

## RS3

## **High-performance SCARA Plus**

- Arm Length of 350 mm
- Unique Workspace Design
- Extraordinary Work Envelope Usage



## **Specifications**

Mounting type	- p		
Arm length			RS3-351
Max. operating speed	Mounting type		Ceiling
Note	Arm length	Arm #1, #2	350 mm
Meight (cables not included)	Max. operating speed	Joints #1, #2	6237 mm/s
Weight (cables not included)		Joint #3	1100 mm/s
Repeatability		Joint #4	2600 deg/s
Joint #3	Weight (cables not included)		17 kg
Max. motion range	Repeatability	Joints #1, #2	±0.01 mm
Max. motion range		Joint #3	±0.01 mm
Joint #2		Joint #4	±0.01 deg
Joint #3 Std   Joint #3 Clean   100 mm   100 mm   Joint #4   ±720 deg	Max. motion range	Joint #1	±225 deg
Doint #3 Clean   100 mm     Joint #4   ±720 deg     Payload   Rated   1 kg     Maximum   3 kg     Standard cycle time¹   0.34 sec     Joint #4 allowable moment of inertia²   Maximum   0.005 kg⋅m2     Motor power consumption   Motor power consumption   Joint #1   400 W     Joint #2   200 W     Joint #3   Joint #4   100 W     Joint #3 downward force   150 N     Electric lines   15Pin (D-Sub)     Pneumatic lines   Ф4 mm × 1, Ф6 mm × 2     Installation environment   Standard/Cleanroom³ & ESD     Available controllers   RC180, RC620+, RC700A     Rated   1 kg     1 k		Joint #2	±225 deg
Payload   Rated   1 kg			130 mm
Payload         Rated Maximum         1 kg           Standard cycle time¹         0.34 sec           Joint #4 allowable moment of inertia²         Rated         0.005 kg⋅m2           Motor power consumption         Joint #1         400 W           Joint #2         200 W           Joint #3         150 W           Joint #3 downward force         150 N           Electric lines         15Pin (D-Sub)           Pneumatic lines         Φ4 mm × 1, Φ6 mm × 2           Installation environment         Standard/Cleanroom³ & ESD           Available controllers         RC180, RC620+, RC700A			100 mm
Maximum         3 kg           Standard cycle time¹         0.34 sec           Joint #4 allowable moment of inertia²         Rated         0.005 kg⋅m2           Motor power consumption         Joint #1         400 W           Joint #2         200 W           Joint #3         150 W           Joint #3 downward force         150 N           Electric lines         15Pin (D-Sub)           Pneumatic lines         Φ4 mm × 1, Φ6 mm × 2           Installation environment         Standard/Cleanroom³ & ESD           Available controllers         RC180, RC620+, RC700A		Joint #4	±720 deg
Standard cycle time¹         0.34 sec           Joint #4 allowable moment of inertia²         Rated         0.005 kg⋅m2           Motor power consumption         Joint #1         400 W           Joint #2         200 W           Joint #3         150 W           Joint #3 downward force         150 N           Electric lines         15Pin (D-Sub)           Pneumatic lines         Φ4 mm × 1, Φ6 mm × 2           Installation environment         Standard/Cleanroom³ & ESD           Available controllers         RC180, RC620+, RC700A	Payload	Rated	1 kg
Digit #4 allowable moment of inertia2   Maximum   0.005 kg*m2		Maximum	3 kg
of inertia²         Maximum         0.05 kg⋅m2           Motor power consumption         Joint #1         400 W           Joint #2         200 W           Joint #3         150 W           Joint #3 downward force         150 N           Electric lines         15Pin (D-Sub)           Pneumatic lines         Φ4 mm × 1, Φ6 mm × 2           Installation environment         Standard/Cleanroom³ & ESD           Available controllers         RC180, RC620+, RC700A			0.34 sec
Motor power consumption         Joint #1         400 W           Joint #2         200 W           Joint #3         150 W           Joint #3 downward force         150 N           Electric lines         15Pin (D-Sub)           Pneumatic lines         Φ4 mm × 1, Φ6 mm × 2           Installation environment         Standard/Cleanroom³ & ESD           Available controllers         RC180, RC620+, RC700A		Rated	0.005 kg•m2
Joint #2   200 W     Joint #3   150 W     Joint #4   100 W     Joint #3 downward force   150 N     Electric lines   15Pin (D-Sub)     Pneumatic lines   Φ4 mm × 1, Φ6 mm × 2     Installation environment   Standard/Cleanroom <sup>3</sup> & ESD     Available controllers   RC180, RC620+, RC700A		Maximum	·
Joint #3   150 W     Joint #3   100 W     Joint #3 downward force   150 N     Electric lines   15Pin (D-Sub)     Pneumatic lines   Ф4 mm × 1, Ф6 mm × 2     Installation environment   Standard/Cleanroom <sup>3</sup> & ESD     Available controllers   RC180, RC620+, RC700A	Motor power consumption		*****
Joint #3 downward force   150 N			
Joint #3 downward force			
Electric lines         15Pin (D-Sub)           Pneumatic lines         Φ4 mm × 1, Φ6 mm × 2           Installation environment         Standard/Cleanroom³ & ESD           Available controllers         RC180, RC620+, RC700A		Joint #4	
Pneumatic lines         Φ4 mm × 1, Φ6 mm × 2           Installation environment         Standard/Cleanroom³ & ESD           Available controllers         RC180, RC620+, RC700A			
Installation environment     Standard/Cleanroom³ & ESD       Available controllers     RC180, RC620+, RC700A			
Available controllers RC180, RC620+, RC700A	- 11001111011101		,
Safety standards CE, ANSI/RIA15.06-2012, UL 1740			
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<sup>1</sup> Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with 1 kg payload (path coordinates optimized for maximum speed). I 2 When payload center of gravity is aligned with Joint #4; if not aligned with Joint #4, set parameters using INERTIA command. I 3 Complies with ISO Class 3 (ISO14644-1) and older Class 10 (less than 100.1 µm particles per 28,317cm<sup>2</sup>:1cft) cleanroom standards.