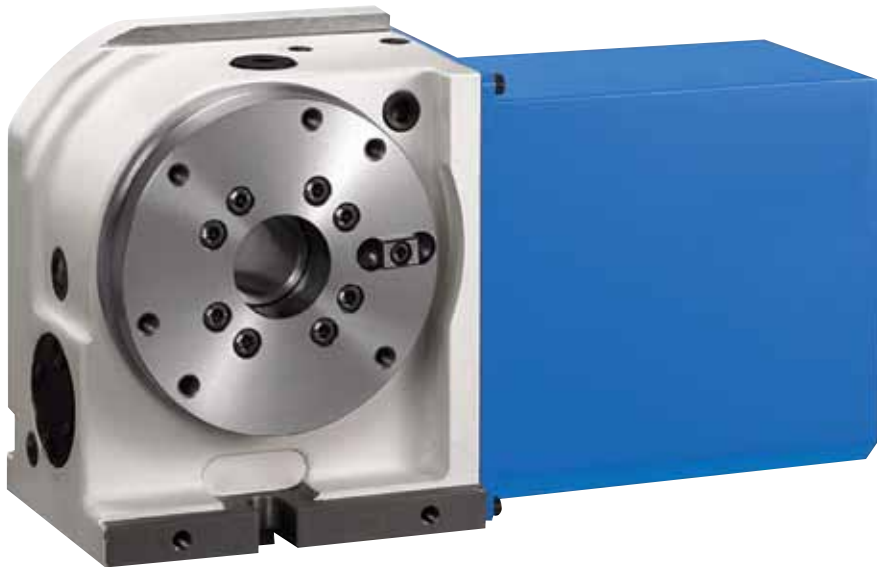


KITAGAWA MR SERIES NC ROTARY TABLES

MODELS

MR120R**MR160R****MR200R****MR250R****MR320R**

- **ECONOMICALLY PRICED, HIGH PERFORMANCE UNITS**
- **HIGH SPEED TABLE ROTATION**
50 RPM FOR 120 MODEL
41.6 RPM FOR 160 MODE
33.3 RPM FOR 200 AND 250 MODELS
16.6 RPM FOR 320 MODEL
- **GUARANTEED ACCURACY WITHIN 20 SECONDS IN MOST MODELS**
- **AIR PURGE**
MOTOR COVER IS AIR-PURGED TO PREVENT MOISTURE AND FOREIGN MATERIALS FROM ENTERING
- **TRIPLE DISC CLAMPING SYSTEM**
A PATENTED POWERFUL AIR CLAMPING SYSTEM EXERTS THE LARGEST CLAMPING FORCE; THUS ELIMINATING THE NEED FOR A HYDRAULIC UNIT.
- **DOUBLE LEAD WORM GEAR**
OPTIMUM DURABILITY AND HIGHEST ACCURACY
- **EXTRA LARGE CROSS ROLLER BEARING**
PROVIDES THE HIGHEST RIGIDITY AND ACCURACY
- **COMPACT & VERSATILE DESIGN**
HORIZONTAL AND VERTICAL USE

KITAGAWA MR SERIES NC ROTARY TABLES

LOAD CAPACITIES

	PERMISSIBLE LOAD		MAX. MACHINE FORCE			*MAX. TORQUE CAPACITY
MODEL	lb.	lb.	lb.	ft-lb.	ft-lb.	ft-lb. W
MR120R	264	132	1798	258	110	133
MR160R	353	176	2248	443	229	162
MR200R	441	220	3822	811	258	199
MR250R	551	276	4721	1180	443	354
MR320R	772	397	5620	1772	885	590

Note: Clamping force is based on pneumatic at 71 PSI.

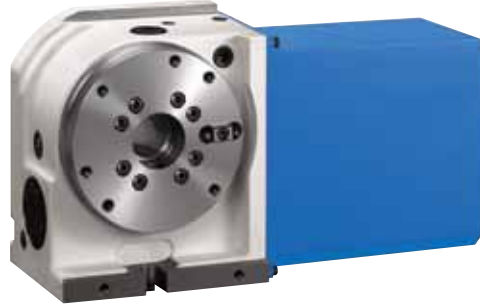
Note: * means maximum torque capacity of worm gear per 1 rpm table rotation.

GUARANTEED ACCURACIES

ITEM	DESCRIPTION OF INSPECTION	GUARANTEED ACCURACY	1	2
1	Run-out of Table I.D.	.0004		
2	Run-out of Table Face	.0008		
3	Parallelism Between Table Face and Base	.0008		
4	Parallelism Between Spindle and Base	.0008		
5	Parallelism Between Spindle and Guide Block	.0008		
6	Indexing Accuracy (second)	20		
7	Repeatability (second)	±2		

Note: Measurement is taken at 6" length from face or center of the table.

