

FAST MOVING TECHNOLOGY

**Stäubli**

# FAST picker TP80

4 axis industrial robot - picker





## A unique 4 axis and 6 axis robot range for all applications

Whenever industrial companies need speed, repeatability and reliability, Stäubli robots provide the most appropriate answer.

To satisfy its customers, Stäubli Robotics has developed specific solutions, meeting the needs of all industries: electronics, medical, automotive, food, plastics, mechanical or painting.

Designed to work in the most hostile environments, but also to meet stringent cleanroom requirements, Stäubli robots demonstrate their efficiency in all circumstances.

**With performance always in mind.**

## MAN AND MACHINE

# Reliability, flexibility, performance



The FAST picker TP80 is an extremely fast and precise robot designed for Pick and Place operations. It pick rate sustained than 200 picks per minute with repeatability under 0.05 mm.

This robot can side and end mount, eliminating the need for contaminating overhead structures and offering flexibility of cell layout. This robot can be used in all

areas including sensitive and restrictive environments.



FAST picker TP80 model  
Stroke 200 mm, 7.8 in (option)



**High speed**  
Up to 200 picks per minute

**Precision**  
Repeatability of  $\pm 0.05$  mm,  
no interference with a  
camera's field of vision

**Able to reach con-fined spaces**  
Slim arm

**Optimum use of the work area**  
Large work space and  
vertical 200 mm, 7.8 in  
stroke (option)

**Work in difficult environments**  
Protective covers and  
bellows

## The added values of Stäubli robot arms

### Precise trajectory performance

- Increased part quality
- Reduced rework costs
- Rigid structure

### Sleek and easy to clean

- No foreign bodies reported
- Fully enclosed structure
- Smooth surface

### Space efficient

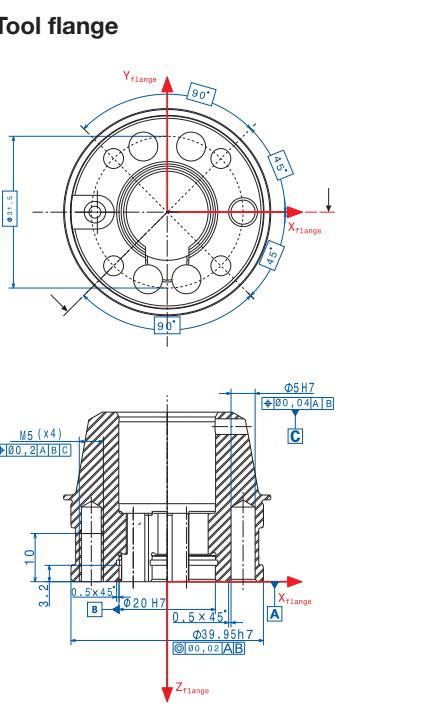
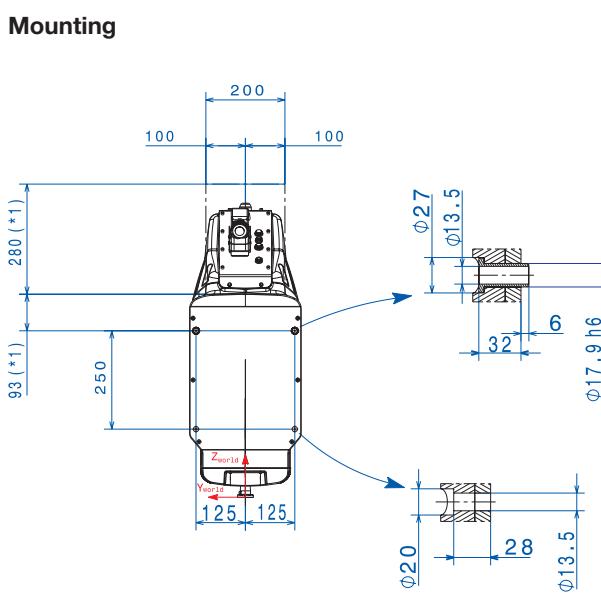
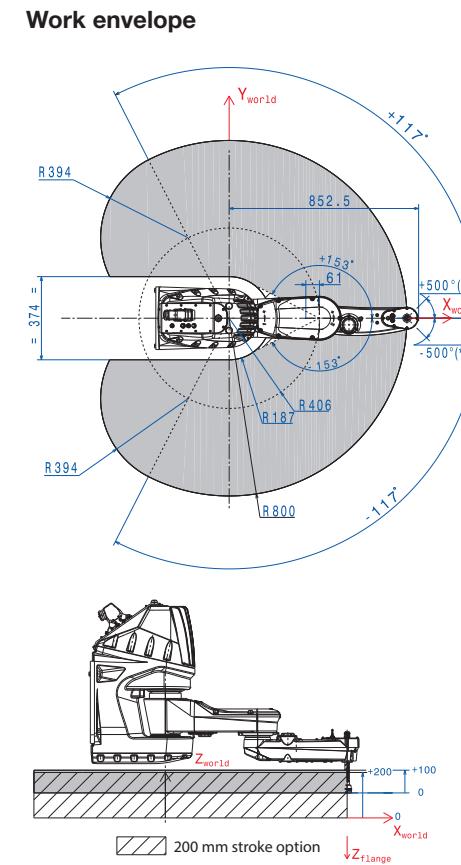
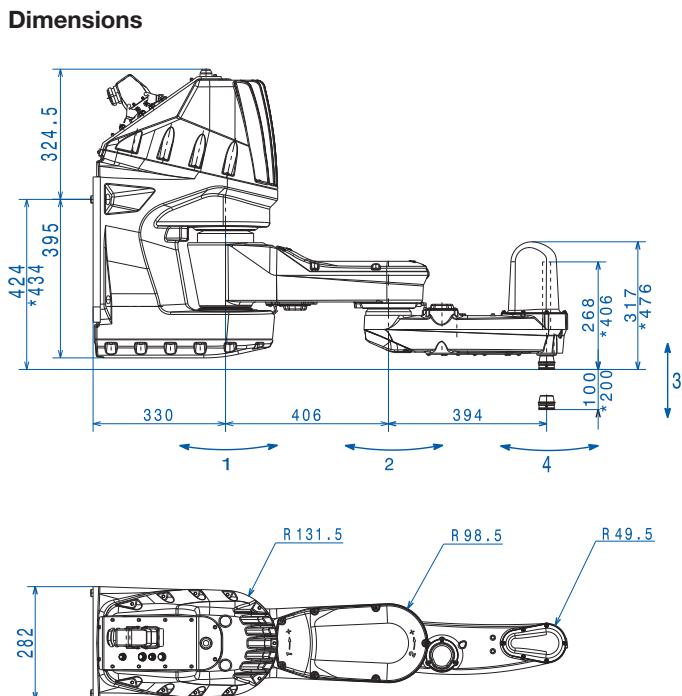
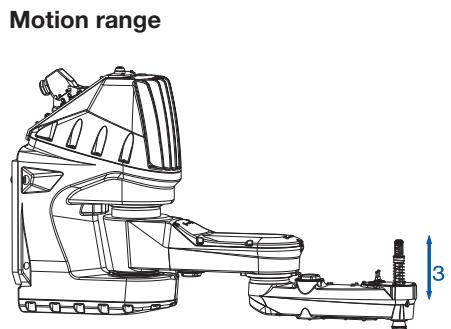
- Simple attachment
- Option to mount the robot on a mobile structure
- Small mounting plate

