

FANUC Robot DR series



FEATURES

DR/05

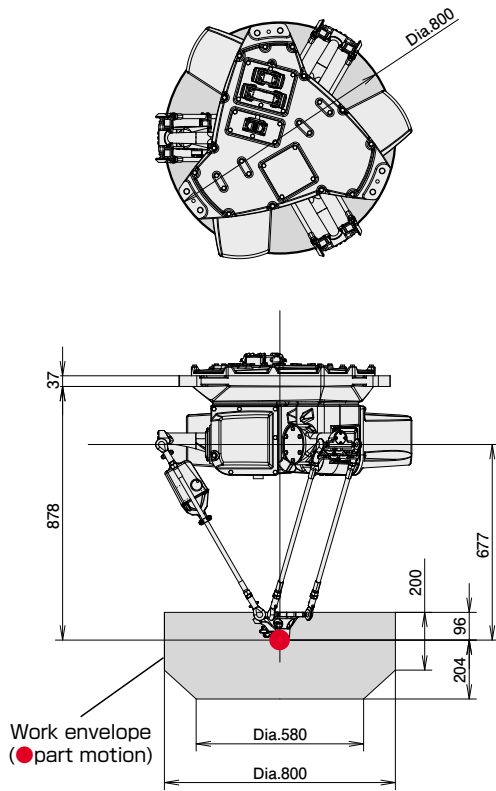
- These models are light weight and compact high speed assembly robots.
- Installation types of no stand, desktop stand and ceiling mount are selectable. It makes easy integration in narrow space.
- A variety of wrist configurations (6 or 4 axes) and operating area (standard or long arm) are selectable to meet different application needs.
- A camera for *i*RVision (integrated robot vision) can be integrated in the mechanical unit.

DR/3, /6, /8, /12

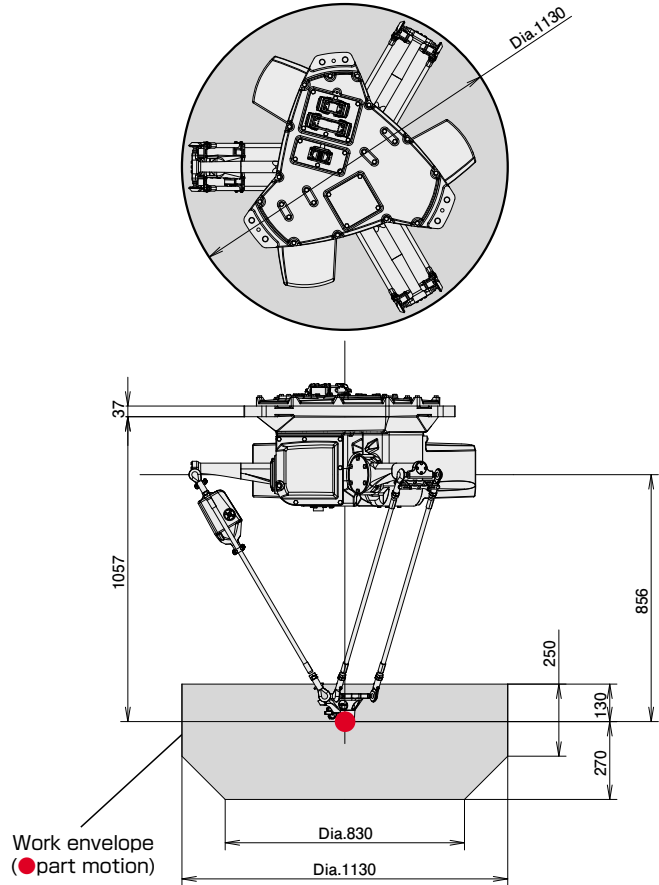
- These are parallel link robots for high speed picking and assembly.
- According to applications, weights of objects, necessity of posture change of the objects and size of workspace, extensive models are lined up from a middle size (operating space $\Phi 800\text{mm}$) to a large size (operating space $\Phi 1600\text{mm}$).
- The enclosed structure realizes IP67 environmental resistance (water/dust proof). There are also IP69K options which withstand high-pressure washing (DR/3, DR/6-12B, DR/8-16B).
- NSF H1 food grade oil/grease are applied as lubricants for all robot types. Materials and surface finishing for food sanitary can be selected (options).
- The metal surface of DR/6-12B Stainless is all stainless and can withstand daily washdown / sterilization. This robot can be operated more hygienically.
- Various intelligent functions are available, such as *i*RVision (integrated robot vision) and *i*RPickTool.

