

**CONTINUOUS HINGES**



**TWZ**

**SINCE 1911**

**THE HISTORY OF TKZ** begins in 1911. Its genetic code is top-notch metalwork. Gradually, we have become a significant European company in the production of window and door hinges and have built an excellent global reputation in the field of replicas of historical hinges.

**1911**

Company founded, production of metal goods, 50 employees, manufacturing space of 1,000 m<sup>2</sup>.

**1955**

Commencement of production of construction and furniture fittings.

**1976**

New pressing plant, machining shop, and tooling room - expansion of production space to 4,000 m<sup>2</sup>.

**1981**

Fully automated welding machine line.

**1998**

Start of production of adjustable hinges TRIO and EXPERT, commissioning of own testing facility.

**2010**

Expansion of production space to a total area of 8,000 m<sup>2</sup>.

**2015**

Start of production of concealed hinge ESPRIT for groove-less doors.

**2017**

Expansion of warehouse space by 2,000 m<sup>2</sup>.

**2022**

Extension of production capacity for concealed hinges.

**2024**

New welding facility of 2,000 m<sup>2</sup>.

**PRESENT TKZ**'s scope of products and solutions encompasses a wide range of custom metal manufacturing in addition to hinges. This includes not only small items, but also metal conveyor belts spanning hundreds of meters, as well as complex conveyor systems and intricate metal structures.



We focus on metalwork. In addition to a broad portfolio of our own products, we traditionally carry out both serial and unique custom production, from small details to large assemblies.

We are used to manufacturing complete products „in-house“ as well as coordinating production in collaboration with subcontractors and taking full responsibility

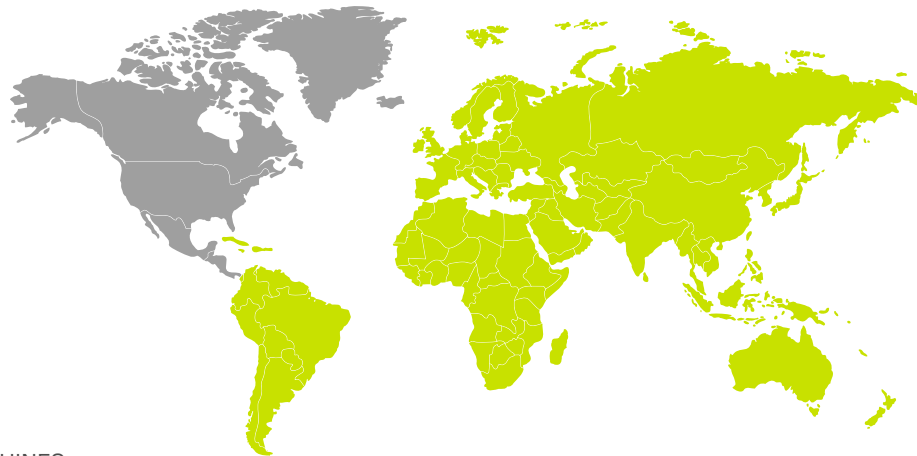
In most cases, we work according to the client's documentation. However, we are also prepared for situations where the client only has an initial idea. In such cases, we start by refining the assignment and continue with development, design, tool production, material selection, parts manufacturing, and final assembly of both simple and complex assemblies with a wide range of surface treatments, which we can equip with necessary accessories or electronics if needed.

Do not hesitate to take advantage of our extensive production program and our experience.

170 +  
EMPLOYEES

300 +  
PRODUCTS  
IN PORTOFILO

150 +  
PRODUCTION MACHINES



39 000 km +  
PIANO HINGES

1 500 +  
LONG-TERM  
CUSTOMERS

10 000 m<sup>2</sup> +  
PRODUCTION AREA

<b>Standard hinges</b>	<b>4</b>
<b>Piano hinges</b>	<b>10</b>
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# Continuous hinges

## CONTINUOUS HINGES

Continuous hinges represent a special category of movable and rotatable connections between two parts. Principally, they are simple. They consist of two wings connected by a pin. The complexity of their production and design increases with the growing demands of specific uses.

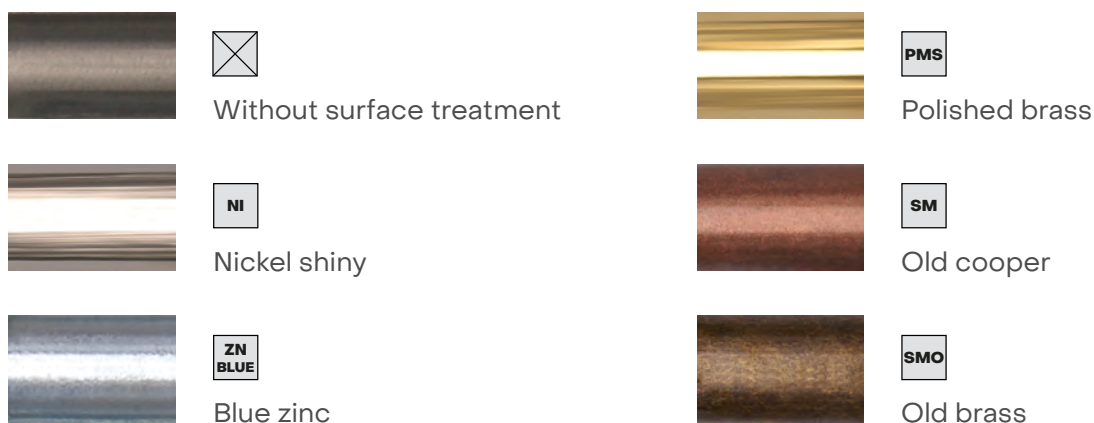
The wings can be simple or very complexly shaped, with a range of holes or anchoring elements. They find application in very simple or amateur uses as well as in very sophisticated projects, meeting demanding movement and strength expectations.

