



BSP61 - Print and Apply System



Complete labelling solution to obtain 100% traceability

The BSP61 Print and Apply System offers a fully automatic labelling solution anywhere along the production line. It combines a thermal transfer label printer with an automatic applicator and is designed to consistently print and accurately position and apply labels in almost all manufacturing applications. The BSP61 combines precision, versatility and high print quality and offers best value for money.

Increase your productivity

The use of high-performance equipment for labelling in a production environment maximises efficiency by enabling first-time clean, clear and accurate labelling, streamlined traceability, reducing material wastage, maintaining

uptime and measuring WIP. The result? A reduction of each unit's total production cost.

Tier 1 automotive suppliers have reported up to 70% labour cost savings and an increase in production efficiency and quality.

BRADY

Meets the demands of your environment

The BSP[™]61 Print and Apply System is developed for applications such as PCB marking, component and product marking in high quality demanding industries like automotive, electronics, manufacturing and laboratory. Designed for optimum, easy integration into existing production lines, the BSP61 has a compact footprint and offers a software that is compatible with your host system.

Your benefits

Real time processing and tracking		Maximum efficiency in production line integration		
Zero queue print and apply	Follows real time processing and tracking eliminating the potential for error	Manual or automatic feeding by adding a foot switch or interfacing to a PLC	With a choice of how to control the print and apply cycle, it maximises efficiency in production line integration	
Printing and labelling at the same time		One system for many applications		
Multi-tasking capability	Allows printing and labelling at the same time to maximise efficiency in the production process, reducing production time and therefore total unit cost	3 standard applicators: 1 or 2 axis placement and rotation 90° or 180°	Brings both efficiency and flexibility. Use the same print & apply machine to label different components on same surface or product i.e. PCB even if components are positioned differently on surface	
A specially developed Auto Apply labelling material		Accurate label resiliening		
Brady tailored label materials for Auto Apply	Best print quality and dispensability. Materials available for every harsh environment, such as, chemical washes, abrasion, temperature and weathering including UV. Specially developed ROHS PCB labelling material.	Very high placement accuracy +/- 0.3 mm	Best quality labelling, to ensure content is in the right place on the label and also the label is correctly positioned in situ. Ensures 100% accurate traceability	
		Easy integration into existing production lines		
Ensure correct traceability with crisp printing 300 and 600 dpi printing Maximum flexibility for labelling. With		Compact size	A small footprint and overall size allows fast, easy integration into existing production lines and work areas.	
capability	the quality of 600 dpi, small, legible labels are guaranteed. Capable of printing 2D codes (DataMatrix, QR,) on the smallest of labels.	Seamless software integration		
		Direct programming with J-Script, printer language is	No data duplication, error and risk reduction, ensure correct traceability	
Label sizes for every application		easy to integrate into your host		
Prints and applies a range of labels sized from 4 mm to 60 mm height, and 4 mm to 115 mm width	Label sizing to suit every application. Ideal for labelling small components or surfaces to ensure correct traceability.	ESD safe working Anti-static brush	Ensures optimal functionality in ESD production environments	

Why Brady labelling solutions?

- Brady runs one of the world's largest R&D programmes on the design and production of industrial-grade labels. Our expertise in the application of specialist inks, adhesives, plastics and other materials used in labels is unrivalled.
- Brady products and services are focused on its industrial customer base. We have a team of qualified engineering consultants who know how to implement a lineside labelling system for maximum efficiency.
- Brady labels are manufactured in facilities with ISO/TS 16949 certification. You can rest assured that your production process will not be hindered by failures in our products.
- Brady supplies via specialised integrators a complete labelling system that includes the means to print and apply labels within your production process and link the printing software into your production software system, quickly and easily.

Problem free automatic labelling

Brady have developed unique solutions that remove the problems of automating label application to ensure reliable tracking and tracing.

- No Cutting into the liner custom developed Clean Liner Technology (CLT) prevents over cutting into the liner and ensures a perfect result from the outset.
- Clean pick up our applicator head will pick up every label without exception
- No Adhesive bleeding CLT eradicates any problems with the adhesive
- No Label curling our labelling materials are developed specifically for automatic application with a no-curl guarantee
- Accuracy correct placement first time, every time

High performance identification materials for demanding applications require:

- A label material and material top coat that is carefully matched with an ink to create the most durable print for your application
- An adhesive selected to adhere to the application surface and stay applied for the product's lifetime
- Production expertise to ensure that however the product is applied, it can be dispensed and/or handled efficiently

Whatever your application, our carefully developed material combinations withstand nearly any chemical that is found in use in the industry, often without the need to laminate.

