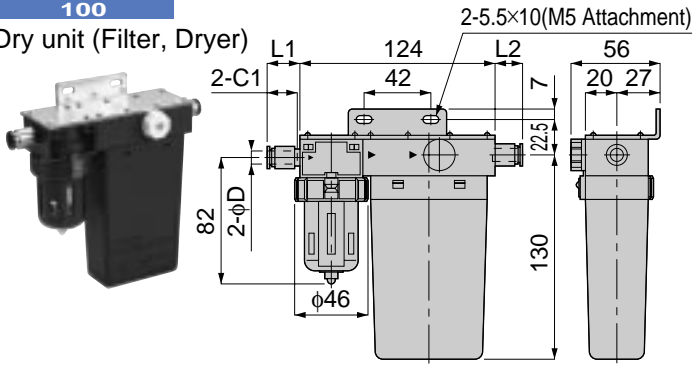


# Control Series Fiber Dry

## FDT 100

Dry unit (Filter, Dryer)

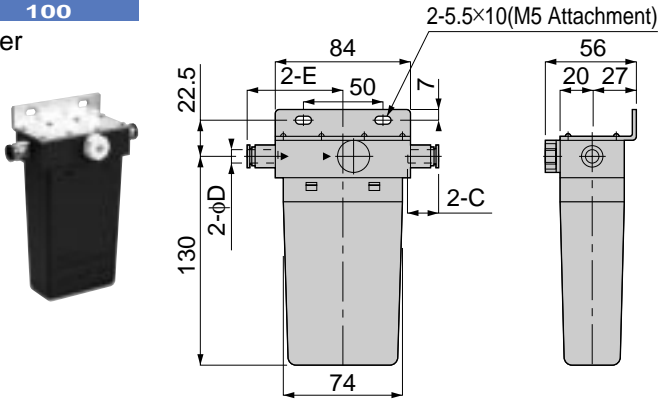


unit:mm

Model	Tube dia. φD	L1	L2	C	Mass (g)
FDT 100-4	4	9.5	6	11	443
FDT 100-4-A					445
FDT 100-6	6	12.5	9	12	443
FDT 100-6-A					445
FDT 100-8	8	20.5	17	18.5	449
FDT 100-8-A					451
FDT 100-10	10	25.5	22	21	459
FDT 100-10-A					461

## DMP 100

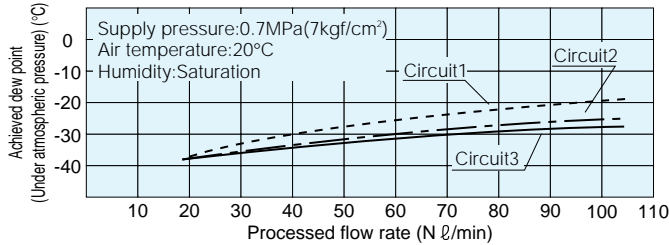
Dryer



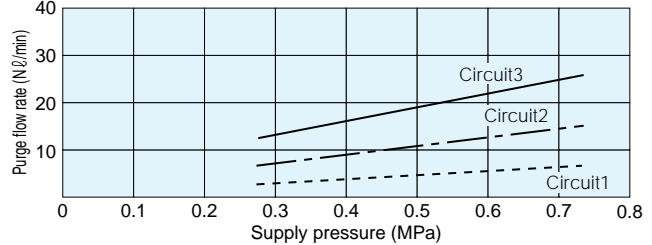
unit:mm

Model	Tube dia. φD	C	E	Mass (g)
DMP 100-4	4	11	48	327
DMP 100-6	6	12	51	327
DMP 100-8	8	18.5	59	340
DMP 100-10	10	21	64	359

FDT, DMP Dehumidification Performance Curve (Example)

