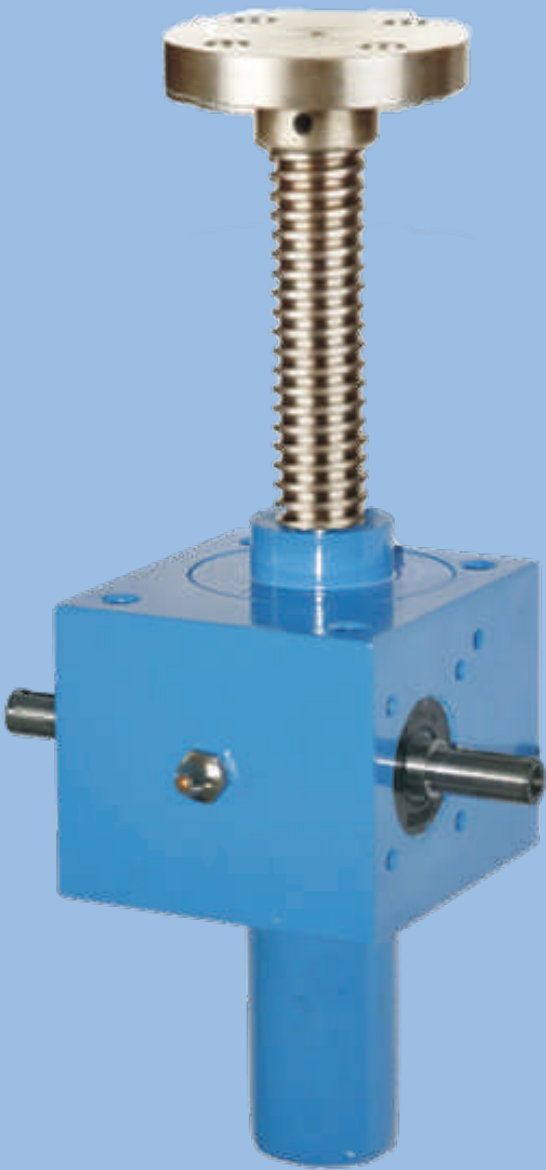


**HITORK**®



**Cubical Worm Gear  
Screw Jack  
MCJ**

ISO : 9001 - 2008



**Gears and Gear Drives (India) Pvt. Ltd.**  
(ISO 9001 : 2008 Certified)



## DIMENSION SHEET

Nominal Size MCJ 0.5 to MCJ 10 Type 1					
Nominal Size	0.5	1	2.5	5	10
Lifting Screw TR	18x4	20x4	30x6	40x7	55x9
A	120	140	195	240	300
A1	72	85	105	145	165
A2	52	63	81	115	131
A3	10	11	12	15	17
A4	10	11	12	15	17
A5	2.5	2.5	2.5	2.5	2.5
A6	21	29	42	63	66
A7	60	78	106	150	166
A8	1.5	1.5	2	2	2.5
B	36	46	51	66	97
B1	Lift+15	Lift+25	Lift+25	Lift+45	Lift+55
B2	62	75	82	117	160
C1	4	7	5	4	7
D1	30	38.7	46	60	85
D9	32	38	50	60	85
D11	28	35	35	35	52
H	25	32	45	63	71
K	3x3x18	5x5x18	5x5x36	6x6x36	8x7x56
L	24	27.5	45	47.5	67.5
L16	80	100	130	180	200
L17	31	37.5	41	58.5	80
L18 SQ	32	35	44	55	60
S2	12	18	23	32	40
NxF6	M5x8	M6x9	M8x10	M10x14	M12x16
NxF7	M8x13	M8x15	M10x15	M12x16	M20x30
D(i6)	10	14	16	20	25
<b>Head type I</b>					
D5	12	14	20	30	36
L1	23	27	27	33	55
L3	19	20	22	29	48
<b>Head Type II</b>					
D2	65	80	90	110	150
D3	48	60	67	85	117
D4	29.3	38.7	46	66	85
L19	20	21	23	30	50
L20	7	8	10	15	20
NxF5	4xØ9	4xØ11	4xØ11	4xØ13	4xØ17
<b>Head Type III</b>					
L2	23	27	27	33	55
L4	19	20	22	29	48
D6	M12x1.75	M14x2	M20x2.5	M30x3.5	M36x4
<b>Head Type IV</b>					
D7	30	39	45	60	85
D10 H8	10	12	16	20	22
L5	44	52	58	74	104
L6	59	70	83	104	137
L7 -0.2	15	20	30	35	40
L8	15	18	20	30	33
<b>Fork End</b>					
D8 H9	12	14	20	30	35
L9	24	28	40	60	70
L10	12	14	20	30	35
L11	24	28	40	60	70
L12	14	16	25	40	44
L13	24	28	40	60	72
L14	66	79	110	164	195
L15	44	50	75	117	144
<b>Travelling Nut Type 2</b>					
NL	Lift + 95	Lift + 112	Lift + 134	Lift + 185	Lift + 232
D10	48	55	62	95	110
D11	38	45	50	78	90
D12	28	32	38	63	72
L21	44	44	46	73	97
L22	12	12	14	16	18
nxF8	6xf6	6xf7	6xf7	6xf9	6xf11
C2	12	15	20	25	25



