

# Handles a Variety of Medium-to-High-Duty Tasks

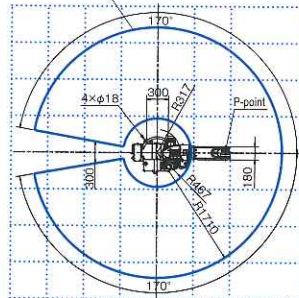
\* The figures below show working range of P-point with no torch mounted.

Versatile handling

## FD-V20

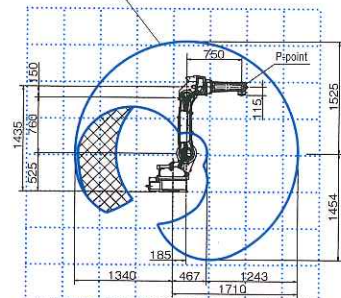


P-point Working Range



□ = 500 mm

P-point Working Range



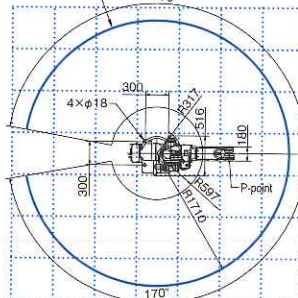
□ For welding applications when floor-mounted  
 ⊗ □ : For other than the above

