

### EXCHANGEABLE MEASURING ADAPTER FOR HSK, SK AND SPK





# F-SENSO SPINDLE PULL-IN FORCE MEASURING DEVICE

Ensuring consistently high machining quality has top priority. Due to the regular check of the tool clamping system with the pull-in force measuring device, F-senso spindle, changes in the clamping force are detected even before it has an effect on the machining quality.

### ADVANTAGES AT A GLANCE

- Maximum flexibility due to exchangeable measuring adapter for all HSK and SK sizes
- (a) Best user-friendliness due to intuitive operation and delivery in a practical case
- Simulation of the tool and spindle tolerances possible by a scaled ring





# F-senso spindle 0-15 kN



### **APPLICATION**

Measuring device for SK and HSK spindles of size SK 30; HSK (A) 20, 25, 32, 40.

Measuring range 0-15 kN.

### **CUSTOMER BENEFITS**

- Maximum flexibility due to exchangeable adapters for all HSK and steep-taper sizes
  High user-friendliness due to intuitive operation and delivery in a practical case
  Simulation of the tool and spindle tolerances possible by a scaled ring

- Delivery includes:
   F-senso spindle force measurement device
   Case with space for adapter
   Mounting bar
   Battery

C 15 Pull-in force measurement device F-senso spindle 0-15 kN



Adaptor for HSK taper



Item no.	Size HSK-A/C/E/T	Size HSK-B/D/F
1269725 ▲	20	-
1255735	25	32
1255736	32	40
1255737	40	50

Adaptor for steep taper shank



Item no.	Matching adapter
1255743	SK 30

A 34 Draw-in bolts



Item no. SK 30	Design
698582	Draw-in bolt DIN 69872 A
698583	Draw-in bolt DIN 69872 B
1297449 ▲	Draw-in bolt ISO 7388/II-B
1297435 ▲	Draw-in bolt MAS BT 1 (45°)
1297436 ▲	Draw-in bolt MAS BT 2 (30°)
1297450 ▲	Draw-in bolt ANSI B5.50

Calibration services F-senso spindle (including test certificate)

Item no.	Design
1295776	Calibration including test certificate (Recommendation: Annually)



# F-senso spindle 10-100 kN



### **APPLICATION**

Measuring device for SK and HSK clamping systems of sizes SK 40, 50, 60; HSK (A) 50, 63, 80, 100, 125 and clamping head SPK.

### **TYPE**

Measuring range 10-100 kN.

### **CUSTOMER BENEFITS**

- $\ensuremath{\, \widehat{ \, }}$  Maximum flexibility due to exchangeable adapters for all HSK and steep-taper
- SIZES
  High user-friendliness due to intuitive operation and delivery in a practical case Simulation of the tool and spindle tolerances possible by a scaled ring

- Delivery includes:
   F-senso spindle force measurement device
   Case with space for adapter
   Mounting bar
   Betten:

- Battery

C 15 Pull-in force measurement device F-senso spindle 10-100 kN



•	
Item no.	1255729
Measuring range / Clamping force kN	10-100 kN
Accuracy	0,25% (f.s.)
Dimensions (base unit)	ca. Ø66mm; L=189 mm

Adaptor for HSK taper



Item no.	Size HSK-A/C/E/T	Size HSK-B/D/F
1255738	50	63
1255739	63	80
1255740	80	100
1255741	100	125
1255742 ▲	125	160

C 15 Adaptor for steep taper shank



Item no.	Matching adapter
1255744	SK 40
1255745	SK 50
1255746 ▲	SK 60

A 34 Draw-in bolts



	SK 40	SK 50	SK 60
Draw-in bolt DIN 69872 A	347325	367316	1297443 ▲
Draw-in bolt DIN 69872 B	698584	698586	1234433 ▲
Draw-in bolt ISO 7388/II-B	367569	698588	1297444 ▲
Draw-in bolt MAS BT 1 (45°)	1297437 ▲	698594	1297445 ▲
Draw-in bolt MAS BT 2 (30°)	1297438 ▲	698591	1297446 ▲
Draw-in bolt ANSI B5.50	620770	620771	1297447 🛦



# F-senso spindle 10-100 kN

A 34C 15 Adaptor for clamping heads



Item no.	Matching adapter
1288317	SPK 100 (1154381)
1296094	SPK 110 (1154382)
1288319	SPK 125 (1256149)
1288320	SPK 140 (1262302)

### C 15

Calibration services F-senso spindle (including test certificate)

Item no.	Design
1295776	Calibration including test certificate (Recommendation: Annually)

Ollogico conco