



## **Model Number**

# GLP80-RT/40b/103/156

Photoelectric slot sensor with 3-pin, M8 x 1 connector

## **Features**

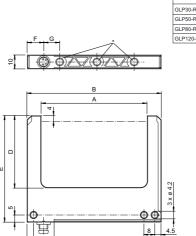
- Plastic version •
- Clearly visible function indicators •
- Degree of protection IP67 •

# **Product information**

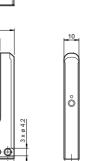
An extremely favorable price/performance ratio and an innovative display concept characterize the GLP series. The switching states are visible from all directions. The optional attachment holes or dove tail joint significantly increase installation flexibility. The external, dynamic Teach-In function allows you to teach in moving objects easily.

### **Dimensions**



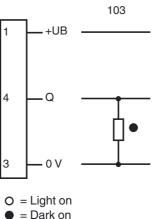


Туре	A	В	С	D	E	F	G	Number of mounting holes M4 *
GLP30-RT-	30	50	30	34	59.5	20	-	1
GLP50-RT-	50	70	50	54	79.5	20	28	2
GLP80-RT-	80	100	80	54	79.5	20	2 x 28	3
GLP120-RT-	120	140	120	54	79.5	20	3 x 28	4





### **Electrical connection**

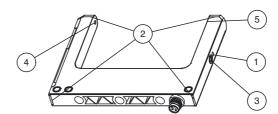




**Pinout** 



### Indicators/operating means



1	Operating display	green
2	Signal display	yellow
3	TEACH-IN button	
4	Emitter	
5	Receiver	

Refer to "General Notes Relating to Pepperl+Fuchs Product Information" USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 4411 fa-info@de.pepperl-fuchs.com

