GEARBOXES

Right Angle Helical Reducers

Heavy Duty 6mm Dia. Shafts 0.4 – 2.53 Nm 1:1 - 40:1

Part Number | Ratio | Type | Input Face | Efficiency at 1000 Rpm | Max Input Speed | Reflected Inertia at Input (kg.m²) Self | Locking Output |
---|---|---|---|---|---|---|---|
E15-1 | 1:1 | Helical | A | 88% | 4,000 | 3.762 x 10⁴ | X |
E15-2 | 2:1 | Helical | A | 86% | 4,000 | 2.349 x 10⁵ | X |
E15-3 | 3:1 | Helical | A | 85% | 4,000 | 2.011 x 10⁵ | X |
E15-4 | 4:1 | Helical | A | 84% | 4,000 | 1.986 x 10⁵ | X |
E15-5 | 5:1 | Helical | A | 80% | 4,000 | 1.544 x 10⁵ | X |
E15-8 | 8:1 | Wormwheel | A | 80% | 2,000 | 1.622 x 10⁵ | X |
E15-10 | 10:1 | Wormwheel | A | 73% | 2,000 | 1.609 x 10⁵ | X |
E15-20 | 20:1 | Wormwheel | A | 67% | 2,000 | 1.593 x 10⁵ | ✓ |
E15-40 | 40:1 | Wormwheel | A | 60% | 2,000 | 1.589 x 10⁵ | ✓ |
E15-SP | 1:1 - 40:1 | Special Ratios | | | | | Replace SP with required ratio |
E15-SPA | 1:1 - 40:1 | Low Backlash ≤30' | | | | | Replace SP with required ratio |
E15-SPLH | 1:1 - 40:1 | Left Hand Helicals | | | | | Replace SP with required ratio |

Output Torque Nm

<table>
<thead>
<tr>
<th>RPM</th>
<th>1:1</th>
<th>2:1</th>
<th>3:1</th>
<th>4:1</th>
<th>5:1</th>
<th>8:1</th>
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<th>20:1</th>
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Weight: 0.255 kg. Greased for Life: Shell Gadus S2 V220AD 2.
Self Locking Output: Subject to ratio and only applies in static condition.
Max. Overhung Loads at 1000 Rpm: Overhung Load (Fx) = 15 kg.
Max. Thrust Loads at 1000 Rpm: Thrust Load (Fx) = 10 kg.
Standard Backlash: ±1°.
Special shaft sizes and other modifications are available.
Please contact Technical Sales department.
Testing in your application is necessary.
You will need to assess duty cycles and confirm gearbox suitability with your own calculations.
All figures listed are to be used for guidance only.

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GEARBOXES

Right Angle Helical Reducers
Heavy Duty 0.25 Dia. Shafts 3.5 – 22.4 lbf.in 1:1 - 40:1

Part Number | Ratio | Type       | Efficiency at 1000 Rpm | Max Input Speed | Reflected Inertia at Input (lb.in²) | Self Locking Output
--- | --- | --- | --- | --- | --- | ---
EA15-1     | 1:1 | Helical   | 88%               | 4,000           | 1.29 x 10⁻² | X
EA15-2     | 2:1 | Helical   | 86%               | 4,000           | 8.03 x 10⁻³ | X
EA15-3     | 3:1 | Helical   | 85%               | 4,000           | 6.87 x 10⁻³ | X
EA15-4     | 4:1 | Helical   | 84%               | 4,000           | 6.79 x 10⁻³ | X
EA15-5     | 5:1 | Helical   | 80%               | 4,000           | 5.28 x 10⁻³ | X
EA15-8     | 8:1 | Wormwheel | 80%               | 2,000           | 5.54 x 10⁻¹ | X
EA15-10    | 10:1| Wormwheel | 73%               | 2,000           | 5.50 x 10⁻¹ | X
EA15-20    | 20:1| Wormwheel | 67%               | 2,000           | 5.44 x 10⁻¹ | ✓
EA15-40    | 40:1| Wormwheel | 60%               | 2,000           | 5.43 x 10⁻¹ | ✓

