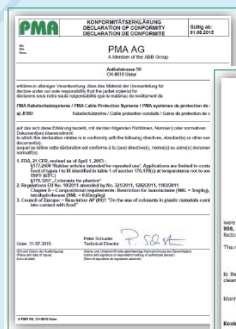
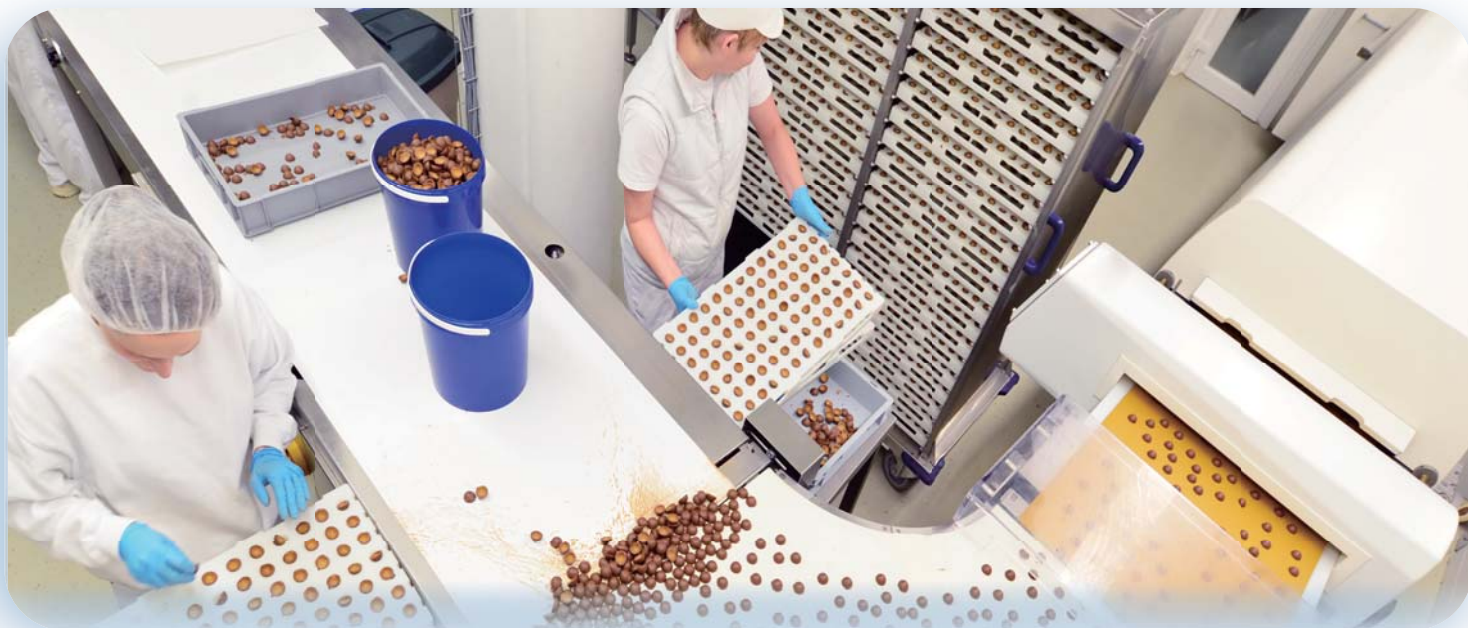
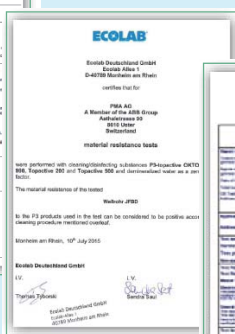




New cable protection solutions
for the food and beverage industries
食品饮料行业的新电缆保护解决方案



JFBD软管的外层
材质的符合性声明



已获ECOLAB认证



已获IEC 60529认证



Meeting ever more stringent requirements 满足更严格的要求

PMA Cable Protection in the food and beverage industry PMA电缆保护系统应用于食品&饮料行业

To meet ever more stringent demands for rapid and effective washdown, the latest incarnation of PMA products, known as JFBD, incorporates for the first time an overextruded non-porous FDA compliant material, delivering further enhanced cleanability alongside unrivalled resistance to aggressive chemicals to ECOLAB standards.

