

ROBOTICS

Product specification

IRB 365



Trace back information:
Workspace 26-1 version a20
Checked in 2026-04-27
Skribenta version 5.6.019

Product specification

IRB 365-1.5/800

IRB 365-1.5/1100

IRB 365-1.5/1300

OmniCore

Document ID: 3HAC079184-001

Revision: E

The information in this manual is subject to change without notice and should not be construed as a commitment by ABB. ABB assumes no responsibility for any errors that may appear in this manual.

Except as may be expressly stated anywhere in this manual, nothing herein shall be construed as any kind of guarantee or warranty by ABB for losses, damage to persons or property, fitness for a specific purpose or the like.

In no event shall ABB be liable for incidental or consequential damages arising from use of this manual and products described herein.

This manual and parts thereof must not be reproduced or copied without ABB's written permission.

Keep for future reference.

Additional copies of this manual may be obtained from ABB.

Original instructions.

Table of contents

Overview of this specification	7
1 Description of IRB 365	9
1.1 About the IRB 365	9
1.2 Standards	11
1.2.1 Applicable standards	11
1.3 Maintenance and troubleshooting	12
2 Technical data for IRB 365	13
2.1 Technical data	13
2.2 Robot motion	18
2.2.1 Working range	18
2.2.2 Performance according to ISO 9283	20
2.3 Installation	21
2.3.1 Introduction to installation	21
2.3.2 Requirements on the installation site	22
2.3.3 Mounting the manipulator	24
2.3.4 Fitting equipment on the robot (robot dimensions)	27
2.3.5 Installing a brake release unit	30
2.4 Calibration and references	31
2.4.1 Calibration methods	31
2.4.2 Calibration movement directions for all axes	32
2.5 Load diagrams	33
2.5.1 Introduction	33
2.5.2 Load diagrams	34
2.5.3 Maximum TCP acceleration	35
2.6 Typical cycle times	36
2.7 Robot stopping distances and times	37
3 Specification of variants and options	39
3.1 Introduction to variants and options	39
3.2 Manipulator	40
3.3 Floor cables	41
3.4 Warranty	42
Index	43

This page is intentionally left blank

Overview of this specification

About this product specification

This product specification describes the performance of the manipulator or a complete family of manipulators in terms of:

- The structure and dimensional prints
- The fulfilment of standards, safety, and operating equipment
- The load diagrams, mounting or extra equipment, the motion, and the robot reach
- The specification of available variants and options

The specification covers the manipulator using the OmniCore controller.

Usage

Product specifications are used to find data and performance about the product, for example to decide which product to buy. How to handle the product is described in the product manual.

The specification is intended for:

- Product managers and product personnel
- Sales and marketing personnel
- Order and customer service personnel
- Integrators and customers

References

Reference	Document ID
<i>Product manual - OmniCore C30</i>	3HAC060860-001
<i>Product manual - OmniCore C30 Type B</i>	3HAC097281-001
<i>Application manual - Controller software OmniCore RobotWare 7</i>	3HAC066554-001
<i>Application manual - Controller software OmniCore RobotWare 8</i>	3HAC098393-001
<i>Product manual - IRB 365</i>	3HAC079185-001
<i>Product specification - OmniCore C line RW 7 (RobotWare 7)</i>	3HAC065034-001
<i>Product specification - OmniCore C line RobotWare 8 (RobotWare 8)</i>	3HAC098715-001



Tip

All documents can be found via ABB Robotics One, <https://one.robots.abb.com/en/knowledge-hub>.

Revisions

Revision	Description
A	First edition.

Continues on next page

Revision	Description
B	Published in release 23A. The following updates are done in this revision: • Added option for mains cable [3203-x]. • Added introduction for air swivel. • Added IRB 365-1.5/800 and IRB 365-1.5/1300. • Corrected working area for IRB 365 1.5/1100.
C	Published in release 23B. The following updates are done in this revision: • Added option Manipulator cable-22m [3200-4].
D	Published in release 24D. The following updates are done in this revision: • Minor corrections. • Updated options [3203-X] <i>Mains cable</i>.
E	Published in release R26.1. The following updates are made in this revision: • The structure of the document is updated. • The stopping distance data is updated and moved to this document. • Company name updated to reflect current legal entities. • Updated portal name from myABB to ABB Robotics One. • Added air pressure to technical data. • Added support for RobotWare 8.

1 Description of IRB 365

1.1 About the IRB 365

General introduction

IRB 365 FlexPicker™ is specially designed for high speed top loading pick & place processes.

Operating system

The robot is equipped with the OmniCore C30 controller and robot control software, RobotWare. RobotWare supports every aspect of the robot system, such as motion control, development and execution of application programs, communication etc. See *Operating manual - OmniCore*.

Safety

The safety standards are valid for the complete robot, manipulator and controller.

Additional functionality

For additional functionality, the robot can be equipped with optional software for application support - communication features - network communication - and advanced functions such as multitasking, sensor control, etc. For a complete description on optional software, see *Product specification - OmniCore C line RW 7*.

PickMaster® is a specific application software for vision guided picking with high speed conveyors. It provides a task-oriented programming and execution of random flow pick and place operations on the fly, see *Product specification - PickMaster® Twin*.

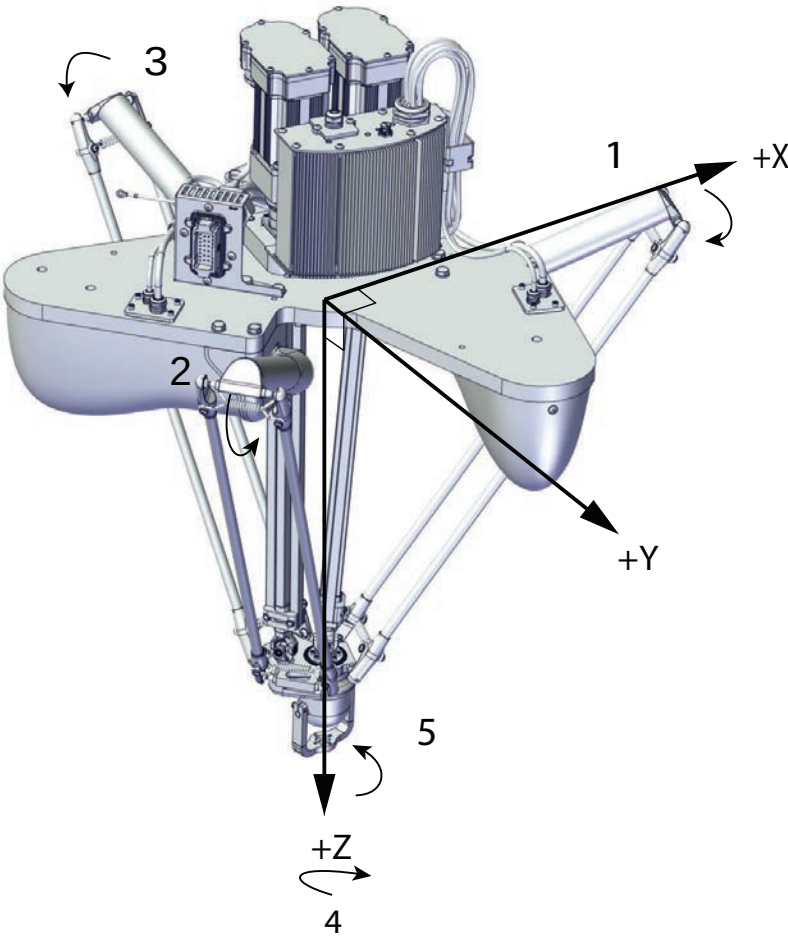
Continues on next page

1 Description of IRB 365

1.1 About the IRB 365

Continued

Robot axes



xx2200000237

Robot variants

The IRB 365 is available in the following variants.:

Robot variant	Handling capacity (kg)
IRB 365-1.5/800	1.5
IRB 365 1.5/1100	1.5
IRB 365-1.5/1300	1.5

1.2 Standards

1.2.1 Applicable standards

General

This product is designed according to the global product standard ISO 10218-1:2025, *Robots for industrial environments - Safety requirements - Part 1 Robots*. In case of deviation from ISO 10218-1:2025, these are listed in the declaration of incorporation. The declaration of incorporation is part of the delivery.

