

**Ordering Code**

WLA4 - BS - 080 - - - - -

1

Model

2

Drive Unit

3

Size

4

Stroke

5

Pitch

6

Mounting Kit Model

7

Mounting Kit Assembly

8

Assembly Accessories

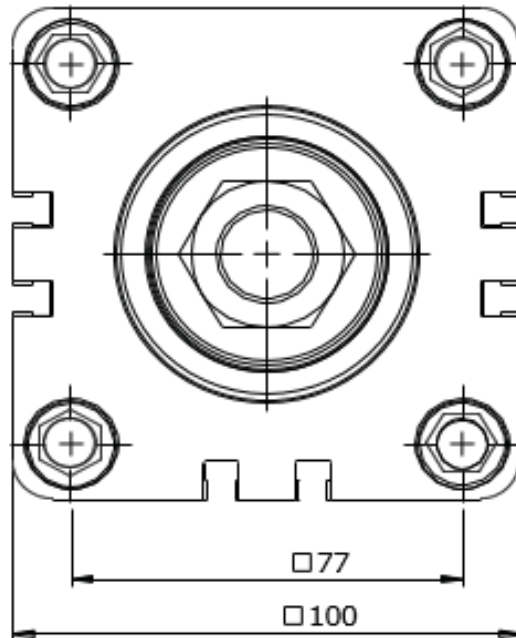
**1 - Model**

**WLA4-080** : Series Linear Actuators

**2 - Drive Unit**

BS : Ball Screw

**3 - Size**



WLA4 - BS - 080

**Ordering Code**

**WLA4 - B S - 080 -** - - - - -  
 1 2 3 4 5 6 7 8  
 Model Drive Unit Size Stroke Pitch Mounting Kit Model Mounting Kit Assembly Assembly Accessories

**4 - Stroke**

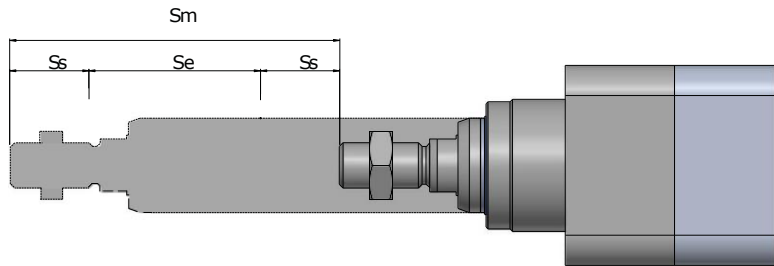
**0000 : Maximum 1200 mm**

**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<sub>m</sub>** : Movement Stroke  
**S<sub>e</sub>** : Safety Stroke  
**p** : Ball Screw Pitch



**5 - Pitch**

Drive Unit	Ball Screw	
<b>Actuator Model</b>	<b>5</b>	<b>10</b>
<b>WLA4 - B S - 080</b>	<b>+</b>	<b>+</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.

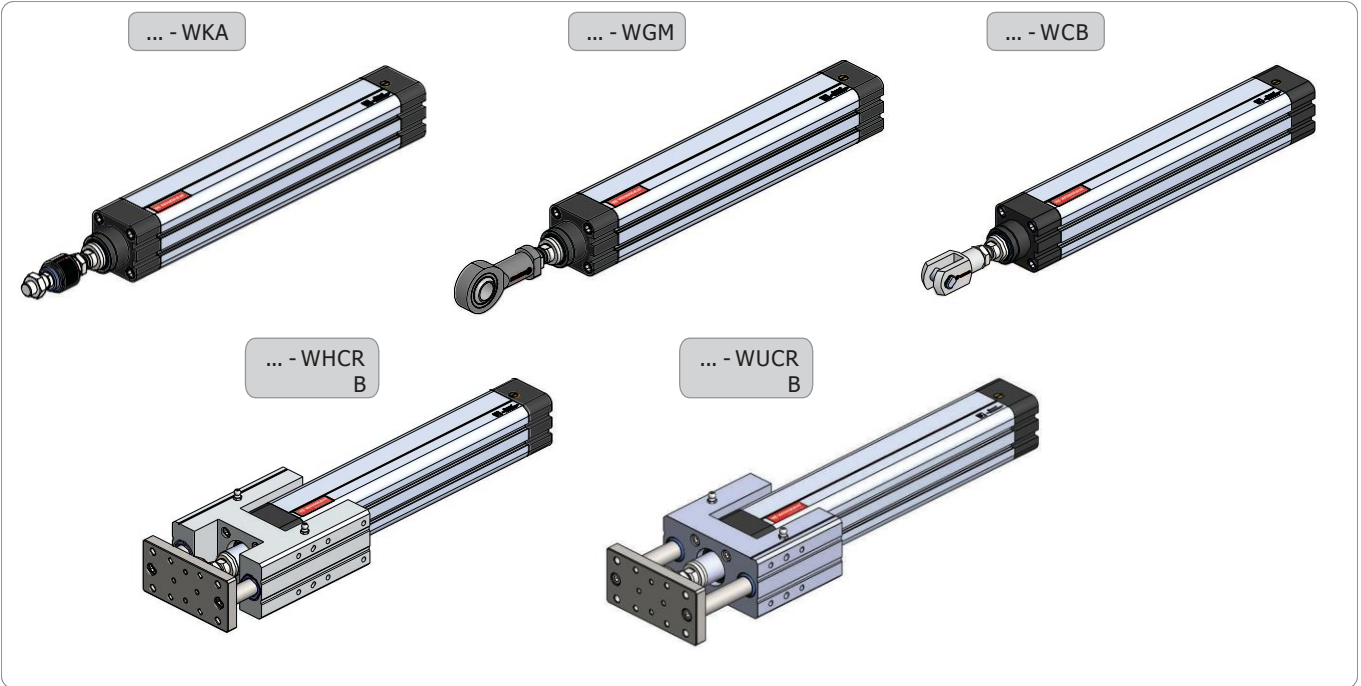
Note 2 : Please contact for to use reducer.

