TUNING KNOBS
AWARD-WINNING TUNING, CONTROL AND COLLET KNOBS IN ERGONOMIC, MODERN AND CLASSIC DESIGNS

Turtle © by OKW Gehäusesysteme, Buchen, Germany.
Subject to technical modification without notice.
June 2022.
OKW has over 70 years’ experience in the development and production of potentiometer knobs. Today we can offer a wide range of modern and traditional tuning knob designs for spindles from 3 to 8 mm.

Our latest operating elements combine special technical features with a contemporary appearance. This includes optional LED illumination, flush-fitting installation, a main body which is slightly inclined towards the internal axis, function-oriented marking elements, modern colour selection etc.

The OKW range of tuning knobs is well tried and tested for rotary potentiometers with round and flattened shaft ends in accordance with DIN 41591 or 6/4.6 mm. The knobs are fitted using the proven collet fixture, lateral screw fixing or simply by pushing them on. Choose from round knobs, wing knobs, spindle-shaped knobs, pointer knobs or simple rotary switches. Different sizes and combinations offer a wide range of possible solutions.
MATERIAL / COLOUR
Soft-touch TPE outer shell
- TPE, volcano
- TPE, nero
Knob body
- PC, translucent (can be illuminated)
- PC, traffic white RAL 9016 (for applications without illumination)
Cover / Base
- PA 6, volcano
- PA 6, nero

KNOB SIZES (MM)
Ø 36 mm
(knob hole: 6 mm and 1/4”)
Ø 46 mm
(knob hole: 6 mm and 1/4”)

BACKLIGHT
Optional illumination possible with modern, energy-saving SMD LED technology.
- RGB backlight for individual colours. You can display your own colour.

FASTENING
Tried and tested collet fixture system with secure fit on the axle according to DIN 41591.
Max. tightening torque: assembly = 1.5 Nm, function = 1.2 Nm.

CUSTOMISING
- Machining*
- Printing*
- Laser Marking*
- Installation/Assembly of accessories *cover only

YOUR ADVANTAGE
- Potentiometer tuning knobs that are highly comfortable to operate
New ergonomic CONTROL-KNOBS have a soft-touch surface which is easy to grip and feels comfortable in operation.
The high-quality appearance – illuminated if required – distinguishes this advanced range of tuning knobs as the central element of menu-driven interfaces.

CONTROL-KNOBS
NEW
CONTROL-KNOBS WITH ILLUMINATION
CONTROL-KNOBS WITHOUT ILLUMINATION

Order data on pages 18-19

APPLICATION FIELDS
For rotary potentiometers or rotary pulse generators with round shaft ends in accordance with DIN 41591, including touch function:
- Measuring and control technology
- Health Care
- Heating and air conditioning
- Communication devices
- Building management
- Smart Factory
**ILLUMINATION**

Modern, energy-saving SMD LED technology for power supply units with 5 V: either white backlight for the colours diamond, ruby, emerald and sapphire or RGB backlight for individual colours as accessory.

**MATERIAL / COLOUR**

**Knob**
- PA, volcano
- PA, nero
- PC, diamond (can be illuminated)
- PC, ruby (can be illuminated)
- PC, emerald (can be illuminated)
- PC, sapphire (can be illuminated)

**Cover**
- PA, volcano
- PA, nero

**FASTENING**

Tried and tested collet fixture system with secure fit on the axle.

**KNOB SIZES (MM)**
- Ø 33 mm
  (boreholes 6 mm, 1/4”)
- Ø 41 mm
  (boreholes 6 mm, 8 mm)

**BACKLIGHT**

Optional illumination possible with modern, energy-saving SMD LED technology. With white backlight you can realize the colours diamond, ruby, emerald and sapphire.

**RGB**

For individual colours there is a RGB backlight available. In this way you can display your own colour.

**CUSTOMISING**

- Machining
- Printing / Laser marking
- Lacquering (only on request and according to sample)
- Installation / Assembly of acc.

**STAR-KNOBS “FLUSH-FITTING”**

**MODERN ILLUMINATED TUNING KNOBS**

Our STAR-KNOBS are designed for menu driven interfaces, click rotation and click push-in for “OK”. This reduces the number of knobs and controls required on the front panel. The illumination is a visual highlight and enhances user operation of the equipment.

**INNOVATIVE DESIGN FOR FLUSH FITTING OR SURFACE MOUNTING**

**YOUR ADVANTAGE**

- the flush-fitting version represents an attractive transition between the knob and the front of the device; the knob can be illuminated, that is, a ring lights up between the recess and the knob cover
- knob with or without knurls
- cover with or without finger recess for fine adjustments
- tried and tested collet fixture system with secure fit on the axle
- max. torques: assembly = 1.5 Nm, function = 1.2 Nm
- minimum components for 1 STAR-KNOB: 1 knob, 1 cover, 1 assembly kit

**APPLICATION FIELDS**

For rotary potentiometers or rotary pulse generators with round shaft ends in accordance with DIN 41659, including touch function:
- Measuring and control technology
- Health Care
- Heating and air conditioning
- Communication devices
- Building management
- Smart Factory

**ILLUMINATION**

Illumination possible with modern, energy-saving SMD LED technology for power supply units with 5 V: either white backlight for the colours diamond, ruby, emerald and sapphire or RGB backlight for individual colours as accessory.
Our STAR-KNOBS are designed for menu driven interfaces, click rotation and click push-in for ‘OK’. This reduces the number of knobs and controls required on the front panel. The illumination is a visual highlight and enhances user operation of the equipment.

