


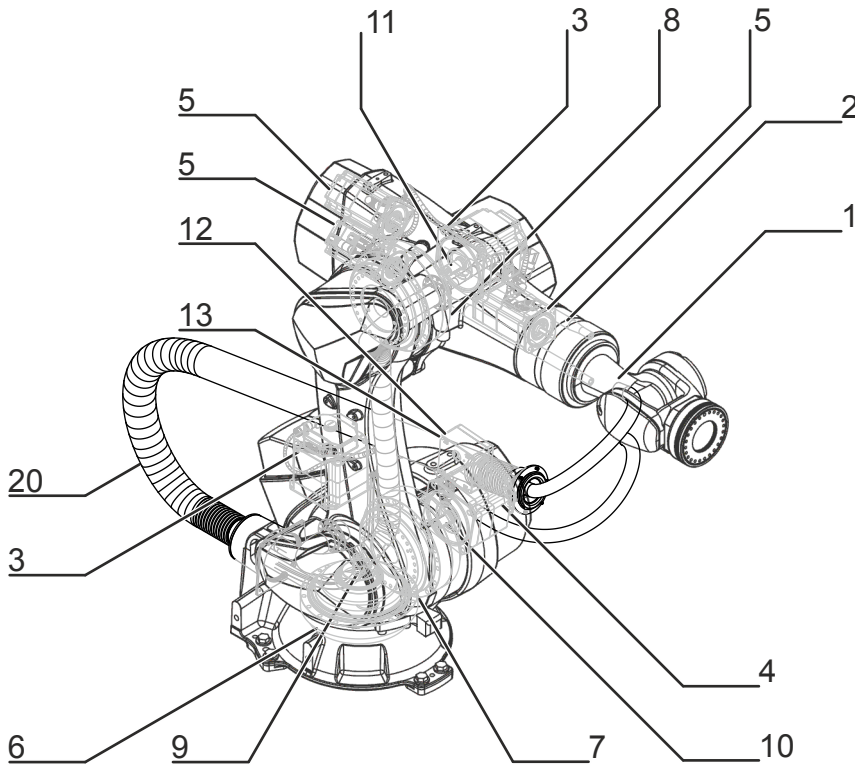
KUKA

Xpert

Identification number: AR9035

货号	0000-253-457
材料状态	15 - 批准批量生产
制造商	KUKA Roboter
产品图片	

Spare parts



Spare parts graphic KR 120 R2100 nano F exclusive , schematic representation

Pos.	Article number	Designation	Component	Work instruction
1	0000-259-247	SPP ZH 120 F exclusive	In-line wrist	
2	0000-269-586	SPP connecting shafts, A4, A5	Connecting shaft	
3	0000-192-296	SPP AC servomotor G1/1FK7100	Motor A1 Motor A3	Exchanging motor A1 Exchanging motor A3
4	0000-192-293	SPP AC servomotor K2/1FK7103	Motor A2	Exchanging motor A2
5	0000-192-297	SPP AC servomotor D01/1FK7063	Motor A4 Motor A5 Motor A6	Exchanging motor A4 Exchanging motor A5 Exchanging motor A6
6	0000-258-634	SPP gear RV-400CS i=198,03 coat.,w/o oil	Gear A1	
7	0000-258-661	SPP gear RV700N i=284 coat., w/o oil	Gear A2	

Pos.	Article number	Designation	Component	Work instruction
8	0000-258-675	SPP gear RV-320ES I=225 coat., w/o oil	Gear A3	
9	0000-192-640	SPP Input shaft kit RV-700CS-198,03	Gear unit input shaft A1	
10	0000-259-394	SPP input shaft inst. kit RV-700N-284.4	Gear unit input shaft A2	
11	0000-192-637	SPP Input shaft kit RV-320ES-225	Gear unit input shaft A3	
12	0000-246-872	Resolver Digital Converter RDC	RDC	Exchanging the RDC
13	0000-172-903	Electronic Data Storage EDS	EDS	Exchanging the EDS
14	0000-107-331	Gauge cartridge IP67 (A0)		
	0000-106-814	Gauge cartridge IP67 (A20) short		
15	0000-264-559	O-ring 390x3.5		
16	0000-264-560	O-ring 323x3.5		
17	0000-264-562	O-ring 335x3.5		
18	0000-264-561	O-ring 385x3.5		
19	0000-218-643	O-ring 112x1.5		
20	0000-263-995	Cable set 5m CON RDCextern	Cable set	Exchanging the cable set
	0000-263-997	Cable set 7,5m CON RDCextern		Exchanging the cable set
	0000-254-030	Cable set 10m CON RDCextern		Exchanging the cable set

Export to Excel 

Maintenance information

Gear oil



The quantity of oil drained depends on the draining time and the oil temperature. The refilling quantity is the quantity of oil that was drained from the gear unit at the correct operating temperature and with the correct draining time. This oil quantity must be determined. Only this quantity of oil may be used when refilling.

