



*From the Founder&Managing Director
Haluk Karaoguz*

Dear Sirs,

Greetings from Promedi,Istanbul,Turkey.

We are pleased to offer Aircraft Tools and Manufacturing Equipment.

Please review our line of products which are designed for Professional Aircraft Maintenance Technicians.

Our tools are widely used in many countries around the world and the companies such as Proto, Bahco, Irimo, Milbar, ZAVIA, Macnaught and Test-Fuchs are some of the major companies are the ones using our tools successfully.

Hoping that our line is in line with your expectation and we are looking forward to receiving your enquiries to submit our quotation.

Please feel free to contact me at cell: + 90 532 446 2929 (what's app)& at halukpromedi@gmail.com karaoguz@superonline.com for any information you may need.

Thank you for your cooperation.

Haluk Karaoguz

Founder&Managing Director

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V.D. BEŞİKTAŞ 733 010 4891 , Mersis No: 733010489100017



TORQUE WRENCHES



US Torque Instruments (in-lb) - ±4% Accuracy



Square Drive, inches	Stock No.	Head Style	Range, min	Range, max	Increments
1/4	QDI50	Fixed	10 in-lb	50 in-lb	.5 in-lb
1/4	QDIR50	Fixed Ratchet	10 in-lb	50 in-lb	.5 in-lb
1/4	QDI200	Fixed	40 in-lb	200 in-lb	1 in-lb
1/4	QDIR200	Fixed Ratchet	40 in-lb	200 in-lb	1 in-lb
1/4	GQTIF200NP	Plain	40 in-lb	200 in-lb	1 in-lb
1/4	GQTI200NP	Fixed Ratchet	40 in-lb	200 in-lb	1 in-lb
3/8	QD2R200	Compact Ratchet	40 in-lb	200 in-lb	1 in-lb
3/8	GQT2R200NP	Fixed Ratchet	40 in-lb	200 in-lb	1 in-lb
3/8	QD2I000	Fixed	200 in-lb	1,000 in-lb	5 in-lb
3/8	QD2RI000	Fixed Ratchet	200 in-lb	1,000 in-lb	5 in-lb
3/8	GQT2FI000NP	Plain	200 in-lb	1,000 in-lb	5 in-lb
3/8	GQT2RI000NP	Fixed Ratchet	200 in-lb	1,000 in-lb	5 in-lb
1/2	QD3RI600	Fixed Ratchet	320 in-lb	1,600 in-lb	10 in-lb
1/2	QD32500	Fixed	500 in-lb	2,500 in-lb	10 in-lb
1/2	QD3R2500	Fixed Ratchet	500 in-lb	2,500 in-lb	10 in-lb



US Torque Instruments (ft-lb) - ±4% Accuracy



Square Drive, inches	Stock No.	Head Style	Range, min	Range, max	Increments
3/8	QD275	Fixed	15 ft-lb	75 ft-lb	.5 ft-lb
3/8	QD2FR75	Flex Ratchet	5 ft-lb	75 ft-lb	.5 ft-lb
3/8	QD2I00	Fixed	20 ft-lb	100 ft-lb	.5 ft-lb
3/8	QD2RI00A	Fixed Ratchet	20 ft-lb	100 ft-lb	.5 ft-lb
1/2	QD3I50	Fixed	30 ft-lb	150 ft-lb	1 ft-lb
1/2	QD3RI50	Fixed Ratchet	30 ft-lb	150 ft-lb	1 ft-lb
1/2	QD3250	Fixed	50 ft-lb	250 ft-lb	1 ft-lb
1/2	QD3R250	Fixed Ratchet	50 ft-lb	250 ft-lb	1 ft-lb
1/2	BRUTUS3R250D	Fixed Ratchet	50 ft-lb	250 ft-lb	1 ft-lb
1/2	GQT3R250NP	Fixed Ratchet	50 ft-lb	250 ft-lb	1 ft-lb
3/4	QD4400	Fixed	80 ft-lb	400 ft-lb	2.5 ft-lb
3/4	QD4R400	Fixed Ratchet	80 ft-lb	400 ft-lb	2.5 ft-lb
3/4	QD4600	Fixed	120 ft-lb	600 ft-lb	5 ft-lb
3/4	QD4R600	Fixed Ratchet	120 ft-lb	600 ft-lb	5 ft-lb
1	QD5RI000	Fixed Ratchet	200 ft-lb	1,000 ft-lb	5 ft-lb



Metric Torque Wrenches (kg-m, kg-cm) - ±4% Accuracy



Square Drive, inches	Stock No.	Head Style	Range, min	Range, max	Increments
3/8	QD2RM1000	Flex Head	200 kg-cm	1,000 kg-cm	5 kg-cm
1/2	QD3RM30	Fixed Ratchet	6 kg-m	30 kg-m	.2 kg-m



Newton Meter Torque Wrenches - ±4% Accuracy



Square Drive, inches	Stock No.	Head Style	Range, min	Range, max	Increments
1/4	QD1RN6A	Fixed Ratchet	1 N-m	6 N-m	.05 N-m
1/4	QD1RN25A	Fixed Ratchet	5 N-m	25 N-m	.1 N-m
3/8	QD2RN25A	Compact Ratchet	5 N-m	25 N-m	.1 N-m
3/8	QD2RN50	Fixed Ratchet	10 N-m	50 N-m	.5 N-m
3/8	QD2RN100	Fixed Ratchet	20 N-m	100 N-m	.5 N-m
1/2	QD3RN200	Fixed Ratchet	40 N-m	200 N-m	2 N-m
1/2	QD3RN350	Fixed Ratchet	70 N-m	350 N-m	2 N-m
3/4	QD4RN800	Fixed Ratchet	150 N-m	800 N-m	5 N-m



US Reading/Standard - ±2% Accuracy



Square Drive, inches	Basic Models Stock No.	Follow up Models Stock No.	Signal Models Stock No.	Range	Increments
1/4	TE1A	TE1FUA	—	15 in-lb	1/4 in-lb
1/4	TE3A	TE3FUA	—	30 in-lb	1/2 in-lb
1/4	TE6A	TE6FUA	—	75 in-lb	1 in-lb
1/4	GTE6A	—	—	75 in-lb	1 in-lb
3/8	TE12A	TE12FUA	TE12LA	150 in-lb	2 1/2 in-lb
3/8	TE25A	TE25FUA	TE25LA	300 in-lb	5 in-lb
3/8	TE50A	TE50FUA	TE50LA	600 in-lb	10 in-lb
3/8	TE12FA	TE12FFUA	TE12FLA	12 ft-lb	1/2 ft-lb
3/8	TE25FA	TE25FFUA	TE25FLA	25 ft-lb	1/2 ft-lb
3/8	TE50FA	TE50FFUA	TE50FLA	50 ft-lb	1 ft-lb
1/2	TE51	TE51FU	TE51L	600 in-lb	10 in-lb
1/2	TE51F	TE51FFU	TE51FL	50 ft-lb	1 ft-lb
1/2	TE100	TE100FU	TE100L	100 ft-lb	1 ft-lb
1/2	GTE100	—	—	100 ft-lb	1 ft-lb
1/2	TE175	TE175FU	TE175L	175 ft-lb	2 1/2 ft-lb
1/2	GTE175	—	—	175 ft-lb	2 1/2 ft-lb
1/2	TE250	TE250FU	TE250L	250 ft-lb	5 ft-lb
3/4	TE352A	TE352FUA	TE352LA	350 ft-lb	5 ft-lb
3/4	TE602A	TE602FUA	TE602LA	600 ft-lb	10 ft-lb
1	TE803**	TE803FU**	TE803L**	800 ft-lb	10 ft-lb
1	TE1003**	TE1003FU**	TE1003L**	1,000 ft-lb	10 ft-lb
1	TE1503t	TE1503FUt	TE1503Lt	1,500 ft-lb	25 ft-lb
1	TE2003t	TE2003FUt	TE2003Lt	2,000 ft-lb	25 ft-lb
1 1/2	TE2005t	TE2005FUt	TE2005Lt	2,000 ft-lb	25 ft-lb
1 1/2	TE3005t	TE3005FU	TE3005L	3,000 ft-lb	50 ft-lb

Electronic torque wrench, reversible ratchet head



Accuracy ± 2%
Visual, audio and vibration signal
Reversible interchangeable heads (supplied with ratchet head)
60 teeth/6° action
Ranges programmable in Nm, Lbf.ft., Lbf.in.
ISO 6789 & 89/336/EEC



Article				
IZO-D-30	1/4" in	3-30 Nm	2.21-22.13 lb-ft	26.6-265.5 lb-in
IZO-D-135	3/8" in	13.5-135 Nm	10-99.57 lb-ft	62-1195 lb-in
IZO-D-200	1/2" in	20-200 Nm	14.75-147.50 lb-ft	177-1770 lb-in
IZO-D-340	1/2" in	34-340 Nm	25.07-250.80 lb-ft	301-3009 lb-in

WRENCHES

SET NO. J1214FASD

14 PCS. ASD PROTO® FULL POLISH COMBINATION WRENCH SET 12POINT



ITEM # :	SIZE [IN]
J1208-T500	1/4
J1210-T500	5/16
J1211-T500	11/32
J1212-T500	3/8
J1214-T500	7/16
J1216-T500	1/2
J1218-T500	9/16
J1220-T500	5/8
J1222-T500	11/16
J1224-T500	3/4
J1226-T500	13/16
J1228-T500	7/8
J1230-T500	15/16
J1232-T500	1

PROTO® FULL POLISH COMBINATION WRENCHES – SPLINE

ITEM #:	SIZE [IN]
J1208SPL	1/4
J1209SPL	9/32
J1210SPL	5/16
J1211SPL	11/32
J1212SPL	3/8
J1214SPL	7/16
J1216SPL	1/2
J1218SPL	9/16
J1220SPL	5/8
J1222SPL	11/16
J1224SPL	3/4
J1226SPL	13/16
J1228SPL	7/8
J1230SPL	15/16
J1232SPL	1



PROTO® FULL POLISH COMBINATION WRENCHES - 12 POINT

ITEM # :	SIZE [IN]
J1208-T500	1/4
J1209-T500	9/32
J1210-T500	5/16
J1211-T500	11/32
J1212-T500	3/8
J1214-T500	7/16
J1216-T500	1/2
J1218-T500	9/16
J1220-T500	5/8
J1222-T500	11/16
J1224-T500	3/4
J1226-T500	13/16
J1228-T500	7/8
J1230-T500	15/16
J1232-T500	1
J1234-T500	1-1/16
J1236-T500	1-1/8
J1240-T500	1-1/4



PROTO® BLACK CHROME COMBINATION REVERSIBLE RATCHETING WRENCHES – SPLINE

ITEM # :	SIZE [IN]
JSCV07	7/32
JSCV08	1/4
JSCV09	9/32
JSCV10	5/16
JSCV11	11/32
JSCV12	3/8
JSCV14	7/16
JSCV16	1/2
JSCV18	9/16
JSCV20	5/8
JSCV22	11/16
JSCV24	3/4
JSCV26	13/16
JSCV28	7/8
JSCV30	15/16
JSCV32	1



PROTO® BLACK CHROME DOUBLE BOX REVERSIBLE RATCHETING WRENCHES – SPLINE

ITEM # :	SIZE [IN]
JSBV0709	7/32 x 9/32
JSBV0810	1/4 x 5/16
JSBV1214	3/8 x 7/16
JSBV1618	1/2 x 9/16
JSBV2022	5/8 x 11/16
JSBV2428	3/4 x 7/8
JSBV2630	13/16 x 15/16



PROTO® SATIN COMBINATION WRENCHES - 12 POINT

ITEM # :	SIZE [IN]
J1242	1-5/16
J1244	1-3/8
J1246	1-7/16
J1248	1-1/2
J1252	1-5/8
J1254	1-11/16
J1256	1-3/4
J1258	1-13/16
J1260	1-7/8
J1264	2
J1266	2-1/16
J1268	2-1/8
J1270	2-3/16
J1272	2-1/4
J1276	2-3/8
J1280	2-1/2



PROTO® FULL POLISH DOUBLE BOX WRENCHES - 12 POINT

ITEM # :	SIZE [IN]
J1170	5/16 x 3/8
J1171	7/16 x 1/2
J1126L	1/2 x 9/16
J1172	9/16 x 5/8
J1173	11/16 x 3/4
J1139	3/4 x 7/8
J1174	13/16 x 7/8
J1175	15/16 x 1
J1176	1-1/16 x 1-1/8



PROTO® FULL POLISH SHORT COMBINATION WRENCHES 12 POINT

ITEM # :	SIZE [IN]
J1208ES	1/4
J1209ES	9/32
J1210ES	5/16
J1211ES	11/32
J1212ES	3/8
J1214ES	7/16
J1216ES	1/2
J1218ES	9/16
J1220ES	5/8
J1222ES	11/16
J1224ES	3/4



PROTO® 7 PIECE BOX WRENCH SET - 12 POINT

ITEM # :J1100R

ITEM # :	SIZE [IN]
J1170	5/16 x 3/8
J1171	7/16 x 1/2
J1172	9/16 x 5/8
J1173	11/16 x 3/4
J1174	13/16 x 7/8
J1175	15/16 x 1
J1176	1-1/16 x 1-1/8



PROTO® SHORT SATIN COMBINATION WRENCHES - 6 POINT

ITEM # :	SIZE [IN]
J1204EF	1/8
J1205EF	5/32
J1206EF	3/16
J1207EF	7/32



PROTO® 5 PIECE BOX WRENCH SET - 12 POINT

ITEM # :J1100G

ITEM # :	SIZE [IN]
J1170	5/16 x 3/8
J1171	7/16 x 1/2
J1172	9/16 x 5/8
J1173	11/16 x 3/4
J1174	13/16 x 7/8



WRENCHES

PROTO® FULL POLISH OFFSET BOX WRENCHES - 12 POINT

ITEM #:	SIZE [IN]
J1012-500	3/8 x 7/16
J1016-500	1/2 x 9/16
J1018-500	9/16 x 5/8
J1022-500	11/16 x 3/4
J1026-500	13/16 x 7/8
J1030-500	15/16 x 1
J1034-500	1-1/16 x 1-1/8



PROTO® 7 PIECE OFFSET BOX WRENCH SET - 12 POINT ITEM # :J1000G-500

ITEM #:	SIZE [IN]
J1012-500	3/8 x 7/16
J1016-500	1/2 x 9/16
J1018-500	9/16 x 5/8
J1022-500	11/16 x 3/4
J1026-500	13/16 x 7/8
J1030-500	15/16 x 1
J1034-500	1-1/16 x 1-1/8



PROTO® SATIN DEEP OFFSET BOX WRENCHES - 12 POINT

ITEM #:	SIZE [IN]
J8180	3/8 x 7/16
J8181	1/2 x 9/16
J8182	5/8 x 11/16
J8183A	11/16 x 13/16
J8184	3/4 x 7/8
J8185	15/16 x 1



PROTO® 6 PIECE DEEP OFFSET BOX WRENCH SET - 12 POINT ITEM # :J8100C

ITEM #:	SIZE [IN]
J8180	3/8 x 7/16
J8181	1/2 x 9/16
J8182	5/8 x 11/16
J8183A	11/16 x 13/16
J8184	3/4 x 7/8
J8185	15/16 x 1



PROTO® SHORT SATIN DOUBLE BOX WRENCHES - 12 POINT

ITEM #:	SIZE [IN]
J1120	5/16 x 3/8
J1122	3/8 x 7/16
J1125	7/16 x 1/2
J1126	1/2 x 9/16
J1131	5/8 x 3/4



PROTO® FULL POLISH DOUBLE BOX WRENCHES - SPLINE

ITEM #:	SIZE [IN]
J1118SPL	1/4 x 5/16
J1122SPL	3/8 x 7/16
J1126SPL	1/2 x 9/16
J1130SPL	9/16 x 5/8
J1135SPL	11/16 x 3/4
J1142SPL	13/16 x 15/16
J1144SPL	7/8 x 1



REVERSIBLE RATCHETING BOX WRENCHES—12 POINT

ITEM #:	SIZE [IN]
RB810-DH	1/4 x 5/16
RB1214-DH	3/8 x 7/16
RB1618-DH	1/2 x 9/16



OFFSET RATCHETING BOX WRENCHES—12 POINT

ITEM #:	SIZE [IN]
ROW-1011DH	5/16-11/32
ROW-1212DH	1/4 x 5/16
ROW-1214DH	3/8 x 7/16
ROW-1216DH	1/2 x 9/16



PROTO® SATIN OPEN END WRENCHES

ITEM #:	SIZE [IN]
J3016	3/16 x 1/4
J3018	1/4 x 5/16
J3020	5/16 x 3/8
J3021	3/8 x 7/16
J3025	7/16 x 1/2
J3026	1/2 x 9/16
J3030	9/16 x 5/8
J3031	5/8 x 3/4
J3034	5/8 x 11/16
J3035	11/16 x 3/4
J3037	11/16 x 25/32
J3039	3/4 x 7/8
J3040	13/16 x 7/8
J3045	15/16 x 1
J3050	1-1/16 x 1-1/8
J3051	1-1/16 x 1-1/4
J3055	1-1/4 x 1-5/16
J3060	1-3/8 x 1-7/16
J3070	1-1/2 x 1-5/8
J3075	1-11/16 x 1-13/16
J3080	1-7/8 x 2



PROTO® 10 PIECE SATIN OPEN-END WRENCH SET ITEM # :J3000H

ITEM #:	SIZE [IN]
J3018	1/4 x 5/16
J3020	5/16 x 3/8
J3025	7/16 x 1/2
J3026	1/2 x 9/16
J3030	9/16 x 5/8
J3031	5/8 x 3/4
J3035	11/16 x 3/4
J3040	13/16 x 7/8
J3045	15/16 x 1
J3050	1-1/16 x 1-1/8



PROTO® 5 PIECE SATIN OPEN-END WRENCH SET ITEM # :J3000N

ITEM #:	SIZE [IN]
J3021	3/8 x 7/16
J3026	1/2 x 9/16
J3030	9/16 x 5/8
J3035	11/16 x 3/4
J3040	13/16 x 7/8



FACOM® 5 PIECE FULL POLISH SHORT OPEN-END WRENCH SET ITEM # :FF-22-JU5T

ITEM #:	SIZE [IN]
FF-22.1/2X9/16	1/2 x 9/16
FF-22.11/32X7/16	11/32 x 7/16
FF-22.3/16X1/4	3/16 x 1/4
FF-22.5/16X3/8	5/16 x 3/8
FF-22.7/32X9/32	7/32 x 9/32



PROTO® SHORT SATIN ANGLE OPEN END WRENCHES

ITEM #:	SIZE [IN]
J3314	7/32
J3315	15/64
J3316	1/4
J3318	9/32
J3320	5/16
J3322	11/32
J3324	3/8
J3328	7/16
J3332	1/2
J3336	9/16
J3340	5/8



WRENCHES

PROTO® 9 PIECE SATIN SHORT ANGLE OPEN-END WRENCH SET

ITEM # :J3300A

ITEM # : SIZE [IN]

J3314	7/32
J3315	15/64
J3316	1/4
J3318	9/32
J3320	5/16
J3322	11/32
J3324	3/8
J3328	7/16
J3332	1/2



PROTO® 13 PIECE IGNITION WRENCH SET

ITEM # :J3200C

ITEM # :J000D
ITEM # :J3210
ITEM # :J3211
ITEM # :J3215
ITEM # :J3216
ITEM # :J3220
ITEM # :J3221
ITEM # :J3225
ITEM # :J3226
ITEM # :J235
ITEM # :J2302
ITEM # :J9853

FEELER GAUGE, IGNITION 10 BLADE SET
WRENCH, IGNITION 13/64" X 15/64"
WRENCH, IGNITION 15/64" X 13/64"
WRENCH, IGNITION 7/32" X 1/4"
WRENCH, IGNITION 1/4" X 7/32"
WRENCH, IGNITION 9/32" X 5/16"
WRENCH, IGNITION 5/16" X 9/32"
WRENCH, IGNITION 11/32" X 3/8"
WRENCH, IGNITION 3/8" X 11/32"
PLIERS, SMALL ANGLE NOSE W/ GRIP 5-1/4"
FILE, IGNITION POINT
SCREW STARTER, SLOTTED 5-5/8"



PROTO® 9 PIECE IGNITION WRENCH SET

ITEM # :J3200D

ITEM # :J3210
ITEM # :J3211
ITEM # :J3215
ITEM # :J3216
ITEM # :J3220
ITEM # :J3221
ITEM # :J3225
ITEM # :J3226
ITEM # :J235

WRENCH, IGNITION 13/64" X 15/64"
WRENCH, IGNITION 15/64" X 13/64"
WRENCH, IGNITION 7/32" X 1/4"
WRENCH, IGNITION 1/4" X 7/32"
WRENCH, IGNITION 9/32" X 5/16"
WRENCH, IGNITION 5/16" X 9/32"
WRENCH, IGNITION 11/32" X 3/8"
WRENCH, IGNITION 3/8" X 11/32"
PLIERS, SMALL ANGLE NOSE W/ GRIP 5-1/4"



PROTO® SATIN ADJUSTABLE WRENCHES

ITEM # : LENGTH [IN]

J704	4
J706	6
J708	8
J710	10
J712	12
J715	15
J718	18
J724	24



PROTO® CUSHION GRIP ADJUSTABLE WRENCHES

ITEM # : LENGTH [IN]

J704G	4
J706G	6



CHROME PLATED ADJUSTABLE WRENCH

ITEM # : SIZE [IN]

9070C	6
9071C	8
9072C	10
9073C	12



LOCKING PLIERS CURVED JAWS

ITEM # :
111-05-089
111-10-089

SIZE [IN]
5
10



LOCKING PLIERS CURVED JAWS

ITEM # :
J294WFXL7

SIZE [IN]



ERGO LOCKING PLIER

ITEM # :
727-08-090

SIZE [IN]
7



GRIP WITH LONG AND AND SLIM JAWS

ITEM # :
2952-165
2952-235

SIZE [mm]
165
235



NUT PLIER

ITEM # :
2979 D-180

SIZE [mm]
180



PROTO® SAFETY WIRE TWISTER REVERSIBLE PLIERS - 8-3/4"

ITEM # : J196



PROTO® SAFETY WIRE TWISTER PLIERS - 8-3/8"

ITEM # : J190



STAINLESS STEEL SAFETY WIRE

- Conforms to Government Specification QQW423.
- Conforms to Military Specification MS-20995-C.
- 1 lb. center core dispensers

SW015—,015

SW020—,020

SW025—,025

SW032—,032

SW041—,041



Manufacturing Specifications

NASH - ASTM - AMS - QQ - MS

PLIERS

PROTO® NEEDLE-NOSE PLIERS W/SIDE CUTTER 6-5/8"
ITEM # :J226G



PROTO® DUCKBILL PLIERS W/GRIP - 7-25/32"
ITEM # :J227G



PROTO® BENT NOSE NEEDLE-NOSE PLIERS - 6-5/16"
ITEM # :J225G



PROTO® DIAGONAL CUTTING PLIERS WITH GRIP
ITEM # : OVERALL LENGTH [IN]

