新代编码器规格说明书

匯出日期：2023-05-10
修改日期：2022-04-20

文件目录 文件履历

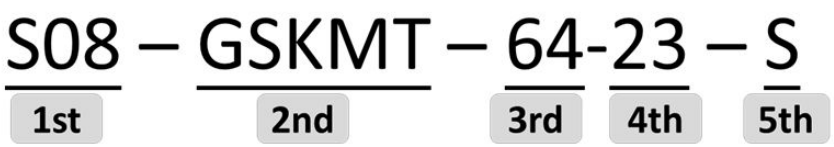
- 型号定义(Definition of Encoder Model Number)
- 规格(Specification)
- 编码器线材与Pin脚定义(Encoder Cable & Pin Define)
  - 编码器线材 (Encoder Cable)
  - Pin脚定义(Pin Define)
- 磁环安装(Encoder Installation)
  - 磁环内径与衬套配合尺寸(Table of encoder and recommend motor shaft diameter/ bushing outer diameter)
  - 干涉量建议表(Table of encoder and recommend interference range)
- 外型尺寸(External Dimensions)
- 磁环安装(Encoder Installation)
  - 磁环内径与衬套配合尺寸(Table of encoder and recommend motor shaft diameter/ bushing outer diameter)
  - 干涉量建议表(Table of encoder and recommend interference range)

文件目录 文件履历

版本號	編修日期	編修內容	Excel檔	作者	審查	核准
V1.0	2018/09/06	新增新代編碼器規格與外型尺寸、安裝須知	業務選型-新代編碼器_v1.0.xlsx	☐ 劉思伶	☐	☐
V1.1	2021/3/3	新增下線產品區，將一代162/242移入下線產品區	业务选型-新代编码器_v1.1.xlsx	☑ 江國維	☐	☐
V1.2	2022/4/20	更換326級圖面		☑ 江國維		

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1. 1 型号定义(Definition of Encoder Model Number)



	1st	2nd	3rd	4th	5th
項目 **Item**	S08	GSKMT	64	23	S
定義 **Definition**	伺服產品相關 Servo Product	編碼器品號Encoder Item Number GSKM: 編碼器組(側邊出線)Cable outlet from Side GSKMT: 編碼器組(頂部出線)Cable outlet from Top	編碼器極數 Pole Number 64: 64極 64 poles	特規內徑(mm) Special specification Inner diameter 23: 內徑Inner diameter 23 mm	有/無螺孔 S: 有螺孔with Screw

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2. 2 规格(Specification)

編碼器型號 Encoder Model Number		極數 Pole Number	解析度 Resolution	最大轉速 Max. Speed	內徑 Inner Diameter	外徑 Outer Diameter	安裝空間 Installation Space
S08-GSKM□-□□-□□-□		--	pulse	rpm	mm	mm	mm
GSKM□-64-□□	GSKM-64	64	262144	40000	20	39.1	84
	GSKMT-64				20		75
	GSKMT-64-23				23		75
	GSKMT-64-30				30		75
GSKM□-82	GSKM-82	82	335872	24000	30	50.7	95
	GSKMT-82						
GSKM□-102	GSKM-102	102	417792	20000	40	63.5	108
	GSKMT-102						
GSKM-124	GSKM-124	124	507904	15000	60	77.4	121
GSKM-326-□	GSKM-326-S	326	1335296	10000	160	205.6	250

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3. 3 编码器线材与Pin脚定义(Encoder Cable & Pin Define)

a. 3.1 编码器线材 (Encoder Cable)

編碼器線材料號 Encoder Cable Model Number		
單軸驅動器 Single-axis Servo Drive		多合一驅動器 Multi-axis Servo Drive
一代單軸驅動器 Servo Drive I	二代單軸驅動器 Servo Drive II	
W01-PGS-EN-4M	W01-PGSF-EN-3M	W01-PGSF-EN-3M
W01-PGS-EN-5M	W01-PGSF-EN-4M	W01-PGSF-EN-4M
W01-PGS-EN-6M	W01-PGSF-EN-5M	W01-PGSF-EN-5M
W01-PGS-EN-8M	W01-PGSF-EN-6M	W01-PGSF-EN-6M
W01-PGS-EN-10M	W01-PGSF-EN-8M	W01-PGSF-EN-8M
W01-PGS-EN-12M	W01-PGSF-EN-10M	W01-PGSF-EN-10M
W01-PGS-EN-15M	W01-PGSF-EN-12M	W01-PGSF-EN-12M
W01-PGS-EN-18M	W01-PGSF-EN-15M	W01-PGSF-EN-15M
--	W01-PGSF-EN-18M	W01-PGSF-EN-18M
--	W01-PGSF-EN-25M	W01-PGSF-EN-25M

b. 3.2 Pin脚定义(Pin Define)

