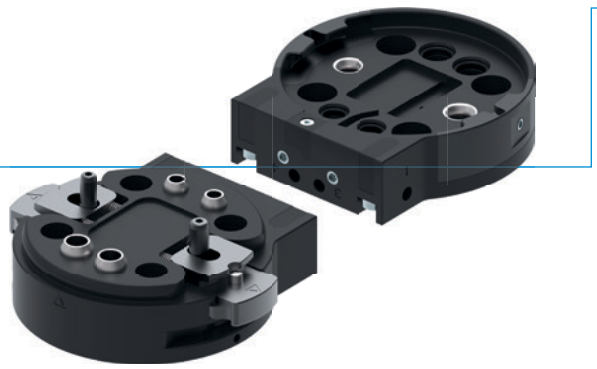
TOOL CHANGERS
SERIES FWR

▶ PRODUCT ADVANTAGES



▶ **Automated tool change without external activation**

In interaction with the storage station, the changer is actuated mechanically during retraction. As a result, no additional power supply is required for the change operation.

▶ **Manual tool change**

The sizes FWR40 and FWR50 can be opened with just one hand. If this is not desired, you can lock the actuation manually.

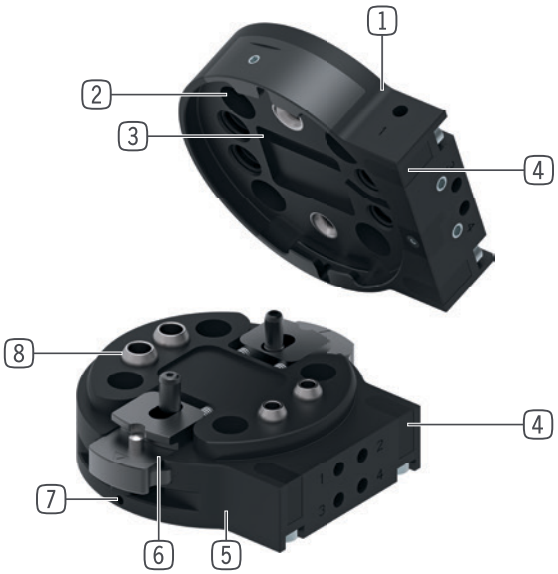
▶ **Optional media transmission**

Adapt the tool changer to your application. With the energy elements of the WER1000 and WER2000 series, you can transmit a variety of media with standard connections!

▶ 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 **Connecting flange**
- partial mounting circle in accordance with EN ISO 9409-1

3 **Loose part presence sensing**
- via inductive proximity switch

4 **Mounting for energy element**
- Direct connection, without adapter plates

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

6 **Locking**
- Manual actuation
- Automatic actuation via a storage station

7 **Lock for manual actuation (optional)**
- Secure against inadvertent loosening

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

▶ TECHNICAL DATA

Installation size	Connecting flange according EN ISO 9409-1	Handling weight max. [kg]	Tool weight max. [kg]	Pneumatic energy transfer [Quantity]
FWR40	TK 40	13	5	4
FWR50	TK 50	16	7	4
FWR63	TK 63	20	10	4
FWR80	TK 80	29	12	4

▶ FURTHER INFORMATION IS AVAILABLE ONLINE

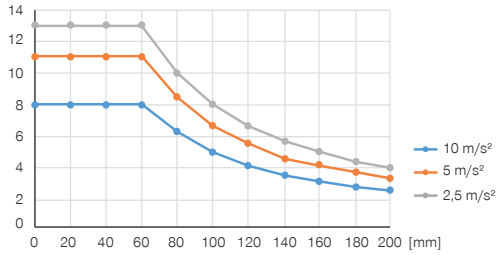
All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

