

## Single axis NC controllers equipped with advanced functions for M-signal

Single axis NC table controllers that operate by means of M-signals from the machining center. Operation can be programmed by machining center under "Remote mode + M" specification.

For small-sized rotary tables

### TPC-Jr K2/K3

Single axis NC controllers that operate small-sized TSUDAKOMA NC rotary tables by means of M-signals from machining center.

TSUDAKOMA rotary tables equipped with super-compact AC servo motors are the most compact among similar models.

Operation can be programmed by machining center.

With "Remote mode + M" specification

(Parameter change)  P.52

※Corresponding to Cable option

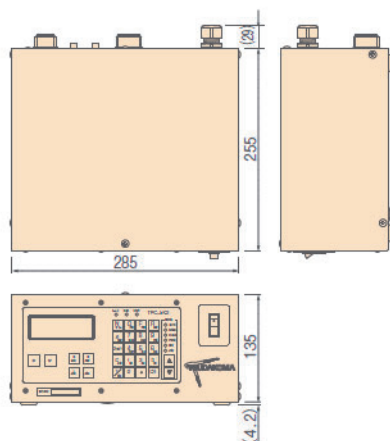


#### Applicable models

	K2	K3
RN-100	●	
RWE/RWA-160	●	
RWE/RWA-200		●
RWA-250*		●
RWA-320*		●
TWA-100	●	
TWA-130	●	
TWA-160	●	
TWA-200		●
TWM-100*	●	
TWM-160*		●
TBS-130	●	
TBS-160	● (R)	● (T)
TDB-200		● (T)

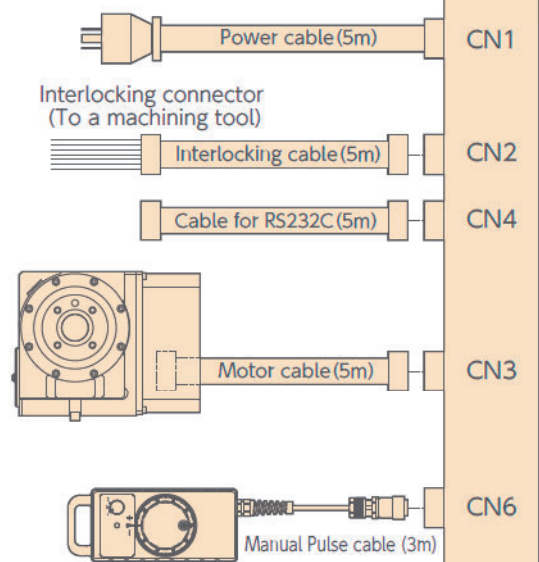
\*Table maximum rotation speed is limited.

