

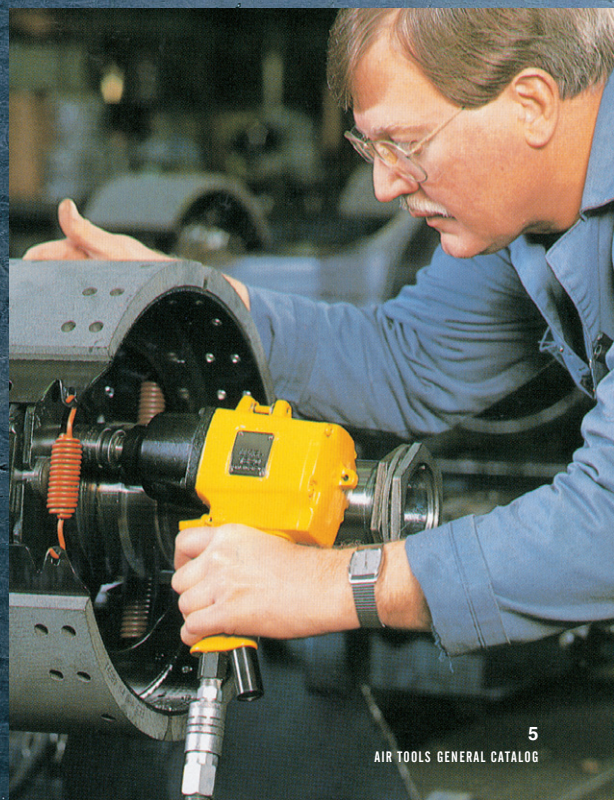
# BOLT & NUT SETTERS



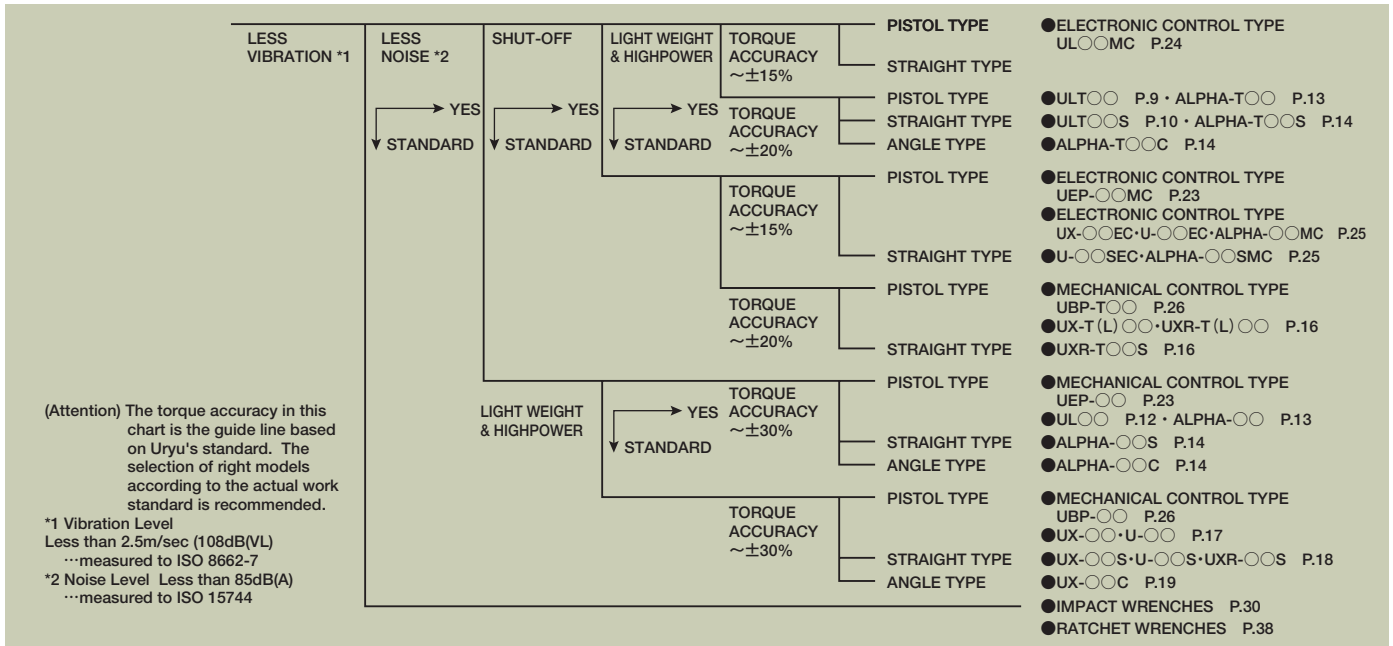
PHOTO ; MODEL NO. UXR-TL1820 1993  
STILL USED AT USERS

ULT SERIES OIL-PULSE TOOLS  
UL SERIES OIL-PULSE TOOLS  
ALPHA-T SERIES OIL-PULSE TOOLS  
ALPHA SERIES OIL-PULSE TOOLS  
UX-T SERIES OIL-PULSE TOOLS  
U · UX SERIES OIL-PULSE TOOLS  
SUPER INTELEC SYSTEM MC · EC TOOLS  
ELECTRIC OIL-PULSE TOOLS  
BATTERY PULSE TOOLS  
IMPACT WRENCHES  
MULTIPLE NUTRUNNERS  
RATCHET WRENCHES  
OPEN-END WRENCHES · GEARED WRENCHES  
ANGLE NUTRUNNERS  
FASTENING COUNTER

\* Sound Level measured to ISO 15744  
\* Vibration Level measured to ISO 8662



# SELECTION CHART & TORQUE CHART FOR OIL-PULSE WRENCHES

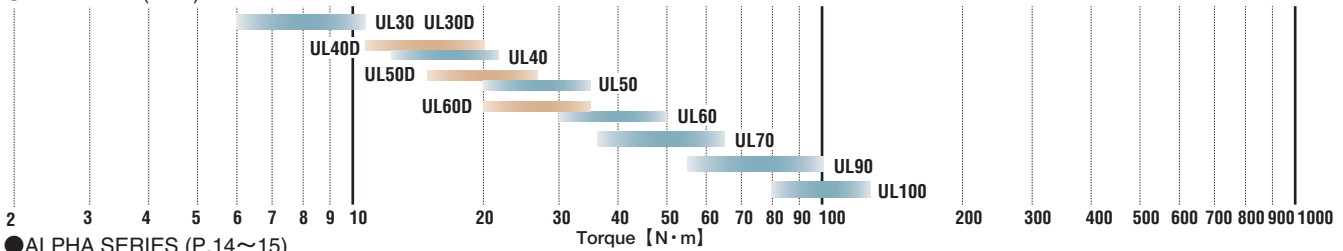


The torque chart is made based on the measurement of our standard, and the actual fastening power can be different. Please use this chart as a reference when selecting the model.

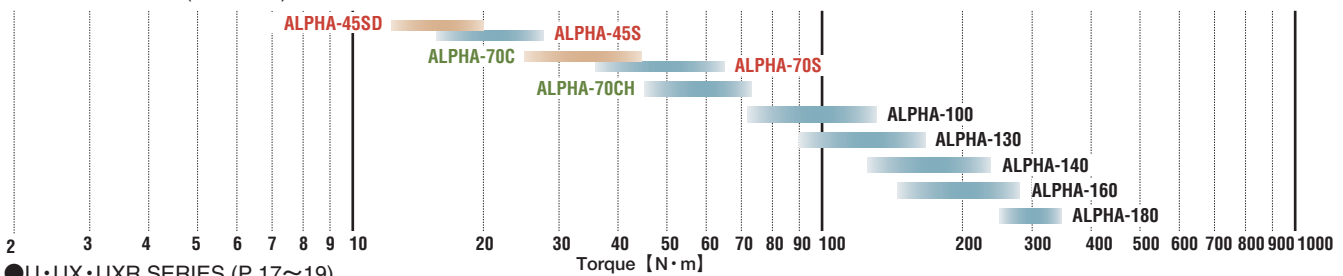


## STANDARD TYPE

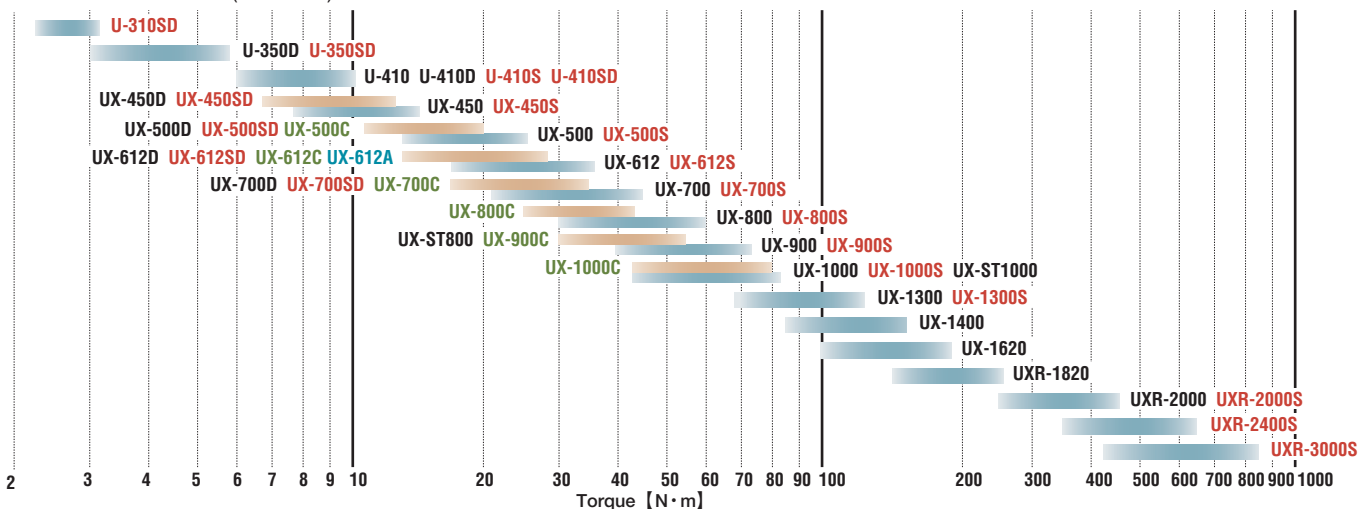
### ● UL SERIES (P.12)



### ● ALPHA SERIES (P.14~15)



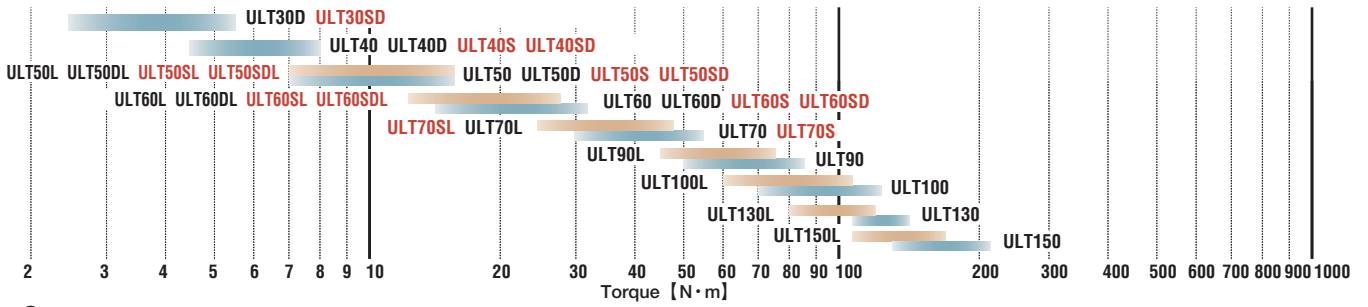
### ● U·UX·UXR SERIES (P.17~19)



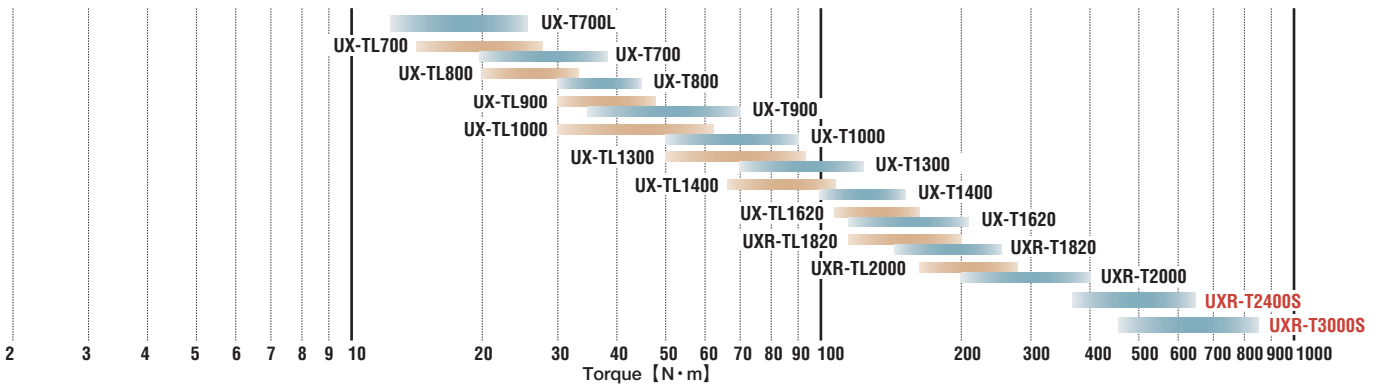
# TORQUE CHART FOR OIL-PULSE WRENCHES

## TORQUE-CONTROL TYPE

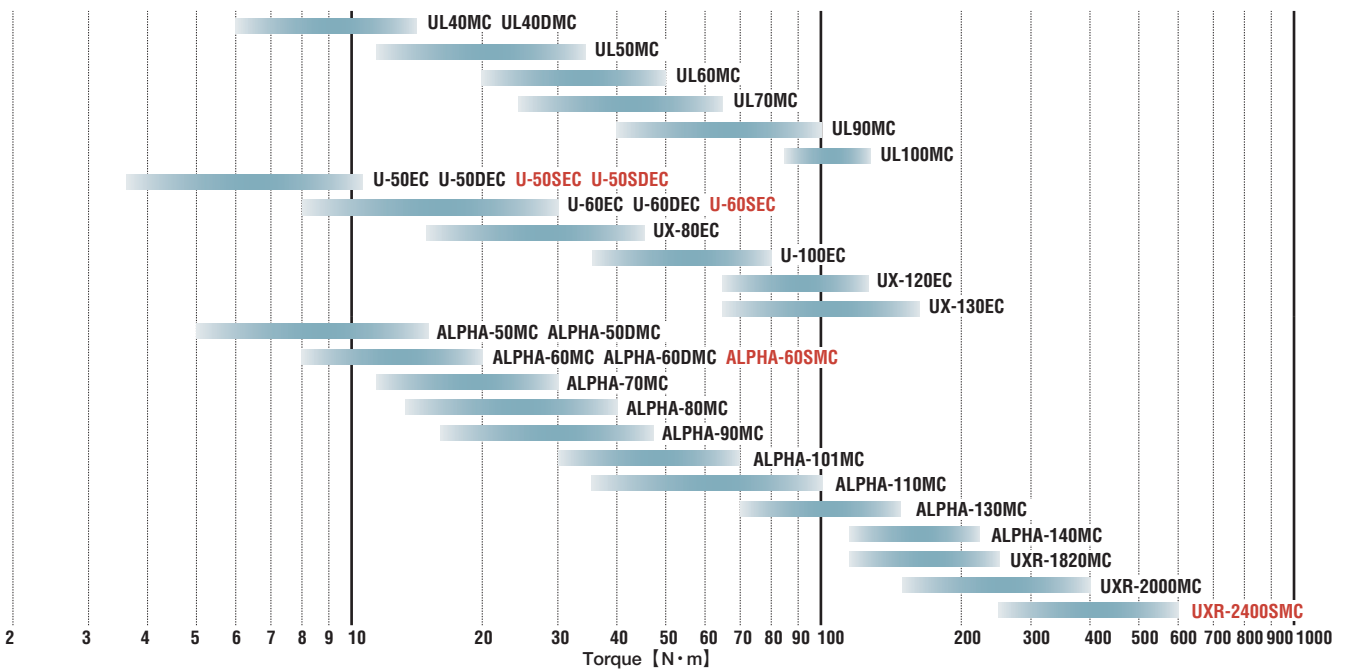
● ULT SERIES (P.9~10)



● UX(R)-T SERIES (P.16)

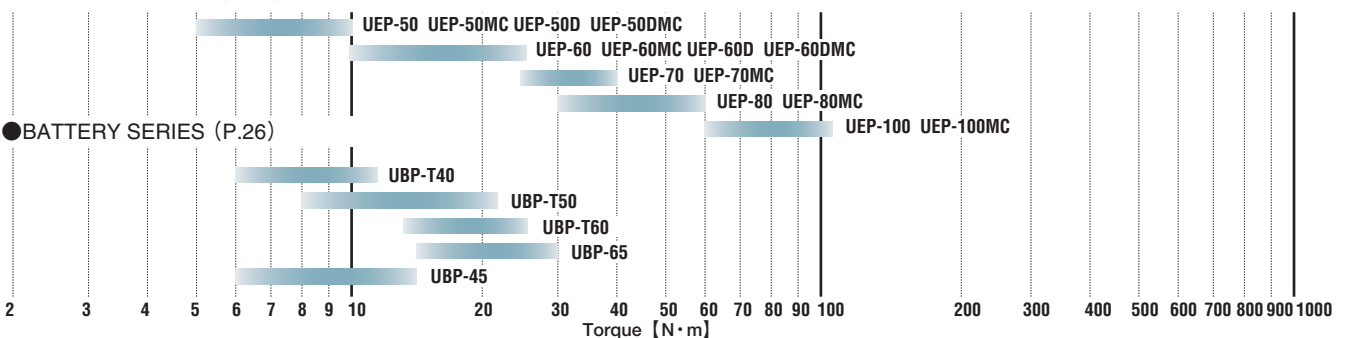


● MC·EC SERIES (P.24~25)

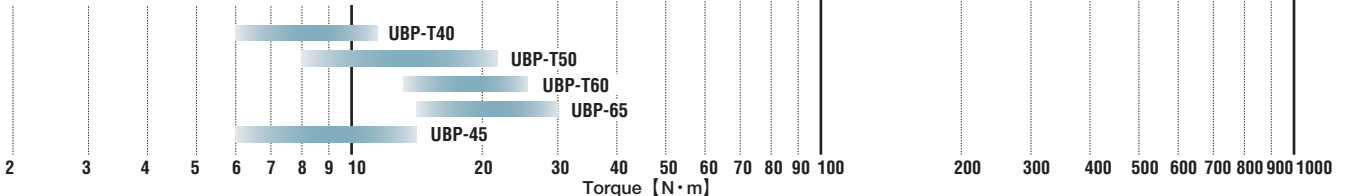


## ELECTRIC TYPE

● ELECTRIC SERIES (P.23)

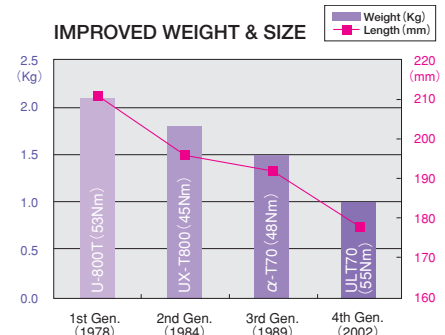
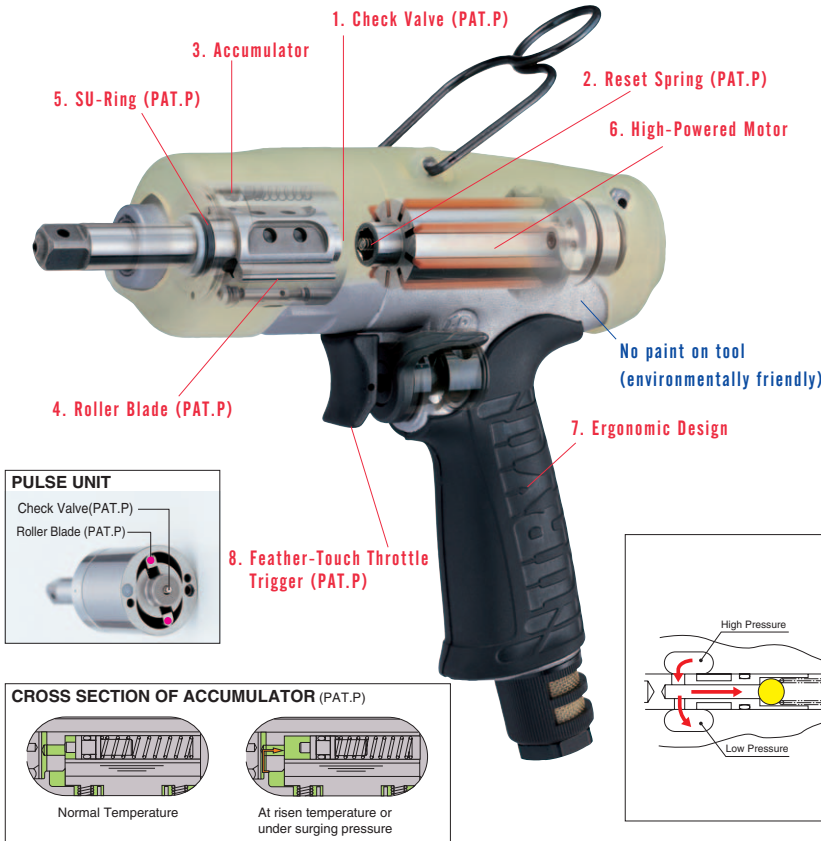


● BATTERY SERIES (P.26)



# ULT ULTIMATE SERIES OIL-PULSE TOOLS (SHUT-OFF TYPE)

Since started the production of Oil-Pulse Tools about 30 years ago, we have been continuously developing advanced mechanisms. Featured with unique Air/Hydraulic mechanism, **URYU Oil-Pulse Tools** have now come to the fourth generation "**ULT Ultimate Series**" passing through the first generation "**U Single-Blade Series**", the second "**UX Two-Blade Series**" and the third "**ALPHA Double-Chamber Series**". ULT Ultimate Fastening Tools achieve tremendous light weight & short size in addition to numerous features and benefits to raise your productivity.



## 1. Improvement in Torque Accuracy

Newly adopted Check Valve (PAT.P) stabilizes the current of oil. By stabilizing the oil current, the shut-off valve can sense with accuracy the small volume of high-pressure oil from the relief valve section during operation and shuts the tool off as soon as it has reached the target torque.

## 2. Workable at Low Air Pressure

We have added a Reset Spring (PAT.P) to help the operation rod return back to the original position without fail every time. Therefore, the operation rod can always sense more accurately the load on the shut-off valve and shuts the tool off even when operated at lower air pressure.

## 3. Room to expand

The new Accumulator works as a surge drum against the sudden rise of oil pressure. And when the oil temperature rises during consecutive fastening, the accumulator will take in the expanded oil volume and keep the same pulse condition.

## 4. High Speed Fastening

Newly adopted Roller Blades (Driving Blade with Roller Pin)(PAT.P) reduce the friction inside the pulse unit and improve the energy efficiency. They also create less frictional wear of driving blades, which will reduce maintenance costs. Furthermore, they smooth the pulse blows and shorten the fastening time.

## 5. Increased Durability

Our original unique sealing, SU-Ring (PAT.P) extends the maintenance interval than the conventional O-Ring. Compared with our conventional pulse wrenches, the life cycle becomes increased by 60% or more with no leakage.

## 6. Improvement in Energy Efficiency

For the high-powered dual chamber motor that minimized torque ripples, we employed 9 pcs. of specially-coated blades. The special coating on the blades creates a better seal in the cylinder, helping to reduce the weight of the motor and increasing the energy efficiency.

## 7. Standard Handgrip & Body Protector

In addition to the oil pulse mechanism offering low noise, low vibration and small reaction, the comfortable handgrip lightens the burden for operators. Taking the environmental issue into consideration, the protective full-cover jacket is equipped as standard instead of painting.

## 8. Feather-Touch Throttle Trigger

Feather-touch trigger mechanism (PAT.P) with interchangeable direction lever lightens the load imposed on the operator's finger by at least 50%.

Non-step valve is adopted for smooth speed adjustment. Stationary to full speed is proportional to the throttle stroke. Therefore, ULT series tools make it easier on run down and final tightening.

# ULT ULTIMATE SERIES OIL-PULSE TOOLS (SHUT-OFF TYPE)



BOLT & NUT SETTERS

## SPECIFICATIONS

Recommended Air Pressure: 0.4MPa(57psi)~0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length less Socket or Bit (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibra- tion Level
			0.4~0.5MPa		0.5~0.6MPa															
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.4MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m³/min	ft³/min	dB(A)	m/sec²
ULT30D	4-5	5/32-13/34	2.5-5.5	1.9-4.1	2.5-5.5	1.9-4.1	3300	3700	163	6 27/64	0.88	1.9	21.5	27/32	6.35	1/4	0.20	7.0	74	1.0
ULT40	5	13/64	4.5-8.0	3.3-5.9	4.5-8.0	3.3-5.9	3200	3600	160	6 19/64	0.92	2.0	22.5	57/64	9.5	3/8	0.20	7.0	75	1.0
ULT40D	5	13/64	4.5-8.0	3.3-5.9	4.5-8.0	3.3-5.9	3200	3600	163	6 27/64	0.92	2.0	22.5	57/64	6.35	1/4	0.20	7.0	75	1.0
ULT50	6-8	1/4-5/16	-	-	7.0-15.5	5.2-11.5	-	4400	160	6 19/64	0.92	2.0	22.5	57/64	9.5	3/8	0.25	8.8	78	1.2
ULT50D	6-8	1/4-5/16	-	-	7.0-15.5	5.2-11.5	-	4400	163	6 27/64	0.92	2.0	22.5	57/64	6.35	1/4	0.25	8.8	78	1.2
ULT60	8	5/16	-	-	15-32	11.1-23.7	-	6700	172	6 49/64	0.95	2.1	22.5	57/64	9.5	3/8	0.35	12.3	80	1.5
ULT60D	8	5/16	-	-	15-32	11.1-23.7	-	6700	175	6 57/64	0.95	2.1	22.5	57/64	6.35	1/4	0.35	12.3	80	1.5
ULT70	8-10	5/16-3/8	-	-	30-55	22.2-40.7	-	6000	178	7 1/64	1.05	2.3	23.5	59/64	9.5	3/8	0.40	14.0	80	1.5
ULT90	10-12	3/8-1/2	-	-	50-85	37.0-62.9	-	5700	190	7 31/64	1.45	3.2	27.0	1 1/16	12.7	1/2	0.53	18.6	82	2.0
ULT100	12	1/2	-	-	70-130	51.8-96.2	-	5200	197	7 3/4	1.70	3.7	29.5	1 5/32	12.7	1/2	0.55	19.3	82	2.0
ULT130	14	9/16	-	-	110-150	81.4-111.0	-	4000	215	8 15/32	2.30	5.1	32.0	1 17/64	12.7	1/2	0.73	25.6	82	2.0
ULT150	16	5/8	-	-	140-210	103.6-155.4	-	3700	238	9 29/64	2.90	6.4	36.0	1 27/64	19.0	3/4	0.70	24.5	82	2.0
ULT180	-	-	-	-	200-300	148.0-222.0	-	-	-	-	3.50	7.7	-	-	-	-	UNDER DEVELOPMENT			
ULT200	-	-	-	-	280-400	207.2-296.0	-	-	-	-	4.50	9.9	-	-	-	-	UNDER DEVELOPMENT			
ULT50L	6-8	1/4-5/16	7.0-15.5	5.2-11.5	-	-	4000	-	160	6 19/64	0.92	2.0	22.5	57/64	9.5	3/8	0.20	7.0	75	1.0
ULT50DL	6-8	1/4-5/16	7.0-15.5	5.2-11.5	-	-	4000	-	163	6 27/64	0.92	2.0	22.5	57/64	6.35	1/4	0.20	7.0	75	1.0
ULT60L	8	5/16	13-28	9.6-20.7	-	-	6000	-	172	6 49/64	0.95	2.1	22.5	57/64	9.5	3/8	0.25	8.8	77	1.2
ULT60DL	8	5/16	13-28	9.6-20.7	-	-	6000	-	175	6 57/64	0.95	2.1	22.5	57/64	6.35	1/4	0.25	8.8	77	1.2
ULT70L	8-10	5/16-3/8	25-48	18.5-35.5	-	-	5500	-	178	7 1/64	1.05	2.3	23.5	59/64	9.5	3/8	0.30	10.5	78	1.3
ULT90L	10-12	3/8-1/2	45-75	33.3-55.5	-	-	5100	-	190	7 31/64	1.45	3.2	27.0	1 1/16	12.7	1/2	0.45	12.8	79	1.5
ULT100L	12	1/2	60-110	44.4-81.4	-	-	4800	-	197	7 3/4	1.70	3.7	29.5	1 5/32	12.7	1/2	0.48	16.8	79	1.5
ULT130L	12-14	1/2-9/16	80-125	59.2-92.5	-	-	3600	-	215	8 15/32	2.30	5.1	32.0	1 17/64	12.7	1/2	0.60	21.1	79	1.5
ULT150L	14-16	9/16-5/8	110-170	81.4-125.8	-	-	3500	-	238	9 29/64	2.90	6.4	36.0	1 27/64	19.0	3/4	0.50	17.5	79	1.5

Air Inlet Size : N.P.T.1/4"

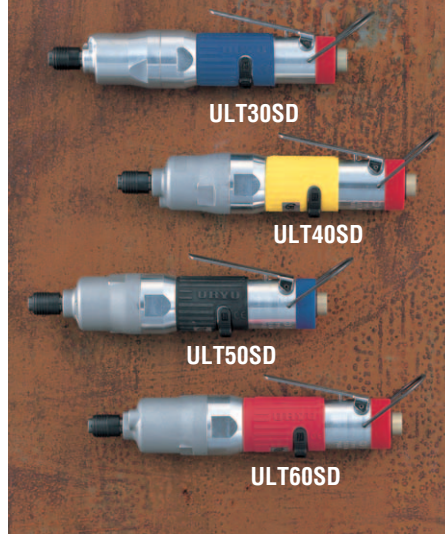
Air Hose Size : 10mm×6.5mm×5m for ULT30-50(L) 12mm×8.0mm×5m for ULT60(L)-100 16mm×11.0mm×5m for ULT100L-150(L)

