



HIGH SPEED PRODUCTION
HIGH QUALITY TIGHTENING

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Impulse wrenches

System wrenches

Poka Yoke⁺

(Non-) shut-off tools

Cordless impulse
wrenches

Sleeve Drive sockets

Accessories

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Guideline values for tightening torques

DIN 267*		3.6	4.6	4.8	5.8	8.8	10.9	12.9
Bolt	Socket size	Torque Nm	Torque Nm	Torque Nm	Torque Nm	Torque Nm	Torque Nm	Torque Nm
M1,6	-	0,05	0,065	0,086	0,11	0,17	0,24	0,29
M2	-	0,10	0,13	0,17	0,22	0,35	0,49	0,58
M2,2	-	0,13	0,017	0,23	0,29	0,46	0,64	0,77
M2,5	-	0,20	0,26	0,35	0,44	0,70	0,98	1,20
M3	-	0,35	0,46	0,61	0,77	1,20	1,70	2,10
M3,5	-	0,55	0,73	0,97	1,20	1,90	2,70	3,30
M4	7	0,85	1,1	1,5	1,9	2,9	4,1	4,9
M5	9	1,7	2,2	3,0	3,7	6	8,5	10
M6	10	2,9	3,9	5,1	6,4	10	14	17
M8	13	7	9,3	12	16	25	35	41
M10	17	14	19	25	31	49	69	83
M12	19	24	32	43	54	86	120	145
M14	22	39	51	68	86	135	190	230
M16	24	59	79	105	130	210	295	355
M18	27	81	110	145	180	290	405	485
M20	30	115	155	205	255	410	580	690
M22	32	155	205	275	345	550	780	930
M24	36	265	200	350	440	710	1000	1200
M27	41	295	390	520	650	1050	1500	1800
M30	46	395	530	710	880	1450	2000	2400
M33	50	540	720	960	1200	1900	2700	3250
M36	55	690	920	1250	1550	2450	3450	4150

* These torque values are only guide lines and are calculated with friction factor 0,125.

Ecology



The tools are innovatively designed, paying the highest attention to the environment and its safeguard.

All the components are easy to dispose of, because they are built with recyclable materials. Therefore they do not present any danger in terms of environmental pollution.

Models with automatic air shut-off reduce the cycle time and therefore the compressed air consumption.

Yokota

Yokota Industrial Co. Ltd. (Japan) is making great effort to provide high quality and performance airtools for all industries. The modern technology is resulting in a high quality production system, based on 70 years of experience. The company is internationally orientated and active in global sales. The production of the Yokota airtools meet the demands of the 21th century. All developments are based on original and flexible ideas. The Yokota strategy is that development with team spirit, flexible ideas and young power will bring the best solutions. With all this research and developments Yokota is contributing to a better environment for the operator.

Advantages of the Yokota Impulse Wrenches: Joint Quality



Faster

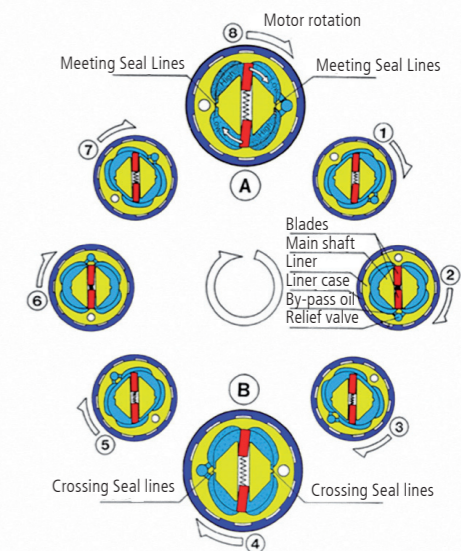
Yokota impulse wrenches are widely used for tightening jobs in the assembly industry, where accurate torque tolerances are necessary. Impulse tools are light, powerful, small and very importantly, have no kick-back. The Yokota range of impulse tools is increasing fast, starting at 6 Nm to tighten small joints, and goes up to 600 Nm. Evaluation of tightening processes in car assembly shows that tightening joints uses 10% of the total assembly time. Working with faster tools therefore can speed up assembly lines substantially.

High accuracy

Product liability is essential to carmakers. All tightened joints have to be correct. For this reason critical joints must be counted, documented and, of course, tightened with the right clamping force. In order to do this, you need an impulse wrench (with a built-in transducer) connected to a controller. This system ensures that only OK joints are counted resulting in "Zero Fault Production". This fail-safe system fits perfectly in the **Poka Yoke Strategy**.

High repeatability

Impulse wrenches have a twin blade impulse mechanism for sealing oil which gives a high repeatability. The mechanism is designed so that the liner, rotated by the air motor gives an equal torque on both blades and instant rotation torque on the mainshaft (see figure below). A by-pass is designed in the liner so that the oil can escape from the area of high pressure to the area of low pressure at the moment of creating a pulse and the amount of oil flow can be adjusted by the relief valve to control the torque output. Depending on model and setting, the impulse wrenches give 10 - 40 impulses per second. The power is transmitted by oil pressure and therefore the impulse wrenches have a very low noise- and vibration level.

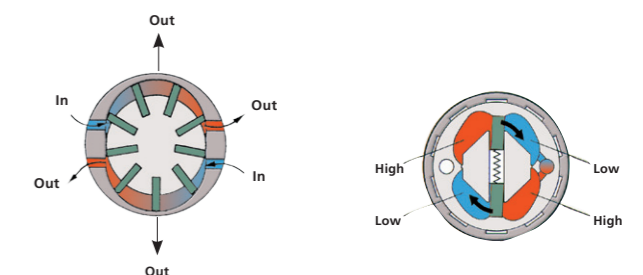


Double chamber air motor

The Yokota Y-, YLa, YLT, YED- and TKa-series impulse wrenches with double chamber air motor reach the required torque very quickly. The tools have a high number of impulses per second, and therefore very accurate torques can be realized, resulting in increased production speed.

Patented twin blade impulse unit. Yokota's unique impulse mechanism reduces noise and vibration!

High impulse frequency.



How to use

Specified torque range

The specified torque range is measured in the laboratory under standard conditions. Therefore these torque figures are only to be used as a guidance.

The actual torque range is depending on a variety of working conditions, eg: air pressure, joint hardness, used accessory.

The torque ranges are specified at a dynamic air pressure of 0.6 MPa, lower air pressure will result in lower torque. Please take note that these impulse wrenches are developed for a dynamic air pressure of 0.63 MPa maximum.

Shut-of impulse wrenches selection:

- Hard joint: torque levels up to 100% of the specified torque range
- Soft joint: torque levels up to 90% of the specified torque range

Non shut-off impulse wrenches selection:

- Hard joint: torque levels up to 95% of the specified torque range
- Soft joint: torque levels up to 85% of the specified torque range

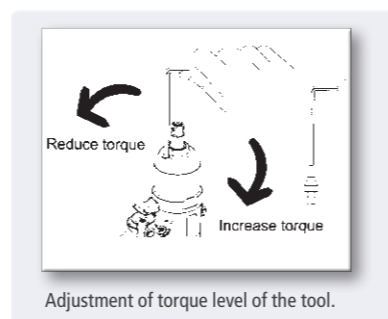
Accessories:

The size and shape of impact sockets influence the torque result. Extension bars, depending on the length, can lower the torque range with 5-30% Inner torx and inner hexagon can lower the torque range with 5-20%

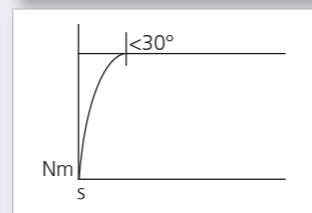
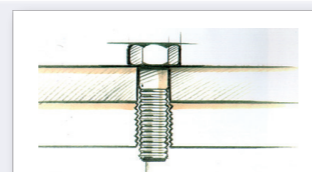
For the best result of the impulse wrench, use:

- Constant stabilized air pressure
- Sleeve drive sockets, impact quality (see pages 20-25)
- Impact quality accessories with the correct dimensions
- Accessories in good condition
- Correct hose inner diameter and length
- Lubricated air

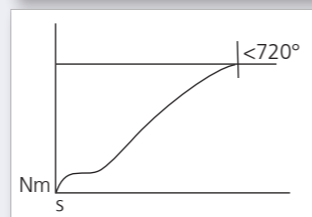
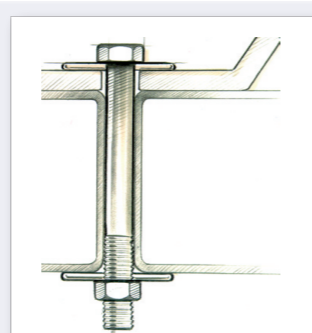
We advise to use the impulse wrench up to 80% of it's capacity for the highest productivity, accuracy and durability.



