



## TBi PP-TX

### Push-Pull welding torch

Compact and ergonomic handle

Powerful wire transport

TX quick-change system for torch neck

#### Rating

<b>TBi PP-TX 360</b>		4-12 m
Gas cooled	Mix:	260 A
60% (10 min.)	CO <sub>2</sub> :	310 A

<b>TBi PP-TX 411</b>		4-8 m	10 m	12 m
Water cooled	Mix:	350 A	350 A	330 A
100% (10 min.)	CO <sub>2</sub> :	400 A	360 A	330 A

<b>TBi PP-TX 511-CC</b>		4-8 m	10 m	12 m
2-circuit water cooling	Mix:	400 A	360 A	330 A
100% (10 min.)	CO <sub>2</sub> :	400 A	360 A	330 A

It is the recommended choice for aluminum and pulsed-arc welding.

Torch rating will be reduced when using pulsed-arc power sources.

#### Technical Data

Wire diameter	0.8 - 1.6 mm
Wire feed speed	approx. 2.5 to 18 m/min (depends on electrical connection of the torch)
Gas flow	16 l/min
Technical specification	according to IEC 60974-7
Weight with 1.5 m cable	2.65 kg
Connection	Euro-Central connector Other connectors are available upon request.



#### Options

- 2 potentiometers (each 10 kOhm). Other versions with 1, 2.2, 4.7 kOhm are available upon request.
- Connection via TBI Syntronic for even better feeding properties.

# TBi PP-TX

## Ordering information for torches

TBi PP-TX 360	without poti	2 potis (10 kOhm)
straight neck	185PB710_0*	185PB711_0*
40° bent	185PB720_0*	185PB721_0*

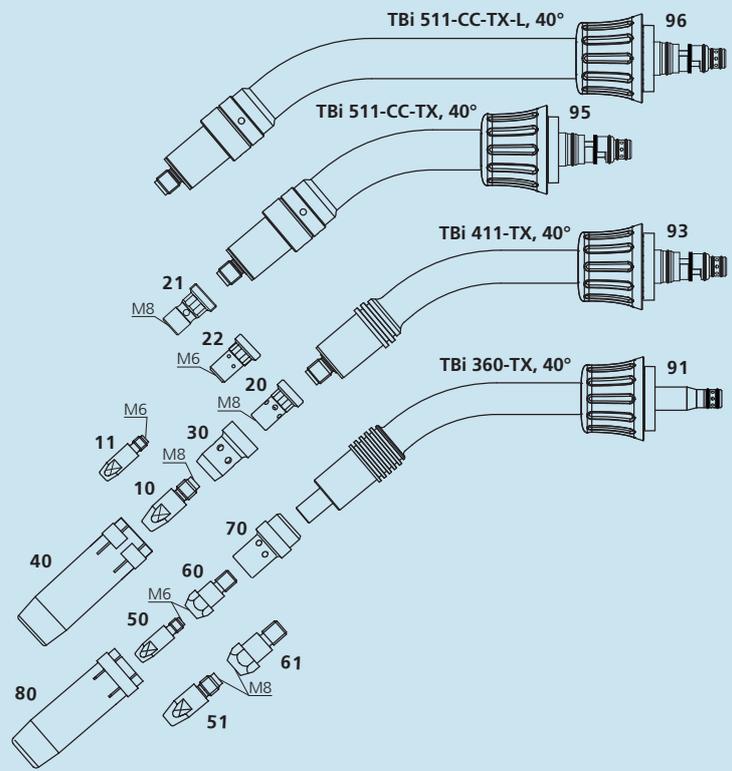
TBi PP-TX 411	without poti	2 potis (10 kOhm)
straight neck	195PB710_0*	195PB711_0*
40° bent	195PB720_0*	195PB721_0*

TBi PP-TX 511-CC	without poti	2 potis (10 kOhm)
straight neck	195PB730_0*	195PB731_0*
40° bent	195PB740_0*	195PB741_0*

\* At the blank, please insert 6, 8, A or C for a torch length of 6 m, 8 m, 10 m or 12 m.



The torch comes equipped for aluminum wire Ø 1.2 mm and with P/C board (Pos. 120). Please order other required parts separately.