TOOL CHANGERS
INSTALLATION SIZE FWR40

▶ PRODUCT SPECIFICATIONS

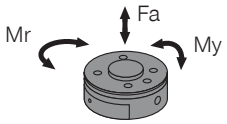
▶ Variable installation position

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]	40
My [Nm]	40
Fa [N]	1000

▶ INCLUDED IN DELIVERY

2 [piece]
Mounting screw
C737903062

4 [piece]
O-Ring
COR0050100

▶ RECOMMENDED ACCESSORIES

ENERGY SUPPLY

GVM5
Straight Fittings - Quick Connect Style

SENSORS

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

CONNECTIONS / OTHER

Energy elements and accessories for tool changer

AFWR1-40-A
Storage station

▶ RECOMMENDED ACCESSORY STORAGE STATION

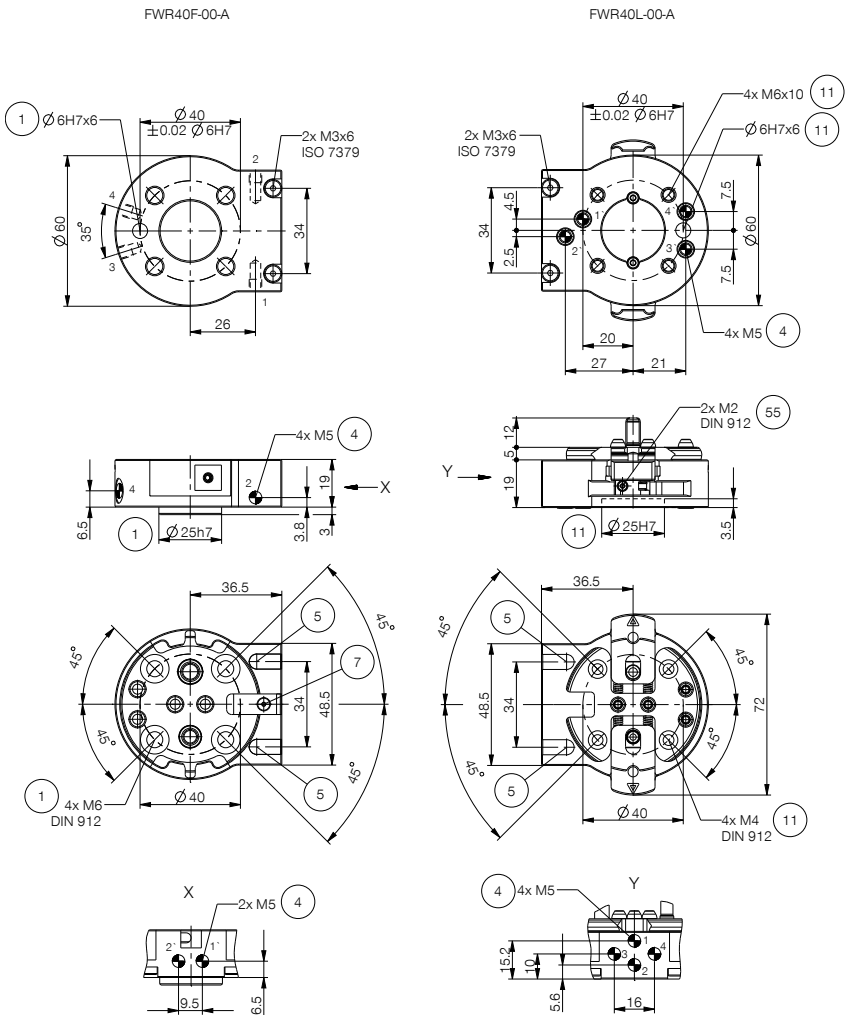
NJ5-E2SK-01
Inductive Proximity Switch Cable 0,3 m - Connector M8

▶ Technical data

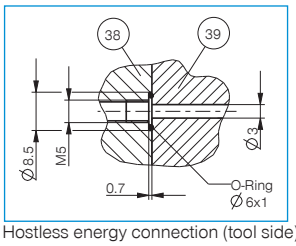
Order no.	FWR40F-00-A	FWR40L-00-A
Connecting flange according EN ISO 9409-1	TK 40	TK 40
Handling weight max. [kg]	13	13
Tool weight max. [kg]	5	5
Pneumatic energy transfer [Quantity]	4	4
Flow per connector M5 [l/min]	170	170
Electrical energy transfer	optional	optional
Locking stroke [mm]	0.6	
Repetition accuracy in Z [mm]	0.02	
Repetition accuracy in X, Y [mm]	0.03	
Joining force [N]	0	0
Release force [N]	0	0
Offset at coupling max. in X,Y [mm]	1.8	1.8
Offset at coupling max. in X,Y [°]	1.3	1.3
Tightening force [N]*	50	
Tightening torque [Nm]*	3	
Operating pressure for energy transmission [bar]	-0.6 ... 6	-0.6 ... 6
Operating temperature [°C]	5 ... +80	5 ... +80
Moment of inertia [kgcm²]	0.95	1.19
Protection to IEC 60529	IP44**	IP44**
Weight [kg]	0.15	0.22

*Note the mating force of the energy elements!

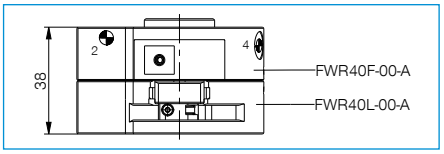
**only in coupled state



① Fixing (robot side)
④ Integrated air feed-through
⑤ Fixing energy element
⑦ Intake proximity switch
⑪ Fixing (customer-side)
㊳ Tool changer
㊴ Adapter
㊺ Manual / automatic mode



Hostless energy connection (tool side)



ENERGY ELEMENTS FOR TOOL CHANGER
SIZES FWR40 / FWR50

▶ CONNECTION DIAGRAM