

PRECISION GLASS WARE AND APPARATUS

Applications:

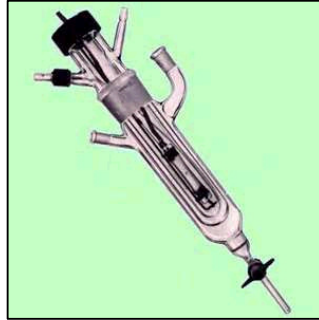
- Micro-electronics, chemistry, bio-chemical /medical , lubricants , Semiconductors packaging ,
- Glass, polymers/heavy electrical engineering, MEMS, heat sink,nuclear/power plant,leather
- Pesticides, petrochemical, genetic engineering, aero-space, polymer, environment etc.

Introduction & Operation Principle:

These lab/industrial glass wares are made from borosilicate grade of non-reactive glass, which are normally inert to normally used chemicals. Glassware/apparatus are scratch free and polished to give faded functional value. These pastes are available in more than 10 grades with different specifications including some tailor made formulations virtually meeting all industrial/research-development specifications. These are available for some critical physical conditions like crogenic/high temperature range meeting other related corrosion/environmental/tribological/chemical and thermodynamical aspects. Tailor-made solutions are always encouraged.



Graduated test tube



heat exchanger



graduated bottle/flask

Mechanical/Electrical Specifications of general graduated/non-graduated test tube:

S.No.	O.D. m.m.	Length m.m.	Wall thick ness m.m.	Bottom curvature Degree
MGTT13100	10	75	1.0/option	140-160
MGTT18100	12	75	1.0/option	140-160
MGTT18150	12	100	1.0/option	140-160
MGTT25200	15	125	1.0/option	140-160
MGTT25200	15	150	1.0/option	140-160
MGTT32250	18	150	1.0/option	140-160
MGTT48200	25	100	1.0/option	140-160
MGTT48250	25	150	1.0/option	140-160
MGTT13100	25	200	1.0/option	140-160
MGTT18100	32	200	1.0/option	140-160
MGTT13100	38	200	1.0/option	140-160

Mechanical/Electrical Specifications of general graduated/non-graduated test tube with rim:

S.No.	O.D. m.m.	Length m.m.	Wall thick ness m.m.	Bottom curvature Degree
MGTTR13100	10	75	1.0/option	140-160
MGTTR18100	12	75	1.0/option	140-160
MGTTR18150	12	100	1.0/option	140-160
MGTTR25200	15	125	1.0/option	140-160
MGTTR25200	15	150	1.0/option	140-160
MGTTR32250	18	150	1.0/option	140-160
MGTTR48200	25	100	1.0/option	140-160
MGTTR48250	25	150	1.0/option	140-160
MGTTR13100	25	200	1.0/option	140-160
MGTTR18100	32	200	1.0/option	140-160
MGTTR13100	38	200	1.0/option	140-160

Mechanical/Electrical Specifications of Round bottom, Short neck with stopper:

S.No.	Volumetric capacity m.l.	I.C. Joint Length m.m.	O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MRBa13100	50	19/26	90	2.5	270
MGTa18100	100	24/29	110	2.5	270
MGTa18150	150	24/29	115	2.5	270
MGTa25200	250	24/29	130	2.5	270
MGTa25200	500	24/29	150	2.5	270
MGTa32250	1000	24/29	188	2.5	270

PRECISION GLASS WARE AND APPARATUS



Conical Flaks with flat bottom

graduated beaker with rim

graduated beaker

Mechanical/Electrical Specifications of Round bottom, Short neck with dual neck and stopper:

S.No.	Volumetric capacity m.l.	I.C. Joint Lenth m.m.	O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MRBb13100	50	19/26	90	2.5	270
MGTb18100	100	24/29	110	2.5	270
MGTb18150	150	24/29	115	2.5	270
MGTb25200	250	24/29	130	2.5	270
MGTb25200	500	24/29	150	2.5	270
MGTb32250	1000	24/29	188	2.5	270

Mechanical/Electrical Specifications of Round bottom, Short neck with triple neck and stopper:

