

FEATURES

Zero Backlash

Peak Torque: 46 Nm to 892 Nm

Accuracy < l arc-min, excellent repeatability

Reduction ratios 50:1 to 120:1

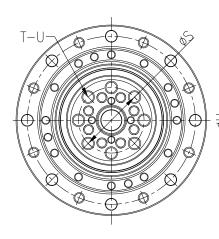
High torsional stiffness & high torque density

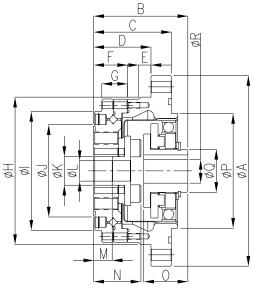
Robust cross roller output bearing

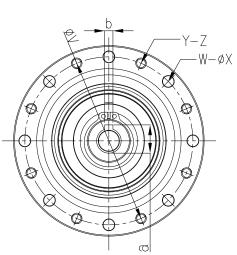
High reliability and long service life

FLEXSPLINE ROBOTIC GEAR REDUCERS

SCS-UK Unit Type

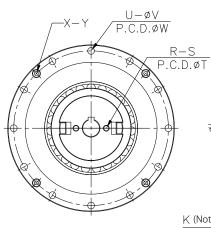


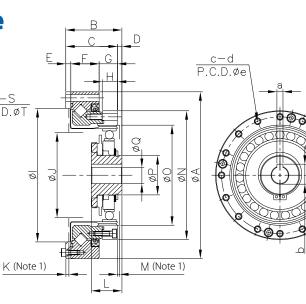




| | | SCS-□- | -UK (mm) | | | | | | |
|--------------------|------|--------|----------|------|------|--|--|--|--|
| Size Dimensions | 14 | 17 | 20 | 25 | 32 | | | | |
| фА | 73 | 79 | 93 | 107 | 138 | | | | |
| В | 41 | 45 | 45.5 | 52 | 62 | | | | |
| С | 34 | 37 | 38 | 46 | 57 | | | | |
| D | 27 | 29 | 28 | 36 | 45 | | | | |
| E | 3.5 | 4.5 | 6 | 6 | 6 | | | | |
| F | 16.5 | 16.5 | 16.5 | 18.5 | 22.5 | | | | |
| G | 12 | 12 | 12 | 14 | 17 | | | | |
| φH | 56 | 63 | 72 | 86 | 113 | | | | |
| φl | 42.5 | 49.5 | 58 | 73 | 96 | | | | |
| φJ | 31 | 38 | 45 | 58 | 78 | | | | |
| φK | 11 | 10 | 14 | 20 | 26 | | | | |
| φL | 8 | 6 | 10 | 15 | 20 | | | | |
| М | 9.4 | 9.5 | 9 | 12 | 15 | | | | |
| N | 21.4 | 23.5 | 23 | 29 | 37 | | | | |
| 0 | 18.5 | 20.7 | 21.5 | 21.6 | 23.6 | | | | |
| φP | 38 | 48 | 56 | 67 | 90 | | | | |
| φQ | 14 | 18 | 21 | 26 | 26 | | | | |
| φR | 6 | 8 | 12 | 14 | 14 | | | | |
| φS | 23 | 27 | 32 | 42 | 55 | | | | |
| Т | 6 | 6 | 8 | 8 | 8 | | | | |
| U | M4 | M5 | M6 | M8 | M10 | | | | |
| φV | 65 | 71 | 82 | 96 | 125 | | | | |
| W | 8 | 8 | 8 | 10 | 12 | | | | |
| φХ | 4.5 | 4.5 | 5.5 | 5.5 | 6.6 | | | | |
| Y | 8 | 8 | 8 | 10 | 12 | | | | |
| Z | M4 | M4 | M5 | M5 | M6 | | | | |
| а | - | _ | 13.8 | 16.3 | 16.3 | | | | |
| b | - | - | 4 | 5 | 5 | | | | |
| set screw | 2-M3 | 2-M3 | - | - | - | | | | |

