



Superior Clamping and Gripping



Rotary Feed-Through DDF 2

The latest Standard for modern Robots

Rotary Feed-Through DDF 2

Even more powerful. More versatile. More energy efficient.

Turn on full performance.

DDF 2 is the latest and most powerful rotary feed-through for modern robot and assembly applications. It ensures maximum process reliability with 360° continuous rotary movement.

Your choice:

We offer the DDF 2 in three variants: For the feed-through of pneumatic or electrical signals or for the combined version. More versatile than ever before, and extremely adaptable to process demands. A significantly increased load allows the use of a steel shaft for transmitting dynamic forces and moments.

Become top-notch now.

The DDF 2 achieves optimal dynamics and its specially-developed seal ensures long service life and energy efficiency due to the use of smaller drives.

We make it simple.

The DDF 2 is based on an advance in SCHUNK's proven DDF series and is 1:1 compatible. It ensures that the rotary feed-through can be changed quickly and smoothly.



SWS

Quick-change system

PGN-plus

Universal gripper with
multi-tooth guidance

MAGNOS

Magnetic clamping technology



DDF 2

Rotary Feed-Through

Our performance commitment. Your benefits.



More stable	40% less torque for the same size
Longer service life	85% longer service life through newly developed seals
Stronger	50% greater moment load by transmission of dynamic forces and moments via a steel shaft
More powerful	20% greater load capacity
More efficient	Can be used for smaller drives yielding the same performance
More sensitive	Allows gentler rotary movements
More versatile	Depending on the size, two and four pneumatic feed-throughs are standard, as are between four and ten electrical transmissions for signals 1 A/60 V
Greater motion	Allows for 360° continuous rotation
Improved performance	Allows for greater electrical transmission and profibus transmission
Larger range	Complete series with 14 sizes for optimal size selection
Simpler	Electrical connector contacts enable rapid and easy replacement in the event of cable breakage at the robot arm or gripper
Safer	Protection class IP65

Our technological advances. Your benefits.

Designation	DDF 2
Starting torque [Nm]	1 .. 15
Continuous torque [Nm]	0.5 .. 10
Max. moment load M_x , M_y [Nm]	60 .. 1000
Max. moment load M_z [Nm]	60 .. 1000
Recommended workpiece weight [kg]	10 .. 250
Maintenance interval	10 million

Design

We offer the DDF 2 in three variants: For pneumatic feed-through, for electrical signal feed-through, and for combined pneumatic and electrical feed-through.

Designation	DDF
Starting torque [Nm]	1.5 .. 60
Continuous torque [Nm]	1 .. 60
Max. moment load M_x , M_y [Nm]	20 .. 550
Max. moment load M_z [Nm]	20 .. 550
Recommended workpiece weight [kg]	8 .. 200
Maintenance interval	1.5 million

Design

The DDF is available with combined pneumatic and electrical feed-throughs as standard.

Technical data



Sizes
31 .. 160



Weight
0.5 .. 14 kg



Speed
70 .. 120 rpm



Air feed-throughs
2 .. 4



Electrical feed-through
4 .. 10

Three variants. You choose the one you need.

DDF 2 for 2 to 4 pneumatic feed-throughs and 4 to 10 electric signal feed-throughs

For applications requiring pneumatic and electrical signals, both feed-throughs are combined in the unit. The unit is modular in construction, which ensures simple handling.

Your advantage: Versatile application due to combined energy transmission one single unit



DDF 2 for 2 to 4 pneumatic feed-throughs

For applications that require only pneumatic feed-through. It ensures high transmission of speed.

Your advantage: Easy handling



DDF 2 for 2 to 10 electrical feed-throughs

Suitable for applications that require electrical signal transmission for applications with electrical components, e.g. the EGP gripper.

Your advantage: More compact system design



Easily connected.

Due to the ISO flange pattern, the DDF 2 can easily be connected to most robot interfaces without additional adapters.



Mount the adapter on the robot



Connect the non-rotating DDF 2 housing with a non-moving part of the robot via a torque support



Connect pneumatic and electrical signal feed-throughs



50% Higher
moment load

How much can you handle? ☐ ☐

Automated
handling

Automated
handling

Lathes

Automatic machine loading

Machining
center

Modular assembly
automation

Mobile gripping
systems

Superior Clamping and Gripping – It's time to make use of hidden potential!

With superior components, we awaken reserves where you would never expect to find them. In your machine. SCHUNK SYNERGY – the perfectly harmonized interplay of clamping technology and gripping systems turns our customers into productivity champions.

Go into extra time. We offer the perfect accessories.

The extension cable for connection of electrical components such as sensors. It is suitable for every application and available in 3 m, 5 m and 10 m lengths.



360°, turns
endlessly

We integrate. For the highest technological demands.

Rotary Feed-Through DDF-I:
World's first rotary feed-through with integrated bus technology

With the DDF-I pneumatic electric rotary feed-through, mechatronic gripping modules, valves or sensors that are located behind a rotational axis can be controlled with high process stability. Up to 26 electrical signals can be transmitted simultaneously, and 13 of them can be used to control valves. Air and vacuum reach the actuators via an air feed-through.

"100% process reliability
from the rotation.
A head start for
modern robots."

J. Lehmann

Jens Lehmann,
the legendary German
goalkeeper, brand ambas-
sador for SCHUNK since 2012



For more information, visit:
www.gb.schunk.com/DDF-I