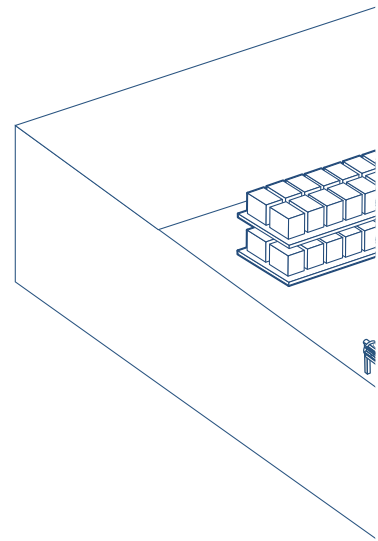
为了满足对快速有效冲洗的高严格要求，最新的PMA产品，称为JFBD，首次采用了一种符合食品和药物管理局（FDA）要求的无孔材料，进一步提高了清洁能力，同时对侵蚀性化学品的抵抗力，达到了生态实验室标准。

The fully IP69-rated range also offers a choice of two high specification fittings. The JENQ single-piece fitting is made from 316L stainless steel and is ideally suited to areas with the highest hygienic demands. The JKNH / JKBH nylon fitting is made from FDA-compliant material, and offers both excellent chemical resistance and quick installation, without the need for tools.

完全符合IP69标准，还提供两种高规格管接头供您选择。JENQ一体式接头由316L不锈钢制成，非常适合卫生要求最高的区域。JKNH / JKBH 尼龙接管头由符合FDA标准的材料制成，具有优异的耐化学性能和无需使用工具并快速安装。

Part of an exclusive cable protection portfolio covering all levels of protection requirements for the food and beverage industry, PMA conduit, with either the JENQ stainless steel or JKNH / JKBH nylon fitting, offers a truly flexible and cost-effective solution.

作为独有的电缆保护系列产品的一部分，其符合食品和饮料行业的所有级别的标准，PMA软管，采用JENQ不锈钢或JKNH / JKBH 尼龙管接头，提供真正灵活且经济高效的解决方案。



Any component used in a food processing area must be completely clean before production commences. For ABB, quality is a law and customers can rely on the company's extensive technological know-how and materials expertise.

在生产之前，食品加工区域中使用的任何组件必须完全清洁。对于ABB而言，质量是一项法规，客户可以信赖公司广泛的技术和专业材料知识



Dynamic applications

In dynamic applications such as robotics, strength is vital. With its unrivalled resistance to dynamic loads and high reverse bending stresses, PMA offers a long-life solution which is rapid and easy to assemble, saving on installation time.

动态应用

在机器人等动态应用中，强度至关重要。PMA具有无可比拟的抗动态载荷能力和交变弯曲应力，提供了一种快速、易于装配、节省安装时间、延长寿命的解决方案。

Packing equipment

PMA JFBD conduit, complete with JKNH / JKBH nylon fittings, can be quickly installed without the need for any specialist tools. Nylon fittings are ideally suited to both static and flexible applications such as packing equipment.

包装设备

PMA JFBD 软管配上JKNH / JKBH 尼龙管接头，无需任何专业工具即可快速安装。尼龙管接头非常适用于静态和灵活性的场合，如包装设备。

For production equipment

PMA JFBD conduit has a unique, easy-to-clean, smooth, non-porous and chemical-resistant outer layer made from FDA-compliant material. When used in combination with the JENQ singlepiece stainless steel fitting, it represents a complete solution for when the highest standards of cleanability are required ideally recommended for indoor food zone - non contact.

适用于生产设备

PMA JFBD 软管具有独特、易于清洁、光滑、无孔、耐化学腐蚀的外层，由符合FDA标准的材料制成。当与JENQ一体式不锈钢管接头配合使用时，这种组合同时也代表了一个完整的解决方案，适用于最高标准清洁的区域，强烈推荐用于室内食品区-非接触。

For pick and place systems

Modern pick and place systems are characterised by continuous and rapid movements. Thanks to its outstanding flexibility and mechanical properties, PMA represents the ideal solution for these areas.

适用于取放系统

现代化的取放系统具有连续快速移动的特点。由于PMA产品其出色的灵活性和机械性能，在这些领域中，PMA将提供完美的解决方案。

Meeting ever more stringent requirements 满足更严格的要求

The food and beverage sector is subject to ever-increasing scrutiny and regulation around the cleanliness of production and storage areas

食品和饮料行业在生产和储存区域的清洁度方面受到越来越多的监督和监管。

This places a significant responsibility on producers of the machinery and individual components used in food processing applications to ensure they can be quickly and easily cleaned at the end of each shift in readiness for the next cycle of production.

