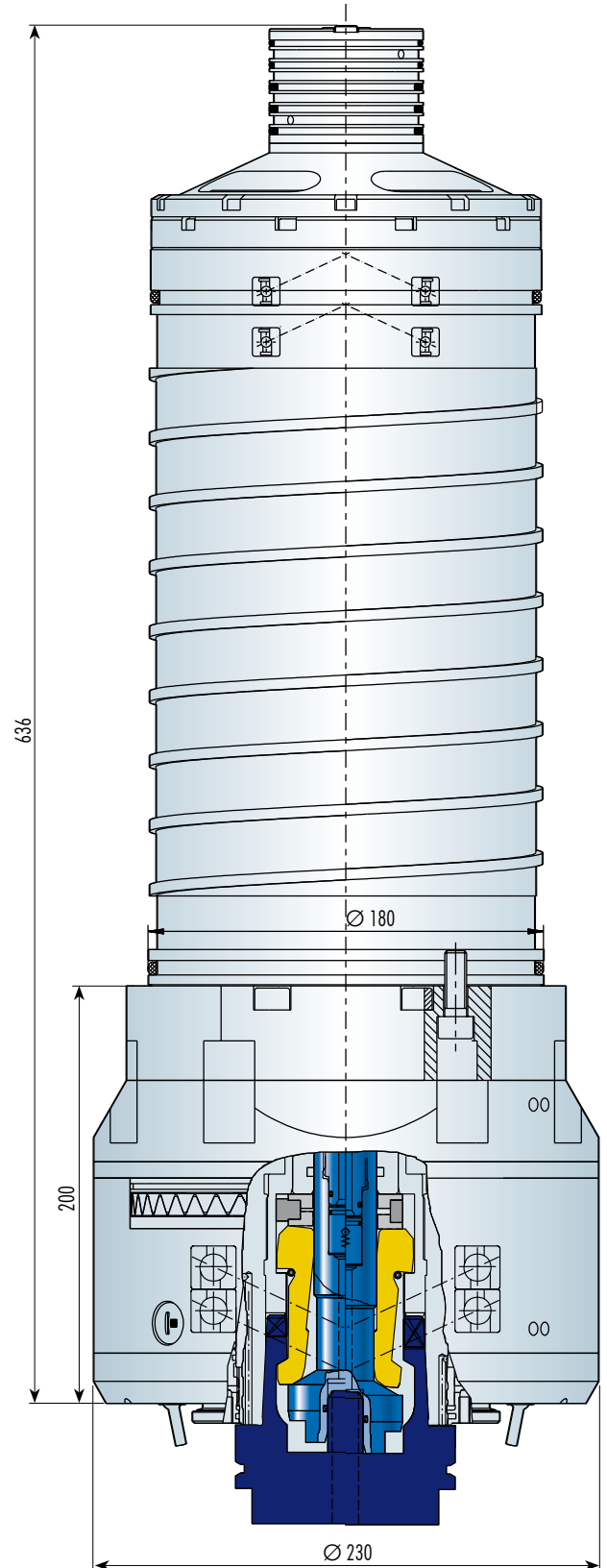
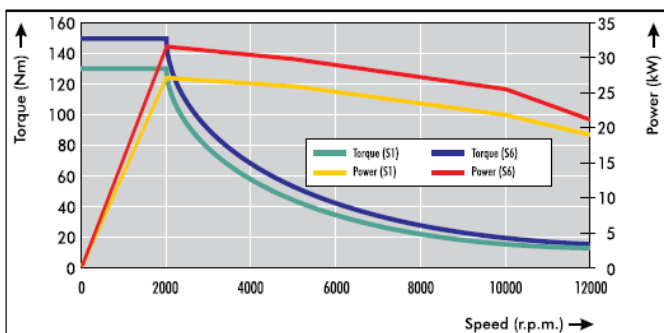




