3
CSM040018 1	1	-Q8	18	16	50	72	80	*	*	*	*	1.4
CSM040019 1	1	-Q8	19	16	60	76	84	*	*	*	*	1.7
CSM040020 1	1	-Q8	20	16	60	80	88	*	*	*	*	1.8
CSM040021 1	1	-Q8	21	16	70	84	92	*	*	*	*	2.2
CSM040022 1	1	-Q8	22	16	70	88	96	*	*	*	*	2.5
CSM040023 1	1	-Q8	23	16	75	92	100	*	*	*	*	2.6
CSM040024 1	1	-Q8	24	16	75	96	104	*	*	*	*	2.7
CSM040025 1	1	-Q8	25	16	75	100	108	*	*	*	*	2.8
CSM040030 1	1	-Q8	30	16	75	120	128	*	*	*	*	2.9
CSM040038 1	2	-Q8	38	25	*	152	160	*	*	*	*	4.0
CSM040040 1	2	-Q8	40	25	*	160	168	*	*	*	*	5.7
CSM040045 1	2	-Q8	45	25	*	180	188	*	*	*	*	6.3
CSM040048 1	2	-Q8	48	25	*	192	200	*	*	*	*	
CSM040050 1	2	-Q8	50	25	*	200	208	*	*	*	*	9.8
CSM040052 1	2	-Q8	52	25		208	216	*	*	*	*	
CSM040056 1	2	-Q8	56	25	*	224	232	*	*	*	*	12.3
CSM040060 1	2	-Q8	60	25	*	240	248	*	*	*	*	14.2
CSM040076 1	2	-Q8	76	25		304	312	*	*	*	*	
CSM040080 1	2	-Q8	80	25	*	320	328	*	*	*	*	25.2
CSM040095 1	2	-Q8	95	25	*	380	388	*	*	*	*	35.6

品質等級

DIN 8

系列 CSM-Q8 直齒齒輪

材料 45C (中碳鋼)

Quality Grade

DIN 8

Series CSM-Q8 Straight Soft Pinions

Material 45C (Medium Carbon Steel)

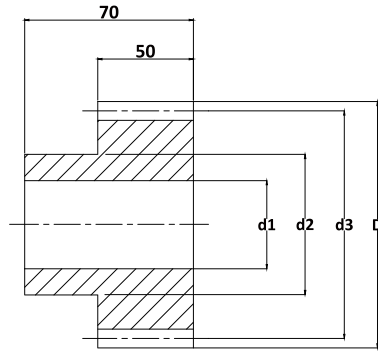
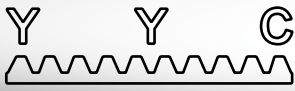


圖1/Fig1.

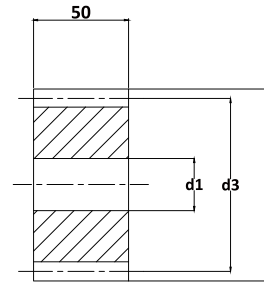


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 5 Module 5												
CSM 050 012 1	1	-Q8	12	20	45	60	70	*	*	*	*	1.2
CSM 050 013 1	1	-Q8	13	20	45	65	75	*	*	*	*	1.4
CSM 050 014 1	1	-Q8	14	20	55	70	80	*	*	*	*	1.8
CSM 050 015 1	1	-Q8	15	20	60	75	85	*	*	*	*	2.0
CSM 050 016 1	1	-Q8	16	20	60	80	90	*	*	*	*	2.1
CSM 050 017 1	1	-Q8	17	20	70	85	95	*	*	*	*	2.2
CSM 050 018 1	1	-Q8	18	20	70	90	100	*	*	*	*	2.6
CSM 050 019 1	1	-Q8	19	20	70	95	105	*	*	*	*	2.8
CSM 050 020 1	1	-Q8	20	20	70	100	110	*	*	*	*	3.1
CSM 050 021 1	1	-Q8	21	20	70	105	115	*	*	*	*	3.8
CSM 050 022 1	1	-Q8	22	20	80	110	120	*	*	*	*	4.3
CSM 050 023 1	1	-Q8	23	20	80	115	125	*	*	*	*	4.7
CSM 050 024 1	1	-Q8	24	20	80	120	130	*	*	*	*	5.0
CSM 050 025 1	1	-Q8	25	20	80	125	135	*	*	*	*	5.4
CSM 050 030 1	1	-Q8	30	20	90	150	160	*	*	*	*	7.7
CSM 050 036 1	2	-Q8	36	30	*	180	190	*	*	*	*	9.9
CSM 050 038 1	2	-Q8	38	30	*	190	200	*	*	*	*	
CSM 050 040 1	2	-Q8	40	30	*	200	210	*	*	*	*	12.3
CSM 050 045 1	2	-Q8	45	30	*	225	235	*	*	*	*	16.0
CSM 050 048 1	2	-Q8	48	30	*	240	250	*	*	*	*	
CSM 050 050 1	2	-Q8	50	30	*	250	260	*	*	*	*	19.2
CSM 050 052 1	2	-Q8	52	30	*	260	270	*	*	*	*	
CSM 050 056 1	2	-Q8	56	30	*	280	290	*	*	*	*	
CSM 050 060 1	2	-Q8	60	30	*	300	310	*	*	*	*	
CSM 050 076 1	2	-Q8	76	30	*	380	390	*	*	*	*	
CSM 050 080 1	2	-Q8	80	30	*	400	410	*	*	*	*	
CSM 050 095 1	2	-Q8	95	30	*	475	485	*	*	*	*	70.0

品質等級

DIN 8

系列 CSM-Q8 直齒齒輪

材料 45C (中碳鋼)

Quality Grade

DIN 8

Series CSM-Q8 Straight Soft Pinions

Material 45C (Medium Carbon Steel)

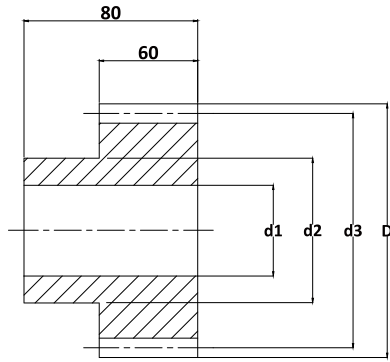


圖1/Fig1.

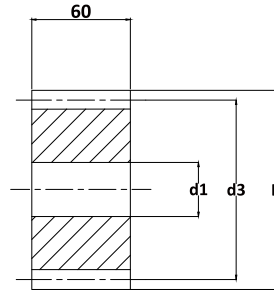


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 6 Module 6												
CSM 060 015 1	1	-Q8	15	20	60	90	102	*	*	*	*	3.2
CSM 060 019 1	1	-Q8	19	20	80	114	126	*	*	*	*	5.4
CSM 060 020 1	1	-Q8	20	20	90	120	132	*	*	*	*	6.0
CSM 060 021 1	1	-Q8	21	20	90	126	138	*	*	*	*	6.7
CSM 060 022 1	1	-Q8	22	20	100	132	144	*	*	*	*	7.4
CSM 060 025 1	1	-Q8	25	20	110	150	162	*	*	*	*	9.6
CSM 060 030 1	2	-Q8	30	30	*	180	192	*	*	*	*	11.9
CSM 060 036 1	2	-Q8	36	30	*	216	228	*	*	*	*	17.2

品質等級

DIN 8

系列 CSM-Q8 直齒齒輪

材料 45C (中碳鋼)

Quality Grade

DIN 8

Series CSM-Q8 Straight Soft Pinions

Material 45C (Medium Carbon Steel)

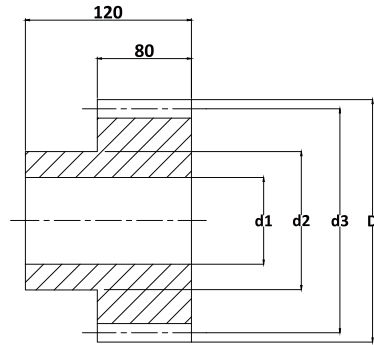
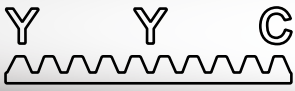


圖1/Fig1.

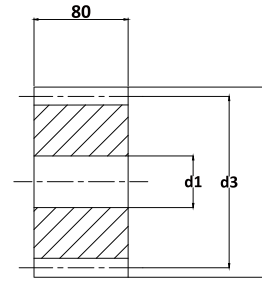


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d_{1H6}	d2	d3	D	w1	w2	k	h	KG
模數 8 Module 8												
CSM 080015 1	1	-Q8	15	40	90	120	136	*	*	*	*	7.7
CSM 080018 1	1	-Q8	18	40	100	144	160	*	*	*	*	9.9
CSM 080020 1	1	-Q8	20	40	120	160	176	*	*	*	*	14.8
CSM 080024 1	1	-Q8	24	40	150	192	208	*	*	*	*	22.0
CSM 080025 1	1	-Q8	25	40	150	200	216	*	*	*	*	23.8
CSM 080030 1	1	-Q8	30	40	190	240	256	*	*	*	*	32.0

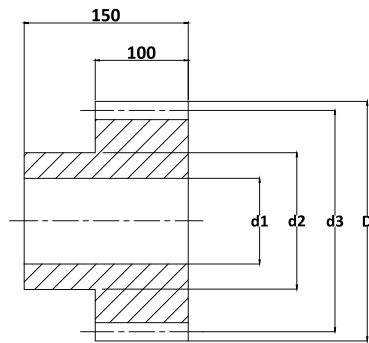


圖1/Fig1.

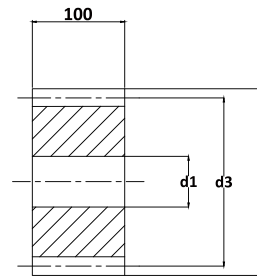


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d_{1H6}	d2	d3	D	w1	w2	k	h	KG
模數 10 Module 10												
CSM 100020 1	2	-Q8	20	40	150	200	220	*	*	*	*	35.0

品質等級

DIN 8

系列 CSM-Q8 直齒齒輪

材料 45C (中碳鋼)

Quality Grade

DIN 8

Series CSM-Q8 Straight Soft Pinions

Material 45C (Medium Carbon Steel)

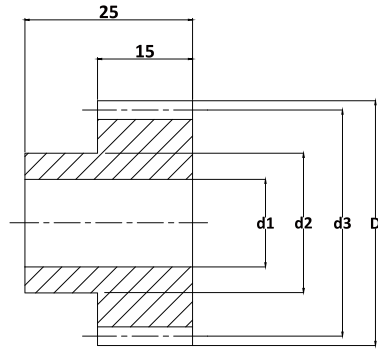


圖1/Fig1.

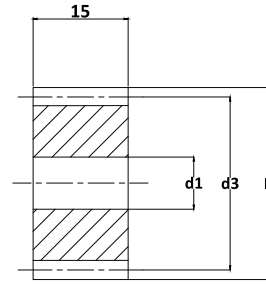


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 1 Module 1												
CSMH 010012 1	1	-Q10	12	6	9	12.0	14.0	*	*	*	*	0.1
CSMH 010013 1	1	-Q10	13	6	9	13.0	15.0	*	*	*	*	0.1
CSMH 010014 1	1	-Q10	14	6	11	14.0	16.0	*	*	*	*	0.1
CSMH 010015 1	1	-Q10	15	6	12	15.0	17.0	*	*	*	*	0.1
CSMH 010016 1	1	-Q10	16	6	12	16.0	18.0	*	*	*	*	0.1
CSMH 010017 1	1	-Q10	17	6	14	17.0	19.0	*	*	*	*	0.1
CSMH 010018 1	1	-Q10	18	6	15	18.0	20.0	*	*	*	*	0.1
CSMH 010019 1	1	-Q10	19	6	15	19.0	21.0	*	*	*	*	0.1
CSMH 010020 1	1	-Q10	20	6	16	20.0	22.0	*	*	*	*	0.1
CSMH 010021 1	1	-Q10	21	6	16	21.0	23.0	*	*	*	*	0.1
CSMH 010022 1	1	-Q10	22	6	18	22.0	24.0	*	*	*	*	0.1
CSMH 010023 1	1	-Q10	23	6	18	23.0	25.0	*	*	*	*	0.1
CSMH 010024 1	1	-Q10	24	9	20	24.0	26.0	*	*	*	*	0.1
CSMH 010025 1	1	-Q10	25	9	20	25.0	27.0	*	*	*	*	0.1
CSMH 010030 1	1	-Q10	30	9	20	30.0	32.0	*	*	*	*	0.1
CSMH 010035 1	1	-Q10	35	9	25	35.0	37.0	*	*	*	*	0.2
CSMH 010038 1	1	-Q10	38	9	25	38.0	40.0	*	*	*	*	0.2
CSMH 010040 1	1	-Q10	40	9	25	40.0	42.0	*	*	*	*	0.2
CSMH 010045 1	1	-Q10	45	9	30	45.0	47.0	*	*	*	*	0.3
CSMH 010048 1	1	-Q10	48	9	30	48.0	50.0	*	*	*	*	0.3
CSMH 010050 1	1	-Q10	50	9	30	50.0	52.0	*	*	*	*	0.3
CSMH 010057 1	1	-Q10	57	9	40	57.0	59.0	*	*	*	*	0.4
CSMH 010060 1	1	-Q10	60	9	40	60.0	62.0	*	*	*	*	0.4
CSMH 010076 1	2	-Q10	76	10	*	76.0	78.0	*	*	*	*	0.6
CSMH 010080 1	2	-Q10	80	10	*	80.0	82.0	*	*	*	*	0.6
CSMH 010095 1	2	-Q10	95	10	*	95.0	97.0	*	*	*	*	0.9
CSMH 010100 1	2	-Q10	100	10	*	100.0	102.0	*	*	*	*	1.0
CSMH 010114 1	2	-Q10	114	10	*	114.0	116.0	*	*	*	*	1.2

品質等級

DIN 10

系列 CSMH-Q10 直齒硬化齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CSMH-Q10 Straight Hardened Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

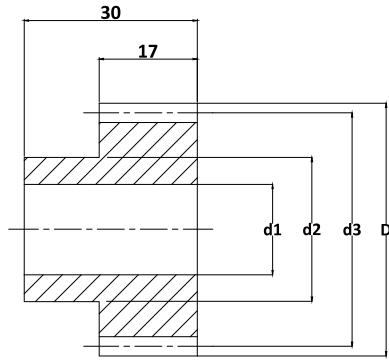
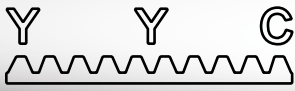


Fig1.

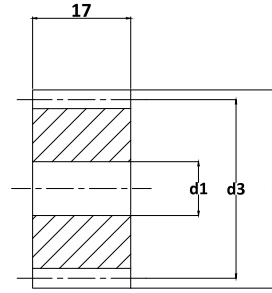


Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 1.5 Module 1.5												
CSMH015 012 1	1	-Q10	12	6	14	18.0	21.0	*	*	*	*	0.1
CSMH015 013 1	1	-Q10	13	6	14	19.5	22.5	*	*	*	*	0.1
CSMH015 014 1	1	-Q10	14	6	16	21.0	24.0	*	*	*	*	0.1
CSMH015 015 1	1	-Q10	15	6	18	22.5	25.5	*	*	*	*	0.1
CSMH015 016 1	1	-Q10	16	6	18	24.0	27.0	*	*	*	*	0.1
CSMH015 017 1	1	-Q10	17	9	20	25.5	28.5	*	*	*	*	0.1
CSMH015 018 1	1	-Q10	18	9	20	27.0	30.0	*	*	*	*	0.1
CSMH015 019 1	1	-Q10	19	9	20	28.5	31.5	*	*	*	*	0.1
CSMH015 020 1	1	-Q10	20	9	25	30.0	33.0	*	*	*	*	0.1
CSMH015 021 1	1	-Q10	21	9	25	31.5	34.5	*	*	*	*	0.1
CSMH015 022 1	1	-Q10	22	9	25	33.0	36.0	*	*	*	*	0.1
CSMH015 023 1	1	-Q10	23	9	25	34.5	37.5	*	*	*	*	0.2
CSMH015 024 1	1	-Q10	24	9	25	36.0	39.0	*	*	*	*	0.2
CSMH015 025 1	1	-Q10	25	9	25	37.5	40.5	*	*	*	*	0.2
CSMH015 030 1	1	-Q10	30	9	30	45.0	48.0	*	*	*	*	0.2
CSMH015 035 1	1	-Q10	35	9	40	52.5	55.5	*	*	*	*	0.2
CSMH015 038 1	1	-Q10	38	9	40	57.0	60.0	*	*	*	*	0.4
CSMH015 040 1	1	-Q10	40	9	40	60.0	63.0	*	*	*	*	0.4
CSMH015 045 1	1	-Q10	45	12	50	67.5	70.5	*	*	*	*	0.6
CSMH015 048 1	1	-Q10	48	12	50	72.0	75.0	*	*	*	*	0.7
CSMH015 050 1	1	-Q10	50	12	50	75.0	78.0	*	*	*	*	0.8
CSMH015 057 1	1	-Q10	57	12	60	85.5	88.5	*	*	*	*	1.0
CSMH015 060 1	1	-Q10	60	12	60	90.0	93.0	*	*	*	*	1.2
CSMH015 076 1	2	-Q10	76	16	*	114.0	117.0	*	*	*	*	1.4
CSMH015 080 1	2	-Q10	80	16	*	120.0	123.0	*	*	*	*	1.5
CSMH015 095 1	2	-Q10	95	20	*	142.5	145.5	*	*	*	*	2.1

品質等級

DIN 10

系列 CSMH-Q10 直齒硬化齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CSMH-Q10 Straight Hardened Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

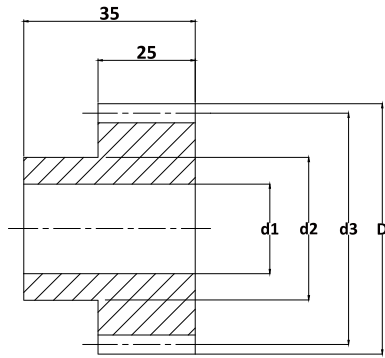
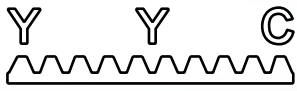


圖1/Fig1.

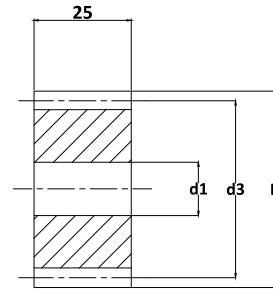


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d_{1H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CSMH 020012 1	1	-Q10	12	9	18	24.0	28.0	*	*	*	*	0.1
CSMH 020013 1	1	-Q10	13	9	19	26.0	30.0	*	*	*	*	0.1
CSMH 020014 1	1	-Q10	14	9	19	28.0	32.0	*	*	*	*	0.1
CSMH 020015 1	1	-Q10	15	9	24.5	30.0	34.0	*	*	*	*	0.2
CSMH 020016 1	1	-Q10	16	9	25	32.0	36.0	*	*	*	*	0.2
CSMH 020017 1	1	-Q10	17	9	25	34.0	38.0	*	*	*	*	0.2
CSMH 020018 1	1	-Q10	18	9	25	36.0	40.0	*	*	*	*	0.2
CSMH 020019 1	1	-Q10	19	9	25	38.0	42.0	*	*	*	*	0.2
CSMH 020020 1	1	-Q10	20	9	30	40.0	44.0	*	*	*	*	0.2
CSMH 020021 1	1	-Q10	21	9	30	42.0	46.0	*	*	*	*	0.3
CSMH 020022 1	1	-Q10	22	9	30	44.0	48.0	*	*	*	*	0.3
CSMH 020023 1	1	-Q10	23	9	30	46.0	50.0	*	*	*	*	0.3
CSMH 020024 1	1	-Q10	24	12	35	48.0	52.0	*	*	*	*	0.4
CSMH 020025 1	1	-Q10	25	12	35	50.0	54.0	*	*	*	*	0.4
CSMH 020028 1	1	-Q10	28	12	40	56.0	60.0	*	*	*	*	0.5
CSMH 020030 1	1	-Q10	30	12	40	60.0	64.0	*	*	*	*	0.5
CSMH 020032 1	1	-Q10	32	12	40	64.0	68.0	*	*	*	*	0.6
CSMH 020035 1	1	-Q10	35	12	50	70.0	74.0	*	*	*	*	0.7
CSMH 020036 1	1	-Q10	36	12	50	72.0	76.0	*	*	*	*	0.9
CSMH 020038 1	1	-Q10	38	12	50	76.0	80.0	*	*	*	*	1.0
CSMH 020040 1	1	-Q10	40	12	50	80.0	84.0	*	*	*	*	1.0
CSMH 020045 1	1	-Q10	45	12	60	90.0	94.0	*	*	*	*	1.3
CSMH 020048 1	1	-Q10	48	15	70	96.0	100.0	*	*	*	*	1.5
CSMH 020050 1	1	-Q10	50	15	70	100.0	104.0	*	*	*	*	1.6
CSMH 020056 1	1	-Q10	56	15	70	112.0	116.0	*	*	*	*	1.9
CSMH 020057 1	1	-Q10	57	15	70	114.0	118.0	*	*	*	*	2.0
CSMH 020060 1	1	-Q10	60	15	70	120.0	124.0	*	*	*	*	2.4
CSMH 020076 1	2	-Q10	76	20	*	152.0	156.0	*	*	*	*	2.8
CSMH 020080 1	2	-Q10	80	20	*	160.0	164.0	*	*	*	*	3.1
CSMH 020095 1	2	-Q10	95	20	*	190.0	194.0	*	*	*	*	4.4

品質等級

DIN 10

系列 CSMH-Q10 直齒硬化齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CSMH-Q10 Straight Hardened Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

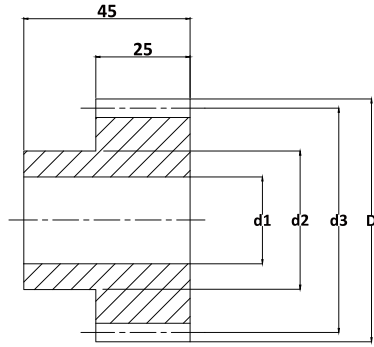
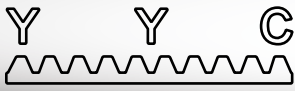


圖1/Fig1.

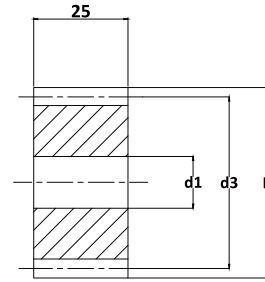


圖2/Fig2.

單位 / Dimension : mm

齒輪 Pinions

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2.5 Module 2.5												
CSMH 025 012 1	1	-Q10	12	9	20	30.0	35.0	*	*	*	*	0.2
CSMH 025 013 1	1	-Q10	13	9	20	32.5	37.5	*	*	*	*	0.2
CSMH 025 014 1	1	-Q10	14	9	25	35.0	40.0	*	*	*	*	0.2
CSMH 025 015 1	1	-Q10	15	9	25	37.5	42.5	*	*	*	*	0.3
CSMH 025 016 1	1	-Q10	16	9	30	40.0	45.0	*	*	*	*	0.3
CSMH 025 017 1	1	-Q10	17	9	30	42.5	47.5	*	*	*	*	0.4
CSMH 025 018 1	1	-Q10	18	9	35	45.0	50.0	*	*	*	*	0.4
CSMH 025 019 1	1	-Q10	19	12	35	47.5	52.5	*	*	*	*	0.4
CSMH 025 020 1	1	-Q10	20	12	35	50.0	55.0	*	*	*	*	0.5
CSMH 025 021 1	1	-Q10	21	12	35	52.5	57.5	*	*	*	*	0.5
CSMH 025 022 1	1	-Q10	22	12	40	55.0	60.0	*	*	*	*	0.5
CSMH 025 023 1	1	-Q10	23	12	40	57.5	62.5	*	*	*	*	0.6
CSMH 025 024 1	1	-Q10	24	12	40	60.0	65.0	*	*	*	*	0.7
CSMH 025 025 1	1	-Q10	25	12	45	62.5	67.5	*	*	*	*	0.8
CSMH 025 030 1	1	-Q10	30	12	50	75.0	80.0	*	*	*	*	1.0
CSMH 025 035 1	1	-Q10	35	12	60	87.5	92.5	*	*	*	*	1.5
CSMH 025 038 1	1	-Q10	38	12	60	95.0	100.0	*	*	*	*	1.7
CSMH 025 040 1	1	-Q10	40	12	70	100.0	105.0	*	*	*	*	1.8
CSMH 025 045 1	1	-Q10	45	15	70	112.5	117.5	*	*	*	*	2.4
CSMH 025 048 1	1	-Q10	48	15	80	120.0	125.0	*	*	*	*	2.8
CSMH 025 050 1	1	-Q10	50	15	80	125.0	130.0	*	*	*	*	2.9
CSMH 025 057 1	1	-Q10	57	15	90	142.5	147.5	*	*	*	*	3.7
CSMH 025 060 1	1	-Q10	60	15	90	150.0	155.0	*	*	*	*	4.0
CSMH 026 076 2	1	-Q10	76	20	*	190.0	195.0	*	*	*	*	
CSMH 027 080 2	1	-Q10	80	25	*	200.0	205.0	*	*	*	*	6.1
CSMH 028 095 2	1	-Q10	95	25	*	237.5	242.5	*	*	*	*	

品質等級

DIN 10

系列 CSMH-Q10 直齒硬化齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CSMH-Q10 Straight Hardened Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

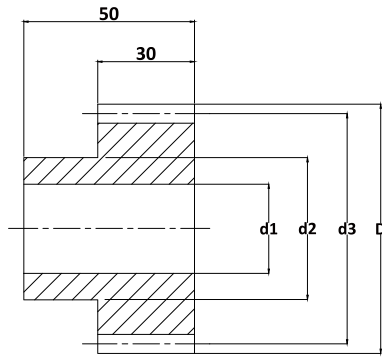
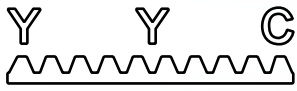


圖1/Fig1.

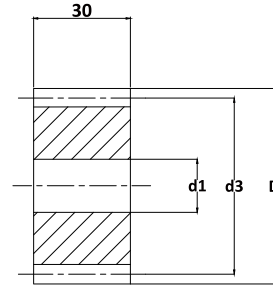


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 3 Module 3											
CSMH030012 1	1	-Q10	12	14	25	36	42	*	*	*	0.3
CSMH030013 1	1	-Q10	13	14	25	39	45	*	*	*	0.3
CSMH030014 1	1	-Q10	14	14	25	42	48	*	*	*	0.3
CSMH030015 1	1	-Q10	15	14	35	45	51	*	*	*	0.4
CSMH030016 1	1	-Q10	16	14	35	48	54	*	*	*	0.5
CSMH030017 1	1	-Q10	17	14	42	51	57	*	*	*	0.7
CSMH030018 1	1	-Q10	18	14	45	54	60	*	*	*	0.7
CSMH030019 1	1	-Q10	19	14	45	57	63	*	*	*	0.8
CSMH030020 1	1	-Q10	20	14	45	60	66	*	*	*	0.8
CSMH030021 1	1	-Q10	21	14	45	63	69	*	*	*	0.9
CSMH030022 1	1	-Q10	22	14	50	66	72	*	*	*	1.1
CSMH030023 1	1	-Q10	23	14	50	69	75	*	*	*	1.1
CSMH030024 1	1	-Q10	24	14	50	72	78	*	*	*	1.2
CSMH030025 1	1	-Q10	25	14	60	75	81	*	*	*	1.4
CSMH030027 1	1	-Q10	27	14	60	81	87	*	*	*	1.6
CSMH030028 1	1	-Q10	28	14	60	84	90	*	*	*	1.7
CSMH030030 1	1	-Q10	30	14	60	90	96	*	*	*	1.8
CSMH030032 1	1	-Q10	32	14	60	96	102	*	*	*	2.0
CSMH030035 1	1	-Q10	35	14	80	105	111	*	*	*	2.7
CSMH030036 1	1	-Q10	36	14	80	108	114	*	*	*	2.8
CSMH030038 1	1	-Q10	38	14	80	114	120	*	*	*	3.0
CSMH030040 1	1	-Q10	40	14	80	120	126	*	*	*	3.3
CSMH030045 1	2	-Q10	45	20	*	135	141	*	*	*	3.3
CSMH030048 1	2	-Q10	48	20	*	144	150	*	*	*	3.8
CSMH030050 1	2	-Q10	50	25	*	150	156	*	*	*	4.1
CSMH030052 1	2	-Q10	52	25	*	156	162	*	*	*	4.5
CSMH030056 1	2	-Q10	56	25	*	168	174	*	*	*	5.3
CSMH030060 1	2	-Q10	60	25	*	180	186	*	*	*	6.0
CSMH030076 1	2	-Q10	76	25	*	228	234	*	*	*	9.6
CSMH030080 1	2	-Q10	80	25	*	240	246	*	*	*	
CSMH030095 1	2	-Q10	95	25	*	285	291	*	*	*	15.0

品質等級

DIN 10

系列 CSMH-Q10 直齒齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CSMH-Q10 Straight Hardened Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

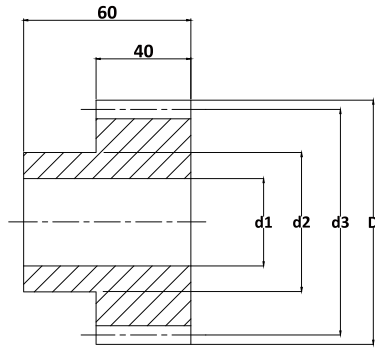
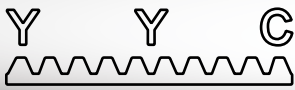


圖1/Fig1.

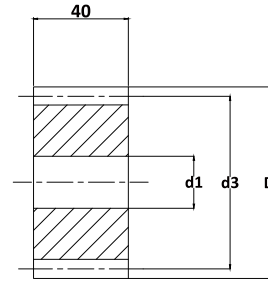


圖2/Fig2.

單位 / Dimension : mm

齒輪 Pinions

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 4 Module 4												
CSMH 040 012 1	1	-Q10	12	16	35	48	56	*	*	*	*	0.6
CSMH 040 013 1	1	-Q10	13	16	35	52	60	*	*	*	*	0.7
CSMH 040 014 1	1	-Q10	14	16	45	56	64	*	*	*	*	0.9
CSMH 040 015 1	1	-Q10	15	16	45	60	68	*	*	*	*	1.0
CSMH 040 016 1	1	-Q10	16	16	45	64	72	*	*	*	*	1.1
CSMH 040 017 1	1	-Q10	17	16	50	68	76	*	*	*	*	1.3
CSMH 040 018 1	1	-Q10	18	16	50	72	80	*	*	*	*	1.4
CSMH 040 019 1	1	-Q10	19	16	60	76	84	*	*	*	*	1.7
CSMH 040 020 1	1	-Q10	20	16	60	80	88	*	*	*	*	1.8
CSMH 040 021 1	1	-Q10	21	16	70	84	92	*	*	*	*	2.2
CSMH 040 022 1	1	-Q10	22	16	70	88	96	*	*	*	*	2.5
CSMH 040 023 1	1	-Q10	23	16	75	92	100	*	*	*	*	2.6
CSMH 040 024 1	1	-Q10	24	16	75	96	104	*	*	*	*	2.7
CSMH 040 025 1	1	-Q10	25	16	75	100	108	*	*	*	*	2.8
CSMH 040 030 1	1	-Q10	30	16	75	120	128	*	*	*	*	2.9
CSMH 040 038 1	2	-Q10	38	25	*	152	160	*	*	*	*	4.0
CSMH 040 040 1	2	-Q10	40	25	*	160	168	*	*	*	*	5.7
CSMH 040 045 1	2	-Q10	45	25	*	180	188	*	*	*	*	6.3
CSMH 040 048 1	2	-Q10	48	25	*	192	200	*	*	*	*	
CSMH 040 050 1	2	-Q10	50	25	*	200	208	*	*	*	*	9.8
CSMH 040 052 1	2	-Q10	52	25		208	216	*	*	*	*	
CSMH 040 056 1	2	-Q10	56	25	*	224	232	*	*	*	*	12.3
CSMH 040 060 1	2	-Q10	60	25	*	240	248	*	*	*	*	14.2
CSMH 040 076 1	2	-Q10	76	25		304	312	*	*	*	*	
CSMH 040 080 1	2	-Q10	80	25	*	320	328	*	*	*	*	25.2
CSMH 040 095 1	2	-Q10	95	25	*	380	388	*	*	*	*	35.6

品質等級

DIN 10

系列 CSMH-Q10 直齒硬化齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CSMH-Q10 Straight Hardened Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

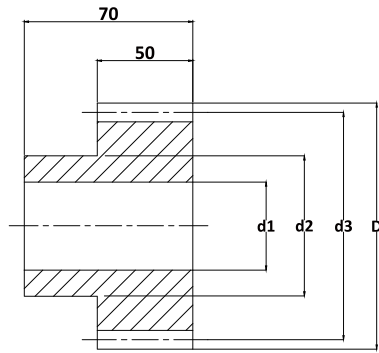
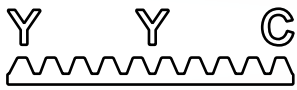


圖1/Fig1.

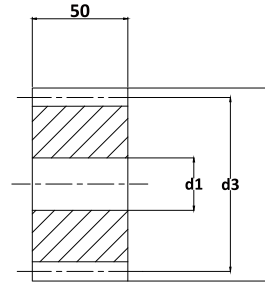


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG	
模數 5 Module 5												
CSMH 050012 1	1	-Q10	12	20	45	60	70	*	*	*	*	1.2
CSMH 050013 1	1	-Q10	13	20	45	65	75	*	*	*	*	1.4
CSMH 050014 1	1	-Q10	14	20	55	70	80	*	*	*	*	1.8
CSMH 050015 1	1	-Q10	15	20	60	75	85	*	*	*	*	2.0
CSMH 050016 1	1	-Q10	16	20	60	80	90	*	*	*	*	2.1
CSMH 050017 1	1	-Q10	17	20	70	85	95	*	*	*	*	2.2
CSMH 050018 1	1	-Q10	18	20	70	90	100	*	*	*	*	2.6
CSMH 050019 1	1	-Q10	19	20	70	95	105	*	*	*	*	2.8
CSMH 050020 1	1	-Q10	20	20	70	100	110	*	*	*	*	3.1
CSMH 050021 1	1	-Q10	21	20	70	105	115	*	*	*	*	3.8
CSMH 050022 1	1	-Q10	22	20	80	110	120	*	*	*	*	4.3
CSMH 050023 1	1	-Q10	23	20	80	115	125	*	*	*	*	4.7
CSMH 050024 1	1	-Q10	24	20	80	120	130	*	*	*	*	5.0
CSMH 050025 1	1	-Q10	25	20	80	125	135	*	*	*	*	5.4
CSMH 050030 1	1	-Q10	30	20	90	150	160	*	*	*	*	7.7
CSMH 050036 1	2	-Q10	36	30	*	180	190	*	*	*	*	9.9
CSMH 050038 1	2	-Q10	38	30	*	190	200	*	*	*	*	
CSMH 050040 1	2	-Q10	40	30	*	200	210	*	*	*	*	12.3
CSMH 050045 1	2	-Q10	45	30	*	225	235	*	*	*	*	16.0
CSMH 050048 1	2	-Q10	48	30	*	240	250	*	*	*	*	
CSMH 050050 1	2	-Q10	50	30	*	250	260	*	*	*	*	19.2
CSMH 050052 1	2	-Q10	52	30	*	260	270	*	*	*	*	
CSMH 050056 1	2	-Q10	56	30	*	280	290	*	*	*	*	
CSMH 050060 1	2	-Q10	60	30	*	300	310	*	*	*	*	
CSMH 050076 1	2	-Q10	76	30	*	380	390	*	*	*	*	
CSMH 050080 1	2	-Q10	80	30	*	400	410	*	*	*	*	
CSMH 050095 1	2	-Q10	95	30	*	475	485	*	*	*	*	70.0

品質等級
DIN 10

系列 CSMH-Q10 直齒齒輪
材料 45C (中碳鋼)
硬度 HRC 50~55°

Quality Grade
DIN 10

Series CSMH-Q10 Straight Hardened Steel Pinions
Material 45C (Medium Carbon Steel)
Hardness: HRC 50~55°

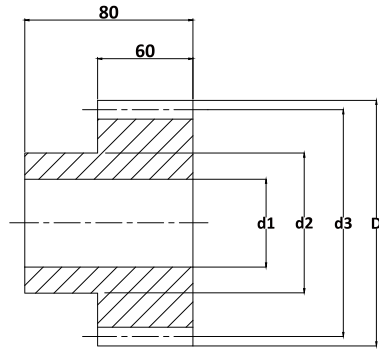
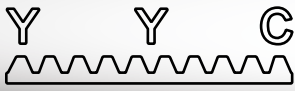


圖1/Fig1.

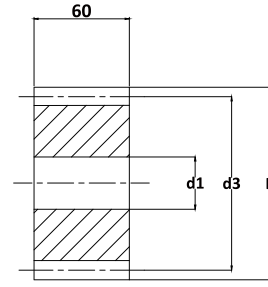


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 6 Module 6												
CSMH 060 015 1	1	-Q10	15	20	60	90	102	*	*	*	*	3.2
CSMH 060 019 1	1	-Q10	19	20	80	114	126	*	*	*	*	5.4
CSMH 060 020 1	1	-Q10	20	20	90	120	132	*	*	*	*	6.0
CSMH 060 021 1	1	-Q10	21	20	90	126	138	*	*	*	*	6.7
CSMH 060 022 1	1	-Q10	22	20	100	132	144	*	*	*	*	7.4
CSMH 060 025 1	1	-Q10	25	20	110	150	162	*	*	*	*	9.6
CSMH 060 030 1	2	-Q10	30	30	*	180	192	*	*	*	*	11.9
CSMH 060 036 1	2	-Q10	36	30	*	216	228	*	*	*	*	17.2

品質等級

DIN 10

系列 CSMH-Q10 直齒齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CSMH-Q10 Straight Hardened Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

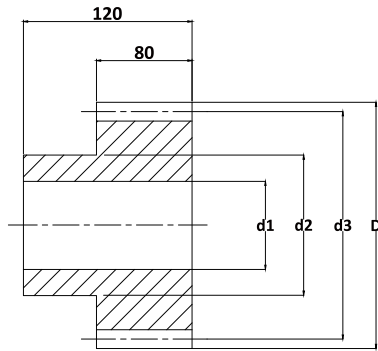
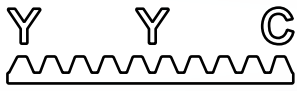


圖1/Fig1.

