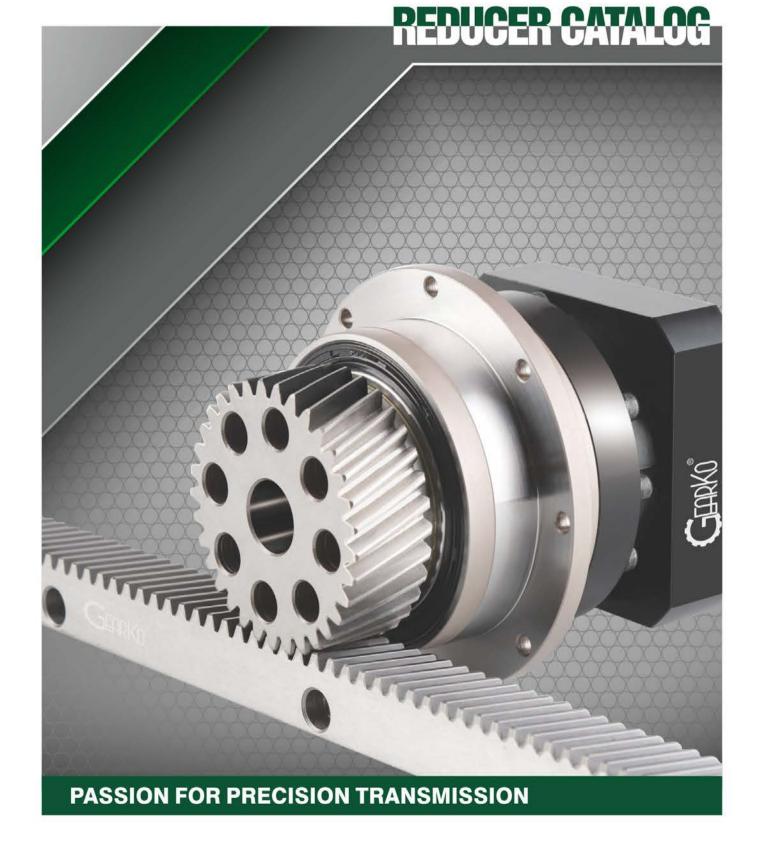


www.gearkoreducer.com







取6° **2023** REV 1.0

PRECISION PLANETARY REDUCER

High Precision / High Rigidity / High Reliability





High-end Design





We customize high precision, high rigidity, high reliability planetary reducers for our customers.











GEARKO® DRIVES THE PRECISION

TABLE OF CONTENTS

| GEARBOX SELECTION REFERENCE TABLE | 01 |
|-----------------------------------|-----|
| EXPLODED VIEW | 03 |
| TB SERIES | 05 |
| TBR SERIES | 19 |
| TD SERIES | 31 |
| TDR SERIES | 45 |
| TE SERIES | 53 |
| TER SERIES | 67 |
| TF SERIES | 75 |
| TCB SERIES | 85 |
| TCBR SERIES | 97 |
| TCE SERIES | 105 |
| TM SERIES | 113 |

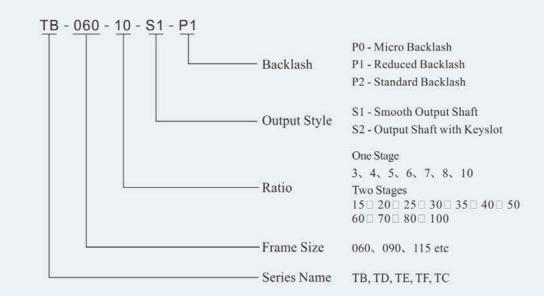
Innovative And Advanced Solutions To Maximize Customer Value

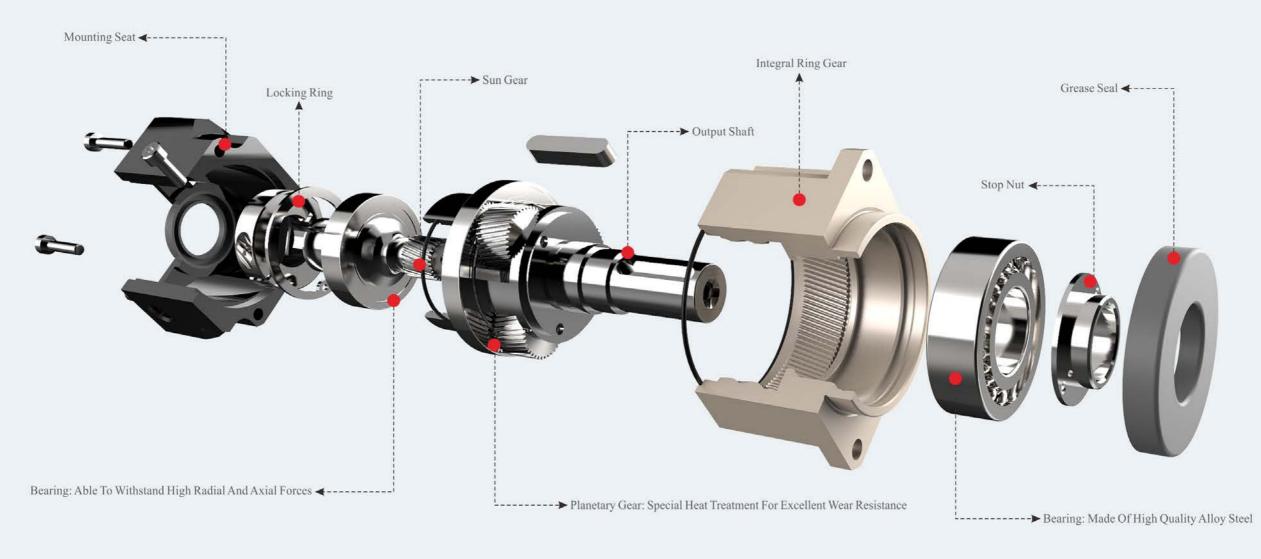
| Gearbox Selection Reference Table | GIN | | GREE | | | ib ove | | Gae | Gae | | Gaw |
|--|--|-----------------------------|-------------------------------------|------------------------|-------|------------------------------|------------------------|---------------------------|-----------------------------|-----------------|-----------------|
| Product Line Series | ТВ | TBR | TD | TDR | ī | ΤE | TER | TF | тсв | TCBR | TCE |
| Backlash Range (for single stage) | ≤ 5 | ≤6 | ≤ 5 | ≤6 | < | ≤ 5 | ≤6 | ≤5 | ≤ 5 | ≤ 8 | ≤5 |
| Lowest Backlash Available (for single stage) | ≤1 | ≤2 | ≤1 | ≤2 | < | ≤ 3 | ≤4 | ≤1 | ≤3 | ≤ 4 | ≤3 |
| Frame Size | 042/060/090/ 115/142/180/ 220 (available for customization for beyond 220) | 042/060/090/ 115/142/180 | 047/064/090/ 110/140/200 /255 | 064/090 / 110/140 | 120/1 | 70 / 090 / 155/205 235 | 070 / 090 / 120/155 | 060 /075/100 /140 /180 | 042/060/090/120/ 140/180 | 042/060/090/120 | 070/090/120/155 |
| Double Stage Available | Yes | Yes | Yes | Yes | Y | Yes | Yes | Yes | Yes | Yes | Yes |
| All Gearing Helical | Yes | Helical & Spiral Bevel | Yes | Helical & Spiral Bevel | Y | Yes | Helical & Spiral Bevel | Yes | Yes | Yes | Yes |
| Bearing Load Capacity Rating | High | High | High | High | н | ligh | High | Very High | High | High | High |
| Lubricated for Life | Yes | Yes | Yes | Yes | Y | Yes | Yes | Yes | Yes | Yes | Yes |
| Efficiency (for one stage) | ≽97% | ≽95% | ≥97% | ≥95% | >< | 97% | ≽95% | ≥97% | ≥97% | ≥95% | ≥97% |
| One-piece Ring Gear & Housing | Yes | Yes | Yes | Yes | Y | Yes | Yes | Yes | Yes | Yes | Yes |
| Housing Material | Steel | Steel | Steel | Steel | Si | iteel | Steel | Steel | Steel | Steel | Steel |
| Housing Nickel Plating | Yes | Yes | Yes | Yes | Y | Yes | Yes | Yes | No | No | No |
| One-piece Output Shaft & Planet Carrier | Yes | Yes | Yes | Yes | У | Yes | Yes | Yes | Yes | Yes | Yes |
| One-piece Sun Gear and Input Collet | Yes | Yes | Yes | Yes | Y | Yes | Yes | Yes | No | No | No |
| Customized Flange for Motor Installation | Yes | Yes | Yes | Yes | Y | Yes | Yes | Yes | Yes | Yes | Yes |
| Page Range | 05-18 | 19-30 | 31-44 | 45-52 | 53 | 3-66 | 67-74 | 75-84 | 85-96 | 97-104 | 105-112 |

^{*}All technical specifications in this brochure were correct at the time of printing. They are subject to change without notice as part of our continuous improvement initiative.

ADVANCED TECHNOLOGY TO MAKE THE DRIVE MORE PRECISELY

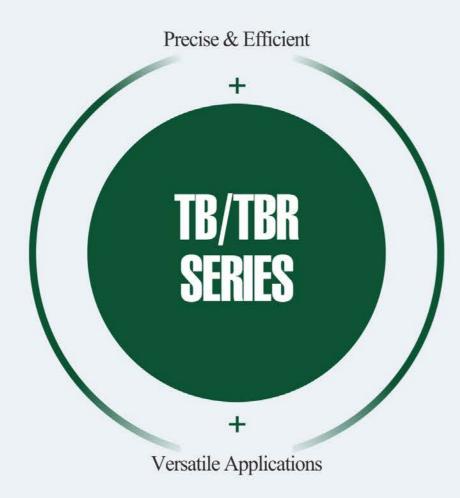
GEARKO QUALITY GUARANTEE STABLE AND EFFICIENT PERFORMANCE





04|

Precision Planetary Reducer



TB/TBR Series planetary reducer achieves maximum efficiency even at the highest speed and load. Robust structure and low backlash enable it to be applied in almost any shaft-output applications.

GEARKO DRIVES THE PRECISION





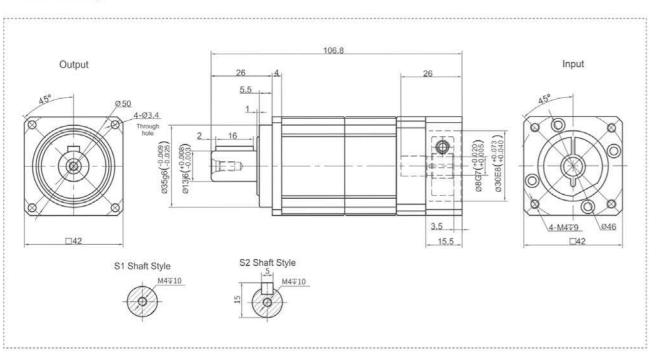
GEARKO®

ТВ

TB042 Series

TB042 One Stage

TB042 Two Stage



Performance Data

The TB series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TB042 | | | | | (|)ne | Stag | e | | | | | | | | Two | Stage | • | | | |
|-----------------------|----------------|-----------|---------|----------|----------|--|----------|---------|----------|-----------|---------|--------------|------------|-----------|-----------|---------|----------|------------|-----------|----------|---|
| Speed Ratio | | î | - | 4 | 5 | 6 | 7 | 8 | 9 | 10 | =: | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | - | 19 | 20 | 19 | 19 | 17 | - | 14 | - | 19 | 20 | 19 | 19 | 17 | 20 | 19 | 19 | 17 | 14 |
| Emergency Stop Torque | T₂ | Nm | | | | T ₁ | ×3 | | | ******** | | | | ********* | ********* | T,× | 3 | ********* | ******** | ******** | |
| Nominal Input Speed | S, | rpm | | | | 50 | 00 | | ****** | ****** | | | ****** | | ****** | 500 | 00 | | ****** | **** | |
| Maximum Input Speed | S₂ | rpm | | | | 100 | 000 | | ******** | | | | | | | 100 | 00 | | | | |
| Maximum Output Torque | T, | Nm | | CONTROL | Т | ×3: | ×609 | % | ****** | X.1333.63 | ******* | ********* | ******** | | Т | ,×3× | 60% | 1 | | | (2,172,124) |
| Maximum Radial Force | F, | N | | | | 78 | 30 | | | | | | | | | 78 | 0 | | | | |
| Maximum Axial Force | F _b | N | 1111111 | VAN/180 | ******** | 39 | 90 | 7330007 | 1110/10/ | 73330555 | | .50.3693 | 0001004100 | KINAMA | ******* | 39 | 0 | V.65017111 | ********* | ******* | 12377000 |
| Torsional Rigidity | - | Nm/arcmin | | | | 3 | 3 | | ******* | | | | | ******** | | 3 | ******** | | ******** | | |
| Efficiency | η | % | | | | ≥9 | 97 | | | ******** | | | | | | ≥9 | 4 | | | | |
| Service Life | - | h | | | | 200 | 000 | ****** | ****** | ********* | ******* | | ********* | ******** | ******** | 200 | 00 | | | ******** | ******** |
| Noise | - | dB | | | | </td <td>55</td> <td>******</td> <td></td> <td>*********</td> <td></td> <td>>4,444,45444</td> <td></td> <td></td> <td></td> <td>≤5</td> <td>5</td> <td></td> <td></td> <td>*******</td> <td></td> | 55 | ****** | | ********* | | >4,444,45444 | | | | ≤5 | 5 | | | ******* | |
| Weight | - | Kg | | ******** | | 0. | .5 | | ******* | ******** | | | | | ******** | 0, | 7 | | ******** | | *************************************** |
| | P0 | | | | | \leq | 1 | | | | | | | | | €: | 3 | | AAAOOAAAA | | 18,8,6,000,000 |
| Backlash | Ρl | arcmin | | | | < | 3 | | | | | | | | | €! | 5 | | | | |
| | P2 | | | ***** | | ≤ | 5 | | | | | | | | | €. | 7 | ********* | | | ******* |
| Operating Temperature | - | °C | | | | -20 | -90 | | | | | | | | | -20- | 90 | | | | |
| Lubrication | | - | | ******* | Sy | nthetic | Greas | ie . | | | | | | ******** | Sy | nthetic | Grease | | ******** | ******** | 3.155.111 |
| Protection Class | | - | | | | IP | 65 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | - | | | 1 | Any D | irection | n | | | | | | | | Any Dir | ection | ******** | | | |
| Moment of Inertia | J | kg.cm² | | | | 0.0 | 03 | | ******* | ., | | | | | | 0.0 | 3 | | | ******** | |

Notes:

- Speed ratio (i=Sin/Sou
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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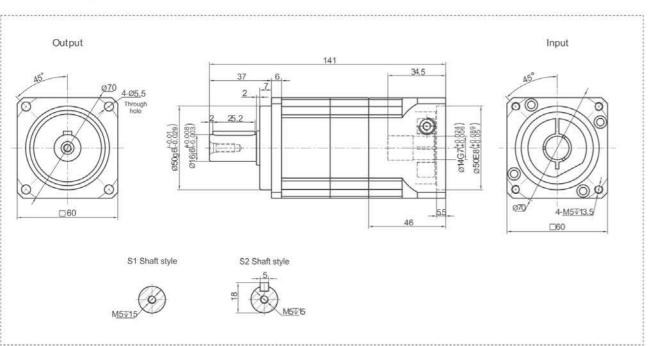


ТВ

TB060 Series

TB060 One Stage

TB060 Two Stage



Performance Data

The TB series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TB060 | | | | | (|)ne | Stag | e | | | | | | | | Γwο | Stage | | | | |
|-----------------------|----------------|-----------|---------|------------|--------------|---------|--------|------------|---------|----------|----|-----------|--------------|-----------|------------|------------|--------|------------|-----------|-----------|----------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | Т, | Nm | 52 | 50 | 58 | 55 | 50 | 45 | | 42 | 52 | 50 | 58 | 58 | 50 | 45 | 58 | 55 | 50 | 45 | 42 |
| Emergency Stop Torque | T ₂ | Nm | | | | Τ, | ×3 | | * | ******** | | ********* | | ********* | ********** | T,× | 3 | 6 | ******** | 613711111 | |
| Nominal Input Speed | S, | rpm | | | | 50 | 00 | ***** | ****** | ******** | | | | ***** | ******* | 500 | 00 | | ***** | ***** | |
| Maximum Input Speed | S₂ | rpm | | | | 100 | 000 | | | | | | | | | 100 | 00 | | | | |
| Maximum Output Torque | T, | Nm | | | Т | ×3 | × 60 | % | ******* | | | | | | Τ, | ×3× | 60% | | | LLESSON I | |
| Maximum Radial Force | F, | N | | | | 15 | 30 | | | | | | | | | 153 | 30 | | | | |
| Maximum Axial Force | F _b | N | ******* | 7/11/7.207 | . 1.0.00.000 | 76 | 35 | 7.110007.1 | 1110000 | 71110707 | | ********* | X01673333 | KANAATA | ********** | 76 | 5 | VANOTA UNI | 111071110 | LISALAS | 1377000 |
| Torsional Rigidity | - | Nm/arcmin | | | | | 7 | | | | | | ******* | ******** | | 7 | | | ******** | | |
| Efficiency | η | % | | | | ≥ | 97 | | | | | | | | | ≥9 | 4 | | | | |
| Service Life | - | h | | | | 200 | 000 | ****** | ****** | | | ******* | | ******** | ******** | 200 | 00 | | ******** | | |
| Noise | - | dB | | | | < | 58 | | | ******** | | ********* | | | | ≤6 | 0 | | ******* | | |
| Weight | - | Kg | | | | 1 | 3 | | | ******** | | | | | | 1.9 | 9 | | ********* | | |
| | PO | | | | | < | 1 | | | | | | 0,140,141,14 | | | €: | 3 | | | | |
| Backlash | P1 | arcmin | | | | < | 3 | | | | | | | | | ≤ ! | 5 | | | | |
| | P2 | | | ******** | ******* | < | 5 | | | | | | | | ********* | €. | 7 | | | | |
| Operating Temperature | - | °C | | | | -20 | ~90 | | | | | | | | | -20~ | 90 | | | | |
| Lubrication | | ;- | | ******* | Sy | ntheti | c Grea | se | | | | | ******* | ******* | Sy | nthetic | Grease | | ****** | ******** | 3.000.00 |
| Protection Class | | - | | | | ΙP | 65 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | - | | | A | ny Di | ection | | | | | | | | A | ny Dire | ction | | | | |
| Moment of Inertia | J | kg.cm² | 0.16 | 0.14 | | ******* | 0. | 13 | ******* | ., | | | | | ********* | 0.1 | 3 | | | ********* | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- $\begin{tabular}{ll} \begin{tabular}{ll} \be$

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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ТВ

TB090 Series

TB090 One Stage

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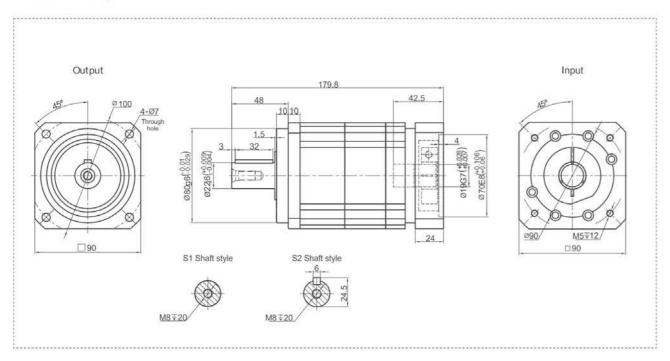
10

TCB

TOE

TM

TB090 Two Stage



Performance Data

The TB series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TB090 | | | | | (|)ne | Stag | e | | | | | | | 81 | Two | Stage | | | | |
|-----------------------|----------------|-----------|------|---------|----------|------------|--------|-----------|---------|-----------|-----|-----------|------------|-----------|------------|---|--------|------------|------------|-----------|-------------|
| Speed Ratio | | í | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | Т, | Nm | 130 | 140 | 160 | 148 | 140 | 123 | - | 102 | 130 | 140 | 160 | 148 | 140 | 123 | 160 | 148 | 140 | 123 | 102 |
| Emergency Stop Torque | T ₂ | Nm | | | | T, > | 3 | | | ******** | | ******** | ******* | ********* | ********** | T,× | 3 | fr:::::::: | ********** | | |
| Nominal Input Speed | S, | rpm | | | | 400 | 00 | | | ******* | | | | ****** | ******* | 400 | 00 | | ***** | | ***** |
| Maximum Input Speed | S₂ | rpm | | | | 800 | 00 | | | | | | | | | 800 | 00 | | | | |
| Maximum Output Torque | T, | Nm | | ******* | T, | ×3> | 609 | % | 9111111 | 0,000.00 | | | | | Τ, | ×3× | 60% | | | | |
| Maximum Radial Force | F, | N | | | | 32 | 50 | | | | | | | | | 325 | 0 | | | | ******* |
| Maximum Axial Force | F _b | N | | A34730A | 11134130 | 162 | 25 | 7A1000731 | 1100000 | 111101101 | | 341361111 | 5685673333 | ******* | 11/10/10/ | 162 | 25 | V83077130 | | 110011000 | 1377000 |
| Torsional Rigidity | | Nm/arcmin | | | | 14 | 4 | | | | | | | ******* | ******* | 14 | | ******** | | ******* | ******* |
| Efficiency | η | % | | | | ≥9 | 7 | | | | | | | | | ≥9 | 4 | | | | |
| Service Life | - | h | | | | 200 | 00 | | ~***** | | | | | | ******* | 200 | 00 | | ******** | ******** | ******* |
| Noise | - | dB | | | | € 6 | 0 | | | | | | | | | ≤6 | 3 | | | | |
| Weight | - | Kg | | | | 3. | 6 | | | | | ******** | .,,,,,,,, | ******** | | 4. | 5 | ******** | | ******** | |
| | PO | | | ***** | . HOULE | < | 1 | 14100001 | | 11101111 | | 21100111 | | | 1110000 | €: | 3 | | | | 1.1.100.000 |
| Backlash | P1 | arcmin | | | | < | 3 | | | | | | | | | </td <td>5</td> <td></td> <td></td> <td></td> <td></td> | 5 | | | | |
| | P2 | | | ******* | | < | 5 | | | ******* | | | | ********* | | €. | 7 | | | | ****** |
| Operating Temperature | - | °C | | | | -20- | 90 | | | | | | | | | -20- | 90 | | | | |
| Lubrication | | - | | 2555522 | Sy | ntheti | c Grea | se | | | | | ******** | ******** | Sy | nthetic | Grease | | ********* | | |
| Protection Class | | j.— j. | | | | IP6 | 55 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | · | | | Α | ny Dir | ection | | | | | | | | Aı | ny Dire | ction | | | | |
| Moment of Inertia | J | kg.cm² | 0.61 | 0.48 | 0.47 | 0. | 45 | | 0.44 | | | | 0.4 | 7 | ******** | | | ******* | 0.44 | ******** | ******* |

Notes:

- Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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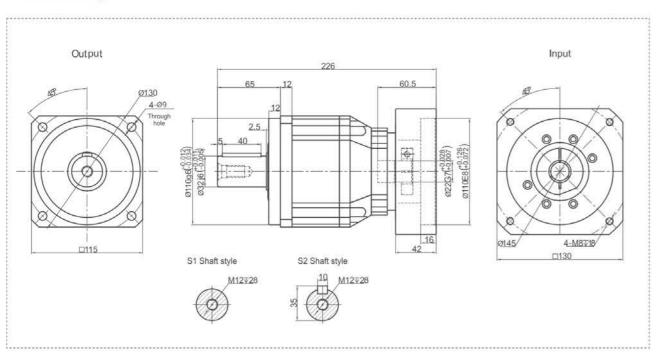
GEARKO®

ТВ

TB115 Series

TB115 One Stage

TB115 Two Stage



Performance Data

The TB series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TB115 | | | | | (| One | Stag | e | | | | | | | 8] | Two | Stage | | | | |
|-----------------------|----------------|-----------|--|---------|---------|--------|--------|------------|-----------|-----------|-----|-----------|-----------|------------|-------------|---|--------|------------|-----------|-----------|-----------|
| Speed Ratio | | ĭ | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 210 2 | 290 | 333 | 310 | 300 | 260 | - | 235 | 210 | 290 | 333 | 310 | 300 | 260 | 333 | 310 | 300 | 260 | 235 |
| Emergency Stop Torque | T ₂ | Nm | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | T,> | < 3 | | | ******** | | ******** | | ********* | *********** | T,× | 3 | ********** | ******** | 611111111 | B-1-1-1-1 |
| Nominal Input Speed | S, | rpm | | | | 40 | 00 | AAAAAAAA | HARAKA | ***** | | | | ****** | ******** | 400 | 00 | | ***** | ***** | AAAAAA |
| Maximum Input Speed | S₂ | rpm | | | | 80 | 00 | | | | | | | ********** | | 800 | | | | | |
| Maximum Output Torque | T, | Nm | | | Т, | ×3 | < 609 | % | Milate. | | | | | ******* | Т, | ×3× | 60% |) | ******* | | 2.572300 |
| Maximum Radial Force | F, | N | | | | 67 | 00 | | | | | | | ********* | | 670 | 00 | | | | |
| Maximum Axial Force | F _b | N | ******* | 177.500 | 1100000 | 33 | 50 | 73,100,073 | 1100000 | 1110000 | | ********* | ********* | ******* | 1111100001 | 335 | 50 | VA3011111 | ********* | 111671770 | 1377000 |
| Forsional Rigidity | - | Nm/arcmin | ******** | ares | | 2 | 5 | | | | | | | ******** | | 25 | 5 | ********* | ******** | | ****** |
| Efficiency | η | % | | | | ≥9 | 97 | | | | | | | | | ≥9 | 4 | | | | |
| Service Life | - | h | ******** | | | 200 | 00 | ******* | 0.6111.01 | | | | | ******** | | 200 | 00 | | | | ****** |
| Noise | - | dB | | | | ≤(| 3 | | | | | | | | | ≤6 | 3 | | | | |
| Weight | - | Kg | | ***** | | 8. | 5 | | | .,,,,,,,, | | | | ******* | | 9. | 5 | | ******** | | ******* |
| | PO | | | | | < | 1 | | | | | | | | | €; | 3 | | | | |
| Backlash | Ρl | arcmin | | | | < | 3 | | | | | | | | | </td <td>5</td> <td></td> <td></td> <td></td> <td></td> | 5 | | | | |
| | P2 | | | | | < | 5 | | | ******* | | | | | | €. | 7 | ******** | | | |
| Operating Temperature | - | °C | | | | -20- | -90 | ******* | | | | | | ********* | | -20- | 90 | ovenii. | ******** | | |
| Lubrication | | - | | ****** | Sy | ntheti | c Grea | se | | | | | | ******** | Sy | nthetic | Grease | | ****** | | |
| Protection Class | | - | | | | IP6 | 35 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | - | | **** | A | ny Di | ection | | | | | | | | Aı | ny Dire | ction | ********* | ******* | | |
| Moment of Inertia | J | kg.cm² | 3.25 2 | .74 | 2.71 | 2.65 | 2.62 | 2.58 | - | 2.57 | | | | 0.47 | | ******** | | C | .44 | | |

Notes:

- Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TB142 Series

TB142 One Stage

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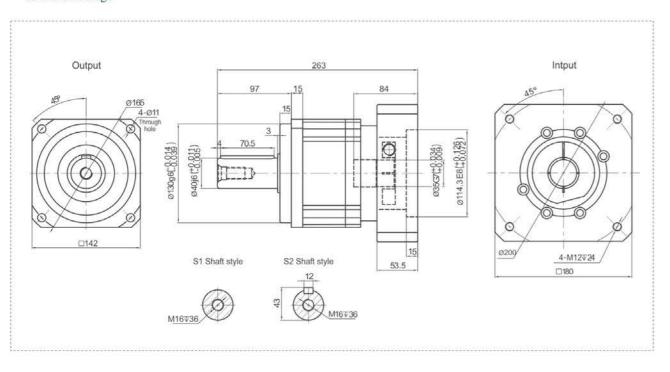
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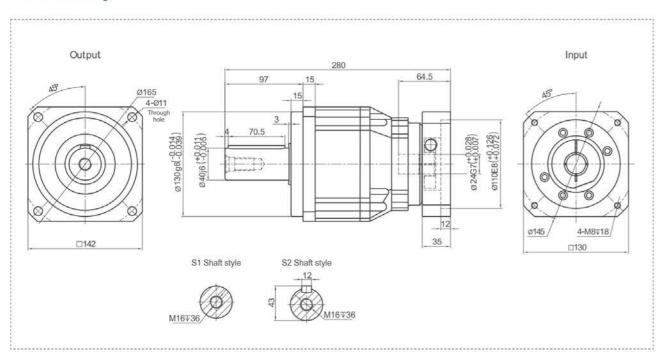
TCB

Tel

TM



TB142 Two Stage



Performance Data

The TB series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TB142 | | | | | (| One | Stag | e | | | | | | | | Γwο | Stage | | | | |
|-----------------------|----------------|-----------|------|------------------------|----------|-------|--------|----------|------------|--|----------|-----------|------------|-----------|------------|------------|---------|-----------|-----------|-----------|---------------|
| Speed Ratio | | Ĭ | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 340 | 545 | 650 | 600 | 555 | 500 | - | 460 | 340 | 545 | 650 | 600 | 555 | 500 | 650 | 600 | 555 | 500 | 460 |
| Emergency Stop Torque | T ₂ | Nm | | A | | T,× | 3 | | ****** | 411111111 | | ******** | ******** | ********* | ********* | T,× | 3 | ********* | | ********* | .,,,,,,,, |
| Nominal Input Speed | S, | rpm | | | | 300 | 0 | | | | | | | | ***** | 300 | 00 | | | | |
| Maximum Input Speed | S₂ | rpm | | | | 600 | 0 | | | | | | | | | 600 | 00 | | | | |
| Maximum Output Torque | | Nm | | | Τ, | ×3× | 60% | 6 | | | | | | ******** | Т | ×3× | 60% | i | | | |
| Maximum Radial Force | F, | N | | | | 940 | 0 | | | | | | | ******** | ********* | 940 | 00 | | | | |
| Maximum Axial Force | F _b | N | | ******* | 71107000 | 470 | 0 | VATABASE | 1110000 | ************************************** | | 341364111 | 0000000000 | ******** | ******* | 470 | 00 | ********* | etterr va | ********* | 13/1000 |
| Forsional Rigidity | - | Nm/arcmin | | | | 50 | 1 | | | | | | ********* | ******** | | 50 |) | | ******* | | ******* |
| Efficiency | η | % | | | | ≥9 | 7 | | | | | | | | | ≥9 |)4 | | | | |
| Service Life | - | h | | ******* | | 200 | 00 | | | ******** | ******** | 200 | 00 | | | | ******* | | | | |
| Noise | - | dB | | | | ≤6 | 5 | | | | | | ≤6 | 5 | | | | | | | |
| Weight | - | Kg | | | | 16. | 5 | | | | | ******** | | | ********* | 16 | .4 | | ********* | | ******** |
| | PO | | | ******* | ******* | ≤1 | | | LALONSON . | | | 21100111 | | | ********** | €: | 3 | | | | A.A.A.P.P.O.C |
| Backlash | P1 | arcmin | | | | €3 | 3 | | | | | | | | | < | 5 | | | | |
| | P2 | | | ******* | | €5 | 5 | | | | | | | | | ≤1 | 0 | | | | |
| Operating Temperature | - | °C | | | | -20~ | 90 | | | | | | | | | -20- | 90 | | | | |
| Lubrication | | ·=: | | 16.5 ≤1 ≤3 ≤5 | | | | | | | | | | | | | | | | | ******* |
| Protection Class | , | | | | | IP6 | 5 | | | ******** | | ********* | | | ******** | IP6 | 5 | | | | |
| Mounting Position | | - | | ****** | A | ny Di | ection | 1 | | | | | | | Α | ny Dire | ection | ********* | | | |
| Moment of Inertia | J | kg.cm² | 9.21 | 7.54 | 7.42 | 7.25 | 7.14 | 7.07 | - | 7.03 | | | | 2.71 | | ********** | T | | 2.57 | 7 | ******* |

Notes:

- Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TB180 Series

TB180 One Stage

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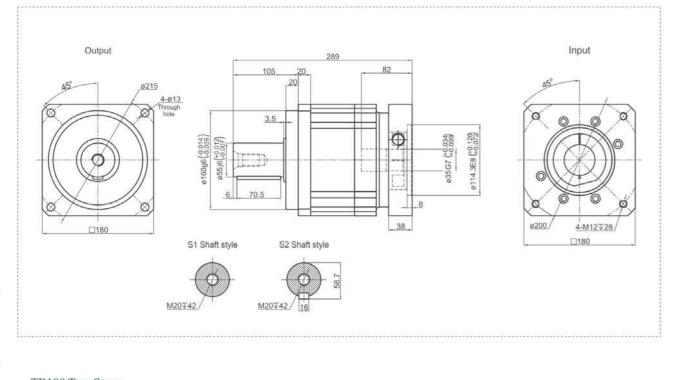
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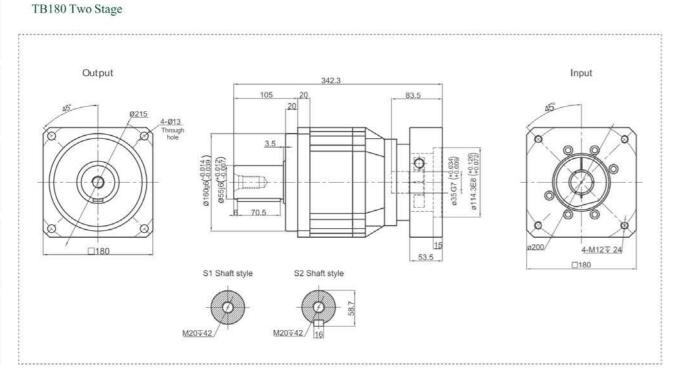
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Performance Data

The TB series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TB180 | | | | (| one S | tage | | | | | | | | Γwο | Stage | | | | |
|-----------------------|----------------|-----------|------------|----------------|---------|-----------|------------|----------|-----|-------------|------------|--------------|------------|---|--------|-------------|-----------|-----------|-----------|
| Speed Ratio | | Ĭ | 3 4 | 5 | 6 | 7 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 590 1050 | 1200 | 11081 | 100 100 | 0 - | 910 | 590 | 1050 | 1200 | 1108 | 1100 | 1000 | 1200 | 1108 | 1100 | 1000 | 910 |
| Emergency Stop Torque | T ₂ | Nm | | ********* | T, × 3 | 3 | | | | *********** | | ********* | ********** | T,× | 3 | ********** | ********* | ********* | .,,,,,,, |
| Nominal Input Speed | S, | rpm | | 28.64.44.4 | 3000 |) | | | | | | | ********* | 300 | 00 | | ***** | | ***** |
| Maximum Input Speed | S₂ | rpm | | | 6000 |) | | | | | | | | 600 | 00 | | | | |
| Maximum Output Torque | T, | Nm | | T ₁ | ×3×6 | 60% | 12.551155 | | | ********* | | | T, | ×3× | 60% | | | | 2.5757.00 |
| Maximum Radial Force | F, | N | | | 1450 | 0 | | | | | | | | 145 | 00 | | | | ******** |
| Maximum Axial Force | F _b | N | | // 11/2/15/ | 7250 |) | 91111000 | SCILLSON | | 731130111 | 1078177710 | KIIVAII. | ********* | 725 | 50 | V.63077130 | 111011110 | TITEATANA | 2,27,000 |
| Forsional Rigidity | | Nm/arcmin | ********* | ********* | 145 | | omon | | | | | 310404 | ********* | 14 | 5 | | | | ****** |
| Efficiency | η | % | | | ≥97 | | | | | | | | | ≥9 | 4 | | | | |
| Service Life | - | h | | | 2000 | 0 | | | | | | | ******** | 200 | 00 | | | | ****** |
| Noise | - | dB | | | ≤66 | | | | | | | | ******** | ≤6 | 6 | | | | |
| Weight | - | Kg | | ********** | 27 | | .,,,,,,,, | | | | | | ********** | 34 | 1 | | ******** | ********* | |
| | PO | | | | ≤1 | | 0111000 | ****** | 1 | | | 0.111.2111.2 | ********* | €; | 3 | | | | 3.3.5.000 |
| Backlash | P1 | arcmin | | | ≤3 | | | | | | | | | </td <td>5</td> <td></td> <td></td> <td></td> <td></td> | 5 | | | | |
| | P2 | | | | ≤5 | | ,,,,,,,,,, | | h | | ********* | ******** | | €. | 7 | 125-72-50-1 | | | |
| Operating Temperature | _ | °C | | | 20~9 | 0 | | | | | | | | -20~ | 90 | | | | |
| Lubrication | | - | | Sy | nthetic | Grease | ******** | | | | | ******* | Sy | nthetic | Grease | | ******** | | ****** |
| Protection Class | | | | | IP65 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | _ | | A | ny Dire | ction | | | | | | | A | ny Dire | ction | | | | |
| Moment of Inertia | J | kg.cm² | 28.98 23.6 | 7 23.29 | 22.75.2 | 2.48 22.5 | 59 - | 22.5 | 1 | ********* | | 7.42 | ******* | | | ******** | 7.03 | 3 | ****** |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TB220 Series

TB220 One Stage

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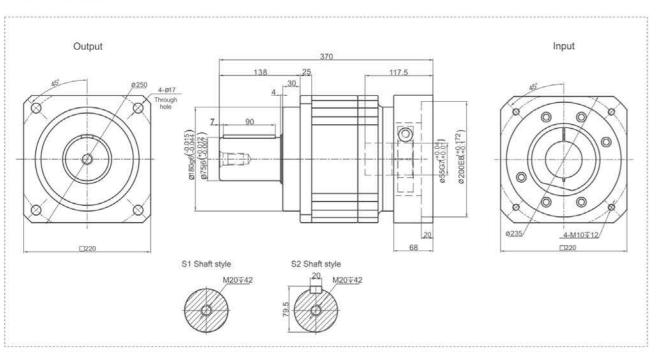
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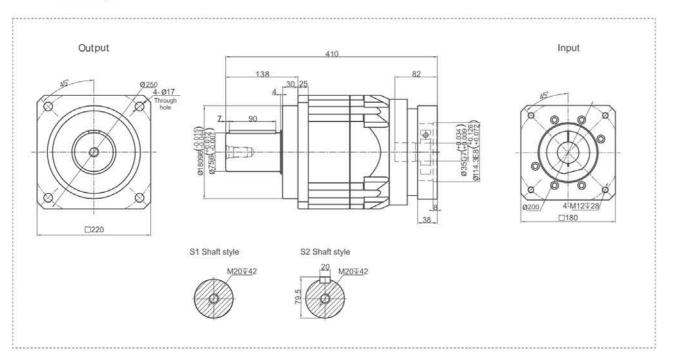
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TB220 Two Stage



Performance Data

The TB series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TB220 | | | | | (| ne s | Stage | è | | | | | | | | Γwο | Stage | | | | |
|-----------------------|----------------|-----------|--------|------------------------|----------|---------|--------|--------------|---|-----------|---------|----------|-----------|----------|------------|---|--------|-------------|-------------|-------------|--------------|
| Speed Ratio | | Ĭ | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | Т, | Nm | 1150 | 700 | 2008 | 1900 | 1810 | 1600 | VQ: | 1550 | 1150 | 1700 | 2008 | 1900 | 1810 | 1600 | 2008 | 1900 | 1810 | 1600 | 1550 |
| Emergency Stop Torque | T₂ | Nm | | | | T, × | 3 | | | ******** | | | | ******** | ********* | T,× | 3 | ********* | *********** | | .,,,,,,,, |
| Nominal Input Speed | Sı | rpm | | | | 200 | 0 | ******* | | | | | | | ******* | 200 | 00 | | | | |
| Maximum Input Speed | S ₂ | rpm | | | | 400 | 0 | | | | | | | | | 400 | 00 | | | | |
| Maximum Output Torque | T ₄ | Nm | | | T, | ×3× | 60% |) | *************************************** | | | | | ******** | Τ, | ×3× | 60% | | | | 2,177,124,01 |
| Maximum Radial Force | F. | N | | | ., | 5000 | 00 | | | | | | | | | 500 | 00 | | | | ********* |
| Maximum Axial Force | F _b | N | | 13177397 | 11000000 | 2500 | 00 | 7.7.0007.7.7 | 1300000 | 1110000 | | 34136911 | 078367733 | KANATAN | ********** | 250 | 00 | V.000.7.130 | ttterrite | 11/11/11/11 | 2,377,000 |
| Torsional Rigidity | - | Nm/arcmin | | ranco | | 225 | 5 | | | | 1000000 | | | ******* | ******** | 22 | 5 | | | ******* | ****** |
| Efficiency | η | % | | | | ≥9 | 7 | | | | | | | | | ≥9 | 4 | | | | |
| Service Life | - | h | | | | 2000 | 00 | ******* | ****** | | | | | ******** | ********* | 200 | 00 | ******** | ******** | ******** | ******* |
| Noise | - | dB | | | | ≤70 | 0 | | | | | | | | | ≤7 | 0 | | ******** | | |
| Weight | - | Kg | | ***** | | 51. | 5 | | | .,,,,,,,, | | | | ******* | | 63. | 5 | ******** | | ******** | 31157115 |
| | PO | | | NAME OF TAXABLE PARTY. | | ≤1 | | | | HARMAN | | | | | | €; | 3 | | | | |
| Backlash | Ρl | arcmin | | | | ≤3 | } | | | | | | | | | </td <td>5</td> <td></td> <td></td> <td></td> <td></td> | 5 | | | | |
| | P2 | | | ****** | | ≤5 | ; | | | | | | | | | € | 7 | | | | |
| Operating Temperature | - | °C | | | | 20~ | 90 | | | | | | | ***** | | -20~ | 90 | | | | |
| Lubrication | | _ | | | Sy | nthetic | Greas | se | | | | | | ******* | Sy | nthetic | Grease | | | | ******* |
| Protection Class | | | | | | IP6 | 5 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | | | ****** | A | ny Dir | ection | | | | | | | | A | ny Dire | ction | | | | |
| Moment of Inertia | J | kg.cm² | 69.615 | 4.37 | 53.27 | 51.72 | 50.97 | 50.84 | - | 50.56 | | | | 23.29 | | | | | 22.5 | 1 | ******* |

Notes:

- ♠ Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TBR042 Series

TBR042 One Stage

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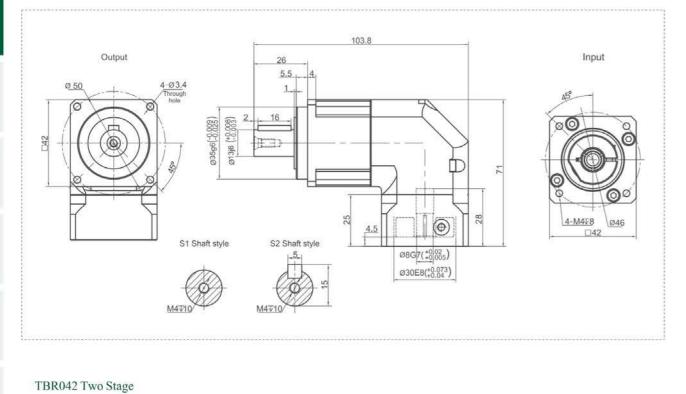
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Output 125.8 Input 125.8 Input

Performance Data

The TBR series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TBR042 | | | | One | Sta | ge | | | | | | | Т | wo S | Stage | | | | | |
|-----------------------|----------------|---------------|---|------------|-------------|------|--------------|-------------|-----------|-------------|----|-----------|------------|--------|------------|-----------|-----------|---|-----------|---------|
| Speed Ratio | | ì | - | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | Т, | Nm | - | 15 | 18 | 18 | 19 | 17 | - | 14 | 15 | 18 | 18 | 19 | 17 | 18 | 18 | 19 | 17 | 14 |
| Emergency Stop Torque | T _z | Nm | | | T, | ×3 | | *********** | | | | | derronen | 7 | T,×3 | B | ********* | *************************************** | | |
| Nominal Input Speed | S, | rpm | | | 50 | 00 | | | | | | | | | 5000 | | | | | |
| Maximum Input Speed | S ₂ | rpm | | | 100 | 000 | | | | | | | | 1 | 0000 | | | | | |
| Maximum Output Torque | | Nm | | 7 | ,×3 | ×609 | % | | | | | | | T,× | 3×6 | | | | | |
| Maximum Radial Force | F. | Ν | | | 78 | 30 | | ********** | | | | | | | 780 | ******** | | | | |
| Maximum Axial Force | F _b | N | | A11730AA11 | 39 | 90 | ** (.**)(*** | | | 54147.55551 | | 000000000 | M.147.1120 | ****** | 390 | 111100110 | VA301/110 | ********* | TARATAN S | 2377000 |
| Forsional Rigidity | - | Nm/ arcmin | | 2000000 | | 3 | | ******** | | | | | .,,,,,,,,, | | 3 | | | ******** | | 2000000 |
| Efficiency | η | % | | | ≥ | 95 | | | | | | | | | ≥92 | | | | | |
| Service Life | - | h | | ********* | 200 | 000 | | ******** | | | | | | 2 | 0000 |) | | | | ****** |
| Noise | - | dB | | | \leq | 61 | | | | | | | | | ≤61 | | | | | |
| Weight | - | Kg | | | 0 | .7 | | ,,,,,,,,, | .,,,,,,,, | | | | | | 0.9 | ******** | | ********* | | ******* |
| | P0 | | | | | - | | | | | | | | | _ | | | | | |
| Backlash | Ρl | arcmin | | | < | 4 | | | | | | | | | ≤ 7 | | | | | |
| | P2 | | | | \$ | 6 | | | | | | | | | ≤9 | | | | | |
| Operating Temperature | - | °C | | | -20 | -90 | | | | | | | | -2 | 20~90 |) | | | | |
| Lubrication | - | | | Synth | etic Gre | ease | ******* | ********** | | | | ******** | | Syntl | netic Gr | ease | oronni. | ******* | | 200000 |
| Protection Class | - | | | | ΙP | 65 | | | | | | | | | IP65 | ******* | | | | |
| Mounting Position | - | | | Any I | Directio | n | | | ****** | | | | | Any | Direct | | | | | |
| Moment of Inertia | J | kg.cm² | | | 0. | 09 | | | | | | | | | 0.09 | | | ******** | | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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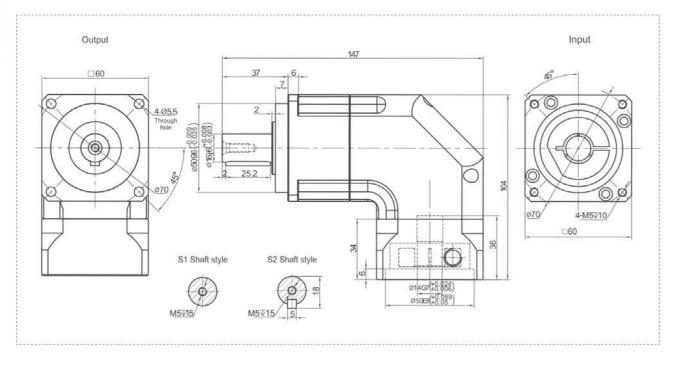


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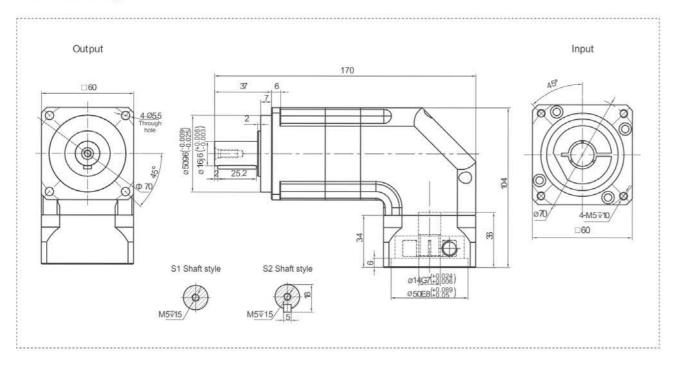
TBR060 Series

TBR060 One Stage

TBR



TBR060 Two Stage



Performance Data

The TBR series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TBR060 | | | | | | C | ne | Stag | ge | | | | | | | | | Tv | vo S | Stag | ge | | | | |
|-----------------------|----------------|---------------|----------|-------------|---------|--------|--------|---------|----------|------------|--------|------------|------|-----------|---------|----------|--------|-----------|--------|---------|---------|--------------|----------|----------|-------------|
| Speed Ratio | | i | 3 | 4 5 | 6 | 7 | 8 | 9 | 10 | 12 | 14 | 16 2 | 0 25 | 30 | 35 | 40 | 50 | 60 | 70 8 | 30 1 | 100 | 120 | 140 | 160 1 | 80 20 |
| Nominal Output Torque | т, | Nm | 50 4 | 8 58 | 55 | 50 | 45 | - | 42 | 55 4 | 12 | 45 4 | 2 58 | 55 | 50 | 45 | 58 | 55 | 50 4 | 45 | 42 | 55 | 50 | 45 | - 42 |
| Emergency Stop Torque | T ₂ | Nm | | 11106-1111 | ****** | T, > | 3 | | | | | | | ***** | ****** | | | Т, | ×3 | ***** | | da = = = = = | | | |
| Nominal Input Speed | Sı | rpm | ******* | | | 500 | 00 | | ***** | | | | | | | | | 50 | 000 | | | | | ***** | |
| Maximum Input Speed | S₂ | rpm | | | | 100 | 00 | | | | | | | | | | | 10 | 000 | | 245500 | | | | |
| Maximum Output Torque | T₄ | Nm | | V.551 5.555 | T,> | ×3> | ×60 | % | | 112.55.115 | ****** | | | eri veter | | | 1 | ,×3 | × 60 | 0% | | etove | | ******** | 3112177744 |
| Maximum Radial Force | F. | N | | | | 153 | 30 | | | | | | | | | | | 15 | 30 | | 252.000 | | | | |
| Maximum Axial Force | F, | N | | 1110000001 | V730773 | 76 | 5 | 5773355 | 1777.700 | 001111000 | 000733 | 3000000000 | | 077.1702 | 0000000 | MAMAA | 201221 | 7 | 65 | 1110001 | 503483 | enne. | enterna | 00110010 | ******* |
| Torsional Rigidity | - | Nm/ arcmin | | | | 7 | | | ****** | | | | | | ****** | .,,,,,, | | | 7 | | | | | | |
| Efficiency | η | % | | | | ≥ 9 | 95 | | | | | | | | | | | ≥ | 92 | | | | | | |
| Service Life | - | h | ******** | | 2 | 200 | 00 | | ****** | | | | | | ****** | | | 20 | 000 | | .,,,,, | | | ******* | |
| Noise | - | dB | | | | ≤6 | 3 | | | | | | | | | | | < | 63 | | | | | | |
| Weight | - | Kg | | | ******* | 2 | | | | .,,,,,, | | | | | ****** | | | 2 | .5 | | | | | ******* | *********** |
| | P0 | | 11101110 | | and an | | | | | | rock), | | | 0.11160 | 333333 | 0.111.01 | | 000000111 | - | | | 0.53.56 | ALIGNA O | ***** | |
| Backlash | P1 | arcmin | | | | < | 4 | | | | | | | | | | | \$ | 7 | | | | | | |
| | P2 | | ******* | 000000000 | ****** | < | 6 | | ******* | tenence | | | | | ***** | | | < | 9 | | | | | ******* | |
| Operating Temperature | - | °C | | | - | 20- | -90 | | | | | | | .,,,,,, | | | | -20 | ~90 |) | | | | | |
| Lubrication | | - - | | | Syn | thetic | Grea | se | ****** | MARKET ST | | | | ******* | 212222 | 2001000 | S | ynthet | ic Gre | ase | | est to | | ******** | |
| Protection Class | | _ | | | | IP6 | 35 | | | | | | | | | | | ΙP | 65 | | | | | | |
| Mounting Position | | - | | | Any | y Dire | ection | | | | | | | | | | | Any Di | rectio | n | | | | | |
| Moment of Inertia | J | kg.cm² | | 0.3 | 5 | ****** | ****** | | | 0.0 | 07 | | | | ****** | ****** | | 0. | 09 | | | | | ****** | |

Notes:

- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For Continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.



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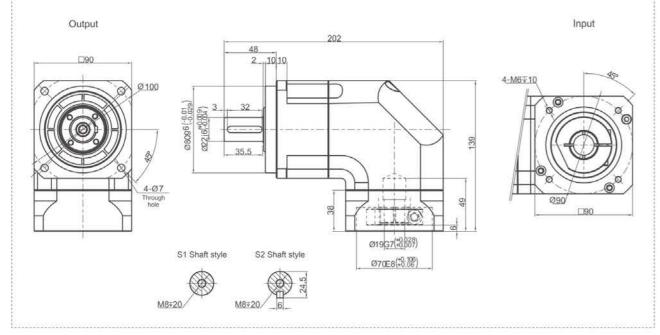
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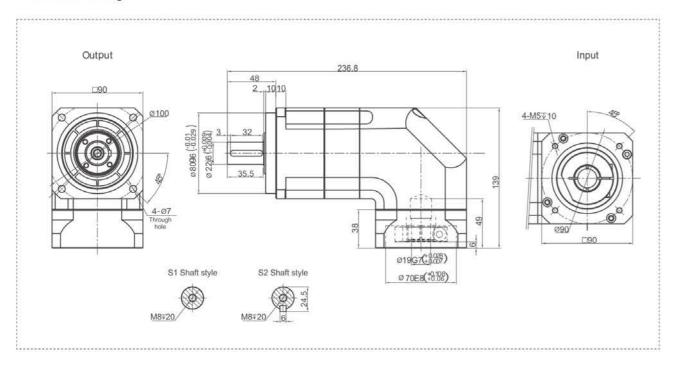
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TBR090 Series

TBR090 One Stage



TBR090 Two Stage



Performance Data

The TBR series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TBR090 | | | | | | On | ie St | age | | | | | | | | | Т | wo | Sta | ıge | | | | |
|-----------------------|----------------|---------------|------------|----------|---------|----------|---------|-----------|------------|-------------|-----------|------|------------|---------|-----------|---------|---------|-------|---------|----------|---------|--------------|-----------|-------------|
| Speed Ratio | | i | 3 4 | 5 | 6 | 7 8 | 8 9 | 10 | 12 | 14 | 16 | 20 2 | 25 30 | 3! | 5 40 | 50 | 60 | 70 | 80 | 10 | 0 12 | 0 140 | 160 | 180 20 |
| Nominal Output Torque | Т, | Nm | 100 120 | 150 | 148 | 14012 | 23 - | 102 | 2 148 | 140 | 123 | 02 1 | 50 14 | 8 14 | 0 120 | 150 | 148 | 140 | 123 | 310 | 2 14 | 8 140 | 123 | - 10 |
| Emergency Stop Torque | T ₂ | Nm | | ob | ******* | T,> | × 3 | | | | ******** | | | | | | | Т, | × 3 | | ******* | | | |
| Nominal Input Speed | S | rpm | ********* | | | 40 | 00 | | | | | | | | | | | 40 | 00 | | | | | |
| Maximum Input Speed | S ₂ | rpm | | | | 80 | 00 | | | | | | | | | | | 80 | 00 | | | | | |
| Maximum Output Torqu | T ₄ | Nm | | 118.5000 | Т | ×3 | × 60° | % | 2.5412.541 | 10021303 | (5555-50) | | umun | | | | Τ, | × 3 | × 60 | 0% | | (71.277.5 | | |
| Maximum Radial Force | F, | N | | | | 32 | 50 | | | | | | | | | | | 32 | 50 | | | | | |
| Maximum Axial Force | F _b | N | | ******* | 730773 | 16 | 25 | 1053277.1 | ********** | 50000733 | 1000000 | | ********** | enteri | 220021752 | ****** | 1000077 | 16 | 25 | 00000 | | 101.1107.7 | 110011000 | 10041147000 |
| Torsional Rigidity | - | Nm/ arcmin | | | | 1 | 4 | | | | | | | | | | | 1 | 4 | | | | | ******** |
| Efficiency | η | % | | | | ≥9 | 95 | | | | | | | | | | | > | 92 | | | | | |
| Service Life | - | h | | ****** | | 200 | 000 | | | | | | | | ******* | | | 20 | 000 | | | | | |
| Noise | - | dB | } | | | €6 | 35 | | | | | | | | | | | < | 65 | | | | | |
| Weight | - | Kg | | ******* | | 6 | 3 | ******** | | | | | | | ******** | | | 6 | .3 | ***** | | | | |
| | P0 | | hiiconomii | | | < | 2 | | | | | | ********* | 00000 | | | | < | 4 | | | COLUMN | | |
| Backlash | P1 | arcmin | | | | < | 4 | | | | | | | | | | | < | 7 | | | | | |
| | P2 | | | ******* | ****** | € | 6 | | | | | | | ****** | | | | \$ | 9 | ,,,,,,,, | ****** | | | ., |
| Operating Temperature | - | °C | | | | -20- | -90 | | | | | | | | | | | -20 | -90 |) | | | | |
| Lubrication | | - | | ******** | S | ynthetic | c Greas | ie | | -32.22.23.2 | | | | ******* | | 9300334 | Syı | nthet | ic Gre | ase | | 127.75.75.75 | 55555555 | |
| Protection Class | | - | | | | IP6 | 35 | | | | | | | | | | | ΙP | 65 | ***** | | | | |
| Mounting Position | | - | | | A | ny Din | ection | | | | | | | | | | An | y Di | rection | n | | | 201103 | |
| Moment of Inertia | J | kg.cm² | | | 2.2 | 25 | | | | 1 | .87 | | | | 2 | 2.25 | | | | ***** | Ī | | 1.8 | 7 |

Notes:

- Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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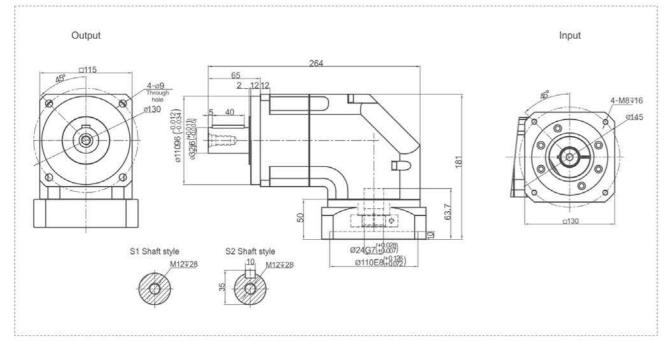


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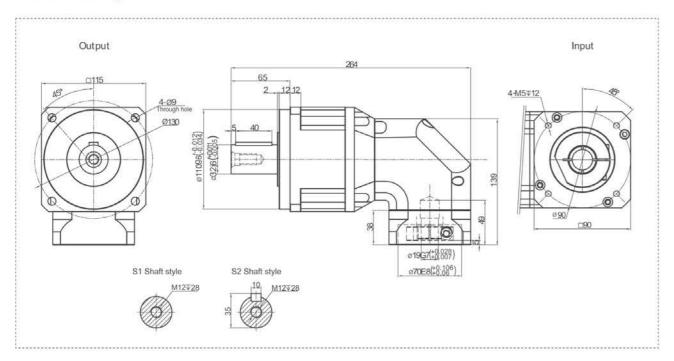
TBR

TBR115 Series

TBR115 One Stage



TBR115 Two Stage



Performance Data

The TBR series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TBR115 | | | One Stage | Two Stage |
|-----------------------|----------------|---------------|---|---|
| Speed Ratio | | i | 3 4 5 6 7 8 9 10 12 14 16 | 20 25 30 35 40 50 60 70 80 100 120 140 160 180 200 |
| Nominal Output Torque | т, | Nm | 200 260 330 310 300 260 - 235 310 300 260 | 235 330 310 300 260 330 310 300 260 235 310 300 260 - 235 |
| Emergency Stop Torque | T₂ | Nm | T ₁ ×3 | T ₁ ×3 |
| Nominal Input Speed | S, | rpm | 4000 | 4000 |
| Maximum Input Speed | S ₂ | rpm | 8000 | 8000 |
| Maximum Output Torque | T ₄ | Nm | T,×3×60% | T,×3×60% |
| Maximum Radial Force | F. | Ν | 6700 | 6700 |
| Maximum Axial Force | F. | N | 3350 | 3350 |
| Torsional Rigidity | - | Nm/ arcmin | 25 | 25 |
| Efficiency | η | % | ≥95 | ≽92 |
| Service Life | - | h | 20000 | 20000 |
| Noise | - | dB | ≤68 | ≤68 |
| Weight | - | Kg | 13 | 12.5 |
| | PO | | €2 | €4 |
| Backlash | P1 | arcmin | ≤4 | €7 |
| | P2 | | ≤6 | ≤9 |
| Operating Temperature | - | °C | -20~90 | -20-90 |
| Lubrication | | <u> </u> | Synthetic Grease | Synthetic Grease |
| Protection Class | | - | IP65 | IP65 |
| Mounting Position | | - | Any Direction | Any Direction |
| Moment of Inertia | J | kg.cm² | 6.84 6.25 | 2.25 1.87 |

Notes:

- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For Continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.



TB

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TBR142 Series

TBR142 One Stage

Output

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Through hole

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S1 Shaft style

S2 Shaft style

35G7(0004)

114.3E8(*0126)

Ø200 4-M12√24
□180

TBR142 Two Stage

Performance Data

The TBR series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TBR142 | | | One S | Stage | | Two Stage | |
|-----------------------|----------------|---------------|-------------------------|-----------------------|---|---------------------------|---|
| Speed Ratio | | i | 3 4 5 6 7 8 | 9 10 12 14 16 20 | 25 30 35 40 5 | 0 60 70 80 100 120 14 | 10 160 180 200 |
| Nominal Output Torque | т, | Nm | 340 540 650 600 555 500 | - 460 600 555 500 450 | 650 600 555 500 65 | 50 600 555 500 460 600 59 | 55 500 - 460 |
| Emergency Stop Torque | T ₂ | Nm | T ₁ × | :3 | | T,×3 | |
| Nominal Input Speed | S, | rpm | 300 | 00 | | 3000 | ******************* |
| Maximum Input Speed | S ₂ | rpm | 600 | 00 | | 6000 | |
| Maximum Output Torque | T₄ | Nm | T,×3× | 60% | *************************************** | T,×3×60% | |
| Maximum Radial Force | F. | Ν | 940 | 00 | | 9400 | |
| Maximum Axial Force | F _b | N | 470 | 00 | | 4700 | *************************************** |
| Torsional Rigidity | - | Nm/ arcmin | 50 |) | *************************************** | 50 | |
| Efficiency | η | 58 | ≥9 | 95 | | ≽92 | *************************************** |
| Service Life | - | h | 200 | 00 | | 20000 | |
| Noise | _ | dB | ≤7 | 0 | | €70 | *************** |
| Weight | - | Kg | 25. | 2 | *************************************** | 21.4 | *************************************** |
| | PO | | ≤2 | 2 | | €4 | *************************************** |
| Backlash | P1 | arcmin | €4 | 4 | | ≤7 | |
| | P2 | | <(| 6 | | ≤9 | |
| Operating Temperature | - | °C | -20- | 90 | | -20~90 | |
| Lubrication | | - | Synthetic | Grease | | Synthetic Grease | |
| Protection Class | | - | IP6 | 5 | | IP65 | |
| Mounting Position | | - | Any Dire | ection | | Any Direction | |
| Moment of Inertia | J | kg.cm² | 23.4 | 21.8 | 6.84 | | 6.25 |

Notes:

- Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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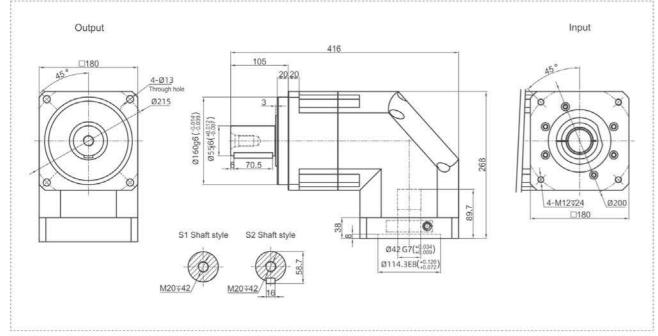
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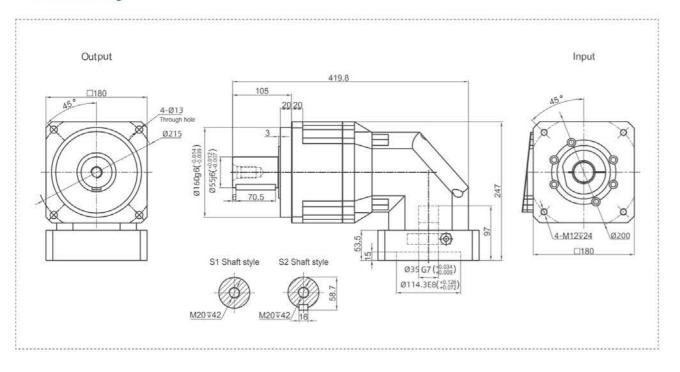
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TBR180 Series

TBR180 One Stage



TBR180 Two Stage



Performance Data

The TBR series reducer adopts a standardized flange interface. The installation is convenient and quick. Due to its integral structure design, this high-precision model can operate excellently in many demanding working application.

| TBR180 | | | One Stage | Two Stage |
|-----------------------|----------------|---------------|--|---|
| Speed Ratio | | i | 3 4 5 6 7 8 9 10 12 14 16 20 | 25 30 36 40 50 60 70 80 100 120 140 160 180 200 |
| Nominal Output Torque | т, | Nm | 59010401200110811001000 - 910110811001000910 | 12001108110010001200110811001000 910 110811001000 - 910 |
| Emergency Stop Torque | T ₂ | Nm | T,×3 | Τ ₁ ×3 |
| Nominal Input Speed | S, | rpm | 3000 | 3000 |
| Maximum Input Speed | S ₂ | rpm | 6000 | 6000 |
| Maximum Output Torque | T ₄ | Nm | T,×3×60% | T;×3×60% |
| Maximum Radial Force | F. | Ν | 14500 | 14500 |
| Maximum Axial Force | F. | N | 7250 | 7250 |
| Torsional Rigidity | - | Nm/ arcmin | 145 | 145 |
| Efficiency | η | % | ≥95 | ≥92 |
| Service Life | - | h | 20000 | 20000 |
| Noise | - | dB | €72 | ≤ 72 |
| Weight | - | Kg | 46.5 | 43 |
| | PO | | €2 | .≤4 |
| Backlash | P1 | arcmin | ≤ 4 | ≤7 |
| | P2 | | ≤ 6 | <9 |
| Operating Temperature | - | °C | -20~90 | -20~90 |
| Lubrication | | _ | Synthetic Grease | Synthetic Grease |
| Protection Class | | - | IP65 | IP65 |
| Mounting Position | | - | Any Direction | Any Direction |
| Moment of Inertia | J | kg.cm² | 68.9 65.6 | 23.4 21.8 |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For Continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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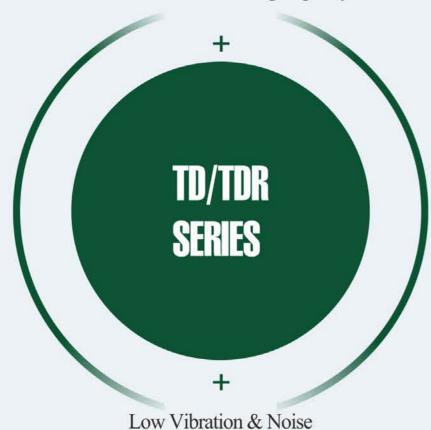
TORR

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TM

Precision Planetary Reducer

Enhanced Load Bearing Capacity



TD/TDR series planetary reducer offers you innovative and advanced solutions in terms of technology, which has achieved outstanding results in any flange-driven applications.

