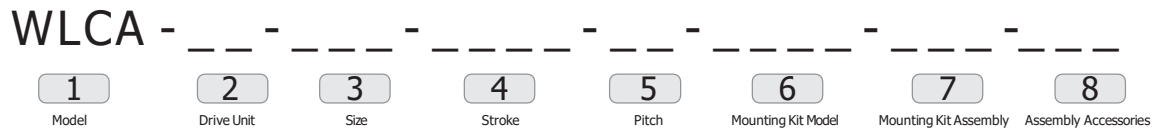


**Ordering Code**



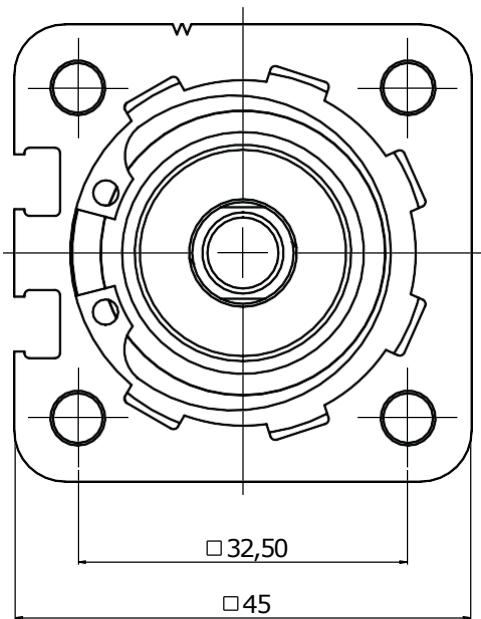
**1 - Model**

**WLCA** : Series Compact Actuators

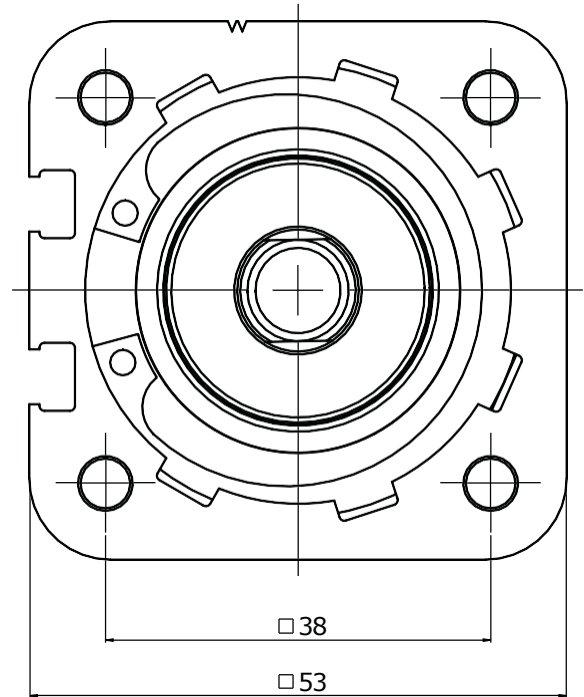
**2 - Drive Unit**

**BS** : Ball Screw

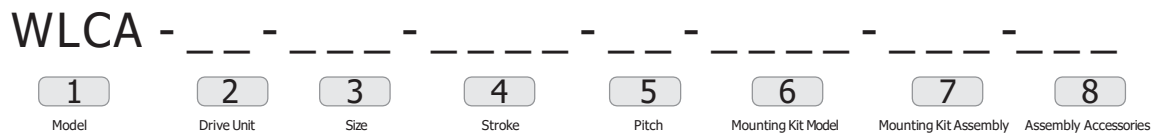
**3 - Size**



WLCA - \_ - \_ - 032



WLCA - \_ - \_ - 040

**Ordering Code**

**4 - Stroke**

Size	Standard Strokes						
032	0050	0100	0150	0200	0250	0300	-
040	0050	0100	0150	0200	0250	0300	0400

**Movement Stroke**

In addition to the desired movement stroke, it is recommended to leave a space on both sides until 2xPitch.

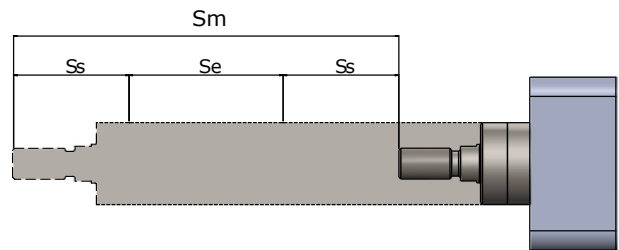
$$S_m = S_e + 2 \cdot S_s$$

$$S_s = 2 \cdot p$$

$S_m$  : Movement Stroke

$S_e$  : Safety Stroke

$p$  : Ball Screw Pitch


**5-Pitch**

Drive Unit	Ball Screw		
Actuator Model	5	10	16
WLCA - _ - - 032	+	+	-
WLCA - _ - - 040	+	+	+

**6 - Mounting Kit Model**

00 : Without Mounting	WDAK :Axial Kit	WDPK :Parallel Kit

Note 1 : Please contact for different motor types and mounting sizes.

