

直通视镜 Tubular Sight Glasses



玻璃保护
Glass protection

Applications 应用

- 直通视镜由不锈钢结构和玻璃组成。在食品加工，化妆品，制药和精细化工行业中，可以通过它清晰并且精确的观察到物料的流动。
- A tubular sight-glass is comprised of stainless steel frame and glass. Through it, operator can observe the flowing of the liquid substance clearly and precisely in the fields of food, cosmetics, pharmaceutical and fine chemicals industries.

Design and features 设计和特点

- 规格DN-25/1" 到100/4".
- 通径设计
- 自锁螺母附件
- 360° 观看角度
- 可以垂直或水平使用
- Available in sizes DN-25/1" to 100/4".
- Full bore design.
- Attachment by self-locking nuts.
- 360° viewing angle.
- Can be used in vertical or horizontal position.

Materials 材质

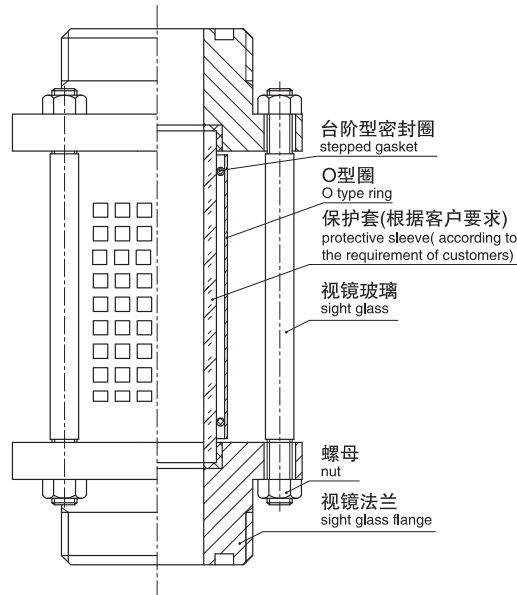
- 保护套 AISI 304
- 玻璃 钢化玻璃
- 垫圈 VMQ FDA 177.2600
- 表面处理 CNC车床
- Protective sleeve: AISI304
- Glass: tempered glass
- Gasket: VMQ FDA177.2600
- Surface treatment: CNC lathe



Technical specifications 技术规格

- 工作温度: -10℃到120℃
(silicone)
- Working temp: -10℃ to 120℃ (Silicone)
- 最大操作压力(bar)
- Max.operating pressure (bar)

DIN	25	32	40	50	65	80	100
PYREX玻璃	10	10	10	8	7	6	5



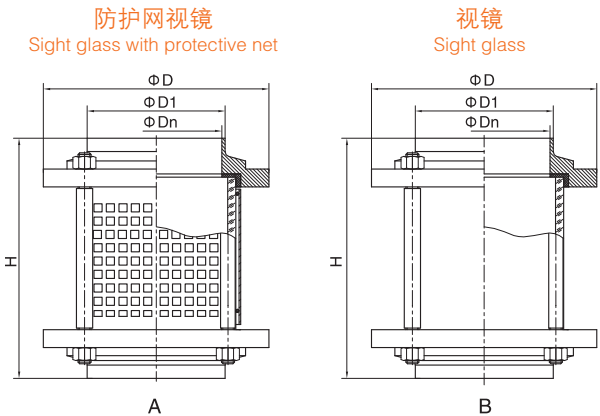
No.SM50037

直通焊接式视镜 (DIN)
straight welded sight glass(DIN)

Size	H	D	D1	Dn
DN10	140	78	13	10
DN15	140	78	18	15
DN20	140	78	22	19
DN25	140	78	28	25
DN32	140	86	34	31
DN40	140	90	40	37
DN50	142	102	52	49
DN65	146	124	70	66
DN80	150	139	85	81
DN100	154	154	104	100
DN125	170	185	129	125
DN150	180	215	154	150

Options 选项

- 垫圈材质: NBR、EPDM、FPM 所有都根据 FDA177.2600
- 连接: 焊接、卡箍、法兰、螺纹
- 标准: IDF, BS-RJT, SMS, DIN
- Gasket material: NBR,EPDM,FPM in accordance with FAD177.2600
- Connection: weld, clamp, flange, thread
- Standard: IDF,BS-RJT, SMS, DIN