EA15-SP    | 1:1 - 40:1 | Special Ratios : Replace SP with required ratio
EA15-SPA   | 1:1 - 40:1 | Low Backlash ≤30° : Replace SP with required ratio
EA15-SPLH  | 1:1 - 40:1 | Left Hand Helicals : Replace SP with required ratio

Weight: 0.56 lb. Greased for Life: Shell Gadus S2 V220 AD 2.
Self Locking Output: Subject to ratio and only applies in static condition.
Amount of locking effect may vary due to manufacturing processes.
Max. Overhung Loads at 1000 Rpm: Overhung Load (Fₐ) = 33.07 lb.
Max. Thrust Loads at 1000 Rpm: Thrust Load (Fₓ) = 22.05 lb.
Standard Backlash: ≈1°.
Special shaft sizes and other modifications are available.
Please contact Technical Sales department.
Testing in your application is necessary.
You will need to assess duty cycles and confirm gearbox suitability with your own calculations.
All figures listed are to be used for guidance only.

Output Torque lbf.in

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GEARBOXES
E20
Right Angle Helical Reducers
Heavy Duty 6mm Bores 0.6 – 3.84 Nm 1:1 - 40:1

Part Number | Ratio | Type | Input Face | Efficiency at 1000 Rpm | Max Input Speed | Reflected Inertia at Input (kg.m²) Self | Self Locking Output
---|---|---|---|---|---|---|---
E20-1 | 1:1 | Helical | A | 88% | 4,000 | 3.762 x 10⁻⁶ | X
E20-2 | 2:1 | Helical | A | 86% | 4,000 | 2.349 x 10⁻⁶ | X
E20-3 | 3:1 | Helical | A | 85% | 4,000 | 2.011 x 10⁻⁶ | X
E20-4 | 4:1 | Helical | A | 84% | 4,000 | 1.986 x 10⁻⁶ | X
E20-5 | 5:1 | Helical | A | 80% | 4,000 | 1.544 x 10⁻⁶ | X
E20-8 | 8:1 | Wormwheel | A | 80% | 2,000 | 1.622 x 10⁻⁶ | X
E20-10 | 10:1 | Wormwheel | A | 73% | 2,000 | 1.609 x 10⁻⁶ | X
E20-20 | 20:1 | Wormwheel | A | 67% | 2,000 | 1.593 x 10⁻⁶ | ✓
E20-40 | 40:1 | Wormwheel | A | 60% | 2,000 | 1.589 x 10⁻⁶ | ✓
E20-SP | 1:1 - 40:1 | Special Ratios | Replace SP with required ratio | | | |
E20-SPA | 1:1 - 40:1 | Low Backlash ≤30° | Replace SP with required ratio | | | |
E20-SPLH | 1:1 - 40:1 | Left Hand Helicals | Replace SP with required ratio | | | |

Weight: 0.255 kg. Greased for Life: Shell Gadus S2 V220AD 2.
Self Locking Output: Subject to ratio and only applies in static condition.
Amount of locking effect may vary due to manufacturing processes.
Max. Overhung Loads at 1000 Rpm: Overhung Load (F₁) = 15 kg.
Max. Thrust Loads at 1000 Rpm: Thrust Load (F₂) = 10 kg.
Standard Backlash: ≈1°.
Special shaft sizes and other modifications are available.
Please contact Technical Sales department.
Testing in your application is necessary.
You will need to assess duty cycles and confirm gearbox suitability with your own calculations.
All figures listed are to be used for guidance only.

