



5-Axis BI-Rotating Heads

HITECO
HIGH TECHNOLOGY COMPONENTS



2-axis milling heads for 5-axis processing

Type	ORBITAL Series (50° inclination angle of B-axis)			Type	TILT Series (90° inclination angle of A-axis)			
Description	ORBITAL J	ORBITAL K	ORBITAL H	Description	TILT J	TILT K	TILT H	TILT TLP
Standard servomotor	Yaskawa	Yaskawa	Yaskawa	Standard servomotor	Yaskawa	Yaskawa	Yaskawa	Yaskawa
Encoder B+C Axis	Encoder absolute	Encoder absolute	Encoder absolute	Encoder A+C Axis	Encoder absolute	Encoder absolute	Encoder absolute	Encoder absolute
Duration of torque B-Axis	320 Nm	320 Nm	320 Nm	Duration of torque A-Axis	380 Nm	380 Nm	380 Nm	720 Nm
Duration of torque C-Axis	320 Nm	320 Nm	670 Nm	Duration of torque C-Axis	380 Nm	380 Nm	460 Nm	550 Nm
Max. torque B-Axis	570 Nm	570 Nm	740 Nm	Max. torque A-Axis	570 Nm	570 Nm	570 Nm	1720 Nm
Max. torque C-Axis	570 Nm	570 Nm	980 Nm	Max. torque C-Axis	570 Nm	570 Nm	980 Nm	1420 Nm
Mechanically blocked axes	No	C-Axis	B+C-Axis	Mechanically blocked axes	No	No	A+C-Axis	A+C-Axis
Max. rotation B-Axis	± 185°	± 185°	± 185°	Max. rotation A-Axis	± 135°	± 135°	± 135°	± 100°
Max. rotation C-Axis	± 320°	± 320°	± 320°	Max. rotation C-Axis	± 320°	± 320°	± 320°	± 320°
Positioning precision B+C Axis	0,1 mm	0,1 mm	0,1 mm	Positioning precision A+C Axis	0,1 mm	0,1 mm	0,1 mm	0,1 mm
Max. positioning speed B-Axis	7.000° /'	7.000° /'	10.000° /'	Max. positioning speed A-Axis	6.100° /'	6.100° /'	6.100° /'	10.000° /'
Max. positioning speed C-Axis	7.000° /'	7.000° /'	11.500° /'	Max. positioning speed C-Axis	6.100° /'	6.100° /'	9.300° /'	12.000° /'
Max. operating speed B-Axis	4.000° /'	4.000° /'	4.500° /'	Max. operating speed A-Axis	3.700° /'	3.700° /'	3.700° /'	4.500° /'
Max. operating speed C-Axis	4.000° /'	4.000° /'	5.500° /'	Max. operating speed C-Axis	3.700° /'	3.700° /'	5.600° /'	7.000° /'
Motor spindle type	QX-2 8.5/12 QX-2 10/12	QS-2 12/12 QS-2 15/12	QS-2 15/12 QS-2 18/12	Motor spindle type	QX-2 8.5/12 QX-2 10/12	QS-2 10/7 QS-2 12/12 QS-2 15/12	QS-2 10/7 QS-2 15/12 QS-2 18/12 PX-2 20/10	QM-2 30/6
Total weight (incl. motor spindle)	55 kg	100 kg	140 kg	Total weight (incl. motor spindle)	60 kg	100 kg	120 kg	200 kg

Motor spindle type	Power S1 / S6 60%	Max. speed in RPM	Nominal speed in RPM	Frequency	Poles	Cooling	Tool Receptacle	Encoder on spindle	Weight
QX-2 8.5/12 24 63F NC	8,5 / 10	24 000	12 000	800 Hz	4	Liquid	HSK 63F	Optional	20 kg
QX-2 10/12 24 63F NC	10 / 12	24 000	12 000	800 Hz	4	Liquid	HSK 63F	Optional	18 kg
QS-2 12/12 24 63F NC	12 / 14	24 000	12 000	800 Hz	4	Liquid	HSK 63F	Optional	27 kg
QS-2 15/12 24 63F NC	15 / 17	24 000	12 000	800 Hz	4	Liquid	HSK 63F	Optional	26 kg
QS-2 18/12 24 63F NC	18 / 20	24 000	12 000	800 Hz	4	Liquid	HSK 63F	Optional	25 kg
QS-2 10/7 24 63F NC	10 / 12	24 000	7 000	800 Hz	4	Liquid	HSK 63F	Optional	26 kg
PX-2 20/10 24 63A NC	19.8 / 22.3	24 000	10 000	800 Hz	4	Liquid	HSK 63A	Standard	
QM-2 30/6 13 80F/85S NC	30 / 35	13 500	6 000	800 Hz	4	Liquid	HSK 80F / HSK 85S	-	70 kg