Continuous hinges are produced in millimeter and meter sizes and can carry even ton loads. They are made from common and noble materials with a wide range of surface treatments.

They are attached with screws or nails directly to the door surface without recessing into a pre-prepared hole. They can also be glued or welded.

Continuous hinges allow movement in one or more directions and are used for opening various openings, whether they are modular constructions from aluminum profiles, welded constructions, plastic parts, woodworking products, cabinets, boxes, doors, windows, covers of special machines, and are key components of many mechanical and construction systems in trains, trams, buses, airplanes, machines, engineering or other fields.

Success begins with the correct hinge design, continues with the proper choice of material, precise part processing to ensure not only smooth operation even at great lengths, complex segments, and high loads, but also achieving the required gap sizes between the hinge elements.



The sample of surface treatments is for illustrative purposes only; the indicated color shades may slightly differ from reality.

# Continuous hinges

## KEY ADVANTAGES OF HINGES

### Permanent adjustment

It is much easier to adjust one long hinge than two or more separate hinges. Since the hinges do not need adjustment, there is also no risk of their initial correct setting being changed. They are therefore successfully applied in environments where, for example, due to temperature, movement, or stress, the setting of other types of hinges has been disrupted.

### Resistance to vibrations

The length of the hinge increases the area that absorbs potential vibrations affecting the hinge. Connections with hinges are therefore more resistant to vibrations, which extends the life of the final product. They find application, for example, in transport or in vibrating products such as washing machines, crushers, and similar.

### Load distribution

Hinges are usually long, allowing attachment along the entire length of the construction elements at several points. The load is then evenly distributed across the entire mass of the product, and individual connections are subjected to less stress. They are therefore suitable for highly stressed connections or those where the material is relatively soft, and with a small number of attachment points, shorter hinges would be torn out.

### Resistance to vandalism

Hiding the attachment points when the hinge is closed and their higher number provide greater strength and make disassembly difficult. The length of the hinges, corresponding to the length of the moving wing, ensures complete filling of the gap and offers no free space for a crowbar. For this reason, hinges are also successfully used in covers of slot machines and ATMs.

### Easy installation and maintenance

No complicated templates or demanding tool equipment are needed for installation. The simple functional design does not require complex maintenance, so their operation does not cause problems.

### Variety of designs

A wide range of lengths, materials, load capacities, and surface treatments can meet not only functional but also aesthetic expectations of designers and constructors.

We have standard hinges in stock for prototype production, but other piano hinges also have relatively short delivery times.

# STANDARD HINGES

For the most common applications without the need for special design, length, or surface treatment, TKZ manufactures a standardized series of hinges in accordance with DIN 7954.

They find application with manufacturers of wooden, steel, or garden furniture, packaging, storage boxes, and many other places. They have their place in high-quality craftsmanship and among DIY enthusiasts of all kinds.

They provide an effective and strong connection of two moving parts. They can be an „ornament“ of a distinctive furniture piece or an inconspicuous and quality connection of moving parts. For special applications such as the renovation of historical objects, we also offer decorative designs.

We have standard hinges in stock in various sizes, designs, and surface treatments.

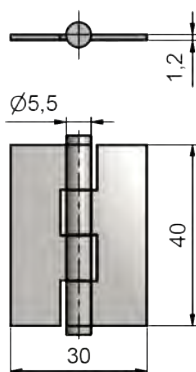
If you still do not find what you are looking for because you need a different size, shape, holes, or surface treatment, we will be happy to manufacture hinges exactly according to your needs, as described in the Custom Hinges section.

# Standard continuous hinges

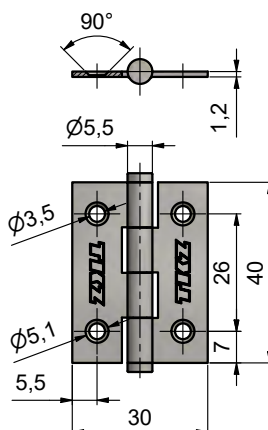
## HINGE KZ 40

Product No.	Name	SF	Load / 1 piece (RAL - RG 607/8)
8239	Hinge KZ 40 without holes	ZN BLUE	1,25 kg
8240	Hinge KZ 40	⊗ PMS SM ZN BLUE	1,25 kg
8241	Hinge KZ 40 UR	PMS SM SMO ZN BLUE	1,25 kg
8242	Hinge KZ 40 classic	ZN BLUE	1,25 kg
8243	Hinge KZ 40 without embossing	⊗ ZN BLUE	1,25 kg
8266	Hinge KZ 40x40 stainless steel	⊗	1,25 kg