Consumables TBi 411 / 511-CC

### Contact tips

Pos.	Material	Part no.
▶ 10	Alu, ECu, M8 x 30	341P__1262**
	ECu, M8 x 30	340P__1262**
	CuCrZr, M8 x 30	340P__3262**
▶ 11	Alu, ECu, M6 x 28	341P__1069**
	ECu, M6 x 28	340P__1069**
	CuCrZr, M6 x 28	340P__3069**

### Tip holder

Pos.	Description	Part no.
▶ 20	for contact tip M8 for contact tip M8, Ms 4 mm longer version	342P008033 342P008133
▶ 21	for contact tip M8, CuCrZr, for heavy duty use	342P008171
▶ 22	for contact tip M6	342P006033
	for contact tip M6, 4 mm longer version	342P006133

Consumables TBi 360

### Contact tips

Pos.	Material	Part no.
▶ 50	Alu, ECu, M6 x 28	341P__1069**
	ECu, M6 x 28	340P__1069**
	CuCrZr, M6 x 28	340P__3069**
▶ 51	Alu, ECu, M8 x 30	341P__1262**
	ECu, M8 x 30	340P__1262**
	CuCrZr, M8 x 30	340P__3262**

### Tip holder

Pos.	Description	Part no.
▶ 60	for contact tip M6 for contact tip M6, 4 mm longer version	342P006014 342P006114
▶ 61	for contact tip M8	342P008014
	for contact tip M8, 6 mm longer version	342P008114

\*\* At the blank, please insert suitable information for wire diameter, e.g. 08 for 0.8 mm.

## Torch necks

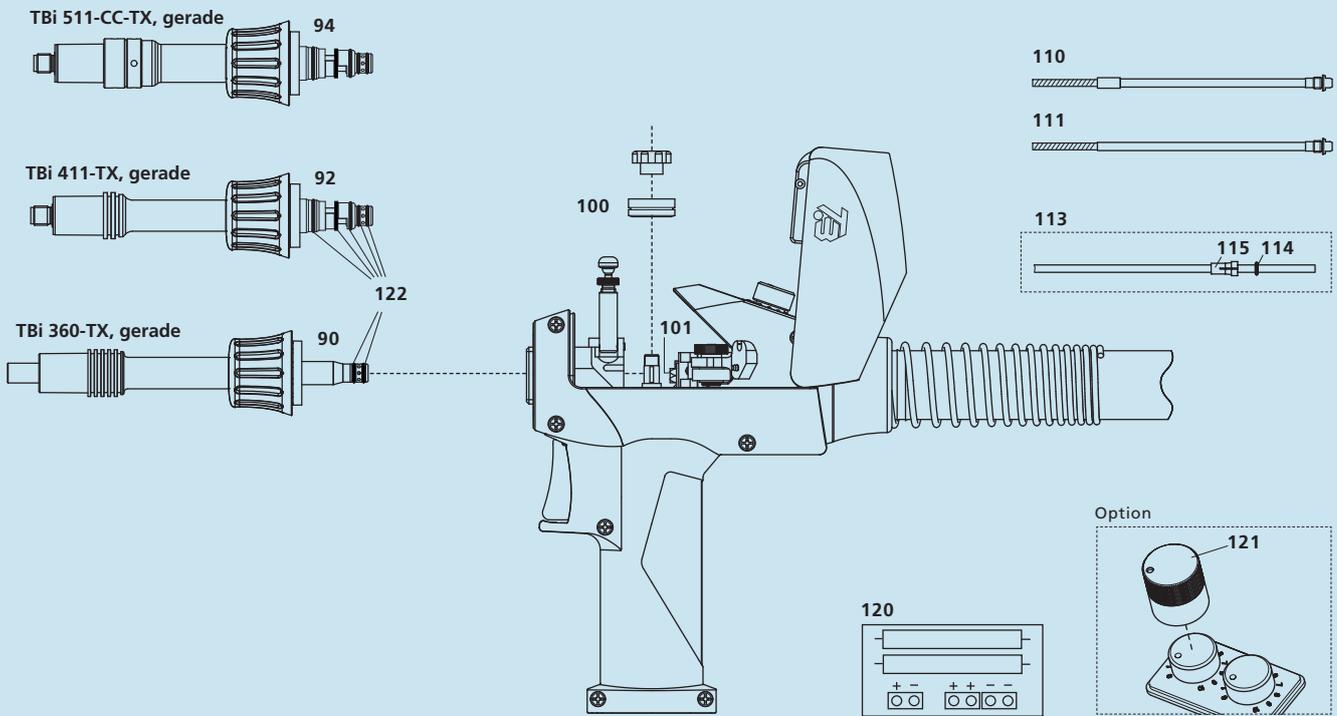
Pos.	Description	Part no.
90	Torch neck TBi 360-TX, straight	185P001001
91	Torch neck TBi 360-TX, 40° bent	185P001002
92	Torch neck TBi 411-TX, straight	195P001001
93	Torch neck TBi 411-TX, 40° bent	195P001002
94	Torch neck TBi 511-CC-TX, straight	195P001003 <b>I</b>
95	Torch neck TBi 511-CC-TX, 40° bent	195P001004 <b>I</b>
96	Torch neck TBi 511-CC-TX-L, 40° bent, long version	195P001005 <b>I</b>

