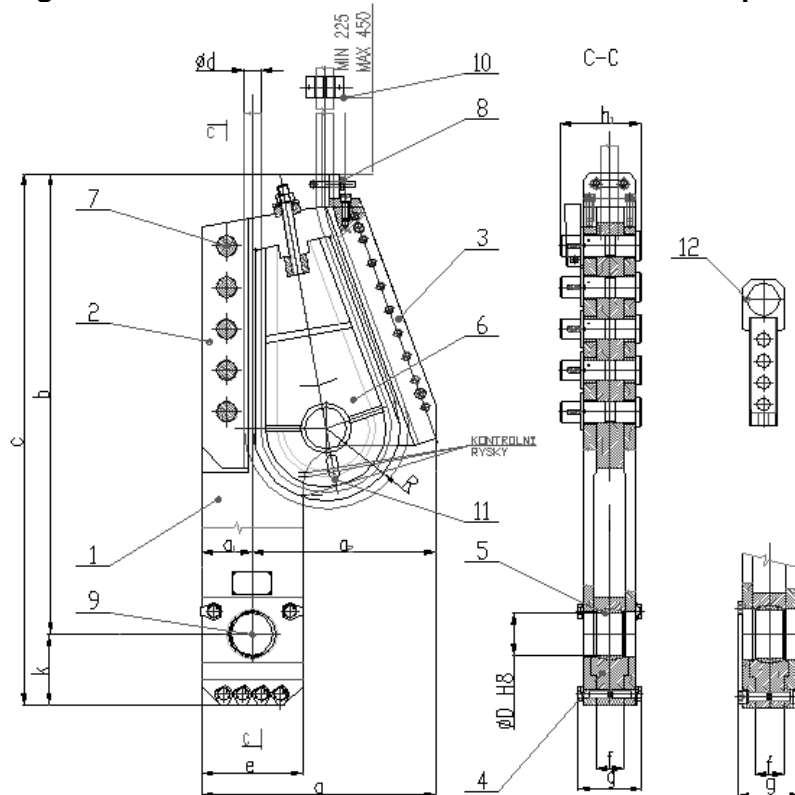


WEDGE THIMBLE OF WINDING ROPES - Type AD

Utilization:

The wedge thimble is designed for the transport-vessel suspension of a more-ropes winding machine and after the loading capacity reanalysis this basic type may also be used for a single-rope winding machine. It is suitable as replacement of the existing thimbles type Schönfeld or Droste, that is why it is manufactured in the size line of these thimbles.

Assembly drawing with main dimensions and essential items description:



- 1 side frame
- 2 bar No. 1 – with hinges
- 3 bar No. 2 – slotted bar
- 4 bar No. 3
- 5 hinged bushing
- 6 heart with locking
- 7 bar hinge with locking pin
- 8 rope-end clamping
- 9 hinge pin with locking
- 10 control bracket
- 11 drift wedge
- 12 assembly jig

Indicator lines: 1- nominal rope diameter
 2- limit heart setting
 3- heart touch-down on the bars

NOTE: rope diameter d and the hole D for the hinge are made according to the customer's assignment, the width g may be modified for countersink screws

Function:

The rope is clutched in the self-locking wedge between the bars and the heart. After the rope setting into the clutch the heart position is assured with female screws and the control bracket is fixed.

Technical parameters

as well as the thimbles dimensions are given in the enclosed table (orientation values only).

Description:

The new technical solution under the type marking AD consists in the combination of the design execution of the carrier slot and the side frame hinges of the product that leads to a higher quality of the machinery manufacturing of the product – a more accurate production connected with a steadier distribution of the loading forces to the thimble carrying parts. The individual main parts are stated in the picture: the side frame (1) is the basic carrying part, where the clutching load is transferred on one side via the bar (2) and hinges, and on the other side via

the bar (3) with the slot. The bar (4) transfers the carrying force from the hinge pin (9) via hinged bushing (5) on the side frame (1) via the slot as well. The hinges (7) are locked with wedges, the heart (6) is locked with a screw through a disc spring and the bars (3 and 4) are fixed in the side frame with screws bonded with plied saddles – by the other modification the bar (4) is fixed with countersink screws. The rope is conducted out from the thimble by the end clamping (8) with the specified control bracket (10). The heart is shot out from the clutch with the drift wedge (11). The product is marked with a label and indicator lines.

