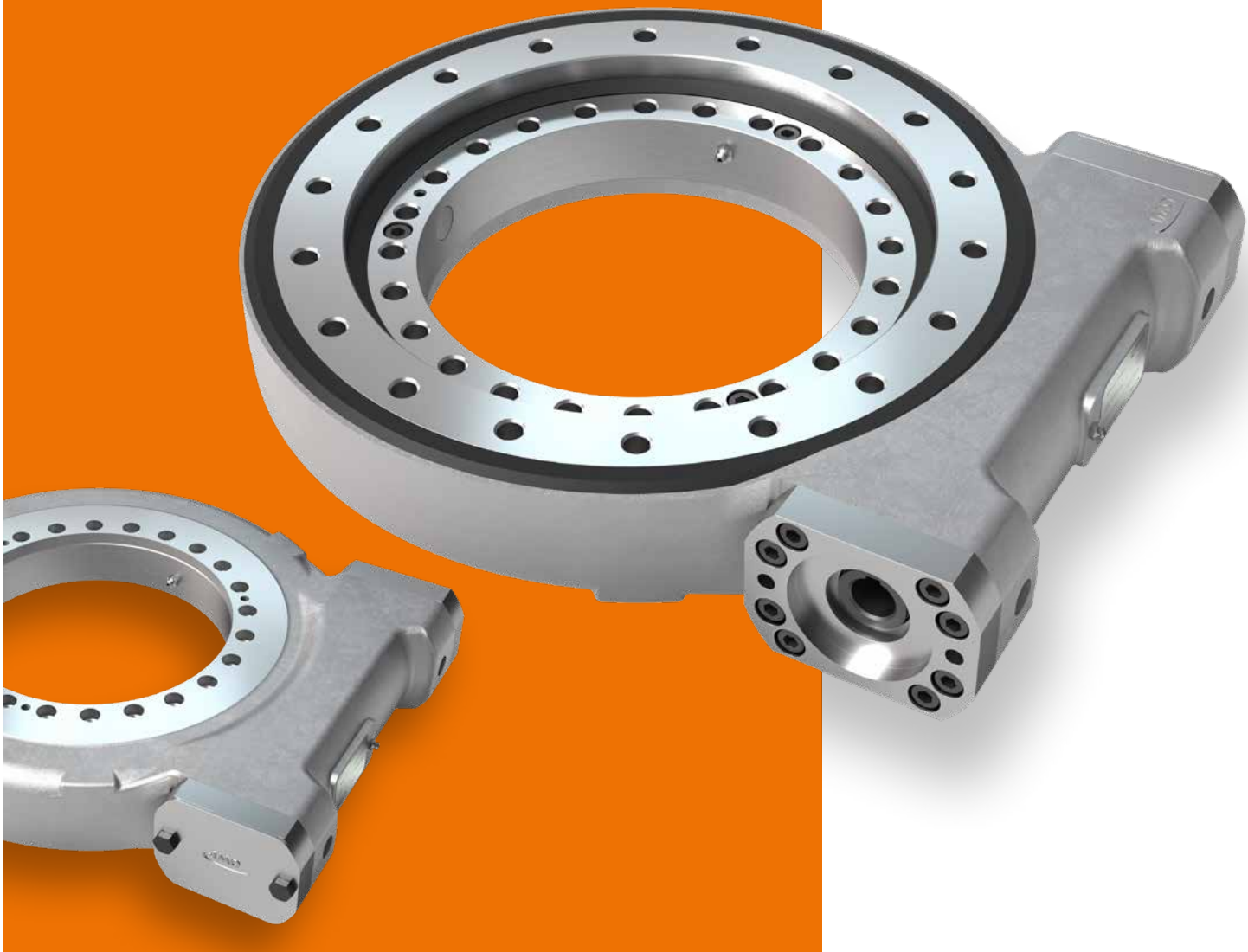
More Power.
Less Weight.

WD-E 0343 **Alu Line**

The Next Generation of Slew Drives



www.imo.de

In IMO development and research, engineers have implemented customer requirements and developed a new generation of the worm-driven slewing drive series: The WD-E Alu Line series.

