直交齿轮箱TSG系列
Right angle gearbox

冷却水塔专用齿轮箱
TCT系列
Gearbox TCT series
for Cooling Tower

橡塑胶专用齿轮箱
Gearbox TEX series
for extruder machine

机器人关节用RV减速机
RV Gearbox for robot

摆线减速机
Cycloidal Speed Reducer

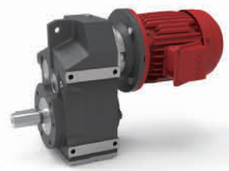
行星减速机
Planetary Speed Reducer

水泥搅拌齿轮箱
Concrete mixture drive

TK斜齿轮
伞齿轮减速电机
TK Helical
Bevel Geared Motor

TR斜齿轮
减速电机
TR Helical
Geared Motor

TS斜齿轮
蜗轮蜗杆减速电机
TS Helical
Worm Geared Motor



TF平行轴
斜齿轮减速电机
TF Parallel Shaft
Helical Geared Motor

台南总部
台南科学园 · 善化区
传仕精密机械股份有限公司

- 电话：+886-6-5818117
- 传真：+886-6-5819117
- evachen@transcyko.com
- 台南市善化区兴农路69巷31弄17号 74160

南京制造中心

南京传仕重工科技有限公司

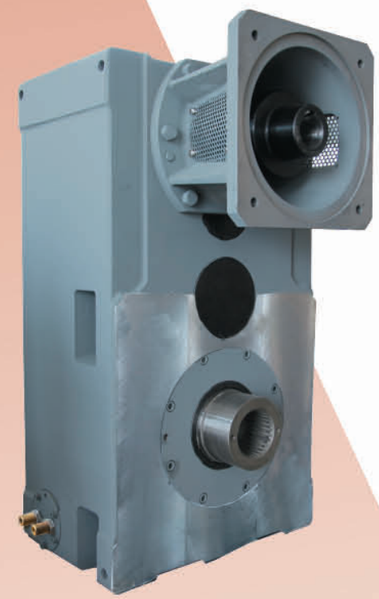
- 电话：+86-025-566-07388
- 传真：+86-025-566-03188
- emma@transcyko-transtec.com
- 南京市溧水区和凤机电产业园凤鸣路28号 211216

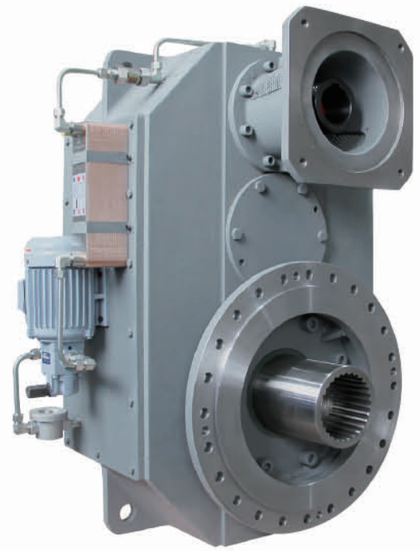
NO.TRANSCYKO-2020-10-TIN/KIN

TRANSCYKO®

注塑机TIN/KIN系列专用齿轮箱

TIN/KIN Series Gearbox for Injection Machine





专业减速机制造商

低背隙摆线减速机 (RV)
斜齿轮和伞齿轮减速机
摆线减速机和衍生品
行星减速机

南京传仕重工科技有限公司
传仕精密机械股份有限公司

www.transcyko.com
www.transcyko.com.cn

传仕精密股份有限公司创立于 1982 年，是一家专注于减速机马达研发与制造的专业生产厂商。优良的质量及快速反应的售服，赢得诸多客户的好评。

传仕以客户为中心，质量为生命。不断地创新及不懈的奋斗，铸成公司极具生命力的文化，公司开发了摆线针轮，行星减速及硬齿面齿轮箱。广泛应用于钢铁行业，化工行业，橡塑胶行业，冷却水塔行业及机械行业等。近几年已成功研发并生产 RV 减速机，应用于机器人及工程车辆的领域。

传仕研发的不断创新、精密的加工中心、精良的测试仪器、优秀的销售团队为您提供性能优越、品质最佳的机械产品。

全电式注塑机 TIN/KIN 系列齿轮箱，节能、成型周期短、污染小、噪音值低、节约冷卻水、成型精度高、射出速度快、在原有模具做射出挤压成型和生生厚壁保压时间长的产品效果极佳。

Transmission Machinery Co., Ltd. (Transcyko) is a professional speed reducer manufacturer built in 1982, which has its own R& D team. Also due to great quality and fast responses, Transcyko is well known for positive feedback from the customers.

Transcyko is customer-centered. First priority is quality. We strive for innovation and continuously hard working to better serve our customers as our main tasks. Transcyko has developed various kinds of speed reducers, including cycloidal speed reducers, planetary drives, industrial helical and bevel gearboxes specialized in plastic, rubber, automation, robotics, steel, chemistry, cooling tower, and other constructional and industrial use.

Transcyko never gives up in innovation, best quality of speed reducers by using updated CNC machining centers, precise measuring machines along with our best sales and technical teams.

Our KIN/KIN series has the benefits of saving electricity, short molding cycle, less pollution, low noise, saving water waste, high molding precision, fast injection speed, which achieved excellent performance to made injection extrusion forming and produce thick wall longer dwell time products.

一般事项

TIN/KIN 齿轮箱主要是为了驱动射出机上的塑化螺杆而开发的。这些拥有平行轴的齿轮箱，由于其特殊的配置设计和制造，很适合用于高扭矩的传输以及承受高速运转，不仅噪音低而且提供超过 95% 以上的工作效率。

在输入（电动马达）和输出（连接驱动螺杆和料管）的黄金距离设计采用三组齿轮（亦即 3 段减速设计），是为使得入力之间的空间足以整合包括马达、齿轮箱、螺杆和料管完整之系统成一“U”型设计，以节省空间并能发挥最大效益。