Adjustment of torque level of the tool.



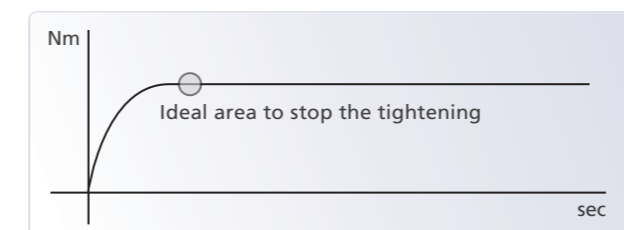
Hard joint, typical example



Soft joint, typical example

What to choose?

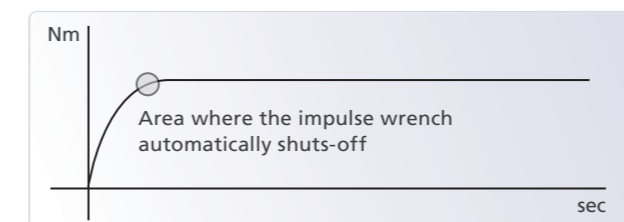
Impulse wrenches without shut-off



Impulse wrenches archive the highest quality joint if the tightening is finished in this area (horizontal part of the torque curve)

- Highest clampforce with smallest tolerances
- Smallest torque tolerances

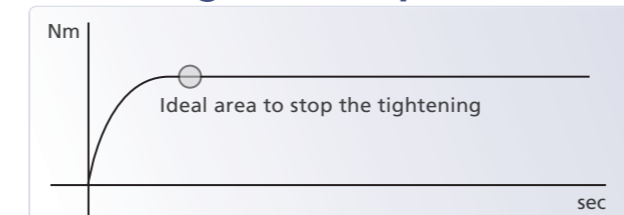
Impulse Wrenches with mechanical shut-off



Mechanical shut-off

- Shorter operating time
- Operator knows when the tightening is finished
- Highest clampforce with smallest tolerances
- Smallest torque tolerances

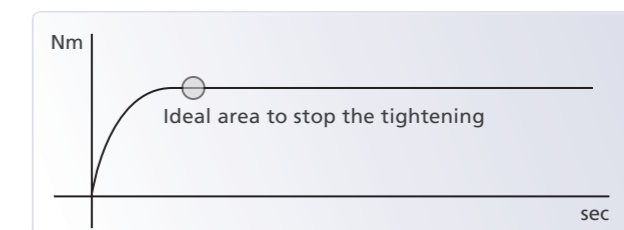
Impulse Wrenches with integrated torque transducer



Impulse wrench with torque transducer integrated

- Highest clamp force with smallest tolerances
- Smallest torque tolerances
- Shortest optimum operating time
- Operator knows when the tightening is finished
- Operator is informed about OK-NOK of the tightening
- OK joints are counted, no missed tightnings
- Actual tightening torque is measured
- Full documentation
- Zero fault production

Impulse Wrench with Poka Yoke⁺ system



Impulse wrench with controlled shut-off

- Highest clamp force with smallest tolerances
- Smallest torque tolerances
- Shortest optimum operating time
- Operator knows when the tightening is finished
- Operator is informed about OK-NOK of the tightening
- OK joints are counted, no missed tightnings



Optional on TKA System Wrenches:

integrated LED status-signal:

- Green = OK
- Red = not OK

Visible from every angle: left, right, from top and behind.

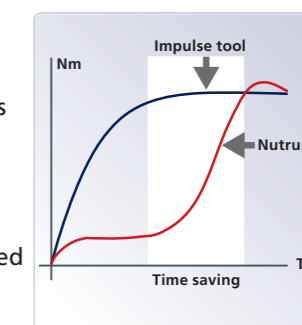
The transducer for the YEX, YED and TKA

The strain gauges are positioned on the main shaft, picking up the twisting torque on the main shaft at each impulse as close as possible to the socket. The electric signals are transmitted by induction through the internal- and external coils. Due to this principle the Yokota transducer is very reliable, accurate and without wear.



Save time - save money

Because of the principal of using hydraulics to reach a certain torque, impulse tools can run at a high rpm. The required torque is reached in a split second. All Yokota impulse wrenches can be used for hard and soft joints, and give a high accuracy / repeatability and a low relaxation.



YLT serie: Shut-off

Shut-off Impulse wrench



0,5-0,6 MPa series

Type	Square/hex drive	Bolt capacity mm	RPM	Torque Nm* 0,5-0,6 MPa	Load aircons. l/s	No-load aircons. l/s	Inlet-thread	Weight kg	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s ²	Noise level dB(A)
YLT50A	1/4" Hex	5	4.300	4,5 - 8	4,2	4,6	PT 1/4"	0,95	6,5	164	22,5	1,1	70
YLT60A	1/4" Hex	6	5.300	6,0 - 13,0	5,5	5,6	PT 1/4"	0,95	6,5	164	22,5	1,4	72
YLT70A	1/4" Hex	6-8	6.800	13,0 - 28,0	6,0	8,8	PT 1/4"	1,01	6,5	177	23	1,8	74
YLT50E	3/8" Square	5	4.300	4,5 - 8	4,2	4,6	PT 1/4"	0,95	6,5	164	22,5	1,1	72
YLT60E	3/8" Square	6	5.300	7,0 - 15,5	5,5	5,6	PT 1/4"	0,95	6,5	164	22,5	1,4	72
YLT70E	3/8" Square	6-8	6.800	15,0 - 32,0	6,0	8,8	PT 1/4"	1,01	6,5	177	23	1,8	74
YLT80E	3/8" Square	8	6.800	30,0 - 55,0	7,3	9,2	PT 1/4"	1,12	10	187	24,5	1,9	78
YLT110E	1/2" Square	10-12	5.800	50 - 85	8,3	13,5	PT 1/4"	1,51	10	194	28,5	1,8	81
YLT120E	1/2" Square	12	5.400	70 - 115	8,6	14,6	PT 1/4"	1,79	10	201	31	2,2	83
YLT140E	1/2" Square	14	5.200	110 - 150	11,8	16,6	PT 1/4"	2,08	10	214	32,5	5,2	85
YLT150	3/4" Square	16	4.400	140 - 210	11,8	17	PT 1/4"	2,95	10	237	38,5	6,2	85

0,4-0,5 MPa series

Type	Square/hex drive	Bolt capacity mm	RPM	Torque Nm* 0,4-0,5 MPa	Load aircons. l/s	No-load aircons. l/s	Inlet-thread	Weight kg	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s ²	Noise level dB(A)
YLT60AL	1/4" Hex	6	4.500	5,0 - 11,5	5,5	4,8	PT 1/4"	0,95	6,5	164	22,5	1,4	72
YLT70AL	1/4" Hex	6-8	6.300	11,0 - 25,0	6,0	7,8	PT 1/4"	1,01	6,5	177	23	1,8	74
YLT60EL	3/8" Square	6	4.500	6,0 - 13,5	5,5	4,8	PT 1/4"	0,95	6,5	164	22,5	1,4	72
YLT70EL	3/8" Square	6-8	6.300	13,0 - 28,0	6,0	7,8	PT 1/4"	1,01	6,5	177	23	1,8	74
YLT80EL	3/8" Square	8	6.600	25,0 - 48,0	7,3	8	PT 1/4"	1,12	10	187	24,5	1,9	78
YLT110EL	1/2" Square	10-12	5.600	45 - 75	8,3	11,8	PT 1/4"	1,51	10	194	28,5	1,8	81
YLT120EL	1/2" Square	12	5.200	60 - 100	8,6	12,3	PT 1/4"	1,79	10	201	31	2,2	83
YLT140EL	1/2" Square	14	4.900	80 - 125	11,8	14,1	PT 1/4"	2,08	10	214	32,5	5,2	85

Note: Torque values are to be used as guidance only.

