

PSF™ 250

PSF™ 250C

PSF™ 305

PSF™ 315C LD

PSF™ 405

PSF™ 405 RS3

PSF™ 405C

PSF™ 405C RS3

PSF™ 410w

PSF™ 410w RS3

PSF™ 410Cw

PSF™ 410Cw RS3

PSF™ 505

PSF™ 510w

PSF™ 510w RS3



Instruction manual

1 DIRECTIVE	3
2 SAFETY	3
3 INTRODUCTION	4
4 SHIPMENT AND PACKAGING	4
5 TECHNICAL DATA	4
6 OPERATION	6
6.1 Contact tip	6
6.2 Wire liner	6
6.3 Replacing the wire liner	6
6.4 Gas nozzle	7
6.5 Gas protection	7
6.6 Gas flow meter	7
6.7 Centrovac	7
7 MAINTENANCE	8
7.1 Daily or as necessary	8
7.2 Centrovac	9
8 FAULT-TRACING	9
9 DISASSEMBLY AND DISPOSAL	10
10 ORDERING OF SPARE PARTS	10
ORDERING NUMBER	12
WEAR PARTS	14
ACCESSORIES	21

1 DIRECTIVE

DECLARATION OF CONFORMITY

ESAB AB, Welding Equipment, SE-695 81 Laxå, Sweden, gives its unreserved guarantee that the welding torch/welding gun PSF 250, 250C, PSF 305, PSF 315C LD, PSF 405, 405 RS3, 405C, 405C RS3, PSF 410w, PSF 410w RS3, 410Cw, 410Cw RS3, PSF 505, PSF 510w, 510w RS3 are constructed and tested in compliance with the standard EN 60974-7 in accordance with the requirements of directive (2006/95/EC).

Laxå 2007-03-08



Kent Eimbrodt
Global Director
Equipment and Automation

2 SAFETY



WARNING



ARC WELDING AND CUTTING CAN BE INJURIOUS TO YOURSELF AND OTHERS. TAKE PRECAUTIONS WHEN WELDING. ASK FOR YOUR EMPLOYER'S SAFETY PRACTICES WHICH SHOULD BE BASED ON MANUFACTURERS' HAZARD DATA.

ELECTRIC SHOCK - Can kill

- Install and earth the welding unit in accordance with applicable standards.
- Do not touch live electrical parts or electrodes with bare skin, wet gloves or wet clothing.
- Insulate yourself from earth and the workpiece.
- Ensure your working stance is safe.

FUMES AND GASES - Can be dangerous to health

- Keep your head out of the fumes.
- Use ventilation, extraction at the arc, or both, to take fumes and gases away from your breathing zone and the general area.

ARC RAYS - Can injure eyes and burn skin.

- Protect your eyes and body. Use the correct welding screen and filter lens and wear protective clothing.
- Protect bystanders with suitable screens or curtains.

FIRE HAZARD

- Sparks (spatter) can cause fire. Make sure therefore that there are no inflammable materials nearby.

NOISE - Excessive noise can damage hearing

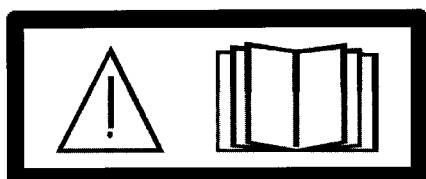
- Protect your ears. Use earmuffs or other hearing protection.
- Warn bystanders of the risk.

MALFUNCTION - Call for expert assistance in the event of malfunction.

READ AND UNDERSTAND THE INSTRUCTION MANUAL BEFORE INSTALLING OR OPERATING.

PROTECT YOURSELF AND OTHERS!

ESAB can provide you with all necessary welding protection and accessories.



Read the instruction manuals for the components included in the equipment!

3 INTRODUCTION

PSF 250, 305, 405 and 505 form a series of self-cooling swan neck welding torches.

PSF w form a series of water-cooled swan neck welding torches.

PSF RS3 welding torches are equipped with program selectors for switching between preset programs. (Programs are preset at the welding power source.)

PSF C form a series of welding torches with smoke exhausters. The welding torches are available with either self-cooling or water cooling systems and are of a swan-neck design.

PSF LD is a smaller welding torch.

This welding torch is available in a variety of types; for more information see the ordering number on page 12.

A range of accessories including welding tips, swan necks and contact tips are also available.

Details of ESAB's welding torch accessories can be found on page 21.

4 SHIPMENT AND PACKAGING

The components are carefully checked and packaged, however, damage may occur during shipping.

Checking procedure on receipt of goods

- Check that the shipment is correct by referring to the shipping note.

In case of damage

- Check the package and components for damage (visual inspection).

In case of complaints

If the package and/or components have been damaged during shipment:

- Contact the last carrier immediately
- Keep the packaging (for possible inspection by the carrier or supplier, or for returning the goods).

Storage in an enclosed space

Ambient temperature

- for shipment and storage: -25 °C to + 55 °C

Relative air humidity: up to 90 % at a temperature of 20 °C

5 TECHNICAL DATA

General torch data with reference to IEC/EN 60974-7	
Type of voltage:	DC voltage
Wire type:	Standard round wire
Voltage measurement:	Peak value of 113V
Connection protection Machine side (EN 60 529):	IP3X
Shielding gas:	CO ₂ or Ar/CO ₂

Enclosure class

The IP code indicates the enclosure class, i. e. the degree of protection against penetration by solid objects of 2,5 mm Ø and greater.

Welding torch	PSF 250	PSF 305	PSF 405, 405 RS3	PSF 505	PSF 410w, 410w RS3	PSF 510w, 510w RS3
Permitted load at 60% duty cycle						
Carbon dioxide CO ₂	250 A	315 A	380 A	475 A	-	-
Mixed gas, Argon (Al wire)	225 A	285 A	325 A	410 A	-	-
Permitted load at 100% duty cycle						
Carbon dioxide CO ₂	-	-	-	-	400 A	500 A
Mixed gas, Argon (Al wire)	-	-	-	-	350 A	440 A
Recommended gas flow	8-13 l/min	10-15 l/min	11-16 l/min	12-18 l/min	11-16 l/min	12-18 l/min
Wire diameter	0.6-1.0 mm	0.8-1.2 mm	0.8-1.6 mm	1.0-2.4 mm	0.8-1.6 mm	1.0-2.4 mm
Weight 3.0 m hose package	1.8 kg	2.5 kg	3.1 kg	3.9 kg	3.0 kg	3.3 kg
Weight 4.5 m hose package	2.5 kg	3.3 kg	4.2 kg	5.3 kg	3.9 kg	4.0 kg

Welding torch	PSF 250C	PSF 315C LD	PSF 405C, PSF 405C RS3	PSF 410Cw, 410Cw RS3
Permitted load at 60% duty cycle				
Carbon dioxide CO ₂	250 A	315 A	380 A	-
Mixed gas, Argon (Al wire)	225 A	285 A	325 A	-
Permitted load at 100% duty cycle				
Carbon dioxide CO ₂	-	-	-	380 A
Mixed gas, Argon (Al wire)	-	-	-	325 A
Recommended gas flow	8-13 l/min	10-15 l/min	11-16 l/min	11-16 l/min
Wire diameter	0.6-1.0 mm	0.8-1.2 mm	1.0-1.6 mm	0.8-1.6 mm
Weight 3.0 m hose package	3,5 kg	4,3 kg	4.6 kg	4.0 kg
Weight 4.5 m hose package	5,0 kg	5,4 kg	6.8 kg	6.2 kg

Duty cycle

The duty cycle refers to the time as a percentage of a ten-minute period that you can weld at a certain load without overloading.