## Spare parts and accessories

Pos.	Description	for wire	Part no.
▶ 100	<b>Feed roll for all wire types except AISi</b>	0.8 mm	185P101030
		0.9 mm	185P101034
		1.0 mm	185P101031
		<b>1.2 mm</b>	<b>185P101032</b>
		1.4 mm	185P101035
		1.6 mm	185P101033
		1.0 mm	185P101036
▶	<b>Feed roll only for AISi</b> (Please order AISi pressure roll separately: 185P101039)	1.2 mm	185P101037
		1.6 mm	185P101038
		101	Wire guide 0.8 – 1.6 mm
120	P/C board for connection to main drive motor	181P001016	
121	Extension for pot. knob (1 piece)	195P102086	
122	O-ring set for torches	195P102100	

▶ = Standard equipment

**I** = Includes tip holder M8, CuCrZr, part no. 342P008171

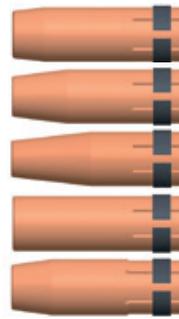


### Gas diffuser



Pos.	Description	Part no.
▶ 30	<b>thermoset, black, very robust</b> ceramic, white, extremely heat resistant	<b>130P002026</b> 130P002019

### Gas nozzle



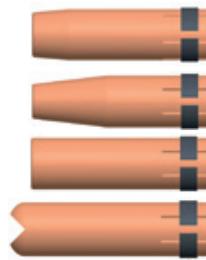
Pos.	Description	Part no.
▶ 40	<b>conical, NW 16 mm L= 75.5 mm</b>	<b>345P012030</b>
41	conical, NW 14 mm L= 75.5 mm	345P013030
42	conical, NW 12 mm only for M6, L= 75.5 mm	345P016030
43	zylindrisch, NW 20 mm L= 75.5 mm	345P011030
	conical, NW 16 mm Heavy Duty, L= 75.5 mm	345P012032

### Gas diffuser



Pos.	Description	Part no.
▶ 70	<b>thermoset, black, very robust</b> ceramic, white, extremely heat resistant	<b>114P002007</b> 114P002005

### Gas nozzle



Pos.	Description	Part no.
▶ 80	<b>conical, NW 16 mm L= 83.5 mm</b>	<b>345P012010</b>
81	conical, NW 12 mm L= 83.5 mm	345P013010
82	cylindrical, NW 20 mm L= 83.5 mm	345P011010
83	spot welding nozzle NW 20 mm, L= 90 mm	345P015010

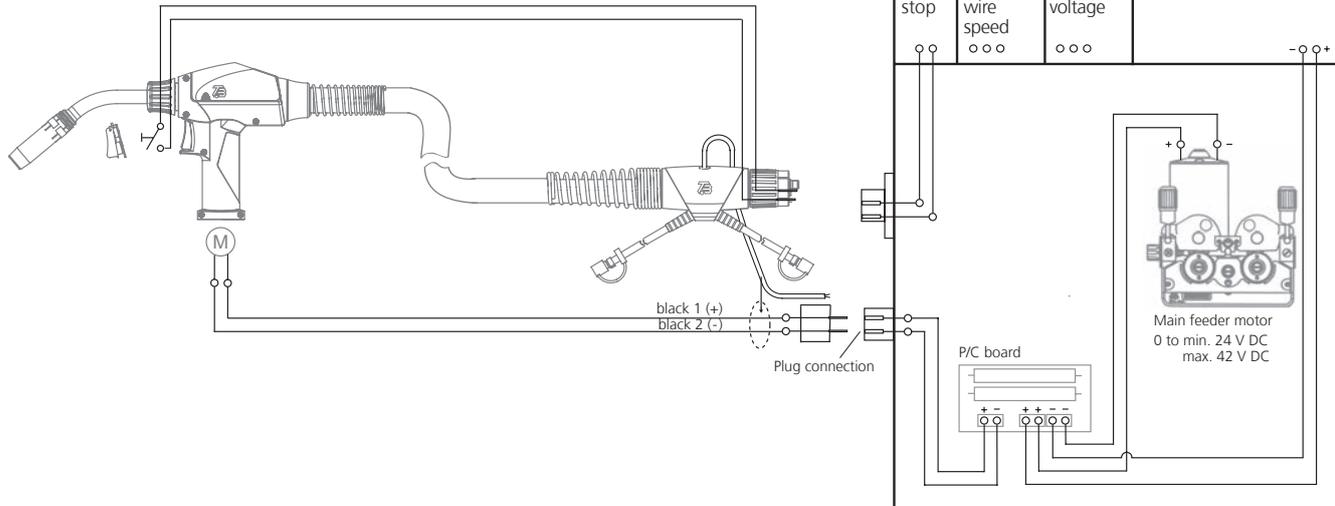
### Wire guide sets for torch neck

Pos.	Description	for wire	colour	Part no.
▶ 110	<b>PA bronze-liner for alu and stainless steel wire assembled, 320 mm</b>	0.8 - 1.0 mm		185P101012
		<b>1.2 mm</b>		<b>185P101013</b>
		1.6 mm		185P101014
111	Insulated liners for steel wire assembled, 320 mm	0.8 - 1.0 mm	blue	185P101027
		1.2 mm	red	185P101028
		1.6 mm	yellow	185P101023