这对食品加工应用中使用的机械和单个部件的生产商负有重大责任，以确保在每班结束时能够快速、轻松地清洁相关的机械等，为下一个生产周期做好准备。

Even components which may have no direct contact with food products must be able to withstand the daily – or even more frequent – application of aggressive cleaning agents, with no effect on performance.

即使是与食品没有直接接触的组件，也必须能够承受每日 – 甚至更频繁 – 使用腐蚀性清洁剂清洁，而不影响性能。

Meanwhile, the continued growth and sophistication of automation in all areas of food processing places a particular requirement on the conduits which house vital cabling to offer multidirectional flexibility without any physical deterioration over extended periods.

同时，自动化在食品加工领域中持续增长和复杂度对软管提出了特殊要求，因这些软管包含重要的电缆，并提供多向灵活性，同时不会在长时间内出现任何物理性恶化。

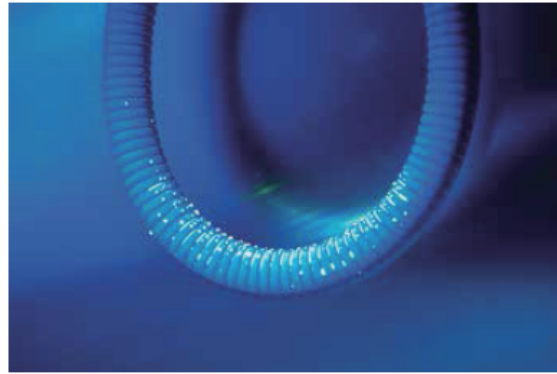
Cleanability of components in food environments is critical to their efficacy, ensuring a sterile environment which is safe for ongoing production. Ideally, components must be sufficiently clean after a standard washdown process to allow production to resume, without delays for additional or deep cleaning to tackle stubborn residues.

食品环境中组件的易清洁性对其效果至关重要，确保无菌环境对持续生产是安全的。理想情况下，在标准冲洗过程后，部件必须足够干净，以便恢复生产，无需延迟进行额外或深度清洗，以处理顽固的残留物。





01



02



03



04

01 Spraying a solution of Riboflavin over a length of the conduit
01 在软管上喷洒核黄素溶液

02 UV light: With Riboflavin being highly fluorescent, bright areas indicates contamination with Riboflavin before wash down
02 紫外线：由于核黄素具有高荧光性，明亮区域表明在洗涤之前会被核黄素污染

03 Washed down with tap water
03 用自来水冲洗干净

04 All visible traces of Riboflavin had been removed from PMA conduit after the first washdown.
04 第一次冲洗后，PMA软管中的核黄素痕迹都已清除。

A variety of testing methods for cleanability can be selected depending on the application; for this product, the Riboflavin test for low-germ or sterile process technologies, developed by the VDMA, a leading European mechanical industry association, was chosen.

根据应用情况，可选择不同的清洁度测试方法；对于该产品，选择由欧洲领先机械工业协会VDMA定义的低细菌或无菌工艺技术的核黄素测试。

Established as a highly reliable means of assessing the cleanability of components in production areas where hygiene is paramount, the test in this instance involved spraying a solution of Riboflavin (Vitamin B2) all over a length of the overextruded PMA conduit, as well as a regular conduit not covered with the over extruded coating.

作为一种高度可靠的方法来评估卫生最重要的生产区域中部件的可清洁性，在这种情况下，试验涉及将核黄素（维生素B2）溶液喷洒在带外层覆盖的整段PMA软管上，以及未覆盖外层的常规软管上。

The conduits were washed down with tap water, then transferred to a darkened room where UV light was applied to it. With Riboflavin being highly fluorescent, any bright areas would indicate where the standard washdown process had been ineffective in removing the solution.

软管被自来水冲洗干净，然后转移到一个黑暗的房间，在那里用紫外线照射。由于核黄素具有很强的荧光性，任何亮区都会显示，标准的冲洗过程是有效去除溶液。

As might have been expected, the entirely unprotected regular conduit still harboured significant detectable fluorescence, requiring extensive additional washdown to achieve a sufficiently clean surface.

正如人们所预期的那样，完全不受保护的常规软管仍然带有明显的可检测荧光，需要大量的额外冲洗才能获得足够清洁的表面。

Proven cleanability

On the new PMA conduit with its overextruded jacket, all visible traces of Riboflavin had been removed after the first washdown – demonstrating clearly the prowess of the latest PMA conduit as a truly. easy-to-clean solution.