J204G 4-7/16
J205G 5-1/16
J206G 6-1/16
J207G 7-5/16



PROTO® COMBINATION SLIP-JOINT PLIERS WITH GRIP

ITEM # : OVERALL LENGTH [IN]
J275G 5-13/16
J276G 6-9/16
J278G 8-1/16
J280G 9-9/16



PROTO® TONGUE & GROOVE POWER-

ITEM # : OVERALL LENGTH
J261SG 5
J262SG 7-1/16
J260SG 10-3/16
J264SG 12
J265SG 16-7/8



SLIP JOINT PLIER 10"
ITEM # : 5224 DC



PROTO® SOFT JAW CANNON PLUG PLIERS - 9-1/2"
ITEM # :J253G



SOFT JAW CANNON PLUG PLIERS - 9-1/2"
ITEM # :2650



PROTO® AVIATION SNIPS

ITEM # :	TIP ANGLE	HANDLE COLOR
J303L	Left	Red
J303R	Right	Green
J303S	Straight	Yellow



RIVETING PLIER
ITEM # : 1741B



UNI VERSAL RUBBER BELT WRENCH
ITEM # : BE66152



Circlip pliers internal



Article	A		
2461 C8	140 mm	8-25 mm	1.0-2.0 mm
2461 C19	180 mm	19-60 mm	2.0-2.5 mm
2461 C40	255 mm	40-100 mm	2.5-3.5 mm



Article	A		
2463 D8	130 mm	8-25 mm	1.0-2.0 mm
2463 D19	170 mm	19-60 mm	2.0-2.5 mm
2463 D40	210 mm	40-100 mm	2.5-3.5 mm



Special circlip pliers for slotted circlips



Shape: With jaw for horseshoe circlips on shafts and external snap-rings

Article	L
2465D-200	200 mm



Circlip pliers external



Article	A		
2464 A3	120 mm	3-10 mm	1.0-1.5 mm
2464 A10	120 mm	10-25 mm	1.5-2.0 mm
2464 A19	180 mm	19-60 mm	2.0-2.5 mm
2464 A40	210 mm	40-100 mm	2.5-3.0 mm



Article	A		
2466 B3	130 mm	3-10 mm	1.0-1.5 mm
2466 B10	130 mm	10-25 mm	1.5-2.0 mm
2466 B19	165 mm	19-60 mm	2.0-2.5 mm
2466 B40	190 mm	40-100 mm	2.5-3.0 mm



Pliers for external horseshoe circlips on shafts



Article	A
2460	175 mm



RESETTABLE PLIERS, INTERNAL&EXTERNAL CIRCLIPS



Article	A				
2928-160	160 mm	7-26 mm	3-26 mm	0.6 0.9 1.2 mm	0.9 1.2 mm
2928-200	200 mm	10-51 mm	7-51 mm	0.9 1.2 1.8 mm	0.9 1.2 mm
2928-250	250 mm	46-102 mm	32-102 mm	2.3 2.7 3.0 mm	2.3 2.7 3.0 mm



RESETTABLE PLIER SET, INTERNAL&EXTERNAL CIRCLIPS ITEM # : 9938



Article	A				
2928-160	160 mm	7-26 mm	3-26 mm	0.6 0.9 1.2 mm	0.9 1.2 mm
2928-200	200 mm	10-51 mm	7-51 mm	0.9 1.2 1.8 mm	0.9 1.2 mm
2928-250	250 mm	46-102 mm	32-102 mm	2.3 2.7 3.0 mm	2.3 2.7 3.0 mm



PROTO® 12 PIECE CONVERTIBLE RETAINING RING PLIERS SET ITEM # :J360B

ITEM # :J370
ITEM # :J371
ITEM # :J372
ITEM # :J373
ITEM # :J374
ITEM # :J375
ITEM # :J376
ITEM # :J377
ITEM # :J378
ITEM # :J379
ITEM # :J385
ITEM # :J399

PLIERS, RETAINING RING CONVERTIBLE 5-3/4"
PLIERS, RETAINING RING CONVERTIBLE 5-11/16"
PLIERS, RETAINING RING CONVERTIBLE 5-7/8"
PLIERS, RETAINING RING CONVERTIBLE 5-3/4"
PLIERS, RETAINING RING CONVERTIBLE 5-11/16"
PLIERS, RETAINING RING CONVERTIBLE 7-3/8"
PLIERS, RETAINING RING CONVERTIBLE 7-1/8"
PLIERS, RETAINING RING CONVERTIBLE 9-1/4"
PLIERS, RETAINING RING CONVERTIBLE 9"
PLIERS, RETAINING RING CONVERTIBLE 8-5/8"
PLIERS, RETAINING RING CONVERTIBLE 7-1/2"
PLIERS, RETAINING RING CONVERTIBLE 5-7/8"



ELECTRONIC SERVICE PRECISION SCREWDRIVERS

Precision screwdriver set Flat Head

Product ID No. 510031 1.0-1.5-2.0-2.5-3.0-3.5 mm



Precision screwdrivers: set 6 pcs

Product ID No. 706-2

Precision screwdriver set, 6 pcs
For slotted and Phillips head screws
In plastic case with hanging hole



Precision screwdriver set Phillips Head

Product ID No. 510033 PH000-PH00-PH0



Double offset screwdrivers, slotted head screws



Xcelite PS120 11-pc. Mini Nutdriver Set, Inch Sizes

Xcelite®



Set includes 10 mini-nutdrivers

and one 3-1/8" torque amplifier handle

3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32" and 3/8"

Double offset screwdriver, Phillips head screws

Article	Screwhead	Length
2047PR-1-2	PH 1 & 2	100 mm
2047PR-3-4	PH 3 & 4	200 mm



Article	Tip thickness	Tip width	Blade length	Length handle	Total length
700-1-50	0.18 mm	1 mm	50 mm	87 mm	137 mm
700-1.2-50	0.20 mm	1.2 mm	50 mm	87 mm	137 mm
700-1.5-50	0.25 mm	1.5 mm	50 mm	87 mm	137 mm
700-1.8-50	0.30 mm	1.8 mm	50 mm	87 mm	137 mm
700-2-50	0.40 mm	2 mm	50 mm	87 mm	137 mm
700-2-75	0.40 mm	2 mm	75 mm	87 mm	162 mm
700-2.5-50	0.40 mm	2.5 mm	50 mm	87 mm	137 mm
700-2.5-100	0.40 mm	2.5 mm	100 mm	87 mm	187 mm
700-3-50	0.50 mm	3 mm	50 mm	87 mm	137 mm
700-3-100	0.50 mm	3 mm	100 mm	87 mm	187 mm
700-3-200	0.50 mm	3 mm	200 mm	87 mm	287 mm
700-3.5-75	0.60 mm	3.5 mm	75 mm	87 mm	162 mm
700-4-75	0.80 mm	4 mm	75 mm	87 mm	162 mm
700-4-250	0.80 mm	4 mm	250 mm	87 mm	337 mm



Screwdriver for hexagonal head screws in inches, ball ended



Article	Hexagon	Blade length	Width handle	Length handle	Total length
BE-8700-5/32	5/32" mm	100 mm	27 mm	122 mm	222 mm
BE-8700-3/16	3/16" mm	100 mm	27 mm	122 mm	222 mm
BE-8700-7/32	7/32" mm	100 mm	36 mm	122 mm	222 mm
BE-8700-1/4	1/4" mm	125 mm	36 mm	122 mm	247 mm
BE-8700-3/8	3/8" mm	150 mm	36 mm	165 mm	272 mm
BE-8700-5/16	5/16" mm	150 mm	36 mm	122 mm	272 mm
BE-8700-7/64	7/64" mm	100 mm	20 mm	122 mm	222 mm

Article	Size	Blade length	Length handle	Total length
701-00-50	PH 00	50 mm	87 mm	137 mm
701-0-50	PH 0	50 mm	87 mm	137 mm
701-0-200	PH 0	200 mm	87 mm	287 mm
701-1-75	PH 1	75 mm	87 mm	162 mm
701-1-250	PH 1	250 mm	87 mm	337 mm



HEX SCREWDRIVERS



Product #	Tip Size (in)	Tips
J88601	3/64	Hex
J88602	1/16	Hex
J88603	5/64	Hex
J88604	3/32	Hex
J88605	7/64	Hex
J88606	1/8	Hex
J88607	9/64	Hex
J88608	5/32	Hex
J88609	3/16	Hex



PROTO® SLOTTED/PHILLIPS SCREW STARTER - 6-1/4"
ITEM # :J9866



Article	Size	Blade length	Length handle	Total length
703-4-50	T 4	50 mm	87 mm	137 mm
703-5-50	T 5	50 mm	87 mm	137 mm
703-6-50	T 6	50 mm	87 mm	137 mm
703-7-50	T 7	50 mm	87 mm	137 mm
703-8-50	T 8	50 mm	87 mm	137 mm
703-9-50	T 9	50 mm	87 mm	137 mm
703-10-50	T 10	50 mm	87 mm	137 mm
703-15-75	T 15	75 mm	87 mm	162 mm
703-20-75	T 20	75 mm	87 mm	162 mm



Article	Size	Blade length	Length handle	Total length
704-1.5-50	1.5mm	50 mm	87 mm	137 mm
704-2-50	2mm	50 mm	87 mm	137 mm
704-2.5-50	2.5mm	50 mm	87 mm	137 mm
704-3-75	3mm	75 mm	87 mm	162 mm
704Z-3/32	3/32"	75 mm	87 mm	162 mm



Minature awls, hooks and picks

- 2633/ S4 total length 130 mm
- 2633L/ S4 total length 250 mm



ERGO™ screw driver



Article	Tip thickness	Tip width	Blade length	Total length
BE-8002	0.3 mm	2.0 mm	60 mm	182 mm
BE-8010	0.4 mm	2.5 mm	60 mm	182 mm
BE-8210	0.4 mm	2.5 mm	75 mm	197 mm
BE-8020	0.5 mm	3.0 mm	60 mm	182 mm
BE-8020L	0.5 mm	3.0 mm	75 mm	197 mm
BE-8022	0.5 mm	3.0 mm	100 mm	222 mm
BE-8220	0.5 mm	3.0 mm	125 mm	247 mm
BE-8225	0.5 mm	3.0 mm	200 mm	322 mm
BE-8030	0.6 mm	3.5 mm	75 mm	197 mm
BE-8235	0.6 mm	3.5 mm	200 mm	322 mm
BE-8230	0.6 mm	3.5 mm	125 mm	247 mm
BE-8040	0.8 mm	4.0 mm	100 mm	222 mm
BE-8240	0.8 mm	4.0 mm	175 mm	297 mm
BE-8242	1.0 mm	5.5 mm	150 mm	272 mm
BE-8250L	1.0 mm	5.5 mm	200 mm	322 mm
BE-8252	1.2 mm	6.5 mm	150 mm	272 mm
BE-8241	1.0 mm	5.5 mm	125 mm	247 mm
BE-8251	1.0 mm	6.0 mm	150 mm	272 mm



Article	Screwhead	Blade length	Total length
BE-8904	T 4	75 mm	197 mm
BE-8905	T 5	75 mm	197 mm
BE-8906	T 6	75 mm	197 mm
BE-8907	T 7	75 mm	197 mm
BE-8908	T 8	75 mm	197 mm
BE-8909	T 9	75 mm	197 mm
BE-8910	T 10	75 mm	197 mm
BE-8915	T 15	100 mm	222 mm
BE-8920	T 20	100 mm	222 mm
BE-8925	T 25	125 mm	247 mm
BE-8927	T 27	125 mm	247 mm
BE-8930	T30	150 mm	272 mm
BE-8940	T40	150 mm	311 mm
BE-8945	T45	150 mm	311 mm



Article	Thickness tip	Width tip	Length blade	Total length
BE-8150	1 mm	5.5 mm	100 mm	222 mm
BE-8155	1.2 mm	6.5 mm	125 mm	247 mm
BE-8250	1 mm	5.5 mm	150 mm	272 mm
BE-8255	1.2 mm	6.5 mm	150 mm	272 mm
BE-8256	1.6 mm	8 mm	150 mm	272 mm
BE-8257	1.6 mm	8 mm	175 mm	297 mm
BE-8258	1.6 mm	10 mm	200 mm	361 mm



Article	Tip thickness	Tip width	Blade length	Total length
BE-8330	0.6 mm	3.5 mm	25 mm	83 mm
BE-8340	0.8 mm	4.0 mm	25 mm	83 mm
BE-8350	1.0 mm	5.5 mm	25 mm	83 mm
BE-8450	1.0 mm	5.5 mm	45 mm	103 mm
BE-8355	1.2 mm	6.5 mm	25 mm	83 mm
BE-8455	1.2 mm	6.5 mm	45 mm	103 mm
BE-8360	1.2 mm	8.0 mm	25 mm	83 mm



Article	Screwhead	Blade length	Total length
BE-8600	PH 0	60 mm	182 mm
BE-8605	PH 0	100 mm	222 mm
BE-8608	PH 0	200 mm	322 mm
BE-8622	PH 2	150 mm	272 mm
BE-8610	PH 1	75 mm	197 mm
BE-8611	PH 1	75 mm	197 mm
BE-8610L	PH 1	* 200 mm	322 mm
BE-8620	PH 2	100 mm	222 mm
BE-8621	PH 2	100 mm	222 mm
BE-8620L	PH 2	* 200 mm	322 mm
BE-8623	PH 3	150 mm	272 mm
BE-8624	PH 4	200 mm	361 mm



Article	Screwhead	Blade length	Total length
BE-8601	PH 1	25 mm	83 mm
BE-8602	PH 2	25 mm	83 mm

Screwdriver for hexagonal head screws, ball ended

Article	Hexagon size	Blade length	Total length
BE-8715	1.5 mm	60 mm	182 mm
BE-8702	2 mm	100 mm	222 mm
BE-8725	2.5 mm	100 mm	222 mm
BE-8703	3 mm	100 mm	222 mm
BE-8704	4 mm	100 mm	222 mm
BE-8705	5 mm	100 mm	222 mm
BE-8706	6 mm	125 mm	247 mm
BE-8708	8 mm	150 mm	272 mm
BE-8710	10 mm	150 mm	311 mm



Hexagonal

Article	Hexagon size	Blade length	Total length
BE-6902	2 mm	75 mm	222 mm
BE-6925	2.5 mm	75 mm	222 mm
BE-6903	3 mm	75 mm	222 mm



Ball ended Hexagonal

Article	Hexagon	Blade length	Total length
BE-8700-5/32	5/32" mm	100 mm	222 mm
BE-8700-3/16	3/16" mm	100 mm	222 mm
BE-8700-7/32	7/32" mm	100 mm	222 mm
BE-8700-1/4	1/4" mm	125 mm	247 mm
BE-8700-3/8	3/8" mm	150 mm	272 mm
BE-8700-5/16	5/16" mm	150 mm	272 mm
BE-8700-7/64	7/64" mm	100 mm	222 mm

ERGO™ screwdriver set, 6 pcs

For slotted and Phillips head screws



BE-9881



Slotted 0.5x3x60	Phillips PH2x100
Slotted 0.8x4x100	Phillips PH1x75
Slotted 1.0x5.5x100	
Slotted 1.2x6.5x125	

SCREWDRIVERS



Snap-on

Item: SSDMR4B

8 3/4" Ratcheting Standard Black Screwdriver



Item: SSDMR1A

4 5/16" Ratcheting Stubby Black Screwdriver

Snap-on



BAHCO

Item: 808050 Ratcheting 1/4" bit holder screwdriver



BAHCO

Item: 808050S Stubby ratcheting screwdriver

PROTO® DURATEK™ SLOTTED ROUND BAR CABINET SCREWDR - 3/16" X 4"

ITEM #: JC31604R



TIP SIZE	3/16
TIPS	Cabinet
SHANK LENGTH [IN]	4
SHANK WIDTH [IN]	0.1875
TIP WIDTH [IN]	0.1875
OVERALL LENGTH [IN]	7

PROTO® DURATEK™ SLOTTED ROUND BAR SCREWDRIVER - 1/4" X 6"

ITEM #: JK1406R



TIP SIZE	1/4
TIPS	Keystone
SHANK LENGTH [IN]	6
SHANK WIDTH [IN]	0.25
TIP WIDTH [IN]	0.25
OVERALL LENGTH [IN]	10

PROTO SCREWDRIVER SLOTTED ROUND WITH HEX 5/16"x 8"



ITEM #: J9609C

TIP SIZE	5/16
TIPS	Keystone
SHANK LENGTH [IN]	8
OVERALL LENGTH [IN]	12

PROTO SCREWDRIVER SLOTTED ROUND WITH HEX 3/8"x10"



ITEM #: J9611C

TIP SIZE	3/8
TIPS	Keystone
SHANK LENGTH [IN]	10
OVERALL LENGTH [IN]	15

PROTO® DURATEK™ PHILLIPS ROUND BAR SCREWDRIVER # 0 X 3"

ITEM #: JPP0003R

TIP SIZE	#0
TIPS	Phillips®
SHANK LENGTH [IN]	3
SHANK WIDTH [IN]	0.125
OVERALL LENGTH [IN]	5-3/4



PROTO® DURATEK™ PHILLIPS ROUND BAR SCREWDRIVER # 1 X 3"

ITEM #: JP0103R

TIP SIZE	#1
TIPS	Phillips®
SHANK LENGTH [IN]	3
SHANK WIDTH [IN]	0.1875
OVERALL LENGTH [IN]	6-3/4



PROTO® DURATEK™ PHILLIPS ROUND BAR SCREWDRIVER # 2 X 4"

ITEM #: JP0204R

TIP SIZE	#2
TIPS	Phillips®
SHANK LENGTH [IN]	4
SHANK WIDTH [IN]	0.25
OVERALL LENGTH [IN]	8



PROTO® DURATEK™ PHILLIPS ROUND BAR STUBBY SCREWDRIVER # 2 X 1-1/2"

ITEM #: JP02112R

TIP SIZE	#2
TIPS	Phillips®
SHANK LENGTH [IN]	1-1/2
SHANK WIDTH [IN]	0.25
OVERALL LENGTH [IN]	3-1/2



PROTO® DURATEK™ SLOTTED ROUND BAR STUBBY SCREWDRIVER 1/4" X 1-1/2"

ITEM #: JK14112R

TIP SIZE	1/4
TIPS	Keystone
SHANK LENGTH [IN]	1-1/2
SHANK WIDTH [IN]	0.25
TIP WIDTH [IN]	0.25
OVERALL LENGTH [IN]	3-1/2



SCREWDRIVERS

PROTO® DURATEK™ 8 PIECE COMBINATION SCREWDRIVER SET ITEM # :J1208SC

ITEM #:JC31603R SCREWDRIVER, SLOTTED CABINET ROUND 3/16" X 3"
ITEM #:JC31604R SCREWDRIVER, SLOTTED CABINET ROUND 3/16" X 4"
ITEM #:JC31605R SCREWDRIVER, SLOTTED CABINET ROUND 3/16" X 5"
ITEM #:JK1404R SCREWDRIVER, SLOTTED KEYSTONE ROUND 1/4" X 4"
ITEM #:JK51606R SCREWDRIVER, SLOTTED KEYSTONE ROUND 5/16" X 6"
ITEM #:JP0103R SCREWDRIVER, PHILLIPS ROUND # 1 X 3"
ITEM #:JP0204R SCREWDRIVER, PHILLIPS ROUND # 2 X 4"
ITEM #:JP0306R SCREWDRIVER, PHILLIPS ROUND # 3 X 6"



PROTO® DURATEK™ 8 PIECE LONG COMBINATION SCREWDRIVER SET ITEM # :J1208SCL

ITEM #:JC1410R SCREWDRIVER, SLOTTED CABINET ROUND 1/4" X 10"
ITEM #:JC1412R SCREWDRIVER, SLOTTED CABINET ROUND 1/4" X 12"
ITEM #:JC1416R SCREWDRIVER, SLOTTED CABINET ROUND 1/4" X 16"
ITEM #:JC31606R SCREWDRIVER, SLOTTED CABINET ROUND 3/16" X 6"
ITEM #:JP0108R SCREWDRIVER, PHILLIPS ROUND # 1 X 8"
ITEM #:JP0208R SCREWDRIVER, PHILLIPS ROUND # 2 X 8"
ITEM #:JP0212R SCREWDRIVER, PHILLIPS ROUND # 2 X 12"
ITEM #:JP0216R SCREWDRIVER, PHILLIPS ROUND # 2 X 16"



PROTO® 13 PIECE ROUND HEAD HEX KEY SET .050" to 3/8" ITEM # :J4995



PROTO® 13 PIECE LONG HEX KEY SET .050" to 3/8" ITEM # :J4983



8pc Standard Handle T-Shaped Hex Wrench Set (3/32"-1/4")

Item: GAW1900A

Shaper



PROTO® 9 PIECE FOLDING HEX KEY SET .050" to 3/16" ITEM # :J4978



Set of zinc plated hexagon offset screwdrivers, 7 pcs, metric
2.5 3 4 5 6 8 10 mm

ITEM# : 1999M/ 7H



Set of black finish hexagon offset screwdrivers,
7 pcs, metric
1.5 2 2.5 3 4 5 6 mm

ITEM# : BE-9776



Offset long series ball end hexagon key set, metric
1.5 2 2.5 3 4 5 6 8 10 mm

ITEM# : BE-9770



Offset long series hexagon key set 1.5 2 2.5 3 4 5 6 8 10 mm

ITEM# : BE-9588



offset hexagon key wrenches, with high torque handles



art.	mm	L mm	art.	mm	L mm
96T	2	139	96T	5	200
96T	2,5	153	96T	6	221
96T	3	153	96T	7	236
96T	3,5	179	96T	8	255
96T	4	179	96T	10	285
96T	4,5	200			

offset hexagon key wrenches, with high torque handles



art.	"	L mm	art.	"	L mm
96T/A S	3/32	153	96T/A S	3/16	200
96T/A S	7/64	153	96T/A S	7/32	221
96T/A S	1/8	179	96T/A S	1/4	236
96T/A S	9/64	179	96T/A S	5/16	255
96T/A S	5/32	200	96T/A S	3/8	285

Beta

PUCHS & CHISELS & HAMMERS

PROTO® 5 PIECE PUNCH & CHISEL SET ITEM # :J3S2



CHISEL, COLD 5/8"	ITEM # :J86A1/2S2
PUNCH, CENTER 3/8"	ITEM # :J413/8S2
PUNCH, PIN 3/16"	ITEM # :J473/8X3/16
PUNCH, PIN 1/8"	ITEM # :J475/16X1/8
PUNCH, STARTING 1/8"	ITEM # :J505/16S2

PROTO® 7 PIECE ROLL PIN PUNCH SET ITEM # :J49007S2



PUNCH, ROLL PIN 1/4"	ITEM # :J49014S2
PUNCH, ROLL PIN 1/8"	ITEM # :J49018S2
PUNCH, ROLL PIN 1/16"	ITEM # :J49116S2
PUNCH, ROLL PIN 3/16"	ITEM # :J49316S2
PUNCH, ROLL PIN 3/32"	ITEM # :J49332S2
PUNCH, ROLL PIN 5/32"	ITEM # :J49532S2
PUNCH, ROLL PIN 7/32"	ITEM # :J49732S2

