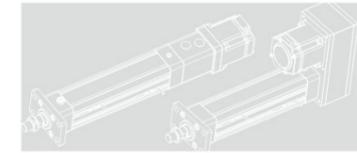


KDG Series

Standard / Ball Screw



CONTENTS

<p>KDG4027 Cylinder diameter: 27mm Stroke: 250mm...455 Load: 0.4kN</p>		<p>KDG7463 Cylinder diameter: 63mm Stroke: 800mm...495 Load: 8kN</p>	
<p>KDG4432 Cylinder diameter: 32mm Stroke: 300mm...465 Load: 0.34kN</p>		<p>KDG9580 Cylinder diameter: 80mm Stroke: 1000mm...505 Load: 15-30kN</p>	
<p>KDG5340 Cylinder diameter: 40mm Stroke: 350mm...475 Load: 1.5kN</p>		<p>KDG110100 Cylinder diameter: 100mm Stroke: 1200mm...515 Load: 30-50kN</p>	
<p>KDG6350 Cylinder diameter: 50mm Stroke: 500mm...485 Load: 3.5-5kN</p>			

KDG Servo Electric Cylinder

Basic Introduction of Servo Electric Cylinder

Principle of electric cylinder:

The electric cylinder converts the rotary motion of motor into the linear motion of push rod through the mechanical motion of the screw and lead screw pair. Using the closed-loop control characteristics of servo motor, it is easy to realize precise control of thrust, speed and position; applying the modern motion control technology, numerical control technology and bus (network) technology, the program-based, bus (network) control is realized. Due to the convenience of its control and use, it will realize the precise motion control that cannot be realized by cylinder and hydraulic cylinder transmission.

Features of electric cylinder:

KDG series electric cylinders adopt the advanced modular design methods and have the following significant features:

1. Compact structure, small outline size, convenient installation and use, simple maintenance, low noise, long life, and multiple safety protection measures.
2. Precise position control: the repeat positioning accuracy can reach ±0.01 mm, and even ±0.005 mm after adding an external displacement sensor.
3. Precise speed control: any speed waveform can be set to achieve high-speed, smooth and shock-free operation, and the control accuracy can reach 0.05%.
4. Precise thrust control: the control accuracy can reach 0.5% after adding an external push-pull force sensor.
5. The trapezoidal screw, ball screw and planetary needle roller screw transmission methods can be used.
6. The servo motor, stepping motor, DC motor and AC motor can be used to drive, servo and variable frequency control.

The relationship between motor output torque and electric cylinder output force:

$$F = T \times \eta \times 2\pi \times R / L$$

- F: electric cylinder output force, unit: kN
- T: motor output torque, unit: Nm
- R: reduction ratio
- L: screw lead, unit: mm
- π : ratio of circumference to diameter
- η : efficiency (generally choose the total efficiency of electric cylinder as 85%, but please note that the efficiency changes as the actual working conditions)

Life calculation of electric cylinder:

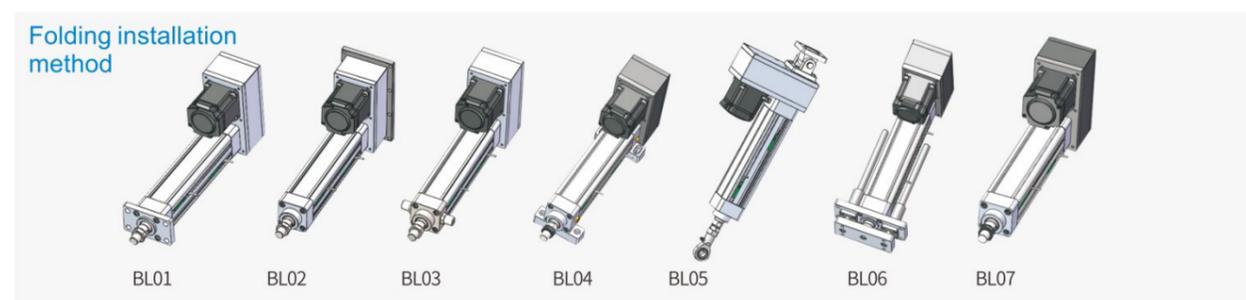
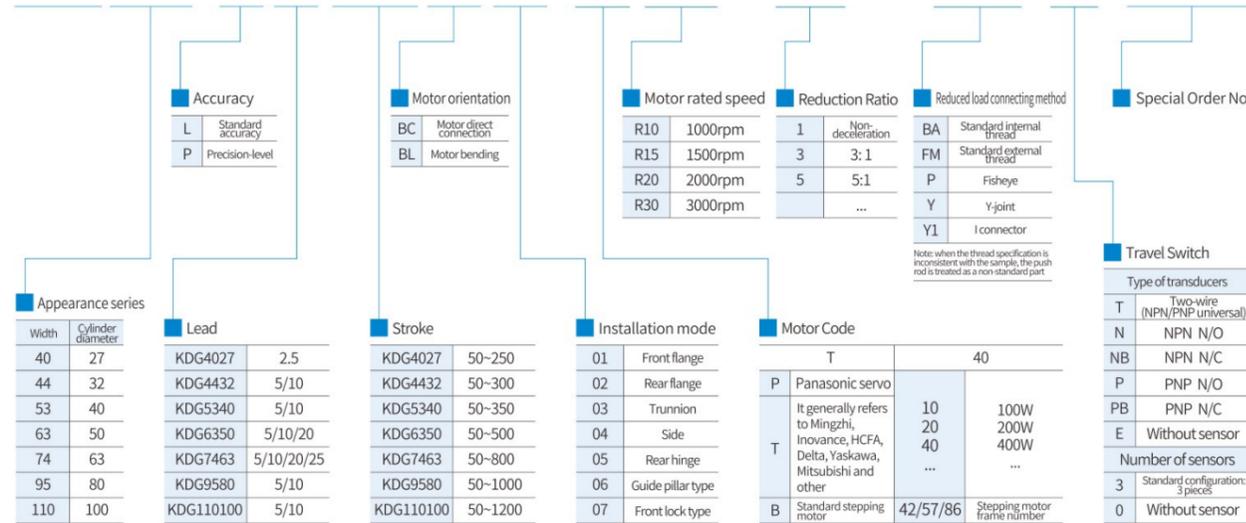
The service life of an electric cylinder generally refers to the life of screw inside the electric cylinder. The life of electric cylinder can be divided into two parts: The first is the theoretical fatigue life of electric cylinder, which can be calculated; The second is the service life of electric cylinder, which is affected by the operating conditions (such as temperature, dust, type of lubricant used and frequency of regular refilling, etc.). The service life can often be calculated through experience. The following is the calculation method of fatigue life of electric cylinder:

$$L_{10} = (C_a / F_m)^3 \times L$$

- L_{10} : electric cylinder life, unit: km
- F_m : Average load borne by the electric cylinder, unit: kN
- C_a : basic dynamic rated load of screw nut, unit: kN (it can be found from screw sample)
- L: Screw lead, unit: mm

Definition of electric cylinder product model

KDG 5340 - L 05 - 100-BC 01 - T40 R30 JS1 - BA - T3 - D123



KDG4027 Servo Electric Cylinder

KDG4027 Servo Electric Cylinder



KDG4027 Series Standard Configuration Parameters

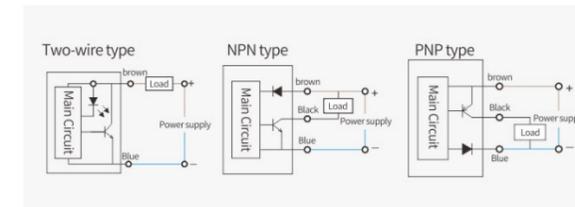
Foundation Information

Cylinder OD	40*40mm
Cylinder ID	27mm
Screw typp	Ball screwΦ8
Stroke range	≤250 mm
Allowable maximum speed	≤125 mm/s
Allowable maximum thrust	≤0.4 kN

Load and accuracy

Bearings	Cr(kN)	3.3	
	Cor(kN)	1.4	
Screw rod	Ca(kN)	1.8	
	Coa(kN)	3.7	
	Accuracy Grade (mm)	C5	C7
	Repeatability (mm)	±0.01	±0.02

Sensor Layout



Coupling and reducer configuration

Electric cylinder direct connecting Screw shaft diameter	Reducer / motor shaft diameter	Coupling model (AKD brand) OD * length - output shaft - K: international keyway
Φ5	Φ8-L22	SFR20*35-5-8K

Conductor Spec.

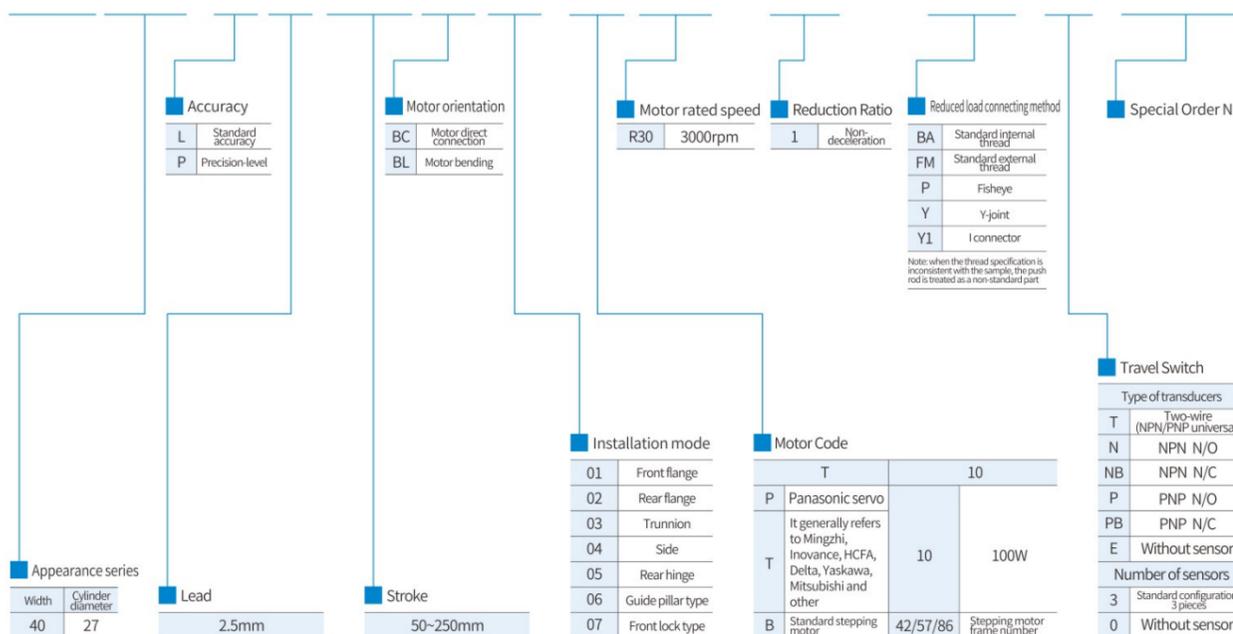
Code	Type	Model Specifications
T	Standard two-wire system	ZMDG-2 N/O
		ZMDGC-2 N/C
N	NPN Type	ZMDN-2 N/O
		ZMDNC-2 N/C
P	PNP Type	ZMDP-2 N/O
		ZMDPC-2 N/C

KDG4027 Force and speed

Motor power		50W servo (40 frame)		100W servo (40 frame)		42 Stepping	
Rated speed		3000rpm		3000rpm		/	
Rated torque		0.16N.m		0.32N.m		/	
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)
1	2.5	0.2	125	0.4	125	/	/

Ordering Method

KDG 4027 - L 2.5-100-BC 01-T10 R30 JS1 - BA - T3 - D123



Rated thrust calculation formula:

$$F = \frac{T * 2\pi * i}{L} * \mu$$

F: electric cylinder thrust (kN); T: motor torque (N.m); π: ratio of circumference to diameter; i: reduction ratio; L: screw lead (mm); μ: efficiency, the total working efficiency of electric cylinder is recommended to be 85%

Calculation formula of output shaft speed:

$$V = \frac{R * L}{i} \div 60$$

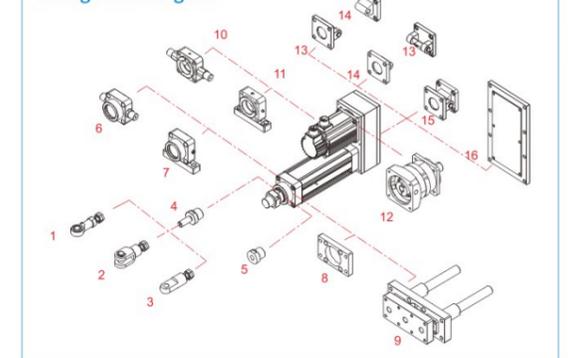
V: output shaft speed (mm/s); R: motor speed (r/min); L: screw lead (mm); i: reduction ratio; 60: constant

Calculation formula of electric cylinder life:

$$L_{10} = \left(\frac{Ca}{F_M} \right)^3 * L$$

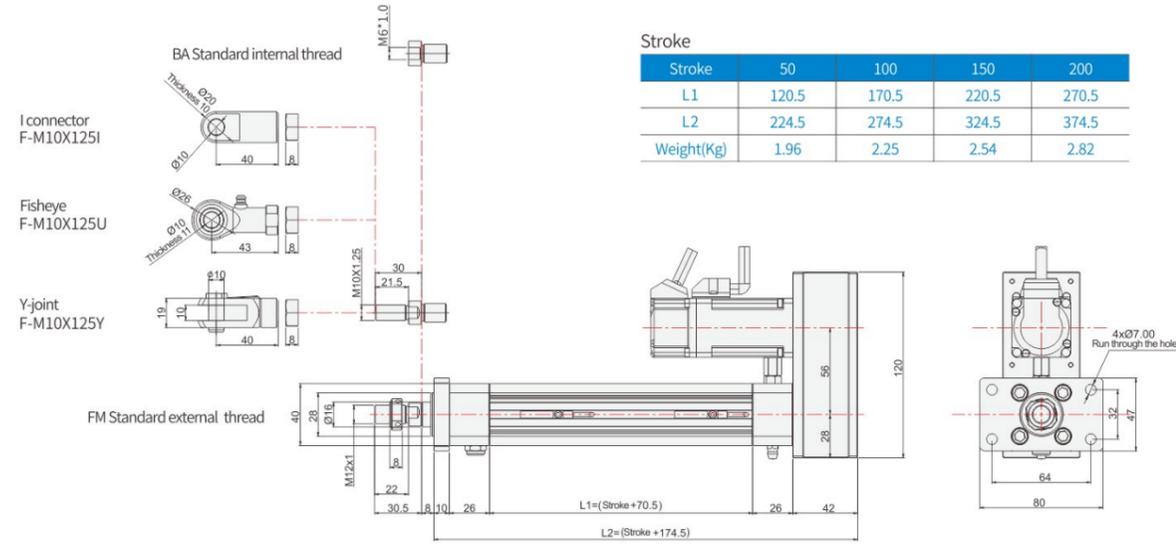
L₁₀: electric cylinder life (km); Ca: dynamic rated load of screw (kN); F_M: average load borne by electric cylinder (kN); L: screw lead (mm)

Configuration legend



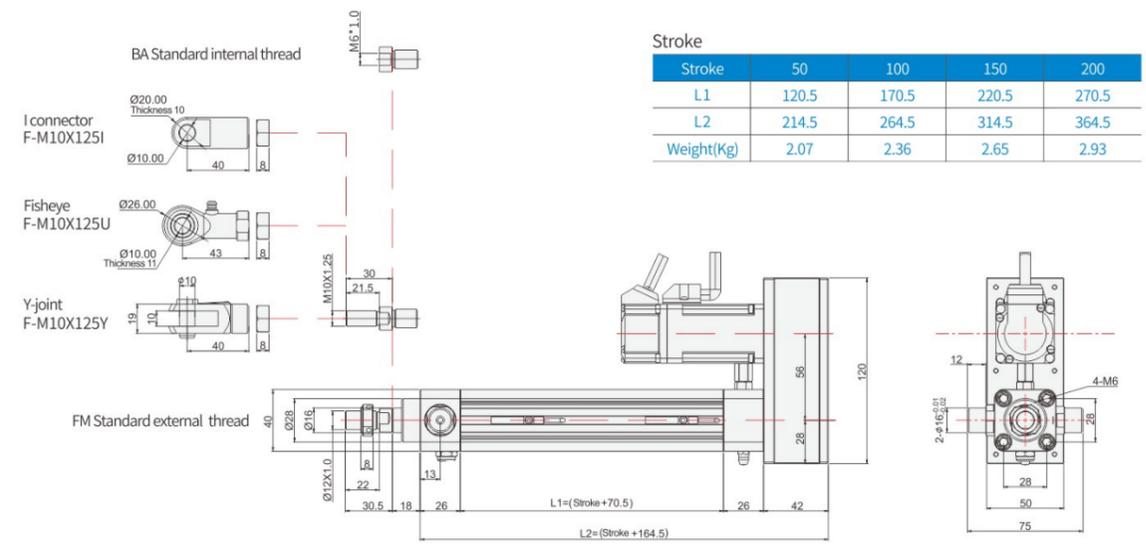
KDG4027-Folding - front flange
KDG4027-BL01

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



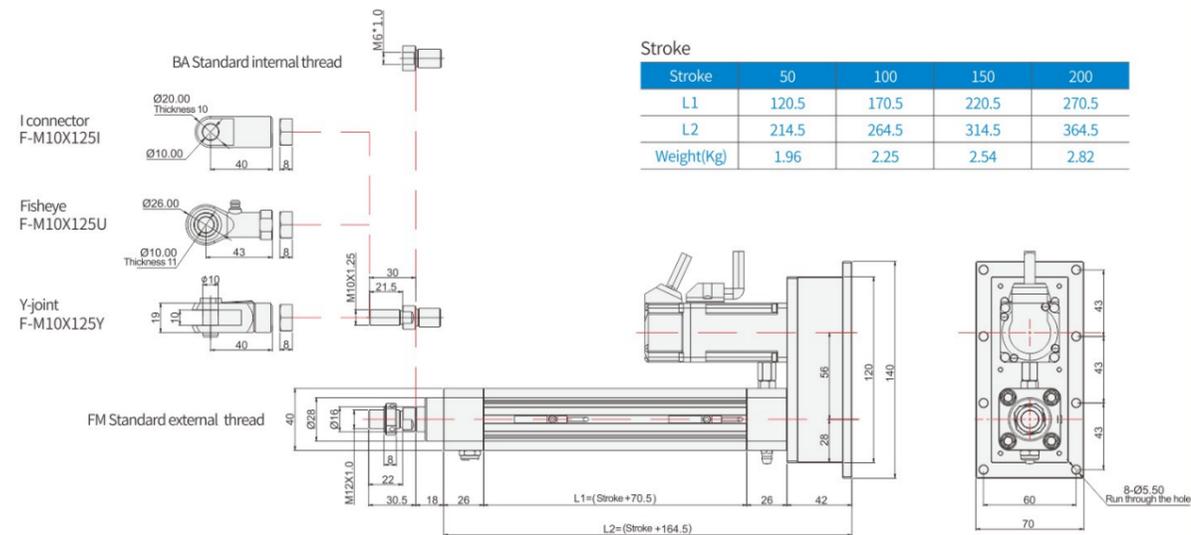
KDG4027-Folding - trunnion
KDG4027-BL03

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



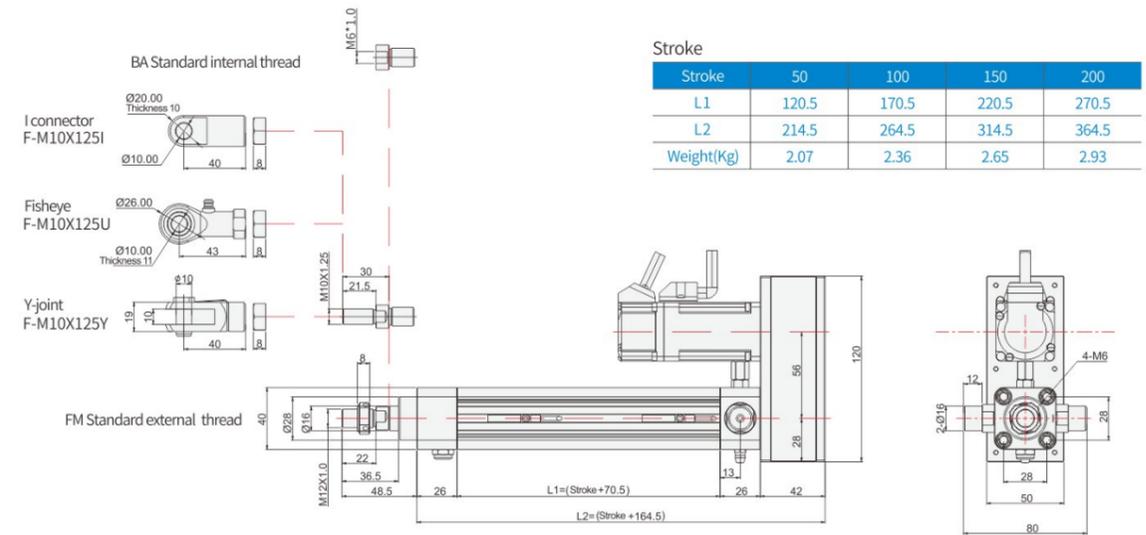
KDG4027-Folding - rear flange
KDG4027-BL02

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



KDG4027-Folding - return rear trunnion
KDG4027-BL03H

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

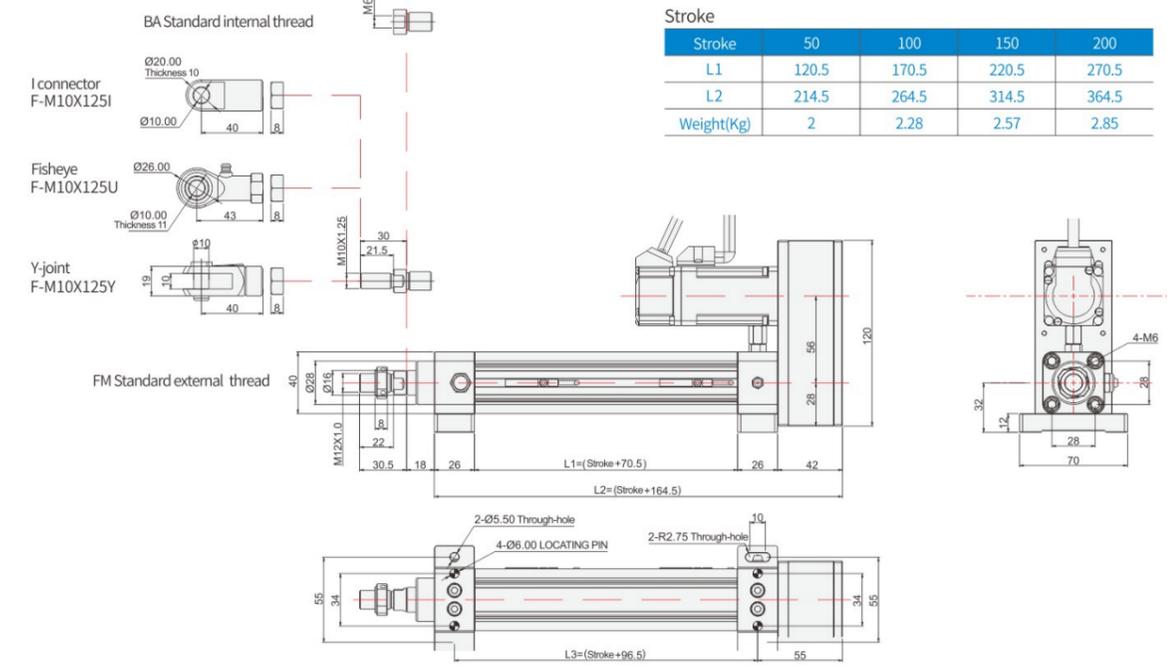


KDG4027 Servo Electric Cylinder

KDG4027 Servo Electric Cylinder

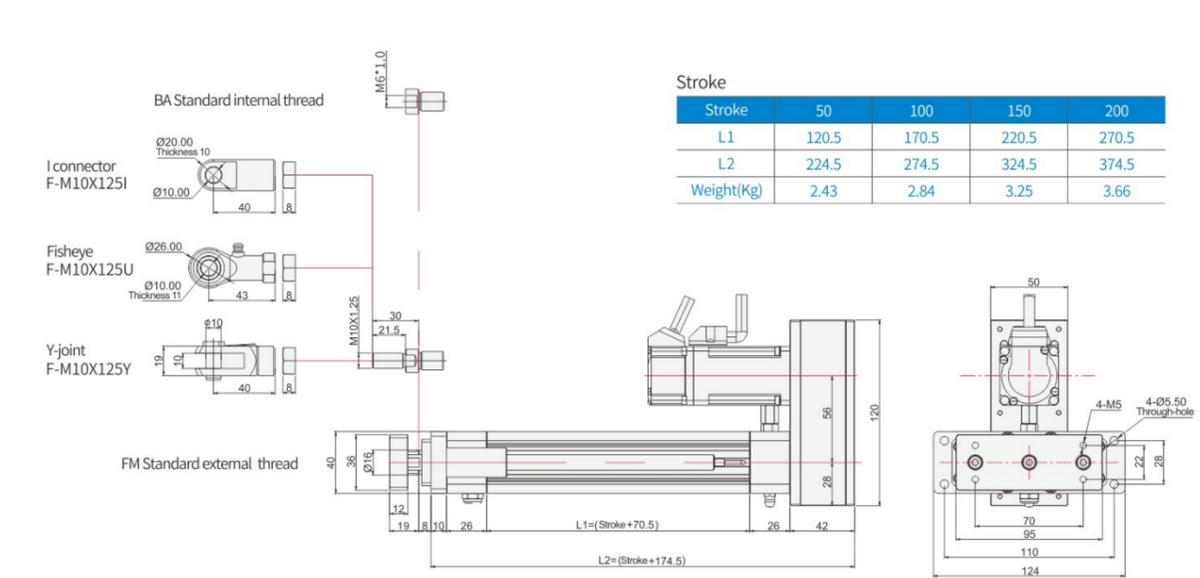
KDG4027-Folding - side flange
KDG4027-BL04

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



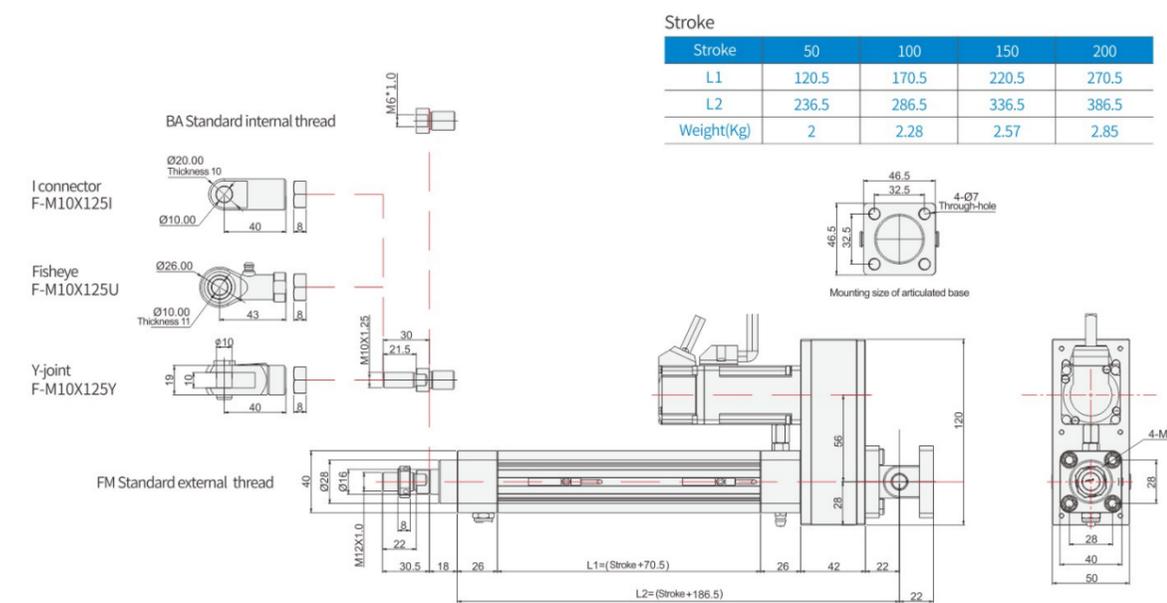
KDG4027-Folding - guide pillar type
KDG4027-BL06

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



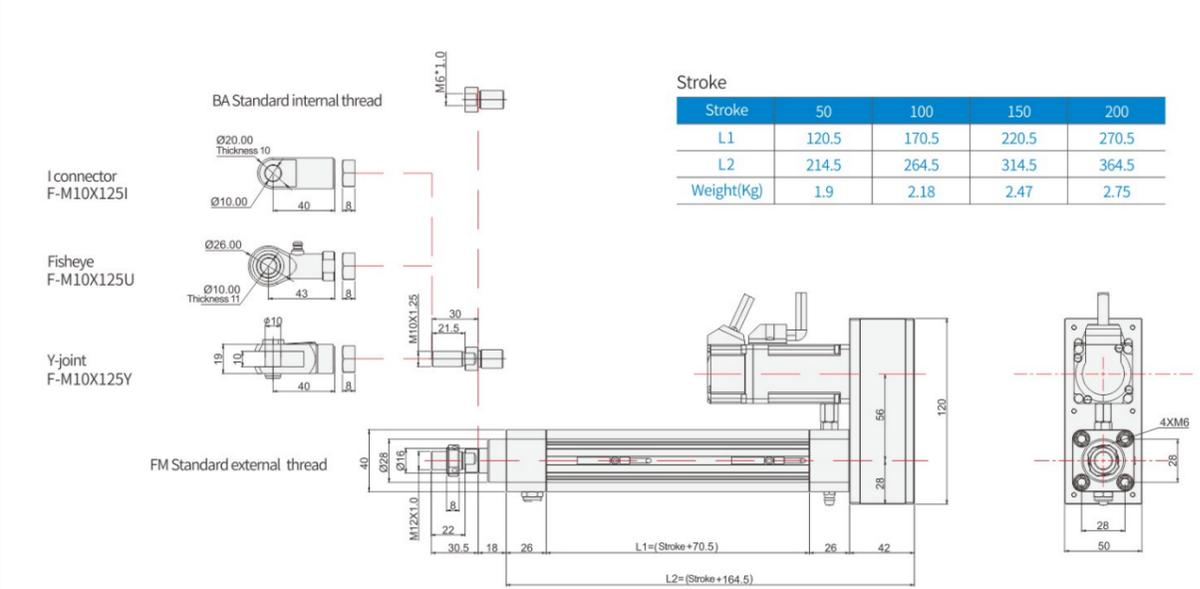
KDG4027-Folding - rear hinge
KDG4027-BL05

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



KDG4027-Folding - front lock type
KDG4027-BL07

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

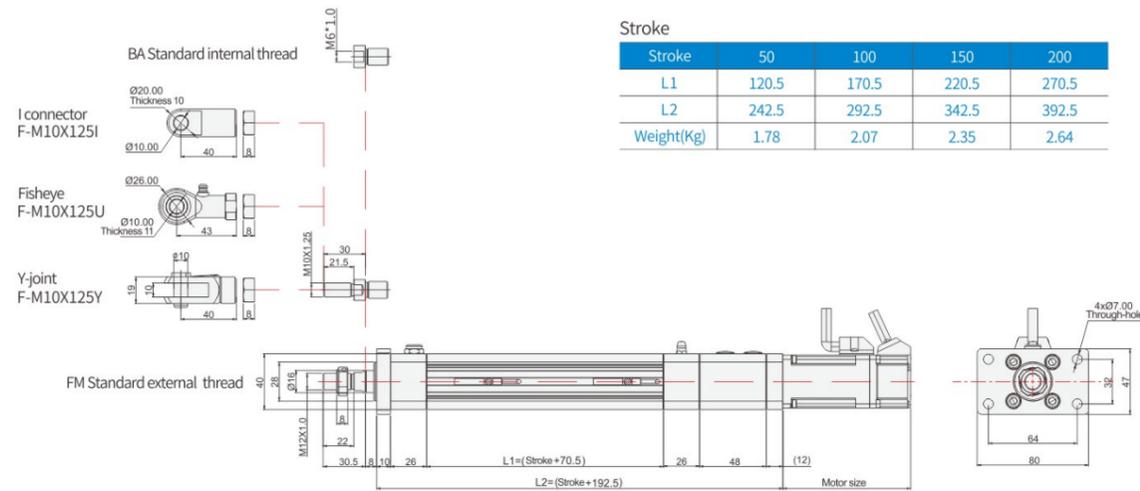


KDG4027 Servo Electric Cylinder

KDG4027 Servo Electric Cylinder

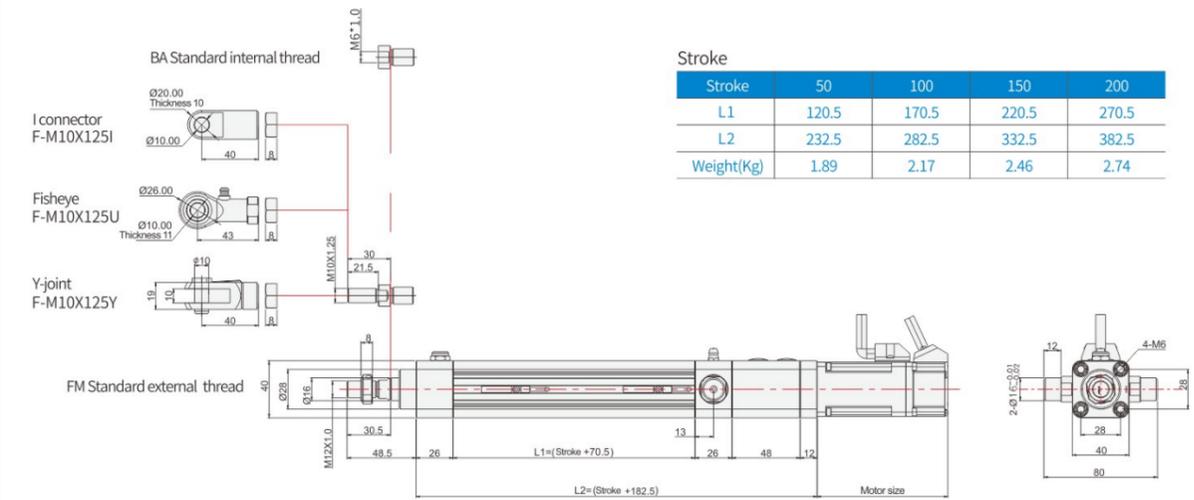
KDG4027-Direct connection - front flange
KDG4027-BC01

Note: when the motor mounting plate matches different motors, the size may change



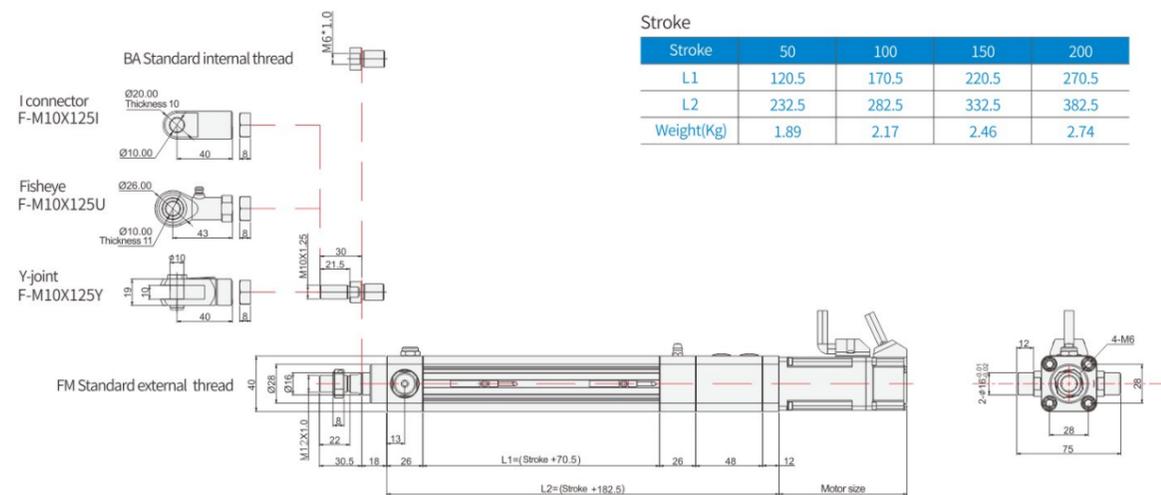
KDG4027-Direct connection - rear trunnion
KDG4027-BC03H

Note: when the motor mounting plate matches different motors, the size may change



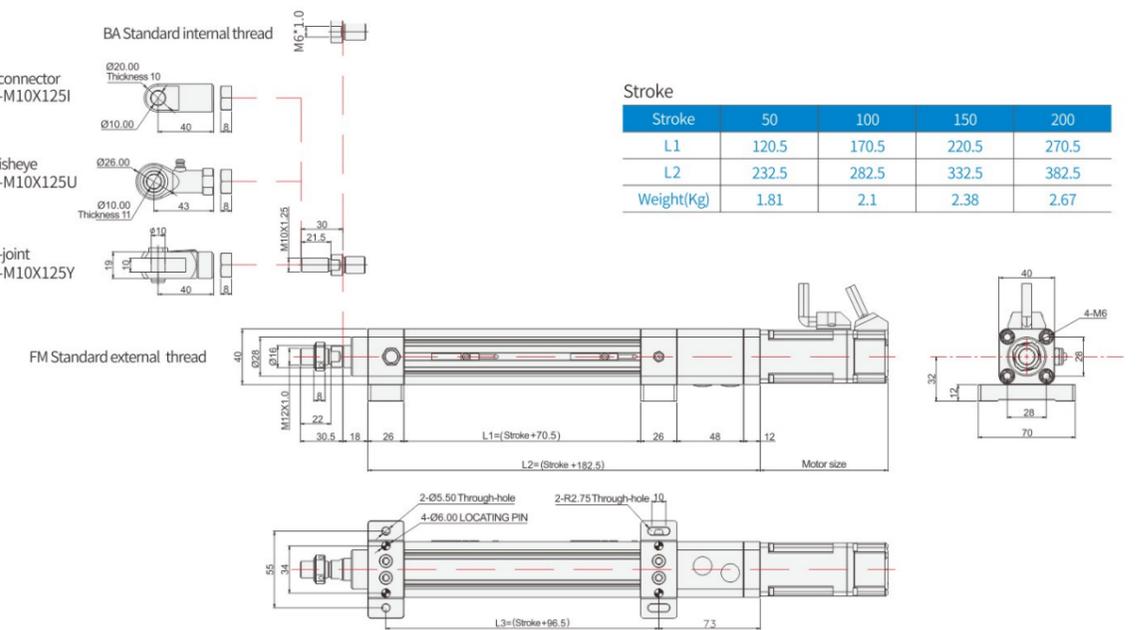
KDG4027-Direct connection - trunnion
KDG4027-BC03

