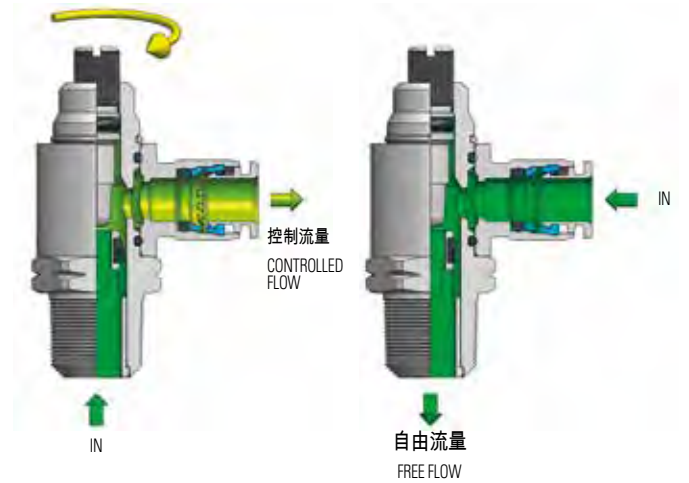


***cmatic***<sup>®</sup>  
P N E U M A T I C F I T T I N G S

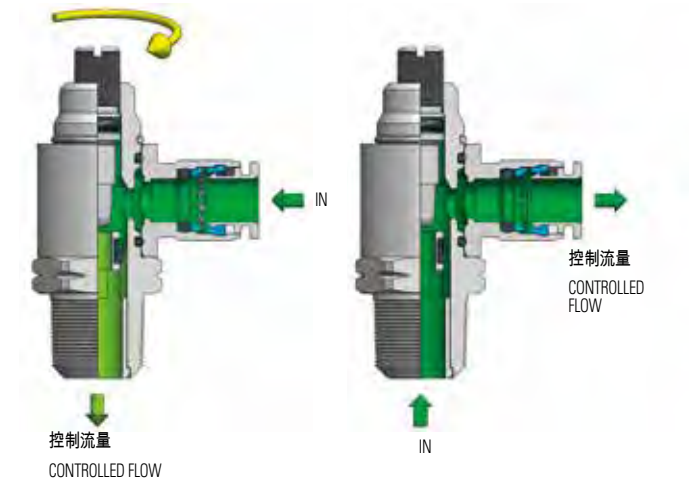
“英寸/ NPT”功能接头  
INCH/NPT Function Fittings



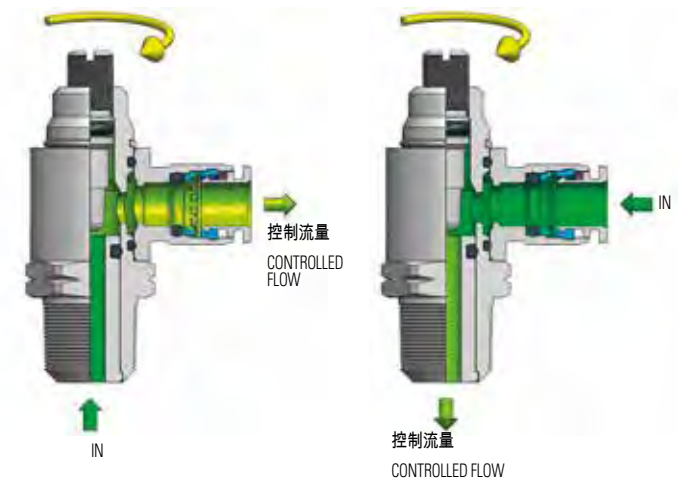
.../C = 排气节流  
Meter out flow control



.../V = 进气节流  
Meter in flow control



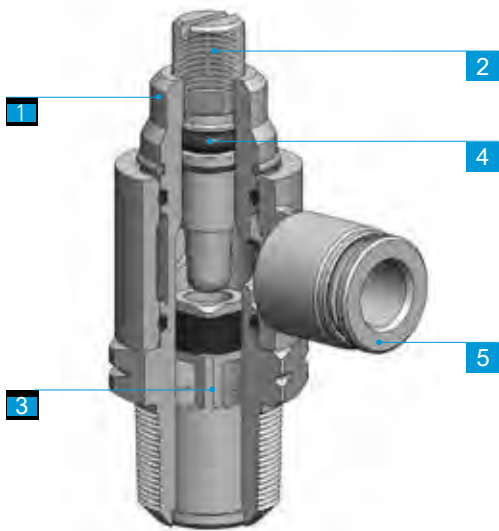
.../B = 双向流量调节  
Bidirectional flow control



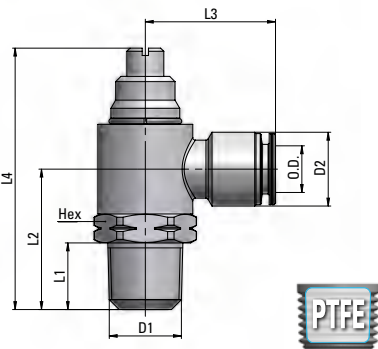
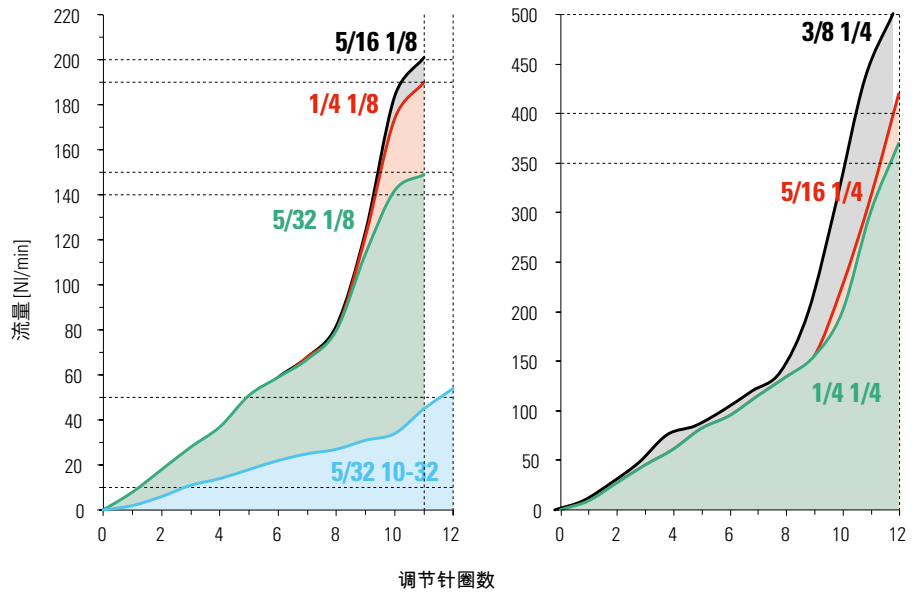
节流阀用于调节气路中流量，根据应用类型，可以分为双向节流阀和单向节流阀。其中单向节流阀非常适合进行气缸速度的调节。

They can adjust the flow in a pneumatic circuit. Depending on the flow control used, the setting can be made both ways (Bidirectional Flow Control), or just one way (Unidirectional Flow Control). The Unidirectional Flow Control is particularly used to adjust the speed of pneumatic cylinders.