Operating space

DR/3-8A



DR/3-11A



Specifications

Model		DR/3-8A	DR/3-11A
Type		Parallel link mechanism	
Controlled axes		4 axes (J1, J2, J3, J4)	
Installation		Ceiling mount	
Motion range (Maximum speed) Note 1)	J1-J3	Diameter 800 mm, height 300 mm	Diameter 1130 mm, height 400 mm
	J4	720° (3500°/s)	12.57 rad (61.06rad/s)
Max.payload at wrist		3 kg	
Repeatability Note 2)		± 0.03 mm	
Drive method		Electric servo drive by servo motor	
Mass Note 3)		130 kg	
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity Normally 75%RH or less (No dew, nor frost allowed.) Short term (Within one month) 95%RH or less (No condensation allowed.) Vibration : 4.9m/s ² (0.5G) or less	

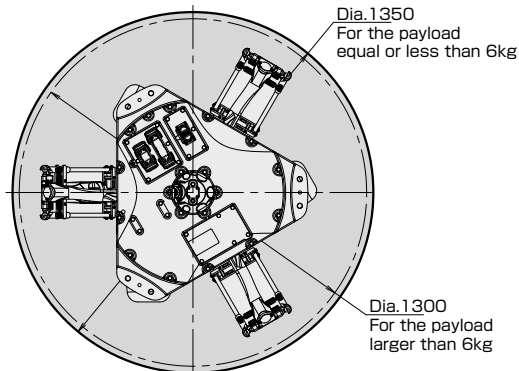
Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

Note 2) Compliant with ISO9283.

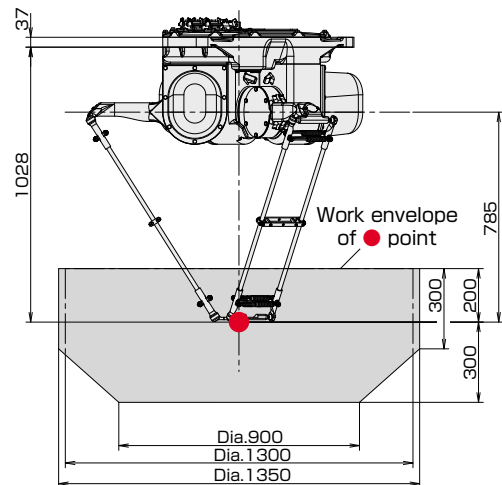
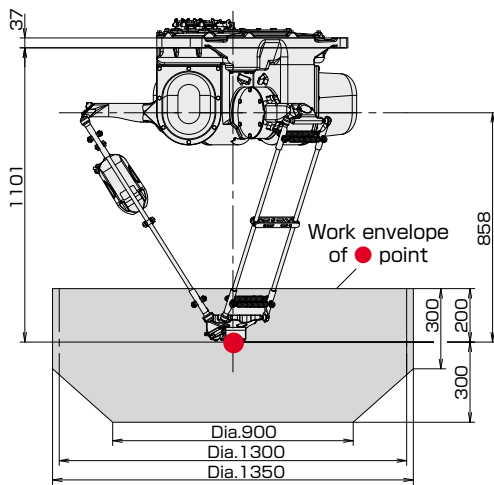
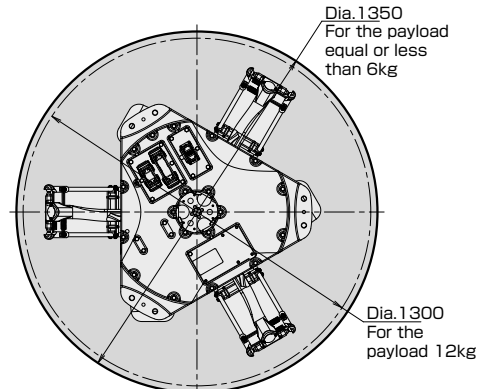
Note 3) Without controller.

