Techno Industrial Products Offers the OU series air source treatment, The OU regulates the compressed air supplied to the set working pressure and compensates for fluctuations in pressure. The OF with water separator cleans the compressed air of fluid oil, condensation and dirt particles. Precision pressure regulating valve is a necessary part of pneumatic control valve. Its main function is to reduce the pressure of the air source and stabilize it to a certain value, so as to enable the control valve to obtain a stable pneumatic power for regulation and control.

Attention:

1. Use shut-off valve for making the system pressure less for fitting and maintenance(e.g.when changing the filter).
2. Note the direction of flow. This can be seen on the connecting flanges.
3. Lesve sufficient space below the filter bowl(min.130mm)for changing the filter.
4. Adjust the OF vertically(±5°).

How To Order

O – U – □ – □ – □ – □ – □ – □

Series	Function Code	Port Size	Grade of Filtration	Working Pressure	Size	Condensate drain	Shell material
F Series	FR.L Combination	G1/8" G1/2" G1/4" G3/4" G3/8" G1"	Blank: 40μm 5M: 5μm	Blank: 12bar 7: 7bar	MINI MIDI MAXI	Blank: Turned manually H: Semi-automatic A: Fully automatic	Blank: Zinc E: Alu.

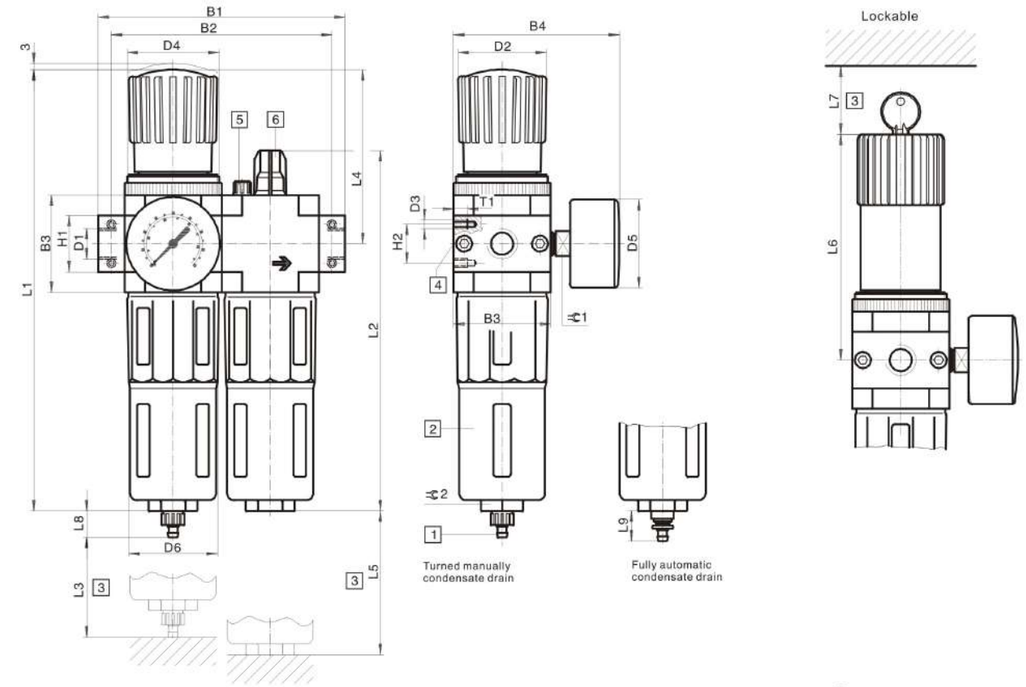
Specification:

