

Ordering Code

WMCD - BS - 145 - _ _ - _ _ - _ _ - _ _ - _ _ - _ _

1 2 3 4 5 6 7 8 9
 Model Drive Unit Size Stroke Pitch Mounting Kit Model Mounting Kit Assembly Mounting Kit Side Linear Unit

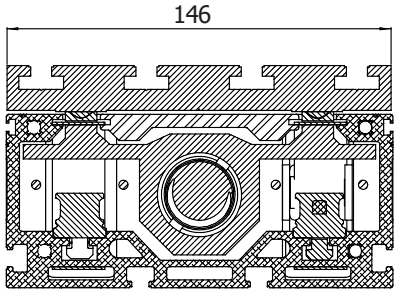
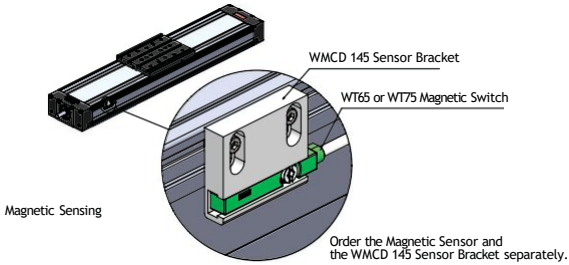
1 - Model

WMCD : Compact Linear Module

2 - Drive Unit

BS : Ball Screw

3 - Size

<p>Standard</p>  <p>146</p>	<p>Option</p>  <p>Magnetic Sensing</p> <p>WMCD 145 Sensor Bracket</p> <p>WT65 or WT75 Magnetic Switch</p> <p>Order the Magnetic Sensor and the WMCD 145 Sensor Bracket separately.</p>
<p>WMCD - BS - 145</p>	<p>_ _ - MS</p>

4 - Stroke

0000 : Maximum 1600 mm

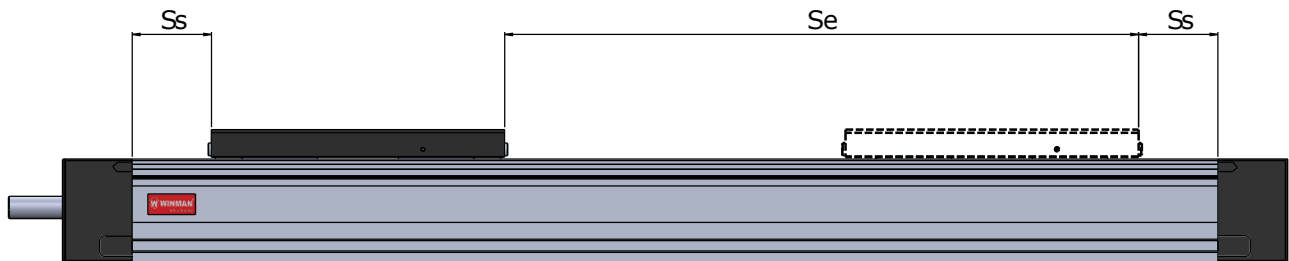
Movement Stroke

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

- 05 : 5 mm/rev
- 10 : 10 mm/rev
- 20 : 20 mm/rev

Ordering Code

WMCD - BS - 145 - - - - -


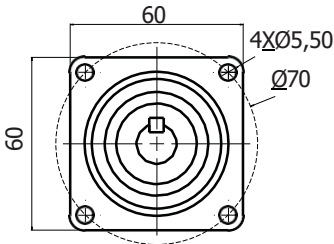
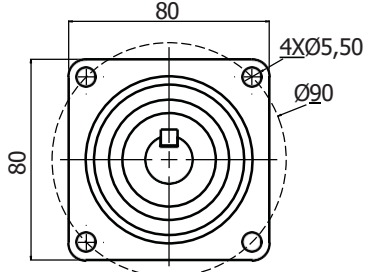
- | | | | | | | | | |
|-------|------------|------|--------|-------|--------------------|-----------------------|-------------------|-------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Model | Drive Unit | Size | Stroke | Pitch | Mounting Kit Model | Mounting Kit Assembly | Mounting Kit Side | Linear Unit |

