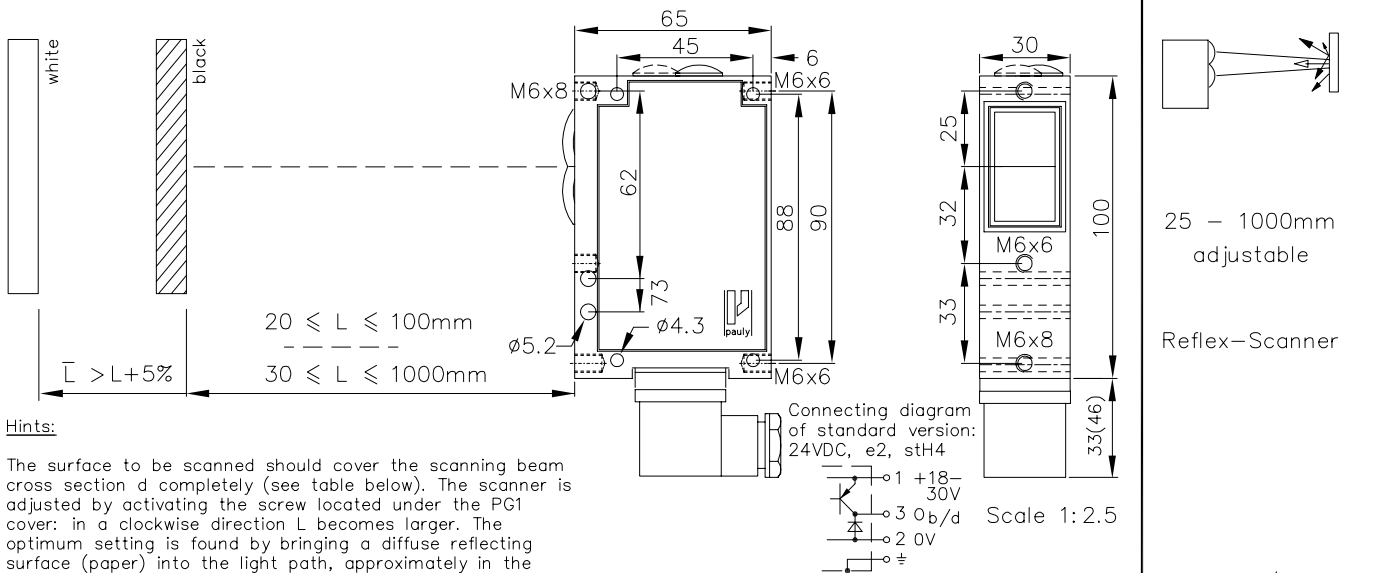


## Adjustable Reflex-Scanner with active Background Response Suppression

### Type ET 192/800



#### Hints:

The surface to be scanned should cover the scanning beam cross section  $d$  completely (see table below). The scanner is adjusted by activating the screw located under the PG1 cover: in a clockwise direction  $L$  becomes larger. The optimum setting is found by bringing a diffuse reflecting surface (paper) into the light path, approximately in the centre between the maximum desired scanning distance  $L$  and the "forbidden" distance  $\bar{L}$  and then adjusting the scanner so that it turns off just at this precise point. The blanking depths  $\bar{L}$  are in general  $< L+5\%$ . Diffuse reflecting surfaces are themselves reliably recognisable under scanning beam incidence angles which sharply deviate from  $90^\circ$ . On reflective surfaces the scanning quality can be considerably impaired. However, reflective surfaces can still be recognised beyond the forbidden distance  $\bar{L}$ ; slightly tilting the scanner helps.

The ON ( $T_i$ ) and OFF delay ( $T_a$ ) is available on request. The delay times are increased by adjusting in a clockwise direction the potentiometer which is located in the housing. The adjustable time interval lies between 0 and approx. 10 seconds. Other time intervals are available on request: 1 sec., 3 sec and 20 sec..

DIANA (Digital ANALoge Anzeige - digital analog indicator) indicates approximately 20-fold to 25-fold levels above the response threshold. It is not necessary for all DIANA LEDs to light up in order for the light barrier to function perfectly! Beyond the switching range (green off), the DIANA may show the level under the switching threshold.

\*E\_1202 1.TXT\*

#### Technical Characteristics:

|                         |                                  |
|-------------------------|----------------------------------|
| Housing                 | Al-Cast                          |
| Weight                  | approx. 350g                     |
| Protection mode         | IP65                             |
| Connection              | 3+1 pin Plug stH4                |
| Supply                  | 24VDC/50mA without load          |
| Output                  | pnp 60mA s.c.-prot., e2          |
| Signal mode             | bright-/darkswitching selectable |
| Transmitter light       | LED 880, invisible               |
| Steady light resistance | >80kLx                           |
| Interference suppress.  | forced synchronization           |
| Access time             | <12ms/switch transition          |
| Switching frequency     | 40/s, Relay: 10/s                |
| Switch indicator        | LED                              |
| Ambient temperatur      | -25...+60°C                      |

#### Accessories:

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

#### Options:

|            |  |
|------------|--|
| Connection | 4 pin Plug stLU4<br>4+1 pin Plug stA5<br>6+1 pin Plug stA7<br>6+1 pin Plug stH7<br>3+1 wire no.-cable K4<br>2x3 wire no.-cable 2K3 |
| Supply     | 230V, 115V, 42...48V<br>24V AC<br>24...230VDC  |
| Output     | nnp 60mA s.c.-prot., e3<br>Optocoupler 60V/50mA, e1<br>Relay 240VAC/5A, 120W/1200VA, 1xCh, R<br>also: 2xe2/2xe3 or antival. e4/e5  |

Access time "q": <2ms/switch transition  
Switching frequency "q": 300/s, Relay 10/s  
Time delay 0-10s, switching-on-off-delay, separately adjustable, z10

Level indicator DIANA, i  
Heat-protected optical system, pl  
If using cooling water flange, then milled wall, y

| L /mm     | $\bar{L}$ /mm | d /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  
L: Blanking depth on white  
d: Light beam dia.  
(only approx. values)