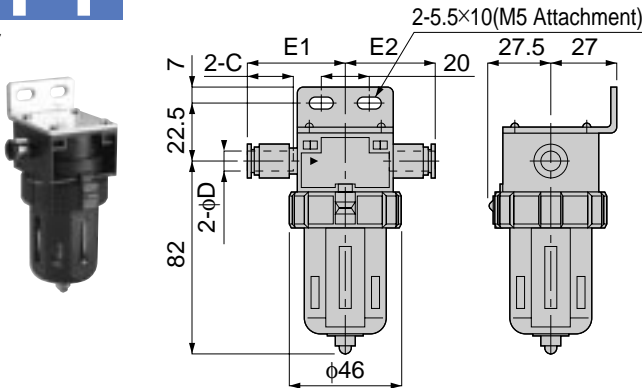


FDT, DMP Purging flow rate curve



## FFT

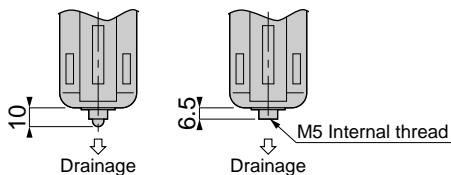
Filter



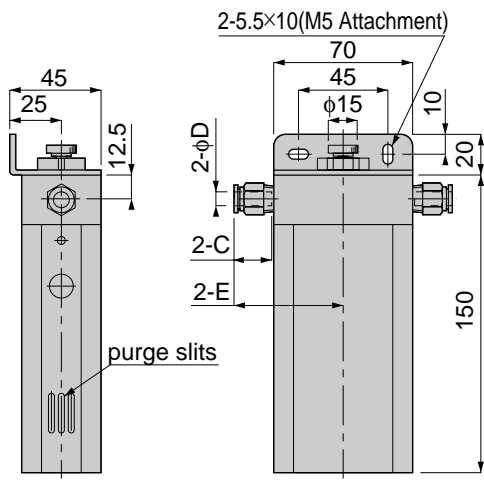
unit:mm

Model	Tube dia. φD	C	E1	E2	Mass (g)
FFT 100-4	4	11	29.5	26	132
FFT 100-4-A					134
FFT 100-6	6	12	32.5	29	132
FFT 100-6-A					134
FFT 100-8	8	18.5	40.5	37	145
FFT 100-8-A					147
FFT 100-10	10	21	45.5	42	164
FFT 100-10-A					166

Manual draining Automatic draining



## DMM 100 Dryer

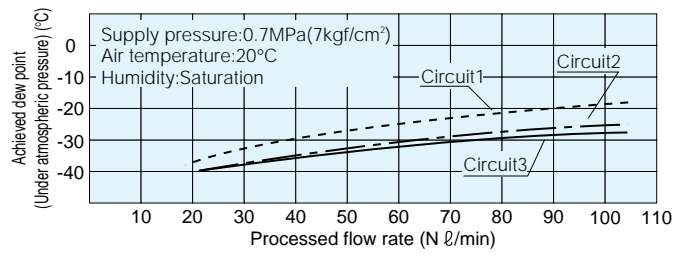


unit:mm

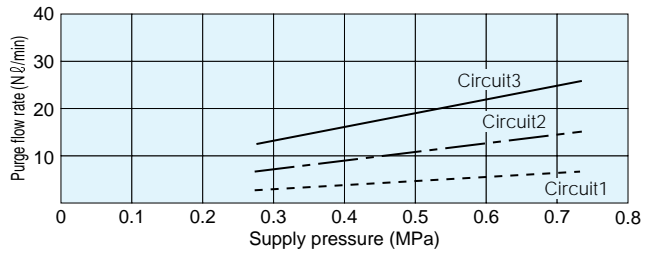
Model	Tube dia. φD	C	E	Mass (g)
DMM 100-4	4	15	50	442
DMM 100-6	6	17	53.5	444
DMM 100-8	8	18.5	55.5	440
DMM 100-10	10	21	59	450
DMM 100-00	-	-	-	



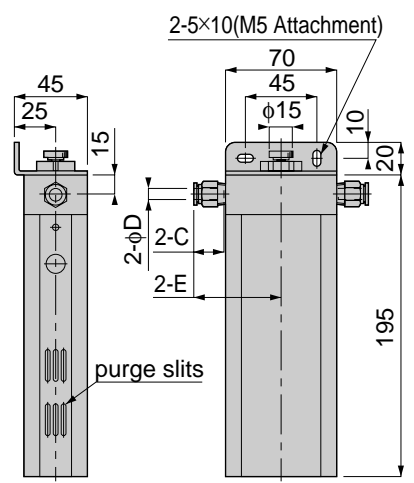
Dehumidification Performance Curve (Example)



Purging flow rate curve



## DMM 300 Dryer

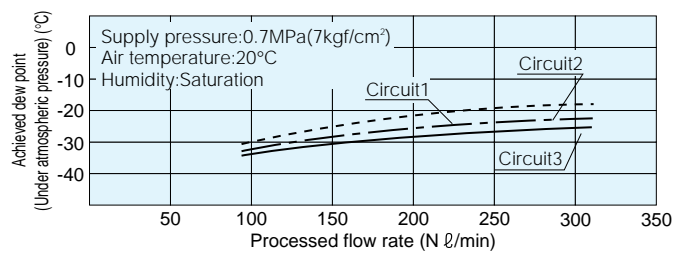


unit:mm

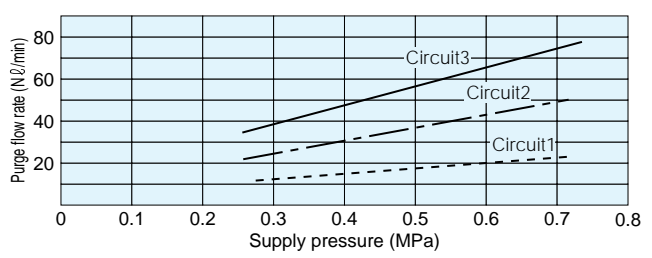
Model	Tube dia. φD	C	E	Mass (g)
DMM 300-6	6	17	52	550
DMM 300-8	8	18	52.5	542
DMM 300-10	10	20	58	548
DMM 300-12	12	23.5	60.5	567
DMM 300-16	16	25	68	615
DMM 300-00	-	-	-	