PROTO® 7 PIECE PIN PUNCH SET ITEM # :J47A



PUNCH, PIN 1/4"	ITEM # :J471/2X1/4
PUNCH, PIN 1/16"	ITEM # :J471/4X1/16
PUNCH, PIN 3/32"	ITEM # :J471/4X3/32
PUNCH, PIN 3/16"	ITEM # :J473/8X3/16
PUNCH, PIN 1/8"	ITEM # :J475/16X1/8
PUNCH, PIN 5/32"	ITEM # :J475/16X5/32
PUNCH, PIN 7/32"	ITEM # :J477/16X7/32

PROTO® SUPER-DUTY DRIVE PIN PUNCHES



ITEM #:	TIP WIDTH [IN]	SHANK WIDTH [IN]	OVERALL LENGTH [IN]
J48014	1/4	7/16	5-3/4
J48018	1/8	5/16	4-3/4
J48038	3/8	5/8	6-1/2
J48116	1/16	1/4	4-1/8
J48316	3/16	3/8	5-1/4
J48332	3/32	1/4	4-1/2
J48516	5/16	1/2	6-1/4
J48532	5/32	5/16	5
J48732	7/32	7/16	5-1/2

PROTO® 5 PIECE LONG DRIVE PIN PUNCH SET ITEM # :J48005LS2



PUNCH, PIN SUPER DUTY LONG 1/4"	ITEM # :J48014LS2
PUNCH, PIN SUPER DUTY LONG 3/16"	ITEM # :J48316LS2
PUNCH, PIN SUPER DUTY LONG 5/16"	ITEM # :J48516LS2
PUNCH, PIN SUPER DUTY LONG 5/32"	ITEM # :J48532LS2
PUNCH, PIN SUPER DUTY LONG 7/32"	ITEM # :J48732LS2

PROTO® SUPER-DUTY LONG DRIVE PIN PUNCHES



ITEM #:	TIP WIDTH [IN]	SHANK WIDTH [IN]	OVERALL LENGTH [IN]
J48014LS2	1/4	1/2	8
J48316LS2	3/16	3/8	8
J48516LS2	5/16	1/2	8
J48532LS2	5/32	3/8	8
J48732LS2	7/32	7/16	8

PROTO® 7 PIECE SUPER-DUTY PIN PUNCH SET ITEM # :J48007



PUNCH, PIN SUPER DUTY 1/4"	ITEM # :J48014
PUNCH, PIN SUPER DUTY 1/8"	ITEM # :J48018
PUNCH, PIN SUPER DUTY 1/16"	ITEM # :J48116
PUNCH, PIN SUPER DUTY 3/16"	ITEM # :J48316
PUNCH, PIN SUPER DUTY 3/32"	ITEM # :J48332
PUNCH, PIN SUPER DUTY 5/32"	ITEM # :J48532
PUNCH, PIN SUPER DUTY 7/32"	ITEM # :J48732

PROTO® DRIVE PIN PUNCHES



ITEM #:	TIP WIDTH [IN]	SHANK WIDTH [IN]	OVERALL LENGTH [IN]
J471/2X1/4	1/4	3/8	6-3/4
J471/4X1/16	1/16	1/4	4-3/8
J471/4X3/32	3/32	1/4	4-3/4
J473/8X3/16	3/16	3/8	5-7/8
J475/16X1/8	1/8	5/16	5-3/16
J475/16X5/32	5/32	5/16	5-9/16
J477/16X7/32	7/32	3/8	6-3/8

PROTO® ROLL PIN PUNCHES



ITEM #:	TIP WIDTH [IN]	SHANK WIDTH [IN]	OVERALL LENGTH [IN]
J49012S2	1/2	5/8	7-1/2
J49014S2	1/4	7/16	6-7/16
J49018S2	1/8	5/16	4-3/4
J49038S2	3/8	1/2	7-1/2
J49116S2	1/16	1/4	3-3/4
J49316S2	3/16	3/8	5-7/16
J49332S2	3/32	1/4	4-1/4
J49532S2	5/32	5/16	5-1/4
J49732S2	7/32	3/8	5-7/8

PROTO® CENTER PUNCHES



ITEM #:	SHANK WIDTH [IN]	OVERALL LENGTH [IN]
J411/2S2	1/2	5-5/8
J411/4S2	1/4	4-3/4
J413/8S2	3/8	4-7/8
J415/16S2	5/16	4-5/8
J415/8S2	5/8	6-1/4
J417/16S2	7/16	5-1/4

PROTO® COLD CHISELS



ITEM #:	TIP WIDTH [IN]	SHANK WIDTH [IN]	OVERALL LENGTH [IN]
J86A1/2S2	5/8	1/2	6-3/4
J86A1/2X12S2	5/8	1/2	12
J86A1/4S2	5/16	1/4	5-1/8
J86A1X8S2	1-3/16	1	8-1/4
J86A3/16S2	1/4	3/16	4-7/8
J86A3/4X12S2	7/8	3/4	12
J86A3/4X8S2	7/8	3/4	8
J86A3/8S2	7/16	3/8	5-9/16
J86A5/16S2	3/8	5/16	5-3/8
J86A5/8S2	3/4	5/8	6-7/8
J86A5/8X12S2	3/4	5/8	12
J86A7/16S2	1/2	7/16	6
J86A7/16X12S2	1/2	7/16	12
J86A7/8X12S2	1	3/4	12
J86A7/8X18S2	1	7/8	18
J86A7/8X8S2	1	7/8	8

PROTO® STARTING PUNCHES



ITEM #:	TIP WIDTH [IN]	SHANK WIDTH [IN]	OVERALL LENGTH [IN]
J501/2S2	1/4	1/2	6-1/2
J501/4S2	3/32	1/4	5
J503/16S2	1/16	1/4	4-1/8
J503/8S2	3/16	3/8	5-5/8
J505/16S2	1/8	5/16	5-1/8
J507/16S2	7/32	7/16	6

PROTO® DRIFT PUNCHES



ITEM #:	TIP WIDTH [IN]	SHANK WIDTH [IN]	OVERALL LENGTH [IN]
J961/2S2	1/4	1/2	10
J961/4S2	3/32	1/4	10
J963/4S2	3/8	3/4	10
J963/8S2	3/16	3/8	10
J965/16S2	1/8	5/16	10
J965/8S2	5/16	5/8	10
J967/16S2	7/32	7/16	10

PROTO® 5/8" X 3/16" LONG ALIGNING PUNCH

ITEM #: J155/ 8S2



OVERALL LENGTH [IN]	16
SHANK WIDTH [IN]	5/8
TIP WIDTH [IN]	3/16
BLADE LENGTH [IN]	8
STRIKING END DIAMETER	9/16



PROTO® BRASS DRIFT PUNCHES

ITEM #:	TIP WIDTH [IN]	OVERALL LENGTH [IN]
J49920	1/2"	7-7/8"
J9612B	1/2"	7"
J9634B	3/4"	8"
J9634HB	3/4"	12"
J9638B	3/8"	6"

Drift punches with knurled guide sleeve



Article	Diameter	Length
3659-0,9	0.9 mm	75 mm
3659-1,4	1.4 mm	85 mm
3659-1,8	1.8 mm	85 mm
3659-2,4	2.4 mm	90 mm
3659-2,8	2.8 mm	95 mm
3659-3,4	3.4 mm	95 mm
3659-3,9	3.9 mm	100 mm
3659-6,0	** 5.9 mm	100 mm

PUCHS & CHISELS & HAMMERS

479-12 BALL PEIN HAMMER-WOOD HANDLE
Handle of first class genuine hickory, straight grained, without knots



Stud extractor set 5 pcs
ITEM: # 1435/ 5

Assortment
1420-1.4
1421-2.1
1422-3.1
1423-4.8
1424-6.2



PROTO® BALL PEIN HAMMERS - INDUSTRIAL FIBERGLASS HANDLE



ITEM #:	HEAD WEIGHT
J1312PGD	12 oz.
J1316PGD	16 oz.
J1324PGD	24 oz.
J1332PGD	32 oz.

ITEM # :J9500A

PROTO® 5 P I E C E S C R E W E X T R A C T O R S E T



PROTO® SOFT FACE HAMMER - MEDIUM TOUGH TIPS

ITEM #:	FACE DIAMETER
J1360	1-3/16"
J1362	1-11/32"
J1364	1-11/16"



PROTO® SOFT FACE HAMMER TIPS

ITEM # :	HARDNESS	FOR USE ON
J1360M	Medium	J1360
J1360T	Tough	J1360
J1364M	Medium	J1364
J1364T	Tough	J1364
J1384M	Medium	J1362
J1384T	Tough	J1362



Superflex plastic hammer

Blue plastic polls made of cellulose butyrate (Cellidor™ - Bayer AG),



Article	Head width	Weight
3625Y-22	22 mm	154 g
3625Y-27	27 mm	230 g
3625Y-32	32 mm	325 g
3625Y-35	35 mm	415 g
3625Y-40	40 mm	570 g
3625Y-50	50 mm	920 g
3625Y-60	60 mm	1280 g



Spare polls with cambered face, pair

Article	Head width
3625YL-22	22 mm
3625YL-27	27 mm
3625YL-32	32 mm
3625YL-35	35 mm
3625YL-40	40 mm
3625YL-50	50 mm
3625YL-60	60 mm

Nylon tip mallet

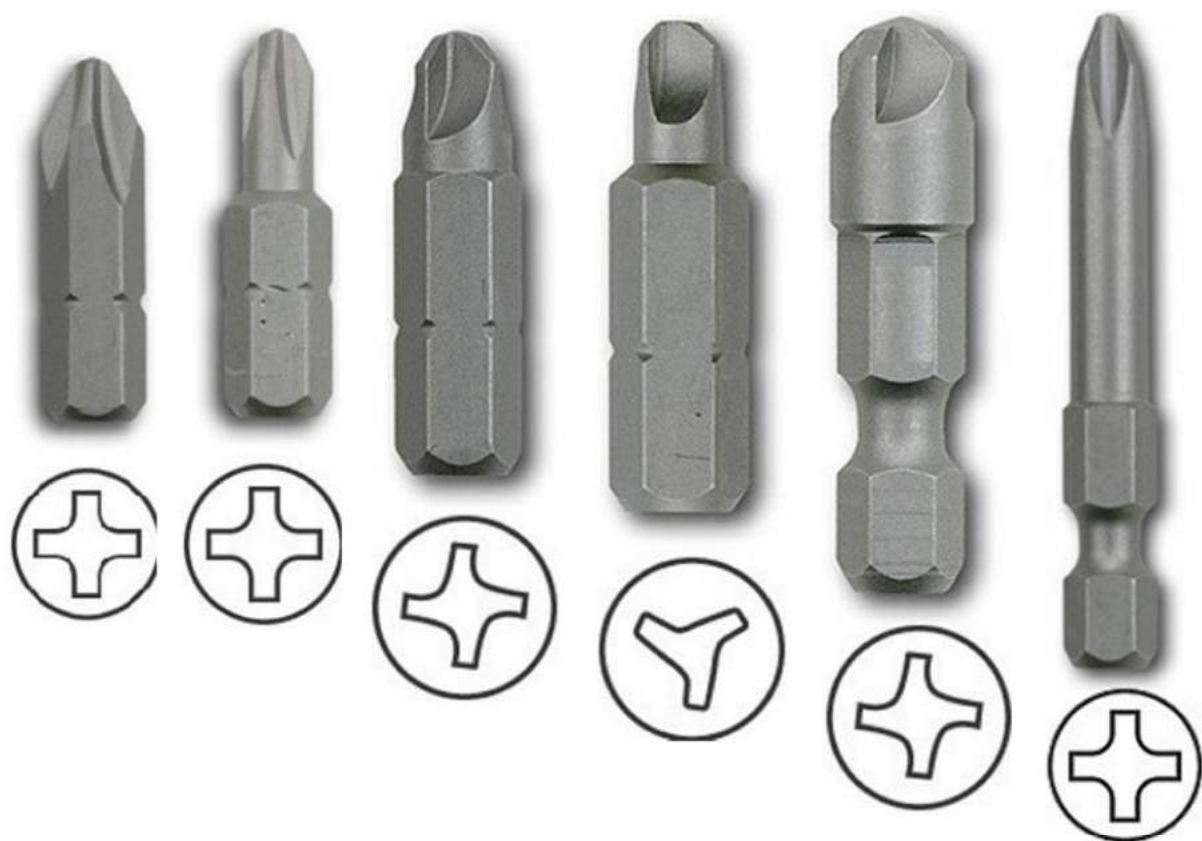


Article	Head width	Weight
3625W-22	22 mm	150 g
3625W-28	28 mm	300 g
3625W-35	35 mm	550 g
3625W-44	44 mm	1050 g
3625W-55	55 mm	1100 g

Article	Head width
3625WL-22	22 mm
3625WL-28	28 mm
3625WL-35	35 mm
3625WL-44	44 mm
3625WL-55	55 mm
3625WLH-22	22 mm
3625WLH-28	28 mm
3625WLH-35	35 mm
3625WLH-44	44 mm
3625WLH-55	55 mm



SCREWDRIVER INSERT & POVER BITS





PHILLIPS INSERT BITS NAS 8502, 8053

Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-28000	440-0	0	1/4"	1"
ZAVIA-28001	440-1	1	1/4"	1"
ZAVIA-28002	440-2	2	1/4"	1"
ZAVIA-28003	440-3	3	1/4"	1"
ZAVIA-28004	440-4	4	1/4"	1.1/4"



PHILLIPS INSERT BITS LIMITED CLEARANCE 8502, 8053

Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-28100	446-0	0	1/4"	1"
ZAVIA-28101	446-1	1	1/4"	1"
ZAVIA-28102	446-2	2	1/4"	1"
ZAVIA-28103	446-3	3	1/4"	1"



PHILLIPS INSERT BITS NAS 8502, 8053

Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-28403	830-3X	3	5/16" Square	1.1/8"



PHILLIPS POWER BITS NAS 8502, 8503

Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-28801	491	1	1/4"	1-15/16"
ZAVIA-28802	492	2	1/4"	1-15/16"
ZAVIA-28803	493	3	1/4"	1-15/16"

TORQ-SET INSERT BITS



Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-28700	212-0	0	1/4"	1"
ZAVIA-28701	212-1	1	1/4"	1"
ZAVIA-28702	212-2	2	1/4"	1"
ZAVIA-28703	212-3	3	1/4"	1"
ZAVIA-28704	212-4	4	1/4"	1"
ZAVIA-28705	212-5	5	1/4"	1"
ZAVIA-28706	212-6	6	1/4"	1"
ZAVIA-28708	212-8	8	1/4"	1"
ZAVIA-28710	212-10	10	1/4"	1"
ZAVIA-28711	212-1/4	1/4	1/4"	1"
ZAVIA-28712	212-8A	8	5/16"	1-1/4"
ZAVIA-28713	212-10A	10	5/16"	1-1/4"
ZAVIA-28714	212-1/4A	1/4	5/16"	1-1/4"
ZAVIA-28715	212-5/16	5/16	5/16"	1-1/4"
ZAVIA-28716	212-3/8A	3/8	5/16"	1-1/4"

TORQ-SET POWER BITS



Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-28750	170-0	0	1/4"	1-1/4"
ZAVIA-28751	170-1	1	1/4"	1-1/4"
ZAVIA-28752	170-2	2	1/4"	1-1/4"
ZAVIA-28753	170-3	3	1/4"	1-1/4"
ZAVIA-28754	170-4	4	1/4"	1-1/4"
ZAVIA-28755	170-5	5	1/4"	1-1/4"
ZAVIA-28756	170-6	6	1/4"	1-1/4"
ZAVIA-28758	170-8	8	1/4"	1-1/4"
ZAVIA-28760	170-10	10	1/4"	1-1/4"
ZAVIA-28761	170-1/4B	1/4	1/4"	1-1/4"
ZAVIA-28762	170-5/16B	5/16	1/4"	1-1/4"
ZAVIA-28763	170-3/8B	3/8	1/4"	1-1/4"
ZAVIA-28759	170-8A	8	5/16"	1-1/4"
ZAVIA-28769	170-10A	10	5/16"	1-1/4"
ZAVIA-28767	170-1/4A	1/4	5/16"	1-1/4"
ZAVIA-28764	170-5/16A	5/16	5/16"	1-1/4"
ZAVIA-28765	170-3/8A	3/8	5/16"	1-1/4"

TORQ-SET POWER BITS

Part Number	Industry Num-	Point Size	Shank Size	OAL
ZAVIA-28312	273-10	10	1/4"	1.15/16"



TRI WING INSERT BITS

Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-28500	TWD-0	#0	1/4"	1"
ZAVIA-28501	TWD-1	#1	1/4"	1"
ZAVIA-28502	TWD-2	#2	1/4"	1"
ZAVIA-28503	TWD-3	#3	1/4"	1"
ZAVIA-28504	TWD-4	#4	1/4"	1"
ZAVIA-28505	TWD-5	#5	1/4"	1"
ZAVIA-28506	TWD-6	#6	1/4"	1"
ZAVIA-28507	TWD-7	#7	1/4"	1"
ZAVIA-28508	TWD-8	#8	1/4"	1"



1/4" Socket Head (Hex-Allen) Hex Power Drive Bits

Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-AM-03-3	AM-03-3	3/32"	1/4"	3"
ZAVIA-AM-05-3	AM-05-3	5/32"	1/4"	3"
ZAVIA-AM-06-3	AM-06-3	3/16"	1/4"	3"



1/4" Socket Head (Hex-Allen) Hex Insert Bits

Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-H185-1X	185-1X	3/32"	1/4"	1"
ZAVIA-H-185-3X	185-3X	5/32"	1/4"	1"
ZAVIA-H-185-4X	185-4X	3/16"	1/4"	1"



1/4" Torx Hex Insert Bits



Part Number	Industry Number	Point Size	Shank Size	OAL
ZAVIA-TX-440-20X	440-TX-20X	T20	1/4"	1"
ZAVIA-TX-440-25X	440-TX-25X	T25	1/4"	1"
ZAVIA-TX-440-27X	440-TX-27X	T27	1/4"	1"
ZAVIA-TX-440-30X	440-TX-30X	T30	1/4"	1"
ZAVIA-TX-440-40X	440-TX-40X	T40	1/4"	1"
ZAVIA-TX-440-45X	440-TX-45X	T45	1/4"	1"
ZAVIA-TX-480-20X	480-TX-20X	T20	5/16"	1"
ZAVIA-TX-480-25X	480-TX-25X	T25	5/16"	1"

1/4" Insert Bits for Slotted Screws



Part Number	Industry Number	Point Size	Shank Size	OAL
59S/0.5-3.0		0.5-3.0	1/4"	1"
59S/0.5-4.0		0.5-4.0	1/4"	1"
59S/0.6-3.5		0.6-3.5	1/4"	1"
59S/0.6-4.5		0.6-4.5	1/4"	1"
59S/0.8-5.5		0.8-5.5	1/4"	1"
59S/1.0-5.5		1.0-5.5	1/4"	1"
59S/1.2-6.5		1.2-6.5	1/4"	1"
59S/1.2-8.0		1.2-8.0	5/16"	1"
59S/1.6-10		1.6-10	5/16"	1"
59S/1.6-9.0		1.6-9.0	5/16"	1"

1/4" Power Bits for Slotted Screws



Part Number	Industry Number	Point Size	Shank Size	OAL
59S/50/0.6-3.5		0.6-3.5	1/4"	2"
59S/50/0.8-4.0		0.8-4.0	1/4"	2"
59S/50/0.8-5.5		0.8-5.5	1/4"	2"
59S/50/1.0-6.0		1.0-6.0	1/4"	2"
59S/50/1.2-6.5		1.2-6.5	1/4"	2"

WORKSHOP TOOLS

BIT ADAPTORS



J6925
Bit Holder, Drive Size (In.) 1/4, Size 1/4"
Hex, Overall Length (In.) 1



808050 Ratcheting bit holder screwdriver 1/4"



J6930
Bit Holder, Drive Size (In.)
3/8, Size 5/16" Hex,
Overall Length (In.) 1-5/16



808050S
Stubby ratcheting screwdriver



J6931
Bit Holder, Drive Size (In.)
3/8, Size 1/4" Hex,
Overall Length (In.) 1-1/4



Item: SSDMR4B
8 3/4" Ratcheting Standard Black Screwdriver **Snap-on**



6973
Bit Holder, Drive Size (In.) 1/4, Size 1/4"
Overall Length (In.) 1
With spring collar



Item: SSDMR1A
4 5/16" Ratcheting Stubby Black Screwdriver



Item: FBSM8A
Socket, Bit, Magnetic,
3/8" drive (For 1/4" hex bits)



Item: 6528-1420

Handle, Ratcheting, Miniature, Straight



Item: BTWS



Handle, Ratcheting, Miniature, Straight



WORKSHOP TOOLS



ZAVI A-1364
600mm FLEXI Claw Pick-Up Tool



ZAVI A-1351
FLEXI Magnetic Pick-Up Tool 1,5kg.



ZAVI A-1102/ 55M
Telescoping, Magnifying 5X Inspection Mirror Ø 2.1/4"



ZAVI A-1252C/ 60
Inspection Mirror, Flexi LED Light
Ø 60mm



ZAVI A-5515T
Telescopic Pocket Type Inspection Mirror Ø30mm
180mm-655mm



J2372
Telescopic Inspection Mirror 2-1/4"
10" to 14"



J2373
Telescopic Inspection Mirror
2-1/8"x3-1/2" 11-1/4" to 15-1/2"



J2375
Telescopic Magnetic Retrieving
16-3/4" to 26-3/4"



ZAVI A-1305S
Telescopic Magnetic Pick Up Tool with scribe



ZAVI A-65002C

5W Ultra Bright High Power LED Lamp

- 100% (460 lms) - 50% (220 lms) - OFF, with battery indicator
- CREE high power white LED delivered up to 460lms.
- DURABLE AIRCRAFT –GRADE ALUMINIUM
- Side push button switch. With power indicator:

The indicator is running in green light when operated as normal, and it will change to red light when battery power is less than 15%.

- Powered by 3pcs AA alkaline or rechargeable batteries. Running time : * Operation lasting for 100% high light : 7 ~ 9 hours; * Operation lasting for 50% low light : 12 ~ 15 hours.


Length: 162mm, Weights: 195g without batteries and 263.6g with batteries.

ZAV A 60105 LED Penlight with Focus Lens



Nichia Japanese super bright LED Powered by 2pcs AAA batteries
LED Penlight with FOCUS Lens

- NICHIA Japanese LED delivers up to 31000 mcd and has long lifespan with 100000 hours
- The focus lens projects concise spot light
- Convenient tail cap ON/OFF click switch for one hand operation.
- Machined Air Craft Quality Heat Treated aluminium
- With pocket clip
- Battery type: 2pcs AAA or rechargeable batteries



Heavy Duty Tool Trolleys

New 1475K Series



Made in  **USA**

Pn code: 1475KXL7—COLOUR RANGE CODE



Pn code: 1475K8—COLOUR RANGE CODE



colour range.

-  Västerås Black (PC)
-  Lidköping Green (PJJ)
-  Malmö Violet (PEV)
-  Göteborg Blue (PDG)
-  Bollnäs Green (PAW)
-  Stockholm Blue (PCM)
-  Bahco Orange (PSP)
-  Enköping Red (PSV)

ITEM # :J000N PROTO® 22 BLADE STEP CUT FEELER GAUGE

"Go / no-go" 1/2" x 3-5/16" blades in steel holder.

Each blade has two different thicknesses.

