

Bevel Gear Type Jack

Highly efficient jack for manual operation,
with a self-locking function

09



Small Screw Jack /01



Screw Jack /02



Ball Small Jack /03



Ball Screw Jack /04



High-Lead Screw Jack /05



High-Lead Ball Screw Jack /06



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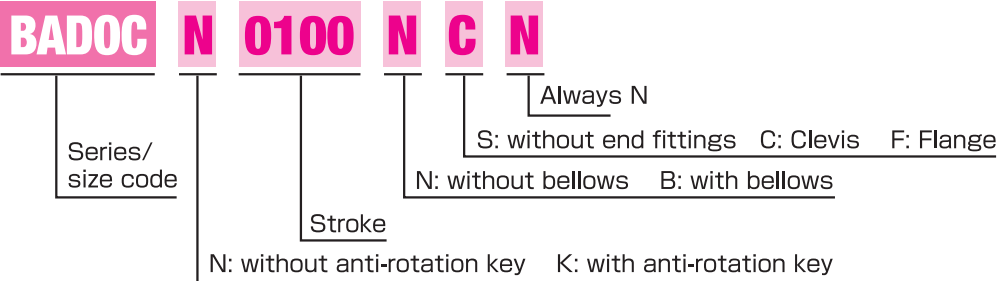


Specification

Specification of Bevel Gear Type Jack: Basic Specification

Please note that series/size codes have changed.

Product code



Current series/size code		BADOC	BAD1C	BAD2C	BA01C	BA02C	BA12C	BA13C	BA24A	BA25A
Former series/size code		BA-00-0	BA-00-1	BA-00-2	BA-0-1	BA-0-2	BA-1-2	BA-1-3	BA-2-4	BA-2-5
Maximum load capacity	kN	10	25	50	25	50	50	100	200	300
Lifting screw diameter ϕ	mm	20	25	40	25	40	40	50	63	85
Lifting screw lead	mm	4	5	8	5	8	8	10	12	16
Worm gear ratio		2.5	2.5	2.5	3	3	4.11	4.11	6	6
Efficiency		0.27	0.26	0.26	0.26	0.27	0.27	0.26	0.23	0.23
Required input torque at allowable load	N·m	10	30	100	30	80	60	150	260	530
Approximate weight(stroke100mm)	kg	20	22	23	25	26	45	46	95	100

As for bevel gear type jacks, the required input torque is to be calculated on a pro-rata basis.

■ Example: BAD1C when the load is 5kN

Required input torque at allowable load 30 N·m
Required input torque at load of 2kN is calculated as follows:

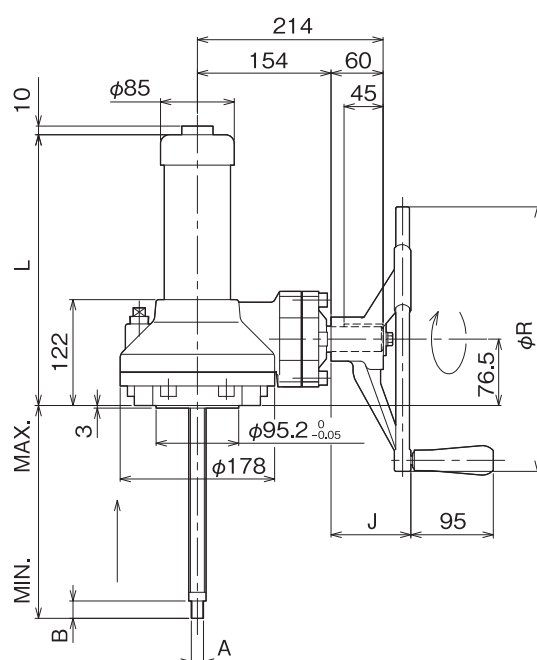
$$30 \times \frac{5}{25} = 6 \text{ N·m}$$

■ Handwheel size (option)

