

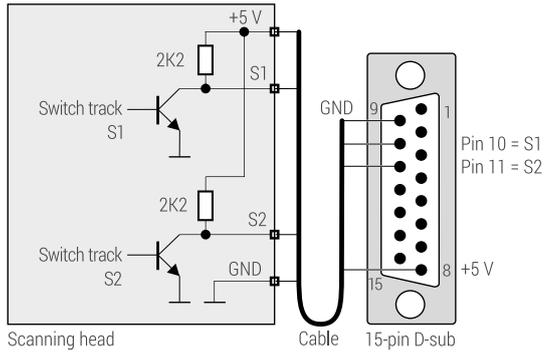
## SWITCH SIGNAL OUTPUT

For individual special functions there are two additional switch tracks on the glass scale/metal tape.  
The switching point position can be chosen by the user by placing self-adhesive covering tapes.

For version with selectable reference mark there is just one switch signal available.  
The second track of this version is used to select the reference mark.  
This feature makes the selection of the reference mark position, by the user, very easy.

### VERSION H

TTL output (active high)

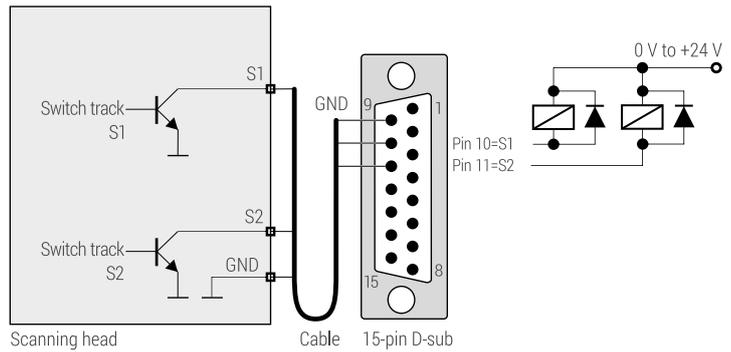


S1, S2 = TTL output  
 $I_{SOURCE} = 1 \text{ mA}$  (high level  $> 2 \text{ V}$ )  
 $I_{SINK} = 20 \text{ mA}$  (low level  $< 0.8 \text{ V}$ )

|                          |                           |
|--------------------------|---------------------------|
| Chrome / Gold reflective | Cover tape non reflective |
| LOW                      | HIGH                      |

### VERSION Z

Open collector output (active high impedance)

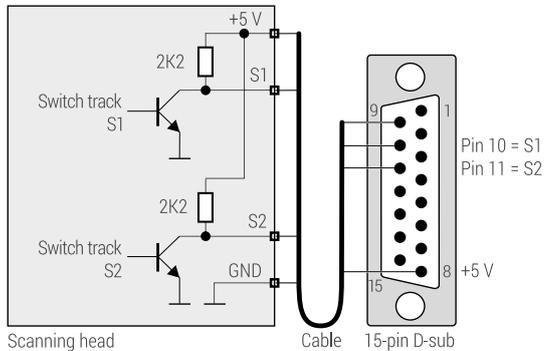


S1, S2 = open collector output  
 $I_{SINK} = 20 \text{ mA}$  (low level  $< 0.8 \text{ V}$ )

|                          |                           |
|--------------------------|---------------------------|
| Chrome / Gold reflective | Cover tape non reflective |
| LOW                      | HIGH IMPEDANCE            |

### VERSION L

TTL output (active low)

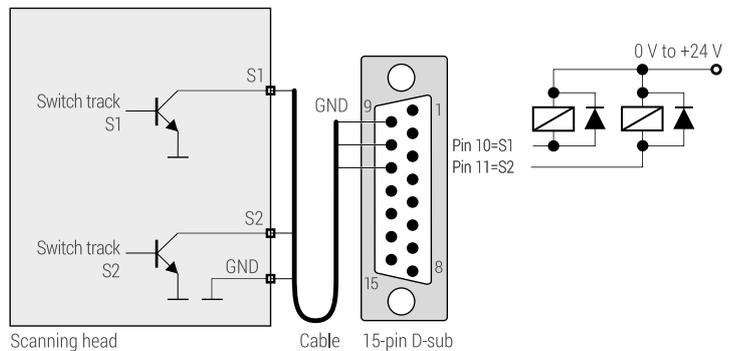


S1, S2 = TTL output  
 $I_{SOURCE} = 1 \text{ mA}$  (high level  $> 2 \text{ V}$ )  
 $I_{SINK} = 20 \text{ mA}$  (low level  $< 0.8 \text{ V}$ )

|                          |                           |
|--------------------------|---------------------------|
| Chrome / Gold reflective | Cover tape non reflective |
| HIGH                     | LOW                       |

### VERSION C

open collector output (active low)