## Turning/milling Spindle CST-27-180-S

Drive		
Power:	27 kW (S1)	34 kW (S6)
Nominal speed:	2.000 r.p.m.	
Torque max.:	130 Nm (S1)	170 Nm (S6)
Speed max.:	10.000 r.p.m.	
Motor type:	synchronous/ 8poles	
Power connection:	400 V/ 125 A	
Shaft clamping system:	clamping torque 2.000 Nm/ 40 bar	
Tool system:	HSK-T63(HSKT100)	
Clamping system:	hydraulically operated	
Clamping force:	20kN/65 bar	
Clamping monitoring:	CyCon K 11-U	
Release pressure max.:	120 bar	
Tool cleaning:	air, 4-6 bar	
Spindle bearing:	<< >> Ø 100 steel	
Bearing rigidity:	axial 557 N/µm, radial 680 N/µm	
Bearing lubrication:	grease	
Sealing:	with sealing air and labyrinth	
Encoder signal:	1 Vpp/256 teeth	
Spindle cooling:	liquid cooling (Antifrogen N/Tyfocon)	
Power dissipation:	6 kW	
Cooling volume flow approx.:	120 l/min (2 bar)	
Metal removal rate:	Milling	Turning
Steel	600 cm³/min	700 cm³/min
Tool cooling		
External coolant supply (ECS):	8 spray nozzles	
Internal coolant supply (ICS):	optional (through spindle shaft)	
max. pressure/filter mesh:	45 bar (20 l/min)/40 µm	
MQL internal/external:	optional	





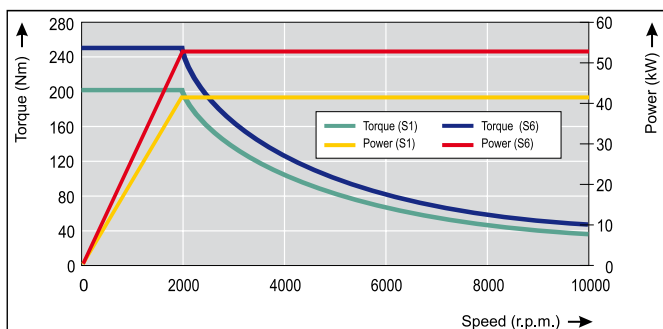
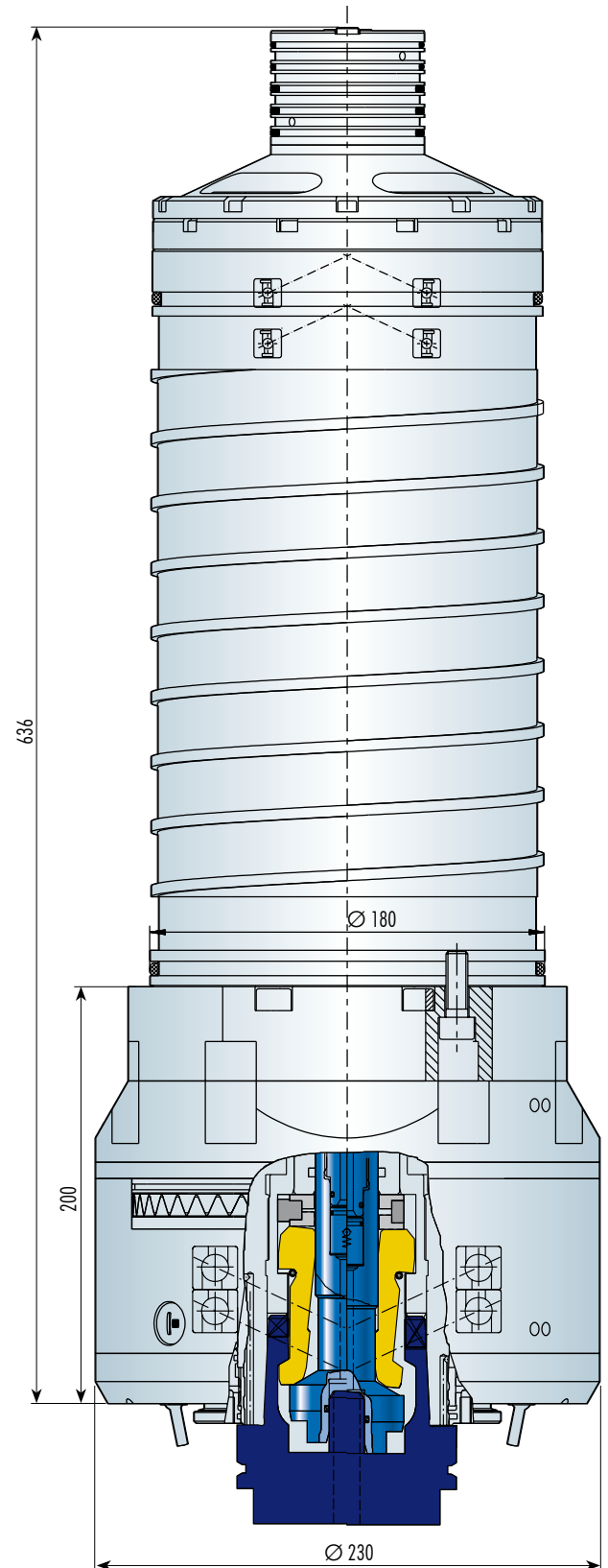
**CySpeed**

