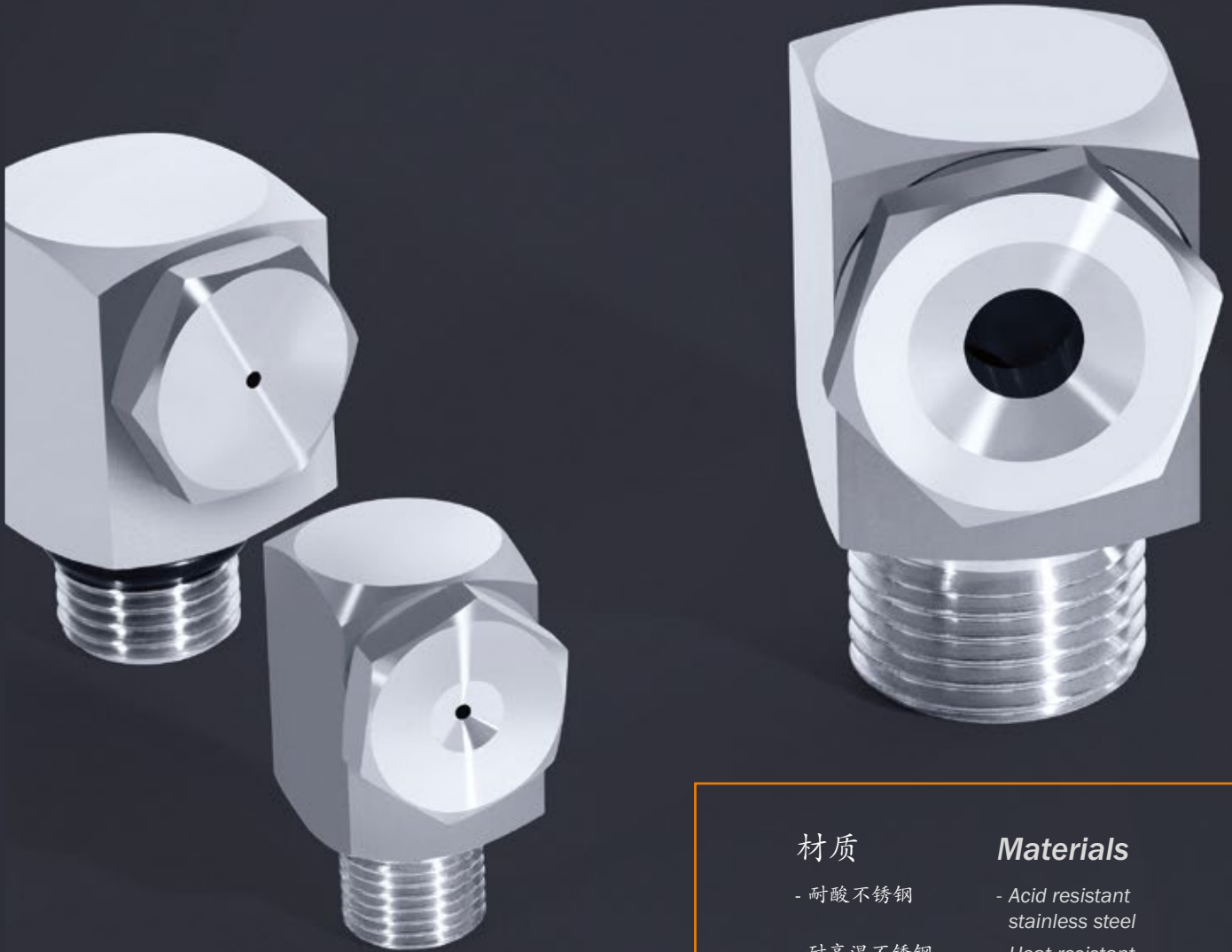


SCHLICK 400-401系列 SCHLICK Series 400-401

Mod. 400-401



压力式喷嘴/空心锥喷嘴
Pressure Nozzles / Hollow-Cone

● 特别的进液设计, 避免了喷嘴堵塞问题, 而且喷嘴结构也极为简单

A specially developed liquid intake allows for a minimalist design and almost completely eliminates blockages

