



HIGH SPEED PRODUCTION  
HIGH QUALITY TIGHTENING

[www.rami-yokota.com](http://www.rami-yokota.com)



Impulse wrenches

System wrenches

Poka Yoke+

(Non-) shut-off tools

Cordless impulse  
wrenches

Sleeve Drive sockets

Accessories



	PAGE
Guideline values	2
Joint Quality	3
How to use	4
What to choose	5
YLT serie: Shut off	6
YLa serie: Non shut off	7
Y serie: Non shut off	8
Double chamber air motor	
YX serie: Non shut off	9
Pistol models	
Angle models	
Straight models	
Battery impulse wrenches	11
Electronic controlled shut-off	
Non shut-off	
Poka Yoke+ system	12
YLa-JQ serie	13
Lightweight YLa-JQ series	
Y-JQ series	
Yokota Multi Fastening Controller	14
Yokota system wrenches	15
System wrenches TKa - YED series	16
System wrenches YEX series	17
Accessories	18
Sleeve Drive Sockets	20
Impact sockets for screwdrivers	26
(Spring) balancers & Specials	27

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

\* 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

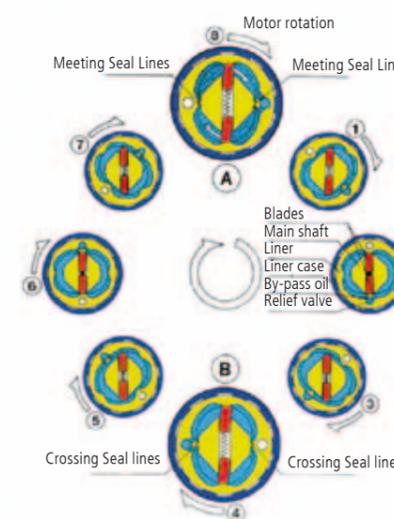
Yokota impulse wrenches are widely used for tightening jobs in the assembly industry, where accurate torque tolerances are necessary. Impulse tools are light, powerful, small and very importantly, have no kick-back. The Yokota range of impulse tools is increasing fast, starting at 6 Nm to tighten small 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.

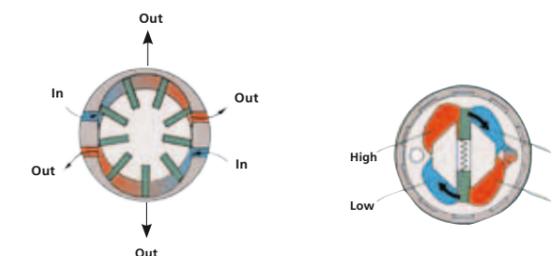


## Double chamber air motor

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

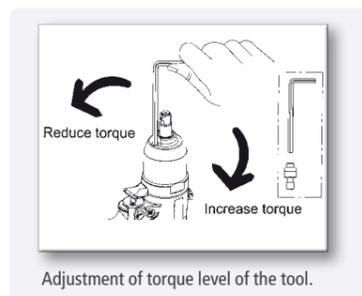
## Accessories:

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%

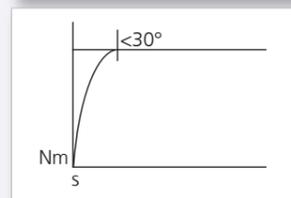
## For the best result of the impulse wrench, use:

- Constant stabilized air pressure
- Sleeve drive sockets, impact quality (see pages 20-24)
- Impact quality accessories with the correct dimensions
- Accessories in good condition
- Correct hose inner diameter and length
- Lubricated air

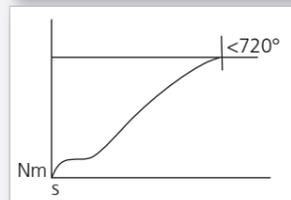
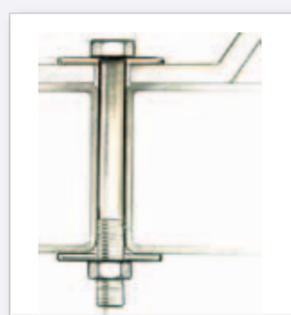
We advise to use the impulse wrench up to 80% of it's capacity for the highest productivity, accuracy and durability.



Adjustment of torque level of the tool.



Hard joint, typical example



Soft joint, typical example

# What to choose?

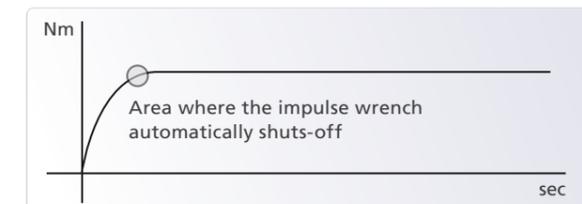
## Impulse wrenches without shut-off



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

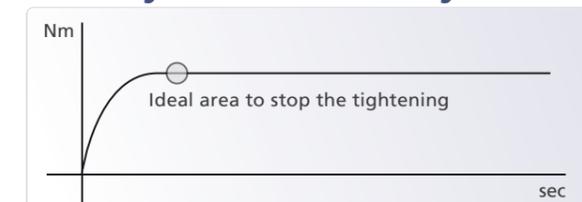
## Impulse Wrenches with mechanical shut-off



### Mechanical shut-off

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

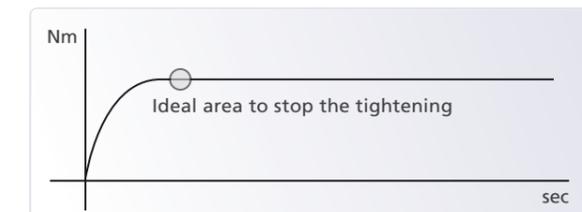
## Impulse Wrenches with system wrench system



### 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<sup>+</sup> 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.

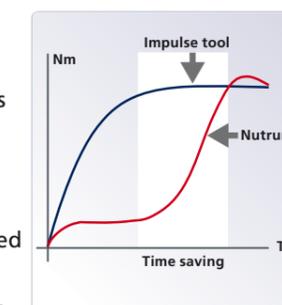
### The transducer for the YEX, YED and TKa

