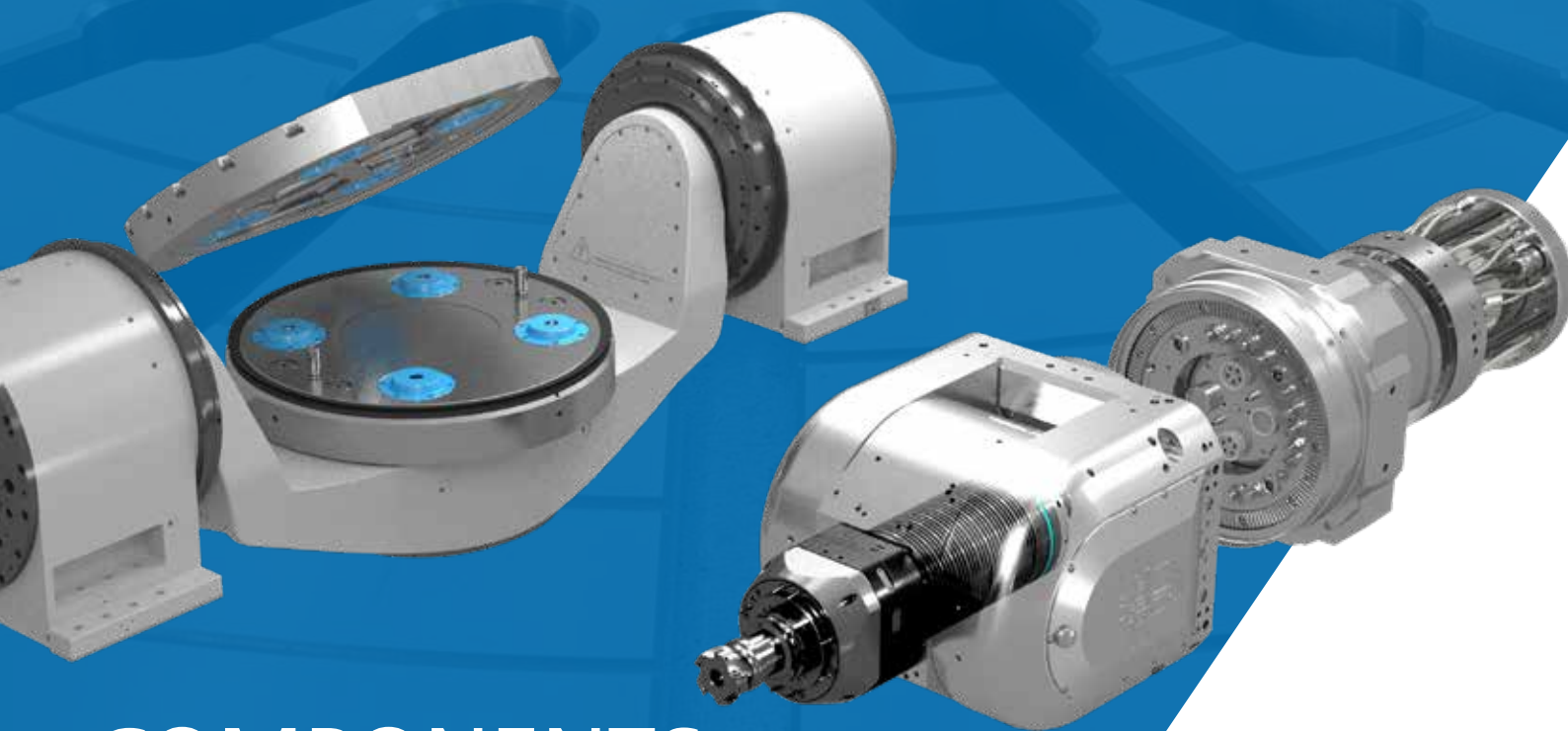


CYTEC

OVERVIEW



MACHINE TOOL COMPONENTS



COMPONENTS PERFECTION.



MADE IN GERMANY



CYTEC - COMPONENTS PERFECTION

CYTEC is a leading manufacturer of high-quality components for machine tools, serving a variety of industries including tool and mold making, automotive, and aerospace engineering. With over 40 years of experience and an international network of production, sales, and service locations, CYTEC has become a permanent player in the market.

At CYTEC, we pride ourselves on our innovative product range and technical expertise, which is reflected in the high-quality of our products. Our team of experienced professionals manufacture all of our products in-house, ensuring that we maintain the highest level of quality control. We offer both standard components and complex, user-oriented systems to meet the specific needs of our customers.

CYTEC's commitment to quality is demonstrated by our regular ISO 9001 audits, which confirm that we meet the highest international standards. Our loyal customer base is a testament to the quality of our products and services, and we are constantly striving to exceed our customers' expectations.

With CYTEC, you can trust that you are getting components that are engineered to perfection. Contact us today to learn more about how we can meet your needs and help you succeed.



Made in  Germany



1983 - Vision of a locking system

Klaus Klement founded CYTEC in 1983, after inventing a new locking cylinder technology. The company quickly became successful in manufacturing hydraulic and pneumatic cylinders, particularly in tool and mould making.



1988 - Construction of company location

In 1988, Klaus Klement moved his company CYTEC from the inventor's garage to the industrial sector and built the first two-story production hall for the assembly of cylinders and clamping systems. To this day, CYTEC remains proud of its name's origin.

1996 - CYTEC becomes a manufacturer of motor spindles

In 1996, CYTEC registered new patents, including one for spindle drive in machine tools. They expanded their product range with motor spindles, becoming a core manufacturer in this field through their introduction of the HSK tool interface.



1997 - Technological advances Machine tool components

Patents related to machine tools, including tool-holder coupling, clamping devices, and tool clamping means, bring significant technological advancements to the market.

1986 - Patent for locking systems

In 1986, Klaus Klement patented a pressure-operated device with a cylinder housing, piston and draw rod for generating and maintaining holding force. This technology was useful for securely holding tools in machine tool change magazines.



1992 - Great success of the clamping and locking systems

New patented locking system allows mechanical load generation without constant air pressure. Positive and preloaded piston rod locking in desired position with fall protection and load rigidity. Widely used in positioning and holding across industries.



1996 - Expansion abroad

In 1996, the first foreign production site and CYTEC France are founded. Both are still part of the internationally active group of companies today.

CYMILL - STRONGEST OF IT'S KIND

Overview page 3

CYMILL - FORK MILLING HEADS

P Series page 5
 Nano Series page 5
 S Series page 6
 S Series HD page 6
 M Series page 7
 M Series HD page 7
 G Series page 8
 G Series HD page 8

CYMILL - UNIVERSAL MILLING HEADS

M Series 45° page 9
 M Series 45° HD page 9
 M Series 2x 45° page 10
 M Series 2x 45° page 10
 G Series 45° page 11
 T Series page 11