**7 - Mounting Kit Assembly**

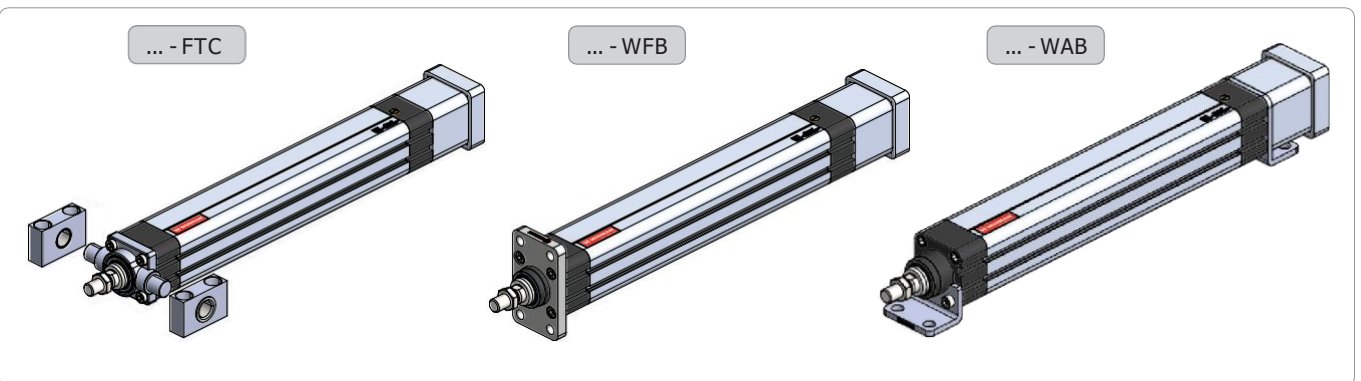
<b>00</b> : Without Motor	<b>070</b> : Ø70 motor mounting	<b>090</b> : Ø90 motor mounting

