

**Ordering Code**

WLA4 - BS - 100 - - - - -

1  
Model

2  
Drive Unit

3  
Size

4  
Stroke

5  
Pitch

6  
Mounting Kit Model

7  
Mounting Kit Assembly

8  
Assembly Accessories

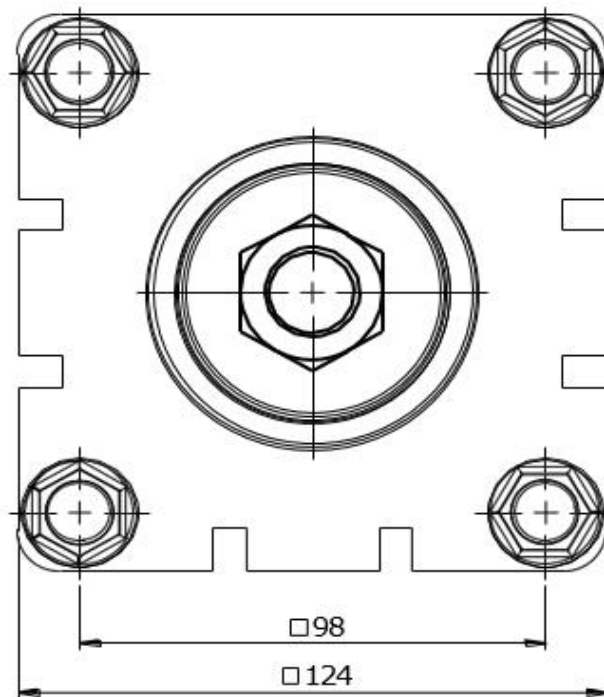
**1 - Model**

**WLA4-100** : Series Linear Actuators

**2 - Drive Unit**

BS : Ball Screw

**3 - Size**



WLA4 - BS - 100

**Ordering Code**

**WLA4 - BS - 100 - - - - -**

1   
 2   
 3   
 4   
 5   
 6   
 7   
 8

Model                  Drive Unit                  Size                  Stroke                  Pitch                  Mounting Kit Model                  Mounting Kit Assembly                  Assembly Accessories

**4 - Stroke**

**0000 : Maximum 1200 mm**

**Movement Stroke**

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

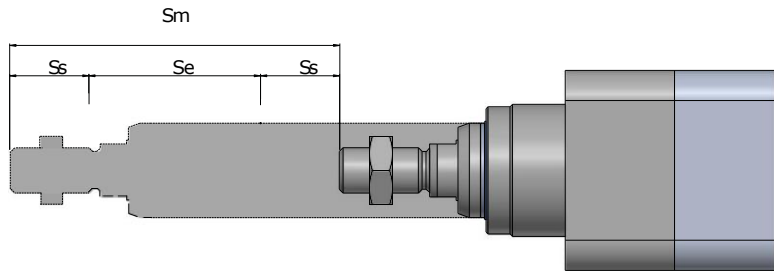
**$S_m = S_e + 2 \cdot S_s$**

**$S_s = 2 \cdot p$**

**$S_m$**  : Movement Stroke

**$S_e$**  : Safety Stroke



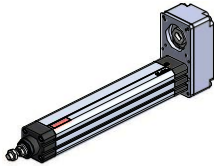
**$p$**  : Ball Screw Pitch



**5 - Pitch**

<b>Drive Unit</b>	Ball Screw	
<b>Actuator Model</b>	<b>5</b>	<b>10</b>
<b>WLA4 - BS - 100</b>	+	

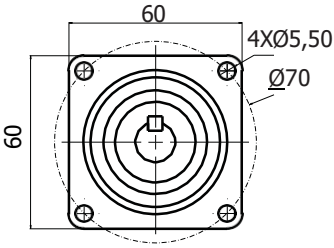
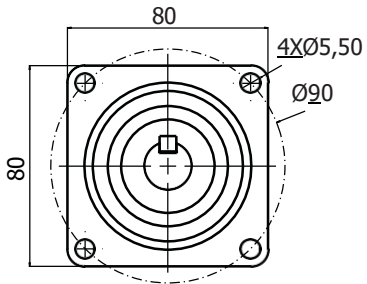
**6 - Mounting Kit Model**

		
<b>00</b> : Without Mounting	<b>WDAK</b> : Axial Kit	<b>WDPK</b> : Parallel Kit

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

Note 2 : Please contact for to use reducer.

