

## FAST picker TP80 HE industrial robot



Automotive & equipment manufacturers

Food

Medical

Life Sciences

Cosmetics

**TS**  
SCARA / 4 axis

**TX**  
LOW PAYLOAD / 6 axis

**RX / TX**  
MEDIUM PAYLOAD / 6 axis

**TX**  
HEAVY PAYLOAD / 6 axis

**TP**  
PICKER / 4 axis

# FAST picker TP80 HE

## CHARACTERISTICS

Maximum load <sup>(1)</sup>	1 kg
Nominal load	0,5 kg
Reach	800 mm
Number of degrees of freedom	4
Repeatability – ISO 9283	± 0,05 mm
Maximum inertia	0,014 kg.m²
Weight	68 kg
Stäubli CS8 series controller	CS8C

## RANGE OF MOTION

Angular reach axis 1	± 117°
Angular reach axis 2	± 153°
Stroke	100 mm
Angular reach axis 4	± 500° <sup>(2)</sup>

## WORK ENVELOPE

Maximum radius between axis 1 & 3	800 mm
Minimum radius between axis 1 & 3	187 mm

## ROBOT PICKS PER MINUTE <sup>(3)</sup>, SUSTAINED, AT 25°C TEMPERATURE

25-300-25 mm cycle:	Up to:
0.1 kg load	200 ppm
0.5 kg load	185 ppm
1 kg load	170 ppm
50-700-50 mm cycle:	Up to:
0.1 kg load	110 ppm
0.5 kg load	105 ppm
1 kg load	95 ppm

## USER INTERFACE

	On forearm	On tool flange (optional)
Electrical cables	8 x 0,16 mm² (AWG26) shielded	8 x 0,16 mm² (AWG26) shielded
Pneumatic lines	1 x Ø 4 mm + 1 x Ø 6 mm	1 x Ø 4 mm + 1 x Ø 6 mm (2 x Ø 4 mm)
Tension & maximum current by contact	60 VDC - 25 VAC - 1A	
Cleanroom standard – ISO 146444-1	6	
Protection class according to standard NF EN 60529	IP65	

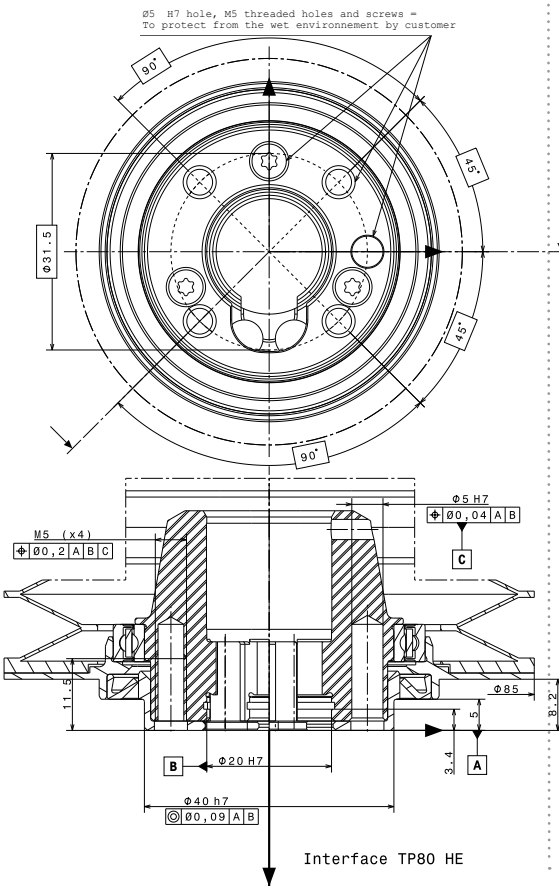
## INSTALLATION ENVIRONMENT

Working temperature according to standard directive NF EN 60 204-1	+ 5°C to + 40°C
Humidity according to standard directive NF EN 60 204-1	30% to 95% max. non-condensing
Attachment methods	Wall

