SECTION INDEX

Proper Size
& Selection 86 - 87
G1 Lightweight
Torque Pump88
G3 Heavy Duty
Torque Pump89
G5 Heavy Duty
Torque Pump90
G5 Heavy Duty
Air Torque Pump91
G5 Autocycle
Torque Pump92
Torque Intensifier93
Square Drive
Wrenches94
Square Drive
Accessories95
Low Clearance
Torque Wrenches 96 - 97





INTRODUCTION

BOLTING PRODUCTS



SIMPLEX BOLTING PRODUCTS OVERVIEW

✓ Bolting Features

Simplex offers a wide variety of hydraulic torque wrenches available in square drive design or low clearance wrenches. These tools are the most versatile in the business. Optional attachments and accessories are available to complement both style wrenches.

✓ WT-Series Square Drive Wrenches

The Simplex square drive wrench combines strength and simplicity to handle the toughest bolting jobs. Simplex square drive wrenches come with a push through drive in the 3/4", 1" and 1 1/2" models, eliminating pulling the drive out of a wrench to change drive direction. The WT-Series wrenches can react off the wrench body for close quarter applications. Several optional accessories are available.

✓ WX-Series Low Clearance Wrenches

Simplex Low Clearance wrenches are the flattest wrenches available, utilizing a patented low height piston. The Simplex WX series wrenches fit in places competitive wrenches cannot. The low clearance wrenches have a wide choice of links available in 1/16" increments. Metric sizes are also available. Several optional accessories are available such as hex reducers, hex to square drive adaptors and different reaction arms.

✓ Bolting Accessories

Simplex torque wrench pumps are available in both electric and air power. Simplex electric pumps are smooth running, continuous duty pumps with permanent magnet motors that will start and run under full load on as little as 60VAC. An integrated auto shut-off switch, along with a steel reservoir, keeps the oil and pump cool and helps prevent pump breakdown. Hoses are twin style with a 4:1 safety factor and the pump mounted gauge reads out in 100 psi increments.



G1 BOLTING PUMP 19 cu.in. / min. @ 10,000 psi



An intermittent 1/2 hp pump that is best suited to power small size torque wrenches. It's easy to transport and very lightweight.

Starting weight @ 36 lbs.

G3 BOLTING PUMP 46 cu.in. / min. @ 10,000 psi



A continuous duty 1 1/8 hp pump that is best suited to power small to medium torque wrenches. Ideal for systems that require high performance, with lightweight portability.

Starting weight @ 57 lbs.

BOLTING WRENCHES SOUARE DRIVE & LOW CLEARANCE WRENCHES



Simplex offers a wide variety of hydraulic wrenches available in lightweight square drive design or the flat low clearance wrenches. Optional attachments and accessories are available for both style wrenches to simplify your task.

G5 BOLTING PUMP 55 cu.in. / min. @ 10,000 psi



A continuous duty 1 1/2 hp pump that is best suited for medium to large torque wrenches. Starting weight @ 75 lbs.

G5 BOLTING PUMP - AIR 55 cu.in. / min. @ 10,000 psi



A continuous duty air pump that is best suited for medium to large size torque wrenches. The high flow rate runs multiple tools efficiently. Starting weight @ 75 lbs.

HOSES & MANIFOLDS



A complete set of high performance and high pressure hose styles and sizes are available to fit any application, along with an 8 port manifold allowing the user the ability to use up to four tools at once.

PROPER SIZE & SELECTION

BOLTING PRODUCTS





SELECTING THE PROPER PUMP

All SIMPLEX bolting pumps are configured specifically for bolting applications. Each "turnkey" power pump includes polarized couplers, external adjustable relief valve, pump mounted gauge and optional multiple port manifold for multiple tools. When selecting a power pump, consider the power requirements; air, 115 vac or 230 vac, 2nd stage hydraulic flow, pump operating / interval time, number of tools being operated and weight. Refer to the internal pages for details.



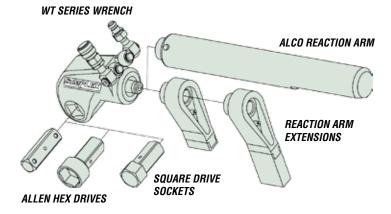
SELECTING THE PROPER HOSE

All of the SIMPLEX hoses are thermo-plastic, banded together, color coded are polarized for plug and play operation. Lengths are available in 15, 20 and 40 feet. Each bolting hose has a 4:1 safety factor that provides you with the flexibility to meet any project requirement.