外箱

齿轮箱的外箱材质为灰口铸铁 FC250 或球墨铸铁 FCD450 或钢制箱体。

齿轮

齿轮是斜齿设计，材质为 18CrNiMo7-6。它的齿轮加工是根据 DIN6（或以上）品质标准，以确保最低噪音和高效率。

轴承

此系列的齿轮箱使用进口锥度或调芯轴承，均有世界一流制造商所制。

马达法兰和驱动轴

（可直接取代传统的油压系统）

为了便于组装 TIN 系列的齿轮箱于射出机上，马达法兰和入力轴为标准配备，其连接方式与传统的油压马达系统相同。

这种设计让客户能在很短的时间内不用任何机器上的修改即可将传统油压系统替换为电动机械传动方式。

另可依据客户的图面要求，制造特殊的马达法兰和入力轴的齿轮箱。

出入部分的法兰是采用铸铁制的，而出力轴则采用调质式的合金钢材所制造而成。

使用系数

此目录上所显示的传输功率是依据使用系数 1 为基本考量。为选择最适当之齿轮箱，我

General notes

The gearboxes of the TIN/KIN series have been developed for the driving of plastifying screws for injection moulding presses. These gearboxes with parallel arranged axes, due to their special configuration provided during design and construction, are suitable to transmit elevated torque rates and to receive high input revolutions, causing only a low noise level and offering a service ratio over 95%. The great distance between input (electric motor) and output (connection with drive-screw and cylinder) designed by using 3 toothed gear pairs avoids any problem of interference between the different components, The special execution in U shape optimizes the overall dimensions of the entire system of motor/gearbox/drive-screw and plastifying cylinder.

Casing

The casing of the gearboxes is made of grey cast-iron FC250 or ductile cast iron FCD450 or welded steel.

Gears

The gears are made of case-steel type 18CrNiMo7-6 and have a helical toothing. The profile is ground to DIN6 quality so to ensure the lowest noise level and an efficient use.

Bearings

The gearboxes of this series are provided with taper roller bearings or spherical roller bearings of excellent makers.

Flanges and drive shafts

(interchangeable with the hydraulic system) In order to facilitate mounting of the gearboxes of the TIN-P3 series to the injection presses, the standard version is supplied completely with flange and drive-shaft having the same fittings which are normally used for the typical hydraulic motor systems. This construction enables the customer to build the electromechanical solution within a short time without any modification on the machine, thus having an alternative solution to the hydraulic version, On request, the gearboxes can be supplied with special flange and drive-shaft according to the customer's drawing. The connection flanges on the output are made of nodular cast-iron and the output shafts are made of tempered alloy steel.

Service factor

The transmittable power rates shown in this catalog have been calculated considering a service factor=1. For best dimensioning

们建议选择使用系数在 1.35 到 2 之间的齿轮箱。

润滑系统

TIN/KIN 系列的齿轮箱常用的组装连结方式为 W1 的安装位置（齿轮箱是直立式而入力轴是在上方与机台平行）。

在这个安装位置，齿轮箱仅需溅式润滑即可正确运作。但为妥善控制操作温度，建议对 280 至 450 较大型号的齿轮箱，使用马达泵浦进行强制润滑，此方式可降低齿轮箱内的油量高度，进而降低温度，而且可以确保入力轴的轴承可以有充分的润滑。

齿轮箱的箱体附有注油孔盖，洩溢油栓以及油面指示器。为确保运输的安全关系，所有的齿轮箱交货时均不附润滑油。

因此

请注意：齿轮箱必须在试机前先补充适量的润滑油。

第一次的更换润滑油必须在 300 个工作小时后为之（试运转时期）。而后每次更换润滑油则必须在每 4000 个工作小时后进行。

of the gearbox, we suggest when selecting the gearbox type to assume a service factor between 1.35 and 2.

LUBRICATION

The gearboxes of the TIN/KIN series normally will be used in the mounting position W1(Gearbox in vertical position with input shaft horizontally at the top).
In this mounting position the gearbox works correctly with only splash lubrication.
However, for improving the operation temperature, for the bigger gearbox sizes for 280 to 450 a forced lubrication is recommended by means of a motor pump which is able to reduce the temperature by lowering the oil-level in the casing, however always ensuring a correct lubrication of the bearings on the high-speed shaft.
The gearbox casing has a filler cap with breather, a drain plug and an oil-level indicator.
For transport reasons, all gearboxes are shipped without oil.

Therefore

ATTENTION:Right amount lubricating oil must be filled before test-running the gearbox.

The first time oil changing must be carried out after 300 operation hours (run-in period). Next oil-changes must be done every 4000 operation hours.

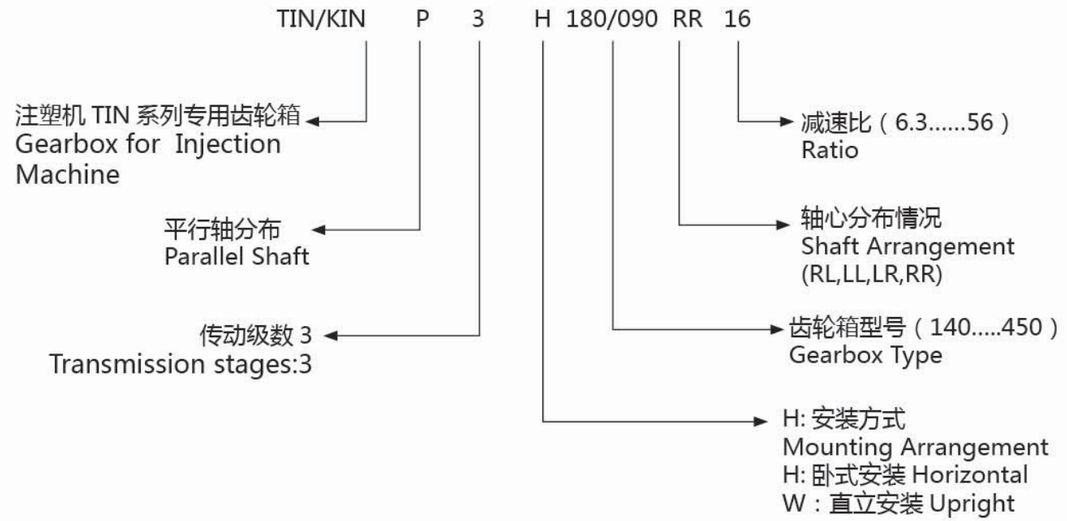
原动机使用系数 Load Service factor SF

每天运行时间 Daily running time	4 hours			8 hours			16 hours			24 hours		
每小时启动次数 Operations per hour	<10	100-200	>200	<10	100-200	>200	<10	100-200	>200	<10	100-200	>200
I	0.7	0.8	1	0.9	1	1.1	1	1.1	1.2	1.2	1.3	1.5
II	1	1.1	1.3	1.1	1.2	1.3	1.2	1.4	1.5	1.4	1.5	1.6
III	1.3	1.4	1.5	1.4	1.5	1.6	1.5	1.6	1.7	1.6	1.7	1.8

