Automation + Robotics
Electrically driven modules
Rotary Units
Electrically driven modules
Rotary Units
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**FIBRO – working on your behalf**

As you will no doubt already be aware, for many decades the name FIBRO has been synonymous with the systematic rationalisation of work processes.

Not content with our well-known range of indexing tables, FIBRO engineers have made another major step towards the automation of production lines by developing the modular handling system.

---

**The modular handling system**

The standardised elements of this modular system (the modules) enable users to solve their handling problems with the minimum of design and planning. The modules can be easily assembled to create devices specifically tailored to the particular handling task and the available space. This means that any point can be approached simply by combining translation and rotary modules. Modules from the various series can be combined with incredible flexibility, opening up a broad range of applications and enabling units to be matched precisely to individual tasks in a way that is normally only possible with expensive made-to-measure machines.

**Elements of the modular handling system**

We can provide translation modules (translational axes) and rotary modules (rotary axes) in a range of sizes in order to execute three-dimensional movements.

The modules can be driven pneumatically, hydraulically or electrically.

For the "gripping" function, the module has
- jaws for swivel motion, and
- jaws for parallel motion.

which are pneumatically, hydraulically or electrically actuated.

These options cover a wide range of gripping functions, and the interchangeable jaws enable the units to be adapted to specific workpiece contours.

The modules required for specific handling tasks can be easily selected with reference to the available design and load data (see datasheets).

Freely programmable control systems can be used to control these modular handling devices.

The modules can be fixed to one another in a number of ways, thus offering a high degree of flexibility when creating handling units for specific functions.

---

**Advantages of the modular handling system**

The modular handling system offers the user a number of advantages:

- A wide range of applications thanks to the highly versatile module combination opportunities
- Mature and proven modules guarantee maximum reliability
- Cuts the time required for design and planning
- Modules are interchangeable and can be reused for different tasks
- The best type of driving unit – pneumatic, hydraulic or electrical – is used for each application
- The elements can be purchased at series-production prices
- CAD support during the design phase

We shall be pleased to advise you on applications and implementation of the modules. Our team of experts will be pleased to hear from you. Confirmation of the versatility of the modular system is provided by many handling systems which have been in constant use for years.
<table>
<thead>
<tr>
<th>Code groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Diameter (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>57.</td>
<td></td>
<td></td>
<td></td>
<td>0380</td>
</tr>
<tr>
<td>2 to 4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>86.</td>
<td></td>
<td></td>
<td></td>
<td>Basic unit without motor</td>
</tr>
</tbody>
</table>

| 87.         |   |   |   | Basic unit without motor |
|             |   |   |   | with coupling             |
|             |   |   |   | for keyless motor shaft   |

| 82.         |   |   |   | with servo motor attached |

| 0           |   |   |   | without rotary transmission leadthrough |

| 4           |   |   |   | with 4 way leadthrough |

| 6           |   |   |   | with 6 way leadthrough |
Rotating Module

Type RE 75

<table>
<thead>
<tr>
<th>Size</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Transport load, max.</td>
<td>75 kg</td>
</tr>
<tr>
<td>Max. moment of inertia</td>
<td>5 kg m²</td>
</tr>
<tr>
<td>Load moment</td>
<td>75 Nm</td>
</tr>
<tr>
<td>Rotary table Ø</td>
<td>90 mm</td>
</tr>
</tbody>
</table>

Type RE 150

<table>
<thead>
<tr>
<th>Size</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>Transport load, max.</td>
<td>150 kg</td>
</tr>
<tr>
<td>Max. moment of inertia</td>
<td>10 kg m²</td>
</tr>
<tr>
<td>Load moment</td>
<td>150 Nm</td>
</tr>
<tr>
<td>Rotary table Ø</td>
<td>120 mm</td>
</tr>
</tbody>
</table>

Type RE 300

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<thead>
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</thead>
<tbody>
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<td>Transport load, max.</td>
<td>300 kg</td>
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<tr>
<td>Max. moment of inertia</td>
<td>50 kg m²</td>
</tr>
<tr>
<td>Load moment</td>
<td>300 Nm</td>
</tr>
<tr>
<td>Rotary table Ø</td>
<td>140 mm</td>
</tr>
</tbody>
</table>

