ProSix C4 and C8 series

Efficiency and precision you can rely on

EPSON

EPSON



EPSON.

+0 32

J1 =>+

EPSON

A robot for every application

Introducing the Epson ProSix series: six-axis robots with the range and load capacity for every application – and precision as standard. With five robots in the range, you'll find one perfectly suited to your needs.

Whatever your industry, the Epson ProSix C4 and C8 six-axis robots are equal to the challenge. Marked out by their slim, compact design, they can work with maximum precision even at high speeds, thanks to our QMEMS[®] sensor technology.

ProSix C4 series - with 4kg payload



Epson ProSix C4

Range: 600mm Applications include: identification, assembly, soldering and welding, measurement, testing and inspection.



Epson ProSix C4L

Range: 900mm Applications include: machine loading and unloading, packing and order picking, assembly, soldering and welding, palletising.

Epson ProSix C4 and C8 series

With a variety of load capacity and different ranges, the series is exceptionally versatile. The robots can be put to use in all kinds of sectors and industries including: automotive, electronics, machine tools, medical devices, semiconductor, foodstuffs, and plastics and metal.

ProSix C8 series – with 8kg payload







Epson ProSix C8

Range: 710mm Applications include: identification, packaging and order picking, assembly, soldering and welding, measurement, testing and inspection.

Epson ProSix C8L

Range: 900mm Applications include: machine loading and unloading, identification, packaging and order picking, assembly, soldering and welding, palletising.

Epson ProSix C8XL

Range: 1,400mm Applications include: machine loading and unloading, parts picking, packaging and order picking, soldering and welding, palletising.

Efficiency redefined: C4 and C8 Fast, sleek, precise

If you're looking for a robot that can work in confined spaces, often in conjunction with other robots, and is accurate even when time is short, you're looking in the right place.

The Epson ProSix series C4 and C8 can help your system reach its full potential. The six-axis machines work at high speeds with precise path behaviour, all in an ultra-slim body. The variety of assembly options gives you all the flexibility you need.

Impressive team player

You can easily combine your Epson six-axis robot with other members of the family, such as SCARA robots, the Epson Spider and other peripheral devices. Although they perform different tasks, robots speak one language via Epson's RC700-A controller: Epson RC+.

Strong and silent

Epson QMEMS® sensor technology and Epson Smart Motion Motor Management.

These fast, powerful, six-axis robots features revolutionary Motor Management from Epson and, for the first time, QMEMS[®] technology, which uses high-precision motion sensors.

QMEMS[®]-equipped robots enable exceptionally quiet and vibration-free travel, even under load and at high speeds. The benefit of this is improved production throughput and consistently stable quality in all assembly tasks.





One for all: Epson RC700-A controller

Extremely compact, outstandingly economical and powerful, the Epson RC700-A controller can communicate with fieldbus systems and can also be used to connect additional robots sensors, actuators and conveyors.



Saves space and reduces cycle times thanks to the possibilities for the axes 2 and 3 to rollover.

EPSON

a

Increased freedom of movement thanks to special joint geometry, which enables axis five to rotate at a $\pm 135^{\circ}$ angle. Fewer interference contours, slim design, internal supply lines for maximum system reliability, simple commissioning and reduced maintenance costs.

Give your robots a clear view with Epson Compact Vision integrated image processing

Accelerate production processes, keep errors to a minimum and reduce of costs – Epson's integrated image processing handles even the most demanding applications.

Single source kinematics, controller and image processing

The Epson Vision Guide 7.0 software is integrated with the Epson RC+ development environment resulting in quicker set-up and vision sequences that can be created in just a few clicks. Programming uses simple drag and drop with no need for additional editors. Robot controller and test tasks/positioning are interlinked with no interface problems. What's more, robots and image processing communicate with each other in milliseconds. The Epson image processing supports high-resolution cameras and colour cameras.

