



Motorized Milling Spindle Selection Manual



Motorized Milling Spindle



FEATURE

1. Adopting efficient asynchronous built-in motor drive, The rotor is made of cast copper material, which has high power, low heat generation, and high efficiency.
2. The bearing adopts ceramic ball angular contact bearing, which has low heat generation, low coefficient of thermal expansion, and high speed. The pre tensioning method mainly adopts positioning pre tensioning and fixed pressure pre tensioning. Positioning pre tensioning can achieve high rigidity and high torque requirements, while fixed pressure pre tensioning can achieve ultra-high speed requirements.
3. Dynamically balanced to G1.
4. Little noise and thermal deformation.
5. High dynamic rotational accuracy.
6. Optional Tool internal cooling、 temperature sensor、 vibration sensor.

INDUSTRIAL APPLICATIONS



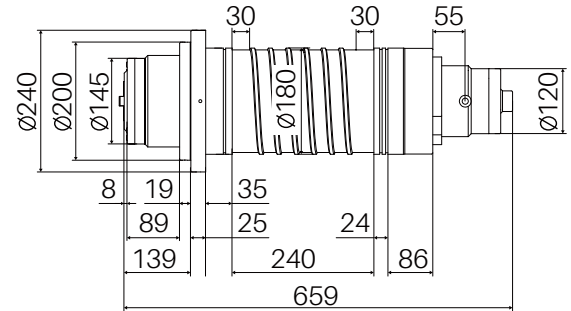
MODEL : BCES-BT40A-4011-2500/12000



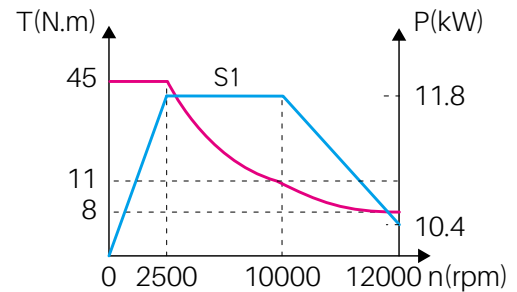
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
11	28	45
Rated Speed rpm	Max. Speed rpm	Type of motor
2500	12000	Asynchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
No	Hydraulic	90

◆ Overall Dimensions



◆ Power Torque Curves



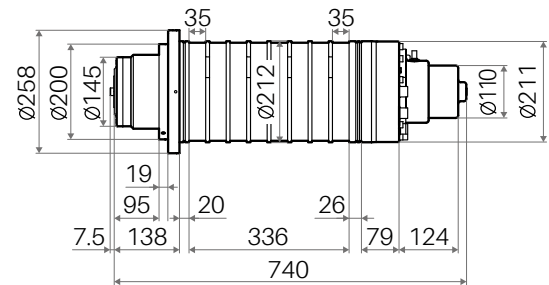
MODEL : BCES-BT40D-4013-1800/12000



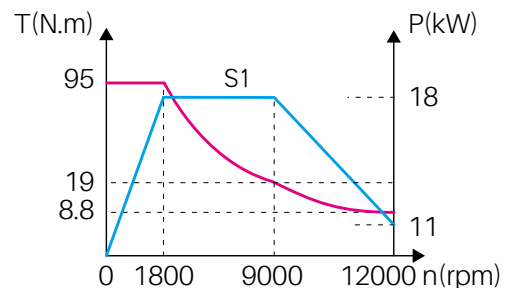
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
18	46	95
Rated Speed rpm	Max. Speed rpm	Type of motor
1800	12000	Asynchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
No	Hydraulic	125

◆ Overall Dimensions



◆ Power Torque Curves



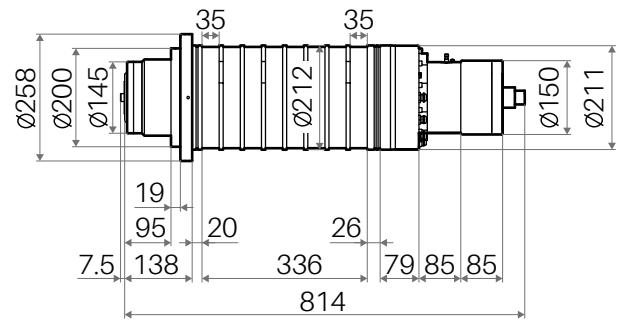
MODEL: BCES-BT40D-4018-1800/12000-R



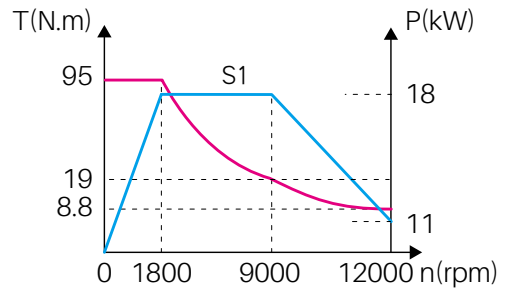
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
18	46	95
Rated Speed rpm	Max. Speed rpm	Type of motor
1800	12000	Asynchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Yes	Hydraulic	125

