

Collaborative Robots

Collaborative robot for assembly, packaging, inspection and logistics

- Designed to promote a safe and harmonious workplace between humans and machines.
- Easy-to-use graphical programming environment for quick startup and operation.
- Built-in vision-based robot control enables visual servoing, inspection, and measurement operations.
- TMvision and landmark allows truly flexible, fast changeover.
- Plug & Play ecosystem provides the tools and versatility for many manufacturing needs.
- Capability to integrate with mobile robots enables fully autonomous machine tending and logistics handling applications.



TM5-700

TM5-900

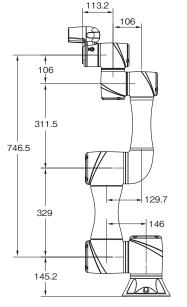
Specification

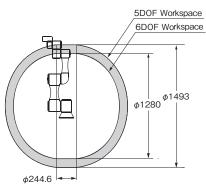
				Tr	M5		
Product Name		TM5-700	TM5M-700	TM5M-700 SEMI	TM5-900	TM5M-900	TM5M-900 SEMI
Part Number		RT6-000700□	RT6-010700	RT6-010701	RT6-000900□	RT6-010900□	RT6-010901
Weight (kg)			22.1			22.6	
Controller Weig	ght (kg)	13.5	14.5	14.5	13.5	14.5	14.5
Max Payload (k	(g)		6	1		4	
Reach (mm)			700			900	
Mounting				Wall, Tab	le, Ceiling		
Typical Speed	Typical Speed (m/s) 1.1 1.4						
	Joint 1			±2	70°		
Joint Range	Joint 2, 4, 5			±1	80°		
oomi nango	Joint 3			±1:	55°		
	Joint 6		±270°				
Joint Speeds	Joint 1, 2, 3		180°/s				
	Joint 4, 5, 6	225°/s					
Repeatability (mm) ±0.05							
IP	IP54 (robot arm), IP32 (control box), IP40 (robot stick)						
Cleanroom Cla					lass 5		
Operating Tem	perature (°C)	0 to 50					
Power Supply		100-240 VAC, 50- 60 Hz	22-60 VDC	22-60 VDC	100-240 VAC, 50- 60 Hz	22-60 VDC	22-60 VDC
Robot Arm Cal	ole Length	3m/12m	1.5m	1.5m	3m/12m	1.5m	1.5m
I/O Ports	Control Box			Digital Analo	In: 16 Out: 16 g In: 2 j Out: 1		
#0 T 0.10	Tool	Digital In: 4 Digital Out: 4 Analog In: 1 Analog Out: 0					
//O Interface 3 X COM, 1 X HDMI, 3 X LAN, 4 X USB2.0, 2 X USB3.0							
Communication	n		RS232, E	thernet (master), Mod	bus TCP/RTU (maste	er & slave)	
Integrated Cam	nera	5M pixels, color	5M pixels, color	5M pixels, color	5M pixels, color	5M pixels, color	5M pixels, color
I/O Power Supply 24V 1.5A (control box and tool)							
Programming I	Environment			TMflow, flow	chart based		
SEMI S2 Certifi	ed*	No	No	Yes	No	No	Yes

 ^{*} SEMI safety SEMI safety guidelines are issued by an industry association with the same name: SEMI (Semiconductor Equipment and Materials International), which is the central global network of manufacturers of micro- and nano-electronics industries.
 * SEMI S2 is the most well-known standard in semiconductor manufacturing equipment for Environmental, Health, and Safety (EHS).

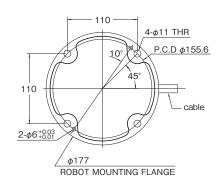
Dimensions (Unit: mm)

