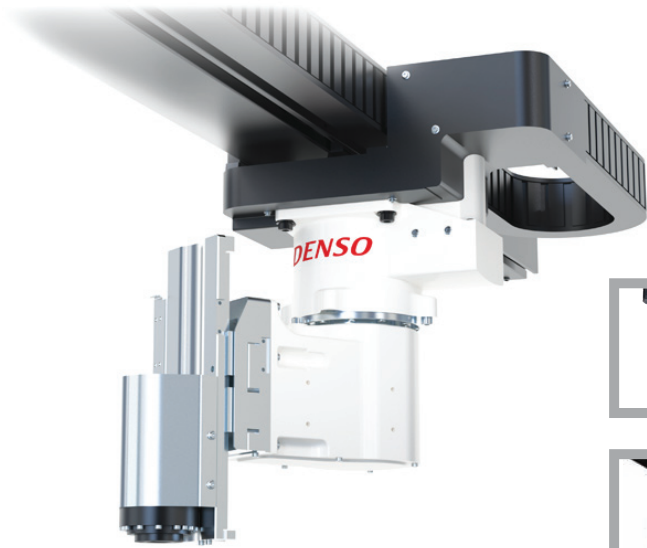


## XR SERIES

The XR-Series four-axis, compact gantry robots feature a flexible SCARA robot combined with a ceiling-mounted, long-stroke Cartesian robot. They have a highly efficient, space-saving design yet a wide range of motion. Their features include:

- Extremely compact, integrated-gantry design uses up to 40% less valuable factory floor space than a conventional SCARA robot
- Ceiling or wall mount maximizes work area
- Fast cycle time of 0.53 sec.
- Outstanding repeatability of  $\pm 0.015$  mm
- Integrated gantry with long X-axis stroke allows conveyorless operation in many applications, saving up to 20% in capital-equipment costs

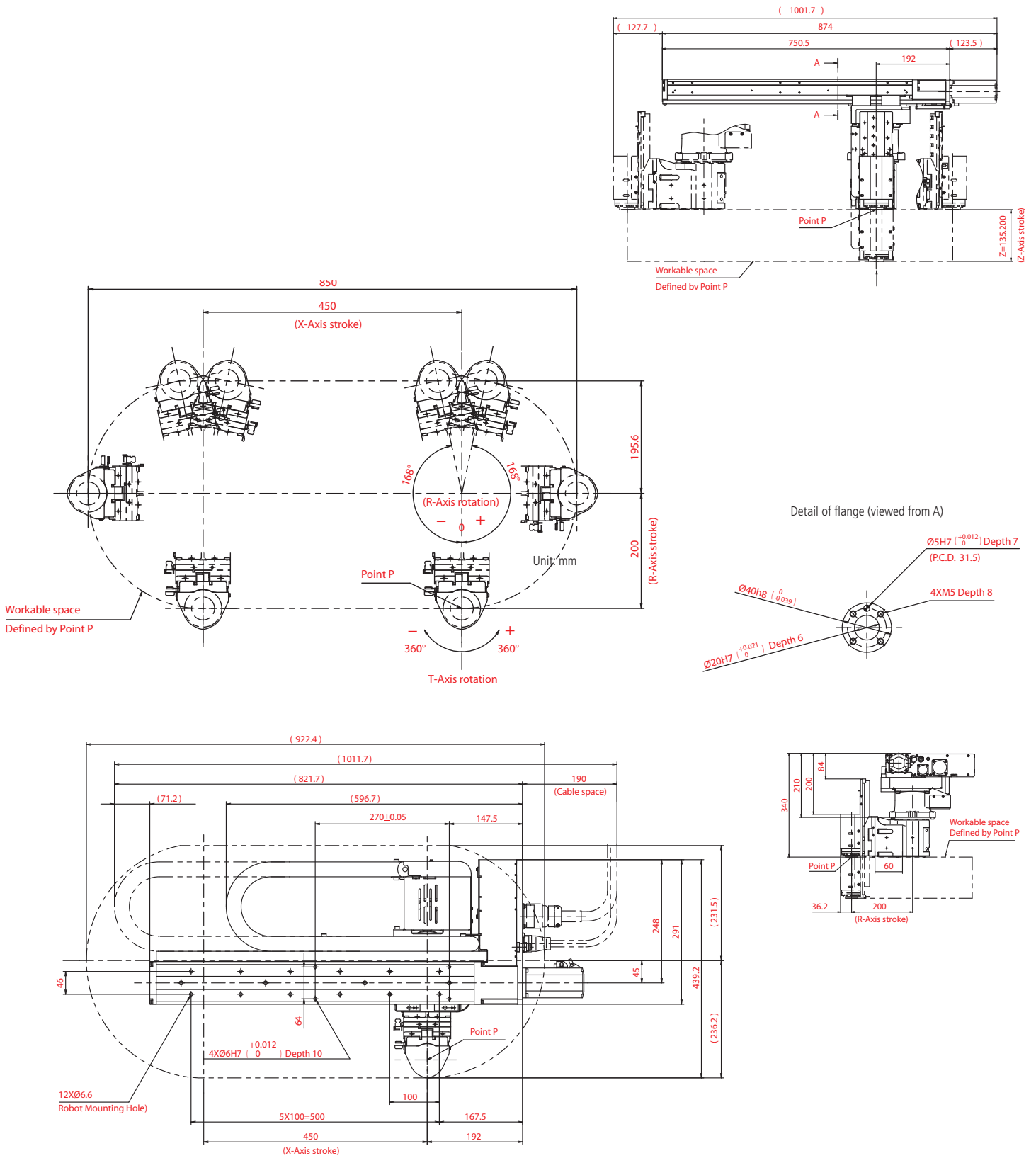


		XR-43411G	XR-43711G	XR-43721G	XR-43731G	XR-43A11G	XR-43A21G	XR-43A31G
Number of axes		4						
Arm length (mm)		200	200	250	300	200	250	300
Axis combination		X axis + R axis + Z axis + T axis						
Maximum payload (kg)		5						
Weight, approx. (kg)		33	45	46	47	51	52	53
Cycle time (sec.)		0.53 (with 1-kg weight)						
Range of motion and stroke	X axis (mm)	450	760			1060		
	R axis (°)	±168						
	Z axis (mm)	135						
	T axis (°)	±360						
Maximum composite speed	At center of hand (X + R, mm/sec.)	3,650	3,600			3,240		
	Z (mm/sec.) and T (°)	Z: 1,500; T: 720						
Maximum joint speed		X: 124–165 mm/sec. R: 382–573°/sec. Z: 1,500 mm/sec. T: 720°/sec.						
Repeatability	X and R (mm)	±0.015						
	Z (mm)	±0.010						
	T (°)	±0.005						
Maximum force fit (1 sec. or less, N)		98						
Maximum allowable moment of inertia (kg/m <sup>2</sup> )		0.05						
Position detection		Absolute encoder						
Drive motors and brakes		AC servo motors for all axes; brake for Z axis						
Brake releasing		Enter brake-release command with Teach Pendant or Mini Pendant						
Air piping (in-arm integrated)		1 system (ø8); 4 systems with optional manifold valve (ø4 × 8)						
Wiring (in-arm integrated)		10 lines (max. 1 A per line)						
Air source (MPa)	Operating pressure	0.05–0.35						
	Maximum allowable pressure	0.59						



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for more information

# XR SERIES



## DENSO ROBOTICS

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