



Rotary Couplings

single, twin, four, six, eight and ten passages with/without leakage oil recirculation
 max. operating pressure 500 bar

General description

Rotary couplings supply the pressure oil to rotating and swivelling installations. They are mounted in the centre of rotation of the installation.

Operating conditions

When selecting, operating pressure and speed have to be taken into account. Only use hydraulic oil of the viscosity classes 22, 32 and 46.

The rotary coupling has to be connected to the power unit on all levels to ensure sufficient lubrications of the seals.

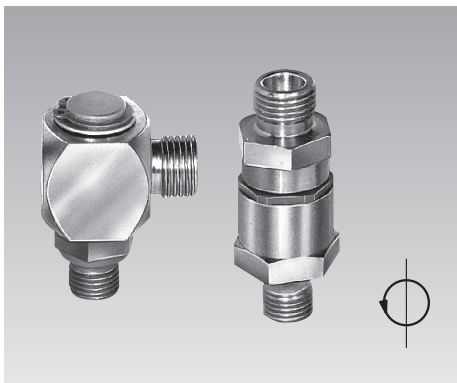
The rotary couplings must only be used in a temperature range between +10 °C and +60 °C. This also applies to possible special versions with FKM seals.

Operating conditions, tolerances and other data see data sheet A 0.100.

Special versions are available on request.

When placing an order, please indicate the most important operating data (pressure, temperature, medium, number of revolutions or cycle time) in order to allow a possible adaptation from standard for the application.

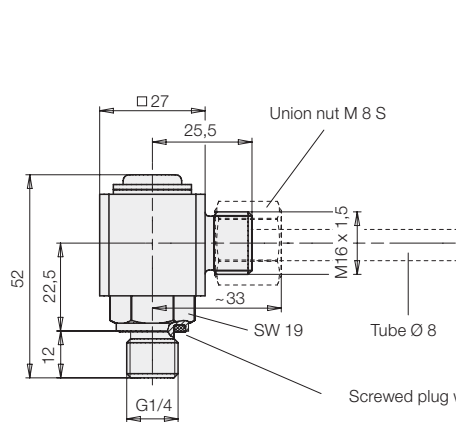
Single Passage Rotary Coupling



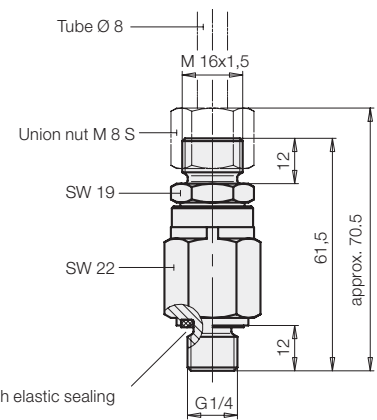
Technical data

Range of operating pressure	10 – 500 bar
Admissible continuous speed	10 min ⁻¹
Starting torque	approx. 1.2 Nm
Tightening torque G1/4	55 Nm

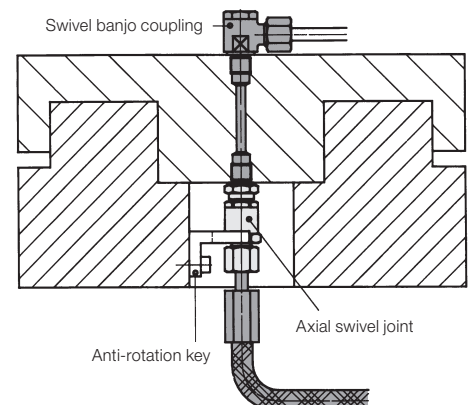
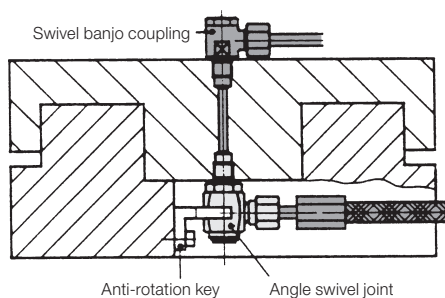
Angle swivel joint


