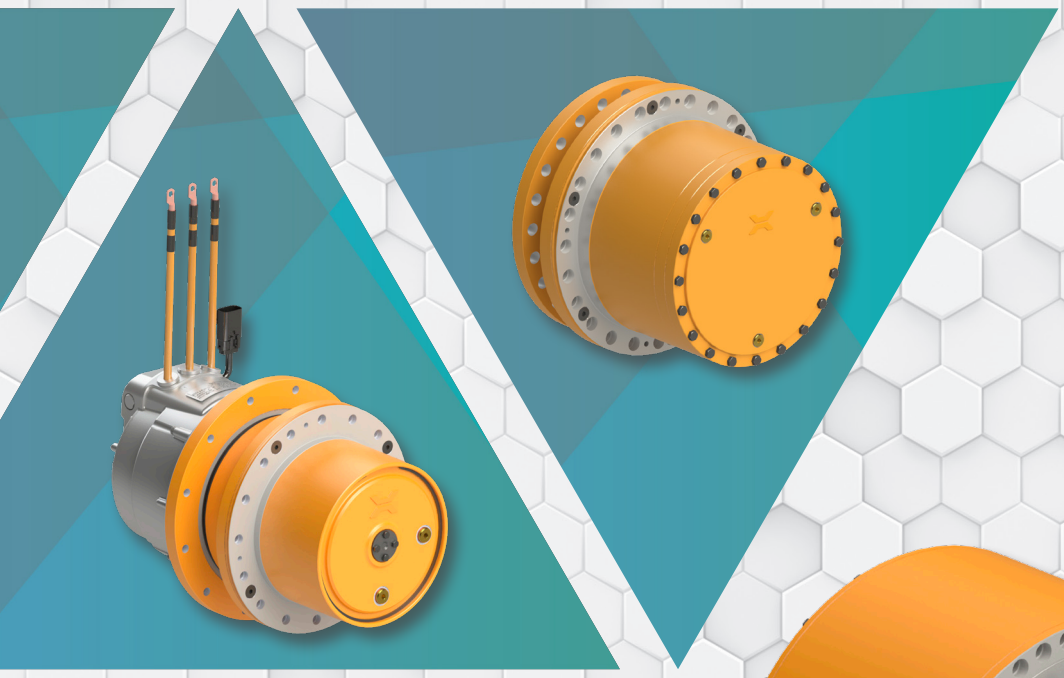
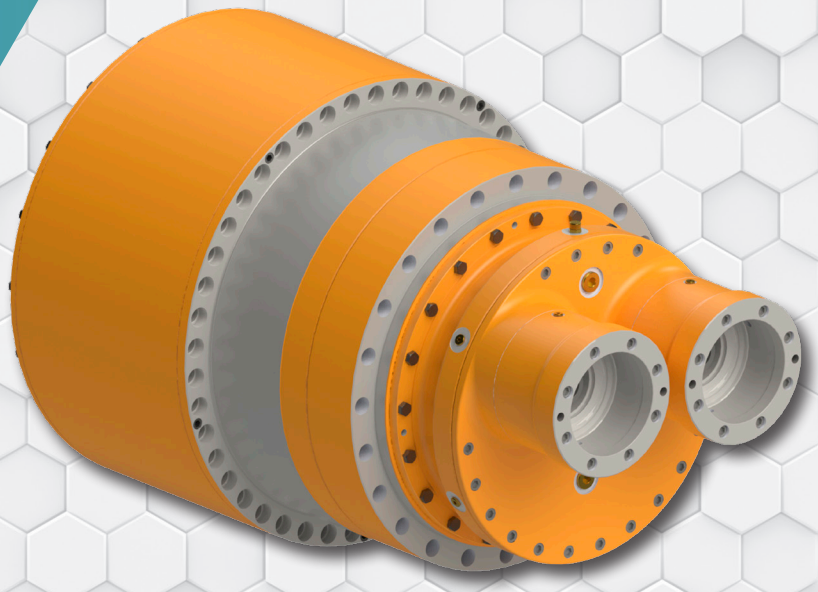
OMNI