FEATURES

- **Maximum accuracy:** extreme accurate and fast
Repeatability, new principle: shut-off valve and reset
- **Maximum durability:** check valve mechanism reduces load on the O-ring inside the oil pulse mechanism
- **Maximum ergonomics:** Ergo touch / Ergo grip / Ergo trigger
- **Maximum environment:** Reduction of CO2 emission / Low noise / Low vibration
- **Double chamber airmotor:** compact high efficiency
- **Oil-free:** can be used with non lubricated air

Rubber protection covers for all YLT-series impulse wrenches are included in the box.

YLT-J

All YLT models are available as J-version: signal hose for detecting shut-off, to connect to counting systems (PLC), line control etc.



YLa serie: Non shut-off

Double chamber air motor, lightweight

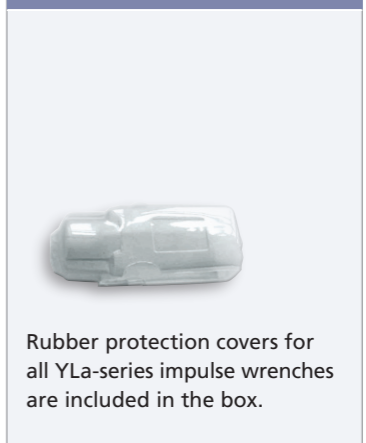


Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s ²	Noise level dB(A)
YLa60A	1/4" Hex	6	4.000	9 - 20	5	5,5	0,78	PT 1/4"	6,5	130	22	1,4	71
YLa70A	1/4" Hex	6 - 8	7.000	20 - 28	5,5	6,1	0,8	PT 1/4"	6,5	132	22	1,4	74
YLa80A	1/4" Hex	8	7.000	24 - 35	5,8	9	0,9	PT 1/4"	6,5	139	22	1,2	75
YLa60E	3/8" Sq.	6	4.000	13 - 22	5	5,5	0,78	PT 1/4"	6,5	130	22	1,4	71
YLa70E	3/8" Sq.	6 - 8	7.000	20 - 35	5,5	6,1	0,8	PT 1/4"	6,5	132	22	1,4	74
YLa80E	3/8" Sq.	8	7.000	33 - 50	5,8	9	0,9	PT 1/4"	6,5	139	22	1,2	75
YLa90E	3/8" Sq.	8 - 10	6.500	47 - 70	6,7	11,8	1,0	PT 1/4"	10	148	24	1,2	78
YLa110E	1/2" Sq.	10 - 12	6.000	65 - 105	9,6	13,1	1,4	PT 1/4"	10	164	26	1,8	81
YLa120E	1/2" Sq.	12	6.600	80 - 130	10	15,6	1,8	PT 1/4"	10	172	28	2,2	82
YLa140E	1/2" Sq.	14	6.000	100 - 160	13	18,9	2,2	PT 1/4"	10	190	30	2,4	84

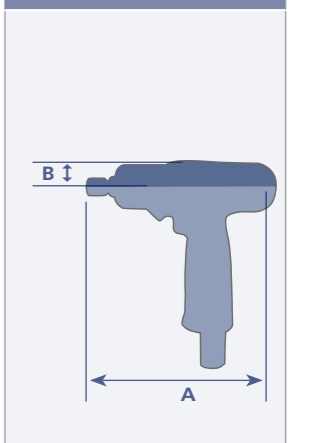
FEATURES

- **Maximum accuracy:** extreme accurate and fast
- **Maximum durability:** check valve mechanism reduces load on the O-ring inside the oil pulse mechanism
- **Maximum ergonomics:** ergo touch / Ergo grip / Ergo trigger
- **Maximum environment:** reduction of CO2 emission / Low noise / Low vibration
- **Double chamber airmotor:** compact high efficiency
- **Oil-free:** can be used with non lubricated air

RUBBER PROTECTION COVER



DIMENSIONS



Y serie: Non shut-off

Double chamber air motor



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions		Vibration m/s ²	Noise-level dB(A)
										A mm	B mm		
Y-40SA ¹⁾	1/4" Hex	4 - 6	10.000	6 - 12	5,0	7,6	0,84	PT 1/4"	6,5	229	17	4,6	69
Y-41A	1/4" Hex	4 - 6	9.300	6 - 12	5,0	8,8	0,73	PT 1/4"	6,5	141	17	2,1	72
Y-46E	3/8" Sq.	5 - 6	8.000	16 - 30	5,8	9,6	0,87	PT 1/4"	6,5	158	18	1,0	80
Y-46A	1/4" Hex	5 - 6	8.000	16 - 26	5,8	9,6	0,87	PT 1/4"	6,5	158	18	1,0	80
Y-56E	3/8" Sq.	6 - 8	7.000	25 - 47	6,6	9,6	0,87	PT 1/4"	10	144	21	1,0	80
Y-56A	1/4" Hex	6 - 8	7.000	22 - 33	6,6	9,6	0,87	PT 1/4"	10	144	21	1,0	80
Y-61E	3/8" Sq.	6 - 8	5.500	34 - 54	6,6	8,8	0,96	PT 1/4"	10	155	21	1,0	74
Y-61A	1/4" Hex	6 - 8	5.500	27 - 41	6,6	8,8	0,96	PT 1/4"	10	155	21	1,0	74
Y-70E	3/8" Sq.	8 - 10	5.500	44 - 72	7,5	9,6	1,40	PT 1/4"	10	170	25	2,0	75
Y-90E	1/2" Sq.	10 - 12	5.000	78 - 116	8,3	15,1	1,85	PT 1/4"	10	177	30	1,5	72
Y-100E	1/2" Sq.	12	5.000	100 - 145	11,8	14,5	2,00	PT 1/4"	13	188	32,5	2,1	80
Y-130E	1/2" Sq.	14	3.500	140 - 220	12,8	18,3	2,50	PT 1/4"	13	201	34	2,2	83
Y-140	3/4" Sq.	16	3.300	160 - 270	13,1	18,4	3,20	PT 1/4"	13	226	36	3,3	82

¹⁾ The Y-40SA is a straight model, all other types are pistol models.

* Torque specifications

All specified torques are measured on the Yokota testers, series YET, at a dynamic airpressure of 0.63MPa. The Yokota testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

Rubber protection covers for all Y-series impulse wrenches are included in the box.

Accessories for impulse wrenches on pages 18 & 19.

YX serie: Non shut-off

Pistol models



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions			Vibration m/s ²	Noise-level dB(A)
										A mm	B mm	D mm		
YX-180E	3/8" Sq.	4 - 6	10.500	19 - 31	4,2	7,8	1,00	PT 1/4"	6,5	169	23	3	72	
YX-180A	1/4" Hex	4 - 6	10.500	18 - 30	4,2	7,8	1,00	PT 1/4"	6,5	169	23	3	72	
YX-280E	3/8" Sq.	6 - 8	10.500	25 - 38	5,0	9,1	1,02	PT 1/4"	6,5	180	23	2	70	
YX-280A	1/4" Hex	6 - 8	10.500	20 - 34	5,0	9,1	1,02	PT 1/4"	6,5	180	20	2	70	
YX-380E	3/8" Sq.	8	10.000	34 - 47	5,0	9,1	1,24	PT 1/4"	6,5	180	25	2,1	75	
YX-380A	1/4" Hex	6 - 8	10.000	29 - 44	5,0	9,1	1,24	PT 1/4"	6,5	180	25,5	2,1	75	
YX-500E	3/8" Sq.	8 - 10	8.200	31 - 55	5,8	11,2	1,40	PT 1/4"	6,5	173	26,5	2	68	
YX-700E	3/8" Sq.	8 - 10	8.000	45 - 78	6,7	13,5	1,60	PT 1/4"	10	185	26,5	2	68	
YX-900E	1/2" Sq.	10	6.500	70 - 111	6,7	12,8	2,00	PT 1/4"	10	201	30,5	2	72	
YX-1100E	1/2" Sq.	10 - 12	4.700	85 - 123	7,5	13,6	2,20	PT 1/4"	10	210	30,5	2,5	72	
YX-1400E	1/2" Sq.	12 - 14	6.000	102 - 148	8,3	15,1	2,70	PT 1/4"	10	214	33,5	2,6	78	
YX-1900E	1/2" Sq.	12 - 14	5.800	140 - 201	8,3	15,1	3,40	PT 1/4"	10	224	35,5	3	79	
YX-2400E	1/2" Sq.	14 - 16	4.200	175 - 279	9,2	16,8	4,10	PT 1/4"	10	236	37,0	5,3	77	
YX-3000	3/4" Sq.	16 - 18	4.700	200 - 304	10,0	20,5	4,60	PT 1/4"	13	246	40,0	3,9	80	
YX-4500	3/4" Sq.	18 - 20	3.400	392 - 490	11,6	24	9,80	PT 3/8"	13	300	65,0	3,9	87	