GEARKO DRIVES THE PRECISION







TD

TB

TD047 Series

TD047 One Stage

TD047 Two Stage

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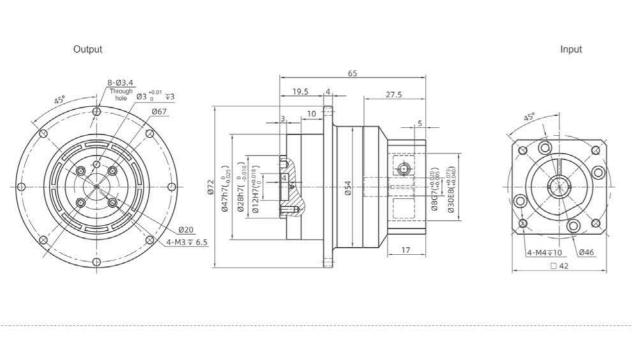
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Output 87.2 19.5 4 19.5 4 10.6 09.7 1.6 09.7

Performance Data

TD series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TD047 | | | | Or | e Stage | | | | | Two S | tage | | |
|------------------------|----------------|-----------|--------------|------------|---|---|----|---|---------------|--------------|---------------|-------------|-----|
| Speed Ratio | | i | 4 | 5 | 7 | 10 | 20 | 25 | 35 | 40 | 50 | 70 | 100 |
| Nominal Output Torque | Т, | Nm | 19 | 20 | 19 | 14 | 19 | 20 | 19 | 17 | 20 | 19 | 14 |
| Emergency Stop Torque | T ₂ | Nm | | T1: | <3 | • | | ************* | | T1×3 | ******* | | |
| Nominal Input Speed | S, | rpm | | 500 | 00 | *************************************** | | ********** | | 5000 | *********** | *********** | |
| Maximum Input Speed | S ₂ | rpm | | 100 | 00 | | | | | 10000 | | | |
| Maximum Output Torque | T, | Nm | | T1×3: | ×60% | 400000000000000000000000000000000000000 | | | Τl | ×3×609 | % | | |
| Maximum Bending Moment | M. | Nm | | 78 | 0 | | | | | 780 | | | |
| Maximum Axial Force | F | N | *********** | 39 | 0 | | | ************ | ************* | 390 | ****** | | |
| Torsional Rigidity | - | Nm/arcmin | ************ | 3 | *************************************** | | | | ************ | 3 | ************ | | |
| Efficiency | η | % | | ≥9 |)7 | | | | | ≥94 | ******** | | |
| Service Life | - | h | | 200 | 00 | | | | | 20000 | | | |
| Noise | - | dB | | ≤ 5 | 55 | | | | | ≤55 | | | |
| Weight | - | Kg | | 0.6 | 55 | | | | | 0.98 | ************* | | |
| | P0 | | | < | 1 | | | | ************ | ≤3 | ************* | | |
| Backlash | P1 | arcmin | | < | 3 | | | | | ≤5 | | | |
| | P2 | | | < | 5 | | | | | ≤ 7 | | | |
| Operating Temperature | - | °C | | -20^ | -90 | | | | - | 20~90 | | | |
| Lubrication | | - | | Synthetic | Grease | | | | Syn | thetic Greas | e | | |
| Protection Class | | - | ************ | IP6 | 55 | | | | | IP65 | | | |
| Mounting Position | | - | | Any Di | rection | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | An | y Direction | 1 | | |
| Moment of Inertia | J | kg.cm² | | 0.0 | 3 | | | | | 0.03 | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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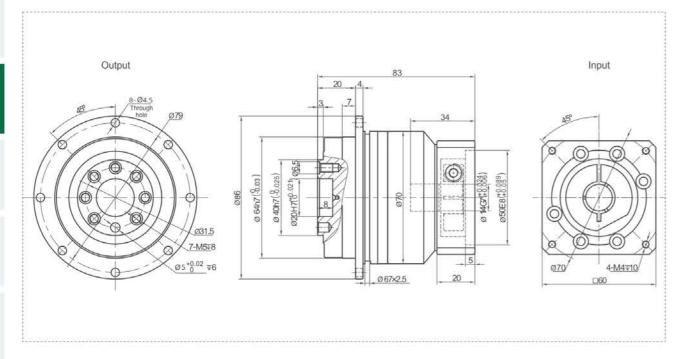


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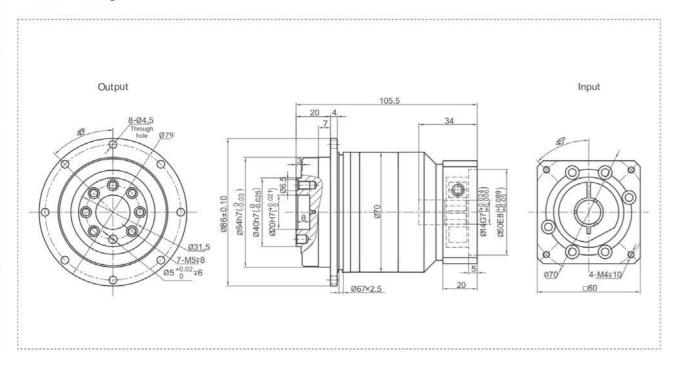
TD

TD064 Series

TD064 One Stage



TD064 Two Stage



Performance Data

TD series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TD064 | | | | On | e Stage | | | | | Two S | tage | | |
|------------------------|----------------|-----------|-------------|-----------|---------|---|----------|-------|---------------------|--------------|----------------|----|---------|
| Speed Ratio | | i | 4 | 5 | 7 | 10 | 20 | 25 | 35 | 40 | 50 | 70 | 100 |
| Nominal Output Torque | Т, | Nm | 50 | 58 | 50 | 42 | 50 | 58 | 50 | 48 | 58 | 50 | 42 |
| Emergency Stop Torque | T ₂ | Nm | | T,× | 3 | ************* | | ••••• | | T,×3 | *********** | | |
| Nominal Input Speed | S, | rpm | | 500 | 00 | Selenia (Cristo | | | | 5000 | *********** | | ******* |
| Maximum Input Speed | S ₂ | rpm | | 100 | 00 | *************************************** | | | | 10000 | | | |
| Maximum Output Torque | Τ, | Nm | | T,×3× | 60% | | | | T, | ×3×609 | % | | |
| Maximum Bending Moment | M. | Nm | | 12 | 5 | | | | | 125 | | | |
| Maximum Axial Force | F | N | | 105 | 50 | *************************************** | | | | 1050 | ************ | | |
| Torsional Rigidity | - | Nm/arcmin | | 13 | 3 | | <u> </u> | | | 13 | **>*********** | | |
| Efficiency | η | % | | ≥9 | 17 | | | | | ≥94 | ******* | | |
| Service Life | - | h | | 300 | 00 | | | | | 30000 | | | |
| Noise | - | dB | *********** | ≤5 | 8 | | | | | ≤58 | | | |
| Weight | - | Kg | | 1.: | 3 | | | | **************** | 1.8 | | | |
| | P0 | | | ≤ | 1 | | | | 02444444444 | ≤3 | | | |
| Backlash | P1 | arcmin | | €. | 3 | *********** | | | | ≤5 | | | |
| | P2 | | | €: | 5 | | | | | ≤ 7 | | | |
| Operating Temperature | - | °C | | -20- | 90 | | | | - | 20~90 | | | |
| Lubrication | | _ | | Synthetic | Grease | | | | Syn | thetic Greas | e | | |
| Protection Class | | - | | IP6 | 55 | | Ì | | | IP65 | ********** | | |
| Mounting Position | | = | | Any Di | rection | ······ | | | An | y Direction | ············ | | |
| Moment of Inertia | J | kg.cm² | 0.14 | | 0.13 | | 1 | | <i>77</i> 833777777 | 0.13 | | | |

Notes:

- When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

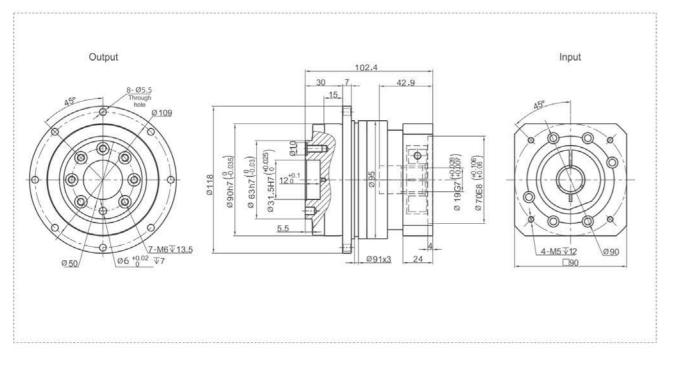


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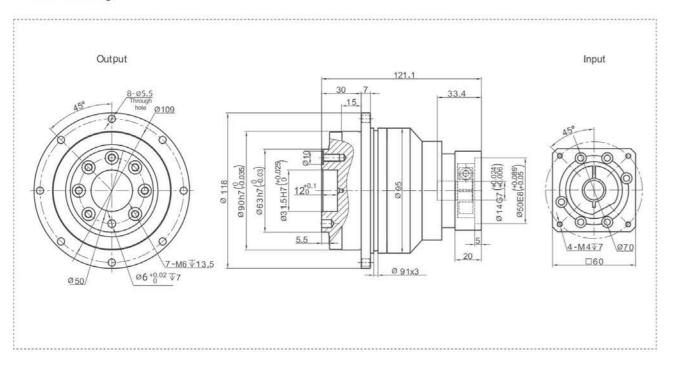
TD090 Series

TD090 One Stage

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TD090 Two Stage



Performance Data

TD series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TD090 | | | | On | e Stage | | | | | Two S | tage | | |
|------------------------|----------------|-----------|---|-----------|---------|---|----------|---|---|-------------|------|---------------|-------------|
| Speed Ratio | | 1 | 4 | 5 | 7 | 10 | 20 | 25 | 35 | 40 | 50 | 70 | 100 |
| Nominal Output Torque | т, | Nm | 130 | 160 | 140 | 102 | 130 | 160 | 140 | 123 | 160 | 140 | 102 |
| Emergency Stop Torque | T ₂ | Nm | ************* | T,× | 3 | ************* | | *********** | ************ | T,×3 | | ********** | ********* |
| Nominal Input Speed | S, | rpm | *********** | 400 | 00 | 2611111116011110 | | *********** | | 4000 | | ************* | ********** |
| Maximum Input Speed | Sz | rpm | | 800 | 00 | *************************************** | | | | 8000 | | | |
| Maximum Output Torque | T., | Nm | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | T,×3× | 60% | | | | T, | ×3×609 | % | | 7.753445 |
| Maximum Bending Moment | M, | Nm | | 23 | 5 | | | | | 235 | | | |
| Maximum Axial Force | F | N | | 285 | 50 | | | | | 2850 | | | |
| Torsional Rigidity | - | Nm/arcmin | | 31 | | | <u> </u> | | *************************************** | 31 | | | ********** |
| Efficiency | η | % | | ≥9 | 7 | | | | | ≥94 | | | |
| Service Life | - | h | | 300 | 00 | | | | | 30000 | | | |
| Noise | - | dB | | ≤6 | 0 | 110.00.01110.00 | | | | ≤60 | | | |
| Weight | - | Kg | ************* | 3.9 | 9 | | | ************* | ************** | 3.1 | | | ********* |
| | PO | | ************* | € | I | 22(1111)502110 | | | VPS-TELESASTI | ≤3 | | | endrewerr) |
| Backlash | P1 | arcmin | | €3 | 3 | | | | | ≤5 | | | |
| | P2 | | | €! | 5 | | | | | ≤ 7 | | | |
| Operating Temperature | - | °C | | -20~ | 90 | | | | - | 20~90 | | | ******** |
| Lubrication | | - | | Synthetic | Grease | | | | Syn | thetic Grea | se | | |
| Protection Class | | - | | IP6 | 5 | | | ************* | | IP65 | | | |
| Mounting Position | | - | | Any Dir | ection | | | | An | y Direction | 1 | | *********** |
| Moment of Inertia | J | kg.cm² | 0.51 | 0.47 | 0.45 | 0.44 | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | 0.13 | | | |

Notes:

- When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.



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TD110 Series

TD110 One Stage

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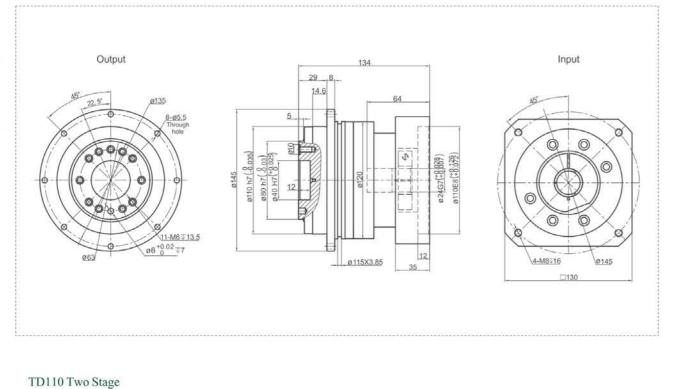
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Output 141.7 Input I

Performance Data

TD series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TD110 | | | | On | e Stage | | | | | Two S | tage | | |
|------------------------|----------------|-----------|--------------|-----------|---------|---|-----|---|---------------|-------------|----------|--------------|------------|
| Speed Ratio | | i | 4 | 5 | 7 | 10 | 20 | 25 | 35 | 40 | 50 | 70 | 100 |
| Nominal Output Torque | т, | Nm | 290 | 333 | 300 | 235 | 290 | 333 | 300 | 260 | 333 | 300 | 235 |
| Emergency Stop Torque | T ₂ | Nm | | T,× | 3 | • | | *************************************** | | T,×3 | | | ********* |
| Nominal Input Speed | S, | rpm | | 400 | 00 | *************************************** | | ************ | | 4000 | | ************ | ********** |
| Maximum Input Speed | S ₂ | rpm | | 800 | 00 | | | | | 8000 | | | **** |
| Maximum Output Torque | Τ, | Nm | | T, ×3× | 60% | ************* | | | Т,> | ×3×60 | % | | |
| Maximum Bending Moment | M _a | Nm | | 43 | 0 | | | | | 430 | | | ********** |
| Maximum Axial Force | F, | N | *********** | 299 | 00 | | | | ************ | 2990 | | | |
| Torsional Rigidity | - | Nm/arcmin | ************ | 82 | 2 | | | | ************ | 82 | | | |
| Efficiency | η | % | | ≥9 | 7 | | | | | ≥94 | ******** | | |
| Service Life | - | h | | 300 | 00 | | | | ; | 30000 | | | |
| Noise | - | dB | | ≤6 | 3 | | | | | ≤63 | | | |
| Weight | - | Kg | | 5.9 | 9 | | | | | 7.9 | | | ********** |
| | P0 | | | < ′ | l | | | | WARREN SANTER | ≤3 | | | ********** |
| Backlash | P1 | arcmin | | €; | 3 | ****** | | | | ≤5 | | | |
| | P2 | | | €! | 5 | | | | | €7 | | | |
| Operating Temperature | - | °C | | -20~ | 90 | | | | - | 20-90 | | | |
| Lubrication | | - 1 | | Synthetic | Grease | | | | Syn | thetic Grea | se | | |
| Protection Class | | - 1 | | IP6 | 5 | | | *********** | | IP65 | | | |
| Mounting Position | | = | | Any Dir | ection | | | ************* | An | y Direction | 1 | | ********** |
| Moment of Inertia | J | kg.cm² | 2.87 | 2.71 | 2.62 | 2.57 | | 0.47 | | | 0.4 | 14 | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.



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TD140 Series

TD140 One Stage

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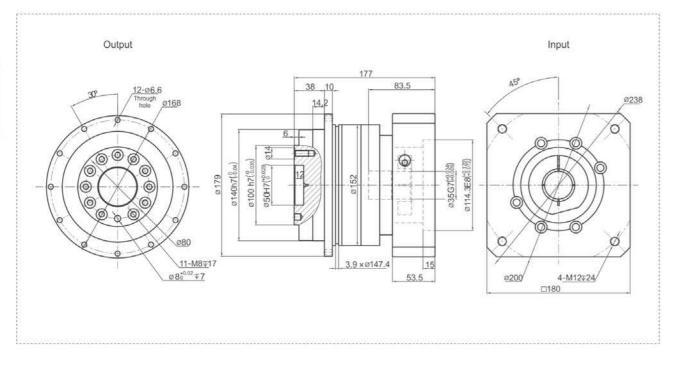
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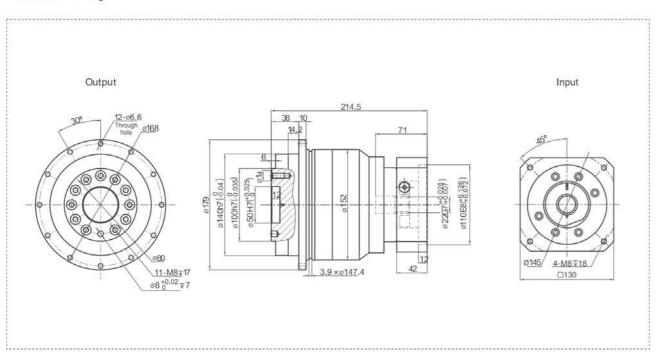
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TD140 Two Stage



Performance Data

TD series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TD140 | | | | On | e Stage | | | | | Two S | tage | | |
|------------------------|----------------|-----------|---|-----------|---------|---|----------|--------|----------------|-------------|---|---------------|------------|
| Speed Ratio | | i | 4 | 5 | 7 | 10 | 20 | 25 | 35 | 40 | 50 | 70 | 100 |
| Nominal Output Torque | Т, | Nm | 545 | 650 | 555 | 460 | 545 | 650 | 555 | 560 | 650 | 555 | 460 |
| Emergency Stop Torque | T ₂ | Nm | | T,× | 3 | | | •••••• | 2 | T,×3 | ************ | ************* | |
| Nominal Input Speed | S, | rpm | | 300 | 00 | Managarana Managarana | | | | 3000 | | | |
| Maximum Input Speed | S ₂ | rpm | | 600 | 00 | | | | | 6000 | | | |
| Maximum Output Torque | Τ, | Nm | *************************************** | T, ×3× | 60% | *************************************** | | | T,> | 3×609 | % | | 3333475 |
| Maximum Bending Moment | M, | Nm | | 130 | 00 | | | | | 1300 | | ************* | |
| Maximum Axial Force | Fb | N | | 105 | 90 | | | | 1 | 10590 | *************************************** | | |
| Torsional Rigidity | - | Nm/arcmin | | 15 | 1 | | | | ************* | 151 | ************* | | |
| Efficiency | η | % | | ≥9 | 7 | | | | | ≥94 | ********* | | ******* |
| Service Life | - | h | | 300 | 00 | | | | 3 | 30000 | | | |
| Noise | - | dB | | ≤6 | 55 | 110.001110.00 | | | | ≤65 | | | |
| Weight | - | Kg | | 14. | .6 | | | | | 15.5 | | | |
| | P0 | | | €. | 1 | | | | V354444454A444 | ≼3 | ************* | (4444) | |
| Backlash | P1 | arcmin | | <; | 3 | ****** | | | | ≤5 | | | |
| | P2 | | | €! | 5 | | | | | ≤7 | | | |
| Operating Temperature | - | °C | | -20~ | 90 | | | | - | 20~90 | | | |
| Lubrication | | - | | Synthetic | Grease | | | | Synt | hetic Greas | se | | |
| Protection Class | | - | | IP6 | 5 | | <u> </u> | | | IP65 | | | |
| Mounting Position | | - | | Any Dir | rection | | | | An | y Direction | 1 | | ********** |
| Moment of Inertia | J | kg.cm² | 7.54 | 7.42 | 7.14 | 7.03 | | 2.71 | | | 2.5 | 57 | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.



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TD200 Series

TD200 One Stage

Output

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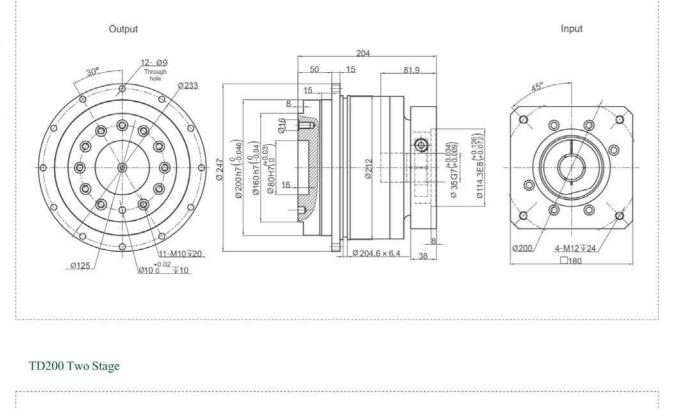
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Input

Performance Data

TD series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TD200 | | | | On | e Stage | | | | | Two S | tage | | |
|------------------------|----------------|-----------|--|-----------|---------|---|------|--------------|---|--------------|---------------|---|------------|
| Speed Ratio | | i | 4 | 5 | 7 | 10 | 20 | 25 | 35 | 40 | 50 | 70 | 100 |
| Nominal Output Torque | т, | Nm | 1050 | 1200 | 1100 | 910 | 1050 | 1200 | 1100 | 1100 | 1200 | 1100 | 910 |
| Emergency Stop Torque | T ₂ | Nm | | T,× | 3 | | | ************ | | T,×3 | * | ## # # # # ## ## ## ## ## ## ## ## ## # | |
| Nominal Input Speed | S, | rpm | | 300 | 00 | *************************************** | | | | 3000 | | | ********** |
| Maximum Input Speed | S ₂ | rpm | | 600 | 00 | | | | | 6000 | | | ********* |
| Maximum Output Torque | Τ, | Nm | ·************************************* | T, × 3 × | 60% | *************************************** | | | T ₁ : | ×3×609 | 6 | | |
| Maximum Bending Moment | M _a | Nm | | 306 | 64 | | | | | 3064 | | ************** | |
| Maximum Axial Force | F, | N | | 166 | 60 | | | | ************ | 16660 | | | |
| Torsional Rigidity | - | Nm/arcmin | | 44 | 0 | | | | *********** | 440 | ************* | | ********* |
| Efficiency | η | % | | ≥9 | 7 | | | | | ≥94 | ********** | | ******** |
| Service Life | - | h | | 300 | 00 | | | | | 30000 | | | |
| Noise | - | dB | | ≤6 | 6 | | | | | ≤66 | | | |
| Weight | - | Kg | | 35. | 1 | | | | *************************************** | 34.9 | | | |
| | P0 | | | €′ | ĺ | | | | West Hiller | ≤3 | | | |
| Backlash | P1 | arcmin | | €3 | 3 | ******* | | | | ≤5 | | | |
| | P2 | | | €! | 5 | | | | | ≤ 7 | | | |
| Operating Temperature | - | °C | | -20~ | 90 | | | | • | 20~90 | | *********** | |
| Lubrication | | = | | Synthetic | Grease | | Ī. | | Syn | thetic Greas | e | | |
| Protection Class | | - | | IP6 | 5 | | İ | | | IP65 | | | |
| Mounting Position | | - | | Any Dir | ection | | | | An | y Direction | 1 | | ********* |
| Moment of Inertia | J | kg.cm² | 25.03 | 23.29 | 22.48 | 22.51 | | 7.42 | | | 7.0 |)3 | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.



TD

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TD255 Series

TD255 One Stage

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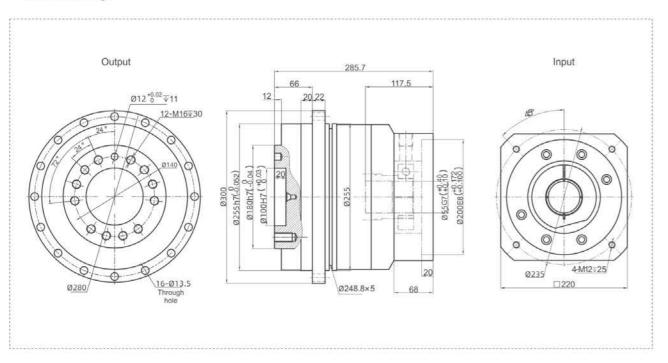
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TCB

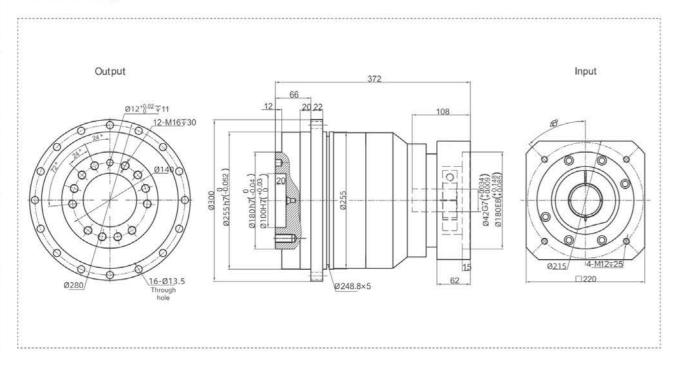
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TM

43



TD255 Two Stage



Performance Data

TD series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TD255 | | | | On | e Stage | | | | | Two S | tage | | |
|------------------------|----------------|-----------|---|-----------|---------|-----------------|--|-------------|---|--------------|---|---|--------------|
| Speed Ratio | | i | 4 | 5 | 7 | 10 | 20 | 25 | 35 | 40 | 50 | 70 | 100 |
| Nominal Output Torque | т, | Nm | 1700 | 2008 | 1810 | 1550 | 1700 | 2008 | 1810 | 1700 | 2008 | 1810 | 1550 |
| Emergency Stop Torque | T ₂ | Nm | *************************************** | T,× | 3 | ************* | | | | T,×3 | ************** | | |
| Nominal Input Speed | S, | rpm | | 200 | 00 | /2/11/19/KK19/K | | | | 2000 | (1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. | ************* | entent North |
| Maximum Input Speed | S₂ | rpm | | 400 | 00 | ************* | | | | 4000 | | | |
| Maximum Output Torque | T ₄ | Nm | | T, ×3× | 60% | | | | T, | <3×609 | % | | 33550755 |
| Maximum Bending Moment | M, | Nm | | 590 | 00 | | | | | 5900 | | | |
| Maximum Axial Force | F, | N | | 294 | 30 | | | | | 29430 | | | ******** |
| Torsional Rigidity | - | Nm/arcmin | | 100 |)6 | | | | | 1006 | *************************************** | | 0.0111110 |
| Efficiency | η | % | | ≥9 | 7 | | | | | ≥94 | *********** | *********** | ****** |
| Service Life | - | h | | 300 | 00 | | | | | 30000 | | | |
| Noise | - | dB | | €7 | 0 | | | | | ≤70 | (0,000,000,000,000,000,000,000,000,000, | 0.001(0.00) | |
| Weight | - | Kg | | 64. | 5 | | | | *************************************** | 70.4 | | *************************************** | |
| | P0 | | | € | 1 | 221111112321113 | | | Www.com | ≤3 | | | 2.1517237511 |
| Backlash | Ρl | arcmin | | €3 | 3 | | | | | ≤5 | | | |
| | P2 | | | €! | 5 | | | | | ≤7 | | | |
| Operating Temperature | - | °C | | -20~ | 90 | | | | - | 20~90 | | ************* | |
| Lubrication | | _ | | Synthetic | Grease | | | | Syn | thetic Greas | se | | |
| Protection Class | | _ | | IP6 | 5 | | | *********** | | IP65 | | | ******* |
| Mounting Position | | - | | Any Dir | rection | | (************************************* | | An | y Direction | 1 | | ********** |
| Moment of Inertia | J | kg.cm² | 58.31 | 53.27 | 50.97 | 50.56 | 2 | 23.29 | | | 22. | 51 | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.