SSH-UK Simple Unit Type



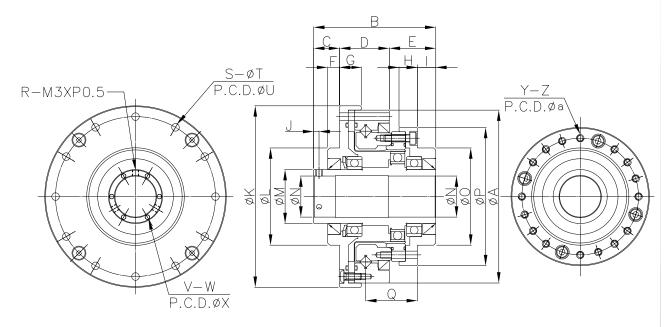


Note 1: The structure design of the section shall be left aside according to the suggestions on the diagram, so as to avoid the influence on the performance and service life of the gear reducer.

| 1 | d service life of the gear fec | SSH | -SK (mm) | | | | | | |
|-----------|--------------------------------|------|----------|------|------|--|--|--|--|
| Size | 14 | 17 | 20 | 25 | 32 | | | | |
| φА | 70 | 80 | 90 | 110 | 142 | | | | |
| В | 28.5 | 32.5 | 33.5 | 37 | 44 | | | | |
| С | 23.5 | 26.5 | 29 | 34 | 42 | | | | |
| D | 5 | 6 | 4.5 | 3 | 2 | | | | |
| E | 2.4 | 3 | 3 | 3.3 | 3.6 | | | | |
| F | 14.1 | 16 | 17.5 | 18.7 | 23.4 | | | | |
| G | 7 | 7.5 | 8.5 | 12 | 15 | | | | |
| Н | 6 | 6.5 | 7.5 | 10 | 14 | | | | |
| φl | 48 | 60 | 70 | 88 | 114 | | | | |
| φJ | 32 | 38 | 45 | 56 | 75 | | | | |
| К | 1.5 | 2 | 1.8 | 2 | 2 | | | | |
| L | 17.6 | 19.5 | 20.1 | 20.2 | 22 | | | | |
| М | 1 | 1 | 1.5 | 1.5 | 1.5 | | | | |
| ΦN | 50 | 60 | 70 | 85 | 110 | | | | |
| φ0 | 37 | 45 | 53 | 66 | 86.5 | | | | |
| φP | 14 | 18 | 21 | 26 | 26 | | | | |
| φQ | 8 | 8 | 11 | 11 | 14 | | | | |
| R | - | - | 2 | 2 | - | | | | |
| S | - | - | M3 | M4 | - | | | | |
| φТ | - | - | 16 | 20 | - | | | | |
| U | 8 | 12 | 12 | 12 | 12 | | | | |
| φV | 3.5 | 3.5 | 3.5 | 4.5 | 5.5 | | | | |
| φW | 64 | 74 | 84 | 102 | 132 | | | | |
| Х | 2 | 4 | 4 | 4 | 4 | | | | |
| Y | M3 | M3 | M3 | M3 | M4 | | | | |
| а | - | - | 4 | 4 | 5 | | | | |
| b | - | - | 12.8 | 12.8 | 16.3 | | | | |
| С | 8 | 16 | 16 | 16 | 16 | | | | |
| d | M3 | M3 | M3 | M4 | M5 | | | | |
| фе | 44 | 54 | 62 | 77 | 100 | | | | |
| set screw | 2-M3 | 2-M3 | - | - | _ | | | | |

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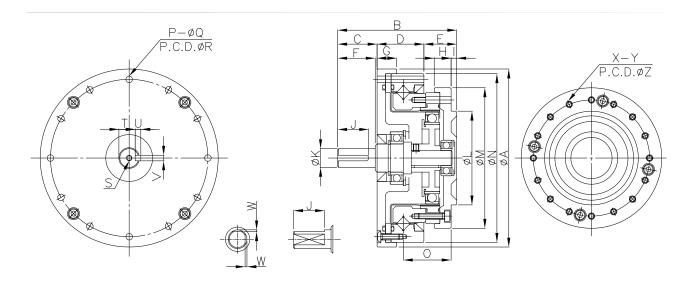
SSH-UH Hollow Unit Type



