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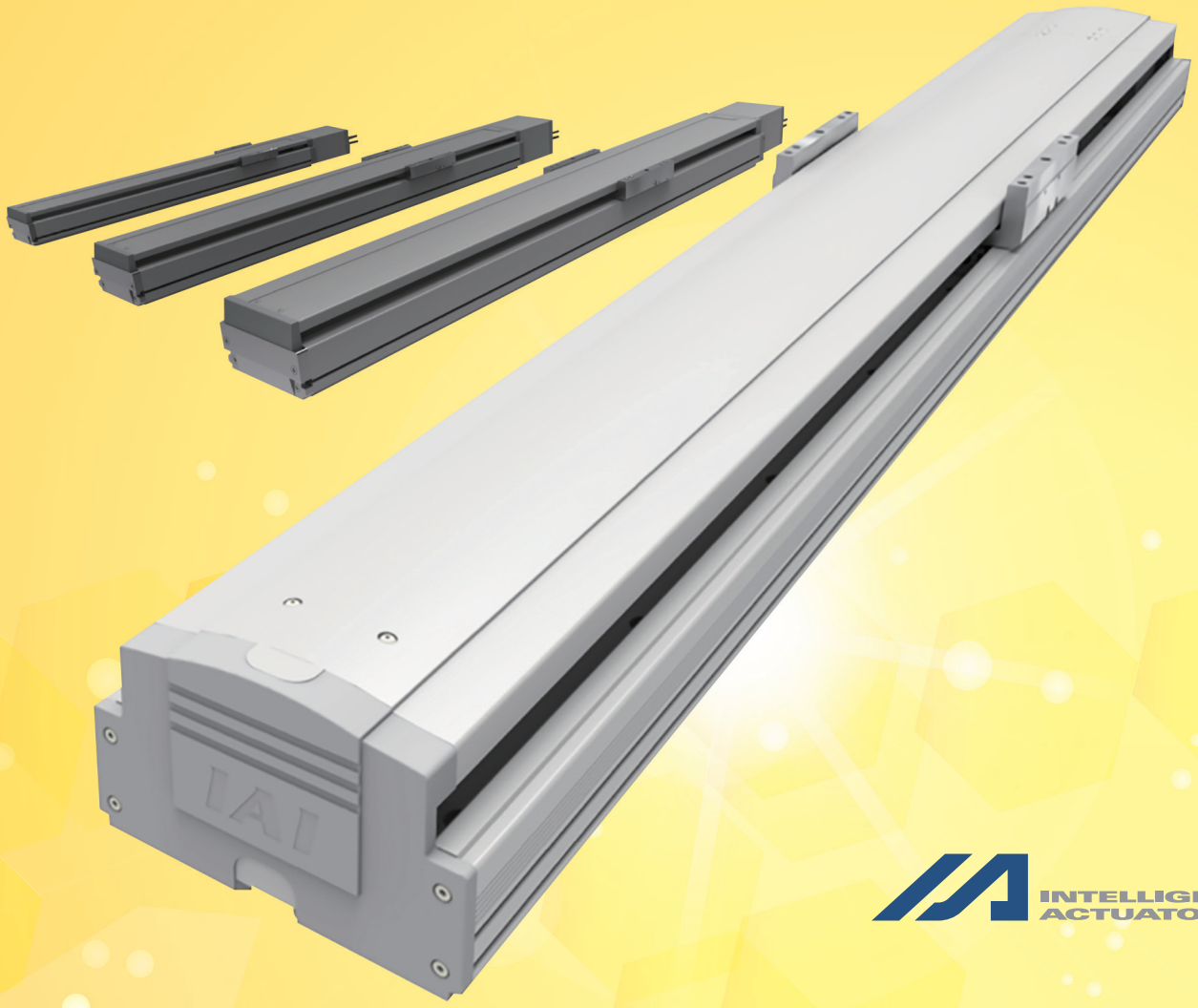
GB

High Payload Single-axis Robot
Extra Large Standard Slider Type

# ISB/ISPB WXM-750

High Payload Single-axis Robot
Extra Large Intermediate Support Type

# ISB/ISPB WXMX-750

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# Wider applications for the ISB Series

## Extra large types with a
## 400kg horizontal payload are available now!

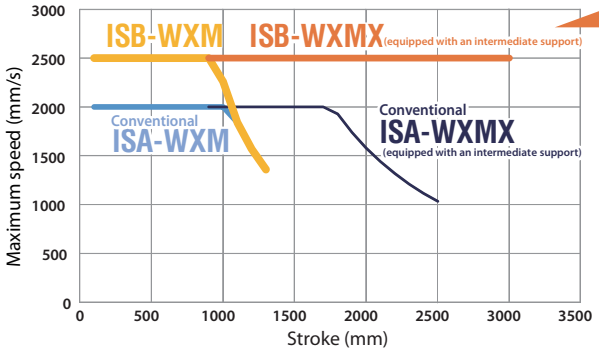
### Feature 1 Long stroke and Ultra high-speed

Maximum stroke 3000 mm*1
Maximum speed 2500 mm/s
Maximum acceleration/deceleration 1.2G

Patent pending

Equipped with a
newly designed intermediate support.
No speed slowdown due to long stroke!

