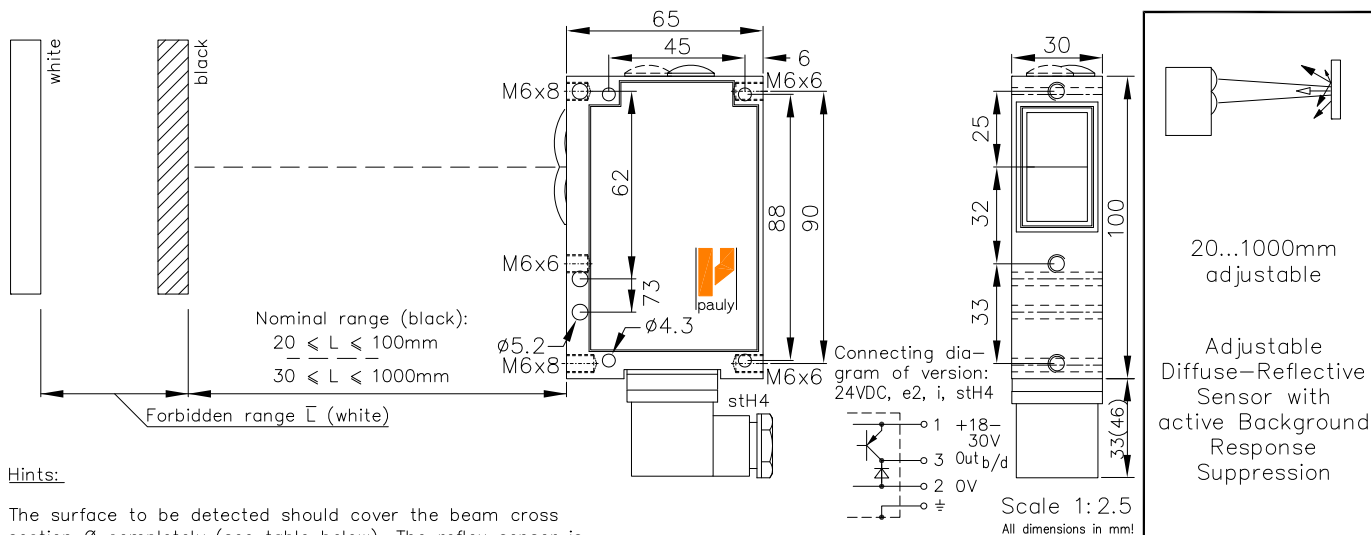


## Adjustable Diffuse-Reflective Sensor with active Background Response Suppression

### Type ET192/800



#### Hints:

The surface to be detected should cover the beam cross section  $\phi$  completely (see table below). The reflex sensor is adjusted by activating the screw located behind the PG1 cover. In a clockwise direction L becomes larger. The optimum setting is found by bringing a diffuse Reflective surface (paper) into the light path. Approximately in the center between the maximum desired detection distance L and the "forbidden" distance  $\bar{L}$  and then adjusting the reflex sensor so that it turns off just at this precise point. The "forbidden" distance  $\bar{L}$  are in general  $< L+5\%$ . Diffuse Reflective surfaces are themselves reliably recognizable under beam incidence angles which sharply deviate from 90°. On reflective surfaces the detection quality can be considerably impaired. However, reflective surfaces can still be recognized beyond the forbidden distance  $\bar{L}$ ; slightly tilting the detection helps. The ON (Ti) and OFF delay (Ta) is available on request. The delay time is increasable by adjusting the potentiometer in a clockwise direction. The potentiometer is located inside the housing. The adjustable time interval lies between 0 and approximately 3 seconds. Other time intervals are available on request: 1 second, 10 second and 20 second. DIANA (Digital ANALoge Anzeige -digital analog indicator) indicates approximately 20-fold levels above the response threshold. It is not necessary that all DIANA LEDs light up in order for a proper function of the reflex sensor! Beyond the switching range (green off), the DIANA may show the level under the switching threshold.

#### Technical characteristics:

Housing	Al-Cast
Weight	approx. 350g
Protection mode	IP65
Connection	6+1 pin Plug stH7
Supply	24VDC/60mA without load
Output	nnp 60mA s.c.-prot., e2
Signal mode	bright-/darkswitching selectable
Transmitter light	GaAs 880nm, invisible
Steady light Resist.	>80kLx
Interference Suppress.	Force synchronization
Access time	<12ms/switch transition
Switching rate	40/s
Switch indicator	LED green
Level indicator	4x LED red (DIANA, i)
Ambient temperatur	-25...+60°C

L/mm	$\bar{L}$ /mm	$\phi$ /mm
20 - 100	101	15
20 - 150	152	23
25 - 200	202	28
25 - 300	303	30
30 - 500	510	35
30 - 800	825	45
30 - 1000	1080	60

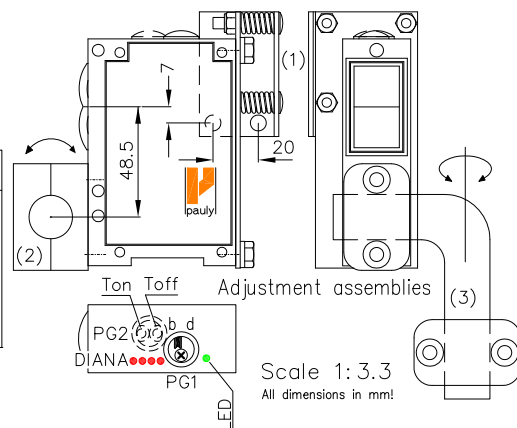
L: Working range on black  
 $\bar{L}$ : Blanking depth on white  
 $\phi$ : Light beam dia.  
 (only approx. values)

#### Accessories:

- Cooling water flange KW19
- Adjustment flange JF19H (1)
- Elbow tube adjustment JR19 (2&3)
- Heat shield & anti dust tube (K)JT19
- Diaphragms, Optical filters

#### Features:

- Connection: 4 pin plug stLU4, 4+1 pin Plug stA5, 6+1 pin Plug stA7, 4+1 wire no.-cable K4
- Supply: 230V, 115V, 42...48V, 24V AC
- Output: npn 60mA s.c.-prot., e3, Optocoupler 60V/50mA, e1, Relay 240VAC/5A, 120W/1200VA, 1xCh, R
- Access time: "q": <2ms/switch transition
- Switching rate: "q": 300/s, Relay 10/s
- Time delay: 0-10s, switching-on-off-delay, separately adjustable, z10
- If using cooling water flange, then milled wall, y
- Heat protected transducer system, pl



1268 DE (18.02.05 mi)  
 E-1268 1 (08.05.14 tb)  
 (15.04.96 tb) 14.05.14 tb  
 (15.01.03 gs)