

Rotors & Accessories Selection Guide

Angle Rotors for MDX-310

2ml



CA-1 [Click Here](#)
2ml×18
15,000rpm : 17,860G
310



CA-10 [Click Here](#)
2ml×24
13,500rpm : 17,730G
310



CA-15 [Click Here](#)
[Outer line] 2ml×18
15,000rpm : 19,120G
[Inner line] 0.5ml×12
15,000rpm : 14,840G
[Middle line] 0.2ml×12
15,000rpm : 13,080G
310



CA-5 [Click Here](#)
2ml×24
15,000rpm : 21,130G
310

2ml



CA-6 [Click Here](#)
2ml×36
[Outer line] 2ml×18
15,000rpm : 21,130G
[Inner line] 2ml×18
15,000rpm : 18,620G
310

5ml

Rotor for Conical Tube



CA-12 [Click Here](#)
5ml×12
15,000rpm : 20,630G

* Recommend Tube : TOMY 5ml tube,
PT0050-11 for CA-12. contact us
for Eppendorf 5ml tube loading.
310

50ml

Rotor for Conical Tube



CA-17 [Click Here](#)
50ml×4 or 15ml×4
15,000rpm : 21,890G
310

310 Can be used for MDX-310.

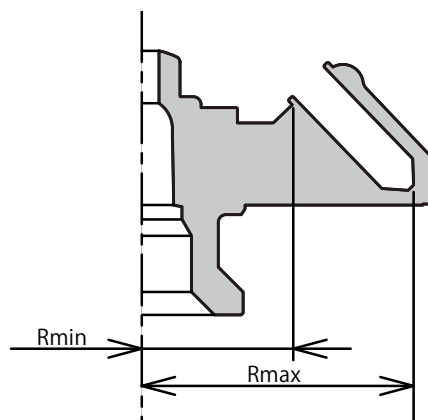
* The above specifications show Max. speed, Max. RCF, and Max. capacity. These values may change according to combination of centrifuge, rotor, bucket, adapter, and tube.

HS has been tested and certified by the Health Protection Agency (HPA, UK) to be compliant with the International Standard (Annex AA of the IEC 61010-2-020), meets requirements for biohazard safety.

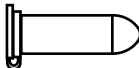
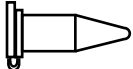


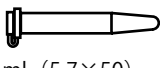

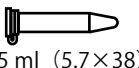

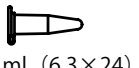

HS adopted a hermetically sealed structure equivalent to **HS** rotors designed and tested in accordance with the International Standard (Annex AA of the IEC 61010-2-020) to offer excellent sealing performance.

CA-1

Applicable model	MDX-310
Max. speed	15,000 rpm
Max. RCF	17,860 G
Tube angle	45 degree
Max. radius	71 mm
Min. radius	40 mm
Rotor capacity	2ml×18

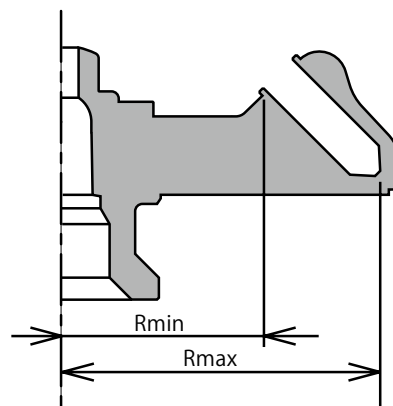


Applicable Tube to CA-1

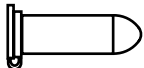
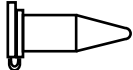
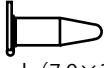

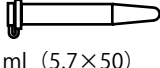

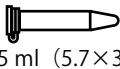



Tube ($\varphi \times L$ [mm])	Adapter	Max.Number	Radius[mm]		Max. RCF [G]	BART Code
			Max	Min		
 2 ml (11×42)	—	18	71	40	17,860	1
 1.5 ml (11×41)	—	18	69	40	17,360	1
 0.5 ml (7.9×31)	 MA006-01	18	62	40	15,600	1
 0.4 ml (5.7×50)	 A-004	18	70	40	17,610	1
 0.25 ml (5.7×38)	 A-004	18	62	40	15,600	1
 0.2 ml (6.3×24)	 MA002-01PC	18	54	40	13,590	1

CA-10

Applicable model	MDX-310
Max. speed	13,500 rpm
Max. RCF	17,730 G
Tube angle	45 degree
Max. radius	87 mm
Min. radius	55 mm
Rotor capacity	2ml×24