Dehumidification Performance Curve (Example)



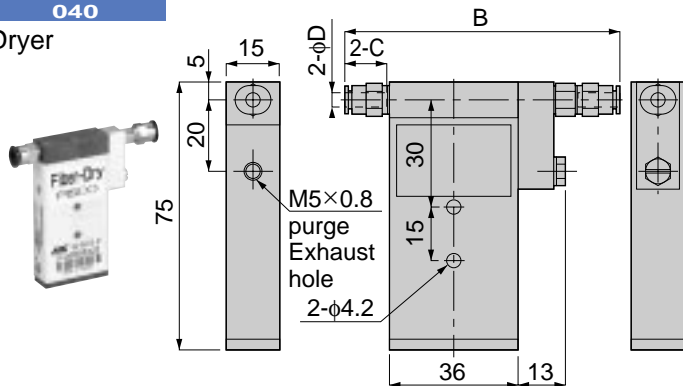
Purging flow rate curve



# Control Series Fiber Dry

## DMM 040

Dryer



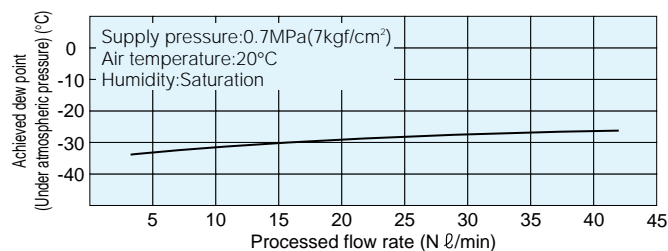
unit:mm

Model	Tube dia. $\phi D$	B	C	Mass (g)
DMM 040-4-□	4	77.5	11	65
DMM 040-6-□	6	80.5	11.5	68

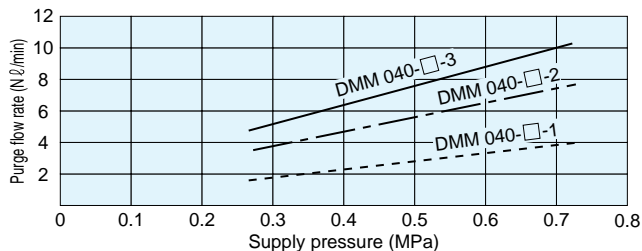
※ DMM-040 does not have purging flow rate adjusting function. Therefore select one from the three types in consultation with the graphs.

Processed flow rate (outlet flow rate)  
Code 1: 16 N ℓ/min.  
2: 30 N ℓ/min.  
3: 40 N ℓ/min.

Dehumidification Performance Curve (Example)

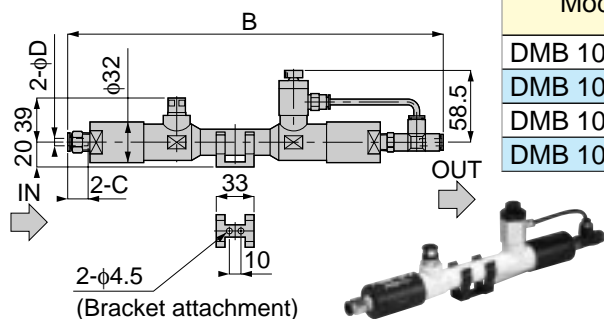


Purging flow rate curve



## DMB 100

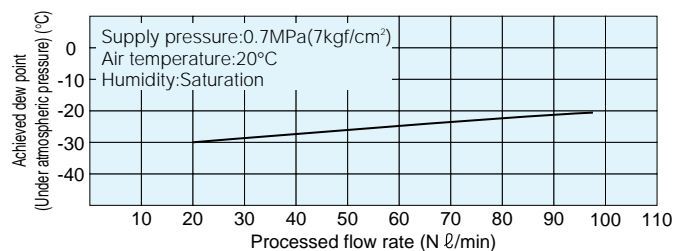
Dryer



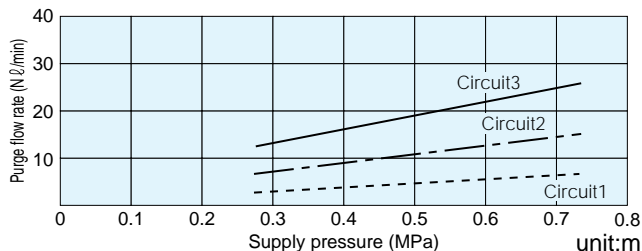
unit:mm

Model	Tube dia. $\phi D$	B	C	Mass (g)
DMB 100-4	4	294	15	307
DMB 100-6	6	302	17	302
DMB 100-8	8	307	18	316
DMB 100-10	10	321	21	333