CYSPEED - OUR SPINDLE TECHNOLOGY

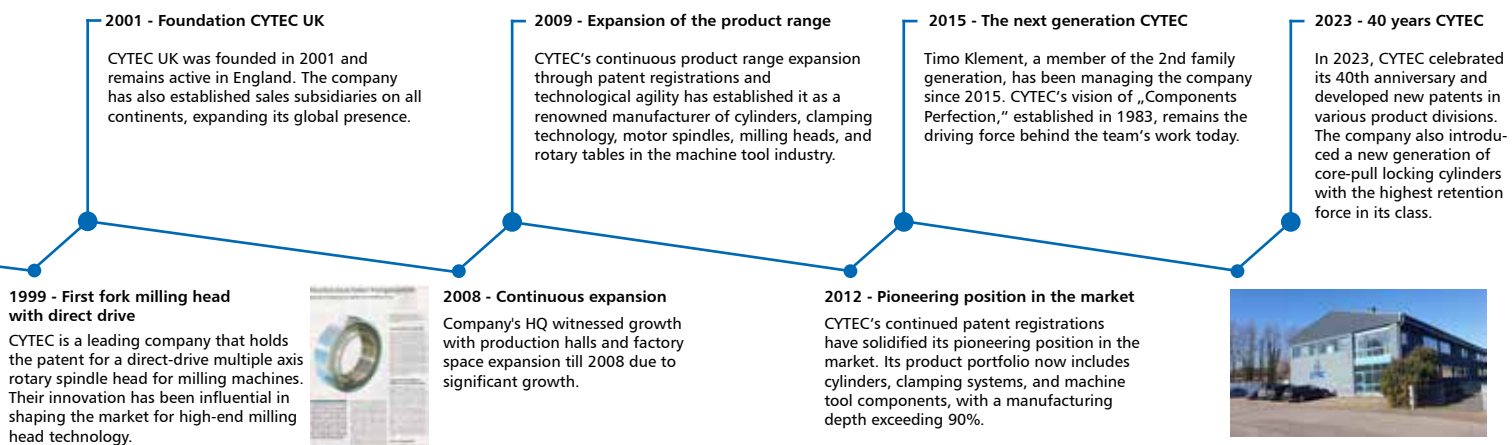
Motorspindles page 13

CYTURN - SWIVEL ROTARY TABLES

2-axis Rotary Tables page 19
 1-axis Rotary Tables page 21

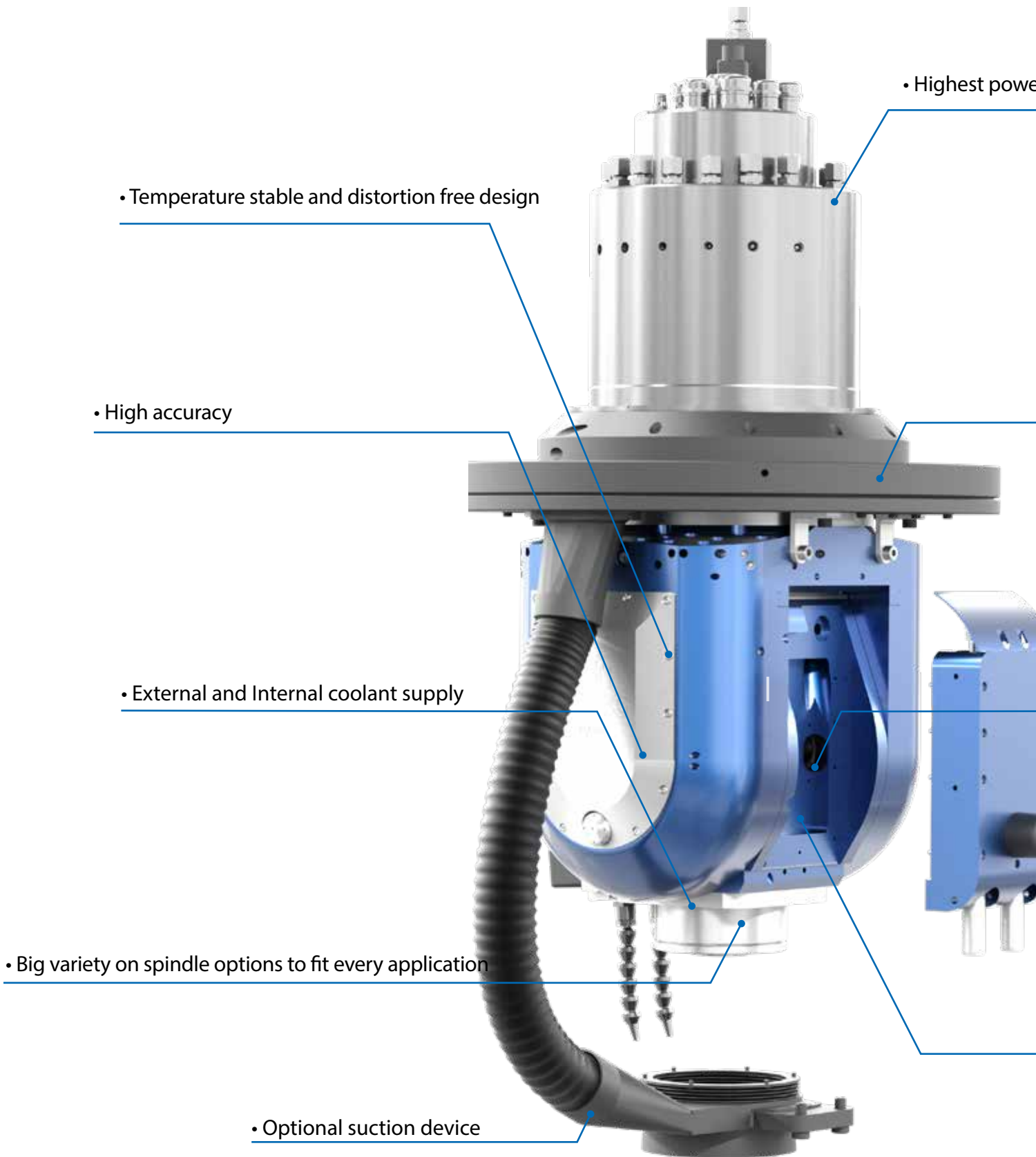
CYTAB

Workpiece clamping systems page 22



CYMILL - STRONGEST OF IT'S KIND

ONE OPTION for every application



• Highest power

• Temperature stable and distortion free design

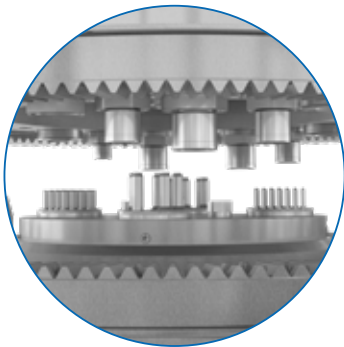
• High accuracy

• External and Internal coolant supply

• Big variety on spindle options to fit every application

• Optional suction device

er density: light compact, rigid and brutal torque in



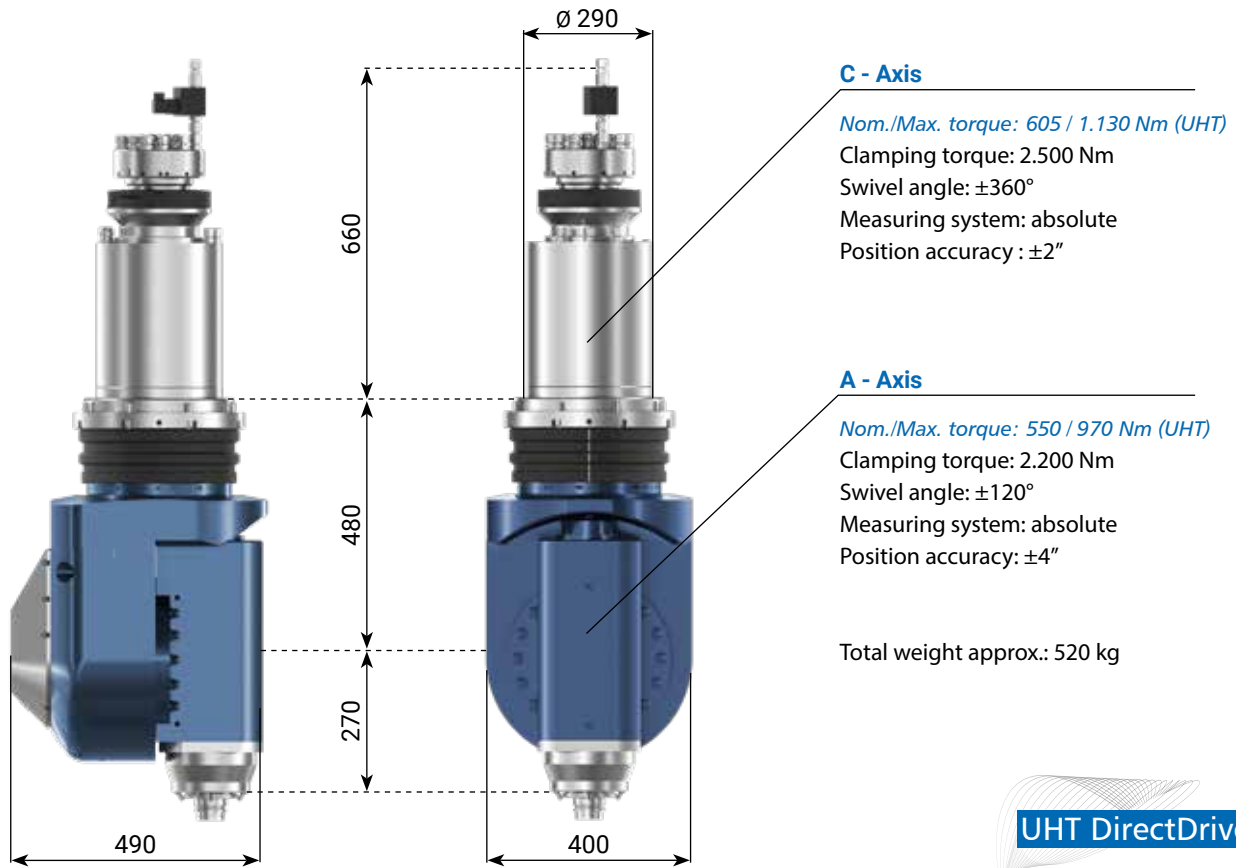
•The most advanced cooling technology in all drives