Size		Mini			Midi				Maxi		
Pneumatic connection		G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
Operating medium		Compressed air									
Design		Filter regulator with/without pressure gauge Proportional standard mist lubricator									
Type of mounting		Via accessories In–line installation									
Assembly position		Vertical ±5°									
Regulator lock		Rotary knob with lock									
		Rotary knob with lock									
Grade of filtration (μm)		5 or 40									
Max.hysteresis (bar)		0.2							0.4		
Pressure regulation range (bar)		0.5...7									
		0.5...12									
Pressure indication		Via pressure gauge									
Max.condensate volume (cm^3)		G1/8 Prepared			G1/4 Prepared				G1/4 Prepared		
		22			43				80		
Input pressure (bar)											
Condensate drain	Turnde manually	2...16									
	Semi–automatic	–									
	Fully automatic	2...12									

Techno Industrial Products
FILTERS,REGULATORS,LUBRICATORS
QUALITY, RELIABILITY & COMMITMENT

Overall Dimension:

Mini/Midi/Maxi



[1] Barbde fitting for plastic tubing type PCN–4
[2] Metal bowl guard
[3] Installation dimensions
[4] Second pressure gauge connection
[5] Bleed screw for oil reservoir
[6] Oil adjusting screw
→ Flow direction

Dimensions:

Unit:mm

Type	B1	B2	B3	B4	D1	D2Φ	D3	D4	D5Φ	D6Φ	H1	H2	L1	L2	L3	L4	L5	L6	L7	L8	L9	T1	⌀C1	⌀C2
Mini																								
OU-1/8-D-MINI	104	92	40	76	G1/8	31	M4	M36×1.5	41	38	20	11	193	169	60	69	100	98	60	15	19	7	14	22
OU-1/4-D-MINI					G1/4																			
OU-3/8-D-MINII	110				G3/8																			
Midi																								
OU-1/4-D-MIDI	140	125	55	95	G1/4	50	M5	M52×1.5	50	52	32	22	250	204	80	99	120	130	60	15	19	8	14	24
OU-3/8-D-MIDI					G3/8																			
OU-1/2-D-MIDI					G1/2																			
OU-3/4-D-MIDI					G3/4																			
Maxi																								
OU-1/2-D-MAXL	162	146	66	107	G1/2	31	M5	M36×1.5	50	65	32	22	252	228	90	82	150	111	60	15	19	8	14	24
OU-1/2-D-DI-MAXL						49		M52×1.5					275			105		135						
OU-3/4-D-MAXL					G3/4	31		M36×1.5					252			82		111						
OU-3/4-D-DI-MAXL						49		M52×1.5					275			105		135						
OU-1-D-MAXL	182	157			G1	31		M36×1.5			40		252			82		111						
OU-1-D-DI-MAXL						49		M52×1.5					275			105		135						

Note: This product conforms with ISO 1179–1 standard and the ISO 228–1 standard.

Techno Industrial Products Offers the OFR series Filter pressure regulating valve, It works by supplying compressed air to a set operating pressure and compensating for pressure fluctuations. The fluid oil, condensate and dirt in compressed air are cleaned by water separator. Precision pressure regulating valve is a necessary part of pneumatic control valve. Its main function is to reduce the pressure of the air source and stabilize it to a certain value, so as to enable the control valve to obtain a stable pneumatic power for regulation and control.

Attention:

1. Use shut-off valve for making the system pressure less for fitting and maintenance(e.g.when changing the filter).
2. Note the direction of flow. This can be seen on the connecting flanges.
3. Lesve sufficient space below the filter bowl(min.130mm)for changing the filter.
4. Adjust the OF vertically(±5°).

How To Order

O – FR – □ – □ – □ – □ – □ – □

Series	Function Code	Port Size	Grade of Filtration	Working Pressure	Size	Condensate drain	Shell material
O Series	Filter&Regulator	G1/8" G1/2"	Blank: 40μm	Blank: 12bar	MINI	Blank: Turned manually	Blank: Zinc
		G1/4" G3/4"	5M: 5μm	7: 7bar	MIDI	H: Semi-automatic	E: Alu.
		G3/8" G1"			MAXI	A: Fully automatic	