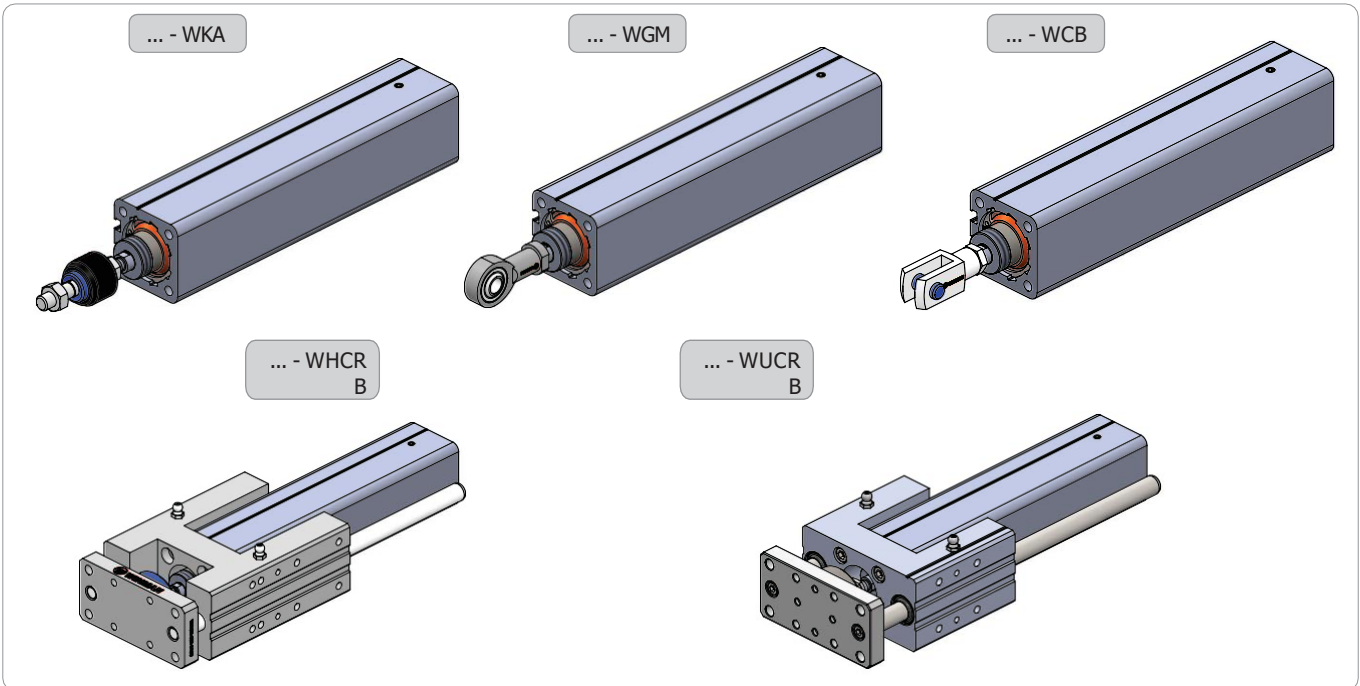
Note 2 : Please contact for to use reducer.

**7 - Mounting Kit Assembly**

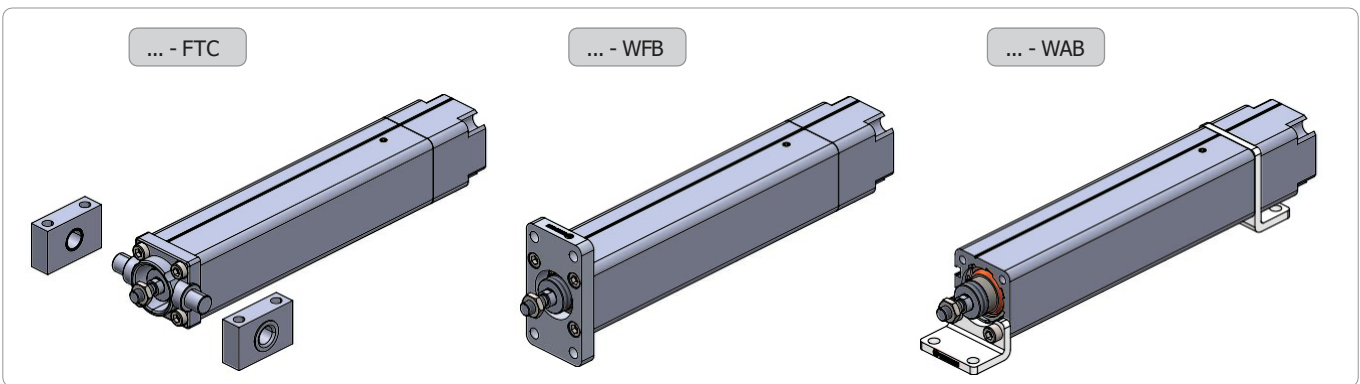
00 : Without Motor	070 : Ø70 motor mounting	023 : Nema 23 motor mounting

