## **TOOL CHANGERS SERIES HWR2000**

#### PRODUCT ADVANTAGES



#### Change in seconds

Reduce your start up costs and minimise downtimes by changing your tool in seconds

#### Integrated air transfer system

For supplying pneumatic actuators. Additional media can be transmitted using optional energy elements.

#### Includes loss protection

Undesired falling of work pieces is eliminated - this means the highest safety for man and machine

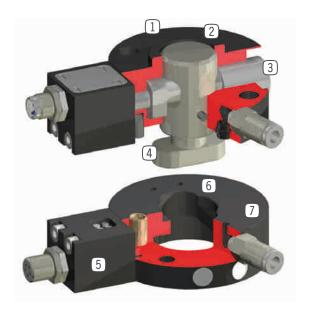
#### ► THE BEST PRODUCT FOR YOUR APPLICATION



#### Our products welcome the challenge!

Extreme conditions, all over the world-our tried and tested components and systems give you endless possibilities. Find the best product for your specific use: www.zimmer-group.com

#### **BENEFITS IN DETAIL**



- 1 Fix part
  - for robot side assembly
- (2) Robot flange
  - partial mounting circle in accordance with EN ISO 9409-1
- 3 Eccentric locking bolt
  - with spring supported snap in function
- 4 Locking bolt
  - adapted to the clamping sleeve
- 5 Pre-assembled standard energy element
- (6) Integrated air feed-through
  - air / vaccum transfer from fix to loose part, hoseless control possible
- 7 Loose part
  - for tool side assembly

#### ► FURTHER INFORMATION IS AVAILABLE ONLINE



#### ► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



## **TOOL CHANGERS INSTALLATION SIZE HWR2050**

#### **▶ PRODUCT SPECIFICATIONS**



#### Forces and moments

Shows static forces and moments which may impact on the tool changer when locked.



Mr [Nm]	80
My [Nm]	70
Fa [N]	1600

#### ► RECOMMENDED ACCESSORIES

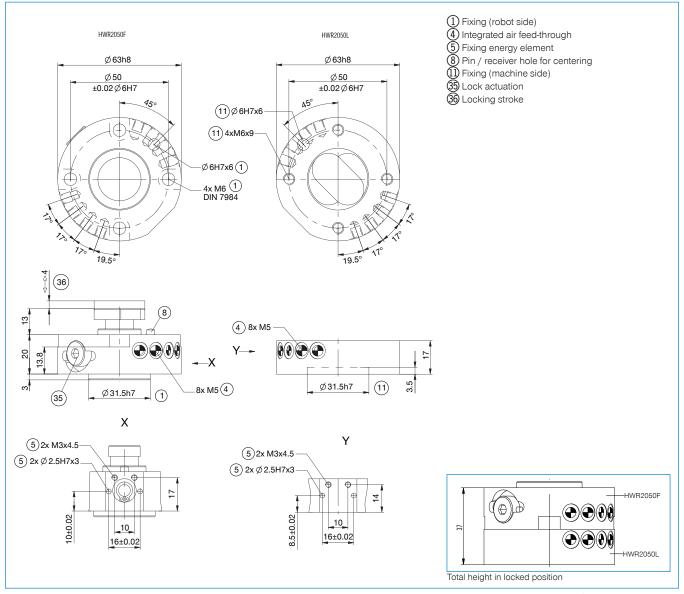


Straight Fittings - Quick Connect Style GVM5



Energy Elements see page 18

	► Technical Data	
Order no.	HWR2050F	HWR2050L
Connecting flange according EN ISO 9409-1	TK 50	TK 50
Recommended handling weight [kg]	20	20
Pneumatic energy transfer [Quantity]	8	8
Electrical energy transfer	optional	optional
Self locking mechanism when locking	mechanical	mechanical
Locking stroke [mm]	4	-
Repetition accuracy in Z [mm]	0.01	0.01
Repetition accuracy in X, Y [mm]	0.02	0.02
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Moment of inertia [kg/cm²]	0.86	0.67
Weight [kg]	0.23	0.115

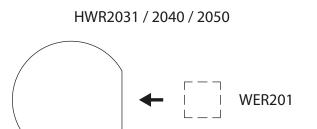


## **ENERGY ELEMENTS FOR TOOL CHANGER**

## SIZES HWR2031 / HWR2040 / HWR2050

#### PRODUCT SPECIFICATIONS





#### ELECTRICAL

	Technical Data	
Order no.	WER201FF04	WER201LF04
compatible with	Fix part	Loose part
Connection type	Spring contact	Spring contact
Round Connector [Straight] *	KAG500B4	KAG500S4
Round Connector [Angle] *	KAW500B4	KAW500S4
Fixing thread	M8	M8
No. of contacts	4	4
Nominal current [A]	3	3
Supply voltage [V AC]	60	60
Supply voltage [V DC]**	75	75
Weight [kg]	0.03	0.03
Connection type	Male	Socket

<sup>\*</sup>als Zubehör erhältlich see page 63

<sup>\*\*</sup>Specifications for on-site grounding, 60V without grounding

# PLUG-IN CONNECTOR FOR ENERGY ELEMENTS SUITABLE FOR WER201 / WER02 / WER03 / WER3000

#### ▶ PLUG-IN CONNECTOR FOR ENERGY ELEMENTS WER201 / WER02 / WER03

	► Technical Data							
Order no.	KAG500B4	KAW500B4	B8-G-4	B8-W-4	KAG500S4	KAW500S4	S8-G-4	S8-W-4
Fixing thread	M8	M8	M8	M8	M8	M8	M8	M8
No. of contacts	4	4	4	4	4	4	4	4
Cable length [m]	5	5	-	-	5	5	-	-
Cable-Ø [mm]	4.3	4.3	-	-	4.3	4.3	-	-
Cable sheath material	PUR	PUR	-	-	PUR	PUR	-	-
Bend radius	10xØ	10xØ	-	-	10xØ	10xØ	-	-
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67
Connection type	Female	Female	Female	Female	Connector	Connector	Connector	Connector
Version [Type]	Straight	Angle	Straight	Angle	Straight	Angle	Straight	Angle

#### ► ROUND PLUG FOR WER3000

	Technical Data			
Order no.	RSTVLM23G06B-B	RSTVLM23W06B-B	RSTVLM23G06S-B	RSTVLM23W06S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	6	6	6	6
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Socket	Socket	Male	Male
			(Care ) (P)	

	Technical Data			
Order no.	RSTVLM23G08B-B	RSTVLM23W08B-B	RSTVLM23G08S-B	RSTVLM23W08S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	8	8	8	8
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Socket	Socket	Male	Male

	Technical Data			
Order no.	RSTVSM23G12B-B	RSTVSM23W12B-B	RSTVSM23G12S-B	RSTVSM23W12S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	12	12	12	12
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Socket	Socket	Male	Male

	Technical Data			
Order no.	RSTVSM23G19B-B	RSTVSM23W19B-B	RSTVSM23G19S-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	19	19	19	19
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Socket	Socket	Male	Male
			(ME) (M	