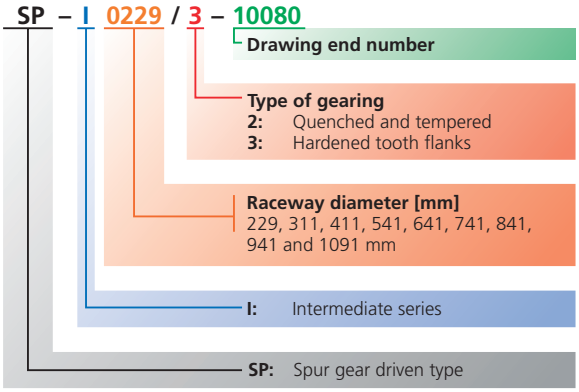
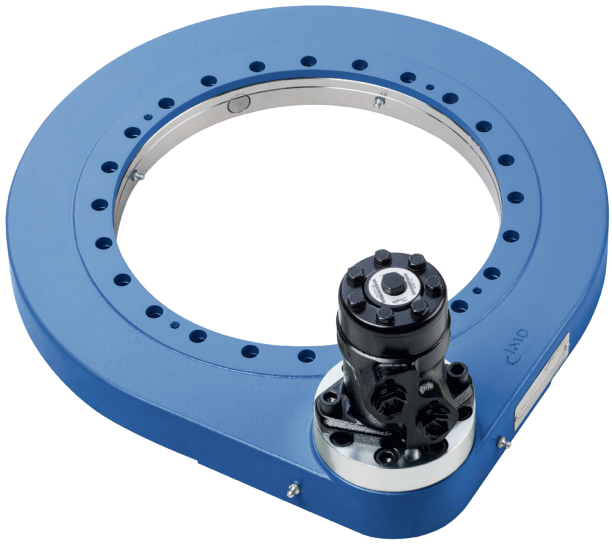
SP-I series

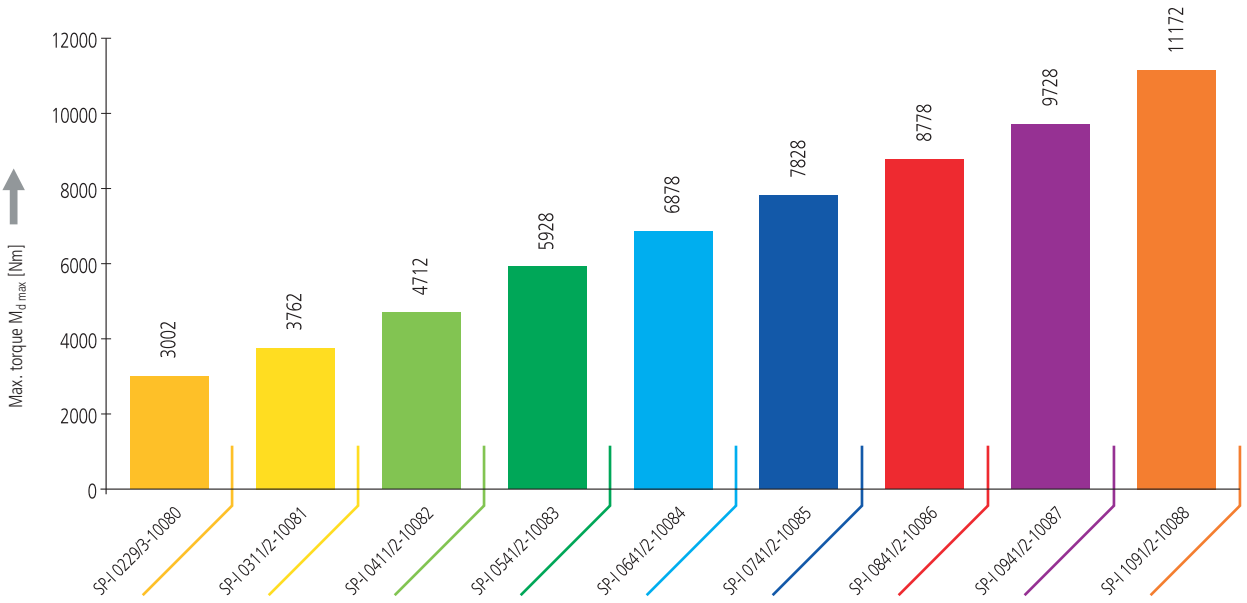
SP-I series overview





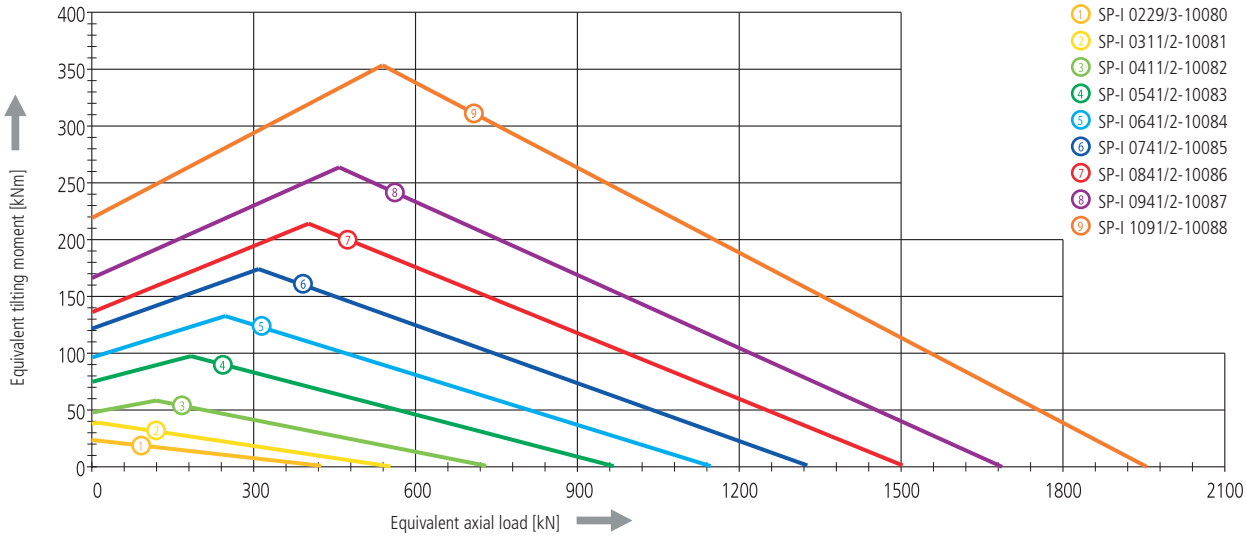
Maximum torque $M_{d\ max}$ of the individual sizes

