

FEATURES

- Reflex type glass indicator
- High pressure & temperature
- For clear liquid level indication

APPLICATION

- Petro-chemical plants
- Process & power plants
- Chemical / Fertilizer plants

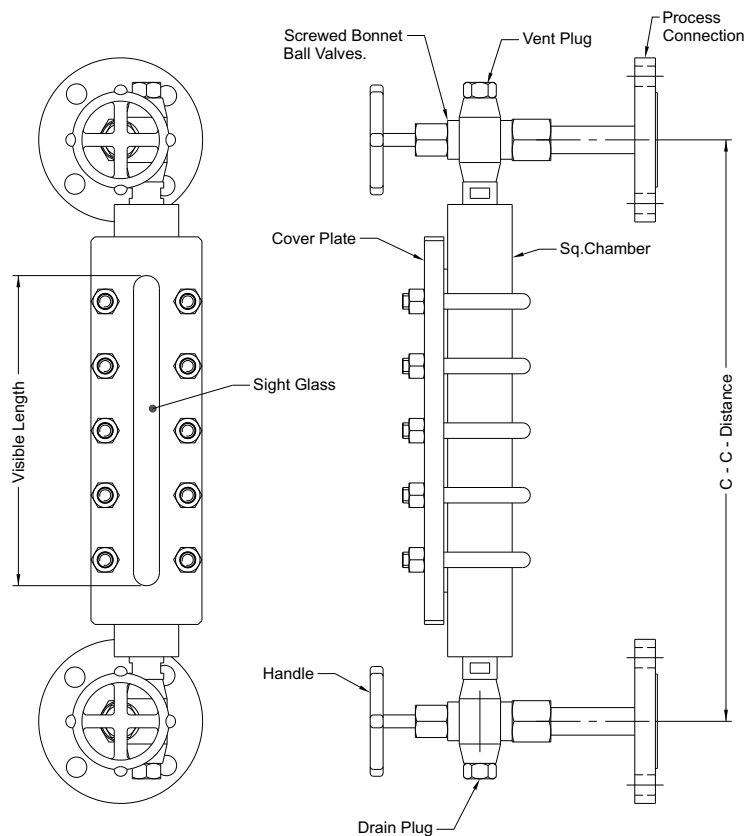
Reflex



STANDARD SPECIFICATIONS

Process connection	:	Threaded / Flanged
Center-to-Center distance	:	350 mm (Min.) up to 6000 mm (Max.)
Visible length	:	± 50 mm to C-C distance
Body material	:	ASTM A105 (Carbon Steel)
Mounting	:	Side/Side
Scale material	:	Aluminum (Standard) , AISI 304 SS (Optional)
Glasses	:	Toughened Borosilicate Glass, Reflex type
Gaskets	:	Compressed Asbestos Fibre (CAF)
Max. operating temperature	:	120°C
Max. operating pressure	:	10...50 bar
Vent / Drain connection	:	1/2" NPTF, plugged
Isolation valves	:	Screwed bolted bonnet ball valve

DIMENSIONAL DRAWING



All dimensions are in mm.

APPROVALS



ORDERING CODES

1. WETTED PARTS

- MB** ASTM A105 (Carbon Steel)
- MC** AISI 304 SS
- MF** AISI 316 SS

MB

2. COVER PLATES

- MB** ASTM A105 (Carbon Steel)
- MC** AISI 304 SS
- MF** AISI 316 SS

MB

3. GLASSES

- B** Borosilicate (P=20bar / T=120°C)
- I** ILMADUR make (P=35bar / T=240°C)
- K** KLINGER make (P=65bar / T=400°C)

B

4. GASKETS

- RC** Compressed Asbestos Fibre (CAF)
- RD** Grafoil
- RE** PTFE

RC

5. VENT CONNECTION

- E41** Plug (1/2" NPTM)
- E42** Plug (3/4" NPTM)
- E43** Plug (1" NPTM)
- E44** Needle Valve (1/2" NPTF)
- E46** Ball Valve (1/2" NPTF)
- A31** 2" RF 150# as per ANSI B 16.5
- A43** 3" RF 150# as per ANSI B 16.5
- A49** 4" RF 150# as per ANSI B 16.5