Part no.
9208176

Axial swivel joint


Part no.
9208069

Application examples

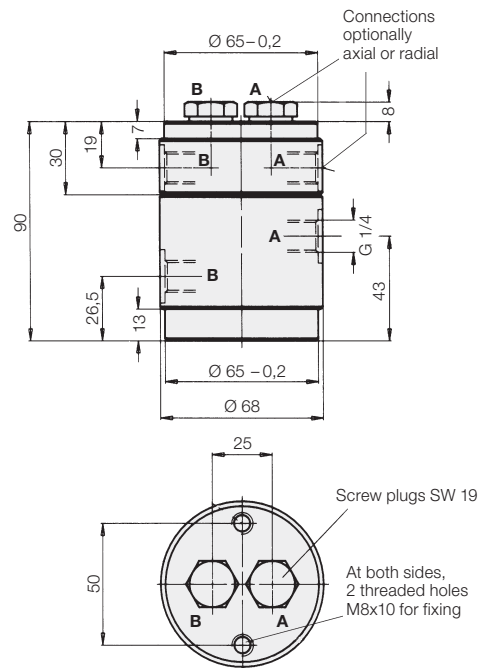


Operating conditions, tolerances and other data see data sheet A 0.100.

Twin Passage Rotary Coupling

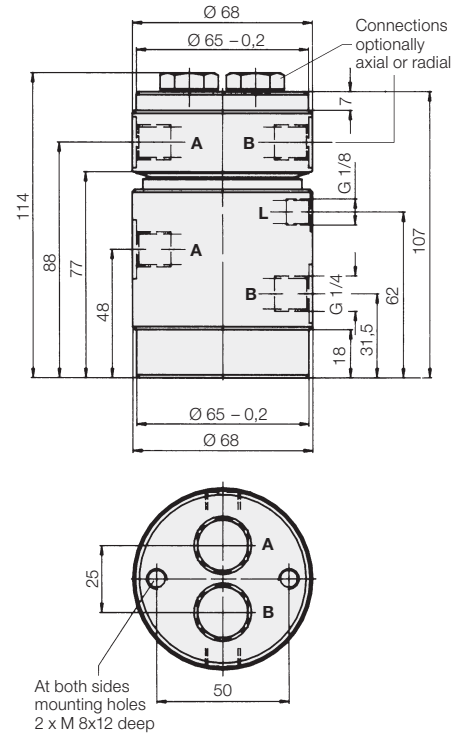


Twin passage rotary coupling

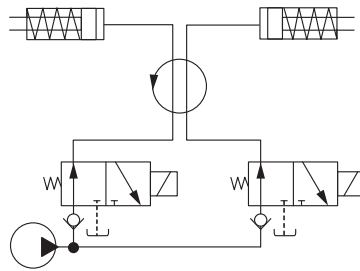


Twin passage rotary coupling

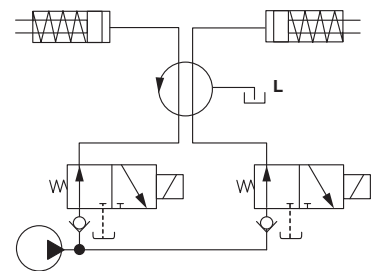
with leakage oil recirculation in the housing



Hydraulic circuit diagram



Hydraulic circuit diagram



Rotary coupling ND 5

Operating pressure range [bar] Leakage rate [cm³/100h] Weight [kg]

Part no.

10 – 500 40 2.4 **9281 136**

Rotary coupling ND 5

with leakage oil recirculation in the housing

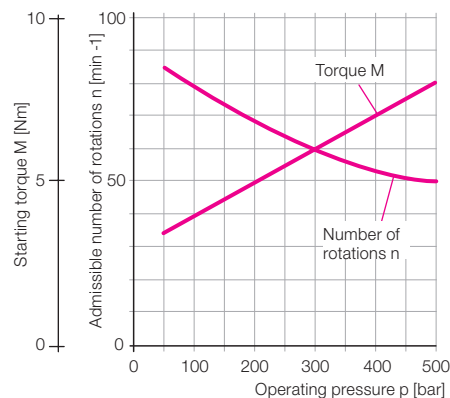
Operating pressure range [bar]

Weight [kg]

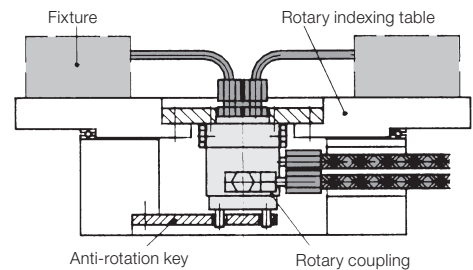
Part no.

