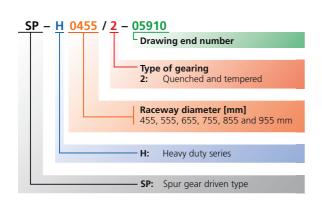
## **Series overview**

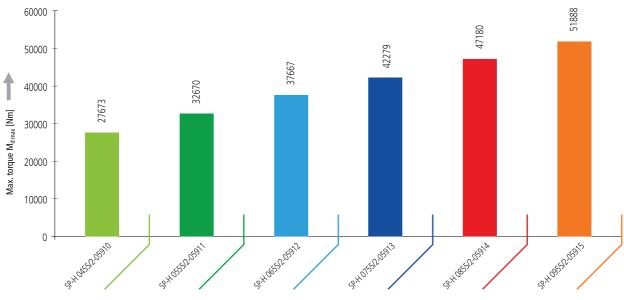




# Maximum torque $M_{d\ max}$ of the individual sizes

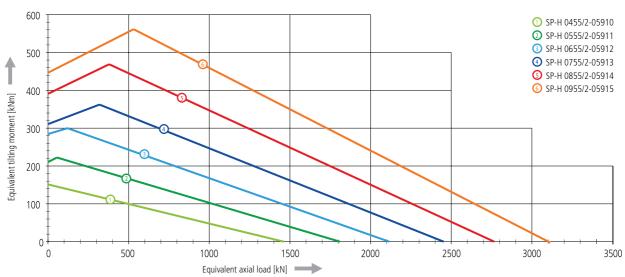
CAUTION: The duty per minute is limited.

Please always observe the explanations in the Technical Information section (from page 60).



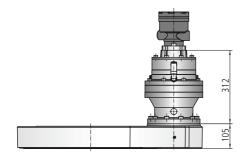
### Limiting load diagrams of the individual sizes for compressive loads

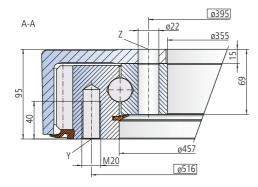
Please always observe the explanations in the Technical Information section (from page 60).





# **Size SP-H 0455**

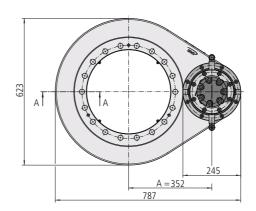




The mounting structure must support the housing to at least ø455.

The seal must be supported by the mounting structure to at least ø610, in order to ensure the full sealing effect.

A recess in the mounting structure of 10 mm above the housing is recommended.



### Mounting holes

Y = 18 drill holes M20-40 deep, evenly distributed

Z = 18 drill holes  $\emptyset 22$ , evenly distributed

### Lubricating ports

4 conical grease nipples on internal diameter

2 conical grease nipples on housing exterior

Slew drive supplied pre-lubricated

| number SP-I        |  |   |
|--------------------|--|---|
|                    | H 0455/  | 2-05910   |
| m                  | [mm]   | 8   |
| z <sub>2</sub>     | [ - ]  | 72  |
| z <sub>1</sub>     | [ - ]  | 15  |
| i                  | [ - ]  | 4.8   |
| i <sub>tot</sub>   | [ - ]  | 86.88   |
| $M_{d max}$        | [Nm]   | 27673   |
| $M_{d nom}$        | [Nm]   | 18115   |
| $M_{h  max}$       | [Nm]   | 27673   |
| C <sub>o rad</sub> | [kN]   | 552   |
| C <sub>o ax</sub>  | [kN]   | 1477  |
| C <sub>rad</sub>   | [kN]   | 280   |
| C <sub>ax</sub>    | [kN]   | 326   |
| tor RE160          | [kg]   | 207   |
|                    | m  Z2 Z1 i i tot  Md max  Md nom  Mh max  Co rad  Co ax  Crad  Cax | m [mm] z <sub>2</sub> [-] z <sub>1</sub> [-] i [-] i <sub>tot</sub> [-] M <sub>d max</sub> [Nm] M <sub>d nom</sub> [Nm] C <sub>o rad</sub> [kN] C <sub>o ax</sub> [kN] C <sub>ax</sub> [kN] |

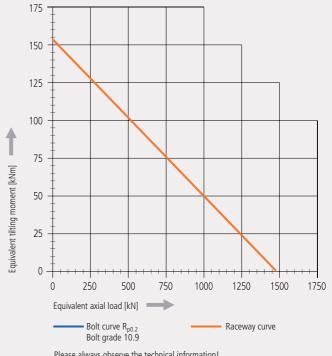
\* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.