# ULT ULTIMATE SERIES OIL-PULSE TOOLS (SHUT-OFF TYPE)

## STRAIGHT SQ. DRIVE TYPE



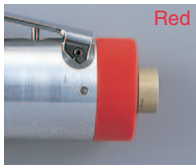
## STRAIGHT HEX. SIZE TYPE



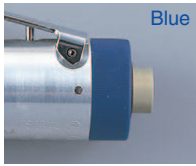
## ANGLE TYPE (UNDER DEVELOPMENT)



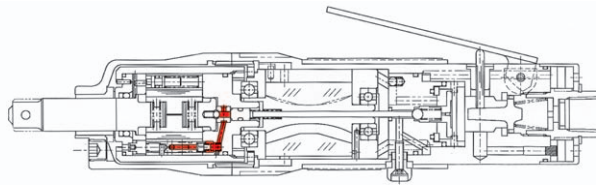
BOLT & NUT SETTERS



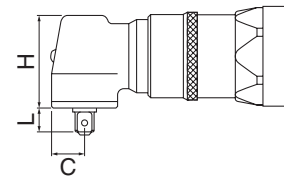
(Standard Type)



(Low Air Pressure Type)



## Head Sizes



MODEL	C				H	
	mm	in	mm	in	mm	in
ULT50C	45.5	1 51/64	16	5/8	12	15/32
ULT60C	45.5	1 51/64	16	5/8	12	15/32
ULT70C	54.5	2 9/64	18	45/64	16	5/8
ULT70CH	56.5	2 15/64	22	7/8	20	25/32

## SPECIFICATIONS

Recommend Air Pressure: 0.4MPa(57psi)-0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length less Socket or Bit (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
	mm	in	0.4-0.5MPa		0.5-0.6MPa		0.4MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m³/min	ft³/min		
			Nm	ft-lbs	Nm	ft-lbs														
ULT30SD	4-5	5/32-13/34	2.5-5.5	1.9-4.1	2.5-5.5	1.9-4.1	3300	3700	221	8 45/64	0.75	1.6	21.5	27/32	6.35	1/4	0.20	7.0	66	1.1
ULT40S	5	13/64	4.5-8.0	3.3-5.9	4.5-8.0	3.3-5.9	3200	3600	218	8 19/52	0.83	1.8	22.5	57/64	9.5	3/8	0.20	7.0	70	5.0
ULT40SD	5	13/64	4.5-8.0	3.3-5.9	4.5-8.0	3.3-5.9	3200	3600	221	8 11/16	0.83	1.8	22.5	57/64	6.35	1/4	0.20	7.0	70	5.0
ULT50S	6-8	1/4-5/16	-	-	7.0-15.5	5.2-11.5	-	4700	218	8 19/52	0.83	1.8	22.5	57/64	9.5	3/8	0.25	8.8	78	5.0
ULT50SD	6-8	1/4-5/16	-	-	7.0-15.5	5.2-11.5	-	4700	221	8 11/16	0.83	1.8	22.5	57/64	6.35	1/4	0.25	8.8	78	5.0
ULT60S	8	5/16	-	-	15-32	11.1-23.7	-	5400	229	9 1/64	0.87	1.9	22.5	57/64	9.5	3/8	0.30	10.5	80	6.0
ULT60SD	8	5/16	-	-	15-32	11.1-23.7	-	5400	232	9 9/64	0.87	1.9	22.5	57/64	6.35	1/4	0.30	10.5	80	6.0
ULT70S	8-10	5/16-3/8	-	-	30-50	22.2-37.0	-	4700	239	9 13/32	0.95	2.1	23.5	59/64	9.5	3/8	0.35	12.3	80	7.0
ULT50SL	6-8	1/4-5/16	7.0-15.5	5.2-11.5	-	-	4500	-	218	8 19/52	0.83	1.8	22.5	57/64	9.5	3/8	0.20	7.0	75	3.5
ULT50SDL	6-8	1/4-5/16	7.0-15.5	5.2-11.5	-	-	4500	-	221	8 11/16	0.83	1.8	22.5	57/64	6.35	1/4	0.20	7.0	75	3.5
ULT60SL	8	5/16	13-28	9.6-20.7	-	-	5000	-	229	9 1/64	0.87	1.9	22.5	57/64	9.5	3/8	0.25	8.8	77	4.0
ULT60SDL	8	5/16	13-28	9.6-20.7	-	-	5000	-	232	9 9/64	0.87	1.9	22.5	57/64	6.35	1/4	0.25	8.8	77	4.0
ULT70SL	8-10	5/16-3/8	25-45	18.5-33.3	-	-	4400	-	239	9 13/32	0.95	2.1	23.5	59/64	9.5	3/8	0.27	9.5	78	4.0
ULT50C	6-8	1/4-5/16	-	-	7.0-15.5	5.2-11.5	-	4800	250	9 27/32	1.35	3.0	24.5	31/32	9.5	3/8	UNDER DEVELOPMENT			
ULT60C	8	5/16	-	-	15-32	11.1-23.7	-	5500	261	10 9/32	1.45	3.2	24.5	31/32	9.5	3/8	UNDER DEVELOPMENT			
ULT70C	8	5/16	-	-	20-35	14.8-25.9	-	4600	275	10 53/64	1.65	3.6	26.5	1 3/64	9.5	3/8	UNDER DEVELOPMENT			
ULT70CH	8-10	5/16-3/8	-	-	30-50	22.2-37.0	-	2300	290	11 27/64	1.85	4.1	26.5	1 3/64	12.7	1/2	UNDER DEVELOPMENT			
ULT50CL	6-8	1/4-5/16	7.0-15.5	5.2-11.5	-	-	4400	-	250	9 27/32	1.35	3.0	24.5	31/32	9.5	3/8	UNDER DEVELOPMENT			
ULT60CL	8	5/16	13-28	9.6-20.7	-	-	5000	-	261	10 9/32	1.45	3.2	24.5	31/32	9.5	3/8	UNDER DEVELOPMENT			
ULT70CL	8	5/16	20-35	14.8-25.9	-	-	4200	-	275	10 53/64	1.65	3.6	26.5	1 3/64	9.5	3/8	UNDER DEVELOPMENT			
ULT70CHL	8-10	5/16-3/8	30-50	22.2-37.0	-	-	2100	-	290	11 27/64	1.85	4.1	26.5	1 3/64	12.7	1/2	UNDER DEVELOPMENT			

Air Inlet Size : N.P.T. 1/4"

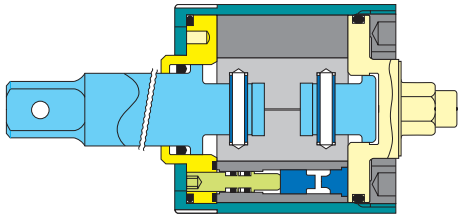
Air Hose Size : 10mm×6.5mm×5m for ULT30S~50S 12mm×8.0mm×5m for ULT60S~70S

# UL SERIES OIL-PULSE TOOLS

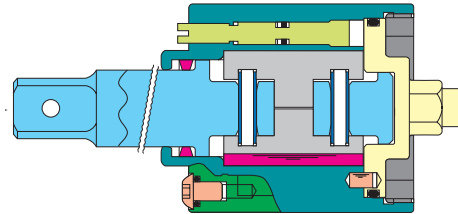
UL series has the same features as ULT series, such as intensified sealing and roller blade. Furthermore, the oil pulse unit is the "one-piece construction", in which liner casing, liner and front liner plate are all in one piece, to reduce the weight.

## Pulse Unit

CONVENTIONAL

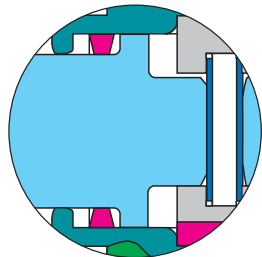


NEW



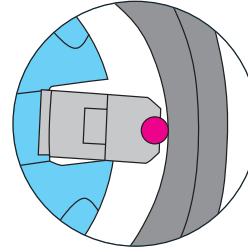
One-Piece-Component Pulse Unit

New Sealing  
PAT.P



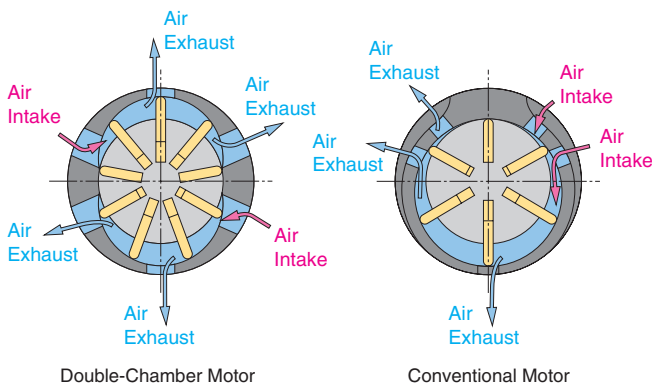
As a measure of the new sealing, a partition on the anvil and SU-Ring (PAT.P) are adopted. The partition walls off the direct high pressure from the liner front plate. And SU-Ring intensifies the gripping area of the liner front plate to avoid its rotation together with the anvil. It brings you a long durability.

Roller Blade  
PAT.P

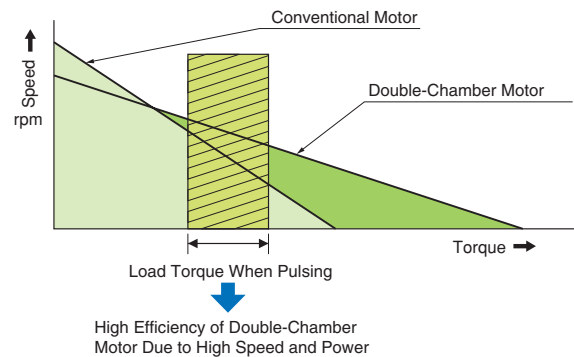


Newly adopted Roller Blades (Driving Blade with Roller Pin) (PAT.P) reduce the friction inside the pulse unit and improve the energy efficiency. Roller Blades also reduce the frictional wear of driving blades, which helps you to save the maintenance cost of driving blades.

## MOTOR COMPARISON CROSS SECTION



## EFFICIENCY OF MOTOR UNDER LOAD



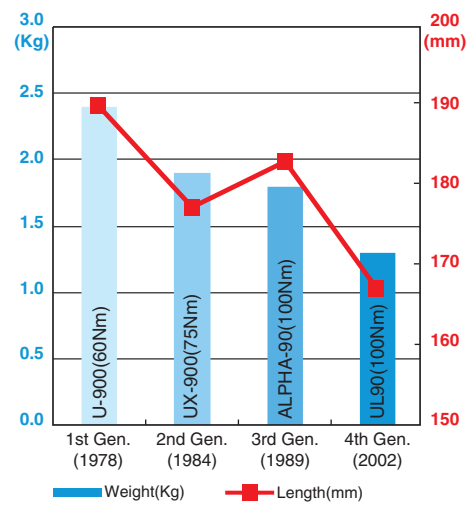
9-blade "Double-Chamber" motor creates super productivity on any joint rate. It provides efficiently slow free speed, compared with the same sized "Single-Chamber" motor. Bolt seating is performed very smoothly, and the torque spike caused by the spinning of the anvil is eliminated to the minimum level on the hard joint. Prevailing torque type joint is also overcome with the optimum cycle time by the effective motor power.

# UL SERIES OIL-PULSE TOOLS

PISTOL TYPE



COMPARISON GRAPH



SPECIFICATIONS

Recommended Air Pressure: 0.5MPa(72psi)-0.6MPa(85psi)

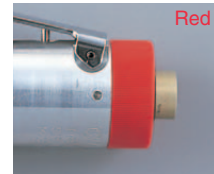
Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length Less Socket or Bit (Approx.)		Weight less Socket or Bit (Approx.)		From Center to Outside (Approx.)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level dB(A)	Vibration Level m/sec <sup>2</sup>
	mm	in	0.5MPa		0.6MPa		0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min		
			Nm	ft-lbs	Nm	ft-lbs														
UL30	5	13/64	5.5-10.5	4.1-7.8	6-12	4.4-8.9	5400	5700	131	5 5/32	0.70	1.5	20.5	13/16	9.5	3/8	0.20	7.0	75	1.2
UL30(TM)	5	13/64	5.5-10.5	4.1-7.8	6-12	4.4-8.9	5400	5700	131	5 5/32	0.70	1.5	20.5	13/16	9.5	3/8	0.20	7.0	75	1.2
UL30D	5	13/64	5.5-10.5	4.1-7.8	6-12	4.4-8.9	5400	5700	135	5 5/16	0.70	1.5	20.5	13/16	6.35	1/4	0.20	7.0	75	1.2
UL30D(TM)	5	13/64	5.5-10.5	4.1-7.8	6-12	4.4-8.9	5400	5700	135	5 5/16	0.70	1.5	20.5	13/16	6.35	1/4	0.20	7.0	75	1.2
UL40	5-6	13/64-1/4	11-20	8.1-14.8	13-22	9.6-16.3	5800	6100	131	5 5/32	0.70	1.5	20.5	13/16	9.5	3/8	0.20	7.0	75	1.2
UL40(TM)	5-6	13/64-1/4	11-20	8.1-14.8	13-22	9.6-16.3	5800	6100	131	5 5/32	0.70	1.5	20.5	13/16	9.5	3/8	0.20	7.0	75	1.2
UL40D	5-6	13/64-1/4	9-17	6.7-12.6	11-20	8.1-14.8	5800	6100	135	5 5/16	0.70	1.5	20.5	13/16	6.35	1/4	0.20	7.0	75	1.2
UL40D(TM)	5-6	13/64-1/4	9-17	6.7-12.6	11-20	8.1-14.8	5800	6100	135	5 5/16	0.70	1.5	20.5	13/16	6.35	1/4	0.20	7.0	75	1.2
UL50	6-8	1/4-5/16	20-32	14.8-23.7	22-35	16.3-25.9	6100	6400	137	5 25/64	0.77	1.7	22.0	55/64	9.5	3/8	0.30	10.5	78	1.5
UL50(TM)	6-8	1/4-5/16	20-32	14.8-23.7	22-35	16.3-25.9	6100	6400	137	5 25/64	0.77	1.7	22.0	55/64	9.5	3/8	0.30	10.5	78	1.5
UL50D	6-8	1/4-5/16	16-25	11.8-18.5	18-28	13.3-20.7	6100	6400	144	5 43/64	0.77	1.7	22.0	55/64	6.35	1/4	0.30	10.5	78	2.3
UL50D(TM)	6-8	1/4-5/16	16-25	11.8-18.5	18-28	13.3-20.7	6100	6400	144	5 43/64	0.77	1.7	22.0	55/64	6.35	1/4	0.30	10.5	78	2.3
UL60	8	5/16	30-45	22.2-33.3	32-50	23.7-37.0	6700	7000	137	5 25/64	0.82	1.8	22.0	55/64	9.5	3/8	0.40	14.0	80	1.5
UL60(TM)	8	5/16	30-45	22.2-33.3	32-50	23.7-37.0	6700	7000	137	5 25/64	0.82	1.8	22.0	55/64	9.5	3/8	0.40	14.0	80	1.5
UL60D	8	5/16	20-32	14.8-23.7	22-35	16.3-25.9	6700	7000	142	5 19/32	0.82	1.8	22.0	55/64	6.35	1/4	0.40	14.0	80	2.3
UL60D(TM)	8	5/16	20-32	14.8-23.7	22-35	16.3-25.9	6700	7000	142	5 19/32	0.82	1.8	22.0	55/64	6.35	1/4	0.40	14.0	80	2.3
UL70	8-10	5/16-3/8	36-60	26.6-44.4	40-65	29.6-48.1	5400	5700	149	5 55/64	0.95	2.1	23.0	29/32	9.5	3/8	0.45	15.8	80	1.5
UL70(TM)	8-10	5/16-3/8	36-60	26.6-44.4	40-65	29.6-48.1	5400	5700	149	5 55/64	0.95	2.1	23.0	29/32	9.5	3/8	0.45	15.8	80	1.5
UL90	10-12	3/8-1/2	55-90	40.7-66.6	60-100	44.4-74.0	5700	6000	168	6 39/64	1.30	2.9	27.0	1 1/16	12.7	1/2	0.53	18.6	82	2.0
UL90(TM)	10-12	3/8-1/2	55-90	40.7-66.6	60-100	44.4-74.0	5700	6000	168	6 39/64	1.30	2.9	27.0	1 1/16	12.7	1/2	0.53	18.6	82	2.0
UL100	12	1/2	-	-	80-130	59.2-96.2	-	5400	175	6 57/64	1.66	3.7	29.5	1 5/32	12.7	1/2	UNDER DEVELOPMENT			
UL100(TM)	12	1/2	-	-	80-130	59.2-96.2	-	5400	175	6 57/64	1.66	3.7	29.5	1 5/32	12.7	1/2	UNDER DEVELOPMENT			

Air Inlet Size : N.P.T.1/4"

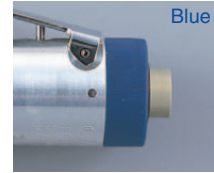
Air Hose Size : 10mm×6.5mm×5m for UL30-50 12mm×8.0mm×5m for UL60-100



# UL SERIES OIL-PULSE TOOLS

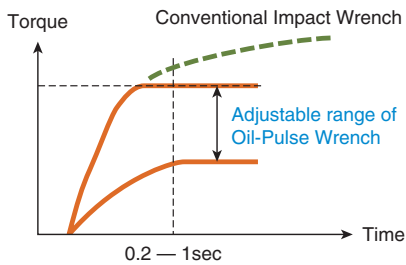


(Standard Type)



(Low Air Pressure Type)

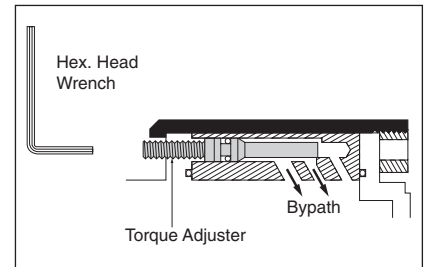
BOLT & NUT SETTERS



### EASY TORQUE ADJUSTMENT

The torque output can be easily adjusted by turning Torque Adjuster through the plug hole or the anvil hole without dismantling the tool.

- ① Turn clockwise  
Increase torque, decrease number of blows
- ② Turn anti-clockwise  
Decrease torque, increase number of blows



Notice : For soft joint attachment, choose one size up model of tool and adjust torque with more number of blows.

### SPECIFICATIONS

Recommended Air Pressure:0.5MPa(72psi)-0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length Less Socket or Bit (Approx.)		Weight less Socket or Bit (Approx.)		From Center to Outside (Approx.)		Sq. Drive or Hex. Size		Average Air Consumption	Noise Level	Vibration Level
			0.5MPa		0.6MPa		0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in			
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m³/min	ft³/min	dB(A)
UL30S	5	13/64	-	-	6-12	4.4-8.9	-	4700	205	8 5/64	0.62	1.4	21.5	27/32	9.5	3/8			UNDER DEVELOPMENT
UL30S(TM)	5	13/64	-	-	6-12	4.4-8.9	-	4700	205	8 5/64	0.62	1.4	21.5	27/32	9.5	3/8			UNDER DEVELOPMENT
UL30SD	5	13/64	-	-	6-12	4.4-8.9	-	4700	209	8 15/64	0.62	1.4	21.5	27/32	6.35	1/4			UNDER DEVELOPMENT
UL30SD(TM)	5	13/64	-	-	6-12	4.4-8.9	-	4700	209	8 15/64	0.62	1.4	21.5	27/32	6.35	1/4			UNDER DEVELOPMENT
UL40S	5-6	13/64-1/4	-	-	11-22	8.1-16.3	-	6200	205	8 5/64	0.62	1.4	21.5	27/32	9.5	3/8			UNDER DEVELOPMENT
UL40S(TM)	5-6	13/64-1/4	-	-	11-22	8.1-16.3	-	6200	205	8 5/64	0.62	1.4	21.5	27/32	9.5	3/8			UNDER DEVELOPMENT
UL40SD	5-6	13/64-1/4	-	-	9-20	6.7-14.8	-	6200	209	8 15/64	0.62	1.4	21.5	27/32	6.35	1/4			UNDER DEVELOPMENT
UL40SD(TM)	5-6	13/64-1/4	-	-	9-20	6.7-14.8	-	6200	209	8 15/64	0.62	1.4	21.5	27/32	6.35	1/4			UNDER DEVELOPMENT
UL50S	6-8	1/4-5/16	-	-	22-35	16.3-25.9	-	6500	208	8 3/16	0.74	1.6	22.0	7/8	9.5	3/8			UNDER DEVELOPMENT
UL50S(TM)	6-8	1/4-5/16	-	-	22-35	16.3-25.9	-	6500	208	8 3/16	0.74	1.6	22.0	7/8	9.5	3/8			UNDER DEVELOPMENT
UL50SD	6-8	1/4-5/16	-	-	18-28	13.3-20.7	-	6500	214	8 27/64	0.74	1.6	22.0	7/8	6.35	1/4			UNDER DEVELOPMENT
UL50SD(TM)	6-8	1/4-5/16	-	-	18-28	13.3-20.7	-	6500	214	8 27/64	0.74	1.6	22.0	7/8	6.35	1/4			UNDER DEVELOPMENT
UL60S	8	5/16	-	-	32-50	23.7-37.0	-	7000	209	8 15/64	0.77	1.7	22.0	7/8	9.5	3/8			UNDER DEVELOPMENT
UL60S(TM)	8	5/16	-	-	32-50	23.7-37.0	-	7000	209	8 15/64	0.77	1.7	22.0	7/8	9.5	3/8			UNDER DEVELOPMENT
UL60SD	8	5/16	-	-	22-35	16.3-25.9	-	7000	212	8 11/32	0.77	1.7	22.0	7/8	6.35	1/4			UNDER DEVELOPMENT
UL60SD(TM)	8	5/16	-	-	22-35	16.3-25.9	-	7000	212	8 11/32	0.77	1.7	22.0	7/8	6.35	1/4			UNDER DEVELOPMENT
UL70S	8-10	5/16-3/8	-	-	36-60	26.6-44.4	-	5000	223	8 25/32	0.87	1.9	23.5	59/64	9.5	3/8			UNDER DEVELOPMENT
UL70S(TM)	8-10	5/16-3/8	-	-	36-60	26.6-44.4	-	5000	223	8 25/32	0.87	1.9	23.5	59/64	9.5	3/8			UNDER DEVELOPMENT

Air Inlet Size : N.P.T.1/4"

Air Hose Size : 10mm×6.5mm×5m for UL30S-50S 12mm×8.0mm×5m for UL60S-70S

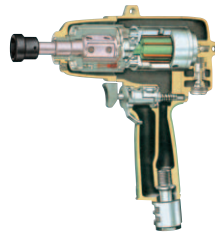
# ALPHA SERIES OIL-PULSE TOOLS

## ALPHA SERIES (STANDARD TYPE)



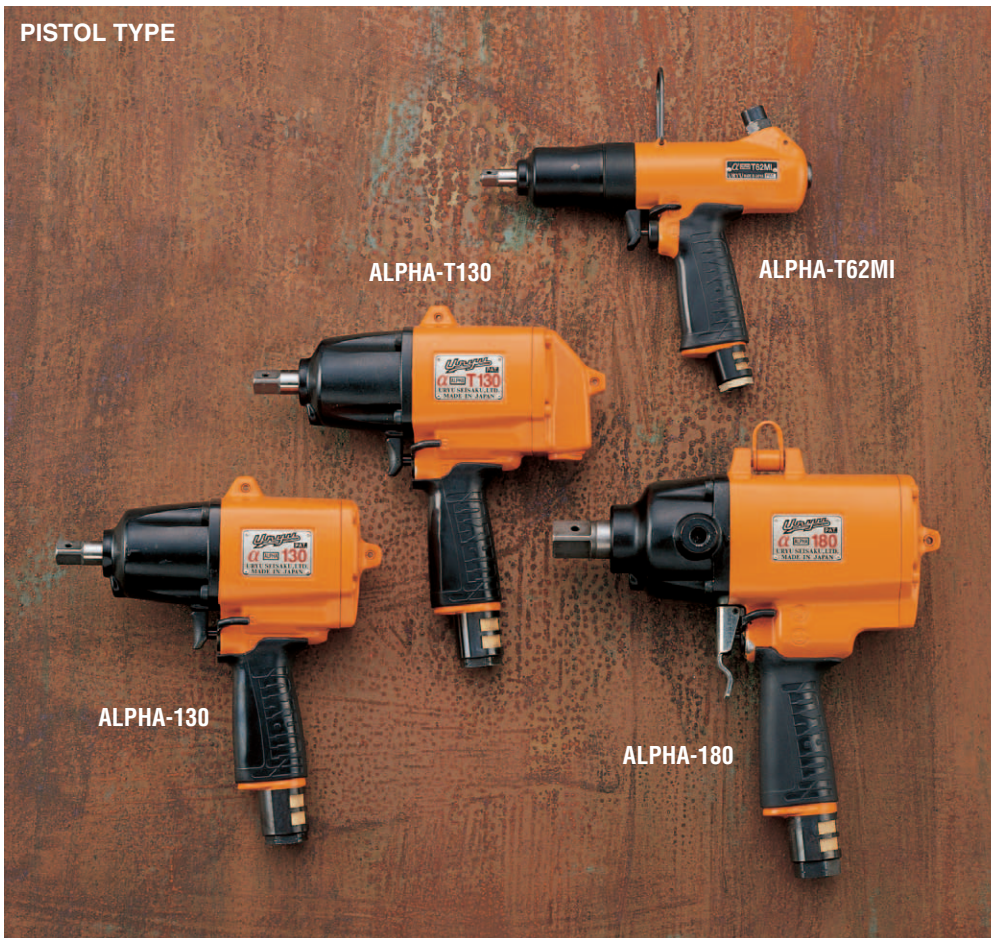
ALPHA's 9-blade "Double-Chamber" motor creates super productivity on any joint rate. It provides efficiently slow free speed, compared with the same sized "Single-Chamber" motor. Bolt seating is performed very smoothly, and the torque spike caused by the spinning of the anvil is eliminated to the minimum level on the hard joint. Prevailing torque type joint is also overcome with the optimum cycle time by the effective motor power.

## ALPHA-T SERIES (SHUT-OFF TYPE)



This series combines the benefits of the ALPHA series with the quality benefit of improved tightening accuracy, regardless of joint rate and operator training level. This is accomplished by incorporating a pressure sensing shut-off mechanism with ALPHA series components.

## PISTOL TYPE



## (DISCONTINUED) ALPHA-T62MI/T62DMI



## ERGONOMIC ADVANCEMENT

The ALPHA-T62MI/T62DMI is designed with MULTIPLE AIR INLET PORTS. Top, bottom and back inlets insure that the tool is always in the optimum position for operator comfort. Inefficient tool/hose combinations (FIG.1 & 2) are eliminated.

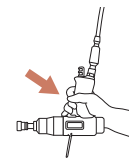


FIG.1

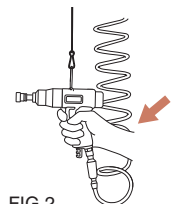


FIG.2

## SPECIFICATIONS

Recommended Air Pressure: 0.6 MPa (85 psi)

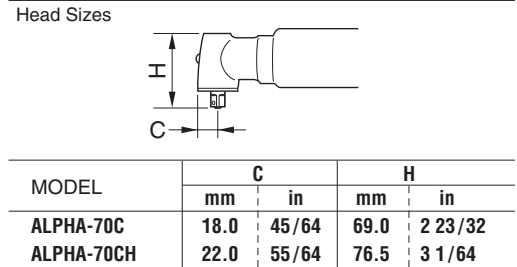
Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.	Overall Length Less Socket or Bit (Approx.)	Weight less Socket or Bit (Approx.)		From Center to Outside (Approx.)		Sq. Drive or Hex. Size		Average Air Consumption	Noise Level	Vibration Level			
			0.5MPa		0.6MPa															
	mm	in	Nm	ft-lbs	Nm	ft-lbs			0.5MPa	0.6MPa	mm	in	kg	lb				mm	in	mm
ALPHA-100	12	1/2	72-120	52.8-88.2	80-130	58.5-95.4	4500	4700	189	7 7/16	2.16	4.8	33.5	1 5/16	12.7	1/2	0.60	21.1	82	2.0
ALPHA-130	14	9/16	90-145	65.8-106.3	100-160	73.0-117.8	3250	3400	209	8 15/64	2.65	5.8	36.0	1 13/32	12.7	1/2	0.65	22.9	82	2.3
ALPHA-140	16	5/8	135-210	99.0-154.7	150-230	109.9-169.2	2900	3100	226	8 57/64	3.35	7.4	40.0	1 37/64	19.0	3/4	0.70	24.7	84	5.0
ALPHA-160	18	45/64	140-220	103.4-162.3	160-270	117.9-198.5	3500	3700	245	9 41/64	3.80	8.4	40.0	1 37/64	19.0	3/4	0.90	31.8	84	5.0
ALPHA-180	18-20	45/64-25/32	250-320	183.8-235.3	270-350	198.5-257.4	3300	3500	250	9 27/64	4.70	10.3	42.0	1 21/32	19.0	3/4	0.95	33.6	84	5.0
ALPHA-T62MI*	6-8	1/4-5/16	20-30	14.4-21.6	20-30	14.4-21.6	6600	7000	217	8 35/64	1.25	2.8	22.5	57/64	9.5	3/8	DISCONTINUED			
ALPHA-T62DMI*	6-8	1/4-5/16	15-25	11.1-18.4	15-25	11.1-18.4	6600	7000	222	8 1/32	1.25	2.8	22.5	57/64	6.35	1/4	DISCONTINUED			
ALPHA-T130	14	9/16	110-160	81.0-117.8	110-160	81.0-117.8	3400	3500	230	9 1/16	2.8	6.2	36.0	1 27/64	12.7	1/2	0.90	31.7	82	2.3
ALPHA-T140	16	5/8	140-210	102.7-154.7	140-210	102.7-154.7	2900	3100	246	9 11/16	3.5	7.7	40.0	1 37/64	19.0	3/4	1.00	35.3	84	3.2

\*ALPHA-T62MI/T62DMI are multi inlet type.