Compact Vision from Epson, ideal for:

Measurement

Quality inspection and error detection

Parts positioning, even for manufacturing variations and varying locations

Complex product tracking on conveyor

The Epson image processing is available in various versions

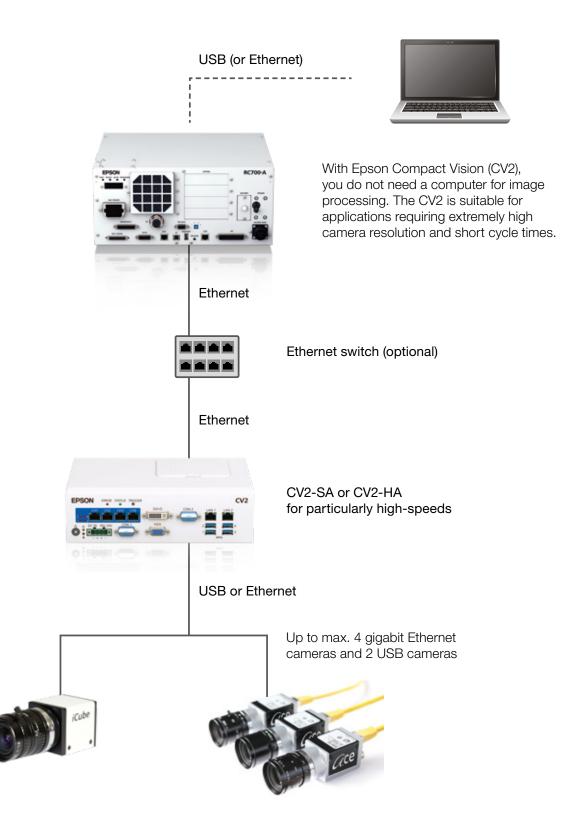
Everything in range, everything in view:

Convenient mobile operating and display unit

Teach pendant TP3

The mobile terminal has an ergonomic, flat housing with a brilliant and high contrast 10" TFT LCD display. Fast processors allow for sophisticated visualisation and operating applications.



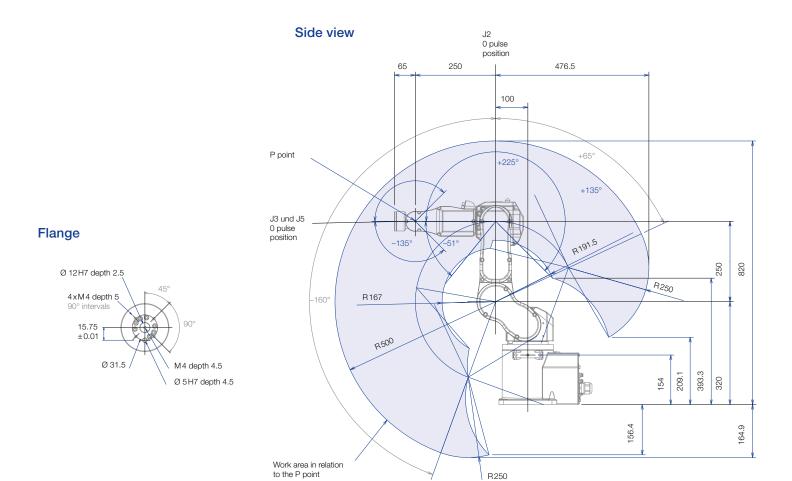


Epson ProSix C4

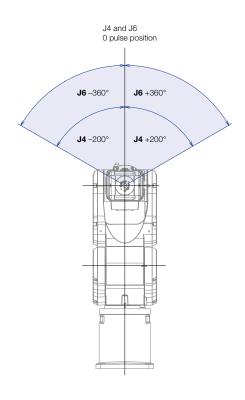
Epson ProSix	C4 EPSON
	C4-A601S
Design	Vertical articulated arm
Load capacity	4/5*kg
Range	P point** 600mm max. 665mm
Repeatability	+/-0,02mm
Permissible moment of inertia	J4 0.15 kg * m ² J5 0.15 kg * m ² J6 0.10 kg * m ²
User cabling	Electrical Connection for 1 x 9-pin D-Sub connector
	Pneumatic Connectors for compressed air supply 4 x Ø 4mm
Veight	27kg
Controllers	RC700-A, RC700DU-A
nstallation	Floor/ceiling each also recessed
Ambient condition	Cleanroom class (option) ISO3 & ESD
	Protection class IP4O

* Possible under specific conditions **P point: Intersection point of rotation J1 = Axis 1 J4 = Axis 4J5 = Axis 5 J2 = Axis 2(see manual) centres of axes 4, 5 and 6 J3 = Axis 3J6 = Axis 6