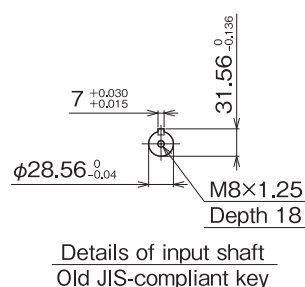
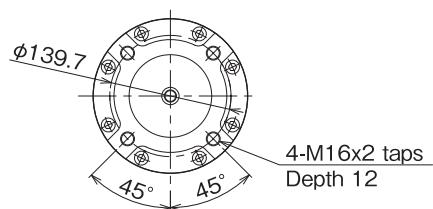
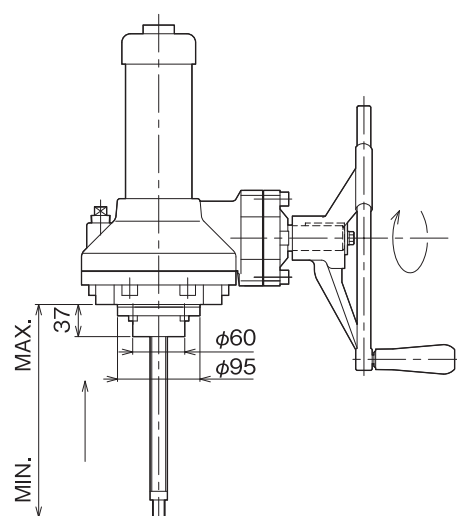
Size Code	12 type	18 type	24 type
R	310	460	610
J	92	106.5	112

Dimensional Drawing: BAD Bevel Gear Type Jack

Without anti-rotation key



With anti-rotation key


BAD Bevel Gear Type Jack Measurement Table

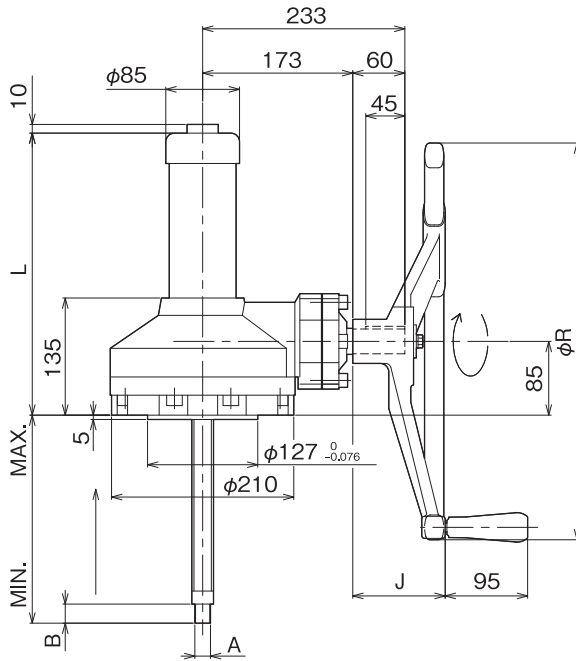
Stroke	BAD0C						BAD1C						BAD2C					
	N: Without anti-rotation key			K: With anti-rotation key			N: Without anti-rotation key			K: With anti-rotation key			N: Without anti-rotation key			K: With anti-rotation key		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L
100	35	135	270	72	172	270	45	145	270	82	182	270	55	155	280	92	192	280
200	35	235	370	72	272	370	45	245	370	82	282	370	55	255	380	92	292	380
300	35	335	470	72	372	470	45	345	470	82	382	470	55	355	480	92	392	480
400	35	435	570	72	472	570	45	445	570	82	482	570	55	455	580	92	492	580
500	35	535	670	72	572	670	45	545	670	82	582	670	55	555	680	92	592	680
600	35	635	770	72	672	770	45	645	770	82	682	770	55	655	780	92	692	780
800	35	835	970	72	872	970	45	845	970	82	882	970	55	855	980	92	892	980

