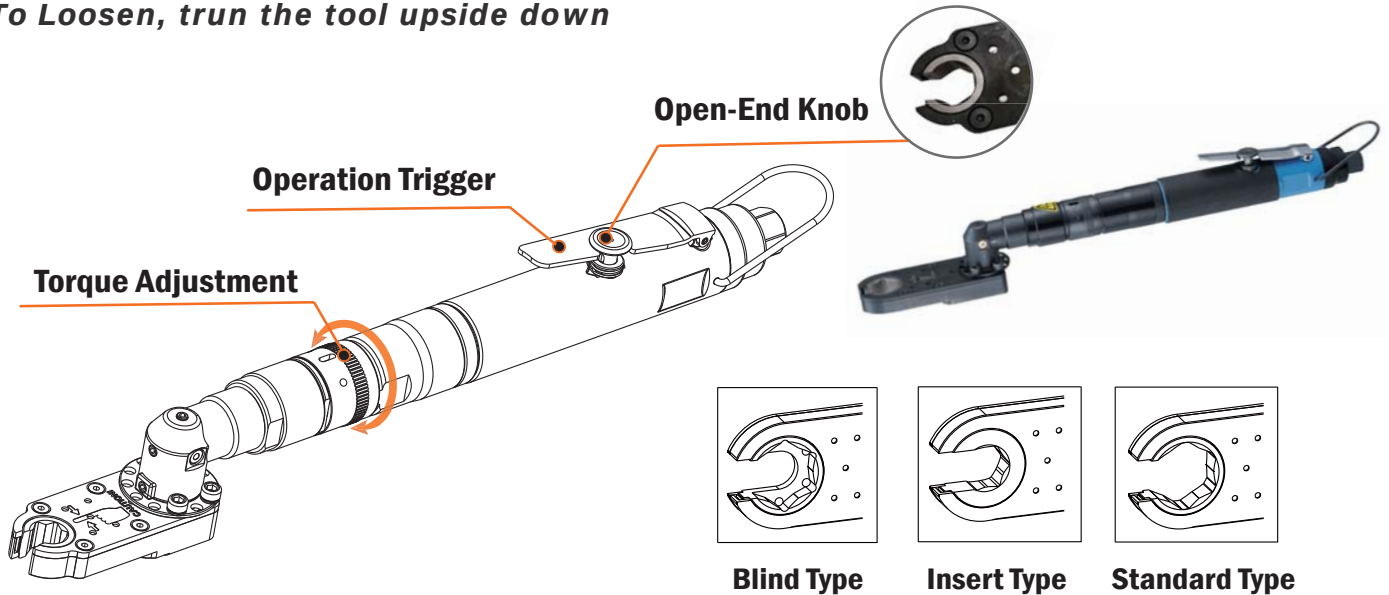
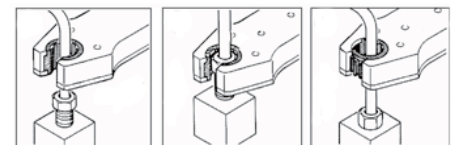
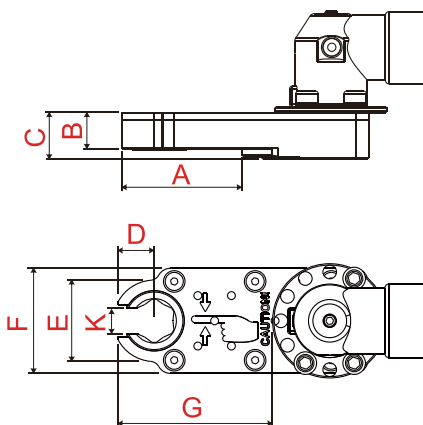


Open-end Ratchet Nutrunner

- **Torque adjustable** with **Open-end** design for fast and accurate tube nut tightening
- Superior solution for limited space or hard-to-access fastening application such as brake pipes, hose and cable connections or assembly lines
- **Open-end Knob** to easy **release socket to open position**
- To Loosen, turn the tool upside down



