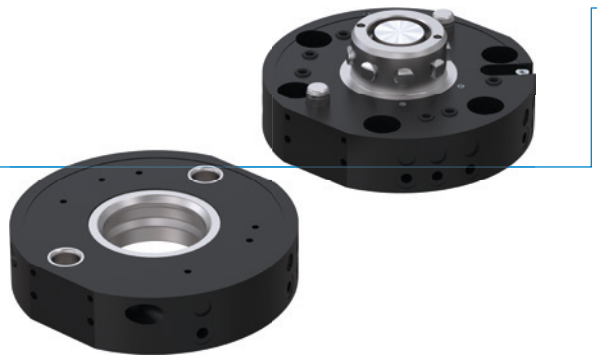
TOOL CHANGERS
SERIES WWR

▶ PRODUCT ADVANTAGES



▶ **Secure hold during pressure drop**

The combination of spring loaded and a high gear ratio guarantees them a safe machine

▶ **Extremely flat design**

This structure reduces the moment load for your robot to a minimum and makes it possible to use smaller and more affordable sizes

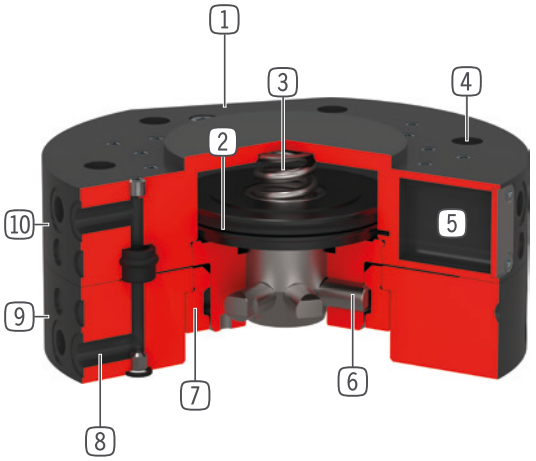
▶ **Inexhaustible variety of media transfer systems**

No matter which medium you would like to transmit, we will draw from our wealth of experience in implementing projects and find a solution to suit your needs!

▶ 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 **Mounting for energy element**

2 **Drive**
- double-acting pneumatic cylinder

3 **Integrated spring**
- energy storage in case of drop in pressure

4 **Robot flange**
- partial mounting circle in accordance with EN ISO 9409-1

5 **Piston position sensing**
- via magnetic field sensor

6 **Locking bolt**
- adapted to the clamping sleeve

7 **Locking sleeve**
- high moment capacity

8 **Integrated air feed-through**
- Air / vaccum transfer
- hoseless control possible

9 **Loose part**
- for tool side assembly

10 **Fix part**
- For robot side assembly

▶ TECHNICAL DATA

Installation size	Connecting flange according EN ISO 9409-1	Pneumatic energy transfer [Quantity]	Electrical energy transfer
WWR40	TK 40	4	optional
WWR50	TK 50	4	optional
WWR63	TK 63	6	optional
WWR80	TK 80	6	optional
WWR100	TK 100	6	optional
WWR125	TK 125	10	optional
WWR160	TK 160	10	optional

▶ FURTHER INFORMATION IS AVAILABLE ONLINE

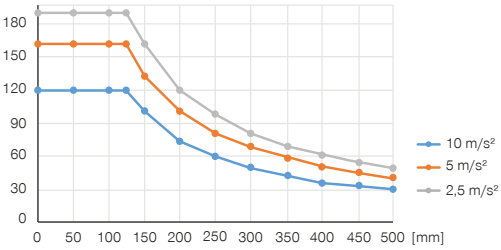
All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

TOOL CHANGERS
INSTALLATION SIZE WWR100

▶ PRODUCT SPECIFICATIONS

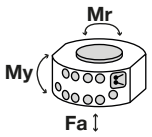
▶ Variable installation position

Shows the maximum handling weight depending on acceleration and lever arm. Does not replace the technical design.



