

TS20 industrial robot



**Automotive & equipment
manufacturers**

Electronics

Electrical

Life Sciences & pharma

TS
SCARA / 4 axis

TX
LOW PAYLOAD / 6 axis

RX / TX
MEDIUM PAYLOAD / 6 axis

TX
HEAVY PAYLOAD / 6 axis

TP
PICKER / 4 axis

TS20

CHARACTERISTICS

Maximum load ⁽¹⁾	1 kg
Nominal load	0,5 kg
Reach	220 mm
Number of degrees of freedom	4
Repeatability - ISO 9283	± 0,01 mm

RANGE OF MOTION

Angular reach axis 1	± 133°
Angular reach axis 2	± 131°
Stroke axis 3	100 mm
Angular reach axis 4	±250°

WORK ENVELOPE

Maximum radius between axis 1 & 3	220 mm
Minimum radius between axis 1 & 3	88 mm

MAXIMUM SPEED

Axis 1	1205 °/s
Axis 2	1715 °/s
Axis 3	645 mm/s
Axis 4	3760 °/s
Maximum inertias (Axis 4)	0,0022 kg.m²
Weight	15 kg
Brakes	Axis 1 and 3
Cleanroom standard - ISO 14644-1	8
Protection class according to standard NF EN 60529	IP10
Stäubli CS8 series controller	CS8C M

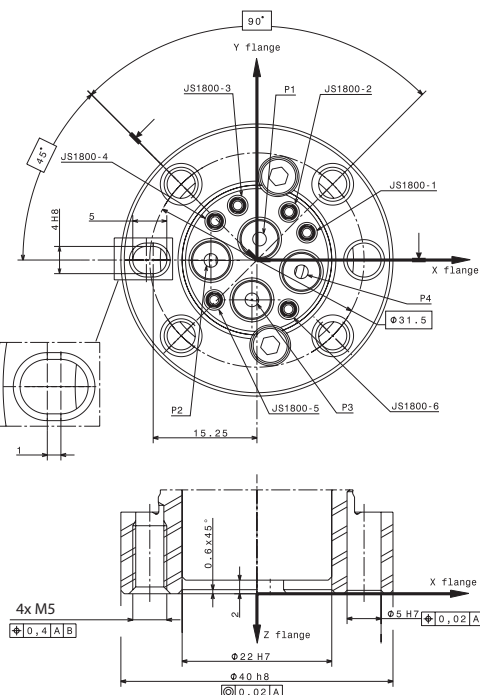
USER INTERFACE (on tool flange)

Electrical cables	6 x 0,21 mm ² (AWG24) not shielded
Pneumatic lines	2 x Ø1,8 mm
Tension & maximum current by contact	24 VDC - 1A

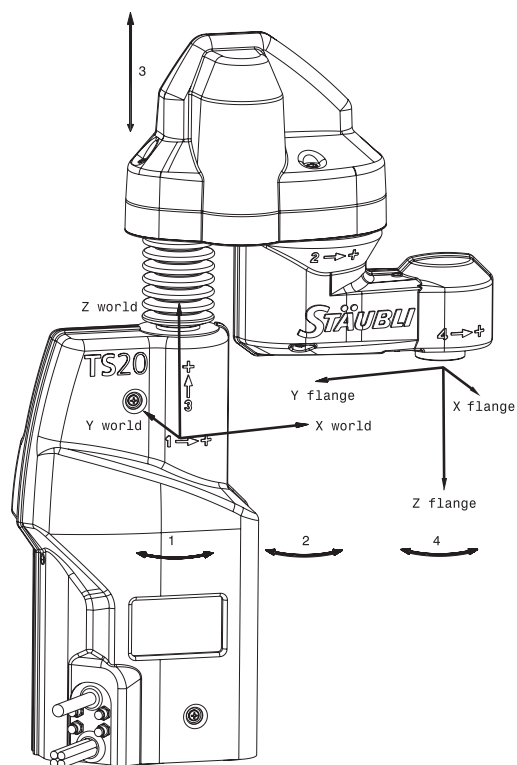
INSTALLATION ENVIRONMENT

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 90% max. non-condensing
Attachment methods	Floor