**INNOVATIVE DESIGN FOR FLUSH FITTING OR SURFACE MOUNTING**

**YOUR ADVANTAGE**
- with the surface-mounted version, the knob design makes a great impression thanks to the slight inclination of the body towards the inner axis, thus allowing ergonomically comfortable operation; the knob is mounted on an approx. 3 mm high ring, which can be illuminated if required
- knob with or without knurls
- cover with or without finger recess for fine adjustments
- tried and tested collet fixture system with secure fit on the axle
- max. torques: assembly = 1.5 Nm, function = 1.2 Nm
- minimum components for 1 STAR-KNOB: 1 knob, 1 cover, 1 assembly kit

**COMPATIBILITY**
- for rotary potentiometers or rotary pulse generators with round shaft ends in accordance with DIN 41591, including touch function:
  - Measuring and control technology
  - Health Care
  - Heating and air conditioning
  - Communication devices
  - Building management
  - Smart Factory

**ILLUMINATION**
Illumination possible with modern, energy-saving SMD LED technology for power supply units with 5 V:
- either white backlight for the colours diamond, ruby, emerald and sapphire or RGB backlight for individual colours as accessory.

**APPLICATION FIELDS**
- Health Care
- Heating and air conditioning
- Communication devices
- Building management
- Smart Factory

**MATERIAL / COLOUR**
- Knob, cover
  - PA, volcano
  - PA, nero
- Ring (can be illuminated)
  - PC, diamond
  - PC, ruby
  - PC, emerald
  - PC, sapphire

**KNOB SIZES (MM)**
- ø 33 mm (boreholes 6 mm, 1/4")
- ø 41 mm (boreholes 6 mm, 8 mm)

**BACKLIGHT**
Optional illumination possible with modern, energy-saving SMD LED technology. With white backlight you can realize the colours diamond, ruby, emerald and sapphire.

For individual colours there is a RGB backlight available. In this way you can display your own colour.

**FASTENING**
Tried and tested collet fixture system with secure fit on the axle.

**CUSTOMISING**
- Machining
- Printing
- Laser marking
- Lacquering (only on request and according to sample)
- Installation / Assembly of acc.

**ILLUMINATION**
- can be illuminated (white backlight)
- can be illuminated (white / RGB backlight)

**ORDER DATA**
Order data on pages 20-21
COM-KNOBS

MODERN COLLET KNOB SYSTEM

Aesthetic design, a modern selection of pastel colours, and a secure collet fixing system are the main features of our COM-KNOBS range. These very attractive tuning knobs will give your application a high-quality appearance.

YOUR ADVANTAGE

• modern and innovative control knobs
• cover with a matt chrome finish for a classy metallic look (sizes 23-40)
• reliable operation with the tried and tested collet fixing system
• convenient assembly from the front with tight fitting on the axis
• with/without slot for arrow marking elements

COM-KNOBS

YOUR ADVANTAGE

• clip-on covers with or without a finger recess for finer control and adjustment
• also suitable for fitting accessory disks, dials, stator and nut covers
• the design is similar to our innovative TOP-KNOBS series; this guarantees you a uniform appearance when using the two knob technologies
• modern colour combinations

APPLICATION FIELDS

For rotary potentiometers with shaft ends corresponding to DIN 41591.

• Measuring and control technology
• Medical and wellness devices
• Laboratory equipment
• Heating and air conditioning
• Communication equipment
• Building management

ORDER DATA ON PAGES 24-25
For rotary potentiometers with shaft ends corresponding to DIN 41591 or with flattened ends ø 6/4.6 mm.

**APPLICATION FIELDS**
- Measuring and control technology
- Medical and wellness devices
- Laboratory equipment
- Heating and air conditioning
- Communication equipment
- Building management

**TOP-KNOBS**
**UNIQUELY MODERN TUNING KNOBS**
Our TOP-KNOBS are unique in design and are thus the ideal solution for users looking for that special something. Individual marking elements define the function of the tuning knobs and give your equipment a modern, contemporary appearance.

**YOUR ADVANTAGE**
- Aesthetically pleasing knob design – iF product design award
- Lateral fixing screw for axis corresponding to DIN 41591 or for flattened ends
- Modern colour combinations
- Individual, functional marking elements, e.g., for fine calibration, slip into the sides and hide the lateral fixing screw

**CUSTOMISING**
- Machining
- Printing
- Laser marking
- Installation / Assembly of accessories

**FASTENING**
With lateral screw fixing on shaft ends according to DIN 41591.
Pinned onto the axes with flattened shaft ends ø 6/4.6 mm.

**MATERIAL / COLOUR**
- Knob:
  - PA 6, volcano
  - PA 6, nero
- Marking elements:
  - Depending on the type:
    - PA 6, coral
    - PA 6, beach
    - PA 6, lagoon
    - PA 6, sky
    - PA 6, mineral

**KNOB SIZES (MM)**
- Ø 16 mm
  - Boreholes 4 mm, 6 mm, 6/4.6 mm
- Ø 20 / Ø 24 / Ø 31 und Ø 40 mm
  - Boreholes 6 mm, 1/4", 6/4.6 mm

**TOP-KNOBS**
**YOUR ADVANTAGE**
- Aesthetically pleasing knob design – iF product design award
- Lateral fixing screw for axis corresponding to DIN 41591 or for flattened ends
- Modern colour combinations
- Individual, functional marking elements, e.g., for fine calibration, slip into the sides and hide the lateral fixing screw

**TOP-KNOBS**
**UNIQUELY MODERN TUNING KNOBS**
Our TOP-KNOBS are unique in design and are thus the ideal solution for users looking for that special something. Individual marking elements define the function of the tuning knobs and give your equipment a modern, contemporary appearance.

**YOUR ADVANTAGE**
- Aesthetically pleasing knob design – iF product design award
- Lateral fixing screw for axis corresponding to DIN 41591 or for flattened ends
- Modern colour combinations
- Individual, functional marking elements, e.g., for fine calibration, slip into the sides and hide the lateral fixing screw

**CUSTOMISING**
- Machining
- Printing
- Laser marking
- Installation / Assembly of accessories

**FASTENING**
With lateral screw fixing on shaft ends according to DIN 41591.
Pinned onto the axes with flattened shaft ends ø 6/4.6 mm.

