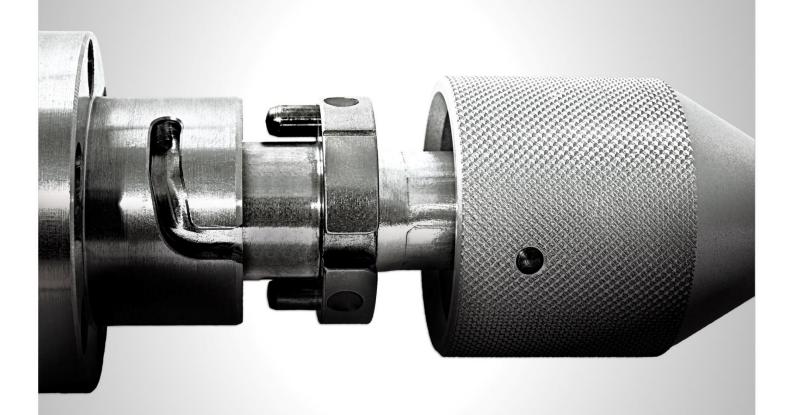


Made for Robots.

## **Power Clutch Retrofit**

Cost optimized modernization of welding torch systems



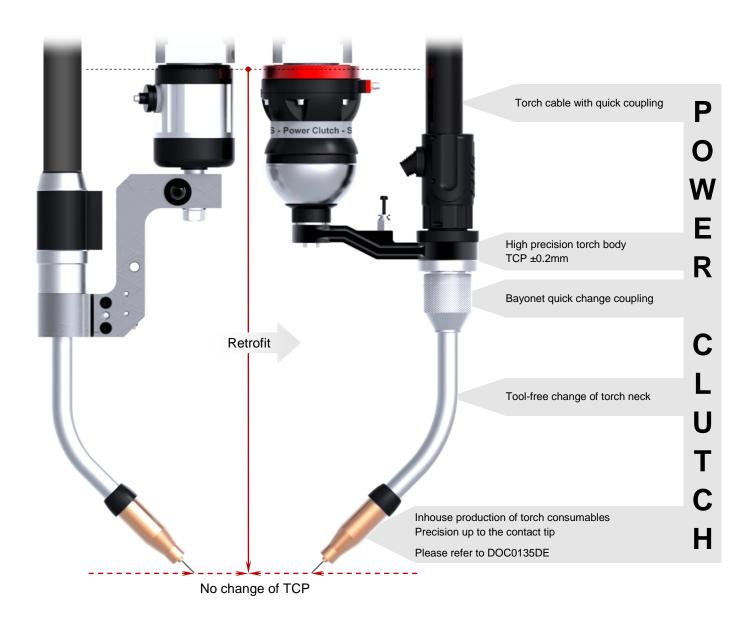
### **Content**

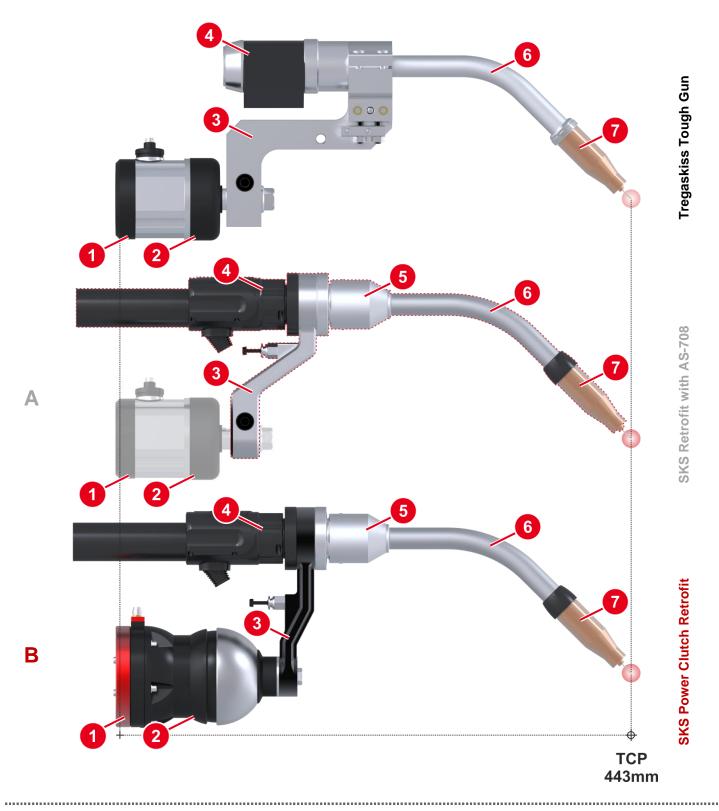
|  | Torch System  | Page |
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|  | Retrofit for Torch Systems with Torch Neck type Q24B  | 4    |
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### Introduction