经验证的易清洁性

在带有外覆盖的新款PMA软管上，第一次冲洗后，所有可见的核黄素痕迹都已被清除 – 这点清楚地证明了最新PMA软管可提供易于清洁的解决方案。

Established as a highly reliable means of assessing the cleanability of components in production areas where hygiene is paramount, the test in this instance involved spraying a solution of Riboflavin (Vitamin B2) all over a length of the overextruded PMA conduit, as well as a regular conduit not covered with the over extruded coating.

将PMA JFDB软管与不锈钢管接头或尼龙管接头以及不锈钢P型管夹相结合，为食品生产领域提供了完整的电缆保护系统解决方案。

There are no exposed crevices for food residues to collect, meaning they remain on the surface and so can be easily removed by standard cleaning methods.

没有暴露在外的裂缝容易使食物残渣堆积，这意味着食物残渣仍留在表面上，因此可以通过标准清洁方法去清除。

The PMA solution offers unrivalled resistance to the corrosive effects of cleaning agents and chemicals, in tandem with excellent mechanical properties, outstanding flexibility with the ability to withstand tight bending radii, and efficient, space - and time-saving fitting and assembly

PMA解决方案具有无与伦比的耐清洁剂和化学品腐蚀作用，同时具有优异的机械性能及柔韧性，并能够承受更小的弯曲半径，以及高效，节省空间和装配时间及易组装。

Key to any cable protection system – especially in the food and beverage sector – is its ability to safeguard the cables against the ingress of liquids and small solid particles

任何电缆保护系统尤其是食品和饮料行业的关键在于其保护电缆，避免液体和小固体颗粒进入。

The food and beverage sector, the paramount importance of hygiene and cleanliness means equipment is regularly subjected to highly rigorous cleaning procedures.

在食品和饮料行业，卫生和清洁的首要重要性意味着设备定期接受高度严格的清洁程序。

The methods of achieving the necessary level of hygiene varies widely some with high pressure water jets some with lower pressure wash down.

达到必要卫生水平的方法各不相同，有些采用高压水射流，有些采用低压冲洗。

International Ingress Protection (IP) standards provide a globally accredited method to qualify a range of components for their performance in preventing the ingress of dust and water.

全球认可国际防护等级（IP）标准，此标准可以对相关产品进行测试和鉴定，以证明其在防止灰尘和水进入方面的性能合格。

Ingress protection (IP) up to IP69 with PMA cable protection solution.

采用PMA电缆保护解决方案，防护等级（IP）高达IP69。

The PMA F&B conduit systems fulfil all the applicable IP ratings, IP65 and IP66 (high volume lower pressure) and IP69 (high pressure/ high temperature) for the various cleaning methods applied.

PMA F&B 软管系列符合所有的IP等级标准，如IP65、IP66（高流量低水压）和IP69（高压/高温），适用于各种清洁方法。

Products classified to either IP65 or IP66 are able to protect against low-power and high-power jet water. However, these IP ratings focus primarily on water volume rather than pressure, bringing the importance of the IP69 rating to the fore.

Products accredited to the IP69 standard, such as the PMA food and beverage cable protection system, will maintain their integrity and performance against hot water applied at pressures of up to 80 bar – in line with all processes commonly used for wash-down in the food and beverage sector. It doesn't matter if high pressure or low pressure methods.

防护等级为IP65或IP66的产品能够抵御低压和高压的喷射水。然而，这些IP等级主要集中在水量而不是压力上，从而突出了IP69等级的重要性。

符合IP69标准的产品，如PMA的食品和饮料电缆保护系列，将保持其在高达80巴压力下使用热水清洗时的完整性和相应的性能，符合食品和饮料行业通常用于冲洗的所有程序，不管是高压还是低压方法。

The combination of IP69 rated and ECOLAB certified products – such as the PMA food and beverage solution – is the perfect choice for any systems subjected to regular cleaning and sanitisation. Ultimately, at times of increased focus on cleaning practice and effectiveness, the PMA food and beverage cable protection system can offer peace of mind to material. This comprises of JFBD nylon conduit, complete with either a stainless steel (JENQ) or nylon (JKNH / JKBH) fitting depending on the specific application use.