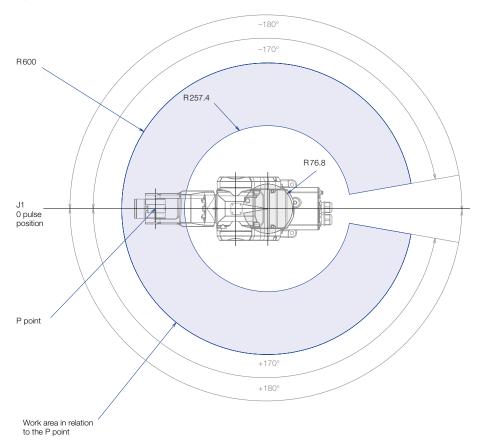
Package	Manipulator options
Epson robots and controller	Extended power and signal cable (5m / 10m / 20m)
Epson RC+ program CD including	Brake release unit
simulation software	Mounting bracket
2x mounting bracket sets for the robot controller	
3m power and signal cable	Installation
3m power cable for the robot controller	The Epson ProSix C4 and ProSix C4L six-axis robots have flexible installation options which work for a wide range of applications.
Emergency stop plug	
Plug for standard inputs and outputs	
Plug set for user cabling	In addition to floor and ceiling installation, recessed
2x air connection sets	installation is also possible. In this case the base of the robot is not required and the cable conduit is
(each with /ix straight and /ix yi) and ed)	hidden, allowing you to reduce the height of your
CD manuals	production cell.
Installation/safety manual	











R250

Epson ProSix C4L

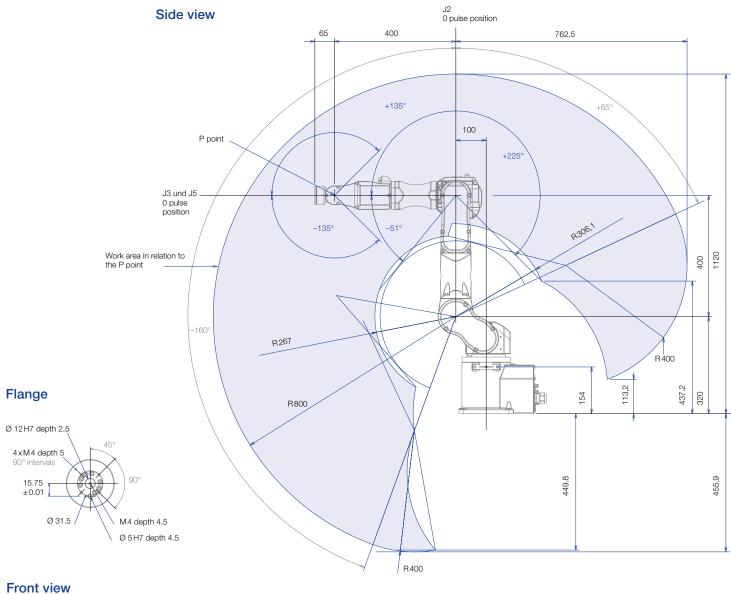
	C4-A901S
Design	Vertical articulated arm
Load capacity	4/5*kg
Range	P point** 900mm max. 965mm
Repeatability	+/-0,03mm
Permissible moment of inertia	J4 0.15 kg * m² J5 0.15 kg * m² J6 0.10 kg * m²
User cabling	Electrical Connection for 1 x 9-pin D-Sub connector Pneumatic Connectors for compressed air supply 4 x Ø 4mm
Weight	29 kg
Controllers	RC700-A, RC700DU-A
Installation	Floor/ceiling each also recessed
Ambient condition	Cleanroom class (option) ISO3 & ESD Protection class
	IP40

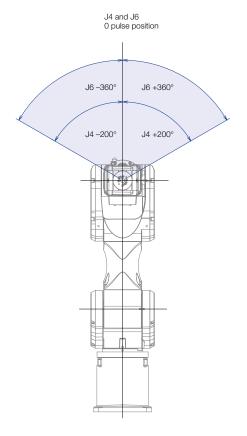
J2 = Axis 2J3 = Axis 3 J5 = Axis 5 J6 = Axis 6