Operating space

DR/6-14A



DR/12-14A-3X



Specifications

Model		DR/6-14A	DR/12-14A-3X
Type		Parallel link mechanism	
Controlled axes		4 axes (J1, J2, J3, J4)	3 axes (J1, J2, J3)
Installation		Ceiling mount	
Motion range (Maximum speed) Note 1)	J1-J3	Diameter 1350 mm, height 500 mm Note 4)	
	J4	720° (4000°/s) 12.57 rad (69.81 rad/s)	—
Max. payload at wrist		6 kg (8 kg with an option)	12 kg
Repeatability Note 2)		±0.03 mm	
Drive method		Electric servo drive by servo motor	
Mass Note 3)		160 kg	155 kg
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity Normally 75%RH or less (No dew, nor frost allowed.) Short term (Within one month) 95%RH or less (No condensation allowed.) Vibration : 4.9m/s ² (0.5G) or less	

Note 1) During short distance motions, the axis speed doesn't reach maximum one.

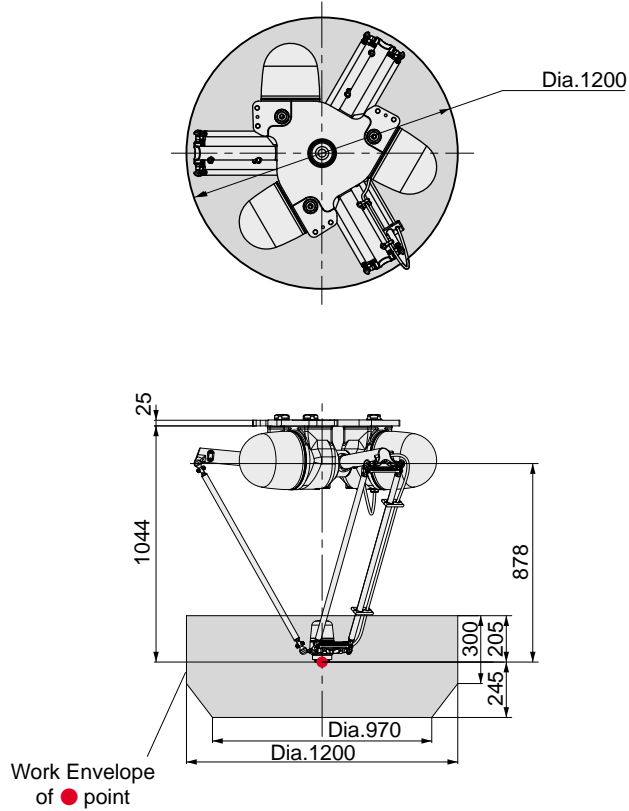
Note 2) Compliant with ISO9283.

Note 3) Without controller.