**8 - Assembly Accessories**

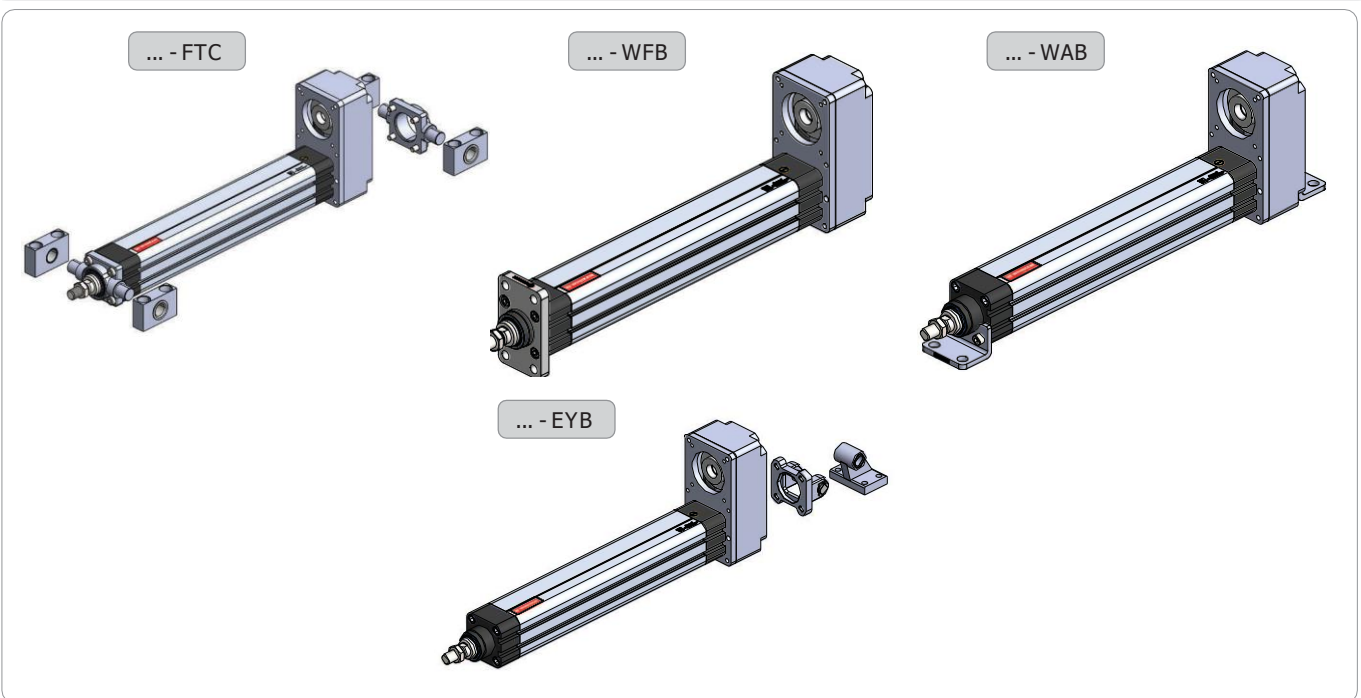
**Front Mounting**



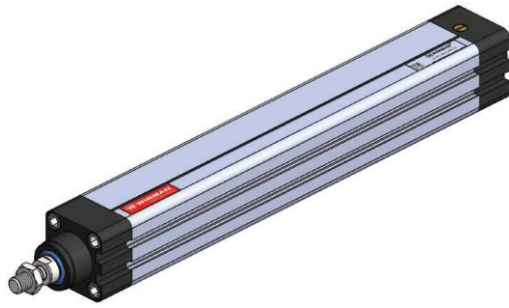
**Mounting for Axial Kit**



**Mounting for Parallel Kit**



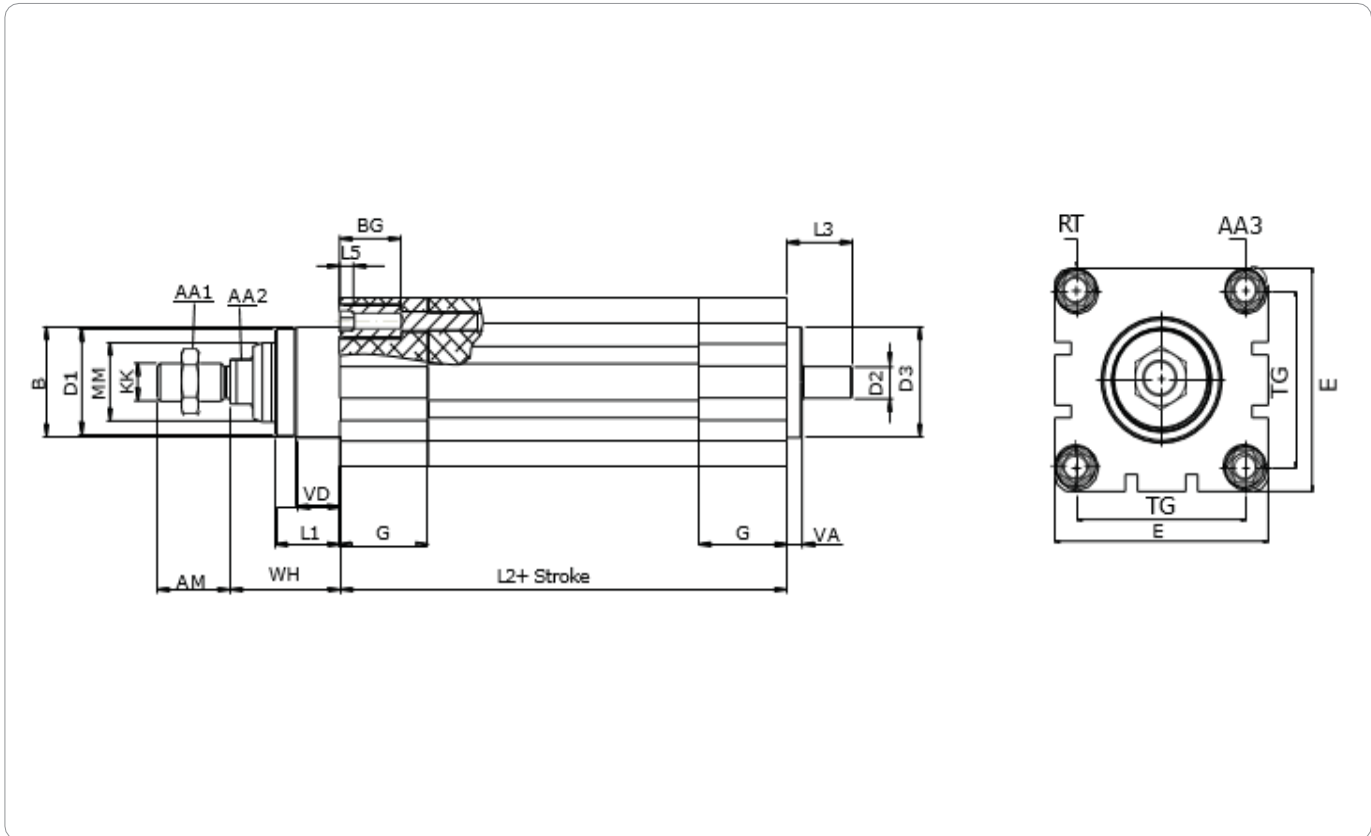
**WINMAN WLA4-080 Series Linear Actuators**



Specification		
<b>Size</b>		<b>080</b>
<b>Maximum Axial Force</b>	<b>N</b>	<b>12000</b>
<b>Maximum Speed</b>	<b>mm/s</b>	<b>500</b>
<b>Maximum Stroke</b>	<b>mm</b>	<b>1200</b>
<b>Position Accuracy</b>	<b>µm/mm</b>	<b>30/600</b>
<b>Repeating Accuracy</b>	<b>mm</b>	<b>±0,01</b>
<b>Acceleration</b>	<b>m/s<sup>2</sup></b>	<b>5</b>