**Stroke and Maximum Speed**




*1 **In the case of ISB-WXMX type (equipped with intermediate support).**
**Intermediate support:**
Suppresses deflection of the ball screw, making high-speed operations possible.
Only horizontal mounting is possible for the intermediate support type.

### Feature 2 High payload setting

Maximum payload capacity
Horizontal 400kg *2 Vertical 70kg *2

*2 In the case of ISPB-WXM Lead 10 and the high payload setting (HLA) are selected.

### Feature 3 Equipped standard with battery-less absolute encoder

Home-return is not needed, shortening the start-up time for long-stroke operations.

### Feature 4 Improved maintainability

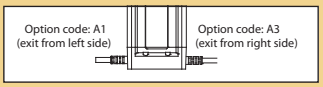
Grease lubrication can be made from both sides of the slider without removing the main cover and other objects attached on the slider.

# Options

## Cable exit direction

**Option code** A1/A3

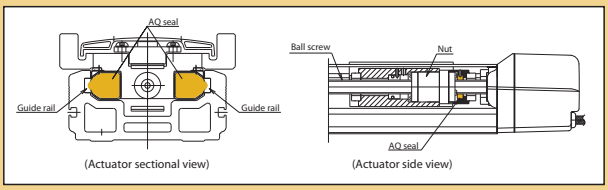
**Description** The extraction direction of the actuator cable can be selected from left side and right side.




## AQ seal

**Option code** AQ

**Description** AQ seal is a lubricant unit that uses a lubricating member made of lubricating oil solidified with resin.
Because it is a porous member that contains a large amount of lubricating oil, the oil seeps out on the surface through capillary action. Lubricating oil is supplied by pressing the AQ seal on the surface of the guide and ball screw (steel ball rolling surface), enabling long-term use without maintenance in a synergistic effect by the combined use of the grease.




## Brake

**Option code** B

**Description** This is a holding mechanism that prevents the slider from falling and damaging any attached fittings when the power or servo is turned off.

## Round cable joint connector with screw locking

**Option code** EU

**Description** Option for a motor/encoder cable with round cable plugs with screw locking. Without this option flat plugs are default.

## Setting of high payload setting

**Option code** HLA

**Description** This option increases payload capacity. In the case of the rated acceleration/deceleration (0.2G), the maximum payload is 400kg for horizontal operations and 70kg for vertical operations.
(Note) Setting is available only for ISPB-WXM Lead 10.
For stable operations, use the actuator with a payload of 100kg or more for horizontal operations, and 40kg or more for vertical operations.

## Home limit switch

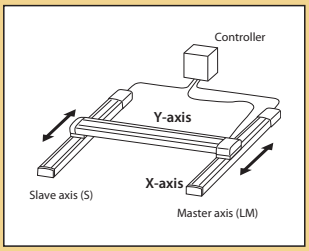
**Option code** L (Standard) LL (Mounted on opposite side)

**Description** When performing home-return, the pressing method determines the home position upon pressing against the mechanical end and reversing. This is an option for triggering the reversion using the sensor.
When L option is specified, 3 proximity sensors including HOME (for home detection), +OT (overtravel on opposite motor side) and -OT (overtravel on the motor side) will be installed. (HOME and -OT are integrated twin sensors)
Use it to fine-tune the inverted position or enhance the certitude.
(Please note that moving the home sensor excessively may shorten the stroke)
The home limit switch and mounting position of the cover is by default at the right side of the actuator body as viewed from the motor side (Option code: L).
When installing a sensor on the opposite side, be sure to select LL (mounting position on opposite side).

## Master axis specification/Slave axis specification in synchronous operation

**Option code** LM (Limit master axis specification) LLM (Mounted on opposite side) S (Slave axis specified)

**Description** One of the features of the XSEL controller is "synchronous operation".
This feature is used to operate the two axes of actuators at the same time. With one axis used as the master (M) and another as the slave (S), the slave follows the master in ultra-high-speed control in order to operate at the same time.
Two axes of actuators that run synchronously need to have the same specifications (type, lead, motor wattage and stroke).
When performing synchronous operation, the master axis needs to have the limit switch specification. Be sure to specify LM (limit specification master axis) for the option code of master axis and S for slave axis. The mounting position of the limit switch and cover is standardly at the right side of the actuator body as viewed from the motor side. When installing the limit switch of the master axis on the opposite side (symmetrically opposite), be sure to select LLM.




## Non-motor end specification

**Option code** NM

**Description** The normal home position is set to the motor side, but this is the option to set the home position on the other side in order to accommodate variations in equipment layout, etc. (Please note that changing the home position after the actuators are shipped may require the products to be sent back to IAI for re-setting.)

