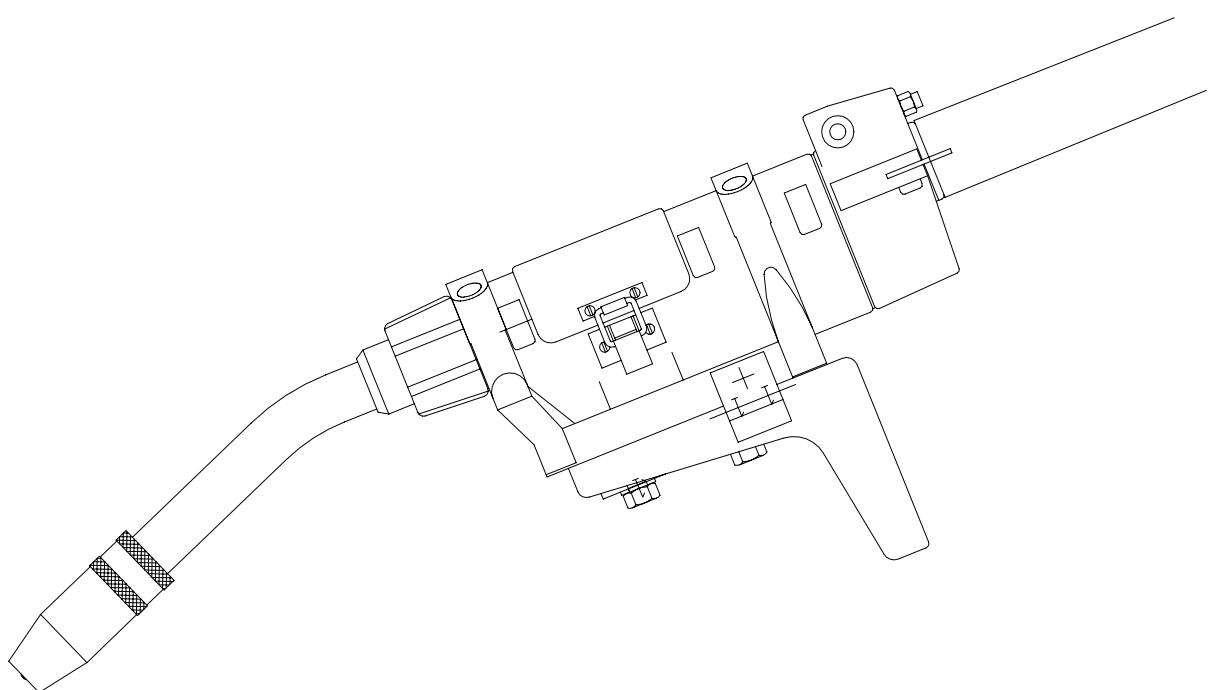


Instruction manual and Spare parts list

Welding torch PKI 250/500/630/300 PP S4C / S4Cplus / PIB

**504 887-102
2003-12**



ABB

The information in this document can be subject to change without prior notice and should not be regarded as an undertaking from ABB. ABB assumes no responsibility for errors that can appear in this document.

ABB is not responsible for damage incurred by the use of this document or software or hardware described in this document.

The document, or parts there of, may not be reproduced or copied without prior permission from ABB. It may neither be imparted to another nor otherwise used without authorisation. Infringement here of will be subject to action in accordance with applicable laws.

Further copies of this document can be obtained from ABB at current prices.

© ABB Automation Technologies AB

Article number: 504 887-102

Date: 2003-12

ABB Automation Technologies AB

Arc Welding Products

S-695 82 Laxå

Sweden

LIST OF CONTENTS

	Page
1 Technical Description.....	5
1.1 Technical data: Hose bundle	5
1.2 The PKH-S hose bundle	5
1.3 Technical data: Torch necks.....	6
1.4 Technical data: Torch holder.....	7
1.5 Technical data: Type 2000 / 2500 Safety bracket	7
2 Installation	9
2.1 Installation PushPull control unit.....	10
3 Instructions for the setting up of the Dinse PushPull Welding Gun with Arcitec.....	13
3.1 Setting up Procedure	13
4 Service and Maintenance.....	17
4.1 Replacing the contact tip for:	17
4.2 Replacing the wire liner for:	18
4.3 Fitting a new torch neck or straightening the torch neck.....	19
4.4 Visual inspection.....	20
4.5 Replacing the overload switch (safety bracket - option)	20
5 Selection tables	21
5.1 Contact tips	21
5.2 Wire liners.....	22
5.3 Gas nozzles	23
6 Reservdelsförteckning/Spare Parts List.....	25

1 Technical Description

The PKI welding torch is intended for mechanized gas/metal arc welding processes. It is water-cooled, and incorporates ducts for pneumatic spatter cleaning. The torch is equipped with an integrated wire feeder, controlled from the standard motor regulator via an additional circuit board. It has a quick-connection coupling for manual exchange of torch necks. The signal cables, cooling water, gas, air and wire liner are all run in the hose bundle.

1.1 Technical data: Hose bundle

The maximum load rating of the hose bundle is 500A at 100% duty cycle. The hose bundle is fitted with a pushbutton for wire feed when changing the filler wire. It is supplied with a wire liner for 1.0-1.2 mm Fe wires.

Maximum loading is limited by the type of torch neck fitted.

1.2 The PKH-S hose bundle

This is intended for fitting on the wire feed unit mounted on robot or freestanding behind the robot.

Length	1.33 m / 2.5 m / 3.0 m and 4.0 m
Connectors	EURO quick connectors for gas and filler wire Quick connectors for water and air 12-pole electrical for control signals

442375B02

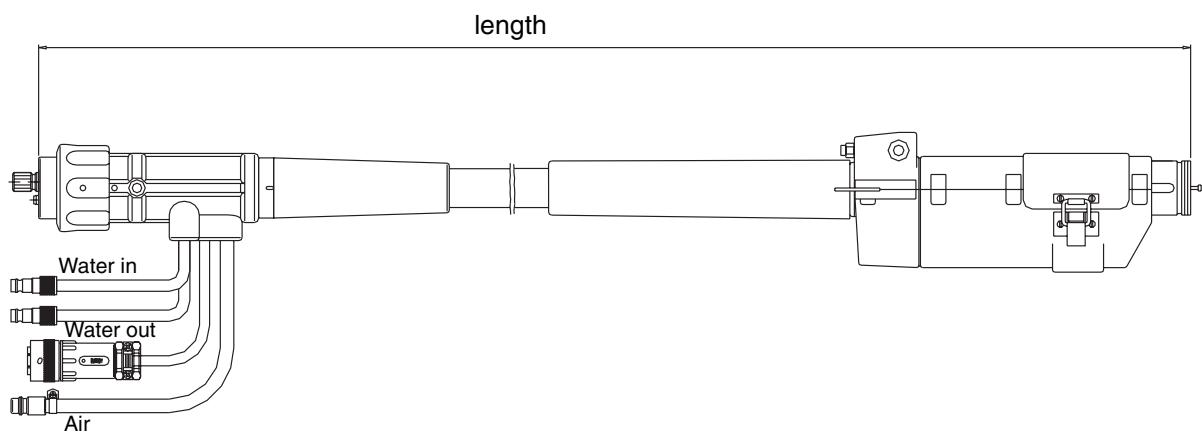
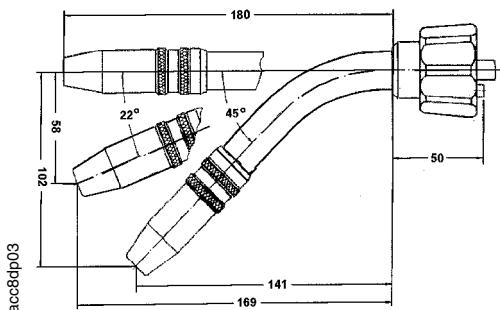


Figure 1 Hose bundle PKH-S.

1.3 Technical data: Torch necks

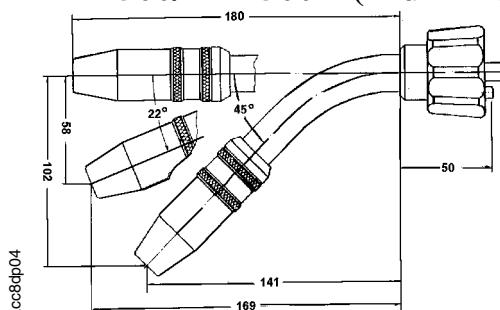
PKI 250

Maximum load | 250 A - 100% duty cycle

Wire diameter | 0.8, 0.9, 1.0, 1.2 mm

The contact tip is secured by a clamp nut.

Supplied with 12/23 gas nozzle, L=68 mm
(part.no 438 533-003)
and contact tip 1.0 mm
(part.no 438 533-032)

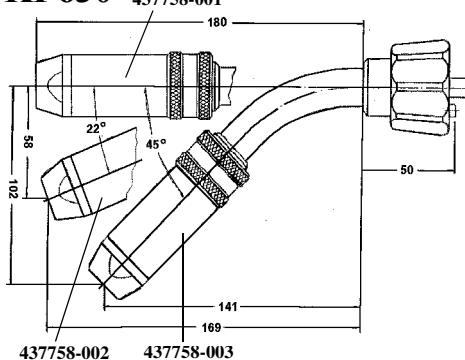
PKI 500/PKI 500A (Aluminium)

Maximum load | 400 A - 100% duty cycle

Wire diameter | 0.8, 0.9, 1.0, 1.2, 1.4, 1.6 mm

The contact tip is secured by a clamp nut.

PKI 500; the contact tip is screwed on.
Supplied with 15/28 gas nozzle, 76 mm long
part.no PKI 500; 441 528-001
part.no PKI 500A; 487 107-001
and contact tip 1.0 mm; (part.no 441 922-003)

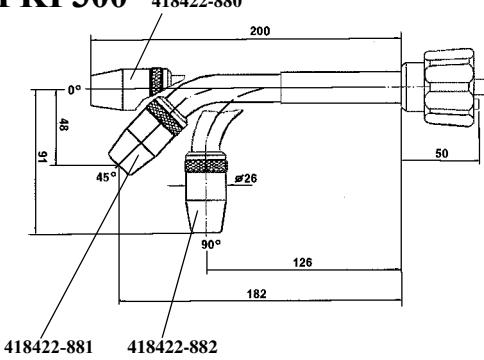
PKI 630

Maximum load | 500 A - 100% duty cycle

Wire diameter | 1.0, 1.2, 1.4, 1.6, 2.0, 2.4 mm

The contact tip is screwed on.