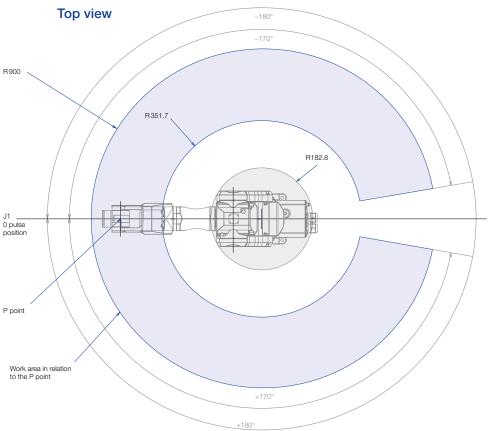
Possible under specific conditions (see manual)

P point: Intersection point of rotation centres of axes 4, 5 and 6

Package **Manipulator options** Epson robots and controller Extended power and signal cable (5m / 10m / 20m) Epson RC+ program CD including Brake release unit simulation software Mounting bracket 2x mounting bracket sets for the robot controller 3m motor and signal cable Installation 3m motor cable for the robot controller The Epson ProSix C4 and ProSix C4L six-axis robots have flexible installation options that work for a wide Emergency stop plug range of applications. Plug for standard inputs and outputs In addition to floor and ceiling installation, recessed Plug set for user cabling installation is also possible. In this case the base of 2x air connection sets the robot is not required and the cable conduit is (each with 4x straight and 4x 90° angled) hidden, allowing you to reduce the height of your Manuals on CD production cell. Installation/safety manual







Epson ProSix C8

	C8-A701S
Design	Vertical articulated arm
Load capacity	8kg
Range	P point* 710mm max. 790mm
Repeatability	+/-0.02mm
Permissible moment of inertia	J4 0.47 kg * m ² J5 0.47 kg * m ² J6 0.15 kg * m ²
User cabling	Electrical Connection for 1 x 15-pin D-Sub connector Connection for 1 x 8-pin RJ45-connector (Ethernet) Connection for 1 x 8-pin connector (Force Sensor) Pneumatic Connectors for compressed air supply 2 x Ø 6mm
Weight	49 kg (IP67: 53 kg)
Controllers	RC700-A, RC700DU-A
Installation	Floor/ceiling
Ambient condition	Cleanroom class (option) ISO3 & ESD Protection class IP 40 (standard)/IP67 (option)

J2 = Axis 2 J3 = Axis 3 J5 = Axis 5 J6 = Axis 6

- - - -

Package

Epson robots and controller

Epson RC+ program CD including simulation software

x2 mounting bracket sets for the robot controller

3m power and signal cable

3m power cable for the robot controller

Emergency stop plug

Plug for standard inputs/outputs

Plug set for user cabling

x2 air connection sets (each with 2x straight and 2x 90° angled)