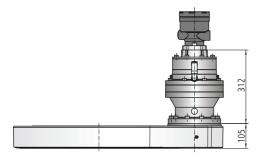
Selection example:
Performance data with hydraulic motor RE160

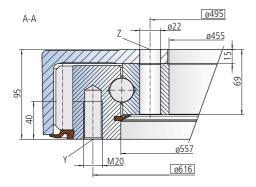
| Terrormance data with nyardane i | HOTOL ITE 100 |          |       |
|----------------------------------|---------------|----------|-------|
| Pressure differential            | Δр            | [bar]    | 165   |
| Oil flow                         | Q             | [l/min]  | 45    |
| Output speed                     | n             | [min -1] | 3     |
| Max. achievable torque           | $M_d$         | [Nm]     | 27673 |

# Limiting load diagram for compressive loads



# **Size SP-H 0555**

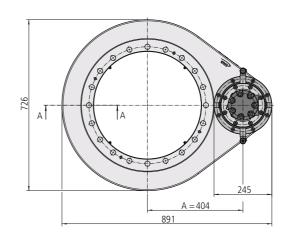




The mounting structure must support the housing to at least ø555.

The seal must be supported by the mounting structure to at least  $\varpi714$ , in order to ensure the full sealing effect.

A recess in the mounting structure of 10 mm above the housing is recommended.



## Mounting holes

Y=20 drill holes M20-40 deep, evenly distributed Z=20 drill holes Ø22, evenly distributed

### Lubricating ports

4 conical grease nipples on internal diameter 2 conical grease nipples on housing exterior

| Slew drive | supplied | pre-lubricated |
|------------|----------|----------------|
|            |          |                |

| Drawi   | ing number SP-     | U 0555 | /2_05011 |
|---|--------------------|--------|----------|
| Module  | m                  | [mm]   | 8        |
| Number of teeth, wheel                            | z <sub>2</sub>     | [-]    | 85       |
| Number of teeth, pinion                           | z <sub>1</sub>     | [-]    | 15       |
| Slew drive gear ratio                             | i                  | [ - ]  | 5.67     |
| Overall gear ratio incl. gear box                 | i <sub>tot</sub>   | [ - ]  | 102.56   |
| Max. torque                                       | M <sub>d max</sub> | [Nm]   | 32670    |
| Nom. torque $S_F = 1$ at $n = 3 \text{ min}^{-1}$ | $M_{d nom}$        | [Nm]   | 21590    |
| Max. holding torque*                              | $M_{h max}$        | [Nm]   | 32670    |
| Static load rating, radial                        | $C_{o rad}$        | [kN]   | 673      |
| Static load rating, axial                         | C <sub>o ax</sub>  | [kN]   | 1802     |
| Dynamic load rating, radial                       | $C_{rad}$          | [kN]   | 301      |
| Dynamic load rating, axial                        | C <sub>ax</sub>    | [kN]   | 351      |
| Weight, incl. 11 kg for hydraulic                 | motor RE160        | [kg]   | 226      |

\* Optionally with brake

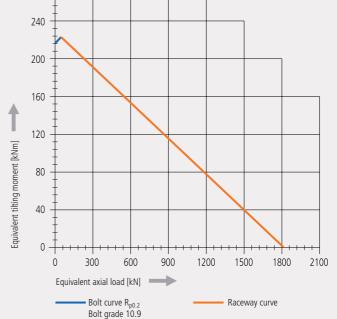
The hydraulic/electric motor is selected according to the actual requirements and customer specification.

Selection example:

Performance data with hydraulic motor RE160

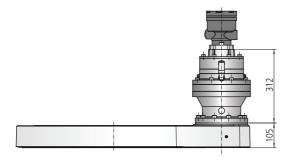
| Pressure differential  | ∆р    | [bar]    | 165   |
|------------------------|-------|----------|-------|
| Oil flow               | Q     | [l/min]  | 53    |
| Output speed           | n     | [min -1] | 3     |
| Max. achievable torque | $M_d$ | [Nm]     | 32670 |

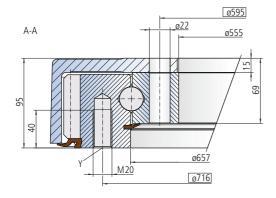
# Limiting load diagram for compressive loads





# **Size SP-H 0655**

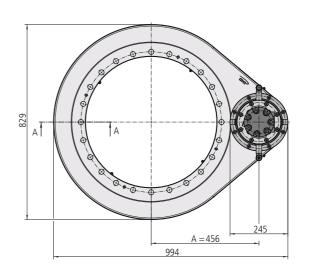




The mounting structure must support the housing to at least ø655.