Type RE 600

<table>
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<th>5</th>
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</thead>
<tbody>
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<td>Transport load, max.</td>
<td>600 kg</td>
</tr>
<tr>
<td>Max. moment of inertia</td>
<td>300 kg m²</td>
</tr>
<tr>
<td>Load moment</td>
<td>600 Nm</td>
</tr>
<tr>
<td>Rotary table Ø</td>
<td>160 mm</td>
</tr>
</tbody>
</table>

Option:
Mix rotary leadthrough, distribution table

Drive motor:
Choice of manufacturers
Electrically driven Rotary Units
Ordering information

<table>
<thead>
<tr>
<th>Type</th>
<th>54.57.2</th>
<th>820</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Turning angle</td>
<td>unrestricted</td>
<td>0360</td>
</tr>
<tr>
<td>Version</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Basic unit</td>
<td>with motor attached</td>
<td>82</td>
</tr>
<tr>
<td>without motor</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>without coupling</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>without rotary transmission leadthrough</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>with 4 way leadthrough</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>with 6 way leadthrough</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Ordering example</td>
<td>54.57.2</td>
<td>0360</td>
</tr>
</tbody>
</table>

Drive unit position on A, B, C or D

Please give us exact details to the motor, even if you wish to make the motor available for fitting, or if you wish to fit it yourselves.

Accessories:
- Distributor table, see page 12
- Fixing rings, see page 26

Technical data

- Transport weight, max [kg] 75
- Load moment, max [Nm] 75
- Tilting moment [Nm] 150
- Moment of inertia, max [kgm²] 5
- Rate of rotation (motor with 3000 rpm) [°/sec] 180
- Rotational acceleration [°/sec²] 450
- Repeat accuracy [+/-] 0.5
- Overall ratio [i] 100:1
- Area of operation [mm] 300

Servo motor: MKD 041 Manufactured by Indramat

Weights:
- Basic unit 12.5 kg
- Connecting block rotary transmission leadthrough 4 x 1.5 kg
- Connecting block rotary transmission leadthrough 6 x 2.2 kg
- Distribution table 0.8 kg
- Coupling flange with clamping hub 1.0 kg
- Motor e.g. Indramat MKD 041 4.65 kg

Note

Indramat MKD 041 motor with drive shaft (Ø14 x 30) with feather key, can be attached directly i.e. without a coupling flange.

All other motors are attached using clamping hub and coupling flange.

Load data

- Axial load \( G \)
  - Vertical rotary axis \( G_{max.} \) 75 kg

- Load moment \( M \):
  - Vertical rotary axis 75 Nm
  - Tangential moment \( M_t \) 75 Nm with gripped shaft

- Tilting moment \( M_k \) 150 Nm

- Moment of inertia 5 kgm²

Calculation of moment of inertia

See example on page 27.
Technical description

The casing is made of high tensile aluminium
Turning angle unrestricted
Positioning by means of braked servo motor
Working principle: 2 stage gearing
Low backlash < 3 min with pre-tensioning
Very stable and rigid
Zero backlash bearings
Greased for life
Installation in any orientation
Drive can be attached in any of 4 x 90° orientations
Motor fitting with clamping hub
Centre opening Ø20 for cable leadthrough

Option:
4 way or 6 way rotary transmission leadthrough
Suitable for hydraulic systems up to 120 bar
pneumatic systems up to 12 bar
Leadthrough diameter Ø 0.5 mm

Dimensions

Detail B

Detail A

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M8 x 20 deep (6x)

Point of rotation when changing orientation of drive. Drive options: 4 x 90°

Position of drive

* Fixing gauge tolerance for fixing holes: ±0.02 mm
Fixing rings, see page 26

Dimensions

RE-75

M8 x 20 deep (6x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

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Thread with fixing ring - countersink

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M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)

M10 x 21 deep (4x)

Thread with fixing ring - countersink

M10 x 21 deep (4x)
RE-75

Rotary unit
electrically driven

Accessories

Distribution table
Order no: 1.048.02791

Examples for fitting to rotary table and line connection with tubeless direct connection

Example 1
On flat surface, centring with 2 fixing rings

Example 2
Centring with overlap and 1 fixing ring

0.181. Fixing rings

Note
CAD
- We shall be pleased to send you, upon request, the CAD dataset for designing the rotary unit. Please specify whether you would like the data on diskette, CD or by e-mail in DXF or IGES format.