Our label materials are extensively tested in our world-class laboratories for resistance to chemicals, abrasion, temperature on one line and weathering, including UV. In many cases it is possible to test specific material combinations to specifications defined by you.







Technical details



Large graphic display

White backlight guarantees clarity of display. Depending on the installation position the display can be rotated in 90° steps.

2 Navigator pad

Simple, interactive menu control. Applicable functions are illuminated. Menu handling is easy to comprehend.

3 Ribbon retainer

The three part tightening axles allow a fast and easy ribbon exchange.

Solid, buckling resistant metal chassis Manufactured from die cast aluminium.

All components are fixed to the body.

5 Assembly applicator

The applicator is attached by hinges and can be changed easily.

6 Printing offset

After changing the label roll the printing position is set up automatically after a few printed labels. This label position is then stored, even if the machine is turned off.

7 Printhead

The printhead can be replaced easily. Adjustments and set-ups are not necessary.

8 Ribbon saver

It is used for labels which are to be only partially printed. The printhead is lifted off in the plain area and the ribbon is stopped during label feed.

9 Transport system

The ball bearing transport rollers ensure a highly accurate printing and the precise feeding of labels.

10 Label unwinder

The swing lever and the integrated brake make sure that the labels are unwound with constant tension.

11 Rewinder

The liner of a label roll is rewound after the labels have been peeled off. The clamping shafts enable an easy exchange of the roll.

12 Print direction

All BSP61 label printers with applicators are available in left and right orientation.

Interfaces



- 1 RS232C- Interface
- 2 USB 2.0 Slave interface
- 3 Ethernet 10/100 Base T-interface with TCP/IP
- 4 Slot for Wireless LAN-card
- 5 Two USB-Master-interfaces to connect an external operation panel, keyboard, scanner or service key
- 5 Slot for memory card CompactFlash Type I
- Connection for warning light
 Indicates the display and the printer status
 Green Ready for operation
 Yellow Pre-warning: end of label, end of ribbon
 Red Printing or applying error
- Connection main valve for air pressure:
 On / off signal for compressed air supply
- Connection external E-stop
 In connection with a main valve this interface allows to cut off the compressed air supply in case of an emergency
- Digital I/O interface
 25-pin SUB-D socket.
 All 24V in- and outputs are optically isolated

Inputs

Start printing and applying Reprint Label feed Delete print job Pause Label dispensed Reset Stop printing and applying Print first label Rotation 4200

Outputs

Ready to operate Print data available Paper feed on Pre-warning end of ribbon Pre-warning end of label Error end of ribbon Error end of label Label in dispensing position Basic position / upper end position Applying position / lower end position Common alarm

Options



Interface Centronics bi-directional acc. IEEE 1284. Interface RS422/RS485 1.200 up to 230.400 Baud/8 Bit. The interfaces are connected to the PC. Connection to the printer via mini USB-connection cable.



Label selection box-I/O-box. Via SPS up to 16 different labels can be loaded from a memory card. Operation of four in-/outputs via Basic Interpreter.



WLAN card 802.11 b/g.

