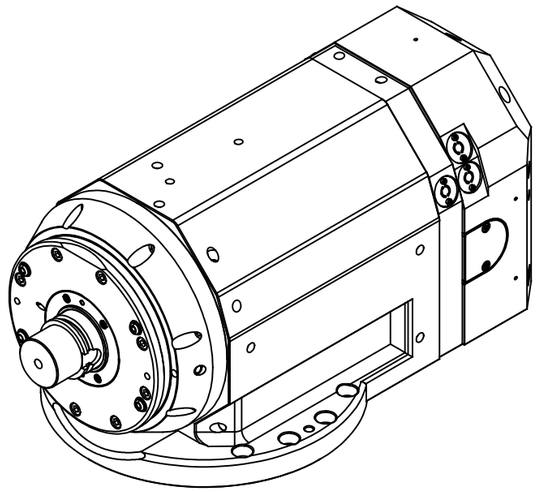
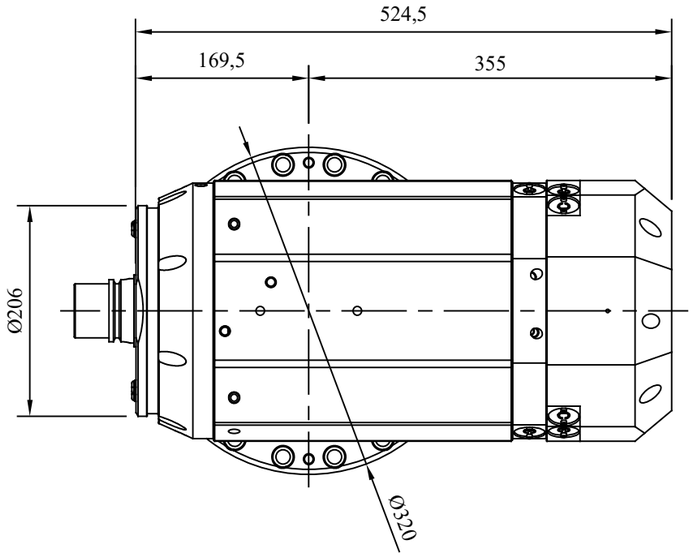
FPN:E01000000001

機密文件 翻印必究

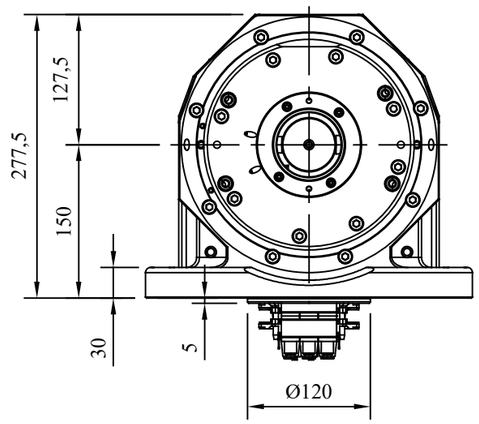


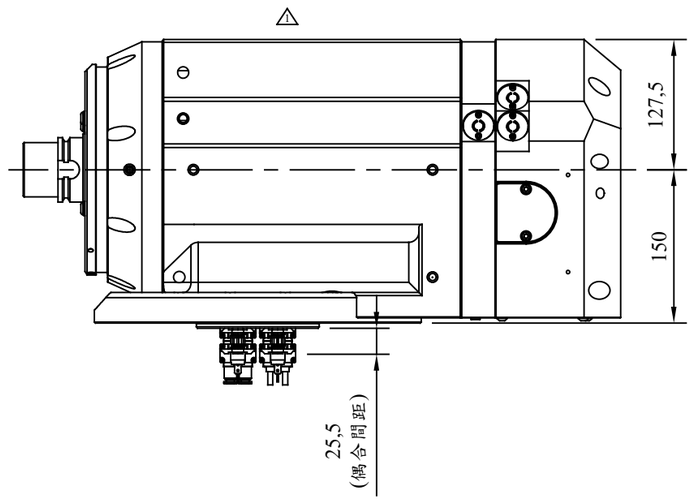


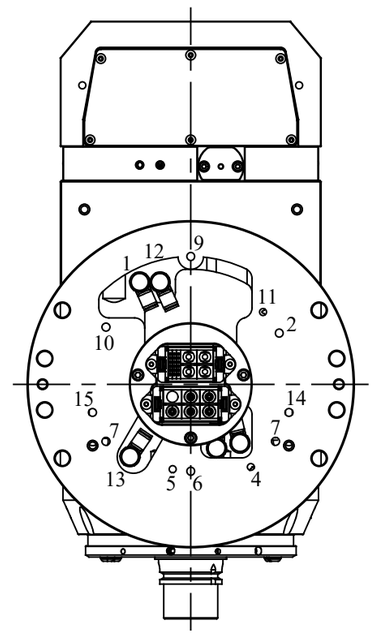
Tool Interface	DIN 69893-HSK-T63
Speed	12000 rpm
Rotation	Right
Operation Position	Vertical/Horizontal
Bearings Lubrication	Oil Air
Vibration Level	ISO 1940 PART 1 - BALANCING GRADE G1
Spindle Weight	195 kg
Spindle Clamping Force	21~25 kN
Spindle Cooling	Liquid

	Code
1	O/A2
2	CTS
3	O/A1
4	CTO
5	CTI
6	WA1
7	CT
8	FAS
9	WA2
10	TO
11	TI
12	RAS
13	CL
14	O/A RT1
15	O/A RT2

WA1	Spindle cooling in <6 bar	Ø8mm
WA2	Spindle cooling out	Ø8mm
CL	Spindle taper cleaning	Ø8mm
TO	Tool out(unclamping)-Oil in 60 bar	Ø8mm
TI	Tool in(clamping)-Oil in 15~20 bar	Ø8mm
CT	Coolant through spindle housing ≦ 10bar	Ø6mm
CTS	Coolant through shaft-In	Ø8mm
O/A1	Spindle oil-air lubrication 4~4.5 bar	Ø6mm
O/A2	Spindle oil-air lubrication 4~4.5 bar	Ø6mm
CTO	Coupling out(umclamping)-Oil in 35 bar	Ø8mm
CTI	Coupling in(clamping)-Oil in 45 bar	Ø8mm
FAS	Front air seal(Air purge) 1 bar	Ø6mm
RAS	Rear air seal(Air purge) 1 bar	Ø6mm
O/A RET1	Spindle oil-air lubrication return	Ø8mm
O/A RET2	Spindle oil-air lubrication return	Ø8mm
SNR1	Spindle CLOSED-LOOP Signal connector	18 pins
PWR	Electrical connection (U、V、W、PE)	

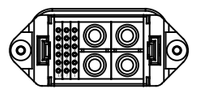


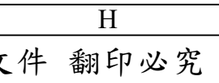




SNR1
18Pins

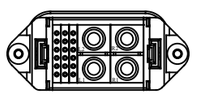
1	White	A+
2	Brown	A-
3	Pink	B+
4	Black	B-
5	Gray	Z+
6	Yellow	Z-
7	Red	+5V
8	Blue	0V
9	White	PT1000+
10	Red	PT1000-
11	Red	A PT-100
12		Shield
13	Black	Tool In
14	Black	Tool Out
15	White	b1 PT-100
16	Brown	+24V
17	Blue	0V
18	White	b2 PT-100





