



We make
things MOVE

IntelliPress™ Bench Top Press



We Make Things Move®

A forward-thinking innovator, Bimba provides industry-leading pneumatic, hydraulic and electric motion solutions that are easy-to-use, reliable and ready for your engineering challenges.

Doing whatever it takes to help you get the job done is what the Bimba companies do best. With an extensive line of industry-leading air cylinders, rotary actuators, linear thrusters, rodless cylinders, NFPA, hydraulics, flow controls, position-sensing cylinders, valves, switches and air preparation equipment, the people of Bimba are ready to tackle your toughest applications.

Bimba is part of IMI Precision Engineering, a world leader in motion and fluid control technologies. Wherever precision, speed and engineering reliability are essential, we deliver exceptional solutions which improve the productivity and efficiency of customers' equipment.

Our range of high-performance products, such as actuators, valves, valve islands, pressure monitoring controls and air preparation products together with trusted products brands including IMI Norgren, IMI Buschjost, IMI FAS, IMI Herion and IMI Maxseal underpin our position as a leading global supplier.

Part of IMI plc, we have a sales and service network in 75 countries, as well as manufacturing capability in the USA, Germany, China, UK, Switzerland.

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IntelliPress™ Electric Bench Top Press

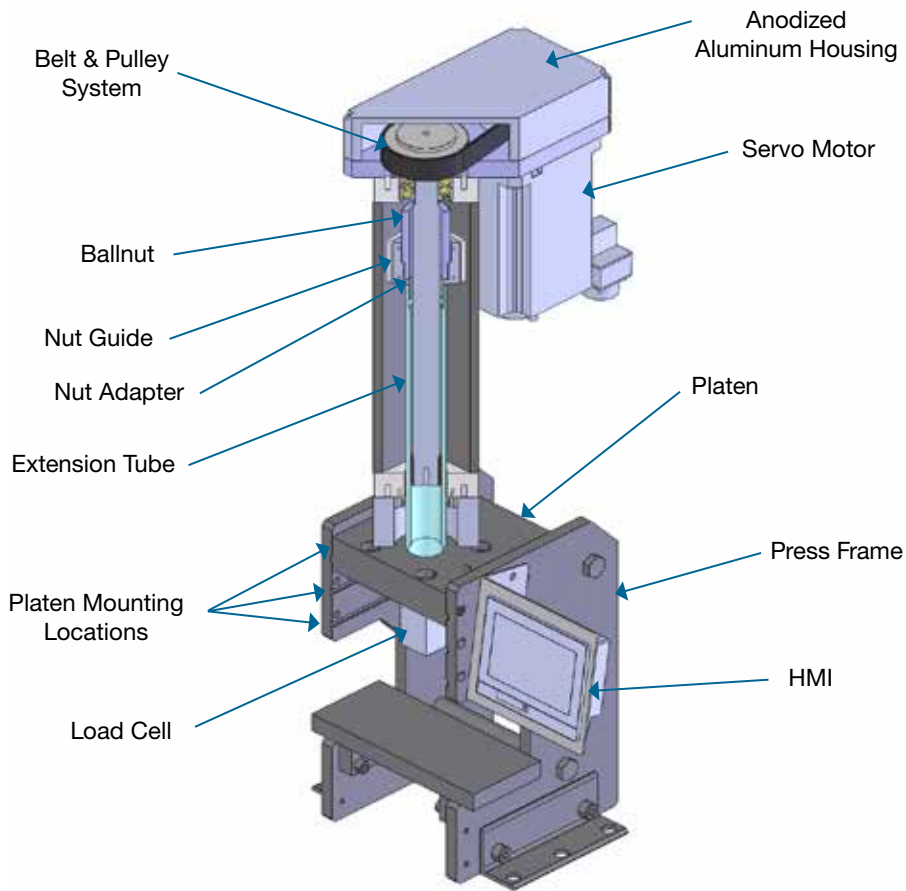
Add more flexibility to your pressing applications with Bimba's IntelliPress™ Electric Bench Top Press. The IntelliPress™ bench top electric press is designed specifically to complement Bimba's hydraulic and pneumatic presses and provide you with complete control over process speed, pressing force, and home position.

The ability to manufacture quality products is made easier with the capability to monitor both pressing distance and applied force. The networkable color HMI provides the ability to monitor production data and enables the operator to change production settings quickly and easily for faster changeover and setup times.

