

PacDrive 3 robotics

Lexium STS robots

SCARA robots for high speed picking

Catalog

July 2018



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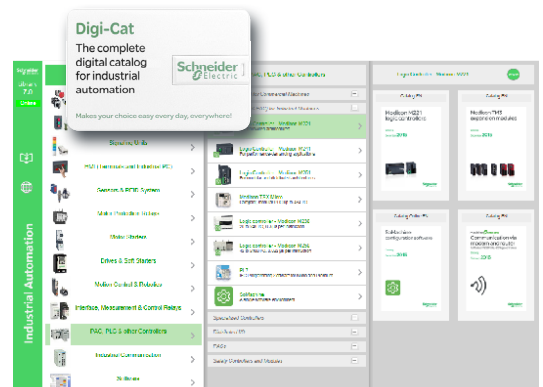
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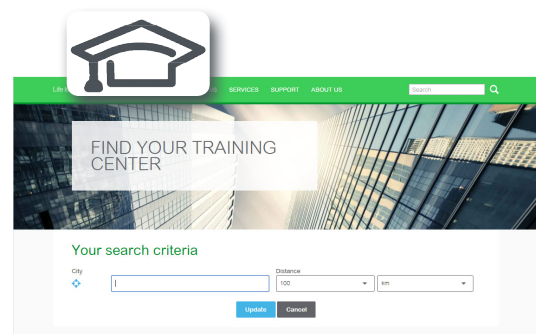
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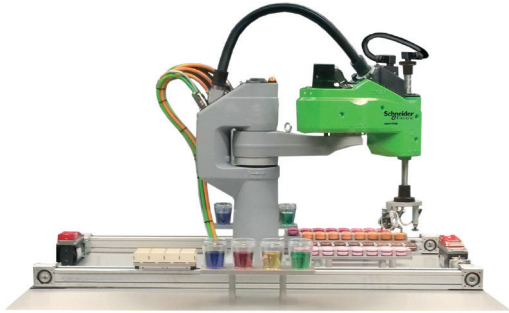
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PacDrive 3 robotics

Lexium STS robots

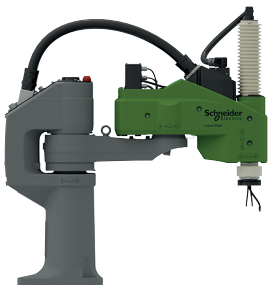
SCARA robots for high speed picking



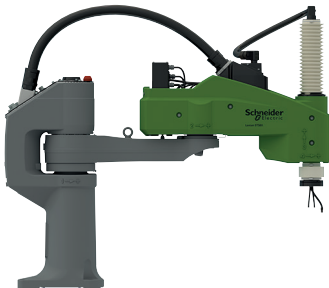
Lexium STS robots guarantee ultra-short cycle times for handling and packaging applications



STS40



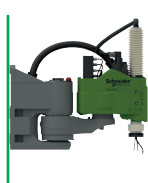
STS60



STS80



Floor mounting



Wall mounting

Presentation

Application

The Lexium STS robots are industrial manipulative robots, in charge of handling pieces for storage - destocking, palletizing - depalletization, loading - unloading machine tool, handling of test pieces, assembly of parts, and many others.

This robotic solution is developed as an add-on to PacDrive 3 automation solutions, designed to satisfy growing customer demand, for robots as an integral part of machine design, in packaging and handling machinery, focused on food & beverage, pharmaceuticals and consumer goods.

Lexium STS offer

The Lexium STS robot offer is used for high speed picking:

- > with four axis SCARA robots
- > up to 100 cycles per minute
- > with a max. of 800 mm range (31.50 in.)
- > with a payload capacity of up to 8 kg (17.6 lb)
- > with a position repeatability (ISO 9283) of $\pm 0,01$ mm (± 0.004 in.)

Lexium STS robot structure

- > Two types of robots are available distinguished by the mounting : floor mounting, or wall mounting, enhancing flexibility and integration of the Lexium STS robot in automation lines
- > Three sizes of arm are available giving up to three ranges of working space:
 - STS40: 400 mm (15.74 in.)
 - STS60: 600 mm (23.62 in.)
 - STS80: 800 mm (31.50 in.)
- > Each size of arm is available with two strokes of ball screw ($\varnothing 25$ mm / $\varnothing 0.98$ in.)
 - 200 mm (7,87 in.)
 - 400 mm (15.74 in.)

Equipment

- > Lexium STS robots are equipped with four motors (one per axis) and the movement transmission mechanisms,
- > Depending on models they are delivered with the following equipments:
 - the User IO cable with six wires to be used on customer's needs (inputs, outputs, ...)
 - the ARMIO board for up to 8 digital IO and 4 analogue IO (this including the User IO cable):

User interface				
Available on forearm		Available on the tool flange		
Standard equipment	with ARMIO board	Standard equipment	with ARMIO board	with tool connector
-	8 digital inputs, 8 digital outputs	-	8 digital inputs, 8 digital outputs	5 digital inputs, 8 digital outputs
-	4 analogue inputs, 4 analogue outputs	-	-	-

- A plastic bellow to protect the ball screw against dust, liquid splashes, is available in two sizes, fitting the two ball screw models
- > System cables: required cables are provided by Schneider Electric: Power cables, Encoder cables, Sercos cables, Digital Input/Output, and CANopen bus cable, available in various lengths up to 30 m (98.43 in.)
- > Lexium STS robots are delivered without gripper. Grippers can be ordered by specialist manufacturers.