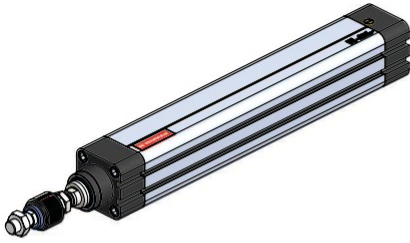
**7 - Mounting Kit Assembly**

		
<b>00</b> : Without Motor	<b>070</b> : Ø70 motor mounting	<b>090</b> : Ø90 motor mounting

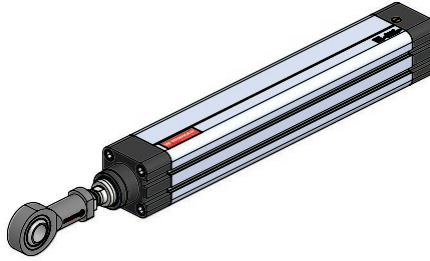
**8 - Assembly Accessories**

**Front Mounting**

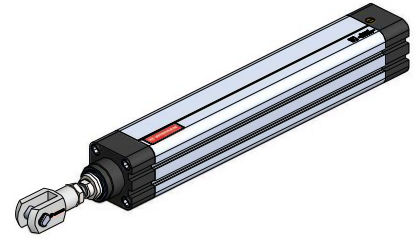
... - WKA



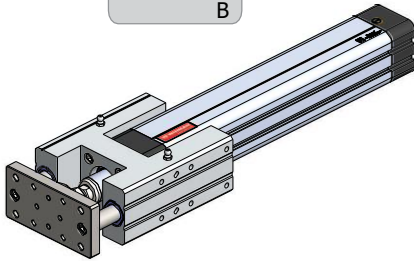
... - WGM



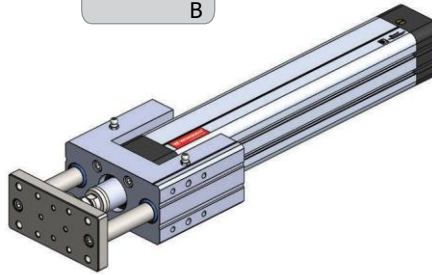
... - WCB



... - WHCR  
B

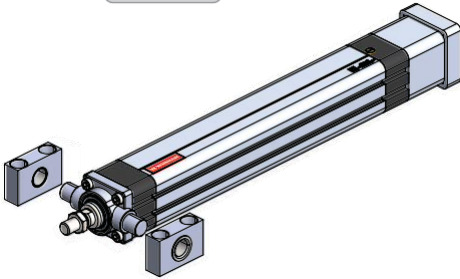


... - WUCR  
B

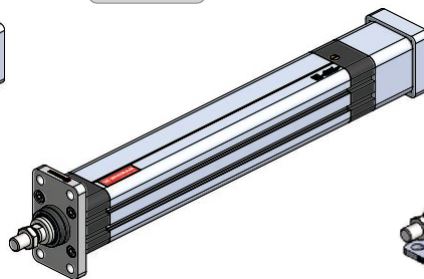


**Mounting for Axial Kit**

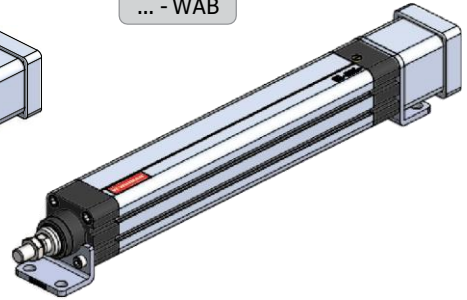
... - FTC



... - WFB

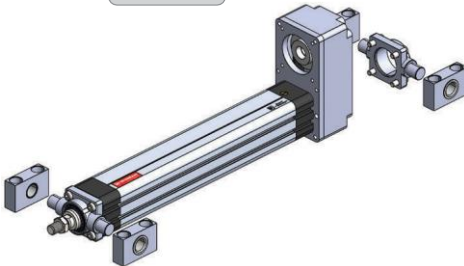


... - WAB