**8 - Assembly Accessories**

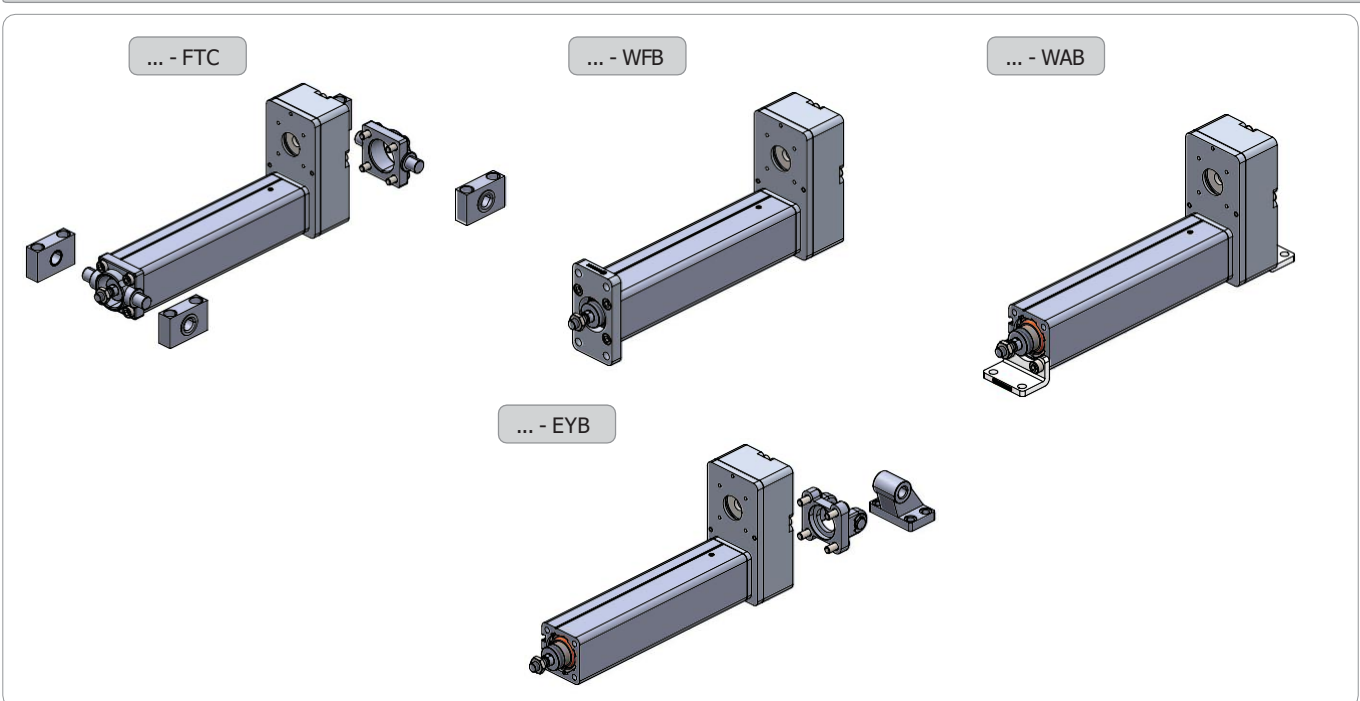
**Front Mounting**

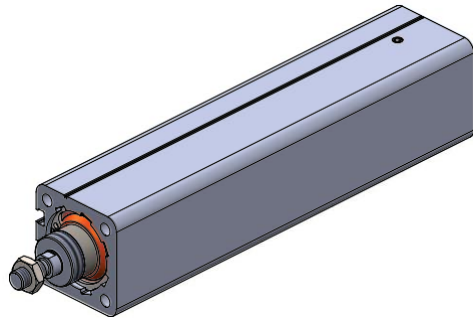


**Mounting for Axial Kit**

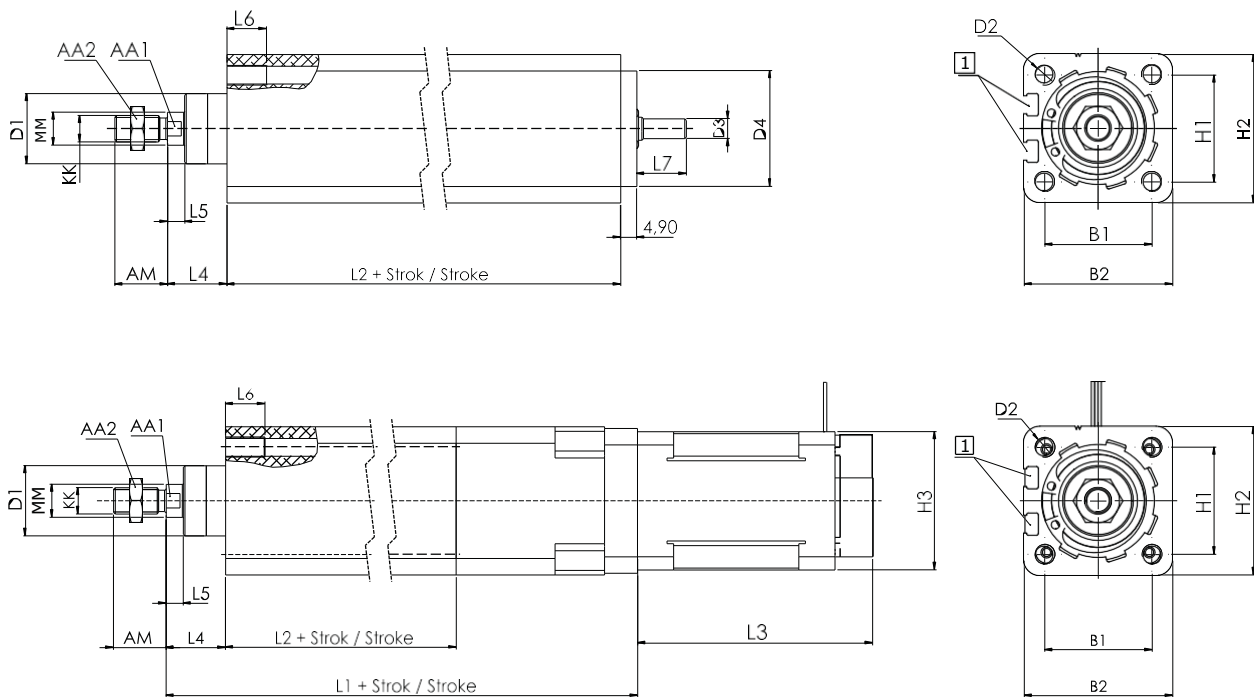


**Mounting for Parallel Kit**



**WINMAN WLCA Series Compact Actuators**

**Specification**

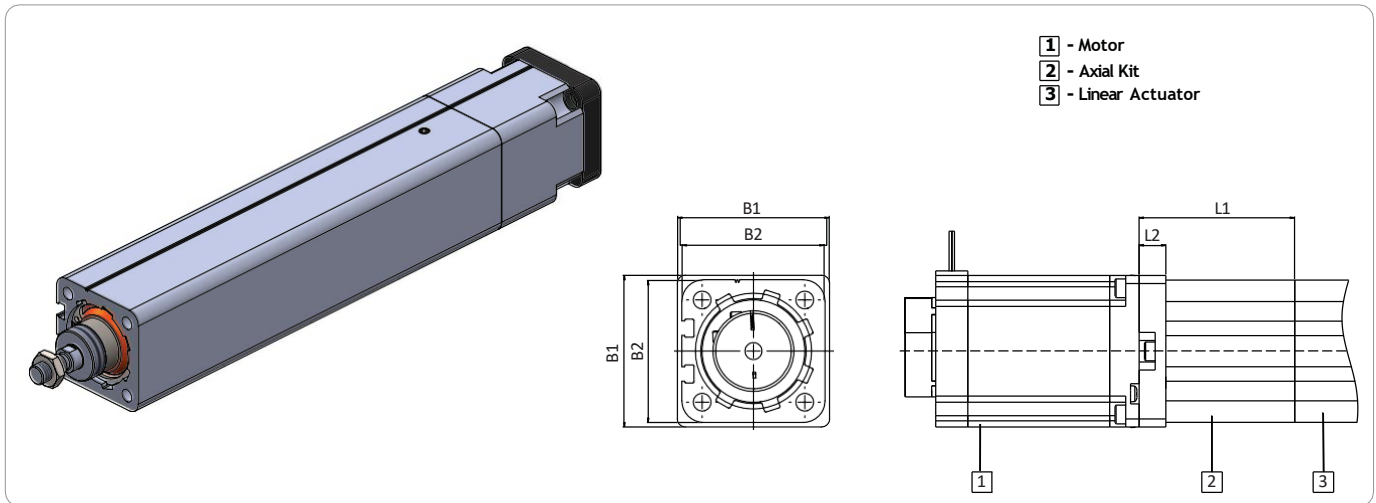
Size	032		040		
Pitch [mm/rev]	5	10	5	10	16
Max. Payload Horizontal [kg]	60	30	120	60	36
Max. Payload Vertical [kg]	30	15	60	30	18
Max. Feed Force Fx [N]	350	175	650	325	200
Max. Speed [mm/s]	150	300	180	360	580
Max. Acceleration [m/s <sup>2</sup> ]	10				
Repetition Accuracy[mm]	±0,02				
Position Sensing	Magnetic Sensor WT65 or WT75				
Basic Weight 0 mm Stroke [kg]	1,04		2,49		
Additional Weight Per 100 mm Stroke [kg]	0,34		0,55		
Mass Moment of Inertia J <sub>0</sub> With 0 mm Stroke [kgmm <sup>2</sup> ]	9,33	9,40	33,25	33,75	34,25
Mass Moment of Inertia J <sub>s</sub> Per Meter Stroke [kgmm <sup>2</sup> /m]	4,87	5,87	11,66	16,70	21,77
Mass Moment of Inertia J <sub>p</sub> Per Kg Payload [kgmm <sup>2</sup> /m]	0,64	2,54	0,64	2,54	6,50
Mass Moment of Inertia J <sub>A</sub> of the Compact Actuator [kgmm <sup>2</sup> ]	$J_A = J_0 + (J_s \times W_s) + (L_p \times m)$				
	<small>W<sub>s</sub>: Working Stroke [m] m: Moving payload [kg]</small>				