TDR

TB

TDR064 Series

TDR064 One Stage

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TE

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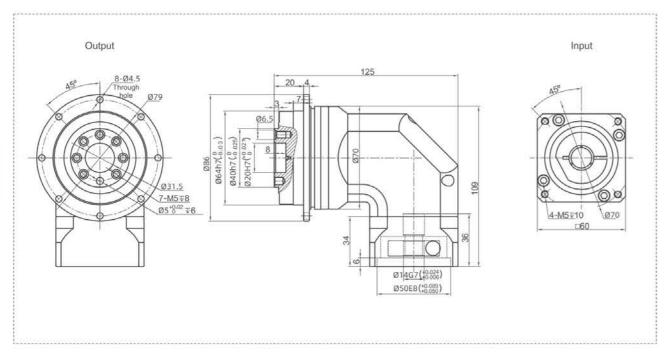
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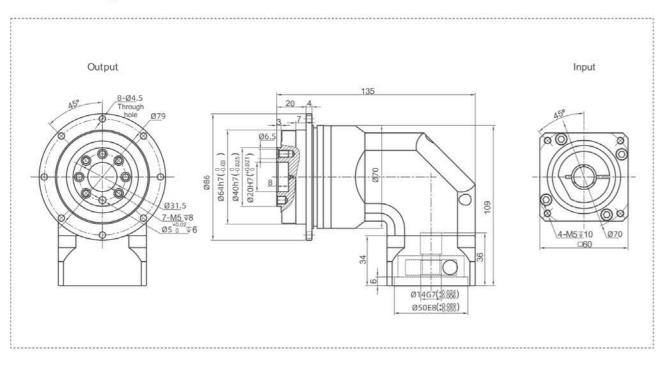
TCB

TCE

TM



TDR064 Two Stage



Performance Data

TDR series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TDR064 | | | | | Oı | ne Stag | ge | | | | | Tw | o Sta | ge | | |
|------------------------|----------------|-----------|-----------|---|-----------|----------|---|---|---|-----------|---|----------|--------|-------------|--------------|-------------|
| Speed Ratio | | i | 4 | 5 | 7 | 10 | 14 | 20 | 25 | 35 | 40 | 50 | 70 | 100 | 140 | 200 |
| Nominal Output Torque | т, | Nm | 48 | 58 | 50 | 42 | 42 | 42 | 58 | 50 | 48 | 58 | 50 | 42 | - | - |
| Emergency Stop Torque | T ₂ | Nm | | *************************************** | Т, | ×3 | ********** | | | | ************ | T,× | 3 | ********** | ************ | ********** |
| Nominal Input Speed | S, | rpm | | | 50 | 00 | | | | ********* | | 500 | 0 | | | ********* |
| Maximum Input Speed | S ₂ | rpm | | | 100 | 000 | | | | | | 100 | 00 | ********** | | ********* |
| Maximum Output Torque | T ₄ | INIII | | | T, × 3 | × 60% | | | | | Ţ | ×3× | 60% | | | |
| Maximum Bending Moment | M, | Nm | | | 12 | 25 | | | | | | 12 | 5 | | | ********** |
| Maximum Axial Force | F, | N | | | 10 | 50 | | *************************************** | | | | 105 | 0 | ********** | | ********* |
| Torsional Rigidity | - | Nm/arcmin | ********* | | 1 | 3 | | | | | ************ | 13 | 3 | | | |
| Efficiency | η | % | | ******* | ≥9 | 95 | | | | ******** | | ≥9 | 2 | ********** | | ******** |
| Service Life | - | h | | | 300 | 000 | | | | | | 3000 | 00 | .,,,,,,,,,, | | |
| Noise | - | dB | | | €(| 33 | | | | | | ≤6 | 3 | | | |
| Weight | - | Kg | | | 2. | 2 | | | | | | 2.6 | 3 | | | |
| | P0 | | | | - | | | | | | | - | | | | |
| Backlash | P1 | arcmin | | | « | 4 | | | | | | €7 | 7 | | | |
| | P2 | | | | \{ | 6 | | | | | | €9 | 9 | | | |
| Operating Temperature | - | °C | | | -20- | -90 | | | | | | -20~ | 90 | | | |
| Lubrication | | = | | | Synthetic | : Grease | | | | | s | ynthetic | Grease | | | |
| Protection Class | | - | | | IP6 | 35 | | | | | | IP6 | 5 | | | |
| Mounting Position | | - | | | Any Di | irection | *************************************** | | | | | Any Dir | ection | | | *********** |
| Moment of Inertia | J | kg.cm² | | 0.35 | | | 0.07 | | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | *************************************** | 0.0 | 9 | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

| 45

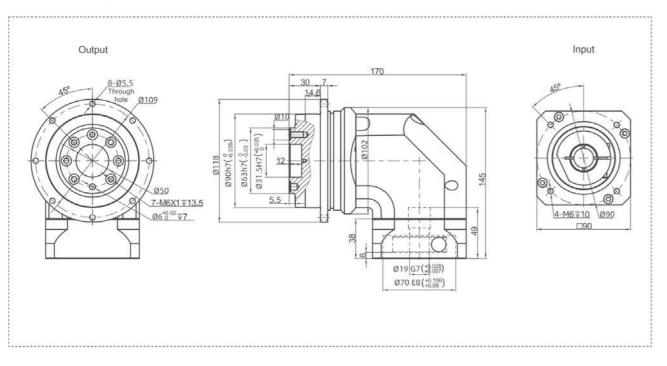


TDR

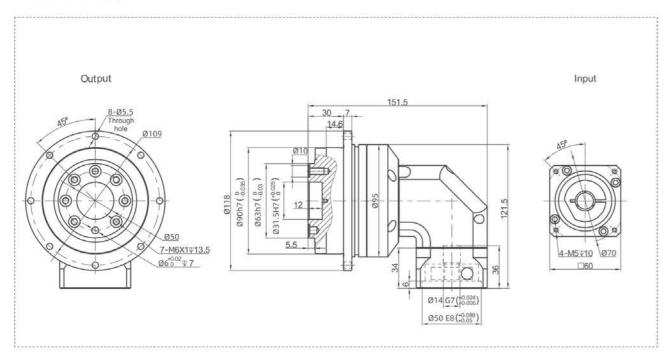
TDR090 Series

TDR090 One Stage

TDR



TDR090 Two Stage



Performance Data

TDR series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TDR090 | | | | | Or | ne Stag | ge | | | | | Two | Stage | | | |
|------------------------|----------------|-----------|-----|-------------|-----------|---------|---------------|---|-------------|--------------|--------------|------------|-------|------------|--------------|-------------|
| Speed Ratio | | i | 4 | 5 | 7 | 10 | 14 | 20 | 25 | 35 | 40 | 50 | 70 | 100 | 140 | 200 |
| Nominal Output Torque | Тт | Nm | 120 | 150 | 140 | 102 | 140 | 102 | 160 | 148 | 120 | 150 | 140 | 102 | 140 | 102 |
| Emergency Stop Torque | T ₂ | Nm | | | T,× | (3 | | | | | | T,× | 3 | | | |
| Nominal Input Speed | Sı | rpm | | | 400 | 00 | | | | | | 4000 |) | | | 2001 |
| Maximum Input Speed | S₂ | rpm | | | 800 | 00 | | *************************************** | *********** | | ************ | 8000 |) | | *********** | ********* |
| Maximum Output Torque | T, | Nm | | *********** | T, ×3× | < 60% | ******** | | | | Т | ,×3× | 60% | | ********** | ********* |
| Maximum Bending Moment | M, | Nm | | | 23 | 5 | | | | | | 235 | | | | |
| Maximum Axial Force | F, | N | | | 285 | 50 | ********** | | | | *********** | 2850 | | | | ********** |
| Forsional Rigidity | - | Nm/arcmin | | | 31 | I | | | | | | 31 | | | | |
| Efficiency | η | % | | | ≥9 | 15 | ************ | | ********** | 000000000 | .01113111 | ≥92 | | UASSERSTAS | ************ | 350444550 |
| Service Life | - | h | | www. | 300 | 00 | *********** | | | | | 3000 | 0 | | | V-111V-V |
| Noise | - | dB | | | ≤6 | 55 | | | | | | ≤65 | | | | |
| Veight | - | Kg | | | 5 | | ************* | | | *********** | *********** | 3.7 | | | | |
| | P0 | | | | €: | 2 | | | | | | ≤4 | | | | |
| Backlash | 25 | arcmin | | | €. | 4 | *********** | | | | | €7 | | | | ****** |
| | P2 | | | | €! | 6 | | | | | | ≤9 | | | | |
| Operating Temperature | - | °C | | | -20~ | 90 | | | | | | -20~9 | 0 | | | *********** |
| ubrication | | _ | | | Synthetic | Grease | | | | ************ | s | ynthetic C | | | | ******* |
| Protection Class | | = | | | IP6 | 55 | ************* | | | | *********** | IP65 | | | | |
| dounting Position | | - | | | Any Di | rection | | | | | | Any Dire | ction | | | |
| Moment of Inertia | J | kg.cm² | | 2.25 | | | 1.87 | | | | 0.3 | 5 | | | 0. | 31 |

Notes:

- When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

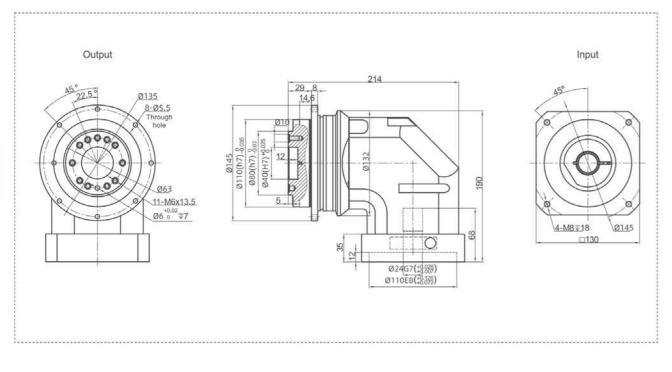


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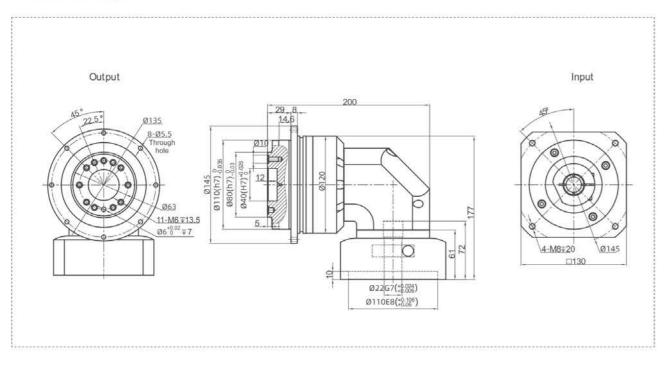
TDR110 Series

TDR110 One Stage

TDR



TDR110 Two Stage



Performance Data

TDR series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TDR110 | | | | | Oı | ne Stag | ge | | | | | Two | Stage | | | | | | | |
|------------------------|----------------|-----------|-----|-------------|-----------|---------|---|---|---|------------|-------------|----------|--------|-------------|--------------|----------|--|--|--|--|
| Speed Ratio | | ř. | 4 | 5 | 7 | 10 | 14 | 20 | 25 | 35 | 40 | 50 | 70 | 100 | 140 | 200 | | | | |
| Nominal Output Torque | Τ, | Nm | 260 | 330 | 300 | 235 | 300 | 235 | 330 | 300 | 260 | 330 | 300 | 235 | 300 | 235 | | | | |
| Emergency Stop Torque | T ₂ | Nm | | | T, > | <3 | | | T, ×3 | | | | | | | | | | | |
| Nominal Input Speed | Si | rpm | | | 40 | 00 | | | | | | 4000 |) | *********** | | | | | | |
| Maximum Input Speed | S₂ | rpm | | | 80 | 00 | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | *********** | 8000 |) | | ************ | | | | | |
| Maximum Output Torque | Т, | Nm | | | T, × 3 | × 60% | | | | ********** | Ţ | ,×3×(| 60% | | ********* | | | | | |
| Maximum Bending Moment | M, | Nm | | | 43 | 0 | *************************************** | | | | | 430 | , , | | | | | | | |
| Maximum Axial Force | F, | N | | | 299 | 90 | | | 2990 | | | | | | | | | | | |
| Torsional Rigidity | - | Nm/arcmin | | | 8: | 2 | | | | | | 82 | | | | | | | | |
| Efficiency | η | % | | | ≥9 | 95 | | | | 0.000.00 | | ≥92 | 2 | ********* | ************ | ******** | | | | |
| Service Life | - | h | | | 300 | 00 | | | | | | 3000 | 0 | | *********** | V-1111/ | | | | |
| Noise | - | dB | | | €(| 38 | | ********** | ≼68 | | | | | | | | | | | |
| Weight | - | Kg | | | 10 | .5 | ************ | | 11 | | | | | | | | | | | |
| | P0 | | | | € | 2 | | | ≤4 | | | | | | | | | | | |
| Backlash | | arcmin | | ********** | € | 4 | | ************ | €7 | | | | | | | | | | | |
| | P2 | | | | < | 6 | | | €9 | | | | | | | | | | | |
| Operating Temperature | - | °C | | *********** | -20- | -90 | | ************ | -20~90 | | | | | | | | | | | |
| Lubrication | | _ | | | Synthetic | Grease | | | Synthetic Grease | | | | | | | | | | | |
| Protection Class | | = | | | IP6 | 35 | | | IP65 | | | | | | | | | | | |
| Mounting Position | | - | | | Any Di | rection | | | | COLONICS | | Any Dire | ction | | | | | | | |
| Moment of Inertia | J | kg.cm² | | 6.84 | | | 6.25 | | | | | 2.25 | 5 | | 1.8 | 87 | | | | |

Notes:

- ♠ Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

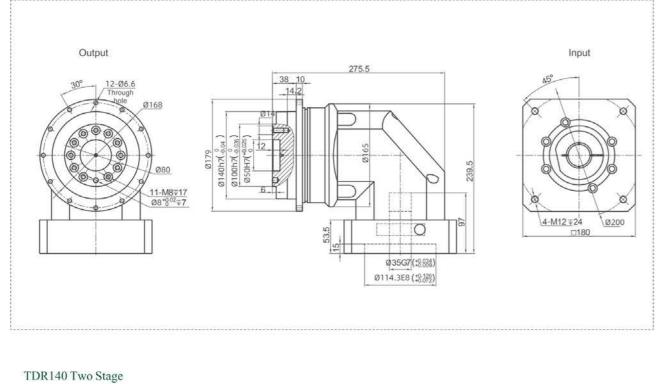


TDR

TDR140 Series

TDR140 One Stage

TDR



Output Input 38 10 142 Ø24G7(‡8889) Ø110E8(‡8.899)

Performance Data

TDR series reducer offers quiet operation with high axial load and tilt moment. High quality and capacity load bearing ensures smooth operation for any flange-operated applications.

| TDR140 | | | | | Or | ne Stag | ge | | | Two Stage | | | | | | | | | |
|------------------------|----------------|-----------|-----|---|-----------|---------|---|-----|------------------|-----------|-------------|-----------|-------------|------------|-------------|------------|--|--|--|
| Speed Ratio | | i | 4 | 5 | 7 | 10 | 14 | 20 | 25 | 35 | 40 | 50 | 70 | 100 | 140 | 200 | | | |
| Nominal Output Torque | т, | Nm | 540 | 650 | 555 | 460 | 555 | 450 | 650 | 555 | 560 | 650 | 555 | 460 | 555 | 460 | | | |
| Emergency Stop Torque | T ₂ | Nm | | 4,54,444,550,000 | T,> | 3 | ********** | | | | *********** | T, × 3 | 3 | | *********** | K******** | | | |
| Nominal Input Speed | S, | rpm | | *********** | 300 | 00 | ********** | | | ********* | | 3000 |) | | ******* | 1001.05000 | | | |
| Maximum Input Speed | S ₂ | rpm | | *************************************** | 600 | 00 | | | | | | 6000 |) | | | ******** | | | |
| Maximum Output Torque | T ₄ | Nm | | | T,×3> | 60% | | | | | Ţ | ,×3×6 | 50% | | | 150//50 | | | |
| Maximum Bending Moment | M _a | Nm | | | 130 | 00 | | | *********** | | | 1300 |) | ********** | *********** | , | | | |
| Maximum Axial Force | F, | N | | | 105 | 90 | ********** | | | | | 1059 | 0 | | | | | | |
| Forsional Rigidity | - | Nm/arcmin | | | 15 | 1 | *********** | | | | ********** | 151 | *********** | | | | | | |
| Efficiency | η | % | | *********** | ≥9 | 95 | | | | ****** | | ≥92 | | | | | | | |
| Service Life | - | h | | | 300 | 00 | | | | | | 3000 | 0 | | | | | | |
| Noise | - | dB | | | €7 | 70 | | | ≤70 | | | | | | | | | | |
| Veight | - | Kg | | | 2 | 5 | | | 22.1 | | | | | | | | | | |
| | P0 | | | | € | 2 | | | ≼4 | | | | | | | | | | |
| Backlash | | arcmin | | | € | 4 | | | ≤ 7 | | | | | | | | | | |
| | P2 | | | | < | 6 | | | ≤9 | | | | | | | | | | |
| Operating Temperature | - | °C | | | -20- | -90 | | | -20~90 | | | | | | | | | | |
| ubrication | | _ | | | Synthetic | Grease | | | Synthetic Grease | | | | | | | | | | |
| rotection Class | | - | | *********** | IP6 | 55 | | | IP65 | | | | | | | | | | |
| Mounting Position | | - | | | Any Di | rection | *************************************** | | | | , | Any Direc | ction | | | ********* | | | |
| Moment of Inertia | J | kg.cm² | | 23.4 | | | 21.8 | | , | | 7777 T | 6.84 | | | 6. | 25 | | | |

Notes:

- When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Precision Planetary Reducer

Creative Structure Design



Optimized Backlash & High Rigidity

TE/TER series planetary reducer combines innovation, efficiency and quality, maximizing customer value and performance.

GEARKO DRIVES THE PRECISION





TR

TE050 Series

TE050 One Stage

TBR

TD

TDR

TE

TE

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TO

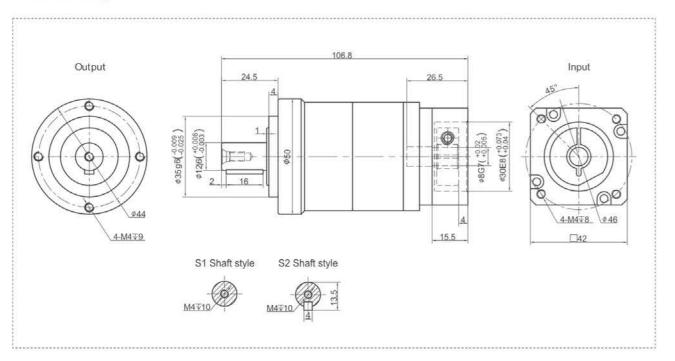
TCB

TCE

TM

Output Input 84.8 26.5 (\$\frac{80.00}{20.00}\) (\$\frac{80.00}\) (\$\frac{80.00}{20.00}\) (\$\frac{80.

TE050 Two Stage



Performance Data

TE series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TE050 | | | | | | One | Sta | ge | | | | | | | T | wo ! | Stage | | | | | |
|-----------------------|----------------|-----------|------------------|-----------|-------------|------------|-------|------------|--------|----|-------------------|---|----|--------|----------|------|-------|----------|----------|-----------|-------------|--|
| Speed Ratio | | j | - | 4 | 5 | 6 | 7 | 8 | 9 | 10 | - | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 | |
| Nominal Output Torque | т, | Nm | - | 19 | 20 | 19 | 19 | 17 | - | 14 | - | 19 | 20 | 19 | 19 | 17 | 20 | 19 | 19 | 17 | 14 | |
| Emergency Stop Torque | Тг | Nm | | ******* | | Т,> | < 3 | densse | doorse | \$ | T ₁ ×3 | | | | | | | | | | | |
| Nominal Input Speed | S, | rpm | 55555 | | | 50 | 00 | ********** | | | 5000 | | | | | | | | | | 13.055.21.5 | |
| Maximum Input Speed | S ₂ | rpm | | | | 100 | 000 | | | | | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | , | 1000 | 00 | ******** | | ******* | | |
| Maximum Output Torque | T₄ | Nm | | (MANUSEE) | Τ, | ×3; | × 609 | 6 | | | | | | 0.3350 | Τ,> | <3× | 60% | | | nteriori. | 747753 | |
| Maximum Radial Force | F。 | N | | | | 70 | 2 | | | | 702 | | | | | | | | | | | |
| Maximum Axial Force | F _b | N | | | | 39 | 0 | | | | 390 | | | | | | | | | | | |
| Torsional Rigidity | - | Nm/arcmin | | ******* | | 3 | 1 | | | | | | | | ******** | 3 | | | ******** | | ******* | |
| Efficiency | η | % | | ≥97 | | | | | | | | | | | | ≥9 | 4 | | | | | |
| Service Life | - | h | | | | 200 | 000 | | | | | | | | 2 | 2000 | 00 | | ,,,,,,,, | | | |
| Noise | - | dB | | | H S X S C H | ≤ ! | 56 | | | | | ≤56 | | | | | | | | | | |
| Weight | - | Kg | | | | 0. | 6 | | | | | 0.9 | | | | | | | | | | |
| | P0 | | | | | | | ********** | | | | = | | | | | | | | | | |
| Backlash | Ρl | arcmin | | | | < | 3 | | | | ≤ 5 | | | | | | | | | | | |
| | P2 | | | | | < | 5 | | | | ≤7 | | | | | | | | | | | |
| Operating Temperature | - | °C | -20-90 | | | | | | | | | -20~90 | | | | | | | | | | |
| Lubrication | | - | Synthetic Grease | | | | | | | | | Synthetic Grease | | | | | | | | | | |
| Protection Class | | - | IP65 | | | | | | | | | IP65 | | | | | | | | | | |
| Mounting Position | | - | Any Direction | | | | | | | | Any Direction | | | | | | | | | | .,,,,,,,, | |
| Moment of Inertia | J | kg.cm² | 0.03 | | | | | | | | | .,,,,,,,,, | | | 7 | 0.1 | 3 | | | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

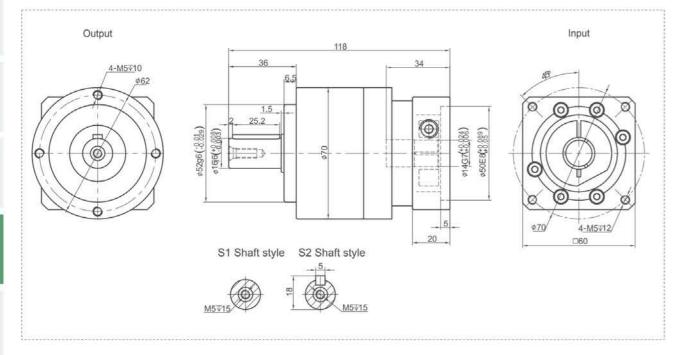
| 53



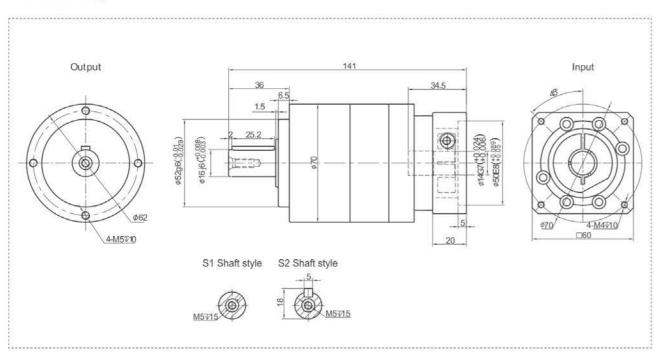
TE070 One Stage

TE

TE070 Series



TE070 Two Stage



Performance Data

TE series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TE070 | | | | | | One | Sta | ge | | | | | | | T | wo S | tage | | | | | |
|-----------------------|----------------|-----------|----------------|----|----|---------|--------|------------|---|-----------|------------------|---------------|----|----|----|------|------|----|----|----|--------|--|
| Speed Ratio | | j | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 10 | |
| Nominal Output Torque | т, | Nm | 52 | 50 | 58 | 55 | 50 | 45 | Ξ | 42 | 52 | 50 | 58 | 55 | 50 | 45 | 58 | 55 | 50 | 45 | 42 | |
| Emergency Stop Torque | T ₂ | Nm | | | | т, | × 3 | ,,,,,,,,,, | | ********* | | | | | | T,×; | 3 | | | | | |
| Nominal Input Speed | S, | rpm | | | | 50 | 00 | | | | | | | | | 500 |) | | | | 100000 | |
| Maximum Input Speed | S ₂ | rpm | | | | 100 | 000 | | | | | | | | | 1000 | 0 | | | | | |
| Maximum Output Torque | | Nm | | | Т | ,×3 | × 609 | % | | | | | | | Τ, | ×3×(| 50% | | | | | |
| Maximum Radial Force | F, | N | | | | 13 | 77 | | | | | | | | | 137 | 7 | | | | | |
| Maximum Axial Force | F, | N | | | | 76 | 65 | | | | | | | | | 765 | | | | | | |
| Torsional Rigidity | - | Nm/arcmin | | | | | 7 | | | | | | | | | 7 | | | | | | |
| Efficiency | η | % | | | | ≥ | 97 | | | | | | | | | ≥94 | ŀ | | | | | |
| Service Life | - | h | | | | 200 | 000 | | | | 20000 | | | | | | | | | | | |
| Noise | - | dB | | | | € | 58 | | | | ≤58 | | | | | | | | | | | |
| Weight | - | Kg | | | | 1. | .4 | | | | 1.6 | | | | | | | | | | | |
| | P0 | | | | | 9.5 | | | | | - | | | | | | | | | | | |
| Backlash | P1 | arcmin | | | | < | 3 | | | | ≤5 | | | | | | | | | | | |
| | P2 | | | | | < | 5 | | | | ≤ 7 | | | | | | | | | | | |
| Operating Temperature | - | °C | | | | -20 | -90 | | | | -20~90 | | | | | | | | | | | |
| Lubrication | | - | | | S | yntheti | c Grea | se | | | Synthetic Grease | | | | | | | | | | | |
| Protection Class | | - | | | | IP | 65 | | | | IP65 | | | | | | | | | | | |
| Mounting Position | | | Any Direction | | | | | | | | | Any Direction | | | | | | | | | | |
| Moment of Inertia | J | kg.cm² | 0.16 0.14 0.13 | | | | | | | | | | | | | 0.13 | 3 | | | | | |

Notes:

- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TE090 Series

TE090 One Stage

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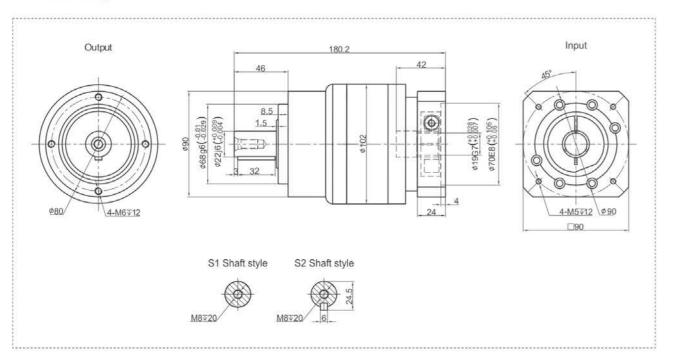
TCB

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TE090 Two Stage



Performance Data

TE series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TE090 | | | | | | One | e Sta | ge | | | | | | | T | wo s | Stage | | | | | |
|-----------------------|----|--------------|--------------------------|-------|-----------|-------------|----------|-----|-----|----------|------------|------------------|-----|-----|------------------|--------|-------|-----|------|-----------|---------|--|
| Speed Ratio | | Ĭ | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 | |
| Nominal Output Torque | т, | Nm | 130 | 140 | 160 | 148 | 140 | 123 | 720 | 102 | 130 | 140 | 160 | 148 | 140 | 123 | 160 | 148 | 140 | 123 | 10 | |
| Emergency Stop Torque | Τ₂ | Nm | | ***** | ********* | Τ, | ×3 | | | 40000000 | | | | | j | r,×3 | | | | ********* | 100-0-0 | |
| Nominal Input Speed | S, | rpm | | | | 40 | 00 | | | | | | | | Z | 1000 | | | | | 100000 | |
| Maximum Input Speed | S₂ | rpm | | | | 80 | 00 | | | | | | | | 8 | 3000 | | | | | | |
| Maximum Output Torqu | | Nm | | | J | ,×3 | ×609 | % | | | | | | | T ₁ × | 3×6 | 0% | | | | | |
| Maximum Radial Force | F, | N | | | | 29 | 85 | | | | | | | | 2 | 2985 | | | | | | |
| Maximum Axial Force | F, | N | | | | 16 | 25 | | | | | | | | 1 | 625 | | | | | | |
| Torsional Rigidity | - | Nm/arcmin | 14 | | | | | | | | | | | | | 14 | | | | | | |
| Efficiency | η | % | | ≽97 | | | | | | | | | | | | ≥94 | | | | | | |
| Service Life | - | h | | | | 200 | 000 | | | | | | | | 2 | 0000 |) | | | | | |
| Noise | - | dB | | | | \leq | 60 | | | | ≤60 | | | | | | | | | | | |
| Weight | - | Kg | | | | 3 | .4 | | | | 5.1 | | | | | | | | | | | |
| | P0 | | | | | 9. | | | | | | · T | | | | | | | | | | |
| Backlash | P1 | arcmin | | | | \$ | 3 | | | | ≤5 | | | | | | | | | | | |
| | P2 | | | | | < | 5 | | | | ≤ 7 | | | | | | | | | | | |
| Operating Temperature | - | °C | -20-90 | | | | | | | | | -20~90 | | | | | | | | | | |
| Lubrication | | | Synthetic Grease | | | | | | | | | Synthetic Grease | | | | | | | | | | |
| Protection Class | | - | IP65 | | | | | | | | | IP65 | | | | | | | | | | |
| Mounting Position | | 5 — 5 | | | | Any D | irection | n | | | | | | | Any | Direct | ion | | | | | |
| Moment of Inertia | J | kg.cm² | 0.61 0.48 0.47 0.45 0.44 | | | | | | | | | | 0.4 | 7 | | | | (|).44 | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.



