



TIGHTENING TABLE

HYDRAULIC TOOLS

Thread M [mm]	Nut S [mm]	Strength class					
		8.8		10.9		12.9	
		Nm	kN	Nm	kN	Nm	kN
M16	24	210	71	299	100	357	120
M18	27	289	87	411	122	490	146
M20	30	411	111	578	156	696	188
M22	32	559	139	784	196	941	234
M24	36	711	160	1000	226	1196	271
M27	41	1049	211	1481	296	1775	356
M30	46	1422	256	2010	360	2403	433
M33	50	1932	320	2716	449	3266	539
M36	55	2481	375	3491	528	4197	633
M39	60	3226	451	4531	634	5443	761
M42	65	3991	516	5609	726	6727	871
M45	70	4992	604	7012	850	8414	1020
M48	75	6021	680	8473	956	10150	1147
M52	80	7747	816	10885	1147	13092	1378
M56	85	9650	941	13582	1324	16279	1589
M60	90	11964	1098	16867	1545	20202	1853
M64	95	14416	1245	20300	1751	24320	2099
M68	100	17615	1426	24771	2005	29725	2406
M72	105	21081	1620	29645	2278	35573	2734
M76	110	24973	1827	35118	2569	42141	3083
M80	115	29314	2046	41222	2877	49467	3452
M90	130	42525	2648	59801	3723	71761	4468
M100	145	59200	3327	83250	4678	99900	5614

Tools with adjustable torque (force)
For screwing and unscrewing bolts

Metric sizes		
Thread M [mm]	Nut S [mm]	Allen J [mm]
M10	17	8
M12	19	10
M14	22	12
M16	24	14
M18	27	14
M20	30	17
M22	32	17
M24	36	19
M27	41	19
M30	46	22
M33	50	24
M36	55	27
M39	60	27 (30)
M42	65	32
M45	70	-
M48	75	36
M52	80	36
M56	85	41
M60	90	46
M64	95	46
M68	100	50
M72	105	55
M76	110	60
M80	115	65
M90	130	70
M100	145	70 (75)

Inch sizes		
Thread M [inch]	Nut S [inch]	Allen J [inch]
5/8"	1 1/16"	1/2"
3/4"	1 1/4"	5/8"
7/8"	1 7/16"	3/4"
1"	1 5/8"	3/4"
1 1/8"	1 13/16"	7/8"
1 1/4"	2"	7/8"
1 3/8"	2 3/16"	1"
1 1/2"	2 3/8"	1"
1 5/8"	2 9/16"	-
1 3/4"	2 3/4"	1 1/4"
1 7/8"	2 15/16"	1 3/8"
2"	3"	1 1/2"
2"	3 1/8"	1 5/8"
2 1/4"	3 3/8"	1 3/4"
2 1/2"	3 7/8"	1 7/8"
2 3/4"	4 1/8"	2"
2 3/4"	4 1/4"	2"
3"	4 5/8"	2 1/4"
3 1/4"	5"	2 1/4"

Attention! Use the table in the absence of instructions or recommendations provided by the manufacturer. All values are valid for standard threads in accordance with DIN 13, DIN ISO 4752, DIN 931, 6912 and 7990. Load 90% of the yield point of the screw. Friction coefficient μ 0.14 new, uncoated and unmanned screws (unlike normal protective oil). In case of lubrication, the required torque reduction is approximately 10-45% (depending on the lubricant used).



HIGH QUALITY OF PRODUCTS

We have been operating in the market since 2004. The rich experience gained through this period allows us to serve our customers at the highest level by providing the best quality equipment.