对于经常定期清洁和消毒的相关系统，选择结合IP69等级和ECOLAB认证产品（如PMA的食品和饮料解决方案）是个完美选择。最终，你会发现来自PMA的食品和饮料电缆保护产品组合可以在越来越注重清洁和有效性的情况下，提供最完美的解决方案。同时它包括JFBD尼龙软管，根据具体应用，配有不锈钢（JENQ）或尼龙（JKNH / JKBH）管接头。





specifiers and system designers that it will deliver in the vital areas of cleanability and ingress protection – irrespective of the cleaning and wash-down methods employed.

无论采用何种清洗和冲洗方法，设计者将在清洁性和防护等级的关键领域提供规范和系统标准。

Transferring the benefits of nylon conduit to the food and beverage sector.

将尼龙软管的优势转移到食品和饮料行业。

Delivering effective cable protection in the food and beverage sector means overcoming a series of challenging operating conditions, including mechanical properties and mitigating the effects of sustained high-pressure wash-downs and chemical disinfection.

在食品和饮料行业提供有效的电缆保护意味着克服一系列具有挑战性的操作条件，包括机械性能、减轻持续高压冲洗和化学消毒的影响。

Corrugated nylon conduit has long been a go-to cable protection solution for industrial manufacturers, given its flexibility, inherent strength, ability to cope with frequent and fast movement, and effective performance in both static and dynamic operation. To help ensure food and beverage manufacturers can benefit from these, PMA has developed an innovative cable protection system, combining all the proven performance attributes of corrugated conduit with the additional benefit of a smooth, easy-to-clean outer layer made from FDA-compliant

波纹尼龙软管长期以来一直提供工业制造商的电缆保护解决方案，其灵活性、固有强度、能够应对频繁和快速运动，以及在静态和动态操作中的有效性能。为了确保食品和饮料制造商能从中受益，PMA开发了一种创新的电缆保护系统，结合了波纹管的所有经过验证的性能特点，以及符合FDA标准的光滑，易于清洁的外层的额外优势。



Starting with the highly successful PMA corrugated nylon conduit system, the product undergoes a further innovative production stage which involves over-extruding a completely smooth, and therefore easy-to-clean, coating onto the outer layer of the conduit. The result is a conduit that has outstanding mechanical properties coupled with industry-leading cleanability and resistance to chemical agents.

从PMA波纹尼龙软管系列获得巨大成功开始，该产品经历了进一步的创新的生产阶段，在软管外覆盖上一层平滑的、易于清洁的外层。其结果是软管具有优异的机械性能，同时满足行业最要高的清洁性和耐化学剂性能。

However, in order to give food and beverage manufacturers ultimate confidence in the efficacy of the system, the PMA JFBD conduit has been subjected to the Riboflavin test.

然而，为了让食品和饮料制造商对该系统效能的信赖，PMA JFBD软管并通过了核黄素测试。



The systems outstanding performance in the Riboflavin test underlines its status as the go-to solution for food and beverage manufacturers looking for the ultimate in cleanability. Given its inherent strength and durability, it can be used in various dynamic and static applications, including conveyor systems, production and packing equipment, and pick and place systems.

该系统在核黄素测试中的出色表现突显了其清洁性能，它是食品和饮料制造商一直在寻找的解决方案。由于其固有的强度和耐用性，它可以在各种动态和静态情况下应用，包括输送系统、生产和包装设备以及取放系统。

Now, food and beverage manufacturers can specify the use of nylon conduit systems throughout their facility, safe in the knowledge that they will not only benefit from the flexibility and durability of a nylon conduit, but from a system that it is easy to clean and hygienic.

现在，食品和饮料制造商可以指定在整个设施内使用尼龙软管系统，他们不仅可以从尼龙软管的灵活性和耐用性中受益，而且可以从易于清洁和卫生的系统中获益。



- Conduit: made from high-grade, specially formulated polyamide 12
- Overextrusion: made from modified polyamide elastomer
- Smooth outer layer
- Easy cleaning
- Good resistance to dynamic loads/high reversed bending stresses
- Good flexibility in combination with high strength
- High resistance to abrasion
- High resistance to chemicals and cleaning agents
- Free from halogen and cadmium
- Corrosion free
- For food zone - non contact application areas
- **Temperature range:** -20°C to +95°C; **Short-term:** +120°C

- 软管：高级特殊改良聚酰胺12制成
- 外覆层：改良聚酰胺弹性体制成
- 外层光滑
- 易清洁
- 良好的动态负载与及倒转弯曲能力
- 良好的柔韧性与高强度的结合
- 高耐磨性
- 高耐化学品和清洗剂
- 不含卤素和镉
- 零腐蚀
- 用于食品区 - 非接触式应用领域
- 温度范围：-20°C 至 +95°C；短期温度：+120°C

JFBD flexible, medium-duty

For dynamic or static processing cable protection systems in food.
For general applications with high cleaning requirements.