1	2	3	4	5
本体 Body	针阀 Needle	套筒 Cartridge	密封圈 Seals	垫圈 Gasket
镀镍黄铜UNI EN 12164 CW614N Brass UNI EN 12164 CW614N Nickel plated			NBR NBR	PA6 PA6



P = 6 bar - Δp = 1 bar

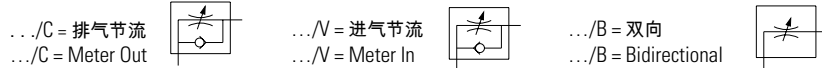


类型	OD管路	D1 UNF	D2	L1	L2	L3	L4	HEX (mm)	g ΔΔ
18 5/32 10-32	5/32	10-32		9.5	5	13.5	18.5	27	6

类型	OD管路	D1 NPTF	D2	L1	L2	L3	L4	HEX	g ΔΔ
18 5/32 1/8	5/32	1/8	9.5	8.5	21.55	20.5	41.6	9/16	32.50
18 1/4 1/8	1/4	1/8	12	8.5	21.55	22.5	41.6	9/16	34.50
18 1/4 1/4	1/4	1/4	12	13	26.9	24	50	11/16	60.00
18 5/16 1/8	5/16	1/8	14	8.5	21.55	23	41.6	9/16	35.50
18 5/16 1/4	5/16	1/4	14	13	26.9	24.5	50	11/16	61.00
18 3/8 1/4	3/8	1/4	16	13	26.9	26.5	50	11/16	65.50

可供 / Available as:



节流阀安装后，管路可调向。  
The banjo ring swivels also after flow control installation.

技术规格

建议的连接管路：  
取决于与节流阀相连的接头类型。

应用领域：  
空气经过过滤和润滑处理的气动系统。

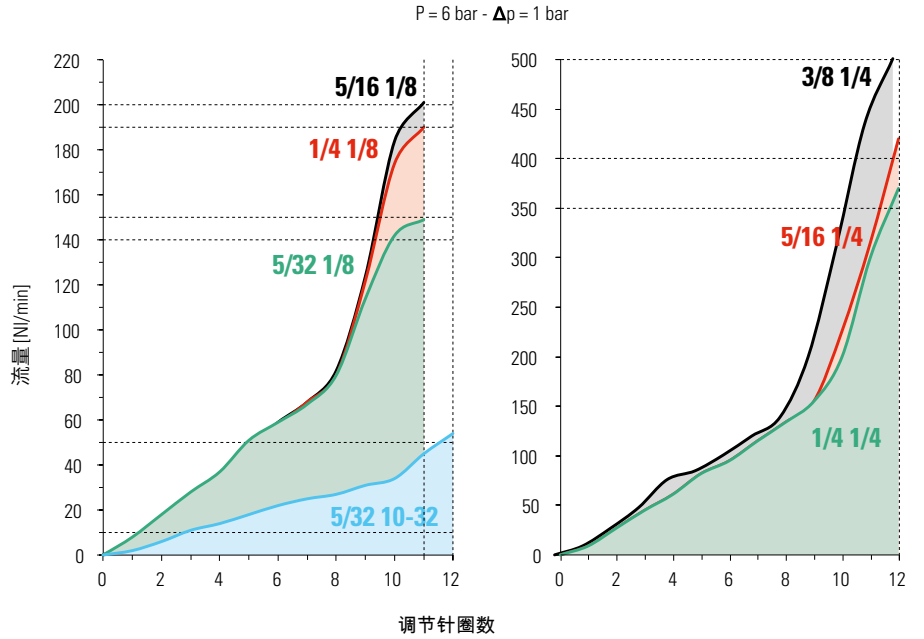
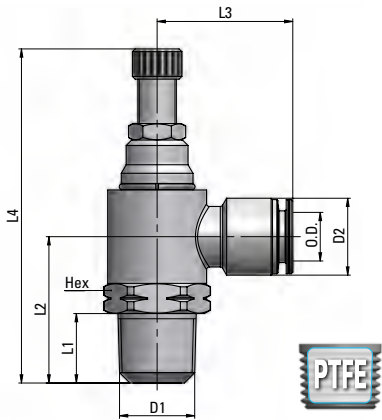
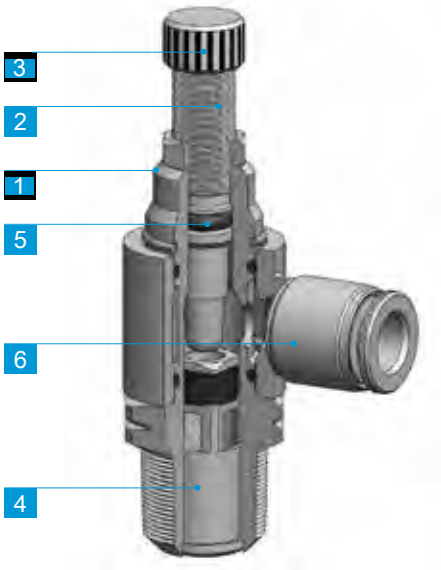
DATA SHEET

Recommended tubings:  
according to the fitting connected to the flow control.

Application field:  
pneumatic installations fed with filtered, lubricated air.

