

其它系列 **CHIKU**® 电气产品选型手册，欢迎垂询索取！
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本手册中所附图片以供参考，实物以实际销售产品为准；
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Breathable valve Selection Guide

透气阀选型手册



关于我们



人 员: 共有员工600余人, 其中研发和工程人员技术人员占比15%
服务网络: 设立有上海、深圳、东莞、北京、南京、苏州、合肥7个
直属的营销和服务中心
设计制造: 产品设计、模具设计及制造、冲压、车削、注塑、组装测
试的全链条生产, 拥有独立的知识产权
证书及体系: 国家高新技术企业、省级科研中心、CNAS认可实验室、ISO9001
等三体系合一, TUV、UL、CE、CQC等认证

Personnel: More than 500 employees, of which R&D engineers account for 15%

Service network: Direct marketing and service centers in Shanghai, Shenzhen, Dongguan, Beijing, Nanjing, Suzhou, Hefei

Design and manufacture: Full-chain production of product design, mold design and manufacturing, stamping, turning, injection molding, assembly and testing, with independent intellectual property

Certificates and systems: National high-tech enterprises, provincial scientific research centers, CNAS accredited laboratories, ISO9001, etc. Three systems in one, TUV, UL, CE, CQC and other certifications

质量方针/Quality Policy:

严谨求实/Rigorous and realistic, 卓越品质/Excellent quality
优良服务/Excellent service, 持续发展/Sustainable development

COMPANY PROFILE



RSV-...螺纹式尼龙透气阀 Air Vent Plug(Thread type,Nylon)	01
RSVK 卡扣式尼龙透气阀 Air Vent Plug(Snap-fit, Nylon)	06
SV-... 阀式防爆透气阀 RSV-...Burst-proof breathable valve	07
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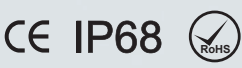


RSV 系列透气阀

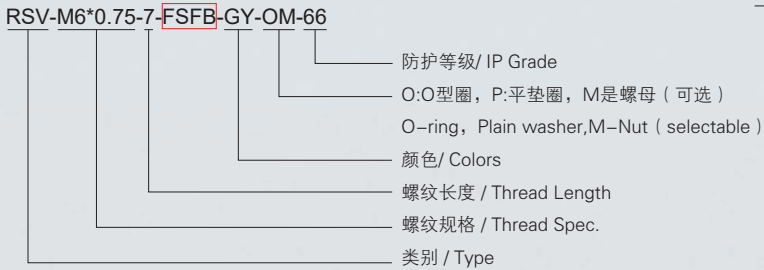
Air Vent Plug

严酷或不断变化的环境，易使户外设备的密封圈加速老化，使密封圈失效。RS防水防尘透气产品可以防止外壳中发生低压、高空气湿度或凝露现象，同时阻隔污物的进入，同时保证持续性的压力平衡和透气效果。提升户外设备安全性、可靠性，延长设备寿命。

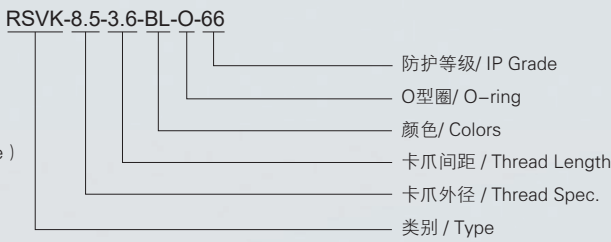
The harsh or changing environments can easily accelerate the aging of the sealing ring of outdoor equipment and cause the seals to fail. RS waterproof and dustproof Valve products can prevent the occurrence of low pressure, high air humidity or condensation in the shell, blocking the entry of dirt, ensuring continuous pressure balance and ventilation effect, improving the safety and reliability of outdoor equipment and prolong the life of the equipment.



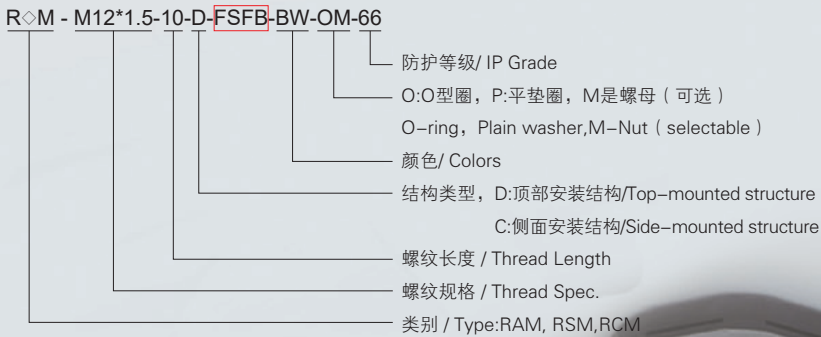
RSV 尼龙螺纹透气阀规格命名方法
Screw-in Nylon Air Vent plug Coding Rules



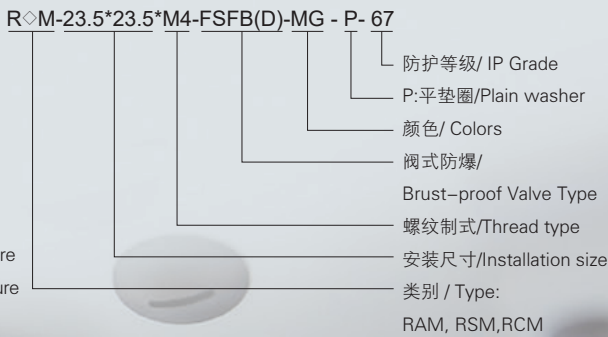
RSVK 尼龙卡扣透气阀规格命名方法
Snap-fit Nylon Air Vent plug Coding Rules



R◇M 金属螺纹透气阀规格命名方法
Screw-in Metal Air Vent plug Coding Rules



R◇M 金属防爆透气阀法兰类命名方法
Flange Metal Burst-proof Air Vent Plug Coding Rules



生产工艺优势/Production process advantage

车间：洁净的生产环境以保障产品的二次污染和操作工人的舒适度，保证稳定的产品质量和稳定的产业工人。

设备：全自动生产线可以减少对工人的依赖，同时保证产品的一致性和稳定性。

检测：100%的透气度全测，保证产品的合格率和客户终端的完美体验。

焊接：超声波焊接保障每个产品耐冲击。

序列号：每个产品的独立的激光序列号可以保障产品的良好的追溯性，并形成数据包。

Workshop: Clean production environment avoided the secondary pollution of products and ensuredoperation workers’ comfort, products quality and industrial workers stable.

Equipment: The automatic production line can reduce the dependence on workers and ensure theconsistency and stability of the products.

Measurement: 100% air permeability test guaranteed products qualification rate and terminalcustomer perfect experience.

Welding: Ultrasonic welding ensured the impact resistance of each product.

Serial number: The independent laser serial number of each product can guarantee good traceabilityof the product and form a packet.