記号	BAD0C	BAD1C	BAD2C
A	M14×1.5	M18×1.5	M25×2
B	20	22	32

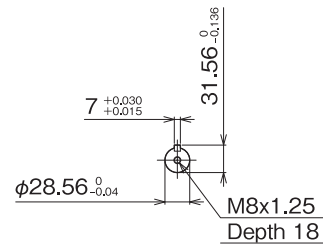
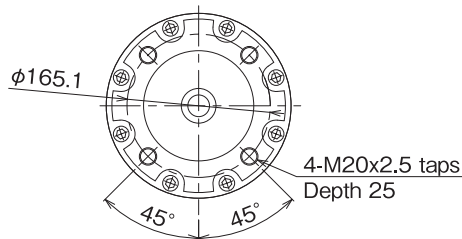
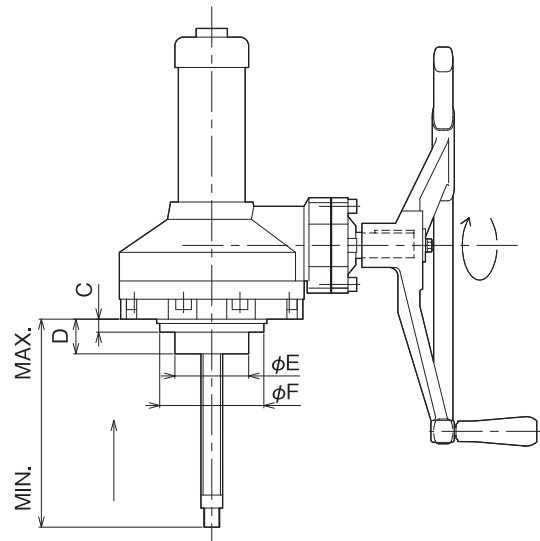
BA0
Dimensional
Drawing

Dimensional Drawing: BA0 Bevel Gear Type Jack

Without anti-rotation key



With anti-rotation key



Details of input shaft
Old JIS-compliant key

BA0 Bevel Gear Type Jack Measurement Table

Stroke	BA01C						BA02C					
	N: Without anti-rotation key			K: With anti-rotation key			N: Without anti-rotation key			K: With anti-rotation key		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L
100	45	145	270	85	185	270	55	155	280	87	187	280
200	45	245	370	85	285	370	55	255	380	87	287	380
300	45	345	470	85	385	470	55	355	480	87	387	480
400	45	445	570	85	485	570	55	455	580	87	487	580
500	45	545	670	85	585	670	55	555	680	87	587	680
600	45	645	770	85	685	770	55	655	780	87	687	780
800	45	845	970	85	885	970	55	855	980	87	887	980