# ISB-WXM-750
# ISPB-WXM-750

±10μm Standard | ±5μm high-precision | Battery-less Absolute | Body Width 200 mm | 750 W

■ Model Specification Items

| ISB / ISPB — Series | WXM — Type | WA — Encoder Type | 750 — Motor Type | □ — Lead | □ — Stroke | □ — Applicable Controllers | □ — Cable Length | □ — Options |
|---|---|---|---|---|---|---|---|---|
| | | WA: Battery-less absolute | 750 : 750W | 50 : 50mm<br>25 : 25mm<br>10 : 10mm | 100 : 100mm<br>↕<br>1300 : 1300mm<br>(50mm increments) | T2 : SCON<br>SSEL<br>XSEL-P/Q<br>XSEL-RA/SA<br>T4 : RCON<br>RSEL | N : None<br>S : 3m<br>M : 5m<br>X□□ : Specified Length | Please refer to the option table below |

CE RoHS

Horizontal | Vertical | Side | Ceiling

POINT Selection Notes

(Note 1) The payload specified in the "Main Specifications" shows the maximum value. Refer to the "Payload Table by Speed and Acceleration/Deceleration" for details.

(Note 2) The guideline of usable duty varies depending on operating conditions (e.g. payload and acceleration/deceleration).

(Note 3) Attention depending on the mounting orientation.

(Note 4) Guideline for overhang length is 900mm in the Ma, Mb and Mc directions.

## Stroke and maximum speed

| Lead \ Stroke | 100~800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | 2500 | | | 2260 | | 1840 | | 1570 | | 1360 | |
| 25 | 1250 | | | 1130 | | 920 | | 785 | | 680 | |
| 10 | 600 | 460 | | 380 | | 320 | | 270 | | 235 | |

(Unit: mm/s)

## Cable length

| Type | Cable code |
|---|---|
| Standard type | S (3m) |
| | M (5m) |
| Specified length | X06 (6m) ~ X10 (10m) |
| | X11 (11m) ~ X15 (15m) |
| | X16 (11m) ~ X20 (20m) |

(*) Only the robot cable is available for this model.

## Options

| Type | Model | Ref. Page |
|---|---|---|
| Cable exits from the left side | A1 | P2 |
| Cable exits from the right side | A3 | P2 |
| AQ seal (Standard equipment) (*1) | AQ | P2 |
| Brake | B | P2 |
| Round cable joint connector with screw locking | EU | P2 |
| High payload setting (*2) | HLA | P2 |
| Home limit switch | L | P2 |
| Master axis specified | LM | P2 |
| Non-motor end spec. | NM | P2 |
| Slave axis specified | S | P2 |

(*1) Make sure to specify in the option column of the model specification item.
(*2) Only the ISPB Lead 10 can be selected.

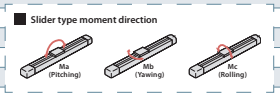
## Main specifications

| Item | | | Details | | | |
|---|---|---|---|---|---|---|
| Lead | | Ball screw lead (mm) | 50 | 25 | 10 | 10 (high payload setting) |
| Horizontal | Payload | Maximum payload (kg) | 80 | 160 | 200 | 100 - 400 (*1) |
| | Speed/ acceleration/ deceleration | Maximum speed (mm/s) | 2500 | 1250 | 600 | 600 |
| | | Rated acceleration/ deceleration (G) | 0.3 | 0.3 | 0.3 | 0.2 |
| | | Maximum acceleration/ deceleration (G) | 1.2 | 1.2 | 0.6 | 0.6 |
| Vertical | Payload | Maximum payload (kg) | 14 | 29 | 65 | 40 - 70 (*1) |
| | Speed/ acceleration/ deceleration | Maximum speed (mm/s) | 2500 | 1250 | 600 | 600 |
| | | Rated acceleration/ deceleration (G) | 0.3 | 0.3 | 0.3 | 0.2 |
| | | Maximum acceleration/ deceleration (G) | 1 | 1 | 0.5 | 0.5 |
| Thrust | | Rated thrust (N) | 255 | 510 | 1021 | 1021 |
| Brake | | Brake specification | Non-excited operation electromagnetic brake | | | |
| | | Brake retaining force (kgf) | 14 | 29 | 70 | 70 |
| Stroke | | Minimum stroke (mm) | 100 | 100 | 100 | 100 |
| | | Maximum stroke (mm) | 1300 | 1300 | 1300 | 1300 |
| | | Stroke pitch (mm) | 50 | 50 | 50 | 50 |

(*1) The figure is for the high payload setting option (HLA).
For stable operations, use the actuator with a payload of 100kg or more for horizontal operations, and 40kg or more for vertical operations.