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	Air-cons. l/s	Inlet-thread	Weight kg	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s <sup>2</sup>	Noise level dB(A)
YLT50A	1/4" Hex	5	4.300	4,5 - 8	4,2	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	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	PT 1/4"	1,01	6,5	177	23	1,8	74
YLT50E	3/8" Square	5	4.300	4,5 - 8	4,2	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	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	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	PT 1/4"	1,12	10	187	24,5	1,9	78
YLT110E	1/2" Square	10-12	5.800	50 - 85	8,3	PT 1/4"	1,51	10	194	28,5	1,8	81
YLT120E	1/2" Square	12	5.400	70 - 115	8,6	PT 1/4"	1,79	10	201	31	2,2	83
YLT140E	1/2" Square	14	5.200	110 - 150	11,8	PT 1/4"	2,08	10	214	32,5	5,2	85
YLT150	3/4" Square	16	4.400	140 - 210	11,8	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	Air-cons. l/s	Inlet-thread	Weight kg	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s <sup>2</sup>	Noise level dB(A)
YLT60AL	1/4" Hex	6	4.500	5,0 - 11,5	5,5	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	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	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	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	PT 1/4"	1,12	10	187	24,5	1,9	78
YLT110EL	1/2" Square	10-12	5.600	45 - 75	8,3	PT 1/4"	1,51	10	194	28,5	1,8	81
YLT120EL	1/2" Square	12	5.200	60 - 100	8,6	PT 1/4"	1,79	10	201	31	2,2	83
YLT140EL	1/2" Square	14	4.900	80 - 125	11,8	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*	Air-cons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s <sup>2</sup>	Noise-level dB(A)
YLa60A	1/4" Hex	6	4.000	9 - 20	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	0,8	PT 1/4"	6,5	132	22	1,4	74
YLa80A	1/4" Hex	8	7.000	24 - 35	5,8	0,9	PT 1/4"	6,5	139	22	1,2	75
YLa60E	3/8" Sq.	6	4.000	13 - 22	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	0,8	PT 1/4"	6,5	132	22	1,4	74
YLa80E	3/8" Sq.	8	7.000	33 - 50	5,8	0,9	PT 1/4"	6,5	139	22	1,2	75
YLa90E	3/8" Sq.	8 - 10	6.500	47 - 70	6,7	1,0	PT 1/4"	10	148	24	1,2	78
YLa110E	1/2" Sq.	10 - 12	6.000	65 - 105	9,6	1,4	PT 1/4"	10	164	26	1,8	81
YLa120E	1/2" Sq.	12	6.600	80 - 130	10	1,8	PT 1/4"	10	172	28	2,2	82
YLa140E	1/2" Sq.	14	6.000	100 - 160	13	2,2	PT 1/4"	10	190	30	2,4	84

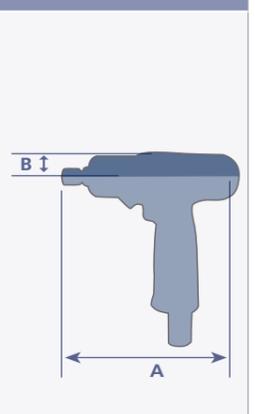
#### FEATURES

- **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

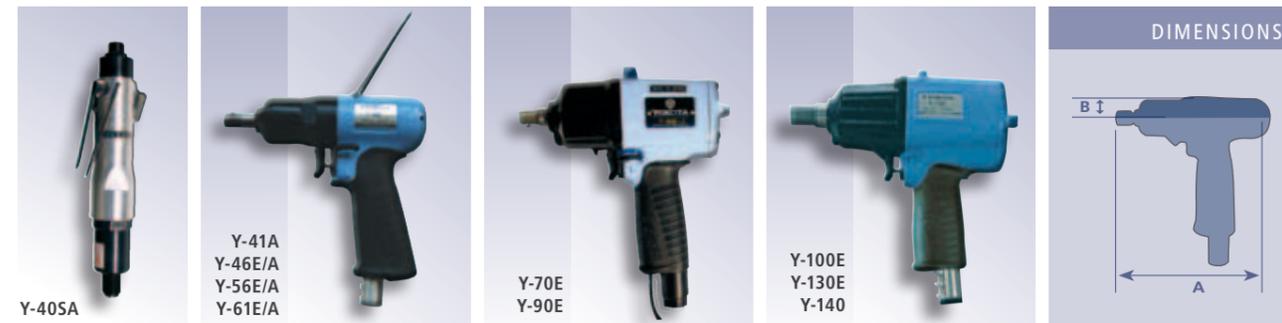


#### DIMENSIONS



# Y serie: Non shut off

## Double chamber air motor



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Air consumption l/sec	Weight kg	Inlet thread	Hose diameter mm	Dimensions		Vibration m/s <sup>2</sup>	Noise-level dB(A)
									A mm	B mm		
Y-40SA <sup>1)</sup>	1/4" Hex	4 - 6	10.000	6 - 12	5,0	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	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	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	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	0,87	PT 1/4"	10	144	21	1,0	80
Y-56A	1/4" Hex	6 - 8	7.000	22 - 33	6,6	0,87	PT 1/4"	10	144	21	1,0	80
Y-61E	3/8" Sq.	6 - 8	5.500	34 - 54	6,6	0,96	PT 1/4"	10	155	21	1,0	74
Y-61A	1/4" Hex	6 - 8	5.500	27 - 41	6,6	0,96	PT 1/4"	10	155	21	1,0	74
Y-70E	3/8" Sq.	8 - 10	5.500	44 - 72	7,5	1,40	PT 1/4"	10	170	25	2,0	75
Y-90E	1/2" Sq.	10 - 12	5.000	78 - 116	8,3	1,85	PT 1/4"	10	177	30	1,5	72
Y-100E	1/2" Sq.	12	5.000	100 - 145	11,8	2,00	PT 1/4"	13	188	32,5	2,1	80
Y-130E	1/2" Sq.	14	3.500	140 - 220	12,8	2,50	PT 1/4"	13	201	34	2,2	83
Y-140	3/4" Sq.	16	3.300	160 - 270	13,1	3,20	PT 1/4"	13	226	36	3,3	82

<sup>1)</sup> 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.

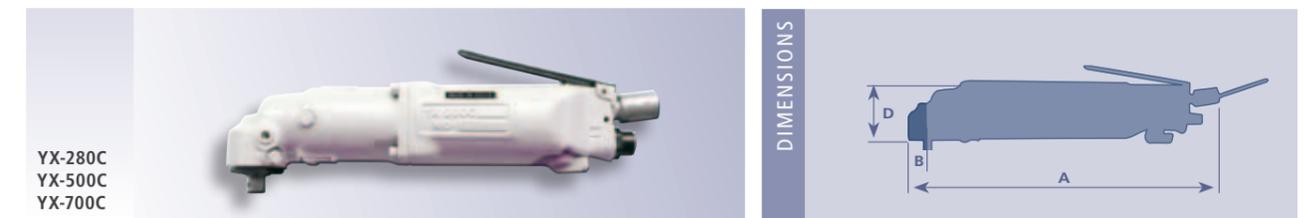
# YX serie: Non shut off

## Pistol models



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Air cons. l/sec	Weight kg	Inlet thread	Hose diameter mm	Dimensions			Vibration m/s <sup>2</sup>	Noise-level dB(A)
									A mm	B mm	D mm		
YX-180E	3/8" Sq.	4 - 6	10.500	19 - 31	4,2	1,00	PT 1/4"	6,5	169	23	3	72	
YX-180A	1/4" Hex	4 - 6	10.500	18 - 30	4,2	1,00	PT 1/4"	6,5	169	23	3	72	
YX-280E	3/8" Sq.	6 - 8	10.500	25 - 38	5,0	1,02	PT 1/4"	6,5	180	23	2	70	
YX-280A	1/4" Hex	6 - 8	10.500	20 - 34	5,0	1,02	PT 1/4"	6,5	180	20	2	70	
YX-380E	3/8" Sq.	8	10.000	34 - 47	5,0	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	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	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	1,60	PT 1/4"	10	185	26,5	2	68	
YX-900E	1/2" Sq.	10	6.500	70 - 111	6,7	2,00	PT 1/4"	10	201	30,5	2	72	
YX-1100E	1/2" Sq.	10 - 12	4.700	85 - 123	7,5	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	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	3,40	PT 1/4"	10	224	35,5	3	79	
YX-2400E	1/2" Sq.	14 - 16	4.200	175 - 279	9,2	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	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	9,80	PT 3/8"	13	300	65,0	3,9	87	

