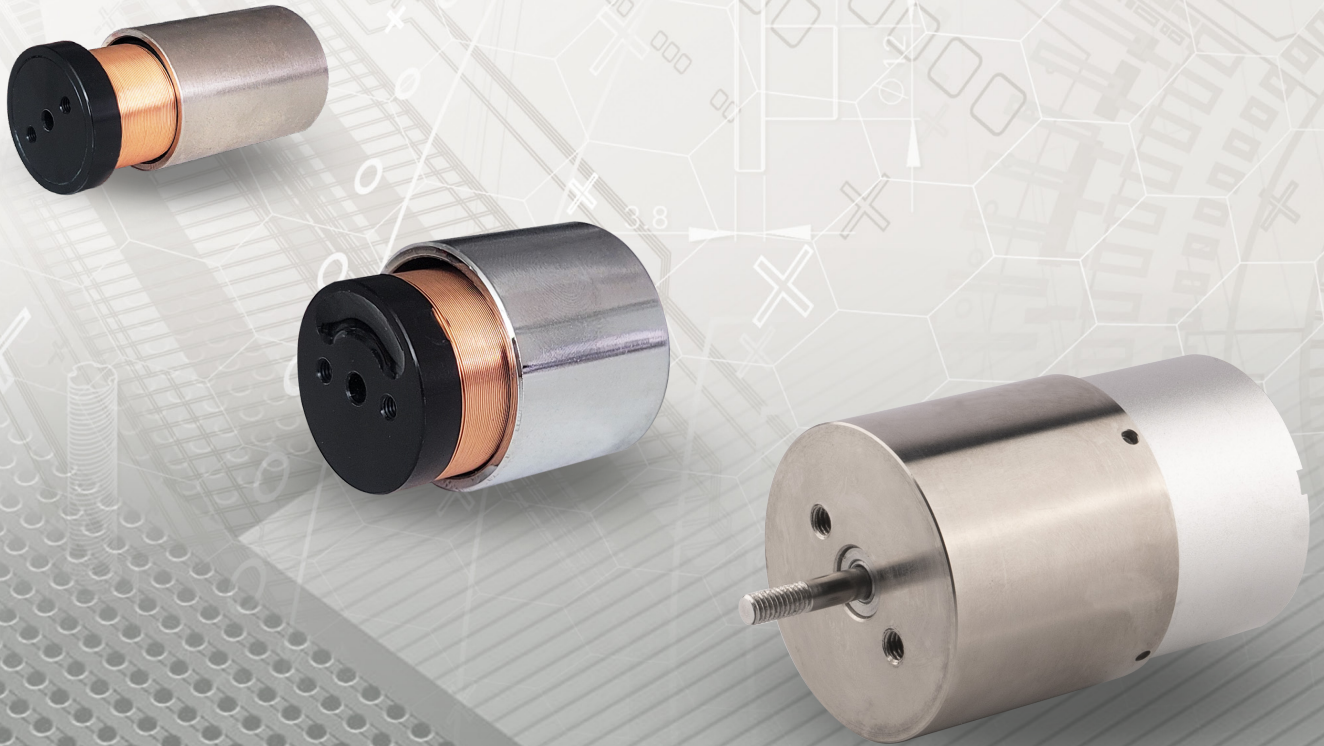


DINGS'

Precision Motion Specialist

VOICE COIL MOTOR / ACTUATOR PRODUCT CATALOG



DINGS' offers wide range of sizes for VCM (Voice Coil Motor) series & VCA (Voice Coil Actuator) from smaller to bigger diameter of dimensional motors.

Based on fixed diameter sizes, DINGS' can customize different stroke compare to other competitors, DINGS' does not fix standard stroke but according to customer's different requirements, DINGS' is freely to customize stroke.

DINGS' provides very low backlash but fast response of voice coil motors with specialized drivers. Also if customer wants, DINGS' is also able to provide linear scale for accurate positioning and feedback.

For more details, please contact DINGS' or local representatives.



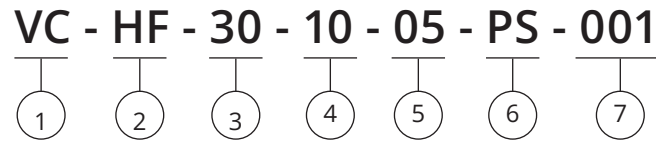
VOICE COIL MOTOR · AC

CONTENTS

Part number	construction
12.7 mm	voice coil motor
13.2 mm	voice coil actuator
25.4 mm	voice coil motor
30 mm	voice coil motor
38 mm	voice coil motor
40 mm	voice coil actuator
45 mm	voice coil motor
60 mm	voice coil motor



Part Number Construction



- ① Motor Type
VC = Voice Coil Motor
- ② Force Version
None = Standard Series
HF = High Force Series
- ③ Frame Size
30 = 30mm
- ④ Stroke
10 = 10mm Stroke
(For custom stroke sizes, please contact DINGS')
- ⑤ Continuous Force
05 = 5N Continuous Force
(For continuous force, refer to the thrust curve. For custom force requirements, please contact DINGS')
- ⑥ Position Sensor
None = No position sensor
PS = With position sensor
- ⑦ Customer Sequence Number
External dimensions, mounting dimensions, and appearance can be customized as required.

Example

Part Number	VC-30-15-4.63
Description	30 mm Frame Size 15 mm Stroke 4.63 N Continuous Force