Angle models



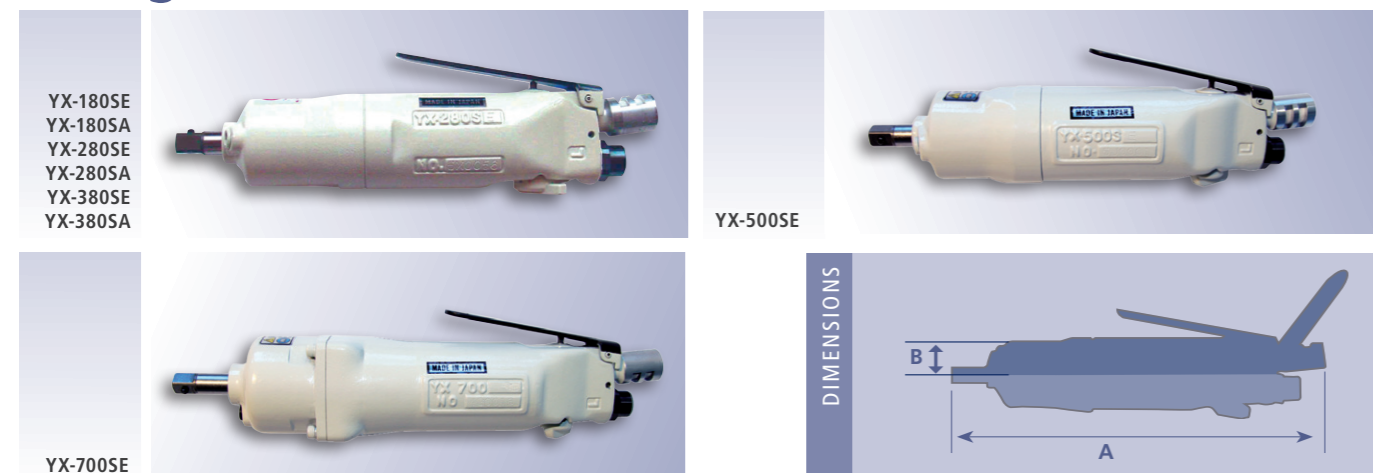
Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions			Vibration m/s ²	Noise-level dB(A)
										A mm	B mm	D mm		
YX-280C	3/8" 4K	4 - 6	10.000	15 - 24	5,0	7,8	1,40	PT 1/4"	6,5	257	16	50	4	83
YX-500C	3/8" 4K	6 - 8	7.500	30 - 45	5,0	8,6	1,50	PT 1/4"	6,5	266	18	66	10	73
YX-700C	3/8" 4K	8 - 10	5.000	36 - 50	5,8	10,8	1,80	PT 1/4"	6,5	289	18	70	8,6	72

* Torque specifications

All specified torques are measured on the Yokota testers, series YET, at a dynamic airpressure of 0.63MPa. The Yokota testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

YX serie: Non shut-off

Straight models



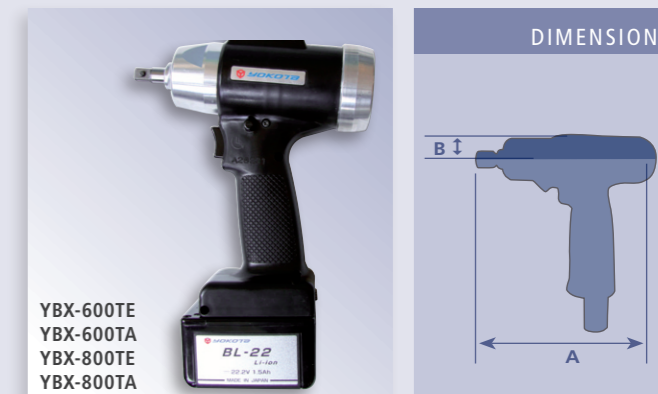
Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread.	Hose diameter mm	Dimensions		Vibration m/s ²	Noise-level dB(A)
										A mm	B mm		
YX-180SE	3/8" Sq.	4 - 6	10.500	19 - 31	4,2	7,8	0,96	PT 1/4"	6,5	220	23	3,3	73
YX-180SA	1/4" Hex	4 - 6	10.500	18 - 30	4,2	7,8	0,96	PT 1/4"	6,5	220	23	3,3	73
YX-280SE	3/8" Sq.	6 - 8	10.500	25 - 38	5,0	9,1	1,02	PT 1/4"	6,5	232	23	4	73
YX-280SA	1/4" Hex	6	10.500	20 - 34	5,0	9,1	1,02	PT 1/4"	6,5	232	23	4	73
YX-380SE	3/8" Sq.	8	10.000	32 - 47	5,0	9,1	1,18	PT 1/4"	6,5	232	25,5	3,3	75
YX-380SA	1/4" Hex	6 - 8	10.000	29 - 44	5,0	9,1	1,18	PT 1/4"	6,5	232	25,5	3,3	75
YX-500SE	3/8" Sq.	8 - 10	7.500	31 - 55	5,0	11,2	1,25	PT 1/4"	6,5	241	25,5	6,6	74
YX-700SE	3/8" Sq.	8 - 10	5.000	35 - 62	5,8	13,5	1,50	PT 1/4"	6,5	262	26,5	6,6	72

*** Torque specifications**

All specified torques are measured on the Yokota testers, series YET, at a dynamic airpressure of 0.63MPa. The Yokota testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

Battery impulse wrenches

YBX-600TE/600TA YBX-800TE/800TA Electronic controlled shut-off



Typ	Drive	Bolt capacity mm	RPM	Torque Nm*	Weight kg	Dimensions		Vibration m/s ²	Noise levels dB(A)
						A mm	B mm		
YBX-600TE	3/8" Sq.	M6	2.000	8 - 20	1,50	170	37	< 2,5	77
YBX-600TA	1/4" Hex	M6	2.000	7 - 18	1,50	170	37	< 2,5	77
YBX-800TE	3/8" Sq.	M8	2.000	18 - 35	1,55	174	37	< 2,5	78
YBX-800TA	1/4" Hex	M8	2.000	16 - 31	1,55	174	37	< 2,5	78

FEATURES YBX-600T/800T

- Very high accuracy
- Electronically controlled shut-off OK/NOK LED on display
- Counting function
- No kick-back
- Maintenance free motor (brushless)
- Lithium-ion battery, sliding model
- Perfectly balanced
- Compact lightweight
- Low vibration and noise levels
- Controller integrated
- Pincode (password protection)

ELECTRONICALLY CONTROLLED



The YBX-600T and YBX-800T are Electronically Controlled battery impulse wrenches with integrated angle encoder for highly accurate torque tolerances. The shut-off is calculated over several impulses. The controller is integrated and enables counting, Poka Yoke.

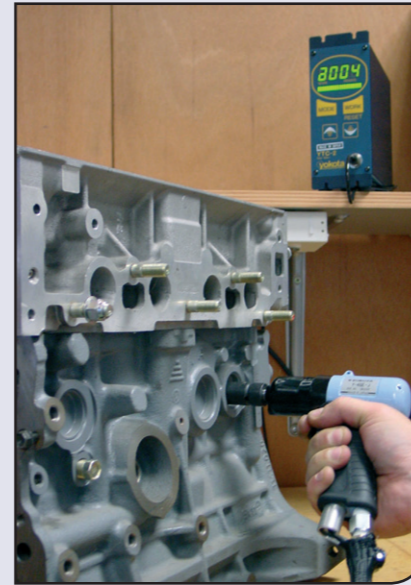
YBX-50A/YBX-50E Non shut-off



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Weight kg	Dimensions		Vibration m/s ²	Noise-level dB(A)
						A mm	B mm		
YBX-50A	1/4" Hex	5 - 8	2.200	7 - 22	1,7	194	26	3	79
YBX-50E	3/8" Sq.	5 - 8	2.200	7 - 22	1,7	194	26	3	79

*** Torque specifications**

All specified torques are measured on the Yokota testers, series YET, at a dynamic airpressure of 0.63MPa. The Yokota testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

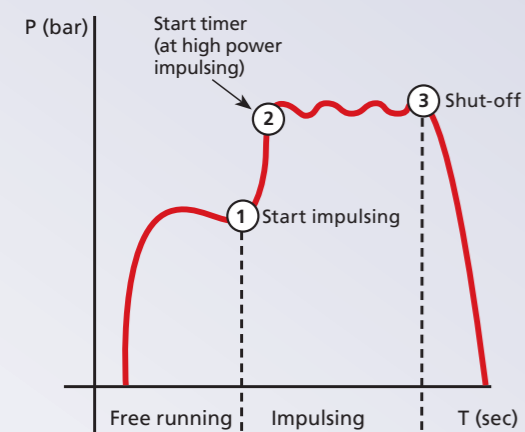


Poka Yoke+: functioning principle

The system is controlled by measuring the air pressure at the inlet side of the air motor. This air pressure varies from free running to impulsing. By this measured air pressure the controller detects contact of the bolt head (point 2). Upon contact, the adjustable timer gives the shut-off signal (point 3). Adjustability of the timer takes care of adoption to either hard or soft joints. Similar, the controller detects double hits and trigger release before shut-off.