Technical data

1. Printhead	BSP61-62	BSP61-34	
Print method	Thermal transfe	r/Direct thermal	
Print resolution dpi	600 300		
Print speed up to mm/s	100	250	
Print width up to mm	57	105.60	
2. Material	0.	100100	
Labels on rolls	Paper cardboard	textiles synthetics	
	PET, PE, PP, PVC	, PU, acrylate, Pl	
Thickness mm / weight g/m²	0.055 - 0.3	5 / 60 - 160	
Width Labels ¹⁾ mm	4 - 58	10 - 114	
Width of liner Spool / Roll	10 - 62 / 25 - 62	-/25 - 118	
Label height ¹⁾ when dispensing mm	4 - 200	8 - 250	
Media roll: Total Ø up to mm	200	/ 305	
Core Ø mm for BSP61	40		
	40	-	
Roll / Adapter	40/50	40/50	
Roll	/6	76	
Winding direction	outside	or inside	
3. Ribbon			
Ink	outside	or inside	
Roll diameter up to mm	80	80	
Core diameter mm	25	25	
Ribbon length variable up to m	500	500	
Width ²⁾ mm	60	114	
4. Internal rewinder			
Total diameter up to mm	155	/ 210	
Core diameter mm	76	76	
5 Dimensions of the printor	10	10	
5. Dimensions of the printer		20	
Label roll Ø 205 mm	40	0	
Label roll Ø 305 mm	5.	38	
Depth mm Label roll Ø 205 mm	40	00	
Label roll Ø 305 mm	5	18	
Width mm	200	255	
Weight kg	15	16	
6. Label sensor			
See-through sensor	for leading edge of t	he label or punching	
, , , , , , , , , , , , , , , , , , ,	marks and er	nd of material	
Reflective sensor from the bottom /	for printi	ng marks	
from the top			
Distance from center to shoulder middle wall	2 - 26	2 - 47	
7. Electronics			
Processor high speed 32 Bit Clock rate MHz	20	66	
(RAM) MB	6	4	
Memory IFFS MB Flash	8	3	
Slot for memory CompactFlash-card Type I			
Slot for Wireless I AN-card			
Battery huffer for	Real-time clock prin	tout of time and date	
Dattery buller for	storage of data	with shut-down	
Warning signal		al when error	
8 Interfaces	Acoustic sign		
Centronics bi-directional and JEEE 1994	-		
	LL		
100 0 0 11/200 UP to 230.400 Baud/8 Bit		•	
USB 2.0 HIGN Speed Slave for			
Fthernet 10/100 Rase T I PD RawIP_Drinting			
ftp-Printing DHCP HTTP FTP SMTP SNMP			
TIME, Zeroconf, mDNS, SOAP	-	-	
RS422. RS485			
1.200 up to 230.400 Baud/8 Bit			
WLAN card 802.11b/g WEP/WPA	г	л — — — — — — — — — — — — — — — — — — —	
PSK (TKIP)			
2x USB Master for	external operation panel, keyboard, scanner		
	or service key		
Connection warning light			
Digital I/O-Interface			
cab applicator connection			
Connection for external emergency stop			
Connection compressed air			
9. Operation data			
Power supply	100 - 240 V ~	50/60 Hz, PFC	
Power consumption	max	300 W	
Temperature / Humidity Operation	+ 5 - 40°C / 10 - 8	5% not condensing	
Charles Charle	+ 0 - 60°C / 00 0	5% not condensing	
Silliage Tropperet		5% not condensing	
Approvale			
Approvals	UE, FCC	Cass A	
	UB", UL	, UL	

10. Operation panel			
Buttons /	Pause, Feed, Cancel, Menu	Enter.	
LED-display:	4 x Cursor	,	
LCD-graphic display:	Width 60, Height 40 mm		
	Text 4 lines, 20 characters	per line	
11. Settings			
	Digital or analogue clock	time	
	System settings	uale	
	25 language settings	security	
12. Monitoring		,,,,	
Warning if:	End of ribbon		
Ŭ	End of labels		
Stop printing if:	End of ribbon		
	End of labels		
	Printhead open	_	
On the display	Data reception	Clock	
	Fthernet state	abc debug	
	Used memory	Input buffer	
	Temperature printhead	Remaining o	uantity of ribbon
	Access to memory card		-
13. Test routines			
System diagnosis	When switched on with test	ing of printhe	ad
Short Status,	Font list, device list, WLAN	state, profile (of label, test grid, monitor mode,
Status print	PPP state		. ,
Status reports	Extensive status print with i	information at	oout setting, e.g. print length
	counter, runtime counter et	C.	manual Data la data ta ta
	Request of machine state vi	a sottware co	mmand. Detailed status
	harcode error etc	y. Helwork ei	101-110 IIIK,
14. Fonts	barcouc ciror etc		
Font types	5 Ritman fonts incl. OCR-A	OCB-B and 3	Vector fonts Swiss 721 Swiss
i on types	721 Bold and Monospace 8	21 available ir	iternally.
	loadable TrueType fonts.		
	Optional Chinese (simplified	l Chinese), Op	tional Thai
Character sets	Windows 1250 up to 1257, I	DOS 437, 737	, 775, 850, 852, 857, 862, 864,
	866, 869, EBC DIC 500, ISC) 8859-1 up to	o -10 and -13 up to -16, WinOEM
	720, UTF-8, Macintosh Ron	nan, DEC MCS	6, KUI8-K.
	characters are supported.	Idlifi, Cyfillic, Intional Thai a	greek, nebrew and arabic
Bitmap fonts	Size of width and height 1 -	3 mm	
	Zoom 2-10	0 mm	
	Orientation 0°, 90°, 180°, 2	70°	
Vector- /	Size of width and height 0.9 - 128 mm		
TrueType fonts	variable zoom,		
	Orientation 360° in steps of	1º	
Font formats	Bold, italic, underlined, outl	ine, negative,	grey, vertical, depending on
Eont width	Variable		
15. Creatico	Valiable		
15. Graphics		<i>C</i> 11 1 1	
Graphic elements	Line, arrow, box, circle, ellip	ose, filled and	filled with fading
Graphic formats	PCX, IMG, BMP, TIF, MAC, G	GIF, PNG	
16. Barcodes			
Linear barcodes	Code 39, Code 93		Interleaved 2 / 5
	Code 39 Full ASCII		Ident- and lead
	Code 128 A, B, C		code of Deutsche
	Codabar		POST AG
	EAN 0, 13 EAN / LICC 128		JAN 0, 13 MSI
	EAN / UPC Appendix 2		Plessev
	EAN / UPC Appendix 5		Postnet
	FIM		RSS 14
	HIBC		UPC A, E, EO
2D-Codes	Aztec, Codablock F, Data M	atrix, PDF 417	, Micro PDF 417, UPS Maxicode,
	QR-Code, RSS 14 truncated	l, limited, stac	ked and stacked omnidirectional,
	All codec verichle in height	Bar modulo width	and ratio Orientation 0° 00°
	All coues variable in height, 180° 270° Optionally with	check digit	ranu ranu. Unernanun u , 90 ,
	code depending on code ty	ne	
17. Software	,,		
Programming	J-Script direct programmin	a	
- 3	abc-Basic Compiler		
	Databasa Connector		-
System diagnosis /	Printer monitoring		
administration	Network Manager		
Accredited for	32 / 64 bit for		
Windows driver	Windows XP Server	2003	
	Windows Vista Server	2008	
	Windows 7 Server	2008 R2	
Stand along approxim			