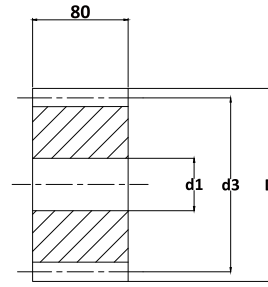


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 8 Module 8												
CSMH 080 015 1	1	-Q10	15	40	90	120	136	*	*	*	*	7.7
CSMH 080 018 1	1	-Q10	18	40	100	144	160	*	*	*	*	9.9
CSMH 080 020 1	1	-Q10	20	40	120	160	176	*	*	*	*	14.8
CSMH 080 024 1	1	-Q10	24	40	150	192	208	*	*	*	*	22.0
CSMH 080 025 1	1	-Q10	25	40	150	200	216	*	*	*	*	23.8
CSMH 080 030 1	1	-Q10	30	40	190	240	256	*	*	*	*	32.0

齒輪 Pinions

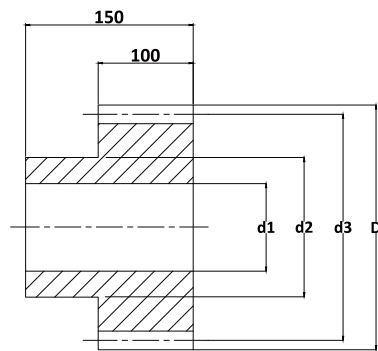


圖1/Fig1.

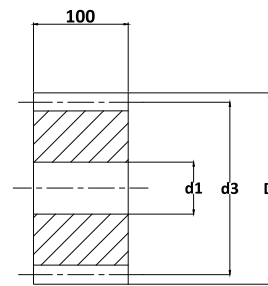


圖2/Fig2.

單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 10 Module 10												
CSMH 100 020 1	2	-Q10	20	40	150	200	220	*	*	*	*	35.0

品質等級

DIN 10

系列 CSMH-Q10 直齒齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CSMH-Q10 Straight Hardened Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

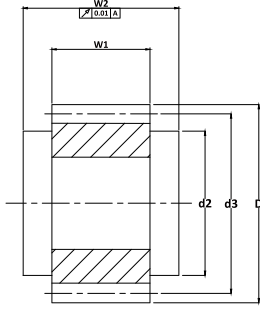
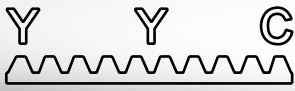


圖1/Fig1.

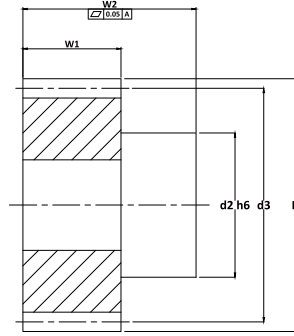
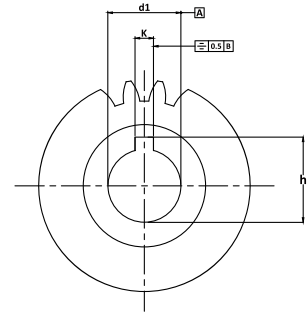


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 1.5 Module 1.5												
CHGH 015 20 1	1	-Q6	20	11	25	31.83	34.83	20	22	4	12.8	0.1
CHGH 015 20 2	1	-Q6	20	14	25	31.83	34.83	20	22	5	16.3	0.1
CHGH 015 20 3	1	-Q6	20	16	25	31.83	34.83	20	22	5	18.3	0.1
CHGH 015 21 1	2	-Q6	21	16	30	33.42	36.42	20	46	5	18.3	0.2
模數 2 Module 2												
CHGH 020 18 1	1	-Q6	18	16	25	38.197	42.2	28	30	5	18.3	0.2
CHGH 020 20 1	1	-Q6	20	19	30	42.44	46.4	28	30	6	21.8	0.2
CHGH 020 20 2	2	-Q6	20	19	30	42.44	46.4	28	56	6	21.8	0.2
CHGH 020 20 3	1	-Q6	20	20	30	42.44	46.4	28	30	6	22.8	0.2
CHGH 020 20 4	2	-Q6	20	22	36	42.44	46.4	28	56	6	24.8	0.2
CHGH 020 20 5	1	-Q6	20	22	30	42.44	46.4	28	30	6	24.8	0.2
CHGH 020 21 1	1	-Q6	21	16	25	44.56	48.6	28	30	5	18.3	0.3
CHGH 020 21 2	2	-Q6	21	22	36	44.56	48.6	28	56	6	24.8	0.3
CHGH 020 22 1	1	-Q6	22	19	30	46.69	50.7	28	30	6	21.8	0.3
CHGH 020 22 2	2	-Q6	22	19	30	46.69	50.7	28	56	6	21.8	0.3
CHGH 020 22 3	1	-Q6	22	22	30	46.69	50.7	28	30	6	24.8	0.3
CHGH 020 22 4	2	-Q6	22	22	36	46.69	50.7	28	56	6	24.8	0.3
CHGH 020 25 1	1	-Q6	25	19	30	53.05	57.1	28	30	6	21.8	0.4
CHGH 020 25 2	2	-Q6	25	19	30	53.05	57.1	28	56	6	21.8	0.4
CHGH 020 25 3	1	-Q6	25	20	30	53.05	57.1	28	30	6	22.8	0.4
CHGH 020 25 4	1	-Q6	25	22	30	53.05	57.1	28	30	6	24.8	0.4
CHGH 020 25 5	2	-Q6	25	22	36	53.05	57.1	28	56	6	24.8	0.4
CHGH 020 25 6	1	-Q6	25	25	36	53.05	57.1	28	30	6	27.8	0.4

品質等級

DIN 6

系列 CHGH-Q6 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CHGH-Q6 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

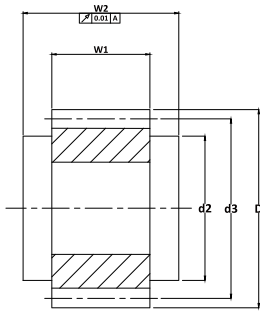
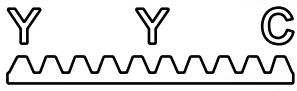


圖1/Fig1.

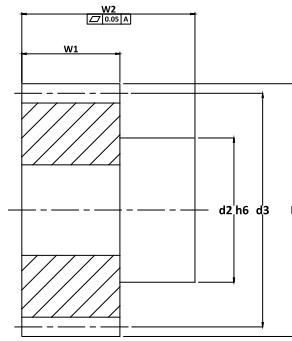
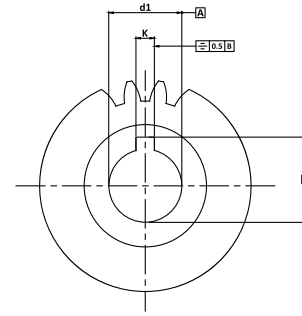


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CHGH 020 28 1	1	-Q6	28	19	30	59.42	63.4	28	30	6	21.8	0.4
CHGH 020 28 2	2	-Q6	28	19	30	59.42	63.4	28	56	6	21.8	0.4
CHGH 020 28 3	1	-Q6	28	22	30	59.42	63.4	28	30	6	24.8	0.4
CHGH 020 28 4	2	-Q6	28	22	36	59.42	63.4	28	56	6	24.8	0.4
CHGH 020 28 5	1	-Q6	28	35	48	59.42	63.4	28	30	10	38.3	0.4
CHGH 020 30 1	1	-Q6	30	16	25	63.66	67.7	28	30	5	18.3	0.7
CHGH 020 30 2	1	-Q6	30	20	30	63.66	67.7	28	30	6	22.8	0.7
CHGH 020 30 3	2	-Q6	30	22	36	63.66	67.7	28	56	6	24.8	0.7
CHGH 020 30 4	1	-Q6	30	25	36	63.66	67.7	28	30	8	28.3	0.7
CHGH 020 30 5	1	-Q6	30	30	45	63.66	67.7	28	30	8	33.3	0.7
CHGH 020 30 6	2	-Q6	30	30	50	63.66	67.7	28	60	8	33.3	0.7
CHGH 020 30 7	2	-Q6	30	32	55	63.66	67.7	28	65	10	35.3	0.7
CHGH 020 32 1	1	-Q6	32	20	30	67.91	71.9	28	30	6	22.8	0.7
CHGH 020 32 2	1	-Q6	32	22	30	67.91	71.9	28	30	6	24.8	0.7
CHGH 020 32 3	2	-Q6	32	22	36	67.91	71.9	28	56	6	27.8	0.7
CHGH 020 32 4	1	-Q6	32	25	36	67.91	71.9	28	30	8	28.3	0.7
CHGH 020 32 5	1	-Q6	32	35	48	67.91	71.9	28	30	10	38.3	0.7
CHGH 020 36 1	1	-Q6	36	35	48	76.39	80.4	28	30	10	38.3	0.8
CHGH 020 39 1	2	-Q6	39	32	55	82.76	86.8	28	65	10	35.3	1.4
CHGH 020 40 1	1	-Q6	40	35	48	84.88	88.9	28	30	10	38.3	1.2

品質等級

DIN 6

系列 CHGH-Q6 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CHGH-Q6 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

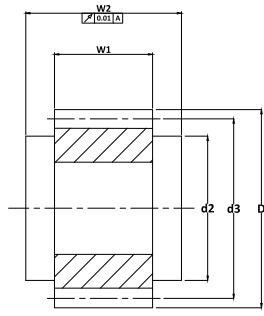
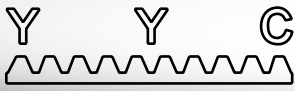


圖1/Fig1.

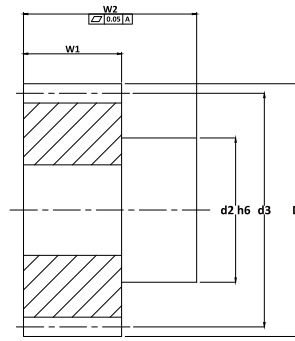
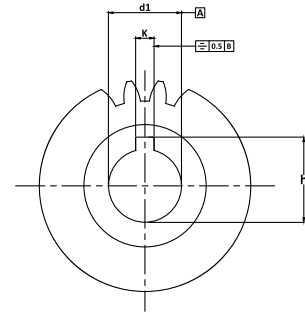


圖2/Fig2.



單位 / Dimension : mm

齒輪 Pinions

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 3 Module 3												
CHGH 030 20 1	2	-Q6	20	22	36	63.66	69.7	28	56	6	24.8	0.7
CHGH 030 20 2	2	-Q6	20	25	44	63.66	69.7	28	60	8	28.3	0.7
CHGH 030 20 3	1	-Q6	20	30	45	63.66	69.7	28	30	8	33.3	0.7
CHGH 030 20 4	2	-Q6	20	30	50	63.66	69.7	28	60	8	33.3	0.7
CHGH 030 20 5	2	-Q6	20	32	55	63.66	69.7	28	65	10	35.3	0.7
CHGH 030 20 6	1	-Q6	20	35	48	63.66	69.7	28	30	10	38.3	0.7
CHGH 030 22 1	1	-Q6	22	25	36	70.03	76.0	28	30	8	28.3	0.8
CHGH 030 22 2	1	-Q6	22	30	45	70.03	76.0	28	30	8	33.3	0.8
CHGH 030 22 3	2	-Q6	22	32	55	70.03	76.0	28	65	10	35.3	0.9
CHGH 030 22 4	1	-Q6	22	35	48	70.03	76.0	28	30	10	38.3	0.8
CHGH 030 22 5	2	-Q6	22	40	62	70.03	76.0	28	65	12	43.3	0.9
CHGH 030 25 1	2	-Q6	25	22	36	79.58	85.6	28	56	6	24.8	1.1
CHGH 030 25 2	1	-Q6	25	25	36	79.58	85.6	28	30	8	28.3	1.1
CHGH 030 25 3	2	-Q6	25	25	44	79.58	85.6	28	60	8	28.3	1.1
CHGH 030 25 4	1	-Q6	25	30	45	79.58	85.6	28	30	8	33.3	1.1
CHGH 030 25 5	2	-Q6	25	30	50	79.58	85.6	28	60	8	33.3	1.1
CHGH 030 25 6	2	-Q6	25	32	55	79.58	85.6	28	65	10	35.3	1.1
CHGH 030 25 7	1	-Q6	25	35	48	79.58	85.6	28	30	10	38.3	1.1
CHGH 030 25 8	2	-Q6	25	35	55	79.58	85.6	28	65	10	38.3	1.1
CHGH 030 25 9	1	-Q6	25	40	70	79.58	85.6	28	50	12	43.3	1.1
CHGH 030 25 10	2	-Q6	25	40	62	79.58	85.6	28	65	12	43.3	1.1
CHGH 030 28 1	2	-Q6	28	32	55	89.13	95.1	28	65	10	35.3	1.1
CHGH 030 28 2	2	-Q6	28	40	62	89.13	95.1	28	65	12	43.3	1.1
CHGH 030 32 1	2	-Q6	32	32	55	101.86	107.85	28	65	10	35.3	2.0
CHGH 030 32 2	2	-Q6	32	40	62	101.86	107.85	28	65	12	43.3	2.0

品質等級

DIN 6

系列 CHGH-Q6 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CHGH-Q6 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

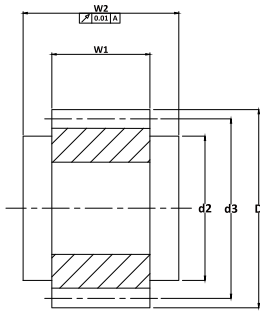
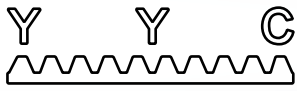


圖1/Fig1.

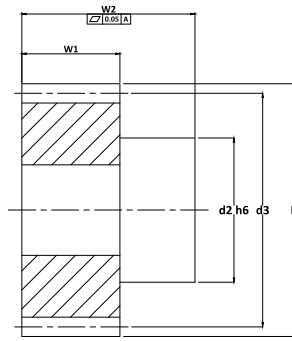
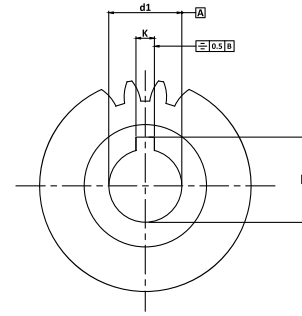


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 4 Module 4												
CHGH 040 15 1	1	-Q6	15	35	52	63.66	71.7	40	50	10	38.3	1.5
CHGH 040 18 1	2	-Q6	18	32	55	76.39	84.4	40	75	10	35.3	1.5
CHGH 040 20 1	1	-Q6	20	35	52	84.88	92.9	40	50	10	38.3	1.8
CHGH 040 20 2	1	-Q6	20	45	65	84.88	92.9	40	50	14	48.8	1.7
CHGH 040 21 1	2	-Q6	21	32	55	89.13	97.1	40	75	10	35.3	1.9
CHGH 040 21 2	2	-Q6	21	35	55	89.13	97.1	40	75	10	38.3	1.9
CHGH 040 21 3	2	-Q6	21	40	62	89.13	97.1	40	75	12	43.3	1.9
CHGH 040 21 4	2	-Q6	21	45	68	89.13	97.1	40	75	14	48.8	1.8
CHGH 040 22 1	1	-Q6	22	35	52	93.37	101.4	40	50	10	38.3	2.3
CHGH 040 22 2	1	-Q6	22	45	65	93.37	101.4	40	50	14	48.8	2.0
CHGH 040 24 1	2	-Q6	24	32	55	101.86	109.9	40	75	10	35.3	2.5
CHGH 040 24 2	2	-Q6	24	35	55	101.86	109.9	40	75	10	38.3	2.5
CHGH 040 24 3	2	-Q6	24	40	62	101.86	109.9	40	75	12	43.3	2.5
CHGH 040 24 4	2	-Q6	24	45	68	101.86	109.9	40	75	14	48.8	2.5
CHGH 040 24 5	2	-Q6	24	55	80	101.86	109.9	40	80	16	59.3	2.5
CHGH 040 25 1	1	-Q6	25	35	52	106.1	114.1	40	50	10	38.3	3.0
CHGH 040 25 2	1	-Q6	25	45	65	106.1	114.1	40	50	14	48.8	3.0
CHGH 040 25 3	2	-Q6	25	55	80	106.1	114.1	40	80	16	59.3	3.0

品質等級

DIN 6

系列 CHGH-Q6 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CHGH-Q6 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

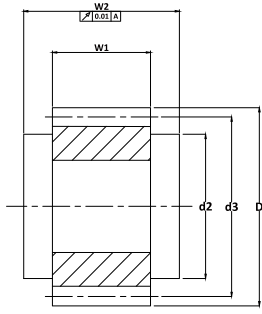
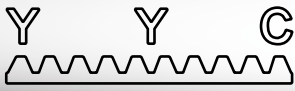


圖1/Fig1.

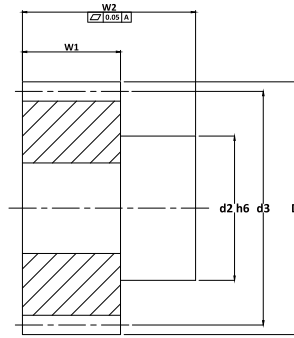
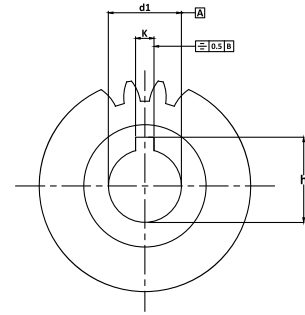


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 5 Module 5												
CHGH 050 18 1	2	-Q6	18	45	68	95.49	105.5	50	85	14	48.8	2.8
CHGH 050 24 1	2	-Q6	24	45	68	127.32	137.3	50	85	14	48.8	5.0
CHGH 050 24 2	2	-Q6	24	55	80	127.32	137.3	50	90	16	59.3	5.0
CHGH 050 24 3	2	-Q6	24	75	110	127.32	137.3	50	110	20	79.9	5.5
模數 6 Module 6												
CHGH 060 20 1	2	-Q6	20	55	80	127	139.3	60	100	16	59.3	5.8
CHGH 060 20 2	2	-Q6	20	75	110	127	139.3	60	120	20	79.9	6.3
CHGH 060 25 3	2	-Q6	25	55	80	159	171.2	60	100	16	59.3	9.0
CHGH 060 25 4	2	-Q6	25	75	110	159	171.2	60	120	20	79.9	9.5
模數 8 Module 8												
CHGH 080 18 1	2	-Q6	18	75	110	152.79	168.8	80	140	20	79.9	11.0
CHGH 080 20 2	2	-Q6	20	85	125	169.8	185.8	80	145	22	90.4	14.0
模數 10 Module 10												
CHGH 100 20 1	2	-Q6	20	85	125	212.21	232.2	100	165	22	90.4	26.0

品質等級

DIN 6

系列 CHGH-Q6 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CHGH-Q6 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

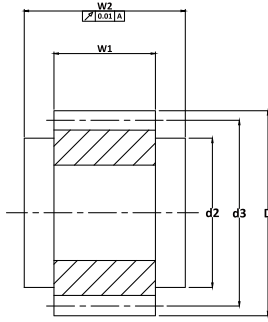
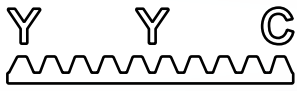


圖1/Fig1.

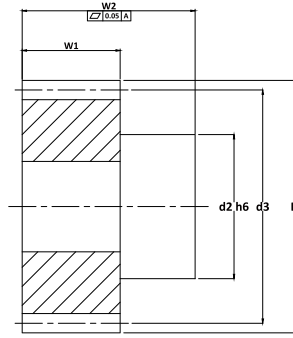
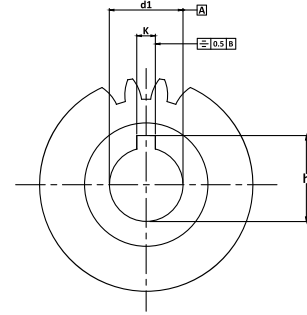


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 1.5 Module 1.5												
CHGH 015 20 1	1	-Q7	20	11	25	31.83	34.83	20	22	4	12.8	0.1
CHGH 015 20 1	1	-Q7	20	13	25	31.83	34.83	20	22	5	15.3	0.1
CHGH 015 20 2	1	-Q7	20	14	25	31.83	34.83	20	22	5	16.3	0.1
CHGH 015 20 3	1	-Q7	20	16	25	31.83	34.83	20	22	5	18.3	0.1
CHGH 015 21 1	2	-Q7	21	16	30	33.42	36.42	20	46	5	18.3	0.2
模數 2 Module 2												
CHGH 020 18 1	1	-Q7	18	16	25	38.197	42.2	28	30	5	18.3	0.2
CHGH 020 20 1	1	-Q7	20	19	30	42.44	46.4	28	30	6	21.8	0.2
CHGH 020 20 2	2	-Q7	20	19	30	42.44	46.4	28	56	6	21.8	0.2
CHGH 020 20 3	1	-Q7	20	20	30	42.44	46.4	28	30	6	22.8	0.2
CHGH 020 20 4	2	-Q7	20	22	36	42.44	46.4	28	56	6	24.8	0.2
CHGH 020 20 5	1	-Q7	20	22	30	42.44	46.4	28	30	6	24.8	0.2
CHGH 020 21 1	1	-Q7	21	16	25	44.56	48.6	28	30	5	18.3	0.3
CHGH 020 21 2	2	-Q7	21	22	36	44.56	48.6	28	56	6	24.8	0.3
CHGH 020 22 1	1	-Q7	22	19	30	46.69	50.7	28	30	6	21.8	0.3
CHGH 020 22 2	2	-Q7	22	19	30	46.69	50.7	28	56	6	21.8	0.3
CHGH 020 22 3	1	-Q7	22	22	30	46.69	50.7	28	30	6	24.8	0.3
CHGH 020 22 4	2	-Q7	22	22	36	46.69	50.7	28	56	6	24.8	0.3
CHGH 020 25 1	1	-Q7	25	19	30	53.05	57.1	28	30	6	21.8	0.4
CHGH 020 25 2	2	-Q7	25	19	30	53.05	57.1	28	56	6	21.8	0.4
CHGH 020 25 3	1	-Q7	25	20	30	53.05	57.1	28	30	6	22.8	0.4
CHGH 020 25 4	1	-Q7	25	22	30	53.05	57.1	28	30	6	24.8	0.4
CHGH 020 25 5	2	-Q7	25	22	36	53.05	57.1	28	56	6	24.8	0.4
CHGH 020 25 6	1	-Q7	25	25	36	53.05	57.1	28	30	8	28.3	0.4

品質等級

DIN 7

系列 CHGH-Q7 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CHGH-Q7 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

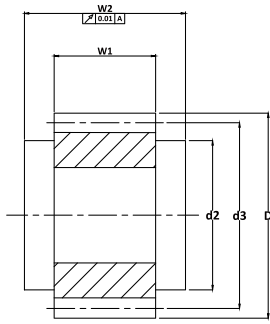
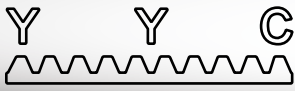


圖1/Fig1.

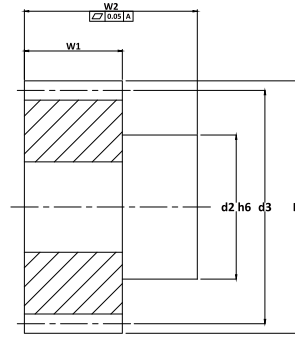
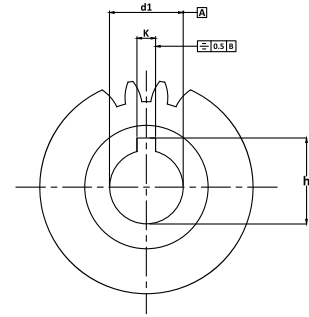


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CHGH 020 28 1	1	-Q7	28	19	30	59.42	63.4	28	30	6	21.8	0.4
CHGH 020 28 2	2	-Q7	28	19	30	59.42	63.4	28	56	6	21.8	0.4
CHGH 020 28 3	1	-Q7	28	22	30	59.42	63.4	28	30	6	24.8	0.4
CHGH 020 28 4	2	-Q7	28	22	36	59.42	63.4	28	56	6	24.8	0.4
CHGH 020 28 5	1	-Q7	28	35	48	59.42	63.4	28	30	10	38.3	0.4
CHGH 020 30 1	1	-Q7	30	16	25	63.66	67.7	28	30	5	18.3	0.7
CHGH 020 30 2	1	-Q7	30	20	30	63.66	67.7	28	30	6	22.8	0.7
CHGH 020 30 3	2	-Q7	30	22	36	63.66	67.7	28	56	6	24.8	0.7
CHGH 020 30 4	1	-Q7	30	25	36	63.66	67.7	28	30	8	28.3	0.7
CHGH 020 30 5	1	-Q7	30	30	45	63.66	67.7	28	30	8	33.3	0.7
CHGH 020 30 6	2	-Q7	30	30	50	63.66	67.7	28	60	8	33.3	0.7
CHGH 020 30 7	2	-Q7	30	32	55	63.66	67.7	28	65	10	35.3	0.7
CHGH 020 32 1	1	-Q7	32	20	30	67.91	71.9	28	30	6	22.8	0.7
CHGH 020 32 2	1	-Q7	32	22	30	67.91	71.9	28	30	6	24.8	0.7
CHGH 020 32 3	2	-Q7	32	22	36	67.91	71.9	28	56	6	27.8	0.7
CHGH 020 32 4	1	-Q7	32	25	36	67.91	71.9	28	30	8	28.3	0.7
CHGH 020 32 5	1	-Q7	32	35	48	67.91	71.9	28	30	10	38.3	0.7
CHGH 020 36 1	1	-Q7	36	35	48	76.39	80.4	28	30	10	38.3	0.8
CHGH 020 39 1	2	-Q7	39	32	55	82.76	86.8	28	65	10	35.3	1.4
CHGH 020 40 1	1	-Q7	40	35	48	84.88	88.9	28	30	10	38.3	1.2

品質等級

DIN 7

系列 CHGH-Q7 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CHGH-Q7 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

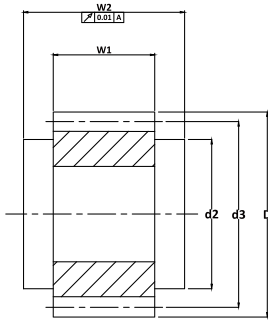
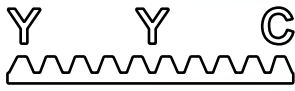


圖1/Fig1.

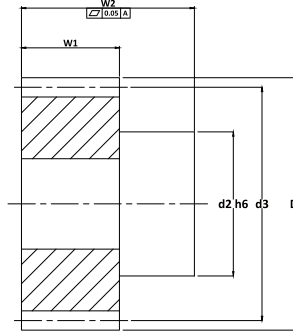
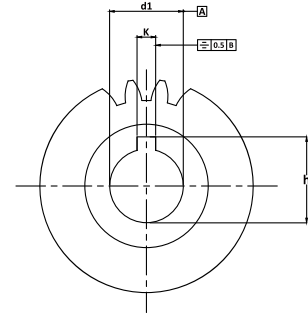


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 3 Module 3												
CHGH 030 20 1	2	-Q7	20	22	36	63.66	69.7	28	56	6	24.8	0.7
CHGH 030 20 2	2	-Q7	20	25	44	63.66	69.7	28	60	8	28.3	0.7
CHGH 030 20 3	1	-Q7	20	30	45	63.66	69.7	28	30	8	33.3	0.7
CHGH 030 20 4	2	-Q7	20	30	50	63.66	69.7	28	60	8	33.3	0.7
CHGH 030 20 5	2	-Q7	20	32	55	63.66	69.7	28	65	10	35.3	0.7
CHGH 030 20 6	1	-Q7	20	35	48	63.66	69.7	28	30	10	38.3	0.7
CHGH 030 22 1	1	-Q7	22	25	36	70.03	76.0	28	30	8	28.3	0.8
CHGH 030 22 2	1	-Q7	22	30	45	70.03	76.0	28	30	8	33.3	0.8
CHGH 030 22 3	2	-Q7	22	32	55	70.03	76.0	28	65	10	35.3	0.9
CHGH 030 22 4	1	-Q7	22	35	48	70.03	76.0	28	30	10	38.3	0.8
CHGH 030 22 5	2	-Q7	22	40	62	70.03	76.0	28	65	12	43.3	0.9
CHGH 030 25 1	2	-Q7	25	22	36	79.58	85.6	28	56	6	24.8	1.1
CHGH 030 25 2	1	-Q7	25	25	36	79.58	85.6	28	30	8	28.3	1.1
CHGH 030 25 3	2	-Q7	25	25	44	79.58	85.6	28	60	8	28.3	1.1
CHGH 030 25 4	1	-Q7	25	30	45	79.58	85.6	28	30	8	33.3	1.1
CHGH 030 25 5	2	-Q7	25	30	50	79.58	85.6	28	60	8	33.3	1.1
CHGH 030 25 6	2	-Q7	25	32	55	79.58	85.6	28	65	10	35.3	1.1
CHGH 030 25 7	1	-Q7	25	35	48	79.58	85.6	28	30	10	38.3	1.1
CHGH 030 25 8	2	-Q7	25	35	55	79.58	85.6	28	65	10	38.3	1.1
CHGH 030 25 9	1	-Q7	25	40	70	79.58	85.6	28	50	12	43.3	1.1
CHGH 030 25 10	2	-Q7	25	40	62	79.58	85.6	28	65	12	43.3	1.1
CHGH 030 28 1	2	-Q7	28	32	55	89.13	95.1	28	65	10	35.3	1.1
CHGH 030 28 2	2	-Q7	28	40	62	89.13	95.1	28	65	12	43.3	1.1
CHGH 030 32 1	2	-Q7	32	32	55	101.86	107.85	28	65	10	35.3	2.0
CHGH 030 32 2	2	-Q7	32	40	62	101.86	107.85	28	65	12	43.3	2.0

品質等級

DIN 7

系列 CHGH-Q7 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CHGH-Q7 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

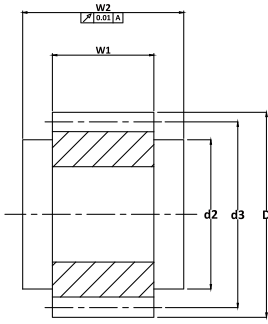


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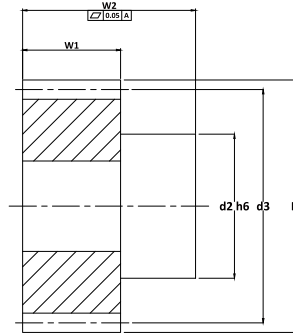
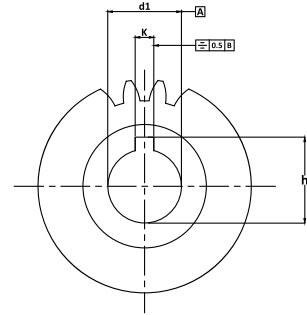


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 4 Module 4												
CHGH 040 15 1	1	-Q7	15	35	52	63.66	71.7	40	50	10	38.3	1.5
CHGH 040 18 1	2	-Q7	18	32	55	76.39	84.4	40	75	10	35.3	1.5
CHGH 040 20 1	1	-Q7	20	35	52	84.88	92.9	40	50	10	38.3	1.8
CHGH 040 20 2	1	-Q7	20	45	65	84.88	92.9	40	50	14	48.8	1.7
CHGH 040 21 1	2	-Q7	21	32	55	89.13	97.1	40	75	10	35.3	1.9
CHGH 040 21 2	2	-Q7	21	35	55	89.13	97.1	40	75	10	38.3	1.9
CHGH 040 21 3	2	-Q7	21	40	62	89.13	97.1	40	75	12	43.3	1.9
CHGH 040 21 4	2	-Q7	21	45	68	89.13	97.1	40	75	14	48.8	1.8
CHGH 040 22 1	1	-Q7	22	35	52	93.37	101.4	40	50	10	38.3	2.3
CHGH 040 22 2	1	-Q7	22	45	65	93.37	101.4	40	50	14	48.8	2.0
CHGH 040 24 1	2	-Q7	24	32	55	101.86	109.9	40	75	10	35.3	2.5
CHGH 040 24 2	2	-Q7	24	35	55	101.86	109.9	40	75	10	38.3	2.5
CHGH 040 24 3	2	-Q7	24	40	62	101.86	109.9	40	75	12	43.3	2.5
CHGH 040 24 4	2	-Q7	24	45	68	101.86	109.9	40	75	14	48.8	2.5
CHGH 040 24 5	2	-Q7	24	55	80	101.86	109.9	40	80	16	59.3	2.5
CHGH 040 25 1	1	-Q7	25	35	52	106.1	114.1	40	50	10	38.3	3.0
CHGH 040 25 2	1	-Q7	25	45	65	106.1	114.1	40	50	14	48.8	3.0
CHGH 040 25 3	2	-Q7	25	55	80	106.1	114.1	40	80	16	59.3	3.0

品質等級

DIN 7

系列 CHGH-Q7 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CHGH-Q7 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

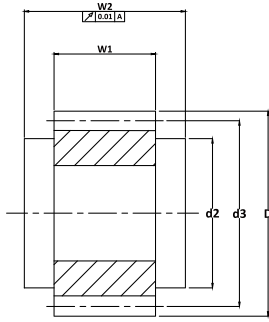
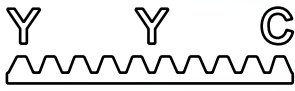


圖1/Fig1.

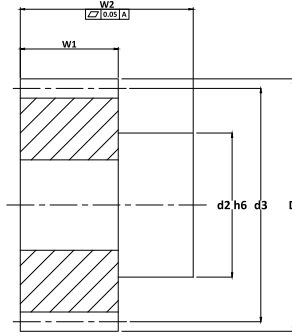
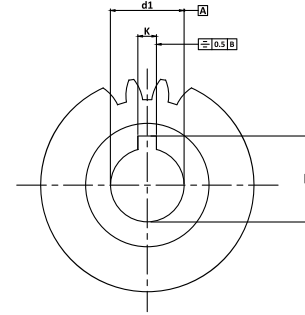


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 5 Module 5												
CHGH 050 18 1	2	-Q7	18	45	68	95.49	105.5	50	85	14	48.8	2.8
CHGH 050 24 1	2	-Q7	24	45	68	127.32	137.3	50	85	14	48.8	5.0
CHGH 050 24 2	2	-Q7	24	55	80	127.32	137.3	50	90	16	59.3	5.0
CHGH 050 24 3	2	-Q7	24	75	110	127.32	137.3	50	110	20	79.9	5.5
模數 6 Module 6												
CHGH 060 20 1	2	-Q7	20	55	80	127.23	139.3	60	100	16	59.3	5.8
CHGH 060 20 2	2	-Q7	20	75	110	127.23	139.3	60	120	20	79.9	6.3
CHGH 060 25 3	2	-Q7	25	55	80	159.16	171.2	60	100	16	59.3	9.0
CHGH 060 25 4	2	-Q7	25	75	110	159.16	171.2	60	120	20	79.9	9.5
模數 8 Module 8												
CHGH 080 18 1	2	-Q7	18	75	110	152.79	168.8	80	140	20	79.9	11.0
CHGH 080 20 2	2	-Q7	20	85	125	169.8	185.8	80	145	22	90.4	14.0
模數 10 Module 10												
CHGH 100 20 1	2	-Q7	20	85	125	212.21	232.2	100	165	22	90.4	26.0

品質等級

DIN 7

系列 CHGH-Q7 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 7

Series CHGH-Q7 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

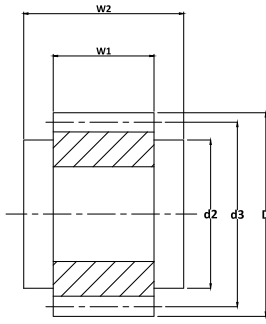
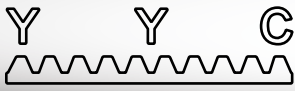


圖1/Fig1.

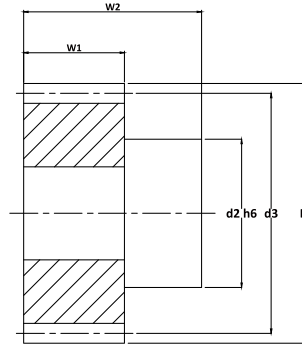
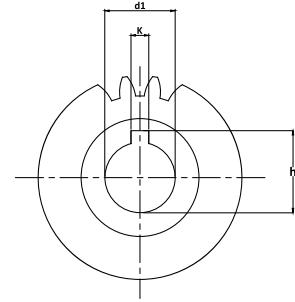


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d_{1H6}	d_2	d_3	D	w1	w2	k	h	KG
模數 1.5 Module 1.5												
CHM 015 20 1	1	-Q8	20	11	25	31.83	34.83	20	22	4	12.8	0.1
CHM 015 20 1	1	-Q8	20	13	25	31.83	34.83	20	22	5	15.3	0.1
CHM 015 20 2	1	-Q8	20	14	25	31.83	34.83	20	22	5	16.3	0.1
CHM 015 20 3	1	-Q8	20	16	25	31.83	34.83	20	22	5	18.3	0.1
CHM 015 21 1	2	-Q8	21	16	30	33.42	36.42	20	46	5	18.3	0.2
模數 2 Module 2												
CHM 020 18 1	1	-Q8	18	16	25	38.197	42.2	28	30	5	18.3	0.2
CHM 020 20 1	1	-Q8	20	19	30	42.44	46.4	28	30	6	21.8	0.2
CHM 020 20 2	2	-Q8	20	19	30	42.44	46.4	28	56	6	21.8	0.2
CHM 020 20 3	1	-Q8	20	20	30	42.44	46.4	28	30	6	22.8	0.2
CHM 020 20 4	2	-Q8	20	22	36	42.44	46.4	28	56	6	24.8	0.2
CHM 020 20 5	1	-Q8	20	22	30	42.44	46.4	28	30	6	24.8	0.2
CHM 020 21 1	1	-Q8	21	16	25	44.56	48.6	28	30	5	18.3	0.3
CHM 020 21 2	2	-Q8	21	22	36	44.56	48.6	28	56	6	24.8	0.3
CHM 020 22 1	1	-Q8	22	19	30	46.69	50.7	28	30	6	21.8	0.3
CHM 020 22 2	2	-Q8	22	19	30	46.69	50.7	28	56	6	21.8	0.3
CHM 020 22 3	1	-Q8	22	22	30	46.69	50.7	28	30	6	24.8	0.3
CHM 020 22 4	2	-Q8	22	22	36	46.69	50.7	28	56	6	24.8	0.3
CHM 020 25 1	1	-Q8	25	19	30	53.05	57.1	28	30	6	21.8	0.4
CHM 020 25 2	2	-Q8	25	19	30	53.05	57.1	28	56	6	21.8	0.4
CHM 020 25 3	1	-Q8	25	20	30	53.05	57.1	28	30	6	22.8	0.4
CHM 020 25 4	1	-Q8	25	22	30	53.05	57.1	28	30	6	24.8	0.4
CHM 020 25 5	2	-Q8	25	22	36	53.05	57.1	28	56	6	24.8	0.4
CHM 020 25 6	1	-Q8	25	25	36	53.05	57.1	28	30	8	28.3	0.4

品質等級

DIN 8

系列 CHM-Q8 斜齒齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

Quality Grade

DIN 8

Series CHM-Q8 Helical Soft Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

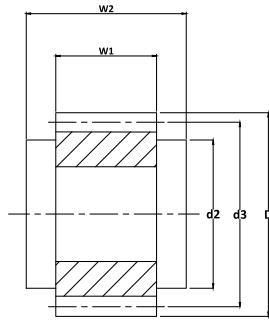
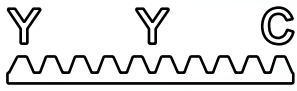


圖1/Fig1.