POWERTRAIN TECHNOLOGIES

D Series

PRODUCT RANGE



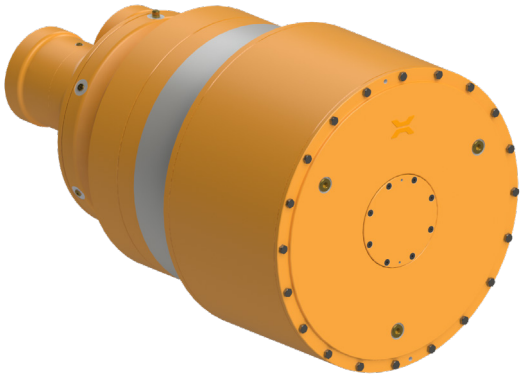


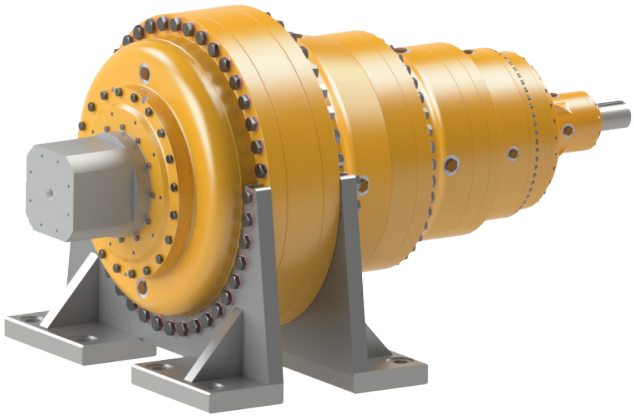
Omni Solutions


Omni Solutions

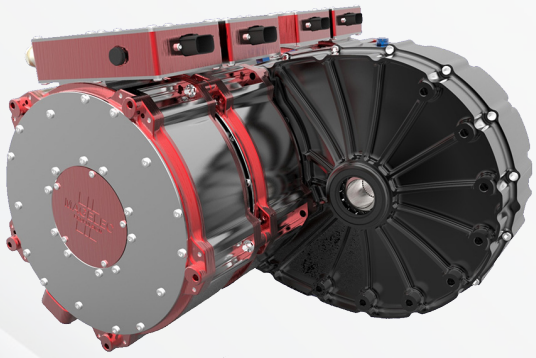
Omni Solutions is a new brand of Omni Powertrain Technologies Group

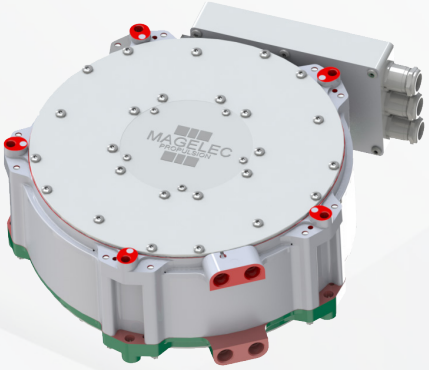
Established in early 2021, this new venture can rely on a TEAM of engineers with decades of experience within the power transmissions and gear drives industries.
The incredible skills and huge background of a TEAM of people who are constantly motivated in researching the best available technologies to achieve high performances, allow Omni Solution to focus its vision on Taylor-Made solutions for our Customers based on a wide range of standard drives.
The whole range of products is designed to obtain the highest density transmissible torque “inside” the boundary volume of each gearbox.
Moreover, the design is based on the latest calculation standards and gathers the state of the art of technology in gear drives and transmissions to represent for the Market and our Customers the most suitable alternative.



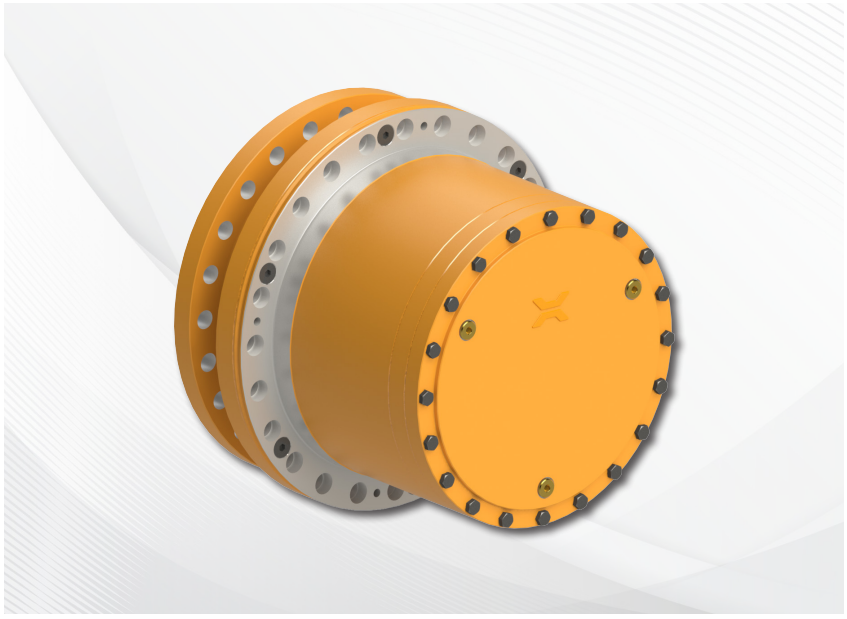


E DRIVE SERIES - HYBRID TECHNOLOGIES





D Series



Small — Rated Torque (Nm)

