



Made for Robots.

## Torch Consumables



Power Joint

Power Joint Lite

Frontpull 8i

Power Clutch

Frontpull 7

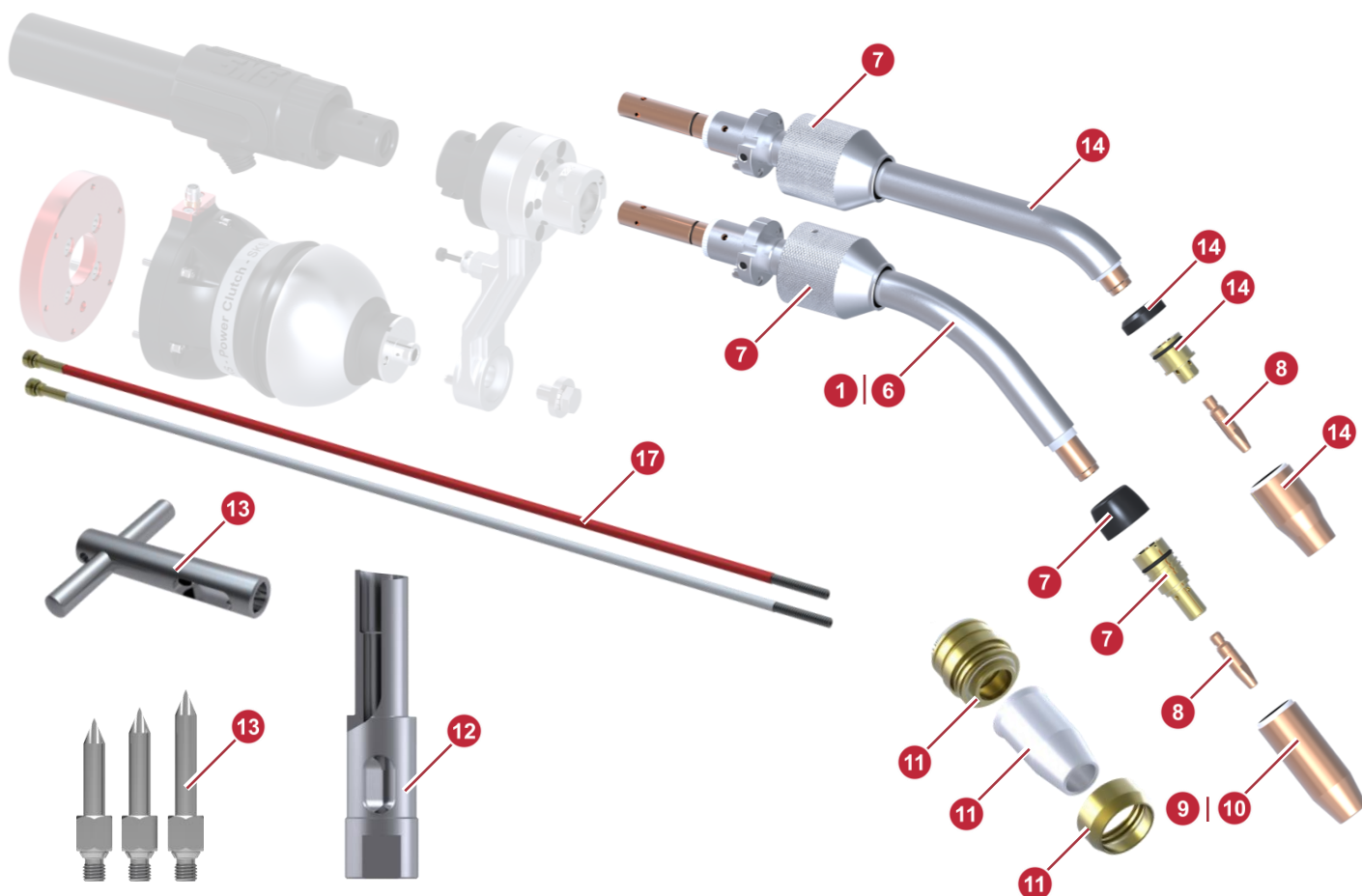
Wire Select

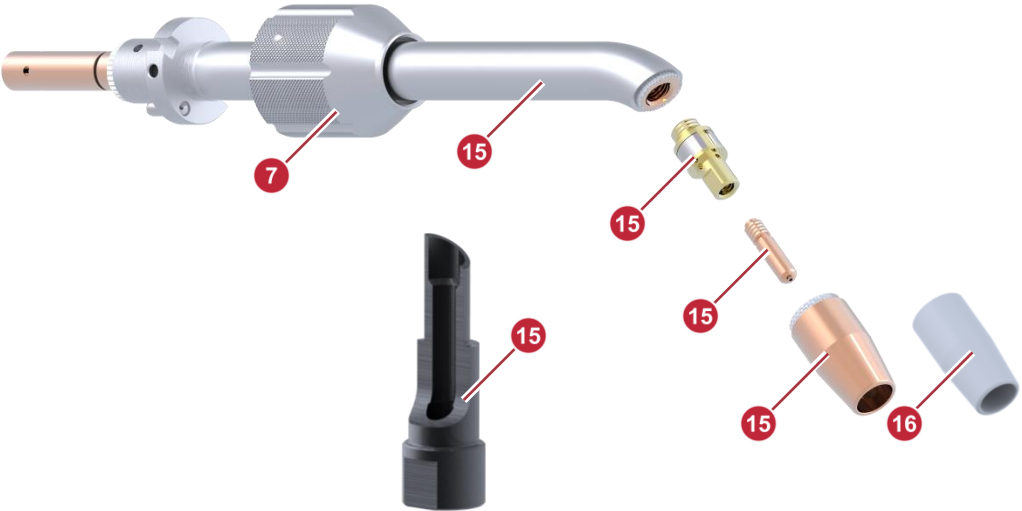
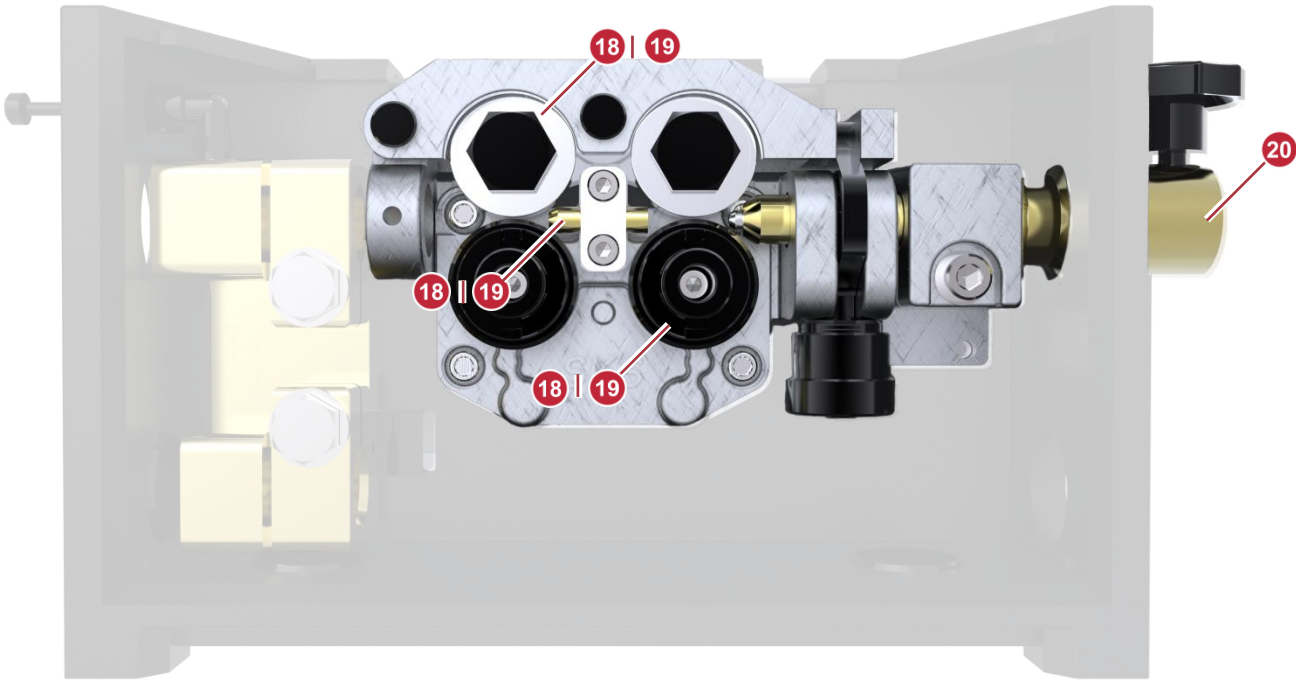
- air cooled torch systems -

Power Joint | Power Joint Lite | Frontpull 8i | Power Clutch | Frontpull 7 | Wire Select

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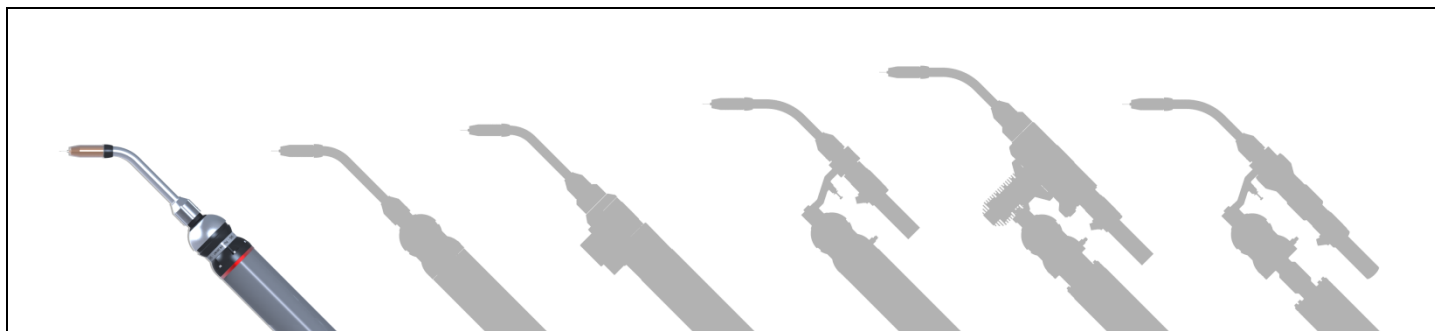




# 1 Torch System Power Joint

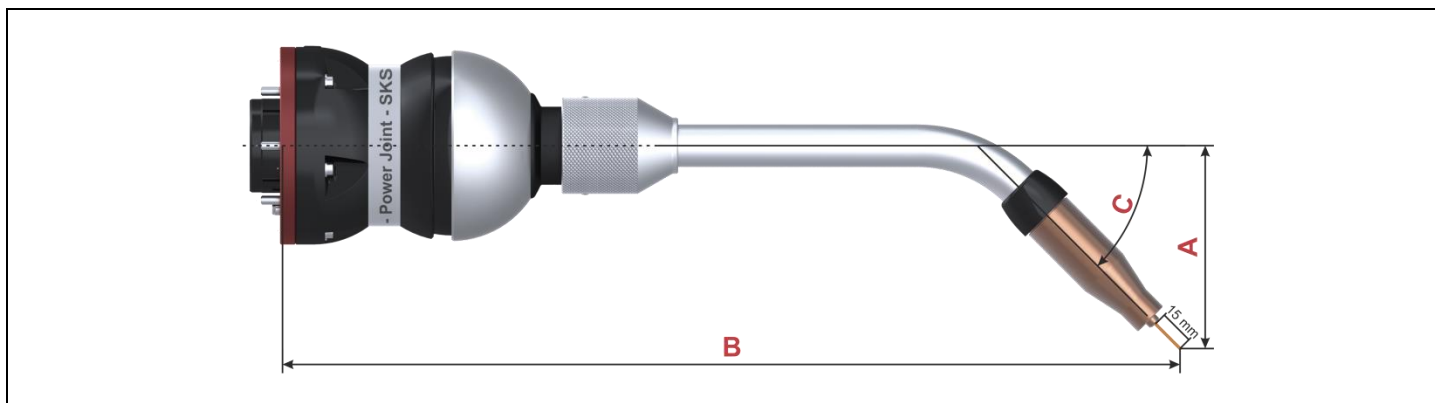
The new freedom of motion.

Power Joint for hollow wrist robots with inner torch cable.



The Power Joint torch system perfects the interaction of SKS welding machines and robots with inner cable dress. A single rotary joint, endlessly rotatable, transmits electrical energy and all media such as gas, air and wire. This reduces torch cable movement (no twisting/no torsional strain) and therefore increases the lifetime of the torch cable. The lack of reorientations also saves airtime because the torch reaches every position in the shortest possible path.