Output Torque Nm

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Phone: 516-771-6444 | www.ondrivesus.com
GEARBOXES

Right Angle Helical Reducers
Heavy Duty 0.25 Dia. Shafts 5.3 – 34 lbf.in 1:1 - 40:1

Weight: 0.56 lb. Greased for Life: Shell Gadus S2 V220AD 2.
Self Locking Output: Subject to ratio and only applies in static condition.
Amount of locking effect may vary due to manufacturing processes.
Max. Overhung Loads at 1000 Rpm: Overhung Load (Fx) = 33.07 lb.
Max. Thrust Loads at 1000 Rpm: Thrust Load (Fa) = 22.05 lb.
Standard Backlash: ≈1°.
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Output Torque lbf.in

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<td>17.7</td>
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</tbody>
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Part Number | Ratio | Type | Input Face | Efficiency at 1000 Rpm | Max Input Speed | Reflected Inertia at Input (lb.in²) | Self Locking Output
---|-------|------|------------|----------------------|-----------------|------------------------------------|------------------------
EA20-1 | 1:1 | Helical | A | 88% | 4,000 | 1.29 x 10² | X |
EA20-2 | 2:1 | Helical | A | 86% | 4,000 | 8.03 x 10³ | X |
EA20-3 | 3:1 | Helical | A | 85% | 4,000 | 6.87 x 10³ | X |
EA20-4 | 4:1 | Helical | A | 84% | 4,000 | 6.79 x 10³ | X |
EA20-5 | 5:1 | Helical | A | 80% | 4,000 | 5.28 x 10³ | |
EA20-8 | 8:1 | Wormwheel | A | 80% | 2,000 | 5.54 x 10⁴ | X |
EA20-10 | 10:1 | Wormwheel | A | 73% | 2,000 | 5.50 x 10⁴ | X |
EA20-20 | 20:1 | Wormwheel | A | 67% | 2,000 | 5.44 x 10⁴ | ✓ |
EA20-40 | 40:1 | Wormwheel | A | 60% | 2,000 | 5.43 x 10⁴ | ✓ |
EA20-SP | 1:1 - 40:1 | Special Ratios | | | | | ✓ |
EA20-SPA | 1:1 - 40:1 | Low Backlash ≤30° | | | | | ✓ |
EA20-SPLH | 1:1 - 40:1 | Left Hand Helicals | | | | | ✓ |
# GEARBOXES

## E30
### Right Angle Helical Reducers

Heavy Duty 10mm Bores 1.5 – 9 Nm 1:1 - 40:1

Testing in your application is necessary. You will need to assess duty cycles and confirm gearbox suitability with your own calculations. All figures listed are to be used for guidance only.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Ratio</th>
<th>Type</th>
<th>Input Face</th>
<th>Efficiency at 1000 Rpm</th>
<th>Max Input Speed</th>
<th>Reflected Inertia at Input (kg.m²)</th>
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### Output Torque Nm

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### E30 Right Angle Helical Reducers

**Heavy Duty 8 & 9mm Bores** 1.5 – 9 Nm **1:1 - 40:1**

- **Weight:** 0.72 kg (Approx.)
- **Standard Backlash:** =1'. Low Backlash: ≤30'.
- **Greased for Life:** Shell Gadus S2 V220AD 2.
- **LH – Left hand helix reverses output rotation.**
- **Max. Overhung Loads at 1000 Rpm:** Overhung Load (F₁) = 20 kg. Max. Thrust Loads at 1000 Rpm: Thrust Load (F₂) = 15 kg.
- **Self Locking Output:** Subject to ratio and only applies in static condition.
- **Amount of locking effect may vary due to manufacturing processes.**
- **Modifications and specials are available. Please contact Technical Sales department.**

### Table of Specifications

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### Bore Sizes

- **ØB Bore Sizes**
  - Standard part 10 mm H7 with 3 mm keyway
  - 9 mm H7 with 3 mm keyway
  - 8 mm H7 with 2 mm keyway
  - All bores supplied with keyway to DIN 6885 - Js9 tolerance.