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

**Technical Drawing**

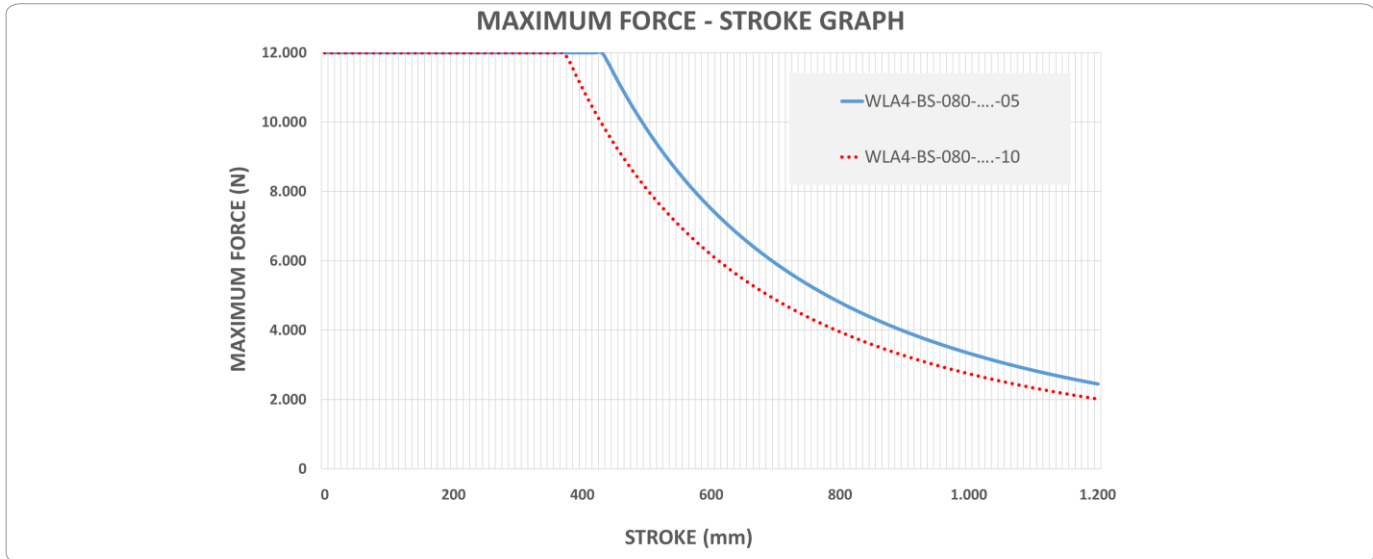


Size	AA1	AA2	AA3	AM	B	BG	D1	D2	D3	E	G
080	30	22	12	40	60	30	59	19	55	100	40

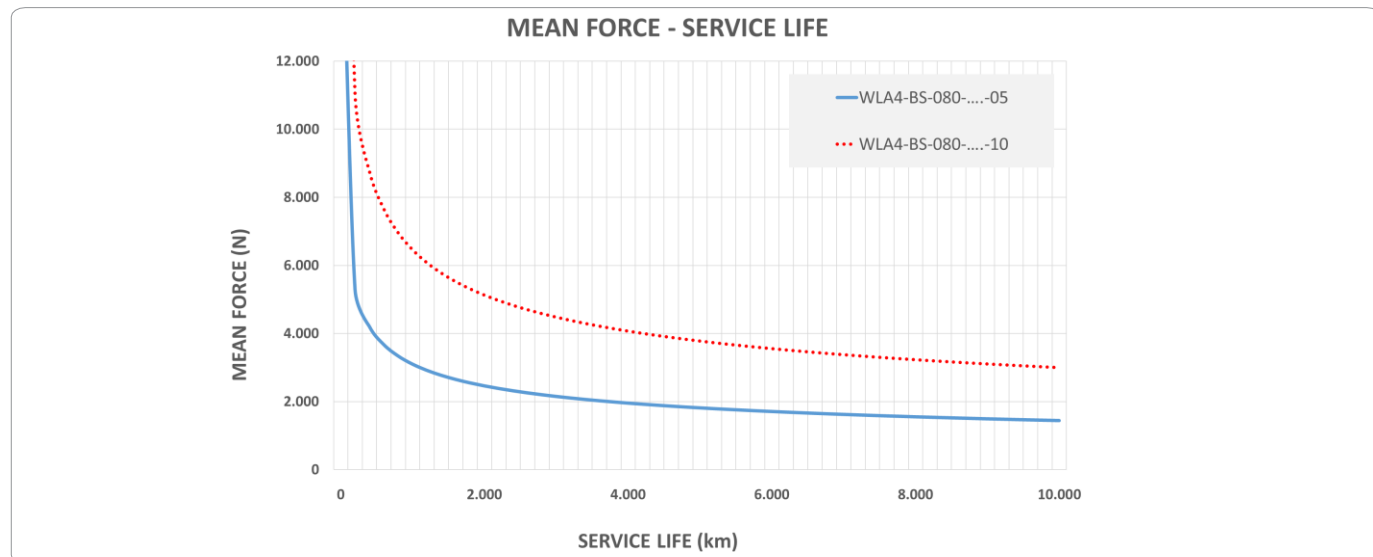
Size	KK	L1	L2	L3	L5	MM	RT	TG	VA	VD	WH
080	20	28,5	230	37	6	45	M12	77	5	16	45