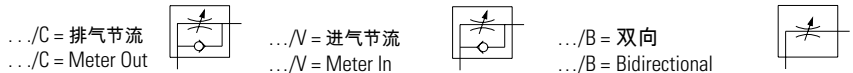
PV 41

1	2	3	4	5	6
本体 Body	针阀 Needle	旋钮 Handwheel	套筒 Cartridge	密封圈 Seals	快插接头 Push-in fittings
镀镍黄铜UNI EN 12164 CW614N Brass UNI EN 12164 CW614N Nickel plated				NBR NBR	PN系列快插接头 PN line push-in fittings



类型	OD	D1 UNF	D2	L1	L2	L3	L4	HEX (mm)	g $\Delta$
41 5/32 10-32	5/32	10-32	9.5	5	13.5	18.5	40.5	6	13.00
类型	OD	D1 NPTF	D2	L1	L2	L3	L4	HEX	g $\Delta$
41 5/32 1/8	5/32	1/8	9.5	8.5	21.55	20.5	52	9/16	37.00
41 1/4 1/8	1/4	1/8	12	8.5	21.55	22.5	52	9/16	38.00
41 1/4 1/4	1/4	1/4	12	13	26.9	24	61.5	11/16	66.50
41 5/16 1/8	5/16	1/8	14	8.5	21.55	23	52	9/16	38.50
41 5/16 1/4	5/16	1/4	14	13	26.9	24.5	61.5	11/16	66.50
41 3/8 1/4	3/8	1/4	16	13	26.9	26.5	61.5	11/16	70.00

可供: / Available as:



节流阀安装后，管路可调向。  
The banjo ring swivels also after flow control installation.

技术规格

建议的连接管路：  
PA11、PA12、PA6、PE聚乙烯、PU聚氨酯 (95 Shore A)

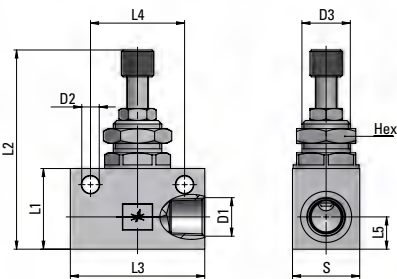
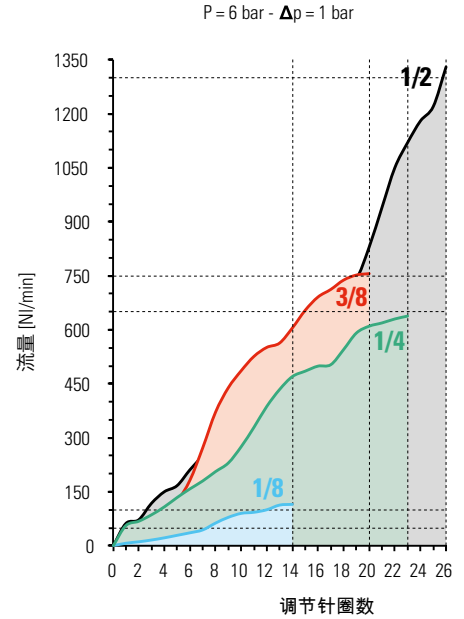
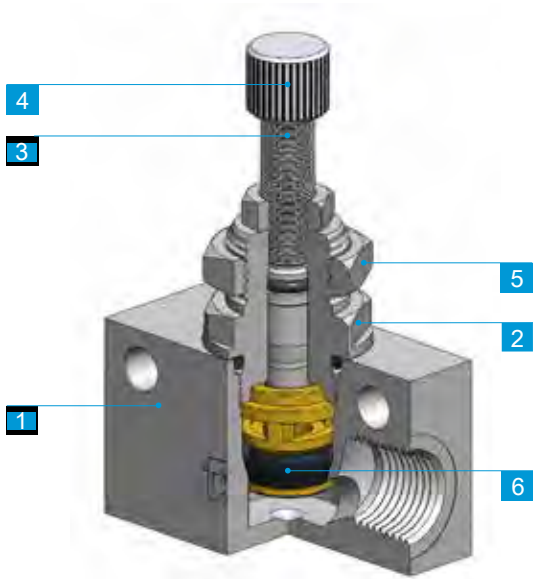
应用领域：  
空气经过过滤和润滑处理的气动系统。

DATA SHEET

Recommended tubings:  
PA11, PA12, PA6, Polyethylene PE, Polyurethane PU (95 Shore A)

Application field:  
pneumatic installations fed with filtered, lubricated air.

1	2	3	4	5	6
本体 Body	阀体 Valve	针阀 Needle	旋钮 Handwheel	螺母 Nut	密封圈 Seals
阳极氧化铝 Anodized aluminium	镀镍黄铜UNI EN 12164 CW614N Brass UNI EN 12164 CW614N Nickel plated				NBR NBR



类型	D1 NPTF	D2	D3	L1	L2	L3	L4	L5	S	HEX(mm)	oz $\Delta$
21 00 18	1/8	.177	M12x0.75	.827	1,909	1,339	.945	.315	.630	15	1,728
21 00 14	1/4	.256	M18x1.5	1,181	2,953	1,969	1,378	.472	.984	22	5,785
21 00 38	3/8	.256	M18x1.5	1,181	2,953	2,283	1,575	.472	.984	22	6,074
21 00 12	1/2	.256	M22x1.5	1,575	3,799	2,559	1,969	.669	1,181	26	10,617

可供 / Available as:

.../U = 单向  
.../U = One way



.../B = 双向  
.../B = Bidirectional



技术规格

建议的连接管路：  
取决于与节流阀相连的接头类型。

应用领域：  
空气经过过滤和润滑处理的气动系统。

DATA SHEET

Recommended tubings:  
according to the fitting connected to the flow control.