S.No.	Volumetric capacity m.l.	I.C. Joint Lenth m.m.	O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MRBc13100	50	19/26	90	2.5	270
MGTc18100	100	24/29	110	2.5	270
MGTc18150	150	24/29	115	2.5	270
MGTc25200	250	24/29	130	2.5	270
MGTc25200	500	24/29	150	2.5	270
MGTc32250	1000	24/29	188	2.5	270

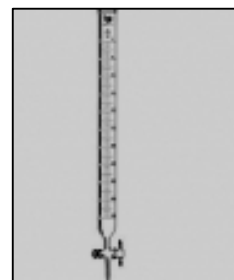
Mechanical/Electrical Specifications of Flaks with flat bottom:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MFFB13100	25	41x90	20	2.5	270
MFFB18100	50	52x90	26	2.5	270
MFFB18150	100	63x105	26	2.5	270
MFFB25200	150	75x132	28	2.5	270
MFFB25200	250	85x140	34	2.5	270
MFFB32250	300	87x160	24	2.5	270
MRBF13100	500	105x170	33	2.5	270
MFFB18100	1000	135x200	42	2.5	270
MFFB18150	2000	167x250	50	2.5	270
MFFB25200	3000	186x300	50	2.5	270
MFFB25200	5000	223x340	60	2.5	270
MFFB32250	10000	279x400	65	2.5	270

Mechanical/Electrical Specifications of Flaks with round bottom:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MRBF13100	25	41x90	20	2.5	270
MFRB18100	50	52x90	26	2.5	270
MFRB18150	100	63x105	26	2.5	270
MFRB25200	150	75x132	28	2.5	270
MFRB25200	250	85x140	34	2.5	270
MFRB32250	500	105x170	33	2.5	270
MRBF13100	1000	135x200	42	2.5	270
MFRB18100	2000	167x250	50	2.5	270
MFRB18150	3000	186x300	50	2.5	270
MFRB25200	5000	223x340	60	2.5	270
MFRB25200	10000	279x400	65	2.5	270

PRECISION GLASS WARE AND APPARATUS



Conical Flasks with flat bottom

Conical Flasks with flat bottom

graduated burette with rim

Mechanical/Electrical Specifications of Graduated conical flask with round bottom:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MGCFRB130000	10	30x55	15	2.5	60
MGCFRB130025	25	40x70	16	2.5	60
MGCFRB130050	50	52x90	20	2.5	60
MGCFRB130100	100	60x105	23	2.5	60
MGCFRB130150	150	69x120	25	2.5	60
MGCFRB130250	250	83x184	30	2.5	60
MGCFRB130500	500	100x195	35	2.5	60
MGCFRB131000	1000	128x225	40	2.5	60
MGCFRB132000	2000	175x285	53	2.5	60
MGCFRB133000	3000	185x315	48	2.5	60
MGCFRB135000	5000	220x377	50	2.5	60

Mechanical/Electrical Specifications of pipette:

S.No.	Volumetric capacity m.l.	O.D. /I.D. m.m.	Bottom curvature Degree	Length m.m.	Accuracy
MPPG13100	1.0	90	270	200	99%
MPPG 8100	2	110	270	200	99%
MPPG18150	5	115	270	250	99%
MPPG25200	10	130	270	250	99%
MPPG25200	20	150	270	300	99%
MPPG32250	25	188	270	300	99%

Mechanical/Electrical Specifications of Graduated Beaker with flat bottom:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MRBF13100	25	41x90	20	2.5	270
MFRB18100	50	52x90	26	2.5	270
MFRB18150	100	63x105	26	2.5	270
MFRB25200	150	75x132	28	2.5	270
MFRB25200	250	85x140	34	2.5	270
MFRB32250	300	87x160	24	2.5	270
MRBF13100	500	105x170	33	2.5	270
MFRB18100	1000	135x200	42	2.5	270
MFRB18150	2000	167x250	50	2.5	270
MFRB25200	3000	186x300	50	2.5	270
MFRB25200	5000	223x340	60	2.5	270
MFRB32250	10000	279x400	65	2.5	270