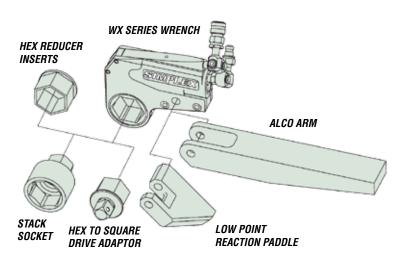
SELECTING THE PROPER TOOL

A hydraulic torque wrench is a tool used to precisely set the hydraulic torque of a fastener such as a nut or bolt. Our hydraulic torque wrenches are available in a square drive and low profile design. These tools allow the operator to measure the torque (rotational force) applied to the bolt so it can be matched to the specifications by the means of a power pump. Consider the amount of torque, footprint requirements and retraction area when selecting your wrench.



WT SERIES SOUARE DRIVE WRENCH

Simplex square drive wrenches come with a push through drive in the 3/4", 1" and 1 1/2" models, eliminating pulling the drive out of a wrench to change drive direction. The WT Series wrenches can react off the wrench body for close quarter applications. Several optional accessories such as Alco Reaction Arms, extensions and sockets are available for your specific needs.



WX SERIES LOW CLEARANCE WRENCH

Simplex low clearance wrenches fit in places that competitive style wrenches cannot. The low clearance wrenches have a wide choice of links available in 1/16" increments. Several optional accessories are available such as hex reducers, hex to square drive adaptors and different reaction arms.

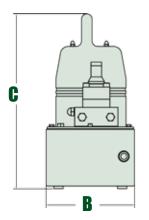




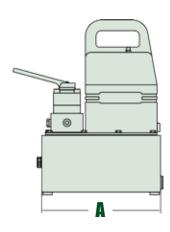
clearance torque wrench was used to tighten the footing of this support tower.

SIMPLEX ADVANTAGES

- ✓ Turnkey bolting pump configuration, ideal for use with small sized torque wrenches.
- ✓ Equipped with an integrated gauge, adjustable relief and 15' remote power controlled pendant.
- **✔** Powered by a 115V 60Hz, .5 hp universal motor (14,640 rpm); low startup voltage, draws 10 amps at full load (230V model available).
- ✓ Two-speed pump operation provides fast tool performance; 19 cubic inches / minute @ 10,000 PSI.
- ✔ Precision machined valve design offers reliability in the most demanding applications.
- ✔ Reservoirs available in 1 gallon; steel.
- Compact, lightweight design, starting at 36 lbs.



G1171T Shown





TORQUE WRENCHES

A wide variety of hydraulic torque wrenches available in lightweight, square drive, or low clearance - Pg. 94-97 wrenches.



HOSES

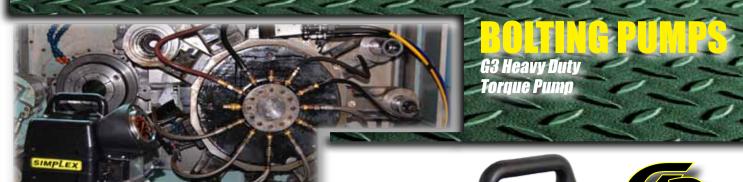
Large selection of heavy duty, thermo-plastic torque wrench hoses to meet your requirements.

- Pg. 95

Usable	Α	В	C
Oil (Gallons)	(in)	(in)	(in)
1 (metal)	11.00	8.17	16.17

^{*} For 230 VAC pump use "2" in the 3rd character of the model number. Motor specifications 0,8 kw single phase, 10 amps @ 230 VAC.

				Product	i Order	ing & Sp	ecificatio	ns		
Model	Pressure Rating (psi) Ou			tput Flow (cu.in./ Moto min.)		Motor Spec. Valve Type		Pendant Control	Reservoir Capacity	Weight (lbs)
	1st Stage 2nd Stage 1st Stage 2nd Stage		(vac)	(amps)						
G1171T	71T 400 10,000 250 19 115 10						4W, 2P	Motor / Solenoid	1	36



The ease of operation and mobility from the G3 bolting pump was needed to repair the massive chuck on this CNC machine.

SIMPLEX ADVANTAGES

- Turnkey bolting pump configuration, ideal for use with small to mid-sized torque wrenches.
- ✔ Powered by a 115V 60Hz, 1-1/8 hp universal motor (21,000 rpm); low startup voltage, draws 16 amps at full load (230V models available).
- ✓ Equipped with an integrated gauge, adjustable relief and 15' remote power controlled pendant.
- ✔ High performance two-stage pump provides higher cross-over pressure for faster cycle times and tool operation; 46 cubic inches / minute @ 10,000 PSI.
- ✔ Precision machined shear seal slider valve design offers reliability in the most demanding applications.
- ✔ Reservoirs available in 1 2.5 gallons; welded steel design.
- ✓ Compact, lightweight design, starting at 57 lbs.