◆ Overall Dimensions



◆ Power Torque Curves



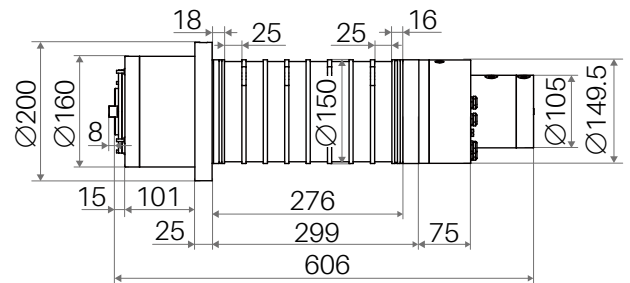
MODEL: BCES-BT40G-4014-3000/12000



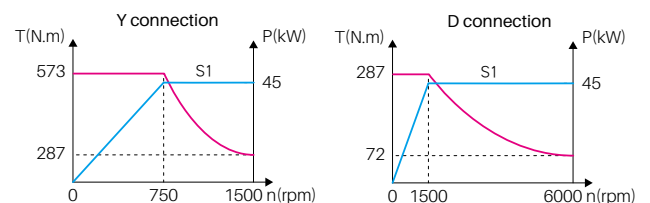
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
14	37/39	45/27
Rated Speed rpm	Max. Speed rpm	Type of motor
3000/5000	5000/12000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
No	Hydraulic	65

◆ Overall Dimensions



◆ Power Torque Curves



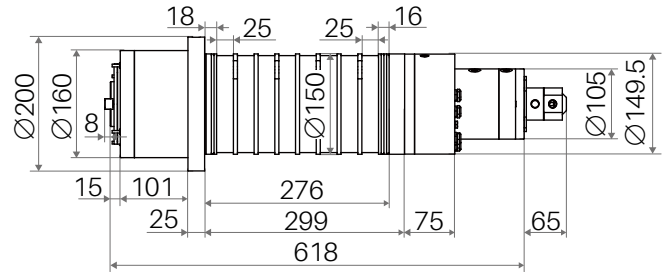
MODEL : BCES-BT40G-4014-3000/12000-R



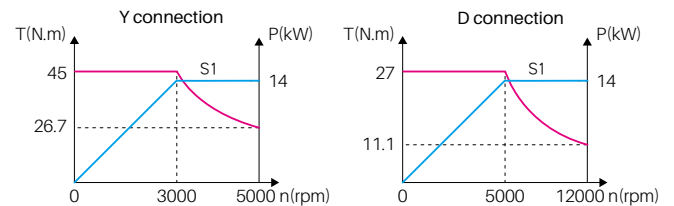
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
14	37/39	45/27
Rated Speed rpm	Max. Speed rpm	Type of motor
3000/5000	5000/12000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Yes	Hydraulic	66

◆ Overall Dimensions



◆ Power Torque Curves



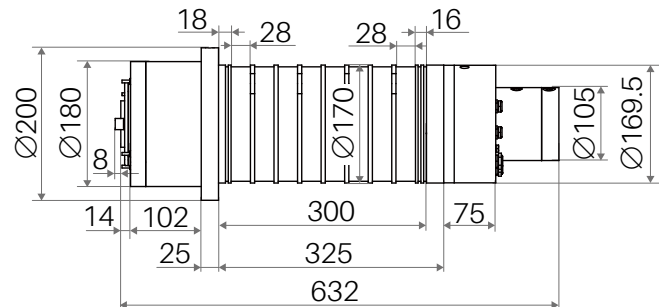
MODEL : BCES-BT40I-4030-3000/12000



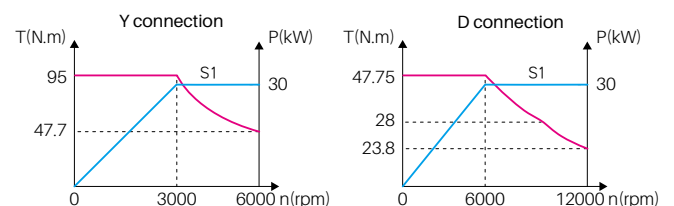
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
30	67	95/47.75
Rated Speed rpm	Max. Speed rpm	Type of motor
3000/6000	6000/12000	Synchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
No	Hydraulic	82.5

◆ Overall Dimensions



◆ Power Torque Curves



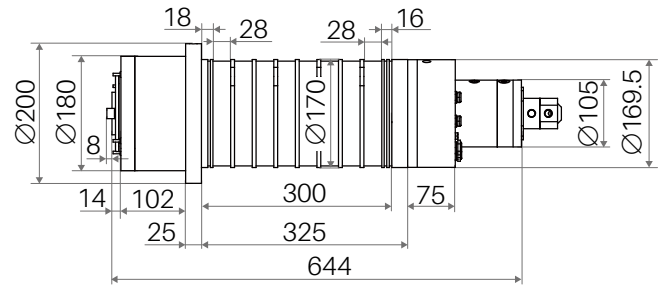
MODEL : BCES-BT40I-4030-3000/12000-R



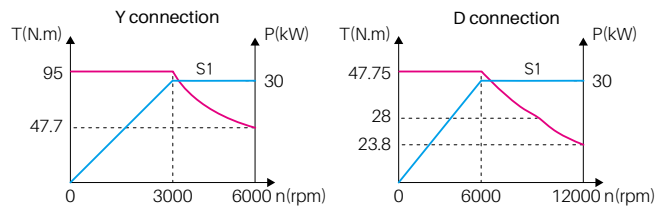
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
30	67	95/47.75
Rated Speed rpm	Max. Speed rpm	Type of motor
3000/6000	6000/12000	Synchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Yes	Hydraulic	83