Example application, see page 26
Rotary unit, electrically driven

54.57.2.

with rotary transmission leadthrough

Order no.
Rotary unit, electrically driven
with 4 way leadthrough
54.57.2.0360.8 4
with 6 way leadthrough
54.57.2.0360.8 6

Connecting block
Rotary transmission leadthrough, 4 way
Duplicate ports
offset 90°
Connection thread G1/4

Connecting block
Rotary transmission leadthrough, 6 way
Duplicate ports
offset 90°
Connection thread G1/4

View X, rotary table

M8 x 20 deep (6x)

Detail C
Feedthrough hole

KANTSEAL
Ø6.07/9.43x1.68
(supplied)
Ordering information

<table>
<thead>
<tr>
<th>Type</th>
<th>54, 57, 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>3, 3, 3</td>
</tr>
<tr>
<td>Rotation angle unrestricted</td>
<td>0, 0, 0</td>
</tr>
<tr>
<td>Version</td>
<td>d, 4</td>
</tr>
<tr>
<td>Basic unit with motor attached</td>
<td>82, 4</td>
</tr>
<tr>
<td>without motor</td>
<td>86, 4</td>
</tr>
<tr>
<td>without motor, with clutch</td>
<td>87, 4</td>
</tr>
<tr>
<td>without rotary transmission leadthrough</td>
<td>0, 4</td>
</tr>
<tr>
<td>with 4 way leadthrough</td>
<td>4, 4</td>
</tr>
<tr>
<td>with 6 way leadthrough</td>
<td>6, 4</td>
</tr>
<tr>
<td>Ordering example</td>
<td>54, 57, 3, 0360, 820</td>
</tr>
<tr>
<td>Drive unit : Position A, B, C or D</td>
<td></td>
</tr>
</tbody>
</table>

Please give us exact details to the motor, or if you wish to fit it yourselves.

Accessories :
Distributor table, see page 16
Fixing rings, see page 26

Technical data

- Transport weight, max [kg] 150
- Load moment, max [Nm] 150
- Tilting moment [Nm] 300
- Moment of inertia, max [kgm²] 10
- Rate of rotation (motor with 3000 rpm) [°/sec] 180
- Rotational acceleration [°/sec²] 450
- Repeat accuracy +/-0.5
- Overall ratio [i] 100:1
- Area of operation max. [mm] 500

Servo motor : MKD 041 Manufactured by Indramat or similar motor

Weights :
- Basic unit 19.8 kg
- Connecting block rotary transmission leadthrough 4 x 2.3 kg
- Connecting block rotary transmission leadthrough 6 x 4.0 kg
- Distribution table 1.1 kg
- Coupling flange with clamping hub 1.6 kg
- Motor e.g. Indramat MKD 041 4.65 kg
- Siemens 1 FK6 042 6AF71 6.4 kg

Ordering example 54, 57, 3, 0360, 820

Note
Indramat MKD 041 motor with drive shaft (Ø14 x 30) with feather key, can be attached directly i.e. without a coupling flange.
All other motors are attached using clamping hub and coupling flange.

Load data

- Axial load G
- Vertical rotary axis G
- Gmax. 150 kg
- Load moment M₀
- 150 Nm
- Tangential moment M₀
- 150 Nm
- with gripped shaft
- Tilting moment M₀
- 300 Nm
- Moment of inertia 10 kgm²
- Tiger unit with 110 mm

Calculation of moments of inertia, see example on page 27
 Rotary Unit, electrically driven

54.57.3.