Dehumidification Performance Curve (Example)

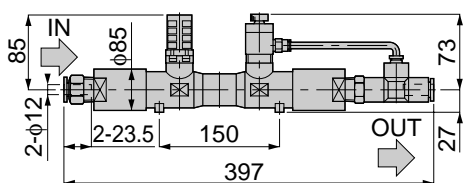


Purging flow rate curve



## DMB 500

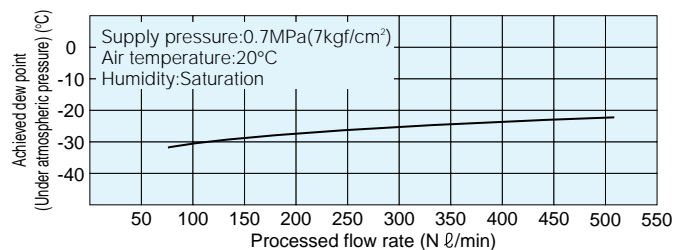
Dryer



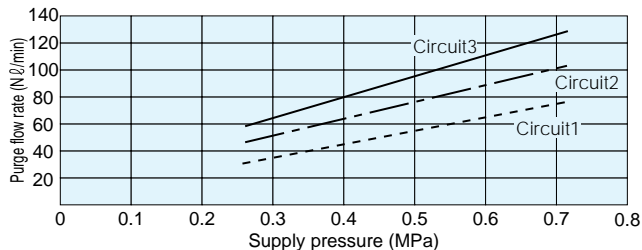
unit:mm

Model	Mass (g)
DMB 500-12	846

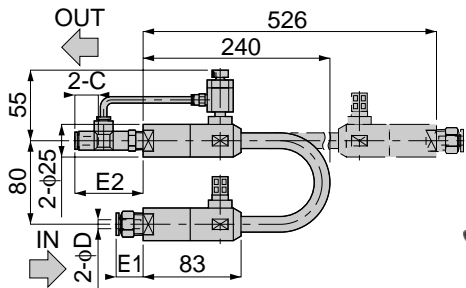
Dehumidification Performance Curve (Example)



Purging flow rate curve



**DMF**  
040  
Dryer

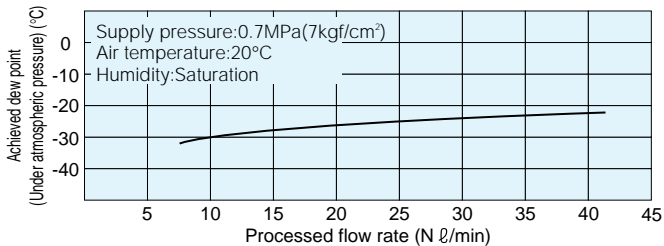


unit:mm

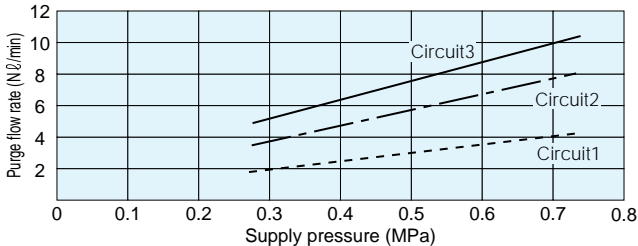
Model	Tube dia. φD	C	E1	E2	Mass (g)
DMF 040-4	4	15	15	37.5	213
DMF 040-6	6	17	18.5	43	208
DMF 040-8	8	18	20.5	47	222



Dehumidification Performance Curve (Example)



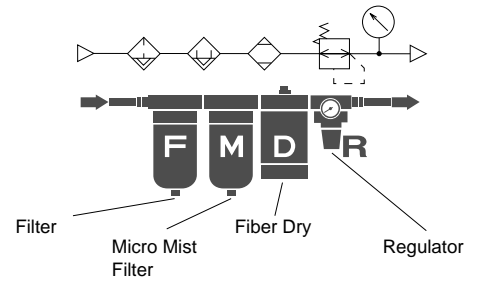
Purging flow rate curve



# Dry Unit

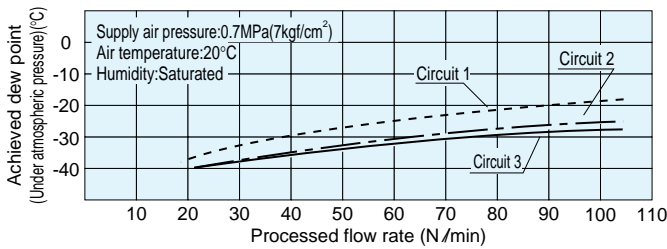
## Features

- The Dry Unit is a combination of Fiber Dry Filter, Micro Mist Filter and Regulator.
- The Dry Unit can be connected directly to the air source.
- The Dry Unit economizes space for installation.