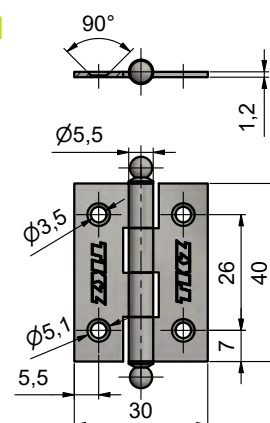
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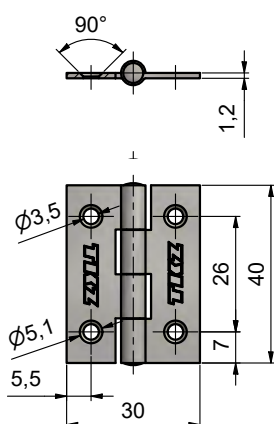
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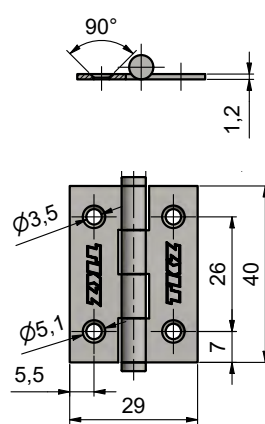
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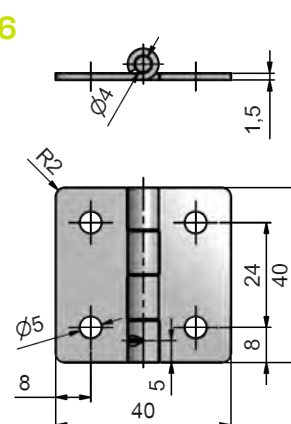
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8243



8266



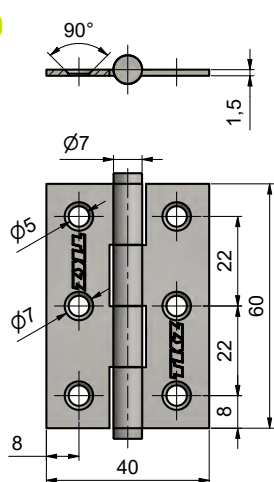
For screwing, we recommend using screws with a diameter of 2.5 mm and a minimum length of 16 mm.

# Standard continuous hinges

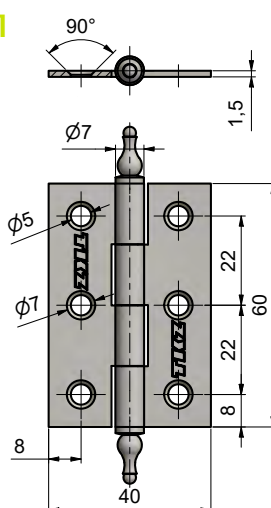
## HINGE KZ 60

Product No.	Name	SF	Load / 1 piece (RAL - RG 607/8)
8260	Hinge KZ 60	<input checked="" type="checkbox"/> PMS <input checked="" type="checkbox"/> SM <input checked="" type="checkbox"/> SMO <input checked="" type="checkbox"/> ZN BLUE	2 kg
8261	Hinge KZ 60 UR	<input checked="" type="checkbox"/> PMS <input checked="" type="checkbox"/> SM <input checked="" type="checkbox"/> SMO <input checked="" type="checkbox"/> ZN BLUE	2 kg
8262	Hinge KZ 60 without holes	<input checked="" type="checkbox"/> ZN BLUE	2 kg
8263	Hinge KZ 60 classic	<input checked="" type="checkbox"/>	2 kg
8264	Hinge KZ 60x38 without embossing, 2 holes with R10	<input checked="" type="checkbox"/> ZN BLUE	2 kg
8265	Hinge KZ 60 stainless steel	<input checked="" type="checkbox"/>	2 kg
8271	Hinge KZ 60x50 without embossing, without holes	<input checked="" type="checkbox"/>	2 kg
8267	Hinge KZ 60x38 without embossing, 2 holes stainless steel	<input checked="" type="checkbox"/>	2 kg

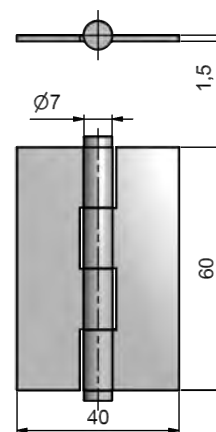
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8261



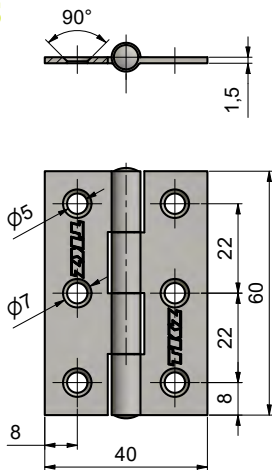
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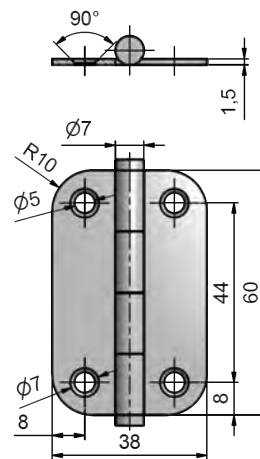