Sizes: .004/.006", .005/.007", .006/.008", .007/.009", .008/.010", .009/.011", .010/.012", .011/.013", .012/.014", .013/.015", .014/.016", .015/.017", .016/.018", .017/.019", .018/.020", .019/.021", .020/.022", .021/.023", .022/.024", .023/.025", .024/.026", .025/.027".

Blades etched with both decimal size and metric equivalent.



Three square file



Article	File length	File width	Type of cut
1-170-04-2-2	100 mm	6.2 mm	Second
1-170-06-1-2	150 mm	11 mm	Bastard
1-170-06-2-2	150 mm	11 mm	Second
1-170-06-3-2	150 mm	11 mm	Smooth
1-170-08-1-2	200 mm	15.5 mm	Bastard
1-170-08-2-2	200 mm	15.5 mm	Second
1-170-08-3-2	200 mm	15.5 mm	Smooth
1-170-10-1-2	250 mm	17.5 mm	Bastard
1-170-10-2-2	250 mm	17.5 mm	Second
1-170-10-3-2	250 mm	17.5 mm	Smooth

ITEM # :J000TL PROTO® 25 BLADE LONG FEELER GAUGE SET

1/2" x 12" blades in steel holder.

Sizes: .0015", .002", .003", .004", .005", .006", .007", .008", .009", .010", .011", .012", .013", .014", .015", .016", .017", .018", .019", .020", .021", .025", .027", .030", .040".

Blades etched with both decimal size and metric equivalent.



Half-round file



Article	File length	File width	Type of cut
1-210-04-1-2	100 mm	10 mm	Bastard
1-210-04-2-2	100 mm	10 mm	Second
1-210-06-1-2	150 mm	16 mm	Bastard
1-210-06-2-2	150 mm	16 mm	Second
1-210-06-3-2	150 mm	16 mm	Smooth
1-210-08-1-2	200 mm	20.5 mm	Bastard
1-210-08-2-2	200 mm	20.5 mm	Second
1-210-08-3-2	200 mm	20.5 mm	Smooth
1-210-10-1-2	250 mm	26.5 mm	Bastard
1-210-10-2-2	250 mm	26.5 mm	Second
1-210-10-3-2	250 mm	26.5 mm	Smooth
1-210-12-1-2	300 mm	31 mm	Bastard
1-210-12-2-2	300 mm	31 mm	Second
1-210-12-3-2	300 mm	31 mm	Smooth

Flat file



Article	File length	File width	File thickness	Type of cut
1-100-04-1-2	100 mm	12 mm	3 mm	Bastard
1-100-04-2-2	100 mm	12 mm	3 mm	Second
1-100-06-1-2	150 mm	16 mm	4 mm	Bastard
1-100-06-2-2	150 mm	16 mm	4 mm	Second
1-100-06-3-2	150 mm	16 mm	4 mm	Smooth
1-100-08-1-2	200 mm	20 mm	5 mm	Bastard
1-100-08-2-2	200 mm	20 mm	5 mm	Second
1-100-08-3-2	200 mm	20 mm	5 mm	Smooth
1-100-10-1-2	250 mm	25 mm	5.5 mm	Bastard
1-100-10-2-2	250 mm	25 mm	5.5 mm	Second
1-100-10-3-2	250 mm	25 mm	5.5 mm	Smooth
1-100-12-1-2	300 mm	30 mm	6 mm	Bastard
1-100-12-2-2	300 mm	30 mm	6 mm	Second
1-100-12-3-2	300 mm	30 mm	6 mm	Smooth

Round file



Article	File length	File width	Type of cut
1-230-04-1-2	100 mm	3.6 mm	Bastard
1-230-04-2-2	100 mm	3.6 mm	Second
1-230-06-1-2	150 mm	6 mm	Bastard
1-230-06-2-2	150 mm	6 mm	Second
1-230-06-3-2	150 mm	6 mm	Smooth
1-230-08-1-2	200 mm	8 mm	Bastard
1-230-08-2-2	200 mm	8 mm	Second
1-230-08-3-2	200 mm	8 mm	Smooth
1-230-10-1-2	250 mm	10 mm	Bastard
1-230-10-2-2	250 mm	10 mm	Second
1-230-10-3-2	250 mm	10 mm	Smooth
1-230-12-1-2	300 mm	12 mm	Bastard
1-230-12-2-2	300 mm	12 mm	Second
1-230-12-3-2	300 mm	12 mm	Smooth

Square file



Article	File length	File width	Type of cut
1-160-04-1-2	100 mm	4.5 mm	Bastard
1-160-04-2-2	100 mm	4.5 mm	Second
1-160-06-1-2	150 mm	6 mm	Bastard
1-160-06-2-2	150 mm	6 mm	Second
1-160-06-3-2	150 mm	6 mm	Smooth
1-160-08-1-2	200 mm	8 mm	Bastard
1-160-08-2-2	200 mm	8 mm	Second
1-160-08-3-2	200 mm	8 mm	Smooth
1-160-10-1-2	250 mm	10 mm	Bastard
1-160-10-2-2	250 mm	10 mm	Second
1-160-10-3-2	250 mm	10 mm	Smooth
1-160-12-1-2	300 mm	12 mm	Bastard
1-160-12-2-2	300 mm	12 mm	Second
1-160-12-3-2	300 mm	12 mm	Smooth

FM10 MILLED TOOTH FILES

Curved teeth: For fast removal of soft metals, lead, aluminium



Needle file set of 9 files

Contains one file each of: hand, flat, half round, round, three square, square, oval, crossing and knife
Includes one handle 9-488-02-10
Type of cut: 1 = Second



ITEM#: 2-471-16-1-0

Needle file set of 12 files

Contains one file each of: hand, flat, three square, square, half round, crossing, round, knife, barrette, slitting, round-edge joint and markin
Includes one handle 9-488-02-10
Type of cut: Bastard



ITEM#: 2-472-16-0-0

File handle developed according to the scientific ERGO™ process
A set for fine filing and polishing jobs
Each set contains one handled file each of:
Hand, warding, square, three square, half round and round
Supplied in a snap-shut plastic wallet with hanging hole
Type of cut: 3 = Smooth



ITEM#: 1-476-04-3-2

1-478-08-1-2

Contains one each of 8" & 200MM :
Hand bastard, hand second, square bastard, half round bastard, round bastard

1-478-10-1-2

Contains one each of 10" & 250mm:
Hand bastard, hand second, square bastard, half round bastard, round bastard



ITEM#: 1-478-08-1-2

ITEM#: 1-478-10-1-2

Combination square



Article	Length
CS150	150 mm
CS300	300 mm
CS400	400 mm

Sliding combination square, metric and imperial marking on ruler
Can mark 90° and 45°
Adjustable depth for repetition marking and scribing
Built in level bubble for approximate marking and a metal scribe con-

Item No: 319

Professional hand hacksaw frame



Item No: 3906-300-24

Hand hacksaw blades 300mm 24TPI



Item No: 3906-300-24-100

Hand hacksaw blades 300mm 24TPI– 100 Blades in pack



Item No: 3834-SET-42

Assortment

3834-ES	ejector spring
3834-ARBR-9100	Arbor 32-100mm
3830-51-VIP	holesaw Ø51mm
3830-76-VIP	holesaw Ø76mm
3830-86-VIP	holesaw Ø86mm
3830-111-VIP	holesaw Ø111mm

Item No: 3834-SET-53

Assortment

3830-19-VIP	holesaw Ø19mm
3834-ARBR-930	14-30 mm
3830-22-VIP	holesaw Ø22mm
3830-25-VIP	holesaw Ø25mm
3834-ARBR-9100	32-100 mm
3830-29-VIP	holesaw Ø29mm
3830-30-VIP	holesaw Ø30mm
3830-35-VIP	holesaw Ø35mm
3830-37-VIP	holesaw Ø37mm
3830-41-VIP	holesaw Ø41mm
3830-52-VIP	holesaw Ø52mm
3830-60-VIP	holesaw Ø60mm
3830-79-VIP	holesaw Ø79mm

WORKSHOP TOOLS

Item: RULER601 Rule, Steel, 6"



Item: RULER120 Rule, Steel, 12"



Item: 1179-FLX



Flexible stainless steel ruler with pocket clip
Both inch and metric measurement scales

Item: 33-215

3.5m/12 ft PowerLock® Tape Rule Metric / Inch



Item: 782-U

General purpose utility wire brush for cleaning of dirt, rust, paint etc



Item: 783

Brake steel brush for cleaning of disc



TUBE CUTTERS

Item: 301-22

Tube cutter for 3 to 22 mm pipes
For copper, bronze, aluminium, and steel tubes



Item: 302-35

Tube cutter for 8 to 35 mm pipes
For copper, bronze, aluminium, and steel tubes



Item: 302-76

Tube cutter for 35 to 76 mm pipes
For copper, bronze, aluminium, and steel tubes



Snap-on

TUBE BENDERS

Tube capacity from 10 mm (2/5") to 15 mm (19/32")
High precision bending of steel, stainless steel, soft and hard copper tubes

BAHCO

Article	Total length	Total width	Width of head	Radius	Diameter
600-10	460 mm	185 mm	125 mm	42 mm	10 mm
600-12	460 mm	185 mm	125 mm	42 mm	12 mm
600-15	640 mm	230 mm	150 mm	55 mm	15 mm



Item: 1084

Multipurpose tubing bender, bends up to a 90° angle
For 1/4", 5/16" and 3/8" (6, 8 and 10 mm) aluminium, copper and stainless steel tubing

PEN REAMERS

Item: 316-1

Pen reamer for deburring tubes
Aluminium body with HSS-blade



Item: 316-2

Pen reamer for deburring tubes
Plastic body with an extra HSS-blade inside



Tube cutter and double flaring tool set

For double or single flares on soft steel, brass or aluminium tubes
Set includes tube cutter, flaring bar, rod handle, yoke and adaptors
Double flaring adapter: 3/16", 1/4", 5/16", 3/8" and 1/2"

Item: 4480/ 2-ZD



Oil cans

Brass pump
Two steel valves
Flexible and rigid spout included

BAHCO

Article	Volume
BOD4200	0.2 l
BOD4500	0.5 l



WORKSHOP TOOLS

ITEM NO: BLE300

Stool with storage
Capacity: 136 kg
3 drawer + a tray for storage of tools & accessories
Rotatable High Density Foam pad for high resistance and comfort
75 mm diameter wheels with 25 mm width, steerable 360°



ITEM NO: KE18-01 ERGO™ 18mm snap off knife



OLFA OL OLFA Cutter, Carpet, W/ Tucker Detail Page

ITEM NO: BLE301

Low profile creeper

Adjustable header with three positions
Capacity: 136 kg
Low height: 120 mm
High density foam pad for higher resistance with good comfort
Hanger at the back for easy storage in the garage
Four PVC wheels, with 75 mm diameter, 25 mm width and steerable 360°



Item: TDTDM117A

Snap-on

Includes all components of the TDTDM500A U.S./Metric Set plus 41pc high speed steel drill bit set in fractional, metric, wire gauge and letter sizes and five spiral screw extractors. Each drill bit matches to corresponding tap size for correct fit. Set offers a complete assortment of high-carbon steel taps and dies in fractional and metric sizes. Tap/drill charts and tool diagrams included. Set packaged in a storage case.

Item: 1418S



Stud extractors for broken-off screws, bolts and studs set



Quick clamp

QCS-150—150mm

QCS-300—300mm



The Superior clamp has the speed of the quick clamp but the extra lever to give the maximum force of 300 kg
Standard pads are medium



Article	Length
QCB-150	150 mm
QCB-300	300 mm
QCB-450	450 mm
QCB-600	600 mm
QCB-900	900 mm
QCB-1250	1250 mm



A wider range up to 1250 mm in length
QCB clamp has a force of 200 kg
Replaceable gripping pads with 2 different compounds, standard pads fitted are medium
Variable speed trigger mechanism that increases power as the head makes contact with the work piece
Can also be used as a spreader



Handy spring clamps with a movable gripping surface for odd shapes
Available in 25 mm and 50 mm opening

420SC-25

420SC-50



Tap wrenches

With reversible ratchet: Forward-reverse-locked



Article	Size
600.003.010	3-10 mm
600.005.012	5-12 mm





Precision Cutting Tools



DRILLING IN AEROSPACE



Expert advice:

High-speed steel is by far the most common material used in the manufacture of bits and is usually also the best. **For highly abrasive materials such as composites with reinforcement of fibre-glass, carbon fibre or Kevlar fibre**, cemented-carbide bits are essential to ensure that they can be used for a reasonable length of time between reshaping.

A point angle of **118°** is used in **aluminium, aluminium alloys, copper and similar soft materials.**

A point angle of **135°** is used in **stainless acid-resistant and heat-resistant steels.**

Always use as short a bit as possible in a hand-held drill, especially if the bit diameter is less than 6mm.

In this way, you will avoid vibrations and bit failure and the bits will retain their strength for longer.

HSS DIN 388 STRAIGHT SHANK TWIST DRILLS – ROLL FORGED



Description

TS ISO 235, HSS high speed steel, N, point angle 118°, diameter tolerance h8, right cutting direction

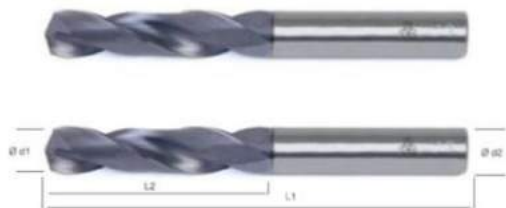
Application

Produced by hot roll-forged technology. The high twisting moment and elasticity enable using by hand drilling devices and conventional machinery for low alloyed steel, cast, ferrous and non-ferrous metals.

Code	d1 (h8) (mm)	L1 (mm)	L2 (mm)
B00000010510	5,1	86	52
B00000010520	5,2	86	52
B00000010530	5,3	86	52
B00000010540	5,4	93	57
B00000000550	5,5	93	57
B00000010560	5,6	93	57
B00000010570	5,7	93	57
B00000010580	5,8	93	57
B00000010590	5,9	93	57
B00000000600	6,0	93	57
B00000010610	6,1	101	63
B00000010620	6,2	101	63
B00000010630	6,3	101	63
B00000010640	6,4	101	63
B00000000650	6,5	101	63
B00000010660	6,6	101	63
B00000010670	6,7	101	63
B00000010680	6,8	109	69
B00000010690	6,9	109	69
B00000000700	7,0	109	69
B00000010710	7,1	109	69
B00000010720	7,2	109	69
B00000010730	7,3	109	69
B00000010740	7,4	109	69
B00000000750	7,5	109	69
B00000010760	7,6	117	75
B00000010770	7,7	117	75
B00000010780	7,8	117	75
B00000010790	7,9	117	75
B00000000800	8,0	117	75
B00000010810	8,1	117	75
B00000010820	8,2	117	75
B00000010830	8,3	117	75
B00000010840	8,4	117	75
B00000000850	8,5	117	75
B00000010860	8,6	125	81
B00000010870	8,7	125	81
B00000010880	8,8	125	81
B00000010890	8,9	125	81
B00000000900	9,0	125	81

Code	d1 (h8) (mm)	L1 (mm)	L2 (mm)
B00000000200	2,0	49	24
B00000010210	2,1	49	24
B00000010220	2,2	53	27
B00000010230	2,3	53	27
B00000010240	2,4	57	30
B00000000250	2,5	57	30
B00000010260	2,6	57	30
B00000010270	2,7	61	33
B00000010280	2,8	61	33
B00000010290	2,9	61	33
B00000000300	3,0	61	33
B00000010310	3,1	65	36
B00000010320	3,2	65	36
B00000010330	3,3	65	36
B00000010340	3,4	70	39
B00000000350	3,5	70	39
B00000010360	3,6	70	39
B00000010370	3,7	70	39
B00000010380	3,8	75	43
B00000010390	3,9	75	43
B00000000400	4,0	75	43
B00000010410	4,1	75	43
B00000010420	4,2	75	43
B00000010430	4,3	80	47
B00000010440	4,4	80	47
B00000000450	4,5	80	47
B00000010460	4,6	80	47
B00000010470	4,7	80	47
B00000010480	4,8	86	52
B00000010490	4,9	86	52
B00000000500	5,0	86	52

SOLID CARBIDE DIN 338 DRILL BITS



Description

Solid carbide, N, point angle 118°, right cutting direction.

Application

For high-speed CNC machining in low and high-alloyed steel with resistance 1200 N/mm², in hard cast, gray and tempered cast, light Ne-metals, Ti and Ti-alloys.

Code	d1 (mm)	d2 (mm)	L1 (mm)	L2 (mm)
B12551003000	3,0	3,0	61	33
B12551003500	3,5	3,5	70	39
B12551004000	4,0	4,0	75	43
B12551004000	4,0	4,0	75	43
B12551004500	4,5	4,5	80	47
B12551005500	5,5	5,5	93	57
B12551006000	6,0	6,0	93	57
B12551006500	6,5	6,5	101	63
B12551007000	7,0	7,0	109	69
B12551007500	7,5	7,5	109	69
B12551008000	8,0	8,0	117	75
B12551008500	8,5	8,5	117	75
B12551009000	9,0	9,0	125	81
B12551009500	9,5	9,5	125	81
B12551010000	10,0	10,0	133	87

TAPS



DIES - THREAD CHASER



REAMERS



COUNTERSINKS



MILLING CUTTERS



SOLID CARBIDE (VHM)



Please caal for requirements



Inch/Metric

Order No	Range	Accuracy	Vernier Graduation Lower Scale	Vernier Graduation Upper Scale
530-104	0-6in 0-150mm	0.05mm	0.02mm	1/120in
530-114	0-8in 0-200mm	0.05mm	0.05mm	1/128in
530-115	0-12in 0-300mm	0.08mm	0.02mm	1/128in
530-312	0-6in 0-150mm	0.03mm	0.02mm	.001in



Inch/Metric

Order No	500-/84"	500-/85"
Range	0-6in 0-150mm	0-8in 0-200mm
Accuracy	.001in	.001in
LCD Resolution	.0005in 0.01mm	.0005in 0.01mm



ITEM NO: 64PKA071

Includes:

- 103-922 Outside Micrometer Set (3 pcs), (Range: 0-3", Graduation: .0001")
- 141-208 Inside Micrometer (with 6pcs Rods)
- 180-905U Combination Set (4R)
- 182-202 6" Full-Flexible Rule (3R)
- 513-518T Test Indicator Set (Range: .04", Graduation: .001")
- 505-675 Dial Caliper (Range: 0-6", Dial Graduation: .001")
- 2416S Dial Indicator (Range: 1.0", Graduation: .001")
- 7010S Magnetic Stand
- 050504 Mahogany Case

MITUTOYO 103-904-10
MICROMETER SET, MECHANICAL 0-6", .001"

Micrometer Set, Micrometers Included 1, 2, 3, 4, 5, 6 In, Range 0 to 6 In, Resolution 0.001 In, Thimble Type Ratchet, Includes 5 Standards, Spanner Wrenches, Carbide Faces, Positive Locking Clamp, Fitted Case.

SPECIFICATIONS

MICROMETERS INCLUDED : 1, 2, 3, 4, 5, 6".

RANGE : 0 to 6".

RESOLUTION : 0.001".

THIMBLE TYPE : Ratchet.

SPC OUTPUT : No.

INCLUDES : 5 Standards, Spanner Wrenches, Carbide Faces, Positive Locking Clamp, Fitted Case.



Inch

Order No	Range	Accuracy	Remarks
101-113	0-1in	±.0001in	with ratchet stop
101-114	1-2in	±.0001in	with ratchet stop
101-119	2-3in	±.0001in	with ratchet stop
101-120	3-4in	±.00015in	with ratchet stop



Inch/Metric

Order No	Range	Accuracy	Type
203-831-30	0-1in 0-25.4mm	±.0001in 2µm	With ratchet stop
283-832-30	0-1in 0-25.4mm	±.0001in 2µm	With friction thimble



ITEM NO: 64PKA070

101-117	Outside Micrometer (Friction Thimble Type), (Range: 0-1", Graduation: .001")
129-132	Depth Micrometer (with 6 pcs Rods), (Range: 0-6", Graduation: .001")
182-202	6" Full-Flexible Rule (3R)
505-675	Dial Caliper (Range: 0-6", Dial Graduation: .001")
050503	Mahogany Case



Depth Micrometer Series 129-Interchangeable Rod

Inch

Metric

Order Number	129-132	129-150
Range	0-6in	0-12in
Base Size	4x63in	4x63in
Rod Qty	6	12



Inside Micrometers - Caliper Type

Inch

Inch/Metric

Metric

Order Number	Range	Accuracy
145-194	1-2in	.0003in



ITEM NO: 64PKA076A

Technical Specs

Item	Precision Measuring Tool Kit	Thimble	Ratchet
Number of Pieces	2	Caliper Range (In./mm)	0 to 8.0 to 150
Micrometer Range (In./mm)	0 to 1" / 0 to 25mm	Caliper Resolution (In./mm)	0.0005/0.01
Micrometer Resolution (In./mm)	0.00005/0.001	Includes	Electronic Digital Micrometer and Caliper, Case, Batteries

1/4" DRIVE SOCKET & ACCESSORIES



PROTO® 1/4" DRIVE 10 PIECE SOCKET SET - 12 POINT ITEM #:J47104

ITEM #:	J4706T	SOCKET, 1/4" DR 3/16" 12 PT
ITEM #:	J4707T	SOCKET, 1/4" DR 7/32" 12 PT
ITEM #:	J4708T	SOCKET, 1/4" DR 1/4" 12 PT
ITEM #:	J4709T	SOCKET, 1/4" DR 9/32" 12 PT
ITEM #:	J4710T	SOCKET, 1/4" DR 5/16" 12 PT
ITEM #:	J4711T	SOCKET, 1/4" DR 11/32" 12 PT
ITEM #:	J4712T	SOCKET, 1/4" DR 3/8" 12 PT
ITEM #:	J4714T	SOCKET, 1/4" DR 7/16" 12 PT
ITEM #:	J4716T	SOCKET, 1/4" DR 1/2" 12 PT
ITEM #:	J4718T	SOCKET, 1/4" DR 9/16" 12 PT



PROTO® 1/4" DRIVE 10 PIECE DEEP SOCKET SET - 12 POINT ITEM #:J47100

ITEM #:	J4706LT	SOCKET DEEP, 1/4" DR 3/16" 12 PT
ITEM #:	J4707LT	SOCKET DEEP, 1/4" DR 7/32" 12 PT
ITEM #:	J4708LT	SOCKET DEEP, 1/4" DR 1/4" 12 PT
ITEM #:	J4709LT	SOCKET DEEP, 1/4" DR 9/32" 12 PT
ITEM #:	J4710LT	SOCKET DEEP, 1/4" DR 5/16" 12 PT
ITEM #:	J4711LT	SOCKET DEEP, 1/4" DR 11/32" 12 PT
ITEM #:	J4712LT	SOCKET DEEP, 1/4" DR 3/8" 12 PT
ITEM #:	J4714LT	SOCKET DEEP, 1/4" DR 7/16" 12 PT
ITEM #:	J4716LT	SOCKET DEEP, 1/4" DR 1/2" 12 PT
ITEM #:	J4718LT	SOCKET DEEP, 1/4" DR 9/16" 12 PT