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TE120 Series

TE120 One Stage

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Performance Data

TE series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TE120 | | | | | | One | Sta | ge | | | | | | | T | wo S | tage | | | | | | |
|-----------------------|----------------|-----------|-------------------------------------|-----------|------------|----------------------------|-------|-----|-----|-----------|---------------|------------------|--------|-----|------|------|-----------|------------|-----|-----|--------|--|--|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 | | |
| Nominal Output Torque | т, | Nm | 210 | 290 | 333 | 310 | 300 | 260 | · - | 235 | 210 | 290 | 333 | 310 | 300 | 260 | 333 | 310 | 300 | 260 | 23 | | |
| Emergency Stop Torque | T ₂ | Nm | | ********* | ********** | $T_{\scriptscriptstyle 1}$ | ×3 | | | descessor | | | | | Т | ,×3 | ********* | ********** | | | | | |
| Nominal Input Speed | S, | rpm | | ******* | | 40 | 00 | | | | | | | | 4 | 000 | 4111414 | | | | 100000 | | |
| Maximum Input Speed | S ₂ | rpm | | | | 80 | 00 | | | | | | | | 8 | 000 | | ******** | | | | | |
| Maximum Output Torqu | | Nm | | | Ţ | ,×3 | × 609 | % | | | | | | | T,×; | 3×60 |)% | | | | | | |
| Maximum Radial Force | F. | N | | | | 61 | 00 | | | | | | | | 6 | 100 | ******* | | | | | | |
| Maximum Axial Force | F, | N | | | | 33 | 50 | | | | | | | | 3 | 350 | | | | | | | |
| Torsional Rigidity | - | Nm/arcmin | | 25 | | | | | | | | | | | | 25 | ******** | | | | | | |
| Efficiency | η | % | | ≽97 | | | | | | | | | | | 3 | ≥94 | | | | | | | |
| Service Life | - | h | | | | 200 | 000 | | | | | | | | 20 | 0000 | | | | | | | |
| Noise | - | dB | | | | € | 63 | | | | ≤63 | | | | | | | | | | | | |
| Weight | - | Kg | | | | 7 | .5 | | | | 8.5 | | | | | | | | | | | | |
| | PO | | | | | 9. | - | | | | v=1 | | | | | | | | | | | | |
| Backlash | P1 | arcmin | | | | < | 3 | | | | ≤5 | | | | | | | | | | | | |
| | P2 | | | | | < | 5 | | | | ≤ 7 | | | | | | | | | | | | |
| Operating Temperature | - | °C | | -20-90 | | | | | | | | | -20-90 | | | | | | | | | | |
| Lubrication | | = | Synthetic Grease | | | | | | | | | Synthetic Grease | | | | | | | | | | | |
| Protection Class | | - | IP65 | | | | | | | | | IP65 | | | | | | | | | | | |
| Mounting Position | | - | Any Direction | | | | | | | | Any Direction | | | | | | | | | | | | |
| Moment of Inertia | J | kg.cm² | 3.25 2.74 2.71 2.65 2.62 2.58 - 2.5 | | | | | | | | | 7 0.47 0.44 | | | | | | | | | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TE155 Series

TE155 One Stage

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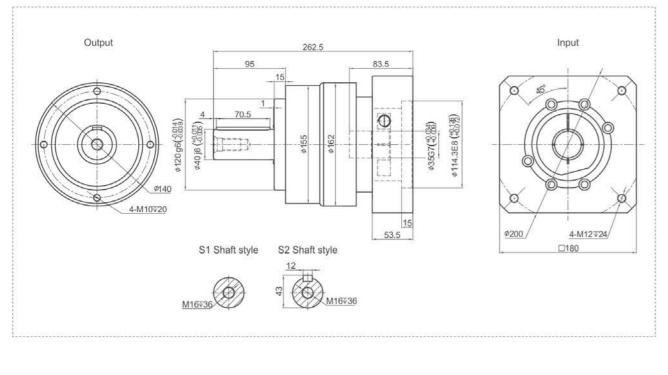
TE

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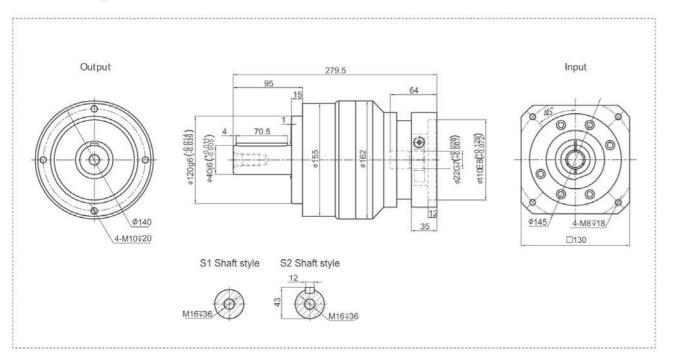
TCB

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TE155 Two Stage



Performance Data

TE series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TE155 | | | | | | One | Sta | ge | | | | | | | T | wo S | stage | | | | | |
|-----------------------|----------------|-----------|-------------------------------------|------|-----|-----|------|-----|---|-----|------------|------------------|-----|-----|------|------|-------|------|-----|-----|----------|--|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 | |
| Nominal Output Torque | т, | Nm | 340 | 545 | 650 | 600 | 555 | 500 | - | 460 | 340 | 545 | 650 | 600 | 555 | 500 | 650 | 600 | 555 | 500 | 460 | |
| Emergency Stop Torque | T2 | Nm | | **** | | т, | ×3 | | | | | | | | Т | ,×3 | | , | | | | |
| Nominal Input Speed | S | rpm | | | | 30 | 00 | | | | | | | | 3 | 000 | | | | | 100000 | |
| Maximum Input Speed | S ₂ | rpm | | | | 60 | 00 | | | | | | | | 6 | 000 | | | | | | |
| Maximum Output Torqu | | INITH | | | 7 | ,×3 | ×609 | % | | | | | | | T, × | 3×6 | 0% | | | | | |
| Maximum Radial Force | F, | | | | | 84 | 60 | | | | | | | | 8 | 460 | | | | | ****** | |
| Maximum Axial Force | F, | N | | | | 47 | 00 | | | | | | | | 4 | 700 | | | | | | |
| Torsional Rigidity | - | Nm/arcmin | ı | 50 | | | | | | | | | | | | 50 | | | | | .,,,,,,, | |
| Efficiency | η | % | | ≽97 | | | | | | | | | | | 3 | ≥94 | | | | | | |
| Service Life | - | h | | | | 200 | 000 | | | , | | | | | 20 | 0000 |) | | | | | |
| Noise | - | dB | | | | € | 65 | | | | ≤65 | | | | | | | | | | | |
| Weight | - | Kg | | | | 1 | 8 | | | | 17 | | | | | | | | | | | |
| | PO | | | | | 9. | - | | | | v=x | | | | | | | | | | | |
| Backlash | P1 | arcmin | | | | < | 3 | | | | ≤ 5 | | | | | | | | | | | |
| | P2 | | | | | \$ | 5 | | | | ≤7 | | | | | | | | | | | |
| Operating Temperature | - | °C | -20~90 | | | | | | | | | -20~90 | | | | | | | | | | |
| Lubrication | | = | Synthetic Grease | | | | | | | | | Synthetic Grease | | | | | | | | | | |
| Protection Class | | - | IP65 | | | | | | | | | IP65 | | | | | | | | | | |
| Mounting Position | | :- | Any Direction | | | | | | | | | Any Direction | | | | | | | | | | |
| Moment of Inertia | J | kg.cm² | 9.21 7.54 7.42 7.25 7.14 7.07 - 7.0 | | | | | | | | | 2 | .71 | | | | | 2.57 | | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

61



TB

TE205 Series

TE205 One Stage

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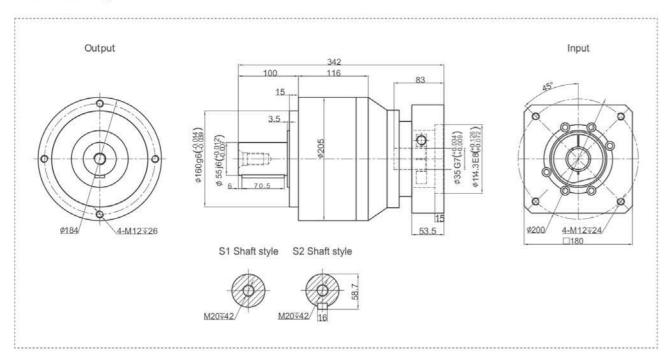
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TE205 Two Stage



Performance Data

TE series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TE205 | | | | | | One | Sta | ge | | | | | | | T | wo : | Stage | | | | |
|-----------------------|----------------|-----------|-------|---|-------------|--------|----------|-------------|---------|--------------|-----|------------|-----------|-----------|---|---------|----------|-------------|----------|-----------|---------|
| Speed Ratio | | î | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 590 | 1050 | 1200 | 1108 | 1100 | 1000 | :-: | 910 | 590 | 1050 | 1200 | 1108 | 1100 | 1000 | 1200 | 1108 | 1100 | 1000 | 910 |
| Emergency Stop Torque | T ₂ | Nm | | ********* | *********** | Т, | ×3 | | | descesses of | | 0000000000 | | PC4XC433X | | T,× | 3 | *********** | | ********* | 1000000 |
| Nominal Input Speed | S, | rpm | | tototte | ********* | 30 | 000 | | ******* | | | | | | Mathara. | 300 | 0 | | | | 105020 |
| Maximum Input Speed | S ₂ | rpm | | | | 60 | 000 | | | | | | | | | 600 | 0 | | | | |
| Maximum Output Torque | T₄ | Nm | | | | Γ,×3 | ×60 | % | | 2000 | | | | 191911111 | Т, | ×3× | 60% | | | | 87755 |
| Maximum Radial Force | F, | N | | | | 13 | 050 | | | | | | ********* | | | 130 | 50 | | | | |
| Maximum Axial Force | F, | N | | | | 72 | 250 | | | | | | | | | 725 | 0 | | | | |
| Torsional Rigidity | - | Nm/arcmin | | | | 1 | 45 | | | | | | | ******* | | 14 | 5 | | | | |
| Efficiency | η | % | | ******* | ******** | ≥ | 97 | | | | | | ******* | | | ≥9 | 4 | | | -1-1-11-1 | |
| Service Life | - | h | | | | 20 | 000 | | | | | | | | | 200 | 00 | | | | |
| Noise | - | dB | | | 911(911(9) | < | 67 | | | CARRON | | 000110000 | | | | ≤6 | 7 | | 10011100 | | |
| Weight | - | Kg | | | | 3 | 34 | | | | | | | | | 35 | | | | | |
| | P0 | | | | | 0. | - | *********** | 2531500 | ********* | | 11121111 | | 9111111 | 111111111111111111111111111111111111111 | (T) | 19111111 | | | March Art | eesti: |
| Backlash | Р1 | arcmin | | | | \$ | 3 | | 202000 | | | | | €5 | 5 | | | | | | |
| | P2 | | | $T_1 \times 3$ $T_1 \times 3$ 3000 3000 6000 6000 $T_1 \times 3 \times 60\%$ $T_1 \times 3 \times 60\%$ 13050 13050 7250 7250 145 145 $\geqslant 97$ $\geqslant 94$ 20000 20000 $\leqslant 67$ $\leqslant 67$ 34 35 7 7 $\leqslant 3$ $\leqslant 5$ $\leqslant 5$ $\leqslant 7$ 7 < | | | | | | | | | | | | v | | | | | |
| Operating Temperature | - | °C | | ******* | | -20 | ~90 | | ******* | | | | ********* | ******** | | -20~ | 90 | | | | |
| Lubrication | | _ | | | S | ynthet | ic Grea | se | | | | | | | Syr | nthetic | Grease | | | | |
| Protection Class | | - | | | | IP | 65 | | ****** | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | - | | ******** | | Any I | Directio | n | ****** | | | | | | Aı | y Dir | ection | | | | |
| Moment of Inertia | J | kg.cm² | 28.98 | 23.67 | 23.29 | 22.75 | 22.48 | 22.59 | 2 | 22.51 | | 7 | .42 | | | | | 7.03 | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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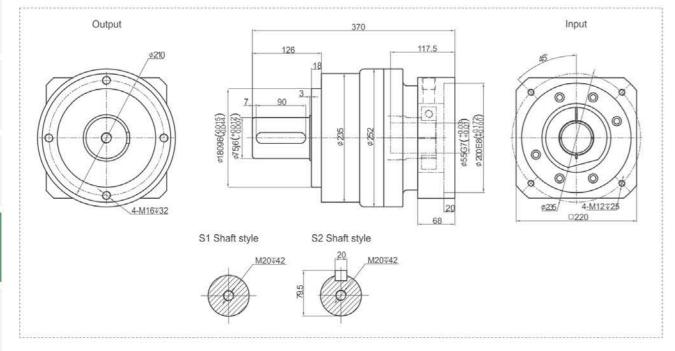
64|



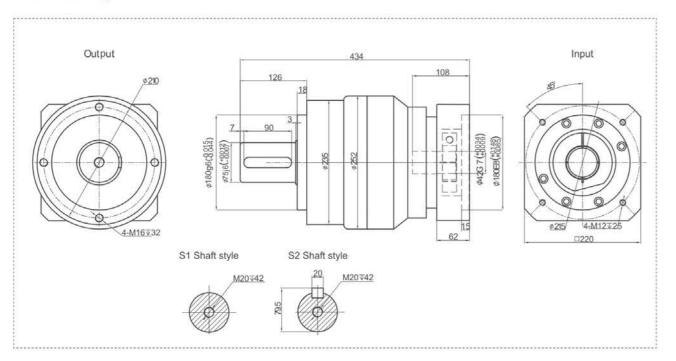
TE235 One Stage

TE

TE235 Series



TE235 Two Stage



Performance Data

TE series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TE235 | | | | | | One | Stag | e | | | | | | | Ty | wo S | stage | е | | | |
|---|----------------|--------------------|---|---------|-----------|---------|----------|-----------|----------|------------|------|-------------|-----------|----------|----------|--------------|----------|------------|-----------|---|----------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 1150 | 1700 | 2008 | 1900 | 1810 | 1600 | = | 1550 | 1150 | 1700 | 2008 | 1900 | 1810 | 1600 | 200 | 1900 | 1810 | 1600 | 155 |
| Emergency Stop Torque | T2 | Nm | | ******* | ********* | Т, | ×3 | 4 | ******* | ********** | | | ********* | | · | $T_1 \times$ | 3 | | ********* | | ******* |
| Nominal Input Speed | Sı | rpm | | | | 20 | 00 | 1110/0411 | | ******** | | | | | 1000000 | 200 | 0 | | | | ****** |
| Maximum Input Speed | S2 | rpm | | | | 40 | 00 | | | | | | | | | 400 | 0 | | | | |
| Maximum Output Torque | | Nm | ., | ******* | Т, | ×3 | ×60% |) | | | | | W11000V | 333377 | T, > | 3× | 60% | 6 | 2000200 | 111111111111111111111111111111111111111 | 0//6565 |
| Maximum Radial Force | F _a | N | | ******* | | 487 | 700 | | | | | | | | 2 | 1870 | 00 | ********* | ******** | | ****** |
| Maximum Axial Force | F _b | N | | | | 180 | 000 | | | | | | | | 1 | 1800 | 00 | | ******** | | |
| Torsional Rigidity | 2 | Nm/arcmin | | | | 22 | 25 | | | ********* | | | ******** | | | 225 | 5 | | | | ****** |
| Efficiency | η | % | | | | ≥! | 97 | | | | | | ******** | | | ≥9 | 4 | | ******* | | |
| Service Life | - | h | | | | 200 | 000 | | | | | | | | 2 | 2000 | 00 | | | | |
| Noise | - | dB | 1140000 | | | € | 70 | | | | | | | | | ≤70 |) | 0000000 | | | ******* |
| Weight | - | Kg | | ******* | | 5 | 3 | | | ********* | | | ******** | | | 66 | | ********* | ******** | | |
| *************************************** | P0 | | | ****** | | 5122223 | - | 11.00111 | 11111111 | ********* | | 152.001.003 | | ******* | 12212250 | - | (571747) | ********* | ******* | NASSASSE. | 200111 |
| Backlash | P1 | arcmin | | | ******** | < | 3 | | | | | | | | | ≤5 | l)ı | | | | |
| | P2 | | 1150 1700 2008 1900 1810 1600 - 1550 1150 1700 2008 1900 1810 1600 T₁×3 T₁×3 2000 2000 4000 4000 T₁×3×60% T₁×3×6 48700 48700 18000 18000 225 225 ≥97 ≥94 20000 ≤70 ≤7 - -20~90 -20~90 Synthetic Grease Synthetic Gr IP65 IP65 | | | | | | | | | | | | ******* | | 27744 | | | | |
| Operating Temperature | - | °C | | | | -20 | ~90 | | | | | | ******** | | - | 20~ | 90 | ********** | ********* | | |
| Lubrication | | - | | | Sy | ntheti | c Grease | | | | | | | | Synt | hetic (| Greas | ž. | | | |
| Protection Class | | - | | | | IP | 65 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | | | | A | ny D | irection | ******** | | ******** | | ******** | ******** | ******** | Any | y Dire | ection | | | | 31310000 |
| Moment of Inertia | J | kg.cm ² | 69.61 | 54.37 | 53.27 | 51.7 | 2 50.97 | 50.84 | _ | 50.56 | 1 | 3 | 23.29 | 9 | | | | | 22.5 | 1 | |

Notes:

- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

65

TE



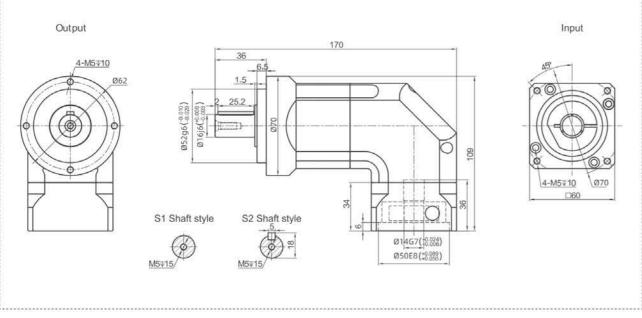
TER070 Series

TER070 One Stage

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Output S1 Shaft style % M5v15 Ø50E8(\$88) TER070 Two Stage

Output



Performance Data

TER series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TER070 | | | | | | | (| One | Stag | ge | | | | | | | | | ľwo | St | age | | | | | |
|-----------------------|----------------|---------------|----|----------|---------|----------|---------------------------------------|------------|----------|---------|-------------|---|------------|----------|-----|---|---------|--------|-------|--------|-----------|--------|---------|---------|----------|----------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 14 2 | 0 | 25 30 | 35 | 40 |) 5 | 0 6 | 0 | 70 8 | 30 | 100 | 120 | 14 | 0 160 | 180 | 200 |
| Nominal Output Torque | т, | Nm | 50 | 48 | 58 | 55 | 50 | 45 | - | 42 | 42 4 | 2 | 58 55 | 5 50 | 45 | 5 5 | 8 5 | 5 ! | 50 4 | 45 | 42 | 55 | 50 | 45 | - | 42 |
| Emergency Stop Torque | T₂ | Nm | | ******** | ******* | ******* | | T,× | 3 | ******* | | | ****** | | | ***** | 414,000 | | T,× | 3 | ******* | | 307.00 | | ******* | ****** |
| Nominal Input Speed | S, | rpm | | ransan | 202224 | etatasa: | | 500 | 0 | | 457554600 | | | 55555533 | | | | | 500 | 0 | ttarara | | 12311 | | | 151211 |
| Maximum Input Speed | S ₂ | rpm | | | | | | 100 | 00 | | | | | | | | | 1 | 000 | 00 | | | | | | |
| Maximum Output Torqu | Τ, | Nm | | | 242200 | 577.1357 | т,: | ×3× | 60% | 5 | | | | | CAN | 2000 | 333300 | T,> | 3× | 609 | % | 1000 | 1000 | | A | V/555 |
| Maximum Radial Force | F, | N | | | | ->>+++++ | | 137 | 7 | | | | | | | 98111 | | | 137 | 7 | | | | | | ***** |
| Maximum Axial Force | F, | N | | | | | | 76 | 5 | | | | | | | | ****** | | 76 | 5 | | | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | | ****** | ****** | | 7 | ******** | | *********** | | ********* | | | | ****** | ****** | 7 | | ****** | | | | | ***** |
| Efficiency | η | % | | .,,,,,,, | | | | ≥9 | 5 | ***** | | | | | | | ****** | | ≥9 | 2 | | | | | | 2,02.0.2 |
| Service Life | - | h | | | | | | 200 | 00 | | | | | | | | | 2 | 2000 | 00 | | | | | | |
| Noise | - | dB | | | | | | ≤6 | 3 | | | | | 0001100 | | 0.00 | | | ≤6 | 3 | EARTH CO. | | | | | 11510 |
| Weight | - | Kg | | | | | | 2.1 | | | | | | | | | | | 2.5 | 5 | | ****** | | | | |
| | PO | | | riessen) | | | e e e e e e e e e e e e e e e e e e e | 97 | 1511100 | ****** | 1128115001 | | | 15634651 | | 1000 | | 111111 | = | 2000 | itanea. | vent. | 1950.05 | | 50,1510. | ACS SES |
| Backlash | P1 | arcmin | | | | ******* | | €2 | 1 | | ********* | | | | | | | | ≤7 | 7 | | | | ****** | | 20000 |
| | P2 | | | | | | | € 6 | ò | | | | | | | 1000 | | 2000 | €9 |) | | | 51000 | | | |
| Operating Temperature | - | °C | | | ****** | | - | 20~ | 90 | | | | restricte | | | | | 7 | 20~ | 90 | | ****** | | ******* | ****** | ***** |
| Lubrication | | - | | | | | Syn | thetic | Greas | 2 | | | | | | | | Synt | hetic | Grea | se | | | | | |
| Protection Class | | - | | | | | | IP6 | 5 | | | | | | | | | | IP6 | 5 | | | | | | |
| Mounting Position | | - | | | ****** | .,,,,,, | An | y Dir | ection | | ********** | | ********** | | | | | Any | Din | ection | | .,,,,, | | | | |
| Moment of Inertia | J | kg.cm² | | | C | .35 | | | | | 0.07 | 7 | | | | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | } | 0.09 | 9 | .,,,,,,,, | | | | | |

Notes:

- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.



TB

TER090 Series

TER090 One Stage

Tar

TD

TDR

TE

TER

7

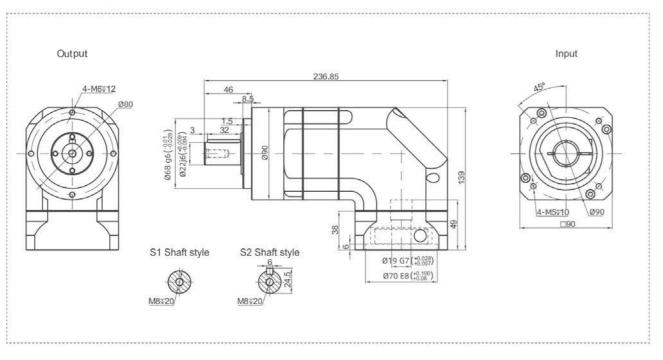
710

TCE

Tes

TM

TER090 Two Stage



Performance Data

TER series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TER090 | | | | | | | (| One | Sta | ige | | | | | | | | | Two | Sta | ago | 2 | | | | |
|-----------------------|---|--|--------|----------|---------|---------|-------------|--------|------|----------|---------|-------|-------|-------------|---------|----------|-------------|-------|------------|-------|------|----------|---------|----------|--------------|-------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 14 | 1 2 | 20 2 | 5 30 | 35 | 40 | 50 60 | 0 | 70 80 | 0 1 | 100 | 120 | 140 | 160 | 180 | 200 |
| Nominal Output Torque | т, | Nm | 100 | 120 | 150 | 148 | 140 | 123 | 3 - | 102 | 2 140 | 0 1 | 02 15 | 0 148 | 140 | 120 | 150 14 | 8 | 14012 | 23 1 | 102 | 148 | 140 | 123 | - | 10 |
| Emergency Stop Torque | Formula (a) T, Nm 100 120 150 148 140 123 7 102 140 102 150 148 140 120 150 148 140 123 102 148 140 123 Formula (a) T, Nm T, ×3 T, ×3 Sol (a) rpm 4000 4000 Sol (a) rpm 8000 8000 Formula (a) T, ×3×60% T, ×3×60% Formula (a) 1625 1625 Formula (a) 14 14 Tolk (a) ×92 ×92 Formula (a) 14 14 Tolk (a) ×95 ×92 Formula (a) 14 14 Formula (a) 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nominal Input Speed | S, | Nm T₁×3 T₁×3 rpm 4000 4000 rpm 8000 8000 Nm T₁×3×60% T₁×3×60% N 2985 2985 N 1625 1625 Nm/ 14 14 % ≥95 ≥92 h 20000 20000 dB ≤65 ≤65 | | | | | | | | | | | | | | 1200.000 | | | ATTE | | | | | | | |
| Maximum Input Speed | S ₂ | rpm | | | | | 80 | 00 | | | ******* | , | | ********* | | | ******** | | 8000 |) | | | | | | |
| Maximum Output Torque | T₄ | Nm | | | | Τ, | ×3 | ×6(| 0% | | | ***** | | | 20.000 | COLUM | | Τ, 2 | ×3×6 | 60% | 6 | 200000 | | 2000 | | |
| Maximum Radial Force | F, | N | | | ******* | | 29 | 85 | | | | | | | | | | | 2985 | 5 | | | | | | **** |
| Maximum Axial Force | F, | N | ****** | | | | 16 | 25 | | | | | | | | | | | 1625 | 5 | | | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | | ******* | | 1 | 4 | | | 2011111 | | | | | | *********** | ***** | 14 | | **** | | | | | |
| Efficiency | | | | | | | ≥ | 95 | | | | | i | ******* | | | | | ≥92 | | | | | | | |
| Service Life | - | h | | | ******* | | 200 | 000 | | | | | | | | | | 2 | 2000 | 0 | | | | | | |
| Noise | - | dB | ****** | | ****** | 000,000 | < | 65 | | | 110000 | | | | | | | | ≤65 | | | 0.100311 | | ((())) | 100-0111 | 5500 |
| Weight | - | Kg | | | | | | 5 | | | | | | | | | | | 6.4 | | | ******* | | | | |
| | P0 | | | ******** | ******* | | errece S | T. | | V. 11.15 | 2011233 | 15000 | T | theory or a | 10.5511 | | | 17555 | | | | eneme. | 9553355 | . COLUMN | 94 AT 155 AV | 0.712 |
| Backlash | Ρl | arcmin | | | 200000 | | < | 4 | | | | | | | | | | | ≤ 7 | | | | | | | |
| | P2 | | | | | | < | 6 | | ****** | | | | | | | | 20120 | ≼9 | | | | | | | 20.55 |
| Operating Temperature | - | °C | ****** | | ****** | | -20 | -90 |) | | | ***** | | ******** | | | | - | 20~9 | 0 | | | | | | |
| Lubrication | | _ | | nam | | Sy | ntheti | ic Gr | ease | | | | | | | | | Syn | thetic G | ireas | | | | | | |
| Protection Class | | _ | | | | | ΙP | 65 | | | | ***** | | | | | | | IP65 | | | | | | | |
| Mounting Position | | _ | | ****** | ****** | A | ny D | irecti | ion | | | | | | | | | An | y Direc | ction | 1 | | | | ****** | |
| Moment of Inertia | J | kg.cm² | | | | 2.25 | 3 | | | XVIII. | 1 | .8 | 7 | | 7 | | 2.25 | | | | 7777 | | | 1.8 | 7 | |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

| 69



TE

TER120 One Stage

TER120 Series

TBR

TD

TDR

TE

TER

TE

110

TCB

Tel

ΤM

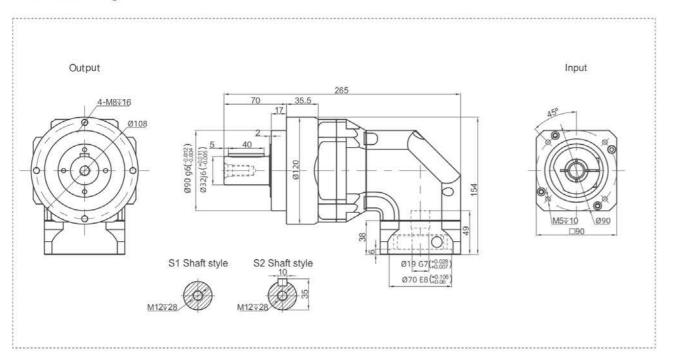
Output Input

4-M8至16

9108

S1 Shaft style S2 Shaft style 024G7(持續) 0110E8(治療)

TER120 Two Stage



Performance Data

TER series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TER120 | | | One Stage | Two Stage |
|-----------------------|----|---------------|-------------------------------|--|
| Speed Ratio | | i | 3 4 5 6 7 8 9 10 | 14 20 25 30 35 40 50 60 70 80 100 120 140 160 180 200 |
| Nominal Output Torque | т, | Nm | 200 260 330 310 300 260 - 235 | 300 235 330 310 300 260 330 310 300 260 235 310 300 260 - 23 |
| Emergency Stop Torque | T₂ | Nm | T,×3 | T,×3 |
| Nominal Input Speed | S, | rpm | 4000 | 4000 |
| Maximum Input Speed | S₂ | rpm | 8000 | 8000 |
| Maximum Output Torqu | | | T₁×3×60% | T,×3×60% |
| Maximum Radial Force | F, | 19 | 6100 | 6100 |
| Maximum Axial Force | F, | N | 3350 | 3350 |
| Torsional Rigidity | - | Nm/ arcmin | 25 | 25 |
| Efficiency | η | % | ≥95 | ≥92 |
| Service Life | - | h | 20000 | 20000 |
| Noise | - | dB | ≤68 | ≤68 |
| Weight | - | Kg | 13 | 12.5 |
| | P0 | | ,- | - |
| Backlash | | arcmin | ≤4 | ≤7 |
| | P2 | | ≤6 | ≤ 9 |
| Operating Temperature | - | °C | -20~90 | -20~90 |
| Lubrication | | _ | Synthetic Grease | Synthetic Grease |
| Protection Class | | - | IP65 | IP65 |
| Mounting Position | | - | Any Direction | Any Direction |
| Moment of Inertia | J | kg.cm² | 6.84 | 6.25 2.25 1.87 |

Notes:

- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

17



TB

TER155 Series

TER155 One Stage

TER

TD

TDR

TE

TER

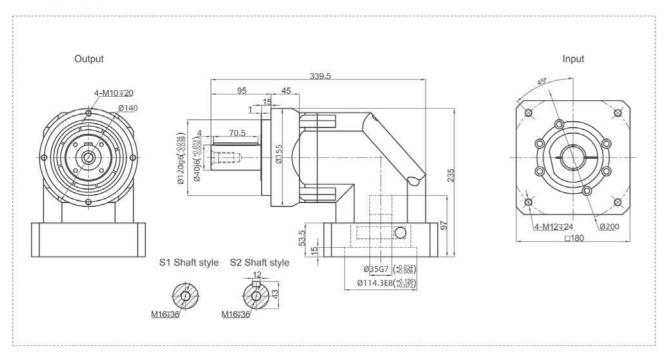
Ť

10

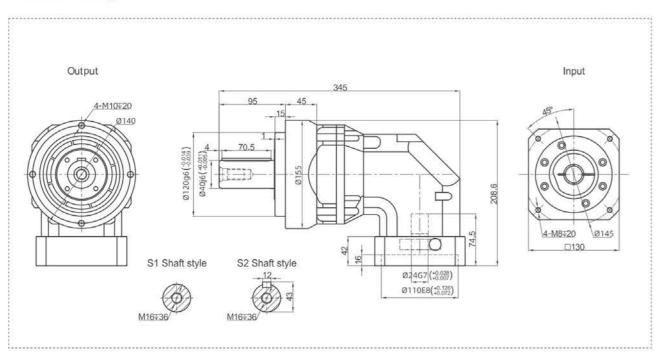
TCB

TOE

TM



TER155 Two Stage



Performance Data

TER series offer additional installation flexibility in addition to TB series but with zero compromise in performance. It is with high precision and robust design.

| TER155 | | | | | | | | One | Sta | ge | | | | | | | | | T | wo | Sta | age | | | | | |
|-----------------------|----------------|---------------|----------|---------|----------|---------|------------------|------------------|---------|-------------|-------------|--------|-------|----------|--------|---------|--------|----------|--------|-------|---------|-----------|---------|----------|-----------|--------|--------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 14 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 |) 8 | 0 | 100 12 | 20 1 | 40 | 160 | 180 | 200 |
| Nominal Output Torque | т, | Nm | 340 | 540 | 650 | 600 | 555 | 500 | o - | 460 | 555 | 45 | 0 650 | 600 | 555 | 500 | 650 | 600 | 55 | 5.50 | 00 4 | 460 60 | 00 5 | 555 | 500 | - | 46 |
| Emergency Stop Torque | Τ₂ | Nm | | | | ******* | | Τ, | × 3 | | | ***** | | | • | | ***** | ****** | Т | , × 3 | 3 | | | | | | |
| Nominal Input Speed | Sı | rpm | | ****** | | | | 30 | 00 | | en en en en | | | | ***** | | | tanete: | 3 | 000 |) | | 20123 | 44554 | | 10000 | 55253 |
| Maximum Input Speed | S ₂ | rpm | | | | | | 60 | 00 | | | | | | | | | | 6 | 000 |) | | | | | | |
| Maximum Output Torque | ,T₄ | Nm | | | | | T ₁ : | ×3: | × 60 | % | | 000000 | | | 20000 | | ***** | Т | × | 3 × 6 | 309 | % | 2000 | | 120000 | 22500 | V.C. |
| Maximum Radial Force | F _a | N | | ****** | | | | 84 | 60 | | | ***** | | | | | | | 8 | 460 |) | | | ****** | | | |
| Maximum Axial Force | F, | N | | | | | | 47 | 00 | | | | | | | | | | 4 | 700 |) | | | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | | | ******* | | 5 | 0 | | ******** | ***** | | | | | ***** | | | 50 | **** | ********* | | ****** | ******* | ***** | |
| Efficiency | η | % | -10121 | ***** | | ******* | | ≥9 | 95 | | | | | | | | | | 2 | ≥92 | | | | | | | |
| Service Life | - | h | | | //////// | | | 200 | 000 | | | | | | | | | | 20 | 000 | 0 | | | ****** | | | |
| Noise | - | dB | *11.000 | | | 000000 | | € | 70 | 01.00.00.00 | | 11000 | | | | | | | * | €70 |) | | 9,11(0) | X0.11.0 | (0)(4)(1) | 000000 | |
| Weight | - | Kg | | | | | | 25 | .1 | | | ***** | | | | | | | 2 | 1.5 | | | | ****** | | | |
| | PO | | | eterre. | | | . An a factor | 9.5 | | ******* | 53188372 | CO. | | 11000110 | 122814 | ******* | ***** | 1.555.11 | 111100 | | 201.001 | | 130,035 | 0.01001 | | 11111 | 55.000 |
| Backlash | P1 | arcmin | | | | | | < | 4 | | | | | | | | | | | ≤7 | | | | | | | -vva |
| | P2 | | | | | | | \(\left\) | 6 | | | 5000 | | | | | | 9000 | | ≤9 | 100 | | | | | 2000 | |
| Operating Temperature | - | °C | ******** | ****** | | | | 20 | -90 | | | | | ******* | ****** | | ****** | | -2 | 0~9 | 0 | | ***** | ***** | | | |
| Lubrication | | _ | | | | | Syn | thetic | Grea | se | | | | | | | | Sy | ynthe | tic G | reas | se | | | | | |
| Protection Class | | - | | | | | | IP | 35 | | | ***** | | | | | ***** | | 11 | P65 | | | | | | | |
| Mounting Position | | - | | | | | An | y D | rection | n | ,,,,,,,, | | | ******** | | | | A | ny | Direc | ction | n | | .,,,,,,, | | ***** | |
| Moment of Inertia | J | kg.cm² | | | ****** | 23.4 | 1 | | | | 21 | .8 | | | | 6 | .84 | | | | 0.000 | | | | 6.25 |) | 777 |

Notes:

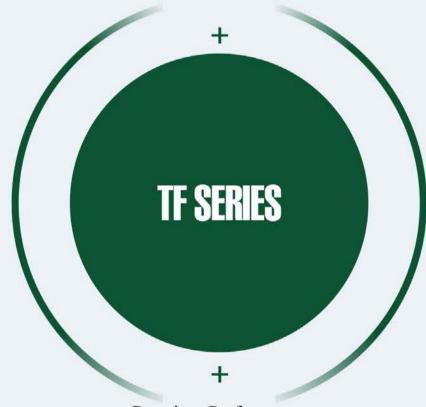
- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- ▶ For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

| 73

Precision Planetary Reducer





Premium Performance

TF series planetary reducer has the characteristics of high rigidity, high precision (single stage can achieve less than 1 arcmin), high transmission efficiency (single stage at 97% -98%), high torque / volume ratio, and lifetime maintenance-free.