1	Spindle oil-air lubrication(O/A2)
3	Spindle oil-air lubrication(O/A1)
8	Front air seal(Air purge)
12	Rear air seal(Air purge)
13	Coolant through spindle housing

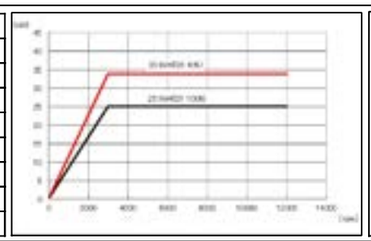
PWR

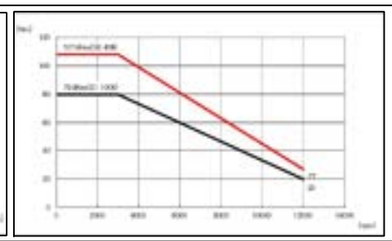


U	Black	R2
V	Brown	R1
W	Blue	L2
PE	Yellow/Green	L1

鈔達研發
2025.07.03
發行

Motor Data								
	S1-100%				S6-40%			
Voltage(V)	261	504			261	504		
Current(A)	72	46			97	54		
Frequency(Hz)	200	800			200	800		
Speed(*10rpm)	3	12			3	12		
Power(kW)	25.1	25.1			33.9	33.9		
Torque(Nm)	79.9	20			107.9	27		
N of poles	8							





3						Scale	1 : 1
2						Page	1 / 1
1						Unit	m m
Project	Change Content				Date	Name	Projection
Tolerance Zone							
Size Range	0~6	6~30	30~100	100~300	300~1000	1000~3000	
IT 12 Grade	±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	
Drawing Number	T01010000001					Designed	Chih
Image Name	Spindle Confirmation Chart					Checked	Liao
Model	TTS-255.0112HGH07L5					Approved	James
鈔達精密股份有限公司 Theta Precision Co.Ltd						Date	25-07-02
						Edition	01

THETA

Theta Precision Co.,Ltd

THETA PRECISION CO., LTD

High-speed grinding spindles For manual tool change

Dressing spindles For manual tool change

High-speed For automatic tool change

Multi-Axis Turning & Milling Spindle

Company Profile

Company Introduction

Theta Precision Co., LTD was established on 21 September 2005, our factory is in No.12, Ln. 191, Sec. 1, Minsheng Rd., Daya Dist., Taichung City 428, Taiwan (R.O.C.). We are professional factory for high speed, high precision, and high quality of spindles. We could offer customers the special size of spindles and technical support and integrated plan of machines. We also set up maintenance department to offer service for traditional spindles wherever in Taiwan or worldwide, and repair works for hidden style of motorized spindles. In this competitive market, we entertain the spirit to make things better to enforce the quality of production and service. In the future, we will continue to develop and study up the technology of high grade spindles and offer reasonable price for our customers to have stronger competitiveness in their market. To design the spindles is part of our interest and our goal, we expect to bring much more profit and innovative technology for our customers in the future.

Why choose us?

1. Use reliable spindle components (e.g., motors, bearings, precision sensing components, etc.) produced in Germany, Japan, Switzerland, Italy, the United States, Sweden, and other countries.
2. Complete parts production history.
3. All spindle parts are inspected by roundness measuring instrument/Coordinate Measuring Machine/Japanese precision measuring tools/self-made rapid inspection equipment, and the data after parts inspection are recorded.
4. The spindle production process uses measuring equipment produced in Germany/Japan/ Switzerland/the United States/UK, and other countries for inspection and testing.
5. The spindle production process has undergone hundreds of inspections and tests, and the data is recorded in detail on the production form.
6. 19 years of spindle data database can quickly adjust product characteristics according to customer needs.
7. Spindles with complete test reports.
8. Multi-national after-sales service/repair bases (UK, USA, Germany, South Korea, China, Japan Taiwan, Türkiye...continuously expanding).
9. Provide small quantity/customized production.

Ø80mm~Ø100mm - Manual tool change
High-speed grinding spindles
Application : Machining of small bores / Universal grinding applications

Type		THG-80.01(400V) THG-80.02(230V)	THGZ-80.03 (230V)	THGZ-80.06 (180V)	THG-100.01(400V) THG-100.03(230V)	THG-100.02(230V) THG-100.04(400V)
Spindle Ø		80mm	80mm	80mm	100mm	100mm
Maximum Speed (Oil-air lubrication)		120,000rpm	150,000rpm	180,000rpm	60,000rpm	90,000rpm
Bore diameter of front bearings		12mm	12mm	10mm	25mm	15mm
Rigidity	Axial (N/μm)	10N/μm	10N/μm	10N/μm	55N/μm	20N/μm
	Radial (N/μm)	20N/μm	20N/μm	18N/μm	55N/μm	30N/μm
Frequency Max. (Hz)		2,000Hz	2,500Hz	3,000Hz	2,000Hz	1,500Hz
at speed		117,500rpm	148,000rpm	180,000rpm	35,500rpm	87,600rpm
S1 kW		1kW	0.64kW	0.6kW	6.4kW	1.5kW
S6-40% kW		1.3kW	0.83kW	0.8kW	8.3kW	1.95kW
kW (Peak Power)		2.65kW	1.5kW	1.3kW	15kW	4.1kW
S1 Torque (Nm)		0.08Nm	0.04Nm	0.03Nm	1.7Nm	0.16Nm
S6-40% Torque (Nm)		0.1Nm	0.05Nm	0.04Nm	2.2Nm	0.21Nm
Tool Interface		D6/12	Collet 3~3.175mm	Collet 3~3.175mm	D14/23	D8/14
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		4.5kg	4.1kg	4.5kg	15kg	12kg
Integral Encoder For Closed-Loop Control		N/A	N/A	N/A	N/A	N/A
Coolant Through Shaft (CTS)		N/A	N/A	N/A	Option	Option
Grease Lubrication.		Also available with grease lubrication. This lubrication leads to speed reduction.				
Flange Type		N/A	N/A	N/A	Option	N/A

THG-80.01
THG-80.02

THGZ-80.03
THGZ-80.06

THG-100.01
THG-100.03

THG-100.02
THG-100.04

Ø100mm~Ø120mm - Manual tool change
High-speed grinding spindles
Application : Machining of small bores / Universal grinding applications

