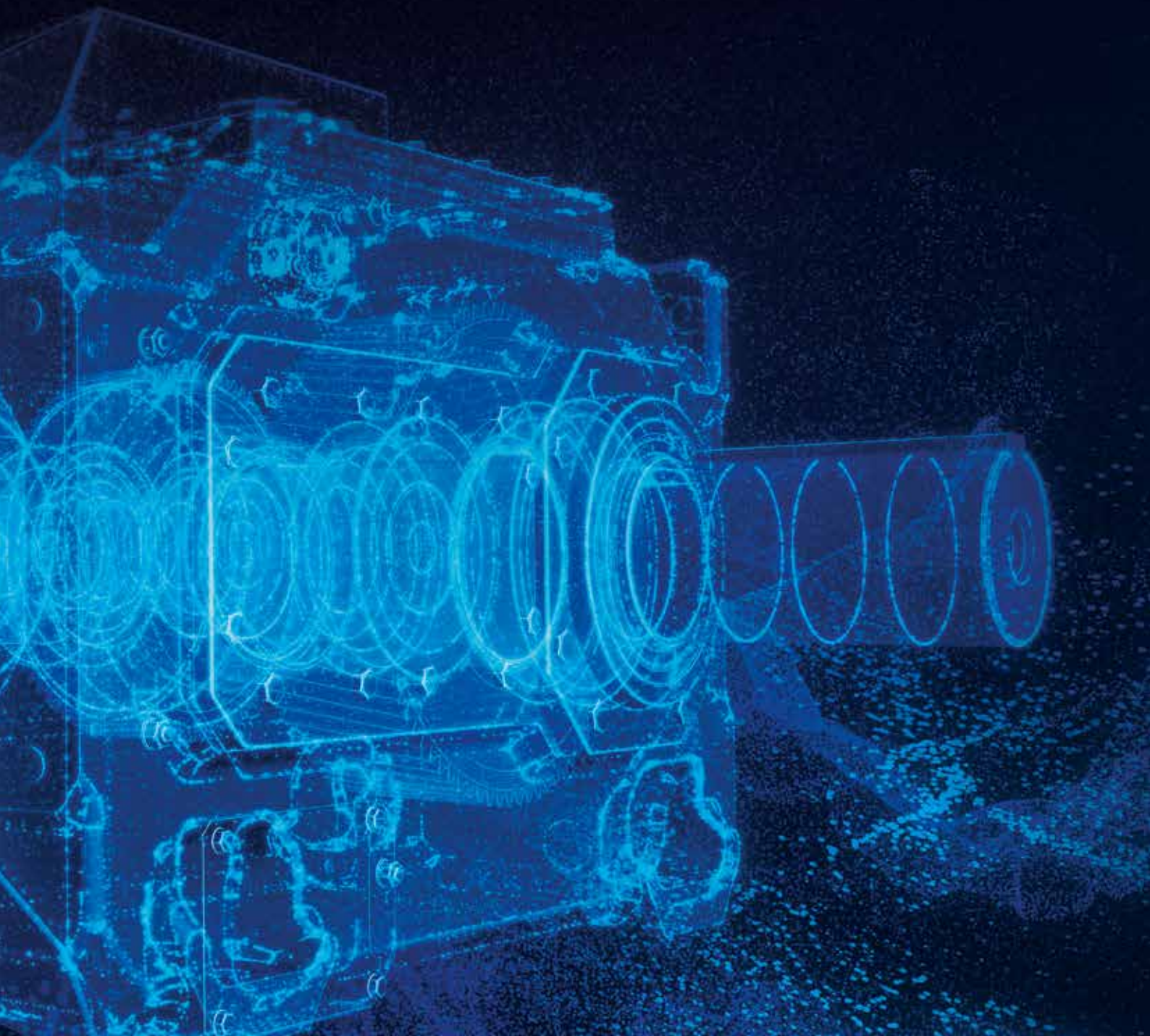
FLENDER

UNLIMIT YOUR GEARBOX

FLENDER ONE. THE INDUSTRIAL GEAR UNIT.



THE NEW FLENDER ONE. NOW ALSO FOR MULTISTAGE GEAR UNITS.

Welcome to the new era of industrial drive technology: tailor-made gear unit solutions, configured in minutes. Individual, efficient, smart. FLENDER ONE® is the new platform for the best Flender industrial gear units.

THE NEW GEAR UNIT PLATFORM 04

INDIVIDUAL 06

EFFICIENT 16

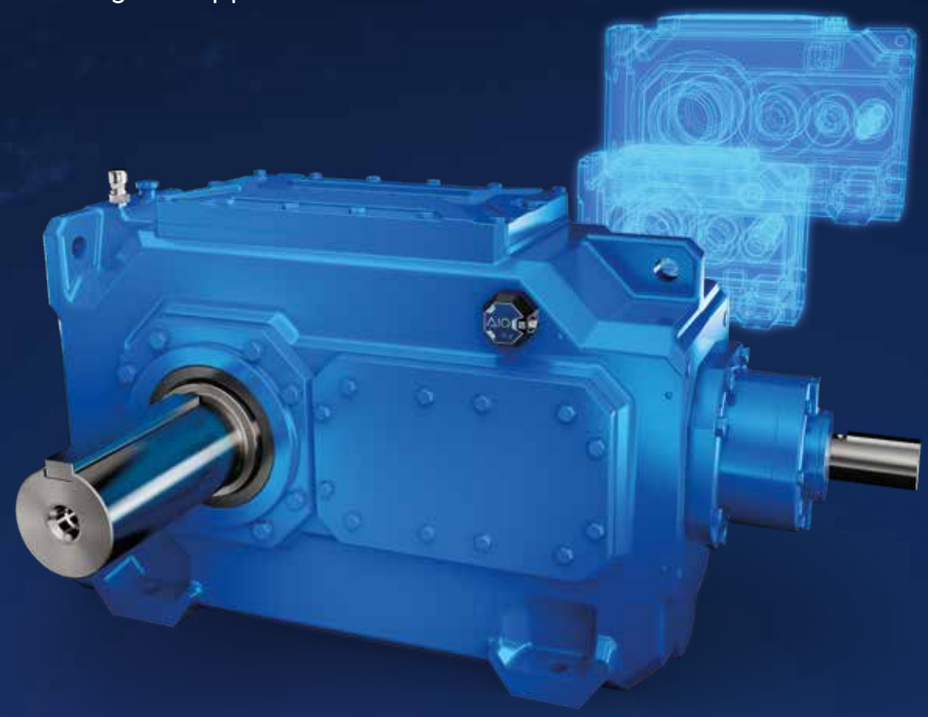
SMART 20

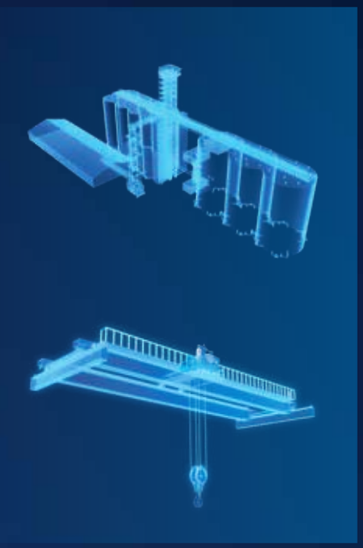
RETROFITTING 22

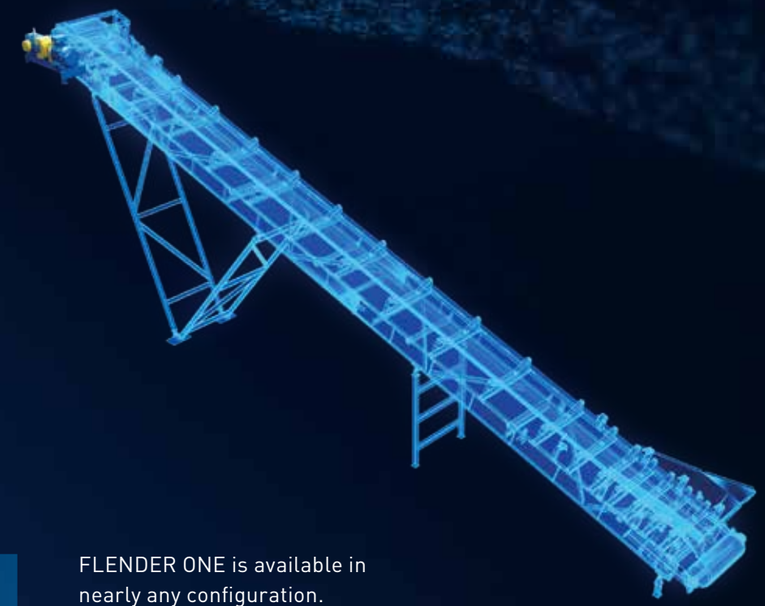
DATA SHEETS 23

THE NEW GEAR UNIT PLATFORM

The multistage FLENDER ONE – the perfect gear unit for a wide range of applications







FLENDER ONE is available in nearly any configuration. The new multistage gear units are an excellent fit for more than one hundred applications, such as bucket conveyors, conveyor belts, hoisting applications and paper machines. A broad spectrum of power classes, sizes and designs enable you to cover your various requirements optimally.



BUCKET CONVEYOR

Our low-maintenance FLENDER ONE solution for bucket conveyors means less time and effort spent on inspection and servicing.



HOIST

Whether for lifting heavy loads or carrying out precision work, our FLENDER ONE hoist drive ensures the highest quality and safety standards.



CONVEYOR BELT

In conveyor belt applications, FLENDER ONE minimizes your operating expenses (OPEX) thanks to its outstanding energy efficiency compared to the predecessor.

INDIVIDUAL

Perfectly geared to your needs

Your plant is just as individual as your company. Anything unnecessary is out of place. You only buy what you need. You don't want to waste anything. With FLENDER ONE, you get tailor-made solutions that lower your operating expenses and raise your efficiency – perfect application fit.

