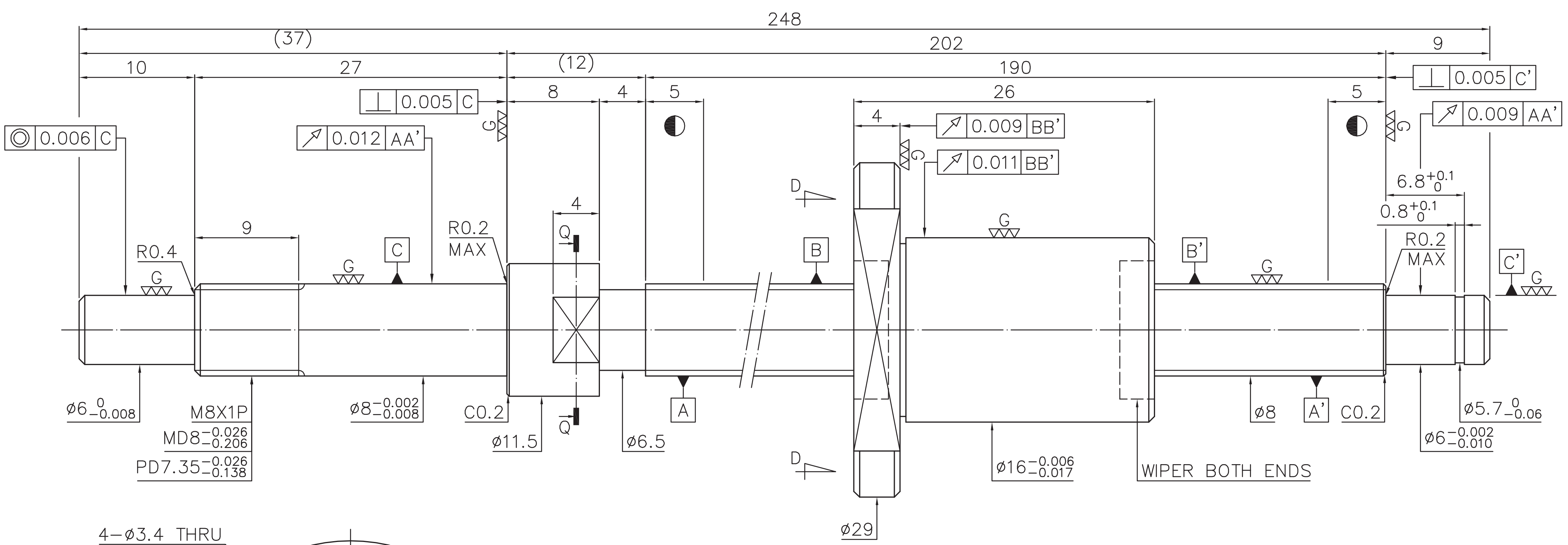
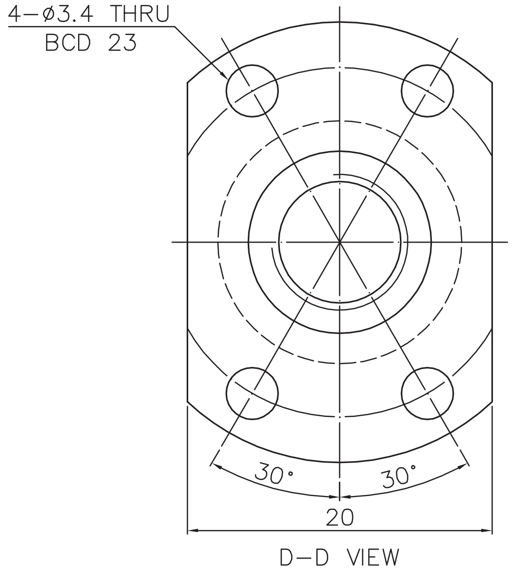
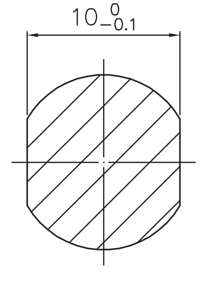
A126K5A1 | Released by HIWIN design group.


1 2 3 4 5 6 7 8 9
A B C E F G
▽▽ (G ▽▽▽)
248
(37)
202
9
10
27
(12)
190
8
4
5
26
5
⊥ 0.005 C
⊥ 0.005 C'
◎ 0.006 C
↗ 0.012 AA'
↗ 0.009 BB'
↗ 0.011 BB'
↗ 0.009 AA'
6.8 +0.1 0
0.8 +0.1 0
R0.4
9
R0.2 MAX
R0.2 MAX
Q
Q
D
D
A B C A' B' C'
G
ø6 0 -0.008
M8X1P
MD8 -0.026 -0.206
PD7.35 -0.026 -0.138
ø8 -0.002 -0.008
C0.2
ø11.5
ø6.5
ø29
ø16 -0.006 -0.017
WIPER BOTH ENDS
ø8
C0.2
ø6 -0.002 -0.010
ø5.7 0 -0.06


4-ø3.4 THRU
BCD 23
30°
30°
20

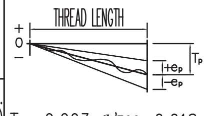
D-D VIEW



Q-Q SECTION

SPEC: R8-2T3-FSI-190-248-0.018

				PRELOAD(kgf)	35MAX
				R.D.	6.652
				S.F. (kgf)	0.17MAX
				DRAG TORQUE(kgf-cm)	0.2MAX
				DIRECTION OF TURN	R
				P.C. DIA.	8.2
MAX. AXIAL LOAD(kgf)		LUBRICATION		BALL DIA.	1.5
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL		BACKLASH	0
DN VALUE		E1 TYPE ASSEMBLY METHOD		CIRCUIT	3
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.		LEAD ANGLE	4.44
ACCELERATION(m/sec²)		CUSTOMER MC TYPE		DYNAMIC (kgf)	170
SUPPORT METHOD		CUSTOMER AXIAL TYPE		STATIC (kgf)	267
				LEAD	2


THREAD LENGTH
+
0
-
Tp
+ep
-ep

Tp:-0.003 𝜈300p:0.018
ep:0.023 𝜈u:0.018

UNCHAMFERED USE ■C0.5 ☐C1 ☐C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	⊕ ⊲	1:X

NORMAL TOLERANCE mm

UP TO 6	6–30	30–120	120–300	300–600	600–1200	1200–2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

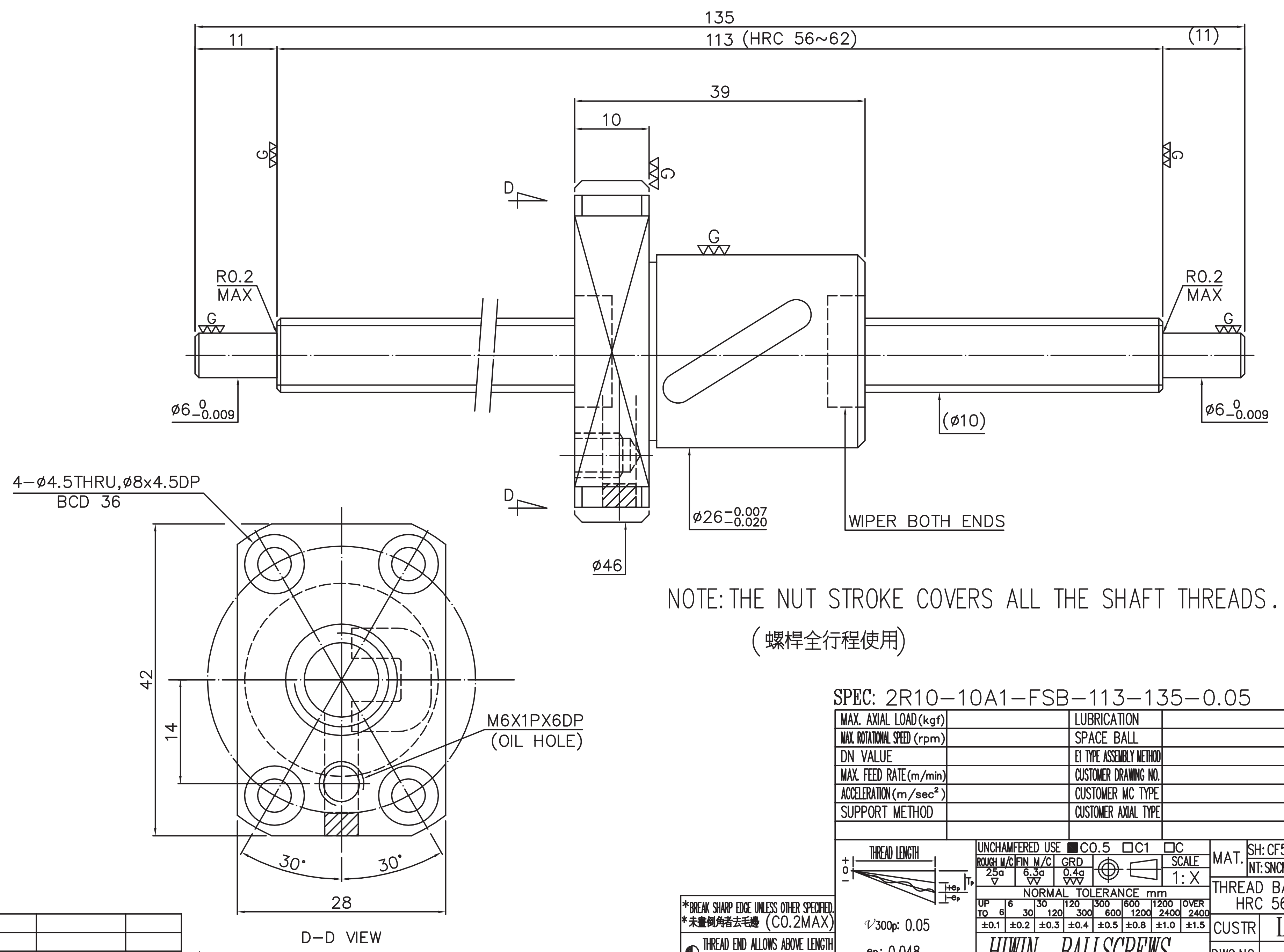
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

HIWIN® BALLSCREWS

MAT.	SH:50CrMo4/Equivalent	DATE	2012.06.27
	NT:SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126K5A1		

DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.



1 2 3 4 5 6 7 8 9
A B C D E F G
▽▽ (G ▽▽▽)
135
11
113 (HRC 56~62)
(11)
39
10
G
R0.2 MAX
ø6 0 −0.009
(ø10)
ø26 −0.007 −0.020
WIPER BOTH ENDS
ø46
D
4−ø4.5THRU,ø8x4.5DP
BCD 36
42
14
M6X1PX6DP
(OIL HOLE)
30°
30°
28
D−D VIEW

NOTE: THE NUT STROKE COVERS ALL THE SHAFT THREADS.

(螺桿全行程使用)

SPEC: 2R10−10A1−FSB−113−135−0.05

PRELOAD(kgf)	~
R.D.	7.742
S.F. (kgf)	~~~
DRAG TORQUE(kgf−cm)	~~~
DIRECTION OF TURN	R
P.C. DIA.	10.2
BALL DIA.	2.381
BACKLASH	0.02MAX
CIRCUIT	1.5*1
LEAD ANGLE	17.33
DYNAMIC (kgf)	198
STATIC (kgf)	282
LEAD /PITCH	10/5

MAX. AXIAL LOAD(kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.	
ACCELERATION(m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

THREAD LENGTH

$\mathcal{V}$300p: 0.05

ep: 0.048

UNCHAMFERED USE ■C0.5 ☐C1 ☐C

ROUGH M/C	FIN M/C	GRD	SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	1: X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: CF53/Equivalent	DATE	2010.05.27
	NT: SNCM220/Equivalent	DWG	Yijr
THREAD BALL TRACK HRC 56 ~ 62		APPD	Lady
		PROCESS NO.	G
CUSTR	LETROMEC (KL)		
DWG.NO.	A11RSGA1		

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

✻ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A11RKXA1

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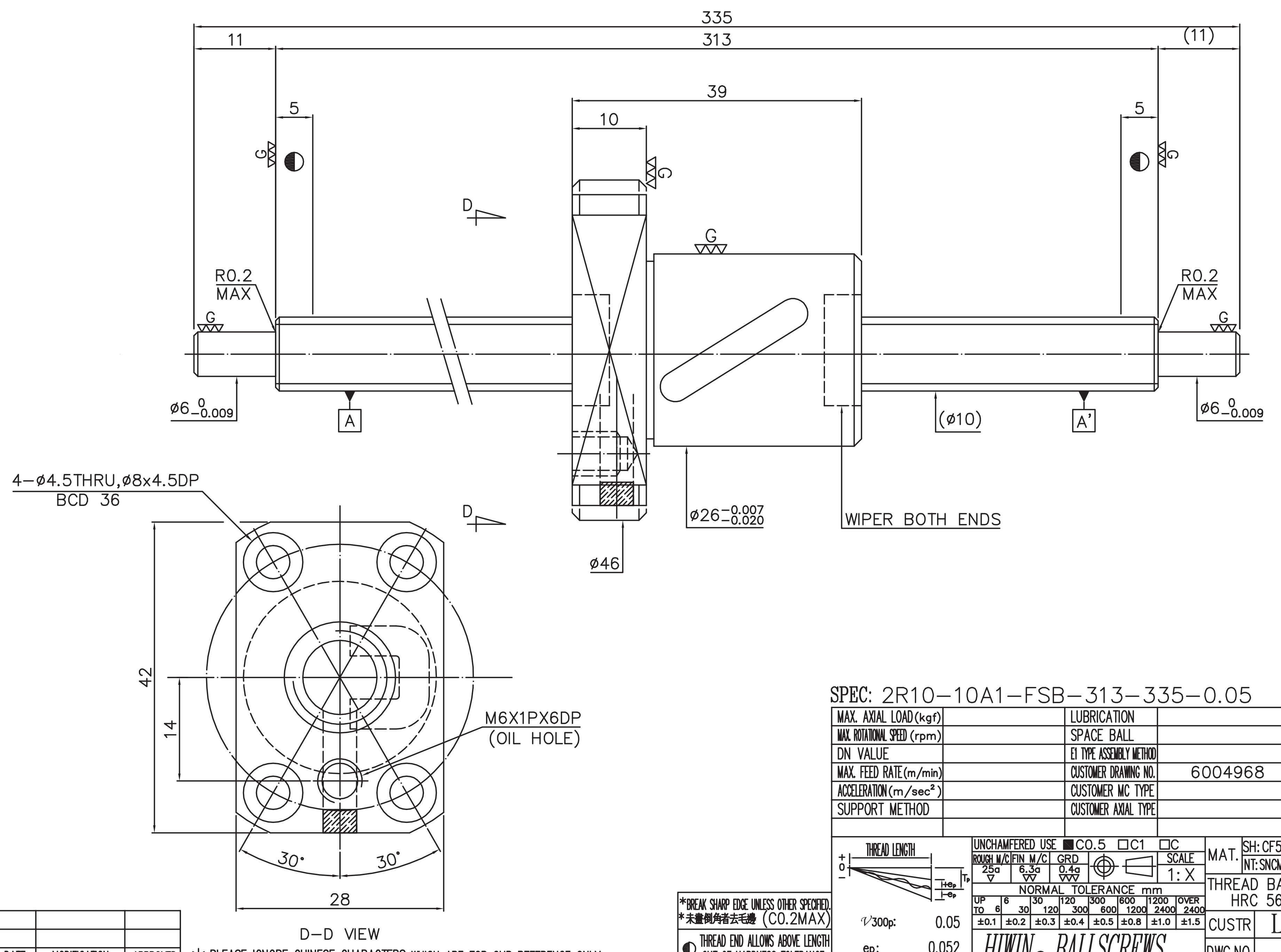

▽▽ (G ▽▽▽)
335
313
11
(11)
39
10
5
5
G
R0.2 MAX
R0.2 MAX
ø6 0 -0.009
ø6 0 -0.009
A
A'
(ø10)
ø26 -0.007 -0.020
ø46
WIPER BOTH ENDS
D
D
4-ø4.5THRU,ø8x4.5DP
BCD 36
M6X1PX6DP
(OIL HOLE)
42
14
28
30°
30°
D-D VIEW

DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

SPEC: 2R10-10A1-FSB-313-335-0.05

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	6004968
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	~
R.D.	7.742
S.F. (kgf)	~
DRAG TORQUE (kgf-cm)	~
DIRECTION OF TURN	R
P.C. DIA.	10.2
BALL DIA.	2.381
BACKLASH	0.02MAX
CIRCUIT	1.5*1
LEAD ANGLE	17.33
DYNAMIC (kgf)	198
STATIC (kgf)	282
LEAD/PITCH	10/5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

THREAD LENGTH

V_{300p}: 0.05

ep: 0.052

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD	SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	1: X

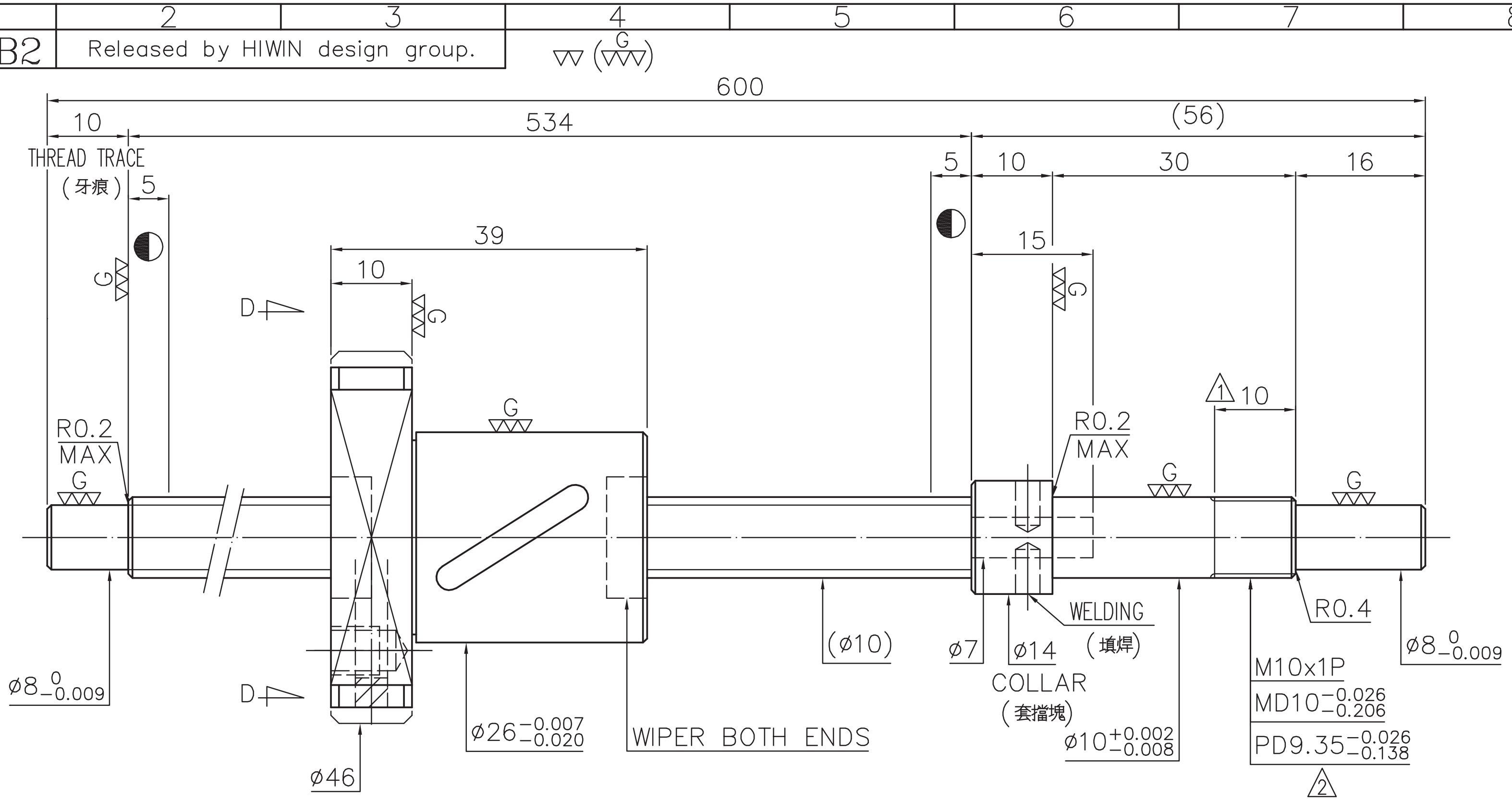
NORMAL TOLERANCE mm

UP TO	6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
	±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

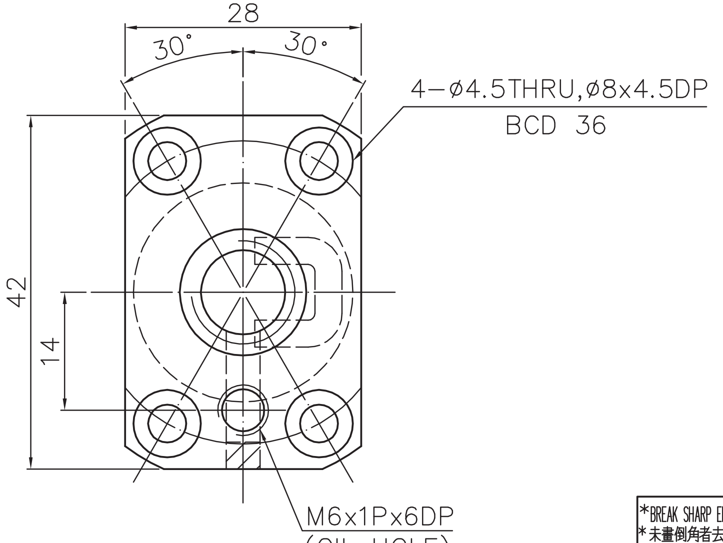
HIWIN® BALLSCREWS

MAT.	SH: CF53/Equivalent	DATE	2010.05.25
	NT: SNCM220/Equivalent	DWG	Rita
THREAD BALL TRACK HRC 56 ~ 62		APPD	Lady
		PROCESS NO.	G
CUSTR	LETROMEC (KL)		
DWG.NO.	A11RKXA1		

A11RKYB2 | Released by HIWIN design group.



▽▽ (G ▽▽▽)
600
10
534
(56)
THREAD TRACE
(牙痕)
5
5
10
30
16
15
39
10
D
D
G
R0.2 MAX
R0.2 MAX
1 10
R0.4
ø8 0 −0.009
ø8 0 −0.009
(ø10)
ø7
ø14
WELDING
(填焊)
COLLAR
(套擋塊)
ø10 +0.002 −0.008
M10x1P
MD10 −0.026 −0.206
PD9.35 −0.026 −0.138
2
ø26 −0.007 −0.020
WIPER BOTH ENDS
ø46



28
30°
30°
4−ø4.5THRU,ø8x4.5DP
BCD 36
42
14
M6x1Px6DP
(OIL HOLE)

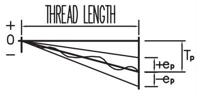
D−D VIEW

NOTE: ASSEMBLING SHAFT.
(接合件)

SPEC: 2R10−10A1−FSB−534−600−0.05

MAX. AXIAL LOAD(kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.	
ACCELERATION(m/sec²)		CUSTOMER MC TYPE	6099533
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD(kgf)	~
R.D.	7.742
S.F. (kgf)	~
DRAG TORQUE(kgf-cm)	~
DIRECTION OF TURN	R
P.C. DIA.	10.2
BALL DIA.	2.381
BACKLASH	0.02MAX
CIRCUIT	1.5*1
LEAD ANGLE	17.33
DYNAMIC (kgf)	198
STATIC (kgf)	282
LEAD/PITCH	10/5



THREAD LENGTH
+
0
−
Tp
+ep
−ep

ν300p: 0.05

ep: 0.089

UNCHAMFERED USE ■C0.5 ☐C1 ☐C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1: X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO	6 30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: CF53/Equivalent NT: SNCM220/Equivalent	DATE	2011.02.18
		DWG	Jiabin
THREAD BALL TRACK HRC 56 ~ 62		CHK	Kai
		APPD	Cody
CUSTR	LETROMEC(KL)		
DWG.NO.	A11RKYB2		

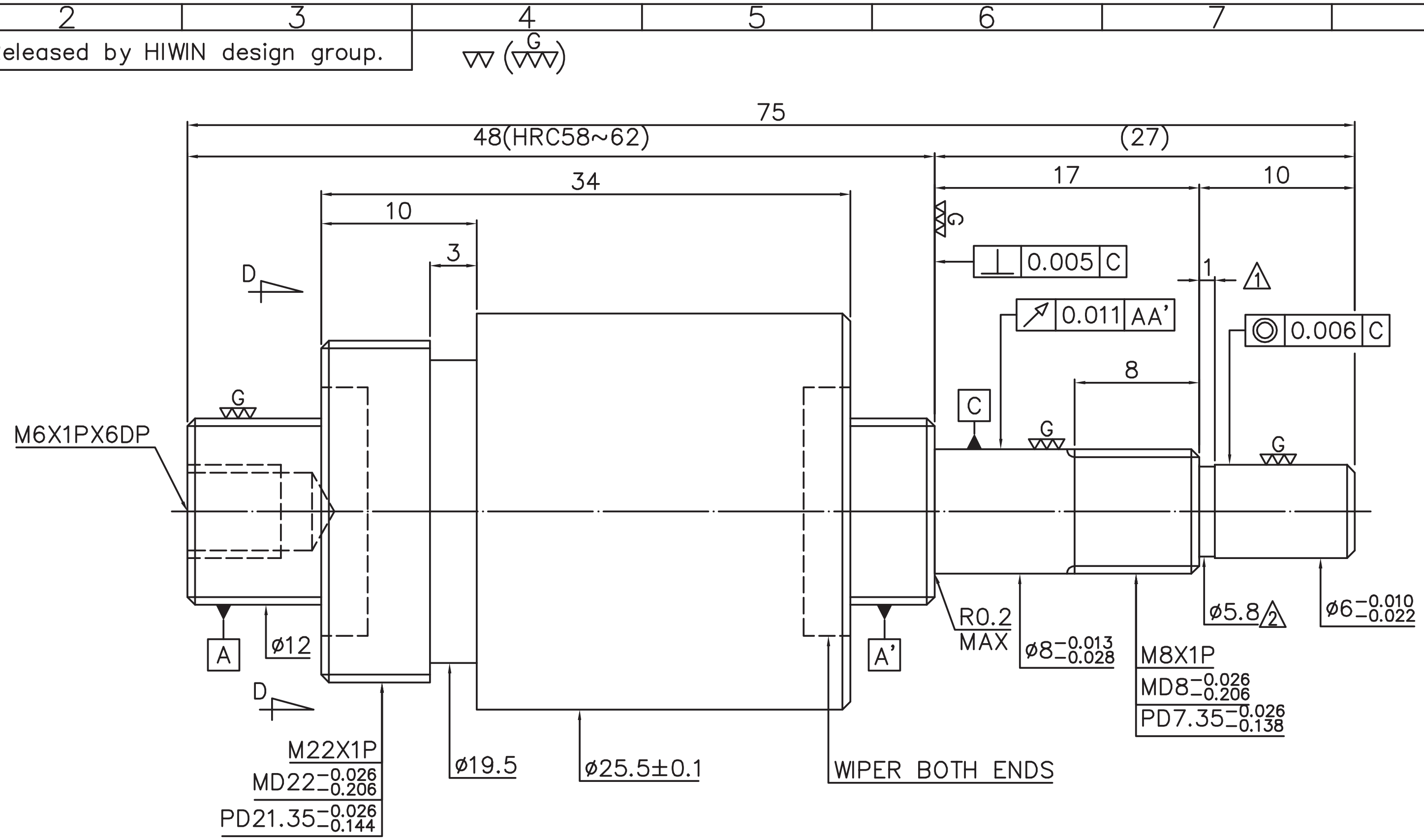
*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

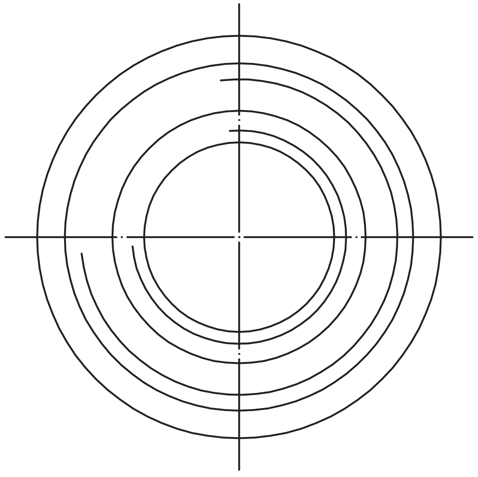
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

2011.02.18	MOD. 1 ~ 2	Cody
DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A11QKMA2 | Released by HIWIN design group.


