



product overview



Components cutting-edge manufacturing process meets human touch.



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Solutions for an evolving industry

In the global marketplace, our customers, investors, partners value our products and services for two reasons: excellence and reliability. In Rossi S.p.A., a company of the Habasit Group, we have made of change a strategic lever for our growth. "Solutions for an evolving industry" fully expresses our corporate philosophy: we are a flexible and dynamic reality, able to satisfy all requirements of a continuously evolving industrial world thanks to our innovative solutions.

Cutting-edge manufacturing

When it comes to high-performance and ground precision gear manufacturing, cutting-edge technology and experience are everything. In Rossi we have both and for this reason we are proud in our work.

High quality products

Over 60 years of experience and know-how have led us to become a reference supplier for the high-quality products we realize, in combination with specific turnkey solutions mainly used in heavy-duty industry applications.

Specialized housing machining

We dedicate special attention to machining all components, including housings for big sizes. High quality standard requirements can be reached only using cutting-edge technology.

Test controls

Systematic, extensive controls on every stage of the process (from materials to final controls under load using computerized brakes at the end of the assembly line) allow quality to be produced, and permit monitoring and improving the process itself. Our solutions have been fully tested and run in our testing room, being operationally certified before on site commissioning.

The power of knowledge

Experience and knowledge also mean how to support customers during all design and dimensioning phases. We continue to develop our experience and share our knowledge that is relevant to machine builder. The informations that we make available includes:

- expected bearing life calculation;
- finite element analysis;
- torque calculation;
- shared design capabilities with customers.

In Rossi we share our know-how to support every kind of application and exigence.

Industrial applications

Main representative applications





Marine & Offshore

Mooring
Anchor winches
Capstans
Towing and Tugger winches
Cranes: Harbor cranes, gantry cranes, crane barges
Fishing winches
Thrusters
Tensioners, Carousels, Reels
Life boat winches/Davits

Quarry & Construction

Concrete/ Asphalt mixers
Concrete pumps
Slew drive unit
Rotary head drilling rigs drive unit
Drilling rigs drive unit
Tunnel boring machines
Tower cranes

Water & Waste Treatment

Clarifiers/Thickeners
Aerators
Biodiscs
Belt filter presses
Screw presses
Hose peristaltic pumps
Shredders
Digesters

Power Generation

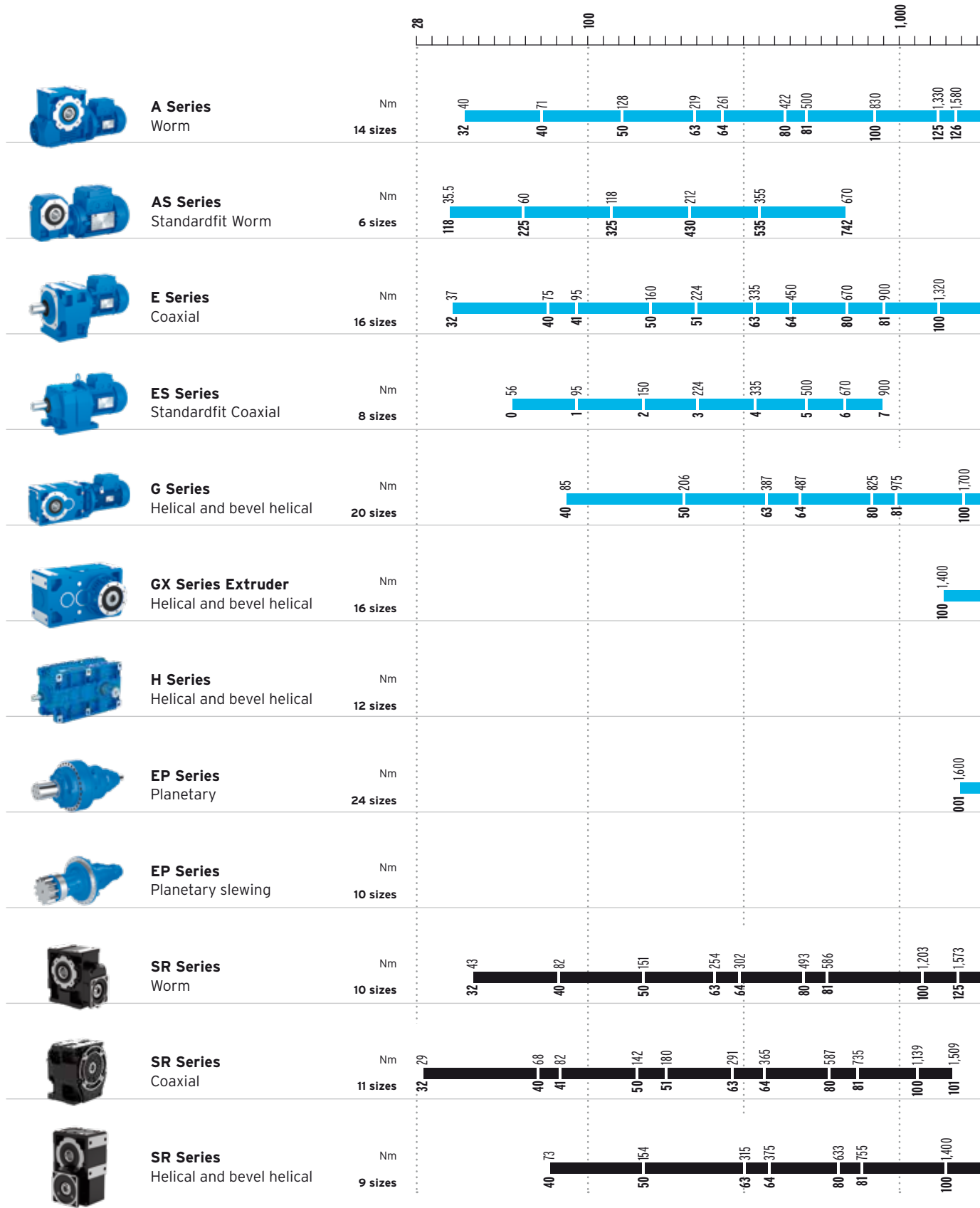
Wet cooling towers
Air Cooler Condensers (ACC)
Wind Tower (Pitch and Yaw drive)
Sun-Movers Solar system