## Angle models



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Air cons. l/sec	Weight kg	Inlet thread	Hose diameter mm	Dimensions			Vibration m/s <sup>2</sup>	Noise-level dB(A)
									A mm	B mm	D mm		
YX-280C	3/8" 4K	4 - 6	10.000	15 - 24	5,0	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	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	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

# Battery impulse wrenches

## Straight models



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Air-cons. l/s	Weight kg	Inlet thread.	Hose diameter mm	Dimensions		Vibration m/s <sup>2</sup>	Noise-level dB(A)
									A mm	B mm		
YX-180SE	3/8" Sq.	4 - 6	10.500	19 - 31	4,2	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	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	1,02	PT 1/4"	6,5	232	23	4	73
YX-280SA	1/4" Hex	6	10.500	20 - 34	5,0	1,02	PT 1/4"	6,5	232	23	4	73
YX-380SE	3/8" Sq.	8	10.000	32 - 47	5,0	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	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	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	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.

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



Typ	Drive	Bolt capacity mm	RPM	Torque Nm*	Weight kg	Dimensions		Vibration m/s <sup>2</sup>	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**

YBX-600TE in use Tightening: OK

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 <sup>2</sup>	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.

Accessories for impulse wrenches on pages 18 & 19.

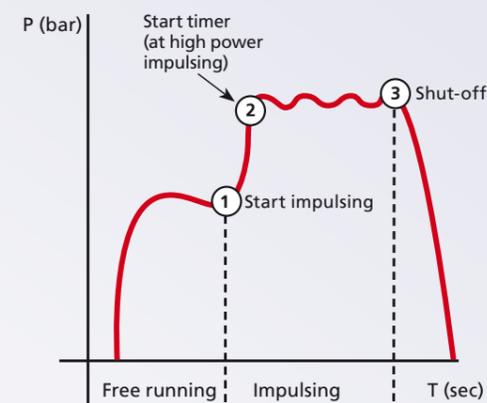


## Poka Yoke+: functioning principle

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*	Air-cons. l/sec	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s <sup>2</sup>	Noise-level dB(A)
YLa60A-JQ	1/4" Hex	6	4.000	11-20	5	0,78	PT 1/4"	6,5	130	22	1,4	71
YLa60E-JQ	3/8" Sq.	6	4.000	13 - 22	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	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	0,80	PT 1/4"	6,5	132	22	1,4	74
YLa80A-JQ	1/4" Hex	8	7.000	24 - 35	5,8	0,90	PT 1/4"	6,5	139	22	1,2	75
YLa80E-JQ	3/8" Sq.	8	7.000	33 - 50	5,8	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	1,00	PT 1/4"	10	148	24	1,2	78
YLa110E-JQ	1/2" Sq.	10 - 12	6.000	65 - 105	9,6	1,40	PT 1/4"	10	164	26	1,8	81
YLa120E-JQ	1/2" Sq.	12	6.600	80 - 130	10	1,80	PT 1/4"	10	172	28	2,2	82
YLa140E-JQ	1/2" Sq.	14	6.000	100 - 160	13	2,20	PT 1/4"	10	190	30	2,4	84

## Y-JQ series

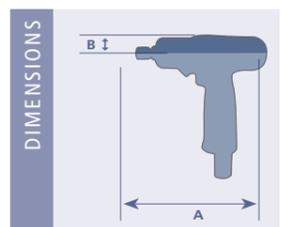
Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Air-cons. l/sec	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s <sup>2</sup>	Noise-level dB(A)
Y-41A-JQ	1/4" Hex	4 - 6	9.300	6 - 12	5,0	0,73	PT 1/4"	6,5	141	17	2,1	72
Y-46E-JQ	3/8" Sq.	5 - 6	8.000	16 - 30	5,8	0,87	PT 1/4"	6,5	158	18	1,0	80
Y-56E-JQ	3/8" Sq.	6 - 8	7.000	25 - 47	6,6	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	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	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	1,85	PT 1/4"	10	177	30	1,5	72
Y-100E-JQ	1/2" Sq.	12	5.000	100 - 145	11,8	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	2,50	PT 1/4"	13	201	34	2,2	83
Y-140-JQ	3/4" Sq.	16	3.300	160 - 270	13,1	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-210/300 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-210EA4C



- 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-300R2L



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

## YETC-300EA

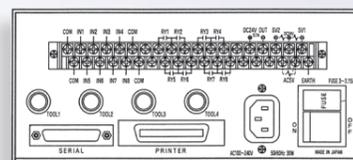


- Torque control
- Two channel controller, two tools can be operated simultaneous
- Optional:**
- LAN version (two I/P addresses)

## 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

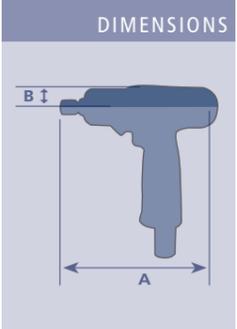
## Back panel



- 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 A mm	Dimensions B mm	Air cons. l/sec
TKa600A	1/4" Hex	6	11 - 16	6.000	1,34	189	21,0	4,5
TKa600	3/8"	6	14 - 20	6.000	1,34	189	21,0	4,5
TKa700A	1/4" Hex	6-8	24 - 33	7.000	1,34	189	21,0	5,3
TKa700	3/8"	6-8	24 - 33	7.000	1,34	189	21,0	5,3
TKa800	3/8"	8	32 - 46	7.000	1,34	196	22,0	5,3
TKa900	3/8"	8-10	47 - 60	6.500	1,50	204	23,0	6,8
TKa1110	1/2"	10-12	65 - 95	5.500	1,97	220	25,5	8,8
TKa1400	1/2"	14	100 - 160	5.200	3,00	246	29,0	13



