



Optimal molding, casting and machining in wet, dusty and hot work environments

Created for applications in harsh work environments – from sand mold production, casting and forging to surface finishing. With the KR QUANTEC Foundry, KUKA is presenting a new generation of robots in the high payload category with payload capacities of up to 300 kg and reaches of up to 3,100 mm. Thanks to its unique features, it sets new standards in terms of performance and cost-effectiveness. Highlights of the new KR QUANTEC F series

- Perfect combination of high payload capacities, reach and small footprint
- Total of 10 foundry variants available
- High IP 67 protection rating, which includes IP 65
- Flange of stainless steel
- Coated gear units with reinforced seal system
- Optional overpressure system and pressure checks
- Two-coat paintwork

Reach / payload

300 kg	•		
270 kg			
250 kg	•		
240 kg		•	
210 kg	•		•
180 kg		•	
150 kg	•		•
120 kg	•		•
	2,700 mm	2,900 mm	3,100 mm

Optimal protection for the toughest conditions

Development of the KR QUANTEC F series was based on KUKA's decades of experience in disciplines ranging from sand casting and die casting to permanent mold casting and even the handling of heavy molds and finished components weighing up to 300 kg. The 10 foundry variants of the KR QUANTEC are designed down to the last detail for use in harsh, hot, dusty and humid work environments. With their optimal balance of high payload capacity and small footprint, they are perfect all-rounders for the foundry and forging industry. The complete machine is designed in protection class IP 67 and also includes protection class IP 65.

The gear units of all axes have a special coating and a reinforced seal system. The seals of axes 4–6 are of dual design to meet the toughest requirements. Two-coat paintwork ensures a particularly resistant and durable surface finish. A robust stainless steel flange is installed in the large foundry wrist as standard. This variant is optionally available for the robot version with a small wrist. For maximum protection, the robot arm of the KR QUANTEC F can also be equipped with a sealing air system. Units for pressure monitoring are also optionally available.

Maximum flexibility

The KR QUANTEC F sets new standards. Reduced disruptive contours, a more streamlined wrist and a minimal footprint – not to mention the option of upgrading the payload capacity in the field – sustainably simplify the engineering of applications. The KR QUANTEC F is the world's first industrial robot for harsh environments to have plug-in motion modes. These are digitalized motion modes that expand the robot's capabilities for specific applications such as high-precision continuous-path motion or higher speed for minimizing cycle times.

Low total cost of ownership

Increase productivity – lower costs. In addition to unique technical features, the KR QUANTEC F series also offers you an advantage in terms of cost-effectiveness. Energy consumption, downtimes and maintenance requirements are reduced to a minimum through innovative adaptations in design and materials. As a result, the KR QUANTEC F excels with a significant reduction in running costs, making it a secure and sustainable investment in the competitiveness of your production facility.

Disruptive contour optimized by up to 10%



The advantages of the KR QUANTEC F

- High protection rating IP 67: the complete machine is designed in protection class IP 67, which includes IP 65.
- Sealing air system and units for pressure monitoring (optional)
- Extra durable, two-coat paintwork
- Flange of stainless steel: included as standard in large foundry wrist, option-ally available for small foundry wrist
- Extended range of ambient conditions: 0°C-55°C, IP 67 standard. The robot wrist is designed for operation at 180°C for 10 seconds per minute.
- Extremely resistant due to state-of-theart sealing technology and lubricants
- Equipped with motion modes for maximum flexibility with low robot diversity
- Best maintenance and service concept on the market for sustainable reduction of the TCO



KR QUANTEC F | EN | 01 | 0320

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