防护等级测试 IP Level Test	防水透气产品防止 颗粒物和水进入的能力	温度测试 Temperature Test	防水透气产品在各种温度下的耐用性	湿度测试 Humidity Test	防水透气产品高温潮湿与环境中的耐用性（加速老化测试）
	The ability of waterproof breathable products provent particles and water from access.		The durability of waterproof breath-able products at various temperatures.		The duability of waterproof breath-able products in high temperation environment (Accel-erated Aging Test)
	方法/Measurement： ● IEC 60529 ● IP66 ● IP67 ● IP68（持续浸泡：1米水深，浸泡 2小时IP68/sustaining soaking：soaking for over 2 hours in 1M water）		方法/Measurement： ● IEC 60068-2-1（达-40℃） ● IEC 60068-2-2（达+125℃） ● IEC 60068-2-14（循环温度：介于-40℃~+125℃之间/Circulating temperature：Between-40℃~+125℃）		方法/Measurement： ● IEC 60068-2-78 测试条件/Test Condition： ● 85℃ ● 85%相对湿度/Relative Humidity ● 1000小时/hours
振动测试 Vibration Measurement	防水透气产抗振能力	阻燃测试 Flame Retardant Test	防水透气产阻燃能力		
	Anti-vibration ability of waterproof breathable products.		Waterproof and breathable products flame retardant ability.		
	方法/Measurement： ● IEC 60068-2-64		方法/Measurement： ● UL94-V0 非金属盖、本体、螺母 /Non-Metal cover,body,nut		



计算公式 (仅供参考) /Caculation Formula(For Ref.)

$N \times \text{透气度} / 1\text{Pcs} = V_{\text{膨胀}} \div t$ $P_0 \times V_{\text{膨胀}} = P_1 \times V_0$

N—防水透气阀的数量(Pcs)

t—膨胀气体排出时间(min)

$V_{\text{膨胀}}$ —在压差 $P_1=1\text{psi}(0.07\text{Kgf/cm}^2)$ 下的
气体膨胀量

P_0 —1大气压 (1 Kgf/cm²)

V_0 —1大气压下容器的体积 (L)

并满足右图的透气率和压差曲线

$N \times \text{Air permeability} / 1\text{Pcs} = V_{\text{expansion}} \div t$

$P_0 \times V_{\text{expansion}} = P_1 \times V_0$

N—Vent Valve No.s(Pcs)

t—Expansion of air discharge time.(min)

$V_{\text{expansion}}$ — $P_1=1\text{psi}(0.07\text{Kgf/cm}^2)$ (expansion volume under the pressure difference)

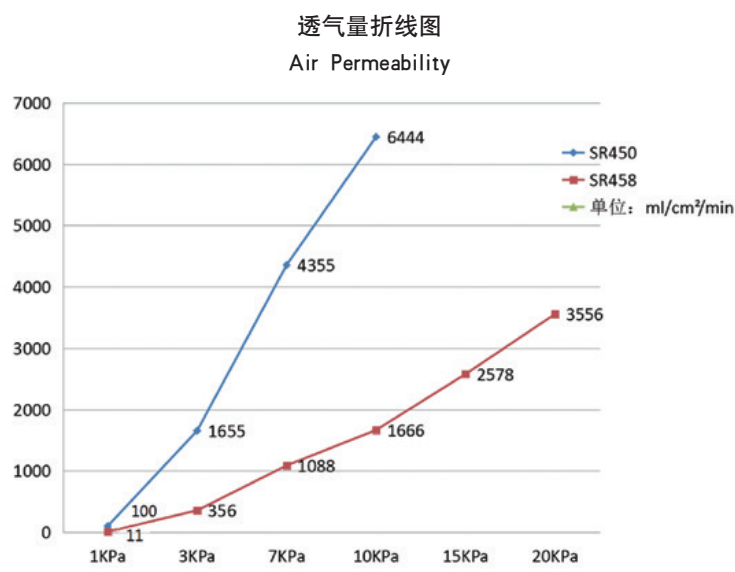
P_0 —1bar pressure (1 Kgf/cm²)

V_0 —1volume with 1bar P (L) And the permeability and pressure difference curves of the right graph are satisfied.

在线监测测试数值(以M12*1, 5-10-68为例)
Online Test Data(take M12*1, 5-10-68 as samples)

绝对压力 Absolute pressue (bar)	合格流量 Qualified flow ml/min	不合格流量 Unqualified flow ml/min	不合格流量 Unqualified flow ml/min
0.066	350~1100	325	1150
0.067	350~1100	326	1152
0.068	350~1100	330	1154
0.069	350~1100	331	1158
0.070	350~1100	335	1160
0.070	350~1100	335	1160
0.070	350~1100	335	1160
0.070	350~1100	335	1169
0.070	350~1100	335	1160
0.071	350~1100	340	1163
0.072	350~1100	342	1165
0.073	350~1100	345	1168
0.074	350~1100	348	1172

*合格品不合格品自动分拣/Qualified and non-qualified products will be divided automatically



透气阀汇总表/Air Vent Plug Summery Table

安装方式 nstallation	材料类别 Material	材 料 Material	型 号 Thread Spec.	颜 色 Colors	防护等级 IP Grade
螺纹式 Thread	塑 料 Plastic	玻 纤 /glass fiber PA66+25%	RSV-M6*0.75	BL黑色 GY灰色 IG铁灰色	IP66-IP68
			RSV-M8*1.0		
			RSV-M10*1.0		
			RSV-M12*1.0		
			RSV-M12*1.5		
			RSV-M24*1.5		
			RSV-M40*1.5		
	铝 合 金 /AL alloy	RAM-M6*1.0	BW亮白色		
		RAM-M8*1.0			
		RAM-M10*1.0			
		RAM-M12*1.5			
		RAM-M16*1.5			
		RAM-PG9			
		RAM-M20*1.5			
		RAM-M24*1.5			
		RAM-M25*1.5			
		RAM-M32*1.5			
	金 属 Metal	RAM-M40*1.5	不锈钢本色		
		RSM-M6*1.0			
		RSM-M8*1.0			
		RSM-M10*1.0			
		RSM-M12*1.5			
		RSM-M24*1.5			
		RSM-M25*1.5			
		RSM-M32*1.5			
		RSM-M40*1.5			
		黄铜/Brass H59-1		RCM-M6*1.0	
	RCM-M8*1.0				
RCM-M10*1.0					
RCM-M12*1.5					
RCM-M16*1.5					
RCM-PG9					
RCM-M20*1.5					
RCM-M24*1.5					
RCM-M25*1.5					
RCM-M32*1.5					
卡扣式 Snap-fit	塑 料 Plastic	PA66	RSVK8.5-3.6	BL黑色	
			RSVK8.5-4.5	GY灰色	