The seal must be supported by the mounting structure to at least ø818, in order to ensure the full sealing effect.

A recess in the mounting structure of 10 mm above the housing is recommended.



### Mounting holes

Y=24 drill holes M20-40 deep, evenly distributed Z=24 drill holes Ø22, evenly distributed

### Lubricating ports

4 conical grease nipples on internal diameter 2 conical grease nipples on housing exterior

Slew drive supplied pre-lubricated

| Drawir  | ng number SP-      | H 0655 | /2-05912 |
|---|--------------------|--------|----------|
| Module  | m                  | [mm]   | 8        |
| Number of teeth, wheel                            | z <sub>2</sub>     | [ - ]  | 98       |
| Number of teeth, pinion                           | z <sub>1</sub>     | [ - ]  | 15       |
| Slew drive gear ratio                             | i                  | [-]    | 6.53     |
| Overall gear ratio incl. gear box                 | i <sub>tot</sub>   | [-]    | 118.25   |
| Max. torque                                       | M <sub>d max</sub> | [Nm]   | 37667    |
| Nom. torque $S_F = 1$ at $n = 3 \text{ min}^{-1}$ | $M_{d nom}$        | [Nm]   | 25048    |
| Max. holding torque*                              | M <sub>h max</sub> | [Nm]   | 37667    |
| Static load rating, radial                        | C <sub>o rad</sub> | [kN]   | 794      |
| Static load rating, axial                         | C <sub>o ax</sub>  | [kN]   | 2127     |
| Dynamic load rating, radial                       | C <sub>rad</sub>   | [kN]   | 319      |
| Dynamic load rating, axial                        | C <sub>ax</sub>    | [kN]   | 373      |
| Weight, incl. 11 kg for hydraulic r               | motor RE160        | [kg]   | 246      |

\* Optionally with brake

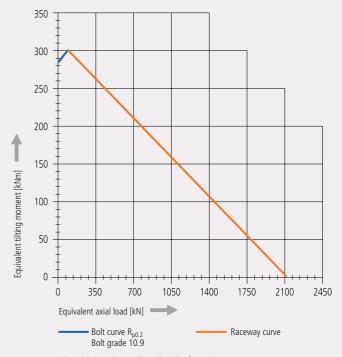
The hydraulic/electric motor is selected according to the actual requirements and customer specification.

Selection example:

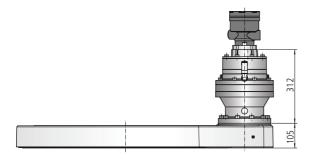
Performance data with hydraulic motor RE160

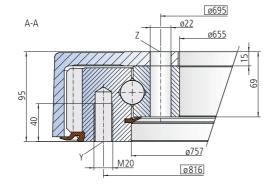
| remornance data with hydraune | . IIIOTOI ITE 100 |          |       |
|-------------------------------|-------------------|----------|-------|
| Pressure differential         | ∆р                | [bar]    | 165   |
| Oil flow                      | Q                 | [l/min]  | 60    |
| Output speed                  | n                 | [min -1] | 3     |
| Max. achievable torque        | $M_d$             | [Nm]     | 37667 |

## Limiting load diagram for compressive loads



# **Size SP-H 0755**

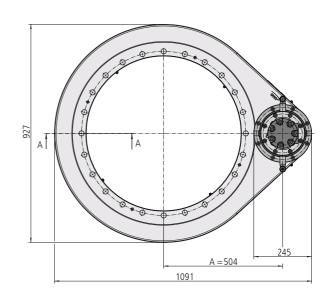




The mounting structure must support the housing to at least ø755.

The seal must be supported by the mounting structure to at least ø914, in order to ensure the full sealing effect.

A recess in the mounting structure of 10 mm above the housing is recommended.



