

Kübler

智動化 高精密
傳動編碼器



德國科技 **K5**

零誤差的堅固編碼器

精密製造及庫伯勒的商譽

馬達傳動及智動化之相關應用



Incremental Encoder

堅固軸出型編碼器 8.5000

增量型編碼器Sendix Robust 8.5000.德國編碼光學科技.雙軸承 Safety-Lock™ 的設計, 高抗震動,高耐衝擊,堅固的外殼,防護等級IP65,最高達 IP67級加上其耐溫工作溫度-40°C~+85°C,軸轉高速容許12000rpm 使其被應用在(伺服)馬達傳動及各種天候環境應用工程機械設備.



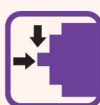
Safety-Lock™
雙軸承結構
安鎖的技術



軸轉高速容許
max.12000 rpm



寬工作溫度
-40°C +85°C



軸向負荷
80N/40N



耐震動防衝擊



防磁性干擾



短路保護



反接保護



光學檢測



防護等級
IP65/67

Order code

8.5000

Shaft version

Type

. 6XXB . XXXX 0020

a

b

c

d

e

f

a Flange more...

6 = synchro flange, IP65 \varnothing 50.8 mm

7 = clamping flange, IP66/IP67 \varnothing 58 mm

8 = clamping flange, IP65 \varnothing 58 mm

B = synchro flange, IP65 \varnothing 58 mm

C = square flange, IP66/IP67 \square 63.5 mm

D = square flange, IP65 \square 63.5 mm

b Shaft ($\varnothing \times L$), with flat more...

1 = \varnothing 6 x 10 mm

6 = \varnothing 8 x 15 mm

3 = \varnothing 10 x 20 mm

5 = \varnothing 12 x 20 mm

c Output circuit / power supply more...

1 = RS422 (with inverted signal) / 5 ... 30 V DC

2 = push-pull (7272 compatible with inverted signal) / 5 ... 30 V DC

5 = push-pull (with inverted signal) / 10 ... 30 V DC

3 = open collector (with inverted signal) / 5 ... 30 V DC

d Type of connection – cable

2 = radial cable, 1 m PVC

1 = axial cable, 1 m PVC

B = radial cable, special length PVC

Type of connection – connector

more...規格品項豐富, 請另洽之



e Pulse rate

1, 2, 4, 5, 10, 12, 14, 20, 25, 28, 30, 32, 36, 50, 60, 64, 80, 100, 120, 125, 150, 180, 200, 240, 250, 256, 300, 342, 360, 375, 400, 500, 512, 600, 625, 720, 800, 900, 1000, 1024, 1200, 1250, 1500, 1800, 2000, 2048, 2500, 3000, 3600, 4000, 4096, 5000

(e.g. 100 pulses => 0100)

f XXXX special model

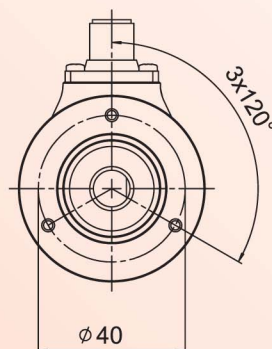
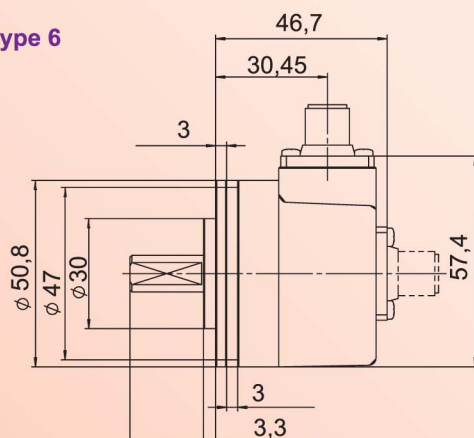
0020 special radial cable 2m PVC 側邊出線

- Ex 2/22 危險區域使用規格請另詢



Dimensions (單位mm)

例: Flange type 6





Incremental Encoder

堅固全中空軸型編碼器 8.5020

增量型編碼器Sendix Robust 8.5020.德國編碼光學科技.全中空貫穿,雙軸承Safety-Lock™的設計,高抗震動,高耐衝擊,堅固的外殼,防護等級IP65,最高達 IP67級加上其耐溫工作溫度-40°C~+85°C,軸轉高速容許12000rpm使其被應用在(伺服)馬達傳動及各種天候環境應用工程機械設備。



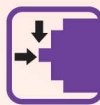
Safety-Lock™
雙軸承結構
安鎖的技術



軸轉高速容許
max.12000 rpm



寬工作溫度



軸向負荷
80N/40N



耐震動防衝擊



防磁性干擾



短路保護



反接保護



光學檢測



防護等級

Order code
Hollow shaft

8.5020
Type

. DXXF .
a b c d

. XXXX .
e

0020
f

a Flange more...