D6	6000
D10	10000
D24	24000

Medium — Rated Torque (Nm)

D36	36000
D44	44000
D60	60000
D80	80000
D110	110000

Large — Rated Torque (Nm)

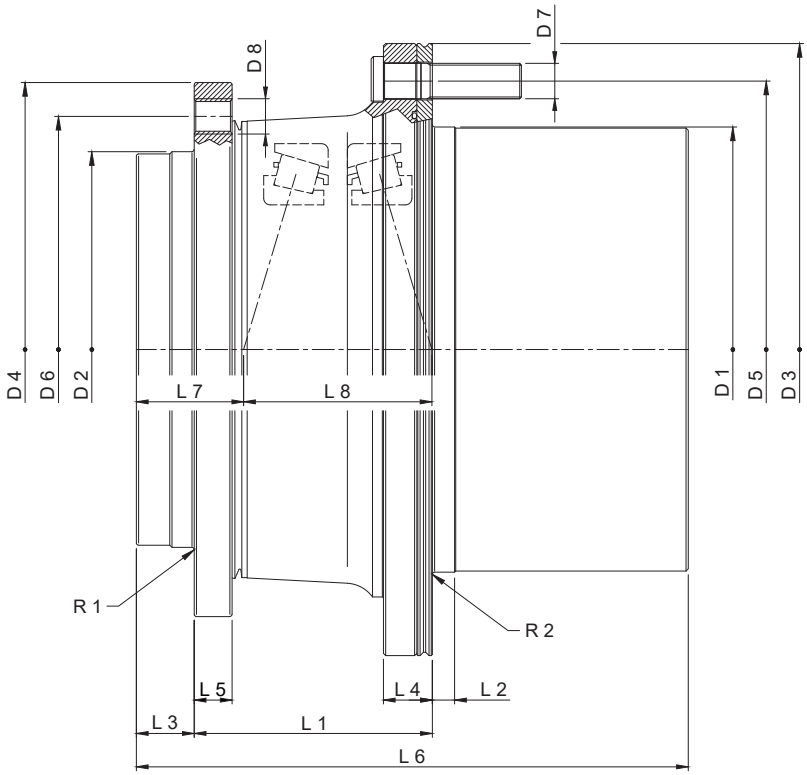
D160	160000
D210	210000
D260	260000
D330	330000

High — Rated Torque (Nm)

D440	440000
D550	550000
D700	1000000

SMALL

TYPE	RATIO .../1 [i]	TORQUE L2-T5 @ 25 [Nm]	PEAK TORQUE [Nm]	MAX INPUT SPEED [rpm]	OIL QUANTITY [Lt]	MOTOR SIZE [CC]	OPENING BRAKE PRESSURE [bar] MIN	OPENING BRAKE PRESSURE [bar] MAX	WEIGHT [kg]
D6	56,2 45,5 33,9 27,4 21,5 17,3	4800	6000	4000	0,9	28 45	15÷18	150	45
D10	41,9 33,2 24	6600	10000	4000	1,05	28	15÷18	150	54
D24	203 168,1 142,6 118 102,3 84,6	16700	24000	4000	2,05	55 (80)	15÷18	150	100

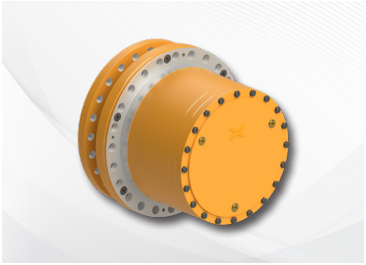


TYPE	L1	L2	L3	L4	L5	L6 (1)	L7	L8	C (kN)	C0 (kN)
D6	107	10	26	22	17	248	48,2	84,6	175	270
D10	72	12	15	18	17,5	255	56	88	240	325
D24	75	25	25	20	15	323	54,5	109	300	440