## TCP Measurements

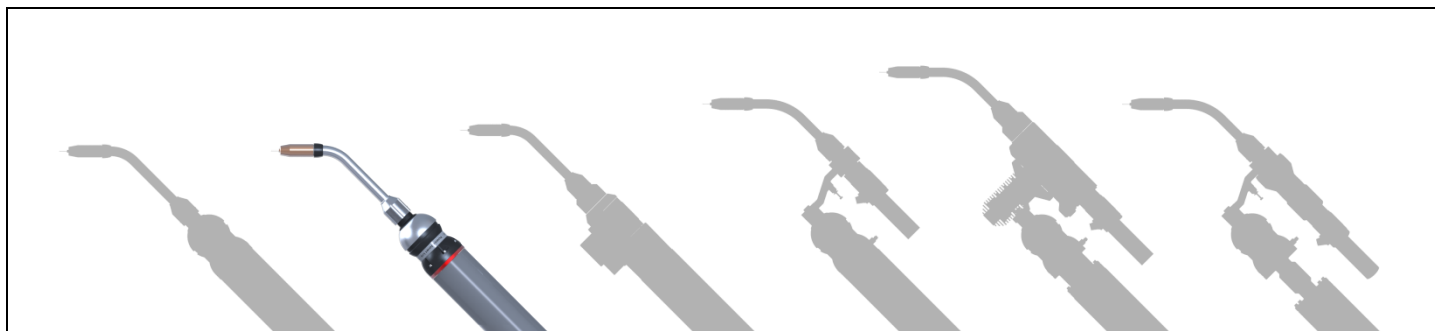


Type	Torch Neck		A	B	C
	Part-No.	Design	Distance in mm	TCP Length in mm	Angle in °
Standard Equipment – air cooled –	58-1-00-316-1		0	316,0	0
	58-1-00-400-1		0	400,0	0
	58-1-22-350-1		45	350,0	22
	58-1-22-400-1		45	400,0	22
	58-1-22-412-1		45	412,0	22
	58-1-22-450-1		45	450,0	22
	58-4-330-500-1		120	438,5	30
	58-1-130-450-1		0	450,0	30
	58-1-35-400-1		70	400,0	35
	58-1-445-400-1		83	400,0	45
	58-1-45-350-1		90	350,0	45
	58-1-45-400-1		90	400,0	45
	58-1-45-450-1		90	450,0	45
	58-4-345-450-1		120	388,5	45
	58-4-45-500-1		120	438,5	45
	58-4-345-567-1		120	505,5	45
	58-4-360-450-1		120	388,5	60

## 2 Torch System Power Joint Lite

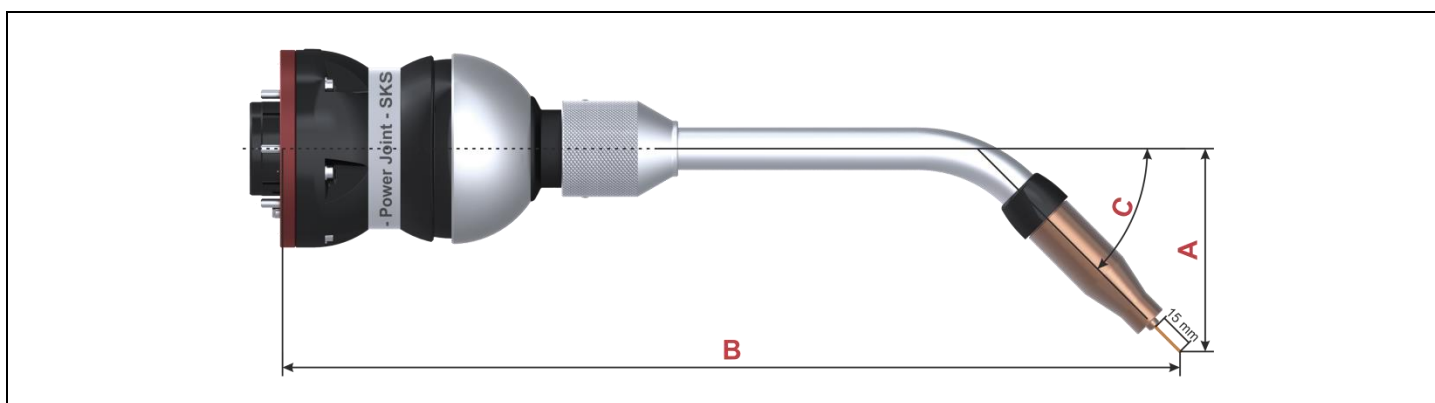
The new freedom of motion.

Power Joint Lite for hollow wrist robots with inner torch cable.



The Power Joint Lite torch system perfects the interaction of SKS welding machines and robots with inner cable dress. A single rotary joint, endlessly rotatable, transmits electrical energy and all media such as gas, air and wire. This reduces torch cable movement (no twisting/no torsional strain) and therefore increases the lifetime of the torch cable. The lack of reorientations also saves airtime because the torch reaches every position in the shortest possible path. The Power Joint Lite uses the thousand times proven Power Joint technology and was developed for supporting the internal robot collision detection. The fixed/rigid torch neck allows the precise adjustment of the robot parameters – an integrated rubber buffer protects the torch and the robot system, up to a complete stop/switch-off of all axes.

### TCP Measurements

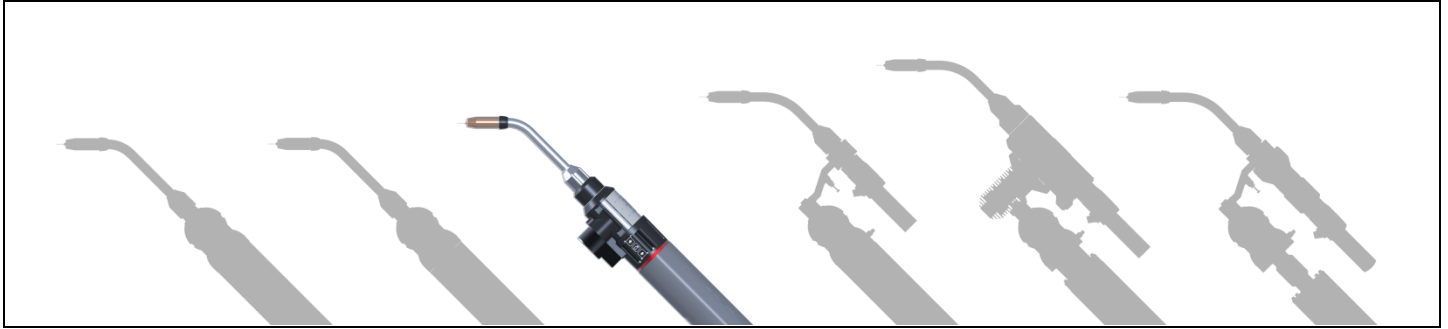


Type	Torch Neck		A	B	C
	Part-No.	Design	Distance in mm	TCP Length in mm	Angle in °
Standard Equipment – air cooled –	58-1-00-316-1		0	316,0	0
	58-1-00-400-1		0	400,0	0
	58-1-22-350-1		45	350,0	22
	58-1-22-400-1		45	400,0	22
	58-1-22-412-1		45	412,0	22
	58-1-22-450-1		45	450,0	22
	58-4-330-500-1		120	438,5	30
	58-1-130-450-1		0	450,0	30
	58-1-35-400-1		70	400,0	35
	58-1-445-400-1		83	400,0	45
	58-1-45-350-1		90	350,0	45
	58-1-45-400-1		90	400,0	45
	58-1-45-450-1		90	450,0	45
	58-4-345-450-1		120	388,5	45
	58-4-45-500-1		120	438,5	45
	58-4-345-567-1		120	505,5	45
	58-4-360-450-1		120	388,5	60

### 3 Torch System Frontpull 8i

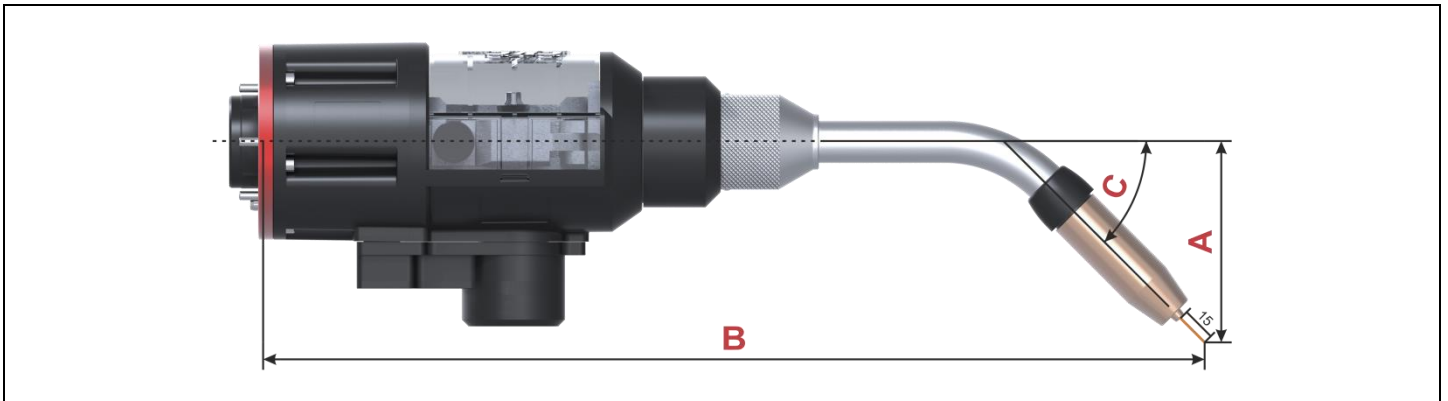
The new freedom of motion for highest precision.

Frontpull 8i for hollow wrist robots with inner torch cable.



The Frontpull 8i torch system perfects the interaction of SKS welding machines and robots with inner cable dress. A single rotary joint, endlessly rotatable, transmits electrical energy and all media such as gas, air and wire. This reduces torch cable movement (no twisting/no torsional stress) and therefore increases the lifetime of the torch cable. The lack of reorientations also saves airtime because the torch reaches every position in the shortest possible path. Additionally, the wire feeding unit, integrated into the torch system, provides highest precision next to the process.

#### TCP Measurements

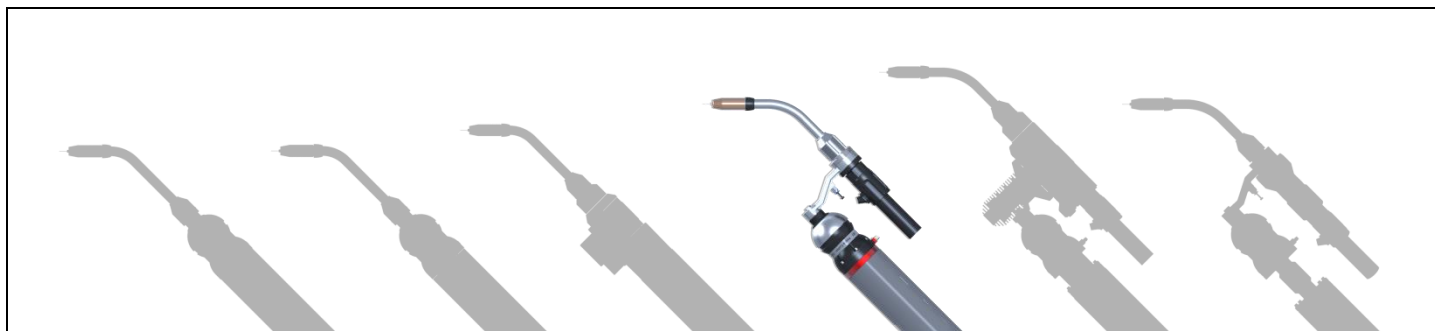


Type	Torch Neck		A	B	C
	Part-No.	Design	Distance in mm	TCP Length in mm	Angle in °
Standard Equipment – air-cooled –	58-1-00-316-1		0	391,0	0
	58-1-00-400-1		0	475,0	0
	58-1-22-350-1		45	425,0	22
	58-1-22-400-1		45	475,0	22
	58-1-22-412-1		45	487,0	22
	58-1-22-450-1		45	525,0	22
	58-4-330-500-1		120	513,5	30
	58-1-130-450-1		0	525,0	30
	58-1-35-400-1		70	475,0	35
	58-1-445-400-1		83	475,0	45
	58-1-45-350-1		90	425,0	45
	58-1-45-400-1		90	475,0	45
	58-1-45-450-1		90	525,0	45
	58-4-345-450-1		120	463,5	45
	58-4-45-500-1		120	513,5	45
	58-4-345-567-1		120	580,5	45
	58-4-360-450-1		120	463,5	60

## 4 Torch System Power Clutch

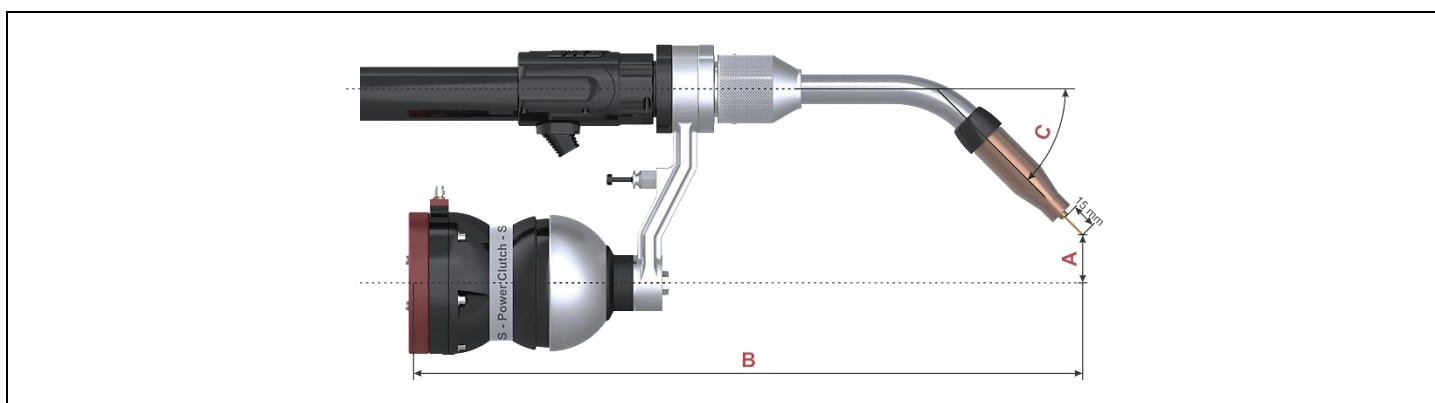
### Power Clutch: New precision.

