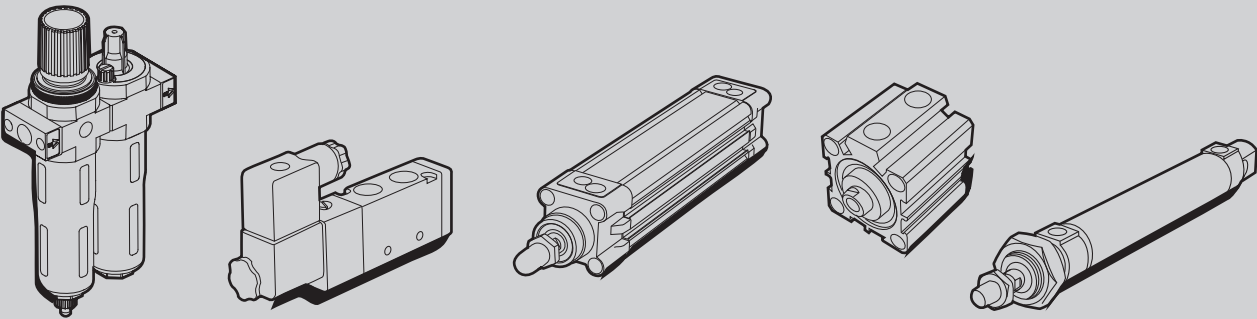


Thanks to browse

Welcome to FORWARD



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Hydraulic Component

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Company introductions 公司简介

In **FORWARD**,Driving force has always been our vision and prospect: We own the courage to challenge mediocrity to create surprising products.Depend on our great perseverance ,we promote the development of Chinese fluid industry.

Welcome to **FORWARD!**

在**FORWARD**，我们的推动力一直是我们的愿景：我们具备挑战平庸的勇气，以求创造令人惊喜的产品。凭借对产品、客户坚持不懈和永不放弃的精神，致力于推动中国流体行业的卓越发展。

FORWARD 欢迎您！



三联件 Filter,Regulator,Lubricator / OU

型号代码 Type codes



OU 型三连件由一个OFR 型过滤减压阀和一个OL型油雾器组成, 这些元件可以分别订购, 分水过滤器能过滤空气中的液态油、冷凝水及杂质, 对于特殊应用场合, $5\mu\text{m}$ 滤芯容易替换 $40\mu\text{m}$ 的标准滤芯。

即使输入压力与压缩空气消耗产生系统波动，减压阀也能保证其设定的工作压力非常稳定。

油雾器可以均匀地向过滤空气中喷油雾，其油雾量与空气流量成正比例，并可不停气加油，可通过调节螺钉调节滴油量，通常每1000L空气中含有1-12滴就足够了。

The OU consisted of OFR and OL, each unit can be ordered separately.

The OF with water separator cleans the compressed air of fluid oil, condensation and dirt particles. For special application, the standard 40µm filter element may easily be replaced by a 5µm filter element.

The OR maintain inputting constant operating pressure despite fluctuation in line pressure and the amount of air consumed.

The proportional lubricator adds a regulated quantity of oil to the filtered air. The oil-mist content proportional to the flow and oil can be added during operation. The oil drip rate is controlled by the adjustable bolt. Normally, 1 to 12 drops / 1000L of the air is sufficient.

基本功能 Basic function	
OU	三联件 Filter,Regulator,Lubricator
接口尺寸 Connection	
1/8	G1/8
1/4	G1/4
3/8	G3/8
1/2	G1/2
3/4	G3/4
1	G1
压力调节范围 Pressure regulation range	
	0.5...12bar
7	0.5...7bar
过滤等级 Grade of Filtration	
	40 μ m
5M	5 μ m
压力表 Pressure gauge	
	带压力表 With pressure gauge
0	不带压力表 Without pressure gauge
规格 Size	
MINI	小型
MIDI	中型
MAXI	大型
排水阀 Condensate drain	
	手动 Turned manually
S	半自动 Semi-automatic
A	自动 Fully automatic

三联件 Filter,Regulator,Lubricator / OU

技术参数 Technical data



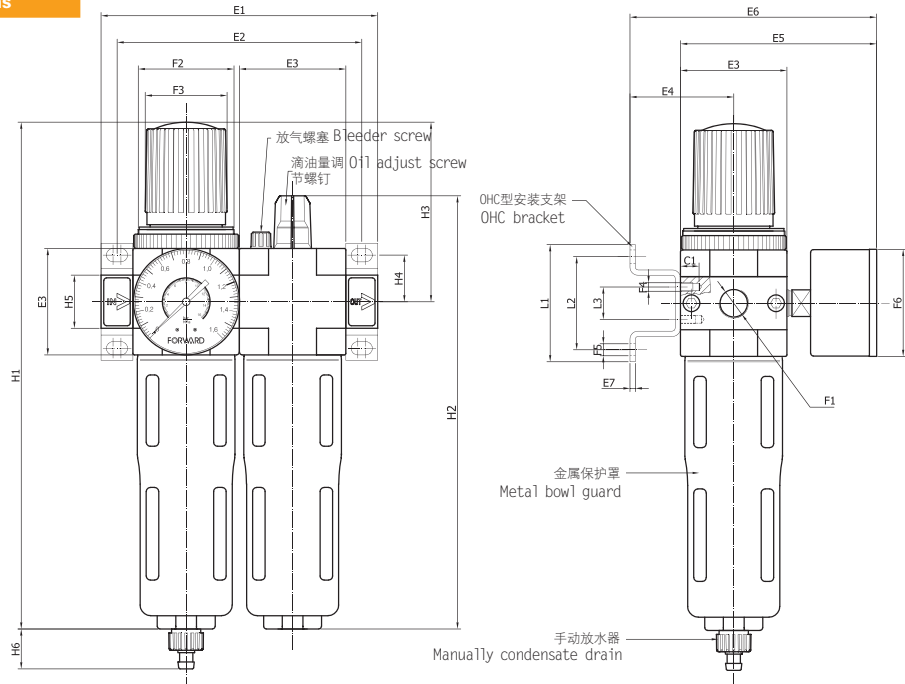
主要技术参数 General technical data									
规格 Size		MINI			MIDI			MAXI	
工作介质 Medium		压缩空气 Compressed air							
结构特点 Features of structure		带水分离器的烧结式过滤器；MINI/MIDI：膜片式减压阀；MAXI：活塞式减压阀；油雾型自动可节节流式 Sintered filter with water separator；MINI/MIDI：Diaphragm type regulator；MAXI：Piston regulator；Direct constant-density lubricator							
安装方式 Mounting type		管式安装或支架安装 Pipe mounting or foot mounting							
安装位置 Assembly position		垂直方向±5° Vertical ±5°							
连接尺寸 Connection		G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1
标准额定流量 Standard nominal flow rate	0FR-... (-A)	700	1000	1200	2000	2600	2600	7000	8000
	0FR-...-7- (-A)	800	1300	1500	2500	2800	2800	8500	8700
	0FR-...-5M- (-A)	600	850	1050	1700	1800	2100	6500	7200
输入压力 Primary pressure	手动排水阀 Manual condensate drain	1~16bar							
	自动排水阀 Automatic condensate drain	1.5~12bar							
工作压力 Working pressure		0.5~12bar / 0.5~7bar							
最小起雾流量 Min. Standard nominal flow rate		3 l/min			6 l/min			10 l/min	
过滤精度 Grade of filtration		40 μm / 5 μm							
最大凝度容量 Capacity of condensate fluid		22ml			43ml			80ml	
温度范围 Temperature range		0~60℃							
材料 Materials information		壳体：压铸锌；过滤杯和油杯：PC；金属保护罩：铝合金；密封：丁腈橡胶；调压手轮：POM Housing：Zinc die-casting；Filter bowl and oil bowl：PC；Metal bowl guard：Aluminium alloy；Sealing：NBR；Adjusting knob：POM							