KITAGAWA MR SERIES NC ROTARY TABLES



MODEL		MR120R	MR160R	MR200R	MR250R	MR320R
Table Diameter		5.04	6.50	7.95	9.84	12.6
Center Height in Vertical		4.72	5.51	5.51	7.09	8.86
Table Height in Horizontal		5.52	5.91	7.01	7.29	8.47
Overall Height in Vertical		8.86	9.37	10.59	12.01	15.16
Thru Hole Diameter		1.26	1.57	1.77	2.76	4.13
AC Servo Motor	Fanuc	αiF2/5000	αiF2/5000	αiF4/4000	αiF4/4000	αiF8/3000
	Mitsubishi	HF-75S	HF-75T	HF-104T	HF-104T	HF-104T
	Yaskawa	SGMAS-08	SGMAS-08	SGMGH-05	SGMGH-09	SGMGH-09
	OSP	BL-ME24J	BL-ME24J	BL-ME40J	BL-ME40J	BL-ME80J
Gear Ratio		1/60	1/72	1/90	1/90	1/120
**Maximum R.P.M.		50.0	41.6	33.3	33.3	25.0
Minimum Resolution (Degree)		0.001	0.001	0.001	0.001	0.001
Indexing Accuracy (sec)		20	20	20	20	20
Repeatability (sec)		±2	±2	±2	±2	±2
*Clamping Force (ft-lb.)		110	229	258	443	885
Permissible Load (lb.)	Horizontal	264	353	441	551	772
	Vertical	132	176	220	276	397
Maximum Work Inertia (lb.-in-sec ²)		1.91	4.51	8.85	17.26	39.67
Weight (lb.)		62	88	108	187	287

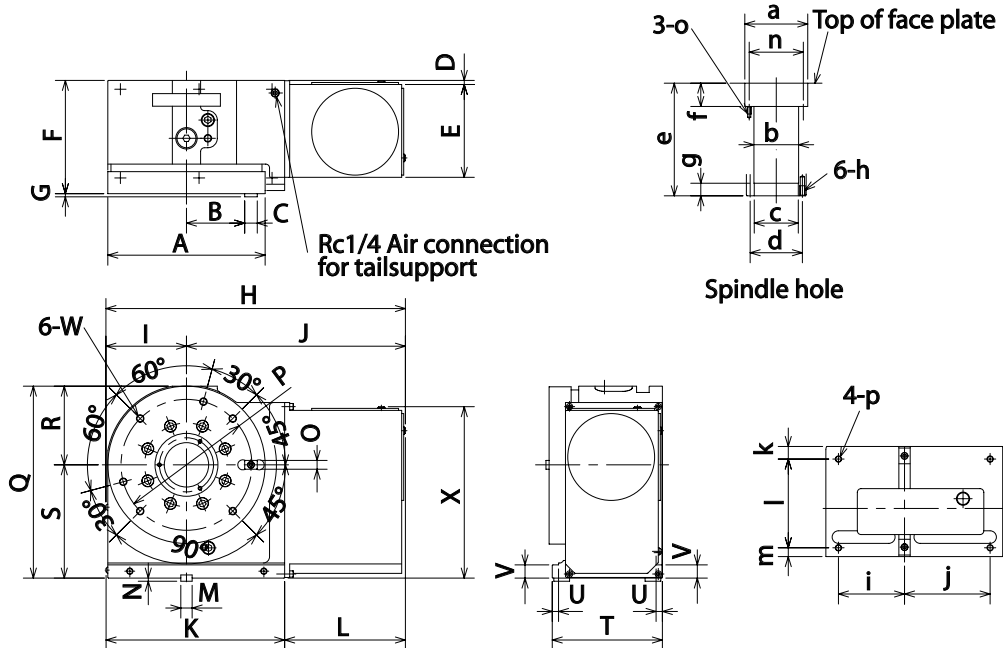
Note: * Clamping force is based on air pressure at 71 PSI.

Note: ** means that maximum RPM is obtained with motor speed at 3,000 rpm.

Note: See accessory chart (p223) for complete listing of optional accessories.

Note: Recommended oil is Mobil Vactra #1.