Characteristics

- > Protection class: IP54
- > Cleanliness class: 6 according to standard ISO 14644-1 (when equipped with bellow)
- > Certification: CE, UL, KCs

Option for Lexium STS robots

- > Lexium STS robots are delivered with a green cover of the forearm (axis 2) ; Lexium STS robot's forearm can be delivered with a special colour, on request
- > A specific tool connector is available to modify the fixation of a gripper from circular to square

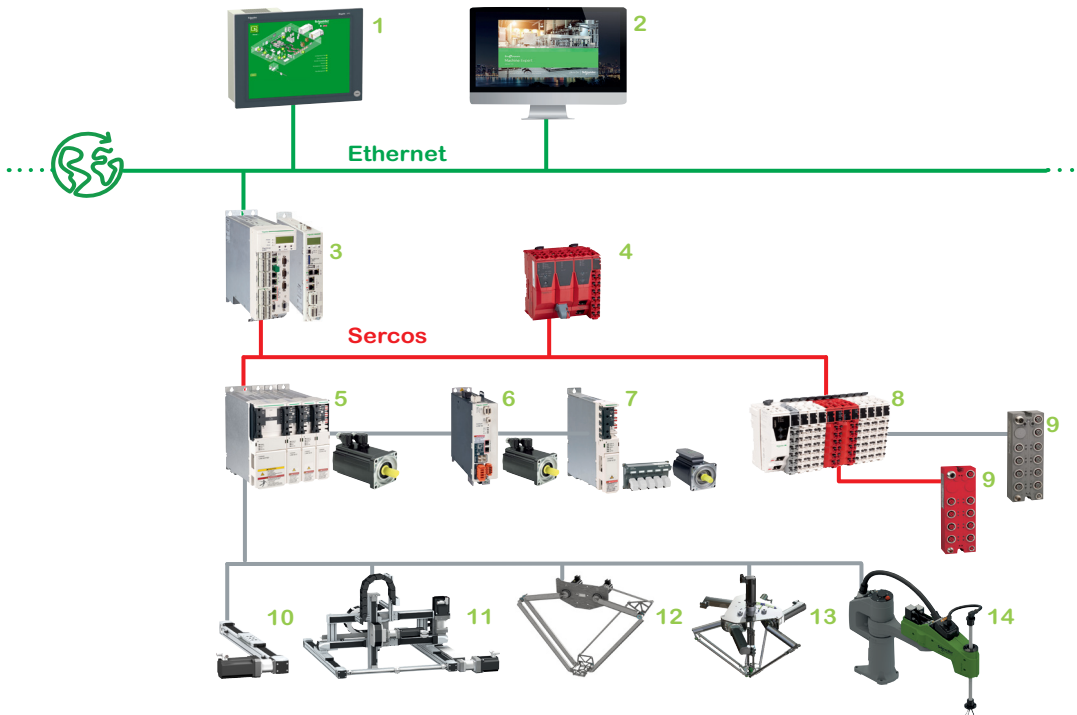
SCARA: Selective Compliance Articulated Robot Arm

Presentation (continued)

Complementary of offers

- > Lexium STS robots are integrated into PacDrive 3 system:
 - Lexium 62 servo drives series (1) control the Lexium STS range of robots
 - Lexium 62 power supply modules provide the DC supply

Power supply connecting: the Lexium 62 power supply module has to be connected in 1- or 3-phase mode providing a minimum of 320 VDC and a maximum of 400 VDC DC bus voltage. Voltages less than this minimum may degrade the performance of the system significantly. DC bus voltages higher than this maximum are not supported by Lexium STS robots. For further information, please contact your local Schneider Electric service representative.
- > In addition to the Lexium STS robots, Schneider Electric provides also Cartesian robots (1), Delta robots (1). Those robot offers consist of standardized elements, complete and customized solutions for a variety of 1 to 3-dimensional motion tasks (Cartesian robots), up to 4 (Delta robots)



- 1 Magelis HMI Small Panel
- 2 SoMachine Motion: configuration software
- 3 PacDrive LMC Eco/Pro/Pro2: motion controller for automating machines/lines with 0 - 130 servo or robot axes
- 4 Modicon TM5CSLC: safety logic controller
- 5 Lexium 62 & Motors: multi axis servo system and servo motors (2)
- 6 Lexium 52 & Motors: stand alone servo drives and servo motors
- 7 Lexium 62 ILM: multiaxis integrated servo drives
- 8 Modicon TM5: Sercos interface module, safety IO expansion module, and IO expansion module (IP 20)
- 9 Modicon TM7: expansion module and safety expansion module (IP 67)
- 10 Lexium PAS: portal axes with fixed axis body
- 11 Lexium MAX: multi-axes systems for 1, 2 or 3 dimensional positioning solutions
- 12 Delta 2 robots for pick & place solutions
- 13 Delta 3 robots for pick & place solutions
- 14 Lexium STS: SCARA robots high speed picking

(1) Please refer to the catalogs listed below (Press to open the catalog)

DIA7ED2160303EN	<p>PacDrive 3 automation solution PacDrive LMC motion controllers (LMC Eco/Pro/Pro2) Catalog March 2016</p>	DIA7ED2160305EN	<p>PacDrive 3 automation solution Lexium 62 multi-axis drive system Catalog February 2017</p>	DIA7ED2160306EN	<p>PacDrive 3 automation solution Lexium 62 ILM integrated drive Catalog March 2016</p>	DIA3ED2160307EN	<p>PacDrive 3 automation solution PacDrive Delta robots Catalog March 2016</p>	DIA7ED2170704EN	<p>Lexium Cartesian Robots Multi-axis systems Catalog January 2018</p>
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Description