PROTO® 1/4" DRIVE 9 PIECE UNIVERSAL SOCKET SET - 12 POINT ITEM #:J47107

ITEM #:	J4770TA	SOCKET, UNIVERSAL 1/4" DR 7/32" 12 PT
ITEM #:	J4771TA	SOCKET, UNIVERSAL 1/4" DR 1/4" 12 PT
ITEM #:	J4772TA	SOCKET, UNIVERSAL 1/4" DR 5/16" 12 PT
ITEM #:	J4773TA	SOCKET, UNIVERSAL 1/4" DR 3/8" 12 PT
ITEM #:	J4774TA	SOCKET, UNIVERSAL 1/4" DR 7/16" 12 PT
ITEM #:	J4775TA	SOCKET, UNIVERSAL 1/4" DR 1/2" 12 PT
ITEM #:	J4776TA	SOCKET, UNIVERSAL 1/4" DR 9/16" 12 PT
ITEM #:	J4777TA	SOCKET, UNIVERSAL 1/4" DR 5/8" 12 PT
ITEM #:	J4778TA	SOCKET, UNIVERSAL 1/4" DR 11/16" 12 PT



PROTO® 1/4" DRIVE 5 PIECE UNIVERSAL SOCKET SET - 12 POINT ITEM #:J47105

ITEM #:	J4771TA	SOCKET, UNIVERSAL 1/4" DR 1/4" 12 PT
ITEM #:	J4772TA	SOCKET, UNIVERSAL 1/4" DR 5/16" 12 PT
ITEM #:	J4773TA	SOCKET, UNIVERSAL 1/4" DR 3/8" 12 PT
ITEM #:	J4774TA	SOCKET, UNIVERSAL 1/4" DR 7/16" 12 PT
ITEM #:	J4775TA	SOCKET, UNIVERSAL 1/4" DR 1/2" 12 PT



PROTO® 1/4" DRIVE 11 PIECE HEX BIT SET ITEM #:J4770-11

ITEM #:	J47701/16	SOCKET, HEX BIT 1/4" DR 1/16"
ITEM #:	J47701/4	SOCKET, HEX BIT 1/4" DR 1/4"
ITEM #:	J47701/8	SOCKET, HEX BIT 1/4" DR 1/8"
ITEM #:	J47703/16	SOCKET, HEX BIT 1/4" DR 3/16"
ITEM #:	J47703/32	SOCKET, HEX BIT 1/4" DR 3/32"
ITEM #:	J47705/16	SOCKET, HEX BIT 1/4" DR 5/16"
ITEM #:	J47705/32	SOCKET, HEX BIT 1/4" DR 5/32"
ITEM #:	J47705/64	SOCKET, HEX BIT 1/4" DR 5/64"
ITEM #:	J47707/32	SOCKET, HEX BIT 1/4" DR 7/32"
ITEM #:	J47707/64	SOCKET, HEX BIT 1/4" DR 7/64"
ITEM #:	J47709/64	SOCKET, HEX BIT 1/4" DR 9/64"

PROTO® 1/4" DRIVE SOCKETS - 6 POINT

ITEM #:	SIZE [IN]
J4704	1/8
J4705	5/32
J4706	3/16



PROTO® 1/4" DRIVE SOCKETS - SPLINE

ITEM #: SIZE [IN]

J4706SPL	3/16
J4707SPL	7/32
J4708SPL	1/4
J4709SPL	9/32
J4710SPL	5/16
J4712SPL	3/8
J4714SPL	7/16



PROTO® 1/4" DRIVE DEEP SOCKETS - SPLINE

ITEM #: SIZE [IN]

J4706DPL	3/16
J4707DPL	7/32
J4708DPL	1/4
J4709DPL	9/32
J4710DPL	5/16
J4712DPL	3/8
J4714DPL	7/16



PROTO® 1/4" DRIVE UNIVERSAL JOINT ITEM #:J4770A



PROTO® STANDARD EXTENSIONS

ITEM #: DRIVE SIZE LENGHT

J4759	1/4	2
J4760	1/4	3
J4761	1/4	6
J4762	1/4	10
J4763	1/4	14-3/32



PROTO® 1/4" DRIVE FLEXIBLE EXTENSION 6-1/4" ITEM #:J4765



PROTO® 1/4" DRIVE SLIDING T-HANDLE 4-1/2" ITEM #:J4785



PROTO® 1/4" DRIVE SOCKET DRIVE ITEM #:J4769



PROTO® 1/4" DRIVE HINGE HANDLE 5-3/4" ITEM #:J4766



PROTO® DRIVE ADAPTERS

ITEM #: INPUT OUTPUT

J5253	3/8	1/2
J5254	1/2	3/8
J5255	3/8	1/4
J5256	1/4	3/8
J5453	3/4	1/2
J5653	1/2	3/4
J5853	3/4	1
J5854	1	3/4



Snap-on



1/4" DRIVE SOCKET & ACCESSORIES

				A	B	C
High Strength Sealed Ratchets						
T72	Standard Handle	Sealed Sealed	72	5°	7/16	29/32 4 7/16
TL72	Long Handle	Sealed Sealed	72	5°	1/16	29/32 6 1/2
HY-LOK® Fastener Ratchet						
TFY936	Standard Handle	HY-LOK®	36	10°	3/8	1 7/32 6 7/8



Universal Joint

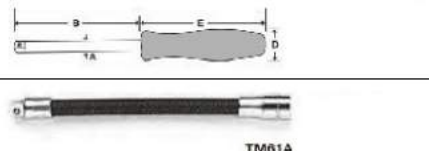
	A	B
TMU8B	1/2	1 5/16

Adaptors

	A	B	C
TA3	3/8	1/4	1 1/4
A2A	1/4	3/8	15/16
QFAT1E	3/8	1/2	1 5/16
GTA3	1/2	3/8	1 13/16
GAF2A	1/2	3/8	1 13/16
GSAF1E	1/2	3/8	1 13/16

Long Shank Driver w/Female Square Drive

	A	B	C
SGT4BR*	5/16	2	7

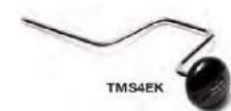


Flexible Extension

	A	B	C
TMG1A	5/16	5	6

Speeder w/Knob

	A	B	C	D
TMS4EK	5/16	7 1/8	3	15 1/32



Knurled Extensions

	A	B
TMXK2*	5/16	2
TMXK4	5/16	4
TMXK60*	5/16	6
TMXK110	5/16	11



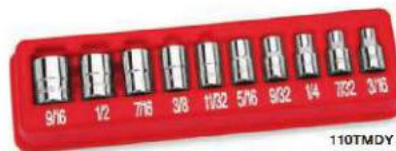
Breaker Bar

	A	C	B
TM10G	5/16	19/32	6



Sliding T-handle

	A	B	C
TM5	13/16	5/16	4 1/2



110TMDY 12-Point Shallow Set. TMD6 thru TMD18 (10 pcs) (3/16" to 9/16").

Shallow

	6	12
1/8	TM04	—
5/32	TM05*	—
3/16	TM6*	TMD6*
7/32	TM7*	TMD7*
1/4	TM8	TMD8
9/32	TM9	TMD9
5/16	TM10	TMD10
11/32	TM11	TMD11
3/8	TM12	TMD12
7/16	TM14	TMD14
1/2	TM16	TMD16
9/16	TM18	TMD18
5/8	TM20	—



110STMDY 12-Point Deep Set. STMD6 thru STMD18 (10 pcs) (3/16" to 9/16").

Deep

	6	12
1/8	STM04*	—
5/32	STM05*	—
3/16	STM6*	STMD6*
7/32	STM7*	STMD7*
1/4	STM8	STMD8
9/32	STM9	STMD9
5/16	STM10	STMD10
11/32	STM11	STMD11
3/8	STM12	STMD12
7/16	STM14	STMD14
1/2	STM16	STMD16
9/16	STM18	STMD18



106TMUA 12-Point Shallow Set. TMU81B thru TMU181A (except TMU91A and TMU111A) (6 pcs) (1/4" to 9/16").

Shallow Universal

	12
3/16	TMU61A*
7/32	TMU71A*
1/4	TMU81B
9/32	TMU91A
5/16	TMU101A
11/32	TMU111A
3/8	TMU121A
7/16	TMU141A
1/2	TMU161A
9/16	TMU181A



110ETMAY Standard Hex Set. TMA2E thru TMA8E (10 pcs) (1/16" to 1/4").

Hex

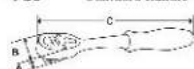
1/16	TMA2E
5/64	TMA2.5E
3/32	TMA3E
7/64	TMA3.5E
1/8	TMA4E
9/64	TMA4.5E
5/32	TMA5E
3/16	TMA6E
7/32	TMA7E
1/4	TMA8E



3/8" DRIVE SOCKET & ACCESSORIES



Dual 80 Technology Ratchets
F80 Standard Handle



F80



Sealed 80 4.5° 1/2 1 3/16 7 11/32



12-Point Chrome Set:

211FY 12-Point Shallow Set. F081 thru F281 (except F111 & F191) (11 pcs) (1/4" to 7/8").

Extensions - Friction Ball



	A	B
FXK3	13/32	3
FXK6	13/32	6
FXK8	13/32	8
FXK11	13/32	11



Adaptors

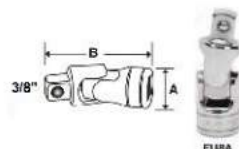
	A	B	C
TA3	3/8	1/4	1 1/4
A2A	1/4	3/8	1 9/16
GFAT1E	3/8	1/2	1 13/16
GTA3	1/4	3/8	1 9/16
GAF2A	3/8	1/2	1 9/16
GSAF1E	1/2	3/8	1 13/16



Universal Joints



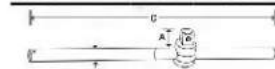
	A	B
FU8A*	3/4	2 1/16



Sliding T-Handle



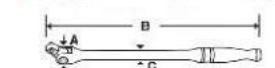
	A	B	C
F5L	3/4	13/32	8



Breaker Bars



	A	C	B
F10LC	3/4	15/32	9 9/16



Speeders



	A	B	C
F4LBK*	13/32	7 7/8	3 1/2



Shallow

	A	B	C	D	E
F081	13/32	11/16	7/16	29/32	7/32
F101	15/32	11/16	7/16	29/32	1/4
F111	1/2	11/16	7/16	29/32	9/32
F121	9/16	11/16	7/16	29/32	9/32
F141	5/8	11/16	7/16	29/32	9/32
F161	23/32	11/16	1/2	15/16	5/16
F181	25/32	3/4	1/2	1 1/32	3/8
F201	13/16	25/32	9/16	1 1/16	3/8
F221	27/32	25/32	19/32	1 3/32	1/2
F241	15/16	7/8	5/8	1 1/8	17/32
F261	1	15/16	11/16	1 3/16	15/32
F281	1 1/16	1	11/16	1 7/32	1/2
F301	1 5/32	1 1/32	23/32	1 9/32	9/16
F321	1 1/4	1 3/16	25/32	1 11/32	9/16
F341	1 5/16	1 1/4	13/16	1 3/8	15/32



F201



12-Point Chrome Sets:

211SFY 12-Point Deep Set. SF081 thru SF281 (except SF191) (11 pcs) (1/4" to 7/8").
214SFY 12-Point Deep Set. SF081 thru SF321 (14 pcs) (1/4" to 1").

Deep

	A	B	C	D	E
SF081	15/32	11/16	1 11/16	2 1/8	1/4
SF101	17/32	11/16	1 11/16	2 1/8	7/32
SF121	1/2	11/16	1 11/16	2 1/8	9/32
SF141	9/16	11/16	1 11/16	2 1/8	5/16
SF161	5/8	11/16	1 11/16	2 1/8	3/8
SF181	23/32	11/16	1 11/16	2 1/8	7/16
SF191	25/32	23/32	1 29/32	2 3/8	7/16
SF201	13/16	25/32	1 29/32	2 3/8	15/32
SF221	27/32	13/16	1 29/32	2 3/8	15/32
SF241	15/16	7/8	2 3/16	2 5/8	1/2
SF261	1	1	2 3/16	2 5/8	5/8
SF281	1 1/16	1	2 3/16	2 5/8	5/8
SF301	1 5/32	1 1/8	2 3/16	2 5/8	23/32
SF321	1 1/4	1 1/4	2 3/16	2 5/8	13/16



WRENCHES

FLANK DRIVE® Plus Combination Reversible Ratcheting Box / Open End Standard Length, 15° Offset



11	12	A	B	C	D	E
3/8	SOEXR12	27/32	27/32	5/16	3/16	7
7/16	SOEXR14	7/8	29/32	11/32	7/32	7 5/8
1/2	SOEXR16	31/32	1 1/16	13/32	1/4	8 11/16
9/16	SOEXR18	1 1/16	1 5/32	13/32	1/4	9 1/4
5/8	SOEXR20	1 3/16	1 5/16	7/16	9/32	10 1/4
11/16	SOEXR22	1 7/16	1 3/8	15/32	5/16	10 7/8
3/4	SOEXR24	1 1/2	1 9/16	1/2	11/32	12

SOEXR707 12-Point Set. SOEXR12 thru SOEXR24 (7 pcs) (3/8" to 3/4").

FLANK DRIVE® Combination

Standard Length

11	12	A	B	C	D	E
1/4	OEX8B	13/32	17/32	3/16	5/32	5
5/16	OEX10B	1/2	21/32	7/32	5/32	5 3/4
11/32	OEX11B	17/32	3/4	1/4	5/16	6 1/8
3/8	OEX12B	19/32	13/16	5/16	3/16	6 1/2
7/16	OEX14B	21/32	29/32	9/16	7/32	7 1/4
1/2	OEX16B	3/4	1 1/16	11/32	1/4	8
9/16	OEX18B	27/32	1 3/16	5/32	8 3/4	8 3/4
5/8	OEX20B	15/16	1 5/16	13/32	9 1/2	9 1/2
11/16	OEX22B	1 1/32	1 13/16	7/16	5/16	10 1/4
3/4	OEX24B	1 1/8	1 9/16	15/32	11/32	11
13/16	OEX26B	1 3/16	1 21/32	17/32	3/8	11 3/4
7/8	OEX28B	1 9/32	1 13/16	9/16	3/8	12 1/2
15/16	OEX30B	1 5/8	1 29/32	19/32	13/32	13 1/4
1	OEX32B	1 15/32	2 1/32	21/32	7/16	14
1 1/16	OEX34B	1 9/16	2 3/16	11/16	15/32	14 3/4
1 1/8	OEX36B	1 5/8	2 5/16	11/16	17/32	15 9/16
1 3/16	OEX38B	1 3/4	2 7/16	3/4	1/2	16 1/8
1 1/4	OEX40B	1 13/16	2 9/16	3/4	17/32	16 1/16
1 5/16	OEX42B	1 29/32	2 13/16	3/4	9/16	17 13/16
1 3/8	OEX44B	2	2 17/16	7/4	19/32	18 9/16
1 7/16	OEX46B	2 1/16	2 29/32	7/8	19/32	19 1/32
1 1/2	OEX48B	2 1/8	3 1/16	7/8	20 1/16	20 1/16
1 9/16	OEX50B	2 1/4	3 3/16	7/8	20 13/16	20 13/16
1 5/8	OEX52B	2 11/32	3 11/32	7/8	11/16	21 9/16
1 11/16	OEX54A	2 7/16	3 13/32	7/8	23/32	22 9/32
1 3/4	OEX56A	2 17/32	3 8/16	1 1/32	23/32	22 7/8
1 13/16	OEX58A	2 5/8	3 21/32	1 1/32	23 15/32	23 15/32
1 7/8	OEX60A	2 11/32	3 13/16	1 1/32	24 1/32	24 1/32
2	OEX64A	2 7/8	4 1/16	1 1/32	25 1/4	25 1/4



OEX714K



OEX714 12-Point Set. OEX8B thru OEX32B (14 pcs.)

FLANK DRIVE® Combination

Short Handle

11	12	A	B	C	D	E
1/4	OEX080B	13/32	17/32	3/16	5/32	4 17/32
5/32	OEX090B	7/16	19/32	7/32	5/32	4 21/32
9/16	OEX100B	1/2	21/32	7/32	5/32	4 27/32
11/32	OEX110B	17/32	23/32	1/4	3/16	5
3/8	OEX120B	19/32	25/32	1/4	3/16	5 1/8
7/16	OEX140B	21/32	29/32	5/16	7/32	5 7/16
1/2	OEX160B	3/4	1 1/16	11/32	1/4	5 3/4
9/16	OEX180B	27/32	1 5/32	3/8	9/32	6 1/16
5/8	OEX200B	15/16	1 5/16	13/32	9/32	6 11/32
11/16	OEX220B	1 1/32	1 13/32	7/16	5/16	6 21/32
3/4	OEX240B	1 1/8	1 9/16	15/32	11/32	6 31/32
13/16	OEX260B	1 3/16	1 21/32	17/32	3/8	7 9/32
7/8	OEX280B	1 5/32	1 13/16	9/16	3/8	7 9/16
15/16	OEX300B	1 5/8	1 29/32	19/32	13/32	7 7/8
1	OEX320B	1 15/32	2 1/32	5/8	7/16	8 3/16
1 1/16	OEX340B	1 9/16	2 5/32	21/32	15/32	8 17/32
1 1/8	OEX360B	1 5/8	2 5/16	11/16	1/2	8 27/32
1 3/16	OEX380B	1 23/32	2 13/32	23/32	1/2	9 1/8
1 1/4	OEX400B	1 13/16	2 9/16	3/4	17/32	9 7/16
1 5/16	OEX420B	1 29/32	2 21/32	3/4	9/16	9 3/4
1 3/8	OEX440B	2	2 13/16	3/4	19/32	10 1/16

OEXS715K 12-Point Set. OEX080B thru OEX320B (15 pcs) (1/4" to 1") in C1505 Kit Bag.



OEXS715K



Midget

11	6	12	A	B	C	D	E
1/8	OXI4SB*	—	7/32	11/32	1/8	1/8	2 11/16
5/32	OXI5SB*	—	9/32	13/32	5/32	1/8	2 27/32
3/16	OXI6SB*	OXI6B*	5/16	7/16	5/32	1/8	2 31/32
7/32	OXI7SB	OXI7B	3/8	1/2	3/16	1/8	3 3/32
1/4	OXI8SB	OXI8B	13/32	17/32	3/16	5/32	3 7/32
9/32	OXI9SB	OXI9B	7/16	19/32	7/32	5/32	3 11/32
5/16	OXI10SB	OXI10B	1/2	21/32	7/32	3/16	3 1/2
11/32	OXI11SB	OXI11B	17/32	23/32	1/4	3/16	3 5/8
3/8	OXI12SB	OXI12B	19/32	25/32	1/4	3/16	3 3/4
7/16	—	OXI14B	21/32	29/32	5/16	7/32	4 1/32
1/2	—	OXI16B	3/4	1 1/16	11/32	1/4	4 9/32
9/16	—	OXI18B	27/32	1 5/32	3/8	9/32	4 17/32
5/8	—	OXI20B	15/16	1 5/16	13/32	9/32	4 13/16
11/16	—	OXI22B	1 1/32	1 13/32	7/16	5/16	5 1/16
3/4	—	OXI24B	1 1/8	1 9/16	15/32	11/32	5 11/32

OXI715 6/12-Point Set. OXI4SB and OXI5SB 6-Point Wrenches and OXI6B thru OXI24B 12-Point Wrenches (15 pcs) (1/8" to 3/4").



Ratcheting Box

Standard Length, 0° Offset

11	12	A	C	E
1/4 - 5/16	R810C	19/32 - 43/64	3/8	4 1/2
5/16 - 11/32	R1011C	5/8 - 3/4	11/32	5 3/8
5/16 - 3/8	R1012C	51/64 - 57/64	3/8	5 1/2
3/8 - 7/16	R1214C	51/64 - 57/64	3/8	5 1/2
1/2 - 9/16	R1618C	1 1/64 - 1 5/32	1/2	6 7/8

Ratcheting Box

Standard Length, 25° Offset

11	12	A	C	E
1/4 - 5/16	RYA810	9/16 - 5/8	11/32	4 9/32
5/16 - 11/32	RYA1011	19/32 - 11/16	3/8	4 1/32
3/8 - 7/16	RYA1214	3/4 - 7/8	11/32	6 5/32
1/2 - 9/16	RYA1618	15/16 - 1	13/32	6 31/32



OPEN END WRENCHES

Ignition, 15°/60° Offsets

A	B	C	D	E
1/8	1/8	DS88A	5/16 - 5/16	1/8
5/32	5/32	DS1010A	3/8 - 3/8	1/8
3/16	3/16	DS1212A	13/32 - 13/32	1/8
15/64	1/4	DS1516A	15/32 - 1/2	1/8
1/4	15/64	DS1615A	1/2 - 15/32	1/8
9/32	5/16	DS1820A	9/16 - 19/32	1/8
5/16	9/32	DS2018A	19/32 - 9/16	1/8
11/32	3/8	DS2224A	21/32 - 23/32	9/32
3/8	11/32	DS2422A	23/32 - 21/32	9/32

ASME/ANSI B107.6-1994

DS809K Set. DS88A thru DS2422A (9 pcs) (1/8" to 3/8") in C0900A Kit Bag.



DS809K

1/4" DRIVE CROWFOOT WRENCHES



Open End

11	A	C	E	F	D
1/4	TMC08	17/32	17/32	1/4	1/4
5/16	TMC010	21/32	9/16	1/4	1/4
3/8	TMC012	25/32	19/32	1/4	1/4
7/16	TMC014	7/8	5/8	9/16	5/16
1/2	TMC016	1 1/32	21/32	9/16	5/16
9/16	TMC018	1 1/8	11/16	9/16	5/16

106TMC0 Set. TMC08 thru TMC018 (6 pcs) (1/4" to 9/16") in storage tray.

WRENCHES

1/4" DRIVE CROWFOOT WRENCHES





Deep, FLANK DRIVE® Flare Nut

		B	C	E	Maximum Recommended Working Torque, in. lb.
5/8	AN85086B	9/32	1/2	1/2	75
7/16	AN85087B	11/32	9/16	9/16	200
1/2	AN85088B	13/32	19/32	9/16	200
9/16	AN85089B	15/32	5/8	9/16	200

3/8" DRIVE CROWFOOT WRENCHES

Deep, FLANK DRIVE® Flare Nut



		A	B	C	E	Maximum Recommended Working Torque, in. lb.
5/8	AN850810B	15/16	1/2	23/32	23/32	250
11/16	AN850811B	1 1/32	17/32	25/32	23/32	310
3/4	AN850812B	1 1/8	9/16	13/16	3/4	450
13/16	AN850813B	1 1/2	5/8	7/8	3/4	450
7/8	AN850814B	1 5/8	25/32	15/16	25/32	625
15/16	AN850815B	1 3/4	3/4	31/32	25/32	625
1	AN850816B	1 7/8	3/4	1	13/16	625
1 1/16	AN850817B	1 23/32	25/32	1 1/32	13/16	625

ASME/ANSI B107.21-1992

208AN Set. AN850810B thru AN850817B (8 pcs) (5/8" to 1 1/16").