6 - Mounting Kit Model


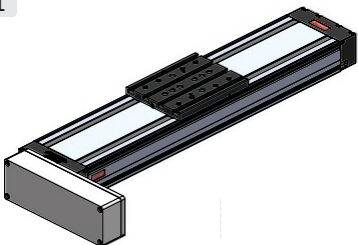




		
00 : Without Mounting (Standard)	WDAK : Axial Kit	WDPK : Parallel Kit

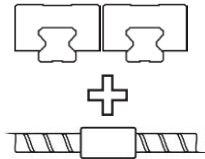
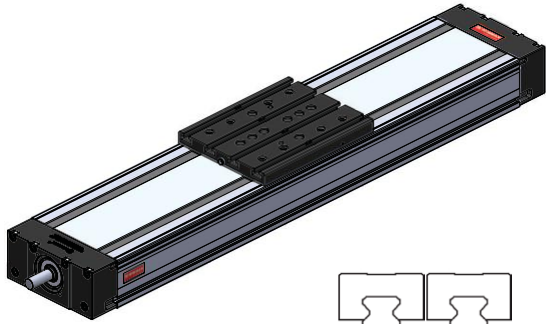
Note 1 : Please contact for different motor types and mounting sizes.
 Note 2 : Please contact for to use reducer.

7 - Mounting Kit Assembly

		
00 : Without Motor (Standard)	070 : Ø70 motor mounting	090 : Ø90 motor mounting

8 - Mounting Kit Side

00 Standard 	01 	02 
	03 	04 

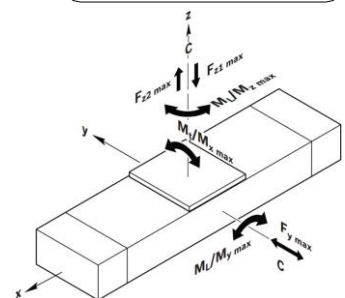
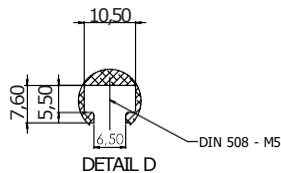
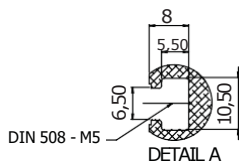
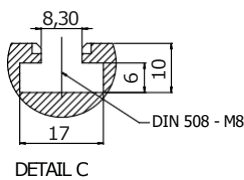
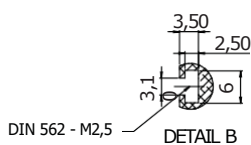
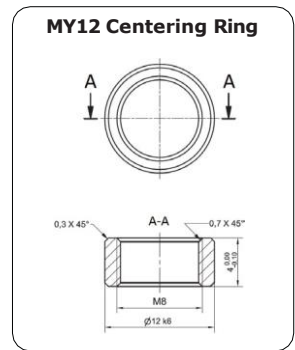
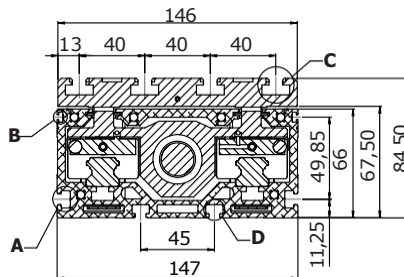
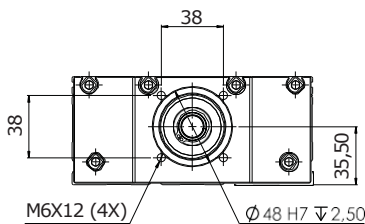
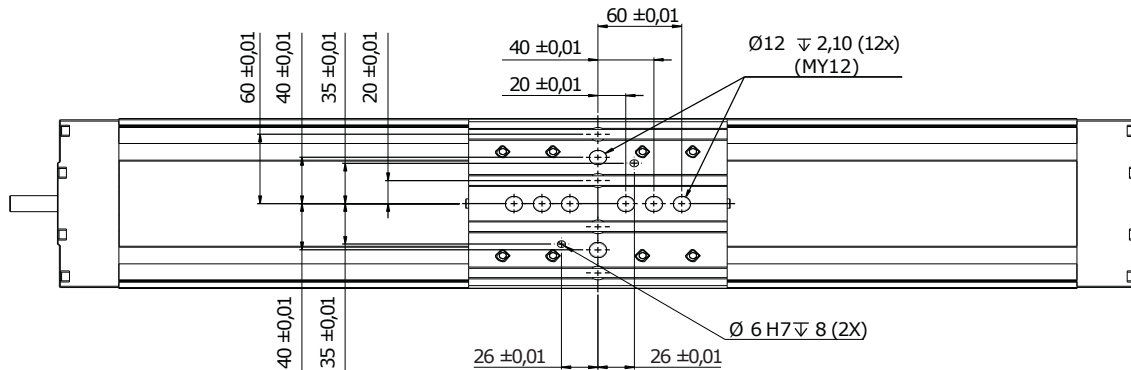
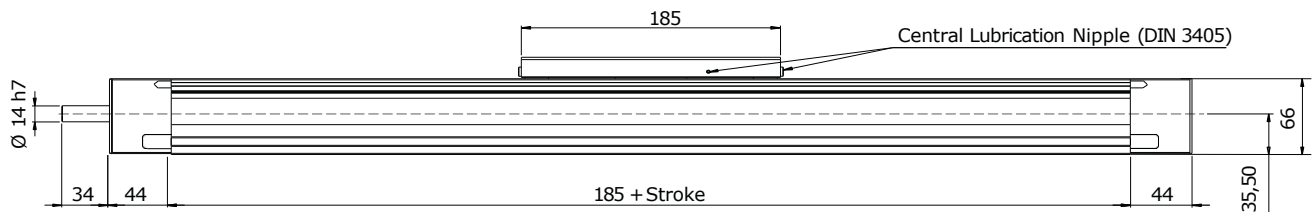
WINMAN WMCD-145 Series Compact Linear Module
9 – Linear Unit – (L)