Liquid cooled torches	PSF 410w, PSF 410w RS3, PSF 510w, PSF 510w RS3, PSF 410Cw, PSF 410Cw RS3
Type of cooling	50% water / 50% ethylglykol
Pressure max.	3.5 bar
Pressure min.	2.0 bar
Temperature, max	50 °C
Flow	1.0 l/min

6 OPERATION

General safety regulations for the handling of the equipment can be found on page 3. Read through before you start using the equipment!

6.1 Contact tip

The hole size of the contact tip is determined by the diameter of the wire, the type of inert gas and the level of current used. See on page 15-19.

6.2 Wire liner

The spiral steel wire liner that comes as standard with the welding torch can be used for all types of wire of the intended size with exception of aluminium.

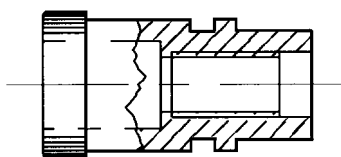
PTFE-wire liners are suitable for welding with all types of wires (Al, Ss, and Fe).

However, it is recommended that PTFE-wire liners are not used when welding using Fe and CW wires that are thicker than 1.2 mm due to the increased instance of wear. PTFE-wire liners have a considerably shorter life than the standard steel spiral.

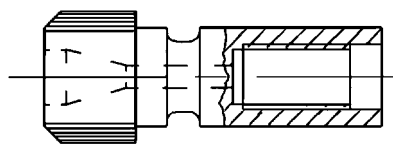
In order to ensure that you enjoy a satisfactory level of wire feed, select a wire liner on page 20.

6.3 Replacing the wire liner

1. Fit the correct nipple



ESAB Connection



EURO Connection

NB Each wire guide is supplied with 2 nipples, 1 for ESAB connection and 1 for EURO connection.

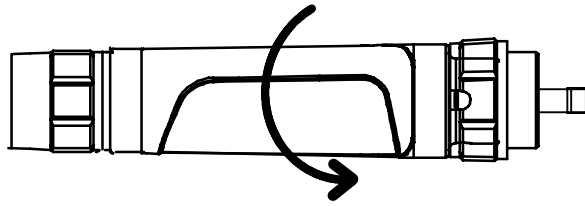
2. Remove the gas nozzle and tip adaptor.
3. Fit the wire liner in the hose package.
4. Cut the wire guide to the correct length

During cutting, the welding torch must be extended with the wire guide fully inserted into the rear connector.

Cut the wire guide using a projectile "X" as shown on the page 11.

Remove sharp edges inside the liner after cutting.

5. Re-fit the tip adaptor and gas nozzle
6. Fit the welding torch on the machine.



- a) Turn the connecting section counterclockwise until resistance is met
- b) The wire guide should go in

6.4 Gas nozzle

There is a spatter protector fitted inside the gas nozzle. This must be in position during welding in order to prevent the welding spatter jamming and thereby causing a short circuit in the swan neck.

Gas nozzles with larger and smaller openings are available as accessories for each type of welding torch. See on page 15-19.

6.5 Gas protection

Several factors come into play for good gas protection. The most important ones are:

1. Selection of shielding gas
 - Mixed gas and Argon require a greater flow than carbon dioxide
2. Set flow quantity
 - See Technical data (to be measured at the gas nozzle).
3. Set welding current
 - High welding currents require greater gas flows.
4. Position of welding joint
 - A vertical position requires greater gas flow
5. Type of welding joint
 - External corner joints require a greater gas flow than butt joints. Conversely, fillet joints require a lower gas flow.
6. Smoke evacuation on welding torch
 - Using smoke evacuation increases the need for inert gas by 10-12%
7. Angle of welding torch to the job.
 - Angling the welding torch at less than 45° may result in poor gas protection.

6.6 Gas flow meter

A gas flow meter to measure gas flow through the welding torch is available as an accessory see on page 21.

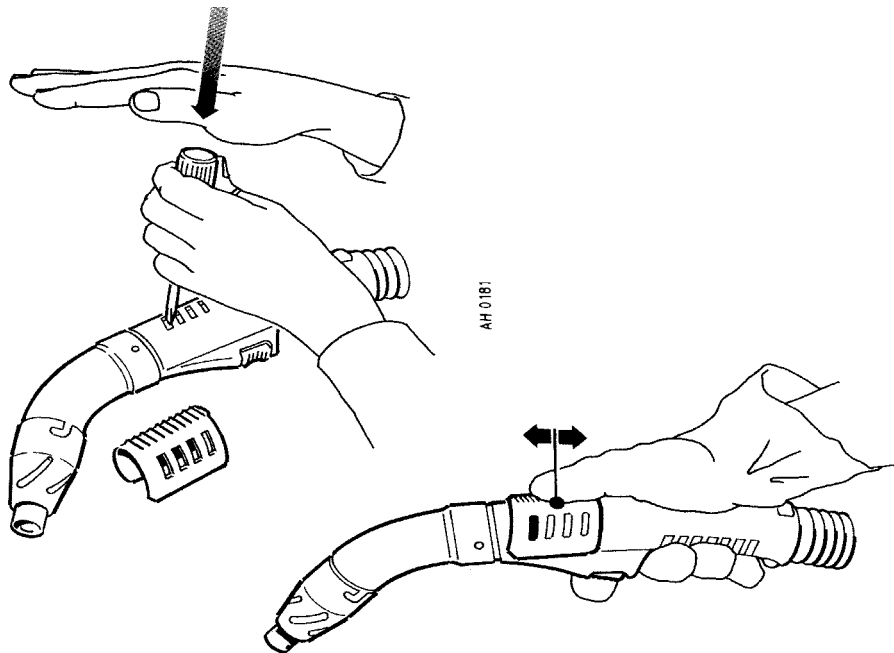
6.7 Centrovac

Integrated smoke evacuation

You can tailor the level of suction by opening the damper on the topside of the handle.

