



A collage of various stud welding equipment and accessories. The central focus is a large, complex welding unit with two long, vertical rods. Surrounding it are several individual components: a threaded stud with a conical tip, a copper-colored stud, a brass-colored stud, a welding torch with a glowing orange tip, and several smaller, cylindrical welding components. The background is a dark, industrial setting with a blue glow.

Accessories Catalogue

Contact our Distributor Stud Welding Products, Inc. for equipment, repairs, weld studs and accessories. 800-252-1919 sales@studweldprod.com



Stud Welding Products
(HBS Distributor)

800-252-1919
www.StudWeldProd.com
sales@StudWeldProd.com

Accessories Catalogue

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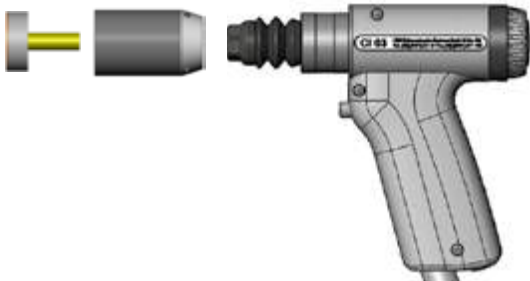
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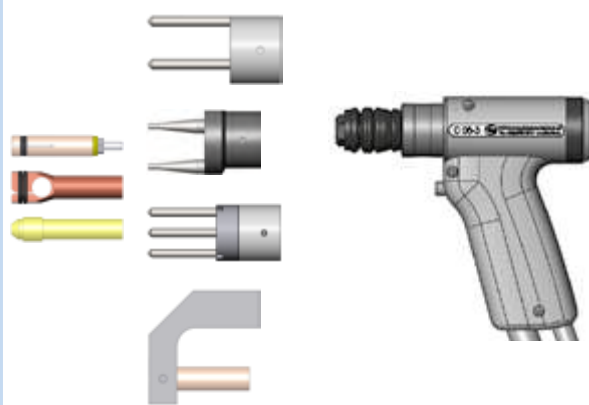
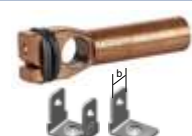


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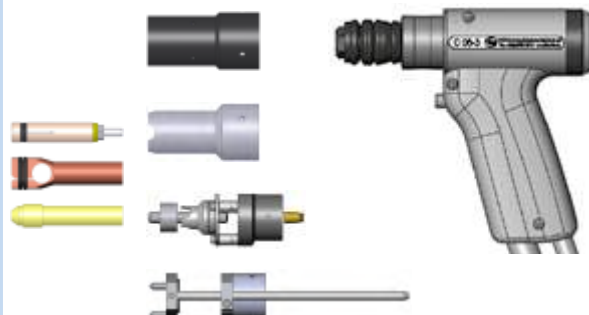


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Equipment			Foot ring with feet (Standard equipment)	Foot ring TK 38 with feet																																
Chucks			universal application on flat surfaces (pitch circle dia. 34 mm)  Foot ring: 80-40-373 Foot: 80-40-049 assembled: 	larger pitch circle dia. (38 mm) for higher stability when placing on the workpiece  Foot ring 80-40-521 Foot: 80-40-077 assembled: 																																
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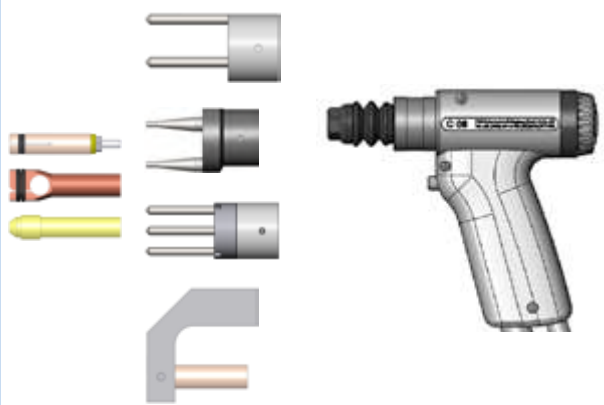
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Length from min. to max.		Length from min. to max.				
25 mm to 55 mm		6 mm to 40 mm		✓	✓	✗
✗		✗		✗	✗	
Length from min. to max.		Length from min. to max.				
25 mm to 50 mm		6 mm to 35 mm		✓	✓	✗
✗		✗				
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Equipment			Noise damping tube	Centering tube																																								
Chucks			for reducing noise level during welding, for welding elements up to dia. 5 mm  Noise damping tube: 82-40-016 assembled:  Ø 35 mm	for welding in templates and for protection against welding sparks  Centering tube: 80-40-513 assembled:  Ø 30 mm																																								
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Centering device	Leg assembly PSI-2	usable with stud welding unit:		
for exact positioning in templates by adjusting the concentricity of the chuck to the centering device, chuck extension necessary Centering tube Ø 20 mm: 80-40-082 Ø 26 mm: 80-40-086 Ø 30 mm: 80-40-083 Centering disc Ø 20 mm: 80-40-092 Ø 26 mm: 80-40-096 Ø 30 mm: 80-40-093 Cylindrical pin 80-10-092 Foot ring TK 38 80-40-521 Chuck extension 80-40-081 Centering device: Ø 20 mm: 92-40-111 / Ø 26 mm: 92-40-117 / Ø 30 mm: 92-40-119 assembled: 	für longer ISO nails and welding elements Foot piece with plastic insert 80-40-127 Clamp plate 80-40-126 Tripod leg 80-40-130 Foot 80-40-306 Foot ring 80-40-373 leg assembly PSI-2 92-40-043 (ISO leg assembly, 3-point rest) assembled: 	CDI 502 with ground cable 92-40-154 	Pegasar 500 accu with ground cable 92-40-154 	Pegasar 500 accu Insulation with ground cable 92-40-154 
Length from min. to max.	Length from min. to max.			
6 mm 40 mm	6 mm ⁵⁾ 200 mm ⁵⁾	✓	✓	✗
✗	✗	✗	✗	
✗	Length from min. to max. 6 mm ⁵⁾ 200 mm ⁵⁾	✓	✓	✗
✗	✗			
✗	✗	✓	✓	✗
✗	Length from min. to max. 20 mm ⁵⁾ / 135 mm ⁶⁾ 135 mm ⁵⁾ / 280 mm ⁶⁾	✓	✗	✓

⁵⁾ when used without plastic insert

⁶⁾ when used with plastic insert

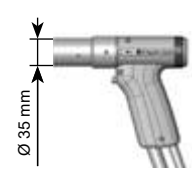
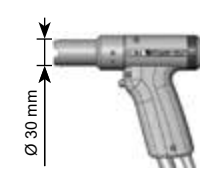
Equipment				Foot ring with feet (Standard equipment)	Foot ring TK 38 with feet
Chucks				universal application on flat surfaces (pitch circle dia. 34 mm)	larger pitch circle dia. (38 mm) for higher stability when placing on the workpiece
				 Foot ring: 80-40-373 Foot: 80-40-049 assembled: 	 Foot ring 80-40-521 Foot: 80-40-077 assembled: 
for CD threaded studs / pins		Welding element dia.	Order No.	Length from min. to max.	Length from min. to max.
		dia. 2 mm	82-50-002	6 mm ¹⁾ / 16 mm ²⁾	6 mm ¹⁾ / 16 mm ²⁾
		dia. 2.5 mm	82-50-025		
		dia. 3 mm	82-50-003	30 mm ¹⁾ / 40 mm ²⁾	30 mm ¹⁾ / 40 mm ²⁾
		dia. 4 mm	82-50-004		
		dia. 5 mm	82-50-005	6 mm ¹⁾ / 16 mm ²⁾	6 mm ¹⁾ / 16 mm ²⁾
		dia. 6 mm	82-50-006		
		dia. 7.1 mm	82-50-071	30 mm ¹⁾ / 40 mm ²⁾	30 mm ¹⁾ / 40 mm ²⁾
		dia. 8 mm	82-50-008		
		dia. 10 mm	82-50-009	6 mm ¹⁾ / 16 mm ²⁾	6 mm ¹⁾ / 16 mm ²⁾
for CD studs with internal thread		Welding element dia.	Order No.	Length from min. to max.	Length from min. to max.
		dia. 5 mm	82-50-905	6 mm	6 mm
		dia. 6 mm	82-50-906		
		dia. 7.1 mm	82-50-971	30 mm	30 mm
		dia. 8 mm	82-50-908		
for ground clips		Welding element	Order No.		
		b = 6.3 mm	82-50-050		
for CD ISO nails		Welding element dia.	Order No.	Length from min. to max.	Length from min. to max.
		dia. 2 mm	82-50-020	20 mm	20 mm
		dia. 3 mm	82-50-030		
		dia. 2.7 mm	82-50-027	80 mm	80 mm

¹⁾ with standard stop pin

²⁾ additional stop pin 80-90-710 necessary

Distance ring with foot ring and feet		Offset chuck adaptor with foot ring and feet		usable with stud welding unit:		
for longer welding elements and welding elements with dia. 10 mm		for welding in corners (minimum distance 9 mm)				
 Foot ring: 80-40-373 Distance ring 92-40-010 with screws Foot: 80-40-049 <u>assembled:</u> 		 Offset chuck adaptor: 82-40-011 Foot ring: 80-40-373 Foot: 80-40-049 <u>assembled:</u> 		CDI 1502 with ground cable 92-40-095	CDI 2302 with ground cable 92-40-095	CDI 3102 with ground cable 92-40-095
Length from min. to max.		Length from min. to max.				
15 mm¹⁾ 25 mm²⁾ 45 mm¹⁾ / 55 mm²⁾³⁾		6 mm 40 mm		✓	✓	✓
15 mm 30 mm		✗		✗	(✓)	✓
Length from min. to max.		Length from min. to max.				
25 mm 45 mm		6 mm 35 mm		✓	✓	✓
✗		✗		✓	✓	✗
✗		✗		✓	✗	✗

³⁾ stop pin 80-90-710 included in delivery of distance ring 92-40-010

Equipment				Noise damping tube	Centering tube
Chucks				for reducing noise level during welding, for welding elements up to dia. 5 mm  Noise damping tube: 82-40-016 assembled:  Ø 35 mm	for welding in templates and for protection against welding sparks  Centering tube: 80-40-513 assembled:  Ø 30 mm
	for CD threaded studs / nails	Welding element dia. Order No. dia. 2 mm 82-50-002 dia. 2.5 mm 82-50-025 dia. 3 mm 82-50-003 dia. 4 mm 82-50-004 dia. 5 mm 82-50-005 dia. 6 mm 82-50-006 dia. 7.1 mm 82-50-071 dia. 8 mm 82-50-008 dia. 10 mm 82-50-009		Length from min. to max. 6 mm¹⁾ 30 mm¹⁾ 16 mm²⁾ 40 mm²⁾	Length from min. to max. 6 mm¹⁾ 30 mm¹⁾ 16 mm²⁾ 40 mm²⁾
		Welding element dia. Order No. dia. 5 mm 82-50-905 dia. 6 mm 82-50-906 dia. 7.1 mm 82-50-971 dia. 8 mm 82-50-908		Length from min. to max. 6 mm 30 mm	Length from min. to max. 6 mm 35 mm
		Welding element Order No. b = 6.3 mm 82-50-050		✓	✓
		Welding element dia. Order No. dia. 2 mm 82-50-020 dia. 3 mm 82-50-030 dia. 2.7 mm 82-50-027		Length from min. to max. 20 mm 80 mm	Length from min. to max. 20 mm 80 mm

¹⁾ with standard stop pin

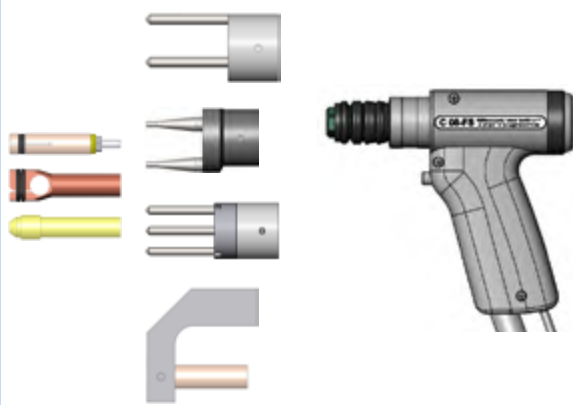
²⁾ additional stop pin 80-90-710 necessary

Centering device	Leg assembly PSI-2	usable with stud welding unit:		
for exact positioning in templates by adjusting the concentricity of the chuck to the centering device, chuck extension necessary Centering tube Ø 20 mm: 80-40-082 Ø 26 mm: 80-40-086 Ø 30 mm: 80-40-083 Centering disc Ø 20 mm: 80-40-092 Ø 26 mm: 80-40-096 Ø 30 mm: 80-40-093 Cylindrical pin 80-10-092 Foot ring TK 38 80-40-521 Chuck extension 80-40-081 Centering device: dia. 20 mm: 92-40-111 / dia. 26 mm: 92-40-117 / dia. 30 mm: 92-40-119 <u>assembled:</u> 	for longer ISO nails and welding elements Foot piece with plastic insert 80-40-127 Clamp plate 80-40-126 Foot 80-40-306 Foot ring 80-40-373 Tripod leg 80-40-130 Leg assembly PSI-2 92-40-043 (ISO leg assembly, 3-point rest) <u>assembled:</u> 	CDi 1502 with ground cable 92-40-095 CDi 2302 with ground cable 92-40-095 CDi 3102 with ground cable 92-40-095 		
Length	Length			
from min.	to max.	from min.	to max.	
6 mm	30 mm	6 mm ⁵⁾	175 mm ⁵⁾	✓
6 mm ⁴⁾	20 mm ⁴⁾			✓
✗		6 mm ⁵⁾	175 mm ⁵⁾	✓
✗		✗		✓
✗		20 mm ⁵⁾ / 110 mm ⁵⁾	110 mm ⁵⁾ / 255 mm ⁵⁾	✗

⁴⁾ only in conjunction with 92-40-119

⁵⁾ when used without plastic insert

⁶⁾ when used with plastic insert

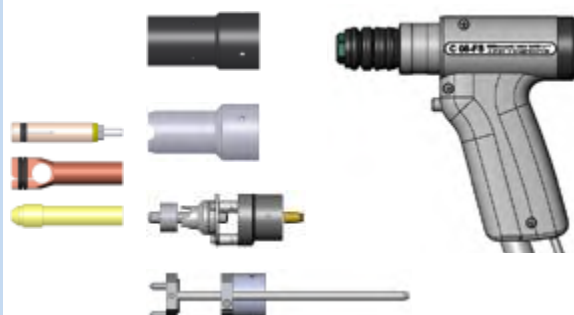
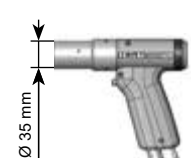
Equipment				Foot ring with feet (Standard equipment)	Foot ring TK 38 with feet
Chucks				universal application on flat surfaces (pitch circle dia. 34 mm)	larger pitch circle dia. (38 mm) for higher stability when placing on the workpiece
				 Foot ring: 80-40-373 Foot: 80-40-049 assembled: 	 Foot ring 80-40-521 Foot: 80-40-077 assembled: 
for CD threaded studs / pins		Welding element dia.	Order No.	Length from min. to max.	Length from min. to max.
		dia. 2 mm	82-50-002		
		dia. 2.5 mm	82-50-025		
		dia. 3 mm	82-50-003		
		dia. 4 mm	82-50-004		
		dia. 5 mm	82-50-005		
		dia. 6 mm	82-50-006		
		dia. 7.1 mm	82-50-071		
		dia. 8 mm	82-50-008		
		dia. 10 mm	82-50-009		
for CD studs with internal thread		Welding element dia.	Order No.	Length from min. to max.	Length from min. to max.
		dia. 5 mm	82-50-905		
		dia. 6 mm	82-50-906		
		dia. 7.1 mm	82-50-971		
		dia. 8 mm	82-50-908		
for ground clips		Welding element	Order No.		
		b = 6.3 mm	82-50-050		
for CD ISO nails		Welding element dia.	Order No.	Length from min. to max.	Length from min. to max.
		dia. 2 mm	82-50-020		
		dia. 3 mm	82-50-030		
		dia. 2.7 mm	82-50-027		

¹⁾ with standard stop pin

²⁾ additional stop pin 80-90-710 necessary

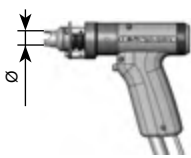
Distance ring with foot ring and feet	Offset chuck adaptor with foot ring and feet	usable with stud welding unit:
for longer welding elements and welding elements with dia. 10 mm  Foot ring: 80-40-373 Distance ring 92-40-010 with screws Foot: 80-40-049 <u>assembled:</u> 	for welding in corners (minimum distance 9 mm)  Offset chuck adaptor: 82-40-011 Foot ring: 80-40-373 Foot: 80-40-049 <u>assembled:</u> 	CDi 508 with ground cable 92-40-095 
Length from min. to max.	Length from min. to max.	
15 mm¹⁾ 45 mm¹⁾ / 55 mm²⁾³⁾ 25 mm²⁾	6 mm 40 mm	✓
15 mm 30 mm	✗	✗
Length from min. to max.	Length from min. to max.	
25 mm 45 mm	6 mm 35 mm	✓
✗	✗	✓
✗	✗	✓

³⁾ stop pin 80-90-710 included in delivery of distance ring 92-40-010

Equipment				Noise damping tube	Centering tube
Chucks				for reducing noise level during welding, for welding elements up to dia. 5 mm  Noise damping tube: 82-40-016 assembled:  Ø 35 mm	for welding in templates and for protection against welding sparks  Centering tube: 80-40-513 assembled:  Ø 30 mm
	for CD threaded studs / nails		Welding element dia.	Order No.	Length from min. to max.
dia. 2 mm			82-50-002	6 mm ¹⁾ / 16 mm ²⁾	30 mm ¹⁾ / 40 mm ²⁾
dia. 2.5 mm			82-50-025		
dia. 3 mm			82-50-003		
dia. 4 mm			82-50-004		
dia. 5 mm			82-50-005	X	6 mm ¹⁾ / 16 mm ²⁾
dia. 6 mm			82-50-006		
dia. 7.1 mm			82-50-071		
dia. 8 mm	82-50-008	X	X		
dia. 10 mm	82-50-009				
for CD studs with internal thread		Welding element dia.	Order No.	Length from min. to max.	Length from min. to max.
		dia. 5 mm	82-50-905	6 mm 30 mm	6 mm 35 mm
		dia. 6 mm	82-50-906	X	
		dia. 7.1 mm	82-50-971		
		dia. 8 mm	82-50-908		
for ground clips		Welding element b = 6.3 mm	Order No. 82-50-050	✓	✓
for CD ISO nails		Welding element dia.	Order No.	Length from min. to max.	Length from min. to max.
		dia. 2 mm	82-50-020	20 mm 80 mm	20 mm 80 mm
		dia. 3 mm	82-50-030		
		dia. 2.7 mm	82-50-027		

¹⁾ with standard stop pin

²⁾ additional stop pin 80-90-710 necessary

Centering device	Leg assembly PSI-2	usable with stud welding unit:
for exact positioning in templates by adjusting the concentricity of the chuck to the centering device, chuck extension necessary Centering tube Ø 20 mm: 80-40-082 Ø 26 mm: 80-40-086 Ø 30 mm: 80-40-083 Centering disc Ø 20 mm: 80-40-092 Ø 26 mm: 80-40-096 Ø 30 mm: 80-40-093 Cylindrical pin 80-10-092 Chuck extension 80-40-081 Foot ring TK 38 80-40-521 Centering device: dia. 20 mm: 92-40-111 / dia. 26 mm: 92-40-117 / dia. 30 mm: 92-40-119 <u>assembled:</u> 	for longer ISO nails and welding elements Foot piece with plastic insert 80-40-127 Clamp plate 80-40-126 Tripod leg 80-40-130 Foot 80-40-306 Foot ring 80-40-373 Leg assembly PSI-2 92-40-043 (ISO leg assembly, 3-point rest) <u>assembled:</u> 	usable with stud welding unit: CDi 508 with ground cable 92-40-095 
Length from min. to max.	Length from min. to max.	
6 mm 30 mm	6 mm⁵⁾ 175 mm⁵⁾	✓
6 mm⁴⁾ 20 mm⁴⁾		
✗	Length from min. to max. 6 mm⁵⁾ 175 mm⁵⁾	✓
✗	✗	✓
✗	Length from min. to max. 20 mm⁵⁾ / 110 mm⁵⁾ 110 mm⁵⁾ / 255 mm⁵⁾	✓

⁴⁾ only in conjunction with 92-40-119

⁵⁾ when used without plastic insert

⁶⁾ when used with plastic insert



1

Welding gun accessories for C 06-3 / C 08-FS / C 08 / CA 08

Welding gun accessories CD 3 mm to 6 mm

for C 06-3 / C 08-FS / C 08 / CA 08



Order No.:
92-40-050

consisting of:

- | | |
|-----------|---------------------|
| 82-50-003 | Chuck M3 |
| 82-50-004 | Chuck M4 |
| 82-50-005 | Chuck M5 |
| 82-50-006 | Chuck M6 |
| 80-40-085 | Socket wrench AF 17 |

Welding gun accessories CD 3 mm to 8 mm

for C 06-3 / C 08-FS / C 08 / CA 08



Order No.:
92-40-018

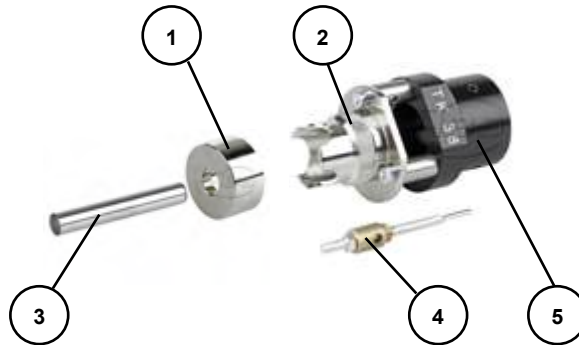
consisting of:

- | | |
|-----------|---------------------|
| 82-50-003 | Chuck M3 |
| 82-50-004 | Chuck M4 |
| 82-50-005 | Chuck M5 |
| 82-50-006 | Chuck M6 |
| 82-50-008 | Chuck M8 |
| 80-40-085 | Socket wrench AF 17 |