12.7mm Voice Coil Motor

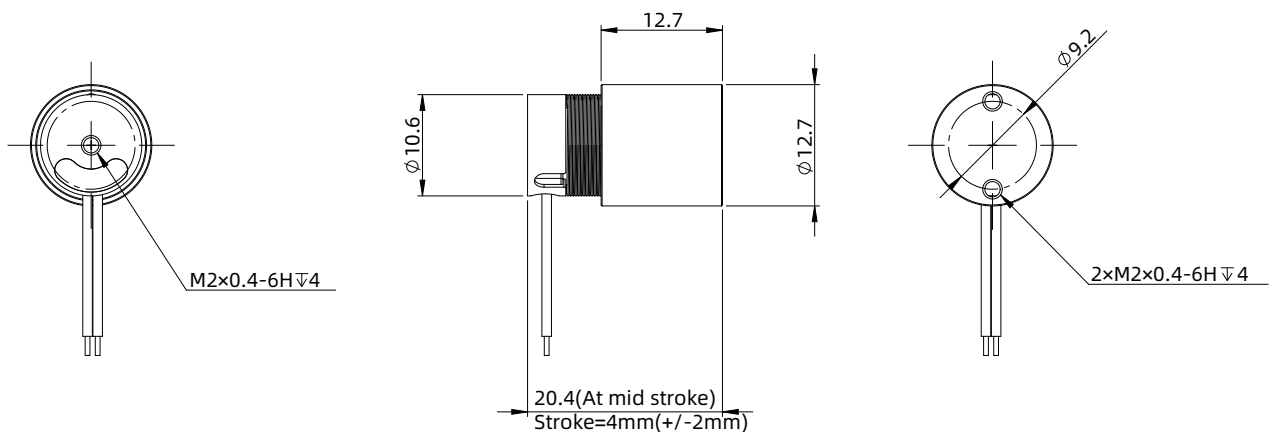


Standard type

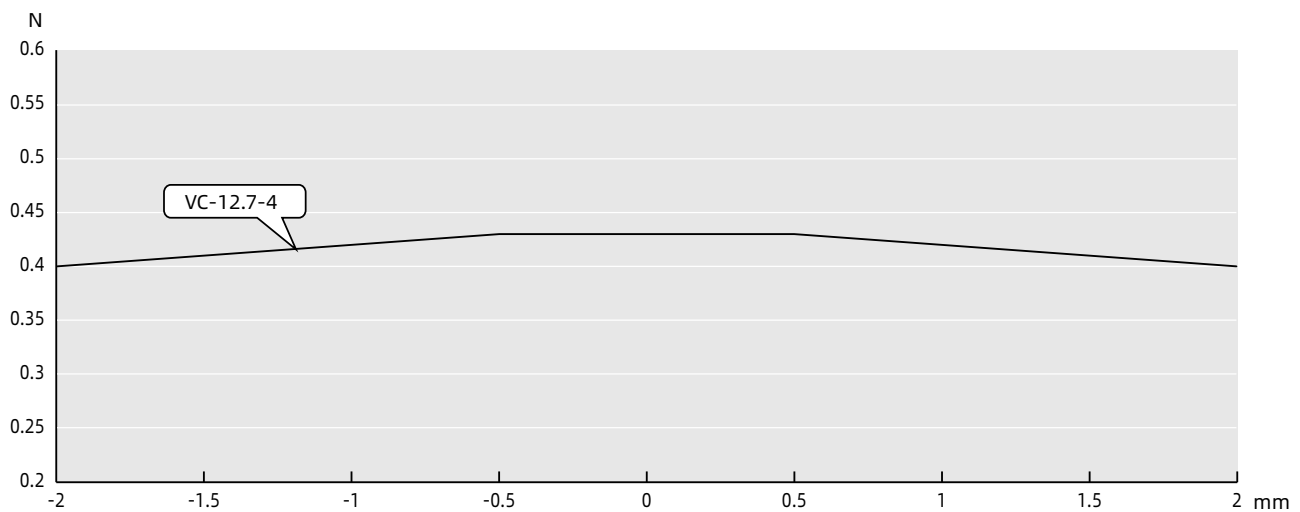
Motor Characteristics

Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
12.7	4	0.4	0.4	1	3.2	0.4	1.3	0.1	0.38	100	3	7.8

Dimensional Drawings



Force Curve



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

13.2mm Voice Coil Actuator

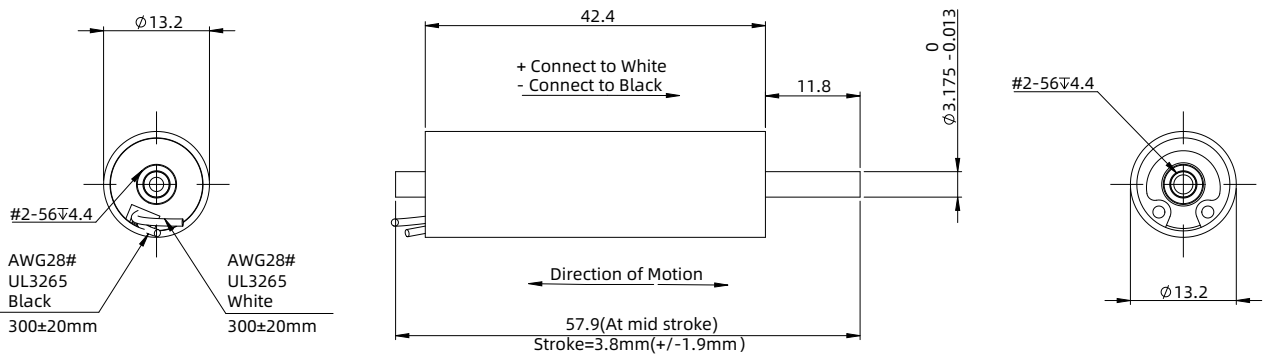


High-Force type

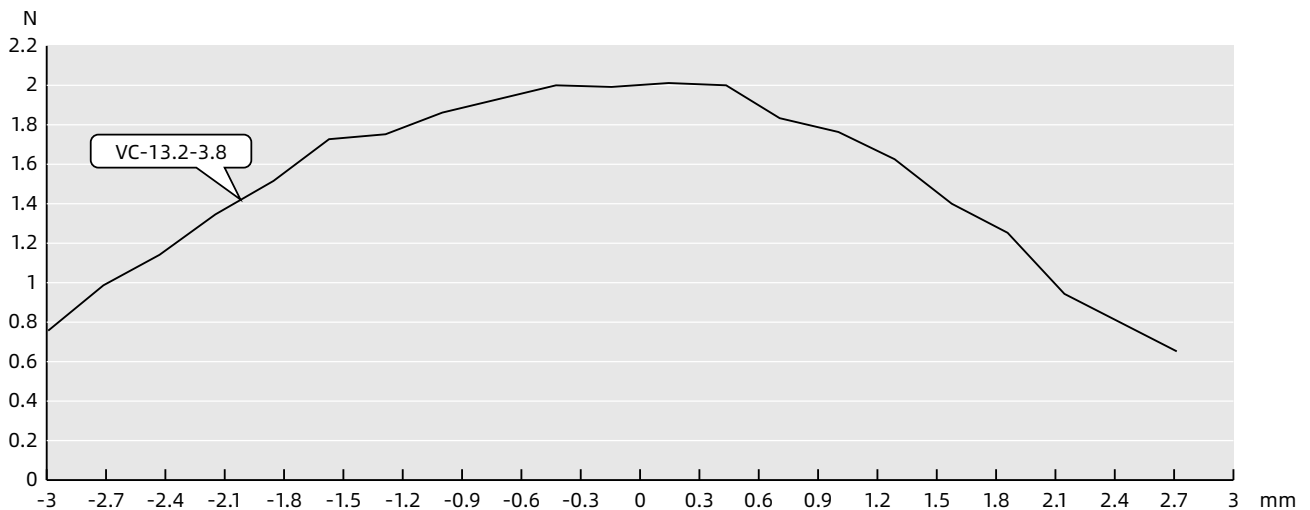
Motor Characteristics

Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
13.2	3.8	3.2	2.2	0.7	6.7	3.2	3.5	0.25	0.4	100	12	49