## 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

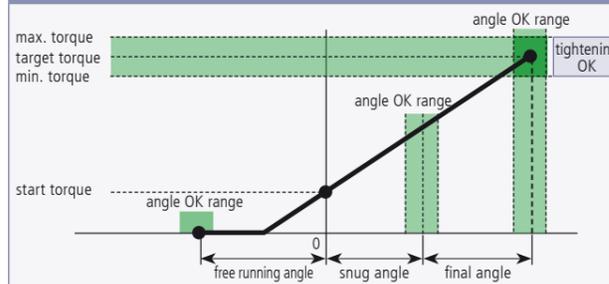
## Features

- 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

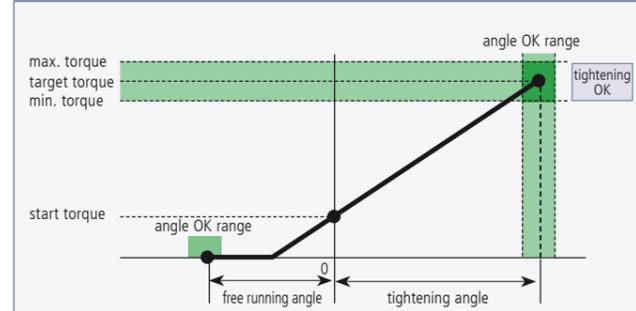
Analysing software



## YETC-300R2L 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**	Air cons. l/sec	Weight kg	Inlet thread	Hose diameter mm	Dimensions		Vibration m/s <sup>2</sup>	Noise-level dB(A)
									A mm	B mm		
TKa60A	1/4" Hex	6	6.000	11 - 16	4,5	1,3	PT 1/4"	6,5	179	22	2,1	71
TKa70A	1/4" Hex	6 - 8	7.000	20 - 27	5,3	1,3	PT 1/4"	6,5	179	22	2,1	75
TKa80A	1/4" Hex	8	7.000	24 - 33	5,3	1,3	PT 1/4"	6,5	186	22	2,1	73
TKa60	3/8" Sq.	6	6.000	14 - 20	4,5	1,3	PT 1/4"	6,5	179	22	2,1	71
TKa70	3/8" Sq.	6 - 8	7.000	20 - 35	5,3	1,3	PT 1/4"	6,5	179	22	2,1	75
TKa80	3/8" Sq.	8	7.000	32 - 46	5,3	1,3	PT 1/4"	6,5	186	22	2,1	73
TKa90	3/8" Sq.	8 - 10	6.500	47 - 70	6,8	1,5	PT 1/4"	9,5	195	24	2,1	78
TKa110	1/2" Sq.	10 - 12	6.000	65 - 105	8,8	1,9	PT 1/4"	9,5	210	26	2,2	80
TKa120	1/2" Sq.	12	5.900	85 - 130	10	2,4	PT 1/4"	9,5	223	28	2,2	82
TKa140	1/2" Sq.	14	5.200	100 - 160	13	2,9	PT 1/4"	9,5	235	30	2,2	84
TKa150	1/2" Sq.	14 - 16	4.200	150 - 220	13,2	3,4	PT 1/4"	9,5	242	32	2,4	84
YED-200	3/4" Sq.	20	3.400	155 - 360	18,3	6,8	PT 1/2"	12,7	309	40	4,2	86
YED-240S*	1" Sq.	24	3.000	250 - 600	28,3	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

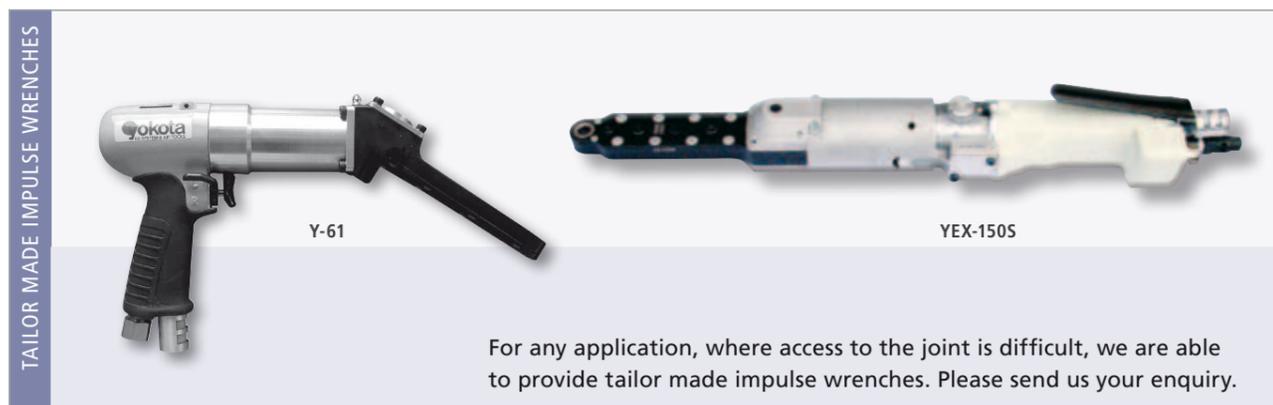


Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Air cons. l/sec	Weight kg	Inlet thread	Hose diameter mm	Dimensions		Vibration m/s <sup>2</sup>	Noise-level dB(A)
									A mm	B mm		
YEX-100SA	3/8" Hex	5	8.000	4.3 - 12	3,6	1,2	PT 1/4"	9,5	285	23	3	77
YEX-120	3/8" Sq.	4 - 5	9.000	13 - 17	4,2	1,43	PT 1/4"	9,5	222	23	3	72
YEX-120A	1/4" Hex	4 - 5	9.000	11 - 15	4,2	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	1,38	PT 1/4"	9,5	279	23	3	72
YEX-150	3/8" Sq.	5 - 6	9.000	19 - 27	4,2	1,43	PT 1/4"	9,5	222	23	3	72
YEX-150A	1/4" Hex	5 - 6	9.000	14 - 22	4,2	1,43	PT 1/4"	9,5	223	23	3	72
YEX-150S	3/8" Sq.	5 - 6	8.000	19 - 27	4,2	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	1,35	PT 1/4"	9,5	276	23	3,3	73
YEX-300S	3/8" Sq.	6	8.000	25 - 33	5,0	1,8	PT 1/4"	9,5	312	27	5,3	71
YEX-300SA	1/4" Hex	6	8.000	21 - 29	5,0	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	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	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	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	2,1	PT 1/4"	9,5	224	27	6,6	71
YEX-700S	3/8" Sq.	8	7.500	33 - 61	5,8	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	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	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	3,5	PT 1/4"	9,5	266	34	3	80
YEX-1900	1/2" Sq.	12	5.800	115 - 183	8,3	4,1	PT 1/4"	9,5	277	39	3	80
YEX-3000	3/4" Sq.	16	4.000	186 - 284	10,0	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

## Battery and charger for battery impulse wrenches



### Battery for YBX 600T/800T

For type	Ordernumber	Description
YBX-600T	0351-1521-03-99	22,2 V / 1,5 Ah Li-ion, Type BL 22 charging time: 20 minutes
YBX-600TA		
YBX-800T		
YBX-800TA		
-	0351-0029-00-01	Rubber protection cover for battery

### Charger for YBX-600T/800T

For type	Ordernumber	Description
YBX-600T	7679-0000-01-00	100 - 240 V, Type BC200
YBX-600TA		Charging time: 20 minutes
YBX-800T		
YBX-800TA		



### Battery for YBX-50

For type	Ordernumber	Description
YBX-1	8530-3001-00-01	9,6 V / 2,0 Ah, Type EB-9B, Ni-Cd
YBX-50		

### Charger for YBX-50

For type	Ordernumber	Description
YBX-1	8530-4006-00-00	230 Volt, Type UC24YFA
YBX-50		Universal charger

## Toolcable for system wrenches

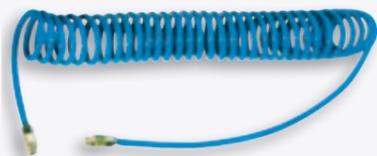
### For the YETC-210 EA, YETC-210 EA4C, YETC-300 EA

Toolcable	Ordernumber
7 meter	7642-1371-00-00
10 meter	7642-1400-00-00
12 meter	7642-1600-00-00
15 meter	7642-1908-01-19
Connection cable, 50 cm	7642-0908-01-38