# Standard continuous hinges

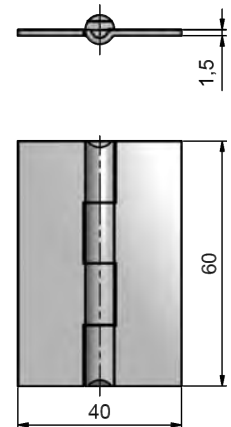
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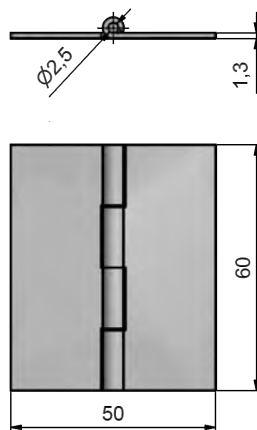
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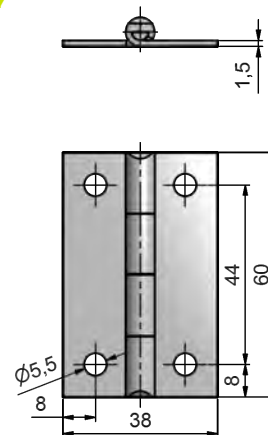
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8271



8267



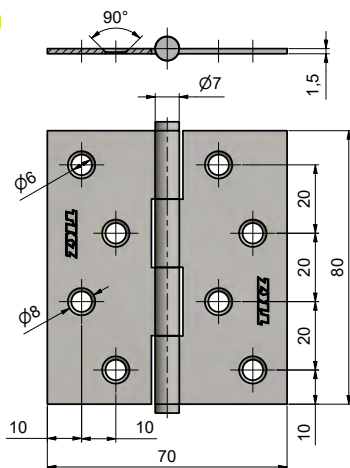
For screwing, we recommend using screws with a diameter of 3.5 mm and a minimum length of 16 mm.

# Standard continuous hinges

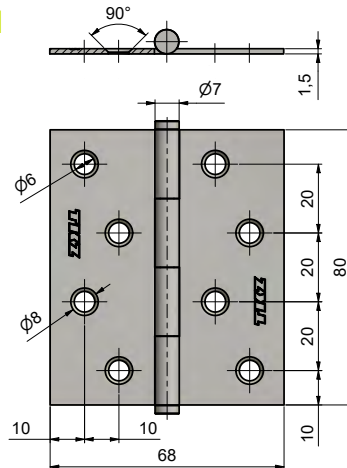
## HINGE KZ 80

Product No.	Name	SF	Load / 1 piece (RAL - RG 607/8)
8280	Hinge KZ 80	PMS SM ZN BLUE	3,25 kg
8281	Hinge KZ 80 without embossing	ZN BLUE	3,25 kg
8282	Hinge KZ 80x68 without embossing with R10	ZN BLUE	3,25 kg
8283	Hinge KZ 80 classic	ZN BLUE	3,25 kg
8284	Hinge KZ 80x35 without embossing	ZN BLUE	3,25 kg

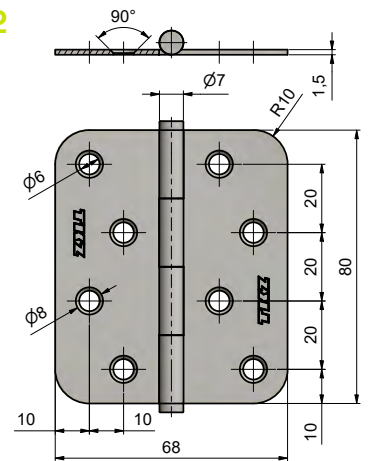
8280



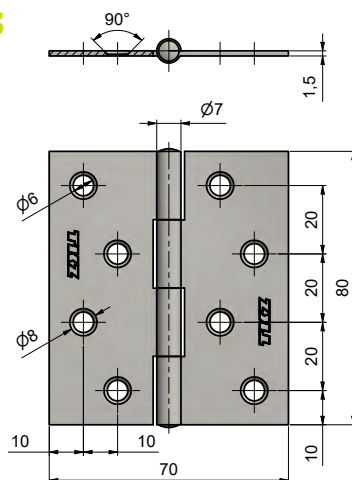
8281



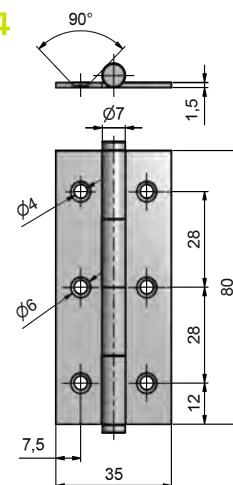
8282



8283



8284



For screwing, we recommend using screws with a diameter of 4 mm and a minimum length of 20 mm.

# Standard continuous hinges

## LOAD CAPACITY

### RAL - RG 607/8

Testing standard used for window hinges and hinges not intended for access and escape routes.

