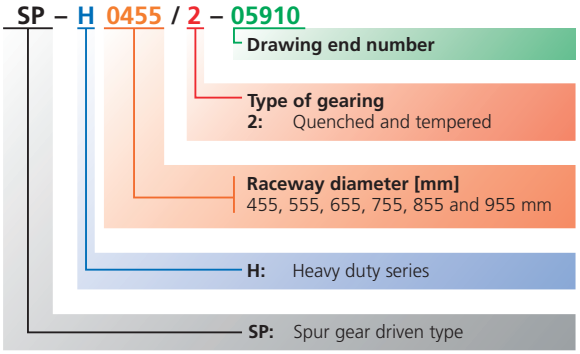
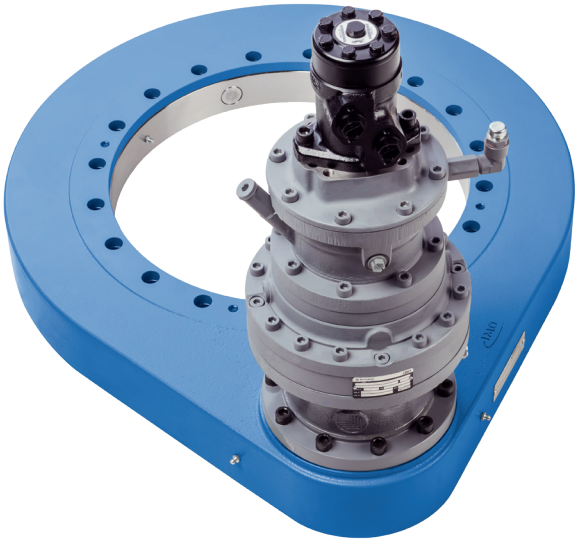
SP-H series