**MATERIAL / COLOUR**
- Knob:
  - PA 6, volcano
  - PA 6, nero
- Marking elements:
  - Depending on the type:
    - PA 6, coral
    - PA 6, beach
    - PA 6, lagoon
    - PA 6, sky
    - PA 6, mineral

**KNOB SIZES (MM)**
- Ø 16 mm
  - Boreholes 4 mm, 6 mm, 6/4.6 mm
- Ø 20 / Ø 24 / Ø 31 und Ø 40 mm
  - Boreholes 6 mm, 1/4", 6/4.6 mm

**TOP-KNOBS**
**YOUR ADVANTAGE**
- Aesthetically pleasing knob design – iF product design award
- Lateral fixing screw for axis corresponding to DIN 41591 or for flattened ends
- Modern colour combinations
- Individual, functional marking elements, e.g., for fine calibration, slip into the sides and hide the lateral fixing screw

**CUSTOMISING**
- Machining
- Printing
- Laser marking
- Installation / Assembly of accessories

**FASTENING**
With lateral screw fixing on shaft ends according to DIN 41591.
Pinned onto the axes with flattened shaft ends ø 6/4.6 mm.

**MATERIAL / COLOUR**
- Knob:
  - PA 6, volcano
  - PA 6, nero
- Marking elements:
  - Depending on the type:
    - PA 6, coral
    - PA 6, beach
    - PA 6, lagoon
    - PA 6, sky
    - PA 6, mineral

**KNOB SIZES (MM)**
- Ø 16 mm
  - Boreholes 4 mm, 6 mm, 6/4.6 mm
- Ø 20 / Ø 24 / Ø 31 und Ø 40 mm
  - Boreholes 6 mm, 1/4", 6/4.6 mm

**TOP-KNOBS**
**YOUR ADVANTAGE**
- Aesthetically pleasing knob design – iF product design award
- Lateral fixing screw for axis corresponding to DIN 41591 or for flattened ends
- Modern colour combinations
- Individual, functional marking elements, e.g., for fine calibration, slip into the sides and hide the lateral fixing screw

**CUSTOMISING**
- Machining
- Printing
- Laser marking
- Installation / Assembly of accessories

**FASTENING**
With lateral screw fixing on shaft ends according to DIN 41591.
Pinned onto the axes with flattened shaft ends ø 6/4.6 mm.

**MATERIAL / COLOUR**
- Knob:
  - PA 6, volcano
  - PA 6, nero
- Marking elements:
  - Depending on the type:
    - PA 6, coral
    - PA 6, beach
    - PA 6, lagoon
    - PA 6, sky
    - PA 6, mineral

**KNOB SIZES (MM)**
- Ø 16 mm
  - Boreholes 4 mm, 6 mm, 6/4.6 mm
- Ø 20 / Ø 24 / Ø 31 und Ø 40 mm
  - Boreholes 6 mm, 1/4", 6/4.6 mm

**TOP-KNOBS**
**YOUR ADVANTAGE**
- Aesthetically pleasing knob design – iF product design award
- Lateral fixing screw for axis corresponding to DIN 41591 or for flattened ends
- Modern colour combinations
- Individual, functional marking elements, e.g., for fine calibration, slip into the sides and hide the lateral fixing screw

**CUSTOMISING**
- Machining
- Printing
- Laser marking
- Installation / Assembly of accessories

**FASTENING**
With lateral screw fixing on shaft ends according to DIN 41591.
Pinned onto the axes with flattened shaft ends ø 6/4.6 mm.

**MATERIAL / COLOUR**
- Knob:
  - PA 6, volcano
  - PA 6, nero
- Marking elements:
  - Depending on the type:
    - PA 6, coral
    - PA 6, beach
    - PA 6, lagoon
    - PA 6, sky
    - PA 6, mineral

**KNOB SIZES (MM)**
- Ø 16 mm
  - Boreholes 4 mm, 6 mm, 6/4.6 mm
- Ø 20 / Ø 24 / Ø 31 und Ø 40 mm
  - Boreholes 6 mm, 1/4", 6/4.6 mm

**TOP-KNOBS**
**YOUR ADVANTAGE**
- Aesthetically pleasing knob design – iF product design award
- Lateral fixing screw for axis corresponding to DIN 41591 or for flattened ends
- Modern colour combinations
- Individual, functional marking elements, e.g., for fine calibration, slip into the sides and hide the lateral fixing screw

**CUSTOMISING**
- Machining
- Printing
- Laser marking
- Installation / Assembly of accessories

**FASTENING**
With lateral screw fixing on shaft ends according to DIN 41591.
Pinned onto the axes with flattened shaft ends ø 6/4.6 mm.
For rotary potentiometers with shaft ends corresponding to DIN 41591. Also suitable for profiled axes 6/4.6 mm in combination with the torsion protection (accessory).

Medical, wellness devices and laboratory equipment

Measuring and control technology

Heating and air conditioning

Communication equipment

MATERIAL / COLOUR

Knob:
- ABS (UL 94 HB), dusty grey (RAL 7037)
- ABS (UL 94 HB), black (RAL 9005)

Cover*:
- ABS (UL 94 HB), red, yellow, green, light blue, pebble grey, dusty grey

Arrow disk*:
- ABS (UL 94 HB), black, red, dusty grey

Disk*:
- ABS, black (RAL 9005)

Dial*:
- PC (UL 94 HB)

Nut cover*:
- ABS, black (RAL 9005)
- ABS, dusty grey (RAL 7037)

*depending on the type / size

KNOB SIZES (MM)
- Ø 9 mm / Ø 10 mm / Ø 13.5 mm
- Ø 16 mm / Ø 20 mm / Ø 23 mm
- Ø 31 mm / Ø 40 and Ø 50 mm

VERSATILE COLLET KNOB SYSTEM

Suitable for a huge number of applications, our COMBINATION KNOBS feature a reliable collet fixing system, and can be configured as round knobs, wing knobs and spindle-shaped knobs in combination with a large selection of accessories.