| Item | Details |
|---|---|
| Drive method | Ball screw Lead 10: ø20mm,<br>Lead 25 and 50: ø25mm Rolled C10 [C5 or equivalent] |
| Positioning repeatability | ±0.01mm [±0.005mm] |
| Lost motion | 0.05mm or less [0.02mm or less] |
| Base | Material: Aluminum white alumite treatment |
| Linear guide | Linear motion endlessly circulating type |
| Static allowable moment | Ma : 774 N·m<br>Mb : 1106 N·m<br>Mc : 2175 N·m |
| Dynamic allowable moment (*2) | Ma : 162 N·m<br>Mb : 231 N·m<br>Mc : 455 N·m |
| Ambient operating air temperature, humidity | 0 to 40°C, 85%RH max. (no condensation) |
| Protection class | — |
| Vibration resistance/shock resistance | 4.9m/s² |
| Product conformity | CE Marking, RoHS Directive |
| Motor type | AC servo motor (230 V) |
| Encoder type | Battery-less absolute (17-bit) |
| Encoder pulse count | 131072 pulse/rev |

■ Slider type moment direction




(Note) Figures in [ ] are for ISPB.
(*2) Based on the assumption of a standard rated life of 10000 km. The traveling life varies depending on the operating conditions and installation conditions

## Table of payload by speed/acceleration

Payload shown in units of kg. Operations are not possible in the blank positions.

| Orientation | | Horizontal | | | | | | | | | | | Vertical | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead (mm) | max.Speed (mm/s) | Acceleration (G) | | | | | | | | | | | | | | | | | | | |
| | | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| 50 | 2500 | 80 | 80 | 60 | 48 | 40 | 34 | 30 | 27 | 23 | 18 | 15 | 14 | 14 | 14 | 14 | 14 | 13 | 12 | 11 | 10 |
| 25 | 1250 | 160 | 160 | 120 | 96 | 80 | 68 | 60 | 54 | 46 | 36 | 30 | 29 | 29 | 29 | 29 | 29 | 26 | 24 | 22 | 20 |
| 10 | 600 | 200 | 200 | 150 | 120 | 100 | | | | | | | 65 | 65 | 60 | 50 | | | | | |
| 10 (High payload setting) | 600 | 400 | 265 | 200 | 160 | 135 | | | | | | | 70 | 70 | 68 | 64 | | | | | |

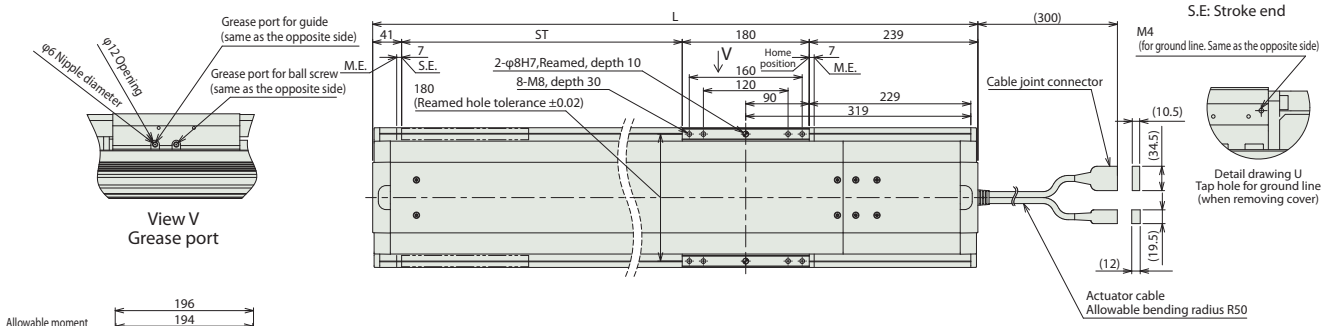
## Dimensions

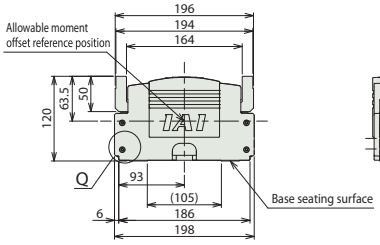
(Note) A motor cable and an encoder cable are connected to the cable joint connector.
(Note) When the slider is returning to its home position, be careful of interference with surrounding objects, as it will travel until it reaches the M.E.
(Note) Changing the home direction will require the actuator to be returned to IAI for adjustment.
(Note) The external dimensions are the same as for the with-brake specification.