Robot standards

Standard	Description
ISO 9283	Manipulating industrial robots – Performance criteria and related test methods
ISO 9787	Robots and robotic devices – Coordinate systems and motion nomenclatures
ISO 9946	Manipulating industrial robots – Presentation of characteristics

Other standards used in design

Standard	Description
ISO 9283	Manipulating industrial robots - Performance criteria and related test methods
ISO 9787	Robots and robotic devices -- Coordinate systems and motion nomenclatures
ISO 9946	Manipulating industrial robots - Presentation of characteristics
IEC 61000-6-2	Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity standard for industrial environments
IEC 61000-6-4	Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments
IEC 61326-3-1	Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) – General industrial applications

Region specific standards

Standard	Description
UL 1740 (option) CSA Z434 (option)	Standards For Safety - Robots and Robotic Equipment Industrial robots and robot Systems - General safety requirements Valid for USA and Canada.

1 Description of IRB 365

1.3 Maintenance and troubleshooting

1.3 Maintenance and troubleshooting

General

The robot requires only minimum maintenance during operation. It has been designed to make it as easy to service as possible:

- Maintenance-free AC motors are used.
- Maintenance-free gearboxes are used.
- All cabling is fixed, no movements. In the unlikely event of a failure, its modular design makes it easy to change.

Maintenance

The maintenance intervals depend on the use of the robot. The required maintenance activities also depend on the selected options. For detailed information on maintenance procedures, see the maintenance section in *Product manual - IRB 365*.

Troubleshooting

The robot has built-in communication that shows information on the FlexPendant. These messages facilitate troubleshooting and are an integral part of the control system. Troubleshooting procedures are describes in the product manual for the manipulator and the controller respectively.

2 Technical data for IRB 365

2.1 Technical data

Weight, robot

The table shows the weight of the robot.

Robot model	Nominal weight
IRB 365-1.5/800	86 kg
IRB 365 1.5/1100	86 kg
IRB 365-1.5/1300	86 kg



Note

The weight does not include additional options, tools and other equipment fitted on the robot.

Mounting positions

The table shows valid mounting positions and the installation (mounting) angle for the manipulator.

Mounting position	Installation angle
Suspended in robot frame	0°



Note

The actual mounting angle must always be configured in the system parameters, otherwise the performance and lifetime is affected. See the product manual for details.

On robots running RobotWare 8, it is also possible to configure the mounting position on the FlexPendant, see the integrator's guide for the controller.

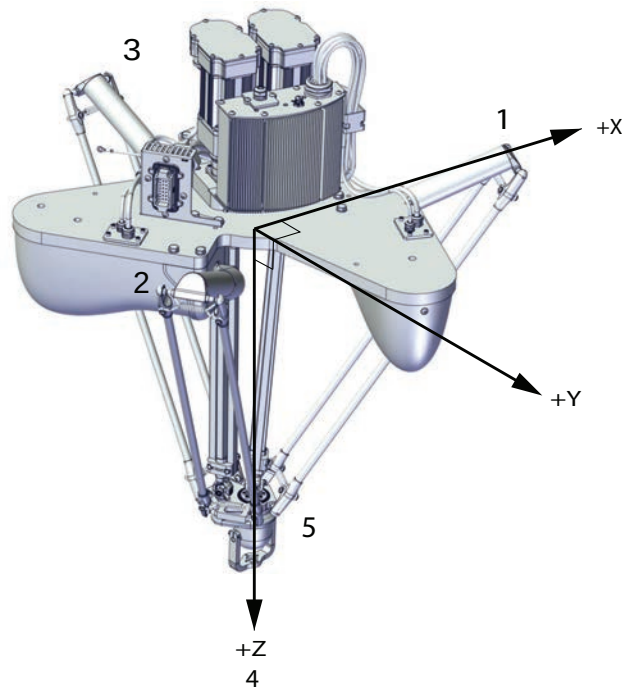
Continues on next page

2 Technical data for IRB 365

2.1 Technical data

Continued

Loads on foundation, robot



xx2200000421

The table shows the various forces and torques working on the robot during different kinds of operation.



Note

These forces and torques are extreme values that are rarely encountered during operation. The values also never reach their maximum at the same time!



WARNING

The robot installation is restricted to the mounting options given in following load table(s).

Suspended in robot frame

Force	Endurance load (in operation)	Maximum load (emergency stop)
Force xy	± 0.32 kN	± 2.3 kN
Force z	0.97 ± 0.21 kN	1.5 ± 0.78 kN
Torque xy	0.21 kNm	1.56 kNm
Torque z	0.10 kNm	0.51 kNm

Continues on next page

Requirements, foundation

The table shows the requirements for the foundation where the weight of the installed robot is included:

Requirement	Value	Note
Flatness of foundation surface	0.3 mm	Flat foundations give better repeatability of the resolver calibration compared to original settings on delivery from ABB. The value for levelness aims at the circumstance of the anchoring points in the robot base.
Minimum resonance frequency	35 Hz  Note It may affect the manipulator lifetime to have a lower resonance frequency than recommended.	The value is recommended for optimal performance. Due to foundation stiffness, consider robot mass including equipment. ⁱ For information about compensating for foundation flexibility, see the description of <i>Motion Process Mode</i> in the manual that describes the controller software option, see References on page 7 .

- ⁱ The minimum resonance frequency given should be interpreted as the frequency of the robot mass/inertia, robot assumed stiff, when a foundation translational/torsional elasticity is added, i.e., the stiffness of the pedestal where the robot is mounted. The minimum resonance frequency should not be interpreted as the resonance frequency of the building, floor etc. For example, if the equivalent mass of the floor is very high, it will not affect robot movement, even if the frequency is well below the stated frequency. The robot should be mounted as rigid as possible to the floor.
Disturbances from other machinery will affect the robot and the tool accuracy. The robot has resonance frequencies in the region 10 – 20 Hz and disturbances in this region will be amplified, although somewhat damped by the servo control. This might be a problem, depending on the requirements from the applications. If this is a problem, the robot needs to be isolated from the environment.

Storage conditions, robot

The table shows the allowed storage conditions for the robot:

Parameter	Value
Minimum ambient temperature	-25 °C
Maximum ambient temperature	60 °C
Maximum ambient temperature (less than 24 hrs)	90 °C
Maximum ambient humidity	90% at constant temperature

Operating conditions, robot

The table shows the allowed operating conditions for the robot:

Parameter	Value
Minimum ambient temperature	0 °C ⁱ
Maximum ambient temperature	45 °C
Maximum ambient humidity	90% at constant temperature

- ⁱ At low environmental temperature < 10 °C is, as with any other machine, a warm-up phase recommended to be run with the robot. Below 5 °C this warm-up phase is mandatory. Otherwise there is a risk that the robot stops or run with lower performance due to temperature dependent oil- and grease viscosity.

Continues on next page

2 Technical data for IRB 365

2.1 Technical data

Continued

Protection classes, robot

The table shows the available protection types of the robot, with the corresponding protection class.