TM5-700

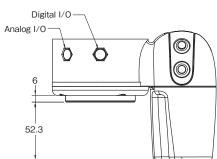


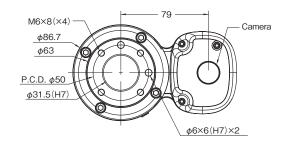


Footprint

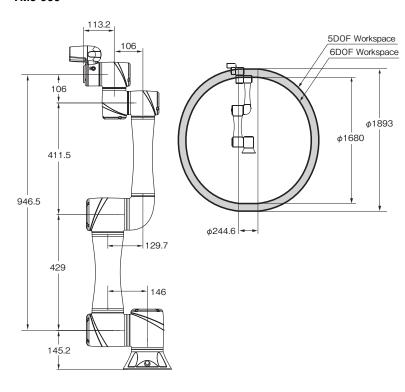


Flange





TM5-900



Control Box



TM12/14

Collaborative robot for assembly, packaging, inspection and logistics

- Designed to promote a safe and harmonious workplace between humans and machines.
- Easy-to-use graphical programming environment for quick startup and operation.
- Built-in vision-based robot control enables visual servoing, inspection, and measurement operations.
- TMvision and landmark allows truly flexible, fast changeover.
- Plug & Play ecosystem provides the tools and versatility for many manufacturing needs
- Capability to integrate with mobile robots enables fully autonomous machine tending and logistics handling applications.



TM12 TM14

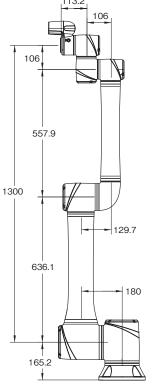
Specifications

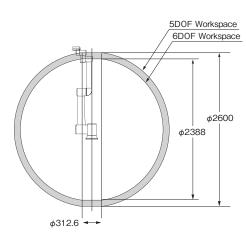
RT6-100130 RT6-110130 RT6-210110 RT6-200110 RT6-210110 RT6				TM12			TM14		
Weight (kg)	Product Name		TM12	TM12M	TM12M SEMI	TM14	TM14M	TM14M SEMI	
Controller Weight (kg)	Part Number		RT6-100130	RT6-110130	RT6-110131	RT6-200110	RT6-210110	RT6-210111	
Max Payload (kg) 12	Weight (kg)			33.3	1		32.6	II.	
Reach (mm)	Controller Weig	ht (kg)	13.8	14.5	14.5	13.8	14.5	14.5	
Mounting Wall, Table, Ceiling	Max Payload (kg	3)		12	I		14		
Typical Speed (m/s)	Reach (mm)			1300			1100		
Joint Range	Mounting				Wall, Tab	le, Ceiling			
Joint Range	Typical Speed (peed (m/s) 1.3 1.1							
Joint 3		Joint 1			±2	70°			
Joint 3	Joint Pange	Joint 2, 4, 5			±18	80°			
Joint Speeds	Joint Hange	Joint 3		±166°			±163°		
Joint Speeds		Joint 6			±2	70°			
Joint 4, 5 Joint 6 Joint 4, 5 Joint 6 Joint 7 Joint 7		Joint 1, 2			120)°/s			
Joint 4, 5 180°/s 150°/s	laint Speeds	Joint 3			180)°/s			
Page	Joint Speeus	Joint 4, 5		180°/s			150°/s		
Post		Joint 6	180°/s						
Cleanroom Class ISO Class 5	Repeatability (mm) ±0.1								
Control Box Tool Control	IP			IP54 (robot arm), IP32 (cor	ntrol box), IP40 (robot	stick)		
Power Supply	Cleanroom Clas	s			ISO C	lass 5			
Control Box	Operating Temp	erature (°C)		-	0 to	50		T.	
Control Box Digital In: 16 Digital Out: 16 Analog In: 2 Analog Out: 1 Tool Digital In: 4 Digital In: 4 Digital Out: 4 Analog In: 1 Analog In: 1 Analog In: 1 Analog Out: 0 O Interface 3 X COM, 1 X HDMI, 3 X LAN, 4 X USB2.0, 2 X USB3.0 Communication RS232, Ethernet(master), Modbus TCP/RTU (master & slave)	Power Supply		100-240 VAC, 50- 60 Hz	22-60 VDC	22-60 VDC		22-60 VDC	22-60 VDC	
Control Box Digital Out: 16 Analog In: 2 Analog Out: 1 Tool Digital In: 4 Digital Out: 4 Analog In: 1 Analog In: 1 Analog In: 1 Analog Out: 0 O Interface 3 X COM, 1 X HDMI, 3 X LAN, 4 X USB2.0, 2 X USB3.0 Communication RS232, Ethernet(master), Modbus TCP/RTU (master & slave)	Robot Arm Cabl	e Length	3m/12m	1.5m	1.5m	3m/12m	1.5m	1.5m	
Tool Digital In: 4 Digital Out: 4 Analog In: 1 Analog Out: 0	I/O Ports	Control Box	Digital Out: 16 Analog In: 2						
Communication RS232, Ethernet(master), Modbus TCP/RTU (master & slave)	Tool Digital In: 4 Digital Out: 4 Analog In: 1								
	I/O Interface			3 X CC	M, 1 X HDMI, 3 X LA	N, 4 X USB2.0, 2 X L	JSB3.0		
	Communication			RS232, E	thernet(master), Mod	bus TCP/RTU (maste	er & slave)		
Integrated Camera 5M pixels, color	Integrated Came	era	5M pixels, color	5M pixels, color	5M pixels, color	5M pixels, color	5M pixels, color	5M pixels, color	
I/O Power Supply 24V 1.5A (control box and tool)	I/O Power Supp	ly		24V 1.5A (control box and tool)					
Programming Environment TMflow, flowchart based	Programming E	nvironment			TMflow, flow	chart based			
SEMI S2 Certified* No No Yes No No Yes	SEMI S2 Certifie	ed*	No	No	Yes	No	No	Yes	

