



**CySpeed**

Series P12

2.2.13

Milling spindle CS-15-180-A

Drive			
Power:	15 kW (S1)	21 kW (S6)	
Nominal speed:	3.000 r.p.m.		
Torque max.:	48 Nm (S1)	67 Nm (S6)	
Speed max.:	24.000 r.p.m.		
Motor type:	asynchronous/6 poles		
Power connection:	400 V/ 56 A (S1)		
Tool system:	HSK-A63		
Clamping system:	hydraulically operated		
Clamping force:	12 kN/50 bar		
Clamping monitoring:	CyCon K 11 (optional)		
Release pressure:	60-100 bar		
Tool cleaning:	Air, 3-4 bar		
Spindle bearing:	<< >> Ø 65 Hybrid		
Bearing rigidity:	axial 170 N/µm, radial 510 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:	2 kW		
Cooling volume flow approx.:	8 l/min (3-8 bar)		
Metal removal rate:	Milling	Drilling	Threading
AlMgSi1	400 cm³/min	Ø 30	M 12
Tool cooling			
External coolant supply (ECS):	8 Spray nozzles		
Internal coolant supply (ICS):	optional (through spindle shaft)		
max. Pressure/Filter mesh:	50 bar (15 l/min)/40 µm		
MQL external:	optional		
MQL internal:	optional		