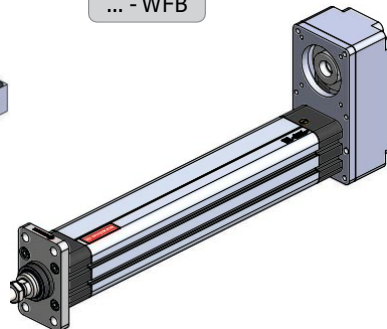


**Mounting for Parallel Kit**

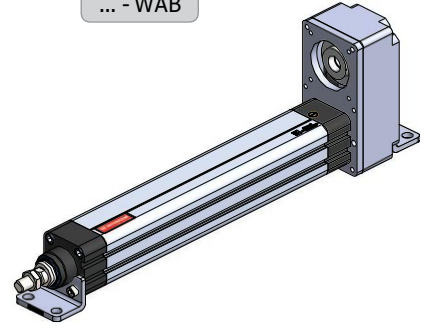
... - FTC



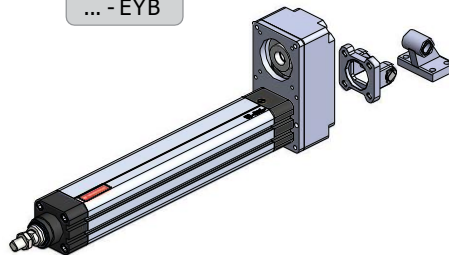
... - WFB



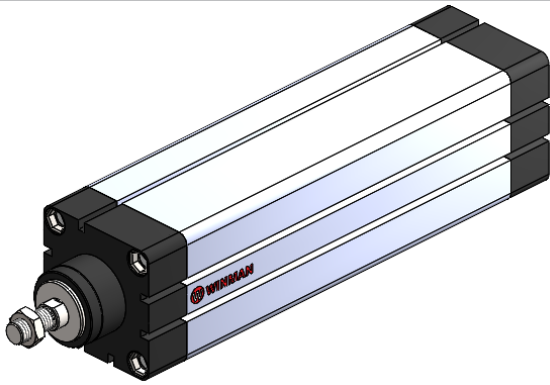
... - WAB



... - EYB



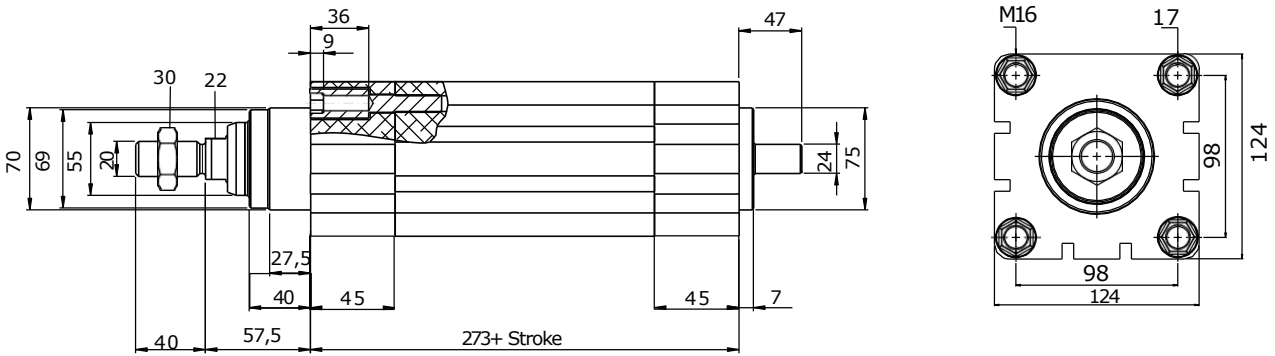
**WINMAN WLA4 100 Series Linear Actuators**



Specification		
Size		100
Maximum Axial Force	N	18000
Maximum Speed	mm/s	500
Maximum Stroke	mm	1200
Position Accuracy	µm/mm	30/600
Repeating Accuracy	mm	±0,01
Acceleration	m/s <sup>2</sup>	5

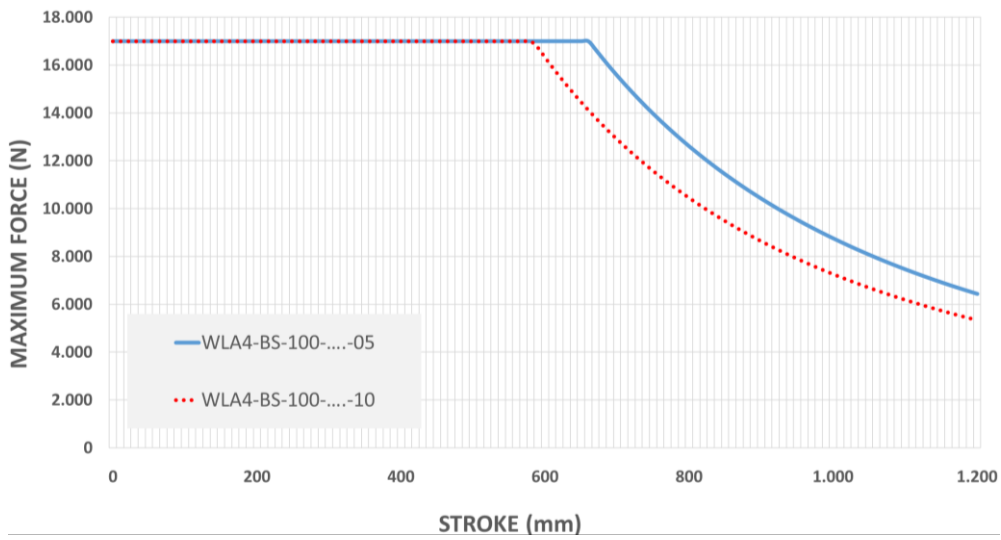
**Note :** Calculated value are theoretical values. We recommend you to calculate safety factor as five(5).