Protection type	Protection class ⁱ
Manipulator, protection type Standard	IP54

ⁱ According to IEC 60529.

Environmental information

The product complies with IEC 63000. *Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.*

Airborne noise level

Data	Description	Note
Airborne noise level	The sound pressure level outside the working space	< 59 dB (A) Leq (acc. to Machinery directive 2006/42/EG)

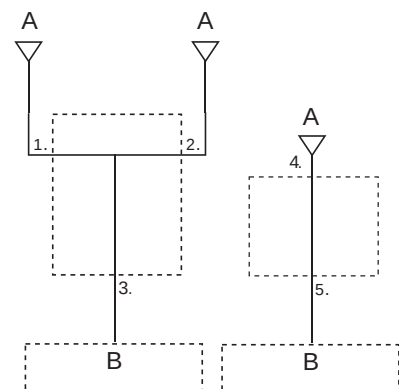
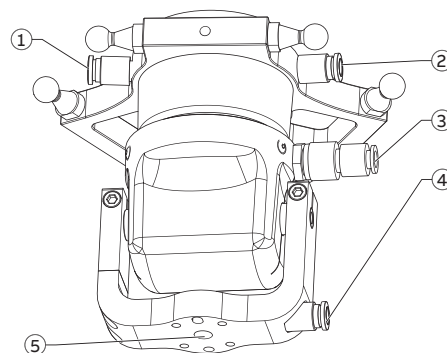
Power consumption at max load

ISO Plane (630 x 630 mm)

Type of movement	All variants
Average power consumption (kW)	0.35

Robot in calibration position	All variants
Brakes engaged (W)	90
Brakes disengaged (W)	170

Air feedthrough TCP with tilt control



xx2600000031

A	Main air
B	Air / vacuum application

Air and vacuum supply	Value
Diameter of air tube	8 mm

Continues on next page

Air and vacuum supply	Value
Threaded hole for air nozzle	G1/8
Air pressure	4 bar
Air overload pressure	6 bar
Vacuum	0.8 bar

Explosive environments

The robot must not be located or operated in an explosive environment.

2 Technical data for IRB 365

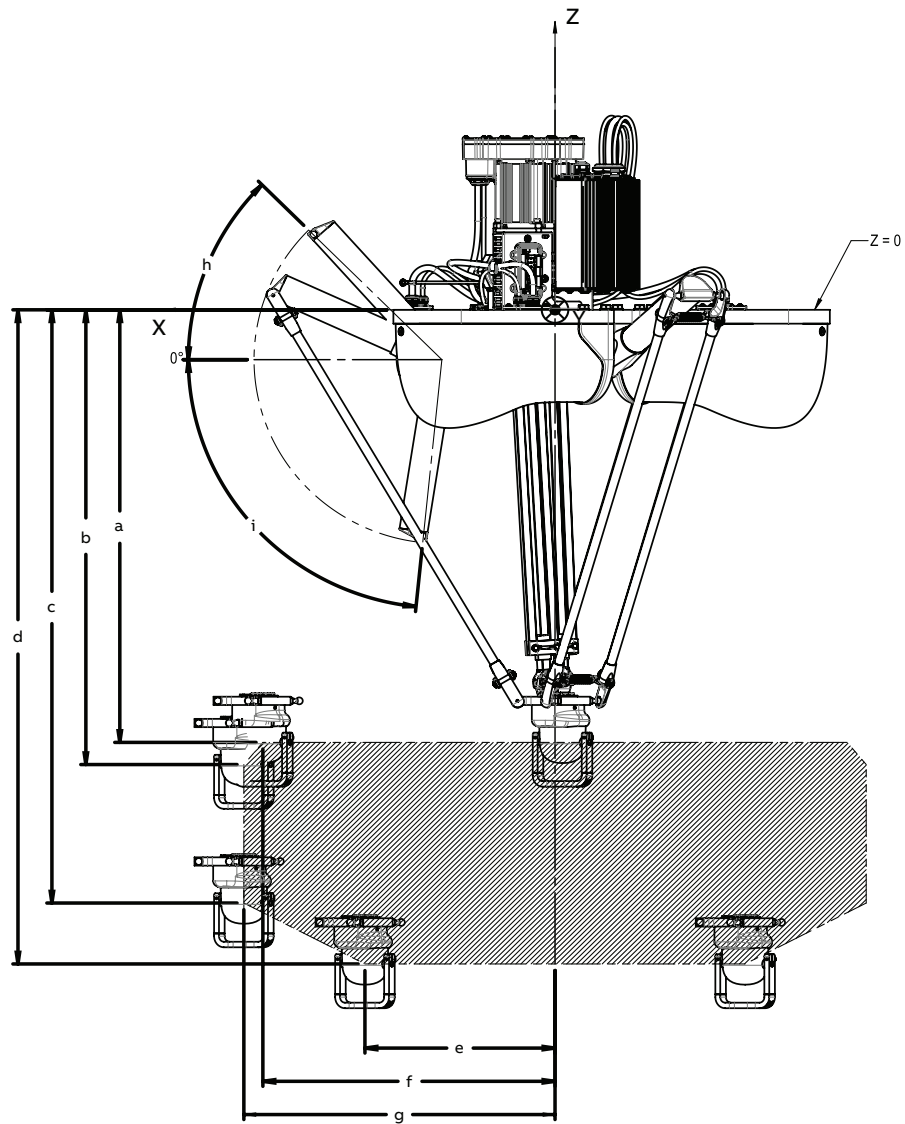
2.2.1 Working range

2.2 Robot motion

2.2.1 Working range

Illustration, working range

This illustration shows the unrestricted working range of the robot.

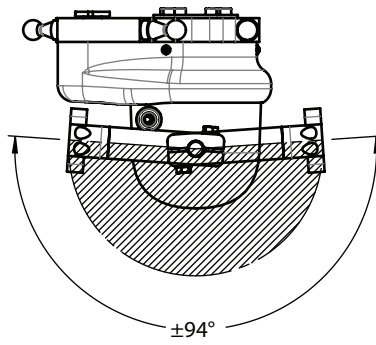


xx2200000476

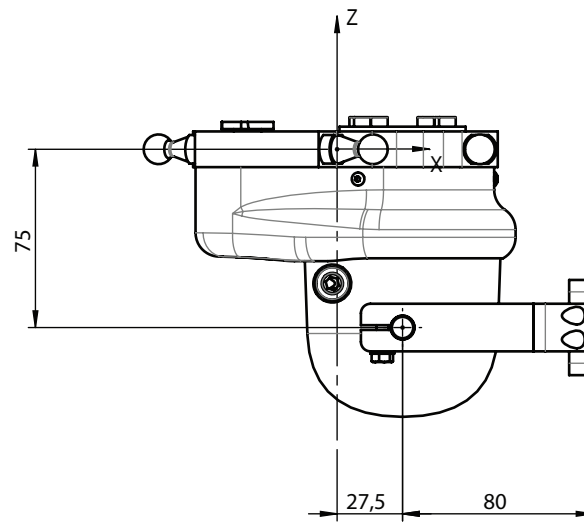
Dimensions

Variant	a	b	c	d	e	f	g	h	i
IRB 365-1.5/800	731	731	981	1081	257	400	400	-35°	+88°
IRB 365 1.5/1100	781	821	1031	1181	335	516	550	-47°	+99.5°
IRB 365-1.5/1300	881	931	1131	1281	409	608	650	-34°	+93.5°