D = with stator coupling, IP65 ø 63 mm

C = with stator coupling, IP66/IP67 ø 63 mm

b Through hollow Shaft more...

9 = ø 8 mm

3 = ø 10 mm

5 = ø 12 mm

A = ø 14 mm

8 = ø 15 mm

c Output circuit / power supply more...

5 = push-pull (with inverted signal) / 10 ... 30 V DC

2 = push-pull (7272 compatible with inverted signal) / 5 ... 30 V DC

3 = open collector (with inverted signal) / 5 ... 30 V DC 1)

1 = RS422 (with inverted signal) / 5 ... 30 V DC

d Type of connection – cable

1 = axial cable, 1 m PVC

F = tangential cable, special length PVC

Type of connection – connector
more...規格品項豐富, 請另洽之



e Pulse rate

1, 2, 4, 5, 10, 12, 14, 20, 25, 28, 30, 32, 36, 50, 60, 64, 80, 100, 120, 125, 150, 180, 200, 240, 250, 256, 300, 342, 360, 375, 400, 500, 512, 600, 625, 720, 800, 900, 1000, 1024, 1200, 1250, 1500, 1800, 2000, 2048, 2500, 3000, 3600, 4000, 4096, 5000
(e.g. 100 pulses => 0100)

f XXXX special model

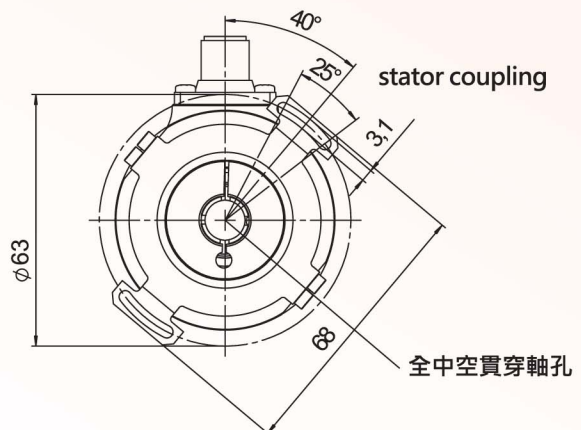
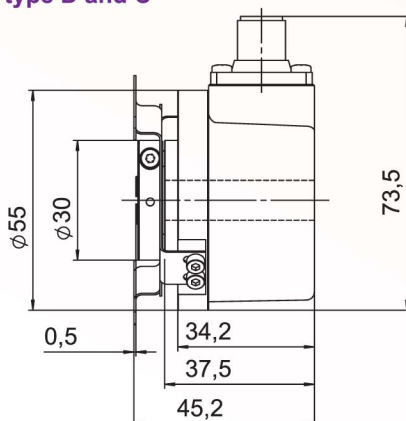
0020 special radial cable 2m PVC 側邊出線

- Ex 2/22 危險區域使用規格請另詢



Dimensions (單位mm)

例: Flange type D and C



Kübler

Incremental Encoder

微寸軸出型編碼器 05.2400

軍事航太, 醫療機台, 電子機器



軸轉高速容許
max.12000 rpm



寬工作溫度
-20°C +85°C



耐震動
防衝擊



短路保護



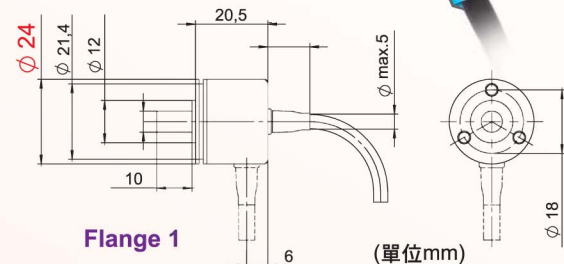
防磁性干擾



光學檢測



防護等級
max IP65



Order code
Hollow shaft

05.2400
Type

. 1XXXX . XXXX
a b c d e

a Flange more...

