



ZAKŁAD BUDOWY MASZYN DOŚWIADCZALNYCH Sp. z o.o.
41-708 Ruda Śląska, ul. Pawła 6

Specification Sheet
Transport Drawbars

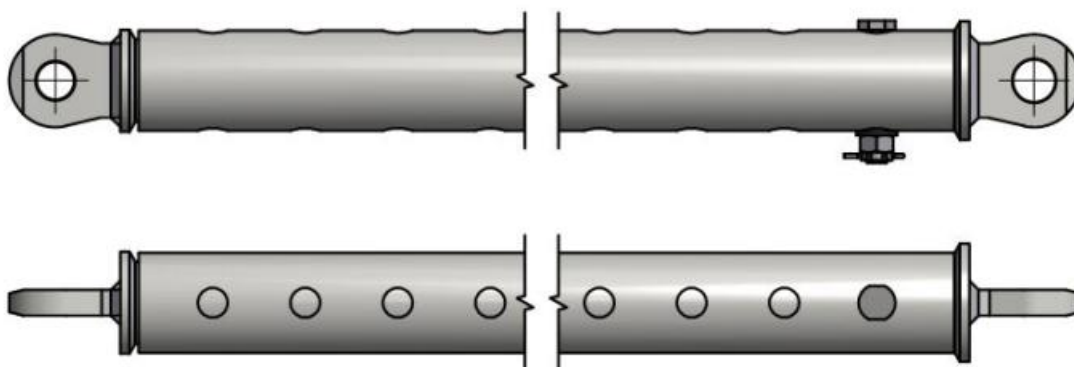
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Specification Sheet

telescopic drawbars

CTT version A - 120 kN

CTT version B - 140 kN



Manufacturer:

Zakład Budowy Maszyn Doświadczalnych [*Experimental Machinery Building Plant*]

ZBMD Sp. z o.o.

41-708 Ruda Śląska

Ul. Pawła 6



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2 General description

Telescopic drawbars are intended for connecting elements of the transport set of overhead monorails with own or cable drive.

Drawbars may be used in underground mining works in non-methane and methane areas, in excavations classified as class "a", "b" or "c" methane explosion hazard and class A or B coal dust explosion hazard.

3 Conditions of use

CTT telescopic drawbars, version A-120 kN and version B-140kN, are used for safe connection of elements of transport sets of suspended railways. The choice of the drawbar (diameter of the hole in the eye, length and strength of the drawbar) is up to the user.

4 Technical specifications

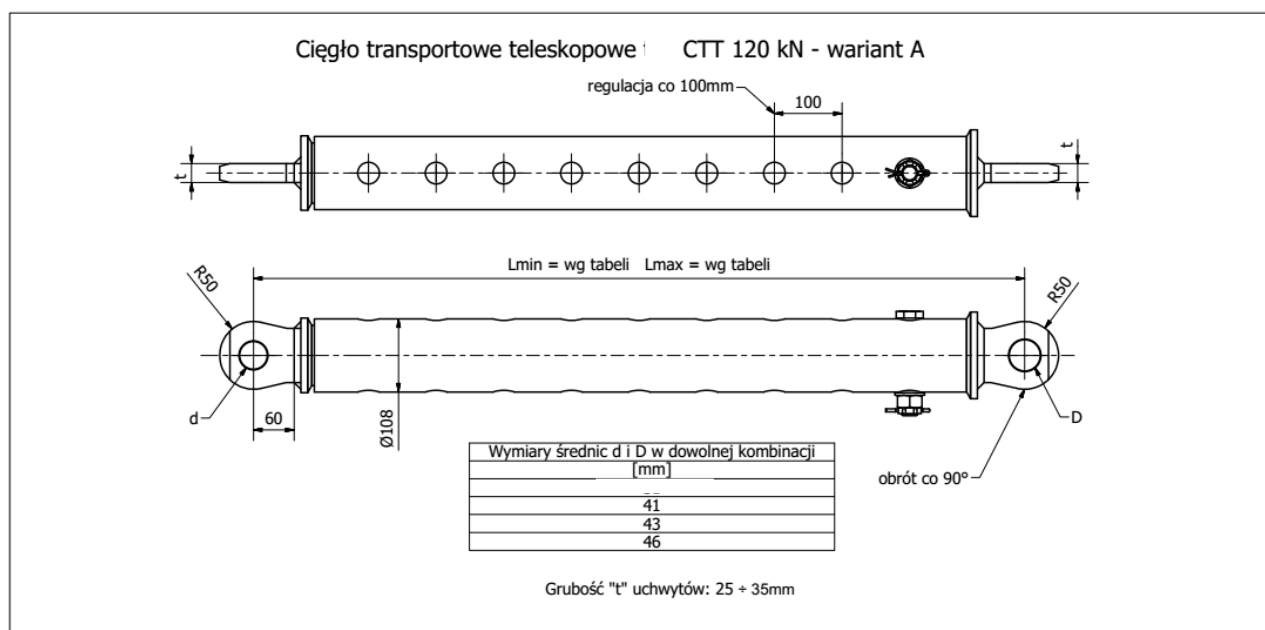
4.1 CTT version A-120 kN

F _p [kN].	L _{min} ÷L _{max} [mm].	Pin arrange ment (*)	Drawbar adapted to the aforementioned sets
120	800÷1150 1140÷1940 1640÷2800	=/+ /II	WHR-1/NM, WTZB1,2,3 Becker Scharf, Bevex, LPS KSP, Pioma, IMM, Fite, KSP WHR-1/N, Zampra, Ulstein, Fama

(*) pin arrangement: "=" - horizontal-horizontal, "+" - horizontal-vertical, "II" - vertical-vertical.

F_p - maximum pulling-pushing force.

L_{min} - L_{max} - drawbar lengths available.