**WINMAN WLA4-080 Technical Data**

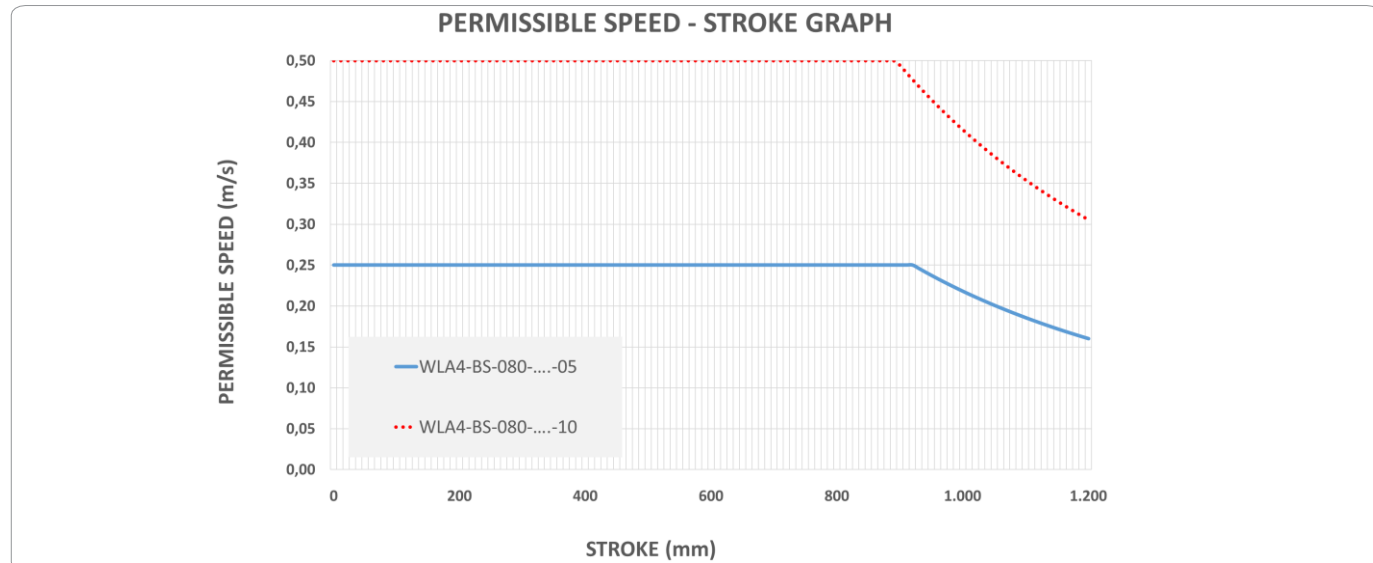
**Maximum Force-Stroke Graph**



**Mean Force-Service Life Graph**

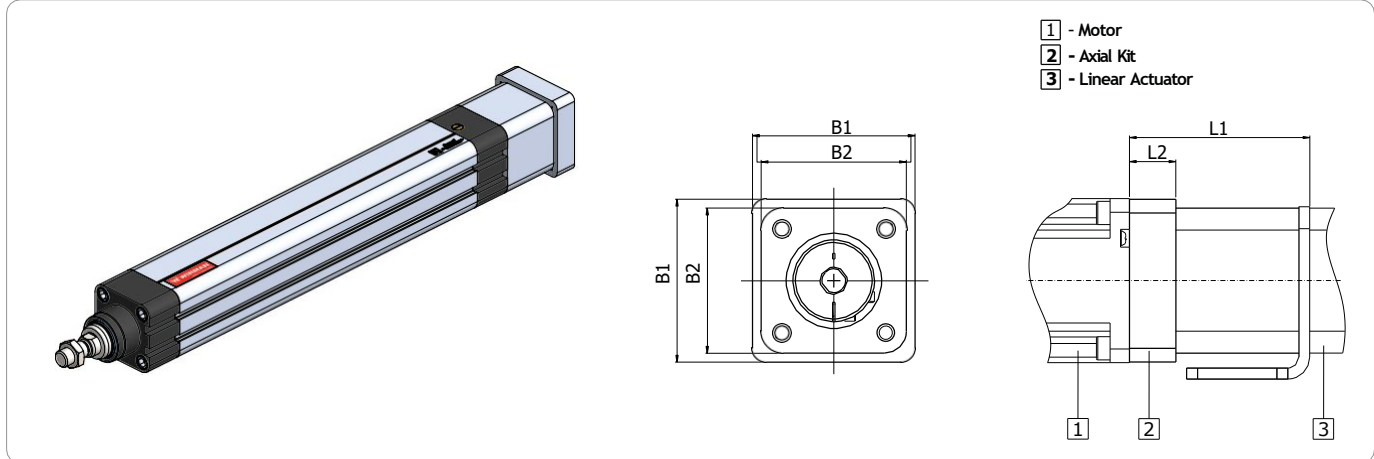


**Permissible Speed-Stroke Graph**