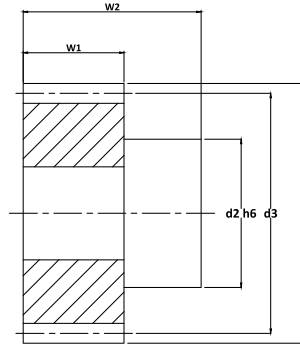
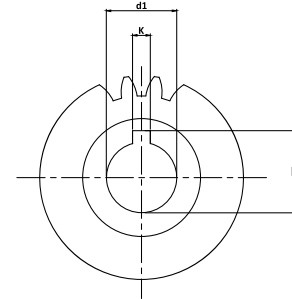


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CHM 020 28 1	1	-Q8	28	19	30	59.42	63.4	28	30	6	21.8	0.4
CHM 020 28 2	2	-Q8	28	19	30	59.42	63.4	28	56	6	21.8	0.4
CHM 020 28 3	1	-Q8	28	22	30	59.42	63.4	28	30	6	24.8	0.4
CHM 020 28 4	2	-Q8	28	22	36	59.42	63.4	28	56	6	24.8	0.4
CHM 020 28 5	1	-Q8	28	35	48	59.42	63.4	28	30	10	38.3	0.4
CHM 020 30 1	1	-Q8	30	16	25	63.66	67.7	28	30	5	18.3	0.7
CHM 020 30 2	1	-Q8	30	20	30	63.66	67.7	28	30	6	22.8	0.7
CHM 020 30 3	2	-Q8	30	22	36	63.66	67.7	28	56	6	24.8	0.7
CHM 020 30 4	1	-Q8	30	25	36	63.66	67.7	28	30	8	28.3	0.7
CHM 020 30 5	1	-Q8	30	30	45	63.66	67.7	28	30	8	33.3	0.7
CHM 020 30 6	2	-Q8	30	30	50	63.66	67.7	28	60	8	33.3	0.7
CHM 020 30 7	2	-Q8	30	32	55	63.66	67.7	28	65	10	35.3	0.7
CHM 020 32 1	1	-Q8	32	20	30	67.91	71.9	28	30	6	22.8	0.7
CHM 020 32 2	1	-Q8	32	22	30	67.91	71.9	28	30	6	24.8	0.7
CHM 020 32 3	2	-Q8	32	22	36	67.91	71.9	28	56	6	27.8	0.7
CHM 020 32 4	1	-Q8	32	25	36	67.91	71.9	28	30	8	28.3	0.7
CHM 020 32 5	1	-Q8	32	35	48	67.91	71.9	28	30	10	38.3	0.7
CHM 020 36 1	1	-Q8	36	35	48	76.39	80.4	28	30	10	38.3	0.8
CHM 020 39 1	2	-Q8	39	32	55	82.76	86.8	28	65	10	35.3	1.4
CHM 020 40 1	1	-Q8	40	35	48	84.88	88.9	28	30	10	38.3	1.2

品質等級

DIN 8

系列 CHM-Q8 斜齒齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

Quality Grade

DIN 8

Series CHM-Q8 Helical Soft Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

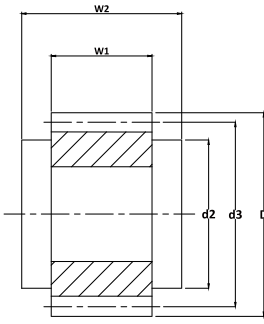
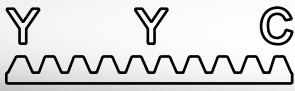


圖1/Fig1.

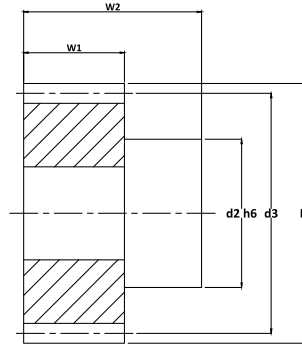
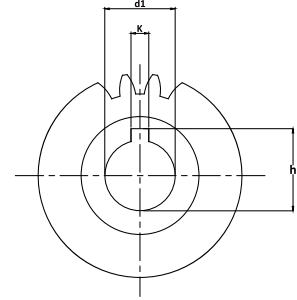


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	齒數 No. of Teeth	d_{1H6}	d_2	d_3	D	w1	w2	k	h	KG	
模數 3 Module 3												
CHM 030 20 1	2	-Q8	20	22	36	63.66	69.7	28	56	6	24.8	0.7
CHM 030 20 2	2	-Q8	20	25	44	63.66	69.7	28	60	8	28.3	0.7
CHM 030 20 3	1	-Q8	20	30	45	63.66	69.7	28	30	8	33.3	0.7
CHM 030 20 4	2	-Q8	20	30	50	63.66	69.7	28	60	8	33.3	0.7
CHM 030 20 5	2	-Q8	20	32	55	63.66	69.7	28	65	10	35.3	0.7
CHM 030 20 6	1	-Q8	20	35	48	63.66	69.7	28	30	10	38.3	0.7
CHM 030 22 1	1	-Q8	22	25	36	70.03	76.0	28	30	8	28.3	0.8
CHM 030 22 2	1	-Q8	22	30	45	70.03	76.0	28	30	8	33.3	0.8
CHM 030 22 3	2	-Q8	22	32	55	70.03	76.0	28	65	10	35.3	0.9
CHM 030 22 4	1	-Q8	22	35	48	70.03	76.0	28	30	10	38.3	0.8
CHM 030 22 5	2	-Q8	22	40	62	70.03	76.0	28	65	12	43.3	0.9
CHM 030 25 1	2	-Q8	25	22	36	79.58	85.6	28	56	6	24.8	1.1
CHM 030 25 2	1	-Q8	25	25	36	79.58	85.6	28	30	8	28.3	1.1
CHM 030 25 3	2	-Q8	25	25	44	79.58	85.6	28	60	8	28.3	1.1
CHM 030 25 4	1	-Q8	25	30	45	79.58	85.6	28	30	8	33.3	1.1
CHM 030 25 5	2	-Q8	25	30	50	79.58	85.6	28	60	8	33.3	1.1
CHM 030 25 6	2	-Q8	25	32	55	79.58	85.6	28	65	10	35.3	1.1
CHM 030 25 7	1	-Q8	25	35	48	79.58	85.6	28	30	10	38.3	1.1
CHM 030 25 8	2	-Q8	25	35	55	79.58	85.6	28	65	10	38.3	1.1
CHM 030 25 9	1	-Q8	25	40	70	79.58	85.6	28	50	12	43.3	1.1
CHM 030 25 10	2	-Q8	25	40	62	79.58	85.6	28	65	12	43.3	1.1
CHM 030 28 1	2	-Q8	28	32	55	89.13	95.1	28	65	10	35.3	1.1
CHM 030 28 2	2	-Q8	28	40	62	89.13	95.1	28	65	12	43.3	1.1
CHM 030 32 1	2	-Q8	32	32	55	101.86	107.85	28	65	10	35.3	2.0
CHM 030 32 2	2	-Q8	32	40	62	101.86	107.85	28	65	12	43.3	2.0

品質等級

DIN 8

系列 CHM-Q8 斜齒齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

Quality Grade

DIN 8

Series CHM-Q8 Helical Soft Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

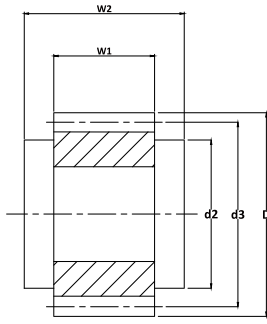
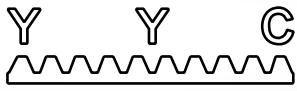


圖1/Fig1.

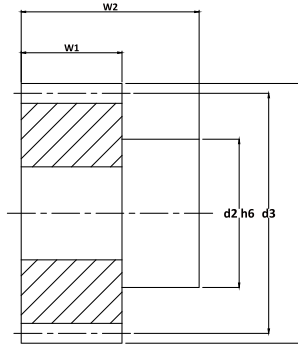
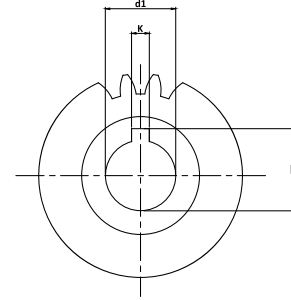


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 4 Module 4												
CHM 040 15 1	1	-Q8	15	35	52	63.66	71.7	40	50	10	38.3	1.5
CHM 040 18 1	2	-Q8	18	32	55	76.39	84.4	40	75	10	35.3	1.5
CHM 040 20 1	1	-Q8	20	35	52	84.88	92.9	40	50	10	38.3	1.8
CHM 040 20 2	1	-Q8	20	45	65	84.88	92.9	40	50	14	48.8	1.7
CHM 040 21 1	2	-Q8	21	32	55	89.13	97.1	40	75	10	35.3	1.9
CHM 040 21 2	2	-Q8	21	35	55	89.13	97.1	40	75	10	38.3	1.9
CHM 040 21 3	2	-Q8	21	40	62	89.13	97.1	40	75	12	43.3	1.9
CHM 040 21 4	2	-Q8	21	45	68	89.13	97.1	40	75	14	48.8	1.8
CHM 040 22 1	1	-Q8	22	35	52	93.37	101.4	40	50	10	38.3	2.3
CHM 040 22 2	1	-Q8	22	45	65	93.37	101.4	40	50	14	48.8	2.0
CHM 040 24 1	2	-Q8	24	32	55	101.86	109.9	40	75	10	35.3	2.5
CHM 040 24 2	2	-Q8	24	35	55	101.86	109.9	40	75	10	38.3	2.5
CHM 040 24 3	2	-Q8	24	40	62	101.86	109.9	40	75	12	43.3	2.5
CHM 040 24 4	2	-Q8	24	45	68	101.86	109.9	40	75	14	48.8	2.5
CHM 040 24 5	2	-Q8	24	55	80	101.86	109.9	40	80	16	59.3	2.5
CHM 040 25 1	1	-Q8	25	35	52	106.10	114.1	40	50	10	38.3	3.0
CHM 040 25 2	1	-Q8	25	45	65	106.10	114.1	40	50	14	48.8	3.0
CHM 040 25 3	2	-Q8	25	55	80	106.10	114.1	40	80	16	59.3	3.0

品質等級

DIN 8

系列 CHM-Q8 斜齒齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

Quality Grade

DIN 8

Series CHM-Q8 Helical Soft Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

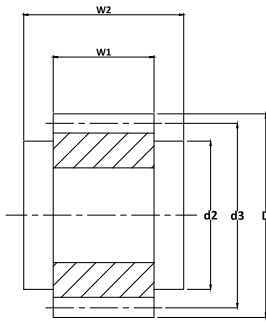
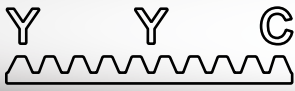


圖1/Fig1.

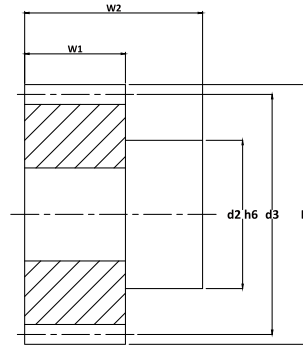
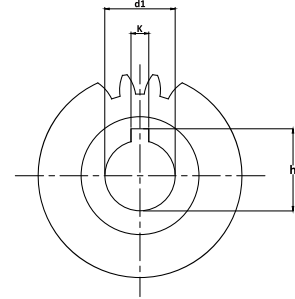


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 5 Module 5												
CHM 050 18 1	2	-Q8	18	45	68	95.49	105.5	50	85	14	48.8	2.8
CHM 050 24 1	2	-Q8	24	45	68	127.32	137.3	50	85	14	48.8	5.0
CHM 050 24 2	2	-Q8	24	55	80	127.32	137.3	50	90	16	59.3	5.0
CHM 050 24 3	2	-Q8	24	75	110	127.32	137.3	50	110	20	79.9	5.5
模數 6 Module 6												
CHM 060 20 1	2	-Q8	20	55	80	127.32	139.3	60	100	16	59.3	5.8
CHM 060 20 2	2	-Q8	20	75	110	127.32	139.3	60	120	20	79.9	6.3
CHM 060 25 3	2	-Q8	25	55	80	159.16	171.2	60	100	16	59.3	9.0
CHM 060 25 4	2	-Q8	25	75	110	159.16	171.2	60	120	20	79.9	9.5
模數 8 Module 8												
CHM 080 18 1	2	-Q8	18	75	110	152.79	168.8	80	140	20	79.9	11.0
CHM 080 20 2	2	-Q8	20	85	125	169.8	185.8	80	145	22	90.4	14.0
模數 10 Module 10												
CHM 100 20 1	2	-Q8	20	85	125	212.21	232.2	100	165	22	90.4	26.0

品質等級

DIN 8

系列 CHM-Q8 斜齒齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

Quality Grade

DIN 8

Series CHM-Q8 Helical Soft Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

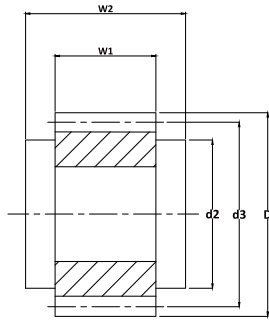
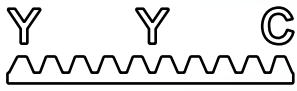


圖1/Fig1.

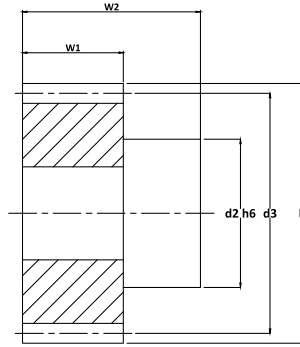
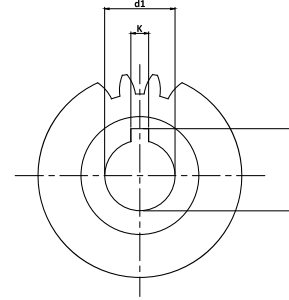


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	$d1_{H6}$	$d2$	$d3$	D	w1	w2	k	h	KG
模數 1.5 Module 1.5												
CHMH 015 20 1	1	-Q10	20	11	25	31.83	34.83	20	22	4	12.8	0.1
CHMH 015 20 1	1	-Q10	20	13	25	31.83	34.83	20	22	5	15.3	0.1
CHMH 015 20 2	1	-Q10	20	14	25	31.83	34.83	20	22	5	16.3	0.1
CHMH 015 20 3	1	-Q10	20	16	25	31.83	34.83	20	22	5	18.3	0.1
CHMH 015 21 1	2	-Q10	21	16	30	33.42	36.42	20	46	5	18.3	0.2
模數 2 Module 2												
CHMH 020 18 1	1	-Q10	18	16	25	38.197	42.2	28	30	5	18.3	0.2
CHMH 020 20 1	1	-Q10	20	19	30	42.44	46.4	28	30	6	21.8	0.2
CHMH 020 20 2	2	-Q10	20	19	30	42.44	46.4	28	56	6	21.8	0.2
CHMH 020 20 3	1	-Q10	20	20	30	42.44	46.4	28	30	6	22.8	0.2
CHMH 020 20 4	2	-Q10	20	22	36	42.44	46.4	28	56	6	24.8	0.2
CHMH 020 20 5	1	-Q10	20	22	30	42.44	46.4	28	30	6	24.8	0.2
CHMH 020 21 1	1	-Q10	21	16	25	44.56	48.6	28	30	5	18.3	0.3
CHMH 020 21 2	2	-Q10	21	22	36	44.56	48.6	28	56	6	24.8	0.3
CHMH 020 22 1	1	-Q10	22	19	30	46.69	50.7	28	30	6	21.8	0.3
CHMH 020 22 2	2	-Q10	22	19	30	46.69	50.7	28	56	6	21.8	0.3
CHMH 020 22 3	1	-Q10	22	22	30	46.69	50.7	28	30	6	24.8	0.3
CHMH 020 22 4	2	-Q10	22	22	36	46.69	50.7	28	56	6	24.8	0.3
CHMH 020 25 1	1	-Q10	25	19	30	53.05	57.1	28	30	6	21.8	0.4
CHMH 020 25 2	2	-Q10	25	19	30	53.05	57.1	28	56	6	21.8	0.4
CHMH 020 25 3	1	-Q10	25	20	30	53.05	57.1	28	30	6	22.8	0.4
CHMH 020 25 4	1	-Q10	25	22	30	53.05	57.1	28	30	6	24.8	0.4
CHMH 020 25 5	2	-Q10	25	22	36	53.05	57.1	28	56	6	24.8	0.4
CHMH 020 25 6	1	-Q10	25	25	36	53.05	57.1	28	30	6	27.8	0.4

品質等級
DIN 10

系列 CHMH-Q10 斜齒硬化齒輪
材料 45C (中碳鋼)
左旋角 19°31'42"
硬度 HRC 50~55°

Quality Grade
DIN 10

Series CHMH-Q10 Helical Hardened Pinions
Material 45C (Medium Carbon Steel)
Left Hand Angle 19°31'42"
Hardness: HRC 50~55°

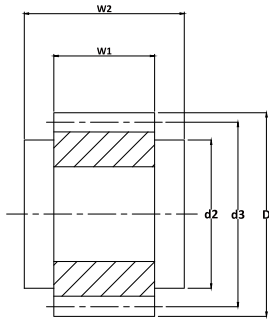
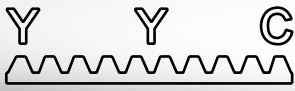


圖1/Fig1.

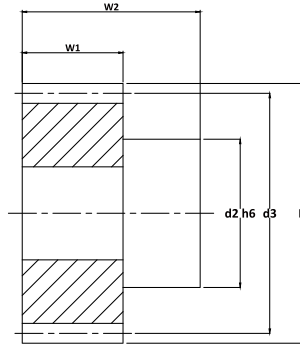
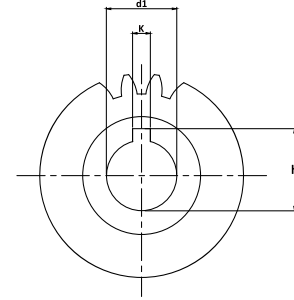


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 2 Module 2												
CHMH 020 28 1	1	-Q10	28	19	30	59.42	63.4	28	30	6	21.8	0.4
CHMH 020 28 2	2	-Q10	28	19	30	59.42	63.4	28	56	6	21.8	0.4
CHMH 020 28 3	1	-Q10	28	22	30	59.42	63.4	28	30	6	24.8	0.4
CHMH 020 28 4	2	-Q10	28	22	36	59.42	63.4	28	56	6	24.8	0.4
CHMH 020 28 5	1	-Q10	28	35	48	59.42	63.4	28	30	10	38.3	0.4
CHMH 020 30 1	1	-Q10	30	16	25	63.66	67.7	28	30	5	18.3	0.7
CHMH 020 30 2	1	-Q10	30	20	30	63.66	67.7	28	30	6	22.8	0.7
CHMH 020 30 3	2	-Q10	30	22	36	63.66	67.7	28	56	6	24.8	0.7
CHMH 020 30 4	1	-Q10	30	25	36	63.66	67.7	28	30	8	28.3	0.7
CHMH 020 30 5	1	-Q10	30	30	45	63.66	67.7	28	30	8	33.3	0.7
CHMH 020 30 6	2	-Q10	30	30	50	63.66	67.7	28	60	8	33.3	0.7
CHMH 020 30 7	2	-Q10	30	32	55	63.66	67.7	28	65	10	35.3	0.7
CHMH 020 32 1	1	-Q10	32	20	30	67.91	71.9	28	30	6	22.8	0.7
CHMH 020 32 2	1	-Q10	32	22	30	67.91	71.9	28	30	6	24.8	0.7
CHMH 020 32 3	2	-Q10	32	22	36	67.91	71.9	28	56	6	27.8	0.7
CHMH 020 32 4	1	-Q10	32	25	36	67.91	71.9	28	30	8	28.3	0.7
CHMH 020 32 5	1	-Q10	32	35	48	67.91	71.9	28	30	10	38.3	0.7
CHMH 020 36 1	1	-Q10	36	35	48	76.39	80.4	28	30	10	38.3	0.8
CHMH 020 39 1	2	-Q10	39	32	55	82.76	86.8	28	65	10	35.3	1.4
CHMH 020 40 1	1	-Q10	40	35	48	84.88	88.9	28	30	10	38.3	1.2

品質等級

DIN 10

系列 CHMH-Q10 斜齒硬化齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CHMH-Q10 Helical Hardened Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

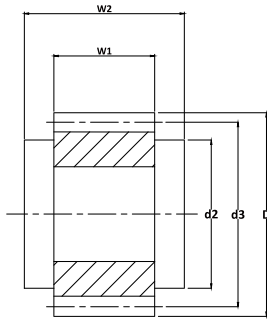
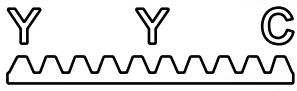


圖1/Fig1.

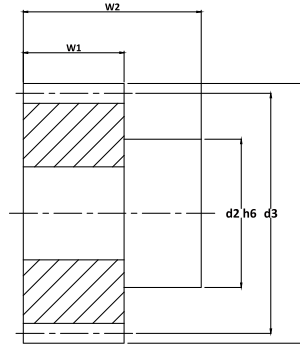
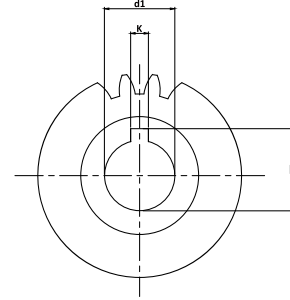


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	$d1_{H6}$	d2	d3	D	w1	w2	k	h	KG
模數 3 Module 3												
CHMH 030 20 1	2	-Q10	20	22	36	63.66	69.7	28	56	6	24.8	0.7
CHMH 030 20 2	2	-Q10	20	25	44	63.66	69.7	28	60	8	28.3	0.7
CHMH 030 20 3	1	-Q10	20	30	45	63.66	69.7	28	30	8	33.3	0.7
CHMH 030 20 4	2	-Q10	20	30	50	63.66	69.7	28	60	8	33.3	0.7
CHMH 030 20 5	2	-Q10	20	32	55	63.66	69.7	28	65	10	35.3	0.7
CHMH 030 20 6	1	-Q10	20	35	48	63.66	69.7	28	30	10	38.3	0.7
CHMH 030 22 1	1	-Q10	22	25	36	70.03	76.0	28	30	8	28.3	0.8
CHMH 030 22 2	1	-Q10	22	30	45	70.03	76.0	28	30	8	33.3	0.8
CHMH 030 22 3	2	-Q10	22	32	55	70.03	76.0	28	65	10	35.3	0.9
CHMH 030 22 4	1	-Q10	22	35	48	70.03	76.0	28	30	10	38.3	0.8
CHMH 030 22 5	2	-Q10	22	40	62	70.03	76.0	28	65	12	43.3	0.9
CHMH 030 25 1	2	-Q10	25	22	36	79.58	85.6	28	56	6	24.8	1.1
CHMH 030 25 2	1	-Q10	25	25	36	79.58	85.6	28	30	8	28.3	1.1
CHMH 030 25 3	2	-Q10	25	25	44	79.58	85.6	28	60	8	28.3	1.1
CHMH 030 25 4	1	-Q10	25	30	45	79.58	85.6	28	30	8	33.3	1.1
CHMH 030 25 5	2	-Q10	25	30	50	79.58	85.6	28	60	8	33.3	1.1
CHMH 030 25 6	2	-Q10	25	32	55	79.58	85.6	28	65	10	35.3	1.1
CHMH 030 25 7	1	-Q10	25	35	48	79.58	85.6	28	30	10	38.3	1.1
CHMH 030 25 8	2	-Q10	25	35	55	79.58	85.6	28	65	10	38.3	1.1
CHMH 030 25 9	1	-Q10	25	40	70	79.58	85.6	28	50	12	43.3	1.1
CHMH 030 25 10	2	-Q10	25	40	62	79.58	85.6	28	65	12	43.3	1.1
CHMH 030 28 1	2	-Q10	28	32	55	89.13	95.1	28	65	10	35.3	1.1
CHMH 030 28 2	2	-Q10	28	40	62	89.13	95.1	28	65	12	43.3	1.1
CHMH 030 32 1	2	-Q10	32	32	55	101.86	107.85	28	65	10	35.3	2.0
CHMH 030 32 2	2	-Q10	32	40	62	101.86	107.85	28	65	12	43.3	2.0

品質等級
DIN 10

系列 CHMH-Q10 斜齒硬化齒輪
材料 45C (中碳鋼)
左旋角 19°31'42"
硬度 HRC 50~55°

Quality Grade
DIN 10

Series CHMH-Q10 Helical Hardened Pinions
Material 45C (Medium Carbon Steel)
Left Hand Angle 19°31'42"
Hardness: HRC 50~55°

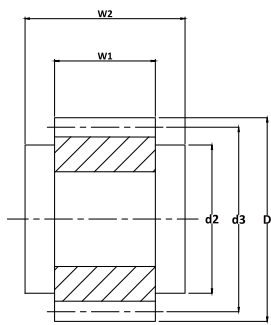


圖1/Fig1.

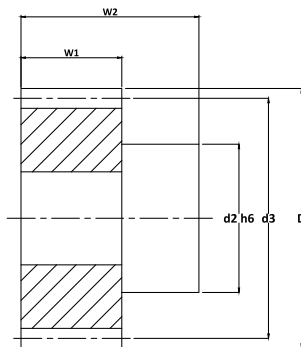
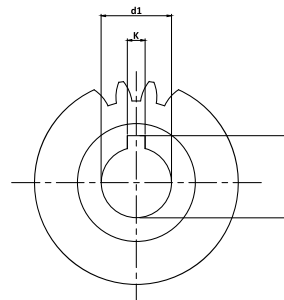


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 4 Module 4												
CHMH 040 15 1	1	-Q10	15	35	52	63.66	71.7	40	50	10	38.3	1.5
CHMH 040 18 1	2	-Q10	18	32	55	76.39	84.4	40	75	10	35.3	1.5
CHMH 040 20 1	1	-Q10	20	35	52	84.88	92.9	40	50	10	38.3	1.8
CHMH 040 20 2	1	-Q10	20	45	65	84.88	92.9	40	50	14	48.8	1.7
CHMH 040 21 1	2	-Q10	21	32	55	89.13	97.1	40	75	10	35.3	1.9
CHMH 040 21 2	2	-Q10	21	35	55	89.13	97.1	40	75	10	38.3	1.9
CHMH 040 21 3	2	-Q10	21	40	62	89.13	97.1	40	75	12	43.3	1.9
CHMH 040 21 4	2	-Q10	21	45	68	89.13	97.1	40	75	14	48.8	1.8
CHMH 040 22 1	1	-Q10	22	35	52	93.37	101.4	40	50	10	38.3	2.3
CHMH 040 22 2	1	-Q10	22	45	65	93.37	101.4	40	50	14	48.8	2.0
CHMH 040 24 1	2	-Q10	24	32	55	101.86	109.9	40	75	10	35.3	2.5
CHMH 040 24 2	2	-Q10	24	35	55	101.86	109.9	40	75	10	38.3	2.5
CHMH 040 24 3	2	-Q10	24	40	62	101.86	109.9	40	75	12	43.3	2.5
CHMH 040 24 4	2	-Q10	24	45	68	101.86	109.9	40	75	14	48.8	2.5
CHMH 040 24 5	2	-Q10	24	55	80	101.86	109.9	40	80	16	59.3	2.5
CHMH 040 25 1	1	-Q10	25	35	52	106.10	114.1	40	50	10	38.3	3.0
CHMH 040 25 2	1	-Q10	25	45	65	106.10	114.1	40	50	14	48.8	3.0
CHMH 040 25 3	2	-Q10	25	55	80	106.10	114.1	40	80	16	59.3	3.0

品質等級
DIN 10

系列 CHMH-Q10 斜齒硬化齒輪
材料 45C (中碳鋼)
左旋角 19°31'42"
硬度 HRC 50~55°

Quality Grade
DIN 10

Series CHMH-Q10 Helical Hardened Pinions
Material 45C (Medium Carbon Steel)
Left Hand Angle 19°31'42"
Hardness: HRC 50~55°

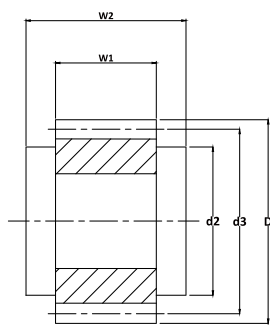


圖1/Fig1.

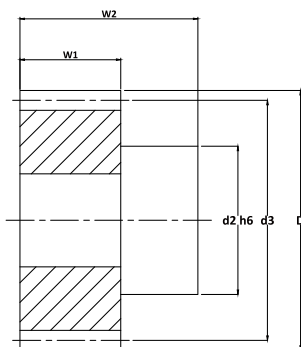
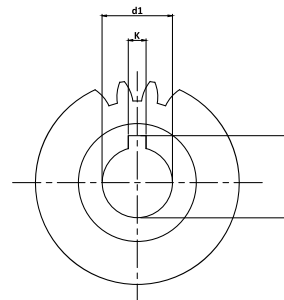


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 _{H6}	d2	d3	D	w1	w2	k	h	KG
模數 5 Module 5												
CHMH 050 18 1	2	-Q10	18	45	68	95.49	105.5	50	85	14	48.8	2.8
CHMH 050 24 1	2	-Q10	24	45	68	127.32	137.3	50	85	14	48.8	5.0
CHMH 050 24 2	2	-Q10	24	55	80	127.32	137.3	50	90	16	59.3	5.0
CHMH 050 24 3	2	-Q10	24	75	110	127.32	137.3	50	110	20	79.9	5.5
模數 6 Module 6												
CHMH 060 20 1	2	-Q10	20	55	80	127.32	139.3	60	100	16	59.3	5.8
CHMH 060 20 2	2	-Q10	20	75	110	127.32	139.3	60	120	20	79.9	6.3
CHMH 060 25 3	2	-Q10	25	55	80	159.16	171.2	60	100	16	59.3	9.0
CHMH 060 25 4	2	-Q10	25	75	110	159.16	171.2	60	120	20	79.9	9.5
模數 8 Module 8												
CHMH 080 18 1	2	-Q10	18	75	110	152.79	168.8	80	140	20	79.9	11.0
CHMH 080 20 2	2	-Q10	20	85	125	169.8	185.8	80	145	22	90.4	14.0
模數 10 Module 10												
CHMH 100 20 1	2	-Q10	20	85	125	212.21	232.2	100	165	22	90.4	26.0

品質等級

DIN 10

系列 CHMH-Q10 斜齒硬化齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 10

Series CHMH-Q10 Helical Hardened Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°

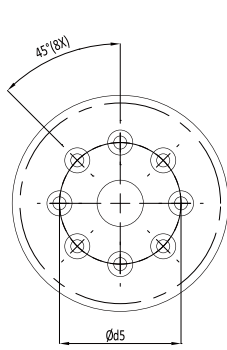
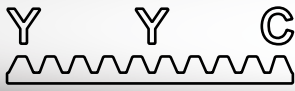


圖1/Fig1.

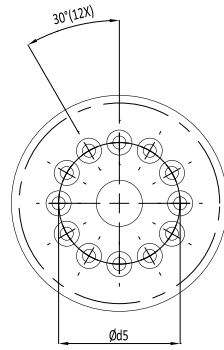
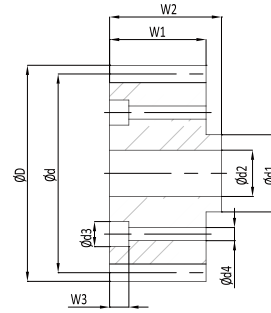


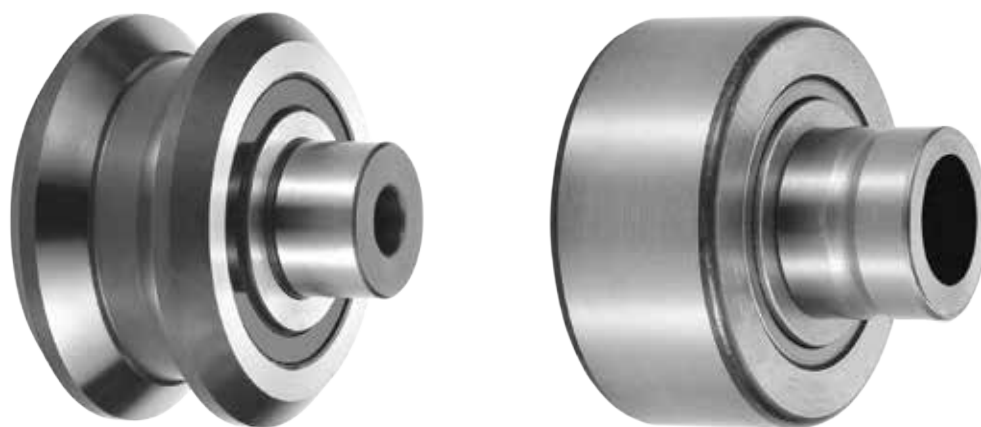
圖2/Fig2.