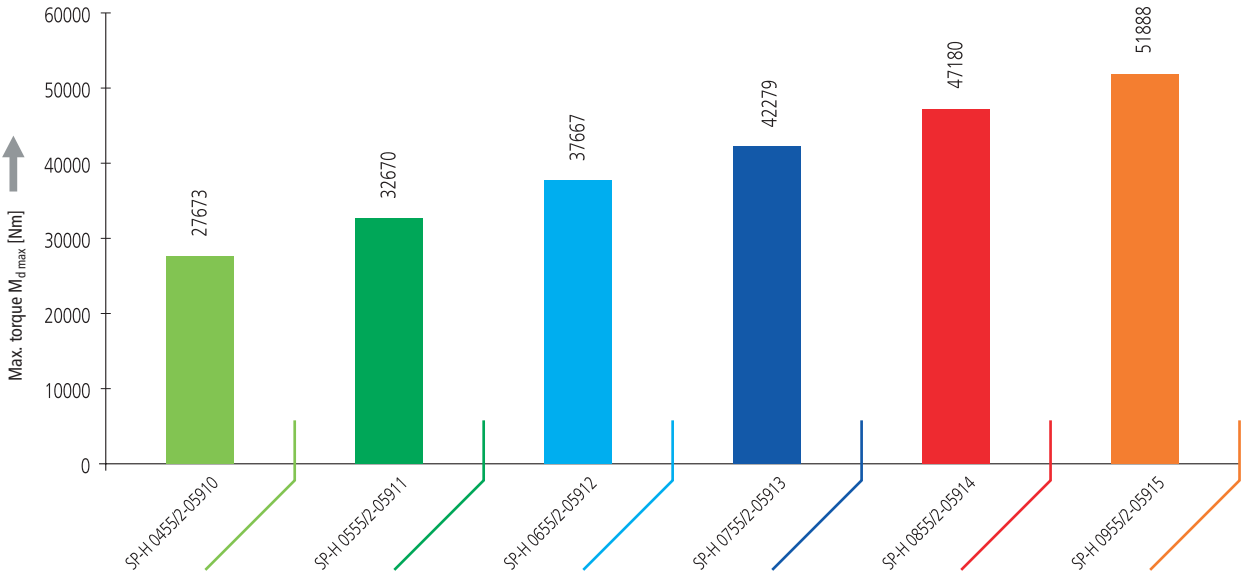
Series overview





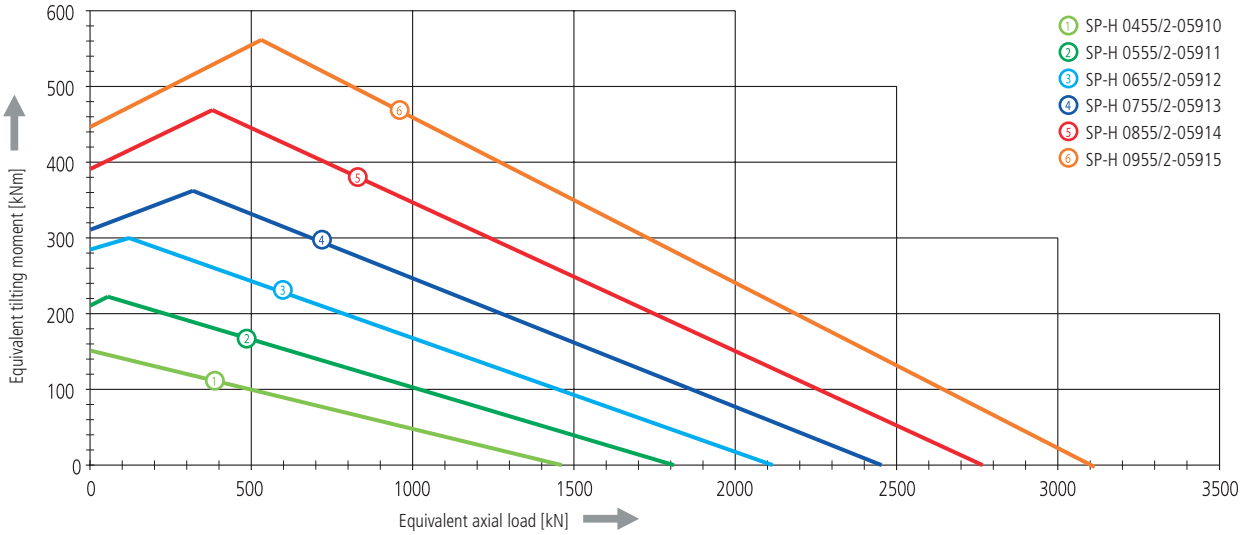
Maximum torque $M_{d\,max}$ of the individual sizes

CAUTION: The duty per minute is limited.
Please always observe the explanations in the Technical Information section (from page 60).

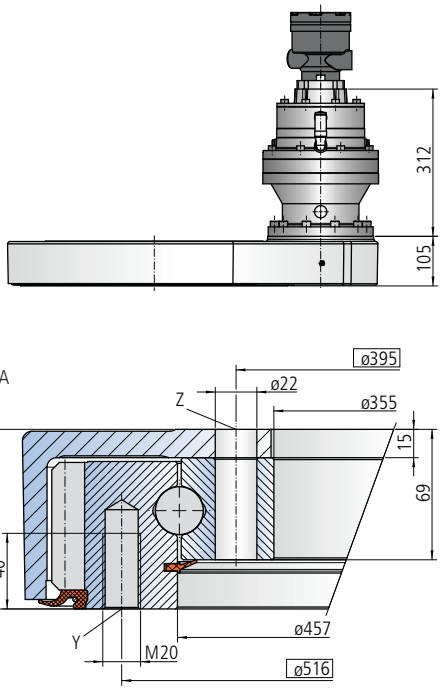


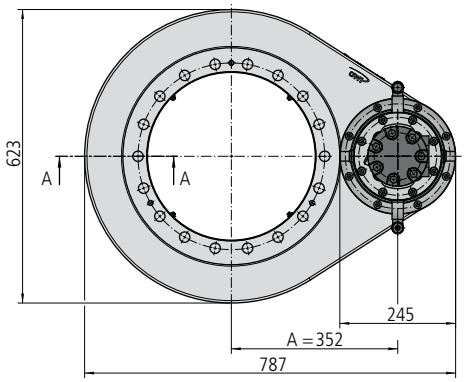
Limiting load diagrams of the individual sizes for compressive loads

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 ø22, evenly distributed

Lubricating ports

4 conical grease nipples on internal diameter
2 conical grease nipples on housing exterior
Slew drive supplied pre-lubricated