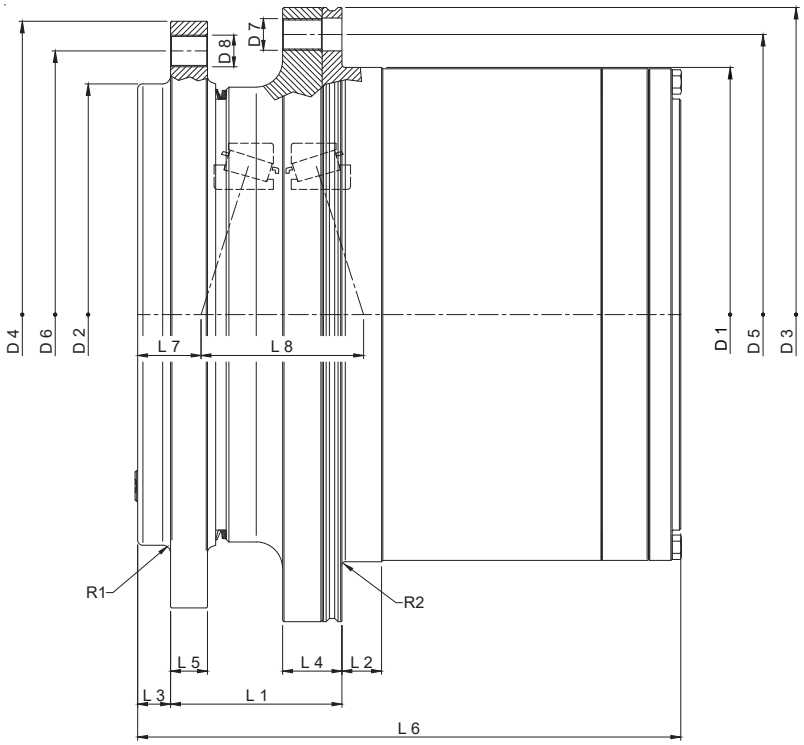
TYPE	D1	D2	D3	D4	D5	D6	D7	D8	R1	R2
D6	200	177,8	275	240	241,3	209,55	UNF 5/8-18 (9x)	UNC 5/8-11 (6x)	1	1
D10	220	190	290	260	260	230	M16 (16x)	M14 (16x)	2,5	2,5
D24	270	240	335	304	305	275	M16 (18x)	M16 (18x)	2,5	2,5

*(1) Some of the dimensions have to be considered preliminary and may vary with different ratios, Please request a detailed dimensional drawing to OMNI Engineering Department

MEDIUM



TYPE	RATIO .../1 [i]	TORQUE L2-T5 @ 25 [Nm]	PEAK TORQUE [Nm]	MAX INPUT SPEED [rpm]	OIL QUANTITY [Lt]	MOTOR SIZE [CC]	OPENING BRAKE PRESSURE [bar] MIN	OPENING BRAKE PRESSURE [bar] MAX	WEIGHT [kg]
D36	239 197,5 167 137,9 113,7 93,8	23200	36000	4000	2,7	55 (80)	15÷18	150	138
D44	203 168,1 142,6 118 102,3 84,6	33600	44000	4000	4	80 (107)	15÷18	150	196
D60	227 187,6 159 131,3 113,7 93,8	42400	60000	4000	5,25	80 (107)	15÷18	150	268

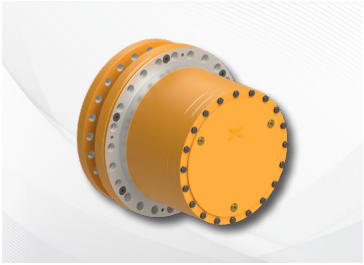


TYPE	L1	L2	L3	L4	L5	L6 (1)	L7	L8	C (kN)	C0 (kN)
D36	91	26	35	34	21	361	48,2	97,6	305	430
D44	91	30	25	29	24	396	74,5	111	300	440
D60	130	30	25	45	28	419	48,1	123,3	560	900

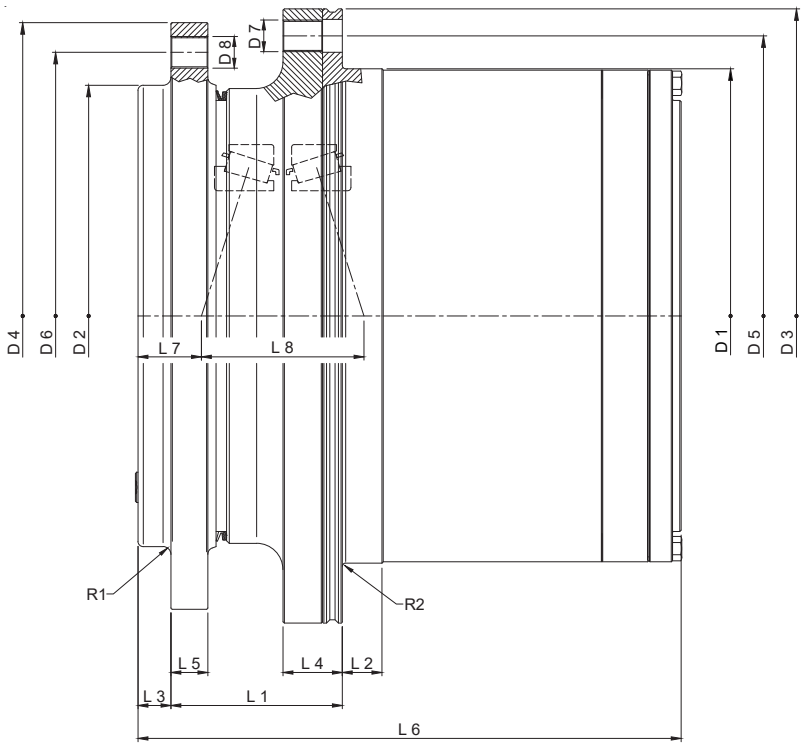
TYPE	D1	D2	D3	D4	D5	D6	D7	D8	R1	R2
D36	295	270	370	345	335	310	M16x1,5 (20x)	M16x1,5 (16x)	2	2
D44	350	240	435	320	400	285	M20x1,5 (20x)	M20x1,5 (20x)	4	4
D60	375	350	466	445	425	400	M24x2 (24x)	M24x2 (24x)	6	2,5