▽▽ (G ▽▽▽)
75
48(HRC58~62)
(27)
34
10
3
17
10
8
1
△1
⊥ 0.005 C
↗ 0.011 AA'
◎ 0.006 C
C
G
M6X1PX6DP
A
ø12
A'
D
D
M22X1P
MD22−0.026 −0.206
PD21.35−0.026 −0.144
ø19.5
ø25.5±0.1
WIPER BOTH ENDS
R0.2 MAX
ø8−0.013 −0.028
M8X1P
MD8−0.026 −0.206
PD7.35−0.026 −0.138
ø5.8△2
ø6−0.010 −0.022



D−D VIEW

NOTE: THE NUT STROKE COVERS ALL THE SHAFT THREADS.(螺桿全行程使用)

SPEC: R12−2T3−RSI−48−75−0.05

MAX. AXIAL LOAD(kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.	6003447
ACCELERATION(m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD(kgf)	29
R.D.	10.652
S.F. (kgf)	0.04~0.28
DRAG TORQUE(kgf-cm)	0.04~0.36
DIRECTION OF TURN	R
P.C. DIA.	12.2
BALL DIA.	1.5
BACKLASH	0
CIRCUIT	3
LEAD ANGLE	2.99
DYNAMIC (kgf)	217
STATIC (kgf)	430
LEAD	2

THREAD LENGTH + 0 − Tp +ep −ep

Tp: −0.001 $\mathcal{V}$300p: 0.05
ep: 0.05 $\mathcal{V}$u: 0.05

UNCHAMFERED USE ■C0.5 □C1 □C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	⊕ ◁	1: X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

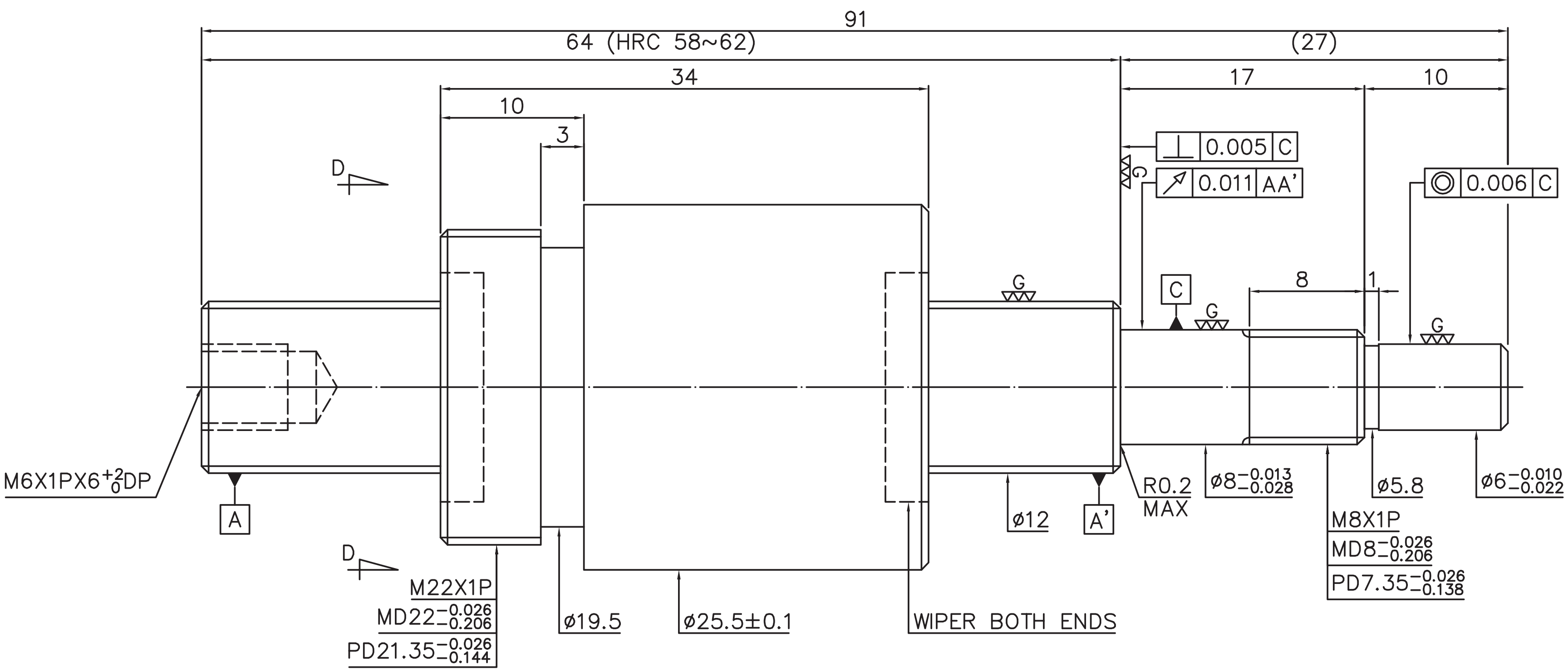
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

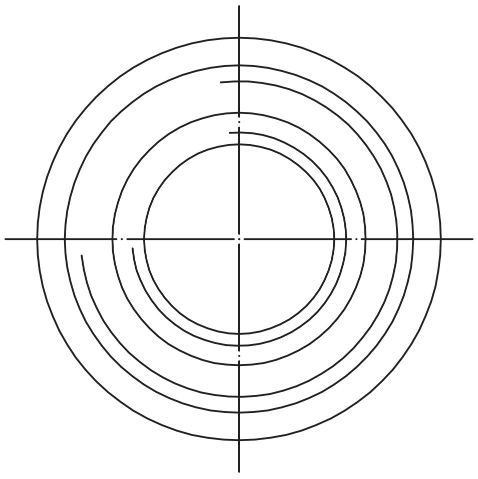
MAT.	SH:50CrMo4/Equivalent NT:SNCM220/Equivalent	DATE	2010.06.08
		DWG	Ivan
THREAD BALL TRACK HRC 58 ~ 62		APPD	Cody
		PROCESS NO.	G
CUSTR	BESI		
DWG.NO.	A11QKMA2		

DATE	MODIFICATION	APPROVED
2010.06.08	MOD△1~△2	Cody

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A11SF4A1	Released by HIWIN design group.


▽▽ (G ▽▽▽)
91
64 (HRC 58~62)
(27)
34
17
10
10
3
8
1
D
D
⊥ 0.005 C
↗ 0.011 AA'
◎ 0.006 C
G
C
A
A'
M6X1PX6$^{+2}_{0}$DP
M22X1P
MD22$^{-0.026}_{-0.206}$
PD21.35$^{-0.026}_{-0.144}$
ø19.5
ø25.5±0.1
WIPER BOTH ENDS
ø12
R0.2 MAX
ø8$^{-0.013}_{-0.028}$
ø5.8
ø6$^{-0.010}_{-0.022}$
M8X1P
MD8$^{-0.026}_{-0.206}$
PD7.35$^{-0.026}_{-0.138}$



D–D VIEW

NOTE: THE NUT STROKE COVERS ALL THE SHAFT THREADS.(螺桿全行程使用)

SPEC: R12–2T3–RSI–64–91–0.05

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	6003427
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD(kgf)	29
R.D.	10.652
S.F. (kgf)	0.04~0.28
DRAG TORQUE(kgf-cm)	0.04~0.36
DIRECTION OF TURN	R
P.C. DIA.	12.2
BALL DIA.	1.5
BACKLASH	0
CIRCUIT	3
LEAD ANGLE	2.99
DYNAMIC (kgf)	217
STATIC (kgf)	430
LEAD	2

THREAD LENGTH

Tp: –0.001 ν300p: 0.05

ep: 0.050 νu: 0.050

UNCHAMFERED USE ■C0.5 □C1 □C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	⊕	1: X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未註倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

HIWIN® BALLSCREWS

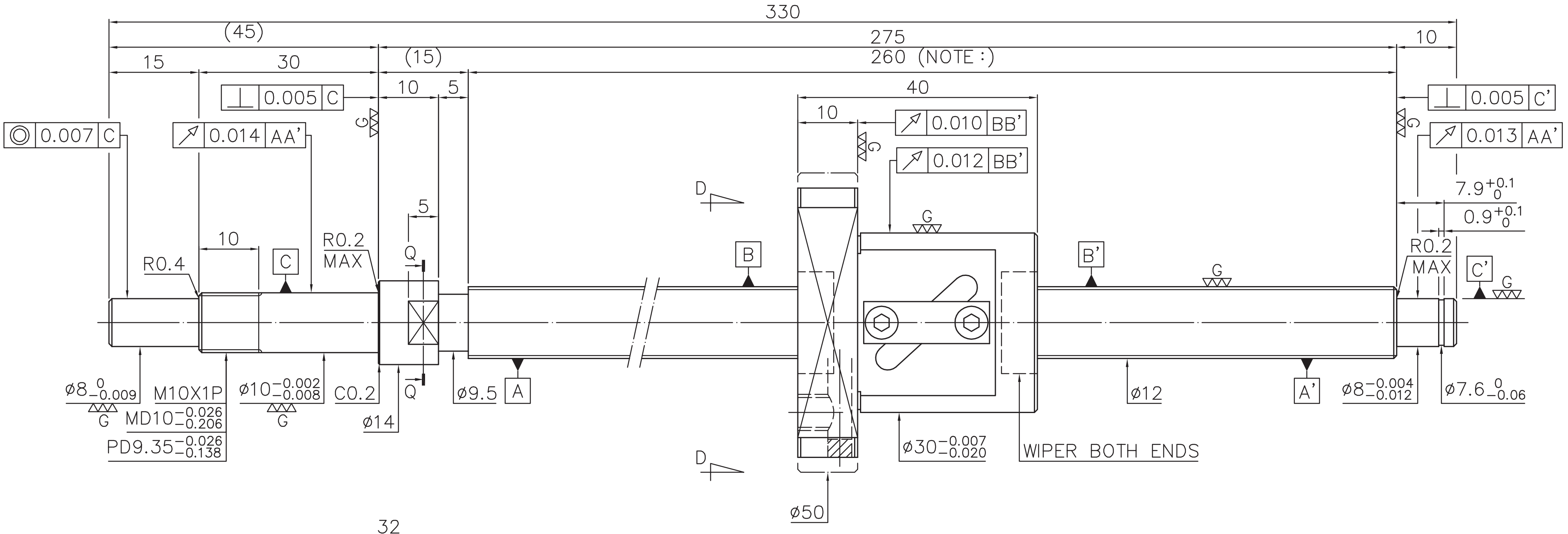
MAT.	SH: 50CrMo4/Equivalent	DATE	2010.06.29
	NT: SNCM220/Equivalent	DWG	Ford
THREAD BALL TRACK HRC 58 ~ 62		APPD	Lady
		PROCESS NO.	G
CUSTR	BESI		
DWG.NO.	A11SF4A1		

DATE	MODIFICATION	APPROVED

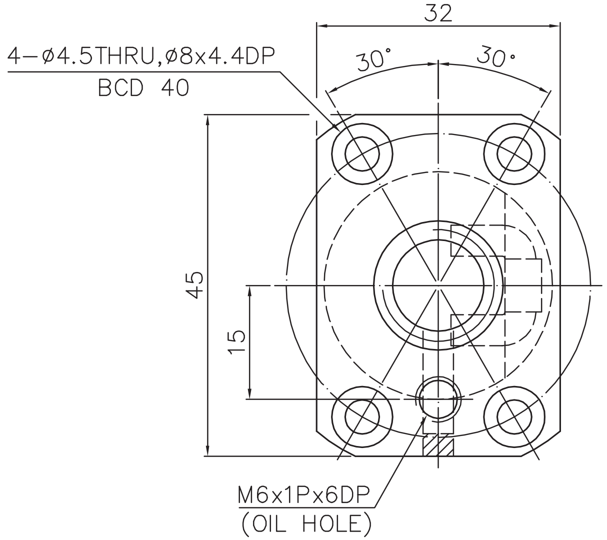
＊ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126K6A1	Released by HIWIN design group.

▽▽ (G ▽▽▽)

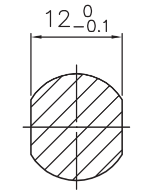


330
(45)
275
10
15
30
(15)
260 (NOTE:)
⊥ 0.005 C
10
5
40
⊥ 0.005 C'
◎ 0.007 C
↗ 0.014 AA'
G
10
↗ 0.010 BB'
G
↗ 0.012 BB'
↗ 0.013 AA'
7.9 +0.1 0
0.9 +0.1 0
D
5
G
R0.4
10
C
R0.2 MAX
Q
B
B'
G
R0.2 MAX
C'
G
ø8 0 -0.009 G
M10X1P
MD10 -0.026 -0.206
PD9.35 -0.026 -0.138
ø10 -0.002 -0.008 G
C0.2
ø14
Q
ø9.5
A
ø30 -0.007 -0.020
ø12
A'
ø8 -0.004 -0.012
ø7.6 0 -0.06
WIPER BOTH ENDS
D
ø50



32
30°
30°
4-ø4.5THRU,ø8x4.4DP
BCD 40
45
15
M6x1Px6DP
(OIL HOLE)

D-D VIEW



Q-Q SECTION

NOTE: SHAFT HARDENING IN THE SPECIFIC RANGE: HRC58~62.
(指定硬化範圍:HRC58~62)

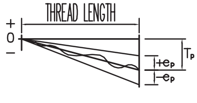
SPEC: R12-5B1-FSW-260-330-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	25
R.D.	9.792
S.F. (kgf)	0.05~0.22
DRAG TORQUE (kgf-cm)	0.1~0.45
DIRECTION OF TURN	R
P.C. DIA.	12.25
BALL DIA.	2.381
BACKLASH	0
CIRCUIT	2.5*1
LEAD ANGLE	7.4
DYNAMIC (kgf)	382
STATIC (kgf)	637
LEAD	5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE



THREAD LENGTH
+
0
−
+ep
−ep
Tp

Tp: −0.004 𝒱300p: 0.018
ep: 0.023 𝒱u: 0.018

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1: X

NORMAL TOLERANCE mm

UP TO	6	6–30	30–120	120–300	300–600	600–1200	1200–2400	OVER 2400
	±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

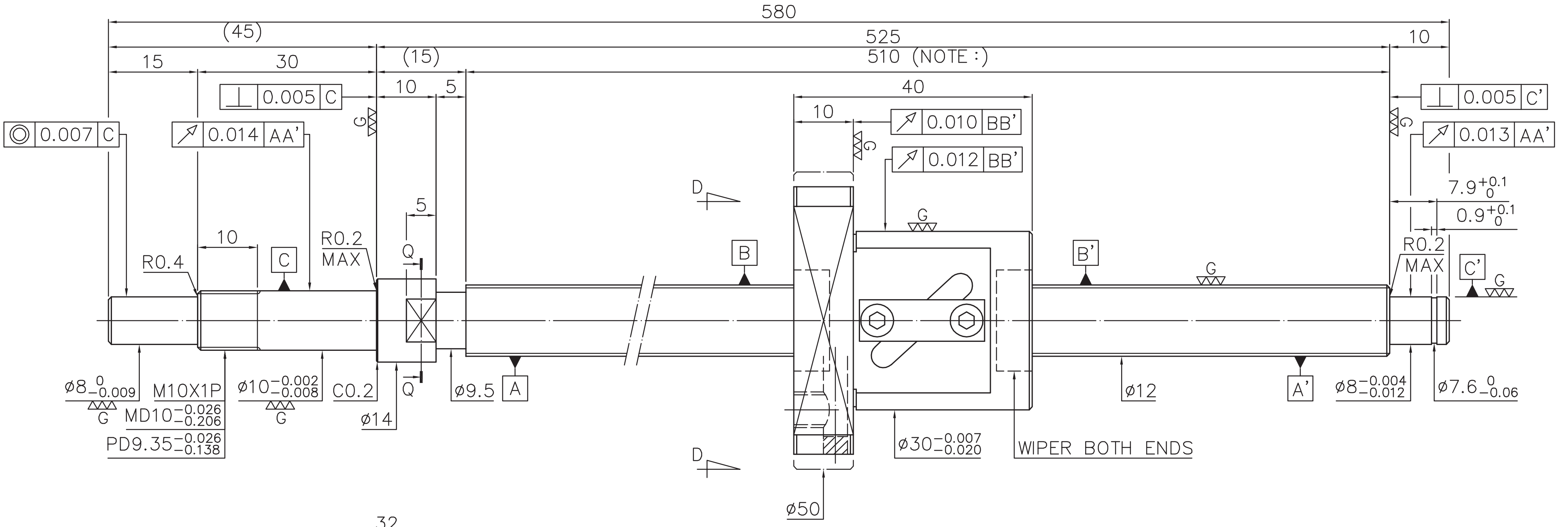
HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent NT: SNCM220/Equivalent	DATE	2012.06.27
		DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126K6A1		

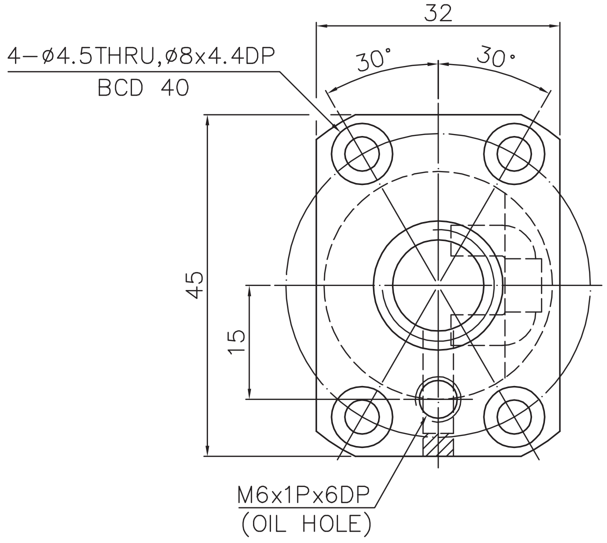
DATE	MODIFICATION	APPROVED

✻ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126K7A1	Released by HIWIN design group.

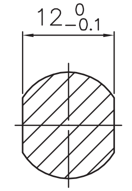


▽▽ (G ▽▽▽)
580
(45)
525
10
15
30
(15)
510 (NOTE:)
10
5
40
⊥ 0.005 C
◎ 0.007 C
↗ 0.014 AA'
↗ 0.010 BB'
↗ 0.012 BB'
⊥ 0.005 C'
↗ 0.013 AA'
7.9 +0.1 0
0.9 +0.1 0
G
5
10
R0.4
C
R0.2 MAX
Q
Q
D
D
B
B'
C'
A
A'
R0.2 MAX
ø8 0 -0.009 G
M10X1P
MD10 -0.026 -0.206
PD9.35 -0.026 -0.138
ø10 -0.002 -0.008 G
C0.2
ø14
ø9.5
ø30 -0.007 -0.020
ø50
WIPER BOTH ENDS
ø12
ø8 -0.004 -0.012
ø7.6 0 -0.06



32
30°
30°
4-ø4.5THRU,ø8x4.4DP
BCD 40
45
15
M6x1Px6DP
(OIL HOLE)

D-D VIEW



Q-Q SECTION

NOTE: SHAFT HARDENING IN THE SPECIFIC
RANGE: HRC58~62.
(指定硬化範圍: HRC58~62)

SPEC: R12-5B1-FSW-510-580-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	25
R.D.	9.792
S.F. (kgf)	0.05~0.22
DRAG TORQUE (kgf-cm)	0.1~0.45
DIRECTION OF TURN	R
P.C. DIA.	12.25
BALL DIA.	2.381
BACKLASH	0
CIRCUIT	2.5*1
LEAD ANGLE	7.4
DYNAMIC (kgf)	382
STATIC (kgf)	637
LEAD	5

THREAD LENGTH

Tp: -0.008 ν300p: 0.018

ep: 0.03 νu: 0.023

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1: X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.27
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126K7A1		

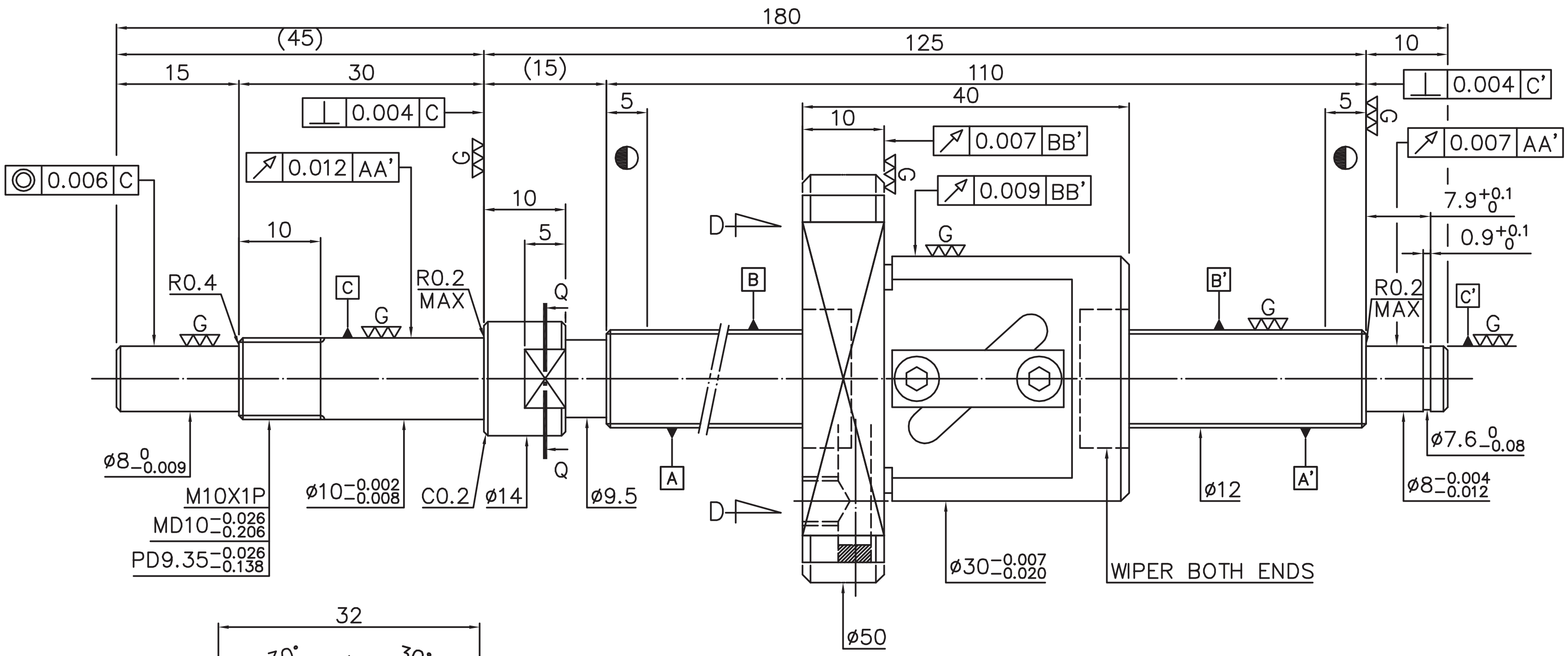
HIWIN® BALLSCREWS

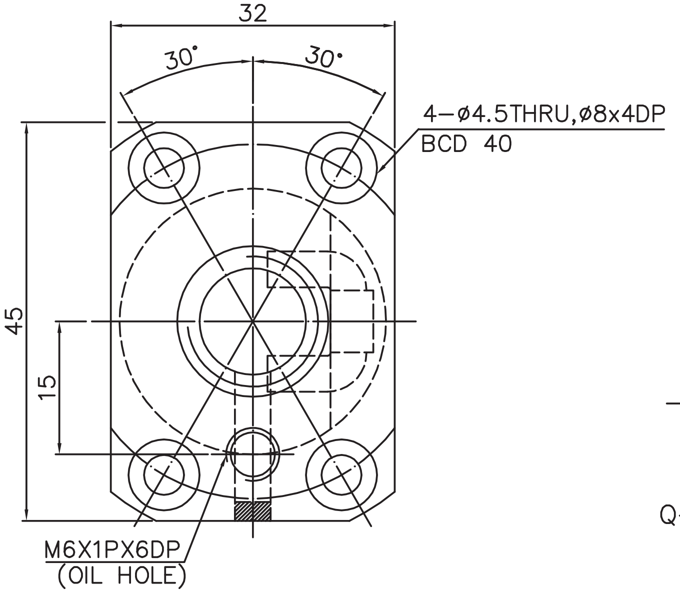
DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

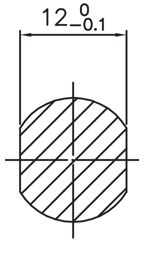
A11HPJA2	Released by HIWIN design group.