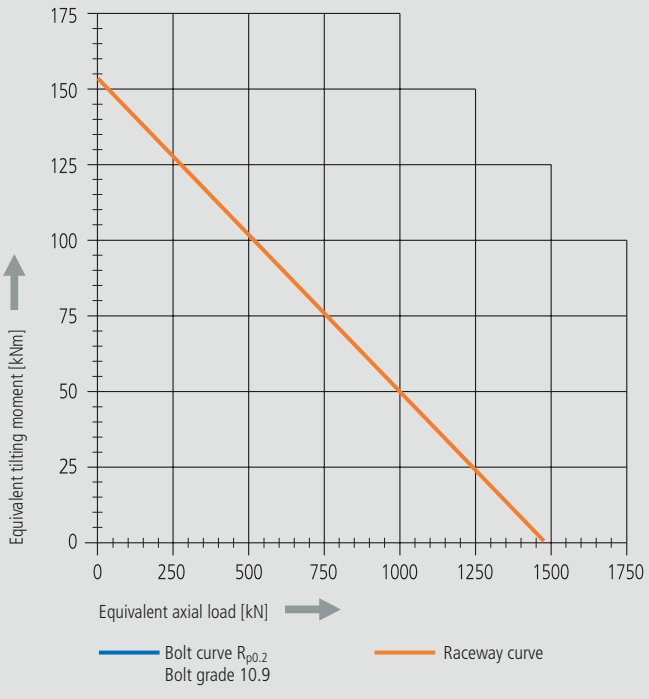
			Drawing number SP-H 0455/2-05910
Module	**m**	[mm]	8
Number of teeth, wheel	z_2	[-]	72
Number of teeth, pinion	z_1	[-]	15
Slew drive gear ratio	**i**	[-]	4.8
Overall gear ratio incl. gear box	i_{tot}	[-]	86.88
Max. torque	$M_{d\,max}$	[Nm]	27673
Nom. torque S_F = 1 at n = 3 min^{-1}	$M_{d\,nom}$	[Nm]	18115
Max. holding torque*	$M_{h\,max}$	[Nm]	27673
Static load rating, radial	$C_{o\,rad}$	[kN]	552
Static load rating, axial	$C_{o\,ax}$	[kN]	1477
Dynamic load rating, radial	C_{rad}	[kN]	280
Dynamic load rating, axial	C_{ax}	[kN]	326
Weight, incl. 11 kg for hydraulic motor RE160		[kg]	207

* 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

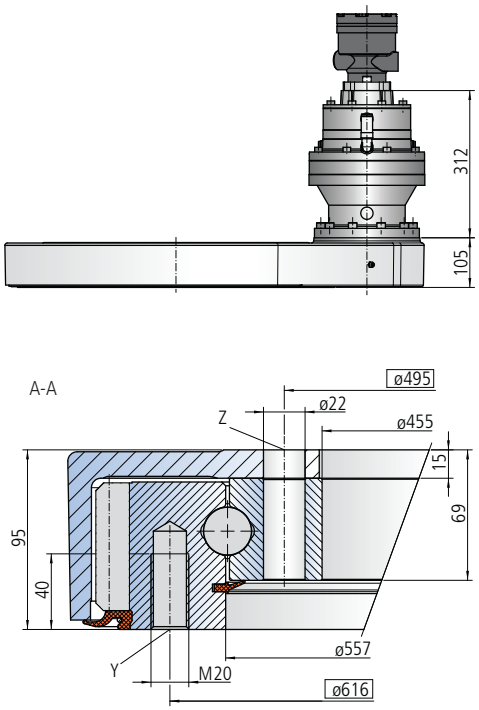
Pressure differential	**Δp**	[bar]	165
Oil flow	**Q**	[l/min]	45
Output speed	**n**	[min $^{-1}$]	3
Max. achievable torque	M_d	[Nm]	27673

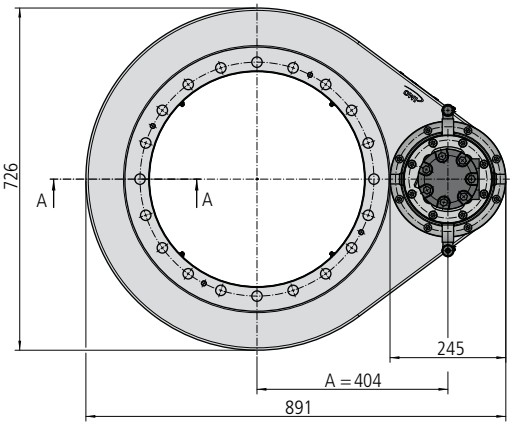
Limiting load diagram for compressive loads



Please always observe the technical information!