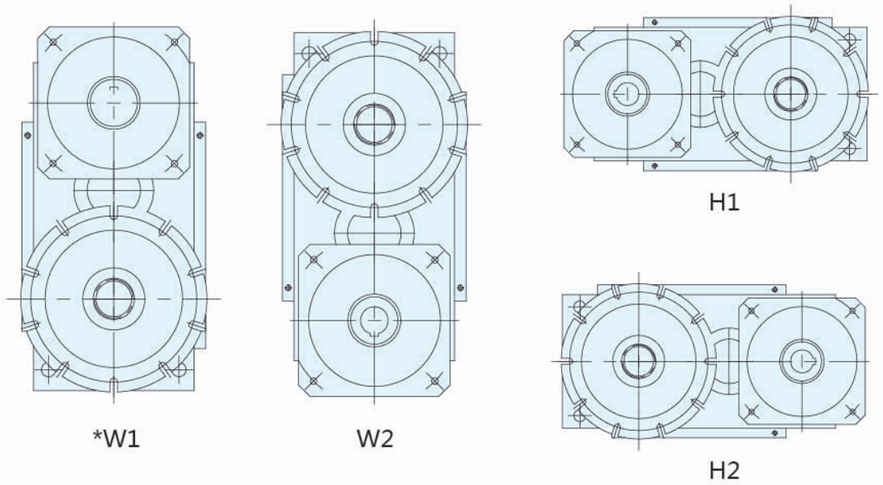
I = 均匀载荷·II = 中等质量的不均匀载荷·III = 较大质量的不均匀载荷
I = Even load · II = Uneven load, medium masses · III = Uneven load, greater masses

原动机使用系数是选择齿轮尺寸时需要考虑的，是指齿轮在各种工况下，例如负载类型，运行时间，运行频率，输出速度等。根据我们的经验，24 小时运行时选择齿轮时必须考虑 fB = 1.5。
The load Service factor fB refers to the various operating conditions of the gear, such as type of load, running time, operation frequency, output speed etc., and is therefore imperative when choosing the gear size. Based on our experience, a load factor fB=1.5 at 24-hour operation must be considered when choosing the gear.

型号表示方法
Model Representation



安装方式
Mounting Arrangement



* 标准方向 Standard Position

n1 rpm	140					160					180					200				
	i	n2 rpm	MN Nm	PN kW	Pt kW	i	n2 rpm	MN Nm	PN kW	Pt kW	i	n2 rpm	MN Nm	PN kW	Pt kW	i	n2 rpm	MN Nm	PN kW	Pt kW
2600	6,3	413	3255	138	22•	6,3	413	4079	181	30•	6,3	413	5500	248	40•	6,3	413	8395	374	51•
2200		349	3357	120	22•		349	4206	158	30•		349	5672	216	40•		349	8658	326	51•
1800		286	3374	99	22•		286	4227	130	30•		286	5700	178	40•		286	8701	268	51•
1500		238	3391	83	22•		238	4248	109	30•		238	5729	149	40•		238	8745	225	51•
2600	8	325	4015	138	22•	8	325	5366	181	30•	8	325	7225	248	40•	8	325	11010	374	51•
2200		275	4141	120	22•		275	5534	158	30•		275	7451	216	40•		275	11353	326	51•
1800		225	4162	99	22•		225	5562	130	30•		225	7488	178	40•		225	11411	268	51•
1500		188	4183	83	22•		188	5590	109	30•		188	7526	149	40•		188	11468	225	51•
2600	10	260	4397	120	22•	10	260	6551	181	30•	10	260	8933	244	40•	10	260	12697	353	51•
2200		220	4533	104	22•		220	6756	158	30•		220	9212	213	40•		220	13094	308	51•
1800		180	4556	86	22•		180	6789	130	30•		180	9258	175	40•		180	13160	253	51•
1500		150	4580	72	22•		150	6824	109	30•		150	9305	147	40•		150	13226	212	51•
2600	12.5	208	4510	103	22•	12.5	208	6373	145	30•	12.5	208	9172	207	40•	12.5	208	12716	270	51•
2200		176	4651	90	22•		176	6572	126	30•		176	9458	180	40•		176	13114	236	51•
1800		144	4675	74	22•		144	6605	104	30•		144	9507	148	40•		144	13180	194	51•
1500		120	4699	62	22•		120	6639	87	30•		120	9554	124	40•		120	13245	162	51•
2600	16	163	4623	82	22•	16	163	6570	113	30•	16	163	9443	158	40•	16	163	12771	222	51•
2200		138	4768	72	22•		138	6775	99	30•		138	9739	137	40•		138	13170	194	51•
1800		113	4792	59	22•		113	6809	81	30•		113	9787	113	40•		113	13236	159	51•
1500		94	4816	50	22•		94	6843	68	30•		94	9837	95	40•		94	13304	133	51•
2600	20	130	4650	62	22•	20	130	6704	93	30•	20	130	9127	130	40•	20	130	12959	179	51•
2200		110	4796	54	22•		110	6913	81	30•		110	9412	114	40•		110	13364	156	51•
1800		90	4819	45	22•		90	6949	67	30•		90	9459	94	40•		90	13432	129	51•
1500		75	4844	37	22•		75	6983	56	30•		75	9507	78	40•		75	13500	108	51•
2600	25	104	4504	51	22•	25	104	6357	69	30•	25	104	9203	99	40•	25	104	12474	137	51•
2200		88	4644	45	22•		88	6556	61	30•		88	9491	86	40•		88	12864	120	51•
1800		72	4668	37	22•		72	6588	50	30•30•		72	9539	71	40•		72	12928	98	51•
1500		60	4692	31	22•		60	6622	42	30•		60	9587	59	40•		60	12994	82	51•
2600	31.5	83	4530	39	22•	31.5	83	6536	58	30•	31.5	83	9458	81	40•	31.5	83	12833	114	51•
2200		70	4672	34	22•		70	6740	51	30•		70	9754	71	40•		70	13234	99	51•
1800		57	4695	28	22•		57	6774	42	30•		57	9804	58	40•		57	13302	82	51•
1500		48	4718	23	22•		48	6808	35	30•		48	9852	49	40•		48	13368	68	51•
2600	40	65	4563	30	22•	40	65	6583	45	30•	40	65	9494	62	40•	40	65	12886	89	51•
2200		55	4705	27	22•		55	6788	40	30•		55	9790	54	40•		55	13289	78	51•
1800		45	4729	22	22		45	6823	33	30•		45	9840	45	40•		45	13356	64	51•
1500		37,5	4753	18	22		37,5	6857	27	30		37,5	9889	37	40		37,5	13423	53	51•
2600	50	52	4345	24	22•	50	52	6622	36	30•	50	52	9355	48	40•	50	52	12979	69	51•
2200		44	4481	21	22		44	6829	31	30•		44	9647	42	40•		44	13385	60	51•
1800		36	4504	18	22		36	6870	26	30		36	9695	34	40		36	13452	49	51
1500		30	4525	15	22		30	6898	21	30		30	9745	29	40		30	13519	41	51

