

CyMill

NC MILLING HEADS



COMPONENTS EXCELLENCE



MADE IN GERMANY



**PROCESS STABLE
RELIABLE
DYNAMIC
STRONG**

DYNAMIC MEETS PRECISION

The CYTEC machining heads with synchronous drives for high dynamic applications are the result of long-term experience gained in the conception and design of torque motors produced by CYTEC Zylindertechnik GmbH.

CYTEC optimised them once more as latest generation of direct drives for rotating and swivel axes.

The distinctive characteristics of the series are performance, precision and a high level of reliability together with enormous power and dynamic.

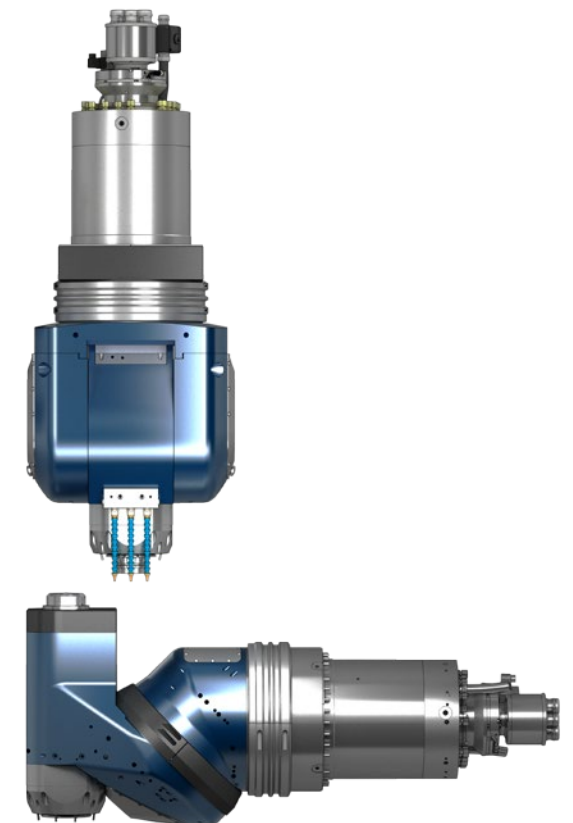
The drives are characterised by optimal control properties. A high overload capacity adapts ideally to most application requirements.

The powerful drive clamping device supports high precision positioning even for rough machining and high workpiece loads.

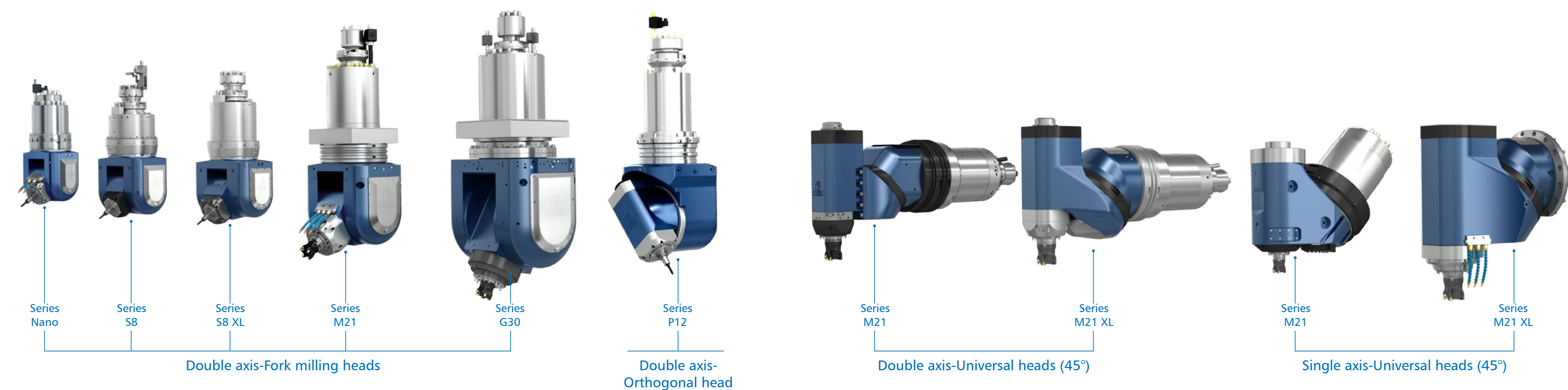


CYTEC Zylindertechnik GmbH is a proven system partner for the mechanical engineering, technical know-how and creativity gained over decades working in the machine tool industry.

The range of products comprises hydraulic and pneumatic clamping systems with positive lock, motor spindles, NC rotary tables and not at least single or multiple axis NC milling heads with ultra-high dynamic, patented direct drives. CYTEC Zylindertechnik GmbH is developer and producer of tool machine components, that meet highest technical demands. Its in-house production depth and flexibility guarantee highest product quality.