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 ø714, 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

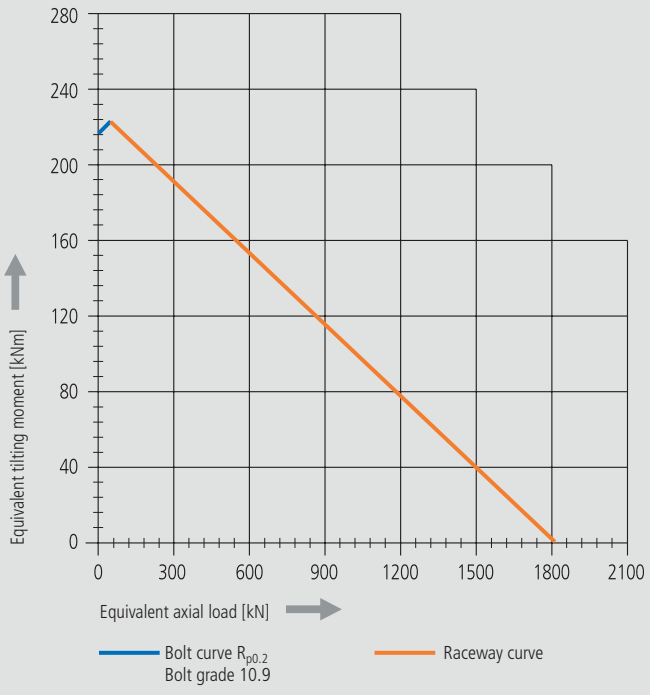
			Drawing number SP-H 0555/2-05911
Module	**m**	[mm]	8
Number of teeth, wheel	z_2	[-]	85
Number of teeth, pinion	z_1	[-]	15
Slew drive gear ratio	**i**	[-]	5.67
Overall gear ratio incl. gear box	i_{tot}	[-]	102.56
Max. torque	$M_{d\,max}$	[Nm]	32670
Nom. torque S_F = 1 at n = 3 min^{-1}	$M_{d\,nom}$	[Nm]	21590
Max. holding torque*	$M_{h\,max}$	[Nm]	32670
Static load rating, radial	$C_{o\,rad}$	[kN]	673
Static load rating, axial	$C_{o\,ax}$	[kN]	1802
Dynamic load rating, radial	C_{rad}	[kN]	301
Dynamic load rating, axial	C_{ax}	[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

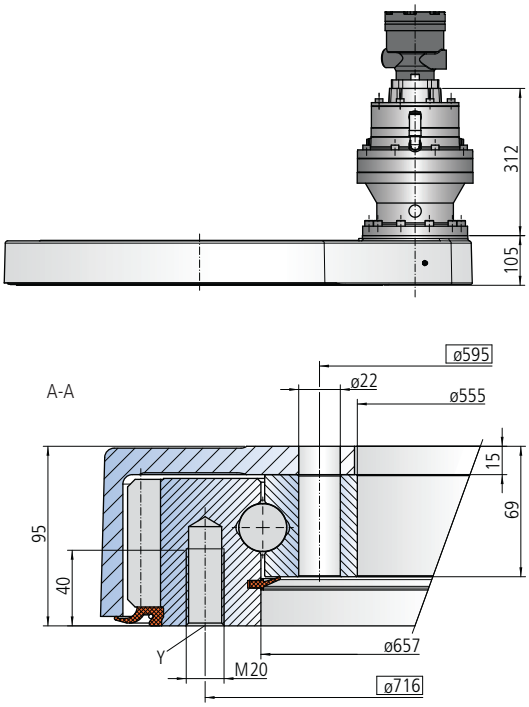
Pressure differential	**Δp**	[bar]	165
Oil flow	**Q**	[l/min]	53
Output speed	**n**	[min $^{-1}$]	3
Max. achievable torque	M_d	[Nm]	32670

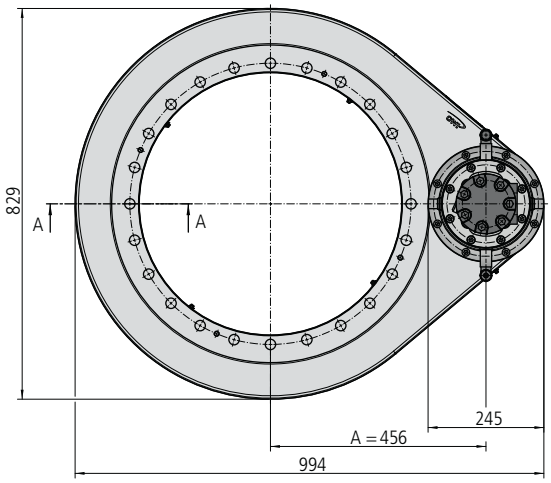
Limiting load diagram for compressive loads



Please always observe the technical information!

