



NEW

Mixers for Chemical Industry



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Who we are



over **1,000** people around the world



5,000 customers worldwide



70 years of experience



50 million euros investments in new technologies and methodologies to improve manufacturing efficiency



18 affiliated companies



5 production facilities

8 assembly plants

After-sales service



Highly trained mechanics and support teams can ensure a fast and efficient after-sale service providing support worldwide.

Digital support



Rossi Drawings, Selector and Download area enable real-time access to your order tracking, invoices, spare part tables download and contact to our service. Fast and easy online access is available 24/7, in 5 languages.

Visit us at
www.rossi.com

3 years warranty*



Our drive is to innovate and boost operations by manufacturing performing, precise, reliable and high-quality products all over the world. We are always one step forward in offering and developing solutions that can satisfy an unlimited number of application needs, even in the most demanding conditions.

* As per our warranty terms.

Quality System certifications

UNI EN ISO
9001:2015

ISO
14001:2015

ISO
45001:2023

Product certifications



Global presence local service

**Local support**

Sales, customer service,
technical support, spare parts

**18 branches*****Worldwide distribution network***

*All contacts available on www.rossi.com



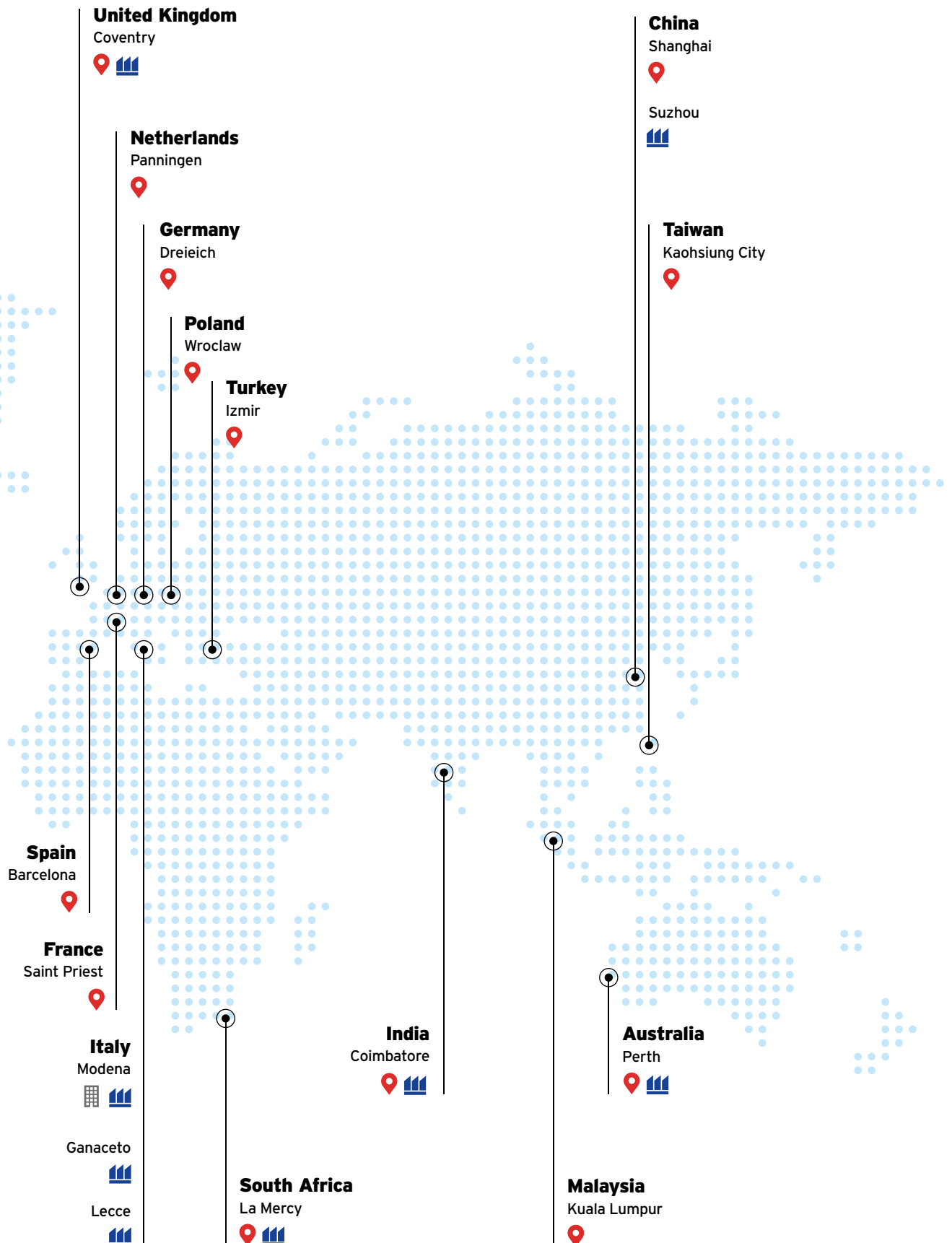
Main offices



Affiliated companies



Production facilities/Assembly plants



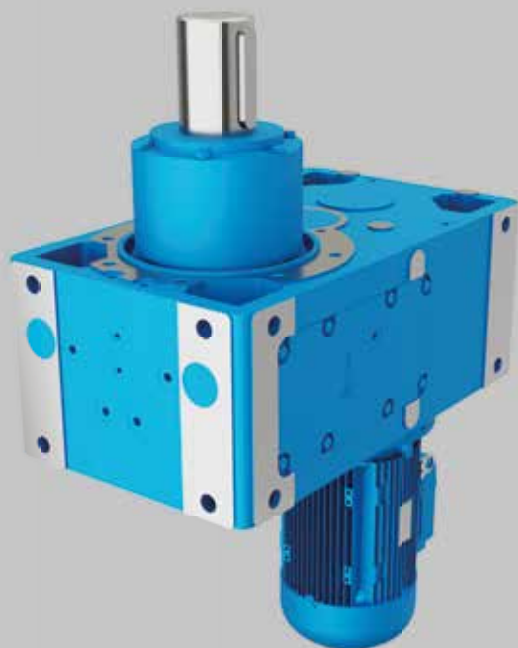
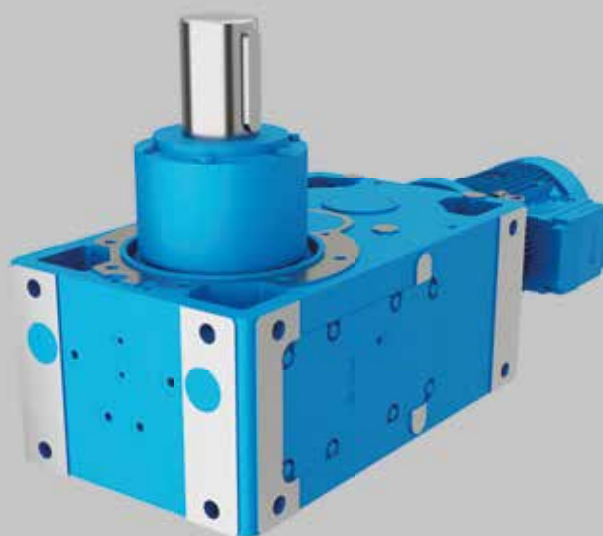
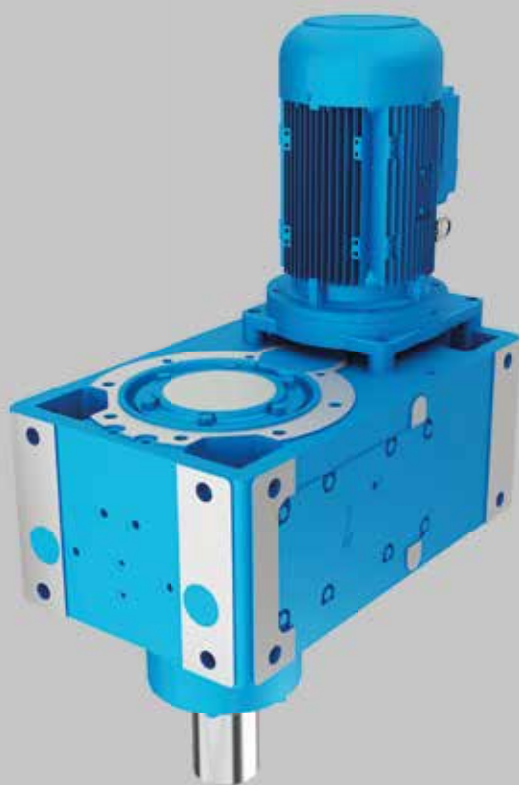
Product Overview



