

# ROBOTE C

An Innovative Geared Servo Motor  
with Output Torque Control & Sensing Capability

## UNISERVO®

Controller  
**SVC-15/80/200/  
750/1500**



Motor  
**SVM-15/40/80A/200/  
750/1500**



## The only actuator transmitting the tangible sensations

An innovative torque servo motor by ROBOTEC

A brand-new torque servo motor with a torque sensor on the output end!

- High-resolution and high-response torque sensor on the output end!  
Simple solution to achieve high-speed and accurate output torque control!
- Reduction gears to achieve high output torque in a compact body!
- Wide dynamic range of 10000:1 to achieve fine torque control and high torque capacity simultaneously!

### Specification

#### Motor

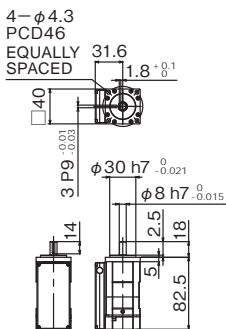
TYPE		SVM-15		SVM-40		SVM-80A	
Rated output		15W		40W		80W	
Reduction ratio		50	100	50	100	50	100
Rated torque		1.5Nm	3Nm	4Nm	8Nm	8.5Nm	16Nm
Max. torque		3.3Nm	4.8Nm	8.3Nm	11Nm	23Nm	36Nm
Rated rotation speed		60rpm	30rpm	60rpm	30rpm	60rpm	30rpm
Max. rotation speed		120rpm	60rpm	120rpm	60rpm	120rpm	60rpm
Max. radial load		100N		200N		400N	
Max. thrust load		100N		200N		500N	
Temperature and humidity environment	Operation	0 to 40°C, 20 to 80%RH (non-condensing)					
	Storage	-20 to 60°C, 20 to 80%RH (non-condensing)					
External dimension (WxHxD)		40x51.6x100.5 mm <small>(not including protrusions)</small>		53x65.5x140 mm <small>(not including protrusions)</small>		74x73.3x194.5 mm <small>(not including protrusions)</small>	
Weight		Approx 0.35kg		Approx 0.9kg		Approx 1.5kg	
TYPE		SVM-200		SVM-750		SVM-1500	
Rated output		200W		750W		1500W	
Reduction ratio		50	100	50	100	50	100
Rated torque		23Nm	45Nm	87Nm	174Nm	171Nm	348Nm
Max. torque		70Nm	107Nm	261Nm	433Nm	515Nm	982Nm
Rated rotation speed		60rpm	30rpm	60rpm	30rpm	60rpm	30rpm
Max. rotation speed		120rpm	60rpm	96rpm	48rpm	76rpm	38rpm
Max. radial load		1000N		1500N		3000N	
Max. thrust load		2500N		4000N		7000N	
Temperature and humidity environment	Operation	0 to 40°C, 20 to 80%RH (non-condensing)					
	Storage	-20 to 60°C, 20 to 80%RH (non-condensing)					
External dimension (WxHxD)		100.5x98.5x214.7 mm <small>(not including protrusions)</small>		135.9x132.6x312.5 mm <small>(not including protrusions)</small>		184x215.75x378.25 mm <small>(not including protrusions)</small>	
Weight		Approx 3.4kg		Approx 10.1kg		Approx 27kg	

#### Controller

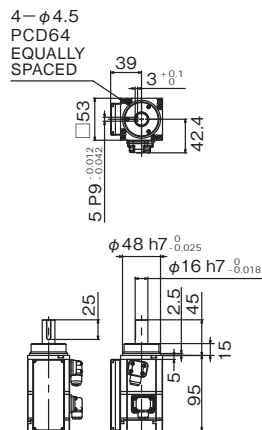
TYPE		SVC-15	SVC-80	SVC-200	SVC-750	SVC-1500
Capacity		15W	80W	200W	750W	1500W
Input power source	Main circuit	Single-phase AC100 to 115V 50/60Hz			Single-phase AC200 to 240V 50/60Hz	Three-phase AC200 to 240V 50/60Hz
	Control circuit	Single-phase AC100 to 115V 50/60Hz			Single-phase AC200 to 240V 50/60Hz	Single-phase AC200 to 240V 50/60Hz
Control mode		Torque control, compliance control, speed control, position control, Q-axis current control				
I/O signals	Digital I/O	Input 8ch, output 8ch				
	Analog I/O	Input 2ch, output 2ch				
	Line driver I/O	Input 2ch, output 3ch				
Display	Code display	2 digits of 7-segment red LED				
	Status display	3 red LEDs				
	Charge display	1 red LED for main power circuit				
Input device	Push button	2				
Periferral interface	USB	Standards	USB Ver2.0 compliant			
		Data rate	Full speed			
		Class	Virtual COM port			
		OS	Windows7(32/64bit)			
Temperature and humidity environment	Operation	0 to 40°C, 20 to 80%RH (non-condensing)				
	Storage	-20 to 60°C, 20 to 80%RH (non-condensing)				
External dimension (WxHxD)		45×195×134 mm <small>(not including protrusions)</small>	45×195×174 mm <small>(not including protrusions)</small>	60×195×252 mm <small>(not including protrusions)</small>	68×245×293 mm <small>(not including protrusions)</small>	
Weight		Approx 0.8kg	Approx 1.0kg	Approx 2.0kg	Approx 4.3kg	
Others		Inrush current limiter, dynamic braking				
Correspondence motor		SVM-15	SVM-40 SVM-80A	SVM-200	SVM-750	SVM-1500
Software option		Virtual rotation load control and remote bidirectional control				