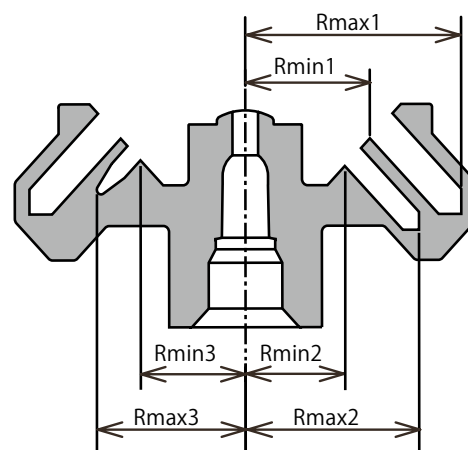


Applicable Tube to CA-10

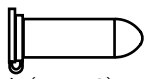
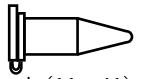
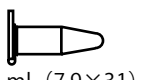

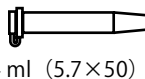

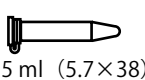

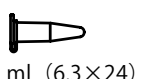

Tube ($\varphi \times L$ [mm])	Adapter	Max.Number	Radius[mm]		Max. RCF [G]	BART Code
			Max	Min		
 2 ml (11×42)	—	24	87	55	17,730	1
 1.5 ml (11×41)	—	24	86	55	17,530	1
 0.5 ml (7.9×31)	 MA006-01	24	78	55	15,900	1
 0.4 ml (5.7×50)	 A-004	24	86	55	17,530	1
 0.25 ml (5.7×38)	 A-004	24	77	55	15,690	1
 0.2 ml (6.3×24)	 MA002-01PC	24	69	55	14,060	1

CA-15

Applicable model	MDX-310
Max. speed	15,000 rpm
Max. RCF	19,120 G
Tube angle	45 degree
Max. radius 1 (Rmax1)	76 mm
Max. radius 2 (Rmax2)	61 mm
Max. radius 3 (Rmax3)	52 mm
Min. radius 1 (Rmin1)	44 mm
Min. radius 2 (Rmin2)	35 mm
Min. radius 3 (Rmin3)	37 mm
Rotor capacity	2ml×18 (outer line)
	0.5ml×12 (inner line)
	0.2ml PCR tube×12 (middle line)

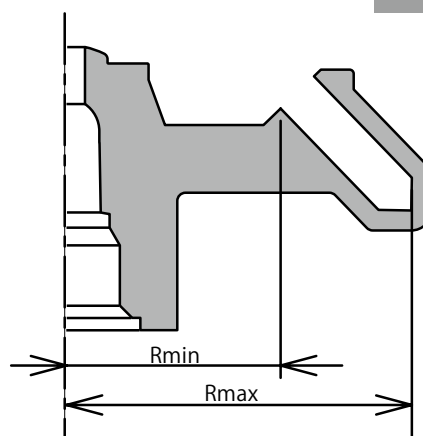


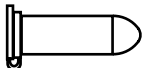
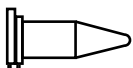
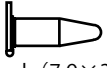

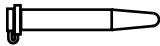

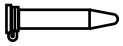



Applicable Tube to CA-15

Tube ($\phi \times L$ [mm])	Adapter	Max.Number	Radius[mm]		Max. RCF [G]	BART Code
			Max	Min		
 2 ml (11×42)	—	18 (outer line)	76	44	19,120	1
 1.5 ml (11×41)	—	18 (outer line)	74	44	18,620	1
 0.5 ml (7.9×31)	—	12 (inner line)	59	35	14,840	1
	 MA006-01	18 (outer line)	67	44	16,860	1
 0.4 ml (5.7×50)	 MA004-01	18 (outer line)	76	44	19,120	1
 0.25 ml (5.7×38)	 MA004-01	18 (outer line)	67	44	16,860	1
 0.2 ml (6.3×24)	—	12 (middle line)	52	37	13,080	1
	 MA002-01PC	18 (outer line)	58	44	14,590	1

CA-5

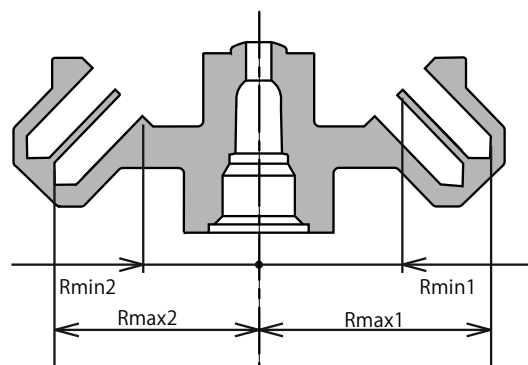
Applicable model	MDX-310
Max. speed	15,000 rpm
Max. RCF	21,130 G
Tube angle	44 degree
Max. radius	84 mm
Min. radius	52 mm
Rotor capacity	2ml×24