GEARKO DRIVES THE PRECISION

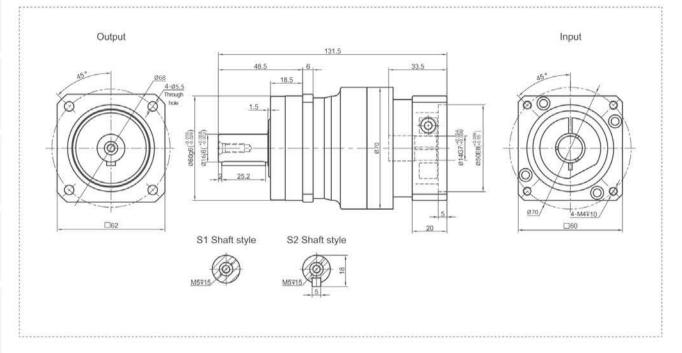




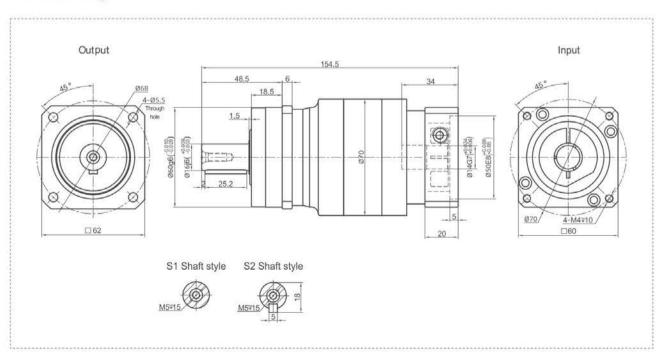
TF060 Series

TF060 One Stage

TF



TF060 Two Stage



Performance Data

The TF series reducer targets those applications requiring extremely smooth operation even at high axial or radial load at high speed. The enhanced load bearing capacity guarantees its design precision at almost any demanding condition.

| TF060 | | | | | | On | e St | age | | | | | | | | Γwο | Stage | | | | |
|-----------------------|----------------|-----------|------|----------|----------|--|---------|------------|----------|-----------|----|-----------|-------------|------------|----|---|----------|------------|-----------|------------|------------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | Τ, | Nm | 52 | 50 | 58 | 55 | 50 | 45 | 12 | 42 | 52 | 50 | 58 | 55 | 50 | 45 | 58 | 55 | 50 | 45 | 42 |
| Emergency Stop Torque | T ₂ | Nm | | | K | Τl | ×3 | de cososos | ******** | ******* | | ********* | ********** | ********* | | T1> | · 3 | ********** | ********* | | |
| Nominal Input Speed | Sı | rpm | | 17063333 | 00000000 | 50 | 00 | 73077130 | ******** | ********* | | orition. | 00771100001 | X111.00111 | | 500 | 00 | VIII. | ******* | 77.135.557 | 2413011 |
| Maximum Input Speed | S ₂ | rpm | | | | 100 | 000 | ******** | | | | | 0417000 | ******** | | 100 | 00 | 01110000 | 11110000 | | 227655 |
| Maximum Output Torque | | Nm | | | Т | ×3 | × 60 | % | | | | | | | TI | ×3> | × 60% | ó | | | |
| Maximum Radial Force | F. | N | | | | 14 | 00 | | | ******** | | | | ******** | | 140 | 00 | | | | ****** |
| Maximum Axial Force | F, | N | | | | 11 | 00 | | | | | | | | | 110 | 00 | | ******* | | |
| Torsional Rigidity | - | Nm/arcmin | | | wexu | 7 | 7 | | | | | | | ****** | | 7 | ******** | 2117,7113 | | | ***** |
| Efficiency | η | % | | | | ≥! | 97 | | | | | 000111000 | | ****** | | ≥9 | 4 | | | | |
| Service Life | - | h | | | | 300 | 000 | | | | | | | | | 300 | 00 | | ******** | | |
| Noise | - | dB | | | | </td <td>58</td> <td></td> <td>******</td> <td>*******</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>≤6</td> <td>0</td> <td></td> <td>********</td> <td></td> <td></td> | 58 | | ****** | ******* | | | | | | ≤6 | 0 | | ******** | | |
| Weight | - | Kg | | | ******** | 1. | 6 | | | | | | ********** | ******** | | 2. | 1 | | ******** | | ****** |
| | PO | | | vertit. | | | • | | ******* | 200000 | | ******** | 2011/22/2 | | | | ****** | 91116000 | | ********* | ******** |
| Backlash | P1 | arcmin | | | | < | 3 | | | | | | | | | </td <td>5</td> <td></td> <td></td> <td></td> <td></td> | 5 | | | | |
| | P2 | | | | | < | 5 | | | | | | | | | €. | 7 | ,,,,,,,,,, | | | |
| Operating Temperature | - | °C | | | | -20- | -90 | | | | | | | | | -20~ | 90 | | | | 300000 |
| Lubrication | | | | | Sy | ntheti | e Grea | se | | | | | ********* | ******* | Sy | nthetic | Grease | | | | |
| Protection Class | | - | | | ******** | IP | 35 | | ******* | | | | ********* | | | IP6 | 5 | | ******** | | ***** |
| Mounting Position | | :-: | | | Α | ny D | irectio | n | | | | | | ******** | A | ny Dir | rection | | ******* | | 407.452.47 |
| Moment of Inertia | J | kg.cm² | 0.16 | 0.14 | | | (| 0.13 | | | | | | | | 0.1 | 3 | | | | |

Notes:

- ♠ Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

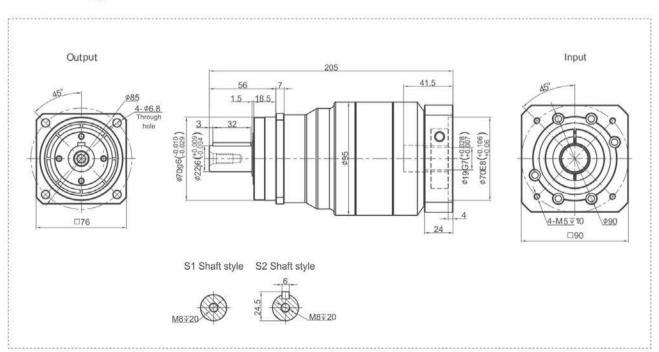


TF075 Series

TF075 One Stage

TF075 Two Stage

TF



Performance Data

The TF series reducer targets those applications requiring extremely smooth operation even at high axial or radial load at high speed. The enhanced load bearing capacity guarantees its design precision at almost any demanding condition.

| TF075 | | | | | | On | e St | age | | | | | | | | Γwο | Stage | | | | |
|-----------------------|----------------|-----------|-------|---|------|-------------|---------------|---|----------|----------|-----|-----------|----------|--|----------|---------|---------|-----------|---|-----------|---------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | Т, | Nm | 130 | 140 | 160 | 148 | 140 | 123 | E4 | 102 | 130 | 140 | 160 | 148 | 140 | 123 | 160 | 148 | 140 | 123 | 102 |
| Emergency Stop Torque | T ₂ | Nm | | | | T, > | < 3 | ******** | ******** | | | | | ACCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC | 6070000 | T,× | 3 | ***** | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | K |
| Nominal Input Speed | Sı | rpm | | | | 40 | 00 | | | | | | | | | 400 | 00 | | | | |
| Maximum Input Speed | S₂ | rpm | | 0011110 | | 80 | 00 | ******* | | | | | 0117000 | *********** | | 800 | 00 | 0111-0004 | 111.0000 | | 2200000 |
| Maximum Output Torqu | T ₄ | Nm | | | Т | ×3> | < 60° | % | | | | | | | Т | ×3× | 60% | | | | |
| Maximum Radial Force | F. | N | | | | 41 | 00 | ******* | | ******** | | ******** | | ******* | | 410 | 00 | ******** | | | ****** |
| Maximum Axial Force | F _b | N | | | | 37 | 00 | | | | | | | | | 370 | 00 | | | | mun |
| Torsional Rigidity | - | Nm/arcmin | | | | 1 | 4 | ******* | | | | ******** | | ******* | |] 4 | 1 | 211277113 | | | ****** |
| Efficiency | η | % | | | | ≥9 | 7 | | | | | ********* | | 24446244 | 2.000000 | ≥9 | 4 | | A.U. 6000000 | | |
| Service Life | - | h | | | | 300 | 000 | | | | | | | | | 300 | 00 | | | | |
| Noise | - | dB | | | | €(| 30 | | ******* | | | ********* | | | | ≤6 | 0 | | | | |
| Weight | - | Kg | | | | 3. | 9 | | | | | ******** | | | | 5. | 1 | | | | 2122011 |
| | PO | | | | | \leq | 1 | J. S. | | | | 2111211 | ******** | MARKALL . | | = | | 91115233 | | ********* | 5335553 |
| Backlash | P1 | arcmin | | | | | | | | | | | | | | | | | | | |
| | P2 | | | 140 160 148 140 123 - 102 130 140 160 148 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 123 140 140 123 140 | | | | | | | | | | | | | | | | | |
| Operating Temperature | - | °C | | | | -20- | 90 | ******* | | | | | | | | -20~ | 90 | | | | 300000 |
| Lubrication | | - | | | Sy | nthetic | Grea | se | | | | ******** | | ******** | Sy | nthetic | Grease | | | | |
| Protection Class | | - | | | | IP6 | 35 | ******* | | | | | | ******** | | IP6 | 5 | | | | ***** |
| Mounting Position | | - | | | A | ny Di | rectio | n | ******* | | | | | ******** | A | ny Dir | rection | | | | 0.000 |
| Moment of Inertia | J | kg.cm² | 0.610 | 0.48 | 0.47 | 0.4 | 45 | | 0.4 | 4 | | | 0.4 | 7 | | | | | 0.4 | 4 | 2000 |

Notes:

- ♠ Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ▶ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TF100 Series

TF100 One Stage

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Output Input

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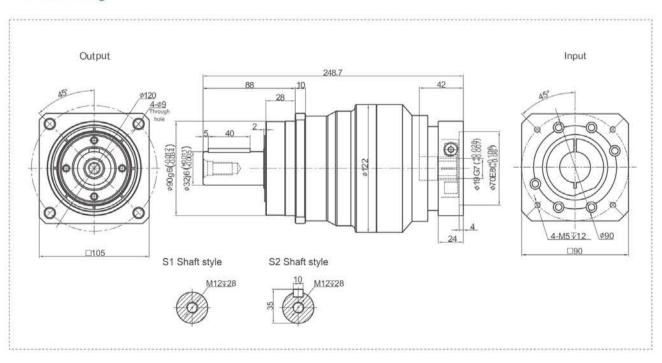
S1 Shaft style

S2 Shaft style

S2 Shaft style

M12¥28

TF100 Two Stage



Performance Data

The TF series reducer targets those applications requiring extremely smooth operation even at high axial or radial load at high speed. The enhanced load bearing capacity guarantees its design precision at almost any demanding condition.

| TF100 | | | | | Or | ie St | age | | | | | | | | Cwo | Stage | ž. | | | |
|-----------------------|----------------|------------|--|----------|-------------|----------|---------------------|---------|-------------|-----|---|------------|--------------|-----------|---|---------|------------|-----------|-----------|-----------|
| Speed Ratio | | i | 3 4 | 1 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 210 29 | 90 33: | 3 310 | 300 | 260 | _ | 235 | 210 | 290 | 333 | 310 | 300 | 260 | 333 | 310 | 300 | 260 | 235 |
| Emergency Stop Torque | T ₂ | Nm | | ******** | т, | ×3 | ele a u y a u y e e | | • | | k + > > > > > > > > > > > > > > > > > > | ********** | | | T,× | 3 | ***** | ********* | ********* | ******* |
| Nominal Input Speed | Sı | rpm | | 11100001 | 40 | 00 | 775077113 | 1101711 | *********** | | 011111000 | 0477330000 | ************ | 311301111 | 400 | 00 | Y11110000 | V11130460 | 01130507 | 31.150.11 |
| Maximum Input Speed | S₂ | rpm | | | 80 | 00 | 170031110 | | | | | | | | 800 | 00 | 01110000 | 01110000 | | 217000 |
| Maximum Output Torque | T ₄ | Nm | | ٦ | r,×3 | × 60° | % | | | | | | | T, | ×3× | 60% | | | | |
| Maximum Radial Force | F. | N | | ******* | 92 | 00 | | | ****** | | ******** | | | | 920 | 00 | | | ******* | |
| Maximum Axial Force | F, | N | | | 58 | 20 | | | | | | | | enenn. | 582 | 20 | | | | erreer. |
| Forsional Rigidity | - | Nm/arcmin | | usus: | 2 | 5 | | | | | ******* | | ********* | | 25 | 5 | ********** | | | ****** |
| Efficiency | η | % | | | ≥ | 97 | | | | | | ********* | | | ≥9 | 4 | | | | |
| Service Life | - | h | | , | 300 | 000 | | | | | | | | | 300 | 00 | | | | |
| Noise | - | dB | | | € | 63 | | | | | ******** | | | | ≤6 | 3 | | | ******** | |
| Weight | - | Kg | ************************************** | | 8 | 9 | | | | | ******** | ********* | | | 8. | 1 | | | 148947778 | |
| | PO | | | | \leq | 1 | | | | | ******** | | | | €: | 3 | ******** | ****** | | |
| Backlash | Р1 | arcmin | | | < | 3 | | | | | (20000001) | | | | </td <td>5</td> <td></td> <td></td> <td></td> <td></td> | 5 | | | | |
| | P2 | | | | | 5 | | | | | | | | | ≼` | 7 | ,,,,,,,, | | | |
| Operating Temperature | - | °C | | | -20 | ~90 | | | | | | | | | -20- | 90 | | | | |
| Lubrication | | ; <u> </u> | | 5 | Syntheti | c Grea | se | | | | ******** | | | Sy | nthetic | Grease | | | | 4 |
| Protection Class | | ····· | | ******** | IP | 65 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | ·— | | | Any D | irection | n | | | | | | | A | ny Dir | rection | 0.1000 | | | |
| Moment of Inertia | J | kg.cm² | 3.252. | 74 2.7 | 12.65 | 2.62 | 2.58 | - | 2.57 | | 0. | 47 | | | | | 0.4 | 4 | | |

Notes:

- ♠ Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ▶ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.



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TF140 Series

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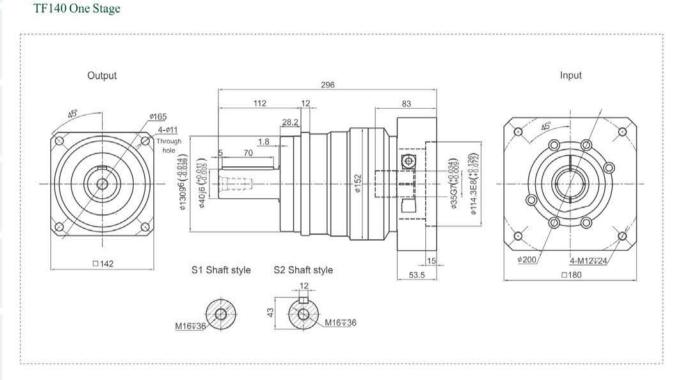
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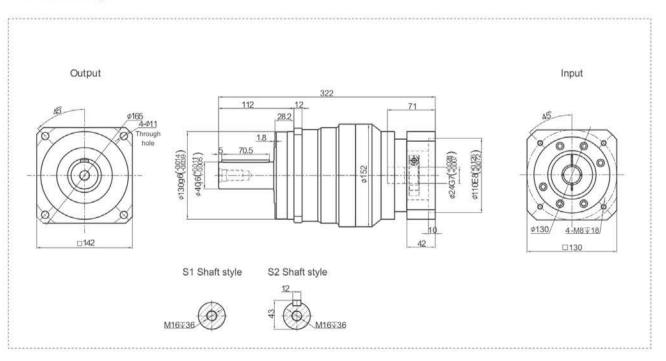
TCBI

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TF140 Two Stage



Performance Data

The TF series reducer targets those applications requiring extremely smooth operation even at high axial or radial load at high speed. The enhanced load bearing capacity guarantees its design precision at almost any demanding condition.

| TF140 | | | | | | On | e St | tage | | | | | | | | ĵ | Гwо | Stage | ÷ | | | |
|-----------------------|----------------|-----------|----------|---|--------------|-------------|---------|-----------|----------|-------|-----------|-----|-----------|--------------|----------|-------------|---------|---------|-------------|------------|-----------|----------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 5 |) | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | T, | Nm | 340 | 545 | 650 | 600 | 555 | 500 | o - | - | 460 | 340 | 545 | 650 | 600 | 555 | 500 | 650 | 600 | 555 | 500 | 460 |
| Emergency Stop Torque | T ₂ | Nm | | 6200000 | korono y rek | T, | ×3 | ******* | | | | | | | | | T,× | 3 | 44979900000 | Annoona | | ******* |
| Nominal Input Speed | Sı | rpm | ******** | 17041111 | ******** | 30 | 00 | ******* | 137,130 | 7.110 | ********* | | VIII. | 47113646 | | 31130711 | 300 | 00 | | W71136AA | 111110007 | 31130111 |
| Maximum Input Speed | S₂ | rpm | | | | 60 | 00 | ****** | | | ****** | | 0111000 | 34170000 | | | 600 | 00 | 0111000 | 0.111.0000 | | |
| Maximum Output Torque | T ₄ | Nm | | | Т, | ×3 | ×60 |)% | | | | | | | | Т, | ×3× | 60% |) | | | |
| Maximum Radial Force | F. | N | | | | 140 | 000 | ****** | | | | | | | | ********* | 140 | 00 | ********* | ******** | | |
| Maximum Axial Force | F _b | N | | | | 114 | 400 | ,,,,,,,,, | | | | | | | | | 114 | 00 | | | | |
| Torsional Rigidity | - | Nm/arcmin | | | | 5 | 0 | | | | | | | | | ********* | 50 |) | ********** | | | |
| Efficiency | η | % | | | | ≽ | 97 | | 000000 | 0.000 | | | 0110000 | | | 2.110-1-110 | ≥9 | 4 | ******** | 001100000 | | |
| Service Life | - | h | | | | 300 | 000 | ••••• | | | | | | | | | 300 | 00 | | | | |
| Noise | - | dB | | | | < | 65 | | | | | | | | | | ≤6 | 5 | | | | |
| Weight | - | Kg | | | ********* | 1 | 8 | | | | | | | ******** | | | 16. | 6 | ********* | | | |
| | PO | | | vent. | | \leq | 1 | erenen. | interes. | tetee | | | ******** | ******* | | 5445444 | €; | 3 | -21115-00 | ******* | | |
| Backlash | P1 | arcmin | | | | < | 3 | | | | | | | | | | €! | 5 | | | | |
| | P2 | | | 6000 $T_1 \times 3 \times 60\%$ 14000 11400 50 ≥97 30000 ≤65 18 ≤1 ≤3 ≤5 -20-90 Synthetic Grease | | | | | | | | | | | | | € | 7 | | | | |
| Operating Temperature | - | °C | | ****** | | -20 | ~90 | | | | | | ********* | | ******** | | -20- | 90 | | | | 900000 |
| Lubrication | | - | | | Sy | ntheti | c Grea | ase | | | | | | | | Sy | nthetic | Grease | | | | |
| Protection Class | | - | | | | IP | 65 | | | ***** | | | | ******* | | | IP6 | 5 | | | | |
| Mounting Position | | -: | | | A | ny D | irectio | on | (0).(0) | | | | | 21,1,144,114 | | A | ny Dir | rection | | | | |
| Moment of Inertia | J | kg.cm² | 9.2 | 7,5 | 7.4 | 7.2 | 7.1 | 7.0 |) . | - ! | 7.0 | | | 2.71 | | | | | | 2.57 | | |

Notes:

- ♠ Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.



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TF180 Series

TF180 One Stage

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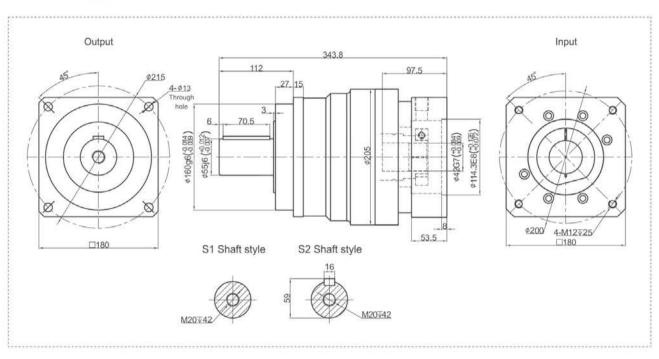
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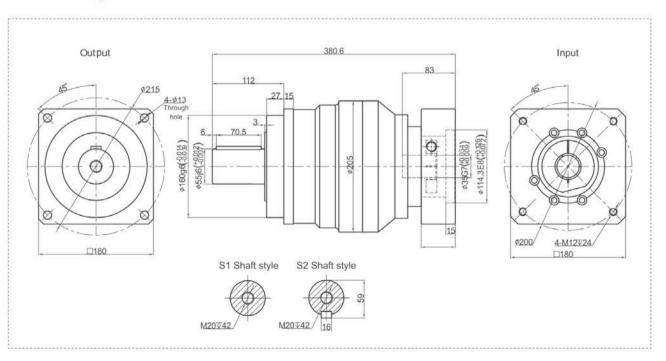
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TF180 Two Stage



Performance Data

The TF series reducer targets those applications requiring extremely smooth operation even at high axial or radial load at high speed. The enhanced load bearing capacity guarantees its design precision at almost any demanding condition.

| TF180 | | | | | О | ne S | tage | | | | | | | | | Ty | vo | Sta | ige | | | | | |
|-----------------------|----------------|-----------|----------|------------|---------|------------|-----------|--------|-----------|--------|------------|-----|------------|-----------|----------|---------|------------|---------------|--------|-----------|--------|-----------|-----------|--------------|
| Speed Ratio | i i | î | 3 | 4 | 5 | 6 | 7 | 8 | 3 | 9 | 10 | 15 | 20 | 25 | 30 | 3 | 5 | 40 | 5 | 0 (| 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 590 | 1050 | 1200 | 1108 | 1100 | 10 | 00 | -: | 910 | 590 | 1050 | 1200 | 110 | 8 11 | 001 | 000 | 12 | 001 | 108 | 110 | 0 100 | 0 910 |
| Emergency Stop Torque | T_z | Nm | | | Т | ,×3 | | | ********* | | ********** | | ORNY CO-SS | | ******** | | T,> | < 3 | ***** | | | ******** | | 3,8400-3000 |
| Nominal Input Speed | S, | rpm | | 11//100001 | 3 | 000 | V7507735 | 341361 | 111001110 | 77.550 | 1151100 | | ****** | MILITAN. | vatato | ******* | 300 | 00 | 1770 | 11.07.001 | 2007 | 100000 | 77.35567 | /3/130111 |
| Maximum Input Speed | S ₂ | rpm | | ******* | 6 | 000 | 17003114 | | | ***** | ******** | | 0.1110000 | 0417000 | | | 600 | 00 | | | | | ******** | ******* |
| Maximum Output Torque | T, | Nm | | | T, × 3 | 3×60 |)% | | | | | | | | | T,× | (3) | × 60 |)% | | | | | |
| Maximum Radial Force | F" | N | | ******** | 18 | 3000 | | | ******* | | ,,,,,,,, | | ******* | ******* | | 1 | 80 | 00 | | | | ****** | | |
| Maximum Axial Force | F, | N | | ******* | 19 | 9500 | | | | | | | | | | 1 | 95 | 00 | | | | | ******* | |
| Torsional Rigidity | - | Nm/arcmin | | | | 45 | ********* | | ******* | | ******* | | | | | ****** | 14 | 5 | | | | | ******* | ****** |
| Efficiency | η | % | | | 3 | ≥97 | | | | | | | | ********* | NALUE . | 1111111 | ≥ 9 | 94 | | 13,1,100 | onni i | .00.000 | | iiiiiiiiiiii |
| Service Life | - | h | | | 30 | 0000 | | | | | , | | | | ,,,,,,, | 3 | 300 | 000 | | | | | | |
| Noise | - | dB | | | \$ | €67 | | | | | | | ******* | ******** | 1411110 | | ≤ 6 | 37 | 57000 | | | | 1101000 | ******* |
| Weight | - | Kg | | ******* | 3 | 5.5 | | | | | ******* | | | | 1121010 | 000000 | 42 | 2 | 22000 | | | | ******* | ********* |
| | P0 | | | 1115000 | 1110000 | ≤ 1 | 9753411 | 21.22 | | 11.05 | | | 2711.5235 | 233,232 | testase | utten | € | 3 | tioo | ****** | 95871 | | 11.170.00 | |
| Backlash | P1 | arcmin | | | | ≤3 | | | | | | | | | | | < | 5 | | | | | | |
| | P2 | | | | | ≤5 | | | | | | | | | | | < | 7 | 11.000 | | | | | |
| Operating Temperature | - | °C | | | -2 | 0~90 | | | ******* | | ******* | | | | ****** | -1 | 20- | -90 | ***** | | | | ******* | |
| Lubrication | | - | <u> </u> | ******** | Synthe | tic Gre | ase | ***** | | ***** | | | | | | Synt | hetic | Gre | ase | | | | | |
| Protection Class | | _ | | ******** | II | P65 | | 2102 | | 79.552 | ******** | | | | | | IPE | 35 | | | | | | |
| Mounting Position | | - | | | Any | Directi | on | eroex. | | ,,,,,, | | | | | | Any | y Di | rectio | on | | | ,,,,,,,,, | | |
| Moment of Inertia | J | kg.cm² | 28.98 | 23.67 | 23.29 | 22.75 | 22.48 | 322 | 59 | - | 22.5 | 1 | | 7.4 | 2 | | | | | | 7.0 |)3 | | |

Notes:

- ♠ Speed ratio (i=Sin/Sout)
- When the output speed is 100 rpm, it acts on the center of the output shaft.
- ♠ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

Precision Planetary Reducer

Modular & Economical Design



Optimized Performance

TCB/TCBR/TCE series planetary reducer backlash is low and its transmission capacity is strong, the input end can be matched with servo, stepping and any other motors.

GERKO DRIVES THE PRECISION



GEARKO®

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TCB042 One Stage

Output

S1 Shaft style

TCB042 Series

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Output S6.3 TCB042 Two Stage Input Input Input Input Input Input Input Input S6.3 Z7.5 Input Input S6.3 Z7.5 Input Input Input S6.3 Z7.5 Input Input Input Input S6.3 Z7.5 Input
Performance Data

TCB series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCB042 | | | | | O | ne S | tage | | | | | | | | | Γwο | Stage | * | | | |
|-----------------------|----------------|---------------|---|--------|--|-----------|----------|---|-----------|-----------|---|----------|----------|-----------|------------|---------|----------|------------|------------|-----------|---------|
| Speed Ratio | | i | - | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | Т, | Nm | - | 17 | 19 | 18 | 19 | 16 | - | 14 | - | 17 | 19 | 18 | 18 | 16 | 19 | 18 | 18 | 16 | 14 |
| Emergency Stop Torque | T ₂ | Nm | | | | т, | ×3 | ****** | ******* | ********* | | | | ********* | ********* | T, × | 3 | | ********** | mounn | ****** |
| Nominal Input Speed | S, | rpm | | | tata a a a a a a a a a a a a a a a a a | 30 | 000 | 9505555 | ekteen. | | | | | | | 300 | 0 | | | | |
| Maximum Input Speed | Sz | rpm | | | | 60 | 000 | | ******* | | | | | | | 600 | 0 | .,,,,,,,,, | | | |
| Maximum Output Torque | T ₄ | Nm | | | 1 | T, × 3 | × 60 |)% | | | | 2030002 | | 50//07/55 | T, | ×3× | 60% | 1560-2255 | ******** | | 0//55 |
| Maximum Radial Force | F, | N | | | | 7 | 60 | | | | | | | | .,,,,,,,,, | 760 |) | | | | ****** |
| Maximum Axial Force | F _b | N | | | | 3 | 80 | | | | | | | ******** | | 380 |) | | ******** | | |
| Torsional Rigidity | - | Nm/ arcmin | | ****** | | | 3 | ****** | 270311111 | | | | | ******** | | 3 | ******** | | ******** | | ****** |
| Efficiency | η | % | | | | ≥ | 97 | | | | | | | | | ≥9 | 4 | | ******** | | |
| Service Life | - | h | | | | 20 | 000 | | | | | | | | | 2000 | 00 | | | | |
| Noise | - | dB | | | | \$ | 56 | | 110.00 | | | | | | | ≤5 | 6 | 0.000 | | | |
| Weight | - | Kg | | | | (|).5 | | ******** | | | | | | | 0.7 | | | | | |
| | P0 | | | | | 100.110.0 | -: -: | | obsess. | | | | | 1000111 | MATERIE: | =: | ALVIER A | | 11111211 | Market in | 5505555 |
| Backlash | P1 | arcmin | | | | : | €3 | | | | | | | | | ≤5 | | | | | |
| | P2 | | | | | | ≤5 | | | | | 11000000 | 20000000 | | | ≤7 | | | | | 51117.1 |
| Operating Temperature | - | °C | | | | -20 | ~90 |) | ******* | | | | | | - | 20~ | 90 | | | | |
| Lubrication | | - | | | Sy | nthetic | Greas | e | | | | | | | Sy | nthetic | grease | | ********* | | |
| Protection Class | | | | | | IP6 | 35 | | | | | | | | | IP6 | 5 | | ******* | | |
| Mounting Position | | =: | | | A | ny Di | rection | | .,,,,,,,, | | | | | ******** | Aı | ny Dire | ection | | | | 3131441 |
| Moment of Inertia | J | kg.cm² | | 7 | | 0.0 | 3 | /////////////////////////////////////// | | | | | | | | 0.03 | 3 | | | | |

Notes:

- ▶ Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TCB060 Series

TCB060 One Stage

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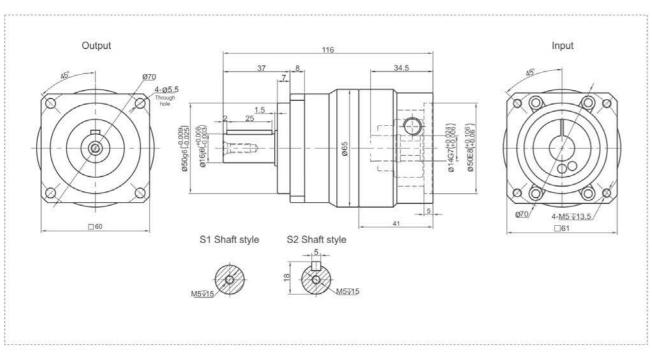
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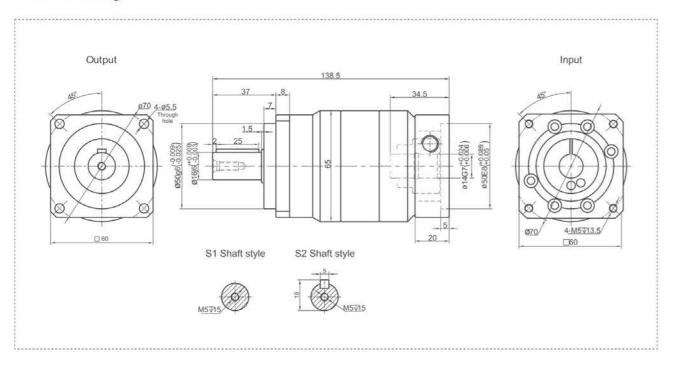
TCB