### Mounting holes

Y = 24 drill holes M20-40 deep, evenly distributed

Z = 24 drill holes ø22, evenly distributed

### Lubricating ports

4 conical grease nipples on internal diameter

2 conical grease nipples on housing exterior

Slew drive supplied pre-lubricated

| Drawing I   | number SP-         | H 0755 | /2-05913 |
|---|--------------------|--------|----------|
| Module  | m                  | [mm]   | 8        |
| Number of teeth, wheel                            | z <sub>2</sub>     | [-]    | 110      |
| Number of teeth, pinion                           | z <sub>1</sub>     | [-]    | 15       |
| Slew drive gear ratio                             | i                  | [-]    | 7.33     |
| Overall gear ratio incl. gear box                 | i <sub>tot</sub>   | [-]    | 132.73   |
| Max. torque                                       | $M_{d  max}$       | [Nm]   | 42279    |
| Nom. torque $S_F = 1$ at $n = 3 \text{ min}^{-1}$ | $M_{d \ nom}$      | [Nm]   | 28204    |
| Max. holding torque*                              | $M_{h \; max}$     | [Nm]   | 42279    |
| Static load rating, radial                        | C <sub>o rad</sub> | [kN]   | 916      |
| Static load rating, axial                         | C <sub>o ax</sub>  | [kN]   | 2452     |
| Dynamic load rating, radial                       | C <sub>rad</sub>   | [kN]   | 336      |
| Dynamic load rating, axial                        | C <sub>ax</sub>    | [kN]   | 393      |
| Weight, incl. 11 kg for hydraulic mo              | tor RE160          | [kg]   | 268      |

\* Optionally with brake

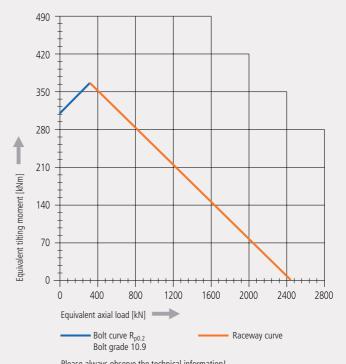
The hydraulic/electric motor is selected according to the actual requirements and customer specification.

Selection example:

Performance data with hydraulic motor RE160

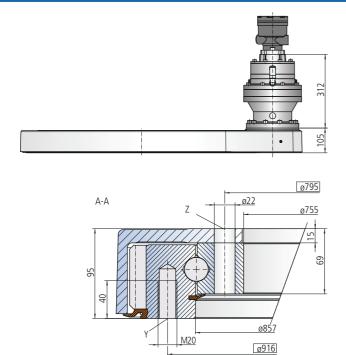
| remornance data with hydraune | THOUGH INE TOO |          |       |
|-------------------------------|----------------|----------|-------|
| Pressure differential         | ∆р             | [bar]    | 170   |
| Oil flow                      | Q              | [l/min]  | 67    |
| Output speed                  | n              | [min -1] | 3     |
| Max. achievable torque        | $M_d$          | [Nm]     | 42279 |

# Limiting load diagram for compressive loads





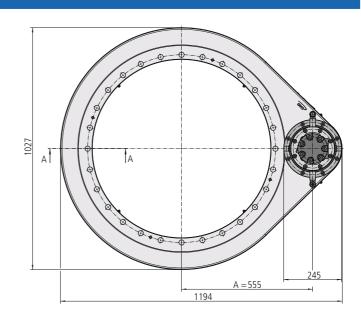
# **Size SP-H 0855**



The mounting structure must support the housing to at least ø855.

The seal must be supported by the mounting structure to at least  $\emptyset 1016$ , in order to ensure the full sealing effect.

A recess in the mounting structure of 10 mm above the housing is recommended.



### Mounting holes

Y = 28 drill holes M20-40 deep, evenly distributed

Z = 28 drill holes ø22, evenly distributed

### Lubricating ports

4 conical grease nipples on internal diameter

2 conical grease nipples on housing exterior

Slew drive supplied pre-lubricated

| Drawing   | number SP-         | H 0855 | /2-05914 |
|---|--------------------|--------|----------|
| Module  | m                  | [mm]   | 8        |
| Number of teeth, wheel                            | Z <sub>2</sub>     | [ - ]  | 122      |
| Number of teeth, pinion                           | z <sub>1</sub>     | [ - ]  | 15       |
| Slew drive gear ratio                             | i                  | [ - ]  | 8.13     |
| Overall gear ratio incl. gear box                 | i <sub>tot</sub>   | [-]    | 147.21   |
| Max. torque                                       | M <sub>d max</sub> | [-]    | 47180    |
| Nom. torque $S_F = 1$ at $n = 3 \text{ min}^{-1}$ | M <sub>d nom</sub> | [Nm]   | 32749    |
| Max. holding torque*                              | M <sub>h max</sub> | [Nm]   | 47180    |
| Static load rating, radial                        | C <sub>o rad</sub> | [Nm]   | 1037     |
| Static load rating, axial                         | C <sub>o ax</sub>  | [kN]   | 2777     |
| Dynamic load rating, radial                       | C <sub>rad</sub>   | [kN]   | 354      |
| Dynamic load rating, axial                        | C <sub>ax</sub>    | [kN]   | 414      |
| Weight, incl. 11 kg for hydraulic mo              | otor RE160         | [kg]   | 289      |

<sup>\*</sup> Optionally with brake

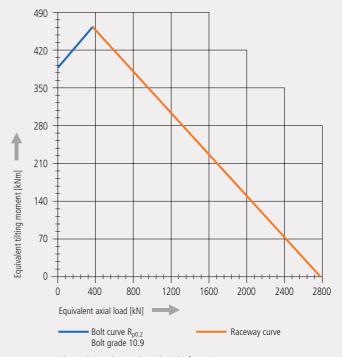
The hydraulic/electric motor is selected according to the actual requirements and customer specification.