G3 TORQUE PUMP FACTORY INSTALLED OPTIONS
For ordering, add option letter to end of the model number.







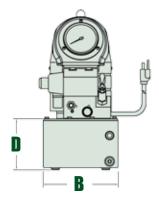
Z = Multi-Port Manifold

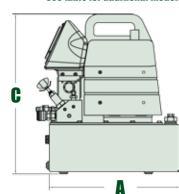
C = Caster Kit

R = Roll Cage



G3171T Shown See table for additional models





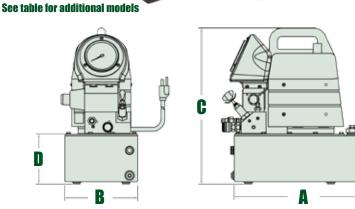
Usable Oil	A	В	C	D
(Gallons)	(in)	(in)	(in)	(in)
1.5	15.13	8.75	19	5.96
2.5	17	9.75	19	5.96

* For 230 VAC pump use "2" in the 3rd character of the model number. Motor specifications 0,8 kw single phase, 10 amps @ 230 VAC.

				Product	Order	ing & Sp	ecificatio	ns		
Model	(cu.in./min.)					r Spec.	Valve Type	Pendant Control	Reservoir Capacity	Weight (lbs)
	1st Stage	2nd Stage	1st Stage	2nd Stage	(vac)	(amps)				
G3171T	1,100	10,000	700	46	115	16	4W, 2P	Motor / Solenoid	1	57
G3172T	1,100	10,000	700	46	115	16	4W, 2P	Motor / Solenoid	1.5	62
G3173T	1,100	10,000	700	46	115	16	4W, 2P	Motor / Solenoid	2.5	69

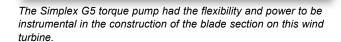






Usable Oil	A	В	C	D
(Gallons)	(in)	(in)	(in)	(in)
1.5	15.13	8.75	19	5.96
2.5	17	9.75	19	5.96

Larger capacities available upon request.



SIMPLEX ADVANTAGES

- ✓ Turnkey bolting pump configuration, ideal for use with mid to large sized torque wrenches.
- ✓ Powered by a 115V 60Hz, 1-1/2 hp permanent magnet motor (3,000 rpm); low startup voltage, draws 18 amps at full load (230V models available).
- ✓ Equipped with an integrated gauge, adjustable relief and 15' remote power controlled pendant.
- ✓ High performance two-stage pump provides higher cross-over pressure for faster cycle times and tool operation; 55 cubic inches / minute @ 10,000 PSI. Optional 3 stage for progressive force.
- ✔ Precision machined shear seal slider valve design offers reliability in the most demanding applications.
- ✓ Reservoirs available in 1.5 & 2.5 gallons; welded steel design.
- ✔ Best performance to weight ratio, starting at 75 lbs.

G5 FACTORY INSTALLED OPTIONS

For ordering, add option letter to end of the model number.



H = Heat Exchanger

C = Caster Kit

Z = Multi-Port Manifold

R = Roll Cage

* For 230 VAC pump use "2" in the 3rd character of the model number. Motor specifications 0,8 kw single phase, 10 amps @ 230 VAC.

				Product	Order	ing & Sp	ecificatio	ns		
Model	(cu.in./min.)					Motor Spec.		Pendant Control	Reservoir Capacity	Weight (lbs)
			2nd Stage	(vac)	(amps)					
G5172T	1,100	10,000	700	55	115	18	4W, 2P	Motor / Solenoid	1.5	75
G5173T	1,100	10,000	700	55	115	18	4W, 2P	Motor / Solenoid	2.5	85



A Simplex G5 Air Torque pump is used with a WT-2 to remove the shroud on this steel cutter.

- ✓ Turnkey bolting pump configuration, ideal for use with mid to large sized torque wrenches.
- ✔ Powered by a rotary air vane, 3 hp motor (3,000 rpm).
- ✓ Equipped with a filter-lubricator assembly, air muffler, carrying handlebar, adjustable relief and 12' remote controlled pendant on all models.
- ✔ High performance two-stage pump provides higher cross-over pressure for faster cycle times and tool operation; 55 cubic inches / minute @ 10,000 PSI. Optional 3 stage for progressive force.
- ✔ Precision machined shear seal slider valve design offers reliability in the most demanding applications.
- ✓ Reservoirs available in 1.5 & 2.5 gallons; welded steel design.
- ✓ High-performance, compact design, starting at 75 lbs.







