

# Rotors & Accessories Selection Guide

## Angle Rotor for Suprema 25

1,000ml



**NA-610** [Click Here](#)  
1,000ml × 6  
7,000rpm : 11,120G

## Angle Rotors for Suprema 25 / 21

1,000ml



**NA-400** [Click Here](#)  
1,000ml × 4  
9,000rpm : 15,220G

50ml



**NA-4HS** [Click Here](#)  
50ml × 8  
21,000rpm : 48,820G

10ml



**NA-3HS** [Click Here](#)  
10ml × 16  
21,000rpm : 50,300G

500ml



**NA-18** [Click Here](#)  
500ml × 6  
10,000rpm : 16,890G



**NA-16** [Click Here](#)  
500ml × 4  
11,000rpm : 18 270G

250ml



**NA-11** [Click Here](#)  
250ml × 6  
12,000rpm : 22,540G

100ml



**NA-12** [Click Here](#)  
100ml × 8  
15,000rpm : 30,700G

50ml



**NA-8** [Click Here](#)  
50ml × 12  
15,000rpm : 31,200G



**NA-1** [Click Here](#)  
50ml × 6  
22,000rpm : 51,420G

Rotor for Conical Tube



**NA-23** [Click Here](#)  
50ml × 12  
11,000rpm : 19,620G



**NA-22** [Click Here](#)  
50ml × 8  
14,000rpm : 26,740G

1.5ml



**NA-20** [Click Here](#)  
1.5ml × 24  
20,000rpm : 43,840G

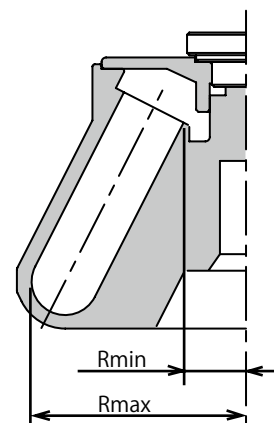
\* The above specifications show Max. speed, Max. RCF, and Max. capacity. These values may change according to combination of centrifuge, rotor, bucket, adapter, and tube.

**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.

# NA-1

Applicable model	Suprema25	Suprema21
Max. speed	22,000 rpm	21,000 rpm
Max. RCF	51,420 G	46,850 G
Tube angle	27 degree	
Max. radius	95 mm	
Min. radius	28 mm	
Rotor capacity	50ml×6	



## Applicable Tube to NA-1

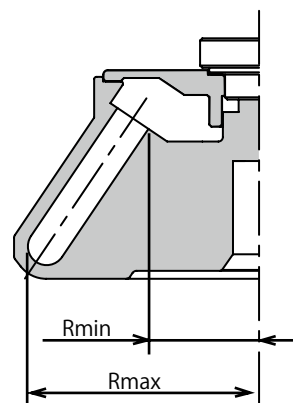
Tube						Actual capacity [ml]	Max. Number	*1 Allowable speed [rpm]	*1 Max.RCF [G] (Radius[mm])	BART Code	Remarks
Nominal capacity [ml]	Mfr abbr.	Model Name (Material)	Bottom Shape	Tube Dimension (φ×L [mm])	Allowable RCF [G]						
50ml	NAL	3110-0500 (PPCO)	R	φ28.7×103.3	50,000	35	6	A) 21,600 B) 21,000	A) 49,560 (95) B) 46,850 (95)	1	Applicable cap 3111-0030 
50ml	NAL	3114-0050 (FEP)	R	φ28.8×107.7	50,000	42	6				Sealing Cap Assembly 3131-0024 is required *2
50ml	NAL	3117-0500 (PC)	R	φ29.3×103.8	50,000	35	6				A) 22,000 B) 21,000
50ml	NAL	3118-0050 (PC)	R	φ28.8×107.0	50,000			40	6	A) 21,600 B) 21,000	
50ml	NAL	3119-0050 (PPCO)	R	φ28.8×106.7	50,000						
50ml	NAL	3137-0050 (PSF)	R	φ29.0×115.3	50,000	40	6				A) 21,600 B) 21,000
50ml	NAL	3138-0050 (PC)	R	φ28.8×115.0	50,000						
50ml	NAL	3139-0050 (PPCO)	R	φ28.8×114.1	50,000						

\*1 Allowable speed and maximum RCF are listed with respect to each centrifuge.