Supplied with 18/34 gas nozzle, L=32 mm
(part.no 438 633-002)
and contact tip 1.2 mm; (part.no 438 633-008)

PKI 300

Maximum load | 300 A - 100% duty cycle

Wire diameter | 0.8, 0.9, 1.0, 1.2, mm

The contact tip is screwed on.

Supplied with 15/26 gas nozzle, L=46 mm
(part.no 418 423-003)
and contact tip 1.0 mm; (part.no 418 424-003)

Maximum loading is reduced by about 25% when performing pulse welding.

The factors that determine this are the particular power source being used, the workpiece being welded and the shielding gas.

Special designs of torch necks can be supplied on request.

NB!

When deciding on the torch neck to be used, allowance must be made for the type of robot to be used.

1.4 Technical data: Torch holder

The holder for the PKI welding torches consists of two parts. The lower part is fixed, carrying an adjustable upper part that allows the correct TCP to be set.

The holder is fitted to the safety bracket.

(Note that the dimensions shown below are approximate, and do not apply to the PKI 300).

acc8dp07

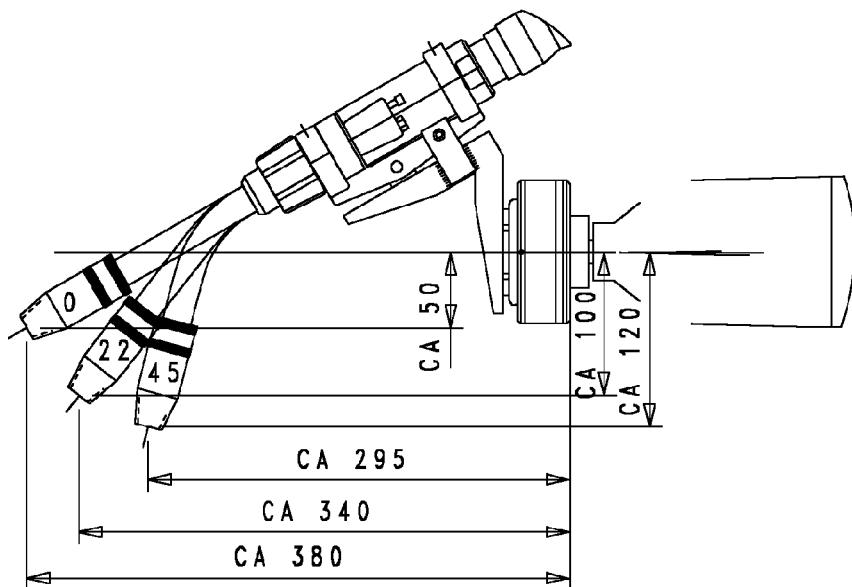


Figure 2 Torch holder

1.5 Technical data: Type 2000 / 2500 Safety bracket

The mounting plate fitted to the safety switch operates the switch in all load directions, thus preventing damage to tools or welding torches. Operation of the switch causes the robot to revert to standby mode. In the event of a collision or overload, the switch senses the situation and operates in a fraction of a second.

Repetitive accuracy is high, and the switch automatically resets itself to the operating position.

1.5.1 Recommend actions in the event of a stop:

- Press the RESET button on the wire feed to activate the system.
- Change position using the programming unit, i.e move away from the obstacle.
- Check the connectors and TCP setting.
- Restart production.

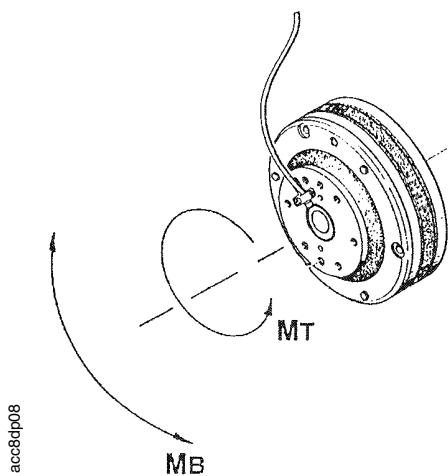
Technical Description

2000

Torsion operating torque MT=30Nm
Bending operating torque MB=20-25Nm

2500

Torsion operating torque MT=35Nm
Bending operating torque MB=25-30Nm



acc8dp08

2 Installation

- 1 Check that the correct wire liner and contact tip are fitted, as needed to suit the wire size and type to be used.
- 2 Fit the safety bracket and welding torch holder.

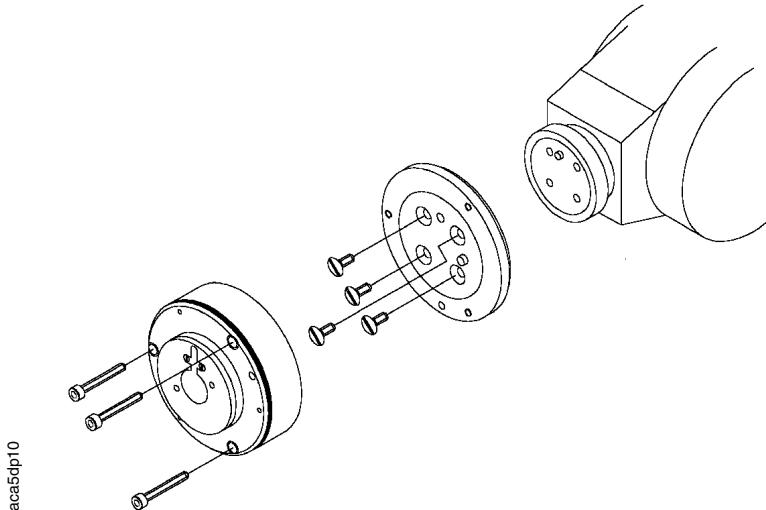


Figure 3

- 3 Fit the welding torch to the holder. When doing this, make sure that the holder is in the neutral position, in order to allow the TCP to be adjusted in all directions when changing the torch neck.

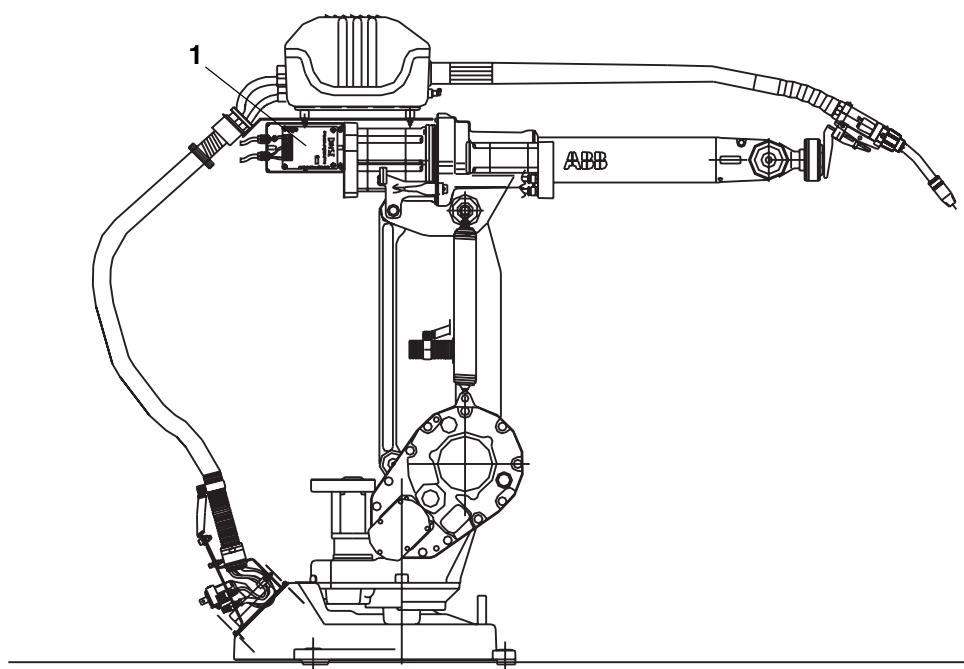
Connect the cable from the safety bracket to the welding torch and secure the hose bundle to its various supports.

- 4 Connect the hose bundle:
 - For PKH-S; connect the hose bundle to the wire feed unit.
- 5 Connect the cooling water hoses;
the blue hose to "WATER IN"
the red hose to "WATER OUT".
Check that cooling water is flowing at the return connection to the cooling unit (the red hose).
- 6 Connect the Burndy connector and the thick white hose for pneumatic spatter cleaning.
- 7 Connect the gas hose.
- 8 Cut off the end of the filler wire and file a round tip on it. Insert it in the wire liner and feed it through to the welding torch.

2.1 Installation PushPull control unit.

- 1 Assembly the control PC-board inside the wire feed unit.
- 2 Connect the wires according to circuit diagram, Figure 6
- 3 Control the rotation direction of the "pull" motor.
- 4 Adjust the speed of the forward motor according to the instruction "Setting up Procedure" on page 13.