10 – 500 2.75 **9281 135**

Max. admissible number of rotations n and starting torque M as a function of the operating pressure p



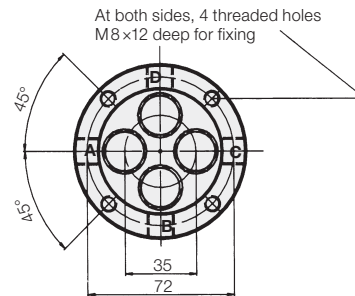
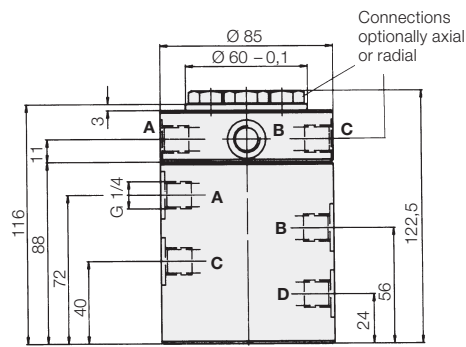
Application example



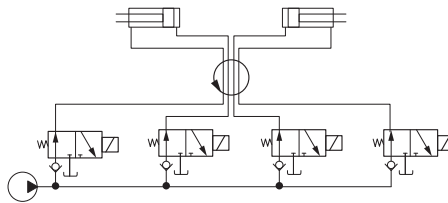
Four Passage Rotary Coupling



Four passage rotary coupling



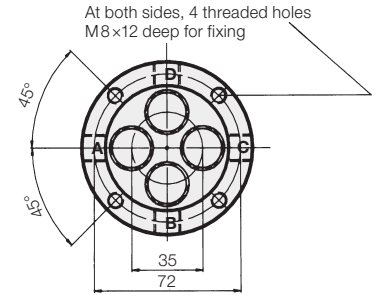
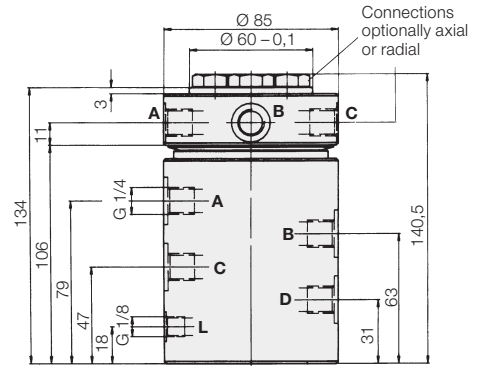
Hydraulic circuit diagram



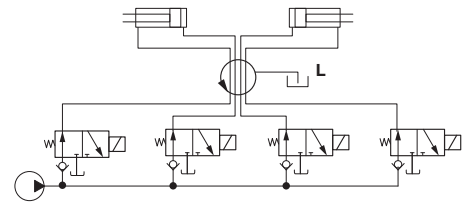
Rotary coupling ND 5

Operating pressure range [bar]	Leakage rate [cm³/100h]	Weight [kg]	Part no.
10 – 500	60	4.6	9284 036