Specification

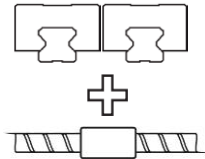
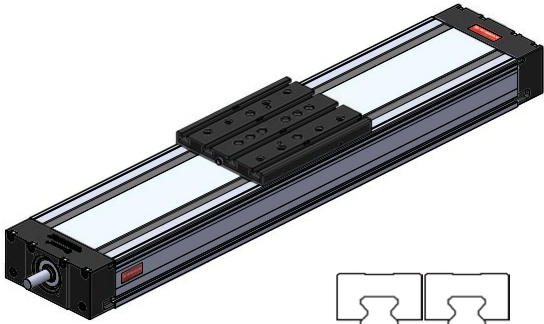
Maximum Stroke [mm]	1600
Position Accuracy [$\mu\text{m}/\text{mm}$]	53/300
Repeating Accuracy [mm]	$< 0,05$
Acceleration [m/s^2]	10

Screw Lead [mm]	Dynamic Load Capacity [N]		Dynamic Torsional Moment Load Capacity [Nm]	
	C	C _{DS}	M _t	M _L
5	57680	13350	4200	5400
10		15580		
20		14650		

Max. Permissible Torsional Moment Around The Axis [Nm]			Max. Dynamic Load in Directions [N]		
M _x max	M _y max	M _z max	F _y max	F _{z1} max	F _{z2} max
1475	1650	970	10385	20190	20190