WE ARE MANUFACTURER OF THE FOLLOWING DEVICES:

- electric torque wrenches,
- battery torque wrenches
- pneumatic torque wrenches
- hydraulic tensioners
(including multi-step and back spring),
- hydraulic torque wrenches.

ul. Centralna 40,
43-210 Kobiór, Polska

+48 32 750 68 58
+48 604 774 071 biuro@bewo-tech.pl
+48 660 230 930 info@bewo-tech.pl

www.bewo-tech.pl
www.bewo.pl



TORQUE WRENCHES

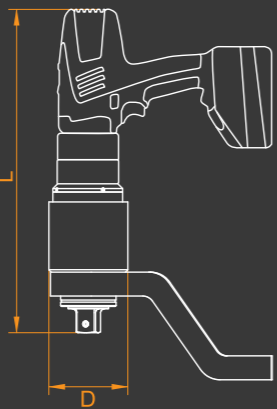
BATTERY | ELECTRIC | PNEUMATIC

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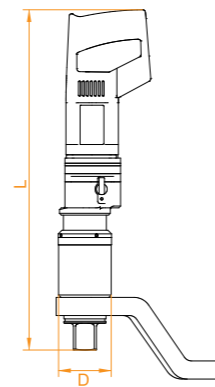
BATTERY OPERATED TORQUE WRENCHES STRAIGHT VERSION

- Rotary drive 360°
- Brushless motor – very powerfull
- Lithium-ion rechargeable batteries 18V – 6Ah with charge indicator
- 4-gears (speeds)
- Included: battery torque wrench, reaction arm, two batteries, charger, carry case, certificate of calibration and torque table.



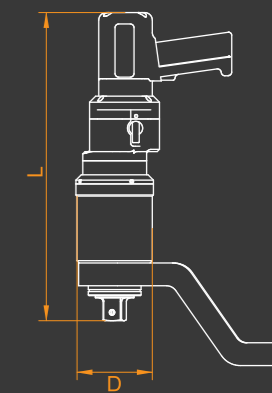
ELECTRIC TORQUE WRENCHES STRAIGHT VERSION

- Rotary drive 360°
- 200 different torque settings
- 2-speed transmission
- Quick and accurate
- Included: electric torque wrench, reaction arm, metal carry case certificate of calibration and torque table.



PNEUMATIC TORQUE WRENCHES STRAIGHT VERSION

- Rotary drive 360°
- Rotation switch clockwise/ anticlockwise
- Stepless torque adjustment
- Included: pneumatic torque wrench, reaction arm, adjusting unit with spiral air duct, metal carry case, calibration certificate and torque table.



PRODUCT DESCRIPTION

Battery operated torque wrenches (nutrunners) have an electronics which switches off the tool when the torque is reached. Accuracy of ± 3.5%. They are fast, precise, safe and quiet. They are equipped with lithium ion batteries of capacity 6Ah.

Direction switch (screw / unscrew). The quick charger ensures that the battery is fully charged in about 30-40 minutes. They have a visual signal when the battery is charged. There is a possibility of producing a battery torque wrenches for the individual needs of the customer. Therotary 360° drive makes that the work becomes extremely comfortable (convenient position). Tools manufactured in Poland by BEWO-TECH company.

Type	Range [Nm]	Drive [square]	Diameter D [mm]	Length L [mm]	Reaction weight [kg]	Total weight [kg]	Speed [rpm]
BA-850	50-850	3/4"	78	369	2,9	5,5	70
BA-1000	100-1000	1"	78	369	2,9	5,5	66
BA-2000	100-2000	1"	87	375	2,9	6,9	39
BA-2500	100-2500	1"	87	407	2,9	7,6	18
BA-3000	100-3000	1"	87	407	2,9	7,7	12
BA-4000	150-4000	1 1/2"	87	417	4,7	8,3	12
BA-5000	150-5000	1 1/2"	99	424	4,7	9,5	10
BA-8000	600-8000	1 1/2"	0	0	4,7	0	0

PRODUCT DESCRIPTION

Electric torque wrenches (nutrunners) have an electronics which switch off the tool when the torque is reached. Accuracy of ± 3.5%. They are fast, precise, safe and quiet. Power 220/240V. Direction switch (screw / unscrew). The rotary 360° drive makes work extremely comfortable (convenient position). Tools manufactured in Poland by BEWO-TECH company.

