Product Specifications

Tool Specifications
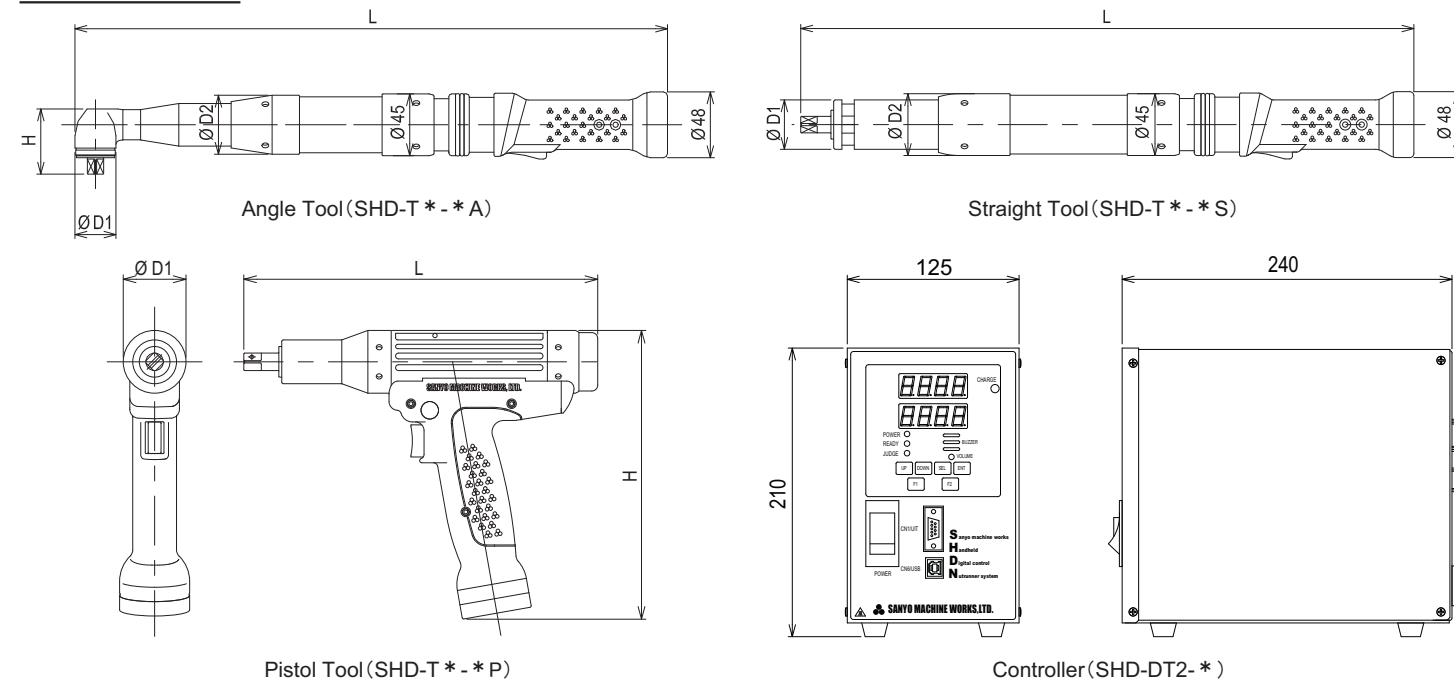
Type	Model	Rated Torque (N.m)	Torque Range (N.m)	Free Speed (rpm)	Weight (kg)	D1	D2	H	L (*1)	Output Axis Size (mm)	Fastening Accuracy (%)
Pistol	SHD-T1-012P	12.0	3.6 – 16.0	1125	0.89	40	n.a.	194	226	(*2)	
	SHD-T1-020P	20.0	6.0 – 32.0 (impact mode)	635	0.93				230	Square 9.52	
High-Speed Pistol	SHD-T2-010P	10.0	3.0 – 14.0	3750	1.10	43		198	242.5	(*2)	
	SHD-T2-012P	12.0	3.6 – 16.0	3000						(*2)	
	SHD-T2-020P	20.0	6.0 – 32.0 (impact mode)	1730	1.30				269	Square 9.52	
Angle	SHD-T1-020A	20.0	6.0 – 20.0	675	1.35	30	43	48	434	Square 9.52	±5 (3σ / Rated Torque)
	SHD-T2-050A	50.0	15.0 – 50.0	740	1.85	36	45	52	477	Square 9.52	
	SHD-T2-100A	100.0	30.0 – 100.0	525	2.55	46	54	63	498	Square 12.7	
	SHD-T2-150A	150.0	45.0 – 150.0	335	3.25	54	56	75	505	Square 15.88	
Straight	SHD-T1-005S	5.0	1.5 – 5.0	1125	1.20	31	43	n.a.	390	Square 9.52	
	SHD-T1-010S	10.0	3.0 – 10.0								
	SHD-T2-030S	30.0	9.0 – 30.0	1230	1.72	36	45		446		
	SHD-T2-050S	50.0	15.0 – 50.0	900	2.36	44	54		456	Square 12.7	
	SHD-T2-085S	85.0	25.5 – 85.0	555	2.60	47	56		469		

(*1) Length dependent on output axis, square drive or hex female bit. (The size of a table is the square type size.) (*2) Square 9.52 or Hex female 6.35.

Controller Specifications

Model	Input Power (V)	Average Power Consumption (W)	Peak Power Consumption (W)	Operating Temperature (℃)
SHD-DT2-1	AC 90 – 127	160	3500	0 – 50 (Do not condense dew)
SHD-DT2-2	AC 180 – 253			

Dimensions

Angle Tool (SHD-T * - * A)

Straight Tool (SHD-T * - * S)

Pistol Tool (SHD-T * - * P)

Controller (SHD-DT2- *)

* The above-mentioned specification may be changed without prior notice.