Collet Type
- sizes 10 and 13: blind holes with screw fixing
- sizes 16 and 20: brass collet with stepped counterbored hole, except for axes 4 mm
- from size 23 up: brass collet with through holes

VERSIONS
- Round Knobs: sizes Ø 9, 10, 13.5, 16, 20, 23, 31, 40, 50 mm with bareholes 3, 4, 6, 8 mm, 1/8", 1/4" (depend from the size)
- Wing Knobs: sizes Ø 13.5, 16 mm with barehole 6 mm
- Spindle-shaped Knobs: sizes Ø 16, 23, 31, 40 mm with bareholes 3, 4, 6 mm (depend from the size)

CUSTOMISING
- Machining
- Printing
- Laser marking
- Lacquering

YOUR ADVANTAGE
- standard round, wing and spindle type design with matt surfaces
- secure operation by tried and tested collet fixing system
- convenient assembly of knobs from the front; brass collet fixing system for tight fitting to the control spindle
- clip-on covers in different colours, with or without indicator line
- also suitable for fitting accessory arrow disks, disks, dials, stator and nut covers

APPLICATION FIELDS
For rotary potentiometers with shaft ends corresponding to DIN 41591. Also suitable for profiled axes 6/4.6 mm in combination with the torsion protection (accessory).

- Medical, wellness devices and laboratory equipment
- Measuring and control technology
- Heating and air conditioning
- Communication equipment
**TUNING KNOBS “CLASSIC”**

**PRACTICAL RANGE OF TUNING KNOBS**

Choose a knob that meets your own special size and design requirements. OKW TUNING KNOBS are suitable for many different applications and are offered in thermoplastic for normal use and thermosetting plastic (Duroplast) for high temperature resistance requirements.

**APPLICATION FIELDS**

For rotary potentiometers with shaft ends corresponding to DIN 41591: Measuring and control technology, medical and wellness devices, laboratory equipment, heating and air conditioning and communication equipment.

**YOUR ADVANTAGE**

- different designs and sizes: practical, with a good grip
- high-grade metal effect with aluminium cap or insert embellisher; the colour and styling of your front panel thus forms a unified whole
- models with markings; advantageous for adjusting and indicating
- lateral screw fixing for rotary potentiometer with shaft ends
- sizes from ø 12 to ø 38 mm with spindle sizes 4 mm or 6 mm
- accessory insert: reduces borehole from 6 to 4 mm

**APPLICATIONS**

Examples of customers show different possibilities for the use of our tuning knobs.

Please refer to our website www.okw.com for further applications.

**MATERIAL / COLOUR**

Knob
- Thermoplastic, black
- Duroplast, black

Insert embellisher / embellisher cap (depending on the type)
- Aluminium

**KNOB SIZES (MM)**

Sizes from ø 12 to ø 38 mm with spindle sizes 4 mm or 6 mm.

**FASTENING**

Lateral screw fixing type A or B for rotary potentiometer with shaft ends.

**CUSTOMISING**

- Machining
- Printing
- Installation / Assembly of acc.

**Order data see pages 32-35**
Minimum components for 1 CONTROL-KNOB

- 1 knob (can be illuminated)
- 1 cover
- 1 base
- 1 LED illumination kit

With optional LED illumination

- PCB with LED illumination (RGB backlight) – for power supply units with 5 V

Minimum components:

For 1 CONTROL-KNOB with optional LED illumination:
- 1 knob (can be illuminated)
- 1 cover
- 1 base
- 1 LED illumination kit

For 1 CONTROL-KNOB without LED illumination:
- 1 knob
- 1 cover
- the accessory base can also be added if required

Other accessories:

- Potentiometer (not included in supply)
- Front panel / enclosure front
- Round nut (accessory)
- Knob without/with indication line
- Knob can be illuminated without/with indication line
**STAR-KNOBS**

Information in the product catalogue on pages 6-9

---

### KNOB

<table>
<thead>
<tr>
<th>Knob</th>
<th>Knob ø</th>
<th>Dim. in mm</th>
<th>Colour</th>
<th>PA</th>
<th>Part-No.</th>
<th>PC*</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>6 mm</td>
<td>1.5 1.2</td>
<td></td>
<td></td>
<td>B 80 13 061</td>
<td>B 81 13 061</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B 80 13 069</td>
<td>B 81 13 069</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B 83 13 061</td>
<td>B 84 13 061</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B 83 13 063</td>
<td>B 84 13 063</td>
</tr>
<tr>
<td>41</td>
<td>6 mm</td>
<td>1.5 1.2</td>
<td></td>
<td></td>
<td>B 80 41 061</td>
<td>B 81 41 061</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B 80 41 069</td>
<td>B 81 41 069</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B 83 41 061</td>
<td>B 84 41 061</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B 83 41 063</td>
<td>B 84 41 063</td>
</tr>
</tbody>
</table>

---

### SURFACE-MOUNTED

**flush-fitting**

- **PCB with LED Illumination**
  - for power supply units with 5 V

**Surface-mounted**

- **LED Illumination**
  - "white backlight"
  - "RGB backlight"

---

### COVERS

<table>
<thead>
<tr>
<th>Covers</th>
<th>For knob ø</th>
<th>Dim. in mm</th>
<th>Colour</th>
<th>PA</th>
<th>Part-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>29 28 9 1.7</td>
<td></td>
<td></td>
<td></td>
<td>B 86 33 008</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B 86 33 108</td>
</tr>
<tr>
<td>41</td>
<td>37 36 11 1.7</td>
<td></td>
<td></td>
<td></td>
<td>B 86 41 008</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B 86 41 108</td>
</tr>
</tbody>
</table>

---

### ASSEMBLY KIT

**flush-fitting version**

- **flush-fitting version**
  - front panel / enclosure front

- **round nut**
  - (accessory)

**Surface-mounted version**

- **LED Illumination**
  - "white backlight"
  - "RGB backlight"