Selection example:

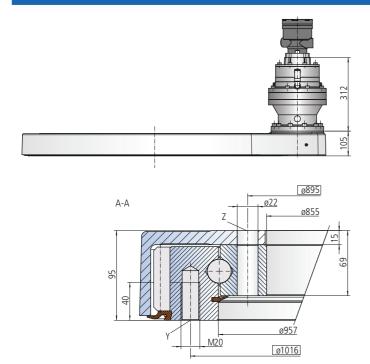
Performance data with hydraulic motor RE160

| remorniance data with hydraune | . IIIOTOI ITE 100 |          |       |
|--------------------------------|-------------------|----------|-------|
| Pressure differential          | ∆р                | [bar]    | 175   |
| Oil flow                       | Q                 | [l/min]  | 74    |
| Output speed                   | n                 | [min -1] | 3     |
| Max. achievable torque         | $M_d$             | [Nm]     | 47180 |

## Limiting load diagram for compressive loads



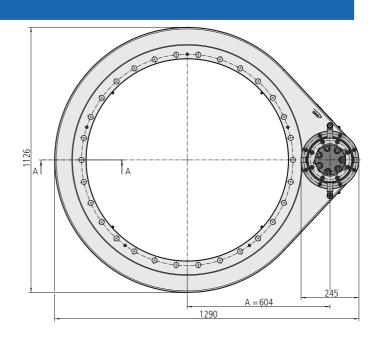
## **Size SP-H 0955**



The mounting structure must support the housing to at least ø955.

The seal must be supported by the mounting structure to at least ø1114, in order to ensure the full sealing effect.

A recess in the mounting structure of 10 mm above the housing is recommended.



### Mounting holes

Y = 30 drill holes M20-40 deep, evenly distributed

Z = 30 drill holes ø22, evenly distributed

### Lubricating ports

4 conical grease nipples on internal diameter

2 conical grease nipples on housing exterior

Slew drive supplied pre-lubricated

| Drawing   | number SP-         | H 0955 | /2-05915 |
|---|--------------------|--------|----------|
| Module  | m                  | [mm]   | 8        |
| Number of teeth, wheel                            | Z <sub>2</sub>     | [ - ]  | 134      |
| Number of teeth, pinion                           | z <sub>1</sub>     | [ - ]  | 15       |
| Slew drive gear ratio                             | i                  | [ - ]  | 8.93     |
| Overall gear ratio incl. gear box                 | i <sub>tot</sub>   | [ - ]  | 161.69   |
| Max. torque                                       | M <sub>d max</sub> | [Nm]   | 51888    |
| Nom. torque $S_F = 1$ at $n = 3 \text{ min}^{-1}$ | M <sub>d nom</sub> | [Nm]   | 36342    |
| Max. holding torque*                              | M <sub>h max</sub> | [Nm]   | 51888    |
| Static load rating, radial                        | C <sub>o rad</sub> | [kN]   | 1159     |
| Static load rating, axial                         | C <sub>o ax</sub>  | [kN]   | 3101     |
| Dynamic load rating, radial                       | C <sub>rad</sub>   | [kN]   | 369      |
| Dynamic load rating, axial                        | C <sub>ax</sub>    | [kN]   | 431      |
| Weight, incl. 10 kg for hydraulic moto            | or OMS125          | [kg]   | 315      |

\* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.

Selection example:

Performance data with hydraulic motor OMS125

| ,                      |       |          |       |
|------------------------|-------|----------|-------|
| Pressure differential  | Др    | [bar]    | 200   |
| Oil flow               | Q     | [l/min]  | 65    |
| Output speed           | n     | [min -1] | 3     |
| Max. achievable torque | $M_d$ | [Nm]     | 51888 |

# Limiting load diagram for compressive loads 700 600 500 400 300 Equivalent tilting moment [kNm] 200 100 500 3000 3500 1000 1500 2000 2500 Equivalent axial load [kN] Bolt curve R<sub>p0.2</sub> Bolt grade 10.9 Raceway curve Please always observe the technical information!



# **Your notes**