Centering device for an exact positioning in welding templates

for C 06-3 / C 08-FS / C 08 / CA 08

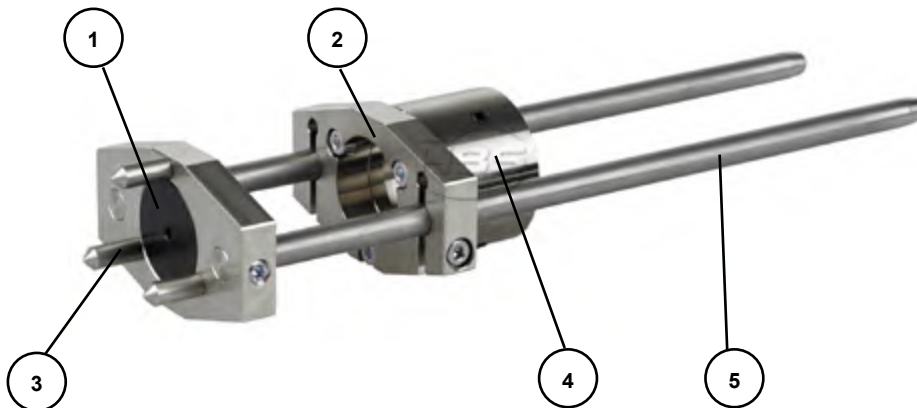
1



92-40-111	Centering device dia. 20 mm complete	92-40-117	Centering device dia. 26 mm complete	92-40-119	Centering device Ø 30 mm complete
80-40-092	Centering disc dia. 20 mm	80-40-096	Centering disc dia. 26 mm	80-40-093	Centering disc dia. 30 mm
80-40-082	Centering tube dia. 20 mm	80-40-086	Centering tube dia. 26 mm	80-40-083	Centering tube dia. 30 mm
80-10-092	Cylindrical pin				
80-40-081	Chuck extension				
80-40-521	Foot ring pitch circle 38 mm				

Leg assembly PSI-2 for welding of ISO nails and studs

for C 06-3 / C 08-FS / C 08 / CA 08



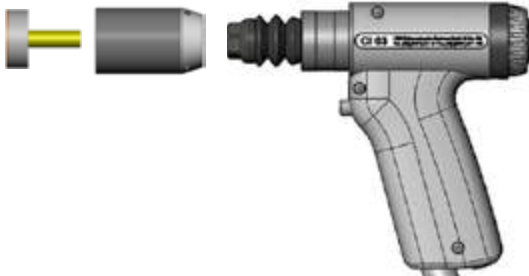
92-40-043 Leg assembly ISO PSI-2 with 3-point rest complete

1	80-40-127	Foot piece with plastic insert
2	80-40-126	Clamp plate
3	80-40-306	Foot
4	80-40-373	Foot ring
5	80-40-130	Leg 8 x 220 mm

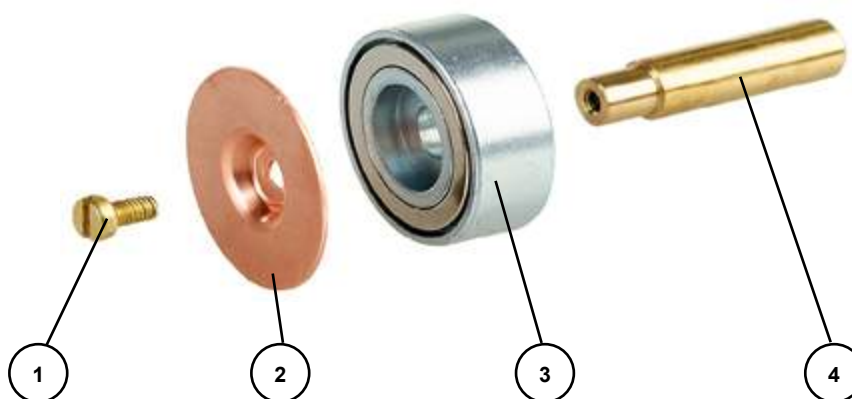
Leg assemblies – details for C 06-3 / C 08-FS / C 08 / CA 08

1

Equipment for CI 03

Equipment		Spacer with gun head	usable with stud welding unit:								
Chucks		for welding of cupped head pins  Spacer: 80-05-818 Gun head: 80-05-819 <u>assembled:</u> 	CDI 502 with ground cable 92-40-091 	CDI 1502 with ground cable 92-40-091 	Pegasar 500 accu Insulation with ground cable 92-40-091 						
	for cupped head pins	 <table><tr><th>Welding element dia.</th><th>Order No.</th></tr><tr><td>Ø 30 mm</td><td>82-50-310B</td></tr><tr><td>Ø 38 mm</td><td>82-50-308A</td></tr></table>	Welding element dia.	Order No.	Ø 30 mm	82-50-310B	Ø 38 mm	82-50-308A			
Welding element dia.	Order No.										
Ø 30 mm	82-50-310B										
Ø 38 mm	82-50-308A										

Chuck for cupped head pins



82-50-310B Chuck CI 03 with magnetic holder for Ø 30 mm
82-50-308A Chuck CI 03 with magnetic holder for Ø 38 mm

1	80-90-206	Screw M4 x 8	3	80-10-0476	Magnet
2	80-41-141 80-41-128	Copper washer for 82-50-310B Copper washer for 82-50-308A	4	80-41-126	Cylinder

Welding gun accessories ISO for cupped head pins Ø 30 mm



Order No.:

92-40-066A

consisting of:

82-50-310B

Chuck CI 03 with magnetic holder for Ø 30 mm

80-10-069

Double open ended wrench 14 x 17

Welding gun accessories ISO for cupped head pins Ø 38 mm



Order No.:

92-40-063A

consisting of:

82-50-308A

Chuck CI 03 with magnetic holder for Ø 38 mm

80-10-069

Double open ended wrench 14 x 17

1

Accessories for ACCU-TWIN

Accessories for ACCU-TWIN (Order No. 92-10-2280A)



Chuck	for: ACCU-TWIN with steplessly adjustable stud spacing
	V 82-55-003



Clamping nut	for: Fixing of chucks
	80-05-454



Spark protection

for: Reduce sparks
(from 26 mm stud spacing)
and noise protection

V 80-08-124A



Bellows

for: Distance between chucks is under 26 mm
(higher sparkling)
and noise protection

80-20-016



Battery
(rechargeable)

Lead battery 12 V, 5 Ah

80-50-1348



External power
supply unit
(charger)

for: charging battery

88-21-490

1

Accessories for ACCU-TWIN

Accessories for ACCU-TWIN (Order No. 92-10-2380A)





Chuck

for: ACCU-TWIN with steplessly adjustable stud spacing

V 82-55-003



Clamping nut

for: Fixing of chucks

80-05-454



Spark protection

for: Reduce sparks (from 26 mm stud spacing) and noise protection

V 80-08-124A



Bellows

for: Distance between chucks is under 26 mm (higher sparkling) and noise protection

80-20-016



Battery (rechargeable)

Lead battery 12 V, 5 Ah

80-50-1348

1

Accessories for ACCU-TWIN

Preparation:



Grinder

for: Removing paint from heating elements

88-25-441

Charging:



Power supply unit

for: Charging the battery at the mains

88-25-438



Car adaptor
(charging cable for
12 V connection)

for: Charging the battery via 12 V connection

88-25-440

Everything close to hand:

1



Toolbag

for: Carrying accessories (chucks, tool)

for: ACCU-TWIN

88-25-192



Shoulder strap

for: Safe transport of the stud welding unit

80-10-704



Assortment box

for: Safe storage of chucks and other small parts

88-25-444

Accessories for ACCU-TWIN

Accessories for Pegasar 500 accu / Pegasar 500 accu Insulation



Version „metric“
M3 – M4 – M5 – M6

Version „imperial“
#4 – #6 – #10 – 1/4"

Version „ISO“

Quick battery change



Toolbag – everything at the ready





Battery
(rechargeable)
type Accu 150

for: welding in battery mode
LiNiCoAlO2 battery 25.55 V, 5.7 AH, 145.64 Wh

88-23-484



Charging unit
type ACCU
CHARGER 150

for: charging the battery type Accu 150 outside of the
stud welding unit

88-23-661



Transport protection

for: transportation and shipping of the stud welding
unit with inserted battery
separating the contacts between the stud welding
unit and the battery

88-24-081



(Delivery without content)

Toolbag

for: accessories (chucks, tools)

for: Pegasar 500 accu, Pegasar 500 accu Insulation,
Visar 650

88-24-466

Overview manual stud welding

Drawn arc with ceramic ferrule



2

Manual stud welding – drawn arc with ceramic ferrule

Equipment for A 12	Page
	30 - 31
Equipment for A 12-FL	Page
	32 - 33
Welding gun accessories for A 12 / A 12-FL	Page
	34
Leg assemblies – Detail views for A 12 / A 12-FL	Page
	35



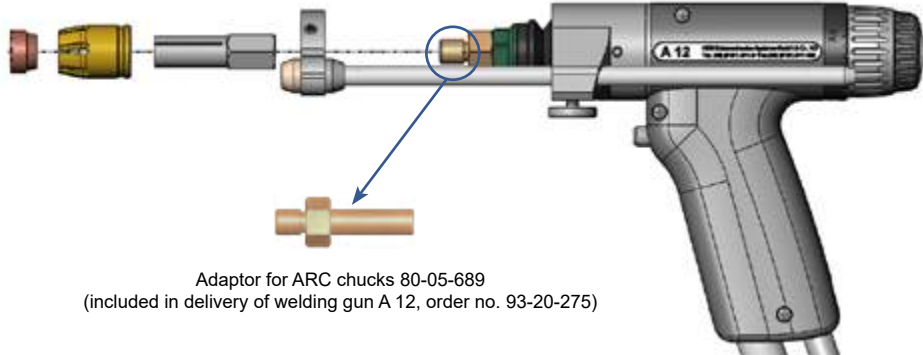
Overview manual stud welding

Drawn arc with ceramic ferrule

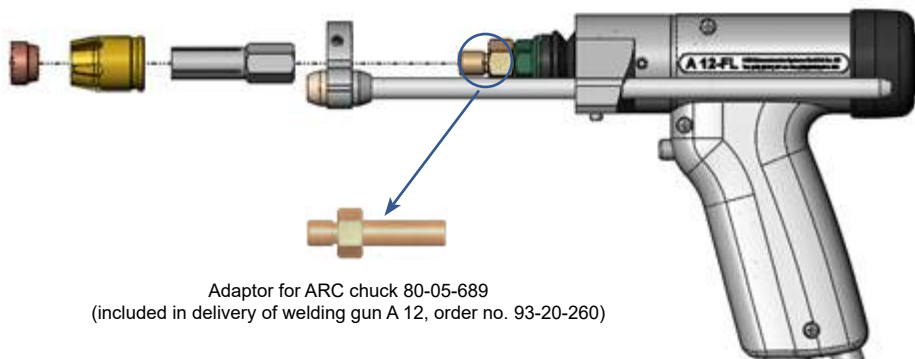
2

Manual stud welding – drawn arc with ceramic ferrule

Equipment for A 16	Page
	36 - 41
Equipment for A 22	Page
	46 - 49
Welding gun accessories for A 16 / A 22 (RD / MD (DD) / PD / UD/ ID)	Page
	50 - 52
Welding gun accessories for A 16 / A 22 (concrete anchor SD)	Page
	52 - 54
Leg assemblies – Detail views for A 16 / A 22	Page
	55 - 57

Equipment						Leg assembly PSC-1		
Chucks / Ceramic ferrule grips	 Adaptor for ARC chucks 80-05-689 (included in delivery of welding gun A 12, order no. 93-20-275)					for drawn arc stud welding with ceramic ferrule		
						 Leg assembly PSC-1 93-40-022 (Ceramic leg assembly) assembled: 		
for threaded studs type RD and PD		Welding element $\varnothing d_1$	Chuck	Ceramic ferrule grip		Stud length from min. to max.		
			Order No.	Insertion depth	Order No.	Flat	Standard	
		M6	83-50-006	7 mm	80-31-095	---	20 mm	150 mm
		M8	83-52-008	6 mm	80-31-120	15 mm	20 mm	25 mm
		M8	83-50-008	9 mm	80-31-120	20 mm	25 mm	150 mm
		M10	83-52-010	4 mm	80-31-150	15 mm	20 mm	25 mm
		M10	83-50-010	11 mm	80-31-150	20 mm	25 mm	150 mm
		M12	83-52-012	6 mm	80-31-170	15 mm	20 mm	30 mm
M12	83-50-012	13 mm	80-31-170	20 mm	30 mm	150 mm		
for threaded studs type MD (DD) and unthreaded studs (pins) type UD		Welding element $\varnothing d_1$	Chuck	Ceramic ferrule grip		Stud length from min. to max.		
			Order No.	Insertion depth	Order No.	Flat	Standard	
		M4 / $\varnothing$ 4 mm	83-50-004	6 mm	80-30-104	---	15 mm	150 mm
		M5 / $\varnothing$ 5 mm	83-50-005	6 mm	80-31-095	---	15 mm	150 mm
		M6 / $\varnothing$ 6 mm	83-50-006	7 mm	80-31-095	---	20 mm	150 mm
		M8 / $\varnothing$ 8 mm	83-52-008	6 mm	80-31-150	---	20 mm	25 mm
		M8 / $\varnothing$ 8 mm	83-50-008	9 mm	80-31-150	---	25 mm	150 mm
		M10 / $\varnothing$ 10 mm	83-52-010	4 mm	80-31-150	---	20 mm	25 mm
		M10 / $\varnothing$ 10 mm	83-50-010	11 mm	80-31-150	---	25 mm	150 mm
		M12 / $\varnothing$ 12 mm	83-52-012	6 mm	80-31-205	---	20 mm	25 mm
M12 / $\varnothing$ 12 mm	83-50-012	13 mm	80-31-205	---	25 mm	150 mm		
for studs with internal thread type ID		Welding element	Chuck	Ceramic ferrule grip		Stud length from min. to max.		
		$\varnothing d_2$ $\varnothing d_1$	Order No.	Insertion depth	Order No.	Flat	Standard	
		10 M5 / M6	83-52-010	4 mm	80-31-150	---	20 mm	25 mm
		10 M5 / M6	83-50-010	11 mm	80-31-150	---	25 mm	150 mm
		12 M8	83-52-012	6 mm	80-31-205	---	20 mm	25 mm
		12 M8	83-50-012	13 mm	80-31-205	---	25 mm	150 mm

usable with stud welding unit:				
Visar 650 with ground cable 93-40-020	ARC 800 with ground cable 93-40-020	IT 1002 with ground cable 93-40-020	Visar 1200 with ground cable 93-40-020	IT 2002 with 2x ground cable 93-40-019 (for welding elements to M20)
				
✓ (up to M10 type RD)	✓ (up to M12 type RD)	✓	✓	✓
✗				
✓	✗			
✓	✓	✓	✓	✓
✗				
✗	✗			
✗	✓	✓	✓	✓
✗	✗			

Equipment						Leg assembly PSC-1		
Chucks / Ceramic ferrule grips	 Adaptor for ARC chuck 80-05-689 (included in delivery of welding gun A 12, order no. 93-20-260)					for drawn arc stud welding with ceramic ferrule		
						 Leg assembly PSC-1 93-40-022 (Ceramic leg assembly) assembled: 		
for threaded studs type RD and PD		Welding element Ø d ₁	Chuck	Ceramic ferrule grip		Stud length (see below) from min. to max.		
			Order No.	Insertion depth	Order No.	Flat	Standard	
		M6	83-50-006	7 mm	80-31-095	---	20 mm	150 mm
		M8	83-52-008	6 mm	80-31-120	15 mm	20 mm	25 mm
		M8	83-50-008	9 mm	80-31-120	20 mm	25 mm	150 mm
		M10	83-52-010	4 mm	80-31-150	15 mm	20 mm	25 mm
		M10	83-50-010	11 mm	80-31-150	20 mm	25 mm	150 mm
		M12	83-52-012	6 mm	80-31-170	15 mm	20 mm	30 mm
M12	83-50-012	13 mm	80-31-170	20 mm	30 mm	150 mm		
for threaded studs type MD (DD) and unthreaded studs (pins) type UD		Welding element Ø d ₁	Chuck	Ceramic ferrule grip		Stud length from min. to max.		
			Order No.	Insertion depth	Order No.	Flat	Standard	
		M4 / Ø 4 mm	83-50-004	6 mm	80-30-104	---	15 mm	150 mm
		M5 / Ø 5 mm	83-50-005	6 mm	80-31-095	---	15 mm	150 mm
		M6 / Ø 6 mm	83-50-006	7 mm	80-31-095	---	20 mm	150 mm
		M8 / Ø 8 mm	83-52-008	6 mm	80-31-150	---	20 mm	25 mm
		M8 / Ø 8 mm	83-50-008	9 mm	80-31-150	---	25 mm	150 mm
		M10 / Ø 10 mm	83-52-010	4 mm	80-31-150	---	20 mm	25 mm
		M10 / Ø 10 mm	83-50-010	11 mm	80-31-150	---	25 mm	150 mm
		M12 / Ø 12 mm	83-52-012	6 mm	80-31-205	---	20 mm	25 mm
M12 / Ø 12 mm	83-50-012	13 mm	80-31-205	---	25 mm	150 mm		
for studs with internal thread type ID		Welding element	Chuck	Ceramic ferrule grip		Stud length from min. to max.		
		Ø d ₂ Ø d ₁	Order No.	Insertion depth	Order No.	Flat	Standard	
		10 M5 / M6	83-52-010	4 mm	80-31-150	---	20 mm	25 mm
		10 M5 / M6	83-50-010	11 mm	80-31-150	---	25 mm	150 mm
		12 M8	83-52-012	6 mm	80-31-205	---	20 mm	25 mm
		12 M8	83-50-012	13 mm	80-31-205	---	25 mm	150 mm

usable with stud welding unit:				
Visar 650 with ground cable 93-40-020 	ARC 800 with ground cable 93-40-020 	IT 1002 with ground cable 93-40-020 	Visar 1200 with ground cable 93-40-020 	IT 2002 with 2x ground cable 93-40-019 (for welding elements to M20) 
 (up to M10 type RD)	 (up to M12 type RD)			
				
				
				
				
				
				
				

Welding gun accessories ARC ceramic Ø 6 mm to 12 mm

for A 12 / A 12-FL

	Order No.: 93-41-012	consisting of:	suitable for leg assembly:
	83-50-006 83-50-008 83-50-010 83-50-012	Chuck ARC M6 ceramic Chuck ARC M8 ceramic Chuck ARC M10 ceramic Chuck ARC M12 ceramic	93-40-022
	80-31-095 80-31-120 80-31-150 80-31-170 80-31-205	Ceramic ferrule grip RD5/RD6/DD5/DD6 Ceramic ferrule grip RD8 Ceramic ferrule grip DD8/DD10/RD10 Ceramic ferrule grip RD12 Ceramic ferrule grip DD12/RD16	
	80-10-069	Double open ended wrench 14 x 17	
	80-10-1022	Allen key 2 mm	
	80-10-073	Allen key 3 mm	
	80-10-075	Allen key 5 mm	
	80-10-104	Allen key 4 mm long	
	80-10-126	Allen key 2.5 mm	
	80-10-832	Allen key 8 mm	

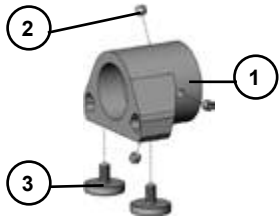
Welding gun accessories ARC ceramic Ø 6 mm to 10 mm

for A 12 A / 12-FL

	Order No.: 93-41-010	consisting of:	suitable for leg assembly:
	83-50-006 83-50-008 83-50-010	Chuck ARC M6 ceramic Chuck ARC M8 ceramic Chuck ARC M10 ceramic	93-40-022
	80-31-095 80-31-120 80-31-150	Ceramic ferrule grip RD5/RD6/DD5/DD6 Ceramic ferrule grip RD8 Ceramic ferrule grip DD8/DD10/RD10	
	80-10-069	Double open ended wrench 14 x 17	
	80-10-1022	Allen key 2 mm	
	80-10-073	Allen key 3 mm	
	80-10-075	Allen key 5 mm	
	80-10-104	Allen key 4 mm long	
	80-10-126	Allen key 2.5 mm	
	80-10-832	Allen key 8 mm	

Tripod leg guidance complete

for A 12



Order No.:

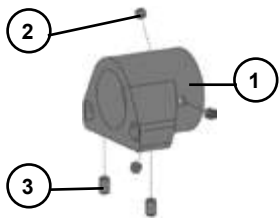
93-40-129

Description

1	80-40-409	Leg guidance
2	80-90-144	Screw DIN 916 M5 x 5
3	80-10-834	Knurled cap screw, flat

Tripod leg guidance complete

for A 12-FL



Order No.:

93-40-130

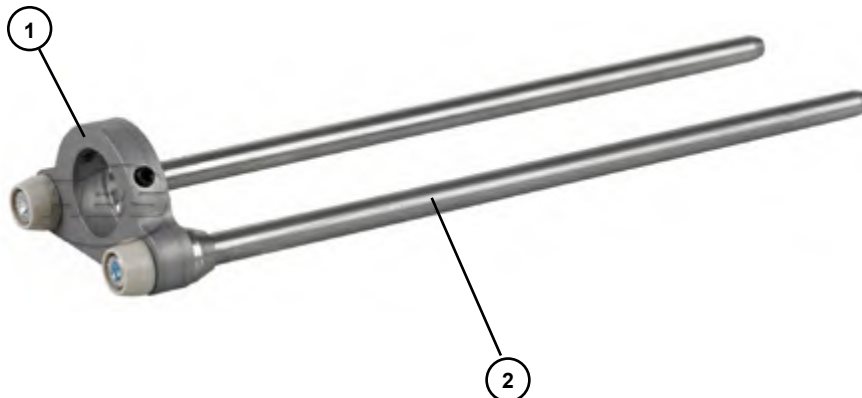
Description

1	80-40-409	Leg guidance
2	80-90-144	Screw DIN 916 M5 x 5
3	80-90-205	Screw DIN 913 M3 x 6