F _p [kN].	L _{min} ÷L _{max} [mm].	Pin arrange ment (*)	Drawbar adapted to the aforementioned sets
120	800÷1150 1140÷1940	=/+ /II	WHR-1/NM, WTZB1,2,3 Becker Scharf, Bevex, LPS KSP, Pioma, IMM, Fite, KSP WHR-1/N, Zampra, Ulstein, Fama

Transport telescopic drawbar CTT 120 kN – version A - adjustable in 100mm increments

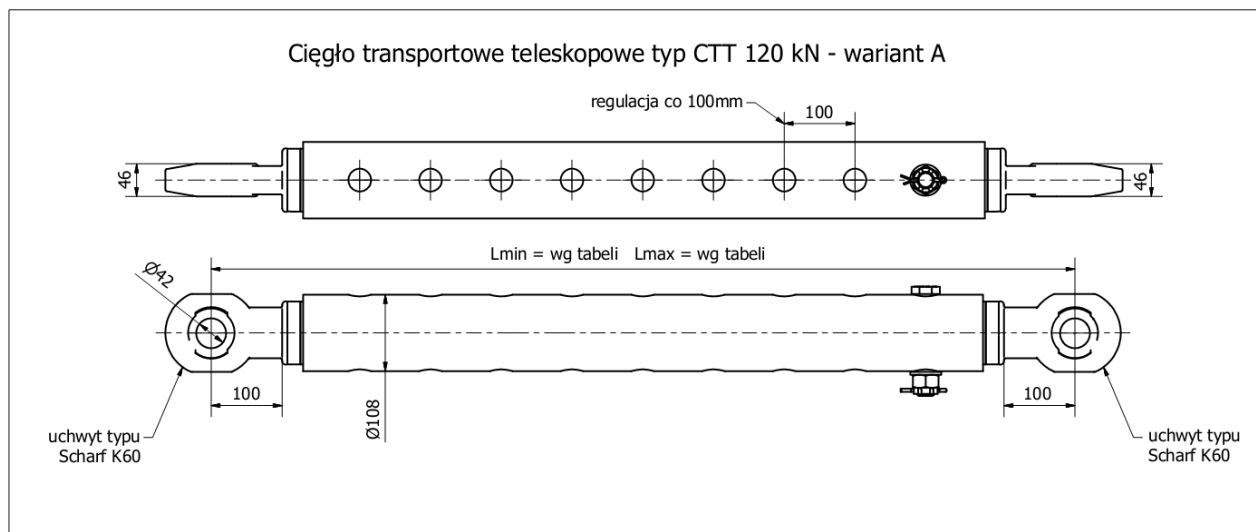
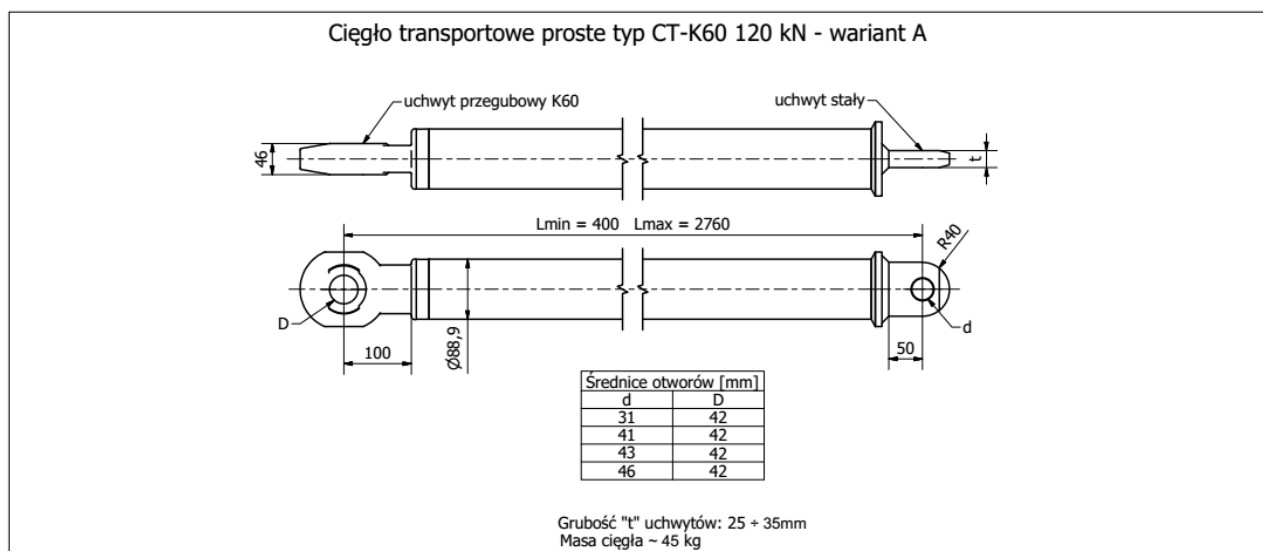
L_{min} – according to the table / L_{max} = according to the table

Thickness „t” holdres

(*) pin arrangement: "=" - horizontal-horizontal, "+" - horizontal-vertical, "II" - vertical-vertical.

F_p maximum pulling-pushing force.

L_{min} - L_{max} - drawbar lengths available.



Transport straight drawbar type CT-K60 120 kN - version A

Articulated holder K60

Fixed holder

L_{min} – 400 L_{max} = 2760

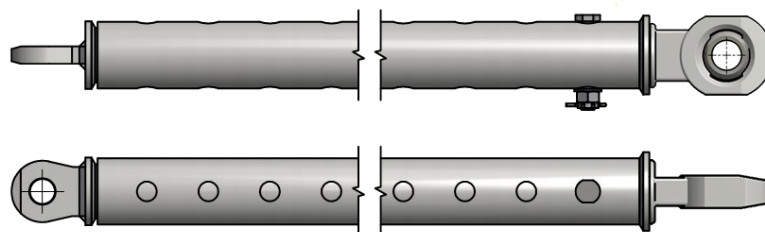
Hole diameters

Thicknes „t” holders

Adjustable in 100mm increments

L_{min} = according to the table / L_{max} – according to the table

Cięgło transportowe teleskopowe CTT - 120kN z uchwytem typu Scharf K-60



* - istnieje możliwość wstawiania uchwyty typu Scharf K-60 z obydwu stron

CTT-120kN transport telescopic drawbar with Scharf K-60 type handle

*- Scharf K-60 handle can be welded on both sides.