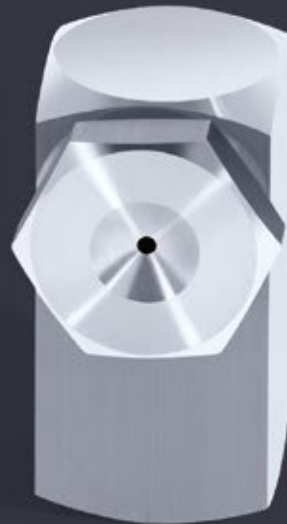
如有技术变更, 恕不另行通知。

材质

- 耐酸不锈钢
- 耐高温不锈钢
- 黄铜
- 哈氏合金
- 铬镍合金
- 聚丙烯
- 聚四氟乙
- 聚氯乙烯
- 聚偏氟乙烯
- 超高分子量聚乙烯
- 钽
- 钛
- 其他客户指定材料

Materials

- Acid resistant stainless steel
- Heat resistant stainless steel
- Brass
- Hastelloy
- Inconel
- PP
- PTFE
- PVC
- PVDF
- RCH 1000
- Tantalum
- Titanium
- Custom materials available on request



雾化均匀、雾化效果一致性好

Completely even and very fine spray results

外螺纹或内螺纹的直角空心锥喷嘴

Extremely robust tangential hollow cone nozzles with external or internal screw threads for right-angled installation

SCHLICK 空心锥喷嘴

100%德国制造

产品目录
Product Overview

两液体喷嘴
Two-Substance
Nozzles

防滴漏/专业包袋技术
ABC/PCA Technique

三/四液体喷嘴
Three-/Four-
Substance Nozzles

多喷头技术
Multispray

喷射杆
Insertion Pipes

喷嘴头
Nozzle Heads

实心锥喷嘴
Full Cone Nozzles

空心锥喷嘴
Hollow Cone Nozzles

硬质合金喷嘴
Carbide Nozzles

扁平喷嘴
Flat Spray Nozzles

喷射喷嘴
Smooth-Jet Nozzles

混合喷嘴
Mixing Nozzles

拉瓦尔喷嘴
Laval Nozzles

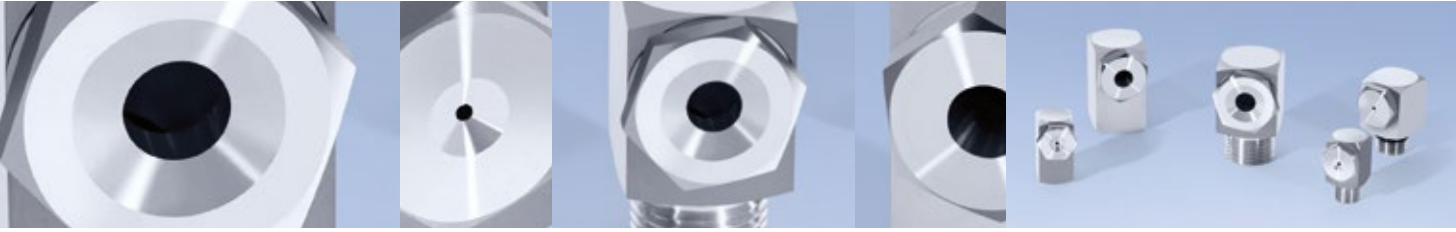
清洗喷嘴
Cleaning Nozzles

喷嘴附件
Accessories

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SCHLICK 400-401系列

SCHLICK Series 400-401



无与伦比的防堵性

空心锥喷嘴通过液体自身的压力进行雾化, 具有雾化液滴小、雾化面积大的特点。

液体切向流入涡流室, 从而开始旋转。液体压力转化为旋转能或动能。旋转的液体形成液膜, 以空心锥体的形状喷出。

在喷嘴出口处, 旋转的液膜与周围的空气发生碰撞, 分解成细小液滴, 这些液滴沿轴向和径向远离喷嘴, 形成空心锥体。

对于表中比正常雾化角度大或小的情况, 说明喷嘴配备了比表中所示更大或更小的直径的喷孔, 所有流量数据, 都是基于标称孔径。





Unequaled – the obstruction-insensitive nozzle





SCHLICK hollow-cone nozzles atomise liquids under pressure into finest droplets having a large specific surface.