## DIMENSION SHEET

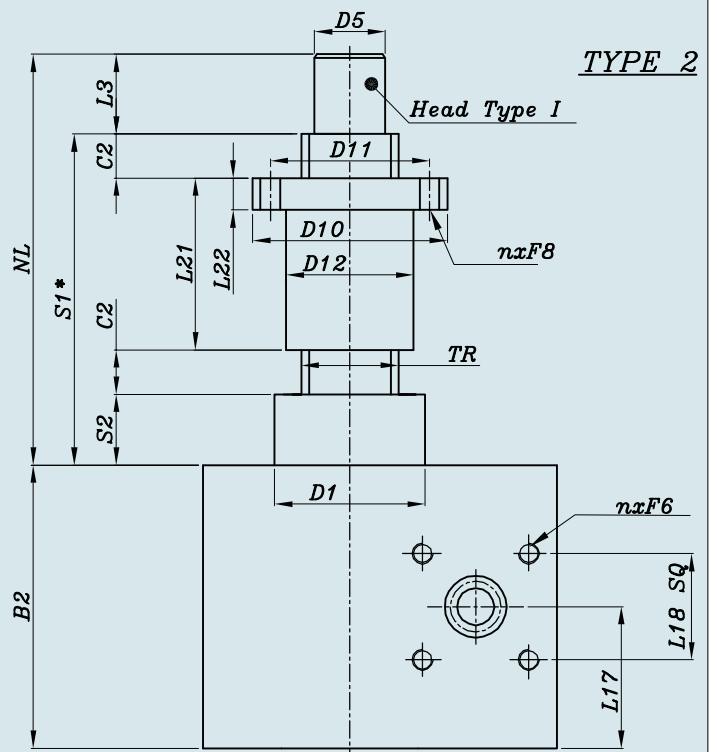
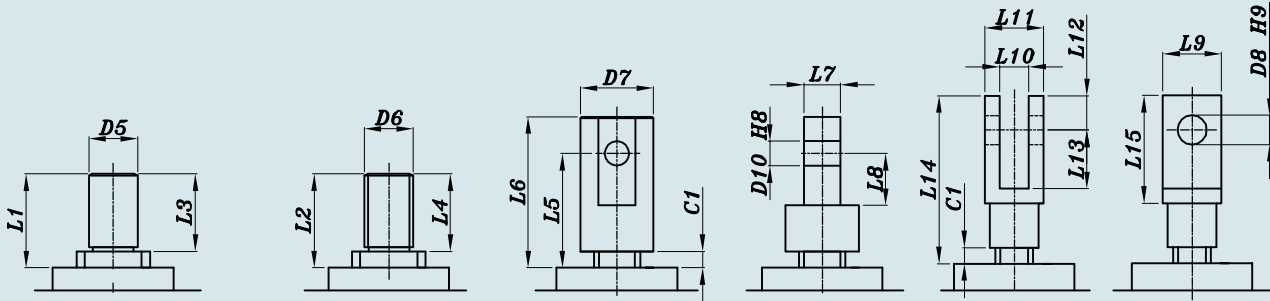
Nominal Size MCJ 15 to MCJ 50 Type 1					
Nominal Size	15	20	25	35	50
Lifting Screw TR	60x9	70x10	80x10	100x10	120X14
A	325	355	355	380	500
A1	195	220	220	250	300
A2	155	170	170	190	230
A3	20	25	25	30	35
A4	20	25	25	30	35
A5	2.5	2.5	2.5	2.5	2.5
A6	70	75	75	95	115
A7	170	190	190	230	290
A8	8	8	8	8	8
B	97	112	112	142	202
B1	Lift+55	Lift+55	Lift+55	Lift+65	Lift+90
B2	175	165	165	220	266
C1	7	12	12	12	22
D1	90	105	120	145	170
D9	90	115	115	133	153
D11	52	58	58	72	80
H	71	80	80	100	135
K	8x7x56	8x7x56	8x7x56	10x8x56	14X9X90
L	65	67.5	67.5	65	100
L16	210	240	240	290	360
L17	87.5	-	-	-	-
L18 SQ	60	35	44	55	60
S2	40	40	40	50	60
NxF6	M12x16	-	-	-	-
NxF7	M24x40	M30x45	M30x45	M36x54	M42x80
D(j6)	25	30	30	35	48
<b>Head type I</b>					
D5	48	56	64	72	100
L1	55	70	70	90	140
L3	48	58	58	78	118
<b>Head Type II</b>					
D2	170	200	220	260	310
D3	130	155	170	205	240
D4	90	105	120	145	170
L19	50	60	60	80	120
L20	25	30	30	40	40
NxF5	4xØ21	4xØ25	4xØ25	4xØ32	4xØ38
<b>Head Type III</b>					
L2	55	70	70	90	140
L4	48	58	58	78	118
D6	M48x2	M56x2	M64x3	M72x3	M100x3
<b>Head Type IV</b>					
D7	90	105	120	145	170
D10 H8	40	50	60	80	90
L5	90	102	117	147	222
L6	127	142	167	232	322
L7 -0.2	60	70	80	110	120
L8	45	50	60	85	100
<b>Travelling Nut Type 2</b>					
NL	Lift + 244	Lift + 260	Lift + 275	Lift + 330	Lift + 400
D10	125	180	190	240	300
D11	105	140	150	185	230
D12	85	95	105	130	160
L21	99	100	110	130	160
L22	20	30	30	35	40
nxF8	6xf11	6xf17	6xf17	6xf25	6xf28
C2	25	25	25	25	30



