

What Are Parallel Keys Used For?

Engineering Hardware & Fasteners · engineeringhardware.com/applications/parallel-keys

[Fasteners](#) / [Keys](#) / [Parallel Keys](#) / Applications

Keys · DIN 6885 / ISO 773 · Application guide

Typical applications, the industries that specify parallel keys, and how to choose the right size, material and finish for the joint.

Parallel Keys are used for transmitting torque between a shaft and a hub. They are manufactured to DIN 6885 / ISO 773, and selection is driven by the key section, the fit and tolerance the assembly requires, and the service environment.

Primary duty

Transmitting torque between a shaft and a hub

Governing standard

DIN 6885 / ISO 773

Key section range

68 mm to 440500 mm

Category

Keys

Application notes are general engineering guidance. Verify the property class and any approval requirement against your own design calculation.



Parallel Keys are selected when an assembly calls for transmitting torque between a shaft and a hub. This application guide to the DIN 6885 / ISO 773 type covers concrete end-uses, the specification checklist, correct installation, and where an alternative fastener performs better. Stocked across roughly 68 mm to 440500 mm, they cover heavy and structural work.

Typical Applications for Parallel Keys

The most common settings where these are specified:

- **Gearboxes & motors:** transmitting torque from a shaft to a hub.
- **Pumps & fans:** driving rotating components without slip.
- **General machine building:** fastening covers, brackets, motors and sub-assemblies on production equipment.
- **Maintenance & repair (MRO):** a stocked size for servicing existing plant where the original fastener spec must be matched.
- **Fabrication & metalwork:** bench and on-site assembly of steel frames, enclosures and weldments.

How to Specify Parallel Keys for Your Application

- **Size:** Select on key section, and confirm it against the mating feature in the assembly. This product spans 68 mm–440500 mm; check the full table below for the exact dimensions of each size.

- **Material:** Choose the material and finish for the service environment — plated steel for general use, stainless for corrosion resistance.
- **Environment:** For damp, coastal or chemical exposure prefer A4/316 stainless or a suitable coating; indoors, plated steel or A2 is usually sufficient.
- **Standard:** This product is supplied to DIN 6885 / ISO 773. Quoting the standard on your order guarantees interchangeable dimensions between suppliers.

Where Parallel Keys Are Not the Right Choice

Not for very high reversing torque without an interference fit, and not as an axial retainer.

Technical Drawing

Customize the parameters below — every spec field is editable, and the drawing redraws to match the values you choose. Changing the size will snap the other fields to that size's standard values; you can then override any individual value.

Sends the selected values to the quote form below.

Request a Quote

The form below follows the current technical drawing configuration. Change the drawing values above and the request details update automatically.

Dimensions & Specifications (DIN 6885 / ISO 773)

Shaft diameter range (mm)	Key width b (mm)	Key height h (mm)	Key length range (mm)	Shaft groove depth t1 (mm)	Hub groove depth t2 (mm)	Reference standard	Notes
6~8	2	2	6~20	1.2	1.0	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
8~10	3	3	6~36	1.8	1.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
10~12	4	4	8~45	2.5	1.8	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
12~17	5	5	10~56	3.0	2.3	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
17~22	6	6	14~70	3.5	2.8	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
22~30	8	7	18~90	4.0	3.3	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
30~38	10	8	22~110	5.0	3.3	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
38~44	12	8	28~140	5.0	3.3	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square

Shaft diameter range (mm)	Key width b (mm)	Key height h (mm)	Key length range (mm)	Shaft groove depth t1 (mm)	Hub groove depth t2 (mm)	Reference standard	Notes
44~50	14	9	36~160	5.5	3.8	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
50~58	16	10	45~180	6.0	4.3	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
58~65	18	11	50~200	7.0	4.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
65~75	20	12	56~220	7.5	4.9	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
75~85	22	14	63~250	9.0	5.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
85~95	25	14	70~280	9.0	5.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
95~110	28	16	80~320	10.0	6.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
110~130	32	18	90~360	11.0	7.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square

Shaft diameter range (mm)	Key width b (mm)	Key height h (mm)	Key length range (mm)	Shaft groove depth t1 (mm)	Hub groove depth t2 (mm)	Reference standard	Notes
130~150	36	20	100~400	12.0	8.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
150~170	40	22	100~400	13.0	9.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
170~200	45	25	110~450	15.0	10.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
200~230	50	28	125~500	17.0	11.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
230~260	56	32	140~500	20.0	12.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
260~290	63	32	160~500	20.0	12.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
290~330	70	36	180~500	22.0	14.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
330~380	80	40	200~500	25.0	15.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square

Shaft diameter range (mm)	Key width b (mm)	Key height h (mm)	Key length range (mm)	Shaft groove depth t1 (mm)	Hub groove depth t2 (mm)	Reference standard	Notes
380~440	90	45	220~500	28.0	17.4	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square
440~500	100	50	250~500	31.0	19.5	DIN 6885 type A / ISO 773	Type A round ends; B square ends; C one round one square

Inside the plant

Manufactured in our own plant

This part is cold-formed, threaded, heat-treated and finished in-house. The stages below are where its class and finish are actually decided.

1.



01

Cold heading

Wire rod is drawn to size and cold-formed into blanks. Forming rather than cutting keeps the grain flow continuous around the head, which is where a bolt is most likely to fail.

Head dimensions and under-head radius checked at set-up and per shift.



2.

02

Thread rolling

Threads are rolled between hardened dies rather than cut. Rolled threads are stronger in fatigue than cut threads and hold pitch and flank angle far more consistently across a batch.

Go / no-go ring gauges to ISO 965 tolerance class 6g.

3.



03

Heat treatment

Quench-and-temper brings carbon and alloy steel to the property class ordered — 8.8, 10.9 or 12.9 — with the furnace charge tracked so a finished lot can be traced back to it.

Core hardness and tensile tested per lot to ISO 898-1.

4.



04

Surface treatment

Zinc, zinc-nickel, hot-dip galvanizing, black oxide, phosphate and Dacromet, selected against the service environment rather than against the price list.

Coating thickness and neutral salt spray hours to ISO 9227.

Frequently Asked Questions

What material should Parallel Keys be for outdoor use?

For damp, coastal or chemical environments specify A4 (316) stainless or a suitably coated steel. For indoor or dry use, A2 (304) stainless or zinc-plated steel is normally adequate.

Are Parallel Keys made to a recognized standard?

Yes — they are manufactured to DIN 6885 / ISO 773, so dimensions are interchangeable between suppliers when you quote the standard on your order.

What are Parallel Keys used for?

Transmitting torque between a shaft and a hub. They are supplied to DIN 6885 / ISO 773.

Which industries use Parallel Keys?

They are commonly specified in general machine building, maintenance & repair (mro) and fabrication & metalwork, among other sectors.

Can I get a quote for Parallel Keys in the size and material I need?

Yes. Use the technical drawing and quote form on this page to set the size and options, then send the exact configuration to our team for pricing and lead time.

Related Pages

Product page: [Parallel Keys — specifications & sizes](#)

Parallel Keys Specification Guides

- [A4 stainless Parallel Keys](#)

Related Fastener Applications

- [Woodruff Keys applications](#)