三联件 Filter,Regulator,Lubricator / OU

技术参数 Technical data

FORWARD

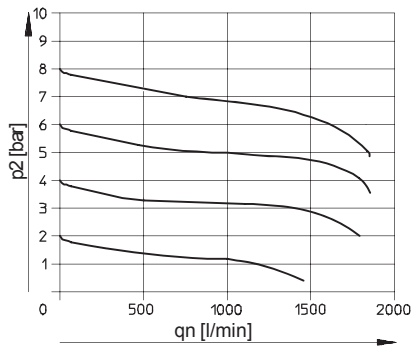
尺寸图 Dimensions



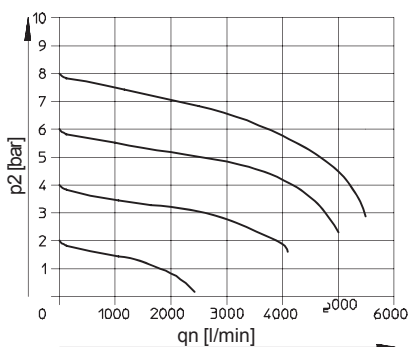
型号 Model	E1	E2	E3	E4	E5	E6	E7	F1	F2	F3	F4	F5	F6	L1	L2	L3	H1	H2	H3	H4	H5	H6
OU-...-MINI	104	92	40	39	76	95	2	G1/8,G1/4,G3/8	M36*1.5	31	M4	4.5	40	44	35	11	194	169	69	17.5	20	15
OU-...-MIDI	140	125	55	47	93	112	3	G1/8,G1/2,G3/4	M52*1.5	50	M5	5.5	52	71	60	22	250	206	97	24.5	32	15
OU-...-MAXI	162,182	146,157	66	53	104	124	3	G3/4,G1	M36*1.5	31	M5	5.5	63	71	60	22	252	223	80	24.5	32,40	15

标准额定流量qn和输出压力p2的关系 Standard flow rate qn as a function of the output pressure p2

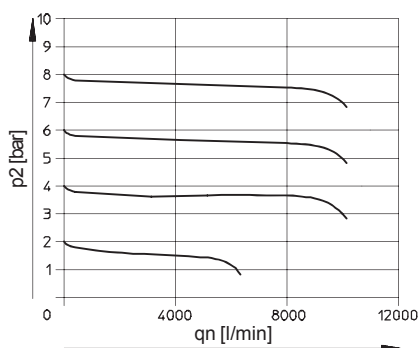
OU-1/4-MINI



OU-1/2-MIDI



OU-1-MAXI



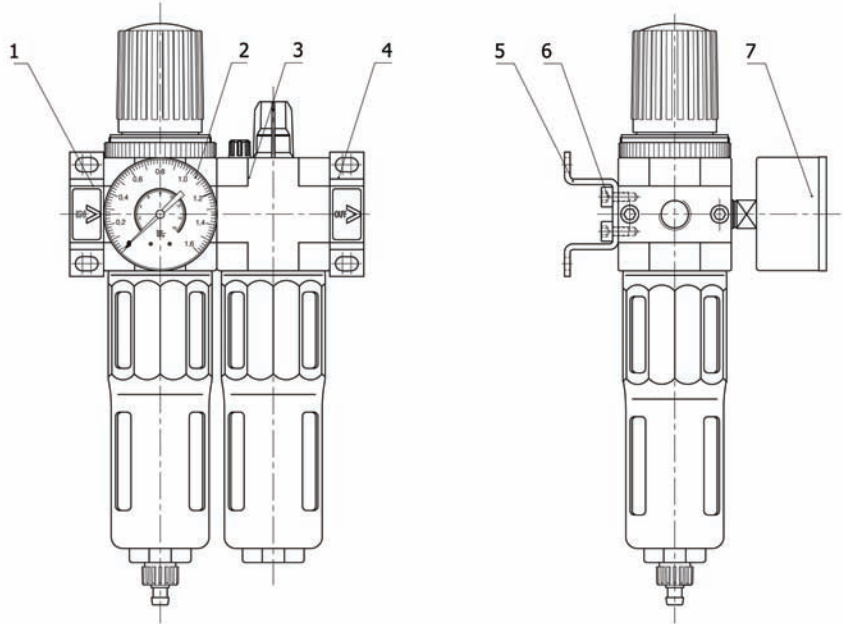
*输入压力 Primary pressure: p1=10 bar

三联件 Filter,Regulator,Lubricator / OU

技术参数 Technical data

FORWARD

内部结构图 Inner structure



序号 NO.	名称 Item	材料 Material	序号 NO.	名称 Item	材料 Material
1	分气块-IN Flange - IN	锌合金 Zinc alloy	5	支架 Bracket	SPCC
2	过滤减压阀 Filter + Regulator		6	内六角螺丝 Allen screw	S35C
3	油雾器 Lubricator		7	压力表 Pressure guage	
4	分气块-OUT Flange - OUT	锌合金 Zinc alloy			

过滤减压阀 Filter regulator / OFR

型号代码 Type codes

FORWARD



过滤器和减压阀组成一个单独的装置，能过滤空气中的液态油、冷凝水及杂质，对于特殊应用场合，5μm 滤芯容易替换40μm的标准滤芯。即使输入压力与压缩空气消耗产生系统波动，减压阀也能保证其设定的工作压力非常稳定。

Filter and pressure regulator combine a single unit ,and cleans the compressed air of fluid oil,condensation and dirt particles.For special application,the standard 40μm filter element may easily be replaced by a 5 μm filter element. The OR maintain imputting constant operating pressure despite fluctuation in line pressure and the amount of air consumed.

OFR - 1/4 - - - MINI -

基本功能 Basic function

OFR | 过滤减压阀 Filter regulator

接口尺寸 Connection

1/8 | G1/8

1/4 | G1/4

3/8 | G3/8

1/2 | G1/2

3/4 | G3/4

1 | G1

压力调节范围 Pressure regulation range

| 0.5...12bar

7 | 0.5...7bar

过滤等级 Grade of Filtration

| 40 μ m

5M | 5 μ m

压力表 Pressure gauge

| 带压力表 With pressure gauge

0 | 不带压力表 Without pressure gauge

规格 Size

MINI | 小型

MIDI | 中型

MAXI | 大型

排水阀 Condensate drain

| 手动 Turned manually

S | 半自动 Semi-automatic

A | 自动 Fully automatic

过滤减压阀 Filter regulator / OFR

技术参数 Technical data

FORWARD

主要技术参数 General technical data									
Size		MINI		MIDI				MAXI	
工作介质 Medium		压缩空气 Compressed air							
结构特点 Features of structure		带水分离器的烧结式过滤器；MINI/MIDI：膜片式减压阀；MAXI：活塞式减压阀 Sintered filter with water separator；MINI/MIDI：Diaphragm type regulator；MAXI：Piston regulator							
安装方式 Mounting type		管式安装或支架安装 Pipe mounting or foot mounting							
安装位置 Assembly position		垂直方向±5° Vertical±5°							
连接尺寸 Connection		G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1
标准额定流量 Standard nominal flow rate	OFR-...（-A）	750	1400	1600	3100	3400	3400	9000	10000
	OFR-...-7-（-A）	900	1500	1700	3400	3900	4000	9500	16000
	OFR-...-5M-（-A）	650	1200	1350	2400	2500	2600	7300	7600
输入压力 Primary pressure	手动排水阀 Manual condensate drain	1~16bar							
	自动排水阀 Automatic condensate drain	1.5~12bar							
工作压力 Working pressure		0.5~12bar / 0.5~7bar							
过滤精度 Grade of filtration		40μm / 5μm							
最大凝度容量 Max.condensate capacity		22ml			43ml			80ml	
温度范围 Temperature range		0~60℃							
材料 Materials information		壳体：压铸锌；过滤杯：聚碳酸酯；金属保护罩：铝合金；密封：丁腈橡胶；调压手轮：POM Housing：Zinc die-casting；Filter bowl：PC；Metal bowl guard：Aluminium alloy；Sealing：NBR；Adjusting knob：POM							