PSF 250C/PSF 315C LD

When welding in narrow positions it may be necessary to reduce the suction. This can be achieved by opening the slots as shown below.



Suction source for welding torches with integrated smoke evacuation

In order to achieve full suction power, the smoke evacuation welding torch must be connected to a suction source where pressure does not fall below 15 kPa.

7 MAINTENANCE

Regular maintenance is important for safe, reliable operation.

Note!

All guarantee undertakings from the supplier cease to apply if the customer himself attempts any work in the product during the guarantee period in order to rectify any faults.

7.1 Daily or as necessary

A regular programme of care and maintenance reduces unnecessary and expensive downtime.

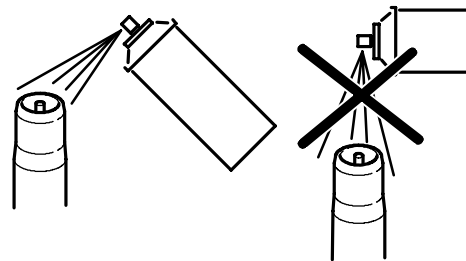
- Each time an wire bobbin is changed, the welding hose should be removed from the supply unit and blown clean with compressed air.
- The wire end must not have sharp edges when inserted into the wire liner. This is especially important when using PTFE wire liners.

Tips and nozzles

- Remove the gas nozzle, spatter protector, tip adapter and contact tip.
- Clean any spatter from the gas nozzle, tip adaptor and contact tip so that the shielding gas can flow freely, thus eliminating the risk of a short circuit.
- Check that the gas nozzle is free from defects. Damaged or worn tips/nozzles should be replaced with a new one.
- The spatter protector in the gas nozzle must be replaced once its front end wears thin.
- Select contact tip to suit wire dimension.
- Mount the fittings.
- Welding spray in the gas nozzle diminishes gas protection and increases the danger of spark-over.
Clean the equipment on a regular basis and use sparing amounts of welding paste or welding spray.

- The gas nozzle and the front parts of the welding torch must be kept free of weld spatter. Spray anti-spatter agent at an angle into the gas nozzle from two directions. Use ESAB anti-spatter agent to prevent spatter sticking.

Note! Never spray directly into the nozzle. Too much spray can attract dirt.



- The contact tip should be replaced when the hole opening is worn to more than double the wire diameter. Make sure that the new tip is screwed into the base.

7.2 Centrovac

Cleaning welding torches with integrated smoke evacuation

In order to maintain a constant level of suction, the inside of the welding torch handle should be cleaned on a regular basis. The appropriate length of time between cleans is dependant on how often the equipment is used and the amount of dust and oil contained in the welding smoke.

8 FAULT-TRACING

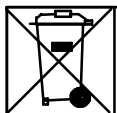
Please also read the operating instructions for the welding components, e.g. power source and wire feed unit.

If the measures described below are not successful, please consult your dealer or the manufacturer.

Problem	Cause	Solution
Welding torch becomes too hot	<ul style="list-style-type: none"> • Contact tip is not tight enough. • Electrical connections to the welding torch and to the workpiece are loose. 	<ul style="list-style-type: none"> • Check and tighten. • Check and tighten.
No trigger function	<ul style="list-style-type: none"> • Control cable interrupted/faulty. 	<ul style="list-style-type: none"> • Check/repair.

Problem	Cause	Solution
Wire burnt back onto the contact tip at stop	<ul style="list-style-type: none"> • Wrong burn back time set. • Worn contact tip. 	<ul style="list-style-type: none"> • Decrease the burn back time. • Replace.
Irregular wire feed	<ul style="list-style-type: none"> • Liner blocked. • Contact tip and wire diameter do not match. • Wrong tension set on the wire feed unit. 	<ul style="list-style-type: none"> • Blow through in both directions. • Replace contact tip. • Correct according to manufacturer's instructions.
Short arc between the gas nozzle and workpiece	<ul style="list-style-type: none"> • Spatter bridge between the contact tip and gas nozzle. 	<ul style="list-style-type: none"> • Clean and spray the inside of the gas nozzle.
Variable arc	<ul style="list-style-type: none"> • Contact tip is worn or does not match the wire diameter. • Incorrect welding parameters set. • Liner worn. 	<ul style="list-style-type: none"> • Check/replace the contact tip • Correct the welding parameters. • Replace the wire liner.
Porous welds	<ul style="list-style-type: none"> • Large amount of spatter in the gas nozzle. • Insufficient or total lack of shielding gas. • Draught is disturbing the shielding gas. 	<ul style="list-style-type: none"> • Clean the gas nozzle. • Check contents of the gas bottle/hoses and the pressure setting. • Shield welding area with protective screens.

9 DISASSEMBLY AND DISPOSAL



Do not dispose of electrical equipment together with normal waste!

In observance of European Directive 2002/96/EC on Waste Electrical and Electronic Equipment and its implementation in accordance with national law, electrical equipment that has reached the end of its life must be collected separately and returned to an environmentally compatible recycling facility. As the owner of the equipment, you should get information on approved collection systems from our local representative.

By applying this European Directive you will improve the environment and human health!

The welding torch system is mainly made from steel, plastics and non-ferrous metal and must be disposed of in compliance with local environmental regulations. The disposal of coolant is also subject to local requirements.

10 ORDERING OF SPARE PARTS

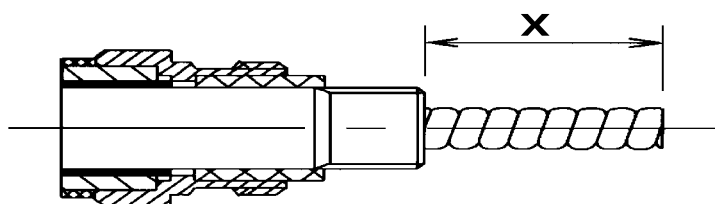
PSF 250/305/405/505/405 RS3, PSF 410w/510w/410w RS3/510w RS3, PSF 250C/315C LD/405C/405C RS3/410Cw, 410Cw RS3 is designed and tested in accordance with the international and European standards IEC/EN 60974-7 .

It is the obligation of the service unit which has carried out the service or repair work to make sure that the product still conforms to the said standard.

Spare parts may be ordered through your nearest ESAB dealer, see the last page of this publication.