•One part swivel housing for highest accuracy in all dimensions

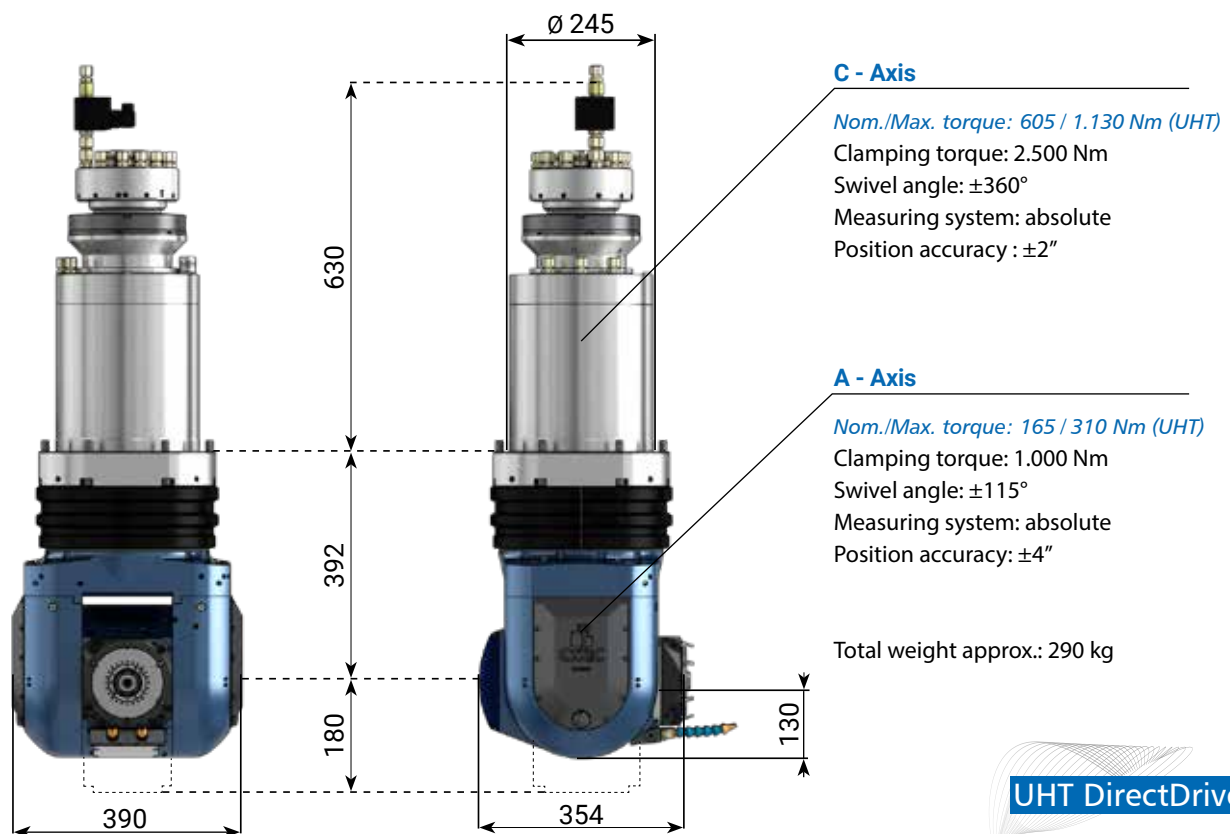


P-Series



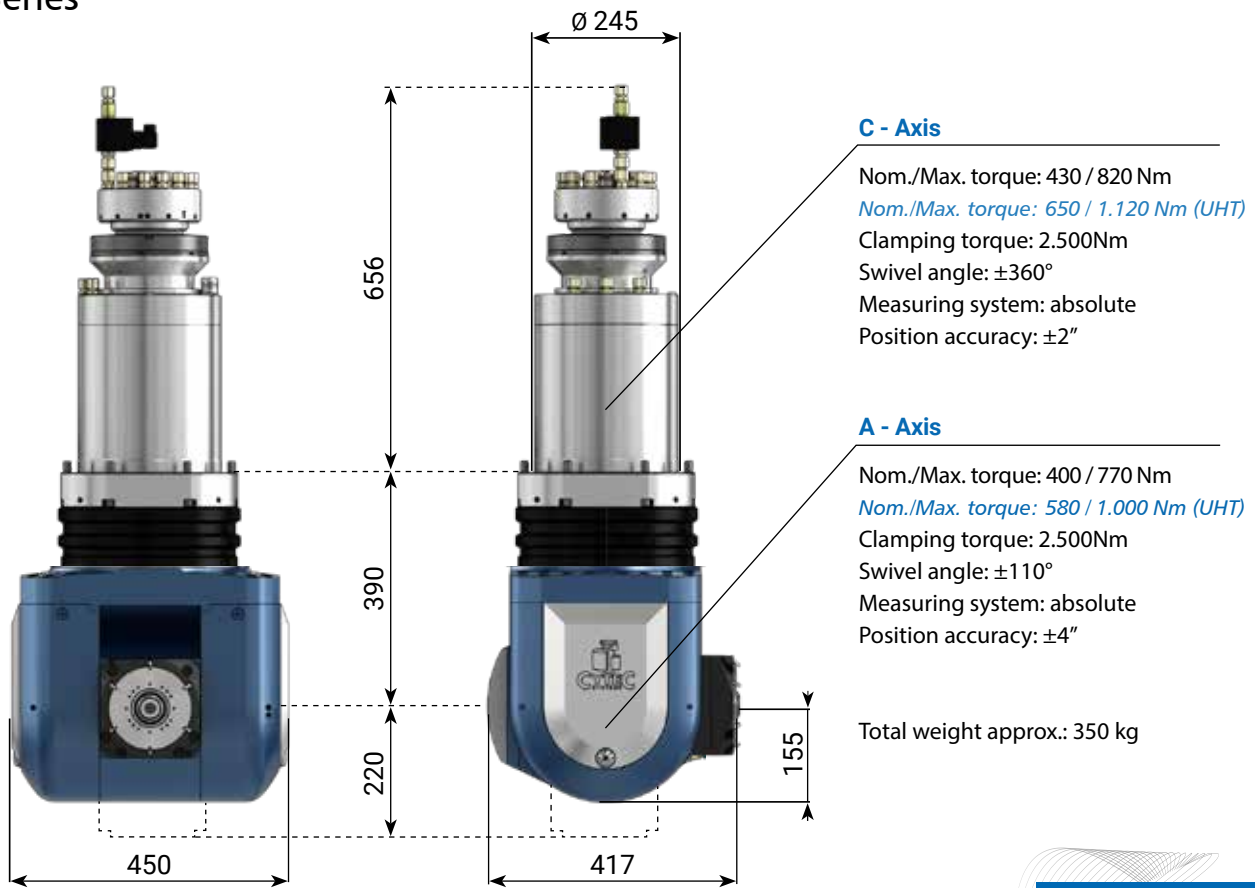
*Spindle options for P-Series: CS-21-180-A, CS-25-180-A, CS-28-180-A, CS-40-180-S - see page 16

Nano-Series



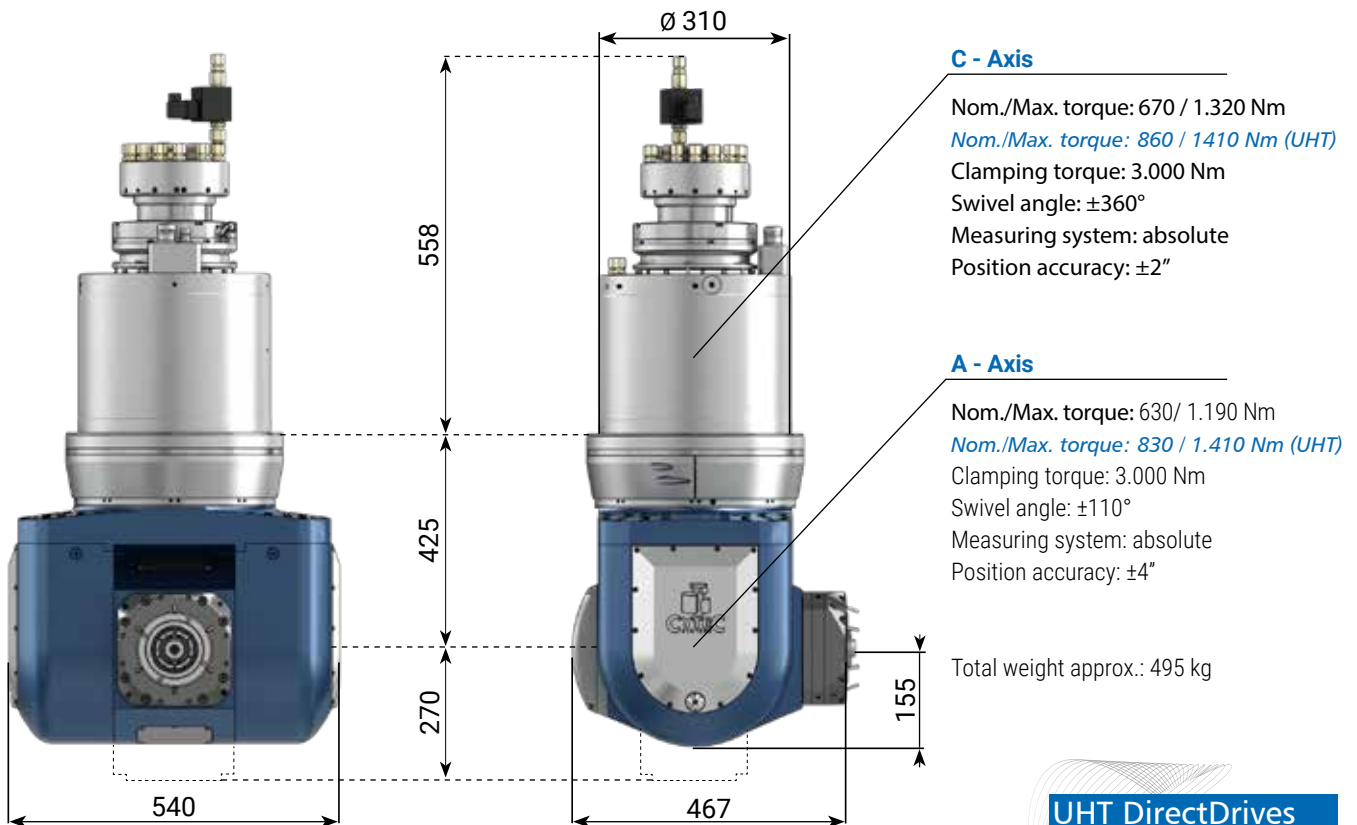
*Spindle options for Nano-Series ($\varnothing 135$ mm) see page 15

S-Series



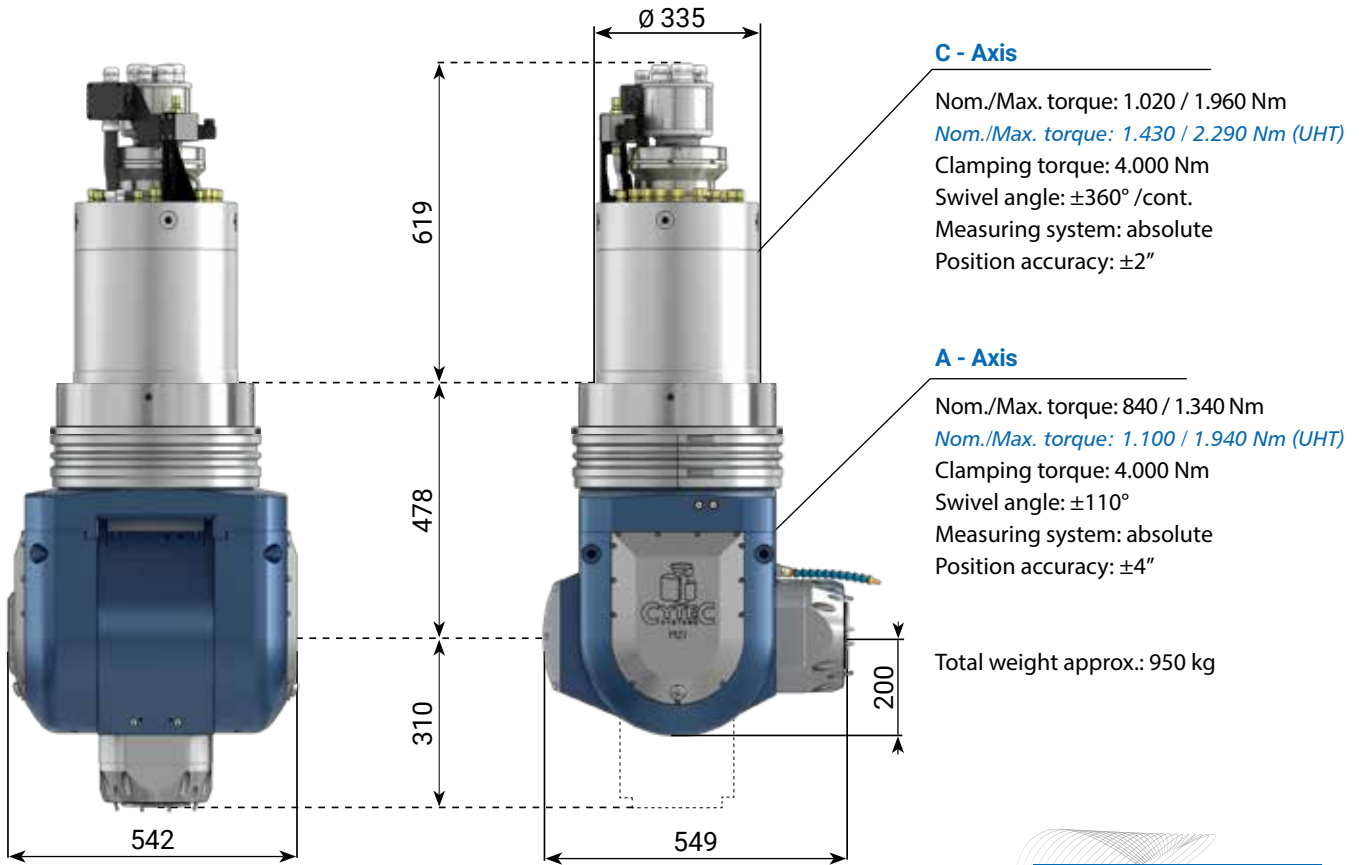
*Spindle options for S-Series ($\varnothing 135$ mm) see page 15