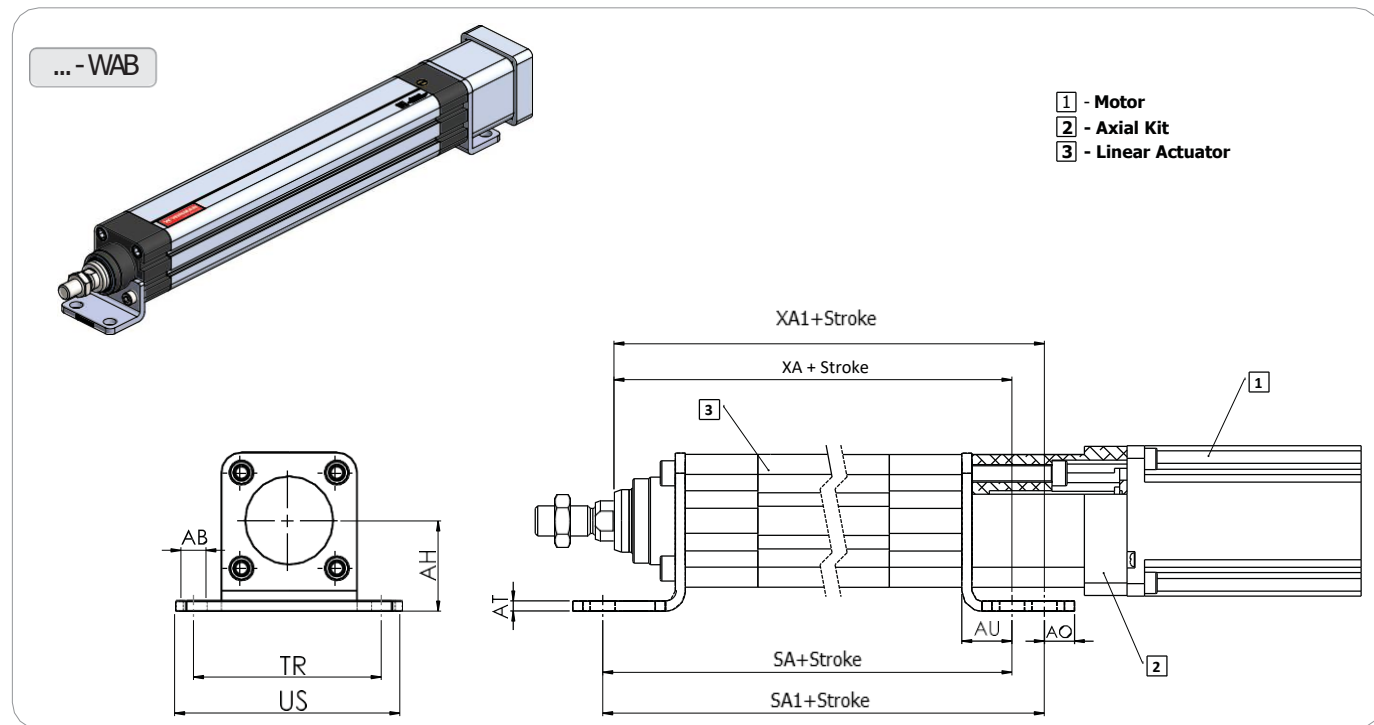
**WDAK Axial Mounting Kit**

**Technical Drawing**



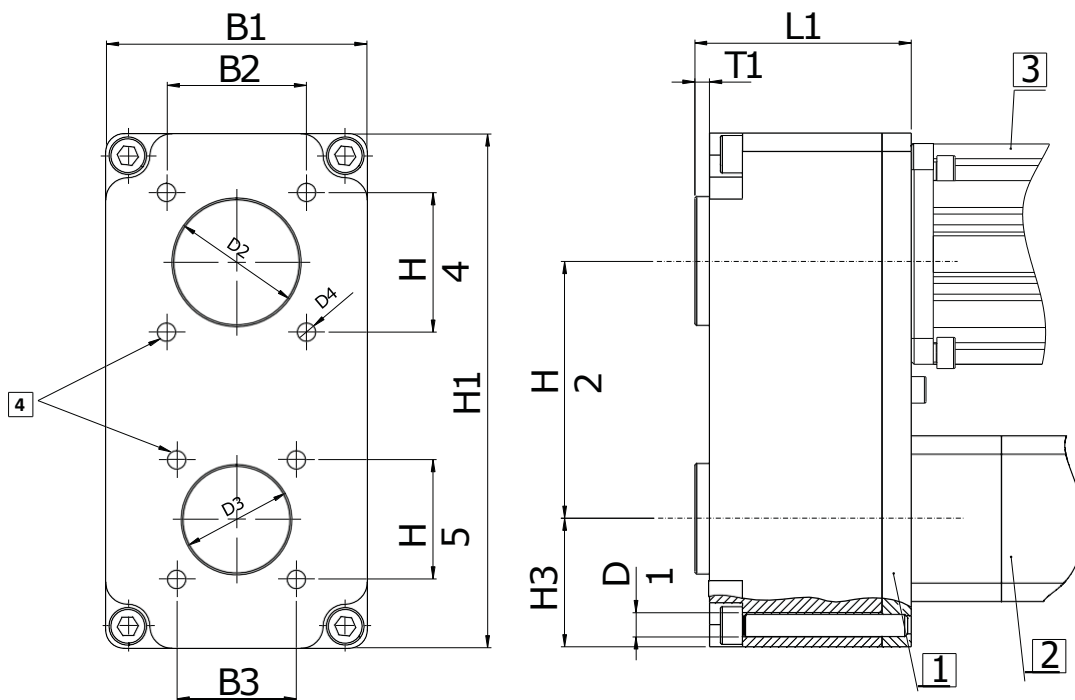
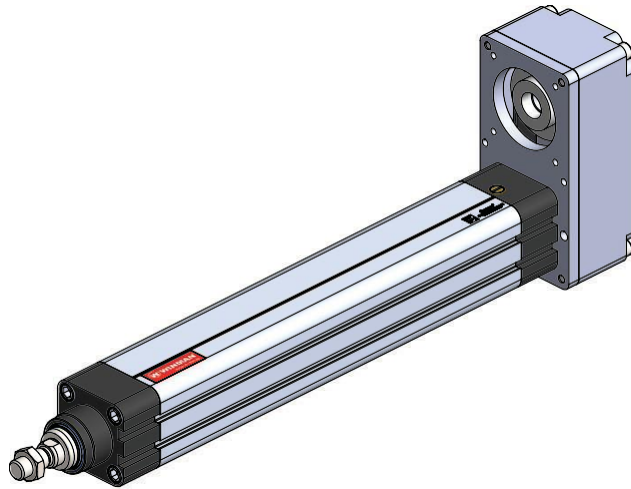
Size	B1	B2	L1	L2
<b>080</b>	100	80	92	12

