

# Robotic Gripper and Automation-Ready Workholding



## Kurt RV36 Gripper

The new Kurt RV36 Robotic Arm Gripper saves space and money and improves efficiency with quick-change, customizable jaws and custom accessories.

- Automated finger changes in seconds with patent-pending pull stud design
- Integrated electronic sensors ensure finger position and readiness
- Light weight design: high-strength aluminum alloy
- Maximum clamping and unclamping force from double-acting oval piston
- Self-centering wedge-type design for high force transmission and centric gripping
- Small gripper size saves space in robotic cells

See pages 4-5 for complete details



## Precision Force (PF) Vises

- High clamp force
- Jaw design minimizes jaw lift
- Easy centerline adjustment
- Quick lash adjustment
- Hex on both ends of screw, can be adjusted from either side
- 52mm pattern spacings for mounting to industry standard zero-point systems
- End effector ready for automation integration

See pages 6-9 for complete details



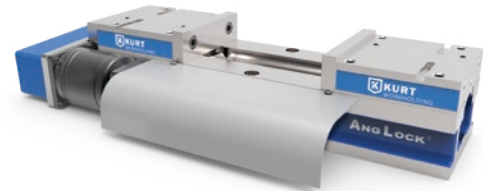
## Air Vise - Air Powered Vise for Automation

- Air powered motorized clamping provides consistent preset force and can be set to stop precisely on location
- Works great in automated systems and with Robotic workpiece handling
- Helps provide consistent clamping in unattended CNC operation
- Can be equipped with most Kurt vise models
- Air motor can be positioned under or on the side of the vise
- Operates on 20-100 PSI and requires air/oil mist
- Movable jaw can move through the entire stroke of the vise
- Air motor advantages include clean and easy pneumatic circuit hookup



## Servo Vise - For Automation

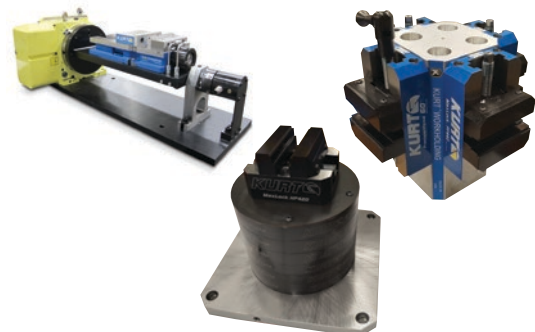
- Variable speed servo and position programmable
- Servo powered vise with Allen Bradley 570 watt Servo Motor
- Capable of handling loads up to 80 ft-lbs torque [Max torque with most Kurt 6 inch vises]
- Encoder
- Gear Drive and Gear Box Assembly Included
- Ethernet Cable [8 Conductors] Included
- Optional Ethernet/IP Servo Drive and cable sold separately



## Specialty Vises & Custom Engineered Workholding

Your ideas aren't off-the-shelf. Why should your workholding be? When you want the best workholding solutions for your specific needs, let Kurt custom-build them for you. Then, get ready to experience increased throughput and lower costs.

See full catalog for complete details for Specialty Vises and Custom Engineered Vises



### Pyramid 45° mounting platform

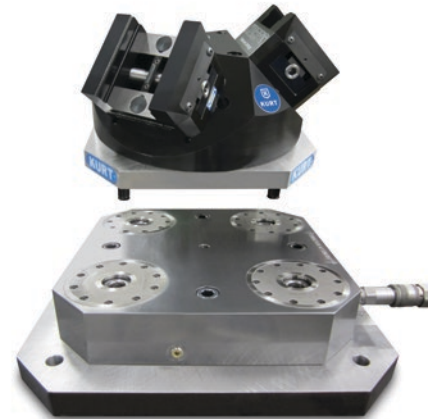
- 45-degree Pyramid design provides maximum access to all machined surfaces and allows for enhanced spindle and cutting tool clearance.
- Pyramid platform configuration accommodates 11 different Kurt vises including these models: HP series, PF series, SCMX series, and DT series vises. Jaw options available from Carvable, Dovetail and Serrated.
- Pyramid platform is constructed of 7075 anodized aluminum and has a 12" diameter base.
- Fits a wide variety of 5 axis CNC machines with predrilled holes for easy mounting to most machine tables, pallets or wide variety of sub plates.