Dimensional Drawings



Force Curve



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

25.4mm Voice Coil Motor

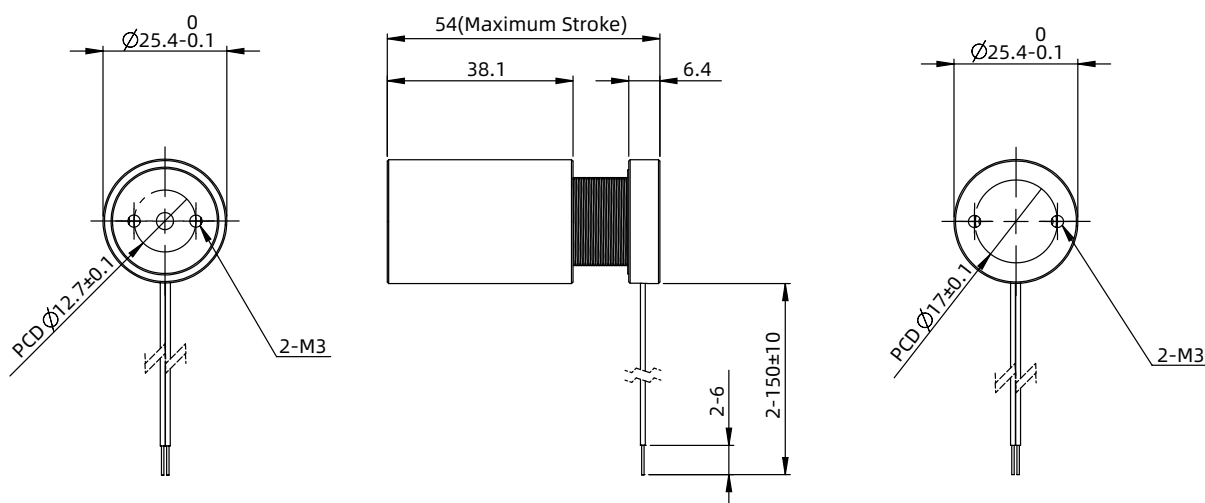


Standard type

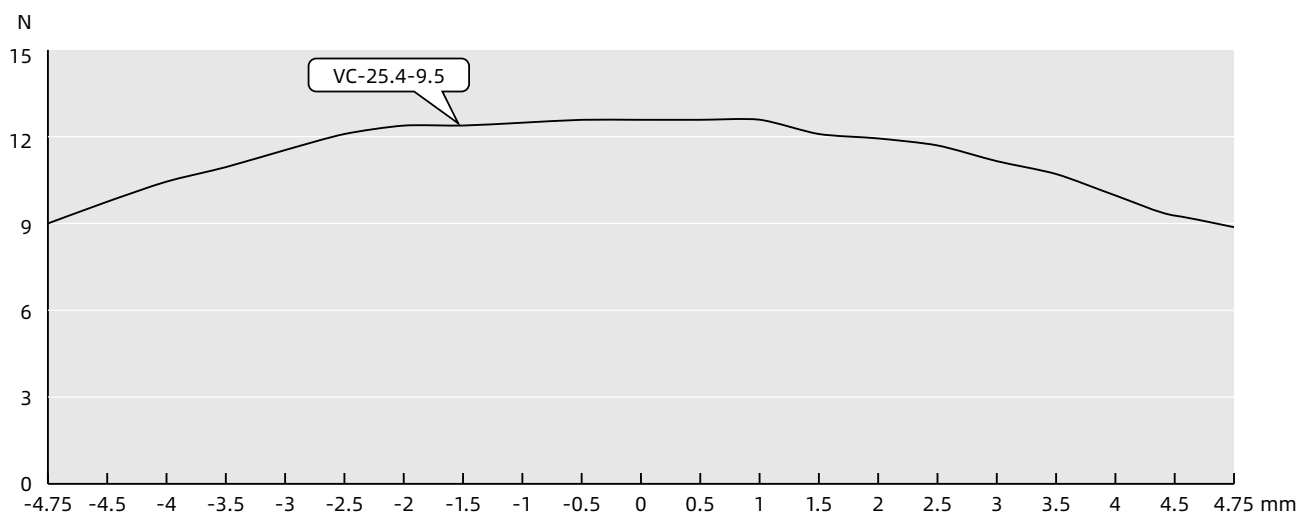
Motor Characteristics

Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
25.4	9.5	9	11	1.25	31	9	6.9	2	0.38	100	33	102