◆ Overall Dimensions



◆ Power Torque Curves



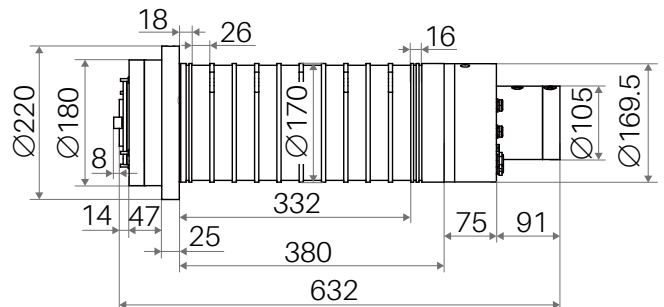
MODEL : BCES-BT40J-4030-3000/12000



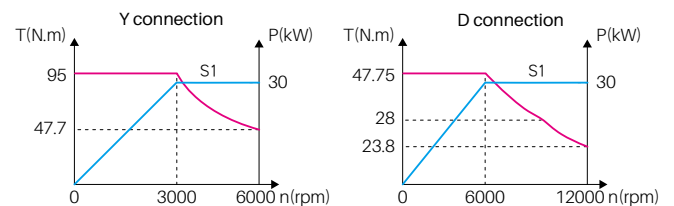
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
30	67	95/47.75
Rated Speed rpm	Max. Speed rpm	Type of motor
3000/6000	6000/12000	Synchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
No	Hydraulic	81

◆ Overall Dimensions



◆ Power Torque Curves



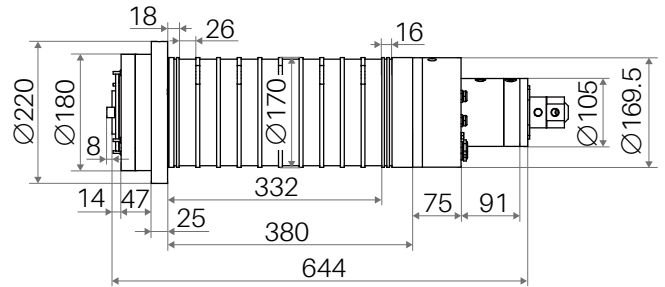
MODEL: BCES-BT40J-4030-3000/12000-R



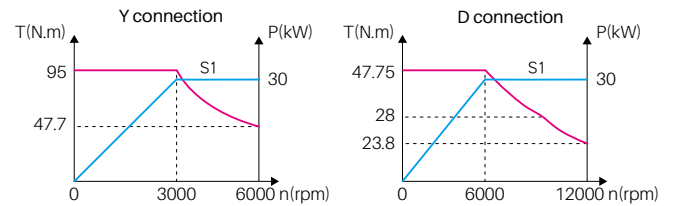
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
30	67	95/47.75
Rated Speed rpm	Max. Speed rpm	Type of motor
3000/6000	6000/12000	同步
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Yes	Hydraulic	81.5

◆ Overall Dimensions



◆ Power Torque Curves



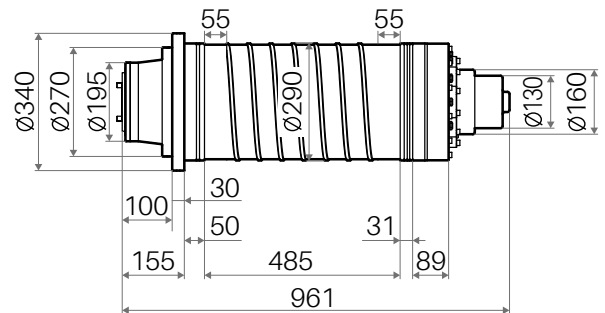
MODEL: BCES-BT50A-4022-750/6000



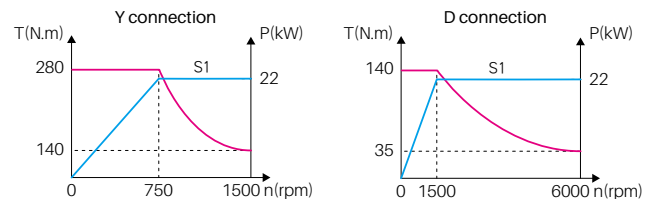
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
22	43/42	280/140
Rated Speed rpm	Max. Speed rpm	Type of motor
750/1500	1500/6000	Asynchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT50	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
No	Hydraulic	327

◆ Overall Dimensions



◆ Power Torque Curves



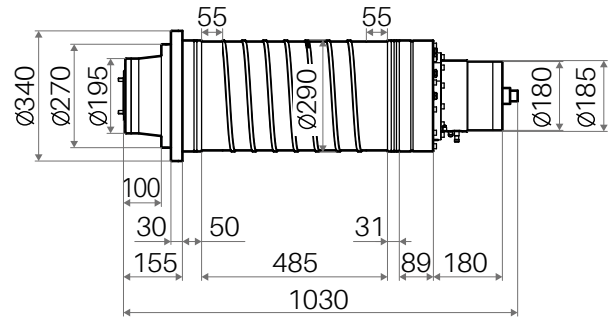
MODEL : BCES-BT50A-4022-750/6000-R



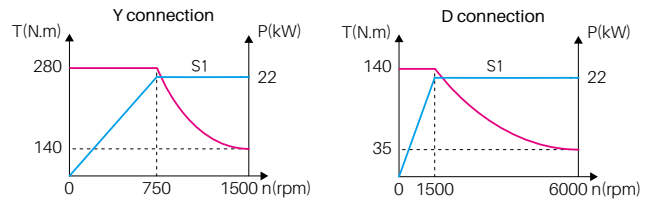
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
22	43/42	280/140
Rated Speed rpm	Max. Speed rpm	Type of motor
750/1500	1500/6000	Asynchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT50	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Yes	Hydraulic	327