Note: when the motor mounting plate matches different motors, the size may change



KDG4027-Direct connection - side flange
KDG4027-BC04

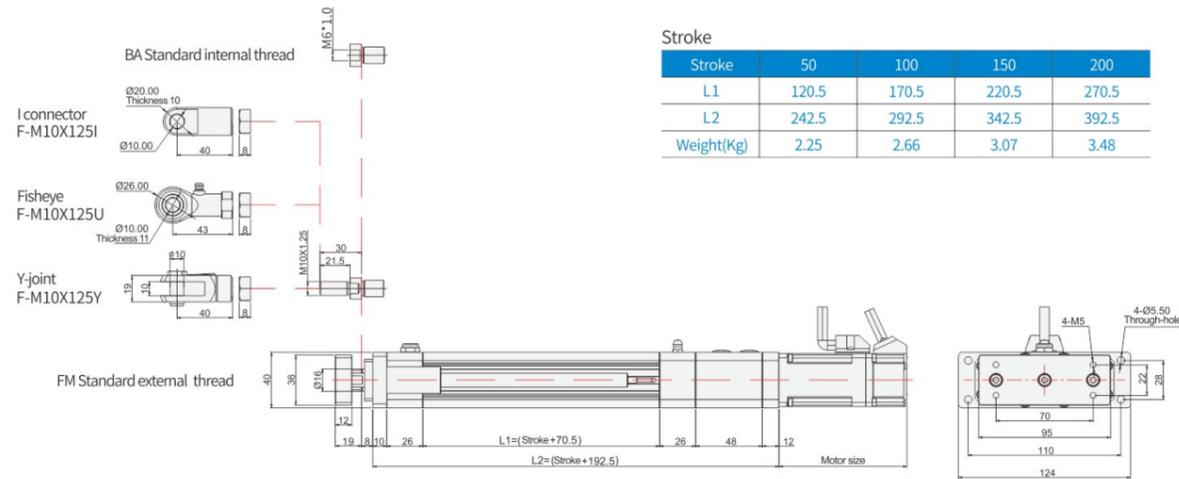
Note: when the motor mounting plate matches different motors, the size may change



KDG4027 Servo Electric Cylinder

KDG4027-Direct connection - guide pillar type
KDG4027-BC06

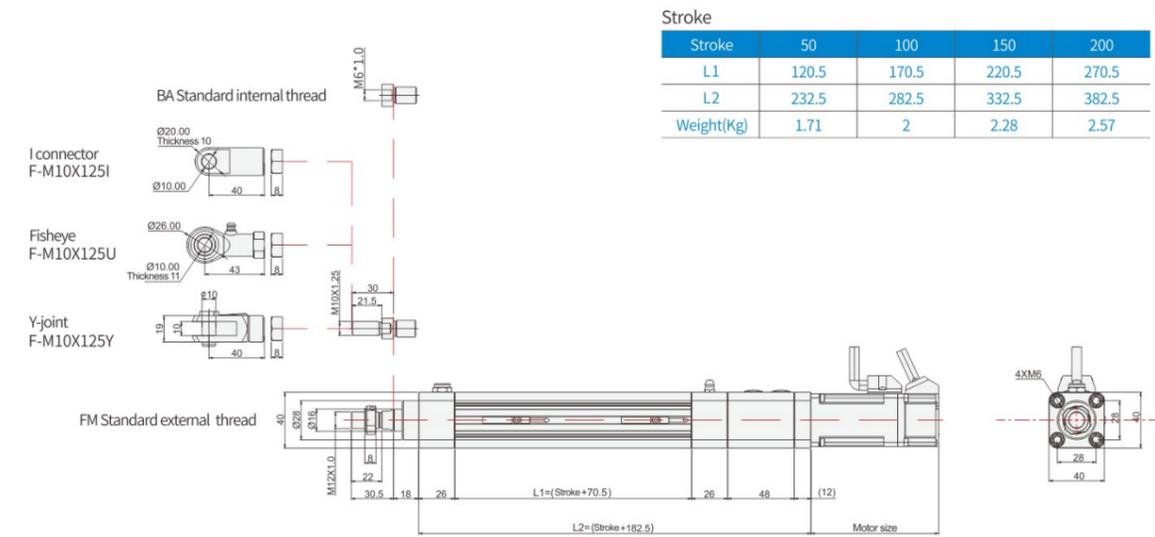
Note: when the motor mounting plate matches different motors, the size may change



MEMO

KDG4027-Direct connection - front lock type
KDG4027-BC07

Note: when the motor mounting plate matches different motors, the size may change



KDG4432 Servo Electric Cylinder

KDG4432 Servo Electric Cylinder



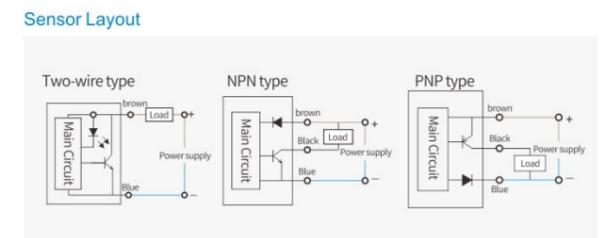
KDG4432 Series Standard Configuration Parameters

Foundation Information

Cylinder OD	44*44mm
Cylinder ID	32mm
Screw typp	Ball screw Φ12
Stroke range	≤300 mm
Allowable maximum speed	≤500 mm/s
Allowable maximum thrust	≤0.34 kN

Load and accuracy

Bearings	Cr(kN)	4.55	
	Cor(kN)	1.97	
Screw rod	Ca(kN)	Lead : 05	6.4
		Lead : 10	6.2
	Coa(kN)	Lead : 05	12.8
		Lead : 10	12.6
Accuracy Grade (mm)	C5	C7	
Repeatability (mm)	±0.01	±0.02	



Coupling and reducer configuration

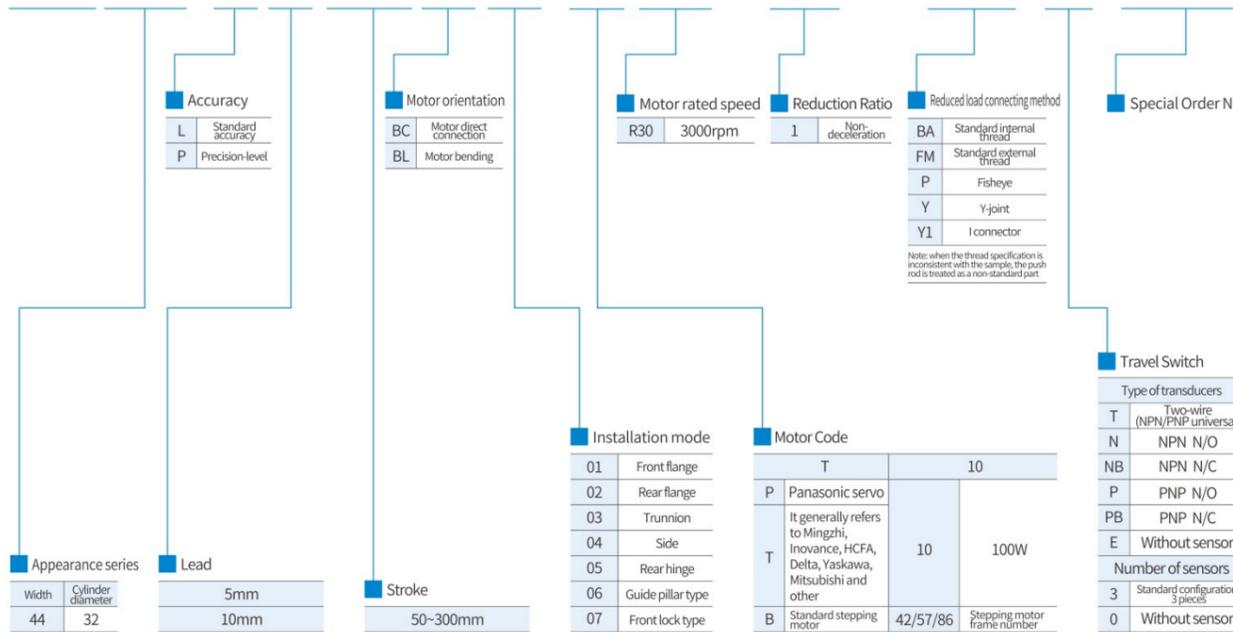
Electric cylinder direct connecting Screw shaft diameter	Reducer / motor shaft diameter	Coupling model (AKD brand) OD * length - output shaft - K: international keyway
Φ8	Φ8-L22	SFR25*30-8K-8K

Conductor Spec.

Code	Type	Model Specifications
T	Standard two-wire system	ZMDG-2 N/O ZMDGC-2 N/C
N	NPN Type	ZMDN-2 N/O ZMDNC-2 N/C
P	PNP Type	ZMDP-2 N/O ZMDPC-2 N/C

Ordering Method

KDG 4432 - L 05 - 100-BC 01 - T10 R30 JS1 - BA - T3 - D123



KDG4432 Force and speed

Motor power	50W servo (40 frame)		100W servo (40 frame)		42 Stepping		
Rated speed	/		3000rpm		/		
Rated torque	/		0.32N.m		/		
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)
1	5	/	/	0.34	250	/	/
	10	/	/	0.17	500	/	/

Rated thrust calculation formula:

$$F = \frac{T * 2\pi * i}{L} * \mu$$

F: electric cylinder thrust (kN); T: motor torque (N.m); π: ratio of circumference to diameter; i: reduction ratio; L: screw lead (mm); μ: efficiency, the total working efficiency of electric cylinder is recommended to be 85%

Calculation formula of output shaft speed:

$$V = \frac{R * L}{i} \div 60$$

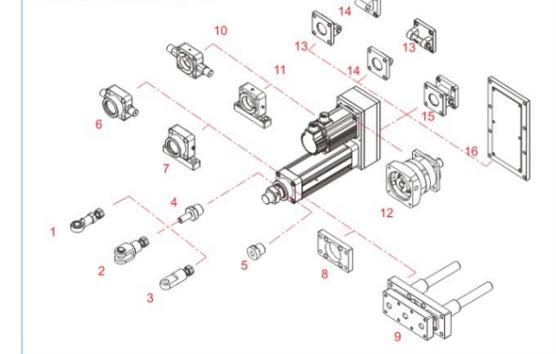
V: output shaft speed (mm/s); R: motor speed (r/min); L: screw lead (mm); i: reduction ratio; 60: constant

Calculation formula of electric cylinder life:

$$L_{10} = \left(\frac{Ca}{F_M} \right)^3 * L$$

L₁₀: electric cylinder life (km); Ca: dynamic rated load of screw (kN); F_M: average load borne by electric cylinder (kN); L: screw lead (mm)

Configuration legend

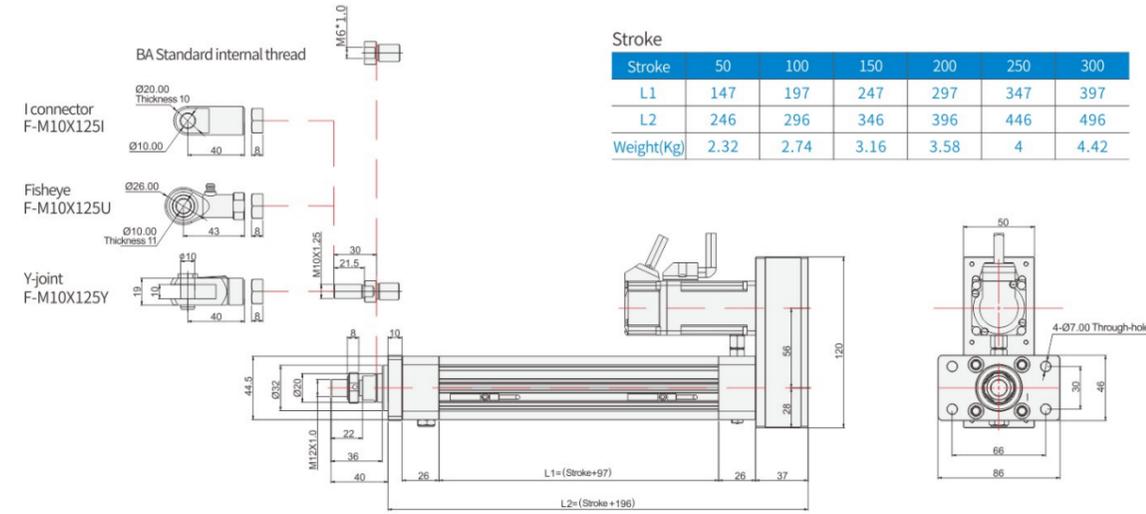


KDG4432 Servo Electric Cylinder

KDG4432 Servo Electric Cylinder

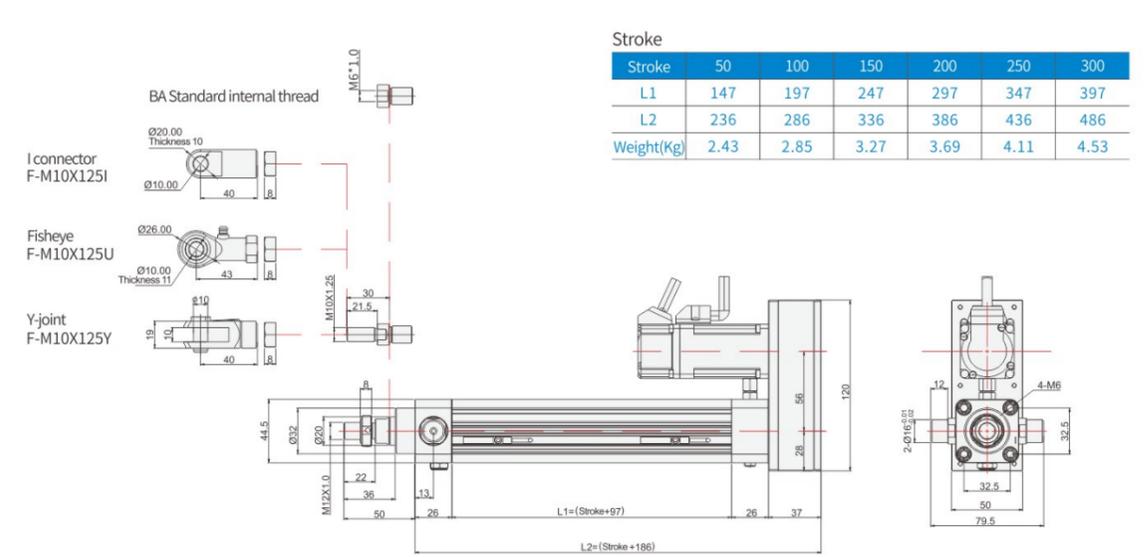
KDG4432-Folding - front flange
KDG4432-BL01

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



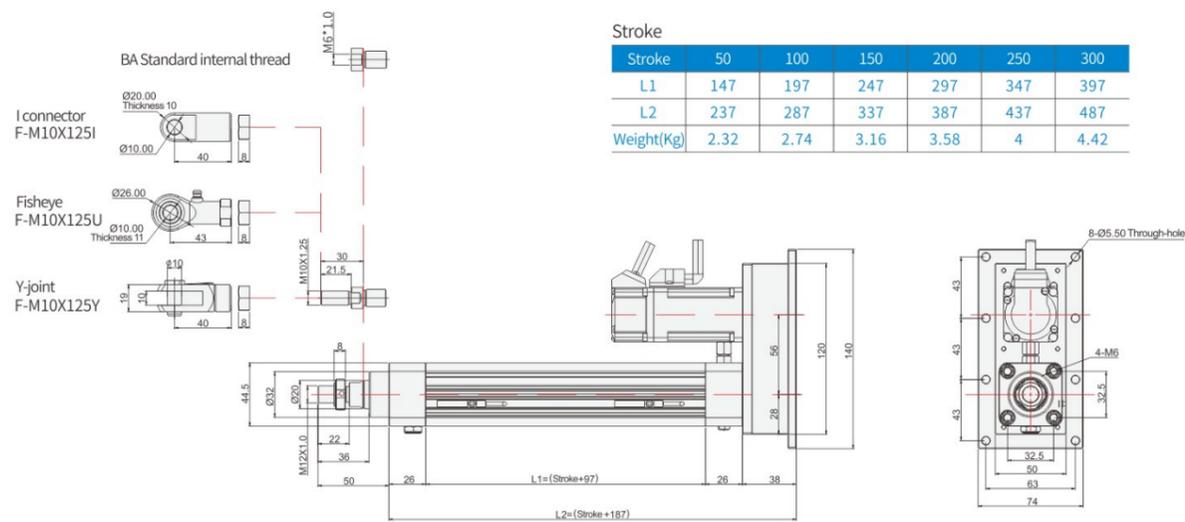
KDG4432-Folding - trunnion
KDG4432-BL03

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



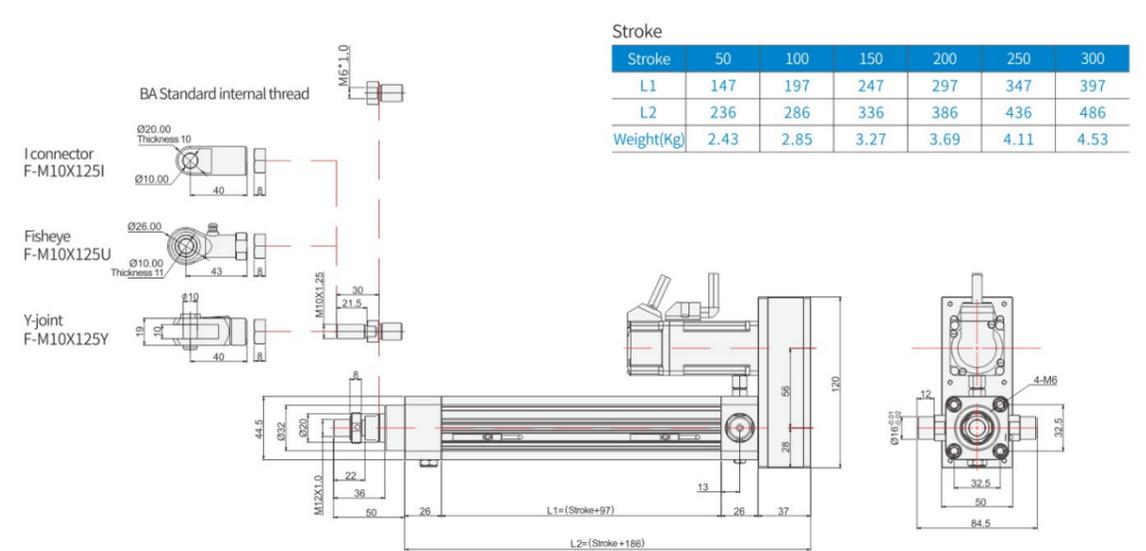
KDG4432-Folding - rear flange
KDG4432-BL02

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



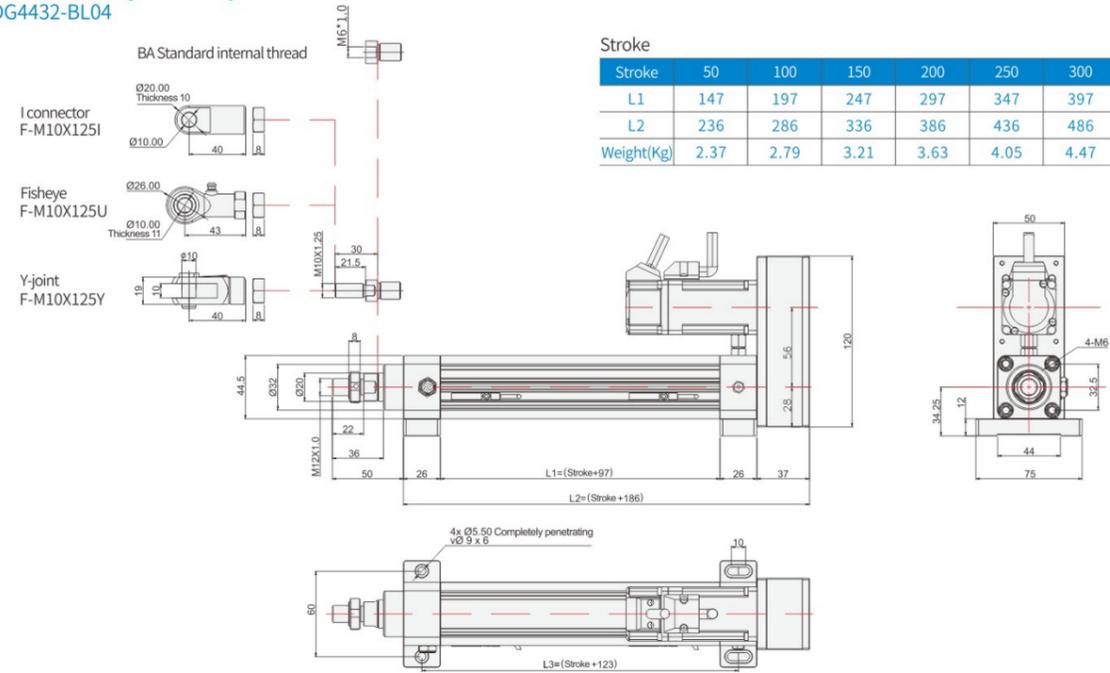
KDG4432-Folding - return rear trunnion
KDG4432-BL03H

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



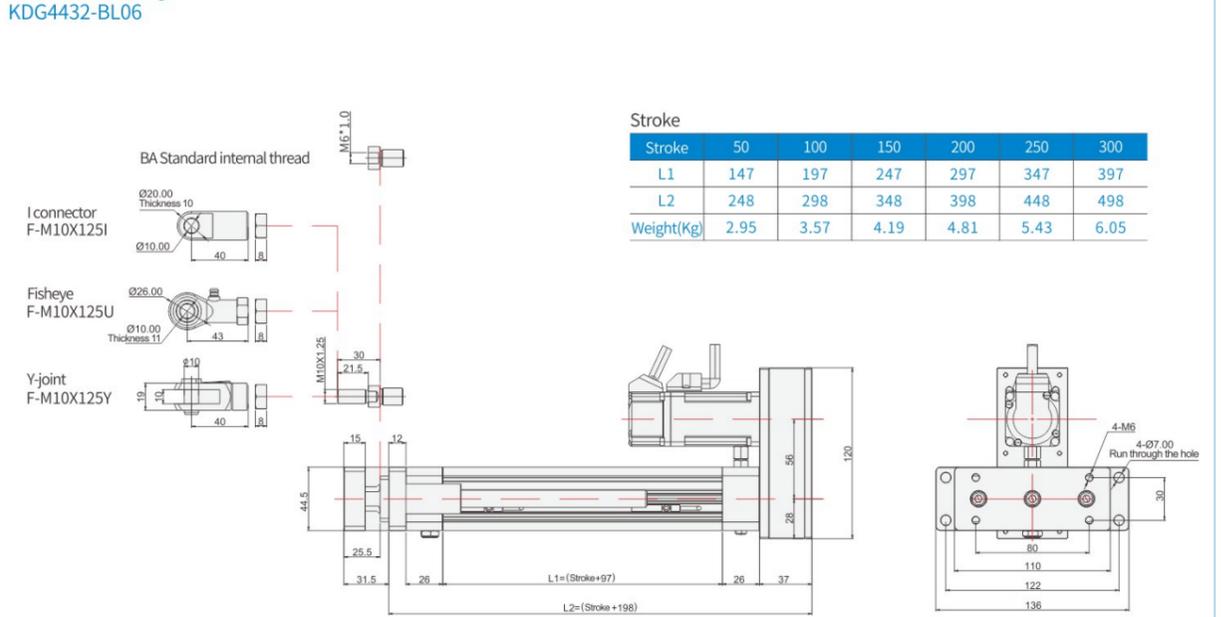
KDG4432-Folding - side flange
KDG4432-BL04

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



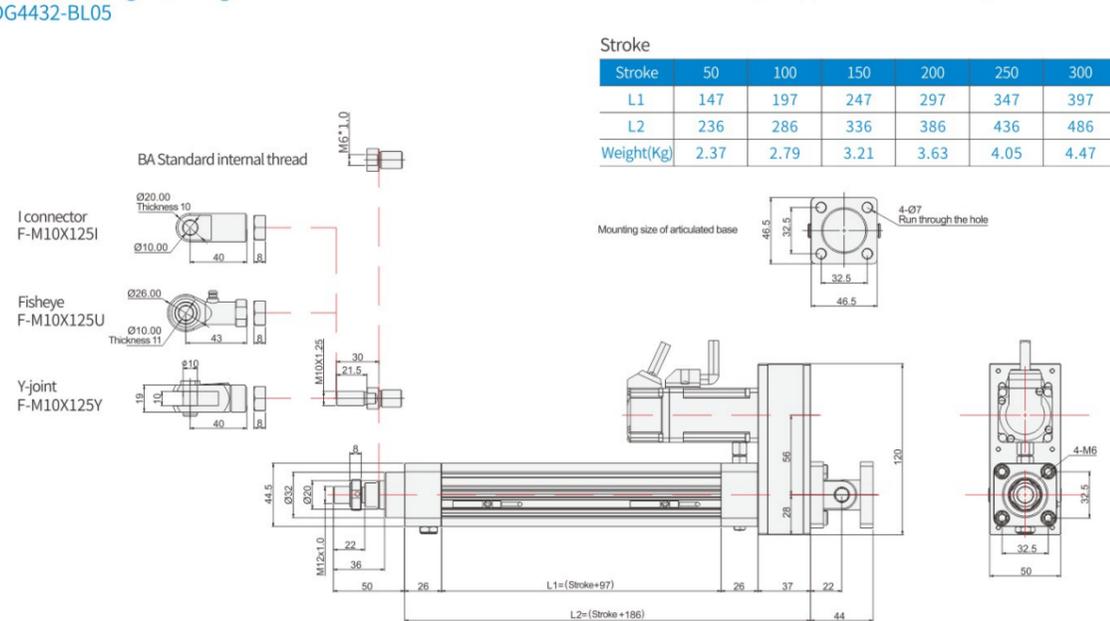
KDG4432-Folding - trunnion
KDG4432-BL06

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



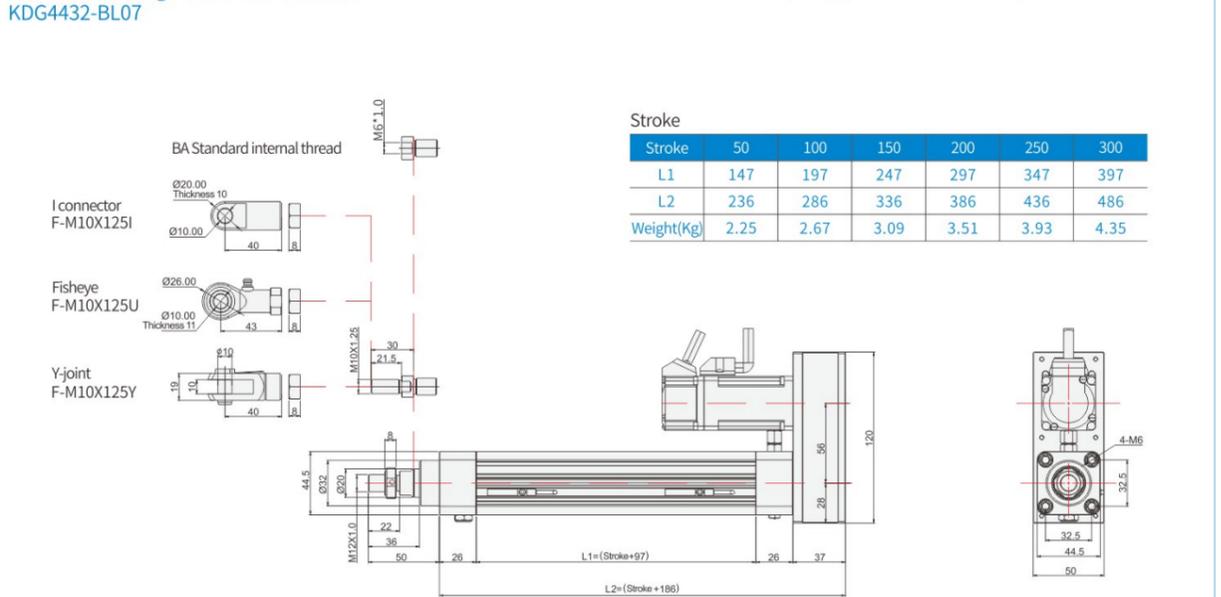
KDG4432-Folding - rear hinge
KDG4432-BL05

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



KDG4432-Folding - return rear trunnion
KDG4432-BL07

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

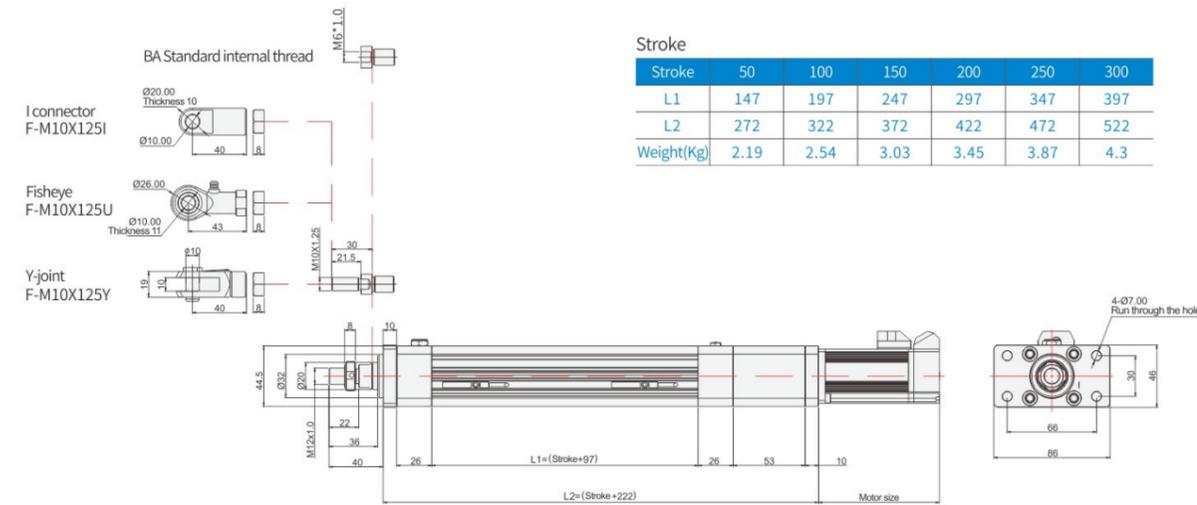


KDG4432 Servo Electric Cylinder

KDG4432 Servo Electric Cylinder

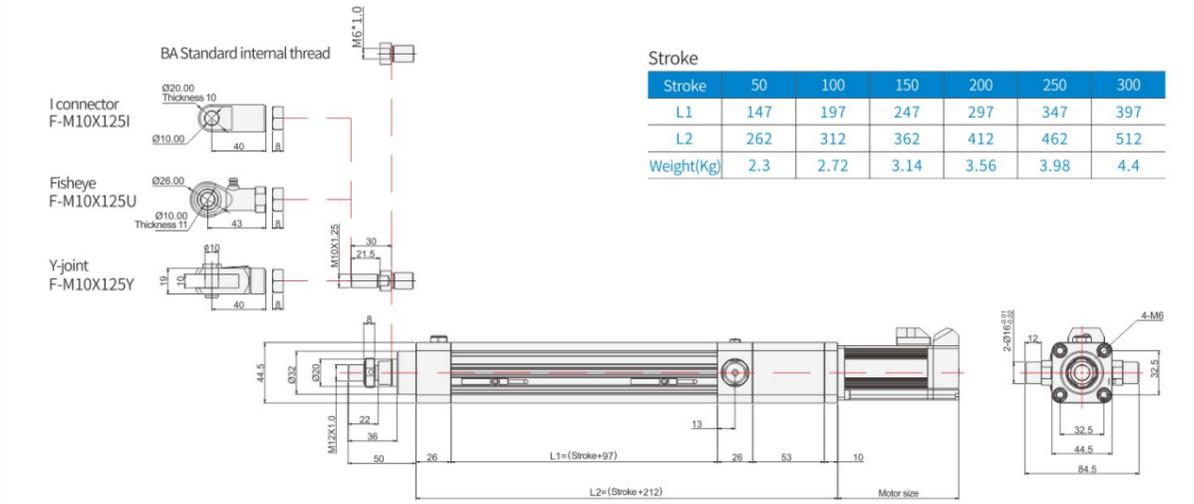
KDG4432-Direct connection - front flange
KDG4432-BC01

Note: when the motor mounting plate matches different motors, the size may change



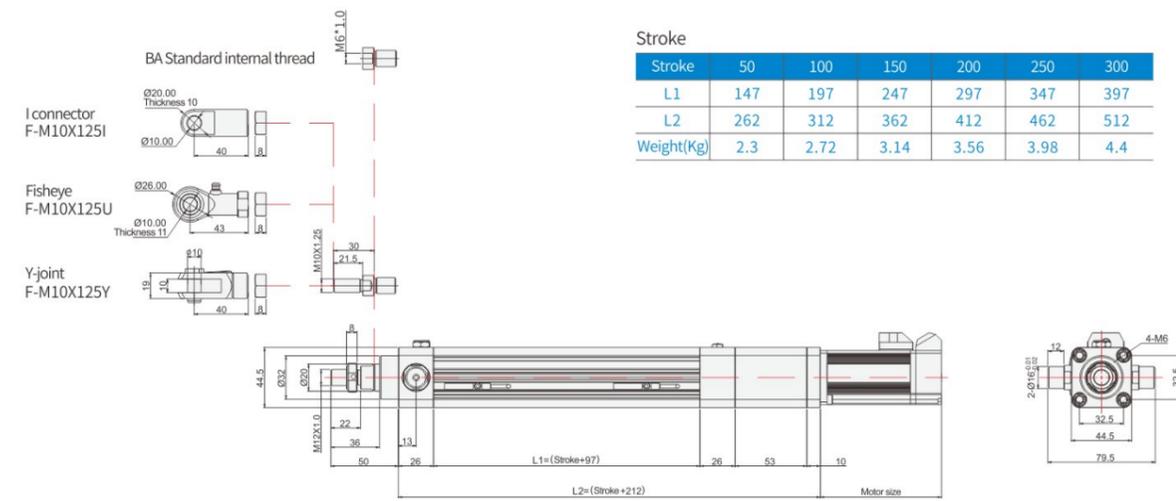
KDG4432-Direct connection - rear trunnion
KDG4432-BC03H

Note: when the motor mounting plate matches different motors, the size may change



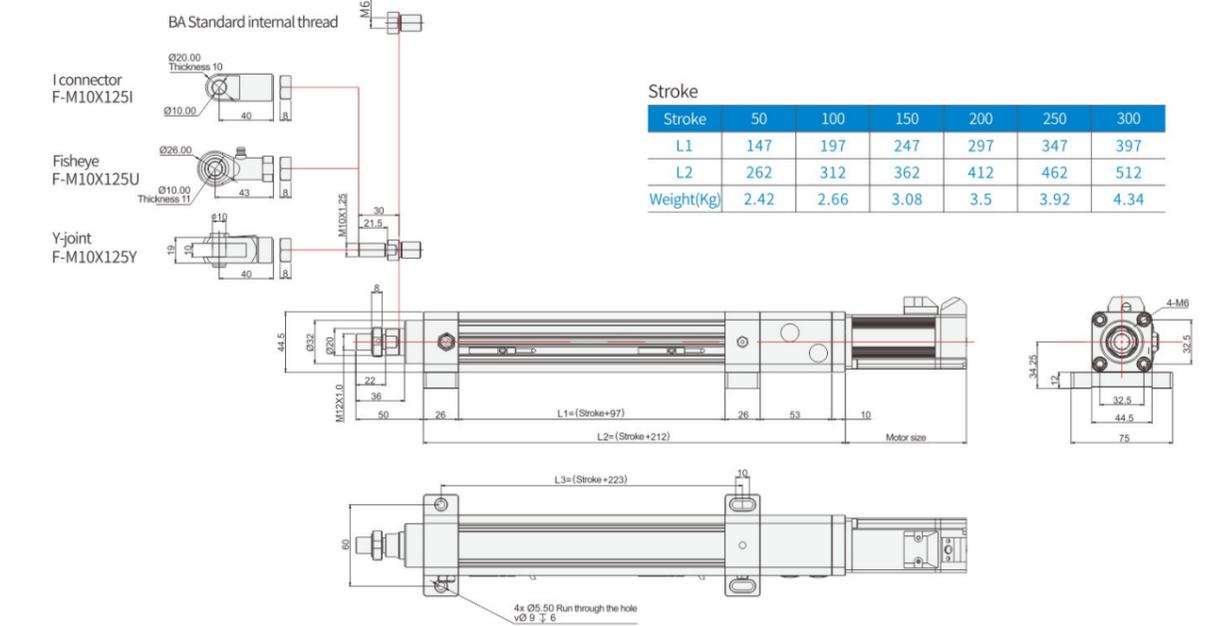
KDG4432-Direct connection - trunnion
KDG4432-BC03