**WDAK Foot Mounting**



Size	ØAB	AH	AO	AT	AU	SA	SA1	TR	US	XA	XA1
<b>080</b>	12	63	15	6	32	319	344	120	150	297	322

**WDPK Parallel Mounting Kit**



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

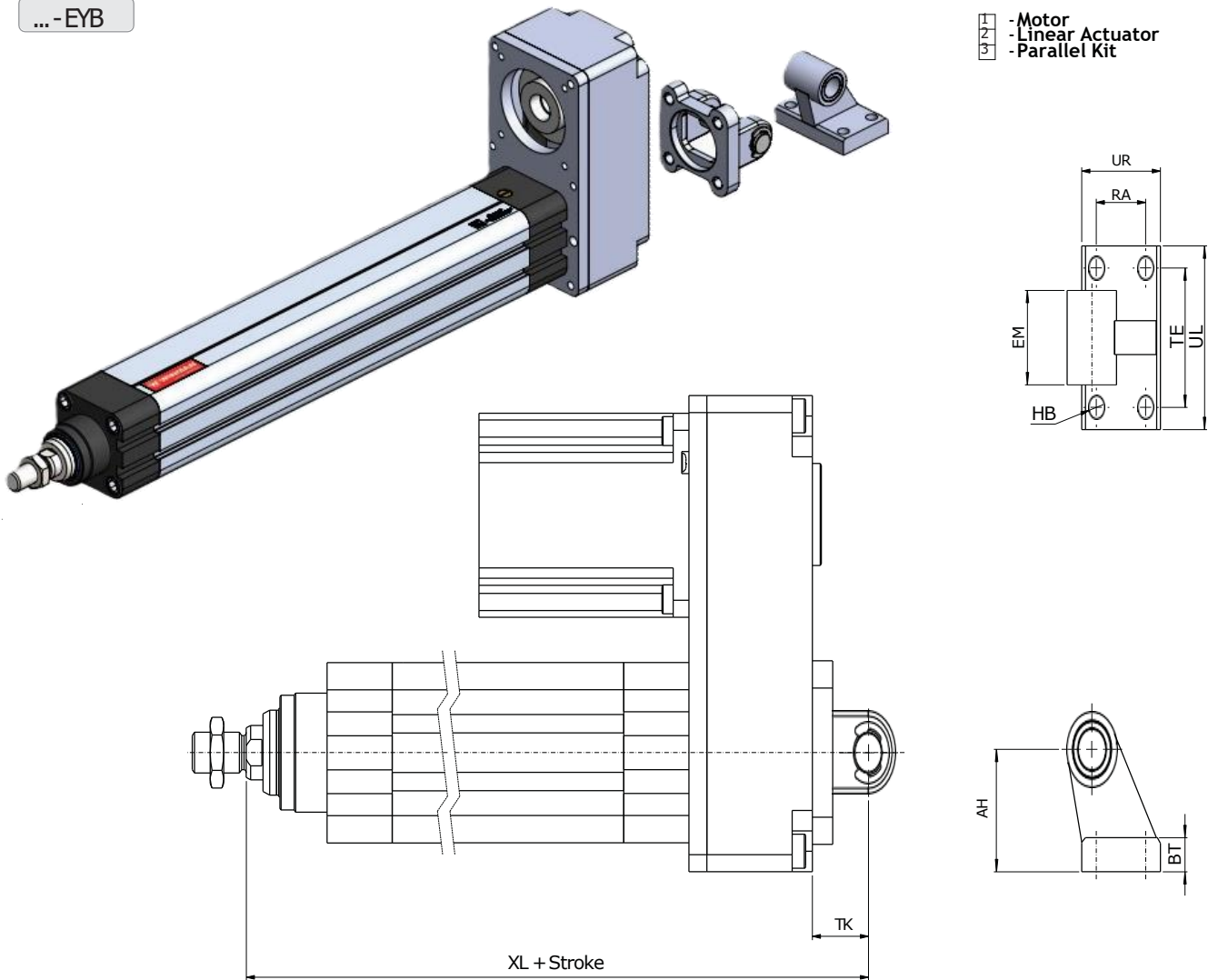
Size	L1	T1	B1	B2	B3	D1	D2	D3	D4	H1	H2	H3	H4	H5
080	86	4	110	-	72	M8	-	45	M8	230	116	57	-	72