Four passage rotary coupling with leakage oil recirculation in the housing

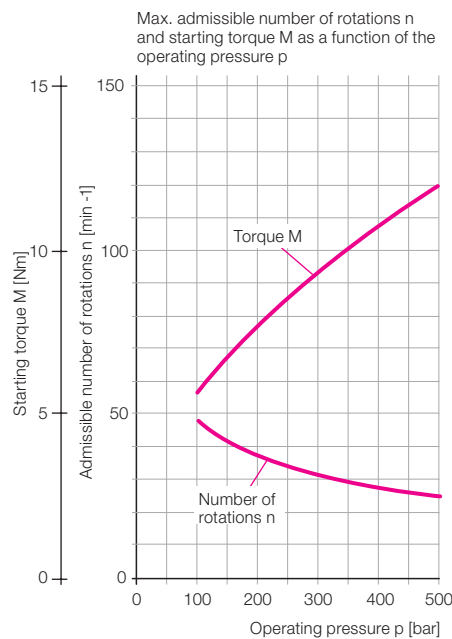


Hydraulic circuit diagram

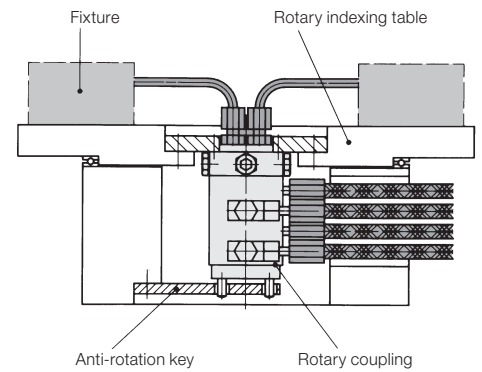


Rotary coupling ND 5

Operating pressure range [bar]	Weight [kg]	Part no.
10 – 500	5.5	9284 135



Application example

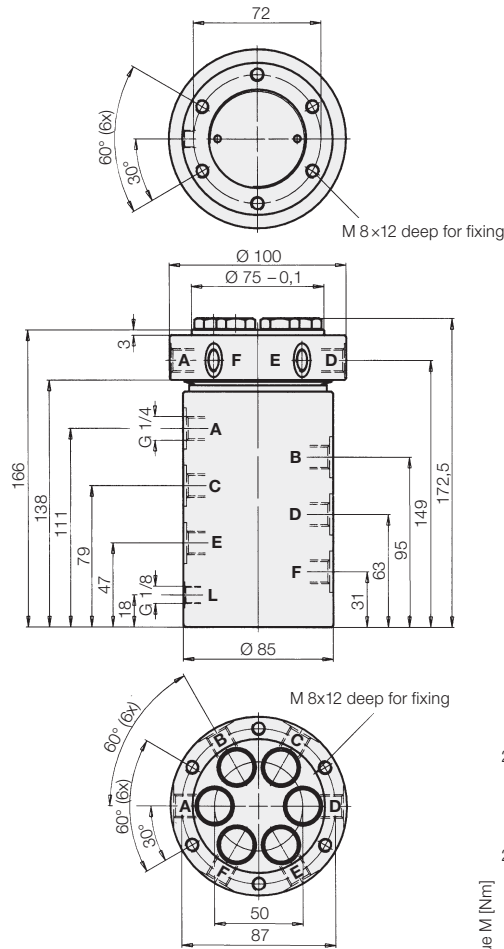


Operating conditions, tolerances and other data see data sheet A 0.100.

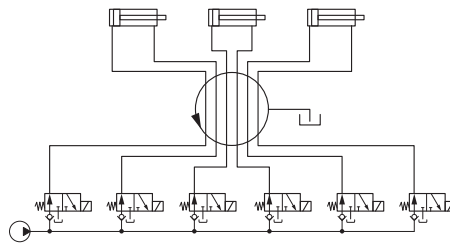
Six Passage Rotary Coupling



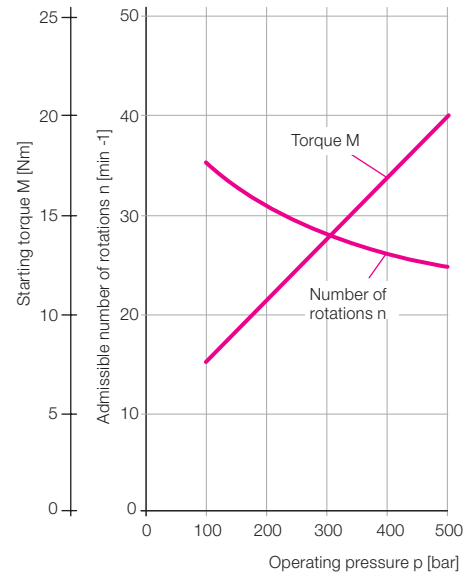
Six passage rotary coupling
with leakage oil recirculation in the housing