**Technical Drawing**

**1 - Sensor Slot For Magnetic Switch**

Size	AA1	AA2	AM	B1	B2	Ø D1	D2	Ø D3	Ø D4	H1	H2
032	9	13	16	32,50	45	21,30	M6	6	35	32,50	45
040	10	16	19	38	53	26,40	M6	10	43	38	53

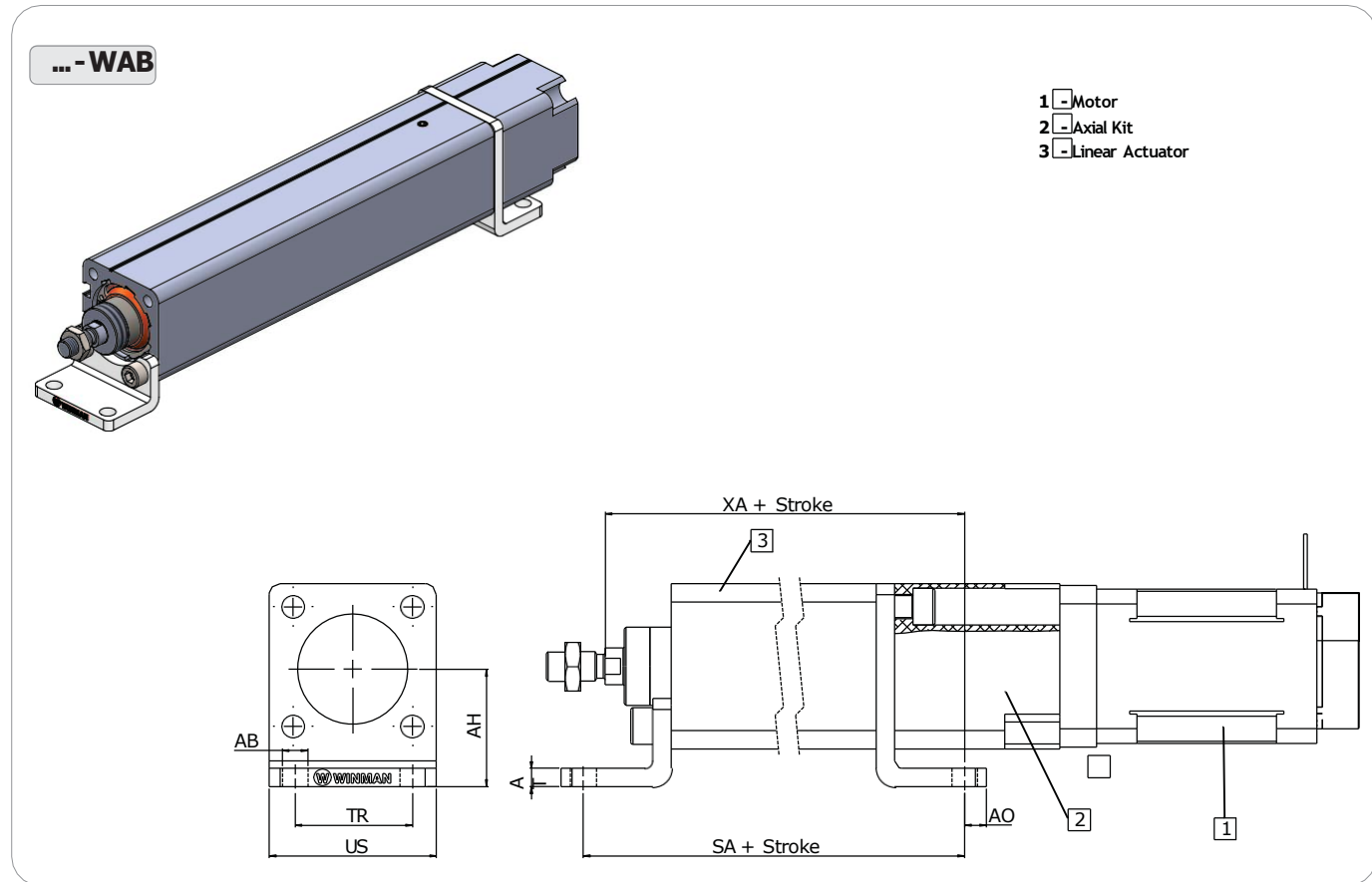
Size	H3	KK	L1	L2	L3	L4(±0,2)	L5	L6	L7	Ø MM
032	42	M8	173	100	71,50	18	5,20	12	15	10
040	56,5	M10	188,80	108,50	87,50	21,70	5,70	12	19	12

**WDAK Axial Mounting Kit**



Size	B1	B2	L1	L2
032	45	-	55	10
040	56,40	53	55	10

**WDAK Foot Mounting**

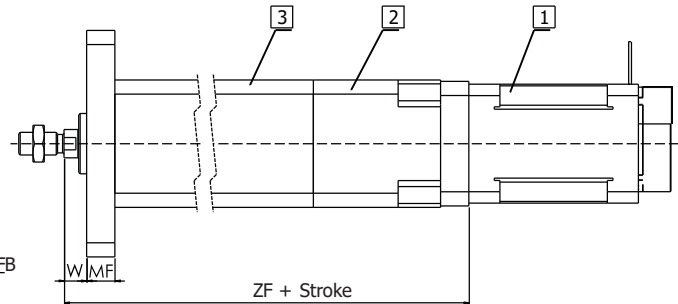
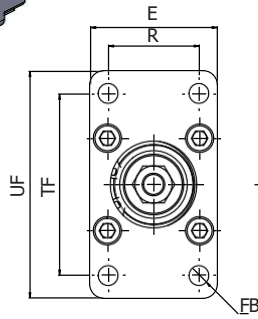
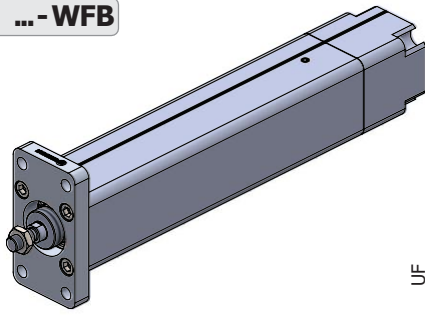