JFBD 柔软，中壁

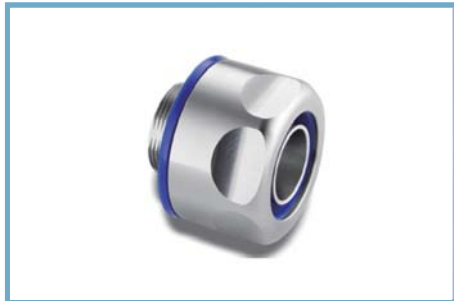
适用于食品行业中动态或静态的电缆保护系统。
适用于高度清洁要求的区域。



Order No. blue 订货号 蓝色	Profile 波纹	Fits to conduit size NW 适配软管尺寸 NW	metric 公制	Inside diameter 内径	Outside diameter 外径	stat.** / dyn.*** radius 静态 / 动态 最小弯曲半径	PU meter 包装单位米
JFBDT-12C01	T	12	16	12.0	15.6	40 / 100	50
JFBDG-17C01	G	17	20	15.7	21.1	55 / 125	50
JFBDG-23C01	G	23	25	21.8	28.4	75 / 170	50
JFBDG-29C01	G	29	32	27.6	34.5	90 / 210	50
JFBDG-36C01	G	36	40	36.3	42.4	110 / 260	30
JFBDG-48C01	G	48	50	47.3	54.5	140 / 330	30

Profiles-fine (T) ; Profiles-coarse (G) / 细波纹 (T) ; 粗波纹 (G)
For technical specification in details, please ask for “Technical Data Sheet” DB-Nr.16310
要了解详细技术规格，请索取“技术数据表” DB-Nr.16310

unit = mm
单位 = mm



- Outer part: stainless steel 1.4404 (AISI 316L)
- Inner part: stainless steel 1.4305 (AISI 303)
- Seals: high-performance polyester elastomer
- Corrosion-free
- Rounded design
- Easy cleaning
- High thread and system connection strengths
- High resistance to chemicals and cleaning agents
- Easy assembly
- For food zone - non contact application areas

- 外层部分：不锈钢 1.4404 (AISI 316L)
- 内层部分：不锈钢 1.4305 (AISI 303)
- 密封：高性能聚酯弹性体
- 零腐蚀
- 圆形设计
- 易清洁
- 螺纹与系统的高强度连接
- 高耐化学品和清洗剂
- 易于安装
- 用于食品区 - 非接触式应用领域

IP66/IP68/IP69

JENQ stainless steel metric thread

For termination of overextruded conduits.
For high hygienic requirements.
Suitable for food & beverage industry.

JENQ 不锈钢， 公制螺纹

适用于在JFBD软管末端的应用。
适用于高卫生要求的区域。
适用于食品和饮料行业。



Order No.	Thread metric	Fits to conduit size NW		Thread length	Overall length
订货号	螺纹 公制	适配软管尺寸 标称内径 公制		螺纹 长度	总长度
JENQ-M162-10	M16x1.5	12	16	10	35.9
JENQ-M207-10	M20x1.5	17	20	10	36.9
JENQ-M253-11	M25x1.5	23	25	11	41.6
JENQ-M329-13	M32x1.5	29	32	13	48.7
JENQ-M406-13	M40x1.5	36	40	13	51.2
JENQ-M508-14	M50x1.5	48	50	14	57.4

For technical specification in details, please ask for “Technical Data Sheet” DB-Nr.52300
要了解详细技术规格，请索取 “技术数据表” DB-Nr.52300

unit = mm
单位 = mm

IP66/IP68/IP69

JKNH straight, metric thread

For applications with high technical requirements in the food & beverage industries.