请注意：

- 在室温 30℃时所能承受的最大热功率，若热功率需求大于表列数据时，必须选用强制冷却系统。
- 上述表列 PN 值为额定马力在安全系数等于 1 的基础下所计算出的数值。计算最大可使用马力时请考量安全系数需为 1.5，若入力转速高于 2600rpm 时请与我们技术部门联络。

ATTENTION:

•Maximum input power at ambient temperature of 30℃ . If a higher input power is required, please ask for forced cooling.

The indicated PN is the nominal power calculated with factor sf(agma)=1.To calculate the maximum trasmittable power please consider service factor SF(AGMA)=1,5.For imput speed higher than 2600 rpm please conctacs up.

TRANSCYKO® TIN
TIN 马力及额定扭矩表
Powers(KW) & Nominal Torque

n1 rpm	225					250					280					320				
	i	n2 rpm	MN Nm	PN kW	Pt kW	i	n2 rpm	MN Nm	PN kW	Pt kW	i	n2 rpm	MN Nm	PN kW	Pt kW	i	n2 rpm	MN Nm	PN kW	Pt kW
2600	6,3	413	11990	513	67•	6,3	413	16992	752	85•	6,3	413	24254	1026	108•	6,3	413	30490	1351	139•
2200		349	12365	448	67•		349	17523	565	85•		349	25011	895	108•		349	31443	1179	139•
1800		286	12427	368	67•		286	17612	540	85•		286	25138	736	108•		286	31602	970	139•
1500		238	12490	308	67•		238	17700	452	85•		238	25264	617	108•		238	31761	812	139•
2600	8	325	14616	513	67•	8	325	22535	752	85•	8	325	29915	1026	108•	8	325	40119	1351	139•
2200		275	15073	448	67•		275	23240	656	85•		275	30849	895	108•		275	41373	1179	139•
1800		225	15149	368	67•		225	23357	540	85•		225	31005	736	108•		225	41582	970	139•
1500		188	15225	308	67•		188	23475	452	85•		188	31161	617	108•		188	41791	812	139•
2600	10	260	16949	479	67•	10	260	24214	671	85•	10	260	33398	909	108•	10	260	48976	1351	139•
2200		220	17478	418	67•		220	24971	586	85•		220	34441	793	108•		220	50507	1179	139•
1800		180	17568	343	67•		180	25097	482	85•		180	34615	652	108•		180	50762	970	139•
1500		150	17656	288	67•		150	25223	403	85•		150	34789	546	108•		150	51017	812	139•
2600	12.5	208	17482	380	67•	12.5	208	24134	542	85•	12.5	208	34318	783	108•	12.5	208	51134	1160	139•
2200		176	18029	332	67•		176	24889	473	85•		176	35391	683	108•		176	52733	1012	139•
1800		144	18120	273	67•		144	25014	389	85•		14	35569	562	108•		144	53000	833	139•
1500		120	18211	229	67•		120	25140	326	85•		120	35748	471	108•		120	53266	697	139•
2600	16	163	17618	296	67•	16	163	24432	424	85•	16	163	34766	596	108•	16	163	50894	876	139•
2200		138	18168	258	67•		138	25196	370	85•		138	35852	520	108•		138	52485	765	139•
1800		113	18260	212	67•		113	25323	304	85•		113	36033	427	108•		113	52750	629	139•
1500		94	18352	178	67•		94	25450	255	85•		94	36214	358	108•		94	53015	527	139•
2600	20	130	17553	233	67•	20	130	24898	348	85•	20	130	35650	475	108•	20	130	52142	723	139•
2200		110	18101	204	67•		110	25675	303	85•		110	36764	415	108•		110	53772	631	139•
1800		90	18192	167	67•		90	25804	250	85•		90	36950	341	108•		90	54043	519	139•
1500		75	18284	140	67•		75	25934	209	85•		75	37135	286	108•		75	54314	435	139•
2600	25	104	17552	188	67•	25	104	23901	262	85•	25	104	34607	394	108•	25	104	51876	559	139•
2200		88	18100	164	67•		88	24647	228	85•		88	35689	344	108•		88	53497	488	139•
1800		72	18192	135	67•		72	24772	188	85•		72	35869	283	108•		72	53767	401	139•
1500		60	18283	113	67•		60	24897	157	85•		60	36049	237	108•		60	54037	336	139•
2600	31.5	83	18662	151	67•	31.5	83	24522	218	85•	31.5	83	34909	299	108•	31.5	83	51004	453	139•
2200		70	18224	132	67•		70	25289	190	85•		70	36000	261	108•		70	52598	395	139•
1800		57	18316	109	67•		57	25416	156	85•		57	36183	214	108•		57	52863	325	139•
1500		48	18408	91	67•		48	25544	131	85•		48	36364	179	108•		48	53129	272	139•
2600	40	65	17765	118	67•	40	65	24692	171	85•	40	65	35138	235	108•	40	65	57304	355	139•
2200		55	18320	103	67•		55	25464	149	85•		55	36236	205	108•		55	52969	309	139•
1800		45	18412	85	67•		45	25592	123	85•		45	36419	168	108•		45	53236	254	139•
1500		37.5	18505	71	67•		37.5	25720	103	85•		37.5	36602	141	108•		37.5	53505	213	139•
2600	50	52	18166	100	67•	50	52	24813	142	85•	50	52	35314	195	108•	50	52	51761	279	139•
2200		44	18733	87	67•		44	25589	124	85•		44	36417	171	108•		44	53379	243	139•
1800		36	18828	72	67•		36	25718	102	85•		36	36601	140	108•		36	53648	200	139•
1500		30	18922	60	67		30	25847	85	85		30	36785	117	108•		30	53917	167	139•