▽▽ (G ▽▽▽)


180
(45)
125
10
15
30
(15)
110
5
40
5
⊥ 0.004 C
⊥ 0.004 C'
◎ 0.006 C
↗ 0.012 AA'
↗ 0.007 BB'
↗ 0.009 BB'
↗ 0.007 AA'
10
10
5
7.9 +0.1 0
0.9 +0.1 0
G
R0.4
C
R0.2 MAX
Q
Q
D
D
B
B'
A
A'
C'
R0.2 MAX
ø8 0 -0.009
M10X1P
MD10 -0.026 -0.206
PD9.35 -0.026 -0.138
ø10 -0.002 -0.008
C0.2
ø14
ø9.5
ø30 -0.007 -0.020
ø50
WIPER BOTH ENDS
ø12
ø8 -0.004 -0.012
ø7.6 0 -0.08


32
30°
30°
4−ø4.5THRU,ø8x4DP
BCD 40
45
15
M6X1PX6DP
(OIL HOLE)

D−D VIEW



Q−Q DETAIL

⚠1 NOTE: USE GREASE "HIWIN G04"(使用指定油脂). ⚠2

SPEC: R12−5B1−FSW−110−180−0.008

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	1:1
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	25
R.D.	9.792
S.F. (kgf)	0.05~0.23
DRAG TORQUE (kgf-cm)	0.10~0.46
DIRECTION OF TURN	R
P.C. DIA.	12.25
BALL DIA.	2.381
BACKLASH	0
CIRCUIT	2.5*1
LEAD ANGLE	7.4
DYNAMIC (kgf)	382
STATIC (kgf)	637
LEAD	5

THREAD LENGTH

Tp: −0.003 $\mathcal{V}$300p: 0.008

ep: 0.012 $\mathcal{V}$u: 0.008

UNCHAMFERED USE ■R0.5 □R1 □R

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1:X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者以R0.5MAX

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2009.07.15
	NT: SNCM220/Equivalent	DWG	Rita
THREAD BALL TRACK HRC 58 ~ 62		APPD	Cody
		PROCESS NO.	G
CUSTR	LETROMEC(KL)		
DWG.NO.	A11HPJA2		

DATE	MODIFICATION	APPROVED
2009.07.20	MOD. ⚠2	Cody
2009.07.15	MOD. ⚠1	Cody

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

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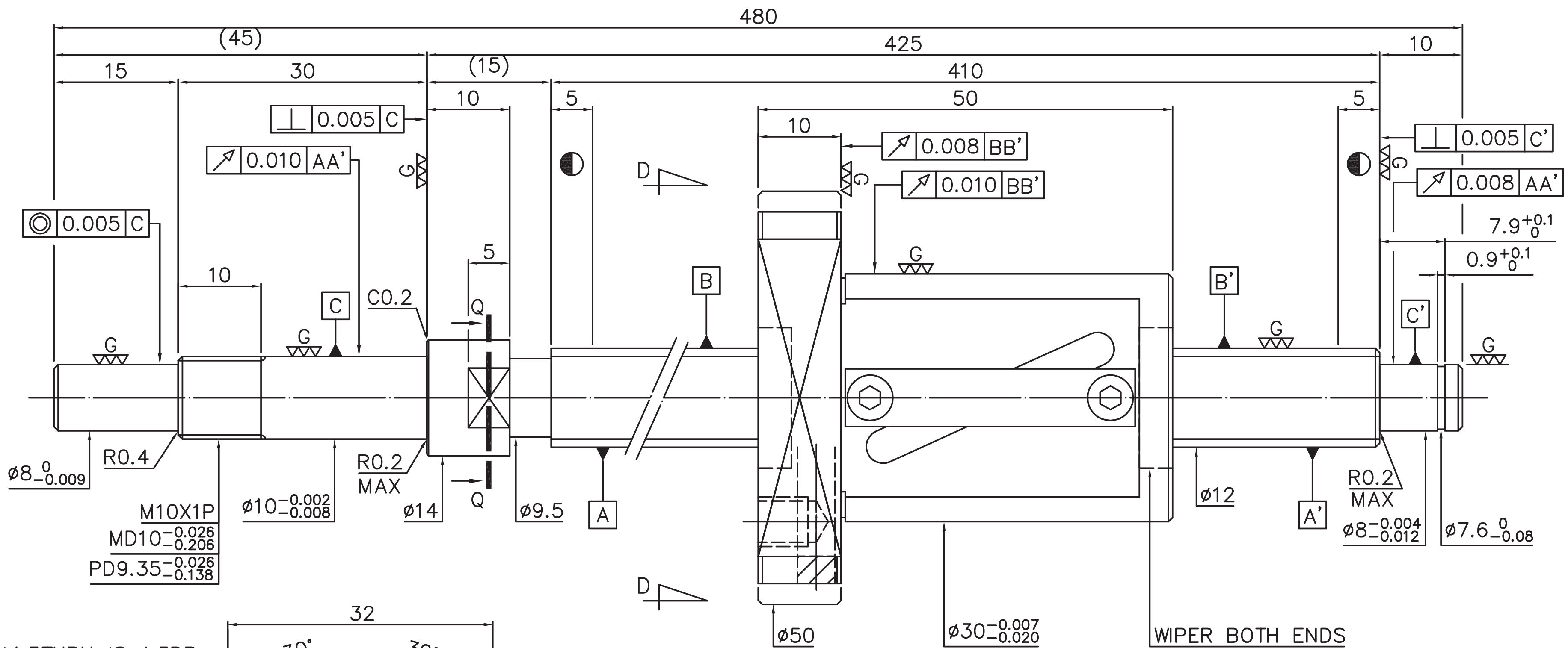
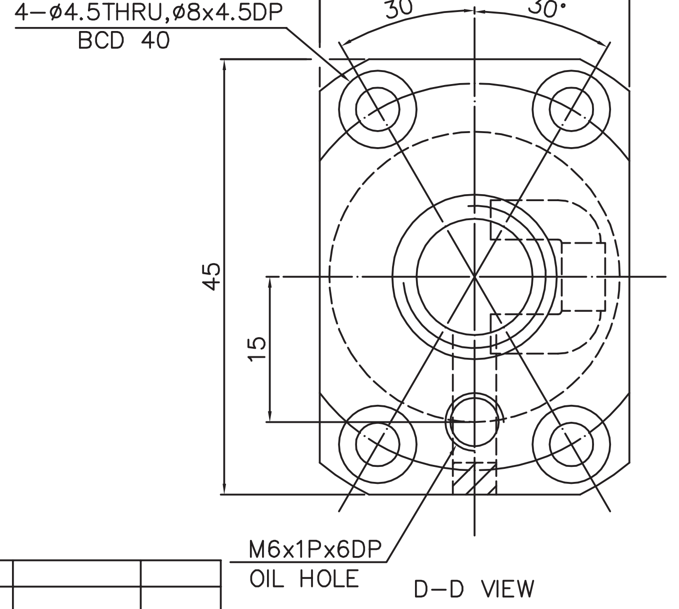
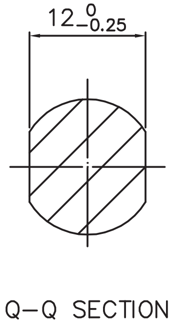


480
(45)
425
10
15
30
(15)
410
10
5
50
10
5
⊥ 0.005 C
↗ 0.010 AA'
◎ 0.005 C
↗ 0.008 BB'
↗ 0.010 BB'
⊥ 0.005 C'
↗ 0.008 AA'
$7.9^{+0.1}_{0}$
$0.9^{+0.1}_{0}$
G
10
5
C
C0.2
Q
Q
B
B'
C'
A
A'
D
D
$ø8^{0}_{-0.009}$
R0.4
M10X1P
$MD10^{-0.026}_{-0.206}$
$PD9.35^{-0.026}_{-0.138}$
$ø10^{-0.002}_{-0.008}$
R0.2 MAX
ø14
ø9.5
ø50
$ø30^{-0.007}_{-0.020}$
WIPER BOTH ENDS
ø12
R0.2 MAX
$ø8^{-0.004}_{-0.012}$
$ø7.6^{0}_{-0.08}$



32
30°
30°
4-ø4.5THRU,ø8x4.5DP
BCD 40
45
15
M6x1Px6DP
OIL HOLE

D-D VIEW



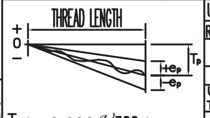
Q-Q SECTION

NOTE: BS不塗油脂.
(WITHOUT GREASE)

SPEC: R12-10B1-FSW-410-480-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	19
R.D.	9.792
S.F. (kgf)	0.05~0.25
DRAG TORQUE (kgf-cm)	0.09~0.51
DIRECTION OF TURN	R
P.C. DIA.	12.25
BALL DIA.	2.381
BACKLASH	0
CIRCUIT	2.5*1
LEAD ANGLE	14.57
DYNAMIC (kgf)	382
STATIC (kgf)	637
LEAD	10



THREAD LENGTH
+
0
−
+ep
−ep
Tp

Tp: −0.006 ν300p: 0.018

ep: 0.027 νu: 0.020

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

UNCHAMFERED USE ■C0.5 ☐C1 ☐C

ROUGH M/C	FIN M/C	GRD	SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	1: X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2010.05.10
	NT: SNCM220/Equivalent	DWG	Rita
THREAD BALL TRACK HRC 58 ~ 62		APPD	Lady
		PROCESS NO.	G
CUSTR	LETROMEC/BESI		
DWG.NO.	A11R93A1		

DATE	MODIFICATION	APPROVED

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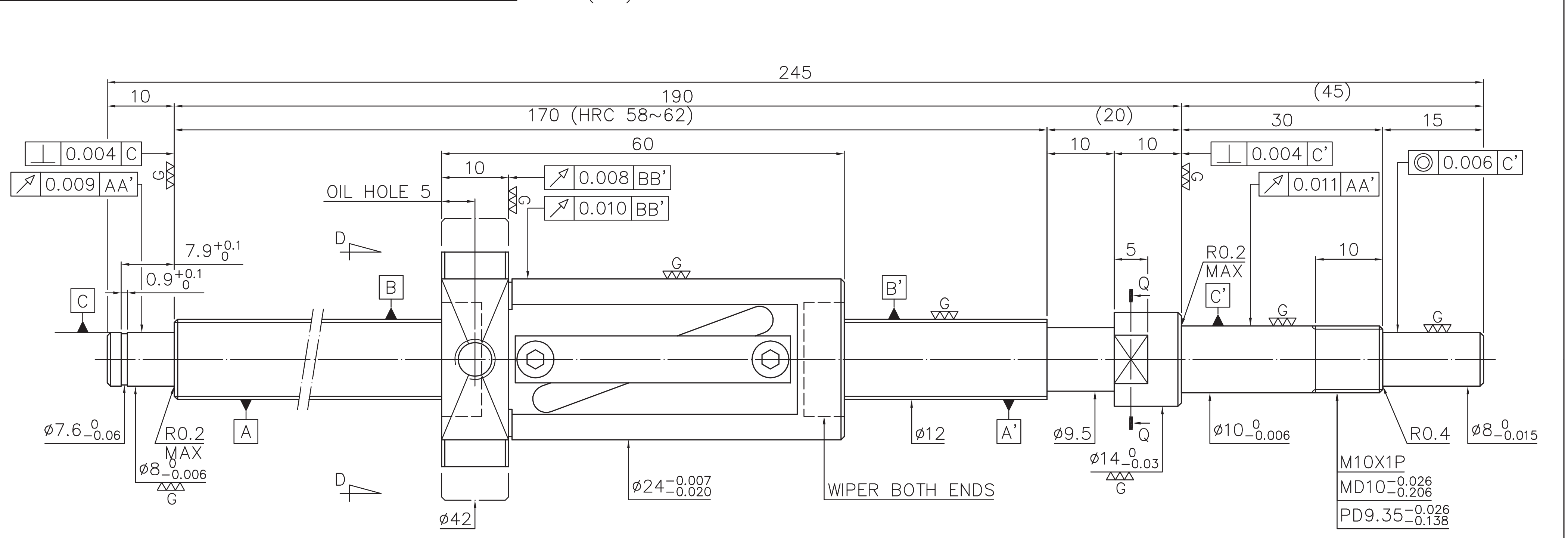
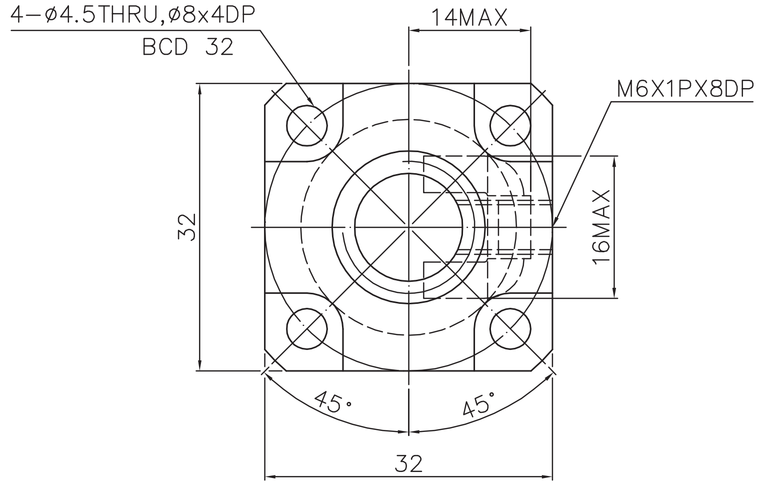


1 2 3 4 5 6 7 8 9
A B C
G
245
10
190
170 (HRC 58~62)
(45)
(20)
30
15
60
10
10
10
⊥ 0.004 C
↗ 0.009 AA'
↗ 0.008 BB'
↗ 0.010 BB'
⊥ 0.004 C'
↗ 0.011 AA'
◎ 0.006 C'
OIL HOLE 5
D
D
7.9 +0.1 0
0.9 +0.1 0
C
B
A
B'
A'
C'
5
Q
Q
R0.2 MAX
R0.2 MAX
10
R0.4
ø7.6 0 -0.06
ø8 0 -0.006
ø24 -0.007 -0.020
ø42
WIPER BOTH ENDS
ø12
ø9.5
ø14 0 -0.03
ø10 0 -0.006
ø8 0 -0.015
M10X1P
MD10 -0.026 -0.206
PD9.35 -0.026 -0.138

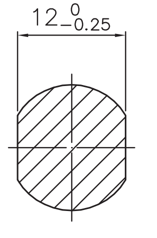
NOTE: THE NUT STROKE COVERS ALL THE SHAFT THREADS.

(螺桿全行程使用)



4-ø4.5THRU,ø8x4DP
BCD 32
14MAX
M6X1PX8DP
16MAX
32
45°
45°
32

D-D VIEW

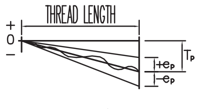


Q-Q SECTION

SPEC:R12-20A1-FSV-170-245-0.008

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	Die Bonder
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	15
R.D.	9.792
S.F. (kgf)	0.13~0.53
DRAG TORQUE (kgf-cm)	0.09~0.33
DIRECTION OF TURN	R
P.C. DIA.	12.25
BALL DIA.	2.381
BACKLASH	0
CIRCUIT	1.5*1
LEAD ANGLE	27.46
DYNAMIC (kgf)	246
STATIC (kgf)	382
LEAD	20



THREAD LENGTH
+
0
-
Tp
+ep
-ep

Tp: -0.003 $\mathcal{V}$300p: 0.008

ep: 0.012 $\mathcal{V}$u: 0.008

UNCHAMFERED USE ■C0.5 □C1 □C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	⊕	1: X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

MAT.	SH: 50CrMo4/Equivalent	DATE	2011.03.08
	NT: SNCM220/Equivalent	DWG	Ivan
THREAD BALL TRACK HRC 58 ~ 62		CHK	Kai
		APPD	Lady
CUSTR	LETROMEC(KL)		
DWG.NO.	A11WV2A1		

DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

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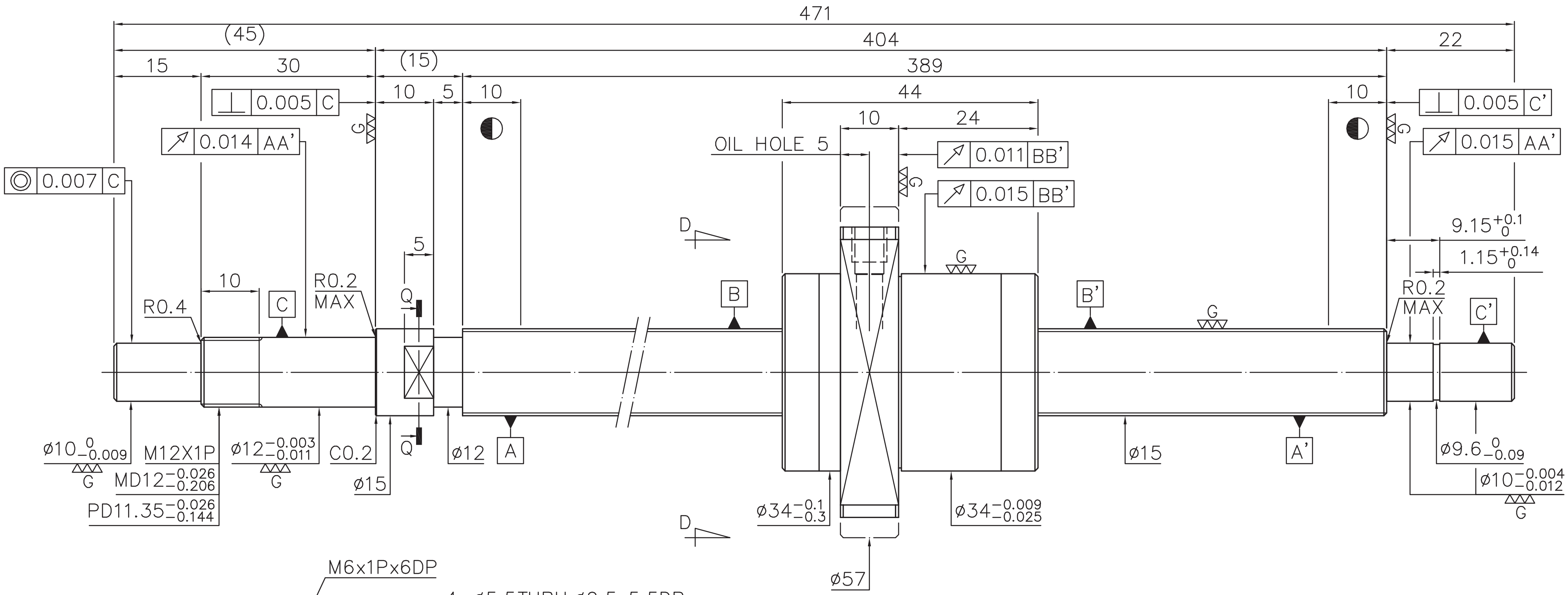
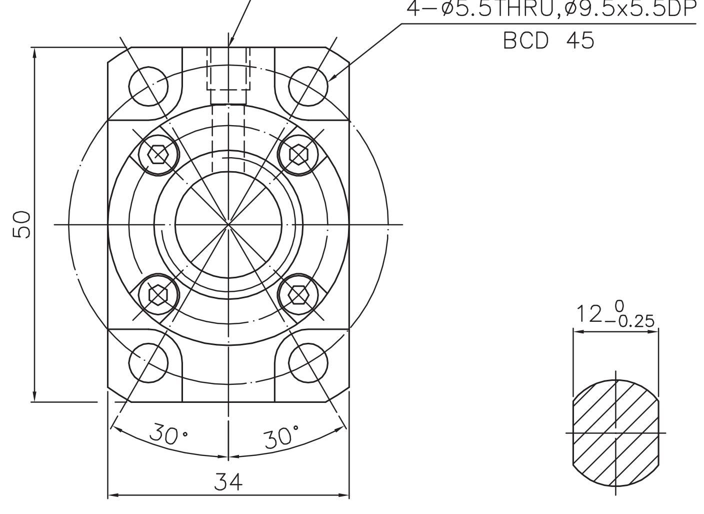

1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
▽▽ (G ▽▽▽)
471
(45)
404
22
15
30
(15)
389
10
5
10
44
10
24
10
⊥ 0.005 C
↗ 0.014 AA'
◎ 0.007 C
OIL HOLE 5
↗ 0.011 BB'
↗ 0.015 BB'
⊥ 0.005 C'
↗ 0.015 AA'
9.15 +0.1 0
1.15 +0.14 0
R0.4
R0.2 MAX
C
Q
Q
B
B'
C'
A
A'
D
D
ø10 0 -0.009 G
M12X1P
MD12 -0.026 -0.206
PD11.35 -0.026 -0.144
ø12 -0.003 -0.011 G
C0.2
ø15
ø12
ø34 -0.1 -0.3
ø57
ø34 -0.009 -0.025
ø15
ø9.6 0 -0.09
ø10 -0.004 -0.012 G


M6x1Px6DP
4-ø5.5THRU,ø9.5x5.5DP
BCD 45
50
30°
30°
34
12 0 -0.25

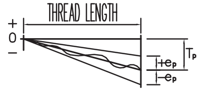
D-D VIEW

Q-Q SECTION

SPEC: 2R15-10U2-DFSH-389-471-0.018

MAX. AXIAL LOAD(kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.	
ACCELERATION(m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD(kgf)	34
R.D.	12.324
S.F. (kgf)	0.09~0.44
DRAG TORQUE(kgf-cm)	0.2~1.0
DIRECTION OF TURN	R
P.C. DIA.	15.6
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	2.8*2
LEAD ANGLE	11.53
DYNAMIC (kgf)	1490
STATIC (kgf)	3190
LEAD / PITCH	10/5


THREAD LENGTH
+
0
−
Tp
+ep
−ep

Tp: −0.006 $\mathcal{V}$300p: 0.018

ep: 0.025 $\mathcal{V}$u: 0.02

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1:X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.27
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126K8A1		

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126K9A1	Released by HIWIN design group.

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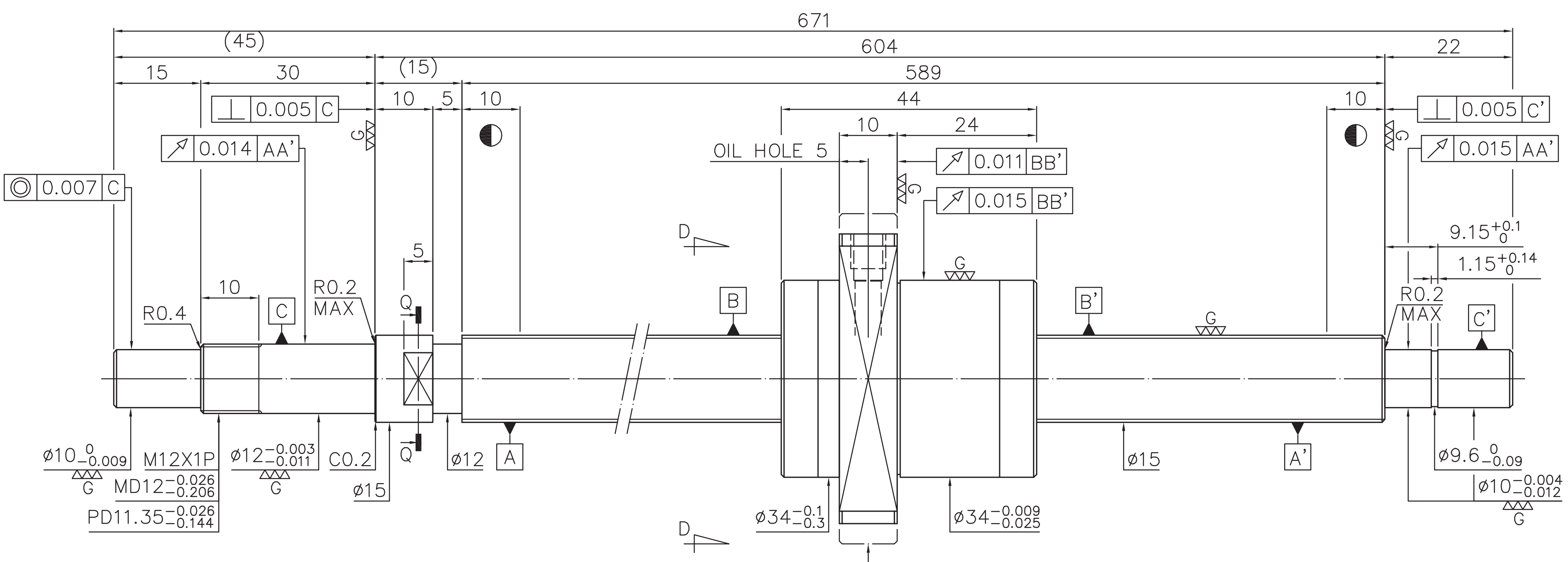
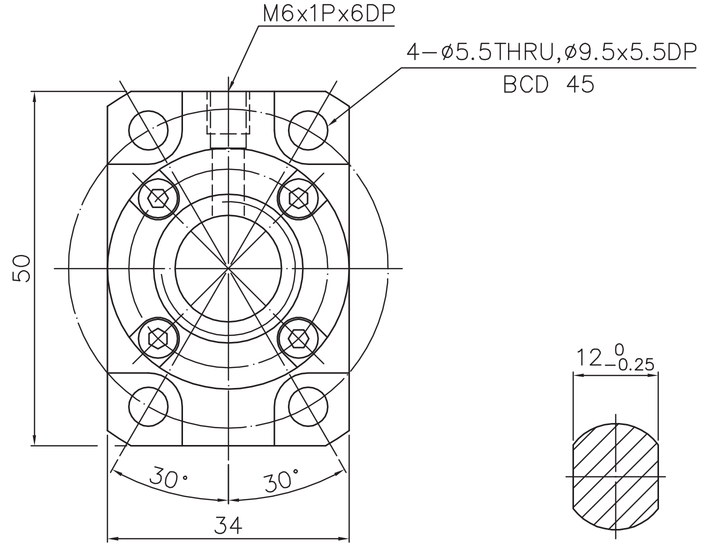


671
(45)
604
22
15
30
(15)
589
10
5
10
44
10
24
10
⊥ 0.005 C
↗ 0.014 AA'
◎ 0.007 C
OIL HOLE 5
↗ 0.011 BB'
↗ 0.015 BB'
⊥ 0.005 C'
↗ 0.015 AA'
9.15 +0.1 0
1.15 +0.14 0
G
D
R0.4
R0.2 MAX
C
Q
5
B
B'
C'
A
A'
Ø10 0 -0.009
M12X1P
MD12 -0.026 -0.206
PD11.35 -0.026 -0.144
Ø12 -0.003 -0.011
C0.2
Ø15
Ø12
Ø15
Ø34 -0.1 -0.3
Ø34 -0.009 -0.025
Ø57
Ø9.6 0 -0.09
Ø10 -0.004 -0.012



M6x1Px6DP
4-Ø5.5THRU,Ø9.5x5.5DP
BCD 45
50
30°
30°
34

D-D VIEW

12 0 -0.25

Q-Q SECTION

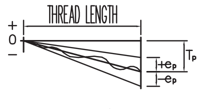
SPEC: 2R15-10U2-DFSH-589-671-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	34
R.D.	12.324
S.F. (kgf)	0.09~0.44
DRAG TORQUE (kgf-cm)	0.2~1.0
DIRECTION OF TURN	R
P.C. DIA.	15.6
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	2.8*2
LEAD ANGLE	11.53
DYNAMIC (kgf)	1490
STATIC (kgf)	3190
LEAD / PITCH	10/5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

● THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE



THREAD LENGTH
+
0
−
+ep
−ep
Tp

Tp: −0.009 $\mathcal{V}$300p: 0.018
ep: 0.03 $\mathcal{V}$u: 0.023

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	⊕	1:X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

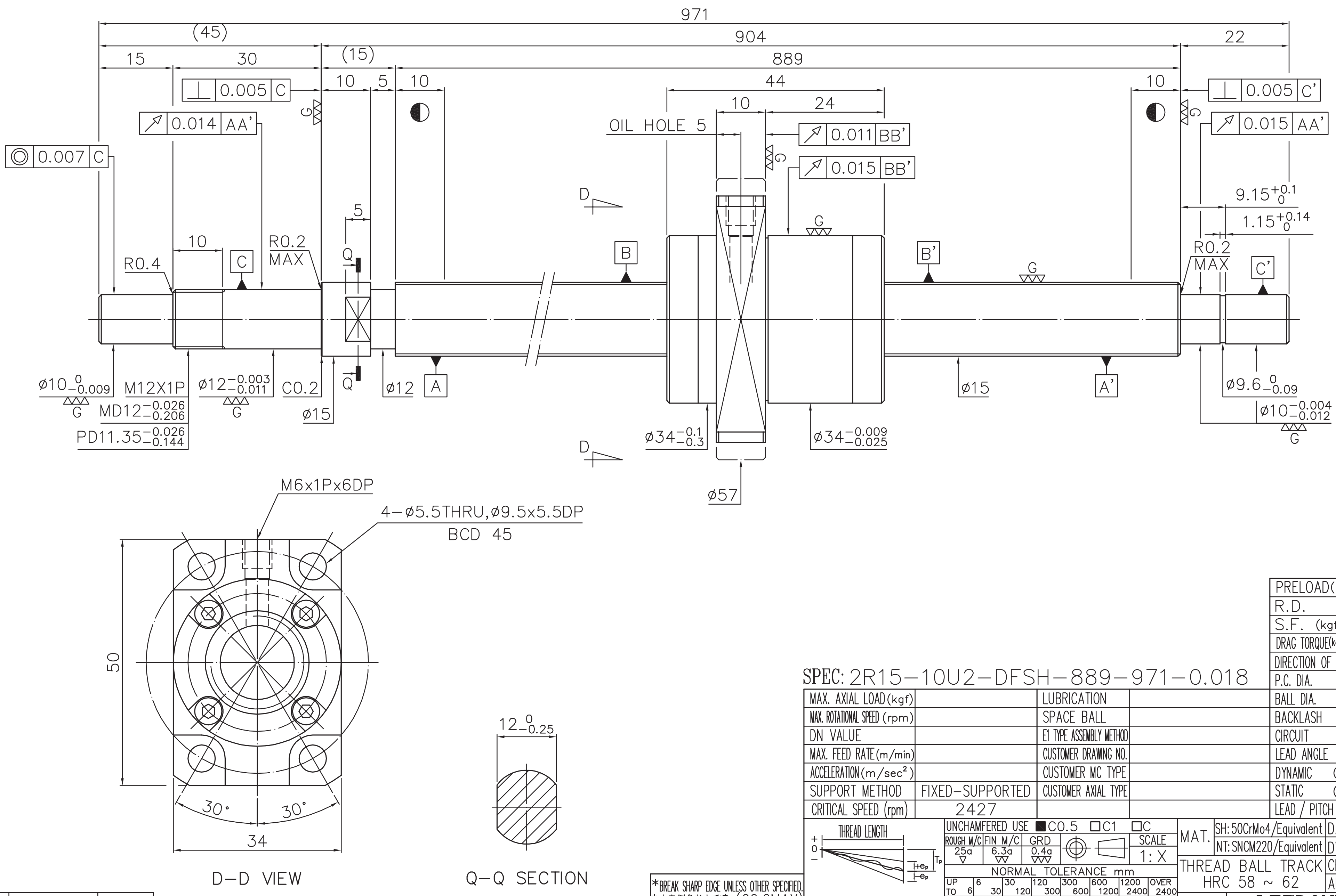
HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent NT: SNCM220/Equivalent	DATE	2012.06.27
		DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126K9A1		

DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126KAA1 | Released by HIWIN design group.