Cutting length

Welding torch	Length	Adapter	Size X	Helix	Size X
PSF™ 250	3.0 m	0366 314 001	21 mm	0368 310 001	14 mm
PSF™ 250	4.5 m	0366 314 001	25 mm	0368 310 001	18 mm
PSF™ 305	3.0 m	0366 394 001	24 mm	0368 311 001	20 mm
PSF™ 305	4.5 m	0366 394 001	27 mm	0368 311 001	23 mm
PSF™ 405/405 RS3	3.0 m	0366 394 002	17 mm	0368 311 001	20 mm
PSF™ 405/405 RS3	4.5 m	0366 394 002	20 mm	0368 311 001	23 mm
PSF™ 505	3.0 m	0366 395 001	21 mm	0368 312 001	20 mm
PSF™ 505	4.5 m	0366 395 001	24 mm	0368 312 001	23 mm
PSF™ 410w/410w RS3	3.0 m	0366 394 002	23 mm	0368 311 001	26 mm
PSF™ 410w/410w RS3	4.5 m	0366 394 002	32 mm	0368 311 001	35 mm
PSF™ 510w/510w RS3	3.0 m	0366 394 002	23 mm	0368 311 001	26 mm
PSF™ 510w/510w RS3	4.5 m	0366 394 002	32 mm	0368 311 001	35 mm
PSF™ 250C	3.0 m	0366 314 001	21 mm	0368 310 001	14 mm
PSF™ 250C	4.5 m	0366 314 001	25 mm	0368 310 001	18 mm
PSF™ 315C LD	3,0 m	0366 394 001	24 mm	0366 311 001	20 mm
PSF™ 315C LD	4,5 m	0366 394 001	27 mm	0366 311 001	23 mm
PSF™ 405C	3.0 m	0366 394 002	17 mm	0368 311 001	20 mm
PSF™ 405C	4.5 m	0366 394 002	20 mm	0368 311 001	23 mm
PSF™ 410Cw/410Cw RS3	3.0 m	0366 394 002	23 mm	0366 311 001	26 mm
PSF™ 410Cw/410Cw RS3	4.5 m	0366 394 002	32 mm	0366 311 001	35 mm



PSF™ welding torches

Ordering number



Order Nos	Type	Description
0368 100 882	PSF™ 250	Welding torch 3.0 m
0368 100 883	PSF™ 250	Welding torch 4.5 m
0458 401 880	PSF™ 305	Welding torch 3.0 m
0458 401 881	PSF™ 305	Welding torch 4.5 m
0458 401 882	PSF™ 405	Welding torch 3.0 m
0458 401 883	PSF™ 405	Welding torch 4.5 m
0458 401 884	PSF™ 505	Welding torch 3.0 m
0458 401 885	PSF™ 505	Welding torch 4.5 m
0458 401 893	PSF™ 405 RS3	Welding torch 4.5 m
0459 694 990	Spare Parts Catalogue	

Order Nos	Type	Description
0458 400 882	PSF™ 410w	Welding torch 3.0 m
0458 400 883	PSF™ 410w	Welding torch 4.5 m
0458 400 884	PSF™ 510w	Welding torch 3.0 m
0458 400 885	PSF™ 510w	Welding torch 4.5 m
0458 400 898	PSF™ 410w RS3	Welding torch 3.0 m
0458 400 899	PSF™ 410w RS3	Welding torch 4.5 m
0458 400 900	PSF™ 510w RS3	Welding torch 3.0 m
0458 400 901	PSF™ 510w RS3	Welding torch 4.5 m
0459 694 990	Spare Parts Catalogue	

The spare parts list is available on the Internet at www.esab.com

PSF™ welding torches

Ordering number

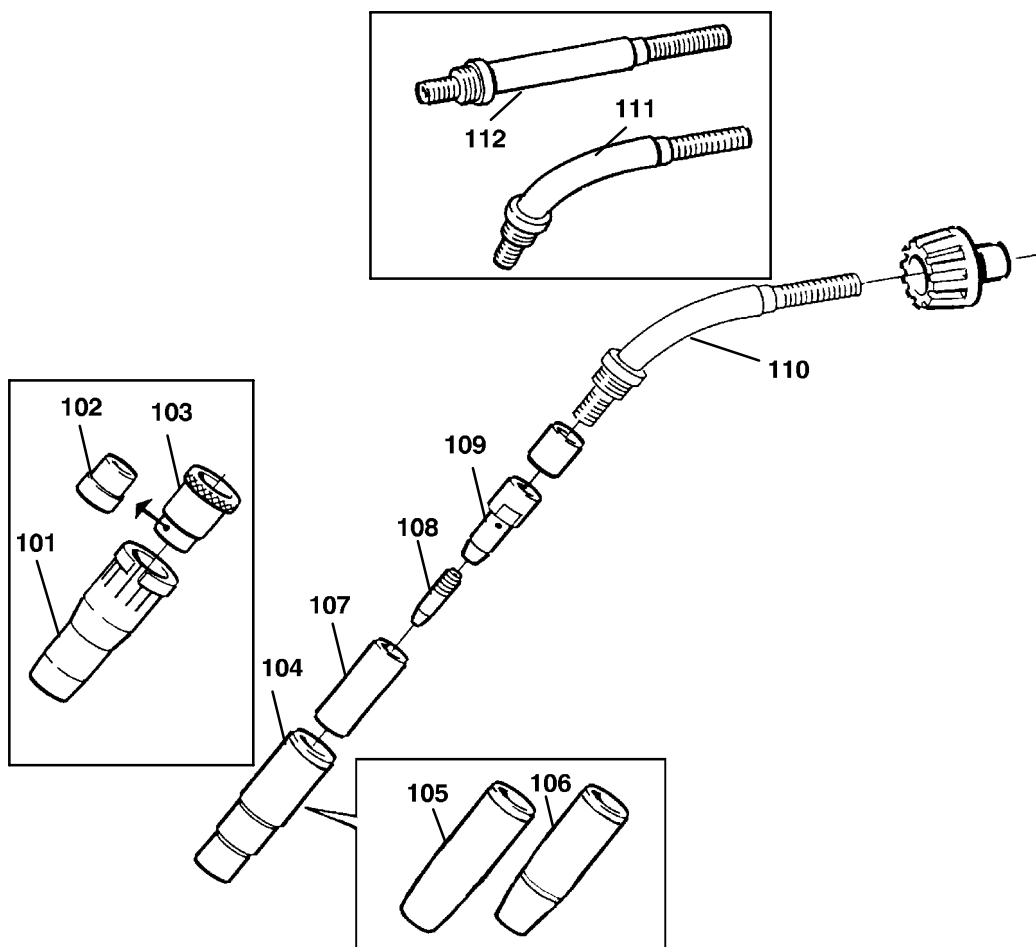


Order Nos	Type	Description
0468 410 882	PSF™ 250C	Welding torch 3.0 m
0468 410 883	PSF™ 250C	Welding torch 4.5 m
0468 410 885	PSF™ 315C LD	Welding torch 3.0 m
0468 410 886	PSF™ 315C LD	Welding torch 4.5 m
0458 499 882	PSF™ 405C	Welding torch 3.0 m
0458 499 883	PSF™ 405C	Welding torch 4.5 m
0458 450 880	PSF™ 410Cw	Welding torch 3.0 m
0458 450 881	PSF™ 410Cw	Welding torch 4.5 m
0458 450 884	PSF™ 410Cw RS3	Welding torch 3.0 m
0458 450 885	PSF™ 410Cw RS3	Welding torch 4.5 m
0459 694 990	Spare Parts Catalogue	