请注意：

- 在室温 30℃时所能承受的最大热功率，若热功率需求大于表列数据时，必须选用强制冷却系统。
- 上述表列 PN 值为额定马力在安全系数等于 1 的基础下所计算出的数值。计算最大可使用马力时请考量安全系数需为 1.5，若入力转速高于 2600rpm 时请与我们技术部门联络。

ATTENTION:

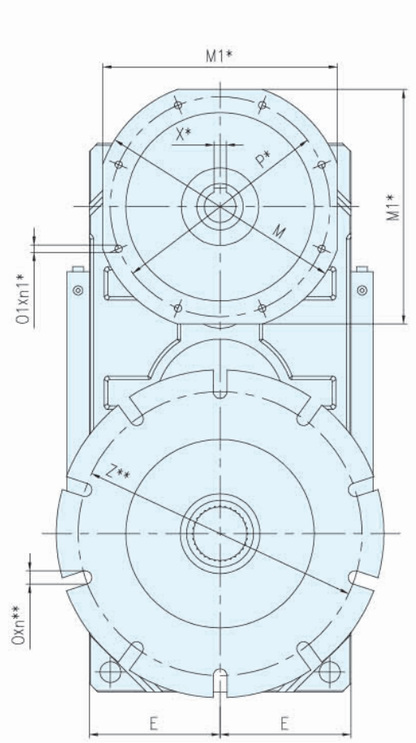
•Maximum input power at ambient temperature of 30℃ . If a higher input power is required, please ask for forced cooling.

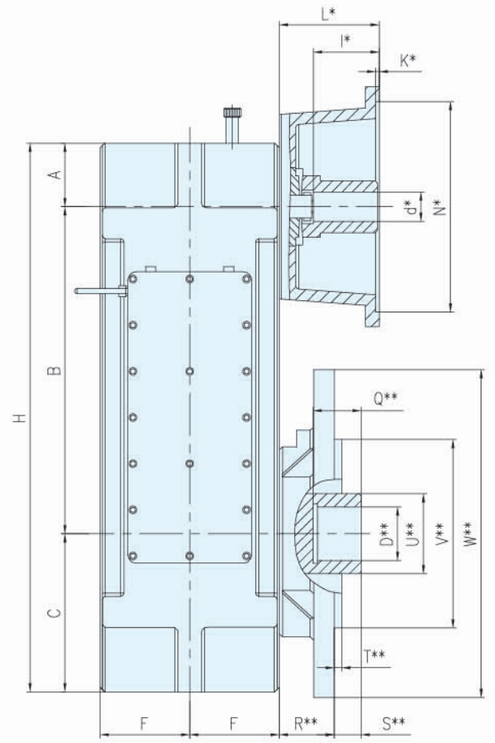
The indicated PN is the nominal power calculated with factor sf(agma)=1.To calculate the maximum trasmittable power please consider service factor SF(AGMA)=1,5.For imput speed higher than 2600 rpm please conctacs up.

n1 rpm	360					400					450				
	i	n2 rpm	MN Nm	PN kW	Pt kW	i	n2 rpm	MN Nm	PN kW	Pt kW	i	n2 rpm	MN Nm	PN kW	Pt kW
2200		349	42777	1631	170•		349	64328	2412	211•		349	84172	3154	274•
1800	6,3	286	42993	1341	170•	6,3	286	64653	1984	211•	6,3	286	84596	2594	274•
1500		238	43210	1123	170•		238	64978	1661	211•		238	85022	2172	274•
2200		275	56190	1631	170•		275	80167	2412	211•		275	106099	3154	274•
1800	8	225	56474	1341	170•	8	225	80571	1984	211•	8	225	106635	2594	274•
1500		188	56758	1123	170•		188	80976	1661	211•		188	107170	2172	274•
2200		220	70650	1631	170•		220	103718	2364	211•		220	137791	3154	274•
1800	10	180	71008	1341	170•	10	180	104243	1944	211•	10	180	138487	2594	274•
1500		150	71364	1123	170•		150	104767	1628	211•		150	139182	2172	274•
2200		176	73384	1398	170•		176	104635	1924	211•		176	131415	2542	274•
1800	12.5	144	73754	1150	170•	12.5	144	105164	1582	211•	12.5	144	132079	2090	274•
1500		120	74125	963	170•		120	105692	1325	211•		120	132742	1750	274•
2200		138	75671	1068	170•		138	104276	1475	211•		138	143847	2167	274•
1800	16	113	76053	878	170•	16	113	104802	1213	211•	16	113	144574	1782	274•
1500		94	76435	736	170•		94	105329	1016	211•		94	145299	1493	274•
2200		110	73234	885	170•		110	106987	1212	211•		110	159150	1792	274•
1800	20	90	73605	728	170•	20	90	107528	997	211•	20	90	159953	1474	274•
1500		75	73974	609	170•		75	108068	835	211•		75	160757	1234	274•
2200		88	74040	671	170•		88	103610	994	211•		88	148941	1343	274•
1800	25	72	74414	552	170•	25	72	104134	818	211•	25	72	149692	1104	274•
1500		60	74789	462	170•		60	104657	685	211•		60	150444	925	274•
2200		70	76167	551	170•		70	104896	751	211•		70	145931	1112	274•
1800	31.5	57	76551	453	170•	31.5	57	105426	618	211•	31.5	57	146669	914	274•
1500		48	76936	380	170•		48	105956	517	211•		48	147405	766	274•
2200		55	76809	427	170•		55	107553	652	211•		55	147155	873	274•
1800	40	45	77197	351	170•	40	45	108096	536	211•	40	45	147898	718	274•
1500		37.5	77585	294	170•		37.5	108639	449	211•		37.5	148641	601	274•
2200		44	75646	328	170•		44	100340	466	211•		44	148198	674	274•
1800	50	36	76028	269	170•	50	36	100847	383	211•	50	36	148947	555	274•
1500		30	76410	226	170•		30	101354	321	211•		30	149696	465	274•
2200		35	74131	273	170•		35	106929	378	211•		35	148855	560	274•
1800	63	29	74505	225	170•	63	29	107468	311	211•	63	29	149608	461	274•
1500		24	74880	188	170•		24	108009	260	211•		24	150359	386	274•

请注意：
- 在室温 30℃时所能承受的最大热功率，若热功率需求大于表列数据时，必须选用强制冷却系统。
- 上述表列 PN 值为额定马力在安全系数等于 1 的基础下所计算出的数值。计算最大可使用马力时请考量安全系数需为 1.5，若入力转速高于 2600rpm 时请与我们技术部门联络。

ATTENTION:
•Maximum input power at ambient temperature of 30℃ . If a higher input power is required, please ask for forced cooling.
The indicated PN is the nominal power calculated with factor sf(agma)=1.To calculate the maximum trasmittable power please consider service factor SF(AGMA)=1,5.For imput speed higher than 2600 rpm please conctacs up.