Type		THG-100.12(350V)	THG-120.02(400V) THG-120.15(230V)	THG-120.01(400V) THG-120.08(230V)	THG-120.14 (400V)	THG-120.17(400V) THG-120.18(230V)
Spindle Ø		100mm	120mm	120mm	120mm	120mm
Maximum Speed (Oil-air lubrication)		105,000rpm	36,000rpm	42,000rpm	42,000rpm	36,000rpm
Bore diameter of front bearings		15mm	40mm	40mm	40mm	45mm
Rigidity	Axial (N/µm)	26N/µm	90N/µm	90N/µm	90N/µm	100N/µm
	Radial (N/µm)	24N/µm	120N/µm	120N/µm	120N/µm	130N/µm
Frequency Max. (Hz)		1,750Hz	1,200Hz	1,400Hz	1,400Hz	1,200Hz
at speed		105,000rpm	9,700rpm	17,600rpm	35,700rpm	17,600rpm
S1 kW		1.4kW	4.6kW	10kW	13kW	10kW
S6-40% kW		1.8kW	6kW	13kW	16.9kW	13kW
kW (Peak Power)		2.9kW	14kW	25kW	30.6kW	25kW
S1 Torque (Nm)		0.13Nm	4.5Nm	5.4Nm	3.5Nm	5.4Nm
S6-40% Torque (Nm)		0.17Nm	5.9Nm	7.1Nm	4.5Nm	7.1Nm
Tool Interface		D8/14	D22/38 HSK-C32	D22/38 HSK-C32	D22/38 HSK-C32	D28/43 HSK-C40
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		12kg	25kg	25kg	25kg	25kg
Integral Encoder For Closed-Loop Control		N/A	Option	Option	Option	Option
Coolant Through Shaft (CTS)		Option	Option	Option	Option	Option
Grease Lubrication.		Also available with grease lubrication. This lubrication leads to speed reduction.				
Flange Type		N/A	Option	Option	Option	Option

THG-100.12

THG-120

Ø120mm~Ø150mm - Manual tool change
High-speed grinding spindles
Application : Universal grinding / Universal grinding with high rigidity

Type		THG-120.20(380V) THG-120.22(220V)	THG-120.21 (400V)	THG-120.24 (380V)	THG-120.26 (400V)	THG-150.01(380V) THG-150.03(220V)
Spindle Ø		120mm	120mm	120mm	120mm	150mm
Maximum Speed (Oil-air lubrication)		51,000rpm	45,000rpm	45,000rpm	30,000rpm	36,000rpm
Bore diameter of front bearings		30mm	45mm	45mm	55mm	50mm
Rigidity	Axial (N/µm)	70N/µm	100N/µm	90N/µm	100N/µm	130N/µm
	Radial (N/µm)	100N/µm	130N/µm	130N/µm	145N/µm	150N/µm
Frequency Max. (Hz)		1,700Hz	1,500Hz	1,000Hz	1,000Hz	1,200Hz
at speed		29,700rpm	35,700rpm	29,700rpm	23,700rpm	13,500rpm
S1 kW		10kW	13kW	18kW	15kW	15kW
S6-40% kW		12.5kW	16.9kW	23kW	19.5kW	20kW
kW (Peak Power)		25kW	30.6kW	84.3kW	56.4kW	50kW
S1 Torque (Nm)		3.2Nm	3.5Nm	5.8Nm	6Nm	10.6Nm
S6-40% Torque (Nm)		4.0Nm	4.5Nm	7.4Nm	7.9Nm	14.1Nm
Tool Interface		D16/28	D28/43 HSK-C40	D28/43 HSK-C40	D32/53 HSK-C50	D28/43 HSK-C40
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		25kg	25kg	27kg	30kg	43kg
Integral Encoder For Closed-Loop Control		Option	Option	Option	Option	Option
Coolant Through Shaft (CTS)		Option	Option	Option	Option	Option
Grease Lubrication.		Also available with grease lubrication. This lubrication leads to speed reduction.				
Flange Type		Option	Option	Option	Option	Standard

THG-120

THG-150

Ø150mm - Manual tool change
High-speed grinding spindles
Application : Universal grinding / Universal grinding with high rigidity

Type		THG-150.01(380V) THG-150.03(220V)	THG-150.02 (400V)	THG-150.06 (350V)	THG-150.07 (350V)	THG-150.10 (400V)
Spindle Ø		150mm	150mm	150mm	150mm	150mm
Maximum Speed (Oil-air lubrication)		24,000rpm	42,000rpm	30,000rpm	30,000rpm	18,000rpm
Bore diameter of front bearings		65mm	40mm	65mm	65mm	65mm
Rigidity	Axial (N/μm)	130N/μm	90N/μm	130N/μm	130N/μm	130N/μm
	Radial (N/μm)	200N/μm	120N/μm	200N/μm	200N/μm	150N/μm
Frequency Max. (Hz)		800Hz	1,400Hz	1,000Hz	1,000Hz	600Hz
at speed		13,500rpm	17,600rpm	14,700rpm	20,700rpm	11,600rpm
S1 kW		15kW	10kW	23kW	33kW	13.5kW
S6-40% kW		20kW	13kW	30kW	43kW	17.6kW
kW (Peak Power)		50kW	25kW	61.2kW	98.1kW	32.1kW
S1 Torque (Nm)		10.6Nm	5.4Nm	15Nm	15.2Nm	11.1Nm
S6-40% Torque (Nm)		14.1Nm	7.1Nm	19.5Nm	19.8Nm	14.5Nm
Tool Interface		D36/63 HSK-C63	D22/38 HSK-C32	D36/63 HSK-C63	D36/63 HSK-C63	D36/63 HSK-C63
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		43kg	43kg	55kg	55kg	47kg
Integral Encoder For Closed-Loop Control		Option	Option	Option	Option	Option
Coolant Through Shaft (CTS)		Option	Option	Option	Option	Option
Grease Lubrication.		Also available with grease lubrication. This lubrication leads to speed reduction.				
Flange Type		Standard	Standard	Standard	Standard	Standard

THG-150

Ø170mm~Ø190mm - Manual tool change
High-speed grinding spindles
Application : Universal grinding / Universal grinding with high rigidity

Type		THG-170.01(400V) THG-170.02(230V)	THG-170.06(380V)	THGN-170.01(230V) THGN-170.02(400V)	THGN-170.03 (380V)	THG-190.01 (400V)
Spindle Ø		170mm	170mm	170mm	170mm	190mm
Maximum Speed (Oil-air lubrication)		24,000rpm	24,000rpm	20,000rpm	20,000rpm	10,000rpm
Bore diameter of front bearings		65mm	65mm	70mm	70mm	80mm
Rigidity	Axial (N/μm)	150N/μm	150N/μm	180N/μm	180N/μm	200N/μm
	Radial (N/μm)	200N/μm	200N/μm	200N/μm	200N/μm	250N/μm
Frequency Max. (Hz)		800Hz	800Hz	667Hz	667Hz	667Hz
at speed		5,870rpm	9,860rpm	5,870rpm	9,860rpm	3,200rpm
S1 kW		18kW	30kW	18kW	30kW	15kW
S6-40% kW		23.4kW	39kW	23.4kW	39kW	19.5kW
kW (Peak Power)		58kW	106kW	58kW	106kW	N/A
S1 Torque (Nm)		29.3Nm	29.1Nm	29.3Nm	29.1Nm	44.8Nm
S6-40% Torque (Nm)		38.1Nm	37.8Nm	38.1Nm	37.8Nm	58Nm
Tool Interface		D36/63 HSK-C63	D36/63 HSK-C63	D36/68 HSK-C63	D36/68 HSK-C63	D36/68 D36/78 HSK-C63
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		63kg	63kg	65kg	65kg	80kg
Integral Encoder For Closed-Loop Control		Option	Option	Option	Option	Option
Coolant Through Shaft (CTS)		Option	Option	Option	Option	Option
Grease Lubrication.		Also available with grease lubrication. This lubrication leads to speed reduction.				
Flange Type		Standard	Standard	Standard	Standard	Standard