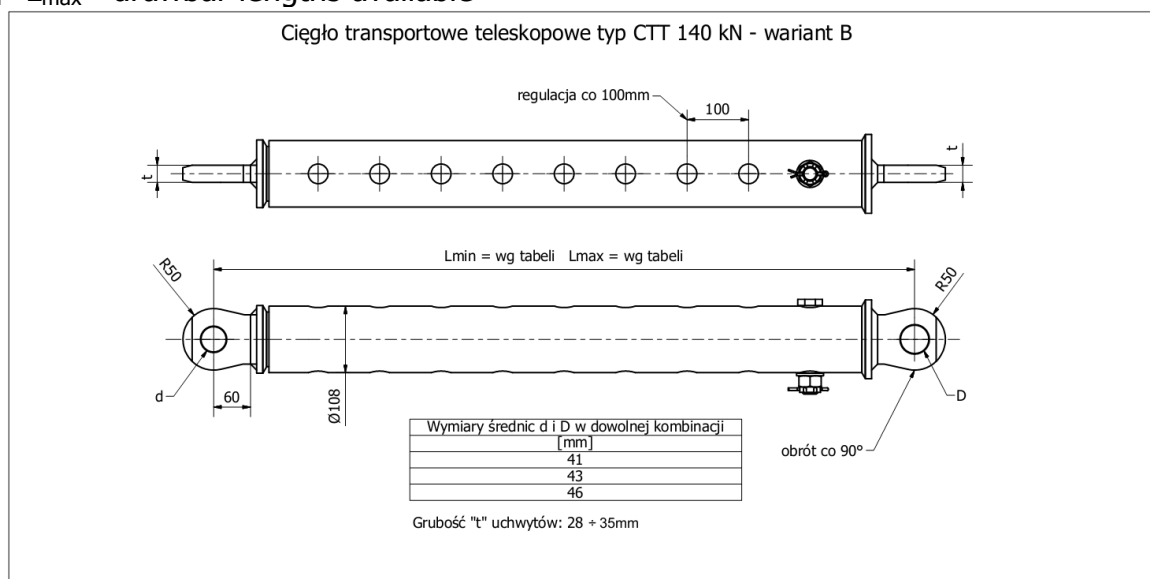
4.2 CTT version B-140 kN

F _p [kN].	L _{min} ÷L _{max} [mm].	Pin arrange ment *)	Drawbar adapted to the aforementioned sets
140	800÷1150 1140÷1940 1640÷2800	=/+/II	WHR-1/NM, WTZB1,2,3 Becker Scharf, Bevex, LPS KSP, Pioma, IMM, Fite,KSPWHR-1/N,Zampra, Ulstein, Fama

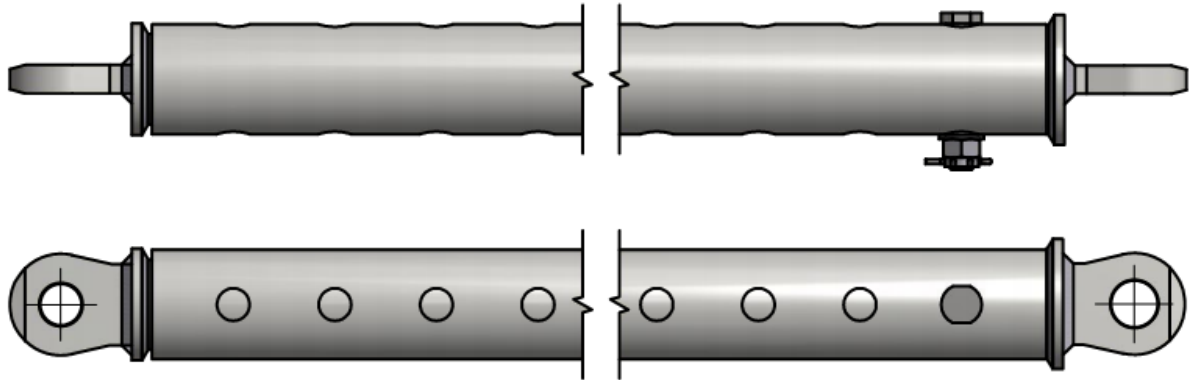
(*) pin arrangement: "=" - horizontal-horizontal, "+" - horizontal-vertical, "II" - vertical-vertical.

F_p - maximum pulling-pushing force.

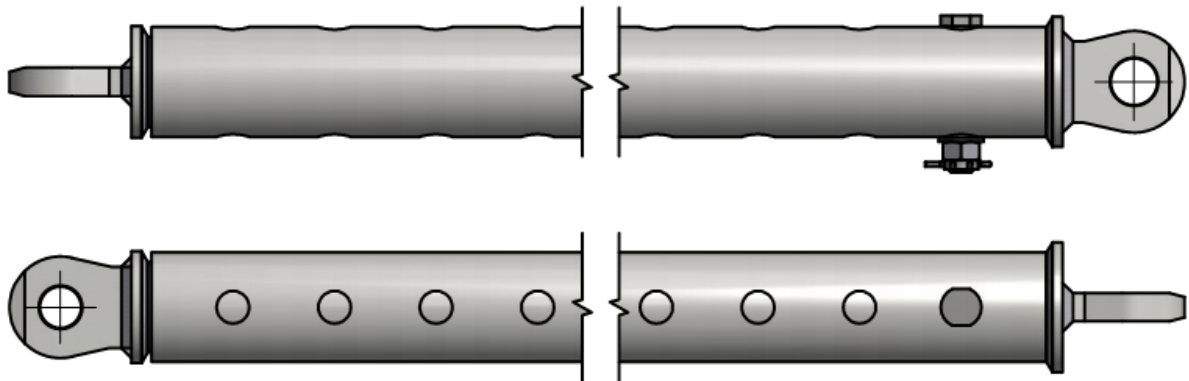
L_{min} - L_{max} - drawbar lengths available