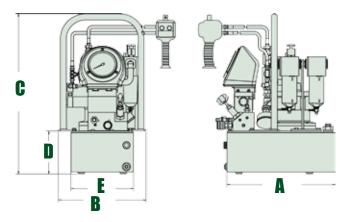


Z = Multi-Port Manifold

C = Caster Kit

R = Roll Cage





Usable Oil	A	В	C	D	E
(Gallons)	(in)	(in)	(in)	(in)	(in)
1.5	15.13	8.75	22.34	5.96	12.24
2.5	17	9.75	22.34	5.96	13.24

Larger capacities available upon request.

	Product Ordering & Specifications													
Model														
	1st Stage	2nd Stage	1st Stage	2nd Stage	(psi)	(cfm)	Туре	Control	Capacity	(lbs)				
G5772T	1,100	10,000	700	55	90	50	4W, 2P	Motor / Solenoid	1.5	75				
G5773T	1,100	10,000	700	55	90	50	4W, 2P	Motor / Solenoid	2.5	85				



time constraint of our outage, the Simplex Auto-cycle pump was our only choice. "It provides the fastest, most reliable power available for bolting applications".

SIMPLEX ADVANTAGES

- ✓ Turnkey bolting pump configuration, ideal for use with mid to large sized torque wrenches.
- ✔ Powered by a 115V 60Hz, 1-1/2 hp permanent magnet motor (3,000 rpm); low startup voltage, draws 18 amps at full load (230V models available).
- ✓ Equipped with an integrated hand-held digital LCD pendant, adjustable relief and 15' remote power controlled pendant.
- ✓ High performance three-stage pump provides higher cross-over pressure for faster cycle times throughout the pressure range; 55 cubic inches / minute @ 10,000 PSI.
- ✔ Precision machined shear seal slider valve design offers reliability in the most demanding applications.
- ✓ Reservoirs available in 1.5 2.5 gallons; welded steel design.
- ✔ Progressive force, high-performance pump, starting at 71 lbs.

Pendant Features:

See table for additional models

G5173A Shown

- · Large LCD Display.
- Raised Rubberized Keypad.
- Tough ABS Enclosure.

Control Menu Options:

- Manual Mode provides the user the ability to manually cycle the tool.
- Auto-Cycle Mode continuously cycles tool until selected torque has been achieved.
- Output measurements are displayed in Imperial or Metric units.
- Full diagnostic capabilities keeps the user informed on system operations.

Lightweight **Auto-Cycle Pendant**



G5 AUTO-CYCLE FACTORY INSTALLED OPTIONS For ordering, add option letter to end of the model number.



H = Heat Exchanger

C = Caster Kit

Z = Multi-Port Manifold

R = Roll Cage

* For 230 VAC pump use "2" in the 3rd character of the model number. Motor specifications 0,8 kw single phase, 10 amps @ 230 VAC.

				Product	Order	ing & Sp	ecificatio	ns		
Model	(cu.in./min.)					Motor Spec.		Pendant Control	Reservoir Capacity	Weight (lbs)
	1st Stage					(amps)				
G5172A	172A 1,100 10,000 700 55			55	115	18	4W, 2P	Motor / Solenoid	1.5	71
G5173A	1,100	10,000	700	55	18	4W, 2P	Motor / Solenoid	2.5	81	



The PIT4 torque wrench intensifier was used by a rail repair crew to loosen the joint brackets on segmented rail.

- ✓ Converts on board mobile hydraulic systems into high pressure (10,000 psi) power source.
- ✓ Ideal for utilities, railroads, construction, riggers and aerial buckets.
- ✓ Compact and easy to carry.
- ✓ No reservoir oil level to maintain; uses low pressure system as oil supply.
- ✓ Integrated pressure gauge.
- ✓ 1/4" NPTF ports with quick disconnect couplers.



TORQUE WRENCHES

Simplex offers a wide variety of hydraulic torque wrenches available in lightweight square drive design or flat low clearance. - Pgs. 94-97

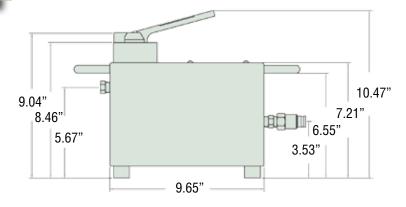


Please refer to pages 4 & 5 for a complete list of safety tips and recommendations to ensure that your Simplex equipment will perform to its full potential.