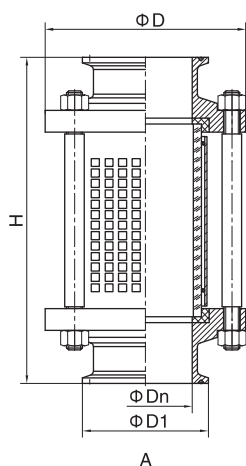


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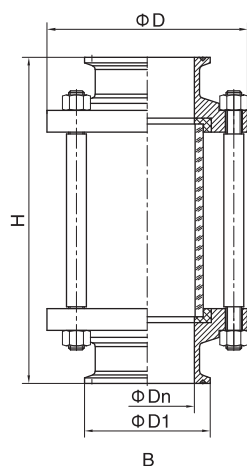
直通焊接式视镜
straight welded sight glass

Size	H	D	D1	Dn
1/2"	140	78	12.7	9.4
3/4"	140	78	19.1	15.8
1"	140	78	25.4	22.4
1 1/4"	140	78	31.8	38.8
1 1/2"	140	86	38.1	35.1
2"	142	102	50.8	48.8
2 1/2"	146	115	63.5	59.5
3"	146	124	76.2	72.2
3 1/2"	150	139	89	85
4"	154	154	101.6	97.6
5"	170	185	133	127
6"	180	215	159	153

防护网视镜
Sight glass with protective net



视镜
Sight glass

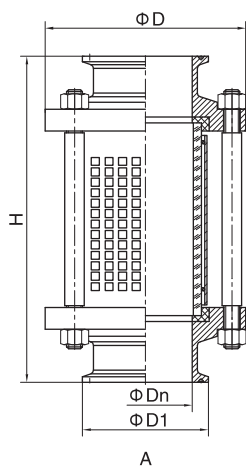


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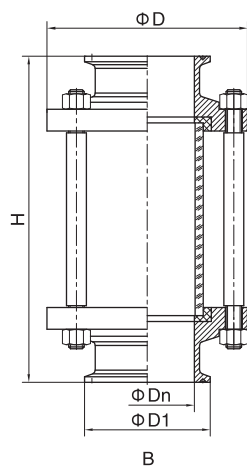
卡箍直通式视镜 Straight clamped sight glass

Size	H	D	D1	Dn
DN10	156	78	34	10
DN15	156	78	34	15
DN20	156	78	34	19
DN25	156	78	50.5	25
DN32	156	78	50.5	31
DN40	160	86	50.5	37
DN50	166	102	64	49
DN65	174	120	91	66
DN80	174	134	106	81
DN100	194	154	119	100
DN125	212	185	144.4	125
DN150	236	215	167	150

防护网视镜
Sight glass with protective net



视镜
Sight glass

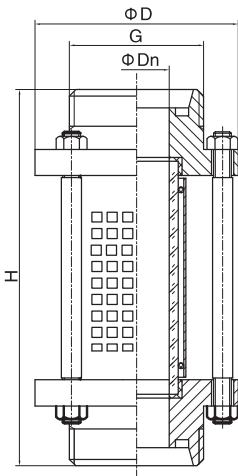


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卡箍直通式视镜 Straight clamped sight glass

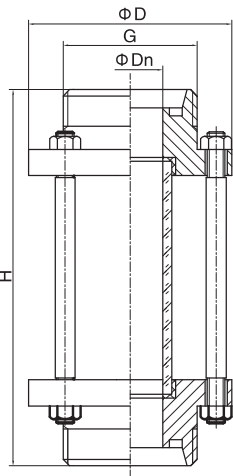
Size	H	D	D1	Dn
1/2"	156	78	25.4	9.4
3/4"	156	78	25.4	15.8
1"	156	78	50.5	22.4
1 1/4"	156	78	50.5	28.8
1 1/2"	160	86	50.5	35.1
2"	166	102	64	47.8
2 1/2"	170	115	77.5	59.5
3"	174	124	91	72.2
3 1/2"	176	139	106	84.9
4"	194	154	119	97.6
5"	212	185	144.4	127
6"	236	215	183	153