| SSH-□- ■ -UH (mm) | | | | | | | | | | | | |
|--------------------------|-----------------|------------------|------|------|------|--|--|--|--|--|--|--|
| Size Dimensions | 14 | 17 | 20 | 25 | 32 | | | | | | | |
| ØΑ | 70 | 80 | 90 | 110 | 142 | | | | | | | |
| В | 52.5 | 56.5 | 51.5 | 55.5 | 65 5 | | | | | | | |
| С | 12 | 12 | 5 | 6 | 7 | | | | | | | |
| D | 20.5 | 23 | 25 | 26 | 32 | | | | | | | |
| E | 20 | 21.5 | 21.5 | 23.5 | 26.5 | | | | | | | |
| F | 5.5 | 5.5 | - | - | - | | | | | | | |
| G | 9 | 10 | 10.5 | 10.5 | 12 | | | | | | | |
| Н | 8 | 8.5 | 9 | 8.5 | 9.5 | | | | | | | |
| | 7.5 | 8.5 | 7 | 6 | 5 | | | | | | | |
| J | 2.5 | 2.5 | - | - | - | | | | | | | |
| ØК | 74 | 84 | 95 | 115 | 147 | | | | | | | |
| φL | 36 | 45 | - | - | - | | | | | | | |
| ØМ | 20 | 25 | 30 | 38 | 45 | | | | | | | |
| ØN | 14 | 19 | 21 | 29 | 36 | | | | | | | |
| φO | 36 | 45 | 50 | 60 | 85 | | | | | | | |
| ØР | 54 | 64 | 75 | 90 | 115 | | | | | | | |
| Q | 21.7 | 23.9 | 25.5 | 29.6 | 36.4 | | | | | | | |
| R | 3 | 3 | - | - | - | | | | | | | |
| S | 8 | 12 | 12 | 12 | 12 | | | | | | | |
| ØТ | 3.5 | 3.5 | 3.5 | 4.5 | 5.5 | | | | | | | |
| ¢∪ | 64 | 74 | 84 | 102 | 132 | | | | | | | |
| V | - | _ | 6 | 6 | 6 | | | | | | | |
| W | - | - | M3×6 | M3×6 | M3×6 | | | | | | | |
| φx | - | - | 25.5 | 33.5 | 40.5 | | | | | | | |
| Y | 8 of 12 divides | 16 of 20 divides | 16 | 16 | 16 | | | | | | | |
| Z | M3×5 | M3×6 | M3×6 | M4×7 | M5×8 | | | | | | | |
| фа | 44 | 54 | 62 | 77 | 100 | | | | | | | |