Our new online configurator is based on our decades-long competence in drive technology and delivers on this promise. You define the connection dimensions, desired power capacity and rotation speed. We take care of the rest. An extensive portfolio of optional add-ons enables you to match the gear unit solution perfectly to your needs.

DIMENSIONING FOR A PERFECT FIT

The same performance with fewer resources

In developing FLENDER ONE, our ambition to design a gear unit platform that represented an improvement for our customers in all relevant aspects. This is based on understanding customer needs and technical specifications and dimensioning the gear unit accordingly. That's why we at Flender developed the perfect-sizing approach.
We have calibrated the bearings and thermal capacity more precisely to the requirements of our customers, so that over-dimensioning is no longer necessary. The result is a gear unit with the highest performance and, simultaneously, lower resource usage, compared to the predecessor, both in production and in our customers' operations.

SAME PERFORMANCE – FEWER RESOURCES





PREDECESSOR FZG H3



FLENDER ONE

ADVANTAGES AT A GLANCE

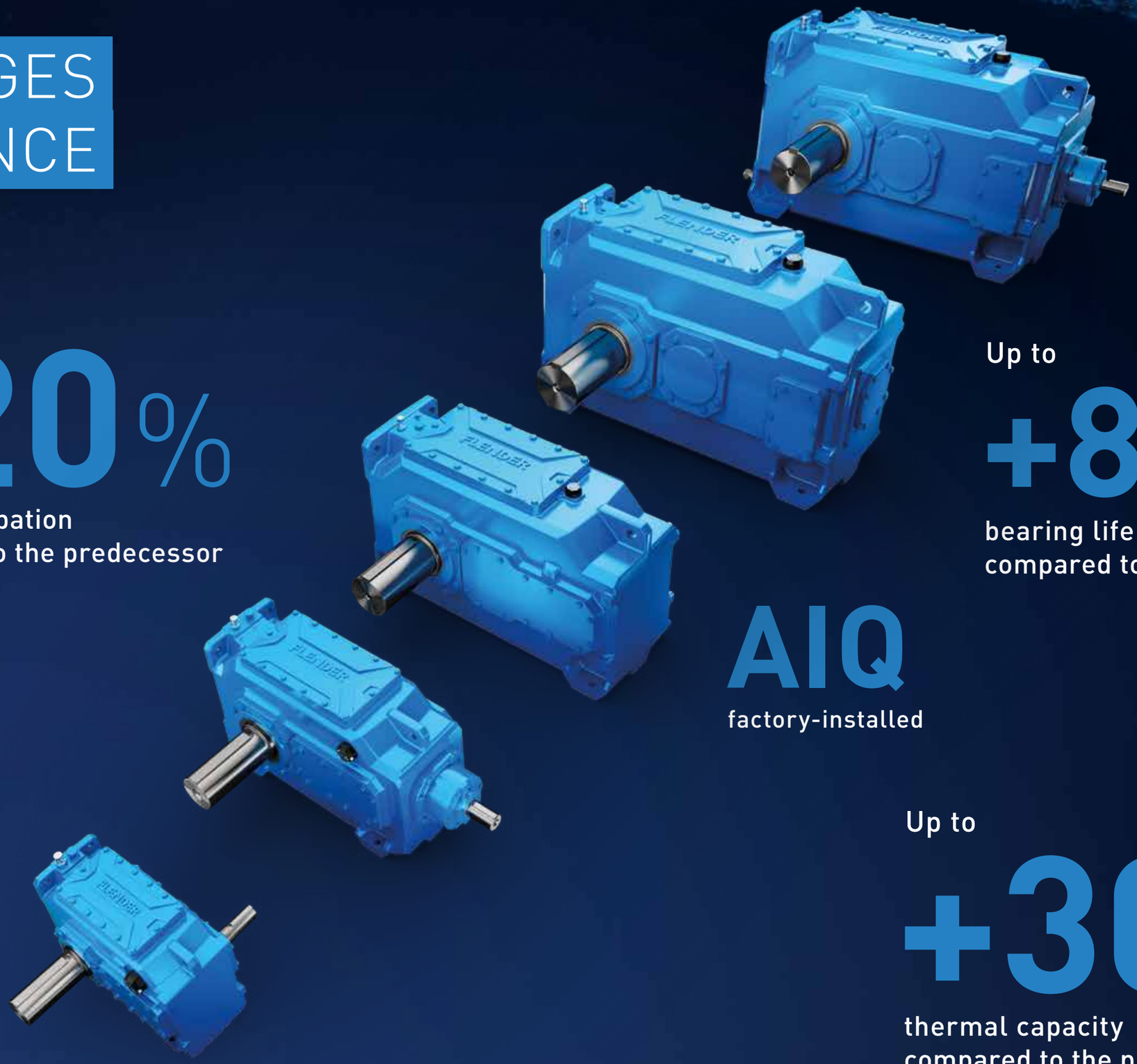
Up to

-20%

power dissipation
compared to the predecessor

-5%

weight
compared to the predecessor



Up to

+80%

bearing life
compared to the predecessor

AIQ

factory-installed

Up to

+30%

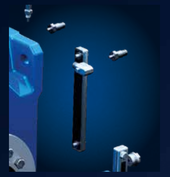
thermal capacity
compared to the predecessor

WE THOUGHT OF EVERYTHING – TO MEET YOUR SPECIFIC REQUIREMENTS



EFFICIENT COOLING

Our various fan solutions allow efficient cooling. Choose between different fan types in the configurator. Our new controlled electric fan only runs when it is needed, thus saving energy costs.



SIMPLE OIL LEVEL MONITORING

Servicing is easy due to quick and reliable oil level reading, including the option of an integrated scale thermometer. The configurator provides for various assembly positions for an optimal fit in your installation space.

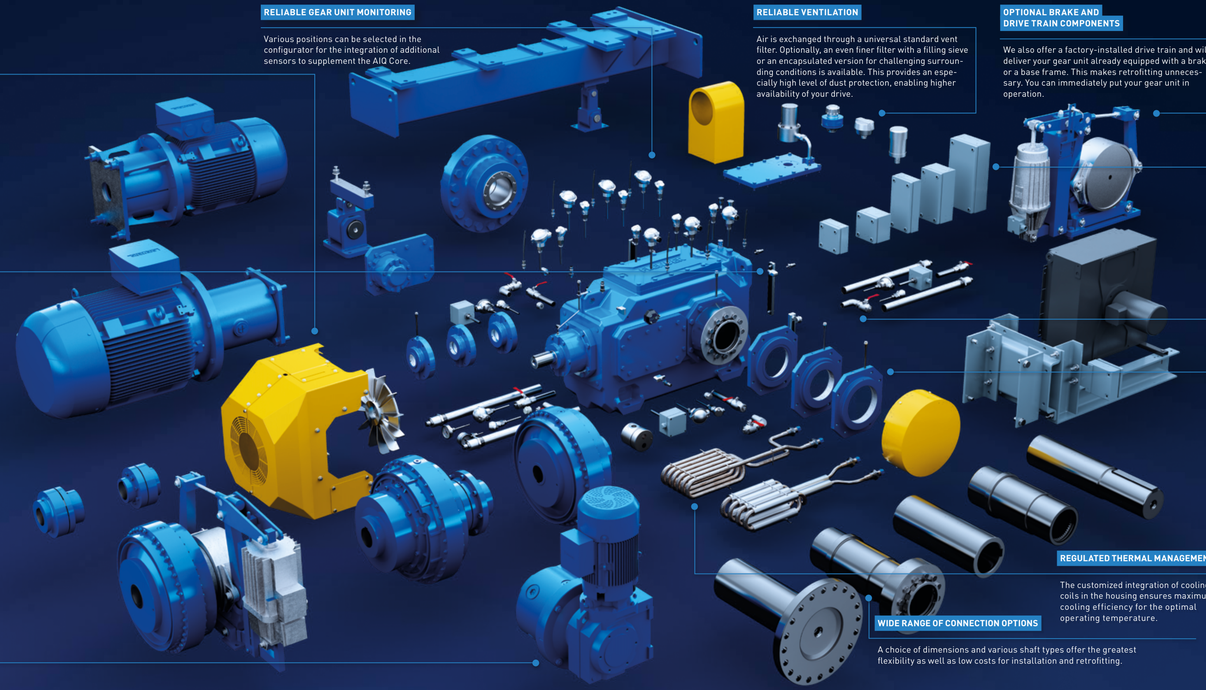


RELIABLE OPERATION (AUXILIARY DRIVES)

FLENDER ONE offers various auxiliary drive solutions for maximum flexibility.

RELIABLE GEAR UNIT MONITORING

Various positions can be selected in the configurator for the integration of additional sensors to supplement the AIQ Core.



Example: three-stage FLENDER ONE with bevel-helical gear

RELIABLE VENTILATION

Air is exchanged through a universal standard vent filter. Optionally, an even finer filter with a filling sieve or an encapsulated version for challenging surrounding conditions is available. This provides an especially high level of dust protection, enabling higher availability of your drive.

OPTIONAL BRAKE AND DRIVE TRAIN COMPONENTS

We also offer a factory-installed drive train and will deliver your gear unit already equipped with a brake or a base frame. This makes retrofitting unnecessary. You can immediately put your gear unit in operation.

REGULATED THERMAL MANAGEMENT

The customized integration of cooling coils in the housing ensures maximum cooling efficiency for the optimal operating temperature.

WIDE RANGE OF CONNECTION OPTIONS

A choice of dimensions and various shaft types offer the greatest flexibility as well as low costs for installation and retrofitting.

WELL-ORGANIZED ELECTRICAL COMPONENTS

A terminal box forms a central connection point for sensors and other electrical components. This enables the optimal integration of FLENDER ONE into your plant as a turnkey system.



EASY OIL SERVICE

Customizable oil drain cocks for draining and filling make oil change easier. Various installation positions for the drain cocks are available in the configurator, allowing optimal adaptation to your installation space.