單位 / Dimension : mm

齒輪 Pinions

型號 Code	圖 Fig.	齒數 No. of Teeth	轉位係數 Shift Coefficient	ØD	節圓直徑 Pitch Dia. Ød	結合節圓直徑 Working Pitch Dia.	d1	d5	w1	w2	d4	d3	W3	d2	
模數 2 Module 2															
MHFGH 02026 1	1	-Q6	26	0.407	60.800	55.174	56.800	20.0	31.5	26	29	5.5	9.5	12.0	16.2
MHFGH 02027 1	1	-Q6	27	0.000	61.296	57.296	57.296	20.0	31.5	30	33	5.5	9.5	11.0	16.2
MHFGH 02029 1	1	-Q6	29	0.415	67.200	61.540	63.200	20.0	31.5	26	29	5.5	9.5	12.0	16.2
MHFGH 02035 1	1	-Q6	35	0.382	79.800	74.272	75.800	20.0	31.5	26	29	5.5	9.5	12.0	16.2
MHFGH 02029 1	1	-Q6	29	0.415	67.200	61.540	63.200	25.0	40	26	29	6.6	11.0	10.5	20.3
MHFGH 02033 1	1	-Q6	33	0.393	75.599	70.028	71.599	31.5	50	26	29	6.6	11.0	14.0	23.7
MHFGH 02036 1	1	-Q6	36	0.000	80.394	76.394	76.394	31.5	50	30	33	6.6	11.0	8.0	23.7
MHFGH 02037 1	1	-Q6	37	0.421	84.200	78.517	80.200	31.5	50	26	29	6.6	11.0	14.0	23.7
MHFGH 02037 2	2	-Q6	37	0.421	84.200	78.517	80.200	31.5	50	26	29	6.6	11.0	14.0	23.7
模數 3 Module 3															
MHFGH 03031 1	2	-Q6	31	0.354	106.800	98.676	100.800	31.5	50	31	35	6.6	11.0	14.0	23.7
MHFGH 03035 1	2	-Q6	35	0.365	119.600	111.409	113.600	50.0	80	31	35	9.0	14.0	10.5	32.2
MHFGH 03040 1	2	-Q6	40	0.379	135.599	127.324	129.599	50.0	80	31	35	9.0	14.0	10.5	32.2
模數 4 Module 4															
MHFGH 04030 1	2	-Q6	30	0.000	135.324	127.324	127.324	50.0	80	45	49	9.0	14.0	9.5	32.2
MHFGH 04038 1	2	-Q6	38	0.240	171.200	161.277	163.200	80.0	125	41	45	11.0	17.5	10.5	56.1
模數 5 Module 5															
MHFGH 05021 1	2	-Q6	21	0.000	121.109	111.409	111.409	50.0	80	59	64	9.0	14.0	11.5	32.2
MHFGH 05036 1	2	-Q6	36	0.000	200.986	190.986	190.986	80.0	125	55	60	11.0	17.5	12.5	56.1



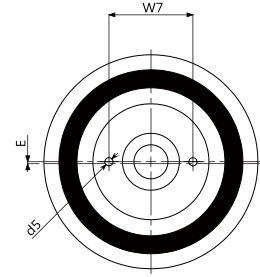
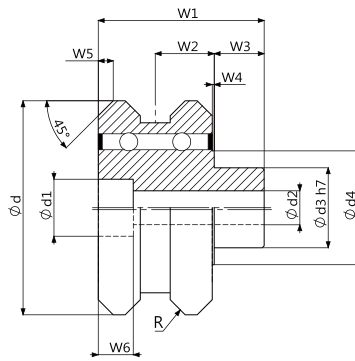
滾輪目錄 Content of Rollers

型號 Code	材料 Material	滾輪型狀 Type	心軸外徑 Shaft Dia.	頁碼 Page
UV	SUJ2 (100Cr6)	導軌滾輪 V Type Roller	15 20 25 35	77
UR	SUJ2 (100Cr6)	平軌滾輪 Round Roller	15 20 25 35	77

滾輪型號說明 Roller Code Instruction

1st	2nd	3rd	4th
材料 Material	型狀 Type	心軸外徑 Shaft Diameter	偏心量 Excenter
U=軸承鋼	V= V型 R=圓型	15 20	Y=1mm N=0mm
U=SUJ2 (100Cr6)	V= V Type R=Round	25 35	Y=1mm N=0mm

導軌滾輪 V Type Roller

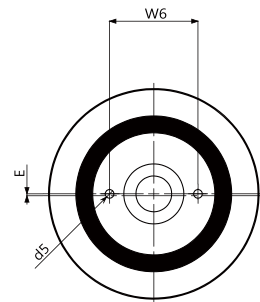
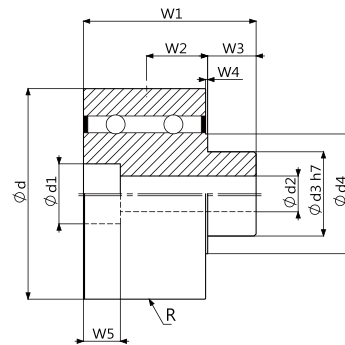


單位 / Dimension : mm

型號 Code	心軸外徑 Shaft Dia.	偏心率 Excenter	ød	ød1	W1	W5	W2	W3	W4	W6	R	ød2	ød3	ød4	W7	d5	Ga (µm)	KG
UV15Y	15	1 mm	53	13.5	35	2	12	12	1	9	R250	8.4	15h7	23.8	18.5	2.6x3	-3/+5	0.23
UV15N	15	0 mm	53	13.5	35	2	12	12	1	9	R250	8.4	15h7	23.8	18.5	2.6x3	-3/+5	0.23
UV20Y	20	1 mm	63	16.5	46	3	16	15	1	11	R300	10.5	20h7	27.7	22.5	2.6x3	-3/+5	0.45
UV20N	20	0 mm	63	16.5	46	3	16	15	1	11	R300	10.5	20h7	27.7	22.5	2.6x3	-3/+5	0.45
UV25Y	25	1 mm	77	20.5	60	3.5	20.5	20	1	13	R360	13	25h7	35.6	27.5	4.1x4.5	-3/+5	1.00
UV25N	25	0 mm	77	20.5	60	3.5	20.5	20	1	13	R360	13	25h7	35.6	27.5	4.1x4.5	-3/+5	1.00
UV35Y	35	1 mm	107	28.5	84	7.5	30	25	1	17.5	R500	17	40h7	56.9	42	4.1x4.5	-3/+5	2.50
UV35N	35	0 mm	107	28.5	84	7.5	30	25	1	17.5	R500	17	40h7	56.9	42	4.1x4.5	-3/+5	2.50

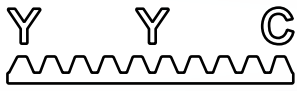
Ga (µm)內部軸向間隙/Internal Axial Tolerance

平軌滾輪 Round Roller



單位 / Dimension : mm

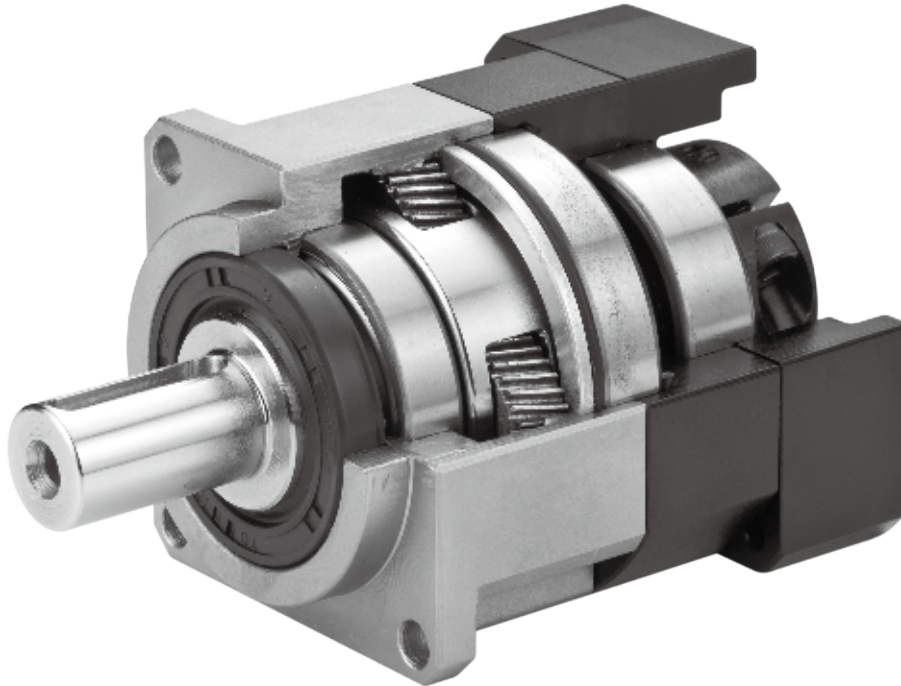
型號 Code	心軸外徑 Shaft Dia.	偏心率 Excenter	ød	ød1	W1	W2	W3	W4	W5	R	ød2	ød3	ød4	W6	d5	Ga (µm)	KG
UR15Y	15	1 mm	47	13.5	35	12	12	1	9	R500	8.4	15h7	23.8	18.5	2.6x3	-3/+5	0.16
UR20Y	20	1 mm	72	16.5	46	16	15	1	11	R500	10.5	20h7	27.7	22.5	2.6x3	-3/+5	0.63
UR25Y	25	1 mm	85	20.5	60	20.5	20	1	13	R500	13	25h7	35.6	27.5	4.1x4.5	-3/+5	1.00
UR35Y	35	1 mm	100	28.5	84	30	25	1	17.5	R500	17	40h7	56.9	42	4.1x4.5	-3/+5	2.70



行星減速機目錄 Contents of Planetary Reducer

型號 Code	主結構 Structure	機型 Type	型號 Code	減速比 Ratio	背隙等級 Backlash Level	照片 Photo	頁碼 Page
SR	直齒 Straight	標準型 Standard	42, 60, 90, 115, 142, 180	L1: 3, 4, 5, 7, 10 L2: 15, 20, 25, 30, 35, 40, 50, 70, 100	P2: L1≤8 · L2≤12		80
SCR	直齒 Straight	圓型 Cylindrical	42, 60, 90, 115, 142, 180	L1: 3, 4, 5, 7, 10 L2: 15, 20, 25, 30, 35, 40, 50, 70, 100	P2: L1≤8 · L2≤12		84
HR	斜齒 Helical	標準型 Standard	42, 60, 90, 115, 142, 180	L1: 3, 4, 5, 6, 7, 8, 9, 10 L2: 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 90, 100	PS L1≤1 · L2≤3 P0 L1≤3 · L2≤5 P1 L1≤5 · L2≤7		87
HER	斜齒 Helical	經濟型 Economy	42, 60, 90, 115, 142, 180	L1: 3, 4, 5, 6, 7, 8, 9, 10 L2: 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 90, 100	P2: L1≤8 · L2≤12		91
HSR	斜齒 Helical	高鋼性 Super	42, 60, 90, 115, 142, 180	L1: 3, 4, 5, 6, 7, 8, 9, 10 L2: 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 90, 100	PS L1≤1 · L2≤3 P0 L1≤3 · L2≤5 P1 L1≤5 · L2≤7 P2 L1≤7 · L2≤9		95
HCR	斜齒 Helical	圓型 Cylindrical	42, 60, 90, 115, 142, 180	L1: 3, 4, 5, 6, 7, 8, 9, 10 L2: 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 90, 100	P2: L1≤8 · L2≤12		98
HDR	斜齒 Helical	盤型 Disk	47, 64, 90, 110, 140, 200	L1: 4, 5, 7, 10 L2: 20, 25, 35, 40, 50, 70, 100	PS L1≤1 · L2≤3 P0 L1≤3 · L2≤5 P1 L1≤5 · L2≤7		101
HRR	斜齒 Helical	90度直角型 Right Angle	42, 60, 90, 115, 142	L1: 3, 4, 5, 6, 7, 8, 9, 10, 14, 20 L2: 25, 30, 35, 40, 50, 60, 70, 80, 90, 100	P0 L1≤2 · L2≤4 P1 L1≤4 · L2≤7 P2 L1≤6 · L2≤9		104
HBR	斜齒 Helical	傘齒型 Bevel	60, 90, 115, 142	L1: 3, 4, 5, 10, 20 L2: 15, 25, 30, 40, 50	P0 L1≤4 · L2≤6 P1 L1≤7 · L2≤9 P2 L1≤10 · L2≤12		107

行星減速機型號說明 Planetary Reducer Code Instruction



1st	2nd	3rd	4th	5th	6th	7th	8th
主結構 Structure	機型 Type	品名 Name	型號 Code	減速比 Ratio	出力軸鍵槽 Output Shaft Keyway	背隙等級 Backlash Level	馬達 Motor
S/H	C E S F R B	R	042~220	3~100	S1 S2	Ps P0 P1 P2	N/A
S=直齒 H=斜齒	C=圓型 E=經濟型 S=高剛性 D=盤型 R=90度直角型 B=傘齒型	減速機	42 60 90 110 115 140 142 180 220	L1=1段 減速比 3,4,5, 6,7, 8, 9, 10 L2=2段 減速比 25, 30, 35, 40, 50, 60, 70, 80, 90, 100	S1 標準品 (有鍵槽) S2 實心軸 (無鍵槽)	Ps=極精密 P0=超精密 P1=精密 P2=標準	N/A
S=straight H=Helical	C=Cylindrical E=Economy S=Super D=Disk R=Right Angle B=Bevel	Reducer	42 60 90 110 115 140 142 180 220	L1=Level 1 Ratio 3,4,5, 6,7, 8, 9, 10 L2=Level 2 Ratio 25, 30, 35, 40, 50, 60, 70, 80, 90, 100	S1: Standard, with Keyway S2: Solid Output, No Keyway	Ps=Ultra Precision P0=Super Precision P1=Precision P2=Standard	N/A



齒輪箱和內環齒輪採一體式設計，結構緊湊、精密度高、輸出扭矩大。

Gear box and internal ring gear are integrated designed, diameter maximized, high precision and high torque capacity are specialties.

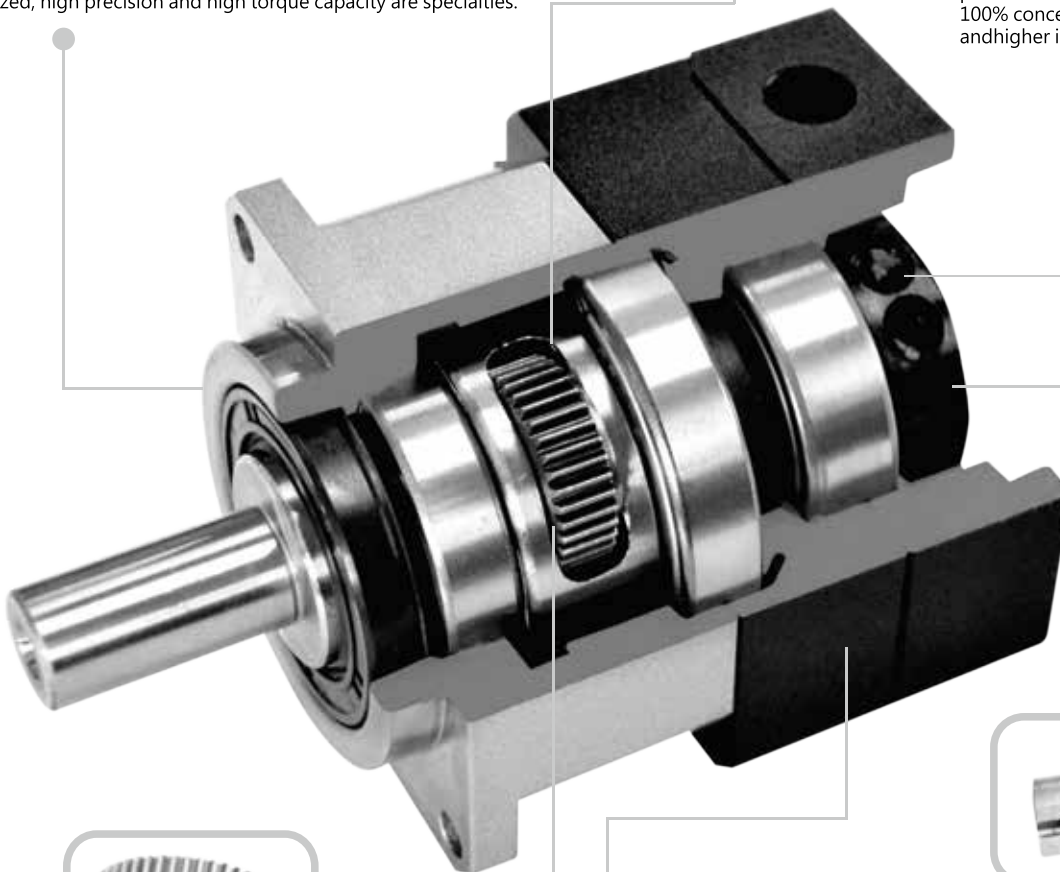


行星臂架與輸出軸採一體式的設計結構，確保最大耐扭力剛性及穩定性
Integrated design of planet carrier and output shaft ensures the maximum torque stiffness and stability.



輸入端與馬達的連結機構，採用筒夾式的鎖緊經動平衡分析，以確保在高輸入轉速下結合界面的同心度和零背隙的動力傳遞。

Triple split collet with dynamic balanced set collar clamping system provides backlash free power transmission and eliminates slippage. 100% concentricity allows for smooth rotation and higher input speed capability.



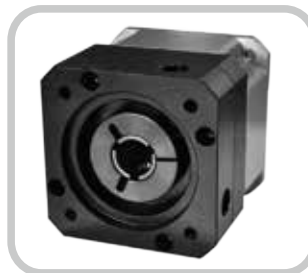
齒輪材質選用鉻鉬釩合金鋼，經調質熱處理至基材硬度 HRC25 度，再利用氣體氮化方式將齒輪表面硬度提升至 600HV，以獲得最佳的耐磨耗及耐衝擊韌性。

To gain the best abrasion performance and impact resistance, Chromium Molybdenum Vanadium Alloy steel is selected as raw material. Accompany with quenching and tempering heat treatment process, the core hardness is increased to 25 HRC. Accompany with plasma nitriding heat treatment process, the surface hardness is increased to 600 HV.

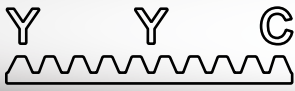


太陽齒採一體式設計，應用於高負載使其精確傳動不滑脫。

The sun gear adopted one-piece design, integrate with all components perfectly. It's for heavy duty and high speed load application. Acts with accurate transmission without slippage and escape.



馬達連接板和襯套採模組化設計，適用於任何廠牌、型式的伺服馬達。
Motor adapter and bushing module are modularized designed, which applied to types of servomotors.

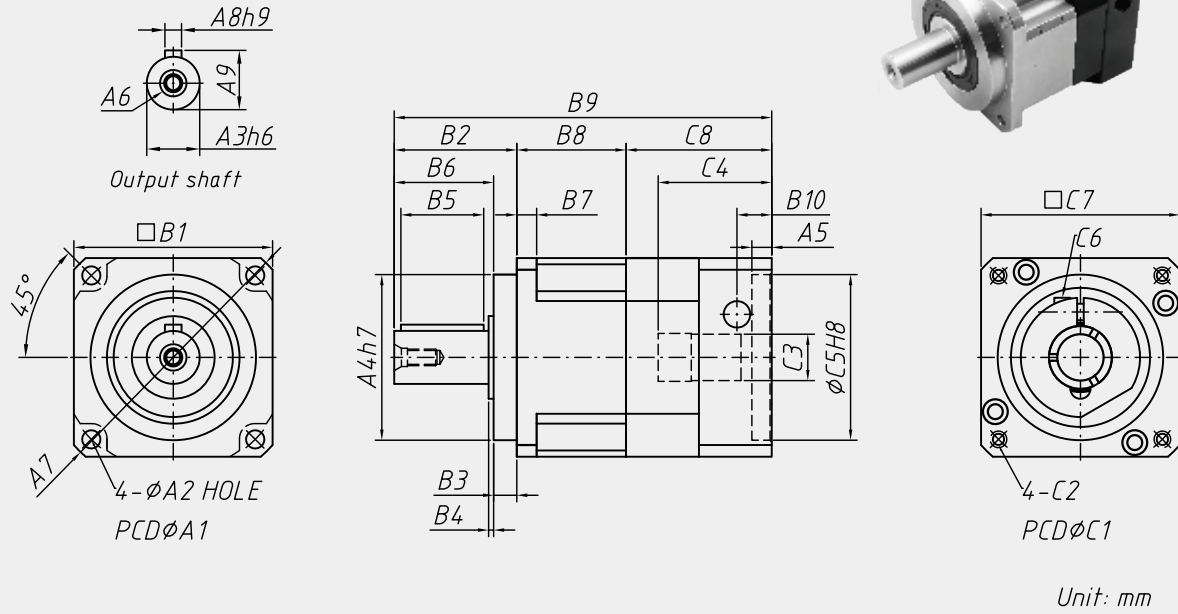


減速機性能資料 Reducer Performance Information

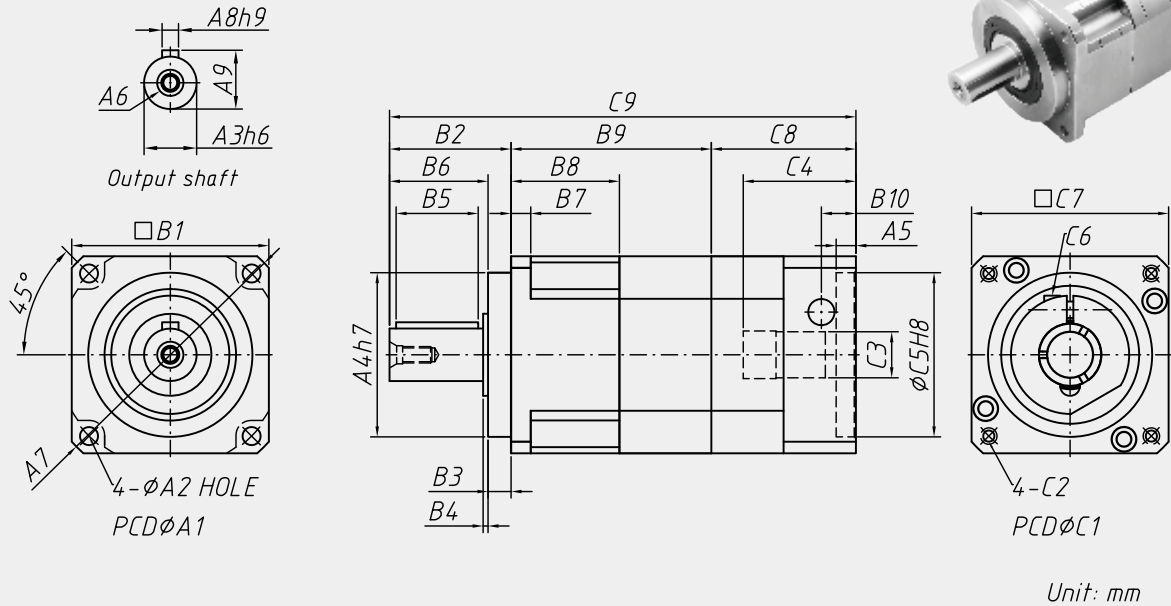
規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	220
額定輸出力矩 Nominal Output Torque	Nm	L1	3	18	52	130	276	492	955	1440
			4	16	47	116	246	436	875	1320
			5	15	44	109	231	411	850	1290
			7	14	41	103	216	383	805	1200
			10	13	39	97	206	366	775	1160
		L2	15	18	52	130	276	492	955	1440
			20	16	47	116	246	436	875	1320
			25	15	44	109	231	411	850	1290
			30	18	52	130	276	492	955	1440
			35	14	41	103	216	383	805	1200
			40	16	47	116	246	436	875	1320
			50	15	44	109	231	411	850	1290
			70	14	41	103	216	383	805	1200
			100	13	39	97	206	366	775	1160
最大輸入轉速 Max. Input Speed	rpm	L1/L2	3~100	5,000	5,000	5,000	5,000	5,000	3,000	3,000
額定輸入轉速 Nominal Input Speed	rpm	L1/L2	3~100	3,000	3,000	3,000	3,000	3,000	2,000	2,000
標準背隙 P ₂ Standard Backlash	arc min	L1	3~10	≤ 8						
		L2	15~100	≤ 12						
最大加速扭矩 Max. Acceleration Torque	Nm	L1/L2	3~100	1.8倍額定輸出力矩 / 1.8 Times of nominal output torque						
最大輸出(急停)扭矩 Max. Output (Emergency Stop) Torque	Nm	L1/L2	3~100	3倍額定輸出力矩 / 3 Times of nominal output torque						
扭轉剛性 Torsional Rigidity	Nm/arc min	L1/L2	3~100	2.3	5	15	45	69	140	220
容許徑向力 Max. Radial Force	N	L1/L2	3~100	750	1,180	3,000	6,500	9,100	11,150	35,000
容許軸向力 Max. Axial Force	N	L1/L2	3~100	325	590	1,500	3,250	4,550	5,575	17,500
使用壽命 Product Life	hr	L1/L2	3~100	S5週期運轉 > 20,000 ; (S1連續運轉 > 10,000 hrs) S5 Cycle Operation ; > 20,000 (S1 Continuous Operation ; > 10,000 hrs)						
使用溫度 Operation Temp	°C	L1/L2	3~100	-25°C ~ 90°C						
效率 Efficiency	*	L1	3~10	≤ 97						
		L2	15~100	≤ 94						
潤滑 Lubrication		L1/L2	3~100	合成潤滑油脂 / Synthetic Lubrication Grease						
噪音值 Noise Level	dB	L1	3~10	≤ 62	≤ 62	≤ 65	≤ 68	≤ 70	≤ 70	≤ 70
		L2	15~100	≤ 65	≤ 65	≤ 68	≤ 70	≤ 72	≤ 72	≤ 72
防護等級 Degree of Gearbox Protection	IP	L1/L2	3~100	IP 65						
安裝方向 Mounting Direction		L1/L2	3~100	任意方向 / Any direction						
重量 Weight	kg	L1	3~10	0.5	1.2	3.5	7.5	15.5	38	54
		L2	15~100	0.8	1.8	5.2	11.2	22.5	48	75

減速機轉動慣量 Reducer Moment of Inertia

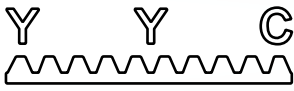
規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	220
轉動慣量 Moments of Inertia	kg.cm ²	L1	3	0.04	0.14	0.61	3.25	8.75	24.63	50.67
			4	0.04	0.13	0.48	2.74	7.16	20.12	46.21
			5	0.04	0.11	0.47	2.74	6.84	19.80	45.28
			7	0.04	0.11	0.44	2.58	6.78	19.21	43.32
			10	0.04	0.11	0.44	2.57	6.68	19.13	42.98
		L2	15	0.04	0.14	0.61	3.25	8.75	24.63	50.67
			20	0.04	0.13	0.48	2.74	7.16	20.12	46.21
			25	0.04	0.11	0.47	2.74	6.84	19.80	45.28
			30	0.04	0.14	0.61	3.25	8.75	24.63	50.67
			35	0.04	0.11	0.44	2.58	6.78	19.21	43.32
			40	0.04	0.11	0.48	2.74	7.16	20.12	46.21
			50	0.04	0.11	0.47	2.74	6.84	19.80	45.28
			70	0.04	0.11	0.44	2.58	6.78	19.21	43.32



Code	Model	42	60	90	115	142	180	220
A1		50	70	100	130	165	215	250
A2		3.5	5.5	6.5	8.5	10.5	13.5	17
A3		13	16	22	32	40	55	75
A4		35	50	80	110	130	160	180
A5		6	6	7.5	22.5	11	12	35
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5	M20 x P2.5
A7		56	80	116	148	185	240	292
A8		5	5	6	10	12	16	20
A9		15	18	24.5	35	43	60	79.5
B1		42.6	60	90	115	142	180	220
B2		25.8	37	48	65	97	104.5	150
B3		5.5	7	10	12	15	20	30
B4		1.6	1.5	1.5	2	3	2.5	15
B5		15	25	30	40	63	70	90
B6		20.5	30	38	53	82	84.5	120
B7		4	6	8	10	12	16	20
B8		28.3	33	43	54	72	87.5	97.4
B9		88.65	114	138	190	251	292	384.4
B10		11	13.5	14	15	23	27.5	45
C1		46	70	90	145	165	200	265
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M14 x P2.0
C3		8	14, 19	19, 24	24, 28	35, 42	42	55
C4		26	34	43	67.5	68	72.5	121
C5		30	50	70	110	130	114.3	230
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75
C7		42.6	60	90	130	142	180	250
C8		34.35	44	47	71	82	100	144



Code \ Model	42	60	90	115	142	180	220
A1	50	70	100	130	165	215	250
A2	3.5	5.5	6.5	8.5	10.5	13.5	17
A3	13	16	22	32	40	55	75
A4	35	50	80	110	130	160	180
A5	6	6	7.5	22.5	11	12	35
A6	M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5	M20 x P2.5
A7	56	80	116	148	185	240	292
A8	5	5	6	10	12	16	20
A9	15	18	24.5	35	43	60	79.5
B1	42.6	60	90	115	142	180	220
B2	25.8	37	48	65	97	104.5	150
B3	5.5	7	10	12	15	20	30
B4	1.6	1.5	1.5	2	3	2.5	15
B5	15	25	30	40	63	70	90
B6	20.5	30	38	53	82	84.5	120
B7	4	6	8	10	12	16	20
B8	28.3	33	43	54	72	87.5	97.4
B9	54.3	61	83	102	123	177.5	211.4
B10	11	13.5	14	15	23	27.5	45
C1	46	70	90	145	165	200	265
C2	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M14 x P2.0
C3	8	14, 19	19, 24	24, 28	35, 42	42	55
C4	26	34	43	67.5	68	72.5	121
C5	30	50	70	110	130	114.3	230
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75
C7	42.6	60	90	130	142	180	250
C8	34.35	44	47	71	82	100	144
C9	114.65	142	178	238	312	382	505.4



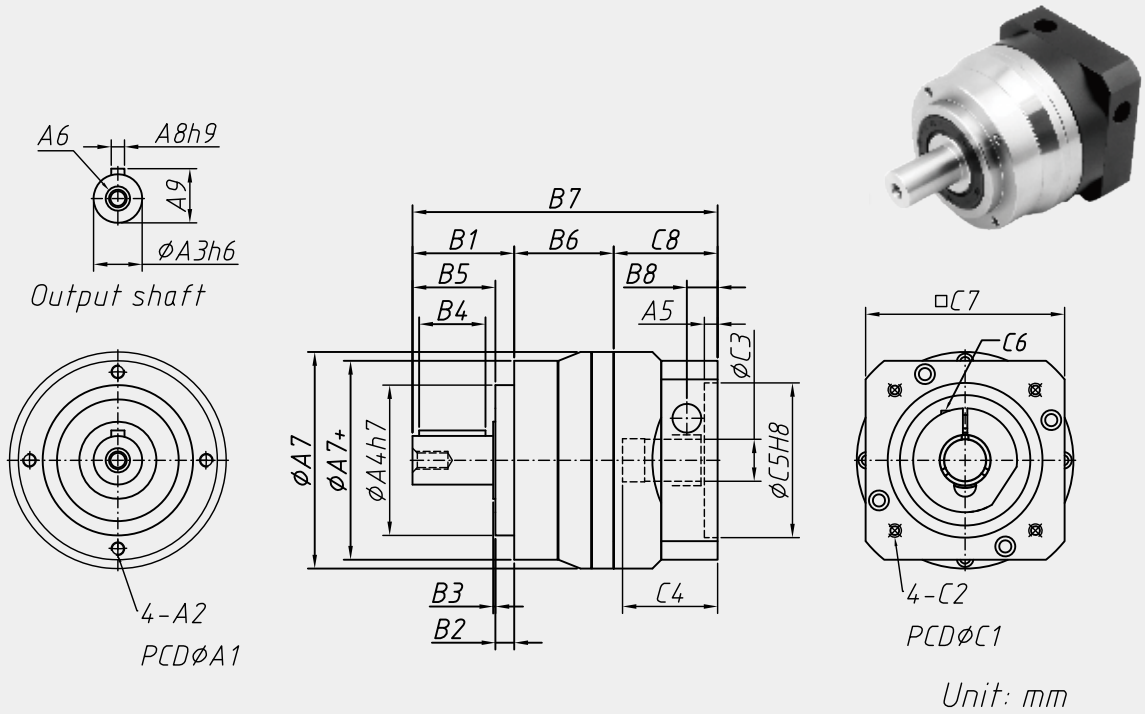
減速機性能資料 Reducer Performance Information

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180
額定輸出力矩 Nominal Output Torque	Nm	L1	3	17	44	115	225	440	955
			4	17	44	118	231	450	875
			5	16	42	123	228	445	850
			7	13	37	101	206	376	805
			10	11	29	73	163	305	775
		L2	15	16	42	114	221	434	955
			20	17	44	121	238	464	875
			25	16	42	128	236	460	850
			30	16	42	113	220	432	955
			35	13	37	105	214	392	805
			40	17	45	122	240	469	875
			50	16	42	128	236	460	850
			70	13	37	105	214	392	805
			100	11	29	75	170	318	775
最大輸入轉速 Max. Input Speed	rpm	L1/L2	3~100	8,000	6,000	6,000	4,800	3,600	3,000
額定輸入轉速 Nominal Input Speed	rpm	L1/L2	3~100	4,500	4,000	3,600	3,600	2,500	2,000
標準背隙 P ₂ Standard Backlash	arc min	L1	3~10	≤ 8					
		L2	15~100	≤ 12					
最大加速扭矩 Max. Acceleration Torque	Nm	L1/L2	3~100	1.8倍額定輸出力矩 / 1.8 Times of nominal output torque					
最大輸出(急停)扭矩 Max. Output (Emergency Stop) Torque	Nm	L1/L2	3~100	3倍額定輸出力矩 / 3 Times of nominal output torque					
扭轉剛性 Torsional Rigidity	Nm/arc min	L1/L2	3~100	3	7	14	25	50	140
容許徑向力 Max. Radial Force	N	L1/L2	3~100	810	1,150	1,530	3,260	4,550	11,150
容許軸向力 Max. Axial Force	N	L1/L2	3~100	405	575	765	1,630	2,275	5,575
使用壽命 Product Life	hr	L1/L2	3~100	S5週期運轉 > 20,000 (S1連續運轉 > 10,000 hrs) S5 Cycle Operation > 20,000 (S1 Continuous Operation > 10,000 hrs)					
使用溫度 Operation Temp	°C	L1/L2	3~100	-25°C ~ 90°C					
效率 η Efficiency	%	L1	3~10	≤ 97					
		L2	15~100	≤ 94					
潤滑 Lubrication		L1/L2	3~100	合成潤滑油脂 / Synthetic Lubrication Grease					
噪音值 Noise Level	dB	L1	3~10	≤ 60	≤ 62	≤ 64	≤ 66	≤ 68	≤ 70
		L2	15~100	≤ 60	≤ 62	≤ 64	≤ 66	≤ 68	≤ 72
防護等級 Degree of Gearbox Protection	IP	L1/L2	3~100	IP 65					
安裝方向 Mounting Direction		L1/L2	3~100	任意方向 / Any direction					
重量 Weight	kg	L1	3~10	0.6	1.4	3.3	6.9	13	38
		L2	15~100	0.9	1.6	4.7	8.7	17	48

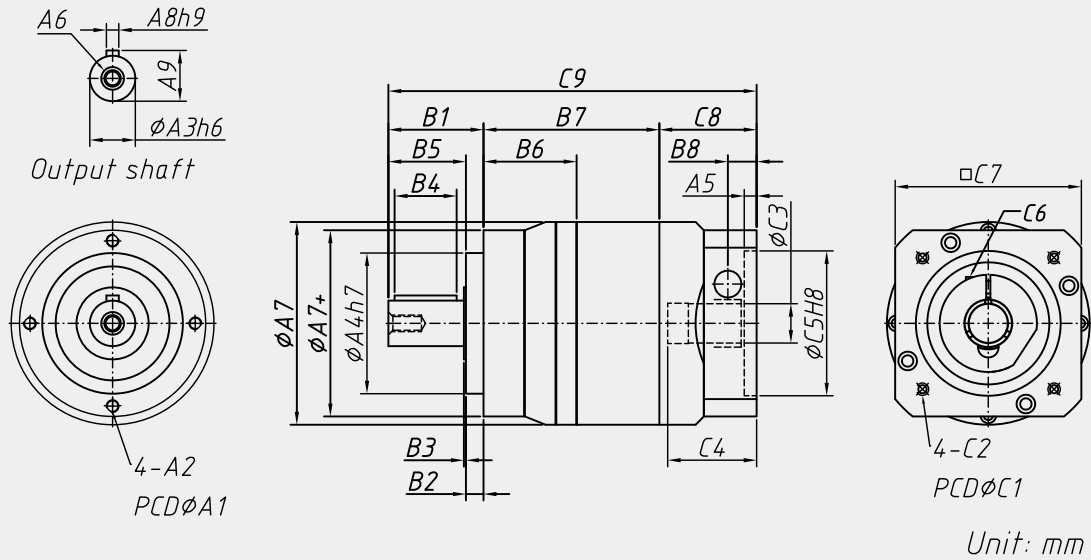
行星減速機 Planetary Reducer

減速機轉動慣量 Reducer Moment of Inertia

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180
轉動慣量 Moments of Inertia	kg.cm ²	L1	3	0.04	0.14	0.61	3.25	8.75	24.63
			4	0.04	0.13	0.48	2.74	7.16	20.12
			5	0.04	0.11	0.47	2.74	6.84	19.80
			7	0.04	0.11	0.44	2.58	6.78	19.21
			10	0.04	0.11	0.44	2.57	6.68	19.13
		L2	15	0.04	0.14	0.61	3.25	8.75	24.63
			20	0.04	0.13	0.48	2.74	7.16	20.12
			25	0.04	0.11	0.47	2.74	6.84	19.80
			30	0.04	0.14	0.61	3.25	8.75	24.63
			35	0.04	0.11	0.44	2.58	6.78	19.21
			40	0.04	0.11	0.48	2.74	7.16	20.12
			50	0.04	0.11	0.47	2.74	6.84	19.80
			70	0.04	0.11	0.44	2.58	6.78	19.21
			100	0.04	0.11	0.44	2.57	6.68	19.13



Code	Model	42	60	90	115	142	180
A1		44	62	80	108	140	184
A2		M4 X P0.7	M5 x P0.8	M6 x P1.0	M6 x P1.0	M10 x P1.25	M12 x P1.75
A3		13	16	22	32	40	55
A4		35	52	68	90	120	160
A5		6	6	7.5	22.5	11	12
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7		59	70	98	125	156	212
A7+		50	70	90	120	156	212
A8		5	5	6	10	12	16
A9		15	18	24.5	35	43	60
B1		26	36.5	46	70	97	99.5
B2		5.5	6.5	8.5	17	15	15
B3		1.6	1.5	1	2	3	2.5
B4		15	25	30	40	63	70
B5		20.5	30	37.5	53	82	84.5
B6		28.3	33.5	45	49	72	87.5
B7		114.8	114	138	190	251	283
B8		11	10.5	14	30	23	27.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14, 19	19, 24	24, 28	35, 42	42
C4		26	34.1	43	67.5	68.1	72.5
C5		30	50	70	110	130	114.3
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7		42.6	60	90	130	142	180
C8		34.5	44	47	71	82	91



Code	Model	42	60	90	115	142	180
A1		44	62	80	108	140	184
A2		M4 X P0.7	M5 x P0.8	M6 x P1.0	M6 x P1.0	M10 x P1.25	M12 x P1.75
A3		13	16	22	32	40	55
A4		35	52	68	90	120	160
A5		6	6	7.5	22.5	11	12
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7		59	70	98	125	156	212
A7+		50	70	90	120	156	212
A8		5	5	6	10	12	16
A9		15	18	24.5	35	43	60
B1		26	36.5	46	70	97	99.5
B2		5.5	6.5	8.5	17	15	15
B3		1.6	1.5	1	2	3	2.5
B4		15	25	30	40	63	70
B5		20.5	30	37.5	53	82	84.5
B6		28.3	33.5	45	49	72	87.5
B7		54.3	61.5	85	97	133	177.5
B8		11	10.5	14	30	23	27.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14, 19	19, 24	24, 28	35, 42	42
C4		26	34.1	43	67.5	68.1	72.5
C5		30	50	70	110	130	114.3
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7		42.6	60	90	130	142	180
C8		34.5	44	47	71	82	91
C9		114.8	142	178	238	312	373



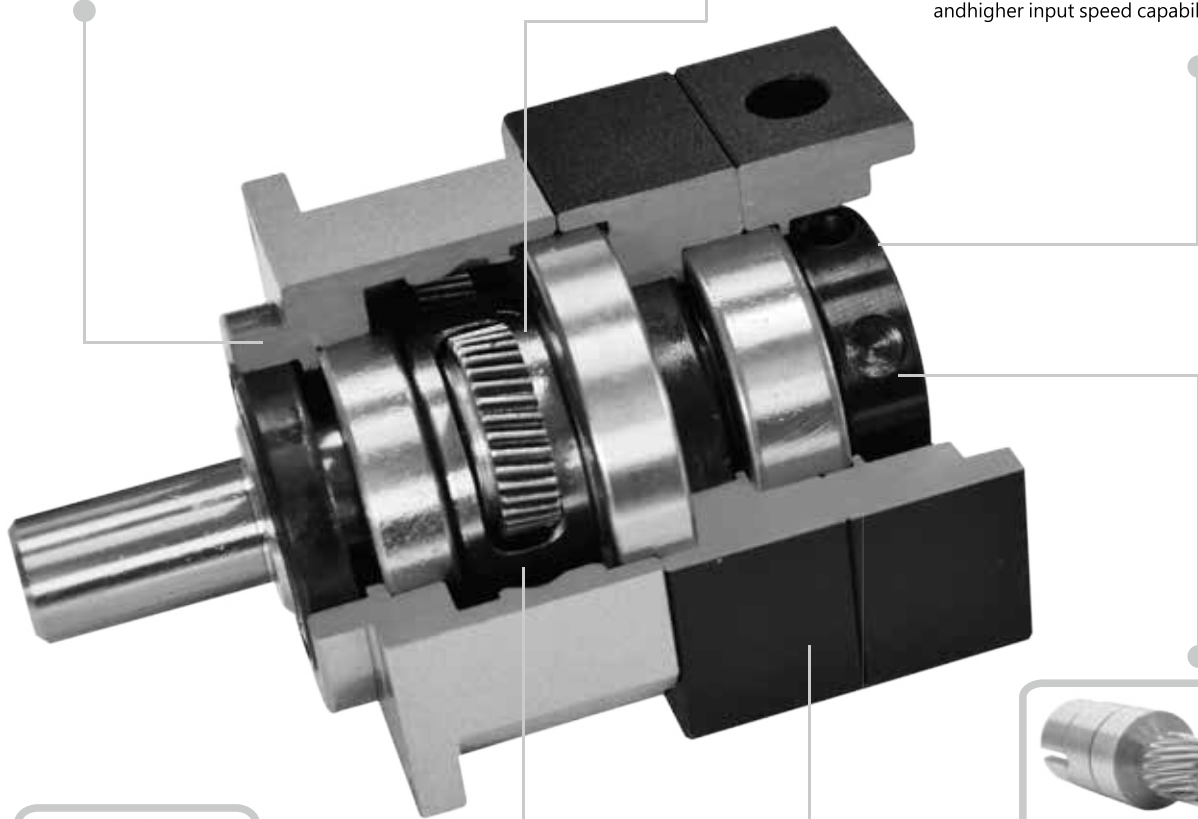
齒輪箱和內環齒輪採一體式設計，結構緊湊、精密度高、輸出扭矩大。
Gear box and internal ring gear are integrated designed, diameter maximized, high precision and high torque capacity are specialties.



行星臂架與輸出軸採一體式的設計結構，確保最大耐扭力剛性及穩定性。
Integrated design of planet carrier and output shaft ensures the maximum torque stiffness and stability.



輸入端與馬達的連結機構，採用筒夾式的鎖緊經動平衡分析，以確保在高輸入轉速下結合介面同心度和零背隙的動力傳遞。
Ripple split collet with dynamic balanced set collar clamping system provides backlash free power transmission and eliminates slippage. 100% concentricity allows for smooth rotation and higher input speed capability.