#### EXAMPLE

Window hinge 60 – Load capacity 8 kg per hinge. Calculation of load capacity for 2 hinges –  $8 \times 2 = 16$  kg.  
Calculation of load capacity for 3 hinges – load capacity for 2 hinges  $\times 1.3 = 16$  kg  $\times 1.3 = 20.8$  kg

# PIANO HINGES

They can be found on every piano or grand piano. They support the long and folding lid of the keyboard as well as the heavy top panel of the grand piano or piano. They got their name from the piano. True piano hinges are characterized not only by their delicate appearance but also by high-quality polishing and surface treatment. Over time, piano hinges have also found other uses where less noble appearances are required.

Some types of piano hinges can be easily shortened to the desired length, which has increased their flexibility and thereby their popularity among manufacturers of simple products and furniture. They are particularly well-suited for top lid openings, cabinet flap mechanisms, and are also popular for less demanding cabinet door constructions.

One of the main advantages is the distribution of the weight of the supported element over a large number of fastening elements. Thus, a relatively delicate hinge can carry high loads of soft materials, such as heavy panels.

Since closing does not create a gap between the body and the door, their use is safe (there is no risk of pinching fingers in the hinge area).

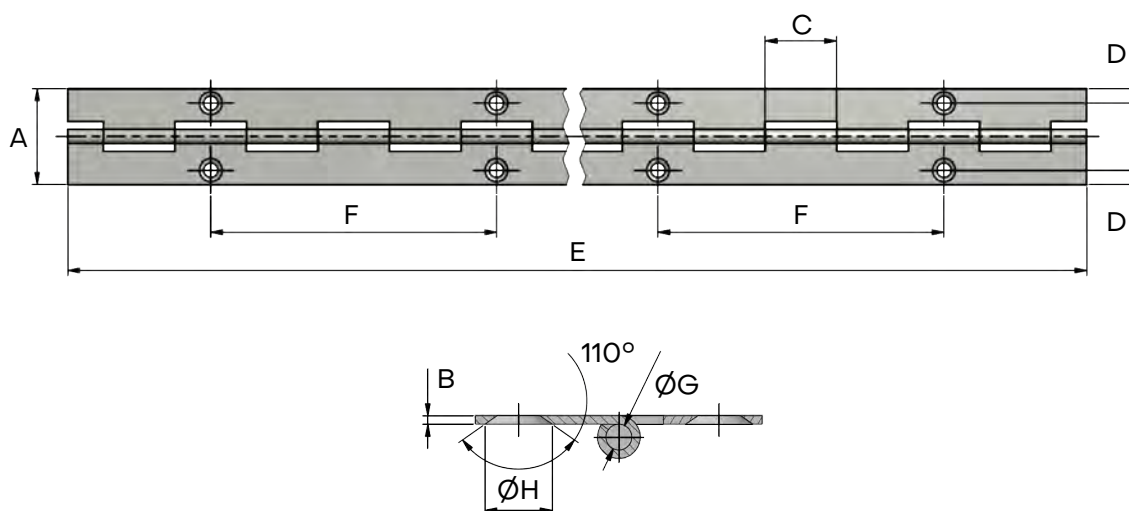
TKZ piano hinges are produced using continuous technology in various sizes and surface treatments. We are one of the few European manufacturers. Thanks to our long-standing experience and extensive technological park, we can respond very flexibly to individual needs.

They offer an opening angle of up to 180°, making them suitable for connecting furniture constructions in a flush position.

# Piano hinges

## HINGES WITHOUT EMBOSSING, WITH HOLES

Product No.	Type of hinge	SF	Dimensions (mm)							
			A	B	C	D	E	F	G	H
7197	25x0,6x910/70	NI	25	0,6	17,5	5	910	70	1,8	4,9
7196	25x0,6x910/70	PMS	25	0,6	17,5	5	910	70	1,8	4,9
1102	25x0,6x1980/60	PMS	25	0,6	15	4,25	1980	60	1,8	4,9
1180	25x0,6x3480/60	☒	25	0,6	15	4,25	3480	60	2	4,9
7100	25x0,6x3500/70	NI	25	0,6	17,5	5	3500	70	1,8	4,9
7101	25x0,6x3500/70	PMS	25	0,6	17,5	5	3500	70	1,8	4,9
1202	32x0,6x1980/60	PMS	32	0,6	15	6	1980	60	1,8	5,2
1280	32x0,6x3480/60	☒	32	0,6	15	6	3480	60	2	5,2
1380	40x0,6x3480/60	☒	40	0,6	15	8	3480	60	2	5,5