The liquid flows tangentially into a swirl chamber and thereby starts to rotate. The energy in the pressurised liquid is converted into rotational energy or kinetic energy. A rotating film of liquid forms around an air core and emerges through the hole as a hollow cone.

At the exit of the nozzle the liquid film encounters the surrounding air in a reciprocal reaction and breaks-up into fine droplets. These move away from the nozzle in an axial and radial direction and form a hollow cone.

For spray cones smaller or larger than the normal spray cone the nozzle is fitted with a smaller or larger exit hole than that shown in the table. In each case the through flow corresponds to the nominal bore hole.

	雾化形状:	空心圆锥体
	雾化角度	15°, 30°, 45°, 60°, 78°, 90°, 120°
	处理量:	0.4-800升/分钟(3 bar时)
	常用喷孔大小:	1.0 mm – 45 mm

	Spray pattern:	circular hollow-cone
	Spray angle:	15°, 30°, 45°, 60°, 78°, 90°, 120°
	Capacity:	0.4 – 800 l/min at 3 bar
	Standard orifices:	1.0 mm – 45 mm

创新性设计

- 安装拆卸非常简单
- 专为精细雾化的应用场合设计
- 应用范围非常广泛
- 终身售后服务保障
- 免费产品设计和技术支持

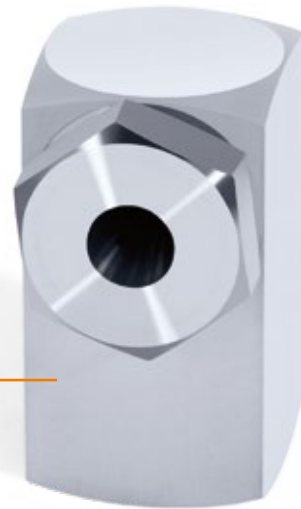
Innovative product design:

- Extremely easy installation/de-installation
- Designed for very fine atomisation
- Very wide range of applications
- Long-term after-sales warranty
- Engineering free of charge



外螺纹的**401**系列
喷嘴

SCHLICK Model 401
with male thread



内螺纹的**400**系列
喷嘴

SCHLICK Model 400
with female thread

此系列喷嘴结构极为简单,由主体和喷头组成,特别的进液设计,避免了喷嘴堵塞问题。

The nozzles simply consist of one nozzle body and one exchangeable exit unit. Through the specially developed liquid intake no further fittings are necessary, which means that blockages are practically eliminated.

400系列和401系列喷嘴,都是直角安装,其中400系列是外螺纹,401系列是内螺纹,都有不同尺寸喷嘴和材质可供选择。

SCHLICK models 400 and 401 are especially well suited for right-angled fitting and are available with external screw thread (model 400) or internal screw thread (model 401). Different sizes and various materials complement this range.