TOOL FLANGE

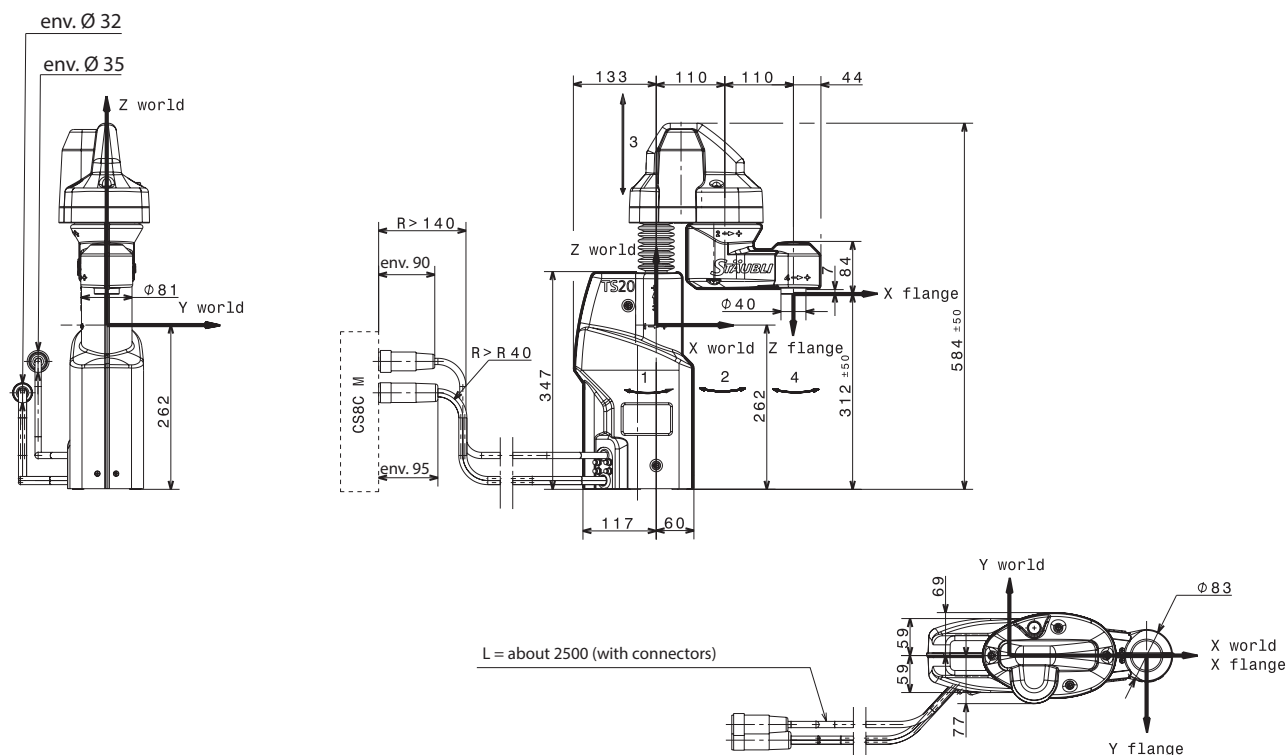


MOTION RANGE

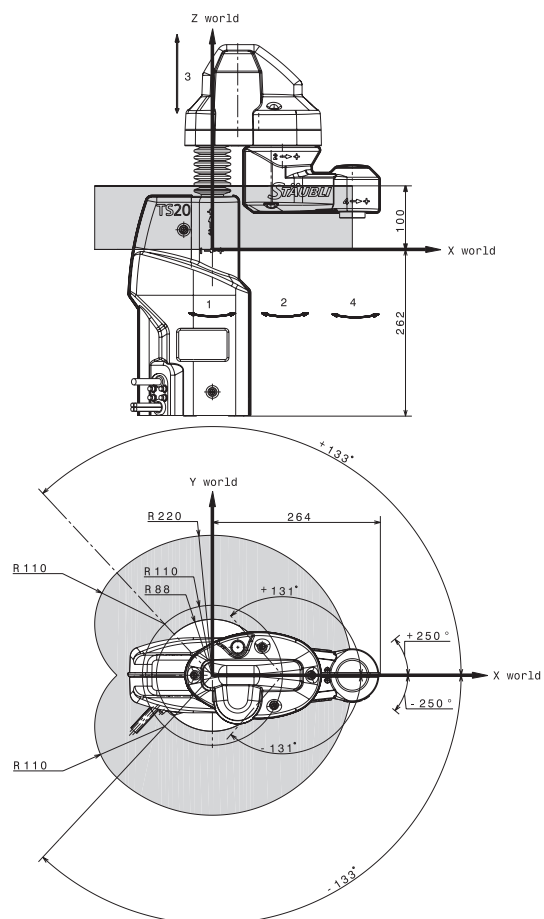


(1) Under special conditions with reduced speed and acceleration, consult us.