S-Series HD



*Spindle options for S-Series HD ($\varnothing 160$ mm) see page 15

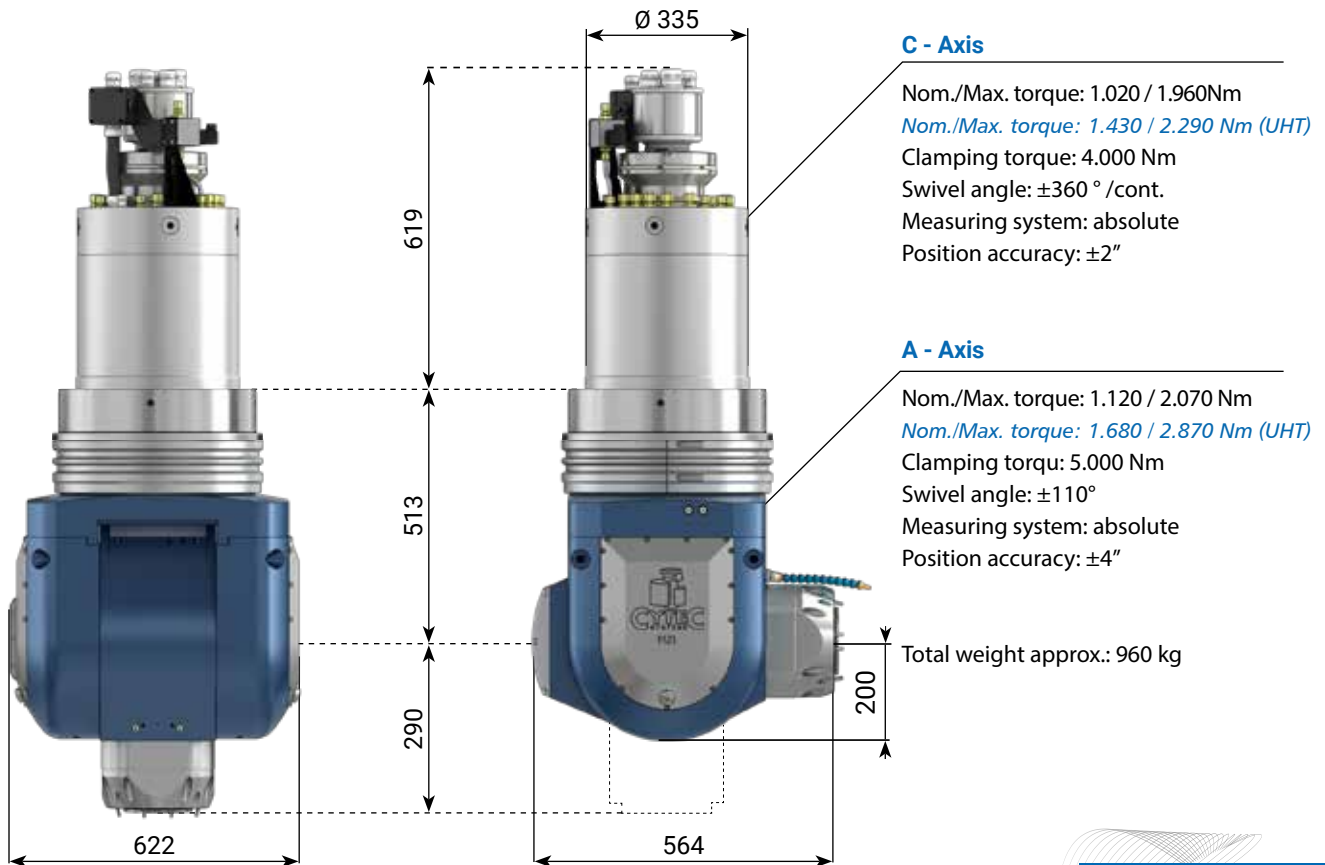
M-Series



*Spindle options for M-Series ($\varnothing 180$ mm) see page 16



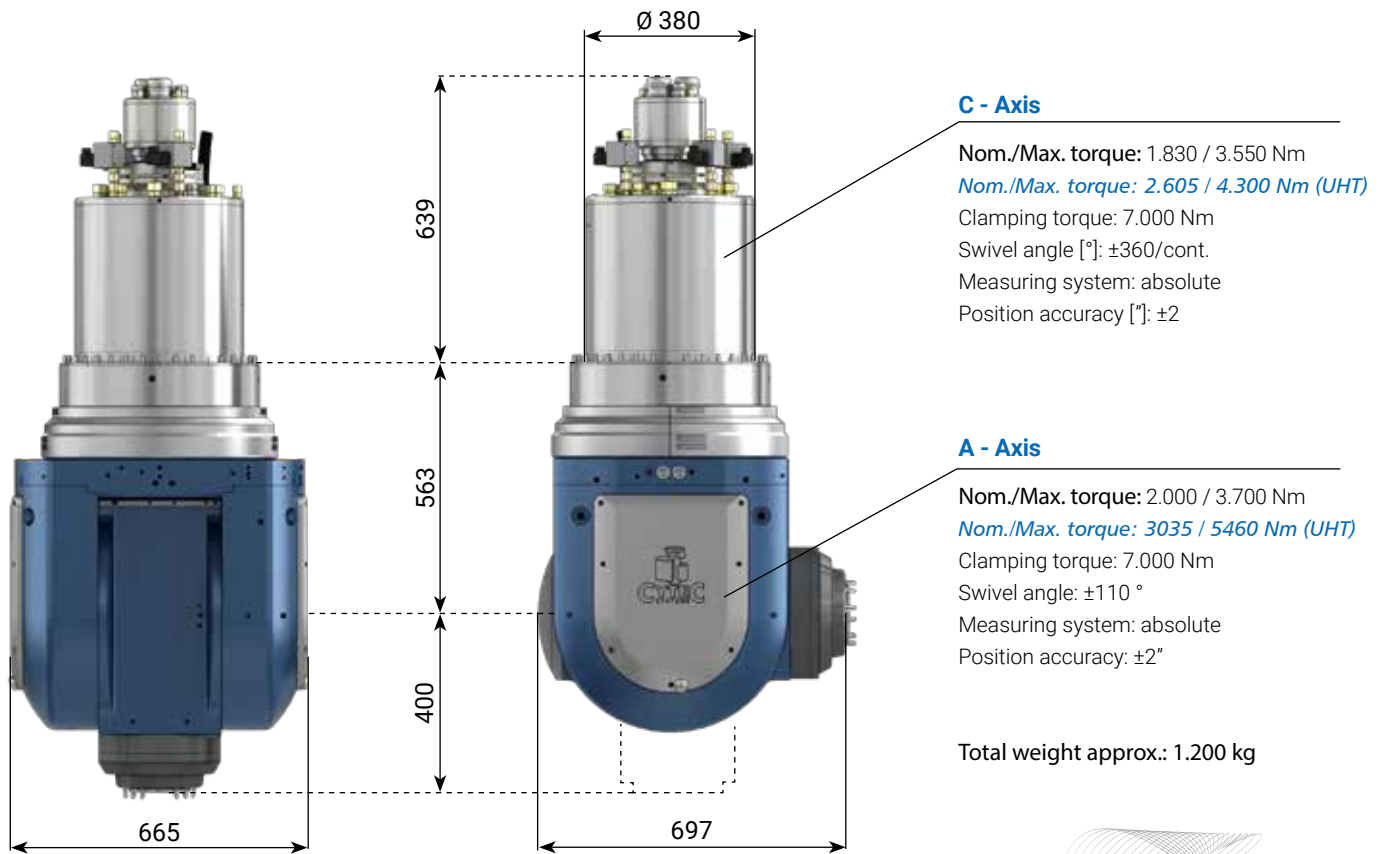
M-Series HD



*Spindle options for M-Series HD ($\varnothing 200$ mm) see page 17



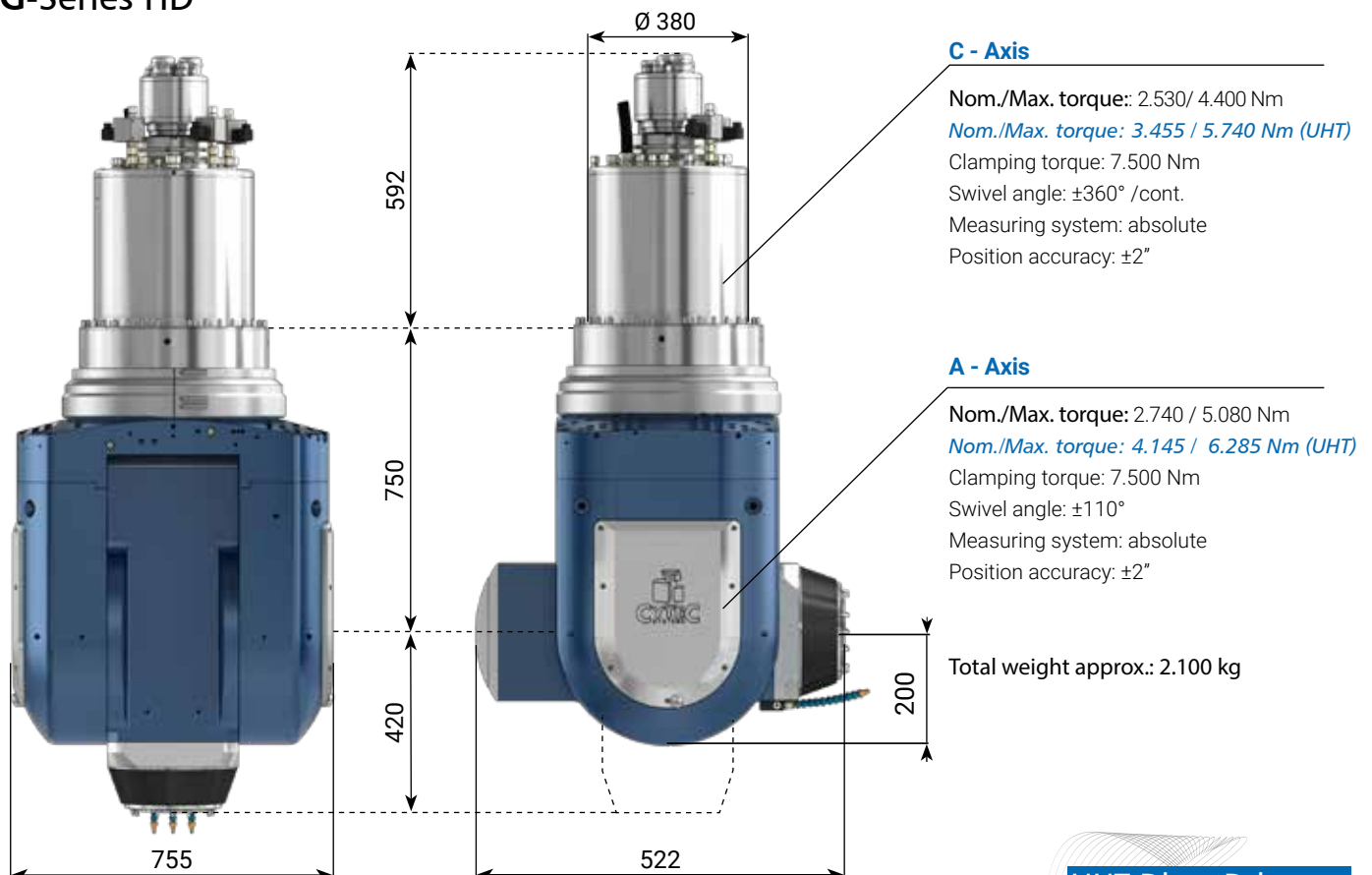
G-Series



*Spindle options for G-Series HD (Ø238 mm) see page 17

UHT DirectDrives

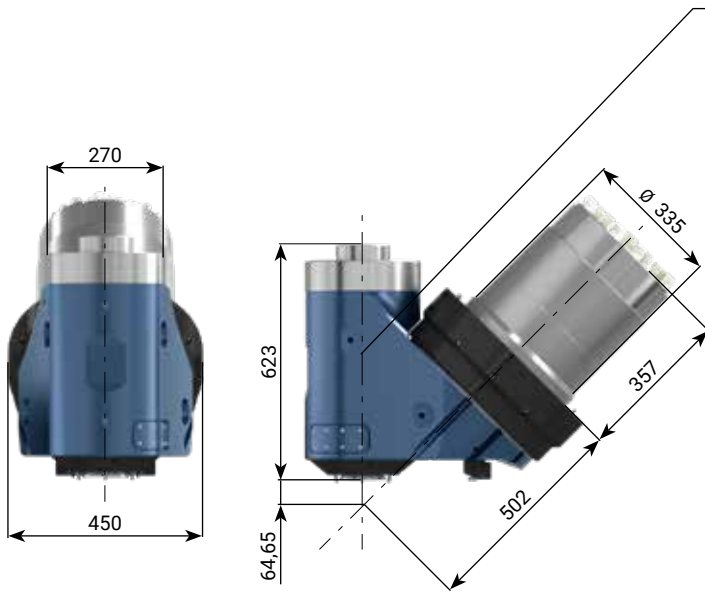
G-Series HD



*Spindle options for G-Series HD (Ø260 mm) see page 18

UHT DirectDrives

M-Series 45°



A - Axis

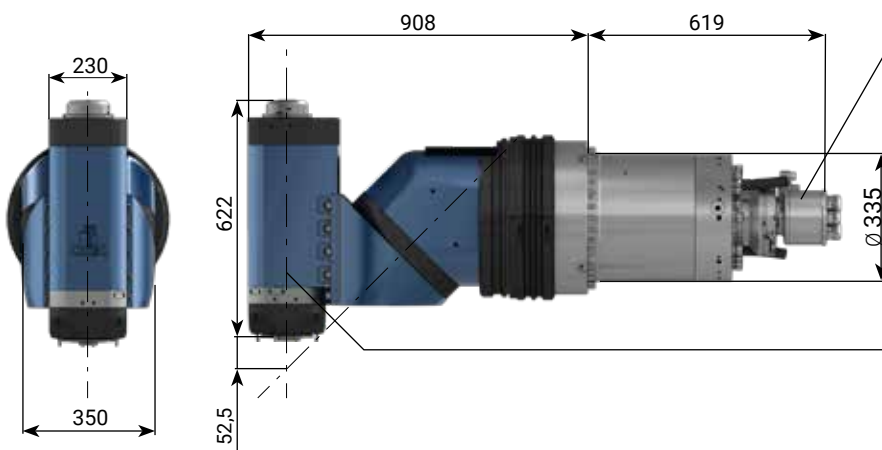
Nom./Max. torque: 900 / 1.680 Nm
Nom./Max. torque: 1.150 / 1.950 Nm (UHT)
 Clamping torque: 4.000 Nm
 Swivel angle: $\pm 180^\circ$
 Measuring system: absolute
 Position accuracy: $\pm 2''$

Total weight approx.: 410 kg

*Spindle options for M-Series 45° (Ø180 mm) see page 16

UHT DirectDrives

M-Series 2x 45°



C - Axis

Nom./Max. torque: 1.020 / 1.960 Nm
Nom./Max. torque: 1430 / 2290 Nm (UHT)