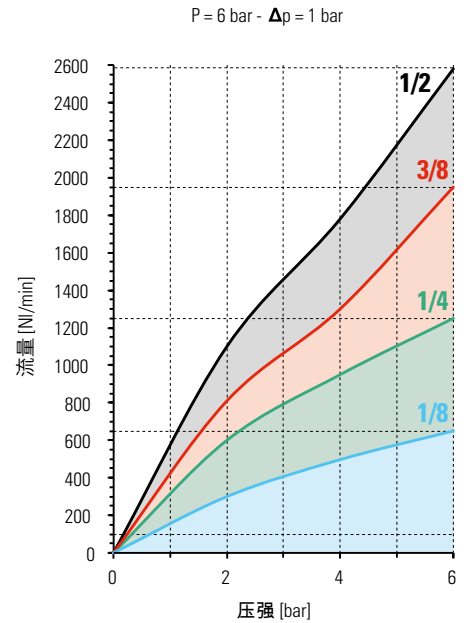
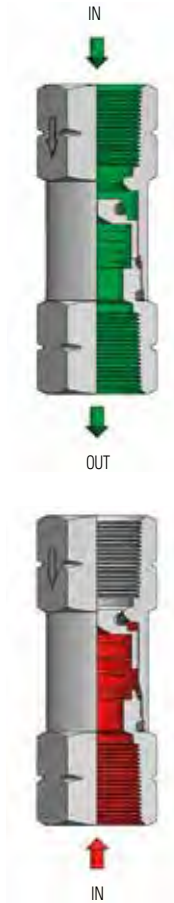
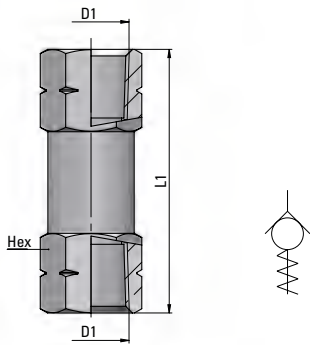
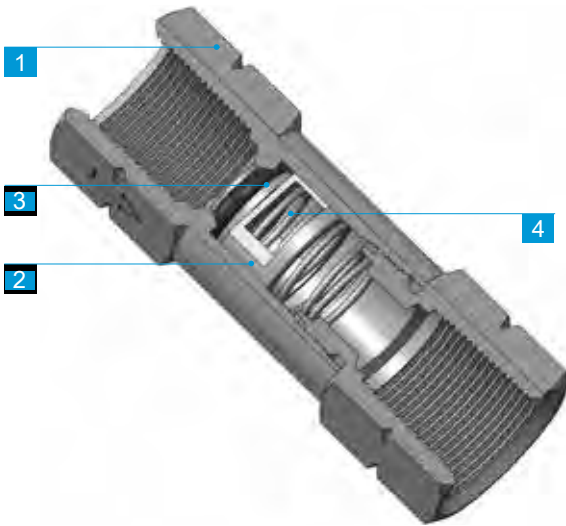
Application field:  
pneumatic installations fed with filtered, lubricated air.

# PV 23

## 止回阀

## Check Valve

1	2	3	4
本体 Body	阀体 Valve	弹簧 Spring	密封圈 Seals
镀镍黄铜UNI EN 12164 CW614N Brass UNI EN 12164 CW614N Nickel plated		AISI 302不锈钢 Stainless Steel AISI 302	NBR NBR



类型	D1 NPTF	L1	HEX (mm)	g ΔΔ
23 00 18	1/8	39.5	13	27.10
23 00 14	1/4	48	16	42.90
23 00 38	3/8	52	20	74.40
23 00 12	1/2	62	24	121.60

这些阀允许空气沿（阀体上的箭头指示）方向通过，反向截止

### 技术规格

建议的连接管路：  
取决于与阀相连的接头类型。

应用领域：  
空气经过过滤和润滑处理的气动系统。

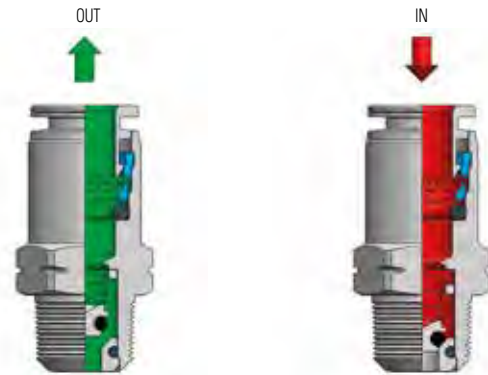
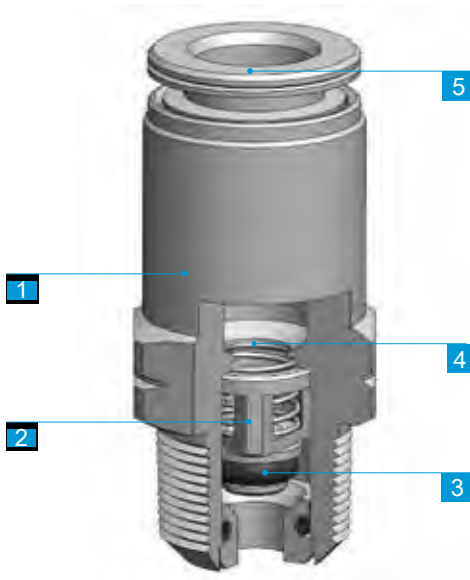
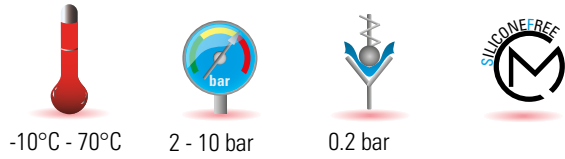
The flow is allowed only in one way (the arrow direction engraved on the body) and stopped in the reverse way.

### DATA SHEET

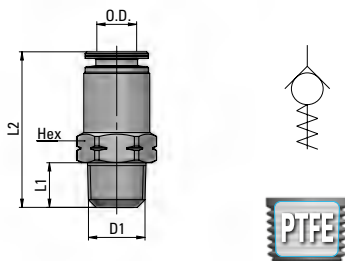
Recommended tubings:  
according to the fitting connected to the valve.

Application field:  
pneumatic installations fed with filtered, lubricated air.

1	2	3	4	5
本体 Body	阀体 Valve	密封圈 Seals	弹簧 Spring	快插接头 Push-in fittings
镀镍黄铜UNI EN 12164 CW614N Brass UNI EN 12164 CW614N Nickel plated		NBR NBR	AISI 302不锈钢 Stainless Steel AISI 302	PN系列快插接头 PN line push-in fittings



管端出气型  
Meter Out Version



管端出气型  
Meter Out Version

类型	OD管路	D1 NPTF	L1	L2	HEX (mm)	g	ΔΔ
33 1/4 1/8	1/4	1/8	.334	1,122	13	-	-
33 1/4 1/4	1/4	1/4	.511	1,26	14	-	-

这些阀允许空气沿（阀体上的箭头指示）方向通过，反向截止

#### 技术规格

建议的连接管路：  
取决于与阀相连的接头类型。

应用领域：  
空气经过过滤和润滑处理的气动系统。

The flow is allowed only in one way (the arrow direction engraved on the body) and stopped in the reverse way.

