

## KL-TCG Steuerung - INDUSTRIE 4.0

Intelligentes Schraubsystem mit Drehmoment-Überwachung und Winkelkontrollfunktion



- Programmierung über PC oder Steuerung
- mit hoher Drehmomentgenauigkeit +/-3%
- 100% integrierbar in Industrie 4.0
- Export der Schraubdaten über RS-232
- 50 Schraubparametersätze / Job - Job Sequence
- 250 Programmabläufe / Unterprogramme programmierbar
- 99 Programme mit bis zu 5 Stufen pro Programm / Schritte je Schraubvorgang



I/O Signal	KL-TCG KL-TCG-L	KL-TCG-S1 KL-TCG-L-S1
externe Programmanwahl		X
Start	X	
Reverse	X	
Disable	X	X
Confirm	X	X
Clear	X	X
Gate	X	X



Modell	KL-TCG	KL-TCG-L
Eingangsspannung	AC 115 / 230V 50-60Hz	
Ausgangsspannung	DC 40V	
Eingänge	Sensor / Freigabe, Reset, Start, Reverse	
Ausgänge	OK / NG / OK ALL / Start / Reverse	
Serielle Schnittstelle	RS-232X2, Micro SD, LAN	
Gewicht	3,4 kg	
Abmessungen	185 x 241 x 127 (mm)	
Schrauber	SKT-CGS10/CGS30/CG30/CG50/CG70 SKT-LCG30/LCG50/LCG70	SKT-CG120/CG180/CG250 SKT-LCG120/LCG180/LCG250

# Programmablauf für KL-TCG und KL-GTCS

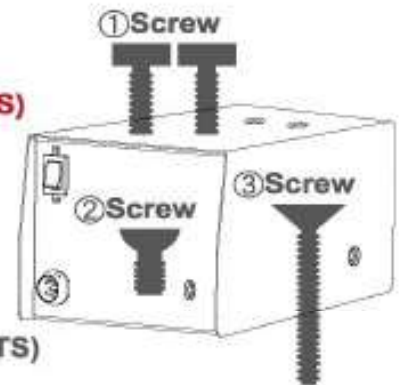
## Step 1 Tightening Step(TS)

Setup tightening step (TS) with various parameters

★ Save up to 250 pre-programmed tightening steps (TS)

Tightening step parameters as below

RPM Torque Number of turns Forward Reverse



## Step 2 Tightening Program(TP)

Each program (TP) can use up to 5 tightening steps (TS)

★ Set up to 99 programs (TP)

① Screw (TP5)	First (TS3)	RPM + Torque or Number of turns + Forward
	Second (TS8)	RPM + Torque or Number of turns + Reverse
	Third (TS4)	RPM + Torque or Number of turns + Forward
② Screw (TP8)	First (TS33)	RPM + Torque or Number of turns + Forward
	Second (TS26)	RPM + Torque or Number of turns + Reverse
	Third (TS5)	RPM + Torque or Number of turns + Reverse
	Fourth (TS1)	RPM + Torque or Number of turns + Forward
③ Screw (TP4)	First (TS10)	RPM + Torque or Number of turns + Forward
	Second (TS28)	RPM + Torque or Number of turns + Reverse
	Third (TS22)	RPM + Torque or Number of turns + Forward
	Fourth (TS14)	RPM + Torque or Number of turns + Reverse
	Fifth (TS6)	RPM + Torque or Number of turns + Forward
(TP99)		

## Settings Tightening Program(TP) + Tighten Repeat (TR)

→ Sequence(SEQ)

★ Set up to 99 tightening repeat (TR)

★ Use up to 50 sequences (SEQ) in 1 job

- ① Screw(TP5) + (TR)x2 → (SEQ1)
- ② Screw(TP8) + (TR)x1 → (SEQ2) (JOB)
- ③ Screw(TP4) + (TR)x1 → (SEQ3)



Barcode reader



(JOB)

★ Save up to 50 jobs