Ceramic leg assembly PSC-1

for welding of drawn arc welding elements Ø 6 to 12 mm up to l = 150 mm with ceramic ferrule

for A 12 / A 12-FL

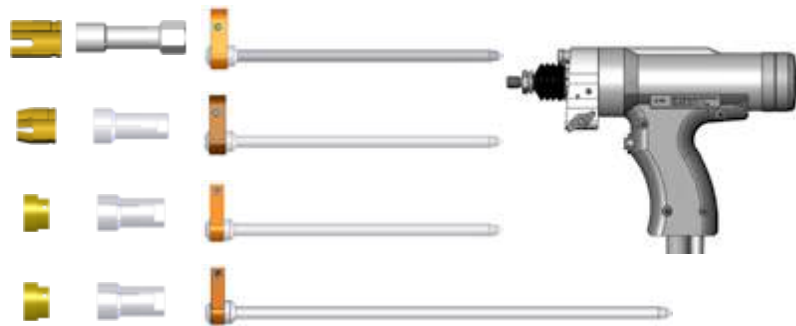
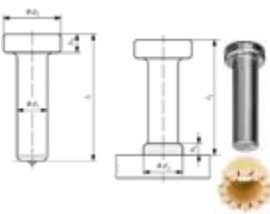


93-40-022 Ceramic leg assembly PSC-1 complete

1	80-40-410	Foot piece Aluminium, d = 22 mm	
2	80-40-411	Leg 8 x 220 mm	alternative: 80-40-533 Leg 8 x 400 mm

Equipment						Ceramic leg assembly PSC-2		
Chucks / Ceramic ferrule grips						for drawn arc stud welding with ceramic ferrule		
for threaded studs type RD and PD						Stud length from min. to max.		
						Flat Standard		
						 		
for threaded studs type MD (DD) and unthreaded studs (pins) type UD						Stud length from min. to max.		
						Flat Standard		
						 		
for studs with internal thread type ID						Stud length from min. to max.		
						Flat Standard		
						 		

Ceramic leg assembly PSC-2			usable with stud welding unit:			
for drawn arc stud welding with ceramic ferrule  Leg assembly PSC-2 93-40-040 (Ceramic leg assembly, Foot piece dia. 28 mm) <u>assembled:</u> 			ARC 800 with ground cable 93-40-020 	IT 1002 with ground cable 93-40-020 	Visar 1200 with ground cable 93-40-020 	IT 2002 with 2x ground cable 93-40-019 (for welding elements to M20) 
Stud length from min. to max. Flat Standard   			 (up to M12 type RD)	 (up to M16 type RD)		
Stud length from min. to max. Flat Standard   						
Stud length from min. to max. Flat Standard   						
Stud length from min. to max. Flat Standard   						
Stud length from min. to max. Flat Standard   						

Equipment					Ceramic leg assembly PSC-2	
Chucks / Ceramic ferrule grips					for drawn arc stud welding with ceramic ferrule	
					 Leg assembly PSC-2 93-40-028 (Ceramic leg assembly, Foot piece dia. 22 mm) <u>mounted:</u> 	
for shear connectors / concrete anchors type SD	 	Welding element Ø d ₁	Chuck Order No.	Insertion depth	Ceramic ferrule grip Order No.	Stud length from min. to max.
						Standard Standard
		6 mm / 1/4"	83-53-006	6 mm	80-30-206	 
		10 mm / 3/8"	83-53-010	9 mm	80-30-210	50 150
		13 mm / 1/2"	83-53-012	8 mm	80-31-213	50 150
		13 mm / 1/2"	83-53-012	8 mm	80-30-213	45 150
		16 mm / 5/8"	83-53-019	12 mm	80-30-219	✗
		19 mm / 3/4"	83-53-019	12 mm	80-30-219	✗
		22 mm / 7/8"	83-53-022	12 mm	80-30-222	✗
		25 mm / 1"	83-53-025	13 mm	88-15-823	✗



Manual stud welding

Drawn arc with ceramic ferrule

2

Equipment for A 16

Ceramic leg assembly PSC-2	Ceramic leg assembly PSC-2	Ceramic leg assembly PSC-2	usable with stud welding unit:			
for drawn arc stud welding with ceramic ferrule  Leg assembly PSC-2 93-40-040 (Ceramic leg assembly, Foot piece dia. 28 mm) <u>mounted:</u> 	for drawn arc stud welding with ceramic ferrule  Leg assembly PSC-2 93-40-041 (Ceramic leg assembly, Foot piece dia. 29 mm) <u>mounted:</u> 	for drawn arc stud welding with ceramic ferrule  Leg assembly PSC-2 93-40-074 (Ceramic leg assembly, Foot piece dia. 29 mm) <u>mounted:</u> 	ARC 800 with ground cable 93-40-020 	IT 1002 with ground cable 93-40-020 	Visar 1200 with ground cable 93-40-020 	IT 2002 with 2x ground cable 93-40-019 (for welding elements to M20) 
Stud length from min. to max. Standard Standard 	Stud length from min. to max. Standard Standard 	Stud length from min. to max. Standard Standard 	✓	✓	✓	✓
✗	✗	✗				
60 150	✗	✗	✗	✗	✗	✗
✗	65 150	65 300	✗			
✗	✗	✗	✗	✗	✗	✗

Equipment				Ceramic leg assembly Y-anchor																
Chucks / Ceramic ferrule grips				for drawn arc stud welding with ceramic ferrule Leg assembly 93-40-125 (Ceramic leg assembly for Y-anchor) d = 19.8 mm <u>assembled:</u> 																
	<table><tr><td rowspan="4"> </td><td>Welding element</td><td>Chuck</td><td>Ceramic ferrule grip</td><td></td></tr><tr><td>Description</td><td>Order No.</td><td>Order No.</td><td></td></tr><tr><td>Y-anchor Ø 6 mm</td><td>83-50-060</td><td>not necessary</td><td>✓</td></tr><tr><td>Y-anchor Ø 8 mm</td><td>83-50-062</td><td>not necessary</td><td>✗</td></tr></table>				 	Welding element	Chuck	Ceramic ferrule grip		Description	Order No.	Order No.		Y-anchor Ø 6 mm	83-50-060	not necessary	✓	Y-anchor Ø 8 mm	83-50-062	not necessary
 	Welding element	Chuck	Ceramic ferrule grip																	
	Description	Order No.	Order No.																	
	Y-anchor Ø 6 mm	83-50-060	not necessary	✓																
	Y-anchor Ø 8 mm	83-50-062	not necessary	✗																
for flat anchor	<table><tr><td rowspan="3"> </td><td>Welding element</td><td>Chuck</td><td>Ceramic ferrule grip</td><td rowspan="3">✗</td></tr><tr><td>Description</td><td>Order No.</td><td>Order No.</td></tr><tr><td>Flat anchor 25 x 5 mm</td><td>83-50-315</td><td>80-31-262</td></tr></table>				 	Welding element	Chuck	Ceramic ferrule grip	✗	Description	Order No.	Order No.	Flat anchor 25 x 5 mm	83-50-315	80-31-262					
 	Welding element	Chuck	Ceramic ferrule grip	✗																
	Description	Order No.	Order No.																	
	Flat anchor 25 x 5 mm	83-50-315	80-31-262																	



Manual stud welding

Drawn arc with ceramic ferrule

2

Equipment for A 16

Ceramic leg assembly Y-anchor Ceramic leg assembly PSC-2		usable with stud welding unit:		
for drawn arc stud welding with ceramic ferrule  Leg assembly 93-40-126 (Ceramic leg assembly for Y-anchor) d = 25 mm <u>assembled:</u> 	for drawn arc stud welding with ceramic ferrule  Leg assembly 93-40-040 (Ceramic leg assembly, Foot piece dia. 28 mm) <u>assembled:</u> 	IT 1002 with ground cable 93-40-020 	Visar 1200 with ground cable 93-40-020 	IT 2002 with 2x ground cable 93-40-019 (for welding elements to M20) 
✗ ✓	✗	✓	✓	✓
✗	✓	✗	✗	✓

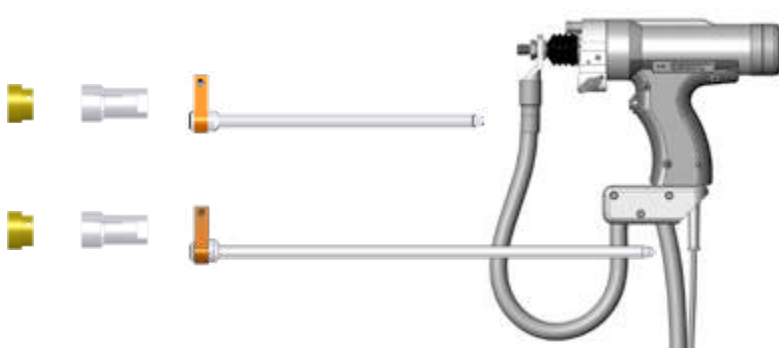
Equipment						Ceramic leg assembly PSC-2		
Chucks / Ceramic ferrule grips						for drawn arc stud welding with ceramic ferrule		
								
for threaded studs type RD and PD		Welding element $\varnothing d_1$		Chuck		Ceramic ferrule grip		
		Order No.		Insertion depth		Order No.		
		M16		83-52-016		10 mm		80-30-116
		M16		83-50-016		15 mm		80-30-116
for threaded studs type MD (DD) and unthreaded studs (pins) type UD		Welding element $\varnothing d_1$		Chuck		Ceramic ferrule grip		
		Order No.		Insertion depth		Order No.		
		M16 / $\varnothing 16$ mm		83-50-016		15 mm		80-31-262
for studs with internal thread type ID		Welding element		Chuck		Ceramic ferrule grip		
		$\varnothing d_2$ $\varnothing d_1$		Order No.		Order No.		
		16 M10		83-50-016		15 mm		80-31-262



usable with
stud welding unit:

IT 2002
with 2x ground cable 93-40-019
(for welding elements to M20)
or
with 2x ground cable 93-40-072
(for welding elements to M22)



Equipment					Ceramic leg assembly PSC-2	
Chucks / Ceramic ferrule grips					for drawn arc stud welding with ceramic ferrule	
					 Leg assembly PSC-2 93-40-041 (Ceramic leg assembly, Foot piece dia. 29 mm) <u>assembled:</u> 	
for shear connectors / concrete anchors type SD		Welding element $\varnothing d_1$	Chuck Order No.	Insertion depth	Ceramic ferrule grip Order No.	Stud length from min. to max.
						Standard Standard
		6 mm / 1/4"	83-53-006	6 mm	80-30-206	
		10 mm / 3/8"	83-53-010	9 mm	80-30-210	
		13 mm / 1/2"	83-53-012	8 mm	80-31-213	
		13 mm / 1/2"	83-53-012	8 mm	80-30-213	65 150
		16 mm / 5/8"	83-53-019	12 mm	80-30-219	
		19 mm / 3/4"	83-53-019	12 mm	80-30-219	65 150
		22 mm / 7/8"	83-53-022	12 mm	80-30-222	70 150
		25 mm / 1"	83-53-025	13 mm	88-15-823	



Ceramic leg assembly PSC-2		usable with stud welding unit:	
for drawn arc stud welding with ceramic ferrule		IT 2002 with 2x ground cable 93-40-019 (for welding elements to M20) or with 2x ground cable 93-40-072 (for welding elements to M22)	
			
Leg assembly PSC-2 93-40-074 (Ceramic leg assembly, Foot piece dia. 29 mm)			
<u>assembled:</u>			
			
Stud length			
from min.	to max.		
Standard	Standard		
			
			
65	300		
65	300		
70	300		
			

Welding gun accessories ARC ceramic 6 mm to 12 mm

for A 16



Order no.:

93-41-012

consisting of:

suitable for leg assembly:



83-50-006

Chuck ARC M6 ceramic



83-50-008

Chuck ARC M8 ceramic



83-50-010

Chuck ARC M10 ceramic



83-50-012

Chuck ARC M12 ceramic



80-31-095

Ceramic ferrule grip RD5/RD6/DD5/DD6



80-31-120

Ceramic ferrule grip RD8



80-31-150

Ceramic ferrule grip DD8/DD10/RD10



80-31-170

Ceramic ferrule grip RD12



80-31-205

Ceramic ferrule grip DD12/RD16



80-10-069

Double open ended wrench 14 x 17



80-10-1022

Allen key 2 mm



80-10-073

Allen key 3 mm



80-10-075

Allen key 5 mm



80-10-104

Allen key 4 mm long



80-10-126

Allen key 2.5 mm



80-10-832

Allen key 8 mm



93-40-028

Welding gun accessories ARC ceramic 6 mm to 16 mm

for A 16 / A 22



Order no.:

93-41-016

consisting of:

suitable for leg assembly:



83-50-006

Chuck ARC M6 ceramic



83-50-008

Chuck ARC M8 ceramic



83-50-010

Chuck ARC M10 ceramic



83-50-012

Chuck ARC M12 ceramic



83-50-016

Chuck ARC M16 ceramic



80-31-095

Ceramic ferrule grip RD5/RD6/DD5/DD6



80-31-120

Ceramic ferrule grip RD8



80-31-150

Ceramic ferrule grip DD8/DD10/RD10



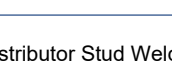
80-31-170

Ceramic ferrule grip RD12



80-31-205

Ceramic ferrule grip DD12/RD16



80-31-262

Ceramic ferrule grip DD16/RD20/DD20



80-10-069

Double open ended wrench 14 x 17



80-10-436

Double open ended wrench 19 x 22

80-10-1022

Allen key 2 mm

80-10-073

Allen key 3 mm

80-10-075

Allen key 5 mm

80-10-104

Allen key 4 mm long

80-10-126

Allen key 2.5 mm

80-10-832

Allen key 8 mm



93-40-040

28 mm

Welding gun accessories ARC ceramic M12

for A 16

2



Order no.:

93-40-082

consisting of:

suitable for leg assembly:

93-40-028



83-50-012

Chuck ARC M12 ceramic



80-31-170

Ceramic ferrule grip RD12

80-31-205

Ceramic ferrule grip DD12/RD16



80-10-069

Double open ended wrench 14 x 17



80-10-1022

Allen key 2 mm

80-10-073

Allen key 3 mm

80-10-075

Allen key 5 mm

80-10-104

Allen key 4 mm long

80-10-126

Allen key 2.5 mm

80-10-832

Allen key 8 mm



Welding gun accessories ARC ceramic M16

for A 16 / A 22



Order no.:

93-40-081

consisting of:

suitable for leg assembly:

93-40-040



83-50-016

Chuck ARC M16 ceramic



80-31-262

Ceramic ferrule grip DD16/RD20/DD20



80-10-069

Double open ended wrench 14 x 17

80-10-436

Double open ended wrench 19 x 22



80-10-1022

Allen key 2 mm

80-10-073

Allen key 3 mm

80-10-075

Allen key 5 mm

80-10-104

Allen key 4 mm long

80-10-126

Allen key 2.5 mm

80-10-832

Allen key 8 mm



Welding gun accessories for A 16 / A 22

Welding gun accessories ARC ceramic M16

for A 16 / A 22

		Order no.:		
		93-40-086	consisting of:	suitable for leg assembly:
	83-50-016	Chuck ARC M16 ceramic	 22 mm 93-40-028 (Foot piece 80-40-177)	
	80-31-205 80-31-262	Ceramic ferrule grip DD12/RD16 Ceramic ferrule grip DD16/RD20/DD20		
	80-10-069 80-10-436	Double open ended wrench 14 x 17 Double open ended wrench 19 x 22	 28 mm 93-40-040 (Foot piece 80-40-201)	
	80-10-1022	Allen key 2 mm		
	80-10-073	Allen key 3 mm		
	80-10-075	Allen key 5 mm		
	80-10-104	Allen key 4 mm long		
	80-10-126	Allen key 2.5 mm		
	80-10-072	Allen key 1.5 mm		
	80-10-832	Allen key 8 mm		
	80-40-177	Foot piece ceramic up to M12, d = 22 mm		
	80-40-201	Foot piece ceramic for M16, d = 28 mm		

Welding gun accessories ARC concrete anchors 1/2"

for A 16

		Order no.:		
		93-40-083	consisting of:	suitable for leg assembly:
	83-53-012	Chuck ARC 1/2" concrete anchors	 22 mm 93-40-028	
	80-31-213	Ceramic ferrule grip 1/2" (22 mm)		
	80-10-069 80-10-436	Double open ended wrench 14 x 17 Double open ended wrench 19 x 22	 22 mm 93-40-028	
	80-10-1022	Allen key 2 mm		
	80-10-073	Allen key 3 mm		
	80-10-075	Allen key 5 mm		
	80-10-104	Allen key 4 mm long		
	80-10-126	Allen key 2.5 mm		
	80-10-832	Allen key 8 mm		

Welding gun accessories ARC concrete anchors 1/2"

for A 16

2

	Order no.:		
	93-40-008	consisting of:	suitable for leg assembly:
	83-53-012	Chuck ARC 1/2" concrete anchors	
	80-30-213	Ceramic ferrule grip 1/2" (28 mm)	93-40-040
	80-10-069	Double open ended wrench 14 x 17	
	80-10-436	Double open ended wrench 19 x 22	
	80-10-1022	Allen key 2 mm	
	80-10-073	Allen key 3 mm	
	80-10-075	Allen key 5 mm	
	80-10-104	Allen key 4 mm long	
	80-10-126	Allen key 2.5 mm	
	80-10-832	Allen key 8 mm	

Welding gun accessories ARC concrete anchors 3/4" and 5/8"

for A 16 / A 22

	Order no.:		
	93-40-010	consisting of:	suitable for leg assembly:
	83-53-019	Chuck ARC 3/4" and 5/8" concrete anchors	
	80-30-219	Ceramic ferrule grip 3/4" and 5/8" (29 mm)	93-40-041
	80-10-069	Double open ended wrench 14 x 17	
	80-10-436	Double open ended wrench 19 x 22	
	80-10-1022	Allen key 2 mm	
	80-10-073	Allen key 3 mm	
	80-10-075	Allen key 5 mm	
	80-10-104	Allen key 4 mm long	
	80-10-126	Allen key 2.5 mm	
	80-10-832	Allen key 8 mm	

Welding gun accessories for A 16 / A 22

Welding gun accessories ARC concrete anchors 7/8"

for A 22 / A 25



Order no.:
93-40-011

consisting of:

83-53-022	Chuck ARC 7/8" concrete anchors
80-30-222	Ceeramic ferrule grip 7/8" (29 mm)
80-10-069	Double open ended wrench 14 x 17
80-10-436	Double open ended wrench 19 x 22
80-10-1022	Allen key 2 mm
80-10-073	Allen key 3 mm
80-10-075	Allen key 5 mm
80-10-104	Allen key 4 mm long
80-10-126	Allen key 2.5 mm
80-10-832	Allen key 8 mm

suitable for leg assembly:



93-40-041

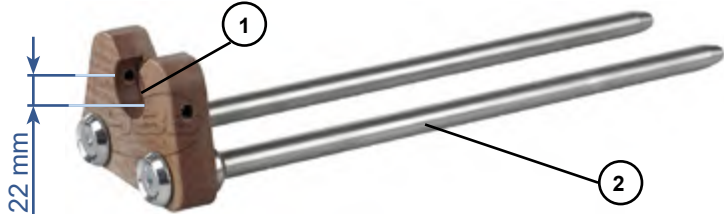


93-40-074

Ceramic leg assembly PSC-2

for welding of ARC welding elements dia. 4 to 12 mm up to l =170 mm with ceramic ferrule

for A 16



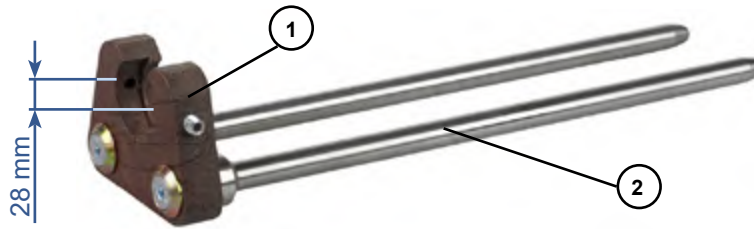
93-40-028 Ceramic leg assembly PSC-2 complete

1	80-40-177	Foot piece, d = 22 mm		
2	80-40-110	Leg 10 x 240 mm	alternative: 80-40-493	Leg 10 x 390 mm

Ceramic leg assembly PSC-2

for welding of ARC welding elements dia. 16 to 20 mm up to $l=170$ mm with ceramic ferrule

for A 16 / A 22



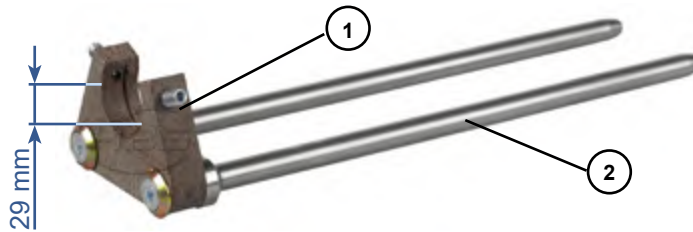
93-40-040 Ceramic leg assembly PSC-2 complete

- ① 80-40-201 Foot piece, d = 28 mm
- ② 80-40-110 Leg 10 x 240 mm alternative: 80-40-493 Leg 10 x 390 mm

Ceramic leg assembly PSC-2

for welding of ARC concrete anchors $5/8"$ - $7/8"$ up to $l=150$ mm with ceramic ferrule

for A 16 / A 22



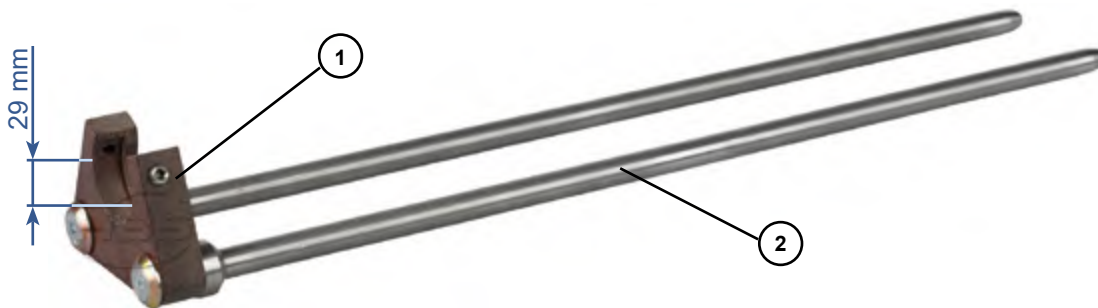
93-40-041 Ceramic leg assembly PSC-2 complete

- ① 80-41-028 Foot piece, d = 29 mm
- ② 80-40-110 Leg 10 x 240 mm alternative: 80-40-493 Leg 10 x 390 mm