Material Handling

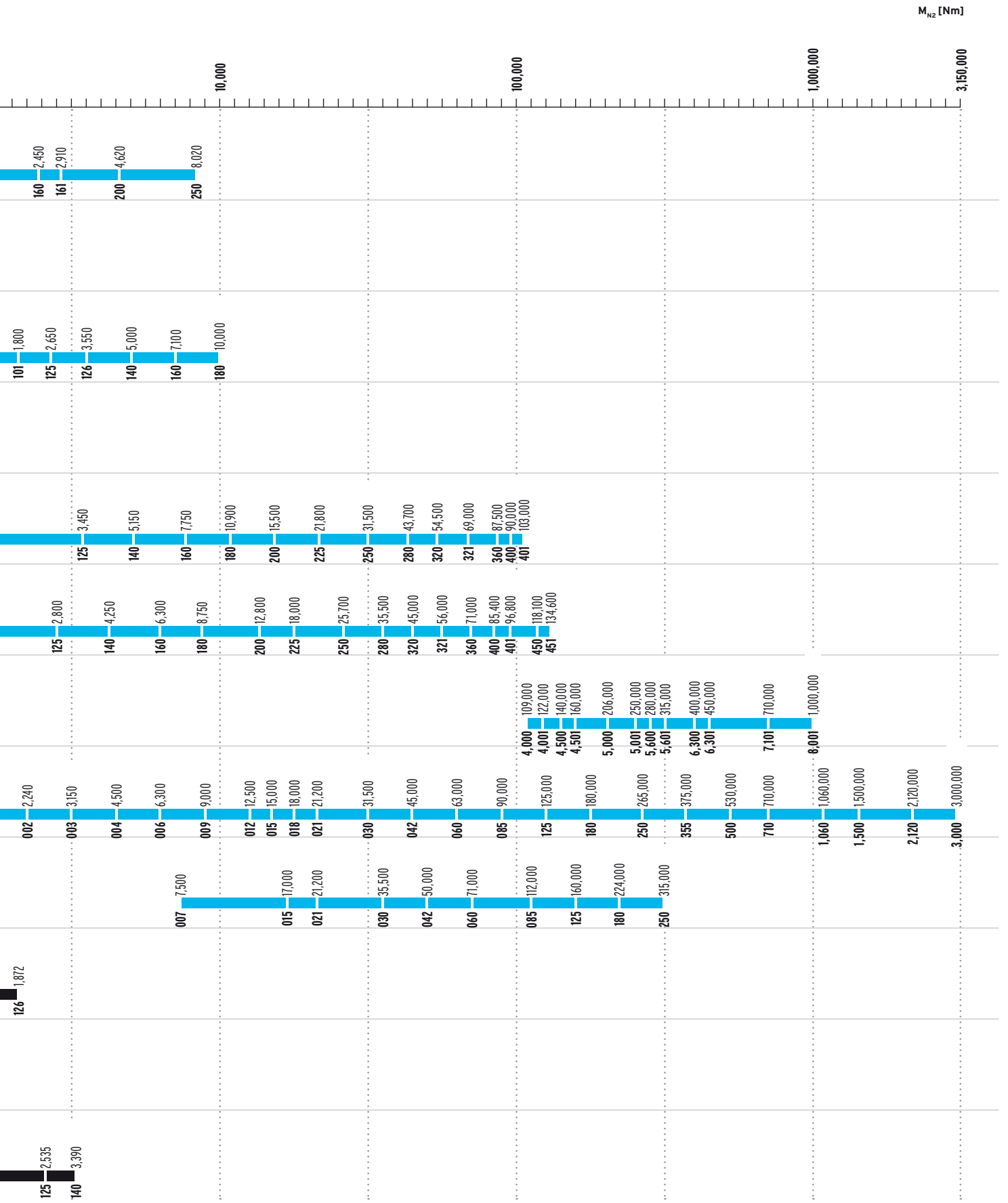
Industrial elevators
Hoists
Automatic storage systems
Positioning/indexing
Units handling
Sorting systems
Packaging
Conveyors system