#### DATA SHEET

**Recommended tubings:**  
according to the fitting connected to the valve.

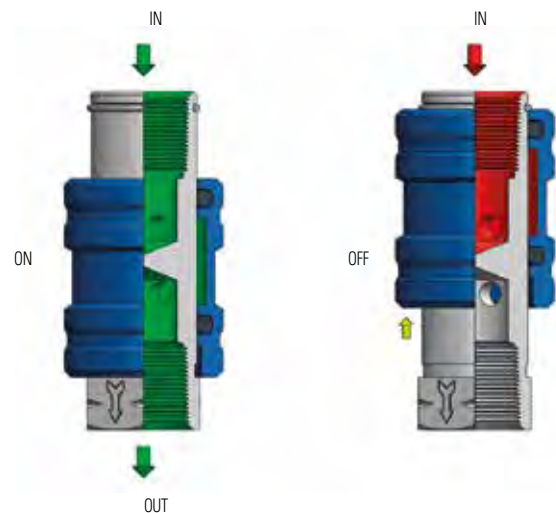
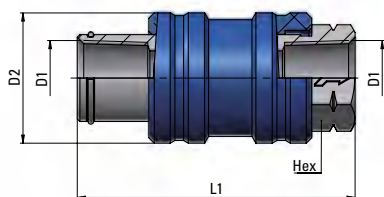
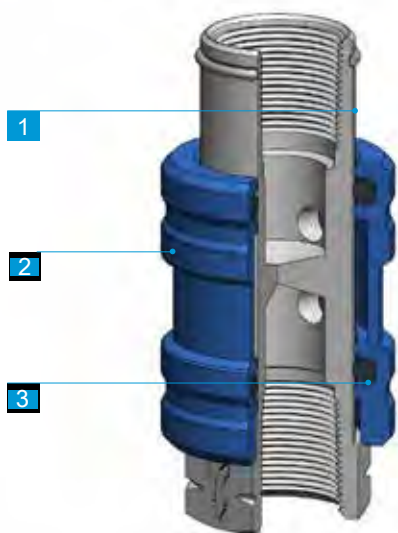
**Application field:**  
pneumatic installations fed with filtered, lubricated air.

# PV 26

滑阀

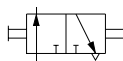
Slide Valve

1	2	3
本体 Body	轴套 Sleeve	密封圈 Seals
黄铜UNI EN 12164 CW614N镀铬 Brass UNI EN 12164 CW614N Chrome plated	阳极氧化铝 Anodised Aluminium	NBR NBR



流量 Flow rate (6 bar - Δp = 1 bar)	IN OUT 1g2
PV 26 00 18	620 NL/min
PV 26 00 14	920 NL/min
PV 26 00 38	1520 NL/min
PV 26 00 12	2720 NL/min

类型	D1 NPTF	D2	L1	HEX (mm)	g Δ
26 1/8 1/8	1/8	21	48.5	14	50.00
26 1/4 1/4	1/4	24	58	17	85.00
26 3/8 3/8	3/8	31	59	22	-
26 1/2 1/2	1/2	35	72.5	26	-



可用于气动系统的阻隔。滑套有开和关两个位置，当滑套背离六角方向滑动，阀门处于开的位置，气流按箭头方向流动；反之则阀门关闭，气源切断，并释放背压。

### 技术规格

建议的连接管路：  
取决于与阀相连的接头类型。

应用领域：  
空气经过过滤和润滑处理的气动系统。

The valve is used to section a pneumatic installation. Sliding the sleeve on the rod, both ON and OFF positions can be achieved. When the sleeve is against the rod hexagon, the flow goes in the arrow direction (ON); pushing it backwards the air supply is cut off and the installation is vented (OFF).

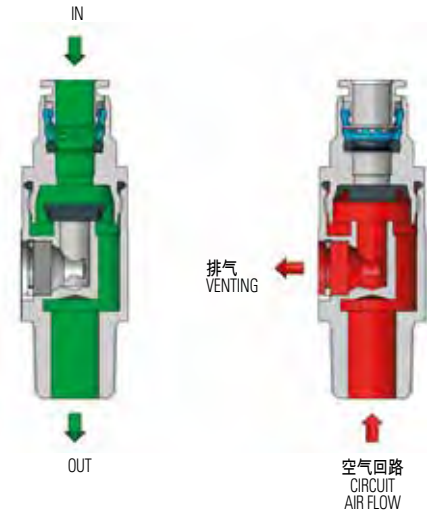
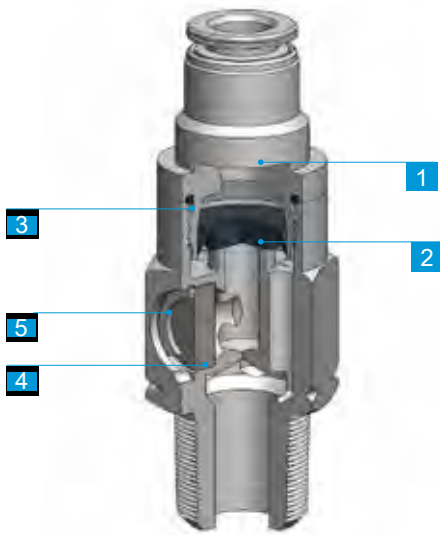
### DATA SHEET

Recommended tubings:  
according to the fitting connected to the valve.

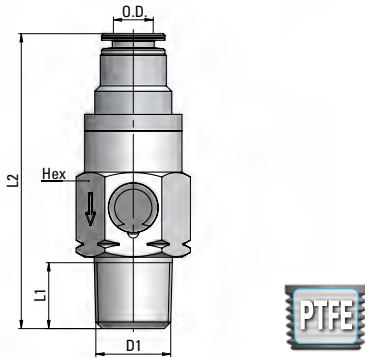
Application field:  
pneumatic installations fed with filtered, lubricated air.



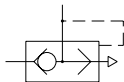
1	2	3	4	5
本体 Body	唇式密封圈 Lip ring	密封圈 Seals	消声器 Muffler	弹性环
阳极氧化铝 Anodised Aluminium	PU - NBR, 仅用于1/4 PU - NBR only for 1/4	NBR NBR	AISI 316不锈钢 Stainless Steel AISI 316	镀锌钢 C75 C75 Steel zinc coated



6 bar时流量 Flow rate at 6 bar	IN OUT 1g2	OUT VENT 2g3
1/4	1050 NL/min	660 NL/min
3/8	3000 NL/min	1900 NL/min
1/2	3420 NL/min	2280 NL/min



类型	OD管路	D1 NPTF	L1	L2	HEX (mm)	g Δ
22 1/4 1/4	1/4	1/4	13	53.5	18	19.70
22 3/8 3/8	3/8	3/8	13	66	27	-
22 1/2 1/2	1/2	1/2	17	79	34	-



断开供应时阀门能够迅速排出回路中空气；如果用于气缸，则可提高速度。

This valve can easily vent the circuit in case of an air supply failure. If assembled on the cylinder port, it increases the cylinder speed.