### Output Shafts (To Suit 10mm Bore)

- E30-X (Single), E30-DX (Double).
- Input/Output Key: KK3-20.
GEARBOXES

EA30 Right Angle Helical Reducers
Heavy Duty 0.375 Dia. Bores 13.3 – 79.7 lbf.in 1:1 - 40:1

Weight: 1.59 lb (Approx.).
Standard Backlash: ≈1°. Low Backlash: ≤30’.
Greased for Life: Shell Gadus S2 V220AD 2.
LH – Left hand helix reverses output rotation.
Max. Overhung Loads at 1000 Rpm: Overhung Load (F_o) = 44.09 lb.
Max. Thrust Loads at 1000 Rpm: Thrust Load (F_a) = 33.07 lb.
Self Locking Output: Subject to ratio and only applies in static condition.
Amount of locking effect may vary due to manufacturing processes.
Modifications and specials are available. Please contact Technical Sales department.

Part Number | Ratio | Type | Input Face | Efficiency at 1000 Rpm | Max Input Speed | Reflected Inertia at Input (lb.in²) | Self Locking Output
---|---|---|---|---|---|---|---
EA30-1 | 1:1 | Helical | B | 90% | 4,000 | 9.80 x 10⁻² | X
EA30-2 | 2:1 | Helical | A | 88% | 4,000 | 4.65 x 10⁻² | X
EA30-3 | 3:1 | Helical | A | 87% | 4,000 | 3.66 x 10⁻² | X
EA30-4 | 4:1 | Helical | A | 86% | 4,000 | 3.53 x 10⁻² | X
EA30-5 | 5:1 | Helical | A | 80% | 4,000 | 3.20 x 10⁻² | X
EA30-8 | 8:1 | Wormwheel | A | 80% | 1,500 | 3.81 x 10⁻² | X
EA30-10 | 10:1 | Wormwheel | A | 73% | 1,500 | 3.78 x 10⁻² | X
EA30-20 | 20:1 | Wormwheel | A | 67% | 1,500 | 3.74 x 10⁻² | ✓
EA30-40 | 40:1 | Wormwheel | A | 60% | 1,500 | 3.73 x 10⁻² | ✓
EA30-SP | 1:1 - 40:1 | | | | | | Special Ratios: Replace SP with required ratio
EA30-SPA | 1:1 - 40:1 | | | | | | Low Backlash ≤30’: Replace SP with required ratio
EA30-SPLH | 1:1 - 40:1 | | | | | | Left Hand Helicals: Replace SP with required ratio

Output Torque lbf.in

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GEARBOXES
Right Angle Helical Reducers
Heavy Duty 15mm Bores 2.3 – 20 Nm 1:1 - 40:1

Part Number | Ratio | Type | Input Face | Efficiency at 1000 Rpm | Max Input Speed | Reflected Inertia at Input (kg.m²) | Self Locking Output
--- | --- | --- | --- | --- | --- | --- | ---
E40-1 | 1:1 | Helical | B | 92% | 4,000 | 1.471 x 10⁻⁴ | ×
E40-2 | 2:1 | Helical | A | 90% | 4,000 | 6.738 x 10⁻⁵ | ×
E40-3 | 3:1 | Helical | A | 89% | 4,000 | 5.193 x 10⁻⁵ | ×
E40-4 | 4:1 | Helical | A | 88% | 4,000 | 5.038 x 10⁻⁵ | ×
E40-5 | 5:1 | Helical | A | 80% | 4,000 | 5.095 x 10⁻⁵ | ×
E40-8 | 8:1 | Wormwheel | A | 80% | 1,500 | 5.213 x 10⁻⁵ | ×
E40-10 | 10:1 | Wormwheel | A | 73% | 1,500 | 5.198 x 10⁻⁵ | ×
E40-20 | 20:1 | Wormwheel | A | 67% | 1,500 | 5.110 x 10⁻⁵ | √
E40-40 | 40:1 | Wormwheel | A | 60% | 1,500 | 5.090 x 10⁻⁵ | √
E40-SP | 1:1 - 40:1 | Special Ratios : Replace SP with required ratio | | | | |
E40-SPA | 1:1 - 40:1 | Low Backlash ≤30° : Replace SP with required ratio | | | | |
E40-SPLH | 1:1 - 40:1 | Left Hand Helicals : Replace SP with required ratio | | | | |