Dimensional Drawings



Force Curve



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

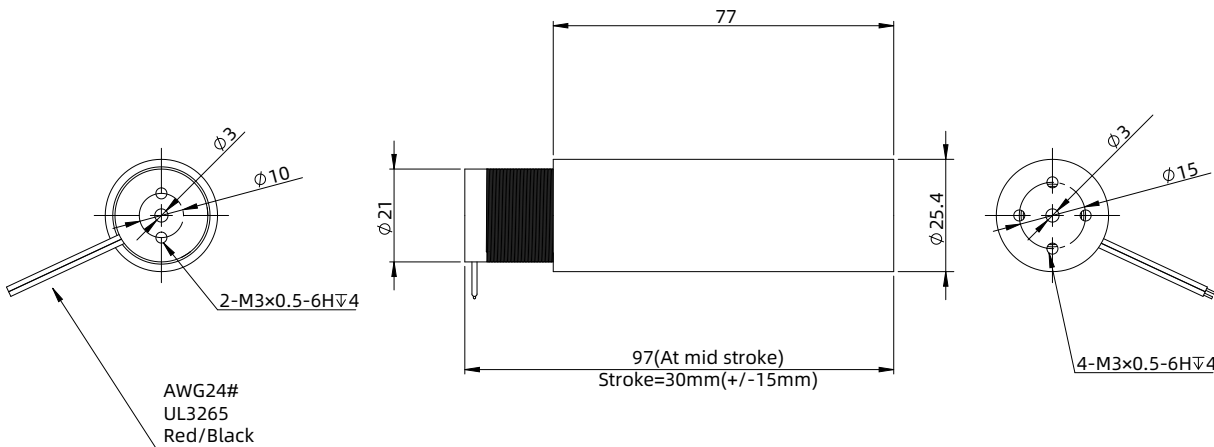
25.4mm Voice Coil Motor

High-Force type

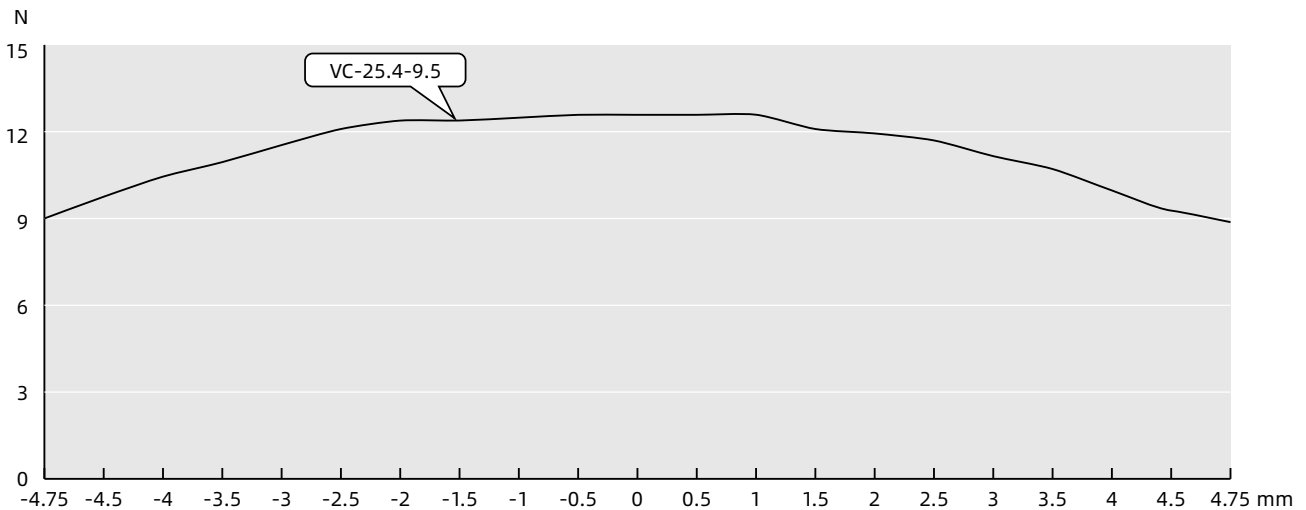
Motor Characteristics

Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
25.4	30	6	6	1	55	6	17.4	5.04	0.5	100	59	225

Dimensional Drawings



Force Curve



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

30mm Voice Coil Motor



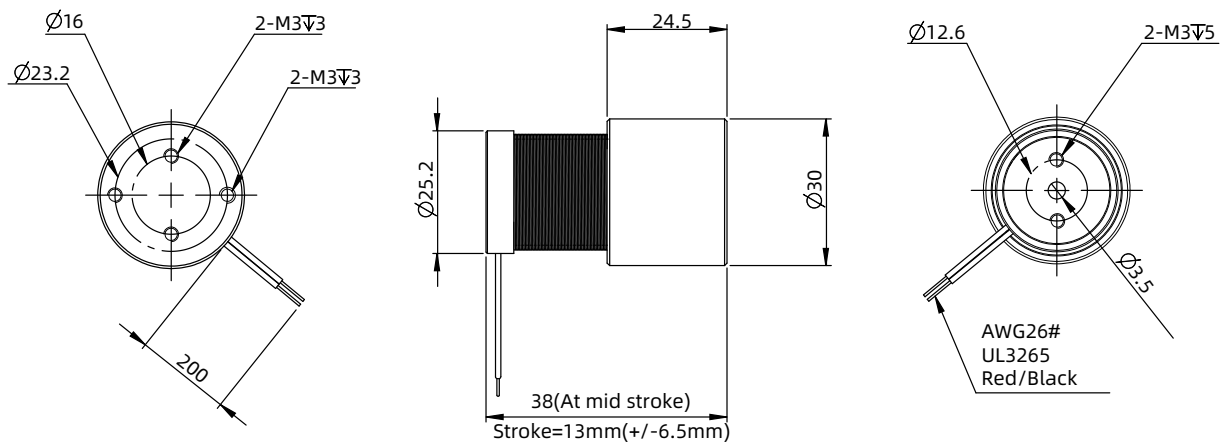
Standard type

Motor Characteristics

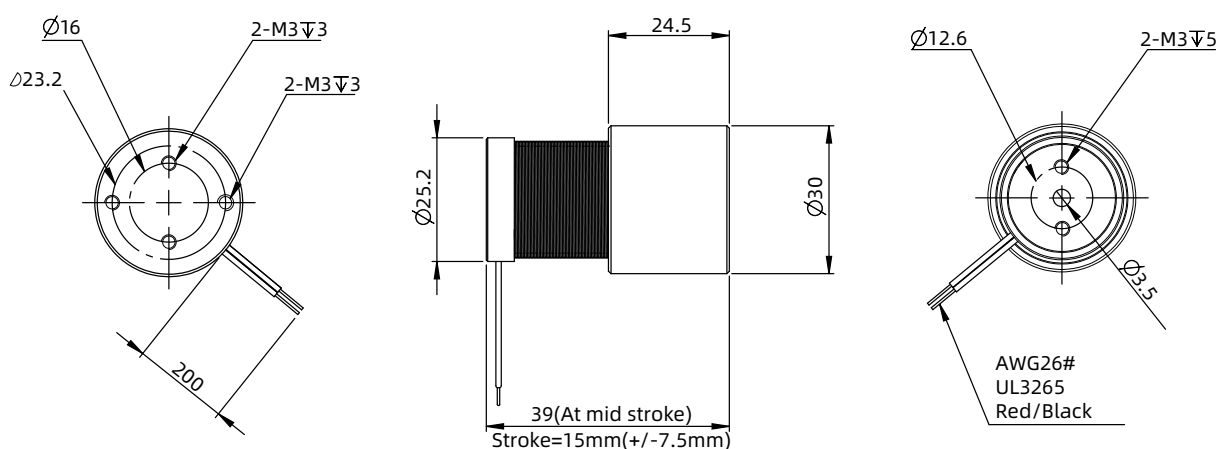
Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
30	13	7.35	4.63	0.63	29.4	7.35	11.34	2.63	0.6	100	25	96
30	15	7.35	4.63	0.63	29.4	7.35	11.35	2.63	0.6	100	25	96