技术规格

建议的连接管路：  
取决于与阀相连的接头类型。

应用领域：  
空气经过过滤和润滑处理的气动系统。

DATA SHEET

Recommended tubings:  
according to the fitting connected to the valve.

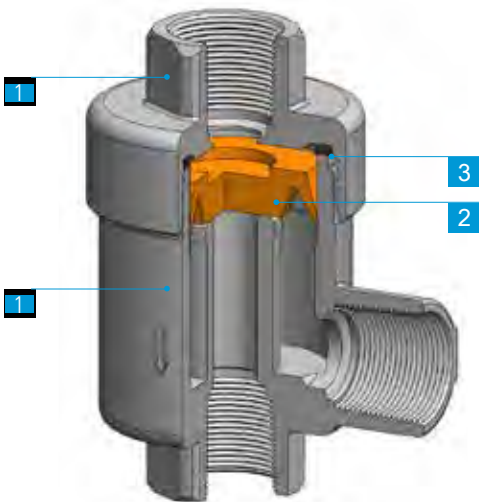
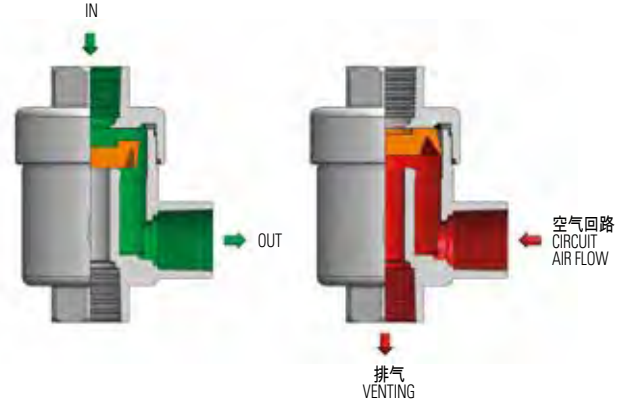
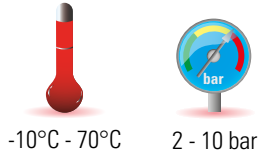
Application field:  
pneumatic installations fed with filtered, lubricated air.

# PV 27

## 快排阀

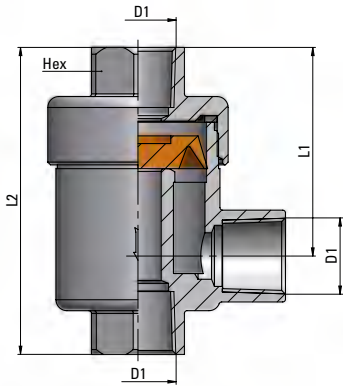
## Quick Exhaust Valve

1	2	3
本体 Body	唇式密封圈 Lip ring	垫圈 Gasket
镀镍黄铜UNI EN 12165 CW617N Brass UNI EN 12165 CW617N Nickel plated	PU - NBR , 仅用于M5 PU - NBR only for M5	PA6 PA6

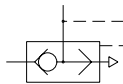


流量 Flow rate	IN OUT (6 bar - Δp = 1bar)	OUT VENT
	<b>1g2</b>	<b>2g3</b>
1/8	450 NL/min	760 NL/min
1/4	780 NL/min	1840 NL/min
3/8	1160 NL/min	2600 NL/min
1/2	1260 NL/min	5300 NL/min
3/4 (3 bar)	1530 NL/min	3300 NL/min

\*3 bar时流量 - Flow rate at 3 bar



类型	D1 NPTF	L1	L2	HEX (mm)	oz ΔΔ
27 00 18	1/8	27	42	15	95.00
27 00 14	1/4	35	54	19	158.00
27 00 38	3/8	35	54	19	160.00
27 00 12	1/2	45	72	26	318.50
27 00 34	3/4	53	89	32	511.00



断开供应时阀门能够迅速排出回路中空气；如果用于气缸，则可提高速度。

This valve can easily vent the circuit in case of an air supply failure. If assembled on the cylinder port, it increases the cylinder speed.

### 技术规格

建议的连接管路：  
取决于与阀相连的接头类型。

应用领域：  
空气经过过滤和润滑处理的气动系统。

### DATA SHEET

Recommended tubings:  
according to the fitting connected to the valve.

Application field:  
pneumatic installations fed with filtered, lubricated air.

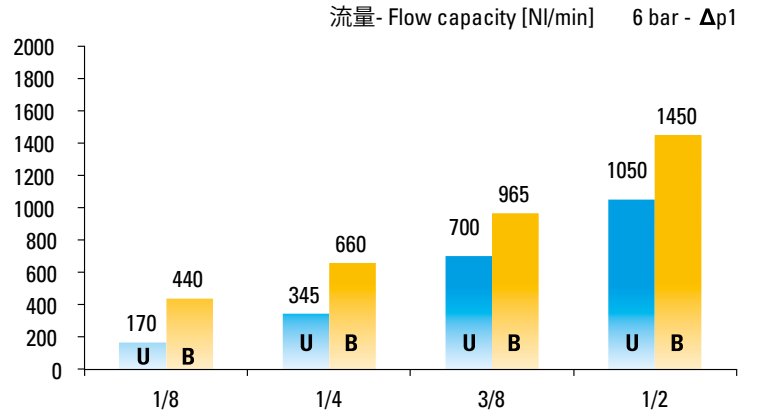
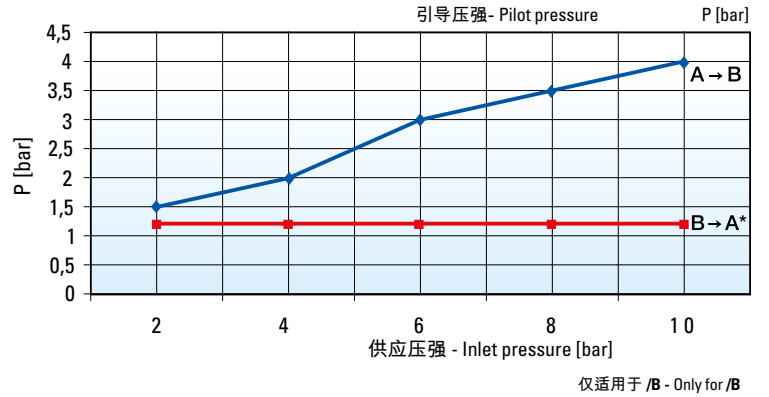
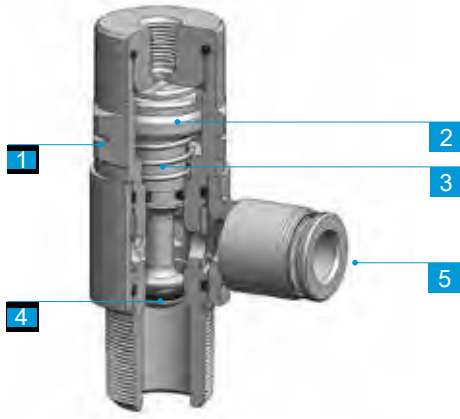