^{*} SEMI safety SEMI safety guidelines are issued by an industry association with the same name: SEMI (Semiconductor Equipment and Materials International), which is the central global network of manufacturers of micro- and nano-electronics industries. SEMI S2 is the most well-known standard in semiconductor manufacturing equipment for Environmental, Health, and Safety (EHS).

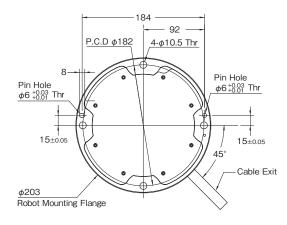
Dimensions (Unit: mm)

TM12

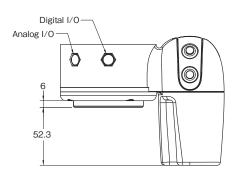


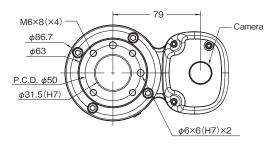


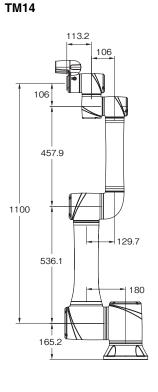
Footprint

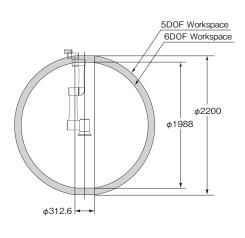


Flange









Control Box



Collaborative Robots

Accessories & Software

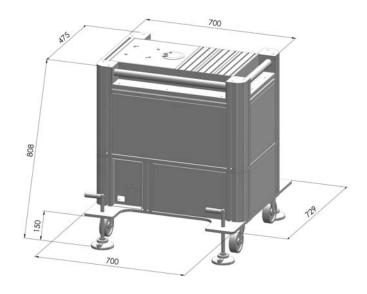
Accessories

Appearance	Product Name	Description	Remarks	Part Number
TM	Landmark	Robot positioning tool as a reference to the environment.	2 included with purchase of a robot.	RT6-A000008
20	Mobile Workstation (MWS)	Workstation (MWS) MWS is a convenient tool for users to mount the robot arm on work surface, and store the control box safely within. Users can move the MWS with the robot to different work cells easily.		RT6-A000010
1100	Robot stand	Similar to MWS, the robot stand can be moved with the robot to different work stations easily.	Height adjustable.Compatible with OMRON TM5 only.	RT6-A000009
The same of the sa	SSD with cable	128 GB solid state hard drive.	SATA cable included. Recommended for external cameras image logging.	RT6-A000012
1	Kit, calibration set with additional pin	Toolkit for teaching a precise tool center point (TCP) that can be used for manual workspace calibration within TMvision	Required for TCP and manual vision calibration	RT6-A000002
9 0	Robot stick stand	Mounting fixture for the robot stick.	Can be used on desktops, walls, and MWS.	RT6-A000000
1	Pneumatic control box	Controls the inputs and outputs and monitors air pressure for Kilews screw driving applications.	Compatible with Kilews screw driving solution kit only. Recommended to attach to the robot stand.	RT6-A000015