For all industrial robots with outer cable dress.



The Power Clutch torch system perfects the interaction of SKS welding machines and robots with outer cable dress. The SKS Power Clutch torch system consists of the Power Clutch, a mounting flange for each robot type, the torch cable and the torch neck with consumables. The changing of the torch neck is designed to be tool-free. This allows for a TCP accuracy of  $\pm 0.2$  mm when changing torch necks.

### TCP Measurements

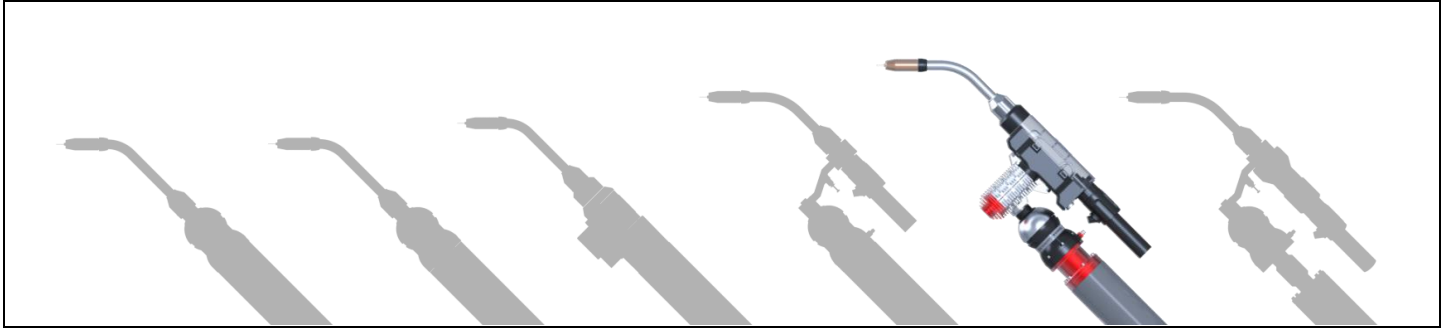


Type	Torch Neck		A	B	C
	Part-No.	Design	Distance in mm	TCP Length in mm	Angle in °
Standard Equipment – air-cooled –	58-1-00-316-1		120	377,5	0
	58-1-00-400-1		120	461,5	0
	58-1-22-350-1		75	411,5	22
	58-1-22-400-1		75	461,5	22
	58-1-22-412-1		75	473,5	22
	58-1-22-450-1		75	511,5	22
	58-4-330-500-1		0	500,0	30
	58-1-130-450-1		120	511,5	30
	58-1-35-400-1		50	461,5	35
	58-1-445-400-1		37	461,5	45
	58-1-45-350-1		30	411,5	45
	58-1-45-400-1		30	461,5	45
	58-1-45-450-1		30	511,5	45
	58-4-345-450-1		0	450,0	45
	58-4-45-500-1		0	500,0	45
	58-4-345-567-1		0	567,0	45
	58-4-360-450-1		0	450,0	60

## 5 Torch System Frontpull 7

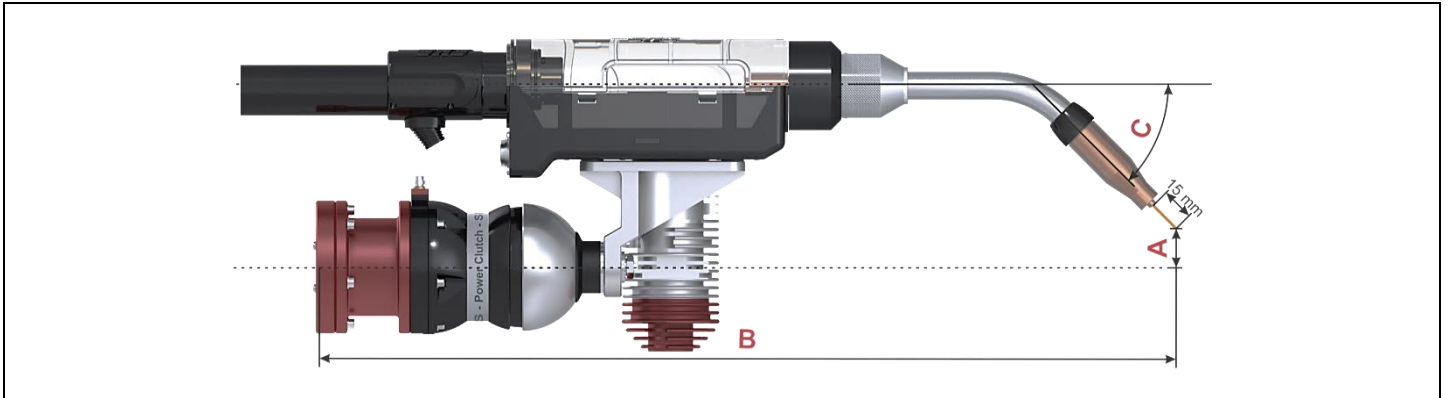
### Welding Evolution: Spatter-free ignition.

The Frontpull 7 torch system.



The latest innovation from SKS is the new Frontpull torch system, the alternative to the push-pull technology. The wire feeder and torch system are merged into a single unit. As a result, synchronization problems of different motors are eliminated which leads to a higher reliability. This feeding precision close to the welding process allows spatter-free ignition and supports the feeding of soft aluminum wire. In addition the newly integrated heat reduced weld process microMIG/ microMIG-cc are almost spatter free with defined penetration.

### TCP Measurements



Type	Torch Neck		A	B	C
	Part-No.	Design	Distance in mm	TCP Length in mm*	Angle in °
Standard Equipment – air cooled –	58-1-00-316-1		120	527,5	0
	58-1-00-400-1		120	611,5	0
	58-1-22-350-1		75	561,5	22
	58-1-22-400-1		75	611,5	22
	58-1-22-412-1		75	623,5	22
	58-1-22-450-1		75	661,5	22
	58-4-330-500-1		0	650,0	30
	58-1-130-450-1		120	661,5	30
	58-1-35-400-1		50	611,5	35
	58-1-445-400-1		37	611,5	45
	58-1-45-350-1		30	561,5	45
	58-1-45-400-1		30	611,5	45
	58-1-45-450-1		30	661,5	45
	58-4-345-450-1		0	600,0	45
	58-4-45-500-1		0	650,0	45
	58-4-345-567-1		0	717,0	45
	58-4-360-450-1		0	600,0	60

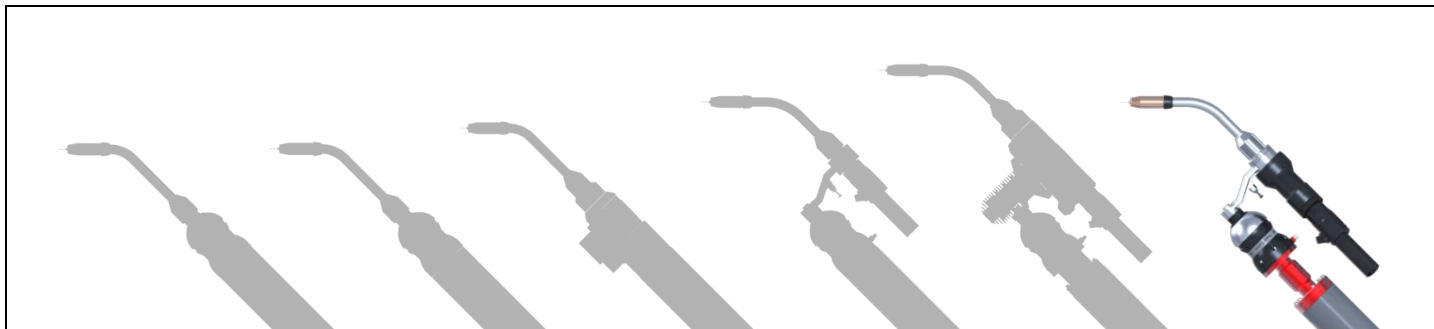
\*TCP Measurements including TCP extension 50mm (Part-No. 93-29)



## 6 Torch System Wire Select

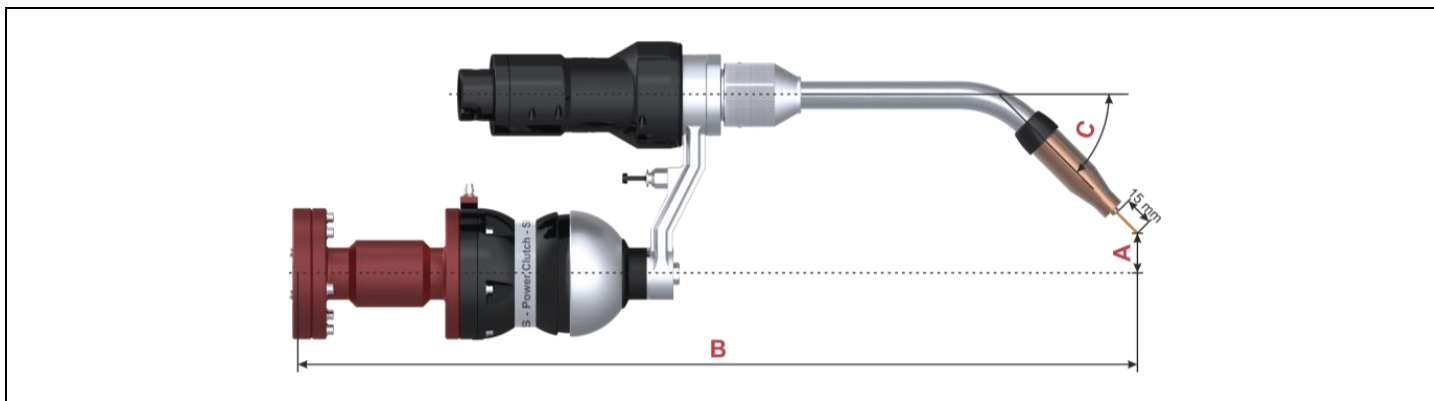
### The new Flexibility.

Welding with two wires at one welding station with automated wire change.



The SKS Wire Select System uses standard SKS components. With one power source, one control unit, one torch system, one wire cutter and two wire feeders two different welding materials can easily be used with a single torch system. Changing of wire is automated: the first wire is pulled back and the second wire is pushed forward – this, within a few seconds. Additionally to operational time and cost savings, this new wire changing concept has less investment costs.

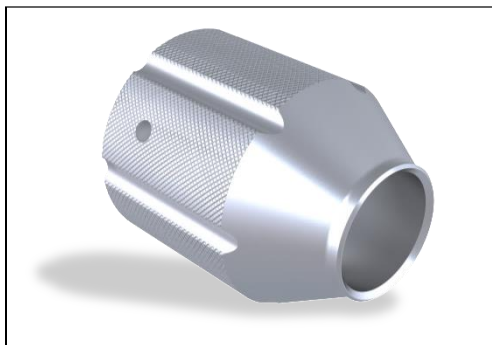
### TCP Measurements



Type	Torch Neck		A	B	C
	Part-No.	Design	Distance in mm	TCP Length in mm*	Angle in °
Standard Equipment – air cooled –	58-1-00-316-1		120	477,5	0
	58-1-00-400-1		120	561,5	0
	58-1-22-350-1		75	511,5	22
	58-1-22-400-1		75	561,5	22
	58-1-22-412-1		75	573,5	22
	58-1-22-450-1		75	611,5	22
	58-4-330-500-1		0	600,0	30
	58-1-130-450-1		120	611,5	30
	58-1-35-400-1		50	561,5	35
	58-1-445-400-1		37	561,5	45
	58-1-45-350-1		30	511,5	45
	58-1-45-400-1		30	561,5	45
	58-1-45-450-1		30	611,5	45
	58-4-345-450-1		0	550,0	45
	58-4-45-500-1		0	600,0	45
	58-4-345-567-1		0	667,0	45
	58-4-360-450-1		0	550,0	60

\*TCP measurements including TCP extension 100mm (Part-No. 93-14)

## 7 Bayonet Clamping Cap | Insulator | Retaining Head



### Bayonet Clamping Cap for SKS single wire torch necks

With the proven bayonet quick change system a tool-free mounting is possible. An integrated corrugated spring ensures an optimal arresting of the torch neck within the torch body.