**Technical Drawing**

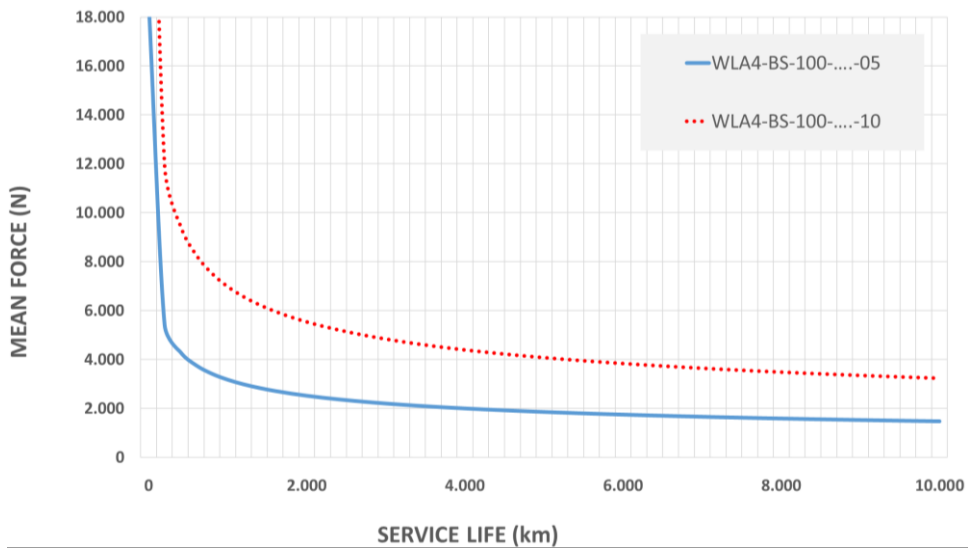


**WINMAN WLA4-100 Technical Data**

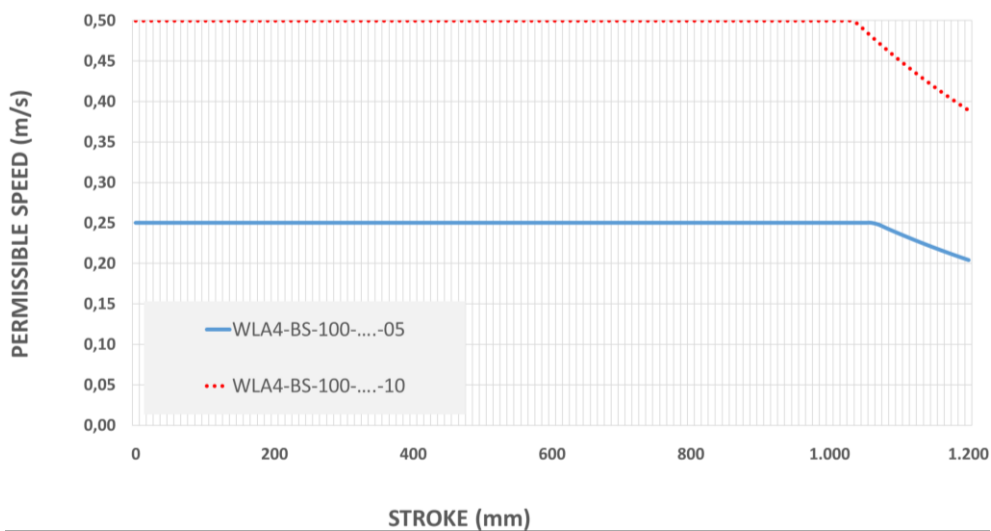
**Maximum Force-Stroke