E41

6. DRAIN CONNECTION

- E41** Plug (1/2" NPTM)
- E42** Plug (3/4" NPTM)
- E43** Plug (1" NPTM)
- E44** Needle Valve (1/2" NPTF)
- E46** Ball Valve (1/2" NPTF)
- A31** 2" RF 150# as per ANSI B 16.5
- A43** 3" RF 150# as per ANSI B 16.5
- A49** 4" RF 150# as per ANSI B 16.5

E41

7. PROCESS CONNECTION

- 14N** 1/2" NPT (M)
- 15N** 3/4" NPT (M)
- 14B** 1/2" BSP (M)
- 15B** 3/4" BSP (M)
- 16N** 1" NPT (M)
- 18N** 2" NPT (M)
- 16B** 1" BSP (M)
- 16B** 2" BSP (M)
- A31** 2" RF 150# as per ANSI B 16.5
- A43** 3" RF 150# as per ANSI B 16.5
- A49** 4" RF 150# as per ANSI B 16.5
- A32** 2" RF 300# as per ANSI B 16.5
- A44** 3" RF 300# as per ANSI B 16.5
- A50** 4" RF 300# as per ANSI B 16.5

A31

8. CENTER TO-CENTER DISTANCE

- XXXX** 250 mm up to 6,000 mm

1500

9. SCALE

- XP** Aluminum scale
- XQ** AISI 304 SS scale

XP

10. OTHER OPTIONS

- XF** Tag plate, AISI 304 SS
- TC** Material test certificate 3.1
- TP** Performance test certificate

XF

Ordering Example : L202-MB-MB-B-RC-E41-E41-A31-1500-XP-0-XF

NOTES:

1. For any special requirements, or special connections, please contact factory.
2. Wetted parts includes float, chamber & process connection.
3. Indicator shall be supplied as single-piece for length up to 3,500 mm, above that in two-piece construction.
4. For details about Mating flanges & mounting nut/bolts, please refer our catalogue A406.

FEATURES

- Transparent type glass indicator
- High pressure & temperature
- For clear liquids & gas level