THE RIGHT SEAL

Contact and non-contact as well as encapsulated and non-encapsulated seals are available to meet your requirements. The non-contact seal additionally enables a drop in the oil level, which leads to reduced power dissipation.

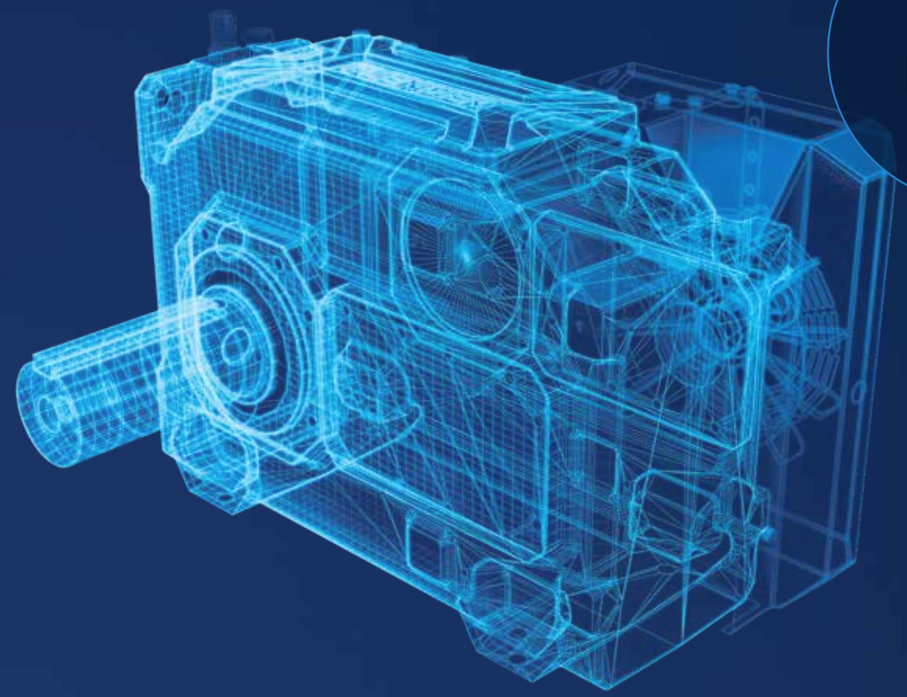


EFFICIENT MEANS SAVING TIME

Three steps to a finished gear unit

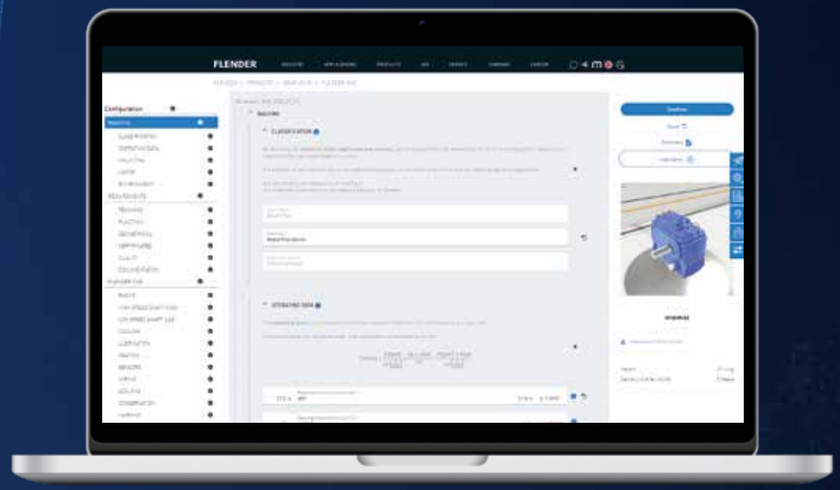
A FLENDER ONE gear unit ideally suited to your demands is efficient in planning and operation. With our solutions, you move more quickly from inquiry to plant operation:
complete and immediately available 3-D data, shorter delivery times, prompt bids and precisely configured gear units accelerate your projects right from the planning phase. In total, you can achieve time savings of around 25% in planning through simplified processes.

With the FLENDER ONE configurator, you will experience a new simplicity in purchasing a gear unit. It speaks your language, making it easy to satisfy your requirements for your finished product – even without gear unit expertise. Just by entering the application, capacity range and rotation speed, you can preconfigure your own specific FLENDER ONE. You always get an unambiguous result – the right gear unit solution for your requirements. The configurator makes all relevant information, data sheets, technical drawings and even complete 3-D CAD data directly available.



The configurator principle





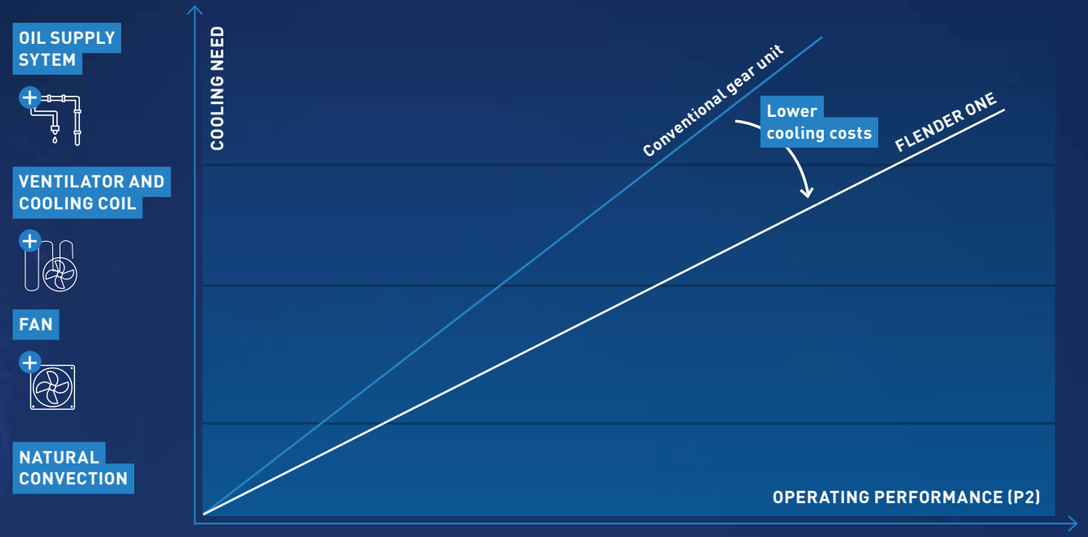
≈25%
savings potential
in the area of engineering

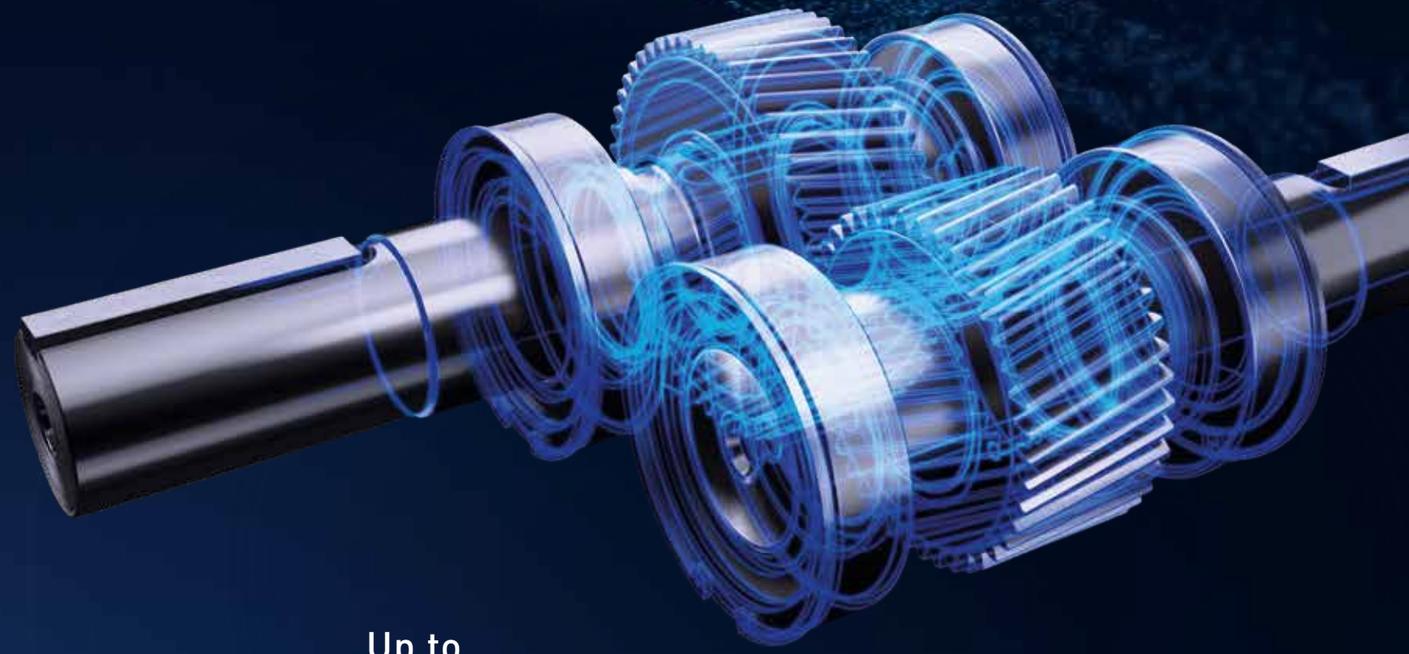
EFFICIENT MEANS SAVING MONEY

Optimized gear unit design and higher thermal capacity for greater profitability

All FLENDER ONE gear units are equipped with the performance-optimized METAPERFORM® gear teeth, which we developed from the ground up. This marks a major step forward in the field of industrial gear units. Thanks to its improved roll-off characteristics and even more uniform path of contact, the power dissipation of the multistage gear unit has been reduced by up to 20% in comparison with earlier models.