New SKS Power Clutch retrofit concepts for modernization of components allow easy update of existing welding systems. Modernization of system offers comprehensive advantages by increasing system availability and cost savings, e.g. maintenance, storage, usage, energy.

Results: increase in product quality and system efficiency.



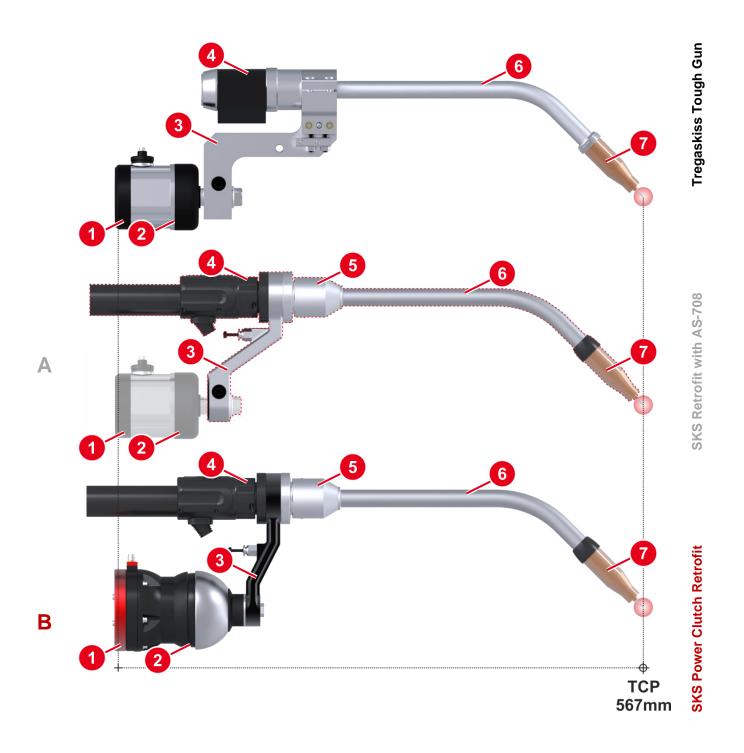


### Possible retrofitting

**Retrofit A:** Retrofitting while maintaining excisting collission protection AS-708

|   | Tregaskiss Tough Gun                                     | SKS Retrofit with AS-708                                 | SKS Power Clutch Retrofit                                |
|---|--|--|--|
| 1 | Robot specific connection flange                         | Robot specific connection flange                         | Robot specific connection flange                         |
|   | 542045400 (or similar)                                   | To be maintained   | 63-4-1 (or similar)                                      |
| 2 | TG collision protection                                  | TG collision protection                                  | Power Clutch collision protection                        |
|   | AS-708   | To be maintained   | 71-17  |
| 3 | TG mouning arm   | Retrofit mounting arm for TG                             | Retrofit torch body for SKS                              |
|   | AS-306-36-3  | 62-5-9-405-Q24B  | 62-5-1-Q24B  |
| 4 | TG torch cable   | SKS torch cable  | SKS torch cable  |
|   | E513-2.5*  | 61-5-075   | 61-5-075   |
|   | E513-3*  | 61-5-09  | 61-5-09  |
|   | E513-3.5*  | 61-5-10  | 61-5-10  |
|   | E513-4*  | 61-5-12  | 61-5-12  |
|   | E513-5*  | 61-5-15  | 61-5-15  |
|   | E513-6*  | 61-5-18  | 61-5-18  |
|   | E513-7*  | 61-5-20  | 61-5-20  |
|   | E513-8*  | 61-5-24  | 61-5-24  |
|   | P513-2.5   | 61-5-075   | 61-5-075   |
|   | P513-3   | 61-5-09  | 61-5-09  |
|   | P513-3.5   | 61-5-10  | 61-5-10  |
|   | P513-4   | 61-5-12  | 61-5-12  |
|   | P513-5   | 61-5-15  | 61-5-15  |
|   | P513-6   | 61-5-18  | 61-5-18  |
|   | P513-7   | 61-5-20  | 61-5-20  |
|   | P513-8   | 61-5-24  | 61-5-24  |
| 5 | Bayonet clamping cap                                     | Bayonet clamping cap                                     | Bayonet clamping cap                                     |
|   | -  | 71-3-24  | 71-3-24  |
| 6 | TG torch neck  | SKS torch neck   | SKS torch neck   |
|   | 405-Q24B   | 58-4-345-450-1   | 58-4-345-450-1   |
| 7 | Consumables  | Consumables  | Consumables  |
|   | Please refer to<br>Overview Torch Front End<br>DOC0135EN | Please refer to<br>Overview Torch Front End<br>DOC0135EN | Please refer to<br>Overview Torch Front End<br>DOC0135EN |