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

Technical Drawing


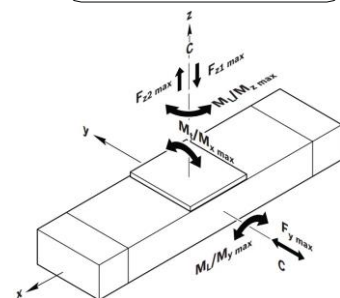
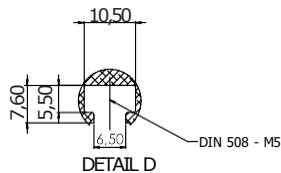
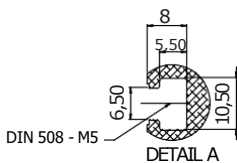
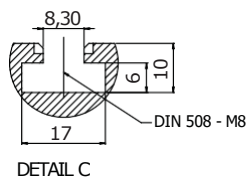
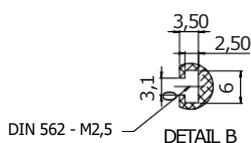
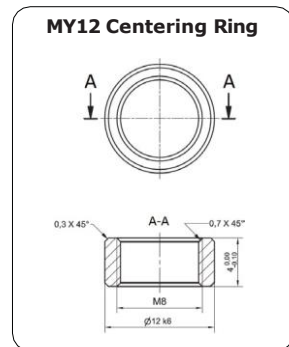
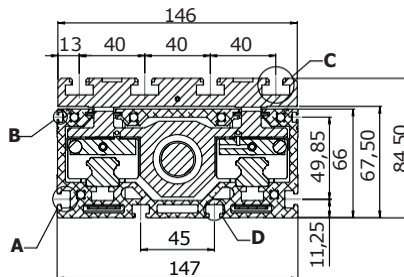
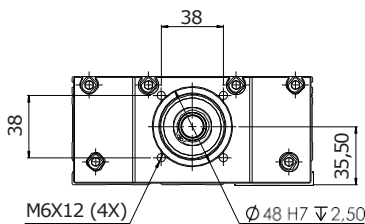
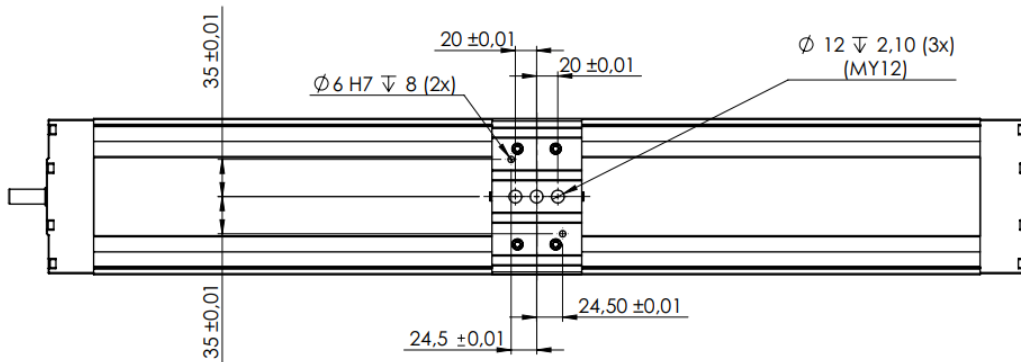
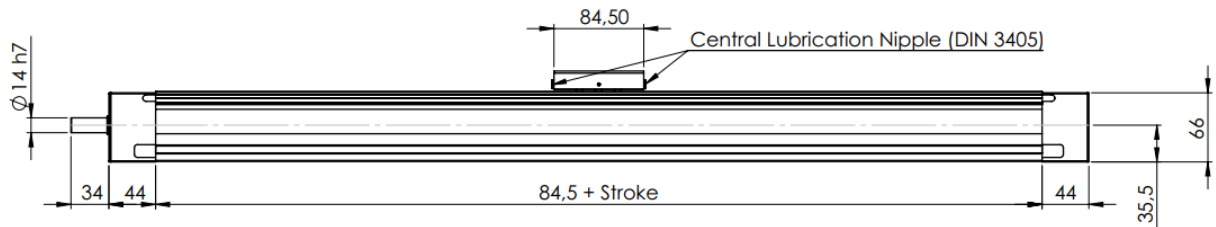
WINMAN WMCD-145 Series Compact Linear Module
9 – Linear Unit – (S)

Specification

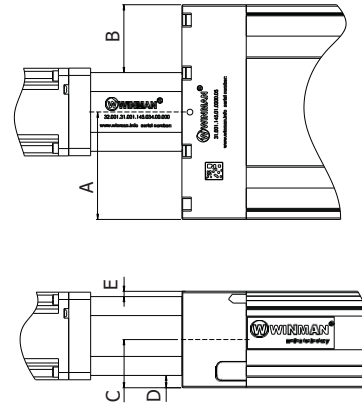
Maximum Stroke [mm]	1600
Position Accuracy [$\mu\text{m}/\text{mm}$]	53/300
Repeating Accuracy [mm]	$< 0,05$
Acceleration [m/s^2]	10

Screw Lead [mm]	Dynamic Load Capacity [N]		Dynamic Torsional Moment Load Capacity [Nm]	
	C	C_{D5}	M_t	M_L
5	31828	13350	2315	477
10		15580		
20		14650		

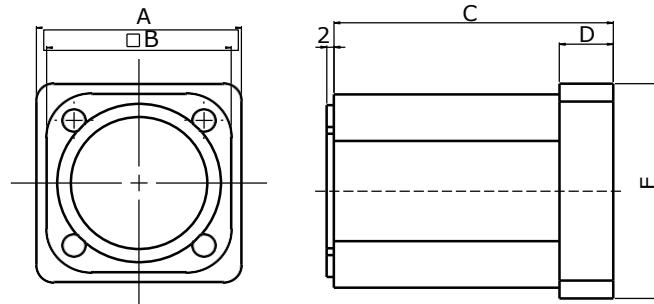
Max. Permissible Torsional Moment Around The Axis [Nm]			Max. Dynamic Load in Directions [N]		
$M_x \text{ max}$	$M_y \text{ max}$	$M_z \text{ max}$	$F_y \text{ max}$	$F_{z1} \text{ max}$	$F_{z2} \text{ max}$
344	201	145	5729	10088	10088