Dimensional Drawings

● VC-30-13



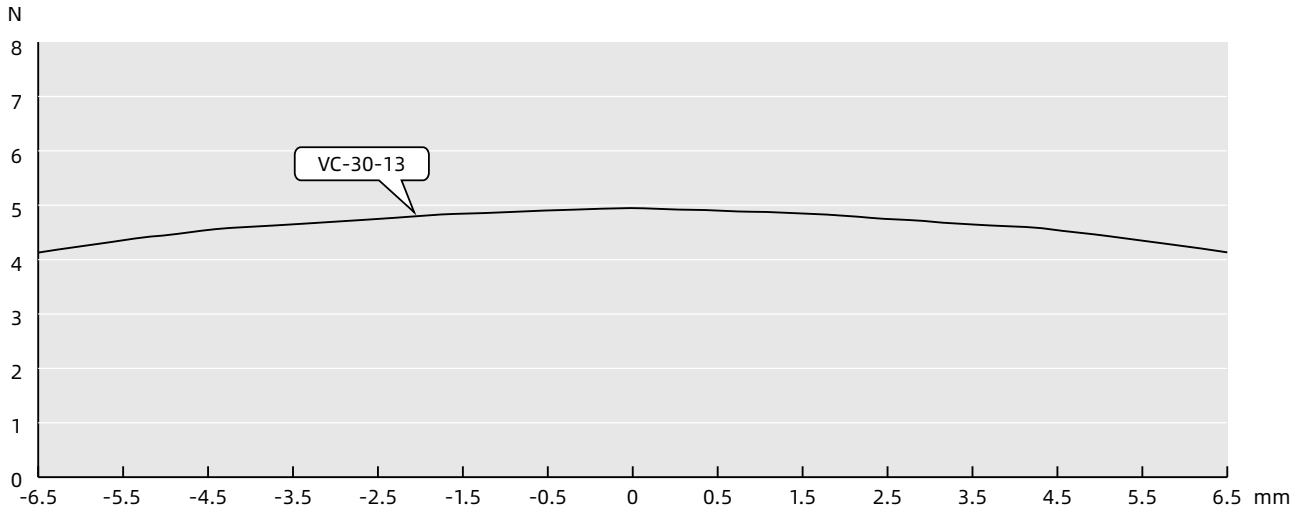
● VC-30-15



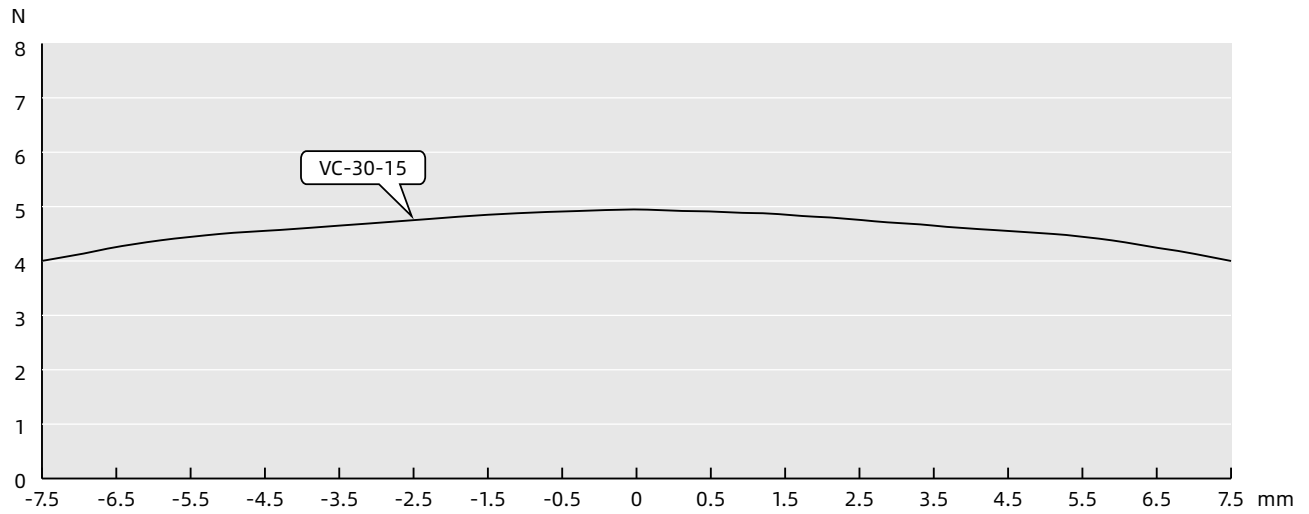
30mm Voice Coil Motor

■ Force Curve

● VC-30-13



● VC-30-15



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

30mm Voice Coil Motor

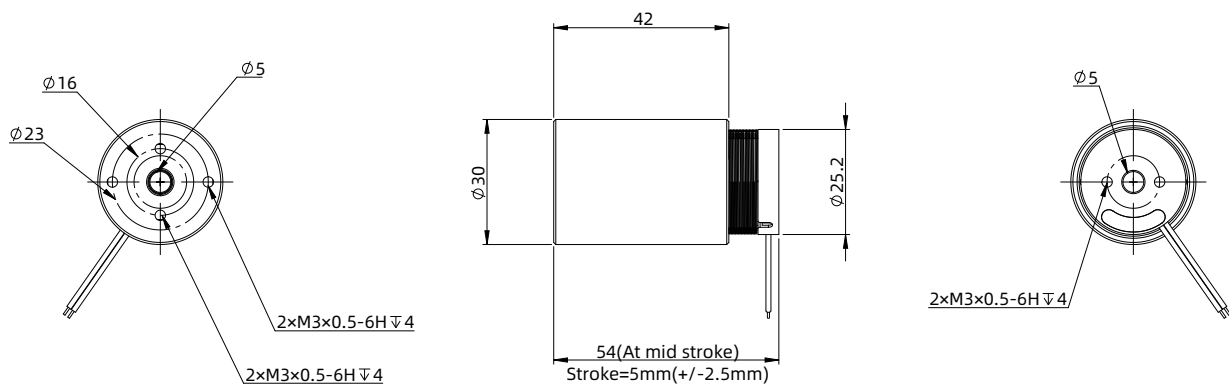
High-Force type

Motor Characteristics

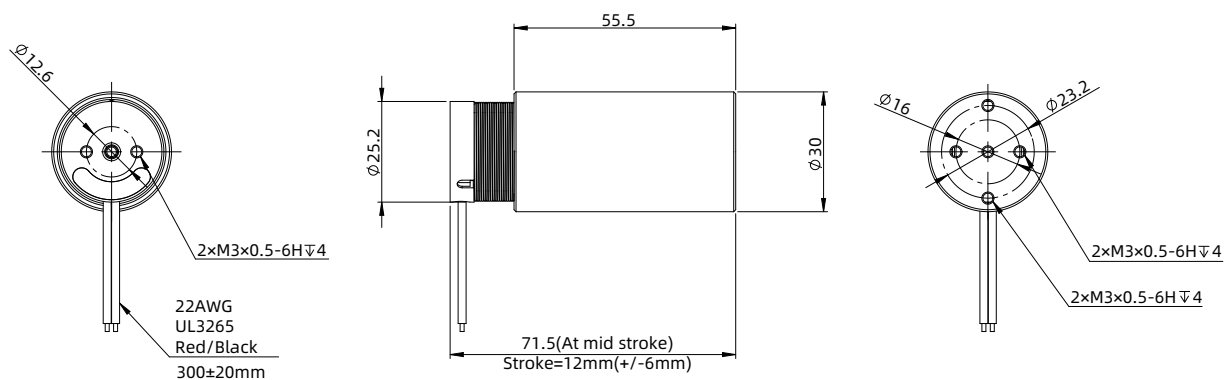
Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
30	5	11.87	9.5	0.8	65	11.87	10.15	2.24	0.5	100	41	158
30	12	9.12	13	1.5	80	9.12	5.21	1.9	0.5	100	64	190