Graph**



**Mean Force-Service Life Graph**

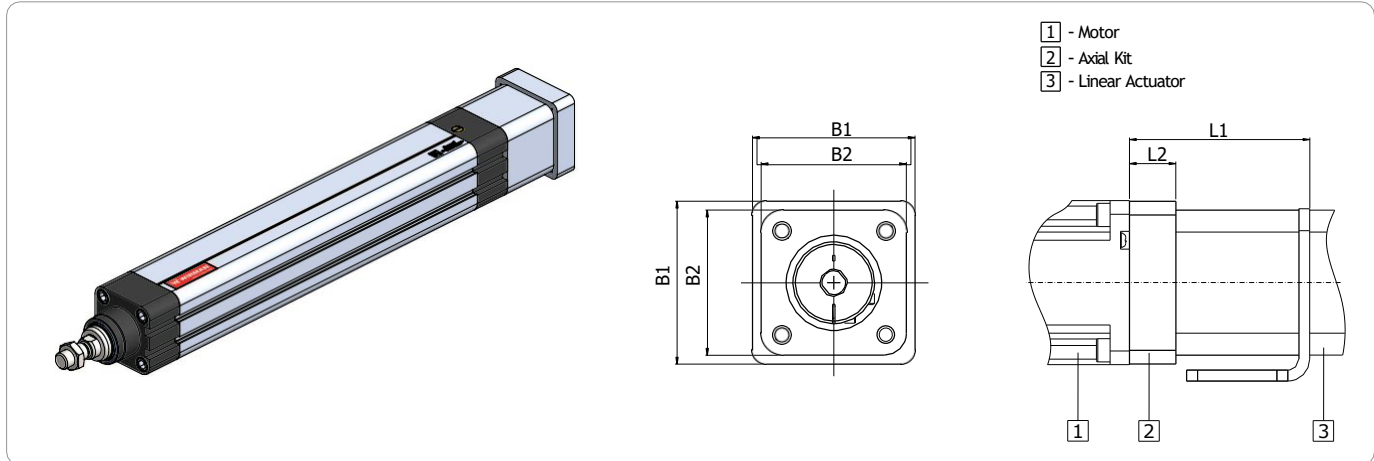


**Permissible Speed-Stroke Graph**



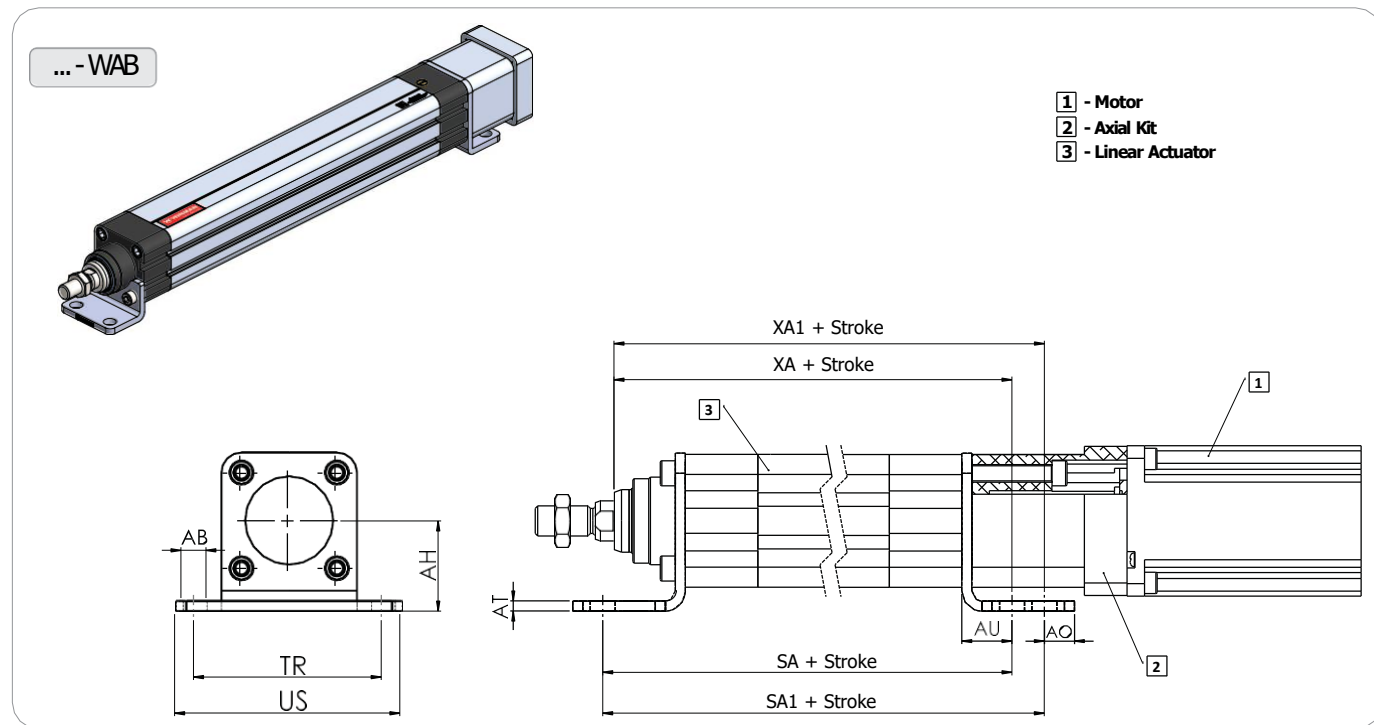