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



1

Ambient light limit       10000 Lux         Indicators/operating means       V3-WM-2M-PUR         Function indicator       LED yellow, lit when the light beam is interrupted LED green: ready       V3-WM-2M-PUR         Control elements       Teach-In key , Sensitivity adjustment and Mode adjustment (NO/NC)       V3-GM-BK2M-PUR-U         Electrical specifications       V3-WM-BK2M-PUR-U       V3-GM-BK2M-PUR-U         Operating voltage       UB       1030 V DC       V3-WM-BK2M-PUR-U         No. lead supply suply supply supply supply supply suply suppl			1	
Light source     LED, 640 nm pulsing     dove tail mounting clamp       Light type     modulated visible red light     dove tail mounting clamp       Object size     min. 0.5 mm     dove tail mounting clamp       Stot width     80 nm     30 nm       Ambient light limit     10000 Lux     V3-GM-2M-PUR       Control elements     Teach-In key. Sensitivity adjustment and Mode adjustment (NO/NC)     Y3-GM-BKZM-PUR-U       Control elements     Teach-In key. Sensitivity adjustment and Mode adjustment (NO/NC)     Y3-GM-BKZM-PUR-U       Control elements     Teach-In key. Sensitivity adjustment and Mode adjustment (NO/NC)     Y3-GM-BKZM-PUR-U       Cable socket, M8, 3-pin, F     Y3-GM-BKZM-PUR-U       Signal output     1 PNF short-circuit protected, reverse polarity protected, open collector       Switching trequency     f     200.mA	chnical data		Accessories	
Light type       modulated visible red light         Object size       min. 0.5 mm         Slot width       80 mm         Ambient light limit       10000 Lux         Indicators/operating means       ED yellow, lit when the light beam is interrupted LED green: ready         Control elements       Teach-th key, Sensitivity adjustment and Mode adjustment (NO/NC)         Electrical specifications       Us         Operating voltage       Us         No-load supply current       0         1 phyle       10 %.         No-load supply current       0         Switching voltage       max. 300 DC         Signal output       1 PNP short-circuit protected, reverse polarity protected, open         Switching voltage       max. 300 DA         Voltage drop       Ug         Subwitching voltage       max. 300 DA         Voltage drop       Ug         Ambient conditions       ax. 100 mA         Ambient meperature       -20 60 °C (-4 140 °F)         Storage temperature       -20 80 °C (-4 176 °F)         Mechanical specifications       Degree of protection         Material       PC         Optical face       plastic         Mass       35 g         Connectio	neral specifications		ОМН-К03	
Light type     modulated visible red light       Object size     min. 0.5 mm       Ambient light limit     0000 Lux       Ambient light limit     10000 Lux       Function indicator     LED yellow, lit when the light beam is interrupted LED green: ready       Control elements     Teach-In key, Sensitivity adjustment and Mode adjustment (NOVC)       Electrical specifications     Teach-In key, Sensitivity adjustment and Mode adjustment (NOVC)       Operating voltage     Ug       1030 V DC       Ripple     10 %       No-load supply current     10 %       No-load supply current     1 PNP short-circuit protected, reverse polarity protected, open collector       Switching type     Iight/dark on       Signal output     1 PNP short-circuit protected, reverse polarity protected, open collector       Switching type     Ug/t Varkar on       Switching requency     f       2000 Hz     2.4 V       Switching frequency     f       200. B0° C (-4 140 °F)       Storage temperature     -20 80° (-4 176 °F)       Mechanical Specifications       Poere of protection     IP67       Connection     MB connector, 3-pin       Material       U     -20 80° (-2 (-4 176 °F)       Mechanical Specifications       Signal donformity       P	ight source	LED , 640 nm pulsing	dove tail mounting clamp	