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TCB060 Two Stage



Performance Data

TCB series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCB060 | | | | | Oı | ne S | tage | | | | | | | | | Γwo | Stage | | | | |
|-----------------------|----------------|---------------|------|------|------------|--------|-----------|---------|------------|---------|----|-----------|-----------|------------|-----------|------------|----------|----------|------------|-----------|---------|
| Speed Ratio | | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 40 | 45 | 55 | 50 | 45 | 45 | - | 35 | 40 | 45 | 55 | 50 | 45 | 45 | 55 | 50 | 45 | 45 | 35 |
| Emergency Stop Torque | Тг | Nm | | | ********* | т, | ×3 | ****** | ******* | | | ********* | ******** | ********* | ********* | T,× | 3 | | ********** | mounn | ******* |
| Nominal Input Speed | Sı | rpm | | | ********** | 30 | 000 | 9505555 | det same | eco. | | | | | | 300 | 0 | ******** | | | 1155211 |
| Maximum Input Speed | S ₂ | rpm | | | | 60 | 000 | | ******* | | | | | | | 600 | 0 | | | | ******* |
| Maximum Output Torque | T4 | Nm | | | Т | ,×3 | × 60 |)% | energie. | | | 2345543 | Steven | 54145155 | Т, | ×3× | 60% | | | | 1477533 |
| Maximum Radial Force | F, | N | | | ******* | 15 | 530 | | | | | ********* | | ******** | .,,,,,,,, | 153 | 0 | ******** | ******** | | ****** |
| Maximum Axial Force | F _b | N | | | | 7 | 65 | | | | | | | | | 765 | 5 | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | | ******** | | 7 | | ******* | | | | | ******** | | 7 | ******** | | | | ****** |
| Efficiency | η | % | | | ******* | ≥ | 97 | | | | | | | | | ≥94 | 4 | | | | |
| Service Life | - | h | | | | 20 | 000 | | | | | | | ******** | | 2000 | 00 | | | | |
| Noise | - | dB | | | | < | 58 | | 110.000 | | | | 0.001110 | | | ≤58 | 3 | | | | |
| Weight | - | Kg | | | | 1 | .3 | | ******* | | | | ********* | | | 1.7 | | | ******** | | |
| | P0 | | | | esternin | | =" | | 8821111111 | 0001111 | | | 1000000 | 10001111 | OMINE. | = 1 | | 1111111 | | . Martini | 2005333 |
| Backlash | P1 | arcmin | | | | \$ | €3 | | | ****** | | | | | | ≤5 | | | ******** | | |
| | P2 | | 1 | | ****** | \$ | €5 | | | | | | | | | ≤ 7 | | | ********** | | |
| Operating Temperature | - | °C | | | | -20 | ~90 |) | ******* | | | | | ********* | - | 20~ | 90 | | | | ******* |
| Lubrication | | - | | | S | ynthet | ic Gre | ase | | | | | | | Sy | nthetic g | grease | | | | |
| Protection Class | | _ | | | | IP | 65 | ****** | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | - | | | | Any I | Direction | on | | | | | | | Aı | ny Dire | ection | | | | 21,244 |
| Moment of Inertia | J | kg.cm² | 0.16 | 0.14 | | | 0. | 13 | | | | | | .,,,,,,,,, | 707200 | 0.13 | 3 | | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f D}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

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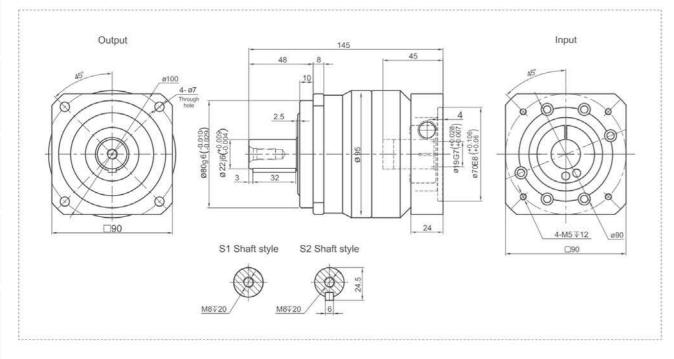
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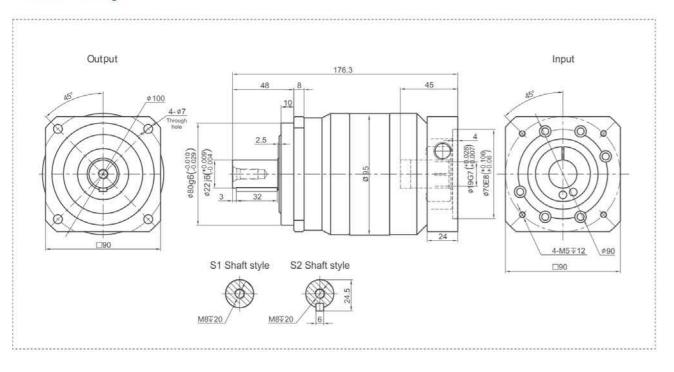
TCB090 One Stage

TCB

TCB090 Series



TCB090 Two Stage



Performance Data

TCB series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCB090 | | | | | Or | ie S | tage | | | | | | | | 3 | [wo | Stage | | | | |
|-----------------------|----------------|---------------|------|----------|--------|----------|--------------|-----------|----------|---------|----------|---------------|---------|-----------|------------|------------|--------|------------|------------|--|------------|
| Speed Ratio | | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 100 | 110 | 150 | 140 | 135 | 120 | - | 100 | 100 | 110 | 150 | 140 | 135 | 120 | 150 | 140 | 135 | 120 | 100 |
| Emergency Stop Torque | T ₂ | Nm | | *2<***** | | т, | ×3 | | | | | ********** | | ********* | | T,× | 3 | | ********** | | 1019-10-01 |
| Nominal Input Speed | S | rpm | | | | 30 | 000 | ******** | etteren. | | | | | | 309431437 | 300 | 0 | ******* | | and the same of th | 100000 |
| Maximum Input Speed | S ₂ | rpm | | | | 60 | 000 | | | | | | | | | 600 | 0 | .,,,,,,,,, | | | |
| Maximum Output Torque | T ₄ | Nm | | COMPLEX | Т | ,×3 | × 60 |)% | | ******* | 100000 | 1,000,000,000 | menne | WW.01011 | Т, | ×3× | 60% | ******** | | 11(17) | 0//555 |
| Maximum Radial Force | F, | N | | | | 32 | 250 | | | | | | ******* | | ,,,,,,,, | 325 | 0 | ******** | | | ****** |
| Maximum Axial Force | Fb | N | | | | 16 | 525 | | | | | | | | | 162 | 5 | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | ******* | | 1 | 4 | ******* | 2311137 | | ******** | | | ********* | | 14 | | | | | 1776611 |
| Efficiency | η | % | | ****** | | ≥ | 97 | | | | | | | | | ≥94 | 1 | | | | |
| Service Life | = | h | | | | 20 | 000 | | | | | | | //////// | | 2000 | 00 | | | | |
| Noise | - | dB | | | | « | 60 | | | | | | | |)110A0 | 60 | | | | | |
| Weight | - | Kg | | | | 3 | .5 | | | | | | | | | 5.1 | | | | | |
| | PO | | | | 200000 | 2413522 | - | V-1-1-1-0 | 20112311 | | | | ******* | | 300111111 | - | | | | ******* | 0005383 |
| Backlash | Р1 | arcmin | | | | \$ | €3 | | | | | | | | | ≤5 | | | | | 200000 |
| | P2 | | | COMMON. | | \$ | ≨5 | NATURE . | | | | | | | | ≤ 7 | | | ******* | | |
| Operating Temperature | _ | °C | | | | -20 | ~90 |) | | | | | | | | 20~ | 90 | ********* | | ******* | |
| Lubrication | | - | | | S | ynthet | ic Gre | ase | | | | | | | Syr | nthetic g | grease | | | | |
| Protection Class | | _ | | ******* | | ΙP | 65 | | | | | | ******* | ******** | | IP65 | 5 | ******** | | | |
| Mounting Position | | - | | ******** | 1 | Any E | Direction | on | | | | | | | Ar | ny Dire | ction | | | | norem |
| Moment of Inertia | J | kg.cm² | 0.61 | 0.48 | 0.47 | 0.45 | 0.45 | 0.44 | - | 0.44 | | | 0.47 | | ,,,,,,,,,, | | | 0.4 | 14 | | |

Notes:

- Speed ratio (i=Sin/Sout)
- ▶ When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

89

TCB



TE

TCB120 Series

TCB120 One Stage

TER

TO

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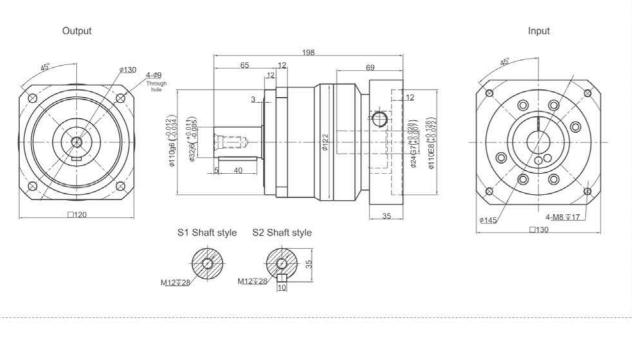
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Output Input Output S1 Shaft style S2 Shaft style M12 ¥28
Performance Data

TCB series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCB120 | | | | | O | ne S | tage | | | | | | | | | Γwο | Stage | | | | |
|-----------------------|----------------|---------------|----------|---|--------------|------------|------------|----------|----------|------------|-----|-----------|-----------|-----------|------------|-------------|--------|-----------|------------|------------|-------------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 10 |
| Nominal Output Torque | т, | Nm | 200 | 280 | 320 | 310 | 300 | 255 | - | 220 | 200 | 280 | 320 | 310 | 300 | 255 | 320 | 310 | 300 | 255 | 22 |
| Emergency Stop Torque | T₂ | Nm | | *><*** | 3400000 | Τ, | ×3 | ******** | | ******** | | ********* | ********* | ********* | ********** | T, × | 3 | | ********** | ********** | BOX 9-10-13 |
| Nominal Input Speed | S, | rpm | | | ******* | 31 | 000 | ******* | iki sasa | | | | | | tankian na | 300 | 0 | | | | 65/5626 |
| Maximum Input Speed | S ₂ | rpm | | ****** | | 6 | 000 | | | .,,,,,,,,, | | | | | | 600 | 0 | | ******* | | ****** |
| Maximum Output Torque | T ₄ | Nm | | (0.000) | 1 | ,×3 | ×60 | 0% | | ******** | | 2302277 | one or mi | 20002333 | т, | ×3× | 60% | | ******* | 2000 | 0//55 |
| Maximum Radial Force | F _a | N | | | | 6 | 700 | | | | | ******** | | | ******** | 670 | 0 | | ******** | | ****** |
| Maximum Axial Force | F _b | N | | 6700 6700 3350 3350 25 25 ≥97 ≥94 | | | | | | | | | | | | | | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | 3350 3350 25 25 ≥97 ≥94 20000 20000 | | | | | | | | | | | | | | | 117141 | | |
| Efficiency | η | % | | 6700 6700 3350 3350 25 25 ≥97 ≥94 | | | | | | | | | | | | | | | | | |
| Service Life | - | h | | 6700 6700 3350 3350 25 25 ≥97 ≥94 20000 20000 ≤63 ≤63 | | | | | | | | | | | | | | | | | |
| Noise | - | dB | <u> </u> | 0.000 |)) H () K () | \$ | 63 | | | | | 0100111 | 0.00.000 | 0.10.1111 | | ≤ 63 | 3 | 01001110 | | | 2.000 |
| Weight | - | Kg | | | | | 8 | | | | | ******** | | | | 9.5 | | | | | |
| | PO | | İ | | ******** | 100.010.00 | _ | veren. | 2012231 | | | ******* | HURCH! | | 52217715 | -: | | | ******* | .www.iii | Modes |
| Backlash | ΡΊ | arcmin | | | | | €3 | | | | | | | | | ≤5 | | | | | |
| | P2 | | | | | | § 5 | | | naren. | | | SEMBER . | | | ≤ 7 | | | | | |
| Operating Temperature | - | °C | | *>****** | | -20 | ~90 |) | | | | | | ******** | | 20~ | 90 | 0.700.710 | ********* | menion | ****** |
| Lubrication | | | 1 | | \$ | ynthe | tic Gre | ase | | 2022717 | | | | | Sy | nthetic | grease | | 111111111 | | |
| Protection Class | | .—. | | | | IF | 65 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | ****** | - | | ****** | | Any l | Directi | on | | | | | | | Aı | ny Dire | ection | | | |)))+++ |
| Moment of Inertia | J | kg.cm² | 3.25 | 2.74 | 12.71 | 2.65 | 2.62 | 2.58 | 12 | 2.57 | | | 0.47 | 7 | 7.77 | | | C |).44 | | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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GEARKO®

TB

TCB140 Series

TCB140 One Stage

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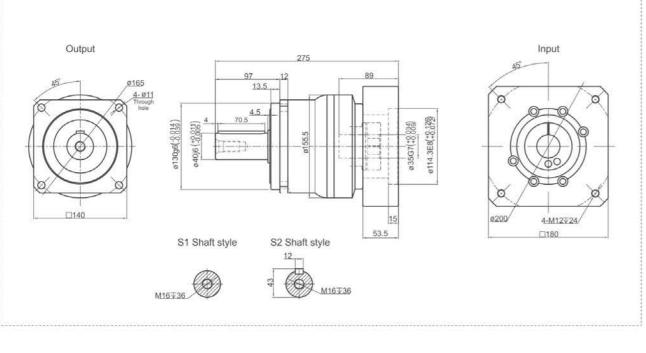
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тсв

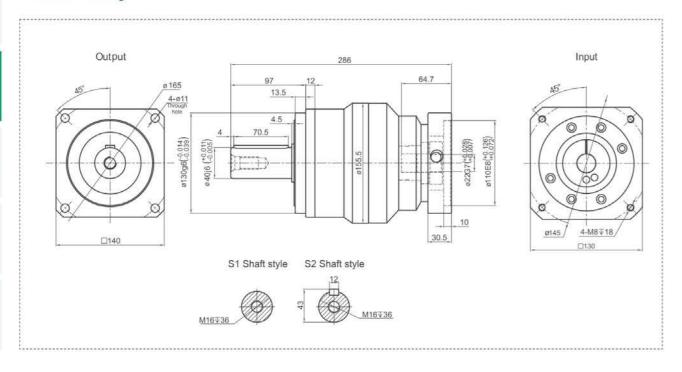
TCB

TCE

TM



TCB140 Two Stage



Performance Data

TCB series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCB140 | | | | | 0 | ne S | tage | | | | | | | | | Γwo | Stage | | | | |
|-----------------------|----------------|---------------|------|---|------|-------|------------|-----------|----------|--------------|------------|-----------|------------|-------------|------------|------------|--------|----------|------------|----------|-----------|
| Speed Ratio | | j | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 10 | |
| Nominal Output Torque | т, | Nm | 340 | 535 | 650 | 600 | 550 | 500 | - | 445 | 340 | 535 | 650 | 600 | 550 | 500 | 650 | 600 | 550 | 500 | 44 |
| Emergency Stop Torque | T ₂ | Nm | | *><*** | | т, | ×3 | | | ********* | | ********* | ******** | ********* | ********** | T, × | 3 | | ********** | mounn | 100000 |
| Nominal Input Speed | S, | rpm | | | | 20 | 000 | 944444 | 211111 | ************ | | | | | SERVINO: | 200 | 0 | | | | 1.094.51 |
| Maximum Input Speed | S ₂ | rpm | | | | 40 | 000 | | | .,,,,,,,,, | | -3110000 | | | | 400 | 0 | | ******* | | ****** |
| Maximum Output Torque | | Nm | | | 7 | ,×3 | × 60 |)% | | ******** | | 2000000 | our contra | 34143333 | т, | ×3× | 60% | 0000000 | ******* | 34443333 | 37755 |
| Maximum Radial Force | F, | N | | | | 94 | 100 | | | | | ******** | | | ******** | 940 | 0 | | ******* | | ***** |
| Maximum Axial Force | F, | N | | 4000 4000 T₁×3×60% T₁×3×60% 9400 9400 4700 4700 50 50 ≥97 ≥94 20000 20000 ≤65 ≤65 | | | | | | | | | | | | | | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | 9400 9400 4700 4700 50 50 ≥97 ≥94 | | | | | | | | | | | | | | | ***** | | |
| Efficiency | η | % | | 9400 9400 4700 4700 50 50 ≥97 ≥94 20000 20000 | | | | | | | | | | | | | | | | | |
| Service Life | - | h | | | | 20 | 000 | | | | ,,,,,,,,,, | 2000 | 00 | | | | | | | | |
| Noise | - | dB | | | | < | 65 | 0.0000000 | | | | 0.00011 | | | | ≤6 | 5 | 0.00000 | | | |
| Weight | - | Kg | | | | | 17 | | | ******** | | ********* | | | ********** | 19.8 | В | | ******** | | ***** |
| | P0 | | | | | | - | ven in | 20112221 | | | | | ******* | 550411111 | - | | | ******** | Verenin. | 650545 |
| Backlash | P1 | arcmin | | .227772 | | | €3 | | | | | | | | | ≤5 | i. | | | | |
| | P2 | | | | | 1 | § 5 | 1000000 | | maran. | ,,,,,,,, | | | | | ≤ 7 | 6 | | ******* | | |
| Operating Temperature | - | °C | | ****** | | -20 | ~90 |) | | | | ******** | | ********* | - | 20~ | 90 | | ******** | | ***** |
| Lubrication | | - | | | S | ynthe | ic Gre | ase | | | | | | | Sy | nthetic | grease | | | | 2000 |
| Protection Class | | _ | | | | IF | 65 | ******* | | | | | | ******* | | IP6 | 5 | ******** | ******* | | |
| Mounting Position | ******* | - | | ******* | | Any I | Direction | on | | | | | | | Aı | ny Dire | ection | | | | ,,,,,,,,, |
| Moment of Inertia | J | kg.cm² | 9.21 | 7.54 | 7.42 | 7.25 | 7.14 | 7.07 | - 2 | 7.03 | | | 2.71 | .,,,,,,,,,, | | | | 2 | 2.57 | | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- $oldsymbol{\circ}$ For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

16

TBR

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TOR

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ТСВ

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TM

TCB180 Series

TCB180 One Stage

Output

TCB

Output 4-M12√24 S1 Shaft style S2 Shaft style TCB180 Two Stage

S1 Shaft style S2 Shaft style

Performance Data

TCB series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCB180 | | | | | 0 | ne S | tage | | | | | | | | 3 | ľwo | Stage | | | | |
|-----------------------|----------------|---------------|-------|---------------|--------|--------|---------|-----------|----------|--------------|-----|-----------|----------|------------|------------|------------|-----------|---|-----------|-----------|---------|
| Speed Ratio | | j | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 580 | 1020 | 1180 | 0 1050 | 1050 | 970 | - | 870 | 580 | 1020 | 1180 | 1050 | 1050 | 970 | 1180 | 1050 | 1050 | 970 | 870 |
| Emergency Stop Torque | T ₂ | Nm | | N 3 4 8 8 4 8 | | Т | ×3 | ******* | ****** | ******** | | | | | | T,×3 | } | | ********* | ********* | ******* |
| Nominal Input Speed | S, | rpm | | | | 2 | 000 | | ****** | More | | | | | energe sor | 2000 |) | ******** | ********* | | 135111 |
| Maximum Input Speed | S₂ | rpm | | | | 4 | 000 | | ******* | | | | | | | 4000 |) | ******** | | | ., |
| Maximum Output Torque | T₄ | Nm | | | | T, × 3 | 8×60 | 0% | | | | 0.000.000 | 21000000 | 50740333 | T,× | 3×6 | 60% | | | N. C. WAR | 0//555 |
| Maximum Radial Force | F, | N | | | | 14 | 100 | | | ,,,,,,,,,,, | | | | ******* | 1 | 410 | 0 | | ******** | | ****** |
| Maximum Axial Force | F. | N | | | | 7 | 050 | | | | | | | | | 7050 |) | | | | |
| Forsional Rigidity | - | Nm/ arcmin | | | | 1 | 40 | ******** | 27.11.11 | | | | | ********* | | 140 | ********* | | | | ****** |
| Efficiency | η | % | | | | 2 | 97 | | | | | | | | | ≥94 |). | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | |
| Service Life | - | h | | | | 20 | 0000 | | | | | | | ////////// | 2 | 2000 | 0 | | | | |
| Noise | - | dB | | | | \$ | 67 | | 11000 | 0.111.0.00.1 | | | | | ********* | ≤67 | | | | | |
| Weight | - | Kg | | | | 2 | 0.7 | ******* | ****** | ******** | | | ******* | | | 27 | | | | | |
| | Р0 | | | | | | = | borostro. | 0211111 | 1000111 | | ********* | | | 22/11/12 | = | | 1111111 | ******** | ********* | 2205111 |
| Backlash | Ρl | arcmin | | | | | €3 | | | | Ì | | | | | ≤5 | | | | | |
| | P2 | | | | er ere | | ≤5 | | | | ļ | ********* | | 7.55.55 | | ≤ 7 | | | | | 93333 |
| Operating Temperature | - | °C | | ****** | | -20 | ~90 |) | ****** | | | | ******** | | -2 | 20~9 | 00 | | | ******** | ****** |
| ubrication | | - | | | 3 | Synthe | tic Gre | ease | | | | | | | Synt | hetic gi | rease | nmmn | | | |
| Protection Class | | _ | | | | IF | 65 | | | | | | ******* | ******** | | IP65 | | ******* | | | |
| Mounting Position | | _ | | ****** | | Any | Directi | on | | | | | ******** | | | Direc | | | | | 3300 |
| Moment of Inertia | J | kg.cm² | 28.98 | 23.67 | 723.29 | 22.75 | 22.48 | 3 22.59 | - | 22.5 | | | 7. | 42 | ,,,,,,,,,, | | | | 7.03 | 3 | |

Notes:

- ▶ When the output speed is 100 rpm, it acts on the center of the output shaft.
- $oldsymbol{\circ}$ For continuous operation, the service life is no less than 10,000 hours.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

- Speed ratio (i=Sin/Sout)
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

95

TCB



TB

TCBR042 Series

TCBR042 One Stage

Output

TBR

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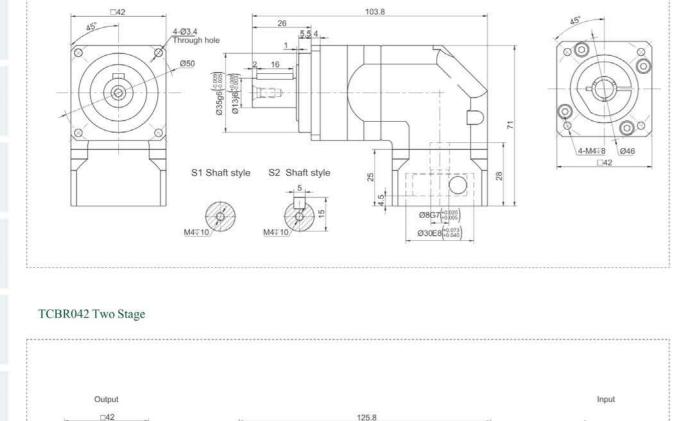
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TCBR

Tel

TM



S1 Shaft style S2 Shaft style

Performance Data

TCBR series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCBR042 | | | | | Oı | ne S | tage | 11 | | | | | | | Two S | Stage | , | | | | | | |
|-----------------------|----------------|---------------|---|-----------|---------|----------|---------|-----------|----------|---|------------|---------|-------------|------------|------------|----------|---------|---------|---------|---|---------|-------------|-------------|
| Speed Ratio | | i | - | 4 | 5 | 6 | 7 | 8 | 10 | 20 | 25 | | 30 | 35 | 40 | 50 |) | 60 |) | 70 | | 80 | 100 |
| Nominal Output Torque | т, | Nm | - | 11 | 13 | 16 | 17 | 15 | 13 | 13 | 13 | | 16 | 17 | 15 | 13 | 3 | 10 | 6 | 17 | | 15 | 13 |
| Emergency Stop Torque | Тг | Nm | | ******* | Т | ,×3 | } | | | | | 3000000 | | ********* | T, × | 3 | | 0.00000 | | ********** | | | ********* |
| Nominal Input Speed | Sı | rpm | | ******** | 3 | 000 |) | | uete | | | 10555 | *********** | ********** | 300 | 00 | 00000 | ******* | nt star | anatana | | | dest tytet |
| Maximum Input Speed | S ₂ | rpm | | | 6 | 000 |) | | | | | | | ********* | 600 | 00 | | | | .,,,,,,,,,, | | | |
| Maximum Output Torque | T, | Nm | | | T,× | 3×6 | 60% | | | | | 537775 | | | T,×3> | 609 | 6 | | | VACCUARI | 9165 | | 250 1/4 550 |
| Maximum Radial Force | F _a | N | | | | 760 | ******* | | | | | | | ********** | 76 | 0 | | ****** | | | | | |
| Maximum Axial Force | F, | N | | | | 380 | (| | | | | | | | 38 | 0 | | | | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | | | 3 | ****** | | | | | ****** | ********* | ommo | 3 | ******* | | | ***** | | **** | | |
| Efficiency | η | % | | | | ≥95 | | | | | | ***** | ********* | ****** | ≥9 | 2 | | | | | | | |
| Service Life | - | h | | | 2 | 000 | 0 | | | | | | | | 200 | 00 | | | | | | | |
| Noise | - | dB | | | | ≤63 | | (0)(1)(1) | (((0)(0) | *************************************** | V-0.1110-M | 10110.0 | | | ≤ 6 | 3 | 1.440.4 | | | | 0 X CO | 11.00300311 | |
| Weight | - | Kg | | | | 0.9 | | | | | | | | | 1. | 1 | azzo | | | | | | |
| | P0 | | | ********* | ******* | - | | 1122222 | | | 111500111 | | | 001150 | | 20111111 | 0.0412 | 1837157 | staare | | (500.5) | | 111222511 |
| Backlash | P1 | arcmin | | | | ≤6 | | | | | | | | | € | 9 | | | | | | | 2222244 |
| | P2 | | | | | ≤8 | | | | | | | | | ≤1 | 2 | ***** | | | | | | |
| Operating Temperature | - | °C | | ******* | -2 | 0~9 | 0 | | | | | ***** | | ********* | -20^ | -90 | | | | | | | |
| Lubrication | | _ | | Sy | ntheti | e Gre | ase | | | | | | | | Synth | etic gr | ease | | | 111111111111111111111111111111111111111 | m | | |
| Protection Class | | - | | | ΙP | 65 | | 901199 | | | ***** | | | | | P65 | | | | | | | |
| Mounting Position | | - | | A | ny D | irection | on | | | | | ***** | | | | Direc | ion | ******* | ., | | | | ********** |
| Moment of Inertia | J | kg. cm² | | | 0. | 09 | | | | | | | | | (| 0.09 | | | ww. | | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f D}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- $oldsymbol{\circ}$ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TE

TCBR060 Series

TCBR060 One Stage

Output Input

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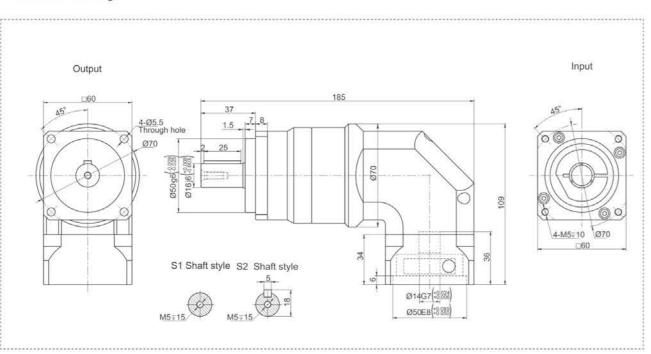
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TCBR060 Two Stage



Performance Data

TCBR series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCBR060 |) | | | | | | One | Sta | ige | | | | | | | | | | Tw | o S | tage | | | | | |
|-----------------------|----------------|---------------|----|--------------------|---------|---------|------------------|--------|---------|----------|----------|---------|----|----|--------|----------|---|---------|---------|---------|---------|----------|---------|---------|----------|---------|
| Speed Ratio | | i: | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 14 | 16 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 | 120 | 140 | 160 | 20 |
| Nominal Output Torque | Т, | Nm | 35 | 45 | 55 | 50 | 46 | 43 | 40 | 50 | 40 | 43 | 40 | 55 | 50 | 46 | 43 | 55 | 50 | 46 | 43 | 40 | 50 | 46 | 43 | 4 |
| Emergency Stop Torque | T ₂ | Nm | | / w ' u = u = u tu | | ******* | | T, > | 3 | | | | | | | ******** | *************************************** | | Т | ,×3 | | ******** | | ******* | | ******* |
| Nominal Input Speed | S, | rpm | | ******* | | cataras | | 300 | 00 | | ******** | | | | ***** | | | | 3 | 000 |) | | | ******* | ******* | Medal |
| Maximum Input Speed | S2 | rpm | | | | | | 600 | 00 | | | | | | | | | | 6 | 000 | 1 | | | | | |
| Maximum Output Torqi | T ₄ | Nm | | | | | T ₁ : | ×3> | 60 | % | | ******* | | | | cen | 474073 | 30003 | Γ, × : | 3×6 | 0% | | | 5355550 | 0.000 | VV50 |
| Maximum Radial Force | F, | N | | | | | | 145 | 50 | ****** | | | | | | ****** | ****** | .,,,,,, | 1 | 450 |) | | ****** | | ****** | |
| Maximum Axial Force | F, | N | | | | | | 72 | 4 | | | | | | | | | | 3 | 724 | | | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | ****** | ******* | | | 6 | . < | ******* | ****** | | | | | ******* | ****** | | | 6 | ****** | | | | | |
| Efficiency | η | % | | ***** | | | ******* | ≥9 | 5 | | | | | | | | | | 3 | ≥92 | | | | | | |
| Service Life | - | h | | | | | | 200 | 00 | | | | | | 7.1337 | | ******* | | 20 | 0000 | 0 | | | | | |
| Noise | - | dB | | | | | | ≤6 | 6 | ****** | | | | | | | | | * | ≤66 | CAARE | | | | | |
| Weight | - | Kg | | | | | ******* | 1. | 5 | | | | | | ****** | ****** | | | | 2.1 | | | | | | |
| | P0 | | | ********* | ******* | | | - | 1555240 | ******** | 2112311 | | | | ****** | | | 1524111 | 1275004 | · . | ******* | ******* | | | ensiste. | 50531 |
| Backlash | Ρl | arcmin | | | | | | < | 6 | | | | | | | | | ******* | | ≤9 | | | ******* | | | |
| | P2 | | | 57777 | 2011410 | | ****** | < | В | | | | | | | | NULL | | 4 | €12 | | | | 97485 | | 2000 |
| Operating Temperature | - | °C | | ****** | | | - | 20^ | 90 | | | | | | ****** | | ******* | | -20 | 0~9 | 0 | | | ****** | ******* | |
| Lubrication | | = | | | | | Syn | thetic | Grea | se | | | | | | | | | Synth | etic gr | ease | | | | | |
| Protection Class | | - | | | | | | IP6 | 5 | | | | | | ****** | | | | 1 | P65 | | | | | | |
| Mounting Position | | = | | ****** | ******* | ****** | An | y Di | rectio | n | | | | | ****** | ****** | | | Any | Direc | tion | | | ****** | ****** | Green |
| Moment of Inertia | J | kg. cm² | | | C | 0.35 | | | | | 0 | .07 | | | | | 2000 | | (| 0.09 | | | | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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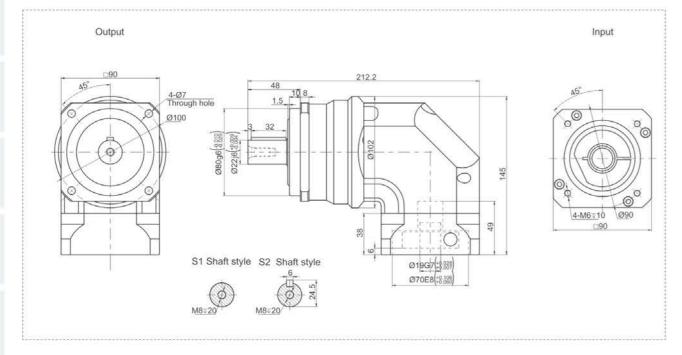
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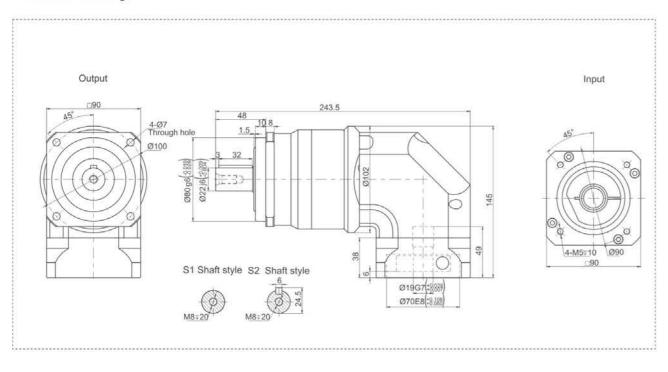
TM

