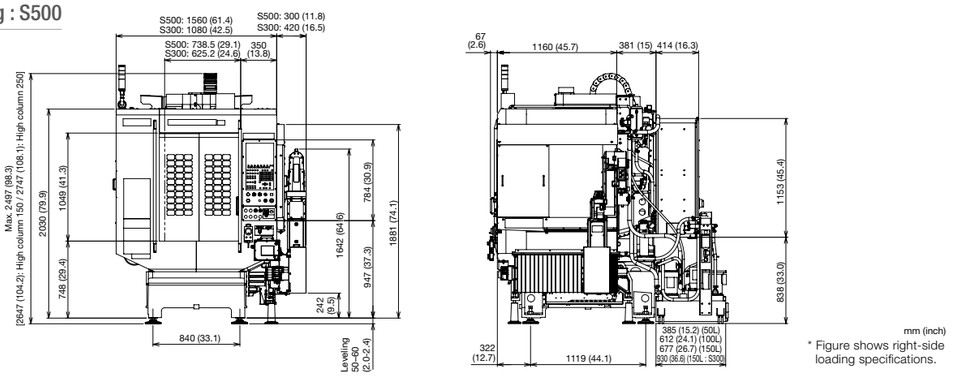
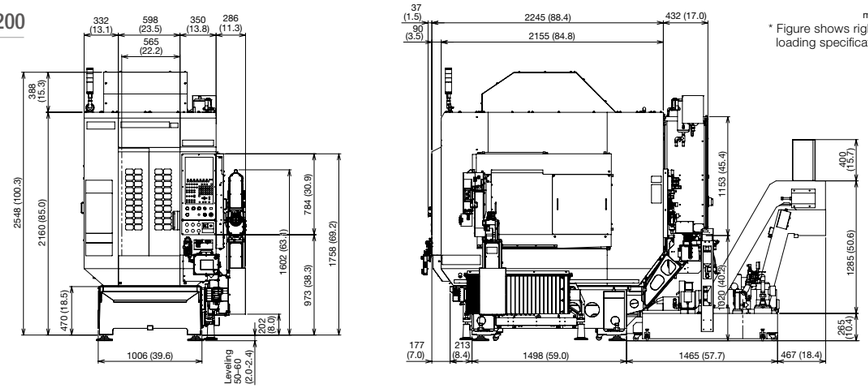
Appearance drawing : S500



mm (inch)
* Figure shows right-side loading specifications.

Appearance drawing : M200



mm (inch)
* Figure shows right-side loading specifications.

Global Service Sites

Local dealers are available to provide services in each region, in addition to the sites below.

U. S. A.

BROTHER INTERNATIONAL CORP.
MACHINE TOOLS DIV. TECHNICAL CENTER
2200 North Stonington Avenue, Suite 270, Hoffman Estates, IL 60169, U.S.A.
PHONE:(1)224-653-8415 FAX:(1)224-653-8821

Germany

BROTHER INTERNATIONALE INDUSTRIEMASCHINEN GmbH
MACHINE TOOLS DIVISION FRANKFURT TECHNICAL CENTER
Hoechster Str.94, 65835 Liederbach, Germany
PHONE:(49)69-977-6708-0 FAX:(49)69-977-6708-80

India

BROTHER INTERNATIONAL (INDIA) PVT LTD.
Machine Tools Bengaluru Technical Center
Park Landing, Ground Floor, Municipal No.5AC-709, 2nd Block, HRBR Extension, Bengaluru - 560 043 Karnataka, India
PHONE:(91)80-43721645

China

BROTHER MACHINERY (SHANGHAI) LTD.
(MACHINE TOOLS DIV.) SHANGHAI TECHNICAL CENTER
Unit 01, 5/F., No.799, West Tianshan Rd., ChangNing District Shanghai 200335, P.R.China
PHONE:(86)21-2225-6666 FAX:(86)21-2225-6688

China

BROTHER MACHINERY (SHANGHAI) LTD.
CHONGQING BRANCH (MACHINE TOOLS DIV.) CHONGQING TECHNICAL CENTER
Room 105, No.51 Xuefudadao, Nan' an District, Chongqing Province, 400074, P.R.China
PHONE:(86)23-6865-5600 FAX:(86)23-6865-5560