#### Bayonet Clamping Cap

##### DESCRIPTION

Bayonet Clamping Cap

##### PART-NO.

71-3-25



### Insulator for SKS single wire torch necks

For secured and steady insulation of the gas nozzle and the torch neck.

#### Insulator

##### DESCRIPTION

Insulator

##### PART-NO.

58-1-5



### Power Lock: Retaining Head

Heavy duty retaining head with thread for screw-on gas nozzles.

#### Retaining Head

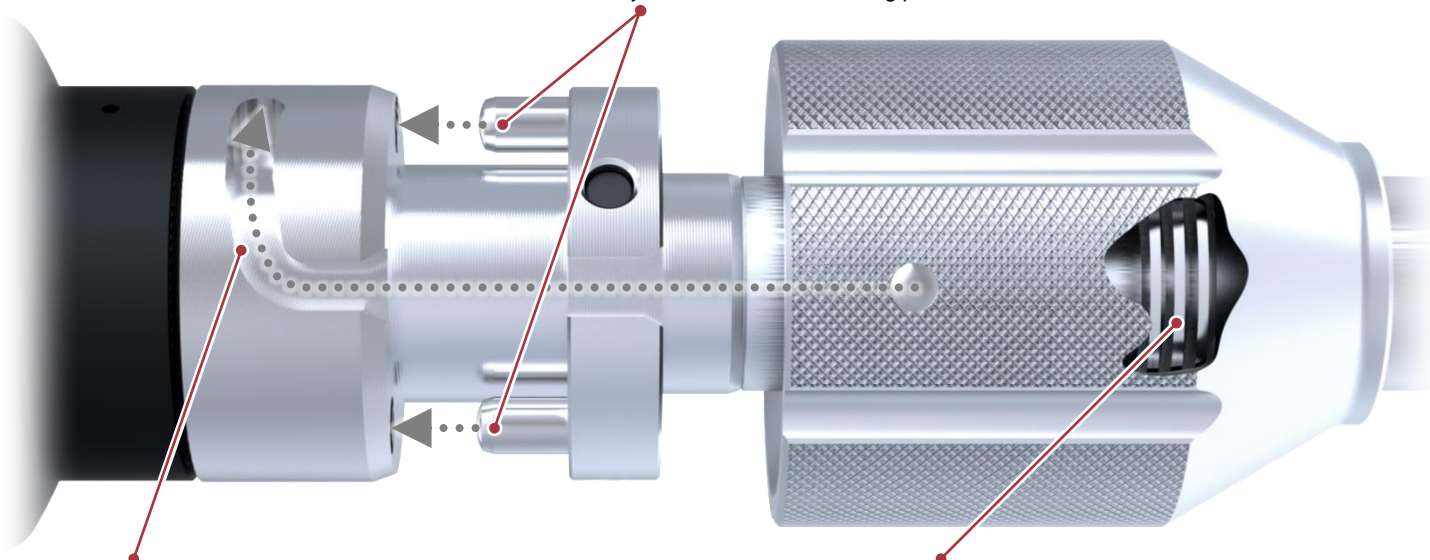
##### DESCRIPTION

Retaining Head

##### PART-NO.

43-9-2

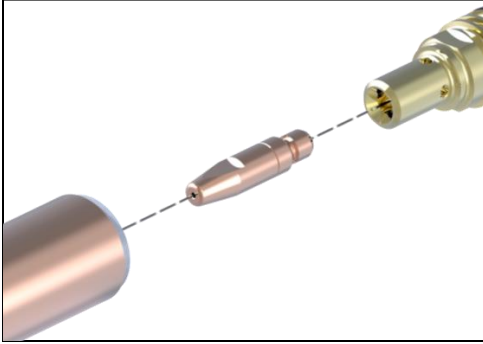
Integrated twist protection of the torch neck by radial offset of the locating pins.



Precise fabrication of the components ensures an exact alignment of the torch neck ( $\pm 0,2\text{mm}$  bei TCP 400mm). A tool free change of the torch neck is possible.

The integrated corrugated spring ensures a constant contact pressure and arresting of the torch neck within the torch holder.

## 8 Contact Tip



### Power Lock: Contact tip

- Tapered design of the contacting surface increases TCP repeatability
- High durability of the contact tip: improved heat dissipation
- Constant arc quality by improved power transfer
- Available for metric and imperial wire diameters
- Available in tapered and rounded design



### Power Lock: Contact tip (metric, tapered)

#### Overview contact tip

Wire-Ø	Cu-ETP / PART-NO.	CuCrZr / PART-NO.	X-Cu / PART-NO.
0.8 mm	40-4-5-0.8E	40-4-7-0.8S	40-4-9-0.8X
0.9 mm	40-4-5-0.9E	40-4-7-0.9S	40-4-9-0.9X
1.0 mm	40-4-5-1.0E	40-4-7-1.0S	40-4-9-1.0X
1.2 mm	40-4-5-1.0E	40-4-7-1.2S	40-4-9-1.0X
1.4 mm		40-4-7-1.4S	40-4-9-1.4X
1.6 mm		40-4-7-1.6S	40-4-9-1.6X



### Power Lock: Contact tip (metric, round)

#### Overview contact tip

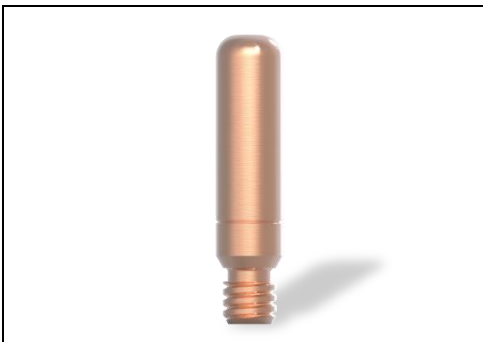
Wire-Ø	Cu-ETP / PART-NO.	CuCrZr / PART-NO.	X-Cu / PART-NO.
0.8 mm	40-5-5-0.8E	40-5-7-0.8S	40-5-9-0.8X
0.9 mm	40-5-5-0.9E	40-5-7-0.9S	40-5-9-0.9X
1.0 mm	40-5-5-1.0E	40-5-7-1.0S	40-5-9-1.0X
1.2 mm	40-5-5-1.0E	40-5-7-1.2S	40-5-9-1.2X
1.4 mm		40-5-7-1.4S	40-5-9-1.4X
1.6 mm		40-5-7-1.6S	40-5-9-1.6X



### Power Lock: Contact tip (imperial, tapered)

#### Overview Contact tip

Wire-Ø	Cu-ETP / PART-NO.	CuCrZr / PART-NO.	X-Cu / PART-NO.
0.030 "	40-4-5-030E	40-4-7-030S	40-4-9-030X
0.035 "	40-4-5-035E	40-4-7-035S	40-4-9-035X
0.040 "	40-4-5-040E	40-4-7-040S	40-4-9-040X
0.045 "	40-4-5-045E	40-4-7-045S	40-4-9-045X
0.052 "	40-4-5-052E	40-4-7-052S	40-4-9-052X
0.062 "		40-4-7-062S	40-4-9-062X



### Power Lock: Contact tip (imperial, round)

#### Overview Contact tip

Wire-Ø	Cu-ETP / PART-NO.	CuCrZr / PART-NO.	X-Cu / PART-NO.
0.030 "	40-5-5-030E	40-5-7-030S	40-5-9-030X
0.035 "	40-5-5-035E	40-5-7-035S	40-5-9-035X
0.040 "	40-5-5-040E	40-5-7-040S	40-5-9-040X
0.045 "	40-5-5-045E	40-5-7-045S	40-5-9-045X
0.052 "	40-5-5-052E	40-5-7-052S	40-5-9-052X
0.062 "		40-5-7-062S	40-5-9-062X

Available

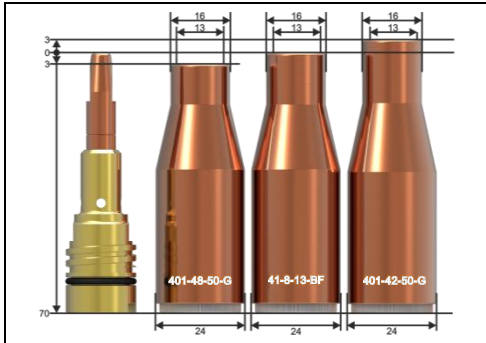
On request

## 9 Standard Gas Nozzle



### Standard Gas nozzle

- Slim design for best possible accessibility
- Tapered and bottle-shaped types available
- Internal thread for mounting on the retaining head
- Automatic centering on the retaining head – No tilt during the cleaning process
- Suitable for welding tasks with short and medium duty cycles

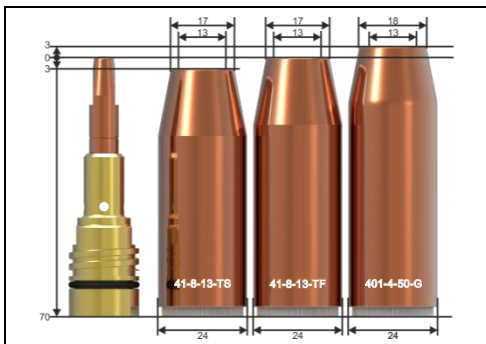


### 13 mm bottle shaped

#### Overview standard gas nozzle | 13 mm bottle shaped

Length	PART-NO.
Short	401-48-50-G
Flush	41-8-13-BF
Long	401-42-50-G

Measurements in mm

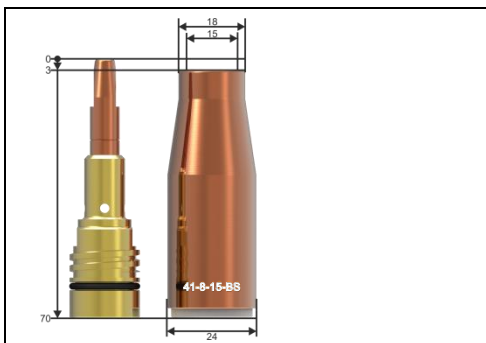


### 13 mm tapered

#### Overview standard gas nozzle | 13 mm tapered

Length	PART-NO.
Short	41-8-13-TS
Flush	41-8-13-TF
Long	401-4-50-G

Measurements in mm

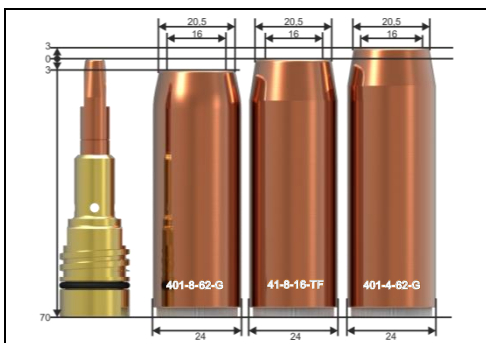


### 15mm bottle shaped

#### Overview standard gas nozzle | 15 mm bottle shaped

Length	PART-NO.
Short	41-8-15-BS

Measurements in mm



### 16 mm tapered

#### Overview standard gas nozzle | 16 mm tapered

Length	PART-NO.
Short	401-8-62-G
Flush	41-8-16-TF
Long	401-4-62-G

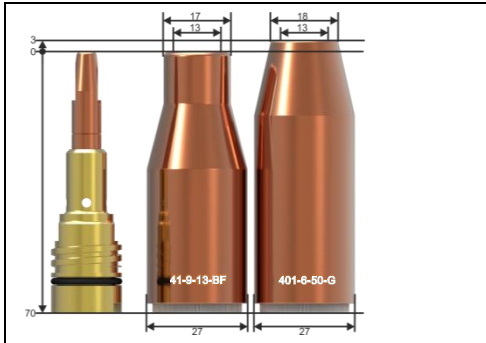
Measurements in mm

## 10 Heavy Duty Gas Nozzle



### Heavy Duty gas nozzle

- Outer sheath made from thicker material – improved head dissipation from the working piece
- Tapered and bottle-shaped types available
- Internal thread for mounting on the retaining head
- Automatic centering on the retaining head – No tilt during the cleaning process
- Suitable for welding tasks with medium and high duty cycles