Superior clampforces

In conventional shut-off tools point 2 is the shut-off point. Due to the above mentioned principle of the Poka Yoke+ controller, the relaxation is minimized and the correct torque and clampforce are achieved. The torque is adjusted at the impulse mechanism. In combination with the parameters in the controller YTC-3, a reliable shut-off is achieved.



The whole system is more accurate than shut-off or standard impulse wrenches.

Controller YTC-3

Controller YTC-3

- Power supply: 100 - 240V AC
- Input: 8
- Relay output: 4 opening and shutting capacity: Max. DC-48W, AC-220VA)
- Output for solenoid valve: 1(DC24V 2W)



System features

- Group control
- Controlled shut-off
- Double tightening detection
- Interlock with assembly line
- Error judgement on trigger release
- Teach-in mode for programming
- Oil deterioration indication



Lightweight YLa-JQ series

Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	Dimensions B mm	Vibration m/s ²	Noise-level dB(A)
YLa60A-JQ	1/4" Hex	6	4.000	11-20	5	5,5	0,78	PT 1/4"	6,5	130	22	1,4	71
YLa60E-JQ	3/8" Sq.	6	4.000	13 - 22	5	5,5	0,78	PT 1/4"	6,6	130	22	1,4	71
YLa70A-JQ	1/4" Hex	6 - 8	7.000	20 - 28	5,5	6,1	0,80	PT 1/4"	6,5	132	22	1,4	74
YLa70 E-JQ	3/8" Sq.	6 - 8	7.000	20 - 35	5,5	6,1	0,80	PT 1/4"	6,5	132	22	1,4	74
YLa80A-JQ	1/4" Hex	8	7.000	24 - 35	5,8	9	0,90	PT 1/4"	6,5	139	22	1,2	75
YLa80E-JQ	3/8" Sq.	8	7.000	33 - 50	5,8	9	0,90	PT 1/4"	6,5	139	22	1,2	75
YLa90E-JQ	3/8" Sq.	8 - 10	6.500	47 - 70	6,7	11,8	1,00	PT 1/4"	10	148	24	1,2	78
YLa110E-JQ	1/2" Sq.	10 - 12	6.000	65 - 105	9,6	13,1	1,40	PT 1/4"	10	164	26	1,8	81
YLa120E-JQ	1/2" Sq.	12	6.600	80 - 130	10	15,6	1,80	PT 1/4"	10	172	28	2,2	82
YLa140E-JQ	1/2" Sq.	14	6.000	100 - 160	13	18,9	2,20	PT 1/4"	10	190	30	2,4	84

Y-JQ series

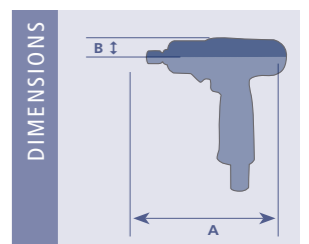
Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	Dimensions B mm	Vibration m/s ²	Noise-level dB(A)
Y-41A-JQ	1/4" Hex	4 - 6	9.300	6 - 12	5,0	8,8	0,73	PT 1/4"	6,5	141	17	2,1	72
Y-46E-JQ	3/8" Sq.	5 - 6	8.000	16 - 30	5,8	9,6	0,87	PT 1/4"	6,5	158	18	1,0	80
Y-56E-JQ	3/8" Sq.	6 - 8	7.000	25 - 47	6,6	9,6	0,87	PT 1/4"	10	144	21	1,0	80
Y-61E-JQ	3/8" Sq.	6 - 8	5.500	34 - 54	6,6	8,8	0,96	PT 1/4"	10	155	21	1,0	74
Y-70-JQ	3/8" Sq.	8 - 10	5.500	44 - 72	7,5	9,6	1,40	PT 1/4"	10	170	25	2,0	75
Y-90E-JQ	1/2" Sq.	10 - 12	5.000	78 - 116	8,3	15,1	1,85	PT 1/4"	10	177	30	1,5	72
Y-100E-JQ	1/2" Sq.	12	5.000	100 - 145	11,8	14,5	2,00	PT 1/4"	13	188	32,5	2,1	80
Y-130E-JQ	1/2" Sq.	14	3.500	140 - 220	12,8	18,3	2,50	PT 1/4"	13	201	34	2,2	83
Y-140-JQ	3/4" Sq.	16	3.300	160 - 270	13,1	18,4	3,20	PT 1/4"	13	226	36	3,3	82

* Torque specifications

All specified torques are measured on the Yokota testers, series YET, at a dynamic airpressure of 0.63MPa. The Yokota testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

Rubber protection covers for YLa-JQ and Y-JQ impulse wrenches are included in the box.

Accessories for impulse wrenches on pages 18 & 19.



Yokota Multi Fastening Controller

Yokota system wrenches

The Yokota YETC-210/320 are developed for accurate tightening and fit in a Poke Yoke assembly process. The controller controls, measures, judges, counts and documents the tightening.

YETC-210EA



- Torque control
- One channel controller
- LAN version optional

YETC-210EA4



- Torque control
- Four channel controller not simultaneous
- LAN version optional (four I/P addresses)

YETC-210ER



- Torque control
- Angle monitoring version
- One channel controller
- LAN version optional

YETC-320ER2L



- Torque control
- Angle monitoring version
- Two channel controller, two tools can be operated simultaneous
- LAN standard, two IP addresses

YETC-320EA2

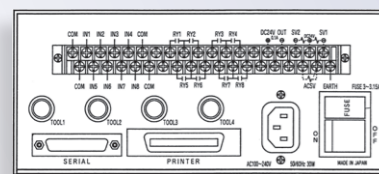


- Torque control
- Two channel controller, two tools can be operated simultaneous
- Optional:**
- LAN version (two I/P addresses)

Advantages of the Yokota Multi Tasking Controller

- Easy to program on the front panel
- Easy to program with PC
- Torque calculation over several impulses
- Compensation impulses to minimize relaxation
- Poke Yoke proof, line management
- 2 step tightening optional
- 8 setting programs
- Parallel and RS 232 connectors standard 2-way communication through RS 232
- Automatic program change (sequence programmable)
- Real Time clock
- Build in timer for group control
- Various input signals selectable
- Various output signals selectable
- Statistics CP / CPK
- Memory 10.000 cycles

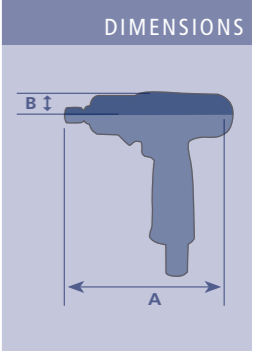
Back panel



- Optional:**
- Ethernet (100 BASE-TX/10 BASA-T Autodetect function)
 - Protocol: TCP/IP
 - Connector: RJ-45



Type	Square-drive	Bolt capacity mm	Torque Nm	RPM	Weight kg	Dimensions		Load aircons. l/s	No-load aircons. l/s
						A mm	B mm		
TKa600A	1/4" Hex	6	11 - 16	6.000	1,34	189	21,0	4,5	5,1
TKa600	3/8"	6	14 - 20	6.000	1,34	189	21,0	4,5	5,1
TKa700A	1/4" Hex	6-8	24 - 33	7.000	1,34	189	21,0	5,3	6,9
TKa700	3/8"	6-8	24 - 33	7.000	1,34	189	21,0	5,3	6,9
TKa800	3/8"	8	32 - 46	7.000	1,34	196	22,0	5,3	7,1
TKa900	3/8"	8-10	47 - 60	6.500	1,50	204	23,0	6,8	10,5
TKa1110	1/2"	10-12	65 - 95	5.500	1,97	220	25,5	8,8	13,5
TKa1400	1/2"	14	100 - 160	5.200	3,00	246	29,0	13	19



Electronic torque control & angle monitoring

Yokota Japan developed the system wrench with torque control more than 25 years ago, in order to tighten and shut-off the impulse wrench at the target torque with the features as insufficient or over torque, error detection, bolt counting, group control, production line management, data saving etc. Due to increased market demands for accuracy and error detection, Yokota integrated the additional angle monitoring function. By controlling the angle during the tightening process, all possible errors can be detected.

