# ROEMHELD

F 9.280

# **Rotary Couplings**

single, twin, four and six passages with / without leakage oil port max. operating pressure 250 / 500 bar

### 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 coupling must only be used in a temperature range between +10 °C and +60 °C.

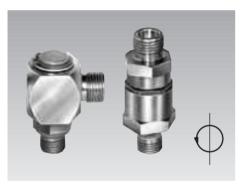
Operating conditions, tolerances and other data see data sheet A 0.100.

## Ordering

When ordering, the most important operating data (pressure, temperature, media, speed i.e. cycle time) should be indicated to enable a possibly required adaptation to the customer's application.

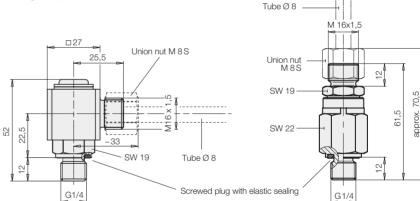
Specially designed rotary couplings are available on request.

# Single passage rotary couplings



### Angle swivel joint

Adm.operating speed: 20 min<sup>-1</sup> Starting torque at 500 bar: 1.2 Nm



Part-no.

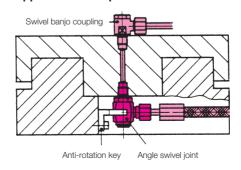
9208-156

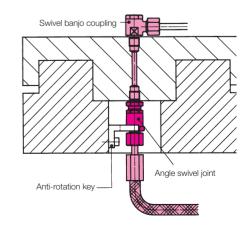
Part-no.

**Axial swivel joint** 

9208-069

## **Application examples**

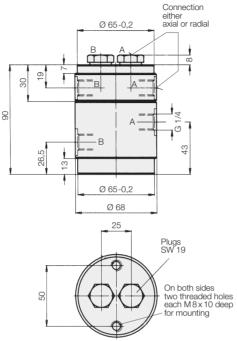




# Twin passage rotary coupling

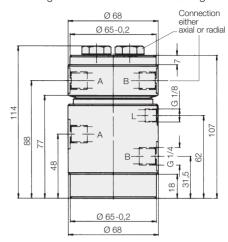


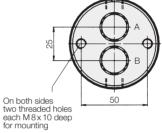
## Twin passage rotary coupling



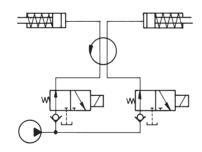
## Twin passage rotary coupling

with leakage oil recirculation in the housing





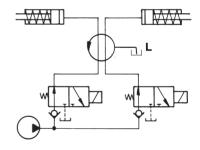
## Hydraulic circuit diagram



## Rotary coupling ND 5

| Operating pressure | Leakage<br>rate         | Weight  | Part-no. |
|--------------------|-------------------------|---------|----------|
| range [bar]        | [cm <sup>3</sup> /100 l | n] [kg] |          |
| 100-500            | 40                      | 2.6     | 9281-103 |
| 10-250             | 20                      | 2.6     | 9281-106 |

## Hydraulic circuit diagram

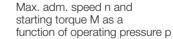


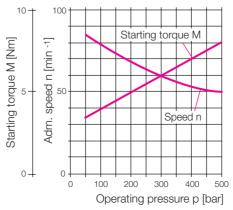
## Rotary coupling ND 5

with leakage oil recirculation in the housing

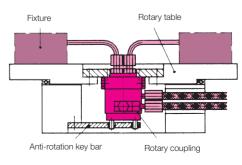
Operating Weight Part-no.
pressure range [bar] [kg]

10-500 3.05 9281-105





### **Application example**

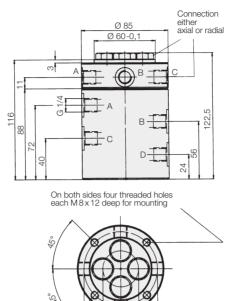




# Four passage rotary coupling

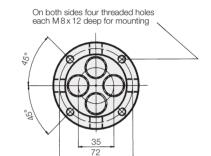


#### Four passage rotary coupling

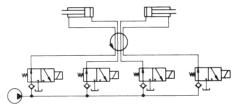


### Four passage rotary coupling

with leakage oil recirculation in the housing Connection either axial or radial



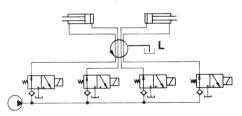
## Hydraulic circuit diagram



## Rotary coupling ND 5

| Operating pressure range [bar] | Leakage<br>rate<br>[cm <sup>3</sup> /100 h | Weight | Part-no. |
|--------------------------------|--------------------------------------------|--------|----------|
| 100-500                        | 60                                         | 5.25   | 9284-005 |
| 10-250                         | 25                                         | 5.25   | 9284-006 |

## Hydraulic circuit diagram



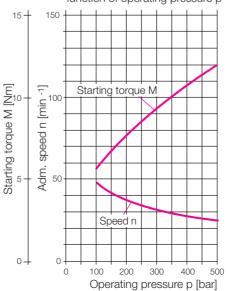
## **Rotary coupling ND 5**

with leakage oil recirculation in the housing

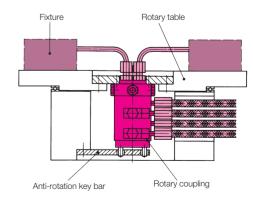
Operating Weight Part-no.
pressure range [bar] [kg]

100-500 6.1 9284-105
10-250 6.1 9284-106

# Max. adm. speed n and starting torque M as a function of operating pressure p



## **Application example**



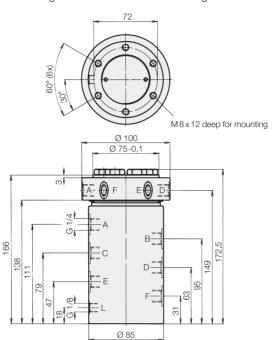


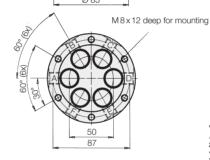
# Six passage rotary coupling



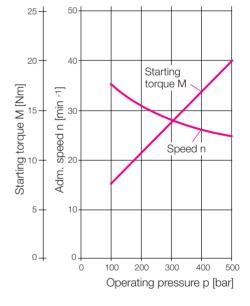
## Six passage rotary coupling

with leakage oil recirculation in the housing

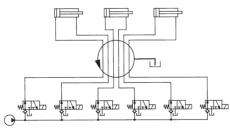




Max. adm. speed n and starting torque M as a function of operating pressure p



## Hydraulic circuit diagram



## Rotary coupling ND 5

| Operating pressure range [bar] | Weight<br>[kg] | Part-no. |
|--------------------------------|----------------|----------|
| 10-500                         | 8.25           | 9286-105 |

## **Application example**