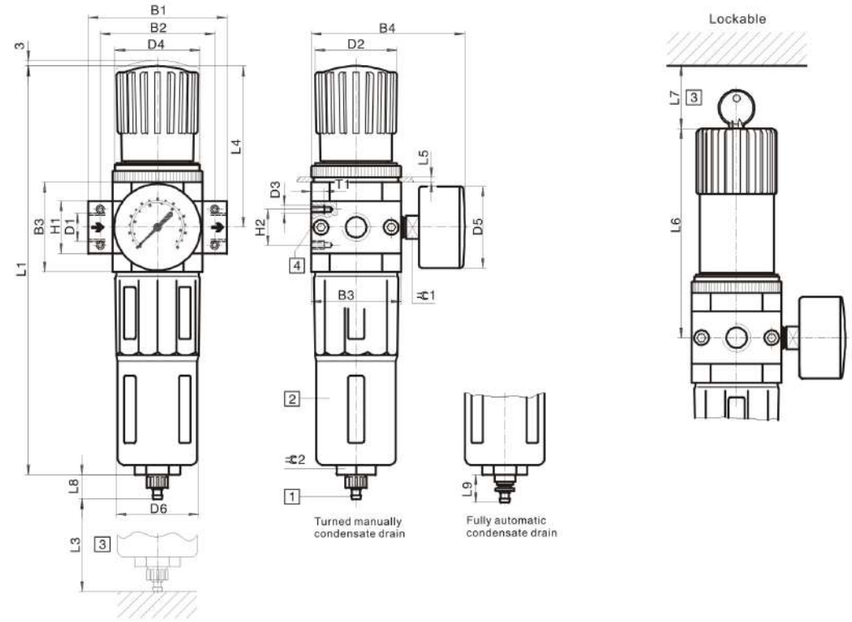
Specification:

Size		Micro					Mini			Midi				Maxi		
Pneumatic connection		M5	M7	G1/8	QS4	QS6	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
Operating medium		Compressed air														
Design		Filter regulator with/wthout pressure gauge														
Type of mounting		Via accessories														
		In-line installation														
Assembly position		Vertical ±5°														
Regulator lock		Rotary knob with lock														
		–					Rotary knob with lock									
Grade of filtration (μm)		5					5 or 40									
Max.hysteresis (bar)		0.3					0.2							0.4		
Pressure regulation range (bar)		0.5...7					0.5...7									
							0.5...12									
Pressure indication		Via pressure gauge														
		M5 Prepared					G1/8 Prepared			G1/4 Prepared				G1/4 Prepared		
Max.condensate volume (cm^3)		3					22			43				80		
Input pressure (bar)																
Condensate drain	Turnde manually	1...10					2...16									
	Semi-automatic	1...10					–									
	Fully automatic	–					2...12									

Techno Industrial Products
FILTERS,REGULATORS,LUBRICATORS
QUALITY, RELIABILITY & COMMITMENT

Overall Dimension:

Mini/Midi/Maxi



[1] Barbde fitting for plastic tubing type PCN-4
[3] Installation dimensions
Flow direction
[2] Metal bowl guard
[4] Second pressure gauge connection

Dimensions:

Unit:mm

Type	B1	B2	B3	B4	D1	D2Φ	D3	D4	D5Φ	D6Φ	H1	H2	L1	L3	L4	L5 max.	L6	L7	L8	L9	T1	⌀1	⌀2
Mini																							
OFR-1/8-D-MINI	64	52	40	76	G1/8	31	M4	M36×1.5	41	38	20	11	193	60	68	3	98	60	15	19	7	14	22
OFR-1/4-D-MINI					G1/4																		
OFR-3/8-D-MINII	70				G3/8																		
Midi																							
OFR-1/4-D-MIDI	85	70	55	95	G1/4	50	M5	M52×1.5	50	52	32	22	250	80	99	5	130	60	15	19	8	14	24
OFR-3/8-D-MIDI					G3/8																		
OFR-1/2-D-MIDI					G1/2																		
OFR-3/4-D-MIDI					G3/4																		
Maxi																							
OFR-1/2-D-MAXL	96	80	66	107	G1/2	31	M5	M36×1.5	50	65	32	22	252	90	82	4	111	60	15	19	8	14	24
OFR-1/2-D-DI-MAXL						49		M52×1.5					275		105		135						
OFR-3/4-D-MAXL					G3/4	31		M36×1.5					252		82		111						
OFR-3/4-D-DI-MAXL						49		M52×1.5					275		105		135						
OFR-1-D-MAXL	116	91			G1	31		M36×1.5			40		252		82		111						
OFR-1-D-DI-MAXL						49		M52×1.5					275		105		135						