See page 8 for complete details



### Pyramid 45° mounting platform with zero-point dock system

- 45-degree Pyramid design interfaces easily with DockLock mounting system for quick, high precision changovers.



### Hydraulic Pump Components for Automation

The Kurt automation pump system is custom configurable to match customer applications. It features fully integrated design for plug & play operation. Just add the appropriate connectors that fit your specific CNC controller or other I/O device.

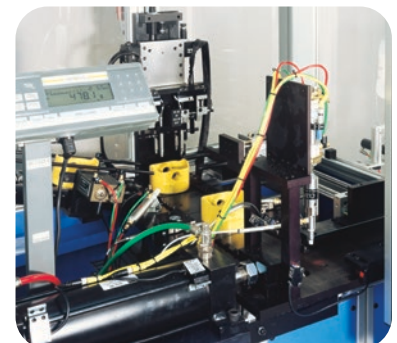
See full catalog for complete details



### Automation Inspection Gaging Systems

From automotive manufacturers to tier-one subcontractors who manufacture components and assemblies, Kurt clients span most areas of precision manufacturing. Kurt Gaging also provides SPC software/ hardware solutions and probes to OEM gaging/fixture makers and robotic system integrators.

See full catalog for complete details





### Kurt RV36 Gripper

The new Kurt RV36 Robotic Arm Gripper saves space and money and improves efficiency with quick-change, customizable jaws and custom accessories.

The new RV36 Robotic Gripper is a two-finger parallel gripper featuring a revolutionary patent-pending design that allows automated finger/end-effector changes without changing the gripper body. Quick-change fingers are secured with pull studs and allow customers to save on gripper-body expenses and create greater part-holding flexibility by using multiple finger configurations with a single gripper body.

Loaded with features, the compact Kurt RV36 Gripper comes standard with integrated electronics featuring sensors that ensure fingers are in place and optional sensors to insure parts are in place and ready for production. High-strength aluminum alloy keeps gripper weight to a minimum while a hard-coat finish reduces wear and increases life in the field. Double-acting piston design gives the RV 36 Gripper maximum clamping and un-clamping force and carvable aluminum- or steel-finger options can be machined to work in a variety of applications. Additional finger sets are also sold separately.

Kurt RV 36 Grippers offer additional space- and money-saving features. The smaller gripper size allows easier storage where space is a premium and pull-stud automation saves money for customers with a quick-change finger system allowing multiple finger options for a single gripper body. The RV36 is the first robot gripper with the ability to automatically change gripper fingers and the ability to accommodate an endless variety of end-effector options.

#### Gripper Features

- Automated finger changes in seconds with patent-pending pull stud design
- Integrated electronic sensors ensure finger position and readiness
- Light weight design: high-strength aluminum alloy
- Hard-coat finish
- Maximum clamping and unclamping force from double-acting oval piston
- Self-centering wedge-type design for high force transmission and centric gripping
- Small gripper size saves space in robotic cells
- Optional aluminum or steel finger configurations