◆ Overall Dimensions



◆ Power Torque Curves



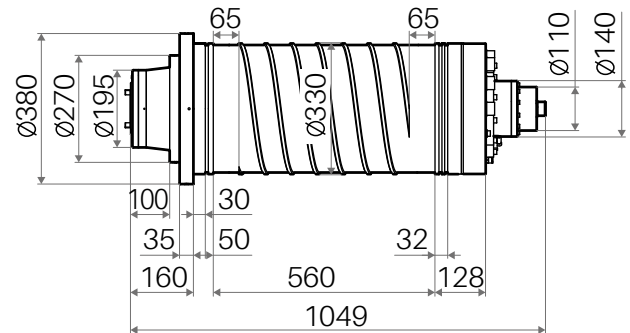
MODEL : BCES-BT50B-4045-750/6000



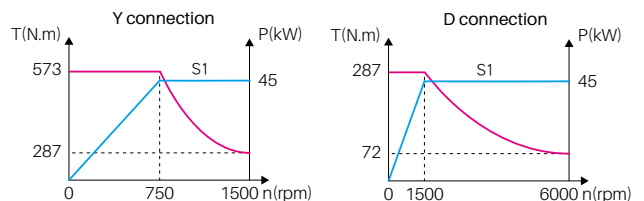
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
45	90	573/287
Rated Speed rpm	Max. Speed rpm	Type of motor
750/1500	1500/6000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT50	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
No	Hydraulic	432

◆ Overall Dimensions



◆ Power Torque Curves



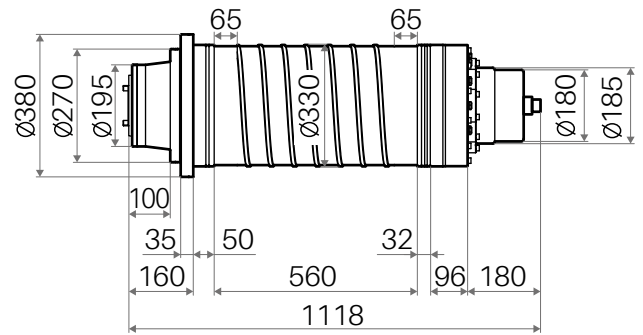
MODEL: BCES-BT50B-4045-750/6000-R



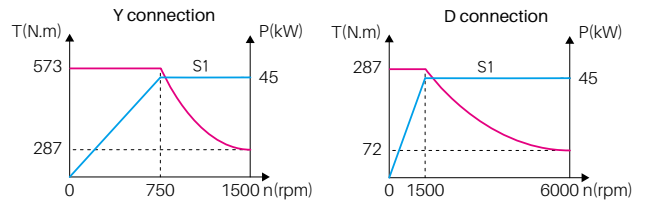
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
45	90	573/287
Rated Speed rpm	Max. Speed rpm	Type of motor
750/1500	1500/6000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT50	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Yes	Hydraulic	460

◆ Overall Dimensions



◆ Power Torque Curves



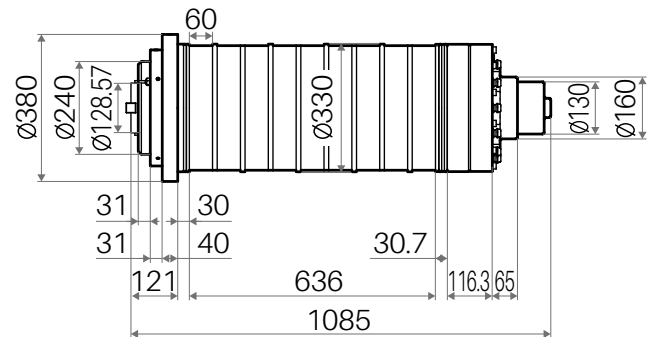
MODEL: BCES-BT50F-4045-750/5000



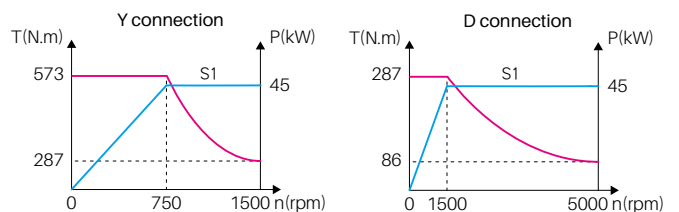
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
45	90	573/287
Rated Speed rpm	Max. Speed rpm	Type of motor
750/1500	1500/5000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT50	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
No	Hydraulic	488

◆ Overall Dimensions



◆ Power Torque Curves



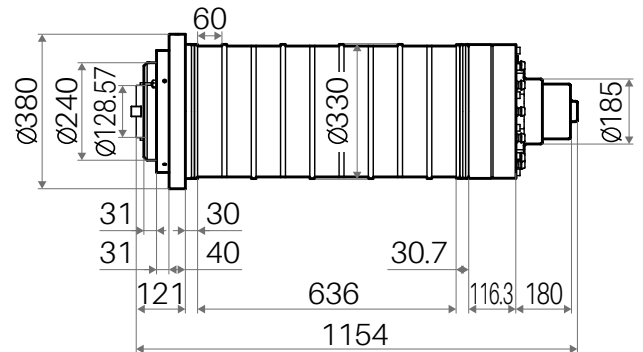
MODEL : BCES-BT50F-4045-750/5000-R



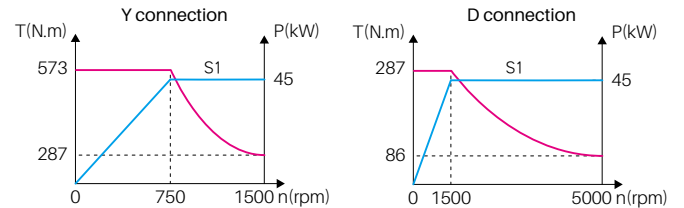
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
45	90	573/287
Rated Speed rpm	Max. Speed rpm	Type of motor
750/1500	1500/5000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT50	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Yes	Hydraulic	488