THE RIGHT HEAD FOR ANY APPLICATION



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Options



AT A GLANCE

⦿ Milling heads in individual configuration

- adapted to the application
- single and double axis systems
- fork, universal and orthogonal versions

⦿ Highest possible precision

- by means of
- radial/axial roller bearings
- state of the art measuring systems
- high torsional stiffness

⦿ Integrated security pack

- in terms of a complete sensor system for total monitoring of all functions during the operational process



⦿ UltraHighTorque direct drives of the latest generation

- modular systems
- for maximised power and dynamic
- effective cooling solutions in A-/C axis
- powerful hydraulic clamping
- products of long term CYTEC experience and knowhow



⦿ High system rigidity

- as a result of extensive FEM calculation:
- simulation of various stress situations caused by different loads and machining processes
- optimised weight-reduced structure
- for best machining quality and trouble free operation

⦿ Cartridge axis housings

- and sealings as reliable protection device from harmful external influences and dirt

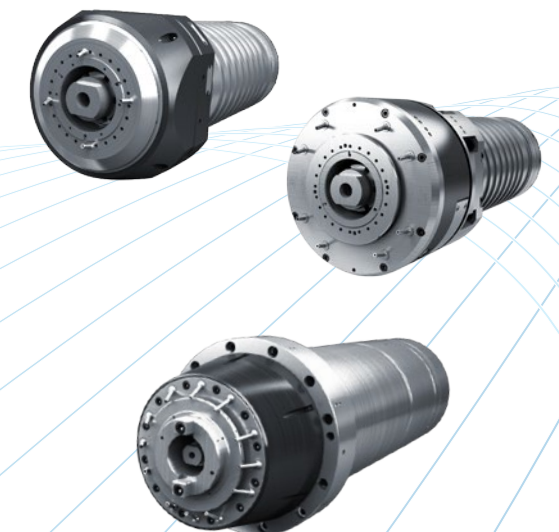
⦿ Effective simultaneous machining

⦿ Intelligent energy line/ data transmission concept

- elaborated internal arrangement with flexible wiring/tubing
- complete flexible cable harness - at least 2m length
- i. e. simple integration into the existing customer machine periphery

⦿ Standard and optional main spindles

- for various requirements;
- sizes/adaption/design available according to customer demands, possible with:
- clampable spindle shaft
- modification of the tool interface
- power range up to 70 kW
- rotational speed up to 24.000 min⁻¹

