SVERO

SVERO Trolleys -20, -21, -24

0,5 – 5 ton

Manual

CE

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SVERO Trolleys -20, -21, -24

Read this manual before mounting the trolley and its use. Incorrect handling may cause danger!

Description

Svero trolleys are to be mounted to I-beams for carrying loads, which can be moved along the beam. In the trolley a lifting device is to be hanged. It can be manually, electric or pneumatically driven. Svero trolleys are adjustable within certain width ranges. The trolleys can be used for I-beams with plane flanges (such as IPE, HEA or HEB types) or beams with sloping flanges (such as INP-beams). The possible width ranges are shown in the data tables. The suspension bolt has got a right- and a left-handed thread for easy mounting to the side plates. The suspension bolt is turned down in its centre part where the hook of the lifting device has to be placed. Thereby the suspension bolt will not rotate.

The trolley models -20 and -24 are to be pushed only but the -21 models are driven by means of a hand chain. All trolleys are manufactured with a protection against falling (in case of wheel brake down) and climbing protection (so that the wheels cannot climb to the top of the beam flange).

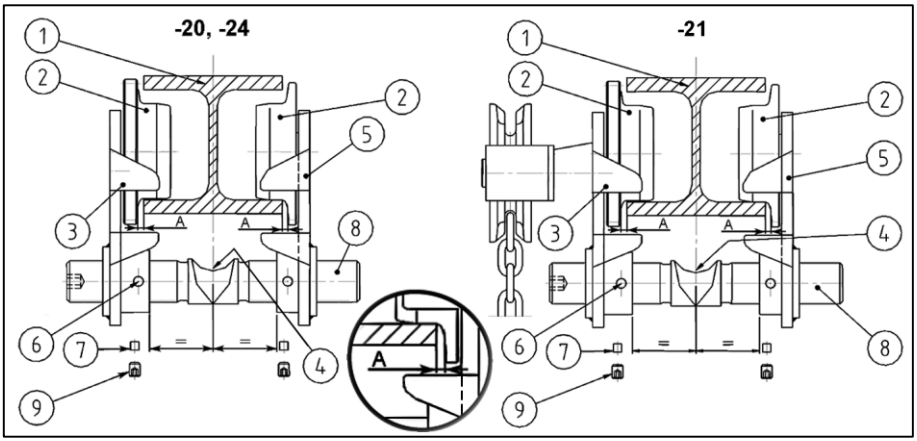


Fig 1 Trolleys mounted to an I-beam (H-beam)

Mounting (fig 1)

The end of the suspension bolt (8) with a tiny hexagon hole is right hand threaded. Screw it by hand about 5 mm into the right threaded hole of the side plate (3), which is marked "H". After that the other side plate (5) has to be screwed about 5 mm onto the other end of the suspension bolt. Note that here the threads are left threaded. Now the trolley can be hanged up to the I-beam (1) so that the trolley wheels will be placed on the lower flange of the beam. By means of the included hexagon key rotate the suspension bolt and adjust the distance between the side plates. A certain space between wheel flange and beam flange is important. Measure **A** at each side of the actual trolley must be:

0,5 – 1 ton	measure A = 1 – 1,5 mm
2 – 3 ton	measure A = 1,5 – 2 mm
5 ton	measure A = 2 – 2,5 mm

Adjust the suspension bolt so that the position (4) for the lifting device hook is upwards. Check that measure A as per above still is kept.

The two soft plugs (7), included in the delivery, should be put into the holes (6). The stop screws (9) are to be screwed into the holes (6) and tightened so that the suspension bolt has been locked.
Now the lifting device can be hanged into the trolley with the suspension hook centred to the suspension bolt position (4). Make sure that there are sturdy stops, preferably with buffer, at each end of the beam to prevent the trolley to fall off the beam. Stops may also be needed to prevent the trolley from colliding with other equipment along the beam.

As regards trolley model -21 note following: The hand chain must be checked that it is placed in the correct position in the chain wheel without getting stuck somewhere and that its length is sufficient. If the trolley will be mounted to a beam with a curve (minimum curve radius is stated in the tables) the drive side plate must be in the outer side of the curve.

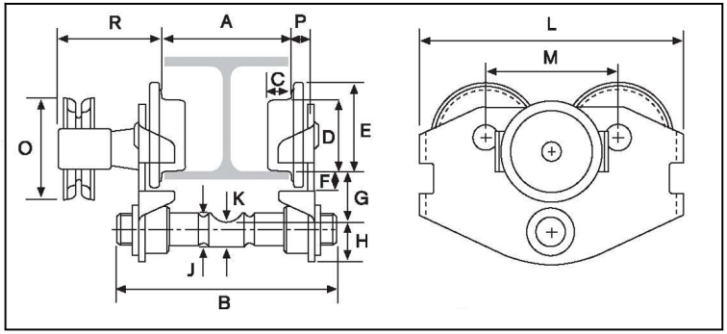
Technical data with dimension sketches for trolleys -20