THG-170

THGN-170

THG-190

Ø120mm~Ø170mm
High-speed grinding spindles
Application : Universal grinding
Manual tool change

Type		THGA-H120.01 (160V)	THGA-H120.02 (200V)	THGA-H120.03 (200V)	THGA-H130.01 (200V)	THGA-H170.01 (200V)
Spindle Ø		120mm	120mm	120mm	130mm	170mm
Maximum Speed (Oil-air lubrication)		80,000rpm	60,000rpm	80,000rpm	50,000rpm	30,000rpm
Bore diameter of front bearings		25mm	30mm	25mm	40mm	70mm
Rigidity	Axial (N/μm)	40N/μm	50N/μm	40N/μm	80N/μm	110N/μm
	Radial (N/μm)	50N/μm	60N/μm	50N/μm	80N/μm	140N/μm
Frequency Max. (Hz)		1,334Hz	1,000Hz	1,334Hz	834Hz	500Hz
at speed		78,500rpm	59,500rpm	79,100rpm	39,400rpm	19,800rpm
S1 kW		1.5kW	3kW	2.4kW	3.9kW	7.5kW
S6-40% kW		2kW	4kW	3.0kW	5.1kW	9.8kW
kW (Peak Power)		2.7kW	9.2kW	7.9kW	8kW	17kW
S1 Torque (Nm)		0.18Nm	0.48Nm	0.29Nm	0.95Nm	3.6Nm
S6-40% Torque (Nm)		0.24Nm	0.64Nm	0.37Nm	1.24Nm	4.7Nm
Tool Interface		D15/25	D18/30	D15/25	D22/40	D35/65
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		10kg	13kg	10kg	32kg	42kg
Integral Encoder For Closed-Loop Control		N/A	N/A	N/A	N/A	N/A
Coolant Through Shaft (CTS)		N/A	N/A	N/A	N/A	N/A
Grease Lubrication.		N/A	N/A	N/A	N/A	N/A
Flange Type		N/A	N/A	N/A	N/A	N/A

THGA-H120

THGA-H130

THGA-H170

Ø150mm
High-speed grinding spindles
Application : Universal grinding
Manual tool change

Type		THGD-M150.01 (155V)	THGD-M150.02 (220V)	THGD-M150.03 (230V)
Spindle Ø		150mm	150mm	150mm
Maximum Speed (Oil-air lubrication)		15,000rpm	24,000rpm	60,000rpm
Bore diameter of front bearings		35mm	25mm	25mm
Rigidity	Axial (N/μm)	70N/μm	40N/μm	55N/μm
	Radial (N/μm)	130N/μm	60N/μm	55N/μm
Frequency Max. (Hz)		250Hz	400Hz	2,000Hz
at speed		14,800rpm	20,960rpm	35,500rpm
S1 kW		3.2kW	4.5kW	6.4kW
S6-40% kW		4.2kW	5.9kW	8.3kW
kW (Peak Power)		11kW	11kW	15kW
S1 Torque (Nm)		2.1Nm	2.1Nm	1.7Nm
S6-40% Torque (Nm)		2.7Nm	2.7Nm	2.2Nm
Tool Interface		D22/40	Ø15.875/40/M12x1.25P	D14/23
Spindle Cooling		Water cooling /Oil cooling		
Spindle Weight		32kg	32kg	24kg
Integral Encoder For Closed-Loop Control		N/A	N/A	N/A
Coolant Through Shaft (CTS)		N/A	N/A	N/A
Grease Lubrication.		N/A	N/A	N/A
Flange Type		N/A	N/A	N/A

THGD-M150

Ø220mm~Ø240mm
High-speed grinding spindles
Application : Universal grinding
Manual tool change

Type		THGA-220.03 (372V)	THGA-220.05 (380)	THGA-220.06 (372V)	THGS-240.02 (380V)
Spindle Ø		220mm	220mm	220mm	240mm
Maximum Speed		6,000rpm	6,000rpm	6,000rpm	5,000rpm
Bore diameter of front bearings		90mm	90mm	90mm	110mm
Rigidity	Axial (N/μm)	230N/μm	230N/μm	230N/μm	400N/μm
	Radial (N/μm)	240N/μm	240N/μm	240N/μm	300N/μm
Frequency Max. (Hz)		200Hz	200Hz	200Hz	260Hz
at speed		3,000rpm	1,500rpm	3,000rpm	3,500rpm
S1 kW		24kW	16kW	24kW	23.6kW
S6-40% kW		31.2kW	21kW	31.2kW	30kW
kW (Peak Power)		55kW	N/A	55kW	N/A
S1 Torque (Nm)		76.4Nm	102Nm	76.4Nm	66Nm
S6-40% Torque (Nm)		99.3Nm	134Nm	99.3Nm	84Nm
Tool Interface		Standardised or according to customer's specifications.			
Spindle Cooling		Water cooling /Oil cooling			
Spindle Weight		160kg	160kg	160kg	218kg
Integral Encoder For Closed-Loop Control		Option	Option	Option	Option
Coolant Through Shaft (CTS)		Option	Option	Option	Option
Grease Lubrication.		Also available with grease lubrication.This lubrication leads to speed reduction.			
Flange Type / Square Type		Standard	Standard	Option	Square Type

THGA-220

THGS-240

Ø49.5mm~Ø60mm
Dressing Spindles
Application : Dressing
Manual tool change

Type		THGA-V50.01 (200V)	THGA-60.01 (220V)	THGL-60.01 (130V)
Spindle Ø		49.5mm	60mm	60mm
Built-in Spindle Motor		Asynchronous motor		
Maximum Speed	Grease	N/A	N/A	12,000rpm
	Oil-Air	18,000rpm	24,000rpm	N/A
Frequency Max. (Hz)		334Hz	400Hz	200Hz
at speed		18,000rpm	19,600rpm	11,700rpm
S1 kW		0.1kW	0.45kW	0.26kW
S1 Torque (Nm)		0.05Nm	0.21Nm	0.21Nm
Tool Interface / Grinding Wheel Flange		M6 X P1.0	External Taper 1/5	
		N/A	Grinding Wheel Flange Contact Face Φ 56mm	
		Shaft Ø 12mm	Grinding Wheel Flange Centering Φ 40mm	
Rotational Direction		Left or Right		
Spindle Cooling		N/A	N/A	N/A
Spindle Weight		2.2kg	3kg	4kg
Integral Encoder For Closed-Loop Control		N/A	N/A	N/A
Built-In AE Sensor		N/A	N/A	N/A
Grease Lubricated		N/A	N/A	Standard
Flange Type		Standard	Standard	N/A