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

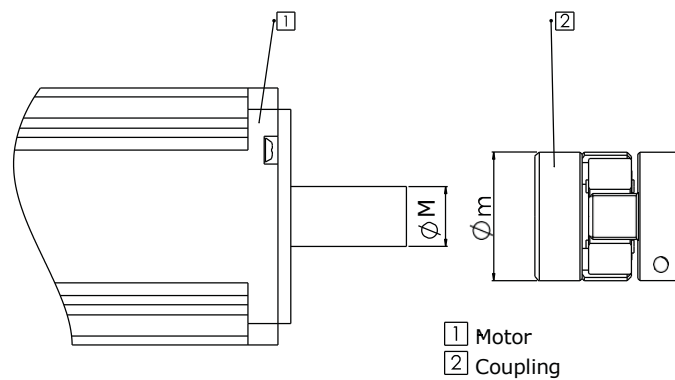
Technical Drawing


WDAK Axial Mounting Kit
Technical Drawing


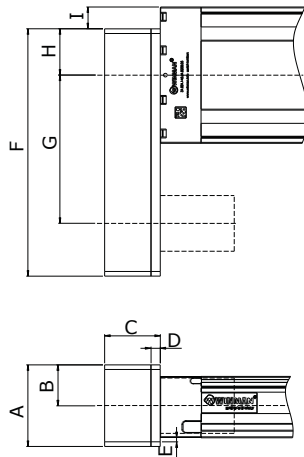
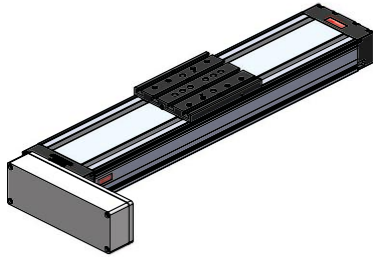
Mounting Kit Type	A	B	C	D	E
WDAK-070	73,5	46,5	35,5	8,5	3,5
WDAK-090	73,5	43,5	35,5	5,5	0,5

Bellhousing


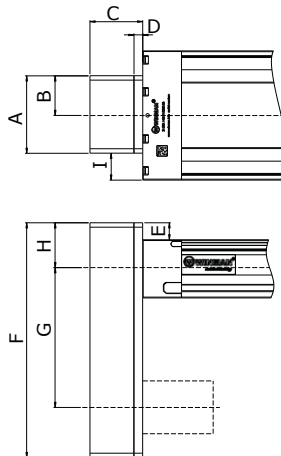
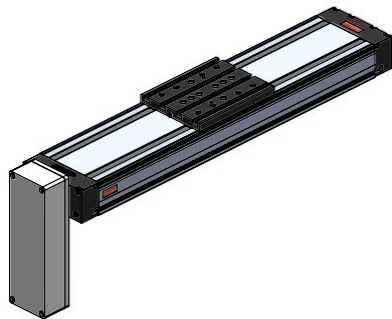
Mounting Kit Type	A	B	C	D	E
WDAK-070	60	54	78	15	60
WDAK-090	80	60	95	20	80

Coupling


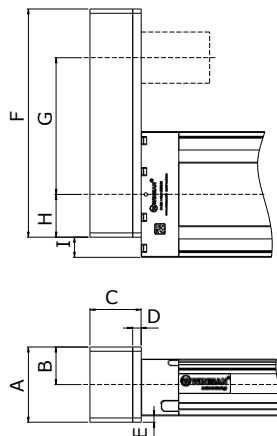
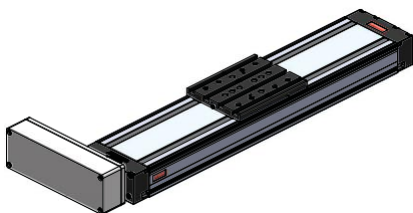
Mounting Kit Type	M	m	Coupling Model
WDAK-070	14	30	WWJL - 30CRD
WDAK-090	19	40	WWJL - 40CRD

WDPK - Parallel Mounting Kit
Technical Drawing
WDPK - _ _ - 01


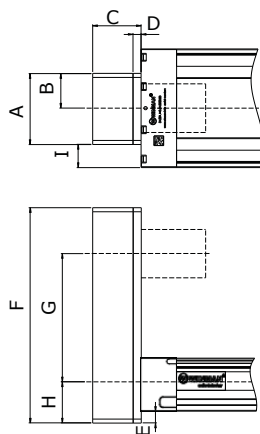
Kit Assembly	WDPK - 070 - 01	WDPK - 090 - 01
A	88	88
B	43	43
C	60	60
D	10	10
E	14,5	5
F	267	297
G	160	186
H	50	55,5
I	23,5	18

WDPK - _ _ - 02


Kit Assembly	WDPK - 070 - 02	WDPK - 090 - 02
A	88	88
B	43	43
C	60	60
D	10	10
E	14,5	9,5
F	267	297
G	160	186
H	50	55,5
I	28,5	18