防护网视镜
Sight glass with protective net



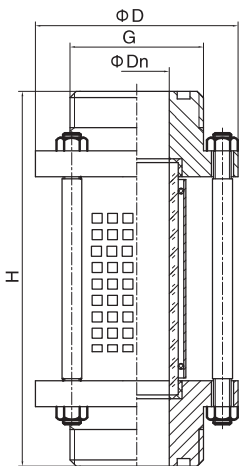
A

视镜
Sight glass



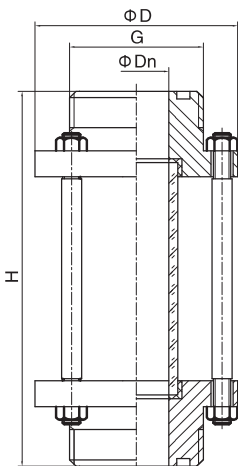
B

防护网视镜
Sight glass with protective net



A

视镜
Sight glass



B

No.SM50035

螺纹式直通视镜 (DIN)
Straight thread sight glass(DIN)

Size	H	G	D	Dn
DN10	156	RD28×1/8	78	10
DN15	156	RD33.5×1/8	78	15
DN20	156	RD43.5×1/6	78	19
DN25	156	RD51.5×1/6	78	25
DN32	160	RD57.5×1/6	86	31
DN40	164	RD64.5×1/6	90	37
DN50	166	RD77.5×1/6	106	49
DN65	170	RD94.5×1/6	124	66
DN80	174	RD109.2×1/4	139	81
DN100	194	RD129.2×1/4	159	100
DN125	220	RD159.2×1/4	185	125
DN150	240	RD189.2×1/4	215	150

No.SM50036

螺纹式直通视镜 (SMS)
Straight thread sight glass (SMS)

Size	H	G	D	Dn
3/4 "	156	RD35.5×1/8	78	16
1 "	156	RD39.5×1/6	78	22.4
1 1/4 "	156	RD47.5×1/6	78	28.8
1 1/2 "	160	RD59.5×1/6	86	35.1
2 "	166	RD69.5×1/6	102	47.8
2 1/2 "	170	RD84.5×1/6	115	59.5
3 "	174	RD97.2×1/6	128	72.2
3 1/2 "	176	RD104.2×1/6	139	84.9
4"(小)	194	RD124.2×1/4	154	97.6
4"(大)	194	RD131.2×1/6	159	97.6

四通视镜 Four-Way Sight Glass

Applications 应用

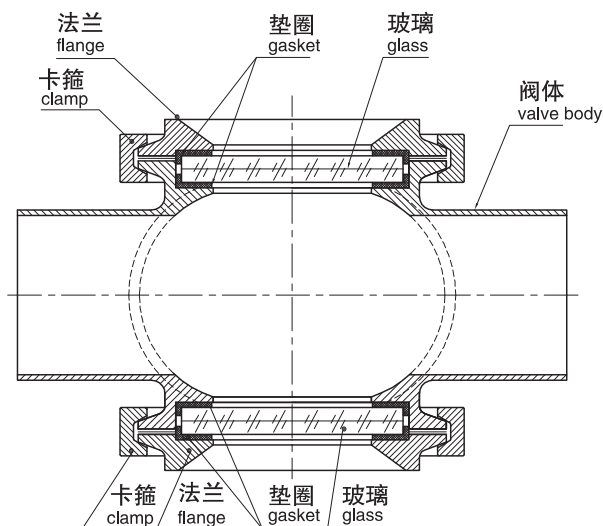
○四通视镜由不锈钢结构和钢化玻璃组成。在食品加工，化妆品，制药和精细化工工业中，可以通过它清晰并且精确的观察到物料的流动。