---

**STAR-KNOBS ACCESSORIES**

<table>
<thead>
<tr>
<th>Article</th>
<th>For knob ø</th>
<th>Version / Application</th>
<th>Part-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>33, 41</td>
<td>&quot;white backlight&quot;, PCB ø 27 mm with 4 LEDs, SMD-technology, connecting cable 150 mm long, 4-pin connector at the end, incl. PCB connector, for knobs/assembly kit in translucent (diamond / ruby / emerald / sapphire)</td>
<td>B 87 33 000</td>
</tr>
<tr>
<td>2</td>
<td>33, 41</td>
<td>&quot;RGB Backlight&quot;, PCB ø 27 mm with 4 LEDs, without controller, SMD-technology, connecting cable 150 mm long, 4-pin connector at the end, incl. PCB connector, for knobs/assembly kit in translucent (diamond)</td>
<td>B 87 33 002</td>
</tr>
<tr>
<td>3</td>
<td>33, 41</td>
<td>for mounting of potentiometer at the assembly kit</td>
<td>B 87 33 001</td>
</tr>
<tr>
<td>4</td>
<td>33, 41</td>
<td>for tightening round nut</td>
<td>A 12 02 009</td>
</tr>
<tr>
<td>5</td>
<td>33, 41</td>
<td>for assembly and adjusting of &quot;flush-fitting&quot; and &quot;surface-mounted&quot; versions</td>
<td>B 87 41 001</td>
</tr>
</tbody>
</table>

---

**Minimum components for 1 STAR-KNOB:**

1 knob, 1 cover and 1 assembly kit.

**Colours:**

- diamond
- ruby
- emerald
- sapphire

---

**STAR-KNOBS**

Information in the product catalogue on pages 6-9

---

**STAR-KNOBS ACCESSORIES**

<table>
<thead>
<tr>
<th>Article</th>
<th>For knob ø</th>
<th>Version / Application</th>
<th>Part-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>33, 41</td>
<td>&quot;white backlight&quot;, PCB ø 27 mm with 4 LEDs, SMD-technology, connecting cable 150 mm long, 4-pin connector at the end, incl. PCB connector, for knobs/assembly kit in translucent (diamond / ruby / emerald / sapphire)</td>
<td>B 87 33 000</td>
</tr>
<tr>
<td>2</td>
<td>33, 41</td>
<td>&quot;RGB Backlight&quot;, PCB ø 27 mm with 4 LEDs, without controller, SMD-technology, connecting cable 150 mm long, 4-pin connector at the end, incl. PCB connector, for knobs/assembly kit in translucent (diamond)</td>
<td>B 87 33 002</td>
</tr>
<tr>
<td>3</td>
<td>33, 41</td>
<td>for mounting of potentiometer at the assembly kit</td>
<td>B 87 33 001</td>
</tr>
<tr>
<td>4</td>
<td>33, 41</td>
<td>for tightening round nut</td>
<td>A 12 02 009</td>
</tr>
<tr>
<td>5</td>
<td>33, 41</td>
<td>for assembly and adjusting of &quot;flush-fitting&quot; and &quot;surface-mounted&quot; versions</td>
<td>B 87 41 001</td>
</tr>
</tbody>
</table>

---

**PCB with LED Illumination (T)**

- for power supply units with 5 V

---

**Assembly kit:**

- "surface mounted" (visible ring can be illuminated in translucent version)

---

**NOTE:**

1. knob can be illuminated individually (flush-fitting version)
2. can be illuminated individually in translucent (diamond / ruby / emerald / sapphire) version (surface-mounted version)
3. assembly instruction see our website www.okw.com
### TOP-KNOBS

**TOP-KNOB**

<table>
<thead>
<tr>
<th>Top-Knob for</th>
<th>Knob ø</th>
<th>Dimensions in mm</th>
<th>Max. tightening torque</th>
<th>Borehole</th>
<th>Part-No.</th>
<th>Part-No. <em>nero</em> volcano</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;flattened end&quot;</td>
<td>16</td>
<td>6/4.6 mm</td>
<td>0,6 Nm</td>
<td>6 mm</td>
<td>A 10 31 049</td>
<td>A 10 31 648</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>6/4.6 mm</td>
<td>0,6 Nm</td>
<td>6 mm</td>
<td>A 10 24 049</td>
<td>A 10 24 648</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>6/4.6 mm</td>
<td>0,6 Nm</td>
<td>6 mm</td>
<td>A 10 24 049</td>
<td>A 10 24 648</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>6/4.6 mm</td>
<td>0,6 Nm</td>
<td>6 mm</td>
<td>A 10 31 049</td>
<td>A 10 31 648</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>6/4.6 mm</td>
<td>0,6 Nm</td>
<td>6 mm</td>
<td>A 10 40 049</td>
<td>A 10 40 648</td>
</tr>
</tbody>
</table>

**MARKING ELEMENTS**

For TOP-Knob ø 16 – 40
Simple push-on marking elements, subsequent replacement is also possible.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coral</td>
<td>A 11 01 003</td>
<td>A 11 05 003</td>
<td>A 11 04 003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beach</td>
<td>A 11 01 004</td>
<td>A 11 05 004</td>
<td>A 11 02 004</td>
<td>A 11 03 004</td>
<td></td>
</tr>
<tr>
<td>Lagoon</td>
<td>A 11 01 005</td>
<td>A 11 05 005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sky</td>
<td>A 11 01 006</td>
<td>A 11 05 006</td>
<td>A 11 02 006</td>
<td>A 11 03 006</td>
<td></td>
</tr>
<tr>
<td>Mineral</td>
<td>A 11 01 007</td>
<td>A 11 05 007</td>
<td>A 11 02 007</td>
<td>A 11 03 007</td>
<td></td>
</tr>
</tbody>
</table>

### MODIFICATIONS AND FINISHING

With all conceivable technologies available in-house, we can adapt our enclosures and tuning knobs to your specific requirements.