THGA-V50.01

THGA-60.01

THGL-60.01

Ø72mm~Ø110mm
Dressing Spindles
Application : Dressing
Manual tool change

Type		THGZ-72 (170V)	TTGZ-72.01 (300V)	TTGZ-72.02 (110V)	TTGD-110.02 (220V)
Spindle Ø		72mm	72mm	72mm	110mm
Built-in Spindle Motor		Asynchronous motor	Synchronous motor		
Maximum Speed	Grease	12,000rpm	6,000rpm	12,000rpm	9,000rpm
	Oil-Air	N/A	N/A	N/A	N/A
Frequency Max. (Hz)		400Hz	200Hz	400Hz	300Hz
at speed		12,000rpm	6,000rpm	10,000rpm	9,000rpm
S1 kW		1.2kW	1.8kW	1.0kW	1.2kW
S1 Torque (Nm)		0.96Nm	3.0Nm	1.0Nm	1.27Nm
Tool Interface / Flat Contact Face Φ		Standardised or according to customer's specifications.			
Tool Interface / Centering Diamter		Standardised or according to customer's specifications.			
Rotational Direction		Left or Right or Left&Right			
Spindle Cooling		Compressed Air	Water cooling / Oil cooling	Compressed Air	Water cooling / Oil cooling
Spindle Weight		4kg	4kg	4kg	14kg
Integral Encoder For Closed-Loop Control		N/A	N/A	N/A	Option
Built-In AE Sensor		Option	Option	Option	Option
Grease Lubricated		Standard	Standard	Standard	Standard
Flange Type / Block housing		N/A	N/A	N/A	Block housing

THGZ-72
TTGZ-72

TTGD-110

Ø62mm~Ø80mm
High Frequency Spindles
Application : Engraving
Automatic Tool Change

Type		THZ-62.03 (220V)		THZ-62.05 (220V)	THZ-62.06 (170V)	THZ-80.01(220V) THZ-80.02(380V)
Spindle Ø		61.91mm	61.91mm	61.91mm	61.91mm	80mm
Maximum Speed		60,000rpm Grease	70,000rpm Grease	70,000rpm Grease	60,000rpm Grease	50,000rpm Oil-Air
Bore diameter of front bearings		17mm	17mm	20mm	17mm	25mm
Rigidity	Axial (N/μm)	28N/μm	28N/μm	38N/μm	28N/μm	40N/μm
	Radial (N/μm)	35N/μm	35N/μm	40N/μm	35N/μm	42N/μm
Frequency Max. (Hz)		1,000Hz	1,167Hz	1,167Hz	1,000Hz	833Hz
at speed		60,000rpm	70,000rpm	70,000rpm	60,000rpm	30,000rpm
S1 kW		1.2kW	1.5kW	1.5kW	1.2kW	2.2kW
S6-40% kW		1.5kW	1.8kW	1.8kW	1.4kW	2.9kW
S1 Torque (Nm)		0.20Nm	0.20Nm	0.20Nm	0.20Nm	0.70Nm
S6-40% Torque (Nm)		0.24Nm	0.24Nm	0.24Nm	0.22Nm	0.90Nm
Tool Interface		WT-5 (Collet 1~6mm)	WT-5 (Collet 1~6mm)	HSK-E20	Collet 3.175~6mm	HSK-E25 ISO-15
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		4kg	4kg	3.6kg	4kg	6.2kg
Integral Encoder For Closed-Loop Control		N/A	N/A	N/A	N/A	Option
Coolant Through Shaft (CTS)		N/A	N/A	N/A	N/A	N/A
Tool Position Sensor		N/A	N/A	N/A	N/A	Proximity switches
Front Bearing Temperature Sensor		N/A	N/A	N/A	N/A	N/A

THZ-62.03

THZ-62.05

THZ-62.06

THZ-80.01
THZ-80.02

Ø80mm~Ø120mm
High Frequency Spindles
Application : Engraving / Milling / Grinding
Automatic Tool Change

Type		TH-80.01(220V) TH-80.02(380V)	TH-100.03(400V) TH-100.04(230V)		TH-120.03(400V) TH-120.04(230V)	
Spindle Ø		80mm	100mm	100mm	120mm	120mm
Maximum Speed		40,000rpm Grease	30,000rpm Oil-Air	40,000rpm Oil-Air	30,000rpm Oil-Air	36,000rpm Oil-Air
Bore diameter of front bearings		25mm	35mm	35mm	40mm	40mm
Rigidity	Axial (N/μm)	40N/μm	90N/μm	90N/μm	90N/μm	90N/μm
	Radial (N/μm)	50N/μm	90N/μm	90N/μm	120N/μm	120N/μm
Frequency Max. (Hz)		1,334Hz	1,000Hz	1,334Hz	1,000Hz	1,200Hz
at speed		32,100rpm	11,700rpm	11,700rpm	9,700rpm	9,700rpm
S1 kW		2.5kW	3kW	3kW	4.6kW	4.6kW
S6-40% kW		3.3kW	3.9kW	3.9kW	6kW	6kW
kW (Peak Power)		5.8kW	8kW	8kW	14kW	14kW
S1 Torque (Nm)		0.7Nm	2.4Nm	2.4Nm	4.5Nm	4.5Nm
S6-40% Torque (Nm)		1Nm	3.2Nm	3.2Nm	5.9Nm	5.9Nm
Tool Interface		ISO-20	ISO-25	HSK-E32	BT-30 BBT-30	HSK-E40 HSK-F50
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		8kg	15kg	15kg	27kg	27kg
Integral Encoder For Closed-Loop Control		N/A	Option	Option	Option	Option
Coolant Through Shaft (CTS)		N/A	N/A	N/A	Option	Option
Tool Position Sensors		Proximity switches / Analog sensor				
Front Bearing Temperature Sensor		N/A	N/A	N/A	Standard	Standard

TH-80.01
TH-80.02

TH-100.03
TH-100.04

TH-120.03
TH-120.04

Ø120mm~Ø170mm
High Frequency Spindles
Application : Milling / Grinding
Automatic Tool Change

Type		TH-120.01(400V) TH-120.02(230V)		TH-150.01(380V) TH-150.02(220V)	TH-170.05(400V) TH-170.02(230V)	
Spindle Ø		120mm	120mm	150mm	170mm	170mm
Maximum Speed (Oil-Air) Also available with grease lubrication. This lubrication leads to speed reduction.		30,000rpm	42,000rpm	36,000rpm	20,000rpm	24,000rpm
Bore diameter of front bearings		40mm	40mm	50mm	65mm	65mm
Rigidity	Axial (N/μm)	90N/μm	90N/μm	130N/μm	150N/μm	150N/μm
	Radial (N/μm)	120N/μm	120N/μm	150N/μm	200N/μm	200N/μm
Frequency Max. (Hz)		1,000Hz	1,400Hz	1,200Hz	667Hz	800Hz
at speed		17,600rpm	17,600rpm	13,500rpm	5,870rpm	5,870rpm
S1 kW		10kW	10kW	15kW	18kW	18kW
S6-40% kW		13kW	13kW	20kW	23.4kW	23.4kW
kW (Peak Power)		25kW	25kW	50kW	58kW	58kW
S1 Torque (Nm)		5.4Nm	5.4Nm	10.6Nm	29.3Nm	29.3Nm
S6-40% Torque (Nm)		7.1Nm	7.1Nm	14.1Nm	38.1Nm	38.1Nm
Tool Interface		BT-30 BBT-30	HSK-E40 HSK-F50	HSK-E50 HSK-F63	BT-40 BBT-40	HSK-A63 HSK-E63
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		27kg	27kg	46kg	63kg	63kg
Integral Encoder For Closed-Loop Control		Option	Option	Option	Option	Option
Coolant Through Shaft (CTS)		Option	Option	Option	Option	Option
Tool Position Sensors		Proximity switches / Analog sensor				
Front Bearing Temperature Sensor		Standard	Standard	Standard	Standard	Standard