Note: when the motor mounting plate matches different motors, the size may change



KDG4432-Direct connection - side flange
KDG4432-BC04

Note: when the motor mounting plate matches different motors, the size may change

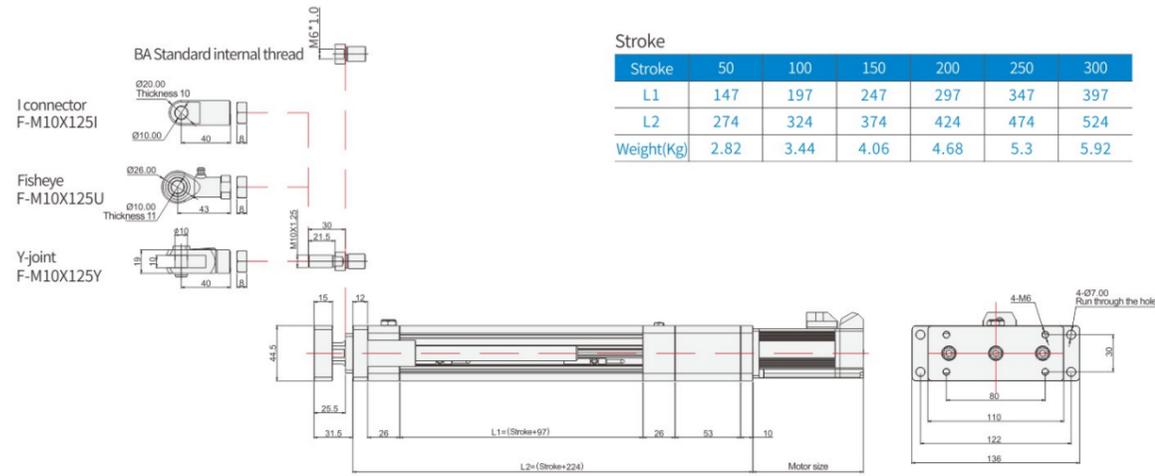


KDG4432 Servo Electric Cylinder

KDG4432

KDG4432-Direct connection - guide pillar type
KDG4432-BC06

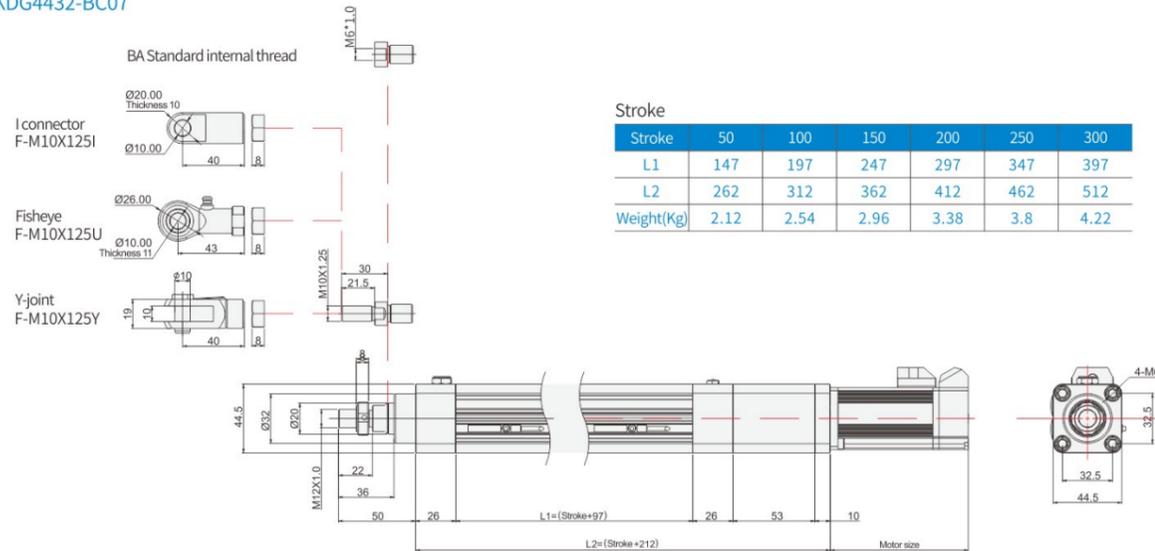
Note: when the motor mounting plate matches different motors, the size may change



MEMO

KDG4432-Direct connection - front lock type
KDG4432-BC07

Note: when the motor mounting plate matches different motors, the size may change



KDG5340 Servo Electric Cylinder

KDG5340 Servo Electric Cylinder

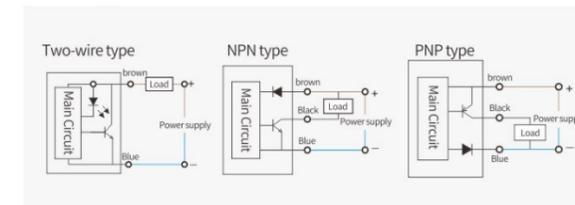


KDG5340 Series Standard Configuration Parameters

Foundation Information	
Cylinder OD	53*53mm
Cylinder ID	40mm
Screw typp	Ball screw Φ12
Stroke range	≤ 350 mm
Allowable maximum speed	≤ 500 mm/s
Allowable maximum thrust	≤ 1.5 kN

Load and accuracy			
Bearings	Cr(kN)	4.6	
	Cor(kN)	2.5	
Screw rod	Ca(kN)	Lead : 05	6.4
		Lead : 10	6.2
	Coa(kN)	Lead : 05	12.8
		Lead : 10	12.6
Accuracy Grade (mm)	C5	C7	
Repeatability (mm)	±0.01	±0.02	

Sensor Layout



Coupling and reducer configuration

Electric cylinder direct connecting Screw shaft diameter	Reducer / motor shaft diameter	Coupling model (AKD brand) OD * length - output shaft - K: international keyway
Φ14	Φ14-L27	SFR30*35-14K-14K

Conductor Spec.

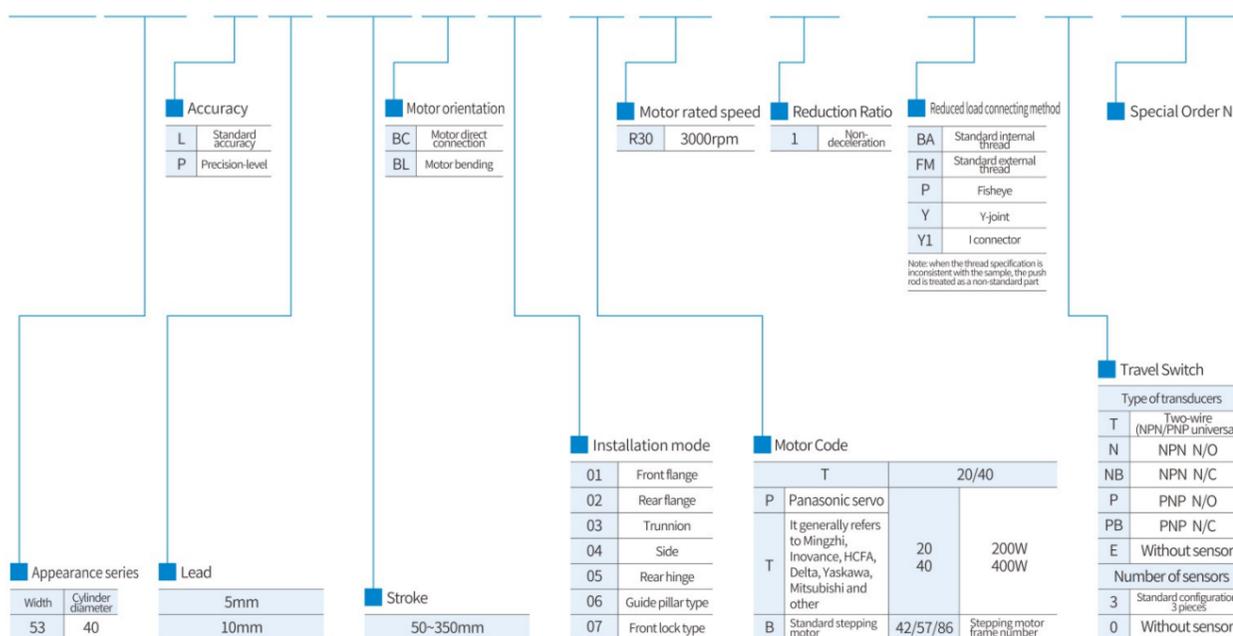
Code	Type	Model Specifications
T	Standard two-wire system	ZMDG-2 N/O ZMDGC-2 N/C
N	NPN Type	ZMDN-2 N/O ZMDNC-2 N/C
P	PNP Type	ZMDP-2 N/O ZMDPC-2 N/C

KDG5340 Force and speed

Motor power		200W servo (60 frame)		400W servo (60 frame)		57 Stepping	
Rated speed		3000rpm		3000rpm		/	
Rated torque		0.63N.m		1.27N.m		/	
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)
1	5	0.68	250	1.36	250	/	/
	10	0.34	500	0.68	500	/	/

Ordering Method

KDG 5340 - L 05 - 100-BC 01- T20 R30 JS1 - BA - T3 - D123



Rated thrust calculation formula:

$$F = \frac{T * 2\pi * i}{L} * \mu$$

F: electric cylinder thrust (kN); T: motor torque (N.m); π: ratio of circumference to diameter; i: reduction ratio; L: screw lead (mm); μ: efficiency, the total working efficiency of electric cylinder is recommended to be 85%

Calculation formula of output shaft speed:

$$V = \frac{R * L}{i} \div 60$$

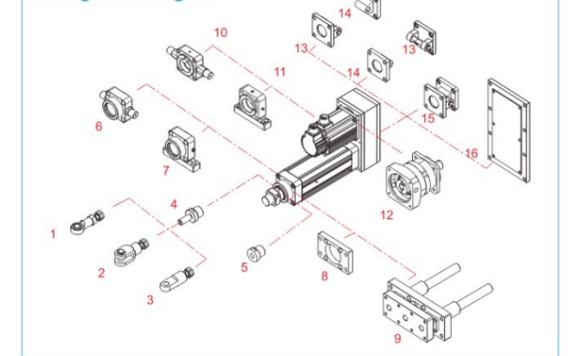
V: output shaft speed (mm/s); R: motor speed (r/min); L: screw lead (mm); i: reduction ratio; 60: constant

Calculation formula of electric cylinder life:

$$L_{10} = \left(\frac{Ca}{F_M} \right)^3 * L$$

L₁₀: electric cylinder life (km); Ca: dynamic rated load of screw (kN); F_M: average load borne by electric cylinder (kN); L: screw lead (mm)

Configuration legend

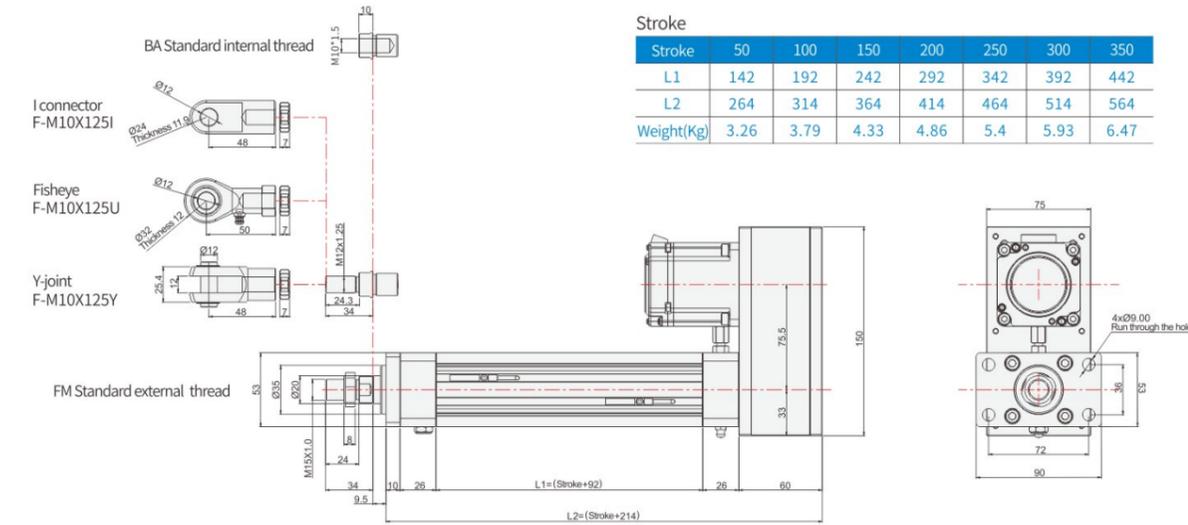


KDG5340 Servo Electric Cylinder

KDG5340 Servo Electric Cylinder

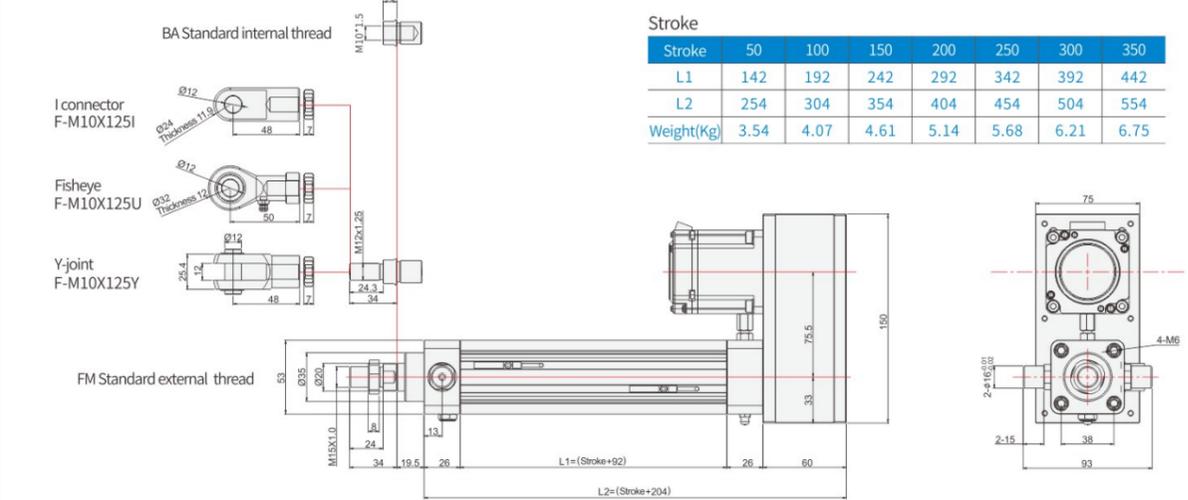
KDG5340-Folding - front flange
KDG5340-BL01

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



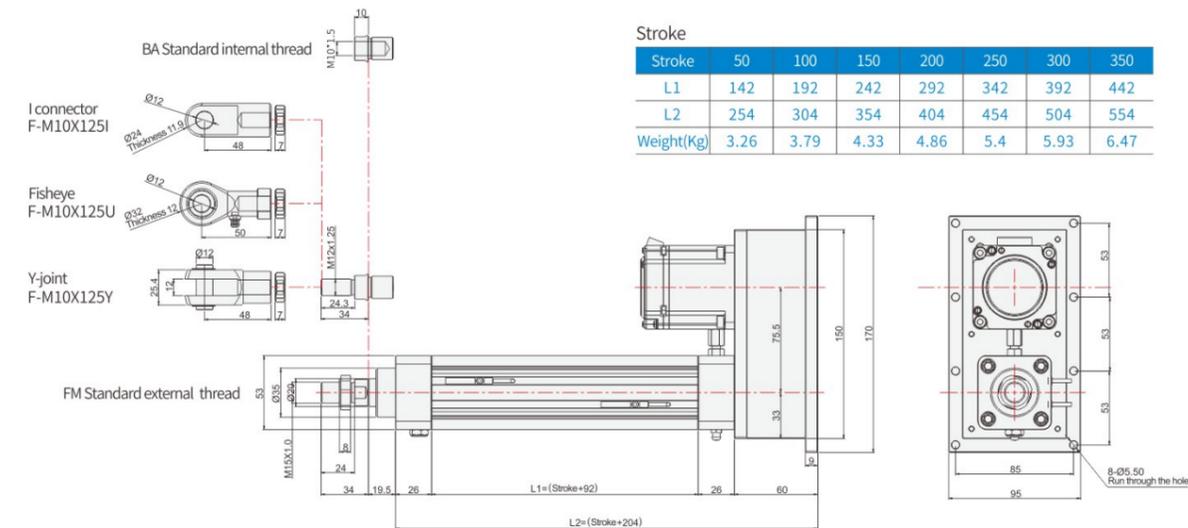
KDG5340-Folding - trunnion
KDG5340-BL03

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



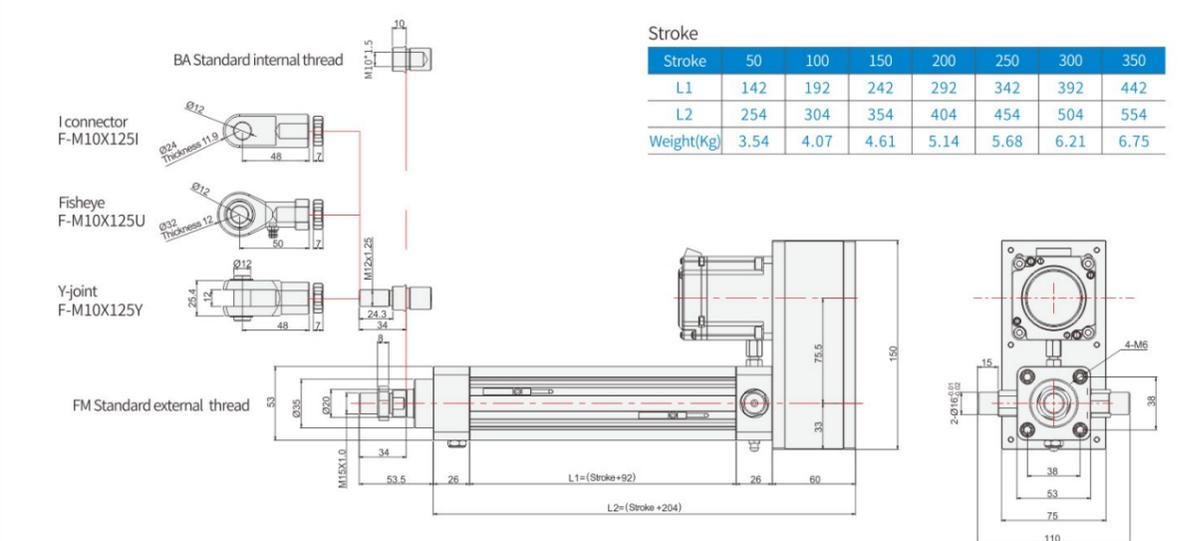
KDG5340-Folding - rear flange
KDG5340-BL02

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



KDG5340-Folding - return rear trunnion
KDG5340-BL03H

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

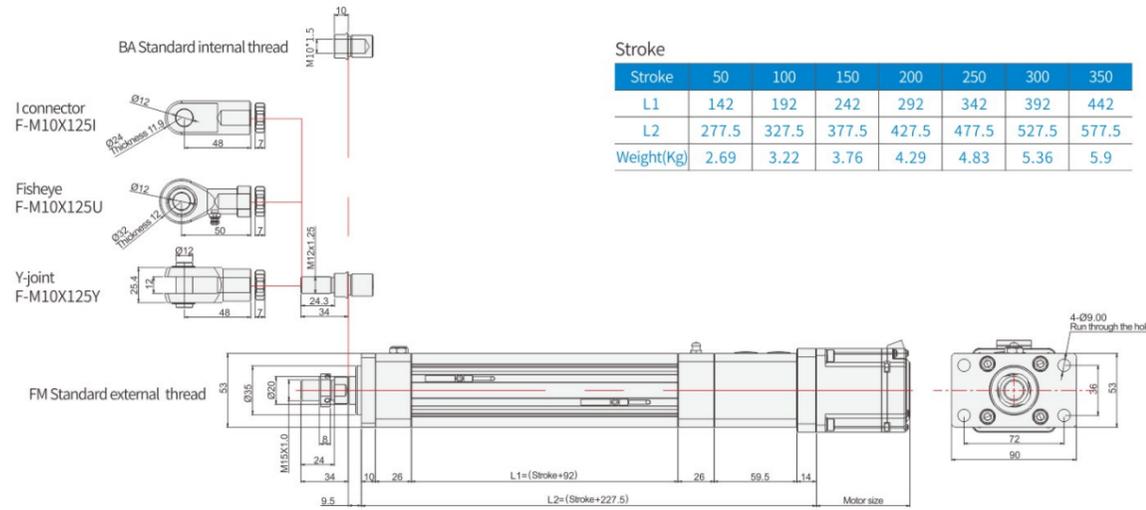


KDG5340 Servo Electric Cylinder

KDG5340 Servo Electric Cylinder

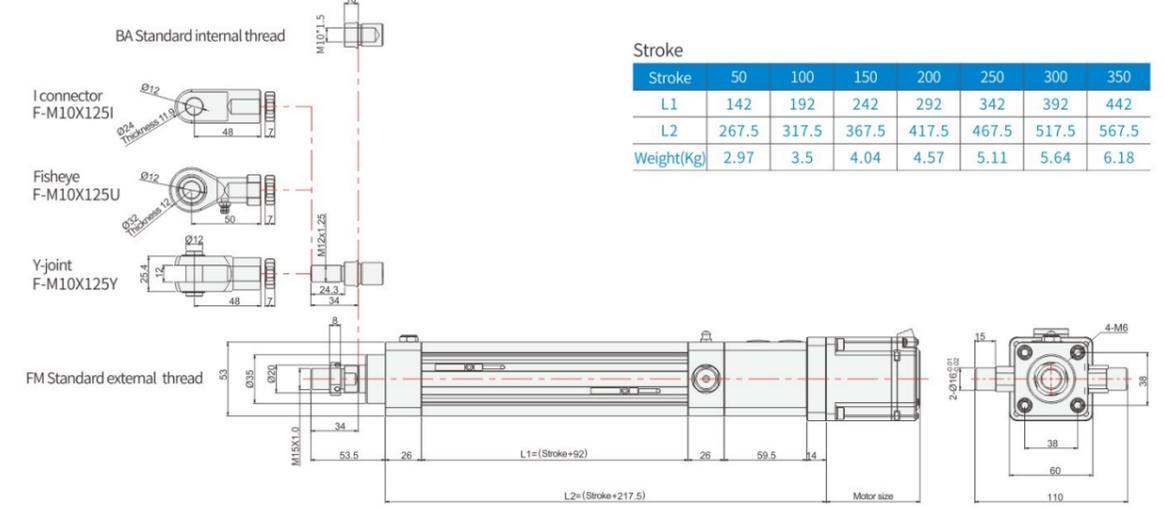
KDG5340-Direct connection - front flange
KDG5340-BC01

Note: when the motor mounting plate matches different motors, the size may change



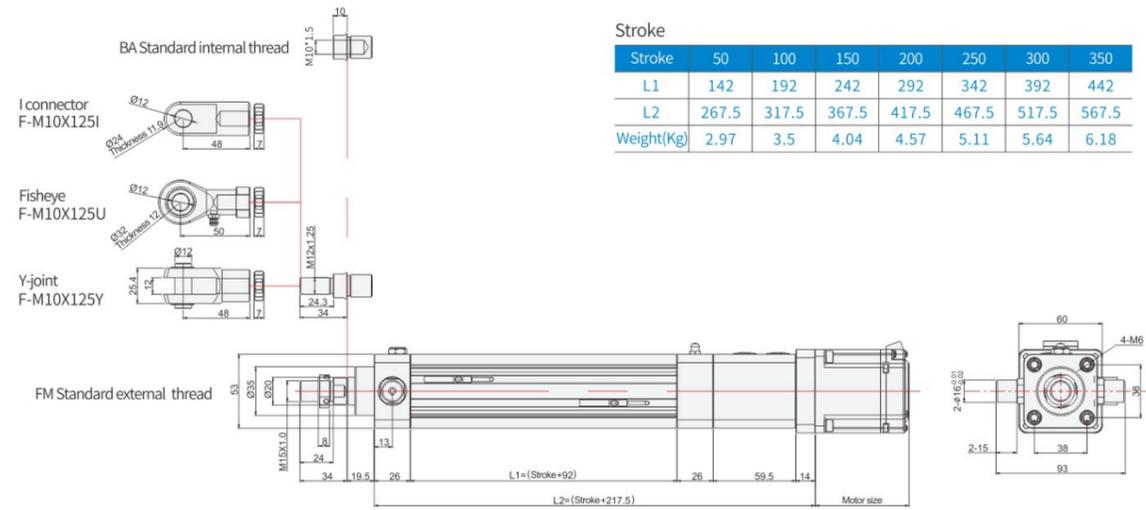
KDG5340-Direct connection - rear trunnion
KDG5340-BC03H

Note: when the motor mounting plate matches different motors, the size may change



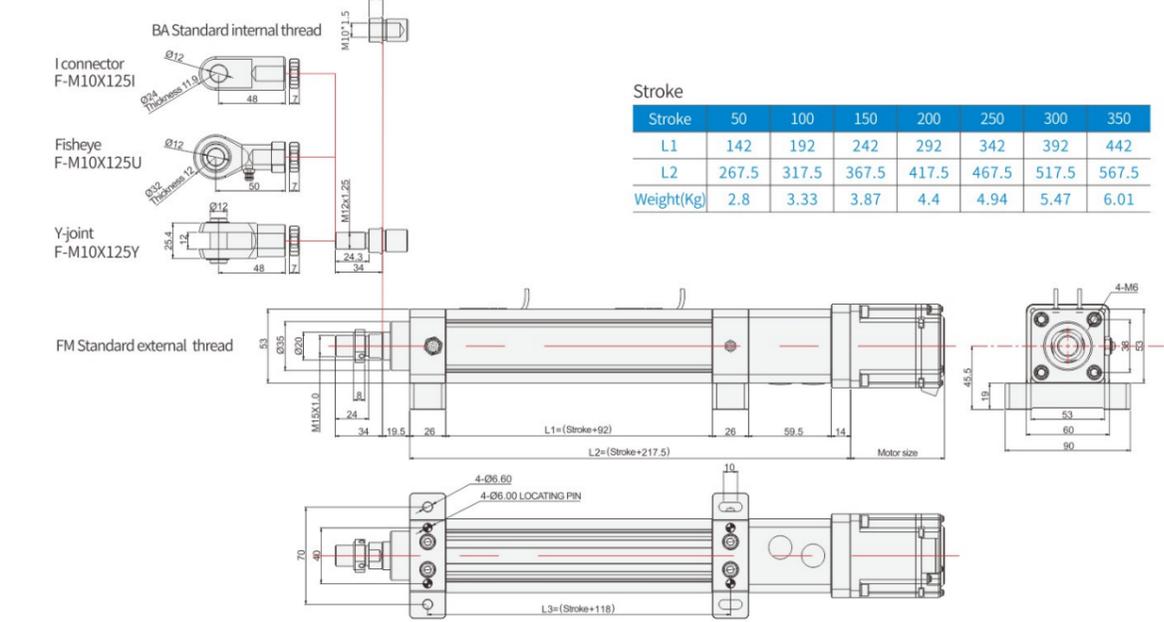
KDG5340-Direct connection - trunnion
KDG5340-BC03

Note: when the motor mounting plate matches different motors, the size may change



KDG5340-Direct connection - side flange
KDG5340-BC04

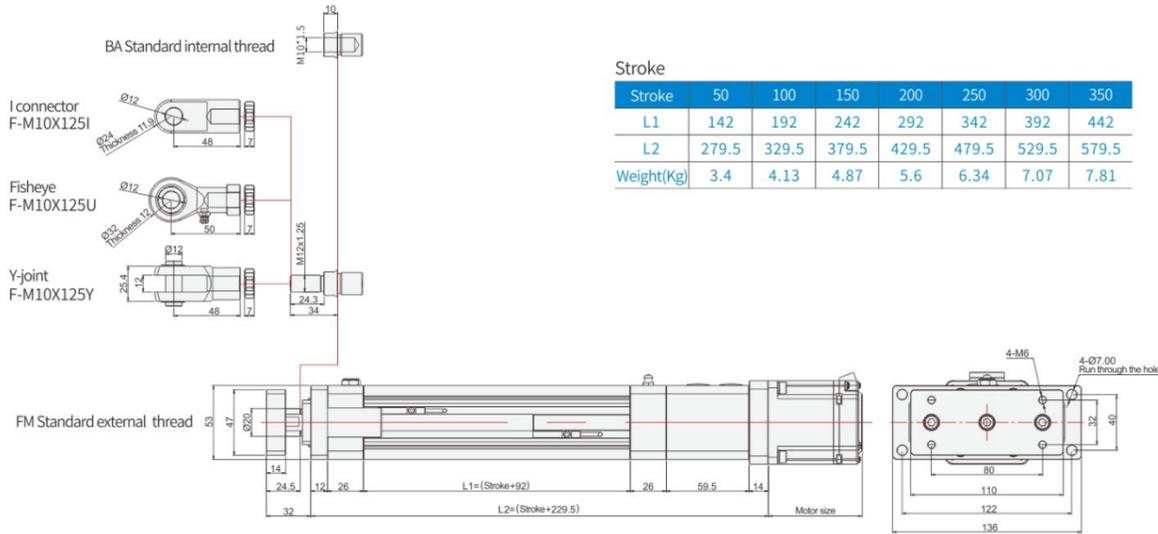
Note: when the motor mounting plate matches different motors, the size may change



KDG5340 Servo Electric Cylinder

KDG5340-Direct connection - guide pillar type
KDG5340-BC06

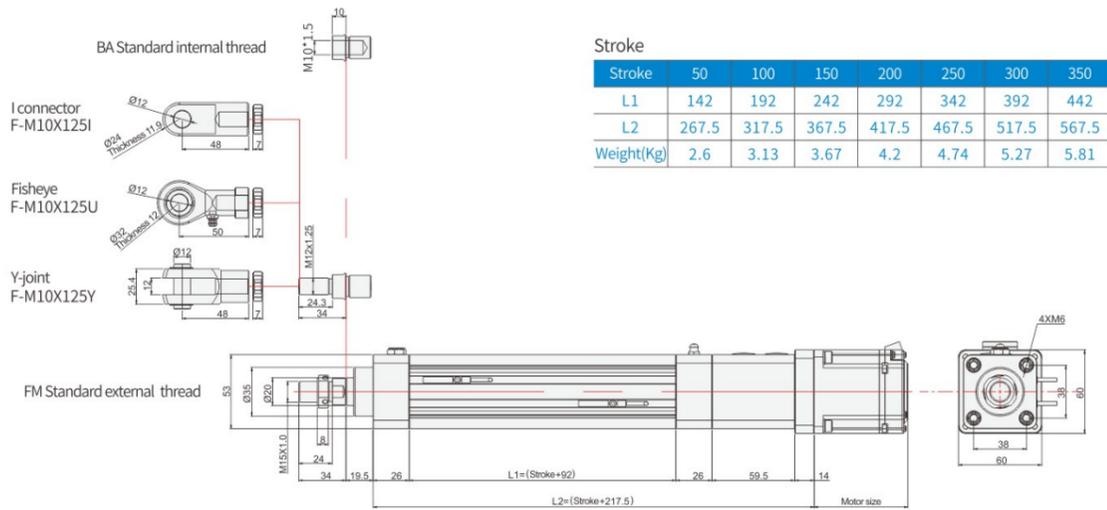
Note: when the motor mounting plate matches different motors, the size may change



MEMO

KDG5340-Direct connection - front lock type
KDG5340-BC07

Note: when the motor mounting plate matches different motors, the size may change



- KDG4027
- KDG4432
- KDG5340**
- KDG6350
- KDG7463
- KDG9580
- KDG110100

- KDG4027
- KDG4432
- KDG5340**
- KDG6350
- KDG7463
- KDG9580
- KDG110100

KDG6350 Servo Electric Cylinder

KDG6350 Servo Electric Cylinder



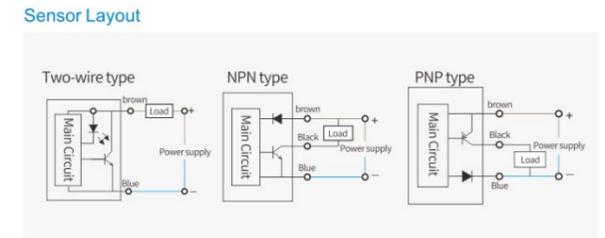
KDG6350 Series Standard Configuration Parameters

Foundation Information

Cylinder OD	63*63mm
Cylinder ID	50mm
Screw typp	Ball screw Φ16
Stroke range	≤ 500 mm
Allowable maximum speed	≤ 500 mm/s
Allowable maximum thrust	≤ 3.5 kN
	≤ 5 kN(U)

Load and accuracy

Bearings	Cr(kN)	23.6	
	Cor(kN)	21.1	
Screw rod	Ca(kN)	Lead: 05	10.9
		Lead: 10	8.2
		Lead: 20	5.4
	Coa(kN)	Lead: 05	24.5
		Lead: 10	17.8
		Lead: 20	11.4
Accuracy Grade (mm)	C5	C7	
Repeatability (mm)	±0.01	±0.02	



Coupling and reducer configuration

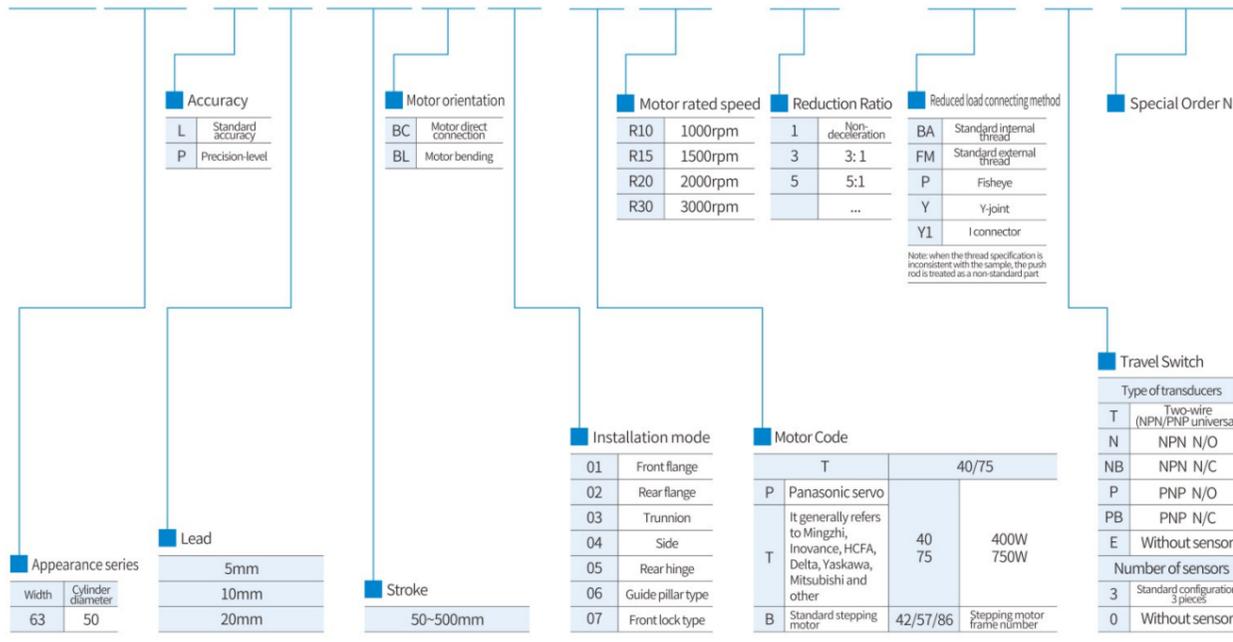
Electric cylinder direct connecting Screw shaft diameter	Reducer / motor shaft diameter	Coupling model (AKD brand) OD * length - output shaft - K: international keyway
	Φ14	Φ14-L27 SFR30*40-14K-14K Φ19-L32 SFR40*50-14K-19K

Conductor Spec.