Note: This product conforms with ISO 1179-1 standard and the ISO 228-1 standard.

Techno Industrial Products Offers the OF series filter, The OF with water separator cleans the compressed air of fluid oil, condensation and dirt particles. The filter is a necessary part of pneumatic control valve. Its main function is to reduce the pressure of the air source and stabilize it to a certain value, so as to enable the control valve to obtain a stable pneumatic power for regulation and control.

Attention:

1. Use shut-off valve for making the system pressure less for fitting and maintenance(e.g.when changing the filter).
2. Note the direction of flow. This can be seen on the connecting flanges.
3. Lesve sufficient space below the filter bowl(min.130mm)for changing the filter.
4. Adjust the OF vertically(±5°).

How To Order

O – F – 1/4 – □ – □ – □ – □

Series	Function Code	Port Size	Grade of Filtration	Size	Condensate drain	Shell material
O Series	Filter	G1/8" G1/2" G1/4" G3/4" G3/8" G1"	5M: 5μm Blank: 40μm	MINI MIDI MAXI	Blank: Turned manually H: Semi-automatic A: Fully automatic	Blank: Zinc E: Alu.

Specification:

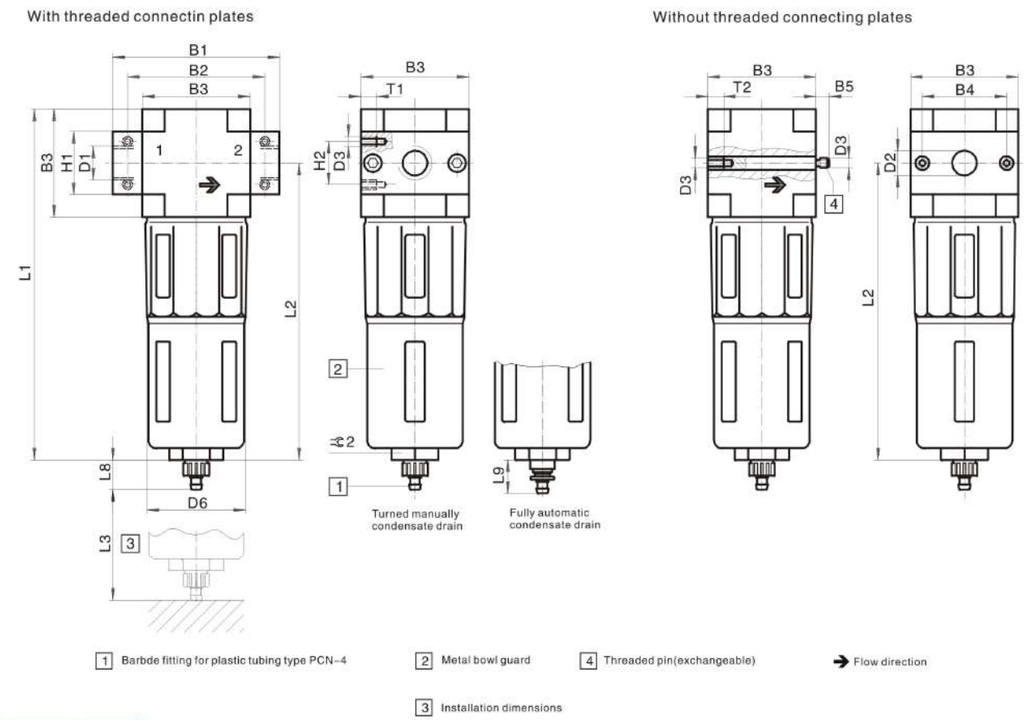
Size		Micro					Mini			Midi				Maxi		
Pneumatic connection		M5	M7	G1/8	QS4	QS6	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
Operating medium		Compressed air														
Design		Sintered filter with centrifuagal separation														
Type of mounting		Via accessories														
		In-line installation														
Assembly position		Vertical ±5°														
Grade of filtration (μm)		5					5 or 40									
Max.condensate volume (cm^3)		3					22			43				80		
Input pressure (bar)																
Condensate drain	Turnde manually	1...10					2...16									
	Semi-automatic	1...10					–									
	Fully automatic	–					2...12									