Air Inlet Thread : N.P.T.1/4" for ALPHA-100 ~ ALPHA-140 & ALPHA-T62MI ~ ALPHA-T140 N.P.T.3/8 for ALPHA-160 & ALPHA-180

Air Hose Size : 12.7mm (1/2") for ALPHA-180 9.5mm (3/8") for other models

# ALPHA SERIES OIL-PULSE TOOLS



## SPECIFICATIONS

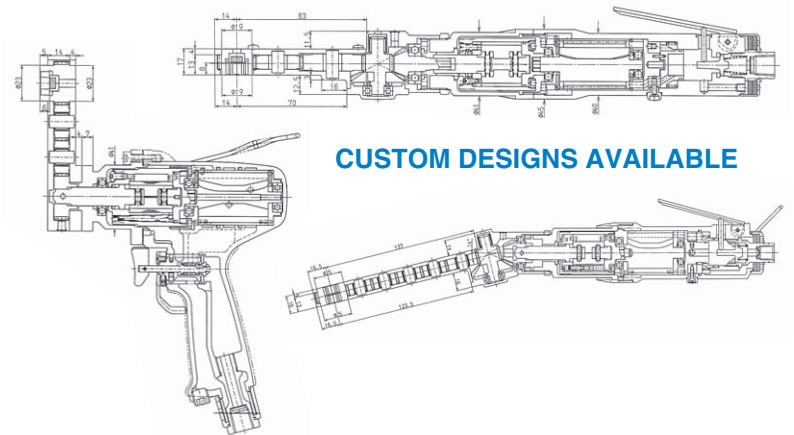
Recommended Air Pressure: 0.5MPa(72psi)-0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
			0.5MPa		0.6MPa															
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m³/min	ft³/min	dB(A)	m/sec²
ALPHA-45S	5	No.10	16-25	11.5-18.0	18-27	13.0-19.5	5300	5500	238	9 3/8	0.86	1.8	22.0	55/64	9.5	3/8	0.25	8.8	75	1.5
ALPHA-45SD	5	No.10	12-19	8.6-13.7	13-20	9.4-14.4	5300	5500	243	9 9/16	0.86	1.8	22.0	55/64	6.35	1/4	0.25	8.8	75	1.5
ALPHA-70S	8-10	5/16-3/8	36-60	26.0-44.1	40-65	28.9-47.7	6000	6300	234	9 7/32	1.19	2.6	26.5	1 3/64	9.5	3/8	0.45	15.8	78	7.9
ALPHA-70C	8-10	5/16-3/8	25-40	18.0-28.9	28-45	20.2-32.5	6000	6300	266	10 15/32	1.77	3.9	69.0*	2 23/32	9.5	3/8	0.45	15.8	82	22.4
ALPHA-70CH	10-12	3/8-1/2	45-68	32.5-49.9	50-76	36.1-56.0	3400	3600	282	11 7/64	2.00	4.4	76.5*	3 1/64	12.7	1/2	0.45	15.8	82	22.4

Air Inlet Thread : N.P.T.1/4" \* Angle Height Air Hose Size : 6.35mm (1/4") for ALPHA-45S~ALPHA-50SD 9.5mm (3/8") for ALPHA-60S~ALPHA-70CH

## GEARED HEAD SERIES OIL-PULSE TOOLS

These models are specially designed for user's request giving priority to productivity or workability rather than durability.



## SPECIFICATIONS

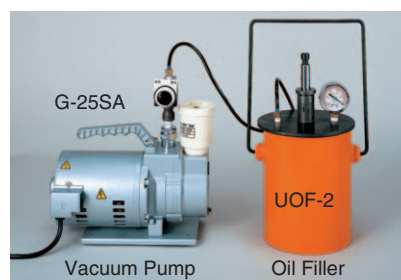
Recommended Air Pressure: 0.5MPa(72psi)-0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Hex. Size of Gear Socket	Average Air Consumption		Noise Level	Vibration Level
			0.5MPa		0.6MPa														
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	m³/min	ft³/min	dB(A)	m/sec²
UL60(042T8)	8	5/16	20-32	14.4-23.1	22-35	15.9-25.3	3000	3200	316	12 7/16	1.50	3.3	16.0	5/8	12.0	0.40	14.0	80	-
UL60(042T7)	8	5/16	20-32	14.4-23.1	22-35	15.9-25.3	3000	3200	313	12 5/16	1.50	3.3	16.0	5/8	12.0	0.40	14.0	80	-

Air Inlet Thread : N.P.T.1/4" Air Hose Size : 9.5mm (3/8")

## OIL FILLER

The new **UOF-2** eliminates troublesome process of oil-filling procedure repeated at previous model UOF-1 due to employment of the powerful vacuuming system.

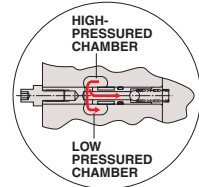
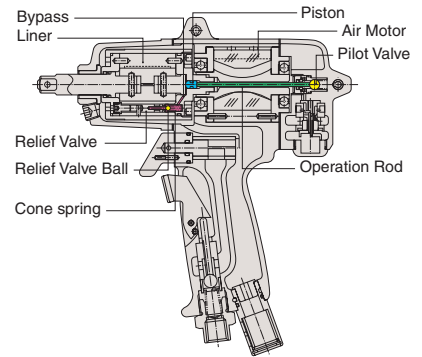


# UX-T SERIES OIL-PULSE TOOLS (SHUT-OFF TYPE)

## PISTOL / STRAIGHT TYPE



## SHUT-OFF MECHANISM



When the increase in oil pressure in the pulse unit overcomes the tension of Relief Valve Spring, the oil in the high-pressure chamber displaces the Relief Valve Ball and travels to the Piston via bypass.

The Piston displaced by oil moves the Operating Rod, which causes the Shut-off Valve Ball to be displaced via Pilot Valve. Immediately after the Pilot Valve opens, the Shut-off Valve gets closed and the tool shuts off.

## SPECIFICATIONS

Recommended Air Pressure: 0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range		Free Speed (about) r.p.m.		Overall Length less Socket or Bit (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
	mm	in	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min	dB(A)	m/sec <sup>2</sup>
UX-T700L	6-8	1/4-5/16	13-26	10-19	7250	7500	187	7 23/64	1.46	3.21	25.5	1	9.5	3/8	0.30	10.5	72	0.7
UX-T700	8	5/16	20-38	15-28	7250	7500	187	7 23/64	1.46	3.21	25.5	1	9.5	3/8	0.30	10.5	72	0.7
UX-T800	8-10	5/16-3/8	30-45	22-33	8000	8300	196	7 23/32	1.80	3.96	28.0	1 7/64	9.5	3/8	0.35	12.3	75	1.0
UX-T900	8-10	5/16-3/8	35-70	25-50	6800	7000	202	7 15/16	2.00	4.40	30.0	1 3/16	12.7	1/2	0.45	16.0	75	1.7
UX-T1000	10-12	3/8-1/2	50-90	36-65	6550	6800	207	8 5/32	2.35	5.17	33.0	1 19/64	12.7	1/2	0.50	17.6	75	1.4
UX-T1300	12-14	1/2-35/64	70-130	50-94	6000	6200	225	8 57/64	2.80	6.16	36.0	1 27/64	12.7	1/2	0.55	19.4	77	1.3
UX-T1400	14	35/64	100-160	75-115	4900	5300	245	9 41/64	3.40	7.48	40.0	1 37/64	12.7	1/2	0.60	21.1	79	1.8
UX-T1620	14-16	35/64-5/8	120-210	87-150	4800	5000	260	10 15/64	3.70	8.14	40.0	1 37/64	19.0	3/4	0.65	22.9	82	2.3
UXR-T1820	16-18	5/8-45/64	150-250	110-180	4200	4400	270	10 5/8	4.50	9.90	42.0	1 21/32	19.0	3/4	0.70	24.7	84	3.2
UXR-T2000	18-20	45/64-25/32	200-400	150-290	3800	4000	303	11 15/16	6.80	14.96	47.0	1 27/32	19.0	3/4	0.95	34.0	85	3.2
UXR-T2400S	24	61/64	360-650	260-470	3400	3600	444	17 31/64	12.00	26.46	61.5	2 27/64	25.4	1	1.00	35.3	85	3.2
UXR-T3000S	30	1-3/16	450-850	330-620	4200	4400	477	18 25/32	14.50	31.97	62.0	2 7/16	25.4	1	1.05	37.1	85	3.2

Air Inlet Thread : N.P.T. 1/4" for UX-T700L-UX-T1620 N.P.T. 3/8" for UXR-T1820-UXR-T2000 N.P.T. 1/2" for UXR-T2400S & UXR-T3000S  
 Air Hose Size : 9.5mm (3/8") for UX-T700L-UX-T1620 12.7mm (1/2") for UXR-T1820-UXR-T3000S  
 Inside Trigger is available for UXR-T2400S & UXR-T3000S

## SPECIFICATIONS

Recommended Air Pressure: 0.4MPa(57psi)

Model	Capacity (Nominal Bolt Size)		Torque Range		Free Speed (about) r.p.m.		Overall Length less Socket or Bit (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
	mm	in	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min	dB(A)	m/sec <sup>2</sup>
UX-TL700	6-8	1/4-5/16	15-28	11.1-20.2	7500	7750	187	7 23/64	1.46	3.21	25.5	1	9.5	3/8	0.20	7.0	72	0.7
UX-TL800	8	5/16	20-32	14.4-23.1	7600	8000	196	7 23/32	1.80	3.96	28.0	1 7/64	9.5	3/8	0.25	8.8	75	1.0
UX-TL900	8-10	5/16-3/8	30-48	22-34.7	7000	7200	202	7 15/16	2.00	4.40	30.0	1 3/16	12.7	1/2	0.30	10.5	75	1.7
UX-TL1000	8-10	5/16-3/8	30-63	22-46.2	6300	6550	207	8 5/32	2.35	5.17	33.0	1 19/64	12.7	1/2	0.35	12.3	75	1.4
UX-TL1300	10-12	3/8-1/2	50-95	36-70	5700	6000	225	8 57/64	2.80	6.16	36.0	1 27/64	12.7	1/2	0.40	14.1	77	1.3
UX-TL1400	12-14	1/2-35/64	65-105	47.7-77.5	4500	4900	245	9 41/64	3.40	7.48	40.0	1 37/64	12.7	1/2	0.45	16.0	79	1.8
UX-TL1620	14	35/64	110-170	81-123	4500	4800	260	10 15/64	3.70	8.14	40.0	1 37/64	19.0	3/4	0.50	17.6	82	2.3
UXR-TL1820	14-16	35/64-5/8	120-200	87-150	4400	4600	270	10 5/8	4.50	9.90	42.0	1 21/32	19.0	3/4	0.50	17.6	84	3.2
UXR-TL2000	16-18	5/8-45/64	170-280	123-206	3900	4100	303	11 15/16	6.80	14.96	47.0	1 27/32	19.0	3/4	0.70	24.7	85	3.2

Air Inlet Thread : N.P.T. 1/4" for UX-TL700-UX-TL1620 N.P.T. 3/8" for UXR-TL1820-UXR-TL2000  
 Air Hose Size : 9.5mm (1/4") for UX-TL700-UX-TL1620 12.7mm (1/2") for UXR-TL1820 & UXR-TL2000

# U·UX·UXR SERIES OIL-PULSE TOOLS

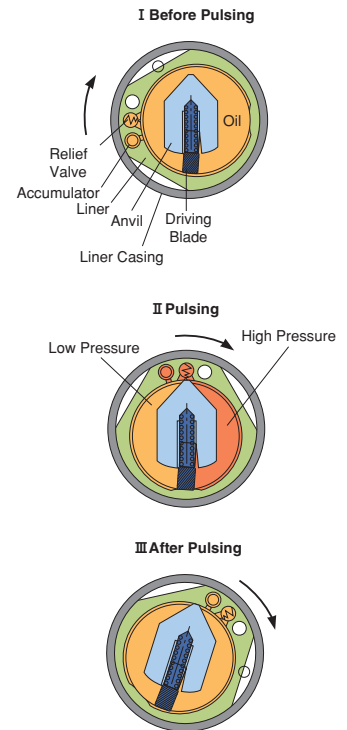
PISTOL TYPE



U-WRENCH

The "U-WRENCH" is a combination tool of a standard air motor and a hydraulic pulse unit utilizing one-blade impulsing mechanism.

The high speed rotation of the air motor increases the oil pressure quickly in the front pulse unit to deliver repeated hydraulic pulse powers to the anvil for bolt and nut fastening and loosening job.



SPECIFICATIONS

Recommended Air Pressure:0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level		Vibration Level	
			0.5MPa		0.6MPa																	
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min	dB(A)	m/sec <sup>2</sup>		
U-350D	3-4	No.8	3.0-5.0	2.2-3.7	3.5-5.8	2.5-4.2	10000	10500	154	6 1/16	0.77	1.7	22.0	7/8	6.35	1/4	0.15	5.3	74	1.0		
U-410	4-5	No.8-No.10	6.0-8.5	4.4-6.3	7-10	5.0-7.2	10000	10500	177	7	1.00	2.2	22.0	7/8	9.5	3/8	0.15	5.3	70	1.4		
U-410D	4-5	No.8-No.10	6.0-8.5	4.4-6.3	7-10	5.0-7.2	10000	10500	188	7 13/32	1.00	2.2	22.0	7/8	6.35	1/4	0.15	5.3	70	1.4		
UX-450	5-6	No.10-1/4	7.7-13	5.7-9.6	9-15	6.5-11	9000	9500	147	5 25/32	0.85	1.9	22.0	7/8	9.5	3/8	0.20	7.0	65	1.0		
UX-450D	5	No.10	6.8-12	5.0-8.9	8-14	5.8-10	9000	9500	152	5 63/64	0.85	1.9	22.0	7/8	6.35	1/4	0.20	7.0	65	1.0		
UX-500	5-6	No.10-1/4	13-21	9.6-15.5	15-25	11-19	9000	9300	147	5 25/32	0.87	1.9	22.0	7/8	9.5	3/8	0.25	8.8	70	1.0		
UX-500D	5-6	No.10-1/4	11-17	8.1-12.5	13-20	10-15	9000	9300	152	5 63/64	0.87	1.9	22.0	7/8	6.35	1/4	0.25	8.8	70	1.0		
UX-612	6-8	1/4-5/16	17-30	12.5-22.1	20-35	15-25	9000	9300	160	6 5/16	0.95	2.1	22.5	7/8	9.5	3/8	0.32	11.2	75	1.0		
UX-612D	6-8	1/4-5/16	13.5-24	10.0-17.7	16-28	12-20	9000	9300	165	6 1/2	0.95	2.1	22.5	7/8	6.35	1/4	0.32	11.2	75	1.0		
UX-700	8	5/16	21-38	15.5-28.0	25-45	20-35	8700	9000	169	6 21/32	1.38	3.0	25.5	1	9.5	3/8	0.35	12.3	72	0.7		
UX-700D	8	5/16	17-31	12.5-22.9	20-36	16-28	8700	9000	174	6 27/32	1.38	3.0	25.5	1	6.35	1/4	0.35	12.3	72	0.7		
UX-800	8-10	5/16-3/8	30-51	22.1-37.6	35-60	25-45	8500	9000	175	6 7/8	1.70	3.7	28.0	1 7/64	9.5	3/8	0.40	14.1	75	1.0		
UX-900	10	3/8	38-64	28.0-47.2	45-75	35-55	7300	7600	181	7 1/8	1.88	4.1	30.0	1 3/16	12.7	1/2	0.42	14.7	75	1.7		
UX-1000	10-12	3/8-1/2	43-81	31.7-59.8	50-95	40-70	6500	6800	187	7 23/64	2.20	4.8	33.0	1 19/64	12.7	1/2	0.51	17.9	75	1.4		
UX-1300	12-14	1/2-9/16	68-110	50.2-81.2	80-130	60-95	5800	6200	205	8 5/64	2.70	5.9	36.0	1 27/64	12.7	1/2	0.55	19.4	77	1.3		
UX-1400	14	9/16	85-135	62.7-99.6	100-160	75-120	5000	5300	224	8 13/16	3.20	7.0	40.0	1 37/64	12.7	1/2	0.60	21.1	79	1.8		
UX-1620	14-16	9/16-5/8	100-160	73.8-118.1	120-190	90-140	4700	5000	241	9 1/2	3.60	7.9	40.0	1 37/64	19.0	3/4	0.65	22.9	82	2.3		
UXR-1820	16-18	5/8-45/64	135-215	99.6-158.7	160-250	120-185	4400	4600	242	9 17/32	4.10	9.0	42.0	1 21/32	19.0	3/4	0.75	26.3	84	3.2		
UXR-2000	18-20	45/64-25/32	255-385	188.2-284.1	300-450	220-330	4000	4200	282	11 3/32	6.50	14.3	47.0	1 27/32	19.0	3/4	0.90	31.5	85	3.2		

Air Inlet Thread : N.P.T.1/4" for U-350D~UX-1620  
 N.P.T.3/8" for UXR-1820 & UXR-2000  
 Air Hose Size : 6.35mm (1/4") for U-350D~UX-500D  
 9.5mm (3/8") for UX-612~UX-1620  
 12.7mm (1/2") for UXR-1820 & UXR-2000

# U·UX·UXR SERIES OIL-PULSE TOOLS

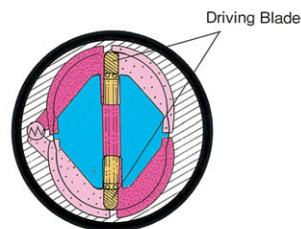
## STRAIGHT TYPE



### UX Series

Torque Range : 9~190 Nm  
6.5~140 ft-lbs

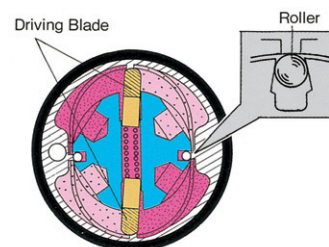
The UX series tools have twin Driving Blades in oil pulse unit and generate higher torque output with lighter weight (Better Power-to-Weight Ratio), which is furnished to UX-450 ~UX-1620 series.



### UXR Series

Torque Range : 160~800 Nm  
120~580 ft-lbs

Rollers on Anvil in Liner are provided to have perfect contact between Anvil and Liner in UXR series. The patented technology is applied specially to larger tools such as UXR-1820~UXR-3000S.



## SPECIFICATIONS

Recommended Air Pressure:0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibra- tion Level
			0.5MPa		0.6MPa															
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min	dB(A)	m/sec <sup>2</sup>
U-310SD	3-4	No.8	2.1-2.6	1.6-1.9	2.5-3.1	1.8-2.2	10000	11000	222	8 45/64	0.62	1.5	18.0	47/64	6.35	1/4	0.15	5.3	74	1.8
U-350SD	3-4	No.8	3.0-5.0	2.2-3.7	3.5-5.8	2.5-4.2	10000	10500	238	9 3/8	0.71	1.5	22.0	47/64	6.36	1/4	0.15	5.3	74	1.8
U-410S	4-5	No.8-No.10	6.0-8.5	4.4-6.2	7-10	5.0-7.2	10000	10500	239	9 27/32	0.80	1.8	22.0	7/8	9.5	3/8	0.15	5.3	70	1.4
U-410SD	4-5	No.8-No.10	6.0-8.5	4.4-6.3	7-10	5.0-7.2	10000	10500	240	9 11/64	0.80	1.8	22.0	7/8	6.35	1/4	0.15	5.3	70	2.2
UX-450S	5-6	No.10	7.7-13	5.7-9.6	9-15	6.5-11	9000	9500	234	9 3/16	0.80	1.8	22.0	7/8	9.5	3/8	0.20	7.0	67	2.2
UX-450SD	5	No.10	6.8-12	5.0-8.8	8-14	5.8-10	9000	9500	239	9 11/64	0.80	1.8	22.0	7/8	6.35	1/4	0.20	7.0	67	2.2
UX-500S	5-6	No.10-1/4	13-21	9.6-15.5	15-25	11-19	9000	9300	239	9 13/32	0.92	2.0	22.0	7/8	9.35	3/8	0.25	8.8	70	2.2
UX-500SD	5-6	No.10-1/4	11-17	8.1-12.5	13-20	10-15	9000	9300	244	9 39/64	0.92	2.0	22.0	7/8	6.35	1/4	0.25	8.8	70	2.2
UX-612S	6-8	1/4-5/16	17-30	12.5-22	20-35	15-25	9000	9300	248	9 49/64	1.00	2.2	23.3	29/32	9.5	3/8	0.32	11.1	75	2.2
UX-612SD	6-8	1/4-5/16	13.5-24	10-17.7	16-28	12-20	9000	9300	253	9 61/64	1.00	2.2	23.3	29/32	6.35	1/4	0.32	11.1	75	2.2
UX-700S	8	5/16	21-38	15.5-28	25-45	20-35	8700	9000	244	9 39/64	1.27	2.8	26.5	13/64	9.5	3/8	0.35	12.3	78	2.2
UX-700SD	8	5/16	17-31	12.5-22.9	20-36	16-28	8700	9000	249	9 51/64	1.27	2.8	26.5	13/64	6.35	1/4	0.35	12.3	78	2.2
UX-800S	8-10	5/16-3/8	30-51	22-37.6	35-60	25-45	8500	9000	250	9 27/32	1.48	3.2	35.5	1	9.5	3/8	0.40	14.2	75	2.3
UX-900S	10	3/8	38-64	28-47.2	45-75	35-55	7300	7600	310	12 13/64	1.80	3.9	37.5	19/64	12.7	1/2	0.42	14.9	75	2.3
UX-1000S	10-12	3/8-1/2	43-81	31.7-59.8	50-95	40-70	6500	6800	320	12 19/32	2.10	4.6	39.0	1 17/64	12.7	1/2	0.51	17.9	75	2.7
UX-1300S	13-14	1/2-9/16	68-110	50.2-81.2	80-130	60-95	5800	6200	336	13 15/64	2.55	6.6	42.0	1 11/32	12.7	1/2	0.55	19.4	77	2.7
UXR-2000S	18-20	45/64-25/32	255-385	188-284	300-450	220-330	4000	4200	340	13 25/64	7.00	15.4	47.0	1 27/32	19.0	3/4	0.90	31.6	85	3.2
UXR-2400S	24	15/16	340-550	251-406	400-650	290-470	3700	4000	385	15 5/32	11.00	23.7	55.0	2 1/8	25.4	1	1.00	35.2	85	3.2
UXR-3000S	30	1-3/16	425-725	313-535	500-850	360-630	4200	4400	455	16 37/64	13.30	29.3	62.0	2 1/8	25.4	1	1.05	37.1	85	3.2

Air Inlet Size : N.P.T.1/4" for U-310SD~UX-1300S N.P.T.3/8" for UXR-2000S  
N.P.T.1/2" for UXR-2400S~UXR-3000S

Air Hose Size : 6.35mm (1/4") for U-310SD~UX-500SD 9.5mm (3/8") for UX-612C~UX-1300S  
12.7mm (1/2") for UXR-2000S~UXR-3000S

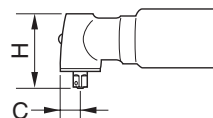
Inside Trigger is available for UXR-2000S~UXR-3000S

# UX SERIES OIL-PULSE TOOLS

## ANGLE TYPE



Head Sizes



MODEL	C		H	
	mm	in	mm	in
UX-500C	15.0	19/32	59.5	2 11/32
UX-612C	16.0	5/8	59.5	2 11/32
UX-700C	16.0	5/8	62.0	2 7/16
UX-800C	18.0	45/64	70.0	2 3/4
UX-900C	18.0	45/64	70.0	2 3/4
UX-1000C	21.5	27/32	80.0	3 5/32

## SPECIFICATIONS

Recommended Air Pressure: 0.6MPa(85psi)

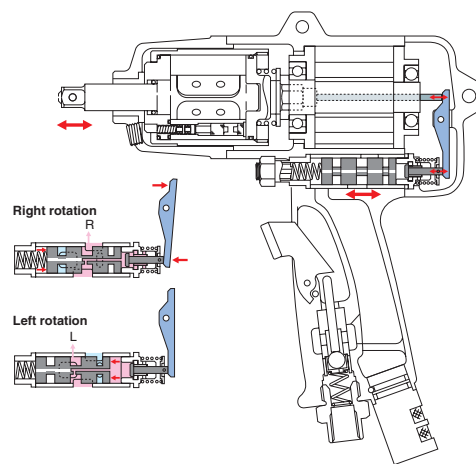
Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length (about)		Weight less Socket or Bit (about)		Angle Height (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
			0.4MPa		0.6MPa															
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min	dB(A)	m/sec <sup>2</sup>
UX-500C	5-6	No. 10-1/4	11-17	8.0-12.5	13-20	10.0-15.0	8800	9300	270	10 5/8	1.28	2.8	59.5	2 11/32	9.5	3/8	0.25	8.8	82	18.0
UX-612C	6	1/4	13.5-24	9.9-17.7	16-28	12.0-20.0	9300	9800	283	11 5/32	1.38	3.0	59.5	2 11/32	9.5	3/8	0.32	11.2	85	30.0
UX-700C	8	5/16	17-31	12.5-22.8	20-36	16.0-28.0	9000	9500	273	10 13/18	1.67	3.7	62.0	2 7/16	9.5	3/8	0.35	12.3	85	5.6
UX-800C	8-10	5/16-3/8	25-36	18.4-26.5	29-43	20.0-31.0	8500	9000	285	11 7/32	1.93	4.3	70.0	2 3/4	9.5	3/8	0.40	14.1	86	7.6
UX-900C	10	3/8	30-47	22.1-34.6	35-55	25.0-40.0	7300	7600	338	13 5/16	2.25	5.0	70.0	2 3/4	9.5	3/8	0.42	14.9	90	30.0
UX-1000C	10-12	3/8-1/2	43-68	31.7-50.1	50-80	40.0-58.0	6600	6800	365	14 23/64	3.05	6.8	80.0	2 5/32	12.7	1/2	0.51	17.9	90	10.0
UX-612A	6	1/4	13.5-24	9.9-17.7	16-28	12.0-20.0	9300	9800	297	11 11/16	1.38	3.0	-	-	9.5	3/8	0.30	10.5	85	30.0

Air Inlet size : N.P.T.1/4"

Air Hose Size : 6.35mm (1/4") for UX-500C 9.5mm (3/8") for UX-612C~UX-1000C

# UX-ST SERIES OIL-PULSE TOOLS

## PISTOL TYPE



### Auto-reversing mechanism

These unique Push-Pull type Oil-Pulse tools simplify stud-bolt driving job considerably without any special operation for frequent reversing. Push the tool forward to the work for driving and simply pull back for automatic reversing.

## SPECIFICATIONS

Recommended Air Pressure: 0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
			0.5MPa		0.6MPa															
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min	dB(A)	m/sec <sup>2</sup>
UX-ST800	8-10	5/16-3/8	30-47	22-35	35-55	25-40	7000	7300	195	7 43/64	1.75	3.8	28.0	1 3/32	9.5	3/8	0.30	10.5	75	1.0
UX-ST1000	10-12	3/8-1/2	43-77	32-57	50-90	40-65	6000	6300	210	8 17/64	2.50	5.5	33.0	1 19/64	12.7	1/2	0.48	16.8	75	1.4

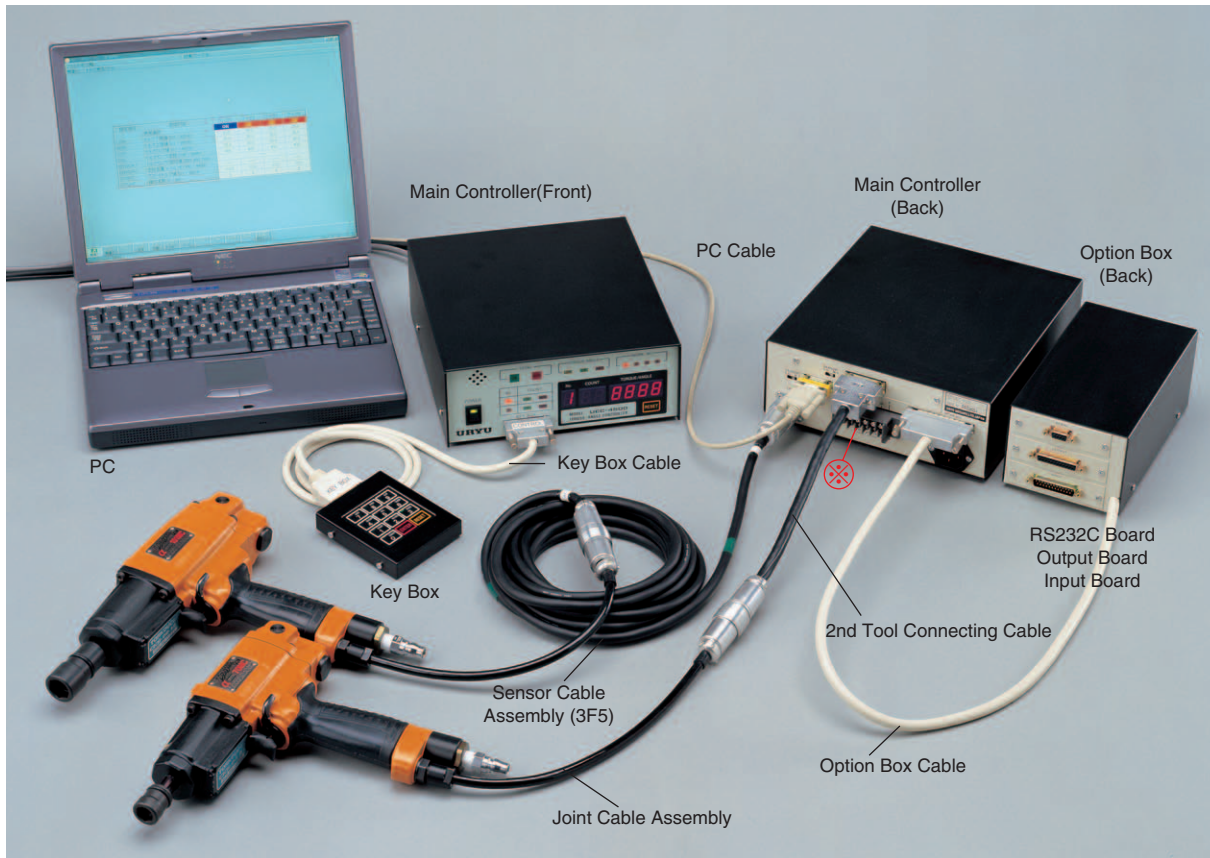
Air Inlet Size: N.P.T.1/4"

Air Hose Size: 9.5mm (3/8")

# SUPER "INTELEC" SYSTEM UEC-4500 CONTROLLER

It is not easy to select the most suitable tool to meet with International Standards or customer's demand in the fastening process. **UEC-4500** is a light weight and compact designed multi-function Controller which conforms to various different fastening operations.