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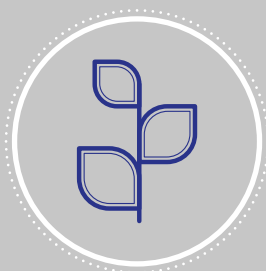
Features & Benefits





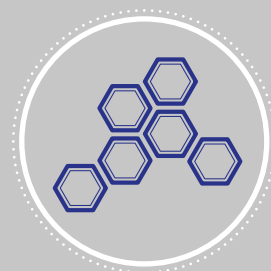
Maximum performance

We drive the heaviest applications worldwide



Sustainability

We care about environment



Modular system

For cost-effective and high quality solutions



Innovation

We are constantly thinking forward, solutions for an evolving industry



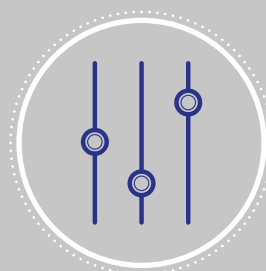
Digitalization

Rossi for You is always at your disposal for any info



Know-how

We support you through interdisciplinary know-how



Customization

Cost-effective solutions starting from standard products

Mixers for every application need

Rossi has been developing and manufacturing high-precision gearmotor solutions for mixing systems used in industrial requirements for almost 70 years. Powdery goods (dry, wet or suspended) are mixed, refined, agglomerated, dried or chemically modified.

The spiral mixing blade inside the ribbon blender initiates a three-dimensional flow of the mixing goods; creating a helical upward movement on the periphery and downward flow in the centre. This industrial mixer

guarantees very good mixing results and complete discharge. It can be used as ribbon blender for dry powder, wet suspensions as well as liquids, paste and dough.

Thanks to its cutting edge technology, Rossi products - gear reducers and electric motors - ensure top performances in terms of efficiency, and help reduce CO₂ emissions, keeping world environment safer and greener.



Helical and bevel helical gearmotors for Chemical industry



Chemical applications - Designs and dimensions

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3.1

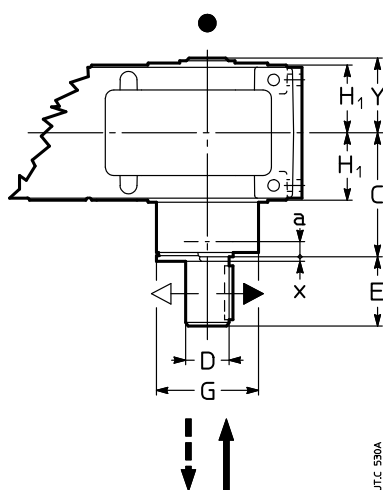
Helical gearmotors G catalog

Design for agitators, aerators, fans (sizes 125 ... 360)

This design has been specifically developed for aerators, agitators, and fans with high bending moment values (as a rough guide $\geq 0,4 \cdot M_2$).

In addition to the rigid and precise **single piece** housing, «symmetrical» **universal** mounting, **patented** keying system for motor sizes 200 ... 315 which offers easier assembly and disassembly and avoids fretting corrosion, taper roller bearings, the fundamental characteristics of this **compact, economic and reliable** design are:

- extended bearing housing to improve radial and axial load ratings (taper roller bearings) and to reduce overhangs;
- plentiful low speed shaft end diameter;
- double seals on the low speed shaft with chromium plated raceway;
- space between double seals packed with grease and top hat arrangement which acts as water splash guard for aerators and as slinger for fans;
- oil lubricated bearing on low speed shaft end side: oil-bath for lower position (V5), pump lubrication for upper position (V6) (price addition); additional stainless steel drain plug to facilitate complete **oil** drainage. All this ensures **total reliability** (gear pairs and bearings) during running and **minimum maintenance**;



● Position of the reference groove (see ch.8, 10, 12, 14 of catalog G): useful for gear reducer design and mounting position identification on catalog.

Options:

- drip proof cover for motor (standard protection IP 55);
- special paint;
- remote oil level and/or oil temperature indicator with threshold signal (sizes ≥ 160).

Combinations **2** (direction of rotation – axial load direction) are to be preferred since they permit to withstand the highest of the two F_{a2} axial loads (see following table).

ICI and C3I trains of gears not possible; for CI and C2I, the ...sin designs are not possible.

Supplementary description when ordering by **designation: design for agitators**.