Note: This product conforms with ISO 1179-1 standard and the ISO 228-1 standard.

Techno Industrial Products
FILTERS,REGULATORS,LUBRICATORS
QUALITY, RELIABILITY & COMMITMENT

Overall Dimension:

Mini/Midi/Maxi



1 Barbde fitting for plastic tubing type PCN-4 2 Metal bowl guard 4 Threaded pin(exchangeable) → Flow direction

3 Installation dimensions

Dimensions:

Unit:mm

Type	B1	B2	B3	B4	B5	D1	D2Φ	D3	D6Φ	H1	H2	L1	L2	L3	L8	L9	T1	⌀1	⌀2
Mini																			
OF-1/8-D-MINI	64	52	40	30	–	G1/8	–	M4	38	20	11	144	124	60	15	19	7	–	22
OF-1/4-D-MINI						G1/4													
OF-3/8-D-MINII	70					G3/8													
OF-D-MINI	–	–			5.8	–	11			–	–						–	10	
Midi																			
OF-1/4-D-MIDI	85	70	55	43	–	G1/4	–	M5	52	32	22	179	151	80	15	19	8	–	24
OF-3/8-D-MIDI						G3/8													
OF-1/2-D-MIDI						G1/2													
OF-3/4-D-MIDI						G3/4													
OF-D-MIDI	–	–			6.8	–	24			–	–						–	11	
Maxi																			
OF-1/2-D-MAXI	96	80	66	46	–	G1/2	–	M5	65	32	22	203	170	90	15	19	8	–	24
OF-3/4-D-MAXI						G3/4													
OF-1-D-MAXI	116	61				G1				40									
OF-D-MAXI	–	–			6.8	–	30			–	–						–	11	

注意：该产品符合ISO1179-1和ISO228-1标准 Note: This product conforms with ISO 1179-1 standard and the ISO 228-1 standard.

Techno Industrial Products Offers OR Regulator. The structure of this type regulator is delicate and compact, which is convenient for installation and application. The pressed-in and self-locking mechanism function can prevent the abnormal movement of the set pressure caused by external interfere.

Attention:

1. Always keep the regulator clean.
2. Always pressurize a regulator slowly, while standing with the cylinder valve between you and the regulator.
3. Never swap gauges or inlet fittings, and never change gas service.
4. Never lubricate a regulator or use pipe dopes. This includes inlet fittings which are intended to be installed dry.

How To Order

O – R – 1/4 – □ – □ – □

Series	Function Code	Port Size	Working Pressure	Size	Shell material
O Series	Regulator	G1/8" G1/2" G1/4" G3/4" G3/8" G1"	Blank: 12bar 7: 7bar	MINI MIDI MAXI	Blank: Zinc E: Alu.