The oversized internal ball screw enables you to choose between three force output ratings for 3,000, 6,000, or 12,000 pounds of pressing force for your applications. The actuator is bolted to a high rigidity anodized steel frame designed for minimal deflection. Press controls include a solid-state safety relay to make integrating into your safety circuit simple and very flexible. Process changeover is made simple as each actuator features a female tapped rod end to readily accept your tooling.



Product Features



Features and Benefits

- Three press sizes with force ranges up to 12,000 lbs
- Fully electric, energy efficient design utilizes single-phase power
- Ballscrew driven electric actuator can accurately apply force in either direction
- Infinitely variable position control within stroke range
- Non-rotating by design
- Configurable rod end:
 - » Imperial Male / Female rod end
 - » Metric Male / Female rod end
- Real-time process monitoring and verification
- Fully assembled with rugged ballscrew electric thrust actuator for maintenance-free operation.
- Single travel distance 6.00" is completely scalable throughout the range of stroke
- Pre-programmed and easy to configure operator interface
- All steel parts are black oxide plated; aluminum parts are anodized
- Heavy duty steel keyed and bolted construction
- Adjustable work heights: choose from three different built-in height settings (2" increments)
- Open work area allows for through feed or side feed of large parts
- Removable, oversized ground tool plate, dowel pinned to press frame provides precision location of tool plate to press frame

The IntelliPress™ electric bench top press utilizes an oversized 10mm lead, high strength, precision-rolled ballscrew to generate repeatable force throughout the stroke range of the press. A timing belt and pulley attaches the high-performance servo motor to the screw, providing consistent, accurate, and repeatable speed and force to your tooling. As an additional benefit, the 2:1 reduction built into the pulley configuration keeps your motor size down and your efficiency up.

The heavy-duty steel press frame is keyed and bolted to provide a rigid structure. The open work area allows for parts feeding from the side or press front. The removable, oversized ground tool plate is dowel pinned to the press frame for precise locating of the tool plate to the press frame.

Materials of Construction

Thrusters		Press Frame	
Body:	Aluminum	Frame:	.75" Black Oxide Plated Steel
Ends:	Aluminum	Tool Plate:	1" Black Oxide Plated Steel
Extension Rod:	Stainless Steel	Tie Bars:	1" Diameter Hardened Steel
Rod Bushing:	Bronze		
Ball Nut Adapter:	Steel		

How It's Used

Application Ideas

- Assembly
- Blanking
- Crimping
- Materials Testing
- Press-to-force
- Press-to-position
- Punching
- Riveting
- Staking
- Stamping
- Trimming

Target Applications

IntelliPress™ is uniquely suited for applications where a pneumatic press doesn't or can't provide what your process demands. By using a high-resolution servo-based motion control system, IntelliPress™ provides infinitely variable speed, position, and force control throughout the range and pressing force capabilities of the press.

Drive Options

IntelliPress incorporates a 2:1 ratio reverse parallel belt drive as the motor to actuator interface. Choose from pre-selected motor options or design your own system to meet the unique needs of your operation.

