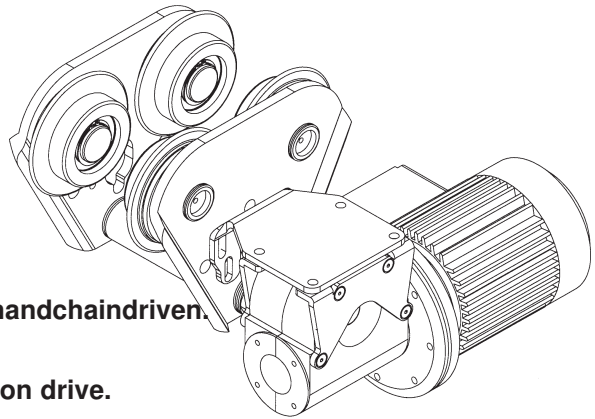




TROLLEYS

for single hoists and/or traversecranes



- To be delivered as 1700kp or 3200kp.
- To be delivered as push trolley, with motor, or as handchaindriven.
- To be delivered for beamflanges up to 300mm.
- Trolleys may also be delivered with rack & pinion drive.
- 3-phase motors can be reconnected from 400v to 230v.
- 1-phase motors can be delivered as option.
- Various speeds are possible, also 2-speeds.
- Optionally softstart/stop can be delivered on request.
- To be delivered with safety device preventing trolley from running off flange.

• Use

• Installation

• Maintenance

• Partlist

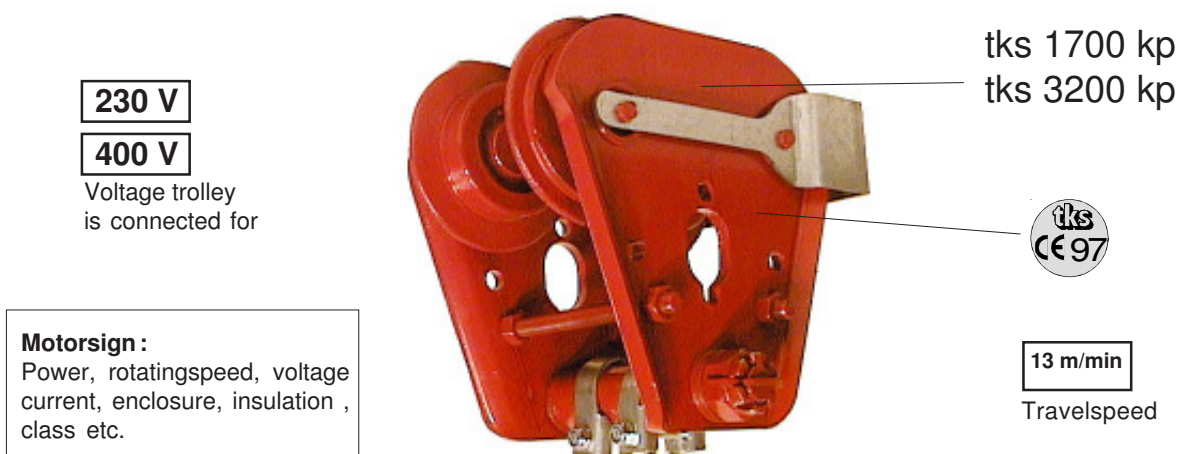
• Letter of conformity

TKS - a leading manufacturer of lifting equipment

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1.0 Overview of labelling :



2.0 Intended usage of trolley :

TKS trolleys are designed to transport hoists and lifting equipment along cranerails. Trolleys are to be pushed, or they can be equipped with motor and hence be driven along the most «I» and «H» beams (height from 120 mm and upwards) Trolleys must not be used for other rails than they are adapted for from manufacturer's side.

The operator of the equipment should have the required skills in order to operate the lifting equipment in a safe manner.

If trolley is to be placed outside, proper protection should be in place (cover i.e) For extreme climate with humidity and great variations in temperature, motors should be ordered with certain protection. Ask sales representative or manufacturer for advice. Trolleys must not be used in hazardous zones (gas areas), nor where acids are present, which may cause damage to the equipment (corrosion etc.)