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

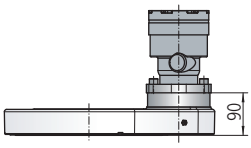


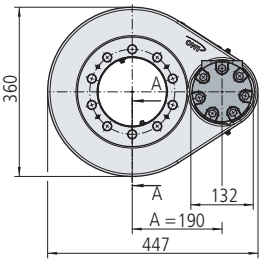
Limiting load diagrams of the individual sizes for compressive loads

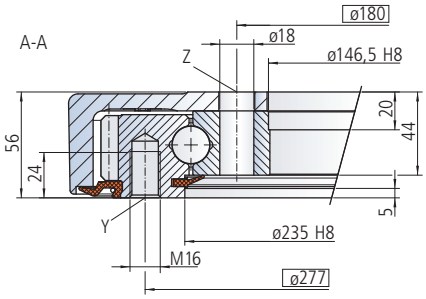
Please always observe the explanations in the Technical Information section (from page 60).



Size SP-I 0229







The mounting structure must support the housing to at least ø229.

The seal must be supported by the mounting structure to at least ø353, in order to guarantee the full sealing effect.
A recess in the mounting structure of 10 mm above the housing is recommended.

Mounting holes

Y = 12 drill holes M16-24 deep, evenly distributed
Z = 10 drill holes ø18, evenly distributed

Lubricating ports

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

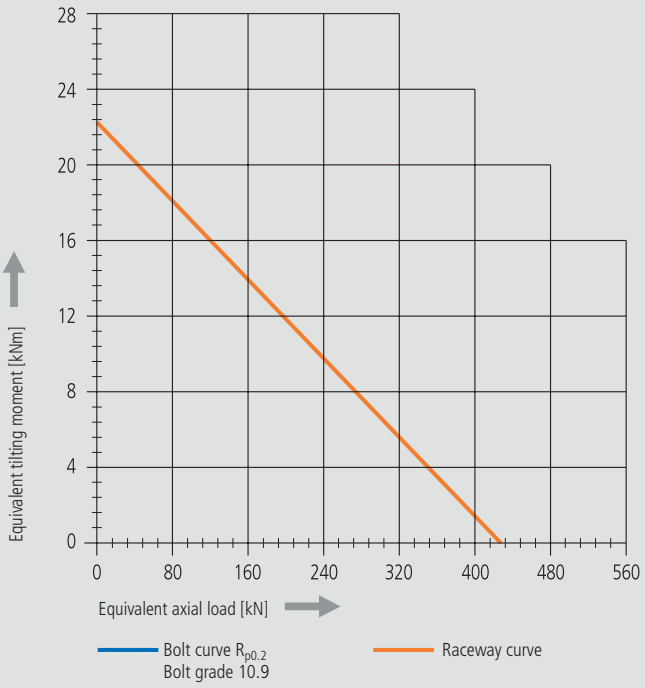
			Drawing number SP-I 0229/3-10080
Module	**m**	[mm]	4
Number of teeth, wheel	z_2	[-]	79
Number of teeth, pinion	z_1	[-]	15
Overall gear ratio	**i**	[-]	5.27
Max. torque	$M_{d\,max}$	[Nm]	3002
Nom. torque $s_F = 1$ at $n = 5$ min^{-1}	$M_{d\,nom}$	[Nm]	2607
Max. holding torque*	$M_{h\,max}$	[Nm]	3002
Static load rating, radial	$C_{o\,rad}$	[kN]	159
Static load rating, axial	$C_{o\,ax}$	[kN]	426
Dynamic load rating, radial	C_{rad}	[kN]	151
Dynamic load rating, axial	C_{ax}	[kN]	176
Weight, incl. 12 kg for hydraulic motor RE300		[kg]	46

* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.
Selection example:
Performance data with hydraulic motor RE300

Pressure differential	**Δp**	[bar]	150
Oil flow	**Q**	[l/min]	13
Output speed	**n**	[min $^{-1}$]	5
Max. achievable torque	M_d	[Nm]	3002

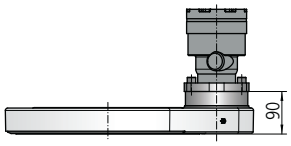
Limiting load diagram for compressive loads

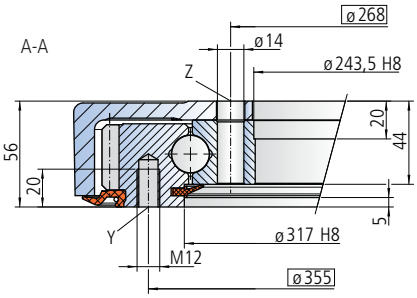


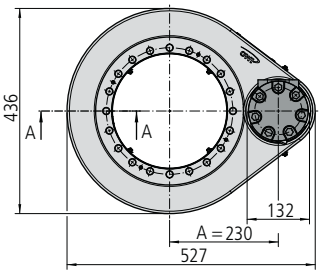
Please always observe the technical information!

SP-I series

Size SP-I 0311







The mounting structure must support the housing to at least ø311.

The seal must be supported by the mounting structure to at least ø431, in order to guarantee the full sealing effect.
A recess in the mounting structure of 10 mm above the housing is recommended.