◆ Overall Dimensions



◆ Power Torque Curves



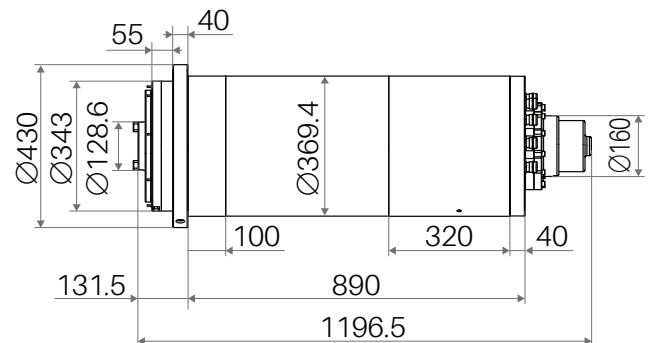
MODEL : BCES-BT50K-4075-600/3000



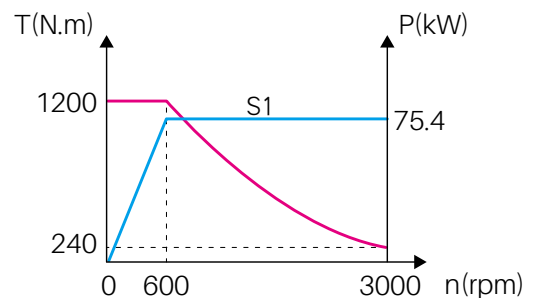
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
75.4	220	1200
Rated Speed rpm	Max. Speed rpm	Type of motor
600	3000	Synchronous
Pole No.	Lubrication	Type of cooling
16	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT50	0.004	Yes
Tool internal cooling	Tool declamp	Weight kg
No	Hydraulic	776.1

◆ Overall Dimensions



◆ Power Torque Curves



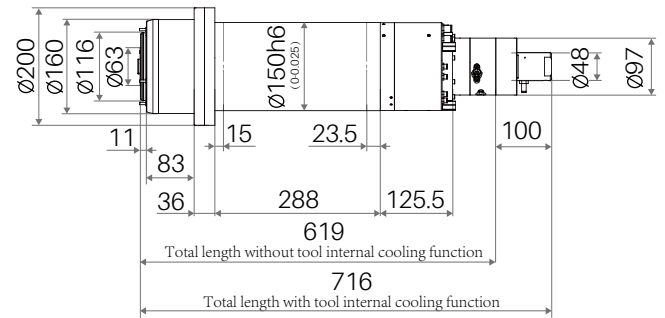
主轴型号: BCES-CMS150A-4014-3000/20000-RK63



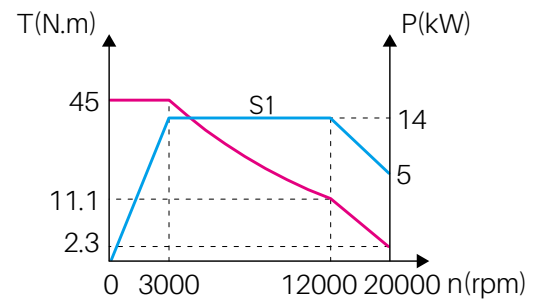
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
14	59	45
Rated Speed rpm	Max. Speed rpm	Type of motor
3000	20000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
HSKA63	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	73

◆ Overall Dimensions



◆ Power Torque Curves



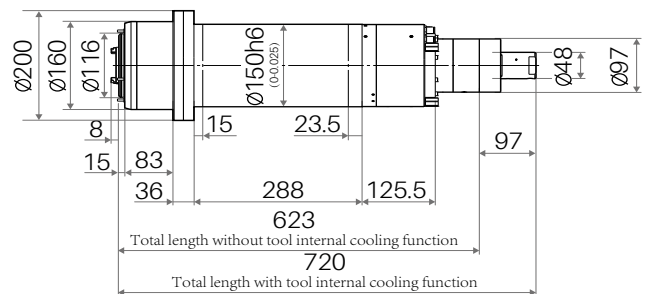
MODEL: BCES-CMS150A-49P5-3000/15000-RT40



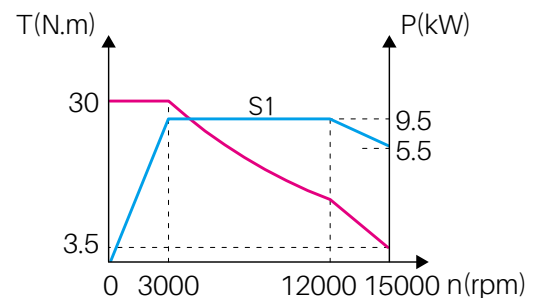
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
9.5	31.6	30
Rated Speed rpm	Max. Speed rpm	Type of motor
3000	15000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	70