技术参数 Technical data

尺寸图 Dimensions



金属保护罩
Metal bowl guard

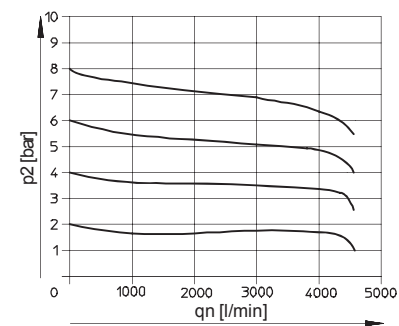
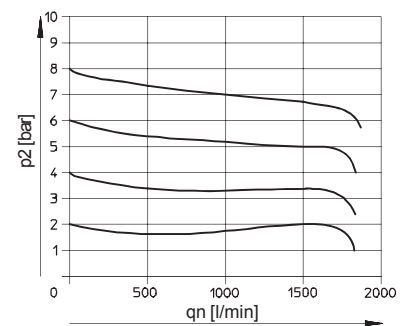
手动放水器
Manually condensate drain

型号 Model	E3	E4	E5	E6	E8	E9	F1	F2	F3Ø	F4	F5Ø	F6Ø	L1	L2	L3	H1	H3	H4	H5	H6
OFR-...-MINI	40	39	76	95	64	52	G1/8,G1/4,G3/8	M36*1.5	31	M4	4.5	40	44	35	11	194	69	17.5	20	15
OFR-...-MIDI	55	47	93	112	85	70	G1/8,G1/2,G3/4	M52*1.5	50	M5	5.5	52	71	60	22	250	98	24.5	32	15
OFR-...-MAXI	66	53	104	124	96,116	80,91	G3/4,G1	M36*1.5	31	M5	5.5	63	71	60	22	252	80	24.5	32,40	15

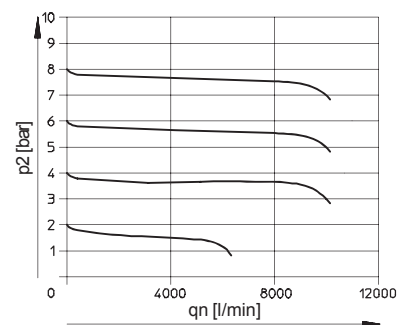
标准额定流量 q_n 和输出压力 p_2 的关系 Standard flow rate q_n as a function of the output pressure p_2

	OFR-1/4-MINI	OFR-1/2-MIDI
--	--------------	--------------

OFR-1/2-MIDI



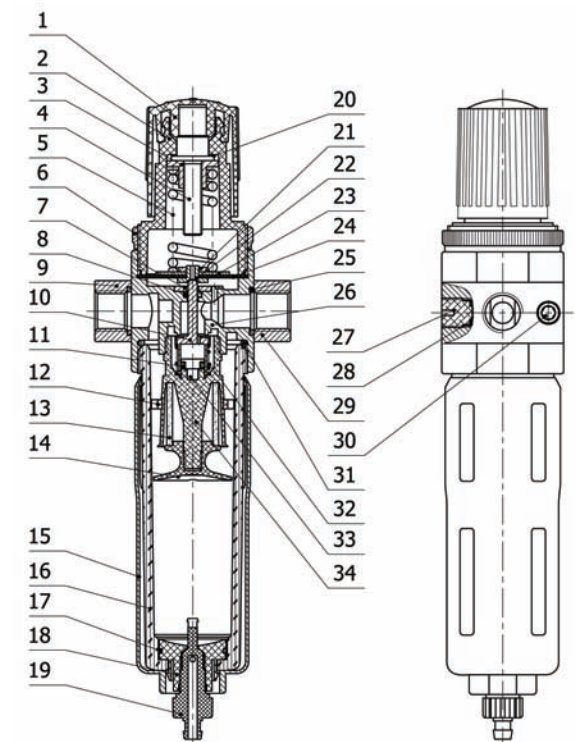
OFR-1-MAXI



输入压力 $p_1=10 \text{ bar}$

技术参数 Technical data

内部结构图 Inner structure

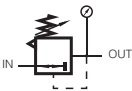


序号 NO.	名称 Item	材料 Material	序号 NO.	名称 Item	材料 Material
1	调压手轮 Pressure knob	POM	21	OR垫片 Sheet	NBR
2	阀盖 Regulator cap	POM	22	溢流阀座 Overflow base	6061-T6
3	主调压六角螺帽 Regulator nut	S35C	23	膜片托盘 One part of diaphragm	SPCC
4	调压螺杆 Adjusting spindle	S35C	24	膜片 Diaphragm	NBR+尼龙网
5	弹簧 Pressure spring	SWC	25	O型圈 O-ring	NBR
6	滚花并帽 Fixed ring	6061-T6	26	OR阀体 OR Body	锌合金 Zinc alloy
7	膜片挡圈 One part of membrane	PA6+G15	27	丝堵 Plug	POM
8	O型圈 O-ring	NBR	28	O型圈 O-ring	NBR
9	分气块-IN Flange - IN	锌合金 Zinc alloy	29	分气块-OUT Flange - OUT	锌合金 Zinc alloy
10	阀芯 Spool	黄铜 Brass	30	内六角螺丝 Allen screw	S35C
11	O型圈 O-ring	NBR	31	O型圈 O-ring	NBR
12	旋风叶轮 Whirl wind impeller	POM	32	复位弹簧 Spring	SWPB
13	滤芯 Filter element	聚乙烯 PE	33	扣钉 Fasteners	黄铜 Brass
14	挡水板 Manger	POM	34	滤芯座 Filter element base	POM
15	保护罩 Metal bowl guard	铝合金 Aluminium alloy			
16	水杯 Filter bowl	PC			
17	O型圈 O-ring	NBR			
18	内接头 Inner joint	POM			
19	放水器 Condensate drain	POM			
20	耐磨垫片 Wearing sheet	绝缘胶板 Insulation sheet			

减压阀 Regulator / OR

型号代码 Type codes

FORWARD



即使输入压力与压缩空气消耗产生系统波动，减压阀也能保证其设定的工作压力非常稳定。

The OR maintain imputting constant operating pressure despite fluctuation in line pressure and the amount of air consumed.

OR		1/4				MINI
基本功能 Basic function						
OR	减压阀 Regulator					
接口尺寸 Connection						
1/8	G1/8					
1/4	G1/4					
3/8	G3/8					
1/2	G1/2					
3/4	G3/4					
1	G1					
压力调节范围 Pressure regulation range						
	0.5...12bar					
7	0.5...7bar					
过滤等级 Grade of Filtration						
	40 μ m					
5M	5 μ m					
压力表 Pressure gauge						
	带压力表 With pressure gauge					
0	不带压力表 Without pressure gauge					
规格 Size						
MINI	小型					
MIDI	中型					
MAXI	大型					