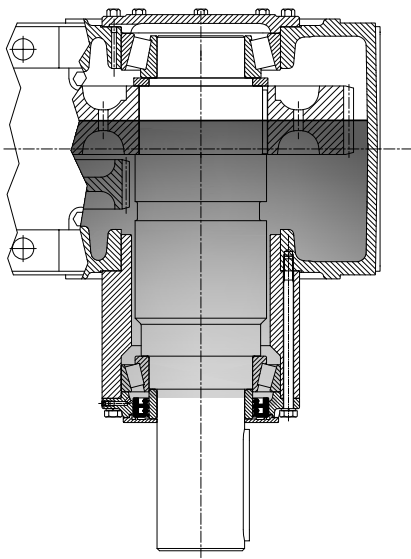
IMPORTANT. For selection of the gear reducer or gearmotor size and verification of radial and axial loads (and hence for the need of this design) **we always must be consulted: a detailed program of calculation** enables us to give a quick and reliable answer.

Size	a	C	D Ø m6	E	G Ø	x ≈	Y	Δm kg	F_{a2}			
									↓	↑	↓	↑
125	55	220	70	105	140	3	108	12	1	2	2	1
140	62	235	70	105	159	3	122	20	1	2	2	1
160	68	270	90	130	183	4	133	28	2	1	1	2
180	72	275	90	130	226	4	148	38	2	1	1	2
200	76	327	110	165	248	4	164	55	1	2	2	1
225	76	340	110	165	248	4	177	65	1	2	2	1
250	97	402	140	200	310	5	203	105	2	1	1	2
280	97	418	140	200	310	5	218	120	2	1	1	2
320, 321	110	505	180	240	388	6	250	215	1	2	2	1
360	110	523	180	240	388	6	268	250	1	2	2	1

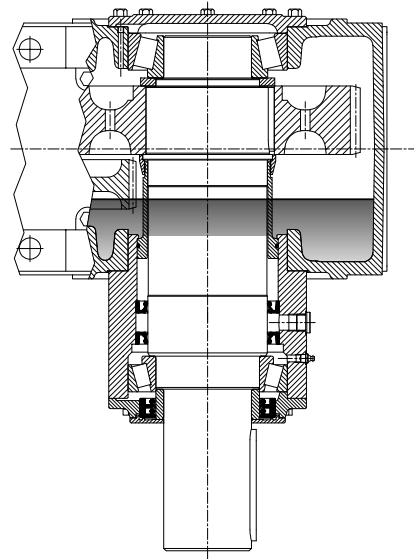
For dimension **H**, see ch. 8, 10, 12 and 14 of cat. G. Other dimensions at ch. 6 «High and low speed shaft end», cat. G.

1) Position of the center point of the bearing.

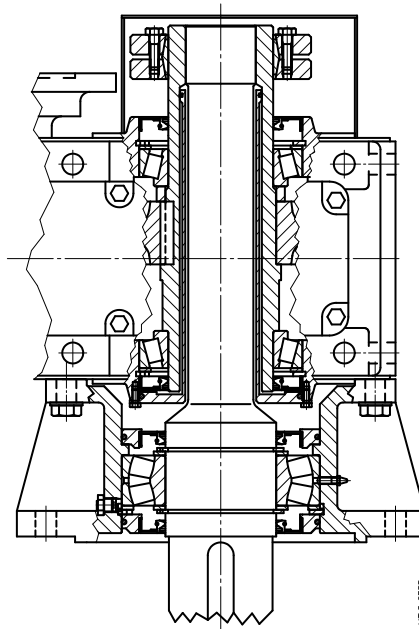
2) Thickness of protection disk.



Standard design with high oil level



Drywell design with low oil level
(external forced lubrication system)

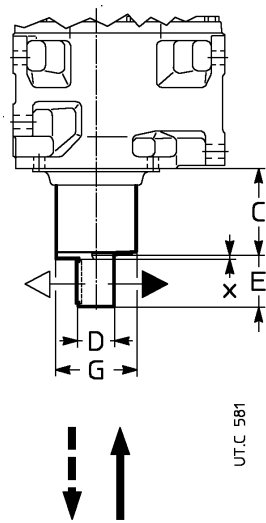


Drywell design with low oil level
(without external forced lubrication system)