# DIMENSION SHEET

## Nominal Size MCJ 0.5 to MCJ 10 Type1

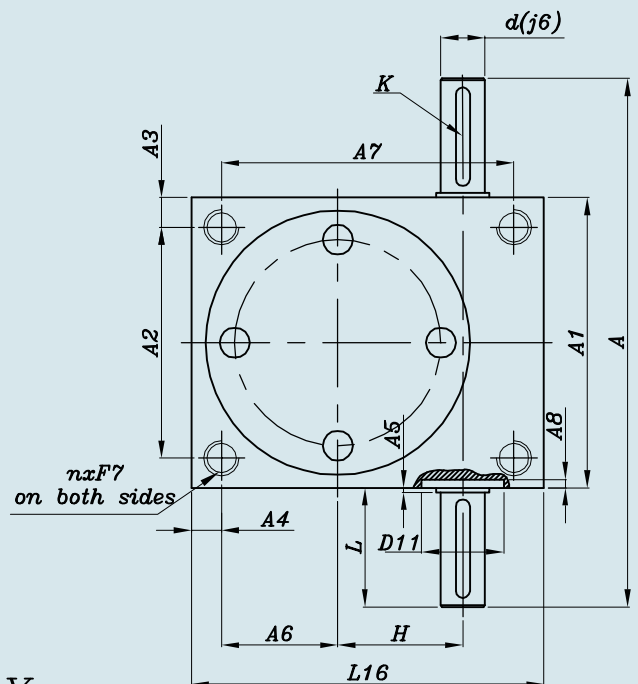
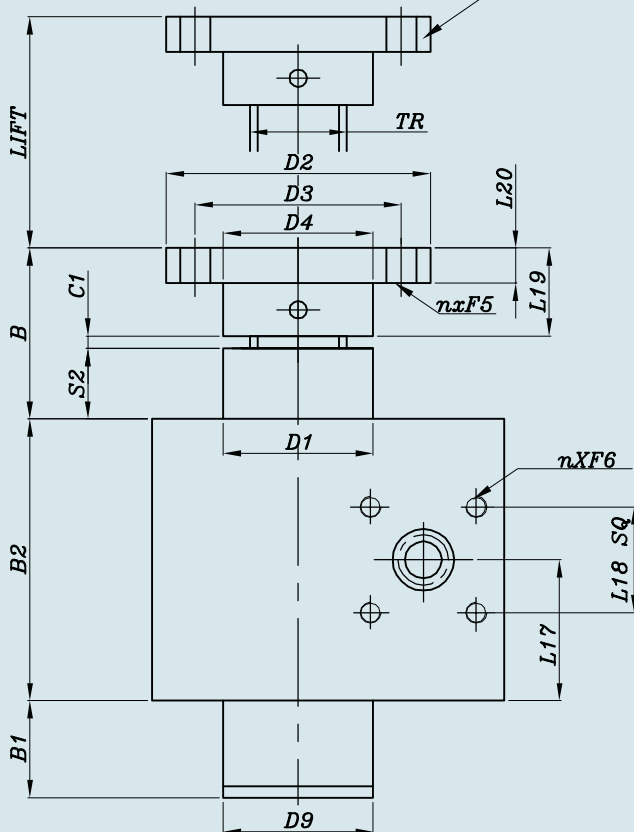
Head Type I   Head Type III   Head Type IV   FORK END