减压阀 Regulator / OR

技术参数 Technical data

FORWARD

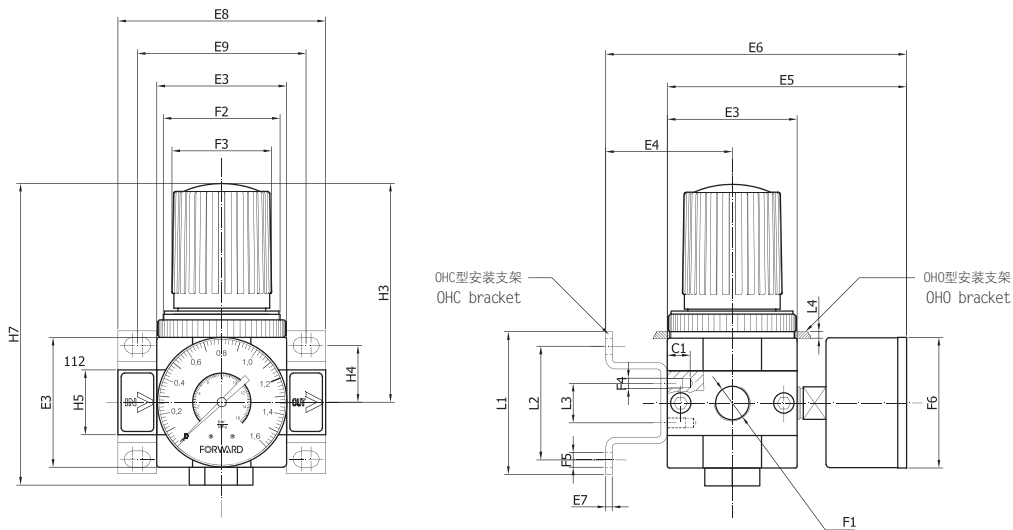
主要技术参数 General technical data									
规格 Size		MINI			MIDI			MAXI	
工作介质 Medium		过滤压缩空气（润滑或未润滑）Filtered,compressed air (lubricated or unlubricated)							
结构特点 Features of structure		MINI/MIDI: 膜片式减压阀 Diaphragm type regulator; MAXI: 活塞式减压阀 Piston regulator							
安装方式 Mounting type		管式安装、支架安装或面板式安装 Pipe / Foot / Plate mounting							
安装位置 Assembly position		任意 Any							
连接尺寸 Connection		G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1
标准额定流量 Standard nominal flow rate	OR-...	800	1500	1700	3200	3500	3500	11000	11500
	OR-...-7-	1000	1600	1800	3300	4000	4500	12000	12500
输入压力 Primary pressure		1~16bar							
工作压力 Working pressure		0.5~12bar / 0.5~7bar							
温度范围 Temperature range		0~60℃							
材料 Materials information		壳体: 压铸锌; 密封: 丁腈橡胶; 调压手轮: POM Housing: Zinc die-casting; Sealing: NBR; Adjusting knob: POM							

减压阀 Regulator / OR

技术参数 Technical data

FORWARD

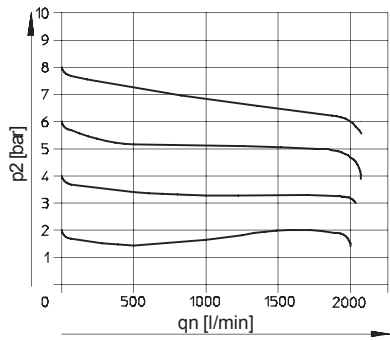
尺寸图 Dimensions



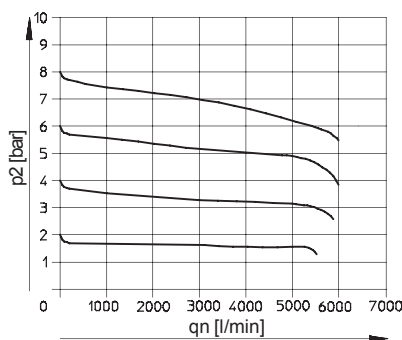
型号 Model	E3	E4	E5	E6	E8	E9	F1	F2	F3Ø	F4	F5Ø	F6Ø	L1	L2	L3	L4	H3	H4	H7
OR-...-MINI	40	39	76	95	64	52	G1/8,G1/4,G3/8	M36*1.5	31	M4	4.5	40	44	35	11	Max.3	69	17.5	96
OR-...-MIDI	55	47	93	112	85	70	G1/8,G1/2,G3/4	M52*1.5	50	M5	5.5	52	71	60	22	Max.5	98	24.5	96
OR-...-MAXI	66	53	104	124	96,116	80,91	G3/4,G1	M36*1.5	31	M5	5.5	63	71	60	22	Max.4	80	24.5	96

标准额定流量qn和输出压力p2的关系 Standard flow rate qn as a function of the output pressure p2

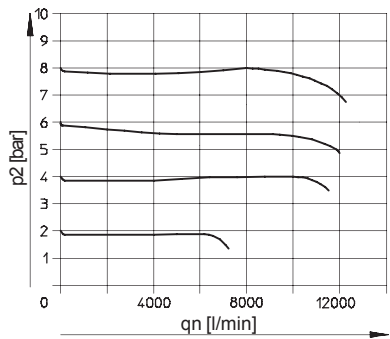
OR-1/4-MINI



OR-1/2-MIDI



OR-1-MAXI



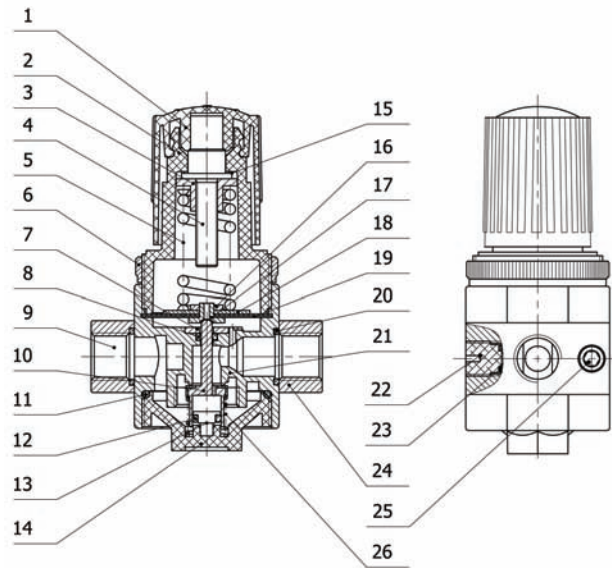
* 输入压力 Primary pressure: p1=10 bar

减压阀 Regulator / OR

技术参数 Technical data

FORWARD

内部结构图 Inner structure



序号 NO.	名称 Item	材料 Material	序号 NO.	名称 Item	材料 Material
1	调压手轮 Pressure knob	POM	16	OR垫片 Sheet	NBR
2	阀盖 Regulator cap	POM	17	溢流阀座 Overflow base	6061-T6
3	主调压六角螺帽 Regulator nut	S35C	18	膜片托盘 One part of diaphragm	SPCC
4	调压螺杆 Adjusting spindle	S35C	19	膜片 Diaphragm	NBR+尼龙网
5	弹簧 Pressure spring	SWC	20	O型圈 O-ring	NBR
6	滚花并帽 Fixed ring	6061-T6	21	OR阀体 OR Body	锌合金 Zinc alloy
7	膜片挡圈 One part of membrane	NBR	22	丝堵 Plug	POM
8	O型圈 O-ring	NBR	23	O型圈 O-ring	NBR
9	分气块-IN Flange - IN	锌合金 Zinc alloy	24	分气块-OUT Flange - OUT	锌合金 Zinc alloy
10	阀芯 Spool	黄铜 Brass	25	内六角螺丝 Allen screw	S35C
11	O型圈 O-ring	NBR	26	复位弹簧 Spring	SWPB
12	O型圈 O-ring	NBR			
13	扣钉 Fasteners	黄铜 Brass			
14	锁紧盖 Locker cover	锌合金 Zinc alloy			
15	耐磨垫片 Wearing sheet	绝缘胶板 Insulation sheet			

过滤器 Filter / OF

型号代码 Type codes

FORWARD



分水过滤器能过滤空气中的液态油、冷凝水及杂质，对于特殊应用场合，5μm滤芯容易替换40μm的标准滤芯。

The OF with water separator cleans the compressed air of fluid oil,condensation and dirt particles,for special application,the standard 40μm filter element may easily be replaced by a 5μm filter element.