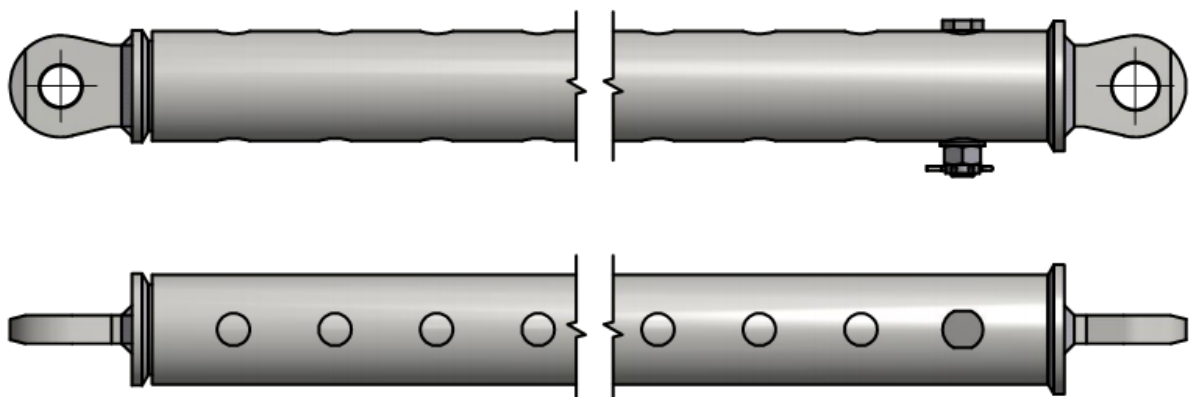
Ciężko transportowe teleskopowe CTT - układ sworzni "poziom-poziom"



Ciężko transportowe teleskopowe CTT - układ sworzni "poziom-pion"



Ciężko transportowe teleskopowe CTT - układ sworzni "pion-pion"



CTT transport telescopic drawbar - horizontal-to-horizontal" pin arrangement

CTT transport telescopic drawbar - horizontal-to-vertical" pin arrangement

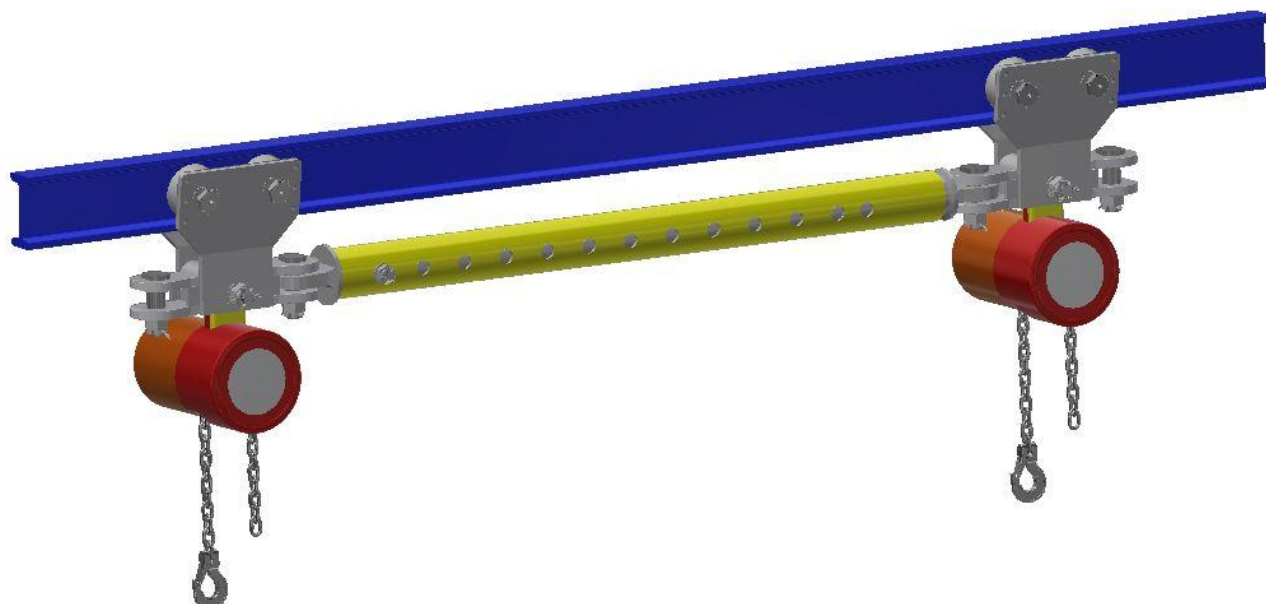
CTT transport telescopic drawbar - vertical-to-vertical" pin arrangement



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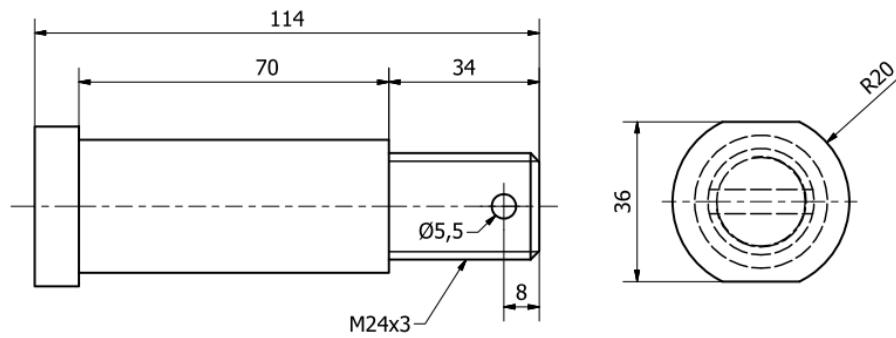
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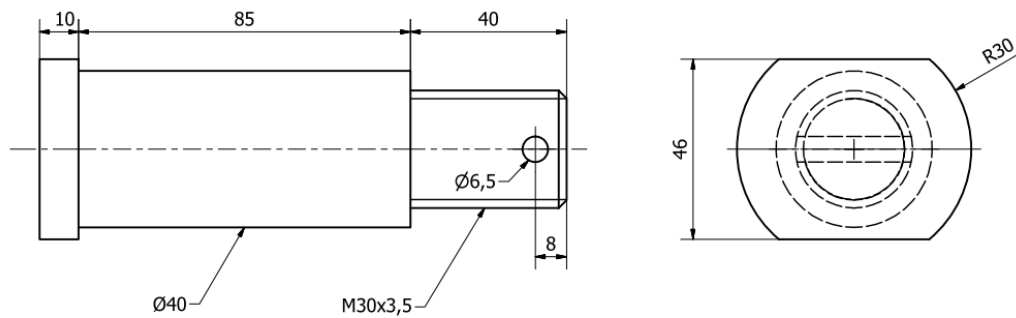
CTT transport telescopic drawbar mounted between the transport trolleys
including chain hoists