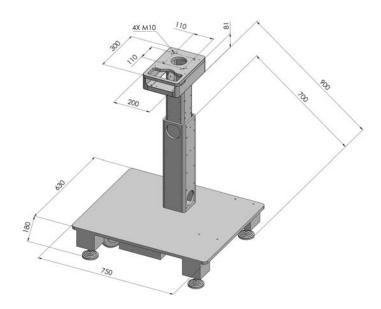
Software

Product Name	Add-On Product Names	Part Number	Add-On Part Numbers	Remarks
USB Dongle	-	RT6-A000004	-	Required for all extra software licenses.
TMflow	-	N/A, Free Download	-	Software required to control the cobot.
	TM Identify & Measure	-	RT6-S100000	License, add-on to TMflow. Includes: identification of pose variation, specific color area size, subtract reference image, line/circle burr, counting and gauge.
	TM External Vision	-	RT6-S100002	License, add-on to TMflow. Required when using eye-to-hand cameras.
	TM OCR	-	RT6-S100003	License, add-on to TMflow. Includes: Text OCR and Number OCR.
TMflow Editor	-	RT6-S200001	-	License, provides a convenient way to open and edit project offline.
	TMflow Editor - Offline AOI	-	RT6-S100005	License, add-on to TMflow Editor. Enables TMflow Editor to offline edit a TMflow project that includes AOI vision.

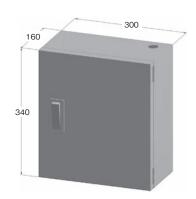
Mobile Work Station (MWS)



Robot Stand



Pneumatic Control Box



Recommended Plug & Play Hardware

Category	Appearance	Company	Product Name	Manufacturer SKU Number*	Description		
	d-b		Adaptive Gripper 2-Finger 85/140 for OMRON TM	85 kit: AGC-OMRON-KIT-85	A 2-finger adaptive gripper that can adapt to parts of various shapes and sizes. Comes in two stroke options – 85mm and 140mm. Each kit includes: - End effector coupling kit		
			robot	140 kit: AGC-OMRON-KIT-140	- 10-meter communication cable - RS485 to RS232 converter - RS485 to USB converter - Screw kit - Quick start guide		
					A 2-finger parallel gripper with an IP67 rating. 50mm stroke. Each kit includes:		
				Hand-E gripper for OMRON TM robot	HND-OMRON-KIT	- Fingertip starting kit - End effector coupling kit - 10-meter communication cable - RS485 to RS232 converter - RS485 to USB converter - Screw kit - Quick start guide	
				VAC-OMRON-EPICK-KIT1	A vacuum gripper that uses an integrated vacuum generator. Each kit includes:		
	4	Robotiq			EPick for Omron TM robot	VAC-OMRON-EPICK-KIT2	-Basic gripper unit -End effector coupling kit -10-meter communicable cable -RS485 to RS232 converter -RS485 to USB converter -Quick start guide -Vacuum cup(s): 1.5 bellows, 55mm diameter
	4			VAC-OMRON-EPICK-KIT4	KIT1 includes 1 vacuum cup KIT2 has a suction system for 2 cups KIT4 has a suction system for 4 cups		
Grippers				VAC-OMRON-AIRPICK-KIT1	A vacuum gripper that uses an external pneumatic supply. Each kit includes:		
			AirPick for Omron TM robot	VAC-OMRON-AIRPICK-KIT2	-Basic gripper unit -Tubing 8mm-8m -End effector coupling kit -RS485 to RS232 converter -RS485 to USB converter -Quick start guide -Vacuum cup(s): 1.5 bellows, 55mm diameter		
				VA-OMRON-AIRPICK-KIT4	KIT1 includes 1 vacuum cup KIT2 has a suction system for 2 cups KIT4 has a suction system for 4 cups		
			I/O Coupling	IO-CPL-OMRON-KIT	Component that connects the Robotiq adaptive/vacuum gripper to the wrist of the OMRON TM robot to eliminate the need for an external serial communication cable. Each kit includes: - I/O Coupling - Screw kit - Micro-USB to USB cable - 16G USB Stick		
	40		Dual-Grip Adapter Plate	AGC-APL-159-002	Adapter plate and mounting screws to mount two grippers onto the OMRON TM robot.		
	14		2F-85 Dual kit for OMRON Robots 2F-140 Dual kit for OMRON Robots HAND-E Dual kit for OMRON Robots	OMRON-DUAL-AGC-85 OMRON-DUAL-AGC-140 OMRON-DUAL-HND	Kit that enables dual gripper setting. Each kit includes: - Chosen gripper x 2 - Mechanical coupling x 2 - USB to RS485 Adapter - Communication Cable - M12 5 Pins Splitter - Dual-Grip Adapter Plate - Screw kit x 2		

 $^{^{\}star}\,$ Manufacturer SKU numbers are 3rd party part numbers, not OMRON part numbers.