Code	Type	Model Specifications
T	Standard two-wire system	ZMDG-2N/O ZMDGC-2N/C
N	NPN Type	ZMDN-2N/O ZMDNC-2N/C
P	PNP Type	ZMDP-2N/O ZMDPC-2N/C

Ordering Method

KDG 6350 - L 05 - 100-BC 01- T40 R30 JS1 - BA - T3 - D123



KDG6350 Force and speed

Motor power	400W servo (60 frame)	750W servo (60 frame)	1000W servo (80 frame)				
Rated speed	3000rpm	3000rpm	3000rpm				
Rated torque	1.27N.m	2.39N.m	3.18N.m				
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)
1	5	1.36	250	2.55	250	3.4	250
	10	0.68	500	1.27	500	1.7	500
2/同步轮减速	5	2.72	125	5.1 (U)	125	/	/
4	5	5.44 (U)	62.5	/	/	/	/
7	10	4.76 (U)	71.4	/	/	/	/

Rated thrust calculation formula:

$$F = \frac{T * 2\pi * i}{L} * \mu$$

F: electric cylinder thrust (kN); T: motor torque (N.m); π: ratio of circumference to diameter; i: reduction ratio; L: screw lead (mm); μ: efficiency, the total working efficiency of electric cylinder is recommended to be 85%

Calculation formula of output shaft speed:

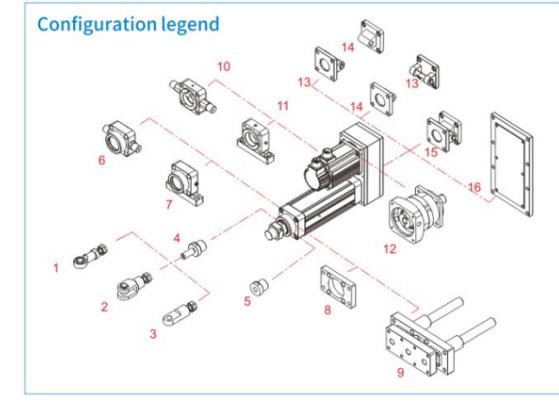
$$V = \frac{R * L}{i} \div 60$$

V: output shaft speed (mm/s); R: motor speed (r/min); L: screw lead (mm); i: reduction ratio; 60: constant

Calculation formula of electric cylinder life:

$$L_{10} = \left(\frac{Ca}{F_M} \right)^3 * L$$

L₁₀: electric cylinder life (km); Ca: dynamic rated load of screw (kN); F_M: average load borne by electric cylinder (kN); L: screw lead (mm)

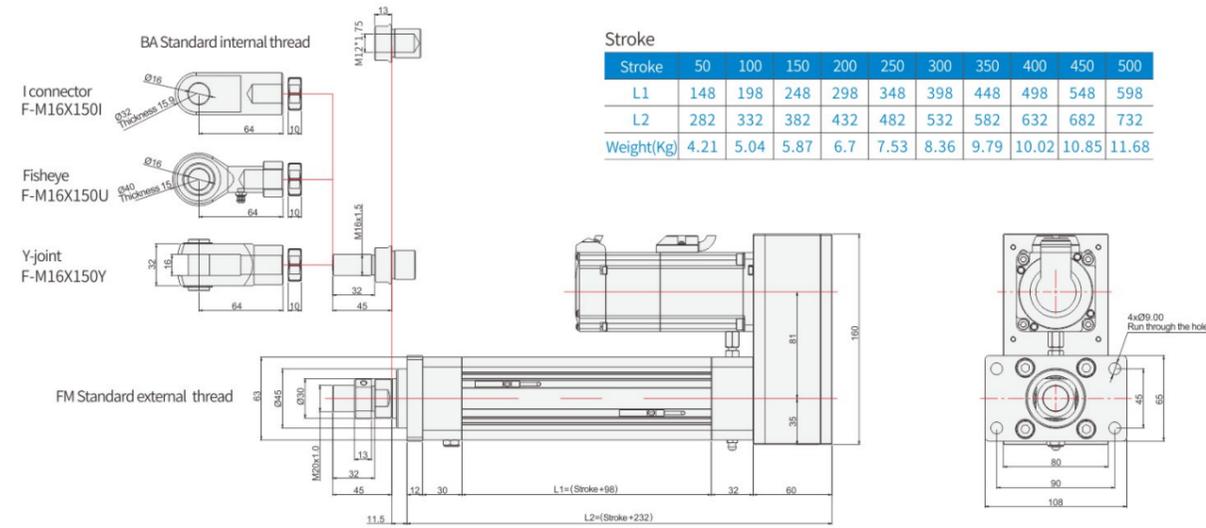


KDG6350 Servo Electric Cylinder

KDG6350 Servo Electric Cylinder

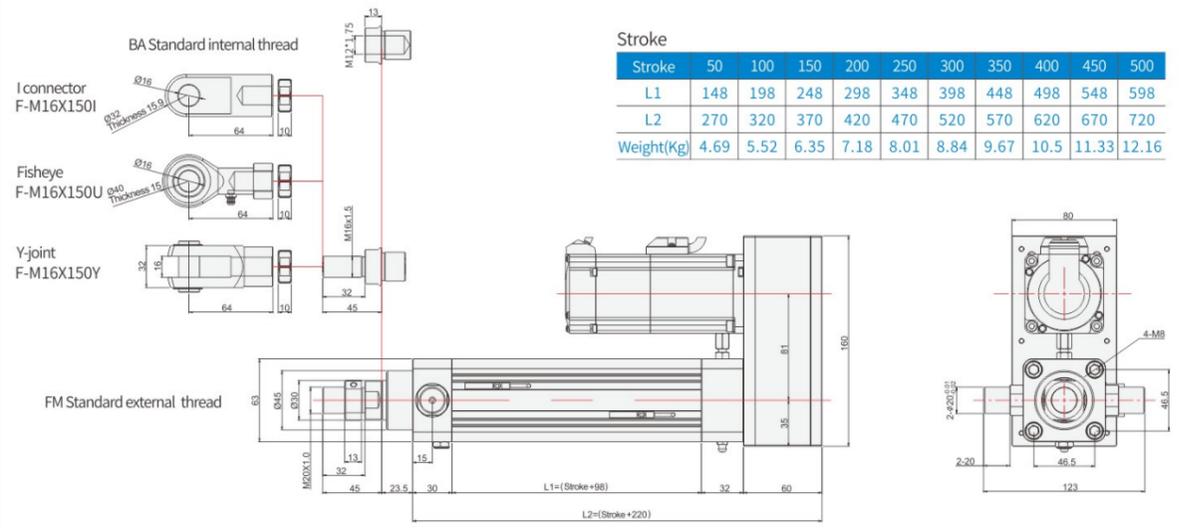
KDG6350-Folding - front flange
KDG6350-BL01

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



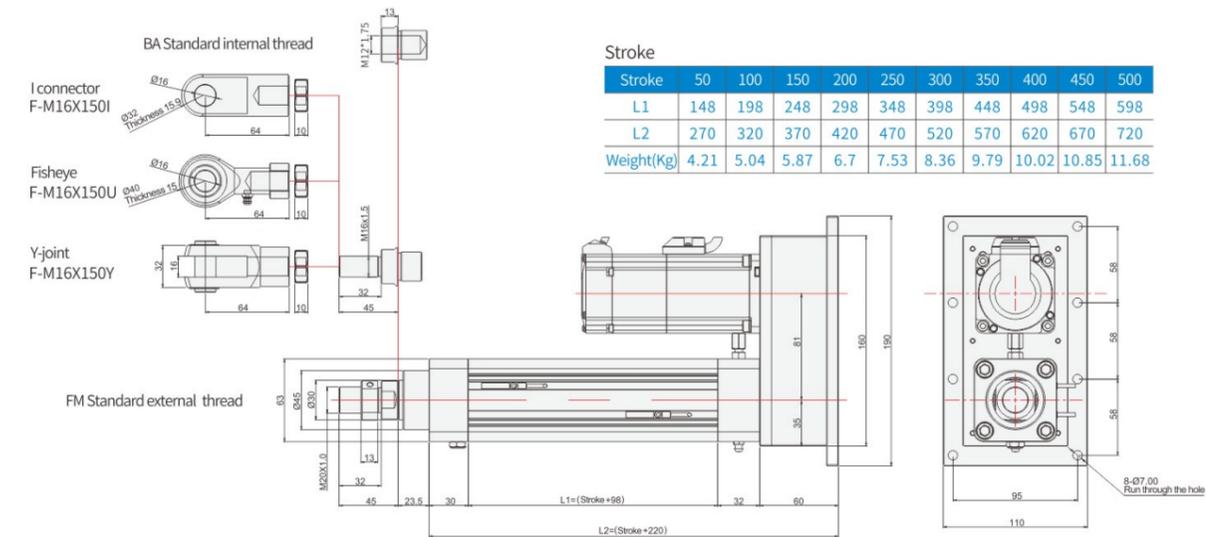
KDG6350-Folding - trunnion
KDG6350-BL03

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



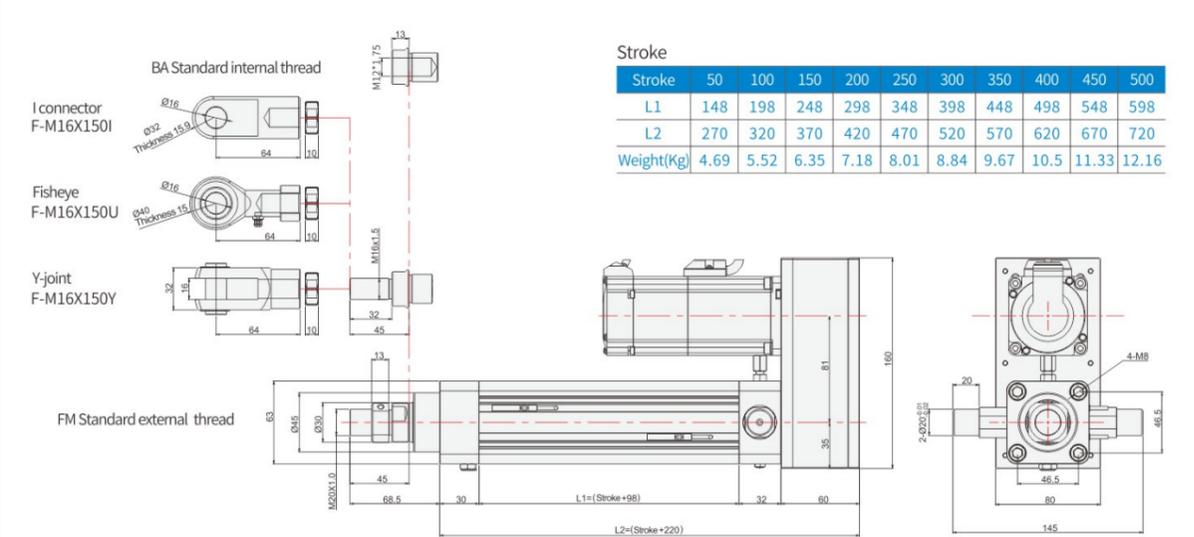
KDG6350-Folding - rear flange
KDG6350-BL02

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



KDG6350-Folding - return rear trunnion
KDG6350-BL03H

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



- KDG4027
- KDG4432
- KDG5340
- KDG6350**
- KDG7463
- KDG9580
- KDG110100

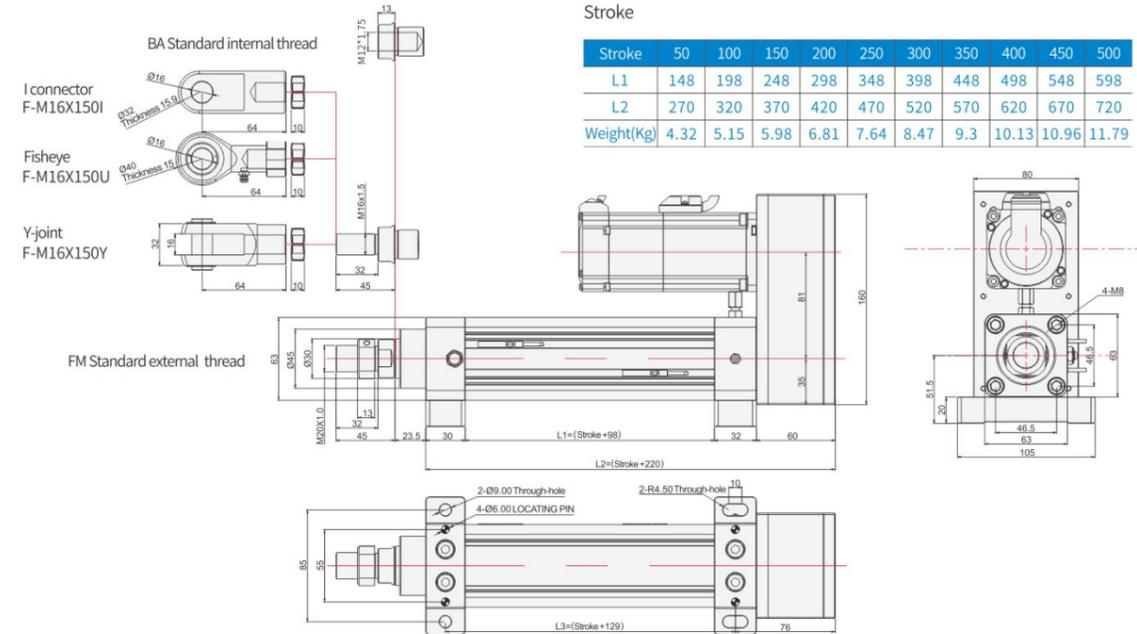
- KDG4027
- KDG4432
- KDG5340
- KDG6350**
- KDG7463
- KDG9580
- KDG110100

KDG6350-Folding - side flange
KDG6350-BL04

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

Stroke

Stroke	50	100	150	200	250	300	350	400	450	500
L1	148	198	248	298	348	398	448	498	548	598
L2	270	320	370	420	470	520	570	620	670	720
Weight(Kg)	4.32	5.15	5.98	6.81	7.64	8.47	9.3	10.13	10.96	11.79

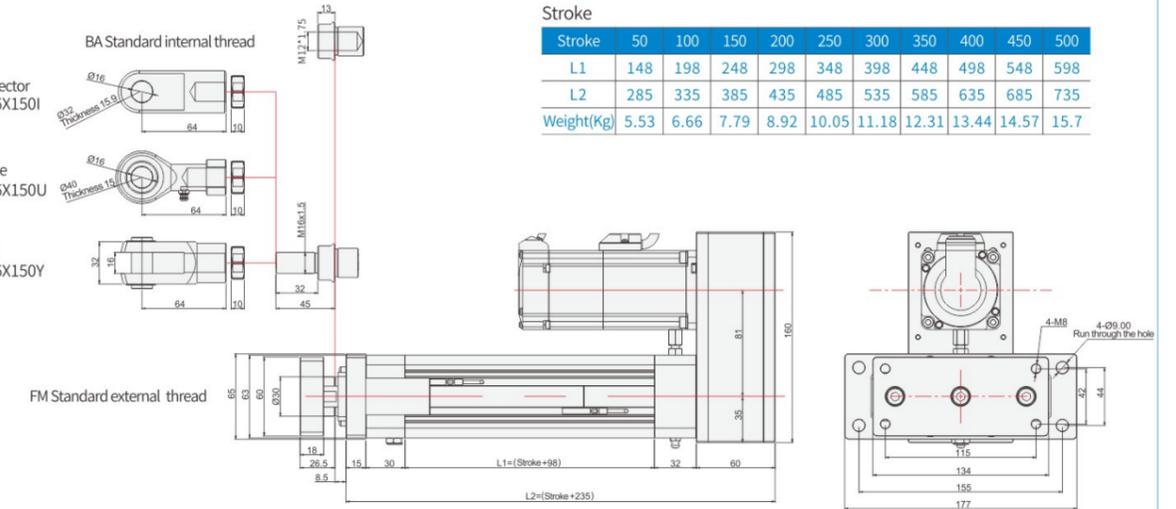


KDG6350-Folding - guide pillar type
KDG6350-BL06

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

Stroke

Stroke	50	100	150	200	250	300	350	400	450	500
L1	148	198	248	298	348	398	448	498	548	598
L2	285	335	385	435	485	535	585	635	685	735
Weight(Kg)	5.53	6.66	7.79	8.92	10.05	11.18	12.31	13.44	14.57	15.7

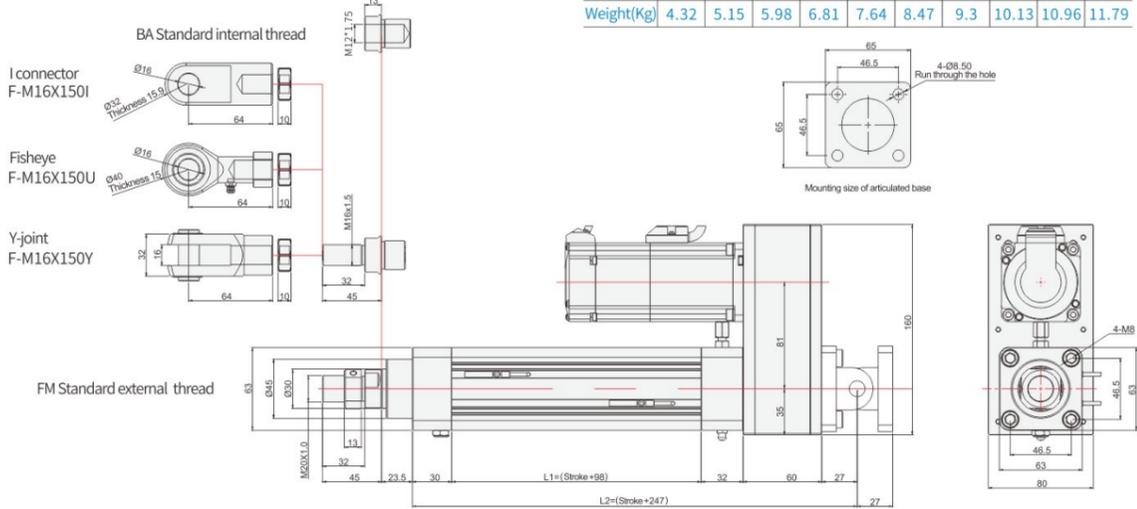


KDG6350-Folding - rear hinge
KDG6350-BL05

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

Stroke

Stroke	50	100	150	200	250	300	350	400	450	500
L1	148	198	248	298	348	398	448	498	548	598
L2	297	347	397	447	497	547	597	647	697	747
Weight(Kg)	4.32	5.15	5.98	6.81	7.64	8.47	9.3	10.13	10.96	11.79

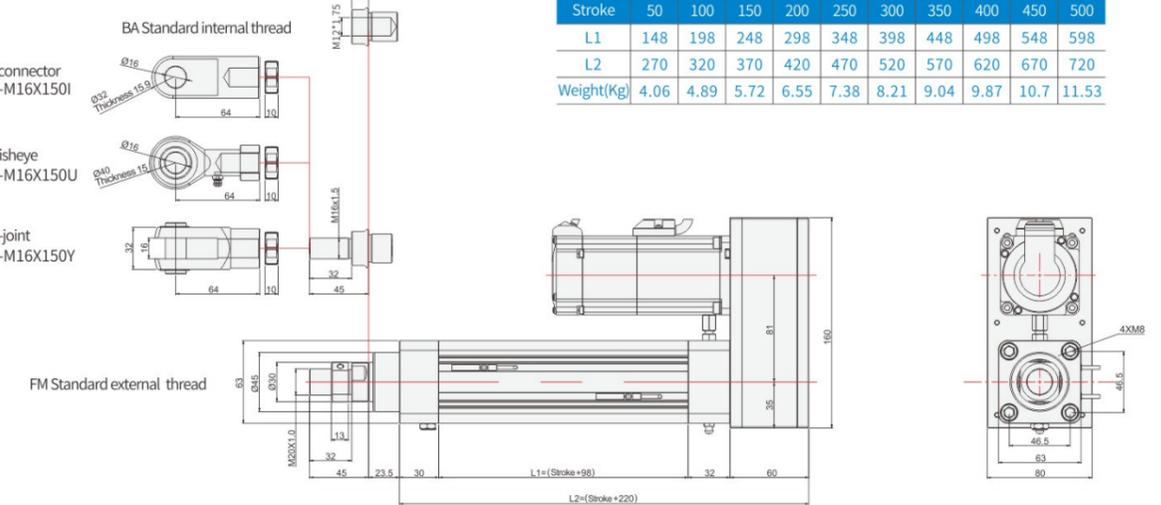


KDG6350-Folding - front lock type
KDG6350-BL07

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

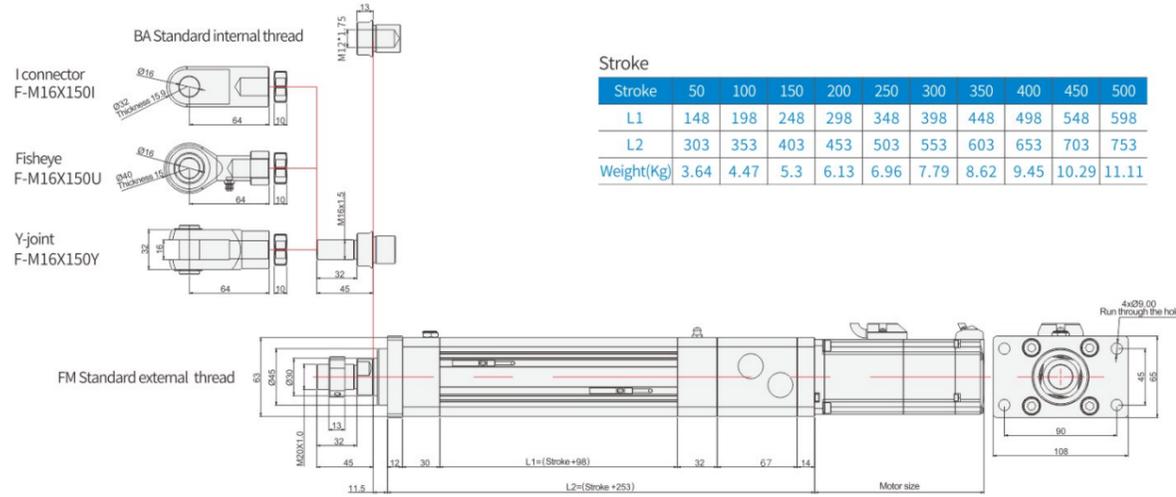
Stroke

Stroke	50	100	150	200	250	300	350	400	450	500
L1	148	198	248	298	348	398	448	498	548	598
L2	270	320	370	420	470	520	570	620	670	720
Weight(Kg)	4.06	4.89	5.72	6.55	7.38	8.21	9.04	9.87	10.7	11.53



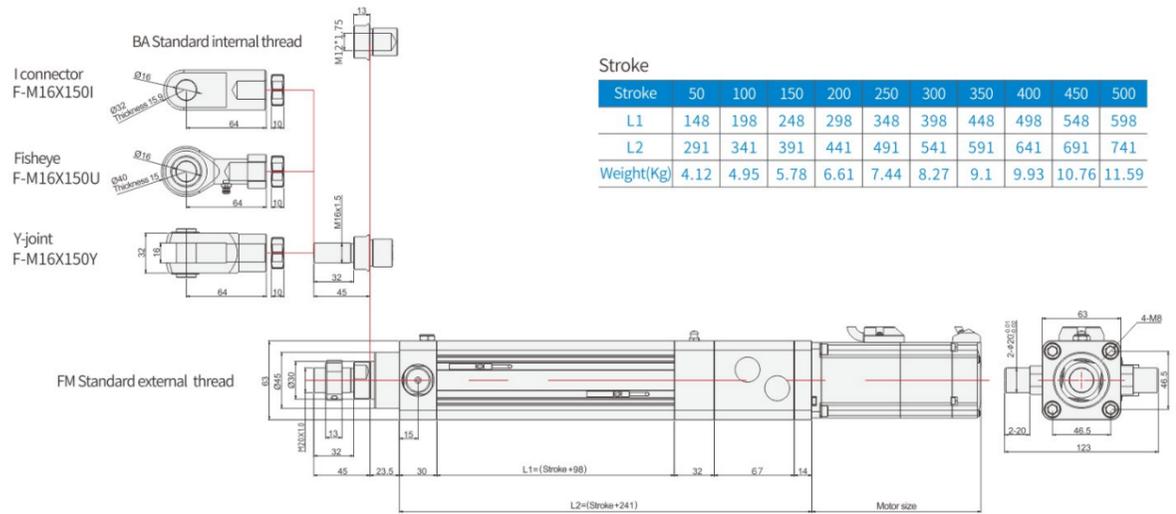
KDG6350-Direct connection - front flange
KDG6350-BC01

Note: when the motor mounting plate matches different motors, the size may change



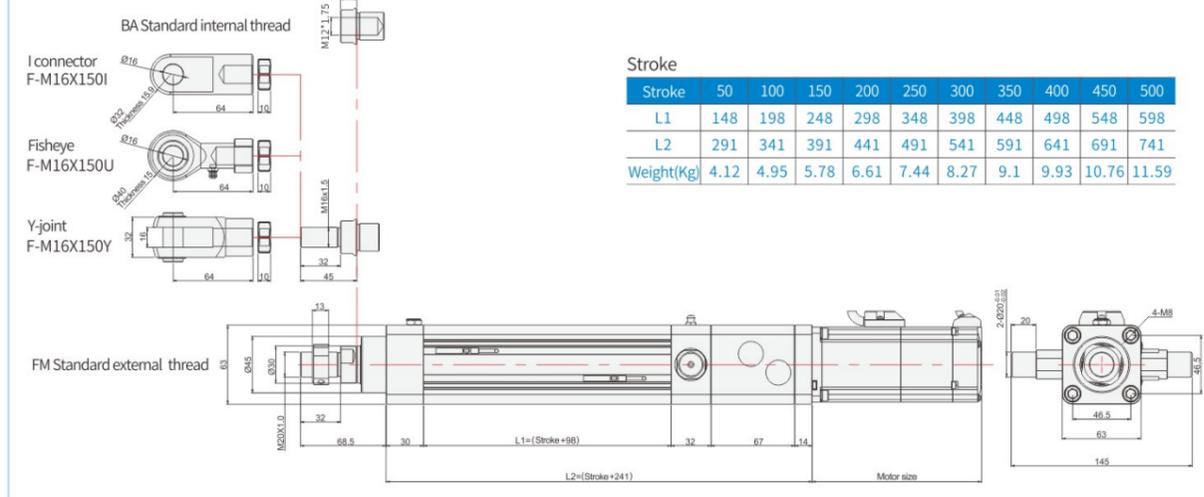
KDG6350-Direct connection - trunnion
KDG6350-BC03

Note: when the motor mounting plate matches different motors, the size may change



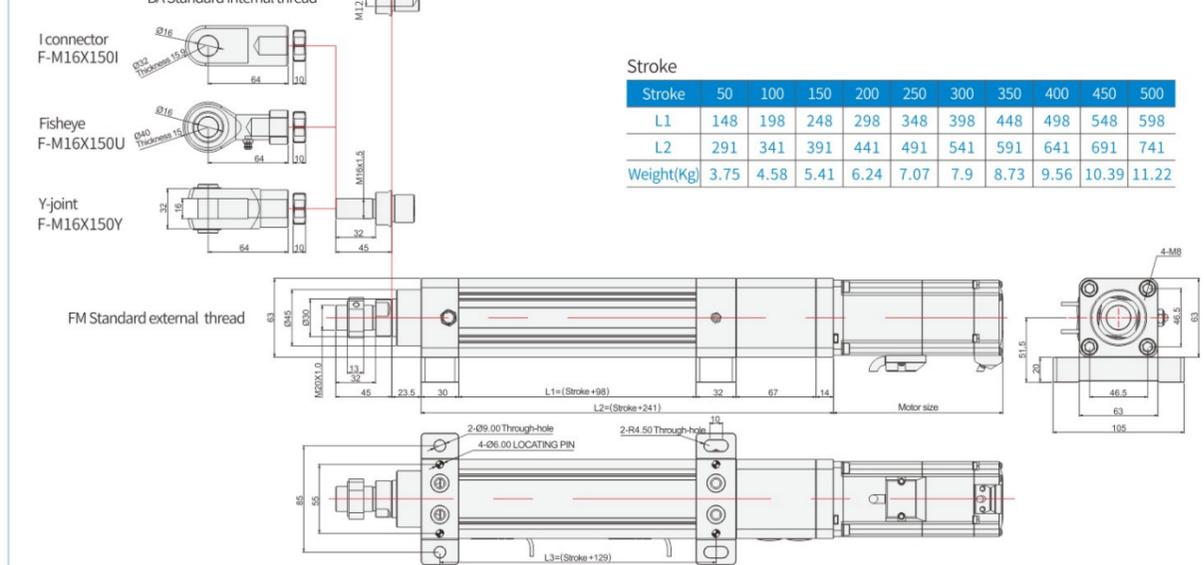
KDG6350-Direct connection - rear trunnion
KDG6350-BC03H

Note: when the motor mounting plate matches different motors, the size may change



KDG6350-Direct connection - side flange
KDG6350-BC04

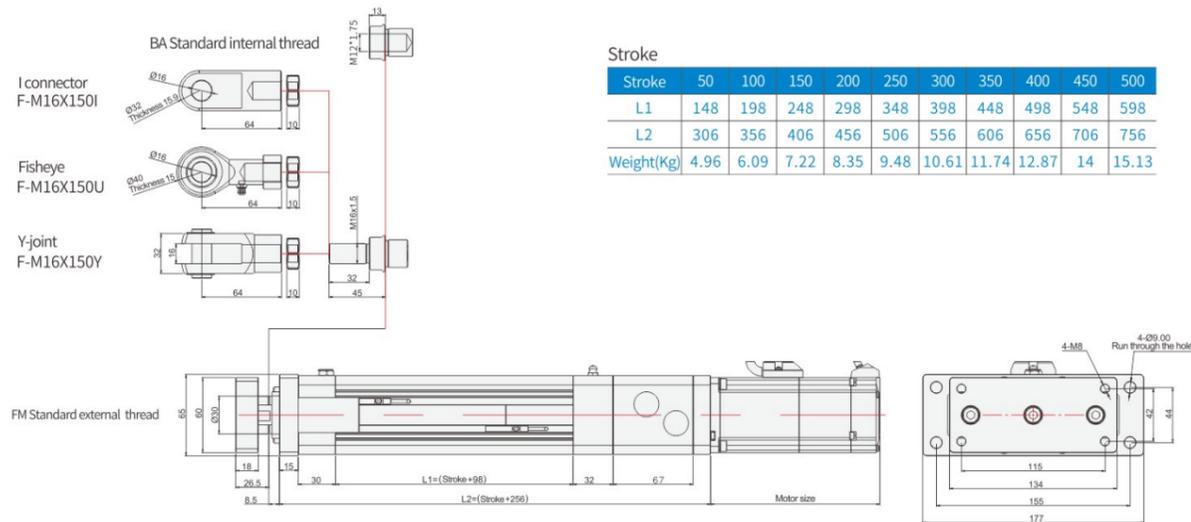
Note: when the motor mounting plate matches different motors, the size may change



KDG6350 Servo Electric Cylinder

KDG6350-Direct connection - guide pillar type
KDG6350-BC06

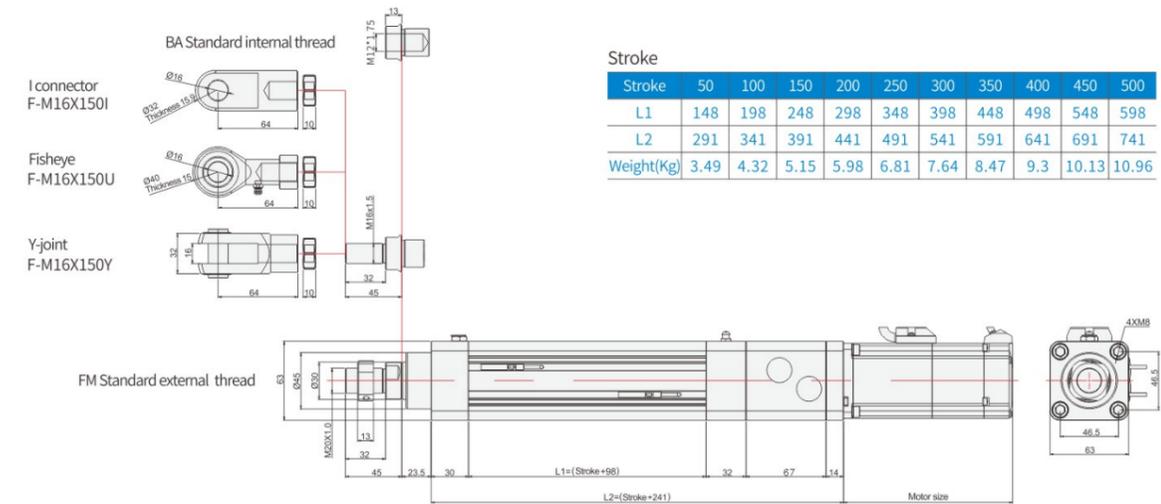
Note: when the motor mounting plate matches different motors, the size may change



MEMO

KDG6350-Direct connection - front lock type
KDG6350-BC07

Note: when the motor mounting plate matches different motors, the size may change



KDG7463 Servo Electric Cylinder

KDG7463 Servo Electric Cylinder



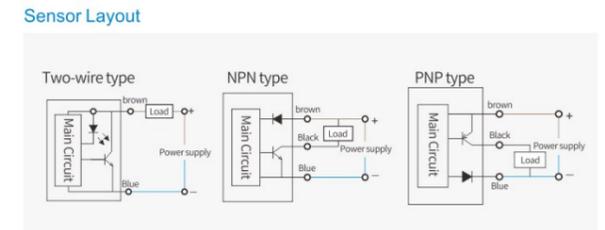
KDG7463 Series Standard Configuration Parameters

Foundation Information

Cylinder OD	74*74mm
Cylinder ID	63mm
Screw typp	Ball screw Φ20/Φ25
Stroke range	≤ 1000 mm
Allowable maximum speed	≤ 1250 mm/s
Allowable maximum thrust	≤ 8kN

Load and accuracy

Bearings	Cr(kN)	23.6	
	Cor(kN)	21.1	
Screw rod	Ca(kN)	Lead : 05	14.5
		Lead : 10	14.8
		Lead : 20	7.64
	Coa(kN)	Lead : 25	8.2
		Lead : 05	36.1
		Lead : 10	37.5
Accuracy Grade (mm)		C5	C7
Repeatability (mm)		±0.01	±0.02



Conductor Spec.