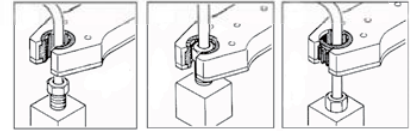
Blind Type	Insert Type	Standard Type	Socket Hex Size	Speed RPM	Torque Range Nm/in-lb	Length mm/inch	Weight kg/lb	Air Consumption LPM / CFM
								
10230	-	10210	6, 8, 10, 1/4	300	6~12 (53~106)	402 (15.8)	1.65 (3.6)	198 (7)
10231	10221	10211	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17	230	7.5~15 (66~132)	413 (16.3)	1.67 (3.6)	198 (7)
10232	10222	10212	17, 18, 19, 20, 21, 22, 23, 24, 11/16	150	10~20 (88~177)	438 (17.2)	1.84 (4.0)	198 (7)
10233	10223	10213	24, 26, 27, 29, 30, 32	115	12~24 (106~212)	461 (18.1)	2.09 (4.6)	198 (7)
-	10224	10214	36, 38, 40, 41, 46, 50, 55	100	14~28 (124~248)	504 (19.8)	2.52 (5.5)	198 (7)



Blind Type	Insert Type	Standard Type	A	B	C	D	E	F	G
			mm	mm	mm	mm	mm	mm	mm
10230	-	10210	38.3	14	18	10.9	27	40	47.3
10231	10221	10211	46.2	14	18	13.6	31	40	58.8
10232	10222	10212	57.2	14	18	20.6	46.6	48	83.2
10233	10223	10213	71	14	18	26.6	59	59	106.6
-	10224	10214	92.1	14	18	39.3	86	86	149.3



Open-end Ratchet Nutrunner



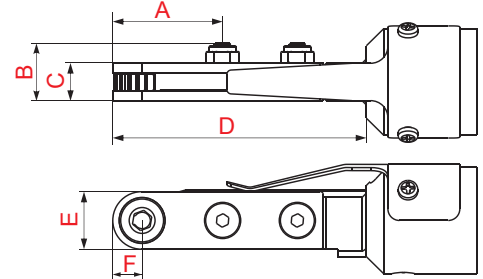
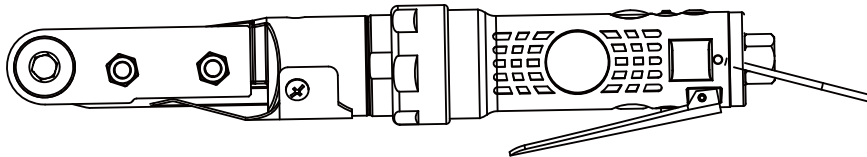
Item No.	10230	10231	10232	10233		
Socket Hex Size 	Blind Type K  L 				K mm	L mm
8mm	10230-8	10231-8			5.6	5
10mm	10230-10	10231-10			7	6.5
11mm		10231-11			8.1	6.5
12mm		10231-12			8.5	6.5
13mm		10231-13			9	9
14mm		10231-14			10.2	9
15mm		10231-15			10.5	9
16mm		10231-16			10.9	9
17mm		10231-17	10232-17		11.3	9
18mm			10232-18		12	9
19mm			10232-19		13.1	9
20mm			10232-20		13.5	9
21mm			10232-21		15	9
22mm			10232-22		15.2	9
23mm			10232-23		15.5	9
24mm			10232-24	10233-24	16.1	9
26mm				10233-26	17.1	9
27mm				10233-27	18.1	9
29mm				10233-29	19.2	9
30mm				10233-30	20.1	9
32mm				10233-32	21.2	9

