

Data Sheet
Intelligent Sensors
DataMatrix Codereader BR 520 / BR 530

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DataMatrix Codereader BR 520 / BR 530

BR 520 and BR 530 are ultra-compact, Ethernet-ready codereader for the fast and secure detection of DataMatrix and bar codes. With the integrated white LED flash it is also possible to read 1D and 2D Pharmacodes. Due to the ultra-compact housing and the patented auto-trigger device the BR 520 may be installed even in plants with strong restrictions for space.

Field of application:

- **Printing machines**
- **Identification of important electronic components and printed circuits**
- **Wafer production**
- **Identification in packaging and factory automation**
- **Document and mail processing**



Features and benefits

- very high reading speeds (up to 30 codes / sec)
- code detection even of fast moving codes (up to 10 m/sec)
- robust, waterproof housing (IP65)
- integrated light source (LED ring flash)
- omnidirectional detection of standard 1D bar codes und 2D matrix codes

- auto-trigger with integrated laser sensor
- network connectivity given by Ethernet and web interface

Additional benefits are:

- easy, factory wide linking of sensors with standard network components
- fast online video transmission of up to 10 frames/sec
- remote maintenance and error diagnosis via Internet
- easy integration in customized user interfaces



Contact Assignment

	M12 x 1 male, 8-pole 1 R x D of RS232 / (+) for RS485 interface (data) 2 (+) 24 V DC output supply voltage 3 T x D of RS232 / (-) for RS485 interface (data) 4 input contact 1 (external triggering) 5 output contact 1 6 output contact 2 7 GND 8 output contact 3		M12 x 1 female connection, 8-pole 1 T x D of the RS232 interface (configuration) 2 (+) 24 V DC output supply voltage 3 R x D of the RS232 interface (configuration) 4 output contact 4 (trigger for external lighting) 5 reserved 6 input contact 2 7 GND 8 reserved		M12 x 1 female connection, 8-pole 1 not assigned 2 not assigned 3 not assigned 4 T x D - of Ethernet interface 5 R x D + of Ethernet interface 6 T x D + of Ethernet interface 7 not assigned 8 R x D - of Ethernet interface
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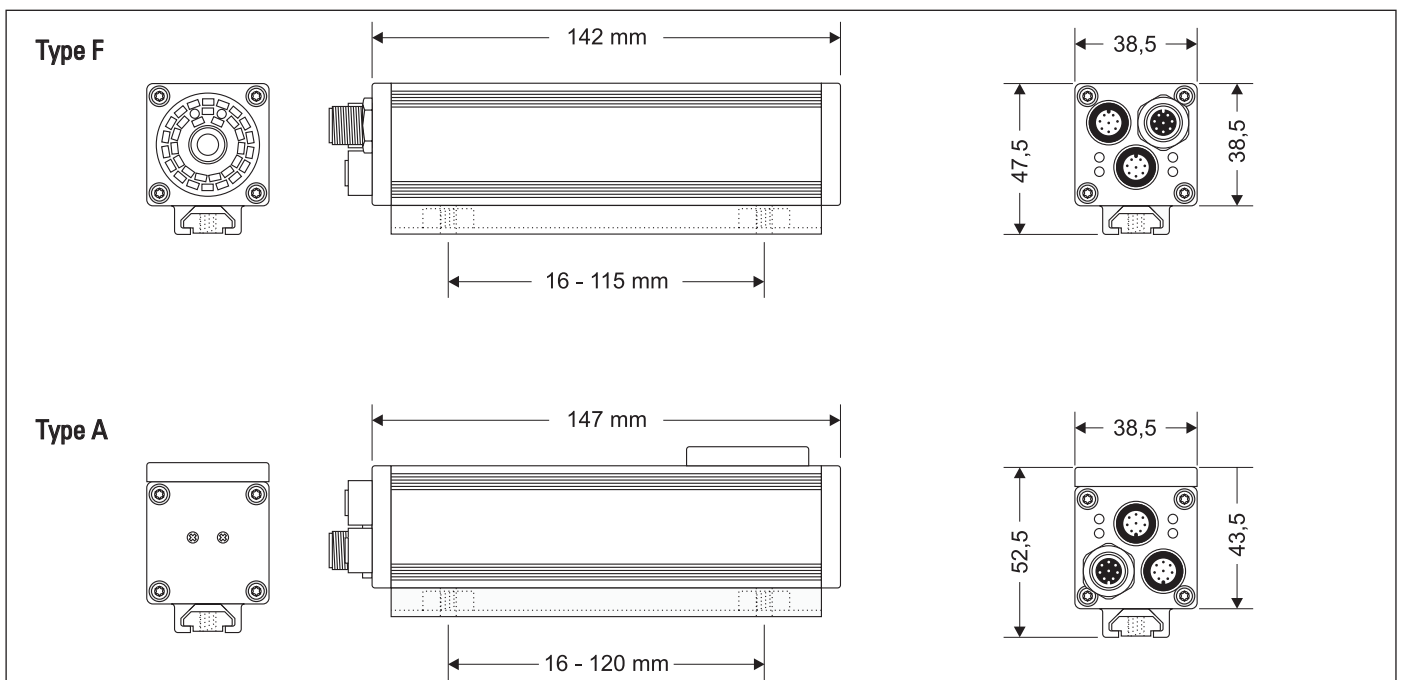
Accessories

