



Designated according to The Construction Products (Amendment etc.) (EU Exit) Regulations 2020

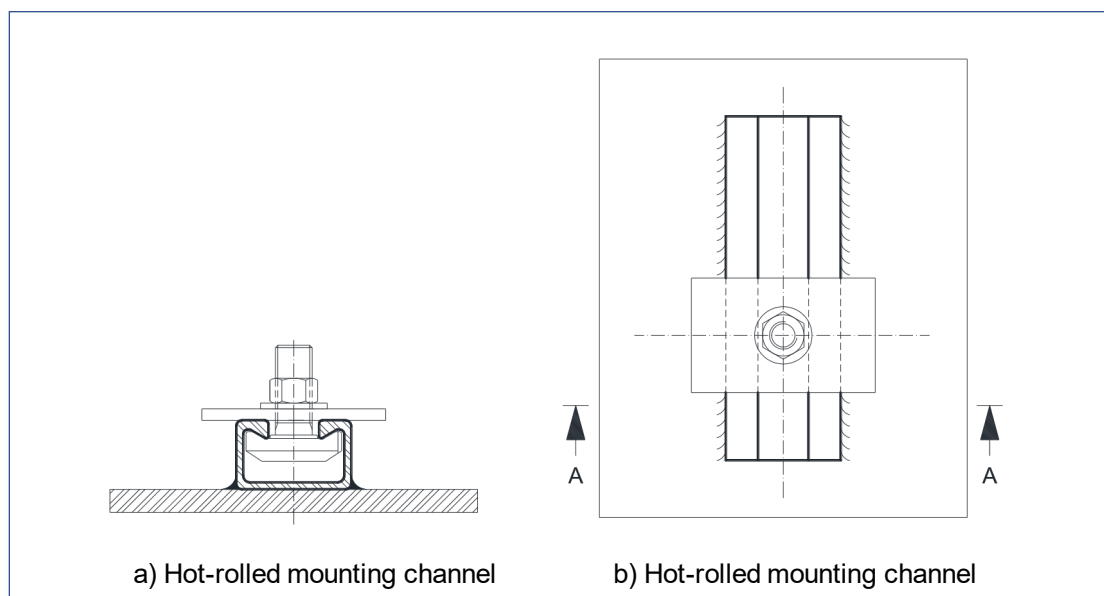
| UK Technical Assessment | UKTA-0836-22/6151 of 11/07/2022 |
|--|--|
| Technical Assessment Body issuing the UK Technical Assessment: | British Board of Agrément |
| Trade name of the construction product: | JORDAHL Mounting Channels JM |
| Product family to which the construction product belongs: | Fixings |
| Manufacturer: | PohlCon GmbH Nobelstrasse 51 12057 Berlin Germany |
| Manufacturing plant(s): | PohlCon GmbH Industriestrasse 5 14959 Trebbin Germany |
| This UK Technical Assessment contains: | 16 pages including 9 annexes which form an integral part of this assessment |
| This UK Technical Assessment is issued in accordance with The Construction Products (Amendment etc.) (EU Exit) Regulations 2020 on the basis of: | European Assessment Document (EAD) 330667-00-0602, <i>Hot-rolled mounting channel</i> |

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1 Technical description of the product

JORDAHL Mounting Channels JM is a hot-rolled mounting channel consisting of a channel profile with two lips produced of carbon steel or stainless steel, in combination with channel bolts. This product has a smooth surface of the channel lips and a smooth surface on the underside of the channel bolt head in contact with the channel. The hot-rolled mounting channels are welded on a steel plate. A fixture shall be connected to the hot-rolled mounting channel by T-bolts with appropriate hexagon nuts and washers. Figure 1 shows an example for a hot rolled mounting channel.

Figure 1: Example of a hot-rolled mounting channels with corresponding channel bolt



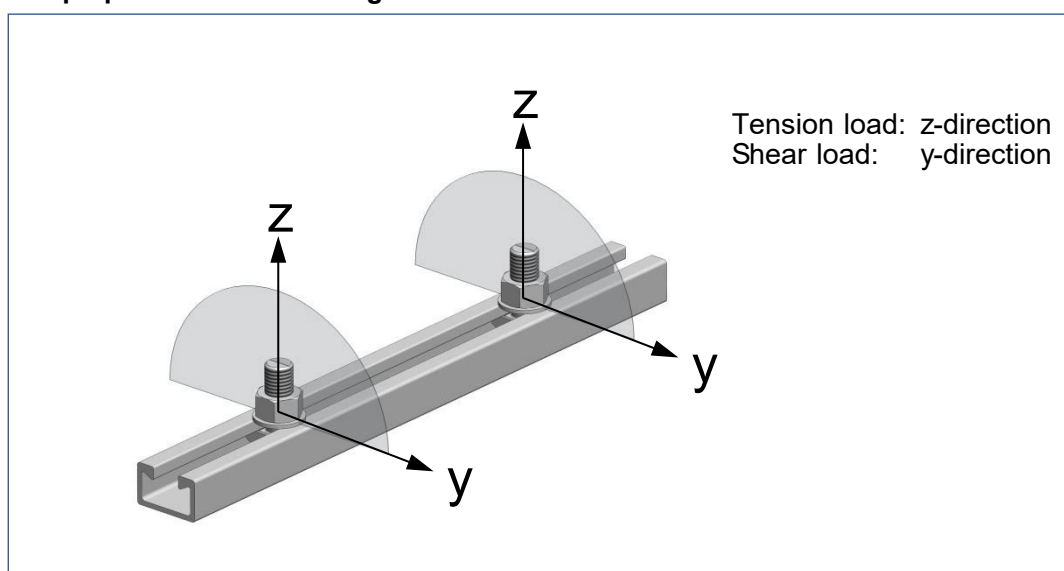
The components and the system setup of the product are given in Annex (1-9).