Product range performances

Gear reducers and gearmotors



Motion control



Product range





I - Gear reducers and gearmotors

Worm gear reducers and gearmotors



A Series

Worm gear reducers and gearmotors

Features

- Universal mounting
- Forced ventilation for an easy thermal power dissipation
- Wide range of accessories and non-standard designs
- Worm wheels of A gear reducers and gearmotors made of nickel bronze with controlled phosphor content, in order to achieve improved performance, a higher load capacity, greater reliability and more wear resistance
- Higher worm efficiency

Benefits

- Easy and functional shaft mounting
- High performance and reliability
- Long life
- Noiselessness, constant performance also for the heaviest applications
- Lower power consumption



AS Series

Worm gearmotors Standardfit

Features

- Universal mounting with lower feet integral with housing, and B14 flange on 2 faces
- Improved modular construction both for components and assembled products
- Nickel bronze worm wheels
- Generous internal space between train of gears and housing
- Tapered roller bearings on worm shaft
- Flange for motor mounting integral with housing
- Higher worm efficiency

Benefits

- Interchangeability with major competitors without changing the machine
- High performance and reliability
- Long life
- Excellent low noise running
- Lower power consumption

14 sizes 32 ... 250

Nominal torque (T_{N2}) up to 8,020 Nm

Transmission ratio (i_N) 7 ... 16,000

Size	Torque (Nm)
A 32	40
A 40	71
A 50	128
A 63	219
A 64	261
A 80	422
A 81	500
A 100	830
A 125	1,330
A 126	1,580
A 160	2,540
A 161	2,910
A 200	4,620
A 250	8,020

6 sizes 118 ... 742

Nominal torque (T_{N2}) up to 670 Nm

Transmission ratio (i_N) 6 ... 75

Size	Torque (Nm)
AS 118	35.5
AS 225	60
AS 325	118
AS 430	212
AS 535	355
AS 742	670

Coaxial gear reducers and gearmotors



E Series

Coaxial gear reducers and gearmotors

Features

- Strong patented housing
- Wide range of sizes
- Final stage pinion with 3 bearings for increased torque capacity

Benefits

- Long life
- Minimum maintenance requirements
- High performance and reliability
- Universal mounting
- Strength and suitability also for the heaviest applications

16 sizes 32 ... 180

Nominal torque (T_{N2}) up to 10,000 Nm

Transmission ratio (i_N) 4 ... 6,300

Size	Torque (Nm)
E 32	37
E 40	75
E 41	95
E 50	160
E 51	224
E 63	335
E 64	450
E 80	670
E 81	900
E 100	1,320
E 101	1,800
E 125	2,650
E 126	3,550
E 140	5,000
E 160	7,100
E 180	10,000



ES Series

Coaxial gearmotors Standardfit

Features

- Foot mounting integral with housing
- Proportioned bearings to withstand high loads