Open End

		A	C	E	F	D
5/8	FC012A	7/8	23/32	7/32	33/64	1 19/64
7/16	FC014A	7/8	41/64	7/32	33/64	1 17/64
1/2	FC016A	1 1/32	51/64	7/32	33/64	1 29/64
9/16	FC018A	1 1/4	59/64	7/32	33/64	1 5/8
5/8	FC020A	1 1/4	55/64	7/32	33/64	1 19/32
11/16	FC022A	1 9/16	1 3/32	7/32	33/64	1 59/64
3/4	FC024A	1 9/16	1 1/32	7/32	33/64	1 57/64
13/16	FC026A	1 23/32	1 3/32	9/32	19/32	2
7/8	FC028A	1 23/32	1 1/32	9/32	19/32	1 31/32
15/16	FC030A	2	1 5/32	11/32	21/32	2 1/8
1	FC032A	2	1 5/8	11/32	21/32	2 3/32
1 1/16	FC34B	1 23/32	1 3/8	3/8	39/64	
1 1/8	FC36A	1 29/32	1 5/32	3/8	39/64	
1 1/16	FC38A	1 29/32	1 13/64	3/8	39/64	
1 1/4	FC40A	2 3/32	1 15/64	3/8	41/64	
1 1/2	FC42A	2 3/32	1 17/64	3/8	41/64	
1 3/8	FC44A	2 3/8	1 19/64	3/8	41/64	
1 7/16	FC46A	2 3/8	1 11/32	3/8	41/64	
1 1/2	FC48A	2 17/32	1 3/8	3/8	41/64	
1 9/16	FC50A	2 17/32	1 13/32	3/8	41/64	
1 5/8	FC52A	2 21/32	1 29/64	3/8	41/64	
1 11/16	FC54A	2 21/32	1 31/64	3/8	41/64	
1 3/4	FC56A	2 7/8	1 33/64	3/8	41/64	
1 13/16	FC58A	2 7/8	1 35/64	3/8	41/64	
1 7/8	FC60A	3 3/32	1 19/32	3/8	41/64	
1 15/16	FC62A	3 3/32	1 5/8	3/8	41/64	
2	FC64A	3 13/32	1 23/32	1/2	45/64	
2 1/16	FC66A	3 13/32	1 3/4	1/2	45/64	
2 1/8	FC68A	3 19/32	1 25/32	1/2	45/64	
2 1/16	FC70A	3 19/32	1 63/64	1/2	45/64	
2 1/4	FC72A	3 27/32	1 15/16	1/2	45/64	
2 5/16	FC74A	3 27/32	1 15/16	1/2	45/64	
2 3/8	FC76A	4 3/32	2 1/16	1/2	45/64	
2 7/16	FC78A	4 3/32	2 1/8	1/2	45/64	
2 1/2	FC80A	4 9/32	2 11/64	1/2	45/64	
2 9/16	FC82A	4 9/32	2 11/64	1/2	45/64	
2 5/8	FC84A	4 17/32	2 21/64	1/2	45/64	
2 11/16	FC86A	4 17/32	2 3/8	1/2	45/64	
2 3/4	FC88A	4 23/32	2 7/16	1/2	45/64	
2 13/16	FC90A	4 23/32	2 17/32	1/2	45/64	
2 7/8	FC92A	5 3/32	2 41/64	1/2	45/64	
2 15/16	FC94A	5 3/32	2 43/64	1/2	45/64	
3	FC96A	5 3/32	2 23/32	1/2	45/64	

242FC Set. FC014A thru FC96A (42 pcs) (7/16" to 3").

226FC Set. FC014A thru FC64A (26 pcs) (7/16" to 2").



214FC Set. FC014A thru FC40A (14 pcs) (7/16" to 1 1/4").

211FCOA Set. FC012A thru FC032A (11 pcs) (3/8" to 1") in storage tray.

1/2" DRIVE CROWFOOT WRENCHES

Deep, FLANK DRIVE® Flare Nut





		A	B	C	E
1 1/8	AN850818B	1 5/8	27/32	1 5/32	7/8
1 3/16	AN850819B	1 11/16	29/32	1 3/16	7/8
1 1/4	AN850820B	1 25/32	15/16	1 7/32	7/8
1 5/16	AN850821B	1 27/32	31/32	1 1/4	7/8
1 3/8	AN850822B	1 15/16	1 1/16	1 5/16	15/16
1 7/16	AN850823B	2	1 1/16	1 11/32	15/16
1 1/2	AN850824B	2 3/32	1 1/8	1 3/8	15/16
1 9/16	AN850825B	2 5/32	1 5/32	1 13/32	15/16
1 5/8	AN850826B	2 7/32	1 7/32	1 7/16	15/16
1 11/16	AN850827B	2 5/16	1 5/16	1 1/2	1 1/32
1 3/4	AN850828B	2 3/8	1 5/16	1 13/16	1 1/32
1 13/16	AN850829B	2 15/32	1 11/32	1 19/32	1 1/32
1 7/8	AN850830B	2 9/16	1 3/8	1 21/32	1 1/16
1 15/16	AN850831B	2 5/8	1 7/8	1 11/16	1 1/16
2	AN850832B	2 23/32	1 9/16	1 23/32	1 1/16
2 1/8	AN850834B	2 7/8	1 9/16	1 13/16	1 1/8
2 3/16	AN850835B	2 15/16	1 21/32	1 27/32	1 1/8
2 1/4	AN850836B	3 1/32	1 11/16	1 7/8	1 1/8
2 3/8	AN850838B	3 3/16	1 13/16	1 31/32	1 3/16
2 7/16	AN850839B	3 1/4	1 13/16	2	1 3/16
2 9/16	AN850841B	3 7/16	1 29/32	2 3/32	1 9/32
2 5/8	AN850842B	3 1/2	2 1/16	2 1/8	1 9/32
2 11/16	AN850843B	3 19/32	2 1/16	2 5/32	1 9/32
2 3/4	AN850844B	3 21/32	2 1/16	2 7/32	1 9/32
3 1/8	AN850850B	4 1/8	2 5/16	2 7/16	1 5/16

ASME/ANSI B107.21-1992

315AN 12-Point Set. AN850818B thru AN850832B (15 pcs) (1 1/8" to 2").

Open End

		A	C	E	F
1 1/16	SC034	2 3/32	1 3/4	3/8	5/8
1 1/8	SC036	2 7/32	1 3/4	3/8	5/8
1 3/16	SC038	2 11/32	1 3/4	13/32	5/8
1 1/4	SC040	2 15/32	2	13/32	5/8
1 5/16	SC042	2 19/32	2	7/16	5/8
1 3/8	SC044	2 23/32	2	7/16	5/8
1 7/16	SC046	2 27/32	2	7/16	5/8
1 1/2	SC048	3 1/32	2	15/32	5/8
1 5/8	SC052	3 7/32	1 31/32	1/2	5/8
1 11/16	SC054	3 11/32	2 3/16	1/2	5/8
1 3/4	SC056	3 15/32	2 3/16	17/32	5/8
1 13/16	SC058	3 19/32	2 3/16	17/32	5/8
1 7/8	SC060	3 23/32	2 3/16	9/16	5/8
2	SC064	3 31/32	2 7/32	9/16	5/8

314SCO Set. SC034 thru SC064 (14 pcs) (1 1/16" to 2").

FOLDING HEX KEY WRENCH SET



AWEF9K


Set, Wrench, Folding, Hex (9 pcs.) (.050"-3/16")



BHS13A Ball Hex Set. Set includes 0.05", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16" and 3/8" sizes (13 pcs) (.050" to 3/8") in plastic index.

ADJUSTABLE WRENCHES

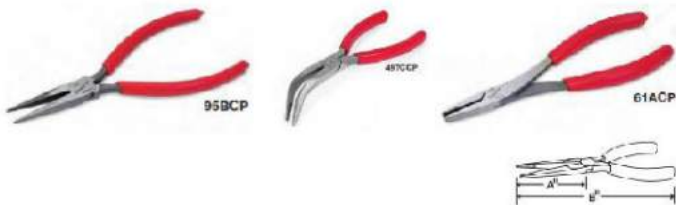
FLANK DRIVE® Plus Adjustable Wrenches/Cushion Handles

	A	B
FADH6A	6 (152)	3/4 (19)
FADH8A	8 (203)	15/16 (24)
FADH10A	10 (254)	1 1/8 (29)



PLIERS

NEEDLE NOSE



		A	B
95BCP	Needle Nose Pliers	1 11/16	6
497CCP	90° Angle Jaws	2 5/8	6 5/8
61ACP**	Duck Bill (Industrial Finish)	1 9/16	7 3/4

Item: AVSL10

Snips, Aviation, Straight Jaws, Left Hand Cut, Red Handle



Item: AVSR10

Snips, Aviation, Straight Jaws, Right Hand Cut, Red Handle



Item: AVSS10

Snips, Aviation, Straight Jaws, Straight Cut, Red Handle



Combination

Feature 2 position slip joints. Red vinyl grips.

	A	B
46ACP	6 7/16	23/64

SIDE CUTTERS



PowerEdge™ Diagonal

		B	C
86CF*	Standard Diagonal	3/4	8 5/16



Standard Diagonal

		A	B	C
184CCP	Cutter	Bowed	13/32	4 3/4



Adjustable Joint Standard

These models feature red, vinyl covered handles for a secure, comfortable grip. Specially hardened jaw teeth provide long life and a solid grip on work object.

		A	B	C
91ACP	Industrial Finish	5	1 3/8	9 1/4

LOCKING PLIERS



	A	B
Straight Jaw		
VGP11205	1 5/32 (30)	5 (135)
VGP11207	1 5/8 (42)	7 (190)
VGP11210	2 7/16 (63)	10 (235)

ELECTRONIC SERVICE PLIERS

Needle Nose Pliers

		A	B	C
E712BCG	Serrated Jaws	1 11/16	1/16	6 1/8
E718BCG	Curved (70°) Serrated Jaws	1 1/8	1/16	5 9/16



Cutters

	Cut	Head Style	Cutting Capacity	Length
E707BCG	True Flush	Tapered	AWG #17	4 3/8



PWC52A Connector Pliers.



Strippers/Cutters/Crimpers

	Description	A	Strips AWG Sizes	Strips Metric Sizes, mm	Application
PWC27	Automatic Wire Stripper	6 1/4	10, 12, 14, 16, 18, 20, 22	—	Strip PVC, THHN, and THWN
PWC14	Wire Stripper/Cutter/Crimper/Roll Cutter	8 1/4	10, 12, 14, 16, 18, 20, 22	10-22 Insulated and Non-Insulated 7-8mm Ignition Terminals	—

K32-PRV25-T FLEXIGUN®

400g HAND OPERATED GREASE GUN
with Pressure Relief Valve fitted

**10 Year
Warranty**

*conditions apply

PRODUCT OVERVIEW

The K32 FLEXIGUN is a classic grease gun that incorporates a unique variable stroke piston and valve arrangement to allow either thicker or heavier greases in even cold temperature conditions while offering true 'one handed' operation.

The preset Pressure Relief Valve (PRV) has been factory set to ensure a limit of 17,240kPa (2,500psi) is maintained at all times avoiding over-pressure in critical aviation applications.

The K32 accepts either standard 400gm grease cartridges or can be bulk filled via the filler/bleeder valve.

FEATURES & BENEFITS

Flexible 300mm (12") Extension
With KY SUPERGRIP™ coupler for positive no-leak connection

Heavy-Duty Construction
Reduces wear & facilitates effortless pressure building

Short Stroke Facility
Boosts pressure up to 68,900kPa (10,000psi)

Pressure Relief Valve
PSI set to your specifications

One-Handed Operation
Easier to grease hard to reach nipples

400g Grease Cartridge Or Bulk Fill
Economical & contamination free greasing from 400g grease cartridge or bulk fill from J3 grease pump

Fully Repairable
Provides a much longer service life

Lock Plunge Rod Into Follower
For easier bleeding

Stepped Barrel
For easy grip

TECHNICAL SPECIFICATIONS

Delivery pressure up to 68,900kPa (10,000psi)

Flexible 300mm (12") high pressure extension hose

KY SUPERGRIP™ 3 jaw high pressure coupler

Up to 0.68g per shot

Wetted parts - Aluminium, steel, nitrile rubber, cork and nylon

Maximum viscosity - Up to NLGI 2

Compatible with 400g cartridges

Heavy-duty 1.6mm thick barrel

OPTIONAL ACCESSORIES

KIN - Push on grease injector needle

ACK2-02 - Complete greasing accessory kit

KZDXL - Straight needlepoint coupler

KZSNR - 90° needlepoint coupler

KDR - Right angle coupler

KSR - Standard buttonhead coupler

PACKAGE INCLUDES

K32 FLEXIGUN® 400g Grease Gun

Flexible 300mm (12") high pressure extension

KY SUPERGRIP™ 3 jaw high pressure coupler

Pressure Relief Valve plus T piece

K32 FLEXIGUN®

400g HAND OPERATED GREASE GUN (K32-01)

**10 Year
Warranty**

*conditions apply

PRODUCT OVERVIEW

The K32 FLEXIGUN® is a classic grease gun that incorporates a unique variable stroke piston and valve arrangement for true 'one handed' operation.

The push in handle is easy to use and requires much less effort to operate. Increased pressure can be produced by short strokes (low volume) or high volume using a long stroke (low pressure).

Heavy duty pistol grip construction with comfortable ergonomics to suit 400g grease cartridges, bulk filling or Macnaught J3 grease transfer pump loading. The K32 FLEXIGUN® is fully repairable with a strong die cast head and heavy gauge steel barrel for extra long service life.

FEATURES & BENEFITS

Flexible 300mm (12") Extension
With KY SUPERGRIP™ coupler for positive no-leak connection

Heavy-Duty Construction
Reduces wear & facilitates effortless pressure building

Short Stroke Facility
Boosts pressure up to 68,900kPa (10,000psi)

One-Handed Operation
Easier to grease hard to reach nipples

Fully Repairable
Provides a much longer service life

Stepped Barrel
For easy grip

400g Grease Cartridge Or Bulk Fill
Economical & contamination free greasing from 400g grease cartridge or bulk fill from J3 grease pump

Lock Plunge Rod Into Follower
For easier bleeding



TECHNICAL SPECIFICATIONS

Delivery pressure up to 68,900kPa (10,000psi)

Flexible 300mm (12") high pressure extension hose

KY SUPERGRIP™ 3 jaw high pressure coupler

Up to 0.68g per shot

Wetted parts - Aluminium, steel, nitrile rubber, cork and nylon

Maximum viscosity - Up to NLGI 2

Compatible with 400g cartridges

Heavy-duty 1.6mm thick barrel

OPTIONAL ACCESSORIES

KIN - Push on grease injector needle

ACK2-02 - Complete greasing accessory kit

KZDXL - Straight needlepoint coupler

KZSNR - 90° needlepoint coupler

KDR - Right angle coupler

KSR - Standard buttonhead coupler

PACKAGE INCLUDES

K32 FLEXIGUN® 400g Grease Gun

Flexible 300mm (12") high pressure extension

KY SUPERGRIP™ 3 jaw high pressure coupler

Instruction Manual

K40 LEVERGUN®

400g HAND OPERATED GREASE GUN (K40-01)

**10 Year
Warranty**

*conditions apply

PRODUCT OVERVIEW

The K40 LEVERGUN® is a lever-action grease gun designed for high pressure/high volume greasing and can easily clear blocked or damaged grease nipples.

The K40 features a durable die cast aluminium head, a heavy gauge steel barrel and a heavy duty follower assembly to handle a wide range of grease viscosities up to NLGI No 2.

Comes complete with 150mm (6") rigid high pressure extension and KY SUPERGRIP™ coupler.

Suits 400g grease cartridges, bulk filling or Macnaught J3 transfer pump loading.

FEATURES & BENEFITS

Rigid 150mm (6") Extension
With KY SUPERGRIP™ coupler
for positive no-leak connection

High Volume Output
Delivers up to 1.5g grease per shot

Fully Repairable
Provides a much longer service life

400g Grease Cartridge Or Bulk Fill
Economical & contamination free
greasing from 400g grease cartridge
or bulk fill from J3 grease pump

Lock Plunge Rod Into Follower
For easier bleeding

Heavy-Duty Construction
Reduces wear & facilitates
effortless pressure building

High Pressure Output
Long lever handle boosts pressure
up to 82,750kPa (12,000psi)
to clear blocked grease nipples

Stepped Barrel
For easy grip



TECHNICAL SPECIFICATIONS

Delivery pressure up to 82,750kPa (12,000psi)

Rigid 150mm(6") high pressure extension hose

KY SUPERGRIP™ 3 jaw high pressure coupler

Up to 1.5g per shot

Wetted parts - Aluminium, steel, nitrile rubber, cork and nylon

Maximum viscosity - Up to NLGI 2

Compatible with 400g cartridges

Heavy-duty 1.6mm thick barrel

OPTIONAL ACCESSORIES

KIN - Push on grease injector needle

ACK2-02 - Complete greasing accessory kit

KZDXL - Straight needlepoint coupler

KZSNR - 90° needlepoint coupler

KDR - Right angle coupler

KSR - Standard buttonhead coupler

PACKAGE INCLUDES

K40 LEVERGUN® 400g Grease Gun

Rigid 150mm(6") high pressure extension hose

KY SUPERGRIP™ 3 jaw high pressure coupler

Instruction Manual

K54 POWERPISTOL®

400g AIR-POWERED GREASE GUN (K54-01)

**10 Year
Warranty**

*conditions apply

PRODUCT OVERVIEW

The K54 POWERPISTOL™ is an air-powered single shot grease gun that combines portability with effortless one handed operation.

Low air consumption makes the K54POWERPISTOL™ ideal for use with truck and bus brake system air supply. Air powered requires much less effort to operate.

Heavy duty pistol grip construction with comfortable ergonomics to suit 450g grease cartridges, bulk filling or Macnaught J3 grease transfer pump loading.

The K54 POWERPISTOL™ is fully repairable with a strong die cast head and heavy gauge steel barrel for extra long service life.

FEATURES & BENEFITS

Flexible 300mm (12") Extension
With KY SUPERGRIP™ coupler for positive no-leak connection

Fully Repairable
Provides a much longer service life

Single Shot Per Trigger Pull
Delivers up to 0.7g per shot

Pistol Grip & Air Powered
For easy one handed operation

Lock Plunge Rod Into Follower
For easier bleeding

Heavy-Duty Construction
Reduces wear & facilitates effortless pressure building

Low Air Consumption
Use with truck & bus brake system air supply

400g Grease Cartridge Or Bulk Fill
Economical & contamination free greasing from 400g grease cartridge or bulk fill from J3 grease pump

Stepped Barrel
For easy grip



TECHNICAL SPECIFICATIONS

Delivery pressure up to 41,400 kPa (6,000psi)

Single shot per trigger pull (up to 0.7g per shot)

Min/Max air pressure: 275kPa (40psi)/830kPa (120psi)

Min compressor size: 0.026 M3/MIN (1 cfm)

1/4" BSP air inlet

Heavy-duty 1.6mm thick barrel

Maximum viscosity - Up to NLGI 2

Compatible with 400g grease cartridges

OPTIONAL ACCESSORIES

KIN - Push on grease injector needle

ACK2-02 - Complete greasing accessory kit

KZDXL - Straight needlepoint coupler

KZSNR - 90° needlepoint coupler

KDR - Right angle coupler

KSR - Standard buttonhead coupler

PACKAGE INCLUDES

K54 POWERPISTOL™ 400g Grease Gun

Flexible 300mm (12") high pressure extension

KY SUPERGRIP™ 3 jaw high pressure coupler

Instruction Manual

1/4" DRIVE SOCKET & ACCESSORIES

PROTO® 1/4" DRIVE SPEED HANDLE 15-1/2"
ITEM #: J4780G



PROTO® 1/4" DRIVE 6 PIECE CROWFOOT WRENCH SET
ITEM #: J47000CF

ITEM #: J4708CF WRENCH, CROWFOOT OPEN END 1/4" DR 1/4"
ITEM #: J4710CF WRENCH, CROWFOOT OPEN END 1/4" DR 5/16"
ITEM #: J4712CF WRENCH, CROWFOOT OPEN END 1/4" DR 3/8"
ITEM #: J4714CF WRENCH, CROWFOOT OPEN END 1/4" DR 7/16"
ITEM #: J4716CF WRENCH, CROWFOOT OPEN END 1/4" DR 1/2"
ITEM #: J4718CF WRENCH, CROWFOOT OPEN END 1/4" DR 9/16"



PROTO® 1/4" DRIVE CROWFOOT WRENCHES

ITEM #: J4708CF WRENCH, CROWFOOT OPEN END 1/4" DR 1/4"
ITEM #: J4710CF WRENCH, CROWFOOT OPEN END 1/4" DR 5/16"
ITEM #: J4712CF WRENCH, CROWFOOT OPEN END 1/4" DR 3/8"
ITEM #: J4714CF WRENCH, CROWFOOT OPEN END 1/4" DR 7/16"
ITEM #: J4716CF WRENCH, CROWFOOT OPEN END 1/4" DR 1/2"
ITEM #: J4718CF WRENCH, CROWFOOT OPEN END 1/4" DR 9/16"



1/4" Drive 72-Tooth High Strength Standard Handle Ratchet
Item: T72



Ratchet, HI-Lok®, Flex Head, 6 1/4"
Item: TFY936



Snap-on

Reversible ratchet, 1/4", 72 teeth/5° action angle
Item: 6950SL



BAHCO

3/8" DRIVE SOCKET & ACCESSORIES



PROTO® 3/8" DRIVE 13 PIECE DEEP SOCKET SET - 12 POINT
ITEM #: J52112

ITEM #: J5008 SOCKET, DEEP 3/8" DR 1/4" 12 PT
ITEM #: J5010 SOCKET, DEEP 3/8" DR 5/16" 12 PT
ITEM #: J5012 SOCKET, DEEP 3/8" DR 3/8" 12 PT
ITEM #: J5014 SOCKET, DEEP 3/8" DR 7/16" 12 PT
ITEM #: J5016 SOCKET, DEEP 3/8" DR 1/2" 12 PT
ITEM #: J5018 SOCKET, DEEP 3/8" DR 9/16" 12 PT
ITEM #: J5020 SOCKET, DEEP 3/8" DR 5/8" 12 PT
ITEM #: J5022 SOCKET, DEEP 3/8" DR 11/16" 12 PT
ITEM #: J5024 SOCKET, DEEP 3/8" DR 3/4" 12 PT
ITEM #: J5026 SOCKET, DEEP 3/8" DR 13/16" 12 PT
ITEM #: J5028 SOCKET, DEEP 3/8" DR 7/8" 12 PT
ITEM #: J5030 SOCKET, DEEP 3/8" DR 15/16" 12 PT
ITEM #: J5032 SOCKET, DEEP 3/8" DR 1" 12 PT



PROTO® 3/8" DRIVE 13 PIECE SOCKET SET - 12 POINT
ITEM #: J52124

ITEM #: J5208 SOCKET, STANDART 3/8" DR 1/4" 12 PT
ITEM #: J5210 SOCKET, STANDART 3/8" DR 5/16" 12 PT
ITEM #: J5212 SOCKET, STANDART 3/8" DR 3/8" 12 PT
ITEM #: J5214 SOCKET, STANDART 3/8" DR 7/16" 12 PT
ITEM #: J5216 SOCKET, STANDART 3/8" DR 1/2" 12 PT
ITEM #: J5218 SOCKET, STANDART 3/8" DR 9/16" 12 PT
ITEM #: J5220 SOCKET, STANDART 3/8" DR 5/8" 12 PT
ITEM #: J5222 SOCKET, STANDART 3/8" DR 11/16" 12 PT
ITEM #: J5224 SOCKET, STANDART 3/8" DR 3/4" 12 PT
ITEM #: J5226 SOCKET, STANDART 3/8" DR 13/16" 12 PT
ITEM #: J5228 SOCKET, STANDART 3/8" DR 7/8" 12 PT
ITEM #: J5230 SOCKET, STANDART 3/8" DR 15/16" 12 PT
ITEM #: J5232 SOCKET, STANDART 3/8" DR 1" 12 PT