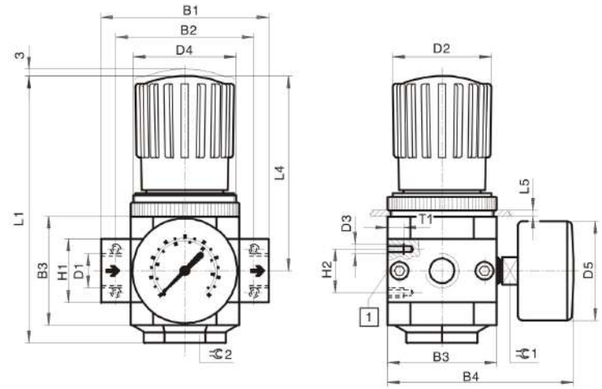
Specification:

Size	Micro					Mini			Midi				Maxi		
Pneumatic connection	M5	M7	G1/8	QS4	QS6	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
Operating medium	Compressed air					Filtered compressed air,lubricated or unlubricated,grade of filtration 40 μm									
Design	Directly actuated diaphragm regulator					Directly actuated diaphragm regulator							Pilot actuated piston regulator		
													Directly actuated diaphragm regulator		
ype of mounting	Via accessories														
	In-line installation														
	Front panel mounting														
Assembly position	Any														
Regulator lock	Rotary knob with lock														
	–					Rotary knob with lock									
Input pressure (bar)	1...10					1...16									
Max.hysteresis (bar)	0.3					0.2							0.4		
Pressure regulation range (bar)	0.5...7					0.5...7									
						0.5...12									
Pressure indication	Via pressure gauge														
	M5 Prepared					G1/8 Prepared			G1/4 Prepared				G1/4 Prepared		

Techno Industrial Products
FILTERS,REGULATORS,LUBRICATORS
QUALITY, RELIABILITY & COMMITMENT

Overall Dimension:

Mini/Midi/Maxi



[1] Second pressure gauge connection [3] Installation dimensions → Flow direction

Dimensions:

Unit:mm

Type	B1	B2	B3	B4	D1	D2Φ	D3	D4	D5Φ	H1	H2	L1	L4	L5 max.	L6	L7	T1	⌀1	⌀2
Mini																			
OR-1/8-D(1)-MINI	64	52	40	76	G1/8	31	M4	M36×1.5	41	20	11	96	68	3	98	60	7	14	22
OR-1/4-D(1)-MINI					G1/4														
OR-3/8-D(1)-MINII	70				G3/8														
Midi																			
OR-1/4-D(1)-MIDI	85	70	55	95	G1/4	50	M5	M52×1.5	50	32	22	135	99	5	130	60	8	14	24
OR-3/8-D(1)-MIDI					G3/8														
OR-1/2-D(1)-MIDI					G1/2														
OR-3/4-D(1)-MIDI					G3/4														
Maxi																			
OR-1/2-D-MAXL	96	80	66	107	G1/2	31	M5	M36×1.5	50	32	22	125	82	4	111	60	8	14	24
OR-1/2-D-DI-MAXL						49		M52×1.5				148	105		135				
OR-3/4-D-MAXL					G3/4	31		M36×1.5				125	82		111				
OR-3/4-D-DI-MAXL						49		M52×1.5				148	105		135				
OR-1-D-MAXL	116	91			G1	31		M36×1.5		40		125	82		111				
OR-1-D-DI-MAXL						49		M52×1.5				148	105		135				

Note: This product conforms with ISO 1179-1 standard and the ISO 228-1 standard.

Techno Industrial Products Offers Air Lubricator. Lubricator can adds a precision adjustable quantity of oil to the compressed air stream. 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 delivers oil from the bowl to the sight oil indicator. The drop of the oil flows into the air channel when it is atomized.

Attention:

1. The oil level in the oil cup should be between the upper and lower limits.
2. The lubricator allows connection with other Techno air preparation equipment.
3. Please pay attention to clean the connecting pipes and joints during installation to prevent dirt entering the gas path.

How To Order

O – L – 1/4 – □ – MINI – □

Series	Function Code	Port Size	Working Pressure	Size	Shell material
O Series	Lubricator	G1/8" G1/2" G1/4" G3/4" G3/8" G1"	7: 7bar Blank: 12bar	MINI MIDI MAXI	Blank: Zinc E: Alu.