2 Specification of the intended use(s) in accordance with the applicable UK Assessment Document (hereinafter UKAD)

The hot-rolled mounting channels may be used for the installation and the connection of several construction systems. They can be welded to steel constructions or can be connected to frame constructions. The rectangular corners of the channel have very good properties for welding processes. The hot-rolled mounting channel may be used to transmit tensile loads, shear loads perpendicular to the longitudinal channel axis or a combination of these loads (see Figure 2).

The shear loads may be applied with or without lever arm.

Figure 2: Admissible load directions covered by this EAD: tension loads and shear load perpendicular to the longitudinal axis



The performances given in Section 3 are only valid if the hot-rolled mounting channel is used in compliance with the specifications and conditions given in Annex (1-9).

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the hot-rolled mounting channel of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

3.1 Mechanical resistance and stability (BWR 1)

| Essential characteristic | Performance |
|---|--------------------|
| Characteristic resistance for tension under static and quasi-static loading | See Annex 4 |
| Characteristic resistance for shear under static and quasi-static loading | See Annex 5 |
| Installation parameters | See Annex 9 |
| Geometric values | See Annex 1 - 3 |
| Durability | See Annex 1 |
| Characteristic resistance for fatigue tensile loading | See Annex 6 |

3.2 Safety in case of fire (BWR 2)

| Essential characteristic | Performance |
|---------------------------------|-------------------------|
| Reaction to fire | No performance assessed |

3.3 Health, hygiene, and the environment (BWR 3)

Not relevant

3.4 Safety and accessibility in use (BWR 4)

Not relevant

3.5 Protection against noise (BWR 5)

Not relevant

3.6 Energy economy and heat retention (BWR 6)

Not relevant

3.7 Sustainable use of natural resources (BWR 7)

No performance assessed.

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied

4.1 System of assessment and verification of constancy of performance

According to UKAD No. 330667-00-0602 and Annex V of the Construction Products Regulation (Regulation (EU) 305/2011 as brought into UK law and amended, the system of assessment and verification of constancy of performance (AVCP) 2+ applies.

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable UKAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with the British Board of Agrément and made available to the UK Approved Bodies involved in the conformity attestation process.

5.1 UKCA marking for the product/ system must contain the following information:

- Identification number of the Approved Body
- Name/address of the manufacturer of the product/ system
- Marking with intention of clarification of intended use
- Date of marking
- Number of certificate of constancy of performance
- UKTA number.

On behalf of the British Board of Agrément



Date of Issue: 11 July 2022

Hardy Giesler
Chief Executive Officer



British Board of Agrément,
Bucknalls Lane,
Watford,
Hertfordshire
WD25 9BA

ANNEXES

These annexes apply to the product described in the main body of the UK Technical Assessment.

| | |
|---------|---|
| Annex 1 | Product and material |
| Annex 2 | Geometrical profile properties |
| Annex 3 | JORDHAL – T-bolts |
| Annex 4 | Characteristic values for tension loads |
| Annex 5 | Characteristic values for shear loads |
| Annex 6 | Characteristic resistance under fatigue cyclic tension load |
| Annex 7 | Applications |
| Annex 8 | Manufacturer's specification: Mounting Channel |
| Annex 9 | Manufacturer's Specification: Installation of JORDAHL T-bolts in the mounting channel |

Mounting channel
hot rolled profile

Channel e.g.
JM-W 53/34

JORDAHL T-bolt
e.g. JB M16x60

Washer

Hexagon nut

Legend:

h_{ch} Channel height
b_{ch} Width of the channel

Product Identification

W = hot rolled

Table 1: Profile sizes

| Mounting channel | b _{ch} [mm] | h _{ch} [mm] |
|------------------|----------------------|----------------------|
| W 40/22 | 39.50 | 23.00 |
| W 50/30 | 49.00 | 30.00 |
| W 53/34 | 52.50 | 33.50 |
| W 55/42 | 54.50 | 42.00 |
| W 72/48 | 72.00 | 48.00 |

**Marking of the JORDAHL –
T-bolts: e.g. JB 8.8**

J = Identifying mark of the manufacturer
B = T-bolts type
8.8 = Material/Strength grade

