

# NORDBLOC.1<sup>®</sup> SINGLE-STAGE GEAR UNITS

## Highlights of single-stage NORDBLOC.1<sup>®</sup> helical gear units

- Low maintenance and exceptional service life made possible by FEM-optimized housing and strengthened output flange assembly due to a bolted connection design.
- Optimized housing design maximizes strength and rigidity of the gearbox while ensuring quiet operation.
- Extensive input offering – direct mount motor, NEMA and IEC motorized reducers.
- Versatile mounting solutions – footed, flanged, B14 face flange, footed/flanged



### Performance Specifications

**Configuration:** Inline

**Motor Power HP:** (min/max) 0.16 – 60

**Motor Power kW:** (min/max) 0.12 – 45

**Number of gear stages:** 1

### Mounting Styles

**Housing with foot mounting:** Standard

**Versatile mounting options:** B5 flange, B14 face flange, footed/B14 flange and footed/B5 flange

**B5 flange outside diameter range:** [in] 4.72 – 17.72

**B5 flange outside diameter range:** [mm] 120 – 450

**B14 flange bolt circle diameter range:** [in] 2.68 – 7.55

**B14 flange bolt circle diameter range:** [mm] 68 – 192

### Gear ratio, speed

**Lowest standard gear ratio:** 1.07:1

**Highest standard gear ratio:** 13.1:1

**Output speed (60 Hz):** 117–1635 rpm

**Output speed (50 Hz):** 97–1355 rpm

### Options

Possible motor configuration – IEC, NEMA and NORD direct mount (integral) motors

- Heavy duty output shaft bearings
- Output flange and shaft combinations offered to match NEMA input dimensions (only standard offering for 071.1 - 771.1 units)



Footed housing with B14 flange and integral motor



Housing with B14 flange mount and integral motor



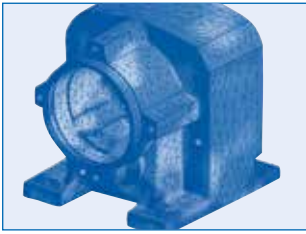
Housing with B5 flange mounting and integral motor

Type	Ratio Range		Input Power Range Max*		Torque Max*		Solid Shaft	
	min	max	[kW]	[HP]	[Nm]	[lb-in]	[mm]	[in]
SK 071.1	1.07	11	1.1	1.5	25	221	15x30	0.500x1.125
SK 171.1	1.07	14	2.2	3	53	469	20x40	0.750x1.570
SK 371.1	1.12	10.86	4	5	83	735	25x50	1.000x1.970
SK 571.1	1.31	9.5	7.5	10	165	1460	30x60	1.250x2.360
SK 771.1	1.25	13.1	7.5	10	311	2753	40x80	1.625x3.150
SK 871.1 <small>NEW</small>	1.41	7.18	22	30	400	3540	35x70 / 40x80	1.375x2.76 / 1.625x3.15
SK 971.1 <small>NEW</small>	1.24	6.82	37	50	600	5310	40x80 / 50x100	1.625x3.15 / 2.125x3.94
SK 1071.1 <small>NEW</small>	1.42	8.09	45	60	1000	8850	60x120	2.375x4.72

\* can differ depending on the gear ratio

# NORDBLOC.1<sup>®</sup>

## SINGLE-STAGE GEAR UNITS



### UNICASE<sup>™</sup> housing

- 1 piece UNICASE<sup>™</sup> housing
- Corrosion resistant, lightweight aluminum alloy (sizes 071.1 – 771.1)
- EN-GJL-HB 215 cast iron (class 35, sizes 871.1 – 1071.1)
- Precision machined in one step
- Precise alignment of shafts and gearing



### High quality gearing

- Designed and manufactured up to AGMA class 13
- Gears hardened using NORD's state-of-the-art equipment
- High momentary overload capacity
- Case-hardened steel
- Minimum gear tooth hardness: 58 Rockwell C/720HV



### Shaft data

- Material for input and output shaft: AISI 1045 or 4140
- Metric parallel key dimensions as per DIN 6885
- Imperial parallel key dimensions as per DIN 6885, AISI B17 for the US
- Standard output shaft with threaded hole
- Application and customer-specific shaft solutions available



### Bearings

- Bearings in ABEC-1/P0 quality
- Large output bearings
- High radial and axial loads possible
- Optional heavy duty output bearings available



### Installation

- Non-positive and positive transmission of torques
- Standard reversible operation possible

### Product options

#### Motors

- Motors: 0.16 – 60 HP  
0.12 – 45 kW
- IEC adapters:  
IEC 63 – IEC 180
- NEMA adapters:  
56C – N280TC
- Custom motor mounting solutions available

#### Lubricants

- ISO VG220 mineral oil standard
- Food grade or synthetic oil optional
- Supplied standard with drain plugs, oil sight glass optional

#### Shaft seals

- NBR shaft sealing rings
- FKM seals optional
- Double shaft sealing rings

#### Environmental protection

- Paint coating solutions and environmental protection options to withstand even the harshest conditions
- Stainless steel shafts optional
- nsd tupH Sealed Surface Conversion System optional (for sizes 071.1 – 771.1 only)

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### NORD DRIVESYSTEMS<sup>®</sup> Group

- Family business from Bargteheide, Germany with 4,000 employees
- Drive solutions for more than 100 branches of industry
- Production in 7 locations worldwide
- Sales and service in 98 countries
- More information: [www.nord.com](http://www.nord.com)

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