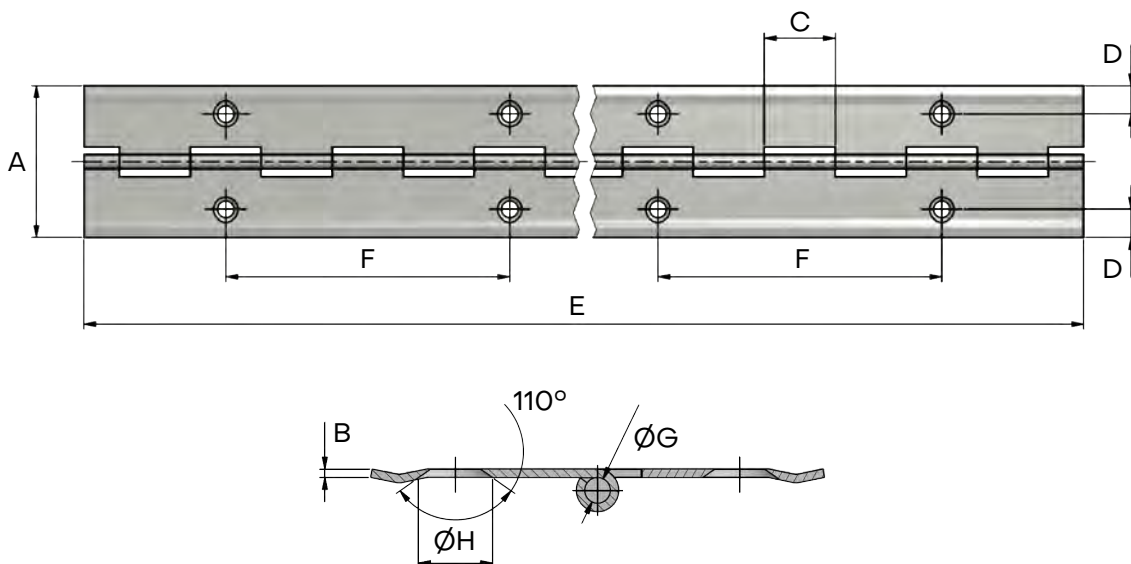


For screwing, we recommend using screws with a diameter of 2.5 mm and a minimum length of 16 mm.

# Piano hinges

## HINGES WITH EMBOSSING, WITH HOLES





Product No.	Type of hinge	SF	Dimensions (mm)							
			A	B	C	D	E	F	G	H
7200	32x0,6x900/70	NI	32	0,6	17,5	6	900	70	1,8	5,1
7202	32x0,6x900/70	PMS	32	0,6	17,5	6	900	70	1,8	5,1
7211	32x0,6x910/70	NI	32	0,6	17,5	6	910	70	1,8	5,1
7212	32x0,6x910/70	PMS	32	0,6	17,5	6	910	70	1,8	5,1
7102	32x0,6x3500/70	NI	32	0,6	17,5	6	3500	70	1,8	5,1
7104	32x0,6x3500/70	PMS	32	0,6	17,5	6	3500	70	1,8	5,1
7204	40x0,6x900/70	NI	40	0,6	17,5	8	900	70	1,8	5,1
7206	40x0,6x900/70	PMS	40	0,6	17,5	8	900	70	1,8	5,1
7205	40x0,6x910/70	NI	40	0,6	17,5	8	910	70	1,8	5,1
7207	40x0,6x910/70	PMS	40	0,6	17,5	8	910	70	1,8	5,1
7106	40x0,6x3500/70	NI	40	0,6	17,5	8	3500	70	1,8	5,1

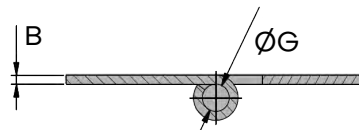
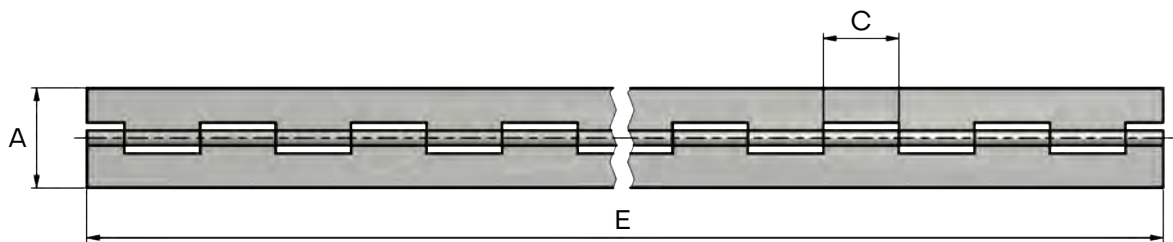


For screwing, we recommend using screws with a diameter of 2.5 mm and a minimum length of 16 mm.

# Piano hinges

## HINGES WITHOUT EMBOSSING, WITHOUT HOLES

Product No.	Type of hinge	SF	Dimensions (mm)				
			A	B	C	E	G
1189	25x0,6x3480		25	0,6	15	3480	2
1286	32x0,6x3480		32	0,6	15	3480	2
1226	32x0,7x3480		32	0,7	15	3480	1,8
1385	40x0,6x3480		40	0,6	15	3480	2



# INDUSTRIAL CONTINUOUS HINGES

TKZ industrial continuous hinges are special, high-quality, and durable hinges for industrial needs in accordance with DIN 7956.

The hinges are made of steel, galvanized or stainless steel, brass, and aluminum alloys. The hinges are made from a pre-determined semi-finished product that is completed in subsequent operations to form the wing with joints.

You can have them in a wide range of material thicknesses and dimensions, which affect their utility properties. This achieves the required load capacity and ensures a perfect connection between the hinge and the mounted parts.