*(1) Some of the dimensions have to be considered preliminary and may vary with different ratios, Please request a detailed dimensional drawing to OMNI Engineering Department

MEDIUM



TYPE	RATIO .../1 [i]	TORQUE L2-T5 @ 25 [Nm]	PEAK TORQUE [Nm]	MAX INPUT SPEED [rpm]	OIL QUANTITY [Lt]	MOTOR SIZE [CC]	OPENING BRAKE PRESSURE [bar] MIN	OPENING BRAKE PRESSURE [bar] MAX	WEIGHT [kg]
D80	213,8 179 149,3 125 101,6 85	54400	80000	4000	5,9	80 107 (160)	15÷18	150	294
D110	239 197,5 167 137,9 104,6 86,3	83800	110000	3400	9,5	107 160	15÷18	150	487

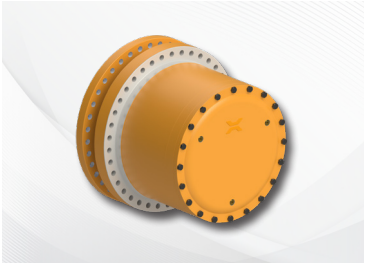


TYPE	L1	L2	L3	L4	L5	L6 (1)	L7	L8	C (kN)	C0 (kN)
D80	90	23	37	41,5	22	437	49	139	620	1000
D110	190	28,5	45	50	35	535	77,5	152	900	1500

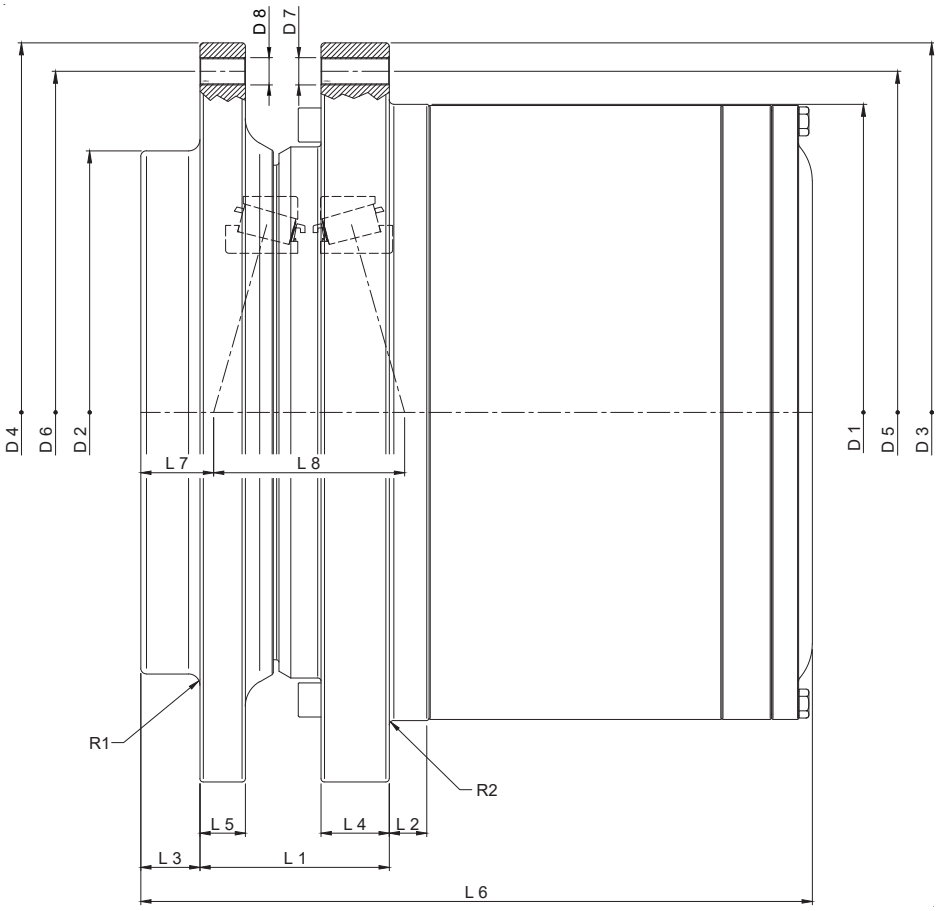
TYPE	D1	D2	D3	D4	D5	D6	D7	D8	R1	R2
D80	400	360	490	440	450	400	M24x2 (20x)	M24x2 (20x)	5	2,5
D110	450	390	550	550	500	500	M24x2 (32x)	M24x2 (32x)	10	6