Robot.Dinse-motor

*Figur 4 Robot with motor regulator PushPull*

1	Motor regulator, see also fig. on the following page
---	--

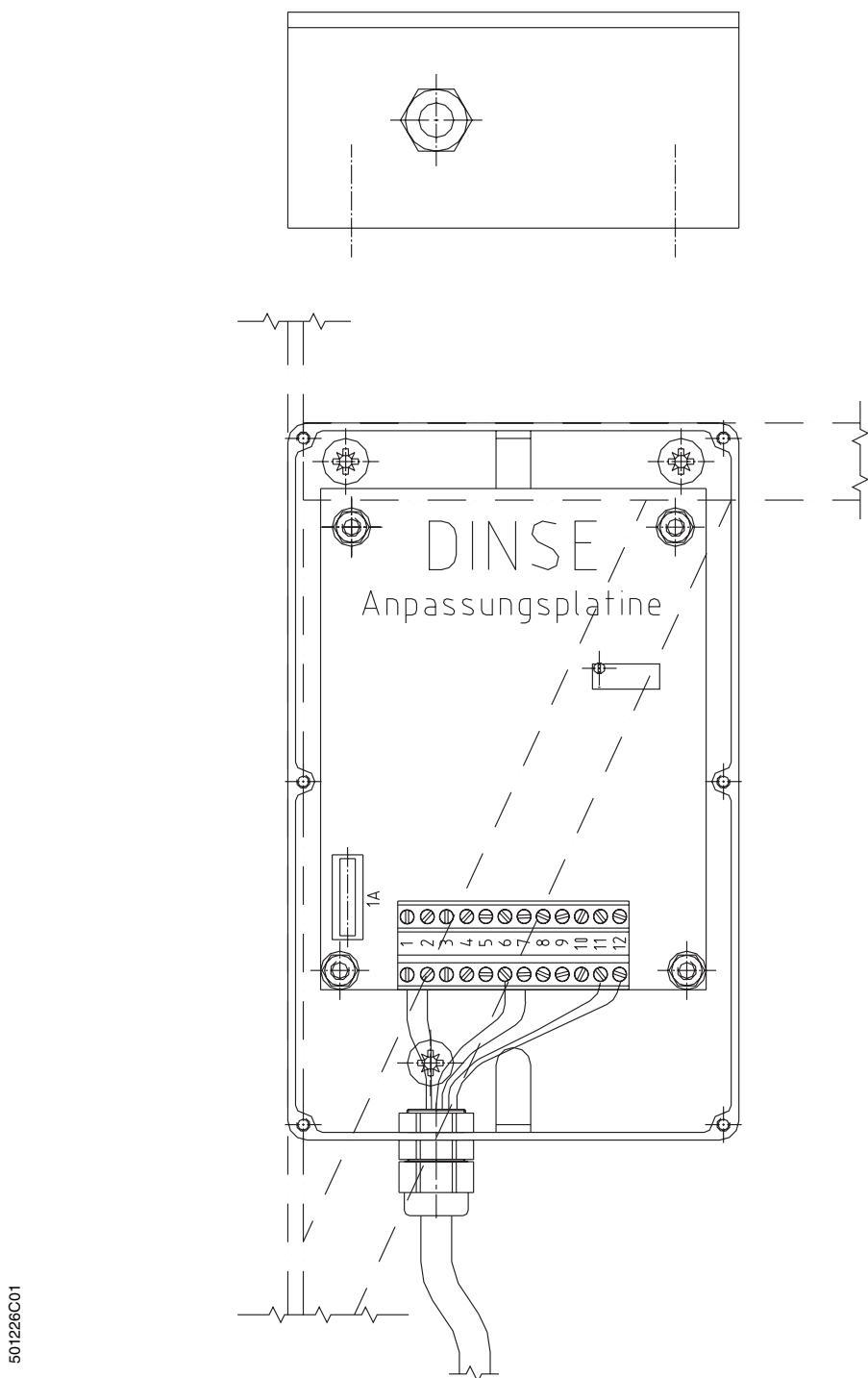


Figure 5 Motor regulator.

501226C01

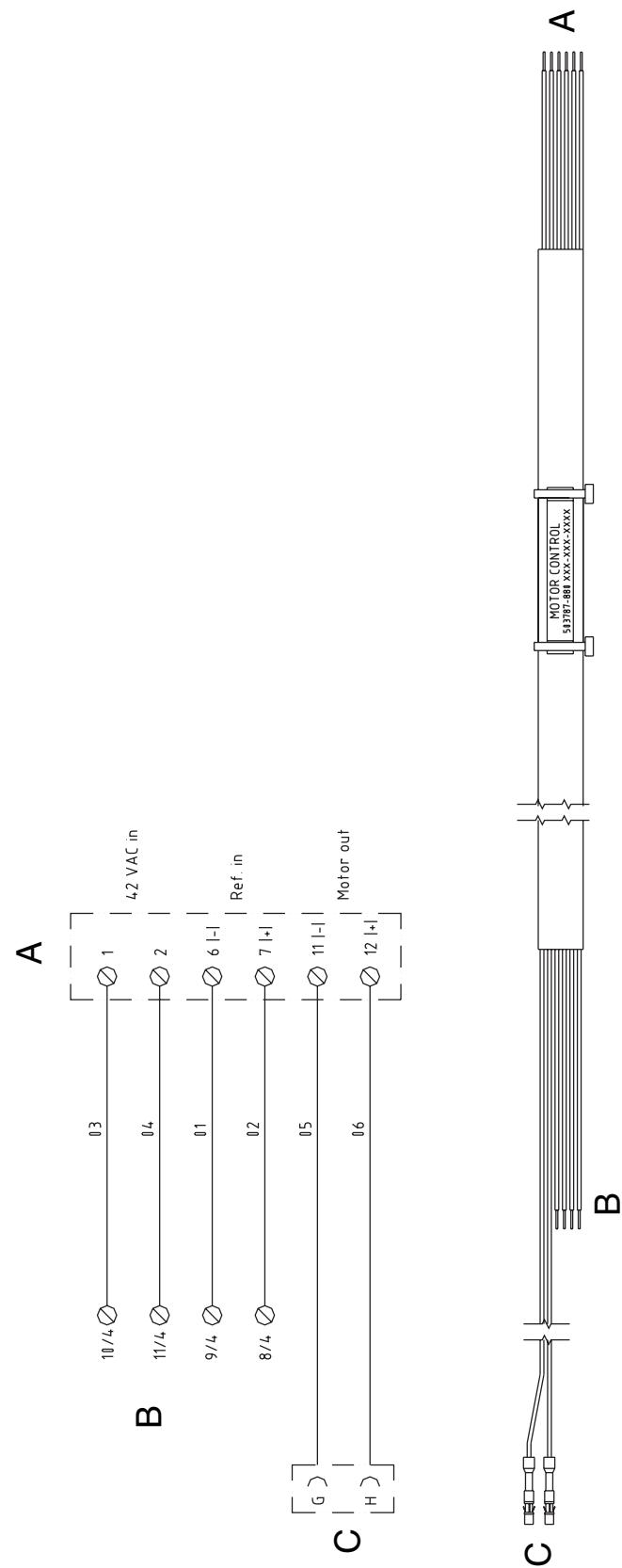


Figure 6 Control cable, DINSE PushPull wire feed unit.

3 Instructions for the setting up of the Dinse PushPull Welding Gun with Arcitec.

To ensure efficient operation and reliable wire feeding, it is imperative that the push-pull system is set up correctly. This set up procedure describes the method for setting the correct relationship between the push wire feeder (A3_4) and the Dinse pull wire feeder.

Failure to adhere to the correct procedure will result in the erratic wire feeding of Aluminium wires, resulting in poor quality welds, burnbacks to the contact tip and unacceptable down time of the robot system.

3.1 Setting up Procedure

- 1** Adjust the spool brake to a light resistance for a 4.0 M/min wire feed speed.
- 2** Fit a new liner in the hose bundle.
- 3** With the robot positioned to give smooth curves on the wire conduit and hose bundle, feed wire through the system.
- 4** Completely release the wire feed pressure roll in the pull gun, and swing it away from the wire so that there is no resistance to the wire.
- 5** Close the feed rolls in the A3_4 feeder and adjust the pressure to give consistent wire feeding.
- 6** Make a test routine in the robot, as follows:

```

Version: 1
Language: English

MODULE PUSH_PULL
  PROC calibration_pp0
    Set A0 aoFEED_REF, 0.133333;
    Set doFEED;
    WaitTime 15;
    Reset doFEED;
  ENDPROC
ENDMODULE

```

- 7** Remove the neck of the gun and cut the wire off level with the end of the gun body (removing the neck reduces some friction in the feeding of wire).

Instructions for the setting up of the Dinse PushPull Welding Gun with Arcitec.

- 8 Run the robot test routine once and cut the wire off level with the gun body. This should give you approximately 2 m of wire. Lay this wire on a flat surface so that it can be pulled out straight. This wire is now the master length of wire with which to make comparisons.

NOTE:

It is advisable to assist the wire feeding by manually turning the wire spool to relieve the tension caused by the spool brake.

It is advisable to repeat the whole process two or three times to confirm that the wire is feeding correctly.

- 9 Release the feed rolls in the A3_4 and swing the top feed rolls fully open.
- 10 Close the feed roll in the pull gun and adjust the pressure to give consistent wire feeding.
- 11 Cut the wire off level with the end of the gun body.
- 12 Run the robot test routine once and cut the wire off level with the gun body. Compare the length of the new wire against the master length of wire.

NOTE:

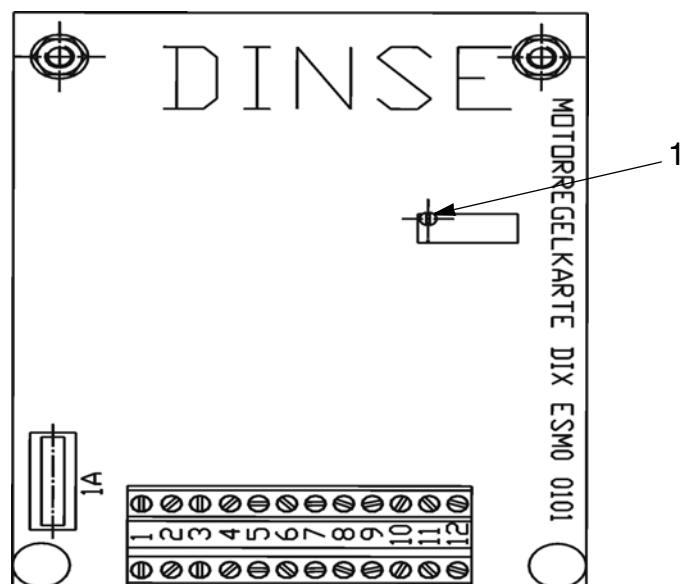
It is advisable to assist the small pull motor by manually turning the wire spool to relieve the tension caused by the spool brake.

- 13 This new length of wire should be approximately 200 mm longer than the master length. If not, then adjust the potentiometer (1, see picture for detail) on the control board and repeat steps 11 and 12 until it is the correct length.

NOTE:

It is advisable to repeat the whole process two or three times to confirm that the wire is feeding correctly.

501226.tif



Instructions for the setting up of the Dinse PushPull Welding Gun with Arcitec.

- 14** Adjust the spool brake for the wire feed rate to be used.
- 15** Close all feed rolls in the push and pull wire feeders, and adjust the pressure to the minimum required for consistent wire feeding.
- 16** The wire feed system is now ready for welding.