971
904
889
(45)
15
30
(15)
10
5
22
44
24
⊥ 0.005 C
↗ 0.014 AA'
◎ 0.007 C
⊥ 0.005 C'
↗ 0.015 AA'
↗ 0.011 BB'
↗ 0.015 BB'
OIL HOLE 5
9.15 +0.1 0
1.15 +0.14 0
R0.4
R0.2 MAX
C0.2
Ø10 0 -0.009
M12X1P
MD12 -0.026 -0.206
PD11.35 -0.026 -0.144
Ø12 -0.003 -0.011
Ø15
Ø12
Ø34 -0.1 -0.3
Ø34 -0.009 -0.025
Ø57
Ø9.6 0 -0.09
Ø10 -0.004 -0.012
A
A'
B
B'
C
C'
D
Q
G
M6x1Px6DP
4-Ø5.5THRU,Ø9.5x5.5DP
BCD 45
50
34
30°
12 0 -0.25

D-D VIEW

Q-Q SECTION

SPEC: 2R15-10U2-DFSH-889-971-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD	FIXED-SUPPORTED	CUSTOMER AXIAL TYPE	
CRITICAL SPEED (rpm)	2427		

PRELOAD (kgf)	34
R.D.	12.324
S.F. (kgf)	0.09~0.44
DRAG TORQUE (kgf-cm)	0.2~1.0
DIRECTION OF TURN	R
P.C. DIA.	15.6
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	2.8*2
LEAD ANGLE	11.53
DYNAMIC (kgf)	1490
STATIC (kgf)	3190
LEAD / PITCH	10/5

THREAD LENGTH

Tp: -0.013 ν300p: 0.018

ep: 0.04 νu: 0.027

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a	6.3a	0.4a		1:X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

HIWIN® BALLSCREWS

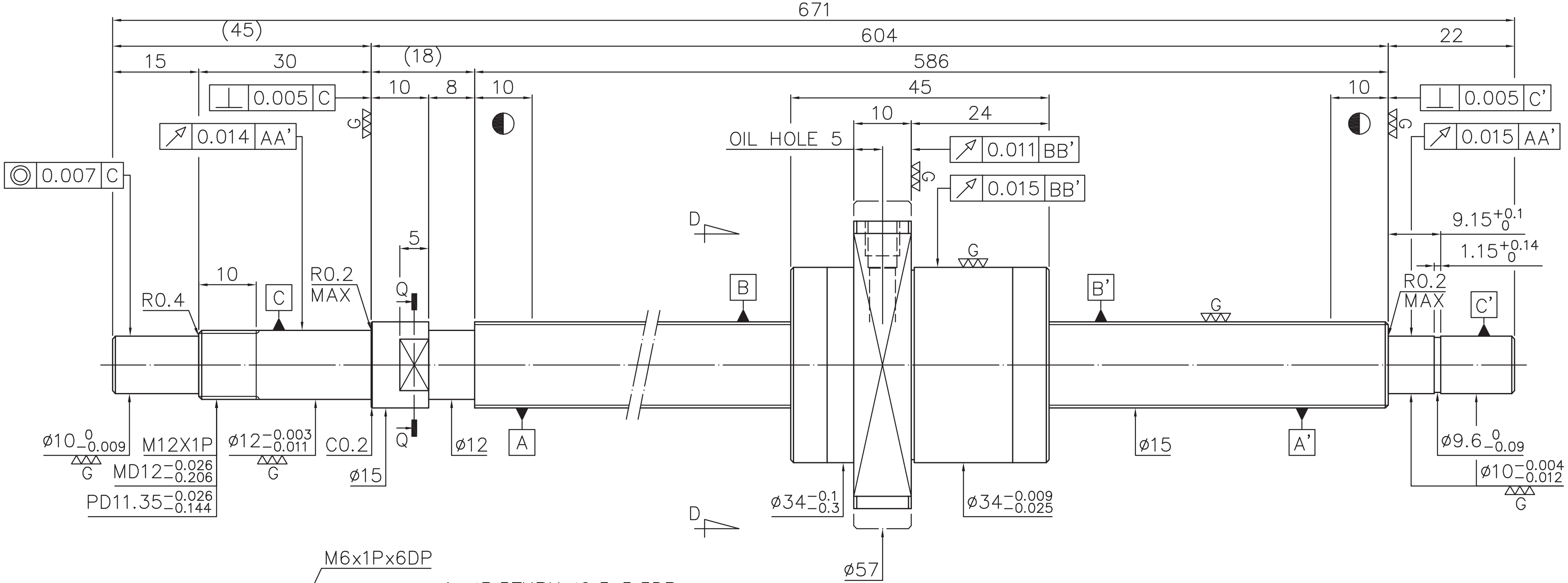
MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.27
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126KAA1		

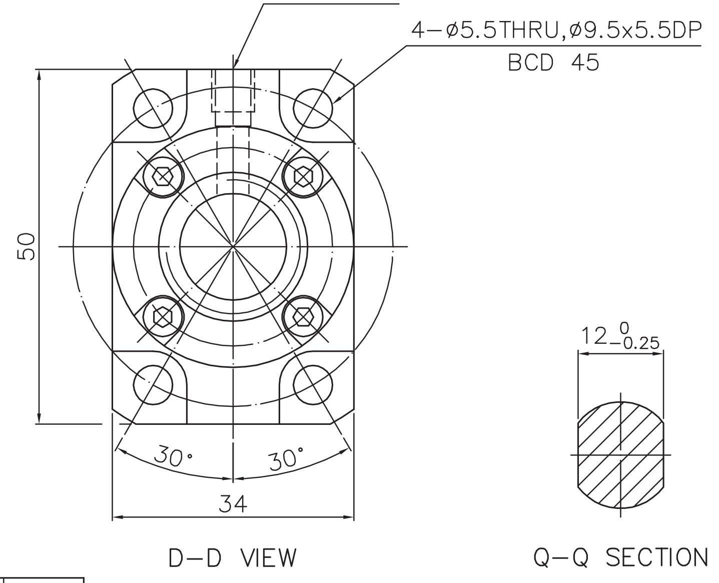
DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126KBA1 | Released by HIWIN design group.

▽▽ (G ▽▽▽)


671
(45)
604
22
15
30
(18)
586
10
8
10
45
10
24
10
⊥ 0.005 C
↗ 0.014 AA'
◎ 0.007 C
OIL HOLE 5
↗ 0.011 BB'
↗ 0.015 BB'
⊥ 0.005 C'
↗ 0.015 AA'
9.15 +0.1/0
1.15 +0.14/0
R0.4
R0.2 MAX
C
5
Q
Q
D
D
B
B'
A
A'
C'
G
ø10 0/−0.009 G
M12X1P
MD12 −0.026/−0.206
PD11.35 −0.026/−0.144
ø12 −0.003/−0.011 G
C0.2
ø15
ø12
ø34 −0.1/−0.3
ø57
ø34 −0.009/−0.025
ø15
ø9.6 0/−0.09
ø10 −0.004/−0.012 G


M6x1Px6DP
4−ø5.5THRU,ø9.5x5.5DP
BCD 45
50
34
30°
30°
12 0/−0.25

D−D VIEW

Q−Q SECTION

SPEC: 2R15−20S2−DFSH−586−671−0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec^2)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	10MAX
R.D.	12.324
S.F. (kgf)	0.1MAX
DRAG TORQUE (kgf-cm)	0.24MAX
DIRECTION OF TURN	R
P.C. DIA.	15.6
BALL DIA.	3.175
BACKLASH	0.005MAX
CIRCUIT	1.8*2
LEAD ANGLE	22.2
DYNAMIC (kgf)	990
STATIC (kgf)	2070
LEAD / PITCH	20/10

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

THREAD LENGTH
Tp: −0.009 𝒱300p: 0.018
ep: 0.03 𝒱u: 0.023

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD	SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	1: X

NORMAL TOLERANCE mm

UP TO	6	6 – 30	30 – 120	120 – 300	300 – 600	600 – 1200	1200 – 2400	OVER 2400
	±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

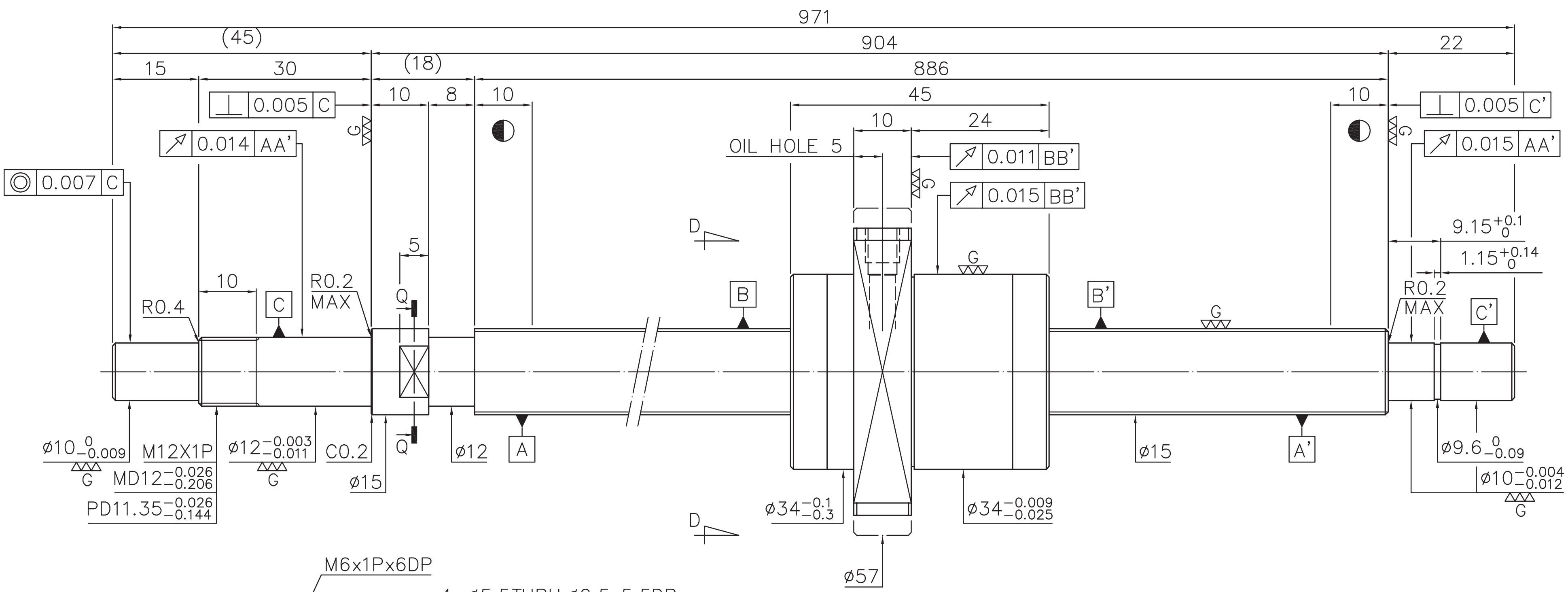
HIWIN® BALLSCREWS

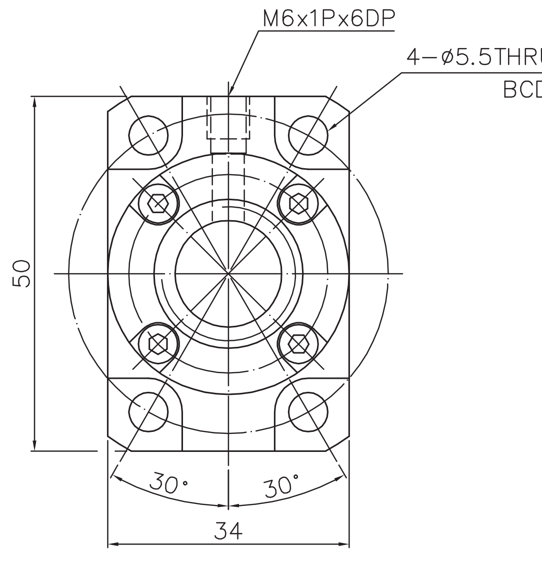
MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.27
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126KBA1		

DATE	MODIFICATION	APPROVED

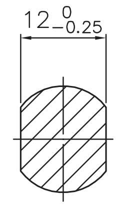
* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126KCA1	Released by HIWIN design group.


971
(45)
904
22
15
30
(18)
886
10
8
10
45
10
24
10
OIL HOLE 5
⊥ 0.005 C
↗ 0.014 AA'
◎ 0.007 C
⊥ 0.005 C'
↗ 0.015 AA'
↗ 0.011 BB'
↗ 0.015 BB'
G
9.15 +0.1/0
1.15 +0.14/0
R0.4
R0.2 MAX
R0.2 MAX
5
Q
Q
D
D
A
A'
B
B'
C
C'
ø10 0/-0.009 G
M12X1P
MD12 -0.026/-0.206
PD11.35 -0.026/-0.144
ø12 -0.003/-0.011 G
C0.2
ø15
ø12
ø15
ø34 -0.1/-0.3
ø34 -0.009/-0.025
ø57
ø9.6 0/-0.09
ø10 -0.004/-0.012 G


M6x1Px6DP
4-ø5.5THRU,ø9.5x5.5DP
BCD 45
50
30°
30°
34

D-D VIEW

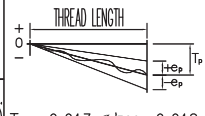


Q-Q SECTION

SPEC: 2R15-20S2-DFSH-886-971-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD	FIXED-SUPPORTED	CUSTOMER AXIAL TYPE	
CRITICAL SPEED (rpm)	2446		

PRELOAD (kgf)	22
R.D.	12.324
S.F. (kgf)	0.09~0.4
DRAG TORQUE (kgf-cm)	0.2~0.9
DIRECTION OF TURN	R
P.C. DIA.	15.6
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	1.8*2
LEAD ANGLE	22.2
DYNAMIC (kgf)	990
STATIC (kgf)	2070
LEAD / PITCH	20/10


THREAD LENGTH
+
0
-
Tp
ep
ep

Tp: -0.013 ν300p: 0.018

ep: 0.04 νu: 0.027

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a	6.3a	0.4a		1: X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.27
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126KCA1		

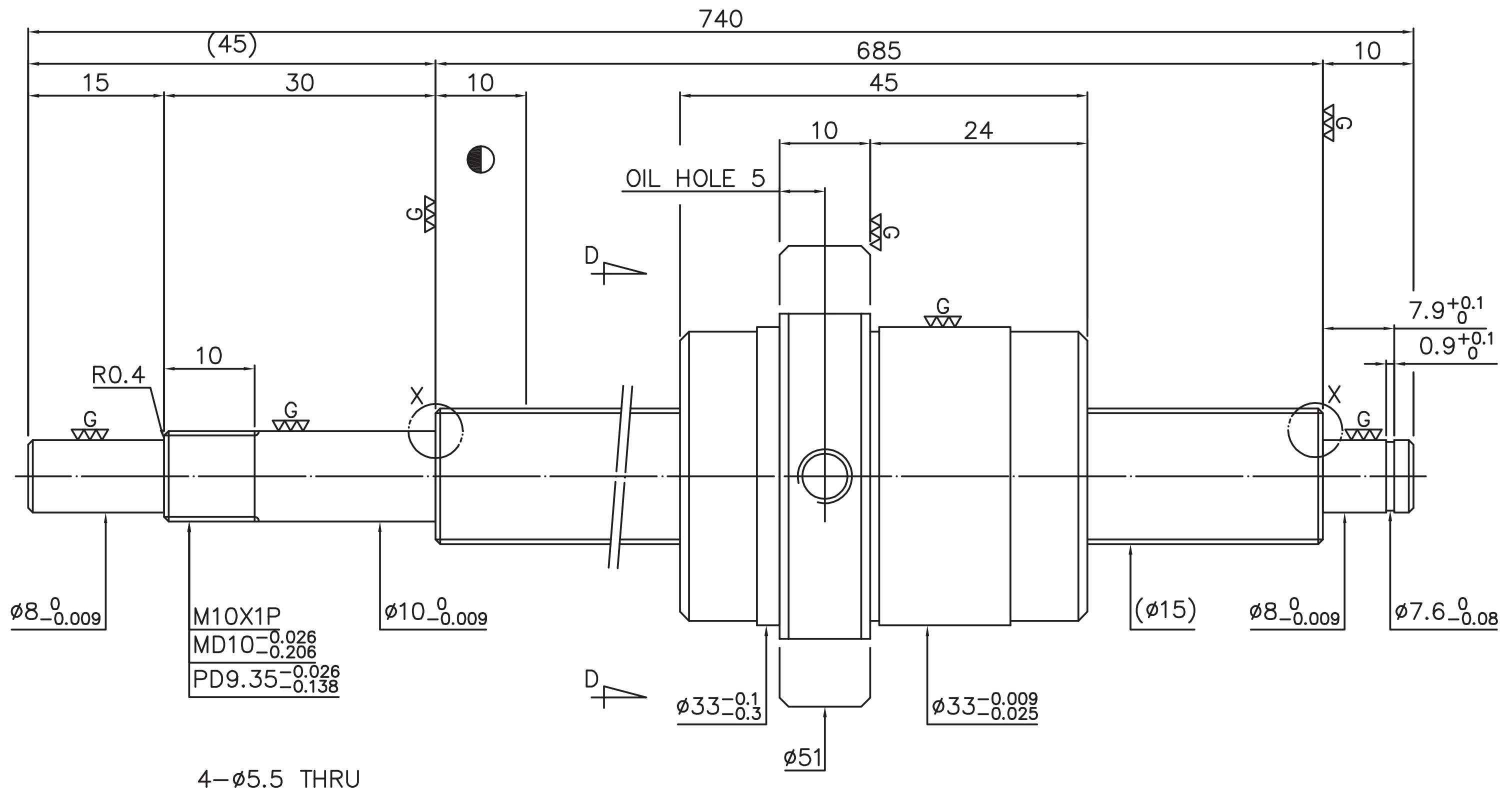
*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

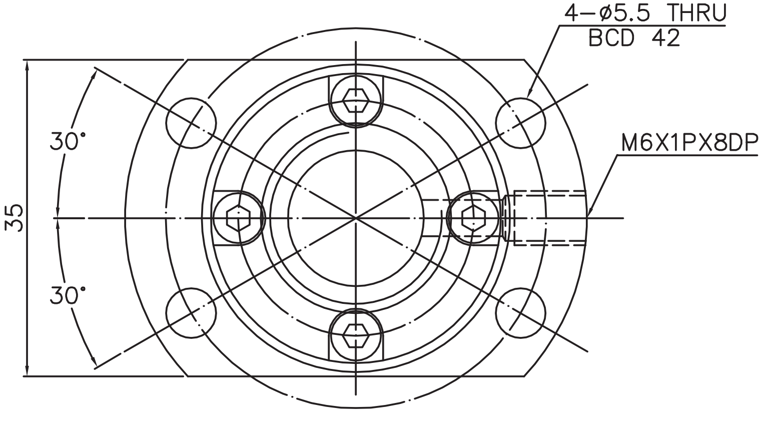
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

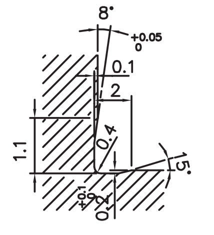
＊ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A11HF6B1	Released by HIWIN design group.


▽▽ (G ▽▽▽)
740
(45)
685
10
15
30
10
45
10
24
OIL HOLE 5
G
R0.4
10
X
X
D
D
7.9 +0.1 0
0.9 +0.1 0
ø8 0 -0.009
M10X1P
MD10 -0.026 -0.206
PD9.35 -0.026 -0.138
ø10 0 -0.009
ø33 -0.1 -0.3
ø51
ø33 -0.009 -0.025
(ø15)
ø8 0 -0.009
ø7.6 0 -0.08


4-ø5.5 THRU
BCD 42
M6X1PX8DP
35
30°
30°

D-D VIEW


8°
+0.05 0
0.1
2
0.4
1.1
15°
ø0.1
F0.4X0.2DIN509

X DETAIL

SPEC: 4R15-20S2-DFSH-685-740-0.052

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD(kgf)	~
R.D.	12.399
S.F. (kgf)	~
DRAG TORQUE(kgf-cm)	~
DIRECTION OF TURN	R
P.C. DIA.	15.675
BALL DIA.	3.175
BACKLASH	0.03MAX
CIRCUIT	1.8*2
LEAD ANGLE	22.1
DYNAMIC (kgf)	720
STATIC (kgf)	1660
LEAD /PITCH	20/5

THREAD LENGTH
+ 0 −
+ep −ep Tp

$\mathcal{V}$300p:0.052

ep: 0.119

UNCHAMFERED USE ■C0.5 □C1 □C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1: X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

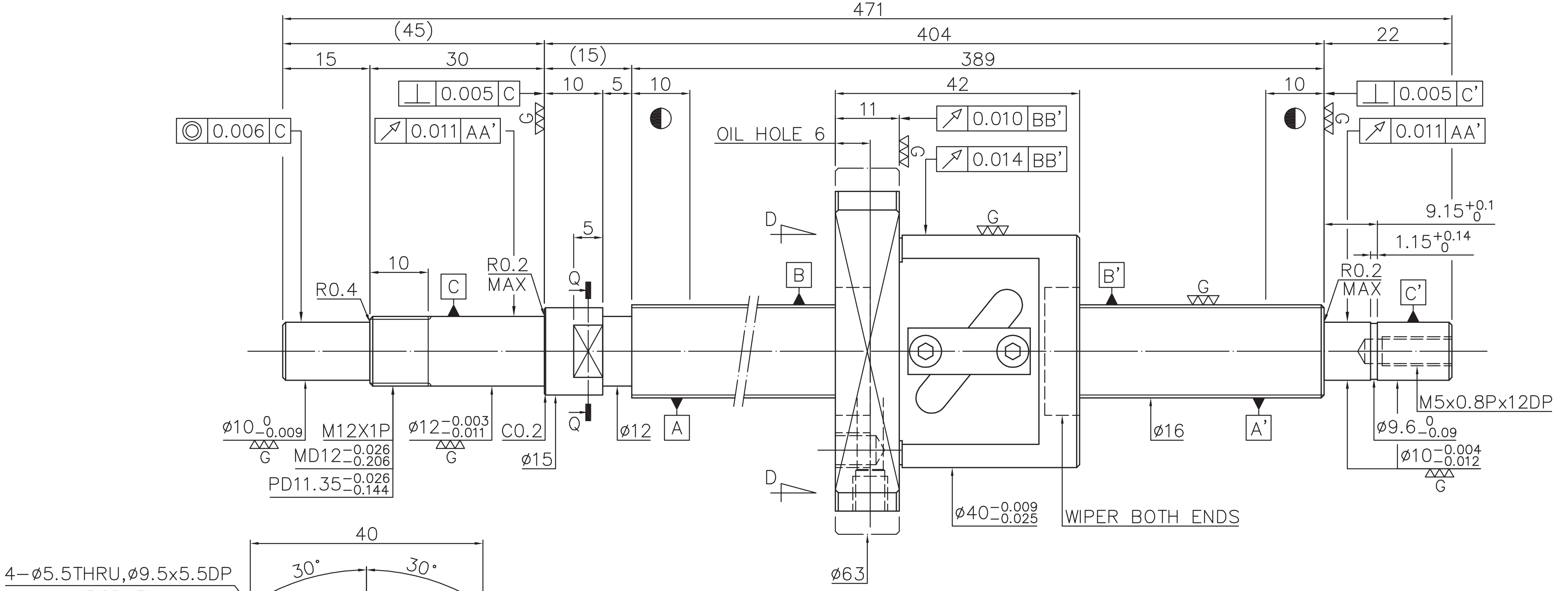
MAT.	SH: CF53/Equivalent NT: SNCM220/Equivalent	DATE	2010.06.09
		DWG	Sting
THREAD BALL TRACK HRC 56 ~ 62		APPD	Cody
		PROCESS NO.	G
CUSTR	BESI		
DWG.NO.	A11HF6B1		

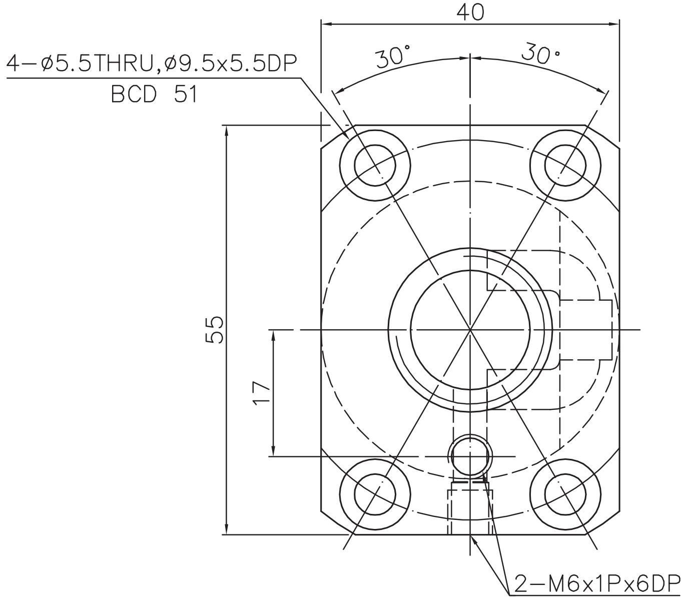
*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

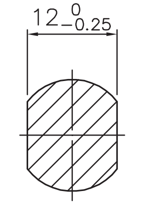
DATE	MODIFICATION	APPROVED
2010.06.09	MOD.A2→B1	Cody

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.