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

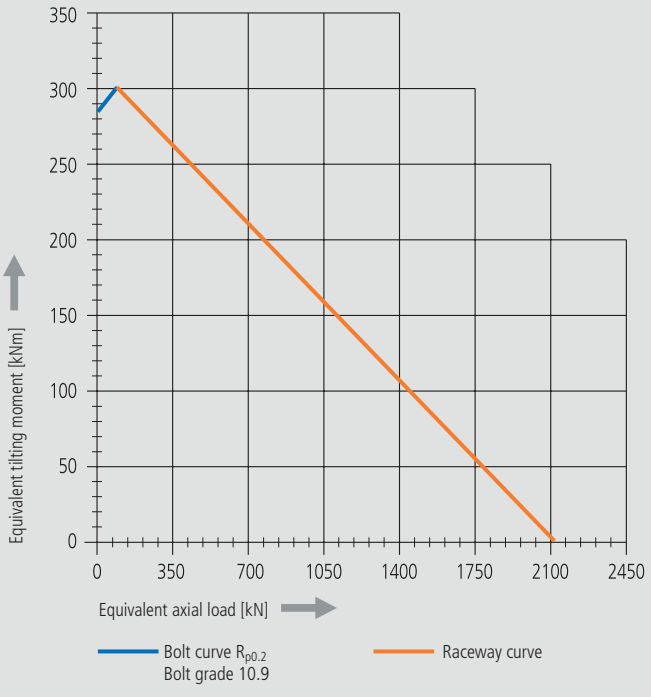
			Drawing number SP-H 0655/2-05912
Module	**m**	[mm]	8
Number of teeth, wheel	z_2	[-]	98
Number of teeth, pinion	z_1	[-]	15
Slew drive gear ratio	**i**	[-]	6.53
Overall gear ratio incl. gear box	i_{tot}	[-]	118.25
Max. torque	$M_{d\,max}$	[Nm]	37667
Nom. torque S_F = 1 at n = 3 min^{-1}	$M_{d\,nom}$	[Nm]	25048
Max. holding torque*	$M_{h\,max}$	[Nm]	37667
Static load rating, radial	$C_{o\,rad}$	[kN]	794
Static load rating, axial	$C_{o\,ax}$	[kN]	2127
Dynamic load rating, radial	C_{rad}	[kN]	319
Dynamic load rating, axial	C_{ax}	[kN]	373
Weight, incl. 11 kg for hydraulic 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

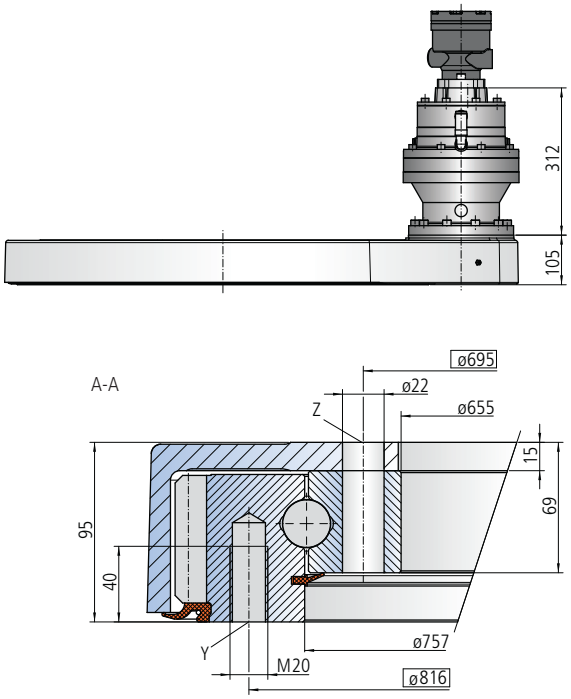
Pressure differential	**Δp**	[bar]	165
Oil flow	**Q**	[l/min]	60
Output speed	**n**	[min $^{-1}$]	3
Max. achievable torque	M_d	[Nm]	37667

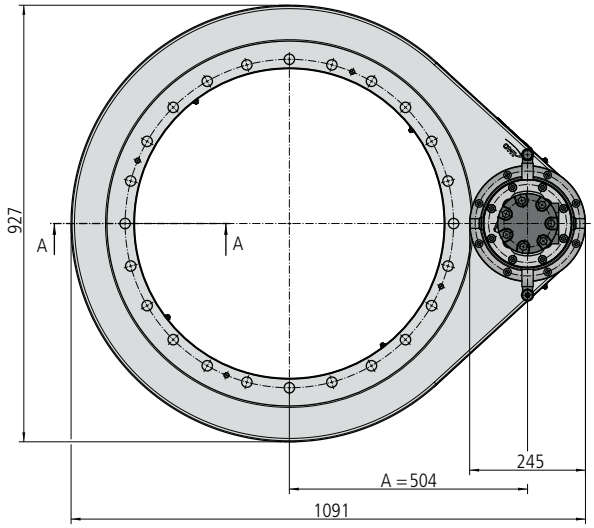
Limiting load diagram for compressive loads



Please always observe the technical information!