Safety:

The product complies to the Public Notice No. 22/1989 Coll. of ČBÚ (Czech Mining Office Board) and especially to the Public Notice No. 415/2003 Coll., § 39

– Thimble:

- Security as min. 7-tuple than maximum static load specified for more-ropes winding machines (for utilization by single-rope winding machines with specified safety 10-tuple, it is necessary to recalculate the basic type load by a coefficient 0,7 or to order a “tailored” thimble);
- Security against the rope removal from the wedge thimble clutch as minimum 1,2-tuple;
- The rope end above the latest bracket as minimum 150 mm;
- Minimum R of the rope bend on the thimble not less than 4-tuple of the rated rope diameter;
- The main parts of the thimble are marked with the identical registration number;
- The thimble carrier parts have a material certificate;
- The thimble is provided with a special surface treatment except of the working parts;
- The thimble is accompanied with the heart drift wedge;
- The thimble is marked with indicator lines (the basic line must be between the lines 1 and 2 on the side frame) and the production label with the data: manufacturer, type, load capacity, production date, rope and hinge pin diameter, user’s registration number
- Each product shall be tested: (the sample for the testing shall be delivered by the customer)
- Testing load by 25% higher than permitted static load;
- Minimum testing period is 20 minutes;
- After the test, the carrier parts shall be dismantled and checked;
- The Test Report is an integral part of the Quality Certificate of the product;
- If requested, manufacturer performs non-destructive test as per § 64 (4) of the Public Notice No. 415/2003 Coll.

Delivery:

The products is delivered with a protective surface zinc coating and painting; working surfaces are protected with preserving oil. The product is accompanied by 2 pc of the heart drift wedges; a set of 4 thimbles is delivered with the assembly jig. The integral part of the delivery is the accompanying documentation: the assembly drawing, Operation Manual, the list of spare parts, Manufacturer’s Certificate, material certificates, Test Reports and static calculation. If ordered it is also possible to deliver the hinge pins (9) with locking.

Assembly:

The assembly shall be performed only by experienced and trained workers authorized for this work by the organization leadership. The rope end in the thimble must be surface-ungreased with technical benzine, the thimble-contact surface must also be clean – free of painting and rusting, ungreased. After the rope end lacing through the thimble the heart is inserted in the rope eye and the heart is tucked in the contact with the rope. After the rope clutching the thimble is strong, the heart position is locked with screw nuts. The overhanging part of the rope shall be bandaged, fastened in a clamp in the upper part of the thimble and deflected so that the ropes do not touch. The control bracket is fastened on the rope, it shall be placed by 5-10-tuple of the rated rope diameter above the thimble. The distance between the thimble and the bracket shall be measured and carried to the Book on the Rope Ride. The thimble for the mounting must be completely assembled; it is necessary to check the hinges and screws tightening. The hinge pin (9) shall be locked after the mounting with a safety pin.

Guarantee:

The product is given a guarantee of 18 months as from the date of the operation start, however maximum 24 months after the delivery. If the instructions in the Operation Manual are not followed the guarantee of the product is left aside. The recommended service life-time is 10 years.

Others:

After the agreement with the manufacturer the product may be modified according to the customer’s requirement.



WEDGE THIMBLE Type AD

Table of sizes, informative dimensions, drawing numbers

Thimble dimension	0	1	2	3	4	5	6	7	8
Load capacity kN	25	40	55	100	150	220	300	400	*
Weight kg	20	33	65	149	250	300	514	825	
Ropes range d	16	16-20	20-25	26-35	36-40	40-45	50-60	63-70	*
a	230	267	352	456	530	555	850	974	
a1					110	120			
a2					420	435			
b	388	450	550	735	1040	1110	1270	1410	
c	443	520	630	850	1200	1280	1450	1650	
e	95	110	156	180	220	240	320	400	
f	31	32	38	44	65	65	72	70	
g	55	72	92	104	145	152/140	148	160	
h	83	97	125	150	172	191	220	242	
k					160	170			
Slot R					0,6d	0,6d			
Hinge D max					100	110			*

Thimble type: **AD 0/25 AD 1/37 AD 2/55 AD 3/100 AD 4/150 AD 5/220 AD 6/300 AD 7/400 AD ***
 AD * atypical delivery according to the customer's requirement

The general and group order number of the drawing related to the type

3726 - 000 100 200 300 400 500 600 700 800

is later completed by the manufacturer with his internal three-figures-code according to the product specification.

In your Purchase Order kindly state: number of pieces, thimble name, type, size/load capacity, drawing number, rope diameter **d**, hinge pin **D** and width **g**

Purchase Order Example: 4 pc Wedge Thimble AD 5/220, Drwng No. 3726-500

for the rope diameter 40 mm, hinge pin diameter 100 mm, width 152 mm