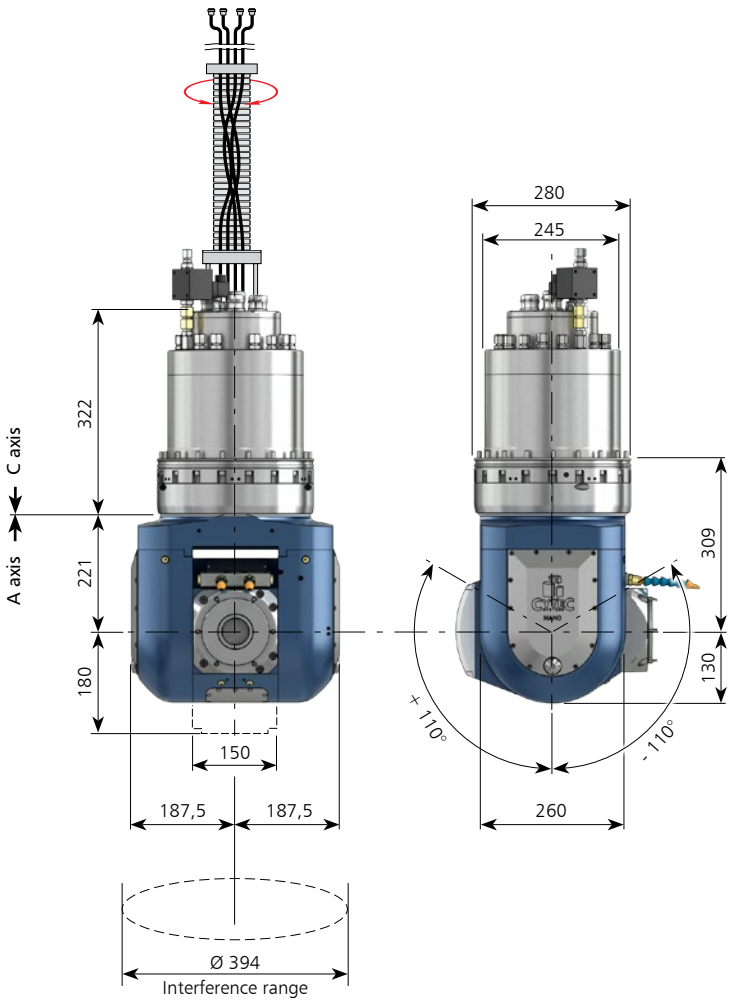


MADE  IN GERMANY



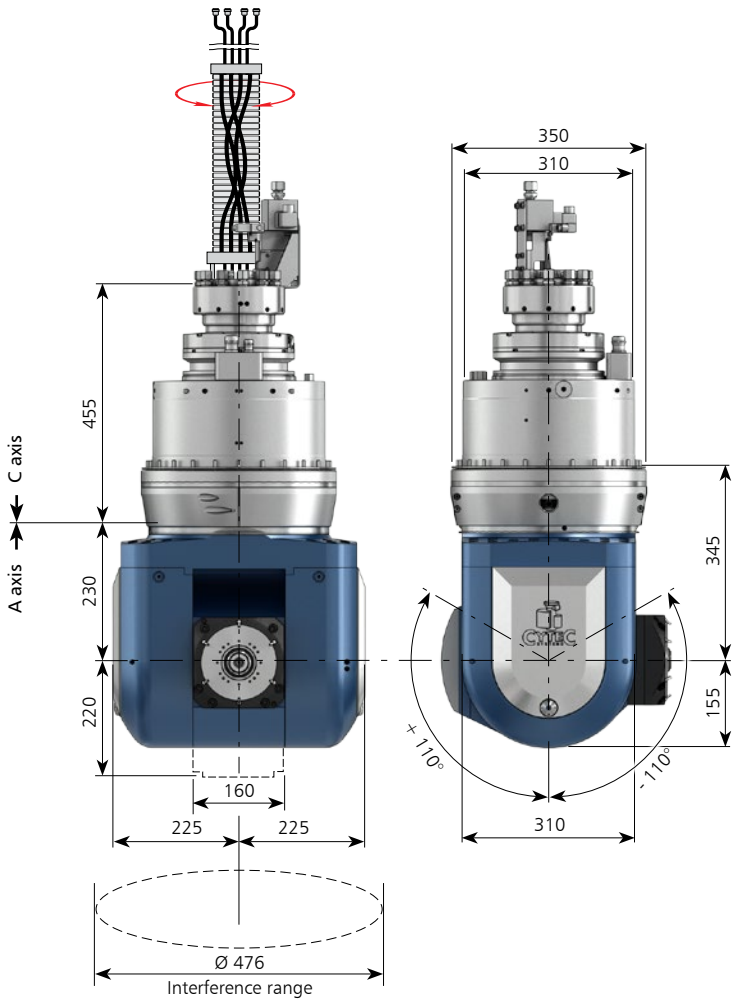
Fork milling head
Series Nano

	A axis	C axis
Nom./max. torque [Nm]:	164/308	245/410
Nom. current [A]:	26	15
Clamping torque 60 bar [Nm]:	700	1.000
Swivel angle [°]:	±110	±190
Measuring system:	absolute	absolute
Positioning accuracy [″]:	±5	±5
Total weight appr. [kg]:	195	



