For large-sized tables

TPC5 SR6／SR12／SR30

Single axis NC controllers automatically start large-sized TSUDAKOMA NC rotary tables by receiving M-signals from machining center.

Easy programming by simple input of the interactive system.
In increments of 0.001° (standard), 0.0001° or 1 sec.

Ready to set optional functions easily.

- With an optional function of B signal, the workpiece number, block number and tilting angle command can be entered from machining center.
- Operation can be programmed by machining center.
  With "remote mode + M" specification (Parameter change) ☞ P.52
  ※Corresponding to Cable option


MDI unit

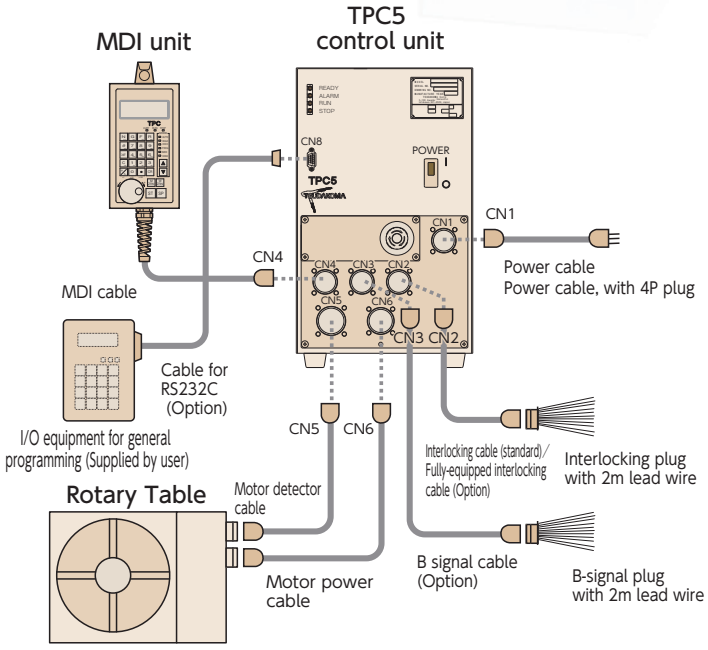
TPC5 control unit

Applicable models

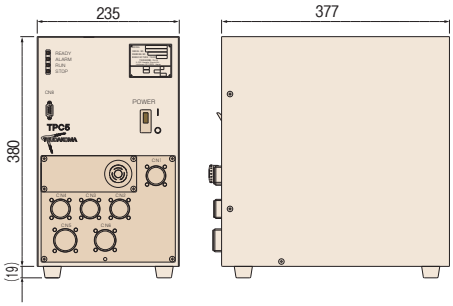
	SR6	SR12	SR30
RWB-250	●		
RWB-320,400,500		●	
RWM-160	●		
RWM-200／250／320-2	●		
RCH/RCV-800		●	
RCH/RCV-1000,1250			●
RCV-1600			●
RNC-2001,1501			●
TN-320	●		
TN-450			●
TWB-320	●(R)	●(T)	
TWB-630		●	
TWM-250*	●(R)	●(T)	
RBS/RBH-160	●		
RBS/RBH-250	●		
RBS/RBH-320		●	
RBM-160*	●		
TBS-250	●		

*Table maximum rotation speed is limited.
RBH requires special TPC5.

Cables

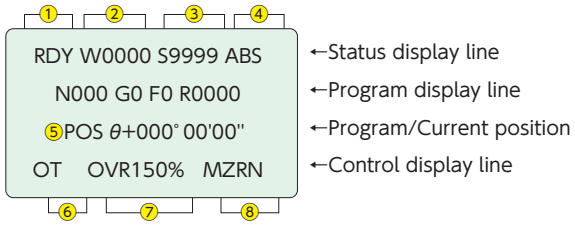


Dimensions



TPC5 FUNCTIONS

Operation panel



Status display line: ①TPC status ②Workpiece number ③Subprogram number ④Command system

Program display line: TPC5 program in 2 lines ⑤Current position/remaining (POS/REM)

Control display line: ⑥Overtravel ⑦Override/machine lock/manual interrupt ⑧Zero point return MZRN/WZRN/TZRN

OPERATION MODE

- **AUTO** AUTO : Automatic operation interlocked with machining center
- **SINGLE** SINGLE : Single operation of TPC5
- **CHECK** CHECK : Program check and self-diagnosis
- **PROG** Program mode : Program entry
- **MDI** MDI mode : Setup operation
- **HANDLE** Handle mode : Manual pulse operation/jog mode

Program edit keys

2nd·F + N W No. **Workpiece No. (Program No.)**
0000 to 9999
100 programs registerable

N W No. **Block No.** 000 to 999

G PRO **Operation command**
G0 to G4 : Movement command
G5 to G9 : Assistance function

F POS **Feed rate select command**
F0 : Rapid positioning speed
F1 to F9 : Cutting feed rate

R REM **Assistance code for codes**

θ DGN **Travel distance command (angle, divided number)**

G-code		R-code		θ-code	
No.	Command	No.	Command	Command	Setting
G0	Direct angle command	0001 to 9999	Number of Repetition (INC command)	Command angle	±000.001° to 999.999°
		0000	(ABS command)	Command angle	±000.000° to 360.000°
G1	Direct indexing number command	0001 to 9999	Number of repetitions	Number of divisions for 360°	±1 to 999999div.
G2	Arc-indexing number command	0001 to 9999	Number of divisions, Number of repetitions	Arc-angle indexed	±000.001° to 360.000°
G3	Lead cutting command	0000 to 0100	Number of table rotations	Command angle	±0° to 360.000°
G4	Zero point return command	0000	1st zero point return (mechanical zero point)	Not required	
		0001	2nd zero point return		
		0002	3rd zero point return		
G5	Sub-program call command	0000 to 9999	Number of repetitions	Sub-program No.	0000 (0001) 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	0000	No operation	Not required	
		0001/0002	Clamp OFF/ON		
		0003/0004	Dowel OFF/ON	Dwell time	001 to 999 (×10m sec)
		0005/0006	Indexing group control OFF/ON	Not required	
		0007/0008	Directional positioning OFF/ON		
		0009/0010	Completion signal control command OFF/ON	Completion signal selection	
		0011	Program display selection command	Not required	
		0012	Current position display selection command		
		0013	Remaining angle display selection command		