Slot width     80 mm     Cable socket, M8, 3-pin, F       Ambient light limit     10000 Lux       Indicators/operating means     LED yellow, lit when the light beam is interrupted LED green: ready       Function indicator     LED yellow, lit when the light beam is interrupted LED green: ready       Control elements     Teach-in key, Sensitivity adjustment and Mode adjustment (NO/NC)       Operating voltage     Ug       Operating voltage     Ug       Operating voltage     Ug       No-load supply current     0       No-load supply current     0       Signal output     1PNP, short-circuit protected, reverse polarity protected, open collector       Switching voltage     max. 30 V DC       Switching voltage     0.25 ms       Ambient conditions     -20 60 °C (4 140 °F)       Storage temperature     -20 60 °C (4 176 °F)       Mechanical specifications     Degree of protection       Degree of protection     M6 connector, 3-pin       Material     -       Housing     PC       Optical face     plastic       Mass <t< td=""><td>ight type</td><td>modulated visible red light</td><td></td></t<>	ight type	modulated visible red light		
Ambient light limit       10000 Lux         Indicators/operating means       Indicators/operating means         Function indicator       IED yellow, lit when the light beam is interrupted LED green: ready         Control elements       Teach-In key , Sensitivity adjustment and Mode adjustment (NO/NC)         Operating voltage       Up         Operating voltage       Up         No-load supply current       lo         Voltage       max. 30 V DC         Switching type       light/dark on         Signal output       1 PNP, short-circuit protected, reverse polarity protected, open collector         Switching voltage       max. 30 V DC         Switching requency       f         Ambient memperature       -2060 °C (-4 140 °F)         Storage temperature       -2060 °C (-4 140 °F)         Storage temperature       -2060 °C (-4 140 °F)         Degree of protection       IP67         Connection       M8 connector, 3-pin         Material       PC         Mass       35 g         Compliance with standards and directi-twes         ves       Signal conformity         Product standard       EN 60947-5-2:2007         Approvals and certificates       EN 60947-5-2:2007	)bject size	min. 0.5 mm	V3-GM-2M-PUR	
Indicators/operating means       LED yellow , it when the light beam is interrupted LED green: ready       V3-WM-2M-PUR         Control elements       Teach-in key , Sensitivity adjustment and Mode adjustment (NO/NC)       Cable socket, M8, 3-pin, F         Electrical specifications       Teach-in key , Sensitivity adjustment and Mode adjustment (NO/NC)       Cable socket, M8, 3-pin, F         Deperating voltage       Uag       10 30 V DC       Cable socket, M8, 3-pin, F         No-load supply current       Io       So WA       Cable socket, M8, 3-pin, F         No-load supply current       Io       So WA       Cable socket, M8, 3-pin, F         Signal output       So WA       Cable socket, M8, 3-pin, F       V3-WM-BK2M-PUR-U         Signal output       IpNF, short-circuit protected, reverse polarity protected, open collector       Cable socket, M8, 3-pin, F         Switching voltage       max. 30 V DC       Max. 30 V DC       Www.pepperl-fuchs.com         Switching requency       f       2000 Hz       Was Max. 30 V DC       Www.pepperl-fuchs.com         Switching requency       f       2000 Hz       Was Max. 30 V DC       Www.pepperl-fuchs.com         Storage temperature       -20 60 °C (-4 140 °F)       Socket, M8, 3-pin, F       Was Max. 30 S         Degree of protection       M8 connector, 3-pin       Material       Socket, M8 S on	lot width	80 mm	Cable socket, M8, 3-pin, PUR cable	
Function indicator       LED yellow, lit when the light beam is interrupted LED green: ready       Control elements       Teach-in key, Sensitivity adjustment and Mode adjustment (NO/NC)         Electrical specifications       Operating voltage       Ug       1030 V DC         Ripple       10 %       Other sectors       V3-GM-BK2M-PUR-U         Objecting voltage       Ug       1030 V DC       V3-WM-BK2M-PUR-U         Ripple       10 %       Other sectors       V3-WM-BK2M-PUR-U         Output       S0 mA       Other sectors       Other sectors         Switching type       light/dark on       Signal output       Other sectors       Other sectors         Switching requency       f       2000 Hz       Sectors       Switching requency       F         Ambient conditions       -20 60 °C (-4 140 °F)       Storage temperature       -20 60 °C (-4 140 °F)       Storage temperature       -20 60 °C (-4 140 °F)         Storage temperature       -20 60 °C (-4 140 °F)       Storage temperature       -20 60 °C (-4 140 °F)         Degree of protection       IP67       Storage temperature       -20 60 °C (-4 140 °F)         Degree of protection       IP67       Storage temperature       -20 60 °C (-4 140 °F)         Degree of protection       IP67       Storade conf	mbient light limit	10000 Lux		