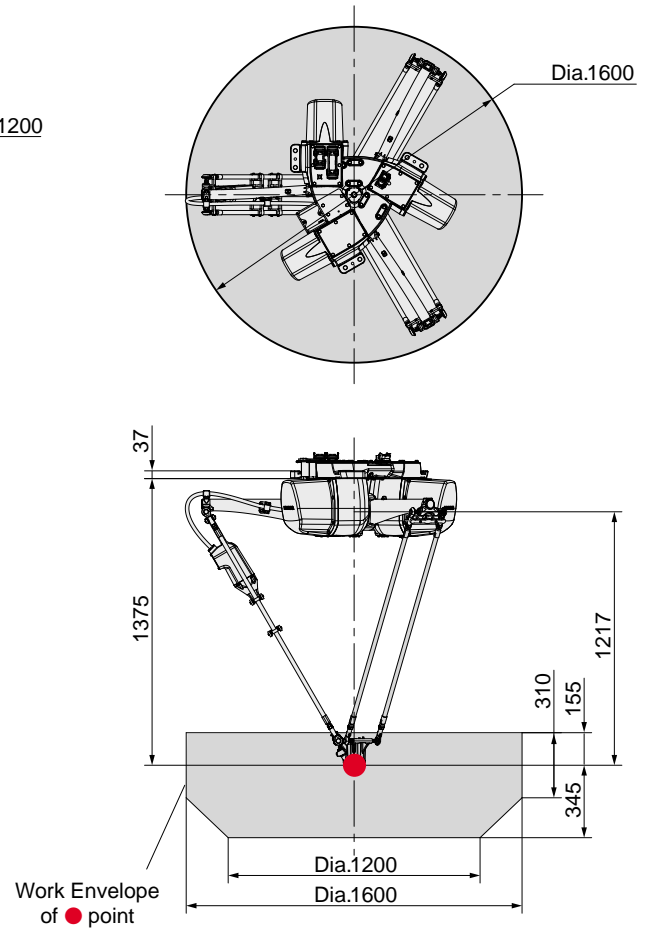
Note 4) In case the payload is larger than 6 kg, there is a limitation on the work envelope.

Operating space

DR/6-12B Stainless



DR/8-16B



Specifications

Model	DR/6-12B Stainless DR/6-12B Stainless/Mirror Note 4)	DR/8-16B DR/8-16B Plated Note 5)
Type	Parallel link mechanism	
Controlled axes	4 axes (J1, J2, J3, J4)	
Installation	Ceiling mount	
Motion range (Maximum speed) Note 1)	J1-J3	Diameter 1200 mm, height 450 mm
	J4	720° (1714°/s) 12.57 rad (29.91rad/s)
Max.payload at wrist	6 kg	8 kg
Repeatability Note 2)	±0.03 mm	
Drive method	Electric servo drive by servo motor	
Mass Note 3)	250 kg	170 kg
Installation environment	Ambient temperature : 0 to 45°C Ambient humidity Normally 75%RH or less (No condensation allowed.) Short term (Within one month) 95%RH or less (No condensation allowed.) Vibration : 4.9m/s ² (0.5G) or less	

Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

Note 2) Compliant with ISO9283.

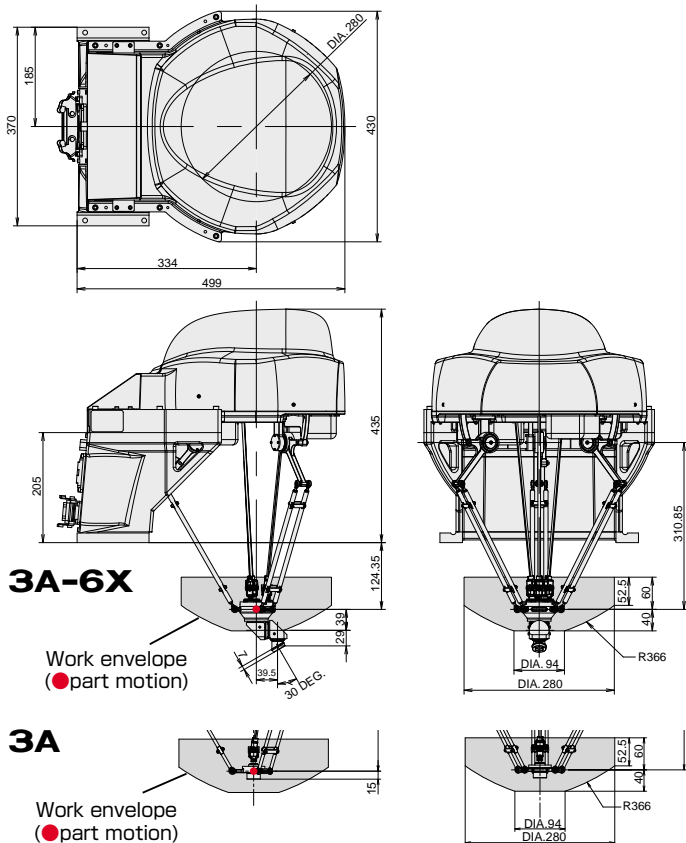
Note 3) Without controller.