PROTO® 3/8" DRIVE 7 PIECE UNIVERSAL SOCKET SET - 12 POINT
ITEM #: J52102

ITEM #: J5273A SOCKET, UNIVERSAL 3/8" DR 3/8" 12 PT
ITEM #: J5274A SOCKET, UNIVERSAL 3/8" DR 7/16" 12 PT
ITEM #: J5275A SOCKET, UNIVERSAL 3/8" DR 1/2" 12 PT
ITEM #: J5276A SOCKET, UNIVERSAL 3/8" DR 9/16" 12 PT
ITEM #: J5277A SOCKET, UNIVERSAL 3/8" DR 5/8" 12 PT
ITEM #: J5278A SOCKET, UNIVERSAL 3/8" DR 11/16" 12 PT
ITEM #: J5279A SOCKET, UNIVERSAL 3/8" DR 3/4" 12 PT

PROTO® 3/8" DRIVE 7 PIECE HEX BIT SET
ITEM #: J4900-7C

ITEM #: J49901/4 SOCKET, HEX BIT 3/8" DR 1/4"
ITEM #: J49901/8 SOCKET, HEX BIT 3/8" DR 1/8"
ITEM #: J49903/16 SOCKET, HEX BIT 3/8" DR 3/16"
ITEM #: J49903/8 SOCKET, HEX BIT 3/8" DR 3/8"
ITEM #: J49905/16 SOCKET, HEX BIT 3/8" DR 5/16"
ITEM #: J49905/32 SOCKET, HEX BIT 3/8" DR 5/32"
ITEM #: J49907/32 SOCKET, HEX BIT 3/8" DR 7/32"



PROTO® 3/8" DRIVE 7 PIECE EXTRA LONG HEX BIT SET
ITEM #: J4990-7XL

ITEM #: J49901/4XL SOCKET, HEX BIT EXTRA LONG 3/8" DR 1/4"
ITEM #: J49901/8XL SOCKET, HEX BIT EXTRA LONG 3/8" DR 1/8"
ITEM #: J49903/16XL SOCKET, HEX BIT EXTRA LONG 3/8" DR 3/16"
ITEM #: J49903/8XL SOCKET, HEX BIT EXTRA LONG 3/8" DR 3/8"
ITEM #: J49905/16XL SOCKET, HEX BIT EXTRA LONG 3/8" DR 5/16"
ITEM #: J49905/32XL SOCKET, HEX BIT EXTRA LONG 3/8" DR 5/32"
ITEM #: J49907/32XL SOCKET, HEX BIT EXTRA LONG 3/8" DR 7/32"



PROTO® 3/8" DRIVE 7 PIECE SHORT HEX BIT SET
ITEM #: J4990-7ST

ITEM #: J49901/4ST SOCKET, HEX BIT SHORT 3/8" DR 1/4"
ITEM #: J49901/8ST SOCKET, HEX BIT SHORT 3/8" DR 1/8"
ITEM #: J49903/16ST SOCKET, HEX BIT SHORT 3/8" DR 3/16"
ITEM #: J49903/8ST SOCKET, HEX BIT SHORT 3/8" DR 3/8"
ITEM #: J49905/16ST SOCKET, HEX BIT SHORT 3/8" DR 5/16"
ITEM #: J49905/32ST SOCKET, HEX BIT SHORT 3/8" DR 5/32"
ITEM #: J49907/32ST SOCKET, HEX BIT SHORT 3/8" DR 7/32"



K7 MINILUBE® + 5kg container

PORTABLE GREASING SYSTEM (K7-67)

**10 Year
Warranty**

*conditions apply

PRODUCT OVERVIEW

The K7 MINILUBE® Portable High Pressure Manual Greasing System provides high-volume/high-pressure greasing in a compact and portable package.

It consists of two main components, a foot operated spring-loaded pump, that dispenses grease from the container to the hose and gun and a patented high pressure/high volume KR pressurite™ gun.

When the gun is set on the "high volume" position the gun will deliver up to 5,000 psi and when set on the "high pressure" setting the gun will deliver a lower volume of grease, but at higher pressures (up to 10,000 psi).

The K7 is an economical alternative to the more expensive air-operated greasing systems.

FEATURES & BENEFITS

Manual Greasing System
Light weight and portable go anywhere design

KY SUPERGRIP™ Coupler
Positive no leak connection ensures grease reaches the bearing

Foot Operated Pump
Provides 30 shots per prime

Rubber-edged Follower Plate
Wipes container clean & prevents air pockets & contamination

5kg Grease Container
Holds 11x the grease capacity of a standard grease cartridge

Fully Repairable
Provides a much longer service life

KR Pressurite Gun
Choose between high pressure or high volume setting

High Pressure Setting
Produces up to 10,000psi (68,900kPa) of pressure

High Volume Setting
Delivers up to 1.25g grease per shot

360° Ball Swivel
Prevents hose from kinking

Fully Sealed System
With inbuilt grease strainer prevents grease contamination

1.5m Delivery Hose
Easy to reach difficult applications

TECHNICAL SPECIFICATIONS

1.5m x 12.5mm ID delivery hose
Compatible with 2.5kg grease containers or bulk fill via J3 Transfer Pump
Grease viscosity up to NLGI 2
High volume setting: Up to 34,450kPa (5,000psi), 1.25g per shot
High pressure setting: Up to 68,900kPa (10,000psi), 0.45g per shot
Delivers up to 30 shots of grease per prime
K7-24 includes 2.5kg container
K7-67 includes 5kg container

OPTIONAL ACCESSORIES

PACKAGE INCLUDES

K7 MINILUBE® Portable Greasing system
5kg grease container
KR PRESSURITE gun
1.5m Flexible delivery hose
Lid & rubber edged follower plate
KY SUPERGRIP™ coupler
Instruction manual

ACK2 Aviation Kit

Accessories typically required when lubricating aircraft. Items included are a KDN, KDS, KDE8, KDF21, KY, KZDXL, KZHY, KZLNJ, KZLNS, KZLNR, KZLN45, KZSNR and J65.



KZLNS Needlepoint coupler 300mm straight - KZLNS



KDE8 Greasing extension 8" - KDE8



KDF13 Flexible greasing extension 13" - KDF13

KDF21 flexible greasing extension 21" - KDF21



KZDXL Straight needlepoint coupler 110mm - KZDXL



KZSNR Needlepoint coupler 110mm 90° - KZSNR



KZHY Hypodermic needlepoint coupler - KZHY



KDN right angle needle point coupler - KDN



KDS Right angle coupler - KDS



KDR Right angle coupler - KDR



KZLN45 Needlepoint coupler 300mm 45° - KZLN45



KZLNJ Needlepoint coupler 300mm J bend - KZLNJ



KZLNR Needlepoint coupler 300mm 90° - KZLNR



B1 MECHANIC TOOLBOX

J47100 1/4" ŞAFT DERİN LOKMA SETİ 12 KÖŞE 10 PARÇA 3/16" TO 9/16"	J47104 1/4" ŞAFT KISA LOKMA SETİ 12 KÖŞE 10 PARÇA 3/16" TO 9/16"	J47107 1/4" ŞAFT 9 PARÇA UNIVERSAL MAFSALLI LOKMA SETİ 7/32" TO 11/32"	J4770-11 1/4" ŞAFT ALLEN LOKMA SETİ 11 PARÇA 1/16"-9/64"	T72 1/4" AEROSPACE CİRCİR KOLU "SNAP ON"	J4759 1/4" ARA KOL 2"	J4760 1/4" ARA KOL 4"
J4761 1/4" ARA KOL 6"	J4765 1/4" FLEXIBLE ARA KOL 6"	J52124 3/8" ŞAFT KISA LOKMA SETİ 12 KÖŞE 13 PARÇA 1/4" TO 1"	J52112 3/8" ŞAFT DERİN LOKMA SETİ 12 KÖŞE 13 PARÇA 1/4" TO 1"	F80 3/8" AEROSPACE CİRCİR KOLU	J5285 3/8" T KOL	J5260 3/8" ARA KOL 3"
J5260-06 3/8" ARA KOL 6"	J5262 3/8" ARA KOL 12"	7752 3/8DR FİRDÖNDÜ 16-1/2"	J5270A 3/8" UNIVERSAL MAFSAL J4770A 1/4" UNIVERSAL MAFSAL	J5255 3/8" - 1/4" ADAPTOR	J5256 1/4" - 3/8" ADAPTOR	F85M8A 3/8" ŞAFT 1/4" MANYETİK BİT TUTUCU ADAPTOR
J4978 ÇAKI ALLEN SETİ	2047PR-1-2 Z TİPİ TORNAVIDA YILDIZ PH1-	2047-1-5.5 Z TİPİ DÜZ TORNAVIDA	J3300A 9 PARÇA CEP TİPİ MIDGET TYPE AÇILI ANAHTAR SETİ 7/32" TO 1/2"	1112/14T DÜZ-YILDIZ GEÇME ANAHTAR SETİ 14 PARÇA 1/4" - 1"	JSCV07 CİRCİRLİ KOMBİNE ANAHTAR SPLINE 7/32"	JSCV09 CİRCİRLİ KOMBİNE ANAHTAR SPLINE 9/32"
RB810-DH GÖBEKTEN CİRCİR 1/4-5/16	RB1214-DH GÖBEKTEN CİRCİR 3/8-7/16	RB1618-DH GÖBEKTEN CİRCİR 1/2-9/16	J710 10" KURBAĞACIK	J706 6" KURBAĞACIK	111-05-89 GRIP ON 5" Ayarlı Pense	111-10-89 GRIP ON 10" Ayarlı Pense
6528-1420 CİRCİRLİ BİT TUTUCU	JP0204R YILDIZ TORNAVIDA PH-2	JC31604R DÜZ TORNAVIDA 3/16"	JK1406R DÜZ TORNAVIDA 1/4 *	J9611C DÜZ TORNAVIDA 3/8"	SSDMR4B CİRCİRLİ BİT TUTUCU TOR- NAVIDA	SSDMR1A AVUÇ İÇİ CİRCİRLİ BİT TUTUCU TORNAVIDA
J206G DIAGONAL YAN KESKİ	J276G 6-9/16" AMERİKAN PENSE	J226G KARGABURUN	5224 DC 10" PAĞAĞAN PENSE	J196 8" EMNİYET PENSESİ	J1312PGD 12 OZ FİBER SAPLI KÜRESEL BAŞLI ÇEKİÇ	3625V-40 PLASTİK ÇEKİÇ Ø40MM
J3 KESKİ ZIMBA SETİ 5 PARÇA	ZAVIA-1305S CEP TİPİ TELESKOPIK ÇİZGİ - MİKROMETRE	33-215 ŞERİT METRE 3MT METRİK/ INCH	ZAVIA-1102/55M Ø2.1/4" TELESKOPIK AYNA 10"-14"	ZAVIA-1351 FLEXİ MİKROMETRE	ZAVIA-1364 FLEXİBLE TEKNİSYEN PARMAĞI	ZAVIA-65002C 5W 460 LUMEN LED EL FENERİ



B2 AVIONIC TOOLBOX

J47104 1/4" KISA LOKMA SETİ 12 KÖŞE 3/16"- 9/16"	J47100 1/4" DERİN LOKMA SETİ 12 KÖŞE 3/16"- 9/16"	J4770-11 3/4" ALLEN LOKMA SETİ 1/16" - 5/16"	J4704 1/4" KISA LOKMA 6 KÖŞE 1/8"	J4705T 1/4" KISA LOKMA 12 KÖŞE 5/32"	T72 1/4" CİRCİR KOLU	J4761 1/4" ARA KOL 6"	J4765 3/4" FLEXİBLE ARA KOL 6-1/4"
J4770A 1/4" UNIVERSAL MAFSAL	J4769 1/4" LOKMA TUTUCU TORNAVİDA	J4785 1/4" T-KOL 4-1/2"	RB-810DH GÖBEKTEN CİRCİR 1/4" x 5/16"	RB-1214DH GÖBEKTEN CİRCİR 3/8" x 7/16"	OXI45B KOMBİNE ANAHTAR 1/8"	OXI55B KOMBİNE ANAHTAR 5/32"	OXI707BK CEP TİPİ MIDGET TYPE KOMBİNE ANAHTAR SET 7 PARÇA 3/16"-3/8" 12 KÖŞE
OXI14B KOMBİNE ANAHTAR 7/16"	OXI16B KOMBİNE ANAHTAR 1/2"	OXI18B KOMBİNE ANAHTAR 9/16"	X567A KISA YILDIZ ANAHTAR, 10" Offset, 3/16"-7/32"	X50810A KISA YILDIZ ANAHTAR, 60" Deep Offset, 1/4"-5/16"	6528-1420 CİRCİRLİ BIT TUTUCU	8069 C 4" KURBAĞACIK	221 D FORT PENSE 6"
25W 6" EMNİYET PENSESİ	J253G KONNEKTÖR PENSESİ	J206G DIAGONAL YAN KESKİ - 6- 1/16"	J225G EĞRİ UÇLU KAR- GABURUN - 6-5/16"	E712BCG ELEKTRONİKÇİ KAR- GABURUN, 6 1/8"	E718BCG ELEKTRONİKÇİ KAR- GABURUN, 90° AÇILI, 5 9/16"	E707BCG ELEKTRONİKÇİ YAN KESKİ, 4 3/8" (AWG #17 max.)	TZK5 CİMBİZ SETİ
PWC27 WIRE STRIPPER	PWC9 Wire Stripper/Cutler/ Crimper/Bolt Cutter, (AWG 10 to 2), 9 1/2"	706-2 ELEKTRONİKÇİ TOR- NAVİDA SETİ	YAKS22A Kit, Butane Soldering Iron (15 to 75 Watts)	ZAVIA-1104V-30 TELESKOPIK KONTROL AYNASI - Ø 1.1/4"	ZAVIA-1303 MAFSALLI MIKNATIS - 16-3/4 - 26-3/4"	KE18-01 UNIVERSAL KNIFE	PS120 SET NUT DRIVER 11 PC MIDGET
ZAVIA-1364 FLEXİ PICK UP TOOL "MACHINIST FINGER"	J35250 WIRE BUNDLE SPOON	SSDMR4B CİRCİRLİ BIT TUTUCU TORNAVİDA	JP02112R AVUÇ İÇİ TORNAVİDA PH:2	JK14112R AVUÇ İÇİ TORNAVİDA 0.25X0.25X3.1/2"	JP0204R YILDIZ TORNAVİDA PH:2	JP0103R YILDIZ TORNAVİDA PH:1	JK1406R DÜZ TORNAVİDA 1/4" x 6"
































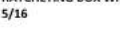
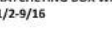
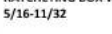
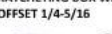
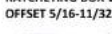

































































CABIN MAINTENANCE TOOLBOX

J47100 1/4" ŞAFT DERİN LOKMA SETİ 12 KÖŞE 10 PARÇA 3/16" TO 9/16"	J47104 1/4" ŞAFT KISA LOKMA SETİ 12 KÖŞE 10 PARÇA 3/16" TO 9/16"	J4770-11 1/4" ŞAFT ALLEN LOKMA SETİ 11 PARÇA 1/16" TO 5/16"	T72 1/4" AEROSPACE CIRCIR KOLU "SNAP ON"	J4760 1/4" ARA KOL 4"	J4761 1/4" ARA KOL 6"	7752 3/8DR FIRDÖNDÜ 16-1/2
J5256 1/4" - 3/8" ADAPTOR	FBSM8A 3/8" ŞAFT 1/4" MANYETİK BIT TUTUCU ADAPTOR	J3300A 9 PARÇA CEP TİPİ MIDGET TYPE AÇILI ANAHTAR SETİ 7/32" TO 1/2"	RB810-DH GÖBEKTEN CIRCIR 1/4-5/16	RB1214-DH GÖBEKTEN CIRCIR 3/8-7/16	RB1618-DH GÖBEKTEN CIRCIR 1/2-9/16	ROW-1011DH 25DRC AÇILI GÖBEKTEN CIRCIR ANAHTAR 5/16-11/32
J4978 ÇAKI ALLEN SETİ	JP0103R YILDIZ TORNAVIDA PH:1	JC31604R DÜZ TORNAVIDA 3/16"	JK1406R DÜZ TORNAVIDA 1/4 "	SSDMR48 CIRCIRLI BIT TUTUCU TOR- NAVIDA	SSDMR1A AVUÇ İÇİ CIRCIRLI BIT TUTUCU TORNAVIDA	6528-1420 CIRCIRLI BIT TUTUCU
J708 8" KURBAĞACIK	J706 6" KURBAĞACIK	111-05-89 GRIP ON 5" Ayarlı Pense	111-10-89 GRIP ON 10" Ayarlı Pense	5224 DC 10" PAĞAĞAN PENSE	25W 6" EMNİYET PENSESİ	J206G DIAGONAL YAN KESKİ
J276G 6-9/16" AMERİKAN PENSE	J226G KARGABURUN	J1312PGD 12 OZ FİBER SAPLI KÜRESEL BAŞLI ÇEKİÇ	3625Y-40 PLASTİK ÇEKİÇ Ø40MM	OLFA OL & FALÇATA	414-22 22MM İSKARPELA	OT/14376 SHEAR 8"
J3 KESKİ ZIMBA SETİ 5 PARÇA	J9500A TERS KLAVUZ SETİ	33-215 ŞERİT METRE 3MT METRİK/ INCH	ZAVIA-1303 MAFSALLI MIKNATIS – 16-3/4 - 26-3/4"	ZAVIA-1102/55M Ø2.1/4" TELESKOPIK AYNA 10"- 14"	PLASTIC SPATULA	



Aviation Tool Supply

STRUCTURAL MAINTENANCE TOOLBOX

CP1014P45 Chicago Pneumatic Industrial 1/4" Pistol Drill 	CP714 Chicago Pneumatic Riveting Hammer 	09-RB-2 Rivet Gun Retainer Springs Beehive 1-3/32" Dia. 	09-RB-2 Rivet Gun Retainer Springs Handi 1-3/32" Dia. 	02-551 MICRO STOP COUNTERSINK CAGE 	07-90 Flush Mushroom Sets .401" Shank 	07-171 Flush Mushroom Sets With Rubber Guard .401" Shank 				
07-10-4703 Rivet Sets .401" Shank (Straight) 3-1/2", 3/32", Universal AN470 	07-10-4704 Rivet Sets .401" Shank (Straight) 3-1/2", 1/8", Universal AN470 	07-10-4705 Rivet Sets .401" Shank (Straight) 3-1/2", 5/32", Universal AN470 	07-10-4706 Rivet Sets .401" Shank (Straight) 3-1/2", 3/16", Universal AN470 	07-666 (31975) CUTTER AIR CHISEL 	20-202 1/2 X 1 SIDE GRIP CLECO FASTER PSG SERIES 	04-62 Sheet Metal Fastener Pliers Standard 				
111-05-089 PLIER LOCKING CURVED 5" 	J294WRXL PLIER LOCKING CURVED 7" 	2979D-180 NUT PLIER 	1741B RIVET TOOL 	J303R AVIATION SNIP RIGHT 	J4978 SET FOLDING HEX 9 PC 	57408 IND.HANDI-HEX SAEDRV.5/64 				
J206G PLIER DIAGONAL W/GRIP 	J226G NEEDLE NOSE PLIERS W/ CUTTER 	J276G PLIER SLIP-JOINT W/GRIP 	SSDMR4B CIRCIRLI BİT TUTUCU TOR- NAVIDA 	FM10 10" FILEMASTER "DURAL" 	1-100-06-2-2 6" FILE FLAT CUT 2 	1-230-06-2-2 6" FILE ROUND CUT 2 				
1-210-06-2-2 6" FILE HALF ROUND CUT 2 	RB-810DH RATCHETING BOX WRENCH 1/4- 5/16 	RB1618-DH RATCHETING BOX WRENCH 1/2-9/16 	5526-0004 RATCHETING BOX WRENCH 5/16-11/32 	ROW-0810DH RATCHETING BOX WRENCH OFFSET 1/4-5/16 	ROW-1011DH RATCHETING BOX WRENCH OFFSET 5/16-11/32 	JSCV07-12 SET WRENCH SET 7/32"-7/16" 7 Pcs. 				
J47104 SET SKT 1/4 DR 10 PC 12 P, 3/16"-9/16" 	TFY936 Ratchet, HY-LOK®, Standard Handle, 4 7/16" 	J4759 EXTENSION 1/4 DR 2" 	J4760 EXTENSION 1/4 DR 4" 	J4761 EXTENSION 1/4 DR 6" 	J4765 EXTENSION FLEX 1/4 DR 6" 	J4770A 1/4" UNIVERSAL MAFSAL 				
J501/4 PUNCH STARTING 3/32 	J48332 PUNCH PIN 3/32 SUPER DUTY 	J48532 PUNCH PIN 5/32 SUPER DUTY 	J48316 PUNCH PIN 3/16 SUPER DUTY 	J48018 PUNCH PIN 1/8 SUPER DUTY 	J86A7/16 CHISEL COLD 1/2 	J505/1652 STARTING PUNCH 5/16 				
A1225M06X Double Cut Carbide Bur 	A1225M06 Single Cut Carbide Bur 	C1225M06X Double Cut Carbide Bur 	M1022M06X Double Cut Carbide 	2-612 GRIP SCALE 	RULER 601 6 IN 5/STEEL RULE 	RULER120 12 IN 5/STEEL RULE 				
33-215 TAPE RULE 3.5MT METIC/ INCH 	4130SW SKIN WEDGE 	30-635 DRILL STOP #40 	30-636 DRILL STOP #30 	30-632 DRILL STOP #20 	30-641 DRILL STOP #10 	30-642 DRILL STOP 1/4 				
27-260 HIGH SPEED STEEL STOP COUNTERSINKS, Three Flute, Integral Pilot, 1/4-28 Thread- ed Shank, 100", 1/2" X 3/32" 	27-261 HIGH SPEED STEEL STOP COUNTERSINKS Three Flute, Integral Pilot, 1/4-28 Thread- ed Shank, 100", 1/2" X 1/8" 	27-262 HIGH SPEED STEEL STOP COUNTERSINKS, Three Flute, Integral Pilot, 1/4-28 Thread- ed Shank, 100", 1/2" X 5/32" 	27-263 HIGH SPEED STEEL STOP COUNTERSINKS, Three Flute, Integral Pilot, 1/4-28 Thread- ed Shank, 100", 1/2" X 3/16" 	27-285 HIGH SPEED STEEL STOP COUNTERSINKS, Three Flute, Integral Pilot, 1/4-28 Thread- ed Shank, 100", 5/8" X "D" 	43-652 NON-PILOTED THREADED COUNTERSINK CUTTER 3/8" X 100" 	08-647 BUCKING BARS DE 1X4X2  <table data-bbox="1311 1382 1455 1426"><tr><td>Part No.</td><td>Weight</td></tr><tr><td>08-647</td><td>1.8 lbs (0.7 kg)</td></tr></table>	Part No.	Weight	08-647	1.8 lbs (0.7 kg)
Part No.	Weight									
08-647	1.8 lbs (0.7 kg)									
20-101HD CLECO FASTENER PHD SREIES 3/32" 	20-102HD CLECO FASTENER PHD SREIES 1/8" 	20-103HD CLECO FASTENER PHD SREIES 5/32" 	20-104HD CLECO FASTENER PHD SREIES 3/16" 	04-MHD-1/4 TEMPORARY FASTENER 						
20-401HD 3/32 H.D. KNURLED NO MAR CLECO - RED 	20-402HD 1/8 H.D. KNURLED NO MAR CLECO - YELLOW 	20-403HD 5/32 H.D. KNURLED NO MAR CLECO - BLUE 	20-404HD 3/16 H.D. KNURLED NO MAR CLECO - BLACK 	20-405HD 1/4 H.D. KNURLED NO MAR CLECO - WHITE 						
02-063 3/32 COBALT DRILL BIT NAS 907J 	02-065 1/8 COBALT DRILL BIT NAS 907J 	02-067 5/32 COBALT DRILL BIT NAS 907J 	02-069 3/16 COBALT DRILL BIT NAS 907J 	02-071 7/32 COBALT DRILL BIT NAS 907J 	02-073 1/4 COBALT DRILL BIT NAS 907J 	04-102 3/32 COBALT 6 AIRCRAFT EXTENSION 				
04-104 1/8 COBALT 6 AIRCRAFT EXTENSION 	04-106 5/32 COBALT 6 AIRCRAFT EXTENSION 	04-108 3/16 COBALT 6 AIRCRAFT EXTENSION 	04-112 1/4(E)COBALT 6 AIRCRAFT EXTENSION 	SCREW EXTRACTOR #1 3/32-5/32 	SCREW EXTRACTOR #2 5/32-7/32 	SCREW EXTRACTOR #3 7/32-9/32 				
J1312PGD 12 OZ FIBER SAPLI KÜRESEL BAŞLI ÇEKİÇ 	3625Y-40 PLASTİK ÇEKİÇ Ø40MM 	ZAVIA-65002C LED FLASHLIGHT 	ZAVIA-1101C-60 MIRROR Ø60MM 	PORTABLE TOOLBOX 						