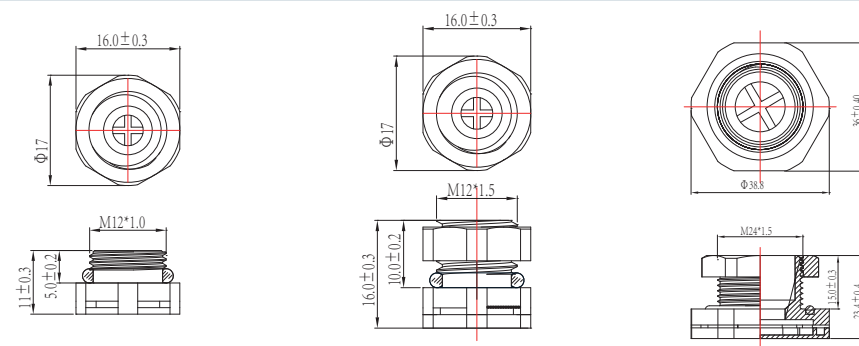
产品名称/Item No.	RSV-M6*0.75	RSV-M8*1.0	RSV-M10*1.0
工程编号/Descriptions*			
产品性能特性/Product Performance Characteristics			
透气量/Item No. (ml/min@0.07bar)	100~1200	150~1800	250~2700
透气膜材料/Membrane material	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	PA	PA	PA
颜色/Colors	● BL 黑色/Black ● GY 灰色/Grey ● IG 铁灰色/ Iron gray	● BL 黑色/Black ● GY 灰色/Grey ● IG 铁灰色/ Iron gray	● BL 黑色/Black ● GY 灰色/Grey ● IG 铁灰色/ Iron gray
扭矩扳手尺寸/Torque Wrench size	10	12	14
O型圈材料/O-ring Material	硅胶/Silica gel		
夹紧螺母材料/Clamping Nut Material	PA	PA	PA
阻燃等级/Flammability Level	V0	V0	V0
抗UV/UV resistant (1000H)	3~4 Level	3~4 Level	3~4 Level
抗盐雾性能/Salt Resistance	10<0.1%	10<0.1%	10<0.1%
抗菌等级Antibacterial Level (GB/T 2423.16)	1 Level	1 Level	1 Level
耐高低温/Anti High&Lowtemperature	-40℃~120℃	-40℃~120℃	-40℃~120℃
IP等级/IP Level	IP66 / IP68	IP66 / IP68	IP66 / IP68
可追溯性/Traceability	☒ With independent laser serial No.	☒ With independent laser serial No.	☒ With independent laser serial No.
设计和尺寸/Designs&Dimensions			
单位为毫米/Unit for Millimeter			
* 具体以实际的工程图为准/The actual engineering drawing shall prevail.			

建议扭矩/Recommended torque	0.4±0.1N.m	0.5±0.1N.m	0.6±0.1N.m
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RSV-... 螺纹式尼龙透气阀/Air Vent Plug(Thread type,Nylon)



产品名称 Item No.	RSV-M12*1.0	RSV-M12*1.5	RSV-M24*1.5
工程编号/Descriptions*			
产品性能特性/Product Performance Characteristics			
透气量 Item No. (ml/min@0.07bar)	350-6000	350-6000	4000-40000
透气膜材料 Membrane material	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)
透气膜特性 Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料 Body Material	PA	PA	PA
颜色Colors	● BL 黑色/Black ● GY 灰色/Grey ● IG 铁灰色/ Iron gray	● BL 黑色/Black ● GY 灰色/Grey ● IG 铁灰色/ Iron gray	● BL 黑色/Black ● GY 灰色/Grey ● IG 铁灰色/ Iron gray
扭矩扳手尺寸Torque Wrench size	16	16	36
O型圈材料O-ring Material		硅胶/Silica gel	
夹紧螺母材料Clamping Nut Material	PA66	PA66	PA66
阻燃等级Flammability Level	V0	V0	V0
抗UV/Flammability Level (1000H)	3-4 Level	3-4 Level	3-4 Level
抗盐雾性能/Salt Resistance	10<0.1%	10<0.1%	10<0.1%
抗菌等级Antibacterial Level (GB/T 2423.16)	1 Level	1 Level	1 Level
耐高低温Anti High&Lowtemperature	-40℃~120℃	-40℃~120℃	-40℃~120℃
IP等级/IP Level	IP66 / IP68	IP66 / IP68	IP66 / IP68
可追溯性/Traceability	☒ With independent laser serial No.	☒ With independent laser serial No.	☒ With independent laser serial No.
设计和尺寸/Designs&Dimensions			
单位为毫米/Unit for Millimeter			



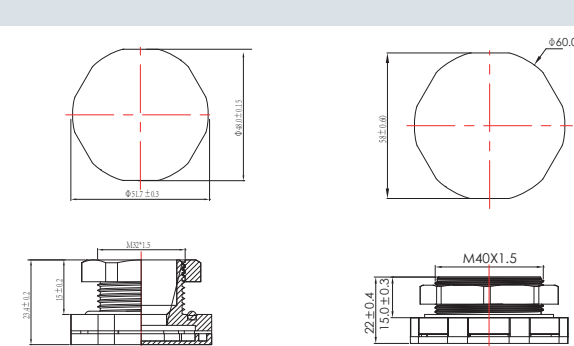
* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

建议扭矩/Recommended torque	0.7±0.1N.m	0.7±0.1N.m	1.2±0.2N.m
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RSV-... 螺纹式尼龙透气阀/Air Vent Plug(Thread type,Nylon)



产品名称/Item No.	RSV-M32*1.5	RSV-M40*1.5
工程编号/Descriptions*		
产品性能特性/Product Performance Characteristics		
透气量/Item No. (ml/min@0.07bar)	8000-5000	16000-65000
透气膜材料/Membrane material	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	PA	PA
颜色/Colors	● BL 黑色/Black ● GY 灰色/Grey ● IG 铁灰色/ Iron gray	● BL 黑色/Black ● GY 灰色/Grey ● IG 铁灰色/ Iron gray
扭矩扳手尺寸/Torque Wrench size	48	58
O型圈材料/O-ring Material	硅胶/Silica gel	
平垫圈材料/Flat Washers Material		硅胶/Silica gel
夹紧螺母材料/Clamping Nut Material	PA66	PA66
阻燃等级/Flammability Level	V0	V0
抗UV/ UV resistant (1000H)	3-4 Level	3-4 Level
抗盐雾性能/Salt Resistance	10<0.1%	10<0.1%
抗菌等级Antibacterial Level (GB/T 2423.16)	1 Level	1 Level
耐高低温/Anti High&Lowtemperature	-40℃~120℃	-40℃~120℃
IP等级/IP Level	IP66 / IP68	IP66 / IP68
可追溯性/Traceability	☒ With independent laser serial No.	☒ With independent laser serial No.
设计和尺寸/Designs&Dimensions		
单位为毫米/Unit for Millimeter		



* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

建议扭矩/Recommended torque	1.5±0.2N.m	1.8±0.2N.m
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备注: "D"状态表示产品待开发

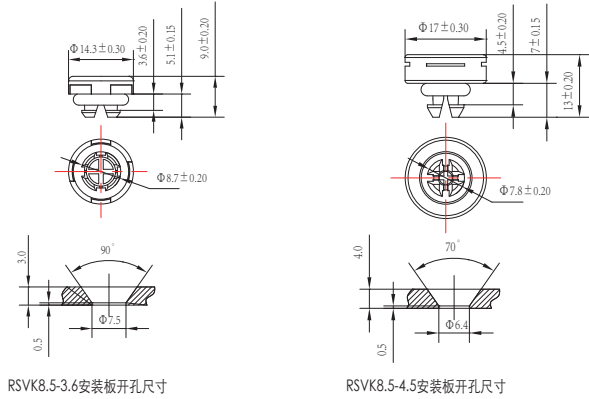
卡扣式尼龙透气阀/Air Vent Plug(Snap-fit, Nylon)