If less than 70 % of the specified oil quantity flows out, flush the gear unit with the determined quantity of drained oil once, then pour in the amount of oil that was drained. If less than 50% of the specified oil quantity flows out (e.g. inclined installation), the flushing operation must be repeated twice. During the flushing procedure, move the axis at jog velocity throughout the entire axis range.

The oil quantities specified in the table correspond to the oil quantities in the gear unit at first filling.

Gear oil new filling quantity	
A1	6.00 l
A2	2.40 l
A3	1.90 l
A4	2.10 l
A5	0.90 l
A6	1.00 l
Gear oil refilling quantity	
A1	-
A2	-
A3	-
A4	-
A5	-
A6	-

技术数据

基本数据

	KR 120 R2100 nano F exclusive
轴数	6
可控制的轴数	6
工作空间体积	29.7 m ³
位姿重复精度 (ISO 9283)	± 0.05 mm
重量	约 963 kg
额定负荷	120 kg
最大负载能力	-
最大运动范围	2100 mm
防护等级 (IEC 60529)	IP65 / IP67 / IP69
机器人腕部防护等级 (IEC 60529)	IP65 / IP67 / IP69
噪声等级	< 75 dB (A)
安装位置	地面
占地面积	850 mm x 615 mm
运动系统安装面布孔图	C590
允许倾角	≤ 5 °
标准色	盖板: 不锈钢
控制系统	KR C4
变压器名称	KR C4: KR120R2100 NANO FEX C4 FLR

环境条件

湿度等级 (EN 60204)	-
环境条件分类 (EN 60721-3-3)	3K3; 3Z10
环境温度	
运行时	10 °C 至 55 °C (283 K 至 328 K)
仓储和运输时	-40 °C 至 60 °C (233 K 至 333 K)

轴数据

运动范围	
A1	±165 °
A2	-135 ° / 45 °
A3	-65 ° / 155 °
A4	±350 °
A5	±125 °
A6	±350 °
额定负载时的速度	
A1	136 °/s
A2	95 °/s
A3	120 °/s
A4	292 °/s
A5	258 °/s
A6	284 °/s

负载能力

额定负荷	120 kg
最大负载能力	-
法兰 I_x 额定质量转动惯量	60 kgm ²
法兰 I_y 额定质量转动惯量	60 kgm ²
法兰 I_z 额定质量转动惯量	60 kgm ²
底座的额定附加负载	0 kg
底座的最大附加负载	0 kg
转盘的额定附加负载	0 kg
旋转机构的最大附加负载	0 kg
大臂的额定附加负载	0 kg
大臂的最大附加负载	0 kg
小臂的额定附加负载	30 kg
小臂的最大附加负载	30 kg
负载重心额定距离	
L_{xy}	270 mm
L_z	215 mm

地基负载

纵向动力 F(v)	
F(v 正常)	13509 N
F(vmax)	14324 N
横向动力 F(h)	
F(h 正常)	4039 N
F(hmax)	4562 N
倾覆力矩 M(k)	
M(k 正常)	13125 Nm
M(kmax)	16660 Nm
轴 2 转矩 M(r)	
M(r 正常)	4018 Nm
M(rmax)	5144 Nm

垂直力 F(v)、水平力 F(h)、倾斜力矩 M(k)、轴 1 的转矩 M(r)

Process forces

Process forces are forces that are exerted on the robot in a defined manner by an external influence. Causes include pressing processes and machining tasks carried out by the robot. The process forces that the robot can withstand depend to a very great degree on the robot position, payload, direction and duration of action. For this reason, it is not possible for a simple limit value to be specified for permissible process forces.

Permissible process torques are therefore specified for all axes of the robot. These values indicate the torque that each robot axis can withstand on a sustained basis as a result of external forces.

The following load torques must not be exceeded:

A1	2500 Nm
A2	2900 Nm
A3	2900 Nm
A4	700 Nm
A5	700 Nm
A6	610 Nm

关税信息

统计货号	84795000
原产地	DE
制造商	-
重量	963 kg

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- > **KR 120 R2100 nano F exclusive** 带有如下的工具 (20)
 - > **KR 120 R2100 nano F exclusive** 有以下选项 (31)
 - > **KR 120 R2100 nano F exclusive** 带有如下的标准组件 (2)
 - > **KR 120 R2100 nano F exclusive** 需要 (8)
 - > **KR 120 R2100 nano F exclusive** 带有如下的备件 (18)