Versatile handling

## FD-V20S

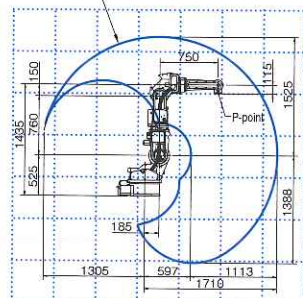


P-point Working Range



□ = 500 mm

P-point Working Range

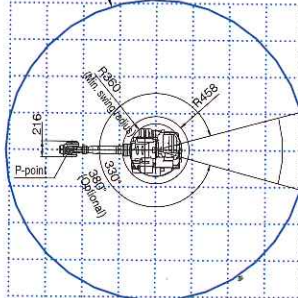


Versatile handling

## FD-V50

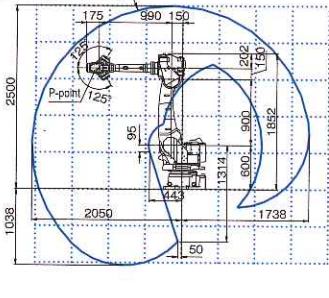


P-point Working Range



□ = 500 mm

P-point Working Range

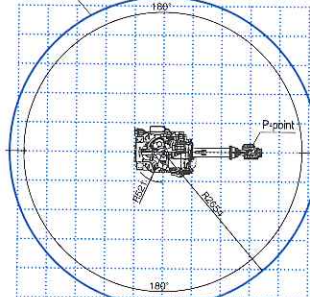


Versatile handling

## FD-V166

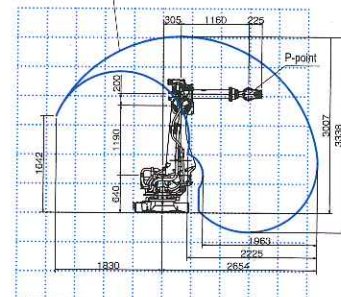


P-point Working Range



□ = 500 mm

P-point Working Range

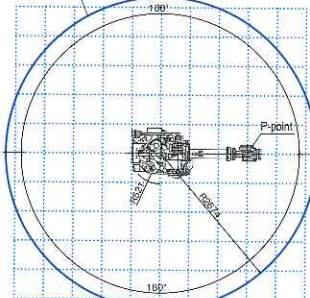


Versatile handling

## FD-V210

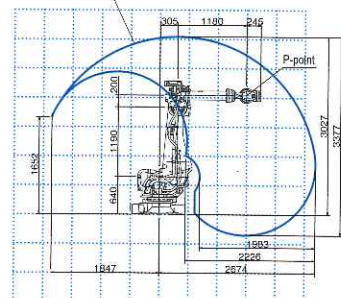


P-point Working Range



□ = 500 mm

P-point Working Range



<b>FD-V20</b>	<b>FD-V20S</b>	<b>FD-V50</b>	<b>FD-V166</b>	<b>FD-V210</b>
NV20	NV20S	NV50	NV166	NV210
Vertically articulated type	Vertical articulated type	Vertically articulated type	Vertically articulated type	Vertically articulated type
6	7	6	6	6
20 kg	20 kg	50 kg	166 kg	210 kg
±0.07 mm (Note 1)	±0.08 mm (Note 1)	±0.07 mm (Note 1)	±0.1 mm (Note 1)	±0.15 mm (Note 1)
◀	◀	◀	◀	◀
5600 W	6600 W	14750 W	18 kW	18 kW
◀	◀	◀	◀	◀
±170°(±50°) (Note 2)	±170°	±165°	±180°	±180°
-155° to +100° (Note 3)	-145° to +75°	+80° to -135°	-80° to +60°	-80° to +60°
-	±90°	-	-	-
-170° to +260° (Note 4)	-170° to +160°	+260° to -146°	-146.5° to +150°	-146.5° to +150°
±180°	±180°	±360°	±360°	±360°
-50° to +230°	-50° to +230° (Note 7)	±125°	±135°	±130°
±360°	±360° (Note 7)	±450°	±360°	±360°
3.40 rad/s {195°/s} (3.05 rad/s {175°/s}) (Note 2)	3.40 rad/s {195°/s}	3.14 rad/s {180°/s}	2.18 rad/s {125°/s}	2.01 rad/s {115°/s}
3.32 rad/s {190°/s}	3.32 rad/s {190°/s}	3.14 rad/s {180°/s}	2.01 rad/s {115°/s}	1.83 rad/s {105°/s}
-	2.79 rad/s {160°/s}	-	-	-
3.14 rad/s {180°/s}	3.14 rad/s {180°/s}	3.14 rad/s {180°/s}	2.11 rad/s {121°/s}	1.97 rad/s {113°/s}
6.98 rad/s {400°/s}	6.98 rad/s {400°/s}	4.45 rad/s {255°/s}	3.14 rad/s {180°/s}	2.44 rad/s {140°/s}
6.98 rad/s {400°/s}	6.98 rad/s {400°/s}	4.45 rad/s {255°/s}	3.02 rad/s {173°/s}	2.32 rad/s {133°/s}
10.5 rad/s {600°/s}	10.5 rad/s {600°/s}	6.46 rad/s {370°/s}	4.54 rad/s {260°/s}	3.49 rad/s {200°/s}
43.7 N·m	43.7 N·m	210 N·m	951 N·m	1,337 N·m
43.7 N·m	43.7 N·m	210 N·m	951 N·m	1,337 N·m
19.6 N·m	19.6 N·m	130 N·m	490 N·m	720 N·m
1.09 kg·m <sup>2</sup>	1.09 kg·m <sup>2</sup>	30 kg·m <sup>2</sup>	88.9 kg·m <sup>2</sup>	141.1 kg·m <sup>2</sup>
1.09 kg·m <sup>2</sup>	1.09 kg·m <sup>2</sup>	30 kg·m <sup>2</sup>	88.9 kg·m <sup>2</sup>	141.1 kg·m <sup>2</sup>
0.24 kg·m <sup>2</sup>	0.24 kg·m <sup>2</sup>	12 kg·m <sup>2</sup>	45.0 kg·m <sup>2</sup>	79.0 kg·m <sup>2</sup>
5.27 m <sup>2</sup> × 340°	3.91 m <sup>2</sup> × 340°	7.4 m <sup>2</sup> × 330°	6.58 m <sup>2</sup> × 360°	6.67m <sup>2</sup> × 360°
◀	◀	◀	◀	◀
278 kg	321 kg	640 kg	1010 kg	1040 kg
20 kg (Note 6)	5 kg (Note 5)	15 kg	45 kg (90 kg max.) (Note 7)	45 kg (90 kg max.) (Note 7)
Floor-/Ceiling-/Wall-mounted	Floor-mounted	Floor-mounted (Note 3)	Floor-mounted	Floor-mounted
◀	◀	◀	◀	◀