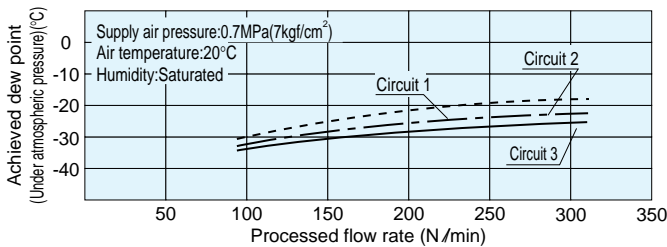


## Dehumidification performance curve

### 100 type

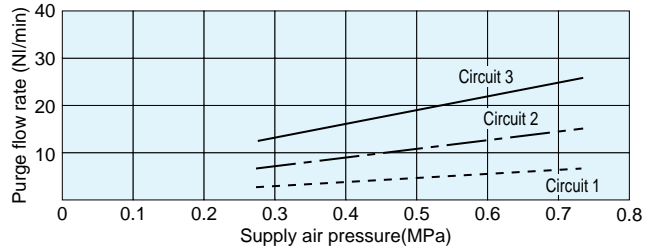


### 300 Type

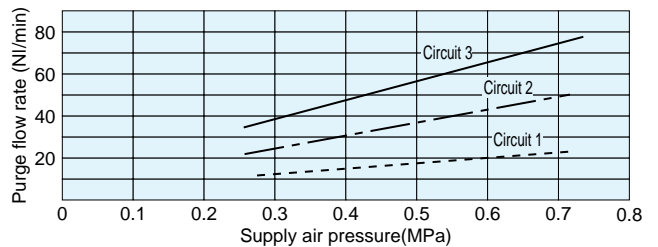


## Purge Flow Rate Curve

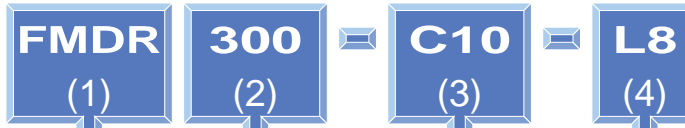
### 100 Type



### 300 Type



## Model Designation (Example)



### (1) Unit type

Type	Filter	Micromist filter	Fiber dry	Regulator
FD	○	-	○	-
FDR	○	-	○	○
FMD	○	○	○	-
FMDR	○	○	○	○

### (2) Dry air flow rate

Code	100	300
Flow rate	3.52SCFM(100N//min)	10.6SCFM(300N//min)

### (3) Supply-side quick-fitting joint

Not required Code : 00

\*When joint is not required 100 series : Female thread Rc 1/4

\*When joint is not required 300 series : Female thread Rc 3/8

### (4) Output-side quick -fitting joint

Not required Code : 00

\*When joint is not required 100 series : Female thread Rc 1/4

\*When joint is not required 300 series : Female thread Rc 3/8

C		L		W output side on'	
Code	Size	Code	Size	Code	Size
C4	φ4mm	L4	φ4mm	W4	φ4mm
C6	φ6mm	L6	φ6mm	W6	φ6mm
C8	φ8mm	L8	φ8mm	W8	φ8mm
C10	φ10mm	L10	φ10mm	W10	φ10mm
C12	φ12mm	L12	φ12mm	W12	φ12mm
C16	φ16mm	L16	φ16mm		

## Handling


Auto-drain type MMF150, F300, MMF300

- Drain is automatically activated when specified amount of moisture is accumulated or pressure inside the ball falls under 0.02MPa (0.2kgf/cm<sup>2</sup>). Drain is manually done by turning drain screw counterclockwise, too.

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 Detailed Safety Instruction

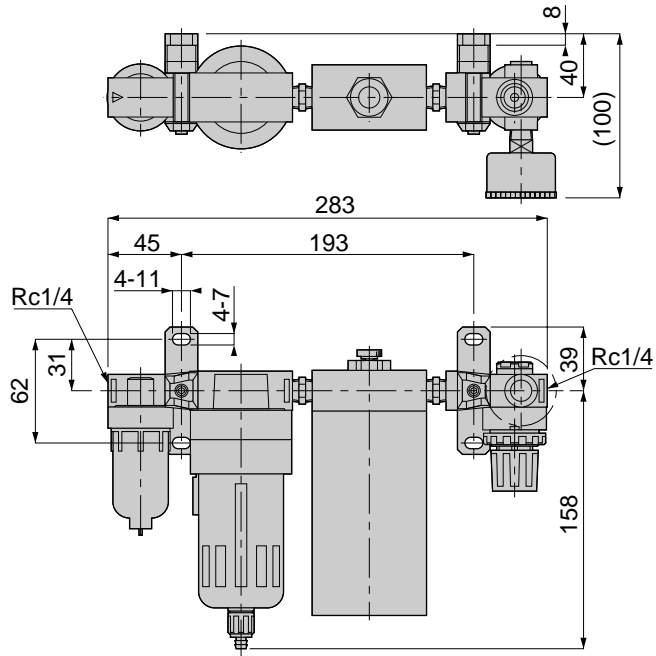
Before using the PISCO device, be sure to read the "Safety Instructions", "Common Safety Instructions for Products Listed in This Manual" on pages 23~24 and "Common Safety Instructions for Controllers" on page 255.