## Intelligent Electronic-Control Fastening System



### 1. Easy Set-up Function !

The Controller set-up for the upper and lower limits and all the other settable parameters can be completed through the remote Key Box. Set-up of the Controller can also be done through a P.C. by using the optional Uryu standard control software, Windows 95 / 98 and XP operating systems. The Down loading of fastening data can also be achieved by using the optional RS-232C interface from the controller, a maximum of 10,000 readings per tool giving the Controller, a maximum capacity of 20,000 readings.

### 2. Controlling Two Tools simultaneously !

By adding a 2nd tool connecting board, the UEC-4500 has the capability of controlling two tools simultaneously regardless of the type of transducer fitted.

### 3. Torque Control !

As standard the Controller is capable of Ultra high-speed sampling. After reaching the required cut torque level the controller can be set to command the tool to carry out additional pulses then shut-off automatically. This enables the tool to have more accurate control with hard-joint conditions.

### 4. Statistical Data Analysis Function !

CP value, CPK value and standard deviations can be analyzed instantly from the stored data within the Controller, which contributes the Quality Control Process.

### 5. Interlock Software - Standardization !

Various interlock software, which is an optional function for conventional controllers until today, is employed as standard in the UEC-4500.

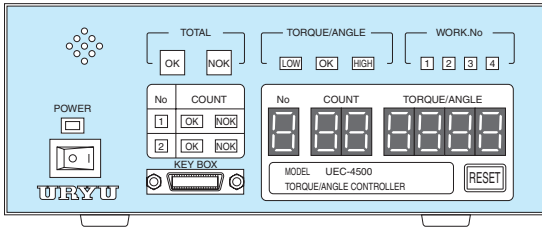
### UEC-4500 SPECIFICATIONS

Power Supply	AC100 - 240V
Power Frequency	50/60 Hz
Noise Protection	1200V 1 μ S (depending on the noise simulator)
Insulation Protection	DC 500V over 10M Ω
Ambient Temperature	0 - 50 °C
Ambient Humidity	30 - 95%(noncondensing)
Power Consumption	Approx. 70VA
Dimensions	240(D)x222(W)x90(H)
Weight	Approx. 2.5Kg
Main Functions	Torque Monitor/Control Angle Monitor/Control Fastening Count Control
Parameter setup	Key box Personal Computer(with setup software)
Display	Torque resolution ±2048(12 Bit A/D) 1-Digit digital display (DPM) Display: Tool Number 2-Digit digital display (DPM) Display: Fastening Count Number 4-Digit digital display (DPM) Display: Torque/Angle Value
LED	Total Judgement: TOTAL OK(green) /NOK(red) Each tool fastening counter judgement: COUNTOK (green) /NOK(red) Each tool fastening judgement: OK(green) /LOW(yellow) /HIGH(red) Work NO.: 1,2,3,4(orange)
Input Terminal Signal	Operation voltage / Current: DC24V / Approx. 10mA LS1-1, START 1, RESET , 1K
Output Terminal Signal	Contact capacity: AC: 125V, 0.3A DC: 30V, 1A COUNT OK VALVE(DC24V) COUNT NOK OPTION OUTPUT (1 Spindle TORQUE OK)
Key Switch	[RESET] Key (front panel)

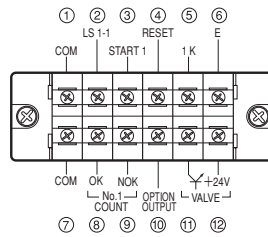


# SUPER "INTELEC" SYSTEM UEC-4500 CONTROLLER

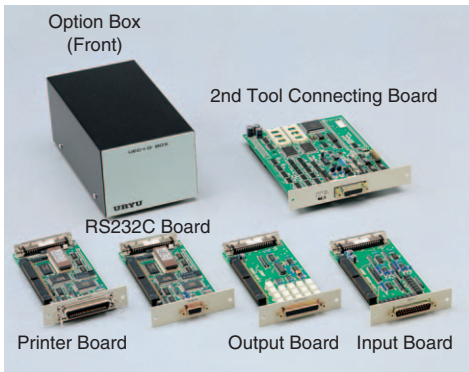
## FRONT PANEL



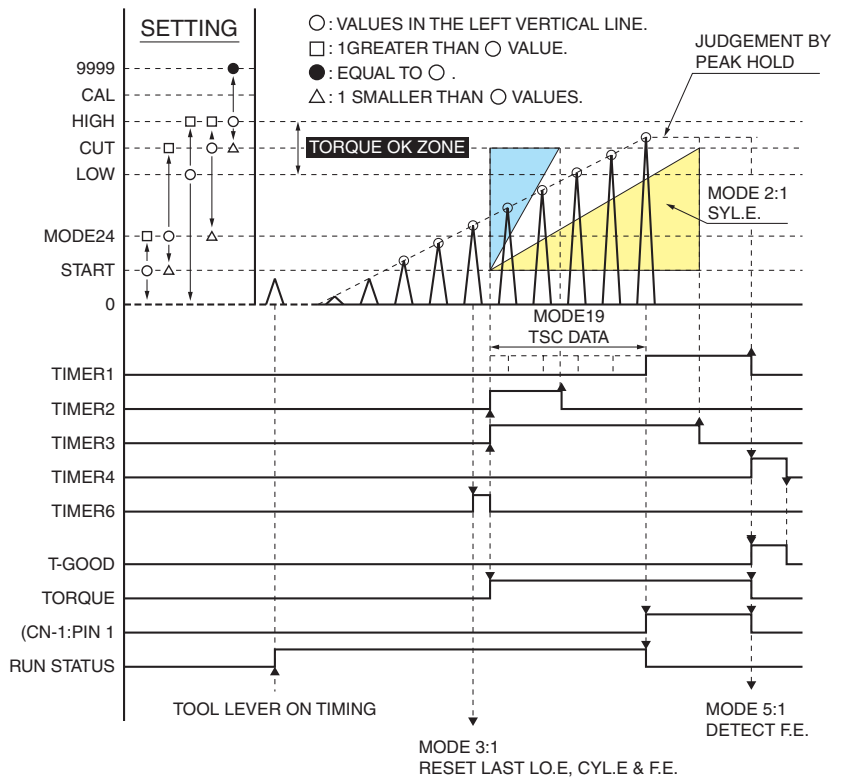
## BACK PANEL



INPUT	OUTPUT
① COM:INPUT COMMON	⑦ COM:OUTPUT COMMON
② LS-1-1	⑧ 1 SPINDLE COUNT OK
③ START 1	⑨ 1 SPINDLE COUNT NOK3
④ RESET	⑩ OPTION OUT
⑤ 1K	⑪ VALVE 1
⑥ E: EARTH	⑫ VALVE COM (+)

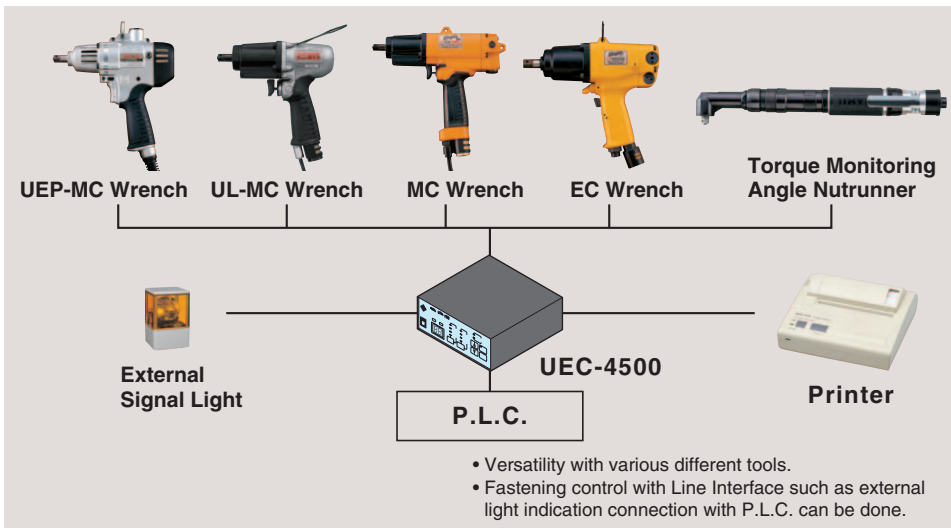


## TIMING CHART



Model Name	Components	Q'ty
UEC-4500	Main Controller with AC Power Cable	1
UEC-4500-1STD	Main Controller with AC Power Cable	1
	Key Box (#910-208-0)	1
	Sensor Cable Assy 3F5 (#909-921-0)	1
UEC-4500-2STD	Main Controller with AC Power Cable	1
	Key Box (#910-208-0)	1
	Key Box Cable (#910-206-0)	1
	Sensor Cable Assy 3F5 (#909-921-0)	2
	2nd Tool Connecting Board Cable (#910-215-0)	1
	2nd Tool Connecting Board (#910-201-0)	1

## SYSTEM LAYOUT (Versatility for all types of Transducerized Tool Control)



## New Controller "UEC-4800" (UNDER DEVELOPMENT)

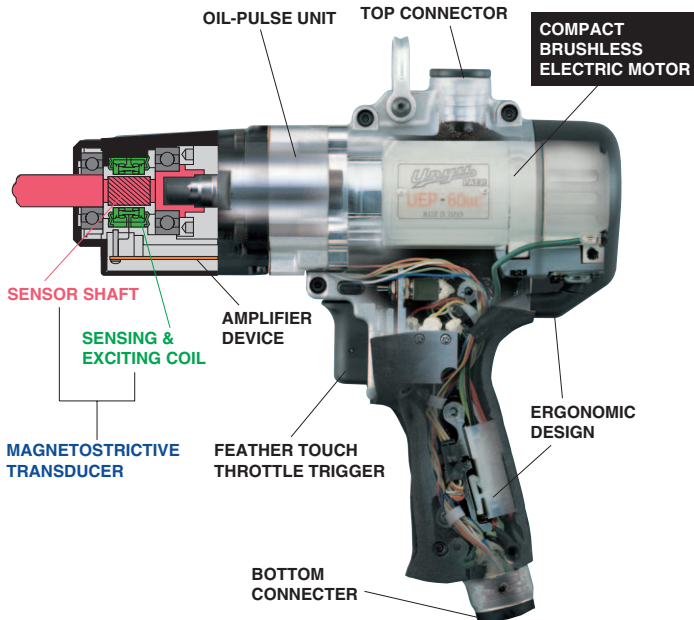


Ethernet (TCP/IP) is available for communication.

# SUPER "INTELEC" SYSTEM ELECTRIC TOOLS

The newly developed "UEP WRENCH" is a combination tool of the unique hydraulic pulse unit and the brushless electric motor utilized as a driving source taking environmental problem into consideration and displays "GOOD" or "NG" on LED by connecting with UEPD Driver. UEP-MC WRENCH is additionally incorporated the Magnetostrictive transducer designed to precisely measure dynamic torque of Oil-Pulse Tool and displays "Torque Value" and "Fastening Count-Down" by connecting with UEC-4500 Controller through UEPD Driver. With the more amazing features than typical Oil-Pulse Tool, UEP Electric Oil-Pulse Wrenches are ideal for continuous heavy production as the Ultimate fastening tools employing ergonomic design (low noise, low vibration, low torque reaction) for minimum operator fatigue.

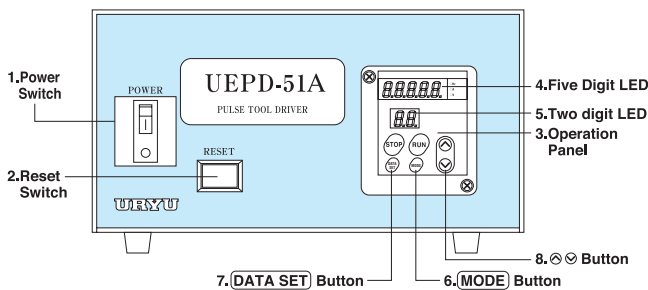
BOLT & NUT SETTERS



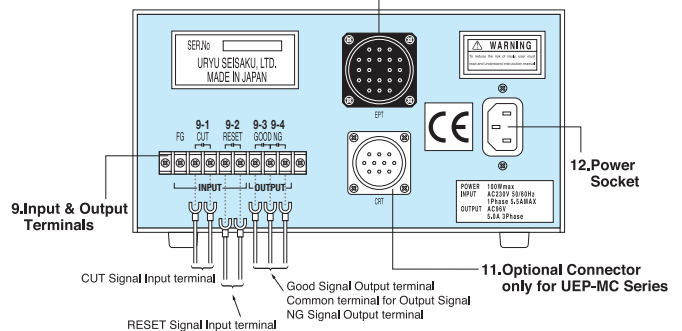
### The main features :

1. Since using the normal common power supply (AC100V - 230V), the line-layout of production site can be easily designed with flexible usage.
2. Single cable connection between the tool and driver is used to improve the working condition for the operator. Power cable can be connected either on the top or bottom (handle grip) of the tool.
3. Using the brushless electric motor, the electric noise from the brush is eliminated and both noise and vibration level has been reduced. The global cost reduction can be expected thanks to "maintenance free" Electric Motor.
4. Based on our long experience of Oil Pulse technology, newly developed "one-piece construction" Oil Pulse Unit is employed for consistent torque operation.
5. Compact handle grip is used for the maximum comfort for the operator with a feather touch throttle trigger.
6. The function of driver is minimized, but it still has capability to connect with some peripheral devices such as bolt fastening device (UTM-1100) and torque controller (UEC-4500).
7. Automatic power cut down device is employed against the abnormalities such as over loaded operation, electric leakage, cable damage and etc.

### DRIVER Front Panel



### DRIVER Rear Panel



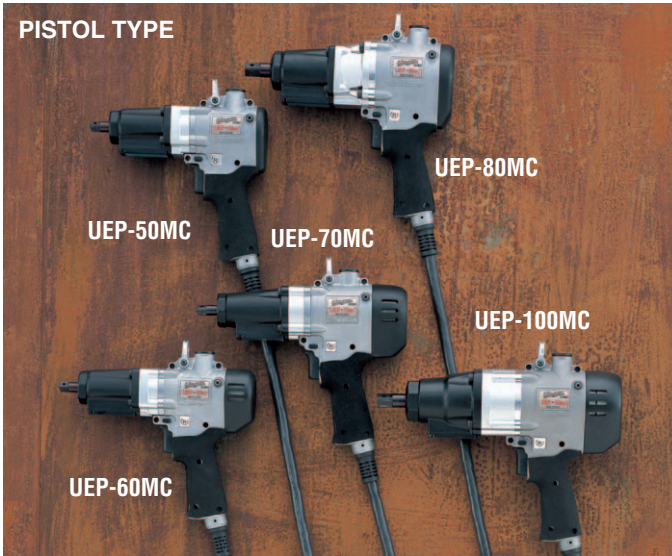
### SPECIFICATIONS

Model	UEP Model	Dimensions (WxDxH)	Weight	Frequency	Voltage	Rated Power
UEPD-51A/E	UEP-50 Series	222(8 45/64)×265(10 7/16)×143(5 5/8)	3.2Kg (7.1lb)	50Hz/60Hz	115V/230V	3.7A
UEPD-61A/E	UEP-60 Series	222(8 45/64)×265(10 7/16)×143(5 5/8)	3.2Kg (7.1lb)	50Hz/60Hz	115V/230V	8.0A
UEPD-71A/E	UEP-70/80 Series	222(8 45/64)×265(10 7/16)×143(5 5/8)	3.2Kg (7.1lb)	50Hz/60Hz	115V/230V	8.8A
UEPD-101A/E	UEP-100 Series	222(8 45/64)×265(10 7/10)×158(6 7/32)	7.0Kg (15.4lb)	50Hz/60Hz	115V/230V	8.4A

Operation Temperature : 10°C~50°C (No Freeze)

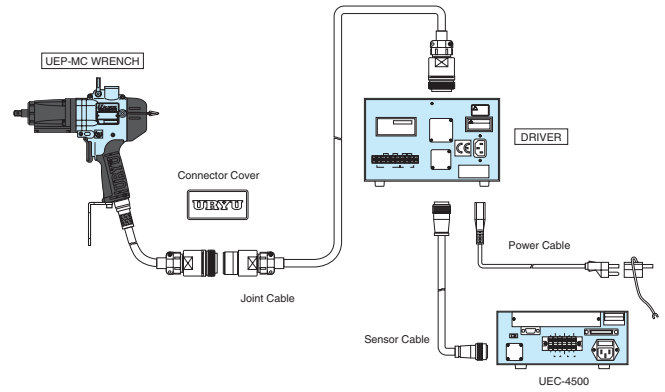
Operation Humidity : Less than 85%RH (No Dew)

# SUPER "INTELEC" SYSTEM ELECTRIC TOOLS



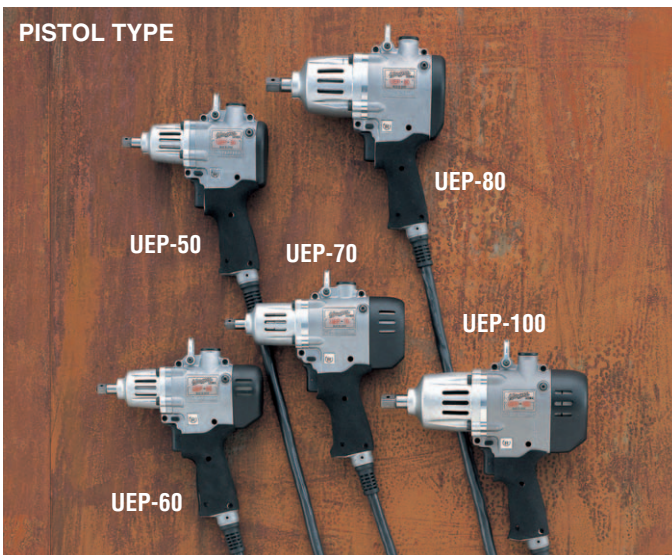
After connecting with UEPD Driver as below ;

1. Select "0" (Time Control) on MODE 04 setting
2. Set fastening time from 0 to 5.0 second
3. Tool shuts off at preset time after bolt-seating
4. Digital display of "GOOD" or "NG" on LED
5. Measure static torque by torque wrench



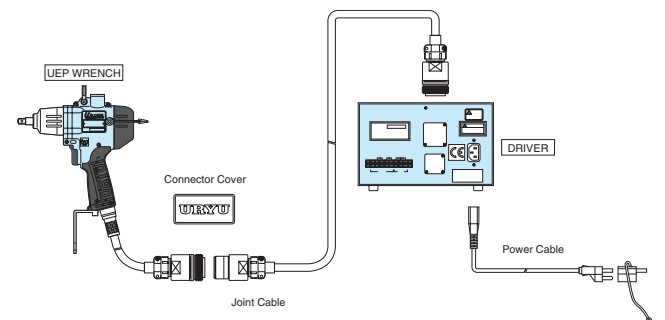
## SPECIFICATIONS (UEP-MC TORQUE CONTROL)

Model	Capacity (Nominal Bolt Size)		Torque range		Free Speed (Approx.)	Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Noise Level	Vibration Level
	mm	in	Nm	ft-lbs	r.p.m.	mm	in	kg	lb	mm	in	mm	in	dB(A)	m/sec <sup>2</sup>
UEP-50MC	5	No. 10	5-10	3.7-7.4	2000	200.0	7 7/8	1.83	4.03	25	63/64	9.5	3/8	70.0	0.70
UEP-50DMC	5	No. 10	5-10	3.7-7.4	2000	199.5	7 55/64	1.83	4.03	25	63/64	6.35	1/4	70.0	0.70
UEP-60MC	6	1/4	10-25	7.4-18.5	2000	222.5	8 49/64	2.13	4.69	25	63/64	9.5	3/8	70.0	1.00
UEP-60DMC	6	1/4	10-25	7.4-18.5	2000	222.0	8 47/64	2.13	4.69	25	63/64	6.35	1/4	70.0	1.00
UEP-70MC	8	5/16	25-40	18.5-29.6	2000	238.0	8 3/8	2.38	5.24	31	1 7/32	9.5	3/8	72.0	1.41
UEP-80MC	8-10	5/16-3/8	30-60	22.2-44.4	2000	237.5	8 23/64	3.01	6.62	36.5	1 7/16	12.7	1/2	75.0	1.58
UEP-100MC	10-12	3/8-1/2	60-120	44.4-88.8	2000	276.0	9 55/64	4.16	9.15	36.5	1 7/16	12.7	1/2	75.0	2.24



After connecting with below devices;

1. Select "2" (External Control) on MODE 04 setting
2. Set each MODE following UEC-4500 Inst/Manual
3. Tool stops immediately at preset "Cut Torque"
4. Display of dynamic torque or fastening count-down
5. Data collection of tightening torque through PC



## SPECIFICATIONS (UEP TIME CONTROL)

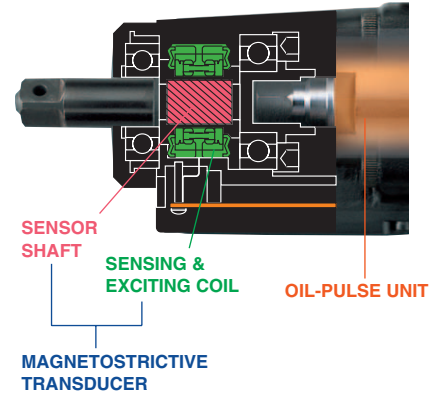
Model	Capacity (Nominal Bolt Size)		Torque range		Free Speed (Approx.)	Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Noise Level	Vibration Level
	mm	in	Nm	ft-lbs	r.p.m.	mm	in	kg	lb	mm	in	mm	in	dB(A)	m/sec <sup>2</sup>
UEP-50	5	No. 10	5-10	3.7-7.4	2000	166.0	6 35/64	1.43	3.15	25	63/64	9.5	3/8	70.0	0.70
UEP-50D	5	No. 10	5-10	3.7-7.4	2000	171.0	6 49/64	1.43	3.15	25	63/64	6.35	1/4	70.0	0.70
UEP-60	6	1/4	10-25	7.4-18.5	2000	188.0	7 13/32	1.76	3.87	25	63/64	9.5	3/8	70.0	1.00
UEP-60D	6	1/4	10-25	7.4-18.5	2000	193.0	7 39/64	1.76	3.87	25	63/64	6.35	1/4	70.0	1.00
UEP-70	8	5/16	25-40	18.5-29.6	2000	203.5	8 1/64	2.2	4.84	31	1 7/32	9.5	3/8	72.0	1.41
UEP-80	8-10	5/16-3/8	30-60	22.2-44.4	2000	202.0	7 61/64	2.73	6.01	36.5	1 7/16	12.7	1/2	75.0	1.58
UEP-100	10-12	3/8-1/2	60-120	44.4-88.8	2000	233.5	8 13/64	3.66	8.05	36.5	1 7/16	12.7	1/2	75.0	2.24

## BOLT & NUT SETTERS

# SUPER "INTELEC" SYSTEM UL-MC TOOLS

We have added the new range of Super Intelec System in combination with **UL-series** Air Motor and non-contact magnetostrictive type transducer. The main object to develop UL-MC series is to reduce the weight and length of the tool for operator's comfort by removing the built-in shut-off valve mechanism. As a result, we could succeed in reducing both the weight and the length by approx. 20% in comparison with conventional ALPHA-MC series tools.

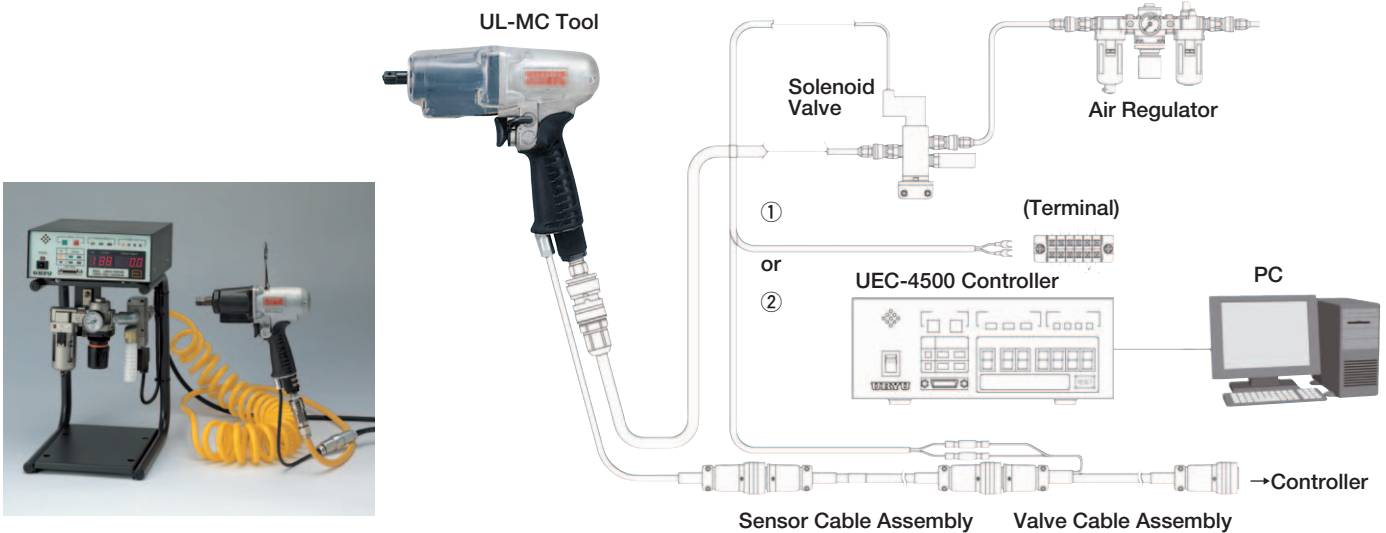
### PISTOL TYPE



### MAGNETOSTRICTIVE TRANSDUCER

Uryu's brushless Magnetostrictive Torque Transducer consists of Anvil and a pair of sensor coils. Without contacting to the Anvil, the sensor coil detects load given to the Anvil. (non-contact)  
The grooves in the Anvil are provided at  $\pm 45$  degree angle in two regions. When torque is applied to the Anvil, tensile stress appears on the region and magnet permeability increase.  
These permeability changes are detected, respectively transformed to the voltage change (proportional to applied torque) and converted to torque signals to control the tool.

## SYSTEM LAYOUT



## SPECIFICATIONS

Recommended Air Pressure: 0.5MPa(72psi)-0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption	Noise Level	Vibration Level	
			0.5MPa		0.6MPa															
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min	dB(A)	m/sec <sup>2</sup>
UL40MC	6	No.10	6-11	4.3-7.9	7.5-15	5.6-11.1	6200	6500	170.0	6 11/16	1.10	2.42	26.0	1 1/32	9.5	3/8	0.20	7.0	78	1.2
UL40DMC	6	No.10	6-11	4.3-7.9	7.5-15	5.6-11.1	6200	6500	169.5	6 43/64	1.10	2.42	26.0	1 1/32	6.35	1/4	0.20	7.0	78	1.2
UL50MC	6	No.10	12-25	8.9-18.5	20-35	14.8-25.9	6300	6700	175.0	6 57/64	1.10	2.42	26.0	1 1/32	9.5	3/8	0.25	8.8	78	1.5
UL60MC	8	5/16	20-40	14.8-29.6	30-50	22.2-37.0	6100	6600	175.0	6 57/64	1.14	2.51	26.0	1 1/32	9.5	3/8	0.40	14.0	80	1.5
UL70MC	8-10	5/16-3/8	25-50	18.5-37.0	36-65	26.6-48.1	5300	5700	187.0	7 23/64	1.24	2.73	26.0	1 1/32	9.5	3/8	0.45	15.8	80	1.5
UL90MC	10-12	3/8-1/2	40-80	29.6-59.2	55-100	40.7-74.0	5200	5500	203.0	7 63/64	1.70	3.74	28.0	1 3/16	12.7	1/2	0.58	20.3	82	2.0
UL100MC	12	1/2	70-110	51.8-81.4	85-130	62.9-96.2	4900	5200	215.0	8 15/32	2.05	4.51	30.0	1 27/64	12.7	1/2	0.55	19.3	82	2.0

Air Inlet size : N.P.T.1/4" Air Hose size : 6.35mm (1/4")

## BOLT & NUT SETTERS

# SUPER "INTELEC" SYSTEM EC & MC TOOLS

The **EC-Series** of URYU popular Oil-Pulse Tools are equipped with strain-gauged torque transducer on the geared Oil-Pulse Unit and are matched with the Electronic Control Unit, model UEC-4500. This system performs easily with strict control and monitoring of fastening torque and eliminates time consuming manual torque check for super quality control and higher productivity. Cautionary lamp and buzzer warn when fasteners are missed or insufficiently fastened.