SANYO MACHINE WORKS, LTD. ~Advanced Solutions and Service in Assembly System~

S anyo machine works
H andheld
D igital control
N utrunner system

These handheld nutrunners have been based upon the accumulated experience from producing electric nutrunners since 1976.

Compact, Ultra-Light Weight & High Power

● **SMALL & ULTRA-LIGHT TOOL**
Newly designed small motor and high-rigidity resin molded body combine to create a light weight tool 1.96lbs (= 0.89kg : 12 N.m Pistol Type).

● **LOW OPERATION TEMPERATURE**
The newly designed motor is so efficient that the operating temperatures are kept at a minimum, even during high duty cycle.

● **THIN & HIGH-FLEX CABLE**
The thin and flexible tool cable makes it much easier for the operator to handle the tool, thus reducing operators strain and fatigue.

● **COMPACT CONTROLLER**
The new space saving, light weight controller can be installed anywhere you like. With its compact size you can install it various places such as line-side or on top of a cart.

SHD-T1-012P

SHD-DT2

SHD-T1-010S

SHD-T1-020A

High performance & High Durability & High Reliability

● **TOP-LEVEL HIGH-SPEED TOOL IN THE WORLD**
The newly designed high speed Pistol tool (SHD-T2-Type), achieves speeds over 3 times faster than an original. With increased brake performance, the tool can reach seating torque at high speeds, reducing tightening times.

● **SUPER DURABILITY**
One million consecutive running test, at rated torque, guarantees outstanding durability. High precision and high efficiency of the planetary gear contributes toward this high durability and reduces operating noise.

● **NON CONTACT TRIGGER SW**
Non-contact, non-wear trigger switch makes the tool trigger highly durable. Two speed trigger provides more accurate tool socket and fastener thread engagement.

● **LED INDICATOR**
End of cycle data (OK/NG) can be easily confirmed by 3 brightly colored LEDs. The color and status (Blinking/Steady) of the LEDs can be user defined based on error/ fault codes.

● **RESOLVER FOR ANGLE DETECTION**
Resolver for measuring degrees of rotation (Angle Detection) ensures high relaiablity and anti-shock durability.

● **QUICK & EASY TOOL CHANGE**
All the tools are inspected and calibrated prior to shipping and are ready for production just by hooking up to the controller.

High Precision & Multi-Function

● **HIGH ACCURACY & QUICK RESPONSE**
Sanyo's newly designed quick response motor can reach seating torque at maximum speeds with minimal torque over-run issues, bringing highly accurate fastening at decreased cycle times.

● **PROGRAMMABLE & MULTI-FUNCTIONS**
Tightening motions and sequences are fully programmable. You can change tightening parameters such as tightening speed and acceleration ratio. Also, you can program complicated tightening motions such as dual tightening.

● **64 FASTENING PROGRAM AVAILABLE**
There are 64 tightening programs. Within each program, parameters such as tightening torque and acceleration ratio can be customized to your specific requirement. By changing the program, this tool can handle 64 totally different fastening applications.

● **LOW REACTION ALGORITHM**
Using ergonomically designed algorithm, operators are considerably relieved from tightening strain. The tool can adjust tightening speeds, by monitoring the torque curve, to reach target torque within a programmed time. When fastening is done on table surface materials, such as sheet metal, this tool automatically distinguishes between soft and hard joints and selects optimum fastening motions.

● **IMPACT MODE**
Impact Tightening Mode helps absorb torque reaction allowing operators to do the job with minimum physical strain.
(Note: Tightening accuracy in Impact Mode gets slightly lower than one in Nutrunner Mode)

● **BATCH COUNT**
Batch count function helps to error proof the fastening process by setting a number of OK joints needed to complete a set amount of fastening cycles (batch). This makes sure all joints in the batch have been fastened. Even in multiple fastening sequence, individual parameters can be set for each fastening.

● **WIDE COMMUNICATION CAPABILITY**
Fastening Data acquisition is available via RS232C port. Additional options are available via Field bus (Devicenet, Profibus, CC-Link) and Ethernet (TCP/IP).

● **USER INTERFACE TERMINAL SOFTWARE**
By using the User Interface Terminal Software, tightening parameters & programs can be set up and the end-of-cycle fastening and torque curve data can be collected.
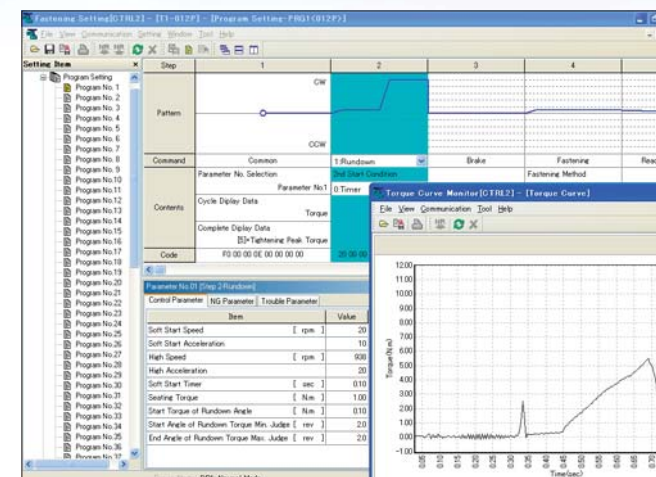
Fastening Setting / Torque Curve Display Screen

End of Cycle Data Display Screen