Continues on next page



Axis 5



xx2200000477

2 Technical data for IRB 365

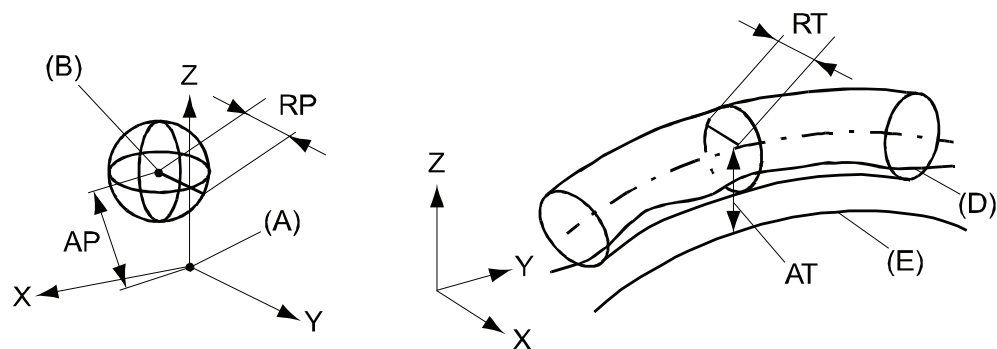
2.2.2 Performance according to ISO 9283

2.2.2 Performance according to ISO 9283

General

At rated load and 1.6 m/s velocity on ISO test plane with all four robot axes in motion, with different payload. Values in the table below are the average result of measurements on a small number of robots. The result may differ depending on where in the working range the robot is positioning, velocity, arm configuration, from which direction the position is approached, the load direction of the arm system. Backlashes in gearboxes also affect the result.

The figures for AP, RP, AT and RT are measured according to figure below.



Position	Description	Position	Description
A	Programmed position	E	Programmed path
B	Mean position at program execution	D	Actual path at program execution
AP	Mean distance from programmed position	AT	Max deviation from E to average path
RP	Tolerance of position B at repeated positioning	RT	Tolerance of the path at repeated program execution

IRB 365-1.5/800, IRB 365 1.5/1100, IRB 365-1.5/1300	At 1.5 kg
Pose accuracy, AP (mm) ⁱ	0.05
Pose repeatability, RP (mm)	0.05
Pose stabilization time, PSt (s) within 0.1 mm of the position	0.34
Pose stabilization overshoot, PSo	0.94
Path accuracy, AT (mm)	2.31
Path repeatability, RT (mm)	0.09

ⁱ AP according to the ISO test above, is the difference between the taught position (position manually modified in the cell) and the average position obtained during program execution.

Backlash axis 4 and 5

Protection class	Value
Standard	1.0 degrees

2.3 Installation

2.3.1 Introduction to installation

General

IRB 365 is adapted for normal industrial environment. Depending on robot version an end effector of max weight 1.5 kg including payload, can be mounted on the robot mounting flange. See [Load diagrams on page 33](#).

Extra loads

The upper and lower arms can handle a load up to 350 grams each, see [Extra equipment attached to the manipulator arms on page 29](#).

Working range limitation

Working range can only be limited by software, not mechanically. Cartesian workspace limits can be set, if needed.

Detailed installation instructions

All detailed installation instructions are found in *Product manual - IRB 365*.

2 Technical data for IRB 365

2.3.2 Requirements on the installation site

2.3.2 Requirements on the installation site

Requirements on the frame

The manipulator is intended to be installed in a frame, platform, or similar. See [Hole configuration, base on page 25](#).

The robot frame must withstand the operational loads. See [Loads on foundation, robot on page 14](#).

Requirements on the layout

There must be sufficient free space around and access ways to the robot to safely perform installation, maintenance, and repair.

Required free space above the robot

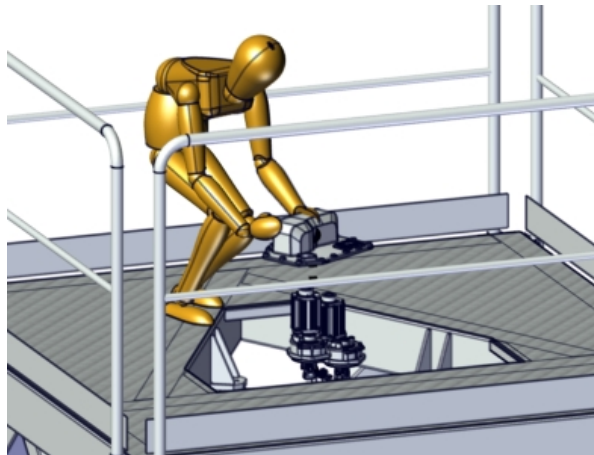
The following service activities require free space above the robot:

- Lifting away the base top cover.
 - Replacing the base components, such as the SMB battery, axis-4 and axis-5 motor, cable harness.
-

Examples of access ways to the base components

Service platform

A service platform for access from above is recommended.

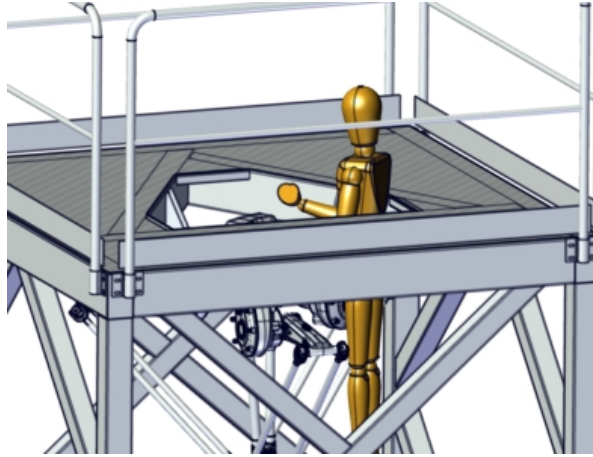


xx2000000672

Continues on next page

Access way beside the robot

If a platform is not possible the service personnel need to be able to stand beside the robot according to the figure.



xx2000000671

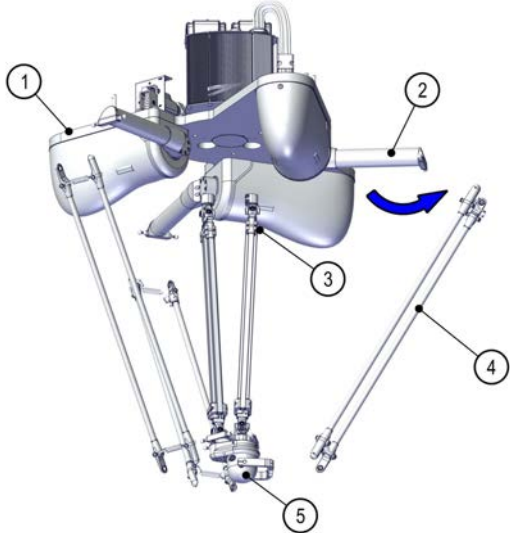
2 Technical data for IRB 365

2.3.3 Mounting the manipulator

2.3.3 Mounting the manipulator

Overview of the assembly order

The IRB 365 is delivered in sub-assemblies which are assembled in the following order:

	Assembly order	Illustration
1	Install the base unit.	
2	Connect the base unit to the robot controller.	
3	Connect the brake release unit.	
4	Release the brakes and move the upper arms into calibration position (horizontal).	
5	Attach the upper end of the telescopic shafts to the motor axes (axes 4 and 5).	
6	Attach the lower arms to the upper arms.	
7	Attach the lower arms to the delta unit.	xx2100000836  Note Make sure not to over-extend the length of the telescope shafts due to risk of damaging the slide bearing.
8	Perform fine calibration of axis 4-5 and update the revolution counters.	

Detailed procedures for each step are given further on in this section.