# PV 45

## 先导式单向阀

## Pilot Operated Check Valve

1	2	3	4	5
本体 Body	活塞 Piston	弹簧 Spring	密封圈 Seals	快插接头 Push-in fittings
镀镍黄铜UNI EN 12164 CW614N Brass UNI EN 12164 CW614N Nickel plated	AISI 304不锈钢 Stainless Steel AISI 304	AISI 302不锈钢 Stainless Steel AISI 302	NBR-PU NBR-PU	PN系列快插接头 PN line push-in fittings



先导式单向阀单向阀如果成对安装在缸上，当控制压力突然下降时，则能确保防止气缸运动。  
通过解锁装置，可以手动重置活塞行程，这在调整阶段或缺少空气时特别有用。

Should a sudden pressure failure happen, if the stop valves are assembled in pairs on the cylinder, the stop valves make sure, that the cylinder piston rapidly stops. By operating the override device, it is possible to reset manually the piston stroke, which is particularly important during a set-up phase or in case of air shortage.

### 技术规格

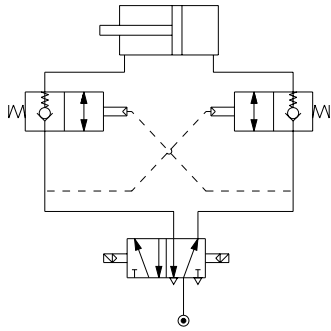
建议的连接管路：  
取决于与阀相连的接头类型。

应用领域：  
空气经过过滤和润滑处理的气动系统。

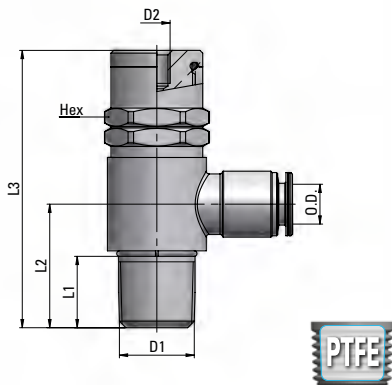
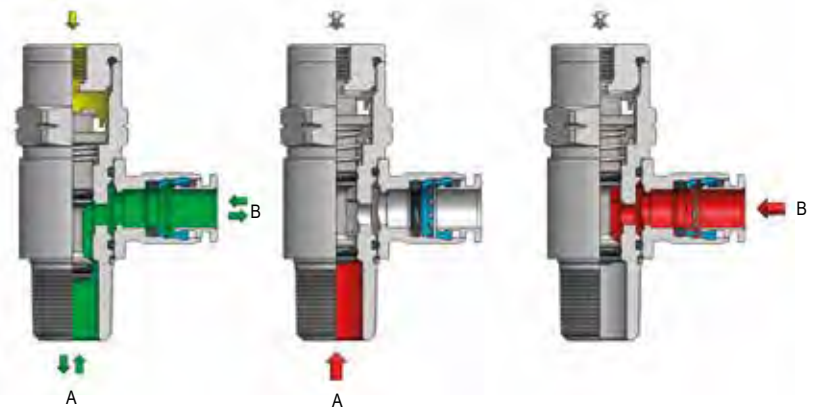
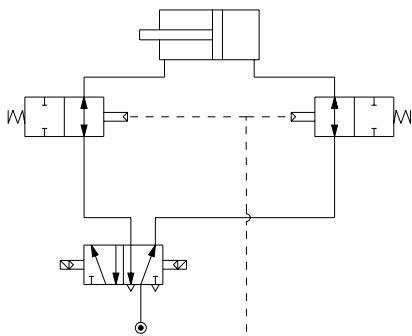
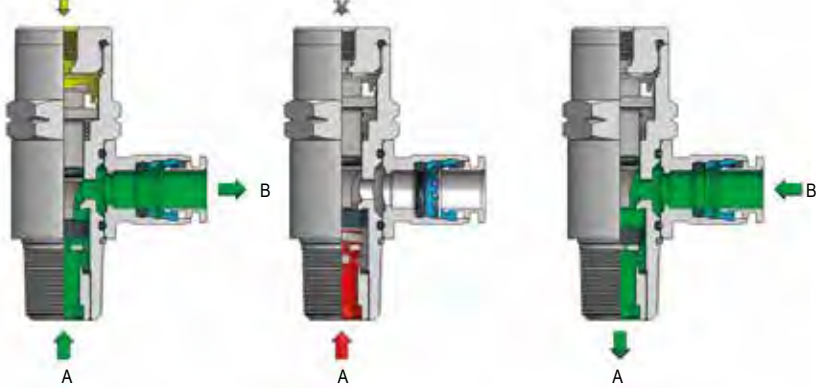
### DATA SHEET

Recommended tubings:  
according to the fitting connected to the valve.

Application field:  
pneumatic installations fed with filtered, lubricated air.