Category	Appearance	Company	Product Name	Manufacturer SKU Number*	Description	
			RG2 Gripper	102012	Electric 2-finger gripper. Each kit includes: - RG2 Gripper - Fingertip adapters (premounted) - Integrated Quick Changer (tool side) - Torx key	
			RG6 Gripper	102021	Electric 2-finger gripper with larger stroke. Each kit includes: - RG2 Gripper - Fingertip adapters (premounted) - Integrated Quick Changer (tool side) - Torx key	
		OnRobot	VG10 Electric Vacuum Gripper	101661	Flexible and adjustable electrical vacuum gripper. Each kit includes: - VG10 Gripper - d30mm suction cups x 16 (pre-mounted) - Integrated Quick Changer (tool side) - d40mm suction cups x4 - d15mm suction cupsx4 - Blind screws x16 - Positioning arrows - Torx key	
Grippers			Gecko Gripper	102215	Gripper that uses van der Waals force to pick up flat and porous objects without compressed air. Each kit includes: - Gecko Gripper - Gecko Pads x4 (pre-mounted) - Integrated Quick Changer (tool side) - Spare Gecko Pads x8 - Pad removal tools	
			Quick Changer-robot side	102037	Manual tool changer to attach on the robot's end-of-arm. Either the Quick Changer (robot side) or the Dual Quick Changer must be purchased for use of all OnRobot grippers. Each kit includes: - Quick Changer robot side - Screws - Torx key	
				Quick Changer- tool side	102014	Manual tool changer to attach on the tool side. (All OnRobot grippers have this component integrated, so this is only necessary when user is developing own tool.)
			Quick Changer Kit	102277	Each kit includes: - Quick Changer (robot side)x1 - Quick Changer (tool side)x2 - Torx key - Screws and pins	
			Dual Quick Changer	101788	Manual tool changer to attach on the robot's end-of-arm for dual gripper configuration. Either the Quick Changer (robot side) or the Dual Quick Changer must be purchased for use of all OnRobot grippers. Each kit includes: - Dual Quick Changer - Screws - Torx key	
	© <u>-</u>			OMRON TM Robot Kit	102359	This kit must be purchased for the use of OnRobot grippers on OMRON TM collaborative robot. Each kit includes: - Compute Box - Power supply - Adapter plate (included in all kits but only necessary for VG10 and Gecko grippers) - USB stick with software components and User Manual - Device cable 5m - UTP cable 0.5m - I/O cable 0.3m - Cable management hook/loop

Category	Appearance	Company	Product Name	Manufacturer SKU Number*	Description
		Schmalz	ROB-SET ECBPi OMRON	10.03.01.00544	Complete vacuum gripper for collaborative robots. Each kit includes: - Vacuum generator (ECBPi) - End-effector coupling kit - Connection cable - Mounting flange - Flat suction cup - Bellows suction cup - Bolts and t-nuts
Grippers			ROB-SET FXCB OMRON	10.01.43.00120	Area gripper equipped with integrated pneumatic vacuum generation. (Needs external air supply.) Each kit includes: - Pneumatic area gripper (FXCB) - Connection cable - Mounting flange - Bolts and t-nuts - Operating instructions
Glippers			Co-act EGP-C 40 N-N-TMID	1374363	Electric 2-finger parallel gripper certified for collaborative operation with actuation via 24 V and digital I/O. Each kit includes: - Co-act EGP-C gripper - Assembly and Operating Manual - Accessory pack
		Schunk	Co-act AUB EGP 40/12 Co-act AUB EGP 40/24 Co-act AUB-F EGP 40/xx	1401285 1401286 1409839	Gripping fingers for Co-act EGP-C.
3D Bin		- Pick-it	Pick-it M	PI-M-2.0	Plug & Play 3D camera and software for picking objects sized 50x50x10mm or larger. Each kit includes: - Pre-calibrated 3D camera - Pick-it software - Industrial processor - 3G dongle to connect directly to Pick-it support - Calibration plate and ROi box teaching markers - All connection cables (plug & play) - Quick start guide
Picking			Pick-it M-HD	PI-M-HD	Plug & Play 3D camera and software for picking objects sized 10x10x5mm or larger. Each kit includes: - Pre-calibrated 3D camera - Pick-it software - Industrial processor - 3G dongle to connect directly to Pick-it support - Calibration plate and ROi box teaching markers - All connection cables (plug & play) - Quick start guide
Screw Driving	A	Kilews	Screw Driving Solution Kit	TM-BN512LAD-□.□	Kilews screwdriver kit and pneumatic control box.Each kit includes: -Screwdriver SKD-BN512LM -Power control Box SKP-32BC-60W -Flange E31700-3 -Air Nozzle KS-TM-B500-□.0 -Singal Box KL-SCBSN