PKI 250/500/500A/630/300 PP

Instructions for the setting up of the Dinse PushPull Welding Gun with Arcitec.

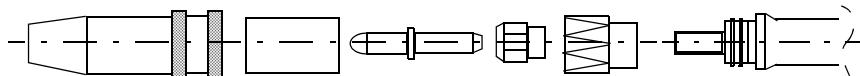
4 Service and Maintenance

Proper performance and reliability of the welding torch depend on correct use and maintenance. Use only genuine spare parts in the interest of minimum life cycle costs and maintenance of guarantee conditions.

4.1 Replacing the contact tip for:

PKI 250/500

- 1 Remove the gas nozzle and clean weld spatter off it.
- 2 Clean the internal and external threads.
- 3 Inspect the spatter protection in the gas nozzle and replace both parts if they are worn.
- 4 Remove the clamp nut, using the spanner supplied.
- 5 Remove the contact tip, the gas distributor. Replace them if worn.
- 6 Reassemble the gas distributor, the contact tip, the clamp nut and the gas nozzle with the spatter protection in the reverse order.

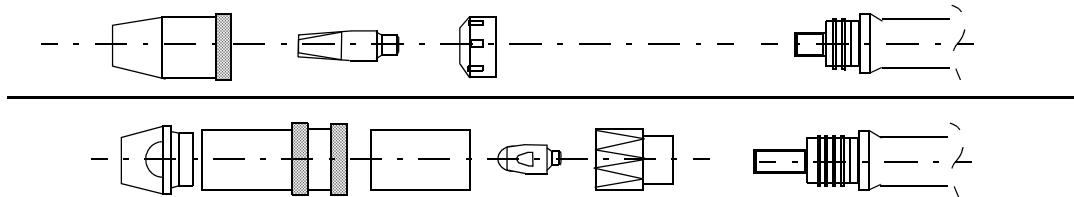


PKI 300/500A/630

- 1 Remove the gas nozzle and cooling jacket, clean weld spatter off.
- 2 Clean the internal and external threads.
- 3 Inspect the spatter protection (PKI 630) in the gas nozzle and replace both parts if they are worn.
- 4 Remove the contact tip and the gas distributor. Replace them if worn.
- 5 Reassemble the gas distributor, the contact tip and the gas nozzle (and the cooling jacket with the spatter protection) in the reverse order.

Do not use pliers or wrenches etc. when assembling the parts.

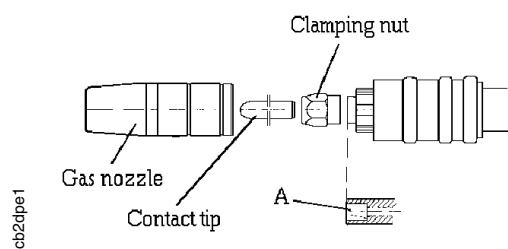
Inspect the gas nozzle and contact tip after every welding session, and replace consumable parts when they become worn.



4.2 Replacing the wire liner for:

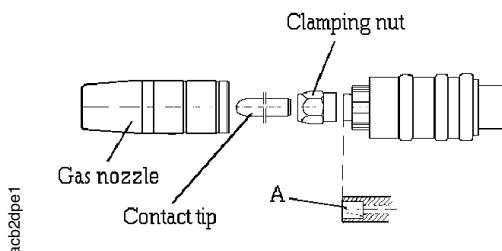
PKI 250/500

- 1** Remove from the wire feed unit:
 - For PKH-S; remove the hose bundle from the wire feed unit.
- 2** Remove the gas nozzle, the clamp nut and the contact tip.
- 3** Remove the end screw in the wire liner.
- 4** Pull out the wire liner.
- 5** Remove the clamping sleeve from the wire liner.
- 6** Fit the clamping sleeve to the new wire liner, as shown in the figure.
- 7** Insert the new wire liner in the hose bundle. Refit the end screw and cut off the end of the wire liner so that it reaches the front edge of the contact tube (A). File the cut end and round it off.
- 8** Refit the contact tip and clamp nut.



PKI 300/630

- 1 Remove from the wire feed unit:
 - For PKH-S; remove the hose bundle from the wire feed unit.
- 2 Remove the gas nozzle and the contact tip.
- 3 Remove the end screw in the wire liner.
- 4 Pull out the wire liner.
- 5 Remove the clamping sleeve from the wire liner.
- 6 Fit the clamping sleeve to the new wire liner, as shown in the figure.
- 7 Insert the new wire liner in the hose bundle. Refit the end screw and cut off the end of the wire liner so that it reaches the front edge of the contact tube (A). File the cut end and round it off.
- 8 Refit the contact tip and gas nozzle.



4.3 Fitting a new torch neck or straightening the torch neck

- 1 Slacken the nut (by hand) anti-clockwise, and pull out the torch neck.
- 2 Straighten the bent torch neck in the straightener.
- 3 Inspect the O-rings in the end connector and replace them if worn.
- 4 Replace the torch neck and refit the nut by hand.
- 5 Check the TCP. If necessary, correct it by adjusting the torch holder.

Do not use pliers or wrenches etc. when assembling the parts.

4.4 Visual inspection

- Inspect hoses, the support hose and support devices for signs of wear, and replace if necessary.
-

4.5 Replacing the overload switch (safety bracket - option)

- Remove the switch by slackening the grub screw beneath the sleeve opposite the cable entry. Remove the cable clamp and pull out the switch and cable.

Fit the new switch by pressing it home to its stop position, and then tighten the screw. (The operating load is set during manufacture, and cannot be adjusted.)

5 Selection tables

5.1 Contact tips

Select the required contact tip to suite the torch neck in use from the table below.
(See "Technical data: torch necks" for details of wire sizes).

If the filler wire binds, e.g. when welding with high welding data using argon or mixed gas, choose a tip having a larger diameter.

Contact tips for PKI 250

Contact tips for PKI 500

Wire size	Contact tip		Wire size	Contact tip	
ø (mm)	Ordering No.	Marking	ø (mm)	Ordering No.	Marking
0.8	438 533-030	0.	0.8	441 922-001	0.8
0.9	438 533-031	0.9	0.9	441 922-002	0.9
1.0	438 533-032	1.0	1.0	441 922-003	1.0
1.2	438 533-033	1.2	1.2	441 922-004	1.2
			1.4	441 922-005	1.4
			1.6	441 922-006	1.6

Contact tips for PKI 500A

Wire size	Contact tip	
ø (mm)	Ordering No.	Marking
1.0	487 107-001	1.0
1.2	487 107-002	1.2
1.4	487 107-003	1.4
1.6	487 107-004	1.6
1.8	487 107-005	1.8

Contact tips for PKI 630

Contact tips for PKI 300

Wire size	Contact tip		Wire size	Contact tip	
ø (mm)	Ordering No.	Marking	ø (mm)	Ordering No.	Marking
1.0	438 633-006	1.0	0.8	418 424-001	0.8
1.2	438 633-007	1.2	0.9	418 424-002	0.9
1.4	438 633-008	1.4	1.0	418 424-003	1.0
1.6	438 633-009	1.6	1.2	418 424-004	1.2
2.0	438 633-010	2.0			
2.4	438 633-016	2.4			

5.2 Wire liners

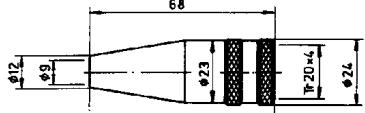
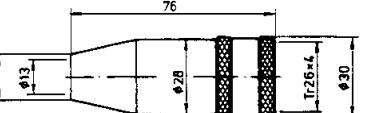
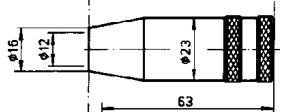
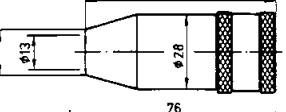
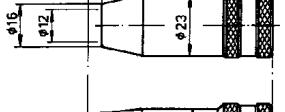
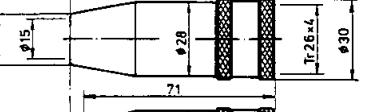
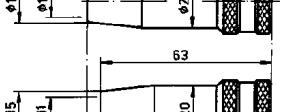
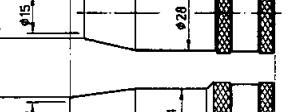
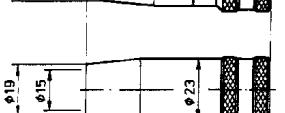
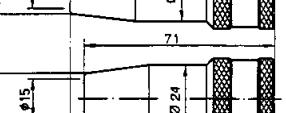
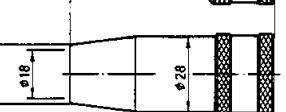
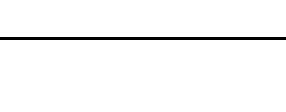
Select the required wire liner from the table below. If the filler wire binds, choose a wire liner having a larger diameter.

Type	Ordering No.	ø (mm)	Length	Diameter (mm)
steel	413 005-001	1.5	3260	Fe 0.8-0.9
	413 005-002	1.5	2260	
	413 005-007	1.5	1700	
	413 005-017	1.5	50 m	
steel	413 005-003	1.8	3260	Fe 1.0-1.2
	413 005-004	1.8	2260	
	413 005-008	1.8	1700	
	413 005-018	1.8	30 m	
steel	413 005-005	2.2	3260	Fe 1.4-1.6
	413 005-006	2.2	2260	
	413 005-009	2.2	1700	
	413 005-019	2.2	30 m	
steel	413 005-023	2.4	50 m	Fe 1.8-2.0 Cored wire 1.4-1.6
steel	413 005-024	2.9	25 m	Fe 2.2-2.4
teflon	441 130-003	1.5	3260	Al 0.8-1.0
teflon	441 130-004	2.2	3260	Al 1.2-1.4
polyamid	441 130-009	3.0	3260	Al 1.6
polyamid	441 130-011	3.0	meter	Al

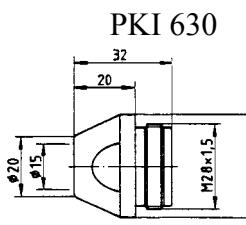
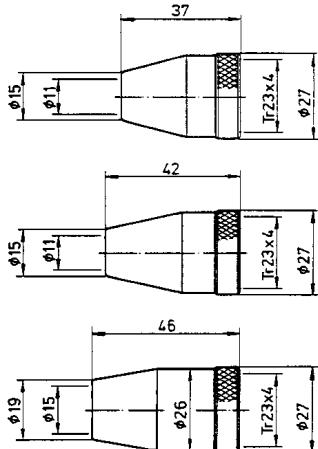
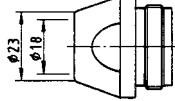
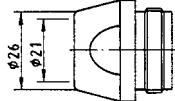
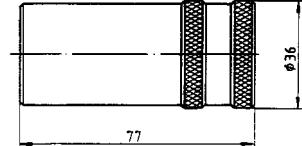
5.3 Gas nozzles

The table below shows the range of gas nozzles available for each torch neck. Select the appropriate gas nozzle depending on factors such as the welding process, accessibility etc.