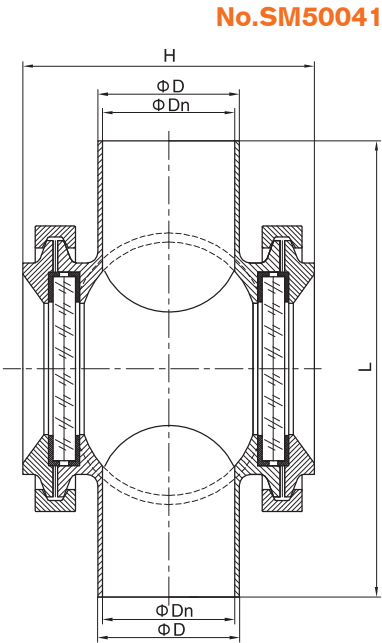
○Flanged sight glass is comprised of stainless steel frame and tempered glass. Through it, operator can observe the flowing of the liquid substance clearly and precisely in the fields of food, cosmetics, pharmaceutical and fine chemicals industries.

Design and features 设计和特点

- 规格从1"-4"到DN25-DN100
- 玻璃通过卡箍安装到机构上
- 连接：螺纹、卡箍、焊接，DIN SMS,IDF
- 垫圈材质：EPDM NBR FPM 符合 FDA177.2600
- 材质：AISI304(1.4301)
AISI316L(1.4404)
- 最大温度：-10℃到+120℃
- 最大压力：10Bar

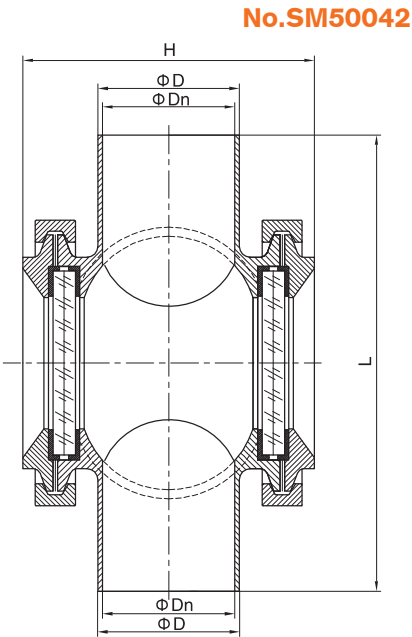
- Available from 1" - 4" to D N25 - D N150
- The glass can be installed on the equipment through clamps
- Connection: weld, clamp, thread,, DIN, SMS, IDF
- Gasket material: NBR,EPDM,FPM in accordance with FAD177.2600
- Material:AISI304(1.4301)AISI316L(1.4404)
- Max.temperature: -10℃ to 120℃
- Max.pressure: 10Bar





球形四通视镜 (DIN)
Four-way spherical sight glass (DIN)

Size	D	Dn	H	L
DN25	28	25	67	90
DN32	34	31	78	100
DN40	40	37	83	130
DN50	52	49	99	165
DN65	70	66	125	205
DN80	85	81	145	250
DN100	104	100	168	300



球形四通视镜 (3A、SMS、ISO、DS)
Four-way spherical sight
glass(3A,SMS,SIO,DS)

Size	D	Dn	H	L
1"	25.4	22.4	67	90
1 1/4"	31.8	28.8	78	100
1 1/2"	38.1	35.1	83	130
2"	50.8	47.8	99	165
2 1/2"	63.5	59.5	125	205
3"	76.2	72.2	134	230
3 1/2"	89	85	145	250
4"	101.6	97.6	168	300

法兰视镜 Flanged Sight Glass



Applications 应用

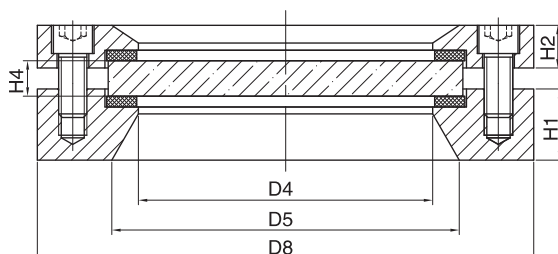
- 法兰视镜由不锈钢结构和钢化玻璃组成。在食品加工，化妆品，制药和精细化工工业中，可以通过它清晰并且精确的观察到物料的流动。
- Flanged sight glass is comprised of stainless steel frame and glass. Through it, operator can observe the flowing of the liquid substance clearly and precisely in the fields of food, cosmetics, pharmaceutical and fine chemicals industries.