Materials channels and bolts

Table 2: Materials and intended use

| 1 | 2 | 3 | 4 | 5 |
|------------------------|---|---|--|--|
| Channel profile | Steel 1.0038; 1.0044 BS EN 10025 hot-dip galv. ≥ 50µm | Steel 1.0038; 1.0044 BS EN 10025 hot-dip galv. ≥ 50µm | Stainless steel 1.4401/1.4404/1.4571; 1.4362 BS EN 10088 | Stainless steel 1.4462/1.4529/1.4547; 1.4362 BS EN 10088 |
| Jordahl T-bolts | Steel, strength grade 4.6/8.8 In dependence on BS EN ISO 898-1: 2013 electroplated ≥ 5 µm | Steel, strength grade 4.6/8.8 In dependence on BS EN ISO 898-1: 2013 electroplated ≥ 5 µm | Stainless steel 1.4401/ 1.4404/1.4571; 1.4362 BS EN ISO 3506-1 | Stainless steel 1.4401/ 1.4462/1.4529; 1.4547 BS EN ISO 3506-1 |

Use conditions

- Structures subject to dry internal conditions (e.g. accommodations, bureaus, schools, hospitals, shops, exceptional internal conditions with usual humidity)
(acc. to Table 2 column 2)
- Structures subject to internal conditions with usual humidity (e.g. kitchen, bath and laundry in residential buildings, exceptional permanent damp conditions and application under water)
(acc. to Table 2 column 3)
- The stainless steel channels, T-bolts, washers and nuts may be used in structures subject to external atmospheric conditions, if no particular aggressive conditions (e.g. permanent, alternating immersion in seawater or the splash zone of seawater, chloride atmosphere of indoor swimming pools or atmosphere with chemical pollution e.g. desulphurization plants or road tunnels where de-icing materials are used) exist
(acc. to Table 2 column 4 – 5)

| | |
|---------------------------------|----------------|
| JORDAHL Mounting Channel | Annex 1 |
| Product and material | |

Hot rolled profile

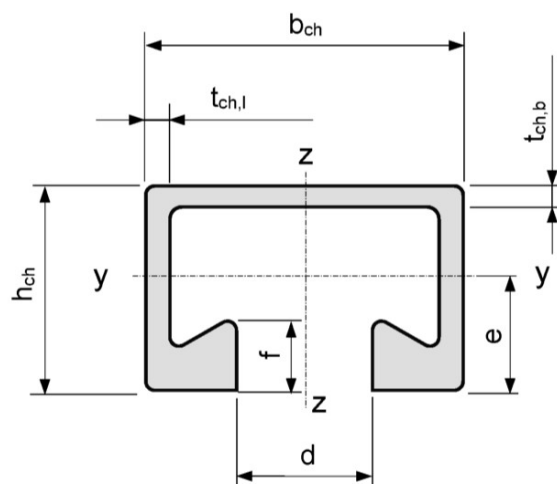


Table 3: Geometrical profile properties

| Mounting channel | Dimensions | | | | | | Material | I_y | I_z | e | W_z | W_y | W_{pl} |
|---------------------|------------|----------|------------|------------|-------|-------|--------------------|--------------------|--------------------|-------|--------------------|--------------------|--------------------|
| | b_{ch} | h_{ch} | $t_{ch,b}$ | $t_{ch,l}$ | d | f | | | | | | | |
| | [mm] | | | | | | | [mm ⁴] | [mm ⁴] | [mm] | [mm ³] | [mm ³] | [mm ³] |
| W 40/22 | 39.50 | 23.00 | 2.60 | 2.30 | 18.00 | 6.00 | Steel | 19939 | 58053 | 12.43 | 2939 | 1604 | 2180 |
| W 50/30 | 49.00 | 30.00 | 3.20 | 2.65 | 22.50 | 7.85 | | 52695 | 138121 | 16.26 | 5638 | 3241 | 4395 |
| W 53/34 | 52.50 | 33.50 | 4.10 | 4.00 | 22.50 | 10.50 | | 93262 | 236986 | 17.44 | 9028 | 5348 | 7177 |
| W 55/42 | 54.50 | 42.00 | 5.00 | 5.00 | 26.00 | 12.90 | | 187464 | 362726 | 22.08 | 13311 | 8490 | 11721 |
| W 72/48 | 72.00 | 48.50 | 4.50 | 5.00 | 33.00 | 15.50 | | 349721 | 832707 | 24.01 | 23131 | 14565 | 18282 |
| W 40/22 | 39.50 | 23.00 | 2.60 | 2.30 | 18.00 | 6.00 | Stainless steel | 19939 | 58053 | 12.43 | 2939 | 1604 | 2180 |
| W 50/30 | 49.00 | 30.00 | 3.20 | 2.65 | 22.50 | 7.85 | | 52695 | 138121 | 16.26 | 5638 | 3241 | 4395 |
| W 53/34 | 52.50 | 33.50 | 4.10 | 4.00 | 22.50 | 10.50 | | 93262 | 236986 | 17.44 | 9028 | 5348 | 7177 |
| W 72/48 | 72.00 | 48.50 | 4.50 | 5.00 | 33.00 | 15.50 | | 349721 | 832707 | 24.01 | 23131 | 14565 | 18282 |