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

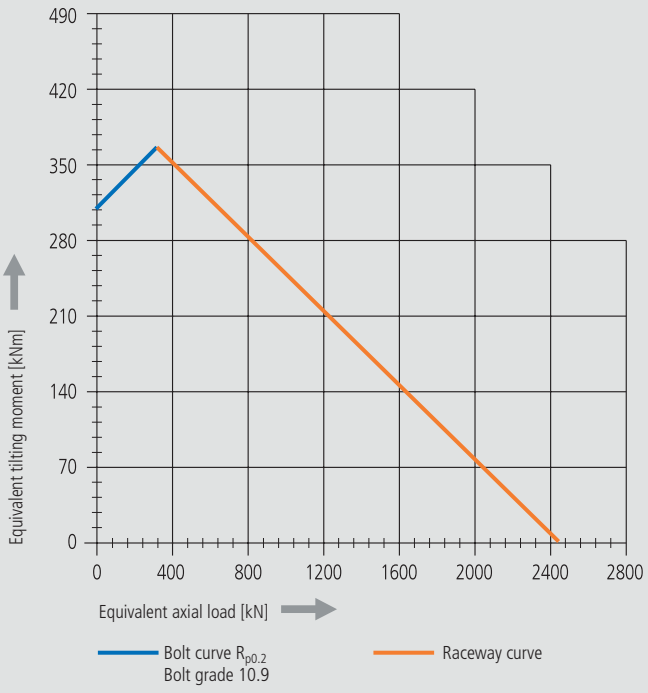
			Drawing number SP-H 0755/2-05913
Module	**m**	[mm]	8
Number of teeth, wheel	z_2	[-]	110
Number of teeth, pinion	z_1	[-]	15
Slew drive gear ratio	**i**	[-]	7.33
Overall gear ratio incl. gear box	i_{tot}	[-]	132.73
Max. torque	$M_{d\,max}$	[Nm]	42279
Nom. torque S_F = 1 at n = 3 min^{-1}	$M_{d\,nom}$	[Nm]	28204
Max. holding torque*	$M_{h\,max}$	[Nm]	42279
Static load rating, radial	$C_{o\,rad}$	[kN]	916
Static load rating, axial	$C_{o\,ax}$	[kN]	2452
Dynamic load rating, radial	C_{rad}	[kN]	336
Dynamic load rating, axial	C_{ax}	[kN]	393
Weight, incl. 11 kg for hydraulic motor 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

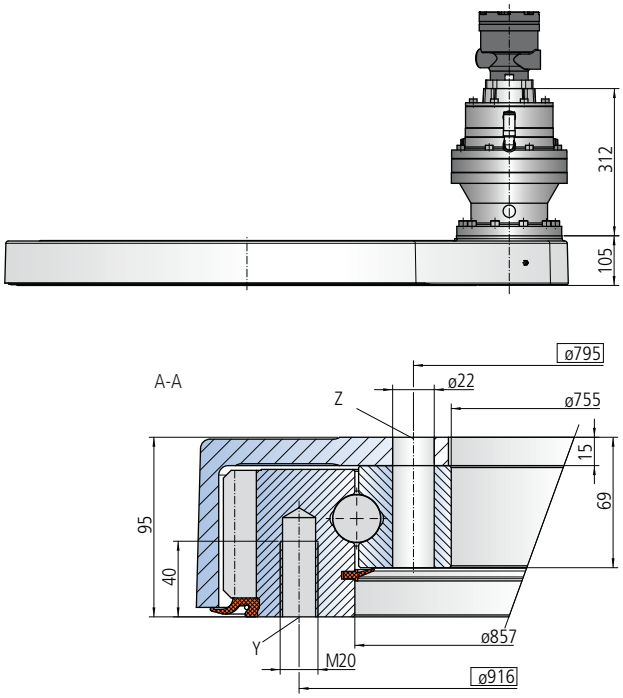
Pressure differential	**Δp**	[bar]	170
Oil flow	**Q**	[l/min]	67
Output speed	**n**	[min $^{-1}$]	3
Max. achievable torque	M_d	[Nm]	42279