### For the YETC-210ER, YETC-300R2-L

Toolcable	Ordernumber
10 meter (included with YETC-210ER)	7681-0908 00 03
10 meter extension cable	7681-0908 00 06

## Double spiral hose 1 for air and 1 for tool cable



For type	Ordernumber
For all system wrenches	-MISCO10606

## Valves for system wrenches

### For all controller (2 Step valve set)

3/8"	YETC-2 SVD 3/8	-	-
1/2"	YETC-2SVD 1/2	-	-

## Joint Assy for YTC-3 controller



For type	Ordernumber
Joint Assy for 3/8 tools	7671-0077-00-97
Joint assy for 1/4 large tools	7671-0077-00-98
Joint assy for 1/4 standard tools	7671-0077-00-99

## Tool holder



For type	Ordernumber
YX-180 • YX-500 • YXS-500 • Y-40 • Y-61 • Y-T45 Y-T55 • YEF-45 • YEF-55 • YEX-120 YEX-150 • YED-60	SKK
YX-500S • YX-1400 • YXS-700 • YXS-1100 • Y-70 Y-90 • Y-130 • Y-T70 • Y-T90 • YEF-70 • YEF-90 YEX-300 • YEX-1400 • YBX-50	SK / SKN

## Rubber protection cover for impulse- & system wrenches

For type	Ordernumber								
TKa60	0186-0029-00-00	Y-41	0161-0029-00-00	YBX-600T	0351-0029-00-00	YLa70	0189-0029-00-00	YX-180	0089-0029-00-00
TKa70	0186-0029-00-00	Y-46	0160-0029-00-00	YBX-800T	0352-0029-00-00	YLa80	0191-0029-00-00	YX-280	0081-0029-00-00
TKa80	0193-0029-00-00	Y-56	0159-0029-00-00			YLa90	0188-0029-00-00	YX-380	0086-0029-00-00
TKa90	0181-0029-00-00	Y-61	0158-0029-00-00	YED-200	0409-0029-00-00	YLa110	0190-0029-00-00	YX-500	0077-0029-00-01
TKa110	0187-0029-00-00	Y-70	0135-0029-00-00	YEX-120	0093-0029-00-00	YLa120	0345-0029-00-00	YX-700	0129-0029-00-01
TKa120	0342-0029-00-00	Y-90	0141-0029-00-00	YEX-150	0093-0029-00-00	YLa140	0346-0029-00-00	YX-900	0237-0029-00-01
TKa140	0341-0029-00-00	Y-100	0334-0029-00-00	YEX-501	0260-0029-00-00			YX-1100	0241-0029-00-00
TKa150	0343-0029-00-00	Y-130	0335-0029-00-00	YEX-701	0143-0029-00-00	YLT60	0371-0029-00-00	YX-1400	0322-0029-00-00
TKa600	0189-0029-00-00	Y-140	0412-0029-00-00	YEX-901	0261-0029-00-00	YLT70	0372-0029-00-00	YX-1900	0320-0029-00-01
TKa700	0191-0029-00-00	Y-T40	0169-0029-00-00	YEX-1400	0323-0029-00-00	YLT80	0373-0029-00-00	YX-2400	0406-0029-00-01
TKa900	0355-0029-00-00	Y-T45	0164-0029-00-00	YEX-1900	0321-0029-00-00	YLT110	0379-0029-00-00	YX-3000	0405-0029-00-00
TKa1100	0190-0029-00-00	Y-T55	0164-0029-00-00	YEX-3000	0407-0029-00-00	YLT120	0380-0029-00-00		
TKa1400	0357-0029-00-00	Y-T70	0166-0029-00-00			YLT140	0381-0029-00-00		
		Y-T90	0167-0029-00-00						



## Service sets

**Service sets containing:**  
O-rings, back-up rings and springs for impulse mechanisms required for oil change.

### Service sets

You will need these service sets with spare parts if you are going to change the oil. For quick service we advise you to use a vacuum pump (Y EVP-1\*) and oil tank (Y EVP-1T\*)

### Please note!

Always use oil with the right specifications when changing oil. Only then you will have a optimal tool power and a minimum oil consumption. We recommend NOBP oil for the impulse unit.

For type	Ordernumber
TKa-60	0186-0991-00-99
TKa-600	0186-0991-00-99
TKa-70	0186-0991-00-99
TKa-700	0186-0991-00-99
TKa-80	0193-0991-00-99
TKa-800	0193-0991-00-99
TKa-90	0181-0991-00-99
TKa-900	0181-0991-00-99
TKa-110	0187-0991-00-99
TKa-1100	0187-0991-00-99
TKa-120	0342-0991-00-99
TKa-140	0341-0991-00-99
TKa-1400	0341-0991-00-99
TKa-150	0304-0991-00-99
YBX-1	0259-0991-01-99
YBX-50	0259-0991-01-99
YBX-600T	0189-0991-00-99
YBX-800T	0191-0991-00-99
YED-200	0409-0991-00-99
YED-240S	0411-0991-01-99
YEX-120	0089-0991-01-99
YEX-150	0089-0991-01-99
YEX-300S	0086-0991-01-99
YEX-500S	0077-0991-02-99

For type	Ordernumber
Y-41	0095-0991-00-99
Y-46	0273-0991-01-99
Y-56	0259-0991-01-99
Y-61	0259-0991-01-99
Y-70	0135-0991-03-99
Y-90	0141-0991-00-99
Y-100	0334-0991-01-99
Y-130	0335-0991-00-99
Y-140	0412-0991-02-09

For type	Ordernumber
YEX-701	0143-0991-00-99
YEX-901	0237-0991-01-99
YEX-1400	0323-0991-00-99
YEX-1900	0320-0991-00-99
YEX-3000	0405-0991-00-99
YLT60	0371-0991-00-99
YLT70	0372-0991-00-99
YLT80	0373-0991-00-99
YLT110	0379-0991-00-99
YLT120	0380-0991-00-99
YLT140	0381-0991-00-99

YLa70	0189-0991-00-99
YLa80	0191-0991-00-99
YLa90	0188-0991-00-99
YLa110	0190-0991-00-99
YLa120	0345-0991-00-99
YLa140	0346-0991-00-99

YLT60	0371-0991-00-99
YLT70	0372-0991-00-99
YLT80	0373-0991-00-99
YLT110	0379-0991-00-99
YLT120	0380-0991-00-99
YLT140	0381-0991-00-99

YX-80	0095-0991-00-99
YX-180	0089-0991-01-99
YX-280	0089-0991-01-99
YX-380	0086-0991-01-99
YX-500S (C)	0086-0991-01-99
YX-500	0077-0991-02-99
YX-700 (S)	0129-0991-00-99
YX-700C	0281-0991-01-99
YX-900	0237-0991-01-99
YX-1100	0237-0991-01-99
YX-1400	0322-0991-00-99
YX-1900	0320-0991-00-99
YX-2400	0320-0991-00-99
YX-3000	0405-0991-00-99
YX-4500	0722-0991-00-99

YXS-500	0245-0991-00-99
YXS-700	0246-0991-00-99
YXS-900	0243-0991-01-99
YXS-1100	0243-0991-01-99
YXS-1900	0248-0991-00-99

## Yokota torque measuring equipment

Yokota torque measuring equipment (YET-series) is especially designed to check and test the functioning and performance of impulse wrenches. All specified torque figures in this brochure are measured on a Yokota torque tester (YET series), with 0,63 MPa air pressure (dynamic). This is a static torque tester. Torque values may differ with other measuring equipment and/or joints (hard/soft).