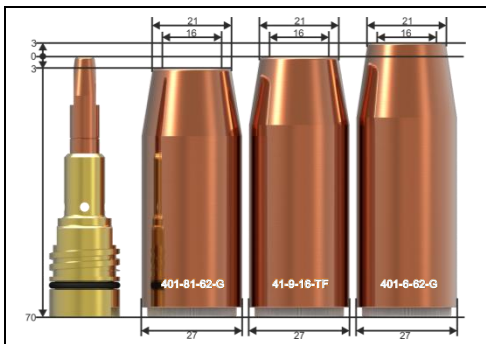


### 13 mm bottle shaped / tapered

#### Overview Heavy Duty gas nozzle | 13mm bottle shaped / tapered

Length	PART-NO.
Flush, bottle shaped	41-9-13-BF
Long, tapered	401-6-50-G

Measurements in mm



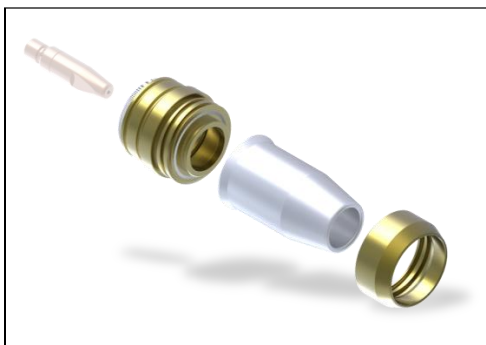
### 16 mm tapered

#### Overview Heavy Duty gas nozzle | 16 mm tapered

Length	PART-NO.
Short	401-81-62-G
Flush	41-9-16-TF
Long	401-6-62-G

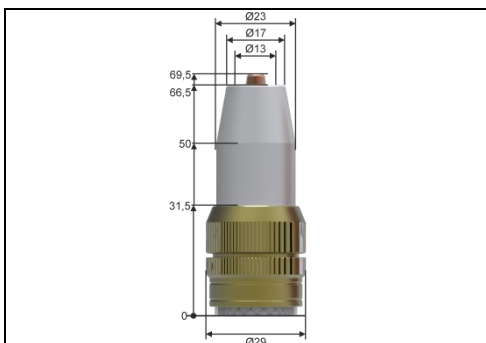
Measurements in mm

## 11 ceraMIG Equipment



### ceraMIG equipment

- Slim design for best possible accessibility
- Improved durability – ceramic base material
- Lower spatter adhesion – polished ceramic surface
- Automatic centering on the retaining head – No tilt during the cleaning process
- Suitable for welding tasks from short till high duty cycles
- Designed for cleaning with brushes



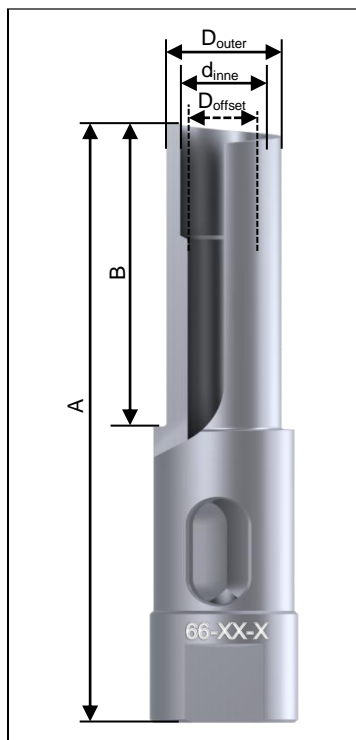
### ceraMIG equipment

#### Overview ceraMIG equipment

DESCRIPTION	PART-NO.
Adapter for ceramic gas nozzle	41-11-9-15
Ceramic gas nozzle 13 mm, tapered, short*	41-10-13-TS
Clamping nut for ceramic gas nozzle	41-11-1

\*for cleaning with brushes only | Measurements in mm

## 12 Reamer Blade (with internal thread UNF 3/8" x 24)



Reamer Blade (with internal thread UNF 3/8" x 24)

Reamer Blade	Short	Flush	Long
Inner diameter of the gas nozzle	PART-NO.	PART-NO.	PART-NO.
13 mm	66-13-S	66-13-F	66-13-R
15 mm	66-15-S	-	-
16 mm	66-16-S	66-16-F	66-16-R

### Dimensions

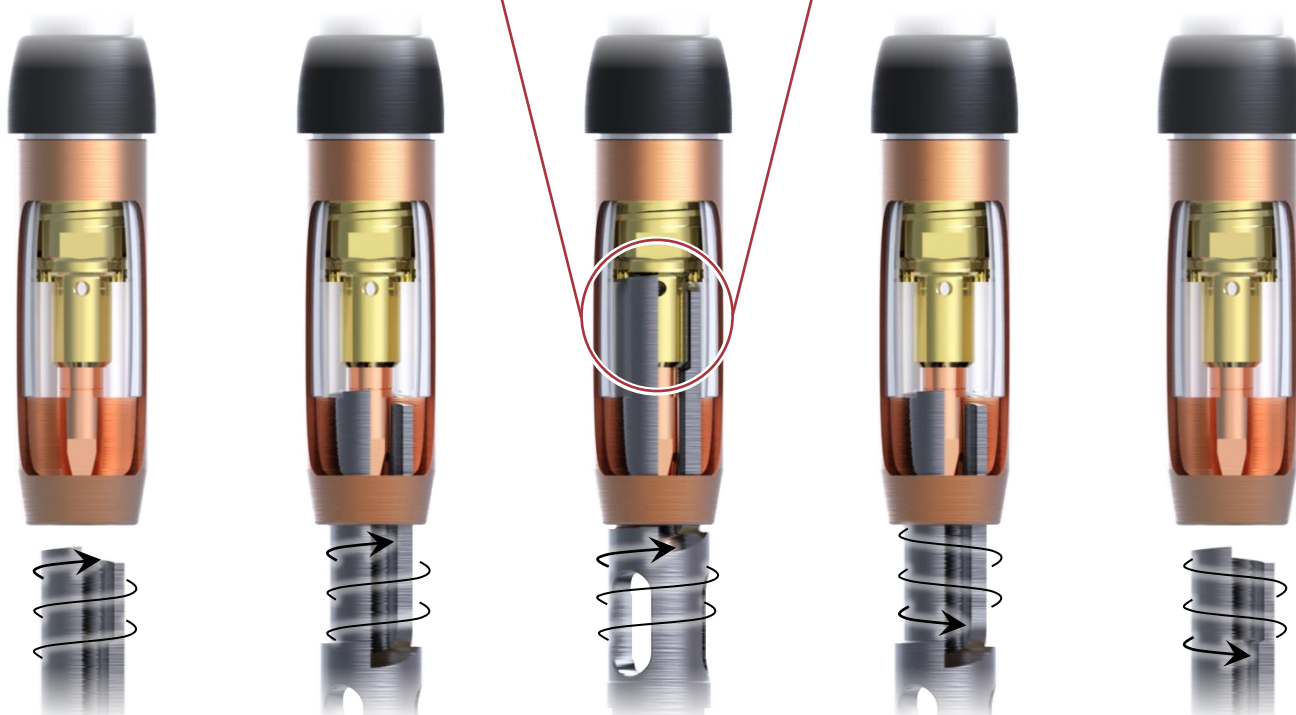
PART-NO.	Dim. A	Dim. B	Dim. d <sub>outer</sub>	Dim. d <sub>inner</sub>	Dim. d <sub>offset</sub>
66-13-S	67	23	12.5	9.8	9.8
66-13-F	70	26	12.5	9.8	9.8
66-13-R	73	29	12.5	9.8	9.8
66-15-S	85	40	14.5	11.8	9.8
66-16-S	85	40	15.5	11.8	9.8
66-16-F	88	43	15.5	11.8	9.8
66-16-R	91	46	15.5	11.8	9.8

Measurements in mm

Cleaning of the gas outlets and  
outline of the retaining head\*

Cleaning of contact tip outline

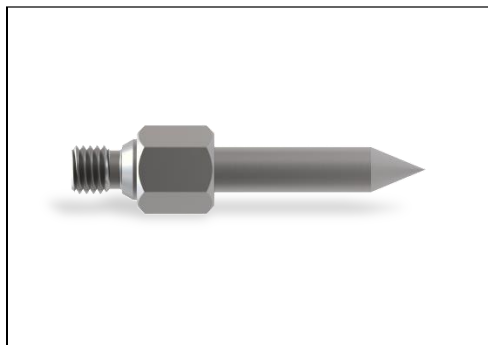
Mechanical end stop avoiding damage  
of gas nozzle while reamer immersion



\*as of gas nozzle inner diameter 15mm

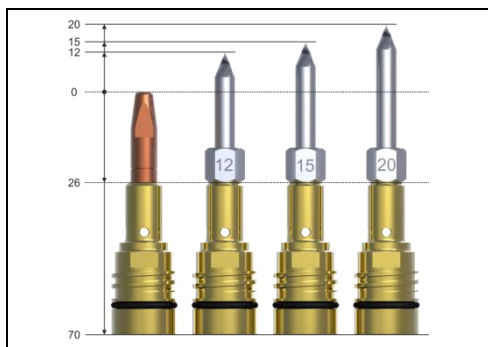


## 13 Programming Tip | Key for contact tip



### Programming Tip

- High concentricity of the programming tip
- Enables precise programming
- Immediately ready for programming after mounting on the retaining head
- Available in stick-out length 12, 15 and 20 mm



### Programming tip

Power Lock programming tips for precise programming of the weld seam

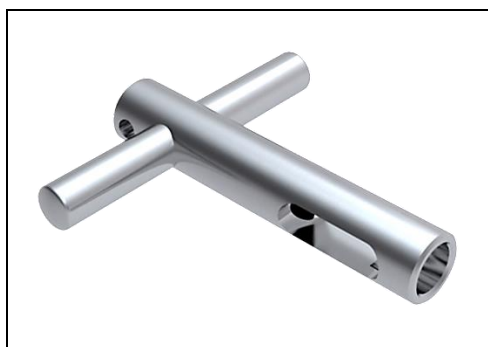
#### Overview Power Lock programming tip

##### Stickout length

12 mm	PART-NO. 65-6
15 mm	PART-NO. 65-7
20 mm	PART-NO. 65-8

##### PART-NO.

Measurements in mm



### Power Lock key for contact tip

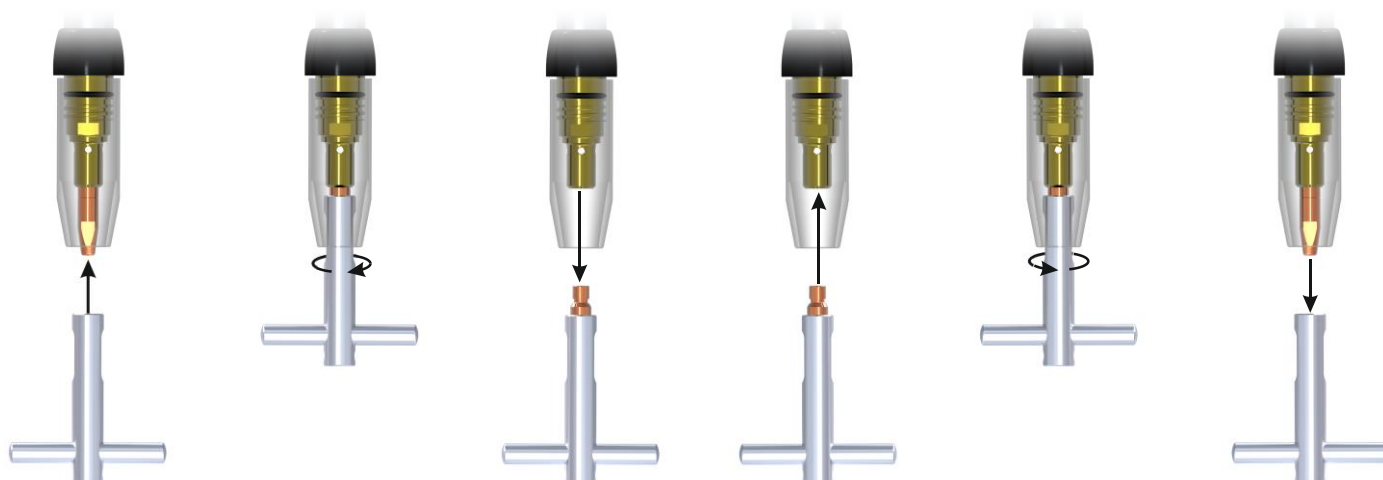
For changing the contact tip: fast exchange of the contact tip without removing the gas nozzle (for contact tips with flats)

#### Power Lock key for contact tip

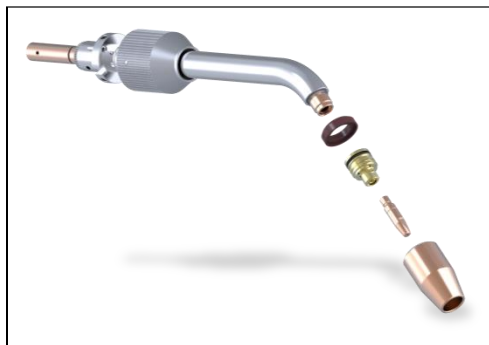
##### DESCRIPTION

Power Lock key for contact tip	PART-NO. 51-9001-00
--------------------------------	---------------------

##### PART-NO.



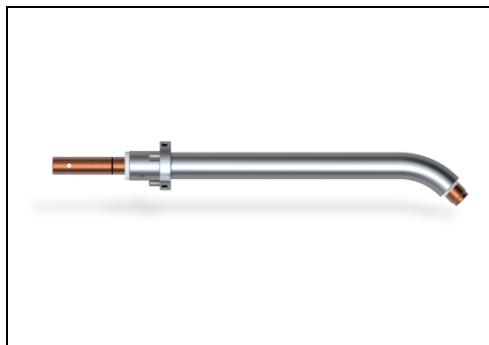
## 14 ZK Equipment



SKS offers a special torch neck (up to 250 A) for welding components with tight accessibility.