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</table>

Testing in your application is necessary. You will need to assess duty cycles and confirm gearbox suitability with your own calculations. All figures listed are to be used for guidance only.
GEARBOXES

Right Angle Helical Reducers
Heavy Duty 12 & 14mm Bores 2.3 – 20 Nm 1:1 - 40:1

Part Number | Ratio | Type | Input Face | Efficiency at 1000 Rpm | Max Input Speed | Self Locking Output
--- | --- | --- | --- | --- | --- | ---
E40-1-12 | E40-1-14 | 1:1 | Helical | B | 92% | 4,000 | X
E40-2-12 | E40-2-14 | 2:1 | Helical | A | 90% | 4,000 | X
E40-3-12 | E40-3-14 | 3:1 | Helical | A | 89% | 4,000 | X
E40-4-12 | E40-4-14 | 4:1 | Helical | A | 88% | 4,000 | X
E40-5-12 | E40-5-14 | 5:1 | Helical | A | 80% | 4,000 | X
E40-8-12 | E40-8-14 | 8:1 | Wormwheel | A | 80% | 1,500 | X
E40-10-12 | E40-10-14 | 10:1 | Wormwheel | A | 73% | 1,500 | X
E40-20-12 | E40-20-14 | 20:1 | Wormwheel | A | 67% | 1,500 | ✓
E40-40-12 | E40-40-14 | 40:1 | Wormwheel | A | 60% | 1,500 | ✓
E40-SP-12 | E40-SP-14 | 1:1 - 40:1 | Special Ratios: Replace SP with required ratio
E40-SPA-12 | E40-SPA-14 | 1:1 - 40:1 | Low Backlash ≤30’: Replace SP with required ratio
E40-SPLH-12 | E40-SPLH-14 | 1:1 - 40:1 | Left Hand Helicals: Replace SP with required ratio

ØB = 12mm | ØB = 14mm

Weight: 1.67 kg (Approx.)
Standard Backlash: ≈1°. Low Backlash: ≤30’.
Greased for Life: Shell Gadus S2 V220AD 2.
LH – Left hand helix reverses output rotation.
Max. Overhung Loads at 1000 Rpm: Overhung Load (Fx) = 40 kg.
Max. Thrust Loads at 1000 Rpm: Thrust Load (Fa) = 30 kg.
Self Locking Output: Subject to ratio and only applies in static condition.
Amount of locking effect may vary due to manufacturing processes.
Modifications and specials are available. Please contact Technical Sales department.

ØB Bore Sizes
Standard part 15 mm H7 with 5 mm keyway
14 mm H7 with 5 mm keyway
12 mm H7 with 4 mm keyway
All bores supplied with keyway to DIN 6885 - J69 tolerance.

Output Shafts (To Suit 10mm Bore)
E40-X (Single), E40-DX (Double).
Input/Output Key: KK5-30.

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EA40 GEARBOXES
Right Angle Helical Reducers
Heavy Duty 0.5 Dia. Bores 20.4 – 177 lbf.in 1:1 - 40:1

Weight: 3.68 lb (Approx.).
Standard Backlash: ≤1°. Low Backlash: ≤30’.
Greased for Life: Shell Gadus S2 V220AD 2.
LH – Left hand helix reverses output rotation.
Max. Overhung Loads at 1000 Rpm: Overhung Load (F_x) = 88.19 lb.
Max. Thrust Loads at 1000 Rpm: Thrust Load (F_y) = 66.14 lb.
Self Locking Output: Subject to ratio and only applies in static condition.
Amount of locking effect may vary due to manufacturing processes.
Modifications and specials are available. Please contact Technical Sales department.