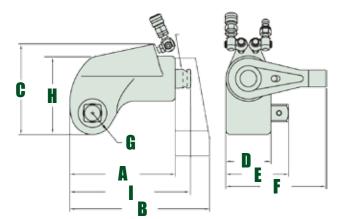
PIT4 Shown

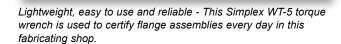


			Product Or	dering & Spe	cification	S			
Model		Valve	Input Flow Range	Input	Output	Output	Output	Output	Weight
	Туре	Function	(GPM)	Pres. (PSI)	Pres. Max. (PSI)	Flow Range (GPM)	Flow Ratio	Pres. Ratio	(lbs)
PIT4	4 Way/3 Position	Advance/Hold/ Retract	5 - 10	300-2,000	10,000	2	1:5	5:1	30









- ✔ Hardened alloy square drive provides long life.
- No reaction pawl eliminates tool lockup.
- 27 degree stroke for high performance & speed.
- ✓ Light weight, high torque ratio.
- ✔ Push through square drive switches from tighten to loosen instantly.
- ✓ Accurate to within + / 3%.
- ✓ Slim nose radius for tight spaces.
- ✔ No leak couplers that swivel on double axis for ease of operation.
- ✔ Anti-Backlash mechanism prevents tool from back-driving.



HOSES

Large selection of heavy duty, thermo-plastic torque wrench hoses to meet your requirements.

- Pg. 95



Please refer to pages 4 & 5 for a complete list of safety tips and recommendations to ensure that your Simplex equipment will perform to its full potential.

	Product Ordering & Dimensional Specifications													
Model	A	В	C	D	E	F	G	Н	I	Wgt. (lbs.)	Output (ft./lbs.)	Square Drive	Available Socket	Available Socket
	Length (in)	Length (in)	Height (in)	Width (in)	Width (in)	Width (in)	Radius (in)	Height (in)	Length (in)	(150.)	(11.7100.7	(in)	Size (in)	Size (mm)
WT-2	4.68	6.10	4.20	2.00	2.76	4.42	0.98	3.42	5.32	3.90	1,270	3/4	1/2 - 2 3/8	13 - 60
WT-3	6.10	8.10	5.30	2.62	3.68	5.81	1.30	4.54	6.68	9.00	3,330	1	3/4 - 4 1/2	19 - 114
WT-5	8.00	10.74	6.99	3.61	5.06	7.98	1.70	6.05	9.48	19.00	7,170	1 1/2	1 5/16 - 5 ^{3/8}	33 - 137
WT-10	9.21	12.21	7.79	3.93	5.43	8.72	1.95	6.70	10.36	29.00	11,010	1 1/2	1 5/16 - 5 ^{3/8}	33 - 137
WT-27	12.29	16.29	10.19	5.26	7.73	11.63	2.43	8.82	13.87	70.00	27,200	2 1/2	1 5/8 - 9 ^{1/4}	41 - 235