TH-120.01
TH-120.02

TH-150.01
TH-150.02

TH-170.05
TH-170.02

Ø170mm~Ø210mm
High Frequency Spindles
Application : Milling / Grinding
Automatic Tool Change

Type		TH-170.03 (380V)		THN-170.02(230V) THN-170.03(400V)	TH-190.04 (400V)	TH-210.01 (400V)
Spindle Ø		170mm	170mm	170mm	190mm	210mm
Maximum Speed (Oil-Air) Also available with grease lubrication. This lubrication leads to speed reduction.		20,000rpm	30,000rpm	20,000rpm	12,000rpm	18,000rpm
Bore diameter of front bearings		65mm	65mm	70mm	70mm	70mm
Rigidity	Axial (N/μm)	150N/μm	150N/μm	180N/μm	180N/μm	180N/μm
	Radial (N/μm)	200N/μm	200N/μm	200N/μm	200N/μm	200N/μm
Frequency Max. (Hz)		667Hz	1,000Hz	667Hz	800Hz	1,200Hz
at speed		9,860rpm	9,860rpm	5,870rpm	3,200rpm	2,000rpm
S1 kW		30kW	30kW	18kW	16kW	15kW
S6-40% kW		39kW	39kW	23.4kW	20.8kW	19.5kW
kW (Peak Power)		106kW	106kW	58kW	63kW	83kW
S1 Torque (Nm)		29.1Nm	29.1Nm	29.3Nm	47.8Nm	71.6Nm
S6-40% Torque (Nm)		37.8Nm	37.8Nm	38.1Nm	62.1Nm	93.1Nm
Tool Interface		BT-40 BBT-40	HSK-A63 HSK-E63	BT-40 BBT-40	HSK-A63 HSK-C63	HSK-A63 BBT-40
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		63kg	63kg	65kg	80kg	100kg
Integral Encoder For Closed-Loop Control		Option	Option	Option	Option	Option
Coolant Through Shaft (CTS)		Option	Option	Option	Option	Option
Tool Position Sensors		Proximity switches / Analog sensor				
Front Bearing Temperature Sensor		Standard	Standard	Standard	Standard	Standard

TH-170.03

THN-170.02
THN-170.03

TH-190.04

TH-210.01

Ø230mm
High Frequency Spindles
Application : Milling / Grinding
Automatic Tool Change

Type		TH-230.02 (400V)	TH-230.05 (400V)	TH-230.12 (400V)	TH-230.23 (400V)	TH-230.24 (400V)
Spindle Ø		230mm	230mm	230mm	230mm	230mm
Maximum Speed (Oil-Air) Also available with grease lubrication. This lubrication leads to speed reduction.		16,000rpm	12,000rpm	20,000rpm	12,000rpm	15,000rpm
Bore diameter of front bearings		70mm	100mm	70mm	100mm	70mm
Rigidity	Axial (N/μm)	Standardised or According to customer needs. It is available to increase the static rigidity, but the maximum speed will be reduced.				
	Radial (N/μm)					
Frequency Max. (Hz)		533Hz	400Hz	667Hz	800Hz	1,000Hz
Low winding	S1 kW	20kW	20kW	20kW	18.5kW	15kW
	S1 Torque (Nm)	96.5Nm	96.5Nm	96.5Nm	177Nm	136Nm
	S6-40% kW	25kW	25kW	25kW	26kW	21.1kW
	S6-40% Torque (Nm)	121Nm	121Nm	121Nm	248Nm	196Nm
	at speed	1,980rpm	1,980rpm	1,980rpm	1,000rpm	1,050rpm
High winding	S1 kW	N/A	N/A	N/A	22kW	18.5kW
	S1 Torque (Nm)	N/A	N/A	N/A	70Nm	55Nm
	S6-40% kW	N/A	N/A	N/A	30.8kW	26kW
	S6-40% Torque (Nm)	N/A	N/A	N/A	98Nm	77.6Nm
	at speed	N/A	N/A	N/A	3,000rpm	3,200rpm
kW (Peak Power)		171kW	171kW	171kW	40kW	32kW
Tool Interface		HSK-A63 BBT-40	HSK-A100 BBT-50	HSK-A63 BBT-40	HSK-A100 BBT-50	HSK-A80
Spindle Cooling		Water cooling /Oil cooling				
Spindle Weight		180kg	210kg	145kg	210kg	170kg
Integral Encoder For Closed-Loop Control		Option	Option	Option	Option	Option
Coolant Through Shaft(CTS)		Option	Option	Option	Option	Option
Tool Position Sensors		Proximity switches / Analog sensor				
Front Bearing Temperature Sensor		Standard	Standard	Standard	Standard	Standard

TH-230

Ø210mm~Ø255mm
Multi-axis spindles
Application : Milling / Turning and Milling
Automatic Tool Change

Type		THS-210.01(400V) Asynchronous Motor	THS-255.01(400V) Multi-Axis Mill Turn Spindle Asynchronous Motor	TTS-255.01(504V) Multi-Axis Mill Turn Spindle Synchronous Motor
Spindle Ø		210mm	255mm	255mm
Maximum Speed (Oil-Air) Also available with grease lubrication. This lubrication leads to speed reduction.		15,000rpm	12,000rpm	12,000rpm
Bore diameter of front bearings		70mm	70mm	70mm
Rigidity	Axial (N/μm)	Standardised or According to customer needs. It is available to increase the static rigidity, but the maximum speed will be reduced.		
	Radial (N/μm)			
Frequency Max. (Hz)		1,000Hz	800Hz	800Hz
at speed		2,000rpm	3,200rpm	3,000rpm
S1 kW		15kW	16kW	25.1kW
S6-40% kW		19.5kW	20.8kW	33.9kW
kW (Peak Power)		83kW	63kW	52.8kW
S1 Torque (Nm)		71.6Nm	47.8Nm	79.9Nm
S6-40% Torque (Nm)		93.1Nm	62.1Nm	107.9Nm
Tool Interface		HSK-A63 BBT-40	HSK-T63 Capto C6	HSK-T63 Capto C6
Spindle Cooling		Water cooling /Oil cooling		
Spindle Weight		120kg	195kg	195kg
Integral Encoder For Closed-Loop Control		Option	Option	Option
Coolant Through Shaft (CTS)		Option	Option	Option
Tool Position Sensors		Proximity switches / Analog sensor		
Front Bearing Temperature Sensor		Standard	Standard	Standard