### Output Torque lbf.in

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Weight: 3.68 lb (Approx.).
Standard Backlash: ≤1°. Low Backlash: ≤30’.
Greased for Life: Shell Gadus S2 V220AD 2.
LH – Left hand helix reverses output rotation.
Max. Overhung Loads at 1000 Rpm: Overhung Load (F_x) = 88.19 lb.
Max. Thrust Loads at 1000 Rpm: Thrust Load (F_y) = 66.14 lb.
Self Locking Output: Subject to ratio and only applies in static condition.
Amount of locking effect may vary due to manufacturing processes.
Modifications and specials are available. Please contact Technical Sales department.
GEARBOXES

Right Angle HelicalReducers
Heavy Duty 20mm Bores 3 – 41 Nm 1:1 - 40:1

E50-1
E50-2
E50-3
E50-4
E50-5
E50-8
E50-10
E50-20
E50-40
E50-SP
E50-SPA
E50-SPLH

Part Number Ratio Type Input Face Efficiency at 1000 Rpm Max Input Speed Reflected Inertia at Input (kg.m²) Self Locking Output

E50-1 1:1 Helical B 93% 3,000 4.585 x 10⁻⁴

E50-2 2:1 Helical A 91% 3,000 2.240 x 10⁻⁴

E50-3 3:1 Helical A 90% 3,000 1.759 x 10⁻⁴

E50-4 4:1 Helical A 89% 3,000 1.924 x 10⁻⁴

E50-5 5:1 Helical A 80% 3,000 1.920 x 10⁻⁴

E50-8 8:1 Wormwheel A 80% 1,500 1.489 x 10⁻⁴

E50-10 10:1 Wormwheel A 73% 1,500 1.496 x 10⁻⁴

E50-20 20:1 Wormwheel A 67% 1,500 1.463 x 10⁻⁴

E50-40 40:1 Wormwheel A 60% 1,500 1.455 x 10⁻⁴

E50-SP 1:1 - 40:1 Special Ratios : Replace SP with required ratio

E50-SPA 1:1 - 40:1 Low Backlash ≤30° : Replace SP with required ratio

E50-SPLH 1:1 - 40:1 Left Hand Helicals : Replace SP with required ratio

Testing in your application is necessary. You will need to assess duty cycles and confirm gearbox suitability with your own calculations. All figures listed are to be used for guidance only.

Output Torque Nm

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</tbody>
</table>

# ¼” BSP Pressure Plug fitted one face only. Will protrude Ø10 x 5 high approx. Actual height will vary.

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GEARBOXES
Right Angle Helical Reducers
Heavy Duty 19 & 22mm Bores 3 – 41 Nm 1:1 - 40:1