JORDAHL Mounting Channel

Geometrical profile properties

Annex 2

Table 4: Minimum spacing and setting torque of JORDAHL –T-bolts

| Mounting channel | T-bolts Ø | Setting Torque T_{inst} ²⁾ | | | |
|------------------|--------------|---|------|-------------------------------|--|
| | | Steel-Steel contact | | | |
| | | 4.6 | 8.8 | A4-50; HC-50 ¹⁾ | A4-70; HC-70; F4-70 L4-70 ¹⁾ |
| | [mm] | [Nm] | | | |
| W 40/22 | 10 | 15 | 40 | 13 | 30 |
| | 12 | 25 | 70 | 24 | 50 |
| | 16 | 65 | 180 | 60 | 130 |
| W 50/30 | 10 | 15 | 40 | 13 | 30 |
| | 12 | 25 | 70 | 24 | 50 |
| | 16 | 65 | 180 | 60 | 130 |
| | 20 | 130 | 360 | 115 | 250 |
| W 53/34 | 10 | 15 | 40 | 13 | 30 |
| | 12 | 25 | 70 | 24 | 50 |
| | 16 | 65 | 180 | 60 | 130 |
| | 20 | 130 | 360 | 115 | 250 |
| W 55/42 | 10 | 15 | 40 | 13 | 30 |
| | 12 | 25 | 70 | 24 | 50 |
| | 16 | 65 | 180 | 60 | 130 |
| | 20 | 130 | 360 | 115 | 250 |
| | 24 | 230 | 620 | 200 | 420 |
| W 72/48 | 20 | 130 | 360 | 115 | 250 |
| | 24 | 230 | 620 | 200 | 420 |
| | 27 | 340 | 900 | 300 | 630 |
| | 30 | 460 | 1200 | 400 | 850 |

¹⁾ Materials according to Annex 9

²⁾ T_{inst} must not be exceeded

Table 6: Strength grade

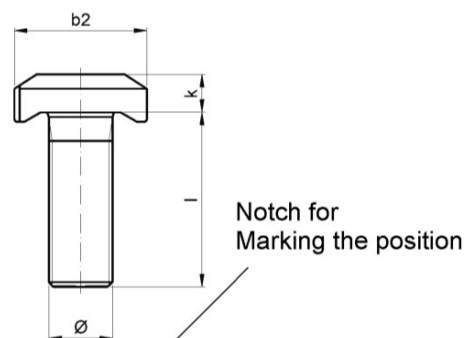
| T-bolts | | Steel ¹⁾ | | Stainless Steel ¹⁾ | |
|-----------------|---------|---------------------|-----|-------------------------------|----------------------------------|
| Strength grade | | 4.6 | 8.8 | A4-50 HC-50 | A4-70 HC-70 F4-70 L4-70 |
| f _{uk} | [N/mm²] | 400 | 800 | 500 | 700 |
| f _{yk} | | 240 | 640 | 210 | 450 |
| Finish | | z.p., h.d.g. | | — | |

¹⁾ Materials according to Annex 9

Table 5: Dimensions of the JORDAHL – T-bolts

| Mounting channel | T- bolts type | T-bolts dimensions | | | | Length l |
|---------------------|---------------------|-----------------------|----------------|------|--------|-------------|
| | | b ₁ | b ₂ | k | Ø | |
| | | [mm] | | | | [mm] |
| W 40/22 | JC | 14.0 | 32.0 | 8.0 | 10 | 20-150 |
| | | | | 8.0 | 12 | 20-250 |
| | | 17.0 | | 11.0 | 16 | 30-300 |
| W 50/30 W 53/34 | JB | 17.0 | 41.5 | 9.0 | 10 | 25-100 |
| | | | | 10.0 | 12 | 30-300 |
| | | 21.0 | | 12.5 | 16 | 30-300 |
| | | | | 14.5 | 20 | 30-300 |
| W 55/42 | JB | 17.0 | 41.5 | 9.0 | 10 | 25-100 |
| | | | | 10.0 | 12 | 30-300 |
| | | 21.0 | | 12.5 | 16 | 30-300 |
| | | | | 14.5 | 20 | 30-300 |
| | JE | 24.5 | 18.5 | 24 | 40-300 | |
| W 72/48 | JA | 25.0 | 58.0 | 14.0 | 20 | 50-300 |
| | | | | 20.0 | 24 | 50-250 |
| | | 31.0 | | 21.6 | 27 | 50-250 |
| | | | | 21.6 | 30 | 30-300 |

Hook-head
T-bolt



alternative head shape

Marking of the T-bolts head acc. to Annex 1

JORDAHL Mounting Channel

JORDAHL – T-bolts

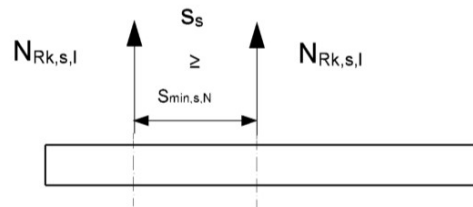
Annex 3

Table 7: Characteristic values – Steel failure channel

| Mounting channel | | | W 40/22 | W 50/30 | W 53/34 | W 55/42 | W 72/48 |
|---|----------------------|------|---------|---------|---------|---------|---------|
| Steel failure, Local flexure of channel lips for $s_s \geq s_{min,s,N}$ | | | | | | | |
| Spacing of T-bolts for $N_{Rk,s,l}$ | $s_{min,s,N}$ | [mm] | 150 | 200 | 200 | 250 | 300 |
| Characteristic resistance | $N_{Rk,s,l}^{2)}$ | [kN] | 21 | 37 | 66 | 98 | 119 |
| Partial safety factor | $\gamma_{Ms,l}^{1)}$ | | 1.8 | | | | |