APPLICATION

- Petro-chemical plants
- Process & power plants
- Chemical / Fertilizer plants

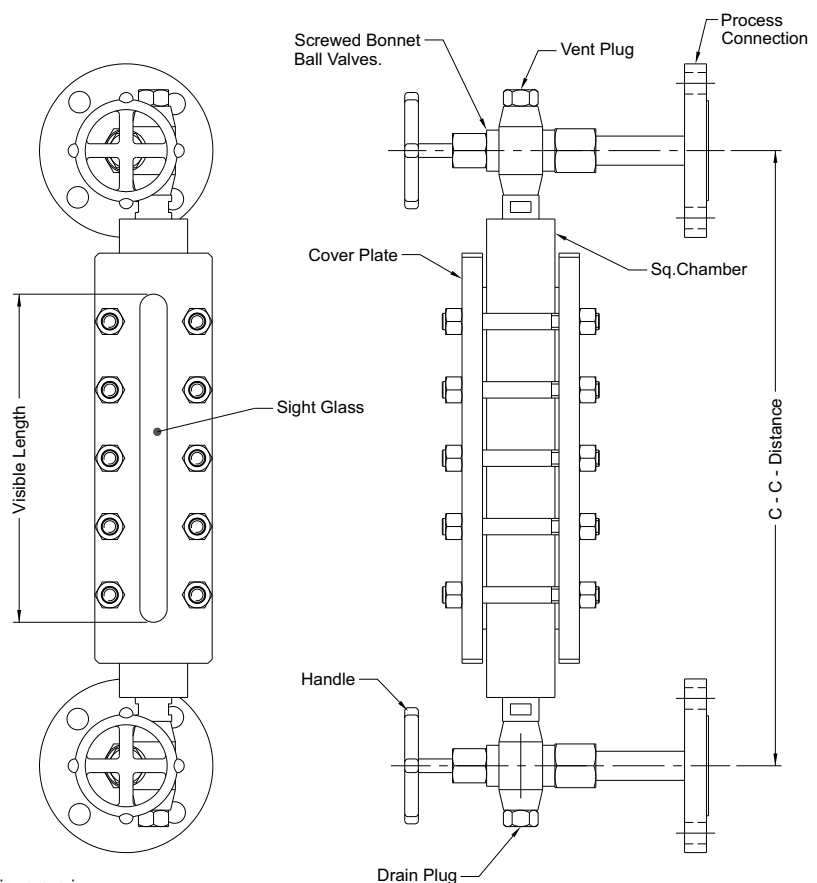
Transparent



STANDARD SPECIFICATIONS

Process connection	:	Threaded / Flanged
Center-to-Center distance	:	350 mm (Min.) up to 6000 mm (Max.)
Visible length	:	± 50 mm to C-C distance
Body material	:	ASTM A105 (Carbon Steel)
Mounting	:	Side/Side
Scale material	:	Aluminum (Standard) , AISI 304 SS (Optional)
Glasses	:	Toughened Borosilicate Glass, Reflex type
Gaskets	:	Compressed Asbestos Fibre (CAF)
Max. operating temperature	:	120°C
Max. operating pressure	:	10...50 bar
Vent / Drain connection	:	1/2" NPTF, plugged
Isolation valves	:	Screwed bolted bonnet ball valve

DIMENSIONAL DRAWING



All dimensions are in mm.

APPROVALS



ORDERING CODES

1. WETTED PARTS

MB	ASTM A105 (Carbon Steel)
MC	AISI 304 SS
MF	AISI 316 SS

MB

2. COVER PLATES

MB	ASTM A105 (Carbon Steel)
MC	AISI 304 SS
MF	AISI 316 SS

MB

3. GLASSES

B	Borosilicate (P=20bar / T=120°C)
I	ILMADUR make (P=35bar / T=240°C)
K	KLINGER make (P=65bar / T=400°C)

B

4. GASKETS

RC	Compressed Asbestos Fibre (CAF)
RD	Grafoil
RE	PTFE

RC

5. VENT CONNECTION

E41	Plug (1/2" NPTM)
E42	Plug (3/4" NPTM)
E43	Plug (1" NPTM)
E44	Needle Valve (1/2" NPTF)
E46	Ball Valve (1/2" NPTF)
A31	2" RF 150# as per ANSI B 16.5
A43	3" RF 150# as per ANSI B 16.5
A49	4" RF 150# as per ANSI B 16.5

E41

6. DRAIN CONNECTION

E41	Plug (1/2" NPTM)
E42	Plug (3/4" NPTM)
E43	Plug (1" NPTM)
E44	Needle Valve (1/2" NPTF)
E46	Ball Valve (1/2" NPTF)
A31	2" RF 150# as per ANSI B 16.5
A43	3" RF 150# as per ANSI B 16.5
A49	4" RF 150# as per ANSI B 16.5

E41

7. PROCESS CONNECTION

14N	1/2" NPT (M)
15N	3/4" NPT (M)
14B	1/2" BSP (M)
15B	3/4" BSP (M)
16N	1" NPT (M)
18N	2" NPT (M)
16B	1" BSP (M)
16B	2" BSP (M)
A31	2" RF 150# as per ANSI B 16.5
A43	3" RF 150# as per ANSI B 16.5
A49	4" RF 150# as per ANSI B 16.5
A32	2" RF 300# as per ANSI B 16.5
A44	3" RF 300# as per ANSI B 16.5
A50	4" RF 300# as per ANSI B 16.5

A31

8. VISIBLE LENGTH

XXXX	250 mm up to 6,000 mm
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1500