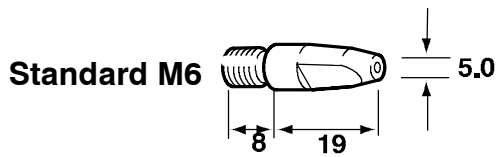
The spare parts list is available on the Internet at www.esab.com

Wear parts

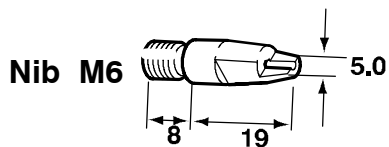
Item	Denomination	Ordering number	Notes
101	Gas Nozzle "slip-on"	0469 752 880	
102	Spatter protection "slip-on"	0469 538 001	
103	Cooling sleeve	0469 756 880	
104	Gas nozzle	0458 464 881	Standard
105	Gas nozzle	0458 470 881	Straight
106	Gas nozzle	0458 465 881	Conical
107	Spatter protection	0458 471 003	
108	Contact tip		See table on page 15.
109	Tip adaptor M6	0366 314 001	Standard
	Tip adaptor M7	0368 310 001	Helix
110	Swan neck complete	0366 315 880	Standard
111	Swan neck complete	0467 985 880	60°
112	Swan neck complete	0366 329 880	Straight



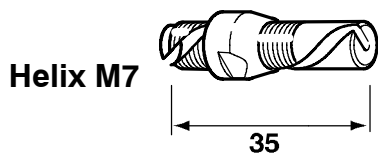
Contact tips



Shielding gas / Welding wire Ø		Contact tip M 6	
CO ₂	Mix / Ar		
0.6	-	0468 500 001	W0.6 0.8
-	0.6	0468 500 002	W0.8 0.9
0.8	-	0468 500 003	W0.8 1.0
0.9	0.8	0468 500 004	W0.9 1.1
1.0	0.9	0468 500 005	W1.0 1.2
1.2	-	0468 500 006	W1.2 1.4
1.2	1.0	0468 500 007	W1.2 1.5



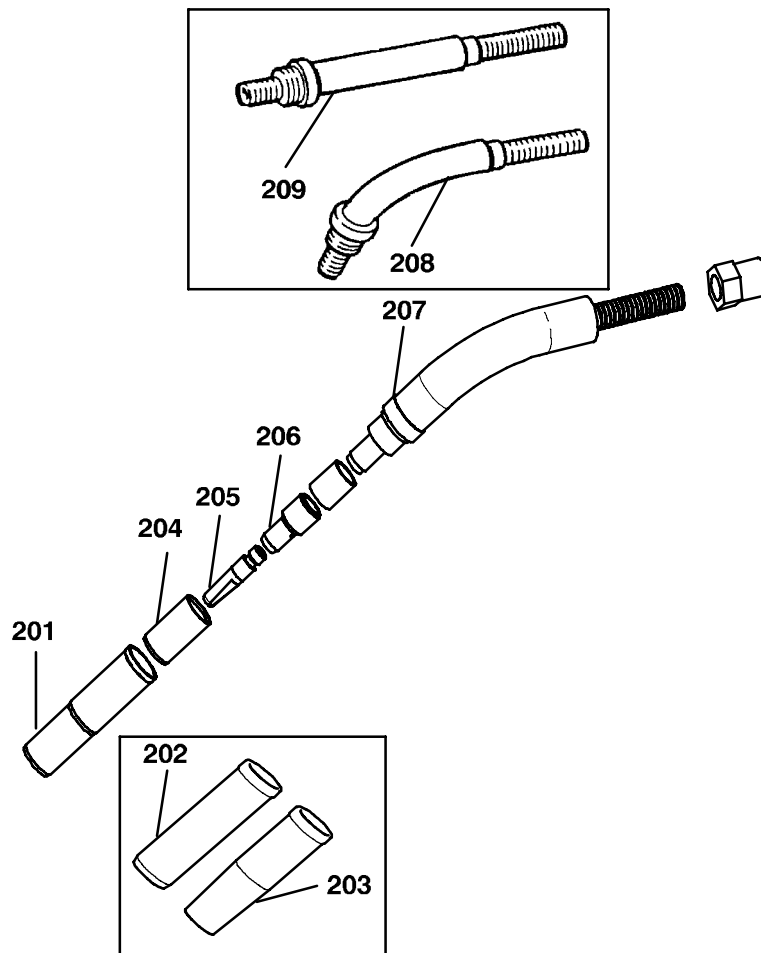
Shielding gas / Welding wire Ø		Contact tip M 6	
CO ₂	Mix / Ar		
0.6	-	0468 501 001	W0.6 0.8
-	0.6	0468 501 002	W0.8 1.0
0.8	-	0468 501 003	W0.9 1.1
0.9	0.8	0468 501 004	W1.0 1.2
1.0	0.9	0468 501 005	W1.2 1.5
1.2	-	0468 501 006	W1.4 1.7
1.2	1.0	0468 501 007	W1.6 1.9



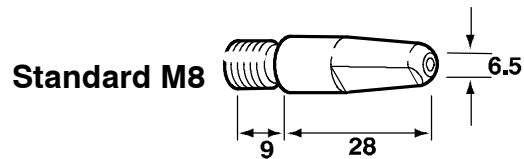
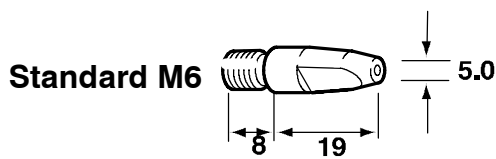
Shielding gas / Welding wire Ø		Contact tip M 7	
CO ₂	Mix / Ar		
0.6	-	0468 313 880	W0.6
-	0.6	0468 313 881	W0.8
0.8	-	0468 313 882	W0.9
0.9	0.8	0468 313 883	W1.0
1.0	0.9	0468 313 884	W1.2
1.2	-	0468 313 885	W1.4
1.2	1.0	0468 313 886	W1.6

