



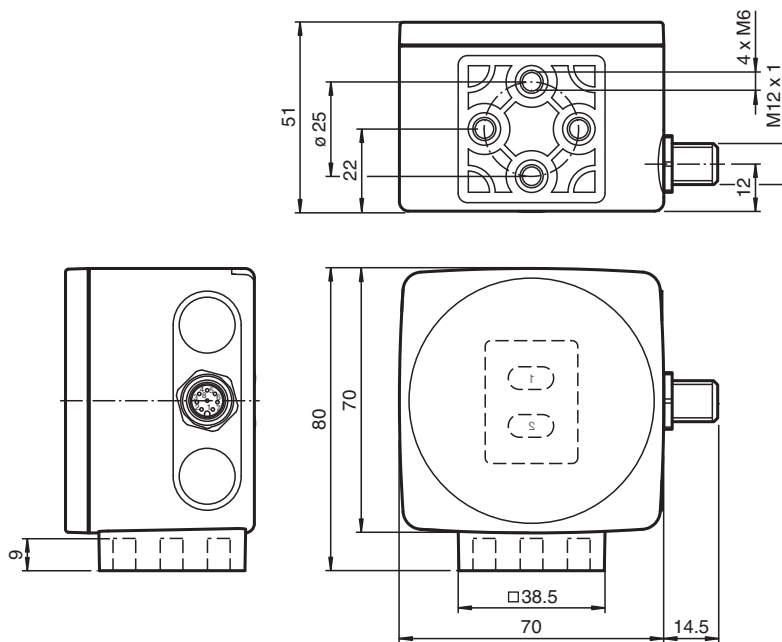
Optical reader - safePXV/PUS PXV80AQS-F200-R4-V19

- RS-485 interface
- Noncontact positioning on Data Matrix tape PXV...-AA...
- Mechanically rugged: no wearing parts, long operating life, maintenance-free
- High resolution and precise positioning, especially for facilities with curves and switch points as well as inclines and declines.
- Traverse distance up to 100 km
- Output of code quality
- Pollution detection

Read head for use with the safe evaluation unit PUS-* (series)



Dimensions



Technical Data

General specifications

Passage speed	v	≤ 10 m/s
Measuring range		max. 100000 m
Light type		Integrated LED lightning (red/blue)
Latency		20 ms ±0.6
Close time		70 μs (During this time a change of the color specification is delayed)
Read distance		80 mm
Depth of focus		± 25 mm
Field of view		100 mm x 65 mm
Ambient light limit		30000 Lux

Release date: 2024-02-07 Date of issue: 2024-02-07 Filename: 293431-100025_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

 PEPPERL+FUCHS

Technical Data

Resolution		
Non safety-related X		± 1 mm
Safety-related X		± 1 cm
Accuracy		
Non safety-related X		± 0.2 mm
Safety-related X		See the original instructions
Measuring frequency		100 Hz
Nominal ratings		
Camera		
Type		CMOS , Global shutter
Processor		
Clock pulse frequency		600 MHz
Speed of computation		4800 MIPS
Digital resolution		32 Bit
Time delay before availability	t_v	6 s
Functional safety related parameters		
MTTF _d		96 a
Mission Time (T _M)		10 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
LED indication		7 LEDs (communication, alignment aid, status information)
Electrical specifications		
Operating voltage	U _B	14.5 ... 30 V DC , PELV (with unloaded switching outputs)
No-load supply current	I ₀	max. 200 mA
Power consumption	P ₀	3 W max: 3.7 W
Interface		
Interface type		RS 485 interface
Data output code		binary code
Transfer rate		115200 Bit/s
Termination		120 Ω, switchable
Query cycle time		≥ 7 ms
Input		
Input type		Input 1: enable blue (active high) Input 2: enable red (active high) Input 3: color change (low:red, high: blue)
Level		Low: 0 V ... 8 V High: 10 V ... +V _b
Input resistance		32 kΩ
Input capacity		500 pF
Output		
Output type		1 switch output PNP , PNP , programmable , short-circuit protected
Switching voltage		Operating voltage
Switching current		150 mA each output
Standard conformity		
Emitted interference		EN 61000-6-4:2007+A1:2011
Noise immunity		EN 61000-6-2:2005
Shock resistance		EN 60068-2-27:2009
Vibration resistance		EN 60068-2-6:2008
Approvals and certificates		
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Operating temperature		0 ... 60 °C (32 ... 140 °F) , -20 ... 60 °C (-4 ... 140 °F) (noncondensing; prevent icing on the lens!)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)

Release date: 2024-02-07 Date of issue: 2024-02-07 Filename: 293431-100025_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

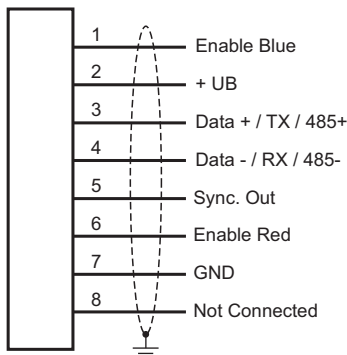
Pepperl+Fuchs Group
www.pepperl-fuchs.comUSA: +1 330 486 0001
fa-info@us.pepperl-fuchs.comGermany: +49 621 776 1111
fa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

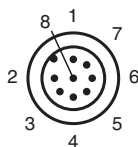
Technical Data

Relative humidity	90 % , noncondensing
Mechanical specifications	
Connection type	8-pin, M12 x 1 connector
Degree of protection	IP67
Material	
Housing	PC/ABS
Mass	approx. 160 g
Dimensions	
Height	70 mm
Width	70 mm
Depth	50 mm
General information	
Note	0° orientation to the DataMatrix code tape

Connection

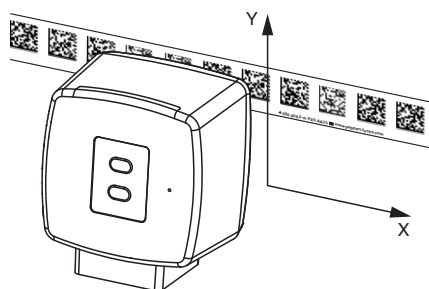


Connection Assignment

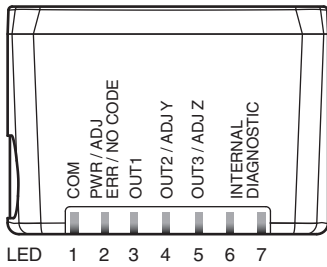


Function Principle

Position Data



Function Principle



Release date: 2024-02-07 Date of issue: 2024-02-07 Filename: 293431-100025_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**