Ceramic leg assembly PSC-2

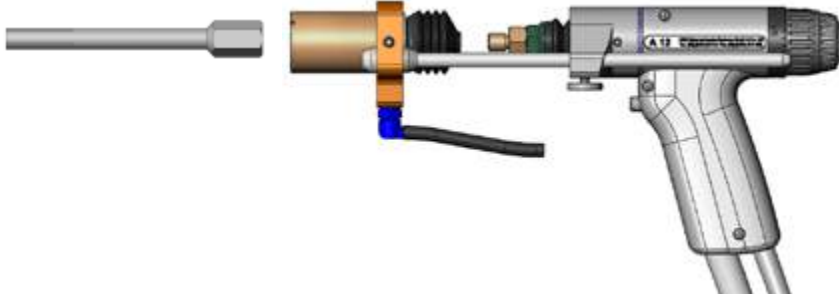
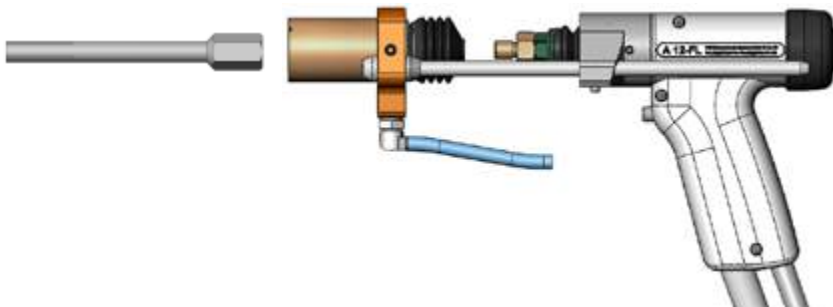
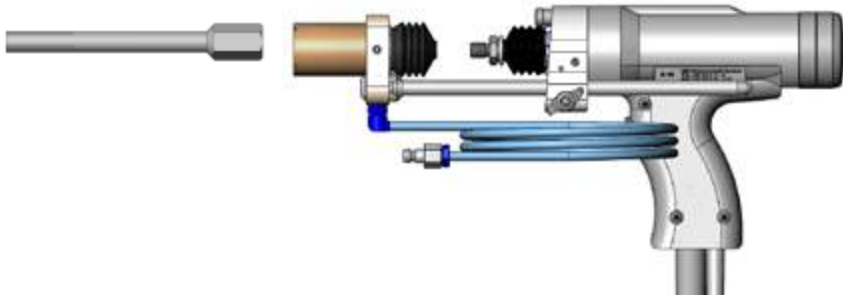
for welding of ARC concrete anchors $5/8"$ - $7/8"$ up to $l=300$ mm with ceramic ferrule

for A 16 / A 22



93-40-074 Ceramic leg assembly PSC-2 complete

- ① 80-41-028 Foot piece, d = 29 mm
- ② 80-40-493 Leg 10 x 390 mm

Equipment for A 12	Page
	54 - 55
Equipment for A 12-FL	Page
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Equipment for A 16	Page
	64 - 65



Overview manual stud welding

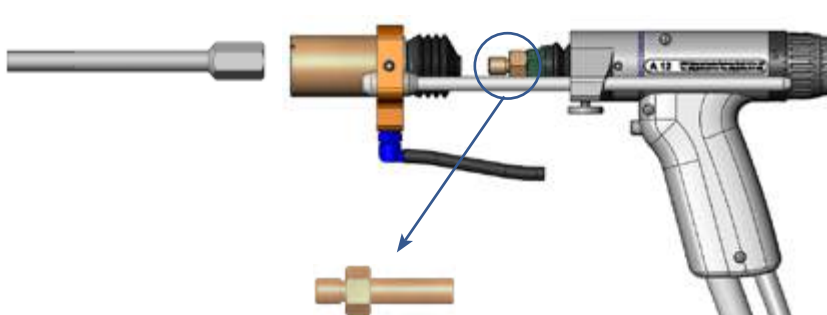
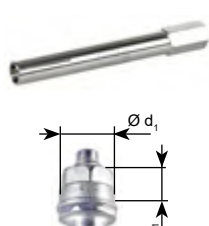
Drawn arc with shielding gas

3

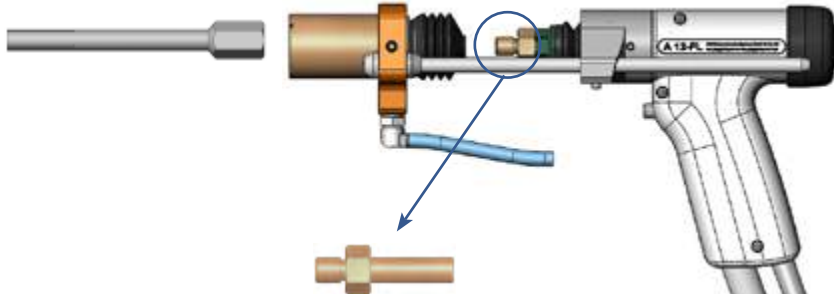
Welding gun accessories for A 12 / A 12-FL / A 16	Page
	64

Leg assemblies – Detail views for A 12 / A 12-FL / A 16	Page
	65

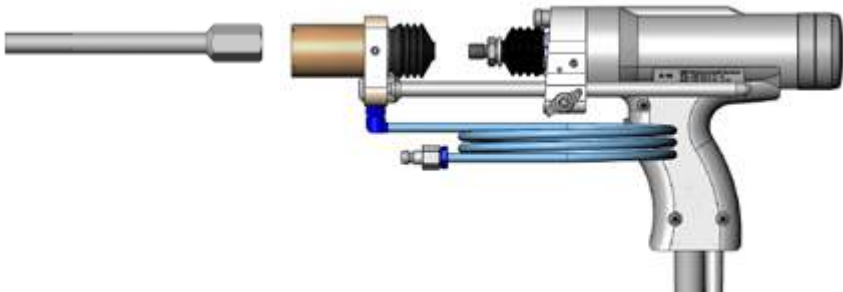
Manual stud welding – drawn arc with shielding gas

Equipment				Shielding gas leg assembly PSS-2	
Chucks					
	Adaptor for ARC chucks 80-05-689 (included in delivery of welding gun A 12, order no. 93-20-274)			Shielding gas leg assembly PSS-2 93-40-021 assembled:	
for threaded studs type RD and PD		Welding element Ø d ₁	Chuck Order No.	Insertion depth	Stud length from min. to max.
		M6	83-51-006	7 mm	15 150
		M8	83-51-008	9 mm	15 150
		M10	83-51-410	4 mm	10 20
		M10	83-51-010	11 mm	20 150
		M12	83-51-012	13 mm	20 150
for threaded studs type MD (DD) and unthreaded studs (pins) type UD		Welding element Ø d ₁	Chuck Order No.	Insertion depth	Stud length from min. to max.
		M4 / Ø 4 mm	83-51-004	5 mm	10 150
		M5 / Ø 5 mm	83-51-005	4 mm	10 150
		M6 / Ø 6 mm	83-51-006	7 mm	15 150
		M8 / Ø 8 mm	83-51-008	9 mm	15 150
		M10 / Ø 10 mm	83-51-410	4 mm	10 20
		M10 / Ø 10 mm	83-51-010	11 mm	20 150
		M12 / 1 Ø 0 mm	83-51-012	13 mm	20 150
for studs with internal thread type ID		Welding element Ø d ₂ Ø d ₁	Chuck Order No.	Insertion depth	Stud length from min. to max.
		10 mm M5 / M6	83-51-410	4 mm	10 20
		10 mm M6 / M6	83-51-010	11 mm	20 150
		12 mm M8	83-51-012	13 mm	20 150
for SC collar studs with flange nut		Welding element Ø d ₁	Chuck Order No.	Insertion depth	h ₁ from min. to max.
		14.5 mm	83-51-146	4 mm	--- 20

usable with stud welding unit:					
Visar 650 (shielding gas version) with ground cable 93-40-020	ARC 800 with ground cable 93-40-020	IT 1002 with ground cable 93-40-020	Visar 1200 with ground cable 93-40-020	IT 2002 with 2x ground cable 93-40-019 (for welding elements to M20)	IT 90 with 2x ground cable 93-40-019 (for welding elements to M20)
					
✓ (up to M10 Typ RD)	✓ (up to M12 type RD)	✓	✓	✓	✓
✗					
✓	✗				
✓	✓	✓	✓	✓	✓
✗					
✗	✗				
✗	✓	✓	✓	✓	✓
✗	✗				
✗	✗	✓	✓	✓	✓

Equipment				Shielding gas leg assembly PSS-2																								
Chucks	 Adaptor for ARC chuck 80-05-689 (included in delivery of welding gun A 12, order no. 93-20-260)			 Shielding gas leg assembly PSS-2 93-40-021 assembled:																								
	for threaded studs type RD and PD		<table><tr><td>Welding element Ø d₁</td><td>Chuck Order No.</td><td>Insertion depth</td></tr><tr><td>M6</td><td>83-51-006</td><td>7 mm</td></tr><tr><td>M8</td><td>83-51-008</td><td>9 mm</td></tr><tr><td>M10</td><td>83-51-410</td><td>4 mm</td></tr><tr><td>M10</td><td>83-51-010</td><td>11 mm</td></tr><tr><td>M12</td><td>83-51-012</td><td>13 mm</td></tr></table>	Welding element Ø d ₁	Chuck Order No.	Insertion depth	M6	83-51-006	7 mm	M8	83-51-008	9 mm	M10	83-51-410	4 mm	M10	83-51-010	11 mm	M12	83-51-012	13 mm	Stud length						
Welding element Ø d ₁		Chuck Order No.	Insertion depth																									
M6		83-51-006	7 mm																									
M8		83-51-008	9 mm																									
M10		83-51-410	4 mm																									
M10	83-51-010	11 mm																										
M12	83-51-012	13 mm																										
			from min.	to max.																								
			15 mm	150 mm																								
			15 mm	150 mm																								
			10 mm	20 mm																								
			20 mm	150 mm																								
			20 mm	150 mm																								
for threaded studs type MD (DD) and unthreaded studs (pins) type UD		<table><tr><td>Welding element Ø d₁</td><td>Chuck Order No.</td><td>Insertion depth</td></tr><tr><td>M4 / Ø 4 mm</td><td>83-51-004</td><td>5 mm</td></tr><tr><td>M5 / Ø 5 mm</td><td>83-51-005</td><td>4 mm</td></tr><tr><td>M6 / Ø 6 mm</td><td>83-51-006</td><td>7 mm</td></tr><tr><td>M8 / Ø 8 mm</td><td>83-51-008</td><td>9 mm</td></tr><tr><td>M10 / Ø 10 mm</td><td>83-51-410</td><td>4 mm</td></tr><tr><td>M10 / Ø 10 mm</td><td>83-51-010</td><td>11 mm</td></tr><tr><td>M12 / Ø 12 mm</td><td>83-51-012</td><td>13 mm</td></tr></table>	Welding element Ø d ₁	Chuck Order No.	Insertion depth	M4 / Ø 4 mm	83-51-004	5 mm	M5 / Ø 5 mm	83-51-005	4 mm	M6 / Ø 6 mm	83-51-006	7 mm	M8 / Ø 8 mm	83-51-008	9 mm	M10 / Ø 10 mm	83-51-410	4 mm	M10 / Ø 10 mm	83-51-010	11 mm	M12 / Ø 12 mm	83-51-012	13 mm	Stud length	
	Welding element Ø d ₁	Chuck Order No.	Insertion depth																									
	M4 / Ø 4 mm	83-51-004	5 mm																									
	M5 / Ø 5 mm	83-51-005	4 mm																									
	M6 / Ø 6 mm	83-51-006	7 mm																									
	M8 / Ø 8 mm	83-51-008	9 mm																									
	M10 / Ø 10 mm	83-51-410	4 mm																									
	M10 / Ø 10 mm	83-51-010	11 mm																									
M12 / Ø 12 mm	83-51-012	13 mm																										
			from min.	to max.																								
			10 mm	150 mm																								
			10 mm	150 mm																								
			15 mm	150 mm																								
			15 mm	150 mm																								
			10 mm	20 mm																								
			20 mm	150 mm																								
			20 mm	150 mm																								
for studs with internal thread type ID		<table><tr><td>Welding element Ø d₂ Ø d₁</td><td>Chuck Order No.</td><td>Insertion depth</td></tr><tr><td>10 mm M5 / M6</td><td>83-51-410</td><td>4 mm</td></tr><tr><td>10 mm M6 / M6</td><td>83-51-010</td><td>11 mm</td></tr><tr><td>12 mm M8</td><td>83-51-012</td><td>13 mm</td></tr></table>	Welding element Ø d ₂ Ø d ₁	Chuck Order No.	Insertion depth	10 mm M5 / M6	83-51-410	4 mm	10 mm M6 / M6	83-51-010	11 mm	12 mm M8	83-51-012	13 mm	Stud length													
	Welding element Ø d ₂ Ø d ₁	Chuck Order No.	Insertion depth																									
	10 mm M5 / M6	83-51-410	4 mm																									
	10 mm M6 / M6	83-51-010	11 mm																									
12 mm M8	83-51-012	13 mm																										
			from min.	to max.																								
			10 mm	20 mm																								
			20 mm	150 mm																								
			20 mm	150 mm																								

usable with stud welding unit:					
Visar 650 (shielding gas version) with ground cable 93-40-020	ARC 800 with ground cable 93-40-020	IT 1002 with ground cable 93-40-020	Visar 1200 with ground cable 93-40-020	IT 2002 with 2x ground cable 93-40-019 (for welding elements to M20)	IT 90 with 2x ground cable 93-40-019 (for welding elements to M20)
					
✓ (up to M10 Typ RD)	✓ (up to M12 type RD)	✓	✓	✓	✓
✗					
✓	✗				
✓	✓	✓	✓	✓	✓
✗					
✗	✗				
✓	✓	✓	✓	✓	✓
✗	✗				

Equipment				Shielding gas leg assembly PSS-2	
Chucks				 Shielding gas leg assembly PSS-3 93-40-017 assembled: 	
for threaded studs type RD and PD		Welding element $\varnothing d_1$	Chuck Order No.	Insertion depth	Stud length from min. to max.
		M4	83-51-004	5 mm	10 120
		M5	83-51-005	4 mm	10 120
		M6	83-51-006	7 mm	15 120
		M8	83-51-008	9 mm	15 120
		M10	83-51-410	4 mm	10 20
		M10	83-51-010	11 mm	20 120
		M12	83-51-012	13 mm	20 120
for threaded studs type MD (DD) and unthreaded studs (pins) type UD		Welding element $\varnothing d_1$	Chuck Order No.	Insertion depth	Stud length from min. to max.
		M4	83-51-004	5 mm	10 120
		M5	83-51-005	4 mm	10 120
		M6	83-51-006	7 mm	15 120
		M8	83-51-008	9 mm	15 120
		M10	83-51-410	4 mm	10 20
		M10	83-51-010	11 mm	20 120
		M12	83-51-012	13 mm	20 120
for studs with internal thread type ID		Welding element $\varnothing d_2$	Chuck Order No.	Insertion depth	Stud length from min. to max.
		10 M5 / M6	83-51-410	4 mm	10 20
		10 M6 / M6	83-51-010	11 mm	20 120
		12 M8	83-51-012	13 mm	20 120
		16 M10	83-51-016	16 mm	30 130

usable with stud welding unit:				
ARC 800 with ground cable 93-40-020	IT 1002 with ground cable 93-40-020	Visar 1200 with ground cable 93-40-020	IT 2002 with 2x ground cable 93-40-019 (for welding elements to M20)	IT 90 with 2x ground cable 93-40-019 (for welding elements to M20)
				
✗	✓ (up to M16 type RD)	✓	✓	✓
✓ (up to M12 type RD)				
✗				
✗	✓	✓	✓	✓
✓				
✗				
✗	✗	✓	✓	✓
✓	✓			
✗	✗			
✗	✓	✓	✓	✓
✗	✓			
✗	✗			

Manual stud welding
Drawn arc with shielding gas



Welding gun accessories ARC shielding gas 6 mm to 12 mm

for A 12 / A 12-FL / A 16



Order No.:

93-40-114

consisting of:

83-51-006 Chuck ARC M6 Shielding gas
83-51-008 Chuck ARC M8 Shielding gas
83-51-010 Chuck ARC M10 Shielding gas
83-51-012 Chuck ARC M12 Shielding gas

suitable for leg assembly:

93-40-021



80-10-069 Double open ended wrench 14 x 17



80-10-1022 Allen key 2 mm
80-10-073 Allen key 3 mm
80-10-075 Allen key 5 mm
80-10-104 Allen key 4 mm long
80-10-126 Allen key 2.5 mm
80-10-832 Allen key 8 mm

93-40-017



Welding gun accessories ARC shielding gas M12

for A 12 / A 12-FL / A 16



Order No.:

93-40-084

consisting of:

83-51-012 Chuck ARC M12 Shielding gas

suitable for leg assembly:

93-40-021



80-10-069 Double open ended wrench 14 x 17



80-10-1022 Allen key 2 mm
80-10-073 Allen key 3 mm
80-10-075 Allen key 5 mm
80-10-104 Allen key 4 mm long
80-10-126 Allen key 2.5 mm
80-10-832 Allen key 8 mm

93-40-017



Protective hose, complete with zipper

for A 12 /
A 12-FL (5 m cable length)



Order No.:

80-11-430

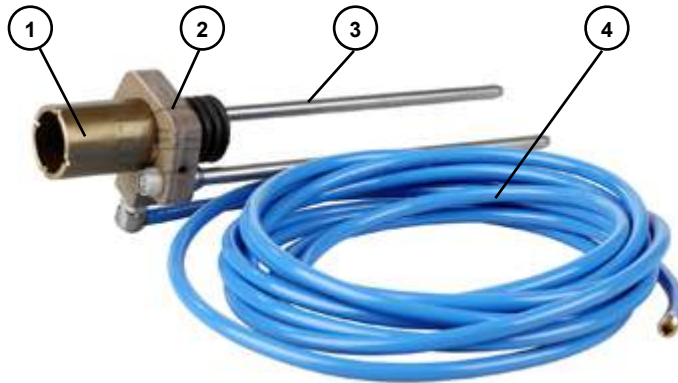
length: 430 cm

Protects welding gun cable
and shielding gas hose against
damage and welding sparks

Shielding gas leg assembly PSS-2

for welding of ARC welding elements dia. 6 to 12 mm up to l = 150 mm with shielding gas

for A 12 / A 12-FL



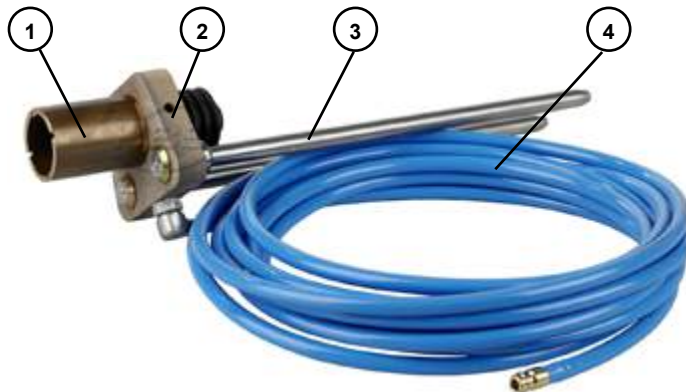
93-40-021 Shielding gas leg assembly PSS-2 complete

- | | | | | |
|---|-----------|--|------------------------|----------------|
| ① | 80-40-149 | Shielding gas tube, D = 35 mm, L = 60 mm | | |
| ② | 80-40-538 | Foot piece D = 35 mm | | |
| ③ | 80-40-411 | Leg 8 x 220 mm | alternative: 80-40-533 | Leg 8 x 400 mm |
| ④ | 80-11-420 | Plastic hose | | |

Shielding gas leg assembly PSS-3

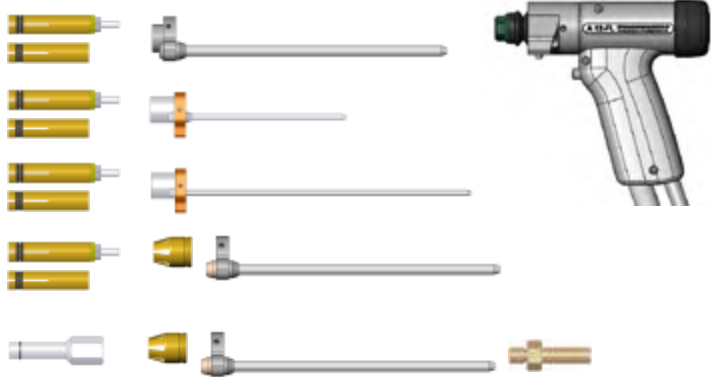
for welding of ARC welding elements dia. 6 to 12 mm up to l = 170 mm with shielding gas

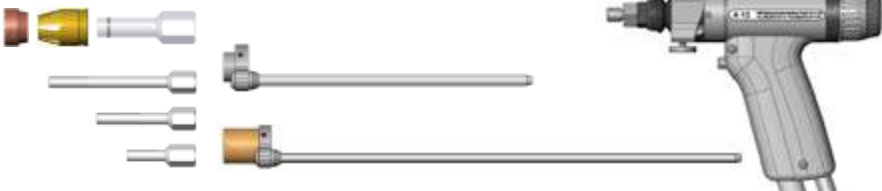
for A 16



93-40-017 Shielding gas leg assembly PSS-3 complete

- | | | | | |
|---|-----------|--|------------------------|-----------------|
| ① | 80-40-149 | Shielding gas tube, D = 35 mm, L = 60 mm | | |
| ② | 80-10-112 | Foot piece D = 35 mm | | |
| ③ | 80-40-110 | Leg 10 x 240 mm | alternative: 80-40-493 | Leg 10 x 390 mm |
| ④ | 80-11-420 | Plastic hose | | |

Equipment for A 12-FL ISO	Page
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Equipment for A 12	Page
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Leg assemblies – Detail views for A 12 / A 12-FL ISO