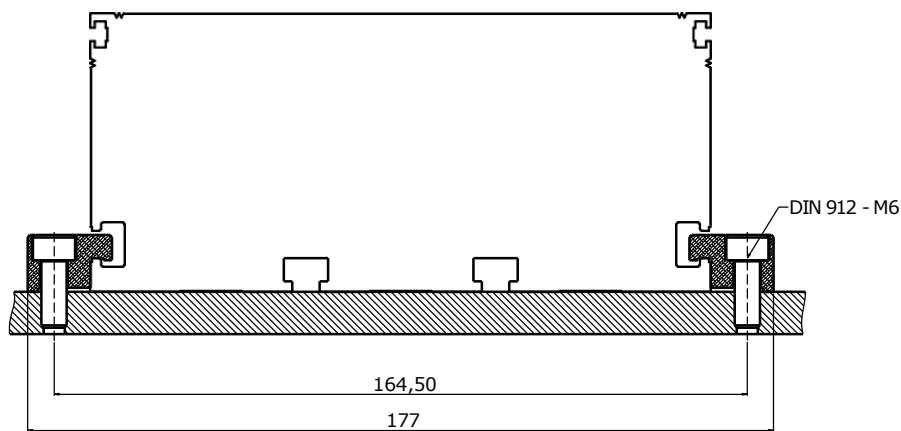
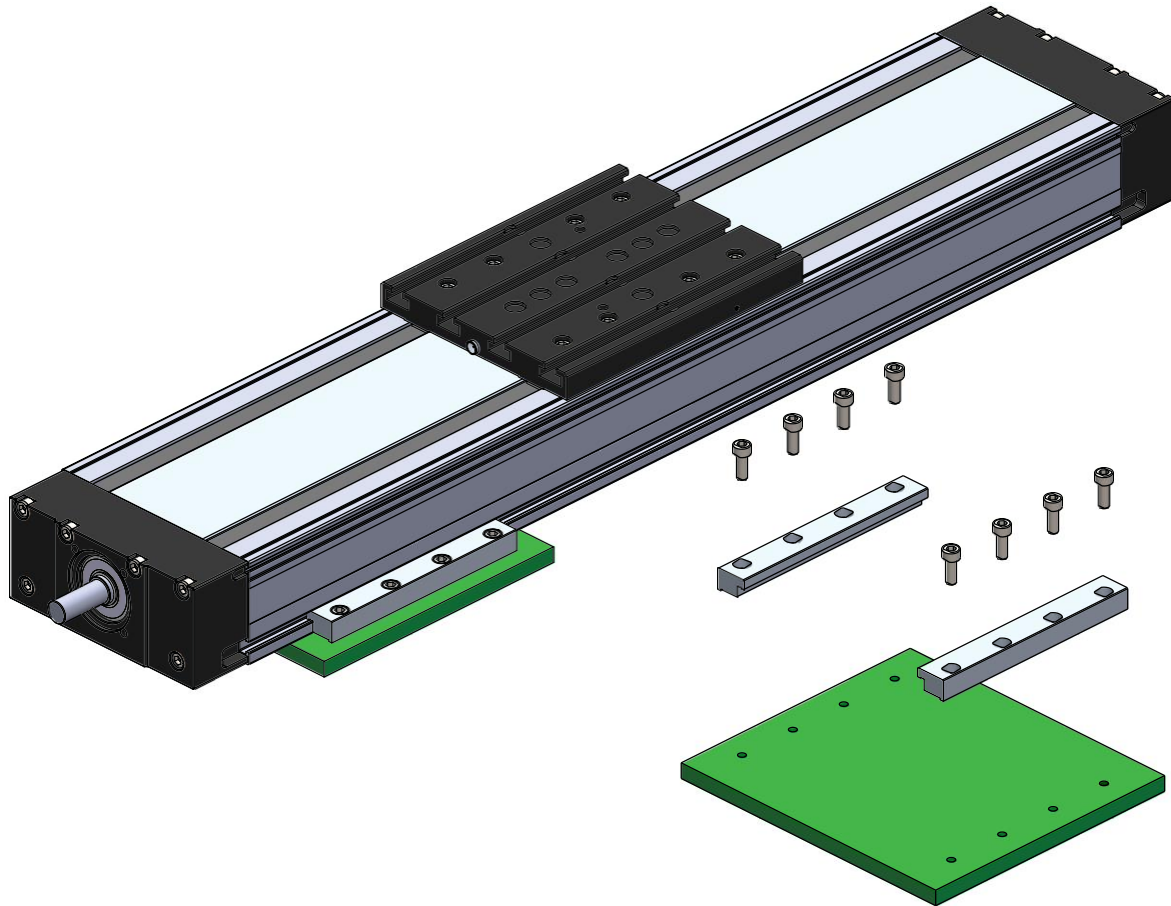
WDPK - _ _ - 03