**RV36 Gripper without Fingers**

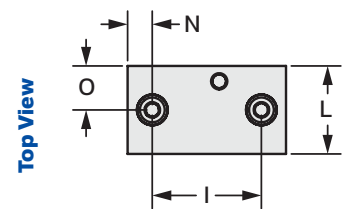
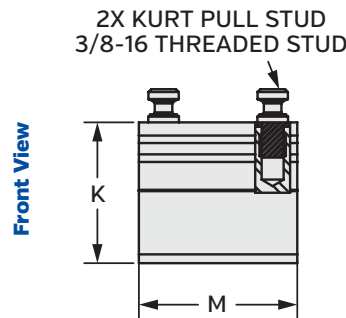
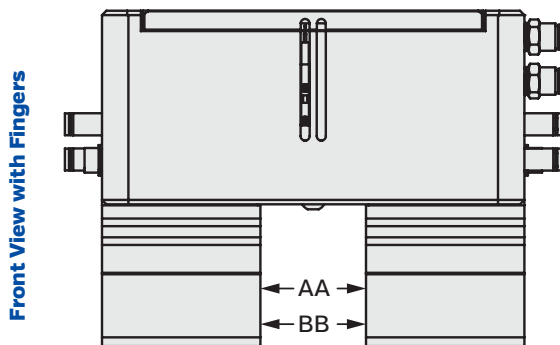
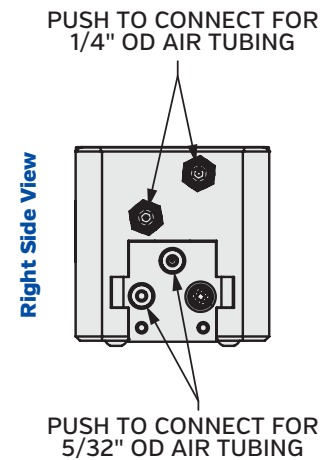
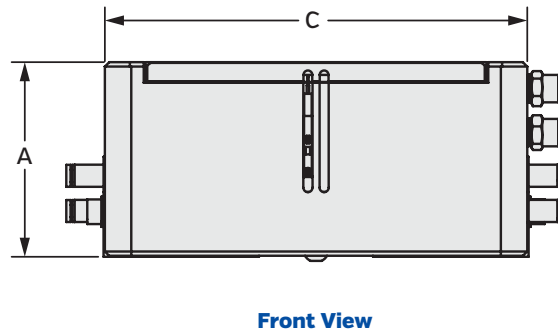
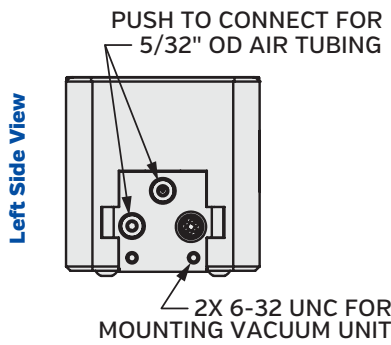
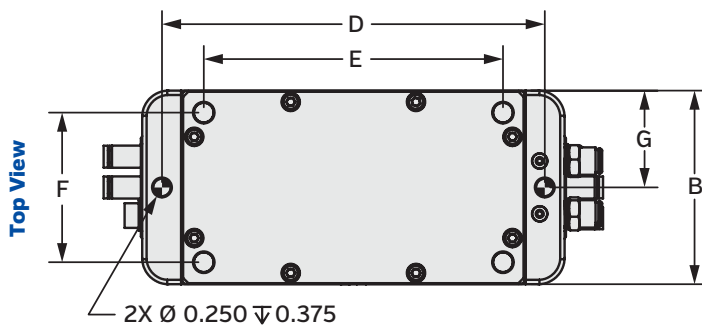
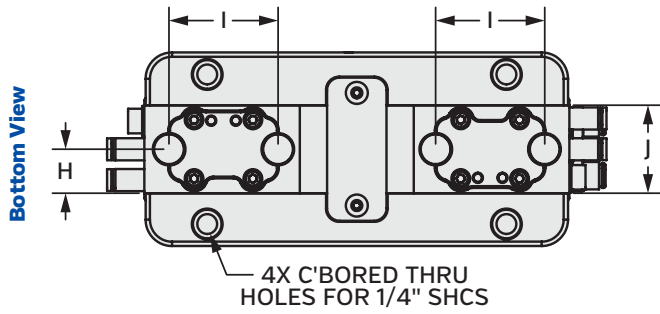
**RV36A Gripper with Aluminum Fingers**

**RV36S Gripper with Steel Fingers**

**RV36-388A-SA Aluminum Gripper Finger Assembly  
Complete with Pull Studs and Magnet Installed (single)**

**RV36-388S-SA Steel Gripper Finger Assembly  
Complete with Pull Studs and Magnet Installed (single)**

**Kurt RV36 Gripper**



Dimensional Data	
A	2.765
B	2.750
C	6.000
D	5.438
E	4.250
F	2.125
G	1.375
H	0.625
I	1.550
J	1.250
K	2.000
L	1.250
M	2.250
N	0.350
O	0.625
MAX OPEN AA	1.50
MIN OPEN BB	0.90