Benefits

- Dimensional interchangeability with other manufacturers for flexible replacement options
- Maximum compactness
- High performance
- Excellent low noise running for any critical environment

8 sizes 0 ... 7

Nominal torque (T_{N2}) up to 900 Nm

Transmission ratio (i_N) 4 ... 200

Size	Torque (Nm)
ES 0	56
ES 1	95
ES 2	150
ES 3	224
ES 4	335
ES 5	500
ES 6	670
ES 7	900

Helical and bevel helical gear reducers and gearmotors



G Series

Helical and bevel helical gear reducers and gearmotors

Features

- Wide range of accessories and non-standard designs
- Single piece housing with high structural stiffness

Benefits

- Easy and functional shaft-mounting design
- Minimum maintenance requirements
- High, reliable and tested performance
- Suitability for the heaviest duties



GX Series

Helical and bevel helical extruders design

Features

- Extruder support conceived for heavy applications
- Option of long models

Benefits

- Excellent gear reducer transmitted torque to weight ratio

20 sizes 40 ... 401

Nominal torque (T_{N2}) up to 103,000 Nm

Transmission ratio (i_N) 2 ... 160

Size	Torque (Nm)
G 40	85
G 50	206
G 63	387
G 64	487
G 80	825
G 81	975
G 100	1,700
G 125	3,450
G 140	5,150
G 160	7,750
G 180	10,900
G 200	15,500
G 225	21,800
G 250	31,500
G 280	43,700
G 320	54,500
G 321	69,000
G 360	87,500
G 400	90,000
G 401	103,000

16 sizes 100 ... 451

Nominal torque (T_{N2}) up to 134,600 Nm

Transmission ratio (i_N) 6.3 ... 28

Size	Torque (Nm)
GX 100	1,400
GX 125	2,800
GX 140	4,250
GX 160	6,300
GX 180	8,750
GX 200	12,800
GX 225	18,000
GX 250	25,700
GX 280	35,500
GX 320	45,000
GX 321	56,000
GX 360	71,000
GX 400	85,400
GX 401	96,800
GX 450	118,100
GX 451	134,600



H Series

Helical and bevel helical gear reducers

Features

- Helical and bevel-helical gear units with 2 and 3 gear stages
- Ratios to R20 series
- Split housing; nodular cast iron frame
- Helical and bevel gear with ground and optimized profile

Benefits

- One of the widest torque range from a single supplier
- Customized solutions on request starting from a standard modular design
- Short delivery times
- Optimized design for heavy industry applications



RE Series

Industrial gear units

Features

- Accurate design and selection of equipment
- Unique reference for commercial and technical issues
- Precise certified alignment of the complete drive
- Global well known and qualified brands of equipment suppliers

Benefits

- Turn key drive units
- Easy and quick installation on site
- Precise and qualified design for baseplates

12 sizes 4,000 ... 8,001

Nominal torque (T_{N2}) up to 1,000,000 Nm

Transmission ratio (i_N) 8 ... 315

Size	Torque (Nm)
H 4,000	109,000
H 4,001	122,000
H 4,022	140,000
H 4,501	160,000
H 5,000	206,000
H 5,001	250,000
H 5,600	280,000
H 5,601	315,000
H 6,300	400,000
H 6,301	450,000
H 7,101	710,000
H 8,001	1,000,000

2 sizes 140 ... 631

Nominal torque (T_{N2}) up to 1,100,000 Nm

Planetary gear reducers and gearmotors



EP Series

Planetary gear reducers and gearmotors

Features

- 2, 3 or 4 reduction stages for both coaxial and right angle shaft
- Wide range of accessories and non-standard designs
- Modular design, with multi-optional executions
- Very compact size and reduced mass of gearbox

Benefits

- Easy and functional flange, foot, or shaft-mounting design
- High torque transmitted
- Extended range of transmission ratios and output speeds available



EP Series

Planetary slewing drives

Features

- Slew drive gear reducers, ranging from 9 kNm to 400 kNm maximum output torque over 10 primary sizes and 3 output reinforced support configurations:
 - R - dual pilot flanged
 - S - dual pilot compact
 - H - single pilot front flanged
- Modular design, with multi-optional executions

Benefits

- Wide choice of the drives allows always the highest performance of cost-efficient solutions
- Enable to benefit of the wider range of options of the EP industrial catalog