产品名称/Item No.	RSVK 8.5-3.6	RSVK 8.5-4.5
工程编号/Descriptions*		
产品性能特性/Product Performance Characteristics		
透气量/Item No. (ml/min@0.07bar)	100-4000	300-6000
透气膜材料/Membrane material	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	PA	PA
颜色/Colors	● BL 黑色/Black ● GY 灰色/Grey	●BL 黑色/Black ●GY 灰色/Grey
O型圈材料/O-ring Material	硅胶/Silica gel	
夹紧螺母材料/Clamping Nut Material	PA66	PA66
阻燃等级/Flammability Level	V0	V0
抗盐雾性能/Salt Resistance	10<0.1%	10<0.1%
抗菌等级Antibacterial Level (GB/T 2423.16)	1 Level	1 Level
耐高低温/Anti High&Lowtemperature	-40℃~120℃	-40℃~120℃
IP等级/IP Level	IP66 / IP68	IP66 / IP68
可追溯性/Traceability	☒ With indepentent laser serial No.	☒ With indepentent laser serial No.
设计和尺寸/Designs&Dimensions		

设计和尺寸/Designs&Dimensions

单位为毫米/Unit for Millimeter



* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

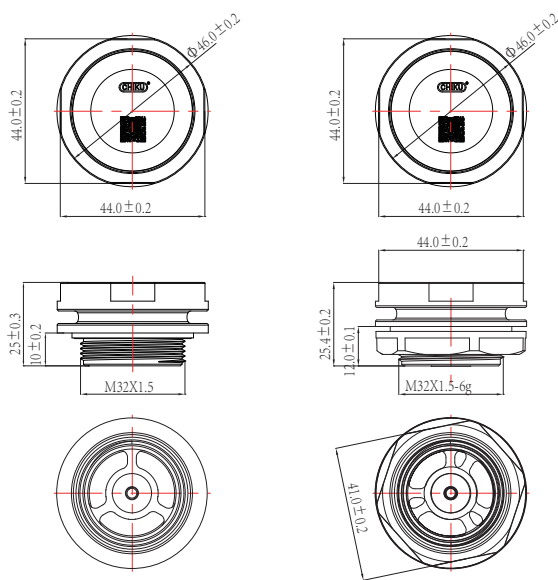
RSV-... 阀式防爆透气阀/Burst-proof breathable valve



产品名称/Item No.	RSV-M32*1.5-10-FSFB-BK-P-66	RSV-M32*1.5-12-FSFB-BK-PM-66
工程编号/Descriptions*		
产品性能特性/Product Performance Characteristics		
透气量/Item No. (ml/min@0.015bar)	>500	>500
防爆压力/ Explosion—proof pressure:	4—8 KPa	4—8 KPa
排气面积/Leaving area (Max) :	310mm ²	310mm ²
透气膜材料/Membrane material	膨体聚四氟乙烯（ ePTFE ）	膨体聚四氟乙烯（ ePTFE ）
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	PA	PA
	—	—
颜色/Colors	● BL 黑色/Black ● —	● BL 黑色/Black ● —
扭矩扳手尺寸/Torque Wrench size	44	44
平垫圈材料/Flat Washers Material	硅胶/Silica gel	硅胶/Silica gel
夹紧螺母材料/Clamping Nut Material	PA	PA
阻燃等级/Flammability Level	V0	V0
抗盐雾性能/Salt Resistance	PH 6—7 720H	PH 6—7 720H
抗菌等级Antibacterial Level（GB/T 2423.16）	1 Level	1 Level
耐高低温/Anti High&Lowtemperature	—40℃~120℃	—40℃~120℃
IP等级/IP Level	IP66	IP66
可追溯性/Traceability	☒ With indepentent laser serial No.	☒ With indepentent laser serial No.

设计和尺寸/Designs&Dimensions

单位为毫米/Unit for Millimeter



* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

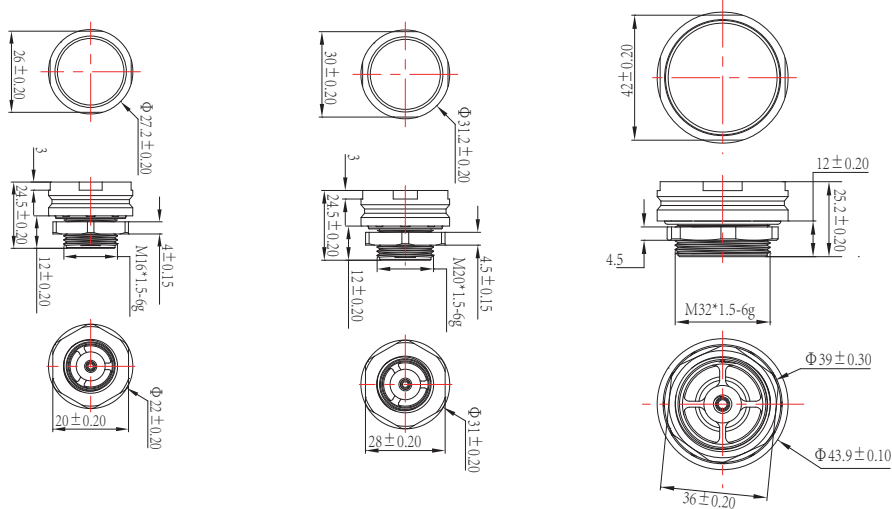
建议扭矩/Recommended torque	1.5±0.2N.m	1.5±0.2N.m
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RAM-... 金属防爆透气阀/Metal burst-proof breathable valve



产品名称/Item No.	RAM-M16*1.5-12-FSFB-MG-PM-6x	RAM-M20*1.5-12-FSFB-MG-PM-6x	RAM-M32*1.5-12-FSFB-MG-PM-6x
工程编号/Descriptions*			
产品性能特性/Product Performance Characteristics			
透气量/Item No. (ml/min@0.015bar)	>100	>500	>500
防爆压力/ Explosion-proof pressure:	8–13 KPa	8–13 KPa	4–8 KPa
排气面积/Leaving area (Max) :	42mm ²	120mm ²	350mm ²
透气膜材料/Membrane material	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	A:铝合金/Aluminum-alloy —	A:铝合金/Aluminum-alloy —	A:铝合金/Aluminum-alloy —
颜色/Colors	○ MW 铝合金本色/Matte White(Alu) ● MG 铝合金哑灰/Matte Grey	○ MW 铝合金本色/Matte White(Alu) ● MG 铝合金哑灰/Matte Grey	○ MW 铝合金本色/Matte White(Alu) ● MG 铝合金哑灰/Matte Grey
扭矩扳手尺寸/Torque Wrench size	20	28	32
平垫圈材料/Flat Washers Material	硅胶/Silica gel		
夹紧螺母材料/Clamping Nut Material	A	A	A
阻燃等级/Flammability Level	V0	V0	V0
抗盐雾性能/Salt Resistance	PH 6–7 720H	PH 6–7 720H	PH 6–7 720H
抗菌等级Antibacterial Level (GB/T 2423.16)	1 Level	1 Level	1 Level
耐高低温/Anti High&Lowtemperature	–40℃~125℃	–40℃~125℃	–40℃~125℃
IP等级/IP Level	IP67	IP67	IP67
可追溯性/Traceability	☒ With independent laser serial No.	☒ With independent laser serial No.	☒ With independent laser serial No.