Size	ØAB	AH	AO	AT	SA	TR	US	XA
032	7	32	6	5	148	32	45,50	142
040	10	37	9	5	175	36	54,50	167

**WDAK Axial Mounting Kit**

**Flansh Mounting**

**...-WFB**

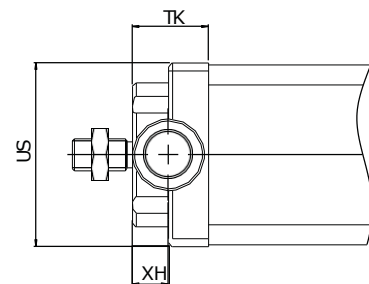
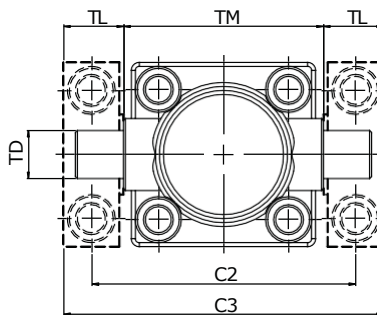
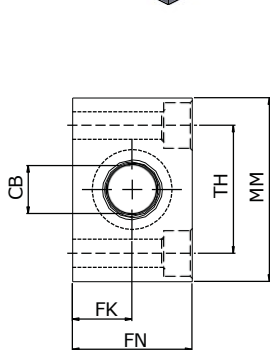
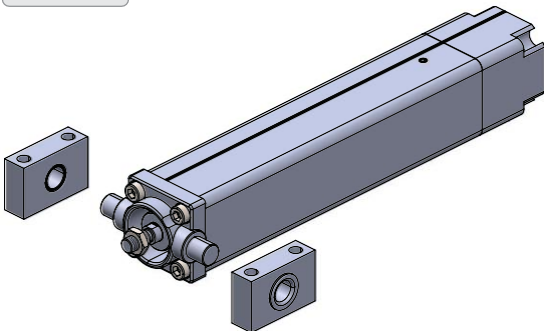


- 1** - Motor
- 2** - Axial Kit
- 3** - Linear Actuator

Size	E	FB	MF	R	TF	UF	W	ZF
032	45	7	10	32	64	80	8	163
040	54	9	10	36	72	90	11,70	188,20

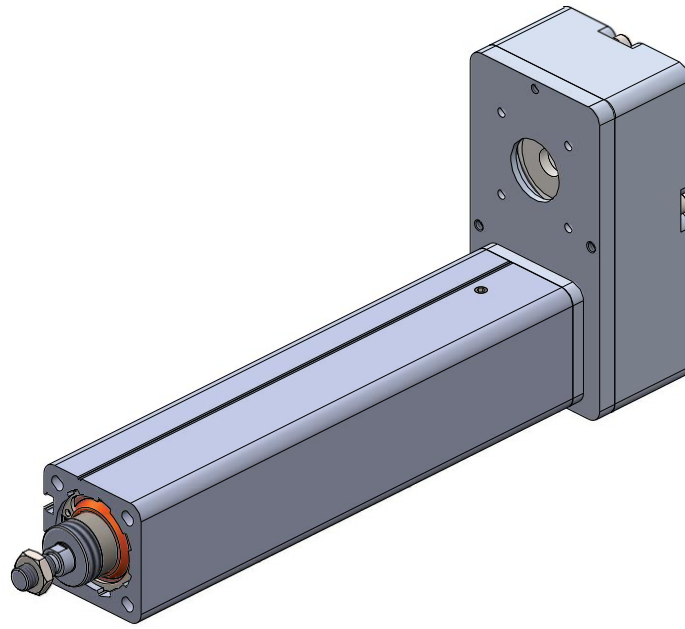
**WDAK Swivel Mounting**

**...-FTC**

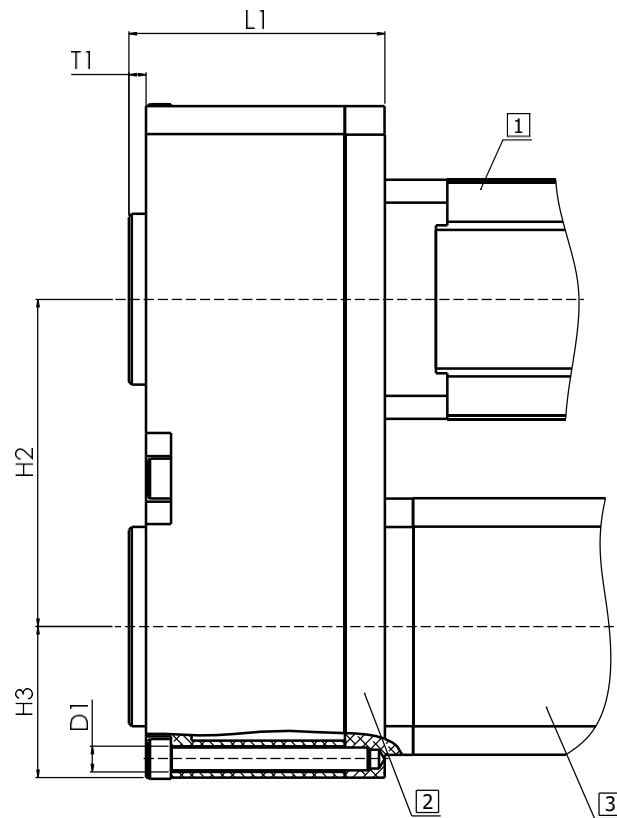
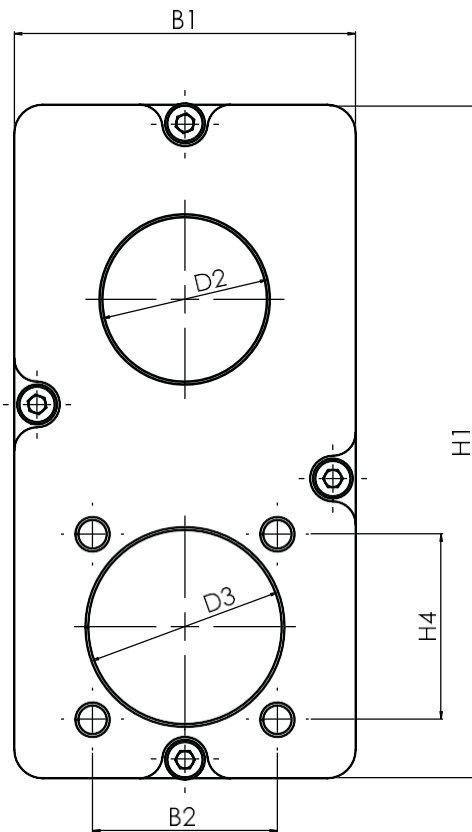