**WDAK Axial Mounting Kit**

**Technical Drawing**



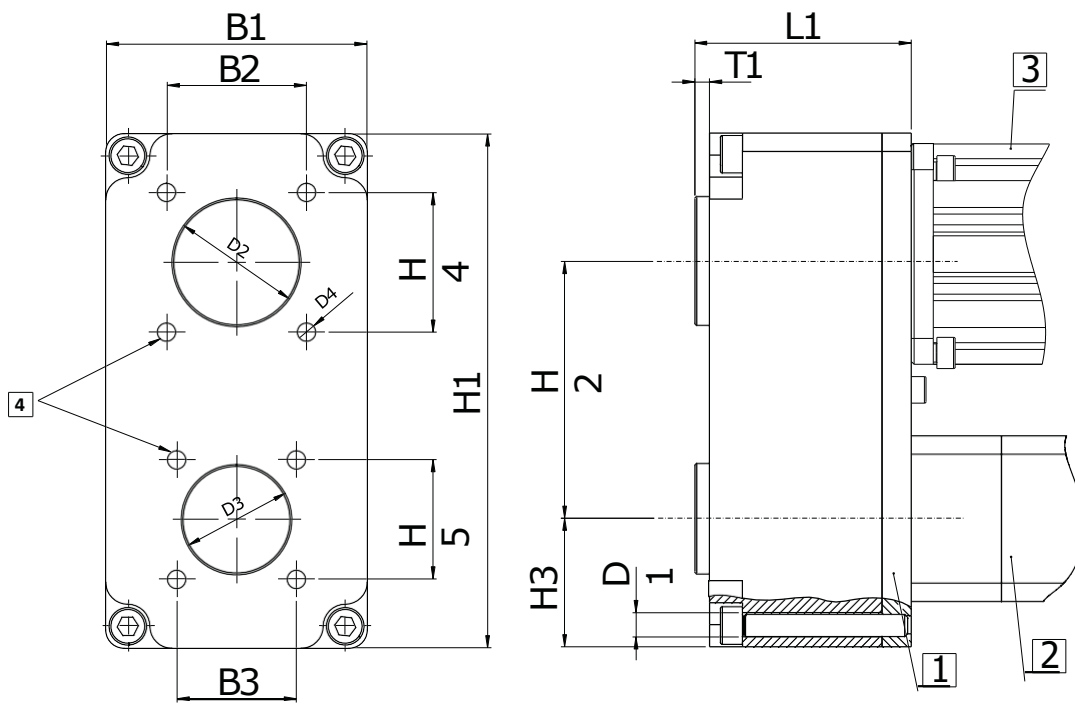
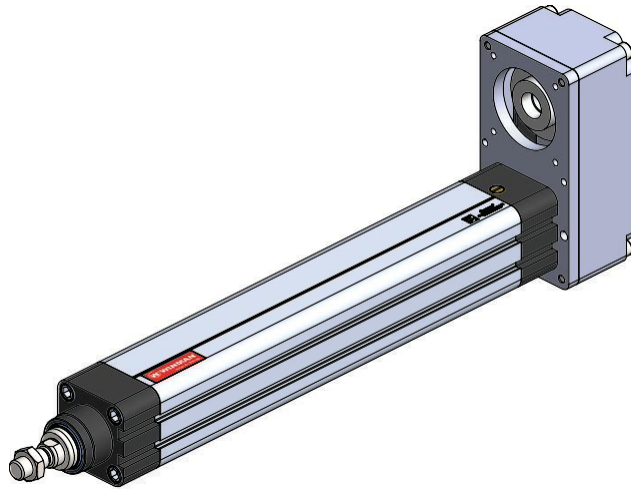
Size	B1	B2	L1	L2
100	124	80	102	18