Mechanical/Electrical Specifications of Graduated Beaker with spout & flat bottom:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MRBF13100	25	41x90	20	2.5	270
MFRB18100	50	52x90	26	2.5	270
MFRB18150	100	63x105	26	2.5	270
MFRB25200	150	75x132	28	2.5	270
MFRB25200	250	85x140	34	2.5	270
MFRB32250	500	105x170	33	2.5	270
MRBF13100	1000	135x200	42	2.5	270
MFRB18100	2000	167x250	50	2.5	270
MFRB18150	3000	186x300	50	2.5	270
MFRB25200	5000	223x340	60	2.5	270
MFRB25200	10000	279x400	65	2.5	270

PRECISION GLASS WARE AND APPARATUS



Conical Flaks with flat bottom



Conical Flaks with flat bottom



graduated beaker with rim

Mechanical/Electrical Specifications of Graduated Conical beaker with spout:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MGCBS130000	10	30x55	15	2.5	60
MGCBS130025	25	40x70	16	2.5	60
MGCBS130050	50	52x90	20	2.5	60
MGCBS130100	100	60x105	23	2.5	60
MGCBS130150	150	69x120	25	2.5	60
MGCBS130250	250	83x184	30	2.5	60
MGCBS130500	500	100x195	35	2.5	60
MGCBS131000	1000	128x225	40	2.5	60
MGCBS132000	2000	175x285	53	2.5	60
MGCBS133000	3000	185x315	48	2.5	60
MGCBS135000	5000	220x377	50	2.5	60

Mechanical/Electrical Specifications of Graduated tissue cuture flask with vent:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MTCFVV13100	25	41x90	20	2.5	270
MTCFVV18100	50	52x90	26	2.5	270
MTCFVV18150	100	63x105	26	2.5	270
MTCFVV25200	150	75x132	28	2.5	270
MTCFVV25200	250	85x140	34	2.5	270
MTCFVV32250	300	87x160	24	2.5	270
MTCFVV13100	500	105x170	33	2.5	270
MTCFVV18100	1000	135x200	42	2.5	270
MTCFVV18150	2000	167x250	50	2.5	270
MTCFVV25200	3000	186x300	50	2.5	270
MTCFVV25200	5000	223x340	60	2.5	270
MTCFVV32250	10000	279x400	65	2.5	270

Mechanical/Electrical Specifications of Graduated dispenser bottle flat bottom:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MGDFB3100	25	41x90	20	2.5	270
MGDFB18100	50	52x90	26	2.5	270
MGDFB18150	100	63x105	26	2.5	270
MGDFB25200	150	75x132	28	2.5	270
MGDFB25200	250	85x140	34	2.5	270
MGDFB32250	500	105x170	33	2.5	270
MGDFBF13100	1000	135x200	42	2.5	270
MGDFB18100	2000	167x250	50	2.5	270
MGDFB18150	3000	186x300	50	2.5	270
MGDFB25200	5000	223x340	60	2.5	270
MGDFB25200	10000	279x400	65	2.5	270

PRECISION GLASS WARE AND APPARATUS



Conical Flaks with flat bottom



Air tight vial



seperatory funnel

Mechanical/Electrical Specifications of watch glass:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MPWGL130000	10	30x55	15	2.5	60
MPWGL130025	25	40x70	16	2.5	60
MPWGL130050	50	52x90	20	2.5	60
MPWGL130100	100	60x105	23	2.5	60
MPWGL130150	150	69x120	25	2.5	60
MPWGL130250	250	83x184	30	2.5	60
MPWGL130500	500	100x195	35	2.5	60
MPWGL131000	1000	128x225	40	2.5	60
MPWGL132000	2000	175x285	53	2.5	60
MPWGL133000	3000	185x315	48	2.5	60
MPWGL135000	5000	220x377	50	2.5	60