24 sizes 001 ... 3,000

Nominal torque (T_{N2}) up to 3,000,000 Nm

Transmission ratio (i_N) 80 ... 1,000

Size	Torque (Nm)
EP 001	1,600
EP 002	2,240
EP 003	3,150
EP 004	4,500
EP 006	6,300
EP 009	9,000
EP 012	12,500
EP 015	15,000
EP 018	18,000
EP 021	21,200
EP 030	31,500
EP 042	45,000
EP 060	63,000
EP 085	90,000
EP 125	125,000
EP 180	180,000
EP 250	265,000
EP 355	375,000
EP 500	530,000
EP 710	710,000
EP 1,060	1,060,000
EP 1,500	1,500,000
EP 2,120	2,120,000
EP 3,000	3,000,000

10 sizes 007 ... 250

Nominal torque (T_{N2}) up to 315,000 Nm

Transmission ratio (i_N) 12.5 ... 2,800

Size	Torque (Nm)
EP 007	7,500
EP 015	17,000
EP 021	21,200
EP 030	35,500
EP 042	50,000
EP 060	71,000
EP 085	112,000
EP 125	160,000
EP 180	224,000
EP 250	315,000



EP Combined Units Series

Planetary gear reducers and gearmotors

Features

- Standard products
- Catalog A, E, G, H + EP

Benefits

- Easy customization
- Flexibility and adaptability to specific application needs
- Interchangeability

24 sizes 001 ... 3,000

Nominal torque (T_{N2}) up to 3,000,000 Nm

Transmission ratio (i_N) 80 ... 1,000

Size	Torque (Nm)
EP 001	1,600
EP 002	2,240
EP 003	3,150
EP 004	4,500
EP 006	6,300
EP 009	9,000
EP 012	12,500
EP 015	15,000
EP 018	18,000
EP 021	21,200
EP 030	31,500
EP 042	45,000
EP 060	63,000
EP 085	90,000
EP 125	125,000
EP 180	180,000
EP 250	265,000
EP 355	375,000
EP 500	530,000
EP 710	710,000
EP 1,060	1,060,000
EP 1,500	1,500,000
EP 2,120	2,120,000
EP 3,000	3,000,000

II - Electric motors



TX Series, HeGen

Premium line electric asynchronous three-phase motors and brake motors

Features

- IEC standard motors
- IP 55 protection
- IE3 Energy efficiency
- Standard and safety brake (AC. DC)
- Optional complex executions available (encoders, axial cooling, increased protection, etc.)

Benefits

- Compactness and flexibility
- Suitable for running with inverter
- Reduced environmental impact and energy saving



S Series

Heavy duty roller table motors

Features

- IEC asynchronous three-phase 4 and 6 poles motors with cage rotor, totally enclosed, without fan
- Motor cooling by natural convection over a large radiating surface area and obtained by ring fins

Benefits

- Specifically designed for heavy industry, in particular roller tables and conveyor roller tables

HeGen
High Efficiency Motor Generation

TX Series, HeGen

Sizes 63 ... 315

Power (P_N) 0.06 ... 110 kW

Polarity 2, 4, 6, 8 poles

S Series

Sizes 112 ... 250

Power (P_N) 2.8 ... 42 kW

Polarity 4, 6 poles

- Asynchronous three-phase motors
- Asynchronous three-phase brake motors (sizes from 225 to 315 available on request)
- Asynchronous three-phase heavy duty roller table motors

Size	PN (kW)
63	0.2
	0.18
71	0.6
	0.55
80	1.1
	1.1
90	2.2
	2.2
100	3
	3
112	5.5
	5.5
	2.8
132	11
	11
	4.5
160	15
	15
	9.5
180	22
	22
200	30
	30
	19.5
225	45
250	55
	42
280	90
315	110

III - Other products



L Series

Right angle shaft gear reducers

Features

- Right angle units with multiple options of executions
- Compact size
- Rigid and durable housing of cast iron
- Several output solutions, with solid or hollow shaft

Benefits

- Low ratios available
- Capability for multiple drives synchronization
- Easy adjustment to specific applications
- High performance and reliability

7 sizes 80 ... 320

Nominal torque (T_{N2}) up to 5,600 Nm

Transmission ratio (i_N) 1 ... 6.25



P Series

Shaft mounted gear reducers

Features

- Split housing reducers
- Simplified design, with narrow housing execution

Benefits

- Very easy maintenance, with minimal requirements
- Easy and functional shaft mounting
- Durable solution dedicated for conveyors