<sup>\*</sup> Conversion of torch connector to Power Pin connector required. Please refer to pages 4 + 15

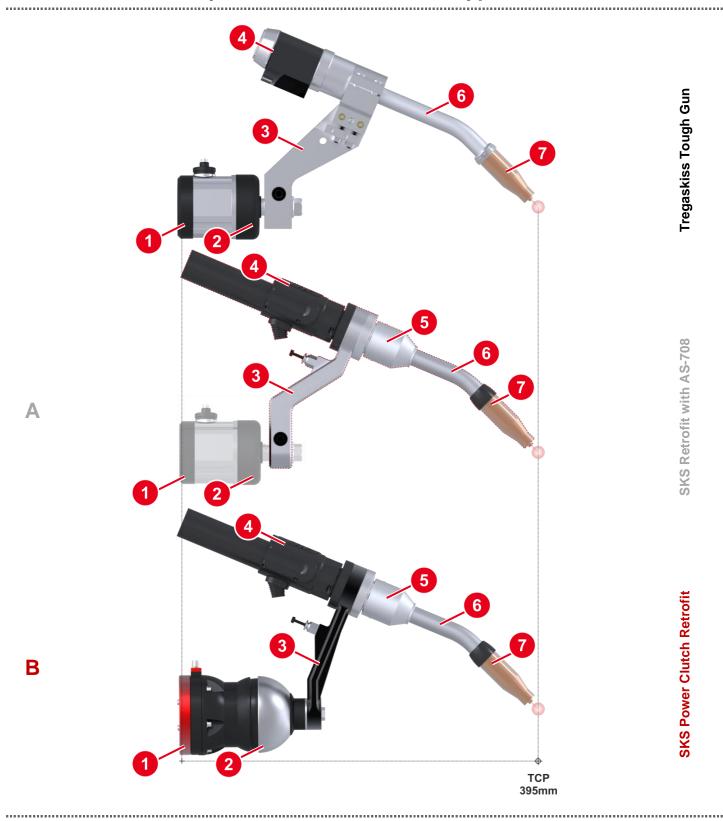


### Possible retrofitting

**Retrofit A:** Retrofitting while maintaining excisting collission protection AS-708

| Tregaskiss Tough (                                   | A  | SKS Power Clutch Retrofit                                |
|--|--|--|
| Robot specific connectio                             |  | · · · · · · · · · · · · · · · · · · ·                    |
| 542045400 (or simil                                  | lar) To be maintained                                  | 63-4-1 (or similar)                                      |
| TG collision protect                                 | ion TG collision protection                            | Power Clutch collision protection                        |
| AS-708   | To be maintained                                       | 71-17  |
| TG mouning arm                                       | Retrofit mounting arm for TG                           | Retrofit torch body for SKS                              |
| AS-306-36-3  | 62-5-9-405-Q048  | 62-5-1   |
| TG torch cable                                       | SKS torch cable  | SKS torch cable  |
| E513-2.5*  | 61-5-075   | 61-5-075   |
| E513-3*  | 61-5-09  | 61-5-09  |
| E513-3.5*  | 61-5-10  | 61-5-10  |
| E513-4*  | 61-5-12  | 61-5-12  |
| E513-5*  | 61-5-15  | 61-5-15  |
| E513-6*  | 61-5-18  | 61-5-18  |
| E513-7*  | 61-5-20  | 61-5-20  |
| E513-8*  | 61-5-24  | 61-5-24  |
| P513-2.5   | 61-5-075   | 61-5-075   |
| P513-3   | 61-5-09  | 61-5-09  |
| P513-3.5   | 61-5-10  | 61-5-10  |
| P513-4   | 61-5-12  | 61-5-12  |
| P513-5   | 61-5-15  | 61-5-15  |
| P513-6   | 61-5-18  | 61-5-18  |
| P513-7   | 61-5-20  | 61-5-20  |
| P513-8   | 61-5-24  | 61-5-24  |
| Bayonet clamping of                                  | cap Bayonet clamping cap                               | Bayonet clamping cap                                     |
| -  | 71-3-24  | 71-3-24  |
| TG torch neck  | SKS torch neck   | SKS torch neck   |
| 405-Q24B   | 58-4-345-567-1   | 58-4-345-567-1   |
| Consumables  | Consumables  | Consumables  |
| Please refer to<br>Overview Torch Front<br>DOC0135EN | Please refer to End Overview Torch Front End DOC0135EN | Please refer to<br>Overview Torch Front End<br>DOC0135EN |

<sup>\*</sup> Conversion of torch connector to Power Pin connector required. Please refer to pages 4 + 15