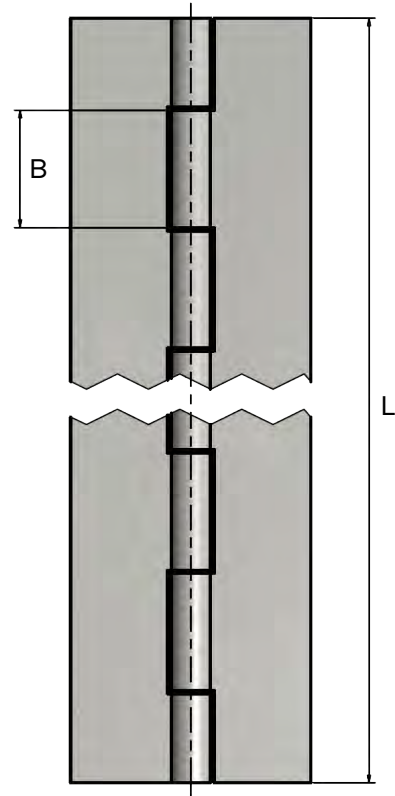
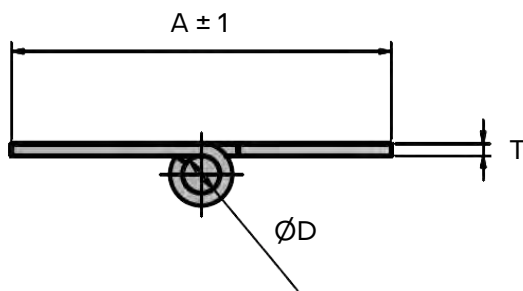
If you do not find a product in our range of industrial hinges that satisfies you, we will be happy to produce hinges exactly according to your needs, as described in the Custom Hinges section.



# Industrial continuous hinges

## STANDARD SIZE

STANDARD SIZE	
Standard length L (mm)	1 000/2 000
Maximum length L (mm)	2 990
Joint width (mm)	30/60



# Industrial continuous hinges

## WITHOUT SURFACE TREATMENT

STEEL DC01, EN10130, Rm = 270 - 410 MPa

PIN S235JRC, EN10277-2

Material thickness T (mm)	Pin Ø D (mm)	B (mm)	Hinge width A (mm)								
			32	40	45	50	60	70	80	90	100
1,5	3	30	S	S	S	S	S				
2	6					S	S	S	S	S	
2,5	8	60					S	S	S		
3	10										S

## HOT-DIP GALVANIZED

STEEL DX51D, EN10346, Rm = 270 - 500 MPa, Z275MAC

PIN S235JRC, EN10277-2, zinc plated

Material thickness T (mm)	Pin Ø D (mm)	B (mm)	Hinge width A (mm)								
			32	40	45	50	60	70	80	90	100
1,5	3	30	S	S	S	S	S				
2	6					S	S	S	S	S	

## STAINLESS STEEL 1.4301

STEEL 1.4301, EN10088-2, Rm = 540 - 750 MPa, matte surface 2B

PIN 1.4301, EN10088-2

Material thickness T (mm)	Pin Ø D (mm)	B (mm)	Hinge width A (mm)								
			32	40	45	50	60	70	80	90	100
1,5	3	30	S	S	S	S	S				
2	6					S	S	S	S	S	

S = STANDARD MANUFACTURED DIMENSIONS

Parameters according to DIN 7956, tolerance ČSN EN 2768 - m.  
On request, stainless steel 1.4404 (AISI 316L), brass CuZn37, AL alloy EN AW 5754.

# CUSTOM HINGES

In practice, it happens that none of the previously mentioned piano hinges, standard hinges, or industrial hinges meet the needs of our clients. In such a case, we are ready to produce hinges according to your exact specifications.

With custom hinges, you can freely choose not only the dimensions and shape of the wings but also their 3D profiling to 100% meet your needs. You can also precisely define the pin locking method, wing connections, shapes and sizes of holes, additional fastening elements, or even their absence.

A wide range of surface treatments is a matter of course.

We manufacture according to the design documentation or received samples. We can handle situations where the client only has two demanding parts that need to be efficiently connected and expects us to come up with a solution. In such a case, our development department makes an initial design, then technical documentation, determines the material, produces the necessary tools, and finally the individual parts of the product. In the end, we assemble the final product with the necessary surface treatment and packaging.

# Custom hinges

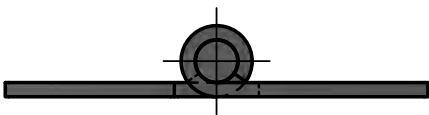
## ORDER REALIZATION

Custom production has no limitations. It follows relatively simple steps:

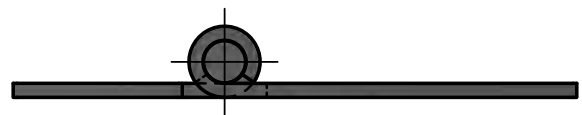
1. Your technical specifications, sample, or discussion of your needs.
2. Definition of expected load capacity, accuracy, and material and surface treatment requirements.
3. Determination of the expected order volume and delivery date for the hinges.
4. Agreement on the possible production of a prototype and possibly a validation series.
5. Preparation of an offer, solution, delivery date, and price.
6. Agreement on the terms of cooperation.
7. If it is interesting for you, we will gladly welcome you to our plant.
8. Production of the necessary tools according to the specifications, if needed.
9. Production and evaluation of a prototype or validation series, if needed.
10. Start of standard production.
11. Delivery of the final product.