◆ Overall Dimensions



◆ Power Torque Curves



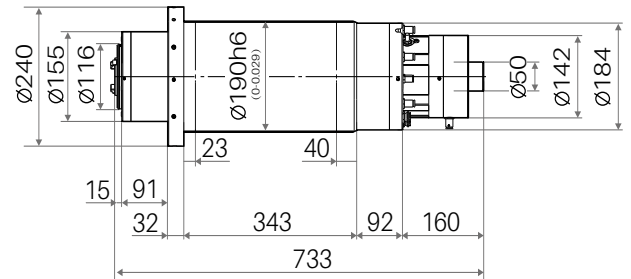
MODEL: BCES-CMS190-4016-3500/15000-RT40



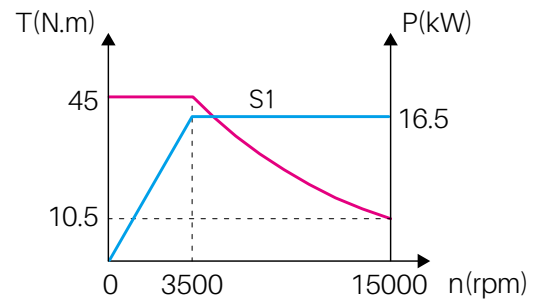
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
16.5	39.1	45
Rated Speed rpm	Max. Speed rpm	Type of motor
3500	15000	Asynchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT40	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	115

◆ Overall Dimensions



◆ Power Torque Curves



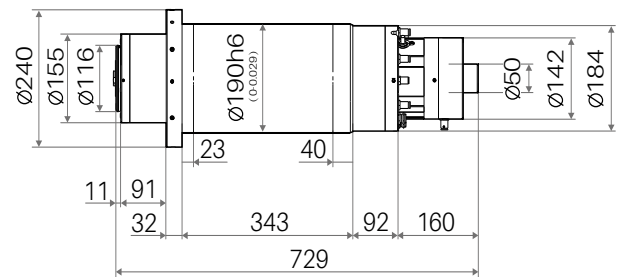
MODEL: BCES-CMS190-4025-3500/18000-RK63



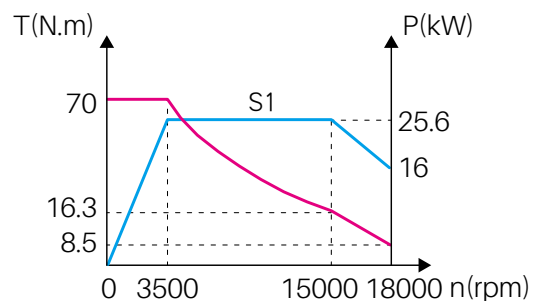
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
25.6	73	70
Rated Speed rpm	Max. Speed rpm	Type of motor
3500	18000	Asynchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
HSKA63	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	118

◆ Overall Dimensions



◆ Power Torque Curves



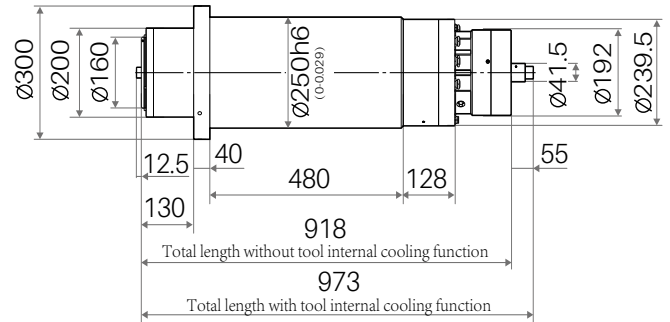
MODEL : BCES-CMS250B-4031-1500/10000-RT50



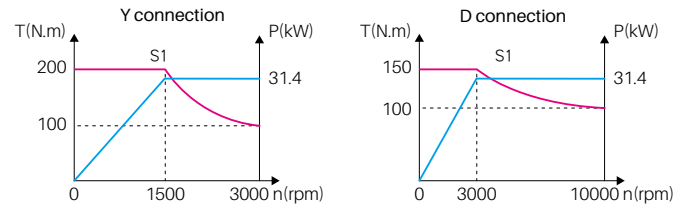
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
31.4	71/72.6	200/100
Rated Speed rpm	Max. Speed rpm	Type of motor
1500/3000	3000/10000	Asynchronous
Pole No.	Lubrication	Type of cooling
8	Air-oil	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT50	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	280

◆ Overall Dimensions



◆ Power Torque Curves



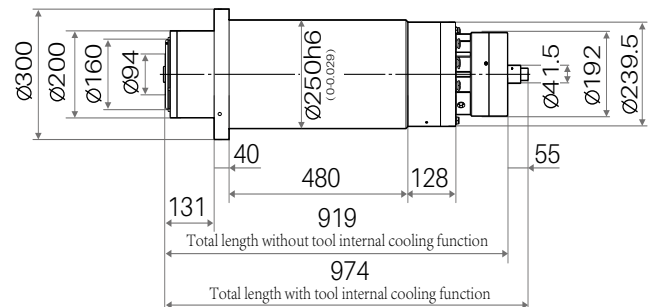
MODEL : BCES-CMS250B-4031-1500/10000-A1US-RK100



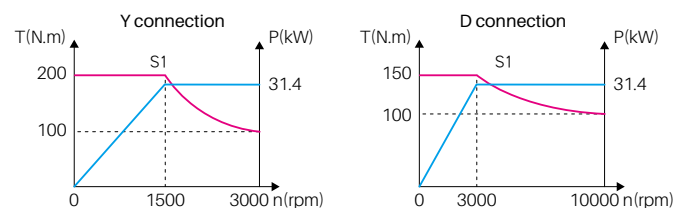
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
31.4	71/72.6	200/100
Rated Speed rpm	Max. Speed rpm	Type of motor
1500/3000	3000/10000	Asynchronous
Pole No.	Lubrication	Type of cooling
8	Air-oil	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
HSKA100	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	280