ready       ready       ready       V3-GM-BK2M-PUR-U         Control elements       Taach-In key, Sensitivity adjustment and Mode adjustment (NO/NC)       V3-GM-BK2M-PUR-U       Cable socket, M8, 3-pin, F         Perating voltage       Up       10 %       V3-GM-BK2M-PUR-U       Cable socket, M8, 3-pin, F         No-load supply current       lo       ≤ 30 mA       Cable socket, M8, 3-pin, F         Output       Signal output       [ight/dark on       Signal output       Cable socket, M8, 3-pin, F         Switching voltage       max. 30 V DC       Signal output       Cable socket, M8, 3-pin, F         Switching current       max. 30 V DC       Signal output       Cable socket, M8, 3-pin, F         Switching current       max. 100 mA       Signal output       Cable socket, M8, 3-pin, F         Voltage drop       Uq       ≤ 2.4 V       Switching requency       T         Switching requency       f       2000 Hz       Response time       0.25 ms         Ambient conditions       Macinal       Housing       PC       0.9 °C (4 140 °F)         Storage temperature       -20 60 °C (4 140 °F)       Storage temperature       -20 80 °C (4 176 °F)         Mechanical Specifications       Degree of protection       IP67       Storage temperature       -30 °G (-4 176 °F)<	licators/operating means			
Calle socket, M8, 3-pin, F         Cable socket, M8, 3-pin, F         Operating voltage       UB         10 %         No-load supply current       I0 %         Switching type       light/dark on         Signal output       1 PNP, short-circuit protected, reverse polarity protected, open collector         Switching current       max. 30 V DC         Switching frequency       f         Personse time       0.25 ms         Ambient conditions       20 60 °C (4 140 °F)         Machaical specifications       20 80 °C (4 176 °F)         Mechanical specifications       35 g         Degree of protection       [P67         Compliance with standards and directive       35 g         Compliance with standards and directive       55 g         Standard conformity       FN 60947-5-2:2007         Yerovals and certificates       EN 60947-5-2:2007 <td>unction indicator</td> <td></td> <td>Cable socket, M8, 3-pin, PUR cable</td>	unction indicator		Cable socket, M8, 3-pin, PUR cable	
Operating voltage     UB     10 30 V DC       Ripple     10 %       No-load supply current     10 %       Switching type     light/dark on       Signal output     1 PNP, short-circuit protected, reverse polarity protected, open collector       Switching voltage     max. 30 V DC       Switching frequency     f       Switching frequency     f       Q - 2 Om B <sup>2</sup> C (-4 140 °F)       Storage temperature     -20 60 °C (-4 140 °F)       Storage temperature     -20 60 °C (-4 140 °F)       Material     P67       Connection     Material       Housing     PC       Optical face     plastic       Mass     35 g       Compliance with standards and directives       Yerovals and certificates	control elements		Cable socket, M8, 3-pin, PUR cable	
Operating voltage       0g       030 V DC         Ripple       10 %       Cable socket, M8, 3-pin, F         No-load supply current       lg       ≤ 30 mA         Output       Switching type       light/dark on         Switching type       light/dark on       other suitable accessories         Switching current       max. 30 V DC       www.pepperl-fuchs.com         Switching current       max. 100 mA       www.pepperl-fuchs.com         Switching current       max. 30 V DC       www.pepperl-fuchs.com         Switching current       wax. 30 V DC       www.pepperl-fuchs.com         Switching current       0.25 ms       www.pepperl-fuchs.com         Ambient conditions       -20 60 °C (-4 176 °F)       www.pepperl-fuchs.com         Material       -20 80 °C (-4 176 °F)       www.pepperl-fuchs.com         Mass       35 g	ectrical specifications			
No-load supply current       lo ≤ 30 mA       Other suitable accessories         Output       Signal output       1 PNP, short-circuit protected, reverse polarity protected, open collector       Switching voltage       max. 30 V DC         Switching voltage       max. 30 V DC       Switching current       max. 100 mA         Voltage drop       U_d       ≤ 2.4 V       Switching frequency       f         Switching frequency       f       2000 Hz       Switching frequency       f       2000 Hz         Response time       0.25 ms       0.25 ms       Switching specifications       Storage temperature       -20 60 °C (4 140 °F)         Storage temperature       -20 60 °C (4 176 °F)       Mechanical specifications       Storage temperature       -20 80 °C (4 176 °F)         Mechanical specifications       Material       Housing       PC       Optical face       plastic         Mass       35 g       Storage temperature       -20 80 °C (-4 176 °F)       Storage temperature       -20 80 °C (-4 176 °F)         Mechanical Specifications       Storage temperature       -20 80 °C (-4 176 °F)       Storage temperature       -20 80 °C (-4 176 °F)         Material       Topositical face       plastic       Storage temperature       -20 80 °C (-4 176 °F)	)perating voltage			