5 Pins supplied on request for the drawbars in question.

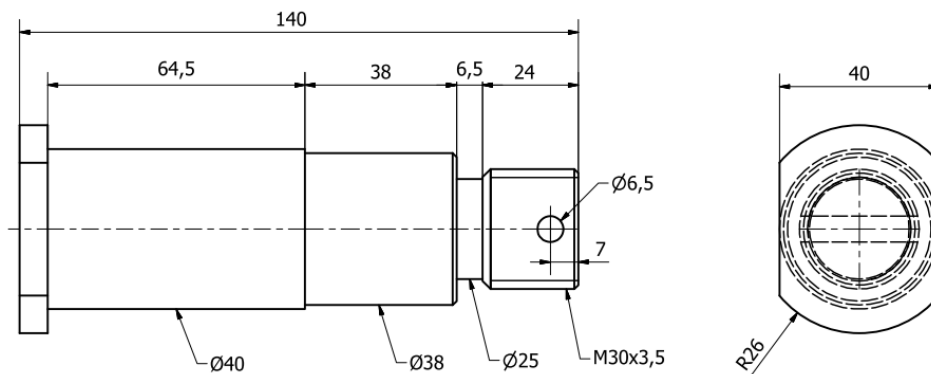
A. Cylindrical pin $\varnothing 30$ 120kN



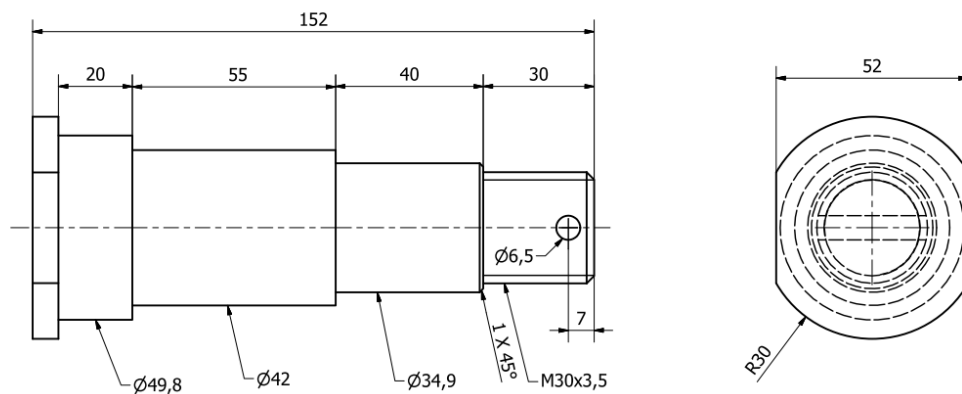
B. Cylindrical pin $\varnothing 40$ 140kN



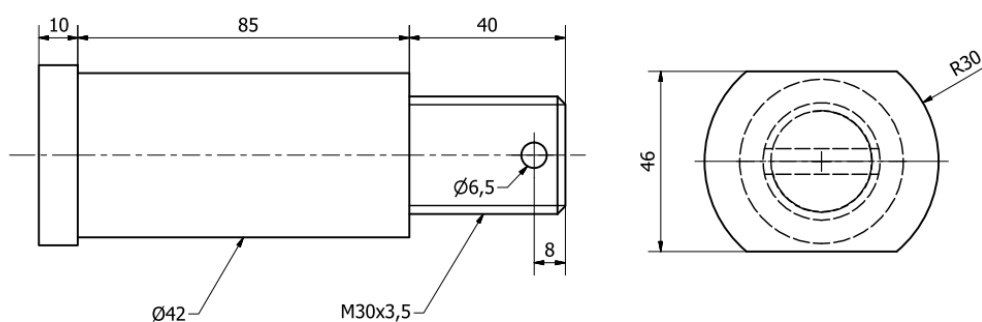
C. Pioma cylindrical pin $\varnothing 40$ 140kN



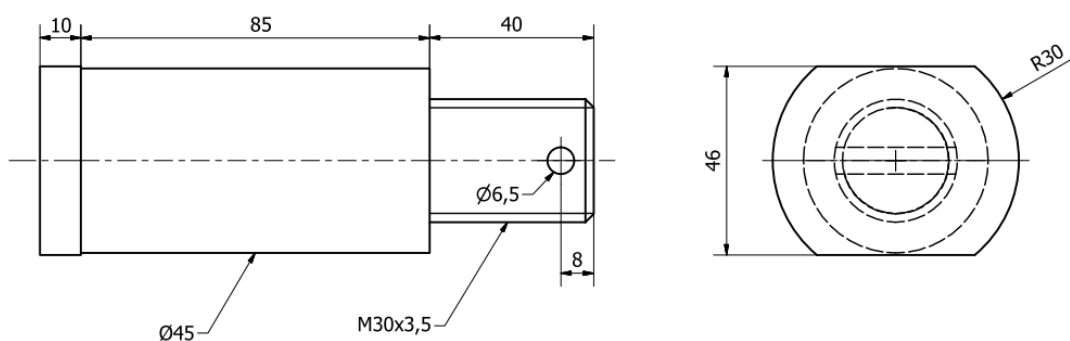
D. Clamp cylindrical pin K60 $\varnothing 42$ 140kN

