

About PMA 关于PMA



Company Profile	0-6
公司简介	
Areas of Application	0-8
应用领域	

Conduits 软管



Introduction	1-1
介绍	
Code Reference	1-2
代码指南	
Conduit guide	1-3
软管指南	
PMAFLEX Pro Conduits	1-7
PMAFLEX Pro 系列软管	
PMAFLEX Conduits	1-10
PMAFLEX 系列软管	
PMAFLEX Multilayer Conduits	1-23
PMAFLEX 多层系列软管	
PMA FLEXPlus Conduits	1-31
PMA FLEXPlus 系列软管	
PMA Smart Line Conduits	1-33
PMA 轻巧型系列软管	

Strain relief connector with metal thread 金属螺纹消除应力管接头



PFLITSCH Introduction PFLITSCH 介绍	2-1
	2-3
PMAFIX Pro 管接头	2-7
- PMAFIX Connector PMAFIX 管接头	2-1
- Multiple Sealing Inserts	2-12
多孔密封插入件	
JACOB Introduction	2-13
JACOB 介绍 - PMAFIX Pro Connector	2-15
PMAFIX Pro 管接头	
- PMAFIX Connector	2-16
PMAFIX 管接头 - Multiple Sealing Inserts	2-18
多 孔密封插入件	

Connectors 管接头



Introduction	3-1
Connector Code Reference	3-3
管接头代码指南 Conduit and Thread Codes	3-4
软管和螺纹代码	



Connectors 管接头



PMAFIX Pro Connector PMAFIX Pro 管接头	
- Metric / Metal	3-6
公制螺纹 /金属	
- Female Thread Adapter	3-8
内螺纹适配器	
PMAFIX Connector PMAFIX 管接头	
- 安全密封系统 - IP66 / 68 / 69	3-11
- Metric / Polyamide	3-15
- Metric / Metal	
- PG / Polyamide PG制螺纹 / 聚酰胺	
- PG / Metal PG制螺纹 / 金属	
- Gas / Polyamide	
- NPT / Polyamide & Metal 美国标准锥管螺纹 / 聚酰胺& 金属	
- FIXPlus / Polyamide	
- Flange / Female Thread Adapters / Metal fitting 法兰 /内螺纹适配器 / 金属管接头	
- Transparent fitting	
- Y, V, T Pieces Y型, V型, T型三通	3-50
Smart Line Connectors 轻巧型管接头	
- Metric / Polyamide	
- PG / Polyamide	
Conduit Supports 软管固定夹	3-56

Large Sizes 大型号产品



Introduction	4-1
Flange 法兰	4-2
Connectors ————————————————————————————————————	4-4
Conduits 软管	4-5
Accessories W件	4-6





ח	ivi	sih	le S	System	可从	刑产	: 品
ш	IVI	SID	IC C)	- PT 7.7	421	ш

	5-1
	5-2
管接头 Y. T Pieces	5-4
Y, T 型三通	0 1
Conduits / Tools ···································	5-5
Supports	5-8
固定夹	

Special Products 特殊产品



Introduction	6-1
介绍	
Swivel Connectors	6-2
旋转管接头	
Swivel & Positioning Adapters	6-6
旋转&定位适配器	
Elbow Adapters	6-9
弯曲适配器	
Special Connectors	6-11
特殊管接头	
Conduit Adapters	6-14
软管适配器	
Terminal and Protection Sleeves	6-16
终端和保护套管	

Accessories 附件



Introduction	7-1
介绍	
Clips	7-2
夹子	
Lock Nuts	7-3
螺母	
Enlargers / Reducers	7-7
增扩器 / 减缩器	
Sealing Caps	7-10
密封圈	
O-Ring	7-13
0型圈	
Flat Gaskets	7-15
扁平垫圈	
Plug Screws	7-17
闷盖	
Tools	7-18
工具	
Junction Box	7-21
分线盒	

PMAJACK 编织网管



Introduction	8-1
Plastic Braided Hoses / Accessories	8-3
塑料编织网管 / 附件 Metal Braided Hoses / Accessories	8-8
金属编织网管 / 附件	0-0



EMC Products EMC 屏蔽产品



Introduction	9-1
EMC System ····································	9-2
Metal Braids	9-3
EMC Connectors EMC管接头	9-5
EMC Connectors Female Thread UNEF UNEF制内螺纹EMC管接头	9-8
EMC Connectors with Strain Relief 带消除应力EMC管接头	9-9
EMC Adapter EMC适配器	9-13
EMC Overbraiding Connectors 外包金属编织网软管的EMC管接头	9-15
Accessories W件	9-18

New Railway Industry 轨道车辆



Introduction	10-1
Standard EN 45545-1 EN 45545-1标准	10-3
Standard EN 45545-2	10-4
Standard EN 45545-3	10-16
Project Relevant Certificates	10-27