Code	BA01C	BA02C
A	M18x1.5	M25x2
B	22	32
C	15	17
D	40	32
E	85	87
F	120	125

Dimensional Drawing: BA1 Bevel Gear Type Jack

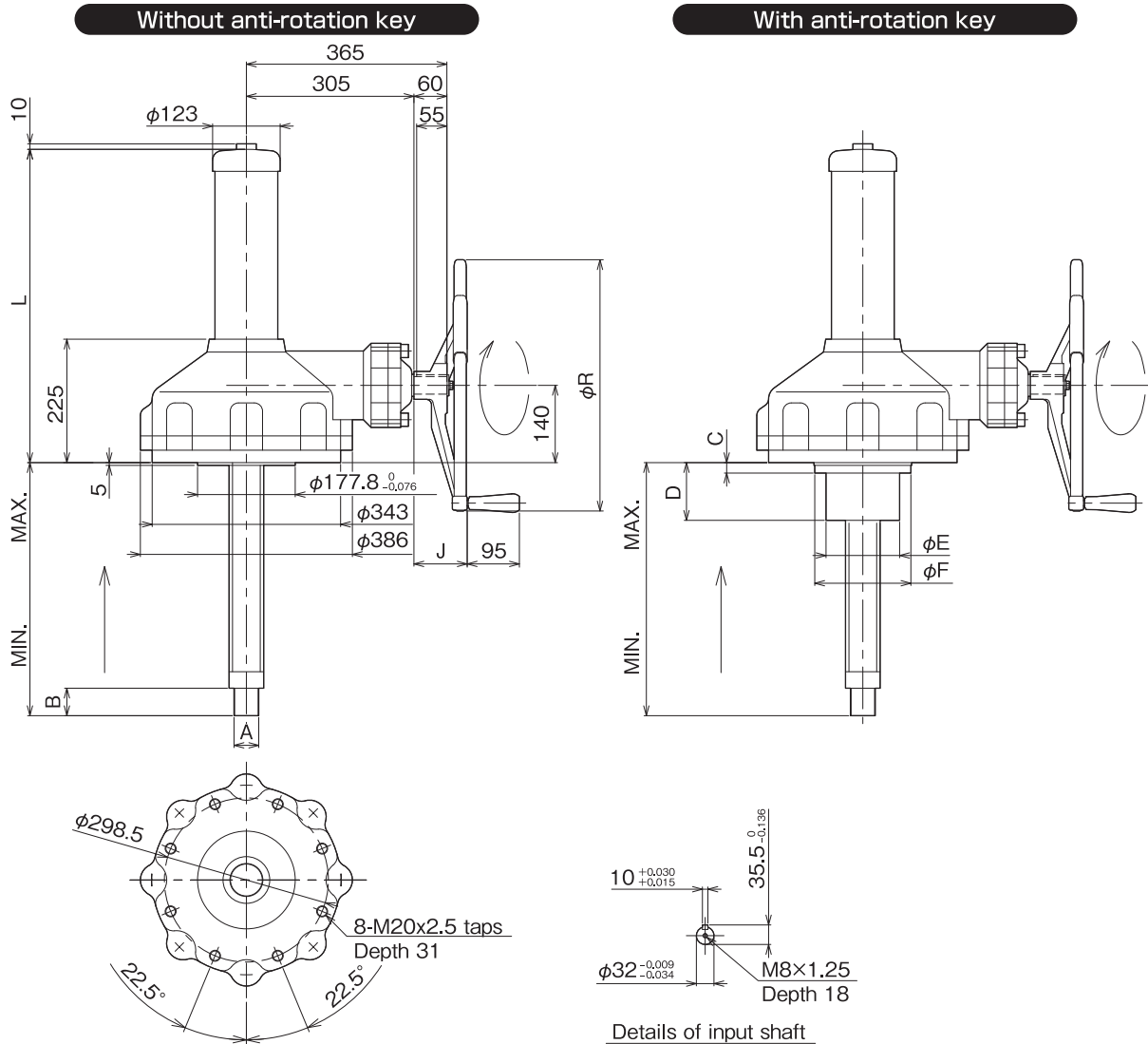


Stroke	BA12C						BA13C					
	N: Without anti-rotation key			K: With anti-rotation key			N: Without anti-rotation key			K: With anti-rotation key		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L
100	55	155	310	94	194	310	55	155	310	129	229	310
200	55	255	410	94	294	410	55	255	410	129	329	410
300	55	355	510	94	394	510	55	355	510	129	429	510
400	55	455	610	94	494	610	55	455	610	129	529	610
500	55	555	710	94	594	710	55	555	710	129	629	710
600	55	655	810	94	694	810	55	655	810	129	729	810
800	55	855	1010	94	894	1010	55	855	1010	129	929	1010

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BA2
Dimensional
Drawing

Dimensional Drawing: BA2 Bevel Gear Type Jack



BA2 Bevel Gear Type Jack Measurement Table

Stroke	BA24A						BA25A					
	N: Without anti-rotation key			K: With anti-rotation key			N: Without anti-rotation key			K: With anti-rotation key		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	L
100	80	180	385	185	285	385	95	195	375	255	355	375
200	80	280	485	185	385	485	95	295	475	255	455	475
300	80	380	585	185	485	585	95	395	575	255	555	575
400	80	480	685	185	585	685	95	495	675	255	655	675
500	80	580	785	185	685	785	95	595	775	255	755	775
600	80	680	885	185	785	885	95	695	875	255	855	875
800	80	880	1085	185	985	1085	95	895	1075	255	1055	1075

Code	BA24A	BA25A
A	M45x2	M60x2
B	50	62
C	19	19
D	105	160
E	134	134
F	175	175