PSF™ 305, PSF™ 405, PSF™ 505, PSF™ 410w, PSF™ 510w

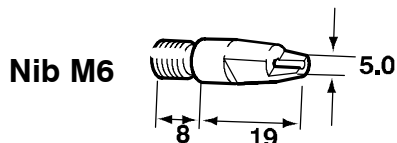
Item	Denomination	PSF 305, PSF 410w	PSF 405, PSF 510w	PSF 505	Notes
201	Gas nozzle	0458 464 882	0458 464 883	0458 464 884	Standard
202	Gas nozzle	0458 470 882	0458 470 883	0458 470 884	Straight
203	Gas nozzle	0458 465 882	0458 465 883	0458 465 884	Conical
204	Spatter protection	0458 471 003	0458 471 004	0458 471 005	
205	Contact tip				See table on page 17.
206	Tip adaptor M6	0366 394 001	0366 394 001	-	Standard
	Tip adaptor M8	0366 394 002	0366 394 002	0366 395 001	Standard
	Tip adaptor M7	0368 311 001	0368 311 001	0368 312 001	Helix
207	Swan neck	0366 388 880	0366 389 880	0366 390 880	Standard
	Swan neck water	0458 403 881	0458 403 882	-	Standard
208	Swan neck	0467 988 881	0467 988 880	0467 989 880	60°
	Swan neck water	0458 403 884	0458 403 885	-	
209	Swan neck	0469 333 880	0469 334 880	0469 335 880	Straight
	Swan neck water	0458 403 886	0458 403 887	-	



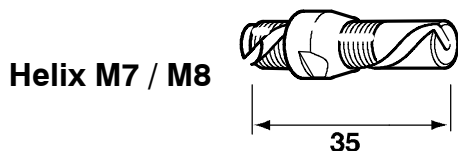
Contact tips



Gas / wire Ø		PSF 305, PSF 410w		PSF 405, PSF 510w		PSF 505		
CO ₂	Mix / Ar	M 6	M 8	M 6	M 8	M 8	M 6	M 8
0.6	-	0468 500 001	-	0468 500 001	-	-	W0.6 0.8	-
-	0.6	0468 500 002	-	0468 500 002	-	-	W0.8 0.9	-
0.8	-	0468 500 003	0468 502 003	0468 500 003	0468 502 003	0468 502 003	W0.8 1.0	W0.8 1.0
0.9	0.8	0468 500 004	0468 502 004	0468 500 004	0468 502 004	0468 502 004	W0.9 1.1	W1.0 1.1
1.0	0.9	0468 500 005	0468 502 005	0468 500 005	0468 502 005	0468 502 005	W1.0 1.2	W1.0 1.2
1.2	-	0468 500 006	0468 502 006	0468 500 006	0468 502 006	0468 502 006	W1.2 1.4	W1.2 1.4
1.2	1.0	0468 500 007	0468 502 007	0468 500 007	0468 502 007	0468 502 007	W1.2 1.5	W1.2 1.5
1.4	1.2	0468 500 008	0468 502 008	0468 500 008	0468 502 008	0468 502 008	W1.4 1.7	W1.4 1.7
1.6	-	0468 500 009	0468 502 009	0468 500 009	0468 502 009	0468 502 009	W1.6 1.9	W1.6 1.9
-	1.6	0468 500 010	0468 502 010	0468 500 010	0468 502 010	0468 502 010	W1.6 2.1	W1.6 2.1
2.0	2.0	-	-	-	0468 502 011	0468 502 011	-	W2.0 2.4
2.4	2.4	-	-	-	0468 502 012	0468 502 012	-	W2.4 2.8



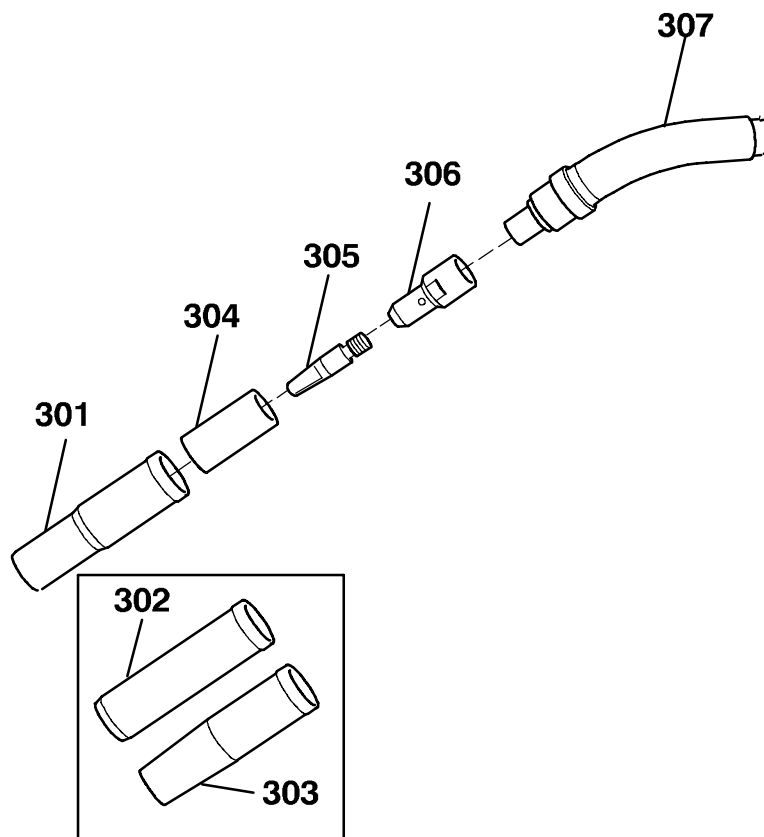
Shielding gas / Welding wire Ø		Contact nozzle		
CO ₂	Mix / Ar	M 6		
0.6	-	0468 501 001	W0.6	0.8
-	0.6	0468 501 002	W0.8	1.0
0.8	-	0468 501 003	W0.9	1.1
0.9	0.8	0468 501 004	W1.0	1.2
1.0	0.9	0468 501 005	W1.2	1.5
1.2	-	0468 501 006	W1.4	1.7
1.2	1.0	0468 501 007	W1.6	1.9