Dimensional Drawings

● VCHF-30-5



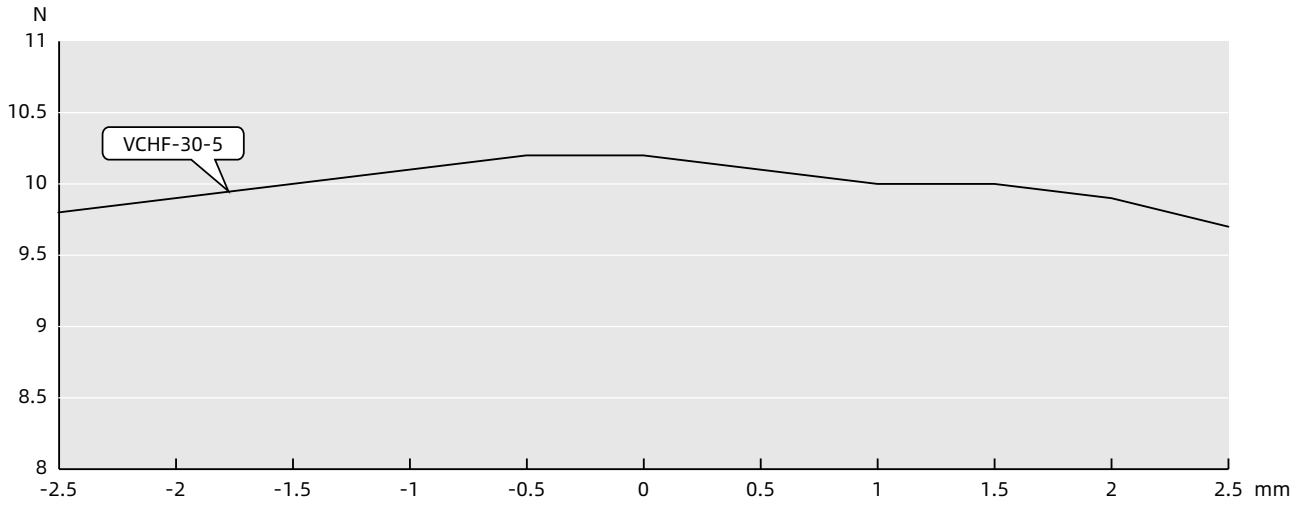
● VCHF-30-12



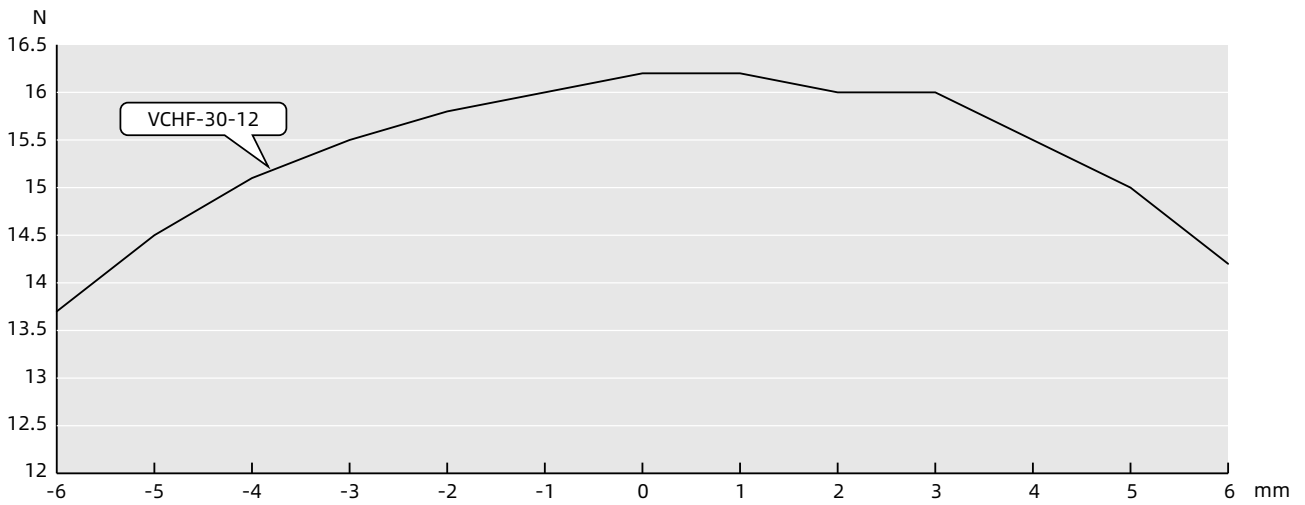
30mm Voice Coil Motor

■ Force Curve

● VCHF-30-5



● VCHF-30-12



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

38mm Voice Coil Motor

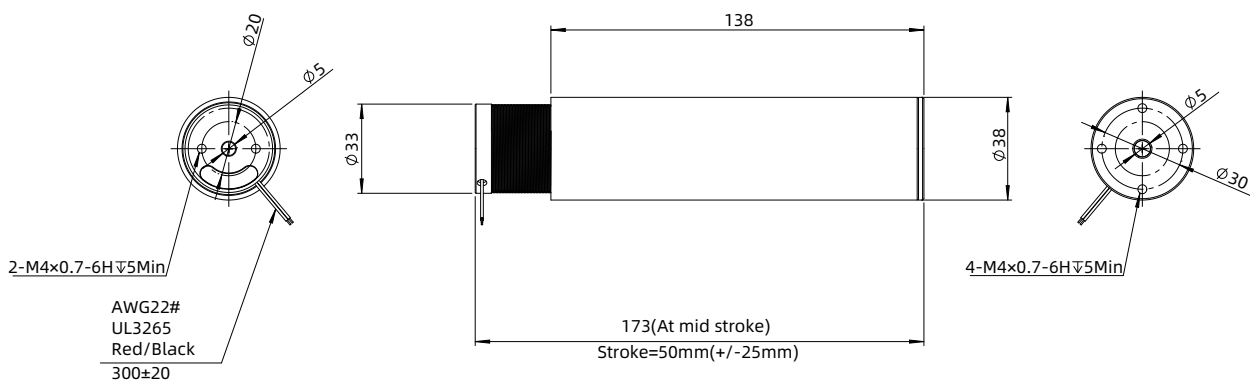


High-Force type

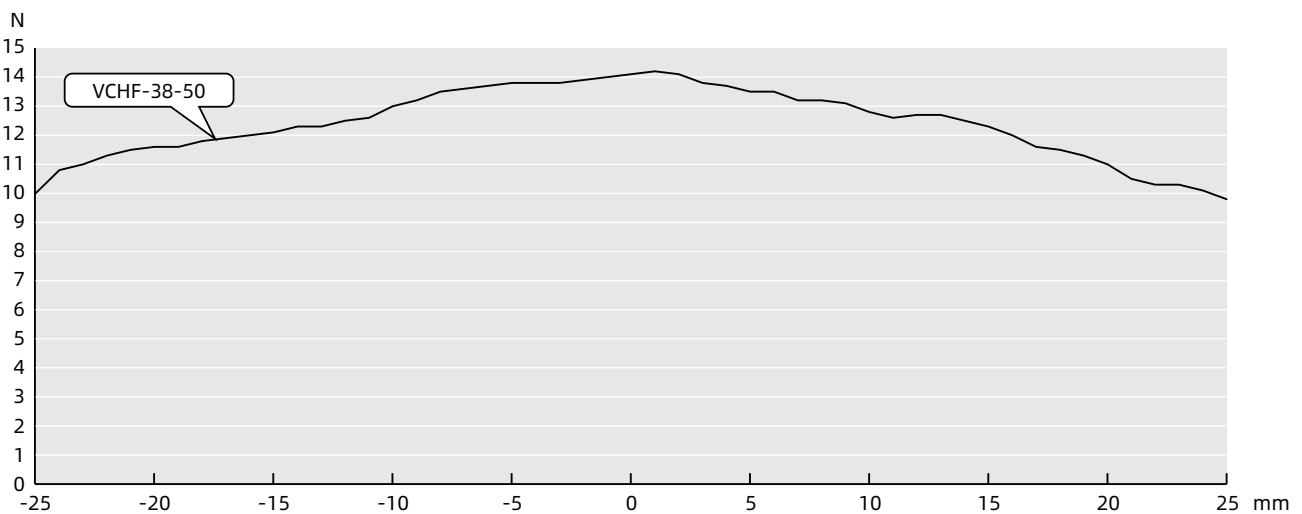
Motor Characteristics

Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
38	50	10.1	10	1	78	10.1	10.93	5.21	0.5	100	252	707.3

Dimensional Drawings



Force Curve



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

40mm Voice Coil Actuator

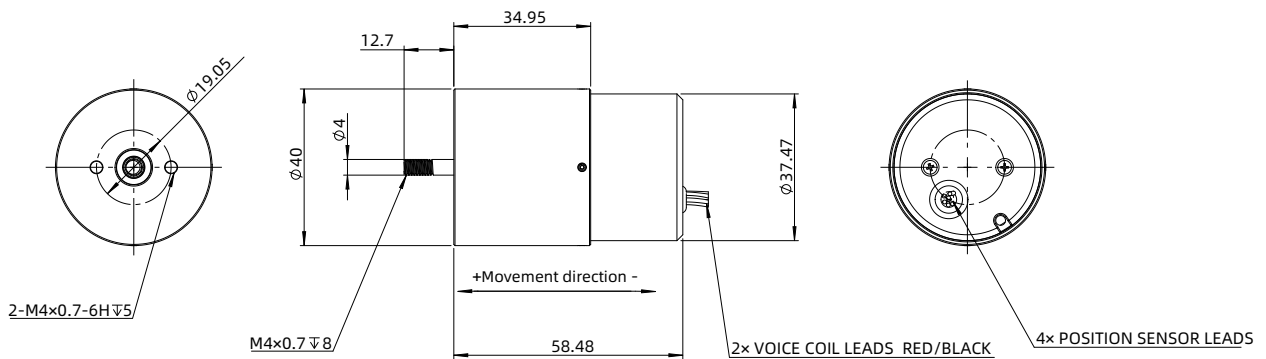


Standard type

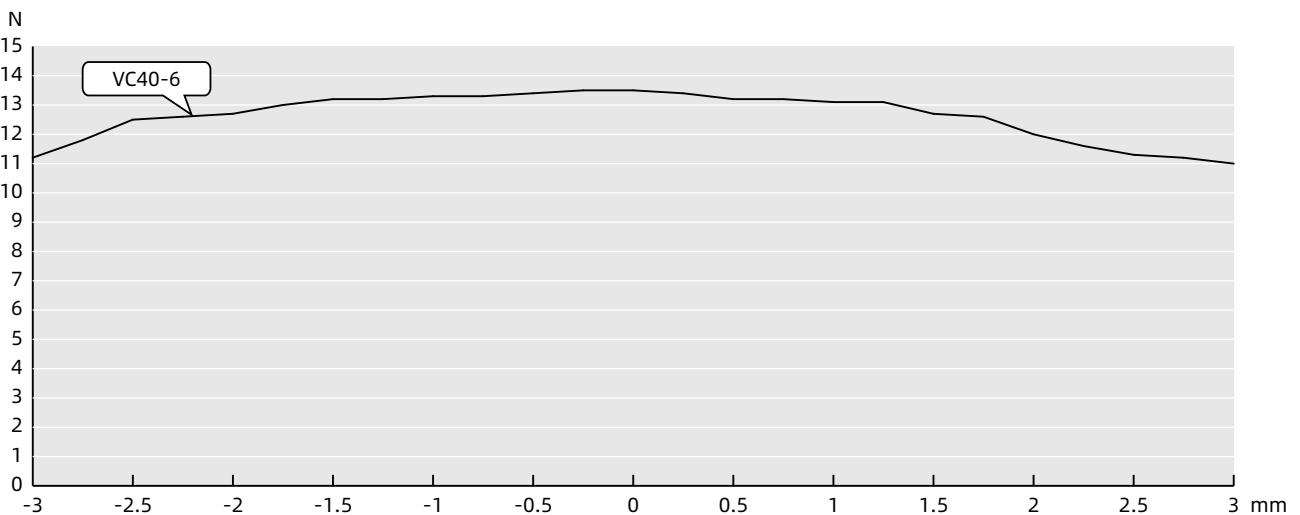
Motor Characteristics

Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
40	6	11	11	1	40	11	5	1.32	0.5	100	48	244