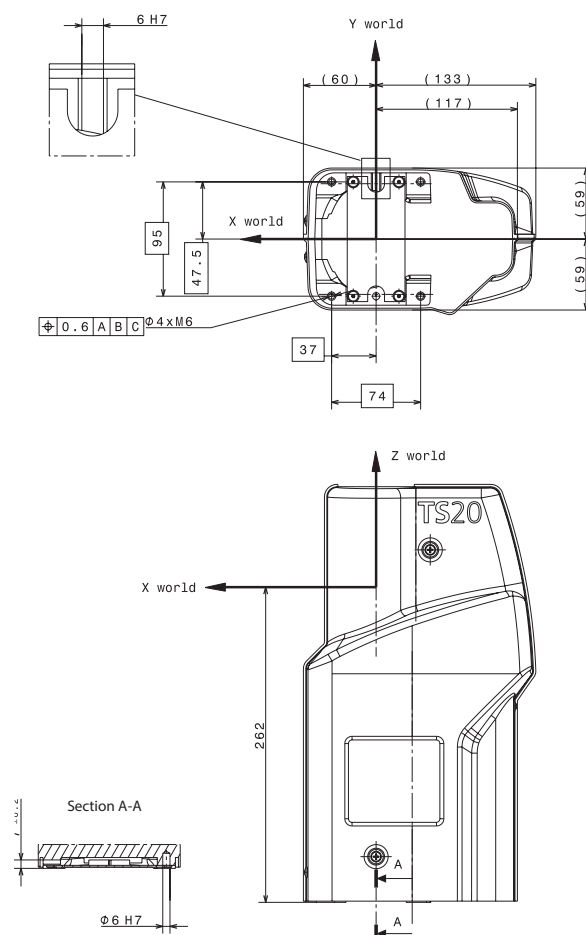
DIMENSIONS



WORK ENVELOPE



ATTACHMENT



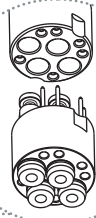
PRODUCT BENEFITS

The TS20 is very compact and built for high speed. Designed entirely by Stäubli, it offers many of the same features as larger robots in our TS line, delivering clean, consistent and performance.



RIGID STRUCTURE

Precise trajectory performance even in the most demanding applications.



MALE CONNECTOR SUPPLIED

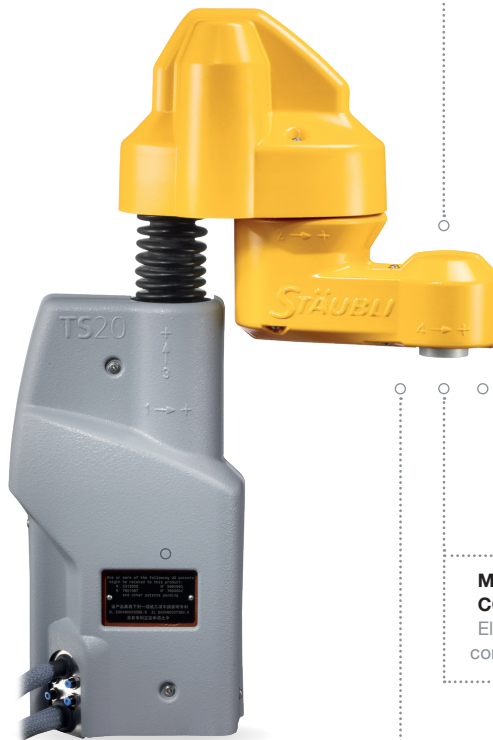
Plug and Play mobile connector:
• 4 pneumatic inputs
• 6 electrical inputs

UNIQUE FEATURES

Repeatability: ± 0.01 mm (ISO 9283)

PNEUMATIC CONNECTIONS AT THE BASE OF THE ROBOT

Internal pneumatic connection from the robot's base to the flange

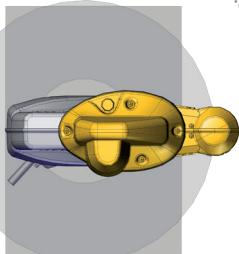


MULTIPLE USER CONNECTIONS

Electrical and pneumatic connections on the tool flange.



VERY COMPACT



A3 sheet of paper

6-WIRE ELECTRICAL CONNECTIONS + 2 SOLENOID VALVES OUTPUTS

Direct electrical connection from the controller to the flange



CERTIFICATION

Compliance with CE, UL and KCS standards allows robot installation whenever you need it.

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