Automation Products 自动化产品



Introduction	11-1
Conduits ····································	11-3
Automation Accessories 自动化专用附件	11-6
Possible Combinations 可行性组合选择	11-17



New Explosion Proof Products 防爆产品



Introduction	12-1
介绍 Selection Guide	12-12
Conduits ····································	12-14
Connectors	12-15
Y, T Pieces ———————————————————————————————————	12-21
Accessories W件	12-22

New Food & Beverage Industries 食品饮料行业



Introduction ————————————————————————————————————	13-1
Conduits & Connectors 软管 & 管接头	13-9
Accessories W件件	13-11

Technical Annex 技术



Testing Methods	14-1
测试方法	44.5
Ingress Protection	14-5
防护等级	44.7
Thread Dimensions	14-7
螺纹尺寸	
Insertion depth	14-9
插入深度	
Comparison Table Thread ID & Conduit ID	14-10
螺纹内径 & 软管内径对比表	
Recommended Torques	14-11
推荐扭矩	
Reference list for O-rings to metal threads	14-16
适配于金属螺纹的0型圈列表	
Sealing Types	14-17
密封系列	
Applications Engineering Information	14-27
应用工程信息	14-21
Storage Recommendation for Polyamide Products	14-28
	14-20
聚酰胺产品贮存建议	44.00
Chemical Resistance	14-29
抗化学性能	



A Company with a Global Presence

个享誉全球的瑞士公司



PMA headquarters is located in Uster, Switzerland close to Zurich. The majority of what we produce for the world market is made at this location, and it is also the home of our intensive research and development activities.

Our large network of distributors and professional partners in all of the major industrialised countries around the globe allow us to offer our customers excellent technical support, optimal service and fast delivery. We continue to expand our distributor base, and PMA products are already sold in more than 45 countries.

PMA 总部位于瑞士 Uster, 靠近苏黎 世,为全球提供的PMA产品主要在此生 产,这里也是产品研究和设计开发中心。

在所有工业国家中,已形成强大的分销, 商和专业伙伴合作网络,PMA一直致力 于为客户提供最佳建议,最优质服务以及 快速送货,不断扩大分销基地,产品已经销 往45多个国家。

Setting New Standards and Trends

确立全新的标准和发展趋势

electrosuisse >>











BOMBARDIER











SIEMENS































Customer needs are a top priority at PMR, and we work every day to ensure all our customer requirements are met in our products. We offer cable protection solutions and services that are tailored to meet requirements in every type of application. Our range extends from basicitems right up to the most demanding high-tech products. We can develop system solutions and special products that are designed to meet specific customer requirements. Our intensive research and development activites, which include the field of new materials, are a major reason why PMA continues to set new standards and trends in the cable protection market place. These efforts together with excellent quality and service have helped us build up an outstanding reputation with leading corporations around the world.

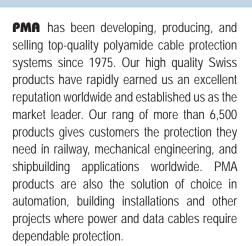
满足客户需求是PMA的立足之本,时刻 努力工作, 保证产品使客户满意, 根据客户 的各种应用需求,提供相应的电缆保护解决 方案及服务。

产品种类繁多,从基本型到最新高科技 产品。为了满足客户特殊需要,能改进系统 解决方案和提供特殊产品。

产品研究和开发中心包括高新材料 领域,可以保证PMA不断在电缆保护领域 确定新的标准和发展趋势。 这些优势结合 优质产品和服务,确保我们建立显赫的全 球领先地位。



From Pioneer to Market Leader



从先行到市场领导者

从1975年以来,**PMA** 一直开发生产和销售顶级质量的聚酰胺电缆保护系统。优质产品使**PMA**在全球范围内迅速赢得极高的知名度,确立市场领导者地位。超过6500多种产品满足铁路、机械工程、造船领域电缆保护方面的需求,同时也为自动化、建筑安装以及其它需要对电力和数据电缆进行保护的领域提供可靠的解决方案。

Unique Benefits of PMA Products

Service to the customer is what motivates us. In addition to series production, **PMA** can build fittings and conduits to meet individual requirements as a special service to our customers.

- a safe, reliable system that is easy to install
- · vibration-proof connections
- · system connection strength
- ingress protection conforming to recognized test methods
- high impact strength even at low temperatures
- high compression strength (peak load)
- long-term reversed bending resistance
- good chemical resistance
- fire protection (flammability and smoke generation)
- good weather resistance
- long wearing
- and much more

PMA产品独特的优异性

为客户服务是我们的强大动力。除了 系列产品,**PMA**为客户的特殊要求提供相 应管接头和软管,作为专项服务。

- 安全可靠的系统, 便于安装
- 防震动连接
- 极佳的系统连接强度
- · 经过测试确认的IP防护等级
- 低温下也有良好的抗冲击强度
- 抗压强度高(满负荷)
- 长期倒转弯曲性能
- 良好的抗化学性
- 防火保护(可燃性和烟雾的产生)
- 良好的耐候性
- 抗磨损和更多......











