

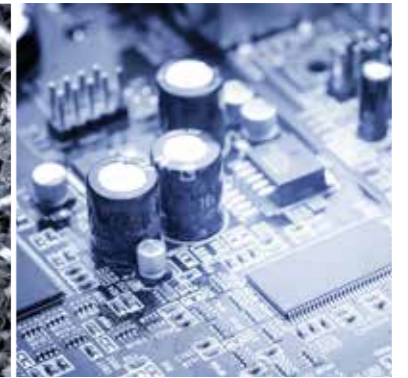
FAST MOVING TECHNOLOGY

*STÄUBLI*

# TX200 range

6 axis industrial robots





## 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



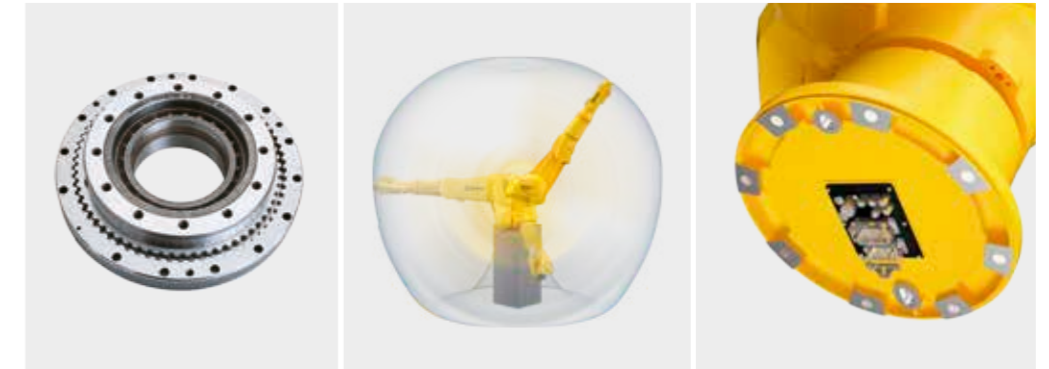
TX200 6-axis industrial robots features an articulated arm for extraordinary dexterity and flexibility. This range of robots is designed to heavy payload up to 150

kg and it is adapted to handle various applications in many industrial sectors. The compactness of the arm and the large work envelope allows maximum utilization

of cell workspace. The enclosed structure of the arm allows the work in sensitive environment.



TX200L model



**High precision, long life time and reduced maintenance**  
JCS gearbox designed by Stäubli

**Optimum use of the work area**  
Less floorspace needed, large work envelope

**Work in difficult environments**  
Vertical cable outlet, complete protection of connections

## The added values of Stäubli robot arms

**Eliminating complex cable management**

- Connections directly on the robot forearm thanks electrical I/O and Ethernet cable

**Precise trajectory performance**

- Increased part quality
- Reduced rework costs

**Flexible integration on the production line**

- Multiple attachment methods

**Optimum cleanliness, arm motion freedom and production reliability**

- All cables and pipes routed through the arm removing obstacles from the work area
- Enclosed structure

**Customizable color and texture**

- Choice of finishes

**Certifications :**



# Characteristics

MODEL	TX200	TX200L
Maximum load	130 kg (150 kg under conditions)	80 kg (100 kg under conditions)
Nominal load	100 kg	60 kg
Reach d'action (between axis 1 and 6)	2194 mm	2594 mm
Number of degrees of freedom	6	6
Repetability - ISO 9283	± 0,06 mm	± 0,1 mm
Stäubli series controller	CS8C HP	CS8C HP
Weight	980 kg	1000 kg

MAXIMUM SPEED		
Axis 1	160°/s	160°/s
Axis 2	160°/s	160°/s
Axis 3	160°/s	160°/s
Axis 4	260°/s	260°/s
Axis 5	260°/s	260°/s
Axis 6	400°/s	400°/s
Maximum speed at load gravity center	12 m/s	14 m/s
Maximum inertia axis 5	45 kg.m <sup>2</sup>	40 kg.m <sup>2</sup>
Maximum inertia Axis 6	20 kg.m <sup>2</sup>	15 kg.m <sup>2</sup>
Brakes	All axes	

WORK ENVELOPPE		
Maximum reach between axis 1 and 5 (R.M)	2000 mm	2400 mm
Maximum reach between axis 2 and 5 (R.M)	1750 mm	2150 mm
Minimum reach between axis 1 and 5 (R.m1)	365 mm	528 mm
Minimum reach between axis 2 and 5 (R.m2)	545 mm	690 mm
Minimum reach between axis 3 and 5 (R.b)	800 mm	1200 mm