JKNH 直型, 公制

适用于高技术要求的食品饮料行业。



Order No. blue 订货号 蓝色	Fits to thread metric 适配螺纹 公制	Fits to conduit size NW 适配软管尺寸 标称内径	metric 公制	Thread length 螺纹 长度	Overall length 总 长度
JKNH-M162	M16x1.5	12	16	11.0	47.5
JKNH-M202	M20x1.5	12	16	11.0	47.5
JKNH-M207	M20x1.5	17	20	11.0	53.5
JKNH-M257	M25x1.5	17	20	12.0	54.5
JKNH-M253	M25x1.5	23	25	12.0	57.0
JKNH-M323	M32x1.5	23	25	15.0	60.5
JKNH-M329	M32x1.5	29	32	15.0	65.5
JKNH-M409	M40x1.5	29	32	19.0	69.5
JKNH-M406	M40x1.5	36	40	19.0	75.0
JKNH-M506	M50x1.5	36	40	19.0	75.0
JKNH-M508	M50x1.5	48	50	19.0	81.0
JKNH-M638	M63x1.5	48	50	19.0	81.0

For technical specification in details, please ask for "Technical Data Sheet" DB-Nr.22405
要了解详细技术规格, 请索取“技术数据表” DB-Nr.22405

unit = mm
单位 = mm



- Specially formulated, halogenfree polyamide 6
- Locking and sealing element made from specially formulated, halogen free polyamide 6 and cross linked polyester elastomer
- Corrosion-free
- Very high impact resistance
- Easy push-in assembly for maximum installation reliability
- Screwdriver required for dismantling, impeding unauthorised or accidental opening
- Space-saving dismantling
- Excellent conduit pull-out strength
- Fits both conduit profiles-fine (T) and coarse (G)
- Temperature range: -50°C to +105°C; Short-term: +120°C
- 高级, 特殊配方, 无卤素聚酰胺6制成
- 锁紧和密封元件由特殊配方, 无卤素聚酰胺6和交叉链接式多酯弹性体制成
- 零腐蚀
- 非常高的抗冲击强度
- 推入式的简易安装, 可达到最可靠性安装
- 需螺丝刀拆卸, 防止擅自或意外开启
- 采用节省空间及易于拆卸的设计
- 优秀的抗拉能力
- 适用软管类型-细波纹 (T) 和粗波纹 (G)
- 温度范围: -50°C 至 +105°C; 短期温度: +120°C

IP66/IP68/IP69

JKBH 90° curved elbow, metric thread

For applications with high technical requirements in the food & beverage industries.

JKBH 90° 曲线弯头, 公制

适用于高技术要求的食品饮料行业。



Order No. blue 订货号 蓝色	Fits to thread metric 适配螺纹 公制	Fits to conduit size NW 适配软管尺寸 标称内径	metric 公制	Thread length 螺纹 长度	External dimensions 外部 尺寸
JKBH-M162	M16x1.5	12	16	11.0	44.5 x 72.0
JKBH-M202	M20x1.5	12	16	11.0	44.5 x 74.0
JKBH-M207	M20x1.5	17	20	11.0	50.0 x 81.0
JKBH-M257	M25x1.5	17	20	12.0	51.0 x 84.0
JKBH-M253	M25x1.5	23	25	12.0	59.5 x 92.0
JKBH-M323	M32x1.5	23	25	15.0	63.0 x 94.5
JKBH-M329	M32x1.5	29	32	15.0	73.0 x 108.0
JKBH-M409	M40x1.5	29	32	19.0	77.0 x 112.0
JKBH-M406	M40x1.5	36	40	19.0	87.5 x 126.0
JKBH-M506	M50x1.5	36	40	19.0	87.5 x 128.0
JKBH-M508	M50x1.5	48	50	19.0	100.5 x 145.5
JKBH-M638	M63x1.5	48	50	19.0	100.5 x 148.5

For technical specification in details, please ask for "Technical Data Sheet" DB-Nr.22415
要了解详细技术规格, 请索取“技术数据表” DB-Nr.22415

unit = mm
单位 = mm



- Specially formulated, halogenfree polyamide 6
- Locking and sealing element made from specially formulated, halogen free polyamide 6 and cross linked polyester elastomer
- Corrosion-free
- Very high impact resistance
- Easy push-in assembly for maximum installation reliability
- Screwdriver required for dismantling, impeding unauthorised or accidental opening
- Space-saving dismantling
- Excellent conduit pull-out strength
- Fits both conduit profiles-fine (T) and coarse (G)
- Temperature range: -50°C to +105°C; Short-term: +120°C
- 高级, 特殊配方, 无卤素聚酰胺6制成
- 锁紧和密封元件由特殊配方, 无卤素聚酰胺6和交叉链接式多酯弹性体制成
- 零腐蚀
- 非常高的抗冲击强度
- 推入式的简易安装, 可达到最可靠性安装
- 需螺丝刀拆卸, 防止擅自或意外开启
- 采用节省空间及易于拆卸的设计
- 优秀的抗拉能力
- 适用软管类型-细波纹 (T) 和粗波纹 (G)
- 温度范围: -50°C 至 +105°C; 短期温度: +120°C