*(1) Some of the dimensions have to be considered preliminary and may vary with different ratios, Please request a detailed dimensional drawing to OMNI Engineering Department

LARGE



TYPE	RATIO .../1 [i]	TORQUE L2-T5 @ 25 [Nm]	PEAK TORQUE [Nm]	MAX INPUT SPEED [rpm]	OIL QUANTITY [Lt]	MOTOR SIZE [CC]	OPENING BRAKE PRESSURE [bar] MIN	OPENING BRAKE PRESSURE [bar] MAX	WEIGHT [kg]
D160	215 177,6 151 124,7 110 90,8	118000	160000	3400	13,4	160 180	15÷18	150	680
D210	254,5 207,1 182,3 148,4 117,8 95,8	138000	210000	3400	15	160 (250)	15÷18	150	780

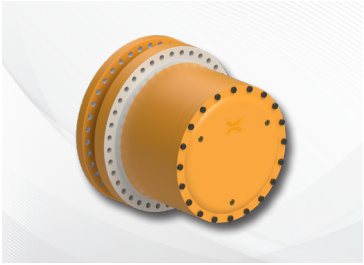


TYPE	L1	L2	L3	L4	L5	L6 (1)	L7	L8	C (kN)	C0 (kN)
D160	168	40	30	50	40	543	51	166	765	1650
D210	166,5	33	52	60	40	589	64	168	765	1650

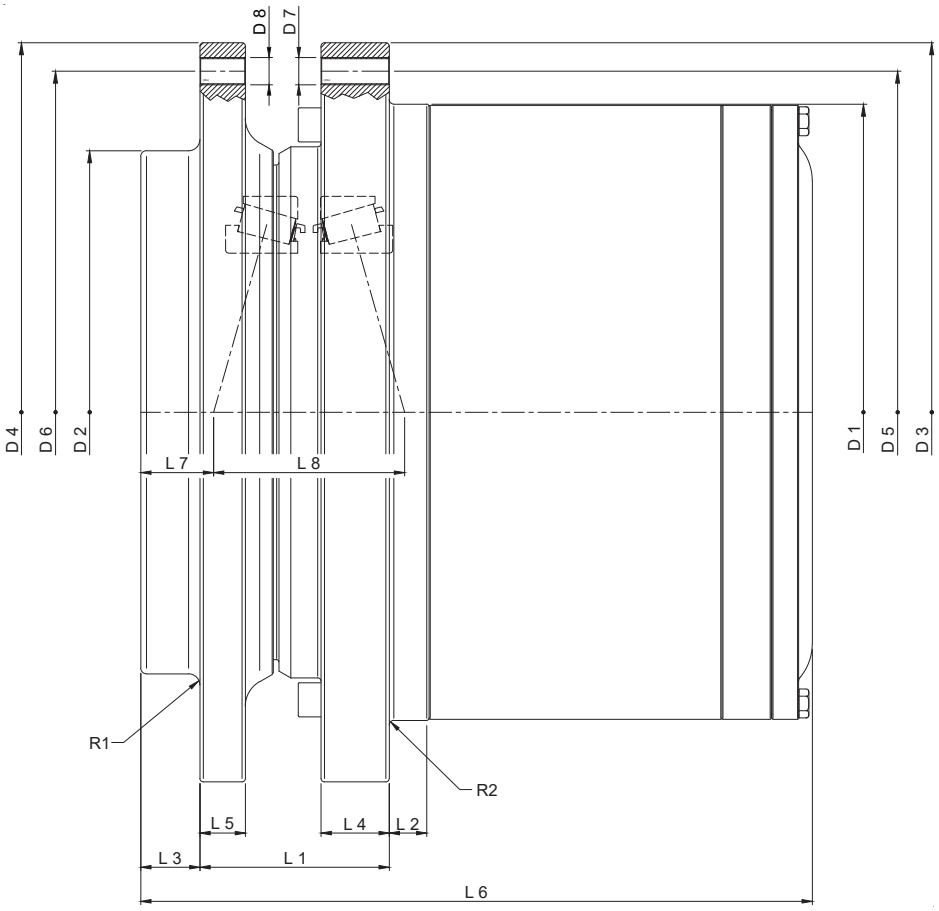
TYPE	D1	D2	D3	D4	D5	D6	D7	D8	R1	R2
D160	535	450	650	560	600	510	M27x2 (30x)	M24x2 (30x)	6	6
D210	542	460	650	650	600	600	M24x2 (38x)	M24x2 (38x)	10	4