Size	AA	AB	C2	C3	CB	FK	FN	MM	TD	TH	TK	TL	TM	US	XH
032	15	14	66	80	12	15	30	46	12	32	19	15	50	46	9
040	18	17	82	99	16	18	36	55	16	36	21	18	63	52	11,70

**WDPK Parallel Mounting Kit**



- 1** - Motor
- 2** - Parallel Kit
- 3** - Linear Actuator

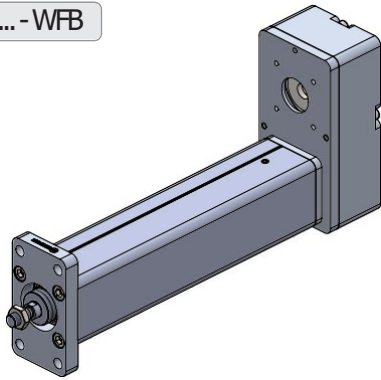


Size	B1	B2	D1 Ø	D2 Ø	D3 Ø	H1	H2	H3	H4	L1	T1
032	60	32,50	4,50	30	35	118	57,50	26,50	32,50	45	3
040	60	38	4,50	30	35	118	57,50	26,50	38	50	3

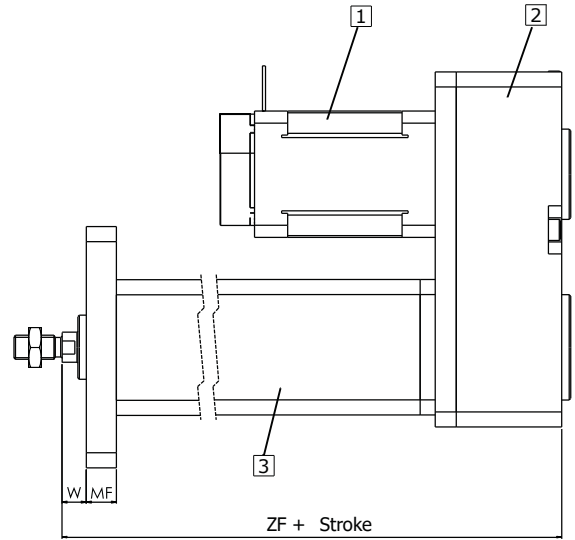
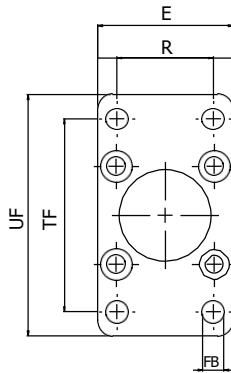
**WDPK / WDAK Axial Mounting Kit**

**WDPK Flansh Mounting**

... - WFB



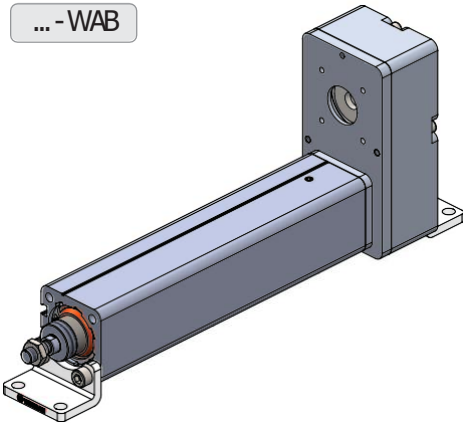
- 1 - Motor
- 2 - Parallel Kit
- 3 - Linear Actuator



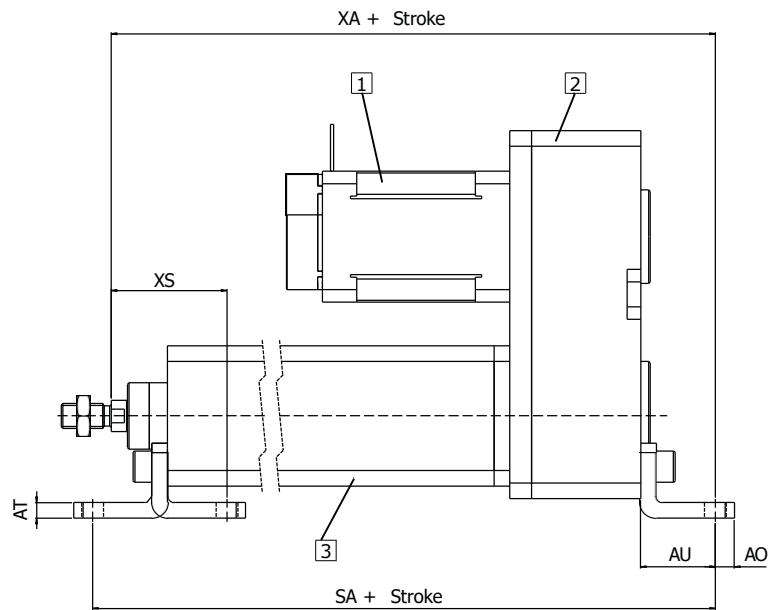
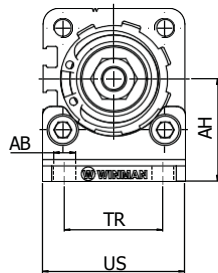
Size	E	ØFB	MF	R	TF	UF	W	ZF
032	45	7	10	32	64	80	8	165
040	54	9	10	36	72	90	11,70	182