Type	Range [Nm]	Drive [square]	Diameter D [mm]	Length L [mm]	Reaction weight [kg]	Total weight [kg]	Speed [rpm]
BE-850	100-850	3/4" lub 1"	78	520	2,9	6,5	24
BE-1200	150-1200	1"	87	520	2,9	7,2	16
BE-2500	360-2500	1"	87	550	2,9	8	9
BE-3000	360-3000	1"	87	550	2,9	8	7,5
BE-3500	400-3500	1 1/2"	87	560	4,7	9,5	6,5
BE-5000	750-5000	1 1/2"	99	570	4,7	11	5
BE-6000	800-6000	1 1/2"	99	570	4,7	11	4,5
BE-10000	1700-10000	1 1/2"	122	615	9,2	15,5	2,5
BE-12000	2000-12000	1 1/2"	122	615	9,2	15,5	2

PRODUCT DESCRIPTION

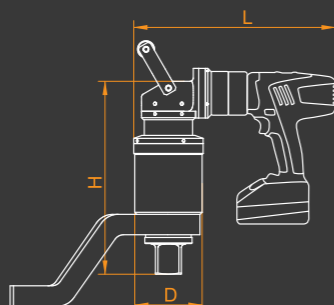
The torque in the pneumatic torque wrenches (nutrunners) is set in the air preparation unit according to the set torque values. They are fast, precise and safe. Included: pneumatic nutrunner, reaction arm, regulating unit with spiral air tube, metal carry case. Direction switch (screw / unscrew). Accuracy ± 3.5%. It is possible to produce a pneumatic nutrunner for individual customer needs. The rotary 360° drive makes work extremely comfortable (convenient position). Tools manufactured in Poland by BEWO-TECH.

Type	Range [Nm]	Drive [square]	Diameter D [mm]	Length L [mm]	Reaction weight [kg]	Total weight [kg]	Speed [rpm]
BP-850	40-850	3/4" lub 1"	78	360	2,9	6	19
BP-1200	40-1200	1"	87	360	2,9	6,8	19
BP-2500	70-2500	1"	87	390	2,9	7	7,5
BP-3500	70-3500	1 1/2"	87	400	4,7	8,2	7,5
BP-5000	130-5000	1 1/2"	99	410	4,7	10,5	3,5
BP-6000	150-6000	1 1/2"	99	410	4,7	10,5	2,8
BP-10000	450-10000	1 1/2"	122	455	9,2	15,5	1,8
BP-12000	600-12000	1 1/2"	122	455	9,2	15,5	1,8



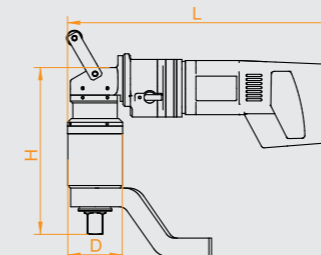
BATTERY OPERATED TORQUE WRENCHES ANGLED VERSION

- Rotary drive 360° horizontally and vertically
- Brushless motor – very powerfull
- Lithium-ion rechargeable batteries 18V – 6Ah with charge indicator
- 4-gears (speeds)
- Included: battery torque wrench, reaction arm, two batteries, charger, carry case, certificate of calibration and torque table.



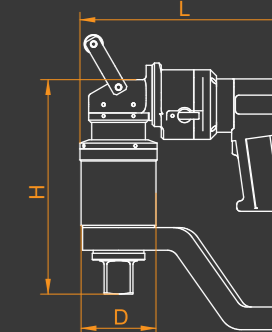
ELECTRIC TORQUE WRENCHES ANGLED VERSION

- Easy rotary drive 360° vertically and horizontally
- 200 different torque settings
- 2-speed transmission
- Quick and accurate
- Included: electric torque wrench, reaction arm, metal carry case, certificate of calibration and torque table.



PNEUMATIC TORQUE WRENCHES ANGLED VERSION

- Rotary drive 360° horizontally and vertically,
- Stepless torque adjustment
- Rotation switch left and right
- Included: pneumatic torque wrench, reaction arm, adjusting unit with spiral air duct, metal carry case, calibration certificate and torque table.