KITAGAWA MR SERIES NC ROTARY TABLES



MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M
MR120R	5.04	1.65	.79	.40	4.76	5.36	.16	15.24	3.35	11.89	7.05	8.19	.5512 h7
MR160R	6.50	1.97	.79	.35	4.84	5.71	.20	16.81	3.62	13.19	7.91	8.90	.7087 h7
MR200R	7.95	2.64	.79	.27	5.79	6.81	.20	18.27	4.41	13.86	10.16	8.11	.7087 h7
MR250R	9.84	3.64	.79	.26	5.81	7.09	.20	18.74	5.04	13.70	11.18	7.56	.7087 h7
MR320R	12.60	4.92	.79	.59	6.02	8.27	.20	22.05	6.30	15.75	12.60	9.45	.7087 h7

N	O	P	Q	R	S	T	U	V	W	X	a	b
.20	.3937 h7	4.45	8.07	3.35	4.72	5.16	.39	.83	M8	8.86	1.9685 H7	1.28
.20	.5512 h7	5.71	9.37	3.86	5.51	5.59	.39	.83	M10	8.68	1.9685 H7	1.59
.20	.5512 h7	6.69	9.84	4.33	5.51	6.61	.39	.83	M10	10.59	2.5591 H7	1.81
.20	.5512 h7	8.19	12.01	4.92	7.09	6.89	.39	.83	M12	10.73	3.9370 H7	2.80
.20	.5512 h7	11.10	15.16	6.30	8.86	7.87	.39	1.18	M12	13.82	5.1181 H7	4.17

c	d	e	f	g	h	i	j	k	l	m	n	o	p
1.2600 H8	1.61	5.33	.94	.79	M5	2.36	2.36	.83	3.78	.55	1.61	M5	M10
1.5748 H8	1.97	5.67	1.10	.79	M6	2.76	3.70	.98	4.06	.55	—	—	M10
1.7717 H8	2.17	6.77	1.38	.79	M6	3.35	5.00	.83	5.24	.55	2.09	M5	M10
2.7559 H8	3.27	7.05	1.46	.79	M8	4.13	5.35	.79	5.55	.55	3.39	M6	M10
4.1339 H8	4.80	8.24	1.34	.79	M10	4.72	4.72	.63	6.65	.59	4.57	M6	M16

ACCESSORY CHART & RECOMMENDED LUBRICANT OIL FOR KITAGAWA ROTARY TABLES

MODEL/ KIW NO.	TAIL STOCK	AIR/HYDRAULIC TAILSTOCK	SCROLL CHUCK	AIR CHUCK	ROTARY JOINT	AIR BOOSTER	LUBE/OIL
TC-5C-1/ TC100	TS100	TS100-RSA	SC-4	—	—	—	MOBIL VACTRA NO. 1
TC-5C-1A/ TC100-A	TS100	TS100-RSA	SC-4				
TC-5C-2A/ TC2100-A	TS100-2	TS100-2RSA	SC-4				
TC-5C-3A/ TC3100-A	TS100-3	TS100-3RSA	SC-4				
MR120	TS160	TS160-RSA	SC-5	NRC04	RJ32H12Q		
MR160	TS200	TS200-RSA	SC-6T	NRC04	RJ40H16Q		
MR200	TS200	TS200-RSA	SC-7T	NRC06	RJ40H20Q		
MR250	TS250	TS250-RSA	SC-9T	NRC08	RJ70H25Q		
MR320	TS320	TS320-RSA	SC-12T-4	NRC10	RJ70H25M		
TMX160	TS160	TS160-RSH(A)	SC-6T	NRC04,06	RJ40H16D		
TMX200	TS200	TS200-RSH(A)	SC-7T	NRC04,06	RJ40H20D		
TMX250	TS250	TS250-RSH(A)	SC-9T	NRC06,08	RJ70H25D		
TRX320	TS320	TS320-RSH(A)	SC-12T-4	NRC10	RJ70H32K		
TR401	TS400	—	SC-14-PB	—	RJ80H40R		
TR500	TS500		SC-14-PB		RJ80H		
TP530	TS500		SC21-12.6 IC21-13.6		—		
TR630	TS630		SC-16		RJ80H		
TBX160	TS160	TS160-RSA(H)	SC-6T	NRC04,06	—	—	MOBIL VACTRA NO. 1
TBX200	TS200	TS200-RSH(A)	SC-7T	NRC04,06	RJ40H20F		MOBIL VACTRA NO. 2
TBX250	TS250	TS250-RSH(A)	SC-9T	NRC06,08	RJ70H25F		
TBX320	TS320	TS320-RSH(A)	SC-12T-4	NRC10	RJ70H32F		