**Gripper weight: 5.6 Lbs.**

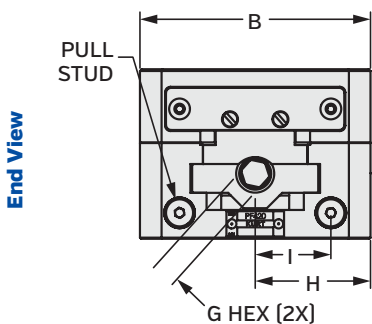
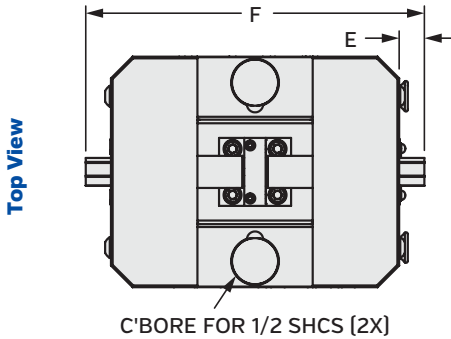
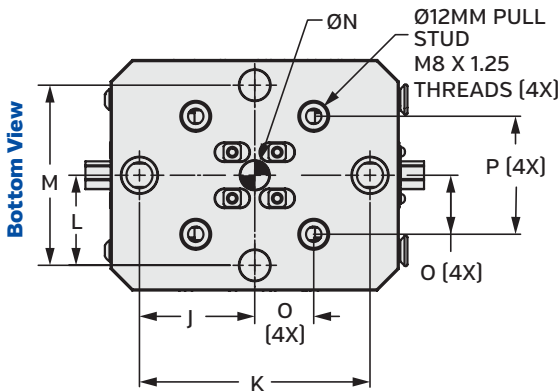
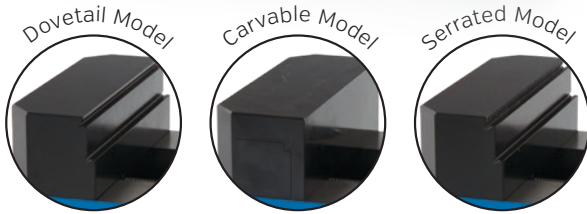
**Aluminum Finger weight: 0.55 Lbs.**

**Steel Finger weight: 1.3 Lbs.**

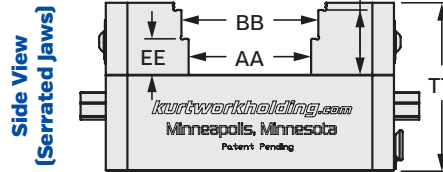


## Precision Force (PF) Vises

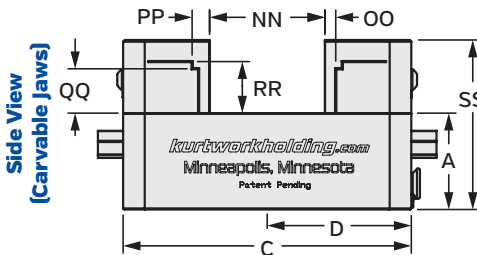
- High clamp force
- Jaw design minimizes jaw lift
- Easy centerline adjustment
- Quick lash adjustment
- Hex on both ends of screw, can be adjusted from either side
- 52mm pattern spacings for mounting to industry standard zero-point systems
- End effector ready for automation integration
- Movable jaw options: Carvable, Dovetail and Serrated
- Jaws and nuts can be reversed for ID clamping
- Jaws are gibbed to help with squareness
- Max torque 45 foot pounds.



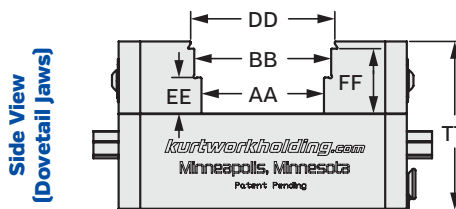
Torque (ft-lbs)	Clamp Force (lbs)	PF420	PF440	PF460	
10	600	A	1.672	1.672	1.672
20	1,200	B	4.000	4.000	4.000
30	1,900	C	5.000	7.000	9.000
40	2,500	D	2.500	3.500	4.500
45	3,300	E	0.438	0.438	0.438
		F	5.875	7.875	9.875
		G	7/16	7/16	7/16
		H	2.000	2.000	2.000
		I	1.313	1.313	1.313
		J	2.000	2.000	2.000
		K	4.000	4.000	4.000
		L	1.563	1.563	1.563
		M	3.125	3.125	3.125
		N	0.500	0.500	0.500
		O	1.024	1.024	1.024
		P	52MM	52MM	52MM
		AA	2.125	4.125	6.125
		BB	2.375	4.375	6.375
		CC	2.625	4.625	6.625
		DD	2.501	4.501	6.501
		EE	0.625	0.625	0.625
		FF	1.125	1.125	1.125
		NN	2.000	4.000	6.000
		OO	0.190	0.190	0.190
		PP	0.303	0.303	0.303
		QQ	0.770	0.770	0.770
		RR	0.885	0.885	0.885
		SS	2.942	2.942	2.942
		TT	2.922	2.922	2.922
		Weight	11 Lbs	14 Lbs	17 Lbs