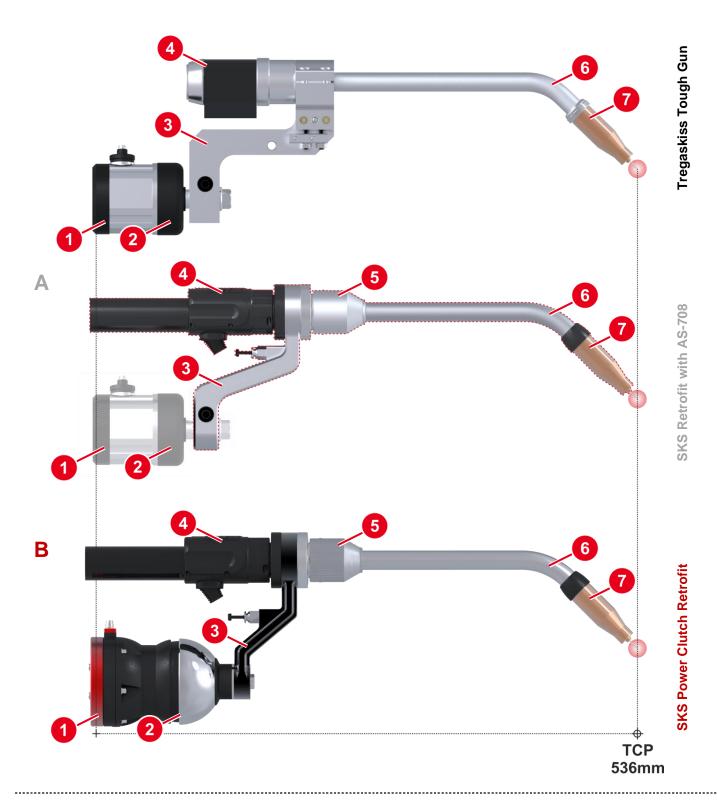


### Possible retrofitting

**Retrofit A:** Retrofitting while maintaining excisting collission protection AS-708

|   | Tregaskiss Tough Gun                                     | SKS Retrofit with AS-708                                 | SKS Power Clutch Retrofit                                |
|---|--|--|--|
| 1 | Robot specific connection flange                         | Robot specific connection flange  To be maintained       |  |
|   | 542045400 (or similar)                                   | To be maintained   | 63-4-1 (or similar)                                      |
| 2 | TG collision protection                                  | TG collision protection                                  | Power Clutch collision protection                        |
|   | AS-708   | To be maintained   | 71-17  |
| 3 | TG mouning arm   | Retrofit mounting arm for TG                             | Retrofit torch body for SKS                              |
|   | AS-306-46-2  | 62-5-9-405-22QC  | 62-5-1-22QC  |
| 4 | TG torch cable   | SKS torch cable  | SKS torch cable  |
|   | E513-2.5*  | 61-5-075   | 61-5-075   |
|   | E513-3*  | 61-5-09  | 61-5-09  |
|   | E513-3.5*  | 61-5-10  | 61-5-10  |
|   | E513-4*  | 61-5-12  | 61-5-12  |
|   | E513-5*  | 61-5-15  | 61-5-15  |
|   | E513-6*  | 61-5-18  | 61-5-18  |
|   | E513-7*  | 61-5-20  | 61-5-20  |
|   | E513-8*  | 61-5-24  | 61-5-24  |
|   | P513-2.5   | 61-5-075   | 61-5-075   |
|   | P513-3   | 61-5-09  | 61-5-09  |
|   | P513-3.5   | 61-5-10  | 61-5-10  |
| ĺ | P513-4   | 61-5-12  | 61-5-12  |
|   | P513-5   | 61-5-15  | 61-5-15  |
| ĺ | P513-6   | 61-5-18  | 61-5-18  |
|   | P513-7   | 61-5-20  | 61-5-20  |
| l | P513-8   | 61-5-24  | 61-5-24  |
| 5 | Bayonet clamping cap                                     | Bayonet clamping cap                                     | Bayonet clamping cap                                     |
|   | -  | 71-3-24  | 71-3-24  |
| 6 | TG torch neck  | SKS torch neck   | SKS torch neck   |
|   | 405-Q24B   | 58-1-22-350-1  | 58-1-22-350-1  |
| 7 | Consumables  | Consumables  | Consumables  |
|   | Please refer to<br>Overview Torch Front End<br>DOC0135EN | Please refer to<br>Overview Torch Front End<br>DOC0135EN | Please refer to<br>Overview Torch Front End<br>DOC0135EN |

<sup>\*</sup> Conversion of torch connector to Power Pin connector required. Please refer to pages 4 + 15