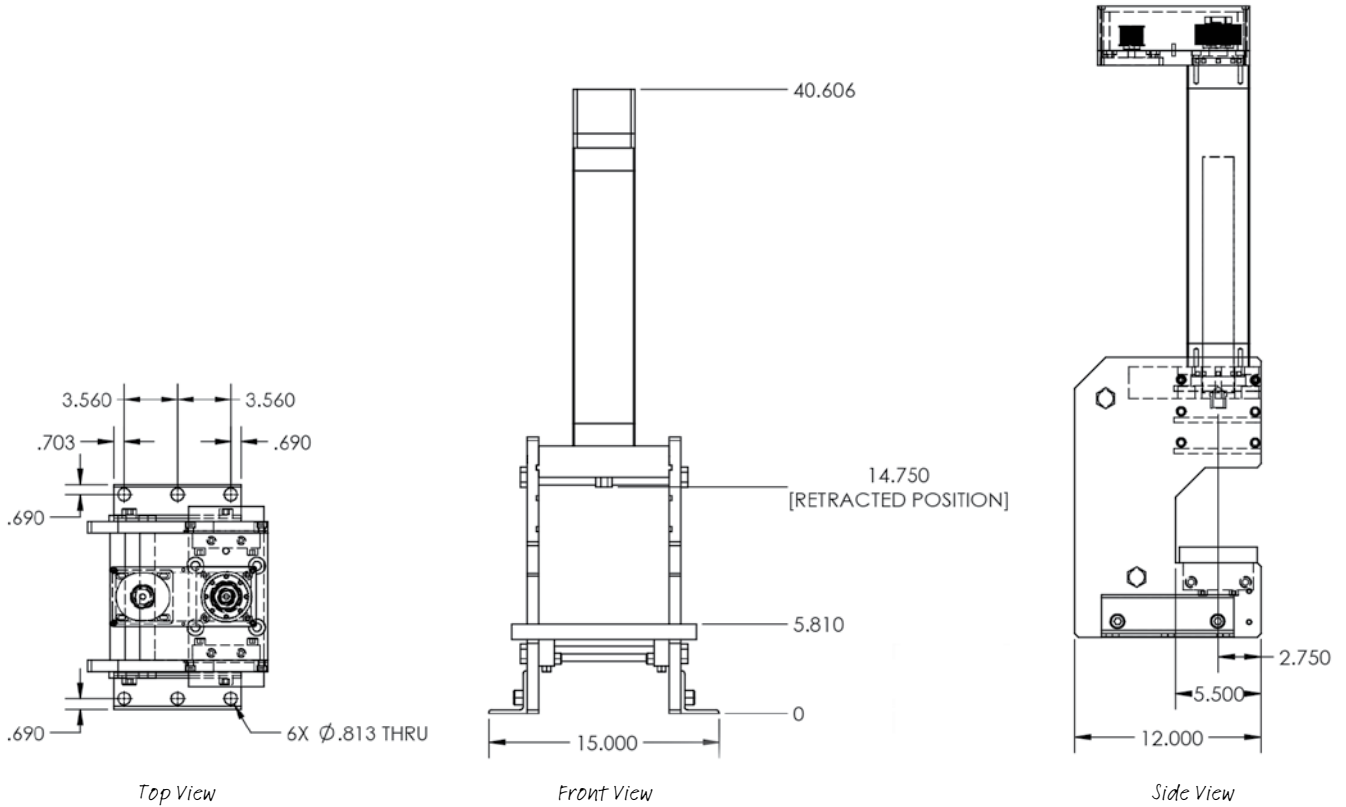
Advantages

Feature	Advantage	Benefit
Precision-rolled ballscrews	Higher accuracy and repeatability	Realize unmatched positional performance leading to reliable output, less waste, and increased throughput
Oversized thrust bearing	Provides maximum amounts of screw capacity in excess of 48,000 lbs.	Offers extreme thrust capability to solve nearly any loading need and provides an alternative to larger bore pneumatics and hydraulics
Steel keyed and bolted frame construction	Minimal deflection when pressing	Improve quality knowing your parts are accurately processed with each cycle of the press



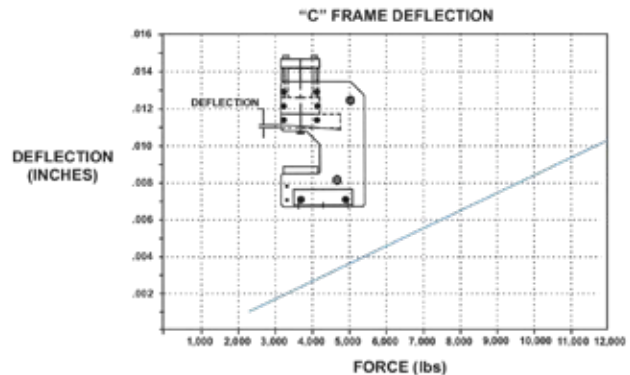
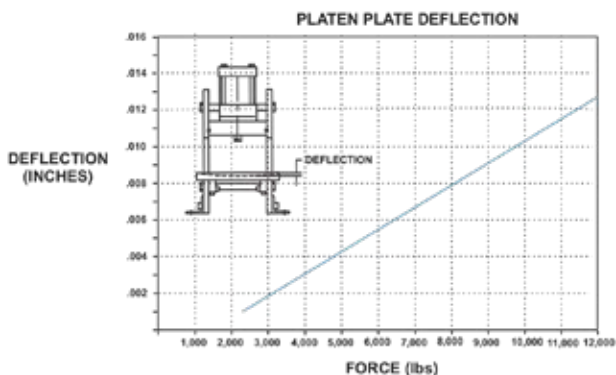
Dimensions

Key specification information for the IntelliPress™ electric bench top press is given below. For additional specification information, contact Bimba Customer Service at cs@bimba.com, or 800.44.BIMBA (800.442.4622).