**WDPK Foot Mounting**

... - WAB



- 1 - Motor
- 2 - Parallel Kit
- 3 - Linear Actuator



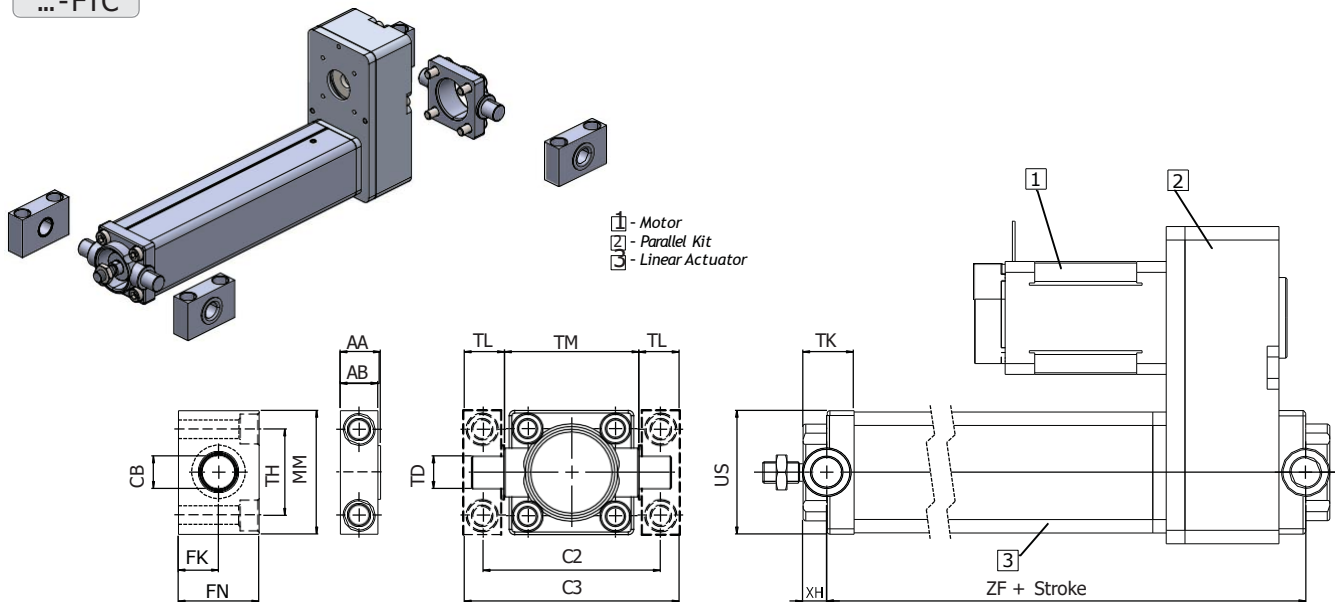
Size	AB	AH	AO	AT	AU	SA	TR	US	XA	XS
032	7	32,75	6	5	24	32	45,5	45,50	189	37
040	10	37	9	5	28	216,50	54,5	54,50	210	44,70



**WDPK / WDAK Axial Mounting Kit**

**WDPK Swivel Mounting**

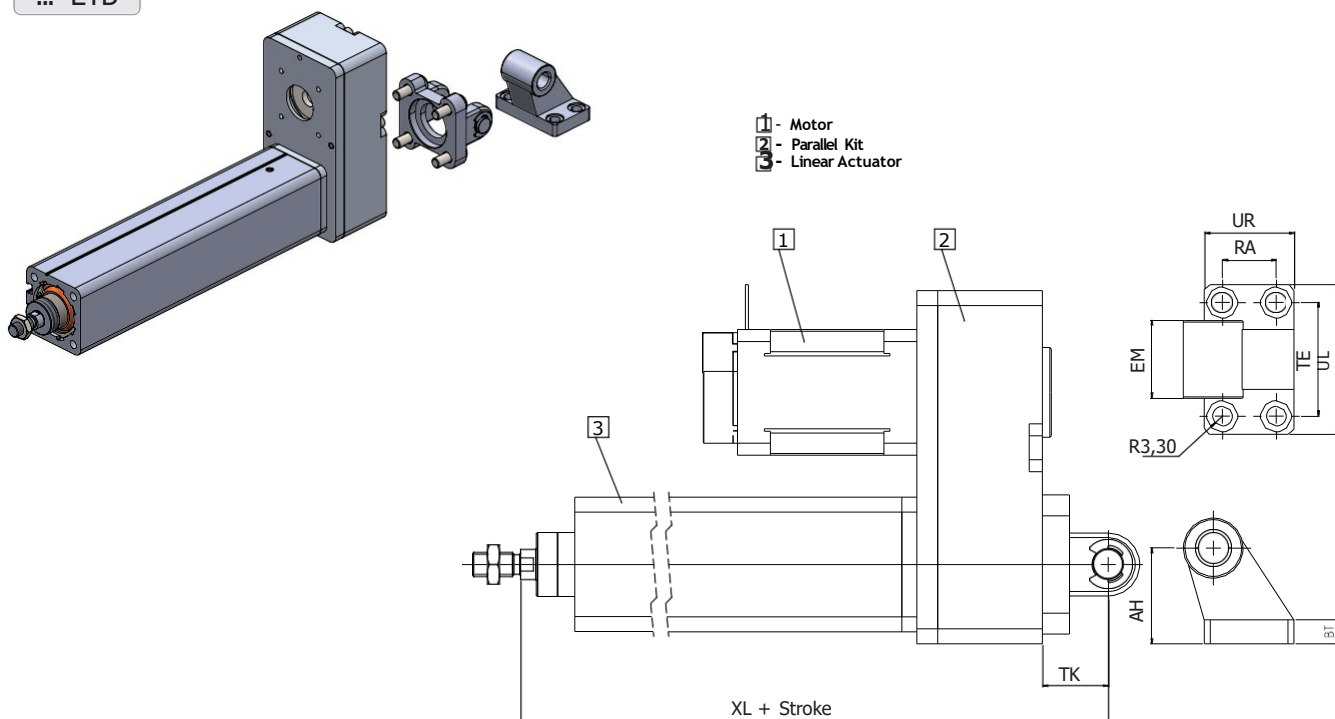
...-FTC



Size	AA	AB	C2	C3	CB	FK	FN	MM	TD	TH	TK	TL	TM	US	XH	ZF
032	15	14	66	80	12	15	30	46	12	32	19	12	50	46	10	167
040	18	17	82	99	16	18	36	55	16	36	21	18	63	52	11	180,5