◆ Overall Dimensions



◆ Power Torque Curves



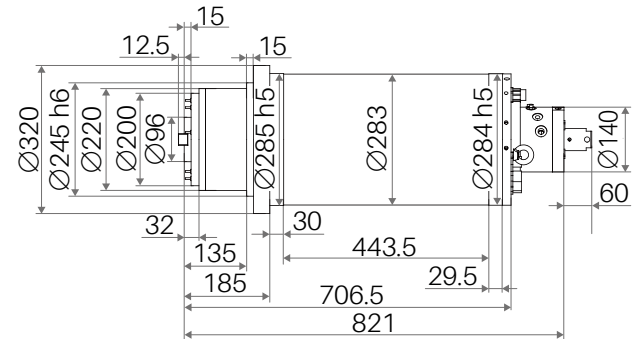
MODEL: BCES-CMS285A-2033-750/8000-RP50



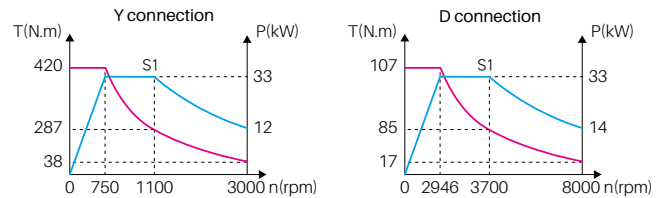
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
33	134/125	420/107
Rated Speed rpm	Max. Speed rpm	Type of motor
750/2946	3000/8000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Air-oil	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
BT50	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	255

◆ Overall Dimensions



◆ Power Torque Curves



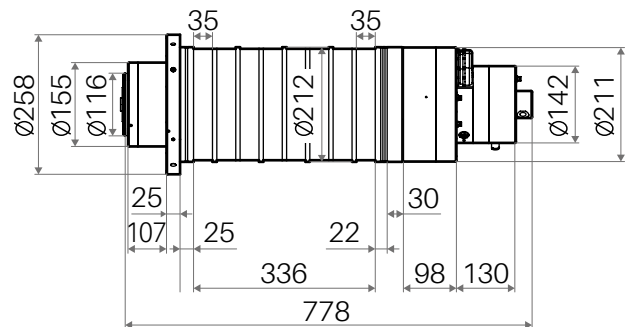
MODEL: BCES-HSKA63C-4020-2000/18000-R



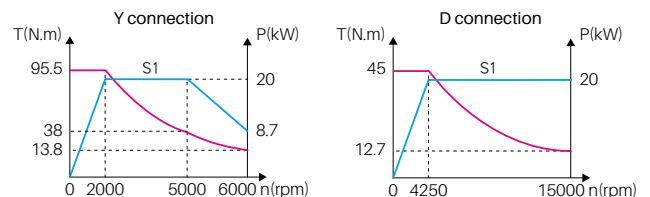
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
20	41/37	95.5/45
Rated Speed rpm	Max. Speed rpm	Type of motor
2000/4250	6000/18000	Asynchronous
Pole No.	Lubrication	Type of cooling
4	Air-oil	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
HSKA63	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	142

◆ Overall Dimensions



◆ Power Torque Curves



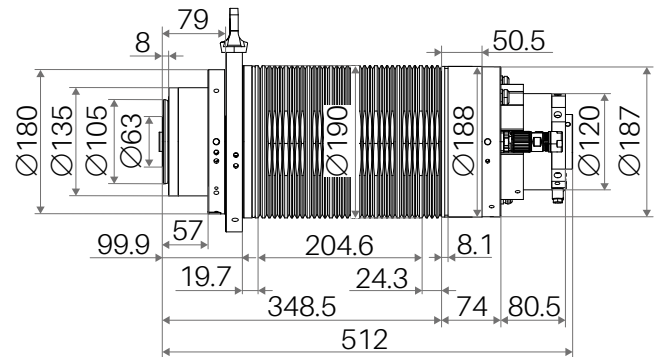
MILLING MOTORIZED SPINDLE FOR SWIVEL HEAD: BCES-CMSPA190B-4035-8000/20000-RA63



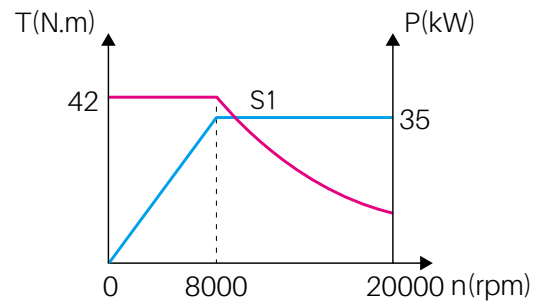
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
35	73	42
Rated Speed rpm	Max. Speed rpm	Type of motor
8000	20000	Synchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
HSKA63	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	79