Compared to the previous series, the thermal capacity has been significantly increased according to housing size. This reduces costs for additional cooling measures, as the need for external cooling is delayed. In case of increased cooling need, Flender offers a solution that is optimized for efficiency: the new controlled electric fan, which is available as an add-on in the configuration.





Up to

-20%

power dissipation compared to the predecessor

	CONVENTIONAL DRIVE	FLENDER ONE
Plant data "P2" power: 500 kW Operating time: 24 hours/7 days		
ENERGY CONSUMPTION		
Per day	420 kWh	336 kWh
Per week	2940 kWh	2352 kWh
Per month	152880 kWh	122304 kWh
ENERGY COSTS		
Electricity price (example)	0.10€/kWh	
Energy costs per year	15288€	12230€
SAVINGS		**3058€** savings per year

For example, gear unit costs of approx. €10 000 are amortized in less than 3 years.

Up to

40%

lower
maintenance costs

Up to

70%

less unplanned
downtime

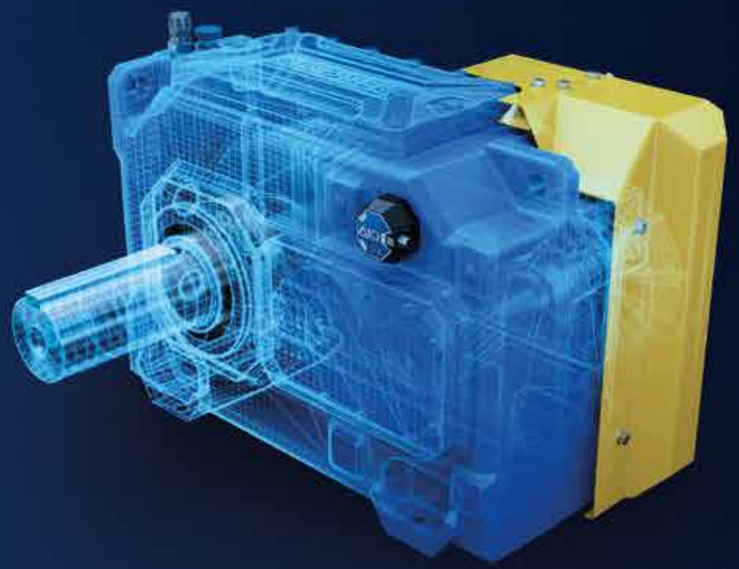
SMART

Increased plant availability and process optimization with AIQ

FLENDER ONE offers you gear unit intelligence straight from the factory. Every new gear unit is delivered with an integrated AIQ Core sensor. With the digital monitoring and intelligent onboard analytical functions, you always have your gear unit and your processes in view. You benefit from reliability, predictability and ease at the highest level.

The system enables you to avoid damage and reduce unplanned downtime by up to 70%. Data- and need-based maintenance intervals allow you to decrease your service costs by up to 40% and service-related downtime by up to 50%.

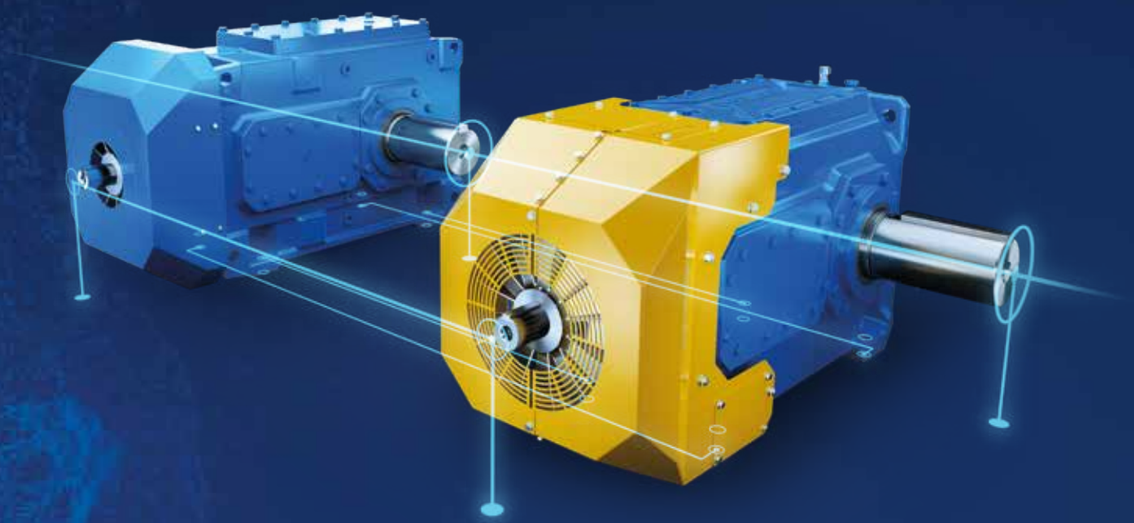
Beyond this, with the optional torque measurement function, you can check and optimize your plant's process and operating point. The AIQ Core torque can be easily selected via the configurator.



RETROFITTING

Benefit from technological evolution with FLENDER ONE

Compared with the predecessor generation, FLENDER ONE offers many advantages with the same footprint. Thus, you can upgrade your current Flender gear unit to FLENDER ONE without difficulty. With the new generation of gear units, you profit from longer operating life for bearings, higher thermal capacity, later oil change and lower weight, and a transmission ratio that is precisely aligned with your rotation speed demand. In a one-to-one replacement, FLENDER ONE offers higher performance at lower operating costs.



TECHNICAL INFORMATION

TECHNICAL INFORMATION

FLENDER ONE®, TWO-STAGE HELICAL GEAR UNIT

Nominal torque (Mtn; kNm)

Nominal ratio (iN)		6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0	18.0	20.0	22.4	25.0	28.0
Size	0042	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	-	-
	0063	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	-	-
	0070	-	-	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
	0096	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	-	-
	0104	-	-	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
	0136	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	-	-
	0151	-	-	46.9	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
	0179	62.8	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	-	-
	0200	-	-	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
	0234	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	-	-
	0257	-	112.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	-
	0294	-	-	129.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
	0312	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	-	-
	0355	-	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	-

Nominal power (Pn; kW) @ n1 = 1500 min-1

Nominal ratio (iN)		6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0	18.0	20.0	22.4	25.0	28.0
Size	0042	166	147	129	114	106	94	81	72	64	57	53	475	-	-
	0063	280	255	225	204	184	167	145	132	113	103	91	84	-	-
	0070	-	-	300	271	241	218	196	178	156	141	121	109	97	89
	0096	537	473	434	382	343	302	266	234	216	190	170	152	-	-
	0104	-	-	553	490	447	396	353	313	274	242	222	197	176	158
	0136	865	795	713	656	553	508	440	405	350	322	286	263	-	-
	0151	-	-	908	810	759	669	588	518	468	412	373	328	292	268
	0179	1606	1453	1269	1131	1032	920	809	721	631	562	521	466	-	-
	0200	-	-	1537	1399	1196	1089	972	885	762	694	594	541	501	448
	0234	2367	2163	1923	1757	1526	1394	1175	1074	953	871	743	679	-	-
	0257	-	2488	2250	2042	1828	1619	1450	1247	1118	1012	906	788	706	-
	0294	-	-	2549	2266	2088	1841	1655	1462	1275	1126	1034	913	806	711
	0312	3703	3380	2967	2712	2403	2195	1927	1759	1495	1366	1213	1108	-	-
	0355	-	3784	3304	3036	2651	2458	2146	1970	1720	1530	1335	1240	1083	-

Actual ratio (i)

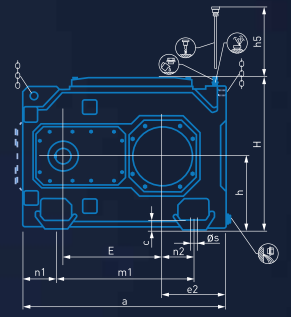
Nominal ratio (iN)		6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0	18.0	20.0	22.4	25.0	28.0
Size	0042	6.344	7.155	8.172	9.217	9.911	11.178	12.967	14.625	16.443	18.545	20.025	22.168	-	-
	0063	6.495	7.158	8.092	8.918	9.923	10.937	12.526	13.806	16.105	17.750	19.941	21.798	-	-
	0070	-	-	8.119	8.973	10.114	11.179	12.404	13.710	15.658	17.306	20.132	22.250	24.997	27.325
	0096	6.349	7.205	7.857	8.916	9.938	11.277	12.825	14.553	15.789	17.917	20.050	22.396	-	-
	0104	-	-	7.958	8.982	9.848	11.116	12.455	14.059	16.074	18.144	19.789	22.338	24.997	27.922
	0136	6.541	7.112	7.930	8.623	10.234	11.129	12.852	13.975	16.159	17.571	19.741	21.476	-	-
	0151	-	-	8.105	9.208	9.827	11.164	12.682	14.408	15.926	18.094	20.025	22.750	25.559	27.806
	0179	6.161	6.917	7.916	8.887	9.739	10.933	12.422	13.946	15.927	17.880	19.307	21.579	-	-
	0200	-	-	7.971	8.759	10.241	11.253	12.600	13.844	16.071	17.659	20.605	22.640	24.448	27.325
	0234	6.371	6.973	7.837	8.578	9.881	10.815	12.825	14.037	15.816	17.312	20.301	22.220	-	-
	0257	-	7.067	7.890	8.693	9.706	10.960	12.237	14.226	15.883	17.544	19.588	22.518	25.142	-
	0294	-	-	7.953	9.008	9.784	11.082	12.335	13.972	16.009	18.134	19.744	22.364	25.342	28.705
	0312	6.494	7.109	8.095	8.861	9.998	10.945	12.474	13.655	16.066	17.588	19.810	21.686	-	-
	0355	-	7.181	8.224	8.951	10.251	11.055	12.662	13.793	15.797	17.766	20.347	21.905	25.087	-