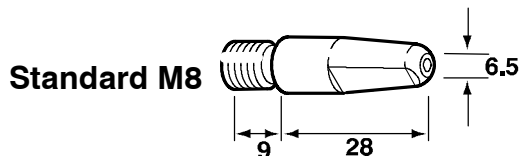
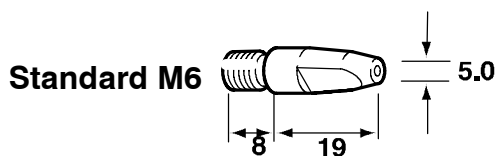
Shielding gas / Welding wire Ø		Contact nozzle			
CO ₂	Mix / Ar	M 7	M 8		
0.6	-	0468 313 880	-	W0.6	
-	0.6	0468 313 881	-	W0.8	
0.8	-	0468 313 882	-	W0.9	
0.9	0.8	0468 313 883	0368 313 983	W1.0	
1.0	0.9	0468 313 884	0368 313 984	W1.2	
1.2	-	0468 313 885	-	W1.4	
1.2	1.0	0468 313 886	-	W1.6	

PSF™ 250C, PSF™ 315C LD, PSF™ 405C, PSF™ 410Cw

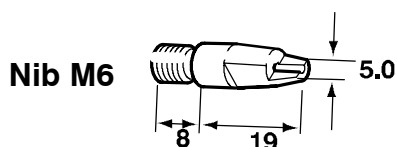
Item	Denomination	PSF 250C	PSF 315C LD	PSF 405C	PSF 410Cw	Notes
301	Gas nozzle	0458 464 881	0458 464 882	0458 464 884	0458 464 883	Standard
302	Gas nozzle	0458 470 881	0458 470 882	0458 470 884	0458 470 883	Straight
303	Gas nozzle	0458 465 881	0458 465 882	0458 465 884	0458 465 883	Conical
304	Spatter protection	0458 471 002	0458 471 003	0458 471 005	0458 471 004	
305	Contact tip					See table on page 19.
306	Tip adaptor M6	0366 314 001	0366 394 001	0366 394 001	0366 394 001	Standard
	Tip adaptor M8	-	0366 394 002	0366 394 002	0366 394 002	Standard
	Tip adaptor M7	0368 310 001	0368 311 001	0368 311 001	0368 311 001	Helix
	Tip adaptor M8	-	0366 394 002	0366 394 002	0366 394 002	Helix
307	Swan neck	0366 315 880	0457 862 880	0459 763 880	0458 487 880	



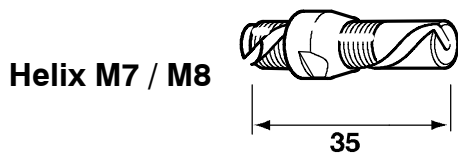
Contact tips



Gas / wire Ø		PSF 250C	PSF 315 C LD	PSF 405C		PSF 410Cw			
CO ₂	Mix / Ar	M 6	M 6	M 6	M 8	M 6	M 8	M 6	M 8
0.6	-	0468 500 001	0468 500 001	0468 500 001	-	0468 500 001	-	W0.6 0.8	-
-	0.6	0468 500 002	0468 500 002	0468 500 002	-	0468 500 002	-	W0.8 0.9	-
0.8	-	0468 500 003	0468 500 003	0468 500 003	0468 502 003	0468 500 003	0468 502 003	W0.8 1.0	W0.8 1.0
0.9	0.8	0468 500 004	0468 500 004	0468 500 004	0468 502 004	0468 500 004	0468 502 004	W0.9 1.1	W1.0 1.1
1.0	0.9	0468 500 005	0468 500 005	0468 500 005	0468 502 005	0468 500 005	0468 502 005	W1.0 1.2	W1.0 1.2
1.2	-	0468 500 006	0468 500 006	0468 500 006	0468 502 006	0468 500 006	0468 502 006	W1.2 1.4	W1.2 1.4
1.2	1.0	0468 500 007	0468 500 007	0468 500 007	0468 502 007	0468 500 007	0468 502 007	W1.2 1.5	W1.2 1.5
1.4	1.2	-	0468 500 008	0468 500 008	0468 502 008	0468 500 008	0468 502 008	W1.4 1.7	W1.4 1.7
1.6	-	-	-	0468 500 009	0468 502 009	0468 500 009	0468 502 009	W1.6 1.9	W1.6 1.9
-	1.6	-	-	0468 500 010	0468 502 010	0468 500 010	0468 502 010	W1.6 2.1	W1.6 2.1



Shielding gas / Welding wire Ø		Contact nozzle		
CO ₂	Mix / Ar	M 6		
0.6	-	0468 501 001	W0.6	0.8
-	0.6	0468 501 002	W0.8	1.0
0.8	-	0468 501 003	W0.9	1.1
0.9	0.8	0468 501 004	W1.0	1.2
1.0	0.9	0468 501 005	W1.2	1.5
1.2	-	0468 501 006	W1.4	1.7
1.2	1.0	0468 501 007	W1.6	1.9



Shielding gas / Welding wire Ø		Contact nozzle			
CO ₂	Mix / Ar	M 7	M 8		
0.6	-	0468 313 880	-	W0.6	
-	0.6	0468 313 881	-	W0.8	
0.8	-	0468 313 882	-	W0.9	
0.9	0.8	0468 313 883	0368 313 983	W1.0	
1.0	0.9	0468 313 884	0368 313 984	W1.2	
1.2	-	0468 313 885	-	W1.4	
1.2	1.0	0468 313 886	-	W1.6	

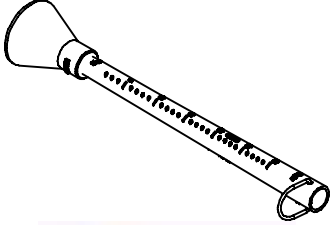

Wire liner

Welding torch	Welding wire	Steel spiral liner		PTFE ceramic liner ^{*)} (beige)	
		3 m	4.5 m	3 m	4.5 m
PSF™ 250, PSF™ 250C	0.6-0.8 mm	0366 549 882	0366 549 883	-	-
	0.9-1.0 mm	0366 549 884	0366 549 885	0457 969 882	0457 969 883
PSF™ 305, PSF™ 315C LD	1.2 mm	0366 549 886	0366 549 887	0457 969 882	0457 969 883
PSF™ 405, PSF™ 405C, PSF™ 410w, PSF™ 410Cw	1.4 mm	0366 549 888	0366 549 889	0457 969 884	-
	1.6 mm	0366 549 890	0366 549 891	-	-
PSF™ 505, PSF™ 510w	2.0 mm	-	0366 549 898	-	-
	2.4 mm	-	0366 549 899	-	-
The wire guide is marked with the max. wire diameter (stamped on the nipple).					
*) No wear insert needed.					

