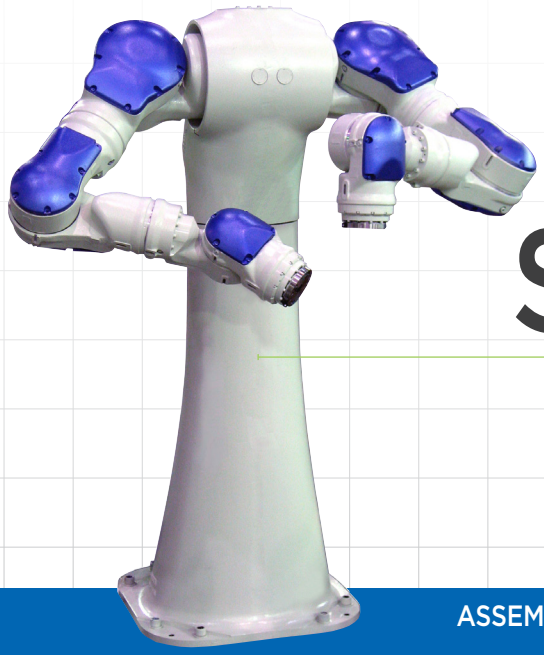
YASKAWA

HUMAN-LIKE FLEXIBILITY



SDA10F

ASSEMBLY | HANDLING | MACHINE TENDING
PACKAGING | PART TRANSFER

KEY BENEFITS

Dexterity to perform complex tasks; dual 7-axis arms work together or independently

Slim design optimizes space; provides "human-like" flexibility and range of motion, even in tight spaces