◆ Overall Dimensions



◆ Power Torque Curves



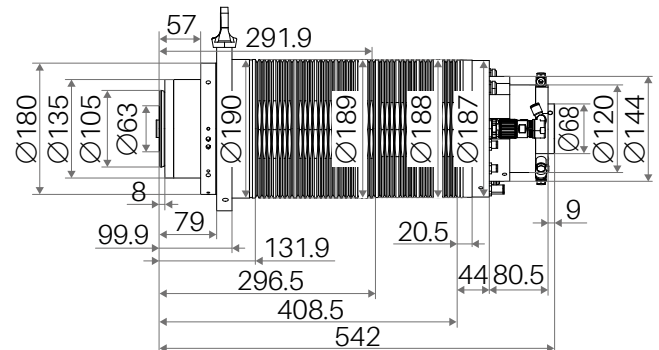
MILLING MOTORIZED SPINDLE FOR SWIVEL HEAD: BCES-CMSPA190-4028-4500/18000-RA63



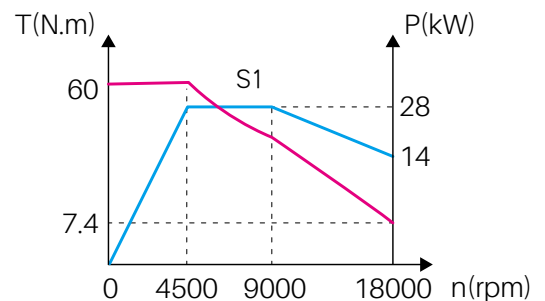
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
28	105	60
Rated Speed rpm	Max. Speed rpm	Type of motor
4500	18000	Synchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
HSKA63	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	85

◆ Overall Dimensions



◆ Power Torque Curves



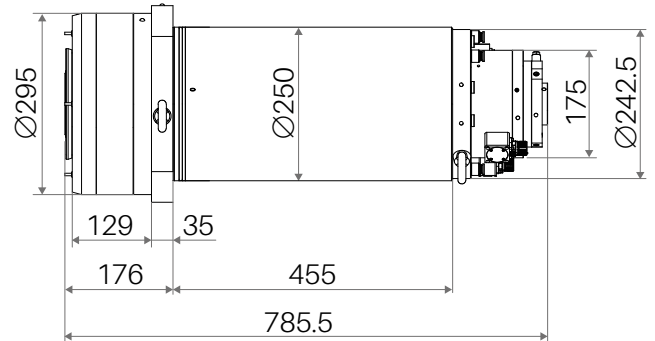
MILLING MOTORIZED SPINDLE FOR SWIVEL HEAD: BCES-CMSPA250-4047-2500/6000-RT100



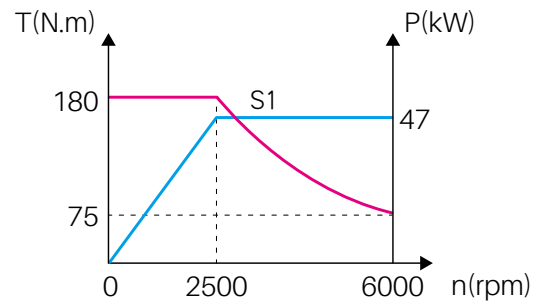
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
47	106	180
Rated Speed rpm	Max. Speed rpm	Type of motor
2500	6000	Asynchronous
Pole No.	Lubrication	Type of cooling
6	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
HSKT100	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	260.7

◆ Overall Dimensions



◆ Power Torque Curves



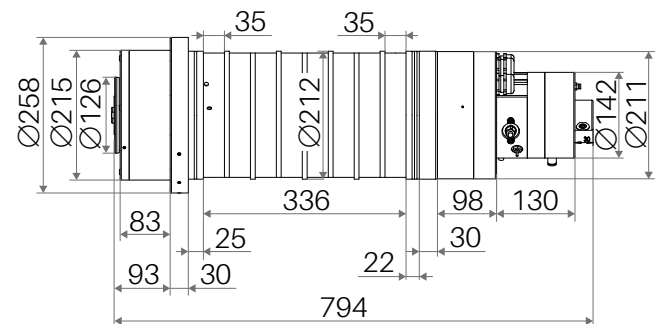
MILLING MOTORIZED SPINDLE FOR SWIVEL HEAD: BCES-HSKT63A-4015-2000/12000-R



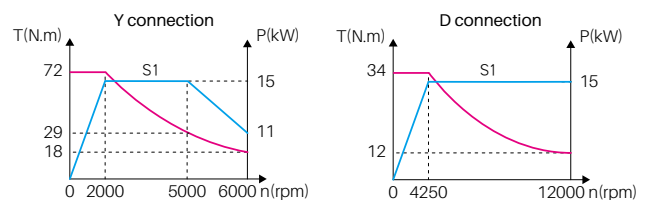
◆ Electrical Specifications

Rated Power kW	Rated Current A	Rated Torque N·m
15	32.6/32.2	72/34
Rated Speed rpm	Max. Speed rpm	Type of motor
2000/4250	4250/12000	Asynchronous
Pole No.	Lubrication	Type of cooling
4	Grease	Liquid cooling
Tool coupling	Taper hole accuracy mm	Tool external cooling
HSKT63	0.002	Yes
Tool internal cooling	Tool declamp	Weight kg
Optional	Hydraulic	159

◆ Overall Dimensions



◆ Power Torque Curves



STRIVE FOR CONTINUAL SELF-RENEWAL KEEP PACE WITH THE WORLD



Professional manufacturer of mechatronics products



Address: No. 9, 6th Yunxi Road, Miyun Economic Development
Zone, Beijing (101500)
Tel: 010-69076533
Fax: 010-69076577
<http://www.ctb.com.cn>
24 h national toll-free service line: 400-888-9055



WeChat



Tiktok

Due to constant technological improvements, texts, drawings and technical data in the manual may be changed without prior notice.