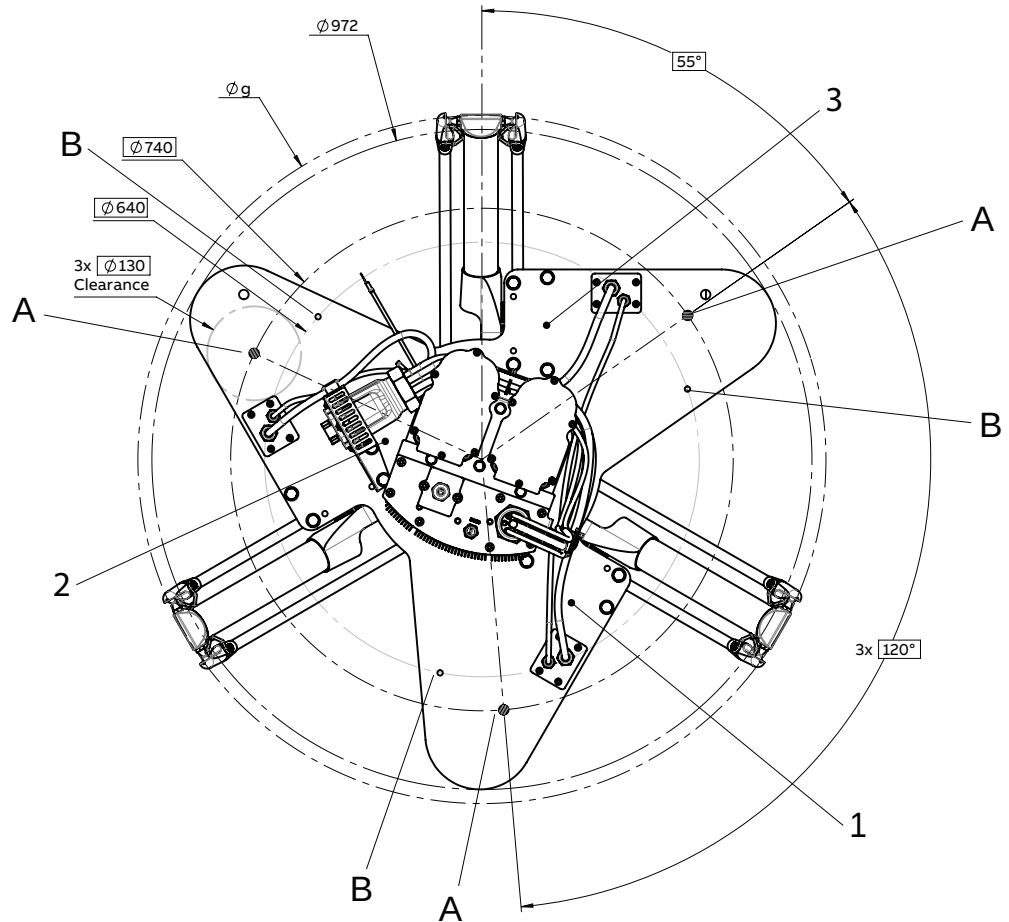
Note regarding M_{xy} and F_{xy}

The bending torque (M_{xy}) can occur in any direction in the XY-plane of the base coordinate system. The same applies to the transverse force (F_{xy}).

Continues on next page

Hole configuration, base

This illustration shows the hole configuration used when securing the robot.



xx2100000837

1	Axis-1 gearbox
2	Axis-2 gearbox
3	Axis-3 gearbox
A	Robot mounting holes
B	Attachment holes M8 for lifting eyes
g	IRB 365-1.5/800: 1,100 mm
g	IRB 365 1.5/1100: 1,100 mm
g	IRB 365-1.5/1300: 1,300 mm

The three support points of the manipulator base box shall be mounted against three flat surfaces with a flatness within the specification. Use shims if necessary. See specification in [Requirements, foundation on page 15](#).

Continues on next page

2 Technical data for IRB 365

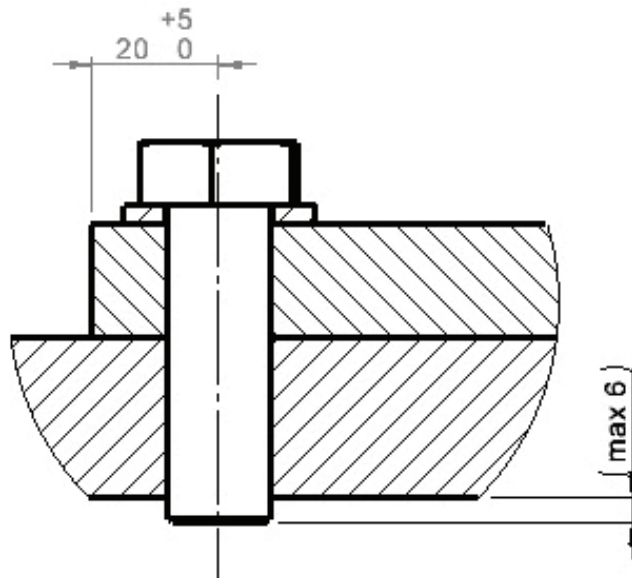
2.3.3 Mounting the manipulator

Continued

Attachment screws

The table below specifies the type of securing screws and washers to be used for securing the robot to the base foundation.

Suitable screws	M16. Minimum length of thread engagement: 25 mm
Quantity	3 pcs
Minimum screw quality	Screw class 8.8 with Yield Strength 640 MPa
Suitable washer	17x25x3 coated stainless steel 3HAC060866-005 (HV200)
Tightening torque	200 Nm
Level surface requirements	0.3 mm