Mounting holes

Y = 20 drill holes M12-20 deep, evenly distributed
Z = 20 drill holes ø14, evenly distributed

Lubricating ports

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

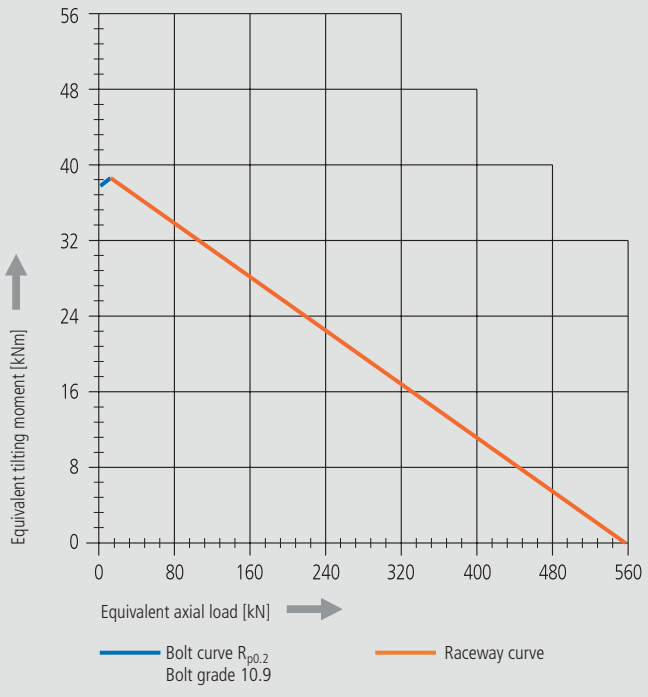
			Drawing number SP-I 0311/2-10081
Module	**m**	[mm]	4
Number of teeth, wheel	z_2	[-]	99
Number of teeth, pinion	z_1	[-]	15
Overall gear ratio	**i**	[-]	6.60
Max. torque	$M_{d\,max}$	[Nm]	3762
Nom. torque s_F = 1 at n = 5 min^{-1}	$M_{d\,nom}$	[Nm]	2653
Max. holding torque*	$M_{h\,max}$	[Nm]	3762
Static load rating, radial	$C_{o\,rad}$	[kN]	208
Static load rating, axial	$C_{o\,ax}$	[kN]	557
Dynamic load rating, radial	C_{rad}	[kN]	172
Dynamic load rating, axial	C_{ax}	[kN]	200
Weight, incl. 12 kg for hydraulic motor RE300		[kg]	50

* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.
Selection example:
Performance data with hydraulic motor RE300

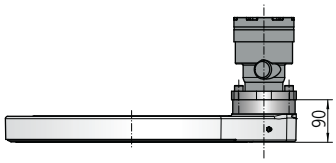
Pressure differential	**Δp**	[bar]	150
Oil flow	**Q**	[l/min]	15
Output speed	**n**	[min $^{-1}$]	5
Max. achievable torque	M_d	[Nm]	3762

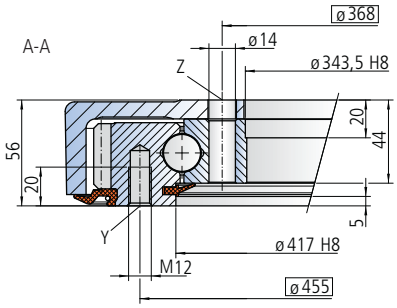
Limiting load diagram for compressive loads

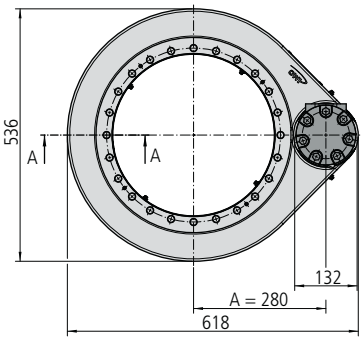


Please always observe the technical information!

Size SP-I 0411







The mounting structure must support the housing to at least ø411.

The seal must be supported by the mounting structure to at least ø531, in order to guarantee the full sealing effect.
A recess in the mounting structure of 10 mm above the housing is recommended.

Mounting holes

Y = 20 drill holes M12-20 deep, evenly distributed
Z = 24 drill holes ø14, evenly distributed

Lubricating ports

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

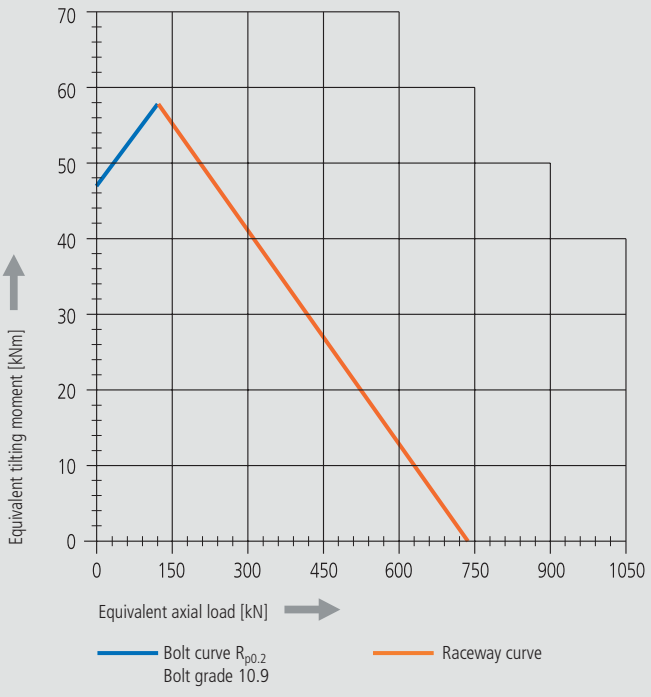
			Drawing number SP-I 0411/2-10082
Module	**m**	[mm]	4
Number of teeth, wheel	z_2	[-]	124
Number of teeth, pinion	z_1	[-]	15
Overall gear ratio	**i**	[-]	8.27
Max. torque	$M_{d\,max}$	[Nm]	4712
Nom. torque $s_F = 1$ at $n = 5\ min^{-1}$	$M_{d\,nom}$	[Nm]	3348
Max. holding torque*	$M_{h\,max}$	[Nm]	4712
Static load rating, radial	$C_{o\,rad}$	[kN]	275
Static load rating, axial	$C_{o\,ax}$	[kN]	736
Dynamic load rating, radial	C_{rad}	[kN]	190
Dynamic load rating, axial	C_{ax}	[kN]	222
Weight, incl. 12 kg for hydraulic motor RE300		[kg]	59

* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.
Selection example:
Performance data with hydraulic motor RE300

Pressure differential	**Δp**	[bar]	150
Oil flow	**Q**	[l/min]	17
Output speed	**n**	[min $^{-1}$]	5
Max. achievable torque	M_d	[Nm]	4712

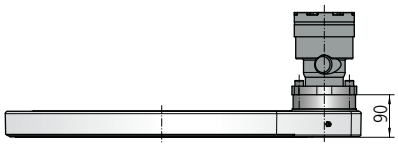
Limiting load diagram for compressive loads

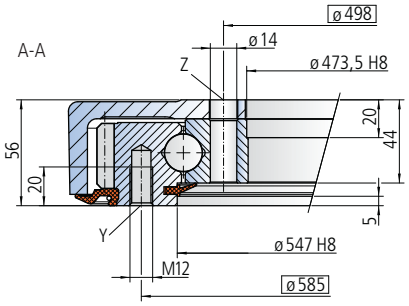


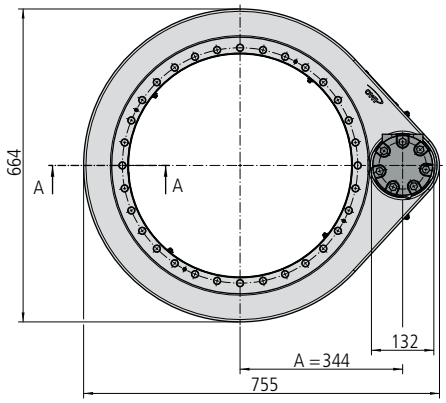
Please always observe the technical information!

SP-I series

Size SP-I 0541







The mounting structure must support the housing to at least ø541.

The seal must be supported by the mounting structure to at least ø661, in order to guarantee the full sealing effect.
A recess in the mounting structure of 10 mm above the housing is recommended.

Mounting holes

Y = 28 drill holes M12-20 deep, evenly distributed
Z = 32 drill holes ø14, evenly distributed

Lubricating ports

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

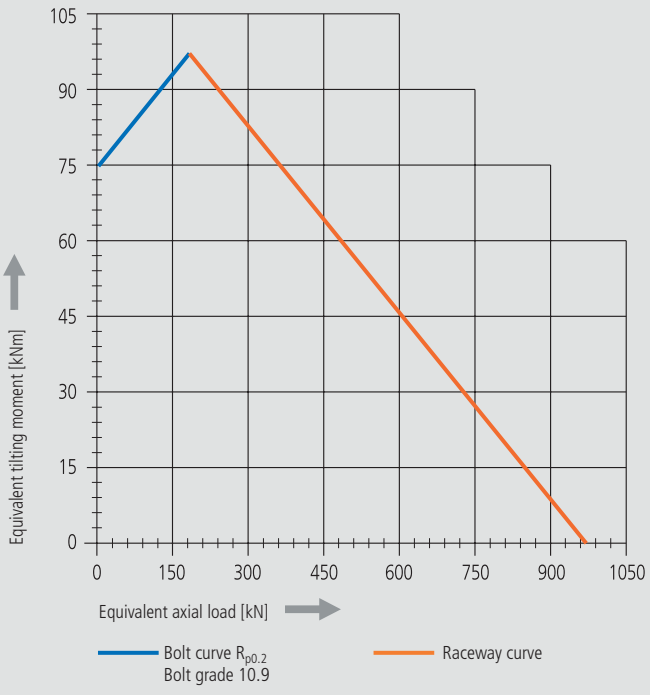
			Drawing number SP-I 0541/2-10083
Module	**m**	[mm]	4
Number of teeth, wheel	z_2	[-]	156
Number of teeth, pinion	z_1	[-]	15
Overall gear ratio	**i**	[-]	10.4
Max. torque	$M_{d\,max}$	[Nm]	5928
Nom. torque $s_F = 1$ at $n = 5$ min^{-1}	$M_{d\,nom}$	[Nm]	4243
Max. holding torque*	$M_{h\,max}$	[Nm]	5928
Static load rating, radial	$C_{o\,rad}$	[kN]	362
Static load rating, axial	$C_{o\,ax}$	[kN]	970
Dynamic load rating, radial	C_{rad}	[kN]	212
Dynamic load rating, axial	C_{ax}	[kN]	248
Weight, incl. 12 kg for hydraulic motor RE300		[kg]	72

* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.
Selection example:
Performance data with hydraulic motor RE300

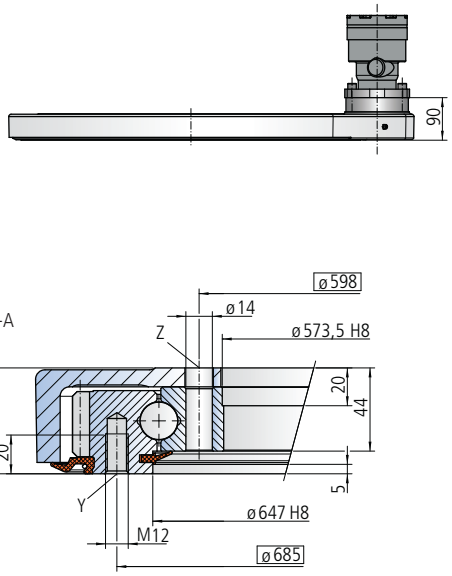
Pressure differential	**Δp**	[bar]	150
Oil flow	**Q**	[l/min]	21
Output speed	**n**	[min $^{-1}$]	5
Max. achievable torque	M_d	[Nm]	5928

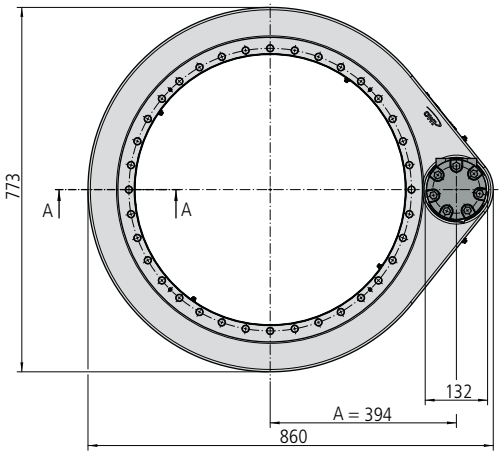
Limiting load diagram for compressive loads



Please always observe the technical information!