Dimensional Drawings



Force Curve



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

45mm Voice Coil Motor

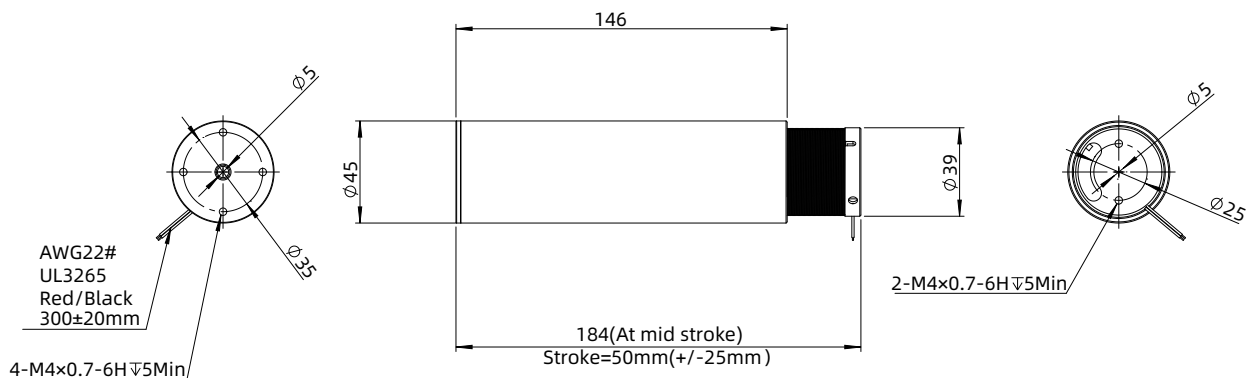


High-Force type

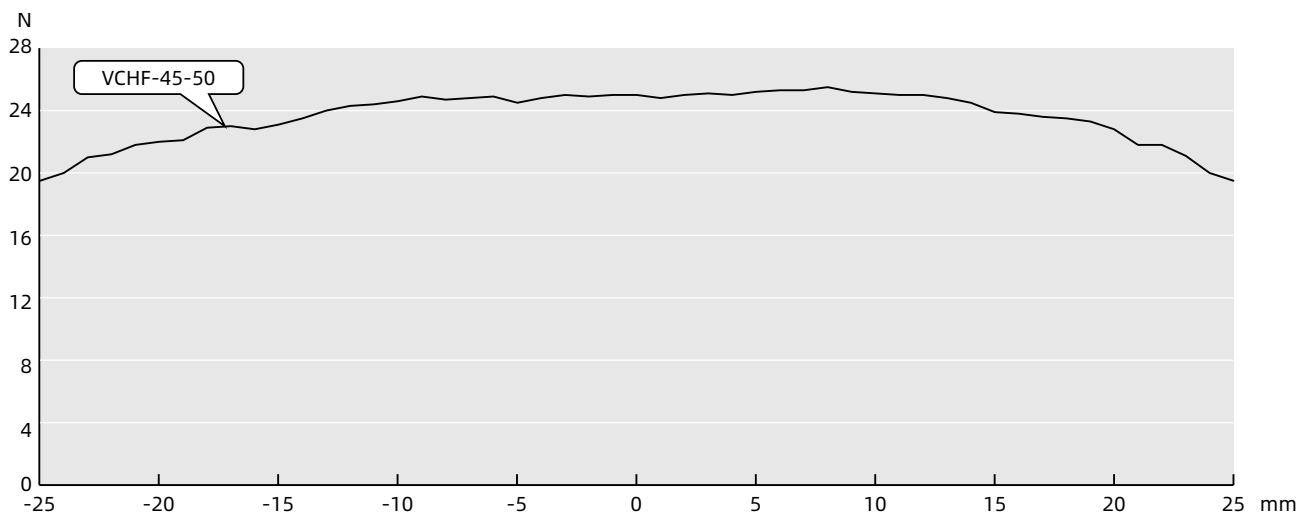
Motor Characteristics

Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
45	50	19.1	19	1	120	19.1	14.03	6.45	0.5	100	324	1154

Dimensional Drawings



Force Curve



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

60mm Voice Coil Motor

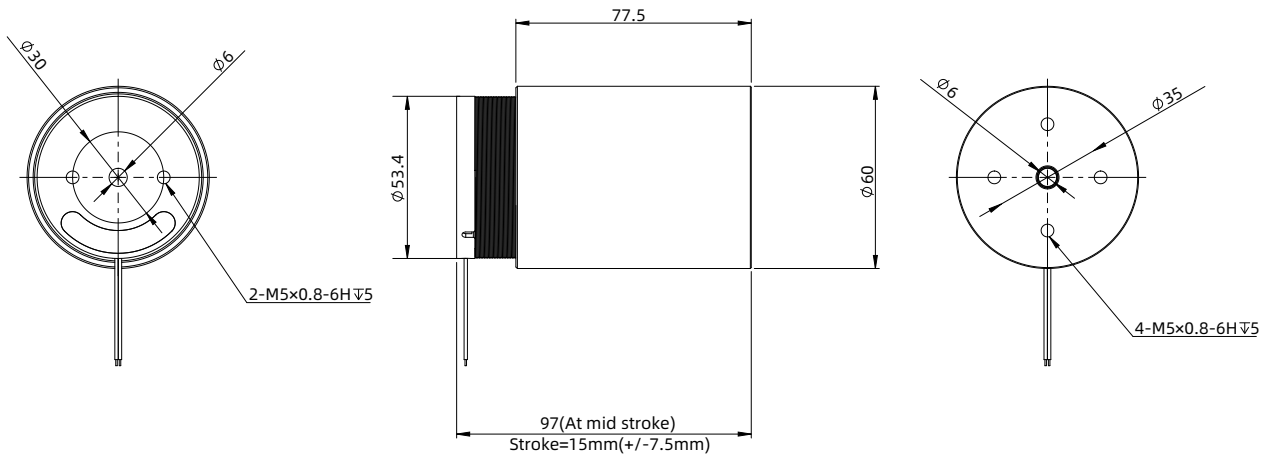


High-Force type

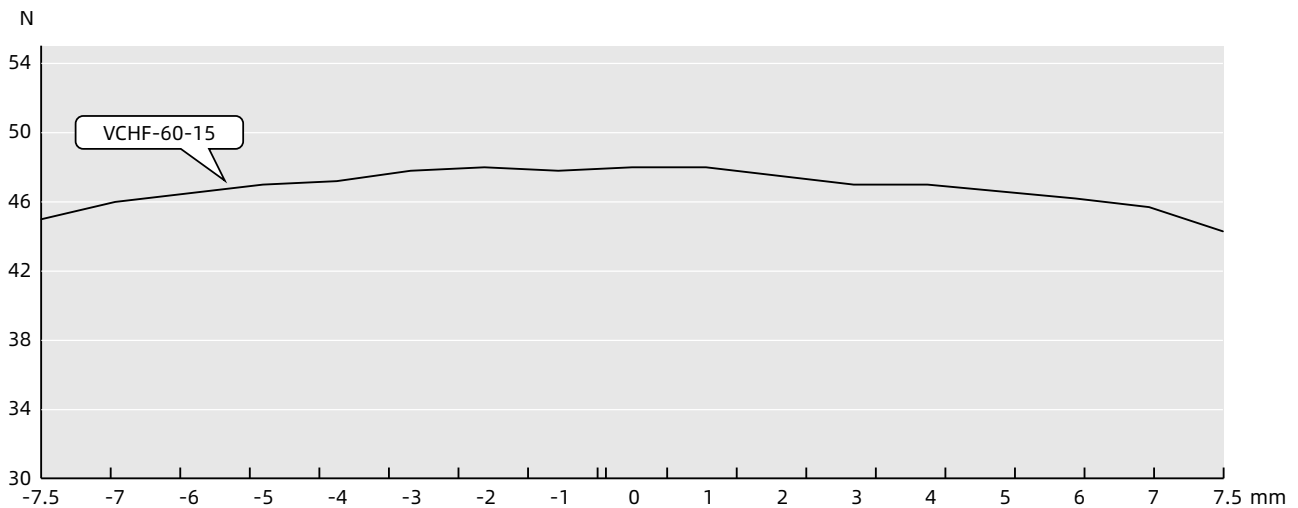
Motor Characteristics

Motor	Stroke (mm)	Back EMF constant (V/m/s)	Continuous force (N)	Continuous current 100°C (A)	Peak thrust force (N)	Force sensitivity (N/A) middle position	Resistance (Ω)	Inductance (mH)	Coil gap (mm)	Coil Max. temperature (°C)	Coil assembly mass (g)	Body assembly mass (g)
60	15	36.66	44	1.2	182	36.66	10.57	3.67	0.7	100	251	1183

Dimensional Drawings



Force Curve



* This curve is the thrust curve under the rated current and the thrust is affected by the current change.

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