 Clamping torque: 4.000 Nm
 Swivel angle: $\pm 360^\circ$
 Measuring system: absolute
 Position accuracy: $\pm 2''$

A - Axis

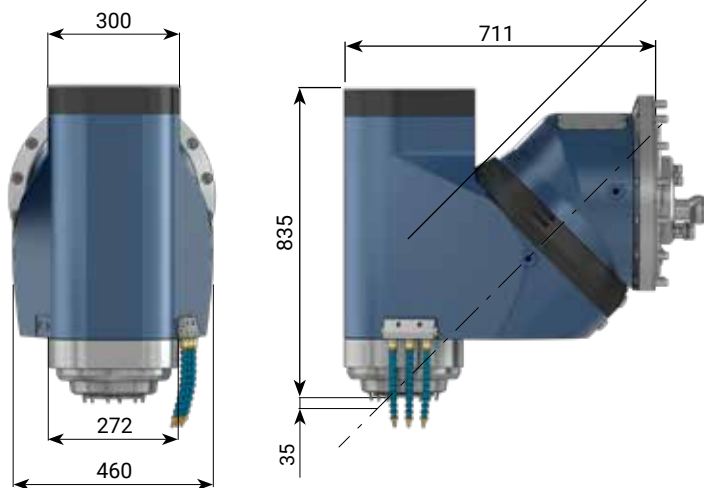
Nom./Max. torque: 670 / 1.320 Nm
Nom./Max. torque: 860 / 1.410 Nm (UHT)
 Clamping torque: 2.000 Nm
 Swivel angle: $\pm 180^\circ$
 Measuring system: absolute
 Position accuracy: $\pm 2''$

Total weight approx.: 870 kg

*Spindle options for M-Series HD (Ø180 mm) see page 16

UHT DirectDrives

M-Series 45° HD



A - Axis

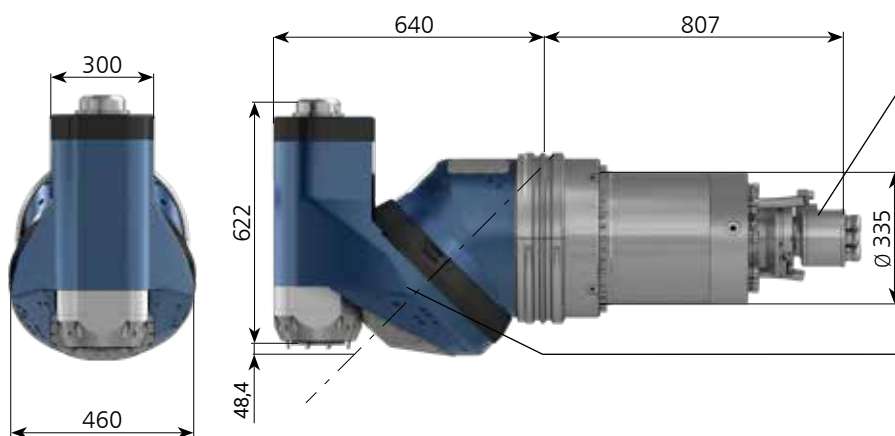
Nom./Max. torque: 780 / 1.470 Nm
Nom./Max. torque: 1.150 / 1.950 Nm (UHT)
 Clamping torque: 2.500 Nm
 Swivel angle: $\pm 190^\circ$
 Measuring system: absolute
 Position accuracy: $\pm 2''$

Total weight approx.: 780 kg



*Spindle options for M-Series 45° HD (Ø200 mm) see page 17

M-Series 2x 45° HD



C - Axis

Nom./Max. torque: 1.020 / 1.960 Nm
Nom./Max. torque: 1430 / 2290 Nm (UHT)
 Clamping torque: 4.000 Nm
 Swivel angle: $\pm 360^\circ$
 Measuring system: absolute
 Position accuracy: $\pm 2''$