3/8" DRIVE SOCKET & ACCESSORIES

PROTO® 3/8" DRIVE SOCKETS - SPLINE

ITEM #: SIZE [IN]

J5212SPL 3/8
J5214SPL 7/16
J5216SPL 1/2
J5218SPL 9/16
J5220SPL 5/8



PROTO® 3/8" DRIVE SPEED HANDLE 17-1/2"

ITEM #: J5280G



PROTO® 3/8" DRIVE DEEP SOCKETS - SPLINE

ITEM #: SIZE [IN]

J5012DPL 3/8
J5014DPL 7/16
J5016DPL 1/2
J5018DPL 9/16
J5020DPL 5/8



3/8" SPEEDER WITH ROTARY STEEL HANDLE

Item: 7752



PROTO® STANDARD EXTENSIONS

ITEM #: DRIVE LENGTH

J5259 3/8 1-3/4
J5260 3/8 3
J5260-06 3/8 6
J5261 3/8 8
J5262 3/8 12
J5263 3/8 17-3/16



PROTO® 3/8" DRIVE TORQUE ADAPTERS - 12 POINT

ITEM #: DRIVE SIZE [IN]

J5112 3/8 3/8
J5114 3/8 7/16
J5116 3/8 1/2
J5118 3/8 9/16
J5120 3/8 5/8
J5122 3/8 11/16
J5124 3/8 3/4
J5126 3/8 13/16
J5128 3/8 7/8



PROTO® 3/8" DRIVE FLEXIBLE EXTENSION 8" - BLACK OXIDE

ITEM #: J5268



PROTO® 9 PIECE 3/8" DRIVE TORQUE ADAPTER SET - 12 POINT

ITEM #: J5100



PROTO® DRIVE ADAPTERS

ITEM #: INPUT OUTPUT

J5253 3/8 1/2
J5254 1/2 3/8
J5255 3/8 1/4
J5256 1/4 3/8
J5453 3/4 1/2
J5653 1/2 3/4
J5853 3/4 1
J5854 1 3/4



PROTO® 3/8" DRIVE HINGE HANDLE 8-1/2"

ITEM #: J5265



PROTO® 3/8" DRIVE HINGE HANDLE 12"

ITEM #: J5266



PROTO® 3/8" DRIVE SLIDING T-HANDLE 8"

ITEM #: J5285



PROTO® 3/8" DRIVE UNIVERSAL JOINT

ITEM #: J5270A



3/8" Drive 80-Tooth Standard Handle Ratchet

Item: F80



Reversible ratchet, 3/8", 72 teeth/5°

Item: 7750SL



PROTO® 3/8" DRIVE 9 PIECE CROWFOOT WRENCH SET

ITEM #: J49004CF

ITEM #: J4912CF WRENCH, CROWFOOT OPEN END 3/8" DR 3/8"
ITEM #: J4914CF WRENCH, CROWFOOT OPEN END 3/8" DR 7/16"
ITEM #: J4916CF WRENCH, CROWFOOT OPEN END 3/8" DR 1/2"
ITEM #: J4918CF WRENCH, CROWFOOT OPEN END 3/8" DR 9/16"
ITEM #: J4920CF WRENCH, CROWFOOT OPEN END 3/8" DR 5/8"
ITEM #: J4922CF WRENCH, CROWFOOT OPEN END 3/8" DR 11/16"
ITEM #: J4924CF WRENCH, CROWFOOT OPEN END 3/8" DR 3/4"
ITEM #: J4926CF WRENCH, CROWFOOT OPEN END 3/8" DR 13/16"
ITEM #: J4928CF WRENCH, CROWFOOT OPEN END 3/8" DR 7/8"



PROTO® 3/8" DRIVE 8 PIECE CROWFOOT FLARE NUT WRENCH SET

ITEM #: J49000CFFN

ITEM #: J4920FL WRENCH, CROWFOOT FLARE NUT 3/8" DR 5/8"
ITEM #: J4922FL WRENCH, CROWFOOT FLARE NUT 3/8" DR 11/16"
ITEM #: J4924FL WRENCH, CROWFOOT FLARE NUT 3/8" DR 3/4"
ITEM #: J4926FL WRENCH, CROWFOOT FLARE NUT 3/8" DR 13/16"
ITEM #: J4928FL WRENCH, CROWFOOT FLARE NUT 3/8" DR 7/8"
ITEM #: J4930FL WRENCH, CROWFOOT FLARE NUT 3/8" DR 15/16"
ITEM #: J4932FL WRENCH, CROWFOOT FLARE NUT 3/8" DR 1"
ITEM #: J4934FL WRENCH, CROWFOOT FLARE NUT 3/8" DR 1-1/16"



PROTO® 3/8" DRIVE FULL POLISH CROWFOOT WRENCHES

ITEM #:	SIZE [IN]	ITEM #:	SIZE [IN]
J4912CF	3/8	J4950CF	1-9/16
J4914CF	7/16	J4952CF	1-5/8
J4916CF	1/2	J4954CF	1-11/16
J4918CF	9/16	J4956CF	1-3/4
J4920CF	5/8	J4958CF	1-13/16
J4922CF	11/16	J4960CF	1-7/8
J4924CF	3/4	J4962CF	1-15/16
J4926CF	13/16	J4964CF	2
J4928CF	7/8	J4966CF	2-1/16
J4930CF	15/16	J4968CF	2-1/8
J4932CF	1	J4970CF	2-3/16
J4934CF	1-1/16	J4972CF	2-1/4
J4936CF	1-1/8	J4974CF	2-5/16
J4938CF	1-3/16	J4976CF	2-3/8
J4940CF	1-1/4	J4978CF	2-7/16
J4942CF	1-5/16	J4980CF	2-1/2
J4944CF	1-3/8	J4982CF	2-9/16
J4946CF	1-7/16	J4984CF	2-5/8
J4948CF	1-1/2	J4986CF	2-11/16
		J4988CF	2-3/4
		J4990CF	2-13/16
		J4992CF	2-7/8
		J4994CF	2-15/16
		J4996CF	3



PROTO® 3/8" DRIVE FULL POLISH FLARE NUT CROWFOOT WRENCHES - 12 POINT

ITEM #:	SIZE [IN]
J4920FL	5/8
J4922FL	11/16
J4924FL	3/4
J4926FL	13/16
J4928FL	7/8
J4930FL	15/16
J4932FL	1
J4934FL	1-1/16



PROTO® 1/2" DRIVE SOCKETS - 6 POINT

ITEM #:	SIZE [IN]	ITEM #:	SIZE [IN]
J5408H	1/4	J5426H	13/16
J5410H	5/16	J5428H	7/8
J5412H	3/8	J5430H	15/16
J5414H	7/16	J5431H	31/32
J5416H	1/2	J5432H	1
J5418H	9/16	J5434H	1-1/16
J5419H	19/32	J5436H	1-1/8
J5420H	5/8	J5438H	1-3/16
J5421H	21/32	J5440H	1-1/4
J5422H	11/16	J5442H	1-5/16
J5424H	3/4	J5444H	1-3/8
		J5446H	1-7/16
		J5448H	1-1/2
		J5450H	1-9/16



PROTO® 1/2" DRIVE DEEP SOCKETS - 6 POINT

ITEM #:	SIZE [IN]
J5312H	3/8
J5314H	7/16
J5316H	1/2
J5318H	9/16
J5320H	5/8
J5322H	11/16
J5324H	3/4
J5326H	13/16
J5328H	7/8
J5330H	15/16
J5332H	1
J5334H	1-1/16
J5336H	1-1/8
J5338H	1-3/16
J5340H	1-1/4
J5342H	1-5/16
J5344H	1-3/8
J5346H	1-7/16
J5348H	1-1/2



PROTO® 1/2" DRIVE SOCKETS - 12 POINT

ITEM #:	SIZE [IN]	ITEM #:	SIZE [IN]
J5408T	1/4	J5428	7/8
J5410	5/16	J5429	29/32
J5412	3/8	J5430	15/16
J5414	7/16	J5431	31/32
J5416	1/2	J5432	1
J5417	17/32	J5434	1-1/16
J5418	9/16	J5436	1-1/8
J5419	19/32	J5438	1-3/16
J5420	5/8	J5440	1-1/4
J5421	21/32	J5442	1-5/16
J5422	11/16	J5444	1-3/8
J5424	3/4	J5446	1-7/16
J5425	25/32	J5448	1-1/2
J5426	13/16		



PROTO® 1/2" DRIVE DEEP SOCKETS - 12 POINT

ITEM #:	SIZE [IN]
J5312	3/8
J5314	7/16
J5316	1/2
J5318	9/16
J5320	5/8
J5322	11/16
J5324	3/4
J5326	13/16
J5328	7/8
J5330	15/16
J5332	1
J5334	1-1/16
J5336	1-1/8
J5338	1-3/16
J5340	1-1/4
J5342	1-5/16
J5344	1-3/8
J5346	1-7/16
J5348	1-1/2



PROTO® 1/2" DRIVE SOCKETS - SPLINE

ITEM #:	SIZE [IN]
J5416SPL	1/2
J5418SPL	9/16
J5420SPL	5/8
J5422SPL	11/16
J5424SPL	3/4
J5426SPL	13/16
J5428SPL	7/8
J5430SPL	15/16



PROTO® 1/2" DRIVE DEEP SOCKETS - SPLINE

ITEM #:	SIZE [IN]
J5316DPL	1/2
J5318DPL	9/16
J5320DPL	5/8
J5322DPL	11/16
J5324DPL	3/4
J5326DPL	13/16
J5328DPL	7/8
J5330DPL	15/16



Reversible ratchet, 1/2", 72 teeth/5° Item: 8150SL



PROTO® DRIVE ADAPTERS

ITEM #:	INPUT	OUTPUT
J5253	3/8	1/2
J5254	1/2	3/8
J5255	3/8	1/4
J5256	1/4	3/8
J5453	3/4	1/2
J5653	1/2	3/4
J5853	3/4	1
J5854	1	3/4



1/2" DRIVE SOCKET & ACCESSORIES

PROTO® 1/2" HINGE HANDLES

ITEM # :	DRIVE SIZE [IN]	OVERALL LENGTH [IN]
J5466	1/2	10-7/8
J5467	1/2	15-3/4
J5468	1/2	18-5/8
J5469	1/2	24



PROTO® 1/2" DRIVE EXTENSIONS

ITEM # :	OVERALL LENGTH [IN]
J5460	2-1/2
J5461	5
J5463	10
J5464	20
J5465	36



PROTO® 1/2" DRIVE SLIDING T-HANDLE 12-15/16"

ITEM # :J5485



PROTO® 1/2" DRIVE SPEED HANDLE 18"

ITEM # :J5480G



PROTO® 1/2" DRIVE FULL POLISH CROWFOOT WRENCHES

ITEM # :	SIZE [IN]
J5330CF	15/16
J5332CF	1
J5334CF	1-1/16
J5336CF	1-1/8
J5338CF	1-3/16
J5340CF	1-1/4
J5342CF	1-5/16
J5344CF	1-3/8
J5346CF	1-7/16
J5348CF	1-1/2
J5350CF	1-9/16
J5352CF	1-5/8
J5354CF	1-11/16
J5356CF	1-3/4
J5358CF	1-13/16
J5360CF	1-7/8
J5364CF	2
J5368CF	2-1/8
J5372CF	2-1/4
J5376CF	2-3/8
J5378CF	2-7/16
J5380CF	2-1/2



PROTO® 1/2" DRIVE FULL POLISH FLARE NUT CROWFOOT WRENCHES - 12 POINT

ITEM # :	SIZE [IN]
J5336FL	1-1/8
J5338FL	1-3/16
J5340FL	1-1/4
J5342FL	1-5/16
J5344FL	1-3/8
J5346FL	1-7/16
J5348FL	1-1/2
J5350FL	1-9/16
J5352FL	1-5/8
J5354FL	1-11/16
J5356FL	1-3/4
J5358FL	1-13/16
J5360FL	1-7/8
J5362FL	1-15/16
J5364FL	2



PROTO® DRIVE ADAPTERS

ITEM # :	INPUT	OUTPUT
J5253	3/8	1/2
J5254	1/2	3/8
J5255	3/8	1/4
J5256	1/4	3/8
J5453	3/4	1/2
J5653	1/2	3/4
J5853	3/4	1
J5854	1	3/4



3/4" DRIVE SOCKET & ACCESSORIES

PROTO® 3/4" DRIVE DEEP SOCKETS - 6 POINT

ITEM # :	SIZE [IN]
J5528HL	7/8
J5530HL	15/16
J5532HL	1
J5534HL	1-1/16
J5536HL	1-1/8
J5540HL	1-1/4
J5542HL	1-5/16
J5544HL	1-3/8
J5546HL	1-7/16
J5548HL	1-1/2
J5552HL	1-5/8



PROTO® 3/4" DRIVE SOCKETS - 12 POINT

ITEM # :	SIZE [IN]	ITEM # :	SIZE [IN]
J5524	3/4	J5550	1-9/16
J5526	13/16	J5552	1-5/8
J5528	7/8	J5554	1-11/16
J5530	15/16	J5556	1-3/4
J5532	1	J5558	1-13/16
J5534	1-1/16	J5560	1-7/8
J5536	1-1/8	J5564	2
J5538	1-3/16	J5566	2-1/16
J5540	1-1/4	J5568	2-1/8
J5542	1-5/16	J5570	2-3/16
J5544	1-3/8	J5572	2-1/4
J5546	1-7/16	J5576	2-3/8
J5548	1-1/2		



PROTO® 3/4" DRIVE CLASSIC PEAR HEAD RATCHET 20"

ITEM # :J5649



Reversible ratchet, 3/4", 72 teeth/5°
Item: 8950N



PROTO® 3/4" DRIVE HINGE HANDLE 20"

ITEM # :J5668



PROTO® 3/4" DRIVE SLIDING T-HANDLE 20"

ITEM # :J5685



PROTO® 3/4" STANDARD EXTENSIONS

ITEM # :	OVERALL LENGTH [IN]
J5660	4
J5661	8
J5663	16



TORQUE WRENCHES

Torque wrenches with scale, metal handle

Mechanical torque wrench
Accuracy $\pm 4\%$ (CW and CCW)
Fixed ratchet head
32 teeth/11.25° action
Dual scale, metric and imperial
ISO 6789



Dial torque wrenches, double scale

Dial torque wrench
Accuracy $\pm 4\%$
Visual signal
Reversible operation
Dual scale in metric and imperial
Memory needle
Anti-shock protected dial
With rubber sleeve in 1/4", 3/8" and 1/2" models

Article					
7455-5	1/4"	1-5 Nm	1.74-3.7 lb-ft	8.9-44.3 lb-in	258
7455-15	3/8"	3-15 Nm	2.2-11.1 lb-ft	26.5-132.8 lb-in	258
7455-20	3/8"	4-20 Nm	3-14.8 lb-ft	35.4-177 lb-in	258
7455-25	3/8"	5-25 Nm	3.7-18.4 lb-ft	44.3-221.3 lb-in	286
7455-60	3/8"	10-60 Nm	7.4-44.3 lb-ft	88.5-531 lb-in	406
7455-100	3/8"	20-100 Nm	14.8-73.8 lb-ft	177-885 lb-in	406
7455-200	1/2"	40-200 Nm	29.5-147.5 lb-ft	354-1770 lb-in	483
7455-300	1/2"	60-300 Nm	44.3-221.3 lb-ft	531-2655 lb-in	457
7455-340	1/2"	60-340 Nm	44.3-221.3 lb-ft	531-3009 lb-in	620
7455-500	3/4"	100-500 Nm	73.8-368.8 lb-ft	885-4425 lb-in	870
7455-800	3/4"	150-800 Nm	110.6-590 lb-ft	1328-7081 lb-in	1067
7455-1500	1"	300-1500 Nm	221.3-1106.4 lb-ft	2655-13275 lb-in	1778

Article						
7454-3	1/4"	0-3.5 Nm	0-2.6 lb-ft	0-30 lb-in	0.1	292
7454-9	1/4"	0-9 Nm	0-6.6 lb-ft	0-75 lb-in	0.2	292
7454-18	3/8"	0-18 Nm	0-13.3 lb-ft	0-150 lb-in	0.5	292
7454-35	3/8"	0-35 Nm	0-25.8 lb-ft	0-300 lb-in	1	292
7454-70	3/8"	0-70 Nm	0-50 lb-ft	0-620 lb-in	2	381
7454-140	1/2"	0-140 Nm	0-100 lb-ft	0-1239 lb-in	5	552
7454-240	1/2"	0-240 Nm	0-175 lb-ft	0-2124 lb-in	5	552
7454-350	1/2"	0-350 Nm	0-250 lb-ft	0-3098 lb-in	10	552
7454-480	3/4"	0-480 Nm	0-350 lb-ft	0-4248 lb-in	10	711
7454-800	3/4"	0-800 Nm	0-600 lb-ft	0-7081 lb-in	20	1194
7454-1400	1"	0-1400 Nm	0-1000 lb-ft	0-12391 lb-in	25	1880
7454-800E	3/4"	0-800 Nm	0-600 lb-ft	0-7081 lb-in	20	1194
7454-1400E	1"	0-1400 Nm	0-1000 lb-ft	0-12391 lb-in	25	1880

Ratcheting head Micrometer Torque Wrenches - in-lbs

Calibrated to $\pm 4\%$ clockwise direction and $\pm 6\%$ and counter clockwise direction at 20% to 100% of full scale.
Certification documents are traceable to N.I.S.T. (National Institute of Technology) (CXCERT only)



C Series	CXCERT Series	Drive Size (inl)	Torque Range (in-lbsl)	Increments (in-lbsl)
J6060A	-	1/4	10-50	1
J6062C	J6062CXCERT	1/4	40-200	1
J6064C	J6064CXCERT	3/8	40-200	1
J6066C	J6066CXCERT	3/8	200-1000	5
J6068C	-	1/2	360-1800	10
J6072C	J6072CXCERT	1/2	600-3000	10

Dial Torque Wrenches - in-lbs/ cm-Kg



Product #	Certified Series	Drive (in)	Torque Range (metric)	Torque Range (in-lbs)	Incr. (in-lbs)
J6168F	-	1/4	7-35 cm kg	6-30	0.5
J6169F	J6169FCERT	1/4	18-90 cm kg	15-75	1
J6177F		3/8	56-280 cm kg	50-250	5
J6181F		3/8	40-700 cm kg	120-600	10

Ratcheting head Micrometer Torque Wrenches - Ft-Lbs

Calibrated to $\pm 4\%$ clockwise direction and $\pm 6\%$ and counter clockwise direction at 20% to 100% of full scale.
Certification documents are traceable to N.I.S.T. (National Institute of Technology) (CXCERT only)



C Series	CXCERT Series	Drive Size (inl)	Torque Range (ft-lbsl)	Increments (ft-lbsl)
J6006C	J6006CXCERT	3/8	16-80	0.50
J6012C	-	3/8	20-100	0.50
J6008C	J6008CXCERT	1/2	16-80	0.50
J6016C	J6016CXCERT	1/2	30-150	1
J6014C	J6014CXCERT	1/2	50-250	1
J6018AB	J6018CXCERT	3/4	60-300	2
J6020AB	J6020CXCERT	3/4	120-600	2
J6022B	-	1	140-700	2

Dial Torque Wrenches - ft-lbs/ mkg



Product #	Drive Size (in)	Torque Range (metric)	Torque Range (ft-lbs)	Incr. (ft-lbs)
J6113F	3/8	1.4-7 mkg	10-50	1
J6121F	1/2	5-24 mkg	35-175	5
J6125F	1/2	7-35 mkg	50-250	5
J6134F	3/4	-	70-350	10
J6133F	3/4	16-80 mkg	120-600	10
J6141F	1	28-140 mkg	200-1000	20
J6149F	1	56-280 mkg	400-2000	40

Dial Torque Wrenches - Nm, l n.lbs, ft-lbs



Product #	Certified Series	Drive (Inch)	ft.lbs.	in.lbs.	Nm.	Incr. (Nm)
J6169NMF		1/4	-	18-90	2-10	0.2
J6177NMF	J6177NMF CERT	3/8	-	50-250	6-30	0.5
J6113NMF		3/8	10-50	-	14-70	2
J6121NMF		1/2	35-175	-	50-250	5

Ratcheting head Micrometer Torque Wrenches - Nm

Calibrated to $\pm 4\%$ clockwise direction and $\pm 6\%$ and counter clockwise direction at 20% to 100% of full scale.



Product #	Drive Size (inl)	Torque Range (Nm)	Increments (Nm)	Torque Range (ft-lbsl)	Increments (ft-lbsl)
J6006MC	3/8	16-80	0.5	-	-
J6006NMC	3/8	16-80	0.5	11.1-62.7	0.5
J6016MC	1/2	40-200	1	-	-
J6016NMC	1/2	40-200	1	33.2-151.2	1
J6014MC	1/2	70-350	1	-	-
J6014NMC	1/2	70-350	1	55.3-261.8	1
J6020NM	3/4	160-800	4	-	-