For type	Range
YET-501C	5 - 50 Nm
YET-2001C	20 - 200 Nm
YET-5001C	100 - 500 Nm



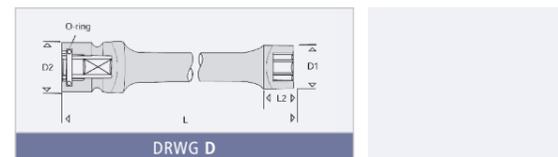
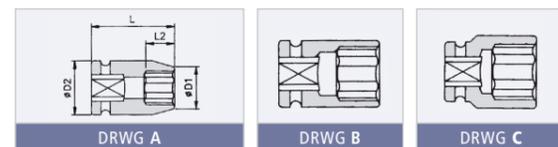
**Service sets containing:** O-rings, back up rings and springs for impulse mechanisms for oilchange.

# Sleeve drive sockets

## 3/8" Drive

SIZE							1
6-Point normal							
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm	
<b>Metrical</b>							
DO60910006	6	A	11	19	43	5	
DO60910007	7	A	12	19	43	5	
DO60910008	8	A	13	19	43	7	
DO60910009	9	A	15	19	43	7	
DO60910010	10	A	16	19	43	8	
DO60910011	11	A	17,5	19	43	9	
DO60910012	12	B	19	19	43	9	
DO60910013	13	A	20	22	43	9	
DO60910014	14	A	21	22	43	9	
DO60910015	15	B	22	22	43	11	
DO60910016	16	C	24	22	43	11	
DO60910017	17	C	25	22	43	11	
DO60910018	18	C	26	22	43	11	
DO60910019	19	C	27,5	22	43	11	
DO60910021	21	C	30	22	43	13	

SIZE							1
6-Point normal magnetic							
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm	
<b>Metrical</b>							
DO6091A006	6	A	11	19	43	5	
DO6091A007	7	A	12	19	43	5	
DO6091A008	8	A	13	19	43	7	
DO6091A009	9	A	15	19	43	7	
DO6091A010	10	A	16	19	43	8	
DO6091A011	11	A	17,5	19	43	9	
DO6091A012	12	B	18,5	19	43	9	
DO6091A013	13	A	20	22	43	9	
DO6091A014	14	A	21	22	43	9	
DO6091A015	15	B	22	22	43	11	
DO6091A016	16	C	24	22	43	11	
DO6091A017	17	C	25	22	43	11	
DO6091A018	18	C	26	22	43	11	
DO6091A019	19	C	27	22	43	11	
DO6091A020	20	C	28	22	43	13	
DO6091A021	21	C	30	22	43	13	
DO6091A022	22	C	31	22	50	13	
DO6091A023	23	C	32	22	50	13	
DO6091A024	24	C	34	22	50	13	
DO6091A025	25	C	35	22	50	13	
DO6091A026	26	C	36	22	50	13	
DO6091A027	27	C	38	22	50	13	



SIZE							2
6-Point long							
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm	
<b>Metrical</b>							
DO60913006	6	D	10,5	22	100	4	
DO60913008	8	D	12,5	22	100	8	
DO60913010	10	D	15	22	100	8	
DO60913012	12	D	18	22	100	9	
DO60913013	13	D	19	22	100	9	
DO60913014	14	D	20	22	100	9	
DO60913015	15	D	21	22	100	11	
DO60913016	16	D	22,5	22	100	11	
DO60913017	17	D	24	22	100	11	
DO60914006	6	D	10,5	22	150	4	
DO60914008	8	D	12,5	22	150	8	
DO60914010	10	D	15	22	150	8	
DO60914012	12	D	18	22	150	9	
DO60914013	13	D	19	22	150	9	
DO60914014	14	D	20	22	150	9	
DO60914015	15	D	21	22	150	11	
DO60914016	16	D	22,5	22	150	11	
DO60914017	17	D	24	22	150	11	
DO60915006	6	D	10,5	22	200	4	
DO60915008	8	D	12,5	22	200	8	
DO60915010	10	D	15	22	200	8	
DO60915012	12	D	18	22	200	9	
DO60915013	13	D	19	22	200	9	
DO60915014	14	D	20	22	200	9	
DO60915015	15	D	21	22	200	11	
DO60915016	16	D	22,5	22	200	11	
DO60915017	17	D	24	22	200	11	

SIZE							3
6-Point long magnetic							
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm	
<b>Metrical</b>							
DO6091P006	6	D	11	19	100	3	
DO6091P007	7	D	12	19	100	3	
DO6091P008	8	D	13	19	100	4	
DO6091P009	9	D	15	19	100	4	
DO6091P010	10	D	16	19	100	4	
DO6091P011	11	D	17,5	19	100	5	
DO6091P012	12	D	18,5	19	100	5	
DO6091P013	13	D	20	22	100	6	
DO6091P014	14	D	21	22	100	6	
DO6091P015	15	D	22	22	100	7	
DO6091P016	16	D	24	22	100	7	
DO6091P017	17	D	25	22	100	7	
DO6091R006	6	D	11	19	150	3	
DO6091R007	7	D	12	19	150	3	
DO6091R008	8	D	13	19	150	4	
DO6091R009	9	D	15	19	150	4	
DO6091R010	10	D	16	19	150	4	
DO6091R011	11	D	17,5	19	150	5	
DO6091R012	12	D	18,5	19	150	5	
DO6091R013	13	D	20	22	150	6	
DO6091R014	14	D	21	22	150	6	



# Sleeve drive sockets

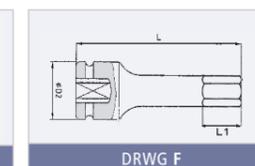
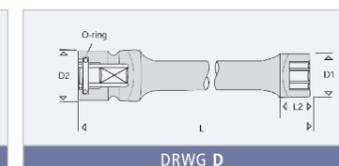
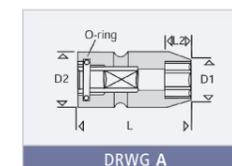
## 3/8" Drive

SIZE							1
6-Point long magnetic (continued)							
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm	
<b>Metrical</b>							
DO6091R015	15	D	22	22	150	7	
DO6091R016	16	D	24	22	150	7	
DO6091R017	17	D	25	22	150	7	
DO6091T007	7	D	12	19	200	3	
DO6091T008	8	D	13	19	200	4	
DO6091T009	9	D	15	19	200	4	
DO6091T010	10	D	16	19	200	4	
DO6091T011	11	D	17,5	19	200	5	
DO6091T012	12	D	18,5	19	200	5	
DO6091T013	13	D	20	22	200	6	
DO6091T014	14	D	21	22	200	6	
DO6091T015	15	D	22	22	200	7	
DO6091T016	16	D	24	22	200	7	
DO6091T017	17	D	25	22	200	7	