Output     Switching type     light/dark on     Signal output     1 PNP, short-circuit protected, reverse polarity protected, open collector     Switching voltage     max. 30 V DC       Switching voltage     max. 30 V DC     Switching output     1 and a collector       Switching outge     max. 100 mA     Switching frequency     f       Voltage drop     Ud     2 2.4 V     Switching frequency     f       Switching frequency     f     2000 Hz     Response time     0.25 ms       Ambient conditions     Ambient conditions     Ambient conditions     Material       Degree of protection     IP67     Connection     M8 connector, 3-pin       Material     PC     Optical face     plastic       Mass     35 g     So g     Compliance with standards and directives       Ves     Standard conformity     EN 60947-5-2:2007     Standard conformity       Product standard     EN 60947-5-2:2007     Standard conformity	lipple	10 %	Cable socket, M8, 3-pin, PUR cable	
Output       www.pepperl-fuchs.com         Switching type       light/dark on         Signal output       light/dark on         Switching output       nax. 30 V DC         Switching outage       max. 30 V DC         Switching outage       max. 30 V DC         Switching outage       max. 100 mA         Voltage drop       Ud       ≤2.4 V         Switching frequency       f       2000 Hz         Response time       0.25 ms         Ambient conditions          Ambient temperature       -20 60 °C (-4 140 °F)         Storage temperature       -20 80 °C (-4 176 °F)         Mechanical specifications          Degree of protection       IP67         Connection       M8 connector, 3-pin         Material          Housing       PC         Optical face       plastic         Mass       35 g         Compliance with standards and directive       Sin 600947-5-2:2007         Vec       EN 60947-5-2:2007         Broduct standard       EN 60947-5-2:2007         Product standard       EN 60947-5-2:2007         Broduct standard       EN 60947-5-2:2007         Broduct standard       EN 6	lo-load supply current	$I_0 \leq 30 \text{ mA}$	Other suitable accessories can be fo	
Switching type       light/dark on         Signal output       1 PNP, short-circuit protected, reverse polarity protected, open collector         Switching voltage       max. 30 V DC         Switching current       max. 100 mA         Voltage drop       U_d       ≤ 2.4 V         Switching frequency       f       2000 Hz         Response time       0.25 ms         Ambient conditions       -20 60 °C (-4 140 °F)         Storage temperature       -20 60 °C (-4 176 °F)         Mechanical specifications       -20 80 °C (-4 176 °F)         Degree of protection       IP67         Connection       M8 connector, 3-pin         Material	tput			
collectorcollectorSwitching voltagemax. 30 V DCSwitching currentmax. 100 mAVoltage dropUd≤ 2.4 VSwitching frequencyf2000 HzResponse time0.25 msAmbient conditions-20 60 °C (-4 140 °F)Ambient temperature-20 60 °C (-4 140 °F)Storage temperature-20 60 °C (-4 176 °F)Mechanical specificationsIP67ConnectorionM8 connector, 3-pinMaterial-HousingPCOptical faceplasticMass35 gStandard conformityEIN 60947-5-2:2007 IEC 60947-5-2:2007Product standardEIN 60947-5-2:2007 IEC 60947-5-2:2007	witching type	light/dark on		
Switching currentmax. 100 mAVoltage dropUd≤ 2.4 VSwitching frequencyf2000 HzResponse time0.25 msAmbient conditions-20 60 °C (-4 140 °F)Storage temperature-20 80 °C (-4 176 °F)Mechanical specifications-20 80 °C (-4 176 °F)Degree of protectionIP67ConnectionM8 connector, 3-pinMaterial-HousingPCOptical faceplasticMass35 gCompliance with standards and directi-vesEN 60947-5-2:2007Standard conformityEN 60947-5-2:2007Product standardEN 60947-5-2:2007Approvals and certificates-	lignal output			