Hydraulic circuit diagram



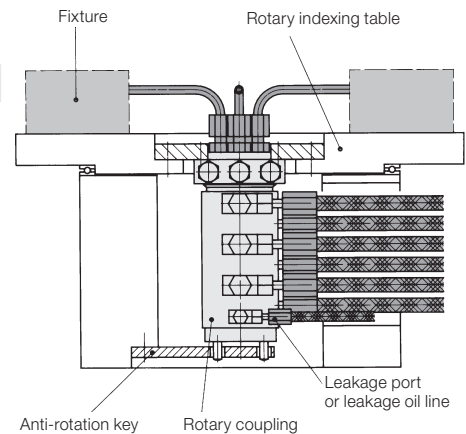
Max. admissible number of rotations n and starting torque M as a function of the operating pressure p



Rotary coupling ND 5

Operating pressure range [bar]	Weight [kg]	Part no.
10 – 500	8.8	9286 135

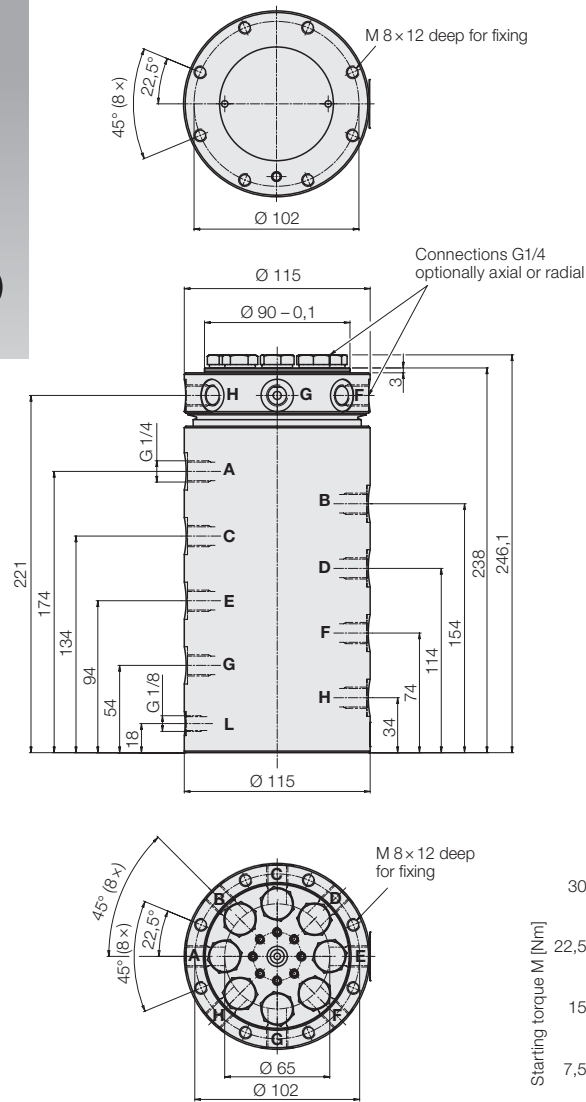
Application example



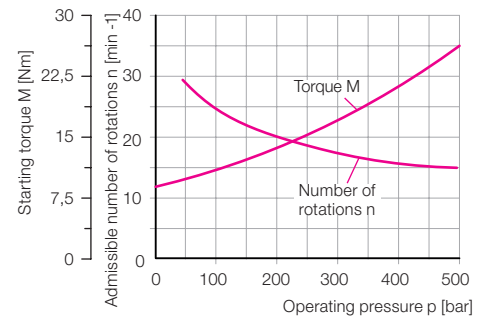
Eight Passage Rotary Coupling



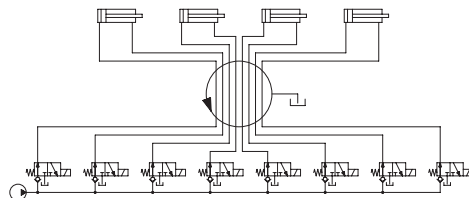
Eight passage rotary coupling
with leakage oil recirculation in the housing



Max. admissible number of rotations n
and starting torque M as a function of the
operating pressure p