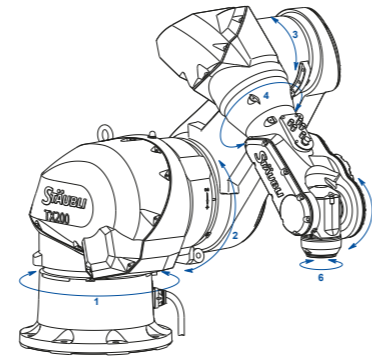
RANGE OF MOTION		
Axis 1 (A)	± 180°	± 180°
Axis 2 (B)	+ 120°/-115°	+ 120°/-115°
Axis 3 (C)	+145°/-140°	+145°/-140°
Axis 4 (D)	± 270°	± 270°
Axis 5 (E)	± 120°	± 120°
Axis 6 (F)	± 270° <sup>(1)</sup>	± 270° <sup>(1)</sup>

INSTALLATION ENVIRONNEMENT		
Working temperature according to 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	Floor/Shelf/Ceiling	
Vertical cable outlet version	•	
Pressurized version	•	

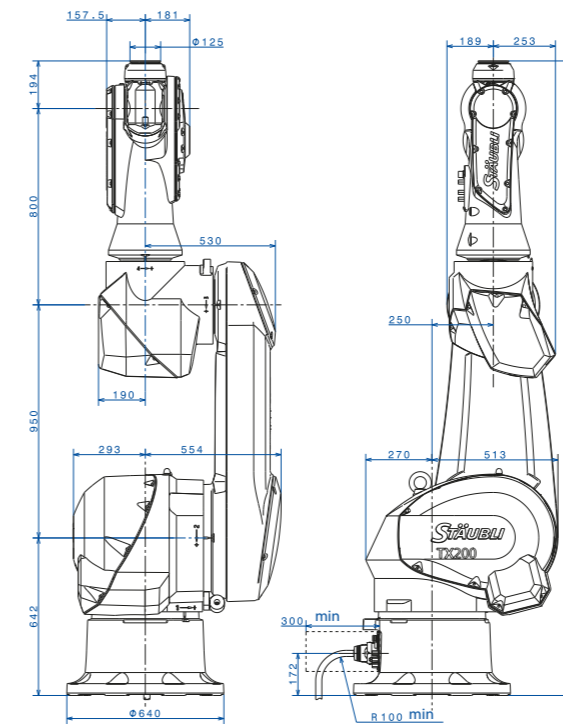
FOREARM CONNECTIONS		
Pneumatic	2 solenoid valves in option 5/2-way monostable (compressed air) 3 direct lines between the base and the forearm	
Electrical	Standard	1 female 19-contact socket (7 twisted pairs including 2 shielded, 3 power contacts)
	Ethernet option	A 19-contact female cylindrical connector with 5 twisted pairs and 3 power contacts + 4-contact female cylindrical connector M12 code D for a Cat 5e Ethernet link.
Cleanroom standard ISO 14644-1	5	
Protection class according to EN 60529	IP65 / IP67	

MARKET SPECIFIC VERSIONS		
ESD (ElectroStatic Discharge) version	•	
Version environnement humide (HE)	•	
Plastics - Euromap 12/67 and SPI interface	•	
NSF H1 Food graded oil	•	