TCBR090 Series

TCBR090 One Stage



TCBR090 Two Stage



Performance Data

TCBR series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCBR090 |) | | | | | | One | Sta | ige | | | | | | | | | | | Tv | vo i | Stag | e | | | | |
|-----------------------|----------------|---------------|----|----------|-----------|--------|--------|--------|-----------|---------|------------|-----------|-------|--------|--------|----------|-----------|--------|--------|--------|------------|--------|-------|---------|-----------|-----------|----------|
| Speed Ratio | | F | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 14 | 16 | 20 | 25 | 30 | 35 | 4 | 0 ! | 50 | 60 | 70 | 80 | 0 1 | 00 | 120 | 40 1 | 60 20 |
| Nominal Output Torque | т, | Nm | 85 | 115 | 140 | 140 | 135 | 115 | 97 | 140 | 135 | 115 | 97 | 140 | 14 | 0 13 | 5 11 | 5 1 | 40 | 140 | 13 | 5 11 | 5 | 97 | 140 | 35 1 | 15 97 |
| Emergency Stop Torque | T2 | Nm | | | | C-> | Т | , × 3 | 3 | | | | | | 403000 | | CW ME WAS | 42.449 | ***** | Т | , × | 3 | | ****** | | ***** | ****** |
| Nominal Input Speed | S, | rpm | | ******** | it totata | | 3 | 000 |) | ******* | 24.18.1924 | (Colored) | | | 22.22 | 10111111 | | | neset | 3 | 00 | 0 | 22112 | | | ******** | ******** |
| Maximum Input Speed | S₂ | rpm | | | | | 6 | 000 |) | | | ******* | | | ***** | | | ***** | ***** | 6 | 00 | 0 | | | | ******** | |
| Maximum Output Torqu | T ₄ | Nm | | | | | T, × | 3×6 | 60% | | | | | 282200 | | | 35070 | 313500 | T | , × | 3 × | 60% | ś | | NESTA. | 2000 | 504/4555 |
| Maximum Radial Force | F, | N | | | | 03776 | 3 | 200 |) | ****** | | ****** | | | ****** | | | , | | 3 | 20 | 0 | | .,,,,, | | | |
| Maximum Axial Force | F, | N | | | | | 1 | 600 |) | | | | | | | | | ***** | | 1 | 60 | 0 | | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | | | | | 14 | | | U123377 | ******** | ***** | | ***** | | | ***** | ***** | | 14 | | | | ****** | | ******** |
| Efficiency | η | % | | | | ****** | 3 | ≥95 | | ****** | | | | | 20041 | | | ***** | | j | ≥92 | 2 | | | | | ******* |
| Service Life | - | h | | | | | 20 | 000 | 0 | | | | | | | | | | | 2 | 000 | 00 | | | | | |
| Noise | - | dB | | | | | | €67 | ((())())(| | | | | | | | (0.10) | | 1100 | | €67 | 7 | | | | | |
| Weight | _ | Kg | | | | | | 6.4 | | | | | | | | | | | | | 7.7 | | | | | ********* | |
| | P0 | Banke. | | | 2111111 | | | ≤4 | | | MINNE | | | | 51335 | 1110.01 | | | ontes: | 157500 | ≤ 7 | | 20110 | | 0.000.000 | ********* | 10000111 |
| Backlash | ΡΊ | arcmin | | | ******* | | | ≤6 | | | | | | | | | 3223 | Marin. | | 32440 | ≤9 | | 2022 | | | | |
| | P2 | | | 5777 | | | | ≤8 | | | | W. | | | | | 2112 | | Wit | 3 | €12 | 2 | | V1 1777 | | | |
| Operating Temperature | - | °C | | | | | -20 | 0~9 | 90 | | | ******* | | | ****** | | | | ***** | -2 | 0~ | 90 | | ****** | ***** | ******* | ******** |
| Lubrication | | = | | mam | | | Synthe | etic G | irease | | | | | | | | 2000 | | S | ynth | etic į | grease | | 111/211 | | | |
| Protection Class | | - | | | | | 1 | P65 | ; | | | ****** | | | ->> | | | | | | P6 | 5 | | ***** | | -311-441 | |
| Mounting Position | | _ | | ****** | | | Any | Direc | ction | | | | | | | | | | 7 | | | ection | | | | | **>>> |
| Moment of Inertia | J | kg.cm² | | | 2 | 25 | | | | | | 1.87 | | | | | | | 0.3 | 5 | | | X | | C | .31 | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- $oldsymbol{\circ}$ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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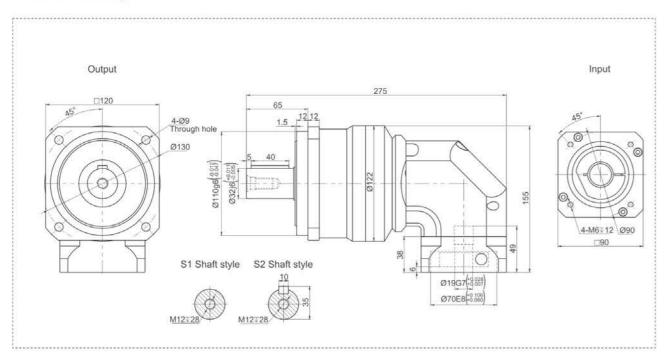
GEARKO®

TA

TCBR120 Series

TCBR120 One Stage

TCBR120 Two Stage



Performance Data

TCBR series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCBR120 | | | | | | One | Sta | ige | | | | | | | | | | Γwο | Stag | e | | | |
|-----------------------|----------------|---------------|---|----------|--|---------------|------------|---------|--------|---------|--|--------|-----|---------|-------------|----------|--------|---------|--------|------------|--------|------------|-----------|
| Speed Ratio | | Ĺ | 3 4 | 5 | 6 | 7 | 8 | 10 | 12 | 14 | 16 | 20 | 25 | 30 | 35 4 | 0 5 | 0 6 | 60 7 | 0 80 | 100 | 120 | 140 1 | 60 20 |
| Nominal Output Torque | т, | Nm | 190 245 | 315 | 305 | 290 | 255 | 225 | 305 | 290 | 25 | 5 225 | 315 | 305 | 290 25 | 55 3 | 153 | 05 29 | 0 25 | 5 225 | 305 | 290 2 | 55 22 |
| Emergency Stop Torque | T₂ | Nm | | | ********* | Ţ | ,×3 | 3 | | | | | | | *********** | | | T,× | 3 | | | | |
| Nominal Input Speed | S, | rpm | | | (estatus | 3 | 000 |) | ****** | 410004 | OCCUPATION OF THE PERSON OF TH | | | ***** | | 1001.000 | Mitti | 300 | 0 | | | | |
| Maximum Input Speed | S ₂ | rpm | | | | 5 | 000 |) | | | | | | | | | | 500 | 0 | | | ********** | |
| Maximum Output Torqu | Τ, | Nm | | enton. | | T,× | 3×6 | 50% | | | ***** | | | 244550 | | 11111111 | Т, | ×3× | 60% | 1 | 300000 | | -50//55 |
| Maximum Radial Force | F, | N | | | | 6 | 600 |) | | | | | | | | | | 660 | 0 | | | | ******* |
| Maximum Axial Force | F | N | | | | 3 | 200 |) | | | | | | | | | | 320 | 0 | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | ******* | | | 25 | | | 355557 | | | | | | ****** | ****** | 25 | | | | | (******** |
| Efficiency | η | % | | | ****** | | ≥95 | | | | | | | | | ***** | | ≥9 | 2 | ******** | ***** | | |
| Service Life | - | h | | V/400V | oonen | 2 | 000 | 0 | | | | | | ,,,,,,, | | | | 200 | 00 | ******* | | | |
| Noise | - | dB | | 00000 | | | ≤70 | 1 | | | | | | | | 100001 | | ≤7 | 0 | | | | |
| Weight | - | Kg | | | | ******** | 13 | | | | | | | | | | | 14 | | | | | |
| | P0 | | | | restaure. | SUPPLY STATES | ≤ 4 | Harling | 242100 | 1100000 | 00043 | | | 11.00 | | ******* | Milita | ≤7 | , | enene e | | | |
| Backlash | P1 | arcmin | | | | | ≤ 6 | | | | | ****** | | | | | | €9 |) | | | | |
| | P2 | | | | | | ≤8 | | | | | | | | | | | ≤1 | 2 | | | | |
| Operating Temperature | - | °C | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | -2 | 0~9 | 90 | | | | | | | ********** | | | 20~ | 90 | | | ********** | |
| Lubrication | | - - | | | ······································ | Synth | etic G | rease | | | | | | | | | Sy | nthetic | grease | | | | |
| Protection Class | | _ | | | | 1 | P65 | | | | | | | | | | | IP6 | 5 | | () | ******* | |
| Mounting Position | | _ | | ******** | | Any | Direc | ction | ***** | | | | | | | ****** | Aı | ny Din | | | | | |
| Moment of Inertia | J | kg.cm² | | | 6.8 | 34 | | | | 6 | 6.2 | 5 | | 7.0000 | | 5 | 2.25 | | | | | 1.87 | |

Notes:

- ♠ Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- $oldsymbol{\circ}$ For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TCE070 Series

TCE070 One Stage

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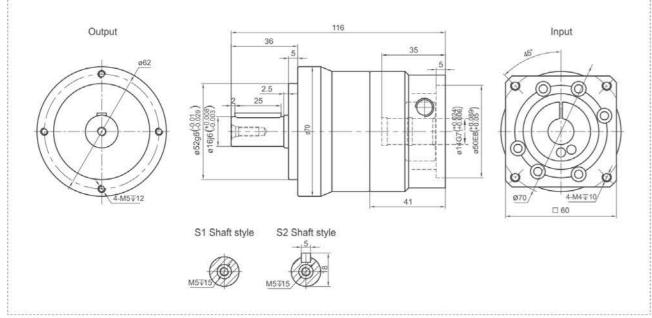
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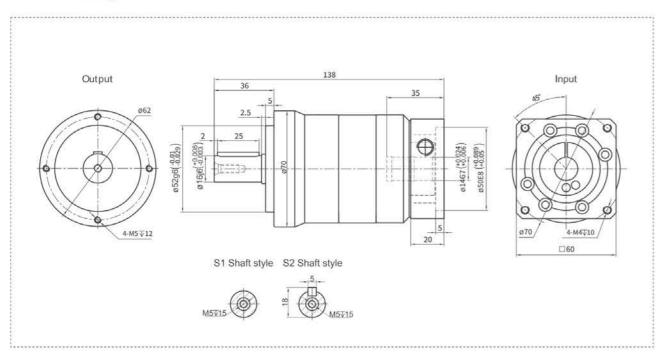
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TCE070 Two Stage



Performance Data

TCE series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCE070 | | | | | 0 | ne S | tage | | | | | | | | | wo | Stage | | | | |
|-----------------------|----------------|---------------|------|---|----|--------|-----------|----------|----------|----|----|-----------|-----------|-----------|--------------|-----------|-------------|------------|------------|-----------|---------|
| Speed Ratio | | j | 3 | 0 45 55 50 45 45 - 35 40 45 55 50 45 55 50 45 45 55 50 45 | | 100 | | | | | | | | | | | | | | | |
| Nominal Output Torque | т, | Nm | 40 | 45 | 55 | 50 | 45 | 45 | - | 35 | 40 | 45 | 55 | 50 | 45 | 45 | 55 | 50 | 45 | 45 | 35 |
| Emergency Stop Torque | Τ₂ | Nm | | *><***** | | т, | ×3 | | | | | ********* | ********* | ********* | ********** | T,× | 3 | B-X4*>>+++ | ********** | ********* | ****** |
| Nominal Input Speed | S, | rpm | | | | 30 | 000 | | | | | | | | 1000010001 | 300 | 0 | | | | |
| Maximum Input Speed | S ₂ | rpm | | | | 60 | 000 | | | | | | | | | 600 | 0 | .,,,,,,,,, | | | |
| Maximum Output Torque | | Nm | | | Т | ,×3 | × 60 |)% | | | | | | | т, | ×3× | 60% | | | | |
| Maximum Radial Force | F, | N | | 1530 1530 765 765 | | | | | | | | | | | | | | ****** | | | |
| Maximum Axial Force | F. | N | | 6000 6000 T₁×3×60% T₁×3×60% 1530 1530 765 765 7 7 ≥97 ≥94 20000 20000 ≤58 ≤58 | | | | | | | | | | | | | | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | 6000 T₁×3×60% T₁×3×60% 1530 1530 765 7 7 ≥97 7 ≥97 ≥94 20000 ≤58 ≤58 | | | | | | | | | | | | | | | ****** | | |
| Efficiency | η | % | | T₁×3×60% T₁×3×60% 1530 1530 765 765 7 7 ≥97 ≥94 20000 ≥0000 ≤58 ≤58 | | | | | | | | | | | | | | | | | |
| Service Life | = | h | | 765 765 7 7 ≥97 ≥94 | | | | | | | | | | | | | | | | | |
| Noise | - | dB | | | | < | 58 | 0.000000 | | | | (0.00)311 | 0.00.000 | | | ≤58 | 3 | 0.000 | | | |
| Weight | = | Kg | | | | 1 | .6 | | ******** | | | | ********* | ******** | | 1.9 | .,,,,,,,,,, | | ******** | | ******* |
| | P0 | | | T₁×3×60% T₁×3×60% 1530 1530 765 765 7 7 ≥97 ≥94 20000 20000 ≤58 ≤58 1.6 1.9 - - ≤3 ≤5 | | | | | | | | | | | | | | | . Martin | ezezată | |
| Backlash | Ρl | arcmin | | | | \$ | €3 | | | | | | | | | ≤5 | | | | | |
| | P2 | | | 6000 6000 T₁×3×60% T₁×3×60% 1530 1530 765 765 7 7 ≥97 ≥94 20000 20000 ≤58 ≤58 1.6 1.9 - - ≤3 ≤5 ≤5 ≤7 | | | | | | | | | | | | | | | | | |
| Operating Temperature | - | °C | | | | -20 | ~90 |) | | | | | ********* | ********* | ············ | 20~ | 90 | | ********* | | ****** |
| Lubrication | | -: | | | S | ynthet | ic Gre | ase | | | | | | | Syı | nthetic § | grease | | | | |
| Protection Class | | _ | | | | IP | 65 | | | | | | | | | IP6 | 5 | | | | |
| Mounting Position | | = | | ******** | | Any E | Direction | on | | | | | | ******** | Ar | y Dire | ection | | | | |
| Moment of Inertia | J | kg.cm² | 0.16 | 0.14 | | | 0 | .13 | 7 | | | | | | 7.00.000 | 0.13 |); | | | | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- $oldsymbol{\circ}$ For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TCE090 Series

TCE090 One Stage

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S1 Shaft style S2 Shaft style

Performance Data

TCE series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCE090 | | | | | 0 | ne S | Stage | | | | | | | | | | Γwο | Stage | | | | |
|-----------------------|----------------|---------------|------|---------------|--------|--------|--------|----------|---------|--------|------|----------|-----------|----------|-----------|-----------|------------|-----------|----------|-------------|-----------|---------|
| Speed Ratio | | i | 3 | 4 | 5 | 6 | 7 | 8 | 9 |) | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | т, | Nm | 100 | 110 | 150 | 140 | 135 | 120 |) - | - 1 | 100 | 100 | 110 | 150 | 140 | 135 | 120 | 150 | 140 | 135 | 120 | 100 |
| Emergency Stop Torque | Тг | Nm | | | | Т | ×3 | | ****** | ****** | | | | | ********* | | T,× | 3 | | ********* | ********* | |
| Nominal Input Speed | S, | rpm | | | | 3 | 000 | 1 | | | | | | | | oreanne. | 300 | 0 | ******* | | | 1000000 |
| Maximum Input Speed | S ₂ | rpm | | | | 6 | 000 | | | | | | | | | | 600 | 0 | | | | |
| Maximum Output Torque | T ₄ | Nm | | erenes. | 1 | Γ,×3 | 3×6 | 0% | | | | 1000000 | 100000000 | 20000000 | | Τ, | ×3× | 60% | 20002000 | | | |
| Maximum Radial Force | F, | N | | | | 3 | 250 | | | | | | | | ******** | | 325 | 0 | ******** | ******** | | |
| Maximum Axial Force | F _b | N | | | | 1 | 625 | | | | | | | | ********* | | 162 | 5 | | | | |
| Forsional Rigidity | - | Nm/ arcmin | | ****** | | | 14 | ****** | | ***** | | | | | ********* | | 14 | ********* | | | | |
| Efficiency | η | % | | ****** | | > | 97 | | | | | | | | ******* | | ≥94 | 4 | | | | |
| Service Life | - | h | | | | 20 | 0000 |) | ////// | | | | | | ZZZZZZZZZ | | 2000 | 00 | | | | |
| Noise | - | dB | 1 | X () (()) | | \$ | 60 | 0.000.00 | | | | | 0000011 | | | 9110000 | ≤60 |) | 0.009316 | | | |
| Weight | - | Kg | | | | | 3.4 | | | | | | | | | | 5.2 | | | | | |
| | PO | | Î | est a catal | | 1000 | = | 100000 | 1000111 | 511523 | | | | ******* | 10000000 | 200111111 | - | | | 500,000,000 | ******* | 0005383 |
| Backlash | P1 | arcmin | | | | | €3 | | | | | | | | | | ≤5 | (| | | | ***** |
| | P2 | | | | areas | | ≤5 | | | | | ,,,,,,,, | | | | | ≤ 7 | | | ********* | | |
| Operating Temperature | - | °C | | ******* | | -20 |)~9 | 0 | ****** | | | | .,,,,,,,, | ******** | ********* | - | 20~ | 90 | | | | ****** |
| Lubrication | | _ | | | 5 | Synthe | tic Gr | ease | | | | | | | | Syr | nthetic ; | grease | | | | |
| Protection Class | | -: | | | ****** | IF | P65 | | | ***** | | | | ******* | ******** | | IP6 | 5 | ******* | | | |
| Mounting Position | | _: | | ****** | ****** | Any | Direct | ion | *20**** | ****** | | | | ******** | | Aı | ny Dire | | | | | novere |
| Moment of Inertia | J | kg.cm² | 0.61 | 0.48 | 0.47 | 0.45 | 0.45 | 0.4 | 4 - | 0 |).44 | | | 0.4 | 7 | ,,,,,,,,, | | | | 0.44 | | |

Notes:

- Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TCE120 Series

TCE120 One Stage

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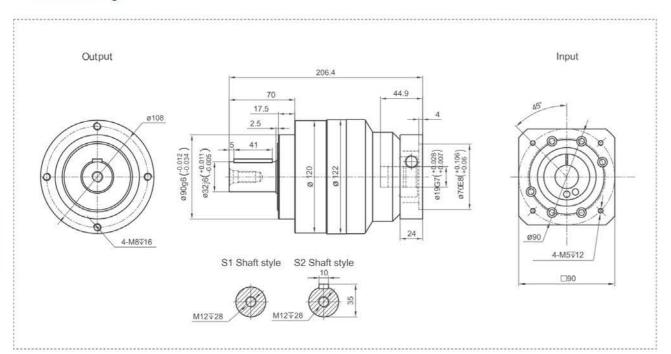
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TCE120 Two Stage



Performance Data

TCE series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCE120 | | | | | Oı | ne S | tage | | | | | | | | 3 | wo | Stage | | | | |
|-----------------------|---|---------------|------|---------------------------------------|----------|----------|------------|---------|----------|-----------|-----|------------|----------|-----------|-----------|----------------|--|----------|------------|-----------|-------------------|
| Speed Ratio | | j | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 10 |
| Nominal Output Torque | т, | Nm | 200 | 280 | 320 | 310 | 300 | 255 | - | 220 | 200 | 280 | 320 | 310 | 300 | 255 | 320 | 310 | 300 | 255 | 22 |
| Emergency Stop Torque | T₂ | Nm | | 3444443# | | т, | ×3 | | | ********* | | ********** | | ********* | | T,× | 3 | | ********** | | K 013-C-01 |
| Nominal Input Speed | S, | rpm | | and death | rasaasti | 30 | 000 | ******* | ibi sasa | accura. | | | | | 372431431 | 300 | 0 | | | | ANTARA |
| Maximum Input Speed | S ₂ | rpm | | | | 60 | 000 | | | | | ********* | | | | 600 | 0 | 07101440 | | | ******** |
| Maximum Output Torque | T ₄ | Nm | | | Т | ,×3 | × 60 |)% | | ******* | | | 21000000 | waa | Т, | ×3× | 60% | | | N.C. | 0.7750 |
| Maximum Radial Force | F, | N | | | | 67 | 700 | | | ******* | | ********** | | | | 670 | 0 | ******** | | | ****** |
| Maximum Axial Force | F _b | N | | | | 33 | 350 | | | ******* | | | | | | 335 | 0 | | | | |
| Torsional Rigidity | - | Nm/ arcmin | | | | 2 | 25 | | | ******* | | | | | | 25 | ********* | | | ******** | ****** |
| Efficiency | η | % | | T,×3×60% T,×3×60% 6700 6700 3350 3350 | | | | | | | | | | | | | | | | | |
| Service Life | - | h | | | | 20 | 000 | | | | | | | | | 2000 | 00 | | | | |
| Noise | - | dB | | | | < | 63 | | | | | 0.000110 | | | 9310A0 | ≤63 | 3 | | X011(00 | | 3.44464.4 |
| Weight | - | Kg | | | | 7 | .8 | | | ******** | | ********** | ******** | | | 8.5 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | ****** |
| | PO | | | | 2000000 | 31411212 | = | | 20110001 | | | | 1110111 | | SAMELIS . | (- | | | | ********* | Model |
| Backlash | P1 | arcmin | | | | \$ | €3 | | | | | | | | | ≤5 | | | | | |
| | P2 | | | | | * | § 5 | | | | | | | | | ≤ 7 | | | | | |
| Operating Temperature | _ | °C | | | | | | | | | | | | | | | | | | | |
| Lubrication | | =: | | | S | ynthet | ic Gre | ase | | | | ********** | | | Syr | thetic g | grease | | | | |
| Protection Class | | _ | | | | IF | 65 | | | | | | ******* | | | IP6 | 5 | | | | ***** |
| Mounting Position | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | _ | | | | Any I | Directi | on | .,,,,,,, | | | | ******** | | Ar | y Dire | ection | | | | ,,,,,,, |
| Moment of Inertia | J | kg.cm² | 3.25 | 2.74 | 2.71 | 2.65 | 2.62 | 2.58 | - | 2.57 | | | 0.47 | | 7.07.000 | | | 0 | .44 | | |

Notes:

- ▶ Speed ratio (i=Sin/Sout)
- $\ensuremath{ f \wp}$ When the output speed is 100 rpm, it acts on the center of the output shaft.
- $oldsymbol{\circ}$ For continuous operation, the service life is no less than 10,000 hours.
- The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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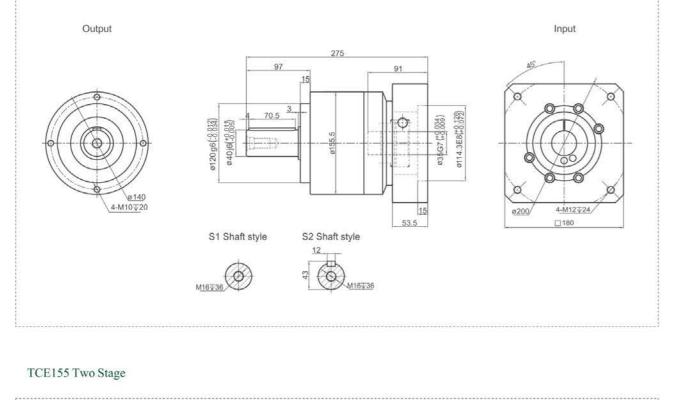


TCE155 Series

TCE155 One Stage

Output

TCE



S1 Shaft style

S2 Shaft style

Performance Data

TCE series planetary reducer has modular design compact structure with high reliability and efficiency. It is a perfect optimization of both performance and cost.

| TCE155 | | One Stage | | | | | | | | Two Stage | | | | | | | | | | | |
|-----------------------|----------------|---------------|------------------|----------|------|------|------|----------|---------------|------------------|-------|-----|------|-----|--------|-----|-----|-----|------|-----|-----|
| Speed Ratio | | i | 3 | 4 5 | 5 | 6 | 7 | 8 | 9 | 10 | 10 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| Nominal Output Torque | Τ, | Nm | 340 | 535 | 650 | 600 | 550 | 500 | - | 445 | 340 | 535 | 650 | 600 | 550 | 500 | 650 | 600 | 550 | 500 | 445 |
| Emergency Stop Torque | T ₂ | Nm | | T,×3 | | | | | | T,×3 | | | | | | | | | | | |
| Nominal Input Speed | S, | rpm | 2000 | | | | 2000 | | | | | | | | | | | | | | |
| Maximum Input Speed | S ₂ | rpm | | 4000 | | | | 4000 | | | | | | | | | | | | | |
| Maximum Output Torque | | Nm | | T,×3×60% | | | | T,×3×60% | | | | | | | | | | | | | |
| Maximum Radial Force | F, | N | | | | 94 | 400 | | | | 9400 | | | | | | | | | | |
| Maximum Axial Force | F, | N | | 4700 | | | | 4700 | | | | | | | | | | | | | |
| orsional Rigidity | - | Nm/ arcmin | | 50 | | | | 50 | | | | | | | | | | | | | |
| Miciency | η | % | ≥97 | | | | ≥94 | | | | | | | | | | | | | | |
| service Life | - | h | | 20000 | | | | 20000 | | | | | | | | | | | | | |
| Noise | - | dB | | ≤65 | | | | ≤65 | | | | | | | | | | | | | |
| Veight | - | Kg | | 19 | | | | 20 | | | | | | | | | | | | | |
| | PO | | - | | | | | ((())) | - | | | | | | | | | | | | |
| 3acklash | P1 | arcmin | €3 | | | | 3 | | | | ≤5 | | | | | | | | | | |
| | P2 | | ≤5 | | | | | | ≤ 7 | | | | | | | | | | | | |
| Operating Temperature | - | °C | | -20~90 | | | | | -20~90 | | | | | | | | | | | | |
| ubrication | | _ | Synthetic Grease | | | | | | | Synthetic grease | | | | | | | | | | | |
| rotection Class | | - | IP65 | | | | | | IP65 | | | | | | | | | | | | |
| Tounting Position | | —: | Any Direction | | | | | | Any Direction | | | | | | | | | | | | |
| Moment of Inertia | J | kg.cm² | 9.21 | 7.54 | 7.42 | 7.25 | 7.14 | 7.07 | - | 7.03 | | | 2.71 | | 707000 | | | 2 | 2.57 | | |

Notes:

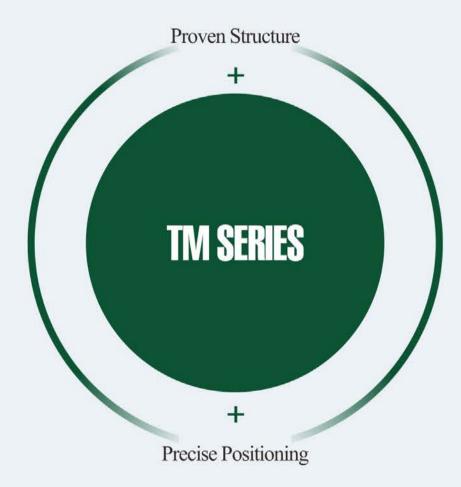
- Speed ratio (i=Sin/Sout)
- ♦ When the output speed is 100 rpm, it acts on the center of the output shaft.
- For continuous operation, the service life is no less than 10,000 hours.
- ♠ The noise value was measured based on the input rotational speed of 3000 rpm, i=10.

Any product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

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TCE

Hollow Rotating Platform



The hollow rotating platform can be driven by different brand servo motors with high precision. The operation is stable and the positioning is precision.

GEARKO DRIVES THE PRECISION



TMN-Hollow Rotary Actuators





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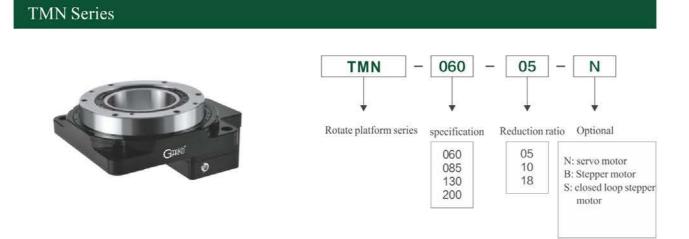
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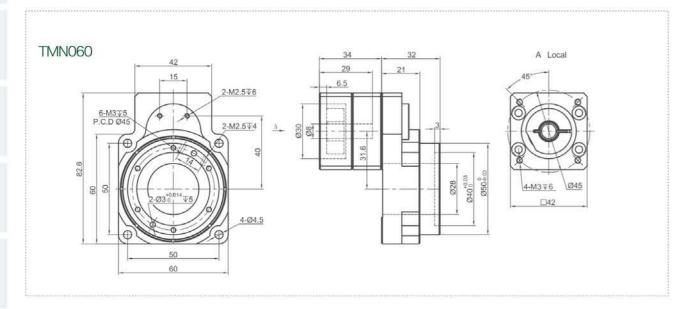
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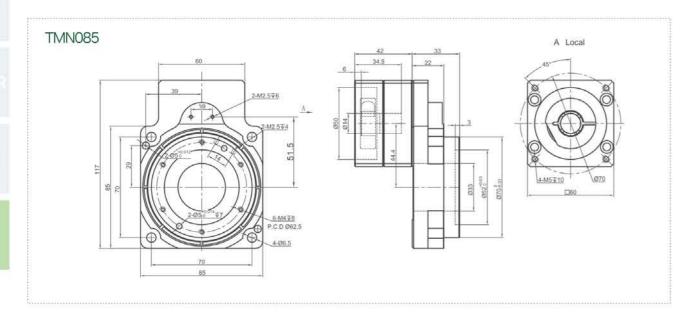
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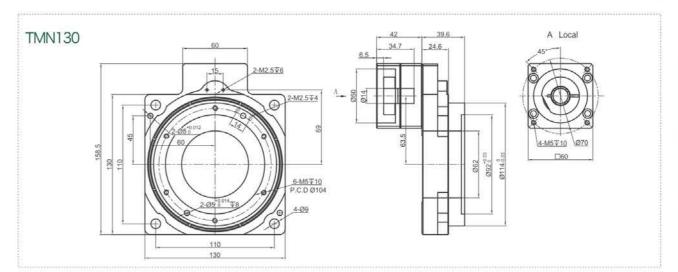
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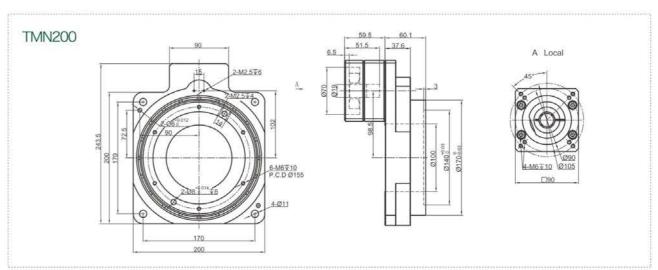
TM











| | | TMN60 | TMN85 | TMN130 | TMN200 | |
|---|--------|------------------------|------------------------|------------------------|------------------------|--|
| Speed Ratio | | 5 10 | 5 10 | 10 18 | 10 18 | |
| Matching Servo Motor | W | 50~100 | 200~400 | 200~400 | 750 | |
| Bearing Type | | Crossed Roller Bearing | Crossed Roller Bearing | Crossed Roller Bearing | Crossed Roller Bearing | |
| Allowable Torque | N.m | 5.3 | 20 16 | 32 20 | 65 50 | |
| Allowable Disk Output Speed | rpm | 200 | 300 250 | 250 150 | 250 | |
| Allowable axial load | N | 250 | 500 | 2000 | 4000 | |
| Repeat Positioning Accuracy | arcsec | ±10 | ±10 | ±10 | ±10 | |
| Positioning Precision | arcmin | 3 | 3 | 3 | 3 | |
| Flatness of Rotating Platform | mm | 0.01 | 0.01 | 0.01 | 0.01 | |
| Outside Diameter Runout of Output End M | | 0.01 | 0.01 | 0.01 | 0.01 | |
| erivce Life h | | 20000 | 20000 | 20000 | 20000 | |
| Noise | dB | ≤65 | ≤65 | ≤65 | ≤65 | |
| Backlash | arcmin | ≤1 | ≼1 | <1 | ≤1 | |
| Protection Class | | IP40 | IP40 | IP40 | IP40 | |
| Weight | kg | 1.2 | 1.8 | 2.5 | 8 | |

The above technical parameters are for reference only. Actually, according to the data provided by the customer, relevant technical parameters and dimensions will be issued. Origin Sensor Kit: TMN Series with OMRON EE-SX674

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| PASSION FOR PRECISION TRANSMISSION | | G ERKO |
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