Design and features 设计和特点



- 规格从2"-6"到DN50-DN150
- 通过内六角螺栓将两片法兰及玻璃装配在一起
- 垫圈材质: PTFE 符合 FDA177.2600
- 材质: AISI304(1.4301) AISI316L(1.4404)
- 最大温度: -10°C 到 $+120^{\circ}\text{C}$
- 最大压力: 10Bar
- Available from 2" - 6" to DN50-DN150
- Assemble flange with glass by using hexagon socket bolts
- Gasket material: PTFE in accordance with FDA177.2600
- Material: AISI304(1.4301) AISI316L(1.4404)
- Max.temperature: -10°C to 120°C
- Max.pressure: 10Bar

No.SM50046



Size	H4	D4	D5	D8	H1	H2
DN25	10	48	63	100	20	12
DN32	10	63	78	115	20	12
DN40	10	63	78	115	20	12
DN50	10	83	98	140	20	12
DN65	15	108	123	165	25	15
DN80	15	108	123	165	25	15
DN100	20	133	148	190	25	20
DN125	20	158	173	224	25	20
DN150	25	183	198	250	30	25
DN200	30	233	248	310	30	30

由任式视镜 Union-Type-Sight-Glass



Applications 应用

- 由任视镜DIN 11851/SMS (奶制品标准装置), 带有透明的圆形玻璃。螺纹管口处有焊颈。
- 焊接视镜带螺纹接头。观看口用于观看生物反应器, 实验室搅拌器, 过滤器, 处理容器, 管道和其他关闭的容器。尤其适合于制药, 食品和饮料加工, 比如酿酒厂, 牛奶厂。
- Union-Type-Sight-Glass DIN 11851/SMS (the standard device of the dairy products), with clear circular glass. Threaded nozzle with the welded neck.
- Welded Sight Glass with threaded ferrule. It is used viewing the biologic reactor, blender in laboratory, filter, processing container, pipeline and other closed container. Especially apply in Pharmacy, Food and Beverage processing, such as the brewery, dairy.

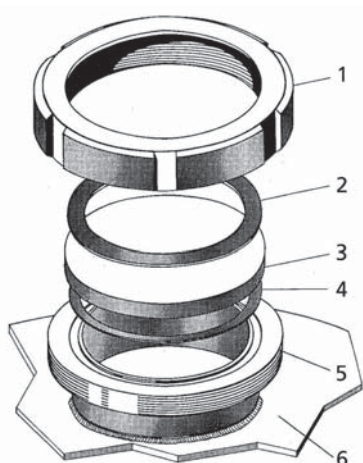
Materials 材质

- | | |
|---|---|
| ○ 槽形螺母: 不锈钢1.4301 (304) | ○ Slot nut: stainless steel.4301 (304) |
| ○ 平垫圈: PTFE | ○ Flat gasket : PTFE |
| ○ 视镜: 钢化玻璃(用于最大温度120℃) | ○ Sight glass: tempered glass(used in max. temperature 120℃) |
| ○ 密封圈(最大180°): Viton, PTFE, BNR, Silicon | ○ Seal(max. temperature 180℃): Viton, PTFE, BNR, Silicon |
| ○ 与物料接触部位: 不锈钢1.4301 (304); 1.4404 (316L) | ○ The parts contact with liquid: stainless steel1.4301(304);1.4404 (316L) |

Assemble 装配

○把螺纹接头(5)焊接到容器壁(6)上后，如同左图所示，装上密封圈(4)，视镜垫圈(3)和平垫圈(2)。旋上螺母(1)，将所有的部件拧紧。通常使用特殊的“C扳手”。

○Weld the threaded ferrule(5) to the container(6), such as the left chart, install seal(4), sight glass gasket(3) and the flat gasket(2). Circle the nut(1), then screw down all parts. Usually used the special "C spanner".