▶ Forces and moments

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



Mr [Nm]	600
My [Nm]	850
Fa [N]	16000

▶ INCLUDED IN DELIVERY

6 [piece]
O-Ring
COR0070150

▶ RECOMMENDED ACCESSORIES

ENERGY SUPPLY

GV1-8X8
Straight Fittings - Quick Connect Style

WV1-8X8
Angled Fittings - Quick Connect Style

SENSORS

ZUB088924
Piston position sensing

SENSORS

NJR04-E2SK
Inductive Proximity Switch Cable 0,3 m - Connector M8

CONNECTIONS / OTHER

Energy elements and accessories for tool changer

ALSR13100
Storage station

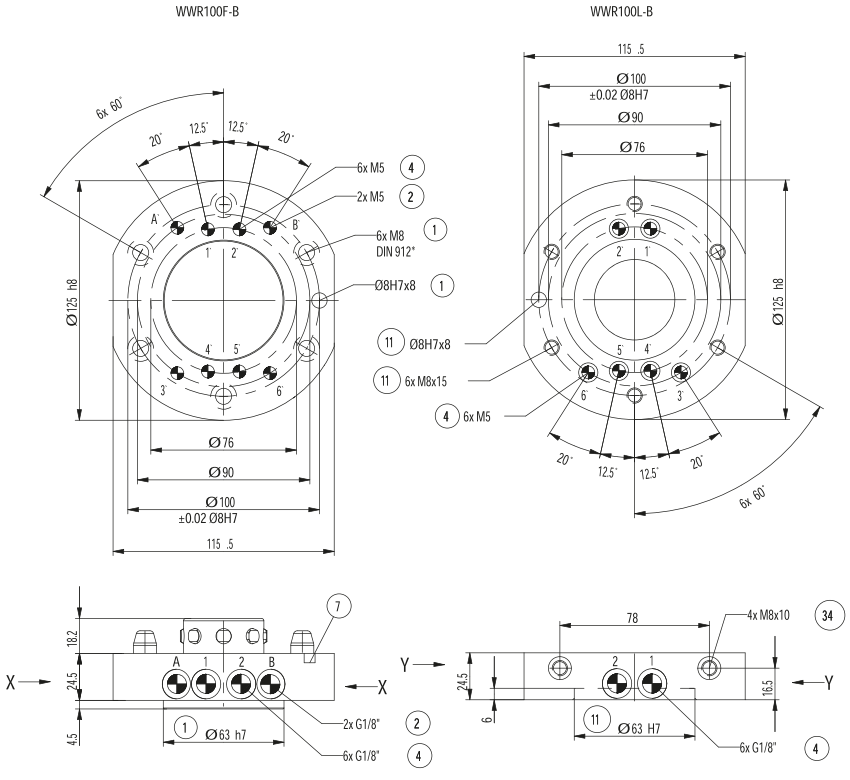
▶ RECOMMENDED ACCESSORY STORAGE STATION

NJ8-E2
Inductive proximity switch - Cable 5 m

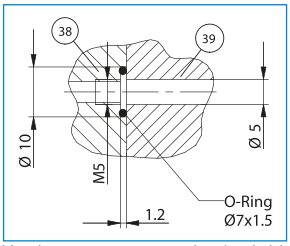
NJ8-E2S
Inductive proximity switch - Connector M8

▶ Technical data

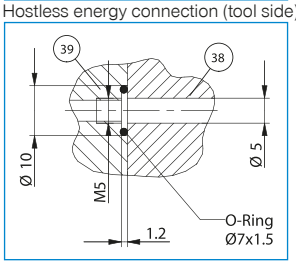
Order no.	WWR100F-B	WWR100L-B
Connecting flange according EN ISO 9409-1	TK 100	TK 100
Pneumatic energy transfer [Quantity]	6	6
Flow per connector [l/min]	330	330
Electrical energy transfer	optional	optional
Hydraulic energy transfer	optional	optional
Self locking mechanism when locking	mechanical	mechanical
Locking stroke [mm]	1.2	
Repetition accuracy in Z [mm]	0.01	0.01
Repetition accuracy in X, Y [mm]	0.02	0.02
Joining force [N]	120	
Release force [N]	75	
Offset at coupling max. in X,Y [mm]	1.85	1.85
Operating pressure [bar]	4 ... 10	4 ... 10
Nominal operating pressure [bar]	6	6
Operating temperature [°C]	5 ... +80	5 ... +80
Air volume per cycle [cm³]	25	
Moment of inertia [kgcm²]	14	14
Weight [kg]	0.99	0.77



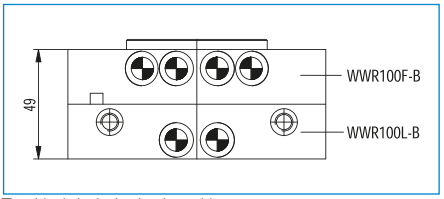
① Fixing (robot side)
② Energy supply
④ Integrated air feed-through
⑤ Fixing energy element
⑦ Intake proximity switch
⑪ Fixing (customer-side)
㉞ Inside thread for pins of storage station
㊳ Tool changer
㊴ Adapter
Ⓐ Air connection locking
Ⓑ Air connection unlocking
Ⓐ' Air connection locking (alternative/direct)
Ⓑ' Air connection unlocking (alternative/direct)



Hostless energy connection (tool side)



Hoseless Energy connection (robot side)



Total height in locked position

ENERGY ELEMENTS FOR TOOL CHANGER
SIZE WWR100

► CONNECTION DIAGRAM