---

*1* lateral screw fixing with hex-cocket set screw (1.5 mm) and annular cutting edge

*2* pinned onto the axes with flattened shaft ends

---

**TOP-KNOBS**

Information in the product catalogue on pages 12-13
## COMBINATION KNOBS

Information in the product catalogue on pages 14-15

<table>
<thead>
<tr>
<th>Knob ø</th>
<th>Shape</th>
<th>Borehole D</th>
<th>ROUND KNOB</th>
<th>SPINDLE-SHAPED KNOB</th>
<th>COVER</th>
<th>ARROW DISK</th>
<th>DISK</th>
<th>DUAL</th>
<th>STATOR</th>
<th>NUT COVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>ROUND KNOB</td>
<td>4 mm, without chamfer</td>
<td>A 25 20 040</td>
<td>A 26 20 040</td>
<td>A 25 20 060</td>
<td>A 26 20 060</td>
<td>A 41 20 000</td>
<td>A 42 20 000</td>
<td>A 44 20 000</td>
<td>A 60 20 019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 mm, with chamfer</td>
<td>1/4&quot;, with chamfer</td>
<td>A 25 20 040</td>
<td>A 26 20 040</td>
<td>A 25 20 060</td>
<td>A 26 20 060</td>
<td>A 41 20 000</td>
<td>A 42 20 000</td>
<td>A 60 20 019</td>
</tr>
<tr>
<td></td>
<td>SPINDLE-SHAPED KNOB</td>
<td>4 mm, with chamfer</td>
<td>A 25 23 040</td>
<td>A 26 23 040</td>
<td>A 25 23 060</td>
<td>A 26 23 060</td>
<td>A 41 23 000</td>
<td>A 42 23 000</td>
<td>A 44 23 000</td>
<td>A 60 23 019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 mm, with chamfer</td>
<td>A 25 23 040</td>
<td>A 26 23 040</td>
<td>A 25 23 060</td>
<td>A 26 23 060</td>
<td>A 41 23 000</td>
<td>A 42 23 000</td>
<td>A 44 23 000</td>
<td>A 60 23 019</td>
</tr>
<tr>
<td></td>
<td>ROUND KNOB</td>
<td>6 mm, without chamfer</td>
<td>A 25 31 040</td>
<td>A 26 31 040</td>
<td>A 25 31 060</td>
<td>A 26 31 060</td>
<td>A 41 31 000</td>
<td>A 42 31 000</td>
<td>A 44 31 000</td>
<td>A 60 31 019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/4&quot;, without chamfer</td>
<td>A 25 31 040</td>
<td>A 26 31 040</td>
<td>A 25 31 060</td>
<td>A 26 31 060</td>
<td>A 41 31 000</td>
<td>A 42 31 000</td>
<td>A 44 31 000</td>
<td>A 60 31 019</td>
</tr>
</tbody>
</table>

**KBOB** (UL 94 HB)
- ...100 = indicator line white, otherwise in black
- ...010 = indicator line white
- Polycarbonate
  - ...0 = symbols black
  - ...9 = symbols silver
- Aluminium
  - indicator line black

**Knob ø**
- ...ø = symbol black
- ...ø = symbol silver

**Comparative overview**
- Descriptions of standard colours
  - See page 31

**Information in the product catalogue on pages 14-15**
### COMBINATION KNOBS

**ACCESSORIES FOR ROUND KNOBS / WING KNOBS AND SPINDLE-SHAPED KNOBS / COM-KNOBS**

<table>
<thead>
<tr>
<th>Article</th>
<th>Version / Application</th>
<th>Dim. in mm</th>
<th>Part-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusting key</td>
<td>For correct adjusting of combination knobs (round knobs) with indicator line, dial and arrow disk. Knob mounting without difficulties.</td>
<td>D1 D2 D3 10 13.5 16 20 23 31</td>
<td>A 64 02 005 A 64 03 005</td>
</tr>
<tr>
<td>Round nut</td>
<td>For mounting of potentiometer at front panels. It fits under knob and nut cover (round knobs / wing knobs / spindle-shaped knobs / COM-KNOBS ø 10 / 13.5 / 16 / 20 / 23 / 31 / 40 / 50).</td>
<td>G ø M6 x 0.75 13.5 M8 x 0.75 13.5 3/8”-32G 12.5</td>
<td>A 62 07 009 A 62 10 009 A 62 95 009</td>
</tr>
<tr>
<td>Spanner</td>
<td>For tightening round nuts.</td>
<td></td>
<td>A 63 00 000</td>
</tr>
<tr>
<td>Torsion protection</td>
<td>For tensioned mounting of knobs on profiled axes 6 / 4.6 mm. Suitable for round and wing knobs since ø 20 to 50 with 6 mm borehole (not suitable for COM-KNOBS).</td>
<td></td>
<td>A 66 00 044</td>
</tr>
</tbody>
</table>

### STANDARD COLOURS KNOBS

<table>
<thead>
<tr>
<th>Combination knobs</th>
<th>Black, RAL 9005 Dust grey, RAL 7037</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covers (depends on size/type)</td>
<td>Black, RAL 9005 Dust grey, RAL 7037</td>
</tr>
<tr>
<td>Arrow disk</td>
<td>Black, RAL 9005 Dust grey, RAL 7037</td>
</tr>
<tr>
<td>Dial</td>
<td>Black, RAL 9005 Dust grey, RAL 7037</td>
</tr>
<tr>
<td>Nut cover (depends on size/type)</td>
<td>Black, RAL 9005 Dust grey, RAL 7037</td>
</tr>
</tbody>
</table>