3.0 Location of operator :



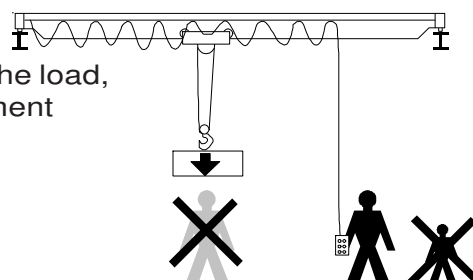
Operator should be located such that he keeps control of the load, avoiding any danger for himself as well as for his environment



Do never walk under hanging load !



Keep children away from the lifting equipment !



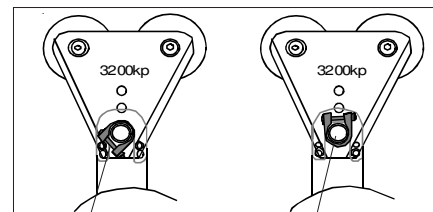
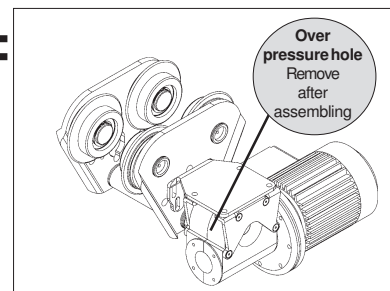
4.0 Checklist/Assembling of trolleys :

4.1 Checklist – prior to assembling

Check that all parts are received according to your purchase order as well as your delivery note/packing list. Important data to check are the following :

- model - voltage - payload SWL/WLL
- CE marking - travel speed - serial number

Also check that none of the parts are damaged.



Figur 1.
For hoisting
without sidepull.

Figur 2.
For hoisting
with sidepull.

4.2 Assembling of trolley

TKS' trolleys are delivered assembled from manufacturer. The ones which are motorized are electrically tested before leaving factory.

Unless anything else is specified, each trolley is adapted/adjusted for IPE160.



1700 kp trolley has got a safety device installed, preventing trolley from running off flange (beams larger than IPE160)
3200 kp trolley has got a safety device installed, preventing trolley from running off flange (beams larger than IPE200)

Trolley can be adapted to other flangewidths by moving washers or by changing bolt.

Trolley is mounted to cranerail primarily by sliding it on from the rail's end. If there is no access to the end, trolley can be dismounted and assembled on from both sides. In this case, one has to ensure that nut is tightened, and that pin is set in place in order to lock nut.

When mounting a TKS electrical chainhoist to the trolley, place the clamps according to fig. 1 and 2.



Note ! «Side-pull» can only be applied to the 3200 kp trolleys. However, both rail and suspension have to be designed for this type of lifting, in order to withstand such load

5.0 Electrical connection (power supply) :



All electrical connections to be carried out by an authorised electrician.

Unless anything else is specified, motor is delivered from factory for 400 V.

However, motor can be reconnected for 230 V according to the enclosed diagram.

Power to the trolley is to be supplied through a cable from the controlbox (when 24 V controlvoltage),

Cable is to be fed into the junctionbox of motor through the nipple.

Only cables with sufficient cross area/capacity are to be used. Use cables shoes.



Connection of cable from controlbox in to junction box on motor.

Power supply can be supported in one of the following ways :

- Cable suspended in wire/string (for straight monorails up to 30 m)
- Cabletrolleys (IPE 120-240, straight or curved monorails)
- Conductor systems (for all types of rails)

In case of using cabletrolleys, make sure the «push-bumper» of trolley is faced against the cabletrolleys. Keep a distance of 3 m between each at straight lengths.

For curves, distance between each cabletrolley should equal the curvelength.

6.0 Technical data :

Trolleys can be delivered in various editions with different speeds

Technical drawing of a 1700 kg trolley. The side view shows a width of 362 mm and a height of 171 mm. The front view shows a width of 130 mm, a height of 280 mm, and a base width of 260 mm. The motor is labeled '1700KP'.