**WDPK Swivel Flange and Clevis Foot**

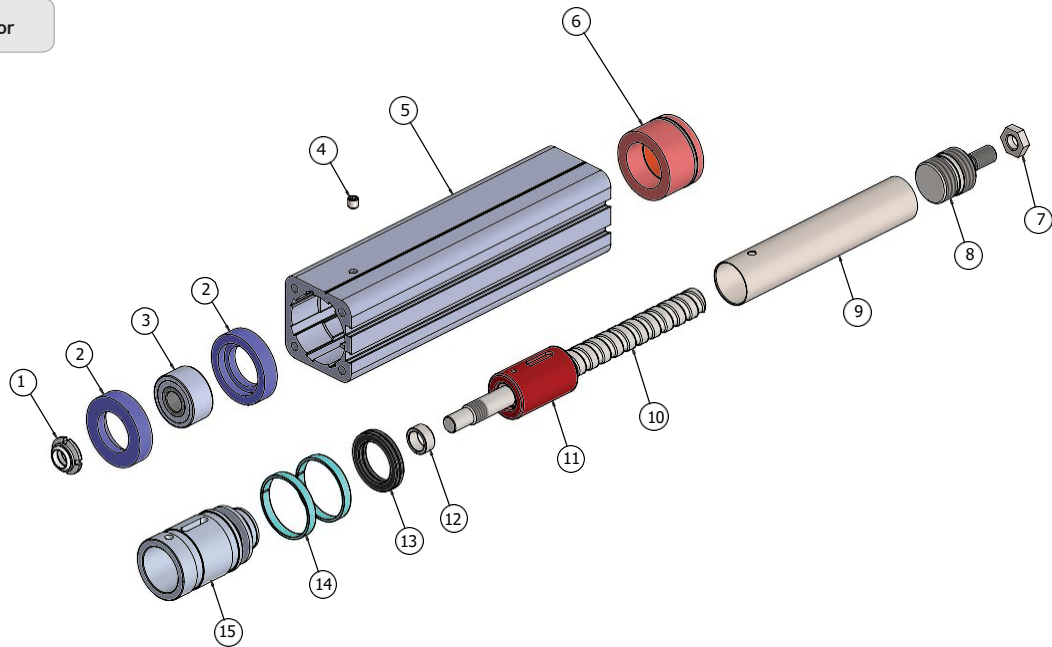
...-EYB



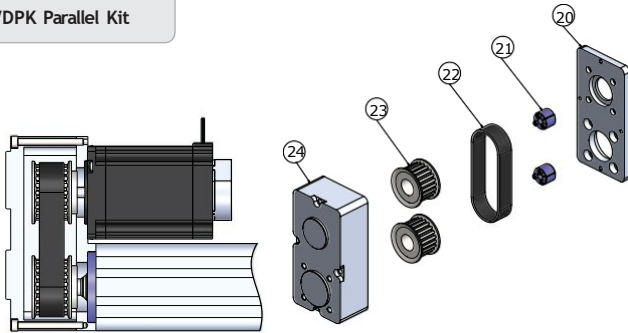
Size	AH	BT	EM	ØHB	RA	TE	TK	UL	UR	XL
032	32	8	26	6,50	18	38	22	50	30	187,50
040	36	10	28	7	22	41	25	54	35	207

**Assembly**

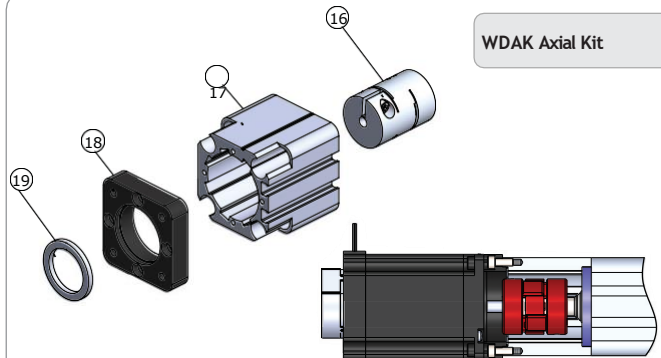
WLCA Compact Actuator



WDPK Parallel Kit

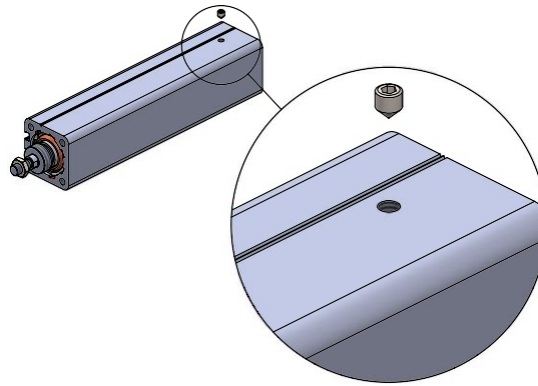


WDAK Axial Kit



Piece	Qty	Part Name	Assembly
1	1	Bearing Fixing Nut	Actuator
2	2	Bearing Fixing Ring	
3	1	Bearing	
4	1	Nipple	
5	1	Profile	
6	1	Front Block	
7	1	Connection Nut	
8	1	Connection Nipple	
9	1	Piston Rod	
10	1	Ball Screw	
11	1	Ball Nut	
12	2	Magnetic	
13	2	Guide Ring	
14	1	Piston	
15	1	Coupling	
16	1	Bellhousing	
17	1	Bellhousing Flange	
18	1	Motor Flange	Parallel Mounting
19	1	Parallel Kit Cover	
20	2	Taper Bushing	
21	1	Toothed Belt	
22	2	Timing Belt Pulleys	
23	1	Parallel Kit Box	

**Maintenance**



Basic lubrication is done in-factory before shipment.

Bearings of the ball screw have been lubricated for life and will not require in-service lubrication under normal operating conditions.

The profile of the linear actuator has port on the top side for access to the lube on the ball nut.

Re-lubrication should be carried out if the defined travel distance is completed or 400 operating hours are reached first. At the end of 2 years, it must be re-lubricated even if the travel distance and working hours are not reached.

For lubrication; set linear actuator to zero stroke position.

Remove the grubs in the lubrication port lubricate the amount indicated in the table and replace the glue after lubrication, move the linear actuator at least three times along the stroke distance. the travel speed must not exceed 10 mm /s.

Linear actuators must be lubricated with suitable grease.

Lithium soap grease should be used.

Caution: Do not use grease containing graphite or MoS!

Lubrication quantity is provided in table by normal operating conditions.

Normal Working Conditions		
Ambient Temperature	°C	10 ~ 40
Speed	m/s	≤ 0,4
Screw Rotation Speed	rev/min	2500
Load	N	≤ 0,2 P
Stroke	mm	> 60

Lubrication			
Actuator Model		WLCA - 032	WLCA- 040
Lubrication Period	km	250	400
	h	400	400
Lubricate Dose	cm <sup>3</sup>	0,6	1,3