▽▽ (G ▽▽▽)
471
(45)
404
22
15
30
(15)
389
10
5
10
42
10
11
⊥ 0.005 C
↗ 0.011 AA'
◎ 0.006 C
↗ 0.010 BB'
↗ 0.014 BB'
⊥ 0.005 C'
↗ 0.011 AA'
OIL HOLE 6
G
9.15 +0.1 0
1.15 +0.14 0
R0.4
10
C
R0.2 MAX
5
Q
D
B
B'
A
A'
C'
R0.2 MAX
M5x0.8Px12DP
ø9.6 0 -0.09
ø10 -0.004 -0.012 G
ø10 0 -0.009 G
M12X1P
MD12 -0.026 -0.206
PD11.35 -0.026 -0.144
ø12 -0.003 -0.011 G
C0.2
ø15
ø12
ø16
ø40 -0.009 -0.025
WIPER BOTH ENDS
ø63


40
4-ø5.5THRU,ø9.5x5.5DP
BCD 51
30°
30°
55
17
2-M6x1Px6DP

D-D VIEW



Q-Q SECTION

SPEC: R16-5B1-FSW-389-471-0.018

MAX. AXIAL LOAD(kgf)		LUBRICATION		PRELOAD(kgf)	37
				R.D.	13.324
				S.F. (kgf)	0.06~0.31
				DRAG TORQUE(kgf-cm)	0.15~0.8
				DIRECTION OF TURN	R
				P.C. DIA.	16.6
MAX. AXIAL LOAD(kgf)		LUBRICATION		BALL DIA.	3.175
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL		BACKLASH	0
DN VALUE		E1 TYPE ASSEMBLY METHOD		CIRCUIT	2.5*1
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.		LEAD ANGLE	5.48
ACCELERATION(m/sec²)		CUSTOMER MC TYPE		DYNAMIC (kgf)	763
SUPPORT METHOD		CUSTOMER AXIAL TYPE		STATIC (kgf)	1399
				LEAD	5

THREAD LENGTH
+ 0 −
Tp
+ep
−ep

UNCHAMFERED USE ■C0.5 ☐C1 ☐C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1:X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

Tp: −0.006 ν300p: 0.018

ep: 0.025 νu: 0.02

MAT.	SH:50CrMo4/Equivalent NT:SNCM220/Equivalent	DATE DWG	2012.06.27 Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK APPD	Michelle Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126KDA1		

HIWIN® BALLSCREWS

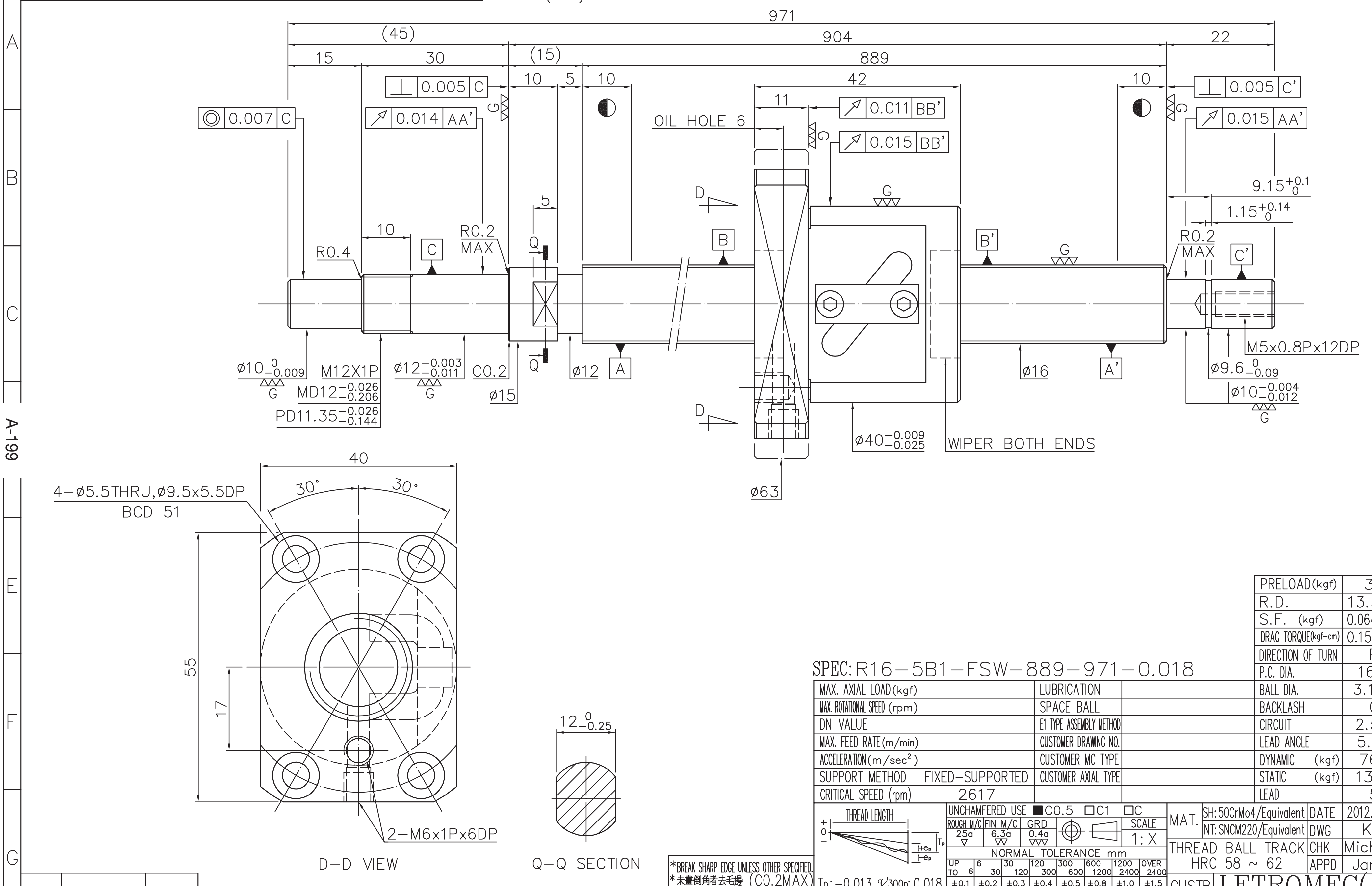
*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126KEA1 | Released by HIWIN design group.



1 2 3 4 5 6 7 8 9
A B C D E F G
▽▽ (G ▽▽▽)
971
(45)
904
22
15
30
(15)
889
10
5
10
42
11
10
⊥ 0.005 C
↗ 0.014 AA'
◎ 0.007 C
⊥ 0.005 C'
↗ 0.015 AA'
↗ 0.011 BB'
↗ 0.015 BB'
OIL HOLE 6
9.15+0.1/0
1.15+0.14/0
R0.4
R0.2 MAX
C
B
B'
C'
A
A'
Q
D
G
ø10 0/-0.009
M12X1P
MD12-0.026/-0.206
PD11.35-0.026/-0.144
ø12-0.003/-0.011
C0.2
ø15
ø12
ø16
ø40-0.009/-0.025
WIPER BOTH ENDS
ø63
M5x0.8Px12DP
ø9.6 0/-0.09
ø10-0.004/-0.012
40
30°
30°
4-ø5.5THRU,ø9.5x5.5DP
BCD 51
55
17
2-M6x1Px6DP
D-D VIEW
12 0/-0.25
Q-Q SECTION

SPEC: R16-5B1-FSW-889-971-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD	FIXED-SUPPORTED	CUSTOMER AXIAL TYPE	
CRITICAL SPEED (rpm)	2617		

PRELOAD (kgf)	37
R.D.	13.324
S.F. (kgf)	0.06~0.31
DRAG TORQUE (kgf-cm)	0.15~0.8
DIRECTION OF TURN	R
P.C. DIA.	16.6
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	2.5*1
LEAD ANGLE	5.48
DYNAMIC (kgf)	763
STATIC (kgf)	1399
LEAD	5

THREAD LENGTH

Tp: -0.013 ν300p: 0.018

ep: 0.04 νu: 0.027

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1:X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.27
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126KEA1		

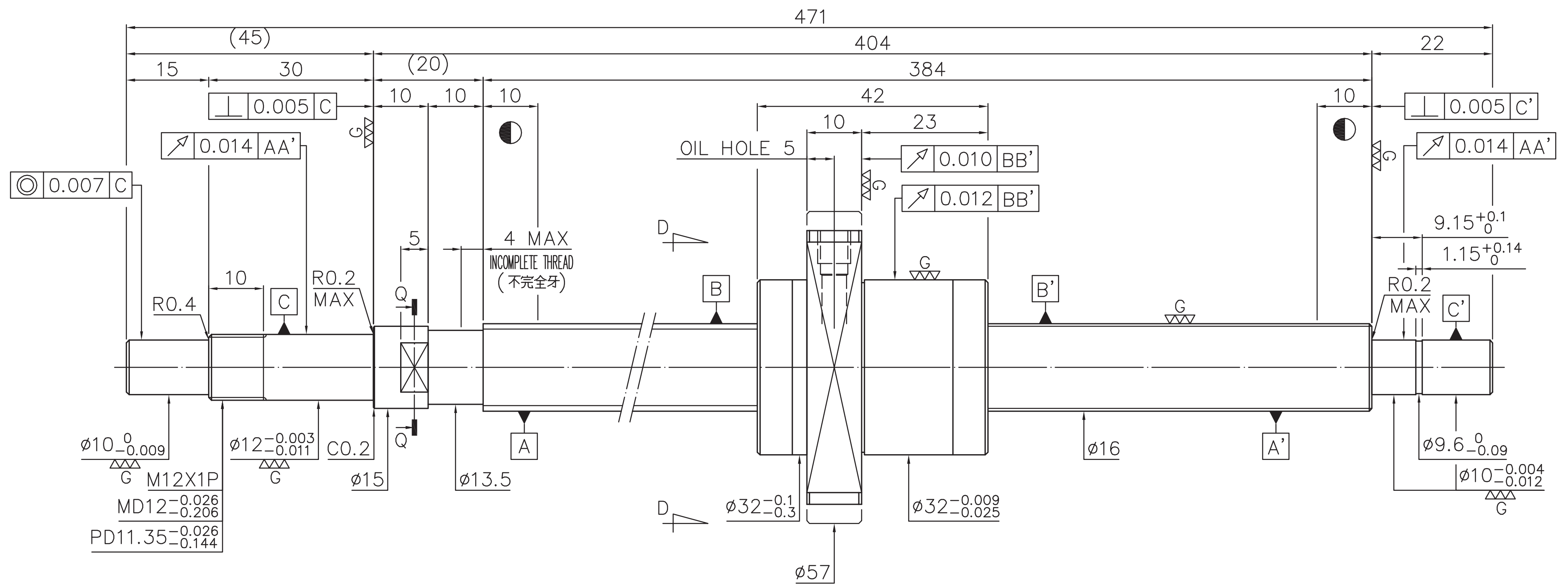
*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

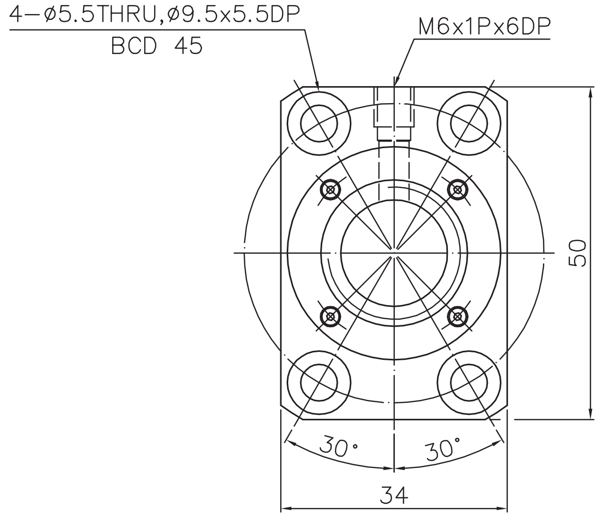
DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126KFA1 | Released by HIWIN design group.

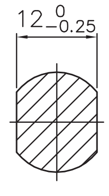


▽▽ (G ▽▽▽)
471
(45)
404
22
15
30
(20)
384
10
10
10
42
10
23
10
⊥ 0.005 C
↗ 0.014 AA'
◎ 0.007 C
G
OIL HOLE 5
↗ 0.010 BB'
↗ 0.012 BB'
⊥ 0.005 C'
↗ 0.014 AA'
G
9.15 +0.1 0
1.15 +0.14 0
5
4 MAX
INCOMPLETE THREAD
（不完全牙）
D
B
B'
R0.2 MAX
C'
10
R0.4
C
R0.2 MAX
Q
Q
G
G
A
A'
ø10 0 -0.009 G
M12X1P
MD12 -0.026 -0.206
PD11.35 -0.026 -0.144
ø12 -0.003 -0.011 G
C0.2
ø15
ø13.5
D
ø32 -0.1 -0.3
ø57
ø32 -0.009 -0.025
ø16
ø9.6 0 -0.09
ø10 -0.004 -0.012 G



4-ø5.5THRU,ø9.5x5.5DP
BCD 45
M6x1Px6DP
50
30°
30°
34

D-D VIEW

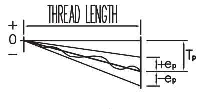


Q-Q SECTION

PRELOAD(kgf)	26
R.D.	13.344
S.F. (kgf)	0.09~0.44
DRAG TORQUE(kgf-cm)	0.2~1.0
DIRECTION OF TURN	R
P.C. DIA.	16.62
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	1.8*2
LEAD ANGLE	17.04
DYNAMIC (kgf)	1060
STATIC (kgf)	2280
LEAD / PITCH	16/8

SPEC: 2R16-16S2-DFSH-384-471-0.018

MAX. AXIAL LOAD(kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.	
ACCELERATION(m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	



THREAD LENGTH
+
0
−
Tp
+ep
−ep

Tp:−0.006 𝒱300p: 0.018

ep:0.025 𝒱u: 0.02

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	⌖ ⏢	1:X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.27
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126KFA1		

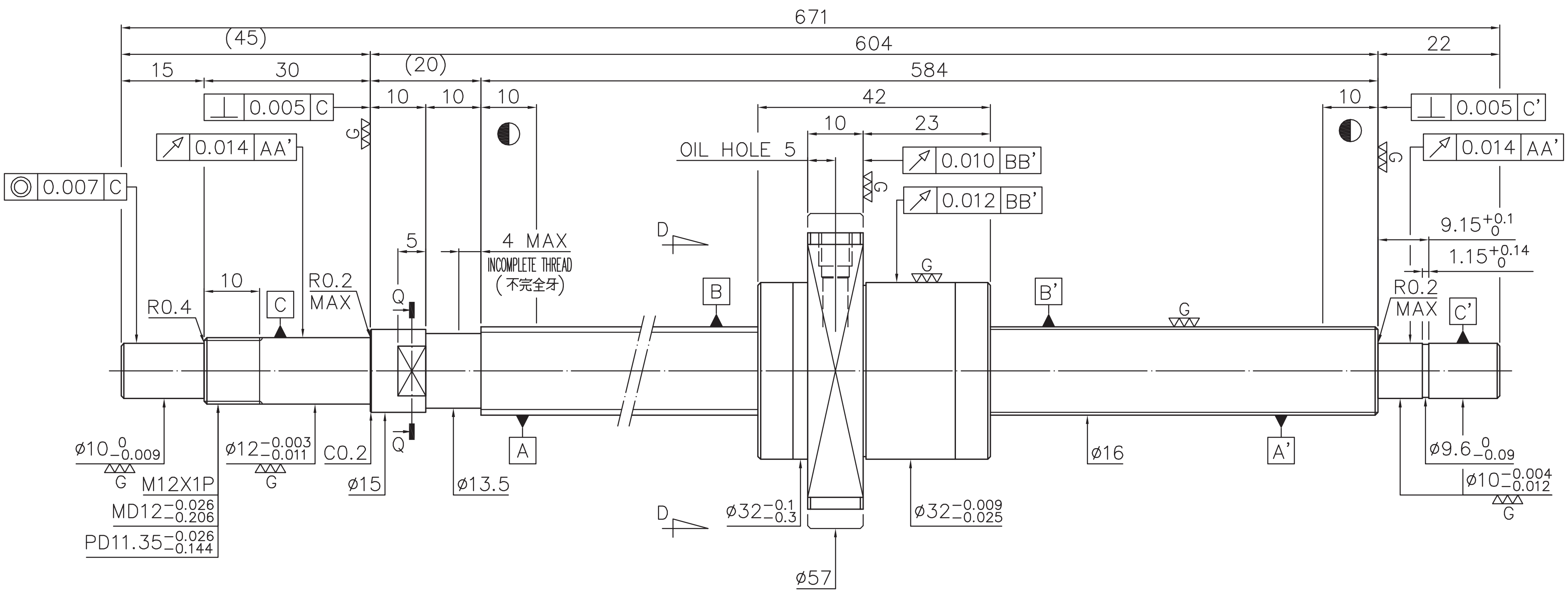
*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

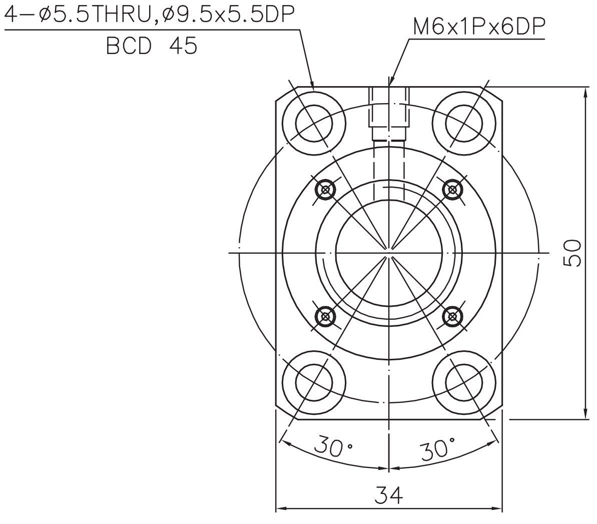
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

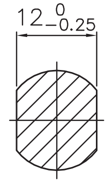
* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126KGA1 Released by HIWIN design group.


671
(45)
604
22
15
30
(20)
584
10
10
10
10
42
10
23
⊥ 0.005 C
⊥ 0.005 C'
↗ 0.014 AA'
↗ 0.014 AA'
◎ 0.007 C
↗ 0.010 BB'
↗ 0.012 BB'
OIL HOLE 5
9.15 +0.1 0
1.15 +0.14 0
5
4 MAX
INCOMPLETE THREAD
(不完全牙)
R0.4
R0.2 MAX
R0.2 MAX
C
C'
A
A'
B
B'
Q
Q
D
D
G
ø10 0 -0.009
G
M12X1P
MD12 -0.026 -0.206
PD11.35 -0.026 -0.144
ø12 -0.003 -0.011
C0.2
ø15
ø13.5
ø32 -0.1 -0.3
ø57
ø32 -0.009 -0.025
ø16
ø9.6 0 -0.09
ø10 -0.004 -0.012


4-ø5.5THRU,ø9.5x5.5DP
BCD 45
M6x1Px6DP
50
34
30°
30°

D-D VIEW



Q-Q SECTION

SPEC: 2R16-16S2-DFSH-584-671-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec^2)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	26
R.D.	13.344
S.F. (kgf)	0.09~0.44
DRAG TORQUE (kgf-cm)	0.2~1.0
DIRECTION OF TURN	R
P.C. DIA.	16.62
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	1.8*2
LEAD ANGLE	17.04
DYNAMIC (kgf)	1060
STATIC (kgf)	2280
LEAD / PITCH	16/8

THREAD LENGTH

Tp: -0.009 ν300p: 0.018

ep: 0.03 νu: 0.023

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a	6.3a	0.4a		1:X

NORMAL TOLERANCE mm

UP / TO	6 / 30	30 / 120	120 / 300	300 / 600	600 / 1200	1200 / 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.27
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126KGA1		

HIWIN® BALLSCREWS

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126KHA1 | Released by HIWIN design group.

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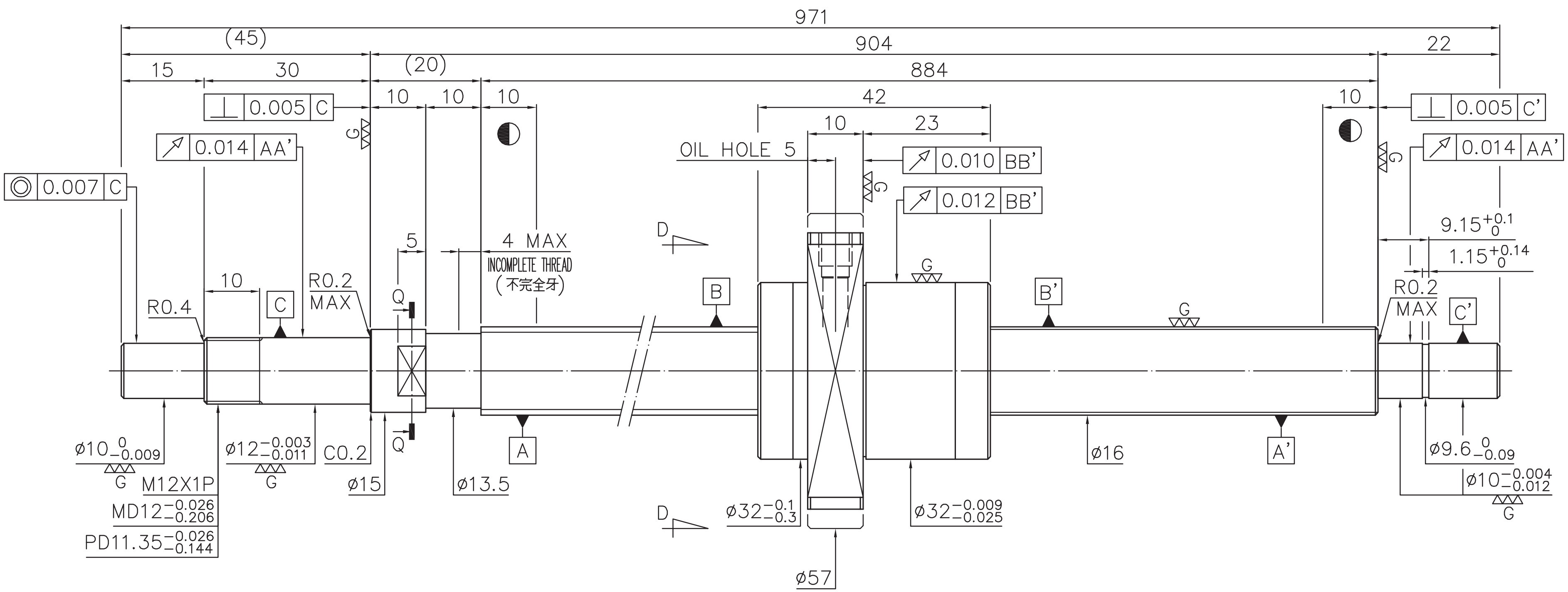
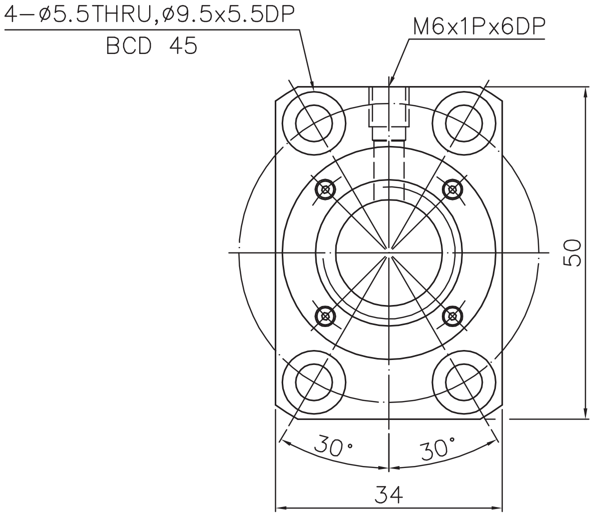
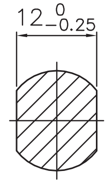

971
(45)
904
22
15
30
(20)
884
10
10
10
42
10
23
10
⊥ 0.005 C
↗ 0.014 AA'
◎ 0.007 C
OIL HOLE 5
↗ 0.010 BB'
↗ 0.012 BB'
⊥ 0.005 C'
↗ 0.014 AA'
9.15 +0.1 0
1.15 +0.14 0
5
4 MAX
INCOMPLETE THREAD
(不完全牙)
R0.4
R0.2 MAX
R0.2 MAX
C
B
B'
C'
A
A'
Q
Q
D
D
G
ø10 0 -0.009
G M12X1P
MD12 -0.026 -0.206
PD11.35 -0.026 -0.144
ø12 -0.003 -0.011
G
C0.2
ø15
ø13.5
ø32 -0.1 -0.3
ø57
ø32 -0.009 -0.025
ø16
ø9.6 0 -0.09
ø10 -0.004 -0.012
G