1 = \varnothing 24 mm
3 = \varnothing 28 mm

b shaft(\varnothing x L) more...

1 = \varnothing 4 x 10 mm
2 = \varnothing 6 x 10 mm

c Output circuit / power supply more...

3 = push-pull (without inverted signal) / 8 ... 30 V DC

d Type of connection more...

2 = radial cable, 2 m PVC
1 = axial cable, 2 m PVC

e Pulse rate more...

2, 4, 6, 8, 10, 16, 20, 25, 36, 40, 50, 60,
80, 100, 120, 125, 180, 200, 250, 300,
360, 400, 500, 512, 1000, 1024
(e.g. 360 pulses => 0360)



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Incremental Encoder

碳纖維軸出型編碼器 8.3700

潮濕環境, 工程機具



防護等級
max IP67



軸轉高速容許
max.6000 rpm



寬工作溫度
-20°C +70°C



耐震動
防衝擊



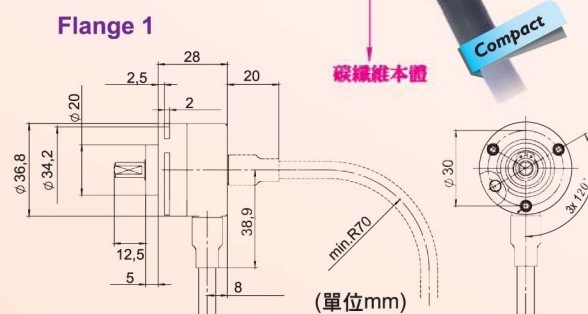
短路保護



防磁性干擾



光學檢測



Order code
Hollow shaft

8.3700
Type

. 1XXXX . XXXX
a b c d e

a Flange more...

1 = clamping-synchro flange, \varnothing 36.8 mm

b shaft with flat (\varnothing x L) more...

3 = \varnothing 6 x 12.5 mm
6 = \varnothing 8 x 12.5 mm

c Output circuit / power supply more...

1 = RS422 / 5 V DC (± 5 %)
3 = push-pull (with inverted signal) / 5 ... 30 V DC

d Type of connection more...

4 = radial cable, 2 m PVC
3 = axial cable, 2 m PVC

e Pulse rate

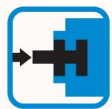
10, 25, 50, 60, 100, 200, 250, 300, 360,
400, 500, 512, 600, 1000, 1024
(e.g. 360 pulses => 0360)

Kübler

Incremental Encoder

精密軸出型編碼器 8.KIS40

增量型編碼器Sendix Base **KIS40**. 德國編碼光學科技,高經濟效益設計. 提供解析度max2500pulses選擇. 於狹小聯軸空隙,在小型機械及設備特別適合.



Safety-Lock™
雙軸承結構
安鎖的技術



軸轉高速容許
max.4500 rpm



寬工作溫度
-20°C +70°C



軸向負荷
40N/20N



耐震動
防衝擊



短路保護



反接保護



防磁性干擾



光學檢測



防護等級
max IP64

Order code
Shaft version

8.KIS40
Type

. 1XXXX .
a b c d

XXXX .
e

PXX
f

a Flange

1 =clamping-synchro flange, \varnothing 40 mm

b Shaft ($\varnothing \times L$)

3 = \varnothing 6 x 12,5 mm, with flat

5 = \varnothing 1/4" x 12,5 mm, with flat

6 = \varnothing 8 x 12,5 mm, with flat

c Output circuit / power supply

4 = push-pull (with inverted signal) / 10 ... 30 V DC

6 = RS422 (with inverted signal) / 5 V DC

3 = open collector (with inverted signal) / 10 ... 30 V DC

d Type of connection

2 = radial cable, 2 m PVC 側邊出線

1 = axial cable, 2 m PVC 後端出線

e Pulse rate

25, 100, 200, 360, 500, 512, 600,

1000, 1024, 2000, 2048, 2500

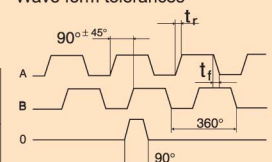
(e.g. 500 pulses => 0500)

f Special signal format

03 = extended zero pulse (360°)