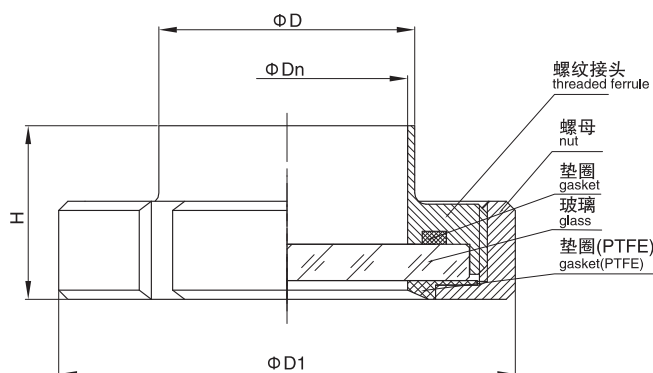
Operational term 操作条件

○压力: 6bar (如果需要压力可以更高) 真空

○温度: 最大280℃(见温度图表)–使用适当的垫圈(编号4), 在平面上。

○Pressure: 6bar (higher pressure is possible if needed) Vacuum

○Temperature: Max. 120℃ (temperature chart) – using proper gasket (No.4) as the drawing.



No.SM50043

由任视镜 (DIN) Union-Type-Sight-Glass(DIN)

Size	H	D1	D	Dn
DN25	26	63	28	25
DN32	28	70	34	31
DN40	28	78	40	37
DN50	30	92	52	49
DN65	31	110	70	66
DN80	33	125	85	81
DN100	37	146	104	100
DN125	38	178	129	125
DN150	45	210	154	150

No.SM50044

由任视镜 (Inch) Union-Type-Sight-Glass(Inch)

Size	H	D1	D	Dn
1"	24	54	25.4	22.4
1 1/4"	26	70	31.8	28.8
1 1/2"	28	72	38.1	35.1
2"	28	92	50.8	47.8
2 1/2"	32	97	63.5	59.5
3"	32	111	76.2	72.2
3 1/2"	33	125	89.0	85.0
4"	35	138	101.6	97.6

不锈钢泛光灯视镜 Stainless Steel Lumiglas Luminaire Sight Glass



不锈钢泛光灯
Stainless steel luminaire



不锈钢泛光灯视镜组合
Combination of Stainless steel
lumiglas luminaire and sight glass



Applications 应用

- 设计用于制药和食品加工工业，如酿酒厂，牛奶厂等，罐，反应堆，搅拌器，分离器，管道和其他常闭式容器非爆炸危险区域内部的照明。
- Designed for use in pharmaceutical and food processing industries e.g. breweries, dairies etc. for illumination of internals of tanks, reactors, mixers, separators and other normally closed vessels as well as pipelines in non explosion hazardous areas.

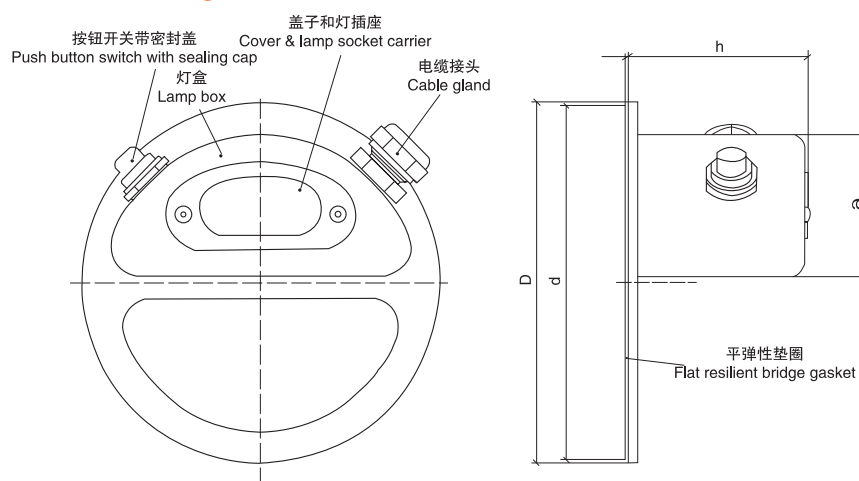
Design and features 设计和特点

- 形状轻巧美观，有设计专利保护。
- 和螺纹视镜装置一起使用。
- 将视镜和灯组合在一起，适用于 DIN 11851 圆形螺纹视镜装置或类似于乳制品款式，从规格 DN65 到 DN150。
- Sturdy, attractively shaped, registered design-protected.
- For use with screwed sight glass fittings.
- Providing combined sight and light port, suitable for circular screwed sight glass fittings to DIN 11851 or similar dairy style, sizes DN 65 to DN 150.