¹⁾ In absence of other national regulations

²⁾ For steel and stainless steel



Assumption of system

Table 8: Characteristic values for tension loads – Steel failure JORDAHL – T- bolts

| T - bolts Ø | | | | M 10 | M 12 | M 16 | M 20 | M 24 | M 27 | M 30 |
|---------------------------|----------------------|------|--|---------------|------|-------|-------|-------|-------|-------|
| | | | | Steel failure | | | | | | |
| Characteristic resistance | $N_{Rk,s,s}^{2)}$ | [kN] | 4.6 | 23.2 | 33.7 | 62.8 | 98.0 | 141.2 | 183.6 | 224.4 |
| | | | 8.8 | 46.4 | 67.4 | 125.6 | 196.0 | 282.4 | 367.2 | 448.8 |
| | | | A4-50 HC-50 ¹⁾ | 29.0 | 42.2 | 78.5 | 122.5 | 176.5 | 229.5 | 280.5 |
| | | | A4-70 F4-70 L4-70 HC-70 ¹⁾ | 40.6 | 59.0 | 109.9 | 171.5 | 247.1 | 321.3 | 392.7 |
| | | | | | | | | | | |
| Partial safety factor | $\gamma_{Ms,s}^{3)}$ | | 4.6 | 2.00 | | | | | | |
| | | | 8.8 | 1.50 | | | | | | |
| | | | A4-50 HC-50 ¹⁾ | 2.86 | | | | | | |
| | | | A4-70 F4-70 L4-70 HC-70 ¹⁾ | 1.87 | | | | | | |
| | | | | | | | | | | |

¹⁾ Materials according to Annex 9

²⁾ In conformity to BS EN ISO 898-1: 2013

³⁾ In absence of other national regulations

Table 9: Displacement under tension loads

| Mounting channel | | | W 40/22 | W 50/30 | W 53/34 | W 55/42 | W 72/48 |
|------------------|--------------------|------|---------|---------|---------|---------|---------|
| Tension load | N_{Ek} | [kN] | 8.3 | 14.7 | 26.2 | 38.9 | 47.2 |
| displacement | $\delta_{V\infty}$ | [mm] | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |

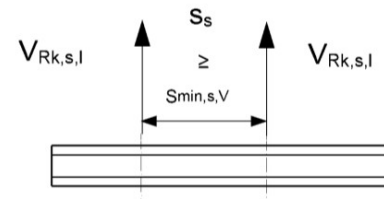
JORDAHL Mounting Channel

Characteristic values for tension loads

Annex 4

Table 10: Characteristic values for shear loads

| Mounting channel | | | W 40/22 | W 50/30 | W 53/34 | W 55/42 | W 72/48 |
|---|----------------------|------|---------|---------|---------|---------|---------|
| Steel failure, Local flexure of channel lips for $s_s \geq s_{min,s,V}$ | | | | | | | |
| Spacing of T-bolts for $V_{Rk,s,l}$ | $s_{min,s,V}$ | [mm] | 150 | 200 | 200 | 250 | 300 |
| Characteristic resistance | $V_{Rk,s,l}^{2)}$ | [kN] | 12 | 26 | 38 | 44 | 44 |
| Partial safety factor | $\gamma_{Ms,l}^{1)}$ | | 1.8 | | | | |



Assumption of system

¹⁾ In absence of other national regulations²⁾ For steel and stainless steel

Table 11: Characteristic values for shear loads – steel failure JORDAHL – T-bolts

| T-bolts Ø | | | | M 10 | M 12 | M 16 | M 20 | M 24 | M 27 | M 30 |
|-----------------------------------|----------------------|------|--|---------------|-------|-------|-------|-------|--------|--------|
| | | | | Steel failure | | | | | | |
| Characteristic resistance | $V_{Rk,s,s}^{2)}$ | [kN] | 4.6 | 13.9 | 20.2 | 37.7 | 58.8 | 84.7 | 110.2 | 134.6 |
| | | | 8.8 | 23.2 | 33.7 | 62.8 | 98.0 | 141.2 | 183.6 | 224.4 |
| | | | A4-50 HC-50 ¹⁾ | 17.4 | 25.3 | 47.1 | 73.5 | 105.9 | 137.7 | 168.3 |
| | | | A4-70 F4-70 L4-70 HC-70 ¹⁾ | 24.4 | 35.4 | 65.9 | 102.9 | 148.3 | 192.8 | 235.6 |
| | | | 4.6 | 29.9 | 52.4 | 133.2 | 259.6 | 449.0 | 665.8 | 899.6 |
| | | | 8.8 | 59.8 | 104.8 | 266.4 | 519.3 | 898.0 | 1331.5 | 1799.2 |
| Characteristic flexure resistance | $M_{Rk,s}^o$ | [Nm] | A4-50 HC-50 ¹⁾ | 37.4 | 65.5 | 166.5 | 324.5 | 561.3 | 832.2 | 1124.5 |
| | | | A4-70 F4-70 L4-70 HC-70 ¹⁾ | 52.3 | 91.7 | 233.1 | 454.4 | 785.8 | 1165.1 | 1574.3 |
| | | | 4.6 | 1.67 | | | | | | |
| | | | 8.8 | 1.25 | | | | | | |
| | | | A4-50 HC-50 ¹⁾ | 2.38 | | | | | | |
| | | | A4-70 F4-70 L4-70 HC-70 ¹⁾ | 1.56 | | | | | | |
| Partial safety factor | $\gamma_{Ms,s}^{3)}$ | | 4.6 | 1.67 | | | | | | |
| | | | 8.8 | 1.25 | | | | | | |
| | | | A4-50 HC-50 ¹⁾ | 2.38 | | | | | | |
| | | | A4-70 F4-70 L4-70 HC-70 ¹⁾ | 1.56 | | | | | | |
| | | | 4.6 | 1.67 | | | | | | |
| | | | 8.8 | 1.25 | | | | | | |