Page



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Equipment					Leg assembly with support tube	Leg assembly PSI-3
Chucks	 Order No. 93-20-26010				ISO leg assembly with Aluminium support tube, leg dia. 8 mm 	ISO leg assembly with support tube and Teflon insert, leg dia. 8 mm 
					Leg assembly with support tube (leg length = 220 mm) 93-40-044 <u>assembled:</u> 	Leg assembly PSI-3 (leg length = 220 mm) 93-40-066 <u>assembled:</u> 
for short insulation pins type ND up to dia. 5 mm		Welding element dia.	Chuck Order No.	Ceramic ferrule grip	Length from min. to max.	
		Dia. 2 mm	80-04-958	not necessary	40 mm 220 mm	75 mm 250 mm
		Dia. 3 mm	80-04-959	not necessary		
		Dia. 4 mm	80-04-960	not necessary		
		Dia. 5 mm	80-04-961	not necessary	40 mm 220 mm	75 mm 250 mm
for short insulation pins type ND up to dia. 6 mm		Welding element dia.	Chuck Order No.	Ceramic ferrule grip	Length from min. to max.	
		Dia. 6 mm	80-04-962	80-31-095	X	X
for long insulation pins type ND up to dia. 5 mm		Welding element dia.	Chuck Order No.	Ceramic ferrule grip	Length from min. to max.	
		Dia. 2 mm	80-05-512	not necessary	90 mm 250 mm	135 mm 280 mm
		Dia. 3 mm	80-05-452	not necessary		
		Dia. 4 mm	80-05-513	not necessary		
		Dia. 5 mm	80-04-956	not necessary	40 mm 250 mm	135 mm 280 mm
for insulation pins type ND dia. 6 mm		Welding element dia.	Chuck Order No.	Ceramic ferrule grip	Length from min. to max.	
		Dia. 6 mm	80-04-957	80-31-095	X	X
for Fiberfix pins		Welding element dia.	Chuck Order No.	Ceramic ferrule grip	Length from min. to max.	
		Dia. 5 mm	83-50-011	80-30-105	X	X

Leg assembly PSI-3	Leg assembly PSC-1	Leg assembly PSC and adaptor for ARC chucks	usable with stud welding unit:			
ISO leg assembly with support tube and Teflon insert, leg dia. 8 mm  Leg assembly PSI-3 (leg length = 400 mm) 93-40-065 assembled: 	for drawn arc stud welding with ceramic ferrule  Leg assembly PSC-1 93-40-022 assembled: 	for drawn arc stud welding with ceramic ferrule  Leg assembly PSC-1 93-40-022 adaptor for ARC chucks 80-05-689 assembled: 	Visar 650 with ground cable 93-40-020 			
Length from min. to max. 75 mm 430 mm	✗	✗	✓	✗	✓	✓
75 mm 430 mm	✗	✗	✓	✓		
✗	Length from min. to max. 40 mm 220 mm	✗	✓	✓	✓	✓
Length from min. to max. 135 mm 430 mm	✗	✗	✓	✗	✓	✓
135 mm 460 mm	✗	✗	✓	✓		
✗	Length from min. to max. 40 mm 220 mm	✗	✓	✓	✓	✓
✗	✗	Length from min. to max. 40 mm 160 mm	✓	✓	✓	✓

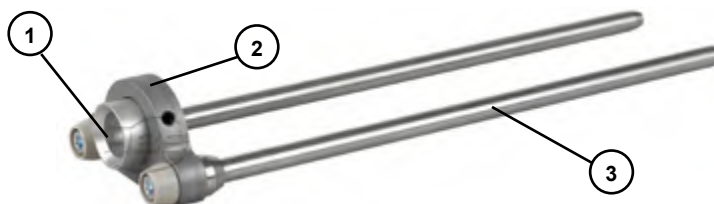
Equipment					Leg assembly with support tube		
Chucks	 Order No. 93-20-270				ISO leg assembly with Aluminium support tube, leg dia. 8 mm  Leg assembly with support tube (leg length = 220 mm) 93-40-044 assembled: 		
	for insulation pins type ND up to dia. 5 mm		Welding element dia.	Chuck Order No.	Ceramic ferrule grip	Length from min. up to max.	
			Dia. 3 mm	83-54-103	not necessary	90 mm	155 mm
			Dia. 4 mm	83-54-104	not necessary		
	Dia. 5 mm	83-54-105	not necessary				
for insulation pins type ND up to dia. 5 mm		Welding element dia.	Chuck Order No.	Ceramic ferrule grip	Length from min. up to max.		
		Dia. 3 mm	83-50-1346	not necessary	45 mm	155 mm	
		Dia. 4 mm	83-50-1446	not necessary			
Dia. 5 mm	83-50-1546	not necessary					
for insulation pins type ND dia. 3 and 4 mm		Welding element dia.	Chuck Order No.	Ceramic ferrule grip	Length from min. up to max.		
		Dia. 3 mm	83-55-103	not necessary	30 mm	160 mm	
		Dia. 4 mm	83-55-104	not necessary			
for Fiberfix pins		Welding element dia.	Chuck Order No.	Ceramic ferrule grip	Length from min. up to max.		
Dia. 5 mm	83-50-011	80-30-105			40 mm	160 mm	

Leg assembly with support tube		usable with stud welding unit:			
ISO leg assembly with Aluminium support tube, leg dia. 8 mm  Leg assembly with support tube (leg length = 390 mm) 93-40-026 <u>assembled:</u> 		Visar 650 with ground cable 93-40-020 	ARC 800 with ground cable 93-40-020 	IT 1002 with ground cable 93-40-020 	Visar 1200 with ground cable 93-40-020 
Length	from min. up to max.	✓	✗ ✓	✓	✓
90 mm	355 mm				
Length	from min. up to max.	✓	✗ ✓	✓	✓
45 mm	355 mm				
Length	from min. up to max.	✓	✗	✓	✓
30 mm	360 mm				
Length	from min. up to max.	✓	✓	✓	✓
40 mm	360 mm				

ISO leg assembly PSI

for welding of ISO pins type ND dia. 3 to 5 mm

for A 12 / A 12- FL



93-40-044 ISO Leg assembly PSI complete

- | | | | |
|---|-----------|---------------------------|---------------------------------------|
| ① | 80-05-451 | Supporting tube D = 22 mm | |
| ② | 80-40-410 | Foot piece d = 22 mm | |
| ③ | 80-40-411 | Leg 8 x 220 mm | alternative: 80-40-533 Leg 8 x 400 mm |

ISO leg assembly PSI

for welding of ISO pins type ND dia. 3 to 6 mm

for A 12 / A 12- FL



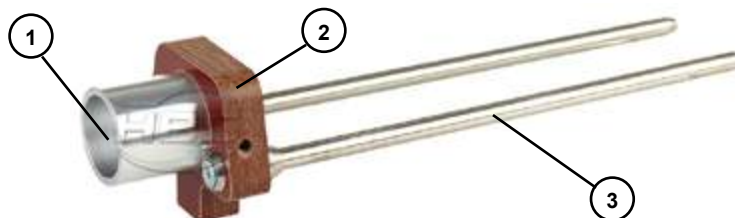
93-40-026 ISO Leg assembly PSI complete

- | | | |
|---|-----------|----------------------|
| ① | 80-40-623 | Supporting tube HGW |
| ② | 80-40-410 | Foot piece d = 22 mm |
| ③ | 80-40-533 | Leg 8 x 400 mm |

ISO leg assembly PSI-3

for welding of ISO pins type ND dia. 3 to 5 mm

for A 12 / A 12-FL



ISO Leg assembly PSI-3 complete

93-40-066

- | | | |
|---|-----------|--|
| ① | 80-40-411 | Leg 8 x 220 mm |
| ② | 80-11-001 | Supporting tube Alu with Teflon insert |
| ③ | 80-40-538 | Foot piece d = 35 mm |

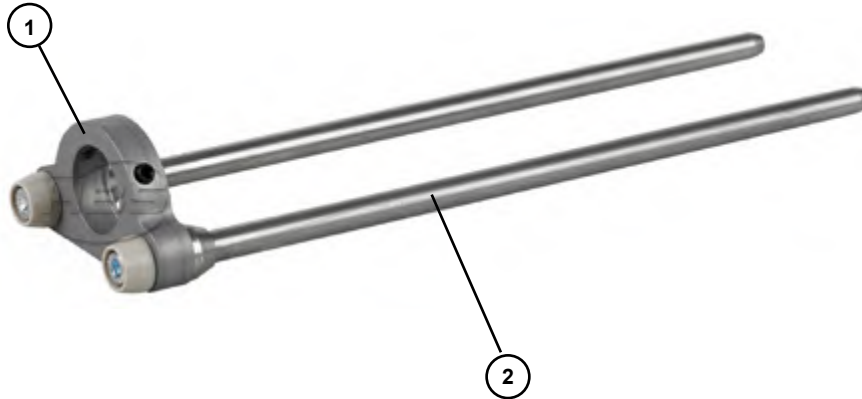
93-40-065

- | | |
|-----------|--|
| 80-40-533 | Leg 8 x 400 mm |
| 80-11-001 | Supporting tube Alu with Teflon insert |
| 80-40-538 | Foot piece d = 35 mm |

Ceramic leg assembly PSC-1

for welding of ISO pins typ ND dia. 6 mm and ARC-Fiberfix-pins dia. 5 mm up to l=160 mm
with ceramic ferrule

for A 12 / A 12-FL



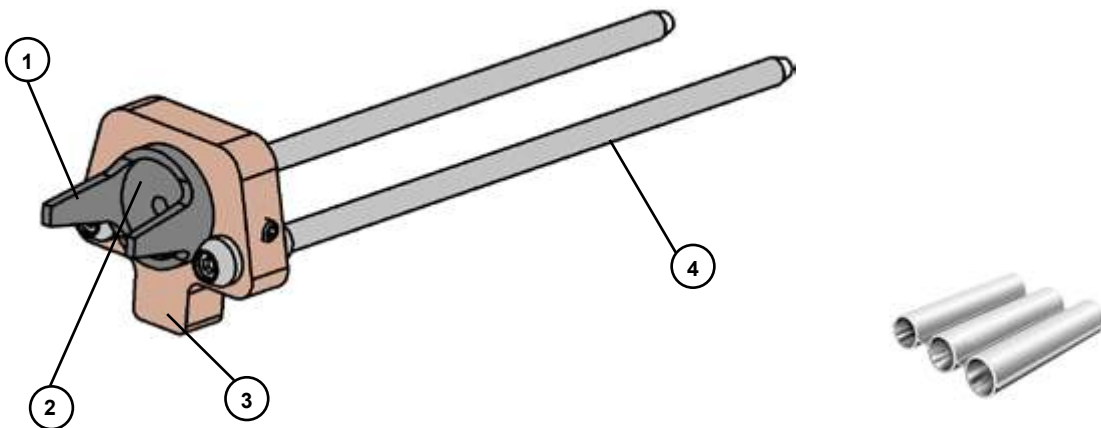
93-40-022 Ceramic leg assembly PSC-1 complete

- | | | | | |
|---|-----------|---------------------------------|------------------------|----------------|
| ① | 80-40-410 | Foot piece Aluminium, d = 22 mm | | |
| ② | 80-40-411 | Leg 8 x 220 mm | alternative: 80-40-533 | Leg 8 x 400 mm |

ISO leg assembly with support fork

for welding of ISO pins type ND dia. 3 to 6 mm on finned walls

for A 12 / A 12-FL



ISO leg assembly with fork support complete

93-40-052

- | | | | | |
|---|-----------|-------------------------------|-----------------------|----------------|
| ① | 80-41-154 | Support fork for finned walls | | |
| ② | 80-11-090 | Teflon insert | | |
| ③ | 80-40-538 | Foot piece d = 35 mm | | |
| ④ | 80-40-411 | Leg 8 x 220 mm | alternative 80-40-533 | Leg 8 x 400 mm |

Equipment for A 12	Page
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Welding gun accessories for CA 08 / A 12	Page
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Leg assemblies – Detail views for CA 08 / A 12	Page
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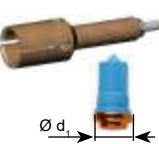
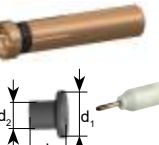
Manual stud welding

SC (short cycle)



5

Equipment for A 12

Equipment			Centering tube PPR-2 and distance ring	Gas shroud PSS-1 and distance ring	Gas shroud PSS-1			
Chucks			for Short cycle without shield. gas  Centering tube 80-40-513 distance ring 88-21-548 assembled:  Ø 30 mm	for Short cycle with shielding gas  Gas shroud (l=79 mm) 92-40-051 distance ring 88-21-548 assembled:  Ø 30 mm	for Short cycle with shielding gas  Gas shroud (l=85 mm) 92-41-051 assembled:  Ø 30 mm			
	for SC threaded studs and pins		Welding element dia. Order No.	Stud length from min. to max.		Stud length from min. to max.		Stud length from min. to max.
Ø 2 mm 82-50-002			8 mm ¹⁾³⁾ / 16 mm ²⁾³⁾	30 mm ¹⁾³⁾ / 40 mm ²⁾³⁾	8 mm ¹⁾³⁾ / 16 mm ²⁾³⁾	30 mm ¹⁾³⁾ / 40 mm ²⁾³⁾	15 mm ¹⁾³⁾ / 25 mm ²⁾³⁾	35 mm ¹⁾³⁾ / 45 mm ²⁾³⁾
Ø 2.5 mm 82-50-025								
Ø 3 mm 82-50-003			8 mm ¹⁾³⁾ / 16 mm ²⁾³⁾	30 mm ¹⁾³⁾ / 40 mm ²⁾³⁾	8 mm ¹⁾³⁾ / 16 mm ²⁾³⁾	30 mm ¹⁾³⁾ / 40 mm ²⁾³⁾	15 mm ¹⁾³⁾ / 25 mm ²⁾³⁾	35 mm ¹⁾³⁾ / 45 mm ²⁾³⁾
Ø 4 mm 82-50-004								
Ø 5 mm 82-50-005			8 mm ¹⁾³⁾ / 16 mm ²⁾³⁾	30 mm ¹⁾³⁾ / 40 mm ²⁾³⁾	8 mm ¹⁾³⁾ / 16 mm ²⁾³⁾	30 mm ¹⁾³⁾ / 40 mm ²⁾³⁾	15 mm ¹⁾³⁾ / 25 mm ²⁾³⁾	35 mm ¹⁾³⁾ / 45 mm ²⁾³⁾
Ø 6 mm 82-50-006								
Ø 7.1 mm 82-50-071			8 mm ¹⁾³⁾ / 16 mm ²⁾³⁾	30 mm ¹⁾³⁾ / 40 mm ²⁾³⁾	8 mm ¹⁾³⁾ / 16 mm ²⁾³⁾	30 mm ¹⁾³⁾ / 40 mm ²⁾³⁾	15 mm ¹⁾³⁾ / 25 mm ²⁾³⁾	35 mm ¹⁾³⁾ / 45 mm ²⁾³⁾
Ø 8 mm 82-50-008								
Ø 10 mm 82-50-009	X		X		X			
for studs with internal thread type ID		Welding element dia. Order No.	Stud length from min. to max.		Stud length from min. to max.		Stud length from min. to max.	
		Ø 5 mm 82-50-905	8 mm ³⁾	35 mm ³⁾	8 mm ³⁾	35 mm ³⁾	15 mm	40 mm
		Ø 6 mm 82-50-906						
		Ø 7.1 mm 82-50-971	8 mm ³⁾	35 mm ³⁾	8 mm ³⁾	35 mm ³⁾	15 mm	40 mm
Ø 8 mm 82-50-908								
for SC collar studs with plastic cap		Order No.	X	X	X			
		Ø 14 mm 82-53-135						
for SC collar studs with flange nut		Order No.	X	X	X			
		Ø 12.5 mm 82-50-125						
for T studs		Order No.	Stud length from min. to max.		Stud length from min. to max.		Stud length from min. to max.	
		Ø 5 mm / Ø 3 mm 82-50-060 Inlaid tool 80-41-040	3.5 mm ³⁾ / 7 mm ⁴⁾	7 mm ³⁾ / 10 mm ⁴⁾	3.5 mm ³⁾ / 7 mm ⁴⁾	7 mm ³⁾ / 10 mm ⁴⁾	10 mm	13 mm

¹⁾ with standard stop pin

²⁾ additional stop pin 80-90-710 necessary

³⁾ with distance ring

⁴⁾ without distance ring

- 3) with distance ring
- 4) without distance ring



Welding gun accessories 3 mm to 6 mm

for A 12



OrderNo.:
92-40-050

82-50-003
82-50-004
82-50-005
82-50-006

80-40-085

consisting of:

Chuck M3
Chuck M4
Chuck M5
Chuck M6

Socket wrench AF17

suitable for leg assembly:

Positioning tube / PSS-1



Welding gun accessories 3 mm to 8 mm

for A 12



Order No.:
92-40-018

82-50-003
82-50-004
82-50-005
82-50-006
82-50-008

80-40-085

consisting of:

Chuck M3
Chuck M4
Chuck M5
Chuck M6
Chuck M8

Socket wrench AF17

suitable for leg assembly:

Positioning tube / PSS-1



Gas shroud PSS-1 for Short Cycle applications

for A 12

5



Gas shroud PSS-1	92-40-051 L = 79 mm	92-41-051 L = 85 mm	92-44-051 L = 88 mm	92-42-051 L = 95 mm
Distance ring	88-21-548	not necessary	not necessary	not necessary
for welding elements to	L = 40 mm	L = 45 mm	L = 45 mm	L = 50 mm
1 Shielding gas tube Ø 30 mm	80-40-737 L = 42 mm	80-41-737 L = 48 mm	80-44-737 L = 51 mm	80-42-737 L = 58 mm
2 Shielding gas connection piece	80-40-736			
3 Plastic hose 5.5 m	80-10-182			
4 Connector male	80-10-246			
5 Swivel connection	80-10-0984			

Protective hose, complete with zipper

for A 12

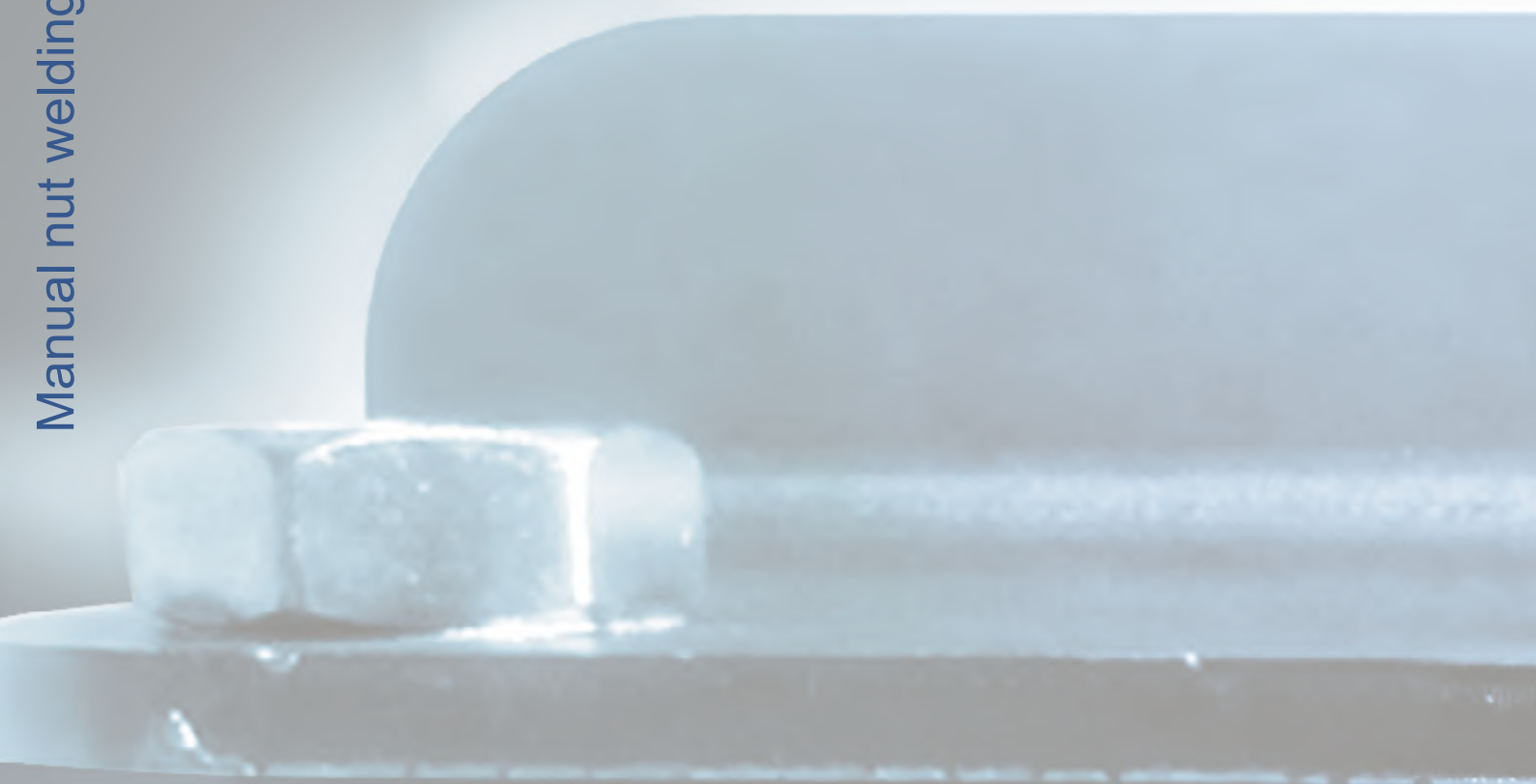


Order No.:
80-11-430

length: 430 cm

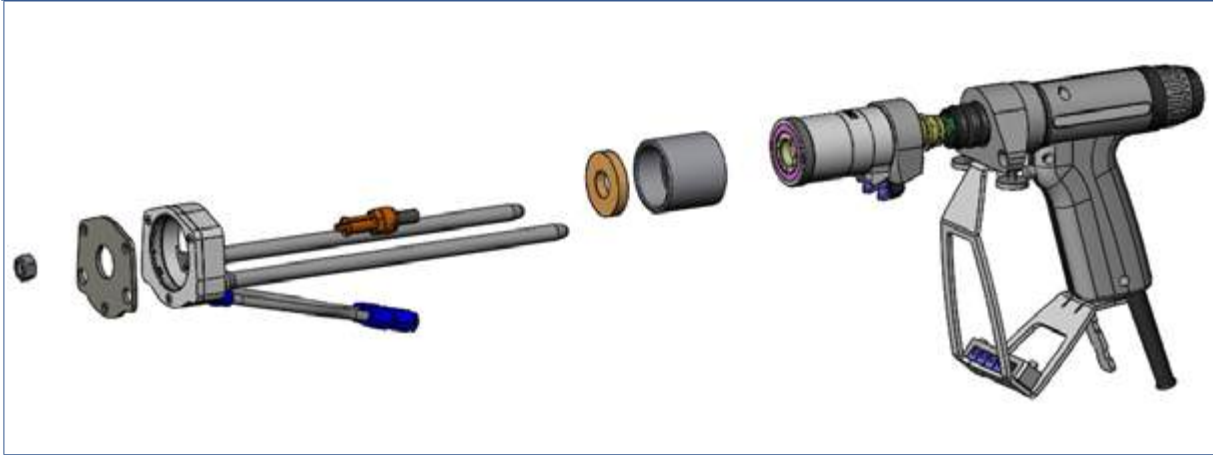
Protects welding gun cable
and shielding gas hose against
damage and welding sparks