線材顏色 Color	定義 Define	新代Pin数 Pin Number
紅Red	5V	1 PIN
藍Blue	GND	2 PIN
白White	Data+	3 PIN
咖Brown	Data-	4 PIN
綠Green	T1+	溫度端子接頭Temp. Terminal Header
黃Yellow	T1-	溫度端子接頭Temp. Terminal Header
粉紅Pink	T2+	溫度端子接頭Temp. Terminal Header
灰Gray	T2-	溫度端子接頭Temp. Terminal Header
編織網隔離披附 Braid Sleeve	GND	a.9 PIN–接地(GND) b.9PIN-- 機殼螺絲(Screw)

4. 4 磁环安装(Encoder Installation)

a. 4.1 磁环内径与衬套配合尺寸(Table of encoder and recommend motor shaft diameter/ bushing outer diameter)

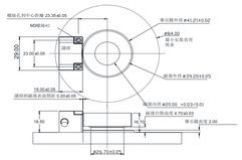
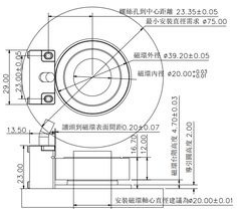
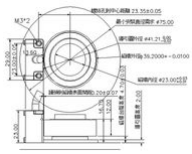
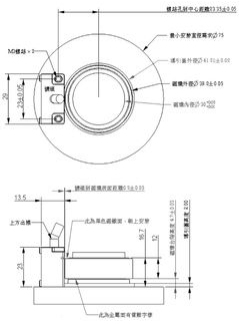
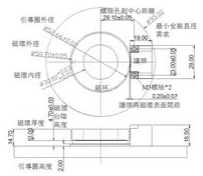
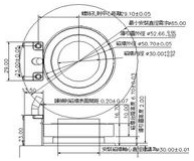
編碼器型號 Encoder Model Number	極數 Pole Number	內徑 Inner Diameter	溫度變動10℃公差範圍 Temp. 10℃ Tolerence	磁環內孔與端面垂直度誤差 Verticality	建議電機軸徑/內襯套外徑(熱套)與公差範圍 Recommend Motor Shaft Diameter/ Bushing Outer Diameter with Tolerence
		um	um	um	um
GSKM-64	64	20 +0.01 / +0.03	0.005	0.01	20 -0.005 / + 0.005
GSKM-64-23	64	23 +0.01 / +0.03	0.005	0.01	23 -0.005 / + 0.005
GSKM-64-30	64	30 +0.01 / +0.03	0.005	0.01	30 -0.005 / + 0.005
GSKM-82	82	30 +0.01 / +0.03	0.005	0.01	30 -0.005 / + 0.005
GSKM-102	102	40 +0.01 / +0.03	0.005	0.01	40 -0.005 / + 0.005
GSKM-124	124	60 +0.0 / +0.03	0.009	0.015	60 +0.0 / +0.02

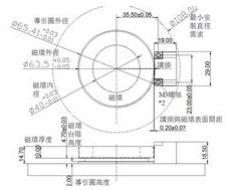
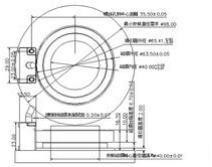
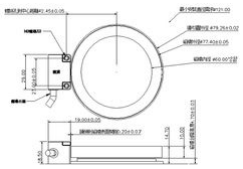
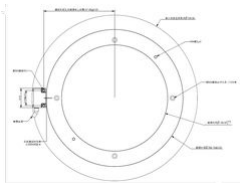
b. 4.2 干涉量建议表(Table of encoder and recommend interference range)