UTC 2033

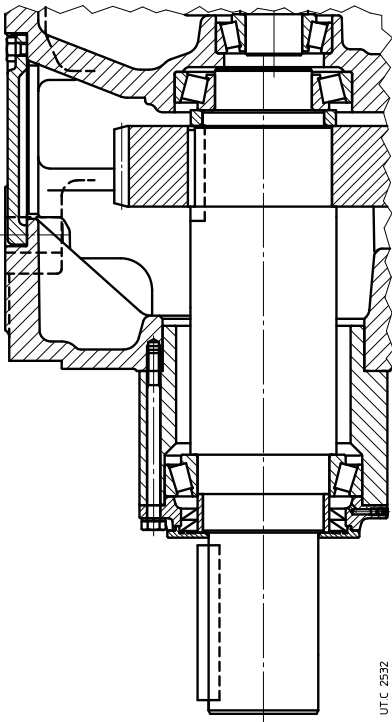
3.2

Helical inline gearmotors E catalog



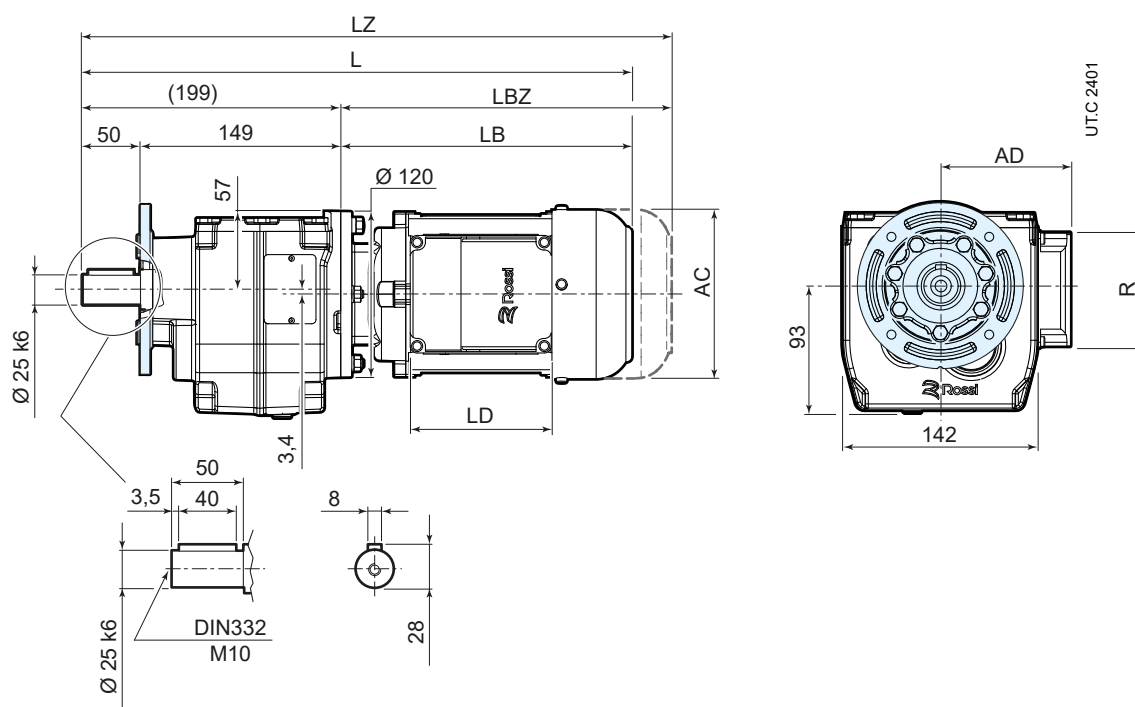
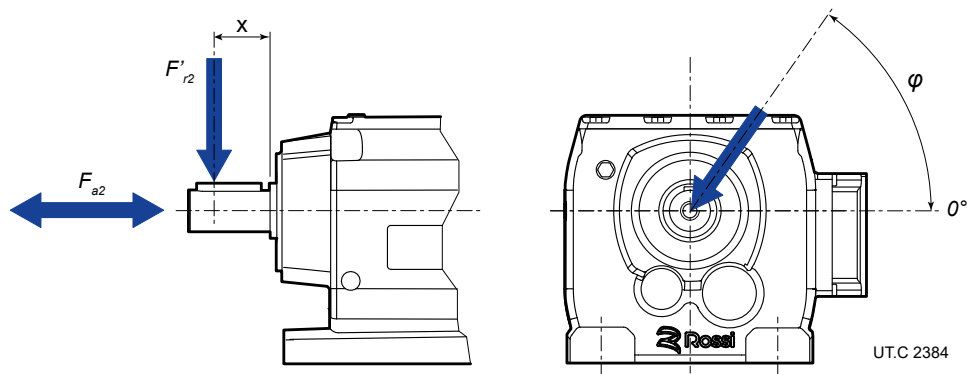
Grandezza riduttore Gear reducer size	C	D Ø	E	G Ø	x 1)	Carico assiale F_{a2} Axial load F_{a2}			
						←		→	
						↓	↑	↓	↑
80, 81	112	45 k6	82	104	—	1	2	2	1
100, 101	137	55 m6	82	126	—	2	1	1	2
125, 126	139	70 m6	105	140	3	1	2	2	1
140	140	80 m6	130	159	3	1	2	2	1
160	168	90 m6	130	183	4	2	1	1	2
180	158	100 m6	165	226	4	2	1	1	2