Kit Assembly	WDPK - 070 - 03	WDPK - 090 - 03
A	88	88
B	43	43
C	60	60
D	10	10
E	9,5	20
F	267	297
G	160	186
H	50	55,5
I	23,5	28,5

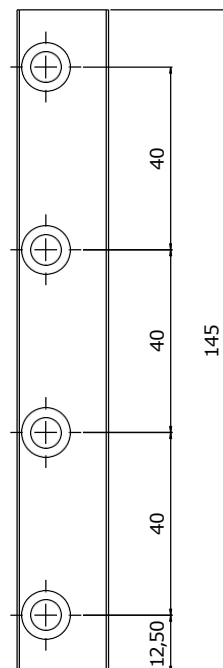
WDPK - _ _ - 04


Kit Assembly	WDPK - 070 - 04	WDPK - 090 - 04
A	88	88
B	43	43
C	60	60
D	10	10
E	14,5	20
F	267	297
G	160	186
H	50	55,5
I	28,5	28,5

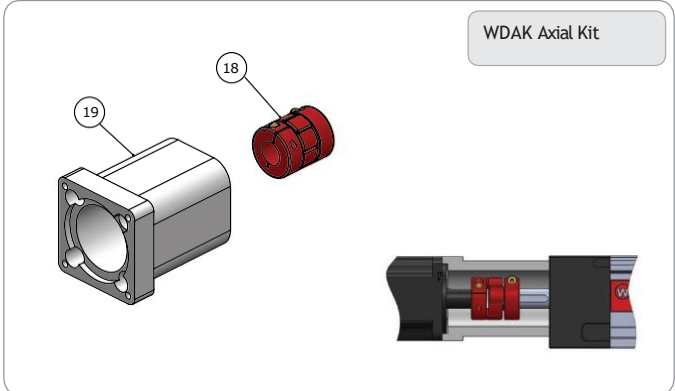
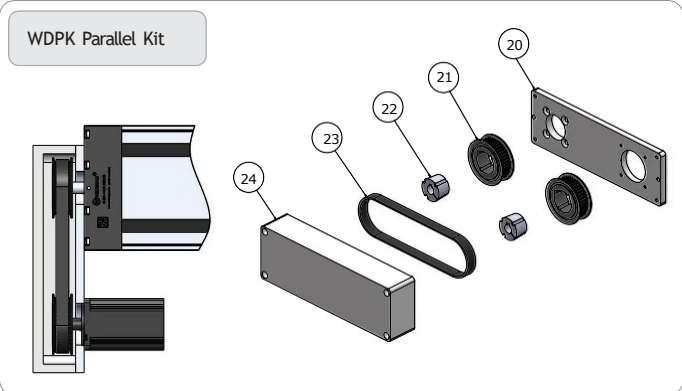
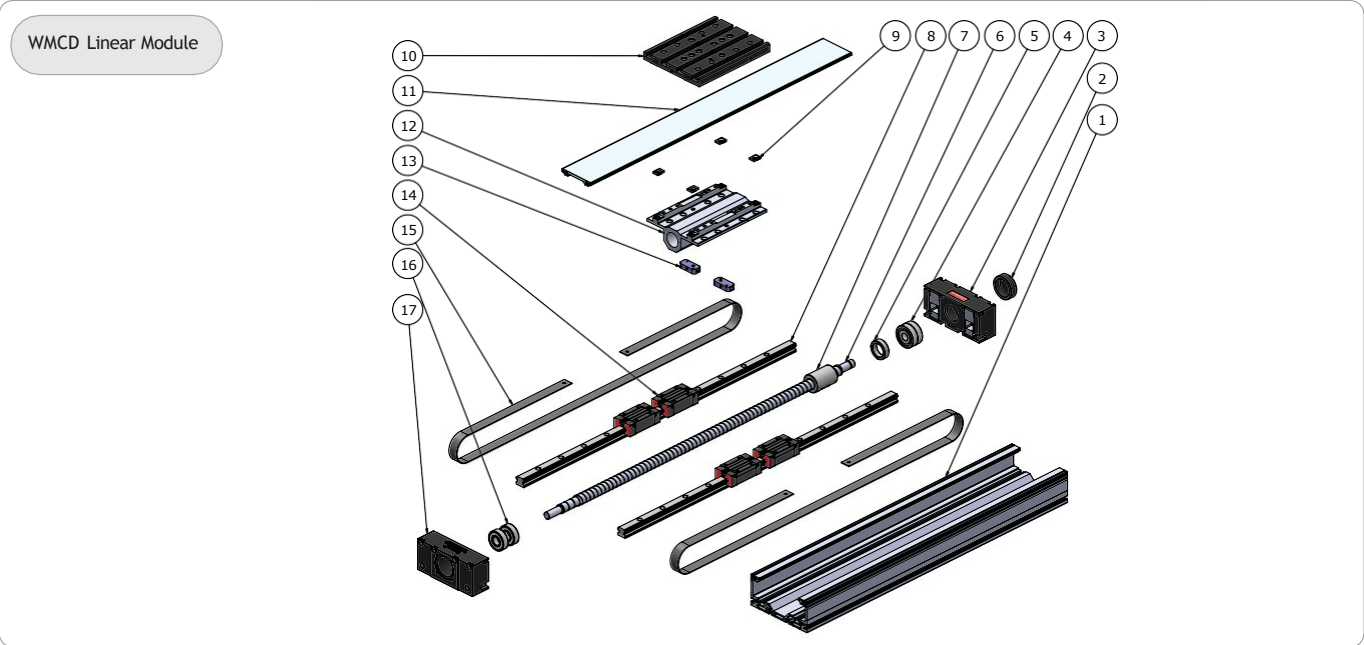
Assembly