**WDAK Foot Mounting**



Size	ØAB	AH	AO	AT	AU	SA	SA1	TR	US	XA	XA1
100	12	75,5	15	6	32	346	371	120	150	350	375

**WDPK Parallel Mounting Kit**



- 1** - Parallel Kit
- 2** - Linear Actuator
- 3** - Motor
- 4** - Mounting Thread

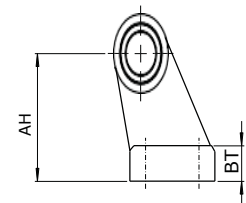
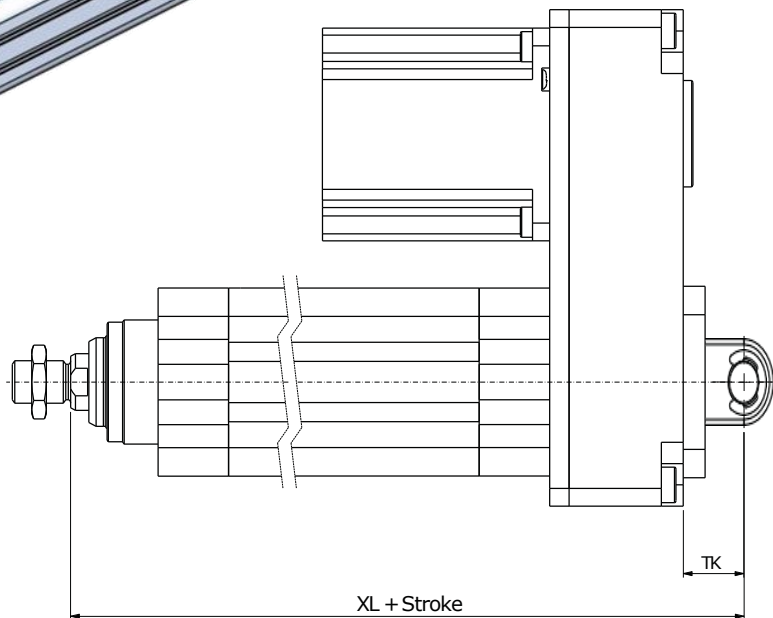
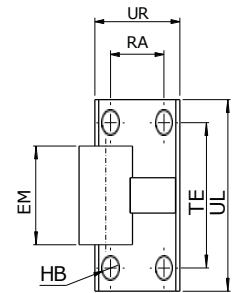
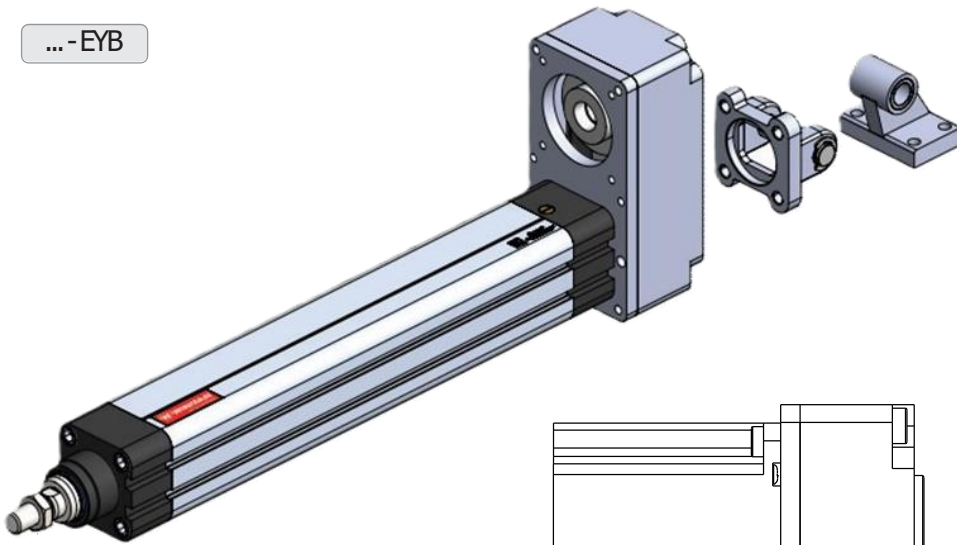
Size	L1	T1	B1	B2	B3	D1	D2	D3	D4	H1	H2	H3	H4	H5
100	100	4	150	-	98	M16	-	45	M10	315	168	73,5	-	98

