MACHINE TECHNOLOGY ZERO-POINT CLAMPING SYSTEM

ZERO-POINT CLAMPING SYSTEM

In addition to a standard version reduced to the basic functions, which fulfills essential operations such as unlocking and a PLUS connection, there is also an advanced version with an extensive range of functions that are necessary for automated production, for example. Both variants feature positive locking via clamping segments that are specially adapted to the pin contour. This creates an extremely rigid system that can absorb the highest forces with maximum repeat accuracy.

The product range is extended by many different types of clamping plates, available in every size and various configurations. To increase the protection of the particular zero-point clamping system and to prevent any intrusion of dirt, there is an optional automatic seal that reliably protects the pin opening.



ZIMMER GROUP - THE KNOW-HOW FACTORY

OUR KNOW-HOW FACTORY WORKS WITH ALL INDUSTRIES AND DELIVERS **EVERYTHING FROM A SINGLE SOURCE. OUR PRODUCT RANGE IS FAR** REACHING, BOTH IN ITS DEPTH AND ITS BREADTH.

DO YOU HAVE A DEVELOPMENT PROBLEM? WE'LL SOLVE IT! SET US A CHALLENGE IN RESEARCH AND DEVELOPMENT. COUNTLESS INNOVATIONS ORIGINATE FROM OUR COMPANY. WE ARE ENTHUSIASTIC ABOUT NEW PRODUCTS AND PRIDE OURSELVES ON OUR CORPORATE PIONEERING SPIRIT.

CONTACT - WORLDWIDE



www.zimmer-group.com/en-us/contact

HERE FOR YOU 24/7/365 -OUR VIRTUAL TRADE SHOW BOOTH

With impressive features such as an animated camera flight, clickable information hotspots and 3D models that can be rotated, we guarantee that you will be thrilled-virtually.

www.zimmer-group.com/en-us/expo

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technology

Overview

THE KNOW-HOW FACTORY







As key components in machining centers, tooling machines and end-of-arm applications, our motor spindles guarantee optimal value creation thanks to maximum precision, productivity, availability and long service life. They are critical for the performance of the machine and the quality of machined workpieces. Compact power packages with high power density and high-precision bearings are essential for achieving high speeds and excellent true-running characteristics. The Zimmer Group product line comprises both air and fluid-cooled motor spindles for wood, aluminum and plastics processing as well as for metal cutting. The spindles stand out for their extremely high reliability, superior power density and a wide range of compatibility.

With speeds of up to 26,000 rpm and an optional vector-regulated 14.5 kW motor, these motor spindles are best suited for processing various materials such as wood, plastic, light metal or composites.

Highest productivity meets highest precision

This mechanically integrated motor solution is extremely compact, highly productive and achieves maximum stiffness.



www.zimmer-group.com

MACHINE TECHNOLOGY MOTOR SPINDLES

MOTOR SPINDLES

HF150-003 SERIES OUR KNOW-HOW – YOUR ADVANTAGES

Maximum performance

The highest performance standards for these motor spindles are met due to the exclusive use of vacuum cast, hand-wound, high-performance motors from German manufacturing.

Maximum workpiece quality

MACHINE TECHNOLOGY MOTOR SPINDLES

WATER-COOLED				
ASYNCHRONOUS				
5	HF100-010-001 Rated power: Max. speed: Nominal torque: Weight:	4 kW 30,000 rpm 4 Nm 9 kg		
0	HF100-012-001 Rated power: Max. speed: Nominal torque: Weight:	4 kW 30,000 rpm 4 Nm 10 kg		
0,11	HF125-002-001 Rated power: Max.speed: Nominal torque: Weight:	9 kW 24,000 rpm 7.3 Nm 16 kg		
0,11	HF125-002-002 Rated power: Max. speed: Nominal torque: Weight:	12 kW 24,000 rpm 9 Nm 16 kg		
	HF150-003-003 Rated power: Max. speed: Nominal torque: Weight:	14.5 kW 26,000 rpm 14.7 Nm 35 kg		
	HF150-004-003 Rated power: Max. speed: Nominal torque: Weight:	14.5 kW 24,000 rpm 14.7 Nm 39 kg		
S.	HF150-009-001 Rated power: Max. speed: Nominal torque: Weight:	14.5 kW 26,000 rpm 14.7 Nm 26 kg		
	HF150-005-002 Rated power: Max. speed: Nominal torque: Weight:	20 kW 24,000 rpm 14.3 Nm 36 kg		
3	HF205-006-001 Rated power: Max. speed: Nominal torque: Weight:	34 kW 14,000 rpm 83.7 Nm 136 kg		
SYNCHRONOUS				
	HF150-005-001 Rated power: Max. speed: Nominal torque:	20 kW 24,000 rpm 18.5 Nm		