### SPECIFICATIONS

Recommended Air Pressure: 0.5MPa(72psi)-0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
			0.5MPa		0.6MPa															
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min	dB(A)	m/sec <sup>2</sup>
U-50EC	6	No.10	4-10	2.9-7.4	5-11	3.7-8.1	2000	2100	195	7 64/64	1.50	3.31	24.0	1 1/32	9.5	3/8	0.25	8.8	72	3.0
U-50DEC	6	No.10	4-10	2.9-7.4	5-11	3.7-8.1	2000	2100	201	7 15/16	1.50	3.31	24.0	1 1/32	6.35	1/4	0.25	8.8	72	3.0
U-60EC	6	No.10	10-25	7.4-18.4	15-30	11.1-22.1	1800	1900	193	7 19/32	1.57	3.46	27.0	1 1/16	9.5	3/8	0.35	12.3	75	6.0
U-60DEC	6	No.10	10-25	7.4-18.4	15-30	11.1-22.1	1800	1900	198	7 51/64	1.57	3.46	27.0	1 1/16	9.5	3/8	0.35	12.3	75	6.0
UX-80EC	8	5/16-3/8	15-40	18.4-29.5	20-45	14.7-33.2	1700	1800	196	7 3/4	1.80	3.97	30.0	1 3/16	9.5	3/8	0.45	15.8	77	5.0
U-100EC	10	25/64	40-70	29.5-51.6	50-80	36.9-59.0	1500	1600	233	8 11/64	2.80	6.17	33.0	1 19/64	12.7	1/2	0.65	22.9	78	10.0
UX-120EC	12	1/2	-	-	-	-	-	-	255	9 61/64	3.90	8.60	36.0	1 27/64	12.7	1/2	0.80	28.2	80	15.0
UX-130EC	12	1/2	80-150	59.0-110.2	90-170	66.1-125.4	1050	1250	273	10 3/4	4.70	10.37	40.0	1 9/16	12.7	1/2	1.00	35.0	80	20.0
U-50SEC*	6	No.10	4-10	2.9-7.4	5-11	3.7-8.1	2000	2100	280	11 11/64	1.55	3.42	21.0	53/64	9.5	3/8	0.22	7.7	72	43.0
U-50SDEC*	6	No.10	4-10	2.9-7.4	5-11	3.7-8.1	2000	2100	288	11 11/32	1.55	3.42	21.0	53/64	6.35	1/4	0.22	7.7	72	43.0
U-60SEC	6	No.10	10-20	7.4-19.1	15-25	11.1-18.4	1800	1900	305	12	2.00	4.41	27.0	1 1/16	9.5	3/8	0.35	12.3	75	55.0

\*External Solenoid Valve is required. Air Inlet Size : N.P.T.1/4" Air Hose Size : 9.5mm (3/8")

UX-120EC has to be used at about 0.35MPa (50psi) - 0.40MPa (57psi) The Torque Range : 65 - 120Nm The Free Speed : 900 r.p.m.

### PISTOL / STRAIGHT TYPE



### PISTOL / STRAIGHT TYPE



The **MC-series** combines the benefits of the ALPHA Series with the quality and reliability benefits of a Good or No Good judgement, based on torque, after each tightening. This is accomplished by incorporating brushless Magnetostrictive transducer, solenoid valve, electronic control unit, and indicator lights with ALPHA Series components.

### SPECIFICATIONS

Recommended Air Pressure: 0.5MPa(72psi)-0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Torque Range				Free Speed (Approx.) r.p.m.		Overall Length (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
			0.5MPa		0.6MPa															
	mm	in	Nm	ft-lbs	Nm	ft-lbs	0.5MPa	0.6MPa	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min	dB(A)	m/sec <sup>2</sup>
ALPHA-60MC	6	1/4	9-15	6.5-10.8	10-20	7.2-14.4	6800	7000	215	8 5/54	1.40	3.1	25.5	1	9.5	3/8	0.25	8.8	75	1.0
ALPHA-60DMC	6	1/4	9-15	6.5-10.8	10-20	7.2-14.4	6800	7000	215	11 1/32	1.40	3.1	25.5	1	6.35	1/4	0.25	8.8	75	1.0
ALPHA-60SMC*	6	1/4	9-15	6.5-10.8	10-17	7.2-14.4	6000	6300	280	8 5/54	1.40	2.6	25.5	1	9.5	3/8	0.25	8.8	75	1.0
ALPHA-70MC	8	1/4-5/16	12.5-25	8.6-18.0	15-30	10.8-21.6	6800	7300	215	8 5/54	1.35	3.1	25.5	1	9.5	3/8	0.25	8.8	75	1.0
ALPHA-80MC	8	5/16	16-30	11.5-21.6	20-40	14.4-28.8	6800	7000	231	8 21/32	1.50	3.3	25.5	1	9.5	3/8	0.45	15.8	78	1.5
ALPHA-90MC	8-10	5/16-3/8	20-40	14.4-28.9	30-47	21.6-33.9	6000	6500	231	8 21/32	1.50	3.3	25.5	1 7/64	9.5	3/8	0.45	15.8	78	1.5
ALPHA-101MC	10	3/8	34-58	24.5-42.6	38-70	27.4-51.3	6000	6200	243	9 11/64	2.10	4.6	28.0	1 3/16	12.7	1/2	0.50	17.6	80	1.5
ALPHA-110MC	12	3/8-1/2	45-75	32.5-54.9	55-100	40.5-72.3	4500	5000	250	9 51/64	2.50	5.6	30.0	1 27/64	12.7	1/2	0.65	22.9	80	1.5
ALPHA-130MC	14	9/16	80-130	58.5-95.4	90-150	65.8-109.9	3200	3400	276	10 15/32	3.50	7.7	36.0	1 21/32	12.7	1/2	0.65	22.9	82	2.3
ALPHA-140MC	16	5/8	140-200	103.4-147.6	150-220	110.7-162.0	3300	3500	295	11 5/8	4.63	10.2	40.0	1 37/64	19.0	3/4	0.80	28.3	84.5	4.5
UXR-1820MC	18	45/64	140-220	102.7-162.0	160-250	117.8-183.7	4400	4600	322	12 43/64	5.50	12.3	42.0	1 21/32	19.0	3/4	0.70	24.7	84	3.2
UXR-2000MC	20	25/32	200-350	147.6-258.2	250-400	184.4-295.1	4600	4800	355	13 31/64	8.00	17.6	47.0	1 21/32	19.0	3/4	0.95	33.6	85	3.2
UXR-2400SMC	24	15/16	300-550	221.3-405.8	350-600	258.2-442.7	3100	3300	457	16 3/8	12.5	27.6	55.0	1 11/64	25.4	1	1.00	35.3	85	3.2

\*External Solenoid Valve is required. Inside Trigger is available for UXR-2400SMC

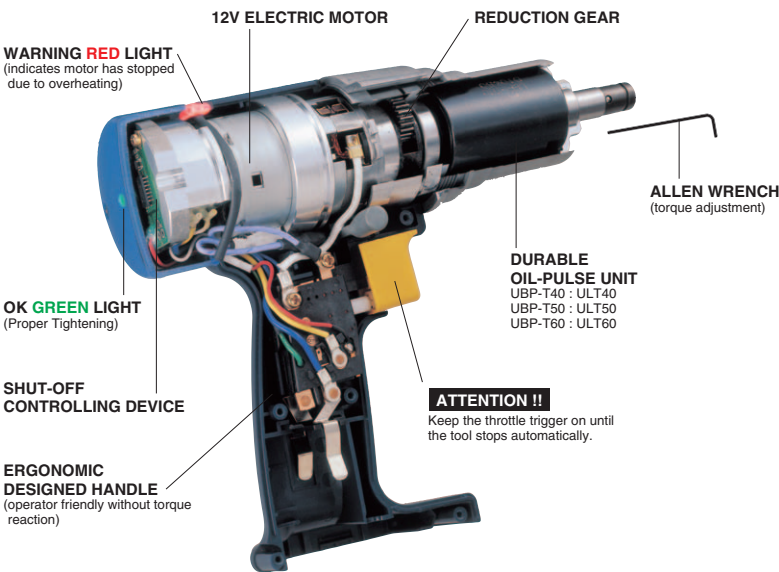
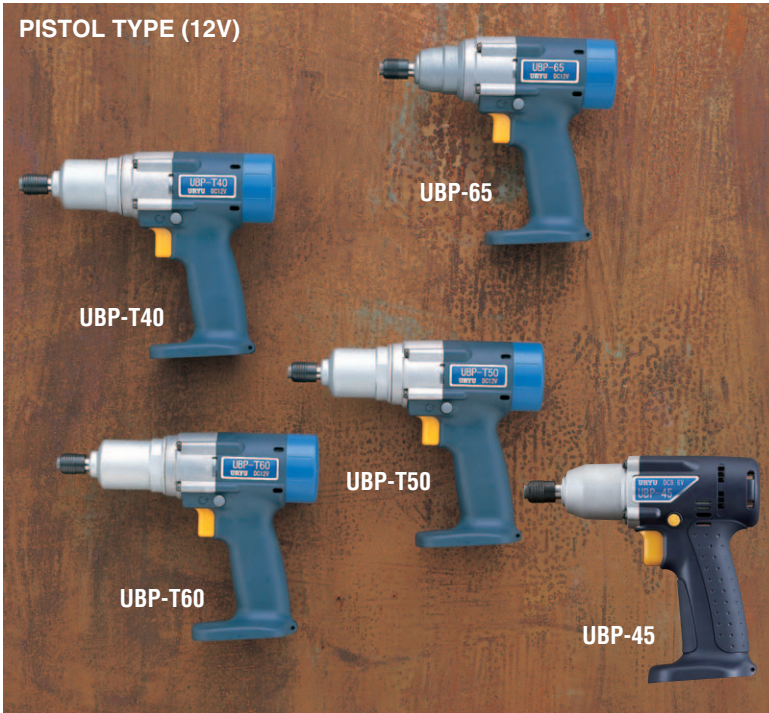
Air Inlet size : N.P.T.1/4" for ALPHA-50MC~ALPHA-140MC N.P.T.3/8" for UXR-1820MC & UXR-2000MC N.P.T.1/2" for UXR-2400MC

Air Hose size : 6.35mm (1/4") for ALPHA-50MC & ALPHA-50DMC 9.5mm (3/8") for ALPHA-60MC~ALPHA-140MC 12.7mm (1/2") for UXR-1820MC~UXR-2400MC

# BATTERY OIL-PULSE TOOLS

**UBP-T series** 12V Battery Powered Oil-Pulse Tool offer the most convenient cordless operation without dragging tool hoses. The characteristics of the shut-off torque mechanism eliminates the operator influence and increases the torque accuracy for continuous heavy production.

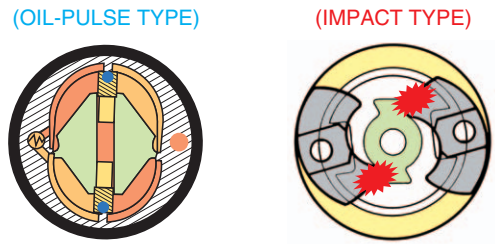
**PISTOL TYPE (12V)**



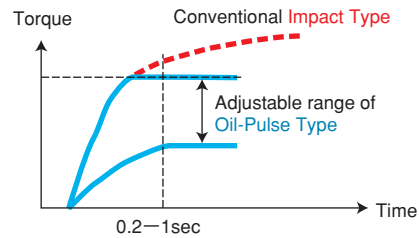
**UBP SERIES**

Offer a healthy work environment featuring operator comfort while reducing fatigue. The Hydraulic Pulse Action of Battery Oil-Pulse tools minimizes noise & vibration generated by the structural metal-to-metal contact of Battery Impact Types, eliminating most wearing parts thus producing cost savings in addition to easy torque adjustment.

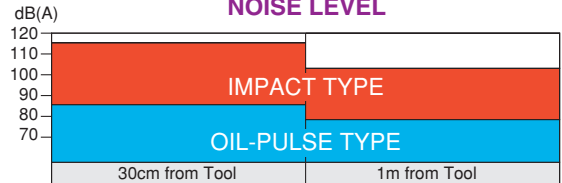
**DIFFERENCE OF FASTENING MECHANISM**



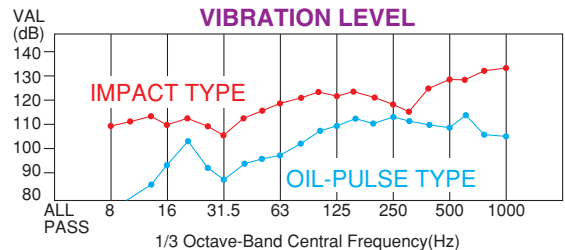
**TORQUE CHART**



**NOISE LEVEL**



**VIBRATION LEVEL**



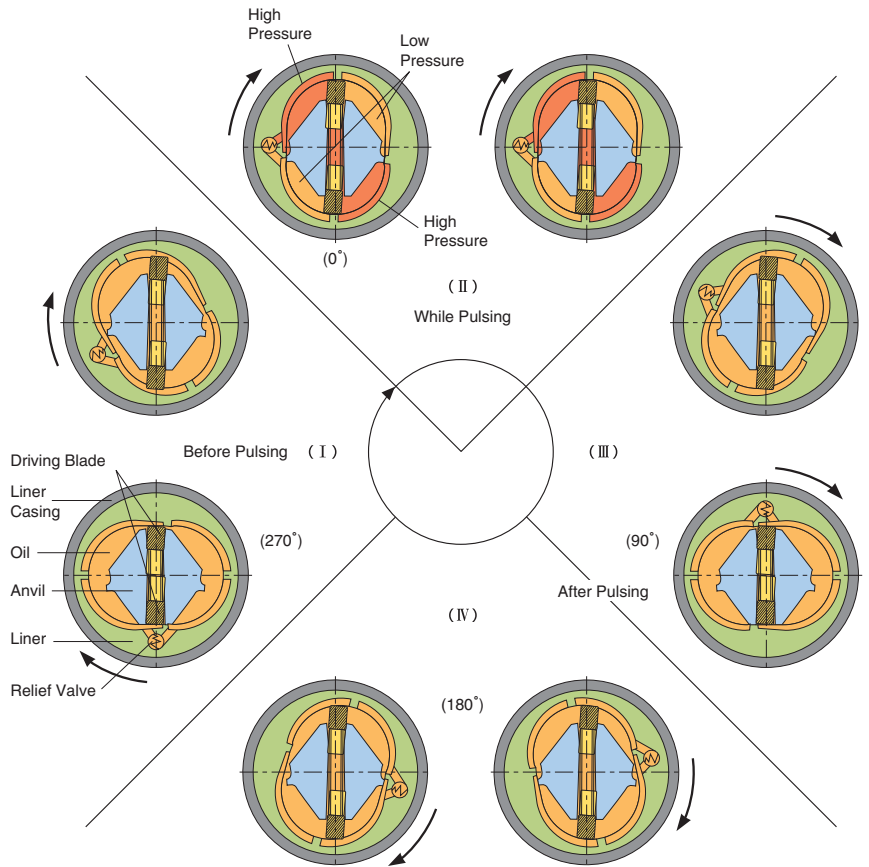
**SPECIFICATIONS**

Model	Capacity (Nominal Bolt Size)		Torque range		Free Speed (Approx.) r.p.m.	Overall Length (about)		Weight less Battery (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Number of Fastening per charge (about)	Noise Level dB(A)	Vibration Level m/sec <sup>2</sup>
	mm	in	Nm	ft-lbs		mm	in	kg	lb	mm	in	mm	in			
UBP-T40	6	1/4	6-12	4.4-8.9	2,200	211	8 5/16	1.2	2.64	28.0	1 7/64	6.35	1/4	420	85	8.0
UBP-T50	6-8	1/4-5/16	8-22	5.9-16.3	2,200	211	8 5/16	1.2	2.64	28.0	1 7/64	6.35	1/4	490	85	8.0
UBP-T50(P)	6-8	1/4-5/16	8-22	5.9-16.3	2,200	211	8 5/16	1.2	2.64	28.0	1 7/64	9.5	3/8	490	85	8.0
UBP-T60	8	5/16	14-26	10.4-19.2	2,200	216	8 1/2	1.3	2.85	28.0	1 7/64	6.35	1/4	470	85	8.0
UBP-T60(P)	8	5/16	14-26	10.4-19.2	2,200	212	8 11/32	1.3	2.85	28.0	1 7/64	9.5	3/8	470	85	8.0
UBP-45※	6	1/4	6-15	4.4-11.1	2,200	174	6 27/32	0.9	1.98	28.0	1 7/64	6.35	1/4	430	79	4.7
UBP-65※	8	5/16	15-30	11.1-22.2	2,200	189	7 7/16	1.2	2.64	28.0	1 7/64	6.35	1/4	530	83	7.0
UBP-65(P)※	8	5/16	20-37	14.8-27.4	2,200	189	7 7/16	1.2	2.64	28.0	1 7/64	9.5	3/8	530	83	7.0

Numbers of tightenings per charge varies depending on torque level, fastener length and application. ※Non Shut-off Type  
Recommended Battery Charger : Panasonic Model EY0230B(AC110V~230V). Recommended Battery Pack : Panasonic Model EY9200B(DC12V)  
(Please procure above parts from the local supplier of Panasonic products in your country.)

# OIL-PULSE TOOLS

It is the greatest feature of **UX, ALPHA & UL series** that one pulse per rotation is actualized in the two-blade impulsing mechanism to be capable of producing higher torque with less vibration. In the mechanism 2 blades and 4 seal points are provided for maximum energy utilization, while 1 blade and 2 seal points in the single blade mechanism. 2 seal points are aligned concentrically and 2 other seal points are made eccentric by some degree from the center line in order not to make the sealing status in 180 degree rotation (in case of 180 degree rotation sealing, 2 pulses/rotation...low power impulsing). This innovation enables two blades to more efficiently absorb impulsing power to deliver about 30 - 40% higher torque than the single blade mechanism.



When selecting the tool for fastening operation, it is necessary to consider bolt size, fastening torque, working conditions and so on. Generally, working conditions can be defined as hard joint (H-joint) and soft joint (S-joint) from the aspect of relation between fastening torque and angle. (Please refer to ISO-5393.) It is also necessary to consider characteristics of work pieces.

Fig. 1 Joint

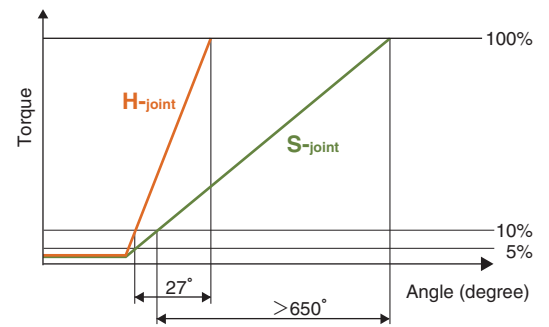
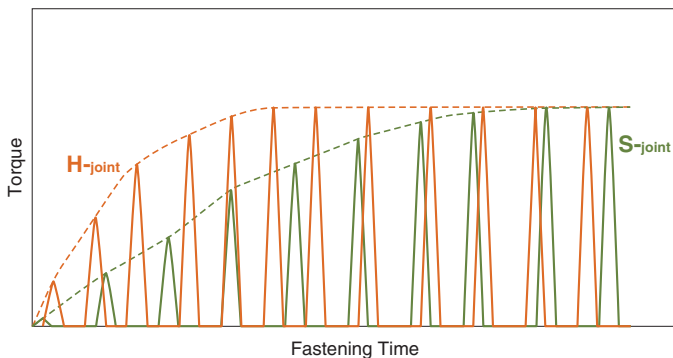
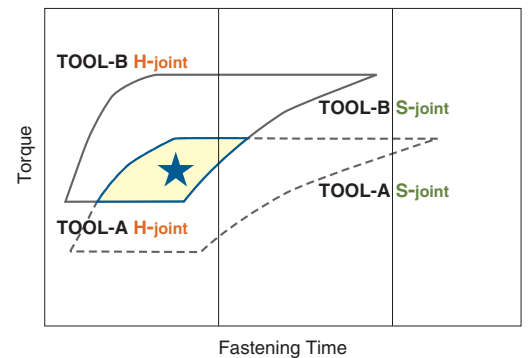


Fig. 2 Fastening with Oil-Pulse Tool(H-S Joint)



As shown above Fig. 2, torque output curve of the hard joint and soft joint is different when the same torque setting against same tool is applied. (Difference of torque raise up speed and time to reach the target torque.)

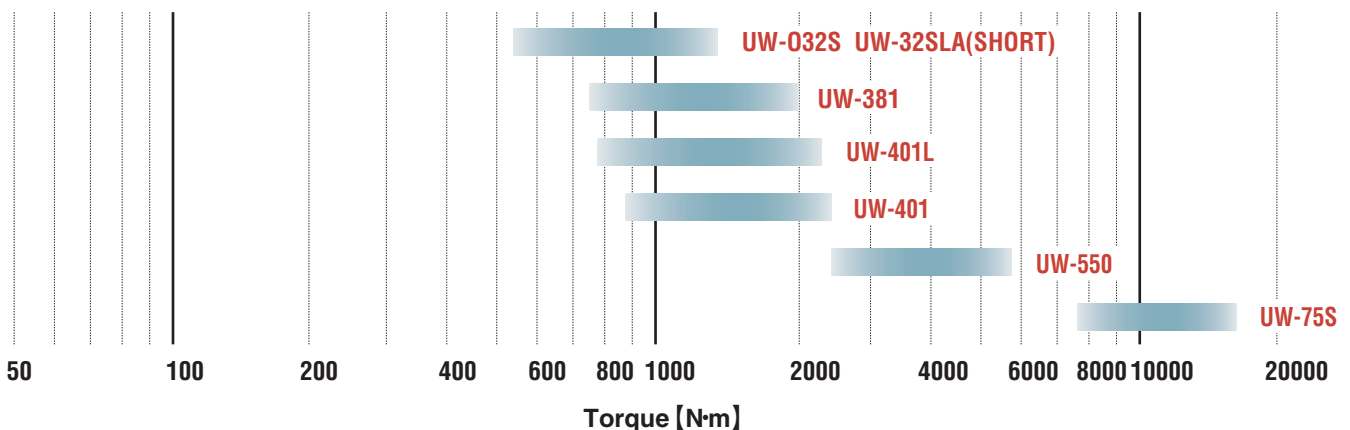
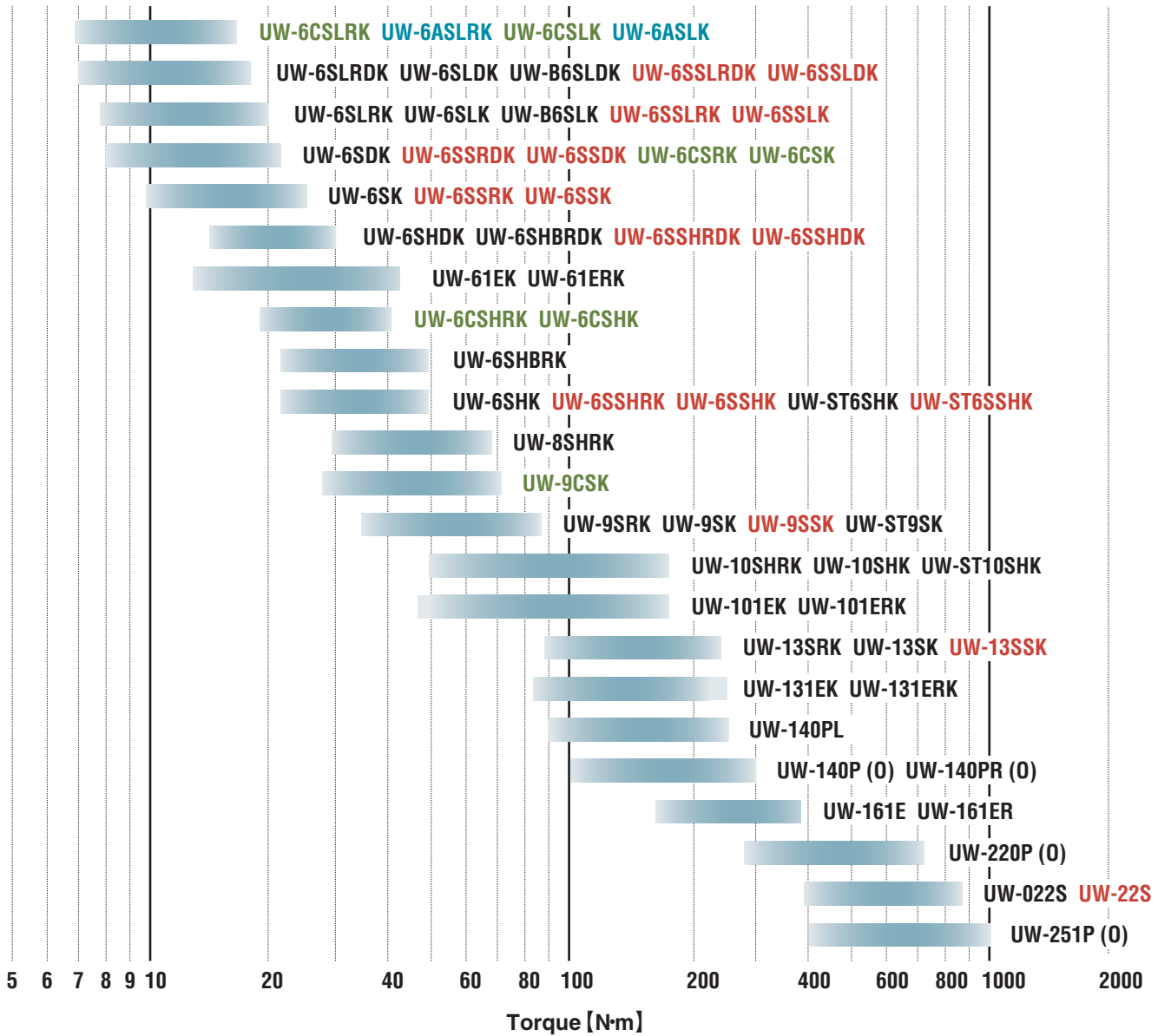
Fig. 3 Tool selection by work feature



When selecting the tool against the target torque of ★ as shown Fig. 3, pay attention to the operating conditions (tool weight, fastening time), required torque accuracy, torque adjusting position of tools and select the most suitable model.

# RECOMMENDED TORQUE CHART OF THE IMPACT WRENCHES

Fastening force of the impact wrenches changes in accordance to the fastening time and the bolt size. This table shows various common fastening torque. Please use this table as just guide line when selecting the model.





# IMPACT WRENCHES

Torque in the chart is the reference value which is calculated from the proof load of the bolt, the metric coarse thread and the torque coefficient 0.2. Please select the tool in accordance to your true joint conditions. In general, if the fastening time is longer than 5 seconds, a larger model should be used.

## Recommended torque of the bolt (calculated value)

Hardness class of the bolt	4.8		5.8		6.8		8.8		10.9		12.9	
	Torque (N·m)	Proof Load (kN)	Torque (N·m)	Proof Load (kN)	Torque (N·m)	Proof Load (kN)	Torque (N·m)	Proof Load (kN)	Torque (N·m)	Proof Load (kN)	Torque (N·m)	Proof Load (kN)
M6	6.9	5.7	8.6	7.2	10.4	8.6	13.7	11.5	18.7	15.6	22.4	18.7
M8	16.7	10.4	20.9	13.0	25.1	15.7	33.4	20.9	45.5	28.4	54.6	34.1
M10	33.1	16.6	41.4	20.7	49.6	24.8	66.2	33.1	90.0	45.0	107.8	54.0
M12	57.6	24.0	72.2	30.1	86.5	36.1	115.6	48.0	156.8	65.5	188.2	78.5
M14	91.9	32.8	114.7	41.1	138.2	49.3	183.3	65.6	249.9	89.2	298.9	106.8
M16	143.1	44.8	179.3	56.0	215.6	67.2	286.2	89.6	389.1	121.5	467.5	146.0
M18	197.0	54.8	247.0	68.5	296.0	82.2	394.9	109.8	536.1	149.0	641.9	178.4
M20	279.3	69.9	349.9	87.4	419.4	104.9	560.6	140.1	760.5	190.1	913.4	288.3
M22	380.2	86.4	474.3	107.8	569.4	129.4	758.5	172.5	1038.8	235.2	1244.6	282.2
M24	484.1	100.9	601.7	125.4	724.2	150.9	964.3	200.9	1313.2	274.4	1577.8	328.3
M27	709.5	131.3	884.0	163.7	1068.2	197.0	1411.2	261.7	1930.6	356.7	2303.0	427.3
M30	958.4	159.7	1195.6	199.9	1440.6	240.1	1920.8	319.5	2606.8	435.1	3136.0	522.3
M33	1303.4	198.0	1636.6	247.9	1960.0	296.9	2616.6	395.9	3557.4	539.0	4263.0	645.8

BOLT & NUT SETTERS

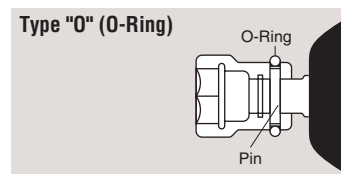
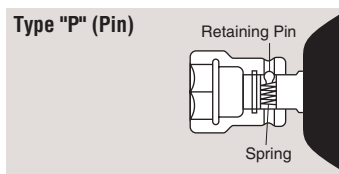
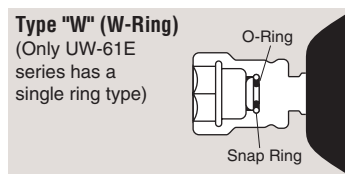
## Model name of Impact Wrenches

Example	UW	-	6SH	L	K
			<ul style="list-style-type: none"> <li>- 6SH (pistol grip for 6mm bolt*)</li> <li>- 6SSH (straight handle)</li> <li>- 6CSH (angle head)</li> <li>- 6AS (45 degree angle head)</li> <li>- ST (for stud bolt)</li> <li>- P (pistol grip only for UW-140•220•381 series)</li> </ul>	<ul style="list-style-type: none"> <li>- L (long anvil)</li> <li>- R (rear exhaust)</li> </ul>	<ul style="list-style-type: none"> <li>- K (light weight)</li> <li>- DK (driver type anvil • light weight)</li> </ul>

\*Exception: UW-140 series =14mm bolt, UW-220 series =22mm, UW-381 series=38mm, UW-401 series=40mm and UW-550 = 55 mm

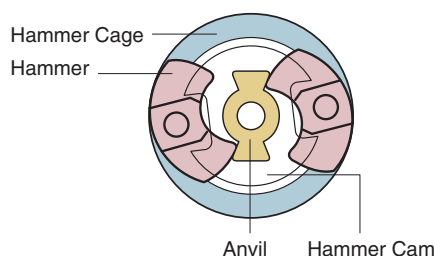
## Socket Retaining Methods

Please specify the type of Anvil when ordering.