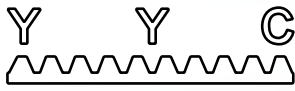
齒輪材質選用鉻鉬釩合金鋼，經調質熱處理至基材硬度 HRC25度，再利用氣體氮化方式將齒輪表面硬度提升至 600HV，以獲得最佳的耐磨耗及耐衝擊韌性。
To gain the best abrasion performance and impact resistance, Chromium Molybdenum Vanadium Alloy steel is selected as raw material. Accompany with quenching and tempering heat treatment process, the core hardness is increased to 25 HRC. Accompany with plasma nitriding heat treatment process, the surface hardness is increased to 600 HV.



減速機結構採螺旋齒輪設計，齒行嚙合率為一般正齒輪的二倍以上，具有運轉平順、低噪音高輸出扭矩和低背隙的特性。
Adopting helical gear design, the contact ratio of planetary reducer is twice higher than vertical one. Smooth running, high output torque and low backlash are distinguished features.



馬達連接板和襯套採模組化設計，適用於任何廠牌、型式的伺服馬達。
Motor adapter and bushing module are modularized designed, which applied to types of servomotors.



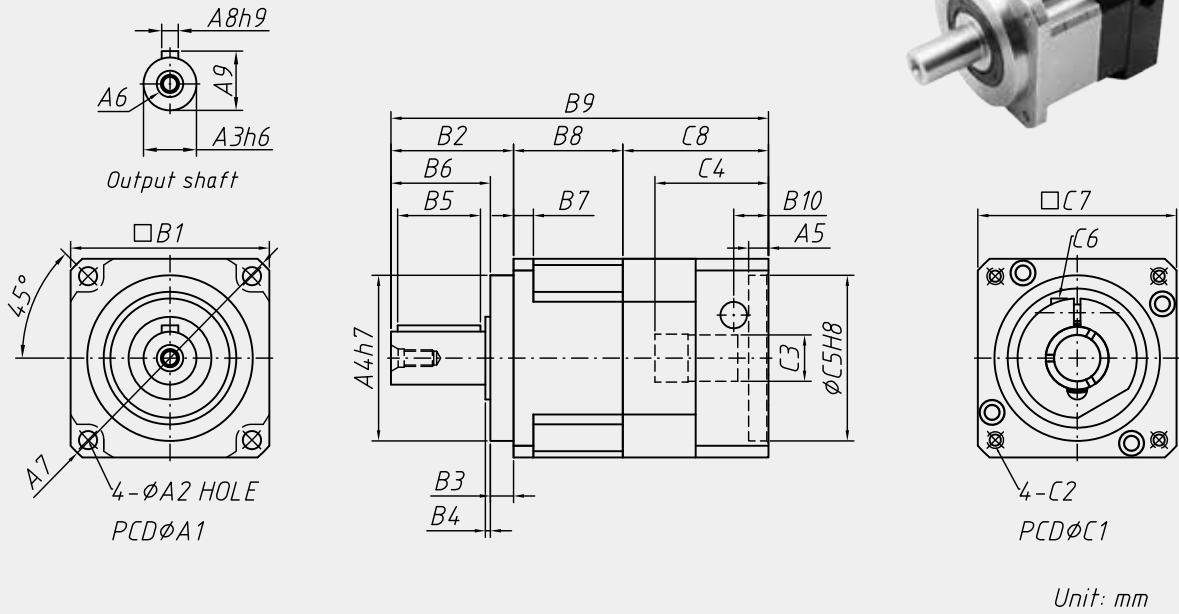
減速機性能資料 Reducer Performance Information

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	
額定輸出力矩 Nominal Output Torque	Nm	L1	3	21	57	135	216	352	603	
			4	20	52	145	298	552	1065	
			5	23	62	165	338	660	1215	
			6	21	57	155	318	610	1115	
			7	20	52	145	308	560	1115	
			8	18	47	125	268	510	1015	
			9	15	42	105	238	460	915	
			10	15	42	105	238	460	915	
			L2	15	21	57	135	216	352	603
				20	20	52	145	298	552	1065
		25		23	62	165	338	660	1215	
		30		21	57	155	318	610	1115	
		35		20	52	145	308	560	1115	
		40		18	47	125	268	510	1015	
		50		23	62	165	338	660	1215	
		60		21	57	155	318	610	1115	
		70		20	52	145	308	560	1115	
		80		18	47	125	268	510	1015	
		90	15	42	105	238	460	915		
		100	15	42	105	238	460	915		
最大輸入轉速 Max. Input Speed	rpm	L1/L2	3~100	10,000	10,000	8,000	8,000	6,000	6,000	
額定輸入轉速 Nominal Input Speed	rpm	L1/L2	3~100	5,000	5,000	4,000	4,000	3,000	3,000	
極精密背隙 P _S Ultra Precision Backlash	arc min	L1	3~10	≤ 1						
		L2	15~100	≤ 3						
超精密背隙 P ₀ Super Precision Backlash	arc min	L1	3~10	≤ 3						
		L2	15~100	≤ 5						
精密背隙 P ₁ Precision Backlash	arc min	L1	3~10	≤ 5						
		L2	15~100	≤ 7						
最大加速扭矩 Max. Acceleration Torque	Nm	L1/L2	3~100	1.8倍額定輸出力矩 / 1.8 Times of nominal output torque						
最大輸出(急停)扭矩 Max. Output (Emergency Stop) Torque	Nm	L1/L2	3~100	3倍額定輸出力矩 / 3 Times of nominal output torque						
扭轉剛性 Torsional Rigidity	Nm/arc min	L1/L2	3~100	3	7	14	25	50	145	
容許徑向力 Max. Radial Force	N	L1/L2	3~100	780	1,530	3,250	6,700	9,400	14,500	
容許軸向力 Max. Axial Force	N	L1/L2	3~100	390	765	1,625	3,350	4,700	7,250	
使用壽命 Product Life	hr	L1/L2	3~100	S5週期運轉 > 20,000 (S1連續運轉 > 10,000 hrs) S5 Cycle Operation > 20,000 (S1 Continuous Operation > 10,000 hrs)						
使用溫度 Operation Temp	°C	L1/L2	3~100	-25°C ~ 90°C						
效率 Efficiency	%	L1	3~10	≤ 97						
		L2	15~100	≤ 94						
潤滑 Lubrication		L1/L2	3~100	合成潤滑油脂 / Synthetic Lubrication Grease						
噪音值 Noise Level	dB	L1	3~10	≤ 56	≤ 60	≤ 63	≤ 63	≤ 65	≤ 67	
		L2	15~100	≤ 56	≤ 60	≤ 63	≤ 63	≤ 65	≤ 67	
防護等級 Degree of Gearbox Protection	IP	L1/L2	3~100	IP 65						
安裝方向 Mounting Direction		L1/L2	3~100	任意方向 / Any direction						
重量 Weight	kg	L1	3~10	0.5	1.2	3.5	7.5	15.5	38	
		L2	15~100	0.8	1.8	5.2	11.2	22.5	48	

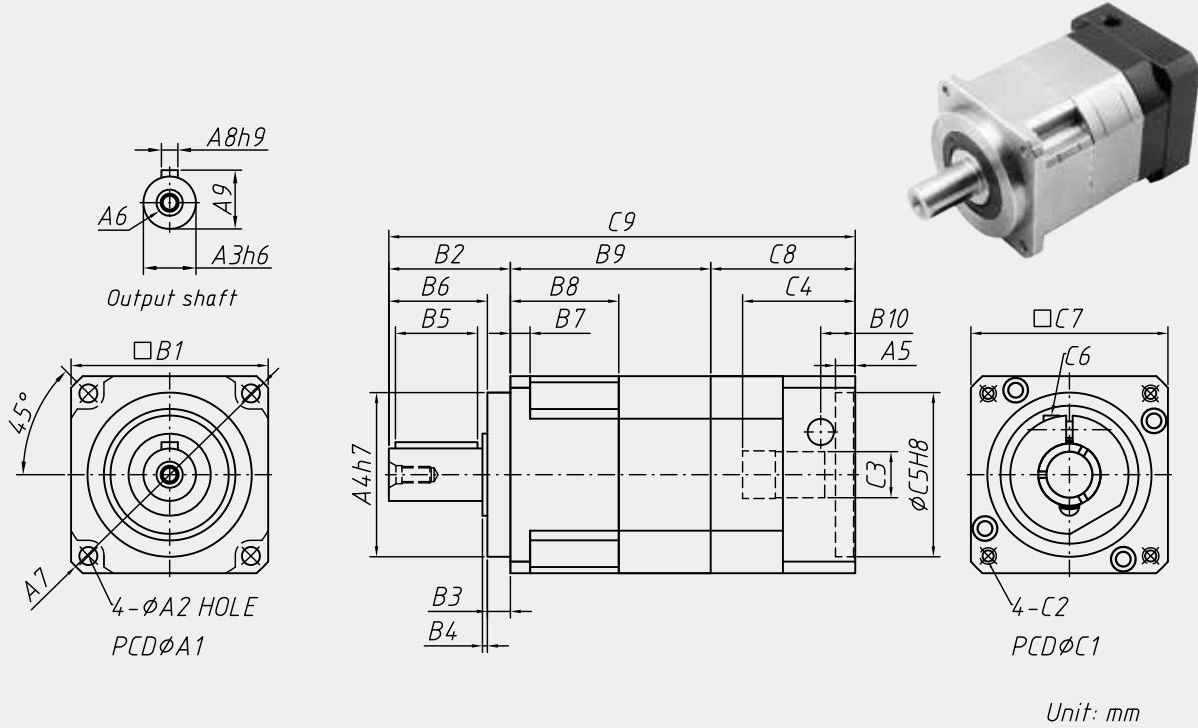
行星減速機 Planetary Reducer

減速機轉動慣量 Reducer Moment of Inertia

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	
轉動慣量 Moments of Inertia	kg.cm ²	L1	3	0.03	0.16	0.61	3.25	9.21	28.98	
			4	0.03	0.14	0.48	2.74	7.54	23.67	
			5	0.03	0.13	0.47	2.71	7.42	23.29	
			6	0.03	0.13	0.45	2.65	7.25	22.75	
			7	0.03	0.13	0.45	2.62	7.14	22.48	
			8	0.03	0.13	0.44	2.58	7.07	22.59	
			9	0.03	0.13	0.44	2.57	7.04	22.53	
			10	0.03	0.13	0.44	2.57	7.03	22.51	
			L2	15	0.03	0.03	0.13	0.47	2.71	7.42
				20	0.03	0.03	0.13	0.47	2.71	7.42
		25		0.03	0.03	0.13	0.47	2.71	7.42	
		30		0.03	0.03	0.13	0.47	2.71	7.42	
		35		0.03	0.03	0.13	0.47	2.71	7.42	
		40		0.03	0.03	0.13	0.47	2.71	7.42	
		50		0.03	0.03	0.13	0.44	2.57	7.03	
		60		0.03	0.03	0.13	0.44	2.57	7.03	
		70		0.03	0.03	0.13	0.44	2.57	7.03	
		80		0.03	0.03	0.13	0.44	2.57	7.03	
		90	0.03	0.03	0.13	0.44	2.57	7.03		
		100	0.03	0.03	0.13	0.44	2.57	7.03		



Code \ Model	42	60	90	115	142	180
A1	50	70	100	130	165	215
A2	3.5	5.5	6.5	8.5	10.5	13.5
A3	13	16	22	32	40	55
A4	35	50	80	110	130	160
A5	6	6	7.5	22.5	11	12
A6	M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7	56	80	116	148	185	240
A8	5	5	6	10	12	16
A9	15	18	24.5	35	43	60
B1	42.6	60	90	115	142	180
B2	25.8	37	48	65	97	104.5
B3	5.5	7	10	12	15	20
B4	1.6	1.5	1.5	2	3	2.5
B5	15	25	30	40	63	70
B6	20.5	30	38	53	82	84.5
B7	4	6	8	10	12	16
B8	28.3	33	43	54	72	87.5
B9	88.65	114	138	190	251	292
B10	11	13.5	14	15	23	27.5
C1	46	70	90	145	165	200
C2	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3	8	14, 19	19, 24	24, 28	35, 42	42
C4	26	34	43	67.5	68	72.5
C5	30	50	70	110	130	114.3
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7	42.6	60	90	130	142	180
C8	34.35	44	47	71	82	100



Code \ Model	42	60	90	115	142	180
A1	50	70	100	130	165	215
A2	3.5	5.5	6.5	8.5	10.5	13.5
A3	13	16	22	32	40	55
A4	35	50	80	110	130	160
A5	6	6	7.5	22.5	11	12
A6	M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7	56	80	116	148	185	240
A8	5	5	6	10	12	16
A9	15	18	24.5	35	43	60
B1	42.6	60	90	115	142	180
B2	25.8	37	48	65	97	104.5
B3	5.5	7	10	12	15	20
B4	1.6	1.5	1.5	2	3	2.5
B5	15	25	30	40	63	70
B6	20.5	30	38	53	82	84.5
B7	4	6	8	10	12	16
B8	28.3	33	43	54	72	87.5
B9	54.3	61	83	102	123	177.5
B10	11	13.5	14	15	23	27.5
C1	46	70	90	145	165	200
C2	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3	8	14, 19	19, 24	24, 28	35, 42	42
C4	26	34	43	67.5	68	72.5
C5	30	50	70	110	130	114.3
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7	42.6	60	90	130	142	180
C8	34.35	44	47	71	82	100
C9	114.65	142	178	238	312	382



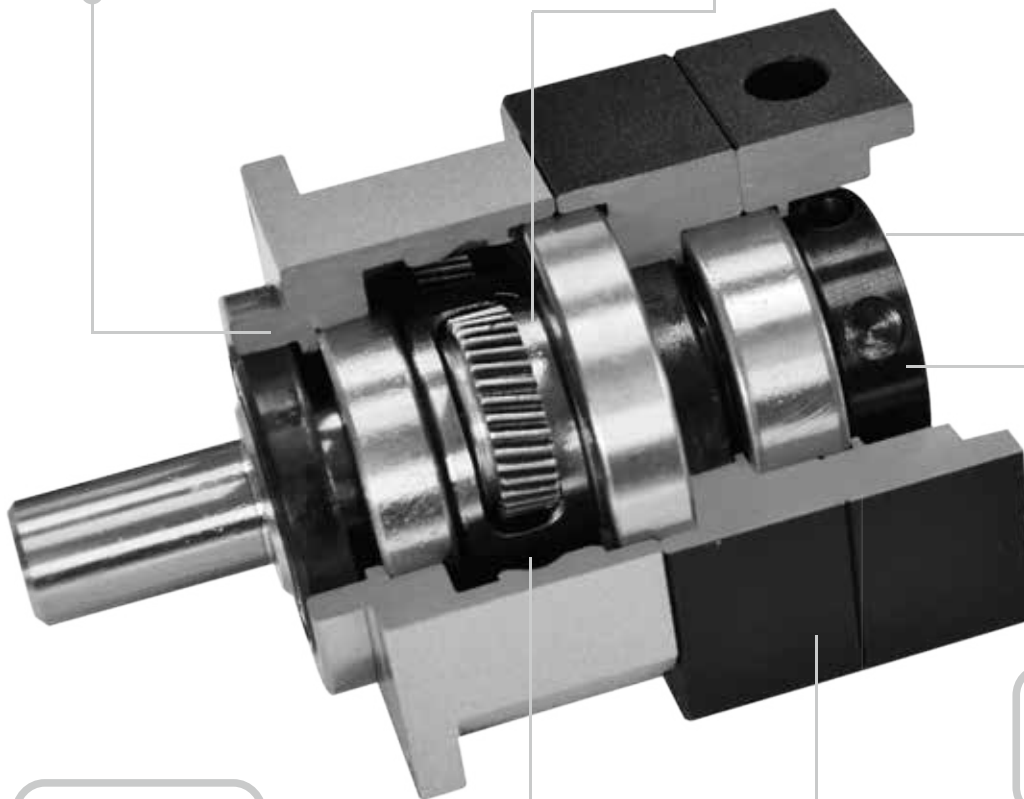
齒輪箱和內環齒輪採一體式設計，結構緊湊、精密度高、輸出扭矩大。
Gear box and internal ring gear are integrated designed, diameter maximized, high precision and high torque capacity are specialties.



行星臂架與輸出軸採一體式的設計結構，確保最大耐扭力剛性及穩定性。
Integrated design of planet carrier and output shaft ensures the maximum torque stiffness and stability.



輸入端與馬達的連結機構，採用筒夾式的鎖緊經動平衡分析，以確保在高輸入轉速下結合介面同心度和零背隙的動力傳遞。
ripple split collet with dynamic balanced set collar clamping system provides backlash free power transmission and eliminates slippage. 100% concentricity allows for smooth rotation and higher input speed capability.



齒輪材質選用鉻鉬釩合金鋼，經調質熱處理至基材硬度 HRC25 度，在利用氣體氮化方式將齒輪表面硬度提昇至 600HV，以獲得最佳的耐磨耗及耐衝擊韌性。

To gain the best abrasion performance and impact resistance, Chromium Molybdenum Vanadium Alloy steel is selected as raw material. Accompany with quenching and tempering heat treatment process, the core hardness is increased to 25 HRC. Accompany with plasma nitriding heat treatment process, the surface hardness is increased to 600HV.

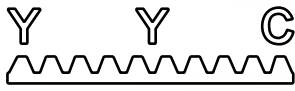


減速機結構採螺旋齒輪設計，齒形嚙合率為一般正齒輪的二倍以上，具有運轉平順、低噪音高輸出扭矩和低背隙的特性。

Adopting helical gear design, the contact ratio of planetary reducer is twice higher than vertical one. Smooth running, high output torque and low backlash are distinguished features.



馬達連接板和襯套採模組化設計，適用於任何廠牌、型式的伺服馬達。
Motor adapter and bushing module are modularized designed, which applied to types of servomotors.



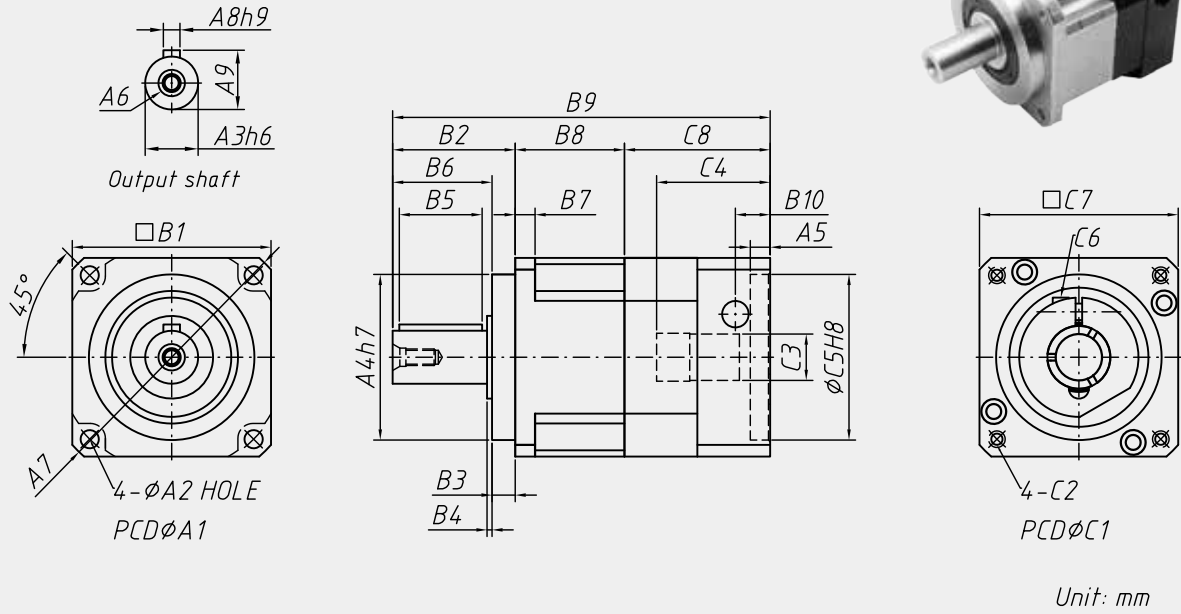
減速機性能資料 Reducer Performance Information

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180
額定輸出力矩 Nominal Output Torque	Nm	L1	3	21	57	135	216	352	603
			4	20	52	145	298	552	1065
			5	23	62	165	338	660	1215
			6	21	57	155	318	610	1115
			7	20	52	145	308	560	1115
			8	18	47	125	268	510	1015
			9	15	42	105	238	460	915
			10	15	42	105	238	460	915
		L2	15	21	57	135	216	352	603
			20	20	52	145	298	552	1065
			25	23	62	165	338	660	1215
			30	21	57	155	318	610	1115
			35	20	52	145	308	560	1115
			40	18	47	125	268	510	1015
			50	23	62	165	338	660	1215
			60	21	57	155	318	610	1115
			70	20	52	145	308	560	1115
			80	18	47	125	268	510	1015
90	15	42	105	238	460	915			
100	15	42	105	238	460	915			
最大輸入轉速 Max. Input Speed	rpm	L1/L2	3~100	10,000	10,000	8,000	8,000	6,000	6,000
額定輸入轉速 Nominal Input Speed	rpm	L1/L2	3~100	5,000	5,000	4,000	4,000	3,000	3,000
標準背隙 P2 Standard Backlash	arc min	L1	3~10	≤ 8					
		L2	15~100	≤ 12					
最大加速扭矩 Max. Acceleration Torque	Nm	L1/L2	3~100	1.8倍額定輸出力矩 / 1.8 Times of nominal output torque					
最大輸出(急停)扭矩 Max. Output (Emergency Stop) Torque	Nm	L1/L2	3~100	3倍額定輸出力矩 / 3 Times of nominal output torque					
扭轉剛性 Torsional Rigidity	Nm/arc min	L1/L2	3~100	3	7	14	25	50	145
容許徑向力 Max. Radial Force	N	L1/L2	3~100	780	1,530	3,250	6,700	9,400	14,500
容許軸向力 Max. Axial Force	N	L1/L2	3~100	390	765	1,625	3,350	4,700	7,250
使用壽命 Product Life	hr	L1/L2	3~100	S5週期運轉 > 20,000 ; (S1連續運轉 > 10,000 hrs) S5 Cycle Operation ; > 20,000 (S1 Continuous Operation ; > 10,000 hrs)					
使用溫度 Operation Temp	°C	L1/L2	3~100	-25°C ~ 90°C					
效率 Efficiency	*	L1	3~10	≤ 97					
		L2	15~100	≤ 94					
潤滑 Lubrication		L1/L2	3~100	合成潤滑油脂 / Synthetic Lubrication Grease					
噪音值 Noise Level	dB	L1	3~10	≤ 56	≤ 60	≤ 63	≤ 63	≤ 65	≤ 67
		L2	15~100	≤ 56	≤ 60	≤ 63	≤ 63	≤ 65	≤ 67
防護等級 Degree of Gearbox Protection	IP	L1/L2	3~100	IP 65					
安裝方向 Mounting Direction		L1/L2	3~100	任意方向 / Any direction					
重量 Weight	kg	L1	3~10	0.5	1.2	3.5	7.5	15.5	38
		L2	15~100	0.8	1.8	5.2	11.2	22.5	48

行星減速機 Planetary Reducer

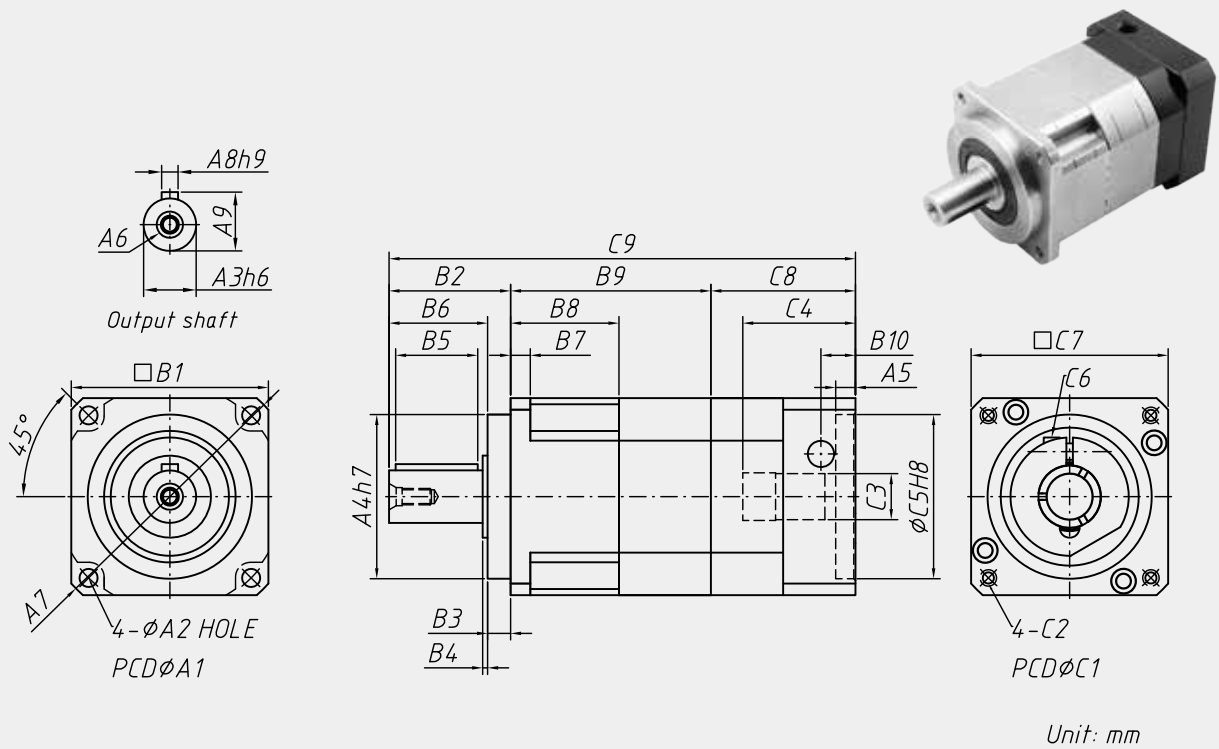
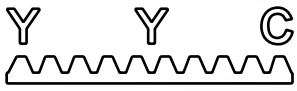
減速機轉動慣量 Reducer Moment of Inertia

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	
轉動慣量 Moments of Inertia	kg.cm ²	L1	3	0.03	0.16	0.61	3.25	9.21	28.98	
			4	0.03	0.14	0.48	2.74	7.54	23.67	
			5	0.03	0.13	0.47	2.71	7.42	23.29	
			6	0.03	0.13	0.45	2.65	7.25	22.75	
			7	0.03	0.13	0.45	2.62	7.14	22.48	
			8	0.03	0.13	0.44	2.58	7.07	22.59	
			9	0.03	0.13	0.44	2.57	7.04	22.53	
			10	0.03	0.13	0.44	2.57	7.03	22.51	
			L2	15	0.03	0.03	0.13	0.47	2.71	7.42
				20	0.03	0.03	0.13	0.47	2.71	7.42
		25		0.03	0.03	0.13	0.47	2.71	7.42	
		30		0.03	0.03	0.13	0.47	2.71	7.42	
		35		0.03	0.03	0.13	0.47	2.71	7.42	
		40		0.03	0.03	0.13	0.47	2.71	7.42	
		50		0.03	0.03	0.13	0.44	2.57	7.03	
		60		0.03	0.03	0.13	0.44	2.57	7.03	
		70		0.03	0.03	0.13	0.44	2.57	7.03	
		80		0.03	0.03	0.13	0.44	2.57	7.03	
		90	0.03	0.03	0.13	0.44	2.57	7.03		
		100	0.03	0.03	0.13	0.44	2.57	7.03		

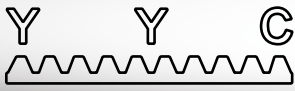


行星減速機 Planetary Reducer

Code \ Model	42	60	90	115	142	180
A1	50	70	100	130	165	215
A2	3.5	5.5	6.5	8.5	10.5	13.5
A3	13	16	22	32	40	55
A4	35	50	80	110	130	160
A5	6	6	7.5	22.5	11	12
A6	M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7	56	80	116	148	185	240
A8	5	5	6	10	12	16
A9	15	18	24.5	35	43	60
B1	42.6	60	90	115	142	180
B2	25.8	37	48	65	97	104.5
B3	5.5	7	10	12	15	20
B4	1.6	1.5	1.5	2	3	2.5
B5	15	25	30	40	63	70
B6	20.5	30	38	53	82	84.5
B7	4	6	8	10	12	16
B8	28.3	33	43	54	72	87.5
B9	88.65	114	138	190	251	292
B10	11	13.5	14	15	23	27.5
C1	46	70	90	145	165	200
C2	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3	8	14, 19	19, 24	24, 28	35, 42	42
C4	26	34	43	67.5	68	72.5
C5	30	50	70	110	130	114.3
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7	42.6	60	90	130	142	180
C8	34.35	44	47	71	82	100



Code	Model	42	60	90	115	142	180
A1		50	70	100	130	165	215
A2		3.5	5.5	6.5	8.5	10.5	13.5
A3		13	16	22	32	40	55
A4		35	50	80	110	130	160
A5		6	6	7.5	22.5	11	12
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7		56	80	116	148	185	240
A8		5	5	6	10	12	16
A9		15	18	24.5	35	43	60
B1		42.6	60	90	115	142	180
B2		25.8	37	48	65	97	104.5
B3		5.5	7	10	12	15	20
B4		1.6	1.5	1.5	2	3	2.5
B5		15	25	30	40	63	70
B6		20.5	30	38	53	82	84.5
B7		4	6	8	10	12	16
B8		28.3	33	43	54	72	87.5
B9		54.3	61	83	102	123	177.5
B10		11	13.5	14	15	23	27.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14, 19	19, 24	24, 28	35, 42	42
C4		26	34	43	67.5	68	72.5
C5		30	50	70	110	130	114.3
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7		42.6	60	90	130	142	180
C8		34.35	44	47	71	82	100
C9		114.65	142	178	238	312	382



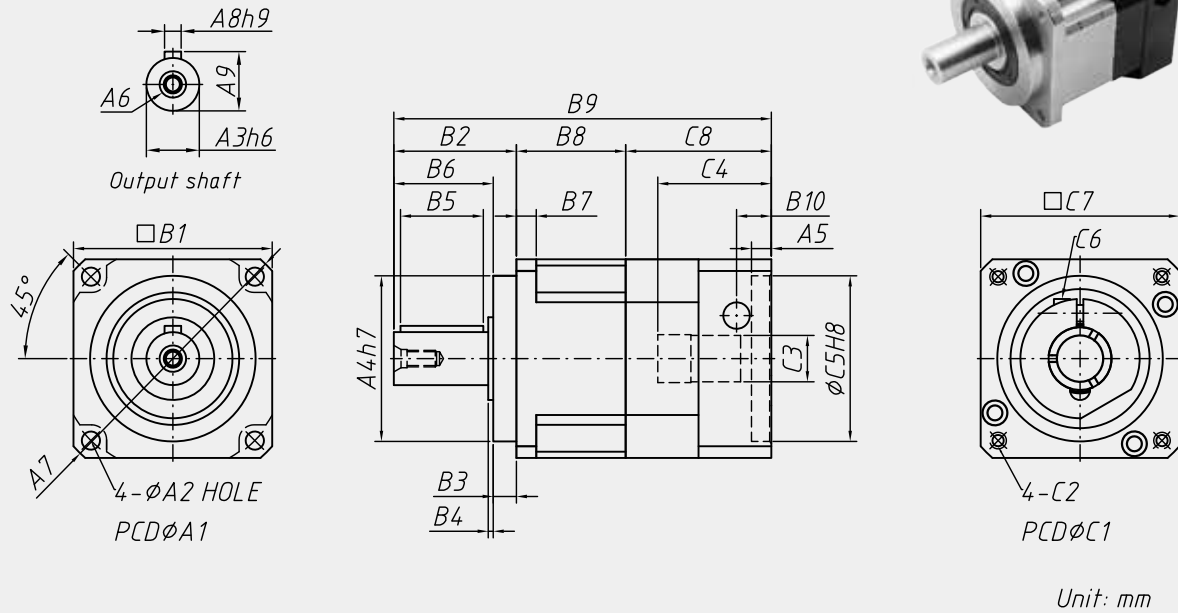
減速機性能資料 Reducer Performance Information

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180
額定輸出力矩 Nominal Output Torque	Nm	L1	3	21	57	135	216	352	603
			4	20	52	298	552	1065	
			5	23	62	165	338	660	1215
			6	21	57	155	318	610	1115
			7	20	52	145	308	560	1115
			8	18	47	125	268	510	1015
			9	15	42	105	238	460	915
			10	15	42	105	238	460	915
			15	21	57	135	216	352	603
			20	20	52	145	298	552	1065
		L2	25	23	62	165	338	660	1215
			30	21	57	155	318	610	1115
			35	20	52	145	308	560	1115
			40	18	47	125	268	510	1015
			50	23	62	165	338	660	1215
			60	21	57	155	318	610	1115
			70	20	52	145	308	560	1115
			80	18	47	125	268	510	1015
			90	15	42	105	238	460	915
			100	15	42	105	238	460	915
最大輸入轉速 Max. Input Speed	rpm	L1/L2	3~100	10,000	10,000	8,000	8,000	6,000	6,000
額定輸入轉速 Nominal Input Speed	rpm	L1/L2	3~100	5,000	5,000	4,000	4,000	3,000	3,000
極精密背隙 P _s Ultra Precision Backlash	arc min	L1	3~10	≤ 1					
超精密背隙 P ₀ Super Precision Backlash		L2	15~100	≤ 3					
		L1	3~10	≤ 3					
精密背隙 P ₁ Precision Backlash		L2	15~100	≤ 5					
		L1	3~10	≤ 5					
標準背隙 P ₂ Standard Backlash		L2	15~100	≤ 7					
		L1	3~10	≤ 7					
L2		15~100	≤ 9						
最大加速扭矩 Max. Acceleration Torque	Nm	L1/L2	3~100	1.8倍額定輸出力矩 / 1.8 Times of nominal output torque					
最大輸出(急停)扭矩 Max. Output (Emergency Stop) Torque	Nm	L1/L2	3~100	3倍額定輸出力矩 / 3 Times of nominal output torque					
扭轉剛性 Torsional Rigidity	Nm/arc min	L1/L2	3~100	3	7	14	25	50	145
容許徑向力 Max. Radial Force	N	L1/L2	3~100	610	1,400	4,100	9,200	14,000	18,000
容許軸向力 Max. Axial Force	N	L1/L2	3~100	320	1,100	3,700	5,820	11,400	19,500
使用壽命 Product Life	hr	L1/L2	3~100	S5週期運轉 > 20,000 (S1連續運轉 > 10,000 hrs) S5 Cycle Operation > 20,000 (S1 Continuous Operation > 10,000 hrs)					
使用溫度 Operation Temp	°C	L1/L2	3~100	-25°C ~ 90°C					
效率 Efficiency	*	L1	3~10	≤ 97					
		L2	15~100	≤ 94					
潤滑 Lubrication		L1/L2	3~100	合成潤滑油脂 / Synthetic Lubrication Grease					
噪音值 Noise Level	dB	L1	3~10	≤ 56	≤ 60	≤ 63	≤ 63	≤ 65	≤ 67
		L2	15~100	≤ 56	≤ 60	≤ 63	≤ 63	≤ 65	≤ 67
防護等級 Degree of Gearbox Protection	IP	L1/L2	3~100	IP 65					
安裝方向 Mounting Direction		L1/L2	3~100	任意方向 / Any direction					
重量 Weight	kg	L1	3~10	0.5	1.2	3.5	7.5	15.5	38
		L2	15~100	0.8	1.8	5.2	11.2	22.5	48

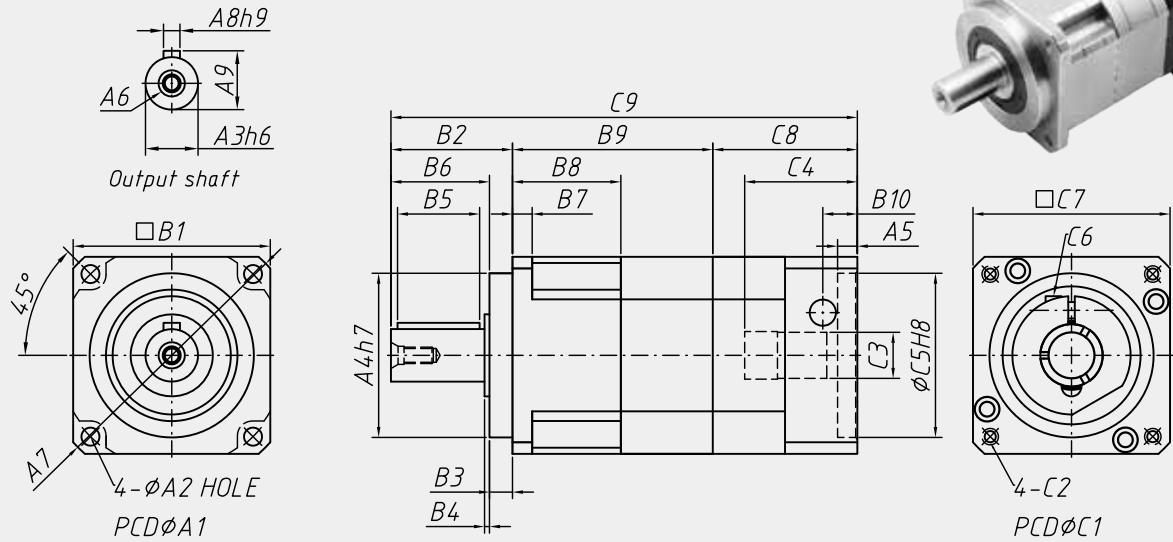
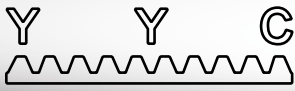
行星減速機 Planetary Reducer

減速機轉動慣量 Reducer Moment of Inertia

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	
轉動慣量 Moments of Inertia	kg.cm ²	L1	3	0.03	0.16	0.61	3.25	9.21	28.98	
			4	0.03	0.14	0.48	2.74	7.54	23.67	
			5	0.03	0.13	0.47	2.71	7.42	23.29	
			6	0.03	0.13	0.45	2.65	7.25	22.75	
			7	0.03	0.13	0.45	2.62	7.14	22.48	
			8	0.03	0.13	0.44	2.58	7.07	22.59	
			9	0.03	0.13	0.44	2.57	7.04	22.53	
			10	0.03	0.13	0.44	2.57	7.03	22.51	
			L2	15	0.03	0.03	0.13	0.47	2.71	7.42
				20	0.03	0.03	0.13	0.47	2.71	7.42
		25		0.03	0.03	0.13	0.47	2.71	7.42	
		30		0.03	0.03	0.13	0.47	2.71	7.42	
		35		0.03	0.03	0.13	0.47	2.71	7.42	
		40		0.03	0.03	0.13	0.47	2.71	7.42	
		50		0.03	0.03	0.13	0.44	2.57	7.03	
		60		0.03	0.03	0.13	0.44	2.57	7.03	
		70		0.03	0.03	0.13	0.44	2.57	7.03	
		80		0.03	0.03	0.13	0.44	2.57	7.03	
		90	0.03	0.03	0.13	0.44	2.57	7.03		
		100	0.03	0.03	0.13	0.44	2.57	7.03		