9. SCALE

XP	Aluminum scale
XQ	AISI 304 SS scale

XP

10. OTHER OPTIONS

C	Anti-frost protection
D	Illuminator with Diffuser - WP ⁴
E	Illuminator with Diffuser - FP ⁵
F	Illuminator with Diffuser - EP ⁶
XF	Tag plate, AISI 304 SS
TC	Material test certificate 3.1
TP	Performance test certificate

0

Ordering Example : L203-MB-MB-B-RC-E41-E41-A31-1500-XP-0-XF

NOTES:

- For any special requirements, or special connections, please contact factory.
- Wetted parts includes chamber & process connection.
- Indicator shall be supplied as single-piece for length up to 3,500 mm, above that in two-piece construction.
- Weather proof to IP 65
- Flame proof to IIA / IIB + IP 65
- Ex proof to IIC + IP 65
- For details about Mating flanges & mounting nut/bolts, please refer our catalogue A406.

FEATURES

- Easy Installation
- External Mounting
- Economical version

APPLICATION

- Chemical / Fertilizer plants
- Pharmaceutical plants

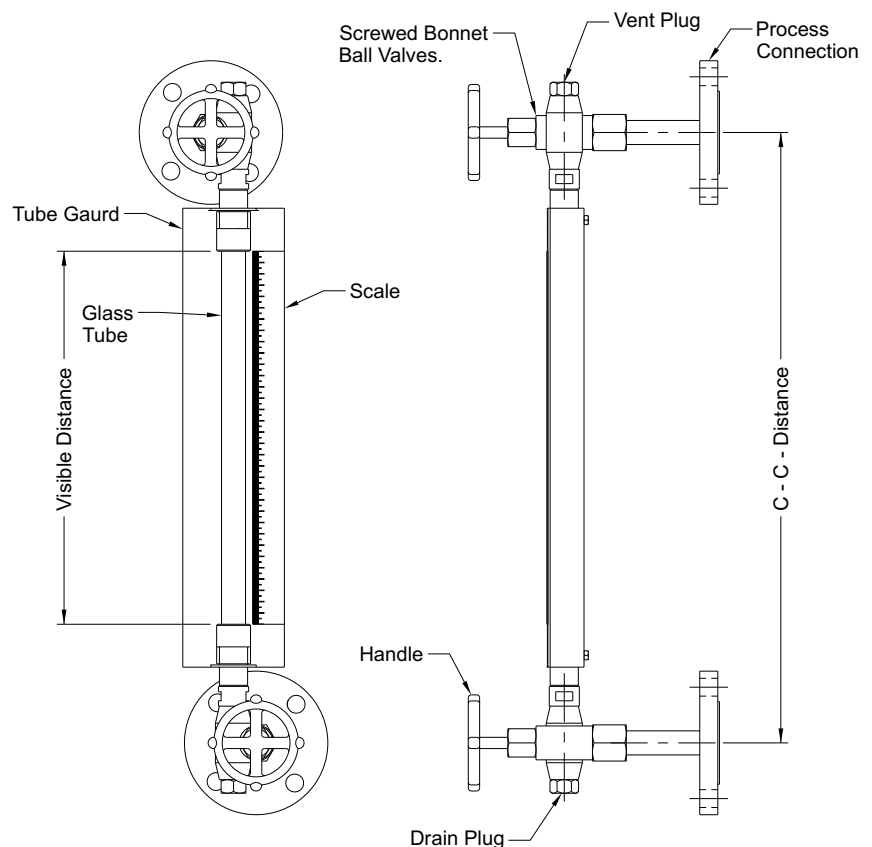
Tabular Glass



STANDARD SPECIFICATIONS

Process connection	:	Threaded / Flanged
Center-to-Center distance	:	250 mm (Min.) up to 1,500 mm (Max.)
Tubular glass	:	Acrylic glass
Glass protection	:	Powder coated Carbon Steel channel box
Packing gasket	:	PTFE
Mounting	:	Side/Side
Scale material	:	Aluminum (Standard) , AISI 304 SS (Optional)
Max. operating temperature	:	100°C
Max. operating pressure	:	10 bar
Vent / Drain connection	:	1/2" NPTF, plugged
Isolation valves	:	Screwed bolted bonnet ball valve

DIMENSIONAL DRAWING



All dimensions are in mm.