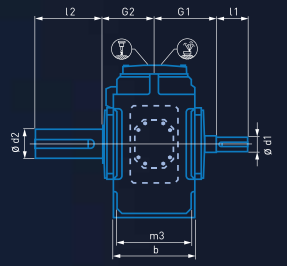
Oil quantity (l/max.) @ i = 11.2

Size	42	63	70	96	104	136	151	179	200	234	257	294	312	355
Labyrinth seals	9	13	14	24	25	39	39	66	-	115	115	140	180	168
Radial shaft seals	10	16	17	28	30	46	48	77	82	135	140	165	215	222

TECHNICAL INFORMATION

FLENDER ONE®, TWO-STAGE HELICAL GEAR UNIT





Dimension (in mm) [1] ≤ 25 mm tolerance k6 | > 25 ... 100 mm tolerance m6 | > 100 mm tolerance n6. [2] Tolerance –0.5 mm. Shaft ends with parallel keys and parallel keyways acc. to DIN 6885/1 | Shaft ends with centering holes (form DS) acc. to DIN 332/1 (exception: ø > 130 mm)

		HIGHSPEED SHAFT			LOWSPEED SHAFT			MAIN DIMENSIONS												TRANSPORT	
		Without fan																		3x shackles acc. to DIN 82101 *	Weight **
Size	Transmission range	Diam. d1 [1]	Length l1	G1	Diam. d2 [1]	Length l2	G2	Length a	Width b	Height H	Distance E	Height h [2]	Height h5	e2	m1	m3	n1	n2	ØS	c	"A" / "B" / "C"	kg
0042	6.3-11.2	45	100	170	80	170	140	560	215	414	270	200	323	190	355	180	100	85	19	28	1	175
	12.5-22.4	32	80																			
0063	6.3-11.2	50	100	195	100	210	165	640	255	480	315	230	369	205	430	220	105	100	19	28	2.5	285
	12.5-22.4	38	80																			
0070	8-14	50	100	195	110	210	165	720	255	480	350	230	369	250	510	220	105	145	19	28	2.5	330
	16-28	38	80																			
0096	6.3-11.2	60	135	210	120	210	195	785	300	575	385	280	418	250	545	260	120	130	24	35	2.5	465
	12.5-22.4	50	110																			
0104	8-14	60	135	210	130	250	195	890	300	575	430	280	423	310	650	260	120	190	24	35	2.5	550
	16-28	50	110																			
0136	6.3-11.2	75	140	240	140	250	235	925	370	660	450	320	472	300	635	320	145	155	28	40	4	780
	12.5-22.4	60	140																			
0151	8-14	75	140	240	160	300	235	1.025	370	660	500	320	485	350	735	320	145	205	28	40	4	920
	16-28	60	140																			
0179	6.3-11.2	90	165	275	170	300	270	1.105	430	787	545	380	554	345	775	370	165	180	35	50	6	1.275
	12.5-22.4	70	140																			
0200	8-14	90	165	275	180	300	270	1.245	430	787	615	380	530	415	930	370	165	265	35	50	6	1.505
	16-28	70	140																			
0234	6.3-11.2	100	205	330	200	350	335	1.295	545	910	635	440	616	405	1.090	475	105	305	35	60	8	2.175
	12.5-22.4	85	170																			
0257	7.1-12.5	100	205	330	210	350	335	1.435	545	910	705	440	627	475	1.230	475	105	375	35	60	8	2.545
	14-25	85	170																			
0294	8-14	100	205	330	220	380	345	1.550	545	980	740	475	663	555	1.310	460	120	435	42	70	10	2.895
	16-28	85	170																			
0312	6.3-11.2	120	210	365	230	410	380	1.557	620	1.012	762	500	685	485	1.310	535	130	365	42	70	12	3.285
	12.5-22.4	100	210																			
0355	7.1-12.5	120	210	365	240	410	380	1.648	620	1.012	808	500	691	530	1.400	535	128	410	42	70	12	3.525
	14-25	100	210																			

* Or similar. ** Without oil filling and add-on parts.

TECHNICAL INFORMATION

FLENDER ONE®, THREE-STAGE HELICAL GEAR UNIT

Nominal torque (Mtn; kNm)

Nominal ratio (iN)		22.4	25.0	28.0	31.5	35.5	40.0	45.0	50.0	56.0	63.0	71.0	80.0	90.0	100.0	112.0
Size	0063	-	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	-	-
	0070	-	-	-	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
	0096	-	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	-	-
	0104	-	-	-	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
	0136	-	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	-	-
	0151	-	-	-	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
	0179	-	61.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	-	-
	0200	-	-	-	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
	0234	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	-	-
	0257	-	-	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
	0294	-	-	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
	0312	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	-	-
	0355	-	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	-

Nominal power (Pn; kW) @ n1 = 1500 min-1

Nominal ratio (iN)		22.4	25.0	28.0	31.5	35.5	40.0	45.0	50.0	56.0	63.0	71.0	80.0	90.0	100.0	112.0
Size	0063	-	72	65	57	52	45.9	41.6	36.8	33.4	29.6	25.5	23.4	21.3	-	-
	0070	-	-	-	77	69	61	55	49.1	44.4	39.4	35.6	31.6	27.3	25.0	22.7
	0096	-	134	118	104	91	85	75	65	58	53	47.7	43.1	37.9	-	-
	0104	-	-	-	138	122	107	94	88	78	67	60	54	49.1	44.3	39.3
	0136	-	222	204	177	162	144	132	114	105	93	83	72	66	-	-
	0151	-	-	-	236	208	188	166	153	135	121	107	95	85	77	68
	0179	-	412	379	324	289	256	228	199	177	157	151	129	115	-	-
	0200	-	-	-	401	365	305	278	241	220	187	170	151	145	122	111
	0234	702	607	555	490	447	379	347	302	276	250	223	197	180	-	-
	0257	-	-	645	577	520	465	403	361	321	287	261	232	209	187	167
	0294	-	-	736	659	582	531	469	412	363	328	289	263	234	213	188
	0312	1128	951	869	754	689	613	560	481	439	387	358	311	284	-	-
	0355	-	1102	973	849	771	673	627	547	491	429	378	350	318	277	-

Actual ratio (i)

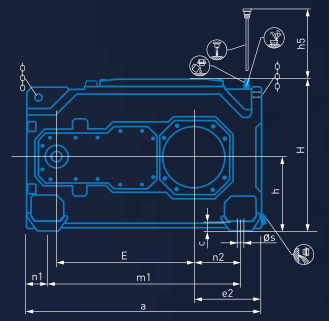
Nominal ratio (iN)		22.4	25.0	28.0	31.5	35.5	40.0	45.0	50.0	56.0	63.0	71.0	80.0	90.0	100.0	112.0
Size	0063	-	25.472	28.073	32.080	35.356	39.692	43.745	49.479	54.532	61.543	71.428	77.753	85.693	-	-
	0070	-	-	-	31.840	35.190	40.100	44.319	49.615	54.836	61.849	68.357	77.146	89.285	97.191	107.418
	0096	-	25.444	28.873	32.919	37.354	39.921	45.300	52.232	59.270	64.789	71.518	79.173	89.840	-	-
	0104	-	-	-	31.890	35.997	41.258	46.571	50.035	56.478	65.464	73.895	80.776	89.636	99.230	112.009
	0136	-	25.516	27.746	32.023	34.822	39.273	42.706	49.574	53.907	60.838	67.820	78.276	85.117	-	-
	0151	-	-	-	31.620	35.923	39.685	45.085	48.669	55.292	61.435	69.795	78.768	87.807	97.002	110.202
	0179	-	23.622	26.518	31.011	34.814	39.224	44.034	50.618	56.825	64.089	66.613	77.900	87.452	-	-
	0200	-	-	-	30.561	33.579	40.121	44.084	50.746	55.758	65.487	71.955	81.154	84.350	100.783	110.736
	0234	21.465	24.829	27.177	30.796	33.708	39.745	43.503	49.910	54.629	60.208	67.685	76.701	83.952	-	-
	0257	-	-	27.541	30.750	34.160	38.140	44.086	49.223	55.362	61.812	68.125	76.585	85.079	94.991	106.405
	0294	-	-	27.730	30.995	35.108	38.444	43.546	49.615	56.199	62.305	70.573	77.781	87.440	95.748	108.455
	0312	21.312	25.262	27.656	31.870	34.889	39.209	42.923	50.012	54.749	62.126	67.154	77.387	84.717	-	-
	0355	-	24.655	27.934	31.993	35.240	40.360	43.356	49.656	55.301	63.336	71.870	77.686	85.572	98.004	-

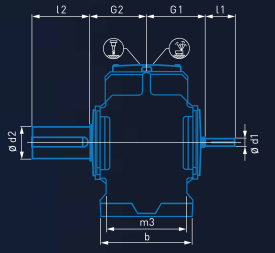
Oil quantity (l/max.) @ i = 45

Size	42	63	70	96	104	136	151	179	200	234	257	294	312	355
Labyrinth seals	-	14	15	25	27	42	41	72	-	-	-	-	-	178
Radial shaft seals	-	18	19	31	34	52	53	88	94	150	160	185	255	239

TECHNICAL INFORMATION

FLENDER ONE®, THREE-STAGE HELICAL GEAR UNIT





Dimension (in mm) [1] ≤ 25 mm tolerance k6 | > 25 ... 100 mm tolerance m6 | > 100 mm tolerance n6. [2] Tolerance –0.5 mm. Shaft ends with parallel keys and parallel keyways acc. to DIN 6885/1 | Shaft ends with centering holes (form DS) acc. to DIN 332/1 (exception: ø > 130 mm)