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Weight:

Weight:

HF205-006-002

Rated power:

Nominal torque:

Max. speed:

48 kW
6,000 rpm
153 Nm
140 ka

36 kg

AIR-COOLED						
ASYNCHRONOUS						
5-2	HF110-007-001 Rated power: Max. speed: Nominal torque: Weight:	4 kW 18,000 rpm 3.8 Nm 15 kg				
	HF145-001-001 Rated power: Max. speed: Nominal torque: Weight:	6 kW 24,000 rpm 4.9 Nm 29 kg				
	HF145-001-002 Rated power: Max. speed: Nominal torque: Weight:	7.5 kW 24,000 rpm 6.1 Nm 30 kg				
	HF145-001-003 Rated power: Max. speed: Nominal torque: Weight:	11.8 kW 24,000 rpm 9.6 Nm 35 kg				
2	HF145-008-002 Rated power: Max. speed: Nominal torque: Weight:	7.5 kW 24,000 rpm 6,1 Nm 19 kg				
Ž	HF145-011-001 Rated power: Max. speed: Nominal torque: Weight:	7.5 kW 24,000 rpm 6.1 Nm 20 kg				
ROBOT CHANGE UNIT						
	WWS100F-001/ WWS100L-001 Connecting flange in accordance with EN ISO 9409-1: Energy transmission: Total weight:	TK 100 Suitable for HF145-001 4 kg				

WWS100F-002/ WWS100L-002

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Connecting flange in accordance with EN ISO 9409-1: Energy transmission: Total weight:

TK 100 Suitable for HF125-002 4.8 kg

ADVANCED		
ZERO-POINT CLAMPING SYSTEM		



SPN062AD Operating pressure Clamping force:



Clamping force with PLUS connection: Positioning check:



Operating pressure: 4 bar - 7 bar 4 kN - 6 kN Clamping force with PLUS connection: Positioning check: 10 kN - 15 kN Yes



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4 bar - 7 bar 12 kN - 18 kN Clamping force with PLUS connection: 24 kN - 36 kN Yes



Clamping force:

SPN138SD

Positioning check:

Operating pressure:

Clamping force:

Positioning check:

4 bar - 7 bar 1 kN - 2 kN 2.5 kN - 5 kN No

4 bar - 7 bar

1 kN - 2 kN

Yes

2.5 kN - 5 kN

4 bar - 7 bar 4 kN - 6 kN Clamping force with PLUS connection: 10 kN - 15 kN No

4 bar - 7 bar

12 kN - 18 kN 24 kN - 36 kN No

PALLET CHANGER PNEUMATIC SPP138-B

Clamping force with PLUS connection:



- 4.5 bar 7 bar 300 kg Yes

We focus on the highest level of scalability and productivity and rely on the latest development technologies and simulation methods such as the digital twin to design complete manufacturing and assembly cells.

MACHINE TECHNOLOGY **ZERO-POINT CLAMPING SYSTEM**

MACHINE TECHNOLOGY

TRANSPORT SYSTEMS

TRANSPORT

With their modular transport system for workpieces, the Zimmer Group combines the functions for transport, processing and quality assurance. Depending on the requirements profile, the actual transport route can be enhanced by a flexible arrangement of loading robots, measuring and plausibility stations, machining robots, converters or assembly stations.

The workpiece can be positioned anywhere along the cycle. The high flexibility results from the reconfigurability of the overall system, which allows nearly any number of shuttles, as well as independently acting function units.

MACHINE TECHNOLOGY COMPLEX COMPONENTS

FLEXIBILITY WITHOUT LIMITS

The Zimmer Group offers innovative, application-optimized end-of-arm products for the increasing use of robot technology in the processing of wood, wood-like and composite materials. The flexibility knows no bounds: We manufacture products for implementing a wide variety of functions for machining modules and drilling units with rigid and extendable spindles and multi-functional units.