Size 尺寸	A	B	C	E H10	F	H	Weight kg	Oil kg
140	70	342	160	140	118	572	159	10
160	90	385	180	160	133	655	228	13
180	100	432	200	180	148	732	354	20
200	100	485	225	200	165	810	448	28
225	112	545	250	225	180	907	660	41
250	125	610	280	250	203.5	1015	920	52
280	140	685	315	280	230	1140	1192	86
320	160	770	355	315	252	1285	1711	110
360	-	-	-	-	-	-	-	-
400	-	-	-	-	-	-	-	-
450	-	-	-	-	-	-	-	-

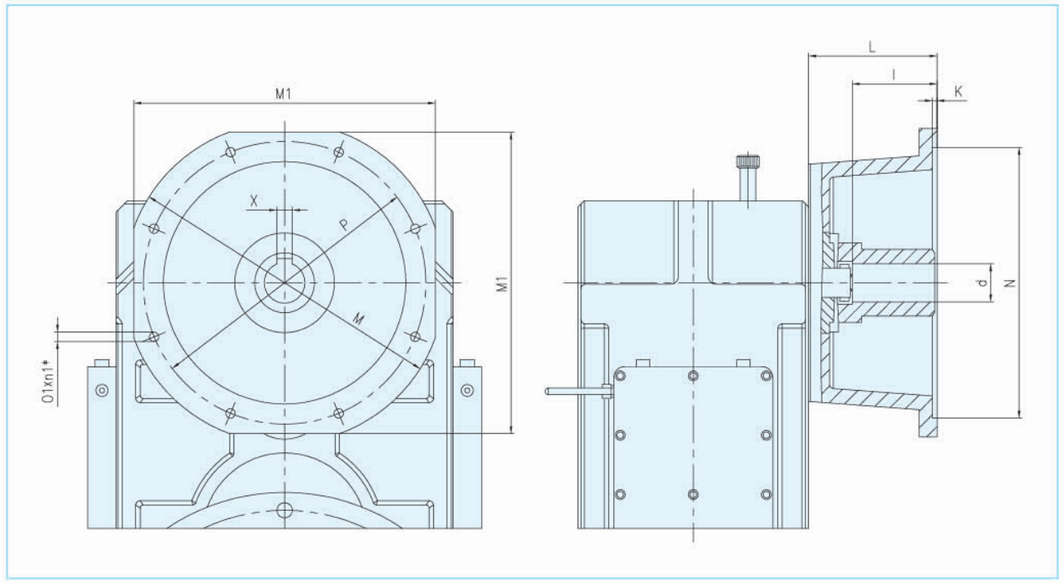
* 马达连接的法兰（MC）尺寸请参照第九页
Flange size for motor mounting(MC)

** 出力轴连接的法兰（OF）尺寸请参照第十页
Otput Flange size (OF)

请注意：上述重量为参考数据，会因减速比、法兰大小和其他的配备不同而改变。

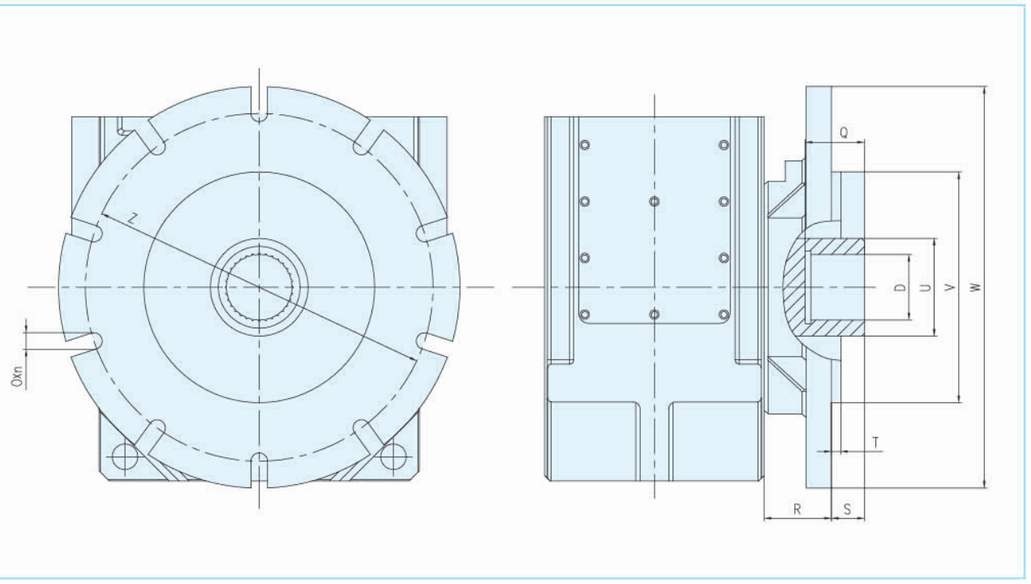
表列之油量是依据 W1 落地方向溅式润滑的齿轮箱為基准，其他落地方向所需之油量可依方向的不同而降低，也可因强制润滑使用泵浦或马达驱动泵浦而减少。

ATTENTION: the weights have tobe considered a guideline and may vary according to the reduction ratio, and the accessories required.
The oil quantity has to be considered as reference and is applicable for gearboxes in mounting position W1 and splash lubrication. The quantity varies according to the mounting position and decreases if the lubrication is of the forced type when a pump or a motor-driven pump is used.