Code	Type	Model Specifications
T	Standard two-wire system	ZMDG-2 N/O ZMDGC-2 N/C
N	NPN Type	ZMDN-2 N/O ZMDNC-2 N/C
P	PNP Type	ZMDPC-2 N/O ZMDPC-2 N/C

Coupling and reducer configuration

Electric cylinder direct connecting Screw shaft diameter	Reducer / motor shaft diameter	Coupling model (AKD brand) OD * length - output shaft - K: international keyway	
Φ14/Φ19	Φ19-L32	SFR40*50-14K-19K	SFR40*50-19K-19K
	Φ22-L39.5	SFR45*55-14K-22K	SFR45*55-19K-22K

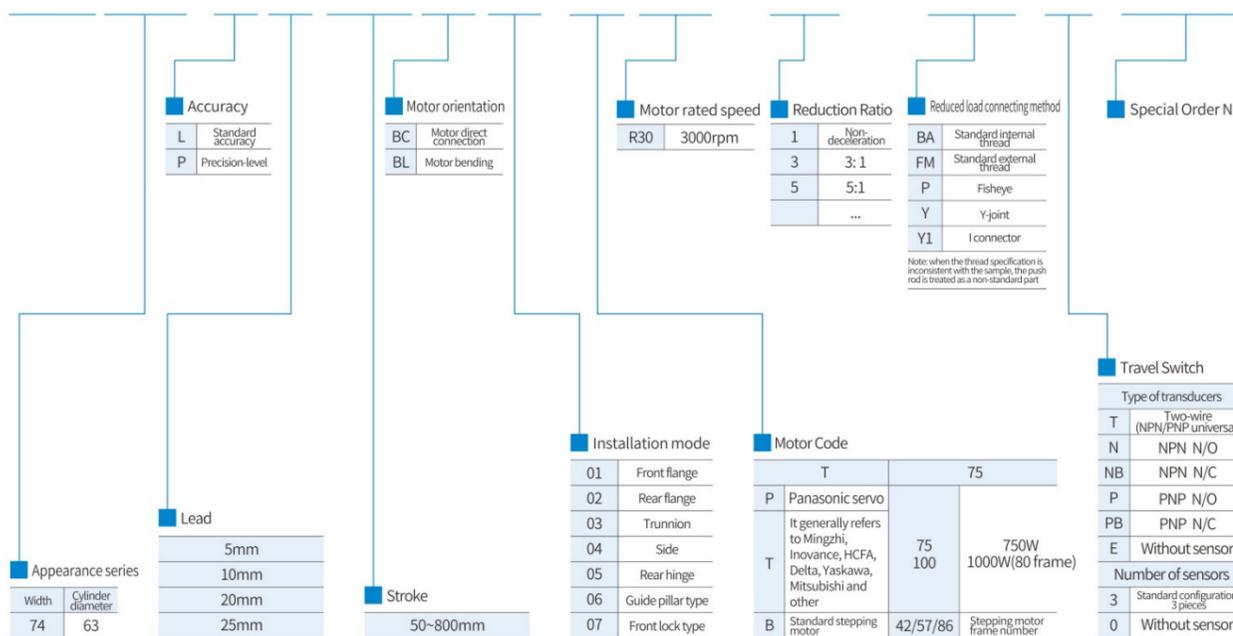
※ When the DmN value of the screw exceeds 50000, please contact the manufacturer for technical confirmation

KDG6350 Force and speed

Motor power		750W servo (80 frame)		1000W servo (80 frame)		86 Stepping	
Rated speed		3000rpm		3000rpm		/	
Rated torque		2.39N.m		3.18N.m		/	
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)
1	5	2.55	250	3.4	250	/	/
	10	1.27	500	1.7	500	/	/
	20	0.64	1000	0.85	1000	/	/
	25	0.51	1250	0.68	1250	/	/
2	5	5.1	125	6.8	125	/	/
	10	2.55	250	3.4	250	/	/
	20	1.27	500	1.7	500	/	/
3	5	7.65	83.3	/	/	/	/
	10	3.8	166.6	5.1	166.6	/	/
	20	1.92	333	2.55	333	/	/
5	5	15.3	166.6	10.2	166.6	/	/
	10	7.65	333	5.1	333	/	/

Ordering Method

KDG 7463 - L 05 - 100 - BC 01 - T75 R30 JS1 - BA - T3 - D123



Rated thrust calculation formula:

$$F = \frac{T * 2\pi * i}{L} * \mu$$

F: electric cylinder thrust (kN); T: motor torque (N.m); π: ratio of circumference to diameter; i: reduction ratio; L: screw lead (mm); μ: efficiency, the total working efficiency of electric cylinder is recommended to be 85%

Calculation formula of output shaft speed:

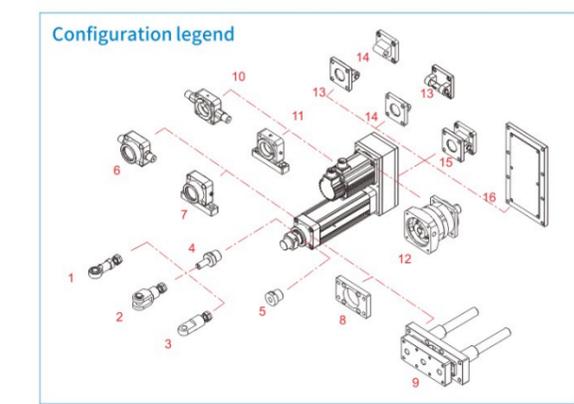
$$V = \frac{R * L}{i} \div 60$$

V: output shaft speed (mm/s); R: motor speed (r/min); L: screw lead (mm); i: reduction ratio; 60: constant

Calculation formula of electric cylinder life:

$$L_{10} = \left(\frac{Ca}{F_M} \right)^3 * L$$

L₁₀: electric cylinder life (km); Ca: dynamic rated load of screw (kN); F_M: average load borne by electric cylinder (kN); L: screw lead (mm)

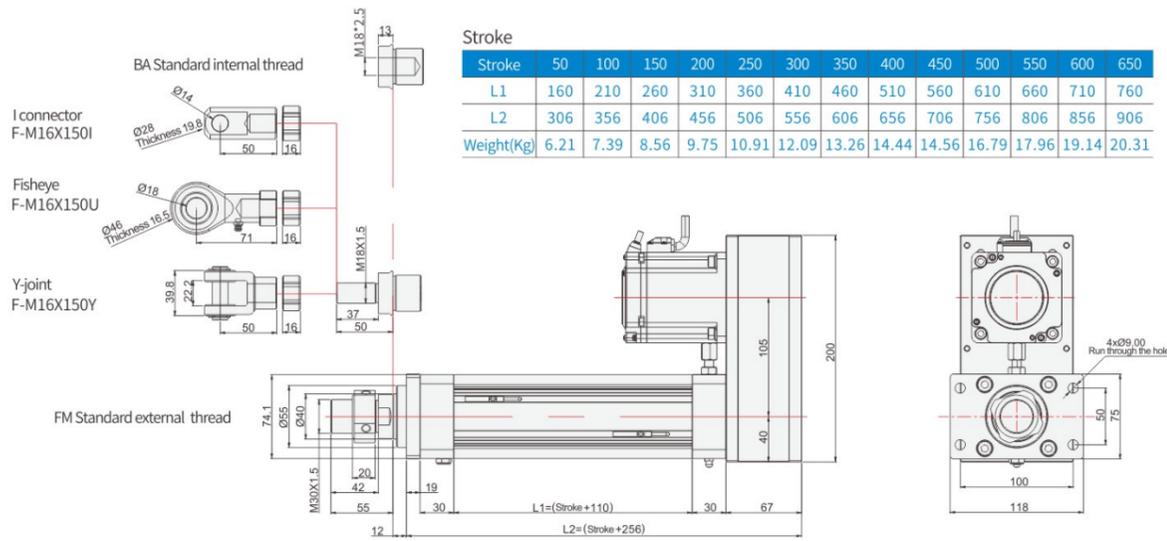


KDG7463 Servo Electric Cylinder

KDG7463 Servo Electric Cylinder

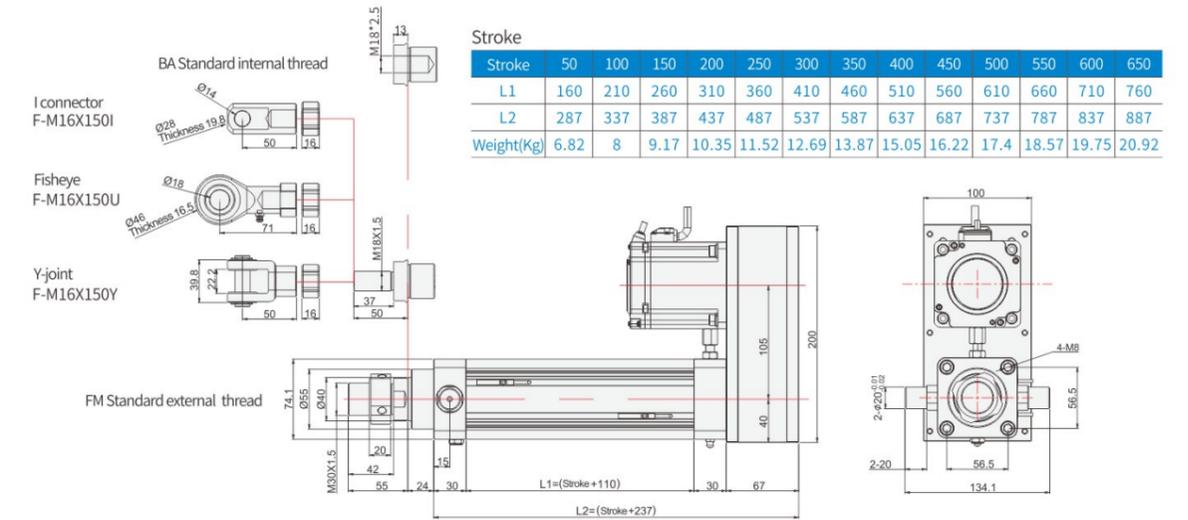
KDG7463-Folding - front flange
KDG7463-BL01

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



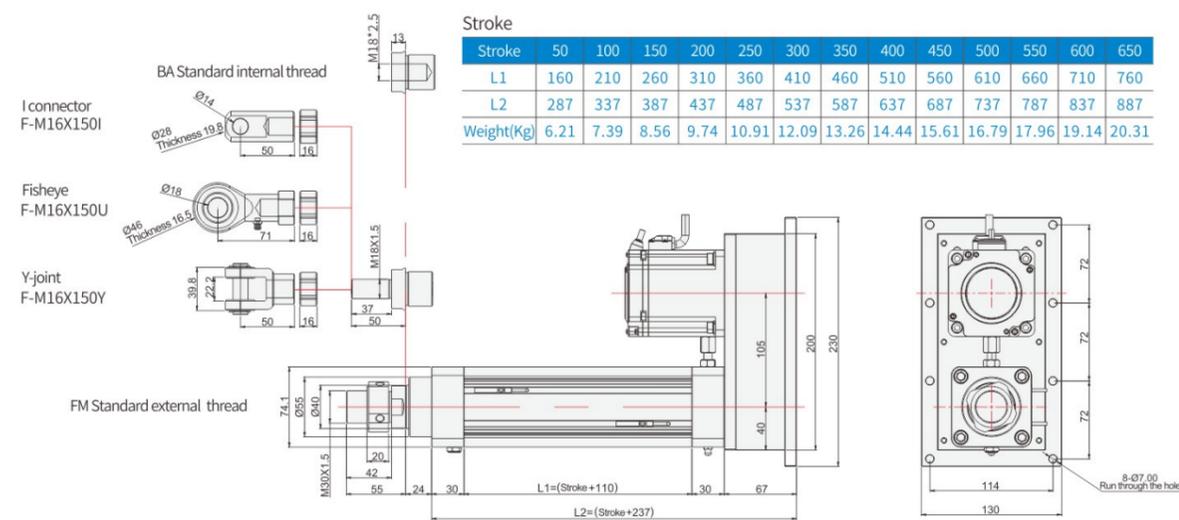
KDG7463-Folding - trunnion
KDG7463-BL03

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



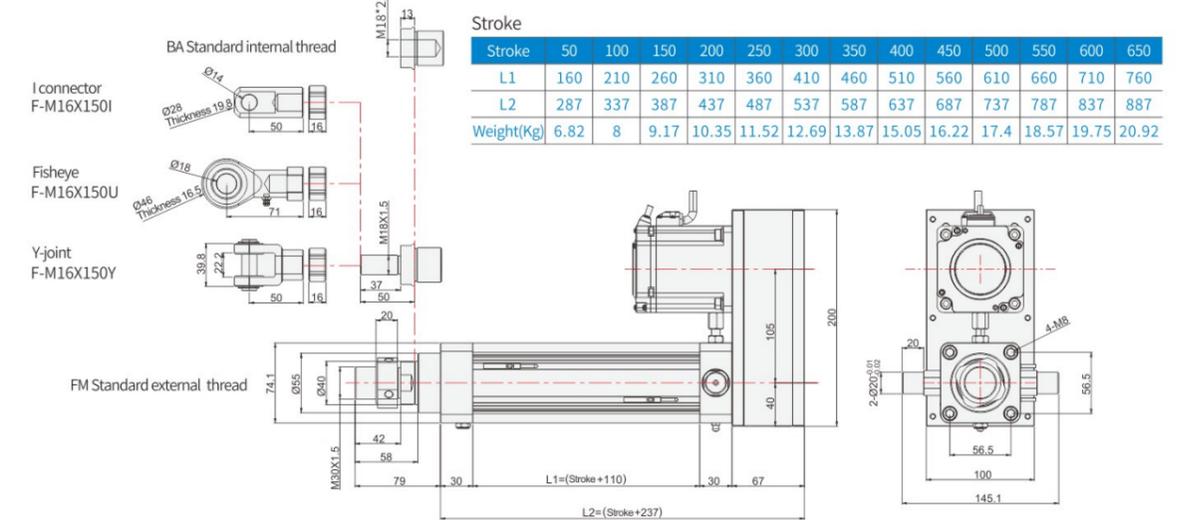
KDG7463-Folding - rear flange
KDG7463-BL02

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



KDG7463-Folding - return rear trunnion
KDG7463-BL03H

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



- KDG4027
- KDG4432
- KDG5340
- KDG6350
- KDG7463**
- KDG9580
- KDG110100

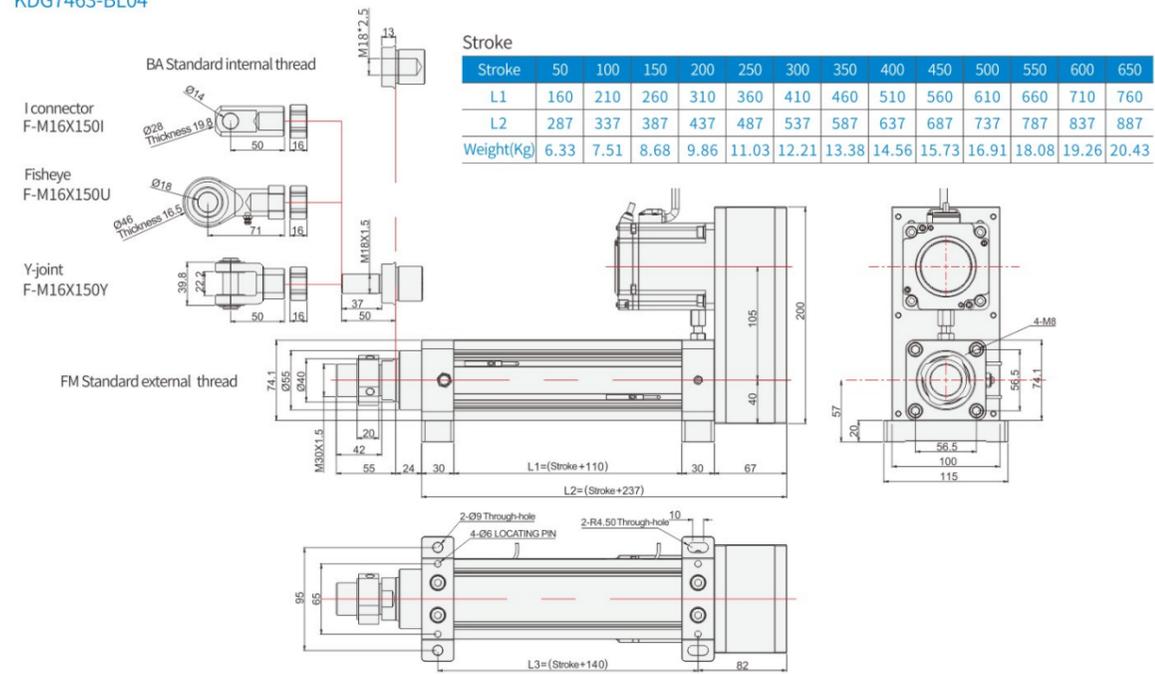
- KDG4027
- KDG4432
- KDG5340
- KDG6350
- KDG7463**
- KDG9580
- KDG110100

KDG7463 Servo Electric Cylinder

KDG7463 Servo Electric Cylinder

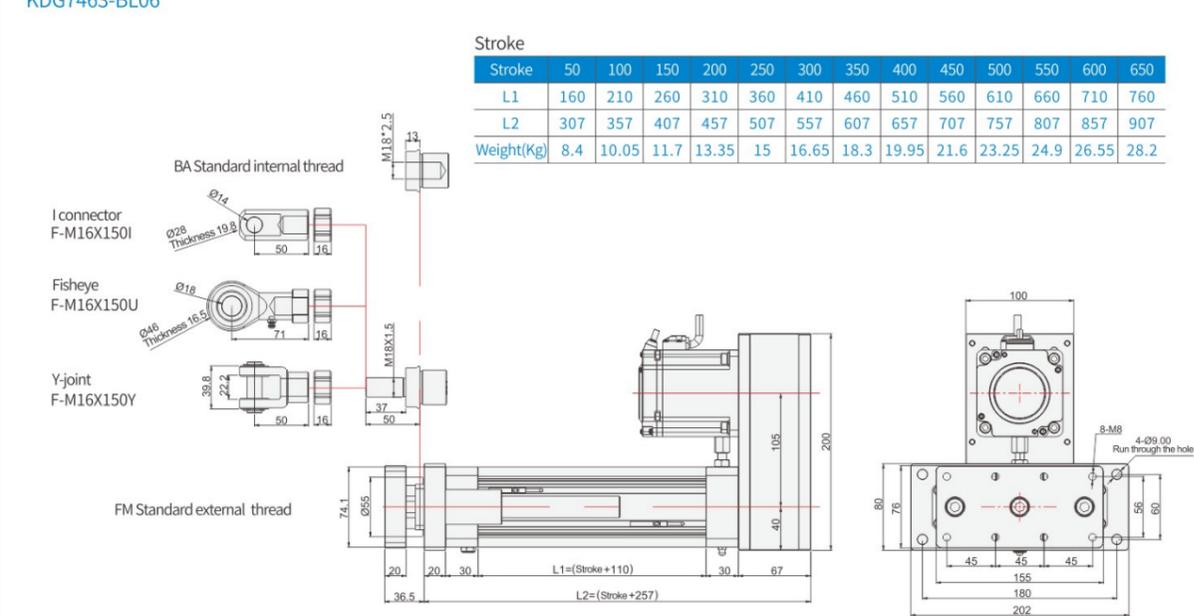
KDG7463-Folding - side flange
KDG7463-BL04

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



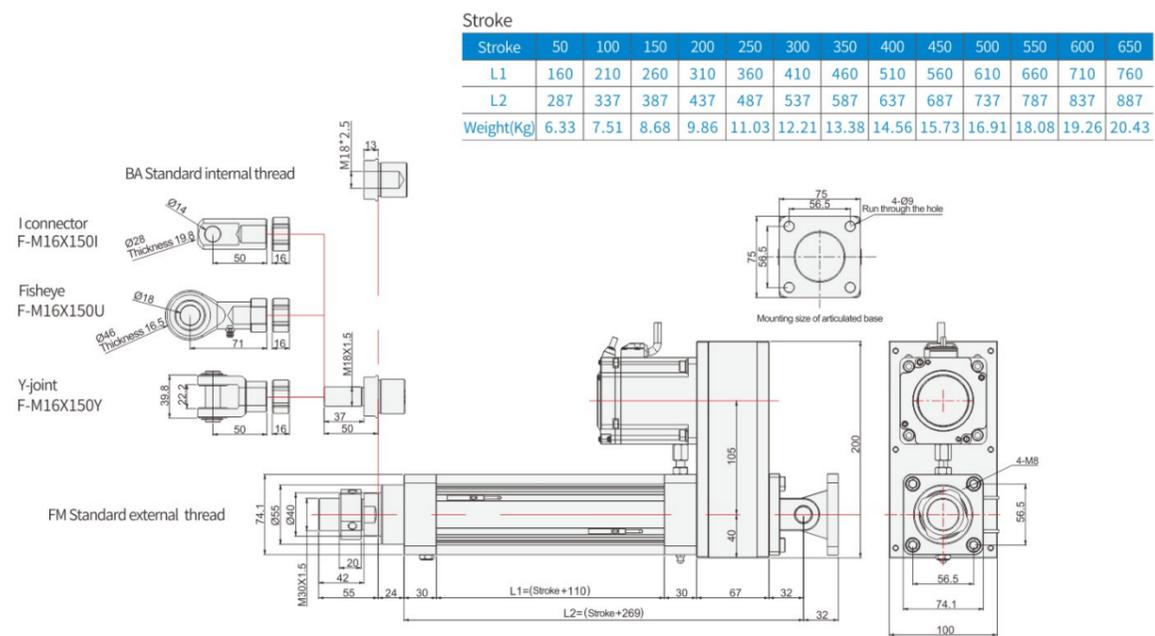
KDG7463-Folding - guide pillar type
KDG7463-BL06

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



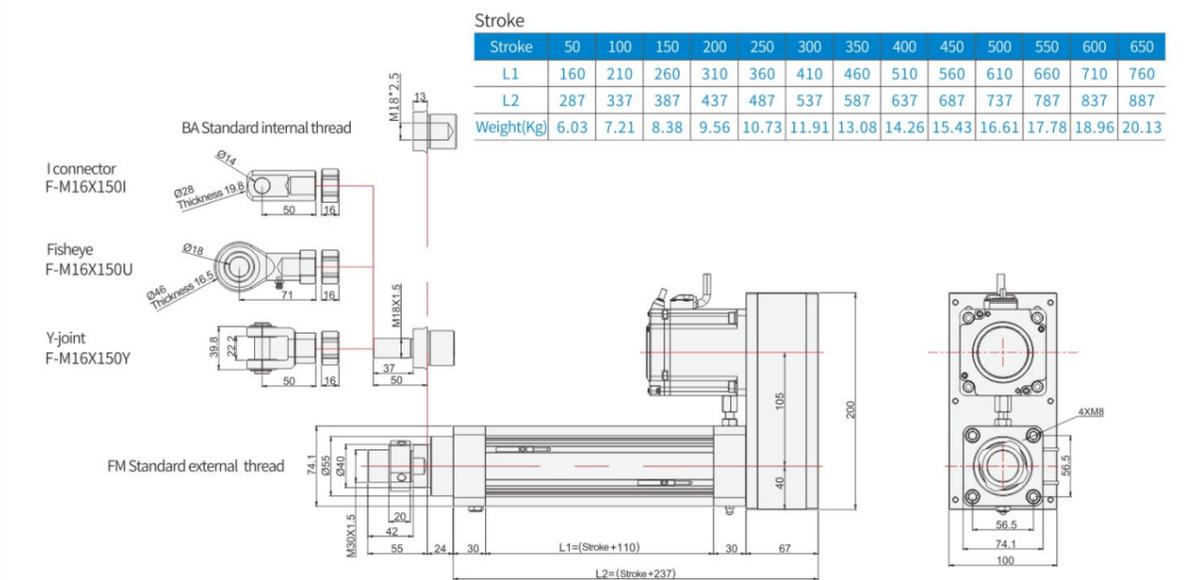
KDG7463-Folding - rear hinge
KDG7463-BL05

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100



KDG7463-Folding - front lock type
KDG7463-BL07

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

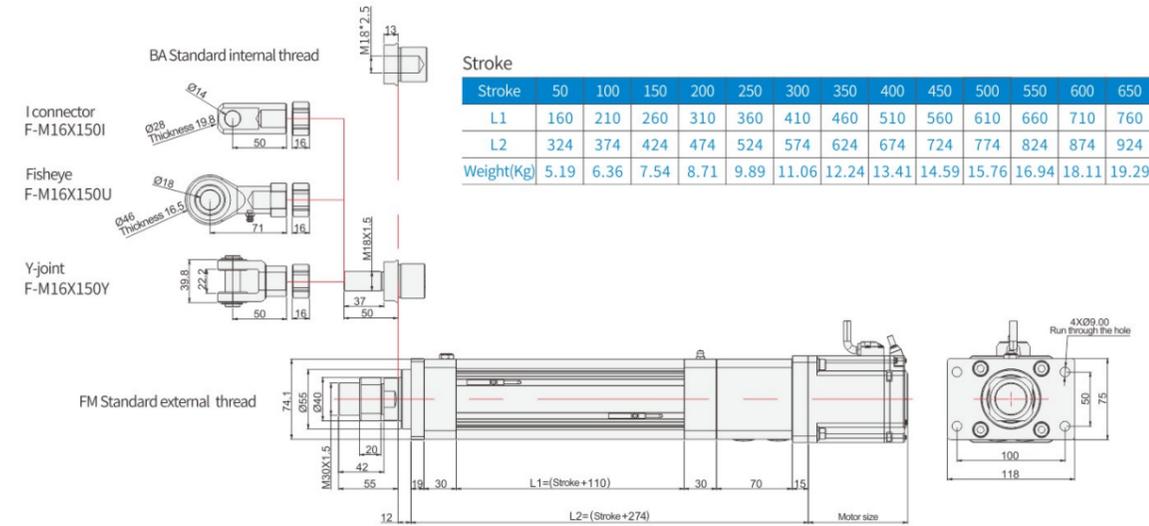


KDG7463 Servo Electric Cylinder

KDG7463 Servo Electric Cylinder

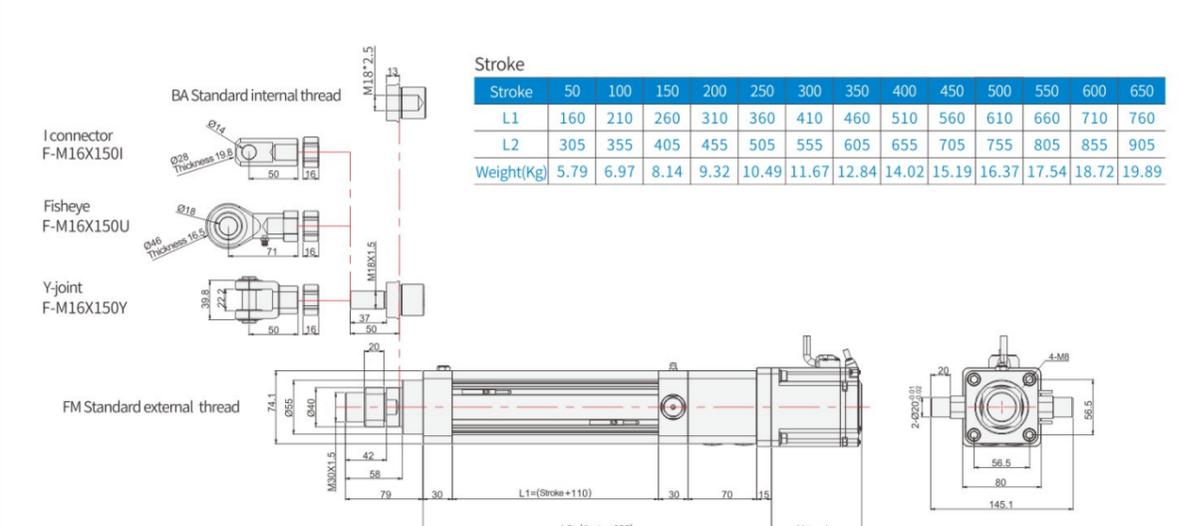
KDG7463-Direct connection - front flange
KDG7463-BC01

Note: when the motor mounting plate matches different motors, the size may change



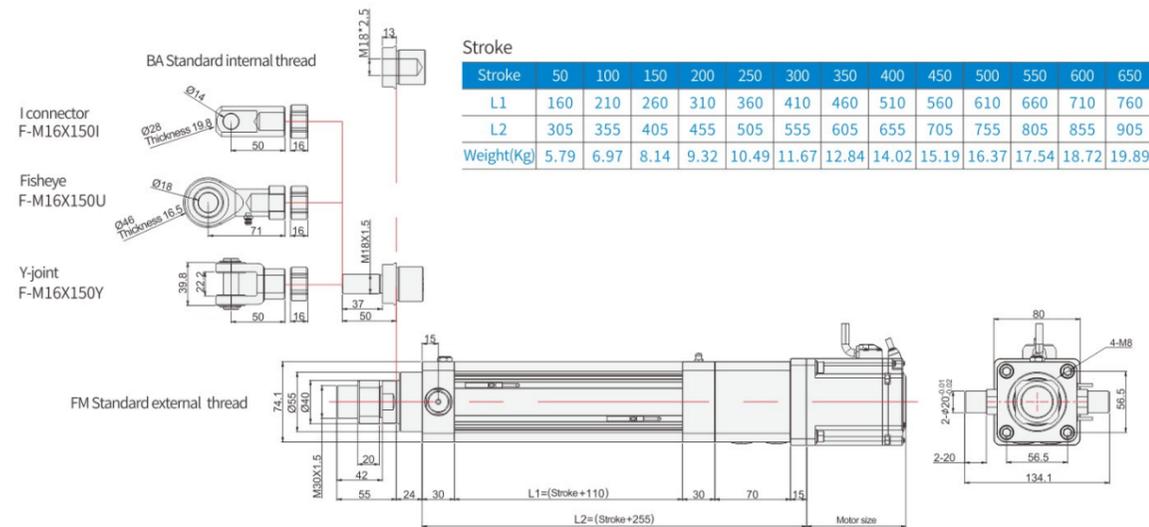
KDG7463-Direct connection - rear trunnion
KDG7463-BC03H

Note: when the motor mounting plate matches different motors, the size may change



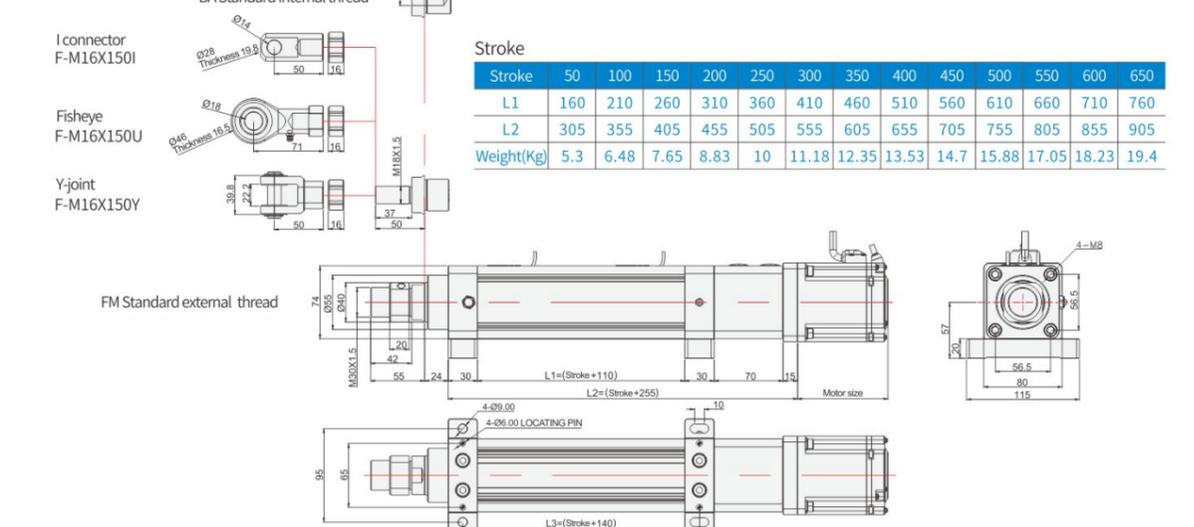
KDG7463-Direct connection - trunnion
KDG7463-BC03

Note: when the motor mounting plate matches different motors, the size may change



KDG7463-Direct connection - side flange
KDG7463-BC04

Note: when the motor mounting plate matches different motors, the size may change



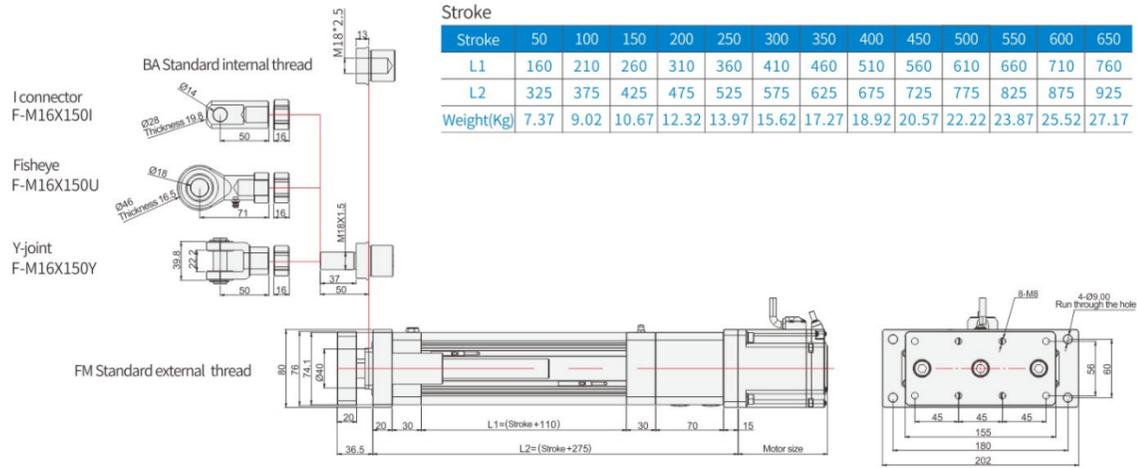
- KDG4027
- KDG4432
- KDG5340
- KDG6350
- KDG7463
- KDG9580
- KDG110100

- KDG4027
- KDG4432
- KDG5340
- KDG6350
- KDG7463
- KDG9580
- KDG110100

KDG7463 Servo Electric Cylinder

KDG7463-Direct connection - guide pillar type
KDG7463-BC06

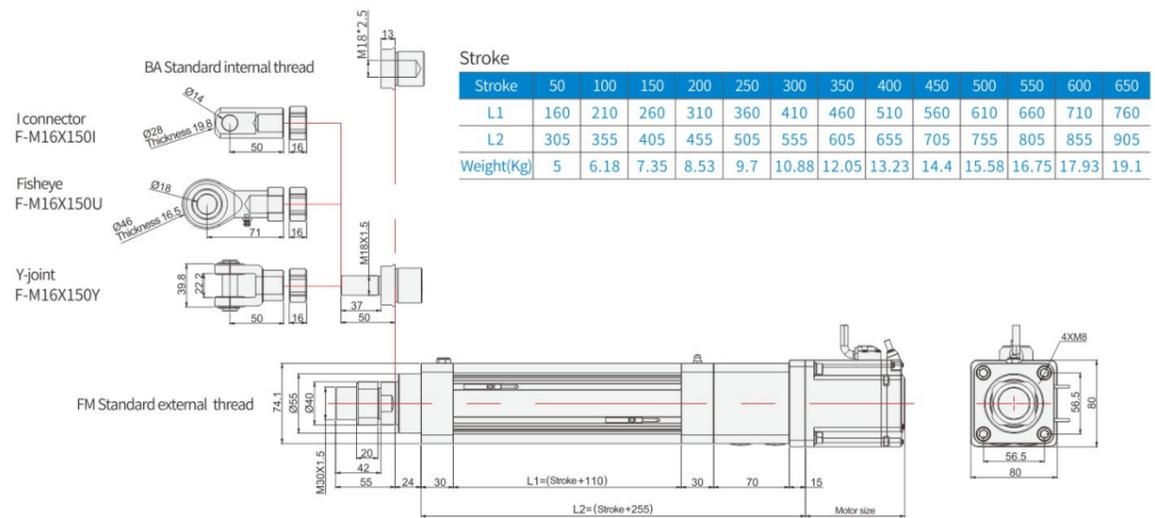
Note: when the motor mounting plate matches different motors, the size may change



MEMO

KDG7463-Direct connection - front lock type
KDG7463-BC07

Note: when the motor mounting plate matches different motors, the size may change



KDG9580 Servo Electric Cylinder

KDG9580 Servo Electric Cylinder



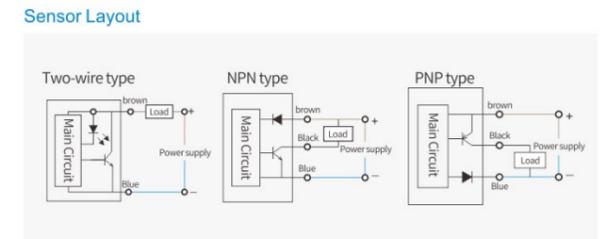
KDG9580 Series Standard Configuration Parameters

Foundation Information

Cylinder OD	95*95mm
Cylinder ID	80mm
Screw typp	Ball screw Φ25
	Ball screw Φ32
Stroke range	≤ 800 mm
Allowable maximum speed	≤ 500 mm/s
Allowable maximum thrust	≤ 15kN
Heavy load(U type)	≤ 30kN

Load and accuracy

Bearings	Cr(kN)	32.8	
	Cor(kN)	32.2	
Screw rod	Ca(kN)	Lead : 05	16.8
		Lead : 10	28.9
	Coa(kN)	Lead : 05	48
		Lead : 10	71.4
	Accuracy Grade (mm)	C5	C7
	Repeatability (mm)	±0.01	±0.02



Coupling and reducer configuration

Electric cylinder direct connecting Screw shaft diameter	Reducer / motor shaft diameter	Coupling model (AKD brand) OD * length - output shaft - K: international keyway	
		Φ22-Φ19	Φ24-Φ19
Φ22/Φ19	Φ22-L50	SFR40*50-19K-22K	SFR40*50-22K-22K
	Φ24-L50	SFR40*50-19K-24K	SFR40*50-22K-24K
	Φ32-L55	SFR40*50-19K-32K	SFR40*50-22K-32K

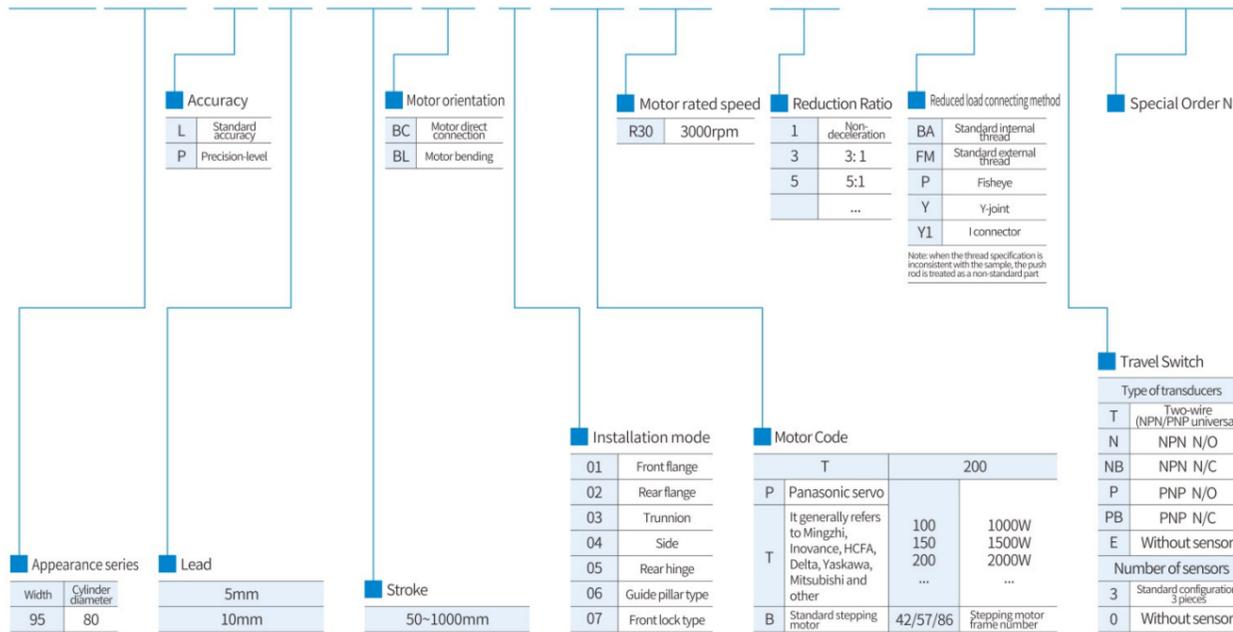
Conductor Spec.