^{*} Manufacturer SKU numbers are 3rd party part numbers, not OMRON part numbers.

Category	Appearance	Company	Product Name	Manufacturer SKU Number*	Description
			GigE camera, color, 5MP, CMOS 1/2.5", 14 fps	acA2500-14gc, Rolling Shutter	
			GigE camera, mono, 5MP, CMOS 1/2.5", 14 fps	acA2500-14gm, Rolling Shutter	
		GigE camera, color, 5MP, CMOS 1", 21fps	acA2500-20gc, Global Shutter		
			GigE camera, mono, 5MP, CMOS 1", 21 fps	acA2500-20gm, Global Shutter	External camera for eye-to-
Vision		Basler	GigE camera, color, 5MP, CMOS 2/3", 23fps	acA2440-20gc, Global Shutter	hand robot
1.0.0	O	240.0.	GigE camera, mono, 5MP, CMOS 2/3", 23 fps	acA2440-20gm, Global Shutter	applications.Maximum 2 external cameras per robot.
			GigE, camera, color, 10MP, CMOS 1/2.3", 10 fps	acA3800-10gc, Rolling Shutter	
			GigE, camera, mono, 10MP, CMOS 1/2.3", 10 fps	acA3800-10gm, Rolling Shutter	-
			GigE, camera, color, 12.2 MP, CMOS 1/1.7", 8 fps	acA4024-8gc, Rolling Shutter	_
			GigE, camera, mono, 12.2 MP, CMOS 1/1.7", 8 fps	acA4024-8gm, Rolling Shutter	
		ATI	Axia80	9105-TM-Axia80	Six-axis force/torque sensor with EtherCAT communication. Each kit includes: - Interface plate - Power and Ethernet cable - Digital delivery of calibration
Force sensor	Robotiq		FT-300	FTS-300-OMRON-KIT	documents and user manual Six-axis force/torque sensor with RS485 Serial Communication. Each kit includes: - Coupling - RS485 to RS232 converter
	STOROTIO				- Nower and communication cable with USB adapter - Screw kit A Kit that includes: chassis w/
		ADLINK	EtherCAT I/O Expansion Modules KIT	EPS - 9905+6000+2032+1132	EtherCAT ports and voltage input, 32-channel digital output module, 32-channel digital input module.
			EtherCAT I/O Expansion Modules (DO Module)	EPS-2032	32-channel digital output module.
Connectivitiy			EtherCAT I/O Expansion Modules (DI Module)	EPS-1132	32-channel digital input module.
	- PA	Advantech	Serial Device Server EKI-1524-CE	EKI-1524-CE	External device with serial ports that communicates with the robot via TCP/IP.
	Prof.		Advantach	Modbus to PROFINET Gateways	EKI-1242IPNMS
	a s		FHS-C-SET TM5 (TM5-700 & TM5-900)	83693500	Cable management dress pack. Each kit includes: Conduit (Cable routing hose, Length:2m, Interior diameter: ~21mm)
	Cable Management	Murrplastik	FHS-C-SET TM12 / TM14 (TM12 & TM14)	83693501	4x Attachment straps 2x End plugs Cable insertion tool Installation instructions
Cable Management			FHS-RS-SET TM5 (TM5-700 & TM5-900)	83693506	Cable management dress pack. Each kit includes: Conduit (Cable routing hose, Length:2m, Interior diameter: ~21mm) 2x Conduit clamps Self-retracting hose guide (2x Rell loint france, Rell loint train
	Car.		FHS-RS-SET TM12 / TM14 (TM12 & TM14)	83693507	Ball joint fixing, Ball joint strain relief, Feedback system, System holder) Tool-end clamp End sleeve Cable puller Installation instructions

 $^{^{\}star}\,$ Manufacturer SKU numbers are 3rd party part numbers, not OMRON part numbers.