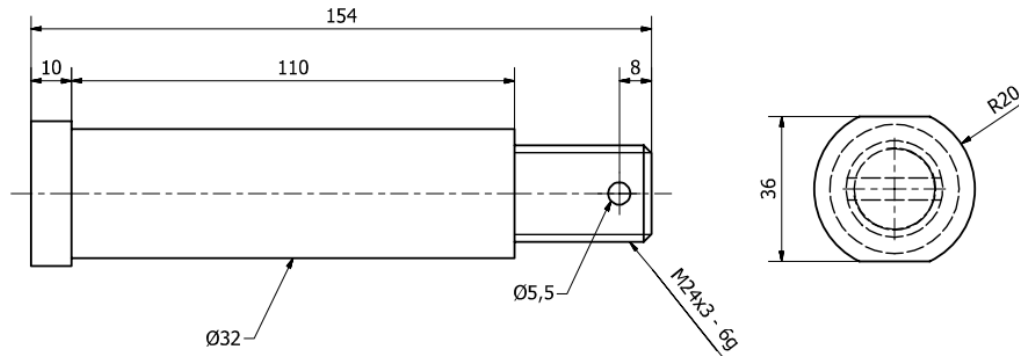


E. Cylindrical pin $\varnothing 42$ 140kN



F. Cylindrical pin $\varnothing 45$ 140kN



G. Straight pin $\varnothing 32$ to set the length of the CTT drawbar**6 Drawbar accessories - holders**

The producer allows for the application of the drawbar accessories in the form of holders for hydraulic hoses type UW-1 and holders for hydraulic controllers type US-1. As standard, these holders are made in three sizes, for drawbar tubes:

- $\varnothing 70$,
- $\varnothing 89$,
- $\varnothing 108$,

However, it is possible to manufacture holders in other sizes on request.

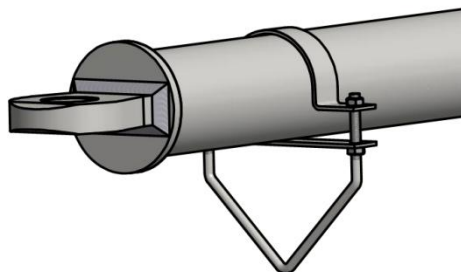
The condition for the use of these holders is not to exceed a total load of 30 kg per link.

The unladen weight of the holders is:

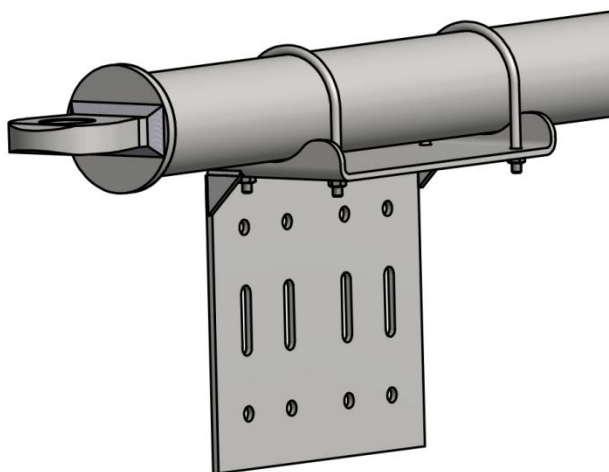
- 0.5 kg for UW-1,
- 6 kg for US-1.

UW-1 and US-1 holder do not require WUG approval.

Holder type UW-1 fastened on the drawbar.



Holder type US-1 fastened on the drawbar, example hole arrangement.

