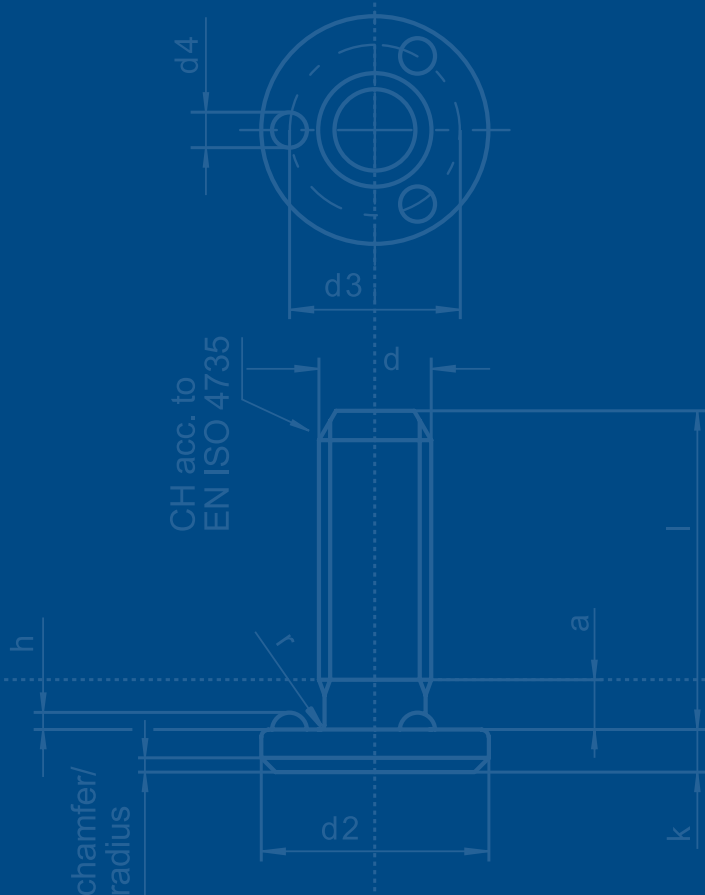




Welding screws and pins

Product information



Welding screws and pins



Welding screw
with elongated lug and flat point



Welding screw
with coned half dog point



Welding pin
with elongated lug



Round lug
(below/on the head)



Welding pin
with annular projection



Welding screw
with link projection

Welding screws and pins

Welding screws and pins are used primarily for the resistance welding process for component production in the automotive industry.

With professional processing, this product group achieves extremely high tear-off forces and fracture torques.

These welding elements are mainly distinguished by various lug geometries and sizes.

The sheet thickness and tear-off forces to be observed after welding determine the welding lug volume, which in turn determines the necessary energy requirement. Other important features are the head and shaft geometry, strength category and finish. Every customer has special requirements, which we meet in real time with our technology, toolmaking and production.

Materials

We manufacture welding screws and pins using the following materials:

- Construction steels in 4.8/5.8/6.8
- Heat-treatable cold-dip steels in 8.8/9.8/10.9
- Stainless steel alloys in A2-50 and A2-70
- Aluminium and copper alloys (on request)

Types of finish

We offer the following finishes:

- Blank stained and lightly oiled
- Galvanic zinc and nickel coatings
- Plastic coating to protect the thread against welding spray
- Various screw locking sealants and insulation coatings (e.g. Nycote)

Thread and shaft ends

Our standard welding screws have a metric ISO thread to DIN 13-20 and at the shaft end, unless specified otherwise, there is a flat point "CH" to DIN EN ISO 4753.

Of course, shaft end versions "RL; FL; SD; LD; CN; TC; PF and PC" can also be produced on any welding screw in accordance with the specified standard. Custom thread types, e.g. metric ISO fine thread, lacquer groove thread, etc., can also be supplied.

Welding screws according to DIN 34817

The most common lug form in welding screws is the **elongated protection lug**. The lug located under the head can be found in **DIN 34817** and various automotive standards.

Standard dimensions of the strength category 8.8 without surface protection (stained and lightly oiled) are often in stock:

| | |
|---------------|----------------|
| M5 x 10 to 35 | M8 x 16 to 45 |
| M6 x 12 to 40 | M10 x 20 to 50 |

In individual cases, the elongated projection lug is also required on the head. The same lug geometry can also be used with welding studs without thread. All custom welding screws and studs are manufactured to order.

Schmeck factory standard

Our in-house standards, abbreviated to **SWN** and allocated a 4-digit number, are based on our many years of production experience.

The **SWN 2501** describes one type from the group of "circular projection welding screws". This has three circular projections arranged 120° below the head.

According to **SWN 2502**, three circular projections are located on the head.

SWN 2503 shows four circular projections each offset by 90° below the head, whereas they are on the head in **SWN 2504**.

We also produce **circular projections** according to customer requirements based on drawings or factory standards.

If, after welding, gas and/or oil leak-tightness is required, annular projection **welding screws** are used. The **annular projections** can be produced below or on the head in line with various automotive standards and customer drawings. In **SWN 2505**, the annular projection is below the head.

We produce all **SWN products** in the following dimensions:

| | |
|---------------|----------------|
| M4 x 8 to 40 | M8 x 15 to 70 |
| M5 x 10 to 50 | M10 x 15 to 70 |
| M6 x 10 to 60 | M12 x 15 to 50 |

If **link projection welding screws** are required, we manufacture them according to your drawings and various factory standards.

We also produce welding screws according to all automotive standards known worldwide.



Elongated lug welding screw
DIN 34817



Elongated lug welding stud
without thread



Circular projection welding screw
In-house standard SWN 2501



Circular projection welding screw
SWN 2503 (M4 x 13.5 V2A)



Annular projection welding screw
SWN 2505

BMW – GS 92022

Mercedes Benz – MBN 75 K

Volkswagen, Porsche, Volvo,
Toyota, Renault, etc.



Our scope of production and delivery covers:

- Weld screws to DIN 34817,
In-house standard and various automotive standards
- Weld screws to DIN EN ISO 13918
- Friction weld screws
- Weld nuts to DIN 928 and DIN 929
- Press-fit and rivet studs
- Screw-and-washer assemblies and
double screw-and-washer assemblies
- Standard and drawing parts/cold-formed parts



*Are you looking for a fixing solution
or do you have any technical questions
about our joining elements?*

*Why not contact us.
We look forward to offering you
the right fixing option.*

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