Fork milling head
Series S8

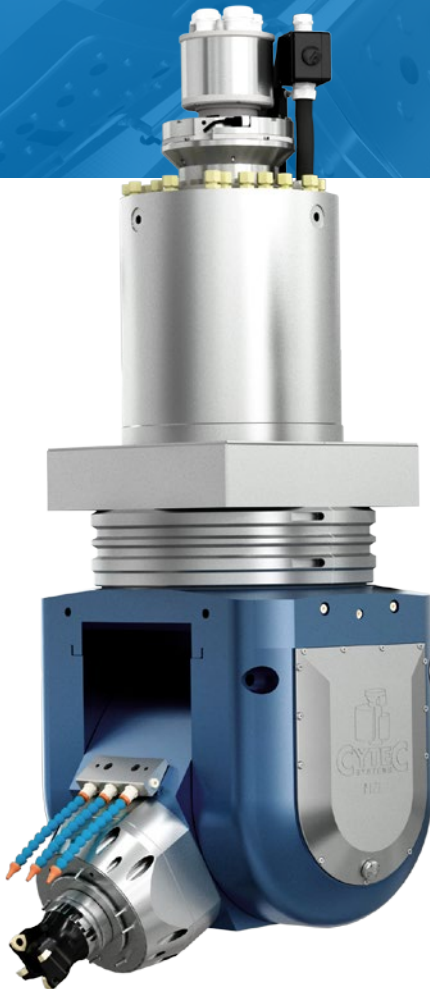
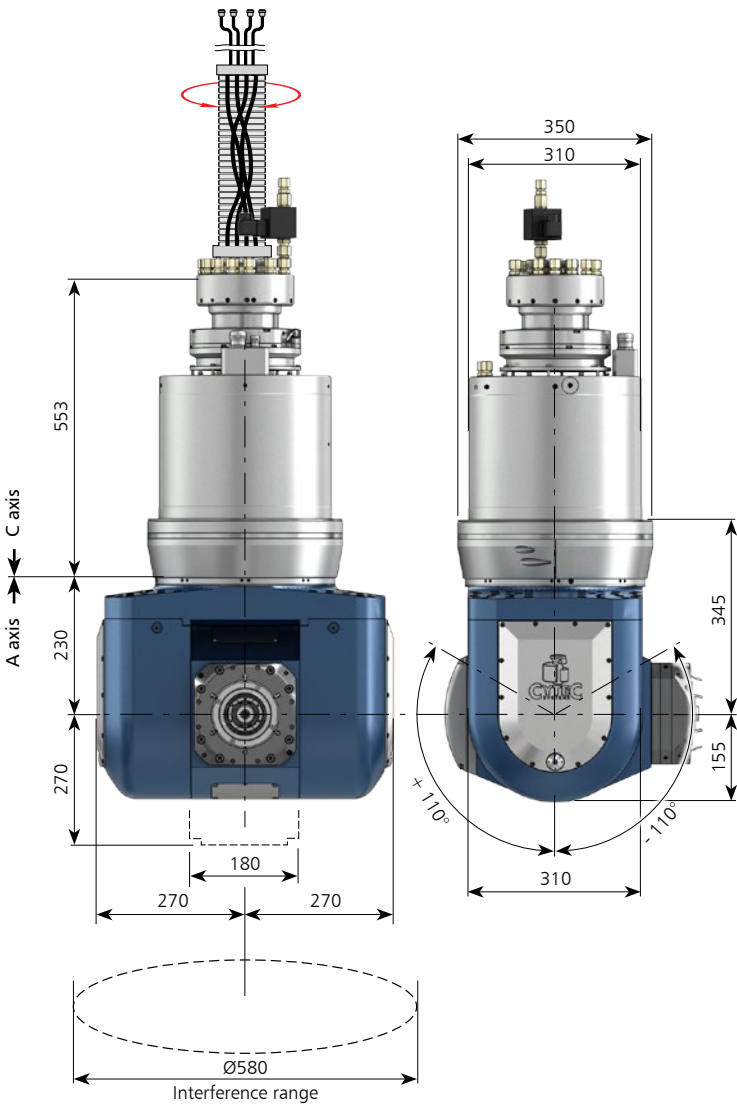
	A axis	C axis
Nom./max. torque [Nm]:	400/770	430/820
Nom. current [A]:	14	26
Clamping torque 60 bar [Nm]:	1.500	1.400
Swivel angle [°]:	±110	±360
Measuring system:	absolute	absolute
Positioning accuracy [″]:	±5	±2
Total weight appr. [kg]:	350	