		HIGHSPEED SHAFT			LOWSPEED SHAFT			MAIN DIMENSIONS												TRANSPORT	
		Without fan																		3x shackles acc. to DIN 82101*	Weight**
Size	Transmission range	Diam. d1 [1]	Length l1	G1	Diam. d2 [1]	Length l2	G2	Length a	Width b	Height H	Distance E	Height h [2]	Height h5	e2	m1	m3	n1	n2	ØS	c	"A" / "B" / "C"	kg
0063	25-45	40	110	180	100	210	165	690	255	480	405	230	369	205	480	220	105	100	19	28	2,5	310
	50-63	30	90																			
	71-90	24	78	182																		
0070	31.5-56	40	110	180	110	210	165	770	255	480	440	230	369	250	560	220	105	145	19	28	2,5	355
	63-80	30	90																			
	90-112	24	78	182																		
0096	25-45	45	120	210	120	210	195	845	300	575	495	280	419	250	605	260	120	130	24	35	2,5	510
	50-63	35	100																			
	71-90	28	90																			
0104	31.5-56	45	120	210	130	250	195	950	300	575	540	280	424	310	710	260	120	190	24	35	2,5	590
	63-80	35	100																			
	90-112	28	90																			
0136	25-45	60	145	260	140	250	235	1.000	370	660	580	320	472	300	710	320	145	155	28	40	4	850
	50-63	45	120																			
	71-90	32	100																			
0151	31.5-56	60	145	260	160	300	235	1.100	370	660	630	320	485	350	810	320	145	205	28	40	4	990
	63-80	45	120																			
	90-112	32	100																			
0179	25-45	70	170	280	170	300	270	1.200	430	787	705	380	554	345	870	370	165	180	35	50	6	1.395
	50-63	50	130																			
	71-90	42	120																			
0200	31.5-56	70	170	280	180	300	270	1.340	430	787	775	380	522	415	1.025	370	165	265	35	50	6	1.615
	63-80	50	130																			
	90-112	42	120																			
0234	22.4-45	85	180	335	200	350	335	1.398	545	910	820	440	578	405	1.195	475	103	305	35	60	8	2.305
	50-63	60	155																			
	71-90	50	130																			
0257	28-50	85	180	335	210	350	335	1.538	545	910	890	440	578	475	1.335	475	103	375	35	60	8	2.660
	56-71	60	155																			
	80-112	50	130																			
0294	28-56	85	180	335	220	380	345	1.653	545	980	925	475	620	555	1.415	460	118	435	42	70	10	3.030
	63-80	60	155																			
	90-112	50	130																			
0312	22.4-45	100	220	365	230	410	380	1.685	620	1.012	987	500	637	485	1.440	535	125	365	42	70	12	3.510
	50-63	75	160																			
	71-90	60	160																			
0355	25-50	100	220	365	240	410	380	1775	620	1012	1033	500	690	530	1530	535	125	410	42	70	12	3.745
	56-71	75	160																			
	80-100	60	160																			

* Or similar. ** Without oil filling and add-on parts.

TECHNICAL INFORMATION

FLENDER ONE®, THREE-STAGE BEVEL-HELICAL GEAR UNIT

Nominal torque (Mtn; kNm)

Nominal ratio (iN)		12.5	14.0	16.0	18.0	20.0	22.4	25.0	28.0	31.5	35.5	40.0	45.0	50.0	56.0	63.0	71.0	80.0	90.0
Size	0042	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.5	6.7	-	-
	0063	9.4	10.3	10.8	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.0	11.6	-	-
	0070	-	-	11.6	12.9	13.5	15.0	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	13.9	15.2
	0096	16.6	18.9	20.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	-	-
	0104	-	-	20.7	23.6	25.9	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
	0136	28.1	30.7	33.6	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	34.2	36.0	-	-
	0151	-	-	34.7	39.7	41.6	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	42.5	47.5
	0179	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	-	-
	0200	-	-	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
	0234	89.8	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	-	-
	0257	-	99.0	111.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
	0294	-	-	111.0	127.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
	0312	151.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	-	-
	0355	-	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	-

Nominal power (Pn; kW) @ n1 = 1500 min-1

Nominal ratio (iN)		12.5	14.0	16.0	18.0	20.0	22.4	25.0	28.0	31.5	35.5	40.0	45.0	50.0	56.0	63.0	71.0	80.0	90.0
Size	0042	84	74	67	60	53	46.7	41.5	36.8	33.2	29.4	26.8	23.8	20.9	18.6	16.2	14.8	-	-
	0063	119	118	109	106	93	84	72	65	58	52	46.5	42.2	36.4	33.0	27.4	26.3	-	-
	0070	-	-	117	118	109	109	99	90	77	70	62	56	49.7	45.0	38.9	35.2	27.7	27.4
	0096	209	210	206	191	167	147	132	116	105	93	85	75	67	59	53	46.6	-	-
	0104	-	-	208	210	206	197	172	153	136	120	109	96	88	78	68	61	55	48.2
	0136	353	355	336	331	287	264	223	205	179	164	144	133	113	104	85	82	-	-
	0151	-	-	352	355	336	337	306	269	238	209	190	167	154	135	120	106	85	84
	0179	843	751	673	599	513	457	398	355	319	284	258	229	201	179	160	143	-	-
	0200	-	-	794	723	634	577	483	439	376	342	301	274	243	221	190	173	151	137
	0234	1146	1117	964	881	777	710	604	552	484	442	390	357	305	279	243	222	-	-
	0257	-	1137	1141	1023	916	825	739	641	574	513	460	414	371	324	290	258	231	206
	0294	-	-	1132	1144	1046	923	843	744	656	579	525	463	424	374	331	292	263	233
	0312	1873	1734	1521	1390	1206	1101	959	876	768	701	620	566	484	442	385	352	-	-
	0355	-	1942	1695	1556	1358	1233	1077	981	856	785	685	634	553	495	432	394	344	-

Actual ratio (i)

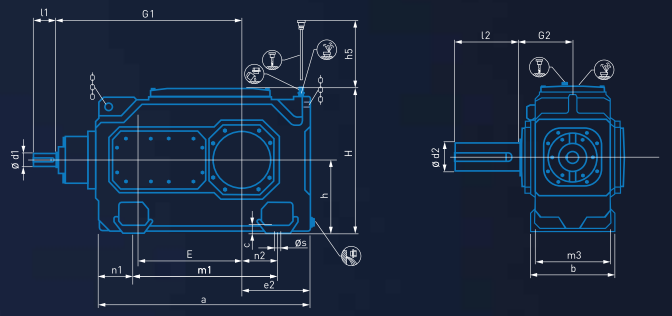
Nominal ratio (iN)		12.5	14.0	16.0	18.0	20.0	22.4	25.0	28.0	31.5	35.5	40.0	45.0	50.0	56.0	63.0	71.0	80.0	90.0
Size	0042	12.556	14.161	15.620	17.617	19.973	22.527	25.365	28.608	31.684	35.735	39.253	44.271	50.256	56.681	63.142	71.214	-	-
	0063	12.449	13.720	15.617	17.212	19.669	21.677	25.298	27.881	31.600	34.827	39.148	43.146	50.122	55.240	62.973	69.404	-	-
	0070	-	-	15.561	17.198	19.522	21.576	24.586	27.173	31.622	34.949	39.500	43.657	48.935	54.085	62.652	69.245	78.716	87.000
	0096	12.481	14.162	15.754	17.876	20.381	23.128	25.883	29.371	32.332	36.688	40.055	45.452	51.282	58.192	64.432	73.113	-	-
	0104	-	-	15.642	17.657	19.745	22.287	25.545	28.834	32.441	36.618	40.523	45.741	50.202	56.667	64.274	72.551	80.755	91.154
	0136	12.490	13.582	15.702	17.074	19.707	21.429	25.346	27.562	31.661	34.428	39.224	42.652	50.218	54.608	63.095	68.609	-	-
	0151	-	-	15.478	17.585	19.458	22.106	24.421	27.744	31.410	35.685	39.236	44.575	48.608	55.222	62.233	70.701	78.190	88.830
	0179	11.925	13.388	14.939	16.771	19.612	22.017	25.225	28.318	31.509	35.373	39.035	43.822	49.977	56.105	62.792	70.491	-	-
	0200	-	-	15.429	16.952	19.327	21.236	25.373	27.879	32.634	35.858	40.765	44.791	50.502	55.490	64.658	71.044	81.237	89.260
	0234	12.337	13.503	15.643	17.122	19.403	21.237	24.955	27.315	31.172	34.120	38.619	42.270	49.443	54.118	62.121	67.994	-	-
	0257	-	13.684	15.279	17.352	19.373	21.522	24.029	27.681	30.906	34.577	38.606	42.837	47.828	54.844	61.234	68.907	76.935	86.179
	0294	-	-	15.400	17.444	19.528	22.119	24.221	27.435	31.152	35.287	38.914	44.078	48.209	54.607	61.722	69.913	77.548	87.839
	0312	12.657	13.855	15.796	17.293	19.928	21.815	25.059	27.432	31.301	34.267	38.778	42.452	49.648	54.351	62.378	68.287	-	-
	0355	-	14.00	16.03	17.47	20.00	22.04	25.24	27.71	31.73	34.61	39.64	42.88	49.11	54.90	62.88	68.98	79.00	-

Oil quantity (l/max.) @ i = 50

Size	42	63	70	96	104	136	151	179	200	234	257	294	312	355
Labyrinth seals	9	13	14	24	25	39	39	66	-	-	-	-	-	167
Radial shaft seals	11	16	17	28	30	47	49	76	83	130	140	165	210	225

TECHNICAL INFORMATION

FLENDER ONE®, THREE-STAGE BEVEL-HELICAL GEAR UNIT



Dimension (in mm) [1] ≤ 25 mm tolerance k6 | > 25 ... 100 mm tolerance m6 | > 100 mm tolerance n6. [2] Tolerance –0.5 mm. Shaft ends with parallel keys and parallel keyways acc. to DIN 6885/1 | Shaft ends with centering holes (form DS) acc. to DIN 332/1 (exception: ø > 130 mm)