外观尺寸 Overall Dimensions

型号	联轴器与连接座 Coupling&Bell										TIN-P3 齿轮箱 Gearboxes TIN3										
	M	M1	P	N	K	Oxn1	d	X	I	L	140	160	180	200	225	250	280	320	360	400	450
MC2A	250	200	215	180	5	M12x4	28	8	60	-	×	×									
MC2B							32	10	80		×	×									
MC3C	300	260	265	230	5	M12x4	38	10	80	150	×	×									
MC3D							42	12	110		×	×	×								
MC4D	350	270	300	250	6	M16x4	42	12	110	160	×	×	×	×							
MC4E							48	14	110		×	×	×	×							
MC4F							55	16	110			×	×	×							
MC5F	400	320	350	300	6	M16x4	55	16	110	180		×	×	×	×	×	×	×			
MC5G							60	18	140			×	×	×	×	×	×	×			
MC5H							65	18	140			×	×	×	×	×	×	×			
MC6G	450	410	400	350	8	M16x8	60	18	140	195		×	×	×	×	×	×	×			
MC6H							65	18	140				×	×	×	×	×	×			
MC6I							70	20	140					×	×	×	×	×			
MC6							-	-	-						×	×	×	×			
MC7H	550	-	500	450	8	M16x8	65	18	140	220					×	×	×	×	×	×	×
MC7I							70	20	140						×	×	×	×	×	×	×
MC7L							75	20	140						×	×	×	×	×	×	×
MC7							-	-	-								×	×	×	×	×
MC8M	660	-	600	550	8	M20x8	80	22	170	-											
MC9	800	-	740	680	9	M22x8	-	-	-	-											



外观尺寸 Overall Dimensions

出力轴法兰 “OF” OUTPUT FLANGE"OF"

Type	D DIN 5480	Oxn	Q	R	S	T	U	V h8	W	Z
OF2	32x2x14	11x10	31	60	17	8	60	145	228	204
OF3	35x2x16	11x10	33	60	14	10	65	160	255	225
OF4	40x2x18	11x10	41	60	27	10	65	175	260	232
OF5	47x2x22	13x10	43	70	28	10	70	190	300	266
OF6	55x3x17	13x10	49	70	28	10	80	220	325	290
OF7	65x3x20	15x10	58	70	38	10	90	250	370	330
OF8	75x3x24	17x10	65	70	47	10	100	290	425	380
OF9	85x3x27	19x10	70	80	48	12	120	335	500	440
OF10	100x3x32	22x10	85	90	50	12	140	400	605	540
OF11	110x3x35	26x10	90	100	50	15	170	450	660	600
OF12	150x4x36	32x12	140	180	82	15	210	450	750	650
OF13	160x5x30	-	150	-	50	-	210	-	-	-

齿轮箱与出力轴法兰之组合
MOUNTINGS OUTPUT FLANGE

TIN3/140/...	...-OF5 ...-OF6
TIN3/160/...	...-OF5 ...-OF6 ...-OF7
TIN3/180/...	...-OF6 ...-OF7 ...-OF8
TIN3/200/...	...-OF8 ...-OF9
TIN3/225/...	...-OF8 ...-OF9 ...-OF10
TIN3/250/...	...-OF9 ...-OF10
TIN3/280/...	...-OF10 ...-OF11
TIN3/320/...	...-OF11 ...-OF12
TIN3/360/...	...-OF12 ...-OF13
TIN3/400/...	... ...
TIN3/450/...	... ...

性能参数，轴距和重量
Performance data, distances between axes and weights

Gear type KIN 齿轮箱型号	Torque 扭矩	Power 功率	Axle base 轴距	Weight 重量
015	2,000	40	328	150
025	3,000	65	358	185
050	6,000	100	405	320
060	8,000	125	425	380
090	11,500	150	482	400
120	15,000	180	517	600
160	18,000	200	517	605
240	30,000	250	630	1,040
300	38,000	300	630	1,100
600	60,000	500	755	1,410

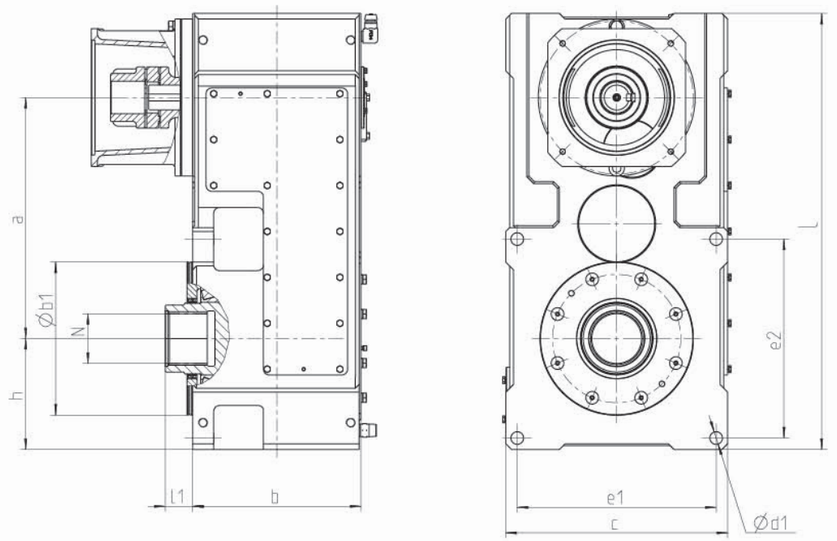
根据要求可以提供更大的扭矩和轴距
* 安全系数 fB = 1 时的最大允许扭矩。
** 重量是近似值，可能因型号而异。

Greater torques and distances between axes upon request.
* Maximum permissible torque at load factor fB = 1.
** The weights are approximations and can vary depending on the model.

油量 Oil quantities

Gear type KIN	015	025	050	060	090	120	160	240/300	600
油量（升） Oil quantity(liter)	8	14	30	29	43	60	58	115	145

表中所列的油量仅是近似值。油尺 / 油镜的标记对于加油量至关重要。
The quantity of oil stated in the table is an approximation only. The markings of the dipstick / oil sight glass are decisive for the amount of oil to be filled in.



安装尺寸 Dimensions

安装尺寸 型号 Dimenslons(mm) Gear type KIN	主要尺寸 Main dimensions									入力轴 Drive shaft 根据客户要求定制 (customer-specific)	
	a	b	c	h	l	Φb1	Φd1	e1	e2	l1	N (DIN5480)
KIN015	328	191	260	130	590	150	13.5	224	224	53	N45×2×21
KIN025	358	200	320	160	650	180	17.5	280	280	40	N55×3×17
KIN050	405	250	400	200	790	250	22	320	302	70	N65×3×20
KIN060	425	250	400	200	790	250	22	320	302	70	N65×3×20
KIN090	482	280	430	215	830	250	22	346.5	346.5	28	N85×3×27
KIN120	517	335	500	250	900	300	26	416	342	83	N85×3×27
KIN160	517	335	500	250	900	300	26	416	390	28	N120×5×22
KIN240	630	440	580	290	1140	400	33	520	520	72	N140×5×26
KIN300	630	440	580	290	1140	400	33	520	520	72	N140×5×26
KIN600	755	477	680	340	1250	450	39	590	590	86	N150×5×28

所有尺寸均参考标准型号。定制尺寸可能会有所不同。如果在技术上可行，当然可以满足特殊要求。来咨询我们吧！
All dimensions refer to the standard models. The customized dimensions may vary here above all. Special requests will of course be satisfied if they are technically available. Just ask us!