Mechanical/Electrical Specifications of Graduated tissue cuture flask with vent:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MTCFVL13100	25	41x90	20	2.5	270
MTCFVL18100	50	52x90	26	2.5	270
MTCFVL18150	100	63x105	26	2.5	270
MTCFVL25200	150	75x132	28	2.5	270
MTCFVL25200	250	85x140	34	2.5	270
MTCFVL32250	300	87x160	24	2.5	270
MRBF13100	500	105x170	33	2.5	270
MTCFVL18100	1000	135x200	42	2.5	270
MTCFVL18150	2000	167x250	50	2.5	270
MTCFVL25200	3000	186x300	50	2.5	270
MTCFVL25200	5000	223x340	60	2.5	270
MTCFVL32250	10000	279x400	65	2.5	270

Mechanical/Electrical Specifications of Graduated dispenser bottle flat bottom:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MDDP13100	25	41x90	20	2.5	270
MDDP18100	50	52x90	26	2.5	270
MDDP18150	100	63x105	26	2.5	270
MDDP25200	150	75x132	28	2.5	270
MDDP25200	250	85x140	34	2.5	270
MDDP32250	500	105x170	33	2.5	270
MDDP13100	1000	135x200	42	2.5	270
MDDP18100	2000	167x250	50	2.5	270
MDDP18150	3000	186x300	50	2.5	270
MDDP25200	5000	223x340	60	2.5	270
MDDP25200	10000	279x400	65	2.5	270

PRECISION GLASS WARE AND APPARATUS

Mechanical/Electrical Specifications of watch glass:

S.No.	Volumetric capacity m.l.	O.DxHeight (mm)	Neck O.D. m.m.	Wall thick ness m.m.	Bottom curvature Degree
MWGLS130000	10	30x55	15	2.5	60
MWGLS130025	25	40x70	16	2.5	60
MWGLS130050	50	52x90	20	2.5	60
MWGLS130100	100	60x105	23	2.5	60
MWGLS130150	150	69x120	25	2.5	60
MWGLS130250	250	83x184	30	2.5	60
MWGLS130500	500	100x195	35	2.5	60
MWGLS131000	1000	128x225	40	2.5	60
MWGLS132000	2000	175x285	53	2.5	60
MWGLS133000	3000	185x315	48	2.5	60
MWGLS135000	5000	220x377	50	2.5	60

Mechanical/Electrical Specifications of general graduated/non-graduated centrifug funnels;

S.No.	OD1 m.m.	OD2 m.m.	Height m.m.	Tail dia/length m.m.	Thickness m.m.
MFNL18100	½	3	3	½ & 4"	1.5
MFNL18150	½	3	3	½ & 4"	1.5
MFNL25200	½	3	3	½ & 4"	1.5
MFNL25200	½	4	3	½ & 4"	1.5
MFNL32250	½	4	4	½ & 4"	1.5
MFNL48200	½	5	4	½ & 4"	1.5
MFNL48250	½	5	4	½ & 4"	1.5

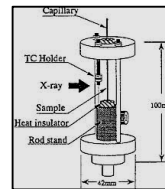
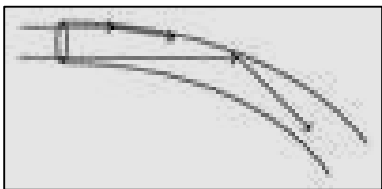
Mechanical/Electrical Specifications of graduated/non-graduated burettes;

S.No.	O.D. m.m.	Length m.m.	Volumetri capacity Micro-litre	Least count Micro-litre	Wall thick ness m.m.
MBRJR13100	06	75	0010	0.1/0.2/0.5	1.0/option
MBRJR18100	10	75	0050	0.1/0.2/0.5	1.0/option
MBRJR18150	12	100	0100	0.1/0.2/0.5	1.0/option
MBRJR25200	15	125	0200	1/2/5	1.0/option
MBRJR25200	15	150	0500	1/2/5	1.0/option
MBRJR32250	18	150	1000	1/2/5	1.0/option
MBRJR48200	25	100	2000	1/2/5	1.0/option
MBRJR48250	25	150	5000	1/2/5	1.0/option
MBRJR13100	25	200	9999	1/2/5	1.0/option

Mechanical/Electrical Specifications of graduated/non-graduated high pressure sampler;