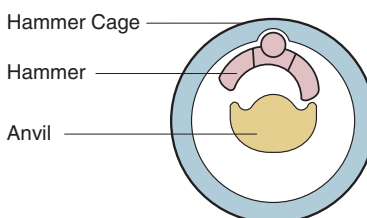
### Double-Hammer mechanism

Powerful & fast assembly for highest productivity with well-balanced hammer mechanism and less torque reaction to operator. Recommended for general high-volume assembly such as motor vehicles, appliances, machinery and so forth.



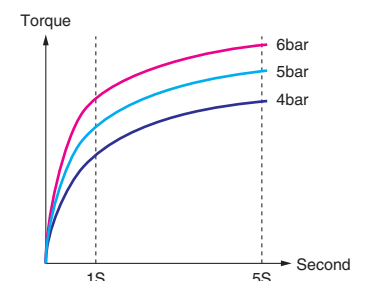
### Swing-Hammer mechanism

Powerful & durable impacting mechanism with one piece Hammer-Hammer pin. Recommended to steel erection, refineries, mines, heavy motor vehicle industries and etc. (UW-140, 220P, 251P, and 381 series)



### TORQUE CHART

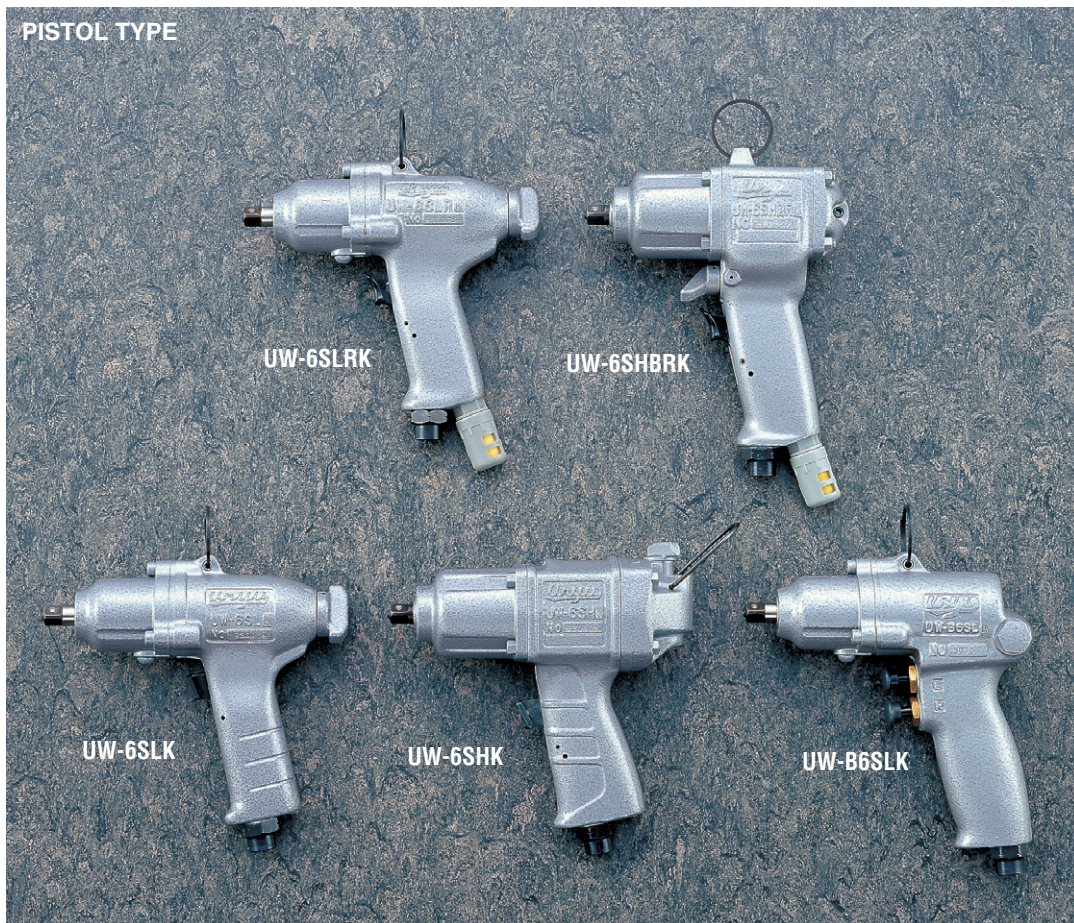
To avoid excess wear of the parts, the tightening time is recommended not to exceed 5 seconds.



# IMPACT WRENCHES

The widest range of URYU Impact Wrenches offer fast, powerful and economical operation in high-volume heavy assembly applications such as Cars, Trucks, Tractors, Appliances, Construction, Machinery and so forth.

PISTOL TYPE

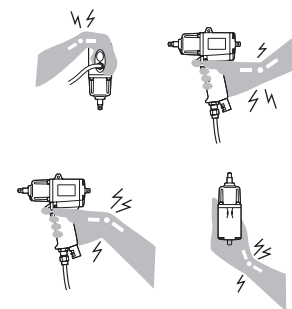


**WARNING**

Repetitive work motions or vibration can cause injury to hands and arms such as Carpal Tunnel Syndrome.

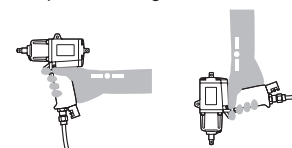
**(BAD POSTURE)**

Avoid repeated bending of wrists and hands.



**(GOOD POSTURE)**

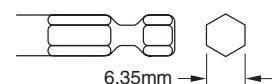
Keep wrists straight.



Front exhaust type (model which does not have "R" in model name.)

**Quick-change driver anvil**

Pull the sleeve and insert or take off the bit. Please add "D" to each model name like UW-6SDK when ordering.



**SPECIFICATIONS**

Recommended Air Pressure:0.6MPa(85psi)

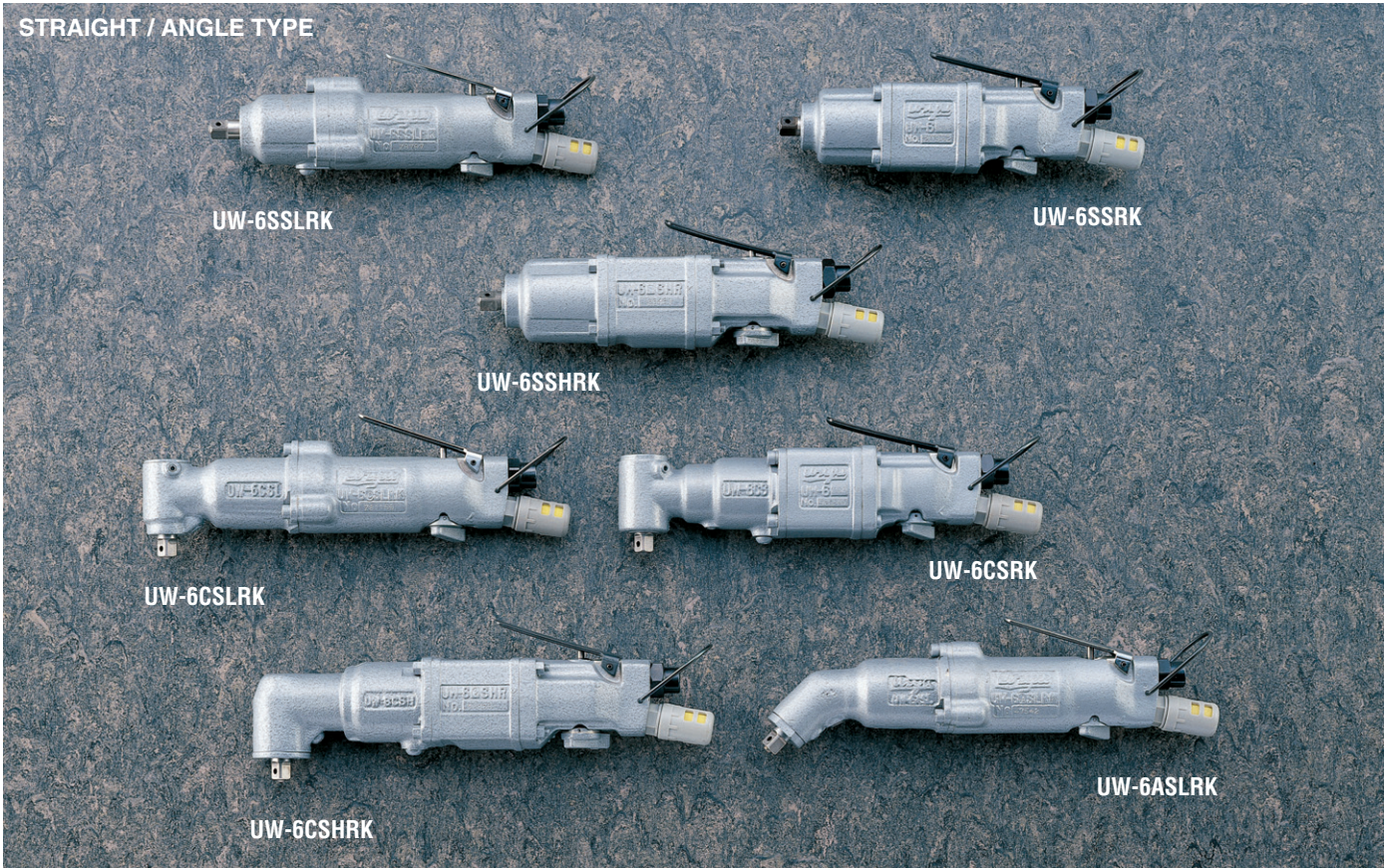
Model	Capacity (Nominal Bolt Size)		Free Speed (about)	Overall Length less Socket or Bit (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
	mm	in		r.p.m.	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min		
UW-6SLRK	6	1/4	8500	169	6 21/32	0.97	2.13	22	27/32	9.5	3/8	0.35	12.4	91	5.6
UW-6SHBRK	8	5/16	7300	153	6 1/32	1.36	2.99	24	15/16	9.5	3/8	0.35	12.4	92	5.6
UW-6SLK	6	1/4	8500	165	6 1/2	0.97	2.13	22	27/32	9.5	3/8	0.30	10.5	92	5.6
UW-B6SLK	6	1/4	8500	160	6 5/16	0.97	2.13	24	15/16	9.5	3/8	0.30	10.5	92	5.6
UW-6SK	6	1/4	7500	160	6 5/16	1.22	2.68	22	27/32	9.5	3/8	0.30	10.5	93	5.6
UW-6SAK	6	1/4	7500	134	5 9/32	1.10	2.47	22	27/32	9.5	3/8	0.30	10.5	93	5.6
UW-6SHK	8	5/16	7500	171	6 47/64	1.41	3.10	24	15/16	9.5	3/8	0.35	12.4	92	5.6
UW-6SLRDK	6	1/4	8500	169	6 21/32	0.97	2.13	22	27/32	6.35	1/4	0.30	10.5	91	5.6
UW-6SHBRDK	8	5/16	7300	153	6 1/32	1.36	2.99	24	15/16	6.35	1/4	0.35	12.4	91	5.6
UW-6SLDK	6	1/4	8500	165	6 1/2	0.97	2.13	22	27/32	6.35	1/4	0.30	10.5	92	5.6
UW-B6SLDK	6	1/4	8500	170	6 45/64	1.00	2.20	24	15/16	6.35	1/4	0.30	10.5	92	5.6
UW-6SDK	8	5/16	7500	160	6 5/16	1.22	2.68	22	27/32	6.35	1/4	0.30	10.5	93	5.6
UW-6SADK	6	1/4	7500	160	6 5/16	1.10	2.47	22	27/32	6.35	1/4	0.30	10.5	93	5.6
UW-6SHDK	8	5/16	7500	190	6 47/64	1.45	3.19	24	15/16	6.35	1/4	0.35	12.4	92	5.6

Air Hose Size (Inside Diameter) : 9.5mm (3/8")

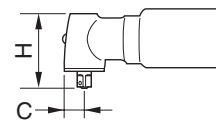
Air Inlet Thread (Pipe Tap) : N.P.T.1/4"

# IMPACT WRENCHES

STRAIGHT / ANGLE TYPE



Head Sizes



MODEL	C		H	
	mm	in	mm	in
UW-6CSLRK	13.5	17/32	59.5	2 11/32
UW-6CSRK	15.0	19/32	60.0	2 23/64
UW-6CSHRK	17.5	11/16	65.0	2 9/16
UW-6CSLK	13.5	17/32	59.5	2 11/32
UW-6CSK	15.0	19/32	60.0	2 23/64
UW-6CSHK	17.5	11/16	65.0	2 9/16

## SPECIFICATIONS

Recommended Air Pressure: 0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Free Speed (about)	Overall Length less Socket or Bit (about)		Weight less Socket or Bit (about)		From Center to Outside (about)		Sq. Drive or Hex. Size		Average Air Consumption		Noise Level	Vibration Level
	mm	in		r.p.m.	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min		
UW-6SSLRK	6	1/4	8500	212	8 11/32	0.87	1.91	21	53/64	9.5	3/8	0.30	10.5	90	10.0
UW-6SSRK	6	1/4	7500	201	7 29/32	0.97	2.13	22	27/32	9.5	3/8	0.30	10.5	90	10.0
UW-6SSHRK	8	5/16	7300	228	8 63/64	1.26	2.77	24	15/16	9.5	3/8	0.35	12.4	91	17.8
UW-6SSLK	6	1/4	8500	190	7 31/64	0.87	1.91	22	27/32	9.5	3/8	0.30	10.5	91	10.0
UW-6SSK	6	1/4	7500	184	7 1/4	0.97	2.13	22	27/32	9.5	3/8	0.30	10.5	91	10.0
UW-6SSHK	8	5/16	7500	201	7 27/32	1.21	2.66	24	15/16	9.5	3/8	0.35	12.4	92	17.8
UW-6SSLRDK	6	1/4	8500	227	8 15/16	0.90	1.98	22	27/32	6.35	1/4	0.30	10.5	90	10.0
UW-6SSRDK	6	1/4	7500	213	8 3/8	1.00	2.20	22	27/32	6.35	1/4	0.30	10.5	90	10.0
UW-6SSHRDK	8	5/16	7300	238	9 3/8	1.30	2.86	24	15/16	6.35	1/4	0.35	12.4	91	17.8
UW-6SSLDK	6	1/4	8500	202	7 61/64	0.90	1.98	22	27/32	6.35	1/4	0.30	10.5	91	10.0
UW-6SSDK	6	1/4	7500	194	7 41/64	1.00	2.20	22	27/32	6.35	1/4	0.30	10.5	91	10.0
UW-6SSHDK	8	5/16	7500	211	8 5/16	1.25	2.75	24	15/16	6.35	1/4	0.35	12.4	92	17.8
UW-6CSLRK	6	1/4	8000	238	8 11/32	1.17	2.57	14	9/16	9.5	3/8	0.30	10.5	93	31.6
UW-6CSRK	6	1/4	7300	234	9 7/32	1.42	3.12	22	27/32	9.5	3/8	0.30	10.5	94	31.6
UW-6CSHRK	8	5/16	7300	256	10 5/64	1.71	3.76	19	47/64	9.5	3/8	0.30	10.5	94	56.2
UW-6ASLRK	6	1/4	6500	260	10 15/64	1.14	2.50	15	19/32	9.5	3/8	0.30	10.5	92	31.6
UW-6CSLK	6	1/4	8000	218	8 19/32	1.17	2.57	14	9/16	9.5	3/8	0.30	10.5	93	31.6
UW-6CSK	6	1/4	7500	271	10 43/64	1.42	3.12	22	27/32	9.5	3/8	0.30	10.5	94	31.6
UW-6CSHK	8	5/16	7500	238	9 3/8	1.71	3.76	19	47/64	9.5	3/8	0.35	12.4	94	56.2
UW-6ASLK	6	1/4	6500	240	9 5/32	1.14	2.50	15	19/32	9.5	3/8	0.30	10.5	92	31.6

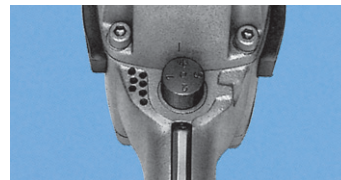
Air Hose Size (Inside Diameter) : 9.5mm (3/8")  
 Air Inlet Thread (Pipe Tap) : N.P.T.1/4"

# IMPACT WRENCHES



### Built-in AIR REGULATOR

Set "4" at the arrow mark for strongest and "1" for weakest.

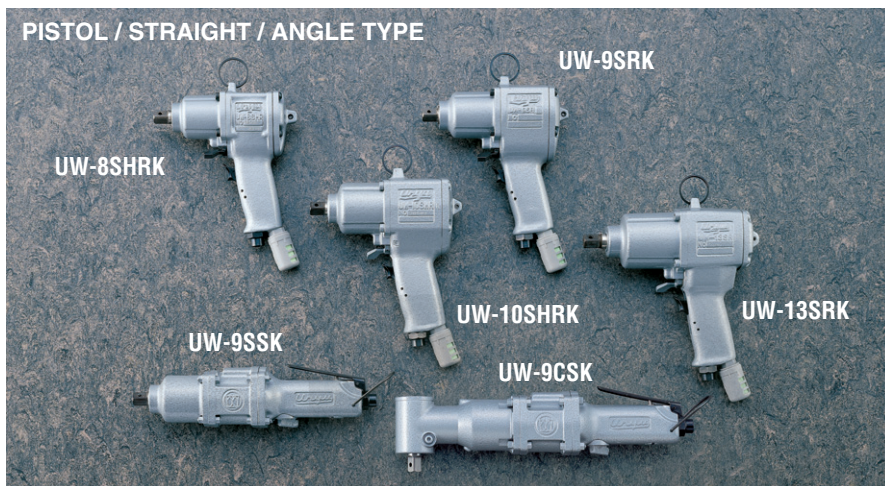


## SPECIFICATIONS

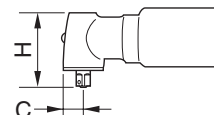
Recommended Air Pressure : 0.6MPa (85psi)

Model	Capacity (Nominal Bolt Size)		Free Speed (about)	Overall Length less Socket (about)		Weight less Socket (about)		From Center to Outside (about)		Sq. Drive Shank		Average Air Consumption		Noise Level	Vibration Level
	mm	in		r.p.m.	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min		
UW-61EK	8	5/16	7500	150	5 15/64	1.62	3.56	30	1 3/16	9.5	3/8	0.35	12.4	92	5.6
UW-101EK	10	3/8	6500	183	7 13/64	2.32	5.87	36	1 27/64	12.7	1/2	0.45	16.0	97	5.6
UW-131EK	13	1/2	6000	212	8 11/32	2.87	6.31	38	1 1/2	12.7	1/2	0.55	19.4	98	7.6
UW-161E	16	5/8	4200	210	8 17/64	4.00	8.80	42	1 25/32	19.0	3/4	0.65	23.0	97	5.6
UW-61ERK	8	5/16	7300	154	6	1.51	3.32	30	1 3/16	9.5	3/8	0.35	12.4	91	5.6
UW-101ERK	10	3/8	5500	185	7 9/32	2.27	4.99	36	1 27/64	12.7	1/2	0.45	16.0	96	5.6
UW-131ERK	13	1/2	5500	210	8 17/64	2.97	6.53	38	1 1/2	12.7	1/2	0.55	19.4	97	7.6
UW-161ER	16	5/8	3800	215	8 15/32	4.10	9.00	42	1 21/32	19.0	3/4	0.65	23.0	96	5.6

Air Hose Size (Inside Diameter) : 12.7mm (1/2") for UW-161E & UW-161ER 9.5mm (3/8") for UW-61E, 101E & 131E series  
Air Inlet Thread (Pipe Tap) : N.P.T. 3/8" for UW-161E & 161ER N.P.T. 1/4" for UW-61E, 101E & 131E series



### Head Sizes



MODEL	C		H	
	mm	in	mm	in
UW-9CSK	22.0	7/8	85.0	3 11/32
UW-13CSK	26.0	1 1/32	102.0	4 7/32

## SPECIFICATIONS

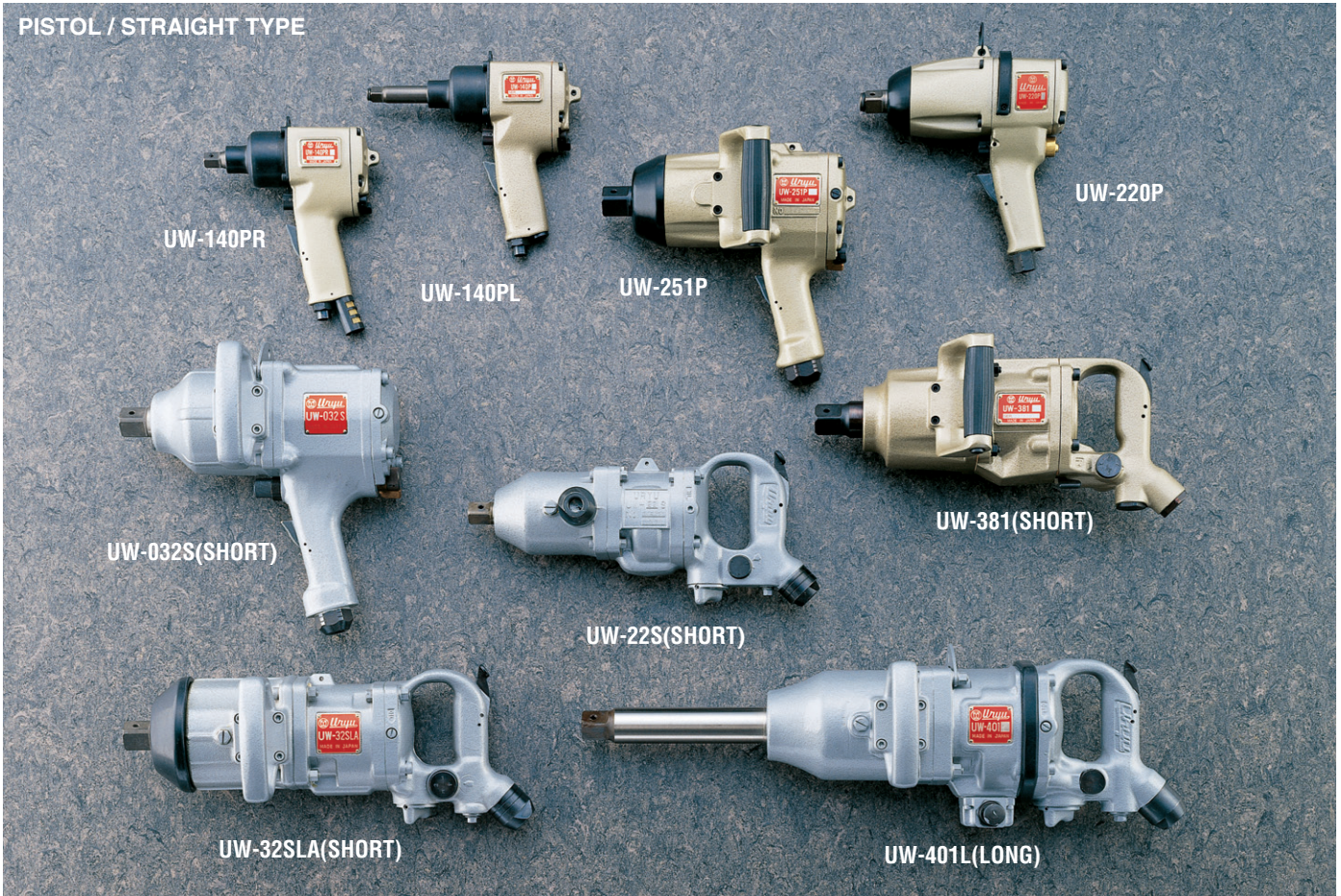
Recommended Air Pressure : 0.6MPa (85psi)

Model	Capacity (Nominal Bolt Size)		Free Speed (about)	Overall Length less Socket (about)		Weight less Socket (about)		From Center to Outside (about)		Sq. Drive Shank		Average Air Consumption		Noise Level	Vibration Level
	mm	in		r.p.m.	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min		
UW-8SHRK	8	5/16	7300	172	6 25/32	1.55	3.41	26.0	1 1/32	12.7	1/2	0.40	14.0	93	7.6
UW-9SRK	10	3/8	7000	173	6 13/16	1.79	3.93	27.5	1 3/32	12.7	1/2	0.45	16.0	93	5.6
UW-10SHRK	10 - 12	3/8 - 1/2	6000	197	7 3/4	2.13	4.68	30.5	1 3/16	12.7	1/2	0.45	16.0	95	5.6
UW-13SRK	13	1/2	6000	205	8 5/64	2.61	5.74	34.0	1 11/32	12.7	1/2	0.45	16.0	95	5.6
UW-8SHK	8	5/16	7500	172	6 25/32	1.55	3.41	26.0	1 1/32	12.7	1/2	0.40	14.0	95	7.6
UW-9SK	10	3/8	7000	185	7 3/16	1.84	4.04	27.5	1 3/32	12.7	1/2	0.50	17.6	95	5.6
UW-10SHK	10 - 12	3/8 - 1/2	6500	197	7 3/4	2.13	4.68	28.5	1 7/64	12.7	1/2	0.45	16.0	97	5.6
UW-13SK	13	1/2	6500	221	8 23/32	2.61	5.74	34.0	1 11/32	12.7	1/2	0.55	19.4	97	5.6
UW-9SSK	10	3/8	7000	290	11 7/16	2.10	4.62	33.0	1 9/32	12.7	1/2	0.45	16.0	95	18.0
UW-13SSK	13	1/2	6300	303	11 15/16	3.17	6.97	34.0	1 11/32	12.7	1/2	0.55	19.4	97	18.0
UW-9CSK	10	3/8	7000	338	13 5/16	2.78	6.11	22.0	7/8	12.7	1/2	0.35	12.4	95	58.5
UW-13CSK	13	1/2	6500	375	14 3/4	5.17	11.37	26.0	1 1/32	12.7	1/2	0.75	26.5	97	60.0

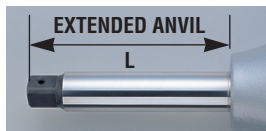
Air Hose Size (Inside Diameter) : 9.5mm (3/8") Air Inlet Thread : N.P.T. 1/4"

# IMPACT WRENCHES

PISTOL / STRAIGHT TYPE



\*Inside Trigger is also available for UW-381, UW-22S, UW-32SLA and UW-401.



Suffix "L" to Model Name.

MODEL	L		MODEL	L	
	mm	in		mm	in
UW-140PL	74.0	2 29/32	UW-381L	200.0	7 7/8
UW-220PL	156.0	6 9/64	UW-381PL	200.0	7 7/8
UW-251PL	151.0	5 15/16	UW-401L	195.5	7 45/64

## SPECIFICATIONS

Recommended Air Pressure:0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Free Speed (about)	Overall Length less Socket (about)		Weight less Socket (about)		From Center to Outside (about)		Sq. Drive Shank		Average Air Consumption		Noise Level	Vibration Level
	mm	in		r.p.m.	mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min		
UW-140P, -140PR	12	1/2	6500	190	7 1/2	2.70	5.90	30.0	1 3/16	12.7	1/2	0.70	25.0	93	7.9
UW-140PL, -140PRL	12	1/2	6500	233	9 3/16	2.80	6.10	30.0	1 3/16	12.7	1/2	0.70	25.0	93	7.9
UW-220P	19	3/4	5500	225	8 7/8	4.40	9.60	42.0	1 21/32	19.0	3/4	0.70	25.0	95	5.6
UW-220PL	19	3/4	5500	338	13 1/4	4.70	10.30	42.0	1 21/32	19.0	3/4	0.70	25.0	95	5.6
UW-251P	25	1	5500	275	10 53/64	8.00	17.60	48.0	1 7/8	25.4	1	0.80	28.0	95	5.6
UW-251PL	25	1	5500	394	15 33/64	8.80	19.40	48.0	1 7/8	25.4	1	0.80	28.0	95	5.6
UW-22S	22	7/8	4000	395	14 1/16	7.90	17.41	46.0	1 13/16	19.0	3/4	0.75	26.5	103	25.0
UW-22S(L)	22	7/8	4000	480	18 29/32	8.30	18.30	46.0	1 13/16	19.0	3/4	0.75	26.5	103	25.0
UW-022S	22	7/8	3800	277	10 29/32	7.65	16.80	46.0	1 13/16	19.0	3/4	0.75	26.5	103	25.0
UW-032S	32	1 1/4	3500	304	11 31/32	11.60	25.50	59.0	2 9/32	25.4	1	1.15	40.6	109	30.0
UW-32SLA	32	1 1/4	3500	390	15 1/32	11.70	25.74	62.5	2 29/64	25.4	1	0.90	32.0	109	30.0
UW-32SLA(L)	32	1 1/4	3500	535	21 1/16	12.50	27.50	62.5	2 29/64	25.4	1	0.90	32.0	109	30.0
UW-381	38	1 1/2	4700	355	13	9.50	20.90	55.0	2 11/64	25.4	1	0.90	31.5	100	11.1
UW-381L	38	1 1/2	4700	504	19 27/32	10.00	22.00	55.0	2 11/64	25.4	1	0.90	31.5	100	11.1
UW-381P	38	1 1/2	4700	276	10 7/8	9.50	20.90	55.0	2 11/64	25.4	1	0.90	31.5	99	7.3
UW-381PL	38	1 1/2	4700	425	16 3/4	10.00	22.00	55.0	2 11/64	25.4	1	0.90	31.5	99	7.3
UW-401	38	1 1/2	3200	421	16 37/64	15.10	33.22	60.0	2 3/8	25.4	1	1.20	42.4	110	35.0
UW-401L	38	1 1/2	3200	591	23 17/64	16.50	36.30	60.0	2 3/8	25.4	1	1.20	42.4	110	35.0

Air Hose Size (Inside Diameter) : 9.5mm (3/8") for UW-140P Series, 12.7mm (1/2") for other models above

Air Inlet Thread : N.P.T.1/4" for UW-140P Series N.P.T.3/8" for UW-220P, UW-251P Series, UW-22S, UW-022S & UW-032S N.P.T.1/2" for UW-381 series & UW-401 Series

UW-140P Series combine compact size and light weight with high torque, 70 - 200Nm to meet a wide range of applications. Recommendable for overall automotive service, body shops etc.

