

$\overline{U_{aS}}$: Störungssignal
Fault detection signal
 Signal de perturbation
 Segnale di malfunzionamento
 Señal de avería

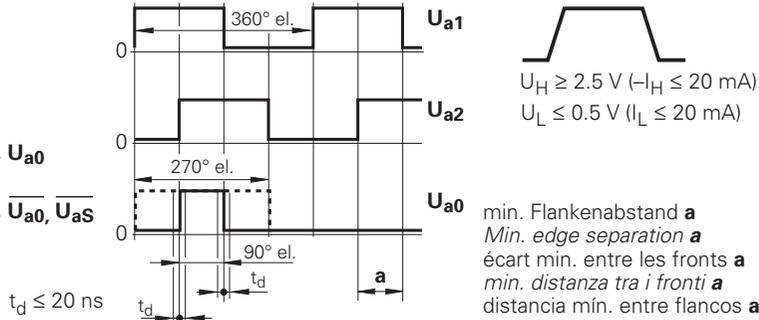
$\overline{U_{aS}} = \text{High}$: ✓

$\overline{U_{aS}} = \text{Low}$: ⚠

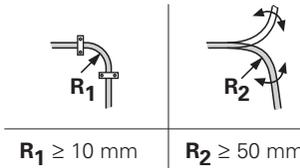
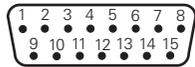
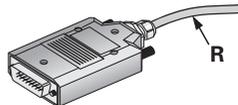
TTL



U_{a1}, U_{a2}, U_{a0}
 $\overline{U_{a1}}, \overline{U_{a2}}, \overline{U_{a0}}, \overline{U_{aS}}$

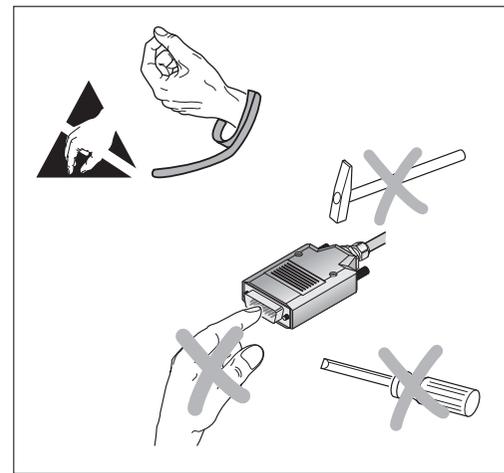


Außenschirm mit Gehäuse verbunden
External shield connected to housing
 Blindage extérieur connecté au boîtier
 Schermo del cavo collegato alla carcassa
 Apantallado exterior unido a la carcasa



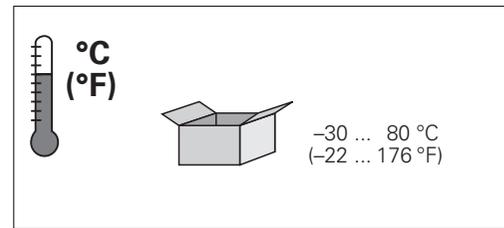
1	9	3	11	14	7	4	2	12	10	13	15	8	6	5
U_{a1}	$\overline{U_{a1}}$	U_{a2}	$\overline{U_{a2}}$	U_{a0}	$\overline{U_{a0}}$	U_p	0V	Sensor U_p	Sensor 0V	$\overline{U_{aS}}$	1)	LIMITS	LIMITS	/

1) Im Normalbetrieb mit 0 V der Folgeelektronik verbinden.
 Bei Anlegen von 5 V Umschaltung TTL/11 μA_{SS} .
In normal operation, connect with the 0 V line of the subsequent electronics.
Apply 5 V and switch to TTL/11 μA_{pp} .
 En fonctionnement normal, relier au 0 V de l'électronique consécutive.
 Avec application de 5 V commutation TTL/11 μA_{CC} .
In funzionamento normale collegare con 0 V alla elettronica successiva.
Per applicare 5 V commutazione TTL/11 μA_{SS} .
 En funcionamiento normal conectar con 0 V de la electrónica subsiguiente.
 Al aplicar 5 V conmutación TTL/11 μA_{pp} .



HEIDENHAIN

Montageanleitung
Mounting Instructions
 Instructions de montage
 Istruzioni di montaggio
 Instrucciones de montaje



APE 157
 APE 164
 APE 371

5/2012



Achtung: Die Montage und Inbetriebnahme ist von einer qualifizierten Fachkraft unter Beachtung der örtlichen Sicherheitsvorschriften vorzunehmen.
 Die Steckverbindung darf nur spannungsfrei verbunden oder gelöst werden.

Note: *Mounting and commissioning is to be conducted by a qualified specialist under compliance with local safety regulations.*
Do not engage or disengage any connections while under power.

Attention: Le montage et la mise en service doivent être réalisés par un spécialiste qualifié en électricité et mécanique de précision dans le respect des règles de sécurité locales.
 Le connecteur ne doit être branché ou débranché que hors tension.