SIZE							2
6-Point deep magnetic							
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm	
<b>Metrical</b>							
DO6091Q010	10	A	16,0	19	100	5	
DO6091Q012	12	A	18,5	19	100	6	
DO6091Q013	13	A	20,0	22	100	6	
DO6091Q014	14	A	21,0	22	100	6	
DO6091Q016	16	A	24,0	22	100	7	

SIZE							3
Torx® intern							
Type	A/F	DRWG	L1 mm	D2 mm	L mm	-	
DO68811009	T9	F	2,0	22	75	-	
DO68811010	T10	F	2,8	22	75	-	
DO68811015	T15	F	2,8	22	75	-	
DO68811020	T20	F	2,8	22	75	-	
DO68811025	T25	F	3,0	22	75	-	
DO68811027	T27	F	3,0	22	75	-	
DO68811030	T30	F	3,8	22	75	-	
DO68811040	T40	F	3,8	22	75	-	
DO68811045	T45	F	4,3	22	75	-	
DO68811047	T47	F	5,0	22	75	-	
DO68811050	T50	F	5,0	22	75	-	
DO68811055	T55	F	5,0	22	75	-	

Torx® is a trademark of Textron.



SIZE							4
Torx® extern							
Type	A/F	DRWG	D1 mm	D2 mm	L mm	L2 mm	
DO66910005	E5	A	8	19	43	4,5	
DO66910006	E6	A	9	19	43	5	
DO66910007	E7	A	9,5	19	43	6	
DO66910008	E8	A	11	19	43	6,5	
DO66910010	E10	A	13	19	43	7,5	
DO66910011	E11	A	14	19	43	8	
DO66910012	E12	A	15,5	19	43	8,5	
DO66910014	E14	A	17,5	22	43	10	
DO66910016	E16	A	18,5	22	43	11	

Torx® is a trademark of Textron.

SIZE							5
Hex Driver (Inbus)							
Type	A/F mm	DRWG	L1 mm	D2 mm	L mm	-	
<b>Metrical</b>							
DO68916003	3	F	11	22	75	-	
DO68916004	4	F	11	22	75	-	
DO68916005	5	F	11	22	75	-	
DO68916006	6	F	11	22	75	-	
DO68916007	7	F	16	22	75	-	
DO68916008	8	F	16	22	75	-	
DO68916009	9	F	16	22	75	-	
DO68916010	10	F	16	22	75	-	
DO68916011	11	F	16	22	75	-	
DO68916012	12	F	16	22	75	-	
DO68916013	13	F	16	22	75	-	
DO68916014	14	F	16	22	75	-	
DO68916015	15	F	16	22	75	-	
DO68916016	16	F	16	22	75	-	

### Stud Bolt Setters

Type	Size	D1 mm	D2 mm	L mm
DO66A10062	M6 x 1	12,5	22	50
DO66A10083	M8 x 1,25	15	22	50
DO66A10104	M10 x 1,5	17	22	50

# Sleeve drive sockets

## 1/2" Drive

SIZE						
6-Point normal						1
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm
<b>Metrical</b>						
DO60920012	12	A	20	25	52	12
DO60920013	13	A	21	25	52	12
DO60920014	14	A	22,5	25	52	12
DO60920015	15	A	23,7	30	52	12
DO60920016	16	A	25	30	52	12
DO60920017	17	A	26	30	52	12
DO60920018	18	A	27,5	30	52	12
DO60920019	19	A	28,7	30	52	12
DO60920021	21	B	30	30	52	12
DO60920022	22	C	32	30	52	12
DO60920023	23	C	32	30	52	12
DO60920024	24	C	35	30	52	12
DO60920025	25	C	36	30	57	12
DO60920027	27	C	39	30	57	12
DO60920030	30	C	42	30	62	12
DO60920032	32	C	44	30	62	12

SIZE						
6-Point long						2
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm
<b>Metrical</b>						
DO60923010	10	D	17	25	100	12
DO60923012	12	D	19,5	25	100	12
DO60923013	13	D	20,5	25	100	12
DO60923014	14	D	21,5	25	100	12
DO60923015	15	D	22,5	25	100	12
DO60923017	17	D	25	25	100	13
DO60923019	19	D	28	25	100	13
DO60924010	10	D	17	25	150	12
DO60924012	12	D	19,5	25	150	12
DO60924013	13	D	20,5	25	150	12
DO60924014	14	D	21,5	25	150	12
DO60924015	15	D	22,5	25	150	12
DO60924017	17	D	25	25	150	13
DO60924019	19	D	28	25	150	13
DO60925010	10	D	17	25	200	12
DO60925012	12	D	19,5	25	200	12
DO60925013	13	D	20,5	25	200	12
DO60925014	14	D	21,5	25	200	12
DO60925015	15	D	22,5	25	200	12
DO60925017	17	D	25	25	200	13
DO60925019	19	D	28	25	200	13

SIZE							
6-Point long magnetic							3
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm	
<b>Metrical</b>							
DO6092P010	10	D	17,5	25	100	4	
DO6092P011	11	D	18,5	25	100	5	
DO6092P012	12	D	20	25	100	5	
DO6092P013	13	D	21	25	100	6	
DO6092P014	14	D	22,5	25	100	6	
DO6092P015	15	D	23,5	30	100	7	
DO6092P016	16	D	25	30	100	7	
DO6092P017	17	D	26	30	100	7	
DO6092P018	18	D	27,5	30	100	8	
DO6092P019	19	D	28,5	30	100	8	
DO6092R010	10	D	17,5	25	150	12	
DO6092R011	11	D	18,5	25	150	12	
DO6092R012	12	D	20	25	150	12	
DO6092R013	13	D	21	25	150	12	
DO6092R014	14	D	22,5	25	150	12	
DO6092R015	15	D	23,5	30	150	12	
DO6092R016	16	D	25	30	150	13	
DO6092R017	17	D	26	30	150	13	
DO6092R018	18	D	27,5	30	150	13	
DO6092R019	19	D	28,5	30	150	13	
DO6092T010	10	D	17,5	25	200	12	
DO6092T011	11	D	18,5	25	200	12	
DO6092T012	12	D	20	25	200	12	
DO6092T013	13	D	21	25	200	12	
DO6092T014	14	D	22,5	25	200	12	
DO6092T015	15	D	23,5	30	200	12	
DO6092T016	16	D	25	30	200	13	
DO6092T017	17	D	26	30	200	13	
DO6092T018	18	D	27,5	30	200	13	
DO6092T019	19	D	28,5	30	200	13	



# Sleeve drive sockets

## 1/2" Drive

SIZE						
6-Point normal magnetic						1
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L2 mm
<b>Metrical</b>						
DO6092A006	6	A	13	25	52	5
DO6092A007	7	A	14	25	52	5
DO6092A008	8	A	15	25	52	7
DO6092A009	9	A	16	25	52	7
DO6092A010	10	A	17,5	25	52	8
DO6092A011	11	A	18,5	25	52	9
DO6092A012	12	A	20	25	52	12
DO6092A013	13	A	21	25	52	12
DO6092A014	14	A	22,5	25	52	12
DO6092A015	15	A	23,5	30	52	12
DO6092A016	16	A	25	30	52	12
DO6092A017	17	A	26	30	52	12
DO6092A018	18	A	27,5	30	52	12
DO6092A019	19	A	28,5	30	52	12
DO6092A020	20	B	30	30	52	12
DO6092A021	21	C	31	30	52	12
DO6092A022	22	C	32	30	52	12
DO6092A023	23	C	34	30	52	12
DO6092A024	24	C	35	30	52	12
DO6092A025	25	C	36	30	57	12
DO6092A026	26	C	38	30	57	12
DO6092A027	27	C	38,5	30	57	12