Changing the gas nozzle also requires the cleaning tools to be changed when using mechanical spatter cleaning.

Ordering No.	Gas nozzle	Ordering No.	Gas nozzle
	PKI 250		PKI 500/500A
438533-002		441528-003	
438533-003		441528-004	
438533-004		441528-001	
438533-001		441528-002	
438533-005		441528-006	
438533-006		441528-007	
		441528-005	

Selection tables

Ordering No.	Gas nozzle	Ordering No.	Gas nozzle
438633-001	PKI 630 	418423-001	PKI 300 
438633-002		418423-002	
438633-003		418423-003	
Cooling sleeve 438633-004			

6 Reservdelsförteckning/Spare Parts List

Reservdelar beställs genom ABB Automation Technology Products AB. Vid beställning var vänlig uppge typ och tillverkningsnummer samt benämningar och beställningsnummer enligt reservdelsförteckningen.

Rätt till ändring av specifikationer utan avisering förbehålls.

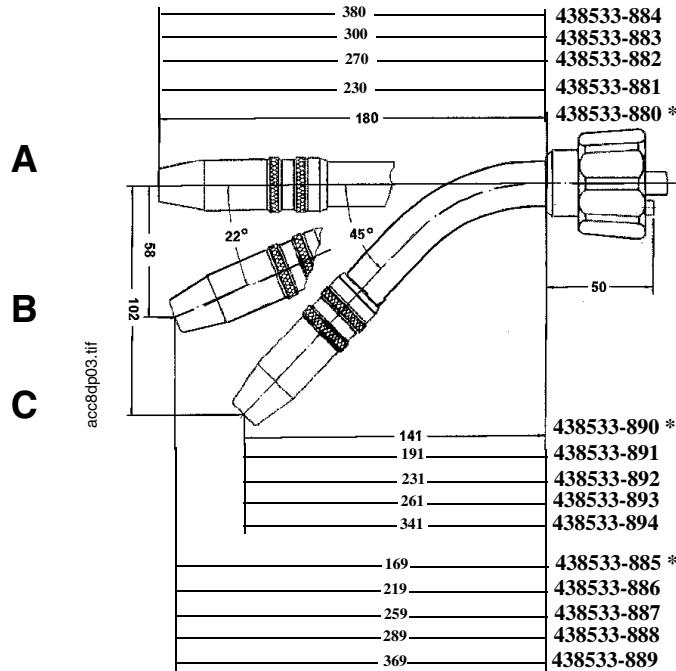
*Spare parts are to be ordered from ABB Automation Technology Products AB.
Kindly indicate type of unit, serial number, denominations and ordering number
according to the spare parts list.*

Rights to reserved to alter specifications without notice.

Positionsnummer Position number	Antal Quantity	Beställningsnummer Ordering number	Benämning	Denomination	Anmärkningar Remarks
A		438 533-880	PKI 250 Kontaktdon, kompl.	PKI 250 Torch neck, compl.	0°
B		438 533-885	Kontaktdon, kompl.	Torch neck, compl.	22°
C		438 533-890	Kontaktdon, kompl.	Torch neck, compl.	45°
1	x	438 533-001	Gaskåpa	Gas nozzle	11/20 L=68
		438 533-002	Gaskåpa	Gas nozzle	9/23 L=68
		438 533-003 ^a	Gaskåpa	Gas nozzle	12/23 L=68
		438 533-004	Gaskåpa	Gas nozzle	12/23 L=63
		438 533-005	Gaskåpa	Gas nozzle	12/20 L=63
		438 533-006	Gaskåpa	Gas nozzle	15/23 L=68
2		438 533-020	Sprutskydd	Spatter protection	
3	x	438 533-030	Kontaktmunstycke	Contact tip	0,8 mm
		438 533-031	Kontaktmunstycke	Contact tip	0,9 mm
	x	438 533-032	Kontaktmunstycke	Contact tip	1,0 mm
		438 533-033	Kontaktmunstycke	Contact tip	1,2 mm
4		438 533-040	Spännmutter	Clamp nut	
5		438 533-100	Gasfördelare	Gas distributor	
6		438 533-110	O-ring sats	Set of o-rings	
7		505 791-001	Kontaktskruv	Connecting piece	
		501 910-880	Kontaktdon, kompl. För HELIX	Torch neck, compl. For HELIX	22°
		501 910-001	Kontaktdon	Contact device	
		501 910-002	Adapter	Adapter	

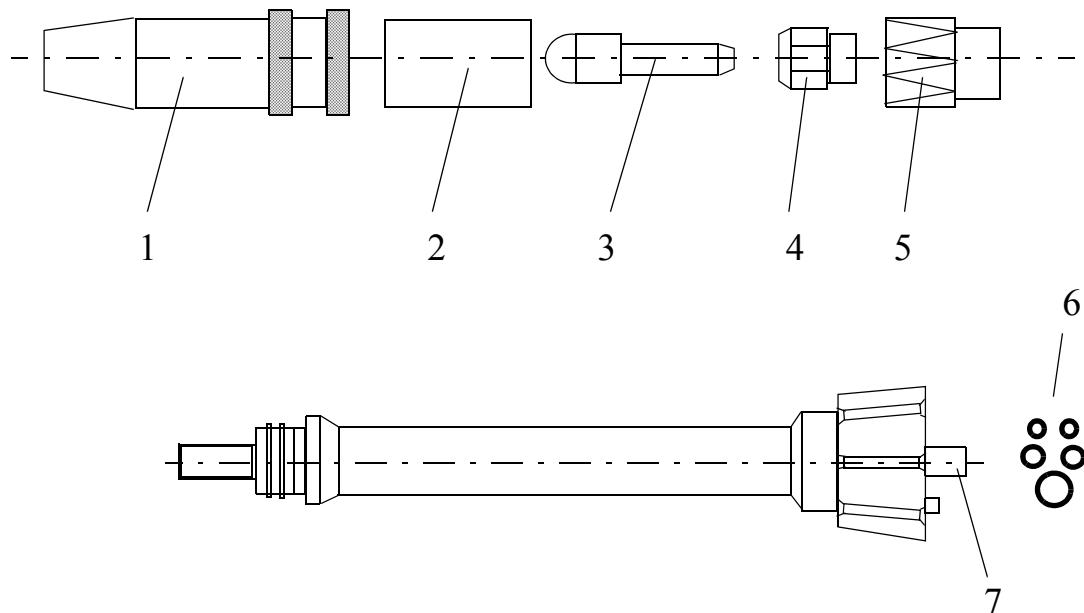
- a. Standard; vid köp av komplett kontaktdon
 a. Included as standard with complete torch neck

PKI 250



Standardmodeller markerade med *

Standard models marked with *

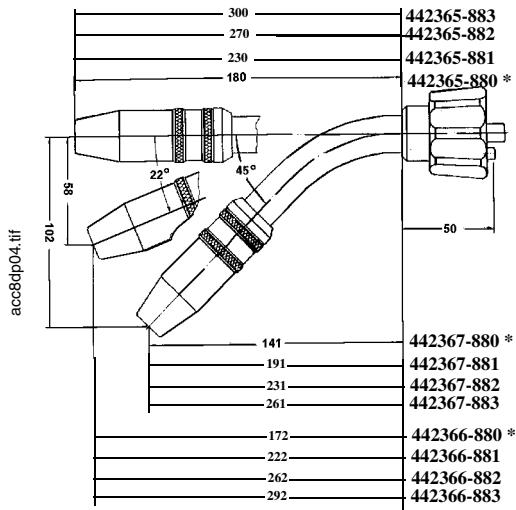


Positionsnummer Position number	Antal Quantity	Beställningsnummer Ordering number	Benämning	Denomination	Anmärkningar Remarks
A*		442 365-880	Kontaktdon, kompl.	PKI 500	Torch neck, compl.
A		442 365-881	Kontaktdon, kompl.		0°
A		442 365-882	Kontaktdon, kompl.		0° +50mm
A		442 365-883	Kontaktdon, kompl.		0° +90mm
B*		442 366-880	Kontaktdon, kompl.		0° +120mm
B		442 366-881	Kontaktdon, kompl.		22°
B		442 366-882	Kontaktdon, kompl.		22° +50mm
B		442 366-883	Kontaktdon, kompl.		22° +90mm
C*		442 367-880	Kontaktdon, kompl.		22° +120mm
C		442 367-881	Kontaktdon, kompl.		45°
C		442 367-882	Kontaktdon, kompl.		45° +50mm
C		442 367-883	Kontaktdon, kompl.		45° +90mm
1	x	441 528-001	Gaskåpa	Gas nozzle	45° +120mm
		441 528-002	Gaskåpa		15/28 L=76
		441 528-003	Gaskåpa		15/28 L=71
		441 528-004	Gaskåpa		13/28 L=76
		441 528-005	Gaskåpa		13/28 L=71
		441 528-006	Gaskåpa		18/28 L=76
		441 528-007	Gaskåpa		15/24 L=76
2		441 530-001	Sprutskydd	Spatter protection	15/24 L=71
3	x	441 922-00	Kontaktmunstycke	Contact tip	0,8 mm
		441 922-002	Kontaktmunstycke		0,9 mm
		441 922-003	Kontaktmunstycke		1,0 mm
		441 922-004	Kontaktmunstycke		1,2 mm
		441 922-005	Kontaktmunstycke		1,4 mm
		441 922-006	Kontaktmunstycke		1,6 mm
4		412 988-001	Spännmutter	Clamp nut	
5		412 992-001	Gasfördelare	Gas distributor	
6		438 533-110	O-ring sats	Set of o-rings	