Attenzione: *far eseguire montaggio e messa in servizio da un tecnico specializzato in impianti elettrici e meccanica di precisione in ottemperanza alle disposizioni di sicurezza locali.*
Collegare o staccare i collegamenti soltanto in assenza di tensione.

Atención: El montaje y la puesta en marcha deben ser realizados por un especialista cualificado, observando las prescripciones locales de seguridad.
 Conectar o desconectar el conector sólo en ausencia de tensión.

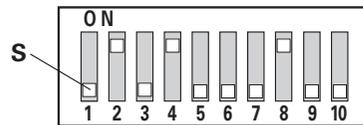
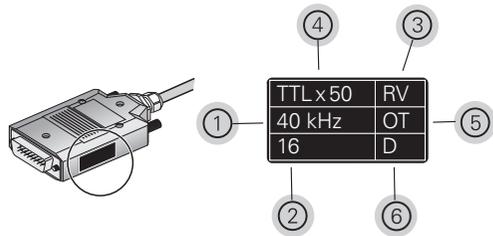
DR. JOHANNES HEIDENHAIN GmbH

Technical support, measuring systems ☎ +49 8669 31-3104 · E-mail: service.ms-support@heidenhain.de

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S1, S10 = reserviert (immer auf off)
Reserved (always set to off)
 Réservé (toujours sur off)
 Riservato (sempre su off)
 Reservado (siempre en off)

Referenzimpuls-Breite
Reference pulse width
 Largeur impulsion de référence
 Ampiezza impulso di riferimento
 Ancho del impulso de referencia

③
S2

R3: 270°

on

RV: 90°

off

min. Flankenabstand **a**
Min. edge separation a
 écart min. entre les fronts **a**
 min. distanza tra i fronti **a**
 distancia mín. entre flancos **a**

max. Eingangs-Frequenz, Toleranz ±5 %
Max. input frequency, tolerance ±5%
 fréquence d'entrée max., tolérance ±5 %
 max frequenza ingresso, Tolleranza ±5 %
 frecuencia máx. de entrada, tolerancia ±5 %

①

②		S6	S7	S8	①					
					TTL x 5	TTL x 10	TTL x 20	TTL x 25	TTL x 50	TTL x 100
16	0.100 µs	off	off	on	275 kHz	200 kHz	100 kHz	80 kHz	40 kHz	20 kHz
	0.220 µs	off	on	off	200 kHz	100 kHz	50 kHz	40 kHz	20 kHz	10 kHz
	0.345 µs	off	on	on	133 kHz	66 kHz	33 kHz	26 kHz	13 kHz	6.6 kHz
	0.465 µs	on	off	off	100 kHz	50 kHz	25 kHz	20 kHz	10 kHz	5 kHz
	0.585 µs	on	off	on	80 kHz	40 kHz	20 kHz	16 kHz	8 kHz	4 kHz
	0.950 µs	on	on	off	50 kHz	25 kHz	12.5 kHz	10 kHz	5 kHz	2.5 kHz
	1.925 µs	on	on	on	25 kHz	12.5 kHz	6.25 kHz	5 kHz	2.5 kHz	1.25 kHz
20	0.080 µs	off	off	on	275 kHz	250 kHz	125 kHz	100 kHz	50 kHz	25 kHz
	0.175 µs	off	on	off	250 kHz	125 kHz	62.5 kHz	50 kHz	25 kHz	12.50 kHz
	0.275 µs	off	on	on	166.67 kHz	83.33 kHz	41.67 kHz	33.33 kHz	16.67 kHz	8.33 kHz
	0.370 µs	on	off	off	125 kHz	62.5 kHz	31.25 kHz	25 kHz	12.50 kHz	6.25 kHz
	0.465 µs	on	off	on	100 kHz	50 kHz	25 kHz	20 kHz	10 kHz	5 kHz
	0.760 µs	on	on	off	62.5 kHz	31.25 kHz	15.63 kHz	12.5 kHz	6.25 kHz	3.13 kHz
	1.540 µs	on	on	on	31.25 kHz	15.63 kHz	7.81 kHz	6.25 kHz	3.13 kHz	1.56 kHz
16.384	0.095 µs	off	off	on	/	/	/	/	40.9 kHz	20.4 kHz

Interpolation <i>Interpolation</i> Interpolazione Interpolación	④	
	S3	S4
TTL x 5	off	off
TTL x 10	off	on
TTL x 20	off	off
TTL x 25	off	on
TTL x 50	on	off
TTL x 100	on	on

⑤	S5
U_{a1}, U_{a1}, U_{a2}, U_{a2}, U_{aS} = low	on
MT: hochohmig (Three State) <i>High impedance (three-state)</i> à haute impédance (tristate) alta impedenza (tristate) alta impedancia (Three State)	on
OT: nicht hochohmig <i>Low impedance</i> à basse impédance bassa impedenza sin alta impedancia	off

⑥	S9
Limits	on
D: aktiviert <i>Activated</i> activé attivo activado	on
K: nicht aktiviert <i>Not activated</i> non activé non attivato no activado	off