Ordering Information

Model Number Legend

$\frac{\textbf{RT6}}{\text{\tiny (1)}} \, - \, \underbrace{0}_{\text{\tiny (2)}} \, \underbrace{0}_{\text{\tiny (3)}} \, \underbrace{0}_{\text{\tiny (4)}} \, \underbrace{0}_{\text{\tiny (5)}} \, \underbrace{0}_{\text{\tiny (6)}} \, \underbrace{0}_{\text{\tiny (7)}} \, \underbrace{0}_{\text{\tiny (8)}}$

No.	Item	Specifications	Symbol			
(1)	Co	Collaborative Robots - Techman				
		TM5	0			
(2)	Model Type	TM12	1			
		TM14	2			
(0)	Dawar Cumply	AC	0			
(3)	Power Supply	DC	1			
(4)	Fue in Hand	Standard	0			
(4)	Eye in Hand	X Model *1	1			
		700 (TM5)	70			
(5)(6)	A was I am with	900 (TM5)	90			
	Arm Length	1300 (TM12)	13			
		1100 (TM14)	11			
(7)	Semi	Standard	0			
(7)	Semi	Semi	1			
(0)	Cabla Langth	Standard Length (3m/1.5m) *2	1			
(8)	Cable Length	Extended Length (12m) *3	2			

^{*1.} X model refers to robot models without integrated camera system.*2. 1.5m cable is only standard on DC models.

Cobot Part Number List

Туре	Part Number
TM5-700	RT6-0007001
TM5-700, 12m cable	RT6-0007002
TM5X-700	RT6-0017001
TM5X-700, 12m cable	RT6-0017002
TM5M-700	RT6-0107001
TM5M-700 SEMI	RT6-0107011
TM5MX-700	RT6-0117001
TM5-900	RT6-0009001
TM5-900, 12m cable	RT6-0009002
TM5X-900	RT6-0019001
TM5X-900, 12m cable	RT6-0019002
TM5M-900	RT6-0109001
TM5M-900 SEMI	RT6-0109011
TM5MX-900	RT6-0119001
TM12	RT6-1001301
TM12, 12m cable	RT6-1001302
TM12X	RT6-1011301
TM12X, 12m cable	RT6-1011302
TM12M	RT6-1101301
TM12M SEMI	RT6-1101311
TM12MX	RT6-1111301
TM14	RT6-2001101
TM14, 12m cable	RT6-2001102
TM14X	RT6-2011101
TM14X, 12m cable	RT6-2011102
TM14M	RT6-2101101
TM14M SEMI	RT6-2101111
TM14MX	RT6-2111101

Accessories Part Number List

Туре	Part Number
Landmark	RT6-A000008
Mobile Workstation (MWS)	RT6-A000010
Robot stand	RT6-A000009
SSD with cable	RT6-A000012
Kit, calibration set with additional pin	RT6-A000002
Robot stick stand	RT6-A000000
Pneumatic control box	RT6-A000015

Software Part Number List

Туре	Part Number
USB Dongle	RT6-A000004
TMflow	N/A, Free Download
TM Identify & Measure	RT6-S100000
TM External Vision	RT6-S100002
TM OCR	RT6-S100003
TMflow Editor	RT6-S200001
TMflow Editor - Offline AOI	RT6-S100005

^{*3. 12}m cable is not available on DC models.

Related Manuals

Manual No.	English Title					
1623	TM5 Regular Payload Series Hardware Installation Manual					
1624	TM12 & TM14 Medium & Heavy Payload Series Hardware Installation Manual					
1626	Software Manual TMflow					
1627	Software Manual TMvision					
1628	TM Mobile Work Station Manual					
1629	TM Robot Stand Manual					
1630	Pneumatic Control Box Manual					
1648	Safety Manual Safety System 3.2					
1848	Expression Editor and Listen Node Reference Guide					