CD manuals

Installation/safety manual

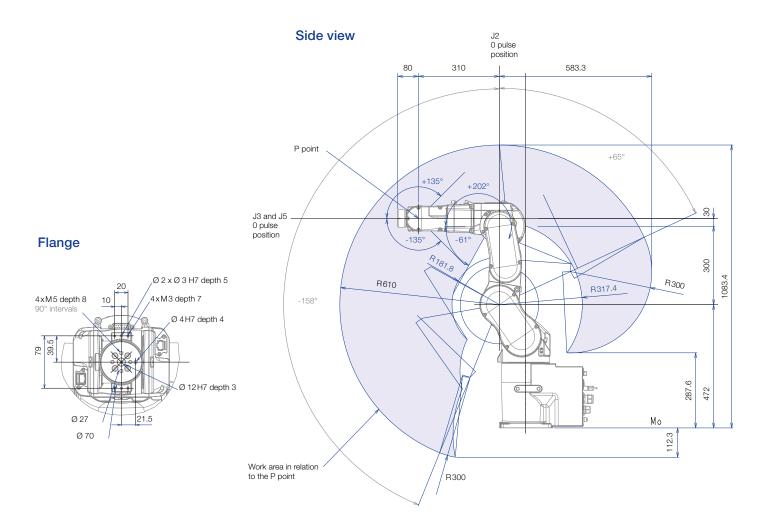
Manipulator options

Extended power and signal cable (5m / 10m / 20m) Brake release unit

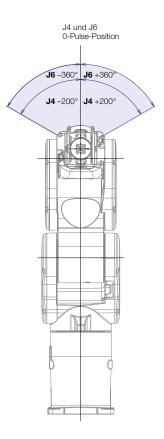
EPSON

Installation

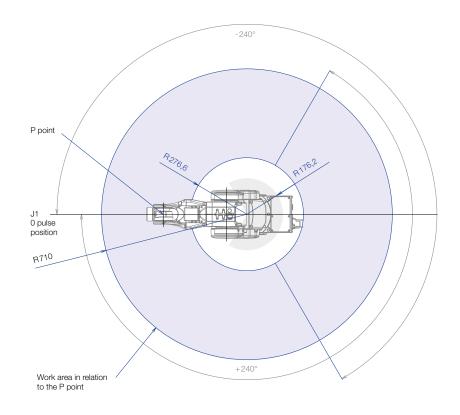
The Epson ProSix C8, ProSix C8L and ProSix C8XL six-axis robots have flexible installation options, including floor and ceiling installation, which suit a wide range of applications.



Front view



Top view



Epson ProSix C8L

	C8L
	C8-A901S
Design	Vertical articulated arm
Load capacity	8kg
Range	P point* 900mm max. 980mm
Repeatability	+/-0,03mm
Permissible moment of inertia	J4 0.47 kg * m ² J5 0.47 kg * m ² J6 0.15 kg * m ²
User cabling	Electrical Connection for 1 x 15-pin D-Sub connector Connection for 1 x 8-pin RJ45-connector (Ethernet) Connection for 1 x 8-pin connector (Force Sensor) Pneumatic Connectors for compressed air supply
	2 x Ø 6mm
Weight	52 kg (IP67: 56 kg)
Controllers	RC700-A, RC700DU-A
Installation	Floor/ceiling
Ambient condition	Cleanroom class (option) ISO3 & ESD
	Protection class IP40 (standard)/IP67 (option)

Package

J3 = Axis 3

Epson robots and controller

Epson RC+ program CD including simulation software

2x mounting bracket sets for the robot controller

J6 = Axis 6

3m motor and signal cable

3m motor cable for the robot controller

Emergency stop plug

Plug for standard inputs/outputs

Plug set for user cabling

2x air connection sets (each with 2x straight and 2x 90° angled)