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Multispray

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Insertion Pipes

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Carbide Nozzles

扁平喷嘴
Flat Spray Nozzles

喷射喷嘴
Smooth-Jet Nozzles

混合喷嘴
Mixing Nozzles

拉瓦尔喷嘴
Laval Nozzles

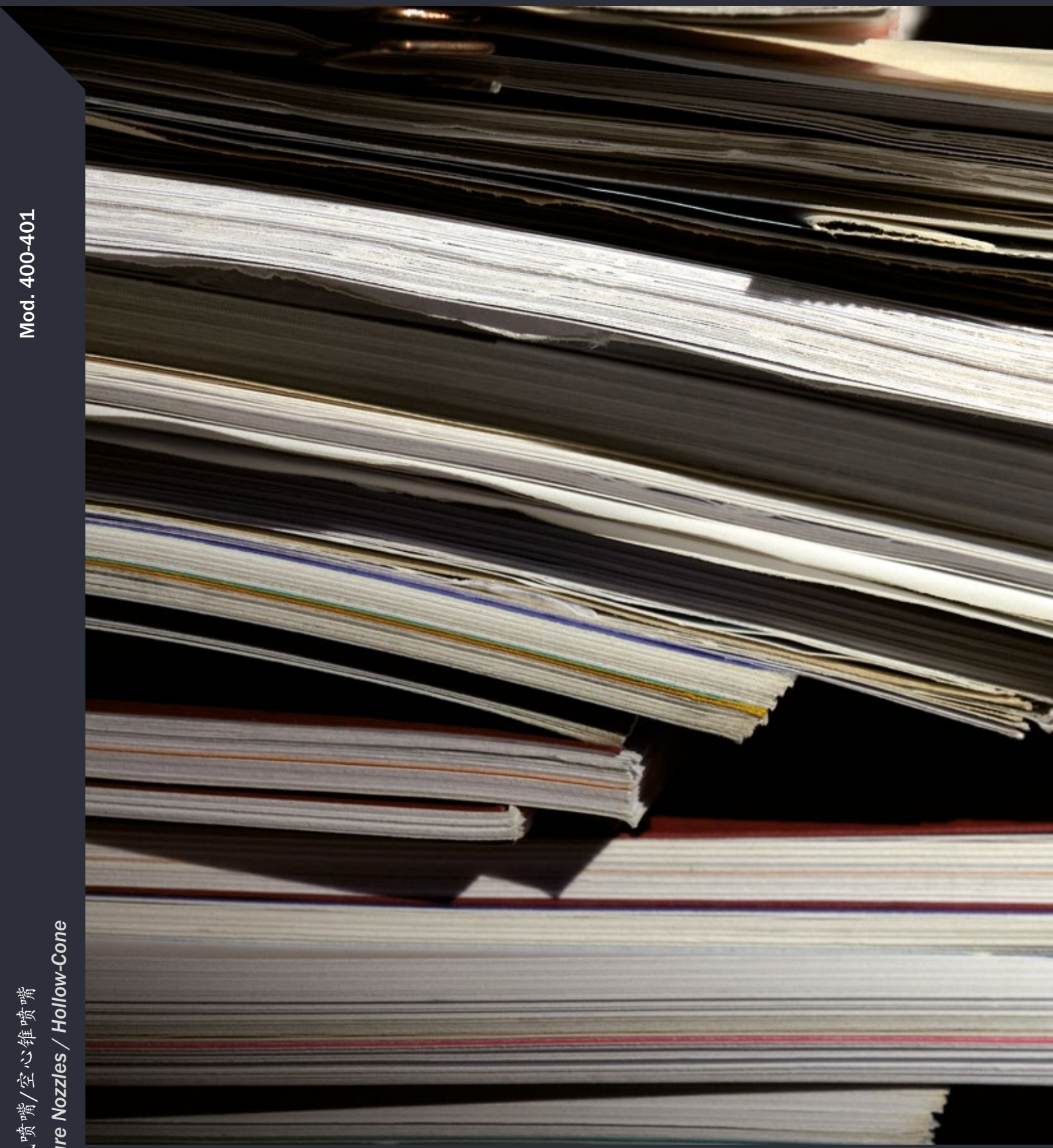
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Cleaning Nozzles

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SCHLICK 400-401系列 SCHLICK Series 400-401