The special torch neck needs a smaller insulator (ZK) and a more compact gas nozzle (ZK).

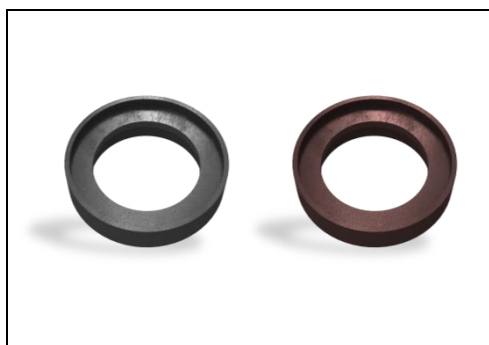
Standard Power Lock contact tips can and the bayonet clamping cap can be used.



### Torch neck ZK

#### Overview torch neck

DESCRIPTION	PART-NO.
Torch neck 45° - aircooled - ZK	58-1-245-400-1



### Insulator for SKS torch neck ZK

#### Overview insulator

DESCRIPTION	PART-NO.
ZK-Version	43-6-4-2
ZK-Heavy Duty-Version*	43-6-4-3

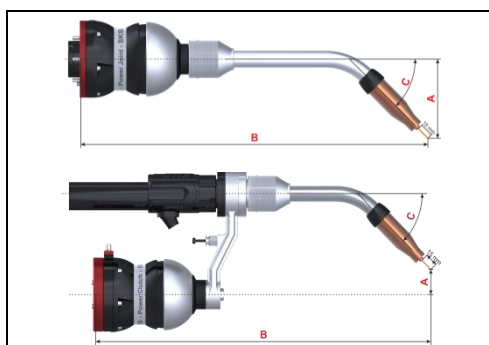
*\*only for Heavy Duty gas nozzles ZK*



### Power Lock: Retaining head ZK

#### Overview retaining head ZK

DESCRIPTION	PART-NO.
ZK-Version	43-8-6



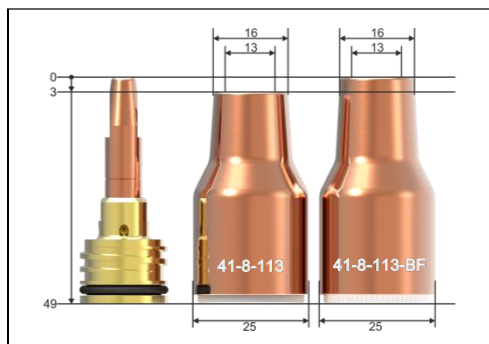
### TCP measurements ZK equipment

Measurement	A	B	C
Torch system	Distance in mm	TCP length in mm	Angle in °
Power Joint	62	400	45
Power Joint Lite	62	400	45
Frontpull 8i	62	475	45
Power Clutch	58	461.5	45
Frontpull 7	58	561.5*	45
Wire Select	58	561.5**	45

*\*incl. TCP-extension 50mm (PART-NO. 93-29) | \*\*incl. TCP-extension 100mm (PART-NO. 93-14)*



## 14 ZK Equipment

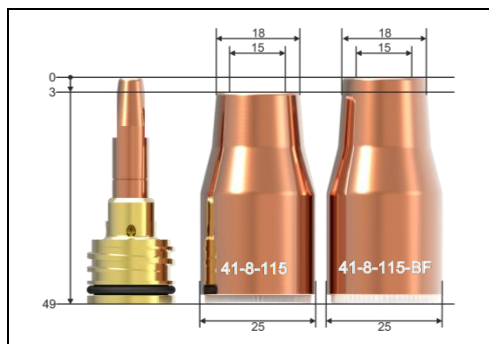


### Standard gas nozzle ZK

#### 13 mm bottle shaped

Length	PART-NO.
Short	41-8-113
Flush	41-8-113-BF

Measurements in mm

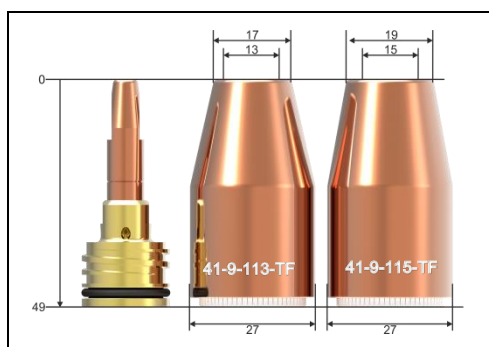


### Standard gas nozzle ZK

#### 15 mm bottle shaped

Length	PART-NO.
Short	41-8-115
Flush	41-8-115-BF

Measurements in mm

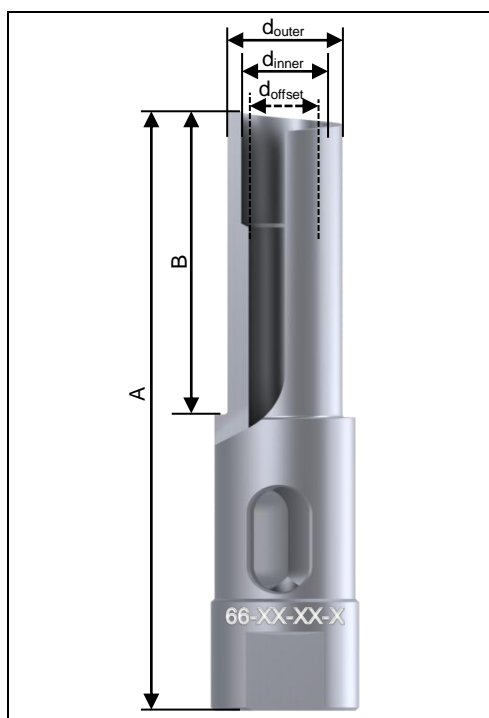


### Heavy Duty gas nozzle ZK

#### 13 + 15 mm tapered

Length	PART-NO.
Flush, 13 mm	41-9-113-TF
Flush, 15 mm	41-9-115-TF

Measurements in mm



### Reamer blade ZK (with internal thread UNF 3/8" x 24)

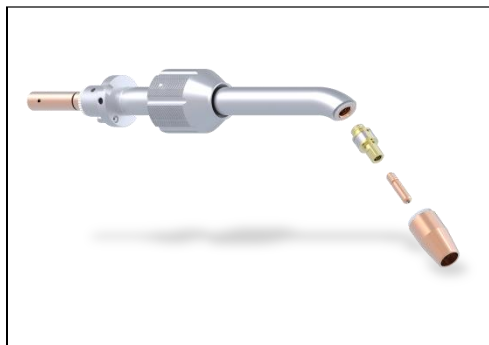
Reamer blade	Short	Flush
Inner diameter of the gas nozzle	PART-NO.	PART-NO.
13 mm	66-13-ZK-S	66-13-ZK-F
15 mm	66-15-ZK-S	66-15-ZK-F

#### Measurements

PART-NO.	Dim. A	Dim. B	Dim. d <sub>outer</sub>	Dim. d <sub>inner</sub>	Dim. d <sub>offset</sub>
66-13-ZK-S	77	23	12.5	9.8	9.8
66-13-ZK-F	77	26	12.5	9.8	9.8
66-15-ZK-S	77	32	14.5	11.8	9.8
66-15-ZK-F	77	35	14.5	11.8	9.8

Measurements in mm

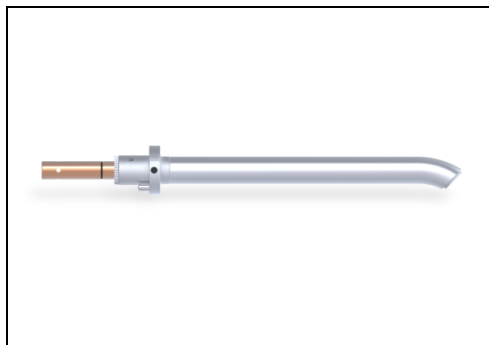
## 15 QK Equipment



SKS offers a special torch neck for welding components with tight accessibility (QK-Version, max. 200 A).

By using consumables of a minimum size working in smallest areas is possible.

The bayonet clamping cap can be used.



### Torch neck QK

#### Overview torch neck QK

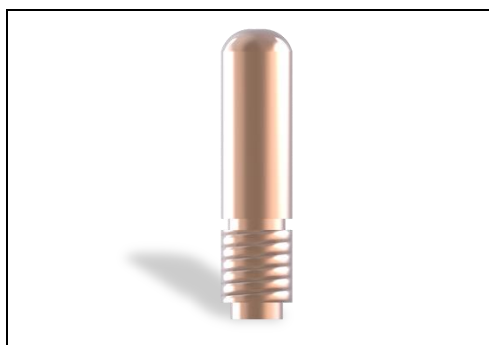
DESCRIPTION	PART-NO.
Torch neck 45° - aircooled - QK	58-1-145-400-1



### Retaining head for torch neck QK

#### Overview retaining head QK

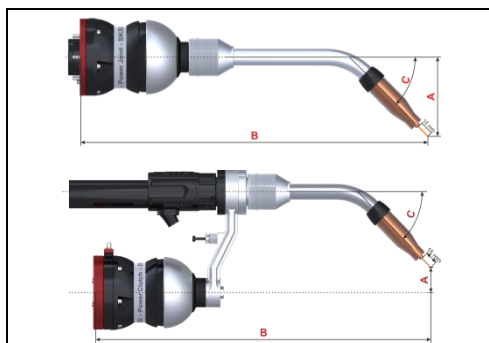
DESCRIPTION	PART-NO.
Retaining head for torch neck QK	43-3-1



### Contact tip QK

#### Overview contact tip QK

Wire-Ø	Cu-ETP / PART-NO.	CuCrZr / PART-NO.
0.8 mm	40-3-0.8S	40-7-0.8S
0.9 mm	40-3-0.9S	40-7-0.9S
1.0 mm	40-3-1.0S	40-7-1.0S

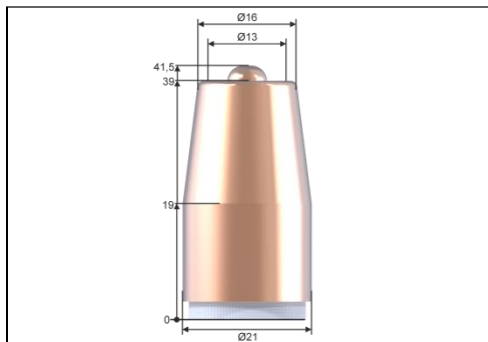


### TCP measurements QK equipment (at stickout length 12mm)

Dimension	A	B	C
Torch system	Distance in mm	TCP length in mm	Angle in °
Power Joint	44	400	45
Power Joint Lite	44	400	45
Frontpull 8i	44	475	45
Power Clutch	76	461.5	45
Frontpull 7	76	561.5*	45
Wire Select	76	561.5**	45

\*incl. TCP-extension 50mm (PART-NO. 93-29) | \*\*incl. TCP-extension 100mm (PART-NO. 93-14)