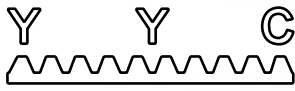


Code	Model	42	60	90	115	142	180
A1		50	70	100	130	165	215
A2		3.5	5.5	6.5	8.5	10.5	13.5
A3		13	16	22	32	40	55
A4		35	50	80	110	130	160
A5		6	6	7.5	22.5	11	12
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7		56	80	116	148	185	240
A8		5	5	6	10	12	16
A9		15	18	24.5	35	43	60
B1		42.6	60	90	115	142	180
B2		25.8	37	48	65	97	104.5
B3		5.5	7	10	12	15	20
B4		1.6	1.5	1.5	2	3	2.5
B5		15	25	30	40	63	70
B6		20.5	30	38	53	82	84.5
B7		4	6	8	10	12	16
B8		28.3	33	43	54	72	87.5
B9		88.65	114	138	190	251	292
B10		11	13.5	14	15	23	27.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14, 19	19, 24	24, 28	35, 42	42
C4		26	34	43	67.5	68	72.5
C5		30	50	70	110	130	114.3
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7		42.6	60	90	130	142	180
C8		34.35	44	47	71	82	100



Unit: mm

Code	Model	42	60	90	115	142	180
A1		50	70	100	130	165	215
A2		3.5	5.5	6.5	8.5	10.5	13.5
A3		13	16	22	32	40	55
A4		35	50	80	110	130	160
A5		6	6	7.5	22.5	11	12
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7		56	80	116	148	185	240
A8		5	5	6	10	12	16
A9		15	18	24.5	35	43	60
B1		42.6	60	90	115	142	180
B2		25.8	37	48	65	97	104.5
B3		5.5	7	10	12	15	20
B4		1.6	1.5	1.5	2	3	2.5
B5		15	25	30	40	63	70
B6		20.5	30	38	53	82	84.5
B7		4	6	8	10	12	16
B8		28.3	33	43	54	72	87.5
B9		54.3	61	83	102	123	177.5
B10		11	13.5	14	15	23	27.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14, 19	19, 24	24, 28	35, 42	42
C4		26	34	43	67.5	68	72.5
C5		30	50	70	110	130	114.3
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7		42.6	60	90	130	142	180
C8		34.35	44	47	71	82	100
C9		114.65	142	178	238	312	382



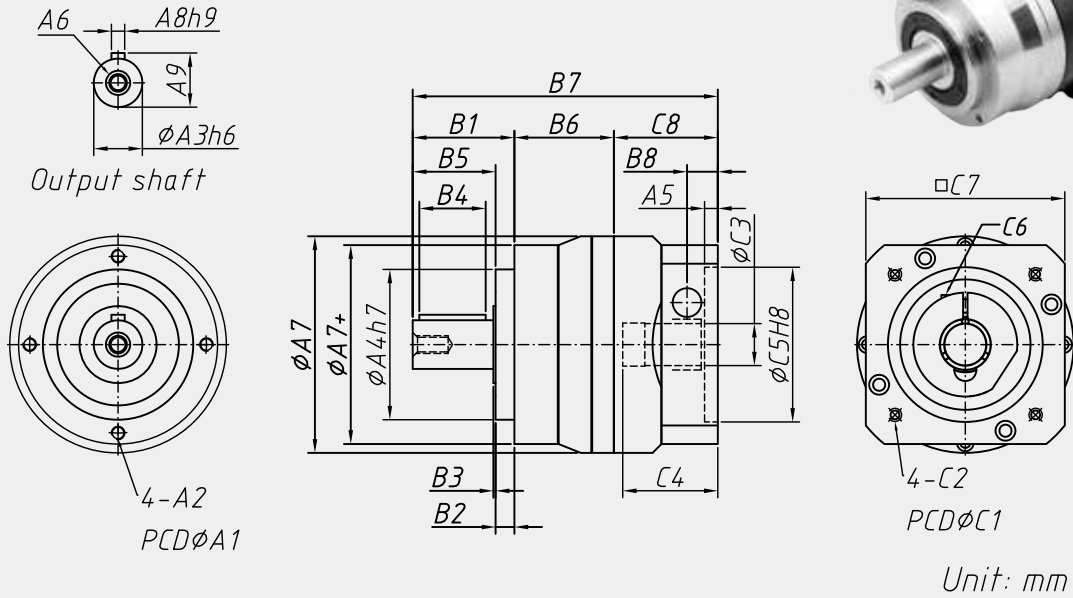
減速機性能資料 Reducer Performance Information

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	
額定輸出力矩 Nominal Output Torque	Nm	L1	3	21	57	135	216	352	603	
			4	20	52	145	298	552	1065	
			5	23	62	165	338	660	1215	
			6	21	57	155	318	610	1115	
			7	20	52	145	308	560	1115	
			8	18	47	125	268	510	1015	
			9	15	42	105	238	460	915	
			10	15	42	105	238	460	915	
			L2	15	21	57	135	216	352	603
				20	20	52	145	298	552	1065
		25		23	62	165	338	660	1215	
		30		21	57	155	318	610	1115	
		35		20	52	145	308	560	1115	
		40		18	47	125	268	510	1015	
		50		23	62	165	338	660	1215	
		60		21	57	155	318	610	1115	
		70		20	52	145	308	560	1115	
		80	18	47	125	268	510	1015		
		90	15	42	105	238	460	915		
100	15	42	105	238	460	915				
最大輸入轉速 Max. Input Speed	rpm	L1/L2	3~100	10,000	10,000	8,000	8,000	6,000	6,000	
額定輸入轉速 Nominal Input Speed	rpm	L1/L2	3~100	5,000	5,000	4,000	4,000	3,000	3,000	
標準背隙P ₂ Standard Backlash	arc min	L1	3~10	≤ 8						
		L2	15~100	≤ 12						
最大加速扭矩 Max. Acceleration Torque	Nm	L1/L2	3~100	1.8倍額定輸出力矩 / 1.8 Times of nominal output torque						
最大輸出(急停)扭矩 Max. Output (Emergency Stop) Torque	Nm	L1/L2	3~100	3倍額定輸出力矩 / 3 Times of nominal output torque						
扭轉剛性 Torsional Rigidity	Nm/arc min	L1/L2	3~100	3	7	14	25	50	145	
容許徑向力 Max. Radial Force	N	L1/L2	3~100	780	1,530	3,250	6,700	9,400	14,500	
容許軸向力 Max. Axial Force	N	L1/L2	3~100	390	765	1,625	3,350	4,700	7,250	
使用壽命 Product Life	hr	L1/L2	3~100	S5週期運轉 > 20,000 (S1連續運轉 > 10,000 hrs) S5 Cycle Operation > 20,000 (S1 Continuous Operation > 10,000 hrs)						
使用溫度 Operation Temp	°C	L1/L2	3~100	-25°C ~ 90°C						
效率η Efficiency	%	L1	3~10	≤ 97						
		L2	15~100	≤ 94						
潤滑 Lubrication		L1/L2	3~100	合成潤滑油脂 / Synthetic Lubrication Grease						
噪音值 Noise Level	dB	L1	3~10	≤ 56	≤ 60	≤ 63	≤ 63	≤ 65	≤ 67	
		L2	15~100	≤ 56	≤ 60	≤ 63	≤ 63	≤ 65	≤ 67	
防護等級 Degree of Gearbox Protection	IP	L1/L2	3~100	IP 65						
安裝方向 Mounting Direction		L1/L2	3~100	任意方向 / Any direction						
重量 Weight	kg	L1	3~10	0.6	1.4	3.3	6.9	13	31	
		L2	15~100	0.9	1.6	4.7	8.7	17	35	

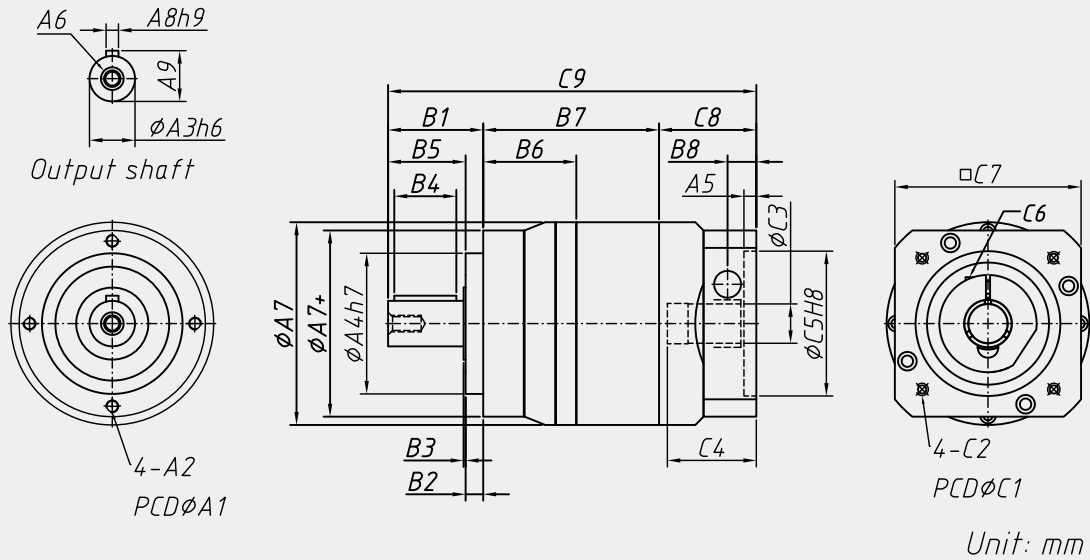
減速機轉動慣量 Reducer Moment of Inertia

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	
轉動慣量 Moments of Inertia	kg.cm ²	L1	3	0.03	0.16	0.61	3.25	9.21	28.98	
			4	0.03	0.14	0.48	2.74	7.54	23.67	
			5	0.03	0.13	0.47	2.71	7.42	23.29	
			6	0.03	0.13	0.45	2.65	7.25	22.75	
			7	0.03	0.13	0.45	2.62	7.14	22.48	
			8	0.03	0.13	0.44	2.58	7.07	22.59	
			9	0.03	0.13	0.44	2.57	7.04	22.53	
			10	0.03	0.13	0.44	2.57	7.03	22.51	
			L2	15	0.03	0.03	0.13	0.47	2.71	7.42
				20	0.03	0.03	0.13	0.47	2.71	7.42
		25		0.03	0.03	0.13	0.47	2.71	7.42	
		30		0.03	0.03	0.13	0.47	2.71	7.42	
		35		0.03	0.03	0.13	0.47	2.71	7.42	
		40		0.03	0.03	0.13	0.47	2.71	7.42	
		50		0.03	0.03	0.13	0.44	2.57	7.03	
		60		0.03	0.03	0.13	0.44	2.57	7.03	
		70		0.03	0.03	0.13	0.44	2.57	7.03	
		80	0.03	0.03	0.13	0.44	2.57	7.03		
		90	0.03	0.03	0.13	0.44	2.57	7.03		
100	0.03	0.03	0.13	0.44	2.57	7.03				

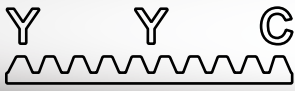
行星減速機 Planetary Reducer



Code	Model	42	60	90	115	142	180
A1		44	62	80	108	140	184
A2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M6 x P1.0	M10 x P1.25	M12 x P1.75
A3		13	16	22	32	40	55
A4		35	52	68	90	120	160
A5		6	6	7.5	22.5	11	12
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7		59	70	98	125	156	212
A7+		50	70	90	120	156	212
A8		5	5	6	10	12	16
A9		15	18	24.5	35	43	60
B1		26	36.5	46	70	97	99.5
B2		5.5	6.5	8.5	17	15	15
B3		1.6	1.5	1	2	3	2.5
B4		15	25	30	40	63	70
B5		20.5	30	37.5	53	82	84.5
B6		28.3	33.5	45	49	72	87.5
B7		114.8	114	138	190	251	283
B8		11	10.5	14	30	23	27.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14, 19	19, 24	24, 28	35, 42	42
C4		26	34.1	43	67.5	68.1	72.5
C5		30	50	70	110	130	114.3
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7		42.6	60	90	130	142	180
C8		34.5	44	47	71	82	91



Code	Model	42	60	90	115	142	180
A1		44	62	80	108	140	184
A2		M4 X P0.7	M5 x P0.8	M6 x P1.0	M6 x P1.0	M10 x P1.25	M12 x P1.75
A3		13	16	22	32	40	55
A4		35	52	68	90	120	160
A5		6	6	7.5	22.5	11	12
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5
A7		59	70	98	125	156	212
A7+		50	70	90	120	156	212
A8		5	5	6	10	12	16
A9		15	18	24.5	35	43	60
B1		26	36.5	46	70	97	99.5
B2		5.5	6.5	8.5	17	15	15
B3		1.6	1.5	1	2	3	2.5
B4		15	25	30	40	63	70
B5		20.5	30	37.5	53	82	84.5
B6		28.3	33.5	45	49	72	87.5
B7		54.3	61.5	85	97	133	177.5
B8		11	10.5	14	30	23	27.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14, 19	19, 24	24, 28	35, 42	42
C4		26	34.1	43	67.5	68.1	72.5
C5		30	50	70	110	130	114.3
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7		42.6	60	90	130	142	180
C8		34.5	44	47	71	82	91
C9		114.8	142	178	238	312	373

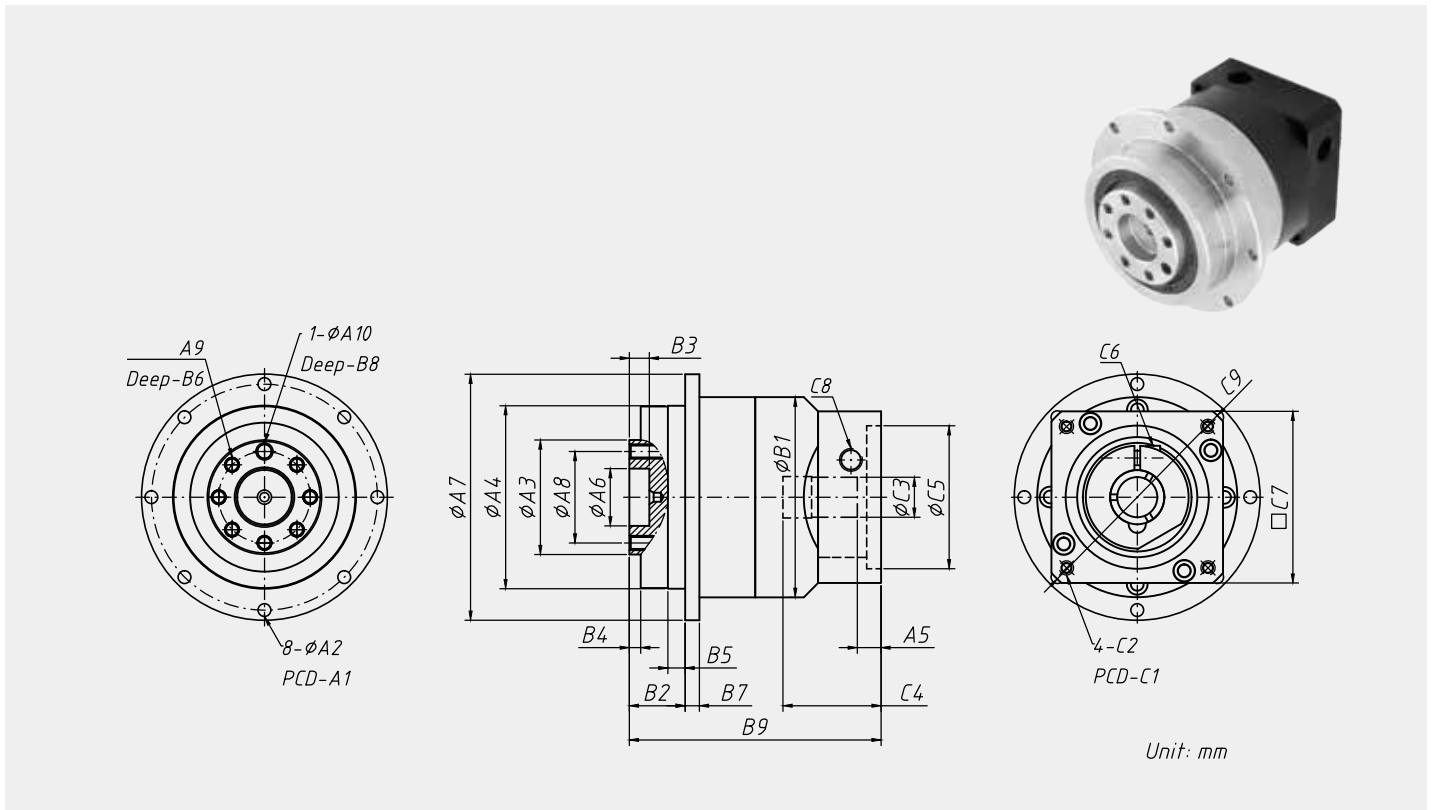
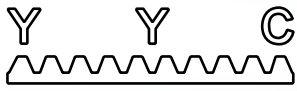


減速機性能資料 Reducer Performance Information

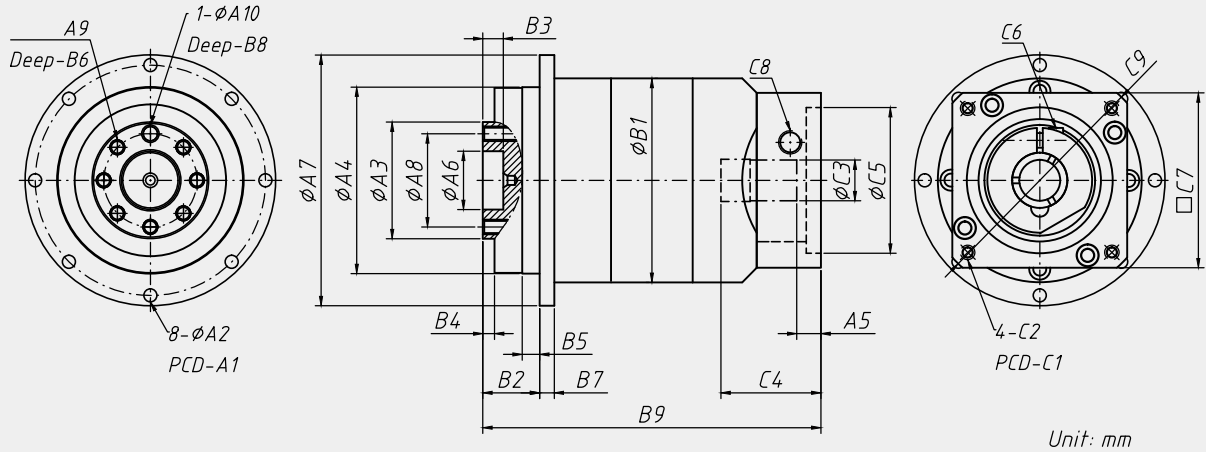
規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	47	64	90	110	140	200
額定輸出力矩 Nominal Output Torque	Nm	L1	4	20	50	135	278	570	1115
			5	23	62	165	338	660	1215
			7	20	52	145	308	560	1115
			10	15	42	105	238	460	915
		L2	20	20	50	135	278	570	1115
			25	23	62	165	338	660	1215
			35	20	52	145	308	560	1115
			40	20	50	135	278	570	1115
L2	50	23	62	165	338	660	1215		
	70	20	52	145	308	560	1115		
	100	15	42	105	238	460	915		
	100	15	42	105	238	460	915		
最大輸入轉速 Max. Input Speed	rpm	L1/L2	4~100	10,000	10,000	8,000	8,000	6,000	6,000
額定輸入轉速 Nominal Input Speed	rpm	L1/L2	4~100	5,000	5,000	4,000	4,000	3,000	3,000
極精密背隙 P _s Ultra Precision Backlash	arc min	L1	4~10	≤ 1					
		L2	20~100	≤ 3					
超精密背隙 P ₀ Super Precision Backlash	arc min	L1/L2	4~10	≤ 3					
		L1/L2	20~100	≤ 5					
精密背隙 P ₁ Precision Backlash	arc min	L1/L2	4~10	≤ 5					
		L1/L2	20~100	≤ 7					
最大加速扭矩 Max. Acceleration Torque	Nm	L1/L2	4~100	1.8倍額定輸出力矩 / 1.8 Times of nominal output torque					
最大輸出(急停)扭矩 Max. Output (Emergency Stop) Torque	Nm	L1/L2	4~100	3倍額定輸出力矩 / 3 Times of nominal output torque					
扭轉剛性 Torsional Rigidity	Nm/arc min	L1/L2	4~100	7	13	31	82	151	440
最大彎曲力矩 Max. OOO Torque	N	L1/L2	4~100	43	125	235	430	1,300	3,064
容許軸向力 Max. Axial Force	N	L1/L2	4~100	990	1050	2,850	2,990	10,590	16,660
使用壽命 Product Life	hr	L1/L2	4~100	S5週期運轉 > 20,000 (S1連續運轉 > 10,000 hrs) S5 Cycle Operation > 20,000 (S1 Continuous Operation > 10,000 hrs)					
使用溫度 Operation Temp	°C	L1/L2	4~100	-25°C ~ 90°C					
效率 Efficiency	%	L1	4~10	≤ 97					
		L2	20~100	≤ 94					
潤滑 Lubrication		L1/L2	4~100	合成潤滑油脂 / Synthetic Lubrication Grease					
噪音值 Noise Level	dB	L1	4~10	≤ 56	≤ 58	≤ 63	≤ 60	≤ 65	≤ 67
		L2	20~100	≤ 56	≤ 58	≤ 63	≤ 60	≤ 65	≤ 67
防護等級 Degree of Gearbox Protection	IP	L1/L2	4~100	IP 65					
安裝方向 Mounting Direction		L1/L2	4~100	任意方向 / Any direction					
重量 Weight	kg	L1	4~10	0.7	1.4	4.2	7.4	13.9	32.4
		L2	20~100	1	1.9	4.8	9.4	16.7	40.2

減速機轉動慣量 Reducer Moment of Inertia

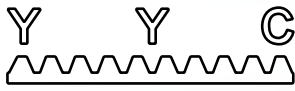
規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180
轉動慣量 Moments of Inertia	kg.cm ²	L1	4	0.03	0.14	0.51	2.87	7.54	25.03
			5	0.03	0.13	0.47	2.71	7.42	23.29
			7	0.03	0.13	0.45	2.62	7.14	22.48
			10	0.03	0.13	0.44	2.57	7.03	22.51
		L2	20	0.03	0.03	0.13	0.47	2.71	7.42
			25	0.03	0.03	0.13	0.47	2.71	7.42
			35	0.03	0.03	0.13	0.47	2.71	7.42
			40	0.03	0.03	0.13	0.44	2.57	7.03
			50	0.03	0.03	0.13	0.44	2.57	7.03
			70	0.03	0.03	0.13	0.44	2.57	7.03
			100	0.03	0.03	0.13	0.44	2.57	7.03
			100	0.03	0.03	0.13	0.44	2.57	7.03



Code \ Model	47	64	90	110	140	200
A1	67	79	109	135	168	233
A2	3.4	4.5	5.5	5.5	6.6	12-9.0
A3	28	40	63	80	100	160
A4	47	64	90	110	140	200
A5	6	6	7.5	22.5	11	12
A6	12	20	31.5	40	50	80
A7	72	86	118	146	179	248
A8	20	31.5	50	63	80	125
A9	3-M3 x P0.5	7-M5 x P0.8	7-M6 x P1.0	11-M6 x P1.0	11-M8 x P1.25	11-M10 x P1.5
A10	3	5	6	6	8	10
B1	59	70	98	125	156	212
B2	19.5	19.5	30	29	44	50
B3	5	7	12	12	12	16
B4	3	4	6	6	6	8
B5	5	6	10	10	15	15
B6	6.5	13	18	18	24	24
B7	4	5	7	8	10	12
B8	4	7	8	10	10	10
B9	71.3	88	106	149	175	228.5
C1	46	70	90	145	165	200
C2	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3	8	14, 19	19, 24	24, 28	35, 42	42
C4	26	34	43	67.5	68	72.5
C5	30	50	70	110	130	114.3
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7	42.6	60	90	130	142	180
C8	M8 x P1.25	M8 x P1.25	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
C9	Ø 56	Ø 80	Ø 116	Ø 160	Ø 189	Ø 240



Code	Model	47	64	90	110	140	200
A1		67	79	109	135	168	233
A2		3.4	4.5	5.5	5.5	6.6	12-9.0
A3		28	40	63	80	100	160
A4		47	64	90	110	140	200
A5		6	6	7.5	22.5	11	12
A6		12	20	31.5	40	50	80
A7		72	86	118	146	179	248
A8		20	31.5	50	63	80	125
A9		3-M3 x P0.5	7-M5 x P0.8	7-M6x P1.0	11-M6 x P1.0	11-M8 x P1.25	11-M10 x P1.5
A10		3	5	6	6	8	10
B1		59	70	98	125	156	212
B2		19.5	19.5	30	29	44	50
B3		5	7	12	12	12	16
B4		3	4	6	6	6	8
B5		5	6	10	10	15	15
B6		6.5	13	18	18	24	24
B7		4	5	7	8	10	12
B8		4	7	8	10	10	10
B9		97.3	116	146	197	236	318.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14, 19	19, 24	24, 28	35, 42	42
C4		26	34	43	67.5	68	72.5
C5		30	50	70	110	130	114.3
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75
C7		42.6	60	90	130	142	180
C8		M8 x P1.25	M8 x P1.25	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
C9		Ø 56	Ø 80	Ø 116	Ø 160	Ø 189	Ø 240



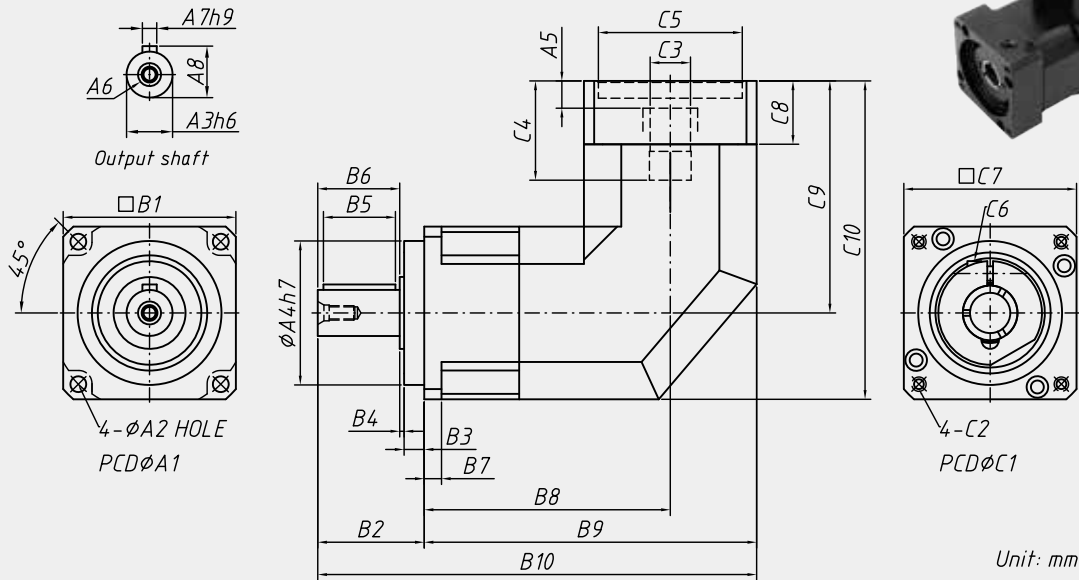
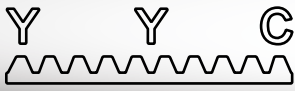
減速機性能資料 Reducer Performance Information

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142
額定輸出力矩 Nominal Output Torque	Nm	L1	3	10	38	95	203	352
			4	13	50	125	268	530
			5	16	62	155	333	660
			6	19	57	155	318	610
			7	20	52	145	308	560
			8	18	47	125	268	510
			9	15	42	105	238	460
			10	15	62	155	333	660
			14	15	44	145	308	560
			20	15	42	105	238	460
		L2	25	16	62	155	333	660
			30	21	57	155	318	610
			35	20	52	145	308	560
			40	18	47	125	268	510
			50	15	62	105	238	660
			60	21	57	155	318	610
			70	20	52	145	308	560
			80	18	47	125	268	510
			90	15	42	105	238	460
			100	15	42	105	238	460
最大輸入轉速 Max. Input Speed	rpm	L1/L2	3~100	10,000	10,000	8,000	8,000	6,000
額定輸入轉速 Nominal Input Speed	rpm	L1/L2	3~100	5,000	5,000	4,000	4,000	3,000
超精密背隙 P ₀ Super Precision Backlash	arc min	L1	3~10	≤ 2				
		L2	15~100	≤ 4				
精密背隙 P ₁ Precision Backlash	arc min	L1/L2	3~10	≤ 4				
		L1/L2	15~100	≤ 7				
標準背隙 P ₂ Standard Backlash	arc min	L1/L2	3~10	≤ 6				
		L1/L2	15~100	≤ 9				
最大加速扭矩 Max. Acceleration Torque	Nm	L1/L2	3~100	1.8倍額定輸出力矩 / 1.8 Times of nominal output torque				
最大輸出(急停)扭矩 Max. Output (Emergency Stop) Torque	Nm	L1/L2	3~100	3倍額定輸出力矩 / 3 Times of nominal output torque				
扭轉剛性 Torsional Rigidity	Nm/arc min	L1/L2	3~100	3	7	14	25	50
容許徑向力 Max. Radial Force	N	L1/L2	3~100	780	1,530	3,250	6,700	9,400
容許軸向力 Max. Axial Force	N	L1/L2	3~100	390	765	1,625	3,350	4,700
使用壽命 Product Life	hr	L1/L2	3~100	S5週期運轉 > 20,000 (S1連續運轉 > 10,000 hrs) S5 Cycle Operation > 20,000 (S1 Continuous Operation > 10,000 hrs)				
使用溫度 Operation Temp	°C	L1/L2	3~100	-25°C ~ 90°C				
效率 Efficiency	%	L1	3~10	≤ 95				
		L2	15~100	≤ 92				
潤滑 Lubrication		L1/L2	3~100	合成潤滑油脂 / Synthetic Lubrication Grease				
噪音值 Noise Level	dB	L1	3~10	≤ 61	≤ 63	≤ 65	≤ 68	≤ 70
		L2	15~100	≤ 61	≤ 63	≤ 65	≤ 68	≤ 70
防護等級 Degree of Gearbox Protection	IP	L1/L2	3~100	IP 65				
安裝方向 Mounting Direction		L1/L2	3~100	任意方向 / Any direction				
重量 Weight	kg	L1	3~10	1	2.3	6.6	13.2	24.5
		L2	15~100	1.2	3	8.2	14.2	27.5

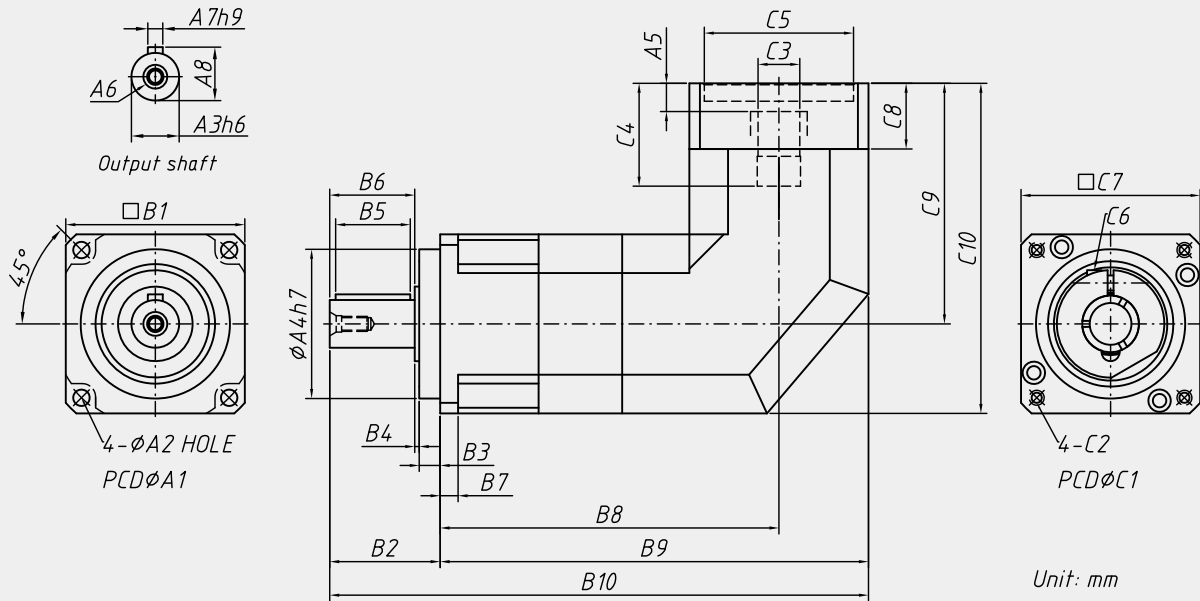
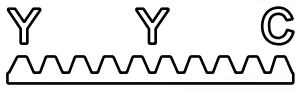
減速機轉動慣量 Reducer Moment of Inertia

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142
轉動慣量 Moments of Inertia	kg.cm ²	L1	3	0.09	0.35	2.25	6.84	23.4
			4	0.09	0.35	2.25	6.84	23.4
			5	0.09	0.35	2.25	6.84	23.4
			6	0.09	0.35	2.25	6.84	23.4
			7	0.09	0.35	2.25	6.84	23.4
			8	0.09	0.35	2.25	6.84	23.4
			9	0.09	0.35	2.25	6.84	23.4
			10	0.09	0.35	2.25	6.84	23.4
			14	0.09	0.07	1.87	6.25	21.8
			20	0.09	0.07	1.87	6.25	21.8
		L2	25	0.09	0.09	0.35	2.25	6.84
			30	0.09	0.09	0.35	2.25	6.84
			35	0.09	0.09	0.35	2.25	6.84
			40	0.09	0.09	0.35	2.25	6.84
			50	0.09	0.09	0.35	2.25	6.84
			60	0.09	0.09	0.35	2.25	6.84
			70	0.09	0.09	0.35	2.25	6.84
			80	0.09	0.09	0.35	2.25	6.84
			90	0.09	0.09	0.35	2.25	6.84
			100	0.09	0.09	0.35	2.25	6.84

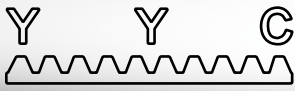
行星減速機 Planetary Reducer



Code \ Model	42	60	90	115	142
A1	50	70	100	130	165
A2	3.5	5.5	6.5	8.5	10.5
A3	13	16	22	32	40
A4	35	50	80	110	130
A5	6.14	6.47	7.5	19.1	11
A6	M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0
A7	5	5	6	10	12
A8	15	18	24.5	35	43
B1	42.6	60	90	115	142
B2	26	37	48	65	97
B3	5.5	7	10	12	15
B4	1.6	1.5	1.5	2	3
B5	15	25	30	40	63
B6	18.9	28.5	36.5	51	79
B7	4	6	8	10	12
B8	76	85.5	122.1	140	178
B9	97.3	115.5	167.1	197.5	249
B10	123.3	152.5	215.1	262.5	346
C1	46	70	90	145	165
C2	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C3	8	14, 19	19, 24	24, 28	35, 42
C4	26	34	53	78	74
C5	30	50	70	110	130
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C7	42.6	60	90	130	142
C8	20	22	25.5	45	35
C9	61	80.6	106.35	144.2	151
C10	82.3	110.6	151.35	201.7	222



Code \ Model	42	60	90	115	142
A1	50	70	100	130	165
A2	3.5	5.5	6.5	8.5	10.5
A3	13	16	22	32	40
A4	35	50	80	110	130
A5	6	6	7.5	19	11
A6	M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0
A7	5	5	6	10	12
A8	15	18	24.5	35	43
B1	42.6	60	90	115	142
B2	26	37	48	65	97
B3	5.5	7	10	12	15
B4	1.6	1.5	1.5	2	3
B5	15	25	30	40	63
B6	18.9	28.5	36.5	51	79
B7	4	6	8	10	12
B8	102	113.5	162.1	188	239
B9	123.3	143.5	207.1	245.5	310
B10	149.3	180.5	255.1	310.5	407
C1	46	70	90	145	165
C2	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C3	8	14, 19	19, 24	24, 28	35, 42
C4	26	34	53	78	74
C5	30	50	70	110	130
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C7	42.6	60	90	130	142
C8	20	22	25.5	45	35
C9	61	80.6	106.35	144.2	151
C10	82.3	110.6	151.35	201.7	222

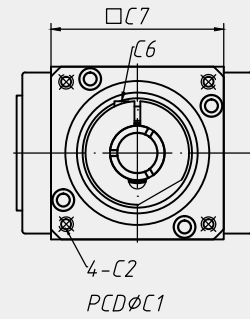
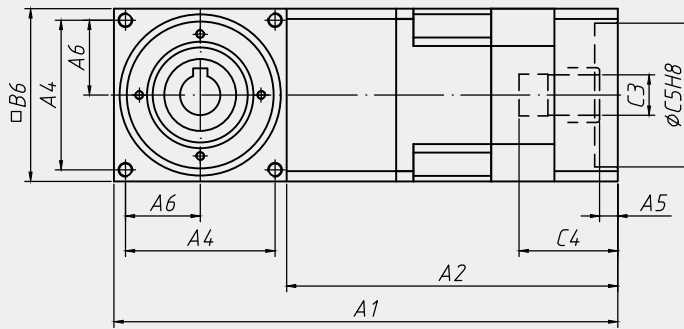
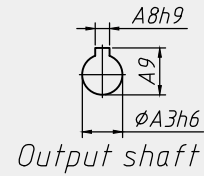
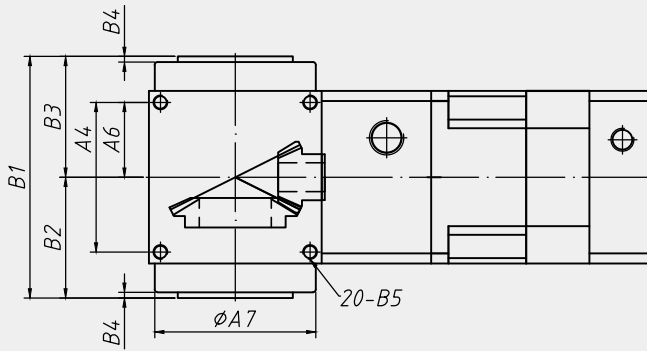
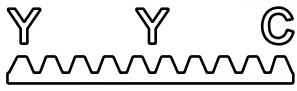