ORDERING CODES

1. WETTED PARTS

MB	Carbon Steel / ASTM A105
MC	AISI 304 SS
MF	AISI 316 SS
M3	PVDF
M4	PP (Polypropylene)

MB

2. GLASS PROTECTION

MB	Carbon Steel / ASTM A105
MC	AISI 304 SS
MF	AISI 316 SS

MB

3. VENT CONNECTION

E41	Plug (1/2" NPTM)
E42	Plug (3/4" NPTM)
E43	Plug (1" NPTM)
E44	Needle Valve (1/2" NPTF)
E46	Ball Valve (1/2" NPTF)
A31	2" RF 150# as per ANSI B 16.5
A43	3" RF 150# as per ANSI B 16.5
A49	4" RF 150# as per ANSI B 16.5

E41

4. DRAIN CONNECTION

E41	Plug (1/2" NPTM)
E42	Plug (3/4" NPTM)
E43	Plug (1" NPTM)
E44	Needle Valve (1/2" NPTF)
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A31	2" RF 150# as per ANSI B 16.5
A43	3" RF 150# as per ANSI B 16.5
A49	4" RF 150# as per ANSI B 16.5

E41

5. PROCESS CONNECTION

14N	1/2" NPT (M)
15N	3/4" NPT (M)
14B	1/2" BSP (M)
15B	3/4" BSP (M)
16N	1" NPT (M)
18N	2" NPT (M)
16B	1" BSP (M)
16B	2" BSP (M)
A31	2" RF 150# as per ANSI B 16.5
A43	3" RF 150# as per ANSI B 16.5
A49	4" RF 150# as per ANSI B 16.5
A32	2" RF 300# as per ANSI B 16.5
A44	3" RF 300# as per ANSI B 16.5
A50	4" RF 300# as per ANSI B 16.5

A31

6. CENTRE-TO-CENTRE DISTANCE

XXXX	250 mm up to 1,500 mm
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1000

7. VISIBLE LENGTH

XXXX	C-C Distance less 150 mm (max.)
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850

8. SCALE

XP	Aluminum scale
XQ	AISI 304 SS scale

XP

9. OTHER OPTIONS

XF	Tag plate, AISI 304 SS
TC	Material test certificate 3.1
TP	Performance test certificate
HM	Mating flange

XF

Ordering Example : L204-MB-MB-E41-E41-A31-1000-850-XP-0-XF

NOTES:

- For any special requirements, or special connections, please contact factory.
- Wetted parts includes process connection, end blocks & isolation valves.

FEATURES

- Easy Installation
- Float and scale follower type

APPLICATION

- Oil & petroleum tanks
- Custody transfer tanks
- Over / underground tanks
- Water & liquid storage tanks