Size SP-I 0641





The mounting structure must support the housing to at least ø641.

The seal must be supported by the mounting structure to at least ø761, in order to guarantee the full sealing effect.
A recess in the mounting structure of 10 mm above the housing is recommended.

Mounting holes

Y = 32 drill holes M12-20 deep, evenly distributed
Z = 36 drill holes ø14, evenly distributed

Lubricating ports

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

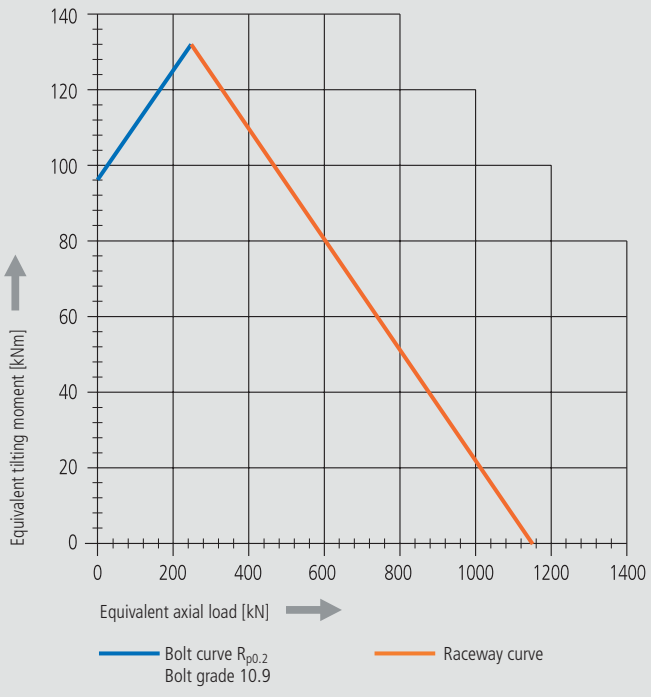
			Drawing number SP-I 0641/2-10084
Module	**m**	[mm]	4
Number of teeth, wheel	z_2	[-]	181
Number of teeth, pinion	z_1	[-]	15
Overall gear ratio	**i**	[-]	12.07
Max. torque	$M_{d\,max}$	[Nm]	6878
Nom. torque $s_F = 1$ at $n = 5$ min^{-1}	$M_{d\,nom}$	[Nm]	4921
Max. holding torque*	$M_{h\,max}$	[Nm]	6878
Static load rating, radial	$C_{o\,rad}$	[kN]	429
Static load rating, axial	$C_{o\,ax}$	[kN]	1149
Dynamic load rating, radial	C_{rad}	[kN]	226
Dynamic load rating, axial	C_{ax}	[kN]	264
Weight, incl. 12 kg for hydraulic motor RE300		[kg]	84

* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.
Selection example:
Performance data with hydraulic motor RE300

Pressure differential	**Δp**	[bar]	155
Oil flow	**Q**	[l/min]	23
Output speed	**n**	[min $^{-1}$]	5
Max. achievable torque	M_d	[Nm]	6878

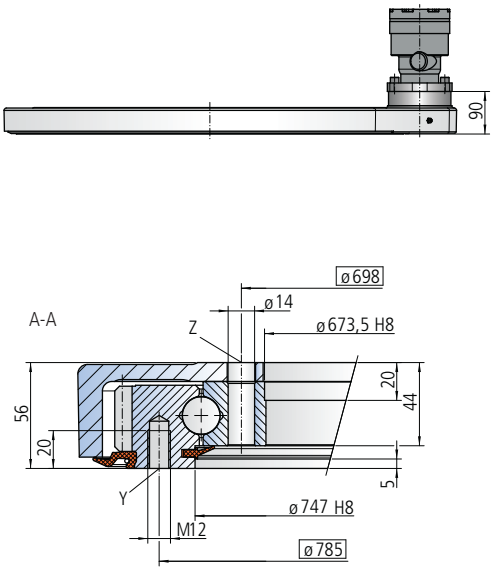
Limiting load diagram for compressive loads

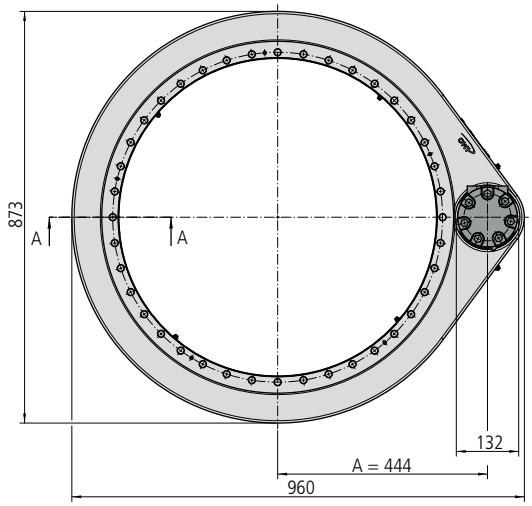


Please always observe the technical information!

SP-I series

Size SP-I 0741





The mounting structure must support the housing to at least ø741.

The seal must be supported by the mounting structure to at least ø861, in order to guarantee the full sealing effect.
A recess in the mounting structure of 10 mm above the housing is recommended.