¹⁾ Materials according to Annex 9²⁾ In conformity to BS EN ISO 898-1: 2013³⁾ In absence of other national regulations

Table 12: Displacement under shear loads

| Mounting channel | | | W 40/22 | W 50/30 | W 53/34 | W 55/42 | W 72/48 |
|------------------|-------------------|------|---------|---------|---------|---------|---------|
| Shear load | V_{Ek} | [kN] | 4.7 | 10.3 | 15.1 | 17.5 | 17.5 |
| displacement * | $\delta_{V_{Ek}}$ | [mm] | 0.9 | 0.9 | 1.8 | 1.8 | 1.8 |

* without slip of channel bolt (hole clearance)

JORDAHL Mounting Channel**Characteristic values for shear loads**

Annex 5

Table 13: Combinations for hot-rolled mounting channels and T-bolts for fatigue-inducing repeated tensile loading

| Mounting channel | T-bolts | | | |
|---------------------|---------|--------|------------|----------------|
| | Type | d [mm] | Strength | Finish |
| W 40/22 | JC | M12 | 8.8 | z.p. h.d.g. |
| | | M16 | 4.6 8.8 | |
| W 50/30 | JB | M16 | 4.6 | |
| | | M20 | 8.8 | |
| W 53/34 | JB | M16 | 8.8 | |
| | | M20 | | |

Table 14: Determined values for fatigue resistance

| Mounting channel | n_c | k | $\Delta N_{Rsk,C}$ [kN] |
|------------------|----------------|-------|----------------------------|
| W 40/22 | $2 \cdot 10^6$ | 3.601 | 2.7 |
| W 50/30 | $2 \cdot 10^6$ | 4.151 | 5.2 |
| W 53/34 | $2 \cdot 10^6$ | 4.680 | 7.8 |

Equation for determining the characteristics fatigue resistance for repeated tensile loading (in accordance with BS EN 1993-1-9: 2005)

$$\Delta N_{Rsk,0} = \Delta N_{Rsk,C} \cdot \left(\frac{n}{n_c} \right)^{-1/k}$$

where

$\Delta N_{Rsk,0}$ = characteristic fatigue resistance after n load cycles without static preload

n_c = number of load cycles

$\Delta N_{Rsk,C}$ = characteristic fatigue resistance after $2 \cdot 10^6$ load cycles

n_c, k see Table 14

Table 15: Characteristic fatigue resistance after n load cycles without static preload ($N_{Ek} = 0$)

| Mounting channel | | | W40/22 | W50/30 | W53/34 |
|--|---------------------|---------------------------------|--------|--------|--------|
| Steel failure | | | | | |
| characteristic fatigue resistance for n load cycles | $\leq 10^5$ | $\Delta N_{Rsk,0}^{1)}$ [kN] | 6.2 | 10.8 | 14.9 |
| | $\leq 2 \cdot 10^5$ | | 5.1 | 9.1 | 12.8 |
| | $\leq 5 \cdot 10^5$ | | 3.9 | 7.3 | 10.5 |
| | $\leq 10^6$ | | 3.2 | 6.2 | 9.1 |
| | $\leq 2 \cdot 10^6$ | | 2.7 | 5.2 | 7.8 |
| | $\leq 5 \cdot 10^6$ | | 2.1 | 4.2 | 6.4 |
| | $\leq 10^7$ | | 1.7 | 3.6 | 5.6 |
| | $> 10^7$ | | 1.7 | 3.6 | 5.6 |

¹⁾ The given resistances are valid for the profile and the T-bolt.

Determining the characteristic fatigue resistance with static preload ($N_{Ek} > 0$).