Applicable Tube to CA-5

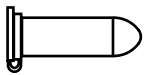
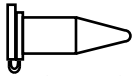
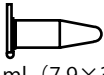

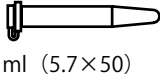

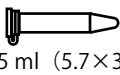



Tube ($\varphi \times L$ [mm])	Adapter	Max.Number	Radius[mm]		Max. RCF [G]	BART Code
			Max	Min		
 2 ml (11×42)	—	24	84	52	21,130	1
 1.5 ml (11×41)	—	24	82	52	20,630	1
 0.5 ml (7.9×31)	 MA006-01	24	74	52	18,620	1
 0.4 ml (5.7×50)	 MA004-01	24	84	52	21,130	1
 0.25 ml (5.7×38)	 MA004-01	24	75	52	18,870	1
 0.2 ml (6.3×24)	 MA002-01PC	24	66	52	16,610	1

CA-6

Applicable model	MDX-310
Max. speed	15,000 rpm
Max. RCF	21,130 G
Tube angle	44 degree
Max. radius 1 (Rmax1)	84 mm
Max. radius 2 (Rmax2)	74 mm
Min. radius 1 (Rmin1)	52 mm
Min. radius 2 (Rmin2)	42 mm
Rotor capacity	2ml×36

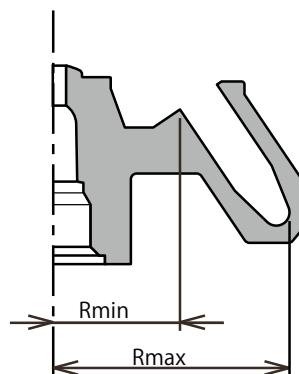


Applicable Tube to CA-6


Tube ($\varphi \times L$ [mm])	Adapter	Max.Number	Radius[mm]		Max. RCF [G]	BART Code
			Max	Min		
 2 ml (11×42)	—	18 (outer line)	84	52	21,130	1
		18 (inner line)	74	42	18,620	1
 1.5 ml (11×41)	—	18 (outer line)	82	52	20,630	1
		18 (inner line)	72	42	18,120	1
 0.5 ml (7.9×31)	 MA006-01	18 (outer line)	74	52	18,620	1
		18 (inner line)	64	42	16,100	1
 0.4 ml (5.7×50)	 MA004-01	18 (outer line)	83	52	20,880	1
		18 (inner line)	73	42	18,370	1
 0.25 ml (5.7×38)	 MA004-01	18 (outer line)	74	52	18,620	1
		18 (inner line)	64	42	16,100	1
 0.2 ml (6.3×24)	 MA002-01PC	18 (outer line)	66	52	16,610	1
		18 (inner line)	56	42	14,090	1

CA-12

Applicable model	MDX-310
Max. speed	15,000 rpm
Max. RCF	20,630 G
Tube angle	34 degree
Max. radius	82 mm
Min. radius	44 mm
Rotor capacity	5ml conical tube × 12



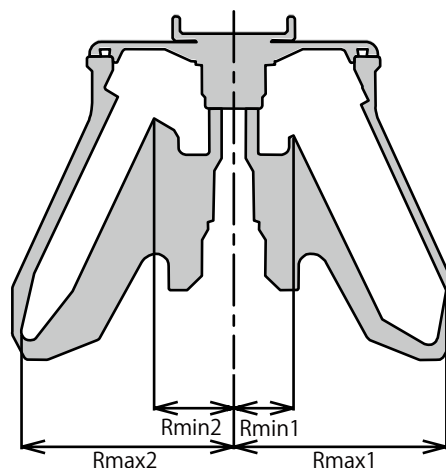
Applicable Tube to CA-12

Tube						Actual capacity [ml]	Max. Number	Allowable speed [rpm]	Max.RCF [G] (Radius[mm])	BART Code	Remarks
Nominal capacity [ml]	Mfr abbr.	Model Name(Material)	Bottom Shape	Tube Dimension (φ × L [mm])	Allowable RCF [G]						
 5ml	TOM	PT0050-11(PP)	C	φ 15 × 59	-	3.5	12	15,000	20,630(82)	1	

* Recommend Tube : TOMY 5ml tube, PT0050-11 for CA-12.

CA-17

Applicable model	MDX-310		
Max. speed	15,000 rpm		
Max. RCF	21,890 G		
Tube angle	25 degree		
Max. radius 1 (Rmax1)	87 mm		
Max. radius 2 (Rmax2)	87 mm		
Min. radius 1 (Rmin1)	25 mm		
Min. radius 2 (Rmin2)	33 mm		
Rotor capacity	50ml conical tube × 4	*1	*2
	15ml conical tube × 4	*1	



*1 Different types of tubes cannot be loaded together.