Item No.	10221	10222	10223	10224		
Socket Hex Size 	Insert Type K 				K mm	
7mm	10221-7				7.1	
8mm	10221-8				8.1	
9mm	10221-9				9.1	
10mm	10221-10				10.1	
11mm	10221-11				11.1	
12mm		10222-12			12.1	
13mm		10222-13			13.1	
14mm		10222-14			14.1	
15mm		10222-15			15.1	
16mm		10222-16			16.1	
17mm			10223-17		17.1	
18mm			10223-18		18.1	
19mm			10223-19		19.1	
20mm			10223-20		20.1	
21mm			10223-21		21.1	
22mm			10223-22		22.1	
36mm				10224-36	36.1	

Item No.	10210	10211	10212	10213	10214	
Socket Hex Size 	Standard Type K 					K mm
6mm	10210-6					4.2
7mm		10211-7				5
8mm	10210-8	10211-8				5.6
9mm		10211-9				6.5
10mm	10210-10	10211-10				7
11mm		10211-11				8.1
12mm		10211-12				8.5
13mm		10211-13				9
14mm		10211-14				10.2
15mm		10211-15				10.5
16mm		10211-16				10.9
17mm		10211-17	10212-17			11.3
18mm			10212-18			12
19mm			10212-19			13.1
20mm			10212-20			13.5
21mm			10212-21			15
22mm			10212-22			15.2
23mm			10212-23			15.5
24mm			10212-24	10213-24		16.1
26mm				10213-26		17.1
27mm				10213-27		18.1
29mm				10213-29		19.2
30mm				10213-28		20.1
32mm				10213-32		21.2
36mm					10214-36	25
38mm					10214-38	26
40mm					10214-40	27
41mm					10214-41	28
46mm					10214-46	31
50mm					10214-50	34.5
55mm					10214-55	37.5
1/4"	10210-I14					4.4
11/16"			10212-I 1116			11.5

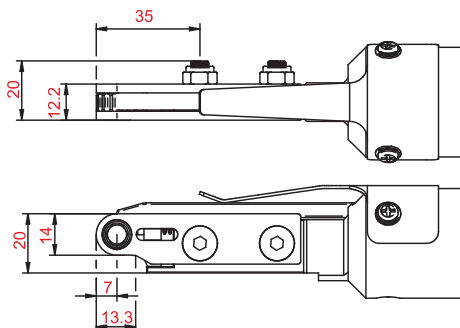
Thru-Hole Ratchet Nutrunner

- Excellent solution for use in assembly lines
- Perfect for tightening and loosening bolts and nuts, especially for limited accessibility space
- To Loosen, turn the tool upside down

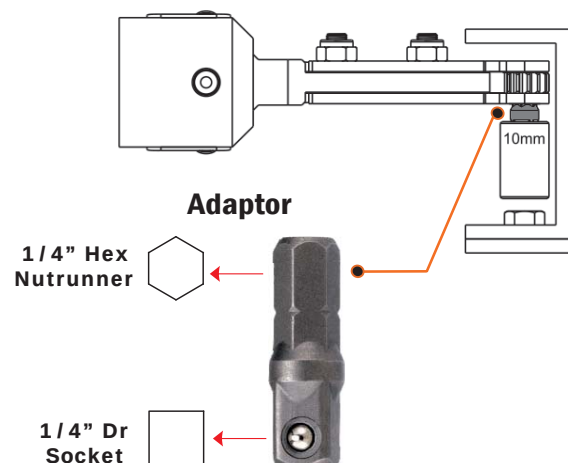


Model No.	A mm	B mm	C mm	D mm	E mm	F mm
10301	38.2	20	13.2	88.2	20	10.2
10200	44.4	26	18	109	25.2	12.2
10201	51	26	18	115	33.2	16.6
10100	51	26	18	115	33.2	16.6
10101	59	26	18	123	41	20.5
10102	66	26	18	130	48	24
10103	70	26	18	134	52	26