设计和尺寸/Designs&Dimensions
单位为毫米/Unit for Millimeter



* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

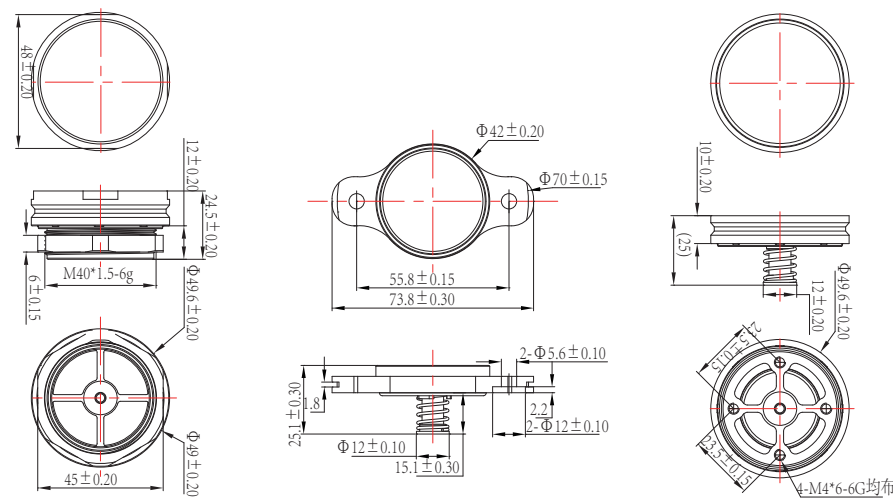
建议扭矩/Recommended torque	2.2-2.4N.m	2.2-2.4N.m	3-3.5N.m
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RAM-... 金属防爆透气阀/Metal burst-proof breathable valve



产品名称/Item No.	RAM-M40*1.5-12-FSFB-MG-PM-6x	RAM-55.8*5.6-FSFB-MW-P-67	RAM-23.5*23.5*M4-FSFB-MG-P-6x
工程编号/Descriptions*			
产品性能特性/Product Performance Characteristics			
透气量/Item No. (ml/min@0.015bar)	>500	>500	>500
防爆压力/ Explosion-proof pressure:	4–8 KPa	4–8 KPa	4–8 KPa
排气面积/Leaving area (Max) :	540mm ²	350mm ²	580mm ²
透气膜材料/Membrane material	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	A:铝合金/Aluminum-alloy —	A:铝合金/Aluminum-alloy —	A:铝合金/Aluminum-alloy —
颜色/Colors	○ MW 铝合金本色/Matte White(Alu) ● MG 铝合金哑灰/Matte Grey	○ MW 铝合金本色/Matte White(Alu) ● MG 铝合金哑灰/Matte Grey	○ MW 铝合金本色/Matte White(Alu) ● MG 铝合金哑灰/Matte Grey
扭矩扳手尺寸/Torque Wrench size	45	—	—
平垫圈材料/Flat Washers Material	硅胶/Silica gel		
夹紧螺母材料/Clamping Nut Material	A	A	A
阻燃等级/Flammability Level	V0	V0	V0
抗盐雾性能/Salt Resistance	PH 6–7 720H	PH 6–7 720H	PH 6–7 720H
抗菌等级Antibacterial Level (GB/T 2423.16)	1 Level	1 Level	1 Level
耐高低温/Anti High&Lowtemperature	–40℃~125℃	–40℃~125℃	–40℃~125℃
IP等级/IP Level	IP67	IP67	IP67
可追溯性/Traceability	☒ With independent laser serial No.	☒ With independent laser serial No.	☒ With independent laser serial No.

设计和尺寸/Designs&Dimensions
单位为毫米/Unit for Millimeter



* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

建议扭矩/Recommended torque	3.6-3.8N.m	2.2-2.4N.m	1.6-1.8N.m
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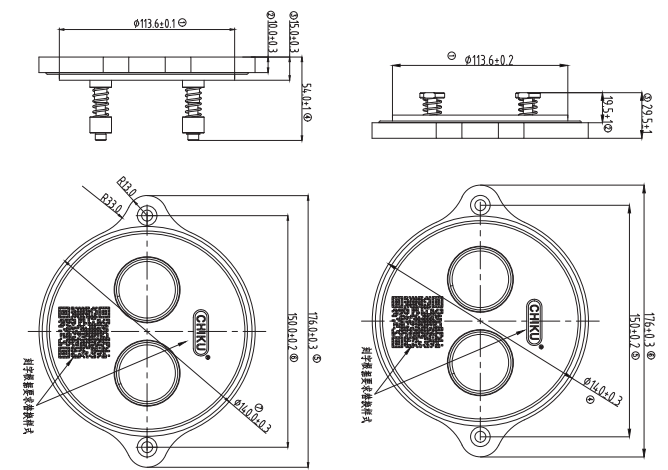
RAM-... 金属防爆透气阀/Metal burst-proof breathable valve



产品名称/Item No.	RAM-150X7-FSFB-MW-P-66	RAM-150X7-FSFB1-MW-P-66
工程编号/Descriptions*		
产品性能特性/Product Performance Characteristics		
透气量/Item No. (ml/min@1.5KPa)	>2500	>2500
防爆压力/ Explosion—proof pressure:	4.5 ± 1KPa	4.5 ± 1KPa
排气面积/Leaving area (Max) :	5400mm ²	2500mm ²
透气膜材料/Membrane material	膨体聚四氟乙烯（ ePTFE ）	膨体聚四氟乙烯（ ePTFE ）
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	A:铝合金/Aluminum—alloy	A:铝合金/Aluminum—alloy
	—	—
颜色/Colors	○ BW 铝合金本色/Bright White(Alu)	○ BW 铝合金本色/Bright White(Alu)
平垫圈材料/Flat Washers Material	硅胶/Silica gel	
阻燃等级/Flammability Level	V0	V0
抗盐雾性能/Salt Resistance	GB/T2423.17 720H	GB/T2423.17 720H
耐高低温/Anti High&Lowtemperature	-40℃~125℃	-40℃~125℃
IP等级/IP Level	IP66	IP66
可追溯性/Traceability	☒ With indepentent laser serial No.	☒ With indepentent laser serial No.