Possible errors that can be detected

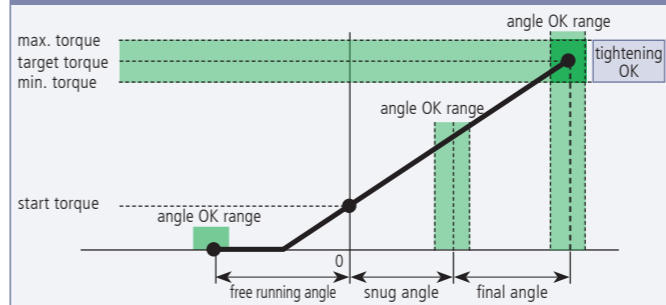
- Detection insufficient torque and over torque
- Detection friction coefficient out of tolerances
- Detection of too long / too short bolt
- Detection of seizure
- Detection of cross threaded threads
- Detection of crooked threads
- Detection of damaged threads
- Detection of double tightening
- Detection of blind holes

Features

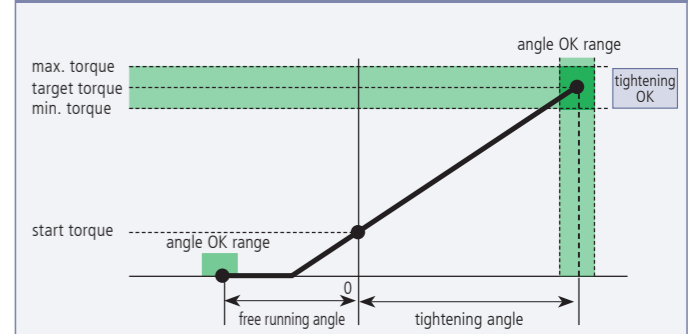
- Built in torque sensor, direct measurement
- Built in angle sensor
- compact angle sensor, 1° degree measurement
- Torque sensor non contact principle
- Torque & angle curve's on PC
- Easy torque adjustment on the tool
- Led or acoustic indication on the tool
- High efficiency air motor
- Shut-off by external solenoid valve



YETC-300ER2-L Torque control & angle monitoring including snug torque



YETC-210 ER Torque Control & angle monitoring



System wrenches TKa - YED series

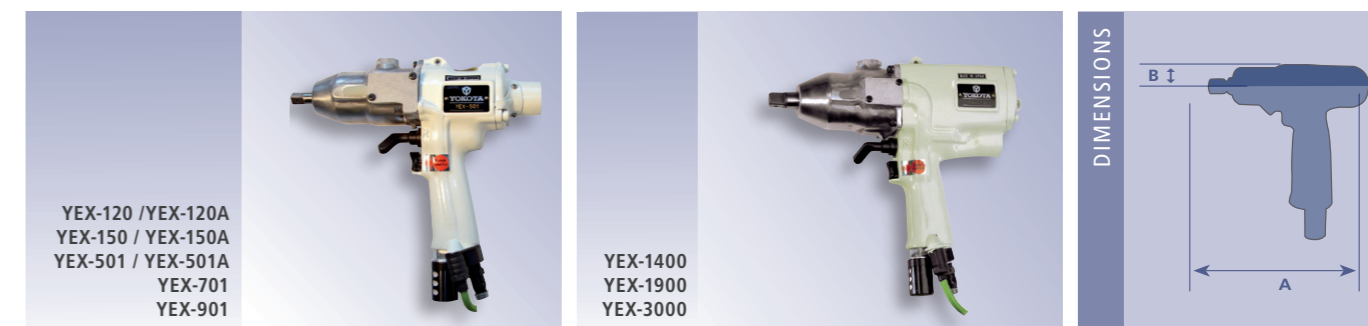


Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm**	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions		Vibration m/s ²	Noise-level dB(A)
										A mm	B mm		
TKa60A	1/4" Hex	6	6.000	11 - 16	4,5	5,1	1,3	PT 1/4"	6,5	179	22	2,1	71
TKa70A	1/4" Hex	6 - 8	7.000	20 - 27	5,3	6,9	1,3	PT 1/4"	6,5	179	22	2,1	75
TKa80A	1/4" Hex	8	7.000	24 - 33	5,3	7,1	1,3	PT 1/4"	6,5	186	22	2,1	73
TKa60	3/8" Sq.	6	6.000	14 - 20	4,5	5,1	1,3	PT 1/4"	6,5	179	22	2,1	71
TKa70	3/8" Sq.	6 - 8	7.000	20 - 35	5,3	6,9	1,3	PT 1/4"	6,5	179	22	2,1	75
TKa80	3/8" Sq.	8	7.000	32 - 46	5,3	7,1	1,3	PT 1/4"	6,5	186	22	2,1	73
TKa90	3/8" Sq.	8 - 10	6.500	47 - 70	6,8	10,5	1,5	PT 1/4"	9,5	195	24	2,1	78
TKa110	1/2" Sq.	10 - 12	6.000	65 - 105	8,8	13,5	1,9	PT 1/4"	9,5	210	26	2,2	80
TKa120	1/2" Sq.	12	5.900	85 - 130	10	17,2	2,4	PT 1/4"	9,5	223	28	2,2	82
TKa140	1/2" Sq.	14	5.200	100 - 160	13	19	2,9	PT 1/4"	9,5	235	30	2,2	84
TKa150	1/2" Sq.	14 - 16	4.200	150 - 220	13,2	18,1	3,4	PT 1/4"	9,5	242	32	2,4	84
YED-200	3/4" Sq.	20	3.400	155 - 360	18,3	32,2	6,8	PT 1/2"	12,7	309	40	4,2	86
YED-240S*	1" Sq.	24	3.000	250 - 600	28,3	52,2	11,2	PT 1/2"	12,7	452	52,5	15,0	92

* YED-240S is a straight model.

** See torque specifications on page 15.

System wrenches YEX series



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions		Vibration m/s ²	Noise-level dB(A)
										A mm	B mm		
YEX-100SA	3/8" Hex	5	8.000	4.3 - 12	3,6	4,4	1,2	PT 1/4"	9,5	285	23	3	77
YEX-120	3/8" Sq.	4 - 5	9.000	13 - 17	4,2	5	1,43	PT 1/4"	9,5	222	23	3	72
YEX-120A	1/4" Hex	4 - 5	9.000	11 - 15	4,2	5	1,43	PT 1/4"	9,5	223	23	3	72
YEX-120SA	1/4" 6 Hex	4 - 5	7.000	11 - 15	4,2	5	1,38	PT 1/4"	9,5	279	23	3	72
YEX-150	3/8" Sq.	5 - 6	9.000	19 - 27	4,2	7,8	1,43	PT 1/4"	9,5	222	23	3	72
YEX-150A	1/4" Hex	5 - 6	9.000	14 - 22	4,2	7,8	1,43	PT 1/4"	9,5	223	23	3	72
YEX-150S	3/8" Sq.	5 - 6	8.000	19 - 27	4,2	7,8	1,35	PT 1/4"	9,5	275	23	3,3	73
YEX-150SA	1/4" Hex	5 - 6	8.000	14 - 22	4,2	7,8	1,35	PT 1/4"	9,5	276	23	3,3	73
YEX-300S	3/8" Sq.	6	8.000	25 - 33	5,0	9,1	1,8	PT 1/4"	9,5	312	27	5,3	71
YEX-300SA	1/4" Hex	6	8.000	21 - 29	5,0	9,1	1,8	PT 1/4"	9,5	313	27	5,3	71
YEX-501	3/8" Sq.	6 - 8	8.200	25 - 52	5,3	9,6	2,0	PT 1/4"	9,5	234	26,5	1,6	68
YEX-501A	1/4" Hex	6 - 8	8.200	23 - 49	5,3	9,6	2,0	PT 1/4"	9,5	227	26,5	1,6	68
YEX-500S	3/8" Sq.	6 - 8	7.800	23 - 49	5,0	9,1	2,1	PT 1/4"	9,5	333	27	6,6	71
YEX-500SA	1/4" Hex	6 - 8	7.800	21 - 47	5,0	9,1	2,1	PT 1/4"	9,5	224	27	6,6	71
YEX-700S	3/8" Sq.	8	7.500	33 - 61	5,8	11,2	2,3	PT 1/4"	9,5	333	27	6,6	72
YEX-701	3/8" Sq.	8 - 10	8.000	45 - 75	6,7	13,5	2,2	PT 1/4"	9,5	246	26,5	1,6	71
YEX-901	1/2" Sq.	10	6.100	61 - 104	6,7	12,5	2,7	PT 1/4"	9,5	257	33,5	2,3	73
YEX-1400	1/2" Sq.	10 - 12	5.900	92 - 142	8,3	16,5	3,5	PT 1/4"	9,5	266	34	3	80
YEX-1900	1/2" Sq.	12	5.800	115 - 183	8,3	15,8	4,1	PT 1/4"	9,5	277	39	3	80
YEX-3000	3/4" Sq.	16	4.000	186 - 284	10,0	20,5	6,4	PT 1/4"	12,7	309	40	4	82