TORONE WARENCHES Square Drive Accessories

SOCKETS FOR 3/4", 1" AND 11/2" DRIVE WRENCES

Model Number for 3/4" Drive WT-2	Socket Size (in)	Model Number for 1" Drive WT-3	Socket Size (in)	Model Number for 1" Drive WT-3	Socket Size (in)	Model Number for 1" Drive WT-3	Socket Size (in)	Model Number for 1 1/2" Drive WT-5 & 10	Socket Size (in)	Model Number for 1 1/2" Drive WT-5 & 10	Socket Size (in)
WST1212	3/4 x 3/4	WST1612	1 x 3/4	WST1633	1 x 2 1/16	WST1654	1 x 3 3/8	WST2422	1 1/2 x 1 3/8	WST2443	1 1/2 x 2 11/16
WST1213	3/4 x 13/16	WST1613	1 x 13/16	WST1634	1 x 2 1/8	WST1655	1 x 3 7/16	WST2423	1 1/2 x 1 7/16	WST2444	1 1/2 x 2 3/4
WST1214	3/4 x 7/8	WST1614	1 x 7/8	WST1635	1 x 2 3/16	WST1656	1 x 3 1/2	WST2424	1 1/2 x 1 1/2	WST2445	1 1/2 x 2 13/16
WST1215	3/4 x 15/16	WST1615	1 x 15/16	WST1636	1 x 2 1/4	WST1657	1 x 3 9/16	WST2425	1 1/2 x 1 9/16	WST2446	1 1/2 x 2 7/8
WST1216	3/4 x 1	WST1616	1 x 1	WST1637	1 x 2 5/16	WST1658	1 x 3 5/8	WST2426	1 1/2 x 1 5/8	WST2447	1 1/2 x 2 15/16
WST1217	3/4 x 1 1/16	WST1617	1 x 1 1/16	WST1638	1 x 2 3/8	WST1659	1 x 3 11/16	WST2427	1 1/2 x 1 11/16	WST2448	1 1/2 x 3
WST1218	3/4 x 1 1/8	WST1618	1 x 1 1/8	WST1639	1 x 2 7/16	WST1660	1 x 3 3/4	WST2428	1 1/2 x 1 3/4	WST2449	1 1/2 x 3 1/16
WST1219	3/4 x 1 3/16	WST1619	1 x 1 3/16	WST1640	1 x 2 1/2	WST1661	1 x 3 13/16	WST2429	1 1/2 x 1 13/16	WST2450	1 1/2 x 3 1/8
WST1220	3/4 x 1 1/4	WST1620	1 x 1 1/4	WST1641	1 x 2 9/16	WST1662	1 x 3 7/8	WST2430	1 1/2 x 1 7/8	WST2451	1 1/2 x 3 3/16
WST1221	3/4 x 1 5/16	WST1621	1 x 1 5/16	WST1642	1 x 2 5/8			WST2431	1 1/2 x 1 15/16	WST2452	1 1/2 x 3 1/4
WST1222	3/4 x 1 3/8	WST1622	1 x 1 3/8	WST1643	1 x 2 11/16			WST2432	1 1/2 x 2	WST2453	1 1/2 x 3 5/16
WST1223	3/4 x 1 7/16	WST1623	1 x 1 7/16	WST1644	1 x 2 3/4			WST2433	1 1/2 x 2 1/16	WST2454	1 1/2 x 3 3/8
WST1224	3/4 x 1 1/2	WST1624	1 x 1 1/2	WST1645	1 x 2 13/16			WST2434	1 1/2 x 2 1/8	WST2455	1 1/2 x 3 7/16
WST1225	3/4 x 1 9/16	WST1625	1 x 1 9/16	WST1646	1 x 2 7/8			WST2435	1 1/2 x 2 3/16	WST2456	1 1/2 x 3 1/2
WST1226	3/4 x 1 5/8	WST1626	1 x 1 5/8	WST1647	1 x 2 15/16			WST2436	1 1/2 x 2 1/4	WST2457	1 1/2 x 3 9/16
WST1227	3/4 x 1 11/16	WST1627	1 x 1 11/16	WST1648	1 x 3			WST2437	1 1/2 x 2 5/16	WST2458	1 1/2 x 3 5/8
WST1228	3/4 x 1 3/4	WST1628	1 x 1 3/4	WST1649	1 x 3 1/16			WST2438	1 1/2 x 2 3/8	WST2459	1 1/2 x 3 11/16
WST1229	3/4 x 1 13/16	WST1629	1 x 1 13/16	WST1650	1 x 3 1/8			WST2439	1 1/2 x 2 7/16	WST2460	1 1/2 x 3 3/4
WST1230	3/4 x 1 7/8	WST1630	1 x 1 7/8	WST1651	1 x 3 3/16			WST2440	1 1/2 x 2 1/2		
WST1231	3/4 x 1 15/16	WST1631	1 x 1 15/16	WST1652	1 x 3 1/4			WST2441	1 1/2 x 2 9/16		
WST1232	3/4 x 2	WST1632	1 x 2	WST1653	1 x 3 5/16			W\$T2442	1 1/2 x 2 5/8		

ALLEN HEX DRIVE FOR WT SERIES WRENCHES

Model	Wrench Model	Allen Hex Size (in)	Maximum Torque (ft./lbs)
WA-1208	WT-2	1/2	395
WA-1210	WT-2	5/8	740
WA-1212	WT-2	3/4	1,270
WA-1214	WT-2	7/8	1,270
WA-1216	WT-2	1	1,270
WA-1610	WT-3	5/8	740
WA-1612	WT-3	3/4	1,330
WA-1614	WT-3	7/8	2,070
WA-1616	WT-3	1	3,100
WA-1618	WT-3	1 1/8	3,330
WA-1620	WT-3	1 1/4	3,330
WA-2414	WT-5	7/8	2,070
WA-2416	WT-5	1	3,100
WA-2418	WT-5	1 1/8	4,355
WA-2420	WT-5	1 1/4	6,275
WA-2422	WT-5	1 ^{3/8}	7,170
WA-2424	WT-5	1 1/2	7,170
WA-2420-10	WT-10	1 1/4	6,275
WA-2422-10	WT-10	1 3/8	7,750
WA-2424-10	WT-10	1 1/2	10,500
WA-2426-10	WT-10	1 5/8	10,500
WA-2428-10	WT-10	1 3/4	10,500
WA-4024	WT-27	1 1/2	10,500
WA-4026	WT-27	1 ^{5/8}	13,280
WA-4028	WT-27	1 3/4	16,230
WA-4030	WT-27	1 7/8	27,200
WA-4032	WT-27	2	27,200
WA-4036	WT-27	2 1/4	27,200