4-ø5.5THRU,ø9.5x5.5DP
BCD 45
M6x1Px6DP
50
30°
30°
34

D-D VIEW



Q-Q SECTION

PRELOAD(kgf)	26
R.D.	13.344
S.F. (kgf)	0.09~0.44
DRAG TORQUE(kgf-cm)	0.2~1.0
DIRECTION OF TURN	R
P.C. DIA.	16.62
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	1.8*2
LEAD ANGLE	17.04
DYNAMIC (kgf)	1060
STATIC (kgf)	2280
LEAD / PITCH	16/8

SPEC: 2R16-16S2-DFSH-884-971-0.018

MAX. AXIAL LOAD(kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.	
ACCELERATION(m/sec^2)		CUSTOMER MC TYPE	
SUPPORT METHOD	FIXED-SUPPORTED	CUSTOMER AXIAL TYPE	
CRITICAL SPEED (rpm)	2648		

THREAD LENGTH + 0 − Tp ±ep ep

Tp: -0.013 ν300p: 0.018

ep: 0.04 νu: 0.027

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD			SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	⊕		1: X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

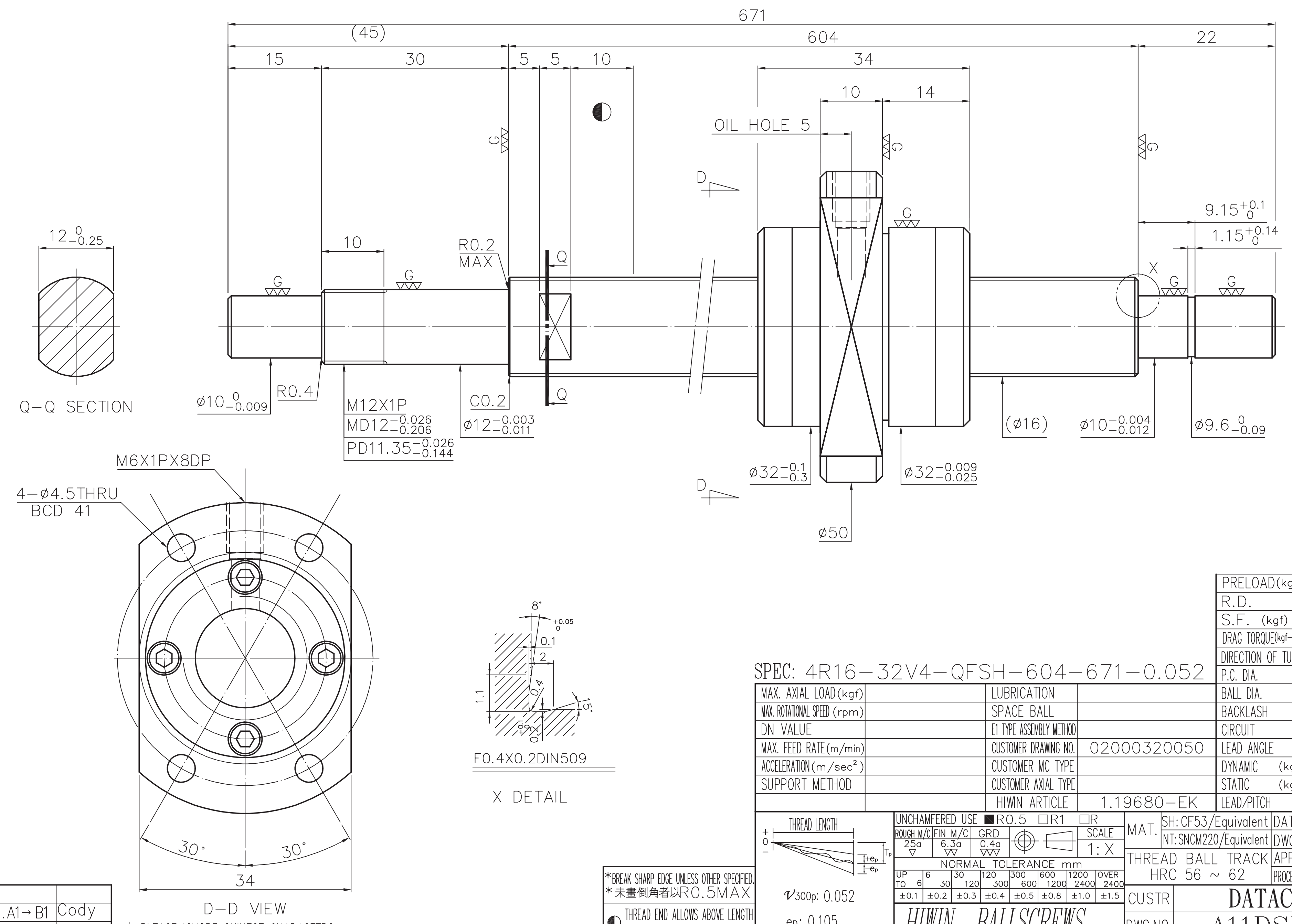
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.27
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126KHA1		

DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.


1
2
3
4
5
6
7
8
9
A
B
C
E
F
G
▽▽ (G ▽▽▽)
671
(45)
604
22
15
30
5
5
10
34
10
14
OIL HOLE 5
G
D
9.15 +0.1 0
1.15 +0.14 0
12 0 -0.25
10
R0.2 MAX
Q
X
Q-Q SECTION
Ø10 0 -0.009
R0.4
M12X1P
MD12 -0.026 -0.206
PD11.35 -0.026 -0.144
C0.2
Ø12 -0.003 -0.011
(Ø16)
Ø10 -0.004 -0.012
Ø9.6 0 -0.09
Ø32 -0.1 -0.3
Ø32 -0.009 -0.025
Ø50
M6X1PX8DP
4-Ø4.5THRU
BCD 41
8°
+0.05 0
0.1
2
1.1
0.4
15°
F0.4X0.2DIN509
X DETAIL
30°
30°
34
D-D VIEW

★ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

DATE	MODIFICATION	APPROVED
2009.10.28	MOD.A1→B1	Cody

SPEC: 4R16-32V4-QFSH-604-671-0.052

MAX. AXIAL LOAD(kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.	02000320050
ACCELERATION(m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	
		HIWIN ARTICLE	1.19680-EK

PRELOAD(kgf)	~
R.D.	12.924
S.F. (kgf)	——
DRAG TORQUE(kgf-cm)	——
DIRECTION OF TURN	R
P.C. DIA.	16.2
BALL DIA.	3.175
BACKLASH	0.03MAX
CIRCUIT	0.8*4
LEAD ANGLE	32.16°
DYNAMIC (kgf)	630
STATIC (kgf)	1520
LEAD/PITCH	32/8

THREAD LENGTH
+
0
−
Tp
+ep
−ep

v_{300p}: 0.052

ep: 0.105

UNCHAMFERED USE ■R0.5 □R1 □R

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	⊕ ⊏	1:X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者以R0.5MAX

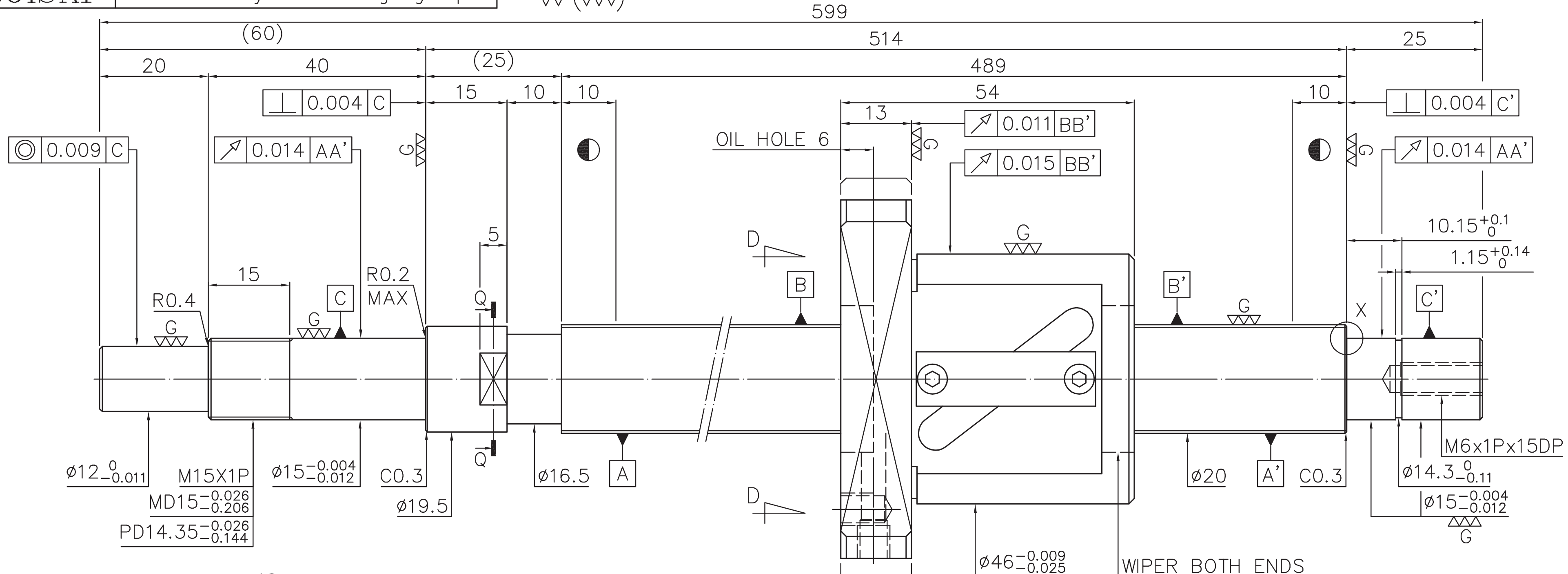
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

HIWIN® BALLSCREWS

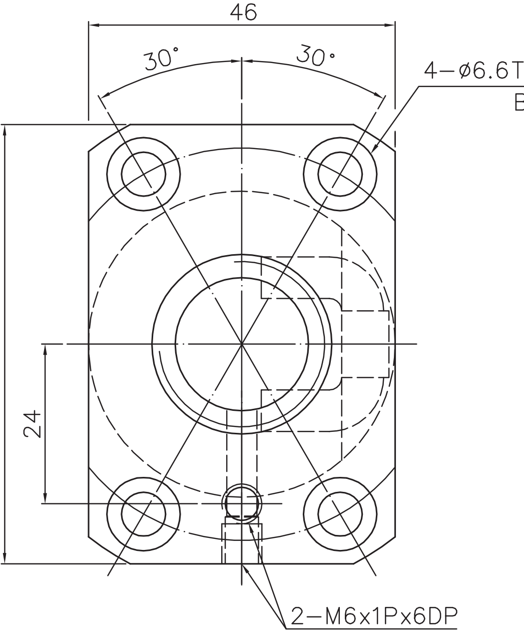
MAT.	SH:CF53/Equivalent NT:SNCM220/Equivalent	DATE	2009.10.28
		DWG	Rita
THREAD BALL TRACK HRC 56 ~ 62		APPD	Cody
		PROCESS NO.	G
CUSTR	DATACON		
DWG.NO.	A11DSEB1		

A126ISA1	Released by HIWIN design group.

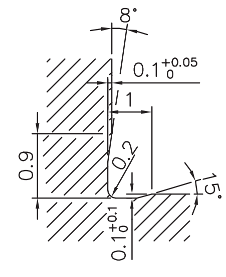
▽▽ (G ▽▽▽)


599
(60)
514
25
20
40
(25)
489
15
10
10
54
10
13
⊥ 0.004 C
◎ 0.009 C
↗ 0.014 AA'
↗ 0.011 BB'
↗ 0.015 BB'
⊥ 0.004 C'
↗ 0.014 AA'
OIL HOLE 6
G
10.15 +0.1 0
1.15 +0.14 0
5
15
R0.4
R0.2 MAX
C
B
B'
C'
X
D
Q
A
A'
ø12 0 -0.011
M15X1P
MD15 -0.026 -0.206
PD14.35 -0.026 -0.144
ø15 -0.004 -0.012
C0.3
ø19.5
ø16.5
ø20
C0.3
M6x1Px15DP
ø14.3 0 -0.11
ø15 -0.004 -0.012
ø46 -0.009 -0.025
WIPER BOTH ENDS

ø74

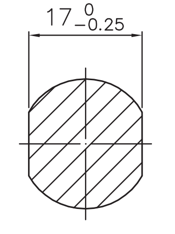

46
30°
30°
4-ø6.6THRU,ø11x6.5DP
BCD 59
66
24
2-M6x1Px6DP

D-D VIEW


8°
0.1 +0.05 0
1
0.9
0.2
15°
0.1 +0.1 0

F0.2X0.1DIN509

X DETAIL



Q-Q SECTION

SPEC:R20-10B1-FSW-489-599-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD(kgf)	34
R.D.	16.744
S.F. (kgf)	0.07~0.4
DRAG TORQUE(kgf-cm)	0.2~1.2
DIRECTION OF TURN	R
P.C. DIA.	20.8
BALL DIA.	3.969
BACKLASH	0
CIRCUIT	2.5*1
LEAD ANGLE	8.7
DYNAMIC (kgf)	1139
STATIC (kgf)	2187
LEAD	10

THREAD LENGTH + 0 − Tp +ep −ep

Tp:-0.007 ν300p:0.018

ep:0.027 νu:0.02

UNCHAMFERED USE ■C0.5 □C1 □C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	⊕	1:X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

MAT.	SH:50CrMo4/Equivalent	DATE	2012.06.26
	NT:SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126ISA1		

HIWIN® BALLSCREWS

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

∗ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A11TA8A1

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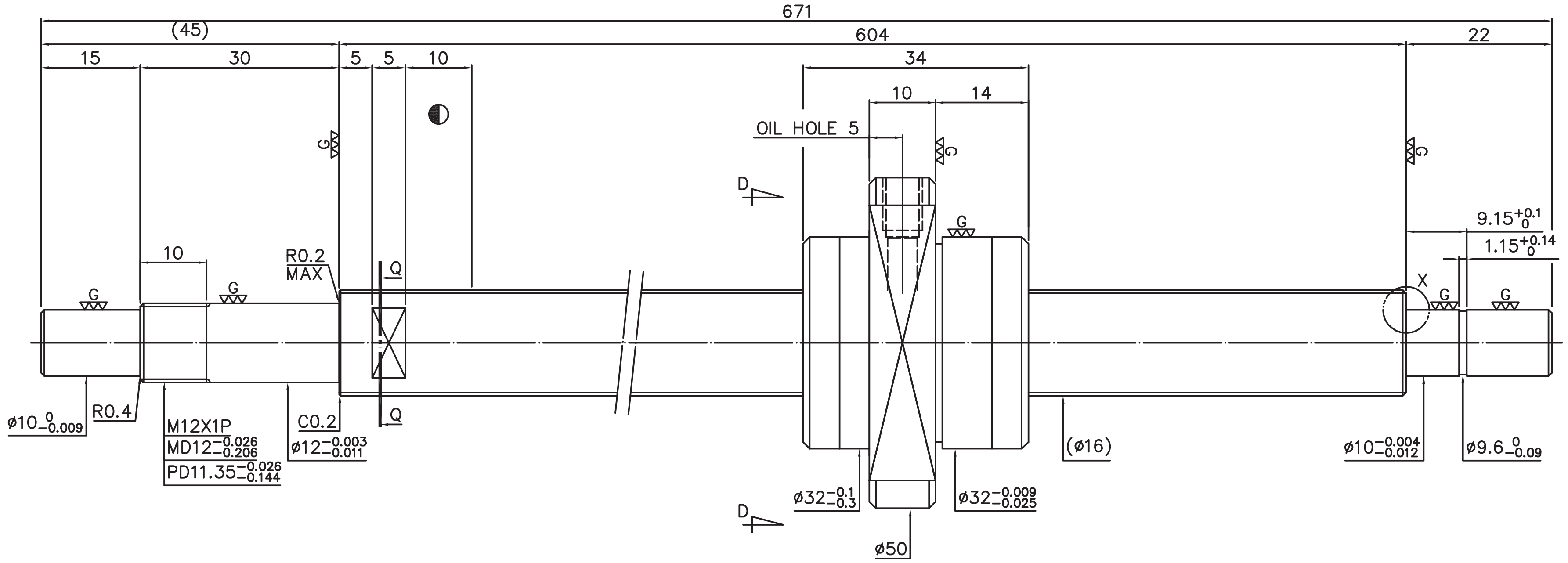
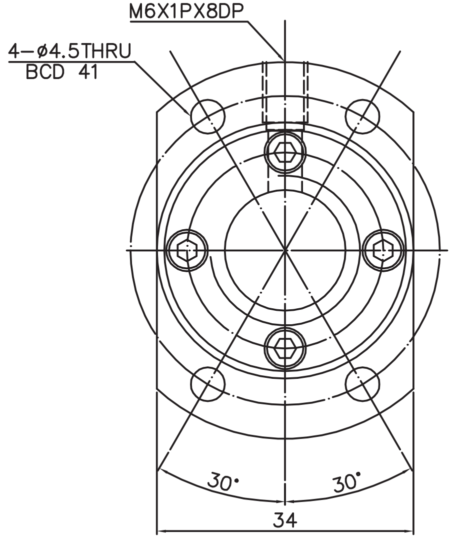
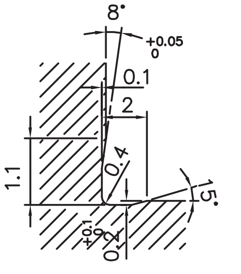


▽▽ (G ▽▽▽)
671
(45)
604
22
15
30
5
5
10
34
10
14
OIL HOLE 5
D
D
9.15 +0.1 0
1.15 +0.14 0
X
G
Q
Q
R0.2 MAX
ø10 0 -0.009
R0.4
M12X1P
MD12 -0.026 -0.206
PD11.35 -0.026 -0.144
C0.2
ø12 -0.003 -0.011
(ø16)
ø10 -0.004 -0.012
ø9.6 0 -0.09
ø32 -0.1 -0.3
ø32 -0.009 -0.025
ø50



M6X1PX8DP
4-ø4.5THRU
BCD 41
30°
30°
34

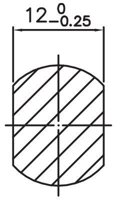
D-D VIEW



8°
+0.05 0
0.1
2
0.4
1.1
15°
+0.1 0
0.2

F0.4X0.2DIN509

X DETAIL



Q-Q SECTION

SPEC: 4R16-32V4-QFSH-604-671-0.052

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	
		HIWIN ARTICLE	

PRELOAD (kgf)	~
R.D.	12.764
S.F. (kgf)	———
DRAG TORQUE (kgf-cm)	———
DIRECTION OF TURN	R
P.C. DIA.	16.04
BALL DIA.	3.175
BACKLASH	0.03MAX
CIRCUIT	0.8*4
LEAD ANGLE	32.42
DYNAMIC (kgf)	620
STATIC (kgf)	1520
LEAD/PITCH	32/8

THREAD LENGTH
+ 0 −
Tp
±ep
ep

V300p: 0.052

ep: 0.105

UNCHAMFERED USE ■C0.5 ☐C1 ☐C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1 : X

NORMAL TOLERANCE mm

UP	6	30	120	300	600	1200	OVER
TO 6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: CF53/Equivalent	DATE	2010.08.16
	NT: SNCM220/Equivalent	DWG	Ivan
THREAD BALL TRACK HRC 56 ~ 62		APPD	Lady
		PROCESS NO.	G
CUSTR	LETROMEC(KL)		
DWG.NO.	A11TA8A1		

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126ITA1

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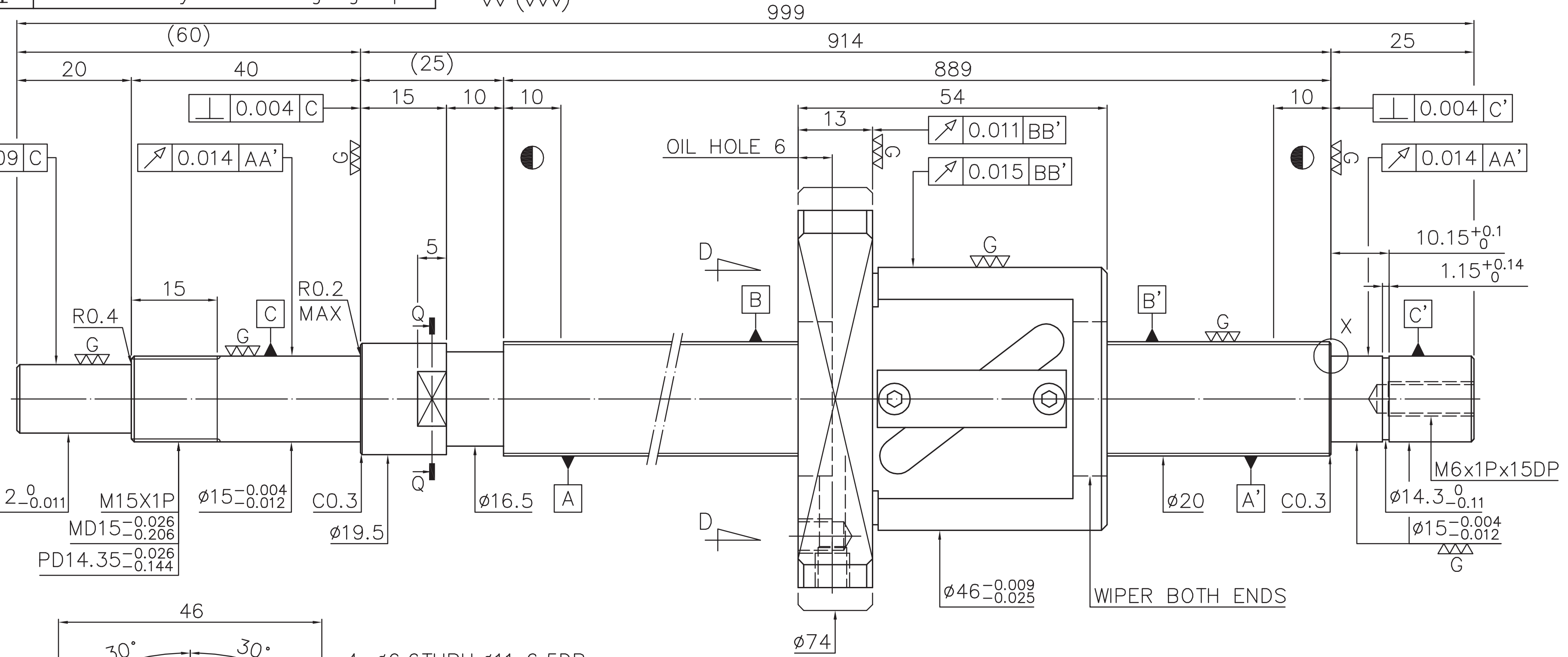
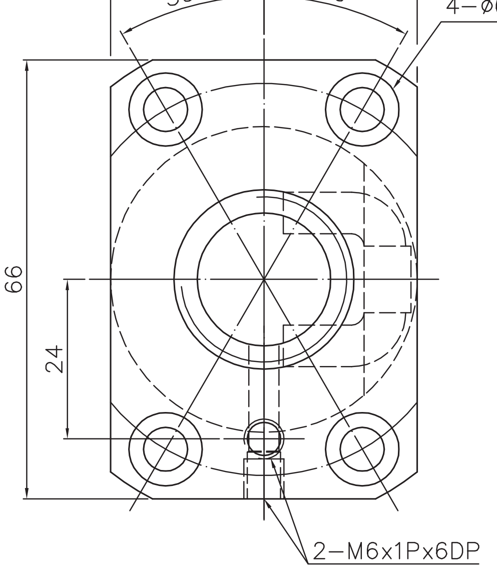
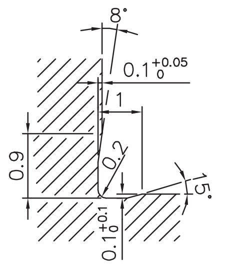


▽▽ (G ▽▽▽)
999
(60)
914
25
20
40
(25)
889
15
10
10
54
10
13
⊥ 0.004 C
⊥ 0.004 C'
◎ 0.009 C
↗ 0.014 AA'
↗ 0.011 BB'
↗ 0.015 BB'
↗ 0.014 AA'
OIL HOLE 6
10.15 +0.1 0
1.15 +0.14 0
15
R0.4
R0.2 MAX
5
Q
G
C
D
B
B'
X
C'
A
A'
ø12 0 -0.011
M15X1P
MD15 -0.026 -0.206
PD14.35 -0.026 -0.144
ø15 -0.004 -0.012
C0.3
ø19.5
ø16.5
ø20
C0.3
ø14.3 0 -0.11
ø15 -0.004 -0.012
M6x1Px15DP
ø46 -0.009 -0.025
WIPER BOTH ENDS
ø74



46
30°
30°
4–ø6.6THRU,ø11x6.5DP
BCD 59
66
24
2–M6x1Px6DP

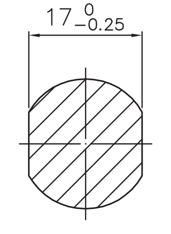
D–D VIEW



8°
0.1 +0.05 0
1
0.2
15°
0.9
0.1 +0.1 0

F0.2X0.1DIN509

X DETAIL



Q–Q SECTION

SPEC:R20–10B1–FSW–889–999–0.018

MAX. AXIAL LOAD(kgf)		LUBRICATION		PRELOAD(kgf)	34
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL		R.D.	16.744
DN VALUE		E1 TYPE ASSEMBLY METHOD		S.F. (kgf)	0.07~0.4
MAX. FEED RATE(m/min)		CUSTOMER DRAWING NO.		DRAG TORQUE(kgf–cm)	0.2~1.2
ACCELERATION(m/sec²)		CUSTOMER MC TYPE		DIRECTION OF TURN	R
SUPPORT METHOD	FIXED–SUPPORTED	CUSTOMER AXIAL TYPE		P.C. DIA.	20.8
CRITICAL SPEED (rpm)	3331			BALL DIA.	3.969
				BACKLASH	0
				CIRCUIT	2.5*1
				LEAD ANGLE	8.7
				DYNAMIC (kgf)	1139
				STATIC (kgf)	2187
				LEAD	10

THREAD LENGTH
Tp:–0.013 $\mathcal{V}$300p:0.018
ep:0.04 $\mathcal{V}$u:0.027

UNCHAMFERED USE ■C0.5 ☐C1 ☐C

ROUGH M/C	FIN M/C	GRD	SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	1:X

NORMAL TOLERANCE mm

UP TO	6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
	±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

HIWIN® BALLSCREWS

MAT.	SH:50CrMo4/Equivalent	DATE	2012.06.26
	NT:SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126ITA1		