Technical description

The casing is made of high tensile aluminium
Turning angle unrestricted
Positioning by means of braked servo motor
Working principle: 2 stage gearing
6x backlash < 2 min with pre-tensioning
very stable and rigid
zero backlash bearings
geared for life
installation in any orientation
Drive can be attached in any of 4 x 90° positions
Motor adaptation with clamping hub
Centre opening Ø 41 for cable leadthrough

Option:
4 way or 6 way rotary transmission leadthrough
suitable for hydraulic systems up to 120 bar
pneumatic systems up to 12 bar
Leadthrough diameter Ø 6.5 mm

Dimensions

Detail A

Thread with fixing ring - countersink

M8 x 20 deep (6x)

M10 x 20 deep (4x)

Rotary table

ø140 x 4,7 deep

Recesses ca. 30 deep x ca. 5 deep

Position of drive

A

B

C

D

Point of rotation when changing orientation of drive
Drive options: 4 x 90°

* Fixing gauge tolerance for fixing holes: ±0.02 mm
Fixing rings, see page 26

* ø15 H7
54.57.3. Rotary unit, electrically driven
Accessories

Distribution table
Order no: 1.048.02792

Examples for fitting to rotary table and line connection with tubeless direct connection

Fixing rings
Anwendungsbeispiel siehe Seite 26

Note
CAD
- We shall be pleased to send you, upon request, the CAD dataset for designing the rotary unit. Please specify whether you would like the data on diskette, CD or by e-mail in DXF or IGES format.
Rotary unit, electrically driven

54.57.3.

with rotary transmission leadthrough

Connecting block
Rotary transmission leadthrough, 4 way
Duplicate connection ports,
offset by 90°
Connection thread G1/4

Connecting block
Rotary transmission leadthrough, 6 way
Duplicate connection ports,
offset by 90°
Connection thread G1/4

View X, rotary table

Recesses
c.a. approx. 30 wide x 5 deep

Order no.
Rotary unit, electrically driven
with 4 way leadthrough
54.57.3.0360.8 4
with 6 way leadthrough
54.57.3.0360.8 6

Detail C
Feedthrough hole
φ41

KANTSEAL
φ7.65/11 x 1.68
(supplied)
### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport weight, max [kg]</td>
<td>300</td>
</tr>
<tr>
<td>Load moment, max [Nm]</td>
<td>300</td>
</tr>
<tr>
<td>Tilting moment [Nm]</td>
<td>800</td>
</tr>
<tr>
<td>Moment of inertia, max [kgm²]</td>
<td>50</td>
</tr>
<tr>
<td>Rate of rotation (motor with 3000 rpm) [°/sec]</td>
<td>180</td>
</tr>
<tr>
<td>Rotational acceleration [°/sec²]</td>
<td>450</td>
</tr>
<tr>
<td>Repeat accuracy [°/min]</td>
<td>+/-0.5</td>
</tr>
<tr>
<td>Overall ratio [ ]</td>
<td>100:1</td>
</tr>
<tr>
<td>Area of operation [mm]</td>
<td>1000</td>
</tr>
</tbody>
</table>

### Servo motor

- Indramat MKD 071
- Manufactured by Indramat or similar motor

### Weights

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic unit</td>
<td>42.9 kg</td>
</tr>
<tr>
<td>Connecting block rotary transmission leadthrough 4 x</td>
<td>2.3 kg</td>
</tr>
<tr>
<td>Connecting block rotary transmission leadthrough 6 x</td>
<td>4.0 kg</td>
</tr>
<tr>
<td>Distribution table</td>
<td>1.6 kg</td>
</tr>
<tr>
<td>Coupling flange with clamping hub</td>
<td>3.0 kg</td>
</tr>
<tr>
<td>Motor e.g. Indramat MKD 071</td>
<td>9.42 kg</td>
</tr>
<tr>
<td>Siemens 1FK6 063 6AF71</td>
<td>13.3 kg</td>
</tr>
</tbody>
</table>

### Note

- Indramat MKD 071 motor with drive shaft (Ø19 x 40) with feather key, can be attached directly i.e. without a coupling flange.
- All other motors are attached using clamping hub and coupling flange.