Leg assemblies – details for A 12



Equipment for AM 12 A	Page
	86 - 87

Equipment for AM 12 A



Equipment complete	consisting of sleeve fixture, distance washer and magnetic field guidance		
M6	V	93-40-0030068	
M8	V	93-40-003008	
M10	V	93-40-003010	
M12	V	93-40-003012	



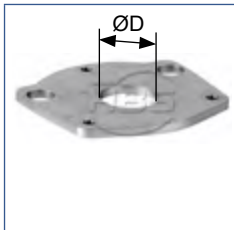
Sleeve fixture complete	for:	AM 12 A	
	for:	Welding of welding nuts type HBS Hex ^{Nut} M6 to M12	
M6	V	88-22-532	
M8	V	88-21-107	
M10	V	88-21-108	
M12	V	88-21-109	



Field former bell	for:	AM 12 A	
			88-16-929



Distance washer	for: AM 12 A
Ø / B	
M6 / 7 mm	V 88-18-966
M8 / 7 mm	V 88-18-966
M10 / 8 mm	V 88-21-116
M12 / 9 mm	V 88-18-967



Magnetic field guidance	for: AM 12 A
Ø / D	
M6 / 21 mm	V 88-17-266A
M8 / 21 mm	V 88-17-266A
M10 / 26 mm	V 88-17-267A
M12 / 28 mm	V 88-17-268A

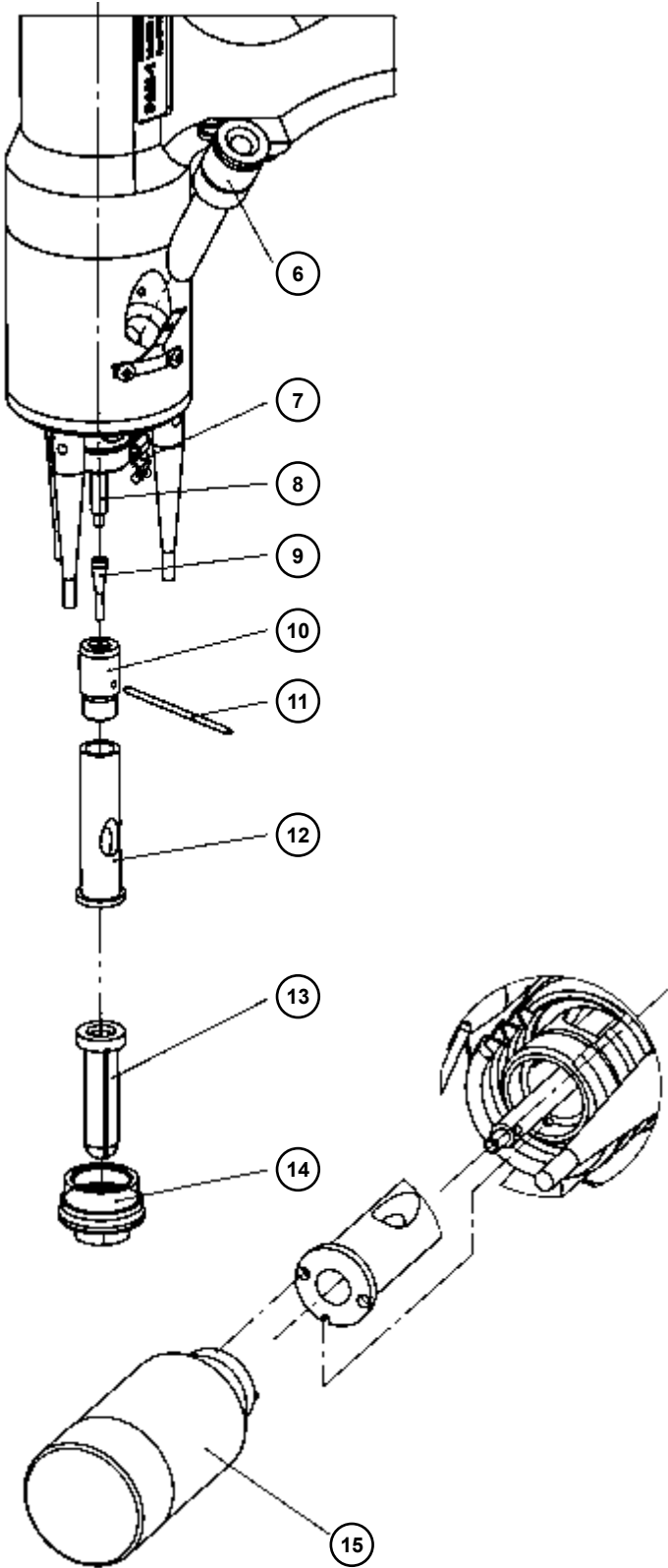


Shielding gas leg assembly complete	for: AM 12 A for: Welding of welding nuts type HBS Hex ^{Nut} M6 to M12 Leg 10 x 240 mm with plastic hose, l = 5.0 m
	88-23-039

Equipment for PAH-1	Page
	86 - 97
Equipment for KAH 412	Page
	98 - 115
Equipment for VBZ-3	Page
	116 - 117
Pneumatic ground clamps	Page
	114 - 115

T-slot blocks / Zero-point stop pins	Page
	120 - 121
PBZ (pneumatic single stud feeding)	Page
	118 - 119
Further components	Page
	124 - 127
Accessories for MPW	Page
	128 - 129

The equipment, which is delivered together with the welding head, consists of standard components of your choice:



Pos.	Quantity	Description	Oder No.
6	1	Feed tube	*)
7	1	Bellows	80-20-010
8	1	Piston rod	80-40-012
9	1	Plunger	*)
10	1	Pin stop	*)
11	1	Pin 2 mm	80-10-208
12	1	Guide bushing	*)
13	1	Chuck	*)
14	1	Retaining nut	80-40-010
15	1	Special wrench	84-40-010
	1	Socket wrench AF 15	80-40-085

*) Selection according to type and dimension of the welding element

Assortment box

Accessories for easy change of equipment for other length and diameter of welding element

for PAH-1

7

84-40-013A

Assortment box, manual

for feeding of standard studs Ø 3 to 8 mm by hand

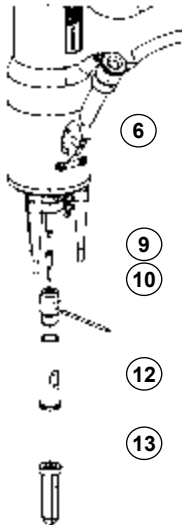
84-43-013A

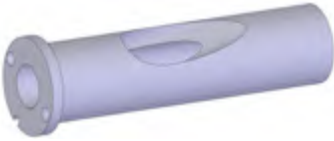
Assortment box, automatic

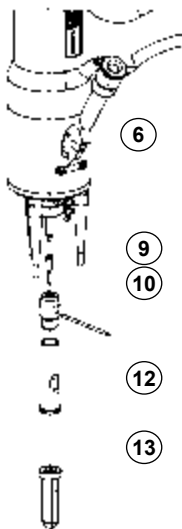
for feeding of standard studs Ø 3 to 8 mm by VBZ



Equipment for PAH-1

Equipment					9 Plunger	
Chucks					The stud is pressed through the chuck by the plunger.	
					84-40-531 (conical short) 84-40-561 (cylindrical short)	
for CD studs with dia. 3 mm		Welding element dia.	Order No. Chuck	Stud length	Order No. Plunger	
		Ø 3 mm	84-50-003	8 mm	84-40-531	
				10 mm	84-40-531	
				12 mm	84-40-531	
				15 mm	84-40-531	
				20 mm	84-40-561	
				25 mm	84-40-561	
				30 mm	84-40-561	
for CD studs with dia. 4 mm		Welding element dia.	Order No. Chuck	Stud length	Order No. Plunger	
		Ø 4 mm	84-50-004	8 mm	84-40-531	
				10 mm	84-40-531	
				12 mm	84-40-531	
				15 mm	84-40-531	
				20 mm	84-40-561	
				25 mm	84-40-561	
				30 mm	84-40-561	
for CD studs with dia. 5 mm		Welding element dia.	Order No. Chuck	Stud length	Order No. Plunger for	
		Ø 5 mm	84-50-005	8 mm	84-40-531	84-40-561
				10 mm	84-40-531	84-40-561
				12 mm	84-40-531	84-40-561
				15 mm	84-40-561	84-40-561
				20 mm	84-40-561	84-40-561
				25 mm	84-40-561	84-40-561
				30 mm	84-40-561	84-40-561

12 Guide bushing	10 Pin stop	6 Feed tube
Together with the feed tube the guide bushing guides the stud into the welding head.	The pin stop defines the stud length which is weldable.	Together with the guide bushing the feed tube guides the stud into the welding head.
		 
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-301	84-40-408	84-40-201 84-40-101
84-41-301	84-40-410	84-40-201 84-40-101
84-41-301	84-40-412	84-40-201 84-40-101
84-41-301	84-40-415	84-40-201 84-40-101
84-41-302	84-40-420	84-40-202 84-40-102
84-41-302	84-40-425	84-40-202 84-40-102
84-41-303	84-40-430	84-40-203 84-40-103
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-302	84-40-408	84-40-202 84-40-102
84-41-302	84-40-410	84-40-202 84-40-102
84-41-302	84-40-412	84-40-202 84-40-102
84-41-302	84-40-415	84-40-202 84-40-102
84-41-303	84-40-420	84-40-203 84-40-103
84-41-303	84-40-425	84-40-203 84-40-103
84-41-304	84-40-430	84-40-204 84-40-104
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-303	84-40-408	84-40-203 84-40-103
84-41-303	84-40-410	84-40-203 84-40-103
84-41-303	84-40-412	84-40-203 84-40-103
84-41-303	84-40-415	84-40-203 84-40-103
84-41-304	84-40-420	84-40-204 84-40-104
84-41-304	84-40-425	84-40-204 84-40-104
84-41-305	84-40-430	84-40-205 84-40-105

Equipment					9 Plunger	
Chucks					The stud is pressed through the chuck by the plunger.	
					84-40-561 (conical short) 84-40-571 (for internal threaded studs with outside diameter 7.1 mm, 8 mm)	
for CD studs with dia. 6 mm	13 	Welding element dia. Ø 6 mm	Order No. Chuck 84-50-006	Stud length	Order No. Plunger for	
					Threaded studs / pins	Internal threaded studs
					8 mm	84-40-561
					10 mm	84-40-561
					12 mm	84-40-561
					15 mm	84-40-561
					20 mm	84-40-561
					25 mm	84-40-561
30 mm	84-40-561					
for CD studs with dia. 7.1 mm	13 	Welding element dia. Ø 7.1 mm	Order No. Chuck 84-50-071	Stud length	Order No. Plunger for	
					Threaded studs / pins	Internal threaded studs
					10 mm	84-40-561
					12 mm	84-40-561
					15 mm	84-40-561
					20 mm	84-40-561
					25 mm	84-40-561
					30 mm	84-40-561
for CD studs with dia. 8 mm	13 	Welding element dia. Ø 8 mm	Order No. Chuck 84-50-008	Stud length	Order No. Plunger for	
					Threaded studs / pins	Internal threaded studs
					10 mm	84-40-561
					12 mm	84-40-561
					15 mm	84-40-561
					20 mm	84-40-561
					25 mm	84-40-561
					30 mm	84-40-561

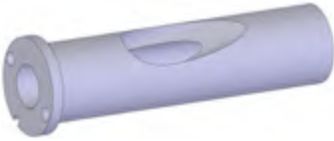


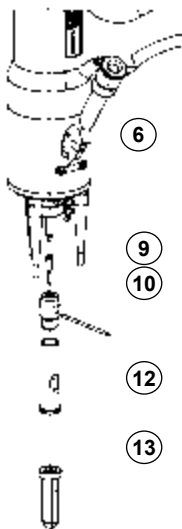
Automatic stud welding

CD / Tip ignition (gap method)

7

Equipment for PAH-1

12 Guide bushing	10 Pin stop	6 Feed tube
Together with the feed tube the guide bushing guides the stud into the welding head.	The pin stop defines the stud length which is weldable.	Together with the guide bushing the feed tube guides the stud into the welding head.
		 
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-304	84-40-408	84-40-204 84-40-104
84-41-304	84-40-410	84-40-204 84-40-104
84-41-304	84-40-412	84-40-204 84-40-104
84-41-304	84-40-415	84-40-204 84-40-104
84-41-305	84-40-420	84-40-205 84-40-105
84-41-305	84-40-425	84-40-205 84-40-105
84-41-305	84-40-430	84-40-205 84-40-105
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-305	84-40-410	84-40-205 84-40-105
84-41-305	84-40-412	84-40-205 84-40-105
84-41-305	84-40-415	84-40-205 84-40-105
84-41-305	84-40-420	84-40-205 84-40-105
84-41-305	84-40-425	84-40-205 84-40-105
84-41-305	84-40-430	84-40-205 84-40-105
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-305	84-40-410	84-40-205 84-40-105
84-41-305	84-40-412	84-40-205 84-40-105
84-41-305	84-40-415	84-40-205 84-40-105
84-41-305	84-40-420	84-40-205 84-40-105
84-41-305	84-40-425	84-40-205 84-40-105
84-41-305	84-40-430	84-40-205 84-40-105

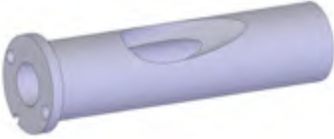
Equipment					9 Plunger	
Chucks					The stud is pressed through the chuck by the plunger.	
					 84-40-531 (conical short)	 84-40-561 (cylindrical short)
	 84-40-532 (conical long)	 84-40-562 (cylindrical long)				
for SC studs with dia. 3 mm	 	Welding element dia. Ø 3 mm	Order No. Chuck 84-50-003	Stud length	Order No. Plunger	
				8 mm	84-40-532	
				10 mm	84-40-531	
				12 mm	84-40-531	
				15 mm	84-40-531	
				20 mm	84-40-562	
				25 mm	84-40-562	
				30 mm	84-40-562	
for SC studs with dia. 4 mm	 	Welding element dia. Ø 4 mm	Order No. Chuck 84-50-004	Stud length	Order No. Plunger	
				8 mm	84-40-532	
				10 mm	84-40-531	
				12 mm	84-40-531	
				15 mm	84-40-531	
				20 mm	84-40-562	
				25 mm	84-40-562	
				30 mm	84-40-562	
for SC studs with dia. 5 mm	 	Welding element dia. Ø 5 mm	Order No. Chuck 84-50-005	Stud length	Order No. Plunger for	
					Threaded studs / pins	Internal threaded studs
				8 mm	84-40-532	84-40-562
				10 mm	84-40-531	84-40-561
				12 mm	84-40-531	84-40-561
				15 mm	84-40-561	84-40-561
				20 mm	84-40-562	84-40-562
				25 mm	84-40-562	84-40-562
				30 mm	84-40-562	84-40-562
					84-40-562	84-40-562

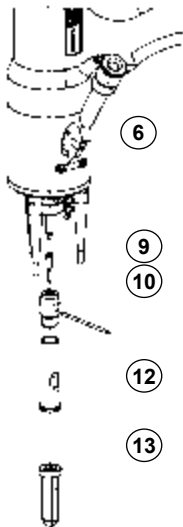


Automatic stud welding SC (short cycle)

7

Equipment for PAH-1

12 Guide bushing	10 Pin stop	6 Feed tube
Together with the feed tube the guide bushing guides the stud into the welding head.	The pin stop defines the stud length which is weldable.	Together with the guide bushing the feed tube guides the stud into the welding head.
		 
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-301	84-40-410	84-40-201 84-40-101
84-41-301	84-40-408	84-40-201 84-40-101
84-41-301	84-40-410	84-40-201 84-40-101
84-41-301	84-40-412	84-40-201 84-40-101
84-41-302	84-40-420	84-40-202 84-40-102
84-41-302	84-40-425	84-40-202 84-40-102
84-41-303	84-40-430	84-40-203 84-40-103
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-302	84-40-410	84-40-202 84-40-102
84-41-302	84-40-408	84-40-202 84-40-102
84-41-302	84-40-410	84-40-202 84-40-102
84-41-302	84-40-412	84-40-202 84-40-102
84-41-303	84-40-420	84-40-203 84-40-103
84-41-303	84-40-425	84-40-203 84-40-103
84-41-304	84-40-430	84-40-204 84-40-104
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-303	84-40-410	84-40-203 84-40-103
84-41-303	84-40-408	84-40-203 84-40-103
84-41-303	84-40-410	84-40-203 84-40-103
84-41-303	84-40-412	84-40-203 84-40-103
84-41-304	84-40-420	84-40-204 84-40-104
84-41-304	84-40-425	84-40-204 84-40-104
84-41-305	84-40-430	84-40-205 84-40-105

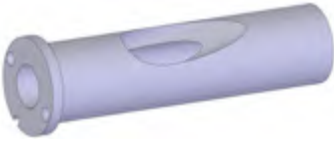
Equipment					9 Plunger	
Chucks					The stud is pressed through the chuck by the plunger.	
					 84-40-561 (conical short)  84-40-571 (for internal threaded studs with outside diameter 7.1 mm, 8 mm)  84-40-562 (cylindrical long)	
for SC studs with dia. 6 mm	 	Welding element dia. Ø 6 mm	Order No. Chuck 84-50-006	Stud length 8 mm 10 mm 12 mm 15 mm 20 mm 25 mm 30 mm	Order No. Plunger for Threaded studs / pins Internal threaded studs 84-40-562 84-40-562 84-40-561 84-40-561 84-40-561 84-40-561 84-40-561 84-40-561 84-40-562 84-40-562 84-40-562 84-40-562 84-40-562 84-40-562	
for SC studs with dia. 7.1 mm	 	Welding element dia. Ø 7.1 mm	Order No. Chuck 84-50-071	Stud length 10 mm 12 mm 15 mm 20 mm 25 mm 30 mm	Order No. Plunger for Threaded studs / pins Internal threaded studs 84-40-561 84-40-571 84-40-561 84-40-571 84-40-561 84-50-571 84-40-562 -- 84-40-562 -- 84-40-562 --	
for SC studs with dia. 8 mm	 	Welding element dia. Ø 8 mm	Order No. Chuck 84-50-008	Stud length 10 mm 12 mm 15 mm 20 mm 25 mm 30 mm	Order No. Plunger for Threaded studs / pins Internal threaded studs 84-40-561 84-40-571 84-40-561 84-40-571 84-40-561 84-40-571 84-40-561 -- 84-40-561 -- 84-40-561 --	



Automatic stud welding SC (short cycle)

7

Equipment for PAH-1

12 Guide bushing	10 Pin stop	6 Feed tube
Together with the feed tube the guide bushing guides the stud into the welding head.	The pin stop defines the stud length which is weldable.	Together with the guide bushing the feed tube guides the stud into the welding head.
		 
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-304	84-40-410	84-40-204 84-40-104
84-41-304	84-40-408	84-40-204 84-40-104
84-41-304	84-40-410	84-40-204 84-40-104
84-41-304	84-40-412	84-40-204 84-40-104
84-41-305	84-40-420	84-40-205 84-40-105
84-41-305	84-40-425	84-40-205 84-40-105
84-41-305	84-40-430	84-40-205 84-40-105
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-305	84-40-408	84-40-205 84-40-105
84-41-305	84-40-410	84-40-205 84-40-105
84-41-305	84-40-412	84-40-205 84-40-105
84-41-305	84-40-420	84-40-205 84-40-105
84-41-305	84-40-425	84-40-205 84-40-105
84-41-305	84-40-430	84-40-205 84-40-105
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube
		Automatic Manual
84-41-305	84-40-408	84-40-205 84-40-105
84-41-305	84-40-410	84-40-205 84-40-105
84-41-305	84-40-412	84-40-205 84-40-105
84-41-305	84-40-420	84-40-205 84-40-105
84-41-305	84-40-425	84-40-205 84-40-105
84-41-305	84-40-430	84-40-205 84-40-105



Retaining nut	for: PAH-1 to: Fix the chuck at the welding gun
---------------	--

80-40-010



Special wrench	For correct positioning of the guide bushing in the piston of the welding gun (see illustration on page 87) Incorrect positioning of the guide bushing may lead to problems during stud feeding.
----------------	---

84-40-010



Pin	to: Connect the pin stop to guide bushing and plunger to piston rod
-----	---

80-10-208



Centering device PZV-3	for: PAH-1 for: Exact positioning in templates
------------------------	---

Ø 20 94-40-021

Ø 26 94-40-026

Ø 30 94-40-030



Gas shroud PSZ	for: PAH-1 (instead of foot ring with feet) for: Welding of ARC welding elements from Ø 3 mm to 8 mm with shielding gas plastic hose, l = 4 m
----------------	--

94-40-022



Standard chuck
adaptor complete

to: Use standard chucks in the automatic welding
gun

92-40-041



Retaining nut
adaptor

for: Standard chuck adaptor complete
(92-40-041)

80-40-582



Adaptor

for: Standard chuck adaptor complete
(92-40-041)