设计和尺寸/Designs&Dimensions

单位为毫米/Unit for Millimeter



* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

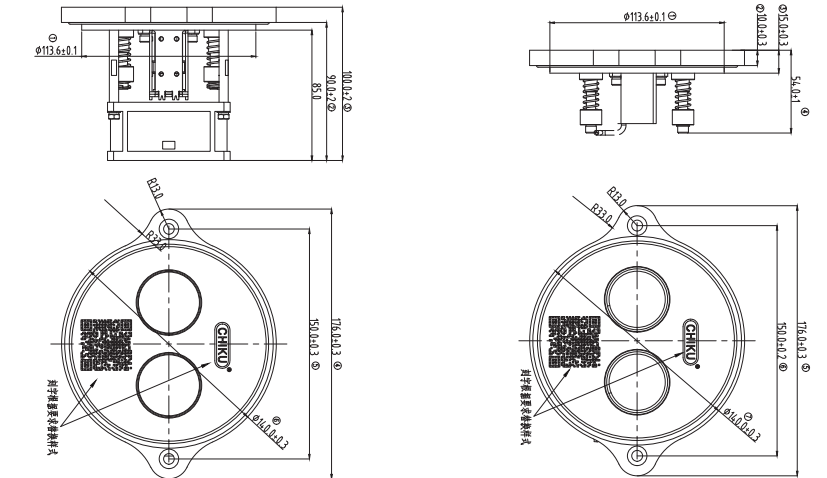
RAM-... 电控金属防爆透气阀/Metal burst-proof breathable valve



产品名称/Item No.	RAM-150X7-FSFB(E)-MW-P-66	RAM-150X7-FSFB(E1)-MW-P-66	RAM-150*7-FSFB(E4)-MW-P-66
工程编号/Descriptions*			
产品性能特性/Product Performance Characteristics			
透气量/Item No. （ml/min@0.015bar）	>2500	>2500	>2500
防爆压力/ Explosion—proof pressure:	4.5 ± 1KPa	4.5 ± 1KPa	4.5 ± 1KPa
排气面积/Leaving area (Max) :	2500mm ²	2500mm ²	2500mm ²
透气膜材料/Membrane material	膨体聚四氟乙烯（ePTFE）	膨体聚四氟乙烯（ePTFE）	膨体聚四氟乙烯（ePTFE）
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	A:铝合金/Aluminum—alloy	A:铝合金/Aluminum—alloy	A:铝合金/Aluminum—alloy
	—	—	—
颜色/Colors	○ BW 铝合金本色/Bright White(Alu)	○ BW 铝合金本色/Bright White(Alu)	○ BW 铝合金本色/Bright White(Alu)
平垫圈材料/Flat Washers Material	硅胶/Silica gel		
阻燃等级/Flammability Level	V0	V0	V0
抗盐雾性能/Salt Resistance	外部（中性盐雾 720H） 内部（中性盐雾 96H）	外部（中性盐雾 720H） 内部（中性盐雾 96H）	外部（中性盐雾 720H） 内部（中性盐雾 96H）
耐高低温/Anti High&Lowtemperature	－40℃－65℃	－40℃－65℃	－40℃－65℃
IP等级/IP Level	IP66	IP66	IP66
可追溯性/Traceability	☒ With indepentent laser serial No.	☒ With indepentent laser serial No.	☒ With indepentent laser serial No.

设计和尺寸/Designs&Dimensions

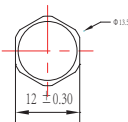
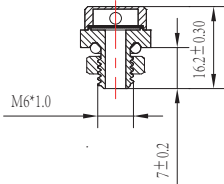
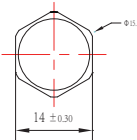
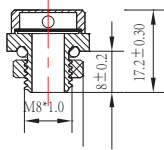
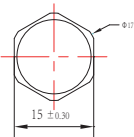
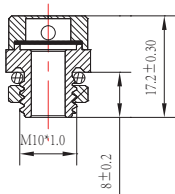
单位为毫米/Unit for Millimeter



* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

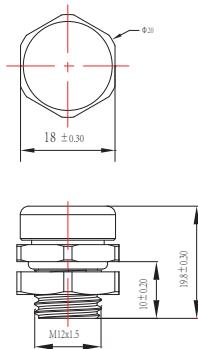
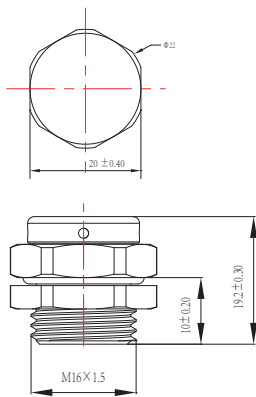
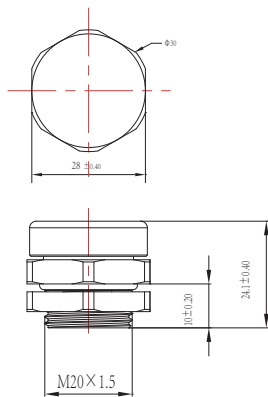
R◇M-... 螺纹式金属透气阀/Thread Metal Air Vent Plug



产品名称/Item No.	R>M-M6*1.0	R>M-M8*1.0	R>M-M10*1.0
工程编号/Descriptions*			
产品性能特性/Product Performance Characteristics			
透气量/Item No. (ml/min@0.07bar)	80-1400	130-2000	180-3000
透气膜材料/Membrane material	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)	膨体聚四氟乙烯 (ePTFE)
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	A:铝合金/Aluminum-alloy S:不锈钢/Stainless steel C:铜/Coppe	A:铝合金/Aluminum-alloy S:不锈钢/Stainless steel C:铜/Coppe	A:铝合金/Aluminum-alloy S:不锈钢/Stainless steel C:铜/Coppe
颜色/Colors	○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)	○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)	○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)
扭矩扳手尺寸/Torque Wrench size	12	14	15
O型圈材料/O-ring Material	硅胶/Silica gel		
夹紧螺母材料/Clamping Nut Material	A/S/C	A/S/C	A/S/C
阻燃等级/Flammability Level	V2	V2	V2
抗盐雾性能/Salt Resistance	PH 1-14	PH 1-14	PH 1-14
抗菌等级Antibacterial Level (GB/T 2423.16)	1 Level	1 Level	1 Level
耐高低温/Anti High&Lowtemperature	-40℃~120℃	-40℃~120℃	-40℃~120℃
IP等级/IP Level	IP66 / IP68	IP66 / IP68	IP66 / IP68
可追溯性/Traceability	☒ With independent laser serial No.	☒ With independent laser serial No.	☒ With independent laser serial No.
设计和尺寸/Designs&Dimensions			
单位为毫米/Unit for Millimeter			
 			
 			
 			
* 具体以实际的工程图为准/The actual engineering drawing shall prevail.			
建议扭矩/Recommended torque	0.8±0.1N.m	1.0±0.1N.m	1.2±0.1N.m

R◇M-... 螺纹式金属透气阀/Thread Metal Air Vent Plug



产品名称/Item No.	R◇M-M12*1.5	R◇M-M16*1.5	R◇M-M20*1.5
工程编号/Descriptions*			
产品性能特性/Product Performance Characteristics			
透气量/Item No. (ml/min@0.07bar)	250-6000	500-8000	800-10000
透气膜材料/Membrane material	膨体聚四氟乙烯（ ePTFE ）	膨体聚四氟乙烯（ ePTFE ）	膨体聚四氟乙烯（ ePTFE ）
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	A:铝合金/Aluminum-alloy S:不锈钢/Stainless steel C:铜/Coppe	A:铝合金/Aluminum-alloy S:不锈钢/Stainless steel C:铜/Coppe	A:铝合金/Aluminum-alloy S:不锈钢/Stainless steel C:铜/Coppe
颜色/Colors	○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)	○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)	○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)
扭矩扳手尺寸/Torque Wrench size	17	28	28
O型圈材料/O-ring Material	硅胶/Silica gel		
夹紧螺母材料/Clamping Nut Material	A/S/C	A/S/C	A/S/C
阻燃等级/Flammability Level	V2	V2	V2
抗盐雾性能/Salt Resistance	PH 1-14	PH 1-14	PH 1-14
抗菌等级Antibacterial Level（GB/T 2423.16）	1 Level	1 Level	1 Level
耐高低温/Anti High&Lowtemperature	-40℃~120℃	-40℃~120℃	-40℃~120℃
IP等级/IP Level	IP66 / IP68	IP66 / IP68	IP66 / IP68
可追溯性/Traceability	☒ With independent laser serial No.	☒ With independent laser serial No.	☒ With independent laser serial No.
设计和尺寸/Designs&Dimensions			
单位为毫米/Unit for Millimeter			
			