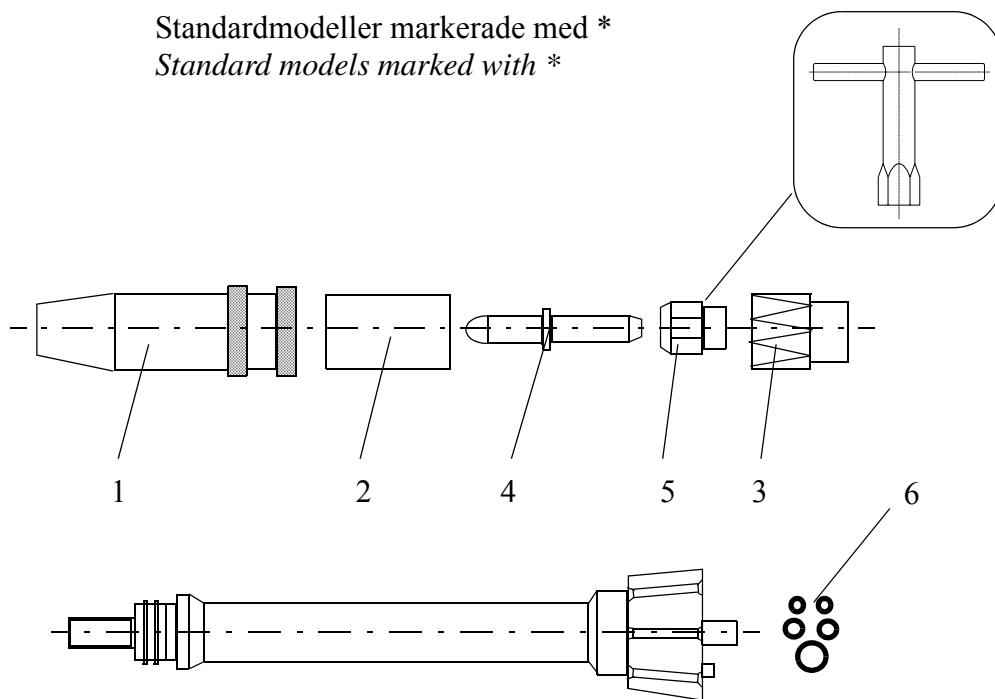
x) Standard vid köp av komplett kontaktdon

x) Included as standard with complete torch neck

PKI 500



Standardmodeller markerade med *
Standard models marked with *

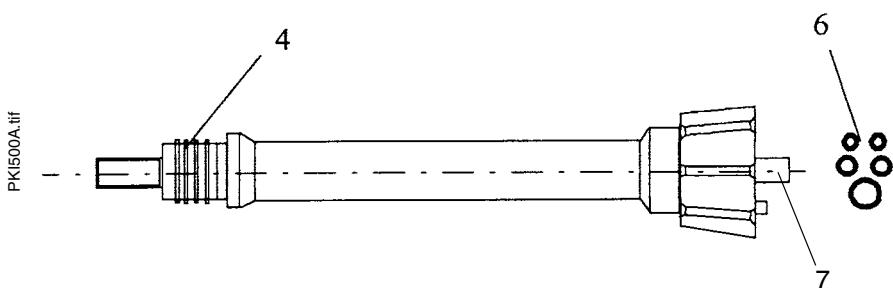
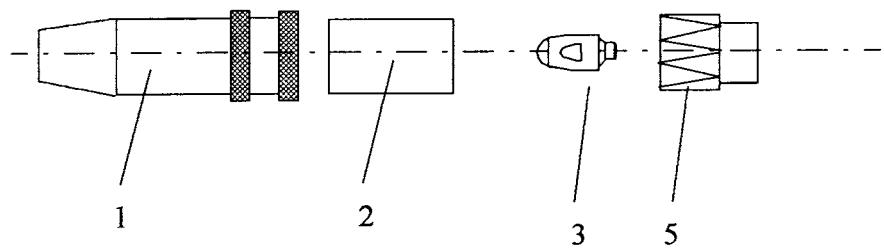
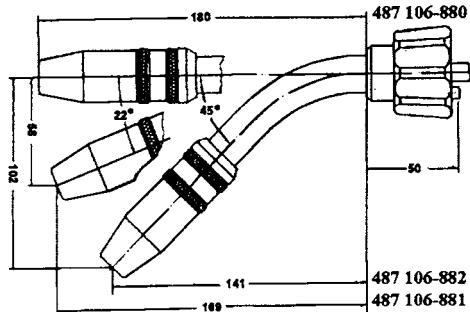


Positions-nummer Position number	Antal Quantity	Beställningsnummer Ordering number	Benämning	Denomination	Anmärkningar Remarks
A		487 106-880	PKI 500A Kontaktdon, kompl.	PKI 500A Torch neck, compl.	0°
B		487 106-881	Kontaktdon, kompl.	Torch neck, compl.	22°
C		487 106-882	Kontaktdon, kompl.	Torch neck, compl.	45°
1	*	441 528-001 ^a	Gaskåpa	Gas nozzle	15/28 L=76
		441 528-002	Gaskåpa	Gas nozzle	15/28 L=71
		441 528-003	Gaskåpa	Gas nozzle	13/28 L=76
		441 528-004	Gaskåpa	Gas nozzle	13/28 L=71
		441 528-005	Gaskåpa	Gas nozzle	18/28 L=76
		441 528-006	Gaskåpa	Gas nozzle	15/24 L=76
		441 528-007	Gaskåpa	Gas nozzle	15/24 L=71
2		441 530-001	Sprutskydd	Spatter protection	
3	*	487 107-001	Kontaktmunstycke	Contact tip	1,0 mm
		487 107-002	Kontaktmunstycke	Contact tip	1,2 mm
		487 107-003	Kontaktmunstycke	Contact tip	1,4 mm
		487 107-004	Kontaktmunstycke	Contact tip	1,6 mm
		487 107-005	Kontaktmunstycke	Contact tip	1,8 mm
		487 107-006	Kontaktmunstycke	Contact tip	0,8 mm
4		487 109-001	O-ring	O ring	
5		487 108-001	Gasfördelare	Gas distributor	
6		438 533-110	O-ring sats	Set of o-rings	
7		505 791-001	Kontaktskruv	Connecting piece	

a. Standard; vid köp av komplett kontaktdon

a. Included as standard with complete torch neck

PKI 500A (Aluminium)

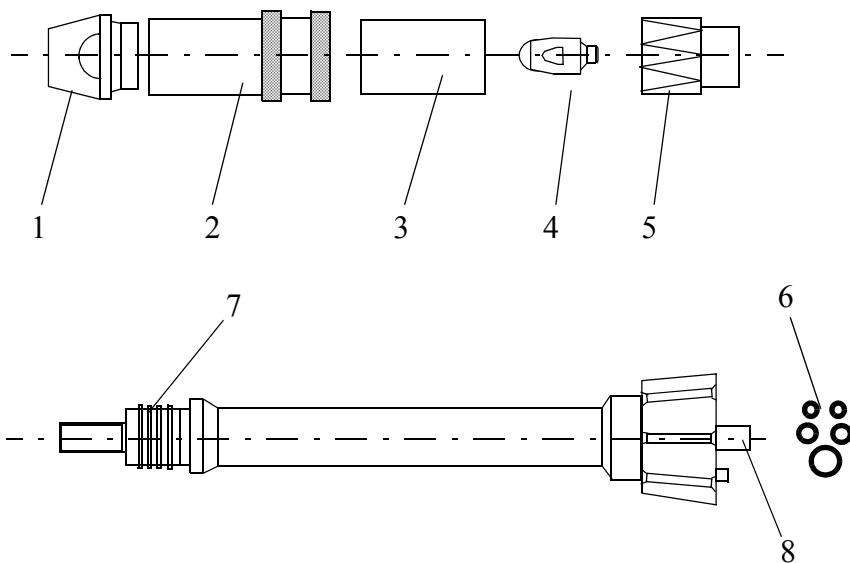
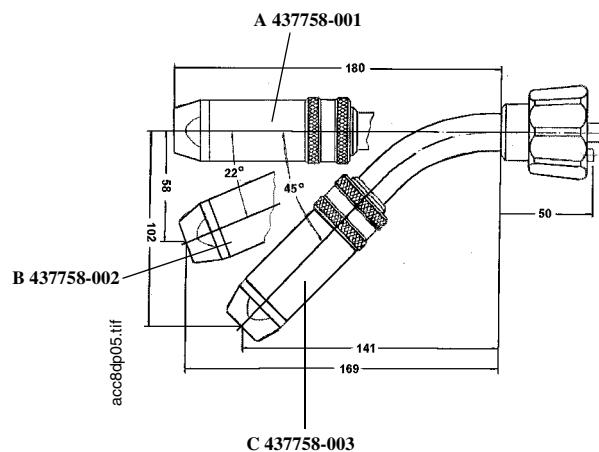