### Load data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axial load G</td>
<td></td>
</tr>
<tr>
<td>Vertical rotary axis Gmax.</td>
<td>300 kg</td>
</tr>
<tr>
<td>Load moment Mₐ</td>
<td>300 Nm</td>
</tr>
<tr>
<td>Tangential moment Mₜ</td>
<td>300 Nm</td>
</tr>
<tr>
<td>with gripped shaft</td>
<td></td>
</tr>
<tr>
<td>Tilting moment Mₖ</td>
<td>800 Nm</td>
</tr>
<tr>
<td>Moment of inertia</td>
<td>50 kgm²</td>
</tr>
</tbody>
</table>

### Calculation of moment of inertia

See example on page 27
Technical description

The casing is made of high tensile aluminium
Turning angle unrestricted
Positioning by means of braked servo motor
Working principle: 2 stage gearing
6x backlash < 3 min with pre-tensioning
very stable and rigid
zero backlash bearings
geared for life
installation in any orientation
Drive can be attached in any of 4 x 90° orientations
Motor adaptation with clamping hub
Centre opening Ø 41 for cable leadthrough

Option:
4 way or 6 way rotary transmission leadthrough
suitable for hydraulic systems up to 120 bar
pneumatic systems up to 12 bar
Leadthrough diameter Ø 6.5 mm

In the case of rotary units without a leadthrough the centre hole can be Ø 63

Dimensions

Point of rotation when changing orientation of drive
Drive options: 4 x 90°

Position of drive

* Fixing
gauge tolerance for fixing holes: ±0.02 mm
Fixing ring, see page 26
RE-300
54.57.4.
Rotary unit, electrically driven
Accessories

Distribution table
Order no: 1.048.02793

Examples for fitting to rotary table and line connection with tubeless direct connection

Example 1
Example 2

Note
CAD
• We shall be pleased to send you, upon request, the CAD dataset for designing the rotary unit. Please specify whether you would like the data on diskette, CD or by e-mail in DXF or IGES format.

0.181.
Fixing rings
with rotary transmission leadthrough

Connecting block
Rotary transmission leadthrough, 4 way
Duplicate connection ports, offset by 90°
Connection thread G1/4

Connecting block
Rotary transmission leadthrough, 6 way
Duplicate connection ports, offset by 90°
Connection thread G1/4

View X, rotary table

Recesses
approx. 30 wide x approx. 5 deep

Order no.
Rotary unit, electrically driven
with 4 way rotary transmission leadthrough
54.57.4.0360.8 □ 4
with 6 way rotary transmission leadthrough
54.57.4.0360.8 □ 6

Detail C
Feedthrough hole

KANTSEAL
Ø 7,65/11 x 1,68
(supplied)
Ordering information

<table>
<thead>
<tr>
<th>Type</th>
<th>54.57.5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>0360.82</td>
</tr>
</tbody>
</table>

Technical data

- Transport weight, max: 600 kg
- Load moment, max: 600 Nm
- Tilting moment: 1200 Nm
- Moment of inertia: 300 kgm²
- Rate of rotation (motor with 3000 rpm): 180 °/sec
- Rotational acceleration: 450 °/sec²
- Repeat accuracy: +/-0.5 sec
- Overall ratio: 100:1
- Area of operation: max. 1500 mm

Servo motor: MKD 090 Manufactured by Indramat

Weights:
- Basic unit: 75 kg
- Connecting block rotary transmission leadthrough 4 x: 2.9 kg
- Connecting block rotary transmission leadthrough 6 x: 4.0 kg
- Distribution table: 2.3 kg
- Coupling flange with clamping hub: 4.2 kg
- Motor e.g. Indramat MKD 090: 15.1 kg

Note

Indramat MKD 090 motor with drive shaft (Ø 24 x 50) with feather key, can be attached directly i.e. without a coupling flange.
All other motors are attached using clamping hub and coupling flange.
### Technical Description

- The casing is made of high tensile aluminium.
- Turning angle unrestricted.
- Positioning by means of braked servo motor.
- Working principle: 2 stage gearing.
- Low backlash < 3 mm with pre-tensioning.
- Very stable and rigid.
- Zero backlash bearings.
- Greased for life.
- Installation in any orientation.
- Drive can be attached in any of 4 x 90° positions.
- Motor attachment with clamping hub.
- Centre opening Ø 41 for cable leadthrough.