Voltage dopUd d $\leq 2.4$ VSwitching frequencyf2000 HzResponse time0.25 msAmbient conditions-20 60 °C (-4 140 °F)Ambient temperature-20 80 °C (-4 176 °F)Mechanical specifications-20 80 °C (-4 176 °F)Degree of protectionIP67ConnectionMaconnector, 3-pinMaterial	witching voltage	max. 30 V DC		
Switching frequencyf2000 HzResponse time0.25 msAmbient conditionsAmbient temperature-20 60 °C (-4 140 °F)Storage temperature-20 80 °C (-4 176 °F)Mechanical specificationsDegree of protectionIP67ConnectionMa connector, 3-pinMaterial	witching current	max. 100 mA		
Response time0.25 msAmbient conditions	′oltage drop	$U_d \leq 2.4 V$		
Ambient conditionsAmbient temperature-20 60 °C (-4 140 °F)Storage temperature-20 80 °C (-4 176 °F)Mechanical specificationsDegree of protectionIP67ConnectionM8 connector, 3-pinMaterialIP67HousingPCOptical faceplasticMass35 gCompliance with standards and directivesStandard conformityEN 60947-5-2:2007 IEC 60947-5-2:2007Product standardEN 60947-5-2:2007Approvals and certificatesEN 60947-5-2:2007	witching frequency	f 2000 Hz		
Ambient temperature-20 60 °C (-4 140 °F)Storage temperature-20 80 °C (-4 176 °F)Mechanical specifications-20 80 °C (-4 176 °F)Degree of protectionIP67ConnectionM8 connector, 3-pinMaterial	lesponse time	0.25 ms		
Storage temperature-20 80 °C (-4 176 °F)Mechanical specificationsDegree of protectionIP67ConnectionM8 connector, 3-pinMaterialIP67HousingPCOptical faceplasticMass35 gCompliance with standards and directi- VesStandard conformityIP 0007-5-2:2007 IEC 60947-5-2:2007 IEC 60947-5-2:2007Approvals and certificatesImage: Standard certificates	bient conditions			
Mechanical specifications         Degree of protection       IP67         Connection       M8 connector, 3-pin         Material       IP67         Housing       PC         Optical face       plastic         Mass       35 g         Compliance with standards and directi- ves         Standard conformity       IP 60947-5-2:2007 IEC 60947-5-2:2007         Product standard       EN 60947-5-2:2007 IEC 60947-5-2:2007	mbient temperature	-20 60 °C (-4 140 °F)		
Degree of protectionIP67ConnectionM8 connector, 3-pinMaterialHousingPCOptical faceplasticMass35 gCompliance with standards and directi- vesStandard conformityProduct standardEN 60947-5-2:2007 IEC 60947-5-2:2007Approvals and certificates	storage temperature	-20 80 °C (-4 176 °F)		
Connection     M8 connector, 3-pin       Material     Image: Massime Connector, 3-pin       Housing     PC       Optical face     plastic       Mass     35 g       Compliance with standards and directives       Standard conformity       Product standard     EN 60947-5-2:2007 IEC 60947-5-2:2007       Approvals and certificates	chanical specifications			
Material       PC         Optical face       plastic         Mass       35 g         Compliance with standards and directi- ves         Standard conformity       Froduct standard         Product standard       EN 60947-5-2:2007 IEC 60947-5-2:2007         Approvals and certificates       Froduct standard	Jegree of protection	IP67		
Howing     PC       Optical face     plastic       Mass     35 g       Compliance with standards and directi- ves       Standard conformity	Connection	M8 connector, 3-pin		
Optical face     plastic       Mass     35 g       Compliance with standards and directi- ves     Standard conformity       Product standard     EN 60947-5-2:2007 IEC 60947-5-2:2007       Approvals and certificates	laterial			
Mass 35 g Compliance with standards and directi- ves Standard conformity Product standard EN 60947-5-2:2007 IEC 60947-5-2:2007 Approvals and certificates	Housing	PC		
Compliance with standards and directi- ves Standard conformity Product standard EN 60947-5-2:2007 IEC 60947-5-2:2007 Approvals and certificates	Optical face	plastic		
ves       Standard conformity       Product standard       EN 60947-5-2:2007 IEC 60947-5-2:2007       Approvals and certificates	lass	35 g		
Product standard EN 60947-5-2:2007 IEC 60947-5-2:2007 Approvals and certificates	-	irecti-	-	
IEC 60947-5-2:2007 Approvals and certificates	standard conformity			
	Product standard			
Protection class II	pprovals and certificates			
	Protection class	11		
UL approval cULus Listed, Class 2 Power Source "For use in NFPA 79 Applications only" Adapters providing field wiring means are available from the manufacturer. Refer to manufacturers information.	JL approval	"For use in NFPA 79 Applications only" Adapters providing field wiring means are available from the		

www.pepperl-fuchs.com

Germany: +49 621 776 4411 fa-info@de.pepperl-fuchs.com

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



2