		HIGHSPEED SHAFT			LOWSPEED SHAFT			MAIN DIMENSIONS												TRANSPORT	
		Without fan																		3x shackles acc. to DIN 82101*	Weight**
Size	Transmission range	Diam. d1 [1]	Length l1	G1	Diam. d2 [1]	Length l2	G2	Length a	Width b	Height H	Distance E	Height h [2]	Height h5	e2	m1	m3	n1	n2	ØS	c	"A" / "B" / "C"	kg
0042	12.5-45	35	70	500	80	170	140	560	215	404	270	200	313	190	355	180	100	85	19	28	1	195
	50-56	35	60																			
	63-71	25	60																			
0063	12.5-45	40	80	575	100	210	165	640	255	465	315	230	354	205	430	220	105	100	19	28	2,5	305
	50-56	40	60																			
	63-71	35	60																			
0070	16-56	40	80	610	110	210	165	720	255	480	350	230	369	250	510	220	105	145	19	28	2,5	355
	63-71	40	60																			
	80-90	35	60																			
0096	12.5-45	50	100	690	120	210	195	785	300	552	385	280	399	250	545	260	120	130	24	35	2,5	500
	50-56	50	80																			
	63-71	40	80																			
0104	16-56	50	100	735	130	250	195	890	300	575	430	280	424	310	650	260	120	190	24	35	2,5	590
	63-71	50	80																			
	80-90	40	80																			
0136	12.5-45	60	110	800	140	250	235	925	370	635	450	320	447	300	635	320	145	155	28	40	4	820
	50-56	60	100																			
	63-71	50	100																			
0151	16-56	60	110	850	160	300	235	1.025	370	660	500	320	485	350	735	320	145	205	28	40	4	985
	63-71	60	100																			
	80-90	50	100																			
0179	12.5-45	70	135	960	170	300	270	1.105	430	762	545	380	529	345	775	370	165	180	35	50	6	1.360
	50-56	70	110																			
	63-71	60	110																			
0200	16-56	70	135	1.030	180	300	270	1.245	430	787	615	380	526	415	930	370	165	265	35	50	6	1.605
	63-71	70	110																			
	80-90	60	110																			
0234	12.5-45	80	165	1.125	200	350	335	1.295	545	910	635	440	585	405	1.090	475	105	305	35	60	8	2.325
	50-71	70	140																			
0257	14-50	80	165	1.195	210	350	335	1.435	545	910	705	440	585	475	1.230	475	105	375	35	60	8	2.675
	56-90	70	140																			
0294	16-56	80	165	1.230	220	380	345	1.550	545	980	740	475	626	555	1.310	460	120	435	42	70	10	3.055
	63-90	70	140																			
0312	12.5-45	95	165	1.367	230	410	380	1.557	620	1.012	762	500	637	485	1.310	535	130	365	42	70	12	3.590
	50-56	95	140																			
	63-71	80	140																			
0355	14-50	95	165	1.402	240	410	380	1.648	620	1.012	808	500	692	530	1.400	535	128	410	42	70	12	3.815
	56-63	95	140																			
	71-80	80	140																			

* Or similar. ** Without oil filling and add-on parts.

TECHNICAL INFORMATION

FLENDER ONE®, FOUR-STAGE HELICAL GEAR UNIT

Nominal torque (Mtn; kNm)

Nominal ratio (iN)		100	112	125	140	160	180	200	224	250	280	315	355	400	450
Size	0063	11.6	11.6	11.6	11.6	-	-	-	-	-	-	-	-	-	-
	0070	-	-	15.5	15.5	15.5	15.5	-	-	-	-	-	-	-	-
	0096	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	-	-
	0104	-	-	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
	0136	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	-	-
	0151	-	-	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
	0179	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	0.0	0.0
	0200	-	-	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
	0234	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	-	-
	0257	-	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
	0294	-	-	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
	0312	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	-	-
	0355	-	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	-

Nominal power (Pn; kW) @ n1 = 1500 min-1

Nominal ratio (iN)		100	112	125	140	160	180	200	224	250	280	315	355	400	450
Size	0063	18.4	16.7	14.4	13.1	-	-	-	-	-	-	-	-	-	-
	0070	-	-	19.7	17.8	15.4	14.0	-	-	-	-	-	-	-	-
	0096	33.6	29.7	26.4	23.3	21.5	18.9	16.9	14.9	13.5	11.9	10.8	9.5	-	-
	0104	-	-	34.6	30.7	27.2	24.1	22.1	19.6	17.4	15.4	13.9	12.3	11.1	9.9
	0136	55	51	44.5	40.9	36.0	33.1	28.9	26.6	22.5	20.7	18.4	16.9	-	-
	0151	-	-	59	52	47.4	41.8	38.3	33.7	30.7	27.1	23.9	21.0	19.6	17.2
	0179	100	89	77	69	64	57	48.8	43.4	38.5	34.2	32.2	28.7	-	-
	0200	-	-	94	85	73	66	60	55	45.9	41.8	36.2	33.0	30.3	27.6
	0234	151	138	121	111	99	90	78	72	61	56	49.6	45.3	-	-
	0257	-	160	144	129	115	105	94	83	74	65	58	53	47.1	42.1
	0294	-	-	164	145	132	116	107	95	85	75	66	58	54	47.5
	0312	238	218	192	176	152	139	118	108	96	88	77	70	-	-
	0355	-	244	213	197	172	156	136	121	105	98	86	78	68	-

Actual ratio (i)

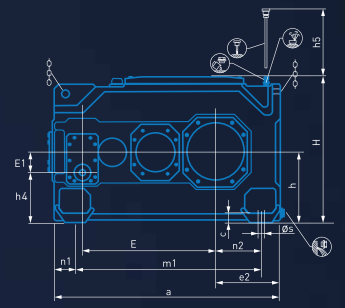
Nominal ratio (iN)		100	112	125	140	160	180	200	224	250	280	315	355	400	450
Size	0063	99.1	109.2	126.2	139.0	-	-	-	-	-	-	-	-	-	-
	0070	-	-	123.8	136.9	157.7	174.3	-	-	-	-	-	-	-	-
	0096	101.3	114.9	129.0	146.4	158.6	180.0	201.3	228.5	252.4	286.4	315.5	358.0	-	-
	0104	-	-	127.0	143.3	161.7	182.5	198.8	224.4	252.3	284.8	316.4	357.1	395.5	446.4
	0136	102.6	111.5	127.0	138.1	157.1	170.8	195.8	212.9	251.8	273.8	307.7	334.6	-	-
	0151	-	-	127.1	144.4	157.3	178.7	194.7	221.2	242.7	275.7	312.0	354.5	381.3	433.2
	0179	100.9	113.2	129.9	145.9	157.6	176.9	206.2	231.4	261.4	293.5	312.5	350.8	-	-
	0200	-	-	130.5	143.4	168.1	184.7	203.9	224.0	266.7	293.1	338.2	371.6	404.3	444.2
	0234	99.8	109.3	124.4	136.1	152.5	166.9	192.5	210.7	247.5	270.9	304.0	332.7	-	-
	0257	-	110.7	123.6	137.9	154.0	169.2	188.9	213.6	238.4	274.6	306.6	337.2	376.5	421.7
	0294	-	-	124.6	141.2	155.2	175.9	190.4	215.7	240.3	272.2	309.0	350.0	379.5	429.8
	0312	100.9	110.4	124.9	136.7	157.9	172.9	203.8	223.1	250.9	274.7	313.6	343.3	-	-
	0355	-	111.6	127.8	138.1	158.1	174.6	200.0	225.3	258.1	277.4	317.7	346.8	397.2	-

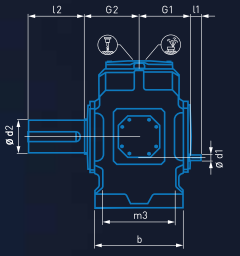
Oil quantity (l/max.) @ i = 160

Size	42	63	70	96	104	136	151	179	200	234	257	294	312	355
Labyrinth seals	-	12	13	22	25	39	40	66	70	112	117	122	181	185
Radial shaft seals	-	17	18	30	33	51	53	87	93	146	157	185	238	248

TECHNICAL INFORMATION

FLENDER ONE®, FOUR-STAGE HELICAL GEAR UNIT





Dimension (in mm) [1] ≤25 mm tolerance k6 | > 25 ... 100 mm tolerance m6 | > 100 mm tolerance n6. [2] Tolerance –0.5 mm. Shaft ends with parallel keys and parallel keyways acc. to DIN 6885/1 | Shaft ends with centering holes (form DS) acc. to DIN 332/1 (exception: ø > 130 mm)

		HIGHSPEED SHAFT			LOWSPEED SHAFT			MAIN DIMENSIONS															TRANSPORT	
		Without fan																					3x shackles acc. to DIN 82101*	Weight**
Size	Transmission range	Diam. d1 [1]	Length l1	G1	Diam. d2 [1]	Length l2	G2	Length a	Width b	Height H	Distance E	Distance E1	Height h [2]	Height h4	Height h5	e2	m1	m3	n1	n2	ØS	c	"A" / "B" / "C"	kg
0063	100-140	30	50	160	100	210	165	690	255	450	405	80	230	150	382	205	480	220	105	100	19	28	2,5	310
0070	125-180	30	50	160	110	210	165	770	255	450	440	80	230	150	410	250	560	220	105	145	19	28	2,5	355
0096	100-180	30	50	180	120	210	195	845	300	540	495	80	280	200	437	250	605	260	120	130	24	35	2,5	510
	200-355	24	40																					
0104	125-224	30	50	180	130	250	195	950	300	540	540	80	280	200	432	310	710	260	120	190	24	35	2,5	595
	250-450	24	40																					
0136	100-180	35	60	215	140	250	235	1.000	370	620	580	90	320	230	489	300	710	320	145	155	28	40	4	840
	200-355	28	50																					
0151	125-224	35	60	215	160	300	235	1.100	370	620	630	90	320	230	496	350	810	320	145	205	28	40	4	985
	250-450	28	50																					
0179	100-180	45	100	250	170	300	270	1.200	430	740	705	110	380	270	581	345	870	370	165	180	35	50	6	1.385
	200-355	32	80																					
0200	125-224	45	100	250	180	300	270	1.340	430	740	775	110	380	270	579	415	1.025	370	165	265	35	50	6	1.605
	250-450	32	80																					
0234	100-180	50	100	305	200	350	335	1.400	545	860	820	130	440	310	632	405	1.195	475	105	305	35	60	8	2.265
	200-355	38	80																					
0257	112-200	50	100	305	210	350	335	1.540	545	860	890	130	440	310	635	475	1.335	475	105	375	35	60	8	2.600
	224-450	38	80																					
0294	125-224	50	100	305	220	380	345	1.655	545	930	925	130	475	345	714	555	1.415	460	120	435	42	70	10	2.990
	250-450	38	80																					
0312	100-180	60	135	345	230	410	380	1.687	620	960	987	160	500	340	698	485	1.440	535	137	365	42	70	12	3.495
	200-355	50	110																					
0355	112-200	60	135	345	240	410	380	1.775	620	1.012	1.033	-	500	-	685	530	1.530	535	128	410	42	70	12	3.765
	224-400	50	110																					

* Or similar. ** Without oil filling and add-on parts.