Welding torch	Welding wire	PTFE liner incl. wear insert (steel, white)		Wear insert separate for PTFE liner	
		3 m	4.5 m	Steel	PTFE (Al)
PSF™ 250, PSF™ 250C	0.6 mm	0366 550 880	0366 550 881	0366 545 880	0368 742 880
	0.8 mm	0366 550 882	0366 550 883	0366 545 880	0368 742 880
	0.9-1.0 mm	0366 550 884	0366 550 885	0366 545 881	0368 742 880
PSF™ 305, PSF™ 315C LD	1.2 mm	0366 550 886	0366 550 887	0366 545 882	0368 742 883
PSF™ 405, PSF™ 405C, PSF™ 410w, PSF™ 410Cw	1.4 mm	0366 550 888	0366 550 889	0366 545 883	0368 742 881
	1.6 mm	0366 550 890	0366 550 891	0366 545 884	0368 742 881
PSF™ 505, PSF™ 510w	2.0/2.4 mm	0366 550 892	0366 550 893	-	-
The wire guide is marked with the max. wire diameter (stamped on the nipple).					

PSF™ welding torches

Accessories

	Gas flow meter	0155 716 880
	MIG handy support with strong magnetic foot	0760 022 300
Spot welding accessory Self and water cooled		
PSF™ 250, PSF™ 250C 0366 643 881		
PSF™ 305, PSF™ 410w, PSF™ 315C LD, 0366 643 882		
PSF™ 410Cw		
PSF™ 405, PSF™ 510w, PSF™ 405C 0366 643 883		
PSF™ 505 0366 643 884		

ESAB subsidiaries and representative offices

Europe

AUSTRIA

ESAB Ges.m.b.H
Vienna-Liesing
Tel: +43 1 888 25 11
Fax: +43 1 888 25 11 85

BELGIUM

S.A. ESAB N.V.
Brussels
Tel: +32 2 745 11 00
Fax: +32 2 745 11 28

THE CZECH REPUBLIC

ESAB VAMBERK s.r.o.
Vamberk
Tel: +420 2 819 40 885
Fax: +420 2 819 40 120

DENMARK

Aktieselskabet ESAB
Herlev
Tel: +45 36 30 01 11
Fax: +45 36 30 40 03

FINLAND

ESAB Oy
Helsinki
Tel: +358 9 547 761
Fax: +358 9 547 77 71

FRANCE

ESAB France S.A.
Cergy Pontoise
Tel: +33 1 30 75 55 00
Fax: +33 1 30 75 55 24

GERMANY

ESAB GmbH
Solingen
Tel: +49 212 298 0
Fax: +49 212 298 218

GREAT BRITAIN

ESAB Group (UK) Ltd
Waltham Cross
Tel: +44 1992 76 85 15
Fax: +44 1992 71 58 03

ESAB Automation Ltd

Andover
Tel: +44 1264 33 22 33
Fax: +44 1264 33 20 74

HUNGARY

ESAB Kft
Budapest
Tel: +36 1 20 44 182
Fax: +36 1 20 44 186

ITALY

ESAB Saldatura S.p.A.
Mesero (Mi)
Tel: +39 02 97 96 81
Fax: +39 02 97 28 91 81

THE NETHERLANDS

ESAB Nederland B.V.
Utrecht
Tel: +31 30 2485 377
Fax: +31 30 2485 260

NORWAY

AS ESAB
Larvik
Tel: +47 33 12 10 00
Fax: +47 33 11 52 03

POLAND

ESAB Sp.zo.o.
Katowice
Tel: +48 32 351 11 00
Fax: +48 32 351 11 20

PORTUGAL

ESAB Lda
Lisbon
Tel: +351 8 310 960
Fax: +351 1 859 1277

SLOVAKIA

ESAB Slovakia s.r.o.
Bratislava
Tel: +421 7 44 88 24 26
Fax: +421 7 44 88 87 41

SPAIN

ESAB Ibérica S.A.
Alcalá de Henares (MADRID)
Tel: +34 91 878 3600
Fax: +34 91 802 3461

SWEDEN

ESAB Sverige AB
Gothenburg
Tel: +46 31 50 95 00
Fax: +46 31 50 92 22

ESAB international AB

Gothenburg
Tel: +46 31 50 90 00
Fax: +46 31 50 93 60

SWITZERLAND

ESAB AG
Dietikon
Tel: +41 1 741 25 25
Fax: +41 1 740 30 55

North and South America

ARGENTINA

CONARCO
Buenos Aires
Tel: +54 11 4 753 4039
Fax: +54 11 4 753 6313

BRAZIL

ESAB S.A.
Contagem-MG
Tel: +55 31 2191 4333
Fax: +55 31 2191 4440

CANADA

ESAB Group Canada Inc.
Mississauga, Ontario
Tel: +1 905 670 02 20
Fax: +1 905 670 48 79

MEXICO

ESAB Mexico S.A.
Monterrey
Tel: +52 8 350 5959
Fax: +52 8 350 7554

USA

ESAB Welding & Cutting Products
Florence, SC
Tel: +1 843 669 44 11
Fax: +1 843 664 57 48

Asia/Pacific

CHINA

Shanghai ESAB A/P
Shanghai
Tel: +86 21 5308 9922
Fax: +86 21 6566 6622

INDIA

ESAB India Ltd
Calcutta
Tel: +91 33 478 45 17
Fax: +91 33 468 18 80

INDONESIA

P.T. ESABindo Pratama
Jakarta
Tel: +62 21 460 0188
Fax: +62 21 461 2929

JAPAN

ESAB Japan
Tokyo
Tel: +81 3 5296 7371
Fax: +81 3 5296 8080

MALAYSIA

ESAB (Malaysia) Snd Bhd
Selangor
Tel: +60 3 8027 9869
Fax: +60 3 8027 4754

SINGAPORE

ESAB Asia/Pacific Pte Ltd
Singapore
Tel: +65 6861 43 22
Fax: +65 6861 31 95

SOUTH KOREA

ESAB SeAH Corporation
Kyungnam
Tel: +82 55 269 8170
Fax: +82 55 289 8864

UNITED ARAB EMIRATES

ESAB Middle East FZE
Dubai
Tel: +971 4 887 21 11
Fax: +971 4 887 22 63

Representative offices

BULGARIA

ESAB Representative Office
Sofia
Tel/Fax: +359 2 974 42 88

EGYPT

ESAB Egypt
Dokki-Cairo
Tel: +20 2 390 96 69
Fax: +20 2 393 32 13

ROMANIA

ESAB Representative Office
Bucharest
Tel/Fax: +40 1 322 36 74

RUSSIA

LLC ESAB
Moscow
Tel: +7 095 543 9281
Fax: +7 095 543 9280

LLC ESAB

St Petersburg
Tel: +7 812 336 7080
Fax: +7 812 336 7060

Distributors

For addresses and phone numbers to our distributors in other countries, please visit our home page

www.esab.com



ESAB AB
SE-695 81 LAXÅ
SWEDEN
Phone +46 584 81 000



www.esab.com