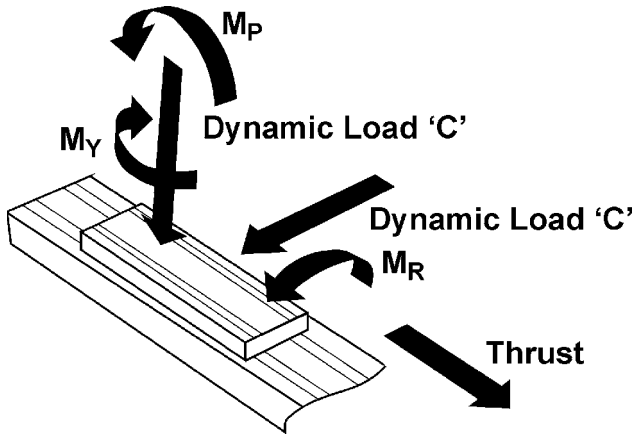
Actuator	Force Output	Screw Diameter	Dimensions																
			A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	S	T
T80	3000	25		15	76.2						60	25							
	6000	32	102	20	102	25.4	50.8	70	25	M20	62.3	36	11.8	38.1	15.9	M6	85	25.4	25.4
	12,000	40	25	112							80	42							

Deflection Charts



How To Specify

Specifications



Linear Actuator	Extrusion Moment of Inertia	
	I_x (cm ⁴)	I_y (cm ⁴)
T80	342	342

Screw Diameter	Thruster Sizes	Screw Lead	End Bearing Capacity		Screw Capacity	
			Dynamic Load N (lbs)	Static Load N (lbs)	Dynamic Load N (lbs)	Static Load N (lbs)
25	T80	10mm	26,000 (5850)	16,600 (3730)	27,500 (6182)	76,300 (17,152)
32	T80	10mm	42,000 (9500)	31,000 (6970)	33,800 (7599)	52,000 (11,690)
40	T80	10mm	55,900 (12,600)	42,500 (9550)	78,600 (17,670)	136,200 (30,619)

Motors and Drives

Mitsubishi servo motors and amplifiers provide the rotary drive mechanism of the IntelliPress™. The advanced auto-tuning, high speed frequency response and high resolution absolute encoders of the servo motor ensure production results yield the highest quality parts possible. An advanced servo amplifier with integral pressure control capability provides highly accurate force monitoring and control for applications requiring accurate and repeatable process control.

Commissioning your press and creating your production profile is easier than ever with Bimba's intuitive Press Control software. With our onboard programming environment, you'll be producing higher quality parts in minutes. Existing recipes can be easily stored for fast callup on future jobs.

See the Motors and Drives section of Bimba's Electric Motion catalog for our wide selection of available motors and motor drives.

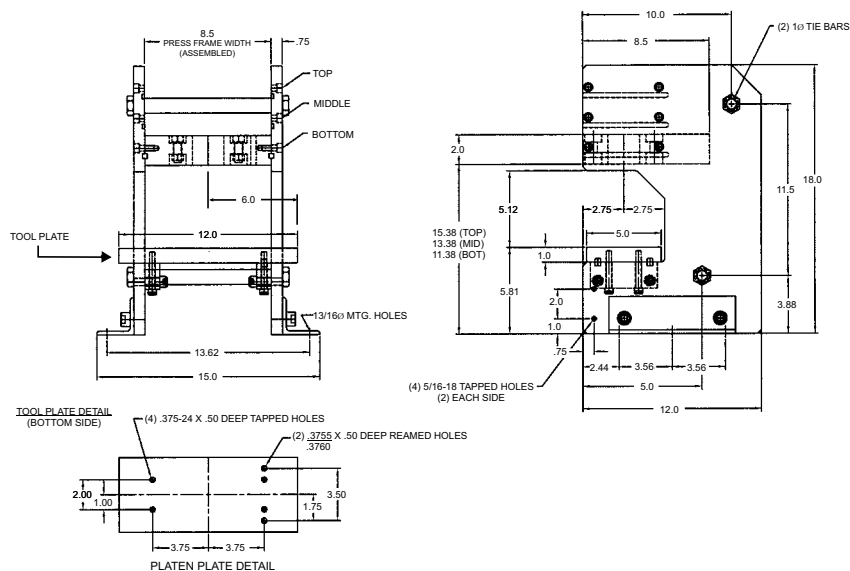
**Contact Bimba's Customer Service team for help in crossing your motor to a Bimba motor.*