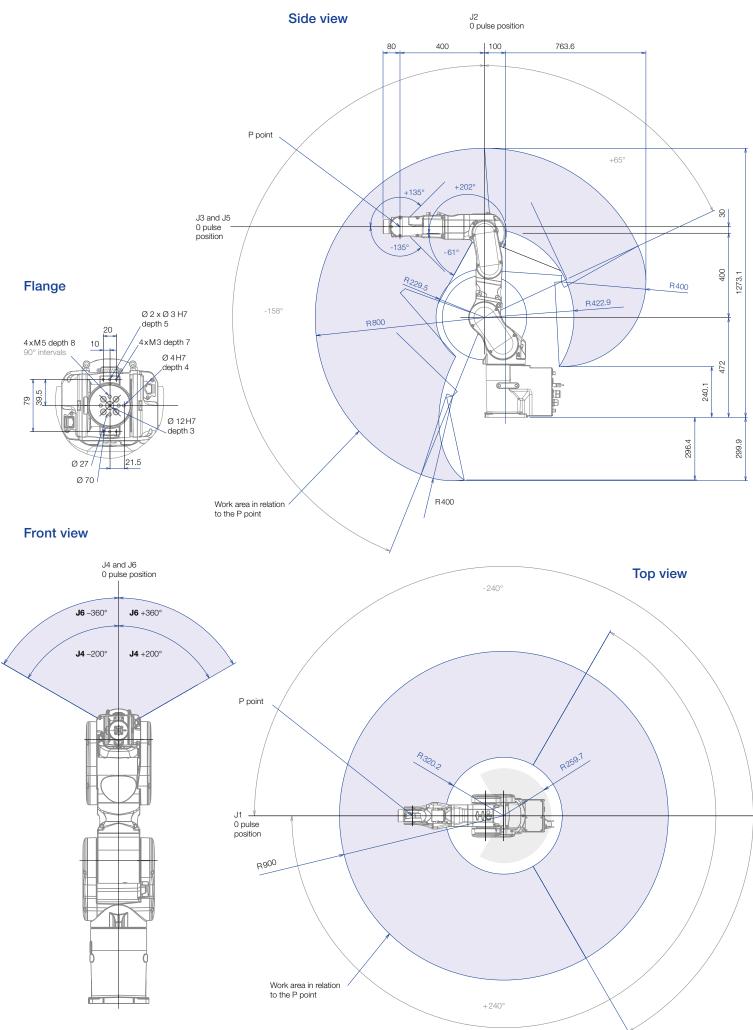
CD manuals

Manipulator options

Extended power and signal cable (5m / 10m / 20m) Brake release unit

Installation

The Epson ProSix C8, ProSix C8L and ProSix C8XL six-axis robots have flexible installation options, including floor and ceiling installation, which suit a wide range of applications.



Epson ProSix C8XL

	C8-A1401S
Design	Vertical articulated arm
Load capacity	8kg
Range	P point* 1400mm max. 1480mm
Repeatability	+/-0.05mm
Permissible moment of inertia	J4 0.47 kg*m² J5 0.47 kg*m² J6 0.15 kg*m²
User cabling	Electrical Connection for 1 x 15-pin D-Sub connector Connection for 1 x 8-pin RJ45-connector (Ethernet) Connection for 1 x 8-pin connector (Force Sensor) Pneumatic
	Connectors for compressed air supply 2 x Ø 6mm
Weight	62 kg (IP67: 66 kg)
Controllers	RC700-A, RC700DU-A
Installation	Floor/ceiling
Ambient condition	Cleanroom class (option) ISO3 & ESD
	Protection class IP40 (standard)/IP67 (option)

J2 = Axis 2J3 = Axis 3 J5 = Axis 5

J6 = Axis 6

Package

Epson robots and controller

Epson RC+ program CD including simulation software

2 mounting bracket sets for the robot controller

3m power and signal cable

3m power cable for the robot controller

Emergency stop plug

Plug for standard inputs/outputs

Plug set for user cabling

2 air connection sets (each with 2 x straight and 2 x 90° angled)

CD manuals

Installation/safety manual

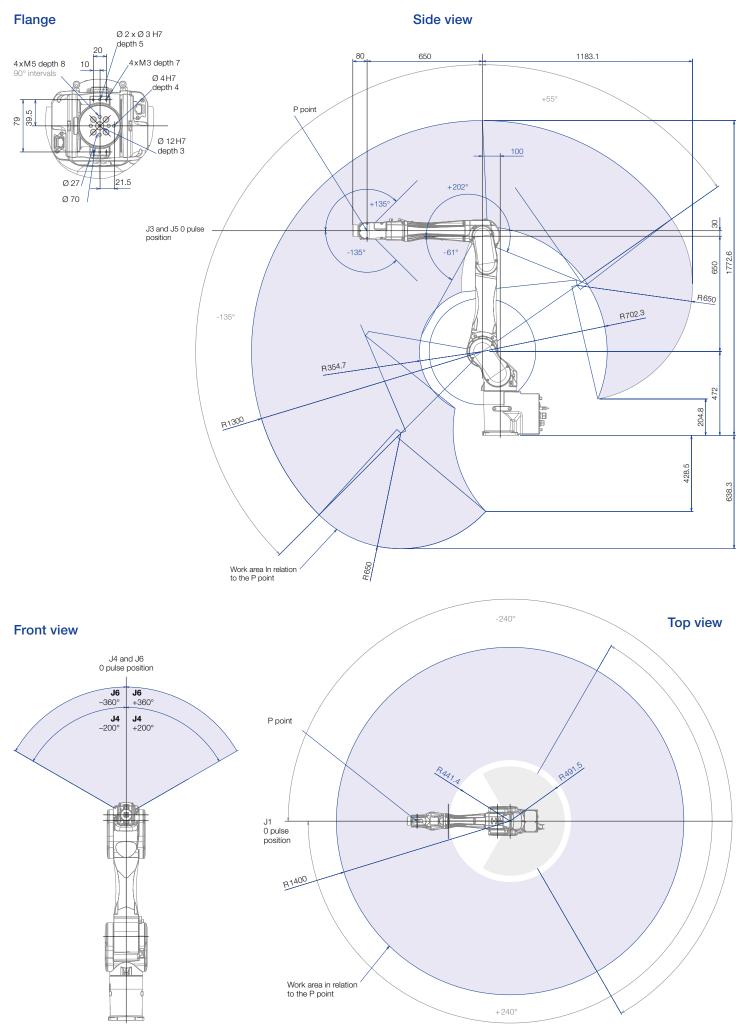
Manipulator options

Extended power and signal cable (5m/10m/20m) Brake release unit

EPSCN

Installation

The Epson ProSix C8, ProSix C8L and ProSix C8XL six-axis robots have flexible installation options, including floor and ceiling installation, which suit a wide range of applications.