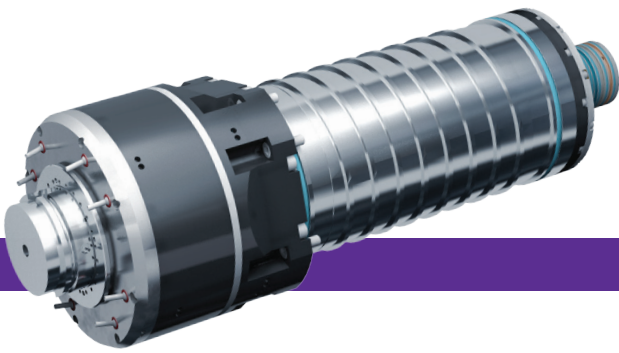
Series M21

2.2.201

Turning/milling Spindle CST-42-180-S

Drive		
Power:	42 kW (S1)	53 kW (S6)
Nominal speed:	2.000 r.p.m.	
Torque max.:	201 Nm (S1)	253 Nm (S6)
Speed max.:	10.000 r.p.m.	
Motor type:	synchronous/ 8poles	
Power connection:	400 V/ 165 A	
Shaft clamping system:	clamping torque 2.000 Nm/ 40 bar	
Tool system:	HSK-T100	
Clamping system:	hydraulically operated	
Clamping force:	30 kN/65 bar	
Clamping monitoring:	CyCon K 11-U	
Release pressure max.:	120 bar	
Tool cleaning:	air, 4-6 bar	
Spindle bearing:	<< >> Ø 100 steel	
Bearing rigidity:	axial 557 N/µm, radial 680 N/µm	
Bearing lubrication:	grease	
Sealing:	with sealing air and labyrinth	
Encoder signal:	1 Vpp/256 teeth	
Spindle cooling:	liquid cooling (Antifrogen N/Tyfocon)	
Power dissipation:	6 kW	
Cooling volume flow approx.:	120 l/min (2 bar)	
Metal removal rate:	Milling	Turning
Steel	700 cm <sup>3</sup> /min	700 cm <sup>3</sup> /min
Tool cooling		
External coolant supply (ECS):	8 spray nozzles	
Internal coolant supply (ICS):	optional (through spindle shaft)	
max. pressure/filter mesh:	45 bar (20 l/min)/40 µm	
MQL internal/external:	optional	





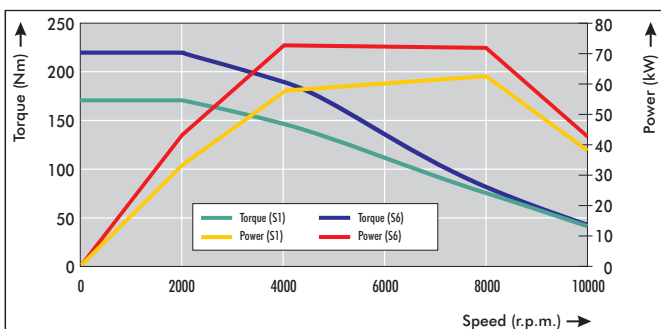
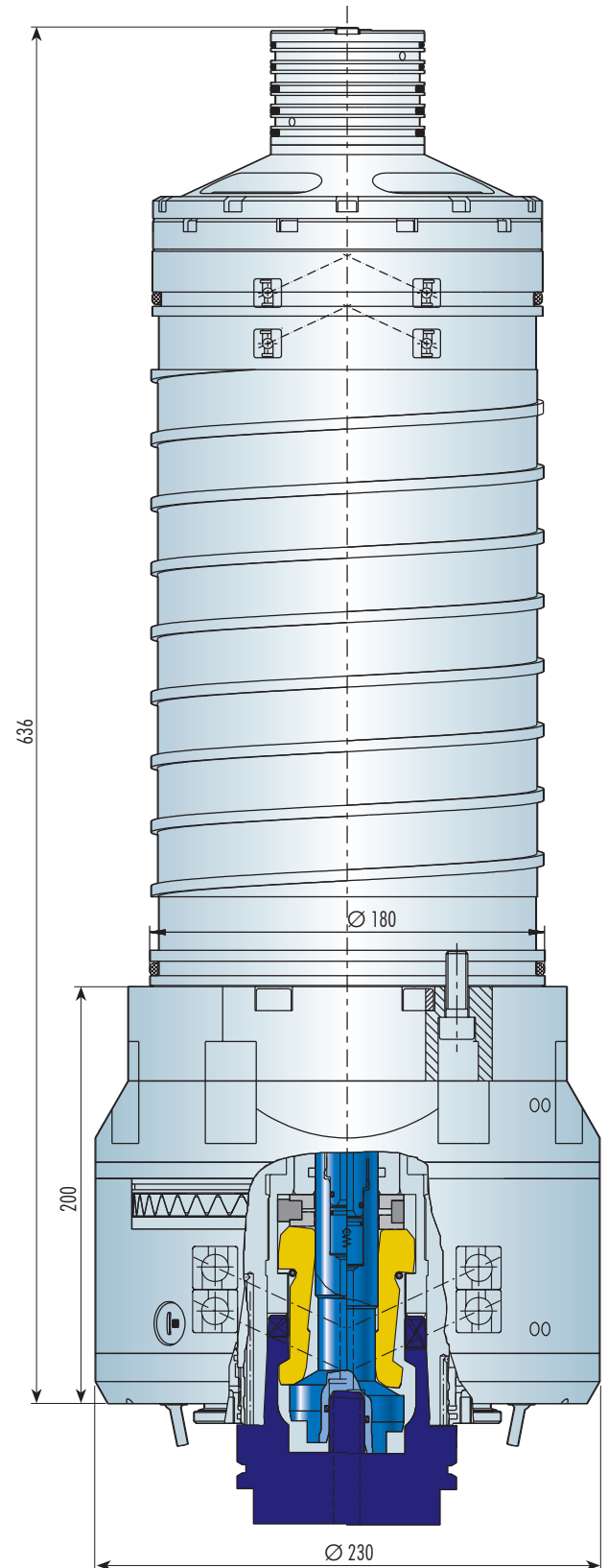
**CySpeed**