PRODUCT DESCRIPTION

Battery operated torque wrenches (nutrunners) have an electronics which switches off the tool when the torque is reached. Accuracy of ± 3.5%. They are fast, precise, safe and quiet. They are equipped with lithium ion batteries of capacity 6Ah. The quick charger ensures that the battery is fully charged in about 30-40 minutes. They have a visual signal when the battery is charged. There is a possibility of producing a battery torque wrenches for the individual needs of the customer. The reversible two-way drive (360°) makes the job extremely comfortable (convenient position). Tools manufactured in Poland by BEWO-TECH company.

Type	Range [Nm]	Drive [square]	Diameter D [mm]	Length L [mm]	Height H [mm]	Reaction weight [kg]	Total weight [kg]	Speed [rpm]
BAK-1000	100-1000	1"	78	303	272	2,9	8,7	66
BAK-1500	100-1500	1"	87	303	286	2,9	9,3	39
BAK-2500	100-2500	1"	87	303	318	2,9	10	18
BAK-3000	100-3000	1"	87	303	318	2,9	10	12
BAK-3500	100-3500	1 1/2"	87	303	318	2,9	10,5	11
BAK-4000	150-4000	1 1/2"	99	303	318	4,7	10,5	10
BAK-5000	150-5000	1 1/2"	99	303	332	4,7	12,5	9

PRODUCT DESCRIPTION

Electric torque wrenches (nutrunners) have an electronics which switch off the tool when the torque is reached. Accuracy of ± 3.5%. They are fast, precise, safe and quiet. Power 220/240V. Direction switch (screw / unscrew). The reversible two-way drive (360°) makes the job extremely comfortable (convenient positioning). Tools manufactured in Poland by BEWO-TECH company.

Type	Range [Nm]	Drive [square]	Diameter D [mm]	Length L [mm]	Height H [mm]	Reaction weight [kg]	Total weight [kg]	Speed [rpm]
BEK-1200	150-1200	1"	87	427	234	2,9	9,5	16
BEK-2500	360-2500	1"	87	427	264	2,9	10	9
BEK-3000	360-3000	1"	87	427	264	2,9	10	7,5
BEK-3500	400-3500	1 1/2"	87	427	274	4,7	11,5	6,5
BEK-5000	750-5000	1 1/2"	99	434	284	4,7	12,5	5
BEK-6000	800-6000	1 1/2"	99	434	284	4,7	12,5	4,5
BEK-10000	1700-10000	1 1/2"	122	445	330	9,2	18	2,5
BEK-12000	2000-12000	1 1/2"	122	445	330	9,2	18	2

PRODUCT DESCRIPTION

The torque in the pneumatic torque wrenches (nutrunners) is set in the air preparation unit according to the set torque values. They are fast, precise and safe. Included: pneumatic nutrunner, reaction arm, regulating unit with spiral air tube, metal carry case. Direction switch (screw / unscrew). Accuracy ± 3.5%. It is possible to produce a pneumatic nutrunner for individual customer needs. The reversible two-way drive (360°) makes the job extremely comfortable (convenient positioning). Tools manufactured in Poland by BEWO-TECH.

Type	Range [Nm]	Drive [square]	Diameter D [mm]	Length L [mm]	Height H [mm]	Reaction weight [kg]	Total weight [kg]	Speed [rpm]
BPK-850	40-850	3/4" lub 1"	78	261	234	2,9	7,5	19
BPK-1200	40-1200	1"	87	267	234	2,9	8,1	19
BPK-2500	70-2500	1"	87	267	264	2,9	9	7,5
BPK-3500	70-3500	1 1/2"	87	267	274	4,7	10,2	7,5
BPK-5000	130-5000	1 1/2"	99	274	284	4,7	12,5	3,5
BPK-6000	150-6000	1 1/2"	99	274	284	4,7	12,5	2,8
BPK-10000	450-10000	1 1/2"	122	285	330	9,2	17,5	1,8
BPK-12000	600-12000	1 1/2"	122	285	330	9,2	17,5	1,8