xx2200000282



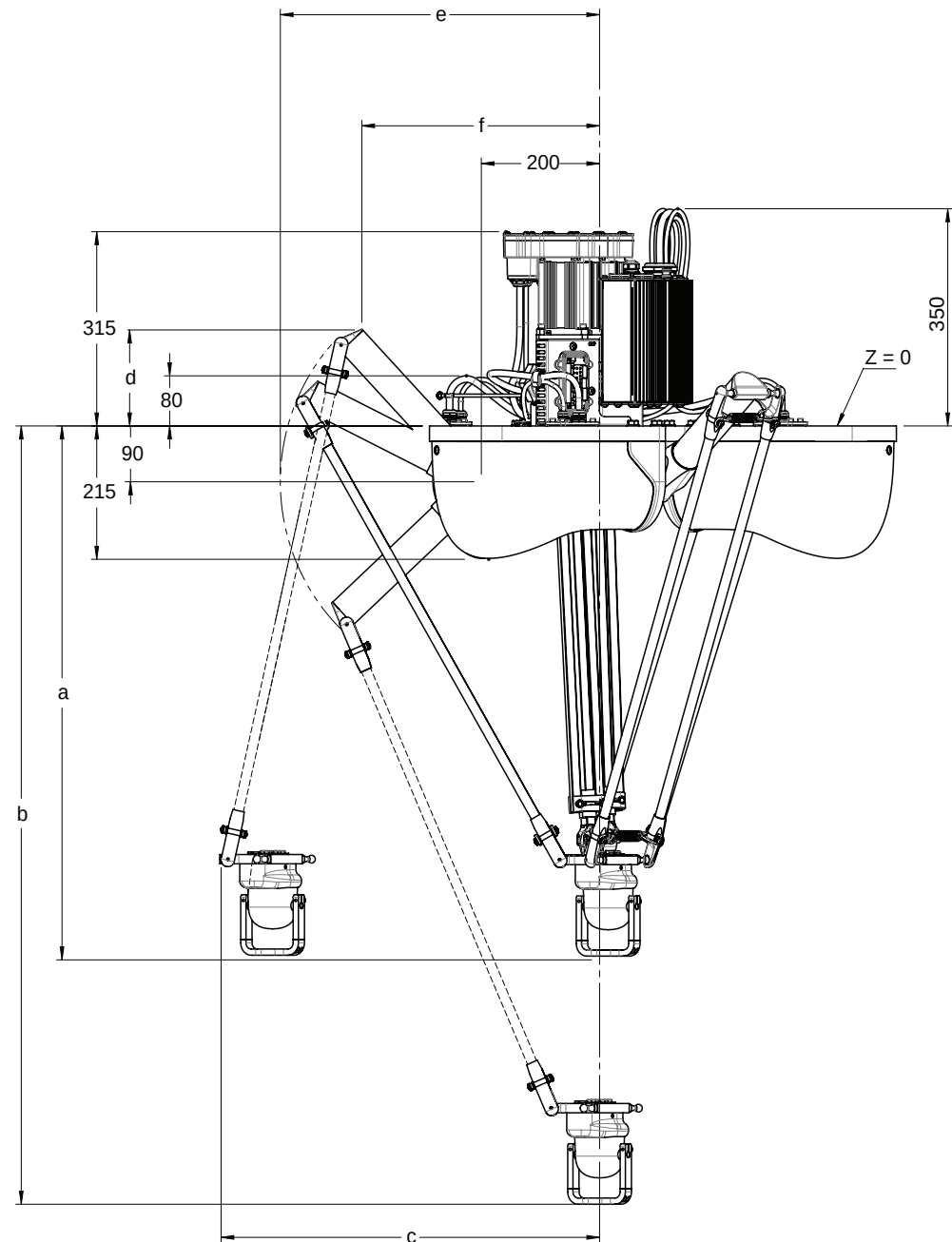
Note

Loctite 5700 is needed on the thread.

2.3.4 Fitting equipment on the robot (robot dimensions)

Robot dimensions

The figure shows the dimension of the robot.



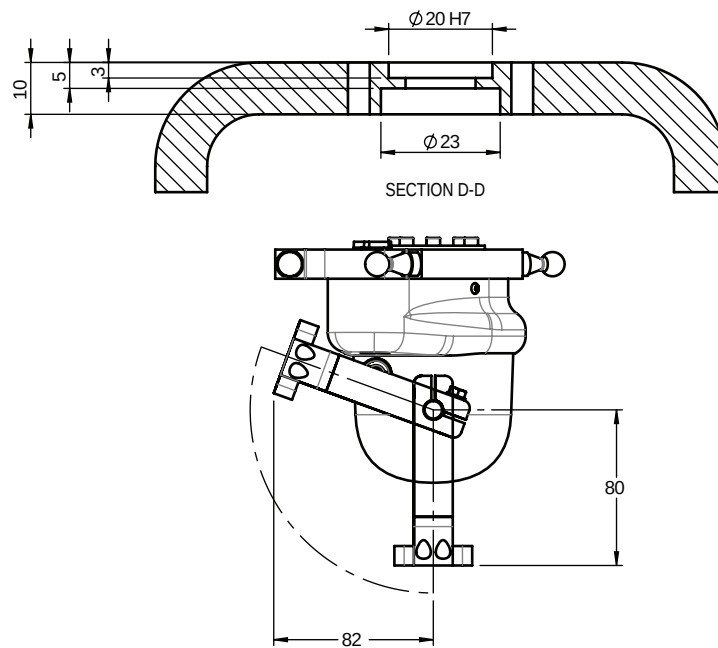
xx2200000423

Continues on next page

2 Technical data for IRB 365

2.3.4 Fitting equipment on the robot (robot dimensions)

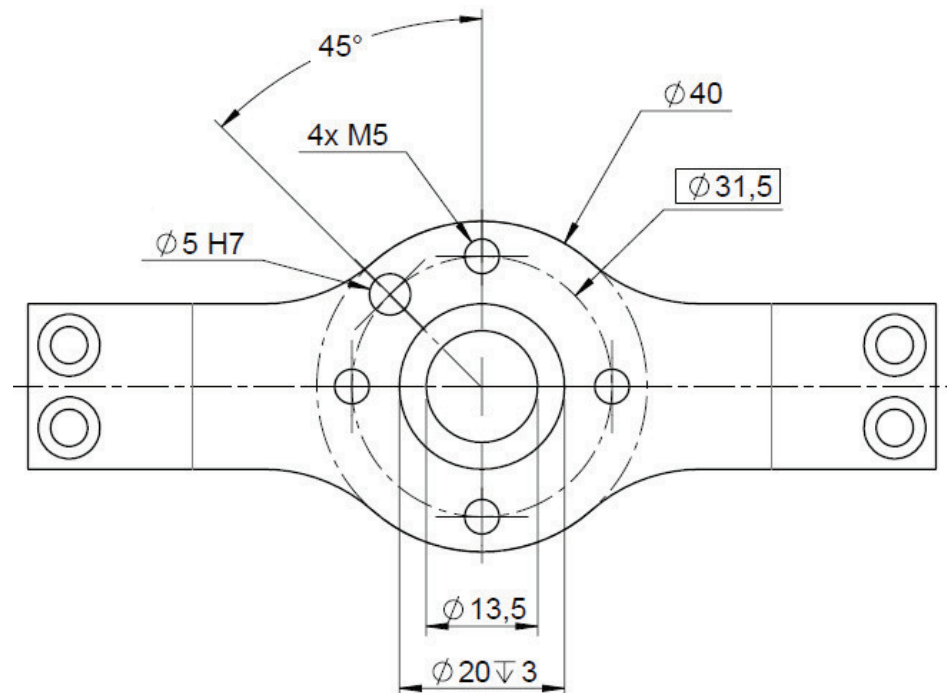
Continued



xx2200000433

Variant	a	b	c	d	e	f
IRB 365-1.5/800	811	1161	492	150	550	414
IRB 365 1.5/1100	861	1261	642	175	550	375
IRB 365-1.5/1300	961	1361	742	190	650	471

Mechanical interface of the tool flange



xx2100000962

Continues on next page

Extra equipment attached to the manipulator arms

Extra loads can be mounted on the manipulator. Definitions of dimensions and masses are shown in the following figures. Maximum allowed arm load depends on center of gravity of arm load and robot payload.

Center of gravity for extra loads on upper and lower arms

TBD New image of robot

M1	Limitation lines for center of gravity for M1
M2	Limitation lines for center of gravity for M2

Attachment of extra loads on the upper and lower arms

No holes for fitting extra equipment are available on the upper and lower arms. If attaching extra equipment to the arms, use shaped clamping blocks. Plastic cable ties can be used but risk of damaging surfaces. Do not use metal directly on the lower arms. Maximum extra load: 0.35 kg to either M1 or M2.

Equipment attached to M1 and/or M2 should be calculated as a point load located in the same position as TCP 0. This point load needs to be added to the calculation of the users normal tool load and declared in used tool data.

Air swivel

The integrated air swivel in the movable head of the IRB 365, is suitable for low and medium pressure vacuum applications with a pressure differential below 0.8 bar. Higher pressures can adversely affect the functionality. The intended use is intermittent vacuum operation. A minor loss of vacuum is to be expected in this solution.



xx2200002090

2 Technical data for IRB 365

2.3.5 Installing a brake release unit

2.3.5 Installing a brake release unit

Brake release unit

The robot cable harness has a brake release unit connected to the SMB battery compartment. The brake release unit is connected on delivery and needs to be mounted somewhere near the robot.



CAUTION

Risk of unintended contact with the push button. Place the brake release box in a way that eliminates the risk of unintended contact with the push button.

Technical specification

Function	Data
Signal	24V DC
Current	13 A continuously
Protection class	IP57

2.4 Calibration and references

2.4.1 Calibration methods

Overview

This section specifies the different types of calibration and the calibration methods that are supplied by ABB.