PacDrive 3 robotics

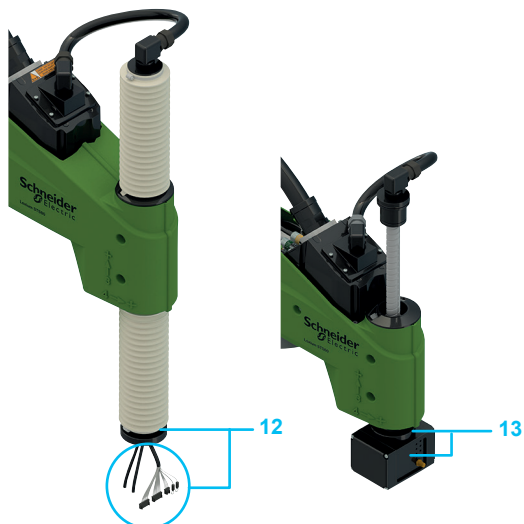
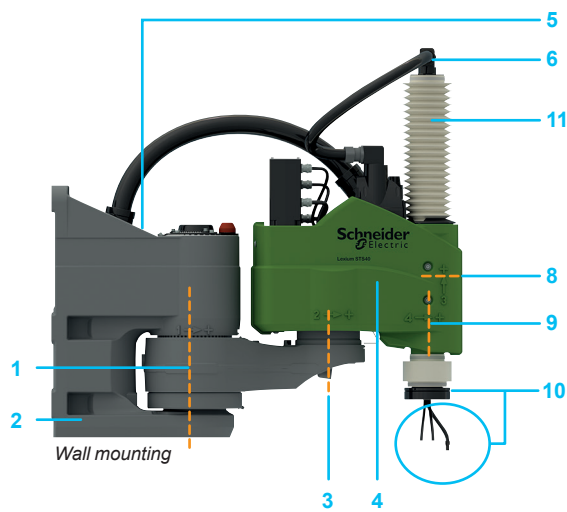
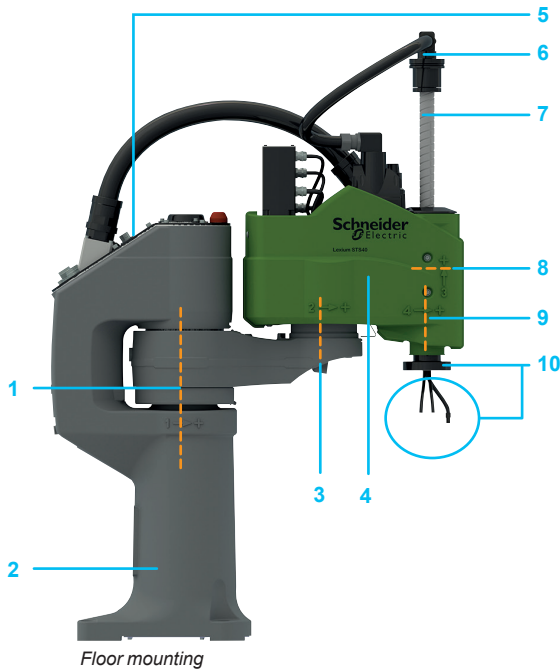
Lexium STS robots

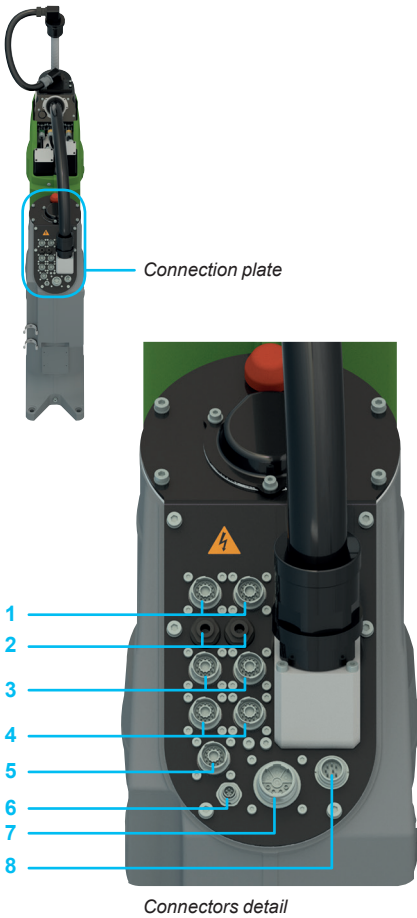
SCARA robots for high speed picking

Description

Lexium STS robot

- 1 Axis 1 (including motor) ; first arm
- 2 Mounting foot (floor mounting) / Mounting arm (wall mounting)
- 3 Axis 2 (including motor)
- 4 Forearm (second arm) with green cover as standard equipment
- 5 Connection plate, for encoder, pneumatic, power and IO cables
- 6 User IO cable (standard equipment)
- 7 Ball screw (Ø 25 mm (0.98 in.), stroke 200 or 400 mm (7.87 or 15.74 in.))
- 8 Axis 3 (including motor)
- 9 Axis 4 (including motor)
- 10 Tool flange (Gripper holder) equipped with User IO cables
- 11 Ball screw equipped with bellow
- 12 Tool flange (Gripper holder) equipped with ARMIO board and User IO cables
- 13 Tool flange with optional tool connector





Description (continued)

Connection plate

- 1 Two connectors for motor axis 4: encoder connection (marked X1214) and power connection (marked X1224)
- 2 Two connectors for pneumatic connections (marked P1 and P2)
- 3 Two connectors for motor axis 3: encoder connection (marked X1213) and power connection (marked X1223)
- 4 Two connectors for motor axis 2: encoder connection (marked X1212) and power connection (marked X1222)
- 5 One connector for motor axis 1: encoder connection (marked X1211)
- 6 One connector for 24 V power connection (marked X1210)
- 7 One connector for motor axis 1: power connection (marked X1221)
- 8 One connector for CANopen bus or I/O connection

Type code

		LXMSTS	●	●	●	●	●●	●●●
Example		LXMSTS	4	0	F	2	A2	000
Lexium range								
LXMSTS								
Range								
4	400 mm (15,74 in.)							
6	600 mm (23.62 in.)							
8	800 mm (31.50 in.)							
Number of active axes								
0	4 active axes							
Mounting position								
F	Floor mounting							
W	Wall mounting							
Type of drive of axis								
2	Ball screw, stroke 200 mm (7,87 in.)							
3	Ball screw with bellow for protection of ball screw, stroke 200 mm (7,87 in.)							
4	Ball screw, stroke 400 mm (15,74 in.)							
5	Ball screw with bellow for protection of ball screw, stroke 400 mm (15,74 in.)							
Option								
00	Without option							
A2	With ARMIO board, with User IO cable, for ball screw, stroke 200 mm (7,87 in.)							
A4	With ARMIO board, with User IO cable, for ball screw, stroke 400 mm (15,74 in.)							
Miscellaneous								
000	Reserved for options; e.g. replacement equipment number							