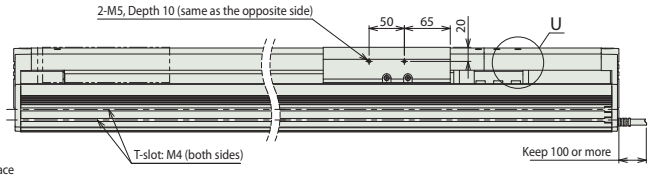
CAD drawings can be downloaded from our website.
www.intelligentactuator.de

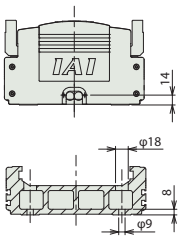
2D CAD 3D CAD

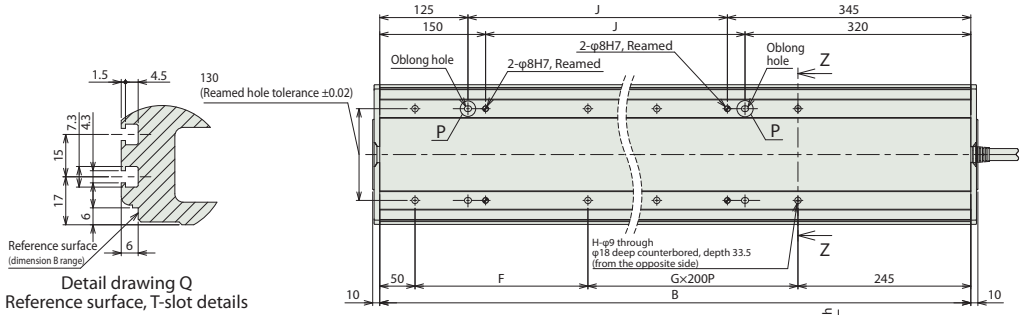
ST: Stroke
M.E: Mechanical end
S.E: Stroke end

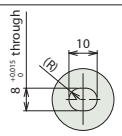


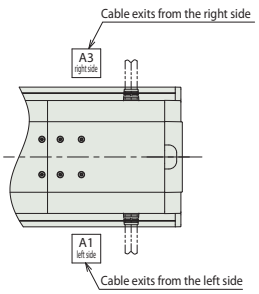




## ■ Dimensions by Stroke

| Stroke | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | 560 | 610 | 660 | 710 | 760 | 810 | 860 | 910 | 960 | 1010 | 1060 | 1110 | 1160 | 1210 | 1260 | 1310 | 1360 | 1410 | 1460 | 1510 | 1560 | 1610 | 1660 | 1710 | 1760 |
| B | 540 | 590 | 640 | 690 | 740 | 790 | 840 | 890 | 940 | 990 | 1040 | 1090 | 1140 | 1190 | 1240 | 1290 | 1340 | 1390 | 1440 | 1490 | 1540 | 1590 | 1640 | 1690 | 1740 |
| F | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 |
| G | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| H | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 | 16 | 16 | 16 |
| J | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | 870 | 920 | 970 | 1020 | 1070 | 1120 | 1170 | 1220 | 1270 |

## ■ Mass by Stroke

| Stroke | | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mass (kg) | w/o brake | 18.3 | 19.3 | 20.4 | 21.5 | 22.5 | 23.6 | 24.6 | 25.7 | 26.8 | 27.8 | 28.9 | 29.9 | 31.0 | 32.0 | 33.1 | 34.2 | 35.2 | 36.3 | 37.3 | 38.4 | 39.5 | 40.5 | 41.6 | 42.6 | 43.7 |
| | w/brake | 18.8 | 19.8 | 20.9 | 22.0 | 23.0 | 24.1 | 25.1 | 26.2 | 27.3 | 28.3 | 29.4 | 30.4 | 31.5 | 32.5 | 33.6 | 34.7 | 35.7 | 36.8 | 37.8 | 38.9 | 40.0 | 41.0 | 42.1 | 43.1 | 44.2 |

## Applicable Controllers

The ISB series actuators can be operated by the controllers indicated below. Please select the type depending on your intended use.

| Type | External view | Max. number of controlled axes | Power supply voltage | Control method | | | | Maximum number of positioning points | Ref. page |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Positioner | Pulse-train | Program | Network *Option | | |
| RCON |  | 16 | DC24V<br>Single-phase 230VAC<br>Three-phase 230VAC | ● | – | – | DeviceNet<br>CC-Link<br>PROFIBUS<br>CompoNet<br>EtherCAT<br>EtherNet/IP<br>PROFINET | 128 points | Please contact IAI for more details |
| RSEL (Coming soon) |  | 8 | | – | – | ● | | 36000 points | |
| SCON-CB/CGB |  | 1 | Single-phase 230VAC | ● | ● | – | | 512 points<br>(768 for network spec.) | |
| SSEL-CS |  | 2 | | ● | – | ● | | 20000 | |
| XSEL-P/Q |  | 6 | Single-phase 230VAC<br>Three-phase 230VAC | – | – | ● | | 20000 | |
| XSEL-RA/SA (Coming soon) |  | 8 | | – | – | ● | | 55000<br>(depending on the type) | |

Note: The type of compatible networks will vary depending on the controller.
Please contact IAI for more details.