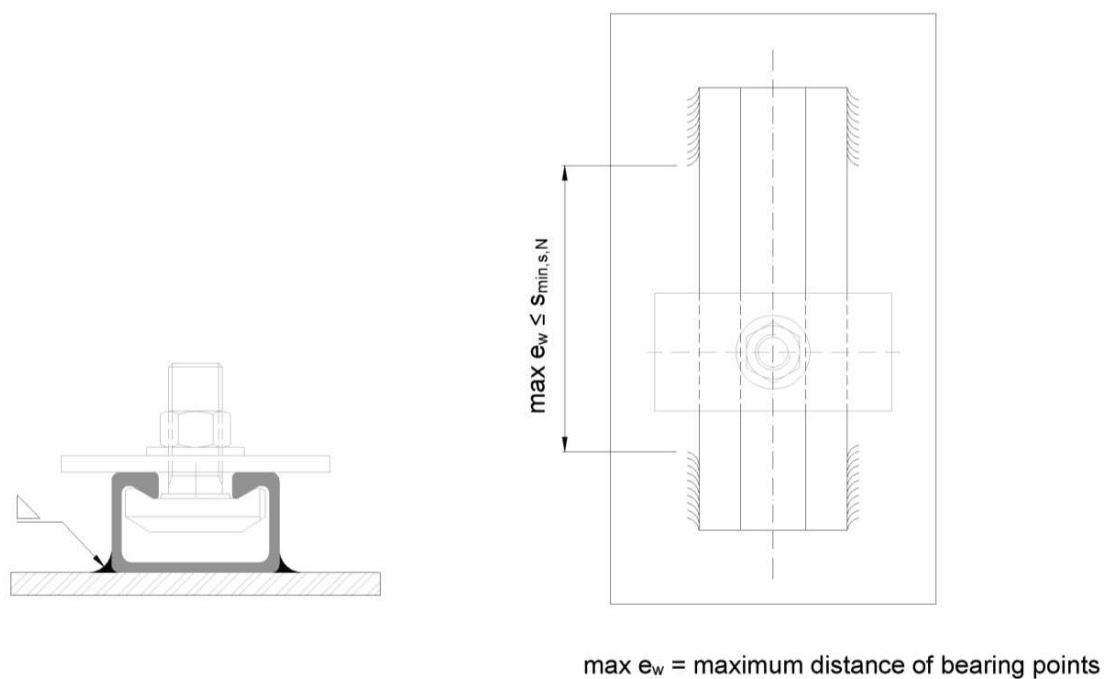
$$\Delta N_{Rsk} = \Delta N_{Rsk,0} \cdot \left(1 - \frac{N_{Ek}}{N_{Rk,s,l}} \right)$$

where: $\Delta N_{Rk,s}$ = characteristic fatigue resistance

JORDAHL Mounting Channel

Characteristic resistance under fatigue cyclic tension load

Annex 6



a) Hot-rolled mounting channel section

b) Hot-rolled mounting channel top view

Fig. 1.1: Example of a hot-rolled mounting channel with corresponding channel bolt

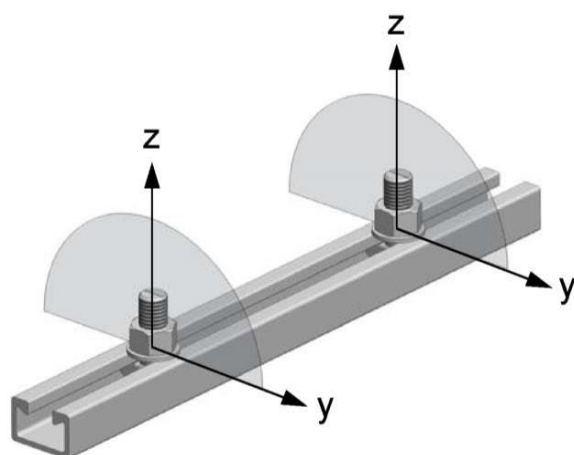


Fig. 1.2: Admissible load directions: tension loads and shear loads perpendicular to the longitudinal axis

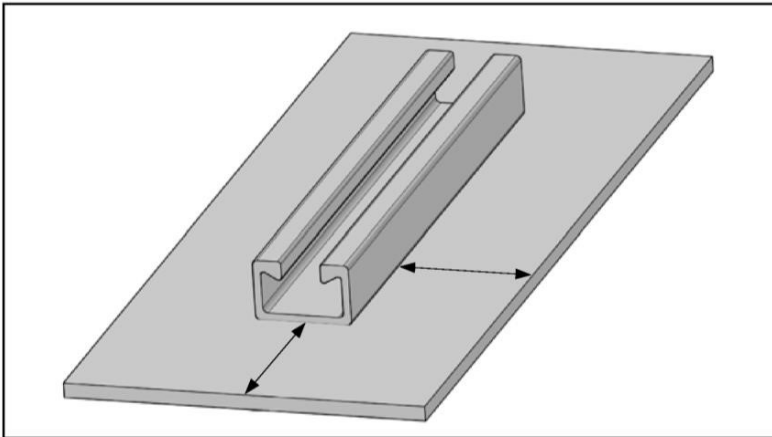
| | |
|--------------------------|---------|
| JORDAHL Mounting Channel | Annex 7 |
| Applications | |

Information for storage and transport of stainless steel mounting channels:

- Ensure sufficient distance to other metals
- Avoid any damage of surface and tramp iron contamination; no direct contact with carbon steel
- Keep packaged goods dry