PacDrive 3 robotics

Lexium STS robots

SCARA robots for high speed picking



LXMSTS40F200000



LXMSTS40W200000



LXMSTS60F200000



LXMSTS60W200000



Lexium STS robots								
Robot type	Mounting type	Ball screw stroke (mm /in.)	Equipment			Reference	Weight kg/ lb	
			With User IO cable (1)	With ARMIO board and User IO cables (2)	With bellow (size in mm /in.)			
Range: 400 mm (15.74 in.)								
STS40	Floor mounting	(200 / 7.87)	<input checked="" type="checkbox"/>	-	-	LXMSTS40F200000	50.000/ 110.2	
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS40F300000	50.000/ 110.2	
			-	<input checked="" type="checkbox"/>	-	LXMSTS40F2A2000	50.000/ 110.2	
			-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS40F3A2000	50.000/ 110.2	
			(400 / 15.74)	<input checked="" type="checkbox"/>	-	-	LXMSTS40F400000	50.000/ 110.2
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (400 / 15.74)	LXMSTS40F500000	50.000/ 110.2	
			-	<input checked="" type="checkbox"/>	-	LXMSTS40F4A4000	50.000/ 110.2	
	Wall mounting	(200 / 7.87)	<input checked="" type="checkbox"/>	-	-	LXMSTS40W200000	48.300/ 106	
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS40W300000	48.300/ 106	
			-	<input checked="" type="checkbox"/>	-	LXMSTS40W2A2000	48.300/ 106	
			-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS40W3A2000	48.300/ 106	
			(400 / 15.74)	<input checked="" type="checkbox"/>	-	-	LXMSTS40W400000	48.300/ 106
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (400 / 15.74)	LXMSTS40W500000	48.300/ 106	
			-	<input checked="" type="checkbox"/>	-	LXMSTS40W4A4000	48.300/ 106	
-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (400 / 15.74)	LXMSTS40W5A4000	48.300/ 106				
Range: 600 mm 23.62 in.)								
STS60	Floor mounting	(200 / 7.87)	<input checked="" type="checkbox"/>	-	-	LXMSTS60F200000	55.400/ 122	
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS60F300000	55.400/ 122	
			-	<input checked="" type="checkbox"/>	-	LXMSTS60F2A2000	55.400/ 122	
			-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS60F3A2000	55.400/ 122	
			(400 / 15.74)	<input checked="" type="checkbox"/>	-	-	LXMSTS60F400000	55.400/ 122
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (400 / 15.74)	LXMSTS60F500000	55.400/ 122	
			-	<input checked="" type="checkbox"/>	-	LXMSTS60F4A4000	55.400/ 122	
	Wall mounting	(200 / 7.87)	<input checked="" type="checkbox"/>	-	-	LXMSTS60W200000	53.700/ 118	
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS60W300000	53.700/ 118	
			-	<input checked="" type="checkbox"/>	-	LXMSTS60W2A2000	53.700/ 118	
			-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS60W3A2000	53.700/ 118	
			(400 / 15.74)	<input checked="" type="checkbox"/>	-	-	LXMSTS60W400000	53.700/ 118
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (400 / 15.74)	LXMSTS60W500000	53.700/ 118	
			-	<input checked="" type="checkbox"/>	-	LXMSTS60W4A4000	53.700/ 118	
-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (400 / 15.74)	LXMSTS60W5A4000	53.700/ 118				

(1) Six wires already prepared to reduce the customer's wiring effort to be used on customer's needs which could be digital or analogue inputs or outputs. 24V power supply, etc.
 (2) Eight digital inputs. 8 digital outputs. 4 analogue inputs. 4 analogue outputs

PacDrive 3 robotics

Lexium STS robots

SCARA robots for high speed picking

Lexium STS robots (continued)								
Robot type	Mounting type	Ball screw stroke (mm /in.)	Equipment			Reference	Weight kg/ lb	
			With User IO cable (1)	With ARMIO board and User IO cables (2)	With bellow (size in mm /in.)			
Range: 800 mm (31.50 in.)								
 <p>LXMSTS80F200000</p>	Floor mounting	(200 / 7.87)	<input checked="" type="checkbox"/>	-	-	LXMSTS80F200000	56.800/ 125	
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS80F300000	56.800/ 125	
			-	<input checked="" type="checkbox"/>	-	LXMSTS80F2A2000	56.800/ 125	
			-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS80F3A2000	56.800/ 125	
			(400 / 15.74)	<input checked="" type="checkbox"/>	-	-	LXMSTS80F400000	56.800/ 125
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (400 / 15.74)	LXMSTS80F500000	56.800/ 125	
	Wall mounting	(200 / 7.87)	<input checked="" type="checkbox"/>	-	-	LXMSTS80W200000	54.900/ 121	
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS80W300000	54.900/ 121	
			-	<input checked="" type="checkbox"/>	-	LXMSTS80W2A2000	54.900/ 121	
			-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (200 / 7.87)	LXMSTS80W3A2000	54.900/ 121	
			(400 / 15.74)	<input checked="" type="checkbox"/>	-	-	LXMSTS80W400000	54.900/ 121
			<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/> (400 / 15.74)	LXMSTS80W500000	54.900/ 121	
 <p>LXMSTS80W200000</p>	Wall mounting	(400 / 15.74)	-	<input checked="" type="checkbox"/>	-	LXMSTS80W4A4000	54.900/ 121	
			-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (400 / 15.74)	LXMSTS80W5A4000	54.900/ 121	

(1) Six wires already prepared to reduce the customer's wiring effort to be used on customer's needs which could be digital or analogue inputs or outputs. 24V power supply, etc.