Mitsubishi®
HA-JR Series

Press Top Plate Positioning

The IntelliPress™ electric bench top press comes standard with three mounting positions: top, middle, and bottom positions. Depending on your application, the actuator is capable of handling a full range of travel from the top to the bottom position. Our standard press will ship in the top mounting position which can be adjusted in the field or a custom mounting option can be requested at the time of order.



Bench Top Diagram

How to Accessorize

Tapped Rod Options

Press Size	Controls Type	Tapped Female Rod (Standard)	Tapped Male Rod (Optional)
3K	PA	1/2"-20 UNF	1/2"-20 UNF
6K	PA	3/4"-16 UNF	3/4"-16 UNF
12K	PA	1"-1 UNS	1"-1 UNS
3K	PAC	1/2"-20 UNF	1/2"-20 UNF
6K	PAC	3/4"-16 UNF	3/4"-16 UNF
12K	PAC	1"-1 UNS	1"-1 UNS
3K	PACL	1/2"-20 UNF	N/A
6K	PACL	3/4"-16 UNF	N/A
12K	PACL	1"-1 UNS	N/A

Custom rod ends available. Contact Bimba Customer Service for assistance.

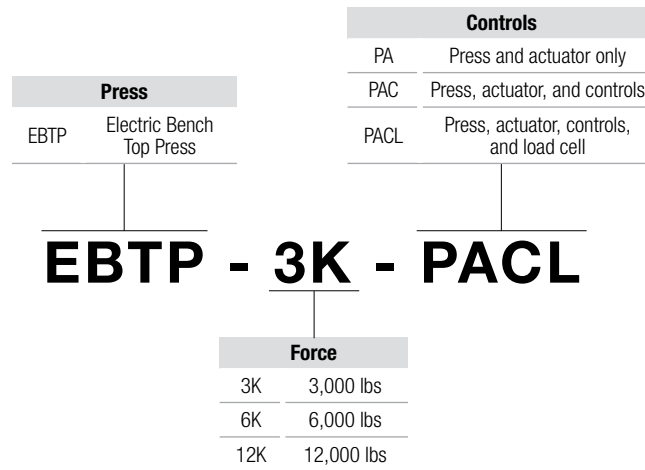
Custom Reverse Parallel Motor Mounting

In cases where space saving is critical, or in which gaining mechanical advantage via a geared drive belt pulley leads to an improved design, Bimba offers reverse parallel motor mounts. They are offered for use with nearly any Bimba motor or customer-provided motor. The option to orient the motor in either the left/right hand or front/rear positions for the IntelliPress adds flexibility. Contact Bimba Customer Service if a specific motor orientation is required.

How to Order

The model numbers of the IntelliPress™ electric bench top press consist of an alphanumeric cluster designating product type, force range, optional controls, and optional load cells that together make up the complete part number to use in ordering. Use the ordering information below to build a valid part number.

An example of a 3,000 lb force press with press, actuator, controls, and a load cell is shown below in the part number configurator.



How to Repair

Bimba IntelliPress™ electric bench top presses are repairable. A list of the individual components is given below that together make up the IntelliPress™. The “XX” in each number indicates the ballscrew diameter in the How to Order sequence.

Please use the linear actuator serial number located at the drive end for all inquiries, along with the original purchase order number (if available). Describe the part required along with part number below. Contact Bimba Customer Service at 800-442-4622 (800-44-BIMBA) or e-mail cs@bimba.com.