	* 具体以实际的工程图为准/The actual engineering drawing shall prevail.		
建议扭矩/Recommended torque	1.4±0.1N.m	1.8±0.2N.m	2.2±0.2N.m

R◇M-... 螺纹式金属透气阀/Thread Metal Air Vent Plug



产品名称/Item No.	R◇M-M24*1.5		R◇M-M25*1.5		R◇M-M32*1.5	
工程编号/Descriptions*						
产品性能特性/Product Performance Characteristics						
透气量/Item No. (ml/min@0.07bar)	1000-2000		12000-25000		1800-30000	
透气膜材料/Membrane material	膨体聚四氟乙烯（ ePTFE ）		膨体聚四氟乙烯（ ePTFE ）		膨体聚四氟乙烯（ ePTFE ）	
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic		疏油、疏水/Oleophobic&Hydrophobic		疏油、疏水/Oleophobic&Hydrophobic	
透气阀本体材料/Body Material	A:铝合金/Aluminum-alloy S:不锈钢/Stainless steel C:铜/Coppe		A:铝合金/Aluminum-alloy S:不锈钢/Stainless steel C:铜/Coppe		A:铝合金/Aluminum-alloy S:不锈钢/Stainless steel C:铜/Coppe	
颜色/Colors	○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)		○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)		○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)	
扭矩扳手尺寸/Torque Wrench size	28		48		36	
O型圈材料/O-ring Material					硅胶/Silica gel	
夹紧螺母材料/Clamping Nut Material	A/S/C		A/S/C		A/S/C	
阻燃等级/Flammability Level	V2		V2		V2	
抗盐雾性能/Salt Resistance	PH 1-14		PH 1-14		PH 1-14	
抗菌等级Antibacterial Level (GB/T 2423.16)	1 Level		1 Level		1 Level	
耐高低温/Anti High&Lowtemperature	-40℃~120℃		-40℃~120℃		-40℃~120℃	
IP等级/IP Level	IP66 / IP68		IP66 / IP68		IP66 / IP68	
可追溯性/Traceability	☒ With independent laser serial No.		☒ With independent laser serial No.		☒ With independent laser serial No.	
设计和尺寸/Designs&Dimensions	单位为毫米/Unit for Millimeter					
* 具体以实际的工程图为准/The actual engineering drawing shall prevail.						
建议扭矩/Recommended torque	2.4±0.2N.m		2.4±0.2N.m		3.0±0.2N.m	

* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

R◇M-... 螺纹式金属透气阀/Thread Metal Air Vent Plug



产品名称/Item No.	R◇M-M40*1.5
工程编号/Descriptions*	
产品性能特性/Product Performance Characteristics	
透气量/Item No. (ml/min@0.07bar)	7000-40000
透气膜材料/Membrane material	膨体聚四氟乙烯 (ePTFE)
透气膜特性/Membrane Characteristics	疏油、疏水/Oleophobic&Hydrophobic
透气阀本体材料/Body Material	铝合金 A 不锈钢 S 铜 C
颜色/Colors	○ BW 铝合金本色/Bright White(Alu) ⦿ DS 不锈钢本色/Dark Silver (SS) ● BS 电镀镍色/Bright Silver(Nickle plating)
扭矩扳手尺寸/Torque Wrench size	48
O型圈材料/O-ring Material	
夹紧螺母材料/Clamping Nut Material	A/S/C
阻燃等级/Flammability Level	V2
抗盐雾性能/Salt Resistance	PH 1-14
抗菌等级Antibacterial Level (GB/T 2423.16)	1 Level
耐高低温/Anti High&Lowtemperature	-40℃~120℃
IP等级/IP Level	IP66 / IP68
可追溯性/Traceability	☑ With independent laser serial No.
设计和尺寸/Designs&Dimensions 单位为毫米/Unit for Millimeter	
建议扭矩/Recommended torque	3.6±0.2N.m

* 具体以实际的工程图为准/The actual engineering drawing shall prevail.

防护等级说明符合EN60529电气标准

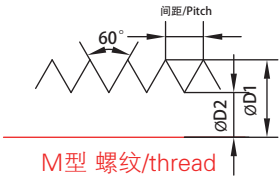
Degrees of protection provided by enclosures (IP-Code) according to IEC 60529

接触保护和外来物保护等级，第一参数		
第一参数	防护等级	
简述	详细描述	
0	无防护	
1	防护50mm 直径和更大的固体外来体	防护球体物质，直径大于50mm，不应完全进入
2	防护12.5mm直径和更大的固体外来体	防护球体物质，直径大于12.5mm，不应完全进入
3	防护2.5mm直径和更大的固体外来体	防护球体物质，直径大于2.5mm，不应完全进入
4	防护1.0mm直径和更大的固体外来体	防护球体物质，直径大于1.0mm，不应完全进入
5	防护灰尘	不可能完全阻止灰尘进入，但灰尘进入的数量不会对设备造成危害
6	灰尘封闭	完全防止灰尘进入
注：球体的直径不应穿过柜体的孔		

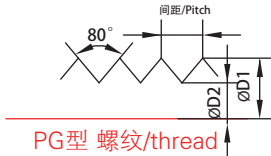
Protection against solid foreign objects, marked first index		
First Index	Protection grade	
Short description	Definition	
0	None-Protected	
1	Protection against solid foreign objects of 50mm diameter and greater	The object probe,sphere of 50 mm diameter,shall not fully penetrate*
2	Protection against solid foreign objects of 12.5mm diameter and greater	The object probe,sphere of 12.5 mm diameter,shall not fully penetrate*
3	Protection against solid foreign objects of 2.5mm diameter and greater	The object probe,sphere of 2.5 mm diameter,shall not fully penetrate at all*
4	Protection against solid foreign objects of 1.0mm diameter and greater	The object probe,sphere of 1.0 mm diameter,shall not fully penetrate at all*
5	Dust-Protected	Ingress of dust is not totally prevented. But dust shall not penetrate in a quantity to interfere with satisfactory operation of apparatus or to impair safety
6	Dust-tight	No ingress of dust
Note:The full diameter of the object probe shall not pass through an opening of the enclosure		