THS-210.01

THS-255.01

TTS-255.01

Ø120mm
High Frequency Spindles
Application : Milling / Grinding
Automatic Tool Change

Type		TH-120.08	TH-120.11	TH-120.15		TT-120.04
FANUC BUILT-IN SPINDLE MOTOR		Bii 40M/70000	Bii 50L/30000	Bii 56L/40000		Bis 56L2/15000-B
Spindle Ø		120mm	120mm	120mm	120mm	120mm
Maximum Speed (Oil-Air) Also available with grease lubrication. This lubrication leads to speed reduction.		40,000rpm	30,000rpm	30,000rpm	40,000rpm	12,000rpm
Bore diameter of front bearings		40mm	40mm	40mm	40mm	40mm
Rigidity	Axial (N/µm)	90N/µm	90N/µm	90N/µm	90N/µm	90N/µm
	Radial (N/µm)	120N/µm	120N/µm	120N/µm	120N/µm	120N/µm
at speed		30,000rpm	15,000rpm	12,000rpm	12,000rpm	7,500rpm
S1 kW		3.0kW	7.5kW	7.5kW	7.5kW	10kW
S2/S3 kW		3.5kW(S2-10min)	9kW(S3-25%)	9kW(S3-25%)	9kW(S3-25%)	11kW(S6-15%)
S1 Torque (Nm)		0.95Nm	4.77Nm	5.9Nm	5.9Nm	12.7Nm
S2/S3 Torque (Nm)		1.1Nm(S2)	6.14 / 7Nm(S3)	7.16Nm(S3)	7.16Nm(S3)	15Nm(S6-15%)
Tool Interface		HSK-E32	HSK-E40 BBT-30	BT-30 BBT-30	HSK-E40 HSK-F50	HSK-E40 HSK-F50
Spindle Cooling		Water cooling Also available with Oil cooling. This cooling leads to motor power reduction.				
Spindle Weight		27kg	27kg	27kg	27kg	27kg
Integral Encoder For Closed-Loop Control		Option	Standard	Standard	Standard	Standard
Coolant Through Shaft (CTS)		N/A	Option	Option	Option	Option
Tool Position Sensors		Proximity switches / Analog sensor				
Front Bearing Temperature Sensor		N/A	Standard	Standard	Standard	Standard

TH-120

TT-120

Ø170mm~Ø190mm
High Frequency Spindles
Application : Milling / Grinding
Automatic Tool Change

Type		TH-170.07	THN-170.04	TH-170.09		TH-190.05
FANUC BUILT-IN SPINDLE MOTOR		Bi 80M/30000	Bi 90L/25000	Bi 90L/25000 TYPE M		Bi 112S/20000-B
Spindle Ø		170mm	170mm	170mm	170mm	190mm
Maximum Speed (Oil-Air) Also available with grease lubrication. This lubrication leads to speed reduction.		30,000rpm	20,000rpm	20,000rpm	24,000rpm	20,000rpm
Bore diameter of front bearings		55mm	70mm	65mm	65mm	70mm
Rigidity	Axial (N/μm)	140N/μm	180N/μm	150N/μm	150N/μm	180N/μm
	Radial (N/μm)	150N/μm	200N/μm	200N/μm	200N/μm	200N/μm
at speed		7,000rpm	6,000rpm	6,000rpm	6,000rpm	3,200rpm
S1 kW		11kW	18.5kW	18.5kW	18.5kW	15kW
S2/S3 kW		15kW(S2-15min) 18.5kW(S3-25%)	26kW(S3-25%)	26kW(S3-25%)	26kW(S3-25%)	18.5kW (S2/S3-10mim)
S1 Torque (Nm)		15Nm	29.5Nm	29.5Nm	29.5Nm	44.8Nm
S2/S3 Torque (Nm)		20.5/23Nm (S2/S3)	43Nm(S3-25%)	43Nm(S3-25%)	43Nm(S3-25%)	55.2Nm(S2-10mim) 63.0Nm(S3-10mim)
Tool Interface		HSK-E50 HSK-F63	HSK-A63 BBT-40	BT-40 BBT-40	HSK-A63 HSK-E63	HSK-A63 / BBT-40 HSK-C63
Spindle Cooling		Water cooling Also available with Oil cooling. This cooling leads to motor power reduction.				
Spindle Weight		58kg	65kg	63kg	63kg	87kg
Integral Encoder For Closed-Loop Control		Standard	Standard	Standard	Standard	Standard
Coolant Through Shaft (CTS)		Option	Option	Option	Option	Option
Tool Position Sensors		Proximity switches / Analog sensor				
Front Bearing Temperature Sensor		Standard	Standard	Standard	Standard	Standard

TH-170.07

THN-170.04

TH-170.09

TH-190.05

Ø190mm~Ø230mm
High Frequency Spindles
Application : Milling / Grinding
Automatic Tool Change

Type		TH-190.01	TH-230.01	TH-230.04	TH-230.08	TH-230.13
FANUC BUILT-IN SPINDLE MOTOR		Bi 112S/20000i	Bi 112L/15000i	Bi 112L/15000i	Bi 112L/20000i	Bi 112L/20000i
Spindle Ø		190mm	230mm	230mm	230mm	230mm
Maximum Speed (Oil-Air) Also available with grease lubrication. This lubrication leads to speed reduction.		20,000rpm	15,000rpm	10,000rpm	20,000rpm	12,000rpm
Bore diameter of front bearings		70mm	70mm	100mm	70mm	70mm
Rigidity	Axial (N/μm)	180N/μm	Standardised or According to customer needs. It is available to increase the static rigidity, but the maximum speed will be reduced.			
	Radial (N/μm)	200N/μm				
Low winding	S1 kW	7.5kW	15kW	15kW	15kW	15kW
	S1 Torque (Nm)	31Nm	95Nm	95Nm	80Nm	80Nm
	S2/S3 kW	11kW(S3-15%)	18.5kW(S3-15%)	18.5kW(S3-15%)	18.5kW(S3-25%)	18.5kW(S3-25%)
	S2/S3 Torque (Nm)	60Nm(S3-15%)	167Nm(S3-15%)	167Nm(S3-15%)	118Nm(S3-25%)	118Nm(S3-25%)
	at speed	2,300rpm	1,500rpm	1,500rpm	1,800rpm	1,800rpm
High winding	S1 kW	11kW	18.5kW	18.5kW	18.5kW	18.5kW
	S1 Torque (Nm)	18Nm	35Nm	35Nm	22Nm	22Nm
	S2/S3 kW	18.5kW(S2-10min)	22kW(S2-15min)	22kW(S2-15min)	22kW(S2-15min)	22kW(S2-15min)
	S2/S3 Torque (Nm)	29Nm(S2-10min)	42Nm(S2-15min)	42Nm(S2-15min)	42Nm(S2-15min)	42Nm(S2-15min)
	at speed	6,000rpm	5,000rpm	5,000rpm	6,500rpm	6,500rpm
Tool Interface		HSK-A63 BBT-40	HSK-A63 BBT-40	HSK-A100 BBT-50	HSK-A63 BBT-40	HSK-A63 BBT-40
Spindle Cooling		Water cooling Also available with Oil cooling. This cooling leads to motor power reduction.				
Spindle Weight		87kg	210kg	230kg	180kg	180kg
Integral Encoder For Closed-Loop Control		Option	Standard	Standard	Standard	Standard
Coolant Through Shaft (CTS)		Option	Option	Option	Option	Option
Tool Position Sensors		Proximity switches / Analog sensor				
Front Bearing Temperature Sensor		Standard	Standard	Standard	Standard	Standard