1700 kg

Technical drawing of a 3200 kg trolley. The side view shows a width of 380 mm and a height of 325 mm. The front view shows a width of 250 mm, a height of 230 mm, and a base width of 490 mm. The motor is labeled '3200KP'.

3200 kg

Can be delivered with 4WD for IPE 120 and 160

Motorspesifications :

- Reconnectable from 230/ 400V
- Enclosure IP55
- Intermittance factor
- Insulation class F

Trolleys can be delivered with 4 different bolts, for the following flangewidths

Profile	Flangewidth
IPE 120 - 180	(64 - 91 mm)
IPE 200 - 240	(100 - 120 mm)
IPE 270 - 330	(135 - 160 mm)
IPE 400 - 500	(180 - 200 mm)

Other bolts for different flangewidths can be delivered on request

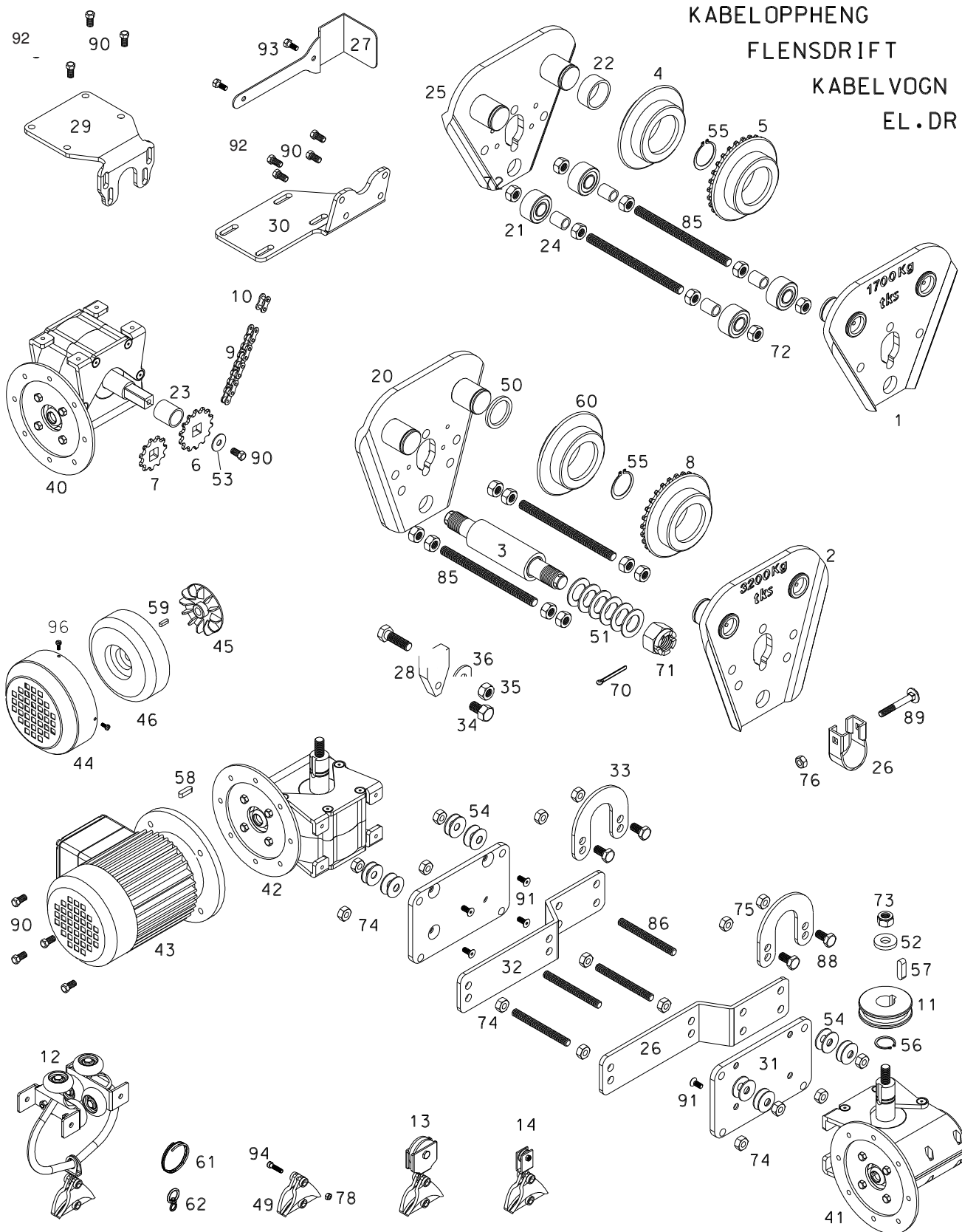
KATTER 3200-1700Kp

KABELOPPHENG

FLENSDRIFT

KABELVOGN

EL.DRIFT



Pos.	Nr.	Benevnelse	Kg.	Pos.	Nr.	Benevnelse	Kg.
1	235120	Løpekattside 1700Kp	2,70		989804	Motor 750/ 3000o/min. B5-160-14	6,50
2	231020	Løpekattside 3200Kp	3,55	44	951132	Viftedeksel (oppgi motorstørrelse)	0,30
3	231050	Taljeaksling ø40 IPE120-180	1,30	45	951131	Vifte ø11 (oppgi motorstørrelse)	0,20
	231055	Taljeaksling ø40 IPE200-240	1,75	46	230012	Svinghjul	1,00
	231056	Taljeaksling ø40 IPE270-330	2,00	49	952515	Kabelfeste m/skruer	0,10
	231057	Taljeaksling ø40 IPE360-500	2,50	50	920236	Skive ø35,5/ø45-4	0,01
	231054	Taljeaksling ø40 IPE550-600	3,00	51	920235	Skive ø25,5/ø40-2	0,01
4	235140	Løpehjul m/1 lager (1700kp)	1,35	52	920231	Skive ø13/ø30-6	0,01
5	235150	Løpehjul m/1 lager og tannkrans (1700kp)	1,50	53	920221	Skive ø9/ø20-4	0,01
6	235011	Kjedehjul Z=14	0,15	54	921309	Tallerkenfjær ø10,2/ø28-1,5	0,01
7	235012	Kjedehjul Z=11	0,10	55	921002	Seegerring A35	0,01
8	232030	Løpehjul m/2 lager og tannkrans (3200kp)	1,50	56	921001	Seegerring A25	0,01
9	921501	Kjede ½"x3/16"-62 ledd (3200kp)	0,25	57	920310	Kile 7x8-30	0,08
	921516	Kjede ½"x3/16"-52 ledd (1700kp)	0,23	58	951155	Kile 5x5-15	0,02
10	921502	Kjedelås ½"x3/16	0,25	59	920314	Kile 4x4-14	0,01
	921513	Kjede ½"x3/16, halvledd	0,01	60	231011	Løpehjul m/2 lager (3200kp)	1,35
11	302526	Drivhjul ø70-spor=8	0,50	61	221526	Kroksikring ø40	0,02
	302588	Drivhjul ø70-spor=10	0,50	62	922498	Svivel	0,02