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Ratio</th>
<th>ØB = 19mm</th>
<th>ØB = 22mm</th>
<th>Type</th>
<th>Input Face</th>
<th>Efficiency at 1000 Rpm</th>
<th>Max Input Speed</th>
<th>Self Locking Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>E50-1-19</td>
<td>1:1</td>
<td>E50-1-22</td>
<td>1:1</td>
<td>Helical</td>
<td>B</td>
<td>92%</td>
<td>3,000</td>
<td>X</td>
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<tr>
<td>E50-2-19</td>
<td>2:1</td>
<td>E50-2-22</td>
<td>2:1</td>
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<td>A</td>
<td>90%</td>
<td>3,000</td>
<td>X</td>
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<tr>
<td>E50-3-19</td>
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<td>E50-3-22</td>
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<td>3,000</td>
<td>X</td>
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<td>4:1</td>
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<td>A</td>
<td>88%</td>
<td>3,000</td>
<td>X</td>
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<tr>
<td>E50-5-19</td>
<td>5:1</td>
<td>E50-5-22</td>
<td>5:1</td>
<td>Helical</td>
<td>A</td>
<td>80%</td>
<td>3,000</td>
<td>X</td>
</tr>
<tr>
<td>E50-8-19</td>
<td>8:1</td>
<td>E50-8-22</td>
<td>8:1</td>
<td>Wormwheel</td>
<td>A</td>
<td>80%</td>
<td>1,500</td>
<td>X</td>
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<tr>
<td>E50-10-19</td>
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<td>E50-10-22</td>
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<td>A</td>
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<td>E50-20-19</td>
<td>20:1</td>
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<td>20:1</td>
<td>Wormwheel</td>
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<td>67%</td>
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<td>E50-40-19</td>
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<td>E50-40-22</td>
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<td>A</td>
<td>60%</td>
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<tr>
<td>E50-SP-19</td>
<td>1:1</td>
<td>E50-SP-22</td>
<td>1:1 - 40:1</td>
<td>Special Ratios : Replace SP with required ratio</td>
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<td>E50-SPA-19</td>
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<td>1:1 - 40:1</td>
<td>Low Backlash ≤30' : Replace SP with required ratio</td>
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<tr>
<td>E50-SPLH-19</td>
<td>1:1</td>
<td>E50-SPLH-22</td>
<td>1:1 - 40:1</td>
<td>Left Hand Helicals : Replace SP with required ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ØB Bore Sizes
Standard part 20 mm H7 with 6 mm keyway
22 mm H7 with 6 mm keyway
19 mm H7 with 6 mm keyway
All bores supplied with keyway to DIN 6885 - Js9 tolerance.

Output Shafts (To Suit 10mm Bore)
E50-X (Single), E50-DX (Double).
Input/Output Key: KK6-32.

Weight: 3.18 kg (Approx.)
Standard Backlash: =1°. Low Backlash: ≤30'.
Greased for life: Shell Gadus S2 V220AD 2.
LH – Left hand helix reverses output rotation.
Max. Overhung Loads at 1000 Rpm: Overhung Load (Fx) = 60 kg.
Max. Thrust Loads at 1000 Rpm: Thrust Load (Fa) = 40 kg.
Self Locking Output: Subject to ratio and only applies in static condition.
Amount of locking effect may vary due to manufacturing processes.
Modifications and specials are available. Please contact Technical Sales department.

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GEARBOXES
Right Angle Helical Reducers
Heavy Duty 25mm Bores 4.5 – 62 Nm 1:1 - 40:1

Part Number | Ratio | Type | Input Face | Efficiency at 1000 Rpm | Max Input Speed | Reflected Inertia at Input (kg.m²) | Self Locking Output
--- | --- | --- | --- | --- | --- | --- | ---
E60-1 | 1:1 | Helical | B | 94% | 3,000 | 1.319 x 10⁻³ | ×
E60-2 | 2:1 | Helical | A | 92% | 3,000 | 6.507 x 10⁻⁴ | ×
E60-3 | 3:1 | Helical | A | 91% | 3,000 | 5.111 x 10⁻⁴ | ×
E60-4 | 4:1 | Helical | A | 90% | 3,000 | 5.543 x 10⁻⁴ | ×
E60-5 | 5:1 | Helical | A | 80% | 3,000 | 5.489 x 10⁻⁴ | ×
E60-8 | 8:1 | Wormwheel | A | 80% | 1,500 | 4.951 x 10⁻⁴ | ×
E60-10 | 10:1 | Wormwheel | A | 73% | 1,500 | 4.911 x 10⁻⁴ | ×
E60-20 | 20:1 | Wormwheel | A | 67% | 1,500 | 4.859 x 10⁻⁴ | √
E60-40 | 40:1 | Wormwheel | A | 60% | 1,500 | 4.846 x 10⁻⁴ | √
E60-SP | 1:1 - 40:1 | Special Ratios : Replace SP with required ratio
E60-SPA | 1:1 - 40:1 | Low Backlash ≤30' : Replace SP with required ratio
E60-SPLH | 1:1 - 40:1 | Left Hand Helicals : Replace SP with required ratio

Testing in your application is necessary. You will need to assess duty cycles and confirm gearbox suitability with your own calculations. All figures listed are to be used for guidance only.