Code	Type	Model Specifications
T	Standard two-wire system	ZMDG-2 N/O ZMDGC-2 N/C
N	NPN Type	ZMDN-2 N/O ZMDNC-2 N/C
P	PNP Type	ZMDP-2 N/O ZMDPC-2 N/C

※ When the DmN value of the screw exceeds 50000, please contact the manufacturer for technical confirmation

Ordering Method

KDG 9580 - L 05 - 100-BC 01-T200 R30 JS1 - BA - T3 - D123



KDG9580 Force and speed

Motor power	1500W servo (100 frame)	2000W servo (100 frame)	2500W servo (100 frame)				
Rated speed	3000rpm	3000rpm	3000rpm				
Rated torque	4.78N.m	6.37N.m	7.96N.m				
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)
1	5	5.1	250	6.8	250	8.5	250
	10	2.55	500	3.4	500	4.25	500
3	10	7.65	166	10.2	166	12.74	166
	4	10	10.2	125	13.59	125	16.99(Heavy load)
5	10	12.74	100	16.99(Heavy load)	100	21.24(Heavy load)	100
	7	10	17.84(Heavy load)	71	23.79(Heavy load)	71	29.74(Heavy load)

Rated thrust calculation formula:

$$F = \frac{T * 2\pi * i}{L} * \mu$$

F: electric cylinder thrust (kN); T: motor torque (N.m); π: ratio of circumference to diameter; i: reduction ratio; L: screw lead (mm); μ: efficiency, the total working efficiency of electric cylinder is recommended to be 85%

Calculation formula of output shaft speed:

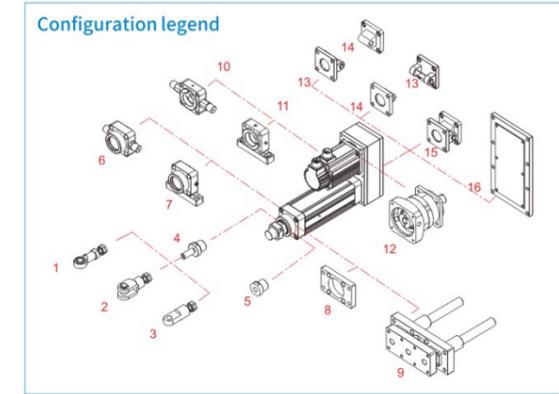
$$V = \frac{R * L}{i} \div 60$$

V: output shaft speed (mm/s); R: motor speed (r/min); L: screw lead (mm); i: reduction ratio; 60: constant

Calculation formula of electric cylinder life:

$$L_{10} = \left(\frac{Ca}{F_M} \right)^3 * L$$

L₁₀: electric cylinder life (km); Ca: dynamic rated load of screw (kN); F_M: average load borne by electric cylinder (kN); L: screw lead (mm)



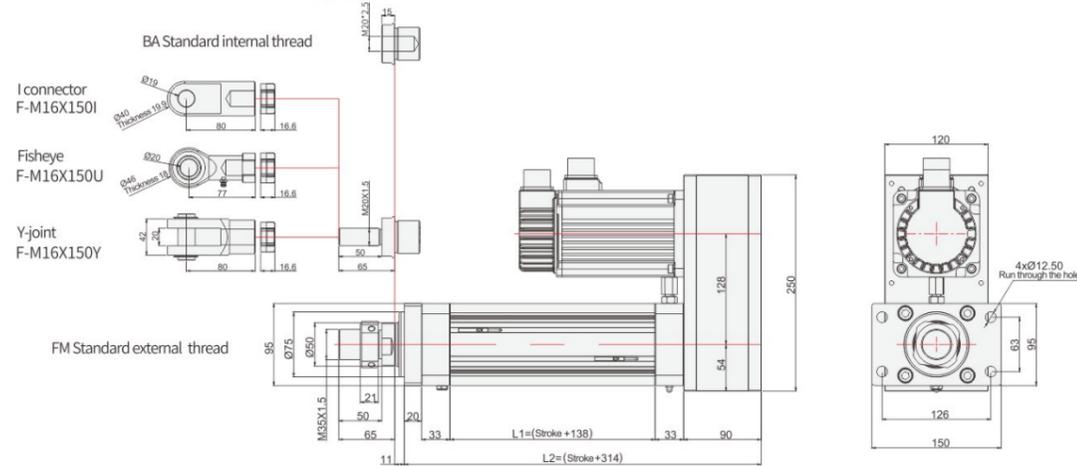
KDG9580 Servo Electric Cylinder

KDG9580 Servo Electric Cylinder

KDG9580-Folding - front flange
KDG9580-BL01

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

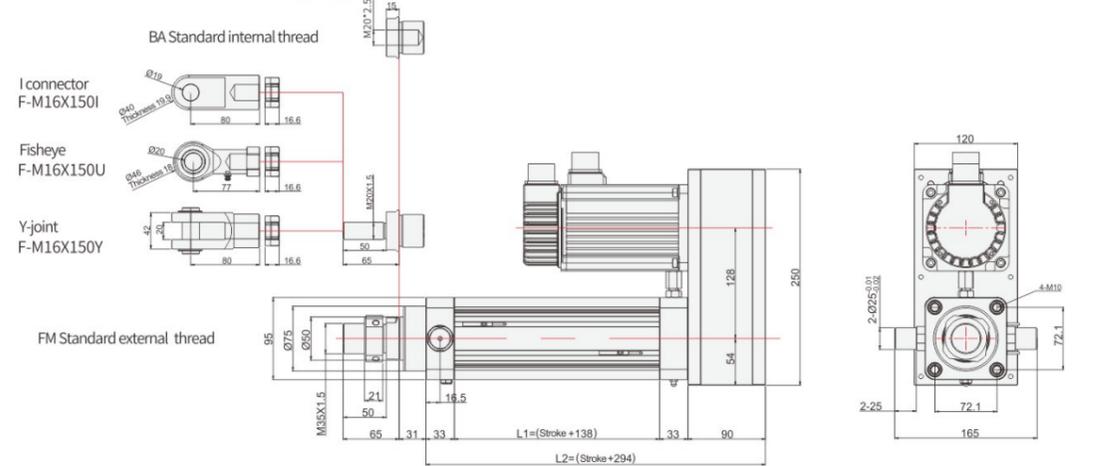
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	364	414	464	514	564	614	664	714	764	814	864	914	964	1014	1064	1114
Weight(Kg)	11.85	13.99	16.13	18.27	20.41	22.55	24.69	26.83	28.97	31.11	32.25	35.39	37.53	39.67	41.81	43.95



KDG9580-Folding - trunnion
KDG9580-BL03

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

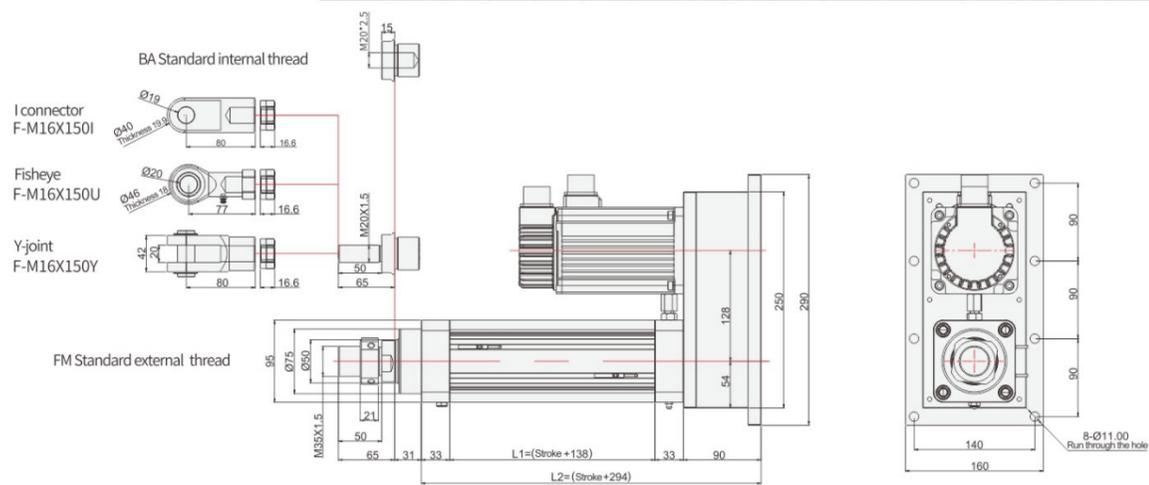
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094
Weight(Kg)	12.96	15.1	17.24	19.38	21.52	23.66	25.8	27.94	30.08	32.22	34.36	36.5	38.64	40.78	42.92	45.06



KDG9580-Folding - rear flange
KDG9580-BL02

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

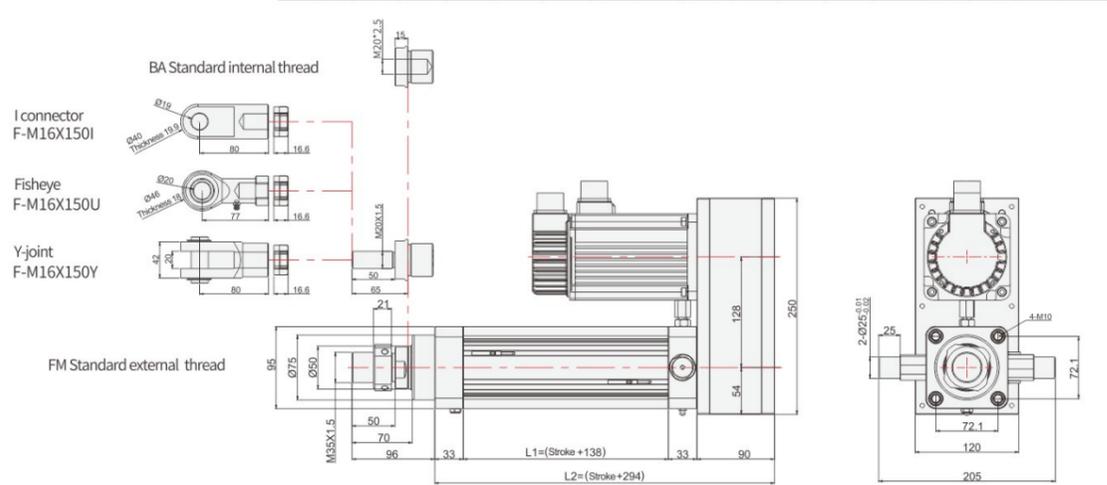
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094
Weight(Kg)	11.85	13.99	16.13	18.27	20.41	22.55	24.69	26.83	28.97	31.11	32.25	35.39	37.53	39.67	41.81	43.95



KDG9580-Folding - return rear trunnion
KDG9580-BL03H

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094
Weight(Kg)	12.96	15.1	17.24	19.38	21.52	23.66	25.8	27.94	30.08	32.22	34.36	36.5	38.64	40.78	42.92	45.06



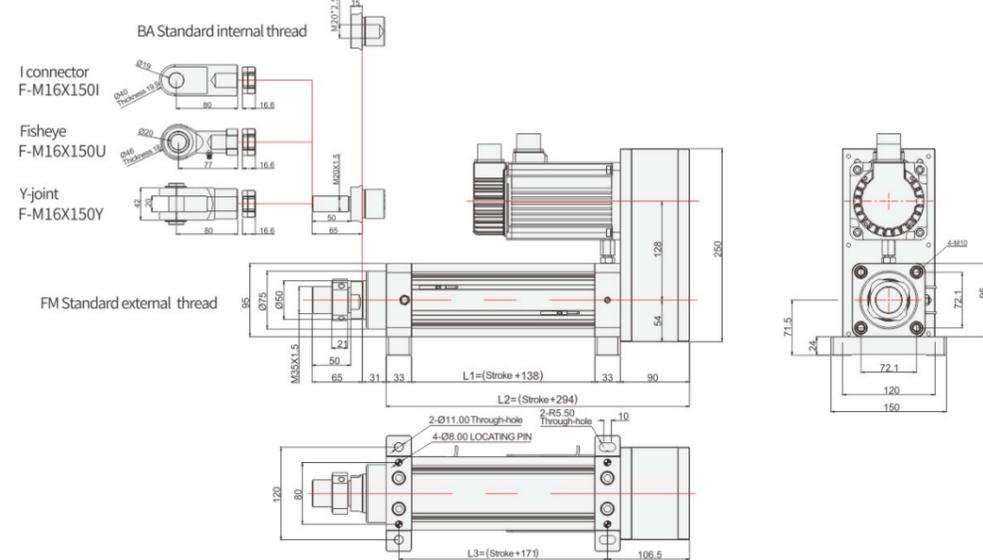
KDG9580 Servo Electric Cylinder

KDG9580 Servo Electric Cylinder

KDG9580-Folding - side flange
KDG9580-BL04

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

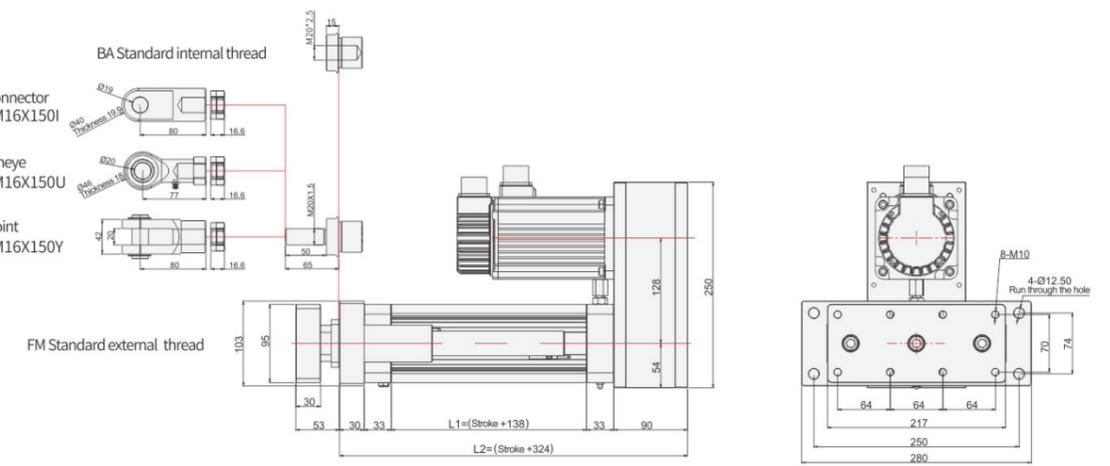
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094
Weight(Kg)	11.91	14.05	16.19	18.33	20.47	22.61	24.75	26.89	29.03	31.17	33.31	35.45	37.59	39.73	41.87	44.01



KDG9580-Folding - guide pillar type
KDG9580-BL06

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

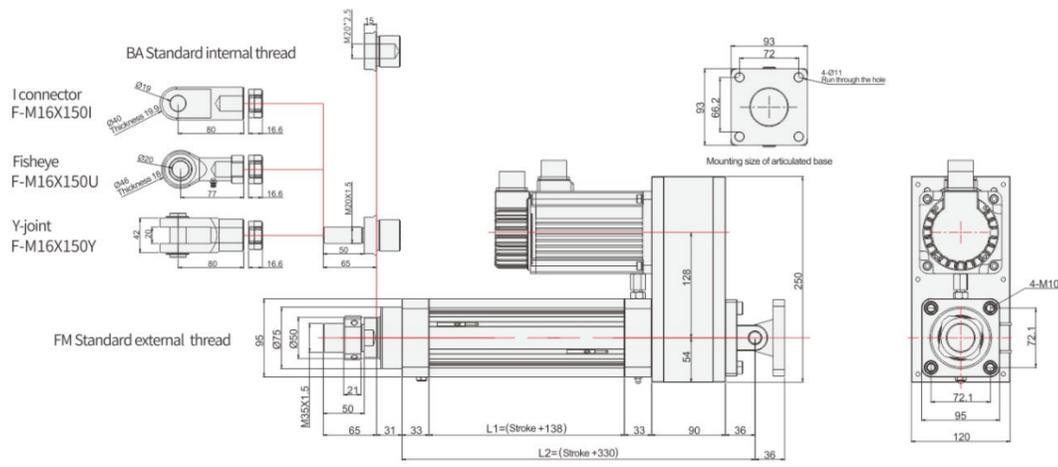
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094
Weight(Kg)	18.08	21.82	25.56	29.3	33.04	36.78	40.52	44.26	48	51.74	55.48	59.22	62.92	66.7	70.44	74.18



KDG9580-Folding - rear hinge
KDG9580-BL05

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

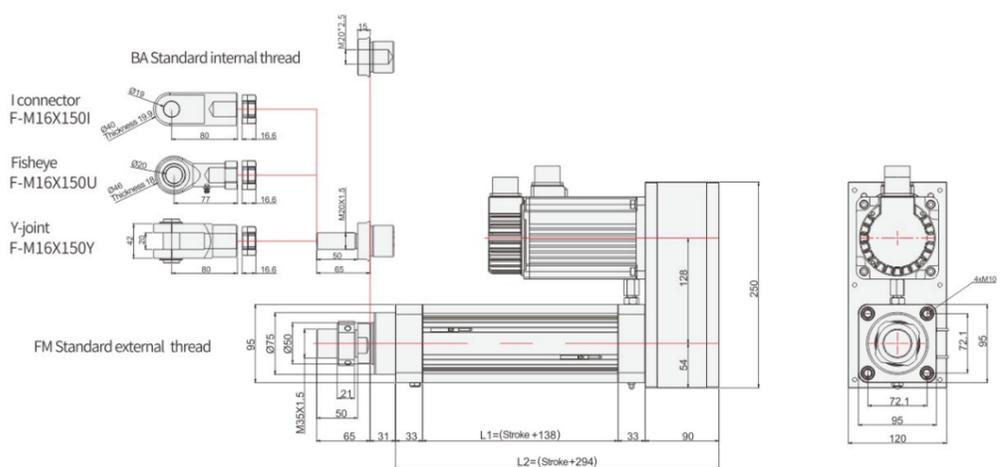
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130
Weight(Kg)	11.91	14.05	16.19	18.33	20.47	22.61	24.75	26.89	29.03	31.17	33.31	35.45	37.59	39.73	41.87	44.01



KDG9580-Folding - front lock type
KDG9580-BL07

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094
Weight(Kg)	11.38	13.52	15.66	17.8	19.94	22.08	24.22	26.36	28.5	30.64	32.78	34.92	37.06	39.2	41.34	43.48



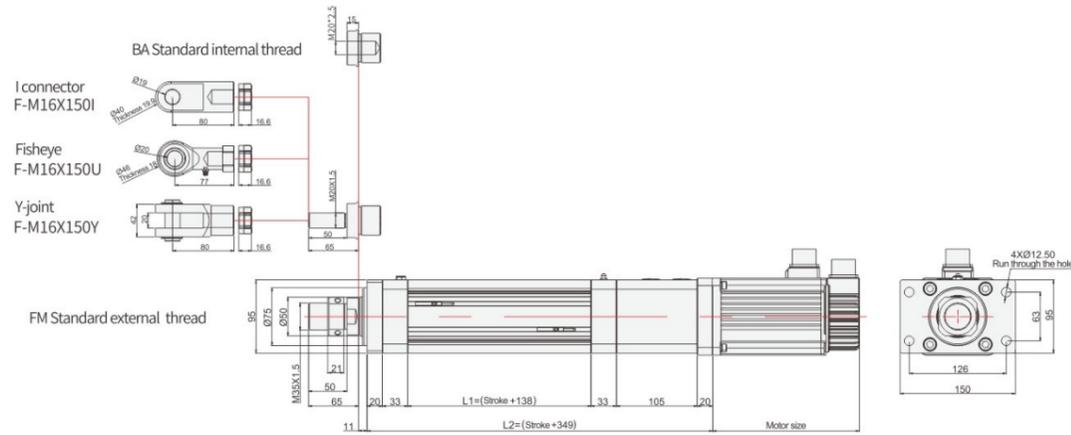
KDG9580 Servo Electric Cylinder

KDG9580 Servo Electric Cylinder

KDG9580-Direct connection - front flange
KDG9580-BC01

Note: when the motor mounting plate matches different motors, the size may change

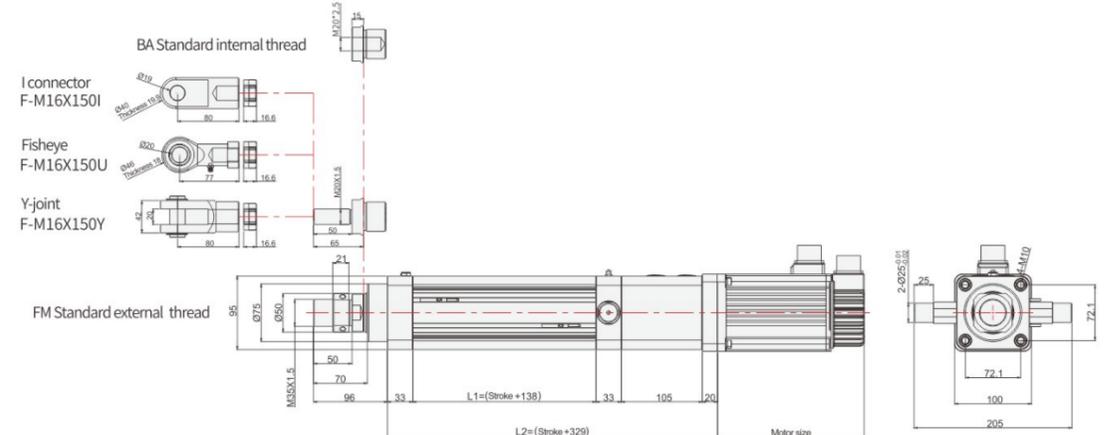
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	399	449	499	549	599	649	699	749	799	849	899	949	999	1049	1099	1149
Weight(Kg)	9.6	11.74	13.88	16.02	18.16	20.3	22.44	24.58	26.72	28.86	31	33.14	35.28	37.42	39.56	41.7



KDG9580-Direct connection - rear trunnion
KDG9580-BC03H

Note: when the motor mounting plate matches different motors, the size may change

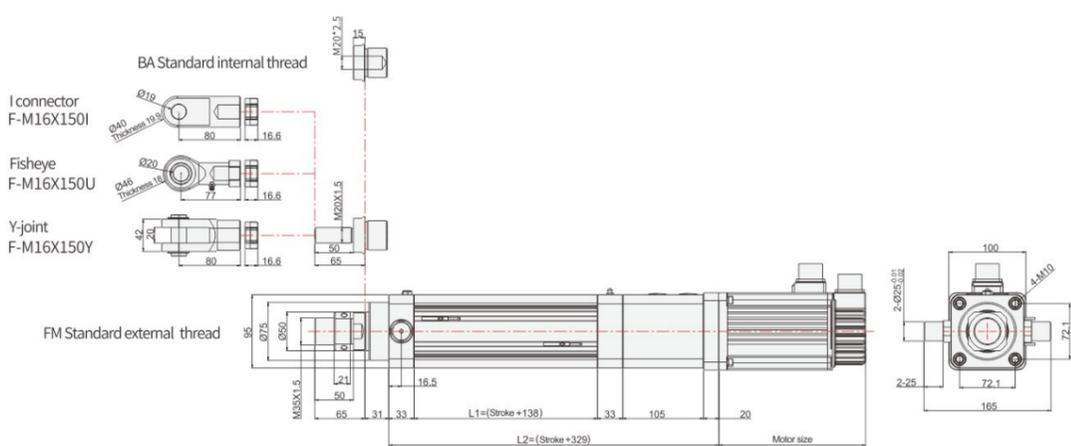
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	379	429	479	529	579	629	679	729	779	829	879	929	979	1029	1079	1129
Weight(Kg)	10.72	12.86	15	17.14	19.28	21.42	23.56	25.7	27.84	29.98	32.12	34.26	36.4	38.54	40.68	42.82



KDG9580-Direct connection - trunnion
KDG9580-BC03

Note: when the motor mounting plate matches different motors, the size may change

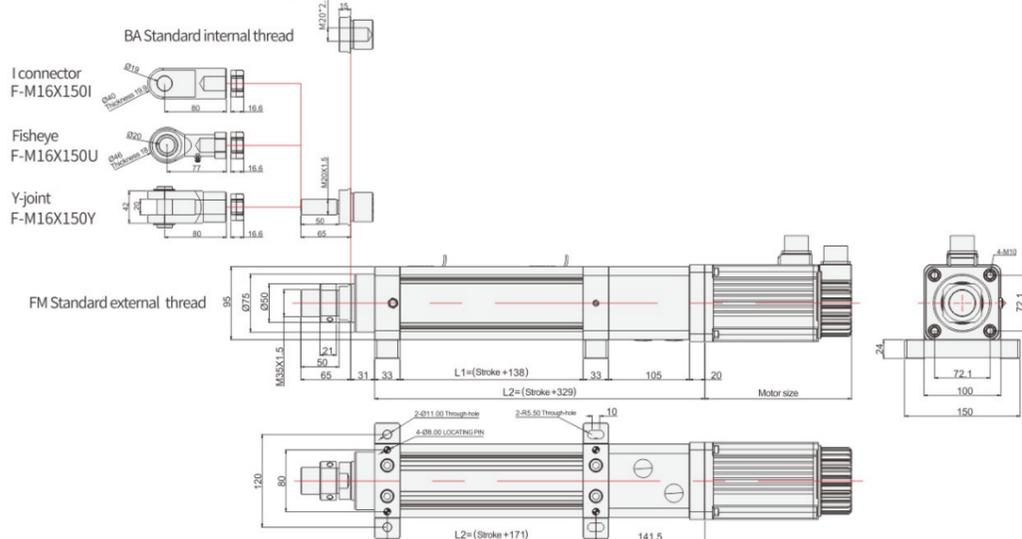
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	379	429	479	529	579	629	679	729	779	829	879	929	979	1029	1079	1129
Weight(Kg)	10.72	12.86	15	17.14	19.28	21.42	23.56	25.7	27.84	29.98	32.12	34.26	36.4	38.54	40.68	42.82



KDG9580-Direct connection - side flange
KDG9580-BC04

Note: when the motor mounting plate matches different motors, the size may change

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	379	429	479	529	579	629	679	729	779	829	879	929	979	1029	1079	1129
Weight(Kg)	9.67	11.81	13.95	16.09	18.23	20.37	22.51	24.65	26.79	28.93	31.07	33.21	35.35	37.49	39.63	41.77



- KDG4027
- KDG4432
- KDG5340
- KDG6350
- KDG7463
- KDG9580
- KDG110100

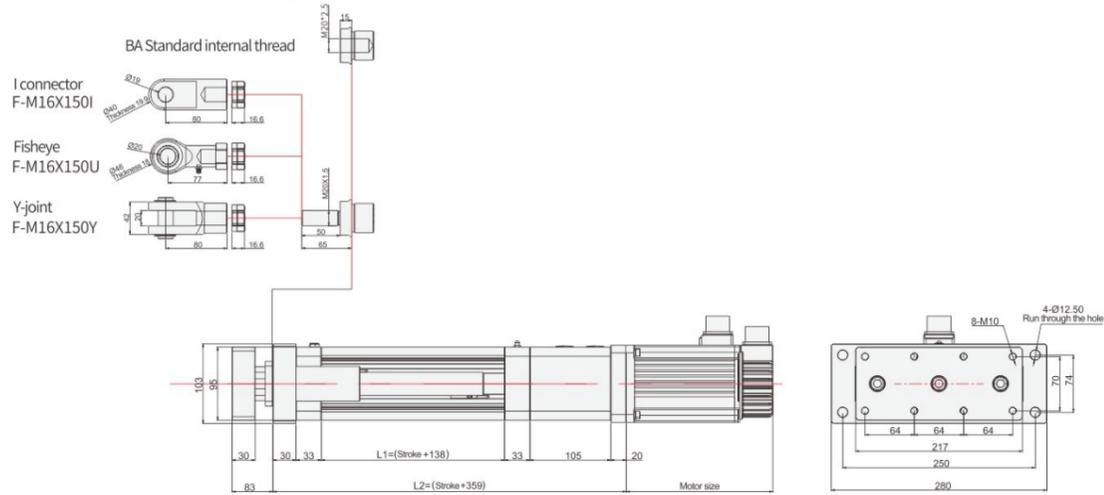
- KDG4027
- KDG4432
- KDG5340
- KDG6350
- KDG7463
- KDG9580
- KDG110100

KDG9580 Servo Electric Cylinder

KDG9580-Direct connection - guide pillar type
KDG9580-BC06

Note: when the motor mounting plate matches different motors, the size may change

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109	1159
Weight(Kg)	15.84	19.58	23.32	27.06	30.8	34.54	38.28	42.02	45.76	49.5	53.24	56.98	60.72	64.46	68.2	71.94

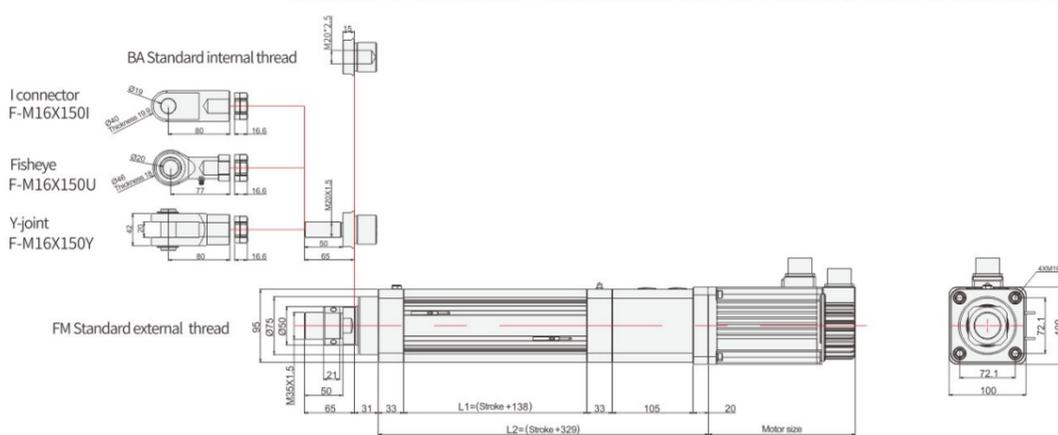


MEMO

KDG9580-Direct connection - front lock type
KDG9580-BC07

Note: when the motor mounting plate matches different motors, the size may change

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L1	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
L2	379	429	479	529	579	629	679	729	779	829	879	929	979	1029	1079	1129
Weight(Kg)	9.14	11.28	13.42	15.56	17.7	19.84	21.98	24.12	26.26	28.4	30.54	32.68	34.82	36.96	39.1	41.24



KDG4027

KDG4432

KDG5340

KDG6350

KDG7463

KDG9580

KDG110100

KDG4027

KDG4432

KDG5340

KDG6350

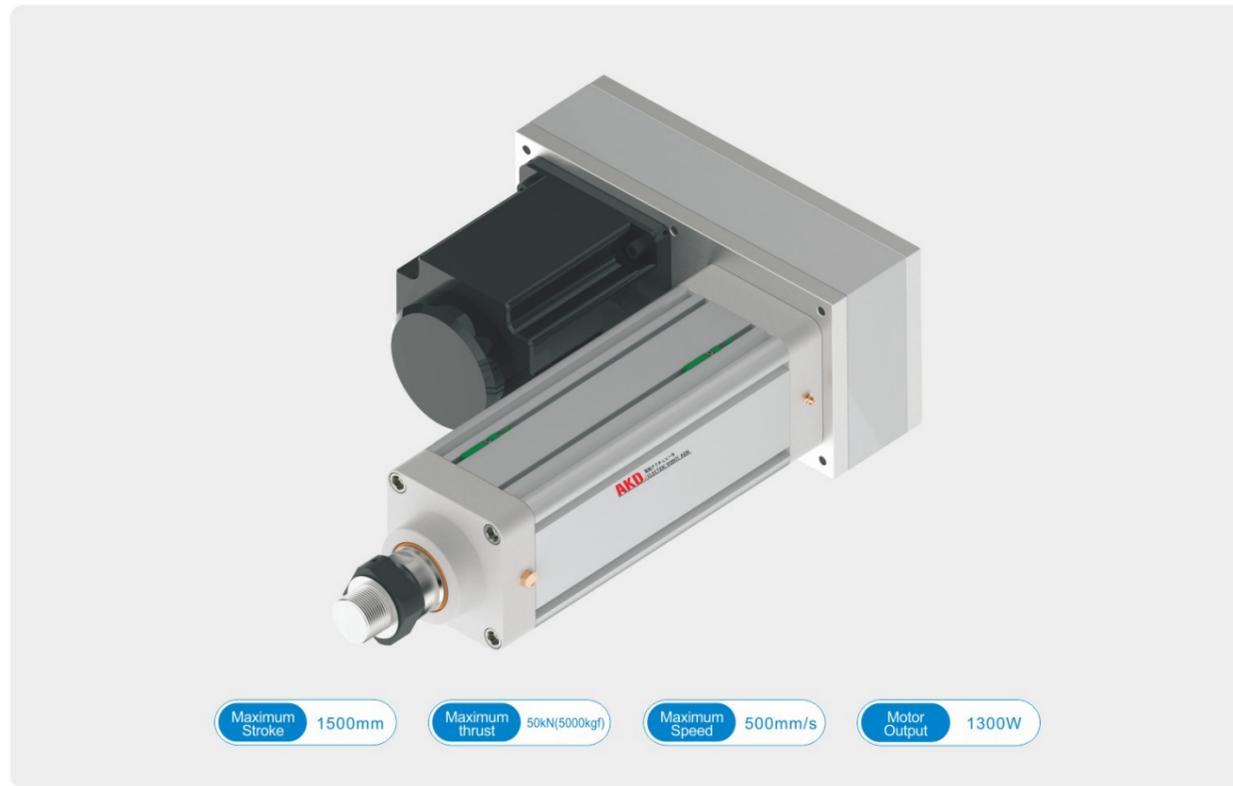
KDG7463

KDG9580

KDG110100

KDG110100 Servo Electric Cylinder

KDG110100 Servo Electric Cylinder



KDG110100 Series Standard Configuration Parameters

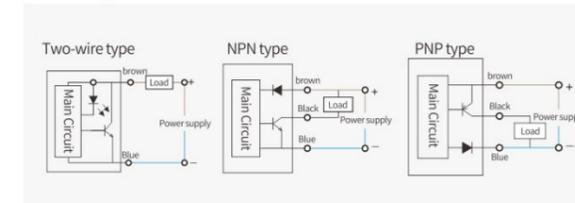
Foundation Information

Cylinder OD	110*110mm
Cylinder ID	100mm
Screw typp	Ball screw Φ32
	Ball screw Φ40
Stroke range	≤ 1000 mm
Allowable maximum speed	≤ 500 mm/s
Allowable maximum thrust	≤ 30kN
Heavy load(U type)	≤ 50kN

Load and accuracy

Bearings	Cr(kN)	49.1
	Cor(kN)	46.4
Screw rod	Ca(kN)	Lead : 05 18.8
		Lead : 10 47
	Coa(kN)	Lead : 05 62.1
		Lead : 10 119.6
Accuracy Grade (mm)	C5 C7	
Repeatability (mm)	±0.01 ±0.02	

Sensor Layout



Conductor Spec.