A considerable number of PMA cable protection systems are used in mechanical engineering. A few examples illustrate how various the range of mechanical engineering applications is. You will find our products in machine tools, packaging machines, printing machines, as well as heating, ventilation, conveyor, and filling systems. PMA products also make a vital contribution to the smooth operation of the high voltage and emergency power systems, can production machinery and woodworking machines, etc. PMR cable protection solutions safeguard cables, wires and data links against heat, cold, tensile stress, pressure stress, and other external influences in the important mechanical engineering industry.

相当多的PMA 电缆保护系统应用于 机械工程领域。一些实例证明无论机械工程应用领域如何变化,你都会发现PMA 的产品应用于机械工具、包装机械、印刷 机械、以及加热、通风、传送、填充系统上。PMA产品也有助于高压电力系统,瓶罐生产机械,木工机械的平滑工作。PMA 电缆保护解决方案能保护电缆,使重要机械工程工业中的电缆和数据连接免受热、冷、拉伸力、压力以及其它外界因素的影响。

Railway/Railway-Infrastructure

铁路/铁路基础建设





PMA products have proven their dependability in railway construction projects around the world. This is the reason why large corporations including CRRC, Siemens, Alstom, Bombardier, Deutsche Bahn, and SNCF have chosen us as supplier over a period of many years. Our special railway engineering product line provides protection and safety on signalling systems, coupling, trucks, and gangways, as well as roof, and underfloor equipment. The range of applications is very extensive. **PMA** proucts contribute to the safe operation of trams, and even roller coasters.

PMA产品在全球铁路建设项目上已经证明了它的可靠性。因此PMA在相当长一段时间里一直作为中车集团、西门子、阿尔斯通、庞巴迪等许多大型跨国集团公司和德国铁路局、法国国营铁路公司稳定的供应商。专业铁路工程产品系列可以为信号系统、车厢连接、载重车、座间通道、以及车顶和车底设备提供安全保护。PMA产品应用非常广泛,有助于轻轨、机车、货车、高速列车、甚至滚厢货车的安全操作。



Automation



In the field of automation, there is a need for products that can withstand the stress of motion-intensive applications. Solutions developed by **PMA** for the automation industry fully meet with these requirements. Special conduit designs, supports and abrasion protection sleeves provide optimal protection along the entire length of all moving elements, enabling engineers to achieve a massive reduction in torsional forces. There is good reason why leading robotics manufacturers rely on **PMA** technology.

自动化

在自动化领域,产品需要能够抗剧烈运动产生的应力。PMR为工业自动化专门开发的产品能够完全满足这些要求,特殊设计的软管、支架和防磨损保护套,对所有运动结构的整体提供最佳的保护,使设备能够大量减少磨损应力,这是国际领先的机器人制造商依赖PMR 技术的重要原因。

Ship-and Off-Shore



Safety has absolute top priority in marine applications. Cables and cable bundles are subjected to high stress. Vibration increases the risk of overheating, abrasion damage and shorts. Cable routing around machinery must provide absolute protection, and it is important that the cables can be easily integrated into prefabricated elements such as cabins. Many shipping companies rely on the dependability of our products, **PMA** products protect the "Queen Mary II" and many other small and large fresh and salt water giants when they are underway.

船舶和近海航业

在航海领域,安全绝对是首要前提。电缆和电缆束受到很大的应力,震动增加了过热、磨损破坏、短路的风险。机械设备旁的电缆线路必须要提供绝对保护。电缆便于集合接入预制结构里面是很重要的。许多船舶公司信赖PMA可靠的产品。PMA产品为"玛丽女王二号"豪华邮轮以及其他大大小小在内陆河流和海上航行的船只提供安全保障。

Countless Applications





PMA cable protection products can be used in an extremely wide range of applications. The list is vitually endless and includes industries such as telecommunications, construction equipment and medical equipment. Wherever there is a need for cable protection, the PMA product portfolio provides safe, dependable, forward-looking solutions or will develop them specially for you to meet your individual needs.

其他应用

PMR电缆防护产品可以应用在非常广泛的领域,涉及范围没有限制,如在通信、建筑机械、医疗设备等工业领域都有应用。哪里电缆需要保护,**PMR**产品就能够提供安全可靠、先进的解决方案,也可以专门进行产品开发,满足客户特殊需求。