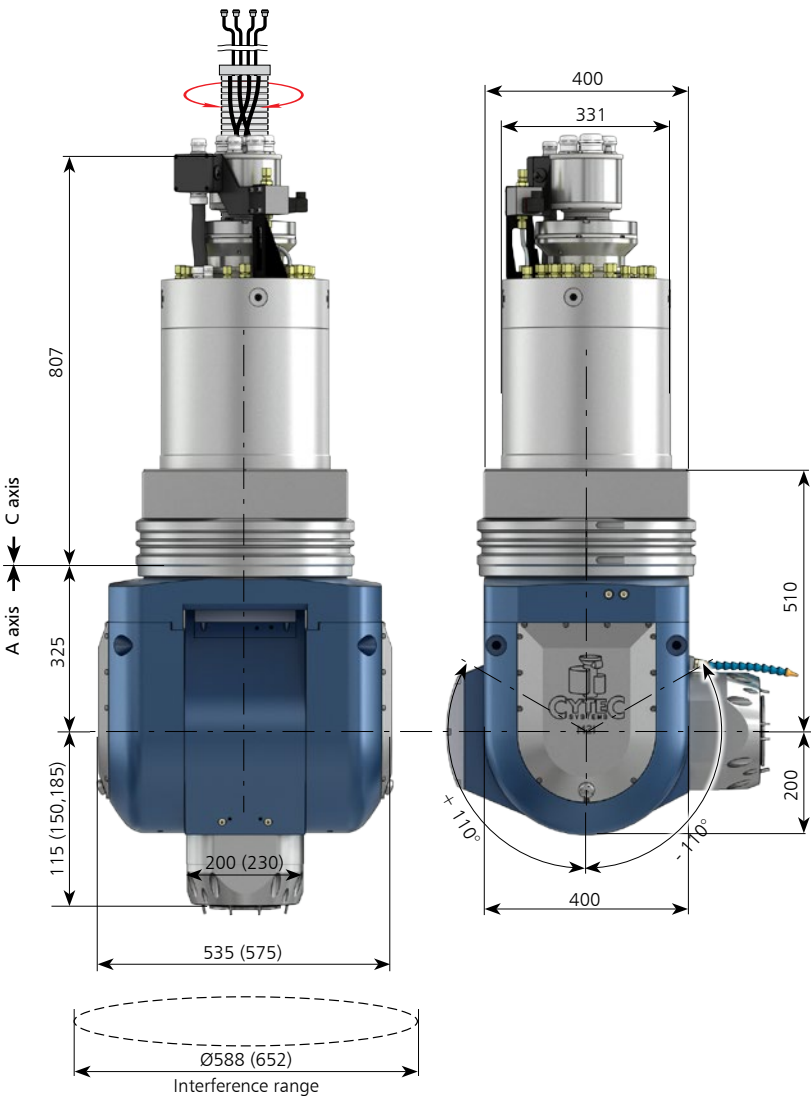
Fork milling head
Series S8 XL

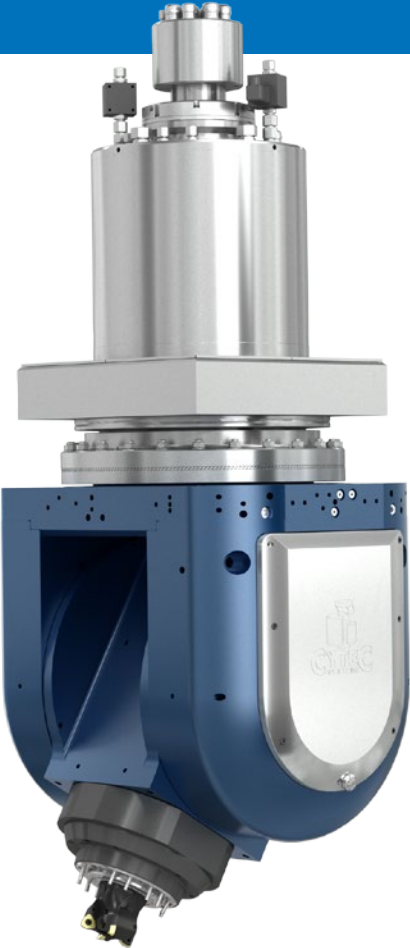
	A axis	C axis
Nom./max. torque [Nm]:	630/1.190	670/1.320
Nom. current [A]:	27	15
Clamping torque 60 bar [Nm]:	2.400	2.400
Swivel angle [°]:	±110	±360
Measuring system:	absolute	absolute
Positioning accuracy [″]:	±5	±2
Total weight appr. [kg]:	495	



Fork milling head
Series M21

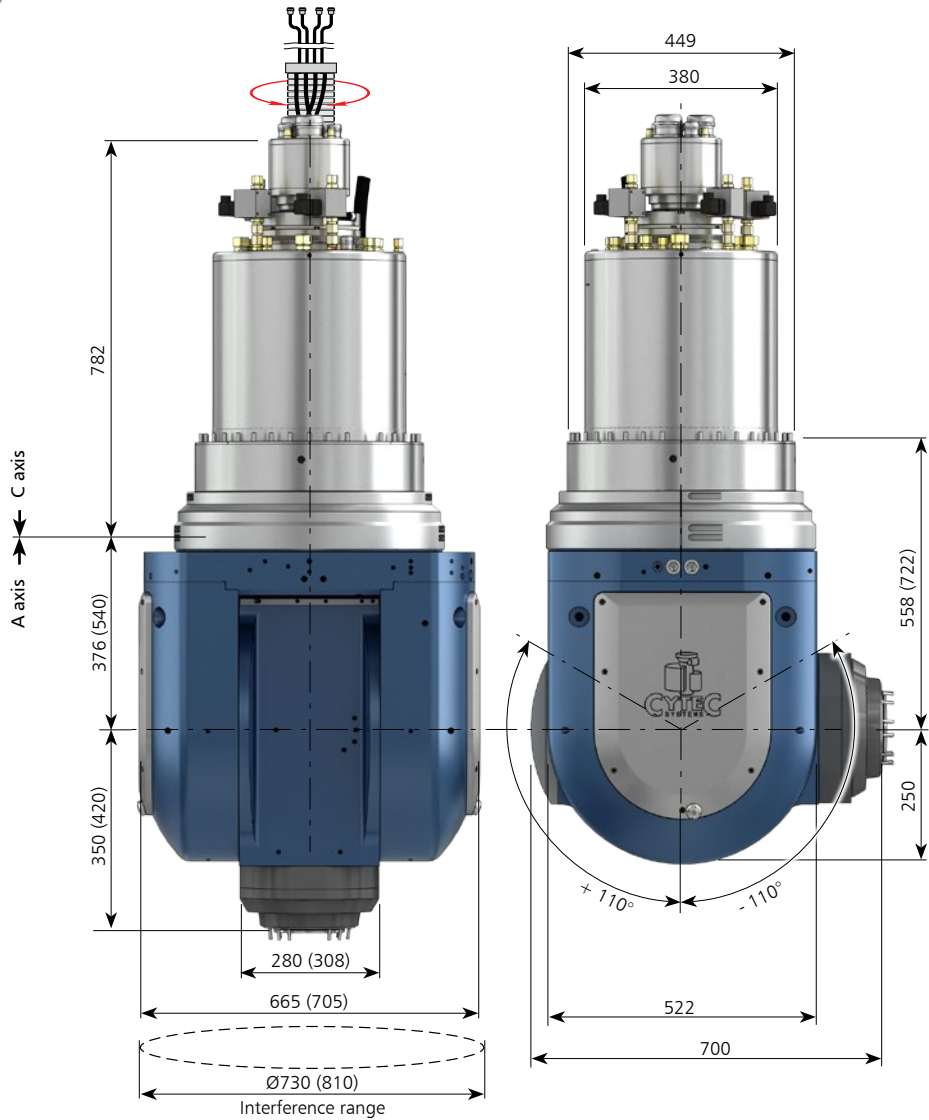
	A axis	C axis
Nom./max. torque [Nm]:	840/1.340	1.020/1.960
Nom. current [A]:	30	30
Clamping torque 60 bar [Nm]:	4.000	4.000
Swivel angle [°]:	±115	±360
Measuring system:	absolute	absolute
Positioning accuracy [″]:	±5	±2
Total weight appr. [kg]:	950	