# ISB-WXMX-750
# ISPB-WXMX-750

±10μm (Standard) | ±5μm (high-precision) | Battery-less Absolute | Intermediate support | Body Width 200 mm | 750 W

■ Model Specification Items

ISB / ISPB — WXMX — WA — 750 — ☐ — ☐ — ☐ — ☐ — ☐

| Series | Type | Encoder Type | Motor Type | Lead | Stroke | Applicable Controllers | Cable Length | Options |
|---|---|---|---|---|---|---|---|---|
| | | WA: Battery-less absolute | 750 : 750W | 50 : 50mm<br>25 : 25mm | 900 : 900mm<br>↕<br>3000 : 3000mm<br>(50mm increments) | T2 : SCON<br>SSEL<br>XSEL-P/Q<br>XSEL-RA/SA<br>T4 : RCON<br>RSEL | N : None<br>S : 3m<br>M : 5m<br>X☐☐ : Specified Length | Please refer to the option table below |

CE RoHS

Horizontal | Vertical | Side | Ceiling

POINT Selection Notes

(Note 1) The payload specified in the "Main Specifications" shows the maximum value. Refer to the "Payload Table by Speed and Acceleration/Deceleration" for details.

(Note 2) The guideline of usable duty varies depending on operating conditions (e.g. payload and acceleration/deceleration).

(Note 3) Attention depending on the mounting orientation.

(Note 4) Guideline for overhang length is 900mm in the Ma, Mb and Mc directions.

## Stroke and maximum speed

| Lead \ Stroke | 900~3000 |
|---|---|
| 50 | 2500 |
| 25 | 1250 |

(Unit: mm/s)

## Cable length

| Type | Cable code |
|---|---|
| Standard type | S (3m) |
| | M (5m) |
| Specified length | X06 (6m) ~ X10 (10m) |
| | X11 (11m) ~ X15 (15m) |
| | X16 (11m) ~ X20 (20m) |

(*) Only the robot cable is available for this model.

## Options

| Type | Model | Ref. Page |
|---|---|---|
| Cable exits from the left side | A1 | P2 |
| Cable exits from the right side | A3 | P2 |
| AQ seal (Standard equipment) (*1) | AQ | P2 |
| Round cable joint connector with screw locking | EU | P2 |
| Home limit switch | L | P2 |
| Master axis specified | LM | P2 |
| Non-motor end spec. | NM | P2 |
| Slave axis specified | S | P2 |

(*1) Make sure to specify in the option column of the model specification item.

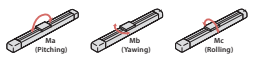
## Main specifications

| Item | | | Details | |
|---|---|---|---|---|
| Lead | | Ball screw lead (mm) | 50 | 25 |
| Horizontal | Payload | Maximum payload (kg) | 80 | 160 |
| | Speed/ acceleration/ deceleration | Maximum speed (mm/s) | 2500 | 1250 |
| | | Rated acceleration/ deceleration (G) | 0.3 | 0.3 |
| | | Maximum acceleration/ deceleration (G) | 1.2 | 1.2 |
| Vertical | Payload | Maximum payload (kg) | — | — |
| | Speed/ acceleration/ deceleration | Maximum speed (mm/s) | — | — |
| | | Rated acceleration/ deceleration (G) | — | — |
| | | Maximum acceleration/ deceleration (G) | — | — |
| Thrust | | Rated thrust (N) | 255 | 510 |
| Stroke | | Minimum stroke (mm) | 900 | 900 |
| | | Maximum stroke (mm) | 3000 | 3000 |
| | | Stroke pitch (mm) | 50 | 50 |

(*1) Based on the assumption of a standard rated life of 10000 km. The traveling life varies depending on the operating conditions and installation conditions

| Item | Details |
|---|---|
| Drive method | Lead 25 and 50: ø25mm Rolled C10 [C5 or equivalent] |
| Positioning repeatability | ±0.01mm [±0.005mm] |
| Lost motion | 0.05mm or less [0.02mm or less] |
| Base | Material: Aluminum white alumite treatment |
| Linear guide | Linear motion endlessly circulating type |
| Static allowable moment | Ma : 774 N·m<br>Mb : 1106 N·m<br>Mc : 2175 N·m |
| Dynamic allowable moment (*1) | Ma : 162 N·m<br>Mb : 231 N·m<br>Mc : 455 N·m |
| Ambient operating air temperature, humidity | 0 to 40°C, 85%RH max. (no condensation) |
| Protection class | — |
| Vibration resistance/shock resistance | 4.9m/s² |
| Product conformity | CE Marking, RoHS Directive |
| Motor type | AC servo motor (230 V) |
| Encoder type | Battery-less absolute (17-bit) |
| Encoder pulse count | 131072 pulse/rev |

■ Slider type moment direction




(Note) Figures in [ ] are for ISPB.