PILOT PRESSURE (P)

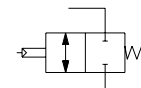
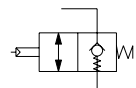


类型	OD管路	D1 NPTF	D2	L1	L2	L3	HEX (mm)	g
45 1/4 1/8	1/4	1/8	10-32	8.4	17	44.3	13	40.70
45 1/4 1/4	1/4	1/4	10-32	13	21.5	50.5	17	71.70
45 3/8 3/8	3/8	3/8	1/8	13	25	58.5	20	118.60
45 1/2 1/2	1/2	1/2	1/8	17	30.7	67.7	25	198.40

可用版本：

.../U = 单向  
One way

.../B = 双向  
Bidirectional



# PV 46

气动开关

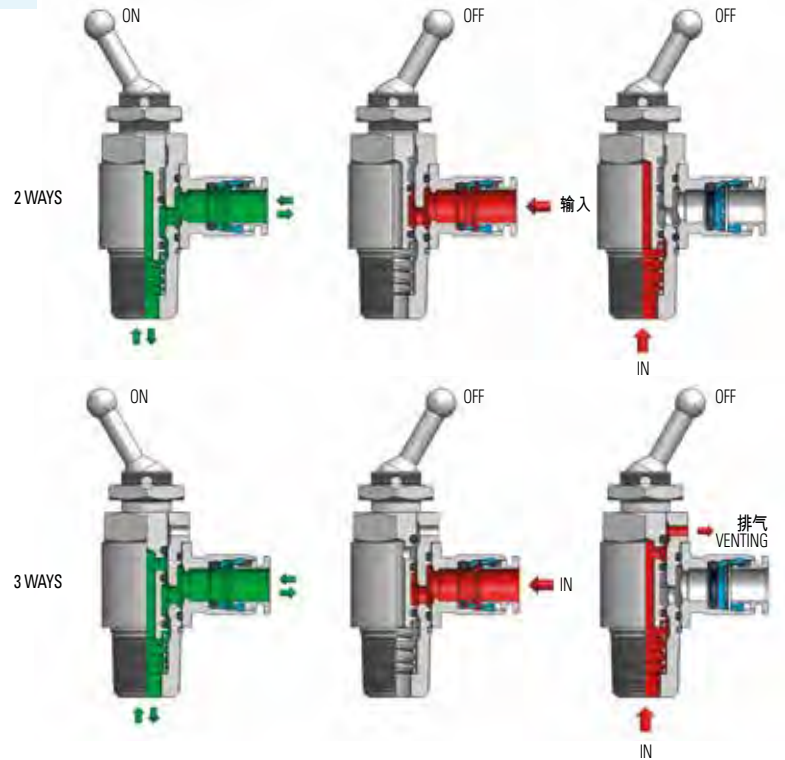
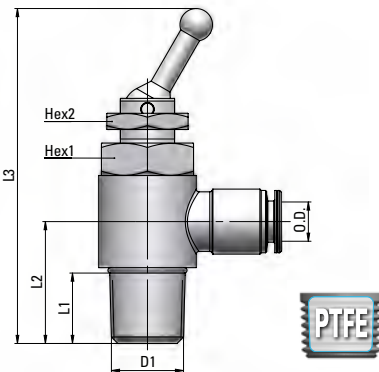
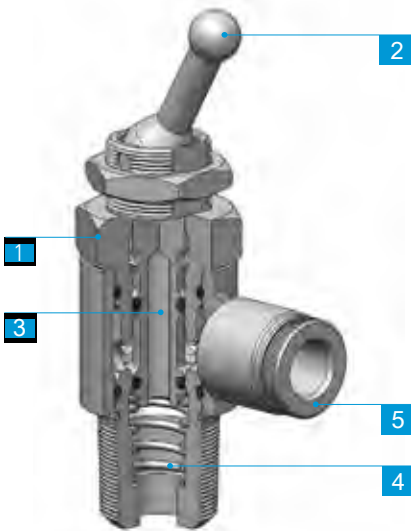
Pneumatic Switch

1	2	3	4	5
本体 Body	手柄 Handle	密封圈 Seals	弹簧 Spring	快插接头 Push-in fittings
镀镍黄铜UNI EN 12164 CW614N Brass UNI EN 12164 CW614N Nickel plated		NBR NBR	AISI 302不锈钢 Stainless Steel AISI 302	PN系列快插接头 PN line push-in fittings

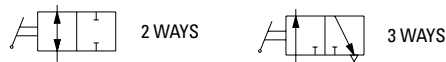


流量  
Flow rate (6 bar - Δp = 1bar)

1/8	235 NL/min
1/4	265 NL/min



类型	OD管路	D1 NPTF	L1	L2	L3	HEX1 (mm)	HEX2 (mm)	g
46 1/4 1/8	1/4	1/8	8.4	15	57.5	14	15	39.80
46 1/4 1/4	1/4	1/4	13	20.5	65	17	15	63.30



这些阀能够通过简单操作控制杆的方式截断回路（开/关）；有二通阀和三通阀两种，通过使用三通阀，除了可以断开回路外，还可以进行排气。

The PV 46 is a pneumatic switch. It is available in a 2/2 and 3/2-way version. The goal of the 2/2 way switch is to cut off the flow in the circuit whenever needed by simply operating the lever. The 3/2 way valve cuts off the flow and vents to atmosphere the terminal part of the circuit.

## 技术规格



建议的连接管路：  
取决于与阀相连的接头类型。

应用领域：  
空气经过过滤和润滑处理的气动系统。

## DATA SHEET

Recommended tubings:  
according to the fitting connected to the valve.

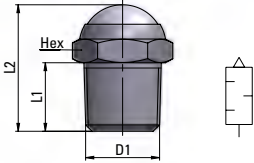
Application field:  
pneumatic installations fed with filtered, lubricated air.

	本体 Body	消声器 Muffler		
PV11-FE	镀镍黄铜UNI EN 12164 CW614N Brass UNI EN 12164 CW614N Nickel plated	AISI 304不锈钢 Stainless Steel AISI 304	0 - 12 bar	-10 - 70 °C
PV11-BE	黄铜UNI EN 12164 CW614N Brass UNI EN 12164 CW614N	烧结青铜 Sintered bronze	0 - 12 bar	-10 - 70 °C

## PV 11-FE

黄铜-不锈钢消音器

Air Muffler with Stainless Steel Wire

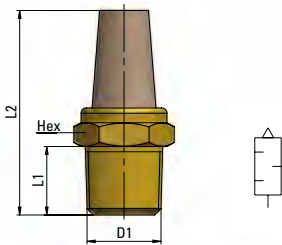


类型	D1 NPT	L1	L2	HEX	g $\Delta\Delta$
11 00 18 -FE	1/8	6	15	13	5.40
11 00 14 -FE	1/4	11	22	16	12.50
11 00 38 -FE	3/8	11	23	19	19.00
11 00 12 -FE	1/2	13	25	24	29.00

## PV 11-BE

烧结青铜消音器

Sintered Bronze Air Muffler



类型	D1 NPT	L1	L2	HEX	g $\Delta\Delta$
11 00 18 -BE	1/8	6	29	13	9
11 00 14 -BE	1/4	11	36	16	17
11 00 38 -BE	3/8	11	43	19	29
11 00 12 -BE	1/2	13	49	24	44