\*2 Be sure to fill the container with liquid completely in use. In addition, usable only with 4°C setting in the condition above.

**NA-3HS**

Applicable model	Suprema25	Suprema21
Max. speed	21,000 rpm	20,000 rpm
Max. RCF	50,300 G	45,620 G
Tube angle	34 degree	
Max. radius	102 mm	
Min. radius	49 mm	
Rotor capacity	10ml × 16	



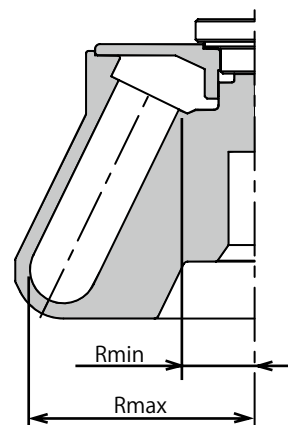
**Applicable Tube to NA-3HS**

Tube						Actual capacity [ml]	Max. Number	*1 Allowable speed [rpm]	*1 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]						
 10ml	NAL	3118-0010 (PC)	R	φ 16.1 × 81.7	50,000	7	16	A) 21,000 B) 20,000	A) 50,300 (102) B) 45,620 (102)	1	
		3119-0010 (PPCO)	R	φ 16.0 × 81.4	50,000						
 10ml	NAL	3138-0010 (PC)	R	φ 16.1 × 82.3	50,000	8	16				
		3139-0010 (PPCO)	R	φ 16.0 × 82.0	50,000						

\*1 Allowable speed and maximum RCF are listed with respect to each centrifuge.

# NA-4HS

Applicable model	Suprema25	Suprema21
Max. speed	21,000 rpm	20,000 rpm
Max. RCF	48,820 G	44,280 G
Tube angle	26 degree	
Max. radius	99 mm	
Min. radius	33 mm	
Rotor capacity	50ml×8	



## Applicable Tube to NA-4HS

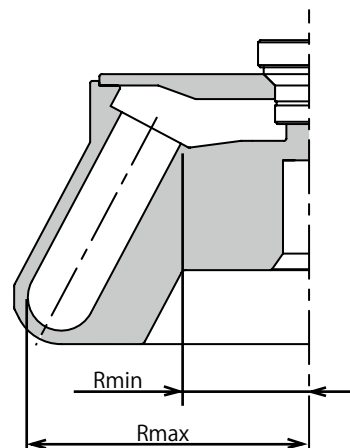
Nominal capacity [ml]		Mfr abbr.	Tube			Actual capacity [ml]	Max. Number	*1 Allowable speed [rpm]	*1 Max.RCF [G] (Radius[mm])	BART Code	Remarks
		Model Name (Material)	Bottom Shape	Tube Dimension (φ×L [mm])	Allowable RCF [G]						
 50ml	NAL	3114-0050 (FEP)	R	φ28.8×107.7	50,000	42	8	A) 21,000 B) 20,000	A) 48,820 (99) B) 44,280 (99)	1	Sealing Cap Assembly 3131-0024 is required*2
		3118-0050 (PC)	R	φ28.8×107.0	50,000	35	8				
		3119-0050 (PPCO)	R	φ28.8×106.7	50,000						
 50ml	NAL	3137-0050 (PSF)	R	φ29.0×115.3	50,000	40	8				
		3138-0050 (PC)	R	φ28.8×115.0	50,000						
		3139-0050 (PPCO)	R	φ28.8×114.1	50,000						

\* 1 Allowable speed and maximum RCF are listed with respect to each centrifuge.