A - Axis

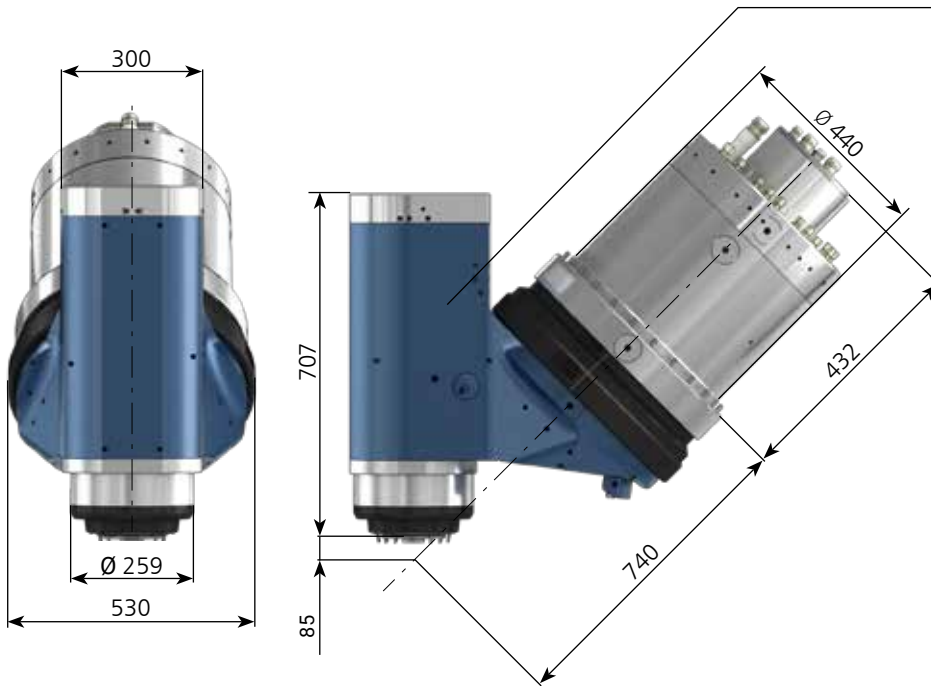
Nom./Max. torque: 780 / 1.470 Nm
Nom./Max. torque: 1.100 / 1.750 Nm (UHT)
 Clamping torque: 2.500 Nm
 Swivel angle: $\pm 190^\circ$
 Measuring system: absolute
 Position accuracy: $\pm 2''$

Total weight approx.: 960 kg



*Spindle options for M-Series 45° HD (Ø200 mm) see page 17

G-Series 45°



A - Axis

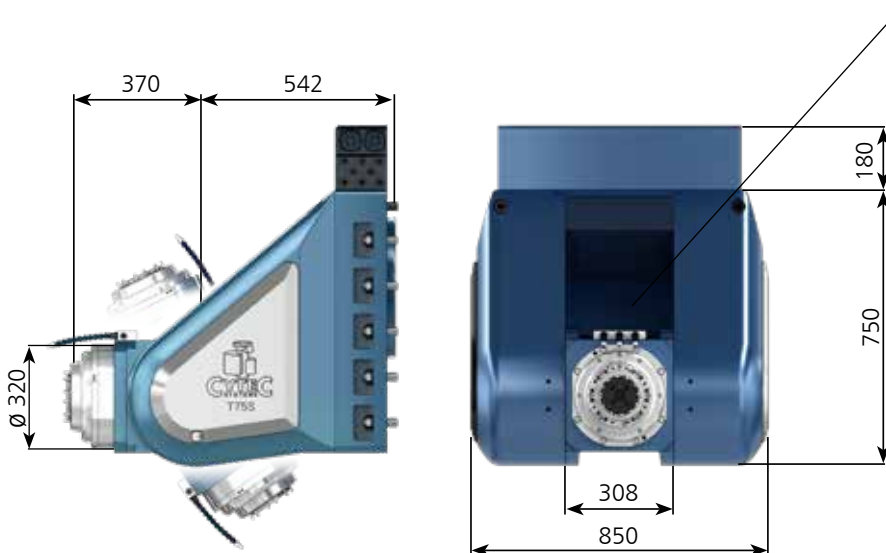
Nom./Max. torque: 1.830 / 3.550 Nm
Nom./Max. torque: 2.605 / 4.300 Nm (UHT)
 Clamping torque: 5.500 Nm
 Swivel angle: $\pm 180^\circ$
 Measuring system: absolute
 Position accuracy: $\pm 2''$

Total weight approx.: 870 kg

*Spindle options for G-Series ($\varnothing 238$ mm) see page 17

UHT DirectDrives

T-Series



A - Axis

Nom./Max. torque: 2.380 / 4.400 Nm
Nom./Max. torque: 3.405 / 5.770 Nm (UHT)
 Clamping torque: 6.500 Nm
 Swivel angle: $-135^\circ / +55^\circ$
 Measuring system: absolute
 Position accuracy: $\pm 2''$

Total weight approx.: 870 kg

*Spindle options for T-Series ($\varnothing 238$ mm / $\varnothing 260$ mm) see page 17

UHT DirectDrives



CYMILL Advantages:

- + HIGHEST POWER DENSITY: LIGHT COMPACT, RIGID AND BRUTAL TORQUE IN EVERY AXIS
- + TEMPERATURE STABLE AND DISTORTION FREE DESIGN FOR CONSTANT ACCURACY
- + ONE PART SWIVEL HOUSING FOR HIGHEST ACCURACY IN ALL DIMENSIONS
- + HUGE VARIETY ON SPINDLE OPTION TO FIT EVERY APPLICATION
- + UNIVERSAL FIT FOR ANY MACHINE TOOL
- + PATENTED DIRECT - DRIVE TECHNOLOGY

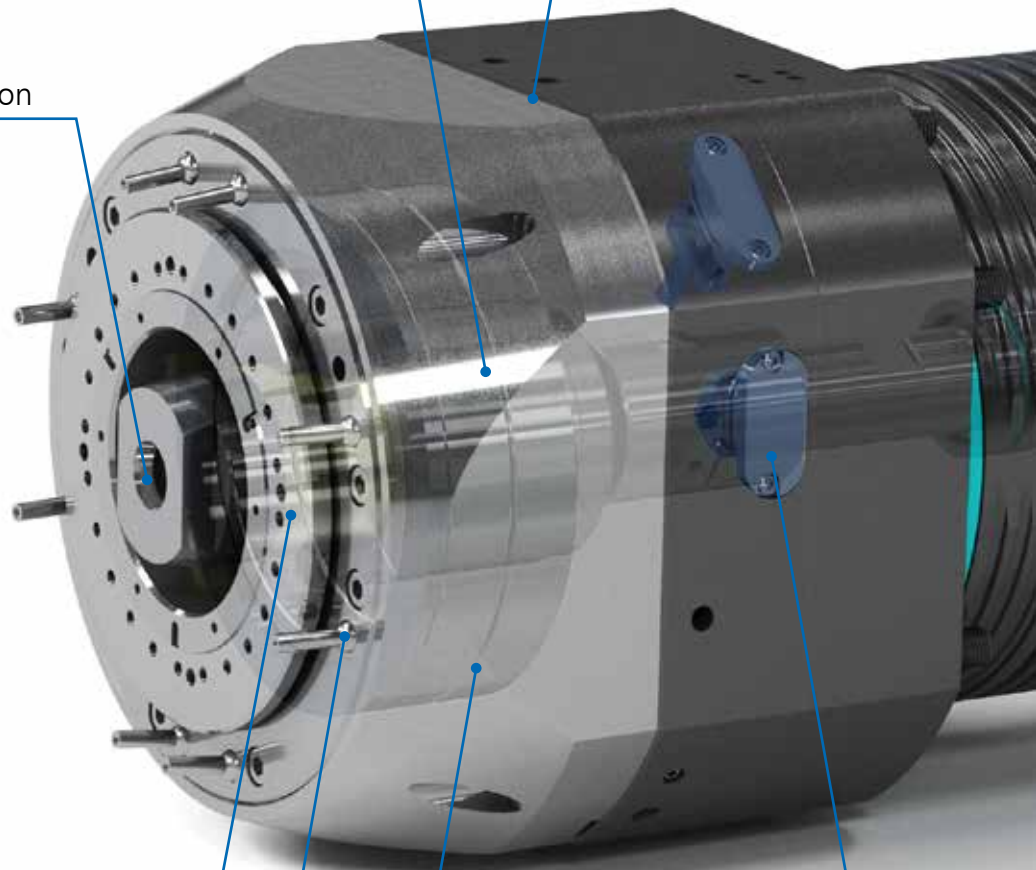




• CyTwist - Automatic hydromechanical tool clamping system

• CST (MILL/TURN)

- Internal coolant supply
- Minimum quantity lubrication



• Clamping and plant control monitoring

• External coolant supply CTS

• High-performance hybrid bearing

- Asynchronous / synchronous motor options

- Various lubrication options for maximum lifespan for all applications

- Cooled rotation union

- High-resolution incremental encoders with position detection

- High performance stator and bearing cooling for homogenous temperature curve

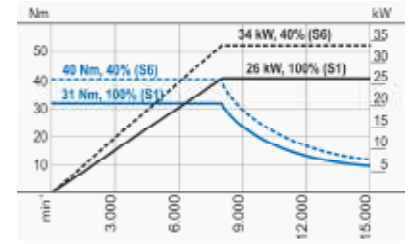
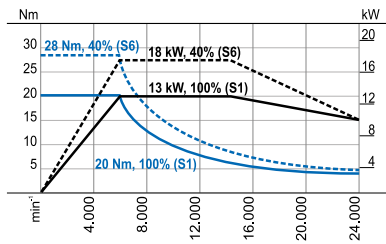
- analog or digital tool monitoring options

- Integrated process monitoring

Δ ZERO
TEMPERATURE CONTROL

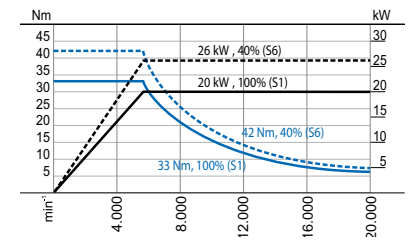
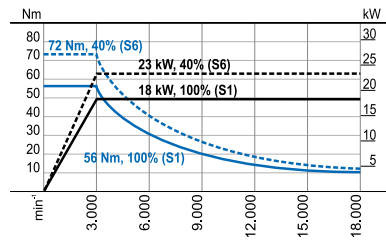


NANO-Series (Ø135mm)