## External dimension

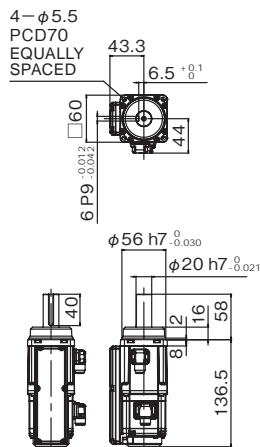
### ■SVM-15



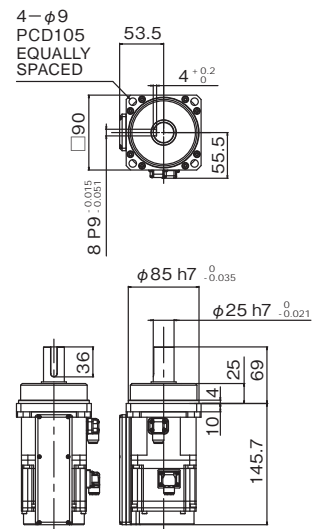
### ■SVM-40



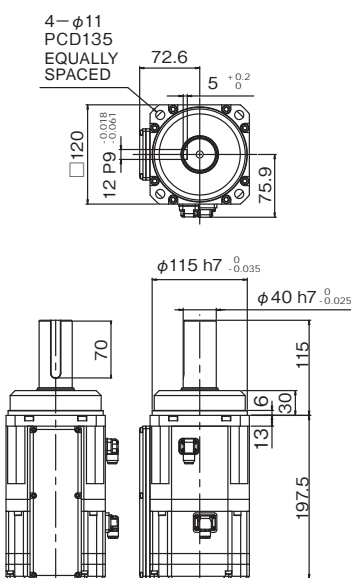
### ■SVM-80A



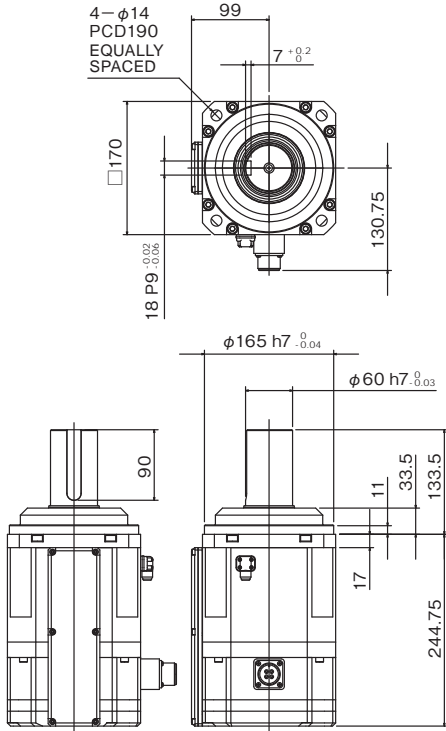
### ■SVM-200



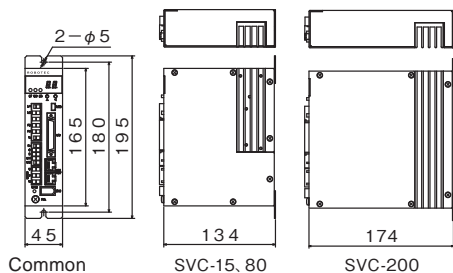
### ■SVM-750



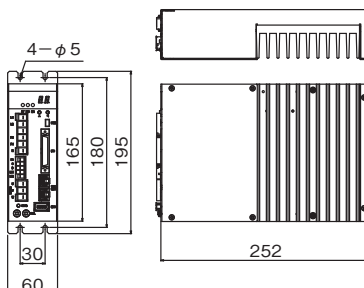
### ■SVM-1500



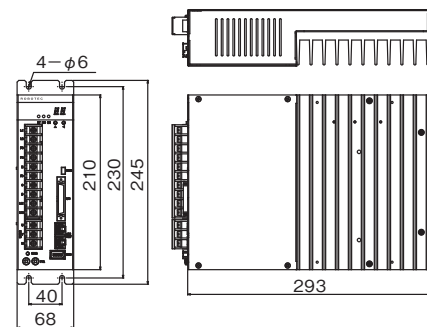
### ■SVC-15/80/200



### ■SVC-750



### ■SVC-1500



Unit : mm

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