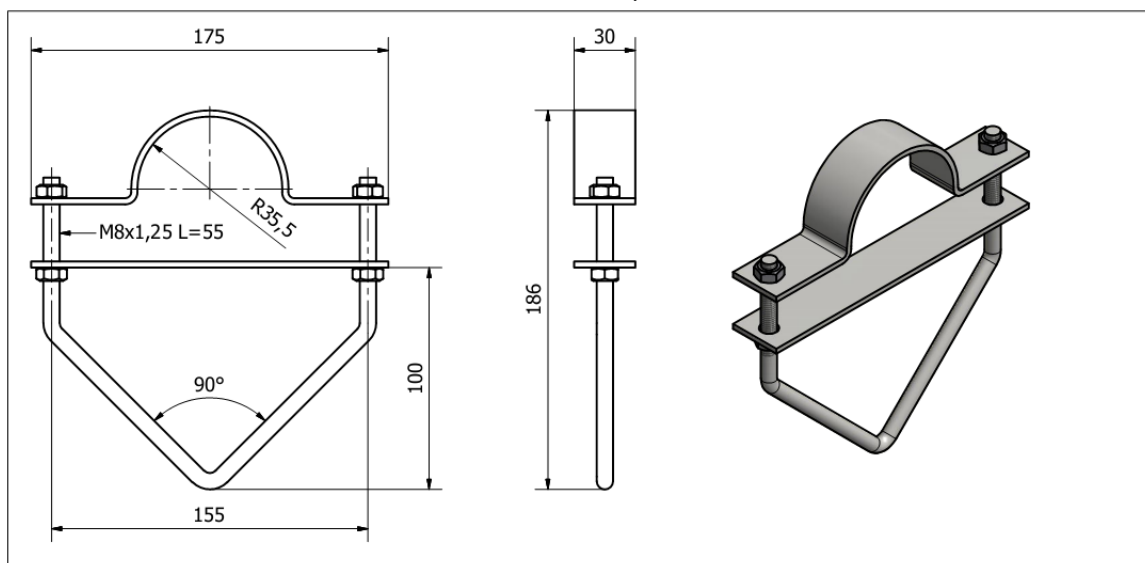


6.1 Holders for hydraulic hoses UW-1

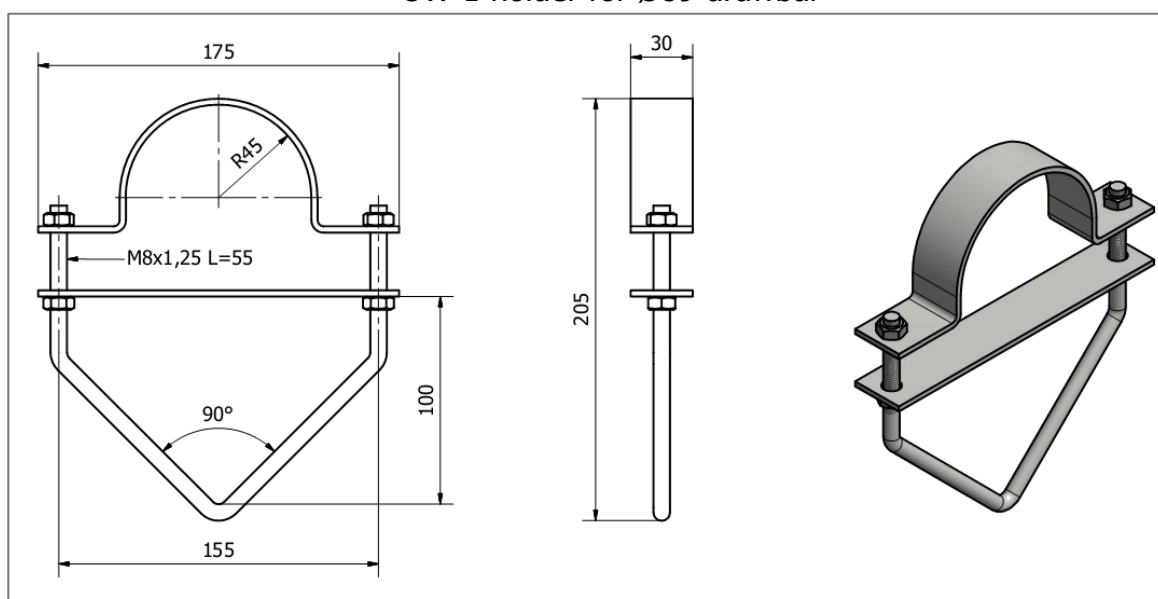
Hydraulic holders UW-1 are to be used for suspending hydraulic hoses connecting elements of transport sets, e.g. brake trucks, shunt tractors, etc. It is forbidden to use UW-1 holders for other purposes.

The structure and dimensions of standard UW-1 holders are shown in the drawings below.