SSH-US Input Shaft Unit Type

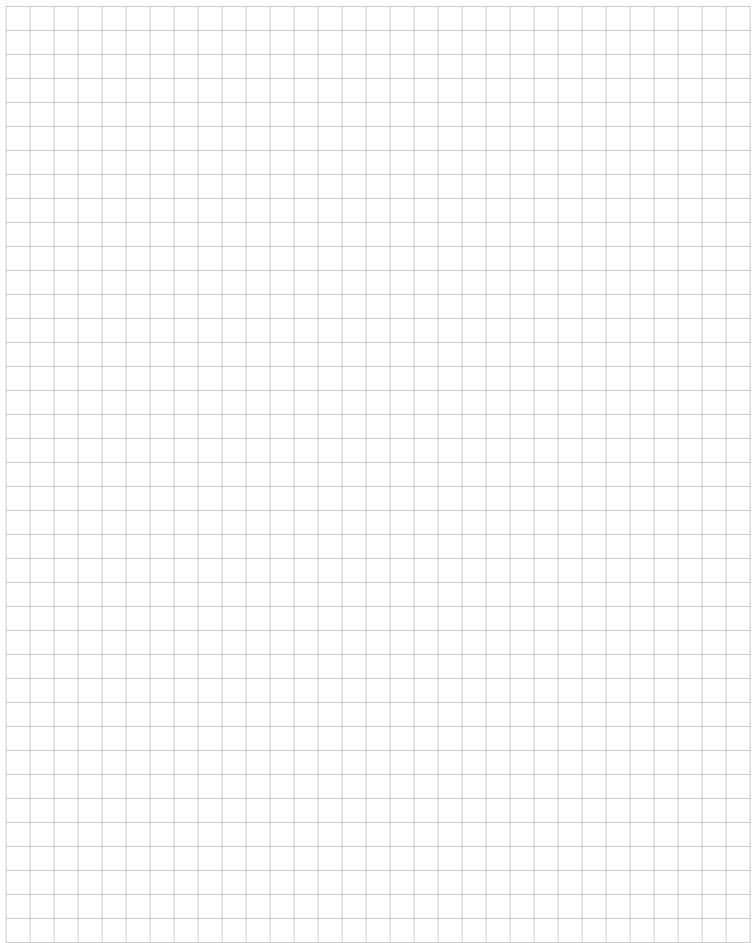


| | | SSH- | -US (mm) | | | | | | |
|--------------------|-----------------|------------------|----------|-------|-------|--|--|--|--|
| Size Dimensions | 14 | 17 | 20 | 25 | 32 | | | | |
| ØA | 74 | 84 | 95 | 115 | 147 | | | | |
| В | 50.5 | 56 | 63.5 | 72.5 | 84.5 | | | | |
| С | 15 | 17 | 21 | 26 | 26 | | | | |
| D | 20.5 | 23 | 25 | 26 | 32 | | | | |
| E | 15 | 16 | 17.5 | 20.5 | 26.5 | | | | |
| F | 14 | 16 | 20 | 25 | 25 | | | | |
| G | 9 | 10 | 10.5 | 10.5 | 12 | | | | |
| Н | 8 | 8.5 | 9 | 8.5 | 9.5 | | | | |
| | 2.5 | 3 | 3 | 3 | 5 | | | | |
| J | 11 | 12 | 16.5 | 22.5 | 22.5 | | | | |
| ØК | 6 | 8 | 10 | 14 | 14 | | | | |
| φL | 36 | 45 | 50 | 60 | 85 | | | | |
| ØМ | 54 | 64 | 75 | 90 | 115 | | | | |
| ØN | 70 | 80 | 90 | 110 | 142 | | | | |
| 0 | 11 | 12 | 16.5 | 22.5 | 22.5 | | | | |
| Р | 8 | 12 | 12 | 12 | 12 | | | | |
| ØQ | 3.5 | 3.5 | 3.5 | 4.5 | 5.5 | | | | |
| ØR | 64 | 74 | 84 | 102 | 132 | | | | |
| S | - | - | M3×6 | M5×10 | M5×10 | | | | |
| Т | - | - | 8.2 | 11 | 11 | | | | |
| U | - | - | 3 | 5 | 5 | | | | |
| V | _ | _ | 3 | 5 | 5 | | | | |
| W | 0.5 | 0.5 | _ | _ | - | | | | |
| Х | 8 of 12 divides | 16 of 20 divides | 16 | 16 | 16 | | | | |
| Y | M3×5 | M3×6 | M3×6 | M4×7 | M5×8 | | | | |
| ¢Ζ | 44 | 54 | 62 | 77 | 100 | | | | |

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Notes





Notes



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|---|------|--|--|--|--|--|--|--|--|--|--|--|--|------|------|------|------|------|------|------|------|--|
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ABOUT DIEQUA

Counded in 1980 by Dietmar Quaas, and now owned by his sons, DieQua Corporation has expanded from a single product line to become a leading manufacturer and supplier of an extensive line of high-quality power transmission and precision motion control products, including gearboxes, servo gearheads, screw jack systems, speed reducers, cycloidal reducers, and connecting components. The company also offers custom product modifications and complete design solutions for virtually any application. DieQua Corporation serves a wide range of industries, including medical and health care, marine engineering, renewable energy, mining, transportation, steel, forestry and lumber, water and wastewater, automotive, and factory automation, to name a few.

An experienced and knowledgeable technical sales, customer service, and engineering support staff, as well as local distributors, ensure that DieQua customers in North America, Mexico and South America select the optimum components, systems, and best design solutions for their specific requirements.

The DieQua family of products



Spiral Bevel Gearboxes



Servo Gearheads



Cycloidal Reducers & Positioners

Zero Backlash Couplings

and Line Shafts



Systems

Custom Designs



Helical Speed Reducers

The DieQua Advantage

Engineering Support

DieQua Corporation has several decades of combined experience specifying power transmission and motion control components. This assures proper selection of components and systems to suit your unique requirements.

Warehousing

Speed Modulating

Gearboxes

We pride ourselves for our extensive in-stock inventory. For fast product turnaround, DieQua Corporation stocks many components of various ratios and sizes, ready to ship fast.

Manufacturing and Assembly

DieQua Corporation now manufactures or assembles most of the products, for on-time delivery of standard orders as well as prototypes. We are ISO 9001 certified and are constantly improving our quality systems to ensure our customers receive the best products.



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