## Table of payload by speed/acceleration

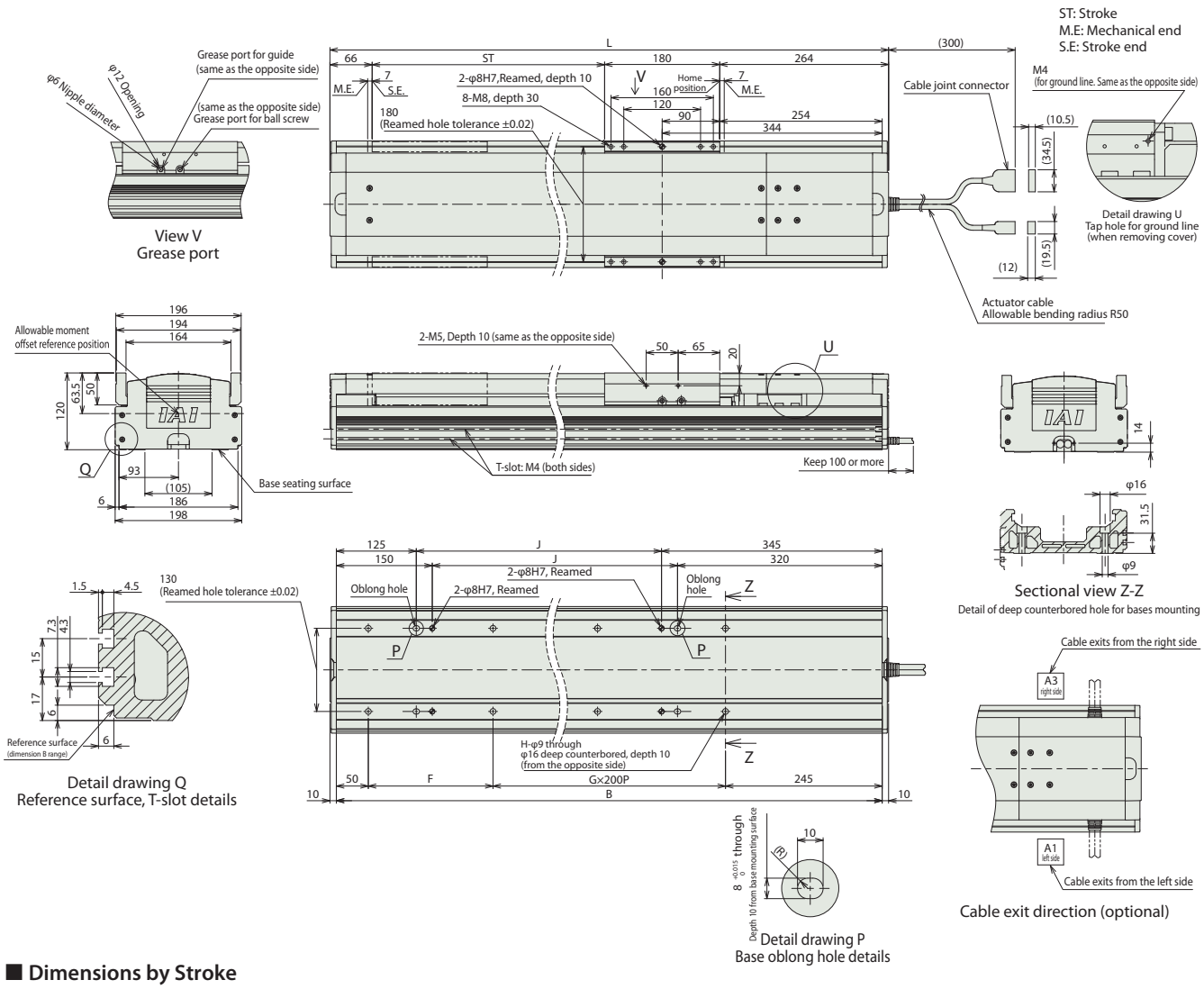
Payload shown in units of kg. Operations are not possible in the blank positions.

| Orientation | | Horizontal | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead (mm) | max.Speed (mm/s) | Acceleration (G) | | | | | | | | | | |
| | | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 |
| 50 | 2500 | 80 | 80 | 60 | 48 | 40 | 34 | 30 | 27 | 23 | 18 | 15 |
| 25 | 1250 | 160 | 160 | 120 | 96 | 80 | 68 | 60 | 54 | 46 | 36 | 30 |

## Dimensions

(Note) A motor cable and an encoder cable are connected to the cable joint connector.
(Note) When the slider is returning to its home position, be careful of interference with surrounding objects, as it will travel until it reaches the M.E.
(Note) Changing the home direction will require the actuator to be returned to IAI for adjustment.