(2) Eight digital inputs. 8 digital outputs. 4 analogue inputs. 4 analogue outputs

PacDrive 3 robotics

Lexium STS robots

SCARA robots for high speed picking



LXMSTSYYYYY001



LXMSTSYYYYY002



LXMSTSYYYYY003



LXMSTSYYYYY004



LXMSTSYYYYY005



LXMSTSYYYYY006



LXMSTSYYYYY007



LXMSTSYYYYY008



LXMSTSYYYYY009



LXMSTSYYYYY010



LXMSTSYYYYY011



LXMSTSYYYYY012



LXMSTSYYYYY013



LXMSTSYYYYY014

Replacement equipments for Lexium STS robots

Designation	Use with robot type	Description	Reference	Weight kg lb
Motors for axis				
Motor for axis	STS40, STS60, STS80	1x motor for axis 1	LXMSTSYYYYY001	4.674 10.304
	STS40, STS60, STS80	1x motor for axis 2	LXMSTSYYYYY002	2.240 4.938
	STS40, STS60, STS80	1x motor for axis 3	LXMSTSYYYYY003	2.090 4.607
	STS40	1x motor for axis 4	LXMSTSYYYYY004	1.200 2.645
	STS60, STS80	1x motor for axis 4	LXMSTSYYYYY005	1.720 3.791
Gearbox sets				
Gearbox set for axis 1	STS40	1x gearbox for axis 1 2x shaft seal ring 1x O-ring axis 1 (bulky) 1x O-ring axis 1 (fine) 1x O-ring axis 1 16x washer 16x screw M6 x 65 1x O-ring motor axis 1 18x screw M8 x 60	LXMSTSYYYYY006	7.531 16.603
	STS60, STS80	1x gearbox for axis 1 2x shaft seal ring 1x O-ring axis 1 (bulky) 1x O-ring axis 1 (fine) 1x O-ring axis 1 16x washer 16x screw M6 x 65 1x O-ring motor axis 1 18x screw M8 x 60	LXMSTSYYYYY007	6.961 15.346
	STS40	1x gearbox for axis 2 16x screw M4 x 20 12x screw M4 x 35 1x screw M4 x 30 12x screw M4 x 40 1x O-Ring 1x O-Ring 1x shaft seal ring 1x retaining ring 1 metal ring	LXMSTSYYYYY008	4.517 9.958
Gearbox set for axis 2	STS60, STS80	1x gearbox for axis 2 16x screw M4 x 20 12x screw M4 x 35 1x screw M4 x 30 12x screw M4 x 40 1x O-Ring 1x O-Ring 1x shaft seal ring 1x retaining ring 1 metal ring	LXMSTSYYYYY009	5.067 11.170
	STS40	1x gearbox for axis 4	LXMSTSYYYYY010	0.900 1.984
Intermediate gearbox axis 4	STS60, STS80	1x gearbox for axis 4	LXMSTSYYYYY011	1.500 3.306
Toothbelt belt sets				
Toothed belt set for axis 4	STS40	1x toothed belt axis 4 1x toothed belt axis 3 1x deflection pulley 3x bearing sleeve 1x belt tightener 2x washer 3x screw M5 x 40 1x deflection pulley	LXMSTSYYYYY012	0.169 0.372
	STS60	1x toothed belt axis 4 - short 1x toothed belt axis 4 1x toothed belt axis 3 2x deflection pulley 6x bearing sleeve 4x belt tightener 6x washer 6x screw M5 x 40	LXMSTSYYYYY013	0.415 0.914
	STS80	1x toothed belt axis 4 - short 1x toothed belt axis 4 1x toothed belt axis 3 2x deflection pulley 6x bearing sleeve 4x belt tightener 6x washer 6x screw M5 x 40	LXMSTSYYYYY014	0.313 0.690

PacDrive 3 robotics

Lexium STS robots

SCARA robots for high speed picking



LXMSTSYYYYY015



LXMSTSYYYYY016



LXMSTSYYYYY017



LXMSTSYYYYY018



LXMSTSYYYYY019
LXMSTSYYYYY020



LXMSTSYYYYY021



LXMSTSYYYYY022



LXMSTSYYYYY023



LXMSTSYYYYY024



LXMSTSYYYYY025



LXMSTSYYYYY026
LXMSTSYYYYY028
LXMSTSYYYYY030



LXMSTSYYYYY027
LXMSTSYYYYY029
LXMSTSYYYYY031

Replacement equipments for Lexium STS robots (continued)

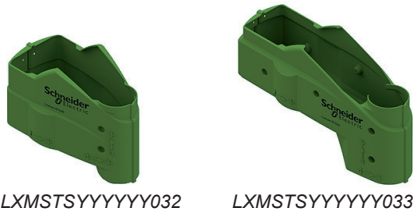
Designation	Use with robot type	Description	Reference	Weight kg lb
Lubricants (oil and grease)				
Standard lubricant	STS40, STS60, STS80	1x oil Castrol optigear synthetic RO 150: 1L for axis 1 1x oil ROBOLUB 68-S: 1L for axis 2 1x grease for ball screw 1x spray for toothed belts	LXMSTSYYYYY015	2.301 5.072
	STS40, STS60, STS80	1x oil H1 for axis 1 and axis 2 1x grease H1 for ball screw, 1 kg (2.2 lb) 1x spray for toothed belts	LXMSTSYYYYY016	1.355 2.987
	STS40, STS60, STS80	Ø 25 mm (0.98 in.), height 200 mm (7.87 in.)	LXMSTSYYYYY017	1.904 4.197
	STS40, STS60, STS80	Ø 25 mm (0.98 in.), height 400 mm (15.74 in.)	LXMSTSYYYYY018	2.304 5.079
Ball screw				
Ball screw	STS40, STS60, STS80	Ø 25 mm (0.98 in.), height 200 mm (7.87 in.)	LXMSTSYYYYY017	1.904 4.197
	STS40, STS60, STS80	Ø 25 mm (0.98 in.), height 400 mm (15.74 in.)	LXMSTSYYYYY018	2.304 5.079
Bellows for robots				
Bellow sets	Use with LXMSTSYYYYY017 on STS40, STS60, STS80	Height 200 mm (7.87 in.) Ø 25 mm (0.98 in.)	LXMSTSYYYYY019	1.200 2.645
	Use with LXMSTSYYYYY018 on STS40, STS60, STS80	Height 400 mm (15.74 in.) Ø 25 mm (0.98 in.)	LXMSTSYYYYY020	1.200 2.645
pinion quills				
pinion quills	STS40, STS60, STS80	For axis 3	LXMSTSYYYYY021	0.960 2.116
	STS40	For axis 4	LXMSTSYYYYY022	0.110 0.242
	STS60, STS80	For axis 4	LXMSTSYYYYY023	0.150 0.330
ARMIO board				
ARMIO board - for 8 optional I/O - module	STS40, STS60, STS80	Supplied with integrated digital and analog inputs/outputs on the tool flange Mounted under the harness cover of the forearm	LXMSTSYYYYY024	0.100 0.220
Tool connector set				
Tool connector set	STS40, STS60, STS80	Change for square fixation of the gripper including Valves 4x screw CHc M6x16 4x safety washer 1x square bracket 2x screw CHc M3x12 2x washer DIN 125-A3,2	LXMSTSYYYYY025	1.000 2.204
User IO cables				
User IO cables	STS40	Length: 200 mm (7.87 in.)	LXMSTSYYYYY026	0.750 1.653
		Length: 400 mm (15.74 in.)	LXMSTSYYYYY027	0.900 1.984
	STS60	Length: 200 mm (7.87 in.)	LXMSTSYYYYY028	0.760 1.675
		Length: 400 mm (15.74 in.)	LXMSTSYYYYY029	0.760 1.675
	STS80	Length: 200 mm (7.87 in.)	LXMSTSYYYYY030	0.760 1.675
		Length: 400 mm (15.74 in.)	LXMSTSYYYYY031	1.650 3.637