Note: All YEX-types are pistol models, with exception of the S and SA types.

* Torque specifications

All specified torques are measured on the Yokota testers, series YET, at a dynamic airpressure of 0.63MPa. The Yokota testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.



For a system YEX, YED or TKa you need:
 1 x Controller YETC-210 GTB or YETC-210 EA
 1 x Impulse wrench YEX, YED or TKa
 1 x Solenoid valve and tool cable (7m) YETC-2 SVC

Sleeve drive sockets

3/4" Drive

SIZE						
6-Point normal						1

Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm
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Metrical

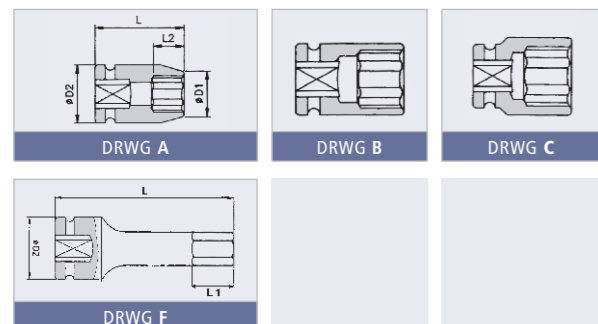
DO60940017	17	A	31	44	65	12
DO60940018	18	A	32	44	65	12
DO60940019	19	A	33	44	65	14
DO60940021	21	A	35	44	65	16
DO60940022	22	A	37	44	65	16
DO60940023	23	A	38	44	65	16
DO60940024	24	A	39	44	65	16
DO60940026	26	A	41	44	65	16
DO60940027	27	A	43	44	65	16
DO60940028	28	B	44	44	68	20
DO60940029	29	C	45	44	68	20
DO60940030	30	C	47	44	68	20
DO60940032	32	C	49	44	70	20
DO60940033	33	C	51	44	70	20
DO60940034	34	C	52	44	70	20
DO60940035	35	C	53	44	70	20
DO60940036	36	C	54	44	70	20
DO60940038	38	C	57	44	72	22
DO60940041	41	C	60	44	72	22
DO60940046	46	C	67	54	77	23
DO60940050	50	C	71	54	77	23

SIZE						
6-Point magnetic						2

Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm
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Metrical

DO6094A013	13	A	24,5	44	65	12
DO6094A014	14	A	25,5	44	65	12
DO6094A015	15	A	27	44	65	12
DO6094A016	16	A	28	44	65	12
DO6094A017	17	A	30	44	65	12
DO6094A018	18	A	31	44	65	12
DO6094A019	19	A	32	44	65	14
DO6094A020	20	A	34	44	68	14
DO6094A021	21	A	35	44	68	16
DO6094A022	22	A	37	44	68	16
DO6094A023	23	A	38	44	68	16
DO6094A024	24	A	39	44	68	16
DO6094A025	25	A	41	44	69	16
DO6094A026	26	A	42	44	69	16
DO6094A027	27	A	43	44	69	16



SIZE						
Hex Driver 6-Point (Inbus)						3

Type	A/F mm	DRWG	D2 mm	L mm	L2 mm
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Metrical

DO68945010	10	F	44	100	20	-
DO68945012	12	F	44	100	20	-
DO68945014	14	F	44	100	20	-
DO68945016	16	F	44	100	20	-
DO68945017	17	F	44	100	20	-
DO68945019	19	F	44	100	20	-
DO68945022	22	F	44	100	20	-
DO68945024	24	F	44	100	20	-
DO68945027	27	F	44	100	20	-
DO68945030	30	F	44	100	20	-
DO68945032	32	F	44	100	20	-
DO68945033	33	F	44	100	20	-
DO68945036	36	F	44	100	20	-
DO68945038	38	F	44	100	20	-

SIZE						
Torx® external						4

Type	A/F	DRWG	D1 mm	D2 mm	L mm	L2 mm
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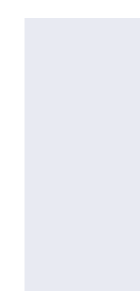
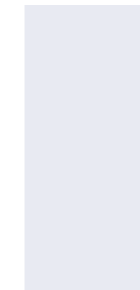
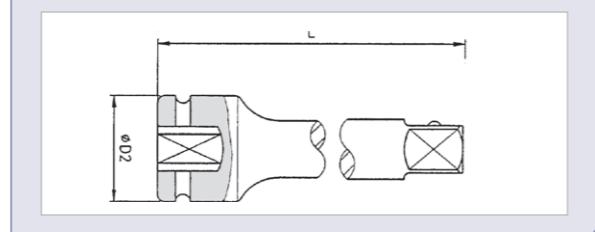
Metrical

DO66940018	E18	A	26	44	65	12,5
DO66940020	E20	A	28	44	65	14
DO66940022	E22	A	31	44	65	15
DO66940024	E24	A	33	44	65	16,5

Torx® ist eine Handelsmarke von Textron.

Extensions			
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Type	Square-drive	L mm	D2 mm
Metrical			
DO64614075	3/8"	75	22
DO64614125	3/8"	125	22
DO64614250	3/8"	250	22
DO64624075	1/2"	75	25
DO64624125	1/2"	125	25
DO64624175	1/2"	175	25
DO64624250	1/2"	250	25
DO64644175	3/4"	175	44
DO64644250	3/4"	250	44
DO64644330	3/4"	330	44



Sleeve drive sockets

Adaptors

SIZE						
Quickchange adaptors						1

Type	Drive-in	Drive-out	D2 mm	L mm	-	-
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Metrical

DO69151116	3/8"	1/2"	20	80	-	-
DO69152112	1/2"	3/8"	25	75	-	-
DO69154116	3/4"	1/2"	44	90	-	-
DO69151112	3/8"	3/8"	19	75	-	-
DO69151212	3/8"	3/8"	19	100	-	-
DO69152216	1/2"	1/2"	25	100	-	-
DO69154324	3/4"	3/4"	44	125	-	-

SIZE						
Quickchange adaptors						2

Type	Square-drive	Hex chuck	D2 mm	L mm	-	-
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Metrical

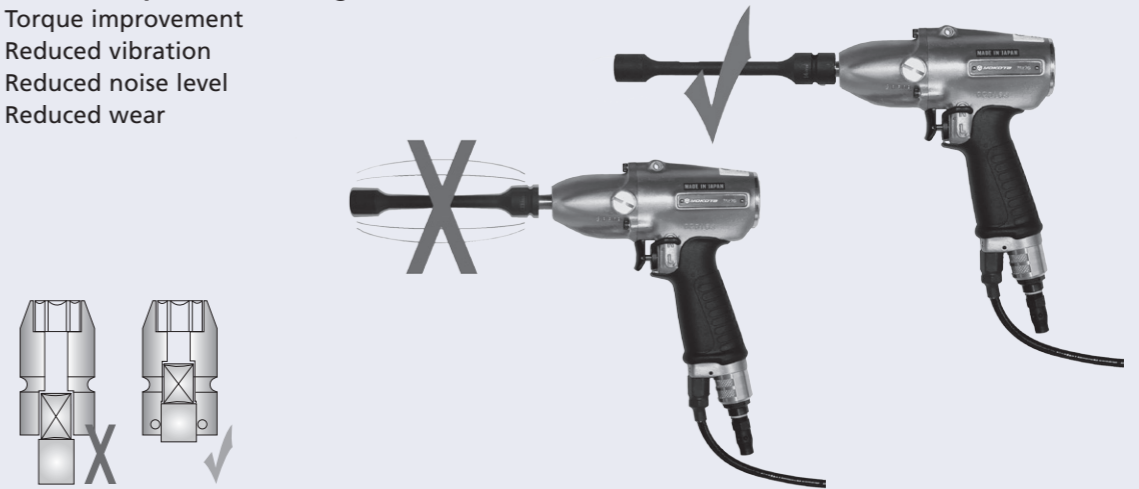
DO69111E08	3/8"	1/4"	52	22	-	-
DO69111E14	3/8"	7/16"	62	22	-	-
DO69112E08	1/2"	1/4"	60	25	-	-
DO69112E14	1/2"	7/16"	70	25	-	-
DO69114E14	3/4"	7/16"	80	44	-	-

Action sleeve drive power sockets guarantee reduced vibration!