¹⁾ The label size is additionally defined through the type of the applicator. Depending on label size, material and adhesive limitations are possible. Critical material or applications have to be tested and cleared.

²⁾ For best print performance the width of the ribbon should be approximately the same width as the labels.

*pending

■ Standard □ Option

Ordering Options

	Order Reference	Description
	BSP61-62L	BSP61 for up to 50 mm wide consumables - 600 dpi - to be combined with left applicator
	BSP61-34L	BSP61 for up to 101 mm wide consumables - 300 dpi - to be combined with left applicator
	BSP61-62R	BSP61 for up to 50 mm wide consumables - 600 dpi - to be combined with right applicator
	BSP61-34R	BSP61 for up to 101 mm wide consumables - 300 dpi - to be combined with right applicator

Product Supplied

Label printer, Power cable Type E+F, length 1.8 m, Connecting cables USB, length 1.8 m, Operation manual in English and German

	Order Reference	Description
	Applic. 4114L-200	Left applicator - cylinder stroke 200 mm - horizontal precision guide in feed direction
	Applic. 4114L-300	Left applicator - cylinder stroke 300 mm - horizontal precision guide in feed direction
	Applic. 4214L-200	Left applicator - cylinder stroke 200 mm - horizontal rotary cylinder (angle of rotation 90 other 180°)
	Applic. 4214L-300	Left applicator - cylinder stroke 300 mm - horizontal rotary cylinder (angle of rotation 90 other 180°)
	Applic. 4414L-200	Left applicator - cylinder stroke 200 mm - adjustable horizontal precision guides in X and Y direction (up to Y = 13 mm, X = 5 mm)
	Applic. 4414L-300	Left applicator - cylinder stroke 300 mm - adjustable horizontal precision guides in X and Y direction (up to $Y = 13 \text{ mm}$, $X = 5 \text{ mm}$)
J	Applic. 4114R-200	Right applicator - cylinder stroke 200 mm - horizontal precision guide in feed direction
	Applic. 4114R-300	Right applicator - cylinder stroke 300 mm - horizontal precision guide in feed direction
	Applic. 4214R-200	Right applicator - cylinder stroke 200 mm - horizontal rotary cylinder (angle of rotation 90 other 180°)
	Applic. 4214R-300	Right applicator - cylinder stroke 300 mm - horizontal rotary cylinder (angle of rotation 90 other 180°)
	Applic. 4414R-200	Right applicator - cylinder stroke 200 mm - adjustable horizontal precision guides in X and Y direction (up to Y = 13 mm, X = 5 mm)
	Applic. 4414R-300	Right applicator - cylinder stroke 300 mm - adjustable horizontal precision guides in X and Y direction (up to Y = 13 mm, X = 5 mm)



Protection against dirt and accidental contact.