## 15 QK Equipment



### Copper gas nozzle QK

#### Overview copper gas nozzle QK

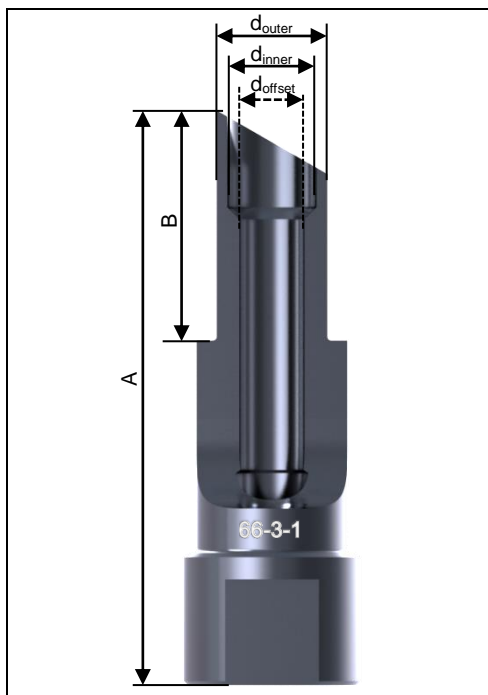
##### DESCRIPTION

Copper gas nozzle QK

##### PART-NO.

41-3-1

Measurements in mm



### Reamer blade for copper gas nozzle QK (with internal thread UNF 3/8" x 24)

#### Overview reamer blade

##### DESCRIPTION

Reamer blade for copper gas nozzle QK

##### PART-NO.

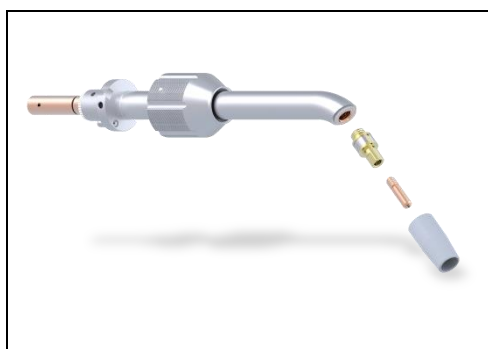
66-3-1

#### Dimensions

PART-NO.	Dim. A	Dim. B	Dim. d <sub>outer</sub>	Dim. d <sub>inner</sub>	Dim. d <sub>offset</sub>
66-3-1	65	26	12.5	10	7.3

Measurements in mm

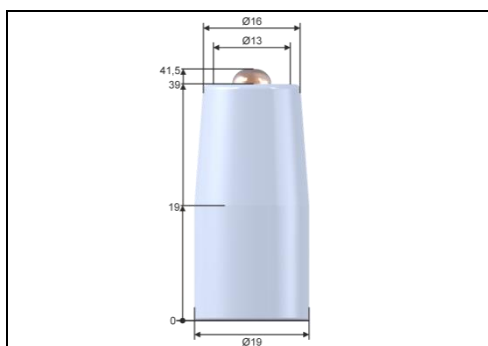
## 16 QK ceraMIG Equipment



Improved durability and duty cycle of the gas nozzle by usage of a ceramic base material.

For dressing with QK equipment.

The bayonet clamping cap can be used.



### Ceramic gas nozzle QK

#### Overview ceramic gas nozzle QK

##### DESCRIPTION

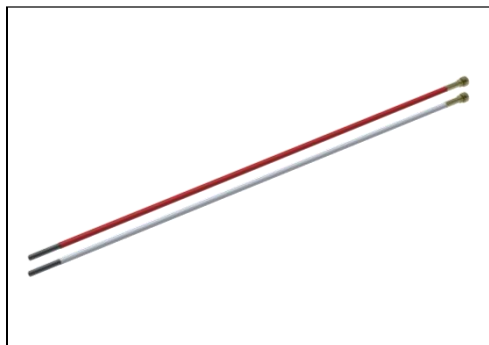
Ceramic gas nozzle QK\*

##### PART-NO.

41-12-13-TS

\* for cleaning with brushes only | Measurements in mm

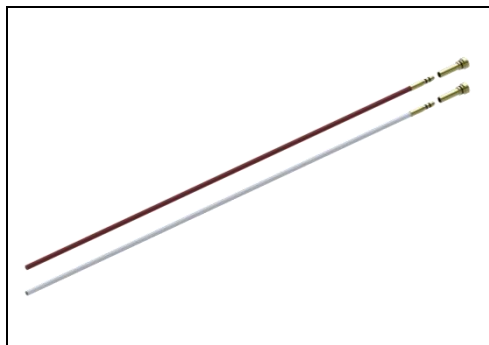
## 17 Liner | Liner for torch neck



### Liner for Power Joint | Power Joint Lite | Power Clutch

#### Overview liners

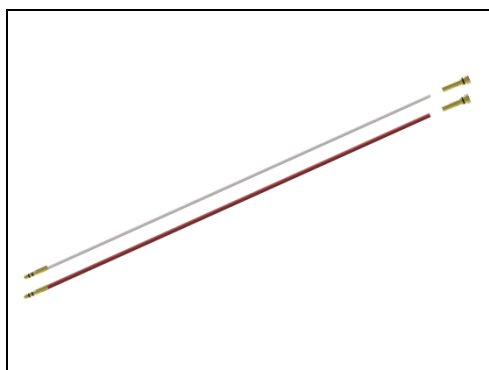
DESCRIPTION	PART-NO.
Liner 2.0m white for wire-Ø 0.8-1.0mm	44-20-0810-20
Liner 3.5m white for wire-Ø 0.8-1.0mm	44-20-0810-35
Liner 5.0m white for wire-Ø 0.8-1.0mm	44-20-0810-50
Liner 2.0m red for wire-Ø 1.2-1.6mm	44-20-1216-20
Liner 3.5m red for wire-Ø 1.2-1.6mm	44-20-1216-35
Liner 5.0m red for wire-Ø 1.2-1.6mm	44-20-1216-50



### Quick load liner for Power Joint | Power Joint Lite | Power Clutch

#### Overview quick load liner

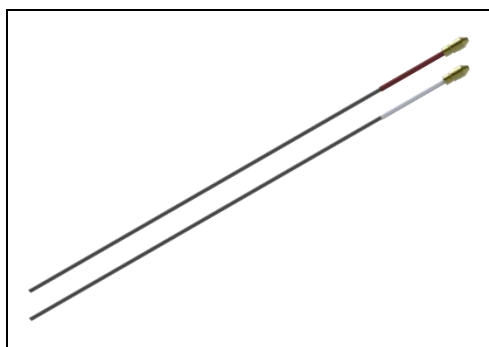
DESCRIPTION	PART-NO.
Quick load liner 1.6m white for wire-Ø 0.8-1.0mm	415-35-6Q
Quick load liner 3.0m white for wire-Ø 0.8-1.0mm	415-35-10Q
Quick load liner 1.6m red for wire-Ø 1.2-1.6mm	415-116-6Q
Quick load liner 3.0m red for wire-Ø 1.2-1.6mm	415-116-10Q
Sleeve for Quick load liner	415-26



### Liner for Frontpull 7 | Frontpull 8i | Wire Select

#### Overview liner

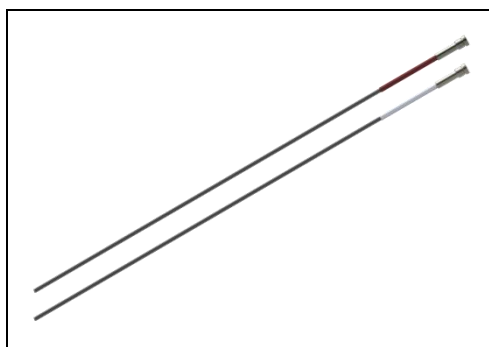
DESCRIPTION	PART-NO.
Liner 2.0m white for wire-Ø 0.8-1.0mm	44-22-0810-20
Liner 3.5m white for wire-Ø 0.8-1.0mm	44-22-0810-35
Liner 5.0m white for wire-Ø 0.8-1.0mm	44-22-0810-50
Sleeve for liner white wire-Ø 0.8-1.0mm	44-30-2
Liner 2.0m red for wire-Ø 1.2-1.6mm	44-22-1216-20
Liner 3.5m red for wire-Ø 1.2-1.6mm	44-22-1216-35
Liner 5.0m red for wire-Ø 1.2-1.6mm	44-22-1216-50
Sleeve for liner red wire-Ø 1.2-1.6mm	44-30-3



### Liner for torch neck on Frontpull 7 | Frontpull 8i

#### Overview liner for torch neck

DESCRIPTION	PART-NO.
Liner for torch neck white for wire-Ø 0.8-1.0mm	58-4-4-500
Liner for torch neck red for wire-Ø 1.2-1.6mm	58-4-3-500



### Liner for torch neck on Wire Select

#### Overview liner for torch neck

DESCRIPTION	PART-NO.
Liner for torch neck white for wire-Ø 0.8-1.0mm	44-210-0810
Liner for torch neck red for wire-Ø 1.2-1.6mm	44-210-1216

## 18 Consumables for Wire Feeder PF5

Strong, lightweight and precise.

The PF5 wire feeder.



Smaller and with less weight accompanied by improved efficiency over conventional wire feeders the PF5 goes along with the steady development of arc welding robots.

Modern motor, gear and control technology provide a strong performance and highest possible precision. The robust plastic housing is electrically insulated. As a "lightweight" the PF5 is the perfect choice for the new generation of robots. The industrial proven Power Feeder PF5 is available with an additional monitoring functionality: an integrated gas-flow sensor. The weld process controller displays the gas flow values, and can also be triggered to an alarm, in case of a non-defined gas flow rate.



### Pressure roll for PF5

#### Overview pressure roll for PF5

DESCRIPTION	PART-NO.
Pressure roll for steel, bronze	12-2-3-0
Locating bolt for pressure roll steel, bronze	12-13-5



### Center guide PF5

#### Overview center guide PF5

DESCRIPTION	PART-NO.
Wire-Ø < 2 mm for steel wire	12-2-1-15



### Drive roll for PF5

#### Overview drive roll for PF5

DESCRIPTION	PART-NO.
Wire-Ø 0.8 mm V-groove	12-2-3-08
Wire-Ø 0.9 mm V-groove	12-2-3-09
Wire-Ø 1.0 mm V-groove	12-2-3-10
Wire-Ø 1.2 mm V-groove	12-2-3-12
Wire-Ø 1.4 mm V-groove	12-2-3-14
Wire-Ø 1.6 mm V-groove	12-2-3-16

## 19 Consumables for Frontpull 7 | Frontpull 8i



### Pressure roll for Frontpull 7 | Frontpull 8i | Frontpull 8i module

#### Overview pressure roll

DESCRIPTION	PART-NO.
Pressure roll for steel, bronze	12-2-3-0
Locating bolt for pressure roll steel, bronze	12-13-5



### Inlet guide for liner Frontpull 7 | Frontpull 8i

#### Overview inlet guide for liner

DESCRIPTION	PART-NO.
Inlet guide for liner in torch body	10-5-12
Inlet guide for liner in torch body*	44-30-16

*\*only for Frontpull 8i torch body*



### Center guide for Frontpull 7 torch body | Frontpull 8i module

#### Overview center guide

DESCRIPTION	PART-NO.
Wire-Ø < 2 mm for steel wire	12-2-1-15



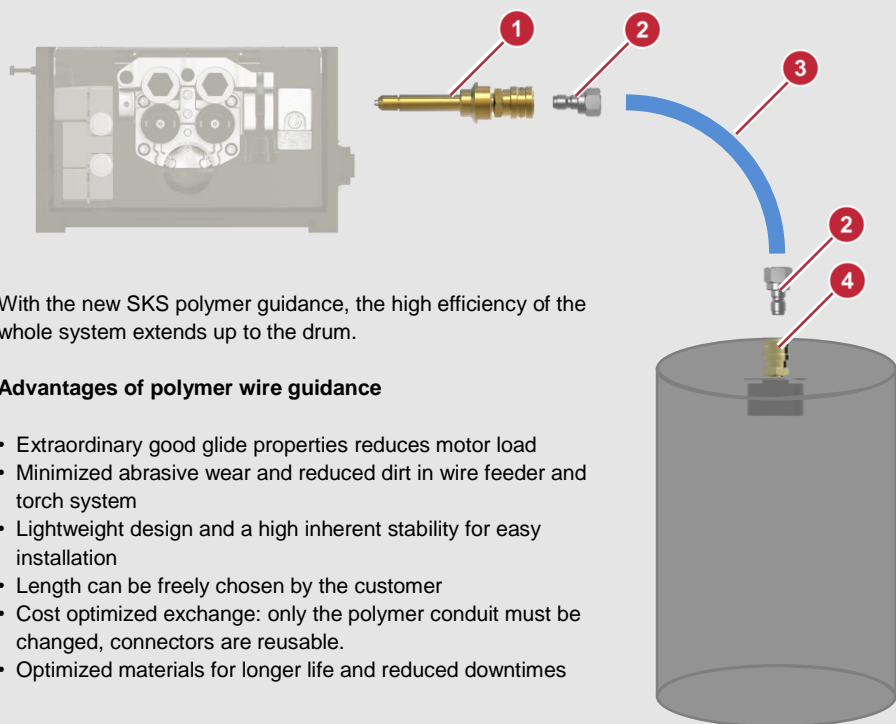
### Drive roll for Frontpull 7 | Frontpull 8i | Frontpull 8i module

#### Overview drive roll

DESCRIPTION	PART-NO.
Wire-Ø 0.8 mm V-groove	12-2-4-08
Wire-Ø 0.9 mm V-groove	12-2-4-09
Wire-Ø 1.0 mm V-groove	12-2-4-10
Wire-Ø 1.2 mm V-groove	12-2-4-12
Wire-Ø 1.4 mm V-groove	12-2-4-14
Wire-Ø 1.6 mm V-groove	12-2-4-16

## 20 Drum Connection | Wire Guidance

### Polymer wire guidance



With the new SKS polymer guidance, the high efficiency of the whole system extends up to the drum.