*(1) Some of the dimensions have to be considered preliminary and may vary with different ratios, Please request a detailed dimensional drawing to OMNI Engineering Department

LARGE



TYPE	RATIO .../1 [i]	TORQUE L2-T5 @ 25 [Nm]	PEAK TORQUE [Nm]	MAX INPUT SPEED [rpm]	OIL QUANTITY [Lt]	MOTOR SIZE [CC]	OPENING BRAKE PRESSURE [bar] MIN	OPENING BRAKE PRESSURE [bar] MAX	WEIGHT [kg]
D260	254,5 207,1 182,3 148,4 117,8 95,8	178000	260000	3000	18,5	250	15÷18	150	950
D330	239 197,5 167 137,9 113,7 93,8	212000	330000	3000	24,5	250 355	15÷18	150	1215

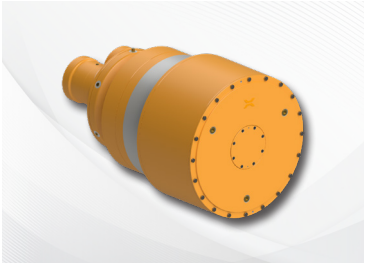


TYPE	L1	L2	L3	L4	L5	L6 (1)	L7	L8	C (kN)	C0 (kN)
D260	170	33	48,5	60	40	600	64	168	765	1650
D330	130	80	100	45	42	674	64	212	1190	2550

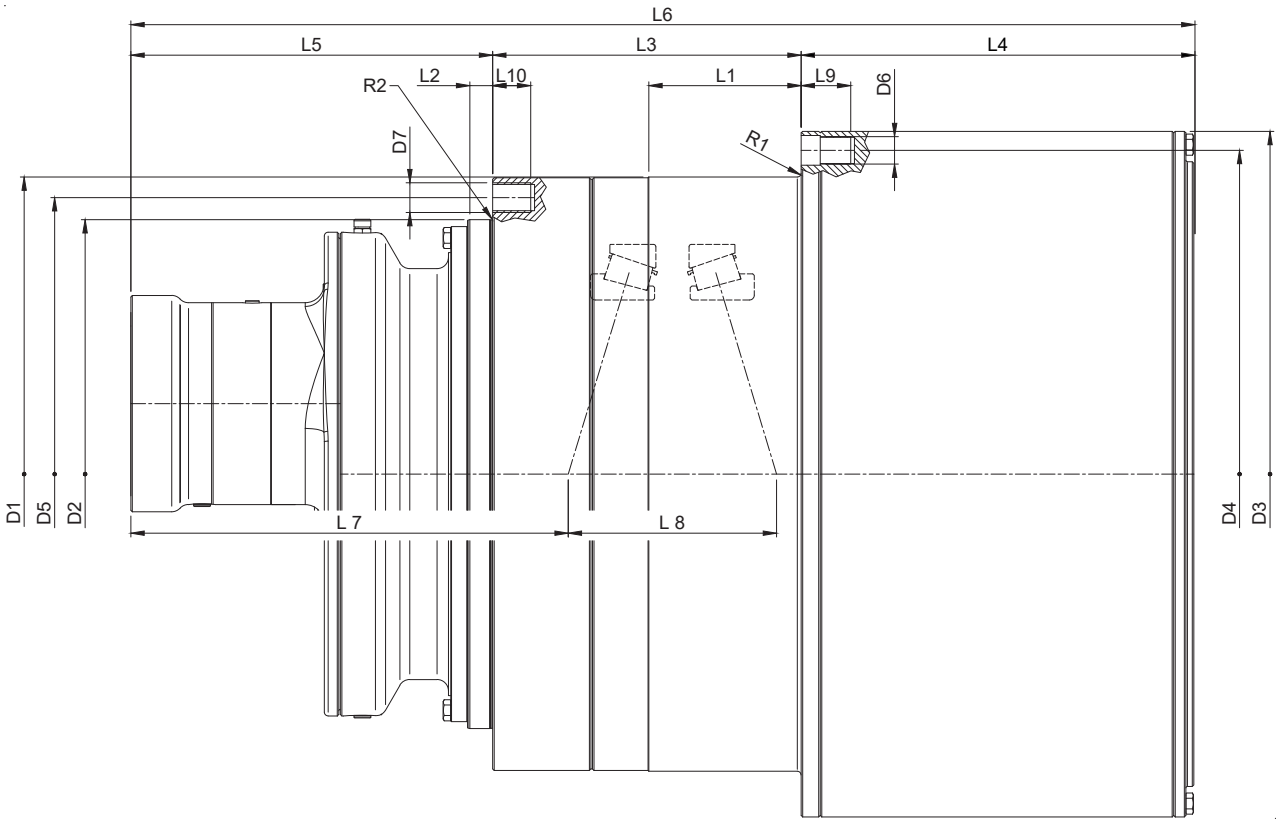
TYPE	D1	D2	D3	D4	D5	D6	D7	D8	R1	R2
D260	610	460	735	650	680	600	M30 (24x)	M30 (30x)	10	6
D330	650	580	775	735	720	680	M30 (30x)	M30 (30x)	10	6