Note 4) Mirror finish type.

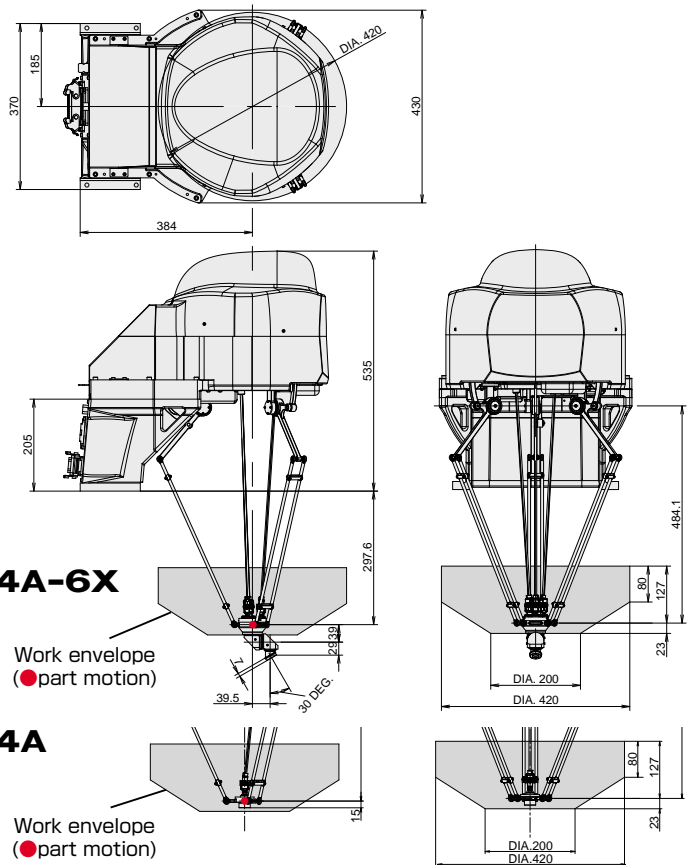
Note 5) Plating finish type.

Operating space

DR/05-3A, /3A-6X



DR/05-4A, /4A-6X



Specifications

Model		DR/05-3A-6X	DR/05-3A
Type		Parallel link mechanism	
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)	4 axes (J1, J2, J3, J4)
Installation		Floor, angle and ceiling mount	Floor and ceiling mount
Motion range (Maximum speed) Note 1)	J1-J3	Diameter 280 mm, height 100 mm	
	J4	720° (1440°/s) 12.57 rad (25.13 rad/s)	720° (3000°/s) 12.57 rad (52.34 rad/s)
	J5	300° (1440°/s) 5.24 rad (25.13 rad/s)	—
	J6	720° (1440°/s) 12.57 rad (25.13 rad/s)	—
Max.payload at wrist		0.5 kg (1 kg with an option)	
Repeatability Note 2)		±0.02 mm	
Drive method		Electric servo drive by servo motor	
Mass Note 3)		17 kg	14 kg
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity Normally 75%RH or less (No dew, nor frost allowed.) Short term (Within one month) 95%RH or less (No condensation allowed.) Vibration : 4.9m/s ² (0.5G) or less	

Model		DR/05-4A-6X	DR/05-4A
Type		Parallel link mechanism	
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)	4 axes (J1, J2, J3, J4)
Installation		Floor, angle and ceiling mount	Floor and ceiling mount
Motion range (Maximum speed) Note 1)	J1-J3	Diameter 420 mm, height 150 mm	
	J4	720° (1440°/s) 12.57 rad (25.13 rad/s)	720° (3000°/s) 12.57 rad (52.34 rad/s)
	J5	300° (1440°/s) 5.24 rad (25.13 rad/s)	—
	J6	720° (1440°/s) 12.57 rad (25.13 rad/s)	—
Max.payload at wrist		0.5 kg (1 kg with an option)	
Repeatability Note 2)		±0.02 mm	
Drive method		Electric servo drive by servo motor	
Mass Note 3)		20 kg	17 kg
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity Normally 75%RH or less (No dew, nor frost allowed.) Short term (Within one month) 95%RH or less (No condensation allowed.) Vibration : 4.9m/s ² (0.5G) or less	

Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

Note 2) Compliant with ISO9283.