7 sizes 80 ... 250

Nominal torque (T_{N2}) up to 11,200 Nm

Transmission ratio (i_N) 10 ... 25

IV - Motion control



SR Series

Worm servo gear reducers

Type MR

7 sizes 32 ... 81

Nominal Torque up to 586 Nm

Accelerating torque up to 747 Nm

Transmission ratio (i_N) 7 ... 239

Type R

9 sizes 40 ... 126

Nominal Torque up to 1,872 Nm

Accelerating torque up to 2,387 Nm

Transmission ratio (i_N) 7 ... 125

Size Torque (Nm)

Size	Torque (Nm)
SR 32	43
SR 40	82
SR 50	151
SR 63	254
SR 64	302
SR 80	493
SR 81	586
SR 100	1,203
SR 125	1,573
SR 126	1,872



SR Series

Helical and bevel helical servo gear reducers

Type MR

8 sizes 40 ... 125

Nominal Torque up to 2,535 Nm

Accelerating torque up to 3,000 Nm

Transmission ratio (i_N) 6.16 ... 139

Type R

8 sizes 50 ... 140

Nominal Torque up to 3,390 Nm

Accelerating torque up to 4,475 Nm

Transmission ratio (i_N) 6.42 ... 127

Size Torque (Nm)

Size	Torque (Nm)
SR 40	73
SR 50	154
SR 63	315
SR 64	375
SR 80	633
SR 81	755
SR 100	1,400
SR 125	2,535
SR 140	3,390

Type MR features

- Wide range of Servo gearboxes, designed to fit almost all servo motors found on the market
- Designed for the highest torsional stiffness and the lowest angular backlash, for the maximum torque and overhung loads
- Bush with slots and hub clamp for servomotor coupling

Type MR benefits

- Enhanced dimensional compactness due to direct servomotor coupling
- The correct technical solution thanks to a comprehensive range of sizes, gear stages, transmission ratios, designs, and non-standard designs
- Widest range of possible servomotor coupling dimensions