WDAK Axial Mounting Kit

Swivel Flange and Clevis Foot

...-EYB

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

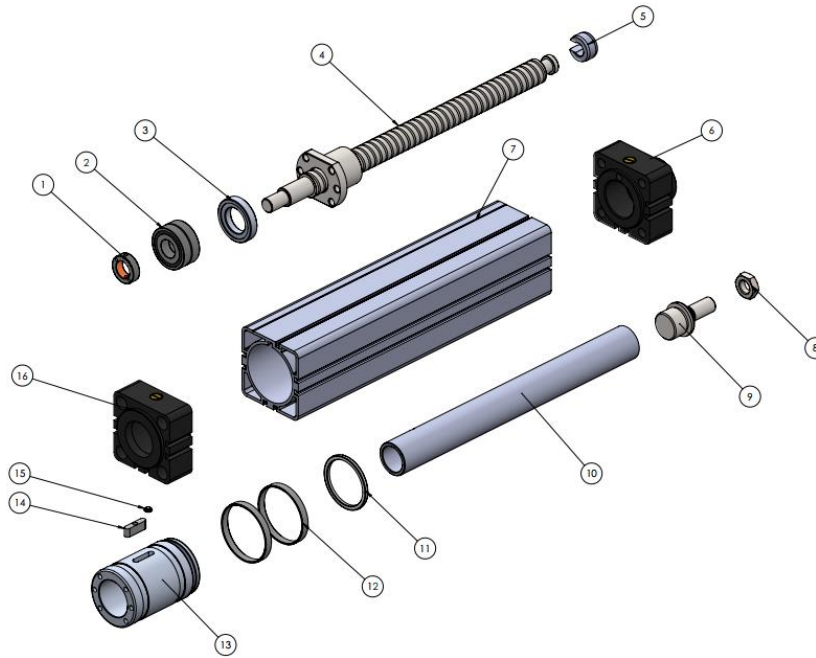


Size	AH	BT	EM	HB	RA	TE	UL	UR	XL
080	63	14	50	11	40	66	86	60	393

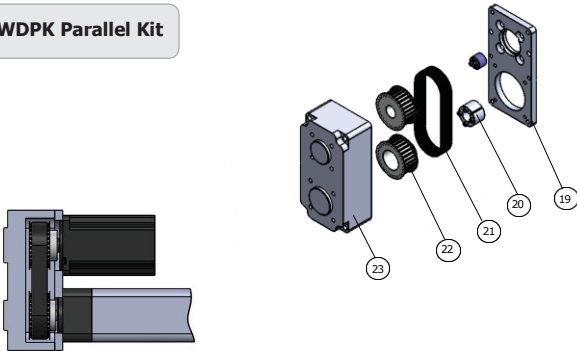


Assembly

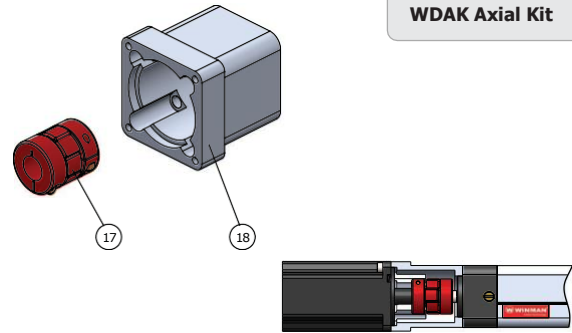
WLA4 Linear Actuator



WDPK Parallel Kit

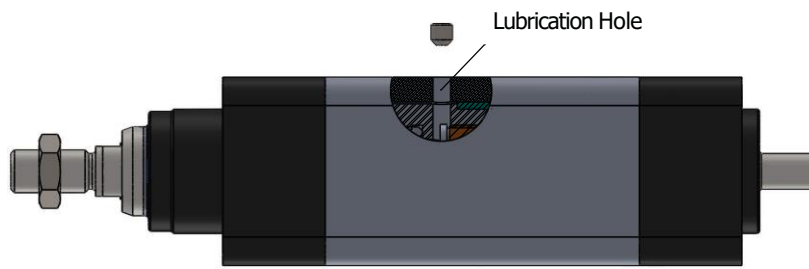


WDAK Axial Kit



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	Magnetic	
12	2	Guide Ring	
13	1	Piston Part - 1	
14	1	Key	
15	1	Nipple	
16	1	Back Block	
17	2	Coupling	
18	1	Bellhousing	Parallel Mounting
19	1	Parallel Kit Cover	
20	1	Toothed Belt	
21	1	Timing Belt Pulleys	
22	1	Trapper Bushing	
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.

<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>

<b>Lubrication</b>		
<b>Lubrication Period</b>	<b>km</b>	600
	<b>h</b>	400
<b>Lubricate Dose</b>	<b>cm<sup>3</sup></b>	3,0