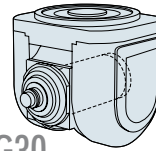
2.2.204

Series M21

Turning/milling spindle CST-34-180-S

Drive			
Power:	34 kW (S1)	43 kW (S6)	
Nominal speed:	2.000 r.p.m.		
Torque max.:	170 Nm (S1)	220 Nm (S6)	
Speed max.:	10.000 r.p.m.		
Motor type:	synchronous/8 poles		
Power connection:	400 V/ 125 A (S1)		
Tool system:	HSK-A100		
Clamping system:	hydraulically operated		
Clamping force:	30 kN/65 bar		
Clamping monitoring:	CyCon K 11 / Analog sensor		
Release pressure max.:	100 bar		
Tool cleaning:	Air, 4-6 bar		
Spindle bearing:	<< >> Ø 100 Hybrid		
Bearing rigidity:	axial / radial 600 N/µm		
Bearing lubrication:	Grease		
Sealing:	with sealing air and labyrinth		
Encoder signal:	1 Vpp/256 teeth		
Spindle cooling:	liquid cooling (Antifrogen N/Tyfocon)		
Power dissipation:	3,5 kW		
Cooling volume flow approx.:	15 l/min (2 bar)		
Metal removal rate:	Milling	Drilling	Threading
Steel	700 cm³/min	Ø 50	M 24
Tool cooling			
External coolant supply (ECS):	8 Spray nozzles		
Internal coolant supply (ICS):	optional (through spindle shaft)		
max. Pressure/Filter mesh:	45 bar (25 l/min)/40 µm		
MQL external:	optional		
MQL internal:	optional		