基本功能 Basic function	
OF	过滤器 Filter
接口尺寸 Connection	
1/8	G1/8
1/4	G1/4
3/8	G3/8
1/2	G1/2
3/4	G3/4
1	G1
过滤等级 Grade of Filtration	
	40 μ m
5M	5 μ m
规格 Size	
MINI	小型
MIDI	中型
MAXI	大型
排水阀 Condensate drain	
	手动 Turned manually
S	半自动 Semi-automatic
A	自动 Fully automatic

OF	-	1/4	-		-	MINI	-	
----	---	-----	---	--	---	------	---	--

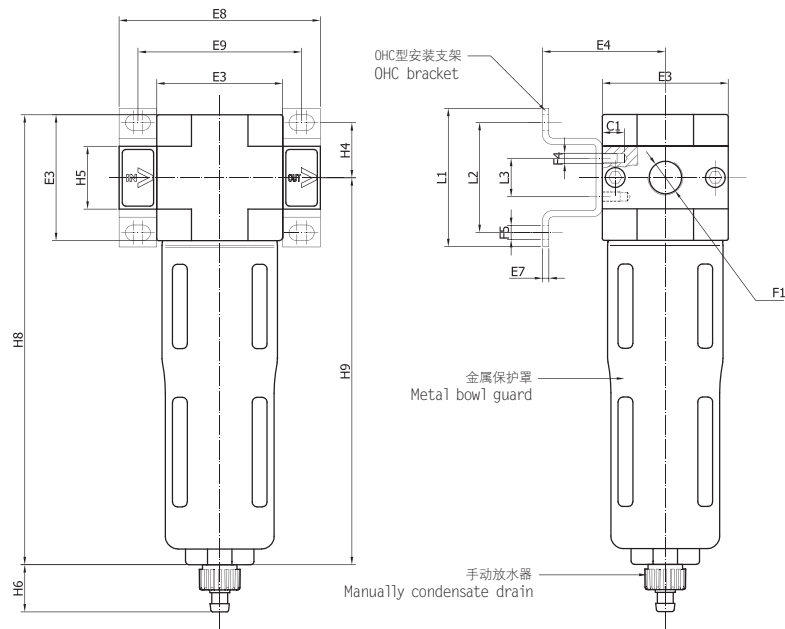
过滤器 Filter / OF

技术参数 Technical data

FORWARD

主要技术参数 General technical data									
规格 Size		MINI			MIDI			MAXI	
工作介质 Medium		压缩空气 Compressed air							
结构特点 Features of structure		带水分离器的烧结式过滤器 Sintered filter with water separator							
安装方式 Mounting type		管式安装或支架安装 Pipe mounting or foot mounting							
安装位置 Assembly position		垂直方向±5° Vertical±5°							
连接尺寸 Connection		G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1
标准额定流量 Standard nominal flow rate	OF-... (-A)	1000	1200	1400	2700	3000	3000	5000	5300
	OF-...-5M- (-A)	600	950	1100	1800	1900	1900	3200	3300
输入压力 Primary pressure	手动排水阀 Manual condensate drain	最大16bar Max: 16bar							
	自动排水阀 Automatic condensate drain	1.5~12bar							
过滤精度 Grade of filtration		40 μ m / 5 μ m							
最大凝度容量 Max.condensate capacity		22ml			43ml			80ml	
温度范围 Temperature range		0~60℃							
材料 Materials information		壳体：压铸锌；过滤杯：PC；金属保护罩：铝合金；密封：丁腈橡胶 Housing: Zinc die-casting; Filter bowl: PC; Metal bowl guard: Aluminium alloy; Sealing: NBR							

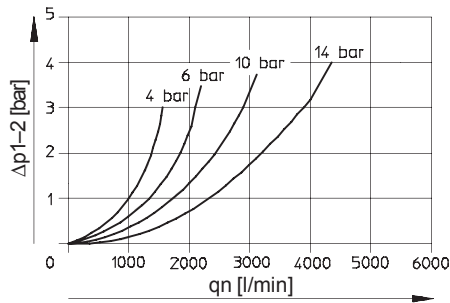
尺寸图 Dimensions



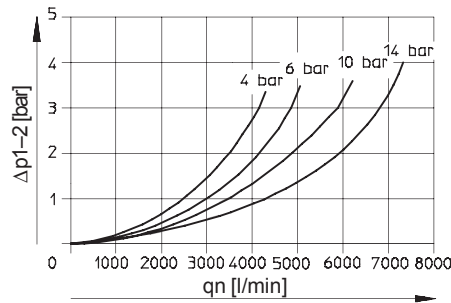
型号 Model	E3	E4	E7	E8	E9	F1	F4	F5	L1	L2	L3	H4	H5	H6	H8	H9
OF-...-MINI	40	39	2	64	52	G1/8,G1/4,G3/8	M4	4.5	44	35	11	17.5	20	15	144	129
OF-...-MIDI	55	47	3	85	70	G1/8,G1/2,G3/4	M5	5.5	71	60	22	24.5	32	15	179	156
OF-...-MAXI	66	53	3	96,116	80,91	G3/4,G1	M5	5.5	71	60	22	24.5	32,40	15	203	175

标准额定流量qn和输出压力p2的关系 Standard flow rate qn as a function of the output pressure p2

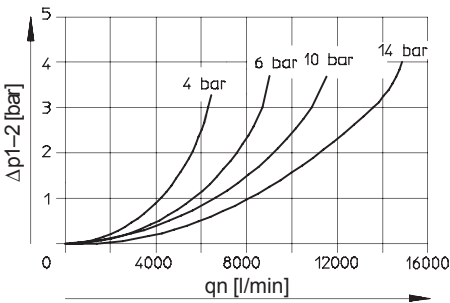
OF-1/4-MINI



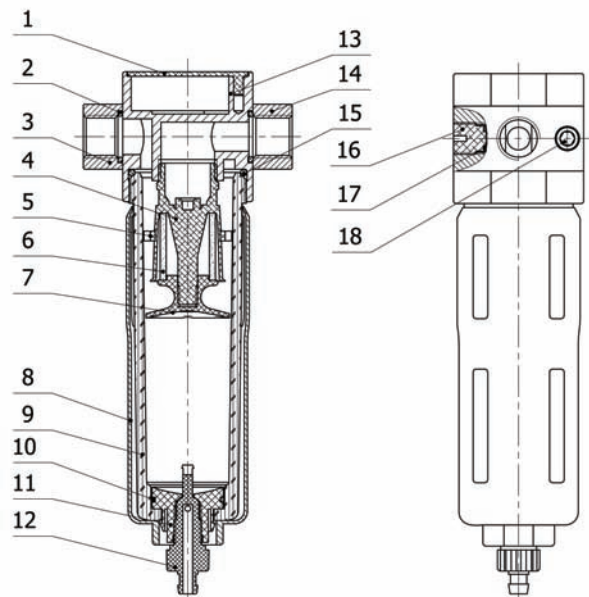
OF-1/2-MIDI



OF-1-MAXI



内部结构图 Inner structure



序号 NO.	名称 Item	材料 Material	序号 NO.	名称 Item	材料 Material
1	装饰盖 (圆型) Ornament cover(round)	POM	11	内接头 Inner joint	POM
2	O型圈 O-ring	NBR	12	放水器 Condensate drain	POM
3	分气块-IN Flange - IN	锌合金 Zinc alloy	13	OF 阀体 OF Body	锌合金 Zinc alloy
4	滤芯座 Filter element base	POM	14	分气块 OUT Flange -OUT	锌合金 Zinc alloy
5	旋风叶轮 Whirl wind impeller	POM	15	O型圈 O-ring	NBR
6	滤芯 Filter element	聚乙烯 PE	16	丝堵 Plug	POM
7	挡水板 Manger	POM	17	O型圈 O-ring	NBR
8	保护罩 Metal bowl guard	铝合金 Aluminium alloy	18	内六角螺丝 Allen screw	S35C
9	水杯 Filter bowl	PC			
10	O型圈 O-ring	NBR			

油雾器 Lubricator / OL

型号代码 Type codes

FORWARD



自动可节流式油雾器可均匀地向压缩空气喷油雾。一个调节器保证了油雾量与压缩空气流量成比例。
压缩空气经过喷嘴时产生压降，迫使油液从油杯进入视油器，随压缩空气进入输入口，同时被雾化。
在工作中可实现不停气加油。
可通过调节螺钉调节滴油量，通常每1000L空气中含有1-12滴就足够了。

The direct constant-density lubricator add regulatd quantity oil to the compressed air.A valve maintains oil mist content proportional to the compressed oil flow.
The pressure drop that occurs when the air flow through a sight feed oil cup delives oil from the bowl to the sight oil indicator .The drop of the oil flows into the air channel when it is atomized.
The oil drip rate is controlled by means of the regulating screw.Normally,1 to 12 drops /1000L of the air is sufficient.