	302586	Drivhjul ø70-spor=11	0,50	70	921605	Splint	0,01
	302556	Drivhjul ø70-spor=13	0,50	71	917503	M24 kronemutter	0,12
	302572	Drivhjul ø70-spor=15	0,50	72	917103	M12 mutter	0,05
12	20054	Kabelvogn (max. 120mm flensbredde)	0,01	73	917205	M12 låsemutter	0,05
13	26252	Snortrinse Ø40	0,13	74	917102	M10 mutter	0,04
14	92251	Kabeloppheng for 4mm streng	0,10	75	917204	M10 låsemutter	0,04
20	232010	Løpekattside 3200Kp m/hull for motorfeste	3,55	76	917202	M8 låsemutter	0,03
21	931704	Rullelager ø17/ø40-21 NATV-PP	0,20	78	917112	M5 mutter	0,01
22	235101	Avstandsrør ø36iv.-18,5	0,10	85	231040	M12x170 forbindelsesbolt IPE120-180	0,12
23	232035	Avstandsrør ø26iv.-28,5	0,10		231045	M12x235 forbindelsesbolt IPE200-240	0,18
24	231062	Foring ø12/ø17-14	0,05		231046	M12x270 forbindelsesbolt IPE270-330	0,21
25	235125	Løpekattside 1700 kp m/hull for motorfeste	2,70		231047	M12x310 forbindelsesbolt IPE400-500	0,25
26	232018	Klammer – taljeaksling	0,06	86	911041	M10x100 forbindelsesbolt IPE120-180	0,08
27	235030	Kabelvognskyver	0,20		911042	M10x130 forbindelsesbolt IPE200-240	0,10
28	235136	Løpekattsikring	0,15		911043	M10x170 forbindelsesbolt IPE270-330	0,12
29	235132	Snekkefeste høyt	0,80	87	911208	M12x50 sekskant	0,07
30	232012	Snekkefeste lavt	0,90	88	911006	M10x25 sekskant	0,03
31	302620	Snekkefeste flensdrift	1,00	89	910830	M 8x60 låseskrue	0,03
32	238041	Kattfeste flensdrift	1,00	90	911005	M 8x20 sekskant	0,02
33	231032	Festelask	0,40	91	911005	M 8x20 insex.senk	0,02
40	409025	Kattsnekke 1:7 B5-160-14	3,20	92	910822	M 8x16 6kt. m/fl., selvgjengende	0,02
	409035	Kattsnekke 1:7 B5-160-14, 4-hjulsdr.	3,20	93	910603	M 6x16 sekskant	0,01
	409024	Kattsnekke 1:14 B5-160-14	3,20	94	910515	M 5x25 sylinderrhode	0,01
	409034	Kattsnekke 1:14 B5-160-14, 4-hjulsdr.	3,20	96	910304	ø3,9x10 plateskrue	0,01
	409023	Kattsnekke 1:28 B5-160-14	3,20				
	409033	Kattsnekke 1:28 B5-160-14, 4-hjulsdr.	3,20				
41	925026	Flensdr.-snekke-H 1:14 B5-160-14	3,20				
	925093	Flensdr.-snekke-H 1:28 B5-160-14	3,20				
42	925027	Flensdr.-snekke-V 1:14 B5-160-14	3,20				
	925096	Flensdr.-snekke-V 1:28 B5-160-14	3,20				
43	989803	Motor 1500o/min. B5-160-14	6,50				
	989815	Motor 3000o/min. B5-160-14	6,50				