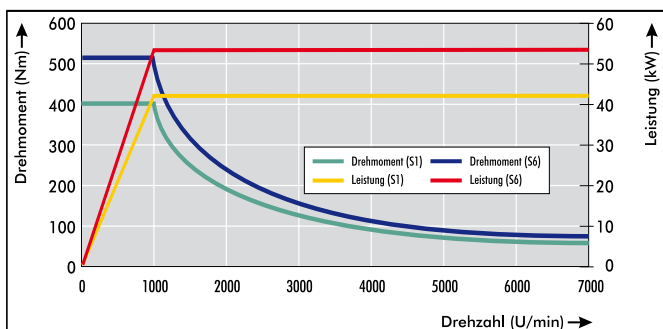
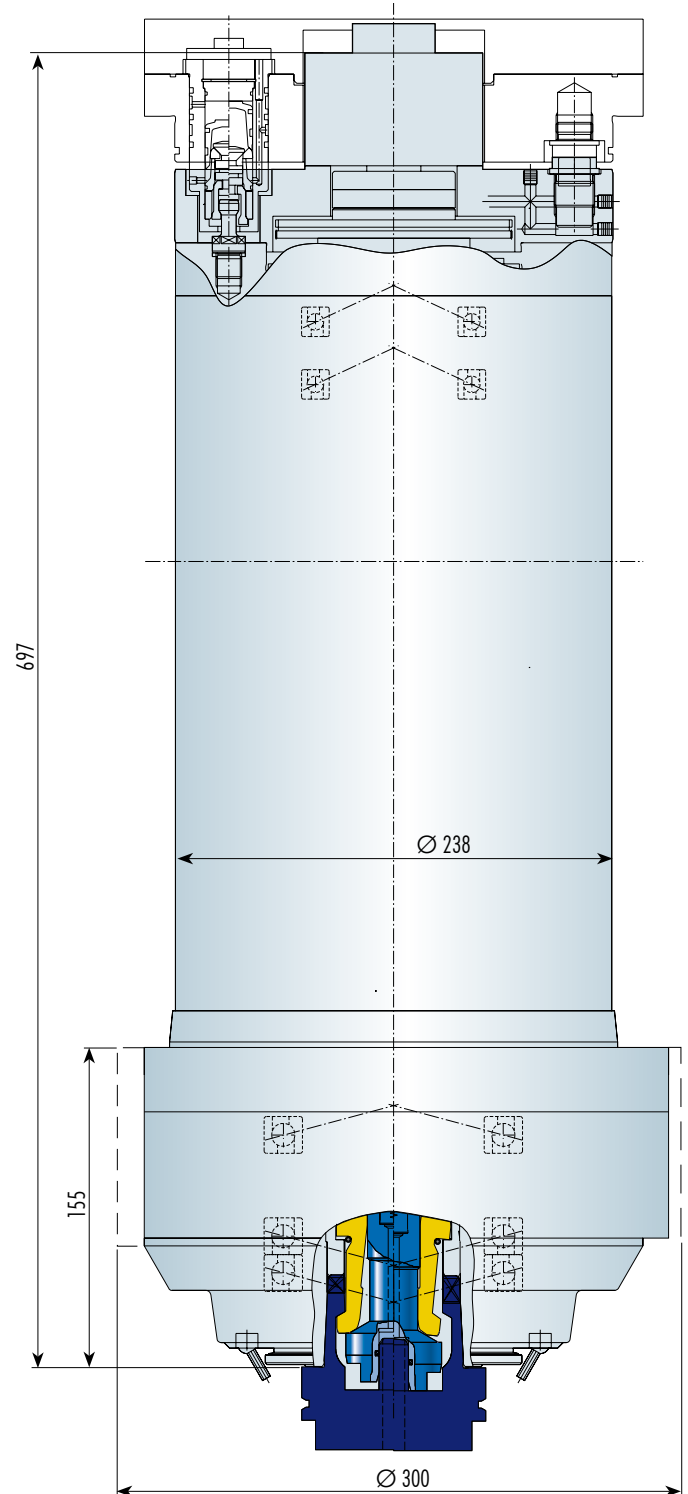
Baureihe G30

**CySpeed**

2.2.253

Frässpindel CS-42-238-S

Antrieb			
Leistung:	42 kW (S1)	55 kW (S6)	
Nennrehzahl:	1.000 U/min		
Max. Drehmoment:	400 Nm (S1)	525 Nm (S6)	
Maximaldrehzahl:	7.000 U/min		
Motortyp:	synchron/8polig		
Leistungsanschluss:	400 V/ 200 A (S1)		
Werkzeugsystem:	HSK-A100		
Spannsystem:	hydraulisch betätigt		
Spannkraft:	30 kN/60 bar		
Spannkontrolle:	CyCon K 11		
Lösedruck max.:	100 bar		
Werkzeugreinigung:	Luft, 4-6 bar		
Spindellagerung:	<< > >> Ø 100 Hybrid		
Lagersteifigkeit:	axial 541 N/µm, radial 897 N/µm		
Lagerschmierung:	Fett		
Abdichtung:	mit Sperlluft und Labyrinth		
Drehgebersignal:	1 Vpp/256 Zähne		
Spindelkühlung:	Flüssigkeitskühlung (Antifrogen N/Tyfocon)		
Kühlleistung:	4 kW		
Kühlvolumenstrom ca.:	15 l/min (2 bar)		
Zerspanleistung:	Fräsen	Bohren	Gew.-Schneiden
Stahl	900 cm <sup>3</sup> /min	Ø 60	M30
Werkzeugkühlung			
Externe Kühlmittelzufuhr (EKZ):	12 Spritzdüsen		
Interne Kühlmittelzufuhr (IKZ):	optional (durch Spindelschaft)		
Max. Druck/Filterfeinheit:	45 bar (25 l/min)/40 µm		
MMKS extern:	optional		
MMKS intern:	optional		



\*ersetzt Datenblatt 2.2.25