**Serrated models:**  
PF420S, PF440S, PF460S



**Carvable models:**  
PF420C, PF440C, PF460C



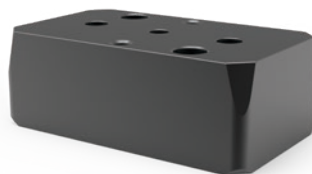
**Dovetail models:**  
PF420D, PF440D, PF460D

## Precision Force Optional Riser Blocks

Designed for use with PF-Series Vises, each vise riser kit includes a base and all the accessories needed for installation.



**HP420-RISERKIT**



**HP440-RISERKIT**



**HP460-RISERKIT**

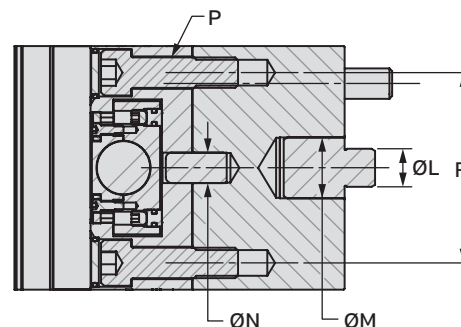
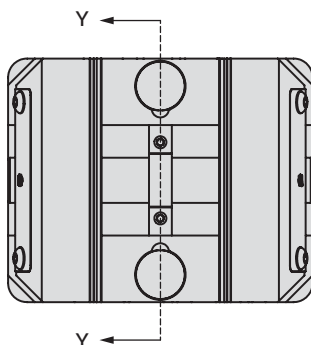
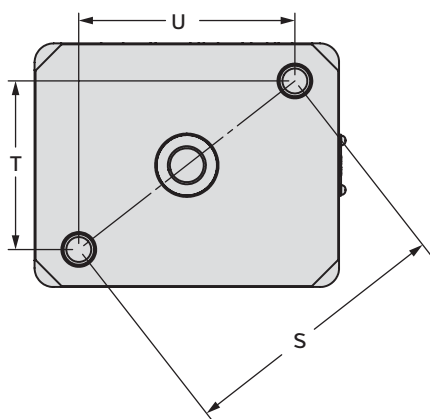
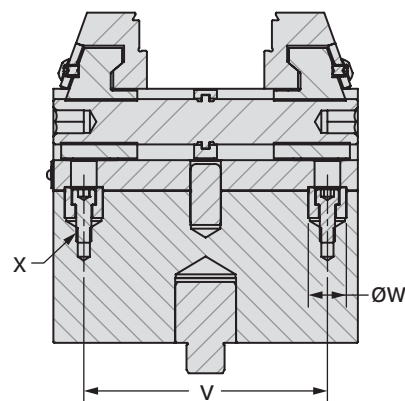
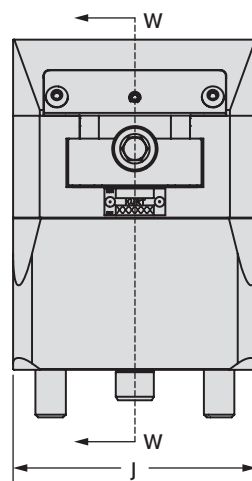
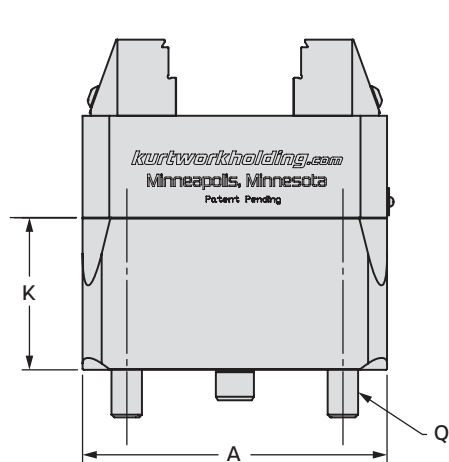
### Jaw Features