TYPE 1

X

HEAD TYPE II



VIEW X

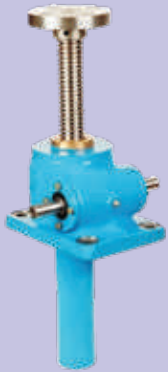


## PRELIMINARY SELECTION TABLE

### Cubical Worm Gear Screw Jack MCJ 0.5 to MCJ 50

Cubical worm gearbox Type	Standard Cubical Worm Gearbox MCJ									
Nominal size, MCJ	0.5		1		2.5		5		10	
Max lifting capacity, kN	5		10		25		50		100	
Lifting screw Tr	18 X 4		20 X 4		30 X 6		40 X 7		55 X 9	
Normal N, Slow L	N	L	N	L	N	L	N	L	N	L
Ratio	4:1	16:1	4:1	16:1	6:1	24:1	7:1	28:1	9:1	36:1
Lift per turn of worm, at ratio,mm	1	0.25	1	0.25	1	0.3	1	0.3	1	0.25
Total efficiency, at ratio, %	0.3	0.2	0.28	0.18	0.26	0.2	0.25	0.2	0.24	0.16
Screw efficiency, %	0.427		0.4		0.4		0.365		0.348	
Screw torque at max lifting capacity, Nm	7.5		16		60		153		411	
Worm torque at max lifting capacity at ratio, Nm	2.7	1.05	5.7	2.2	15	6.3	32.5	13	66	25
Max permissible torque at worm shaft, Nm	3.15		7.15		18.1		38		93	
Weight for zero stroke, kg	1.2		2.1		6		17		33	
Additional weight per 100 mm of screw, kg	0.25		0.42		1.15		1.66		5.05	

Cubical worm gearbox Type	Standard Cubical Worm Gearbox MCJ									
Nominal size, MCJ	15		20		25		35		50	
Max lifting capacity, kN	150		200		250		350		500	
Lifting screw Tr	60x9		70x10		80x10		100x10		120x14	
Normal N, Slow L	N	L	N	L	N	L	N	L	N	L
Ratio	9:1	36:1	10:1	40:1	10:1	40:1	10:1	40:1	14:1	56:1
Lift per turn of worm, at ratio,mm	1	0.25	1	0.25	1	0.3	1	0.3	1	0.25
Total efficiency, at ratio, %	0.23	0.15	0.21	0.14	0.2	0.1	0.164	0.1	0.184	0.11
Screw efficiency, %	0.328		0.316		0.286		0.240		0.27	
Screw torque at max lifting capacity, Nm	656		1007		1390		2312		4100	
Worm torque at max lifting capacity at ratio, Nm	105	40	148	59	204	81	339	133	433	173
Max permissible torque at worm shaft, Nm	147		175		238		338		565	
Weight for zero stroke, kg	42		58		58		86		162	
Additional weight per 100 mm of screw, kg	3.1		4.5		6.15		8		11.7	



Worm Gear Screw Jacks CLASSIC



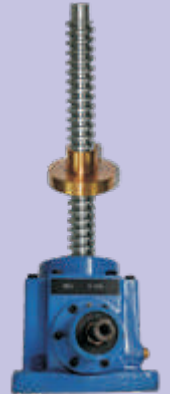
Worm Gear Screw Jacks CUBICAL



Ball Screw Jack



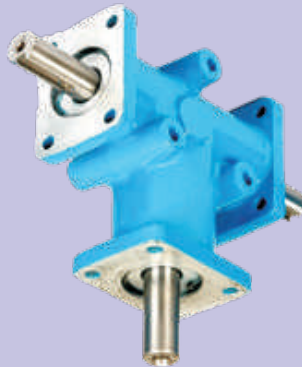
Electric Cylinder



Bevel Gear Screw Jacks



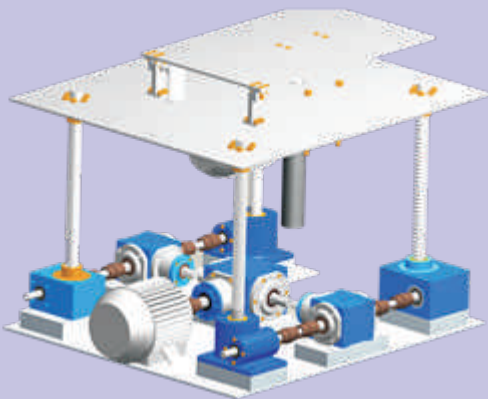
Bevel Gear Box, FG



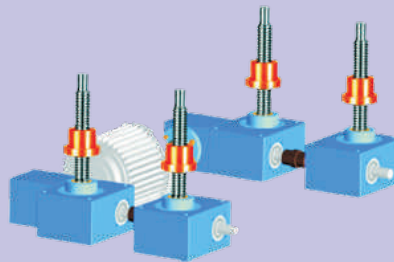
Bevel Gear Box, L Drive



UV Joints



Lifting Systems



Worm Reducer



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(ISO 9001 : 2000 Certified)

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