- Stainless steel AISI 316 / 1.4401
- Rounded edges
- Smooth surface
- Temperature range: -40°C to +120°C

- 不锈钢AISI 316 / 1.4401制成
- 圆润的边缘
- 光滑表面
- 温度范围：-40°C 至 +120°C

JSGB Tube clamps, stainless steel

For the mounting of static conduits.

JSGB 管夹，不锈钢

适用于静态软管安装。

Order No.	Fits to conduit size		Dimensions	Dimensions
	NW	metric	height	width
订货号	适配软管尺寸 标称内径	公制	尺寸 高	尺寸 宽
JSGB-12	12	16	17.2	15.0
JSGB-17	17	20	23.2	15.0
JSGB-23	23	25	30.2	15.0
JSGB-29	29	32	36.2	15.0
JSGB-36	36	40	44.2	15.0
JSGB-48	48	50	56.2	15.0

For technical specification in details, please ask for "Technical Data Sheet" DB-Nr.60100
要了解详细技术规格，请索取“技术数据表”DB-Nr.60100

unit = mm
单位 = mm

GME Hexagonal lock nut,
metric, stainless steel

GME 六角形锁紧螺母，
公制螺纹，不锈钢

Order No.	Fits to thread metric	Wrench size	Dimensions Height
订货号	适配螺纹 公制	对边距	尺寸 高
GME-M16	M16x1.5	19.0	3.0
GME-M20	M20x1.5	24.0	3.5
GME-M25	M25x1.5	30.0	4.0
GME-M32	M32x1.5	36.0	5.0
GME-M40	M40x1.5	46.0	5.0
GME-M50	M50x1.5	60.0	5.0

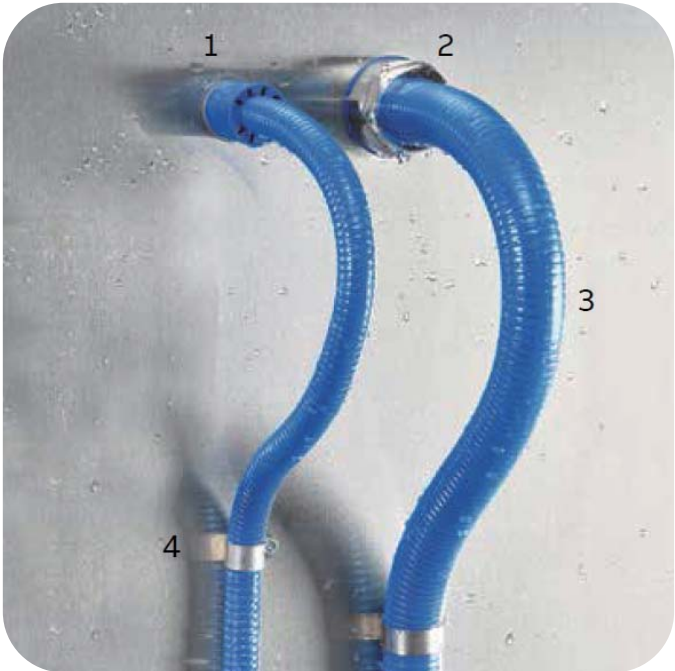
For technical specification in details, please ask for "Technical Data Sheet" DB-Nr.60018
要了解详细技术规格，请索取“技术数据表”DB-Nr.60018

unit = mm
单位 = mm



- Stainless steel AISI 304
- Maximum possible torque
- Safe system connection
- Metric threads according to EN 60423
- 不锈钢AISI 304制成
- 最大扭转力矩
- 安全可靠的连接
- 公制螺纹根据 EN 60423

Cable protection solutions for the food and beverage industry:
食品饮料行业的电缆保护解决方案：



1. IP69 rated system
防护等级：IP69
2. Efficient, easy and space-saving assembly
高效，简易，节省空间的组装
3. Outstanding flexibility combined with smooth
easy-to-clean outer layer conduits
良好的柔韧性与光滑易清洁的外层软管相结合
4. Stainless steel P-Clip provides reliable fixation
不锈钢P-Clip提供可靠的固定