#### Dimensions



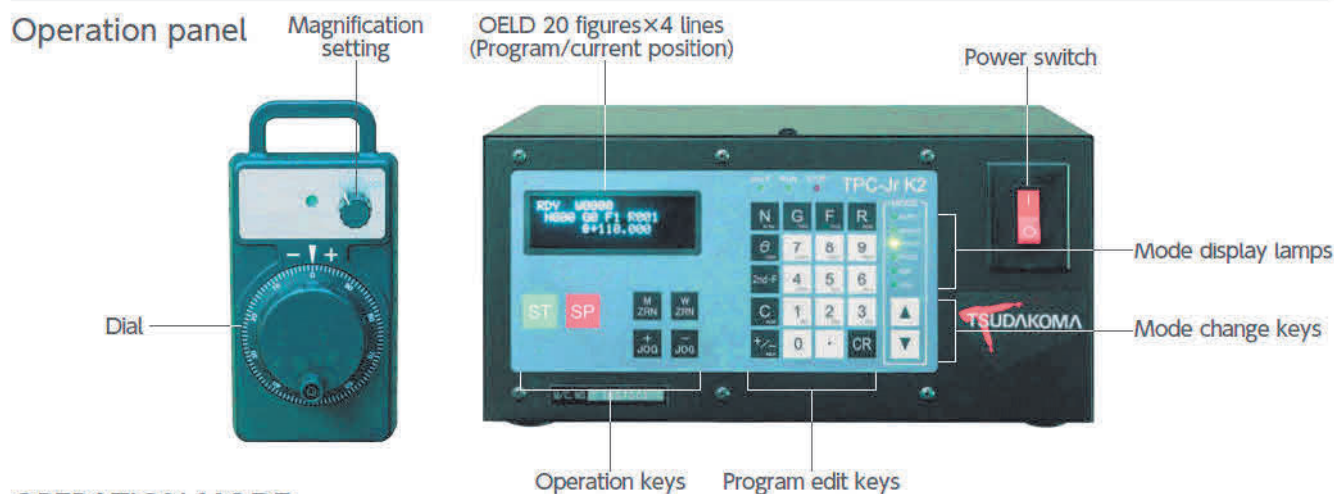
#### Cables

3P plug (with earth)  
Single phase 200V/220V



Note: The cable for RS232C is an optional item.  
Note: Manual pulse generator is an optional item.

## TPC-Jr FUNCTIONS



### OPERATION MODE

- **AUTO** **AUTO :**  
Automatic operation by an M signal from the machining center.
- **SINGLE** **SINGLE :**  
Single operation of TPC-Jr. By pressing **ST**, positioning is performed once.
- **CHECK** **CHECK :**  
Block number call, program check and self-diagnosis.
- **PROG** **Program mode :**  
For inputting and editing the program.
- **MDI** **MDI mode :**  
For setup operation. Ten blocks of programs can be carried out.
- **JOG** **JOG mode :**  
For manual feed and step feed.
- **HANDLE** **Handle mode :**  
Manual pulse operation.

### Program edit keys

- 2nd-F** + **N** **Workpiece No. (Program No.)**  
0000 to 9999  
100 programs registerable
- N** **Block No.**  
000 to 999
- G** **Operation command**  
G0 to G4: Movement command  
G5 to G9: Assistance function
- F** **Feed rate select command**  
F0: Rapid positioning speed  
F1 to F9: Cutting feed rate
- R** **Assistance code for codes**
- θ** **Travel distance command (angle, divided number)**  
Block No./Sub-program No.

G-code		R-code		θ-code	
No.	Command	No.	Command	Command	Setting
G0	Direct angle command	001 to 999	Number of Repetition (INC command)	Command angle	±000.001° to 999.999°
		000	(ABS command)	Command angle	±000.000° to 360.000°
G1	Direct indexing number command	001 to 999	Number of repetitions	Number of divisions for 360°	±1 to 999999div.
G2	Arc-indexing number command	001 to 999	Number of divisions, Number of repetitions	Arc-angle indexed	±000.001° to 360.000°
G3	Lead cutting command	000 to 100	Number of table rotations	Command angle	±0° to 360.000°
G4	Zero point return command	000	1st zero point return (mechanical zero point)	Not required	
		001	2nd zero point return		
		002	3rd zero point return		
G5	Sub-program call command	001 to 999	Number of repetitions	Sub-program No.	0000 to 9999
G6	Subprogram return command		Not required	Not required	
G7	Program end command		Not required	Target address	000 to 999
G8	Workpiece coordinate system setting command		Not required	Reference coordinate	±0° to 360.000°
G9	Declaration command	000	No operation	Not required	
		001/002	Clamp OFF/ON		
		003/004	Dowel OFF/ON		
		005/006	Indexing group control OFF/ON	Dwell time	000 to 999 (×10m sec)
		007/008	Directional positioning OFF/ON	Not required	
		009/010	Completion signal control command OFF/ON		
		011	Program display selection command		
		012	Current position display selection command	Completion signal selection	
		013	Remaining angle display selection command	Not required	

RBS

RBH

Multi-Spindle  
RBM

TBS

RWE/RWA  
RN

RWH

RWA-B  
RNCV-B

RWB

RWB-K  
RNCK

RCB

RCH  
RNC

RCV

Multi-Spindle  
RWM

TWA/TN

TWB  
TTNCMulti-Spindle  
TWM

RDS

RTV  
RTTTDS  
TDB

NC Controllers

Accessories

Options

Technical  
Information