

Push Rod Tools

Create your own Signal Output or TALS-2 Wireless Wrench

SIGNAL OUTPUT WRENCH
(3 Components - SOLD Separately)



TALS-2 WIRELESS WRENCHES
(2 Components - SOLD Separately)



KEY FEATURES

The Push Rod (PR) tools are the common wrench component used for the Signal Output Wrench and the TALS-2 Wireless Wrench. The appropriate Universal Rotary Switch Module or Universal Tool RF Transceiver must be added prior to use.

PR wrenches are designed with a "Push Rod" connected to the mechanism of the wrench. When the wrench achieves its set torque, the rod makes contact with the microswitch housed within the Rotary Switch Module or RF Transceiver Module.

Designed and manufactured to meet or exceed the accuracy and repeatability requirements of ISO 6789:2003

- Tools < 10 N.m ($\pm 6\%$ of setting):

MTBN2-PR & MTBN10-PR, TSP5/45-PR, TSP10/90-PR

- Tools > 10 N.m are ($\pm 4\%$ of setting):

MTBN25-PR, MTBN65-PR & MTBN135-PR, TSN25D-PR, TSN25A-PR, TSN55-PR, TSN125-PR, STB35-PR & STB70-PR

TSN - PUSH ROD WRENCH (Cam-Over Wrench style)

Model	Item #	Torque Ranges			Length		Square Drive	Weight	
		lbf.ft	N.m	kgf.m	inches	mm		oz.	gm.
TSN25D-PR	020500	2 - 18	3 - 25	.3 - 2.5	9 3/4	247	1/4"	13.8	390
TSN25A-PR	020504	2 - 18	3 - 25	.3 - 2.5	9 3/4	247	3/8"	13.8	390
TSN55-PR	020502	10 - 40	15 - 55	1.5 - 5.6	13	328	3/8"	30.1	850
TSN125-PR	020503	30 - 90	40 - 125	4 - 12.7	18 1/4	464	1/2"	50.8	1430

MTBN - PUSH ROD WRENCH (Break-Over Wrench style)

Model	Item #	Torque Ranges			Length		Drive Type	Weight		
		lbf.in	N.m	kgf.m	inches	mm		oz.	gm.	Break
MTBN2-PR	020538	1.8 - 18	0.2 - 2	2 - 20	5 3/4	147	Captive Pin	5.7	160	20° or 90°
MTBN10-PR	020539	9 - 89	1 - 10	10 - 102	5 3/4	147	Captive Pin	6.4	180	20° or 90°
MTBN25-PR*	020494	44 - 221	5 - 25	51 - 255	10 3/8	270	16mm Spigot	16.3	460	20°
MTBN65-PR*	020495	89 - 575	10 - 65	102 - 663	13 1/2	345	16mm Spigot	29	820	20°
MTBN135-PR*	020505	177 - 1195	20 - 135	204 - 1377	17 1/8	435	16mm Spigot	38.2	1080	20°

*Models operate in single direction (clockwise).

STB - PUSH ROD WRENCH (Cam-Over Breaking Wrench style)

Model	Item #	Torque Ranges			Length		Drive Type	Weight		
		lbf.ft	N.m	kgf.m	inches	mm		oz.	gm.	Break
STB35-PR	020575	5.2 - 25	7 - 35	0.7 - 3.5	10	256	16mm Spigot	19.1	540	110°
STB70-PR	020576	14 - 51	20 - 70	2 - 7.1	14 1/2	369	16mm Spigot	34	960	110°

TSP - PUSH ROD WRENCH (Cam-Over Wrench style)

Model	Item #	Torque Ranges			Length		Square Drive	Weight	
		lbf.in	N.m	kgf.m	inches	mm		oz.	gm.
TSP5/45-PR	020537	10 - 45	1 - 5	10.2 - 51	7 7/8	200	1/4"	8.5	240
TSP10/90-PR	020549	20 - 90	20 - 90	20.4 - 102	7 7/8	200	1/4"	8.5	240



NOTE!