Code	Type	Model Specifications
T	Standard two-wire system	ZMDG-2 N/O ZMDGC-2 N/C
N	NPN Type	ZMDN-2 N/O ZMDNC-2 N/C
P	PNP Type	ZMDP-2 N/O ZMDPC-2 N/C

Coupling and reducer configuration

Electric cylinder direct connecting Screw shaft diameter	Reducer / motor shaft diameter	Coupling model (AKD brand) OD * length - output shaft - K: international keyway
Φ22	Φ22-L50	SFR55*78-22K-22K
	Φ32-L50	SFR55*78-22K-32K

※ When the DmN value of the screw exceeds 50000, please contact the manufacturer for technical confirmation

KDG110100 Force and speed

Motor power	1300W servo (130 frame)		1800W servo (130 frame)		5000W servo (130 frame)		
Rated speed	1500rpm		1500rpm		3000rpm		
Rated torque	8.34N.m		11.5N.m		15.92N.m		
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)
1	5	8.9	125	12.2	125	17	250
	10	4.45	250	6.1	250	8.5	500
3	10	13.35	83	18.3	83	25.49	166
4	10	17.8	62	24.4	62	33.99 (Heavy load)	125
5	10	22.5	50	30.5 (Heavy load)	50	42.49 (Heavy load)	100
7	10	31.15 (Heavy load)	35	40.82 (Heavy load)	35	/	/
9	10	39.76 (Heavy load)	27	/	/	/	/

Rated thrust calculation formula:

$$F = \frac{T * 2\pi * i}{L} * \mu$$

F: electric cylinder thrust (kN); T: motor torque (N.m); π: ratio of circumference to diameter; i: reduction ratio; L: screw lead (mm); μ: efficiency, the total working efficiency of electric cylinder is recommended to be 85%

Calculation formula of output shaft speed:

$$V = \frac{R * L}{i} \div 60$$

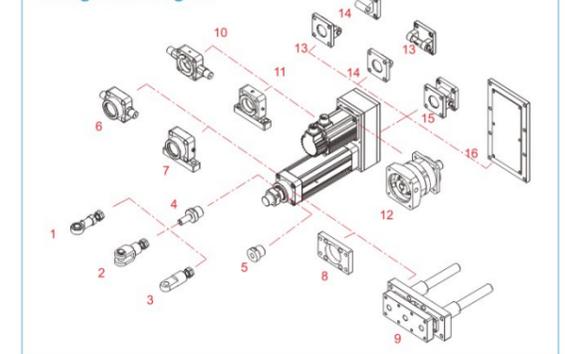
V: output shaft speed (mm/s); R: motor speed (r/min); L: screw lead (mm); i: reduction ratio; 60: constant

Calculation formula of electric cylinder life:

$$L_{10} = \left(\frac{Ca}{F_M} \right)^3 * L$$

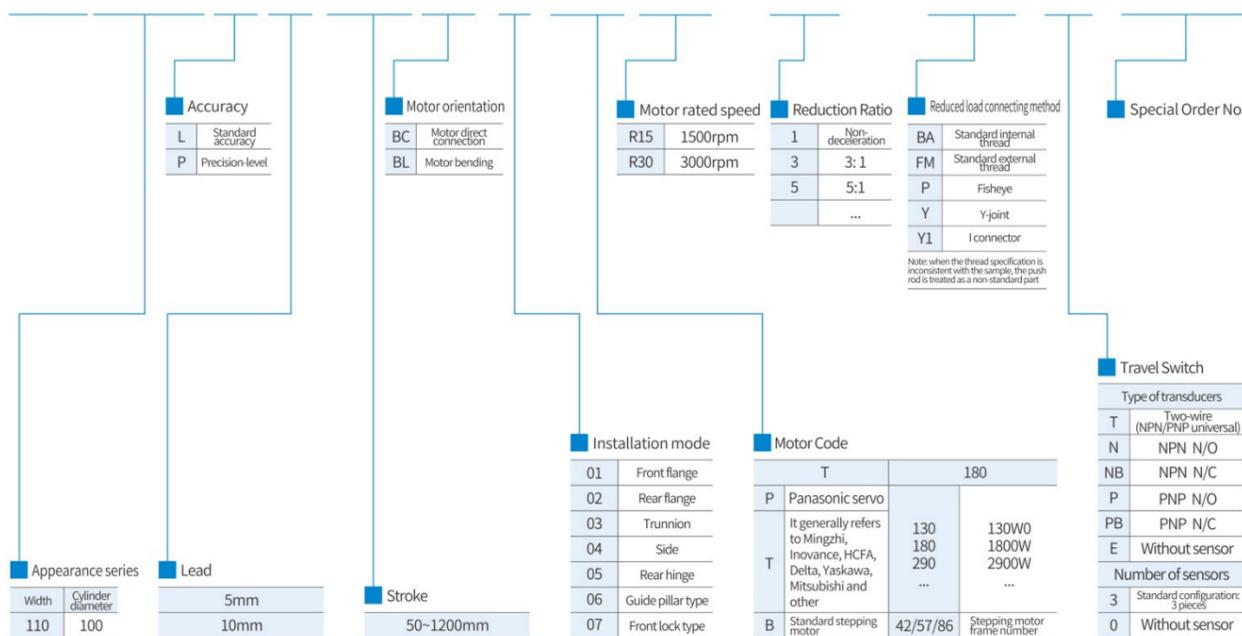
L₁₀: electric cylinder life (km); Ca: dynamic rated load of screw (kN); F_M: average load borne by electric cylinder (kN); L: screw lead (mm)

Configuration legend



Ordering Method

KDG110100-L 05-100-BC 01-T180 R15 JS1 - BA - T3 - D123



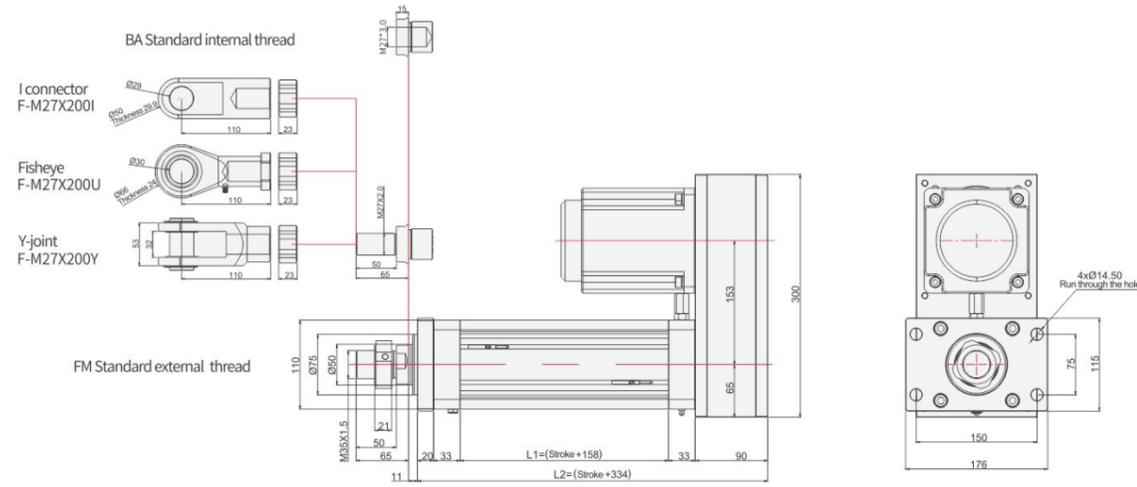
- KDG4027
- KDG4432
- KDG5340
- KDG6350
- KDG7463
- KDG9580
- KDG110100

- KDG4027
- KDG4432
- KDG5340
- KDG6350
- KDG7463
- KDG9580
- KDG110100

KDG110100-Folding - front flange
KDG110100-BL01

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

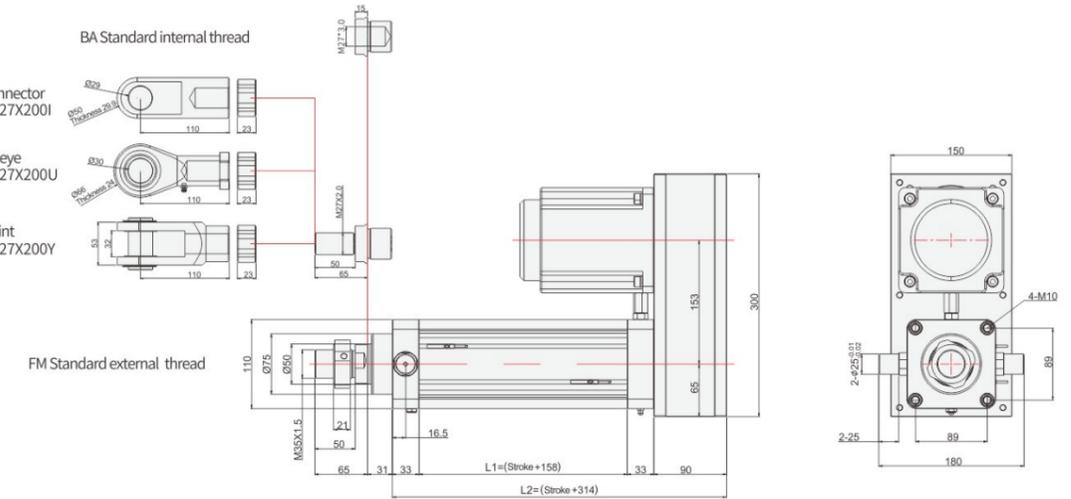
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134	1184	1234	1284	1334
Weight(Kg)	15.53	18.02	20.53	23.02	25.52	28.02	30.52	33.02	35.52	38.02	40.52	43.02	45.52	48.02	50.52	53.02	55.52	58.02	60.52	63.02



KDG110100-Folding - trunnion
KDG110100-BL03

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

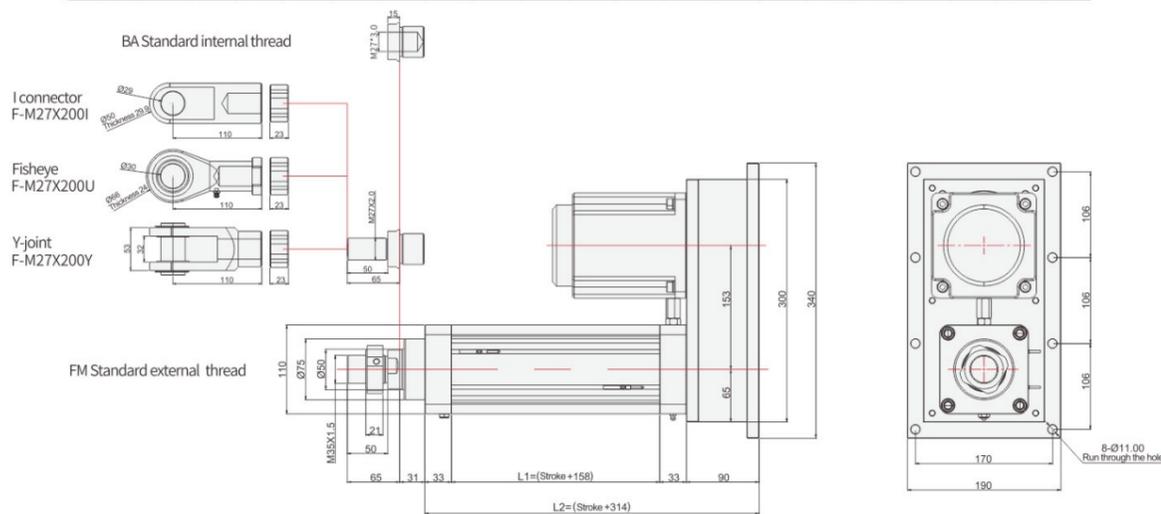
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	364	414	464	514	564	614	664	714	764	814	864	914	964	1014	1064	1114	1164	1214	1264	1314
Weight(Kg)	15.54	18.04	20.54	23.04	25.54	28.04	30.54	33.04	35.54	38.04	40.54	43.04	45.54	48.04	50.54	53.04	55.54	58.04	60.54	63.04



KDG110100-Folding - rear flange
KDG110100-BL02

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

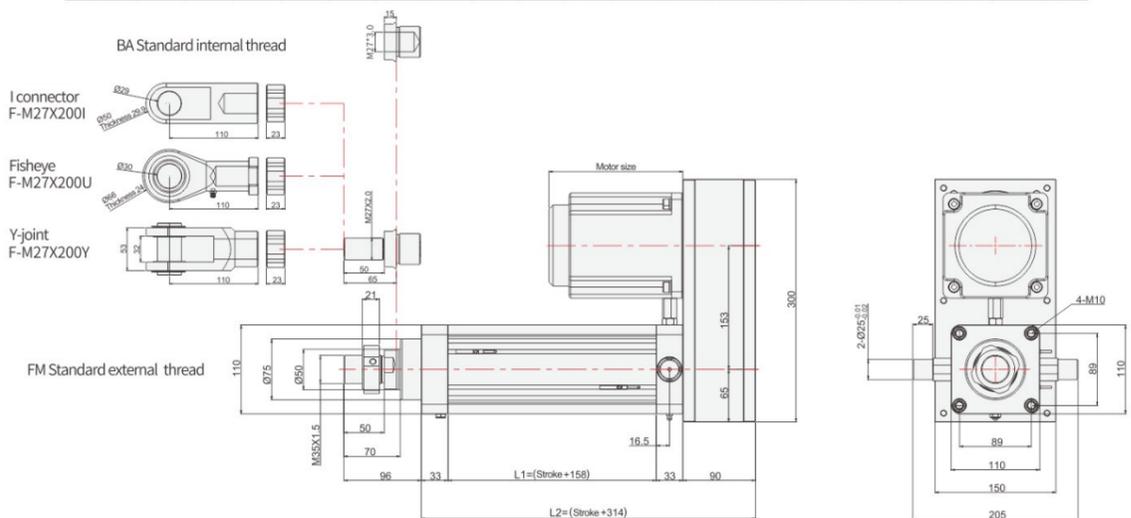
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	364	414	464	514	564	614	664	714	764	814	864	914	964	1014	1064	1114	1164	1214	1264	1314
Weight(Kg)	15.53	18.02	20.53	23.02	25.52	28.02	30.52	33.02	35.52	38.02	40.52	43.02	45.52	48.02	50.52	53.02	55.52	58.02	60.52	63.02



KDG110100-Folding - return rear trunnion
KDG110100-BL03H

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	364	414	464	514	564	614	664	714	764	814	864	914	964	1014	1064	1114	1164	1214	1264	1314
Weight(Kg)	15.54	18.04	20.54	23.04	25.54	28.04	30.54	33.04	35.54	38.04	40.54	43.04	45.54	48.04	50.54	53.04	55.54	58.04	60.54	63.04



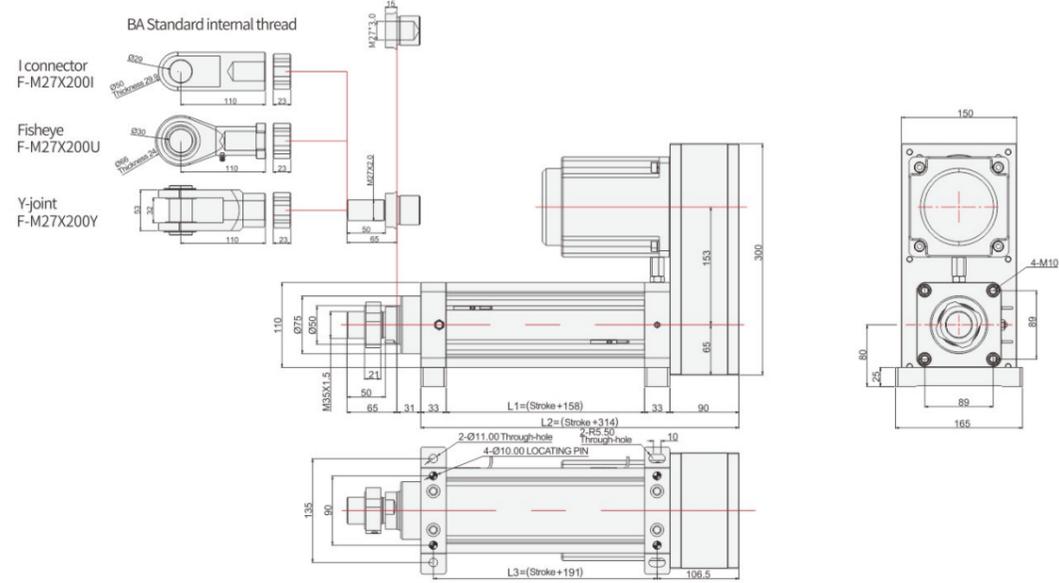
KDG110100 Servo Electric Cylinder

KDG110100 Servo Electric Cylinder

KDG110100-Folding - side flange
KDG110100-BL04

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

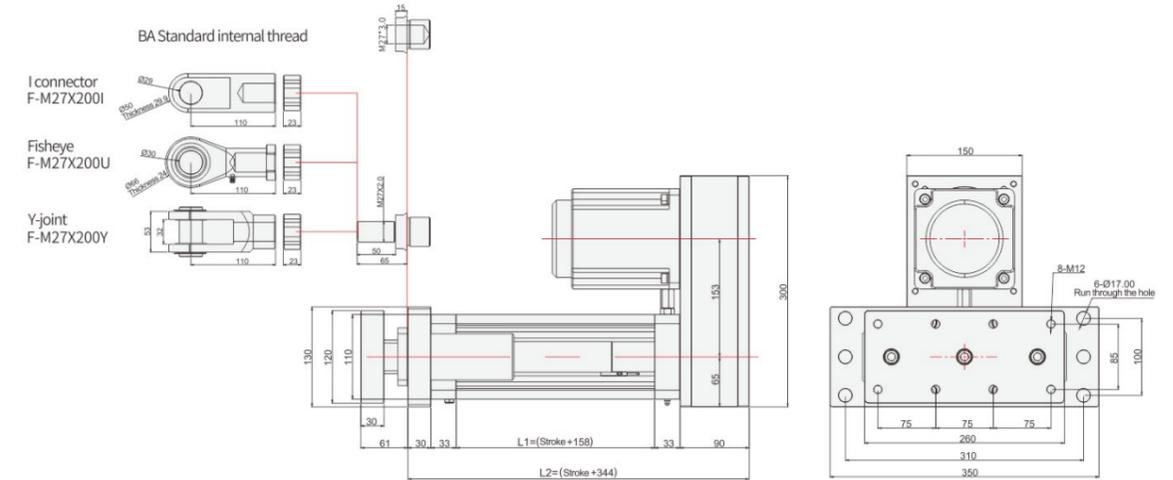
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	364	414	464	514	564	614	664	714	764	814	864	914	964	1014	1064	1114	1164	1214	1264	1314
Weight(Kg)	13.86	16.36	18.86	21.36	23.86	26.36	28.86	31.36	33.86	36.36	38.86	41.36	43.86	46.36	48.86	51.36	53.86	56.36	58.86	61.36



KDG110100-Folding - guide pillar type
KDG110100-BL06

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

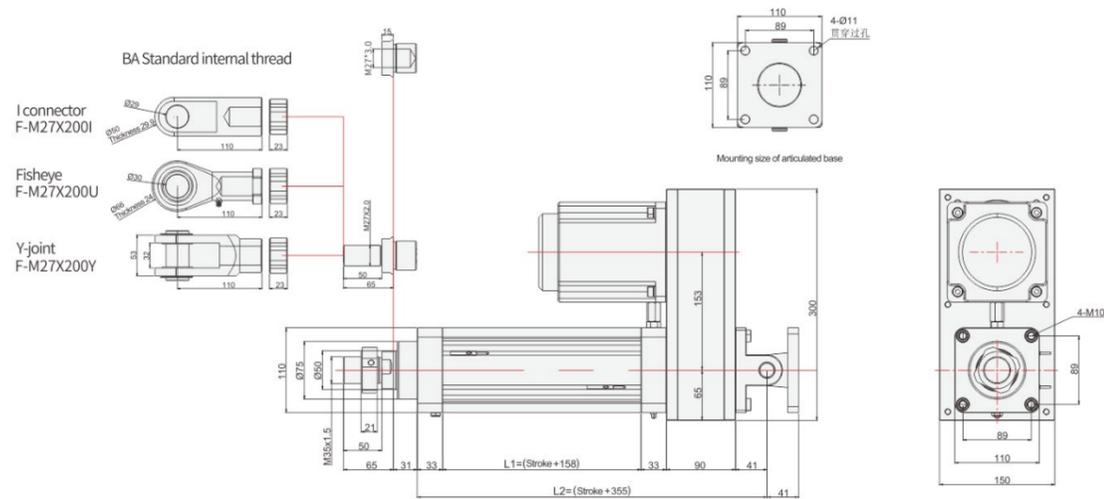
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344
Weight(Kg)	25.16	30.56	35.96	41.36	46.76	52.16	57.56	62.96	68.36	73.76	79.16	84.56	89.96	95.36	100.76	106.16	111.56	116.96	122.36	127.76



KDG110100-Folding - rear hinge
KDG110100-BL05

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

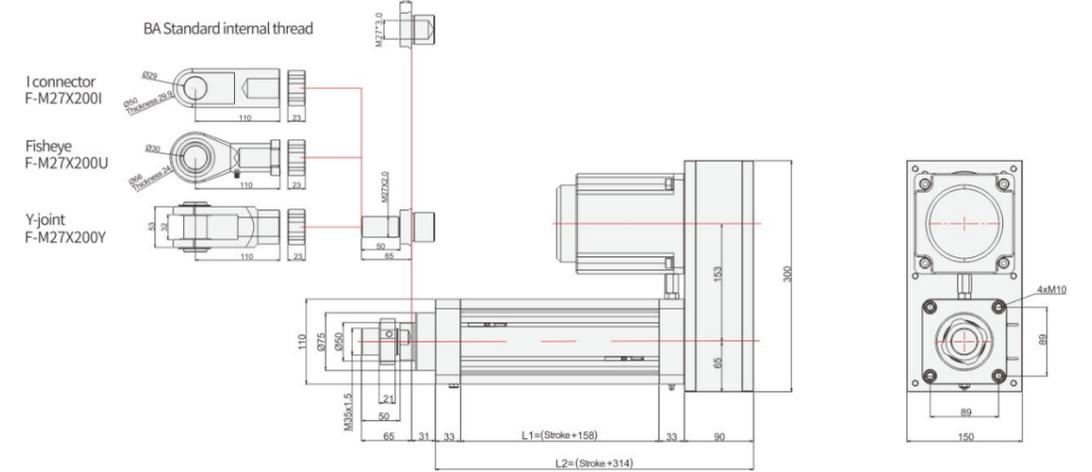
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	405	455	505	555	605	655	705	755	805	855	905	955	1005	1055	1105	1155	1205	1255	1305	1355
Weight(Kg)	13.86	16.36	18.86	21.36	23.86	26.36	28.86	31.36	33.86	36.36	38.86	41.36	43.86	46.36	48.86	51.36	53.86	56.36	58.86	61.36



KDG110100-Folding - front lock type
KDG110100-BL07

Note: for the motor folding series, pay attention to the motor overheight within the stroke 100

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	364	414	464	514	564	614	664	714	764	814	864	914	964	1014	1064	1114	1164	1214	1264	1314
Weight(Kg)	13.26	15.76	18.26	20.76	23.26	25.76	28.26	30.76	33.26	35.76	38.26	40.76	43.26	45.76	48.26	50.76	53.26	55.76	58.26	60.76



KDG4027
KDG4432
KDG5340
KDG6350
KDG7463
KDG9580
KDG110100

KDG4027
KDG4432
KDG5340
KDG6350
KDG7463
KDG9580
KDG110100

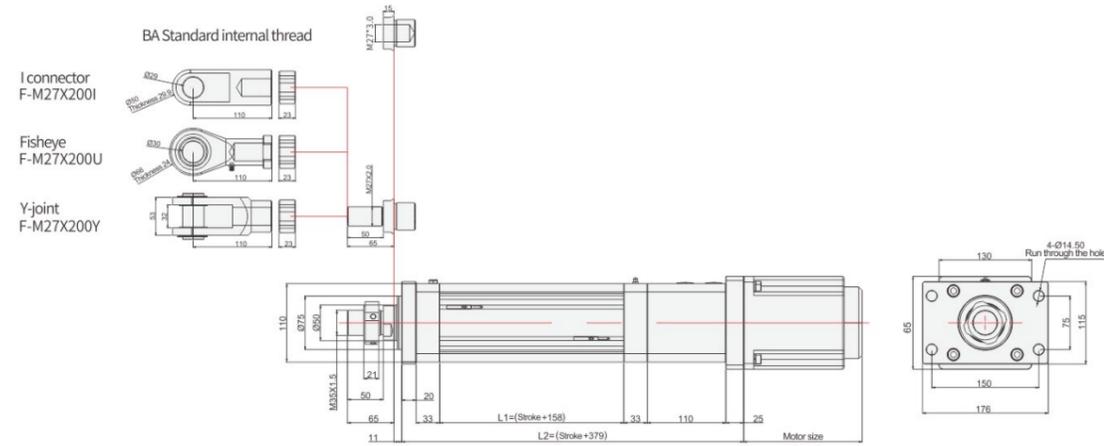
KDG110100 Servo Electric Cylinder

KDG110100 Servo Electric Cylinder

KDG110100-Direct connection - front flange
KDG110100-BC01

Note: when the motor mounting plate matches different motors, the size may change

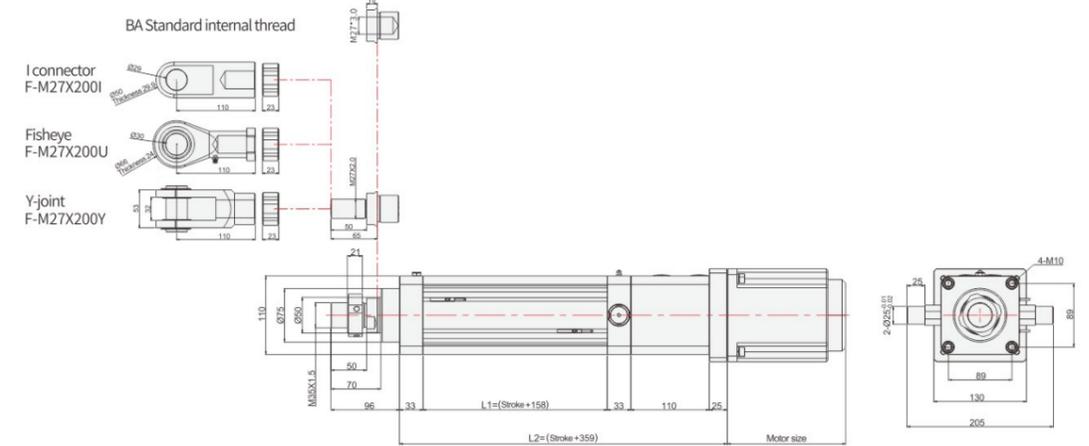
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	429	479	529	579	629	679	729	779	829	879	929	979	1029	1079	1129	1179	1229	1279	1329	1379
Weight(Kg)	14.5	17	19.5	22	24.5	27	29.5	32	34.5	37	39.5	42	44.5	47	49.5	52	54.5	57	59.5	62



KDG110100-Direct connection - rear trunnion
KDG110100-BC03H

Note: when the motor mounting plate matches different motors, the size may change

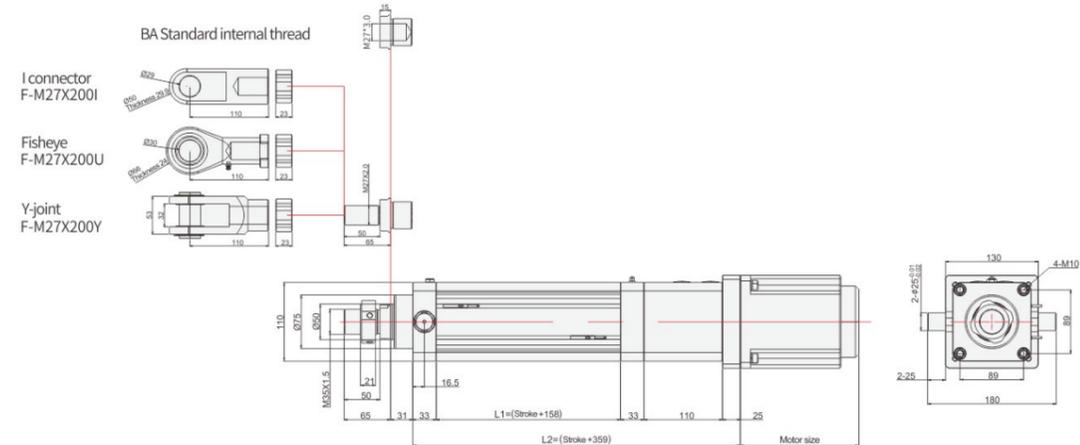
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109	1159	1209	1259	1309	1359
Weight(Kg)	14.5	17	19.5	22	24.5	27	29.5	32	34.5	37	39.5	42	44.5	47	49.5	52	54.5	57	59.5	62



KDG110100-Direct connection - trunnion
KDG110100-BC03

Note: when the motor mounting plate matches different motors, the size may change

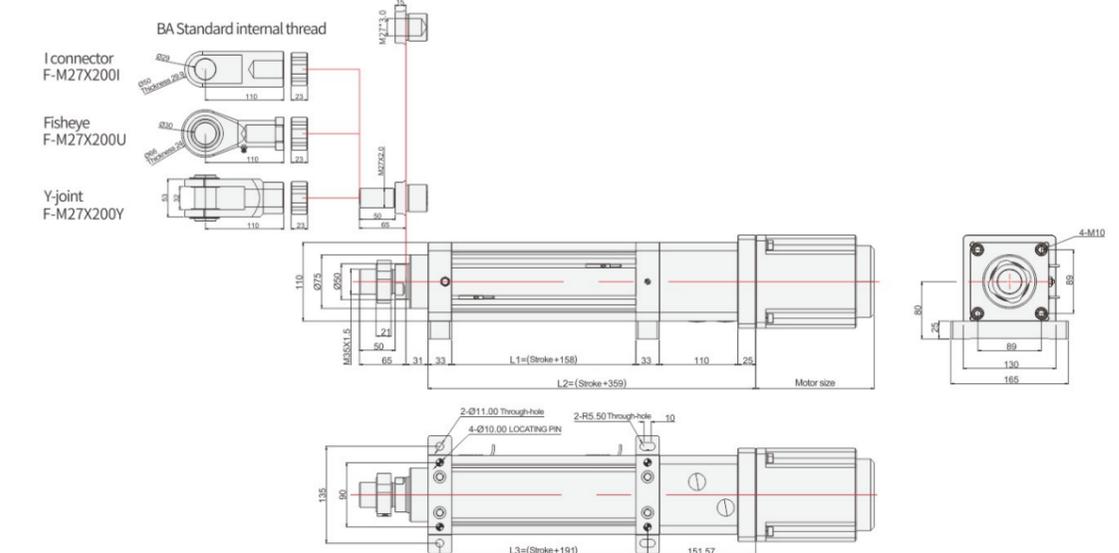
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109	1159	1209	1259	1309	1359
Weight(Kg)	14.5	17	19.5	22	24.5	27	29.5	32	34.5	37	39.5	42	44.5	47	49.5	52	54.5	57	59.5	62



KDG110100-Direct connection - side flange
KDG110100-BC04

Note: when the motor mounting plate matches different motors, the size may change

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109	1159	1209	1259	1309	1359
Weight(Kg)	12.84	15.34	17.84	20.34	22.84	25.34	27.84	30.34	32.84	35.34	37.84	40.34	42.84	45.34	47.84	50.34	52.84	55.34	57.84	60.34



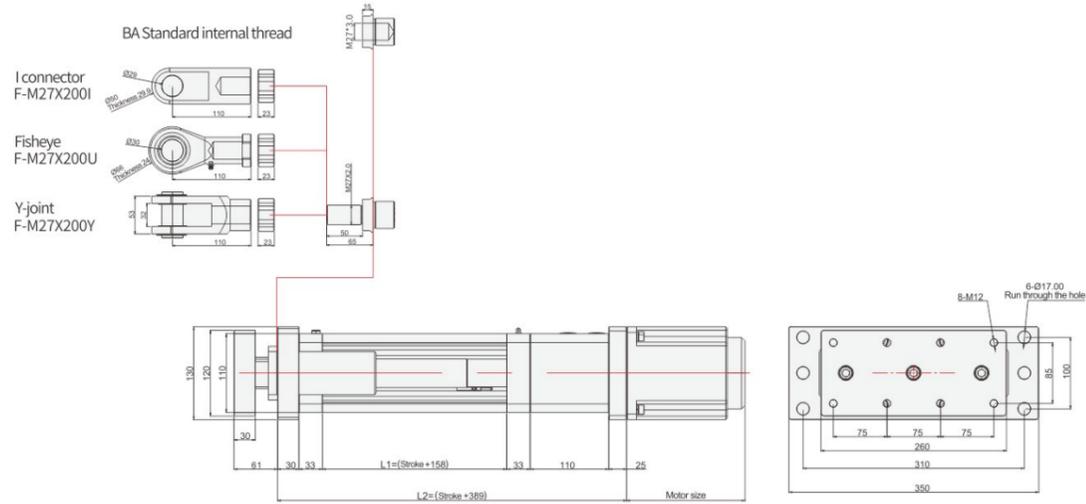
KDG110100 Servo Electric Cylinder

KDG110100-Direct connection - guide pillar type
KDG110100-BC06

Note: when the motor mounting plate matches different motors, the size may change

Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	439	489	539	589	639	689	739	789	839	889	939	989	1039	1089	1139	1189	1239	1289	1339	1389
Weight(Kg)	24.14	29.54	34.94	40.34	45.74	51.14	56.54	61.94	67.34	72.74	78.14	83.54	88.94	93.94	99.74	105.14	110.54	115.94	121.34	126.74

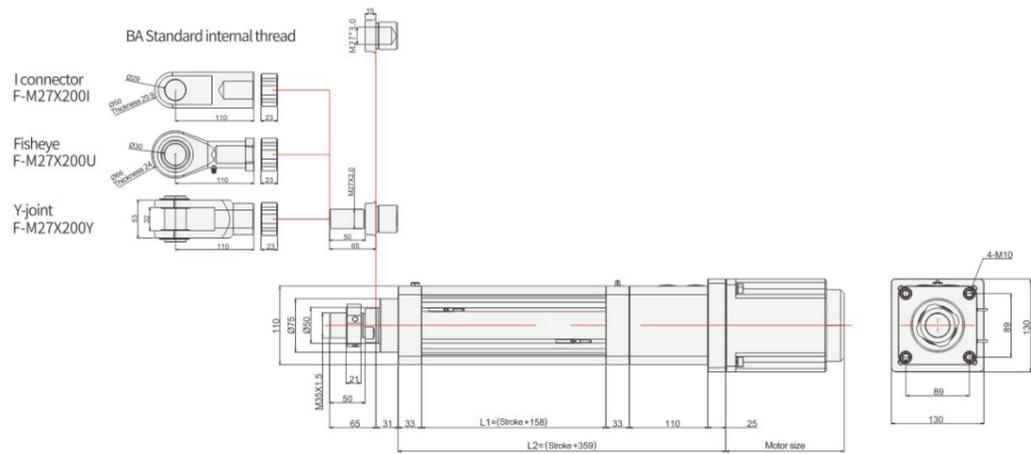


KDG110100-Direct connection - front lock type
KDG110100-BC07

Note: when the motor mounting plate matches different motors, the size may change

Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L1	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
L2	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109	1159	1209	1259	1309	1359
Weight(Kg)	12.24	14.74	17.24	19.74	22.24	24.74	27.24	29.74	32.24	34.74	37.24	39.74	42.24	44.74	47.24	49.74	52.24	54.74	57.24	59.74



MEMO

KDA Servo Electric Cylinder

Basic Introduction of Servo Electric Cylinder

Principle of electric cylinder:

The electric cylinder converts the rotary motion of motor into the linear motion of push rod through the mechanical motion of the screw and lead screw pair. Using the closed-loop control characteristics of servo motor, it is easy to realize precise control of thrust, speed and position; applying the modern motion control technology, numerical control technology and bus (network) technology, the program-based, bus (network) control is realized. Due to the convenience of its control and use, it will realize the precise motion control that cannot be realized by cylinder and hydraulic cylinder transmission.

Features of electric cylinder:

KDG series electric cylinders adopt the advanced modular design methods and have the following significant features:

1. Compact structure, small outline size, convenient installation and use, simple maintenance, low noise, long life, and multiple safety protection measures.
2. Precise position control: the repeat positioning accuracy can reach ±0.01 mm, and even ±0.005 mm after adding an external displacement sensor.
3. Precise speed control: any speed waveform can be set to achieve high-speed, smooth and shock-free operation, and the control accuracy can reach 0.05%.
4. Precise thrust control: the control accuracy can reach 0.5% after adding an external push-pull force sensor.
5. The trapezoidal screw, ball screw and planetary needle roller screw transmission methods can be used.
6. The servo motor, stepping motor, DC motor and AC motor can be used to drive, servo and variable frequency control.

The relationship between motor output torque and electric cylinder output force:

$$F = T \times \eta \times 2\pi \times R / L$$

- F: electric cylinder output force, unit: kN
- T: motor output torque, unit: Nm
- R: reduction ratio
- L: screw lead, unit: mm
- π : ratio of circumference to diameter
- η : efficiency (generally choose the total efficiency of electric cylinder as 85%, but please note that the efficiency changes as the actual working conditions)

Life calculation of electric cylinder:

The service life of an electric cylinder generally refers to the life of screw inside the electric cylinder. The life of electric cylinder can be divided into two parts: The first is the theoretical fatigue life of electric cylinder, which can be calculated; The second is the service life of electric cylinder, which is affected by the operating conditions (such as temperature, dust, type of lubricant used and frequency of regular refilling, etc.). The service life can often be calculated through experience. The following is the calculation method of fatigue life of electric cylinder:

$$L_{10} = (C_a / F_m)^3 \times L$$

- L_{10} : electric cylinder life, unit: km
- F_m : Average load borne by the electric cylinder, unit: kN
- C_a : basic dynamic rated load of screw nut, unit: kN (it can be found from screw sample)
- L: Screw lead, unit: mm

Definition of electric cylinder product model

KDA 134 - L 20 - 100 - BC 01 - T40 R15 JS1 - BA - N3 - D123

Appearance series
134x134
140x140 (134 Heavy load)
180x180
190x190 (180 Heavy load)
240x240

Special Order No.

Motor orientation
BC Motor direct connection
BL Motor bending

Motor rated speed
R10 1000rpm
R15 1500rpm
R20 2000rpm
R30 3000rpm

Accuracy
L Standard accuracy
P Precision-level

Lead
KDA134 10
KDA180 20
KDA240

Stroke
KDA134
KDA180 50~2000
KDA240

Installation mode
01 Front flange
02 Rear flange
03 Trunnion
04 Side
05 Rear hinge
06 Guide pillar type
07 Front lock type

Motor Code
T 40
P Panasonic servo
It generally refers to Mingzhi, Inovance, HCFA, Delta, Yaskawa, Mitsubishi and other
T 10 20 40 ...
B Standard stepping motor 57/86 Stepping motor frame number

Reduction Ratio
1 1:1
3 3:1
5 5:1
.....

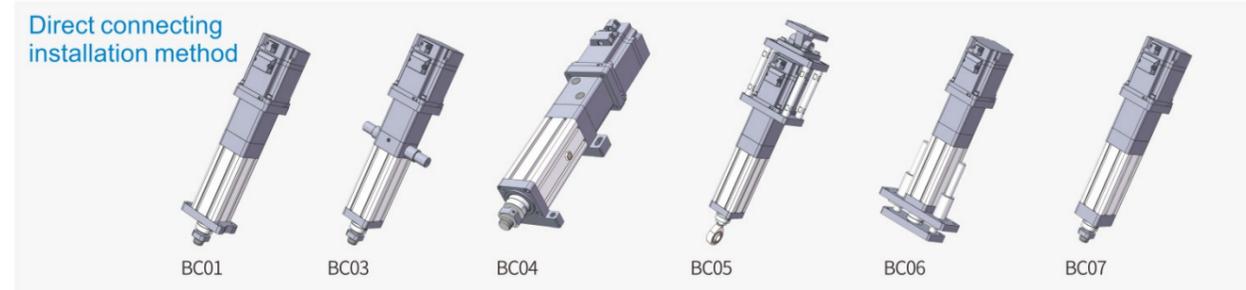
Reduced load connecting method
BA Standard internal thread
FM Standard external thread
P Fisheye
Y Y-joint
Y1 I connector

Travel Switch
T Two-wire (NPN/PNP universal)
N NPN N/O
NB NPN I/C
P PNP N/O
PB PNP N/C
E Without sensor

Number of sensors
3 Standard configuration: 3 pieces
0 Without sensor

Note: when the thread specification is inconsistent with the sample, the push rod is treated as a non-standard part

Please consult with the AKD engineer when selecting a heavy-duty electric cylinder.



KDA134 Servo Electric Cylinder

KDA134 Servo Electric Cylinder

KDA134 Series Standard Configuration Parameters

Basic parameters

Cylinder OD	134x134mm
Cylinder ID	Φ120mm
Screw typp	Ball screw
Allowable maximum thrust	≤80kN
Stroke range	≤2000mm
Allowable maximum speed	≤500mm/s

Basic configuration

Screw diameter	50mm
Screw slenderness ratio	1:50
Screw lead	20mm
Synchronous wheel speed ratio	1
	1.5
	2
Matching motor	180-frame servo
Matching reducer	115-frame servo
	142-frame servo

Stress and accuracy

Bearings	Cr(kN)	115	
	Cor(kN)	147	
Screw rod	Ca(kN)	20mm	71.42
	Coa(kN)	20mm	225.88
Screw accuracy level		C5	C7
Repeated positioning accuracy		±0.01	±0.02
Piston rod rotation angle		±0.3°	
Magnet ring switch		DFGH	

※ When the DmN value of the screw exceeds 50000, please contact the manufacturer for technical confirmation

Please consult with the AKD engineer when selecting a heavy-duty electric cylinder.