Item No.	Socket Hex Size 	Speed RPM 	Working Torque Nm/in-lb 	Length mm/inch 	Weight kg/lb 	Air Consumption LPM / CFM 
10300	6, 1/4	250	10 (88)	282 (11.1)	1.26 (2.7)	127 (4.5)
10301	6, 7, 8, 9, 10, 11, 12, 1/4, 3/8	180	10 (88)	285 (11.2)	1.28 (2.8)	127 (4.5)
10200	10, 11, 12, 13, 14, 1/2, 9/16	220	15 (132)	332 (13.1)	1.92 (4.2)	212 (7.5)
10201	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 11/16	190	15 (132)	338 (13.3)	2.00 (4.4)	212 (7.5)
10100	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 11/16	150	80 (708)	390 (15.3)	2.42 (5.33)	353 (12.5)
10101	21, 22, 23, 24, 26, 27	130	80 (708)	398 (15.6)	2.48 (5.4)	353 (12.5)
10102	29, 30, 32	110	80 (708)	405 (15.9)	2.50 (5.5)	353 (12.5)
10103	35, 36	100	80 (708)	408 (16.0)	2.52 (5.6)	353 (12.5)



Nutrunner apply with adaptor



10300 Mini Thru-Hole Ratchet Nutrunner

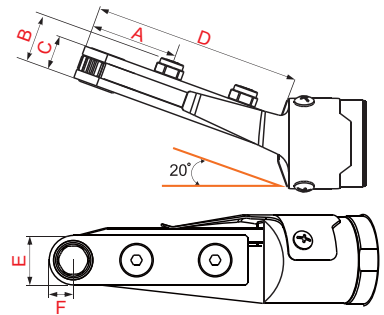


Thru-Hole Ratchet Nutrunner



Socket Hex Size	10300	10301	10200	10201	10100	10101	10102	10103
6mm	10300-6	10301-6						
7mm		10301-7						
8mm		10301-8						
9mm		10301-9						
10mm		10301-10	10200-10	10201-10	10100-10			
11mm		10301-11	10200-11	10201-11	10100-11			
12mm		10301-12	10200-12	10201-12	10100-12			
13mm			10200-13	10201-13	10100-13			
14mm			10200-14	10201-14	10100-14			
15mm				10201-15	10100-15			
16mm				10201-16	10100-16			
17mm				10201-17	10100-17			
18mm				10201-18	10100-18			
19mm				10201-19	10100-19			
21mm						10101-21		
22mm						10101-22		
23mm						10101-23		
24mm						10101-24		
26mm						10101-26		
27mm						10101-27		
29mm							10102-29	
30mm							10102-30	
32mm							10102-32	
35mm								10103-35
36mm								10103-36
38mm								
40mm								
41mm								
46mm								
50mm								
55mm								
1/4"	10300-I14	10301-I14						
3/8"		10301-I38						
1/2"			10200-I12		10100-I12			
9/16"			10200-I916		10100-I916			
11/16"				10201-I 1116	10100-I 1116			

Offset Thru-Hole Ratchet Nutrunner



Model No.	A	B	C	D	E	F
	mm	mm	mm	mm	mm	mm
10302	38.2	20	13.2	83.9	20	10.2
10202	44.4	26	18	105	25.2	12.2
10203	51	26	18	111.5	33.2	16.6

Item No.	Speed RPM	Working Torque Nm/in-lb	Length mm/inch	Weight kg/lb
				
10302	180	10 (88)	281 (11)	1.28 (2.8)
10202	220	15 (132)	327 (12.8)	1.92 (4.2)
10203	190	15 (132)	333 (13.1)	2.00 (4.4)

Socket Hex Size	10302	10202	10203
6mm	10302-6		
7mm	10302-7		
8mm	10302-8		
9mm	10302-9		
10mm	10302-10	10202-10	10203-10
11mm	10302-11	10202-11	10203-11
12mm	10302-12	10202-12	10203-12
13mm		10202-13	10203-13
14mm		10202-14	10203-14
15mm			10203-15
16mm			10203-16
17mm			10203-17
18mm			10203-18
19mm			10203-19
1/4"	10302-I14		
3/8"	10302-I38		
1/2"		10202-I12	
9/16"		10202-I916	
11/16"			10203-I 1116