Mod. 400-401



压力式喷嘴/空心锥喷嘴

Pressure Nozzles / Hollow-Cone

如有技术变更,恕不另行通知。

Anwendungsgebiete

- Beregnungsanlagen
- Direktschmierung
- Fettzerstäubung
- Gaskühlung
- Klimaanlage
- Luftbefeuchtung
- Luft- und Gaswäscher
- Mischen
- Papierbefeuchtung
- Schaumniederschlag
- Sprühtrocknung
- Staubniederschlag
- Verfahrenstechnik
- Zerstäubung verunreinigter Flüssigkeiten

应用

- 空气调节
- 废液雾化
- 直接润滑
- 抑尘
- 泡沫喷洒
- 气体冷却
- 气体调节
- 油脂雾化
- 加湿
- 混合
- 工艺工程
- 果肉保湿
- 喷雾干燥
- 喷洒



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SCHLICK 400-401系列 具体技术参数

Technical Details SCHLICK Series 400-401



400-401系列喷嘴尺寸 Dimensions of model 400-401

Size Size	1	2	3	4	5
喷嘴孔径(mm) Bore diameter in mm	-2.8	-4.8	5.0-6.0	7.0-8.0	9.0-10.0
螺纹规格 Connector ISO 228 G	1/8	1/4	3/8	1/2	3/4
总长度H(mm) Total length L in mm	28	34	40	45	57
总高度H(mm) Total height H in mm	18.0	21.0	27.5	30.0	42.5
总宽度B(mm) Total width B in mm	14	17*/20**	22	25	35
扳手开口尺寸(mm) Spanner size SW in mm	14	17	20	24	32

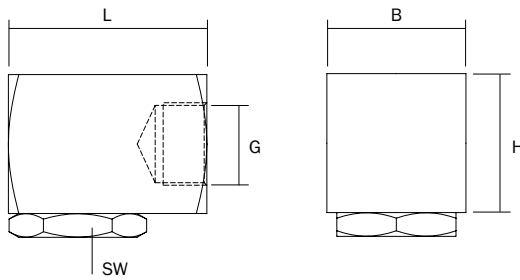
401系列Size 6-Size 10喷嘴尺寸(塑料) Model 401, plastics (size 6 to 10)

6	7	8	9	10
13-15	18-21	23-25	30-36	40-45
1	1 1/4	1 1/2	2	2 1/2
85	100	115	140	170
68	82	92	115	140
60	70	80	100	120
46	60	60	80	90

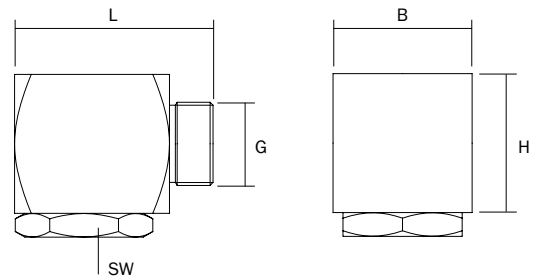
*黄铜、塑料
* Brass, plastics

**其他材料
** other materials

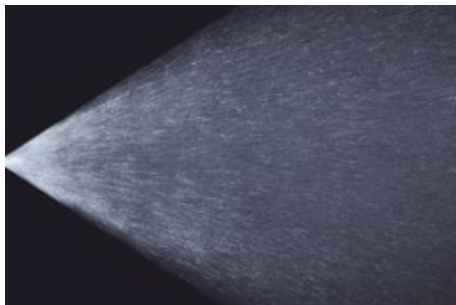
Mod. 400



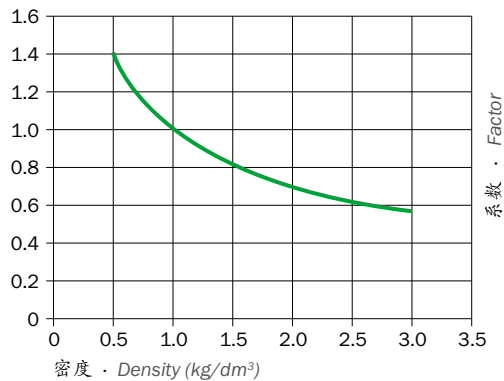
Mod. 401



400-401系列喷嘴雾化图 Spray model 400-401



密度系数换算表 Conversion factor for density



SCHLICK – 为雾化解决方案而生

神奇的SCHLICK雾化技术
Clever SCHLICK technology

从设备设计规划到实际批量生产,
SCHLICK都能提供完美解决方案。

SCHLICK know-how – from planning
to installation. We would be
delighted to assist in the optimisation
of your technical and operational
results.