### MODIFICATIONS AND FINISHING

With all conceivable technologies available in-house, we can adapt our enclosures and tuning knobs to your specific requirements, see pages 36-37.
<table>
<thead>
<tr>
<th>Material</th>
<th>Dim. in mm</th>
<th>Part-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duroplast black, insert embellisher plate aluminium.</td>
<td>D d1 h1 h2</td>
<td>A 13 20 260</td>
</tr>
<tr>
<td>Duroplast black, marking element white, insert embellisher plate aluminium.</td>
<td>D d1 h1 h2 l1</td>
<td>A 13 18 560</td>
</tr>
<tr>
<td>Duroplast black, embellisher cap aluminium.</td>
<td>D d1 d2 H1 h2</td>
<td>A 13 21 250</td>
</tr>
<tr>
<td>Thermoplastic black, embellisher cap aluminium.</td>
<td>D d1 d2 h1 h2</td>
<td>A 13 19 250</td>
</tr>
<tr>
<td>Duroplast black, embellisher cap aluminium.</td>
<td>D d1 h1 h2</td>
<td>A 13 24 250</td>
</tr>
<tr>
<td>ABS (UL 94 HB), aluminium cap, indicator line black.</td>
<td>D d1 d2 h1 h2</td>
<td>A 14 22 265</td>
</tr>
<tr>
<td>ABS (UL 94 HB), aluminium cap, indicator line black.</td>
<td>D d1 d2 h1 h2</td>
<td>A 14 22 265</td>
</tr>
<tr>
<td>ABS (UL 94 HB), aluminium cap, indicator line white.</td>
<td>D d1 d2 h1 h2</td>
<td>A 14 22 265</td>
</tr>
<tr>
<td>Material</td>
<td>Dim. in mm</td>
<td>Part-No.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Duroplast black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 19 260</td>
</tr>
<tr>
<td><strong>Thermoplastic black, red marking.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 16 240</td>
</tr>
<tr>
<td><strong>Thermoplastic black.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 21 160</td>
</tr>
<tr>
<td><strong>Thermoplastic black.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 10 560</td>
</tr>
<tr>
<td><strong>Thermoplastic black.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 05 540</td>
</tr>
<tr>
<td><strong>Thermoplastic black.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 13 560</td>
</tr>
<tr>
<td><strong>Thermoplastic black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 13 560</td>
</tr>
<tr>
<td><strong>Thermoplastic black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 13 560</td>
</tr>
<tr>
<td><strong>Thermoplastic black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 13 560</td>
</tr>
<tr>
<td><strong>Thermoplastic black.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 10 560</td>
</tr>
<tr>
<td><strong>Thermoplastic black.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 13 560</td>
</tr>
<tr>
<td><strong>Thermoplastic black.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 19 260</td>
</tr>
<tr>
<td><strong>Thermoplastic black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 19 260</td>
</tr>
<tr>
<td><strong>Thermoplastic black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 21 060</td>
</tr>
<tr>
<td><strong>Thermoplastic black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 21 060</td>
</tr>
<tr>
<td><strong>Thermoplastic black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 21 060</td>
</tr>
<tr>
<td><strong>Thermoplastic black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 21 060</td>
</tr>
<tr>
<td><strong>Thermoplastic black, indicator line white.</strong></td>
<td>D d1 d2 H h1 h2</td>
<td>A 13 21 060</td>
</tr>
</tbody>
</table>

**INSERT** – for axes with shaft ends

**TUNING-KNOBS**

Information in the product catalogue on page 16

---

**INSERT** – for axes with shaft ends

**TUNING-KNOBS**

Information in the product catalogue on page 16
PRODUCT SOLUTIONS TO SATISFY YOUR SPECIAL NEEDS AND REQUIREMENTS

Look at our comprehensive standard range and select the product that best matches your design ideas, your components and the needs of your customers.

In the next step you merely have to tell us what you still need for your own very personal product. Together with you we choose the necessary modifications from our wide range of services – ideal in terms of price, quality and delivery time – to meet your specific requirements.

MACHINING
We can perform individual machining processes for you, quickly and reliably, for sample or series production quantities. With our modern CNC machining facilities, we can produce individual solutions according to your design or a design proposed by us. We have detailed drawings of numerous enclosures and tuning knobs or 3D models for your ideas, ready to download.

LAQUERING
We can lacquer the enclosures and tuning knobs in any colour you wish so that it matches your application or your company CI. For special requirements, such as for improving the feel of your product, for metallic effects or for protection from electrostatic discharge, OKW offers a wide choice of lacquers.

LASER MARKING
We offer laser marking for numerous enclosures and components from our standard range.
Laser marking is ideal for individual labelling, identifying or marking. In particular, very small machine-readable markings, e.g. QR codes, barcodes, DataMatrix codes, consecutive numbering of individual parts and individual texts, can be carried out quickly and easily with laser marking.

PRINTING
You can use printing on your product to give it a personal touch. It is also possible to indicate the function and usage. With precision craftsmanship, we can carry out the required printing to your satisfaction.
Depending on the printing format and type of enclosure or tuning knobs, we can offer you screen printing, tamp printing as well as digital printing.

INSTALLATION / ASSEMBLY
We offer you e.g. the assembly of the tuning knobs on your device, mounting of assemblies and installation of components, foils and display windows and much more.
If required we can support you in the development of the parts and components, and will help you plan suitable installation.
ENCLOSURE NEWS

Do you already know our latest innovations of enclosures? Rely on innovative technology and aesthetic design from OKW for your electronics packaging tool! We offer an extensive range of sustainable enclosures made of plastic and aluminum profile technology for sophisticated devices.

ASK FOR A SAMPLE AND QUOTE
It’s quick and easy online - just go to the OKW website www.okw.com.

Up-to-date material data sheets are also available in the Internet www.okw.com

The plastic properties are exclusively applicable for the specified standard test pieces. Variations may occur as far as cases and technical parts are concerned. This does not exempt you from carrying out your own tests. The application, utilisation and subsequent processing are beyond our control and the responsibility for this therefore rests solely with you.

DESCRIPTION TO RESISTANCES OF MATERIALS
Values at room temperature:
• = constant
○ = conditionally constant
— = inconstant
Simultaneous exposure to different media may alter the resistance properties of a material! To be safe, it is advisable to test the cases for sufficient resistance of the material under the conditions of the specific application.

MATERIAL ABBREVIATION
ABS Acrylnitril-Butadien-Styrene
PA Polamide
PC Polycarbonate
PF Phenol-Formaldehyde Resin
TPE Thermoplastic Elastomer
TPV Thermoplastic Vulcanizate

PROPERTIES OF PLASTIC MATERIALS

<table>
<thead>
<tr>
<th>Material group</th>
<th>Thermoplastic</th>
<th>DUROPLAST</th>
<th>Thermoplastic Elastomers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviation</td>
<td>Attributes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Styrene-Polymerisate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application for the following tuning knobs</td>
<td>(+ = constant, − = inconstant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property for choice of material</td>
<td>Good resistance against medium temperature combined with good impact strength (only certain types) and aesthetic adjustment. On the whole, good resistance against chemicals. UV light may have a negative effect.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommended use</td>
<td>Cases and operating elements of all kinds, suitable for use in enclosed systems, also at low temperatures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance of material to</td>
<td>Galvanic</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Diesel oil</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Hydrochloric acid 10%</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Oleic acid solution</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Strong alkaline solutions</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Strong acid solutions</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Lactic acid</td>
<td>◦</td>
<td>□</td>
</tr>
</tbody>
</table>