*(1) Some of the dimensions have to be considered preliminary and may vary with different ratios, Please request a detailed dimensional drawing to OMNI Engineering Department

HIGH



TYPE	RATIO .../1 [i]	TORQUE L2-T5 @ 25 [Nm]	PEAK TORQUE [Nm]	MAX INPUT SPEED [rpm]	OIL QUANTITY [Lt]	MOTOR SIZE [CC]	OPENING BRAKE PRESSURE [bar] MIN	OPENING BRAKE PRESSURE [bar] MAX	WEIGHT [kg]
D440	416,2 348,7	309000	440000	2500	30	250	15÷18	150	1387
D550	738,7	412000	550000	2500	36	160 (250)	15÷18	150	1690
D700	649,4	765000	1000000	2500	76	160 (2x) (250 (2x))	15÷18	150	3541



TYPE	L1	L2	L3	L4	L5	L6 (1)	L7	L8	C (kN)	C0 (kN)
D440	146	43	255	520	-	848	86	206	1160	2400
D550	100	43	255	548,5	-	852	108	205	1160	2400
D700	200	33	405	517	475	1390	574,2	273,5	1540	3400

TYPE	R1=R2	D1	D2	D3	D4	D5	D6	D7	L9	L10
D440	5	570	450	670	620	515	M30 (42x)	M36x1,5 (29x)	65	45
D550	5	570	450	763	620	515	M30x1,5 (42x)	M36x1,5 (29x)	70	45
D700	5	780	668	900	850	726	M36x1,5 (45x)	M36x1,5 (30x)	65	50

*(1) Some of the dimensions have to be considered preliminary and may vary with different ratios, Please request a detailed dimensional drawing to OMNI Engineering Department

NOTES

SHIFTING THE BALANCE OF POWER

INNOVATORS AND GLOBAL MANUFACTURERS OF POWERTRAIN SOLUTIONS

OMNI Powertrain Solutions has created the most compact, powerful, light-weight axial flux electric motor powertrain systems on earth. Innovation is our core value, and wh ether we are manufacturing mechanical drivelines for agricultural equipment, hydrostatic powertrain systems for off-highway equipment or state-of-the-art electric powertrain systems for commercial vehicles and motorsports, we strive to exceed the power and quality demanded by our clients no matter their industry.

Our diverse family of manufacturing firms ensure that **OMNI** always provides unparalleled service, distribution and support. From conception through development we have a single objective: to provide the highest performance electric, hydrostatic and mechanical powertrain systems that meet the objectives of our clients.

OMNI
POWERTRAIN TECHNOLOGIES

AMERICA
3620 West 11th Street
Houston, Texas 77008
Tel +1 713 635 6331
Fax +1 713 635 6360

EUROPE
Via Giovanni, Rinaldi 105
Reggio Emilia, Italy 42124
Tel +39 051 758517
Fax +39 051 751575

ASIA
2455 Bao'an Highway
Jiading Malu, Shanghai 201801
Tel +86 21 69153123
Fax +86 21 69154218

WWW.OMNIPOWERTRAIN.COM

THE FOLLOWING PRODUCT LINES ARE PART OF THE **OMNI POWERTRAIN FAMILY**

OMNIGEAR®

Omni Solutions

MAGELEC PROPULSION