Simulation of robot cells

Good preparation is everything. Plan and visualise all procedures in your production, validate your program offline initially and carry out troubleshooting and editing work easily from your desk. With the Epson RC+ Simulator – included in the software package – you save time and money through all phases of your project.

Phase 1 Design

Plan your robot cell at full size in advance and work out the expected cycle time for your application to check feasibility before a single part for the system has been made. Plan future system expansions in the simulation system to keep downtime to a minimum.

Phase 2 Integration

Completing the program validation process before the robots are delivered enables you to create programs at the same time, with the system capable of displaying and evaluating even complex motions. Collision risks are identified and equipment damage is prevented.

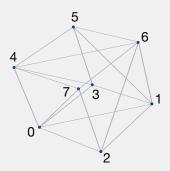
Phase 3 Operation and maintenance

Troubleshoot and modify programs from your desk. Use the 3D layout to visualise collision detection, reachability checks and robot motions.



Even simpler designs using the CAD-to-Point function

The CAD-to-Point function allows CAD data to be converted into robot points.



About Epson

Epson Robotic Solutions is one of the leading suppliers of high tech robot systems that are renowned worldwide for their reliability. The product range includes six-axis robots, SCARA robots, the SCARA entry-level LS and T models, the special Epson-developed Spider and N2 robots types, as well as the pioneering Dual Arm robot. Added to this are image processing controls and the Epson Force Sensor for force-controlled applications.

This gives Epson Robotic Solutions one of the most comprehensive ranges of high-precision industrial robots in the world, making them a technological pioneer for intelligently controlled automation processes.

Technological pioneer

1982

Epson SCARA robots freely available in Japan for the first time

1986

First class 1 cleanroom robot

1997 First PC-based controller

2008

Inventor of the right or left arm-optimised G3 SCARA robot

2009

Inventor of the spider – a unique SCARA robot with no dead zones

2013

First application of Epson QMEMS[®] sensors in robotics, reducing six-axis kinematics vibrations

2014

Epson Compact Vision CV2: Epson's own ultra-fast image processing computer

2016

Epson N2 series: World's first six-axis robot with folding arm - extremely compact and space-saving

2017

Epson Dual Arm robot with an arm geometry inspired by human physiology, as well as integrated sensors such as cameras, force sensors, and accelerometers

Pre- and after-sales support

Feasibility studies for maximum planning and project security

Support for planning and implementation

Introductory seminars, programming/maintenance courses, operator training

Inspection and individual maintenance concepts

Hotline service, on-site repair service

Central spare part stocking

Epson Industrial Solutions Center – find your solution









Experience all our Epson robots in action. Build, simulate and improve your automation application in a workshop cell, with help from our experts. The cell can be controlled and networked using all conventional fieldbus systems. In addition, we can supply you with modern peripherals such as a vision and conveyor tracking system.

Make an appointment

Call us on +49 2159 538 1800

or send an email to info.rs@epson.de

Epson Deutschland GmbH Robotics Solutions Division Otto-Hahn-Strasse 4 40670 Meerbusch

Phone: +49 2159 5381800 Fax: +49 2159 5383170 E-mail: info.rs@epson.de www.epson.de/robots

Epson America Inc. www.epsonrobots.com Seiko Epson Corp http://global.epson.com/products/robots/ Epson China Co, Ltd. www.epson.com.cn/robots/

For more information please contact: Home users: 0343 90 37766 Business users*: 0871 42 37766 Republic of Ireland: 01 436 7742

Or visit us at https://www.epson.co.uk/contactus * 10p per minute p<u>lus network extras.</u>______

Trademarks and registered trademarks are the property of Seiko Epson Corporation or their respective owners Product information is subject to change without prior notice.