防水保护等级，第二参数		
第二参数	防护等级	
简述	详细描述	
0	无防护	
1	水滴防护	垂直落下的水滴不应引起损害
2	倾斜15度时，防护水滴	向任何一侧倾斜15度角时，垂直落下的水滴不应引起损害
3	防护溅出的水	以60度角从垂直线两侧溅出的水,不应引起损害
4	防护喷水	从每个方向对准柜体的喷水都不应引起损害
5	防护射水	从每个方向对准柜体的射水都不应引起损害
6	防护强射水	从每个方向对准柜体的强射水都不应引起损害
7	防护短时浸水	在标准压力下短时浸入水中时，不应有能引起损害的水量浸入
8	防护长期浸水	可以在特定的条件下浸入水中，不应有能引起损害的水量浸入

Protection against water, marked second index		
Second Index	Protection grade	
Short description	Definition	
0	None-Protected	
1	Protection against failing water drops	Vertically failling drops shall have no harmful effects
2	Protection against failing water drops when enclosure tilted up to 15°	Vertically failling drops shall have no harmful effects when the enclosure is tilted at any angle up to 15° on either side of the vertical
3	Protection against spraying water	Water sprayed at an angle up to 60° on either side of the vertical shall have no harmful effects
4	Protection against splashing water	Water splashed against the enclosure from any direction shall have to harmful effects
5	Protection against water jet	Water projected in jets against the enclosure from any direction shall have to harmful effects
6	Protection against powered water jets	Water projected in powerful jets against the enclosure from any direction shall have to harmful effects
7	Protected against the effects of temporary immersion in water	Ingress of water in quantities effects shall not be possible when enclosure is temporarily immersed in water under standardised conditions of pressure and time
8	Protected against the effects of continuous immersion in water	Ingress of water in quantities causing harmful effects shall not be possible when enclosure is continuously immersed in water under conditions which shall be agreed between manufacturer and user but which are more severe than for numeral?



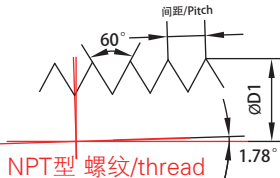
M型 螺纹/thread



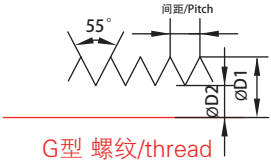
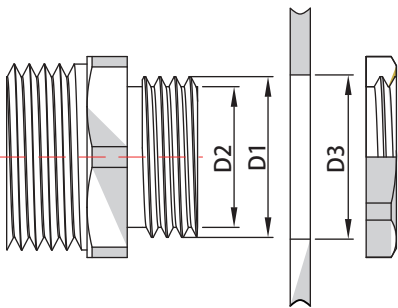
PG型 螺纹/thread

公制ISO螺纹EN60423		Metric ISO thread to EN60423		
公制螺纹	螺距	螺纹外径D1	螺纹内径D2	开孔尺寸D3
Metric thread	Pitch	Nominal Size	Core diameter	Bore through
M12X1.5	1.5	12	10.5	12.2-12.4
M14X1.5	1.5	14	12.5	14.2-14.4
M16X1.5	1.5	16	14.5	16.2-16.4
M18X1.5	1.5	18	16.5	18.2-18.4
M20X1.5	1.5	20	18.5	20.2-20.4
M22X1.5	1.5	22	20.5	22.2-22.4
M25X1.5	1.5	25	23.5	25.2-25.4
M32X1.5	1.5	32	30.5	32.2-32.4
M36X1.5	1.5	36	34.5	36.3-36.5
M40X1.5	1.5	40	38.5	40.3-40.5
M50X1.5	1.5	50	48.5	50.3-50.5
M63X1.5	1.5	63	61.5	63.3-63.5
M72X2.0	2.0	72	70.0	72.3-72.5
M80X2.0	2.0	80	78.0	80.3-80.5

德制PG螺纹 DIN 40430		PG thread to DIN 40430		
公制螺纹	螺距	螺纹外径D1	螺纹内径D2	开孔尺寸D3
Metric thread	Pitch	Nominal Size	Core diameter	Bore through
PG7	1.270	12.5	11.28	12.7-12.9
PG9	1.410	15.2	13.86	15.4-15.6
PG11	1.410	18.6	17.26	18.8-19.0
PG13.5	1.410	20.4	19.06	20.6-20.8
PG16	1.410	22.5	21.16	22.7-22.9
PG21	1.588	28.3	26.78	28.5-28.7
PG29	1.588	37.0	35.48	37.3-37.5
PG36	1.588	47.0	45.48	47.3-47.5
PG42	1.588	54.0	52.48	54.3-54.5
PG48	1.588	59.3	57.78	59.6-59.8



NPT型 螺纹/thread



G型 螺纹/thread

美制NPT锥螺纹		NPT(conical) American pipa thread		
公制螺纹	螺距	螺纹外径D1	螺纹数量	开孔尺寸D3
Metric thread	Pitch	Nominal Size	Number of threads	Bore through
NPT 1/4	1.411	13.716	18	13.9-14.1
NPT 3/8	1.411	17.415	18	13.9-14.1
NPT 1/2	1.814	21.336	14	21.5-21.7
NPT 3/4	1.814	26.67	14	26.8-27.0
NPT 1	2.208	33.4	11 1/2	33.6-33.8
NPT 1 1/4	2.208	42.164	11 1/2	42.4-42.7
NPT 1 1/2	2.208	48.26	11 1/2	48.6-48.8
NPT 2	2.208	60.352	11 1/2	60.8-61.0
NPT 2 1/2	3.175	73.025	8	73.3-73.5
NPT 3	3.175	88.9	8	90.2-90.4
NPT 3 1/2	3.175	101.6	8	101.9-102.1

英制G管螺纹 DIN ISO 228		G thread to DIN ISO 228		
公制螺纹	螺距	螺纹外径D1	螺纹内径D2	开孔尺寸D3
Metric thread	Pitch	Nominal Size	Core diameter	Bore through
G1/4	1.337	13.157	11.145	13.4-13.6
G3/8	1.337	16.662	14.950	16.9-17.1
G1/2	1.814	20.955	18.631	21.2-21.4
G3/4	1.814	26.411	24.117	26.6-26.8
G1	2.309	33.249	30.291	33.5-34.7
G1 1/4	2.309	41.910	38.952	42.3-42.5
G1 1/2	2.309	47.803	44.845	48.1-48.3
G2	2.309	59.614	56.656	59.9-60.1
G2 1/2	2.309	75.184	72.226	75.5-75.7
G3	2.309	87.884	84.926	88.2-88.4
G3 1/2	2.309	100.330	97.372	100.6-100.8
G4	2.309	113.03	110.072	113.3-113.5

螺纹扭矩 VDE 0619		Thread torque VDE 0619			
螺纹规格	The clamping nut	螺母		塑料	金属
		塑料	金属		
Thread specification					
M12/PG7	1.3	3.5	1.2	4.17	
M16/PG9	2.5	6.25	1.5	4.17	
M18/PG11	3.75	6.25	2.0	4.17	
M20/PG13.5	3.75	6.25	2.0	4.17	
M22/M24/PG16	5.0	7.5	3.33	5.0	
M25	7.5	10	3.33	6.67	
M27/PG21	7.5	10	5.0	6.67	
M32/M36/PG29	7.5	10	5.0	6.67	
M40/PG36	7.5	10	5.0	6.67	
M50/PG42	7.5	10	5.0	6.67	
M63/PG48	10	12.5	5.0	6.67	



例：IP 6 8

Example: IP 6 8