

Torch systems



POWER JOINT™
Processes:
MIG/MAG (GMAW)
Weld Package
for process arm
robots

POWER CLUTCH™
Processes:
MIG/MAG (GMAW)
Weld Package for
robots with outer
cable dress

FRONTPULL™
Processes: MIG/MAG (GMAW)
supports microMIG™
Weld Package for heat-
reduced welding with
penetration, practically
spatter-free

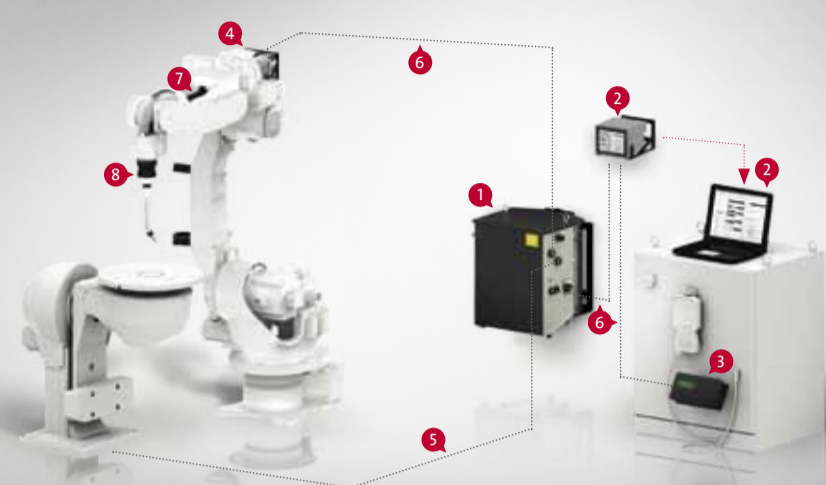
DUAL WIRE 2.0™
Processes:
MIG/MAG (GMAW)
Weld Package for high
welding speed and
high deposition rate

SEMI AUTOMATIC™
Processes:
MIG/MAG (GMAW)
Hand welding with
robotic precision

SKS Weld Packages

System design

- 1 DCT power source
- 2 Weld process controller + Software
- 3 Robot interface
- 4 Wire feeder
- 5 Ground cable
- 6 Control cable
- 7 Torch cable
- 8 Torch system Power Joint™



SKS components

Power sources

The LSQ3 and LSQ5 ensure the optimum arc energy. They uniquely adjust to different weld processes.

Direct Control Technology (DCT) provides a speed regulation up to ten times higher compared to conventional inverter technology. This leads to excellent control behavior and shorter response times. The weld properties are substantially improved.



LSQ3: 340 A - 60 % duty cycle / 40 °C LSQ5: 420 A - 60 % duty cycle / 40 °C

SKS components

Weld process controllers

SKS weld controllers calculate the optimal parameters for each welding process. Only basic data such as material, wire type, wire feed speed and type of gas must be entered.

For cost-optimization the Q4 is designed for integration into the power source.

The Q6pw is a solid solution for welding where no documentation is required.

The Q80 has been developed as a standard solution with touch screen for all MIG/MAG (GMAW) weld processes with comprehensive documentation functionality (up to weld data per part).

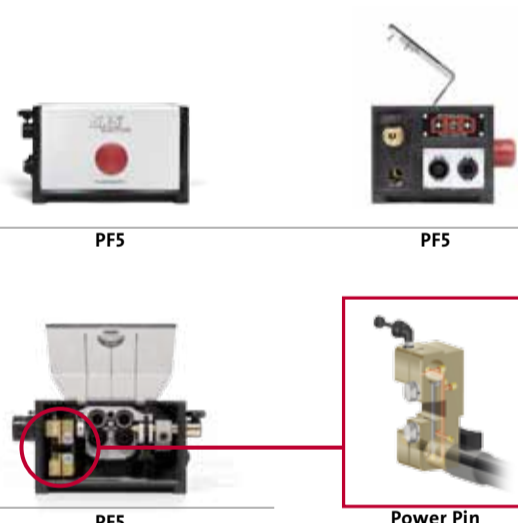
The Q84r and the Q84s are the high-end solutions with touch screen and local weld data visualization. Up to 4 weld machines can be controlled with this weld process controller.



SKS components

Wire feeding

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.



SKS components

Interfacing

With the universal interface solution from SKS, weld controllers can be connected with all industrial robot types. Users basically have two options for connecting robots with weld controllers: The connection can be realized with the SKS interface UNI 5 or by integrating into a given field bus environment with a field bus solution.

UNI 5 interface: All industrial robots are preconfigured in a single interface.

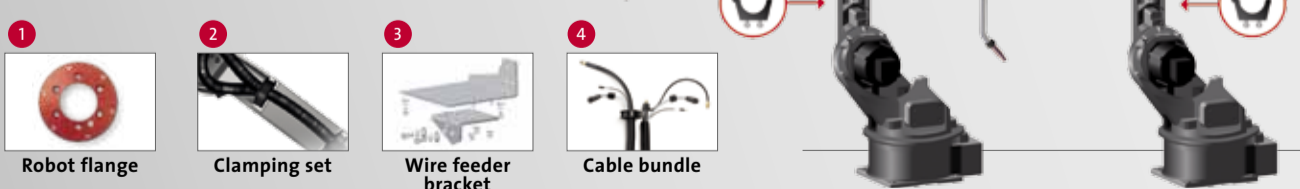
Fieldbus interface FB5: The perfect integration of SKS components into a fieldbus environment.



SKS components

Cables and accessories

SKS torch cables are highly flexibly and air-cooled. The SPW bus cable establishes a single cable standard within the system. Preconfigured mounting kits and brackets are available for all prevalent industrial robots for fast and safe installation of all SKS Weld Packages.



SKS components

Torch necks and consumables

With the innovative bayonet lock system, SKS torch necks can be replaced quickly. This unique tool-free quick change system is also highly precise with a TCP accuracy of ± 0.2 mm.

SKS torch necks are available in different geometries and lengths.



- 1 Tapered contact for:
 - best power and heat transition
 - precisely centered contact tip
- 2 Acme thread for quick change of gas nozzles and absolutely secure fixing.
- 3 Positional accuracy of individual contacts areas to each other for a precise TCP.

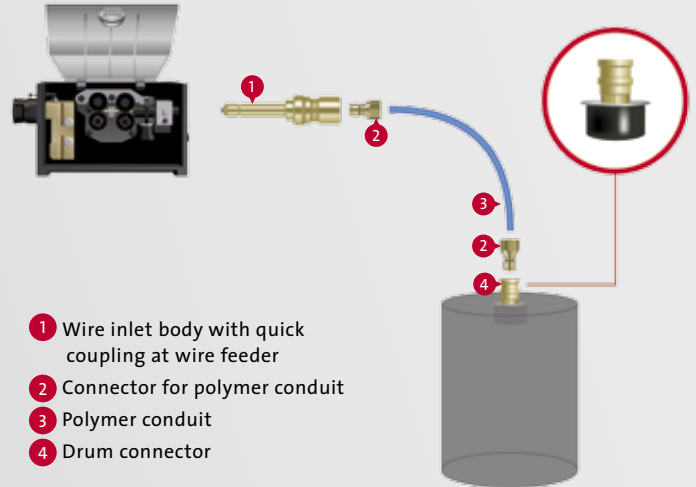
Wire guidance

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

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



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