External operation panel

If the operation panel is not accessible after installation of the printer into a production plant it is possible to attach an external operation panel.



Compact keyboard

Connection: USB, number of keys: 86. L x W: 282 x 132 mm, Cherry G84-4100.



Product sensor

For automatic printing and applying after detection of a product, e.g. on a conveyor belt.



Sub-D plug

Connection of the control signals to the IO-interface with screw clamps.



Warning light

Indicates the display and the printer status.Red:Printing or applying failureYellow:Pre-warning: end of label, end of ribbonGreen:Ready for operation



Air pressure regulation unit

The unit can be assembled to the BSP61 or its brackets by using a mounting angle. Pre-adjustment to 4,5 bar.



Air pressure regulation unit with additional cut-in valve

In case of integration of the print & apply system into a production line the air-pressure can be turned on or off externally. Pre-adjustment to 4.5 bar.

Brady Corporation

Our mission is to identify and protect people, products and places



COMPANY OVERVIEW

BRADY was founded in 1914 in Eau Claire, Wisconsin, as W.H. BRADY Co., and renamed BRADY Corporation in 1998. The company began selling products internationally in 1947. In 1984, BRADY went public, with stock trading on the Nasdaq Stock Market, and in 1999, moved trading of its stock to the New York Stock Exchange, where it trades under the symbol BRC. The company's global headquarters is in Milwaukee, Wisconsin.

BRADY MANUFACTURES AND MARKETS:

- products for identification and safety applications such as signs and markers, printing systems and software to produce identification products on-site and on demand
- products for wire identification, including labelling materials and tools for wire and cable marking in the electrical, datacom and telecommunication markets
- high-performance identification products, including labels and signs that remain legible and highly adhesive even in harsh environments
- products that identify people and enhance security by ensuring the right persons are in the right places at the right time

OPERATIONS – SOME FACTS:

- 6500 employees around the world
- Operations in 29 countries
- Distribution in more than 100 countries through more than 4,400 distributor partners

BRADY WHEN PERFORMANCE MATTERS MOST

Africa

Randburg, South Africa Tel.: +27 11 704 3295 Email: africa@bradycorp.com

Benelux Zele, Belgium Tel.: +32 (0) 52 45 78 11 Email: benelux@bradycorp.com

Central & Eastern Europe Bratislava, Slovakia Tel.: +421 2 3300 4800 Email: central_europe@bradycorp.com

Denmark Odense Tel.: +45 66 14 44 00 Email: denmark@bradycorp.com

France Roncq Tel.: +33 (0) 3 20 76 94 48 Email: france@bradycorp.com

Germany, Austria & Switzerland Egelsbach, Germany Tel.: +49 (0) 6103 7598 660 Email: germany@bradycorp.com

> To help minimise our impact on the environment, Brady limits its number of reprints. Updated versions are always available for download on www.bradyeurope.com.

> > Search for: EUR-0-521-EN

© 2018 Brady Worldwide, Inc. All Rights Reserved.

Hungary Budaörs Tel.: +36 23 500 275 Email: central_europe@bradycorp.com

Italy Gorgonzola Tel.: +39 02 26 00 00 22 Email: italy@bradycorp.com

Middle East FZE Dubai, UAE Tel.: +971 4881 2524 Email: me@bradycorp.com

Norway Kjeller Tel.: +47 70 13 40 00 Email: norway@bradycorp.com

Romania Bucharest Tel.: +40 21 202 3032 Email: central_europe@bradycorp.com

Russia Moscow Tel.: +7 495 269 47 87 Email: central_europe@bradycorp.com

Your distributor

Spain & Portugal Madrid, Spain Tel.: +34 900 902 993 Email: spain@bradycorp.com, portugal@bradycorp.com

Sweden Kista Tel.: +46 (0) 8 590 057 30 Email: sweden@bradyeurope.com

Turkey Istanbul Tel.: +90 212 264 02 20 / 264 02 21 Email: turkey@bradycorp.com

UK & Ireland Banbury, UK Tel.: +44 (0) 1295 228 288 Email: uk@bradycorp.com



30/10/2018

www.bradyeurope.com