Designation	Short description
	Codereader
BR 520-F25LE-A	2D-Codereader, 20 code/s, front lens, lasertrigger, ethernet-interface
BR 520-A25LE-A	2D-Codeleser, 20 code/s, lateral lens type A, lasertrigger, ethernet-interface
BR 530-A25LE-A	2D-Codereader, 30 code/s, front lens, lasertrigger, ethernet-interface
BR 530-A25LE-A	2D-Codeleser, 30 code/s, lateral lens type A, lasertrigger, ethernet-interface
	Connecting cables
AK8-763-FC-5m	Connecting cable with 8-pin female plug, type M12 straight, 5 m
AK8-763-FA-5m	Connecting cable with 8-pin female plug, type M12 angled, 5 m
AK8-763-MC-5m	Connecting cable with 8-pin female plug, type M12 straight, 5 m
AK8-763-MA-5m	Connecting cable with 8-pin female plug, type M12 angled, 5 m
AK8-840-MC-5m	Ethernet connecting cable 8-pin female plug, type M12 x 1 straight and male plug RJ45, 5 m
Scope of delivery	
DataMatrix-Codereader BR 520/BR530 incl. configuration software and operating instructions, without cables	

Technical Data

model	BR 520-x25xx-A	BR 530-x25xx-A
sensor	CCD-Matrix (659 x 494 Pixel)	
reading speed	up to 20 codes/s (BR 520), up to 30 codes/s (BR 530)	
maximum transportation speed	10 m/s	
field of view	45 mm	
depth of focus	33 x 25 mm	
image definition range	± 5 mm	
resolution	0.25 mm (10mil)	
reading angle	torsional angle 360° (omnidirectional) tilting and inclination angle to 30°	
2-D codes	DataMatrix 10 x 10 to 144 x 144 and rectangular codes: 2-D pharmacodes; PDF417 upon request	
bar codes	EAN 8/13, UPC-A, UPC-E, Code 128, Code 39, Code 93, Industrial 2/5, Interleaved 2/5, Codabar, Pharmacode (all upon request)	
reading modes	continuous or triggered digital input, optionally built-in laser trigger	
digital inputs	2 switching inputs (24 V ± 30%)	
digital outputs	2 switching outputs (24 V / 1.5 W), 1 high-speed trigger output for external lighting	
configuration interfaces	RS 232, Ethernet 10Base-T with TCP/IP	
data interfaces	RS 232 / RS 485 switchable, Ethernet 10Base-T with TCP/IP	
display	1 LED for "operation"; 1 LED "trigger"; 2 status LED's	
lighting	built-in LED flash (white) or external lighting	
power supply	24 V DC ±30%	
power input	4 W	
laser protection class	2 (acc. IEC 825-1 resp. EN 60825-1 03.97)	
ingress protection class	IP 65	
operating temperature	0° ... + 45 °C	
storage temperature	-20° ... + 70 °C	
humidity	5%...95%, non-condensing	
EMC emission	according to EN 50081-1	
EMC immunity	according to EN 50081-2	
dimensions (L x W x H)	Typ F: 142 mm x 38.5 mm x 47.5 mm / Typ A: 147 mm x 38.5 mm x 52.5 mm	
weight	380 g	
connection	1 male + 2 female plugs M12 x 1, 8-pole	
housing material	aluminium, silver anodised	
fastening	2 sliding blocks with female threads M5 (distance adjustable)	
configuration software	Suitable for Windows 98, NT 4.0, 2000 and XP or configuration via TCP/IP and standard web browser	

Dimensions



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Subject to modification

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