SR Series

Coaxial servo gear reducers

Type MR

11 sizes 32 ... 101

Nominal Torque up to 1,509 Nm

Accelerating torque up to 2,000 Nm

Transmission ratio (i_N) 4 ... 154

Type R

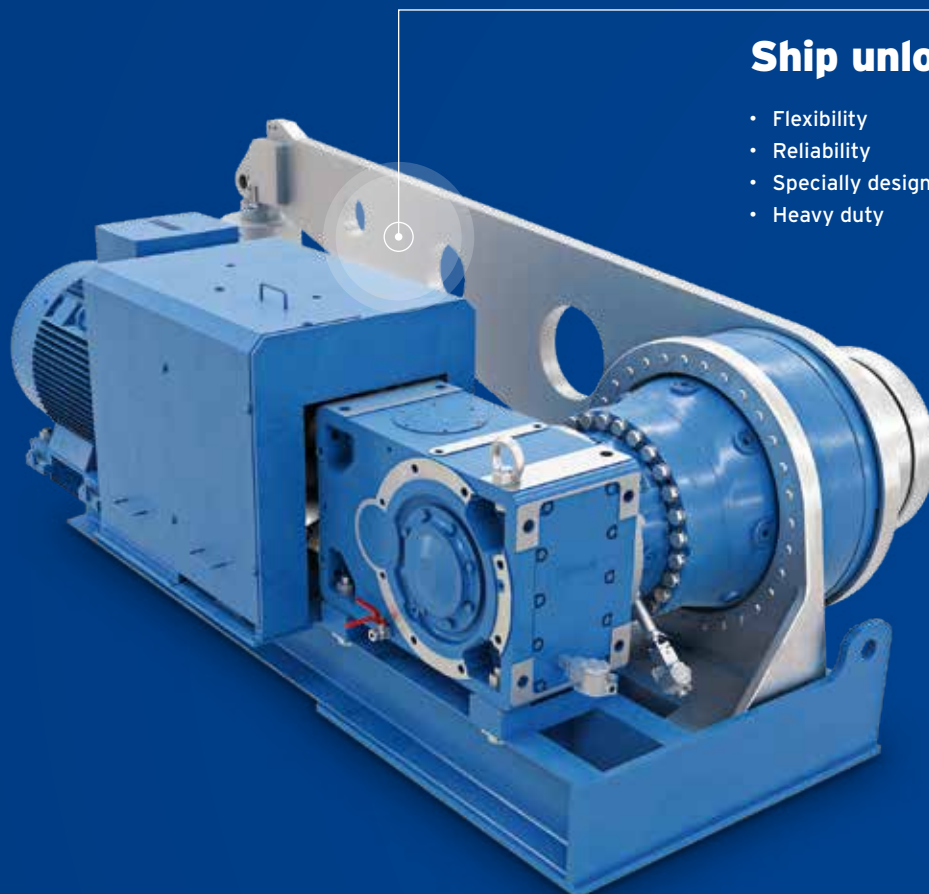
-

Size **Torque (Nm)**

Size	Torque (Nm)
SR 32	29
SR 40	68
SR 41	82
SR 50	142
SR 51	180
SR 63	291
SR 64	365
SR 80	587
SR 81	735
SR 100	1,139
SR 101	1,509

Customized solutions

Ask us whatever you need



Ship unloaded drive

- Flexibility
- Reliability
- Specially designed
- Heavy duty

Modularity can be considered the foundation of Rossi. Modular products and “modular” processes allow us to engineer a solution for almost every industrial application requiring a gearmotor or gear reducer. To us, modularity means flexibility, wide range of options, faster delivery, and most important of all, competitiveness. Even more it allows for assemblies in any assembly facility with almost limitless configurations allowing us to deliver solutions, regardless if it comes to supply a standard unit or an engineered one, in a cost effective manner.

This capability is made possible through our ability to understand the customer’s requirements and translate the needs of that customer into a commercially and technically acceptable solution.

Of course our modular approach doesn’t stop at the delivery of a product or solution. For us this is just the start, with strong online support systems our customers have access to leading interactive product and service care.

Drive units

Features

- Project management
- Accurate selection and sizing of the components
- Precise certified alignment of the complete drive

Benefits

- Heavy customized and innovative solution to match customer requirements
- Feasibility study to find optimal solution
- Turn key drive units design
- Easy and quick installation on site

Power according to customer's requirements.

Nominal torque according to customer's requirements.

Transmission ratio according to customer's requirements.



Our project management

Once the order is assigned, a dedicated team with specific and skilled technicians provide application support offering assistance and innovative solutions during design phase.

Customer order management

We ensure that all processes within the IT platform are designed with rapid transfer of data needed for internal processes as well as for the management

of the order by the customers themselves. we have chosen to operate with Oracle's JD Edwards EnterpriseOne. This facilitates order management on one platform for both the customer and our staff anywhere in the world. Through a standard operating platform we are able to configure customers unique forecasting, shipping standards, transportation sequence and reporting processes in coordination with commercial contracts and associated quality control documentation - all integrated to one ERP system.

Total quality

We have our geographical and philosophical origins rooted in the town of Modena, the renowned Italian capital of precision mechanics. From here stems the unique pool of skills and the high professionalism of our technicians, who are always ready to design products and anticipate innovative solutions to satisfy the needs of a continually evolving market. Our research and development activities are stimulated by the desire to develop ever more complex electromechanical drive systems for our customers.

We are committed to developing processes and products able to meet the growing demands of the modern digital age. Small incremental improvements in elements such as gear quality, housing rigidity and sealing arrangements can have a significant impact on the Total Life Cycle of the product.

Our geared products have a strong market reputation, traditionally built around product innovation, outstanding quality and high operational safety.



Product certifications



RoHS

BUREAU VERITAS
Marine & Offshore

DNV·GL



Complete customer care

Our modular approach doesn't stop at the delivery of a product or solution. For us this is just the start. With strong online support systems, our customers have access to leading interactive product and service care. We aim to deliver performance improvement and on-going assistance during the entire system life-cycle.



Digital support

Rossi for You is a suite of digital support tools enabling 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.

Training

We organize standard and customized courses on how to safely and efficiently operate, maintain and troubleshoot equipment. Staff needs to understand how to properly use the system and how to take advantage of features to maximize productivity and efficiency.



Pre-sales

Wherever a request comes from, worldwide, our engineers can quickly follow up the inquiries. A dedicated team with skilled technicians provides application support offering assistance and innovative solutions from orientation to concept development.

After-sales

We can help you maintain your line efficiency, turning costly downtime into profitable uptime. Spare parts, maintenance (including agreements), technical and field support, including help desk assistance. For emergencies, stock replenishment or planned maintenance, we deliver original spare parts wherever you are, in a timely manner.



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