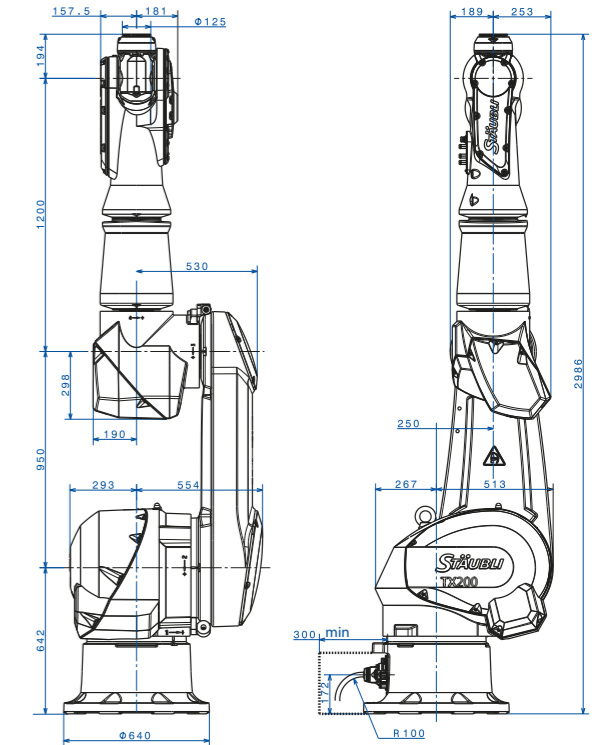
## Motion range



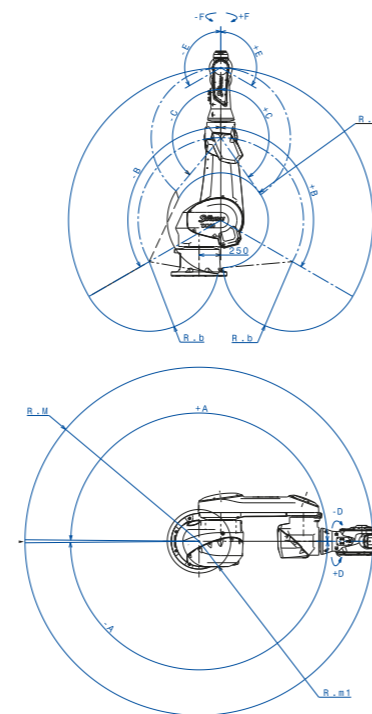
## TX200 dimensions



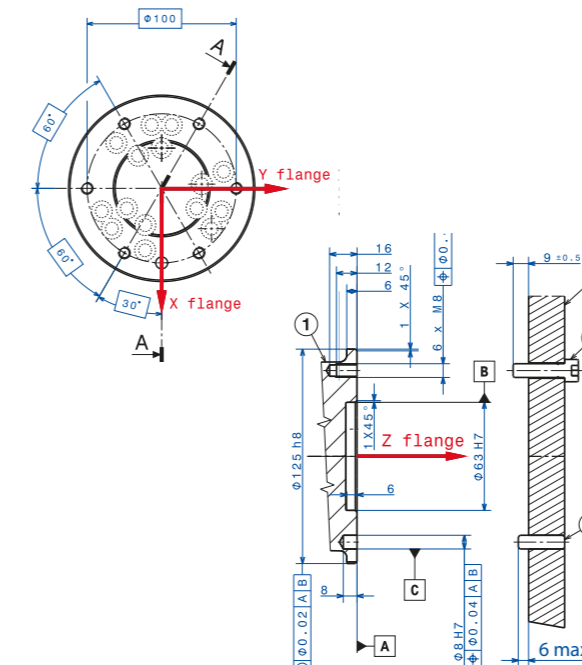
## TX200L dimensions



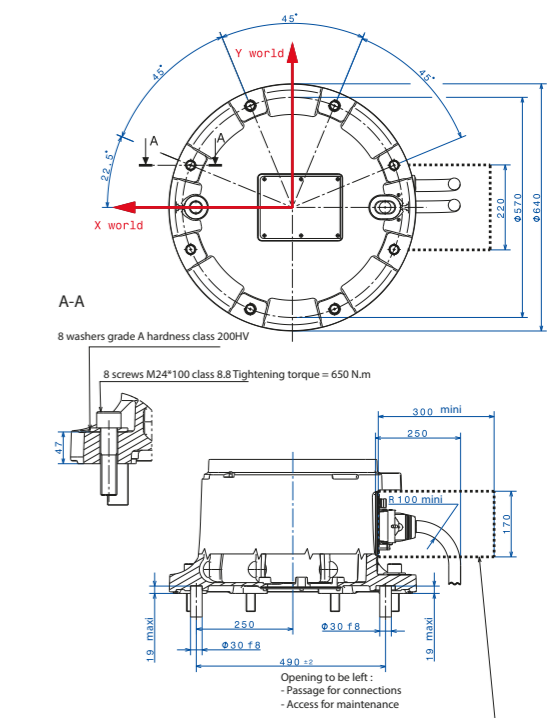
## Work envelope



## Wrist



## Mounting (not for vertical cable outlet option)



(1) Software configurable up to ± 18 000°.



■ Staubli Units    ○ Agents

# Global presence of the Staubli Group

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