TECHNICAL INFORMATION

FLENDER ONE®, FOUR-STAGE BEVEL-HELICAL GEAR UNIT

Nominal torque (Mtn; kNm)

Nominal ratio (iN)		80	90	100	112	125	140	160	180	200	224	250	280	315	355	400
Size	0063	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	-	-
	0070	-	-	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
	0096	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	-	-
	0104	-	-	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
	0136	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	-	-
	0151	-	-	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
	0179	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	-	-
	0200	-	-	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
	0234	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	-	-
	0257	-	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
	0294	-	-	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
	0312	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	-	-
	0355	-	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	173.0	-

Nominal power (Pn; kW) @ n1 = 1500 min-1

Nominal ratio (iN)		80	90	100	112	125	140	160	180	200	224	250	280	315	355	400
Size	0063	23.2	21.0	18.2	16.5	14.6	13.2	11.8	10.7	9.2	8.4	7.3	6.6	6.0	-	-
	0070	-	-	24.7	22.4	19.5	17.6	15.6	14.1	12.6	11.4	9.8	8.9	7.8	7.1	6.4
	0096	42.3	37.3	33.4	29.4	26.7	23.5	21.6	19.0	16.8	14.8	13.4	11.8	10.7	-	-
	0104	-	-	43.6	38.6	34.3	30.4	27.5	24.4	22.2	19.7	17.3	15.4	13.8	12.2	11.1
	0136	73	67	57	52	45.2	41.6	36.5	33.6	28.5	26.2	22.7	20.9	18.9	-	-
	0151	-	-	77	68	60	53	48.1	42.4	38.9	34.2	30.4	26.7	24.2	21.3	19.3
	0179	125	111	98	88	79	70	64	57	49.7	44.2	39.5	35.2	32.0	-	-
	0200	-	-	118	107	93	84	74	68	60	55	46.8	42.6	37.2	33.9	30.8
	0234	197	180	153	140	123	112	99	91	77	71	62	56	51	-	-
	0257	-	209	187	163	146	130	117	105	94	82	74	65	59	53	47.4
	0294	-	-	214	189	166	147	133	117	107	95	84	74	67	59	54
	0312	304	278	237	216	189	173	153	140	119	109	95	87	79	-	-
	0355	-	311	272	242	211	194	169	156	137	122	107	97	85	77	-

Actual ratio (i)

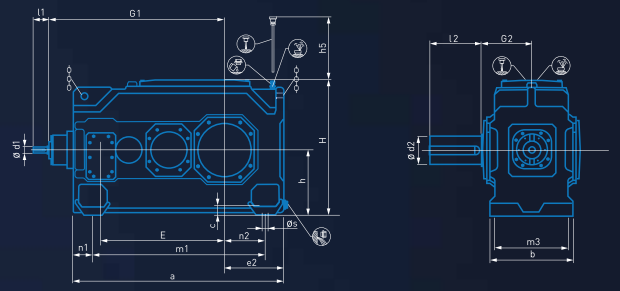
Nominal ratio (iN)		80	90	100	112	125	140	160	180	200	224	250	280	315	355	400
Size	0063	78.7	86.7	99.9	110.1	124.8	137.6	154.6	170.4	198.0	218.2	248.7	274.1	302.1	-	-
	0070	-	-	98.4	108.7	124.9	138.1	156.0	172.4	193.3	213.6	247.5	273.5	310.9	343.6	378.7
	0096	80.5	91.3	102.2	115.9	127.6	144.8	158.1	179.4	202.4	229.7	254.3	288.6	318.1	-	-
	0104	-	-	100.8	113.8	128.1	144.5	160.0	180.6	198.2	223.7	253.7	286.4	318.8	359.8	396.5
	0136	77.8	84.6	100.1	108.9	125.1	136.0	154.9	168.5	198.4	215.7	249.2	271.0	298.7	-	-
	0151	-	-	96.5	109.6	124.1	141.0	155.0	176.1	192.0	218.1	245.8	279.3	308.8	350.9	386.7
	0179	80.4	90.3	102.2	114.7	127.6	143.3	158.1	177.5	202.4	227.2	254.3	285.5	314.6	-	-
	0200	-	-	104.1	114.4	132.2	145.2	165.1	181.4	204.5	224.7	261.9	287.7	329.0	361.5	398.4
	0234	76.5	83.8	98.4	107.7	123.0	134.6	152.3	166.7	195.0	213.5	245.0	268.2	295.6	-	-
	0257	-	84.9	94.8	109.2	121.9	136.4	152.3	169.0	188.7	216.3	241.5	271.8	303.5	334.4	374.6
	0294	-	-	95.5	108.2	122.9	139.2	153.5	173.9	190.2	215.4	243.5	275.8	305.9	346.5	381.8
	0312	79.0	86.4	101.6	111.2	126.9	138.9	157.2	172.0	201.2	220.3	252.8	276.7	305.0	-	-
	0355	-	87.3	100.0	112.3	128.6	140.3	160.7	173.8	199.0	222.5	254.8	279.5	320.1	352.8	-

Oil quantity (l/max.) @ i = 180

Size	42	63	70	96	104	136	151	179	200	234	257	294	312	355
Labyrinth seals	-	12	13	21	23	35	36	59	63	102	105	125	165	187
Radial shaft seals	-	15	17	27	30	46	49	78	84	131	141	166	215	248

TECHNICAL INFORMATION

FLENDER ONE®, FOUR-STAGE BEVEL-HELICAL GEAR UNIT



Dimension (in mm) [1] ≤25 mm tolerance k6 | > 25 ... 100 mm tolerance m6 | > 100 mm tolerance n6. [2] Tolerance –0.5 mm. Shaft ends with parallel keys and parallel keyways acc. to DIN 6885/1 | Shaft ends with centering holes (form DS) acc. to DIN 332/1 (exception: ø > 130 mm)

		HIGHSPEED SHAFT			LOWSPEED SHAFT			MAIN DIMENSIONS													TRANSPORT	
		Without fan																			3x shackles acc. to DIN 82101*	Weight **
Size	Transmission range	Diam. d1 [1]	Length l1	G1	Diam. d2 [1]	Length l2	G2	Length a	Width b	Height H	Distance E	Height h [2]	Height h5	e2	m1	m3	n1	n2	ØS	c	"A" / "B" / "C"	kg
0063	80-224	28	55	615	100	210	165	690	255	450	405	230	381	205	480	220	105	100	19	28	2,5	320
	250-315	20	50																			
0070	100-280	28	55	650	110	210	165	770	255	450	440	230	380	250	560	220	105	145	19	28	2,5	365
	315-400	20	50																			
0096	80-180	35	70	725	120	210	195	845	300	540	495	280	434	250	605	260	120	130	24	35	2,5	515
	200-224	35	60																			
	250-315	25	60																			
00104	100-224	35	70	770	130	250	195	950	300	540	540	280	432	310	710	260	120	190	24	35	2,5	600
	250-280	35	60																			
	315-400	25	60																			
0136	80-180	40	80	840	140	250	235	1.000	370	620	580	320	488	300	710	320	145	155	28	40	4	845
	200-224	40	60																			
	250-315	35	60																			
0151	100-224	40	80	890	160	300	235	1.100	370	620	630	320	493	350	810	320	145	205	28	40	4	995
	250-280	40	60																			
	315-400	35	60																			
0179	80-180	50	100	1.010	170	300	270	1.200	430	740	705	380	579	345	870	370	165	180	35	50	6	1.395
	200-224	50	80																			
	250-315	40	80																			
0200	100-224	50	100	1.080	180	300	270	1.340	430	740	775	380	580	415	1.025	370	165	265	35	50	6	1.490
	250-280	50	80																			
	315-400	40	80																			
0234	80-180	60	110	1.170	200	350	335	1.400	545	860	820	440	631	405	1.195	475	105	305	35	60	8	2.070
	200-224	60	100																			
	250-315	50	100																			
0257	90-200	60	110	1.240	210	350	335	1.540	545	860	890	440	635	475	1.335	475	105	375	35	60	8	2.360
	224-250	60	100																			
	280-400	50	100																			
0294	100-224	60	110	1.275	220	380	345	1.655	545	930	925	475	673	555	1.415	460	120	435	42	70	10	2.745
	250-280	60	100																			
	315-400	50	100																			
0312	80-180	70	135	1.402	230	410	380	1.687	620	960	987	500	697	485	1.440	535	127	365	42	70	12	3.485
	200-224	70	110																			
	250-315	60	110																			
0355	90-200	70	135	1.402	240	410	380	1.778	620	1.012	1.033	500	682	530	1.530	535	128	410	42	70	12	3.800
	224-250	70	110																			
	280-355	60	110																			

* Or similar. ** Without oil filling and add-on parts.

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CONTACT

For more information and support regarding FLENDER ONE, scan the QR code or visit flender.com/one

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Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