**Option:**
- 4 or 6 way rotary transmission leadthrough.
- Suitable for hydraulic systems up to 120 bar.
- Pneumatic systems up to 12 bar.
- Leadthrough diameter Ø 6.5 mm.

In the case of rotary units without a leadthrough, the centre hole can be Ø 63.

### Dimensions

#### View X

- **Thread with fixing ring - countersink:** Ø140° x 4.7 deep.
- **Recesses approx.:** 30 wide x approx. 5 deep.

#### Detail A

- **Fixing gauge tolerance for countersunk fixing holes:** ±0.02 mm.
- **Fixing ring:** See page 26.

### Rotary Unit

- **Rotary table:**
- **Point of rotation when changing orientation of drive:**
- **Drive options:** 4 x 90°.
RE-600 Rotary unit, electrically driven Accessories

Distribution table
Order no: 1.048.02794

Examples for fitting to rotary table and line connection with tubeless direct connection

Example 1
Example 2

Fixing rings

Note
CAD
We shall be pleased to send you, upon request, the CAD dataset for designing the rotary unit. Please specify whether you would like the data on diskette, CD or by e-mail in DXF or IGES format.
Rotary unit, electrically driven 54.57.5.

with rotary transmission leadthrough

Order no.
Rotary unit, electrically driven with 4 way leadthrough
54.57.5.0360.8 4
with 6 way leadthrough
54.57.5.0360.8 6

Connecting block
Rotary transmission leadthrough, 4 way
Duplicate connection ports, offset by 90°
Connection thread G1/4

Connecting block
Rotary transmission leadthrough, 6 way
Duplicate connection ports, offset by 90°
Connection thread G1/4

Recesses approx.
30 wide x approx. 5 deep

View X, rotary table

Detail C
Feedthrough hole

KANTSEAL Ø7.65/11 x 1.68 (supplied)
### Installation example:

* Fixing (diagonal if possible)

### Fixing rings

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Determination of the moment of inertia

1. Bodies with central axis

1.1 Solid cylinder or flat disc rotating about its own axis.
\[ J = \frac{D^2}{8} \times m \]

1.2 Hollow cylinder or flat ring rotating about its own axis.
\[ J = \frac{D^2 + d^2}{8} \times m \]

1.3 Solid cylinder rotating about an axis perpendicular to its central axis.
\[ J = \left( \frac{L^2}{12} + \frac{D^2}{16} \right) \times m \]

1.4 Hollow cylinder rotating about an axis perpendicular to its central axis.
\[ J = \left( \frac{L^2}{12} + \frac{D^2 + d^2}{16} \right) \times m \]

1.5 Rectangular plate of any thickness rotating about one central axis.
\[ J = \frac{A^2 + B^2}{12} \times m \]

1.6 Long thin rod any cross-section rotating about one central axis.
\[ J = \frac{L^2}{12} \times m \]

2. Bodies with offset axis

2.1 Solid cylinder or flat disc rotating about an external axis.
\[ J = \left( \frac{D^2}{8} + r^2 \right) \times m \]

2.2 Hollow cylinder or flat ring rotating about an external axis.
\[ J = \left( \frac{D^2 + d^2}{8} + r^2 \right) \times m \]

2.3 Solid cylinder rotating about an external axis perpendicular to its own central axis.
\[ J = \left( \frac{L^2}{12} + \frac{D^2}{16} + r^2 \right) \times m \]

2.4 Hollow cylinder rotating about an external axis perpendicular to its own central axis.
\[ J = \left( \frac{L^2}{12} + \frac{D^2 + d^2}{16} + r^2 \right) \times m \]

2.5 Rectangular plate of any thickness rotating about an external central axis parallel to the axis of symmetry.
\[ J = \left( \frac{A^2 + B^2}{12} + r^2 \right) \times m \]

2.6 Long thin rod of cross-section rotating about an external axis perpendicular to its own central axis.
\[ J = \left( \frac{L^2}{12} + r^2 \right) \times m \]

\[ J = \text{Moment of inertia in kgm}^2 \]
Dimensions in meters, masses in kg