Mexico

BROTHER INTERNATIONAL DE MÉXICO, S.A. DE C.V.
División de Maquinaria Industrial Centro Técnico Querétaro
Calle 1 No.310 Int 15, Zona Industrial Jurica, Parque Industrial Jurica, Queretaro, QRO C.P. 76100 México
PHONE:(52)55-8503-8760 FAX:(52)442-483-2667

Thailand

BROTHER COMMERCIAL (THAILAND) LTD.
MACHINE TOOLS TECHNICAL CENTER
317 Pattanakarn Road, Pravet Sub-District, Pravet District, Bangkok 10250, Thailand
PHONE:(66)2321-5910 FAX:(66)2321-5913

India

BROTHER INTERNATIONAL (INDIA) PVT LTD.
Machine Tools Gurugram Technical Center
CE SERVICED OFFICES PVT. LTD., DLF CYBER HUB, Building No 10, Tower A, Level 1, Phase 3, DLF Cyber City, Gurugram - 122002 Haryana - India
PHONE:(91)80-43721645

China

BROTHER MACHINERY (SHANGHAI) LTD.
DONGGUAN BRANCH (MACHINE TOOLS DIV.) DONGGUAN TECHNICAL CENTER
1F, Fuyuan Business Center Building, No.1 Lane 13, Maiyuan Road, Xin'an community, Chang'an Town, Dongguan City, Guangdong Province, 523008, P.R.China
PHONE:(86)769-2238-1505 FAX:(86)769-2238-1506

Figures in brackets ( ) are the country codes.

- Please read the instruction manuals and safety manuals before using Brother products for your own safety.
  When using oil-based coolant oil or when machining the materials which can cause a fire (ex. Magnesium, resin material), customers are requested to take thoroughgoing safety measures against fire.
  Depending on the types of cutting material, cutting tools, coolant oil, lubrication oil, it may have an influence on the machine lifecycle.
  Further questions, please contact our sales representative in charge.
- When exporting this product, be sure to check the end user and their purpose of use from the viewpoint of security trade control.

Specifications may be subject to change without any notice.

BROTHER INDUSTRIES, LTD.
Machinery Business Division
1-5, Kitajizoyama, Noda-cho, Kariya-shi,
Aichi-ken 448-0803, Japan
PHONE: 81-566-95-0075
FAX : 81-566-25-3721
https://www.brother.com

The information in this catalogue is current as of September 2019. ver.1909

SPEEDIO

brother
at your side

Option for SPEEDIO
Loading System
BV7-870

SIMPLE& COMPACT

Option for SPEEDIO Loading System BV7-870

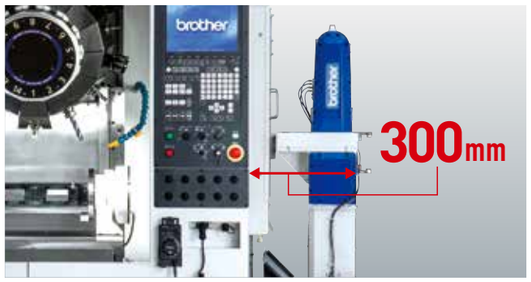
POINT 01 Specialized for loading/ unloading workpieces

POINT 02 Compactly installed on the side of machine

POINT 03 Controller incorporated in machine's control box

Integrated with the SPEEDIO main unit

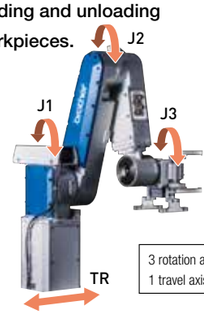
The loading system is integrated with the machine, requiring less installation space.



* S500X2

Easy handling with minimum required functions

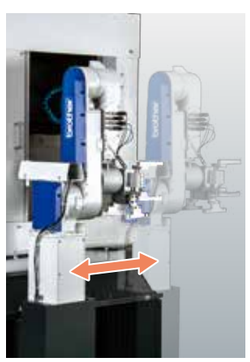
Easy handling 4-axis vertical articulated type, specialized for loading and unloading workpieces.



Controller incorporated in SPEEDIO's control box

Incorporation of the controller saves space and reduces wiring connection workload.