最大轉速 Max. Speed	RPM		3000	3500	4500	6000	8000	10000	12000	15000	20000	25000	30000
新代中空編碼器建議干涉量 Recommend Interference Range	um	GSKM-64	6-32	6-32	6-32	6-32	6-32	6-32	6-32	6-32	7-33	8-34	10-36
		GSKM-82	6-32	6-32	6-32	6-32	6-32	6-32	7-33	8-34	10-36	12-38	15-41
		GSKM-102	6-32	6-32	6-32	6-32	6-32	6-32	7-33	8-34	10-36	12-38	15-41
		GSKM-124	6-34	6-34	6-34	7-35	8-36	9-37	11-39	13-41	----	----	----

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5. 5 外型尺寸(External Dimensions)

编码器型号 Encoder Model Number	外型尺寸 External Dimensions			
S08-GSKM□-□□□-□	mm			
GSKM(T)-64-□□	GSKM-64	GSKMT-64	GSKMT-64-23	GSKMT-64-30
				
GSKM(T)-82	GSKM-82	GSKMT-82	X	X
			X	X
GSKM(T)-102	GSKM-102	GSKMT-102	X	X

			X	X
GSKM-124	**GSKM-124**	**X**	**X**	**X**
		X	X	X
GSKM-326-□	**GSKM-326-S**	**X**	**X**	**X**
		X	X	X

已下線專區

1. **規格(Specification)**

編碼器型號 Encoder Model Number		極數 Pole Number	解析度 Resolution	最大轉速 Max. Speed	內徑 Inner Diameter	外徑 Outer Diameter	安裝空間 Installation Space
S08-GSKM□-□□-□□-□		--	pulse	rpm	mm	mm	mm
GSKM-162-□	GSKM-162	162	663552	12000	82	101.6	144
	GSKM-162-S						
GSKM-242-□	GSKM-242	242	991232	10000	125	152.6	196
	GSKM-242-S						

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2. 6 磁环安装(Encoder Installation)

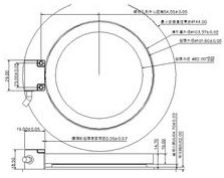
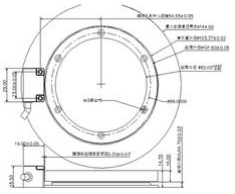
a. 6.1 磁环内径与衬套配合尺寸(Table of encoder and recommend motor shaft diameter/ bushing outer diameter)

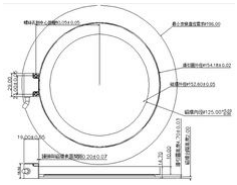
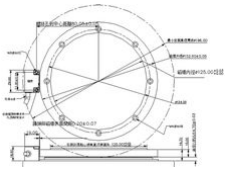
編碼器型號 Encoder Model Number	極數 Pole Number	內徑 Inner Diameter	溫度變動 10℃ 公差範圍 Temp. 10℃ Tolerence	磁環內孔與端面垂直度誤差 Verticality	建議電機軸徑/內襯套外徑(熱套)與公差範圍 Recommend Motor Shaft Diameter/ Bushing Outer Diameter with Tolerence
		um	um	um	um
GSKM-162	162	82 +0.0 / +0.03	0.012	0.015	82 +0.0 / + 0.02
GSKM-242	242	125 +0.0 / +0.03	0.018	0.015	125 +0.0 / +0.02

b. 6.2 干涉量建议表(Table of encoder and recommend interference range)

最大轉速 Max. Speed	RPM		3000	3500	4500	6000	8000	10000	12000	15000	20000	25000	30000
新代中空編碼器建議干涉量 Recommend	um	GSKM-162	7-35	7-35	7-35	9-37	11-39	14-42	18-46	----	----	----	----
		GSKM-242	8-43	9-44	11-46	15-50	24-59	35-70	----	----	----	----	----

3.

编码器型号 **Encoder Model Number**	**外型尺寸** **External Dimensions**			
S08-GSKM□-□□□-□	**mm**			
GSKM-162-□	**GSKM-162**	**GSKM-162-S**	**X**	**X**
			X	X

GSKM-242-□	**GSKM-242**	**GSKM-242-S**	**X**	**X**
			X	X

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7 新代編碼器規格說明書-文件履歷

版本號	編修日期	編修內容	Excel檔	作者	審查	核准
V1.0	2018/09/06	新增新代編碼器規格與外型尺寸、安裝須知	業務選型-新代編碼器_v1.0.xlsx	劉思伶		
V1.1	2021/3/3	新增下線產品區，將一代162/242移入下線產品區	业务选型-新代编码器_v1.1.xlsx	江國維		
V1.2	2022/4/20	更換326級圖面		江國維		

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