WDAK Axial Mounting Kit

Swivel Flange and Clevis Foot

... -EYB

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

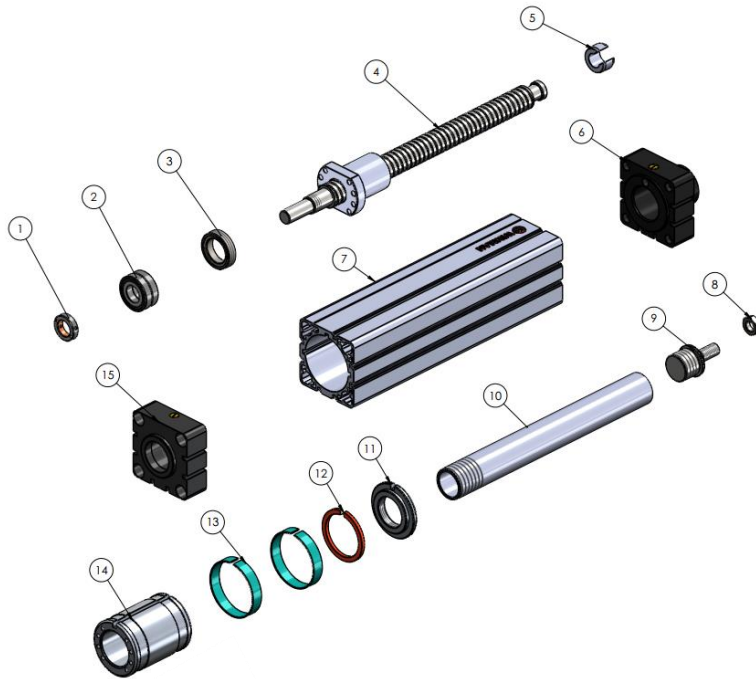


Size	AH	BT	EM	HB	RA	TE	UL	UR	XL
100	71	15	60	11	50	76	96	70	467,5

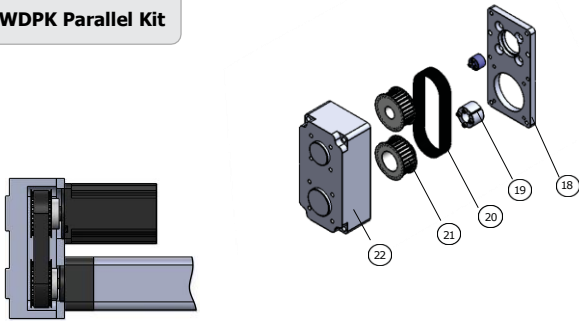


**Assembly**

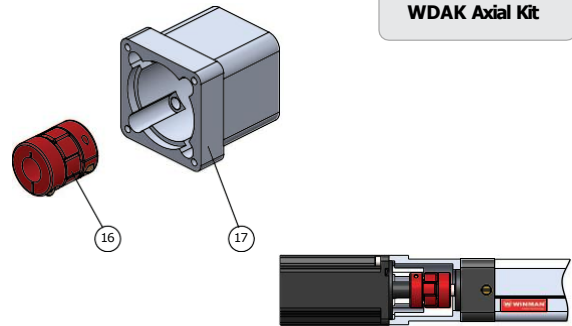
**WLA4-100 Linear Actuator**



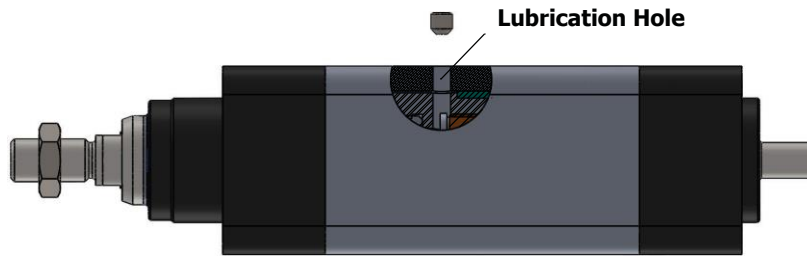
**WDPK Parallel Kit**



**WDAK Axial Kit**



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

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

**Lubrication**

<b>Lubrication Period</b>	<b>km</b>	600
	<b>h</b>	400
<b>Lubricate Dose</b>	<b>cm<sup>3</sup></b>	3,7