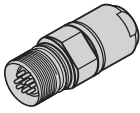
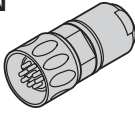



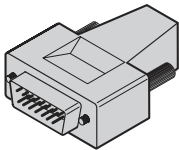
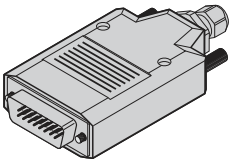





# Connection

12-pin HEIDENHAIN coupling					12-pin HEIDENHAIN connector							
												
Power supply					Incremental signals						Other signals	
	12	2	10	11	5	6	8	1	3	4	7	9
	$U_P$	Sensor 5 V	0 V	Sensor 0 V	$U_{a1}$	$\overline{U}_{a1}$	$U_{a2}$	$\overline{U}_{a2}$	$U_{a0}$	$\overline{U}_{a0}$	$\overline{U}_{aS}$	<sup>1)</sup>
	● — ●		● — ●		A+	A-	B+	B-	R+	R-	L1 <sup>2)</sup>	L2 <sup>2)</sup>
	Brown/ Green	Blue	White/ Green	White	Brown	Green	Gray	Pink	Red	Black	Violet	Yellow

**Shield** is on housing;  $U_P$  = Power supply  
**Sensor:** The sensor line is connected internally to the respective power supply

<sup>1)</sup> Switchover TTL/11  $\mu$ App for PWT.  
<sup>2)</sup> Only with LIDA 48x;  
 Color assignment applies only to cable

15-pin D-sub connector					15-pin D-sub connector with integrated interface electronics									
														
Power supply					Incremental signals						Other signals			
	4	12	2	10	1	9	3	11	14	7	13	8	6	15
	$U_P$	Sensor 5 V	0 V	Sensor 0 V	$U_{a1}$	$\overline{U}_{a1}$	$U_{a2}$	$\overline{U}_{a2}$	$U_{a0}$	$\overline{U}_{a0}$	$\overline{U}_{aS}$	L1 <sup>2)</sup> H <sup>3)</sup>	L2 <sup>2)</sup> L <sup>3)</sup>	<sup>1)</sup>
	● — ●		● — ●		A+	A-	B+	B-	R+	R-	Vacant			Vacant
	Brown/ Green	Blue	White/ Green	White	Brown	Green	Gray	Pink	Red	Black	Violet	Green/ Black	Yellow/ Black	Yellow

**Shield** is on housing;  $U_P$  = Power supply  
**Sensor:** The sensor line is connected internally to the respective power supply

<sup>1)</sup> Switchover TTL/11  $\mu$ App for PWT.  
<sup>2)</sup> Only with LIDA 4xx;  
 Color assignment applies only to cable  
<sup>3)</sup> Only with LIF 481