8.0 Maintenance/inspection and troubleshooting :

Maintenance/inspection :

Lifting equipment shall have regular maintenance according to usage and environment. At least 1 inspection by authorized personnel every 12 months, or due to local legislations. Proper maintenance ensures a successful lifetime of equipment.

Bearings in wheels are greased for its lifetime and protected against dust. Supply of grease is therefore not applicable.

Following topics are however required to carry out :

- Bolts and nuts to be checked, they must be tightened to avoid danger or wear.
- Wheels must be inspected for wear
- Chain on motorized trolleys to be cleaned and greased. Slack has to be tightened
- Gearbox is greased for its lifetime with Shell Tivela Compound
Small portions of grease may however come out around the shaft. Check for noise. If silent OK, if noise is present, try to supply with grease or change gear.
- Check clearance between wheels' edges and rails flange. Max allowed gap is 5 mm in total :
Max distance between wheels is flange width + 5 mm
- Trolleys can be delivered in various editions with different speeds

Troubleshooting :

Trolley is running only in one direction :

Fault in control voltage

Trolley is not running even though motor is working :

Chainwheel is loose (on shaft)

Broken gearbox or broken shaft

Trolley is «slipping» through a curve in rail :

Rail is not properly placed horizontally causing the driven wheel to be out of contact with rail – or the clearance between trolley and rail is too tight. Trolley may be adjusted up to max 5 mm clearance, and hoist may be forced slightly over to the side where driven wheels are placed. Alternatively one may choose 4 wheel drive.

Trolley is not pulling properly :

Power supply is 230 V, whereas the trolley is prepared for 400 V. Reconnect !