CAD drawings can be downloaded from our website.
www.intelligentactuator.de




## ■ Dimensions by Stroke

| Stroke | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | 1450 | 1500 | 1550 | 1600 | 1650 | 1700 | 1750 | 1800 | 1850 | 1900 | 1950 | 2000 | 2050 | 2100 | 2150 | 2200 | 2250 | 2300 | 2350 | 2400 | 2450 | 2500 | 2550 | 2600 | 2650 | 2700 | 2750 | 2800 | 2850 | 2900 | 2950 | 3000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | 1410 | 1460 | 1510 | 1560 | 1610 | 1660 | 1710 | 1760 | 1810 | 1860 | 1910 | 1960 | 2010 | 2060 | 2110 | 2160 | 2210 | 2260 | 2310 | 2360 | 2410 | 2460 | 2510 | 2560 | 2610 | 2660 | 2710 | 2760 | 2810 | 2860 | 2910 | 2960 | 3010 | 3060 | 3110 | 3160 | 3210 | 3260 | 3310 | 3360 | 3410 | 3460 | 3510 |
| B | 1390 | 1440 | 1490 | 1540 | 1590 | 1640 | 1690 | 1740 | 1790 | 1840 | 1890 | 1940 | 1990 | 2040 | 2090 | 2140 | 2190 | 2240 | 2290 | 2340 | 2390 | 2440 | 2490 | 2540 | 2590 | 2640 | 2690 | 2740 | 2790 | 2840 | 2890 | 2940 | 2990 | 3040 | 3090 | 3140 | 3190 | 3240 | 3290 | 3340 | 3390 | 3440 | 3490 |
| F | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 | 245 | 295 | 145 | 195 |
| G | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 |
| H | 12 | 14 | 14 | 14 | 14 | 16 | 16 | 16 | 16 | 18 | 18 | 18 | 18 | 20 | 20 | 20 | 20 | 22 | 22 | 22 | 22 | 24 | 24 | 24 | 24 | 26 | 26 | 26 | 26 | 28 | 28 | 28 | 28 | 30 | 30 | 30 | 30 | 32 | 32 | 32 | 32 | 34 | 34 |
| J | 920 | 970 | 1020 | 1070 | 1120 | 1170 | 1220 | 1270 | 1320 | 1370 | 1420 | 1470 | 1520 | 1570 | 1620 | 1670 | 1720 | 1770 | 1820 | 1870 | 1920 | 1970 | 2020 | 2070 | 2120 | 2170 | 2220 | 2270 | 2320 | 2370 | 2420 | 2470 | 2520 | 2570 | 2620 | 2670 | 2720 | 2770 | 2820 | 2870 | 2920 | 2970 | 3020 |

## ■ Mass by Stroke

| Stroke | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | 1450 | 1500 | 1550 | 1600 | 1650 | 1700 | 1750 | 1800 | 1850 | 1900 | 1950 | 2000 | 2050 | 2100 | 2150 | 2200 | 2250 | 2300 | 2350 | 2400 | 2450 | 2500 | 2550 | 2600 | 2650 | 2700 | 2750 | 2800 | 2850 | 2900 | 2950 | 3000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mass(kg) | 38.4 | 39.5 | 40.5 | 41.6 | 42.7 | 43.7 | 44.8 | 45.8 | 46.9 | 48.0 | 49.0 | 50.1 | 51.2 | 52.2 | 54.2 | 55.3 | 56.4 | 57.4 | 58.5 | 59.6 | 60.6 | 61.7 | 62.7 | 63.8 | 64.9 | 65.9 | 67.0 | 68.1 | 69.1 | 70.2 | 71.3 | 72.3 | 73.4 | 74.5 | 76.5 | 77.5 | 78.6 | 79.7 | 80.7 | 81.8 | 82.8 | 83.9 | 85.0 |

## Applicable Controllers

The ISB series actuators can be operated by the controllers indicated below. Please select the type depending on your intended use.

| Type | External view | Max. number of controlled axes | Power supply voltage | Control method | | | | Maximum number of positioning points | Ref. page |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Positioner | Pulse-train | Program | Network *Option | | |
| RCON |  | 16 | DC24V Single-phase 230VAC Three-phase 230VAC | ● | – | – | DeviceNet, CC-Link, PROFIBUS, CompoNet, EtherCAT, EtherNet/IP, PROFINET | 128 points | Please contact IAI for more details |
| RSEL (Coming soon) |  | 8 | | – | – | ● | | 36000 points | |
| SCON-CB/CGB |  | 1 | Single-phase 230VAC | ● | ● | – | | 512 points (768 for network spec.) | |
| SSEL-CS |  | 2 | | ● | – | ● | | 20000 | |
| XSEL-P/Q |  | 6 | Single-phase 230VAC Three-phase 230VAC | – | – | ● | | 20000 | |
| XSEL-RA/SA (Coming soon) |  | 8 | | – | – | ● | | 55000 (depending on the type) | |

Note: The type of compatible networks will vary depending on the controller.
Please contact IAI for more details.

**ISB/ISPB Series**
**High Payload Type**
**Catalogue No. 1020-E**

The information contained in this catalog is subject to change without notice for the purpose of product inprovement

INTELLIGENT ACTUATOR

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