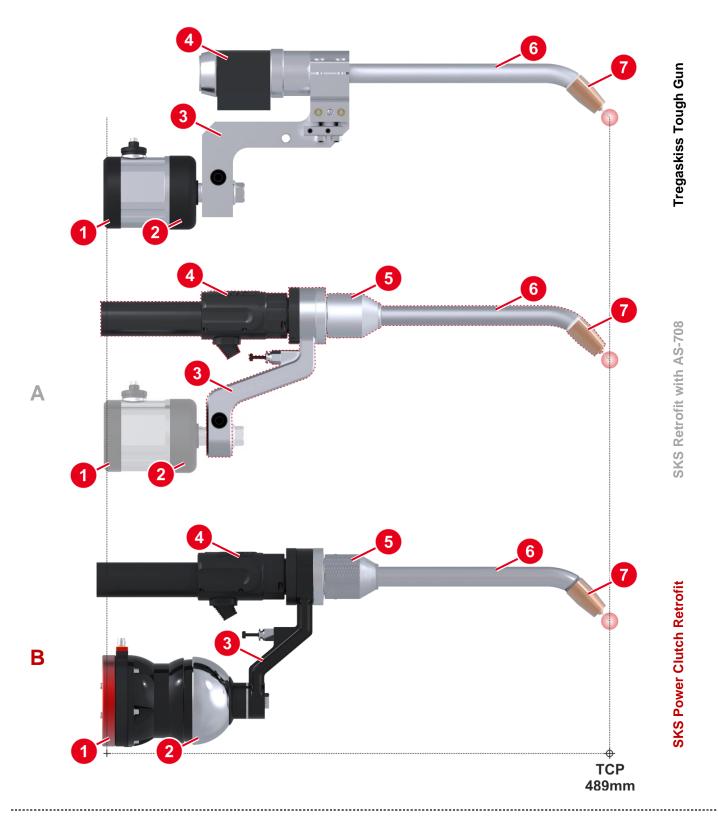


## Possible retrofitting

**Retrofit A:** Retrofitting while maintaining excisting collission protection AS-708

|   | Tregaskiss Tough Gun                                     | SKS Retrofit with AS-708                                 | SKS Power Clutch Retrofit                                |
|---|--|--|--|
| 1 | Robot specific connection flange                         | Robot specific connection flange                         | Robot specific connection flange                         |
|   | 542045400 (or similar)                                   | To be maintained   | 63-4-1 (or similar)                                      |
| 2 | TG collision protection                                  | TG collision protection                                  | Power Clutch collision protection                        |
|   | AS-708   | To be maintained   | 71-17  |
| 3 | TG mouning arm   | Retrofit mounting arm for TG                             | Retrofit torch body for SKS                              |
|   | AS-306-36-3  | 62-5-9-305-Q006  | 62-5-1-Q006  |
| 4 | TG torch cable   | SKS torch cable  | SKS torch cable  |
|   | E513-2.5*  | 61-5-075   | 61-5-075   |
|   | E513-3*  | 61-5-09  | 61-5-09  |
|   | E513-3.5*  | 61-5-10  | 61-5-10  |
|   | E513-4*  | 61-5-12  | 61-5-12  |