減速機性能資料 Reducer Performance Information

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	60	90	115	142
額定輸出力矩 Nominal Output Torque	Nm	L1	3	25	78	150	360
			4	25	78	150	360
			5	25	78	150	360
			10	24	68	150	330
			20	24	68	150	330
		L2	15	25	78	150	360
			25	25	78	150	360
			30	24	68	150	330
			40	24	68	150	330
			50	25	78	150	360
最大輸入轉速 Max. Input Speed	rpm	L1/L2	3~50	6,000	6,000	6,000	6,000
額定輸入轉速 Nominal Input Speed	rpm	L1/L2	1~50	3,000	3,000	3,000	3,000
超精密背隙P0 Super Precision Backlash	arc min	L1	1~50	≤ 4			
		L2	1~50	≤ 6			
精密背隙P1 Precision Backlash		L1	1~50	≤ 7			
		L2	1~50	≤ 9			
標準背隙P2 Standard Backlash		L1	1~50	≤ 10			
		L2	1~50	≤ 12			
最大加速扭矩 Max. Acceleration Torque	Nm	L1/L2	1~50	1.5倍額定輸出力矩 / 1.5 Times of nominal output torque			
最大輸出(急停)扭矩 Max. Output (Emergency Stop) Torque	Nm	L1/L2	1~50	3倍額定輸出力矩 / 3 Times of nominal output torque			
容許徑向力 Max. Radial Force	N	L1/L2	1~50	600	1,000	2,000	3,000
容許軸向力 Max. Axial Force	N	L1/L2	1~50	300	500	1,000	1,500
使用壽命 Product Life	hr	L1/L2	1~50	S5週期運轉 > 20,000 (S1連續運轉 > 10,000 hrs) S5 Cycle Operation > 20,000 (S1 Continuous Operation > 10,000 hrs)			
使用溫度 Operation Temp	°C	L1/L2	1~50	-25°C ~ 90°C			
效率 Efficiency	%	L1	1~10	≤ 94			
		L2	15~50	≤ 90			
潤滑 Lubrication		L1/L2	1~50	合成潤滑油脂 / Synthetic Lubrication Grease			
噪音值 Noise Level	dB	L1	1~10	≤ 68	≤ 73	≤ 74	≤ 75
		L2	15~50	≤ 71	≤ 76	≤ 77	≤ 78

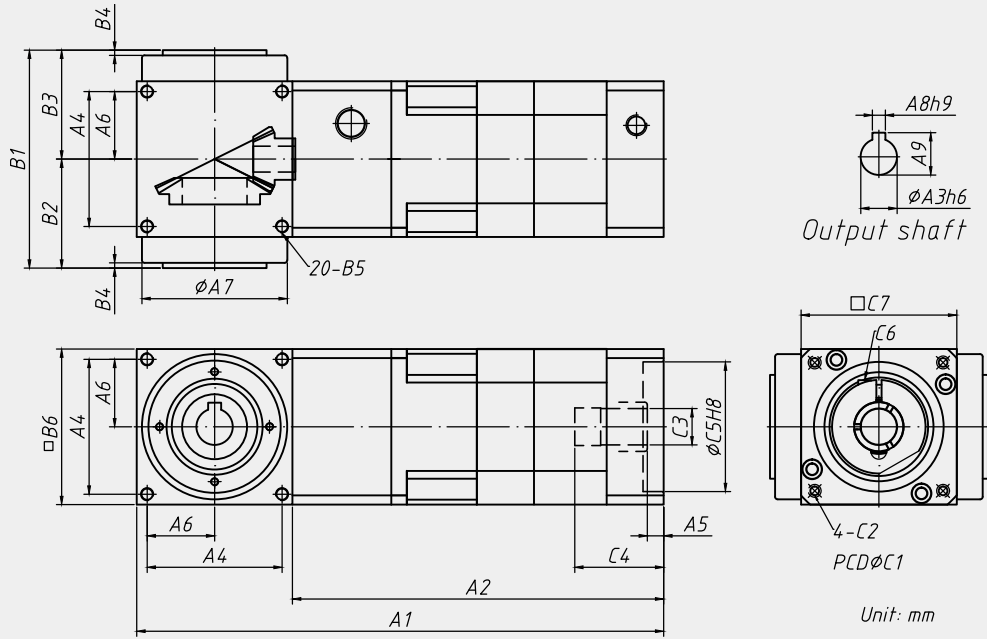
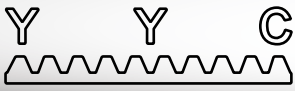
減速機轉動慣量 Reducer Moment of Inertia

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	60	90	115	142
轉動慣量 Moments of Inertia	kg.cm ²	L1	3	0.05	0.18	0.41	0.56
			4	0.05	0.18	0.41	0.56
			5	0.05	0.18	0.41	0.56
			10	0.05	0.18	0.41	0.56
			20	0.05	0.18	0.41	0.56
		L2	15	0.05	0.18	0.41	0.56
			25	0.05	0.18	0.41	0.56
			30	0.05	0.16	0.38	0.53
			40	0.05	0.16	0.38	0.53
			50	0.05	0.16	0.38	0.53

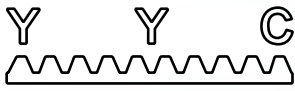


Unit: mm

Code \ Model	60	90	115	142
A1	175.1	225.8	310.5	385
A2	115.1	135.8	195.5	243
A3	14	18	22	32
A4	52	72	88	110
A5	6	7.5	22.5	11.9
A6	26	36	44	55
A7	62	88	106	135
A8	5	6	8	10
A9	16.3	20.8	25.3	35.3
B1	84	118	144	174
B2	42	59	72	87
B3	42	59	72	87
B4	2	2	2	2
B5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
B6	60	90	115	150
C1	70	90	145	142
C2	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C3	14, 19	19, 24	24, 28	35, 42
C4	34	43	67.5	69
C5	50	70	110	130
C6	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C7	60	90	130	142

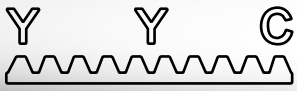


Code \ Model	60	90	115	142
A1	203.1	265.8	358.5	446
A2	143.1	175.8	243.5	304
A3	14	18	22	32
A4	52	72	88	110
A5	6	7.5	22.5	11.9
A6	26	36	44	55
A7	62	88	106	135
A8	5	6	8	10
A9	16.3	20.8	25.3	35.3
B1	84	118	144	174
B2	42	59	72	87
B3	42	59	72	87
B4	2	2	2	2
B5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
B6	60	90	115	142
C1	70	90	145	165
C2	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C3	14, 19	19, 24	24, 28	35, 42
C4	34	43	67.5	69
C5	50	70	110	130
C6	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C7	60	90	130	142



消除減速機目錄 Contents of Backlash Free Reducer

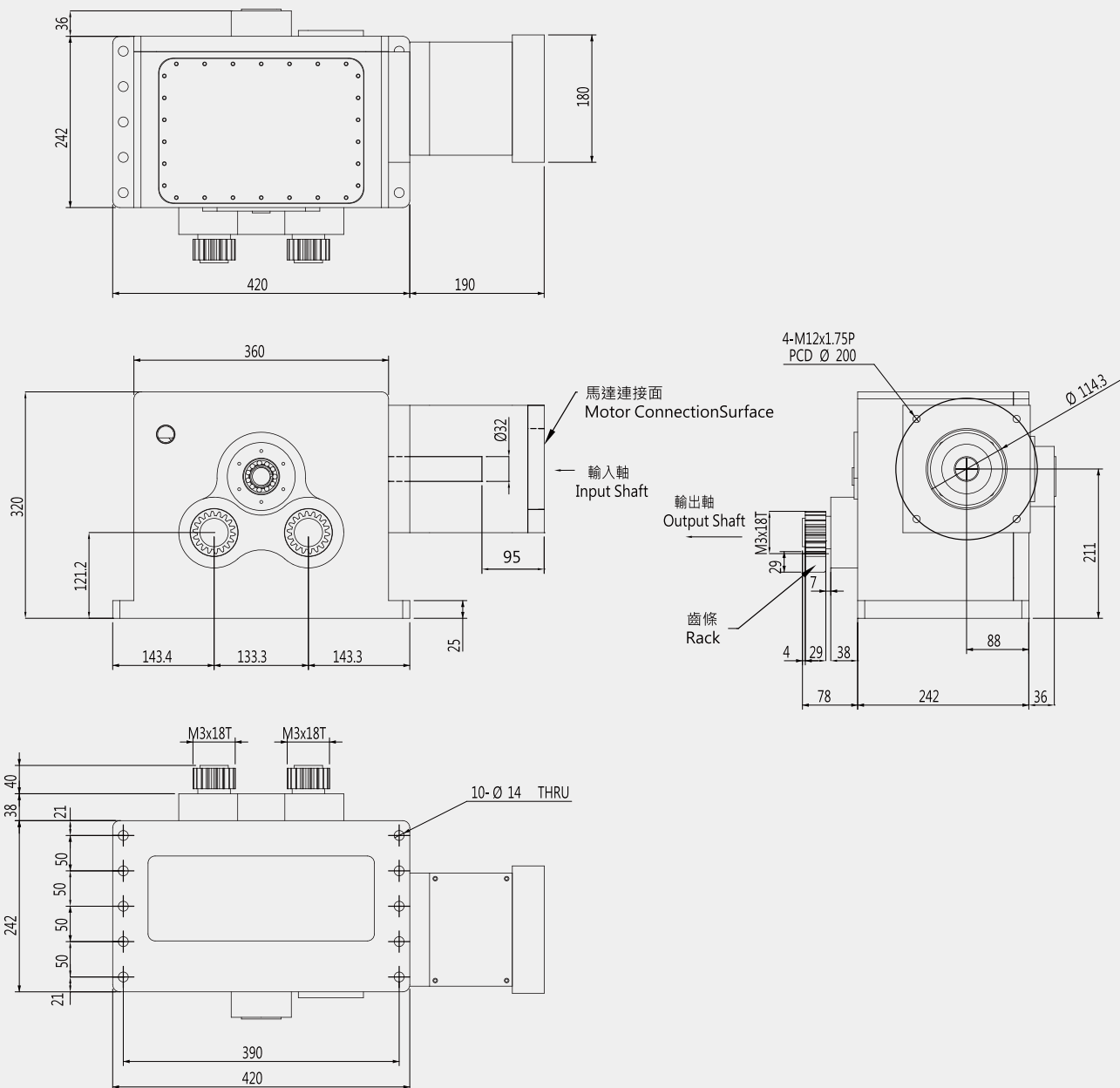
系列 Series	型號 Code	模數 Module	齒型 Type	齒數 No of Teeth	減速比 Ratio	最大輸入轉速 Max Input Speed	最大輸出轉矩 Max Output Torque	節圓 Pitch Circle	頁數 Page
SC-3AX	SC-3AS	3	直齒 Straight	18T	27	3000 RPM	800 Nm	54.00	112
	SC-3AH		斜齒 左旋角 Helical Left 19°31'42"					57.30	
SC-4FX	SC-4FS	4	直齒 Straight	20T	27	3000 RPM	1000 Nm	80.00	113
	SC-4FH		斜齒 左旋角 Helical Left 19°31'42"					84.88	
SC-5FX	SC-5FS	5	直齒 Straight	17T	27	3000 RPM	1200 Nm	85.00	114
	SC-5FH		斜齒 左旋角 Helical Left 19°31'42"					90.18	
SC-6AX	SC-6AS	6	直齒 Straight	19T	47	3000 RPM	3000 Nm	114.00	115
	SC-6AH		斜齒 左旋角 Helical Left 19°31'42"					120.95	
SC-6FX	SC-6FS	6	直齒 Straight	19T	47	3000 RPM	3000 Nm	114.00	116
	SC-6FH		斜齒 左旋角 Helical Left 19°31'42"					120.95	
SC-8AX	SC-8AS	8	直齒 Straight	17T	47	3000 RPM	5000 Nm	136.00	117
	SC-8AH		斜齒 左旋角 Helical Left 19°31'42"					144.30	
SC-8FX	SC-8FS	8	直齒 Straight	17T	47	3000 RPM	5000 Nm	136.00	118
	SC-8FH		斜齒 左旋角 Helical Left 19°31'42"					144.30	



消除減速機型號說明 Backlash Free Reducer Code Instruction



1st	2nd	3rd	4th	5th	6th
系列 Series	模數 Module	安裝類型 Assembly Direction	齒型 Teeth Type	減速比 Ratio	輸出方向 Output Gear
SC	3 4 5 6 8	A F: 五面安裝/5 Direction	S: 直齒/Straight H: 斜齒/Helical	27 47	U: 向上UP D: 向下/Down L: 向左/Left R: 向右/Right



系列 Series	型號 Code	模數 Module	齒型 Type	齒數 No of Teeth	減速比 Ratio	最大輸入轉速 Max Input Speed	最大輸出轉矩 Max Output Torque	節圓 Pitch Circle
SC-3AX	SC-3AS	3	直齒 Straight	18T	27	3000 RPM	800 Nm	54.00
	SC-3AH		斜齒 左旋角 Helical Left 19°31'42"					57.30

齒輪箱對安裝機面的要求：

1. 平行度0.03mm
2. 垂直度0.03mm (兩個方向·對導軌基面)

齒條對安裝基面的要求：

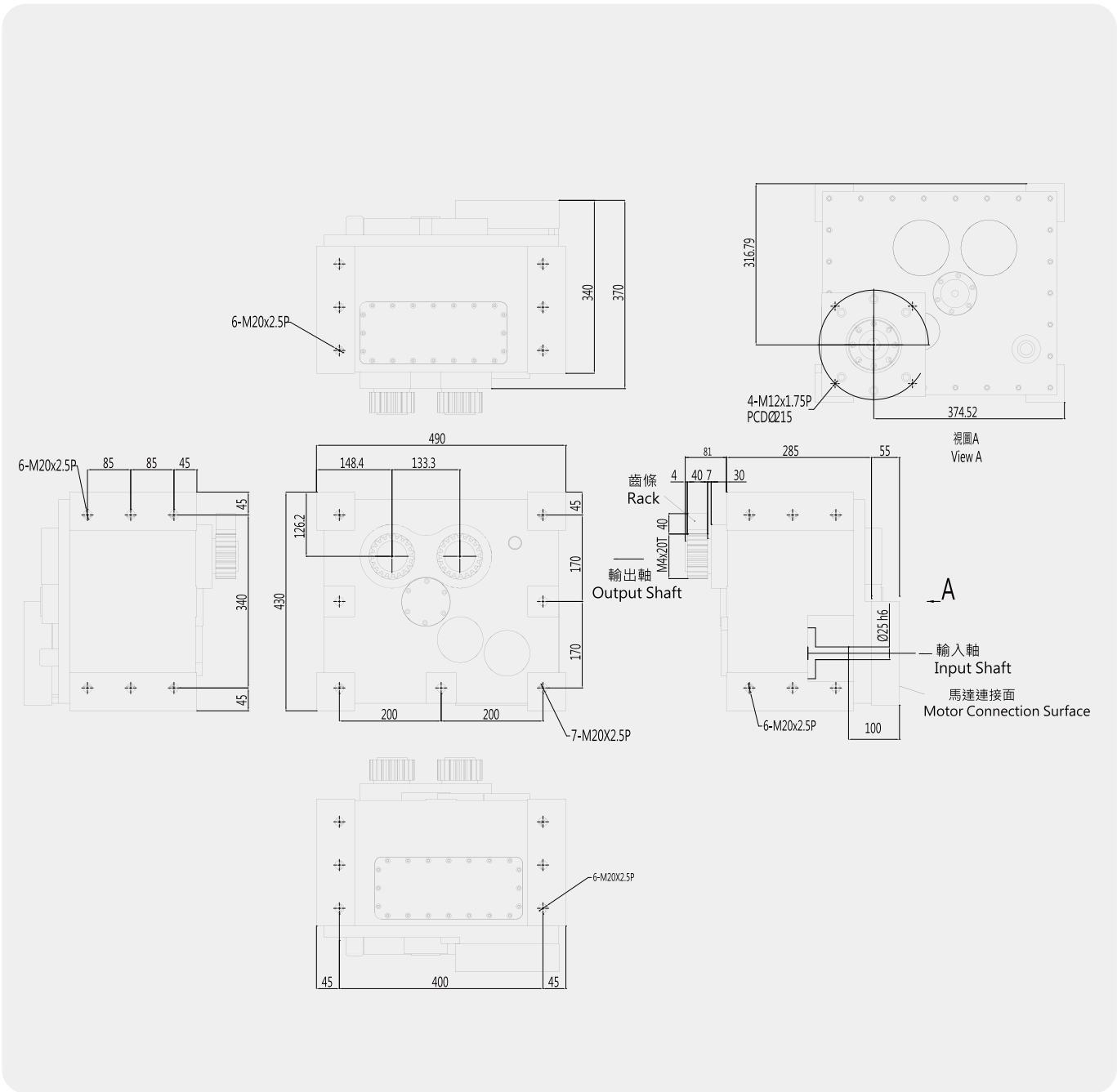
1. 直線度0.01mm/1000mm
2. 平行度0.01mm/1000mm (兩個方向·對導軌基面)
3. 垂直度0.05mm

Installation Base Requirments of Gearbox:

1. Parallelism 0.03mm
2. Verticality 0.03mm (Two directions towards the base of guideway)

Installation Base Requirments of Rack:

1. Straightness 0.01mm/1000mm
2. Parallelism 0.01mm/1000mm (Two directions towards the base of guideway)
3. Verticality 0.05mm



系列 Series	型號 Code	模數 Module	齒型 Type	齒數 No of Teeth	減速比 Ratio	最大輸入轉速 Max Input Speed	最大輸出轉矩 Max Output Torque	節圓 Pitch Circle
SC-4FX	SC-4FS	4	直齒 Straight	20T	27	3000 RPM	1000 Nm	80.00
	SC-4FH		斜齒 左旋角 Helical Left 19°31'42					84.88

齒輪箱對安裝機面的要求：

1. 平行度0.03mm
2. 垂直度0.03mm (兩個方向 · 對導軌基面)

Installation Base Requirments of Gearbox:

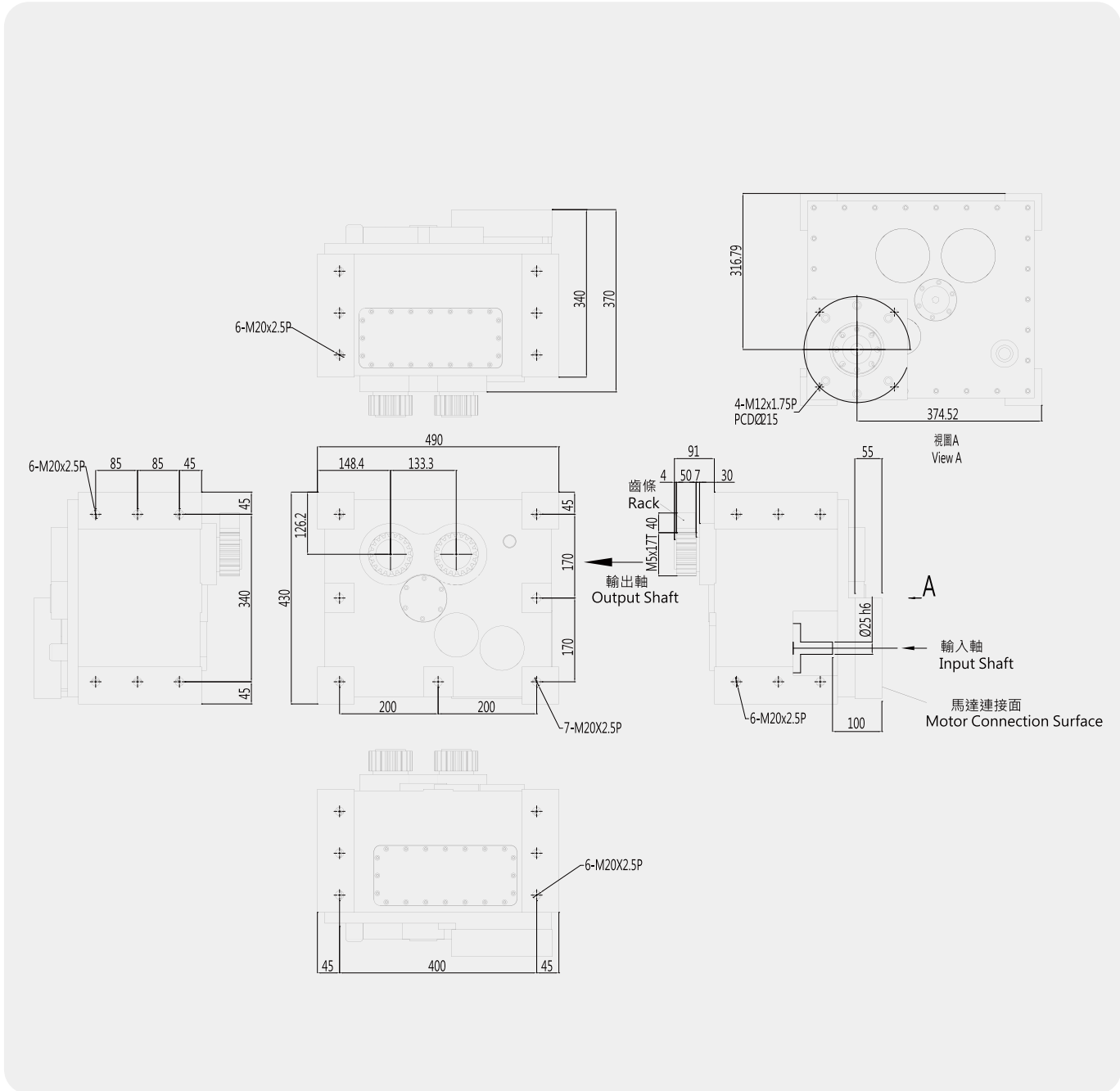
1. Parallelism 0.03mm
2. Verticality 0.03mm (Two directions towards the base of guideway)

齒條對安裝基面的要求：

1. 直線度0.01mm/1000mm
2. 平行度0.01mm/1000mm (兩個方向 · 對導軌基面)
3. 垂直度0.05mm

Installation Base Requirments of Rack:

1. Straightness 0.01mm/1000mm
2. Parallelism 0.01mm/1000mm (Two directions towards the base of guideway)
3. Verticality 0.05mm



系列 Series	型號 Code	模數 Module	齒型 Type	齒數 No of Teeth	減速比 Ratio	最大輸入轉速 Max Input Speed	最大輸出轉矩 Max Output Torque	節圓 Pitch Circle
SC-5FX	SC-5FS	5	直齒 Straight	17T	27	3000 RPM	1200 Nm	85.00
	SC-5FH		斜齒 左旋角 Helical Left 19°31'42					90.18

齒輪箱對安裝機面的要求：

1. 平行度0.03mm
2. 垂直度0.03mm (兩個方向·對導軌基面)

Installation Base Requirments of Gearbox:

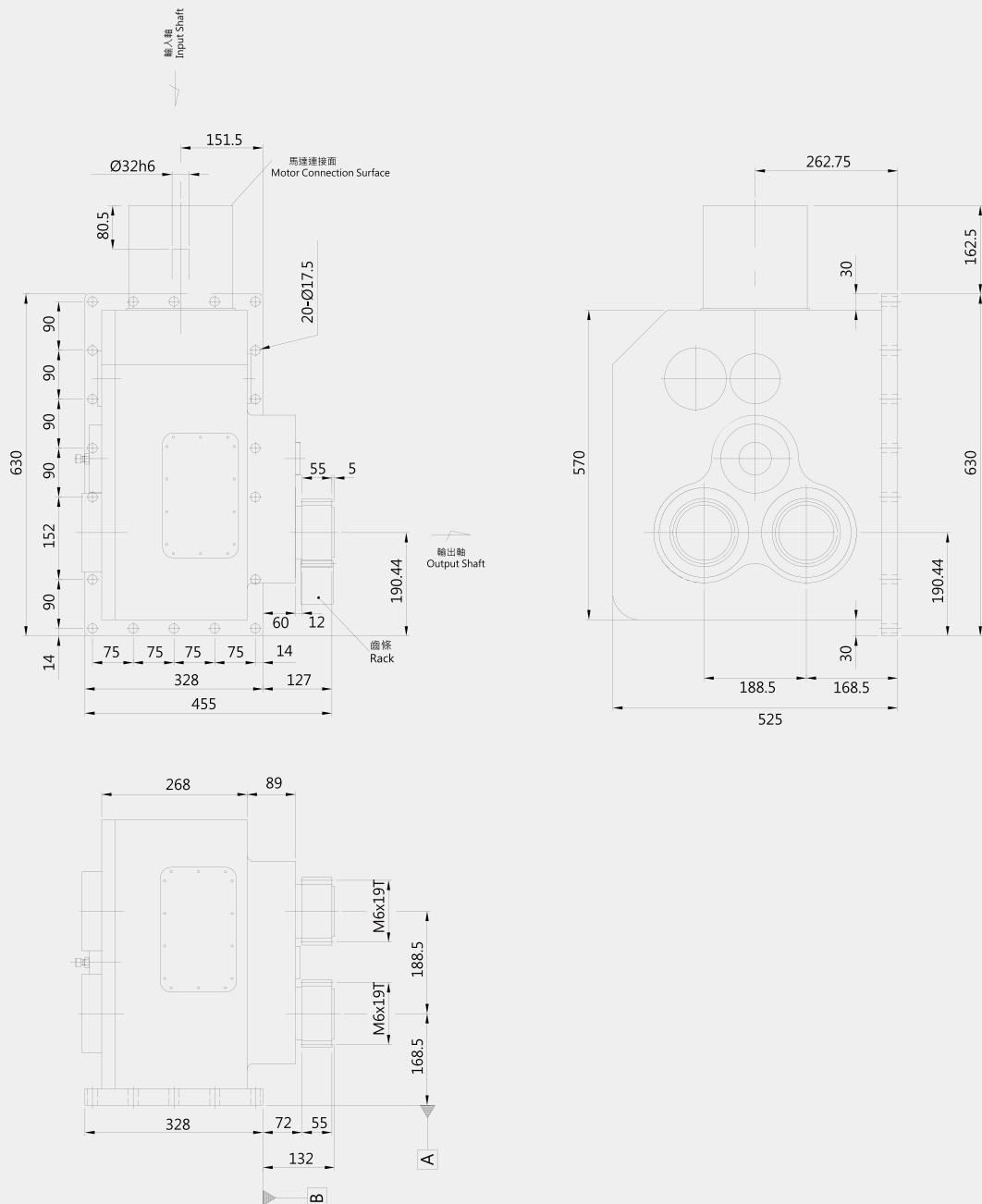
1. Parallelism 0.03mm
2. Verticality 0.03mm (Two directions towards the base of guideway)

齒條對安裝基面的要求：

1. 直線度0.01mm/1000mm
2. 平行度0.01mm/1000mm (兩個方向·對導軌基面)
3. 垂直度0.05mm

Installation Base Requirments of Rack:

1. Straightness 0.01mm/1000mm
2. Parallelism 0.01mm/1000mm (Two directions towards the base of guideway)
3. Verticality 0.05mm



系列 Series	型號 Code	模數 Module	齒型 Type	齒數 No of Teeth	減速比 Ratio	最大輸入轉速 Max Input Speed	最大輸出轉矩 Max Output Torque	節圓 Pitch Circle
SC-6AX	SC-6AS	6	直齒 Straight	19T	47	3000 RPM	3000 Nm	114.00
	SC-6AH		斜齒 左旋角 Helical Left 19°31'42"					120.95

齒輪箱對安裝機面的要求：

1. 平行度 0.03mm
2. 垂直度 0.03mm (兩個方向 · 對導軌基面)

Installation Base Requirments of Gearbox:

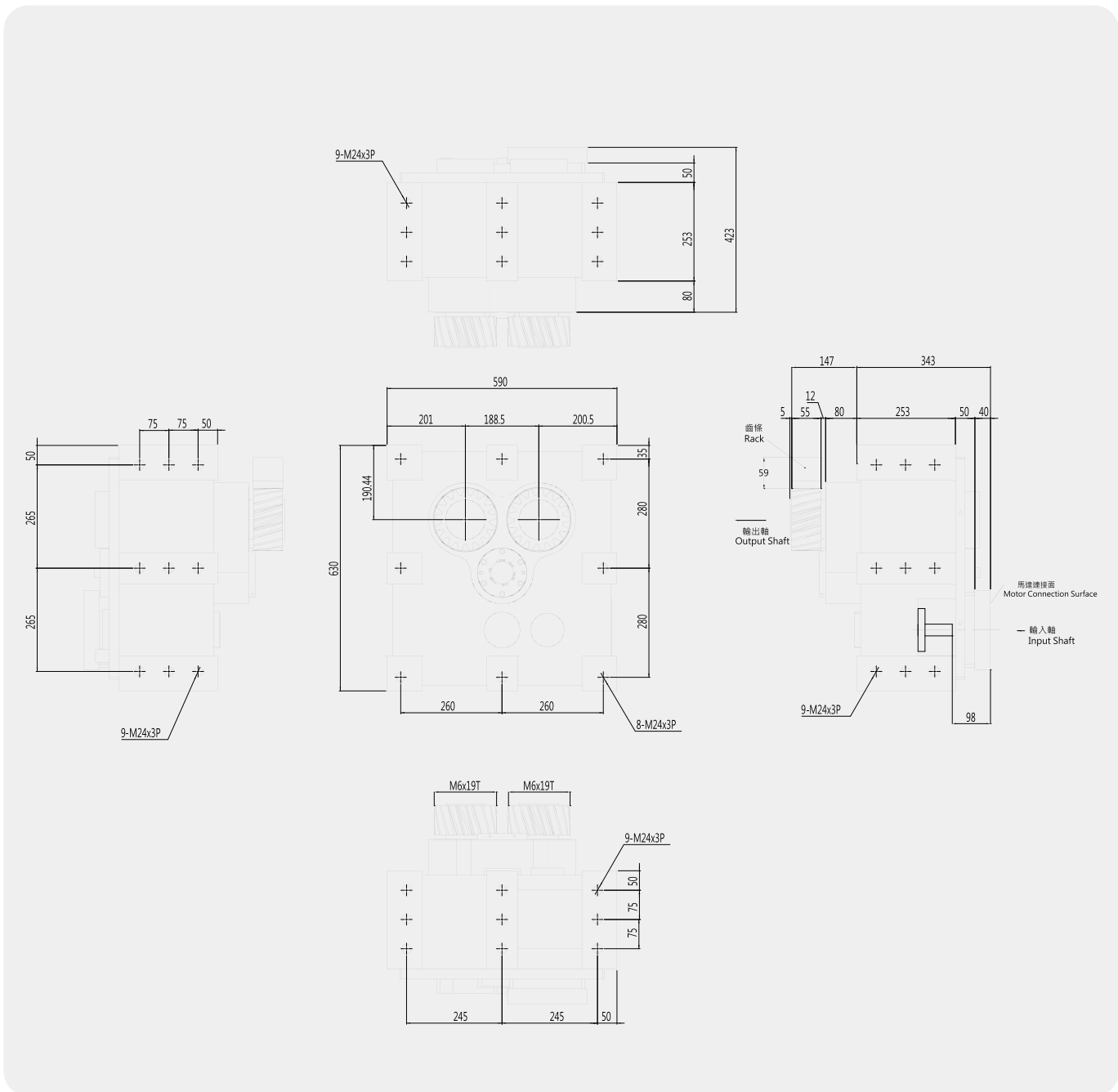
1. Parallelism 0.03mm
2. Verticality 0.03mm (Two directions towards the base of guideway)

齒條對安裝基面的要求：

1. 直線度 0.01mm/1000mm
2. 平行度 0.01mm/1000mm (兩個方向 · 對導軌基面)
3. 垂直度 0.05mm

Installation Base Requirments of Rack:

1. Straightness 0.01mm/1000mm
2. Parallelism 0.01mm/1000mm (Two directions towards the base of guideway)
3. Verticality 0.05mm



系列 Series	型號 Code	模數 Module	齒型 Type	齒數 No of Teeth	減速比 Ratio	最大輸入轉速 Max Input Speed	最大輸出轉矩 Max Output Torque	節圓 Pitch Circle
SC-6FX	SC-6FS	6	直齒 Straight	19T	47	3000 RPM	3000 Nm	114.00
	SC-6FH		斜齒 左旋角 Helical Left 19°31'42"					120.95

齒輪箱對安裝機面的要求：

1. 平行度 0.03mm
2. 垂直度 0.03mm (兩個方向 · 對導軌基面)

齒條對安裝基面的要求：

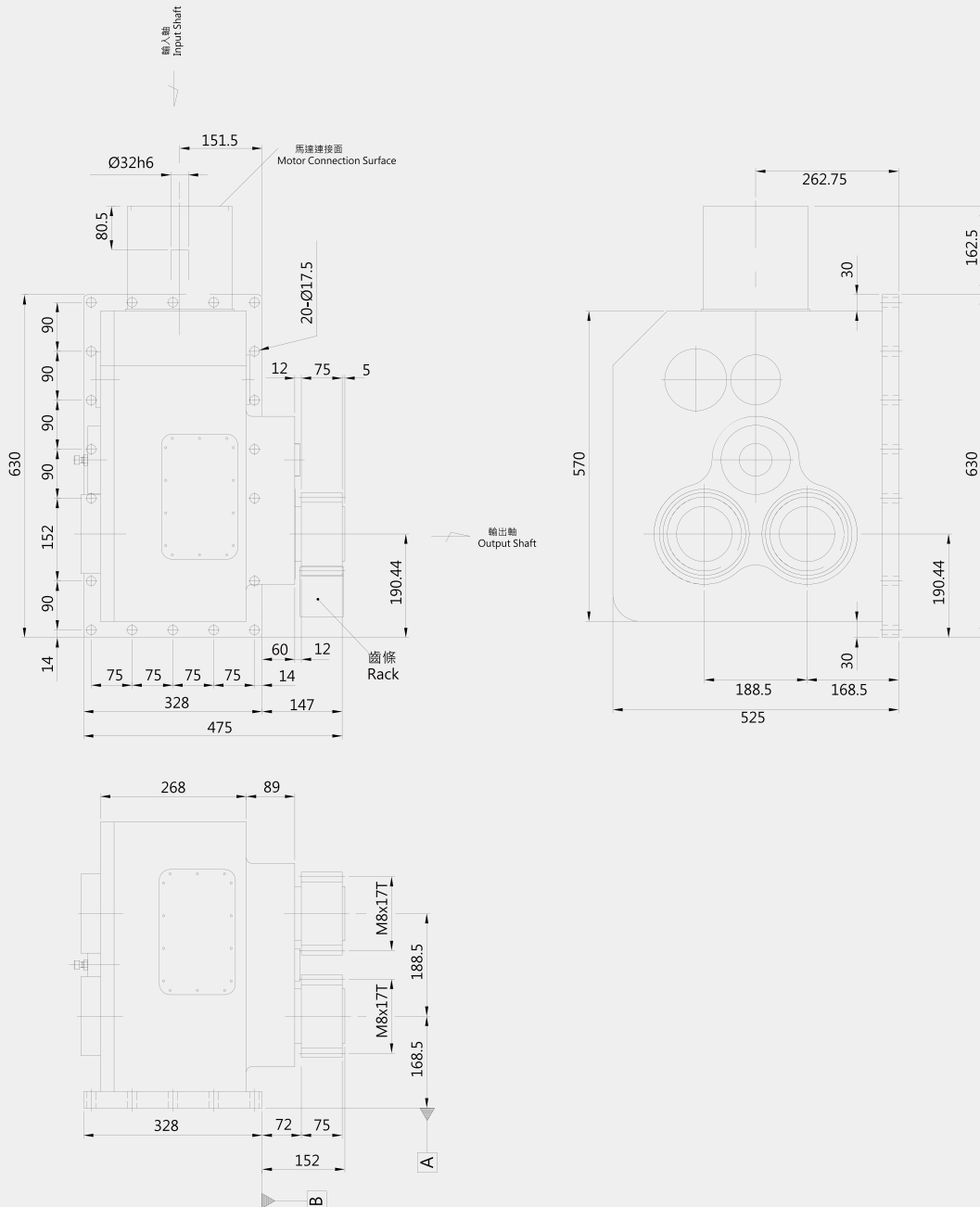
1. 直線度 0.01mm/1000mm
2. 平行度 0.01mm/1000mm (兩個方向 · 對導軌基面)
3. 垂直度 0.05mm

Installation Base Requirments of Gearbox:

1. Parallelism 0.03mm
2. Verticality 0.03mm (Two directions towards the base of guideway)

Installation Base Requirments of Rack:

1. Straightness 0.01mm/1000mm
2. Parallelism 0.01mm/1000mm (Two directions towards the base of guideway)
3. Verticality 0.05mm



系列 Series	型號 Code	模數 Module	齒型 Type	齒數 No of Teeth	減速比 Ratio	最大輸入轉速 Max Input Speed	最大輸出轉矩 Max Output Torque	節圓 Pitch Circle
SC-8AX	SC-8AS	8	直齒 Straight	17T	47	3000 RPM	5000 Nm	136.00
	SC-8AH		斜齒 左旋角 Helical Left 19°31'42"					144.30

齒輪箱對安裝機面的要求：

1. 平行度0.03mm
2. 垂直度0.03mm (兩個方向·對導軌基面)