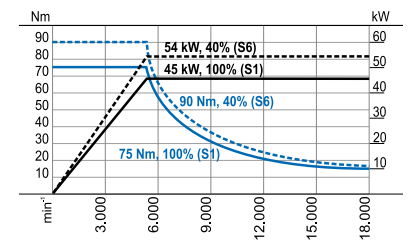
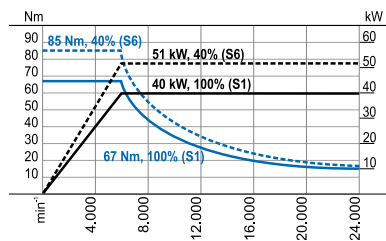
Series:	CS-13-135-A	CS-26-135-S
PowerS1/S6:	13/18 kW	26/34 kW
Nom. speed:	6.000 r.p.m.	8.000 r.p.m.
TorqueS1/S6:	20/28 Nm	31/40 Nm
Max. speed:	24.000 r.p.m.	15.000 r.p.m.
Toolsystem:	HSK-A63	HSK-A63

S-Series (Ø135mm)



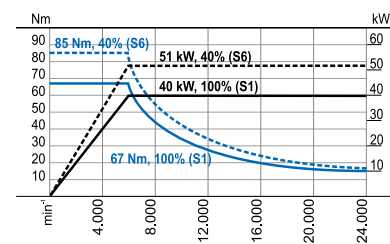
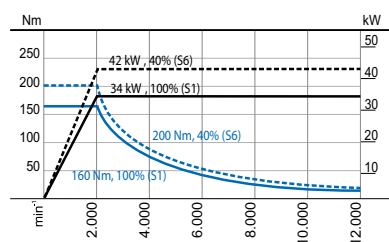
Series:	CS-18-135-S	CS-20-135-A
PowerS1/S6:	18/23 kW	20/26 kW
Nom. speed:	3.000 r.p.m.	6.000 r.p.m.
TorqueS1/S6:	56/72 Nm	33/42 Nm
Max. speed:	18.000 r.p.m.	20.000 r.p.m.
Toolsystem:	HSK-A63	HSK-A63

S-Series HD (Ø160mm)

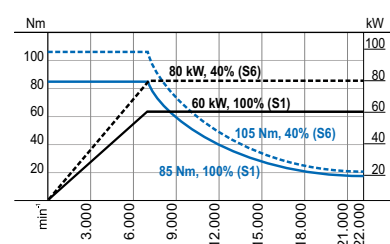
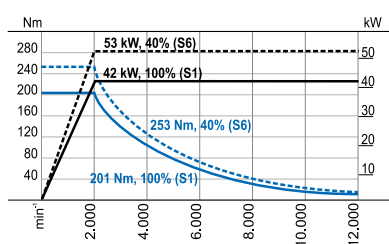


Series:	CS-40-160-S	CS-45-160-S
PowerS1/S6:	40/51 kW	45/54 kW
Nom. speed:	5.700 r.p.m.	5.700 r.p.m.
TorqueS1/S6:	67/85 Nm	75/90 Nm
Max. speed:	24.000 r.p.m.	18.000 r.p.m.
Toolsystem:	HSK-A63	HSK-A63

M-Series (Ø180mm)

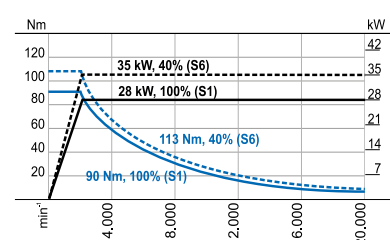
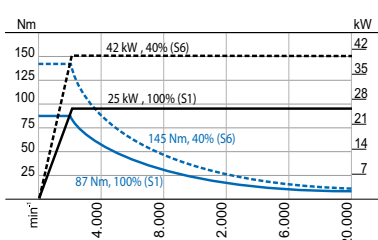
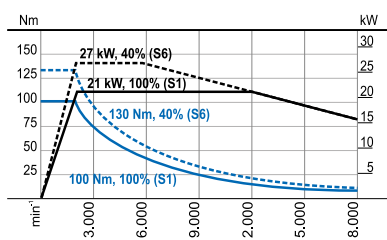


Series:	CS-34-180-S	CS-40-180-S
PowerS1/S6:	34/42 kW	40/51 kW
Nom.speed:	2.000 r.p.m.	5.700 r.p.m.
TorqueS1/S6:	160/200 Nm	67/85 Nm
Max. speed:	12.000 r.p.m.	24.000 r.p.m.
Toolsystem:	HSK-A100	HSK-A63



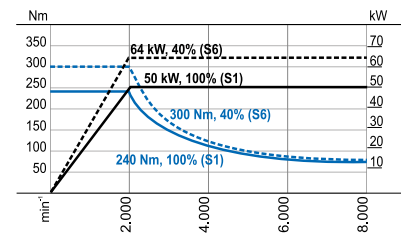
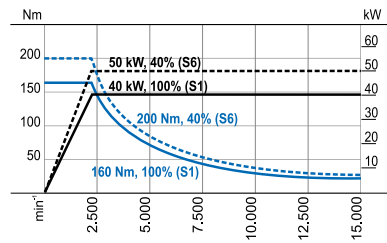
Series:	CS-42-180-S / CST-42-180-S	CS-60-180-S
PowerS1/S6:	42/53 kW	60/80 kW
Nom.speed:	2.000 r.p.m.	7.000 r.p.m.
TorqueS1/S6:	201/253 Nm	85/105 Nm
Max. speed:	12.000 r.p.m.	22.000 r.p.m.
Toolsystem:	HSK-A100	HSK-A63

CYTEC SELECT

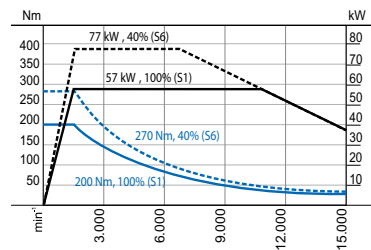


Series:	CS-21-180-A (SELECT)	CS-25-180-A (SELECT)	CS-28-180-A (SELECT)
PowerS1/S6:	21/27 kW	25/42 kW	28/35 kW
Nom.speed:	2.000 r.p.m.	2.000 r.p.m.	2.000 r.p.m.
TorqueS1/S6:	100/130 Nm	87/145 Nm	90/113 Nm
Max. speed:	18.000 r.p.m.	20.000 r.p.m.	20.000 r.p.m.
Toolsystem:	HSK-A63	HSK-A63	HSK-A63

M-Series HD (Ø200mm)



Series:	CS-40-200-S	CS-50-200-S / CST-50-200-S
PowerS1/S6:	40/50 kW	50/64 kW
Nom.speed:	2.400 r.p.m.	2.000 r.p.m.
TorqueS1/S6:	160/200 Nm	240/300 Nm
Max. speed:	15.000 r.p.m.	8.000 r.p.m.
Toolsystem:	HSK-A100	HSK-A100



Series:	CS-57-200-S
PowerS1/S6:	57/65 kW
Nom.speed:	2.700 r.p.m.
TorqueS1/S6:	200/270 Nm
Max. speed:	12.500 r.p.m.
Toolsystem:	HSK-A100

CYSPEED *Select* motorspindles are the most frequent used motorspindles in the market. In due to the high demand, these motorspindles are produced to stock.



Rapid delivery time



Competitive pricing



Big Stock



40 Years of experience



Refurbished program



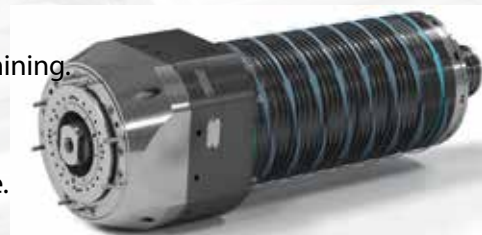
Global Sales & Service



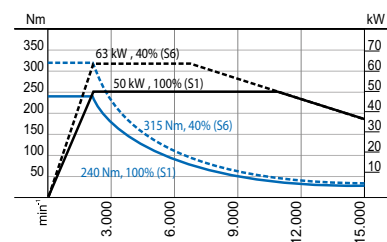
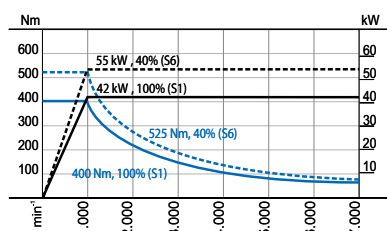
36 months warranty

CYSPEED Advantages:

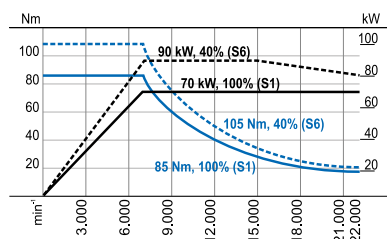
- + CYTEC hydromechanical tool clamping system for failsafe machining.
- + Hybrid bearing combination for highest performance, rigidity, accuracy and spindle lifetime.
- + Delta-Zero Temperature control for homogeneous temperature.
- + Most compact design.
- + Unique grasping safety of clamping system with 2.5mm stroke.
- + Rotary Joint in Standard configuration.