THERMOPLASTICS

<table>
<thead>
<tr>
<th>THERMOPLASTICS</th>
<th>DUROPLAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene-Polymerisate</td>
<td></td>
</tr>
<tr>
<td>Polyamide PA 6x</td>
<td>Reinforced</td>
</tr>
<tr>
<td>Polycarbonate</td>
<td></td>
</tr>
<tr>
<td>Polyamide PA</td>
<td></td>
</tr>
<tr>
<td>Thermoplastic with high temperature stability with excellent resistance to all kinds of temperature. On the whole, good resistance against chemicals and UV light.</td>
<td></td>
</tr>
<tr>
<td>Thermoplastic with high temperature stability, extremely solid and tenacious. Good sliding properties and high capacity of resistance to wear. Contact with humidity may result in a change of properties.</td>
<td></td>
</tr>
<tr>
<td>Weather-resistant with good chemical properties. Depending on their Shore hardness, thermoplastic elastomers can have other properties.</td>
<td></td>
</tr>
<tr>
<td>High thermal and chemical resistance, buttonable and non-fusible when used, recyclable and reusable thanks to modern processes.</td>
<td></td>
</tr>
</tbody>
</table>

EASYTEC FOR MODERN SENSOR APPLICATIONS

SMART-PANEL FOR SMART-HOME, IoT AND IIoT

RAILTEC SUPPORT PA6 FR IN COLOUR GREY

BODY-CASE XL NEW WEARABLE ENCLOSURE SIZE

EASYTEC FOR MODERN SENSOR APPLICATIONS

SMART-PANEL FOR SMART-HOME, IoT AND IIoT

RAILTEC SUPPORT PA6 FR IN COLOUR GREY

BODY-CASE XL NEW WEARABLE ENCLOSURE SIZE

CUSTOM MODIFICATIONS SEE PAGES 36-37

ENCLOSURE NEWS

Do you already know our latest innovations of enclosures? Rely on innovative technology and aesthetic design from OKW for your electronics packaging tool! We offer an extensive range of sustainable enclosures made of plastic and aluminum profile technology for sophisticated devices.

ASK FOR A SAMPLE AND QUOTE
It’s quick and easy online - just go to the OKW website www.okw.com.

Up-to-date material data sheets are also available in the Internet www.okw.com

The plastic properties are exclusively applicable for the specified standard test pieces. Variations may occur as far as cases and technical parts are concerned. This does not exempt you from carrying out your own tests. The application, utilisation and subsequent processing are beyond our control and the responsibility for this therefore rests solely with you.

DESCRIPTION TO RESISTANCES OF MATERIALS
Values at room temperature:
• = constant
○ = conditionally constant
— = inconstant
Simultaneous exposure to different media may alter the resistance properties of a material! To be safe, it is advisable to test the cases for sufficient resistance of the material under the conditions of the specific application.

MATERIAL ABBREVIATION
ABS Acrylnitril-Butadien-Styrene
PA Polyamide
PC Polycarbonate
PF Phenol-Formaldehyde Resin
TPE Thermoplastic Elastomer
TPV Thermoplastic Vulcanizate

PROPERTIES OF PLASTIC MATERIALS

<table>
<thead>
<tr>
<th>Material group</th>
<th>Thermoplastic</th>
<th>DUROPLAST</th>
<th>Thermoplastic Elastomers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviation</td>
<td>Attributes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Styrene-Polymerisate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application for the following tuning knobs</td>
<td>(+ = constant, − = inconstant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property for choice of material</td>
<td>Good resistance against medium temperature combined with good impact strength (only certain types) and aesthetic adjustment. On the whole, good resistance against chemicals. UV light may have a negative effect.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommended use</td>
<td>Cases and operating elements of all kinds, suitable for use in enclosed systems, also at low temperatures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance of material to</td>
<td>Galvanic</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Diesel oil</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Hydrochloric acid 10%</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Oleic acid solution</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Strong alkaline solutions</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Strong acid solutions</td>
<td>◦</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Lactic acid</td>
<td>◦</td>
<td>□</td>
</tr>
</tbody>
</table>

THERMOPLASTICS

<table>
<thead>
<tr>
<th>THERMOPLASTICS</th>
<th>DUROPLAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene-Polymerisate</td>
<td></td>
</tr>
<tr>
<td>Polyamide PA 6x</td>
<td>Reinforced</td>
</tr>
<tr>
<td>Polycarbonate</td>
<td></td>
</tr>
<tr>
<td>Polyamide PA</td>
<td></td>
</tr>
<tr>
<td>Thermoplastic with high temperature stability with excellent resistance to all kinds of temperature. On the whole, good resistance against chemicals and UV light.</td>
<td></td>
</tr>
<tr>
<td>Thermoplastic with high temperature stability, extremely solid and tenacious. Good sliding properties and high capacity of resistance to wear. Contact with humidity may result in a change of properties.</td>
<td></td>
</tr>
<tr>
<td>Weather-resistant with good chemical properties. Depending on their Shore hardness, thermoplastic elastomers can have other properties.</td>
<td></td>
</tr>
<tr>
<td>High thermal and chemical resistance, buttonable and non-fusible when used, recyclable and reusable thanks to modern processes.</td>
<td></td>
</tr>
</tbody>
</table>

EASYTEC FOR MODERN SENSOR APPLICATIONS

SMART-PANEL FOR SMART-HOME, IoT AND IIoT

RAILTEC SUPPORT PA6 FR IN COLOUR GREY

BODY-CASE XL NEW WEARABLE ENCLOSURE SIZE

CUSTOM MODIFICATIONS SEE PAGES 36-37
TUNING KNOBS

AWARD-WINNING TUNING, CONTROL AND COLLET KNOBS IN ERGONOMIC, MODERN AND CLASSIC DESIGNS

Turtle © by OKW Gehäusesysteme, Buchen, Germany.
Subject to technical modification without notice.
June 2022.