Simplified tooling reduces cost

Can be used in environments that are hazardous to humans

Labor savings justifies capital investment

SPECIFICATIONS

10 kg payload per arm

1,440 mm vertical reach

720 mm horizontal reach per arm

±0.1 mm repeatability

CONTROLLERS

DX200	FS100	MLX200
☐	☑	☐

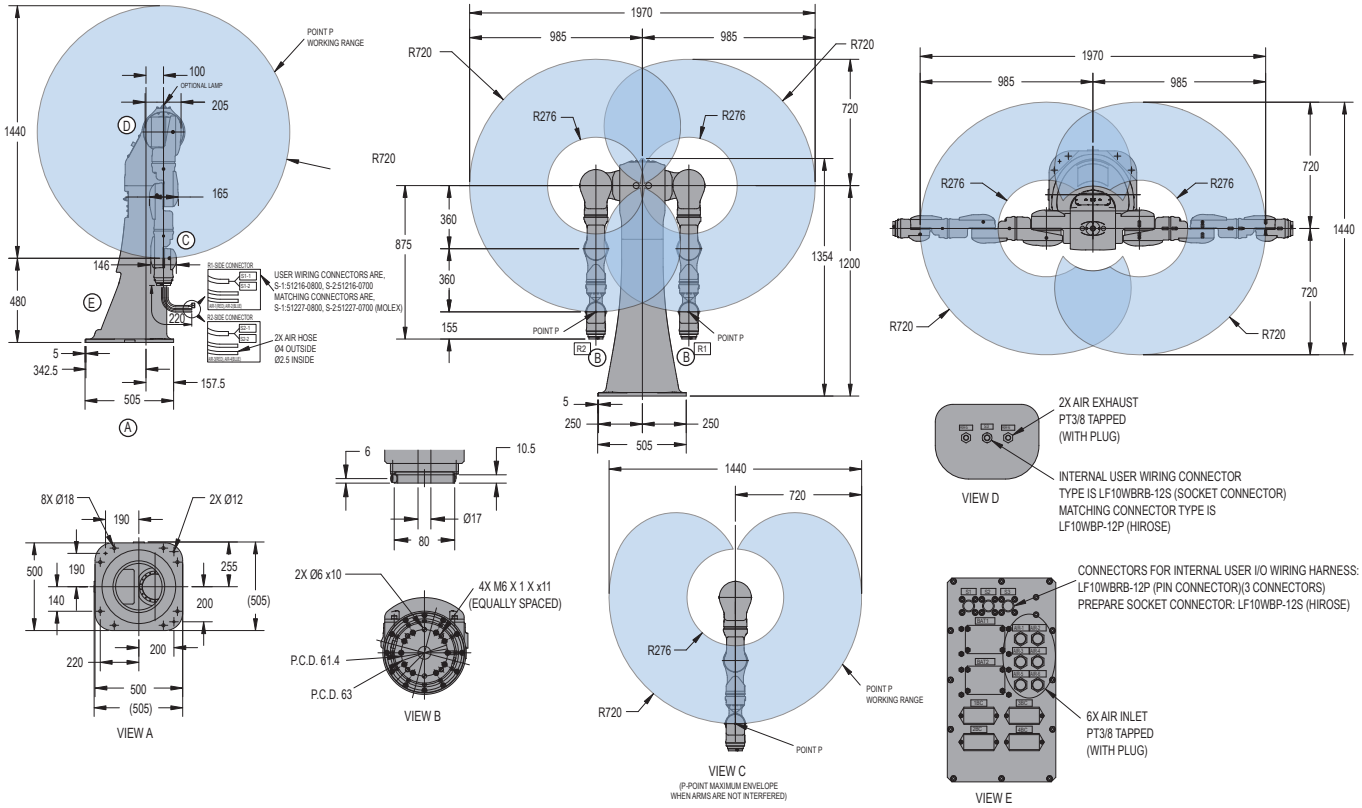
SLIM, DUAL-ARM ROBOT WITH "HUMAN-LIKE" FLEXIBILITY

- Superior dexterity and best-in-class wrist characteristics make slim, dual-arm robot ideally suited for assembly, part transfer, machine tending, packaging and other handling tasks that formerly could only be done by people.
- Highly flexible; 15 axes of motion (7 axes per arm, plus a single axis for base rotation).
- Powerful actuator-based design provides "human-like" flexibility and fast acceleration.
- Internally routed cables and hoses (6 - air, 12 - electric) reduce interference and maintenance, and also make programming easier.
- 10 kg payload per arm; 720 mm horizontal reach per arm; 1,440 mm vertical reach per arm; ±0.1 mm repeatability.
- Both robot arms can work together on one task to double the payload or handle heavy, unwieldy objects. Two arms can perform simultaneous independent operations.
- Ability to hold part with one arm while performing additional operations with other arm and to transfer a part from one arm to the other with no need to set part down.

FS100 CONTROLLER

- Small, compact controller.
- 470 mm wide, 200 mm high, 420 mm deep.
- Designed for packaging and small parts handling robots with payloads of 20 kg and under.
- Compatible with integrated MotoSight™ 2D vision (optional).
- Improved communication speeds and functionality.
- High-speed I/O response and high-resolution timers.
- Open architecture enables software customization in widely accepted environments such as C, C++, C# and .NET.
- Uses similar programming pendant hardware as DX200 controller, providing a consistent programming interface.

SDA10F ROBOT



All dimensions are metric (mm) and for reference only.
Request detailed drawings for all design/engineering requirements.

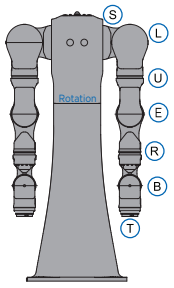
SPECIFICATIONS

Axes	Maximum motion range [°]	Maximum speed [°/sec.]	Allowable moment [N•m]	Allowable moment of inertia [kg•m²]
Rotaion	±170	130		
S	±180	170	-	-
L	±110	170	-	-
E	±170	170	-	-
U	±135	170	-	-
R	±180	200	31.4	1
B	±110	200	31.4	1
T	±180	400	19.6	0.4

Controlled axes	15
Maximum payload (per arm) [kg]	10
Repeatability [mm]	±0.1
Horizontal reach (per arm) [mm]	720
Horizontal reach (P-point to P-point) [mm]	1,970
Vertical reach [mm]	1,440
Protection - IP rating XP Package (optional)	IP54 Base; IP65 Body; IP67 Wrist
Weight [kg]	220
Power requirements	1- or 3-phase; 200/230 VAC at 50/60 Hz
Power rating [kVA]	2.7

OPTIONS

- Wide variety of fieldbus cards
- Vision systems
- Robot base I/O cables
- External axis kit
- Material handling software package
- Conveyor tracking
- MotoFit™ force sensing package



AXES LEGEND

Rotation Axis: Waist
S-Axis: Lifting
L-Axis: Lower Arm
E-Axis: Elbow
U-Axis: Upper Arm
R-Axis: Upper Arm Twist
B-Axis: Wrist Pitch / Yaw
T-Axis: Wrist Twist

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