More information is available in the product manual.

Types of calibration

Type of calibration	Description	Calibration method
Standard calibration	The calibrated robot is positioned at calibration position. Standard calibration data is found on the SMB (serial measurement board) or EIB in the robot.	Manual calibration

Brief description of calibration methods

Manual calibration method

With the manual calibration method, the robot's axes are positioned in specific calibration positions using calibration tools. Under this condition, the position of the axis to be calibrated is pre-determined. The axes must be calibrated one at a time.

2 Technical data for IRB 365

2.4.2 Calibration movement directions for all axes

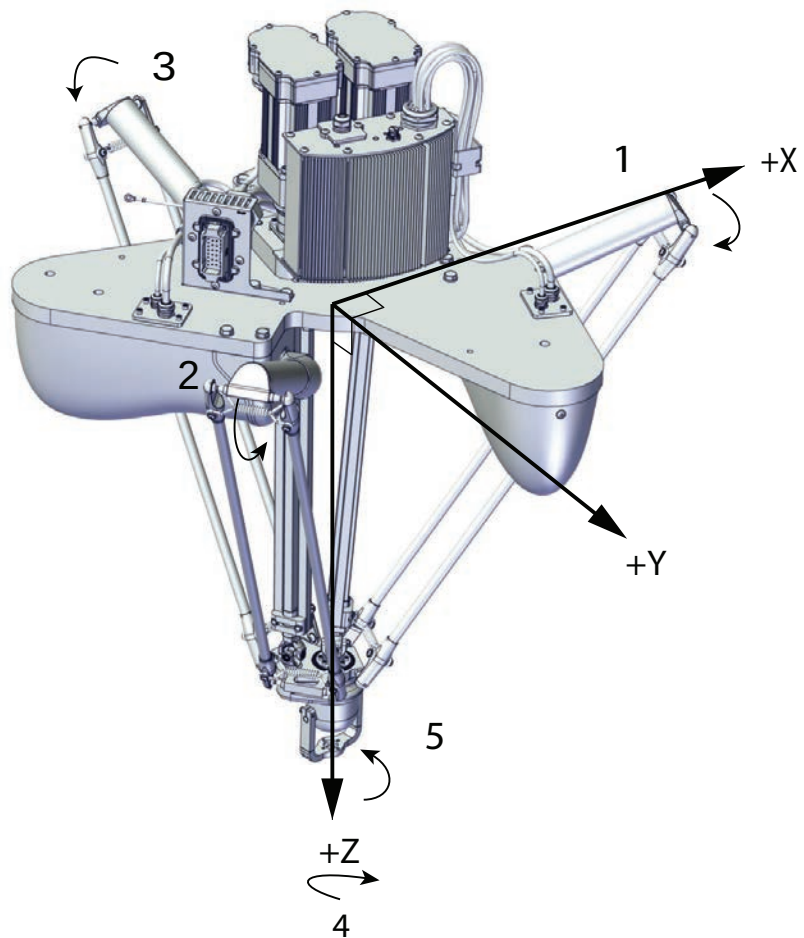
2.4.2 Calibration movement directions for all axes

Overview

When calibrating, the axis must consistently be run towards the calibration position in the same direction in order to avoid position errors caused by backlash in gears and so on. Positive directions are shown in the graphic below.

Calibration service routines will handle the calibration movements automatically and these might be different from the positive directions shown below.

Manual movement directions



xx2200000237

2.5 Load diagrams

2.5.1 Introduction

**WARNING**

It is very important to always define correct actual load data and correct payload of the robot. Incorrect definitions of load data can result in overloading of the robot.

If incorrect load data is used, and/or if loads outside the load diagram are used, the following parts can be damaged due to overload:

- motors
- gearboxes
- mechanical structure

**WARNING**

Robots running with incorrect load data and/or with loads outside the load diagram, will not be covered by robot warranty.

General

The load diagrams include a nominal payload inertia. The J_0 for the all IRB 365 variants are 0.08 kgm^2 . High inertia payloads affect performance.

The IRB 365 can only be used mounted horizontally in a robot frame, other orientations are not allowed.

2.5.2 Load diagrams



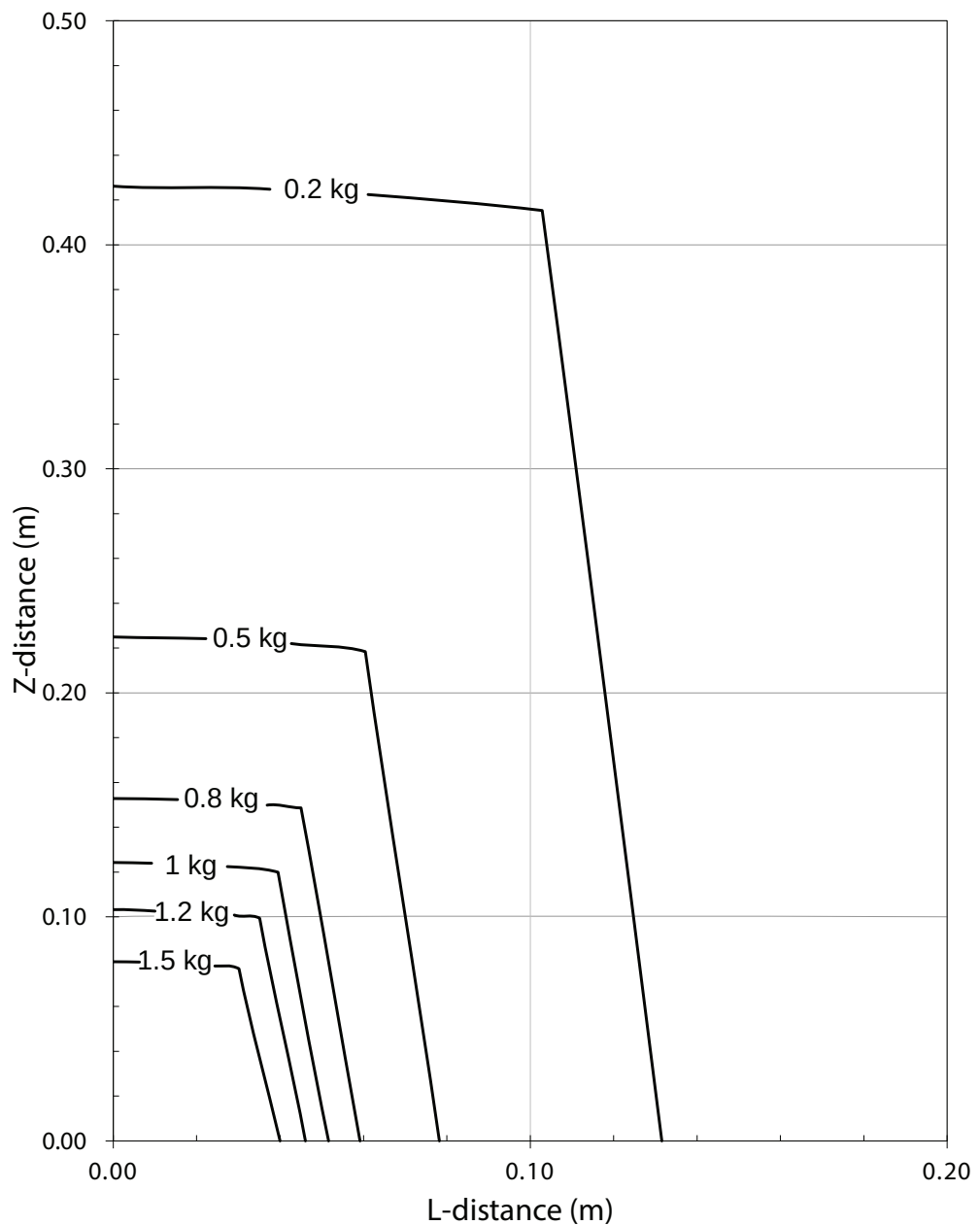
Note

The weight permitted for loads includes grippers etc.