\* 2 Be sure to fill the container with liquid completely in use. In addition, usable only with 4°C setting in the condition above.

# NA-8

Applicable model	Suprema25 / Suprema21
Max. speed	15,000 rpm
Max. RCF	31,200 G
Tube angle	28 degree
Max. radius	124 mm
Min. radius	56 mm
Rotor capacity	50ml×12



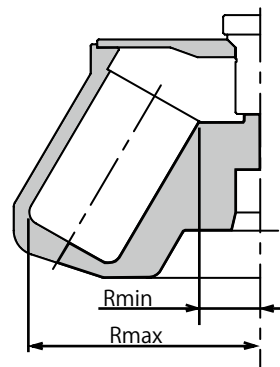
## Applicable Tube to NA-8

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]						
50ml	NAL	3110-0500 (PPCO)	R	φ28.7×103.3	50,000	35	12	15,000	31,200 (124)	1	Applicable cap 3111-0030 
50ml	NAL	3114-0050 (FEP)	R	φ28.8×107.7	50,000						42
50ml	NAL	3117-0500 (PC)	R	φ29.3×103.8	50,000	35	12	15,000	31,200 (124)	1	Applicable cap 3111-0030 
50ml	NAL	3118-0050 (PC)	R	φ28.8×107.0	50,000						
50ml	NAL	3119-0050 (PPCO)	R	φ28.8×106.7	50,000	40	12	15,000	31,200 (124)	1	
50ml	NAL	3137-0050 (PSF)	R	φ29.0×115.3	50,000						
50ml	NAL	3138-0050 (PC)	R	φ28.8×115.0	50,000						
50ml	NAL	3139-0050 (PPCO)	R	φ28.8×114.1	50,000						

\* 1 Be sure to fill the container with liquid completely in use. In addition, usable only with 4°C setting in the condition above.

# NA-11

Applicable model	Suprema25 / Suprema21
Max. speed	12,000 rpm
Max. RCF	22,540 G
Tube angle	30 degree
Max. radius	140 mm
Min. radius	37 mm
Rotor capacity	250ml×6



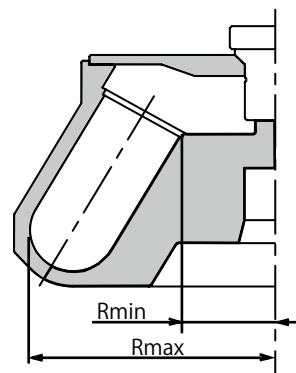
## Applicable Tube to NA-11

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]						
 250ml	BEC	356011 (PP)	F	φ62×120	38,500	175	6	12,000	22,540 (140)	1	*1
		356013 (PC)	F	φ62×120	38,500						
 250ml	NAL	3120-0250PK (PPCO)	F	φ61.8×125.5	13,200			9,100	12,960 (140)		*1
		3122-0250PK (PC)	F	φ61.8×125.2	27,500			12,000	22,540 (140)		

\*1 This tube is used only when the chamber temperature is set at 25°C or lower.

## NA-12

Applicable model	Suprema25 / Suprema21
Max. speed	15,000 rpm
Max. RCF	30,700 G
Tube angle	30 degree
Max. radius	122 mm
Min. radius	46 mm
Rotor capacity	100ml×8