標準	0 由 A 和 B 限定。 這是Kuebler標準 0 為 90° 寬。	0
P03	0 沒有被限定 0 為 330° 到 360° 寬	0

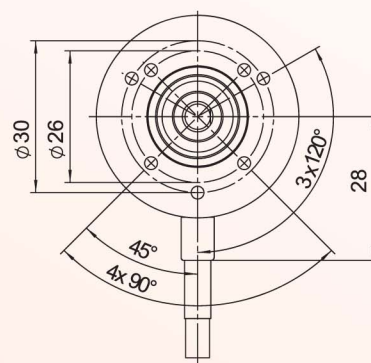
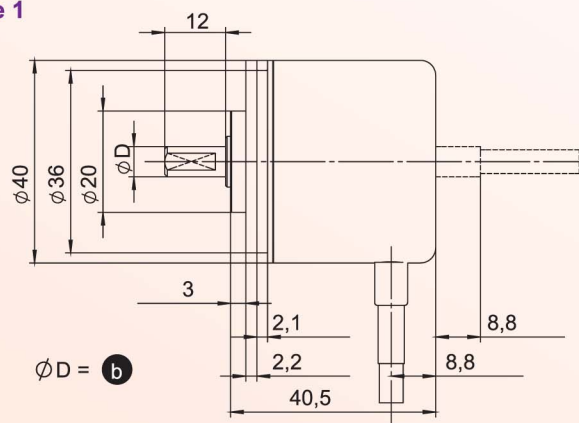
Wave form tolerances



t_r = rising edge time
t_f = falling edge time

Dimensions (單位mm)

Flange type 1





Incremental Encoder

精密半中空軸型編碼器 8.KIH40

增量型編碼器Sendix Base **KIH40**.德國編碼光學科技, 高經濟效益設計. 提供解析度max2500pulses選擇. 半軸套式直接安裝, 在小型機械及設備特別適合.



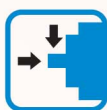
Safety-Lock™
雙軸承結構
安鎖的技術



軸轉高速容許
max.4500 rpm



寬工作溫度
-20°C +70°C



軸向負荷
40N/20N



耐震動
防衝擊



短路保護



反接保護



防磁性干擾



光學檢測



防護等級
max IP64

Order code
Hollow shaft

8.KIH40
Type

. 5XXX .
a b c d

. XXXX .
e

. PXX
f

a Flange

5 = with stator coupling, \varnothing 46 mm
2 = with spring element, long

b Blind hollow shaft

4 = \varnothing 8 mm
3 = \varnothing 1/4"

c Output circuit / power supply

4 = push-pull (with inverted signal) / 10 ... 30 V DC
6 = RS422 (with inverted signal) / 5 V DC
3 = open collector (with inverted signal) / 10 ... 30 V DC

d Type of connection

2 = radial cable, 2 m PVC 側邊出線
1 = axial cable, 2 m PVC 後端出線

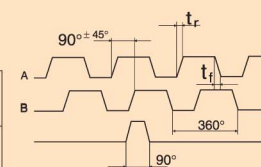
e Pulse rate

25, 100, 200, 360, 500, 512, 600,
1000, 1024, 2000, 2048, 2500
(e.g. 500 pulses => 0500)

f Special signal format

03 = extended zero pulse (360°)