## BENDING VARIATIONS

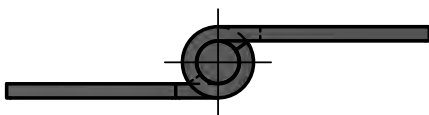
### STANDARD



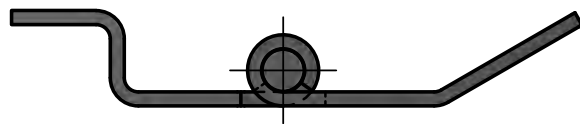
### UNEQUAL WINGS



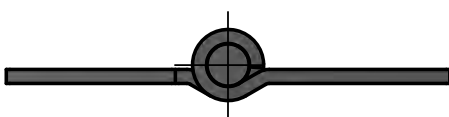
### REVERSE ASSEMBLY OF WINGS



### BENT WINGS

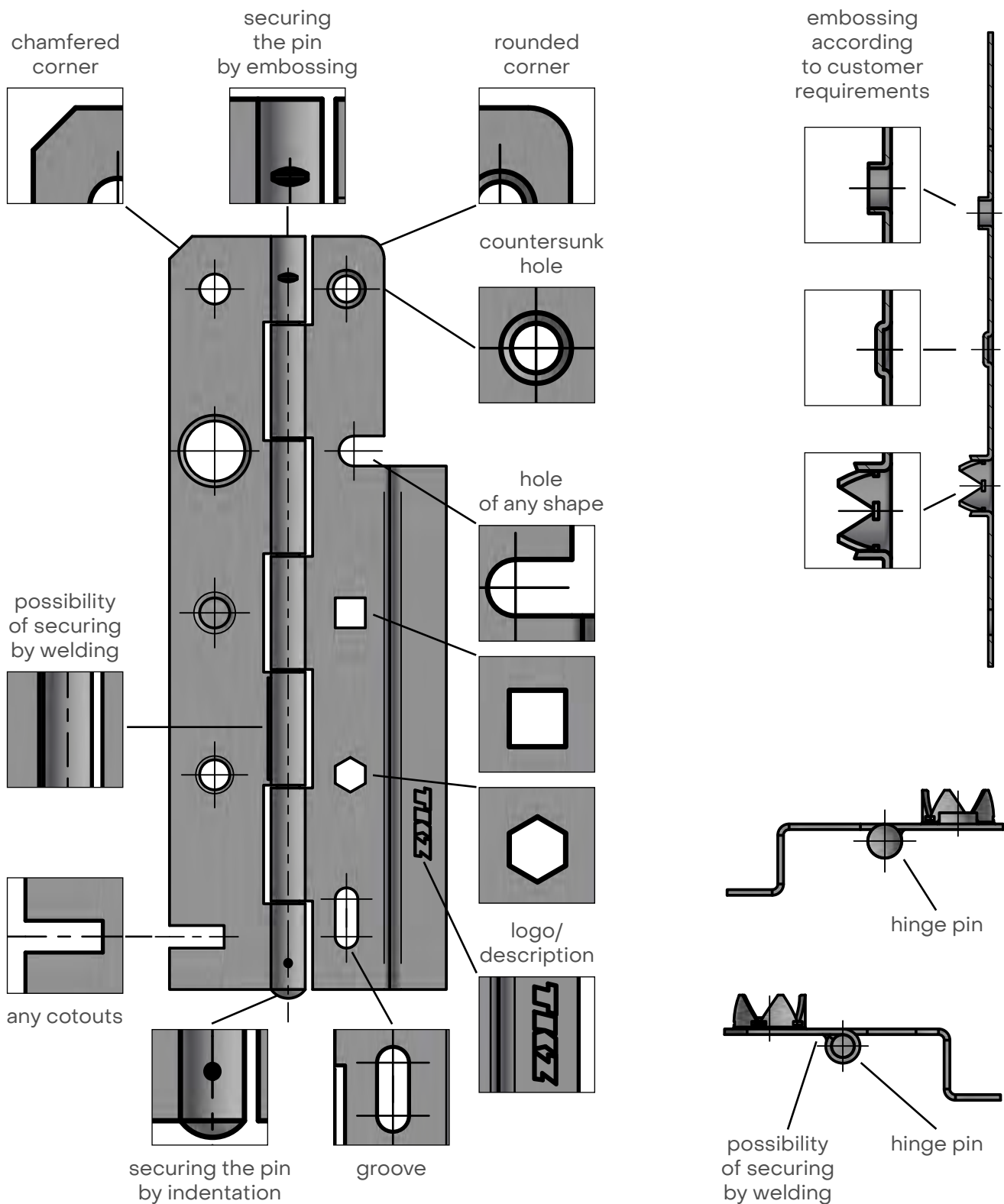


### SHAPED WINGS



# Custom hinges

## SOME POSSIBLE WING VARIATIONS





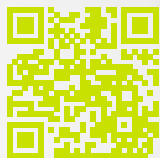
# Other products and services offered by TKZ

## WINDOW AND DOOR HINGES



## HISTORICAL HINGES





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