



## Transistor Amplifier

Series - NPN  
Series - PNP

- For connection to NAMUR - Sensors of Series 30 and 40
- Not permitted for use in Ex area

Sensor operating voltage  $U_s \leq 6 \text{ V DC}$   
Operating current  $I_s = 1 \dots 3 \text{ mA}$



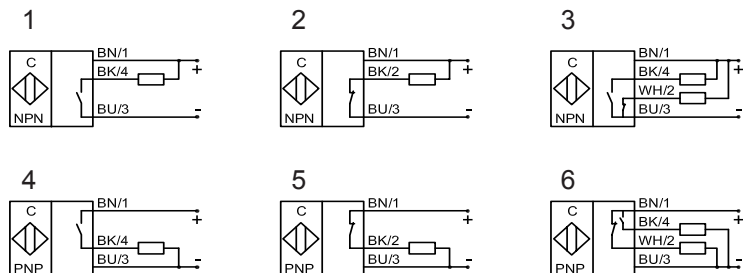
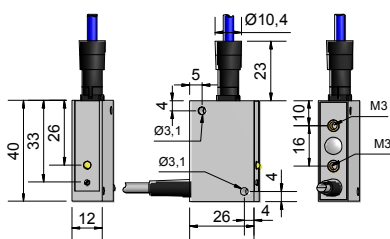
Plug pin connection  
View: soldering side

Certificate:



### Technical data

Electrical version	4-wire DC
Output	Antivalent (NO + NC)
<b>Type NPN</b>	<b>TS-120-NPN-A</b>
<b>Art.-No.</b>	<b>500 150</b>
Connection diagram No.	3
<b>Type PNP</b>	<b>TS-120-PNP-A</b>
<b>Art.-No.</b>	<b>500 350</b>
Connection diagram No.	6
Operating voltage ( $U_B$ )	10...35 V DC
Output current max. ( $I_o$ )	2 x 250 mA
Load current min.	-
Voltage drop max. ( $U_d$ )	$\leq 2.0 \text{ V}$
Permitted residual ripple max.	10 %
No-load current ( $I_o$ )	Typ. 10 mA
Frequency of operating cycles max.	2 kHz (dependend on Sensor)
Permitted ambient temperature	-25...+70 °C
LED-display	Green / yellow
Protective circuit	Built-in
Degree of protection IEC 60529	IP 65
Norm	EN 60947-5-2
Connection cable	2 m, PVC, 4 x 0.14 mm <sup>2</sup>
Housing material	PA 6.6
Active surface	-
Lid	-



Made in Germany

All specifications are subject to change without notice. (07/2011)