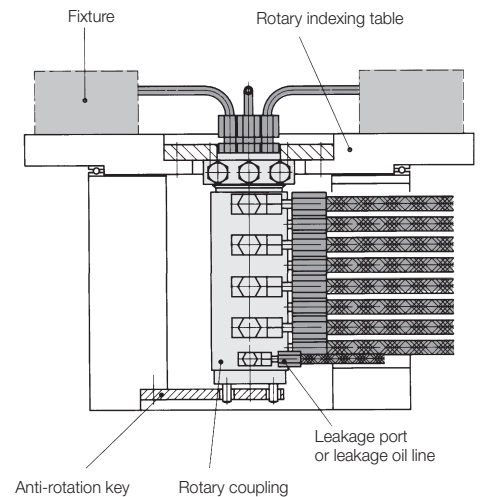
Hydraulic circuit diagram



Rotary coupling ND 5

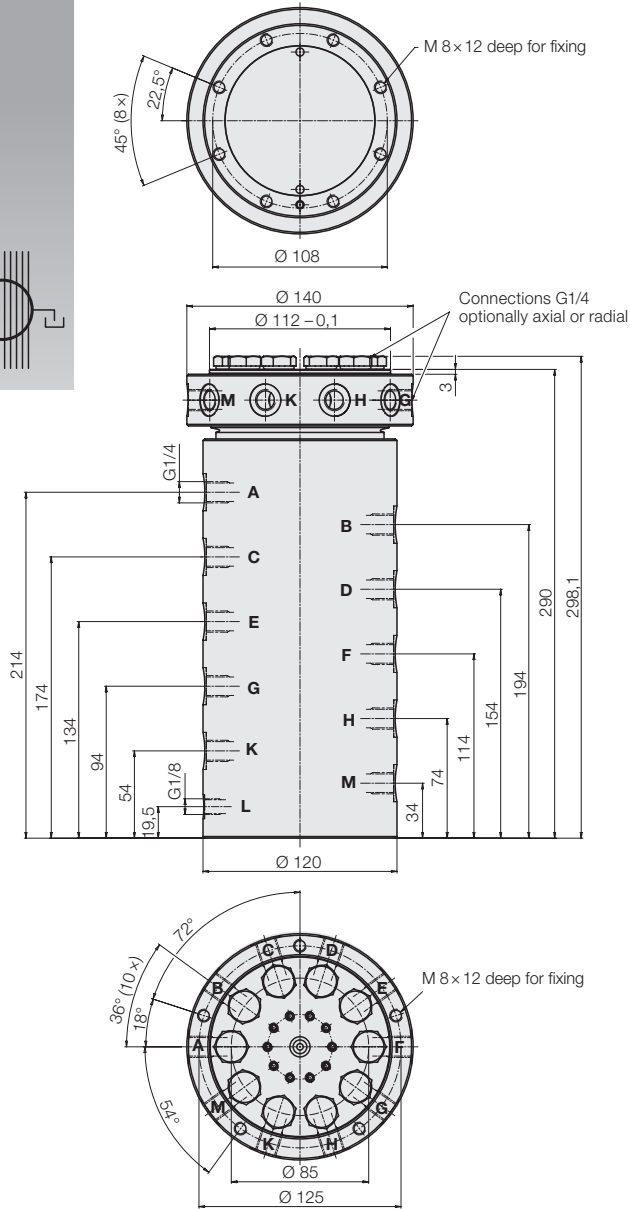
Operating pressure range [bar]	Weight [kg]	Part no.
10 – 500	20.2	9288 135

Application example



Operating conditions, tolerances and other data see data sheet A 0.100.

Ten passage rotary coupling with leakage oil recirculation in the housing



Operating pressure range [bar]	Weight [kg]	Part no.
10 – 500	28	9280 135

A detailed cross-sectional diagram of a rotary indexing table assembly. The diagram shows a central vertical shaft passing through a series of horizontal plates, which represent the indexing table's segments. The shaft is supported by bearings at the top and bottom. A 'Fixture' is shown on the left, connected to the top of the shaft. A 'Rotary indexing table' is labeled at the top right. An 'Anti-rotation key' is shown at the bottom left, preventing the shaft from rotating. A 'Rotary coupling' is shown at the bottom center, connecting the shaft to the base. A 'Leakage port or leakage oil line' is shown at the bottom right, leading from the base of the shaft. The diagram illustrates the mechanical components and their assembly, including the use of seals and bearings to maintain pressure and prevent leakage.

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