S.No.	Volume	Differential pressure Kg/cm ²	Wall thick ness m.m.	Feed through nos
MGSP18100	12	10/option	1.0/option	1-6
MGSP18150	12	10/option	1.0/option	1-6
MGSP25200	15	10/option	1.0/option	1-6
MGSP25200	15	10/option	1.0/option	1-6
MGSP32250	18	10/option	1.0/option	1-6
MGSP48200	25	10/option	1.0/option	1-6
MGSP48250	25	10/option	1.0/option	1-6
MGSP13100	25	10/option	1.0/option	1-6

PRECISION GLASS WARE AND APPARATUS



CAPILLARY WITH BEND

LINEAR CAPILLARY

X-RAY SCATTERING CAPILLARY

Mechanical/Electrical Specifications of general graduated/non-graduated capillary For x-ray scattering:

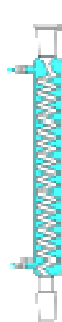
S.No.	O.D. m.m.	Length m.m.	I.D. m.m.	Least count Micro-litre	Bend Degree/45 rad
MUPC13100	03	75	0.2	0.1/0.2/0.5	10-15
MUPC18100	03	75	0.3	0.1/0.2/0.5	10-15
MUPC18150	03	100	0.5	0.1/0.2/0.5	10-15
MUPC25200	04	125	0.2	0.1/0.2/0.5	10-15
MUPC25200	04	150	0.3	0.1/0.2/0.5	10-15
MUPC32250	04	150	0.5	0.1/0.2/0.5	10-15
MUPC48200	05	100	0.2	0.1/0.2/0.5	10-15
MUPC48250	05	150	0.3	0.1/0.2/0.5	10-15
MUPC13100	05	200	0.5	0.1/0.2/0.5	10-15



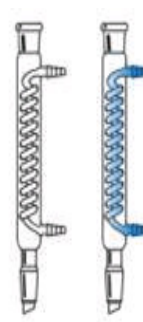
Hartzler type condenser



Lie-beg type condenser



Graham type- condenser



ReFlux coil type- condenser

Mechanical/Electrical Specifications of general graduated/non-graduated lie-beg type condenser:

S.No.	Jacket O.D. m.m.	Jacket Length m.m.	Inner tube O.D. m.l	Least count m.l.	End shape/dimension /45 rad
MGLB-0200	20/24/30/option	200	10/12/15	1.0	Round /option
MGLB-300	30/36/45/option	300	10/12/15	1.0	Round /option
MGLB-400	36/40/45/option	400	10/12/15	1.0	Round /option
MGLB-500	36/40/45/option	500	10/12/15	1.0	Round /option

Mechanical/Electrical Specifications of general graduated/non-graduated graham type condenser:

S.No.	Jacket O.D. m.m.	Jacket Length m.m.	Inner tube O.D. m.l	Least count m.m.	End shape/dimension /45 rad
MGGC-200	20/24/30/option	200	10/12/15	1.0	Round /option
MGGC-300	30/36/45/option	300	10/12/15	1.0	Round /option
MGGC-400	36/40/45/option	400	10/12/15	1.0	Round /option
MGGC-500	36/40/45/option	500	10/12/15	1.0	Round /option

Mechanical/Electrical Specifications of general graduated/non-graduated re-flux type condenser:

S.No.	Jacket O.D. m.m.	Jacket Length m.m.	Inner tube O.D. m.l	Least count m.m.	End shape/dimension /45 rad
MGRFC-200	20/24/30/option	200	10/12/15	1.0	Round /option
MGRFC-300	30/36/45/option	300	10/12/15	1.0	Round /option
MGRFC-400	36/40/45/option	400	10/12/15	1.0	Round /option
MGRFC-500	36/40/45/option	500	10/12/15	1.0	Round /option

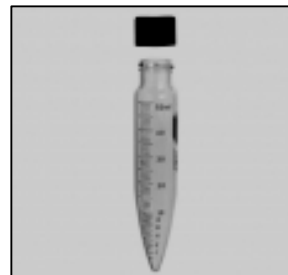
PRECISION GLASS WARE AND APPARATUS



Centrifugal tube with rim



micro-centrifugal tube with rim



graduated centrifugal tube with cap

Mechanical/Electrical Specifications of general graduated/non-graduated centrifugal tube:

S.No.	O.D. m.m.	Length m.m.	I.D. m.m.	Least count Micro-litre	Bend Degree/45 rad
MUPC13100	03	75	0.2	0.1/0.2/0.5	10-15
MUPC18100	03	75	0.3	0.1/0.2/0.5	10-15
MUPC18150	03	100	0.5	0.1/0.2/0.5	10-15
MUPC25200	04	125	0.2	0.1/0.2/0.5	10-15
MUPC25200	04	150	0.3	0.1/0.2/0.5	10-15
MUPC32250	04	150	0.5	0.1/0.2/0.5	10-15
MUPC48200	05	100	0.2	0.1/0.2/0.5	10-15
MUPC48250	05	150	0.3	0.1/0.2/0.5	10-15
MUPC13100	05	200	0.5	0.1/0.2/0.5	10-15

Mechanical/Electrical Specifications of general graduated/non-graduated or tight vial;

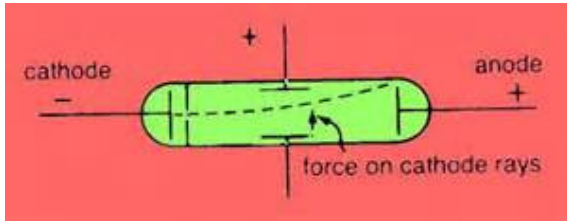
S.No.	O.D. m.m.	Length m.m.	I.D. m.m.	Least count Micro-litre	Bend Degree/45 rad
MUPC13100	03	75	0.2	0.1/0.2/0.5	10-15
MUPC18100	03	75	0.3	0.1/0.2/0.5	10-15
MUPC18150	03	100	0.5	0.1/0.2/0.5	10-15
MUPC25200	04	125	0.2	0.1/0.2/0.5	10-15
MUPC25200	04	150	0.3	0.1/0.2/0.5	10-15
MUPC32250	04	150	0.5	0.1/0.2/0.5	10-15
MUPC48200	05	100	0.2	0.1/0.2/0.5	10-15
MUPC48250	05	150	0.3	0.1/0.2/0.5	10-15
MUPC13100	05	200	0.5	0.1/0.2/0.5	10-15

PRECISION GLASS WARE AND APPARATUS

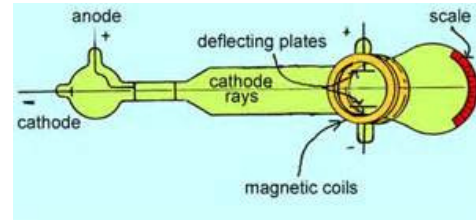
Mechanical/Electrical Specifications of general graduated/non-graduated or tight vial;

S.No.	O.D. m.m.	Length m.m.	I.D. m.m.	Least count Micro-litre	Bend Degree/45 rad
MUPC13100	03	75	0.2	0.1/0.2/0.5	10-15
MUPC18100	03	75	0.3	0.1/0.2/0.5	10-15
MUPC18150	03	100	0.5	0.1/0.2/0.5	10-15
MUPC25200	04	125	0.2	0.1/0.2/0.5	10-15
MUPC25200	04	150	0.3	0.1/0.2/0.5	10-15
MUPC32250	04	150	0.5	0.1/0.2/0.5	10-15
MUPC48200	05	100	0.2	0.1/0.2/0.5	10-15
MUPC48250	05	150	0.3	0.1/0.2/0.5	10-15
MUPC13100	05	200	0.5	0.1/0.2/0.5	10-15

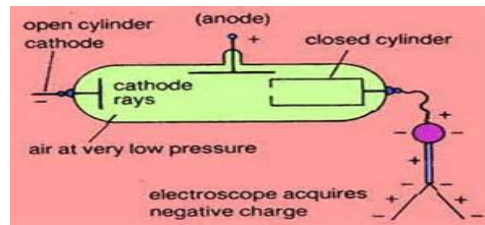
PRECISION GLASS WARE AND APPARATUS



Cathode ray tube with electrostatic deflection



Cathode ray tube with magnetic deflection



Cathode ray tube with electroscope