 Caution

1. Be sure to adjust the pressure of the regulator in the increasing direction and lock it by pressing the lock button after adjustment.
2. The auto drain exhausts air from the drain port until the supply pressure rises to 0.15MPa (21.8psi). During this time, the air will not stop coming out even if the drain knob is operated. [Contact PISCO for instructions if the time is too long before the supply pressure rises to 0.15MPa (21.8psi). ]
3. Operate the drain knob with your fingers.
4. Use a nylon tube of ID 6mm to connect to the joint. Also make sure that the tube is not bent near the joint.
5. The joint rotates freely, so that it is not necessary to remove the tube when performing manual draining.

**FMDR**  
100

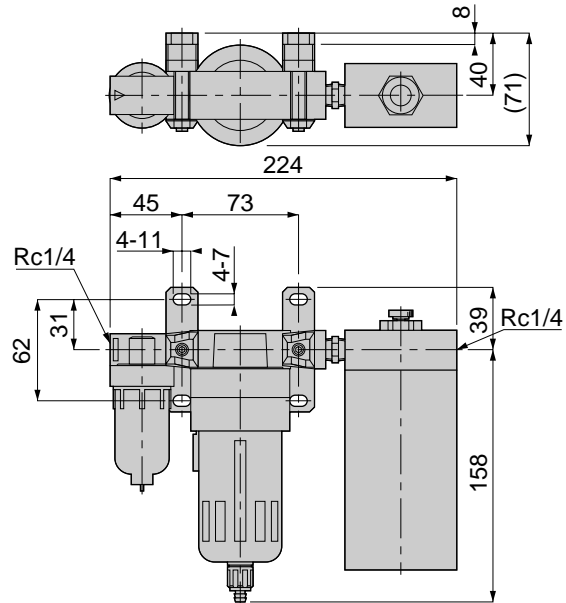
Filter, Micro Mist Filter,  
Fiber Dry, Regulator



