

INDUSTRIAL ROBOT HANDLING APPLICATION



- With compact design 20kg payload and about 1.8 meters arm span, it can be installed on the ground or upside down flexibly.
- With large working space and fast running speed, it is suitable for welding, spraying, loading and unloading, handling, sorting, assembling and other applications.
- The safety emergency stop board is independent of the controller, and the safety relay circuit is adopted to provide double circuit emergency stop to ensure the reliability of emergency stop.
- The robot body cables are made of special cables for highly flexible robots.
- Built-in three-phase transformer, 380V and 200V isolation, more stable power supply.
- Power supply requirements can be customized for different countries. Built-in three-phase filter can effectively improve the performance of EMC and EMI.
- The robot body is with dual-circuit gas pipe and meets welding and handling requirements.

Model		CRP-RH18-20
Arm form		Vertical multiple joints
Degree of freedom	6 axis	
Maximum payload	20KG	
Repeated positioning accuracy	±0.08mm	
Maximum reaching distance		1730mm
Robot body weight		285KG
Installation mode		Ground, upside down mounting, wall mounting
Maximum travel	axis 1	Ground/upside down mounting: ±167°~167°, wall mounting: -30°~30°
	axis 2	-45°~175°
	axis 3	-80°~155°
	axis 4	-190°~190°
	axis 5	-125°~125°
	axis 6	-360°~360°
Maximum speed	axis 1	160°/S
	axis 2	160°/S
	axis 3	169°/S
	axis 4	301°/S
	axis 5	342°/S
	axis 6	520°/S
Allowable torque	axis 4	55N.m
	axis 5	55N.m
	axis 6	30N.m
Allowable moment of inertia	axis 4	2.2kg.m²
	axis 5	2.2kg.m²
	axis 6	1.2kg.m²
Installation environment	ambient temperature	0~45°C
	relative humidity	20~80%(No condensation)
	vibration	Under 0.5 G
	Others	Robot installation must be away from: Flammable or corrosive liquids or gases, electrical sources of interference
IP level		Body IP54 , wrist IP67
Advantage features		Compact structure, high speed, high precision, high expansibility and easy operation
Application		cutting, assembly, handling, marking, grinding
Electric Cabinet Configuration		G4/G5+External Transformer

The technical drawings show the installation dimensions of the pump base and the flange dimensions. The base drawing includes overall dimensions (335mm width and height), mounting hole positions (130mm and 167.5mm), and mounting hole specifications (2-Ø12H7 and 4-Ø18). The flange drawing shows the flange diameter (Ø36H7), mounting hole diameter (Ø4H7), and other specifications (8-M6 (BQS) and Ø90H7).

INSTALLATION DIMENSION OF BASE

Flange Dimensions

Technical drawing of the R419 robot arm, showing three views: front, side, and top.

Front View Dimensions:

- Overall width: 1729.77
- Overall height: 2080
- Base width: 1430
- Base offset: 1033
- Joint offset 1: 808
- Joint offset 2: 709
- Joint offset 3: 277
- Joint offset 4: 419
- Joint offset 5: 523
- Joint offset 6: 316
- Joint offset 7: 768
- Joint offset 8: 820
- Joint offset 9: 115
- Joint offset 10: 795
- Joint offset 11: 150
- Joint offset 12: 200
- Joint offset 13: 500
- Joint offset 14: 760
- Joint offset 15: 150
- Joint offset 16: 115
- Joint offset 17: 173
- Joint offset 18: 275
- Joint offset 19: 271
- Joint offset 20: 229
- Joint offset 21: 1008
- Joint offset 22: 1729.77
- Joint offset 23: 1430
- Joint offset 24: 1033
- Joint offset 25: 808
- Joint offset 26: 709
- Joint offset 27: 277
- Joint offset 28: 419
- Joint offset 29: 523
- Joint offset 30: 316
- Joint offset 31: 768
- Joint offset 32: 820
- Joint offset 33: 115
- Joint offset 34: 795
- Joint offset 35: 150
- Joint offset 36: 200
- Joint offset 37: 500
- Joint offset 38: 760
- Joint offset 39: 150
- Joint offset 40: 115
- Joint offset 41: 173
- Joint offset 42: 275
- Joint offset 43: 271
- Joint offset 44: 229
- Joint offset 45: 1008
- Joint offset 46: 1729.77
- Joint offset 47: 1430
- Joint offset 48: 1033
- Joint offset 49: 808
- Joint offset 50: 709
- Joint offset 51: 277
- Joint offset 52: 419
- Joint offset 53: 523
- Joint offset 54: 316
- Joint offset 55: 768
- Joint offset 56: 820
- Joint offset 57: 115
- Joint offset 58: 795
- Joint offset 59: 150
- Joint offset 60: 200
- Joint offset 61: 500
- Joint offset 62: 760
- Joint offset 63: 150
- Joint offset 64: 115
- Joint offset 65: 173
- Joint offset 66: 275
- Joint offset 67: 271
- Joint offset 68: 229
- Joint offset 69: 1008
- Joint offset 70: 1729.77
- Joint offset 71: 1430
- Joint offset 72: 1033
- Joint offset 73: 808
- Joint offset 74: 709
- Joint offset 75: 277
- Joint offset 76: 419
- Joint offset 77: 523
- Joint offset 78: 316
- Joint offset 79: 768
- Joint offset 80: 820
- Joint offset 81: 115
- Joint offset 82: 795
- Joint offset 83: 150
- Joint offset 84: 200
- Joint offset 85: 500
- Joint offset 86: 760
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- Joint offset 88: 115
- Joint offset 89: 173
- Joint offset 90: 275
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- Joint offset 92: 229
- Joint offset 93: 1008
- Joint offset 94: 1729.77
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- Joint offset 106: 795
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- Joint offset 137: 173
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- Joint offset 140: 229
- Joint offset 141: 1008
- Joint offset 142: 1729.77
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- Joint offset 165: 1008
- Joint offset 166: 1729.77
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- Joint offset 175: 768
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- Joint offset 178: 795
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- Joint offset 189: 1008
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- Joint offset 196: 419
- Joint offset 197: 523
- Joint offset 198: 316
- Joint offset 199: 768
- Joint offset 200: 820
- Joint offset 201: 115
- Joint offset 202: 795
- Joint offset 203: 150
- Joint offset 204: 200
- Joint offset 205: 500
- Joint offset 206: 760
- Joint offset 207: 150
- Joint offset 208: 115
- Joint offset 209: 173
- Joint offset 210: 275
- Joint offset 211: 271
- Joint offset 212: 229
- Joint offset 213: 1008
- Joint offset 214: 1729.77
- Joint offset 215: 1430
- Joint offset 216: 1033
- Joint offset 217: 808
- Joint offset 218: 709
- Joint offset 219: 277
- Joint offset 220: 419
- Joint offset 221: 523
- Joint offset 222: 316
- Joint offset 223: 768
- Joint offset 224: 820
- Joint offset 225: 115
- Joint offset 226: 795
- Joint offset 227: 150
- Joint offset 228: 200
- Joint offset 229: 500
- Joint offset 230: 760
- Joint offset 231: 150
- Joint offset 232: 115
- Joint offset 23