OL

-

1/4

-

MINI

基本功能 Basic function	
OL	油雾器 Lubricator
接口尺寸 Connection	
1/8	G1/8
1/4	G1/4
3/8	G3/8
1/2	G1/2
3/4	G3/4
1	G1
规格 Size	
MINI	小型
MIDI	中型
MAXI	大型

油雾器 Lubricator / OL

技术参数 Technical data

FORWARD

主要技术参数 General technical data								
规格 Size	MINI			MIDI			MAXI	
工作介质 Medium	压缩空气 Compressed air							
结构特点 Features of structure	油雾型自动可节流流式 The direct constant-density lubricator							
安装方式 Mounting type	管式安装或支架安装 Pipe or Foot mounting							
安装位置 Assembly position	垂直方向±5° Vertical ±5°							
连接尺寸 Connection	G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1
标准额定流量 Standard nominal flow rate	1300	2300	2700	5500	6100	6300	8400	9000
最大工作压力 Max. Working pressure	16bar							
最小起雾流量 Min. Standard nominal flow rate	3 l/min			6 l/min			10 l/min	
最大凝度容量 Max.Condensate capacity	22ml			43ml			80ml	
温度范围 Temperature range	0~60℃							
材料 Materials information	壳体：压铸锌；油杯和视油器：PC；金属保护罩：铝合金；密封：丁腈橡胶； Housing: Zinc die-casting; Oil bowl and Drip cap: PC; Metal bowl guard: Aluminium alloy; Sealing: NBR							
推荐用油 Recommended oil	ISO VG 32或同级用油 ISO VG 32 or the same grade							

油雾器 Lubricator / OL

技术参数 Technical data

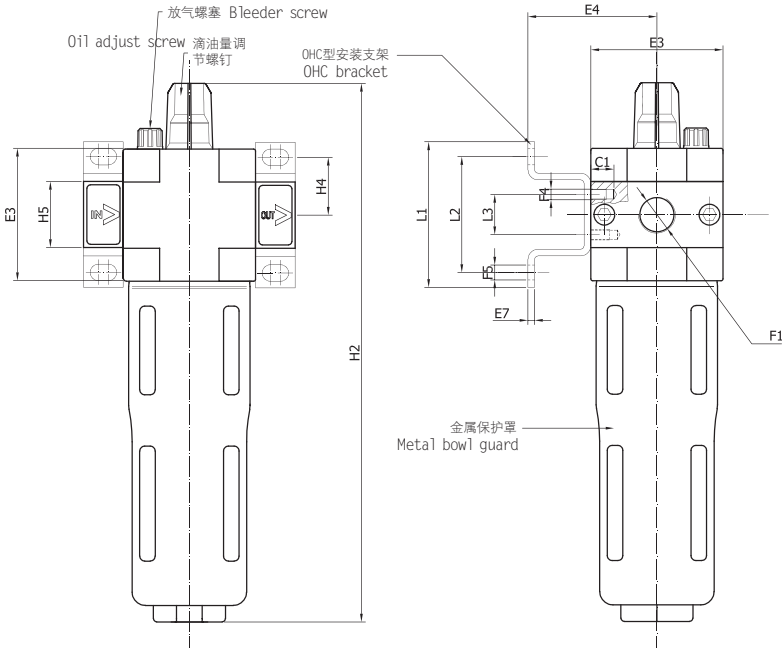
FORWARD

油雾器 Lubricator / OL

技术参数 Technical data

FORWARD

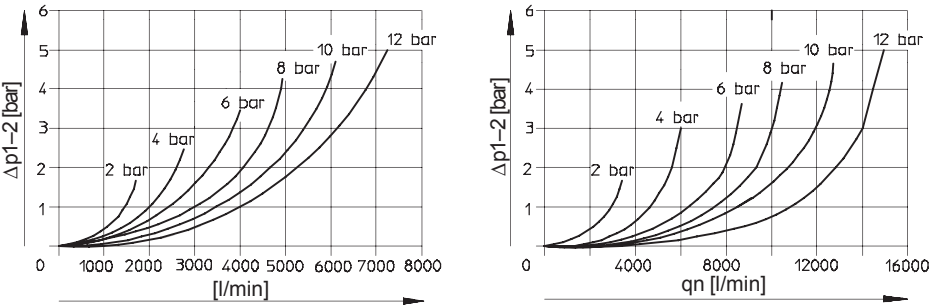
尺寸图 Dimensions



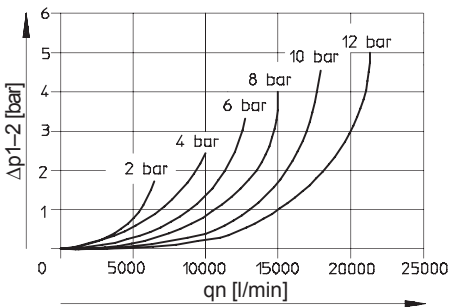
型号 Model	E3	E4	E7	F1	F4	F5Ø	L1	L2	L3	H4	H5
OL-...-MINI	40	39	2	G1/8,G1/4,G3/8	M4	4,5	44	35	11	17,5	20
OL-...-MIDI	55	47	3	G1/8,G1/2,G3/4	M5	5,5	71	60	22	24,5	32
OL-...-MAXI	66	53	3	G3/4,G1	M5	5,5	71	60	22	24,5	32,40