### Certifications :



# Characteristics

MODEL	FAST picker TP80
Maximum load	1 kg, 2.2 lb
Nominal load	0.5 kg, 1.1 lb
Reach (between axis 1 and 4)	800 mm, 31.4 lb
Number of degrees of freedom	4
Repeatability - ISO 9283	$\pm 0.05$ mm
Stäubli series controller	CS8C
Weight	68 kg, 150 lb
WORK ENVELOPE	
Maximum radius between axis 1 & 3	800 mm, 31.5 in
Minimum radius between axis 1 & 3	187 mm, 7.4 in
RANGE OF MOTION	
Axis 1	$\pm 117^\circ$
Axis 2	$\pm 153^\circ$
Stroke	100 mm, 3.9 in or 200 mm, 7.9 in (option)
Axis 4	$\pm 500^\circ$ ( <sup>1</sup> )
INSTALLATION ENVIRONMENT	
Working temperature according to NF EN 60 204-1	+5°C to +40°C, +41°F to +104°F +41°F to +104°F
Humidity according to NF EN 60 204-1	30% to 95% max. non-condensing
Attachment methods	Wall
ROBOT CYCLE-TIME <sup>(2)</sup> , SUSTAINED, AT 25°C/77°F TEMPERATURE	
25-300-25 mm cycle :	up to (ppm = picks per minute)
0,1 kg, 0.22 lb load	200 ppm
0,5 kg, 1.1 lb load	185 ppm
1 kg load, 2.2 lb	170 ppm
50-700-50 mm cycle	up to
0,1 kg, 0.22 lb load	110 ppm
0,5 kg, 1.1 lb load	105 ppm
1 kg load, 2.2 lb	95 ppm
USER INTERFACE	
Available on the forearm	Available on the tool flange (as an option)
Electrical cables	8 wires 0.16 mm <sup>2</sup> (AWG26) shielded cables
Pneumatic hoses	1 x int dia 4 mm + 1 x int dia 6 mm (Pairing of 2 x int dia 4 mm)
Max. voltage and current per contact	60 VDC - 25 VAC - 1A
Cleanroom standard - ISO 14644-1 (version with bellow)	6
Protection class according to NF 60529	IP54 standard, IP65 with bellows
MARKET SPECIFIC VERSION	
HE (Humid Environment) version	•



(1) Standard  $\pm 500^\circ$ .  
Configurable  $\pm 18000^\circ$ .  
With user cable optional  $\pm 200^\circ$ .  
(2) Under special conditions, consult us.



■ Stäubli Units    ○ Agents

## Global presence of the Stäubli Group

[www.staubli.com](http://www.staubli.com)