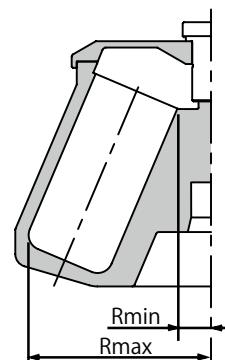


### Applicable Tube to NA-8

Nominal capacity [ml]	Mfr abbr.	Tube				Actual capacity [ml]	Max. Number	Allowable speed [rpm]	Max.RCF [G] (Radius[mm])	BART Code	Remarks
		Model Name (Material)	Bottom Shape	Tube Dimension (φ×L [mm])	Allowable RCF [G]						
100ml	TOM	ST1000-01 (SS)	R	φ42.5×93.0	—	70	8	15,000	30,700 (122)	1	Lid included
		ST1000-11 (SS)	R	φ42.5×106.7	—						
85ml	NAL (TOM)	3118-0085 (PC)	R	φ38.2×105.7	50,000	60	8	15,000	30,190 (120)	2	Adapter  (A8000-01)
80ml	HIT (TOM)	332094A (PA)	R	φ38×106	—	56	8	15,000	30,190 (120)	2	Adapter  (A8000-01)

# NA-16

Applicable model	Suprema25 / Suprema21
Max. speed	11,000 rpm
Max. RCF	18,270 G (Rotating radius 135 mm)
Tube angle	23 degree
Max. radius	144 mm
Min. radius	27 mm
Rotor capacity	500ml×4



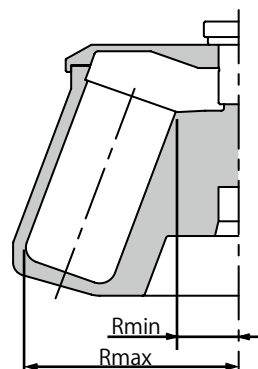
\* NA-16 rotors shipped between 2010 and 2023 may have been supplied with rubber adapter GA5000-01. Remove the rubber adapter GA5000-01 when using the tubes listed in the table above. Failure to do so may result in improper tightening of the rotor lid and cause the rotor to come off.

## Applicable Tube to NA-16

Nominal capacity [ml]	Mfr abbr.	Tube				Actual capacity [ml]	Max. Number	Allowable speed [rpm]	Max.RCF [G] (Radius[mm])	BART Code	Remarks
		Model Name (Material)	Bottom Shape	Tube Dimension (φ×L [mm])	Allowable RCF [G]						
 500ml	TOM  (TOM)	ST5000-01 (SS)	R	φ69.5×157.0	—	250	4	11,000	18,270 (135)	1	Adapter  (SA0500-01)
		ST5000-11 (SS)	R	φ69.5×172.0	—	350	4				Lid included  Adapter  (SA0500-01)
 500ml	BEC	355605 (PC)	F	φ69×160	18,600	350	4	10,500	17,750 (144)	4	
		355607 (PP)	F	φ69×160	11,900			8,500	11,630 (144)		
 450ml	NAL	3140-0500PK (PC)	F	φ69.5×159.5	13,700	315	4	9,200	13,630 (144)	4	
		3141-0500PK (PPCO)	F	φ69.5×159.3	13,700						

# NA-18

Applicable model	Suprema25 / Suprema21
Max. speed	10,000 rpm
Max. RCF	17,780 G
Tube angle	20 degree
Max. radius	159 mm
Min. radius	47 mm
Rotor capacity	500ml×6



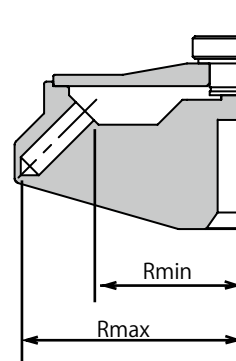
\* NA-18 rotors shipped between 2010 and 2023 may have been supplied with rubber adapter GA5000-01. Remove the rubber adapter GA5000-01 when using the tubes listed in the table above. Failure to do so may result in improper tightening of the rotor lid and cause the rotor to come off.