Force and speed:

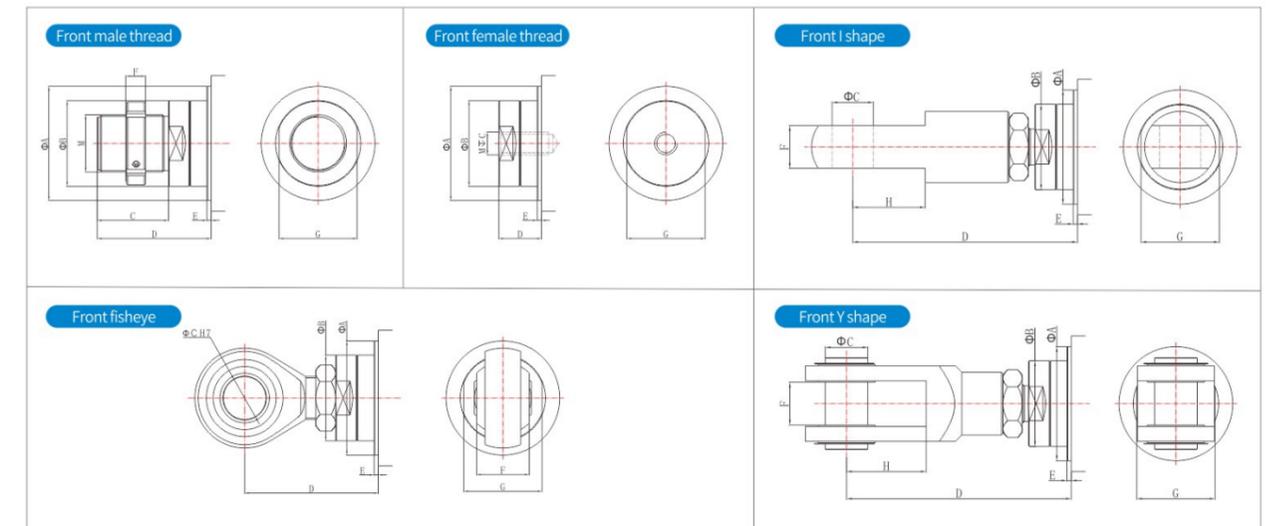
Rated thrust = motor torque × 2π × reduction ratio ÷ lead × efficiency (85%)

Rated speed = motor speed × lead ÷ reduction ratio ÷ 60

Motor power		4500W (180 frame)		5500W (180 frame)		7500W (180 frame)		
Rated speed		1500 rpm		1500 rpm		1500 rpm		
Rated torque		28.65 N.m		35.01 N.m		47.75 N.m		
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	
Synchronous wheel speed ratio	1	20	7.65	500	9.34	500	12.74	500
	1.5	20	11.47	333	14.02	333	19.11	333
	2	20	15.29	250	18.69	250	25.49	250
Reducer Ratio	3	20	22.94	166.67	28.03	166.67	38.23	166.67
	4	20	30.58	125	37.38	125	50.97	125
	5	20	38.23	100	46.72	100	63.72	100
	6	20	45.88	83.33	56.07	83.33	76.46	83.33
	7	20	53.52	71.43	65.41	71.43	89.2	71.43
8	20	61.17	62.5	74.76	62.5	-	-	

The motors equipped above are standard motor frame numbers that can be equipped without adding a reducer. After adding a reducer, the applicable motor frame numbers are more extensive. Due to limited space, the speed ratio of many reducers is not marked. If you need to know other configuration parameters, please consult our staff.

KDA134-Dimensional Diagram of Front Connection Method

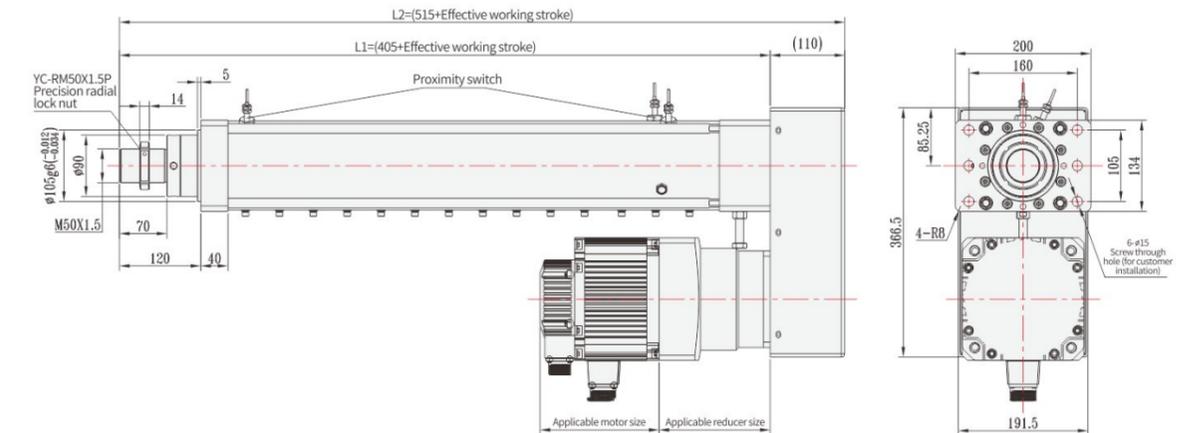


Load Type	ΦA	ΦB	ΦC	C	D	E	F	H	G	M
Front male thread	Φ110	Φ90	-	70	120	10	14	-	-	M50x2
Front female thread	Φ110	Φ90	-	45	50	10	-	-	-	M30x1.5
Front I shape	Φ110	Φ90	Φ40	-	245	10	40	85	-	-
Front fisheye	Φ110	Φ90	Φ50	-	165	10	60	-	-	-
Front Y shape	Φ110	Φ90	Φ40	-	245	10	40.3	86	85	-

KDA134-Standard Dimensional Diagram of Folding Series

Note: when the motor mounting plate matches different motors, the size may change

KDA134-R01 Dimensional Diagram of Flange before Folding



KDA134 Servo Electric Cylinder

KDA134 Servo Electric Cylinder

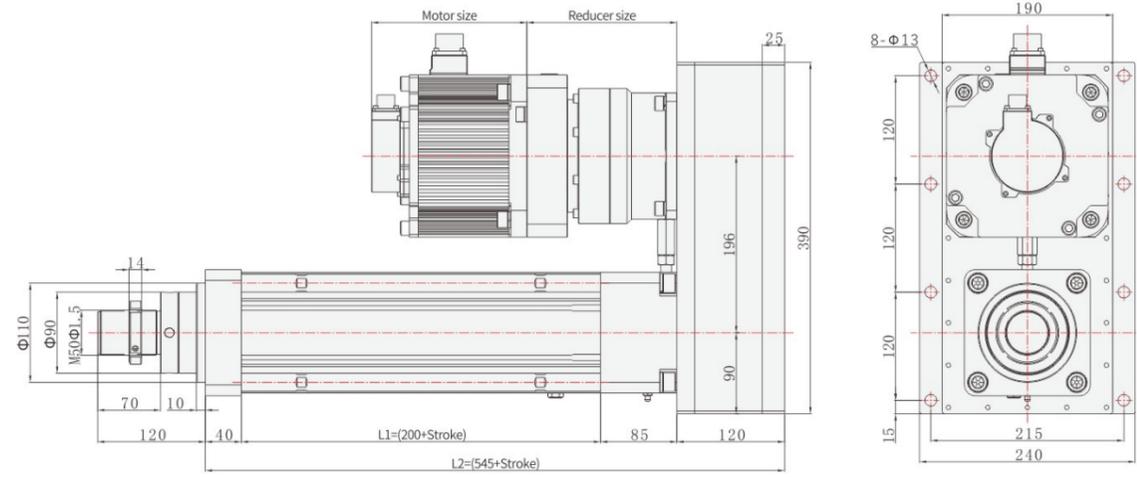
KDA134-Standard Dimensional Diagram of Folding Series

Note: when the motor mounting plate matches different motors, the size may change

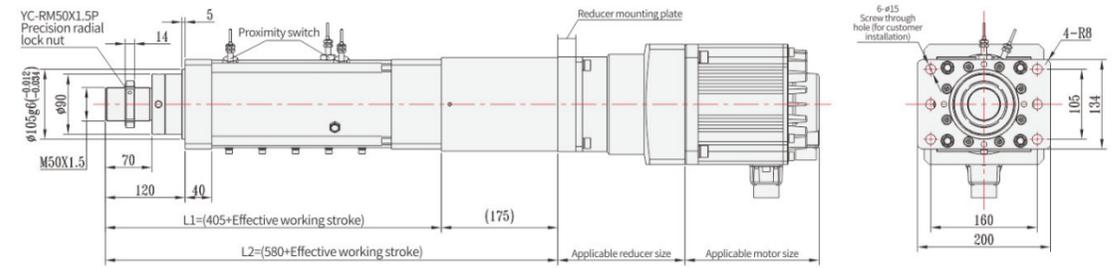
KDA134-Dimensional Diagram Dimensional Diagram of Folding Series

Note: when the motor mounting plate matches different motors, the size may change

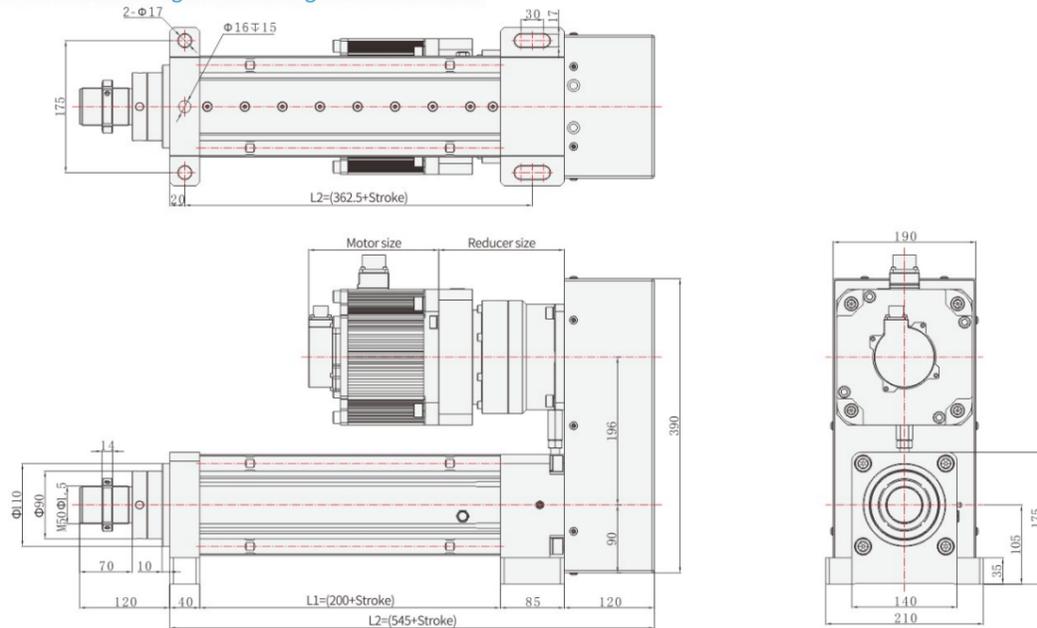
KDA134-R02 Dimensional Diagram of Flange after Folding



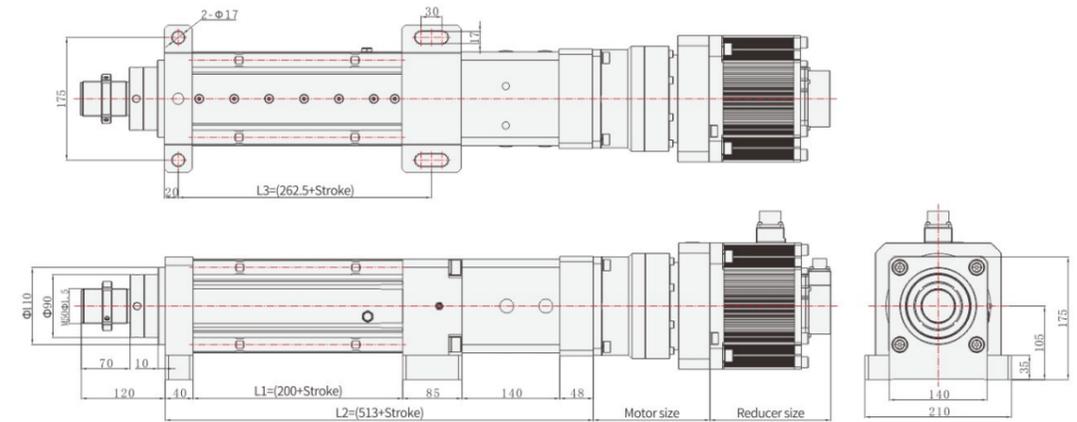
KDA134-L01 Dimensional Diagram of Direct Connecting Front Flange



KDA134-R04 Dimensional Diagram of Folding Horizontal Model



KDA134-L04 Dimensional Diagram of Direct Connecting Horizontal Model



KDA190 Servo Electric Cylinder

KDA190 Servo Electric Cylinder

KDA190 Series Standard Configuration Parameters

Basic parameters

Cylinder OD	195x195mm
Cylinder ID	Φ160mm
Screw typp	Ball screw
Allowable maximum thrust	≤200kN
Stroke range	≤2000mm
Allowable maximum speed	≤500mm/s

Basic configuration

Screw diameter	63mm
Screw slenderness ratio	1:50
Screw lead	20mm
Synchronous wheel speed ratio	1
	1.5
Matching motor	180-frame servo
	142-frame servo
Matching reducer	180-frame servo

Stress and accuracy

Bearings	Cr(kN)	226	
	Cor(kN)	303	
Light load Screw rod	Ca(kN)	20mm	114.4
	Coa(kN)	20mm	366.5
Heavy load Screw rod	Ca(kN)	20mm	326.2
	Coa(kN)	20mm	774.7
Screw accuracy level		C5	C7
Repeated positioning accuracy		±0.01	±0.02
Piston rod rotation angle		±0.3°	
Magnet ring switch		DFGH	

※ When the DmN value of the screw exceeds 50000, please contact the manufacturer for technical confirmation

Please consult with the AKD engineer when selecting a heavy-duty electric cylinder.

Force and speed:

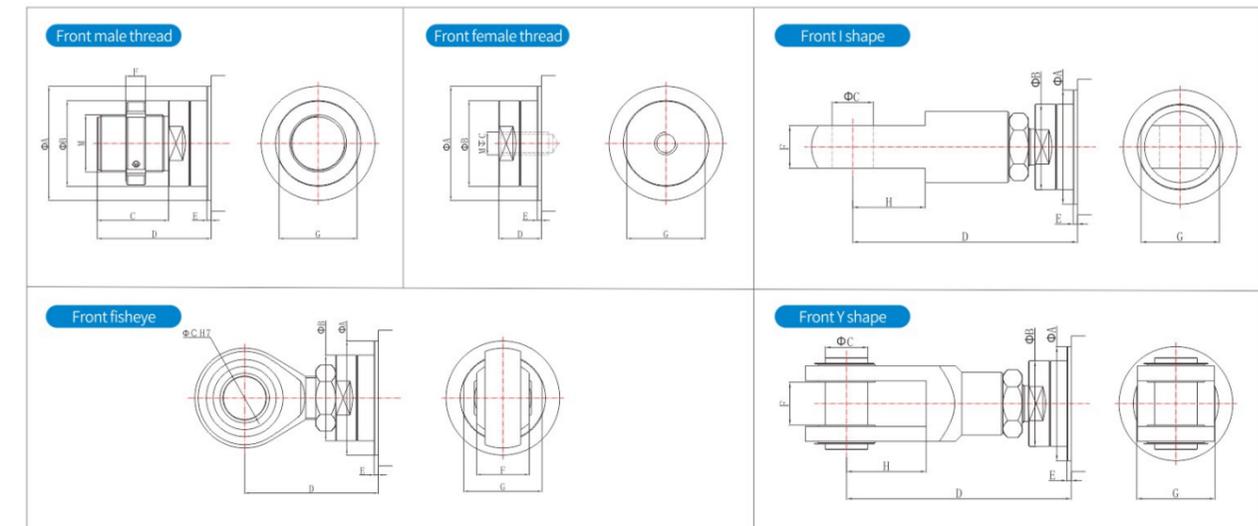
Rated thrust = motor torque × 2π × reduction ratio ÷ lead × efficiency (85%)
 Rated speed = motor speed × lead ÷ reduction ratio ÷ 60

Motor power		4500W (180 frame)		5500W (180 frame)		7500W (180 frame)	
Rated speed		1500 rpm		1500 rpm		1500 rpm	
Rated torque		28.65 N.m		35.01 N.m		47.75 N.m	
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)
Synchronous wheel speed ratio	1	20	7.65	500	9.34	500	12.74
	1.5	20	11.47	333	14.02	333	19.11
Reducer Ratio	3	20	22.94	166.67	28.03	166.67	38.23
	4	20	30.58	125	37.38	125	50.97
	5	20	38.23	100	46.72	100	63.72
	6	20	45.88	83.33	56.07	83.33	76.46
	7	20	53.52	71.43	65.41	71.43	89.2
	8	20	61.17	62.5	74.76	62.5	101.95

The motors equipped above are standard motor frame numbers that can be equipped without adding a reducer. After adding a reducer, the applicable motor frame numbers are more extensive. Due to limited space, the speed ratio of many reducers is not marked. If you need to know other configuration parameters, please consult our staff.



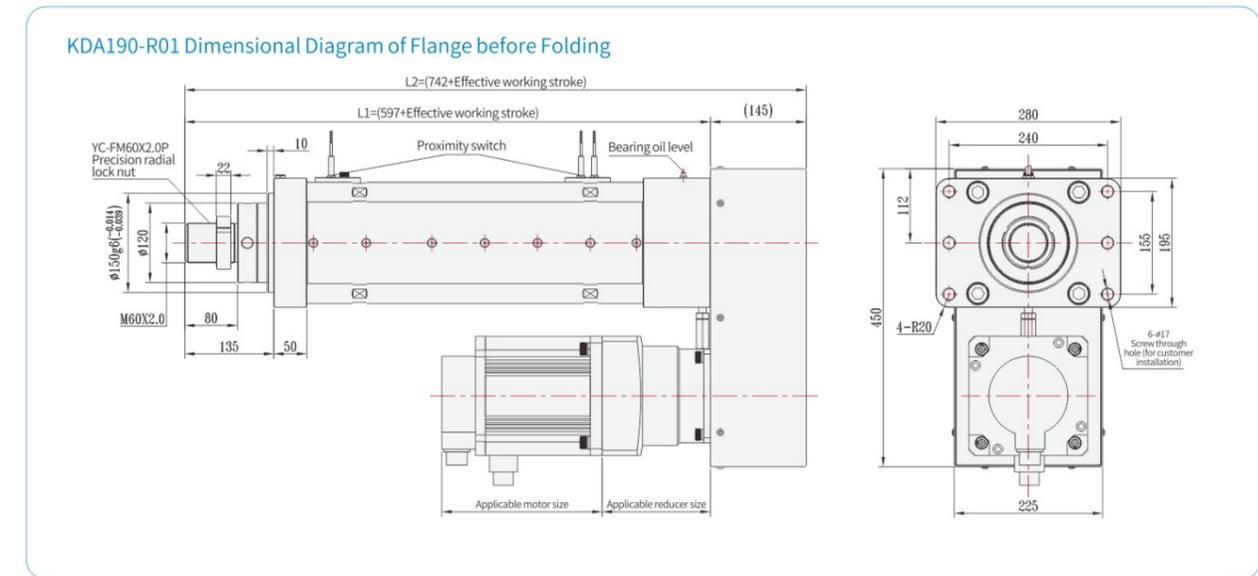
KDA190-Dimensional Diagram of Front Connection Method



Load Type	ΦA	ΦB	ΦC	C	D	E	F	H	G	M
Front male thread	Φ150	Φ120	-	80	135	10	16	-	-	M60x2
Front female thread	Φ150	Φ120	-	45	55	10	-	-	-	M40x1.5
Front I shape	-	-	-	-	-	-	-	-	-	-
Front fisheye	-	-	-	-	-	-	-	-	-	-
Front Y shape	-	-	-	-	-	-	-	-	-	-

KDA190-Standard Dimensional Diagram of Folding Series

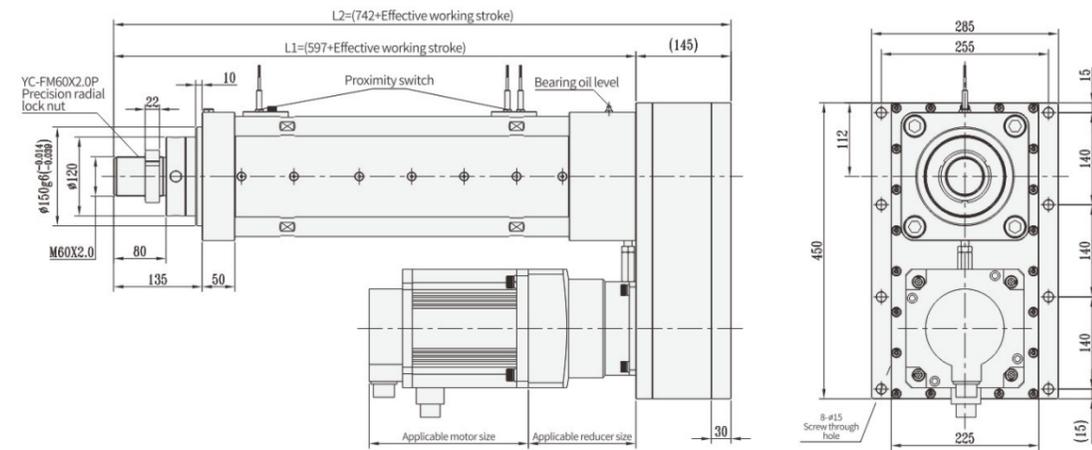
Note: when the motor mounting plate matches different motors, the size may change



KDA190-Standard Dimensional Diagram of Folding Series

Note: when the motor mounting plate matches different motors, the size may change

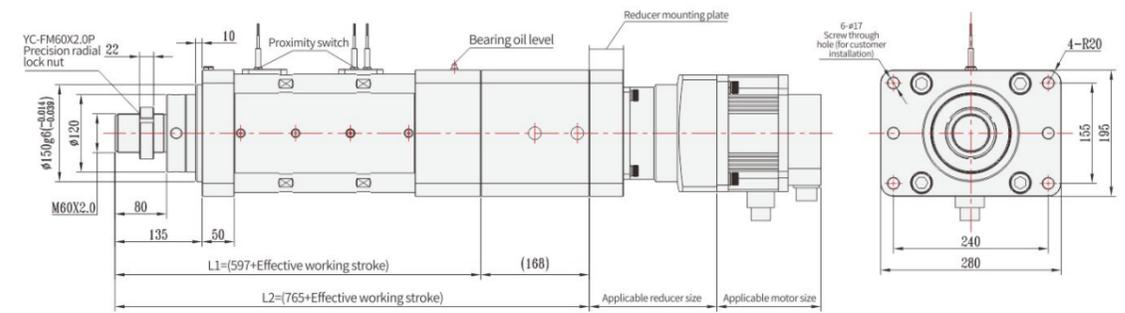
KDA190-R02 Dimensional Diagram of Flange after Folding



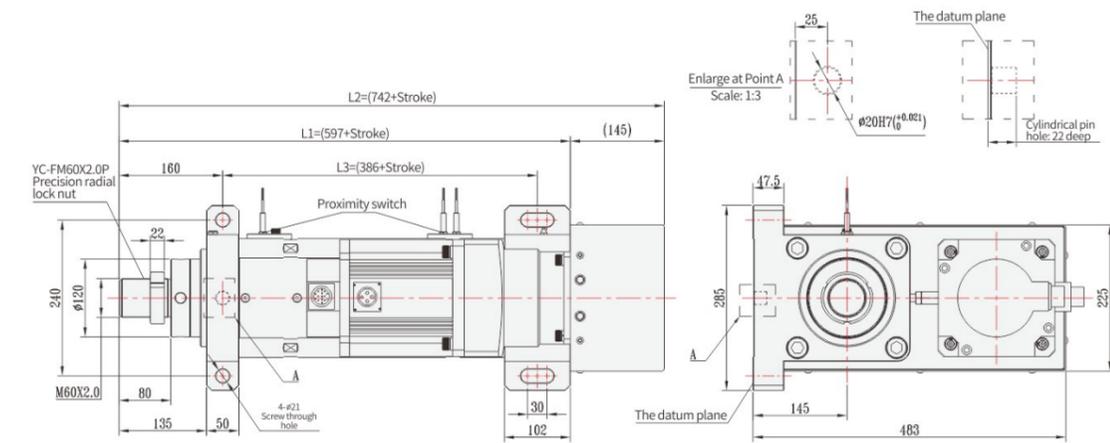
KDA190-Dimensional Diagram Dimensional Diagram of Folding Series

Note: when the motor mounting plate matches different motors, the size may change

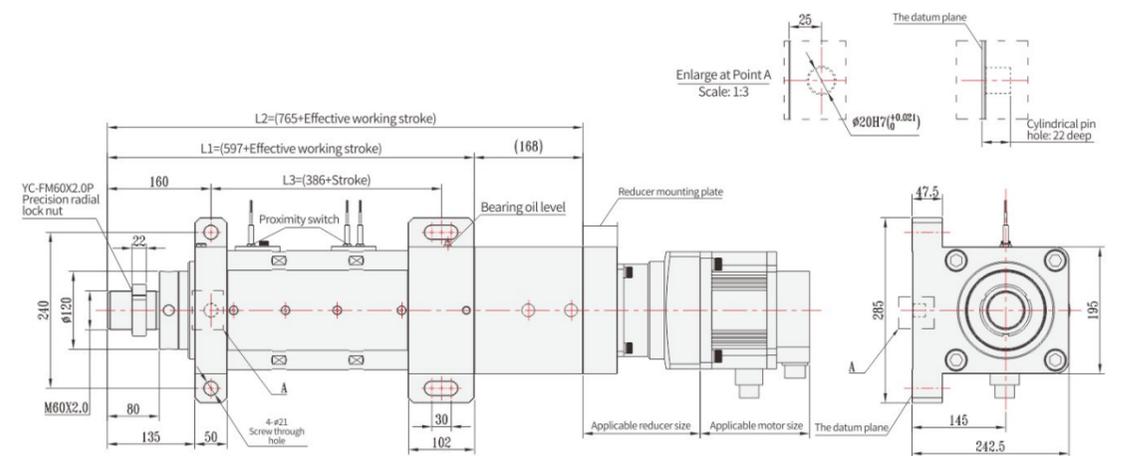
KDA190-L01 Dimensional Diagram of Direct Connecting Front Flange



KDA190-R04 Dimensional Diagram of Folding Horizontal Model



KDA190-L04 Dimensional Diagram of Direct Connecting Horizontal Model



KDA240 Servo Electric Cylinder

KDA240 Servo Electric Cylinder

KDA240 Series Standard Configuration Parameters

Basic parameters

Cylinder OD	245x245mm
Cylinder ID	Φ180mm
Screw typp	Ball screw
Allowable maximum thrust	≤300kN
Stroke range	≤2000mm
Allowable maximum speed	≤500mm/s

Basic configuration

Screw diameter	80mm
Screw slenderness ratio	1:50
Screw lead	20mm
Synchronous wheel speed ratio	1
Matching motor	180-frame servo
Matching reducer	180-frame servo 220-frame servo

Stress and accuracy

Bearings	Cr(kN)	345	
	Cor(kN)	480	
Light load Screw rod	Ca(kN)	20mm	129.11
	Coa(kN)	20mm	477.47
Heavy load Screw rod	Ca(kN)	20mm	-
	Coa(kN)	20mm	-
Screw accuracy level		C5	C7
Repeated positioning accuracy		±0.01	±0.02
Piston rod rotation angle		±0.3°	
Magnet ring switch		DFGH	

※ When the DmN value of the screw exceeds 50000, please contact the manufacturer for technical confirmation

Please consult with the AKD engineer when selecting a heavy-duty electric cylinder.

Force and speed:

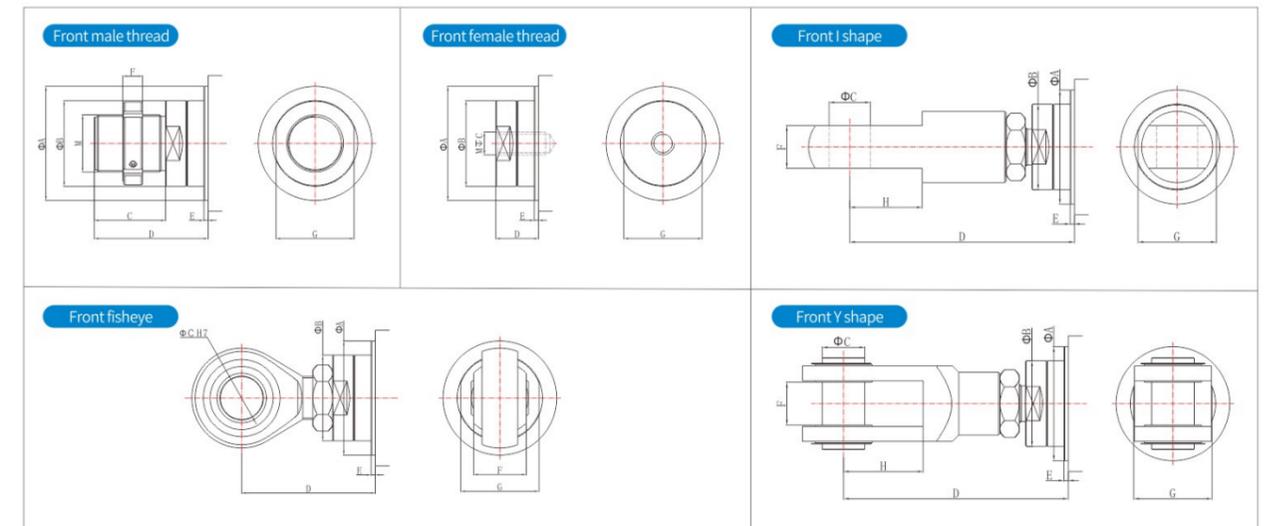
Rated thrust = motor torque × 2π × reduction ratio ÷ lead × efficiency (85%)
Rated speed = motor speed × lead ÷ reduction ratio ÷ 60

Motor power		4500W (180 frame)		5500W (180 frame)		7500W (180 frame)	
Rated speed		1500 rpm		1500 rpm		1500 rpm	
Rated torque		28.65 N.m		35.01 N.m		47.75 N.m	
Reduction Ratio	Lead (mm)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)	Rated thrust (kN)	Rated speed (mm/s)
Synchronous wheel speed ratio	1	20	7.65	500	9.34	500	12.74
	1.5	20	11.47	333	14.02	333	19.11
Reducer Ratio	3	20	22.94	166.67	28.03	166.67	38.23
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The motors equipped above are standard motor frame numbers that can be equipped without adding a reducer. After adding a reducer, the applicable motor frame numbers are more extensive. Due to limited space, the speed ratio of many reducers is not marked. If you need to know other configuration parameters, please consult our staff.



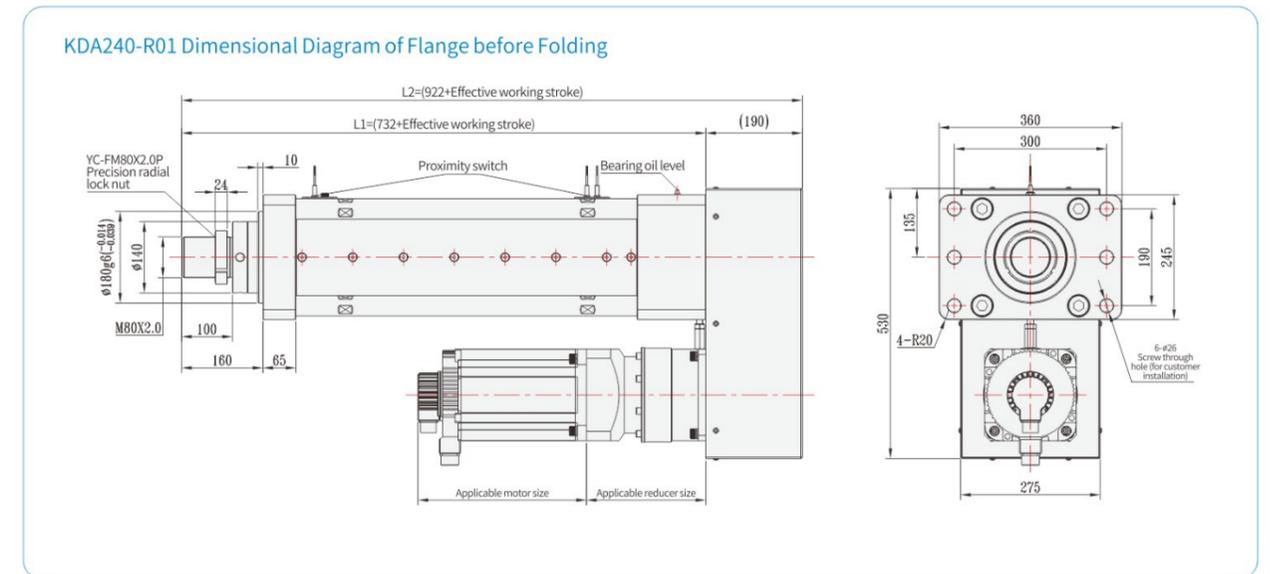
KDA240-Dimensional Diagram of Front Connection Method



Load Type	ΦA	ΦB	ΦC	C	D	E	F	H	G	M
Front male thread	Φ180	Φ140	-	100	160	10	18	-	-	M80x2
Front female thread	Φ180	Φ140	-	50	60	10	-	-	-	M50x1.5
Front I shape	-	-	-	-	-	-	-	-	-	-
Front fisheye	-	-	-	-	-	-	-	-	-	-
Front Y shape	-	-	-	-	-	-	-	-	-	-

KDA240-Standard Dimensional Diagram of Folding Series

Note: when the motor mounting plate matches different motors, the size may change



KDA240 Servo Electric Cylinder

KDA240 Servo Electric Cylinder

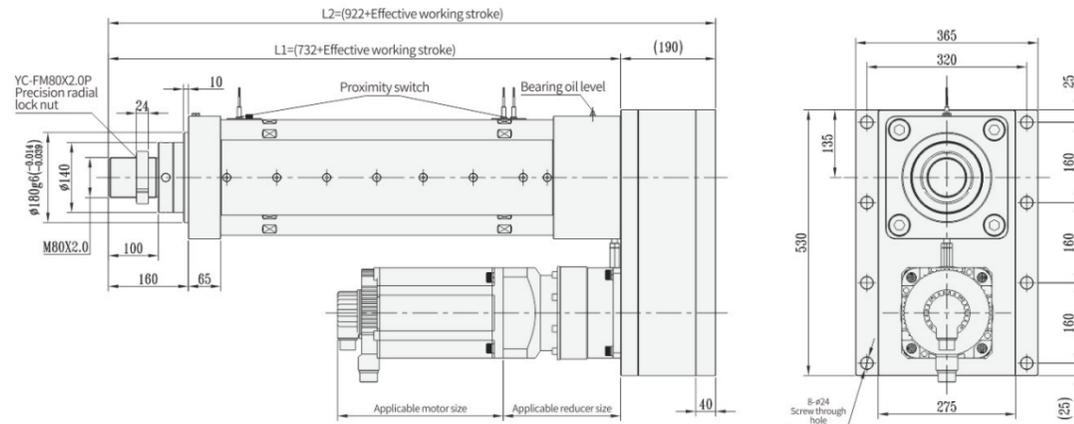
KDA240-Standard Dimensional Diagram of Folding Series

Note: when the motor mounting plate matches different motors, the size may change

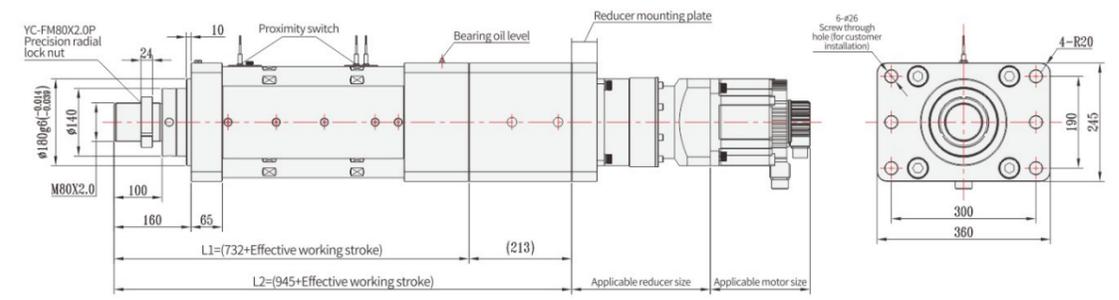
KDA240-Dimensional Diagram Dimensional Diagram of Folding Series

Note: when the motor mounting plate matches different motors, the size may change

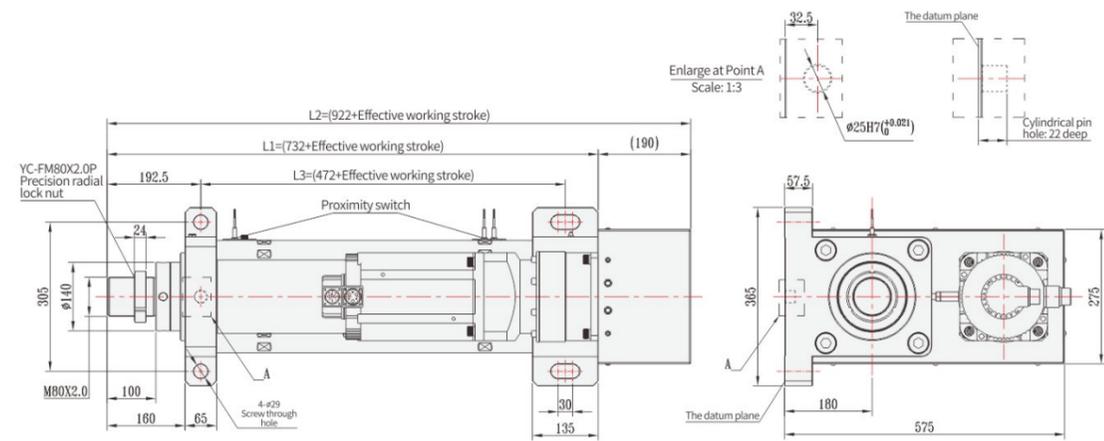
KDA240-R02 Dimensional Diagram of Flange after Folding



KDA240-L01 Dimensional Diagram of Direct Connecting Front Flange



KDA240-R04 Dimensional Diagram of Folding Horizontal Model



KDA240-L04 Dimensional Diagram of Direct Connecting Horizontal Model