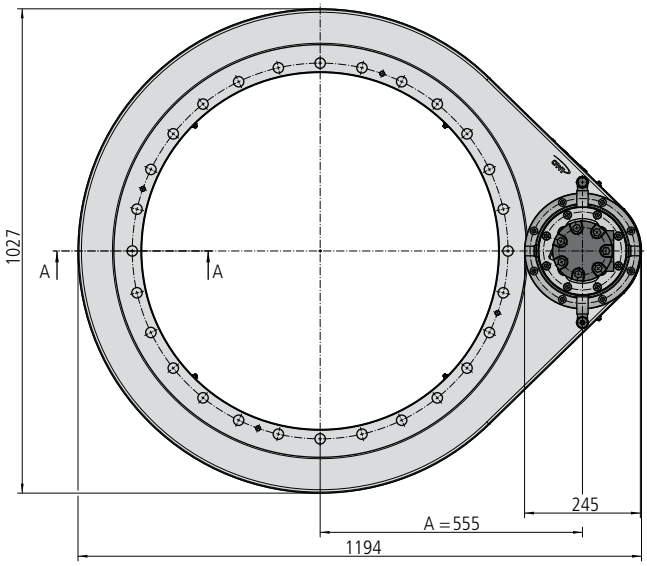
Limiting load diagram for compressive loads



Please always observe the technical information!

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 ø1016, 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

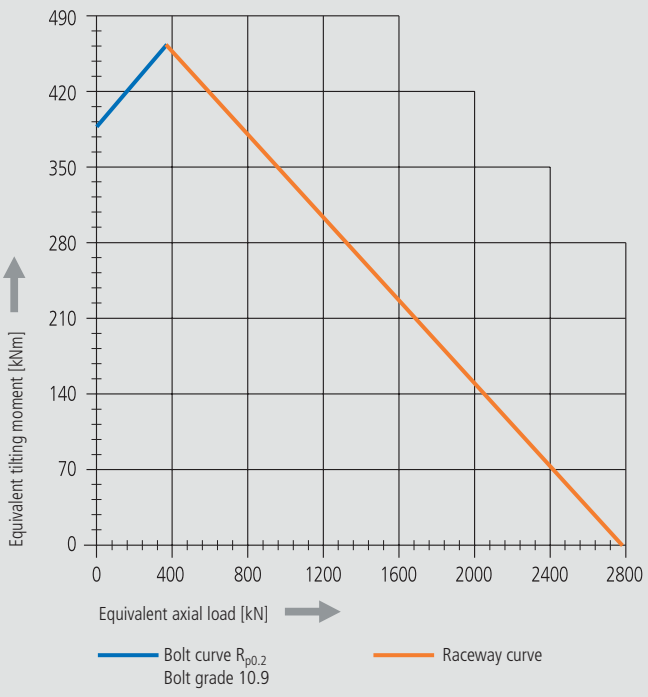
			Drawing number SP-H 0855/2-05914
Module	**m**	[mm]	8
Number of teeth, wheel	z_2	[-]	122
Number of teeth, pinion	z_1	[-]	15
Slew drive gear ratio	**i**	[-]	8.13
Overall gear ratio incl. gear box	i_{tot}	[-]	147.21
Max. torque	$M_{d\,max}$	[-]	47180
Nom. torque S_F = 1 at n = 3 min^{-1}	$M_{d\,nom}$	[Nm]	32749
Max. holding torque*	$M_{h\,max}$	[Nm]	47180
Static load rating, radial	$C_{o\,rad}$	[Nm]	1037
Static load rating, axial	$C_{o\,ax}$	[kN]	2777
Dynamic load rating, radial	C_{rad}	[kN]	354
Dynamic load rating, axial	C_{ax}	[kN]	414
Weight, incl. 11 kg for hydraulic motor RE160		[kg]	289

* 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

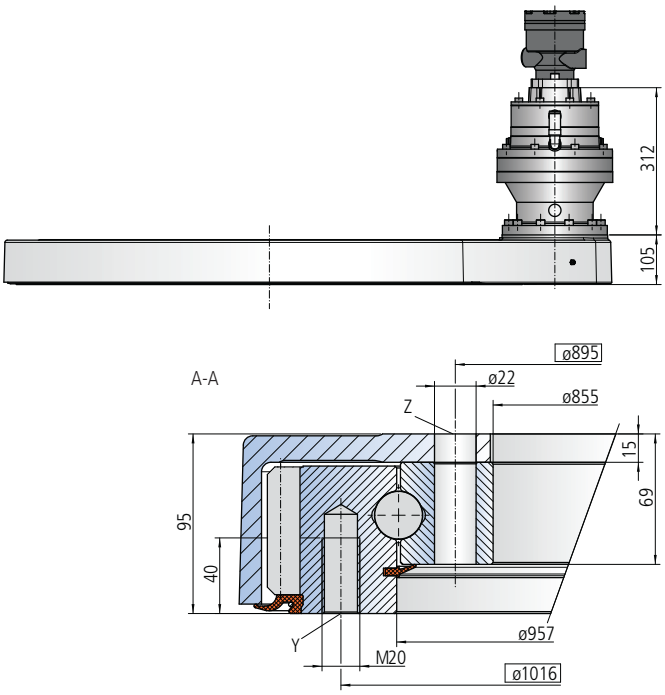
Pressure differential	**Δp**	[bar]	175
Oil flow	**Q**	[l/min]	74
Output speed	**n**	[min $^{-1}$]	3
Max. achievable torque	M_d	[Nm]	47180