齒條對安裝基面的要求：

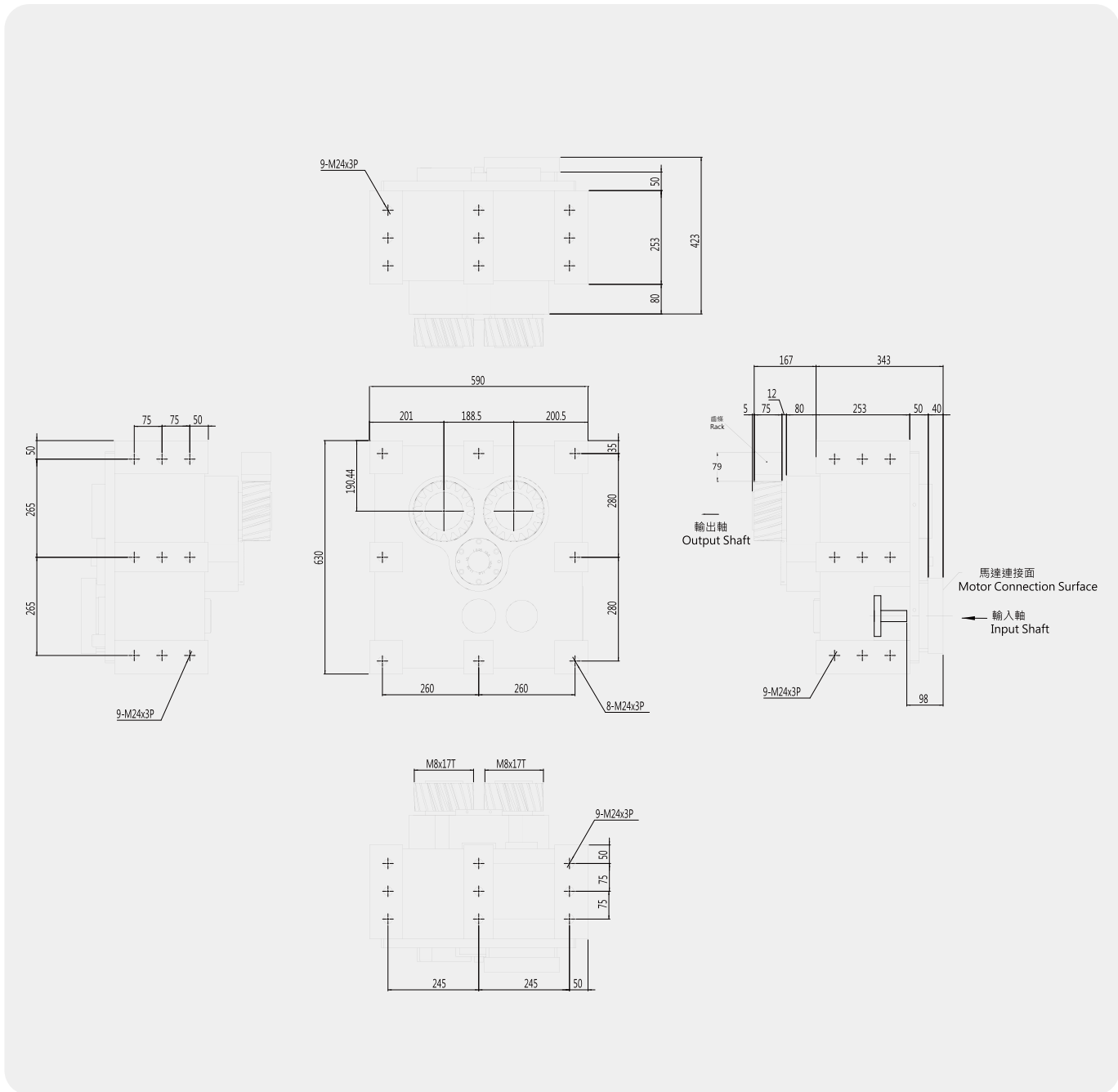
1. 直線度0.01mm/1000mm
2. 平行度0.01mm/1000mm (兩個方向·對導軌基面)
3. 垂直度0.05mm

Installation Base Requirments of Gearbox:

1. Parallelism 0.03mm
2. Verticality 0.03mm (Two directions towards the base of guideway)

Installation Base Requirments of Rack:

1. Straightness 0.01mm/1000mm
2. Parallelism 0.01mm/1000mm (Two directions towards the base of guideway)
3. Verticality 0.05mm



系列 Series	型號 Code	模數 Module	齒型 Type	齒數 No of Teeth	減速比 Ratio	最大輸入轉速 Max Input Speed	最大輸出轉矩 Max Output Torque	節圓 Pitch Circle
SC-8FX	SC-8FS	8	直齒 Straight	17T	47	3000 RPM	5000 Nm	136.00
	SC-8FH		斜齒 左旋角 Helical Left 19°31'42					144.30

齒輪箱對安裝機面的要求：

1. 平行度 0.03mm
2. 垂直度 0.03mm (兩個方向 · 對導軌基面)

齒條對安裝基面的要求：

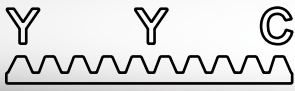
1. 直線度 0.01mm/1000mm
2. 平行度 0.01mm/1000mm (兩個方向 · 對導軌基面)
3. 垂直度 0.05mm

Installation Base Requirments of Gearbox:

1. Parallelism 0.03mm
2. Verticality 0.03mm (Two directions towards the base of guideway)

Installation Base Requirments of Rack:

1. Straightness 0.01mm/1000mm
2. Parallelism 0.01mm/1000mm (Two directions towards the base of guideway)
3. Verticality 0.05mm



附錄一

齒條安裝手冊

本裝配說明指南適用於齒條的運輸、儲存、裝配、及保養。在所有相關專業人員從事並進行上述動作時，請先仔細並確實詳讀本說明書內容。若相關專業人員未仔細詳讀或不按相關操作規範進行齒條的運輸、儲存、裝配及保養而產生任何財產損失及人員受傷，本公司不負責任何賠償。

齒條安裝說明大綱

(一)、運輸

運輸過程勿不正確堆疊、大力摔放或不正常的吊掛造成齒條扭變或損傷。

(二)、儲存

齒條應儲存於乾燥環境中，且溫度應於25°C，相對濕度60%最為適宜。並確實檢查齒條的包裝需完整，放置時應保持水平放置，避免傾斜、側放或直立放置。

(三)、裝配

齒條裝配請由經過合格訓練之專業人員來操作裝配，並確實準備相關裝配所需使用的器具。

(四)、保養事宜

請依造齒輪齒條運行的方式來制定保養計畫。

※若有任何問題，請與我司聯繫。

齒條安裝操作說明

(一)、運輸

齒條於出廠時均經過整直，防鏽以及良好的包裝，使用熱縮膜來隔離空氣並保護齒條以避免碰撞。

本公司出產的齒條如果長度超過1米(100cm)或重量超過10公斤時，應由兩位或兩位以上的操作員協同搬運，可避免碰撞或不慎掉落。

若同時需搬運多支數量之齒條，請使用吊掛棧板，以避免工件滑落；並於吊掛工件時，隨時注意周邊環境避免工件掉落，或是碰撞周邊物品，而砸傷人員。

(二)、儲存

齒條應儲存於溫度適宜並且乾燥的環境中，溫度25°C、相對濕度60%最為適宜，齒條要進行倉庫存放前，應確實檢查齒條外部包裝的完整性。

由於齒條出廠前均經過良好的防鏽處理，在齒條上均塗抹防鏽油，並經過熱縮膜的包裝，以隔絕空氣接觸，並防止碰撞；在儲存齒條的過程中，應避免傾斜或是直立的放置齒條。

放置齒條的場所，需維持適宜的溫度及濕度的穩定，並且放置時應保持場所的穩定避免震動。

另外齒條平放時需避免任何不正常的堆疊，或是壓迫在齒條的上方，以避免齒條因外力壓迫而變形。

Appendix 1

Instruction of Rack Assembly Steps

The instruction of installation is adapted for transportation, storage, assembly and maintenance of racks. All the relevant professionals should study carefully the content of the instruction before doing the actions as above. If any professionals don't study thoroughly nor follow up the regulations to do the actions of transportation, storage, assembly and maintenance of racks, any property damage or personal injury, we are irresponsible for any compensations.

Outline of Rack Installation Instructions

1. Transportation

During transportation process, please do not stack incorrectly, vigorously put or hang racks to make it twisted or damaged.

2. Storage

Racks should be stored in dry environment with temperature 25°C, and relative humidity should be 60% which is the best. To check the rack package should be completed and stored horizontally to avoid being sloping, leaning on one side or upright side.

3. Assembly

Rack assembly should be operated by well-trained and qualified professionals. Meanwhile, please prepare all the relevant tools accurately while assembling.

4. Maintenances

Please set up maintenance plans based on the running methods of rack and pinions.

Please do not hesitate to contact me if you have any queries.

Rack Installation Instructions

1. Transportation

All racks are straightened before delivering, and packed by thermal shrinkage film to isolate the air and to protect racks from collision.

If the rack length is over 1,000mm (100cm) or 10 kgs, it should be carried by 2 or more people to avoid collision or dropping.

If carrying plenty of racks, it should be hanged on a pallet to avoid racks dropping. During hanging, please pay attention to the surroundings to avoid dropping or colliding with somethings to injure people.

2. Storage

Racks should be stored in a suitable temperate and dry environment. The room temperature should be 25°C and relative humidity should be 60% which is the best. Before storage, the rack outside package should be inspected if completed. Before delivering, all the racks are smeared anti-rust lubricant and packed by thermal shrinkage film to isolate air and prevent from collision. During the rack storage process, it should not be sloping, leaning on one side or upright side. The rack storage place should be maintained in a suitable and stable temperature and humidity. Meanwhile, the place should be stable to avoid vibration.

Racks should be put on horizontally; prevent from any abnormally stacking, or oppress on the top of racks. So, the racks will not be twisted due to outside oppression.

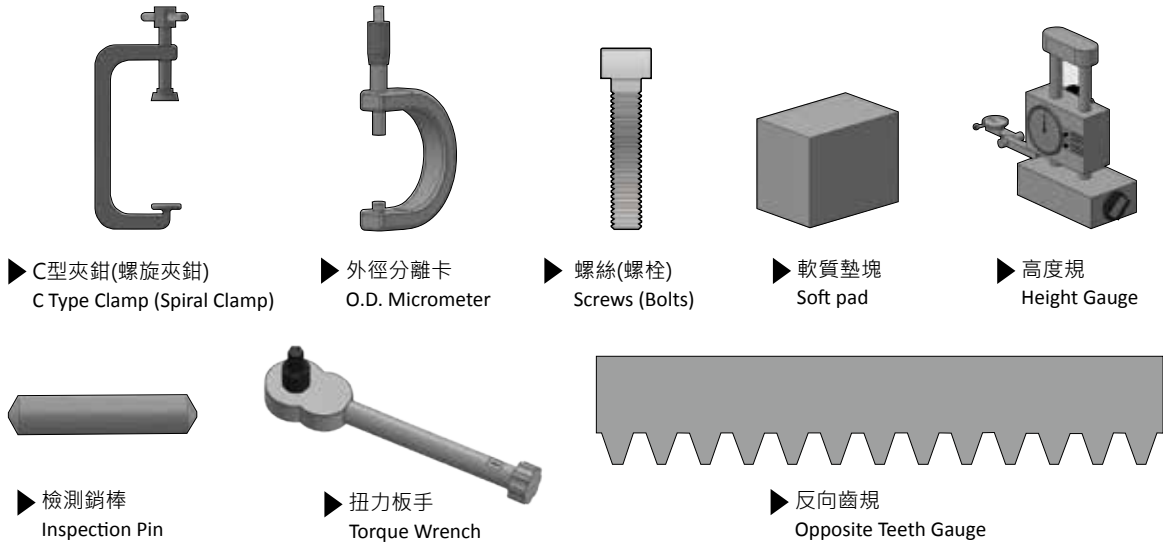
To check the rack package should be completed and stored horizontally to avoid being sloping, leaning on one side or upright side.

(三)、裝配

3.1. 裝配操作前·檢查與準備

3.1.1 安裝齒條前請先確實檢查齒條外包裝的完整性，並在拆封齒條包裝時，請小心拆封，以避免齒條損傷。

3.1.2 安裝齒條前請先確認齒條的規格，並詳細檢查安裝時所需的安裝器具。



安裝器具參考圖1. / Installation Tool Reference Fig. 1

3.1.3 安裝齒條前須確保基座安裝承靠面的垂直度及平行度需在要求內，一般要求平行度為 $\leq 0.02\text{mm}$ /垂直度為 $\leq 0.02\text{mm}$ ，如下圖2. 所示。

3.1.3 Before assembling, please assure the verticality and parallel of bearing surface of installation basement should be within the tolerance. The verticality is $\leq 0.02\text{mm}$ and parallel is $\leq 0.02\text{mm}$ as the Fig. 2 below.

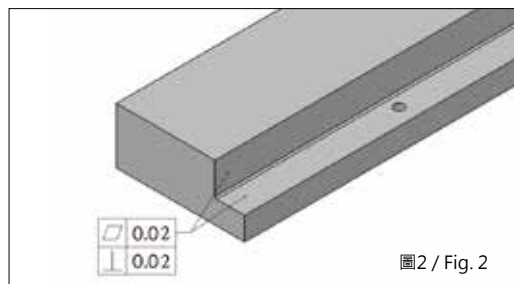


圖2 / Fig. 2

3.1.4 確實檢查齒條及基座安裝的承靠面的清潔及完整性，避免齒條及基座的接觸面有任何損傷或有殘餘毛屑。

3.1.4 Please do check the bearing surface of rack and installation base clean and complete to avoid any damage or chippings.

3.1.5 安裝承靠面底部的倒角面，需注意干涉問題，如下圖3.箭頭所示。

3.1.5 The chamfering surface of installation bearing surface bottom have to be aware of the question as Fig 3 noted.



注意！齒條倒角尺寸須符合本公司要求的規範，(請參考表1)基座安裝承靠面的倒角量建議值最大不得超過0.3mm。



Attention! The rack chamfer angle should be apply with our standards (as chart 1). The recommended chamfer value of bearing surface of installation base should not exceed 0.3 mm at maximum.

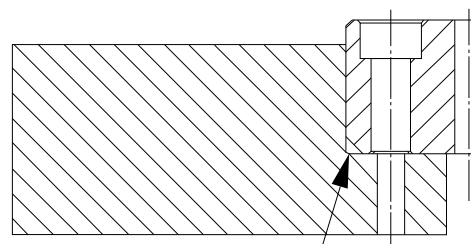
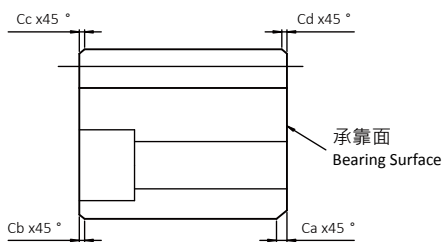


圖3 / Fig. 3

注意干涉
Attention



單位Unit: mm



Rack	Ca	Cb	Cc	Cd
M1.0	1.5mm	0.5mm	0.5mm	0.5mm
M1.5	1.5mm	0.5mm	0.5mm	0.5mm
M2.0	2.0mm	1.0mm	1.0mm	1.0mm
M3.0	2.0mm	1.0mm	1.0mm	1.0mm
M4.0	2.0mm	1.5mm	1.5mm	1.5mm
M5.0	3.0mm	1.5mm	1.5mm	1.5mm
M6.0	3.0mm	2.0mm	2.0mm	2.0mm
M8.0	4.0mm	2.0mm	2.0mm	2.0mm
M10	5.0mm	3.0mm	3.0mm	3.0mm
M12	5.0mm	3.0mm	3.0mm	3.0mm

表1 / Table 1

3.1.6 齒條的定位銷孔是專門提供齒條的重覆安裝時快速定位使用，若非重覆安裝，則不需要安裝定位銷孔。

3.1.6 Rack positioning pin hole is specially for quick positioning purpose when racks are assembled repeatedly. If no repeated demands, it is not necessary to assemble positioning pin hole.

3.2. 裝配步驟A-單支齒條裝配

3.2 Assembly Process A- Single Rack Assembly

3.2.1 將齒條放於枕木上，將檢測銷棒放置齒條的齒谷內，使用外徑分離卡檢測跨銷值，如圖4。

3.2.1 Put the rack on the blocks; put the inspection pin in the rack valley of the teeth and use O.D. micrometer to check the over pin value as Fig. 4.

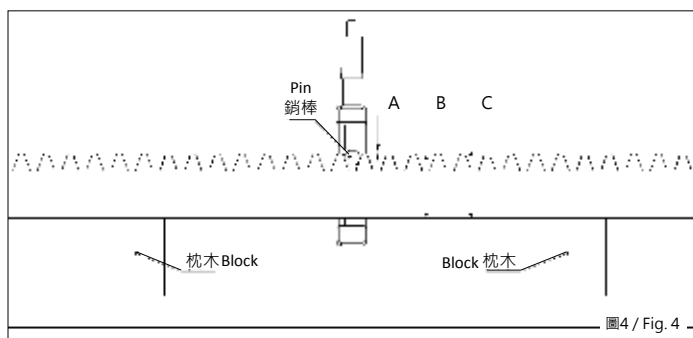


圖4 / Fig. 4

※ 齒條安裝前，請參考圖4. 的量測方式，確定齒條的跨銷值在精度等級內。

※ Before assembling racks, please refer to the inspection method on Fig. 4 and assure the over-pin values of rack are within the quality grade tolerance.

跨銷值計算公式：

跨銷值C=數值A+齒條總高度B

※檢測銷棒數值請參考表2。

Over-Pin Value Formula：

Over-Pin Value C= Value A + Total Rack Height B

※ Please refer to Chart 2 for inspection over-pin value.



注意！檢測銷棒建議直徑公差的最佳精準度為小於0.001mm。

Attention! The best tolerance of inspection pin diameter is 0.001mm.

單位Unit: mm

規格 Module	數值 Value	檢測銷棒 Inspection Pin	齒距 Pitch	
			斜齒 Helical (19°31'42")	直齒 Straight
M1.0	0.766	ψ2	3.333	3.142
M1.5	1.149	ψ3	5.000	4.712
M2.0	1.532	ψ4	6.667	6.283
M3.0	2.298	ψ6	10.000	9.425
M4.0	3.064	ψ8	13.333	12.566
M5.0	3.830	ψ10	16.667	15.708
M6.0	4.596	ψ12	20.000	18.850
M8.0	6.128	ψ16	26.667	25.133
M10.0	7.659	ψ20	33.333	31.416

表2 / Table 2

3.2.2 齒條置放於基座承靠面上，對齊螺絲孔距，微擰螺絲至沉頭螺絲孔接觸面，如下圖5所示。

3.2.2 The rack is put on the top of the base of the bearing surface. Align the screw holes pitches. Slightly tighten the screws to the contact surface of countersunk head screw hole as the Fig. 5 as below.

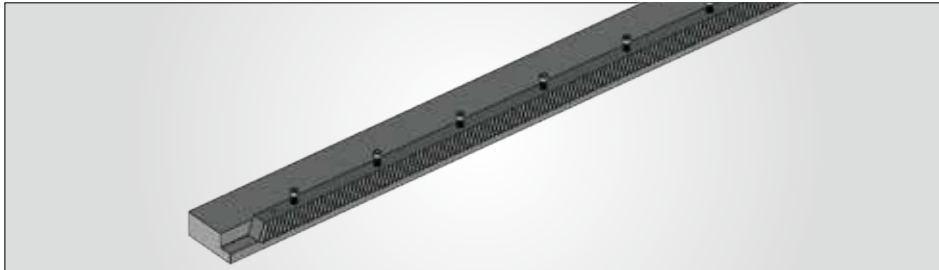


圖5 / Fig. 5

3.2.3 將C型夾鉗墊上軟質墊塊，再將齒條頭尾使用C型夾鉗固定，中間平均固定全部齒條與基座，讓齒條與基座承靠面完全貼合。(如圖6所示)

3.2.3 Place the C-type clamp on the soft pad, then fix the two ends of the racks by the C-type clamp. Fix the middle of the rack averagely on the base to assure the whole rack is attached to the bearing surface of the base completed as Fig. 6 below.

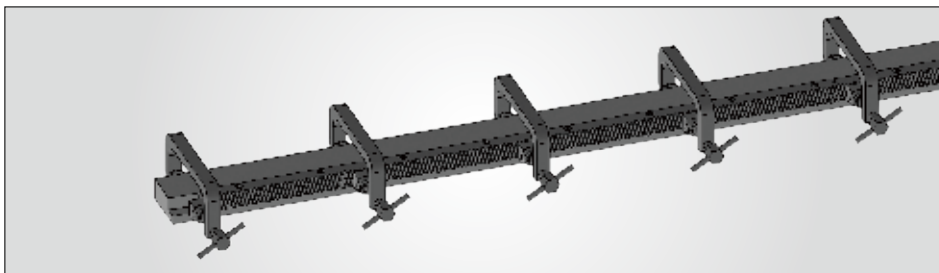


圖6 / Fig. 6

3.2.4 將檢測銷棒平均放置於齒條前中後五個檢測點，使用高度規測量檢測銷棒的最高點，檢測數值須與步驟2.1 所得之數值一致，如檢測出的數值不同，則將C型夾鉗夾緊，調整至與步驟2.1 量測量出的數值一致即可，如圖7。

3.2.4 Place inspection pins averagely on the 5 inspection points of the rack. Use height gauge to measure the highest point of the inspection pins. The inspected values should be the same as step 3.2.1. If the values are different, please tighten the C-type clamp and fix the values to the same as step 3.2.1. as Fig. 7 below.

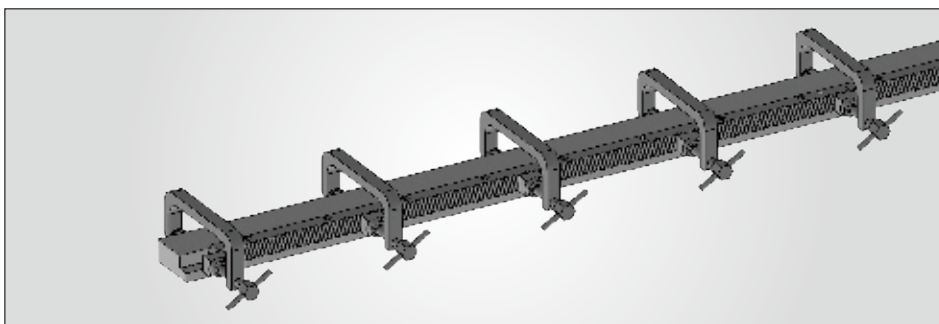


圖7 / Fig. 7

3.2.5 將螺絲(螺栓)由中間端開始固定再往兩側擰緊。

3.2.5 Fix the screws (bolts) from the middle; then onward to the two ends of the racks.

3.2.6 將C型夾鉗與軟性墊塊移除。

3.2.6 Remove the C-type clamp and soft pads.

3.3 裝配步驟B-多支齒條裝配步驟

3.3 Assembly Process B- Multiple Racks Assembly

兩支或兩支以上齒條的裝配，裝配步驟依照裝配步驟A-單支齒條裝配的方式裝配，相接處需增加相接輔助器具反向齒規，作為銜接咬合之標準，以防止齒距誤差過大(如圖8)。

Two or more racks assembly, please follow up the assembly process A-single rack assembly. Between racks joint point, it's necessary to increase an assistive device, opposite teeth gauge as the standard of joining racks up, to avoid pitch error too large. (Fig. 8)



微擰螺絲後撤掉齒規(如圖9)·將檢測銷棒放置於左右相接處的齒谷內(如圖10)·微調相接的兩支齒條·使用高度規量測檢測銷棒最高點的數值(如圖10; ABC 三點)·使其三點數值與前面步驟3.2.1用外徑分離卡檢測之數值相同(圖12)。

使用C型夾鉗墊上軟質墊塊將齒條固定於基座·再使用扭力扳手依序將固定螺絲鎖緊(圖13)·螺絲(螺栓)扭力值可參考表3·待鎖緊後·撤掉測量銷棒·C型夾鉗及軟質墊塊·即完成裝配步驟(圖14)。

Slightly tighten screws and remove opposite teeth gauge as Fig 9, and place the inspection pin on the teeth valley of the joint point pin (Fig 10/A,B,C points). Slightly adjust the jointing two racks and use height gauge to measure the highest point value of the inspection pin. The values of the three points should be the same as step 3.2.1, using O.D. micrometer to measure. (Fig. 12)

Use C-type clamp and place the soft pads on the rack base. Then, use torque wrench in sequence to fix and tighten screws(bolts). The screw torque values could be referred to Table 3. (Fig. 13) After tightening, remove the inspection pins, C-type clamp and soft pads. The assembly step is completed. (Fig. 14)



注意！三根齒條以上裝配·需由基座中央開始向兩側銜接裝配。



Attention! Three racks above assembly, it starts from the middle base, and onwards to the ends.

※ 多支齒條裝配操作步驟：

3.3.1 高度規量測檢測銷棒最高點的數值·量測的數值須與前面步驟3.2.1用外徑分離卡檢測之數值相同。

3.3.2 相接處需使用相接輔助器具反向齒規·作為銜接咬合之標準·以防止齒距誤差過大·如圖8。

※ Multiple Racks Assembly Steps' Instructions.

3.3.1 Measure the highest point of the inspection pin by height gauge. The measured values should be the same as the values by OD micrometer as step 3.2.1.

3.3.2 The two joint sides should be placed on the assistive device, opposite teeth gauge as the standard of joining racks up. to avoid pitch error too large. (Fig. 8)

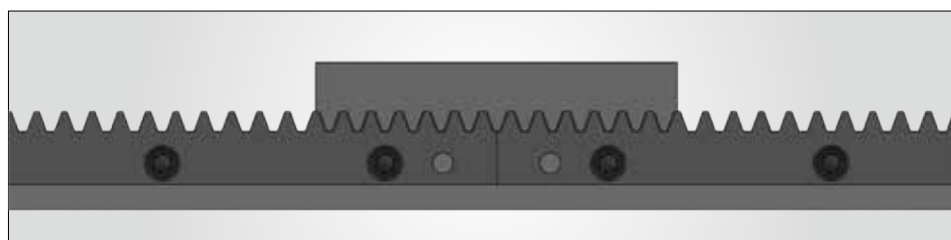


圖8 / Fig. 8

3.3.3 微擰螺絲後撤掉齒規·如圖9。

3.3.3 Slightly loose screws and remove the opposite teeth gauge. Fig 9.

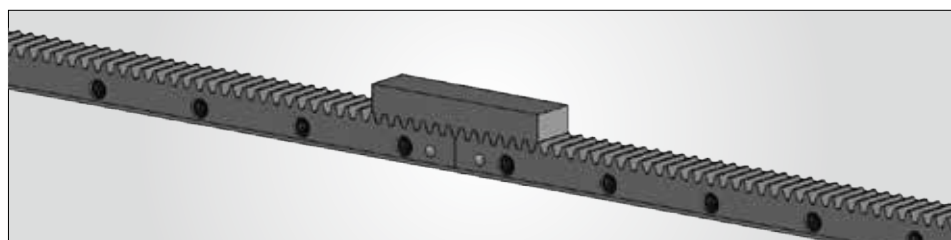


圖9 / Fig. 9

3.3.4 檢測銷棒放置於A、B、C三點做檢測·如圖10。

3.3.4 Place the inspection pins on A, B, C three points. Fig 10.

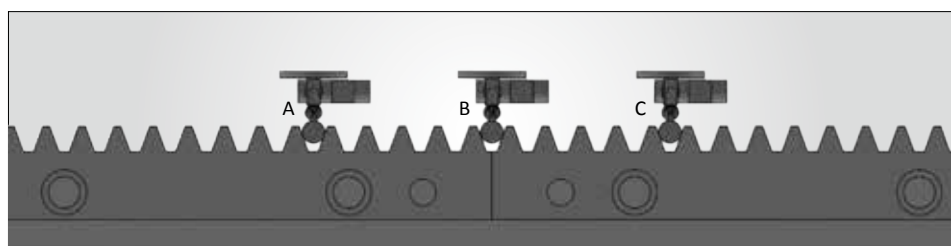


圖10 / Fig. 10

3.3.5 使用高度規量測檢測銷棒最高點的數值，使其三點檢測銷棒最高點數值與前面步驟3.3.1之數值相同。若中間檢測銷棒的最高點數值與左右兩支檢測銷棒最高點數值不同，可左右微調相接處齒條，得到三點檢測銷棒最高點之相同數值，如圖11。

3.3.5 Measure the values of the 3 highest points of the inspection pins by height gauge to assure the 3 values are the same as on 3.3.1. If values are different, slightly adjust the two jointed racks, to make the value of the highest point of inspection pin is the same as step 3.3.1 Fig 11.

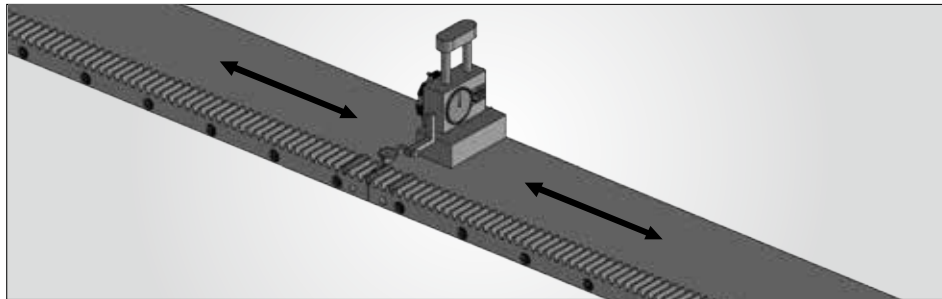


圖11 / Fig. 11

3.3.6 量測正確的檢測銷棒最高點數值後，使用C型夾鉗墊上軟質墊塊，將齒條固定於基座，再使用扭力扳手依序將固定螺絲鎖緊，如圖12。

3.3.6 Measure the correct value of the highest inspection pin; use C-type clamp and place soft pads to fix the rack on the base. Then, use torque wrench in sequence to fix and tighten screws as Fig. 12.

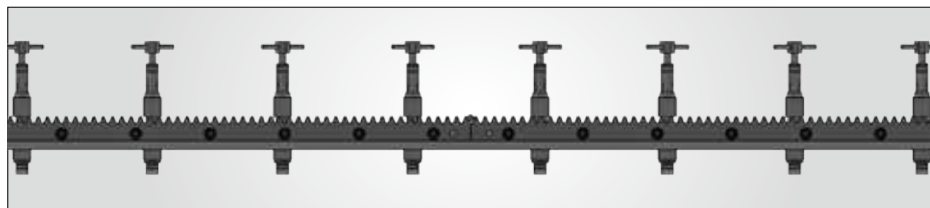


圖12 / Fig. 12

3.3.7 螺絲鎖緊後移除C型夾鉗、軟質墊塊，完成裝配，如圖13。

3.3.7 Tighten screws and remove C-type clamp, soft pads. The assembly is completed. As Fig 13.

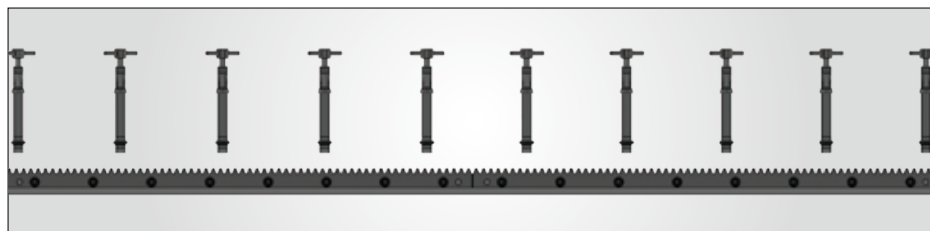


圖13 / Fig. 13

螺絲規格 / Screw Spec.	六角扳手/Hex Wrench (mm)	強度12.9 Torque Value(N.m)
M4*0.7P	3	4.3
M5*0.8P	4	7.5
M6*1.0P	5	13.4
M8*1.25P	6	30.5
M10*1.5P	8	61
M12*1.75P	10	102
M14*2.0P	12	162
M16*2.0P	14	249
M20*2.5P	17	481
M24*3.0P	19	836
M30*3.5P	22	1670

表3螺絲扭力值/ Table 3. Screw Torque

3.4 裝配完成檢查

- 3.4.1 清潔附著於齒面上防鏽油。
- 3.4.2 於齒面上塗抹有色塗料如:黃丹、紅丹或藍丹亦可(請勿塗抹無法清除之漆料)。
- 3.4.3 於齒條運作範圍內，齒輪反覆來回移動嚙合。
- 3.4.4 觀看齒面塗抹有色顏料的脫落情況，如圖14所示。
- 3.4.5 齒面嚙合狀況正確，則清除附著於齒面的有色塗料，裸露部分請塗抹防鏽油脂，若非正確請調整至正確狀況。

如圖14.所示：
1.正確
2.不平行
3.不正確中心距

3.4. Inspection After Assembly.

- 3.4.1 Clean the lubricant oil on the racks.
- 3.4.2 Smear colored paint on racks such as lead oxide yellow powder, red powder and blue powder. (Please use clearable paints).
- 3.4.3 Inside the rack movement, the pinion runs back and forth to clench.
- 3.4.4 Observe the peeling situation on the painted teeth of the racks as Fig. 14.
- 3.4.5 If teeth clenches correctly, please clean the colored paint on the racks. Bare parts should be smeared anti-rust lubricant. If not correctly, please adjust it to correct.

As the Fig. 14：
1. Correct
2. Not Parallel
3. Center Distance Incorrect

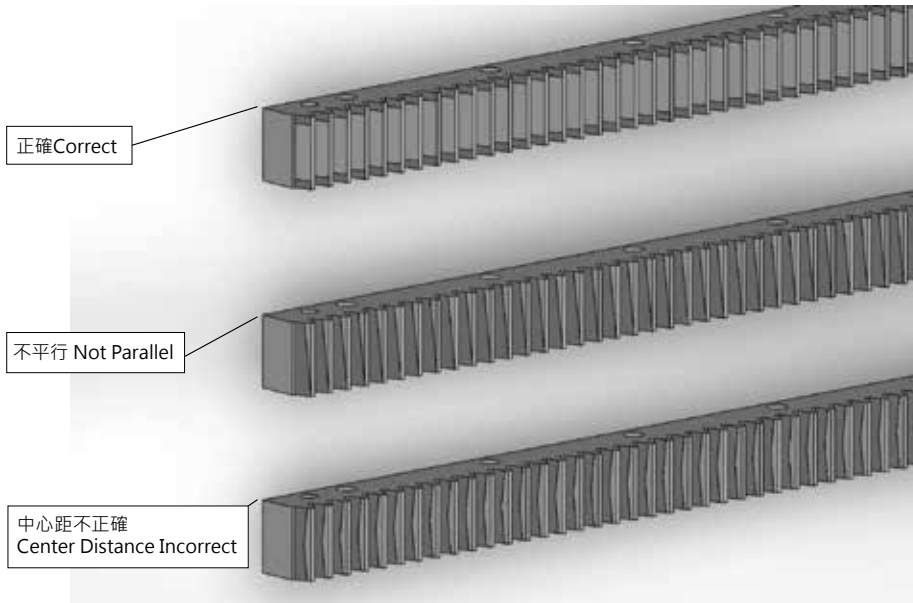


圖14 / Fig. 14

3.5. 運行前注意事項

- 3.5.1 齒條裝配無誤，齒面嚙合情況正確。
- 3.5.2 齒條與齒輪嚙合面須有適合之潤滑油脂。
- 3.5.3 運行範圍裡確定無人員，避免造成傷害。

3.5 Attentions by Operation

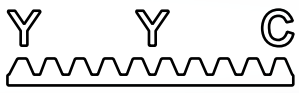
- 3.5.1 Racks Assembly correct. Teeth clench correct.
- 3.5.2. The clenching surface of rack and pinion needs lubricant oil.
- 3.5.3 Assure no people inside the operation area to avoid any injure.

(四)、保養

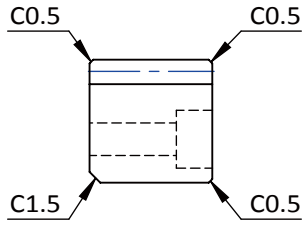
- 4.1 依照設備運作情況制定保養計畫表。
 - 4.2 潤滑油脂請選用適當之油脂，依照選用之油脂決定潤滑之設備。
 - 4.3 保養周期視磨耗情形增長或縮短計畫。
 - 4.4 齒條若磨損嚴重或崩裂，請更換齒條，避免影響運行精度效能。
- ※齒條拆卸與保養請由經過訓練的人員進行處理。

4. Maintenances

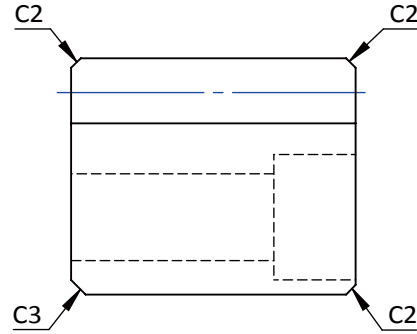
- 4.1 Formulate a maintenance schedule according to the equipment operation situation.
 - 4.2 Please select suitable lubricant oil and decide lubricant system according to the lubricant oil.
 - 4.3 Maintenance cycle should be increased or decreased, based on operation worn situation.
 - 4.4 If racks are worn or damaged seriously, please replace new racks to avoid any impact on operation accuracy and efficiency.
- ※ Rack replacement and maintenance should be operated by trained and qualified professionals.



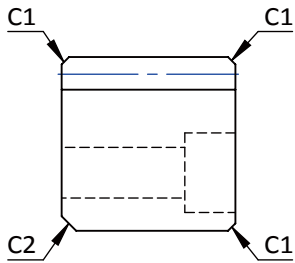
附錄二 齒條標準倒角圖
Appendix 2 Rack Standard Chamfer



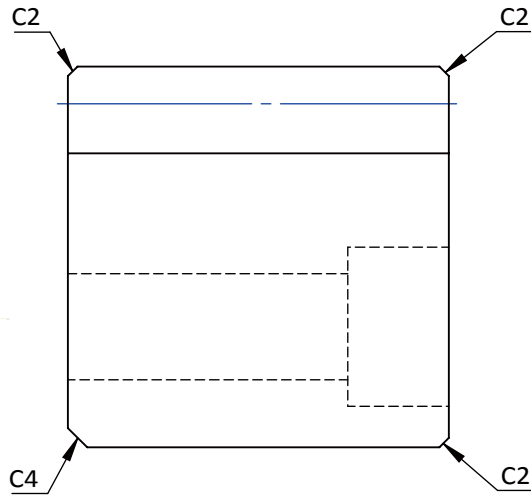
M1 & M1.5



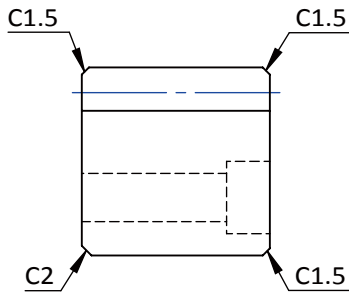
M6



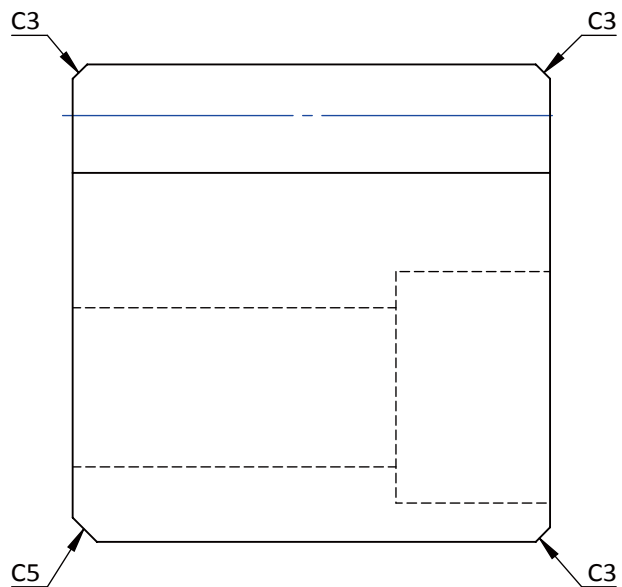
M2 & M3



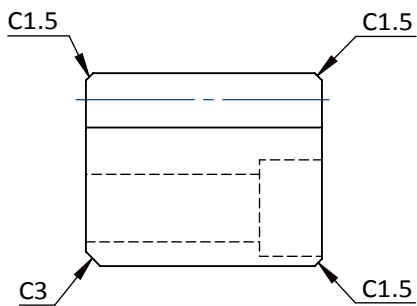
M8



M4



M10 & M12



M5

單位 / Unit: mm