

KR 5 SI (SafeInteraction)

The technology package SafeInteraction is an option for the robot in the low payload range KR 5 ARC HW to allow a direct human - robot collaboration.

The BG-approved safety functionalities fulfill PL = d (DIN EN ISO 13849) and allow a collaborative operation related to DIN EN ISO 10218 and TS 15066.



Applications - customer benefit

Because of the combination of tactile switches and proximity sensors in the foam padding, a fenceless operation mode without additional safety equipment (like light curtain or laser scanner) is allowed. The use of the KR 5 SI is very beneficial in following applications:

- Refitting of existing installations especially with limited space
- Because of the production process, a fence around the installation or not possible or wished
- Use of the multiple functionalities of the KUKA industrial robot

The user cases are handling applications, assembly Tasks, measurement applications or simple processing tasks

KR 5 SI (SafeInteraction)

The safety system is based on five functionalities:

- Safety related monitoring of robot movement in respect to work spaces and velocities (KUKA.SafeOperation)
- Constant reduction of the robot's kinetic energy by use of damping safety pads around the robot
- Stop (PL = d) by safety related tactile sensors
- Stop (PL = a) by capacitive proximity sensors
- Protection of the tool area by a detachable adapter flange (PL = d)



Technical data

Reach:	1,423 mm
Payload:	5 kg (with detachable adapter flange 3 kg)
Mounting position:	Floor, ceiling
Temperature range:	10 - 55 C°
Repeatability:	0,04 mm
Electr. consumption:	7,3 kVA