

## Chain Hoist Testing Set KPS35

for friction clutch testing on chain hoists



### Description

The KPS35 is used to test the friction clutch on chain hoists. The device consists of a force transducer with chain adapters and a display unit. To perform the test, the force transducer is inserted into the chain, travels upwards with it against the base of the chain hoist and thereby blocks the chain. The display unit allows you to read off the magnitude of the force at which the friction clutch operates. Simple and convenient operation is possible using the built-in handle.

The force transducer is built as shear force transducer and is therefore unaffected by parasitic forces and torques. It has a large measuring range from 40kg to 3500kg with a deviation from < 1kg. The output signal is carried via cable to the hand-held indicator.

To test every kind of chain hoist in the specified load range requires two chain adapters and three centering sleeves. With the help of the integrated handle a comfortable operation is possible.

The additional digital hand-held display unit has all the necessary functions to process the output signals of sensors in 2- and 3-wire technology and display the measured value directly. Operation via soft menu keys and cursor keys along with the large dot-matrix display makes handling particularly easy. The capacity of the rechargeable battery allows for more than 8 hours operation without external power supply.

The hand-held indicator, force transducer, three centering sleeves, two chain adapters, charger and 10m signal cable are supplied as a set in a rugged aluminium instrument case.

### Features

- Rugged design
- Easy handling
- Simple calibration of friction clutches without weights
- Low weight
- Single sensor concept for entire load range
- Maximum- / minimum value memory
- Easy to read illuminated graphical display
- High accuracy (measurement uncertainty < 1kg)

### Measuring ranges

40kg up to 3500kg

### Applications

for friction clutch testing on chain hoists,

for chain hoist users,

for services and maintenance

**Model: FRKPS**

## Technical Data

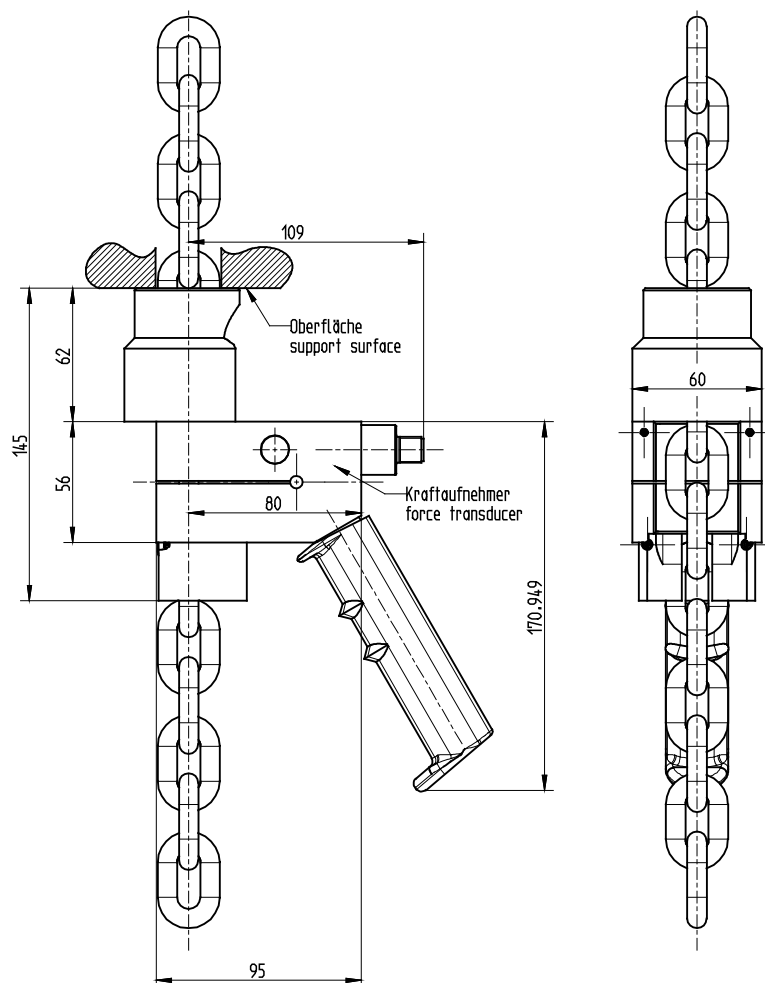
Model	FRKPS
Measurement range	40...3500kg
Accuracy	< 1kg
Hand-held indicator	LCD, 5 digits, illuminated Optional infrared interface for data evaluation via PC
Storage function (optional)	99 data sets (serial number with 12 digits)
Additional display function	MIN, MAX, HOLD, AVG, TARA, LGT
Operating time	8 h (per rechargeable battery)
Chain adapter	2 pieces, for chain size from 3x9 up to 11x31mm (EN 818-2)
Chain center sleeve	3 pieces
Temperature application area	-20°C...60°C
Protection class	force transducer IP67, hand-held indicator IP40
Weight	< 7kg
Dimensions	445 x 165 x 350 mm

## Calibration

Force transducer and hand-held indicator are calibrated together as measuring unit. A repetition calibration is recommended every 12 months. tectis offers to do this service in the company's calibration laboratory.

## Dimensions

### Force transducer



## Chain dimensions according to EN 818-2:2002 (D)

Nominal size dn	Nominal size tolerance	Spacing p	Spacing tolerance	Internal width w1 min.	External width w2 max.	Measuring length of 11 x p	Measuring length of tolerance	Weldet joint ds max.	Weight kg/m
3	+/- 0.1	9	+0.1/-0.05	3.6	10.2	99	+0.3/-0.15	3.3	0.2
4	+/- 0.2	12	+0.15/-0.1	4.8	13.6	132	+0.4/-0.2	4.3	0.35
5	+/- 0.2	15	+0.2/-0.1	6	17	165	+0.5/-0.25	5.4	0.54
6	+/- 0.2	18	+0.2/-0.1	7.2	20.4	198	+0.6/-0.3	6.5	0.78
7	+/- 0.3	21	+0.25/-0.15	8.4	23.8	231	+0.7/-0.35	7.5	1.1
8	+/- 0.3	24	+0.3/-0.15	9.6	27.2	264	+0.8/-0.4	8.6	1.4
9	+/- 0.4	27	+0.35/-0.15	10.8	30.6	297	+0.95/-0.45	9.7	1.75
10	+/- 0.4	30	+0.35/-0.15	12	34	333	+1/-0.5	10.7	2.2
11	+/- 0.4	33	+0.4/-0.2	13.2	37.4	363	+1.2/-0.5	11.8	2.6
12	+/- 0.5	36	+0.45/-0.2	14.4	40.8	396	+1.25/-0.6	12.9	3.1
13	+/- 0.5	39	+0.5/-0.25	15.6	44.2	429	+1.35/-0.65	14	3.65
14	+/- 0.6	42	+0.55/-0.25	16.8	47.6	462	+1.5/-0.7	15.1	4.2
16	+/- 0.6	48	+0.6/-0.3	19.2	54.4	528	+1.7/-0.8	17.3	5.5
18	+/- 0.9	54	+0.7/-0.3	21.6	61.2	594	+1.95/-0.95	19.4	7.0
20	+/- 1.0	60	+0.8/-0.4	24	68	660	+2.2/-1	21.6	8.6
22	+/- 1.1	66	+0.9/-0.4	26.4	74.8	726	+2.4/-1.1	23.8	10.5

Subject of technical changes