## Applicable Tube to NA-18


Nominal capacity [ml]	Mfr abbr.	Tube				Actual capacity [ml]	Max. Number	Allowable speed [rpm]	Max.RCF [G] (Radius[mm])	BART Code	Remarks
		Model Name (Material)	Bottom Shape	Tube Dimension (φ×L [mm])	Allowable RCF [G]						
 500ml	TOM  (TOM)	ST5000-01 (SS)	R	φ69.5×157.0	—	250	6	10,000	16,890 (151)	1	Adapter  (SA0500-01)
		ST5000-11 (SS)	R	φ69.5×172.0	—	350					Lid included  Adapter  (SA0500-01)
 500ml	BEC	355605 (PC)	F	φ69×160	18,600	350	6	10,000	17,780 (159)	4	
		355607 (PP)	F	φ69×160	11,900			8,100	11,670 (159)		
 450ml	NAL	3140-0500PK (PC)	F	φ69.5×159.5	13,700	315	6	8,700	13,460 (159)	4	
		3141-0500PK (PPCO)	F	φ69.5×159.3	13,700						

**NA-20**

Applicable model	Suprema25 / Suprema21
Max. speed	20,000 rpm
Max. RCF	43,840 G
Tube angle	45 degree
Max. radius	98 mm
Min. radius	66 mm
Rotor capacity	1.5ml × 24

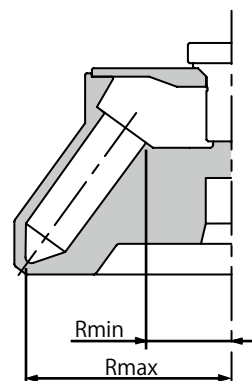


**Applicable Tube to NA-20**

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]						
 1.5ml	BEC	357448 (PA)	C	φ 11 × 40	—	1	24	20,000	43,840 (98)	1	

# NA-22

Applicable model	Suprema25 / Suprema21
Max. speed	14,000 rpm
Max. RCF	26,740 G
Tube angle	36 degree
Max. radius	122 mm
Min. radius	51 mm
Rotor capacity	50ml Conical Tube×8

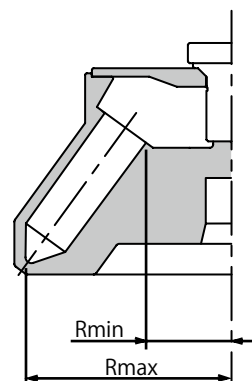


## Applicable Tube to NA-22

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 ( $\phi \times L$ [mm])	Allowable RCF [G]							
 50ml	COR	430291 (PP)	C	$\phi 29 \times 116$	15,500	35	8	8,300	9,400 (122)	1		
		430304 (PET)	C	$\phi 29 \times 116$	3,600			5,100	3,550 (122)			
		430829 (PP)	C	$\phi 29 \times 116$	15,500			8,300	9,400 (122)			
	FLC	352070 (PP)	C	$\phi 30 \times 115$	9,400							
 35ml	NAL	3148-0050 (PPCO)	C	$\phi 28.6 \times 113.8$	50,000	24	8	14,000	26,740 (122)	1		
 15ml	COR	430053 (PET)	C	$\phi 16 \times 120$	3,600	10	8	5,100	3,490 (120)	2	Adapter  (CA1500-01)	
		430766 (PP)	C	$\phi 16 \times 120$	12,000			7,900	8,370 (120)			
		(TOM)	430791 (PP)	C	$\phi 16 \times 120$			12,000				
	FLC	(TOM)	352095 (PS)	C	$\phi 17 \times 120$			1,800	3,600			1,740 (120)
		352196 (PP)	C	$\phi 17 \times 120$	6,000			6,600	5,850 (120)			

# NA-23

Applicable model	Suprema25 / Suprema21
Max. speed	11,000 rpm
Max. RCF	19,620 G
Tube angle	36 degree
Max. radius	145 mm
Min. radius	74 mm
Rotor capacity	50ml Conical Tube×12