80-40-389



Foot

for: Foot ring 80-40-033

Ø 10 mm

V 80-40-032



Foot ring

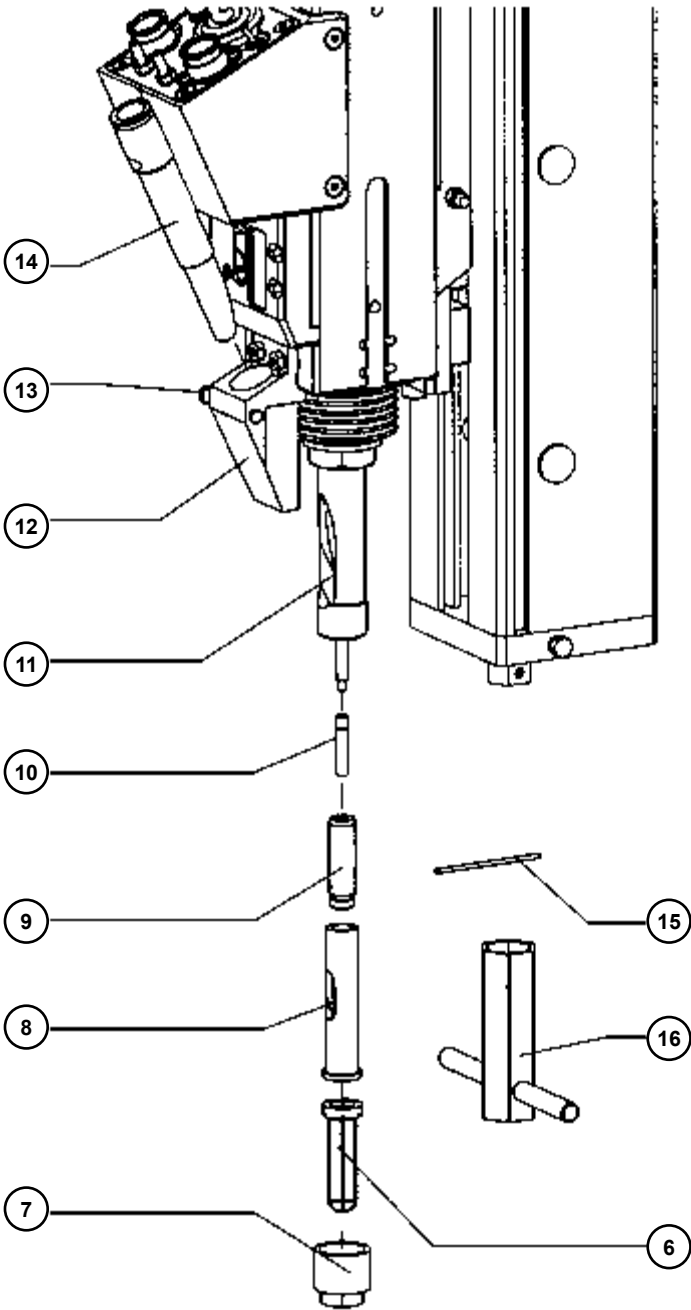
for: PAH-1
to: Fix the feet at the welding gun

V 80-40-033

Equipment

for KAH 412

The equipment, which is delivered together with the welding head, consists of standard components of your choice:



Pos.	number	Description	Order-Nr.
6	1	Chuck	*)
7	1	Retaining nut	80-07-564
8	1	Guide bushing	*)
9	1	Pin Stop	*)
10	1	Plunger	*)
11	1	Slot piston	80-07-567
12	1	Support for feed tube	88-10-433
13	1	Trigger pin complete	
14	1	Feed tube	*)
15	1	Pin 2 mm	80-10-208
16	1	Socket wrench AF 15	80-40-085

*) Selection according to type and dimension of the welding element

Assortment box

Accessories for easy change of equipment for other length and diameter of welding element

for KAH 412

7

84-41-312A

Assortment box, manual

for feeding of standard studs Ø 3 to 8 mm by hand

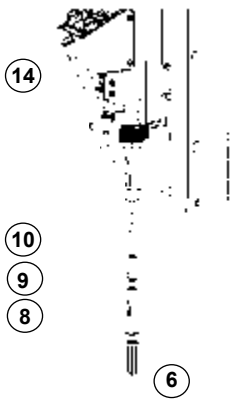
84-42-312A

Assortment box, VBZ

for feeding of standard studs Ø 3 to 8 mm by VBZ



Equipment for KAH 412

Equipment					10 Plunger
Chucks					The stud is pressed through the chuck by the plunger.  84-40-531 (conical short) 84-40-561 (cylindrical short)
for CD studs with dia. 3 mm		Welding element dia.	Order No. Chuck	Stud length ¹⁾	Order No. Plunger
				from min. to max.	
				8 mm 15 mm	
				10 mm 20 mm	
				12 mm 20 mm	
				15 mm 25 mm	
				20 mm 30 mm	
				25 mm 35 mm	
				30 mm 40 mm	
				35 mm 40 mm	
				40 mm 40 mm	
for CD studs with dia. 4 mm		Welding element dia.	Order No. Chuck	Stud length ¹⁾	Order No. Plunger
				from min. to max.	
				8 mm 15 mm	
				10 mm 20 mm	
				12 mm 20 mm	
				15 mm 25 mm	
				20 mm 30 mm	
				25 mm 35 mm	
				30 mm 40 mm	
				35 mm 40 mm	
				40 mm 40 mm	
for CD studs with dia. 5 mm		Welding element dia.	Order No. Chuck	Stud length ¹⁾	Order No. Plunger for
				from min. to max.	
				8 mm 15 mm	Threaded studs / pins
				10 mm 20 mm	Internal threaded studs
				12 mm 20 mm	84-40-531 84-40-561
				15 mm 25 mm	84-40-561 84-40-561
				20 mm 30 mm	84-40-561 84-40-561
				25 mm 35 mm	84-40-561 84-40-561
				30 mm 40 mm	84-40-561 84-40-561
				35 mm 40 mm	84-40-561 84-40-561
				40 mm 40 mm	84-40-561 84-40-561

¹⁾ We recommend orientating the equipment as close as possible to the min. stud length

8 Guide bushing	9 Pin stop	14 Feed tube
Together with the feed tube the guide bushing guides the stud into the welding head.	The pin stop defines the smallest possible stud length which is weldable.	Together with the guide bushing the feed tube guides the stud into the welding head.
		  
Order No. Guide bushing	Order No. Pin stop	Automatic Automatic with steel insert Manual
80-07-761	80-07-782	80-08-161 80-08-161/TKM 80-07-801
80-07-761	80-07-783	80-08-161 80-08-161/TKM 80-07-801
80-07-761	80-07-784	80-08-161 80-08-161TKM 80-07-801
80-07-762	80-07-785	80-08-162 80-08-162/TKM 80-07-802
80-07-762	80-07-786	80-08-162 80-08-162/TKM 80-07-802
80-07-763	80-07-787	80-08-163 80-08-163/TKM 80-07-803
80-07-764	80-07-788	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-789	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-789	80-08-164 80-08-164/TKM 80-07-804
Order No. Guide bushing	Order No. Pin stop	Automatic Automatic with steel insert Manual
80-07-762	80-07-782	80-08-162 80-08-162/TKM 80-07-802
80-07-762	80-07-783	80-08-162 80-08-162/TKM 80-07-802
80-07-762	80-07-784	80-08-162 80-08-162/TKM 80-07-802
80-07-763	80-07-785	80-08-163 80-08-163/TKM 80-07-803
80-07-763	80-07-786	80-08-163 80-08-163/TKM 80-07-803
80-07-764	80-07-787	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-788	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-789	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-789	80-08-164 80-08-164/TKM 80-07-804
Order No. Guide bushing	Order No. Pin stop	Automatic Automatic with steel insert Manual
80-07-763	80-07-782	80-08-163 80-08-163/TKM 80-07-803
80-07-763	80-07-783	80-08-163 80-08-163/TKM 80-07-803
80-07-763	80-07-784	80-08-163 80-08-163/TKM 80-07-803
80-07-764	80-07-785	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-786	80-08-164 80-08-164/TKM 80-07-804
80-07-765	80-07-787	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-788	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-789	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-789	80-08-165 80-08-165/TKM 80-07-805

Equipment					10 Plunger						
Chucks					The stud is pressed through the chuck by the plunger. 						
					84-40-561 (cylindrical short) 84-40-571 (for internal threaded studs with outside diameter 7.1 mm, 8 mm)						
for CD studs with dia. 6 mm		Welding element dia. ²⁾	Order No. Chuck	Stud length ¹⁾		Order No. Plunger for					
				from min.	to max.	Threaded studs / pins	Intenal threaded studs				
				8 mm	15 mm	84-40-561	84-40-561				
				10 mm	20 mm	84-40-561	84-40-561				
				12 mm	20 mm	84-40-561	84-40-561				
				15 mm	25 mm	84-40-561	84-40-561				
				20 mm	30 mm	84-40-561	84-40-561				
				25 mm	35 mm	84-40-561	84-40-561				
				30 mm	40 mm	84-40-561	84-40-561				
				35 mm	40 mm	84-40-561	84-40-561				
				40 mm	40 mm	84-40-561	84-40-561				
				for CD studs with dia. 7.1 mm		Welding element dia.	Order No. Chuck	Stud length ¹⁾		Order No. Plunger for	
from min.	to max.	Threaded studs / pins	Intenal threaded studs								
10 mm	20 mm	84-40-561	84-40-571								
12 mm	20 mm	84-40-561	84-40-571								
15 mm	25 mm	84-40-561	84-50-571								
20 mm	30 mm	84-40-561	84-50-571								
25 mm	30 mm	84-40-561	84-50-571								
30 mm	40 mm	84-40-561	84-50-571								
35 mm	40 mm	84-40-561	84-50-571								
40 mm	40 mm	84-40-561	84-50-571								
for CD studs with dia. 8 mm		Welding element dia.	Order No. Chuck					Stud length ¹⁾		Order No. Plunger for	
								from min.	to max.	Threaded studs / pins	Intenal threaded studs
				10 mm	20 mm	84-40-561	84-40-571				
				12 mm	20 mm	84-40-561	84-40-571				
				15 mm	25 mm	84-40-561	84-40-571				
				20 mm	30 mm	84-40-561	84-40-571				
				25 mm	30 mm	84-40-561	84-40-571				
				30 mm	40 mm	84-40-561	84-40-571				
				35 mm	40 mm	84-40-561	84-40-571				
				40 mm	40 mm	84-40-561	84-40-571				

¹⁾ We recommend orientating the equipment as close as possible to the min. stud length.

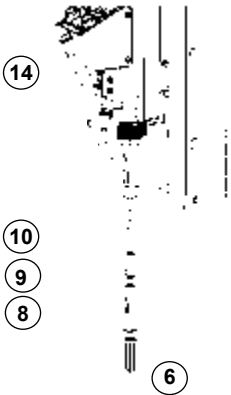
²⁾ Ø 10 mm on request, offer after check for feasibility

8 Guide bushing	9 Pin stop	14 Feed tube
Together with the feed tube the guide bushing guides the stud into the welding head.	The pin stop defines the smallest possible stud length which is weldable.	Together with the guide bushing the feed tube guides the stud into the welding head.
		  
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube Automatic Automatic with steel insert Manual
80-07-764	80-07-782	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-783	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-784	80-08-164 80-08-164/TKM 80-07-804
80-07-765	80-07-785	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-786	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-787	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-788	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-789	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-789	80-08-165 80-08-165/TKM 80-07-805
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube Automatic Automatic with steel insert Manual
80-07-765	80-07-783	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-784	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-785	80-08-165 80-08-165/TKM 80-07-805
88-17-679	80-07-786	80-08-165 80-08-165/TKM 80-07-805
88-17-679	80-07-787	80-08-165 80-08-165/TKM 80-07-805
80-07-766	80-07-788	80-08-981 --- 80-07-806
80-07-766	80-07-789	80-08-981 --- 80-07-806
80-07-766	80-07-789	80-08-981 --- 80-07-806
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube Automatic Automatic with steel insert Manual
80-07-765	80-07-783	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-784	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-785	80-08-165 80-08-165/TKM 80-07-805
88-17-679	80-07-786	80-08-165 80-08-165/TKM 80-07-805
88-17-679	80-07-787	80-08-165 80-08-165/TKM 80-07-805
80-07-766	80-07-788	80-08-981 --- 80-07-806
80-07-766	80-07-789	80-08-981 --- 80-07-806
80-07-766	80-07-789	80-08-981 --- 80-07-806

Equipment					10 Plunger
Chucks					The stud is pressed through the chuck by the plunger. 84-40-531 (conical short) 84-40-561 (cylindrical short)
for SC studs with dia. 3 mm		Welding element dia.	Order No. Chuck	Stud length ¹⁾	Order No. Plunger
				from min. to max.	
				8 mm 8 mm	
				10 mm 15 mm	
				12 mm 20 mm	
				15 mm 25 mm	
				20 mm 30 mm	
				25 mm 35 mm	
				30 mm 40 mm	
				35 mm 40 mm	
				40 mm 40 mm	
for SC studs with dia. 4 mm		Welding element dia.	Order No. Chuck	Stud length ¹⁾	Order No. Plunger
				from min. to max.	
				8 mm 10 mm	
				10 mm 15 mm	
				12 mm 20 mm	
				15 mm 25 mm	
				20 mm 30 mm	
				25 mm 35 mm	
				30 mm 40 mm	
				35 mm 40 mm	
				40 mm 40 mm	
for SC studs with dia. 5 mm		Welding element dia.	Order No. Chuck	Stud length ¹⁾	Order No. Plunger for
				from min. to max.	
				8 mm 10 mm	Threaded studs / pins
				10 mm 15 mm	Internal threaded studs
				12 mm 20 mm	84-40-531 84-40-561
				15 mm 25 mm	84-40-561 84-40-561
				20 mm 30 mm	84-40-561 84-40-561
				25 mm 35 mm	84-40-561 84-40-561
				30 mm 40 mm	84-40-561 84-40-561
				35 mm 40 mm	84-40-561 84-40-561
				40 mm 40 mm	84-40-561 84-40-561

¹⁾ We recommend orientating the equipment as close as possible to the min. stud length

8 Guide bushing	9 Pin stop	14 Feed tube
Together with the feed tube the guide bushing guides the stud into the welding head.	The pin stop defines the smallest possible stud length which is weldable.	Together with the guide bushing the feed tube guides the stud into the welding head.
		  
Order No. Guide bushing	Order No. Pin stop	Automatic Automatic with steel insert Manual
80-07-761	80-07-781	80-08-161 80-08-161/TKM 80-07-801
80-07-761	80-07-782	80-08-161 80-08-161/TKM 80-07-801
80-07-761	80-07-783	80-08-161 80-08-161TKM 80-07-801
80-07-762	80-07-784	80-08-162 80-08-162/TKM 80-07-802
80-07-762	80-07-785	80-08-162 80-08-162/TKM 80-07-802
80-07-763	80-07-786	80-08-163 80-08-163/TKM 80-07-803
80-07-764	80-07-787	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-788	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-789	80-08-164 80-08-164/TKM 80-07-804
Order No. Guide bushing	Order No. Pin stop	Automatic Automatic with steel insert Manual
80-07-762	80-07-781	80-08-162 80-08-162/TKM 80-07-802
80-07-762	80-07-782	80-08-162 80-08-162/TKM 80-07-802
80-07-762	80-07-783	80-08-162 80-08-162/TKM 80-07-802
80-07-763	80-07-784	80-08-163 80-08-163/TKM 80-07-803
80-07-763	80-07-785	80-08-163 80-08-163/TKM 80-07-803
80-07-764	80-07-786	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-787	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-788	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-789	80-08-164 80-08-164/TKM 80-07-804
Order No. Guide bushing	Order No. Pin stop	Automatic Automatic with steel insert Manual
80-07-763	80-07-781	80-08-163 80-08-163/TKM 80-07-803
80-07-763	80-07-782	80-08-163 80-08-163/TKM 80-07-803
80-07-763	80-07-783	80-08-163 80-08-163/TKM 80-07-803
80-07-764	80-07-784	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-785	80-08-164 80-08-164/TKM 80-07-804
80-07-765	80-07-786	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-787	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-788	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-789	80-08-165 80-08-165/TKM 80-07-805

Equipment					10 Plunger		
Chucks					The stud is pressed through the chuck by the plunger.		
					84-40-561 (cylindrical short) 84-40-571 (for internal threaded studs with outside diameter 7,1 mm, 8 mm)		
for SC studs with dia. 6 mm		Welding element dia. ²⁾ Ø 6 mm	Order No. Chuck 84-50-006	Stud length ¹⁾		Order No. Plunger for	
				from min.	to max.	Threaded studs / pins	Intenal threaded studs
				8 mm	15 mm	84-40-561	84-40-561
				10 mm	20 mm	84-40-561	84-40-561
				12 mm	20 mm	84-40-561	84-40-561
				15 mm	25 mm	84-40-561	84-40-561
				20 mm	30 mm	84-40-561	84-40-561
				25 mm	35 mm	84-40-561	84-40-561
				30 mm	40 mm	84-40-561	84-40-561
				35 mm	40 mm	84-40-561	84-40-561
				40 mm	40 mm	84-40-561	84-40-561
for SC studs with dia. 7,1 mm		Welding element dia. Ø 7,1 mm	Order No. Chuck 84-50-071	Stud length ¹⁾		Order No. Plunger for	
				from min.	to max.	Threaded studs / pins	Intenal threaded studs
				10 mm	15 mm	84-40-561	84-40-571
				12 mm	20 mm	84-40-561	84-40-571
				15 mm	25 mm	84-40-561	84-50-571
				20 mm	30 mm	84-40-561	84-50-571
				25 mm	30 mm	84-40-561	84-50-571
				30 mm	40 mm	84-40-561	84-50-571
				35 mm	40 mm	84-40-561	84-50-571
				40 mm	40 mm	84-40-561	84-50-571
				for SC studs with dia. 8 mm		Welding element dia. Ø 8 mm	Order No. Chuck 84-50-008
from min.	to max.	Threaded studs / pins	Intenal threaded studs				
10 mm	15 mm	84-40-561	84-40-571				
12 mm	20 mm	84-40-561	84-40-571				
15 mm	25 mm	84-40-561	84-40-571				
20 mm	30 mm	84-40-561	84-40-571				
25 mm	30 mm	84-40-561	84-40-571				
30 mm	40 mm	84-40-561	84-40-571				
35 mm	40 mm	84-40-561	84-40-571				
40 mm	40 mm	84-40-561	84-40-571				

¹⁾ We recommend orientating the equipment as close as possible to the min. stud length.

²⁾ Ø 10 mm on request, offer after check for feasibility

8 Guide bushing	9 Pin stop	14 Feed tube
Together with the feed tube the guide bushing guides the stud into the welding head.	The pin stop defines the smallest possible stud length which is weldable.	Together with the guide bushing the feed tube guides the stud into the welding head.
		  
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube Automatic Automatic with steel insert Manual
80-07-764	80-07-781	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-782	80-08-164 80-08-164/TKM 80-07-804
80-07-764	80-07-783	80-08-164 80-08-164/TKM 80-07-804
80-07-765	80-07-784	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-785	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-786	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-787	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-788	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-789	80-08-165 80-08-165/TKM 80-07-805
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube Automatic Automatic with steel insert Manual
80-07-765	80-07-782	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-783	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-784	80-08-165 80-08-165/TKM 80-07-805
88-17-679	80-07-785	80-08-165 80-08-165/TKM 80-07-805
88-17-679	80-07-786	80-08-165 80-08-165/TKM 80-07-805
80-07-766	80-07-787	80-08-981 --- 80-07-806
80-07-766	80-07-788	80-08-981 --- 80-07-806
80-07-766	80-07-789	80-08-981 --- 80-07-806
Order No. Guide bushing	Order No. Pin stop	Order No. Feed tube Automatic Automatic with steel insert Manual
80-07-765	80-07-782	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-783	80-08-165 80-08-165/TKM 80-07-805
80-07-765	80-07-784	80-08-165 80-08-165/TKM 80-07-805
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88-17-679	80-07-786	80-08-165 80-08-165/TKM 80-07-805
80-07-766	80-07-787	80-08-981 --- 80-07-806
80-07-766	80-07-788	80-08-981 --- 80-07-806
80-07-766	80-07-789	80-08-981 --- 80-07-806



Retaining nut	for: KAH 412 to: Fix the chuck at the welding gun
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80-07-564



Pin	to: Screw together the pin stop to the guide bushing and the plunger to the piston rod
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80-10-208



Standard chuck adaptor complete	to: Use standard chucks in automatic welding heads
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92-40-053



Retaining nut adaptor	for: Standard chuck adaptor complete (92-40-053)
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80-40-641



Adaptor	for: Standard chuck adaptor complete (92-40-053)
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80-40-389



Gas shroud	for: Welding of ARC welding elements from Ø 3 mm to 8 mm with shielding gas (to be clamped on retaining nut) plastic hose, l = 4 m
	88-10-505



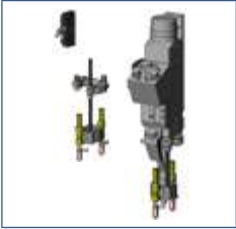
Gas shroud	for: Welding of ARC welding elements from Ø 3 mm to 8 mm with shielding gas (to be screwed on welding head) plastic hose, l = 5 m
	80-07-772A



Gas shroud including grounding device	for: Welding of ARC welding elements from Ø 3 mm to 8 mm with shielding gas with grounding transfer plastic hose, l = 5 m
	80-07-772MA



Shielding gas tube	for: Gas shroud (80-07-772A and 80-07-772MA) D = 40 mm, l = 54 mm
V	80-08-178A

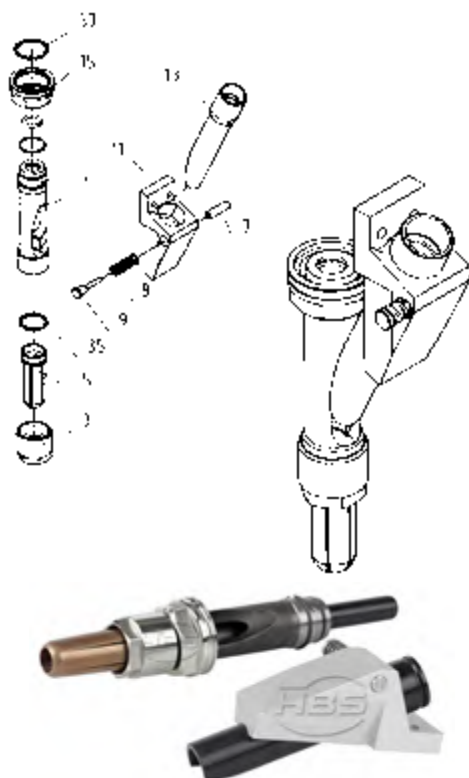
	Pneumatic downholder	for: KAH 412 to hold down the workpiece
	Stroke 100 mm	80-08-702
	Ground connection for pneum. downholder *)	for: KAH 412 for: pneum. downholder 80-08-702
		80-09-715
	Grounding device KAH 412, variable *)	for: KAH 412 fastening the metal sheet to be welded with direct ground transfer
		88-18-220

*) Ground cable not included in delivery. Depending on the application, length and cross-section of the ground cable must be checked.