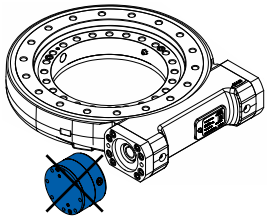
Designed, calculated, and engineered using the finite element method. Subjected to a multitude of challenging tests on the test bench.

30% Higher Performance*

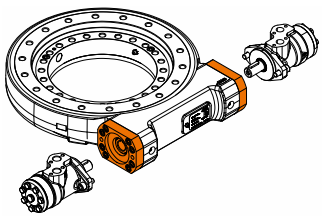
20% Less Weight

300% Longer Gear Life*

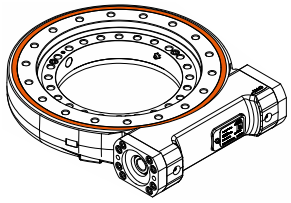
No Brake Necessary**



Symmetrical Drive Input



Optimized Sealing



* at reference base 10,150 Nm nom. torque

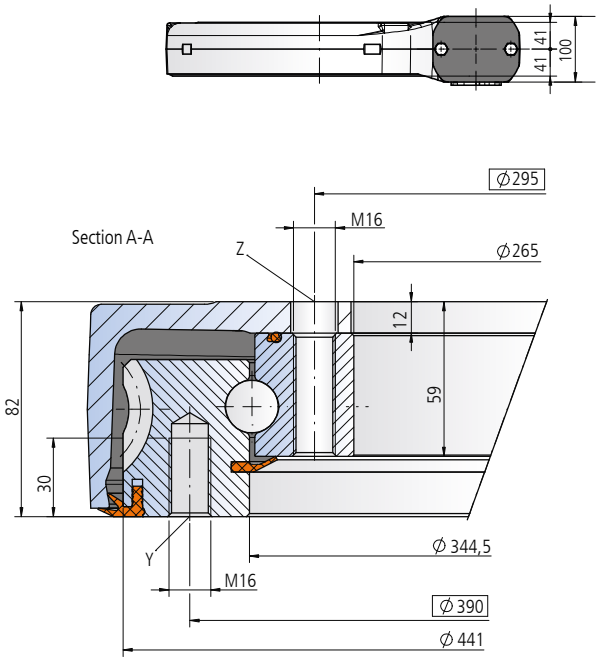
** applies to the single start version

Comparison in Detail

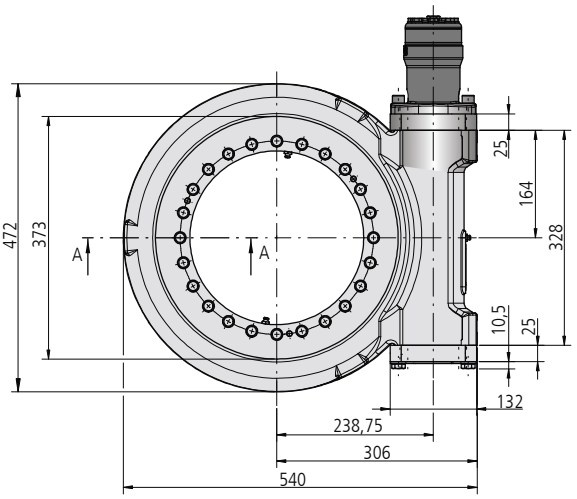
Details not listed are congruent. The WD-E slew drive replaces the WD-L without design changes.

	WD-E series Alu Line 0343 Single Start	WD-E series Alu Line 0343 Dual Start	WD-L series 0343 Standard
Performance Max. / Nom. Torque Max. Holding Torque	13.000 / 13.000 Nm 15.000 Nm	13.000 / 13.000 Nm 15.000 Nm	12.905 Nm / 10.150 Nm 12.905 Nm
Housing	Aluminum	Aluminum	Cast Iron
Weight (without Motor)	51,5 kg	51,5 kg	62 kg
Gearing Operational Life Time (Safety factor against wear $S_w = 1$ at $n = 1\ min^{-1}$)	1577 Hours at 10.150 Nm 960 Hours at 13.000 Nm	2080 Hours at 10.150 Nm 1266 Hours at 13.000 Nm	500 Hours at 10.150 Nm
Shock Resistance Worm Bearing	+++++	+++++	++++
Symmetrical Drive Input	Yes	Yes	No
Self-locking	Yes. No brake necessary.	No. Additional brake necessary.	No. Additional brake necessary.
Position of the output shaft	Vertical	Freely to choose	Freely to choose
Sealing	Optimized	Optimized	Standard