Mounting holes

Y = 36 drill holes M12-20 deep, evenly distributed
Z = 40 drill holes ø14, evenly distributed

Lubricating ports

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

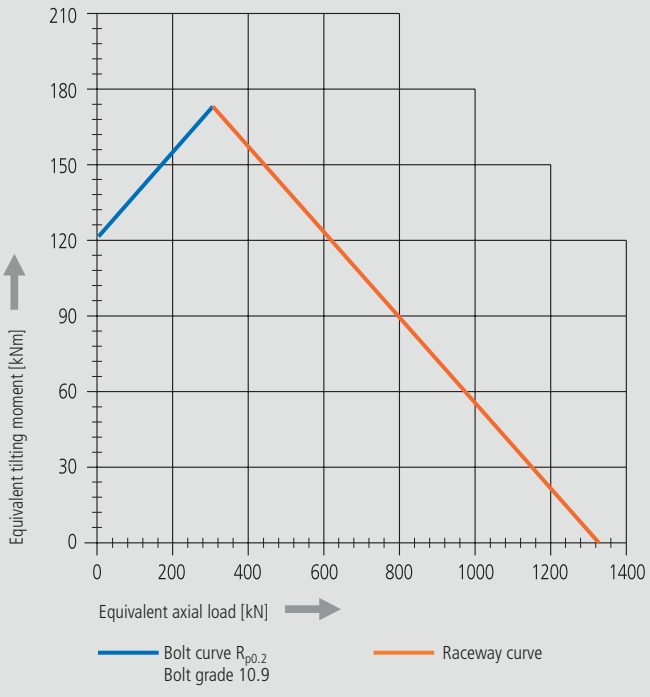
			Drawing number SP-I 0741/2-10085
Module	**m**	[mm]	4
Number of teeth, wheel	z_2	[-]	206
Number of teeth, pinion	z_1	[-]	15
Overall gear ratio	**i**	[-]	13.73
Max. torque	$M_{d\,max}$	[Nm]	7828
Nom. torque s_F = 1 at n = 5 min^{-1}	$M_{d\,nom}$	[Nm]	5644
Max. holding torque*	$M_{h\,max}$	[Nm]	7828
Static load rating, radial	$C_{o\,rad}$	[kN]	496
Static load rating, axial	$C_{o\,ax}$	[kN]	1329
Dynamic load rating, radial	C_{rad}	[kN]	238
Dynamic load rating, axial	C_{ax}	[kN]	278
Weight, incl. 12 kg for hydraulic motor RE300		[kg]	95

* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.
Selection example:
Performance data with hydraulic motor RE300

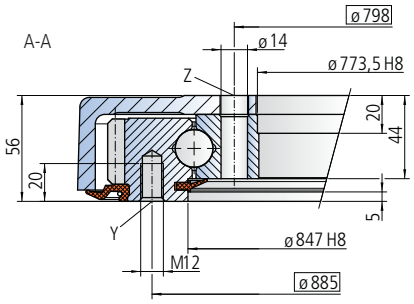
Pressure differential	**Δp**	[bar]	155
Oil flow	**Q**	[l/min]	25
Output speed	**n**	[min $^{-1}$]	5
Max. achievable torque	M_d	[Nm]	7828

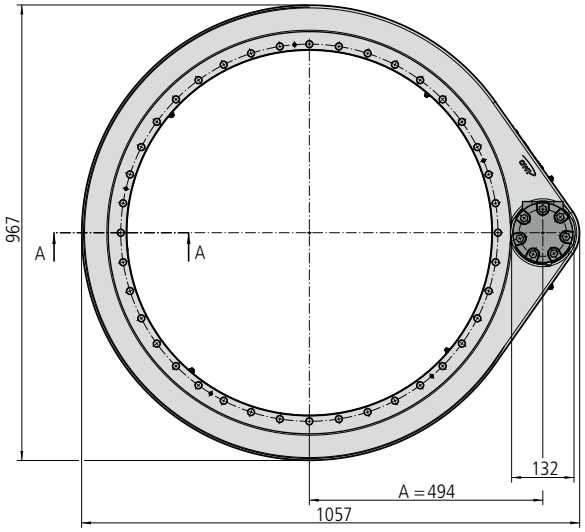
Limiting load diagram for compressive loads



Please always observe the technical information!

Size SP-I 0841





The mounting structure must support the housing to at least ø841.

The seal must be supported by the mounting structure to at least ø961, in order to guarantee the full sealing effect.
A recess in the mounting structure of 10 mm above the housing is recommended.

Mounting holes

Y = 36 drill holes M12-20 deep, evenly distributed
Z = 40 drill holes ø14, evenly distributed

Lubricating ports

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

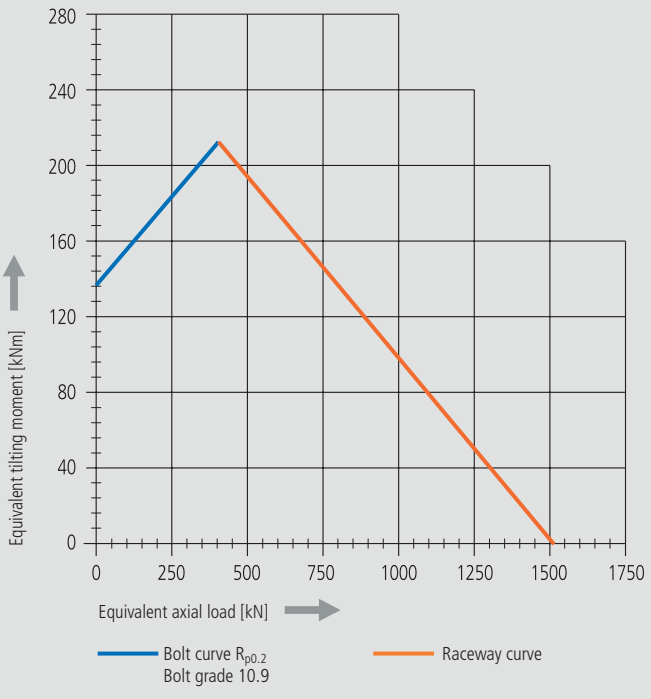
			Drawing number SP-I 0841/2-10086
Module	**m**	[mm]	4
Number of teeth, wheel	z_2	[-]	231
Number of teeth, pinion	z_1	[-]	15
Overall gear ratio	**i**	[-]	15.4
Max. torque	$M_{d\,max}$	[Nm]	8778
Nom. torque s_F = 1 at n = 5 min^{-1}	$M_{d\,nom}$	[Nm]	6329
Max. holding torque*	$M_{h\,max}$	[Nm]	8778
Static load rating, radial	$C_{o\,rad}$	[kN]	563
Static load rating, axial	$C_{o\,ax}$	[kN]	1508
Dynamic load rating, radial	C_{rad}	[kN]	250
Dynamic load rating, axial	C_{ax}	[kN]	293
Weight, incl. 12 kg for hydraulic motor RE300		[kg]	102

* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.
Selection example:
Performance data with hydraulic motor RE300

Pressure differential	**Δp**	[bar]	155
Oil flow	**Q**	[l/min]	28
Output speed	**n**	[min $^{-1}$]	5
Max. achievable torque	M_d	[Nm]	8778

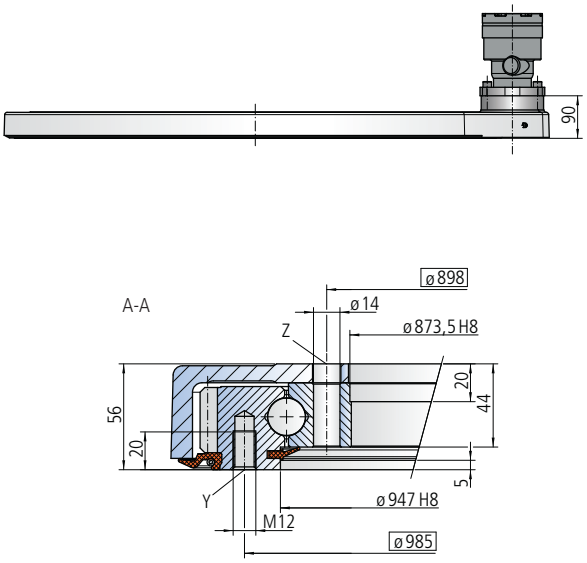
Limiting load diagram for compressive loads

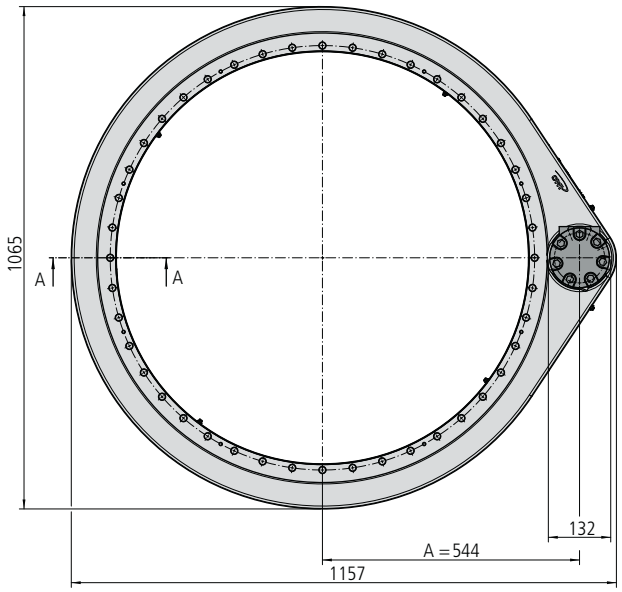


Please always observe the technical information!

SP-I series

Size SP-I 0941





The mounting structure must support the housing to at least ø941.

The seal must be supported by the mounting structure to at least ø1061, in order to guarantee the full sealing effect.
A recess in the mounting structure of 10 mm above the housing is recommended.

Mounting holes
Y = 40 drill holes M12-20 deep, evenly distributed
Z = 44 drill holes ø14, evenly distributed

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

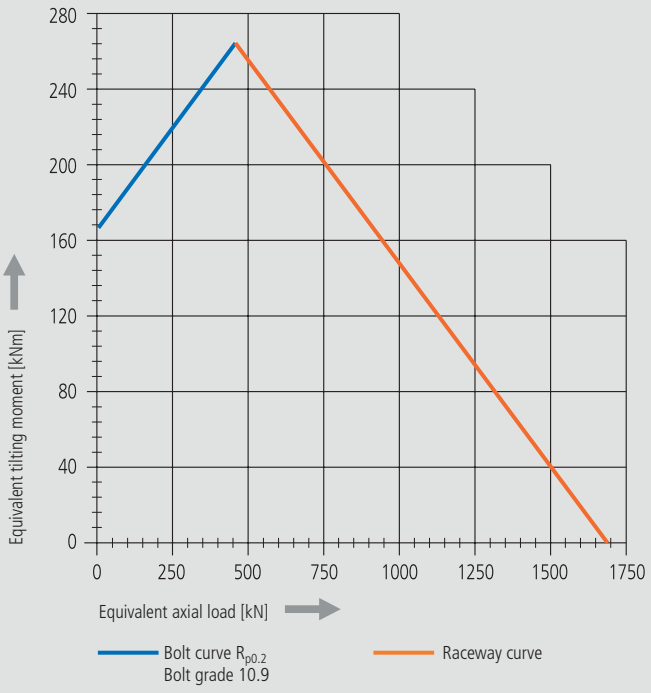
			Drawing number SP-I 0941/2-10087
Module	**m**	[mm]	4
Number of teeth, wheel	z_2	[-]	256
Number of teeth, pinion	z_1	[-]	15
Overall gear ratio	**i**	[-]	17.07
Max. torque	$M_{d\,max}$	[Nm]	9728
Nom. torque $S_F = 1$ at n = 5 min^{-1}	$M_{d\,nom}$	[Nm]	7040
Max. holding torque*	$M_{h\,max}$	[Nm]	9728
Static load rating, radial	$C_{o\,rad}$	[kN]	630
Static load rating, axial	$C_{o\,ax}$	[kN]	1688
Dynamic load rating, radial	C_{rad}	[kN]	260
Dynamic load rating, axial	C_{ax}	[kN]	305
Weight, incl. 12 kg for hydraulic motor RE300		[kg]	115

* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.
Selection example:
Performance data with hydraulic motor RE300

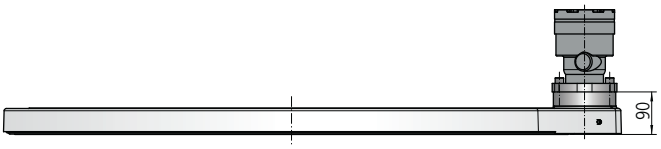
Pressure differential	**Δp**	[bar]	155
Oil flow	**Q**	[l/min]	30
Output speed	**n**	[min $^{-1}$]	5
Max. achievable torque	M_d	[Nm]	9728

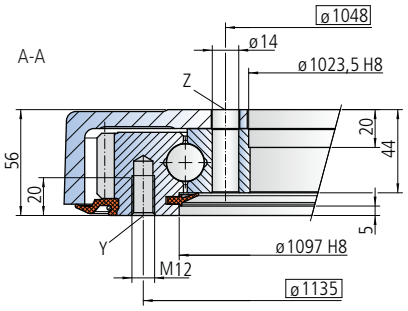
Limiting load diagram for compressive loads

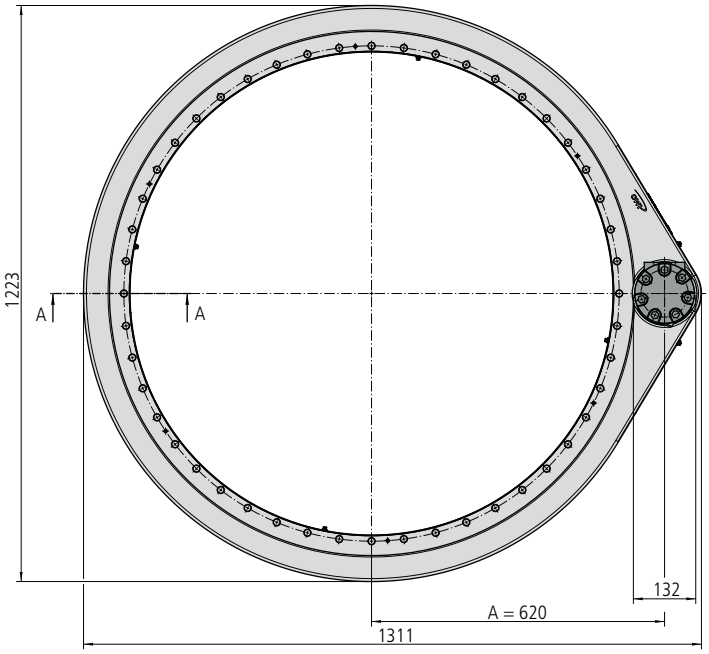


Please always observe the technical information!

Size SP-I 1091







The mounting structure must support the housing to at least ø1091.

The seal must be supported by the mounting structure to at least ø1213, in order to guarantee the full sealing effect.
A recess in the mounting structure of 10 mm above the housing is recommended.

Mounting holes
Y = 44 drill holes M12-20 deep, evenly distributed
Z = 48 drill holes ø14, evenly distributed

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

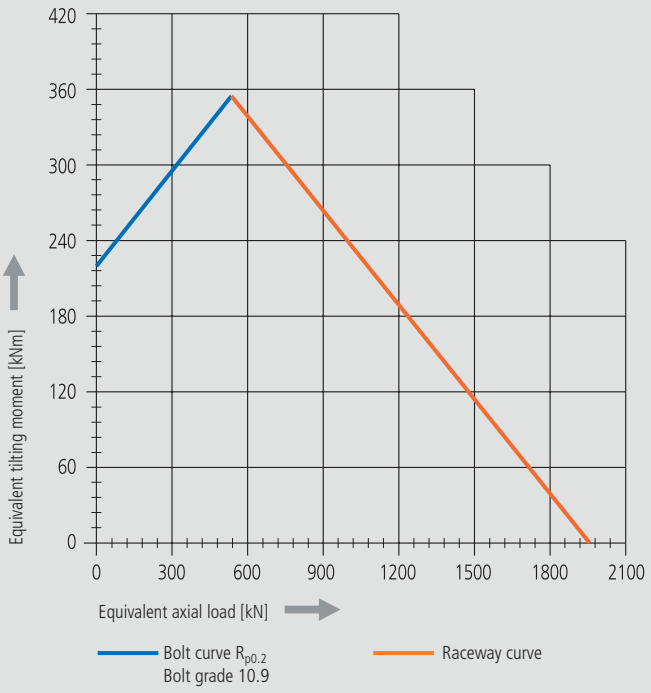
			Drawing number SP-I 1091/2-10088
Module	**m**	[mm]	4
Number of teeth, wheel	z_2	[-]	294
Number of teeth, pinion	z_1	[-]	15
Overall gear ratio	**i**	[-]	19.6
Max. torque	$M_{d\,max}$	[Nm]	11172
Nom. torque s_F = 1 at n = 5 min^{-1}	$M_{d\,nom}$	[Nm]	8085
Max. holding torque*	$M_{h\,max}$	[Nm]	11172
Static load rating, radial	$C_{o\,rad}$	[kN]	731
Static load rating, axial	$C_{o\,ax}$	[kN]	1957
Dynamic load rating, radial	C_{rad}	[kN]	275
Dynamic load rating, axial	C_{ax}	[kN]	321
Weight, incl. 12 kg for hydraulic motor RE300		[kg]	127

* Optionally with brake

The hydraulic/electric motor is selected according to the actual requirements and customer specification.
Selection example:
Performance data with hydraulic motor RE300

Pressure differential	**Δp**	[bar]	150
Oil flow	**Q**	[l/min]	35
Output speed	**n**	[min $^{-1}$]	5
Max. achievable torque	M_d	[Nm]	11172

Limiting load diagram for compressive loads



Please always observe the technical information!