- ▶ Wiring connection with NC not necessary
- ▶ Signals between NC and BV7 internally connected
- ▶ Standard side door

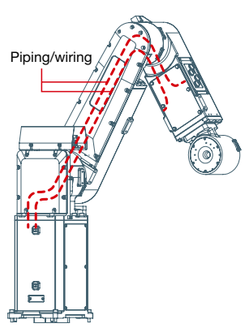


The side door is automatically opened or closed by the travel axis of the loading system.

Simple piping and wiring

Simple design with both piping and wiring stored in the body. Valves for the hand are standard mounted.

*** The hand is not included with the BV7-870. Users must prepare a hand.**



Options

- **Teaching pendant**

You can perform teaching, check operations, correct positions, etc.

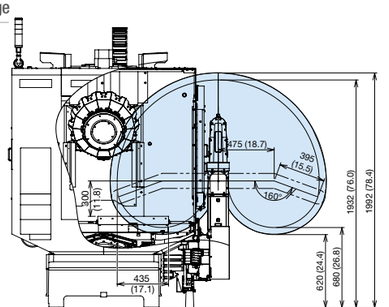
- **PC software**

You can create operation programs and check operations.

- Loading system override switch
- Loading system EXIO board
- Chip shower for side door
- Automatic grease lubricator piping for loading system (Only when the machine is equipped with optional automatic grease lubricator)

Operation range

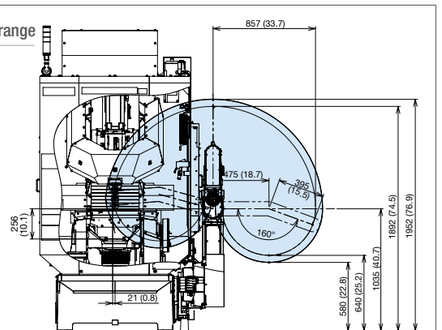
S500



* Figure shows S500X2 with right-side loading specifications.

Operation range

M200



* Figure shows M200X3 with right-side loading specifications.

Specifications of loading system main unit

S500

Model		BV7-870
Type		Vertical articulated
No. of axes		4
Loading position		Right side / Left side
Arm length	Total	870mm (34inch)
	J1	475mm (18.7inch)
	J2	395mm (15.5inch)
Operation range	J1	±90°
	J2	±160°
	J3	±180°
	TR (side door)	600mm (480mm) [23.6 (18.8) inch]
Rated transferable weight		7kg (15.4lbs)
Maximum speed	J1	75°/sec
	J2	170°/sec
	J3	300°/sec
	TR (side door)	730mm/sec (*Opened/closed by BV7)
Repetitive positioning accuracy		±0.08mm (±0.003inch)
weight		330kg (728lbs) (mounted on S300X2) 340kg (750lbs) (mounted on S500X2)
Supported models		S300X2 / S500X2

M200

Model		BV7-870
Type		Vertical articulated
No. of axes		4
Loading position		Right side / Left side
Arm length	Total	870mm (34inch)
	J1	475mm (18.7inch)
	J2	395mm (15.5inch)
Operation range	J1	±90° (75° on machine side)
	J2	±160°
	J3	±180°
	TR (side door)	600mm (550mm) [23.6 (21.7) inch]
Rated transferable weight		7kg (15.4lbs)
Maximum speed	J1	75°/sec
	J2	170°/sec
	J3	300°/sec
	TR (side door)	730mm/sec (*Opened/closed by BV7)
Repetitive positioning accuracy		±0.08mm (±0.003inch)
weight		300kg (661lbs) (mounted on M200X3)
Supported models		M200X3

* The measurement method conforms to ISO9283 (1998) and Brother's standard. Please contact your local distributor for details.

Specifications of control unit

Control axes		4 axes (3 rotation axes + 1 travel axis)
Control method		PTP / Linear interpolation
Program language		Brother BASIC
No. of program that can be registered		8
User interface		Teaching pendant / PC software
Input/output	Special input	Hand open/close sensor, start/stop, reset
	Special output	Hand open/close, start/stop/alarm LEDs
	General-purpose input/output	16 points / 16 points (Optionally 32 points / 32 points)
Linkage with SPEEDIO	Input	Program end, M function signal output, etc.
	Output	External zero point return, M function completion, etc.
	Built-in PLC	Global OM exclusively for loading system
Power supply		Supplied from machine