The data types `loaddata` and `tooldata` with moment of inertia must be used.

IRB 365-1.5/800, IRB 365 1.5/1100 and IRB 365-1.5/1300

The load diagram is valid for all variants of IRB 365.



xx2200000478

2.5.3 Maximum TCP acceleration

Maximum Cartesian design acceleration for nominal loads

Robot type	E-stop Max acceleration at nominal load COG [m/s ²]	Controlled Motion Max acceleration at nominal load COG [m/s ²]
IRB 365-1.5/800	202	97
IRB 365 1.5/1100	205	100
IRB 365-1.5/1300	192	86



Note

Acceleration levels for E-stop and controlled motion includes acceleration due to gravitational forces. Nominal load is define with nominal mass and cog with max offset in Z and L (see load diagram).

2 Technical data for IRB 365

2.6 Typical cycle times

2.6 Typical cycle times

General

Both cycles incorporate an air activation time of 35 ms for picking and 35 ms for placing. Air activation takes place during the cycle time.

Description of typical cycles

- Cycle 1 is a 25 - 305 - 25 movement, with 90 degrees rotation of axis 4.
- Cycle 2 is a 90 - 400 - 90 movement, with 90 degrees rotation of axis 4.

Approximate cycle times

	IRB 365-1.5/800		
Payload	0.5 kg	1.0 kg	1.5 kg
Cycle 1	0.42 s	0.45 s	0.48 s
Cycle 2	0.61 s	0.66 s	0.71 s

	IRB 365 1.5/1100		
Payload	0.5 kg	1.0 kg	1.5 kg
Cycle 1	0.42 s	0.45 s	0.48 s
Cycle 2	0.61 s	0.65 s	0.70 s

	IRB 365-1.5/1300		
Payload	0.5 kg	1.0 kg	1.5 kg
Cycle 1	0.45 s	0.48 s	0.51 s
Cycle 2	0.68 s	0.72 s	0.76 s

2.7 Robot stopping distances and times

About the data for robot stopping distances and times

For delta robots the values are based on movement by all axes, as these axes always move together.

Stopping distance

The robot stops within the zone and the maximum distance is 2*550 mm.

Stopping time

The stopping time is maximum 200 s ms.

This page is intentionally left blank

3 Specification of variants and options

3.1 Introduction to variants and options

General

The different variants and options for the IRB 365 are described in the following sections. The same option numbers are used here as in the specification form.

The variants and options related to the robot controller are described in the product specification for the controller.

3 Specification of variants and options

3.2 Manipulator

3.2 Manipulator

Variants

Option	Description
3300-27	IRB 365-1.5/1100
3300-97	IRB 365-1.5/1300
3300-98	IRB 365-1.5/800

Protection class

Option	Description
3350-540	Base 54,IP54



Note

Base 54 includes IP54, according to standard IEC 60529.

3.3 Floor cables



Note

To comply with the EMC directive, the total cable length (including cables for the motor connection box) must not exceed 30 m between:

Controller and robot (IRB)

Controller and motor & gear units (MU/GU) or track motion (IRT)

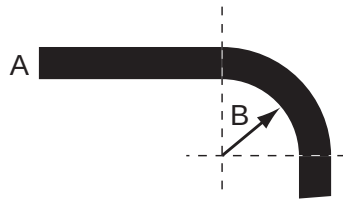
Controller and positioner (IRP)

Manipulator cable - length

Option	Description
3200-1	3 m
3200-2	7 m
3200-3	15 m

Bending radius for static floor cables

The minimum bending radius is 10 times the cable diameter for static floor cables.



xx1600002016

A	Diameter
B	Diameter x10

3 Specification of variants and options

3.4 Warranty

3.4 Warranty

Warranty

For the selected period of time, ABB will provide spare parts and labor to repair or replace the non-conforming portion of the equipment without additional charges. During that period, it is required to have a yearly *Preventative Maintenance* according to ABB manuals to be performed by ABB. If due to customer restrains no data can be analyzed with ABB Connected Services for robots with OmniCore controllers, and ABB has to travel to site, travel expenses are not covered. The *Extended Warranty* period always starts on the day of warranty expiration. Warranty Conditions apply as defined in the *Terms & Conditions*.



Note

This description above is not applicable for option *Stock warranty* [438-8]

Option	Type	Description
438-1	Standard warranty	Standard warranty is 12 months from <i>Customer Delivery Date</i> or latest 18 months after <i>Factory Shipment Date</i> , whichever occurs first. Warranty terms and conditions apply.
438-2	Standard warranty + 12 months	Standard warranty extended with 12 months from end date of the standard warranty. Warranty terms and conditions apply. Contact Customer Service in case of other requirements.
438-4	Standard warranty + 18 months	Standard warranty extended with 18 months from end date of the standard warranty. Warranty terms and conditions apply. Contact Customer Service in case of other requirements.
438-5	Standard warranty + 24 months	Standard warranty extended with 24 months from end date of the standard warranty. Warranty terms and conditions apply. Contact Customer Service in case of other requirements.
438-6	Standard warranty + 6 months	Standard warranty extended with 6 months from end date of the standard warranty. Warranty terms and conditions apply.
438-7	Standard warranty + 30 months	Standard warranty extended with 30 months from end date of the standard warranty. Warranty terms and conditions apply.
438-8	Stock warranty	Maximum 6 months postponed start of standard warranty, starting from factory shipment date. Note that no claims will be accepted for warranties that occurred before the end of stock warranty. Standard warranty commences automatically after 6 months from <i>Factory Shipment Date</i> or from activation date of standard warranty in WebConfig.  Note Special conditions are applicable, see <i>Robotics Warranty Directives</i>.

Index

A

ambient humidity
 operation, 15
 storage, 15
ambient temperature
 operation, 15
 storage, 15

C

calibration
 standard type, 31

D

dimension
 robot, 27
direction of axes, 32

F

foundation
 requirements, 15

H

humidity
 operation, 15
 storage, 15

L

loads on foundation, 14

M

maintenance, 12

N

negative directions, axes, 32

O

operating conditions, 15

options, 39

P

positive directions, axes, 32
product standards, 11
protection classes, 16
protection type, 16

R

requirements on foundation, 15
requirements on the frame, 22
robot
 dimension, 27
 protection class, 16
 protection types, 16
 working range, 18

S

safety standards, 11
securing the robot to foundation, attachment screws, 26
standards, 11
standard warranty, 42
stock warranty, 42
storage conditions, 15

T

temperatures
 operation, 15
 storage, 15
torques on foundation, 14
troubleshooting, 12

V

variants, 39

W

warranty, 42
weight, 13
working range
 robot, 18



ABB Robotics Sweden AB
S-721 71 VÄSTERÅS, Sweden
Telephone +46 10-732 50 00

ABB Robotics Norway AS
Nordlysvegen 7, N-4340 BRYNE, Norway
Box 265, N-4349 BRYNE, Norway
Telephone: +47 22 87 2000

ABB Robotics (Shanghai) Limited
No. 39, 99 Miaoqiao Road,
Pudong New Area,
Shanghai, 201315, China
Telephone: +86 21 6105 6666

ABB Robotics LLC
1250 Brown Road
Auburn Hills, MI 48326
USA
Telephone: +1 248 391 9000

abb.com/robotics