DATE	MODIFICATION	APPROVED

∗ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

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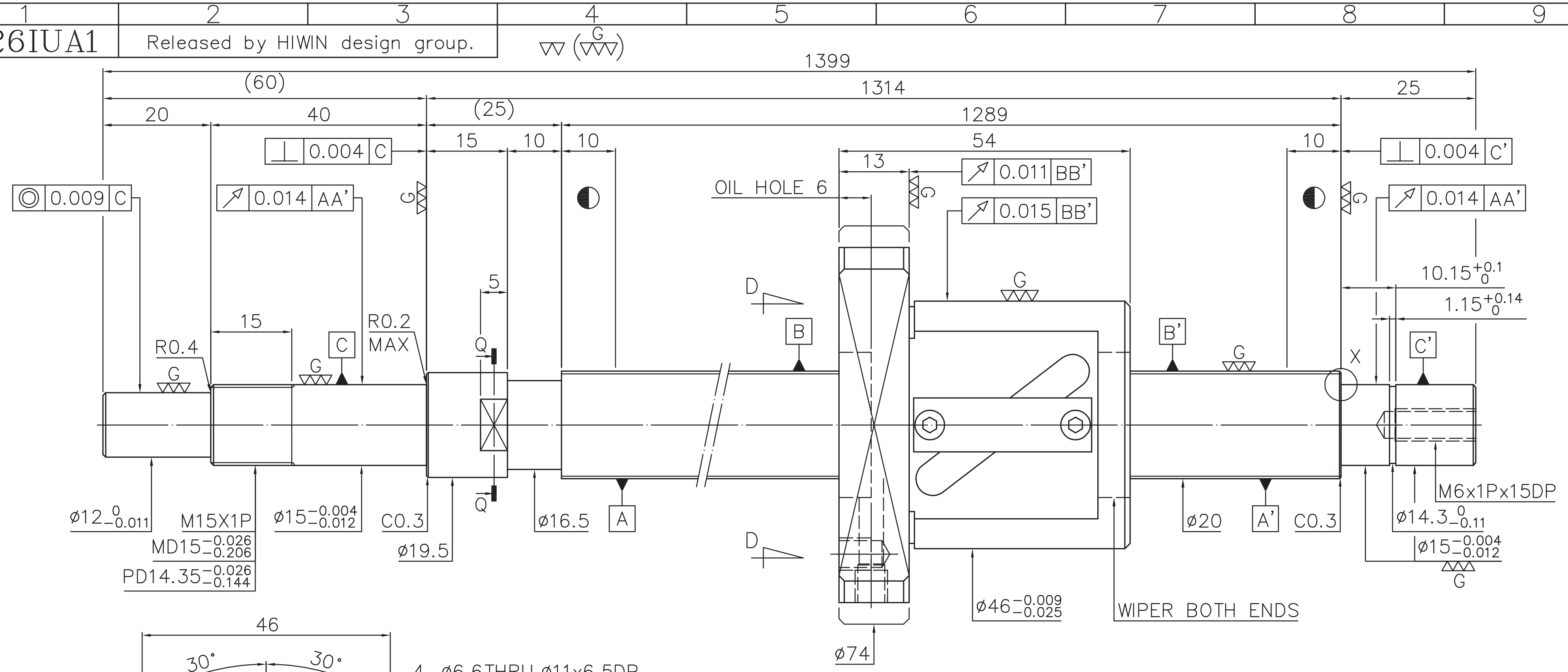
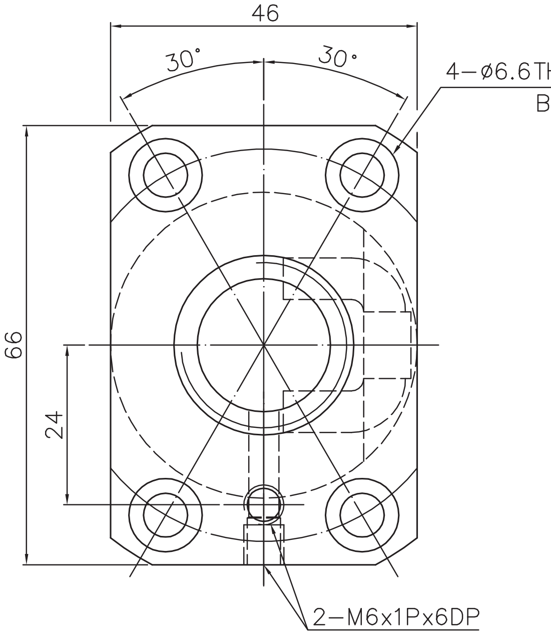
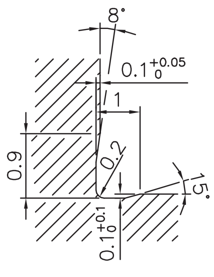


▽▽ (G ▽▽▽)
1399
(60)
1314
25
20
40
(25)
1289
15
10
10
54
13
10
⊥ 0.004 C
◎ 0.009 C
↗ 0.014 AA'
OIL HOLE 6
↗ 0.011 BB'
↗ 0.015 BB'
⊥ 0.004 C'
↗ 0.014 AA'
10.15 +0.1 0
1.15 +0.14 0
5
15
R0.4
G
C
R0.2 MAX
Q
D
B
G
B'
X
C'
Ø12 0 -0.011
M15X1P
MD15 -0.026 -0.206
PD14.35 -0.026 -0.144
Ø15 -0.004 -0.012
C0.3
Ø19.5
Ø16.5
A
Ø20
A'
C0.3
M6x1Px15DP
Ø14.3 0 -0.11
Ø15 -0.004 -0.012
Ø46 -0.009 -0.025
WIPER BOTH ENDS
Ø74



46
30°
30°
4-Ø6.6THRU,Ø11x6.5DP
BCD 59
66
24
2-M6x1Px6DP

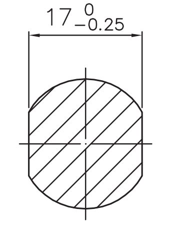
D-D VIEW



8°
0.1 +0.05 0
1
0.9
0.2
15°
0.1 +0.1 0

F0.2X0.1DIN509

X DETAIL



Q-Q SECTION

DATE	MODIFICATION	APPROVED

＊ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

＊BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
＊未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

SPEC:R20-10B1-FSW-1289-1399-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec^2)		CUSTOMER MC TYPE	
SUPPORT METHOD	FIXED-SUPPORTED	CUSTOMER AXIAL TYPE	
CRITICAL SPEED (rpm)	1559		

PRELOAD(kgf)	34
R.D.	16.744
S.F. (kgf)	0.07~0.4
DRAG TORQUE(kgf-cm)	0.2~1.2
DIRECTION OF TURN	R
P.C. DIA.	20.8
BALL DIA.	3.969
BACKLASH	0
CIRCUIT	2.5*1
LEAD ANGLE	8.7
DYNAMIC (kgf)	1139
STATIC (kgf)	2187
LEAD	10

THREAD LENGTH
+ 0 −
Tp ep

Tp:−0.019 ν300p:0.018
ep:0.054 νu:0.035

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1: X

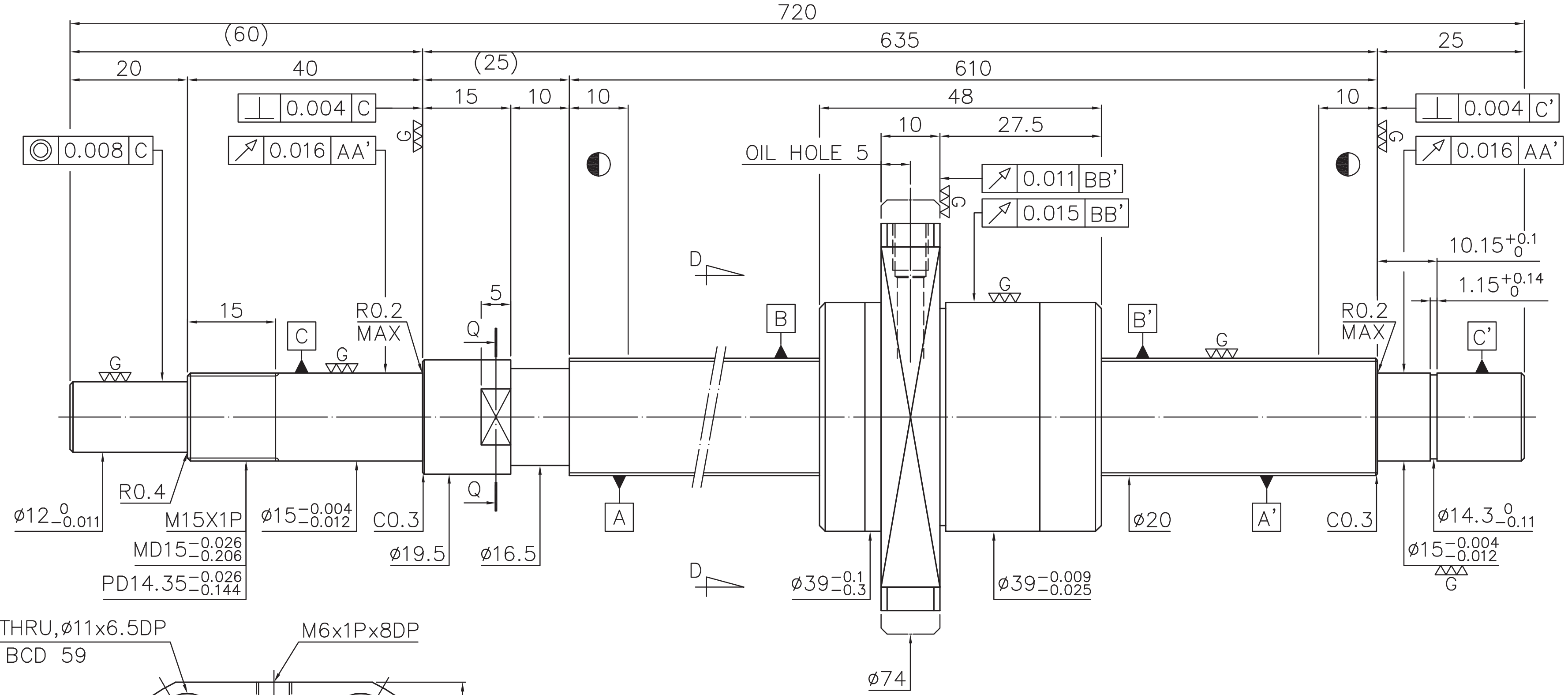
NORMAL TOLERANCE mm

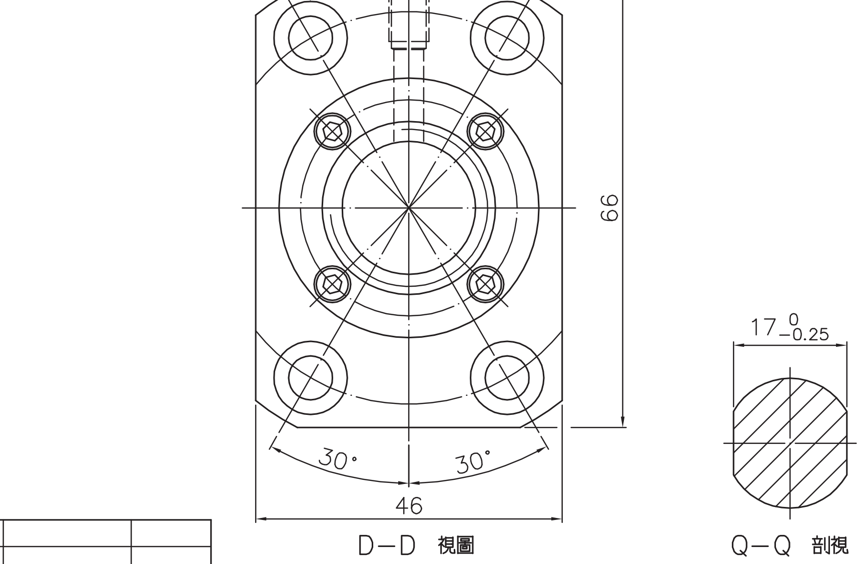
UP / TO	6	30	120	300	600	1200	2400	OVER 2400
6	30	120	300	600	1200	2400		
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5	

HIWIN® BALLSCREWS

MAT.	SH:50CrMo4/Equivalent	DATE	2012.06.26
	NT:SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK		CHK	Michelle
HRC 58 ~ 62		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126IUA1		

A126IPA1 | Released by HIWIN design group.


▽▽ (G ▽▽▽)
720
(60)
635
25
20
40
(25)
610
15
10
10
48
10
27.5
10
⊥ 0.004 C
◎ 0.008 C
↗ 0.016 AA'
⊥ 0.004 C'
↗ 0.016 AA'
OIL HOLE 5
↗ 0.011 BB'
↗ 0.015 BB'
10.15 +0.1 0
1.15 +0.14 0
G
15
C
R0.2 MAX
5
Q
Q
D
D
B
B'
R0.2 MAX
C'
A
A'
ø12 0 -0.011
R0.4
M15X1P
MD15 -0.026 -0.206
PD14.35 -0.026 -0.144
ø15 -0.004 -0.012
C0.3
ø19.5
ø16.5
ø39 -0.1 -0.3
ø39 -0.009 -0.025
ø74
ø20
C0.3
ø14.3 0 -0.11
ø15 -0.004 -0.012
G


4-ø6.6THRU,ø11x6.5DP
BCD 59
M6x1Px8DP
99
30°
30°
46
D-D 視圖
17 0 -0.25
Q-Q 剖視

SPEC: 2R20-20S2-DFSH-610-720-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	19
R.D.	17.084
S.F. (kgf)	0.04~0.33
DRAG TORQUE (kgf-cm)	0.1~1.0
DIRECTION OF TURN	R
P.C. DIA.	20.36
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	1.8*2
LEAD ANGLE	17.36
DYNAMIC (kgf)	1180
STATIC (kgf)	2860
LEAD / PITCH	20/10

THREAD LENGTH
Tp: -0.009 ν300p: 0.018
ep: 0.03 νu: 0.023

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1:X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

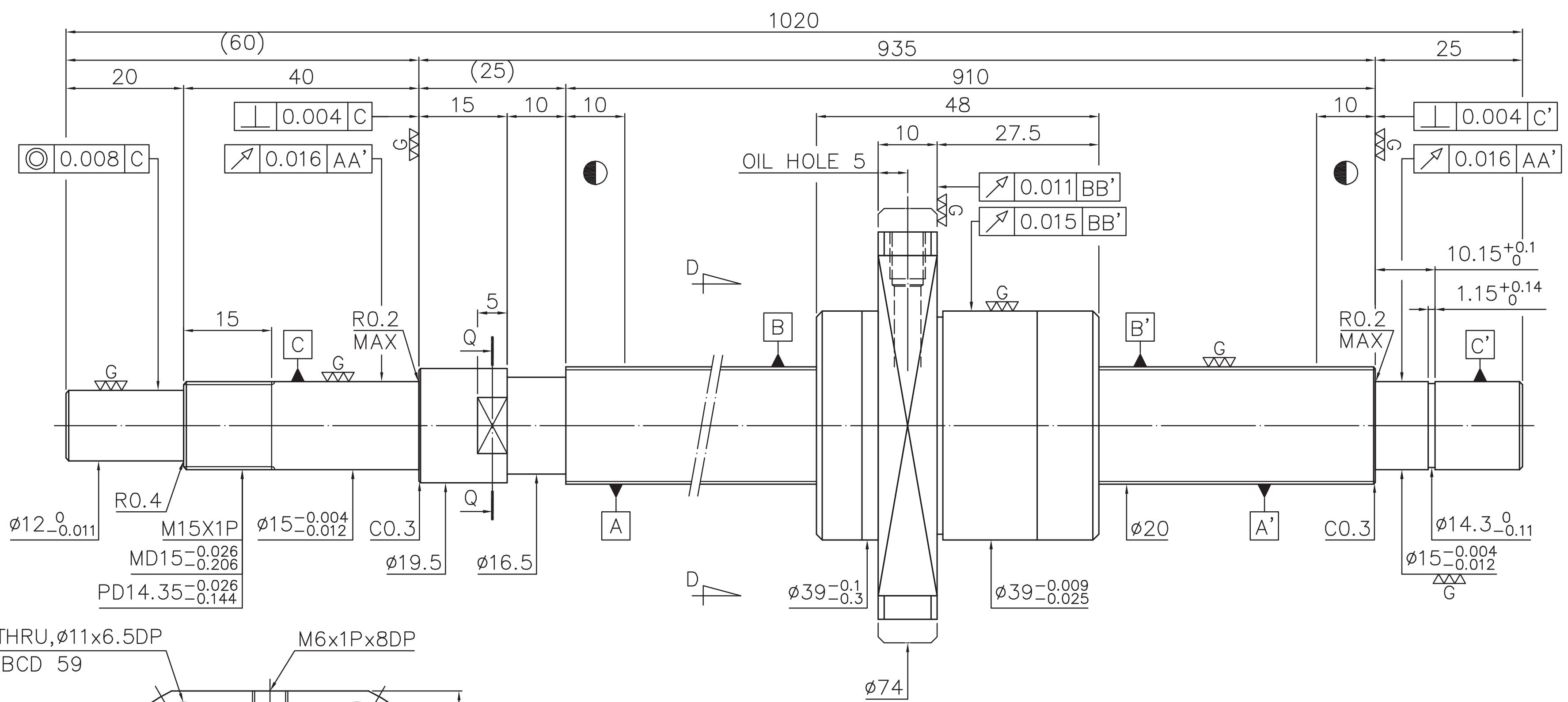
MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.26
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126IPA1		

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

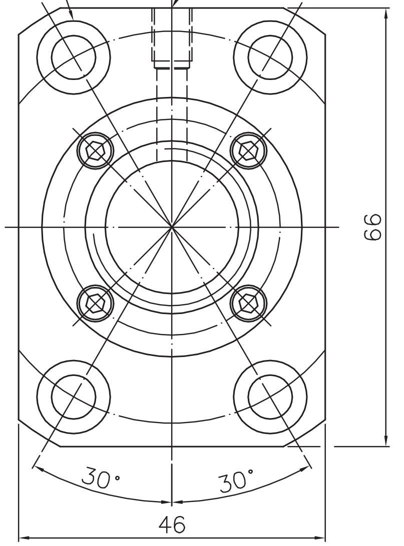
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

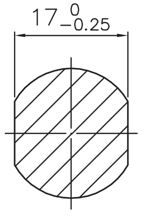
* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.


1020
(60)
935
25
20
40
(25)
910
15
10
10
48
10
27.5
10
⊥ 0.004 C
◎ 0.008 C
↗ 0.016 AA'
↗ 0.011 BB'
↗ 0.015 BB'
⊥ 0.004 C'
↗ 0.016 AA'
OIL HOLE 5
10.15+0.1 0
1.15+0.14 0
15
5
R0.2 MAX
R0.2 MAX
R0.4
Q
Q
D
D
A
B
C
A'
B'
C'
G
ø12 0 -0.011
M15X1P
MD15-0.026 -0.206
PD14.35-0.026 -0.144
ø15-0.004 -0.012
C0.3
ø19.5
ø16.5
ø39-0.1 -0.3
ø74
ø39-0.009 -0.025
ø20
C0.3
ø14.3 0 -0.11
ø15-0.004 -0.012

4-ø6.6THRU,ø11x6.5DP
BCD 59
M6x1Px8DP



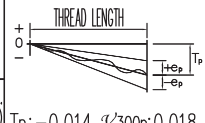
D-D 視圖



Q-Q 剖視

SPEC: 2R20-20S2-DFSH-910-1020-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION		PRELOAD (kgf)	19
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL		R.D.	17.084
DN VALUE		E1 TYPE ASSEMBLY METHOD		S.F. (kgf)	0.04~0.33
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.		DRAG TORQUE (kgf-cm)	0.1~1.0
ACCELERATION (m/sec²)		CUSTOMER MC TYPE		DIRECTION OF TURN	R
SUPPORT METHOD	FIXED-SUPPORTED	CUSTOMER AXIAL TYPE		P.C. DIA.	20.36
CRITICAL SPEED (rpm)	3263			BALL DIA.	3.175
				BACKLASH	0
				CIRCUIT	1.8*2
				LEAD ANGLE	17.36
				DYNAMIC (kgf)	1180
				STATIC (kgf)	2860
				LEAD / PITCH	20/10


THREAD LENGTH
+
0
−
Tp
+ep
−ep

Tp: −0.014 $\mathcal{V}$300p: 0.018

ep: 0.040 $\mathcal{V}$u: 0.027

UNCHAMFERED USE ■ C0.5 □ C1 □ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1 : X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.26
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126IQA1		

HIWIN® BALLSCREWS

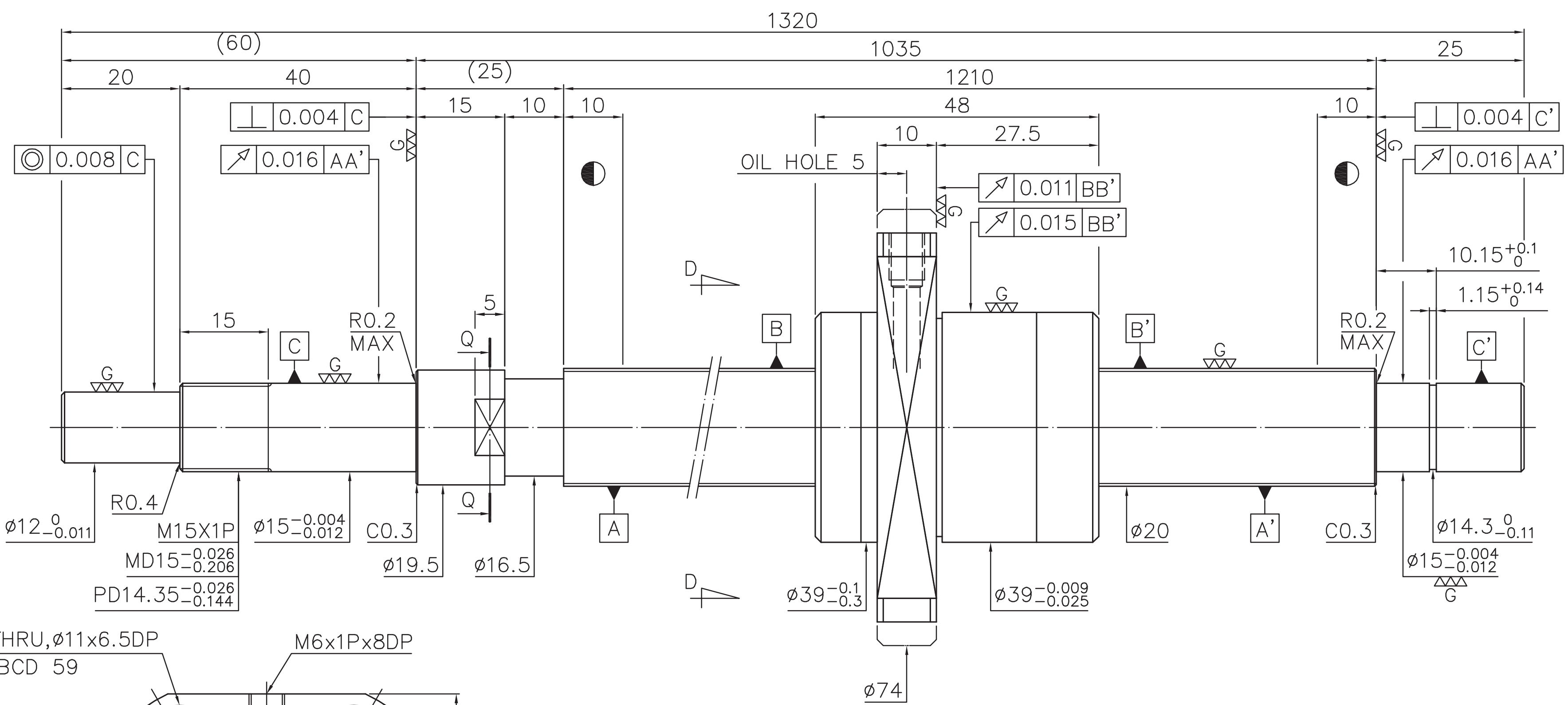
*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

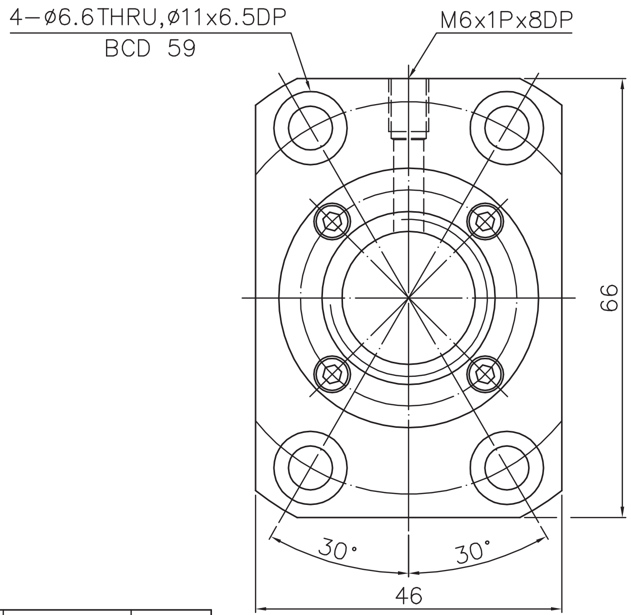
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

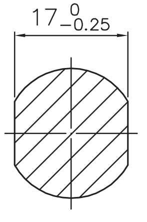
＊ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126IRA1	Released by HIWIN design group.