Specification:

Size	Micro					Mini			Midi				Maxi		
Pneumatic connection	M5	M7	G1/8	QS4	QS6	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1/2	G3/4	G1
Operating medium	Filtered compressed air,unlubricated, grade of filtration 5μm					Filtered compressed air,unlubricated, grade of filtration 40μm									
Design	Proportional standard mist lubricator														
Type of mounting	Via accessories														
	In-line installation														
Assembly position	Vertical ±5°														
Input pressure (bar)	0...10					0...16									
Minimum flow for lubricator operation	3					3			8				10		
Max.oil capacity (cm^3)	6.5					45			110				190		

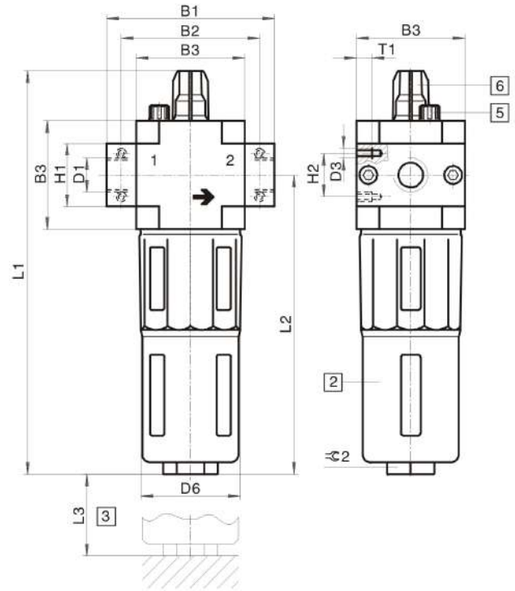
Note: This product conforms with ISO 1179-1 standard and the ISO 228-1 standard.

Techno Industrial Products
FILTERS,REGULATORS,LUBRICATORS
QUALITY, RELIABILITY & COMMITMENT

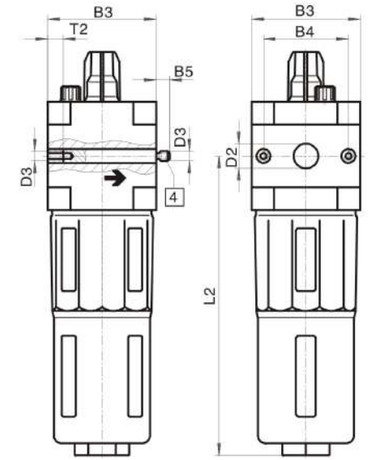
Overall Dimension:

Mini/Midi/Maxi

With threaded connecting plates



Without threaded connecting plates



2 Metal bowl guard
4 Threaded pin(exchangeable)
5 Bleed screw for oil reservoir
→ Flow direction
3 Installation dimensions
6 Oil adjusting screw

Dimensions:

Unit:mm

Type	B1	B2	B3	B4	B5	D1	D2Φ	D3	D6Φ	H1	H2	L1	L2	L3	T1	≈1	≈2
Mini																	
OL-1/8-D-MINI	64	52	40	30	–	G1/8	–	M4	38	20	11	169	124	100	7	–	22
OL-1/4-D-MINI						G1/4											
OL-3/8-D-MINII	70					G3/8											
OL-D-MINI	–	–			5.8	–	11			–	–				–	10	
Midi																	
OL-1/4-D-MIDI	85	70	55	43	–	G1/4	–	M5	52	32	22	204	151	120	8	–	24
OL-3/8-D-MIDI						G3/8											
OL-1/2-D-MIDI						G1/2											
OL-3/4-D-MIDI						G3/4											
OL-D-MIDI	–	–			6.8	–	24			–	–				–	11	
Maxi																	
OL-1/2-D-MAXI	96	80	66	46	–	G1/2	–	M5	65	32	22	228	170	150	8	–	24
OL-3/4-D-MAXI						G3/4											
OL-1-D-MAXI	116	61				G1				40							
OL-D-MAXI	–	–			6.8	–	30			–	–				–	11	

Note: This product conforms with ISO 1179-1 standard and the ISO 228-1 standard.