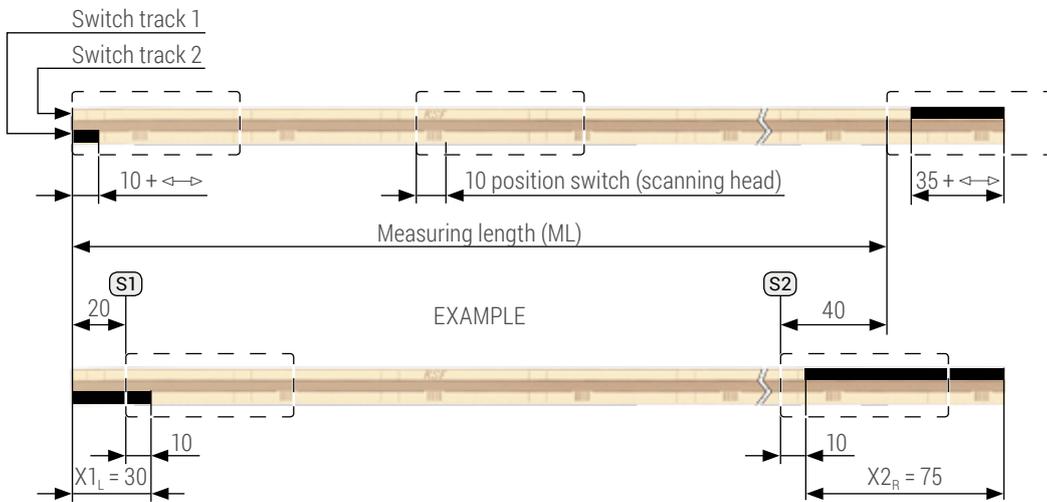


S1, S2 = open collector output  
 $I_{SINK} = 20 \text{ mA}$  (low level  $< 0.8 \text{ V}$ )

|                          |                           |
|--------------------------|---------------------------|
| Chrome / Gold reflective | Cover tape non reflective |
| HIGH IMPEDANCE           | LOW                       |

## SWITCH TRACKS

### POSITIONING OF THE ACTIVATION TAPES



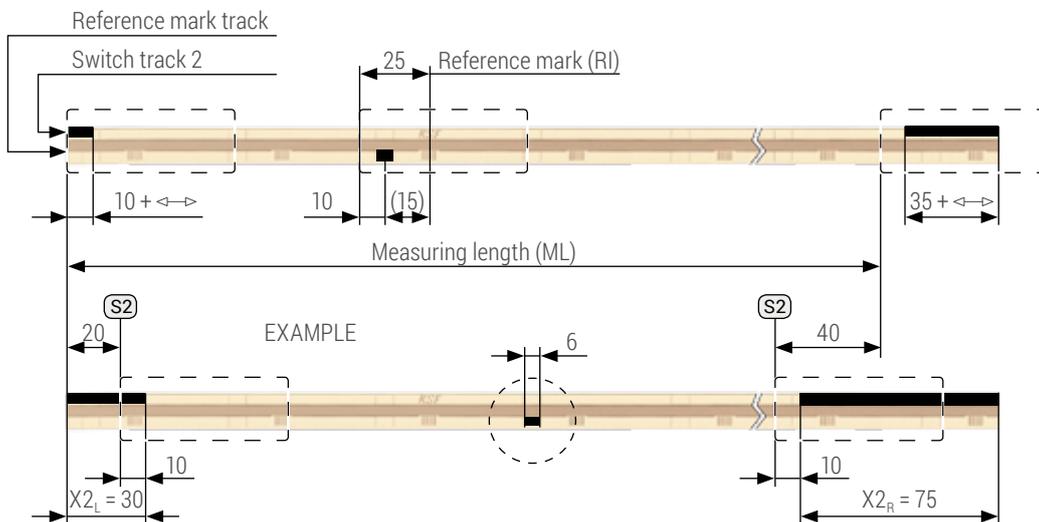
S1 = Switch point signal S1 from beginning of ML  
 $X_{1L}$  = Activation tape length  
 $X_{1L} = S1 + 10$

S2 = Switch point signal S2 before end of ML  
 $X_{2R}$  = Activation tape length  
 $X_{2R} = S2 + 35$

#### EXAMPLE

S1: 20 mm from beginning of ML     $X_{1L} = 30$  mm  
 S2: 40 mm before end of ML         $X_{2R} = 75$  mm

### REFERENCE MARK (RI)-SELECTION AND POSITIONING OF THE ACTIVATION TAPES



S2 = Switch point signal S1 from beginning of ML  
 $X_{2L}$  = Activation tape length  
 $X_{2L} = S2 + 10$

S2 = Switch point signal S2 before end of ML  
 $X_{2R}$  = Activation tape length  
 $X_{2R} = S2 + 35$

#### EXAMPLE

S2: 20 mm from beginning of ML     $X_{2L} = 30$  mm  
 S2: 40 mm before end of ML         $X_{2R} = 75$  mm

Within the measuring length any RI-position is possible - additional reference marks can be selected at a distance of 50 mm.