Operational term 操作条件

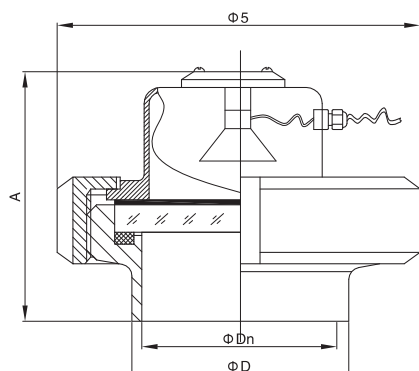
- 独立于容器压力/真空，最大允许电缆接头周围温度为80℃。
- 供应电压: 24V(12V也可以)
- 灯: 2芯卤素细丝灯
基于不同的型号，20 W 或50 W.
- 灯架: 两芯插座
- 变压器: 特殊需要时可以提供
- 开关: 泛光灯标准装配的是无维修的按钮开关
- 供应电缆: 3m长抗温电缆 (耐高温105到90℃)
- Independent of vessel pressure/vacuum; max. permissible ambient temperature at the cable gland 80℃.
- Feed voltage: 24 V (12 V available as alternative)
- Lamp: 2 pin Halogen filament lamp.
Depending on model, 20 W or 50 W.
- Lamp holder: 2 pin socket.
- Transformer: Available as special accessory.
- Integral switch: The luminaries are fitted with non maintained push button switch as standard.
- Supply cable: Temperature resistant supply cable – 3 m length – will have been works fitted (Lapptherm 105 up to 90° C). Lumistar ME is ready wired internally.

不锈钢泛光灯系列的尺寸和连接数据 Dimensions and connecting data for stainless steel series ME



部件，材质和装配：

- 不锈钢304(1.4301)泛光灯体
- 用于制药和食品加工上表面为亚光
- 灯盒盖(2)和弹性平垫圈装在一起，暴露在外灯插方便于旋到灯盒(1)上。
- 无维修的按钮开关(5)装有独立的密封盖。
- 通过密封管电缆接头(3)到内部终端2.5mm²连接电缆。
- 供应电缆: 装有3m电缆尾端和内部连接好的电线(耐高温105到90℃)



○ 订购规格: 例如, 泛光灯 100/24V-50W.

○ 订购时注意事项:

灯要装在现有螺纹视镜的哪个部位, 槽形螺母一定要改成和泛光灯的法兰相匹配, 或重新购买一个匹配的螺母。如有疑问请同供应商联系。除非特别指出, 所有的尺寸单位为mm, 如有变更不另行通知。

Parts, materials and assembly:

- Luminaire body stainless steel 1.4301.
- Satin surface finish for pharmaceutical and food processing.
- Lamp box lid (2) fitted with resilient flat gasket, exposes lamp socket for easy access and screws onto lamp box (1).
- Non maintained push button switch (5) with separate sealing cap fitted as standard.
- Connection of cable through gland (3) to internal terminals 2.5 mm².
- Supply cable; 3 m cable tail works fitted and ready wired internally (Lapptherm 105 up to 90°C).

No.SM50045

Size	A	D5	D	Dn
DN80	90	125	87	81
DN100	100	146	106	100
DN125	90	178	132	125
DN150	96	210	157	150

○ Ordering Specification: Example: Lumiglas luminaire ME 100/24 V – 50W.

○ Important when ordering:

Where the Lumistar ME unit is to be fitted into an existing screwed sight glass, the slotted cover nut must be suitably modified to take the luminaire flange or a matching cover nut ordered – please see bore dimensions 'd8' contained in DIN 11851. If in doubt please ask supplier.