400系列和401系列喷嘴的性能数据 Performance data of model 400 and 401

Size	孔径 Borehole in mm	流量(l/min) Flow rate in l/min at								雾化角度 Spray angle in °
		0.5 bar	1 bar	2 bar	3 bar	4 bar	6 bar	8 bar	10 bar	
1	1.1		0.27	0.38	0.47	0.54	0.66	0.77	0.86	65
	1.6	0.41	0.58	0.81	1.00	1.16	1.43	1.64	1.83	70
	2.3	0.84	1.19	1.68	2.06	2.38	2.92	3.37	3.76	75
	2.8	1.24	1.76	2.48	3.05	3.52	4.32	4.98	5.57	80
2	1.6	0.41	0.58	0.81	1.00	1.16	1.43	1.64	1.83	75
	2.3	0.84	1.19	1.68	2.06	2.38	2.92	3.37	3.76	75
	2.8	1.24	1.76	2.48	3.05	3.52	4.32	4.98	5.57	75
	3.2	1.63	2.30	3.26	4.00	4.62	5.65	6.52	7.30	78
	3.6	2.06	2.92	4.12	5.05	5.83	7.15	8.25	9.20	78
	3.9	2.41	3.40	4.80	5.90	6.82	8.35	9.63	10.75	78
	4.2	2.82	3.98	5.63	6.90	7.95	9.75	11.30	12.60	80
	4.5	3.23	4.55	6.45	7.90	9.10	11.20	12.90	14.40	80
	4.8	3.68	5.20	7.35	9.00	10.40	12.75	14.70	16.50	80
	5.0	4.00	5.60	7.95	9.75	11.13	13.80	15.90	17.80	82
3	5.5	4.82	6.80	9.65	11.80	13.60	16.70	19.25	21.50	82
	6.0	5.70	8.10	11.40	14.00	16.20	19.80	22.80	25.60	82
	7.0	7.80	11.00	15.60	19.10	22.00	27.00	31.20	34.80	82
4	8.0	10.20	14.40	20.40	25.00	28.80	35.40	40.80	45.70	82
	10.0	15.90	22.50	31.80	39.00	45.00	55.20	63.70	71.20	82
5	11.0	19.20	27.20	38.40	47.00	54.50	66.50	77.00	86.00	82
	13.0	27.00	38.00	54.00	66.00	76.00	93.00	108.00	120.00	85
6	15.0	36.00	51.00	72.00	88.00	102.00	124.00	144.00	161.00	85
	18.0	51.00	73.00	103.00	126.00	145.00	178.00	206.00	230.00	85
7	21.0	70.00	99.00	140.00	172.00	197.00	244.00	281.00	314.00	85
	23.0	84.00	119.00	168.00	206.00	238.00	292.00	337.00	376.00	85
8	25.0	100.00	140.00	198.00	243.00	280.00	344.00	397.00	445.00	85
	30.0	143.00	203.00	287.00	352.00	406.00	497.00	575.00	642.00	85
9	36.0	206.00	292.00	412.00	505.00	583.00	650.00	715.00	825.00	85
	40.0	255.00	360.00	510.00	625.00	721.00	884.00	1020.00	1141.00	85
10	45.0	323.00	456.00	645.00	790.00	912.00	1117.00	1290.00	1442.00	85

流量数据是以16°C的水测得的,不同密度的流体流量系数参照上侧图表,喷嘴的孔径是以0.1递增,上表的数据都是标称孔径下的数据。如果要求的雾化角度是非标的,要满足上图的流量,喷嘴孔径可能要变大或者变小。

The air flow performance is based on water at 16°C – liquids of different thickness can be calculated using the conversion table on the left page. The bore hole diameter is marked on the nozzle in 1/10 mm. For technical reasons, nozzles, which produce a spray cone differing from the normal spray cone, must be fitted with smaller or larger bore holes. Each air flow rate corresponds to the nominal bore hole.