WMCD 145 Clamping Fixtures



Assembly



Piece	Qty	Part Name	Assembly
1	1	Profile	Module
2	1	Block Nut	
3	1	Back Block	
4	1	Back Bearing	
5	1	Front Bearing Pressure Nut	
6	1	Ball screw	
7	1	Ball Nut	
8	2	Linear Guided	
9	4	Strip Mounting Piece	
10	1	Front Bearing	
11	1	Profile Cover	
12	1	Carriage	
13	2	Lubrication Port	
14	4	Linear Carriage	
15	2	Protection Strip Corrosion Resistance	
16	1	Front Bearing	
17	1	Front Block	
18	1	Coupling	Axial Kit
19	1	Bell housing	Parallel Kit
20	1	Parallel Kit Cover	
21	1	Toothed Belt	
22	2	Timing Belt Pulleys	
23	2	Taper Bushing	
24	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 lubrication of ball nuts and carriages is made from a single port.

Compact modules must be lubricated with suitable grease.

Lithium soap grease should be used.

Caution: Do not use grease containing graphite or MoS!

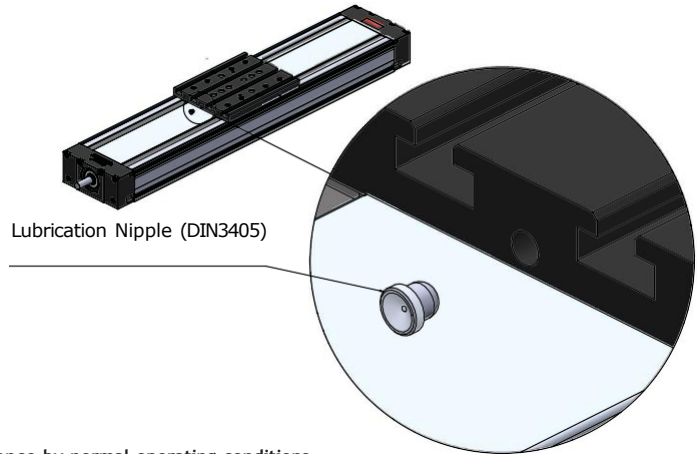
Lubrication is performed every 400 hours or 400 km total working distance by normal operating conditions.

Lubrication quantities are provided in table by normal operating conditions.

After lubrication, move the linear module at least three times. Do not exceed the movement value, the movement speed 10 mm /s.

Belt is assembled with a fixed axis distance between the pulleys in Parallel Kits. In consequence there is no need to adjust the tension of belt.

After maintenance, get information about the protection strip tension on the module.



Normal Working Conditions

Note : The lubrication quantity specified in the table is valid for normal operating conditions. The lubrication quantity may vary in different operating conditions. Get information for the lubrication quantity in different working conditions.

Ambient Temperature	°C	10 ~ 40
Speed	m/s	≤ 1,0
Screw Rotation Speed	rev/min	2500
Load	kN	≤ 0,2 C
Stroke	mm	> 60
Lubrication Period	Km	400
	Hour	400
Lubricate Dose	cm ³	2,8