Action sleeve drive power sockets are supported with an O-ring on the axle of the impulse wrench, giving a tighter fit on the tool.

Sleeve drive power sockets guarantee:

- Torque improvement
- Reduced vibration
- Reduced noise level
- Reduced wear



Impact sockets for screwdrivers

1/4" Drive

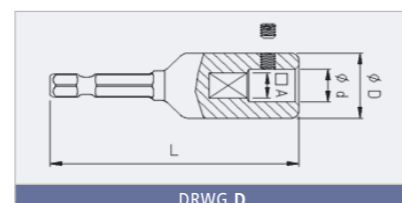
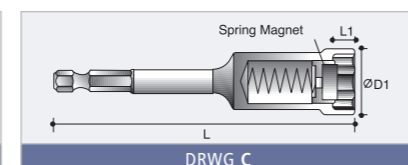
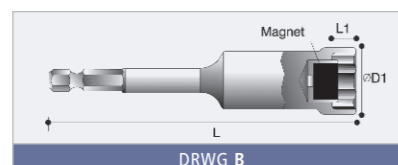
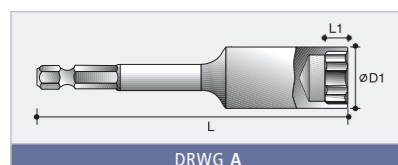
SIZE						
6-Kant						1
Type	A/F mm	DRWG	D1 mm	L mm	L1 mm	-
Metrical						
DO697B0S04	4	A	8	55	4,5	-
DO697B0S06	6	A	10	55	4,5	-
DO697B0T06	6	A	10	75	4,5	-
DO697B0T07	7	A	11	75	4,5	-
DO697B0T08	8	A	12	75	4,5	-
DO697B0T10	10	A	14	75	5,5	-
DO697B0T12	12	A	17	75	5,5	-
DO697B0T13	13	A	18	75	5,5	-
DO697B0T14	14	A	19	75	5,5	-

SIZE						
6-Point magnetic						2
Type	A/F mm	DRWG	D1 mm	L mm	L1 mm	-
Metrical						
DO697B0M06	6	B	10	55	4,5	-
DO697B0M08	8	B	12	55	4,5	-
DO697B0M10	10	B	14	55	5,5	-
DO697B0M12	12	B	17	55	5,5	-
DO697B0M13	13	B	18	55	5,5	-
DO697B0M14	14	B	19	55	5,5	-
DO697B0P06	6	B	10	100	4,5	-
DO697B0P08	8	B	12	100	4,5	-
DO697B0P10	10	B	14	100	5,5	-
DO697B0P12	12	B	17	100	5,5	-
DO697B0P13	13	B	18	100	5,5	-
DO697B0P14	14	B	19	100	5,5	-

SIZE						
6-Point deep magnetic						2
Type	A/F mm	DRWG	D1 mm	L mm	L1 mm	-
Metrical						
DO697B7006	6	C	10	100	4,5	-
DO697B7008	8	C	12	100	4,5	-
DO697B7010	10	C	14	100	5,5	-
DO697B7012	12	C	17	100	5,5	-
DO697B7013	13	C	18	100	5,5	-
DO697B7014	14	C	19	100	5,5	-
DO697B9006	6	C	10	200	4,5	-
DO697B9008	8	C	12	200	4,5	-
DO697B9010	10	C	14	200	5,5	-
DO697B9012	12	C	17	200	5,5	-
DO697B9013	13	C	18	200	5,5	-
DO697B7014	14	C	19	200	5,5	-

SIZE						
Tap holding sockets						3
Type	A mm	DRWG	Ø d mm	Ø D mm	L mm	-
Metrical						
DO63A65001	3,4	D	4,5	14	55	-
DO63A65002	4,9	D	6,0	15	55	-
DO63A65003	5,5	D	7,0	16	55	-
DO63A65004	6,2	D	8,0	17	60	-
DO63A65005	7,0	D	9,0	18	70	-
DO63A65006	8,0	D	10,0	19	70	-
DO63A65007	9,0	D	11,0	20	70	-
DO63A65008	9,0	D	12,0	21	70	-
DO63A65009	11,0	D	14,0	23	75	-

Application example



(Spring) balancers & Specials

(Spring) balancers

Standard model

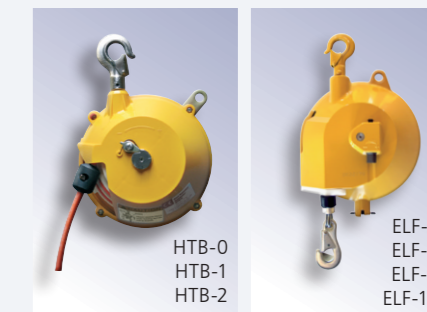
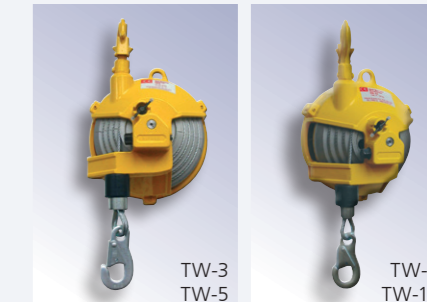
Type	Brand	Capacity kg	Cable length m	Gewicht kg	Hose-diameter mm	Air cons. l/min	Inlet-thread
RRI-9001/1	RRI	0,5 - 1,5	2,0	0,5	-	-	-
RRI-9003/1	RRI	1,0 - 3,0	2,0	0,7	-	-	-
RRI-9005/1	RRI	2,5 - 5,0	2,0	0,9	-	-	-
EK-00	RRI	0,5 - 1,5	0,5	0,2	-	-	-
EK-0	RRI	0,5 - 1,5	1,0	0,5	-	-	-
TW-3	RRI	1,0 - 3,0	1,3	1,4	-	-	-
TW-5	RRI	2,5 - 5,0	1,3	1,5	-	-	-
TW-9	RRI	4,5 - 9,0	1,3	3,4	-	-	-
TW-15	RRI	9 - 15	1,3	3,8	-	-	-

Hosereel with integrated cable

Type	Brand	Capacity kg	Cable length m	Weight kg	Hose diameter mm	Air cons. l/min	Inlet-thread
HTB-0	RRI	0,5 - 1,5	1,3	1,58	6,5	700	PT 1/4"
HTB-1	RRI	1,5 - 3,0	1,3	1,66	6,5	700	PT 1/4"
HTB-2	RRI	3,0 - 5,0	1,3	1,73	6,5	700	PT 1/4"

Long stroke

Type	Brand	Capacity kg	Cable length m	Weight kg	Hose diameter mm	Air cons. l/min	Inlet-thread
ELF-3	RRI	1,5 - 3,0	2,5	4,1	-	-	-
ELF-5	RRI	3 - 5,0	2,5	4,2	-	-	-
ELF-9	RRI	5 - 9	2,5	4,7	-	-	-
ELF-15	RRI	9 - 15	2,5	10,0	-	-	-



Action brochure

Impact sockets for optimal performance and security

Available in the following languages:
English, German, French

CONTENT:
Impact sockets and accessories, Normal/Long, Magnetic/Torx®, Hex Head/12-Point, Surface Drive/Thin wall, Universal joints, Sleeve drive, Impact Socket Sets, Torque/Adaptors, Extension Bars