Positionsnummer Position number	Antal Quantity	Beställningsnummer Ordering number	Benämning	Denomination	Anmärkningar Remarks
A		437 758-001	Kontaktdon, kompl.	PKI 630	Torch neck, compl.
B		437 758-002	Kontaktdon, kompl.		0°
C		437 758-003	Kontaktdon, kompl.		22°
					45°
1	*	438 633-001	Gaskåpa	Gas nozzle	15/34 L=32
		438 633-002	Gaskåpa	Gas nozzle	18/34 L=32
		438 633-003 ^a	Gaskåpa	Gas nozzle	21/34 L=32
2		438 633-004	Kylmantel	Cooling jacket	L=77
3		441 530-001	Sprutskydd	Spatter protection	
4	*	438 633-006	Kontaktmunstycke	Contact tip	1,0 mm
		438 633-007	Kontaktmunstycke	Contact tip	1,2 mm
		438 633-008	Kontaktmunstycke	Contact tip	1,4 mm
		438 633-009	Kontaktmunstycke	Contact tip	1,6 mm
		438 633-010	Kontaktmunstycke	Contact tip	2,0 mm
		438 633-016	Kontaktmunstycke	Contact tip	2,4 mm
5		438 633-011	Gasfördelare	Gas distributor	
6		438 533-110	O-ringsats	Set of o-rings	
7		438 633-017	O-ringsats	Set of o-rings	
8		505 791-001	Kontaktskruv	Connecting piece	

a. Standard; vid köp av komplett kontaktdon

a. Included as standard with complete torch neck

PKI 630

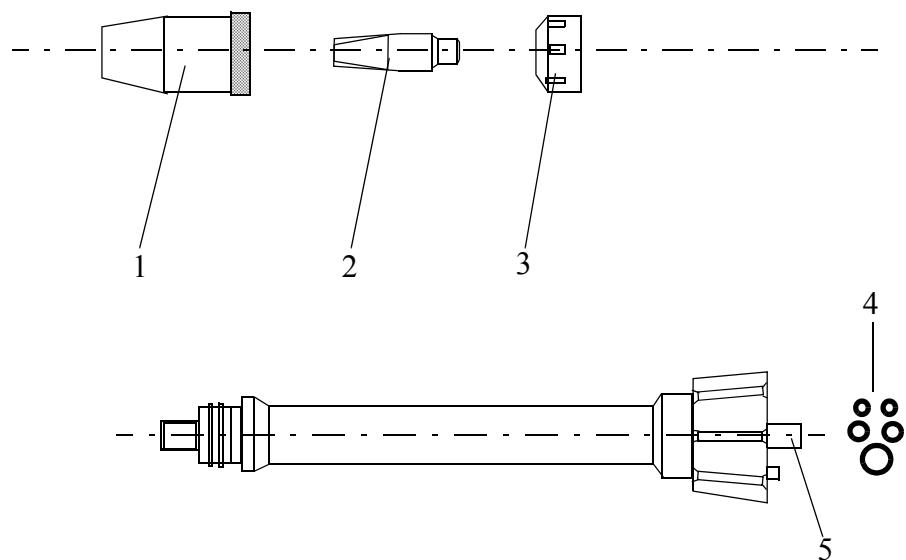
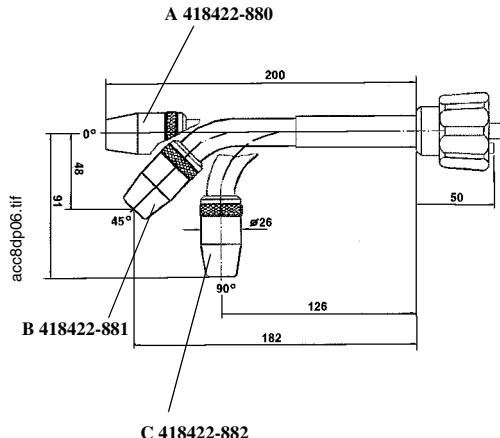


Positions-nummer Position number	Antal Quantity	Beställningsnummer Ordering number	Benämning	Denomination	Anmärkningar Remarks
A		418 422-880	Kontaktdon, kompl.	PKI 300	Torch neck, compl.
B		418 422-881	Kontaktdon, kompl.		0°
C		418 422-882	Kontaktdon, kompl.		45°
					90°
1	*	418 423-001	Gaskåpa	Gas nozzle	11/26 L=37
		418 423-002	Gaskåpa	Gas nozzle	11/26 L=42
		418 423-003 ^a	Gaskåpa	Gas nozzle	15/26 L=46
2	*	418 424-001	Kontaktmunstycke	Contact tip	0,8 mm
		418 424-002	Kontaktmunstycke	Contact tip	0,9 mm
		418 424-003	Kontaktmunstycke	Contact tip	1,0 mm
		418 424-004	Kontaktmunstycke	Contact tip	1,2 mm
3		418 425-001	Gasfördelare	Gas distributor	
4		438 533-110	O-ring sats	Set of o-rings	
5		505 791-001	Kontaktskruv	Connecting piece	

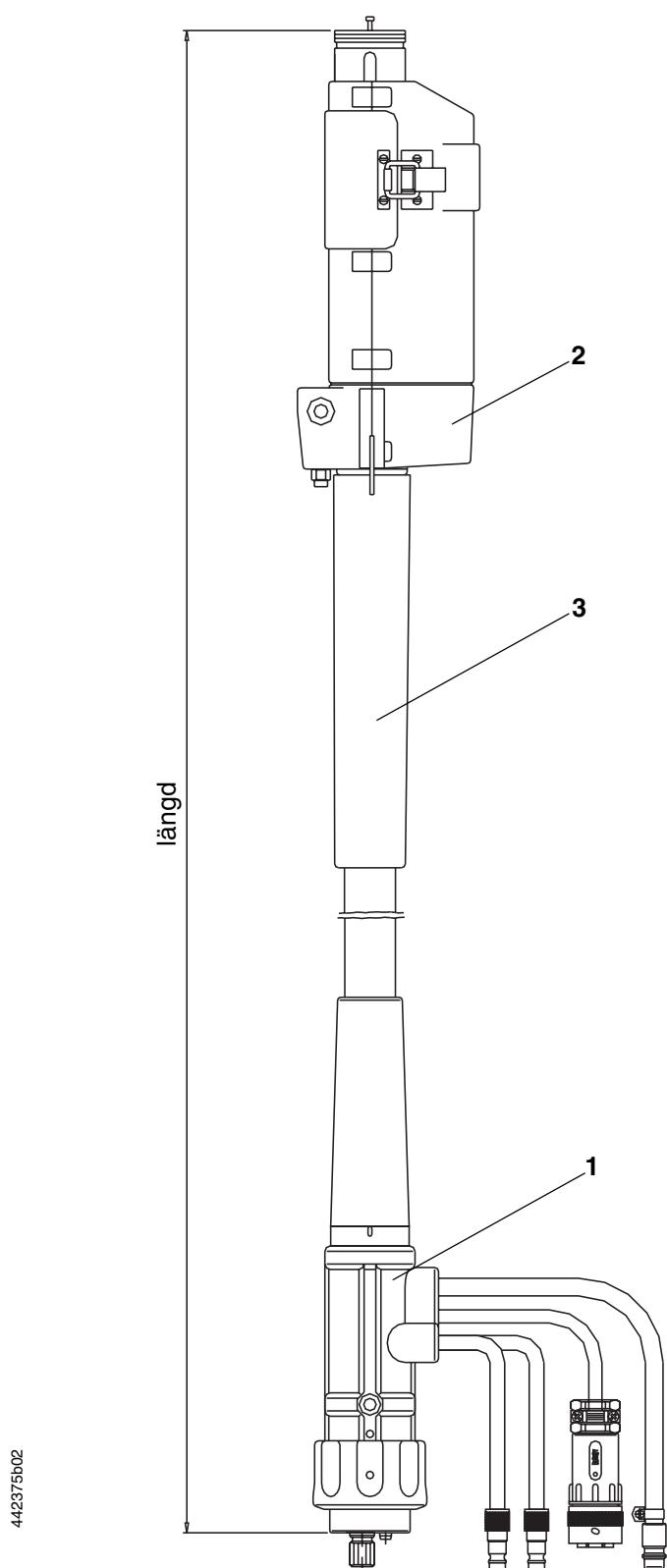
a. Standard; vid köp av komplett kontaktdon

a. Included as standard with complete torch neck

PKI 300



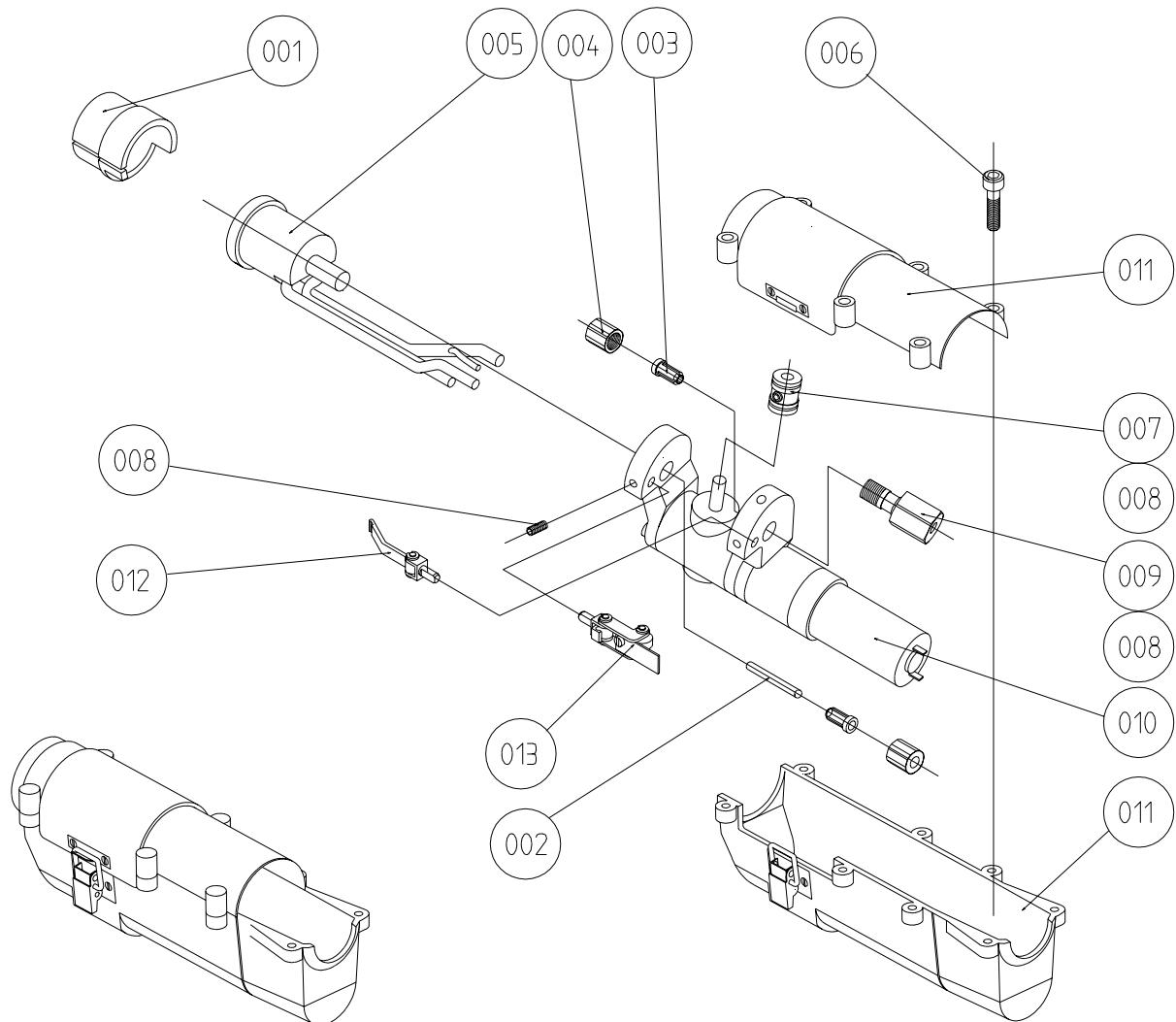
Positions-nummer Position number	Antal Quantity	Beställningsnummer Ordering number	Benämning	Denomination	Anmärkningar Remarks
A		442 375-887	PKH-S Svetspistol utan kontaktdon	PKH-S Welding gun without torch neck	L=3000
B		442 375-888	Svetspistol utan kontaktdon	Welding gun without torch neck	L=1330
C		442 375-889	Svetspistol utan kontaktdon	Welding gun without torch neck	L=4000
D		442 375-890	Svetspistol utan kontaktdon	Welding gun without torch neck	L=2500
1		441 185-880	Matarverkskontakt	Feeder connection	
2		442 373-880	Matarverk	Feeder	
3		441 542-880	Elektrodledare, kompl.	Wire conduit, compl.	L=1400
3		441 542-881	Elektrodledare, kompl.	Wire conduit, compl.	L=1700
		441 549-001	Ändskruv	End screw	
		441 646-001	Klämhylsa	Clamping sleeve	
		441 547-001	Hylsa	Sleeve	
		441 568-880	Insticksnippel	Plug-in nipple	