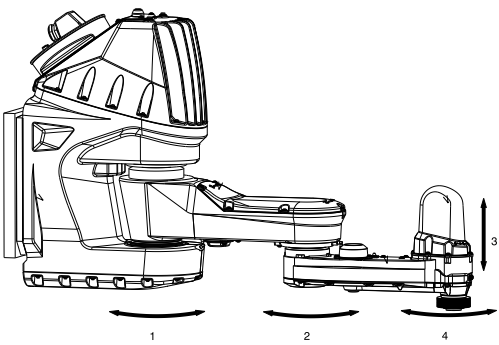
## MARKET SPECIFIC VERSION

HE (Humid Environment) version <sup>(4)</sup>	•
NSF H1 Food graded oil	•

## TOOL FLANGE

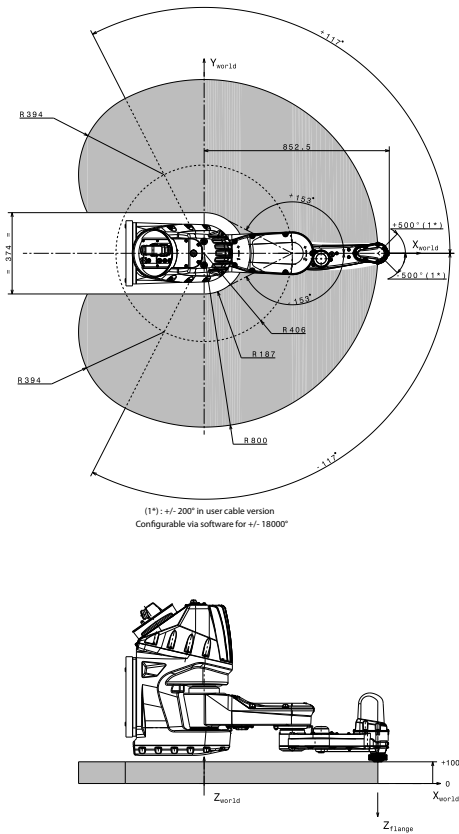


## MOTION RANGE

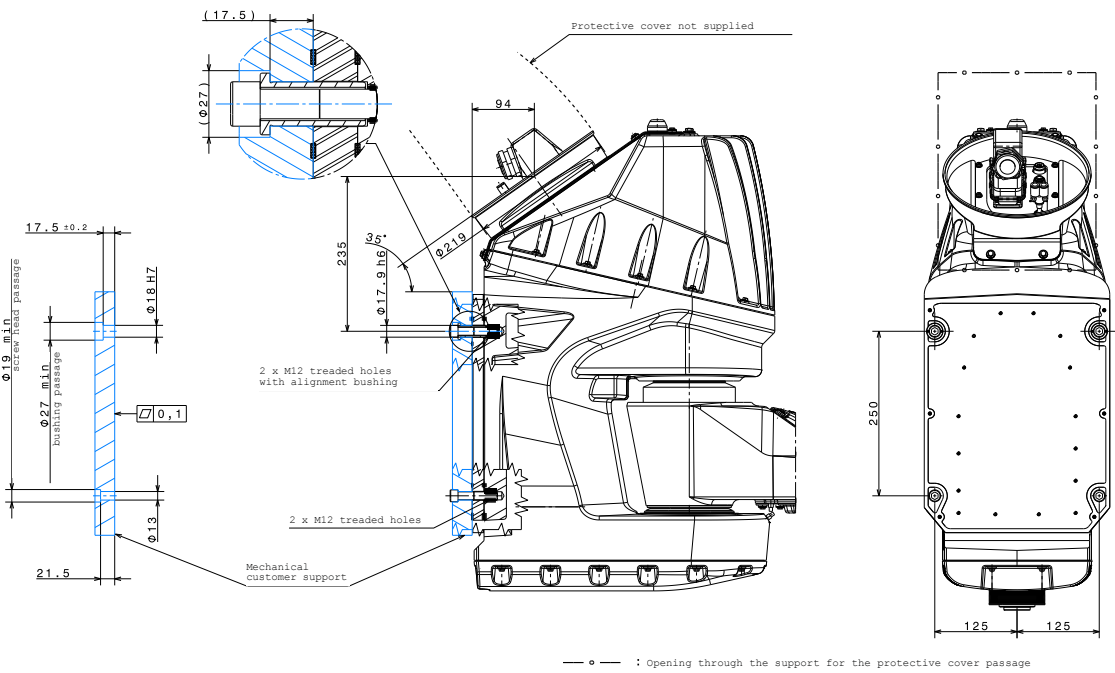


- (1) Under special conditions with reduced speed and acceleration, consult us.  
(2) Standard = ± 500°  
Configurable = ± 18000°  
With user cable optional = ± 200°  
(3) Under special conditions, consult us.  
(4) Version HE (Humid Environment): designed for use in humid and oxidizing environments. The arm components are painted individually, providing additional arm protection against oxidation and corrosion. Factory installation only and required with pressurization kit.

