

**More Power.
Less Weight.**

WD-E 0343 **Alu Line**

**The Next
Generation of
Slew Drives**



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*



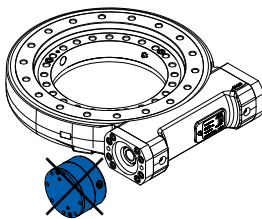
20% Less Weight



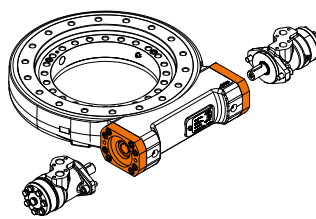
300% Longer Gear Life*



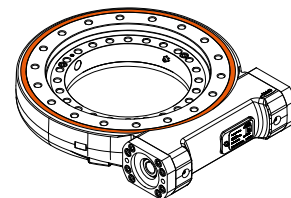
No Brake Necessary**



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.

Performance

Max. / Nom. Torque
Max. Holding Torque

Housing

Weight (without Motor)

Gearing Operational Life Time (Safety factor against wear $S_w = 1$ at $n = 1 \text{ min}^{-1}$)

Shock Resistance Worm Bearing

Symmetrical Drive Input

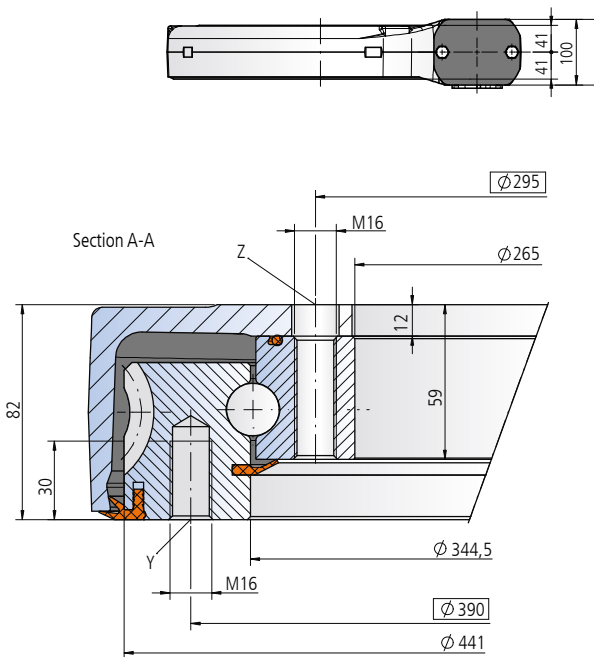
Self-locking

Position of the output shaft

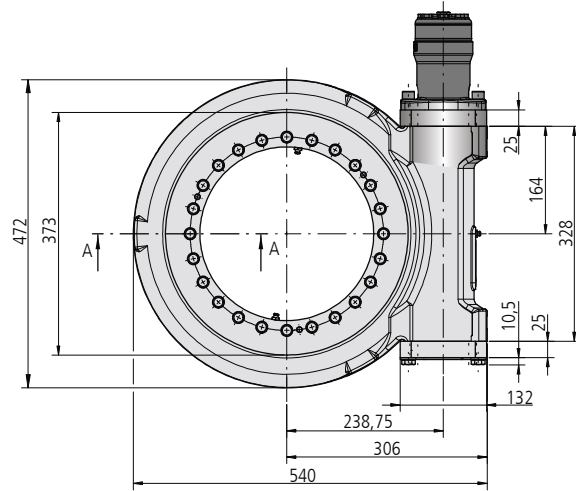
Sealing

	WD-E series Alu Line 0343 Single Start	WD-E series Alu Line 0343 Dual Start	WD-L series 0343 Standard
Performance	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 $n = 1 \text{ min}^{-1}$)	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 housing to at least $\phi 343$ and at most to $\phi 449$



Mounting holes

Y = 18 drill holes M16-30 deep, evenly distributed

Z = 24 drill holes $\phi 18$ -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 0343/3-13622

Drawing number WD-E 0343/3-13621

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 $n = 1 \text{ min}^{-1}$	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

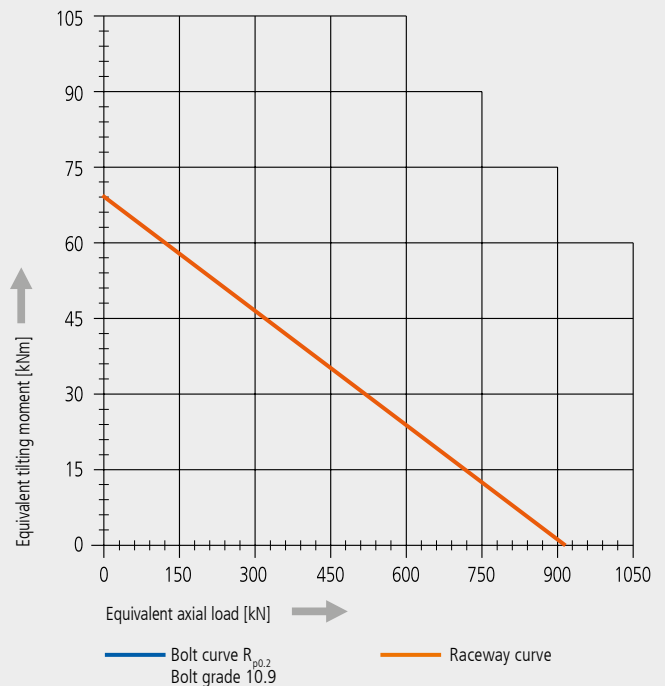
** See: Technical information, section *Self-locking* in Catalog

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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