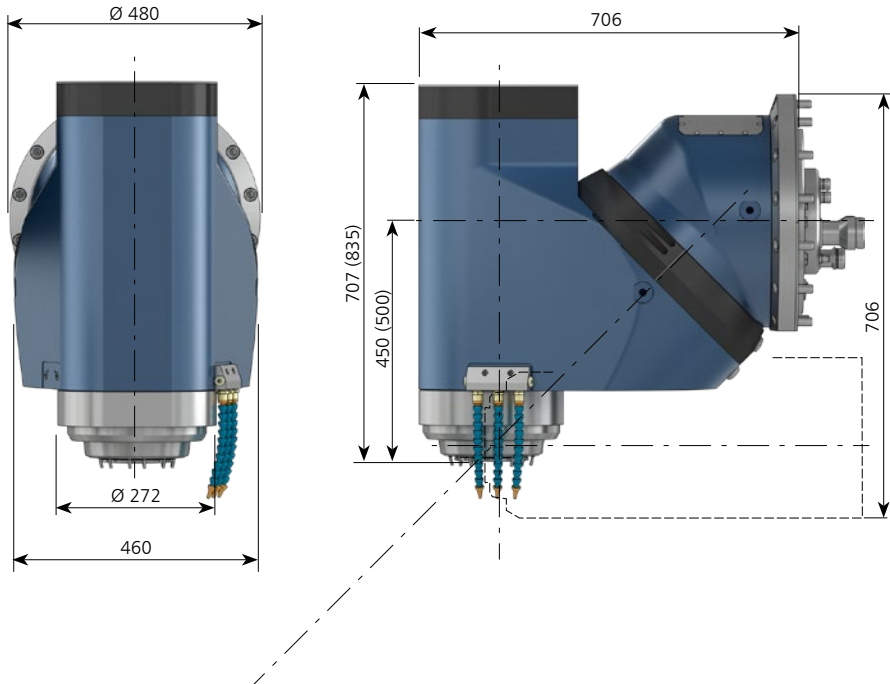
Fork milling head
Series G30

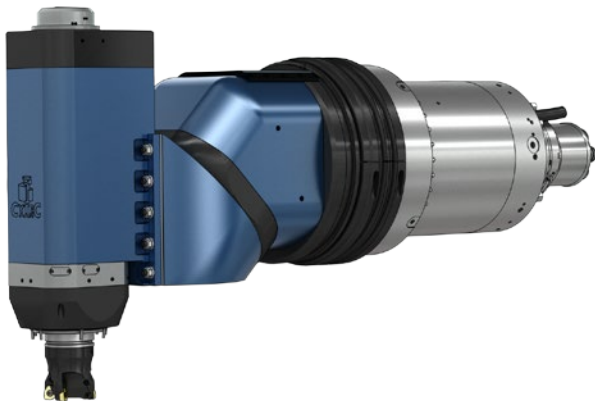
	A axis	C axis
Nom./max. torque [Nm]:	2.000/3.700	1.830/3.550
Speed max. [min ⁻¹]:	60	60
Max. acceleration [min ⁻¹ /s ²]:	7	5
Nom. current [A]:	30	29
Clamping torque 60 bar [Nm]:	7.000	
Swivel angle [°]:	±110	±360/cont.
Measuring system:	absolute	absolute
Positioning accuracy [″]:	±2,5	±2
Total weight appr. [kg]:	1.200	



Universal milling head
Series M21 XL single axis

	A axis
Nom./max. torque [Nm]:	780/1.470
Nom. current [A]:	30
Clamping torque 50 bar [Nm]:	2.500
Swivel angle [°]:	±190
Measuring system:	absolute
Positioning accuracy [″]:	±2
Total weight appr. [kg]:	840