The weight and length does not include the Universal Rotary Switch Model or TALS Transceiver attached to the wrenches.

SIGNAL OUTPUT WRENCHES (Electric Signal Wrenches)



Push Rod Wrench
Item # (Select from previous page)

Requires 3 components:



Universal Rotary Switch Module
Item #20-B25900



Straight Cable (pictured) Item #20-D94402
Spiral Cable Item #20-D94406

KEY FEATURES

Push Rod Tools are fitted with a Universal Rotary Switch Module (360° rotating connector prevents twisting or kinking of the cable), which signals when a pre-set torque value is reached.

Signal Output Wrenches can be connected to a Signal Delay Unit (accessory item) to monitor the use of the wrenches as the electrical signal is displayed each time the wrench achieves its pre-set torque value.

Micro-switch contained in internal shock-resistant housing.

Signal Output Wrenches can be interfaced with computers, counters, or gate switch.

Possible use in Production Line Control: Allowing only components with correctly torque fasteners to pass through a work station. This could be a simple matter of actuating a gate switch or signaling a computer controlled work station.

Counting Function: Count the number of times the torque has been applied - check against finished goods.

ACCESSORIES

SIGNAL DELAY UNIT Item #20-C12870



Designed to exceed the duration of the electrical circuit completed and guarantee interface quality. It minimizes risk of multiple signals caused by rapid use or variable signal duration. The wall mountable box features adjustable signal duration and LEDs to monitor the signal.

POWER SUPPLY FOR SIGNAL DELAY UNIT

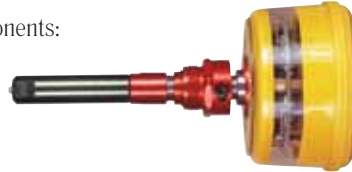
Item #020618

TALS-2 WIRELESS WRENCHES



Push Rod Wrench
Item # (Select from previous page)

Requires 2 components:



Universal Tool RF Transceiver
Item #020533

Connected to Push Rod Wrench to create a wireless wrench. Transmit signals to UIB (User Interface Box) each time wrench reaches pre-set torque.

KEY FEATURES

Wireless torque application monitoring system designed to send signal to an external monitoring device when a preset torque has been applied.

Use TALS as on-line monitoring of critical fasteners in a production line to ensure the line will only move when the required number of fastening operations have been confirmed.

Two way communication between the wrench and user interface box, plus remote antennae; can be positioned close to the production area and provide reliable signal.

Work without the hassle of cables and deliver accurate torque.

Perfect for remote switching, counting, batching, production line control, auditing, and monitoring.

RS-232 interface to download readings and wrench data for easy SPC analysis and quality control documents.

TALS-2 CORE SYSTEM



UIB
(User Interface Box)

KEY FEATURES

Designated to capture signals by the wrenches fitted with RF Transceivers.

Up to 4 wireless wrenches can be monitored simultaneously. Large liquid crystal display allows operator to view: wrench transceiver serial number, battery status, shift count, last calibration count, and relay time delay. Can add up to 3 more nodes.

TALS-2 CORE SYSTEM

Item #020540

Consists of the following:

- 1 User Interface Box
- 2 Node Transceivers
- 2 Circuit Terminators
- 2 Node Cables

TALS POWER SUPPLY

Item #061629



NODE TRANSCEIVER

Item #020534

Contains a radio transceiver to communicate with wrench transceiver. Nodes are hard wired into UIB, a minimum of 2 nodes are needed and maximum of 5 are possible. Two Nodes included with Core system. Additional Nodes may be needed in production area.

TOOL RF TRANSCEIVER BATTERY

Item #770495

Three required per transceiver.



CIRCUIT TERMINATOR FOR INTERFACE BOX

Item #020536

Circuit Terminator - Two included with TALS-2 Core System (Only two required, one for each transceiver channel). Only reason to buy separately would be if one became damaged or lost.

TALS TRANSCEIVER PROTECTIVE COVER

Item #020591