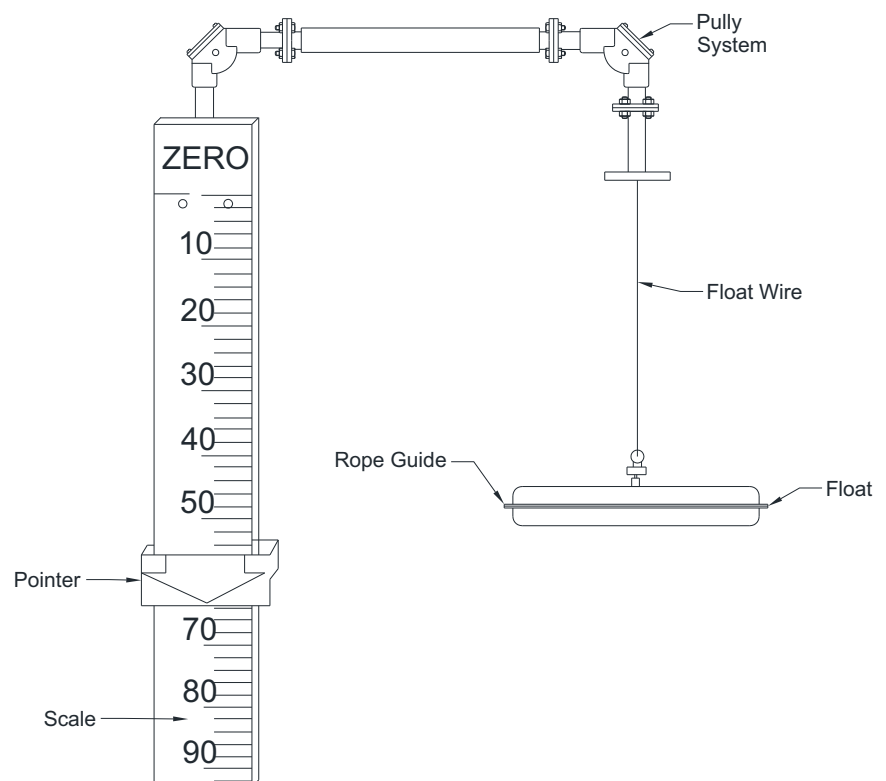
Cat & Mouse



STANDARD SPECIFICATIONS

Process connection	:	Flanged
Measuring range	:	1 up to 20 Meters
Float material & size	:	AISI 316 SS / Ø200 mm for up to 7.5 Meters AISI 316 SS / Ø350 mm for up to 20 Meters
Least count	:	5 mm
Scale material	:	Aluminum
Connection pipe	:	Carbon steel powder coated
Float / Guide wire ropes	:	AISI 316 SS / AISI 304 SS (Ø1.6 mm - multi strand)
Specific gravity	:	0.75
Max. Operating temperature	:	80°C
Max. Operating pressure	:	5 bar
Indication	:	Power coated red CI pointer with Nylon rollers
Mounting assemblies (2 x pulley systems)	:	Cadmium plated steel pulley with PTFE bush and SS shaft housed in weatherproof CI enclosure

SCHEMATIC DIAGRAM



ORDERING CODES

1. WETTED PARTS / FLOAT

- MC AISI 304 SS
- MF AISI 316 SS

MF

2. PROCESS CONNECTION MATERIAL

- MB ASTM A105 (Carbon Steel)
- MC AISI 304 SS
- MF AISI 316 SS

MB

3. PROCESS CONNECTION

- A01 1/2" RF 150# as per ANSI B 16.5
- A02 1/2" RF 300# as per ANSI B 16.5
- A03 1/2" RF 600# as per ANSI B 16.5
- A13 1" RF 150# as per ANSI B 16.5
- A14 1" RF 300# as per ANSI B 16.5
- A15 1" RF 600# as per ANSI B 16.5
- A25 1 1/2" RF 150# as per ANSI B 16.5
- A26 1 1/2" RF 300# as per ANSI B 16.5
- A27 1 1/2" RF 600# as per ANSI B 16.5
- A31 2" RF 150# as per ANSI B 16.5
- A32 2" RF 300# as per ANSI B 16.5
- A33 2" RF 600# as per ANSI B 16.5
- A43 3" RF 150# as per ANSI B 16.5
- A44 3" RF 300# as per ANSI B 16.5
- A45 3" RF 600# as per ANSI B 16.5

A31

4. SCALE

- XP Aluminum scale
- XQ AISI 304 SS scale

XP

5. MEASURING HEIGHT

- XXXXX 1,000 mm up to 20,000 mm

10000

6. OTHER OPTIONS

- A Anchor plate, ASTM A 105
- XF Tag plate, AISI 304 SS
- TC Material test certificate 3.1
- TP Performance test certificate
- HM Mating flange

A

Ordering Example : L205-MF-MB-A31-XP-10000-A-XF

NOTES:

1. For any special requirements, or special connections, please contact factory.
2. Wetted parts includes float, float wire and guide wire.