Robot Parts Code and Bundled Accessories

Туре		TM5-700						TM5-900			
Product Name	TM5-700	TM5M-700	TM5M-700 SEMI	TM5X-700	TM5MX- 700	TM5-900	TM5M-900	TM5M-900 SEMI	TM5X-900	TM5MX- 900	
Part Number	RT6- 000700□	RT6- 010700□	RT6- 010701□	RT6- 001700□	RT6- 011700□	RT6- 000900□	RT6- 010900□	RT6- 010901□	RT6- 001900□	RT6- 011900□	
Overview	Robot and control box with built-in vision system Robot and control box without vision system					Robot and control box with built-in vision system Robot and control box without vision system					
Purpose	Typical for use in single collaborative robot system Ty						Typical for use in single collaborative robot system				
Bundled Accessories	 TM5-700 robot arm (1) Robot stick (1) Control box (1) Calibration plates (one large and one small) (not included with the X model bundles) IO cables (2) Landmark (2) (not included with the X model bundles) Ground wire (1) Conducting wire, 3 cm (2) Power cable for the control box (4 standard part number, 1 mobile part number) SEMI emergency OFF switch (SEMI model only) TM5-900 robot arm (1) Robot stick (1) Control box (1) Calibration plates (one large and one small) (not included x model bundles) IO cables (2) Landmark (2) (not included with the X model bundles) Ground wire (1) Conducting wire, 3 cm (2) Power cable for the control box (4 standard part number, 1 part number) SEMI emergency OFF switch (SEMI model only) 								8)		
Туре		TM12					TM14				
Product Name	TM12	TM12M	TM12M SEMI	TM12X	TM12MX	TM14	TM14M	TM14M SEMI	TM14X	TM14MX	
Part Number	RT6- 100130□	RT6- 110130□	RT6- 110131□	RT6- 101130□	RT6- 111130□	RT6- 200110□	RT6- 210110□	RT6- 210111□	RT6- 201110□	RT6- 211110□	
Overview	Robot and control box with built-in vision system Robot and control box without vision system					Robot and control box with built-in vision system Robot and control box without vision system					
Purpose	Typical for use in single collaborative robot system					Typical for use in single collaborative robot system					
Bundled Accessories	X model b IO cables Landmark Ground wi Conducting Power cab	x (1) x (1) n plates (one la undles) (2) (2) (not includ re (1) g wire, 3 cm (2) le for the cont	ed with the X in the 2 in the	mall) (not inclumodel bundles	TM14 robot arm (1) Robot stick (1) Control box (1) Calibration plates (one large and one small) (not included with the X model bundles) IO cables (2) Landmark (2) (not included with the X model bundles) Ground wire (1) Conducting wire, 3 cm (2) Power cable for the control box (4 standard part number, 1 mobile part number) SEMI emergency OFF switch (SEMI model only)						

SEMI emergency OFF switch (SEMI model only)

 Please note the calibration plates and landmark are not included with the X model bundles.

Terms and Conditions Agreement

Read and understand this catalog.

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranties.

- (a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
- (b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.

See http://www.omron.com/global/ or contact your Omron representative for published information.

Limitation on Liability; Etc.

OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.

Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

Programmable Products.

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

Performance Data.

Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

Errors and Omissions.

Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

OMRON Corporation Industrial Automation Company

Kyoto, JAPAN

Contact: www.ia.omron.com

Regional Headquarters
OMRON EUROPE B.V.
Wegalaan 67-69, 2132 JD Hoofddorp
The Netherlands
Tel: (31)2356-81-300/Fax: (31)2356-81-388

OMRON ASIA PACIFIC PTE. LTD.

No. 438A Alexandra Road # 05-05/08 (Lobby 2),
Alexandra Technopark,
Singapore 119967
Tel: (65) 6835-3011/Fax: (65) 6835-2711

OMRON ELECTRONICS LLC 2895 Greenspoint Parkway, Suite 200 Hoffman Estates, IL 60169 U.S.A. Tel: (1) 847-843-7900/Fax: (1) 847-843-7787

OMRON ROBOTICS AND SAFETY TECHNOLOGIES, INC. 4550 Norris Canyon Road, Suite 150, San Ramon, CA 94583 U.S.A. Tel: (1) 925-245-3400/Fax: (1) 925-960-0590

OMRON (CHINA) CO., LTD.
Room 2211, Bank of China Tower, 200 Yin Cheng Zhong Road, PuDong New Area, Shanghai, 200120, China Tel: (86) 21-5037-2222/Fax: (86) 21-5037-2200

Authorized Distributor:

© OMRON Corporation 2019-2020 All Rights Reserved. In the interest of product improvement, specifications are subject to change without notice.

CSM_3_2_0120

Cat. No. 1837-E-05 0120 (1018)