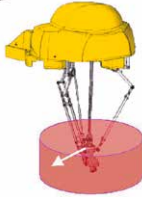
Note 3) In case of "No stand"

Space saving DR/05

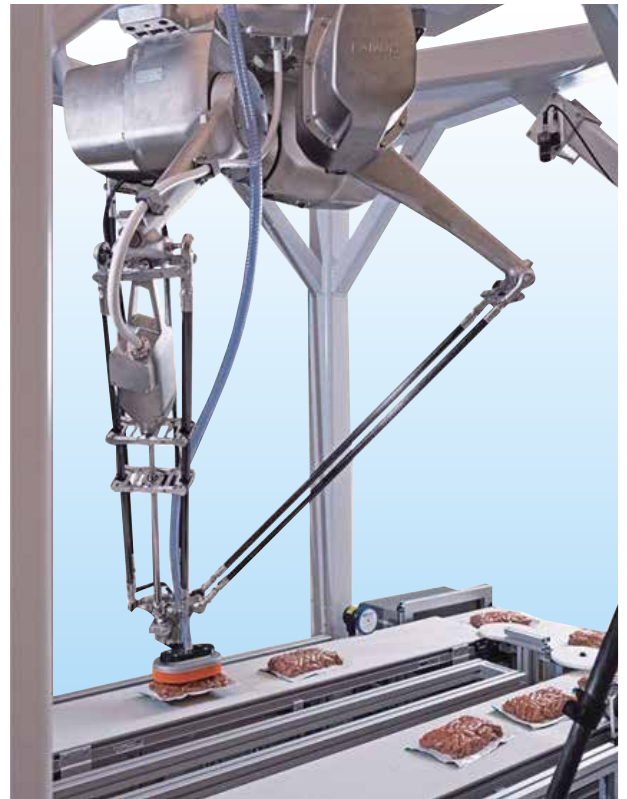
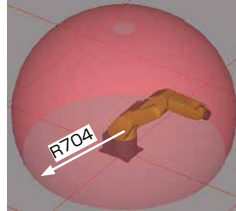
Work envelope is closed around operation object so that the total installation space can be minimized. It enables to place the robot and the worker along the manufacturing line effectively.



R140
(R210 for long arm)



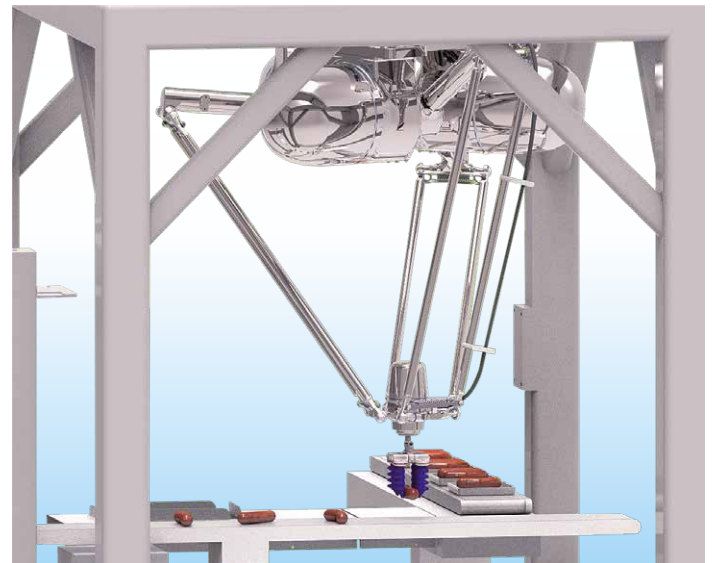
General articulated robot working space



Pouched goods arranging by DR/8-16B Plated



High speed arranging the foods by DR/6-14A



Fresh food arranging by DR/6-12B Stainless/Mirror

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