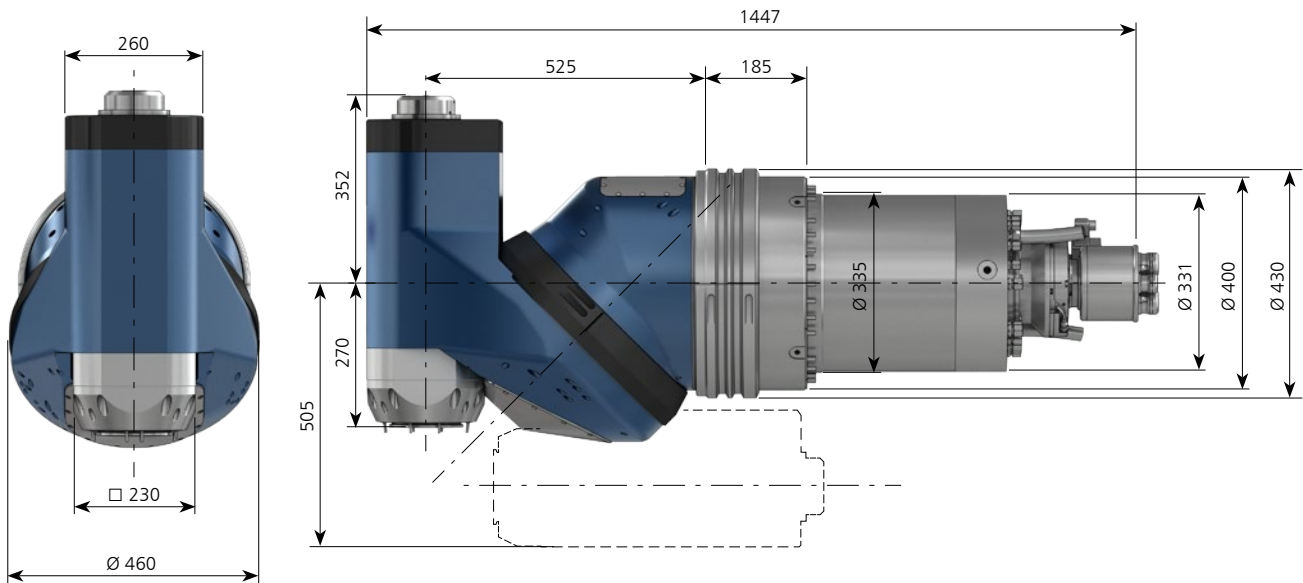
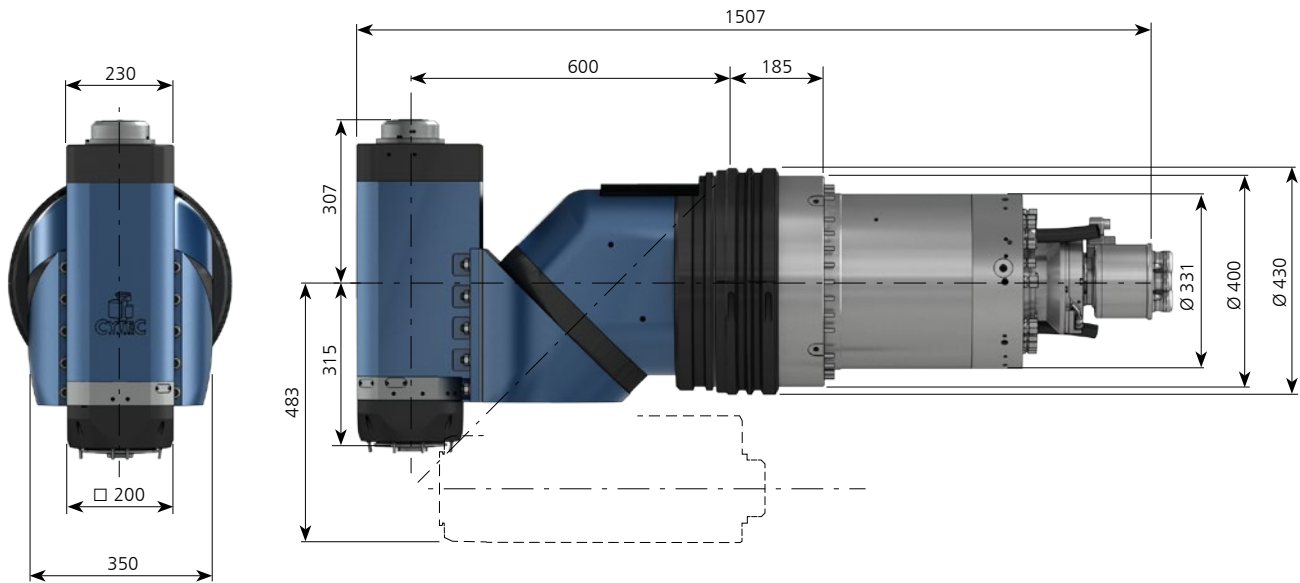
Universal milling head
Series M21 Double axis

	A axis	C axis
Nom./max. torque [Nm]:	552/1.058	1.022/1.985
Nom. current [A]:	14	30
Clamping torque 60 bar [Nm]:	2.000	4.000
Swivel angle [°]:	±180	±360
Measuring system:	absolute	absolute
Positioning accuracy [″]:	±2	±2
Total weight appr. [kg]:	870	