unit:mm		
Model	Mass (g)	
FMDR 100	1,850	1

**FMD**  
100

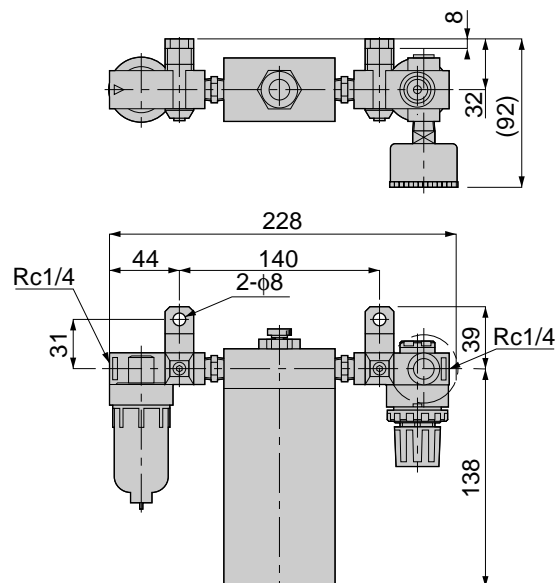
Filter, Micro Mist Filter,  
Fiber Dry



unit:mm		
Model	Mass (g)	
FMD 100	1,650	1

**FDR**  
100

Filter, Fiber Dry, Regulator

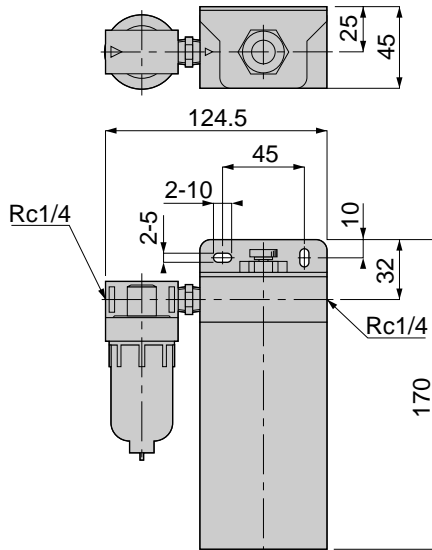


unit:mm		
Model	Mass (g)	
FDR 100	1,050	1


# Control Series Dry Unit

## FD 100

Filter, Fiber Dry

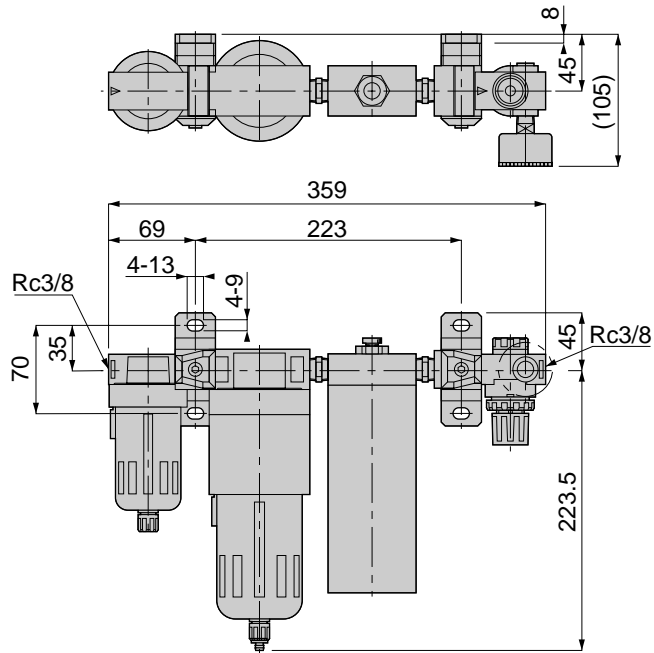


unit:mm


Model	Mass (g)	
FD 100	565	1

## FMDR 300

Filter, Micro Mist Filter, Fiber Dry, Regulator

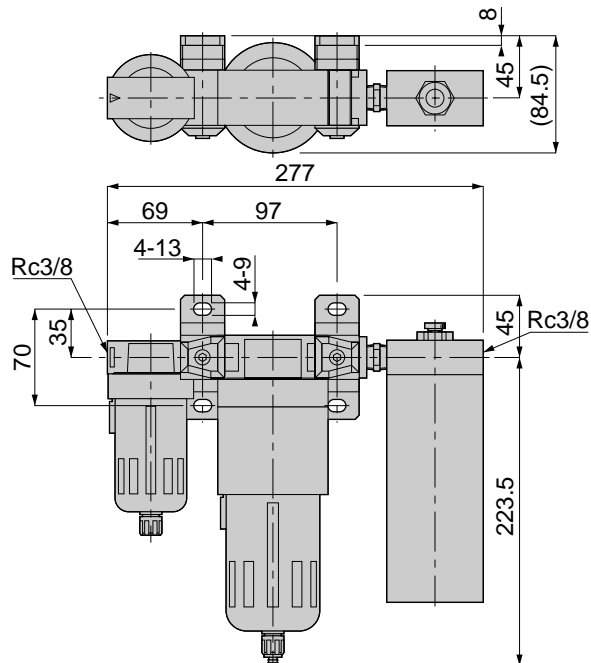


unit:mm


Model	Mass (g)	
FMDR 300	3,150	1

## FMD 300

Filter, Micro Mist Filter, Fiber Dry



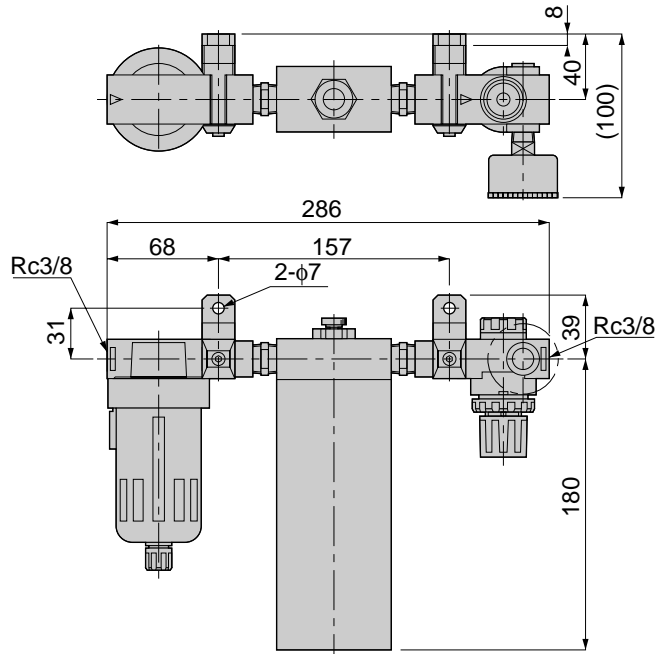
unit:mm

Model	Mass (g)	
FMD 300	2,900	1



**FDR**  
300

Filter, Fiber Dry,  
Regulator



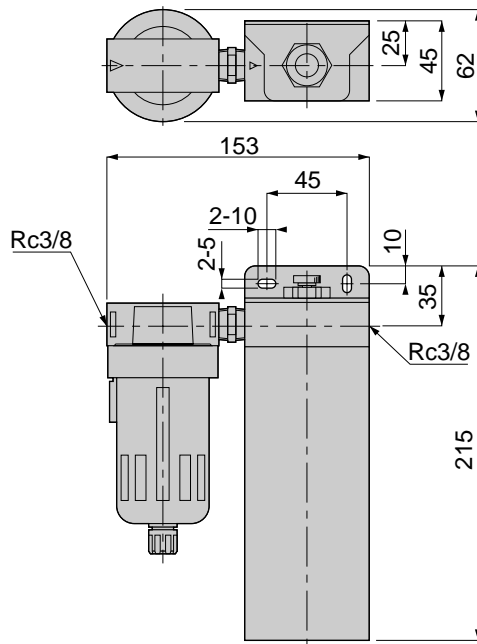
unit:mm

Model	Mass (g)
FDR 300	1,650



**FD**  
300

Filter, Fiber Dry



unit:mm

Model	Mass (g)
FD 300	830



# Control Series Fiber Dry & Dry Unit

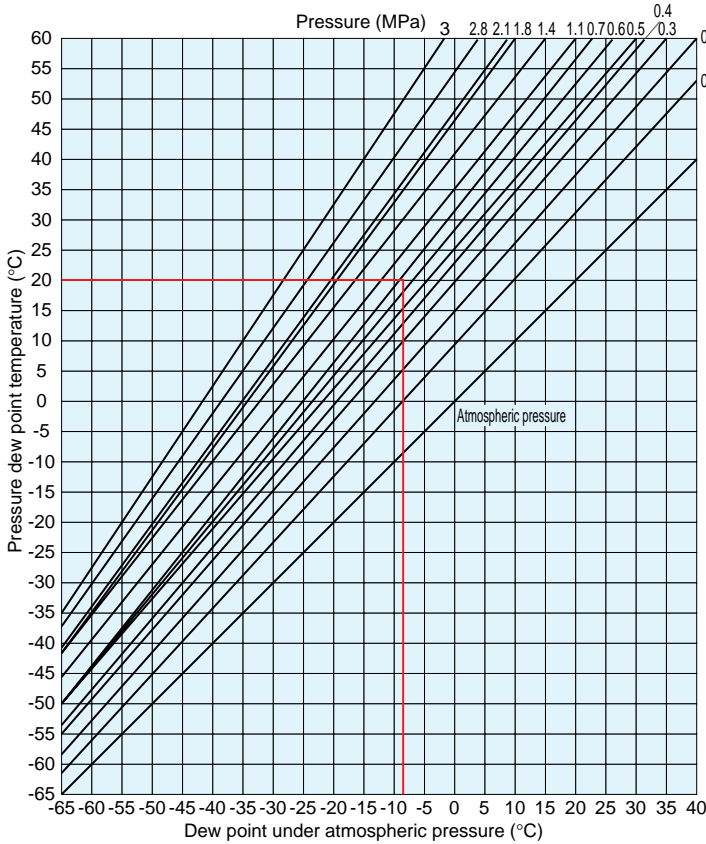
## How to Determine Dehumidification Amount

– Example –