(1) H1 lubricants may be used in applications where accidental contact with food may occur. This accidental contact is limited to a trace: it must not exceed 10 parts per million (0.001%), otherwise the food is considered dangerous for consumption.

PacDrive 3 robotics

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LXMSTSYYYYY032

LXMSTSYYYYY033



LXMSTSYYYYY034

LXMSTSYYYYY035
LXMSTSYYYYY036
LXMSTSYYYYY037



LXMSTSYYYYY038



LXMSTSYYYYY039



LXMSTSYYYYY400



LXMSTSYYYYY600

Replacement equipments for Lexium STS robots

Designation	Use with robot type	Description	Reference	Weight kg lb
Covers for forearm				
Covers	STS40	Colour (RAL 6018)	LXMSTSYYYYY032	0.600 1.322
	STS60	Colour (RAL 6018)	LXMSTSYYYYY033	0.740 1.631
	STS80	Colour (RAL 6018)	LXMSTSYYYYY034	0.940 2.072
Cable harness				
Cable harness	STS40	-	LXMSTSYYYYY035	4.000 8.818
	STS60	-	LXMSTSYYYYY036	4.000 8.818
	STS80	-	LXMSTSYYYYY037	4.000 8.818
Bumpers				
Bumpers	STS40, STS60, STS80	For mechanical limit stop axis 1	LXMSTSYYYYY038	0.004 0.008
	STS40, STS60, STS80	For mechanical limit stop axis 2	LXMSTSYYYYY039	0.940 2.072
Replacement equipments sets				
Replacement equipment sets	STS40	Gearbox set axis 1: 1x gearbox axis 1 1x shaft seal ring 1x shaft seal ring 1x O-Ring axis 1 STS (bulky) 1x O-Ring axis 1 STS (fine) 1x O-Ring axis 1 STS 16x washer 16x screw M6 x 65 1x O-Ring motor axis 1 STS 18x screw M8 x 60 1x gearbox set axis 2 STS40 1x intermediate gearbox axis 4 STS40 Toothed belt Set: 1x toothed belt axis 4 1x toothed belt axis 3 1x deflection pulley 3x bearing sleeve 1x belt tightener 2x washer 3x screw M5x40 1x deflection pulley STS40 Oil and grease - standard: 1x oil Castrol optigear synthetic RO 150, 1L (axis 1) 1x oil Rogolub 68-S 1L (axis 2) 1x grease for ball screw 1x spray for toothed belts	LXMSTSYYYYY400	13.101 28.882
	STS60	Gearbox Set axis 1: 1x Gearbox axis 1 1x shaft seal ring 1x shaft seal ring 1x O-Ring axis 1 STS (bulky) 1x O-Ring axis 1 STS (fine) 1x O-Ring axis 1 STS 16x washer 16x screw M6 x 65 1x O-Ring motor axis 1 STS 18x screw M8 x 60 1x gearbox SET axis 2 STS40 1x gearbox axis 4 STS60/80 Toothed belt Set: 1x toothed belt axis 4 - short 1x toothed belt axis 4 1x toothed belt axis 3 STS60 2x deflection pulley 6x bearing sleeve 4x belt tightener 6x washer 6x screw M5x40 Oil and grease - standard: 1x oil Castrol optigear synthetic RO 150, 1L (axis 1) 1x oil Rogolub 68-S 1L (axis 2) 1x grease for ball screw 1x spray for toothed belts	LXMSTSYYYYY600	12.767 28.146

PacDrive 3 robotics

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Replacement equipments for Lexium STS robots (continued)

Designation	Use with robot type	Description	Reference	Weight kg lb
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Replacement equipments sets

Replacement equipment set	STS80	Gearbox Set Axis 1: 1x Gearbox Axis 1 1x shaft seal ring 1x shaft seal ring 1x O-Ring Axis 1 STS (bulky) 1x O-Ring Axis 1 STS (fine) 1x O-Ring Axis 1 STS 16x washer 16x screw M6 x 65 1x O-Ring motor Axis 1 18x screw M8 x 60 1x Gearbox Set Axis 2 1x Gearbox Axis 4 toothed belt Set: 1x toothed belt Axis 4 - short 1x toothed belt Axis 3 1x toothed belt Axis 4 2x deflection pulley 6x bearing sleeve 4x belt tightener 6x washer 6x screw M5x40 Oil and grease - standard: 1x oil Castrol optigear synthetic RO 150, 1L (axis 1) 1x oil Rogolub 68-S 1L (axis 2) 1x grease for ball screw 1x spray for toothed belts	LXMSTSYYYYY800	12.677 27.948
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LXMSTSYYYYY800