SCHLICK 客户定制 SCHLICK Customized Designs Hollow-Cone Nozzles

可按客户要求定制， 小批量生产

作为一家全球领先的喷嘴制造商，SCHLICK一直为客户提供高质量的标准解决方案。

当然，凭借高精度的制造能力以及丰富的研发经验，SCHLICK也可根据客户要求设计开发、定制喷嘴。

即使客户需求数量很少、交期短。

Custom and individual designs, small series

As a leading nozzle manufacturer, high quality standardised solutions are business-as-usual for SCHLICK.

However, thanks to the breadth of its manufacturing capacities and comprehensive expertise, SCHLICK can also produce custom and individual designs for specific applications.

No matter how small the series or short the timeframe.

如有技术变更，恕不另行通知。



77型(10 x Mod. 120)

直角设计, 喷嘴和安装面齐平、雾化均匀、雾化面积大。

Angled design with integrated and almost flat mounted nozzles. Large scatter cone with even flow rate density.



10.899-1型

客户特定应用, 4个103/3喷嘴安装到杆子, 杆子可插入到设备中。

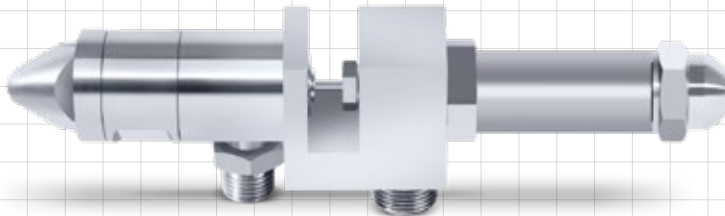
A push-in tube and 4x model 103/3 for a customer-specific application. Extremely robust construction. Welding is used to secure the nozzles.



200 S7型

客户定制设计, 为避免喷嘴堵塞, 增加过滤网, 多种孔径可供选择。

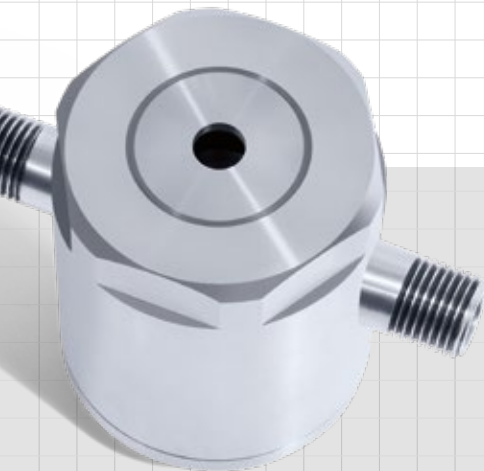
Custom design with filter to avoid blockages. Different apertures available.



123 7-1 S11 型

高压密封和独立的液体回流系统, 确保压缩气体不会窜到液路中, 而且气液如有泄露能很容易被检测到, 喷嘴长度可根据客户要求调整。

With high pressure sealing and separate liquid return system - this means that penetration of the control air is not possible and it is easier to detect leaks. Variable shaft length.



100 S15型

此喷嘴加装了加热套, 可随意拆卸, 用于制药和食品行业。

This version can be completely disassembled for use in the pharmaceutical/food areas. With a heating jacket.



60/8L型(48 x Mod. 121 V)

流量分配到多个喷嘴, 实现了大流量、雾化面积大。同时雾化均匀、雾化液滴细小。

Model for creating a large scatter cone with even flow rate density. Small droplet size through the distribution of the liquid to four nozzles.

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