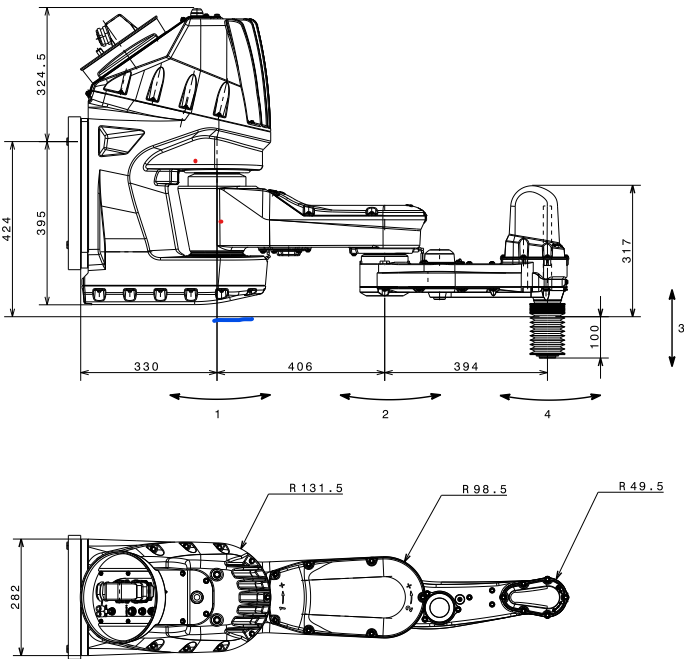
## WORK ENVELOPE



## ATTACHMENT



## DIMENSIONS



## PRODUCT BENEFITS

The FAST picker TP80 HE, the world's only clean picker robot, delivers up to 200 picks per minute, is designed for lightweight handling operation, decoration and packaging in sensitive environments requiring bacteria cleaning protocols.

### ROBOT RESISTANT TO PH 4.5 - 8.5 ENVIRONMENT

- ▶ Foaming and rinsing identical to the rest of the line
- ▶ Compatible with the most cleaning and disinfection solutions
- ▶ Reduced cleaning time

### SIMPLE ATTACHMENT

- ▶ No visible screws
- ▶ No supporting framework above the products
- ▶ Unique mounting options reduces cell size, especially on multi robot lines
- ▶ Multiple mounting configurations away from the sensitive pick area
- ▶ Robot bypass mode: easily placed in a service / maintenance position allowing production to continue

### SMOOTH ROUNDED SURFACE

- ▶ Smooth surface with rounded edges
- ▶ No liquid retention area that accelerates corrosion
- ▶ Encourages liquid run-off

### LARGE WORK ENVELOPE

- ▶ 1600 mm work envelope
- ▶ Repeatability  $\pm 0.05$  mm across the entire work envelope
- ▶ No interference with camera's field of vision

### ELECTRICAL AND PNEUMATIC CONNECTION PROTECTED ENVIRONMENT

- ▶ Ease of integration
- ▶ No risk of wear or tearing
- ▶ All pneumatic and electrical supplies routed through the arm
- ▶ All connections are completely removed from the sensitive area



### ROBOT COMPLETELY TIGHT

- ▶ Fully closed structure with overpressurized IP65 arms
- ▶ The overpressure prevents all contact between the robot's internal components and the outside environment

### INDUSTRY CUSTOMIZED PERFORMANCE

- ▶ Extremely fast robot
- ▶ Up to 200 picks per minute (ppm)
- ▶ Designed to work in primary and secondary handling application
- ▶ Optional VALtrack software allows management of multiple conveyors
- ▶ Ready interface with vision camera for parts detection
- ▶ Reliable and safe handling of sensitive products

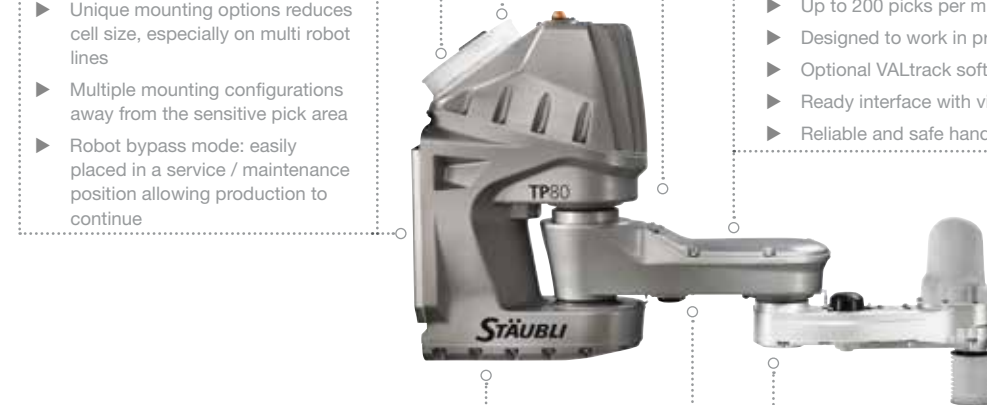
### HYGIENIC DESIGN

- ▶ Designed in compliance with EHEDG food recommendations and requirements of food industry
- ▶ Full head stainless screws without liquid retention area
- ▶ Stainless steel used for wrist flange and critical parts
- ▶ NSF H1 food oil with no loss of performance
- ▶ Bellows
- ▶ Unpainted forearm



### CERTIFICATION

Compliance with CE and KCS standards



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