



DR-TR Series

Flexible Positioning System





MOTION INDEX DRIVES

Flexible Positioning System

Motion Index Drives programmable index drives all feature extremely high accuracy with high quality manufacturing and over-sized components. All programmable index drives feature flame hardened constant lead barrel cams, which provide no backlash between top rotating dial and the cam itself, through the multiple cam followers engaged into the cam at all times. The large number of cam followers engaged in the cam allows for increased inertial loading capabilities along with the ability for very fast index times and very long life. The programmable index tables can be driven with either a 3 phase AC motor with encoder, or with a servo motor of choice. The encoder on the motor provides the position feedback of the index drive, and in many cases, an additional axis for a robot can be used to control the index table while utilizing the same brand servo as the robot. Programmable index tables provide infinite positioning while maintaining the same high quality and reliability of Motion Index Drives traditional fixed index drives.



Motion Index Drives DR-TR Trunnion system is a complete 3 axis machine, designed and engineered to provide superior performance in demand-ing industrial automation environments. The DR-TR System is comprised of a base index drive, which can be either a fixed number of station index drive, or a programmable drive, which rotates a steel weldment. On this weldment are mounted two trunnion assemblies, each consisting of a head stock and tail stock. The system provides a superior accuracy, index time, and flexibility to meet the demands of modern automation systems. As each system is built for our customers needs, all dimensions can be adjusted to fit the application requirement.

Key Features and Benefits

- Infinite positioning and index angle is possible
- Multiple oversized cam followers engaged in cam at all times
- Minimal maintenance
- Can utilize any motor required (AC motor with encoder, servo, etc.)
- Range in all sizes of index drives
- Capable of both high speed applications and high load
- Extremely compact relative to inertial load capability

DUAL TRUNNIONS

Assembly Number	Axis 1	Trunnion	Trunnion Ratio	CI Height	Faceplate Width
TMF3000-TR250-171-750-2000-X	TMF3000	250mm	171mm	750mm	2000mm
TMF3000-TR250-171-750-2500-X	TMF3000	250mm	171mm	750mm	2500mm
TMF3000-TR250-171-750-3000-X	TMF3000	250mm	171mm	750mm	3000mm
TMF3000-TR250-171-900-2000-X	TMF3000	250mm	171mm	900mm	2000mm
TMF3000-TR250-171-900-2500-X	TMF3000	250mm	171mm	900mm	2500mm
TMF3000-TR250-171-900-3000-X	TMF3000	250mm	171mm	900mm	3000mm
TMF3000-TR300-185-750-2000-X	TMF3000	300mm	185mm	750mm	2000mm
TMF3000-TR300-185-750-2500-X	TMF3000	300mm	185mm	750mm	2500mm
TMF3000-TR300-185-750-3000-X	TMF3000	300mm	185mm	750mm	3000mm
TMF3000-TR300-185-900-2000-X	TMF3000	300mm	185mm	900mm	2000mm
TMF3000-TR300-185-900-2500-X	TMF3000	300mm	185mm	900mm	2500mm
TMF3000-TR300-185-900-3000-X	TMF3000	300mm	185mm	900mm	3000mm

TMF3000-TRXXX-XXX-XXX-XXXX

Table Class
 Trunnion Class
 Trunnion Ratio
 CI Height
 Faceplate Width



Standard Double Trunnion with Kuka Motors (other servo motors can be used)

CLASS	MODEL #	EXCHANGE AXIS MOTOR	EXCHANGE AXIS AMPLIFIER	TRUNNION AXIS MOTORS	TRUNNION AXIS DUAL AMPLIFIER	EXCHANGE 180° INDEX TIME	TRUNNION 180° INDEX TIME	EACH TRUNNION PAYLOAD	MAX TRUNNION ENVELOPE	MAX TRUNNION INERTIA	TRUNNION CENTER- LINE TO FLOOR DISTANCE	DISTANCE BETWEEN FACE PLATES
250	TMF3000- TR250-171-750-2000-X	MG360	KSD64	MG180	KSD32	4.5	2	1000	1400	237	750	2000
	TMF3000- TR250-171-750-2500-X	MG360	KSD64	MG180	KSD32	4.5	2	1000	1400	237	750	2500
	TMF3000- TR250-171-750-3000-X	MG480	KSD64	MG180	KSD32	4.5	2	1000	1400	237	750	3000
	TMF3000- TR250-171-900-2000-X	MG360	KSD64	MG180	KSD32	4.5	2	1000	1400	237	900	2000
	TMF3000- TR250-171-900-2500-X	MG360	KSD64	MG180	KSD32	4.5	2	1000	1400	237	900	2500
	TMF3000- TR250-171-900-3000-X	MG480	KSD64	MG180	KSD32	4.5	2	1000	1400	237	900	3000
300	TMF3000- TR300-185-750-2000-X	MG360	KSD64	MG180	KSD48	5	2	1818	1400	620	750	2000
	TMF3000- TR300-185-750-2500-X	MG360	KSD64	MG180	KSD48	5	2	1818	1400	620	750	2500
	TMF3000- TR300-185-750-3000-X	MG360	KSD64	MG180	KSD48	5	2	1818	1400	620	750	3000
	TMF3000- TR300-185-900-2000-X	MG360	KSD64	MG180	KSD48	5	2	1818	1400	620	900	2000
	TMF3000- TR300-185-900-2500-X	MG360	KSD64	MG180	KSD48	5	2	1818	1400	620	900	2500
	TMF3000- TR300-185-900-3000-X	MG360	KSD64	MG180	KSD48	5	2	1818	1400	620	900	3000

Standard Double Trunnion with Fanuc Motors (other servo motors can be used)

250	TMF3000- TR250-171-750-2000-X	A22IF	AISV-80	A8IS	AISV-80/80	4.5	2	1000	1400	237	750	2000
	TMF3000- TR250-171-750-2500-X	A22IF	AISV-80	A8IS	AISV-80/80	4.5	2	1000	1400	237	750	2500
	TMF3000- TR250-171-750-3000-X	A30IF	AISV-80	A8IS	AISV-80/80	4.5	2	1000	1400	237	750	3000
	TMF3000- TR250-171-900-2000-X	A22IF	AISV-80	A8IS	AISV-80/80	4.5	2	1000	1400	237	900	2000
	TMF3000- TR250-171-900-2500-X	A22IF	AISV-80	A8IS	AISV-80/80	4.5	2	1000	1400	237	900	2500
	TMF3000- TR250-171-900-3000-X	A22IF	AISV-80	A8IS	AISV-80/80	4.5	2	1000	1400	237	900	3000
300	TMF3000- TR300-185-750-2000-X	A22IF	AISV-80	A12IS	AISV-80/80	5	2	1818	1400	620	750	2000
	TMF3000- TR300-185-750-2500-X	A22IF	AISV-80	A12IS	AISV-80/80	5	2	1818	1400	620	750	2500
	TMF3000- TR300-185-750-3000-X	A22IF	AISV-80	A12IS	AISV-80/80	5	2	1818	1400	620	750	3000
	TMF3000- TR300-185-900-2000-X	A22IF	AISV-80	A12IS	AISV-80/80	5	2	1818	1400	620	900	2000
	TMF3000- TR300-185-900-2500-X	A22IF	AISV-80	A12IS	AISV-80/80	5	2	1818	1400	620	900	2500
	TMF3000- TR300-185-900-3000-X	A22IF	AISV-80	A12IS	AISV-80/80	5	2	1818	1400	620	900	3000



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