- Movable jaw options: Machinable, Dovetail and Serrated
- Jaws and nuts can be reversed for ID clamping
- Nuts are gibbed to help with squareness

	HP420-RISERKIT	HP440-RISERKIT	HP460-RISERKIT
A	5.000	7.000	9.000
J	4.000	4.000	4.000
K	2.500	2.500	2.500
P	1/2-13 SHCS	1/2-13 SHCS	1/2-13 SHCS
Q	1/2-13 SHCS	1/2-13 SHCS	1/2-13 SHCS
R	3.125	3.125	3.125
S	4.500	4.500	4.500
T	2.767	2.767	2.767
U	3.549	3.549	3.549
V	4.000	4.000	4.000
W	Ø 0.625	Ø 0.625	Ø 0.625
X	1/4-20 SHCS	1/4-20 SHCS	1/4-20 SHCS
Weight	6 lbs	8 lbs	11 lbs

Replacement Jaws		
Part Number	Description	Weight
PF420-2S	Serrated Jaw	1.6 lbs
PF420-2C	Carvable Jaw	1.8 lbs
PF420-2D	Dovetail Jaw	1.6 lbs

**Sold Individually**

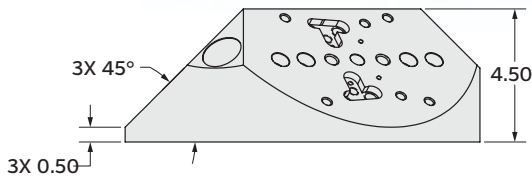




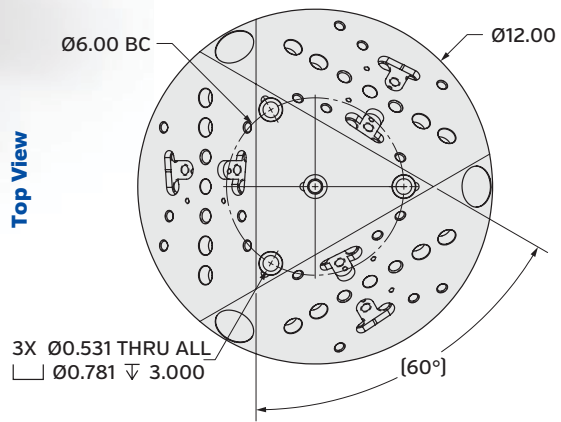
## Pyramid 45° mounting platform

- 45-degree Pyramid design provides maximum access to all machined surfaces and allows for enhanced spindle and cutting tool clearance.
- Pyramid platform configuration accommodates 11 different Kurt vises including these models: HP series, PF series, SCM series, and DT series vises. Jaw options available from Carvable, Dovetail and Serrated.
- Pyramid platform is constructed of 7075 anodized aluminum and has a 12" diameter base.
- Fits a wide variety of 5 axis CNC machines with predrilled holes for easy mounting to most machine tables, pallets or wide variety of sub plates.
- Weight: 35 lbs.

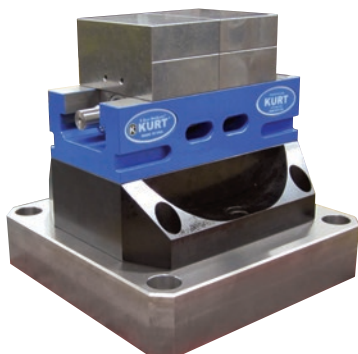
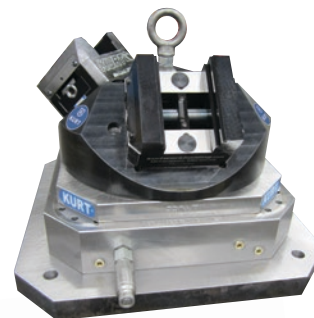
Side View



Top View



For all other 5-Axis and Custom Solutions see full catalog.







# KURT

## WORKHOLDING

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[kurtmachining.com](http://kurtmachining.com)

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