ALCO REACTION ARMS

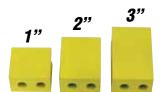


Model	Length (in)
WT2-ALCO	18.00
WT3-ALCO	22.25
WT5-ALCO	21.00
WT10-ALCO	23.50
WT27-ALCO	

TORQUE WRENCH HOSES



REACTION ARM EXTENSIONS



Model	Length (in)
WT3-EX1	1
WT3-EX2	2
WT3-EX3	3
WT5-EX1	1
WT5-EX2	2
WT5-EX3	3
WT10-EX1	1
WT10-EX2	2
WT10-EX3	3

Model	Length (ft)	Hose Type
WH-15	15	15' Blue & Yellow Duplex Hose w/ Quick Disconnect Couplers
WH-20	20	20' Blue & Yellow Duplex Hose w/ Quick Disconnect Couplers
WH-40	40	40' Blue & Yellow Duplex Hose w/ Quick Disconnect Couplers









The WX-4 in-line reaction coupled with an ALCO arm was the perfect solution for this bolting application.

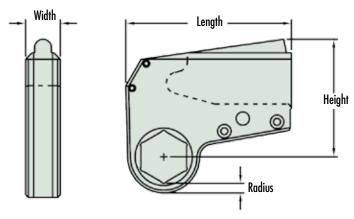
- ✓ Patented piston design for lower profile.
- ✔ Quick and easy interchangeable links requiring no tools.
- ✓ Light weight, high torque ratio.
- ✓ Slim nose radius for easy positioning in close quarters.
- ✓ Accurate to within + / 3%.
- ✓ Slim nose radius for tight spaces.
- ✔ Plated wrenches resist corrosion.
- Custom wrenches available upon request.

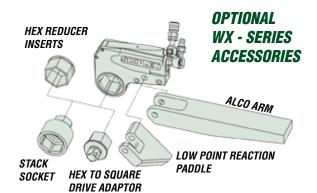


HOSES

Large selection of heavy duty, thermo-plastic torque wrench hoses to meet your requirements.

- Pg. 95





LOW CLEARANCE DRIVE UNITS

Product Ordering & Dimensional Specifications											
Model	Length (in.)	Height (in.)	Radius (in.)	Max. Tool Width (in.)	Output (ft./lbs.)	Weight (lbs.)					
WX-2	5.67	4.00	0.36	1.25	1,930	3.5					
WX-4	7.80	5.60	0.46	1.63	3,950	6					
WX-8	9.80	7.00	0.54	2.05	8,630	11.7					
WX-16	12.93	7.58	0.65	2.50	16,600	16					
WX-32	15.30	10.90	0.93	3.24	35,600	26					

*Weight on Links will vary by size.

Available L (in./n	*Weight (lbs.)	
From	To	
3/4"/ 19mm	2 9/16"/ 65mm	2.5-3.5
1"/ 25mm	3 1/8"/ 80mm	5.4-7.6
1 7/8"/ 50mm	4"/ 105mm	11.9-14.5
2 5/8"/ 65mm	4 5/8"/ 115mm	21-28
3 1/8"/ 80mm	6 1/8"/ 155mm	29-39.5

WX DRIVE UNIT



Select a WX drive unit that will give you the amount of torque you are looking for.





Couple your WX drive unit with the WXL hex link that you will need. See chart below for specific WXL link.

WRENCH HANDLE



Optional Wrench Handle - Order # WCH-1 Handles are available for the WX-8, WX-16 & WX-32. The handle can be screwed on either side of the wrench or on top of the wrench.

Accessories are available in imperial and metric sizes.