TH-190.01

TH-230

Ø230mm~Ø310mm
High Frequency Spindles
Application : Milling / Grinding
Automatic Tool Change

Type		TH-230.17	TH-230.20	TH-310.01	TH-310.02	TH-310.03
FANUC BUILT-IN SPINDLE MOTOR		BiI 112M/15000-B	BiI 112L/20000i	BiI 160LL/13000i	BiI 160LL/13000i typeM	BiI 160LL/13000-B
Spindle Ø		230mm	230mm	310mm	310mm	310mm
Maximum Speed (Oil-Air) Also available with grease lubrication. This lubrication leads to speed reduction.		15,000rpm	10,000rpm	10,000rpm	10,000rpm	10,000rpm
Bore diameter of front bearings		70mm	100mm	100mm	100mm	100mm
Rigidity	Axial (N/μm)	Standardised or According to customer needs. It is available to increase the static rigidity, but the maximum speed will be reduced.				
	Radial (N/μm)					
Low winding	S1 kW	15kW	18.5kW	15kW	18.5kW	18.5kW
	S1 Torque (Nm)	69.9Nm	86.2Nm	238Nm	353Nm	305Nm
	S2/S3 kW	22kW(S3-10%)	25kW(S6-40%)	22kW(S3-25%)	24kW(S6-40%)	37kW(S3-15%)
	S2/S3 Torque (Nm)	195Nm(S3-10%)	116Nm(S6-40%)	420Nm(S3-25%)	458Nm(S6-40%)	609(S3-15%)
	at speed	2,050rpm	2,050rpm	600rpm	500rpm	580rpm
High winding	S1 kW	18.5kW	N/A	25kW	30kW	37kW
	S1 Torque (Nm)	29.4Nm	N/A	95Nm	119Nm	196Nm
	S2/S3 kW	30kW(S3-25%)	N/A	30kW(S2-15min)	37.7kW(S6-40%)	55kW(S3-25%)
	S2/S3 Torque (Nm)	47.7Nm(S3-25%)	N/A	115Nm(S2-15min)	155Nm(S6-40%)	292Nm(S3-25%)
	at speed	6,000rpm	N/A	2,500rpm	2,500rpm	1,800rpm
Tool Interface		HSK-A63 BBT-40	HSK-A100 BBT-50	HSK-A100 BBT-50	HSK-A100 BBT-50	HSK-A100 BBT-50
Spindle Cooling		Water cooling Also available with Oil cooling. This cooling leads to motor power reduction.				
Spindle Weight		230kg	230kg	320kg	320kg	320kg
Integral Encoder For Closed-Loop Control		Standard	Standard	Standard	Standard	Standard
Coolant Through Shaft (CTS)		Option	Option	Option	Option	Option
Tool Position Sensors		Proximity switches / Analog sensor				
Front Bearing Temperature Sensor		Standard	Standard	Standard	Standard	Standard

TH-230

TH-310

THOA-008 2.5
Oil-Air lubrication system

The THOA-008 oil-air lubrication system is designed for THETA spindles and performs optimally.
The system has three standard lubricating point connections, with the option to expand to a maximum of five connections., providing lubrication for two spindles.
We recommended lubricating the spindle bearings with Mobil DTE Light (ISO VG 32) and MOBIL DTE 24(ISO VG 32) oil.

The system monitored the oil level, oil pressure, and air pressure. providing a continuous oil supply to the operation.
This ensures that the high-precision ball bearings are lubricated adequately before the spindles are operated.
The procedure begins with a pre-lubrication cycle times for 390 seconds before switching to the normal lubrication cycle, which occurs once every three minutes.

THOA-008 oil-air lubrication system
offers the user considerable advantages:
1. Modular construction.
2. Freely visible lubricant container filled from the outside made of limpid plastic.
3. Voltage range 90~260 V AC,50/60 Hz: Usable worldwide.
4. Max. Fuse protection: 6 A.
5. Interface with the machine tool control system to signal readiness for operation after checking the oil level, oil pressure, air pressure, and pre-lubricating cycle.

THOA-008 3.0
Oil-Air lubrication system

The THOA-008 oil-air lubrication system is designed for THETA spindles and performs optimally.
The system has three standard lubricating point connections, with the option to expand to a maximum of five connections., providing lubrication for two spindles.
We recommended lubricating the spindle bearings with Mobil DTE Light (ISO VG 32) and MOBIL DTE 24(ISO VG 32) oil.

The system monitored the oil level, oil pressure, and air pressure, providing a continuous oil supply to the operation.
This ensures that the high-precision ball bearings are lubricated adequately before the spindles are operated.
The procedure begins with a pre-lubrication cycle times for 390 seconds before switching to the normal lubrication cycle, which occurs once every three minutes.

THOA-008 oil-air lubrication system
offers the user considerable advantages:
1. Modular construction.
2. Freely visible lubricant container filled from the outside made of limpid plastic.
3. Voltage range 90~260 V AC,50/60 Hz: Usable worldwide.
4. Max. Fuse protection: 6 A.
5. Interface with the machine tool control system to signal readiness for operation after checking the oil level, oil pressure, air pressure, and pre-lubricating cycle.
6.Filter : Filtration Accuracy 5μm

THETA

Theta Precision Co.,Ltd

High speed spindles for ATC / MTC
Magnetic-bearing spindle for automatic tool change
Hydrostatic spindle for Manual tool change

Application：Milling, Internal Grinding, External Grinding, Rolled Ball Screws Grinding, Carriage/Surface Grinding, Linear Grinding Block Grinding, Dressing Spindles
Compatibility with：FANUC, MITSUBISHI,SIEMENS,HEIDENHAIN,FAGOR.
Built-In Spindle Motor：Asynchronous or Synchronous motor
Built-In Spindle Motor kW：～80kW（S1）
Built-In Spindle Motor Torque：～850Nm（S1）
Spindle housing Ø：～Max 420mm
Spindle housing length：～ Max 1500mm
Tool Interface：Standardised or according to customer's specifications
Option：Closed-Loop, AE sensors, Balance systems, Vibration sensor, Displacement sensor

No.12, Ln. 191, Sec. 1, Minsheng Rd., Daya Dist.,
Taichung City 428, Taiwan
T E L ： 886-4-2565-0937 / 2565-0537
F A X ： 886-4-2565-0951
E-mail: info@theta-tw.com
www.theta-spindle.com

GCL INTERNATIONAL
UKAS MANAGEMENT SYSTEMS
ISO 9001 5965
NO. 59Q22349

DUN & BRADSTREET
D-U-N-S® REGISTERED