#### Advantages of polymer wire guidance

- Extraordinary good glide properties reduces motor load
- Minimized abrasive wear and reduced dirt in wire feeder and torch system
- Lightweight design and a high inherent stability for easy installation
- Length can be freely chosen by the customer
- Cost optimized exchange: only the polymer conduit must be changed, connectors are reusable.
- Optimized materials for longer life and reduced downtimes

#### Overview Polymer wire guidance

	DESCRIPTION	PART-NO.
1	Wire inlet body with quick coupling	10-2-0-61
2	Connection nipple for polymer conduit	44-40-7
3	Polymer wire conduit, endless (sold by meter)	44-9-1
4	Connection for wire drum	44-40-1



#### Wire inlet body for additional systems

##### Overview wire inlet body

	DESCRIPTION	PART-NO.
	Wire inlet body with M10 internal thread for ESAB	10-2-0-50
	Wire inlet body with UNF 3/8" x 24 external thread	10-2-0-51
	Wire inlet body with 9.6 mm bore hole	10-2-0-52
	Wire inlet body with 13 mm bore hole	10-2-0-53
	Wire inlet body with PG9 thread	10-2-0-56
	Wire inlet body with 1/4" internal thread	10-2-0-60



#### Spare parts for wire inlet body

##### Overview spare parts for wire inlet body

	DESCRIPTION	PART-NO.
	End cap for wire inlet body	10-2-0-50-4
	Inset for wire inlet body (Type 50/52/53/54/59/60/61)	10-2-0-50-3
	Inset for wire inlet body (Type 51/55/56)	10-2-0-51-3
	Knurled screw for wire inlet body	575005800



## 21 Consumables and equipment for aluminum applications



### Power Lock: Contact tip (metrical, tapered)

#### Overview contact tip

Wire-Ø	CuCrZr / PART-NO.
1.2 mm	40-4-7-1.2AL
1.6 mm	40-4-7-1.6AL



### Aluminum liner

#### Overview aluminum liner

DESCRIPTION	PART-NO.
Aluminum liner, sold by meter	91-68-47025-25E
End sleeve for liner	44-30-7
Power Pin cap for aluminum applications	61-2-0-2-7



### Inlet body for liner Frontpull 7 | Frontpull 8i

#### Overview inlet body for liner

DESCRIPTION	PART-NO.
Inlet guide for liner in torch body	10-5-29
Inlet guide for liner in torch body*	44-30-14

\*only for Frontpull 8i torch body



### Drive roll for Frontpull 7 | Frontpull 8i | Frontpull 8i module

#### Overview drive roll

DESCRIPTION	PART-NO.
Wire-Ø 1.2 mm U-groove	12-2-4-112
Wire-Ø 1.6 mm U-groove	12-2-4-116



### Liner for torch neck Frontpull 7 | Frontpull 8i

#### Overview liner for torch neck

DESCRIPTION	PART-NO.
Liner for torch neck Wire-Ø 1.0-1.6 mm	58-4-9-500



## 21 Consumables and equipment for aluminum applications



### Pressure roll for PF5 | Frontpull 7 | Frontpull 8i | Frontpull 8i module

#### Overview pressure roll

DESCRIPTION	PART-NO.
Pressure roll for aluminum Wire-Ø 1.2 mm, U-groove	12-2-5-112
Pressure roll for aluminum Wire-Ø 1.6 mm, U-groove	12-2-5-116
Locating bolt for pressure roll (aluminum)	12-2-1-23
Knurled screw for pressure roll (aluminum)	12-2-1-24



### Center guide for PF5 | Frontpull 7 | Frontpull 8i module

#### Overview center guide

DESCRIPTION	PART-NO.
Wire-Ø 1.0-1.6 mm Aluminum	12-2-1-19



### Drive roll for PF5

#### Overview drive roll

DESCRIPTION	PART-NO.
Wire-Ø 1.2 mm U-groove	12-2-3-112
Wire-Ø 1.6 mm U-groove	12-2-3-116



### Inset for wire inlet body

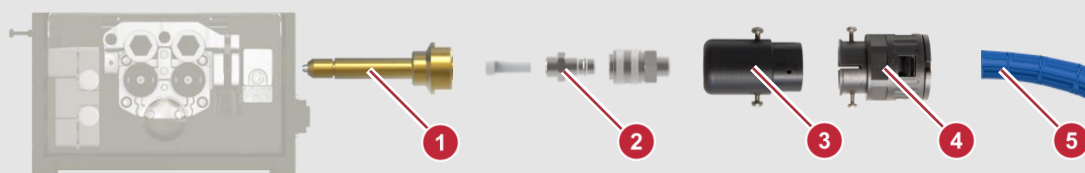
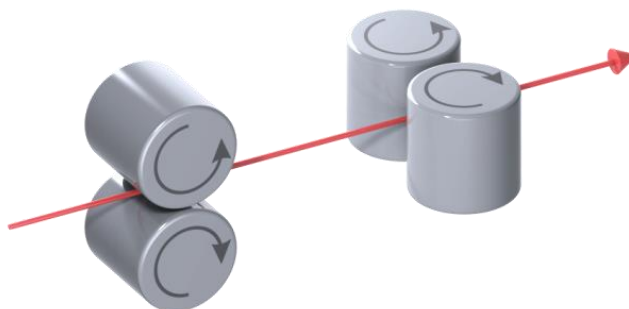
#### Overview inset for wire inlet body

DESCRIPTION	PART-NO.
Inset for wire inlet body (Type 50/52/53/54/59/60/61)	10-2-0-57-3
Inset for wire inlet body (Type 51/55/56)	10-2-0-58-3

## 22 Drum connection Rolliner NG – With corrugated tube

### Rolliner NG

With corrugated tube



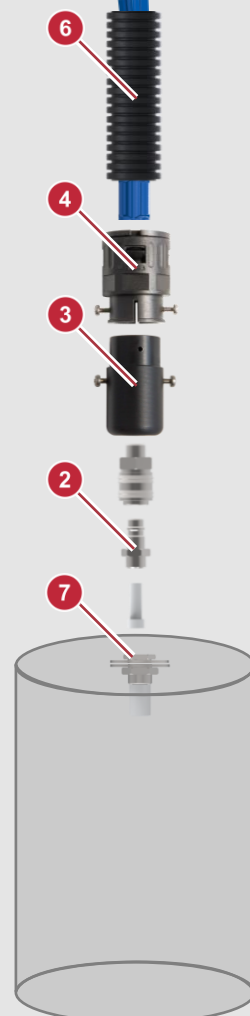
#### Advantages of Rolliner wire guidance

The Rolliner NG was developed for optimized wire guidance, especially for soft wires. The system consists of individual segments, which are arranged in rotation through 90 degrees. In this arrangement, the wire can be guided by 4 sides. With a quick release capability, a clip system, segments can be easily, quickly and safely added or replaced. With the same geometry used in accordions, maximum flexibility when bending radii is provided. The high reliability of the wire guidance, the high flexibility and easy maintenance make the liner roll the perfect supplement of a welding system with maximum reliability and precision.

- Guidance with rolls reduces engine load of the wire feeder
- High operational times and low resistance by system design
- Minimized wire abrasion for less dirtying in the wire feeder and torch system
- High level of stability for easy installation
- Fully sealed guidance with four rolls (two segments)
- Length can be freely determined by customer
- Maintenance and operation cost optimized - segments individually replaceable

#### Overview Rolliner NG – with corrugated tube

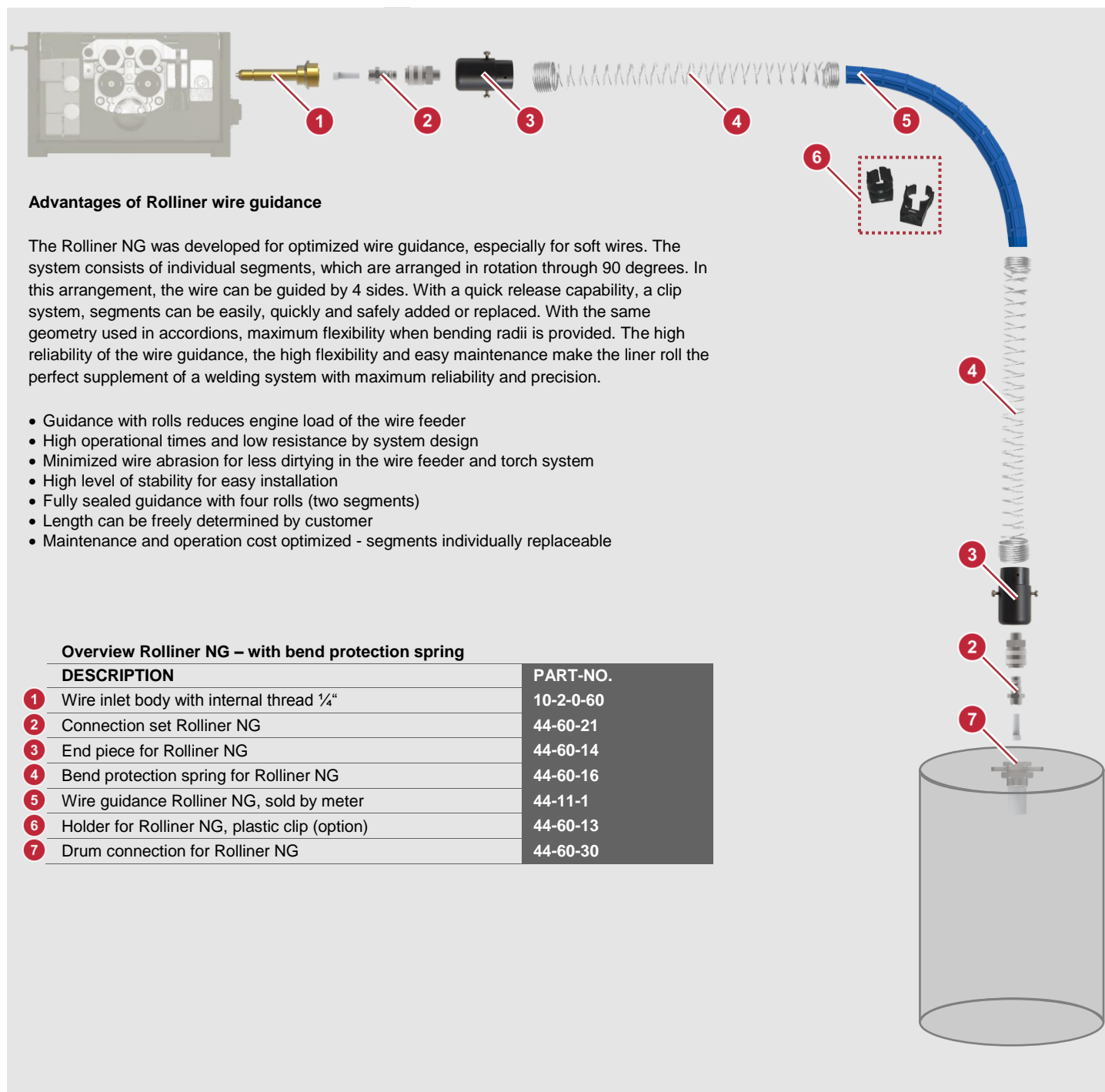
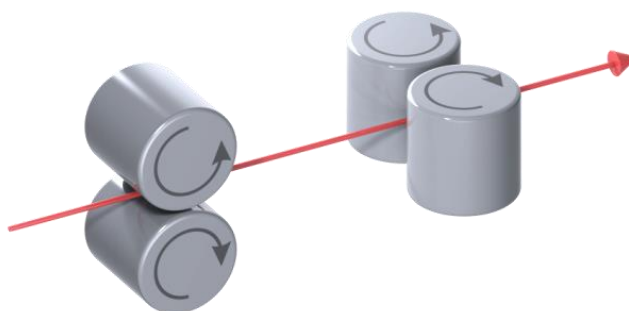
DESCRIPTION	PART-NO.
1 Wire inlet body with internal thread 1/4"	10-2-0-60
2 Connection set Rolliner NG	44-60-21
3 End piece Rolliner NG	44-60-14
4 Adapter piece for corrugated tube PA12 for Rolliner NG	44-60-15
5 Wire guidance Rolliner NG, sold by meter	44-11-1
6 Corrugated tube PA12 black NW23, sold by meter	91-3-2
7 Drum connection for Rolliner NG	44-60-30



## 22 Drum connection Rolliner NG – With bend protection spring

### Rolliner NG

With bend protection spring





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