IntelliPress™ Repair Parts

Quantity	Part Description	Part Numbers
1	Front End Plate	T80-P07-XX
1	Drive End Plate	T80-P05-XX
1	Thrust Bearings	T80-P18-XX
1	Shaft Seal	T80-P16-XX
1	Lock Nut	T80-P17-XX
1	Rod Wiper	T80-P11-XX
1	Ballscrew	T80-P04-XX
1	Spacer	T80-P10-XX
1	Drive Retainer	T80-P08-XX
1	Front Retainer	T80-P09-XX
1	Front Seal Support	T80-P12-XX
1	Bushing	T80-P15-XX
1	Washer	T80-P20-XX
1	End Bolt	T80-P13-XX
1	Nut Adapter	T80-P03-XX
4	Guides	T80-P02-XX
1	Rod End	T80-P06-XX-RE
1	Extension Tube	T80-P06-XX
1	Main Housing	T80-P01-XX

Quantity	Part Description	Part Numbers
	A-70-PF Press Frame Tie Bar	A-70-PF
	DP375-750 Dowel Pin 3/8 Dia. X 3/4 Long	DP375-750
	HCA-BTP-501-X6 (X6=with Blank Top Plate)	HCA-A-009301
	A-75-80 Angle Bracket, 8 Bore	A-75-80
	A-90-25-1 Press Top Plate	A-90-25-1
	A-90-Key-1 Press Frame Key	A-90-KEY-1
	JN750-16 Jam Nut	JN750-16
	SA-90-10 Platen Plate 5 Bore Press	SA-90-10
	SA-90-38-LH Press Side Plate (LH)	SA-90-38-LH
	SA-90-38-RH Press Side Plate (RH)	SA-90-38-RH
	SA-90-39 Platen Plate Bracket	SA-90-39
	SHCS-375-24-2250 3/8-24 X 2-1/4 Socket Head Capscrew	SHCS-375-24-2250
	SHCS-500-20-1750 1/2-20 X 1 3/4 Socket Head Capscrew	SHCS-500-20-1750
	SHCS-625-18-1000 5/8-18 X 1 Socket Head Capscrew	SHCS-625-18-1000
	HN500-20 Hex Nut	HN500-20
	SHCS-375-24-875 3/8-24 X 7/8 Socket Head Capscrew	SHCS-375-24-875
	Rod End	T80-P06-XX-RE
	Extension Tube	T80-P06-XX
	Main Housing	T80-P01-XX

Switches

Switches add versatility to your electric motion application. They can be used to provide end of stroke limits, count strokes, or communicate positioning to an outside source. Switches can provide safety to applications as well, preventing undesirable situations like runaways to prevent damage.

To learn more about Bimba's available switch selection, refer to the Switches section in this catalog.

Air/Purge Ports

Air and purge ports are essential for actuators that operate in dirty applications. In both belt- and screw-driven actuators, ports keep dust and grime from egressing, protecting the internals of the actuator. Air and purge ports are recommended for use with Bimba's air preparation products.

When using purge ports, supply dry filtered air to the actuators in order to achieve optimal protection.

Protection

Bimba offers several protection options for our actuators. Our primary options are Armoloy® and stainless steel. Armoloy® offers additional protection against moisture and dirt. It is used to coat the steel linear rail and bearings in a Bimba actuator. Armoloy® coating can also be applied to the aluminum extrusion upon request. Stainless steel works in conjunction with Armoloy® coatings, providing additional protection to the end caps and carriage.

Additional coatings are available upon request.

Motor Mounting

Motor mounts allow you to mount any motor to any actuator (within the actuator's rating). They give end users the ability to use Bimba electric actuators with the motor of their choosing. Careful considerations regarding torque limitations must be made when mounting a motor the actuator is not rated for.

To request custom motor mounting options, please supply Bimba with the following information: shaft diameter, shaft length, pilot diameter, pilot depth, bolt circle, and hole size.

Customer-Requested Holes and Dowel Pins

Bimba can provide custom holes and dowel pins to accommodate the customer's specific tooling and mounting holes.

For further customization, contact the factory.

IMI Precision Engineering operates four global centres of technical excellence and a sales and service network in 75 countries, as well as manufacturing capability in the USA, Germany, China, UK, Switzerland, Czech Republic, Mexico and Brazil.

For information on all IMI Precision Engineering companies visit www.imi-precision.com

Supported by distributors worldwide.



Due to our policy of continuous development, Bimba reserve the right to change specifications without prior notice.

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