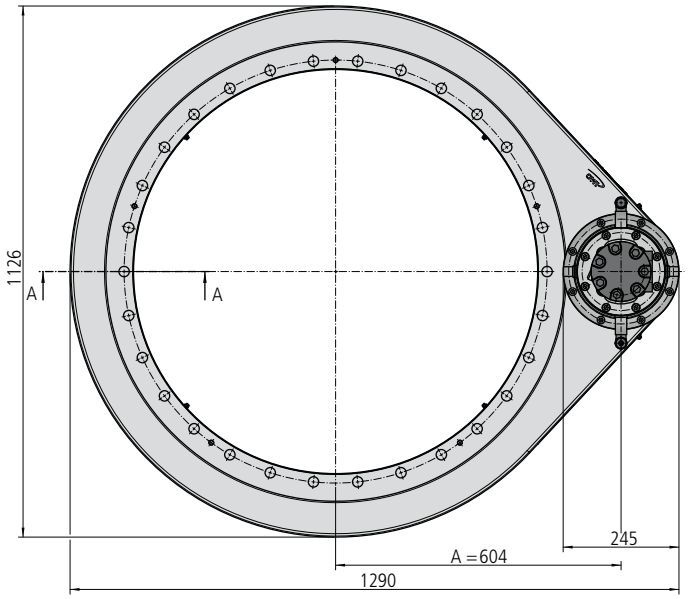
Limiting load diagram for compressive loads



Please always observe the technical information!

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

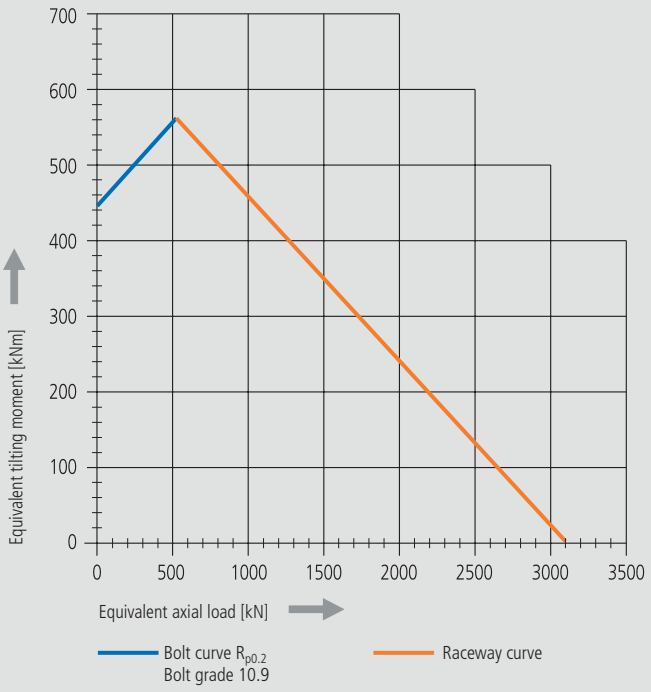
			Drawing number SP-H 0955/2-05915
Module	**m**	[mm]	8
Number of teeth, wheel	z_2	[-]	134
Number of teeth, pinion	z_1	[-]	15
Slew drive gear ratio	**i**	[-]	8.93
Overall gear ratio incl. gear box	i_{tot}	[-]	161.69
Max. torque	$M_{d\,max}$	[Nm]	51888
Nom. torque S_F = 1 at n = 3 min^{-1}	$M_{d\,nom}$	[Nm]	36342
Max. holding torque*	$M_{h\,max}$	[Nm]	51888
Static load rating, radial	$C_{o\,rad}$	[kN]	1159
Static load rating, axial	$C_{o\,ax}$	[kN]	3101
Dynamic load rating, radial	C_{rad}	[kN]	369
Dynamic load rating, axial	C_{ax}	[kN]	431
Weight, incl. 10 kg for hydraulic motor 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	**Δp**	[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



Please always observe the technical information!