Replacement equipments for motors

Replacement equipment set	STS40	1x motor for axis 1 1x motor for axis 2 1x motor for axis 3 1x motor for axis 4 1x pinion axis 3 quill 1x pinion axis 4 quill	LXMSTSYYYYY100	11.274 24.854
	STS60, STS80	1x motor for axis 1 1x motor for axis 2 1x motor for axis 3 1x motor for axis 4 1x pinion axis 3 quill 1x pinion axis 4 quill	LXMSTSYYYYY101	11.834 26.089



LXMSTSYYYYY100



LXMSTSYYYYY101

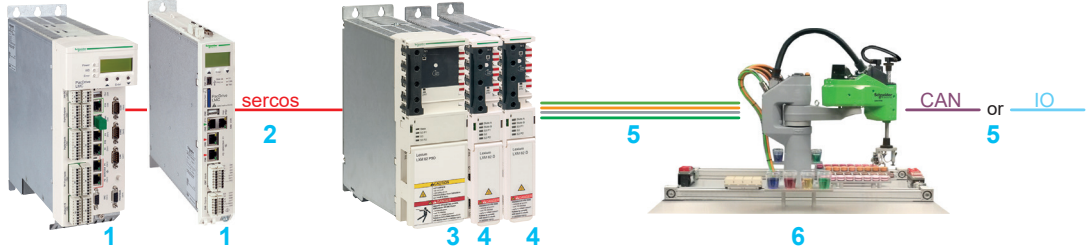
PacDrive 3 robotics

Lexium STS robots

SCARA robots for high speed picking

Connection elements for Lexium STS robots

Example of a system architecture for Lexium STS robots



Item	Qty	Device reference	Device type
1	1	LMC●00C●●● LMC●01C●●●	Motion controller (PacDrive 3 LMC Eco / LMC Pro) (1)
2	3	VW3E5001R●●●	Sercos cable (1)
3	1	LXM62PD84A11000	Lexium 62 power supply
4	1	LXM62DD27●21000	Lexium 62 double drive (with or without embedded Safety) for connection of Lexium STS robot, motor axis 1 and motor axis 2
	1	LXM62DU60●21000	Lexium 62 double drive (with or without embedded Safety) for connection of Lexium STS robot, motor axis 3 and motor axis 4
5	1	VW3E1143R●●●	Power cable for connection of drive and motor axis 1 (2)
	3	FCE319●●●A100	Power cable for connection of drive and motor axis 2, motor axis 3, and motor axis 4 (2)
	4	FCE320●●●A100	Encoder cable for connection of drive and motors (2)
	1	VW3E1169R●●●	Power cable for connection of 24 V voltage and for connection of the brake for the axis 3 and axis 4
	1	VW3E4002R●●●	Digital I/O cable for connection of digital inputs/outputs at the standard configuration (2)
	1	VW3E3067R●●●	CANopen bus cable for connection of CANopen bus at the configuration with ARMIO board (2)
6	1	LXMSTS●●●●●●	Lexium STS robot

Designation		■ Use	Length	Reference	Weight		
		■ Description			m	ft.	kg
Power cables	■ Shielded motor cable from motor axis 1 (connector X1221) on STS40, STS60 and STS80 robots to Lexium 62 double drive ■ M23 connector / free wires		5	16.40	VW3E1143R050	1.367	3.01
			10	32.81	VW3E1143R100	2.602	5.74
			15	49.21	VW3E1143R150	3.837	8.46
			20	65.62	VW3E1143R200	5.072	11.18
			25	82.02	VW3E1143R250	6.307	13.90
			30	98.43	VW3E1143R300	7.542	16.63
Power cables	■ Shielded motor cable from motor axis 2 (connector X1222), motor axis 3 (connector X1223) and motor axis 4 (connector X1224) on STS40, STS60 and STS80 robots to Lexium 62 double drive ■ S915 connector / free wires		5	16.40	FCE319050A100	1.140	2.51
			10	32.81	FCE319100A100	2.270	5.00
			15	49.21	FCE319150A100	3.400	7.50
			20	65.62	FCE319200A100	4.530	9.98
			25	82.02	FCE319250A100	5.660	12.47
			30	98.43	FCE319300A100	6.790	14.96
Power cables	■ Shielded power cable for connection of 24 V voltage and for connection of the brake for the axis 3 and axis 4 ■ From connector X1210 on STS40, STS60 and STS80 robots to Lexium 62 double drive ■ M9 Serie 712 connector (IP67) / free wires		5	16.40	VW3E1169R050	0.200	0.44
			10	32.81	VW3E1169R100	0.380	0.83
			15	49.21	VW3E1169R150	0.560	1.23
			20	65.62	VW3E1169R200	0.740	1.63
			25	82.02	VW3E1169R250	0.920	2.02
			30	98.43	VW3E1169R300	1.100	2.42



VW3E1143R●●●



FCE319●●●A100



VW3E1169R●●●

(1) The cable length depends on the distance between controller and cabinet.
 (2) The cable length depends on the distance between cabinet and robot.