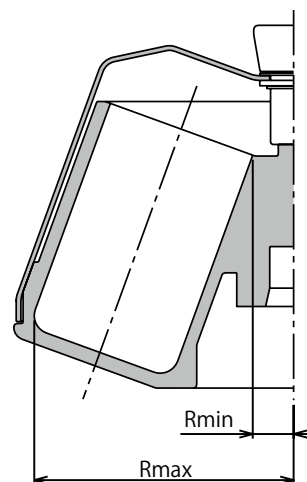
## Applicable Tube to NA-23

Nominal capacity [ml]	Mfr abbr.	Tube				Actual capacity [ml]	Max. Number	Allowable speed [rpm]	Max.RCF [G] (Radius[mm])	BART Code	Remarks
		Model Name (Material)	Bottom Shape	Tube Dimension (φ×L [mm])	Allowable RCF [G]						
 50ml	COR	430291 (PP)	C	φ29×116	15,500	35	12	7,600	9,370 (145)	1	
		430304 (PET)	C	φ29×116	3,600			4,700	3,580 (145)		
		430829 (PP)	C	φ29×116	15,500			7,600	9,370 (145)		
	FLC	352070 (PP)	C	φ30×115	9,400						
 35ml	NAL	3146-0050 (PC)	C	φ28.8×114.1	50,000	24	12	11,000	19,620 (145)	1	
		3148-0050 (PPCO)	C	φ28.6×113.8	50,000						
 15ml	COR	430053 (PET)	C	φ16×120	3,600	10	12	4,700	3,530 (143)	2	Adapter  (CA1500-01)
		430766 (PP)	C	φ16×120	12,000			7,200	8,290 (143)		
		(TOM)	430791 (PP)	C	φ16×120			12,000			
	FLC	352095 (PS)	C	φ17×120	1,800			3,300	1,740 (143)		
		(TOM)	352196 (PP)	C	φ17×120			6,000	6,000		

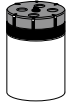

## NA-400

Applicable model	Suprema25 / Suprema21
Max. speed	9,000 rpm
Max. RCF	15,220 G (Rotating radius:168mm)
Tube angle	20 degree
Max. radius	168 mm
Min. radius	26 mm
Rotor capacity	1,000ml×4

\* The expiration date for use of NA-400 is 10 years from its delivery. When the expiration date has been reached, please contact your local dealer or our business office.



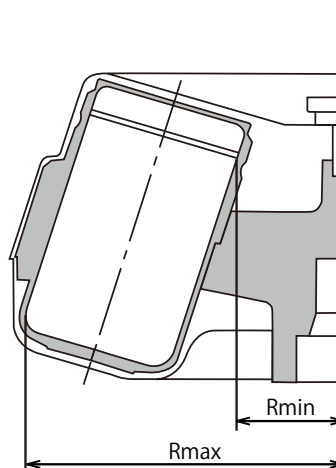
### Applicable Tube to NA-400

Nominal capacity [ml]	Mfr abbr.	Tube				Actual capacity [ml]	Max. Number	Allowable speed [rpm]	Max.RCF [G] (Radius[mm])	BART Code	Remarks
		Model Name (Material)	Bottom Shape	Tube Dimension (φ×L [mm])	Allowable RCF [G]						
 1,000ml	HIT	S308184A (PP)	F	φ97×167	—	900	4	9,000	15,220 (168)	1	Applicable cap S410870A is required 



# NA-610

Applicable model	Suprema25
Max. speed	7,000 rpm
Max. RCF	11,120 G (Rotating radius:203mm)
Tube angle	17 degree
Max. radius	203 mm
Min. radius	103 mm
Rotor capacity	1,000ml×6

\* The warranty period for NA-610 Rotor is seven(7) years from delivery date. When the 7 year warranty period has expired, please contact your dealer or local TOMY office.



## Applicable Tube to NA-610

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]						
 1,000ml	HIT	S307700A (PP)	F	φ97×167	—	900	6	7,000	11,120 (203)	1	Applicable cap S410870A is required 

## 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.