Technical data

WLL * ton	Model	Dimensions in mm														Min curve radius m	Weight kg
		A min – max	B	C	øD	E	F	G	H	øJ	øK	L	M	P		
0,5	20123A	46 – 160	208	18	62	77	18	45	33	25	19	216	100	24	1,0	6,0
0,5	20124A	161 – 280	208	18	62	77	18	45	33	25	19	216	100	24	1,0	6,4
1	20143A	50 – 160	212	20	70	85	20	51	40	32	24	264	130	26	1,25	9,4
1	20144A	161 – 280	212	20	70	85	20	51	40	32	24	264	130	26	1,25	10,7
2	20163A	64 – 180	248	24	100	118	25	63	51	40	32	345	165	30	1,80	19,0
2	20164A	181 – 300	248	24	100	118	25	63	51	40	32	345	165	30	1,80	21,0
3	20173A	74 – 180	262	28	114	137	31	78	57	46	35	384	180	35	2,20	31,5
3	20174A	181 – 300	262	28	114	137	31	78	57	46	35	384	180	35	2,20	34,0
5	20193A	82 – 180	270	34	140	165	34	92	64	56	42	455	215	40	2,50	55,0
5	20194A	181 – 300	270	34	140	165	34	92	64	56	42	455	215	40	2,50	58,0

Table 1 Trolleys -20

*** WLL = Working Load Limit**



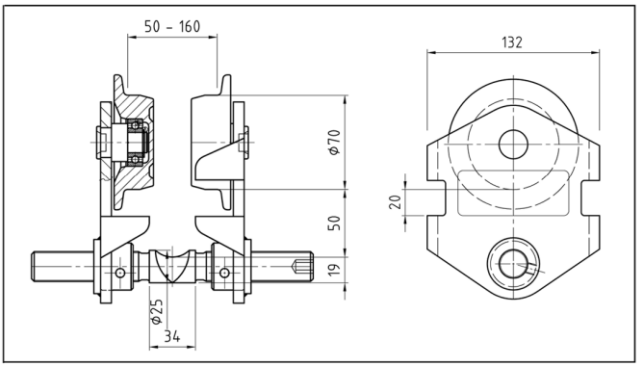
Technical data

WLL * ton	Model	Dimensions in mm															Min curve radius m	Weight kg
		A min – max	B	C	øD	E	F	G	H	øJ	øK	L	M	øO	P	R		
0,5	21123A	50 – 160	212	20	70	88	20	56	35	32	19	264	130	100	24	104	1,25	14,3
0,5	21124A	161– 280	A+57	20	70	88	20	56	35	32	19	264	130	100	24	104	1,25	15,5
1	21143A	50 – 160	212	20	70	88	20	51	40	32	24	264	130	100	24	104	1,25	14,3
1	21144A	161– 280	A+57	20	70	88	20	51	40	32	24	264	130	100	24	104	1,25	15,5
2	21163A	64 – 180	248	24	100	120	24	63	51	40	32	335	165	100	31	118	1,80	25,3
2	21164A	181– 300	A+76	24	100	120	24	63	51	40	32	335	165	100	31	118	1,80	27,4
3	21173A	74 – 180	262	28	114	137	30	78	57	46	35	380	180	165	37	130	2,20	38,2
3	21174A	181– 300	A+89	28	114	137	30	78	57	46	35	380	180	165	37	130	2,20	41,2
5	21193A	82 – 180	270	34	140	166	32	92	64	56	42	437	215	205	41	132	2,50	56,7
5	21194A	181– 300	A+97	34	140	166	32	92	64	56	42	437	215	205	41	132	2,50	60,4

Table 2 Trolleys -21
* WLL = Working Load Limit

Technical data with dimension sketch for 2-wheel trolley -24

WLL (Working Load Limit) 0,5 ton
For I-beams width 50 – 160 mm
Minimum curve radius 0,3 m



Safety instructions

- Check the function of the trolley before use.
- Check that the beam has sufficient permissible load and is securely anchored.
- Do not overload the trolley!
- No person under hanging load!
- Be careful with the trolley. Do not push away the trolley with high speed along the beam.
- The trolley must not be used for lifting or transporting people.
- Don not leave a hanging load unattended. (Lifting device may be hanging in the trolley.)
- Check the installation regularly.

Regular control

Regular controls of lifting devices are normally carried out yearly. When necessary (e.g. high frequency in use) controls are more often carried out. It is advisable to inspect the trolleys at the same time. If a hand chain of a trolley -21 has been damaged it should be replaced with a new one. If any of the wheels do not run properly, has been damaged or is warped the trolley must be repaired or replaced. The trolley might have been overloaded and a trolley with higher WLL (working load limit) might be needed.

Repair

Only SVERO original parts must be chosen when damaged parts have to be replaced.
Order through your dealer.

EC DECLARATION OF CONFORMITY

SVERO LIFTING AB
Momarken 19, S-556 50 Jönköping,

declares that above SVERO trolley models -20, -21, -24 have been manufactured in conformity with the requirements of the EC Machinery Directive 2006/42/EG.

Anders Hallåker