Universal milling head
Series M21 XL Double axis

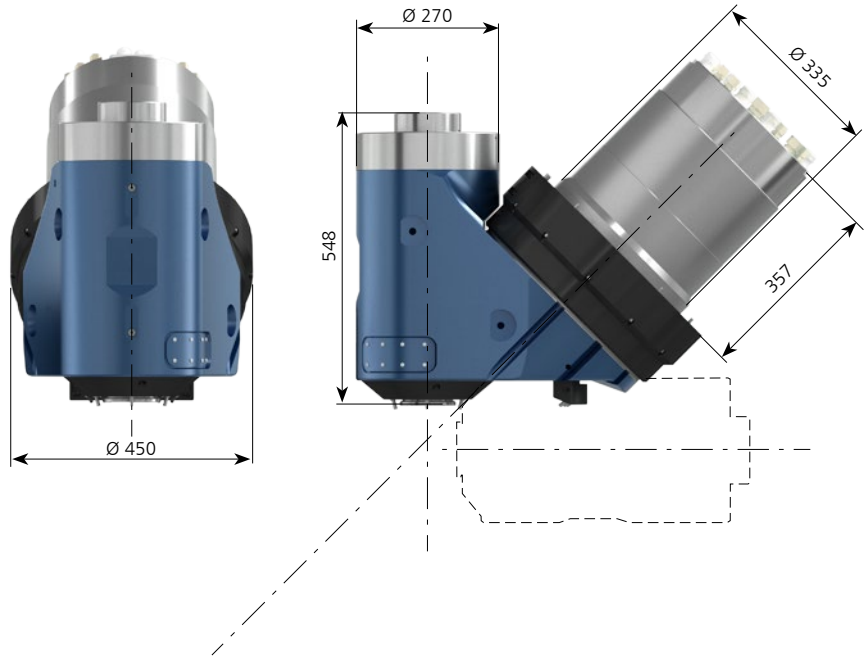
	A axis	C axis
Nom./max. torque [Nm]:	780/1.470	1.020/1.960
Nom. current [A]:	30	30
Clamping torque 60 bar [Nm]:	2.500	4.000
Swivel angle [°]:	±190	±360
Measuring system:	absolute	absolute
Positioning accuracy [″]:	±2	±2
Total weight appr.[kg]:	960	





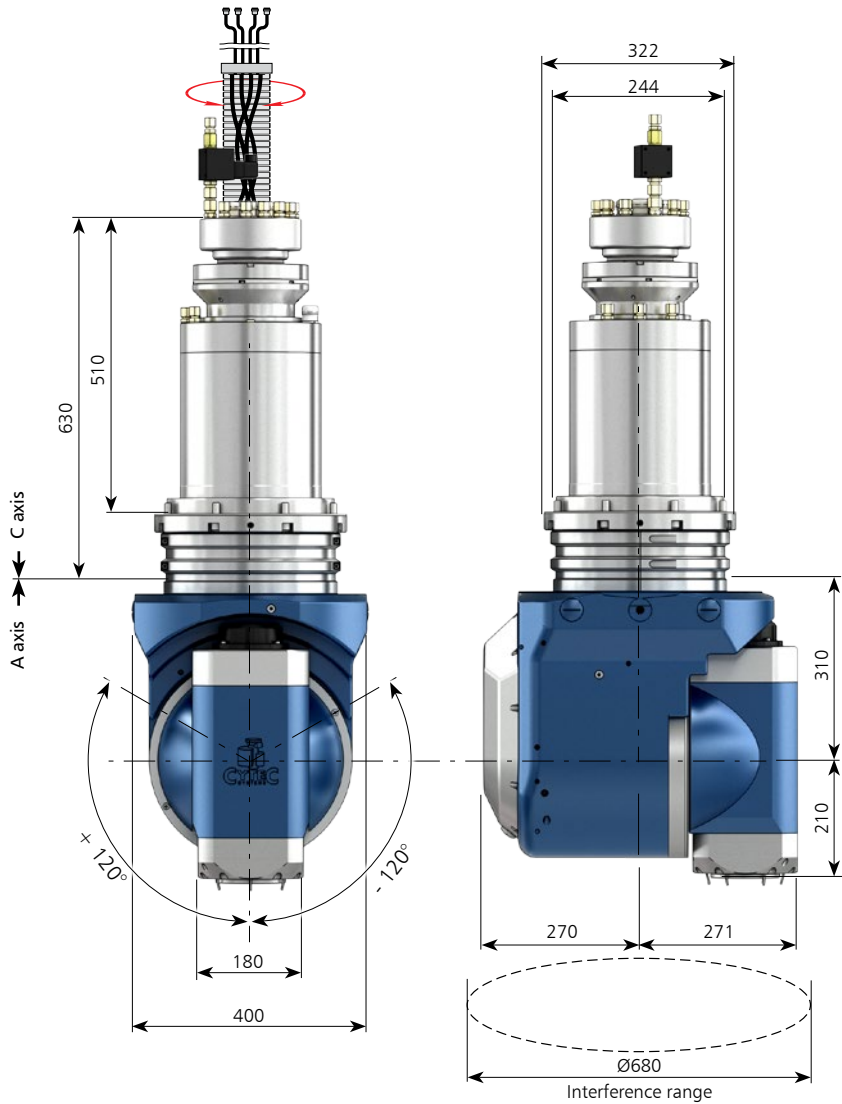
Universal milling head
Series M21 single axis

	A axis
Nom./max. torque [Nm]:	900/1.680
Nom. current [A]:	30
Clamping torque 50 bar [Nm]:	4.000
Swivel angle [°]:	±180
Measuring system:	absolute
Positioning accuracy [″]:	±2
Total weight appr. [kg]:	410



Orthogonal milling head
Series P12

	A axis	C axis
Nom./max. torque [Nm]:	433/817	490/820
Nom. current [A]:	14	30
Clamping torque 60 bar [Nm]:	1.400	2.500
Swivel angle [°]:	±120	±360
Measuring system:	absolute	absolute
Positioning accuracy [″]:	±2	±2
Total weight appr. [kg]:	470	



Motor spindles