标准额定流量qn和输出压力p2的关系 Standard flow rate qn as a function of the output pressure p2

OL-1/4-MINIOL-1/2-MIDI

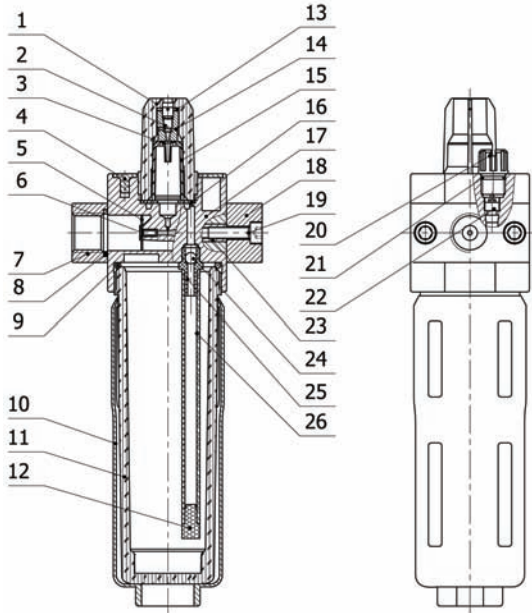


OL-1-MAXI



*输入压力 Primary pressure: p1=10 bar

内部结构图 Inner structure

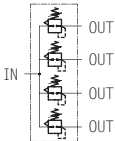


序号 NO.	名称 Item	材料 Material	序号 NO.	名称 Item	材料 Material
1	视油窗 Upper glass	PC	16	密封平垫 Seal piece	NBR
2	调节螺钉 Adjust screw	黄铜 Brass	17	OL 阀体 OL Body	锌合金 Zinc alloy
3	O型圈 O-ring	NBR	18	分气块 OUT Flange – OUT	锌合金 Zinc alloy
4	装饰盖 (环形) Ornament cover (circular)	PO	19	内六角螺丝 Allen screw	S35C
5	挡风片 Windshield chip	NBR	20	放气螺塞 Bleeder screw	POM
6	挡风座 Windshield base	黄铜 Brass	21	O型圈 O-ring	NBR
7	分气块-IN Flange – IN	锌合金 Zinc alloy	22	气门芯 Valve pin	黄铜 Brass
8	O型圈 O-ring	NBR	23	双头螺栓 Double-end bolt	SUS
9	O型圈 O-ring	NBR	24	钢球 Steel ball	SUS304
10	保护罩 Metal bowl guard	铝合金 Aluminium alloy	25	油管接头 Oil tube connection	POM
11	油杯 Lubricator bowl	PC	26	油管 Oil tube	PU
12	滤塞 Oil-filter plug	Brass powder sintered			
13	O型圈 O-ring	NBR			
14	针座 Screw base	黄铜 Brass			
15	滴油嘴 Oil dropping	PC			

减压阀组合 Pressure regulator combinations / ORB

型号代码 Type codes

FORWARD



这种减压阀适用于集成安装，可提供各种不同压力的气源，每个减压阀的前后两边各有一个压力输出口。

The regulator for an integrated installation,can provide a variety of different pressure gas source,the front and rear sides of each one has a output connection.

基本功能 Basic function

ORB 减压阀组件 Pressure regulator combination

接口尺寸 Connection

1/4	G1/4
3/8	G3/8
1/2	G1/2

压力调节范围 Pressure regulation range

	0.5...12bar
7	0.5...7bar

压力表 Pressure gauge

	带压力表 With pressure gauge
0	不带压力表 Without pressure gauge

功能 Functions

K2	集成有2个减压阀 Manifold with 2 pressure regulators
K3	集成有3个减压阀 Manifold with 3 pressure regulators
K4	集成有4个减压阀 Manifold with 4 pressure regulators
K5	集成有5个减压阀 Manifold with 5 pressure regulators

规格 Size

MINI	小型
MIDI	中型
MAXI	大型

ORB - 1/4 - 7 - 0 - K2 - MINI

减压阀组合 Pressure regulator combinations / ORB

技术参数 Technical data

FORWARD

主要技术参数 General technical data			
规格 Size		MINI	MIDI
工作介质 Medium		压缩空气 Compressed air	
结构特点 Features of structure		一级调压膜片式减压阀，带二级排气口和可锁定旋转手柄或按钮式锁（ORBS），直接驱动 Directly actuated diaphragm regulator with through pressure supply	
安装方式 Type of mounting		带安装支架 Via accessory	
安装位置 Assembly position		任意 Any	
连接尺寸 Connection		G1/8 壳体上的内螺纹（压力表） (Connection of pressure gauge)	G1/4 壳体上的内螺纹（压力表） (Connection of pressure gauge)
		G1/4 壳体上的内螺纹（气源输出） (Connection of gas outlet)	G3/8 壳体上的内螺纹（气源输出） (Connection of gas outlet)
压力调节范围 Pressure regulation range		0.5~7bar	
		0.5~12bar	
输入压力 Primary pressure		1~16bar	
标准额定流量 Standard nominal flow rate	0.5~7bar	1800	3800
	0.5~12bar	1600	3200

减压阀组合 Pressure regulator combinations / ORB

技术参数 Technical data

FORWARD

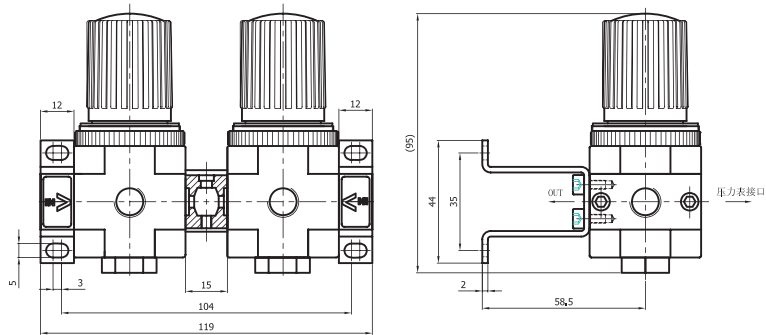
减压阀组合 Pressure regulator combinations / ORB