G-Series/T- Series (Ø238mm)

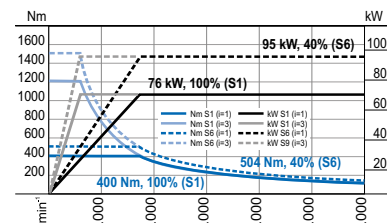
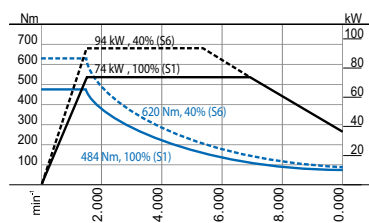


Series:	CS-42-238-S	CS-50-238-A / CST-50-238-A
PowerS1/S6:	42/55 kW	50/63 kW
Nom.speed:	1.000 r.p.m.	2.000 r.p.m.
TorqueS1/S6:	400/525 Nm	248/315 Nm
Max. speed:	7.000 r.p.m.	15.000 r.p.m.
Toolsystem:	HSK-A100 / SK50/C8	HSK-A100



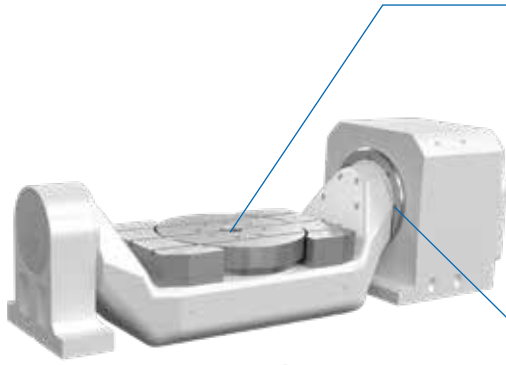
Series:	CS-70-238-S
PowerS1/S6:	70/90 kW
Nom.speed:	8.000 r.p.m.
TorqueS1/S6:	85/105 Nm
Max. speed:	22.000 r.p.m.
Toolsystem:	HSK-A63

G-Series HD/T-Series (Ø260mm)



Series:	CS-74-260-A	CSG-76-300-S
PowerS1/S6:	74/94 kW	76/95 kW
Nom.speed:	1.600 r.p.m.	1.800 r.p.m. (i=1) / 600 r.p.m. (i=3)
TorqueS1/S6:	484/620 Nm	400/504 Nm (i=1) / 1.200/1.512 Nm (i=3)
Max. speed:	10.000 r.p.m.	6.000 r.p.m.
Toolsystem:	HSK-A100 / SK-50	HSK-A100

CRT-2-400/ CRT-2-400-M/T



C - Axis	HighTorque	HighSpeed
Diameter [mm]:	400	400
Rated/max.torque[Nm]	330 / 430	250 / 441
Clamping torque [Nm]:	1.600	1.600
Speed max. [rpm]:	500	1.200
Load max. [kg]	500	500
Position accuracy ["]:	1/2/4	1/2/4

A - Axis	HighTorque
Rated/max. torque [Nm]	780 / 1.470
Clamping torque [Nm]:	4.600
Speed max. [rpm]:	95
Position accuracy ["]:	1/2/4

UHT DirectDrives

CRT-2-600

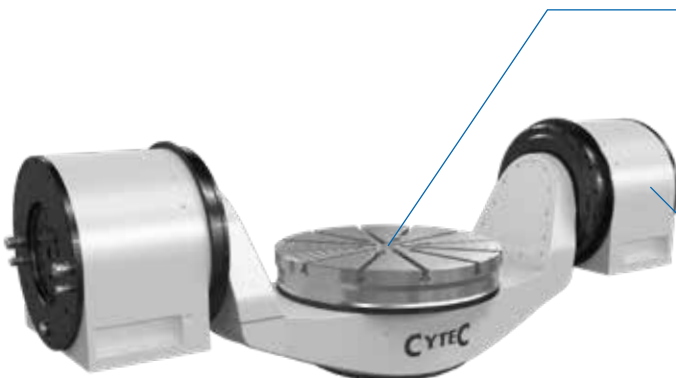


C - Axis	HighTorque
Diameter [mm]:	600 - 750
Rated/max.torque[Nm]	630 / 1.170
Clamping torque [Nm]:	3.000
Speed max. [rpm]:	100
Load max. [kg]	400
Position accuracy ["]:	1/2/4

A - Axis	HighTorque
Rated/max. torque [Nm]	2.125 / 3.955
Clamping torque [Nm]:	5.000
Speed max. [rpm]:	50
Position accuracy ["]:	1/2/4

UHT DirectDrives

CRT-2-630/800 CRT-2-630/800-M/T

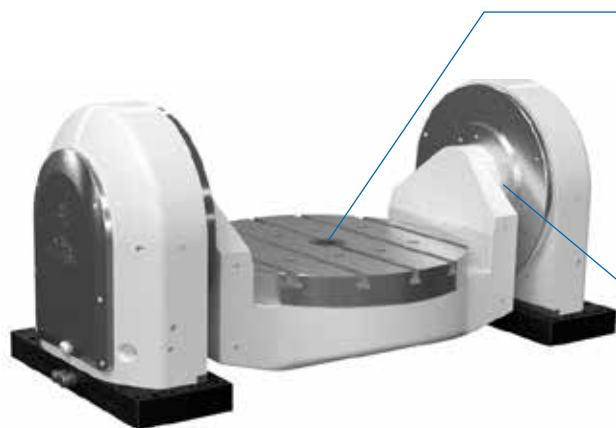


C - Axis	HighTorque	HighSpeed
Diameter [mm]:	630 / 800	630 / 800
Rated/max.torque[Nm]	1.180 / 1.930	860 / 1.390
Clamping torque [Nm]:	2.800	2.800
Speed max. [rpm]:	105	1.000
Load max. [kg]	750	75
Position accuracy ["]:	1/2/4	1/2/4

A - Axis	HighTorque
Rated/max. torque [Nm]	3.620 / 5.720
Clamping torque [Nm]:	5.640
Speed max. [rpm]:	80
Position accuracy ["]:	1/2/4

UHT DirectDrives

CRT-2-660/ CRT-2-660-M/T

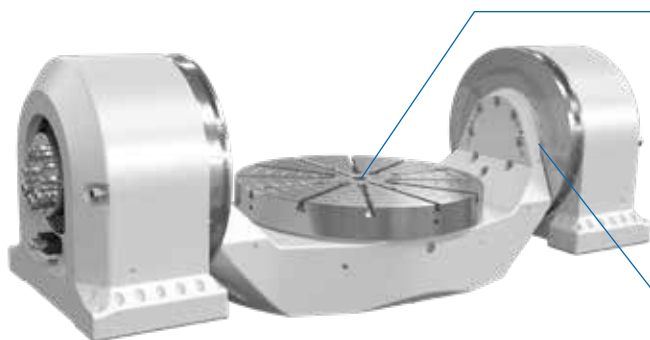


C - Axis	HighTorque	HighSpeed
Diameter [mm]:	660	660
Rated/max.torque[Nm]	1.280 / 2.390	750 / 1.500
Clamping torque [Nm]:	4.000	4.000
Speed max. [rpm]:	95 / 129	650 / 800
Load max. [kg]	1000	1000
Position accuracy ["]:	1/2/4	1/2/4

A - Axis	HighTorque
Rated/max. torque [Nm]	1.995 / 3.700
Clamping torque [Nm]:	7.000
Speed max. [rpm]:	100 / 145
Position accuracy ["]:	1/2/4



CRT-2-800 CRT-2-800-M/T



C - Axis	HighTorque	HighSpeed
Diameter [mm]:	800	800
Rated/max.torque[Nm]	1.200 / 2.000	1.000 / 1.500
Clamping torque [Nm]:	4.000	4.000
Speed max. [rpm]:	310	635 / 1.000
Load max. [kg]	1000	1000
Position accuracy ["]:	1/2/4	1/2/4

A - Axis	HighTorque
Rated/max. torque [Nm]	4.990 / 9.540
Clamping torque [Nm]:	10.000
Speed max. [rpm]:	60 / 95
Position accuracy ["]:	1/2/4



CYTURN Advantages:

- + HIGHEST POWER DENSITY: LIGHT COMPACT, RIGID AND BRUTAL TORQUE IN EVERY AXIS
- + TEMPERATURE STABLE AND DISTORTION FREE DESIGN FOR CONSTANT ACCURACY
- + ONE PART SWIVEL HOUSING FOR HIGHEST ACCURACY IN ALL DIMENSIONS
- + HUGE ON SPINDLE OPTION TO FIT EVERY APPLICATION
- + UNIVERSAL FIT FOR ANY MACHINE TOOL
- + MOST ADVANCED DIRECT – DRIVE TECHNOLOGY, DECADES OF EXPERTISE

DYNAMIC MEETS PRECISION



Series:	S-Line	M-Line	G-Line
Size:	400 - 600	600 - 1200	1200 - 1800
Bearing Ø [mm]:	260 - 325	325 - 580	580 - 850
Motor:	RM 310 HT	RM 410 HT	RM 564 HT
Rated torque up to [Nm]:	2.530	4.400	9.050
Peak torque up to [Nm]:	4.400	7.550	17.000
Clamping torque up to [Nm]:	6.000	12.000	20.000
Speed max. [rpm]:	100	75	50
Load max. [kg]:	1.000	2.000 - 3.000	4.000 - 6.000
Pos. accuracy ["]:	2,5 / 5	1 / 2,5 / 5	1 / 2,5 / 5
Optional Turning function			
Speed max. up to* [rpm]:	2.000	1.500	800
Load max. [kg]:	1.000	1.100 - 2.000	2.000 - 3.000

*The overview represents the range of technical data for an application oriented definition of the optimum type of motor. Technical parameters are not valid in combination with max values.

CYTURN Options:

- + MILL/TURN OPERATION
- + BUILT-IN CLAMPING SYSTEMS
- + AUTOMATIC BALANCING SYSTEM
- + ULTRA PRECISION PACKAGE
- + HIGH CLAMPING TORQUE
- + OPTIONAL FACE PLATES
- + TOOL MEASURING SYSTEM



NPS-H-090-CY1 FLAT



NPS-P-090-CY1 CONE



	Technical Data	Technical Data
Clamping Force [kN]:	35 (35 bar)	35 (40 bar)
Max. clamping force: [kN]:	40	35
max. clamping pressure [bar]:	35	40
max. releasing pressure [bar]:	40	6
max. purging air pressure [bar]:	10	10
mounting position:	universal	universal
repeat accuracy [µm]:	≤ 5	5,00
weight [kg]:	3,5	2,23
operation temperature range [°C]:	+5 - +50	+5 - +50
adm. air humidity [%]:	0 -70	0 -70
oil:	HLP DIN51524 (VG32-100)	HLP DIN51524 (VG32-100)

CYTAB Advantages:

- + SELF CENTERING
- + COMPACT
- + high clamping force
- + CLAMPING MONITORING
electrically, pneumatically, hydraulically
- + FACE CONTACT CONTROL
- + AIR BLAST
- + CONE CLEANING
- + HYDR./PNEUMATIC BOOSTER



CYTEC WORLD WIDE

HQ - CYTEC Zylindertechnik Germany
Jülich

CYTEC France
Le Pecq

CYTEC USA
Florida

CYTEC Taiwan
Taichung

CYTEC China
Shanghai, Jinan

CYTEC UK
Oldham



Contact:

CYTEC Zylindertechnik GmbH

Steffensrott 1 • D-52428 Jülich

Tel.: (+49) 2461 / 6808-0

E-mail: CYTECtrade@cytec.de • [http:// www.CYTEC.de](http://www.CYTEC.de)



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We reserve the right to make technical modifications. The components/ machines shown here may include options, accessories and control variants.