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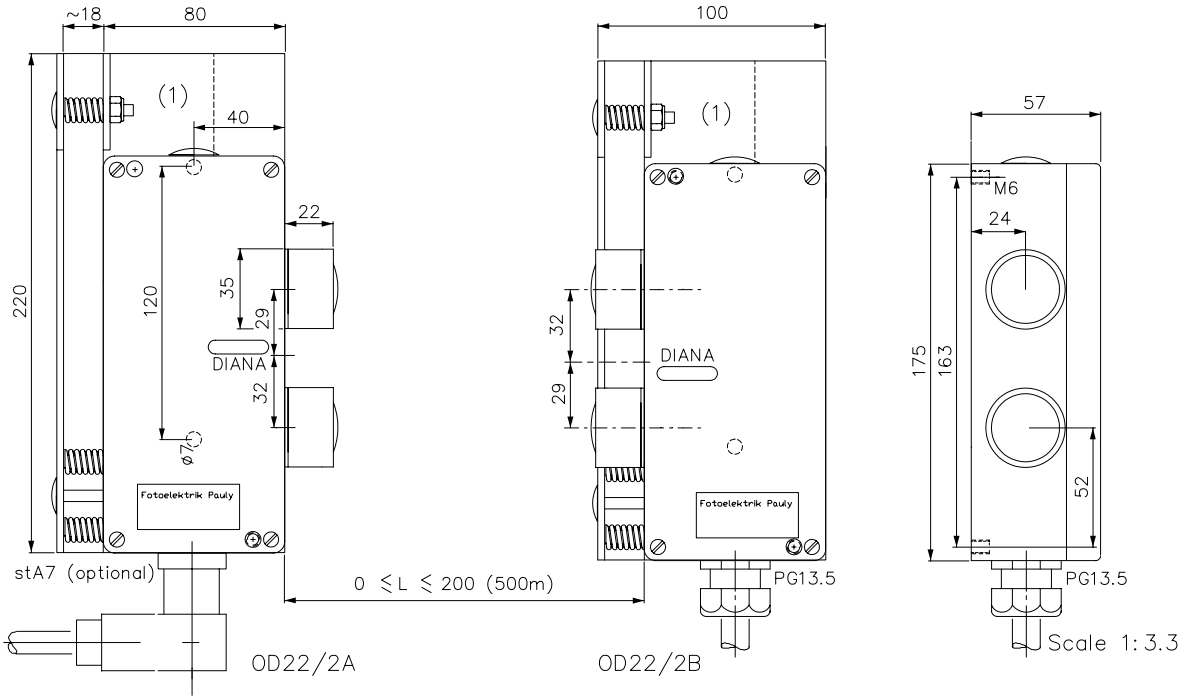
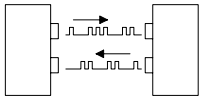
Optical Data Transmission OD22/2





0-200(500m)

Optical Data Transmission duplex

OD22/2

Order no.:

4713

Technical Characteristics:

Housing	Al-Cast
Weight	2x approx. 900g
Protection mode	IP65
Connection	2x7-pole terminal strip
Supply	24VDC/180mA DC
Data output term.3-4	Optocoupler connected
Residual voltage U_{CE}	< 2.7V at I_C=20mA
Data input term.5-6	Optocoupler 7-30mA
Data input voltage	3.3-4.5V for 7 ≤ I_E ≤ 11mA 4.5-6.6V for 11 ≤ I_E ≤ 30mA
Data rate b	0 ≤ b ≤ 20x10^{3}baud
Transmitting light	GaAs 880nm, invisible quartz crystall stabilized
Range	200m, Teleobjective(t): 500m
Steady light resistance	>80kLx
Level indictor	DIANA
Pollution warning outp.	from signal reserve ≤5, VK pnp open coll., 60mA. sc-protected
Operating temperature	-25*...+60°C**

*up to -40°C during on-period conditions

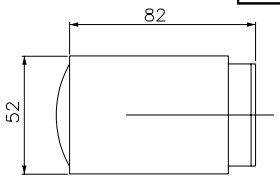
**higher temperatures can shorten live expectancy but only temperatures >120°C diminish function.

Special Design:

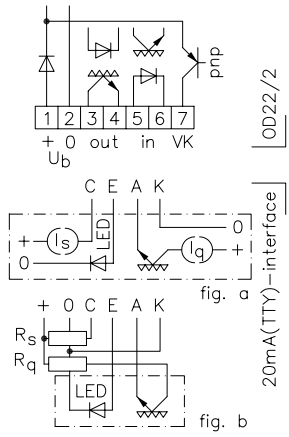
Interfaces	RS232 or RS422
Connection	6+1-pole plug stA7
Heat-protected optical system, pl	
Teleobjective	OD22/2, t
expanded beam spread angle	
reduced beam spread angle	
Red light transmitter	

L/m \ d/m	Normal- objectiv	Tele- objectiv
10	0.5	0.25
30	1.5	0.75
100	5	2.5
200	10	5
300	(15)	7.5
500	(25)	12.5

Light cone diameter "d" as a function of the distance "L".



Teleobjective, Scale 1:3.3



Notes on wiring:

The data input (term. 5-6) must be fed from a data source which supplies a data current Iq of a minimum 7 and maximum 30 mA. The data output (term. 3-4) supplies a switchable signal which is limited by the data sink (LED) of the switched-on interface (dot-dash line) to one Is of a maximum 30 mA (fig. a). * If the interface looks like that in fig. b, the resistors Rs & Rq must be looped in. The dimensioning is decided by the relevant parameters in the specifications.* One often finds interfaces which have a source as in fig. a and a sink as in fig. b.* The second terminal block located in the OD22/2 has wiring identical to that in the first and can be used for wiring with resistors and bridges.

E_4713 1.TXT

U_b: operating voltage OD22/2
I_q/I_s: control current source/sink
R_q/R_s: protective resistor source/sink

Accessories:

- Adjusting flange R27SH (1)
- Anti dust tubes
- Cooling water flange KW 27
- Diaphragms
- Optical filters

4713 DE (18.02.05 mj)
E_ 4713 1 14.04.05 tb
(09.10.96 tb)
(02.07.02 tb)