▽▽ (G ▽▽▽)
1320
(60)
1035
25
20
40
(25)
1210
15
10
10
48
10
27.5
10
⊥ 0.004 C
◎ 0.008 C
↗ 0.016 AA'
↗ 0.011 BB'
↗ 0.015 BB'
⊥ 0.004 C'
↗ 0.016 AA'
OIL HOLE 5
10.15 +0.1 0
1.15 +0.14 0
15
5
R0.2 MAX
R0.2 MAX
R0.4
C
C'
A
A'
B
B'
D
D
Q
Q
G
ø12 0 −0.011
M15X1P
MD15 −0.026 −0.206
PD14.35 −0.026 −0.144
ø15 −0.004 −0.012
C0.3
ø19.5
ø16.5
ø39 −0.1 −0.3
ø39 −0.009 −0.025
ø74
ø20
C0.3
ø14.3 0 −0.11
ø15 −0.004 −0.012


4−ø6.6THRU,ø11x6.5DP
BCD 59
M6x1Px8DP
66
46
30°
30°

D−D 視圖

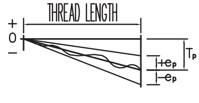


Q−Q 剖視

SPEC: 2R20−20S2−DFSH−1210−1320−0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD	FIXED−SUPPORTED	CUSTOMER AXIAL TYPE	
CRITICAL SPEED (rpm)	1826		

PRELOAD (kgf)	19
R.D.	17.084
S.F. (kgf)	0.04~0.33
DRAG TORQUE (kgf-cm)	0.1~1.0
DIRECTION OF TURN	R
P.C. DIA.	20.36
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	1.8*2
LEAD ANGLE	17.36
DYNAMIC (kgf)	1180
STATIC (kgf)	2860
LEAD / PITCH	20/10


THREAD LENGTH
+
0
−
+ep
−ep
Tp

Tp: −0.018 $\mathcal{V}$300p: 0.018

ep: 0.046 $\mathcal{V}$u: 0.03

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD	SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽	1:X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.26
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126IRA1		

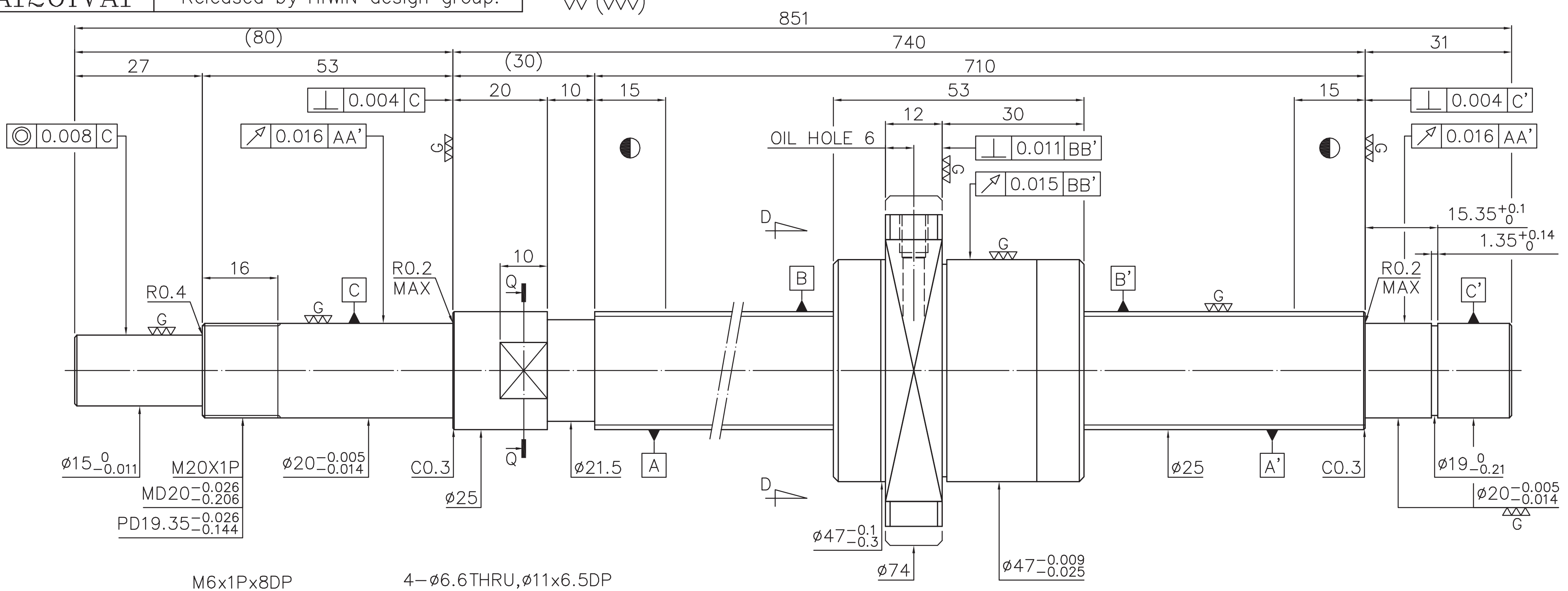
*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

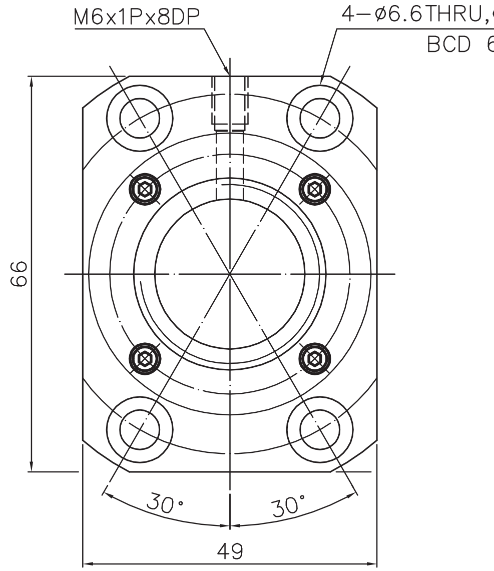
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

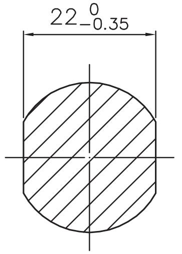
* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A126IVA1	Released by HIWIN design group.


▽▽ (G ▽▽▽)
851
(80)
740
31
27
53
(30)
710
20
10
15
53
12
30
15
◎ 0.008 C
⊥ 0.004 C
↗ 0.016 AA'
OIL HOLE 6
⊥ 0.011 BB'
↗ 0.015 BB'
⊥ 0.004 C'
↗ 0.016 AA'
15.35 +0.1 0
1.35 +0.14 0
D
16
10
R0.4
G
C
R0.2 MAX
Q
B
B'
G
R0.2 MAX
C'
A
A'
ø15 0 −0.011
M20X1P
MD20 −0.026 −0.206
PD19.35 −0.026 −0.144
ø20 −0.005 −0.014
C0.3
ø25
ø21.5
ø47 −0.1 −0.3
ø74
ø47 −0.009 −0.025
ø25
C0.3
ø19 0 −0.21
ø20 −0.005 −0.014
G


M6x1Px8DP
4−ø6.6THRU,ø11x6.5DP
BCD 60
66
30°
30°
49

D−D VIEW



X DETAIL

SPEC:2R25−20S2−DFSH−710−851−0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	

PRELOAD (kgf)	19
R.D.	21.744
S.F. (kgf)	0.07~0.33
DRAG TORQUE (kgf-cm)	0.2~1.0
DIRECTION OF TURN	R
P.C. DIA.	25.8
BALL DIA.	3.969
BACKLASH	0
CIRCUIT	1.8*2
LEAD ANGLE	13.86
DYNAMIC (kgf)	1810
STATIC (kgf)	4540
LEAD / PITCH	20/10

THREAD LENGTH

Tp: −0.011 𝒱300p: 0.018

ep: 0.035 𝒱u: 0.025

UNCHAMFERED USE ■ C0.5 □ C1 □ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1: X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.26
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK		CHK	Michelle
HRC 58 ~ 62		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126IVA1		

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

HIWIN® BALLSCREWS

DATE	MODIFICATION	APPROVED

＊PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

1 2 3 4 5 6 7 8 9

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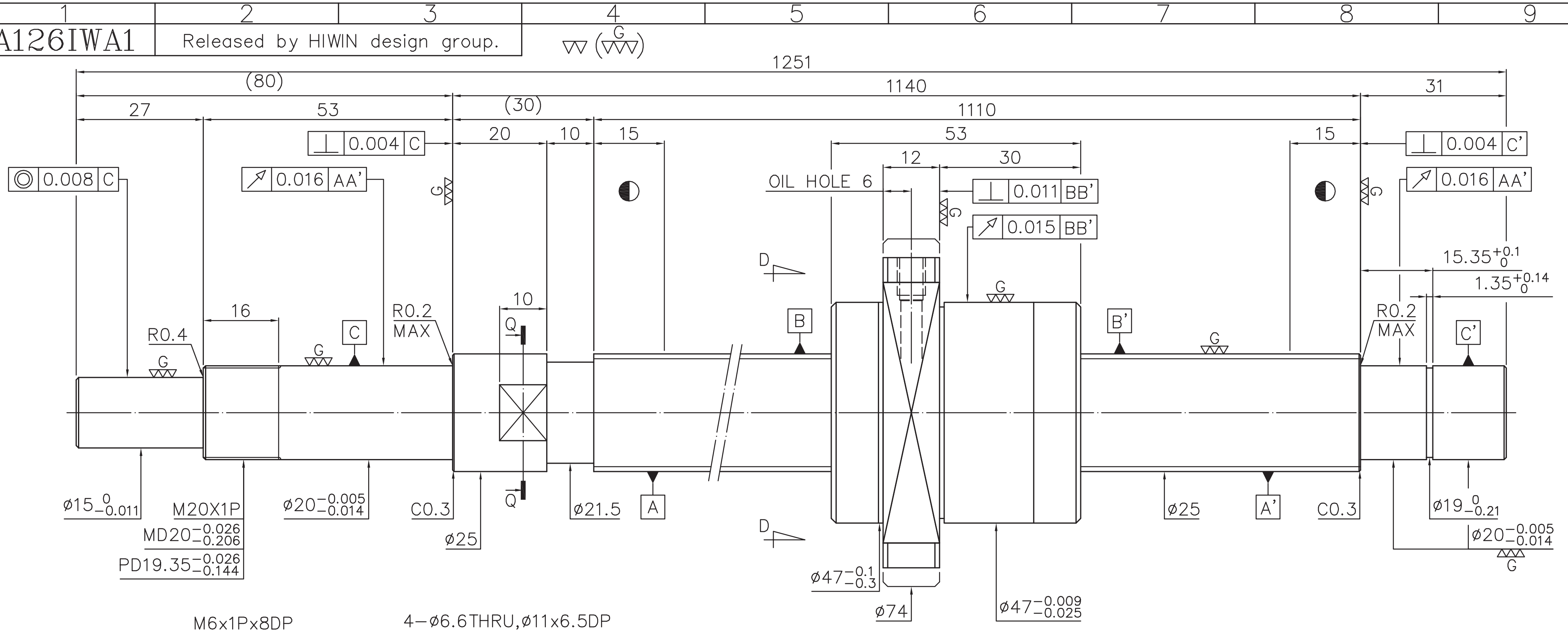
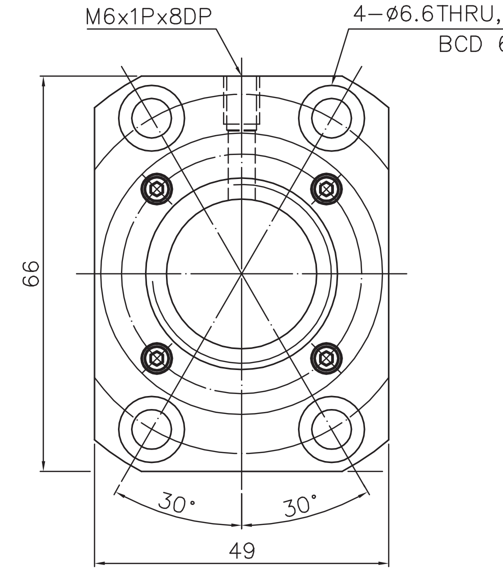
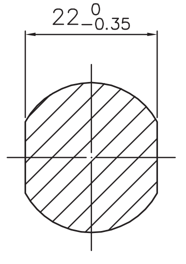


▽▽ (G ▽▽▽)
1251
(80)
1140
31
27
53
(30)
1110
20
10
15
53
12
30
15
◎ 0.008 C
⊥ 0.004 C
↗ 0.016 AA'
OIL HOLE 6
⊥ 0.011 BB'
↗ 0.015 BB'
⊥ 0.004 C'
↗ 0.016 AA'
15.35 $^{+0.1}_{0}$
1.35 $^{+0.14}_{0}$
R0.4
16
C
R0.2 MAX
10
Q
D
B
B'
R0.2 MAX
C'
G
$\phi 15^{\ 0}_{-0.011}$
M20X1P
$MD20^{-0.026}_{-0.206}$
$PD19.35^{-0.026}_{-0.144}$
$\phi 20^{-0.005}_{-0.014}$
C0.3
$\phi 25$
$\phi 21.5$
A
$\phi 47^{-0.1}_{-0.3}$
$\phi 74$
$\phi 47^{-0.009}_{-0.025}$
$\phi 25$
A'
C0.3
$\phi 19^{\ 0}_{-0.21}$
$\phi 20^{-0.005}_{-0.014}$



M6x1Px8DP
4−ø6.6THRU,ø11x6.5DP
BCD 60
66
30°
30°
49

D−D VIEW

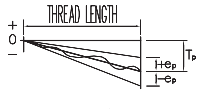


X DETAIL

SPEC:2R25−20S2−DFSH−1110−1251−0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD	FIXED−SUPPORTED	CUSTOMER AXIAL TYPE	
CRITICAL SPEED (rpm)	2731		

PRELOAD (kgf)	19
R.D.	21.744
S.F. (kgf)	0.07~0.33
DRAG TORQUE (kgf-cm)	0.2~1.0
DIRECTION OF TURN	R
P.C. DIA.	25.8
BALL DIA.	3.969
BACKLASH	0
CIRCUIT	1.8*2
LEAD ANGLE	13.86
DYNAMIC (kgf)	1810
STATIC (kgf)	4540
LEAD / PITCH	20/10



THREAD LENGTH
+
0
−
+ep
−ep
Tp

Tp: −0.017 𝓥300p: 0.018

ep: 0.046 𝓥u: 0.03

UNCHAMFERED USE ■ C0.5 ☐ C1 ☐ C

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1:X

NORMAL TOLERANCE mm

UP TO	6	30	120	300	600	1200	OVER
6	30	120	300	600	1200	2400	2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.26
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126IWA1		

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

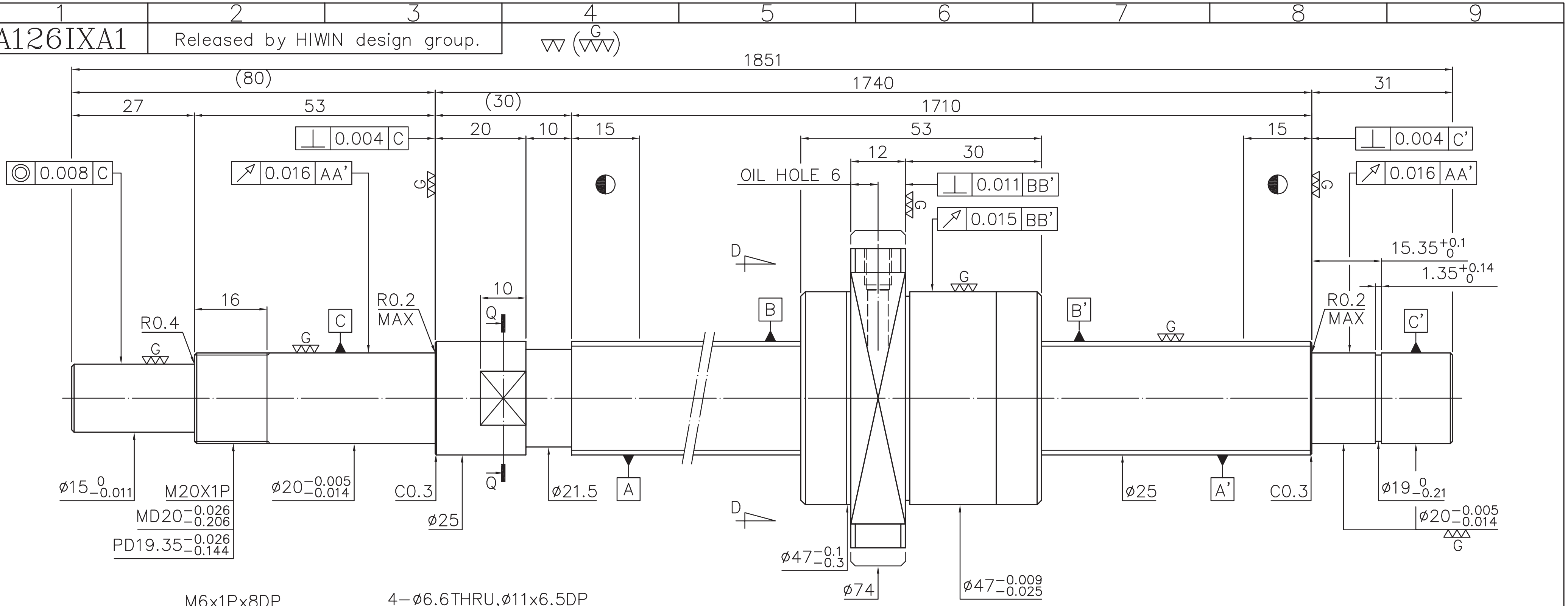
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED

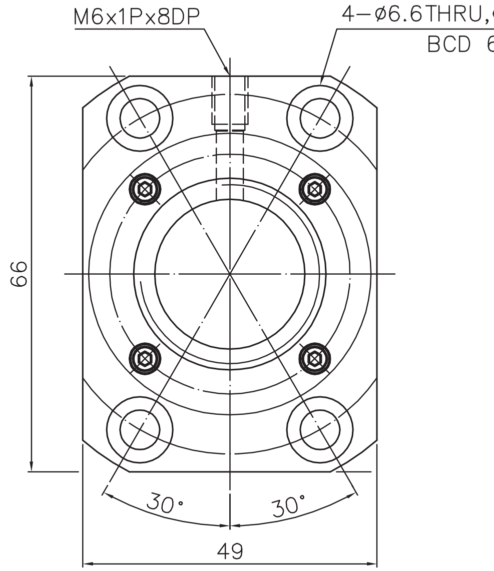
⁎ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

A B C E F G

A126IXA1 | Released by HIWIN design group.

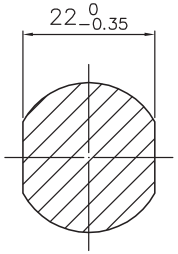


1
2
3
4
5
6
7
8
9
A
B
C
▽▽ (G ▽▽▽)
1851
(80)
1740
31
27
53
(30)
1710
20
10
15
53
15
12
30
⊥ 0.004 C
◎ 0.008 C
↗ 0.016 AA'
OIL HOLE 6
⊥ 0.011 BB'
↗ 0.015 BB'
⊥ 0.004 C'
↗ 0.016 AA'
15.35+0.1/0
1.35+0.14/0
D
D
R0.4
16
C
R0.2 MAX
10
Q
Q
B
B'
R0.2 MAX
C'
G
A
A'
Ø15 0/-0.011
M20X1P
MD20 -0.026/-0.206
PD19.35 -0.026/-0.144
Ø20 -0.005/-0.014
C0.3
Ø25
Ø21.5
Ø47 -0.1/-0.3
Ø74
Ø47 -0.009/-0.025
Ø25
C0.3
Ø19 0/-0.21
Ø20 -0.005/-0.014



E
F
M6x1Px8DP
4-Ø6.6THRU,Ø11x6.5DP
BCD 60
66
30°
30°
49

D-D VIEW

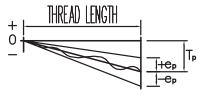


X DETAIL

SPEC:2R25-20S2-DFSH-1710-1851-0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec²)		CUSTOMER MC TYPE	
SUPPORT METHOD	FIXED-SUPPORTED	CUSTOMER AXIAL TYPE	
CRITICAL SPEED (rpm)	1137		

PRELOAD (kgf)	19
R.D.	21.744
S.F. (kgf)	0.07~0.33
DRAG TORQUE (kgf-cm)	0.2~1.0
DIRECTION OF TURN	R
P.C. DIA.	25.8
BALL DIA.	3.969
BACKLASH	0
CIRCUIT	1.8*2
LEAD ANGLE	13.86
DYNAMIC (kgf)	1810
STATIC (kgf)	4540
LEAD / PITCH	20/10



THREAD LENGTH
+
0
−
+ep
−ep
Tp

Tp: −0.026 ν300p: 0.018

ep: 0.065 νu: 0.04

UNCHAMFERED USE ■C0.5 ☐C1 ☐C

ROUGH M/C	FIN M/C	GRD	⊕ ⌷	SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1: X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent	DATE	2012.06.26
	NT: SNCM220/Equivalent	DWG	Kai
THREAD BALL TRACK HRC 58 ~ 62		CHK	Michelle
		APPD	Jamin
CUSTR	LETROMEC(M)		
DWG.NO.	A126IXA1		

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未畫倒角者去毛邊 (C0.2MAX)

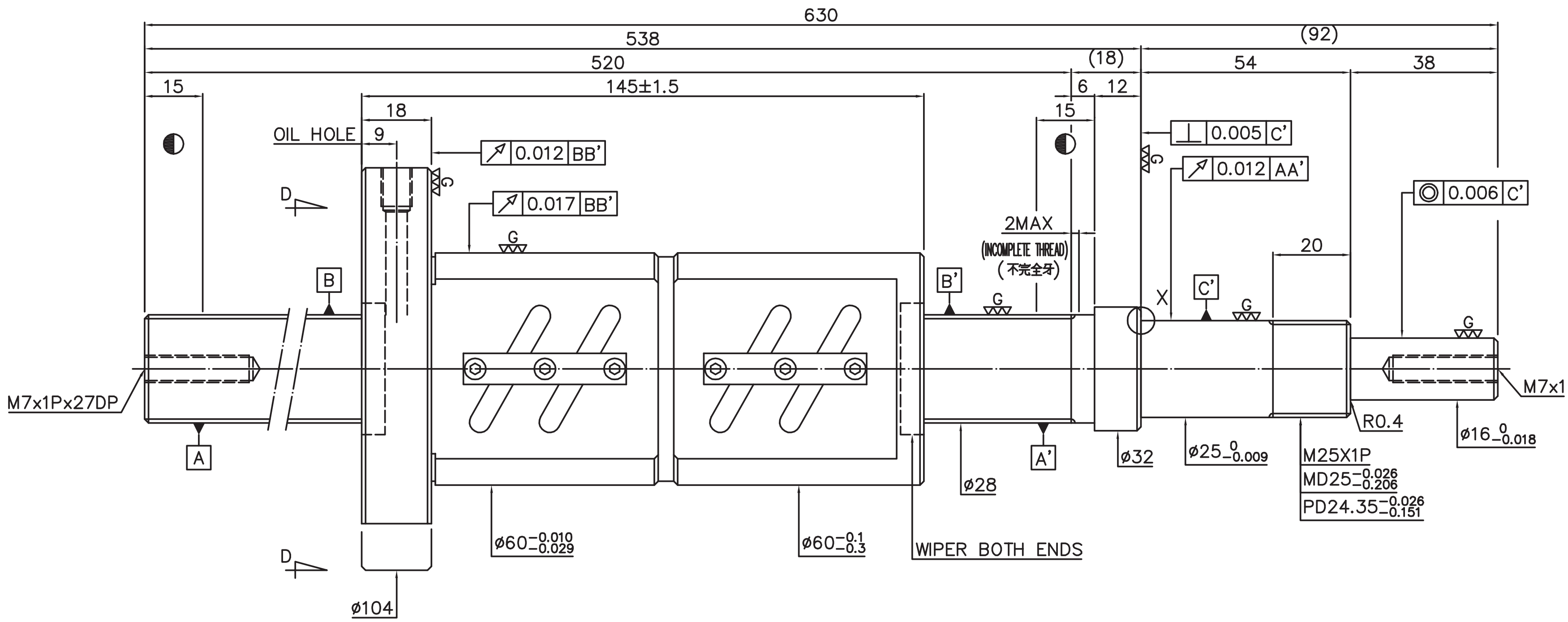
◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

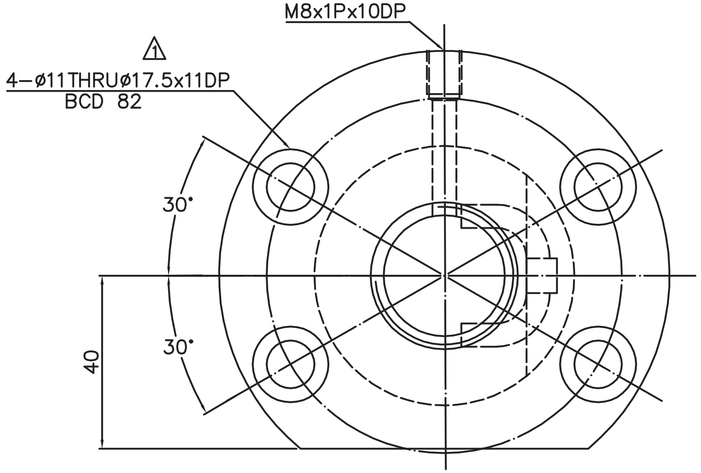
DATE	MODIFICATION	APPROVED

∗ PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.

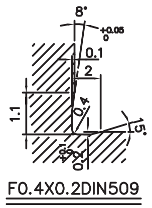
A11HUDA2	Released by HIWIN design group.

▽▽ (G ▽▽▽)


630
538
520
(92)
(18)
54
38
15
145±1.5
6
12
18
15
OIL HOLE
9
0.012 BB'
0.017 BB'
0.005 C'
0.012 AA'
0.006 C'
G
2MAX
(INCOMPLETE THREAD)
(不完全牙)
20
B
B'
C'
X
A
A'
D
M7x1Px27DP
M7x1Px27DP
R0.4
ø16 0 -0.018
ø32
ø25 0 -0.009
M25X1P
MD25 -0.026 -0.206
PD24.35 -0.026 -0.151
ø28
ø60 -0.010 -0.029
ø60 -0.1 -0.3
WIPER BOTH ENDS
ø104


M8x1Px10DP
4−ø11THRUø17.5x11DP
BCD 82
30°
30°
40

D−D VIEW

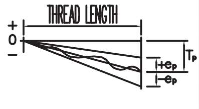

8°
+0.05 0
0.1
2
0.4
1.1
15°
F0.4X0.2DIN509

X DETAIL

SPEC: R28−6B2−FDW−520−630−0.018

MAX. AXIAL LOAD (kgf)		LUBRICATION	
MAX. ROTATIONAL SPEED (rpm)		SPACE BALL	
DN VALUE		E1 TYPE ASSEMBLY METHOD	
MAX. FEED RATE (m/min)		CUSTOMER DRAWING NO.	
ACCELERATION (m/sec^2)		CUSTOMER MC TYPE	
SUPPORT METHOD		CUSTOMER AXIAL TYPE	X

PRELOAD (kgf)	107
R.D.	25.324
S.F. (kgf)	0.15~0.82
DRAG TORQUE (kgf-cm)	0.59~3.37
DIRECTION OF TURN	R
P.C. DIA.	28.6
BALL DIA.	3.175
BACKLASH	0
CIRCUIT	2.5*2
LEAD ANGLE	3.82
DYNAMIC (kgf)	1784
STATIC (kgf)	4932
LEAD	6


THREAD LENGTH
+
0
−
Tp
+ep
−ep

Tp: −0.016 $\mathcal{V}$300p: 0.018

ep: 0.03 $\mathcal{V}$u: 0.023

UNCHAMFERED USE ☐R0.5 ■R1 ☐R

ROUGH M/C	FIN M/C	GRD		SCALE
25a ▽	6.3a ▽▽	0.4a ▽▽▽		1: X

NORMAL TOLERANCE mm

UP TO 6	6 30	30 120	120 300	300 600	600 1200	1200 2400	OVER 2400
±0.1	±0.2	±0.3	±0.4	±0.5	±0.8	±1.0	±1.5

HIWIN® BALLSCREWS

MAT.	SH: 50CrMo4/Equivalent NT: SNCM220/Equivalent	DATE	2009.07.13
		DWG	Edward
THREAD BALL TRACK HRC 58 ~ 62		APPD	Cody
		PROCESS NO.	G
CUSTR	LETROMEC (KL)		
DWG.NO.	A11HUDA2		

*BREAK SHARP EDGE UNLESS OTHER SPECIFIED.
*未註倒角者以R0.5MAX

◐ THREAD END ALLOWS ABOVE LENGTH OUT OF HARDNESS TOLERANCE

DATE	MODIFICATION	APPROVED
2009.07.13	MOD. ⚠1	Cody

* PLEASE IGNORE CHINESE CHARACTERS WHICH ARE FOR OUR REFERENCE ONLY.