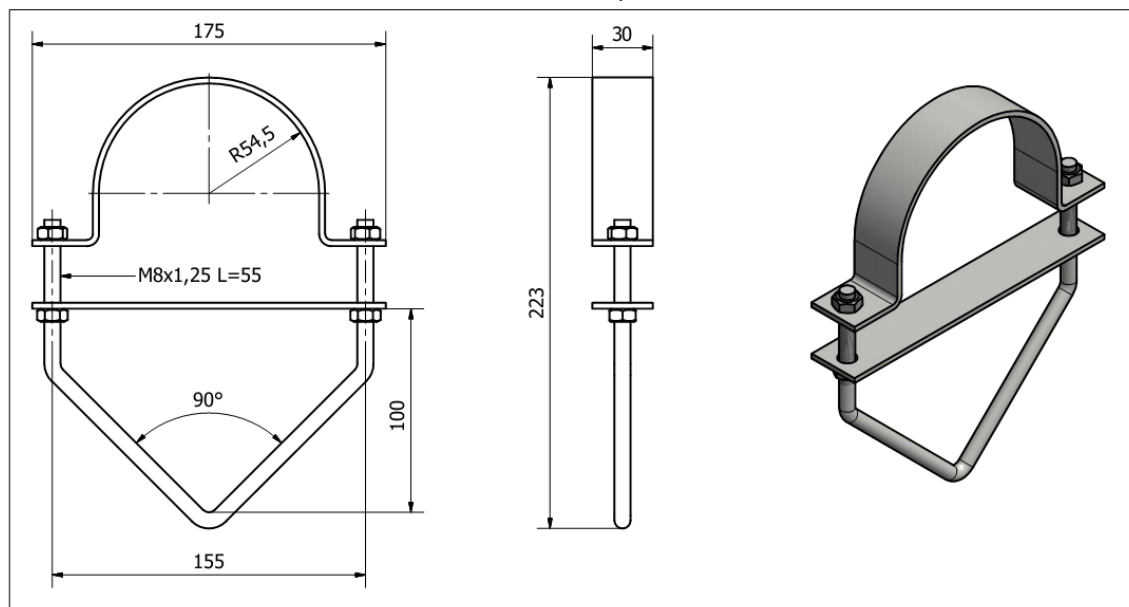
UW-1 holder for Ø70 drawbar



UW-1 holder for Ø89 drawbar



UW-1 holder for Ø108 drawbar

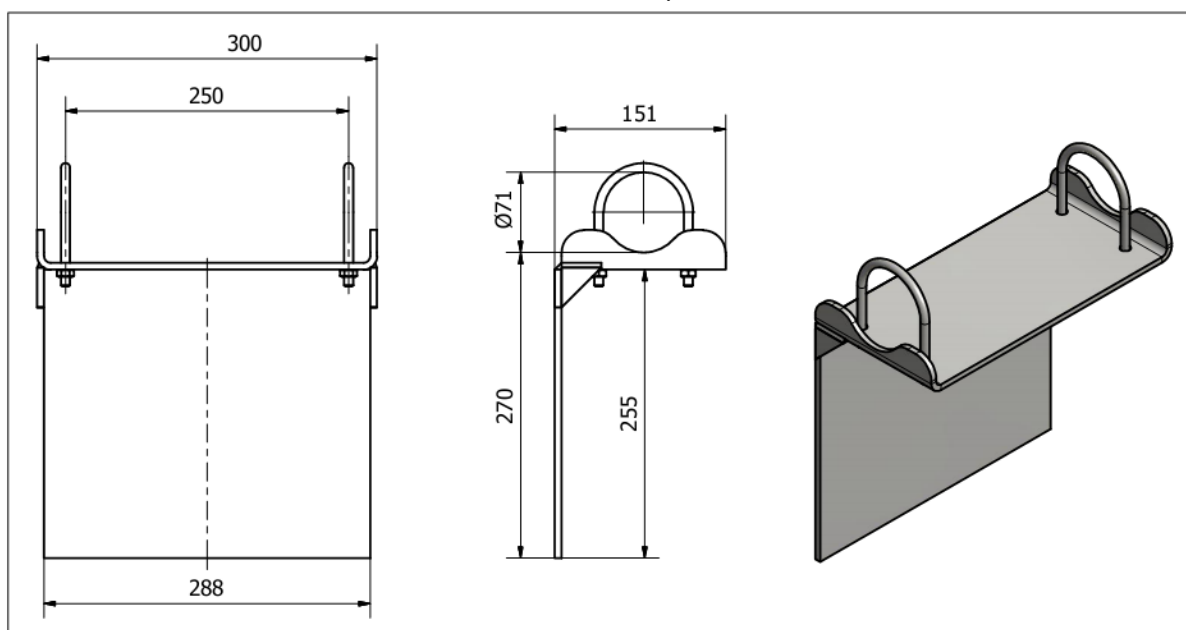


6.2 Holders for hydraulic controllers US-1

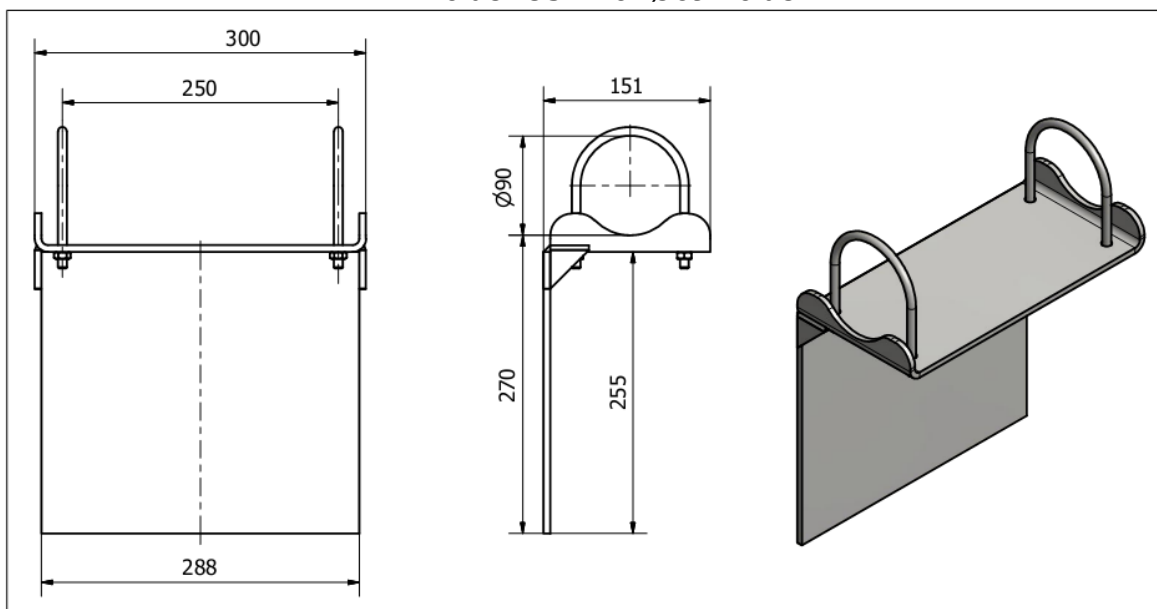
The US-1 hydraulic controller holders are intended for suspending hydraulic controllers of components of transport sets, e.g. hydraulic hoists. It is not allowed to use the US-1 holders for other purposes.

The structure and dimensions of standard US-1 holders are shown in the drawings below.

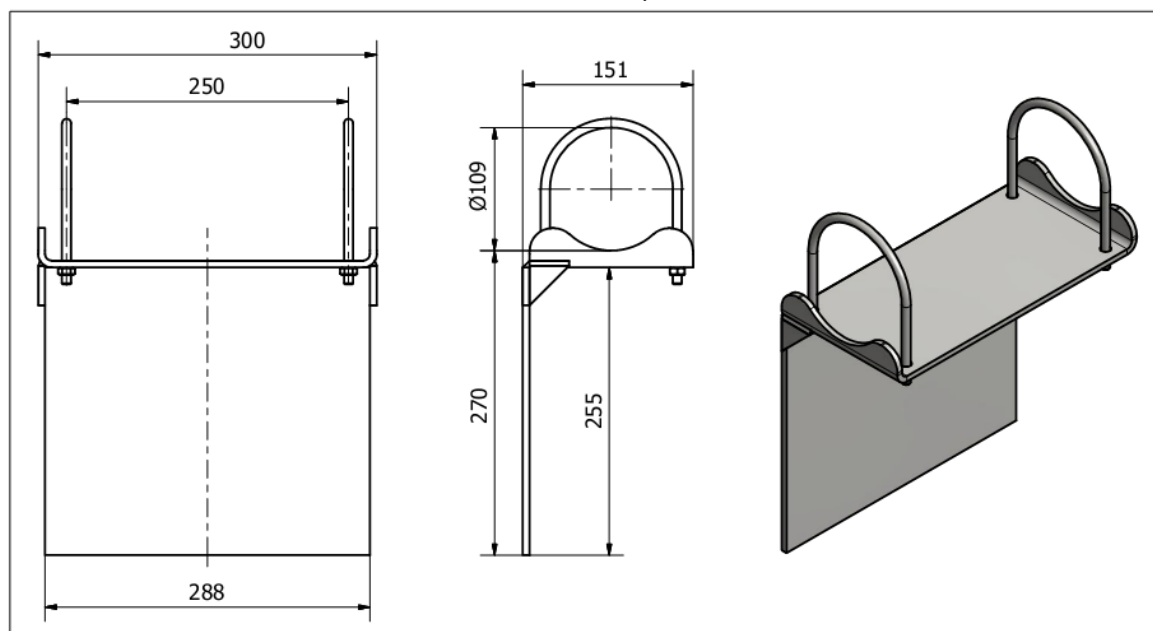
Holder US-1 for Ø70 holder



Holder US-1 for Ø89 holder



Holder US-1 for Ø108 holder





7 Scope of delivery

Delivery includes:

- a complete transport telescopic drawbar,
- original user's manual, operation and maintenance manual of the drawbars,
- warranty card and acceptance certificate for Quality Control,
- declaration that the product meets the technical requirements,
- WUG approval decision.

8 Product ordering

When placing an order for a transport telescopic drawbar, please specify the parameters listed below:

1. drawbar type/version.
2. diameter of the holes in both lugs (and type of pin for coupling - versional).
3. thickness of plates used for both lugs from 25 to 35mm.
4. The length of the drawbar between the axes of the lug openings according to the table in paragraph 5.1. 5.1, 5.2.
5. Lug position versions - vertical-vertical, horizontal-vertical, vertical-horizontal.

You can order transport telescopic drawbar from:
Zakład Budowy Maszyn Doświadczalnych Sp. z o.o.
ul. Pawła 6; 41-708 Ruda Śląska
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k.klasik@zbmdspzoo.pl