<table>
<thead>
<tr>
<th>RPM</th>
<th>1:1</th>
<th>2:1</th>
<th>3:1</th>
<th>4:1</th>
<th>5:1</th>
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<td>60.0</td>
<td>61.0</td>
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</table>

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**GEARBOXES**

**E60**

**Right Angle Helical Reducers**

Heavy Duty 22, 24 & 30mm Bores 4.5 – 62 Nm 1:1 - 40:1

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**ØB Bore Sizes**

- Standard part 25 mm H7 with 8 x 7 mm keyway
- 30 mm H7 with 8 x 7 mm keyway
- 24 mm H7 with 8 x 7 mm keyway
- 22 mm H7 with 6mm keyway

All bores supplied with keyway to DIN 6885 - Js9 tolerance.

**Output Shafts (To Suit 10mm Bore)**

- E60-X (Single), E60-DX (Double)
- Input/Output Key: KK8-7-40

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<table>
<thead>
<tr>
<th>Part Number</th>
<th>Ratio</th>
<th>Type</th>
<th>Input Face</th>
<th>Efficiency at 1000 Rpm</th>
<th>Max Input Speed</th>
<th>Self Locking Output</th>
</tr>
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<tbody>
<tr>
<td>E60-1-22</td>
<td>1:1</td>
<td>Helical B</td>
<td>B</td>
<td>92%</td>
<td>3,000</td>
<td>x</td>
</tr>
<tr>
<td>E60-2-22</td>
<td>2:1</td>
<td>Helical A</td>
<td>A</td>
<td>90%</td>
<td>3,000</td>
<td>x</td>
</tr>
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<td>E60-3-22</td>
<td>3:1</td>
<td>Helical A</td>
<td>A</td>
<td>89%</td>
<td>3,000</td>
<td>x</td>
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<td>E60-4-22</td>
<td>4:1</td>
<td>Helical A</td>
<td>A</td>
<td>88%</td>
<td>3,000</td>
<td>x</td>
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<td>E60-5-22</td>
<td>5:1</td>
<td>Helical A</td>
<td>A</td>
<td>80%</td>
<td>3,000</td>
<td>x</td>
</tr>
<tr>
<td>E60-8-22</td>
<td>8:1</td>
<td>Wormwheel A</td>
<td>A</td>
<td>80%</td>
<td>1,500</td>
<td>x</td>
</tr>
<tr>
<td>E60-10-22</td>
<td>10:1</td>
<td>Wormwheel A</td>
<td>A</td>
<td>73%</td>
<td>1,500</td>
<td>x</td>
</tr>
<tr>
<td>E60-20-22</td>
<td>20:1</td>
<td>Wormwheel A</td>
<td>A</td>
<td>67%</td>
<td>1,500</td>
<td>v</td>
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<tr>
<td>E60-40-22</td>
<td>40:1</td>
<td>Wormwheel A</td>
<td>A</td>
<td>60%</td>
<td>1,500</td>
<td>v</td>
</tr>
<tr>
<td>E60-SP-22</td>
<td>1:1 - 40:1</td>
<td>Special Ratios : Replace SP with required ratio</td>
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<td>E60-SPLH-22</td>
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<td>Left Hand Helicals : Replace SP with required ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Weight: 5.5 kg (Approx.)

- Greased for Life: Shell Gadus S2 V220AD 2.
- LH – Left hand helix reverses output rotation.
- Max. Overhung Loads at 1000 Rpm: Overhung Load (F₀) = 80 kg.
- Max. Thrust Loads at 1000 Rpm: Thrust Load (Fₐ) = 50 kg.
- Self Locking Output: Subject to ratio and only applies in static condition.
- Amount of locking effect may vary due to manufacturing processes.
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**Contact Information**

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