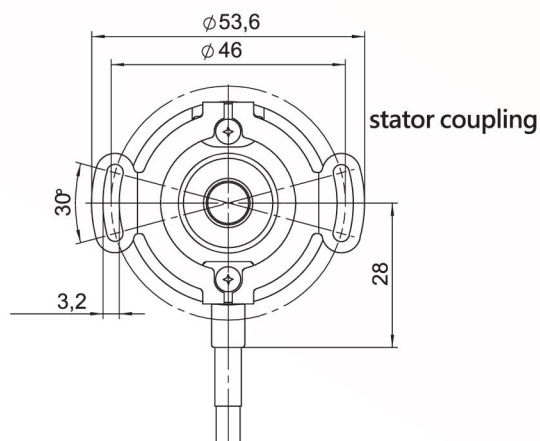
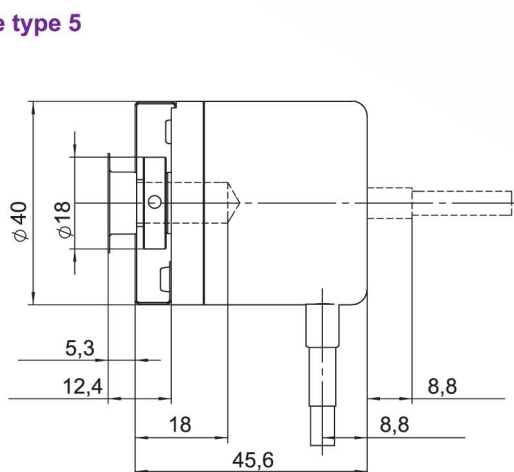
標準	0 由 A 和 B 限定。 這是Kuebler標準 0 為 90° 寬。	0
P03	0 沒有被限定 0 為 330° 到 360° 寬	0



t_r = rising edge time
 t_f = falling edge time

Dimensions (單位mm)

例: Fange type 5





Draw-wire Encoder

增量拉線式編碼器 D5.2XXX

增量拉線式編碼器 D5(A40) 具有德國原廠專業的機械結構設計科技，絕對精度於整個測量範圍 $\pm 0.1\%$ 內，其解析分辨率達 $0.1\text{mm}(1000\text{ppr})$ 其耐用的不銹鋼線 ($\varnothing 0.45\text{mm}$)，橫越速度達 800mm/s 其耐溫工作溫度 $-20^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ，在小型機械及戶外環境的工程機械上特別適合。



1M及2M拉距 →



工程樹脂本體
D5(A40)系列

Order code draw wire encoder	D5.2 Type	XXX a	·	24	XX b	·	1000
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a Steel wire, length
501 = 1000 mm (1M)
102 = 2000 mm (2M)

b Output circuit / power supply
21 = Push-pull with inverted signal / 5 ... 24 V DC
41 = Push-pull with inverted signal / 8 ... 30 V DC



Aalog Draw-wire Encoder

類比拉線式編碼器 D5.350X

類比拉線式編碼器 D5(350X) 在更精度要求的工程機具上被採用，取代電阻尺及其他手搖式編碼器等之應用。



鋁合金本體
D5(A41)系列

Order code draw wire encoder	D5.350 Type	X a	·	A	XX b	X c	·	1000
---------------------------------	----------------	--------	---	---	---------	--------	---	------

a Measuring range
1 = 1000 mm (1M)
2 = 2000 mm (2M)

b Output circuit / power supply
11 = analog output 4 ... 20 mA
22 = analog output 0 ... 10 V DC
power supply 15 ... 28 V DC

c Type of connection
1 = axial cable 2 m (measuring range 1000 mm)
radial cable 2m (measuring range 2000 mm)

Inclinometers

單軸式 8.IS40/360°

Kübler

智動化 全軸向 位移傾角計



IP69K 工程樹脂本體
-30°C~+70°C



類比介面



防護等級



耐震動防衝擊



反接保護

Order code
Inclinometer IS40

8.IS40

Type

1

a

4

b

X

c

2

d

1

e

a Measuring direction
1=1-dimensional

b Measuring range
4=0 ... 360°

c Interface
1=4 ... 20 mA
3=0.1 ... 4.9 V DC

d Power supply
2=10 ... 30 V DC

e Type of connection
1=M12 connector

更多的一維及二維規格請另詢...

Inclinometers

單軸式 8.IN81/180°及360°



IP69K 鋁合金本體
-40°C~+85°C

Order code
Inclinometer IN81

8.IN81

Type

.

a

X

b

X

c

X

d

.

e

X

f

2

g

a Measuring direction
1=1-dimensional

b Measuring range
7=0 ... 360° (±180°)
8=0 ... 180° (±90°)

c Interface
1=4 ... 20 mA / 12 bit
5=0 ... 10 V / 12 bit

d Filter
1=no filter

e Optional switching outputs
1=none

f Power supply
2=10 ... 30V / 40 mA
15 ... 30 V for interface 5

g Type of connection
1=1 x M12 connector, 8-pin

台灣總代理

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