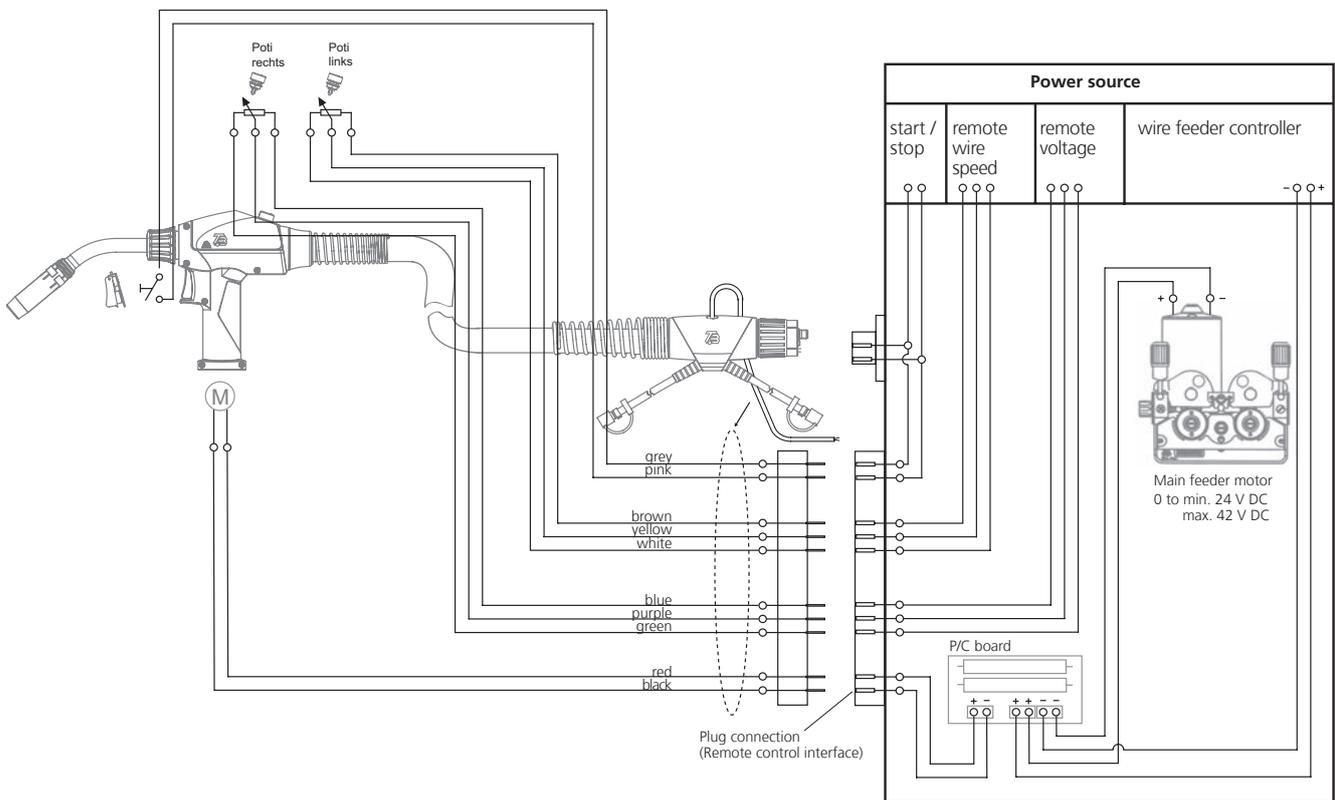
### Wire guides for cable assembly

Pos.	Description	for wire	length	Part no.
▶ 113	<b>PA liners, anthracite for all types of wire assembled</b>	0.8 - 1.6 mm	6.5 m	328P294765
			8.5 m	328P294785
			10.5 m	328P2947A5
			12.5 m	328P2947C5
114	O-ring 3.50x1.50 mm (for PTFE-liner)			365P150035
115	Collet for liner 4.7 mm			331P027047

## TBi PP-TX without potentiometers



## TBi PP-TX with potentiometers



For very high demands regarding the wire feeding quality, we recommend to install the optional TBi Syntronic. This unit allows to precisely adjust the wire feeding speed of main and push-pull motors over a wide range of wire feed speeds.