	Product Ordering & Dimensional Specifications														
Model Number For WX-2 Links	Hex Size (in)	Model Number For WX-4 Links	Hex Size (in)	Model Number For WX-4 Links	Hex Size (in)	Model Number For WX-8 Links	Hex Size (in)	Model Number For WX-8 Links	Hex Size (in)	Model Number For WX-16 Links	Hex Size (in)	Model Number For WX-32 Links	Hex Size (in)	Model Number For WX-32 Links	Hex Size (in)
WXL2-12	3/4	WXL4-16	1	WXL4-43	2 11/16	WXL8-30	1 7/8	WXL8-57	3 9/16	WXL16-42	2 5/8	WXL32-50	3 1/8	WXL32-87	5 7/16
WXL2-13	13/16	WXL4-17	1 1/16	WXL4-44	2 3/4	WXL8-31	1 15/16	WXL8-58	3 5/8	WXL16-43	2 11/16	WXL32-51	3 3/16	WXL32-88	5 1/2
WXL2-14	7/8	WXL4-18	1 1/8	WXL4-45	2 13/16	WXL8-32	2	WXL8-59	3 11/16	WXL16-44	2 3/4	WXL32-52	3 1/4	WXL32-89	5 9/16
WXL2-15	15/16	WXL4-19	1 3/16	WXL4-46	2 7/8	WXL8-33	2 1/16	WXL8-60	3 3/4	WXL16-45	2 13/16	WXL32-53	3 5/16	WXL32-90	5 5/8
WXL2-16	1	WXL4-20	1 1/4	WXL4-47	2 15/16	WXL8-34	2 1/8	WXL8-61	3 13/16	WXL16-46	2 7/8	WXL32-54	3 3/8	WXL32-91	5 11/16
WXL2-17	1 1/16	WXL4-21	1 5/16	WXL4-48	3	WXL8-35	2 3/16	WXL8-62	3 7/8	WXL16-47	2 15/16	WXL32-55	3 7/16	WXL32-92	5 3/4
WXL2-18	1 1/8	WXL4-22	1 3/8	WXL4-49	3 1/16	WXL8-36	2 1/4	WXL8-63	3 15/16	WXL16-48	3	WXL32-56	3 1/2	WXL32-93	5 13/16
WXL2-19	1 3/16	WXL4-23	1 7/16	WXL4-50	3 1/8	WXL8-37	2 5/16	WXL8-64	4	WXL16-49	3 1/16	WXL32-57	3 9/16	WXL32-94	5 7/8
WXL2-20	1 1/4	WXL4-24	1 ^{1/2}			WXL8-38	2 3/8			WXL16-50	3 1/8	WXL32-58	3 5/8	WXL32-95	5 15/16
WXL2-21	1 5/16	WXL4-25	1 9/16			WXL8-39	2 7/16			WXL16-51	3 3/16	WXL32-59	3 11/16	WXL32-96	6
WXL2-22	1 3/8	WXL4-26	1 5/8			WXL8-40	2 1/2			WXL16-52	3 1/4	WXL32-60	3 3/4	WXL32-97	6 1/16
WXL2-23	1 7/16	WXL4-27	1 11/16			WXL8-41	2 9/16			WXL16-53	3 5/16	WXL32-61	3 13/16	WXL32-98	6 1/8
WXL2-24	1 1/2	WXL4-28	1 3/4			WXL8-42	2 5/8			WXL16-54	3 3/8	WXL32-62	3 7/8		
WXL2-25	1 9/16	WXL4-29	1 13/16			WXL8-43	2 11/16			WXL16-55	3 7/16	WXL32-63	3 15/16		
WXL2-26	1 5/8	WXL4-30	1 7/8			WXL8-44	2 3/4			WXL16-56	3 1/2	WXL32-64	4		
WXL2-27	1 11/16	WXL4-31	1 15/16			WXL8-45	2 13/16			WXL16-58	3 5/8	WXL32-65	4 1/16		
WXL2-28	1 3/4	WXL4-32	2			WXL8-46	2 7/8			WXL16-60	3 3/4	WXL32-66	4 1/8		
WXL2-29	1 13/16	WXL4-33	2 1/16			WXL8-47	2 15/16			WXL16-62	3 7/8	WXL32-68	4 1/4		
WXL2-30	1 7/8	WXL4-34	2 1/8			WXL8-48	3			WXL16-64	4	WXL32-70	4 3/8		
WXL2-31	1 15/16	WXL4-35	2 3/16			WXL8-49	3 1/16			WXL16-66	4 1/8	WXL32-72	4 1/2		
WXL2-32	2	WXL4-36	2 1/4			WXL8-50	3 1/8			WXL16-68	4 1/4	WXL32-74	4 5/8		
WXL2-33	2 1/16	WXL4-37	2 5/16			WXL8-51	3 3/16			WXL16-70	4 3/8	WXL32-76	4 3/4		
WXL2-34	2 1/8	WXL4-38	2 3/8			WXL8-52	3 1/4			WXL16-72	4 1/2	WXL32-78	4 7/8		
WXL2-35	2 3/16	WXL4-39	2 7/16			WXL8-53	3 5/16			WXL16-74	4 5/8	WXL32-80	5		
WXL2-36	2 1/4	WXL4-40	2 1/2			WXL8-54	3 3/8					WXL32-82	5 1/8		
WXL2-37	2 5/16	WXL4-41	2 9/16			WXL8-55	3 7/16					WXL32-84	5 1/4		
WXL2-38	2 3/8	WXL4-42	2 5/8			WXL8-56	3 1/2					WXL32-86	5 3/8		