|   | E513-5*  | 61-5-15  | 61-5-15  |
|   | E513-6*  | 61-5-18  | 61-5-18  |
|   | E513-7*  | 61-5-20  | 61-5-20  |
|   | E513-8*  | 61-5-24  | 61-5-24  |
|   | P513-2.5   | 61-5-075   | 61-5-075   |
|   | P513-3   | 61-5-09  | 61-5-09  |
|   | P513-3.5   | 61-5-10  | 61-5-10  |
|   | P513-4   | 61-5-12  | 61-5-12  |
|   | P513-5   | 61-5-15  | 61-5-15  |
|   | P513-6   | 61-5-18  | 61-5-18  |
|   | P513-7   | 61-5-20  | 61-5-20  |
|   | P513-8   | 61-5-24  | 61-5-24  |
| 5 | Bayonet clamping cap                                     | Bayonet clamping cap                                     | Bayonet clamping cap                                     |
|   | -  | 71-3-24  | 71-3-24  |
| 6 | TG torch neck  | SKS torch neck   | SKS torch neck   |
|   | 405-Q24B   | 58-1-45-450-1  | 58-1-45-450-1  |
| 7 | Consumables  | Consumables  | Consumables  |
|   | Please refer to<br>Overview Torch Front End<br>DOC0135EN | Please refer to<br>Overview Torch Front End<br>DOC0135EN | Please refer to<br>Overview Torch Front End<br>DOC0135EN |

<sup>\*</sup> Conversion of torch connector to Power Pin connector required. Please refer to pages 4 + 15



## Possible retrofitting

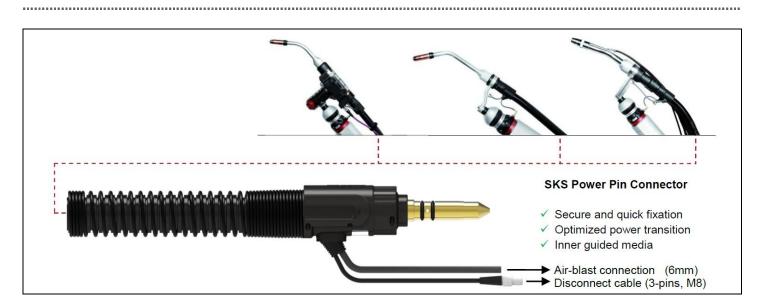
**Retrofit A:** Retrofitting while maintaining excisting collission protection AS-708