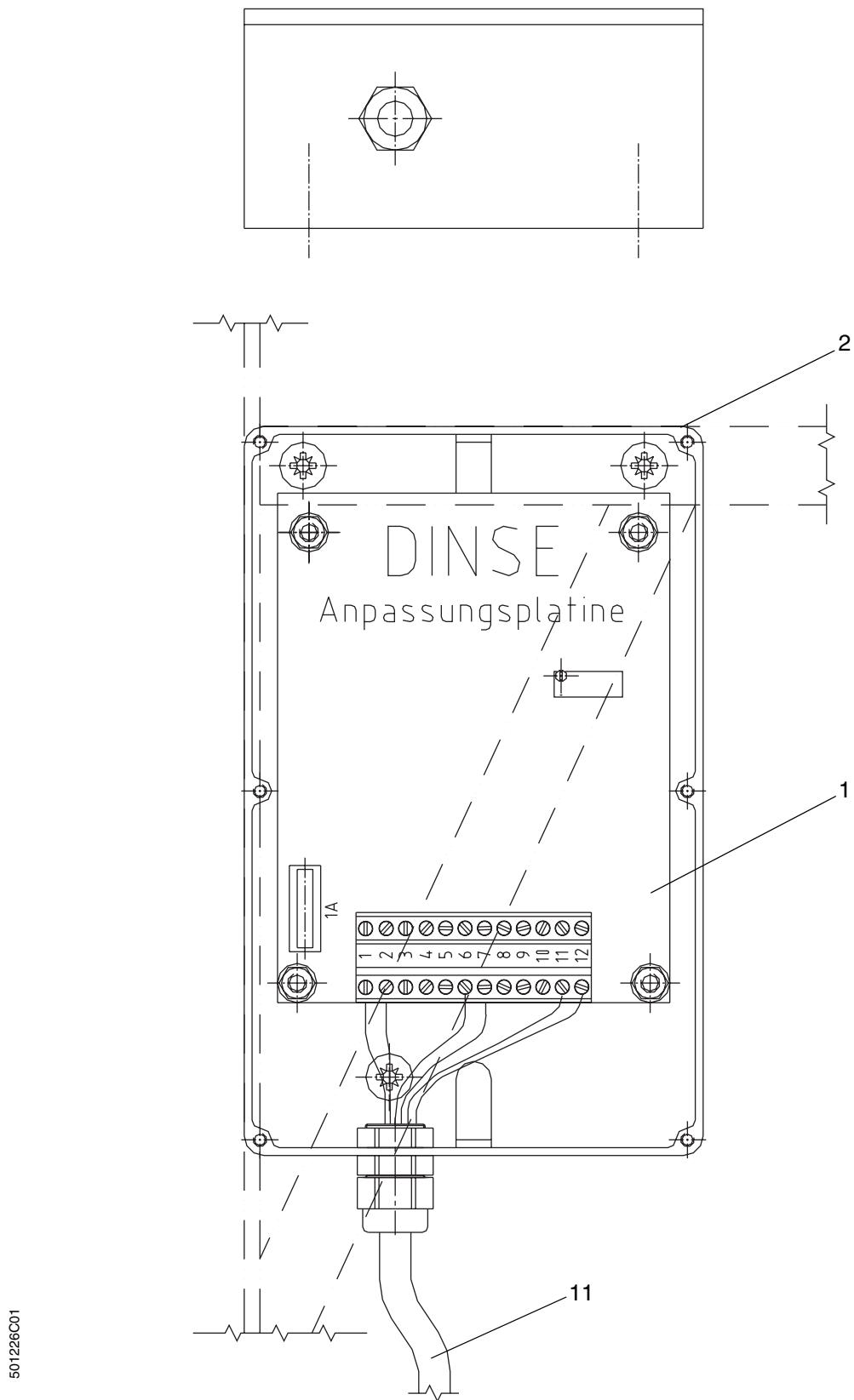
442375b02

Positionsnummer Position number	Antal Quantity	Beställningsnummer Ordering number	Benämning	Denomination	Anmärkningar Remarks
		442 373-880	Matarverk	Wire feeder	
1		442 379-001	Isolerhylsa	Insulating sleeve	
2		442 378-001	Trådföringsrör	Wire guide tube	
3		441 646-001	Klämhylsa	Clamping sleeve	
4		442 381-001	Spännmutter	Clamping nut	
5		442 372-001	Pistolanslutning	Torch connector	
6		192 238-291	Skruv	Screw	
7		442 383-001	Matarrulle	Feed roller	Fe 0,8
7		442 383-002	Matarrulle	Feed roller	Fe 0,9
7		442 383-003	Matarrulle	Feed roller	Fe 1,0
7		442 383-004	Matarrulle	Feed roller	Fe 1,2
7		442 383-005	Matarrulle	Feed roller	Fe 1,6
7		442 383-101	Matarrulle	Feed roller	Al 0,8
7		442 383-103	Matarrulle	Feed roller	Al 1,0
7		442 383-104	Matarrulle	Feed roller	Al 1,2
7		442 383-105	Matarrulle	Feed roller	Al 1,6
8		2122 045-57	Skruv	Screw	
9		442 382-001	Trådledaranslutning	Wire liner connector	
10		442 369-001	Motor	Motor	
11		442 371-001	Hölje	Housing	
12		442 384-001	Bygel	Clamp	
13		442 385-001	Tryckrulle	Pressure roller	

Svetspistol/Welding gun PKI-PP
Reservdelsförteckning/Spare Parts List

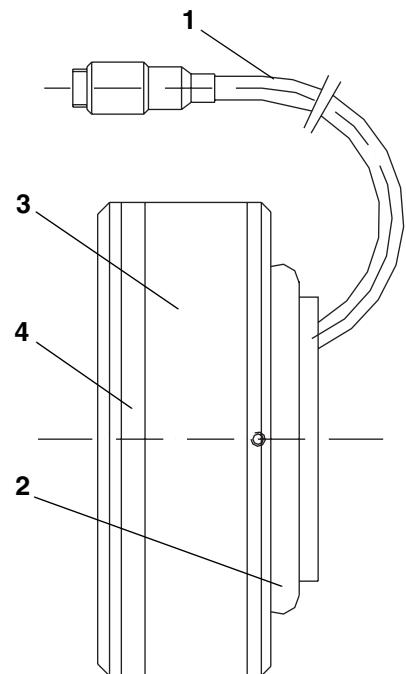
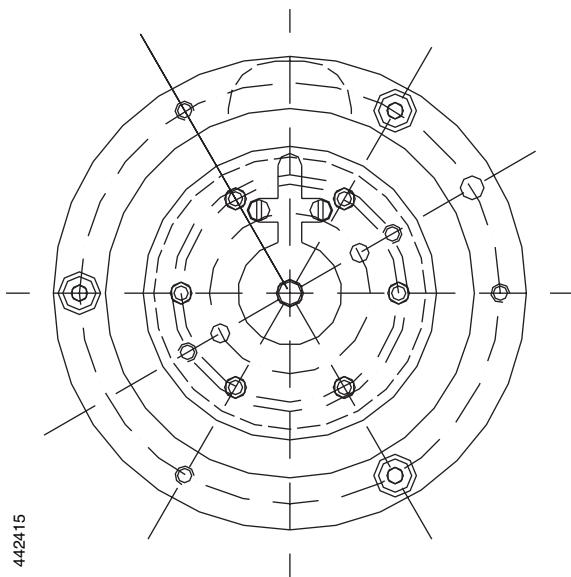


Positionsnummer Position number	Antal Quantity	Beställningsnummer Ordering number	Benämning	Denomination	Anmärkningar Remarks
		501 226-881	Motorreglering, DINSE	Motor control, DINSE	PIB
1		442 377-001	Motorstyrkort	Motor control board	PKH 500P
2		503 962-880	Skärmbox		
11		503 787-880	Styrkabel	Control cable	



Positionsnummer Position number	Antal Quantity	Beställningsnummer Ordering number	Benämning	Denomination	Anmärkningar Remarks
A		442 415-880	Brytfäste 2000	Safety bracket 2000	
B		442 415-881	Brytfäste 2500	Safety bracket 2500	
1		441 211-880	Brytare med kabel	Switch with cable	
2		441 205-001	Manschett, o-ring	O-ring	A
3		441 817-001	Hus	Housing	B
		441 817-002	Hus	Housing	
4		442 438-001	Anslutningsplatta	Connection plate	

442415



Svetspistol/Welding gun PKI-PP

Reservdelsförteckning/Spare Parts List

ABB

504 887-102