SIZE						
6-Point deep magnetic						2
Type	A/F mm	DRWG	D1 mm	D2 mm	L mm	L1 mm
<b>Metrical</b>						
DO6092Q010	10	A	17,5	25	100	5
DO6092Q013	13	A	21,0	25	100	6
DO6092Q016	16	A	25,0	30	100	7
DO6092Q017	17	A	26,0	30	100	7
DO6092Q019	19	A	28,5	30	100	8

SIZE						
Torx® external						3
Type	A/F	DRWG	D1 mm	D2 mm	L mm	L2 mm
DO66920010	E10	A	14	25	52	7,5
DO66920011	E11	A	15	25	52	8
DO66920012	E12	A	16	25	52	8,5
DO66920014	E14	A	18	25	52	10
DO66920016	E16	A	20	25	52	11
DO66920018	E18	A	22	25	52	12,5
DO66920020	E20	A	25	30	52	14
DO66920022	E22	A	27	30	52	15
DO66920024	E24	A	29	30	52	16,5

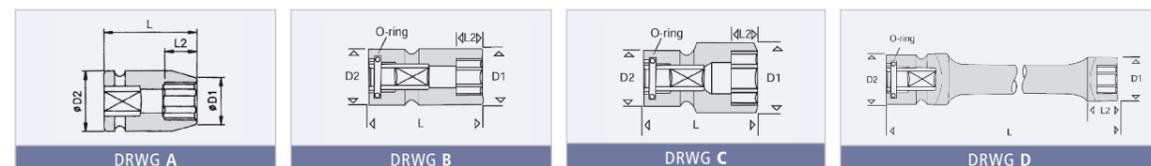
Torx® is a trademark of Textron.

SIZE						
Torx® internal						4
Type	A/F	DRWG	L1 mm	D2 mm	L mm	-
DO68821020	T20	F	2,8	25	75	-
DO68821025	T25	F	3,0	25	75	-
DO68821027	T27	F	3,0	25	75	-
DO68821030	T30	F	3,8	25	75	-
DO68821040	T40	F	3,8	25	75	-
DO68821045	T45	F	4,3	25	75	-
DO68821047	T47	F	5,0	25	75	-
DO68821050	T50	F	5,0	25	75	-
DO68821055	T55	F	5,5	25	75	-
DO68821060	T60	F	8,0	25	75	-
DO68821070	T70	F	9,4	25	75	-
DO68821080	T80	F	10,5	25	75	-
DO68821090	T90	F	11,8	25	75	-
DO68821100	T100	F	13,1	25	75	-

Torx® is a trademark of Textron.

SIZE						
Hex Driver 6-Point (Inbus)						5
Type	A/F mm	DRWG	L1 mm	D2 mm	L mm	-
<b>Metrical</b>						
DO68925003	3	F	11	25	75	-
DO68925004	4	F	11	25	75	-
DO68925005	5	F	15	25	75	-
DO68925006	6	F	15	25	75	-
DO68925007	7	F	20	25	75	-
DO68925008	8	F	25	25	75	-
DO68925009	9	F	25	25	75	-
DO68925010	10	F	25	25	75	-
DO68925011	11	F	25	25	75	-
DO68925012	12	F	25	25	75	-
DO68925013	13	F	25	25	75	-
DO68925014	14	F	25	25	75	-
DO68925015	15	F	25	25	75	-
DO68925016	16	F	25	25	75	-
DO68925017	17	F	25	25	75	-
DO68925018	18	F	25	25	75	-
DO68925019	19	F	25	25	75	-

Stud Bolt Setters				
Type	Size	D1 mm	D2 mm	L mm
DO66A21062	M6 x 1	13	25	75
DO66A21083	M8 x 1,25	15	25	75
DO66A21104	M10 x 1,5	17	25	75
DO66A21125	M12 x 1,75	19	25	75
DO66A21146	M14 x 2	22	25	75
DO66A21166	M16 x 2	27	30	75



# Sleeve drive sockets

## 3/4" Drive

SIZE							1
6-Point normal							

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

### Metrical

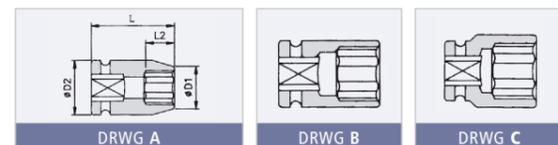
DO60940017	17	A	31	44	65	12
DO60940018	18	A	32	44	65	12
DO60940019	19	A	33	44	65	14
DO60940021	21	A	35	44	65	16
DO60940022	22	A	37	44	65	16
DO60940023	23	A	38	44	65	16
DO60940024	24	A	39	44	65	16
DO60940026	26	A	41	44	65	16
DO60940027	27	A	43	44	65	16
DO60940028	28	B	44	44	68	20
DO60940029	29	C	45	44	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							2
6-Point magnetic							

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

### 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							3
Hex Driver 6-Point (Inbus)							

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

### 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							4
Torx® external							

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

### 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

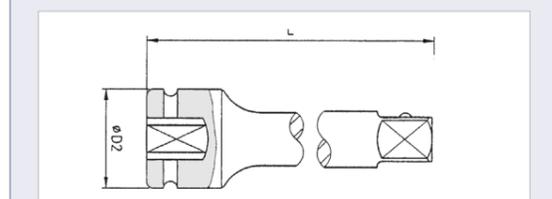
Torx® ist eine Handelsmarke von Textron.

## Extensions

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							1
Quickchange adaptors							

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

### 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						2
Quickchange adaptors						

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

### 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

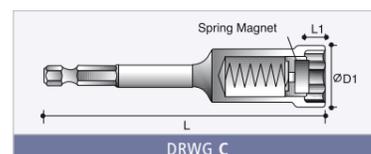
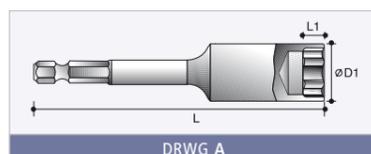
SIZE						
6-Kant						1
Type	A/F mm	DRWG	D1 mm	L mm	L1 mm	-
<b>Metrical</b>						
DO697B0S04	4	A	8	55	4,5	-
DO697B0S06	6	A	10	55	4,5	-
DO697B0T06	6	A	10	75	4,5	-
DO697B0T07	7	A	11	75	4,5	-
DO697B0T08	8	A	12	75	4,5	-
DO697B0T10	10	A	14	75	5,5	-
DO697B0T12	12	A	17	75	5,5	-
DO697B0T13	13	A	18	75	5,5	-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

SIZE						
6-Point magnetic						2
Type	A/F mm	DRWG	D1 mm	L mm	L1 mm	-
<b>Metrical</b>						
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	-
<b>Metrical</b>						
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	-
<b>Metrical</b>						
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