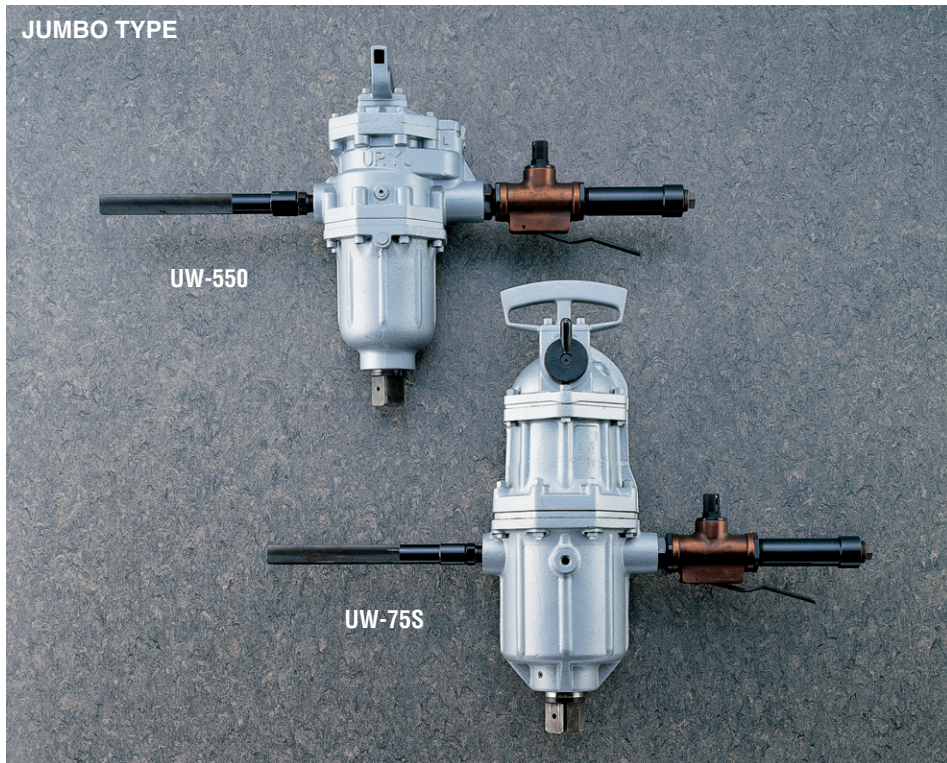
UW-220P Series are recommendable for various popular fastening joints in general industry. (300 - 700Nm)

UW-251P Series are recommendable for heavy industrial production work such as engine work, truck springs, tractor pads, off-road equipment and heavy duty farm equipment. (600 - 1000Nm)

UW-381Series are powerful, light-weight impact wrenches that are ideal for wide applications (1400 - 2000Nm) in steel erection refineries, petrochemical plants, mines, steel mills and heavy motor vehicle plants.

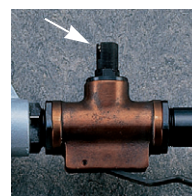
# IMPACT WRENCHES

## JUMBO TYPE



### Double-Hammer Jumbo Type

URYU heavy-duty double-hammer impact wrenches offer the ultimate power for handling big, tough nut running and removal jobs in shipyards, steel mills, chemical plants, powerhouses as well as in plant manufacturing heavy machinery, large diesel engines, turbogenerators etc.



### Built-In Air Regulator

Pull up the spring loaded knob and turn clockwise to lower the power and anticlockwise to increase it, then reset.

## SPECIFICATIONS

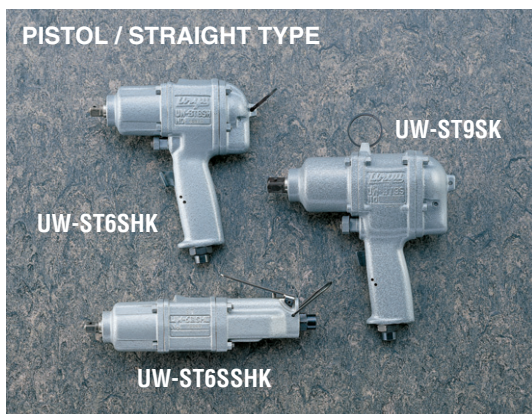
Recommended Air Pressure : 0.6MPa (85psi)

Model	Capacity (Nominal Bolt Size)		Free Speed (about)	Overall Length less Socket (about)		Weight less Socket (about)		From Center to Outside (about)		Sq. Drive Shank		Average Air Consumption		Noise Level dB(A)	Vibration Level m/sec <sup>2</sup>
	mm	in		mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min		
UW-550	56	2 1/4	3500	525	20 43/64	36.0	79.2	75.0	2 61/64	38.1	1 1/2	2.20	79	112	40.0
UW-75S	76	3	1400	668	26 17/64	56.0	123.0	91.0	3 19/32	44.4	1 3/4	3.20	114	112	45.0
UW-75S(1 1/2)	76	3	1400	668	26 17/64	56.0	123.0	91.0	3 19/32	38.1	1 1/2	3.20	114	112	45.0

Air Hose Size (Inside Diameter) : 19.0mm (3/4")  
Air Inlet Thread : N.P.T.1"

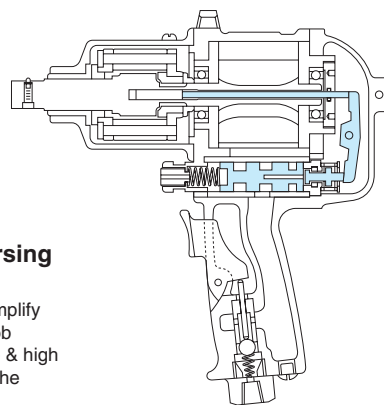
## STUD BOLT WRENCHES

### PISTOL / STRAIGHT TYPE



### Double-Hammer Auto-Reversing for Stud Bolt Driving

These unique Auto-Reversing tools simplify stud-bolt driving (frequent reversing) job considerably for less operator's fatigue & high productivity. Push the tool forward to the work for driving and simply pull it back.



## SPECIFICATIONS

Recommended Air Pressure : 0.6MPa (85psi)

Model	Capacity (Nominal Bolt Size)		Free Speed (about)	Overall Length less Socket (about)		Weight less Socket (about)		From Center to Outside (about)		Sq. Drive Shank		Average Air Consumption		Noise Level dB(A)	Vibration Level m/sec <sup>2</sup>
	mm	in		mm	in	kg	lb	mm	in	mm	in	m <sup>3</sup> /min	ft <sup>3</sup> /min		
UW-ST6SHK	8	5/16	6500	170	6 11/16	1.70	3.74	24.0	31/32	9.5	3/8	0.40	14.0	92	5.6
UW-ST9SK	10	3/8	6300	192	7 19/32	2.35	5.06	28.0	1 3/32	12.7	1/2	0.50	17.6	97	5.6
UW-ST10SHK	10 - 12	3/8 - 1/2	6300	195	7 11/16	2.60	5.72	28.0	1 3/32	12.7	1/2	0.50	17.6	97	5.6
UW-ST6SSHK	8	3/8 - 1/2	6500	230	9 1/16	1.35	2.97	24.0	31/32	9.5	3/8	0.40	14.0	92	17.8

Air Hose Size (Inside Diameter) : 9.5mm (3/8")  
Air Inlet Thread : N.P.T.1/4"

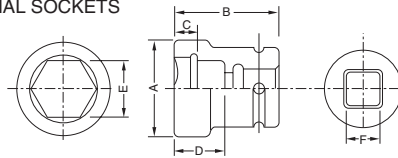
# BOLT & NUT SETTERS ACCESSORIES

## HEXAGONAL SOCKETS

Code Nos.	Dimensions of Sockets (mm)					Sq. Drive F
	A	B	C	D	E	
900-028-0	16	19	5.3	9.4	10	9.5
900-044-0	20	21	5.5	11.4	11	
900-056-0	22	25	6.5	12.0	13	
900-064-0	22	25	6.5	15.4	14	
900-132-0	23	30	6.5	14.0	13	
900-140-0	24	30	6.5	14.0	14	
900-153-0	28	31	7.5	15.0	17	
900-170-0	30	35	8.5	15.0	19	
900-176-0	35	38	9.5	18.0	21	
900-187-0	36	40	9.5	19.0	22	15.9
900-193-0	37	41	10.0	20.0	23	
900-243-0	33	37	8.5	15.0	19	
900-248-0	35	38	9.5	18.0	21	
900-255-0	36	40	10.0	17.0	22	
900-260-0	37	41	10.0	18.0	23	19.0
900-266-0	38	42	11.0	19.0	24	
900-269-0	40.5	44	12.0	24.0	26	
900-342-0	40	48	11.0	21.0	24	
900-347-0	43	49	12.0	22.0	26	
900-360-0	45	50	14.0	23.0	27	25.4
900-377-0	48	52	15.0	27.0	30	
900-380-0	50	54	15.0	29.0	32	
900-390-0	54	57	17.0	32.0	35	
900-400-0	55	58	17.0	33.0	36	
900-464-0	54	57	15.0	29.0	32	25.4
900-475-0	54	60	17.0	32.0	35	
900-483-0	56	60	17.0	32.0	36	
900-499-0	62	66	19.0	38.0	41	
900-512-0	68	70	21.0	42.0	46	
900-519-0	78	76	24.0	48.0	50	

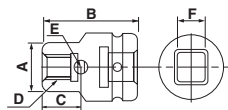
Code Nos.	Dimensions of Sockets (mm)					Sq. Drive F
	A	B	C	D	E	
900-580-0	64	66	19.0	31.0	41	31.8
900-587-0	70	70	21.0	35.0	46	
900-601-0	78	75	24.0	40.0	50	
900-605-0	82	80	27.0	45.0	54	
900-609-0	82	80	27.0	45.0	55	
900-610-0	88	83	29.0	48.0	58	38.1
900-613-0	90	86	30.0	51.0	60	
900-653-0	100	98	33.0	53.0	67	
900-655-0	109	100	36.0	55.0	70	
900-660-0	115	103	38.0	58.0	77	
900-664-0	120	107	40.0	62.0	80	44.4
900-666-0	125	111	43.0	66.0	85	
900-694-0	120	114	38.0	68.0	77	
900-697-0	125	117	41.0	71.0	80	
900-700-0	145	130	48.0	84.0	95	
900-706-0	165	140	60.0	94.0	110	50.8
900-744-0	164	140	60.0	89.0	110	
900-750-0	194	157	70.0	106.0	130	
900-752-0	196	162	64.0	111.0	135	
900-754-0	210	171	79.0	120.0	145	
900-780-0	95	120	30.0	47.0	58	63.5
900-786-0	155	142	41.0	69.0	95	
900-794-0	252	206	83.0	143.0	175	

HEXAGONAL SOCKETS



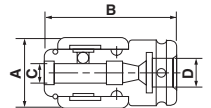
## Sockets for Stud-Bolt Driving

Code Nos.	Nominal Bolt Sizes Dimensions of Sockets (mm)							Models	
	mm	in	A	B	C	D	E		
903-002-0	6	-	16	29	9.0	M6	5/32	9.5	UW-ST6SHK
903-035-0	-	-	16	19	9.0	W1/4-20	5/32	9.5	UW-ST6SSHK
903-003-0	8	-	17	35	16.0	M8	7/32	9.5	UX-ST800
903-103-0	8	-	17	39	16.0	M8	7/32	12.5	UW-ST9SK
903-105-0	10	-	19	41	18.5	M10	9/32	12.5	UW-ST10SHK
903-137-0	-	-	19	41	18.5	W3/8-16	9/32	12.5	UX-ST1000



## Bit Chuck Assembly

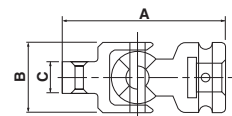
Code Nos.	A	B	C	D
907-000-0	22	41	6.35Hex	9.5Sq
907-050-0	24	46	8.0Sq	12.7Sq



Please do not use UX-1000/UW-10SHK or bigger models as the torque is too strong to use with the above.

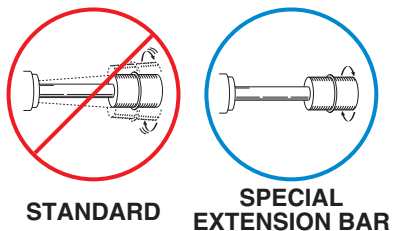
## Joint Assembly

Code Nos.	A	B	C
906-000-0	45	20	9.5
906-020-0	69	30	12.7
906-040-0	84	46	12.7



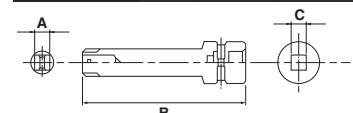
## SPECIAL EXTENSION BARS FOR OIL-PULSE TOOLS

For tool optimum performance these extension bars are especially designed for deeper engagement with tool anvils to minimize torque-down and wobbling.



Code Nos.	B (mm)	A&C Sq. Drive	Socket Retainer Type	Models
904-049-0	75	9.5mm (3/8")	OP-P TYPE	UX-450
904-050-0	100			UX-500
904-051-0	150			UX-612
904-075-0	190			UX-(T)700(L)
904-052-0	254			UX-(T)800
904-054-0	300	12.7mm (1/2")	OP-P TYPE	UL30
904-053-0	320			UL(T)40(S)
904-155-0	76			UL(T)50(S)
904-156-0	125			UL(T)60(S)
904-157-0	204			UL(T)70(S)
904-158-0	254	12.7mm (1/2")	OP-P TYPE	UX-(T)900
904-159-0	355			

Code Nos.	B (mm)	A&C Sq. Drive	Socket Retainer Type	Models
904-168-0	76	12.7mm (1/2")	OP-P TYPE	UX-(T)1000
904-169-0	125			UX-(T)1300
904-172-0	204			UX-(T)1400
904-173-0	355			UL(T)90
904-350-0	76	19.05mm (3/4")	O-RING TYPE	UL(T)100
904-352-0	100			UX-(T)1620
904-351-0	150			UXR-(T)1820
904-353-0	200			UXR-2000(S)
904-455-0	200			25.4mm (1")
904-455-0	200	25.4mm (1")	O-RING TYPE	UXR-2400S
904-455-0	200			UXR-3000S



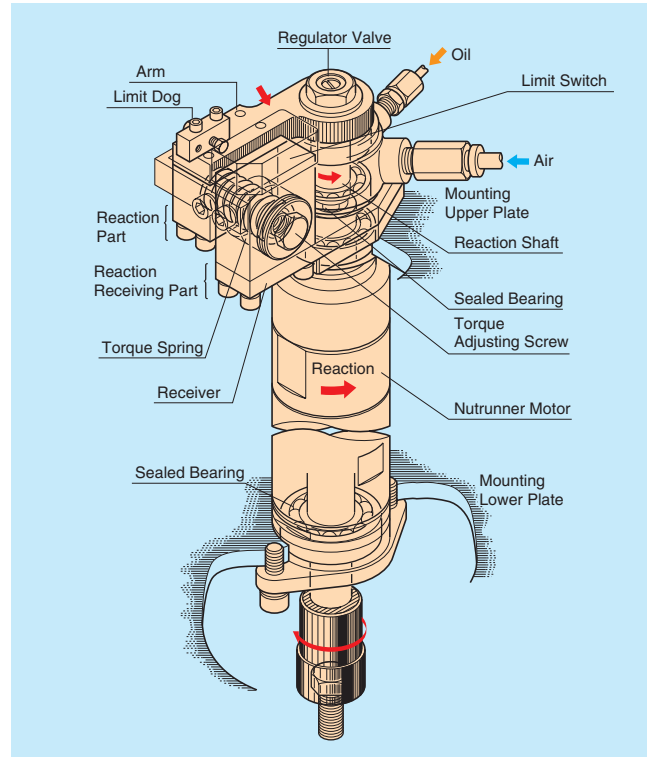
# MULTIPLE NUTRUNNERS (ORDER-MADE PRODUCTS EXEMPTED FROM ISO 9001 CERTIFICATION.)

URYU Air Multiple Nutrunners are now very popular in various modern industries, especially in automobile assembly lines, where two or more bolts or nuts must be tightened simultaneously at uniform torque.



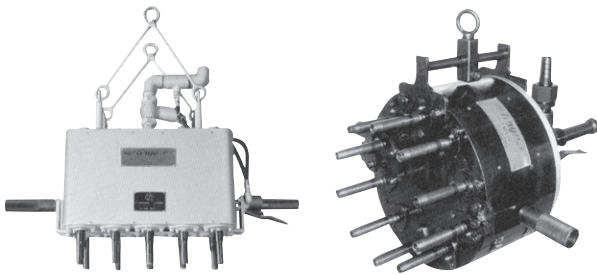
## UMT (URYU Minimum Torque Sensing) SYSTEM

URYU UMT comprises the normal stall torque air motor unit and the torque sensing device. The motor unit is held by bearings between the upper and lower plates and is joined to the Reaction Shaft of the Torque Sensing Device.



## UST (URYU Stall Torque) SYSTEM

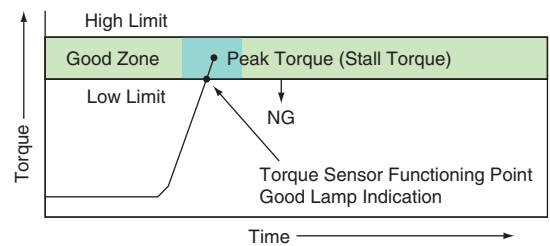
URYU precisely made stall type torque control air motor spindles of either single speed or two-speed are assembled into various multiple units to suit the customers' specific requirements. The satisfactory operation of each air motor incorporated in the conventional multiple units depends on correct adjustment of air pressure by stalling within the tolerance figure for each application.



Vertical Suspension

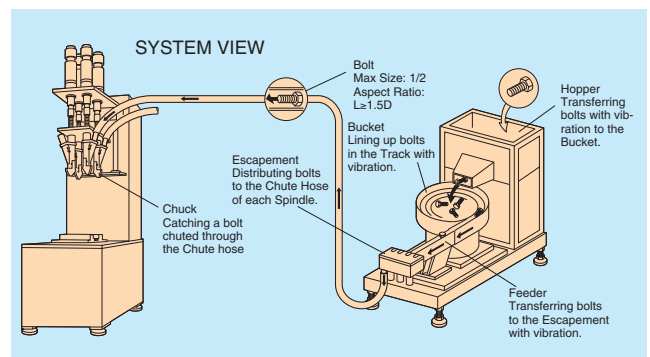
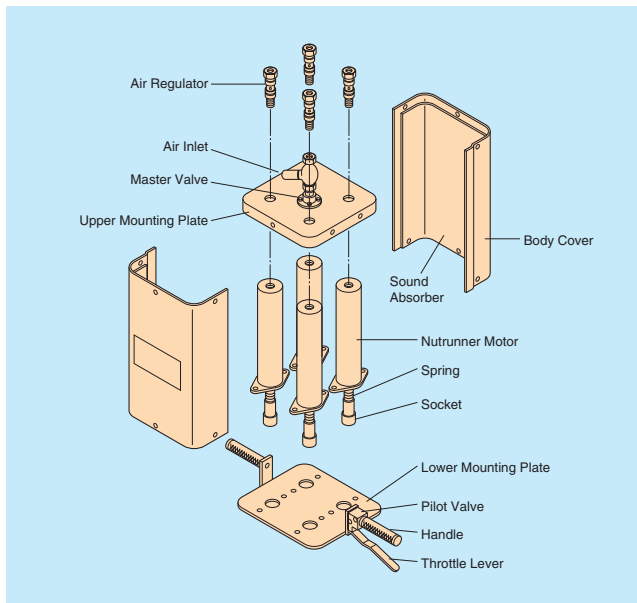
Horizontal Suspension

## TIMING CHART



## AUTOMATIC BOLT FEEDING SYSTEM

In combination with F Series Nutrunner System, URYU Automatic Bolt Feeding System is recommended to be applied for more effective production. As illustrated below, a bolt is automatically chuted to the Chuck of each nutrunner through Hopper - Bucket - Feeder - escapement - Chute Hose. The autofeeding is controlled with photo sensors and pressure switches. This full automation system surprisingly boosts productivity and yet greatly reduces operator's fatigue.



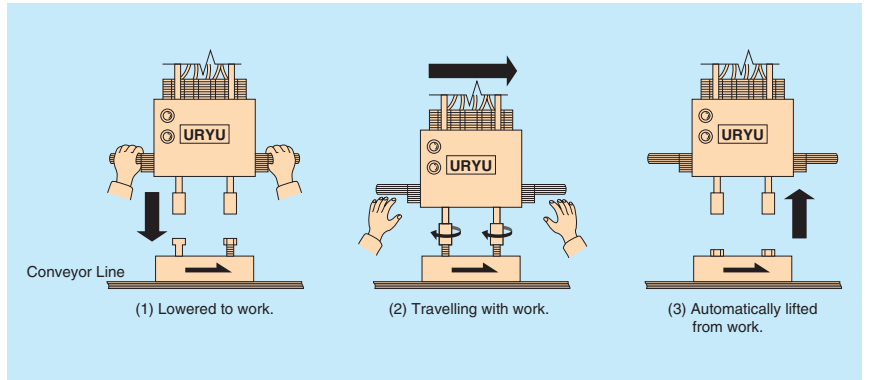


# MULTIPLE NUTRUNNERS (ORDER-MADE PRODUCTS EXEMPTED FROM ISO 9001 CERTIFICATION.)



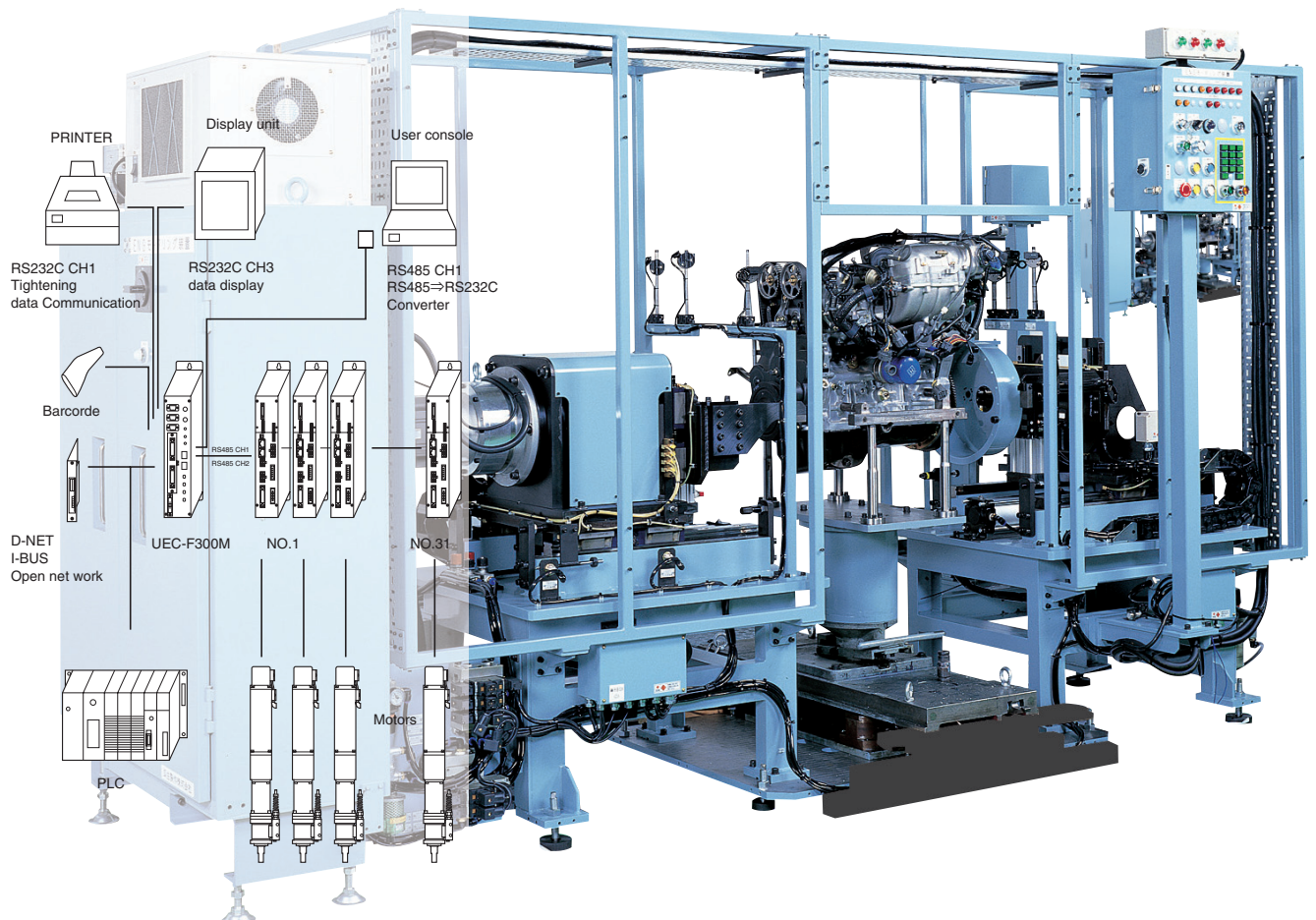
## AUTOMATIC UNLOADING SYSTEM

This is the system, called "NAGARA" in Japan, which enables manually-handled multiple nutrunners to make the auto-cycling fastening operation. This system is mainly made up of Air Cylinder, two Spring Balancers and Control Device. After placed on the work flowing on the conveyor line, the multiple nutrunner travels with the work while fastening is going on. Upon completion of fastening operation, the multiple nutrunner is automatically lifted from the work by means of the automatic unloading system. If required, it is possible to have the multiple nutrunner returned to the original position with an air motor.



## F SERIES ELECTRIC NUTRUNNER SYSTEM

- 1) Torque Control      2) Angle Control      3) Plastic Area Angle Control      4) Spline Fit-in Control      5) Pin Hole Control      6) Pre-load Control
- 7) Idle Running Control      8) Spline Angle Control      9) Yield Control

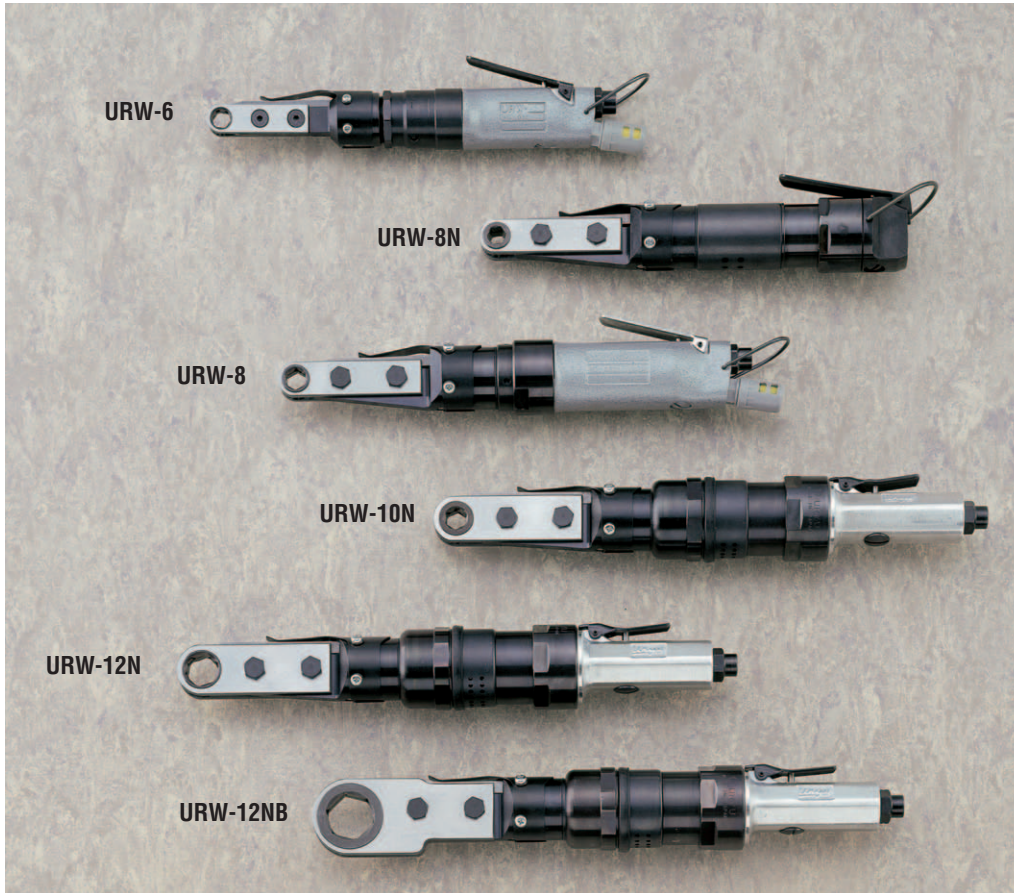


URYU can design and manufacture the complete machine to meet customer's demands besides components individual supply. Please feel free to contact nearest URYU distributors. Individual sheet catalogue is available for further information.