可提供与液压马达匹配的所有法兰尺寸。
Adapter flanges, pin compatible with hydraulic motors, are available for all sizes.

润滑油建议表 Recommended oil types

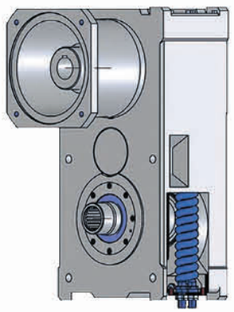
润滑油种类 Type of lubricant	用途 Application	润滑油 Lubricant			
		油品 OIL	适用室温 AMBIENT TEMPERATURE		
矿物油 Mineral oil	减速齿轮箱 Reduction gearboxes	ISO VG 220EP ISO VG 320EP	-15℃ ~+15℃ +10℃ ~+40℃		
		可替代之同等级润滑油 Corresponding Lubricants			
		Type	Brand-name	Type	Brand-name
		MELLANA OIL BLASIA	IP AGIP	MOBIL GEAR 600XP OMALA EP	MOBIL SHELL

冷却方式
TYPE OF COOLING

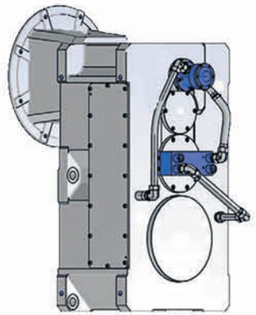
马达泵浦和热交换器
有时，产生的大量热量 (kcal) 必须被消除，因此，必须使用马达泵浦和热交换器。主要增加热交换效率的参数如下：
• 冷却水导入时的水温
• 每分钟的耗水量 (升)
• 油压泵浦每分钟的送油量 (升)
• 热交换器的大小
对上列任何一数据做调整即可解决现有的热功率问题。
这是非常有效的方式而且可满足大多数不同的需求。

Electric pump and heat exchanger
Sometimes a large heat quantity (kcal) must be dissipated.
For this purpose, an electric pump and an extemal heat-exchanger must be used. The main parameters for increasing the heat dissipation are as follows:
-Water intake temperature
-Water quantity in liters for minute
-Delivery rate in liters for minute of the oil pump
-Size of the heat exchanger
Any intervention on these parameters can resolve any existing thermal problems. This solution is very efficient and satisfies the most different requirements.

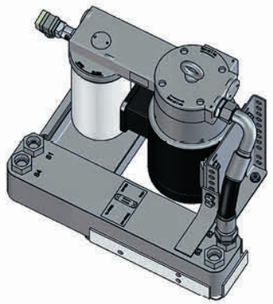
Cooling 冷却



冷却盘管
Cooling coil



泵和板式换热器
Pump and plate heat exchanger



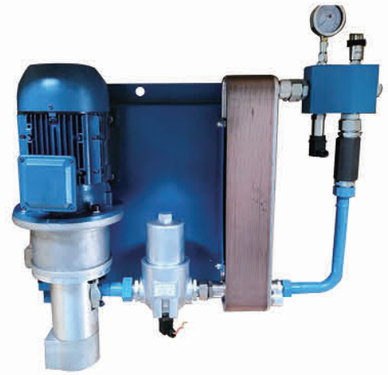
电子泵冷却
Cooling aggregates with electric pump

冷却旋管 Cooling coil

泵和板式换热器 Pump and plate heat exchanger
这种冷却原理是实现更高性能的非常有效，经济且经过验证的解决方案。
This cooling principle is a very effective, economical and proven solution for greater performances.

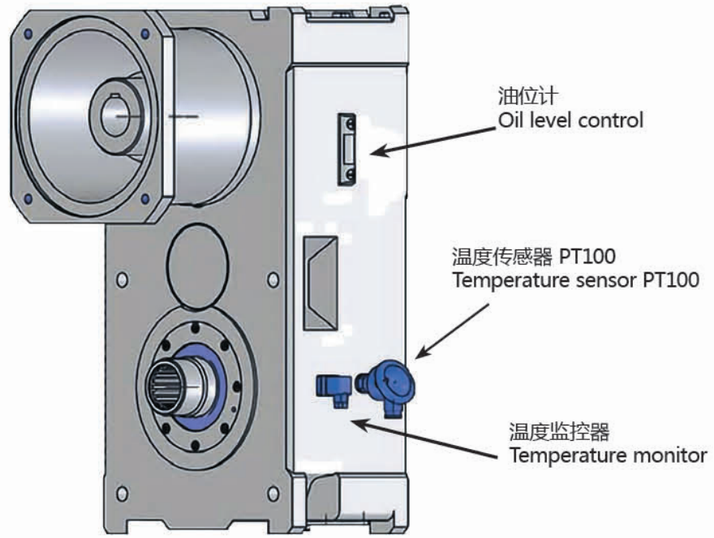
电子泵冷却 Cooling aggregates with electric pump

高性能需要合适的冷却系统。冷却的设计取决于齿轮的尺寸和所需的性能。范围从直接安装的冷却器到带有自己的水箱和所有必要监控设备的外部冷却单元。
High performances demand a suitable cooling system. The cooling is designed depending on the gear size and required performance. This ranges from the directly mounted cooler to the external cooling unit with its own tank and all the necessary monitoring devices.



Example of a pump-transfer cooler filtration unit
泵输送过滤冷却器示例

监控装置 Monitoring devices



为了实现可控的安全运行，对齿轮的监控尤为重要，尤其是为了获得更高的性能，为此使用了特殊的传感器和油温，油位，流量和速度监控器。
For a controlled and safe operation, special importance is attached to the monitoring of the gears, especially for greater performances. Special sensors and monitors for oil temperature, oil level, flow and speed are used for this.

多样的监控装置，传感器和开关有库存。
A large number of monitors, sensors and switches are available.