Size WD-E 0343 / ALU Housing / 1 Row / One Start / Dual Start / 1 Drive



The mounting structure must support the housingto at least ø343 and at most to ø449



Mounting holes

Y = 18 drill holes M16-30 deep, evenly distributed
Z = 24 drill holes ø18-12 deep / M16, evenly distributed

Lubricating ports

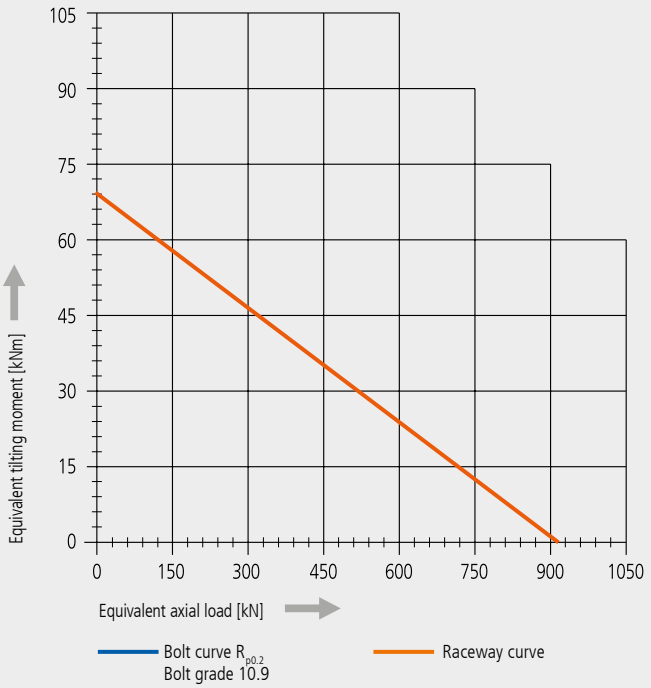
2 conical grease nipples on internal diameter
2 conical grease nipples on housing exterior
Slew drive supplied pre-lubricated

			Drawing number WD-E 0343/3-13621	Drawing number WD-E 0343/3-13622
Module	**m**	[mm]	4,5	4,5
Number of starts wormshaft		[-]	1	2
Gear ratio	**i**	[-]	95	47,5
Self-locking gears			Yes**	No**
Max. torque	$M_{d\,max}$	[Nm]	13.000	13.000
Nom. torque at n = 1 min^{-1}	$M_{d\,nom}$	[Nm]	13.000	13.000
Max. holding torque (static)	$M_{h\,max}$	[Nm]	15.000	15.000*
Static load, radial	$C_{o\,rad}$	[kN]	338	338
Static load, axial	$C_{o\,ax}$	[kN]	905	905
Dynamic load, radial	C_{rad}	[kN]	157	157
Dynamic load, axial	C_{ax}	[kN]	183	183
Weight, incl. 6 kg for hydraulic motor MPY160		[kg]	57,5	57,5

* Optionally with brake
** See: Technical information, section *Self-locking* in Catalog

Selection example: Performance data with two hydraulic motor			MPY160	HWF300
Pressure differential	**Δp**	[bar]	155	115
Oil flow	**Q**	[l/min]	20	30
Output speed	**n**	[min^{-1}]	1	1
Max. achievable torque	M_d	[Nm]	13.000	13.000

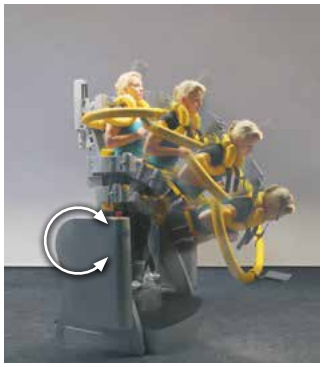
Limiting load diagram for compressive loads



Please always observe the technical information in the catalog!

Variety of Applications:

Examples of
IMO WD-E 0343
Alu Line



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