PacDrive 3 robotics

Lexium STS robots

SCARA robots for high speed picking

Connection elements for Lexium STS robots (continued)

Encoder cables

Designation	■ Use ■ Description	Length		Reference	Weight	
		m	ft.		kg	lb
Encoder cables (feedback cable)	<ul style="list-style-type: none"> ■ Shielded cable from motor axis 1 (connector X1211), motor axis 2 (connector X1212), motor axis 3 (connector X1213) and motor axis 4 (connector X1214) on STS40, STS60 and STS80 robots to Lexium 52 drive and Lexium 62 double drive ■ S615 connector / RJ45 	5	16.40	FCE320050A100	0.500	1.10
		10	32.81	FCE320100A100	0.800	1.76
		15	49.21	FCE320150A100	1.100	2.42
		20	65.62	FCE320200A100	1.400	3.08
		25	82.02	FCE320250A100	1.700	3.74
		30	98.43	FCE320300A100	2.000	4.40



FCE320●●●A100

CANopen bus cables

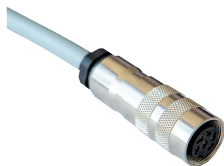
CANopen bus cables (If ARMIO board is mounted)	<ul style="list-style-type: none"> ■ Shielded cable from connector X1202 on STS40, STS60, STS80 robots to CANopen bus ■ M16 Serie 423 connector / MHDM35-9 way connector 	5	16.40	VW3E3067R050	0.409	0.901
		10	32.81	VW3E3067R100	0.749	1.65
		15	49.21	VW3E3067R150	1.089	2.40
		20	65.62	VW3E3067R200	1.429	3.15
		25	82.02	VW3E3067R250	1.769	3.89
		30	98.43	VW3E3067R300	2.109	4.64



VW3E3067R●●●

IO cables

Digital input/output cables (If no ARMIO Board is mounted)	<ul style="list-style-type: none"> ■ Shielded hybrid cable from connector X1202 on STS40, STS60, STS80 robots to digital inputs/outputs ■ M16 Serie 423 connector (IP67) / free wires 	5	16.40	VW3E4002R050	0.539	1.18
		10	32.81	VW3E4002R100	1.029	2.26
		15	49.21	VW3E4002R150	1.519	3.34
		20	65.62	VW3E4002R200	2.009	4.42
		25	82.02	VW3E4002R250	2.499	5.51
		30	98.43	VW3E4002R300	2.989	6.59



VW3E4002R●●●

L			
LXMSTS40F200000	6	LXMSTSYYYYYY016	9
LXMSTS40F300000	6	LXMSTSYYYYYY017	9
LXMSTS40F2A2000	6	LXMSTSYYYYYY018	9
LXMSTS40F3A2000	6	LXMSTSYYYYYY019	9
LXMSTS40F400000	6	LXMSTSYYYYYY020	9
LXMSTS40F500000	6	LXMSTSYYYYYY021	9
LXMSTS40F4A4000	6	LXMSTSYYYYYY022	9
LXMSTS40F5A4000	6	LXMSTSYYYYYY023	9
LXMSTS40W200000	6	LXMSTSYYYYYY024	9
LXMSTS40W300000	6	LXMSTSYYYYYY025	9
LXMSTS40W2A2000	6	LXMSTSYYYYYY026	9
LXMSTS40W3A2000	6	LXMSTSYYYYYY027	9
LXMSTS40W400000	6	LXMSTSYYYYYY028	9
LXMSTS40W500000	6	LXMSTSYYYYYY029	9
LXMSTS40W4A4000	6	LXMSTSYYYYYY030	9
LXMSTS40W5A4000	6	LXMSTSYYYYYY031	9
LXMSTS60F200000	6	LXMSTSYYYYYY032	10
LXMSTS60F300000	6	LXMSTSYYYYYY033	10
LXMSTS60F2A2000	6	LXMSTSYYYYYY034	10
LXMSTS60F3A2000	6	LXMSTSYYYYYY035	10
LXMSTS60F400000	6	LXMSTSYYYYYY036	10
LXMSTS60F500000	6	LXMSTSYYYYYY037	10
LXMSTS60F4A4000	6	LXMSTSYYYYYY038	10
LXMSTS60F5A4000	6	LXMSTSYYYYYY039	10
LXMSTS60W200000	6	LXMSTSYYYYYY400	10
LXMSTS60W300000	6	LXMSTSYYYYYY600	10
LXMSTS60W2A2000	6	LXMSTSYYYYYY800	11
LXMSTS60W3A2000	6	LXMSTSYYYYYY100	11
LXMSTS60W400000	6	LXMSTSYYYYYY101	11
LXMSTS60W500000	6		
		V	
LXMSTS60W4A4000	6	VW3E1143R050	12
LXMSTS60W5A4000	6	VW3E1143R100	12
LXMSTS80F200000	7	VW3E1143R150	12
LXMSTS80F300000	7	VW3E1143R200	12
LXMSTS80F2A2000	7	VW3E1143R250	12
LXMSTS80F3A2000	7	VW3E1143R300	12
LXMSTS80F400000	7	FCE319050A100	12
LXMSTS80F500000	7	FCE319100A100	12
LXMSTS80F4A4000	7	FCE319150A100	12
LXMSTS80F5A4000	7	FCE319200A100	12
LXMSTS80W200000	7	FCE319250A100	12
LXMSTS80W300000	7	FCE319300A100	12
LXMSTS80W2A2000	7	VW3E1169R050	12
LXMSTS80W3A2000	7	VW3E1169R100	12
LXMSTS80W400000	7	VW3E1169R150	12
LXMSTS80W500000	7	VW3E1169R200	12
LXMSTS80W4A4000	7	VW3E1169R250	12
LXMSTS80W5A4000	7	VW3E1169R300	12
LXMSTSYYYYYY001	8	FCE320050A100	13
LXMSTSYYYYYY002	8	FCE320100A100	13
LXMSTSYYYYYY003	8	FCE320150A100	13
LXMSTSYYYYYY004	8	FCE320200A100	13
LXMSTSYYYYYY005	8	FCE320250A100	13
LXMSTSYYYYYY006	8	FCE320300A100	13
LXMSTSYYYYYY007	8	VW3E3067R050	13
LXMSTSYYYYYY008	8	VW3E3067R100	13
LXMSTSYYYYYY009	8	VW3E3067R150	13
LXMSTSYYYYYY010	8	VW3E3067R200	13
LXMSTSYYYYYY011	8	VW3E3067R250	13
LXMSTSYYYYYY012	8	VW3E3067R300	13
LXMSTSYYYYYY013	8	VW3E4002R050	13
LXMSTSYYYYYY014	8	VW3E4002R100	13
LXMSTSYYYYYY015	9	VW3E4002R150	13



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