|   | Tregaskiss Tough Gun   | SKS Retrofit with AS-708   | B  |
|---|--|--|--|
| 1 | Robot specific connection flange   | Robot specific connection flange   | Robot specific connection flange   |
|   | 542045400 (or similar)   | To be maintained   | 63-4-1 (or similar)  |
| 2 | TG collision protection  | TG collision protection  | Power Clutch collision protection  |
|   | AS-708   | To be maintained   | 71-17  |
| 3 | TG mouning arm   | Retrofit mounting arm for TG   | Retrofit torch body for SKS  |
|   | AS-306-36-3  | 62-5-9-305-Q006  | 62-5-1-Q006  |
| 4 | TG torch cable   | SKS torch cable  | SKS torch cable  |
|   | E513-2.5*  | 61-5-075   | 61-5-075   |
| [ | E513-3*  | 61-5-09  | 61-5-09  |
|   | E513-3.5*  | 61-5-10  | 61-5-10  |
|   | E513-4*  | 61-5-12  | 61-5-12  |
|   | E513-5*  | 61-5-15  | 61-5-15  |
|   | E513-6*  | 61-5-18  | 61-5-18  |
|   | E513-7*  | 61-5-20  | 61-5-20  |
| [ | E513-8*  | 61-5-24  | 61-5-24  |
|   | P513-2.5   | 61-5-075   | 61-5-075   |
| [ | P513-3   | 61-5-09  | 61-5-09  |
|   | P513-3.5   | 61-5-10  | 61-5-10  |
| 1 | P513-4   | 61-5-12  | 61-5-12  |
|   | P513-5   | 61-5-15  | 61-5-15  |
| 1 | P513-6   | 61-5-18  | 61-5-18  |
|   | P513-7   | 61-5-20  | 61-5-20  |
|   | P513-8   | 61-5-24  | 61-5-24  |
| 5 | Bayonet clamping cap   | Bayonet clamping cap   | Bayonet clamping cap   |
|   | -  | 71-3-24  | 71-3-24  |
| 6 | TG torch neck  | SKS torch neck   | SKS torch neck   |
|   | 405-Q24B   | 58-1-145-400-1   | 58-1-145-400-1   |
| 7 | Consumables  | Consumables  | Consumables  |
|   | Please refer to<br>Overview Torch Front End<br>(QK and QK ceraMIG™)<br>DOC0135EN | Please refer to<br>Overview Torch Front End<br>(QK and QK ceraMIG™)<br>DOC0135EN | Please refer to<br>Overview Torch Front End<br>(QK and QK ceraMIG™)<br>DOC0135EN |

<sup>\*</sup> Conversion of torch connector to Power Pin Connector required. Please refer to pages 4 + 15



### **Power Pin Torch Connector**





Conversion of wire feeders

### Conversion of wire feeders

Existing SKS wire feeders from QD series as well as from other manufacturers can easily be updated with the power pin connector. For simple conversion SKS provides corresponding conversion kits including screws, adapter panels, torch adapters and detailed conversion manuals.



Torch cable with Power Pin

### **Torch Cables with Power Pin connector**

SKS torch cables are highly flexible coaxial cables with 72mm² cross-section. Lower resistances of torch components lead to improved energy transfer to the process resulting in higher process stability. SKS Power Pin provides secure fixation and reliable transmission of electricity and gas. Disconnection cable connected to safety clutch and air-blast hose are integrated in torch cable. Additional protection springs mounted on both cable ends ensure defined cable guiding avoiding cable damages.



Power Pin connector block

### Transmission of electricity and gas

SKS Power Pin ensures secure transmission of power and gas. Power is transmitted over entire surface of the Power Pin reducing contact resistances. Gas is conducted within the Power Pin, thus ensuring a secure flow of gas.

### Conversion of Wire Feeders to Power Pin Connector

### Conversion of SKS wire feeders to Power Pin connector

Description Part Number

Conversion Kit for SKS wire feeder Q590D/Q591D from Dinse central connector to SKS Power Pin

541029300-URTG



Description Part Number

541029200-URTG

Conversion Kit for SKS wire feeder Q590D/Q591D from Euro connector to SKS Power Pin



#### Conversion of non SKS wire feeders to Power Pin connector

Description Part Number

Conversion Kit for Fronius wire feeder VR1500 from Dinse central connector / Euro connector to SKS Power Pin



Description Part Number

Conversion Kit for ESAB wire feeder A314E-PIB from Euro connector to SKS Power Pin



Description Part Number

Conversion Kit for Lincoln wire feeder Autodrive 4R90 from Lincoln Pin to SKS Power Pin





www.sks-welding.com