1) Spessore del disco di protezione.
1) Thickness of protection disc.



3.3

Helical inline iFIT catalog

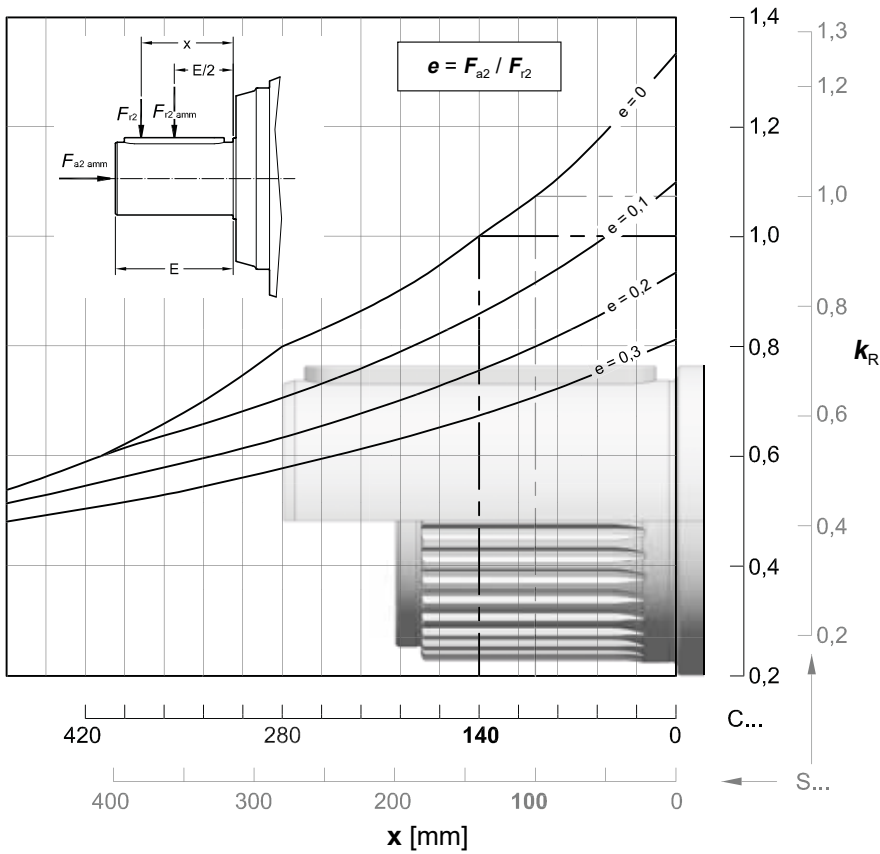


3.4

Planetary gearmotors EP catalog

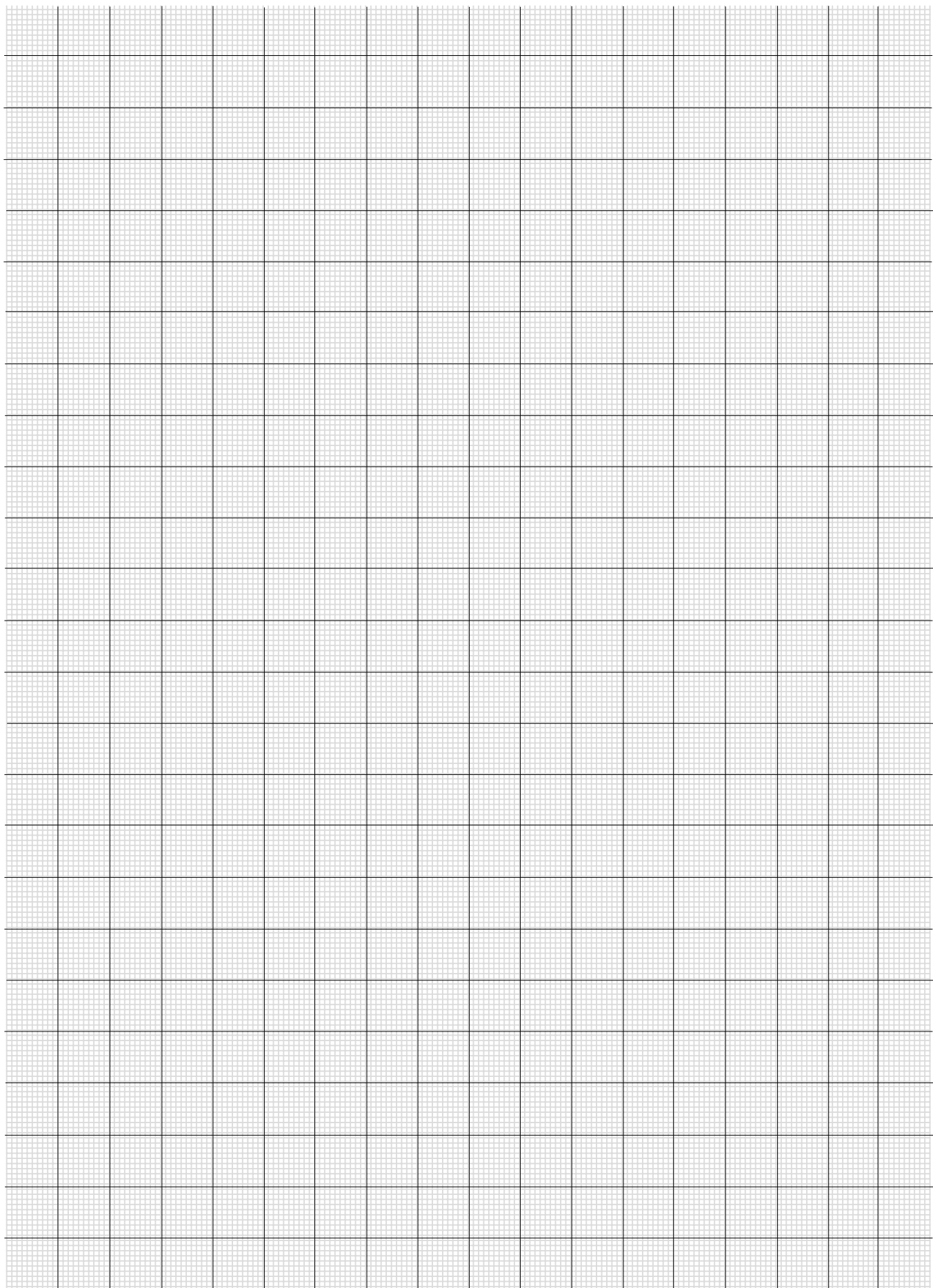


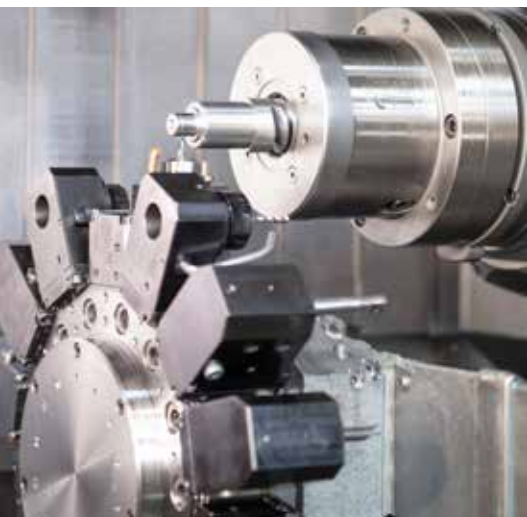
Example of planetary gear unit for agitator application



A full page of blank graph paper. The grid consists of small squares formed by thin black lines. There are no margins, text, or other markings on the page.

Notes





Solutions for
an evolving
industry

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