Change over kit
complete manual

for: Studs M10/M12 or Ø 12,7 mm (1/2")
length: up to 40 mm
includes:



- Pos. 1: 80-08-539 Slot piston hardened
 - Pos. 2: 80-10-281 O-ring 11 x 2
 - Pos. 3: 80-08-540 Retaining nut
 - Pos. 4: 80-11-036 O-ring 17-1,5
 - Pos. 5: 88-10-031 Chuck
 - Pos. 7: 80-07-908 Locking pin
 - Pos. 8: 80-40-241 Pressure spring
 - Pos. 9: 80-07-909 Trigger pin
 - Pos. 11: 88-10-434 Support for feed tube
 - Pos. 13: 88-10-195 Feed tube
 - Pos. 15: 80-08-546 Tension nut 1/2"
 - Pos. 35: 80-11-117 Seeger snap ring
 - Pos. 37: 80-11-118 Seeger snap ring
- please add:
- Pos. 5: 80-08-541 Chuck M10 without flange or
88-10-031 Chuck M10 with flange or
80-08-542 Chuck M12 or
80-08-543 Chuck Ø12.7

M10 without flange

88-11-930/10 *)

M10 with flange

88-11-930 *)

M12

88-11-931 *)

Ø 12.7

88-11-932 *)

*) on request, offer after check for feasibility



Change over kit
complete VBZ

for: Studs M10
includes:
equipment as required,
depending on size of studs

on request, offer after check for feasibility



Change over kit VBZ-3 for: KAH-412, PAH-1	to:	Change to another stud-Ø for fully automatic stud feeder VBZ-3
Ø 3	V	94-43-203B
Ø 4	V	94-43-204B
Ø 5	V	94-43-205B
Ø 6	V	94-43-206B
Ø 7,1	V	94-43-271B
Ø 8	V	94-43-208B
Ø 5 Fir tree stud	V	94-43-253B
Ø 6 Fir tree stud	V	94-43-263B
Ø 10	V	94-43-210B *)
		*) on request, offer after check for feasibility

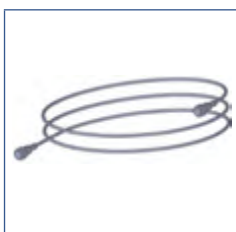


Feeding tube to
VBZ-3 with 2 tube
nozzles

for: KAH 412, PAH-1
Feeding tube l = 4 m

for:

Ø 3	80-43-303A
Ø 4	80-43-304A
Ø 5	80-43-305A
Ø 6	80-43-306A
Ø 7.1 + 8	80-43-308A
Ø 10	80-43-310A



Connecting cable
RENK-round plug
connector/RENK-
round plug connec-
tor

for: Stud welding units ARC 800, IT 1002, IT 50,
IT 90, CDM 2401, CDM 3201, CDi 1502 AT
Cable length: 4 m

92-40-032



Adaptor CDMi-I/O
Interface

for: Stud welding units CDMi 2402 and CDMi 3202
for: Connecting cable RENK-round plug connector/
RENK-round plug connector

80-70-475



Connecting cable
RENK-round plug
connector/HAR-
TING-industrial
connector

for: Stud welding units CDMi 2402 and CDMi 3202
Cable length: 4 m

88-22-290H

Pneumatic ground clamps



PMB-S
(vertical movement)

Pneumatic ground clamp including clamp, swivelling, single acting
for: installation in systems of the MPW series, in automatic systems and systems of type PC-S

90-60-011



PMB-S
(vertical movement)

Pneumatic ground clamp including clamp, swivelling, single acting
incl. sliding block
for: installation in systems of the CPW series

90-61-011



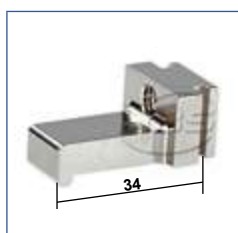
Clamp
PMB-S

for: PMB-S pneumatic clamp



Standard L 24 mm

V 80-40-078



Clamp
PMB-S

for: PMB-S pneumatic clamp



Extra long, L 34 mm

V 80-40-998



PMB-LS2
(horizontal and vertical movement)

Pneumatic ground clamp including clamp (double clamp = extra charge), linear swivelling, double acting
for: installation in systems of the MPW series, in automatic systems and systems of type PC-S

90-60-120



PMB-LS2
(horizontal and vertical movement)

Pneumatic ground clamp including clamp (double clamp = extra charge), linear swivelling, double acting
incl. sliding block
for: installation in systems of the CPW series

90-61-120



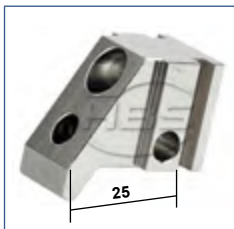
Clamp
PMB-LS2

for: PMB-LS2
pneumatic ground clamp



Standard L 19 mm

V 80-40-780



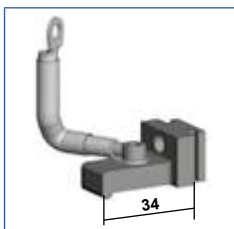
Clamp
PMB-LS2

for: PMB-LS2
pneumatic ground clamp



Special L 25 mm

V 80-05-950



Clamp
PMB-LS2

for: PMB-LS2
pneumatic ground clamp



Special L 34 mm

V 88-22-772

T-slot blocks / Zero-point stop pins

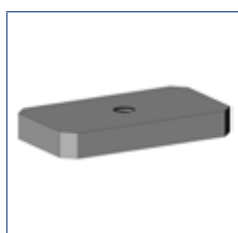


T-Slot block

for: T-slot plate
to fix the pneumatic ground clamp

for: installation in systems of the MPW series, in automatic systems and systems of type PC-S

80-08-988



Sliding block

for: T-slot plate
to fix the pneumatic ground clamp

for: installation in systems of the CPW series

88-16-974



Zero-point stop adjustable

for: T-slot plate (MPW series and PC-S)
for workpiece fixing on Y-axis

Fine adjustment ($\pm 1,5$ mm) of zero-point stops via eccentric bolt possible

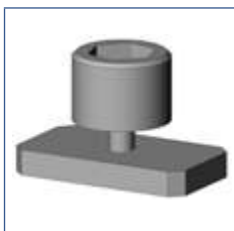
88-14-417



Zero point stop	for: T-slot plate for workpiece fixing on X-axis
	88-10-688



Zero-point stop pin Ø 8 mm	for: T-slot plate (CPW series) for workpiece fixing for insertion into existing bore holes in the T-slot plate
	80-11-711 Metal
	80-10-1543 Ceramic



Zero-point stop	for: T-slot plate (CPW series) for workpiece fixing slidably mounted in the slot of the T-slot plate
	88-19-527



Zero-point stop pin Ø 8 mm with internal thread	for: T-slot plate (CPW series) for workpiece fixing for insertion into fixed drill holes in T-slot work plate
	80-10-2636 Metal



Pin extractor set with sliding hammer	for: Zero-point stops with internal thread for easier removal of stop blocks M3 to M10 in plastic case
	80-10-2024

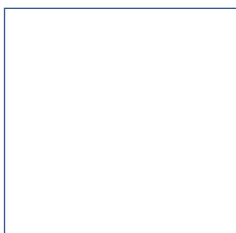
PBZ (pneumatic single feed unit)



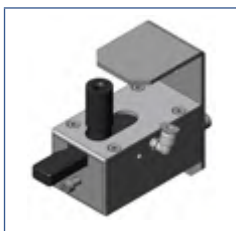
Pneum. single feed unit PBZ	for: KAH-412
	for: installation in systems of the MPW series
M3	94-43-133
M4	94-43-134
M5	94-43-135
M6	94-43-136
M8	94-43-138



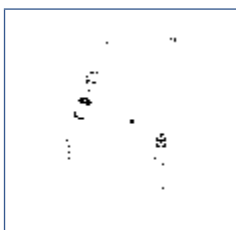
Pneum. single feed unit PBZ	for: KAH-412
	for: installation in automatic systems and systems of type PC-S
M3	94-43-033
M4	94-43-034
M5	94-43-035
M6	94-43-036
M8	94-43-038



Basic kit for all PBZ	for: KAH-412
	for: installation in systems of the CPW series
	88-20-206

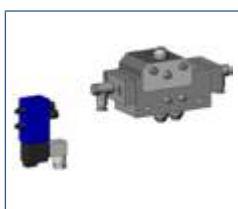


Pneum. single feed unit PBZ	for: KAH-412
	for: installation in systems of the CPW series (Basic kit 88-20-206 necessary)
M3	88-18-163
M4	88-18-164
M5	88-18-165
M6	88-18-166
M8	88-18-168



Changeover kit PBZ-U for: KAH 412	to: Change into another stud-Ø on the PBZ (single studfeeding)
	for: installation in systems of the MPW series, the CPW series, in automatic systems and systems of type PC-S
M3	94-43-103
M4	94-43-104
M5	94-43-105
M6	94-43-106
M8	94-43-108

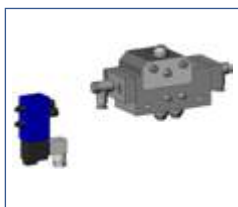
Further components



Pneumatic stud feeding switch PBW complete

for: Feeding studs with the same diameter but different lengths into one automatic welding head
for: installation in systems of the MPW series

M3	88-15-5811B
M4	88-15-5812B
M5	88-15-5813B
M6	88-15-5814B
M8	88-15-5815B



Pneumatic stud feeding switch PBW complete

for: Feeding studs with the same diameter but different lengths into one automatic welding head
for: installation in automatic systems

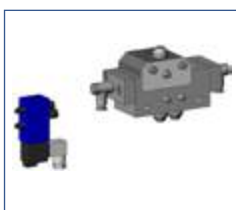
M3	80-08-0471B
M4	80-08-0472B
M5	80-08-0473B
M6	80-08-0474B
M8	80-08-0475B



Holder for all PBW

Holder and mounting hardware
for: installation in systems of the CPW series

88-17-698



Pneumatic stud feeding switch PBW complete	for: Feeding studs with the same diameter but different lengths into one automatic welding head
	for: installation in systems of the CPW series (Holder PBW 88-17-698 necessary)
M3	88-18-173
M4	88-18-174
M5	88-18-175
M6	88-18-176
M8	88-18-178



Solenoid valve complete with utensil socket	for: switching the compressed air for manual stud feeding or for closing/opening the ground clamp
	88-25-857



Solenoid valve	for: switching the compressed air for manual stud feeding or for closing/opening the ground clamp
	80-10-188



Utensil socket	for: Solenoid valve 80-10-188
	80-10-189



Ring initiator	to: See if stud has been fed
hole-Ø	
10 mm	80-50-0083
20 mm	80-50-491



Coupling ring initiator	for: Connection between ring initiator and CNC control
	80-10-375



ESS External weld start	for: HBS power units with 7-pin-plug
	90-70-016



Connecting line complete for welding head KAH 412 continuously	for: CDM 2401, CDM 3201, CDMi 2402, CDMi 3202, ARC 500 AT, ARC 800 AT, ARC 1550 AT, IT 1001 AT, IT 1002 AT
3 m, 25 mm ²	92-40-131
5 m, 35 mm ²	92-40-130



SSS Welding current sensor	for: Signal output - welding current was active incl. connection cable (5 m)
	90-70-020



Working stroke complete, with height adjustment (125/45 mm) without ring initiator	for: KAH 412 to: Move the welding head to the welding position
	80-09-760



Working stroke complete, with height adjustment (125/45 mm) **with** ring initiator

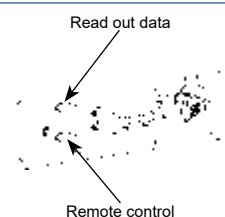
for: KAH 412
to: Move the welding head to the welding position

80-09-750



Data cable

for: Connection for RS232 interface
CDMi 2402 and CDMi 3202
cable length 3 m



80-50-1243

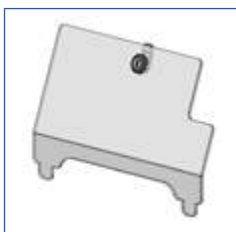


Adaptor

for: CDMi-I/O interface
CDMi 2402 and CDMi 3202
Interface connections for VBZ-3, external welding start and contact sleeve



80-70-475



Panel cover, lockable

for: CDMi 2402 and CDMi 3202
Protection against unintended entries on display

88-21-811A



Data cable

for: Connection for RS232 interface
IT 50, IT 90, IT 130, IT 1002 (Autom.)
cable length 3 m

80-70-308

Accessories for MPW





Adjustment set for welding head position

for: KAH 412

for setting the welding head after a welding head change or as a quality measure to ensure the accuracy of the stud welding machines type MPW and TKM 2

88-22-301B



Code Reader

incl. software package

for: for calling up welding programs via barcode in the control system of stud welding machines type MPW and TKM 2

88-21-127



RDS Software

for: MPW series

for: Error analysis in the MPW control

80-50-2011



Coupling types	Page
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Extension cables and adaptors	Page
	133



Ground cables	Page
	134 - 135

Cable socket:

Cable plugs:

Mini
BKM 25

10 - 25 mm²

Mini
SKM 25

Standard

BK 25
BK 50

16 - 25 mm²
35 - 50 mm²

Standard

SK 25
SK 50

Pegasar 500 accu,
Pegasar 500 accu Insulation
CDi 1502, CDi 2302, CDi 3102

C 06-3

C08, CA 08, PAH-1 ¹⁾
CI 03

Pegasar 500 accu Insulation
ARC 500, ARC 800
Visar 650

CA 08, A 12, A 16, AI 06
A 12

ARC 1550

CA 08, A 12, A 16, A 22, AI 06, PAH-1 ¹⁾

IT 1002

CA 08, A 12, A 16, AI 06, PAH-1 ¹⁾, AM 12 A, AM 12 W

CDMi 2402, CDMi 3202

C 08, CA 08, PAH-1

SC 2401

AI 06

IT 50

A 12, A 16, AI 06, PAH-1

Ground cable 92-40-154

Ground cable 92-40-095
Ground cable 92-40-091 (ISO)
Ground cable 92-40-091 (ISO)

Ground cable 93-40-020
Ground cable 93-40-020

Ground cable 93-40-013

Ground cable 93-40-020

Ground cable 92-40-095

Ground cable 92-40-078 (ISO)

Ground cable 93-40-020

BK 70

50 - 70 mm²

SK 70

IT 2002

A 12, A 16, A 22,
A 25 with adaptor 88-16-760

Ground cable 93-40-019 (1 vg) ²⁾
(for welding elements to M20)

IT 90

A 12, A 16, A 22, PAH-1,
A 25 with adaptor 88-16-760

Ground cable 93-40-019 (1 vg) ²⁾
(for welding elements to M20)

Plus (with double clamp screws)

BKK 70
BKK 95

50 - 70 mm²
70 - 95 mm²

Plus (with double clamp screws)

SKK 70
SKK 95

IT 2002, IT 130

A 12, A 16, A 22,
A 25 with adaptor 88-16-760

Ground cable 93-40-072
(for welding elements to M22)

IT 90

A 12, A 16, A 22, PAH-1,
A 25 with adaptor 88-16-760

Ground cable 93-40-072
(for welding elements to M22)

Special (with double clamp screws)

BKS 95
BKS 120

70 - 95 mm²
95 - 120 mm²

Special (with double clamp screws)

SKS 95
SKS 120

IT 2002, IT 90, IT 130

A 25

Ground cable 93-40-080 with adap-
tor 88-16-760

IT 3002

AI 06, A 12, A 16 und A 22 with adaptor 93-40-120, A 25

Ground cable 93-40-080
Extension cable 93-40-078

¹⁾ only for automatic version

²⁾ Ground cable with one vice grip (vg), 2 ground cables are necessary



Extension cable ARC (50-mm ² -male) (50-mm ² -cable)	for: welding guns A 12, A 16 (SK 50)
	for: stud welding with ceramic ferrule or shielding gas
5 m	93-40-030
10 m	93-40-023
25 m	93-40-025



Extension cable ARC (95-mm ² -male) (95-mm ² -cable)	for: welding gun A 22 (SKK 95)
5 m	93-40-035
10 m	93-40-064
25 m	93-40-032

Ground / extension cables

Ground cables



8

Ground cables

	Ground cable for CD (50-mm²-male) (25-mm²-cable)	for: Pegasar 500 accu, Pegasar 500 accu Insulation, CDi 502, (for CD ISO nails) SK 50
2.5 m (1 Vice grip 10")	92-40-154	
	Ground cable for CD (50-mm²-male) (25-mm²-cable)	for: CD series, CDi series, CDM series, CDMi series SK 50
2.5 m (2 Vice grips 10")	92-40-095	
	Ground cable for ARC (50-mm²-male) (25-mm²-cable)	for: ARC 500, ARC 800, IT 50, IT 1001, IT 1002, Visar 650, Visar 1200 SK 50
5 m (2 Vice grips 10")	93-40-020	
	Ground cable for ARC (70-mm²-male) (70-mm²-cable)	for: IT 90, IT 130, IT 2001, IT 2002 (2 pieces required) (for welding elements to M20) SK 70
5 m (1 Vice grip 10")	93-40-019	



Ground / extension cables

Ground cables

8



Ground cable
for ARC
(95-mm²-male)
(95-mm²-cable)

for: IT 90, IT 130, IT 2001, IT 2002
(2 pieces required)
(for welding elements to M22)
SKK 95

5 m (1 Vice grip 10")

93-40-072



Ground cable
for ISO
(50-mm²-male)
(16-mm²-cable)

for: CD 1501, CDi 1502, CDi 502,
Pegasar 500 accu Insulation
(for cupped head pins)
SK 50

6.7 m (1 Vice grip 10")

92-40-091

Ground cables



Bending device	Page
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Torque bending test device	Page
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Automatic center punch	Page
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Socket wrench	Page
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Quickboy / Bench mounting unit / Mobility systems	Page
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Welding agent	Page
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Metaflux	Page
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Bending device complete, including bushings 3 - 8 mm	for: Bending test according to DIN EN ISO 14555 including equipment to eject stuck studs
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92-40-042



Bending device without bushings	for: Bending test according to DIN EN ISO 14555 including equipment to eject stuck studs
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80-40-120



Bushing	for: Bending device
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for stud M3 80-40-121

for stud M4 80-40-122

for stud M5 80-40-123

for stud M6 80-40-124

for stud M8 80-40-125



Torque bending test device	for: Non-destructive test method. Torque check of the welded studs for quality assurance
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92-40-135A



Automatic center punch	for: Defined punched holes
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80-10-353



Socket wrench	to: Change the chuck
for:	
C 08/CA 08/AI 06	80-40-085 (AF 17)
ACCU-TWIN	80-41-032 (AF 13)



Quickboy	
for C 08/CA 08	92-40-142
for PAH-1	92-40-140



Bench mounting unit	for: C 08
	92-40-100



IT Mobility System*)	for: IT 50, IT 90, IT 130
	Organisation system – Particularly well-suited for transporting the complete welding system incl. gas cylinder, stud welding gun and accessories
	*) Not in stock, order-related production, Price excl. stud welding unit, gas cylinder and accessories Modification done at HBS
	88-21-510



Protective hose, complete with zipper	to:	Protect cables from dirt, dust and welding sparks
230 cm	80-11-230	for: CA 08, PAH-1
430 cm	80-11-430	for A 12, A 12-FL (5m cable)



Wetting agent, silicon free	to:	Reduce the adherences of welding sparks to the equipment of the welding gun or the welding head
	89-10-100	



Metaflux Multi-TS spray bottle 500 ml	to:	Reduce the adherences of welding sparks to the workpiece surface
	80-10-1914	



Metaflux Multi-TS spray 10 l	to:	Reduce the adherences of welding sparks to the workpiece surface
	80-10-1623	

Which stud welding unit / which welding gun is best for my task?

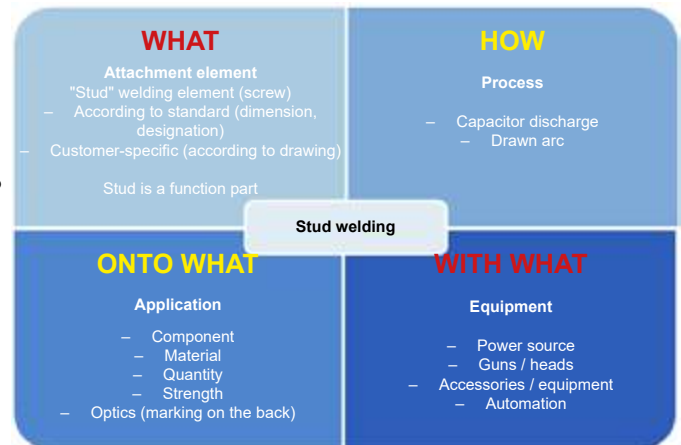
To be clearly defined prior to purchase

WHAT – what purpose is the stud to serve?

HOW – which stud welding process is to be used?

ONTO WHAT – onto what is welding to be performed?

The purpose determines the technical equipment.



Our device technology is, of course, completely – from in-house development to production –

MADE & DESIGNED IN GERMANY

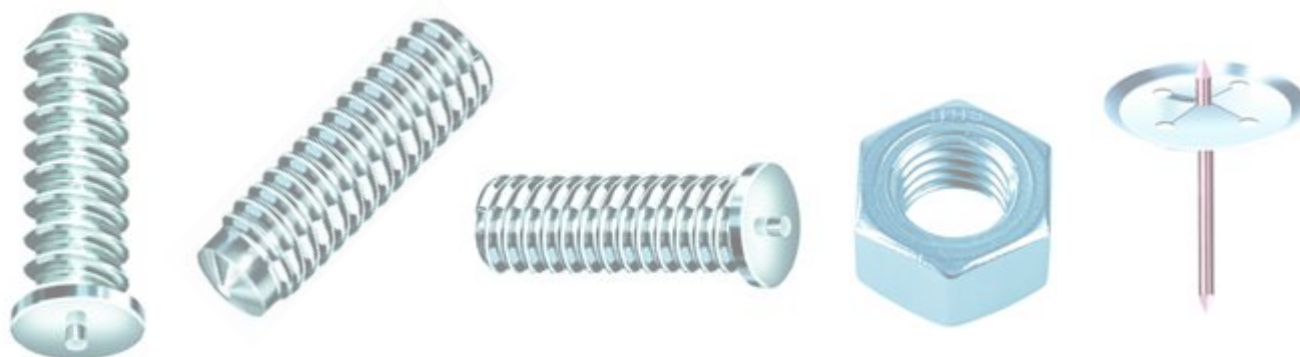


Contact us for an individual consultation or browse through our extensive [Stud Welding Systems Catalogue](#).



Which welding element is best for my task?

The welding element is a decisive factor for a good welding quality. In addition to our extensive portfolio of standard welding elements based on DIN ISO 13918, HBS also offers you a number of industry-specific welding elements, e.g., from the area of automation or isolation.



Our particular strength lies in the development of custom-made welding elements that are optimally tailored to the respective application.



Contact us for an individual consultation or browse through our extensive [Welding Elements Catalogue](#).





Leading through Technology, Quality and Service

Accessories Catalogue