技术参数 Technical data

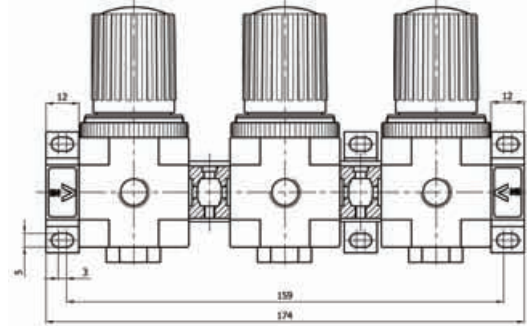
FORWARD

尺寸图 Dimensions

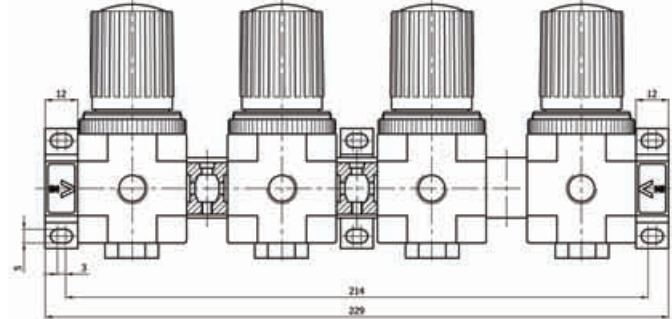
ORB-...-K2 基本尺寸图 Basic version



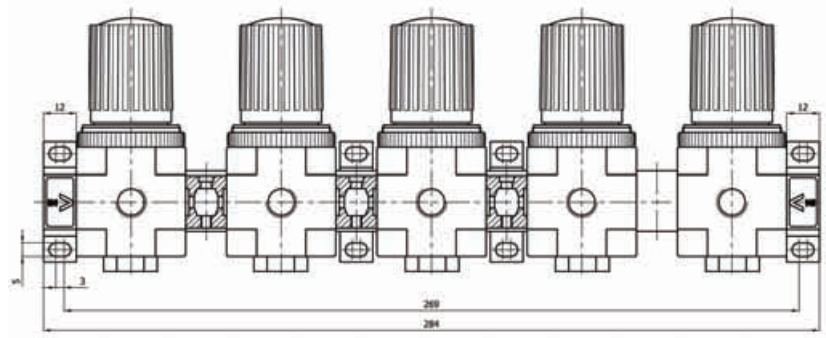
ORB-...-K3 基本尺寸图 Basic version



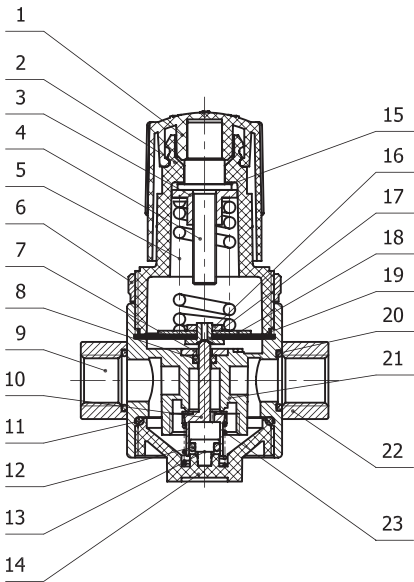
ORB-...-K4 基本尺寸图 Basic version



ORB-...-K5 基本尺寸图 Basic version



内部结构图 Inner structure



序号 NO.	名称 Item	材料 Material	序号 NO.	名称 Item	材料 Material
1	调压手轮 Pressure knob	POM	16	OR垫片 Sheet	NBR
2	阀盖 Regulator cap	POM	17	溢流阀座 Overflow base	6061-T6
3	主调压六角螺帽 Regulator nut	S35C	18	膜片托盘 One part of diaphragm	SPCC
4	调压螺杆 Adjusting spindle	S35C	19	膜片 Diaphragm	NBR+尼龙网
5	弹簧 Pressure spring	SWC	20	O型圈 O-ring	NBR
6	滚花并帽 Fixed ring	6061-T6	21	OR阀体 OR Body	锌合金 Zinc alloy
7	膜片挡圈 One part of membrane	NBR	22	分气块-OUT Flange - OUT	锌合金 Zinc alloy
8	O型圈 O-ring	NBR	23	复位弹簧 Spring	SWPB
9	分气块-IN Flange - IN	锌合金 Zinc alloy			
10	阀芯 Spool	黄铜 Brass			
11	O型圈 O-ring	NBR			
12	O型圈 O-ring	NBR			
13	扣钉 Fasteners	黄铜 Brass			
14	锁紧盖	锌合金 Zinc alloy			
15	耐磨垫片 Wearing sheet	绝缘胶板 Insulation sheet			

辅件 Accessories

技术参数 Technical data

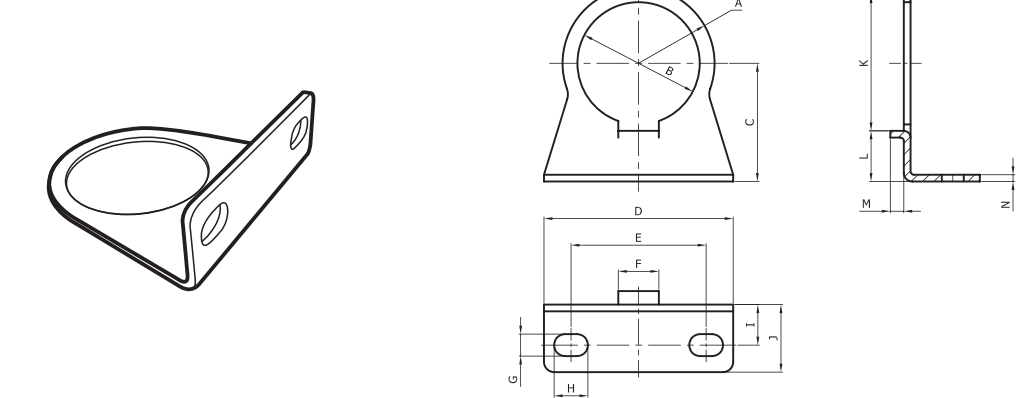
FORWARD

Mounting bracket OHC



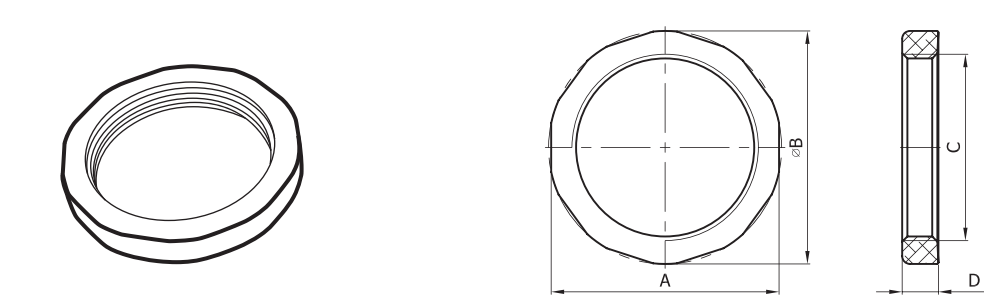
尺寸和订货数据 Dimensions and ordering data										
规格 Size	B1	B1	B1	B1	B1	B1	B1	B1	B1	型号 Type
MINI	2	19	7.3	4.3	43	35	5.5	11	12	OHC-MINI
MIDI/MAXI	3	19	8.3	5.3	70	60	16.5	22	14	OHC-MIDI/MAXI

Mounting bracket OHO



尺寸和订货数据 Dimensions and ordering data															
规格 Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	型号 Type
MINI/MAXI	22.5	36.5	35	56	40	12	6.5	10	12	20	40.4	15	4	2	OHO-MINI/MAXI
MIDI	30	52.5	48	70	53	12	8.5	10.5	17.5	27	55.5	20	4	2	OHO-MIDI

Nut HMR



尺寸和订货数据 Dimensions and ordering data					
规格 Size	A	B	C	D	型号 Type
MINI/MAXI	44	45	M36*1.5	7	HMR-MINI/MAXI
MIDI	60	62	M52*1.5	8	HMR-MIDI

辅件 Accessories

技术参数 Technical data

FORWARD

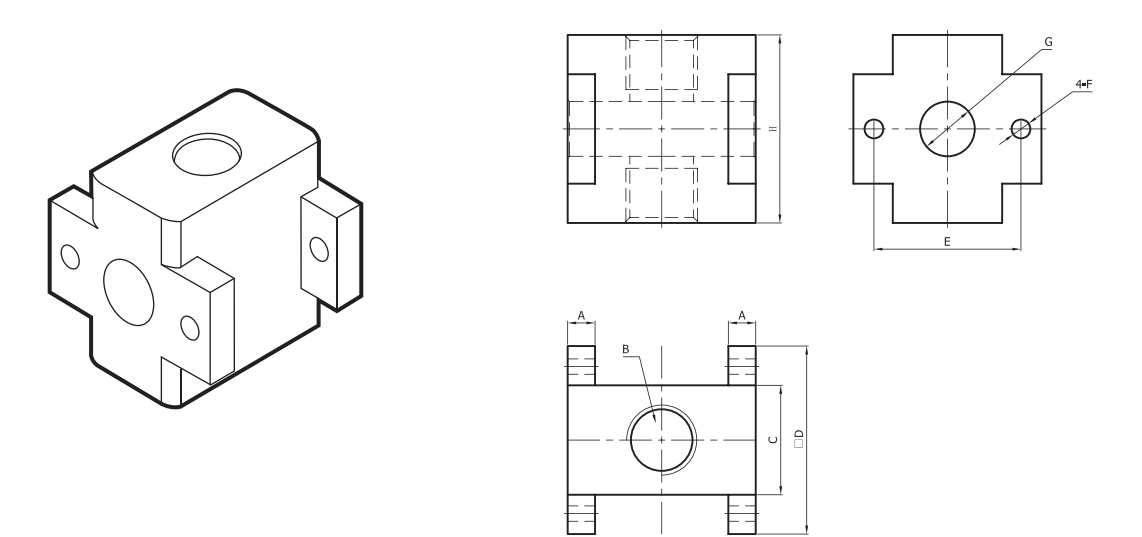
Manometer OMA



压力表用于测量、显示气动控制系统的压力。
The manometer is used to measure and display the pressure of the controlled system.

尺寸和订货数据 Dimensions and ordering data			
型号 Type	Normal size 外形尺寸	Pneumatic connection 接口尺寸	Indicating range 显示范围
OMA-40-10-1/8	40	G1/8	0-10 bar
OMA-40-16-1/8			0-16 bar
OMA-50-10-1/4	50	G1/4	0-10 bar
OMA-50-16-1/4			0-16 bar

Branching modules FRM



尺寸和订货数据 Dimensions and ordering data									
规格 Size	A	B	C	D	E	F	G	H	型号 Type
MINI	6	G1/8,G1/4,G3/8	22	40	30	4.3	11.5	40	FRM-...-MINI
MIDI	8	G3/8,G1/2,G3/4	32	55	43	5.5	16	55	FRM-...-MIDI