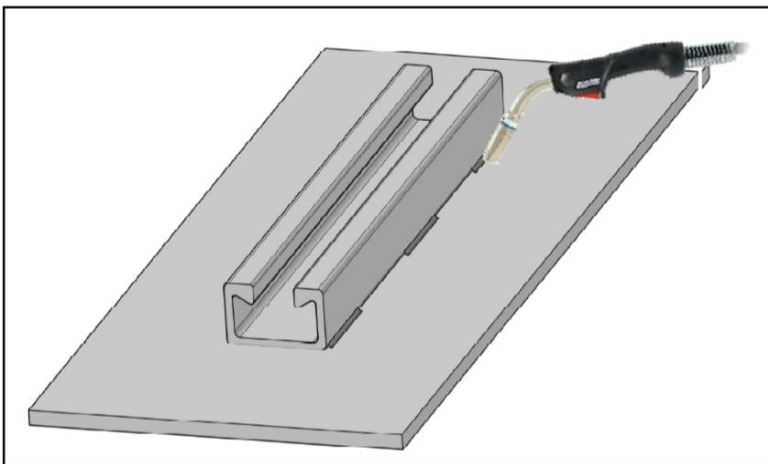
1. Fixing of the mounting channels

Cut, debur, derust and position the mounting channel.
If necessary, tack the mounting channel by welding points.



2. Welding

Weld with suitable welding procedures and qualified personnel.
Then check weld quality, if necessary, perform non-destructive testing.
Welds must be designed in accordance with BS EN 1993-1-8



3. Corrosion protection

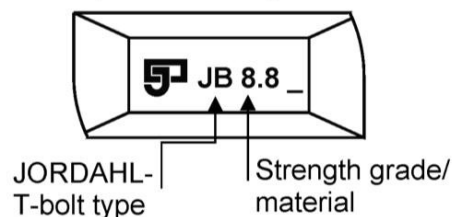
Free from welding residues and protect the mounting channel together with the basic structure against corrosion e.g. by painting, hot dip galvanization etc.

| | |
|--|----------------|
| JORDAHL Mounting Channel | Annex 8 |
| Manufacturer`s specification: Mounting Channel | |

4. Installation of the JORDAHL - T-bolts in the mounting channels

JORDAHL – T-bolt and mounting channels system components may only used together.
For combination of channels and T- bolts see Table 5.

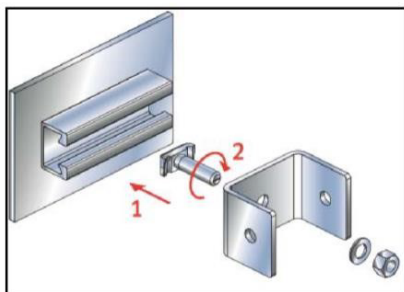
Example for marking:



Material/Strength grade T- bolts:

- 4.6 = Strength grade 4.6, BS EN ISO 898-1
- 8.8 = Strength grade 8.8, BS EN ISO 898-1
- A4 = Stainless steel (1.4401/1.4404/1.4571), Strength grade – 50, BS EN ISO 3506-1
- A4-70 = Stainless steel (1.4401/1.4404/1.4571), Strength grade – 70, BS EN ISO 3506-1
- F4-70 = Stainless steel (1.4462), Strength grade – 70, BS EN ISO 3506-1
- L4-70 = Stainless steel (1.4362), Strength grade – 70, BS EN ISO 3506-1
- HC-50 = Stainless steel (1.4529/1.4547) Strength grade – 50, BS EN ISO 3506-1
- HC-70 = Stainless steel (1.4529/1.4547) Strength grade – 70, BS EN ISO 3506-1

Figure 2



Setting Torques (Steel-to-Steel contact)

1. Insert the JORDAHL-T-bolt into the channel slot at any point along the channel length (Fig. 2).
2. Turn the channel bolt 90° clockwise and the head of the bolts locks into position (Fig. 2).
3. Install the fixture. Use a washer under the nut (Fig. 2).
4. Check the correct fit of the JORDAHL- T-bolt. The groove on the shank end of the channel bolt must be perpendicular to the channel longitudinal axis.
5. Tighten the nuts by a calibrated torque wrench (see Fig. 3) to the setting torque according to Table 16. The setting torque shall not be exceeded.

Figure 3

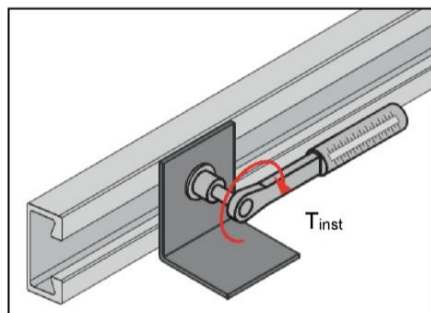


Table 16: Installation torque

| | Strength/ Material grade | T _{inst} [Nm] | | | | | | |
|--------------------------------------|--------------------------------|------------------------|-----|-----|-----|-----|-----|------|
| | | M10 | M12 | M16 | M20 | M24 | M27 | M30 |
| JA, JB JC, JE JD/JUD JH/JUH | 4.6 | 15 | 25 | 65 | 130 | 230 | 340 | 460 |
| | 8.8 | 40 | 70 | 180 | 360 | 620 | 900 | 1200 |
| | A4-50, HC-50 | 13 | 24 | 60 | 115 | 200 | 300 | 400 |
| | A4-70, HC-70 F4-70, L4-70 | 30 | 50 | 130 | 250 | 420 | 630 | 850 |

JORDAHL Mounting Channel

Manufacturer`s Specification:
Installation of JORDAHL T-bolts in the mounting channel

Annex 9



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