BOLT & NUT SETTERS

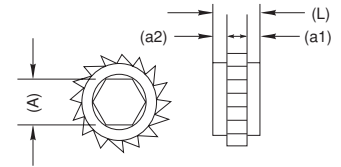
# RATCHET WRENCHES

URYU wide range of **URW series** Ratchet Wrenches offer versatile service for driving and removing bolts or nuts in narrow application. Bent head type, Thinner head type and Extended Head type are also available for many kinds of hard-to-reach access fastening jobs, where even the standard head of Ratchet Wrenches can not get in. Reverse rotation is obtained by simply turning a tool over.



### RATCHET VARIATION

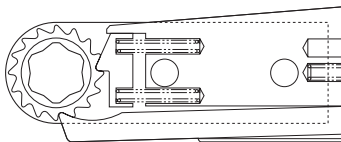
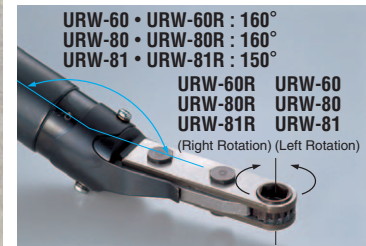
Specify type of ratchet, size of across flat and extension length.



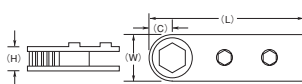
(A): Across Flat  
(L): Thickness  
(a1): Size in fastening side  
(a2): Size in loosening side



Standard Hex Ratchet (Hex)



### Head Sizes



MODEL	H		W		L		C	
	mm	in	mm	in	mm	in	mm	in
URW-6,60,60R	13.0	33/64	20.0	25/32	88.0	3 5/32	10.0	25/64
URW-8,8N,80,80R,81,81R	18.0	45/64	25.0	63/64	102.5	4 1/32	12.5	31/64
URW-10N	18.0	45/64	33.0	19/64	106.5	4 3/16	16.5	21/32
URW-12N	18.0	45/64	36.0	27/64	109.5	4 5/16	18.0	45/64
URW-12NA	18.0	45/64	46.0	1 13/16	120.5	4 3/4	23.0	29/32
URW-12NB	18.0	45/64	54.0	2 1/8	128.5	5 1/16	27.0	1 1/16

## SPECIFICATIONS

Recommended Air Pressure:0.6MPa(85psi)

Model	Capacity (Nominal Bolt Size)		Max. Torque		Free Speed (about)	Overall Length (about)		Weight (about)		* Hex Size of Ratchet Wrench ( ) Standard		Average Air Consumption		Noise Level	Vibration Level
	mm	in	Nm	ft-lbs		r.p.m.	mm	in	kg	lb	mm	in	m <sup>3</sup> /min		
URW-6	6	15/64	10.78	7.95	200	292	11 1/2	1.15	2.54	7, 8, (10), 12	3/8	0.28	9.9	81	10.0
URW-60, 60R	6	15/64	10.78	7.95	200	292	11 1/2	1.15	2.54	7, 8, (10), 12	3/8	0.28	9.9	85	10.0
URW-8N	8	5/16	15.68	11.56	220	300	11 13/16	1.80	3.96	9, 10, 12, (14)	7/16, 1/2, 9/16	0.55	19.5	90	17.8
URW-80, 80R	8	5/16	15.68	11.56	220	300	11 13/16	1.80	3.96	9, 10, 12, (14)	7/16, 1/2, 9/16	0.55	19.5	93	25.4
URW-81, 81R	8	5/16	15.68	11.56	220	300	11 13/16	1.80	3.96	9, 10, 12, (14)	7/16, 1/2, 9/16	0.55	19.5	93	25.4
URW-8	8	5/16	13.72	10.12	240	360	14 3/16	1.80	3.96	9, 10, 12, (14)	7/16, 1/2, 9/16	0.56	19.8	86	10.0
URW-9N	10	3/8	31.36	23.13	200	380	15	2.30	5.06	9, 10, 12, (14)	7/16, 1/2, 9/16	0.67	23.7	90	17.8
URW-10N	10	3/8	56.84	41.92	150	394	15 33/64	2.65	5.83	12, 14, (17)	9/16, 5/8, 11/16	0.70	25.0	90	17.8
URW-12N	13	1/2	58.80	43.38	150	397	15 5/8	2.70	5.94	19, (21)	3/4, 13/16	0.70	25.0	91	17.8
URW-12NA	14	9/16	78.40	57.84	100	408	16 1/16	3.00	6.60	22, (24), 27	3/4, 7/8, 15/16, 1	0.70	25.0	91	17.8
URW-12NB	16	5/8	93.10	68.69	85	416	16 19/64	3.20	7.04	29, (30), 32	3/4, 7/8, 15/16, 1	0.70	25.0	91	17.8

Air Inlet Thread (Pipe Tap) : N.P.T.1/4"

Air Hose Size (Inside Diameter) : 9.5mm (3/8")

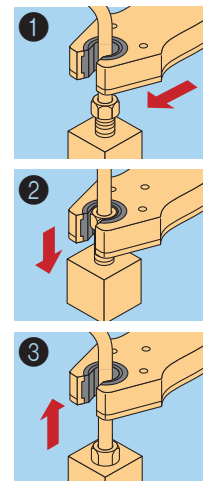
In addition to listed size, many other sizes are available for each models. Specify Hex. size when ordering, otherwise the standard ratchet is supplied.

Max Torque is a guideline.

# OPEN-END WRENCHES

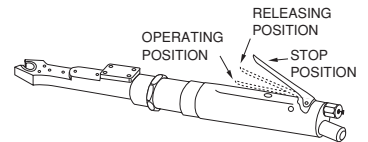
URYU offers two series of Open-End Wrenches for fast, accurate tube nut tightening. **UOW-11 series** is stall torque type and **UOW-T60 series** is mechanical shut-off type with external torque adjustment. All gear drive mechanism without ratcheting provides precise torque, silent operation and longer tool life. The unique one-hand two-step throttle lever simplifies releasing the socket back to the open position and ensures smooth & easy operation. **UOW-T60 series** ensures more precise fastening and less operator fatigue due to fast shut-off clutch mechanism. **UGW** Geared Wrench offers quit and smooth nut fastening operation in hard-to-reach spaces.

## OPEN-END WRENCH



## TWO-STEP THROTTLE LEVER

① HALF-WAY for Releasing the Gear Socket back to the open position.



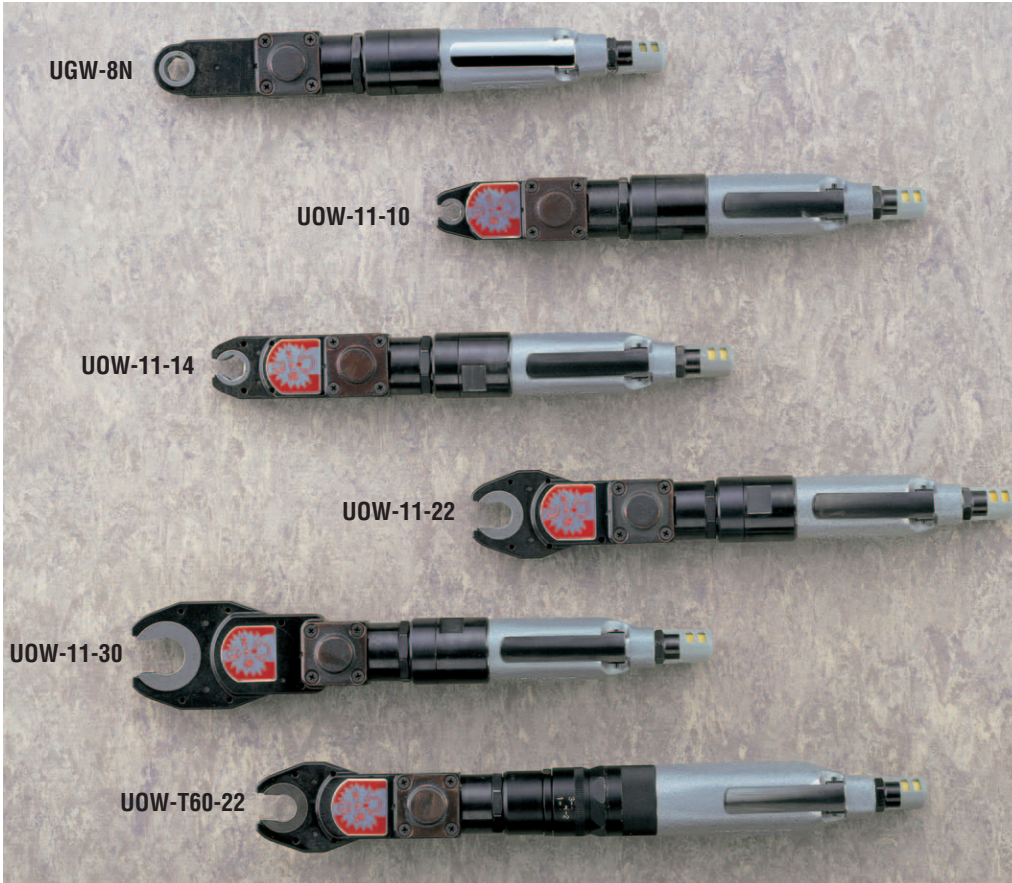
② Full-down for Operation.

## EXTERNAL DIAL

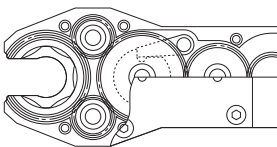
Torque adjustment (No special tool is needed)



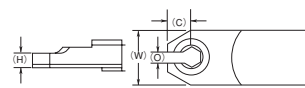
UOW-T60 series only.



BOLT & NUT SETTERS



Head Sizes



MODEL	H		W		O		C	
	mm	in	mm	in	mm	in	mm	in
UOW-11-10,UOW-T60-10	14.0	35/36	37.0	1 29/64	5.0-6.0	13/64-15/64	10.0	25/64
UOW-11-14,UOW-T60-14	14.0	35/36	40.0	1 37/64	6.0-9.0	15/64-23/64	13.0	25/64
UOW-11-22,UOW-T60-22	16.0	5/8	56.0	2 13/64	13.0-15.0	33/64-19/32	17.0	43/64
UOW-11-30,UOW-T60-30	16.0	5/8	68.0	2 43/64	15.0-23.0	19/32-29/32	21.0	53/64

## SPECIFICATIONS

Recommended Air Pressure:0.6MPa(85psi)

Model	Max. Torque / Range		Free Speed (about)	Overall Length (about)		Weight (about)		* Hex Size of Gear Socket ( ) Standard		Average Air Consumption		Noise Level	Vibration Level
	Nm	ft-lbs		r.p.m.	mm	in	kg	lb	mm	in	m <sup>3</sup> /min		
UOW-11-10	12.74	9.40	400	295	11 47/64	1.4	3.08	8, 9, (10)	1/8	0.35	12.5	76	2.0
UOW-11-14	15.68	11.57	260	311	12 1/4	1.8	3.96	10, 11, 12, 13, (14)	3/8, 1/2	0.35	12.5	76	2.0
UOW-11-22	23.52	17.35	180	326	12 53/64	1.8	3.96	17, 19, 21, (22)	5/8, 3/4, 7/8	0.35	12.5	76	1.6
UOW-11-30	31.36	23.14	135	347	13 21/32	2.5	5.50	23, 24, 26, 28, (30)	5/8, 3/4, 7/8	0.35	12.5	76	1.6
UOW-T60-10	3.9-12.7	2.9-9.4	300	370	14 5/8	1.8	3.96	8, 9, (10)	1/8	0.50	18.0	76	1.6
UOW-T60-14	4.9-16.7	3.6-12.3	230	385	15 1/8	2.2	4.85	10, 11, 12, 13, (14)	3/8, 1/2	0.50	18.0	76	1.6
UOW-T60-22	6.9-23.5	5.1-17.4	170	400	15 3/4	2.2	4.85	17, 19, 21, (22)	5/8, 3/4, 7/8	0.50	18.0	76	1.25
UOW-T60-30	9.8-31.4	7.2-23.1	130	420	16 5/8	2.9	3.30	23, 24, 26, 28, (30)	5/8, 3/4, 7/8	0.50	18.0	76	1.25
UGW-6N	17.65	13.02	530	310	12 13/64	1.4	3.08	9, (10), 11	3/8, 7/16	0.63	22.0	76	1.25
UGW-8N	22.56	16.64	410	322	12 11/16	1.5	3.31	12, 13, (14)	7/16, 9/16, 5/8	0.63	22.0	76	1.25

Air Inlet Thread (Pipe Tap) : N.P.T.1/4" Air Hose Size (Inside Diameter) : 9.5mm (3/8")

In addition to listed size, many other sizes are available for each models. Specify Hex. size when ordering, otherwise the standard ratchet is supplied.

Max Torque is a guideline.

# TORQUE CONTROL ANGLE NUTRUNNER (MECHANICAL-CUT)

The New **UAN-611R & UAN-701R series** Torque Control Angle Nutrunners offer exceptional fastening performance in the areas of productivity, ergonomics, reliability and quality.

## Six Performance Advantages

1. Instant shut-off providing increased accuracy and reduced reaction.
2. Low inertia design providing increased accuracy.
3. Simple and accurate method to adjust torque output permitting quick setup.
4. Smooth rolling selector allowing easy adjustment to forward rotation or reverse rotation.
5. Rear exhaust providing low noise operation.
6. Multiple angle head positions allowing comfortable operation on limited access application.

### Right Angle Head

Designed with a spline type interface allowing multiple head positions for the most comfortable throttle location on those hard to reach applications.

### Torque Adjustment

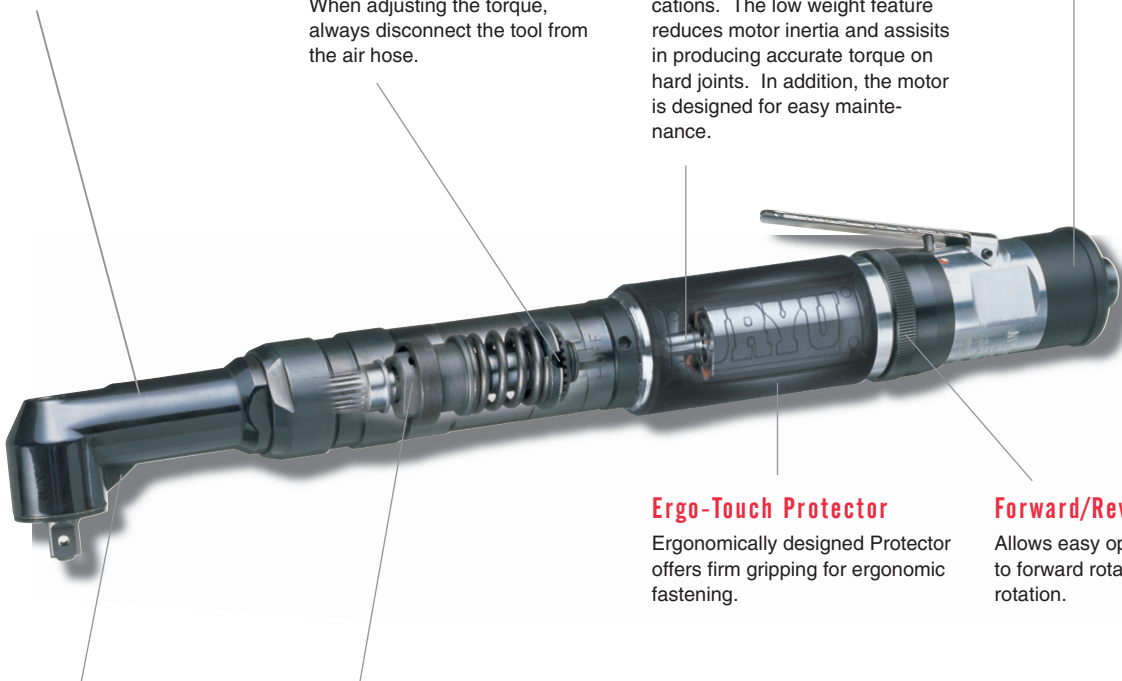
Use a Phillips driver to adjust the torque from the outside of the tool. A gauge displaying 1, 2 and 3 allows you to "roughly adjust" the tool to the desired torque. When adjusting the torque, always disconnect the tool from the air hose.

### Pneumatic Motor

Designed to offer high power performance in a low weight package. The high power feature produces torque efficiently on soft joint and prevailing torque applications. The low weight feature reduces motor inertia and assists in producing accurate torque on hard joints. In addition, the motor is designed for easy maintenance.

### Rear Exhaust

Allows the tool to operate at less than 80 dBA. The piped away exhaust option for further reduces noise.



### Grease Cock

Allows periodic lubrication of the angle head bevel gears without having to disassemble the tool

### Mechanical Clutch

The Uryu "Ergo Clutch" mechanism offers precise control of torque regardless of joint rate. The benefit is virtually no change in torque even on a joint that varies from 30 degrees of rotation (hard joint) to 720 degrees of rotation (soft joint). ISO 5393 testing reveals a 6-sigma combined capability of less than 20% on all models.

### Ergo-Touch Protector

Ergonomically designed Protector offers firm gripping for ergonomic fastening.

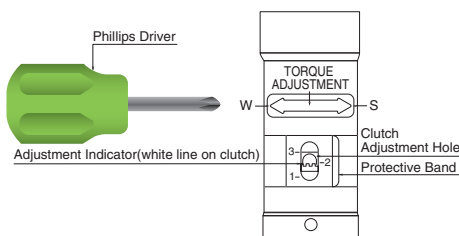
### Forward/Reverse Selector

Allows easy operator adjustment to forward rotation or reverse rotation.

### Poka-Yoke (Option)

A "TM" option is available for bolt counting or "error proofing". This option is used in conjunction with the UTM-1100 Fastening Counter.

## Torque Adjustment



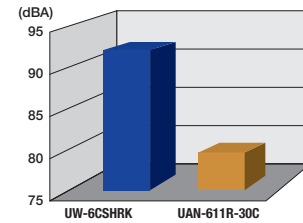
**When adjusting the torque, always disconnect the tool from the air hose.**

1. Rotate the protective band until the slot of clutch adjustment gauge becomes visible.
2. Turn 3/8" square drive of the angle head so the clutch adjustment hole is visible within the clutch adjustment slot.
3. Put the Phillips Driver into the clutch hole and adjust the torque output as follows:-
  - \* Turning the Phillips Driver in the clockwise direction moves the adjustment indicator on the clutch towards the "3" and increases the torque output.
  - \* Turning the Phillips Driver in the counterclockwise direction moves the adjustment indicator on the clutch towards the "1" and decrease the torque output.
4. After achieving the desired torque output level, rotate the protective band until the slot of the clutch adjustment gauge is completely covered.

# TORQUE CONTROL ANGLE NUTRUNNER



## Noise Level Comparison



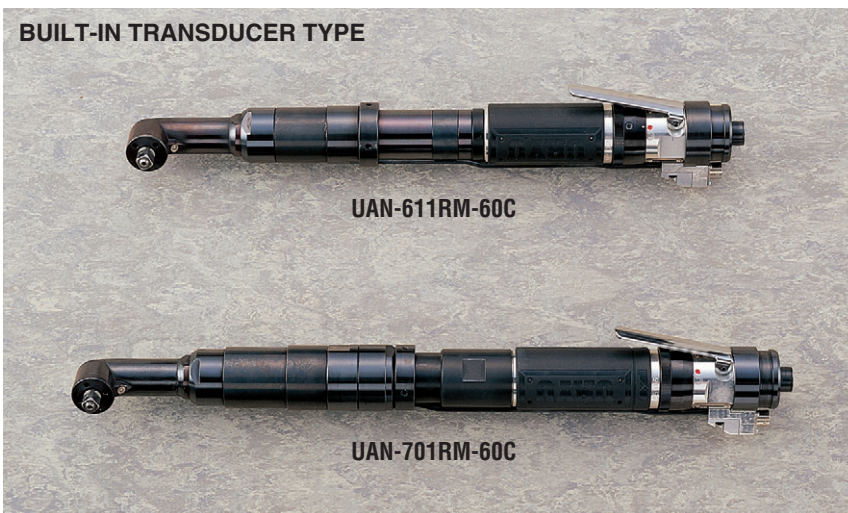
## SPECIFICATIONS

Recommended Air Pressure: 0.6MPa(85psi)

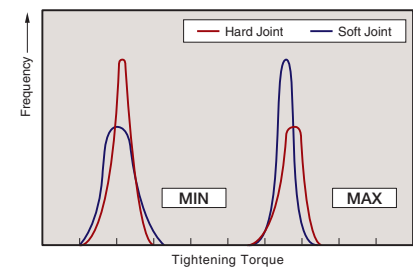
Model	Bolt Capacity		Max. Torque		Free Speed (about)	Overall Length (about)		Weight less Socket (about)		From Center to Outside (about)		Angle Height (about)		Square Drive Shank		Average Air Consumption		Noise Level	Vibration Level
	mm	in	Nm	ft-lbs		r.p.m.	mm	in	kg	lb	mm	in	mm	in	mm	in	m³/min		
UAN-611R-60C	6	1/4	6.5-12.0	4.3-8.6	620	383	15 5/64	1.6	3.52	14.0	35/64	47	1 55/64	9.5	3/8	0.6	21.2	80	1.78
UAN-611R-50C	6-8	1/4-5/16	8.5-15.0	5.7-10.8	470	373	14 11/16	1.6	3.52	14.0	35/64	47	1 55/64	9.5	3/8	0.6	21.2	80	1.78
UAN-611R-40C	6-8	1/4-5/16	10.0-18.0	7.2-12.9	400	373	14 11/17	1.6	3.52	14.0	35/64	47	1 55/64	9.5	3/8	0.6	21.2	80	1.78
UAN-611R-30C	8	5/16	13.0-25.0	9.3-18.0	270	373	14 11/18	1.6	3.52	14.0	35/64	47	1 55/64	9.5	3/8	0.6	21.2	80	1.78
UAN-701R-60C	8	5/16	20.0-31.0	14.5-23.1	600	445	17 33/64	2.4	5.29	14.0	35/64	47	1 55/64	9.5	3/8	0.9	31.8	85	1.78
UAN-701R-40C	8-10	5/16-3/8	28.0-45.0	21.0-33.3	400	455	17 29/32	2.4	5.29	18.0	45/64	51	2	9.5	3/8	0.9	31.8	85	1.78
UAN-701R-30C	10-12	3/8-1/2	37.0-60.0	27.5-44.1	300	455	17 29/32	2.4	5.29	18.0	45/64	58	2 9/32	12.7	1/2	0.9	31.8	85	1.78

Air Inlet Thread (Pipe Tap) : N.P.T.1/4"  
Air Hose Size (Inside Diameter) : 9.5mm (3/8")

## BUILT-IN TRANSDUCER TYPE



## Torque Distribution Chart



## SPECIFICATIONS

Recommended Air Pressure: 0.6MPa(85psi)

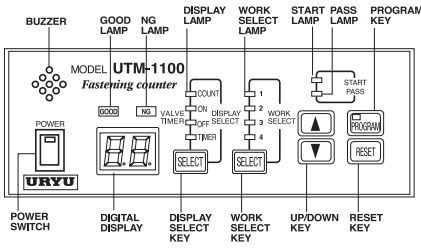
Model	Bolt Capacity		Max. Torque		Free Speed (about)	Overall Length less Socket (about)		Weight less Socket (about)		From Center to Outside (about)		Angle Height (about)		Square Drive Shank		Average Air Consumption		Noise Level	Vibration Level
	mm	in	Nm	ft-lbs		r.p.m.	mm	in	kg	lb	mm	in	mm	in	mm	in	m³/min		
UAN-611RM-60C	6	1/4	6.5-12.0	4.3-8.6	620	419	16 1/2	2.0	4.4	14.0	35/64	47	1 55/64	9.5	3/8	0.6	21.2	80	1.78
UAN-611RM-50C	6-8	1/4-5/16	8.5-15.0	5.7-10.8	470	409	16 7/64	2.0	4.4	14.0	35/64	47	1 55/64	9.5	3/8	0.6	21.2	80	1.78
UAN-611RM-40C	6-8	1/4-5/16	10.0-18.0	7.2-12.9	400	409	16 7/64	2.0	4.4	14.0	35/64	47	1 55/64	9.5	3/8	0.6	21.2	80	1.78
UAN-611RM-30C	8	5/16	13.0-25.0	9.3-18.0	270	409	16 7/64	2.0	4.4	14.0	35/64	47	1 55/64	9.5	3/8	0.6	21.2	80	1.78
UAN-701RM-60C	8	5/16	20.0-31.0	14.5-23.1	600	480	18 57/64	2.7	5.94	14.0	35/64	47	1 55/64	9.5	3/8	0.9	31.8	85	1.78
UAN-701RM-40C	8-10	5/16-3/8	28.0-45.0	21.0-33.3	400	492	19 3/8	2.9	6.38	18.0	45/64	51	2	9.5	3/8	0.9	31.8	85	1.78
UAN-701RM-30C	10-12	3/8-1/2	37.0-60.0	27.5-44.1	300	492	19 3/8	2.9	6.38	18.0	45/64	58	2 9/32	12.7	1/2	0.9	31.8	85	1.78

Air Inlet Thread (Pipe Tap) : N.P.T.1/4"  
Air Hose Size (Inside Diameter) : 9.5mm (3/8")

# FASTENING COUNTER WITH POKA-YOKE

URYU Fastening Counter Model, **UTM-1100**, counts down the number of bolts or nuts after fastening by the TM-type of Oil-Pulse Tool or Impact Wrench modified to sense the back pressure from the tool. This remarkable function automatically ensures the perfect fastening of all the required number of bolts and nuts. Human errors and fastening troubles can be avoided by clear LED display followed by cautionary lamp and buzzer.

## FRONT PANEL



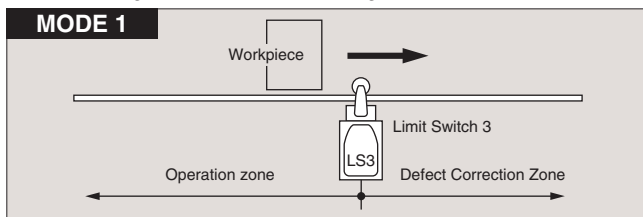
## SPECIFICATIONS

- Power Source : AC100V - 240V 50 / 60Hz
- Count-down Number : Max. 99 by key
- Judgement Indication : GOOD LED (Green)
- NG. LED (Red) with buzzer sounding
- Dimensions (mm) : 210 (W) x 85 (H) x 200 (D)
- Working Temperature : 0 - 40°C (Humidity : Max. 85%)

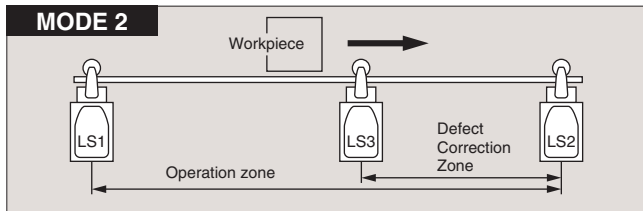
## FEATURES

- Four Different workpieces can be covered.
- Four kinds of control mode are available to various assembly lines.

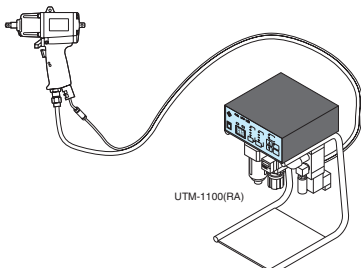
MODE 1 : Judgement after limit switch signal



MODE 2 : Operation zone with 3 pieces of Limit Switches



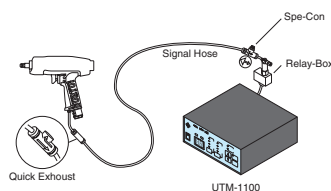
## COMBINATIONS



### (A) With TM-Type Tool

Controlled by making use of air pressure difference at the chamber just before the motor.

\*Shut-off Type Tools Controlled by shut-off signal



### (B) With Shut-off Tool (T-Type)\*

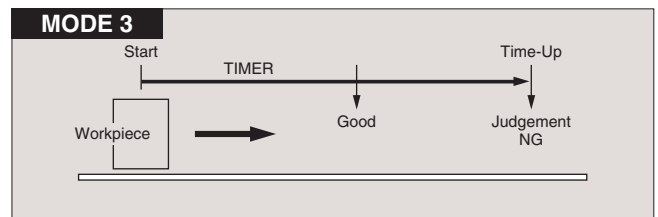
Relay box converts the air signal (release air at the shut-off moment) to electric signal. The electric signal is counted down as OK signal of fasteners up to 99 pieces.

\*Except US-LT, UOW-T60, ALPHA-T70C(H), ALPHA-T70S & UAN Series  
These models cannot be used with this relay from air to electric.

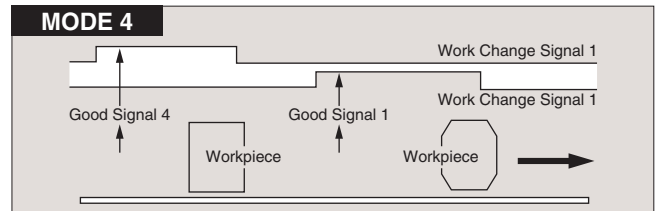


- Easy key programming
- Torque (QL) Wrench with limit switch can also be used.

MODE 3 : Timer Control



MODE 4 : Automatic WORK SELECT through external signal



## New Fastening Counter!



Major Changes :

- Up to 1500 tightening data stored
- Can count the blow number
- PC programmable
- Switchable (AC100-240V)

Combinations	Count Down	Initial Trouble Detection	Cycle Error Detection
(A)	Yes	Yes	Yes
(B)	Yes	No	No