*2 Impossible to use the adapter CA1500-01. The adapter and the tubes may come in contact with each other and may not be properly installed, it may cause the rotor to fall off.

Applicable Tube to CA-17

		Tube				Actual capacity [ml]	Max. Number	Allowable speed [rpm]	Max.RCF [G] (Radius[mm])	Remarks
Nominal capacity [ml]	Mfr abbr.	Model Name(Material)	Bottom Shape	Tube Dimension (φ×L [mm])	Allowable RCF [G]					
 50ml	COR	430291 (PP)	C	φ29×116	15,500	35	4	15,000	21,890 (87)	*3 *4
		430304 (PET)		φ29×116	3,600			6,000	3,500 (87)	
		430829 (PP)		φ29×116	15,500			15,000	21,890 (87)	*3
	FLC	352070 (PP)		φ30×115	9,400			15,000	21,890 (87)	*3
	IWA	2343-050 (PP)		φ29×117	9,400			15,000	21,890 (87)	*3
	NUC	339652 (PP)		φ30×115	17,000			15,000	21,890 (87)	*3 *4
		362696 (PP)		φ26.6×113.7	9,500			9,800	9,340 (87)	
	SUM	MS-56500 (PP)		φ30×115	9,400			15,000	21,890 (87)	*3 *4
	INA	3182-345 (PP)		φ29×115	15,000			15,000	21,890 (87)	*3
		3181-345 (PP)		φ29×115	15,000			15,000	21,890 (87)	
 15ml	COR	430053 (PET)	φ16×120	3,600	10.5		6,000	3,500 (87)		
		430766 (PP)	φ16×120	12,000			11,100	11,990 (87)		
		430791 (PP)	φ16×120	12,000			11,100	11,990 (87)		
	FLC	352095 (PS)	φ17×120	1,800			4,300	1,800 (87)		
		352196 (PP)	φ17×120	6,000			7,800	5,920 (87)		
	NUC	339650 (PP)	φ17×120	10,500			10,300	10,320 (87)		
	INA	3132-345 (PP)	φ17×118	15,000			15,000	21,890 (87)	*3 *5	
		3131-345 (PP)	φ17×118	15,000			15,000	21,890 (87)		

* Different types of tubes cannot be loaded together.

*3 Tube strength may be degraded under some use conditions, such as solvent, set temperature, manufacturer outside recommendation and operation frequency, which can cause damage to the tube. Perform a trial run under actual operating conditions before use and verify that tubes are in good condition with no cracks or damage.

*4 When centrifuging at 15,000rpm, set temperature should not exceed 4°C.

*5 When centrifuging at 15,000rpm, set temperature should not exceed 10°C.

Symbols in the Table

Manufacturer Abbreviation

BDC : Becton, Dickinson and Company.
BEC : BECKMAN COULTER ,INC.
COR : CORNING INTERNATIONAL CORP.
EIK : EIKEN CHEMICAL CO., LTD.
EPP : EPPENDORF AG
FLC : Falcon/CORNING INTERNATIONAL CORP.
HER : Herolab GmbH Laborgeraete
HIT : Eppendorf Himaс Technologies CO., LTD.
IED : IEDA TRADING CORPORATION
INA : Ina-optika corporation.
IWA : Iwaki/AGC TECHNO GLASS CO., LTD.
NAL : NALGENE/ Thermo Fisher Scientific K.K.
NEG : NICHIDEN-RIKA GLASS CO., LTD.
NIP : NIPRO CORPORATION
NUC : NUNC / Thermo Fisher Scientific K.K.
SEK : SEKISUI MEDICAL CO., LTD.
SIO : SHIONOGI & CO., LTD.
SUM : SUMITOMO BAKELITE COMPANY LIMITED
TER : TERUMO CORPORATION
TOM : TOMY SEIKO CO., LTD.
TRE : TOHO KK.
WAT : WATSON CO., LTD.

Materials

FEP : Teflon FEP	G : Glass	HDPE : High-density Polyethylene
PA : Polyallomer	PC : Polycarbonate	PET : Polyethylene Terephthalate
PP : Polypropylene	PS : Polystyrene	PPCO : Polypropylene Copolymer
PSF : Polysulfone	SS : Stainless Steel	

Bottom shape

C : Conical F : Flat R : Round

* The specifications of the tube listed in the applicable tube table indicate the nominal value of the manufacturer.

* If the specifications of the tube have been changed by the manufacturer, it may not be able to fulfill all the conditions stated in the tables. For the latest specifications of the tube, please ask the manufacturer.