Compact and powerful.

Heavy Industry Planetary Gear Units

P2.e SERIES -
THE NEXT GENERATION OF HEAVY INDUSTRY PLANETARY GEAR UNITS

The **P2.e Series** is the heavy industry planetary drive platform, engineered to deliver high continuous torque in a compact footprint. Designed for demanding applications where space is limited, loads are heavy, and uptime is critical, the P2.e combines thermal performance, a modular design, and direct motor integration to simplify drive selection, installation, and long-term operation.

This is planetary power—engineered for real operating conditions.

Key Benefits.

- **Flexible drive options -** High continuous torque capacity in nine gearhead sizes with a wide ratio range.
- **Compact design -** Smaller footprint than traditional planetary or parallel-shaft solutions—ideal for tight installations and retrofits.
- **Designed for continuous duty -** Longer bearing life, higher load capacity, and greater reliability under constant load conditions. Delivers usable torque continuously, *not just peak values*.
- **Direct motor integration -** Eliminates couplings and adapters, reduces length and alignment issues, and offers options, such as encoders and brakes.
- **Flexible, modular configuration -** One planetary platform adapts to many applications—simplifying standardization across machines and plants.
- **Engineered for faster delivery -** Faster delivery, responsive support, and reduced downtime compared to competitors with fragmented supply chains.

SEW-EURODRIVE brings a system-level engineering mindset to planetary gear units. P2.e is not just a gearbox—it's a complete, optimized drive solution backed by global support, proven application expertise, and long-term availability.

Ideal Applications

Horizontal and ring-pan mixers · Crushers and shredders · Screw conveyors and extruders · Shredders · Drying drums and rotary equipment · Heavy-duty material handling and process equipment

Technical Overview

Feature	Benefit
Torque range to 124 kN-m (1 mil lb-in)	Covers demanding applications without oversized heavy gear units
2- and 3-stages options in multiple frame sizes	Scales medium to very high torque within a single planetary platform
Ratio range - 15.2:1 up to 332:1	Supports a wide range of speeds and applications with fewer product families
Adaptable input designs (IEC/NEMA)	Enables compact drive designs using standard industrial motors
Integrated airflow cooling; optional direct-mounted fan	Reduces or eliminates need for external cooling systems
High-performance cylindrical roller bearings	Higher load capacity and extended bearing life under constant load
Design flexibility for new builds or retrofits	Direct motor mount, IEC/NEMA adapter, solid or hollow input shaft
Shaft- or foot-mounted, torque arm, flange options	Simplifies replacement of existing planetary gear units

Competitive Comparison

Critical Variable	SEW P2.e	Traditional Planetary Gear Units
Thermal Performance	✅ Integrated airflow cooling; optional external cooling	⚠️ Often no standard cooling options
Torque Density	✅ High torque in a compact footprint	❌ Larger frames needed for higher torque
Continuous Duty	✅ Designed for continuous rated torque	⚠️ Often not robust for "infinite fatigue strength"
System Integration	✅ Direct motor mounting, fewer components/suppliers	❌ Gearbox-only; motor integration left to user
Installation complexity	✅ SEW modularity for reduced complexity	❌ Couplings, adapters, alignment required
Lifecycle Cost	✅ Lower total cost of ownership	❌ Higher maintenance and operating costs

Take the next step to explore SEW-EURODRIVE's P2.e Series.

PDF Brochure

P2.e podcast

Contact Us

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