Determine the dehumidified amount when the compressed air of 20°C temperature, 100% humidity and 7kgf/cm<sup>2</sup> pressure has been dehumidified to a dew point of -25°C under atmospheric pressure.

## Atmospheric Dew Point Conversion Table

[Fig-1]



Find the dew point under atmospheric pressure for a temperature of 20°C, humidity of 100% and pressure of 7kgf/cm<sup>2</sup>.

[See Fig. 1.]

Dew point under atmospheric pressure ..... -8°C

Find the saturated vapor levels for -8°C and -25°C, respectively.

[See Fig. 2.]

Saturated vapor at -8°C ..... 2.74gf/m<sup>3</sup>

Saturated vapor at -25°C ..... 0.705gf/m<sup>3</sup>

Hence

2.74-0.705=2.035

Dehumidified amount ..... 2.035gf/m<sup>3</sup>

## Saturated Vapor Table

[Fig-2]

(Saturated absolute humidity table)

Temperature (°C)	Vapor content (g/m <sup>3</sup> )	Temperature (°C)	Vapor content (g/m <sup>3</sup> )
-50	0.0617	0	4.85
-49	0.0689	1	5.19
-48	0.0767	2	5.56
-47	0.0853	3	5.95
-46	0.095	4	6.36
-45	0.106	5	6.79
-44	0.117	6	7.26
-43	0.13	7	7.75
-42	0.144	8	8.27
-41	0.159	9	8.82
-40	0.176	10	9.4
-39	0.194	11	10
-38	0.214	12	10.7
-37	0.236	13	11.3
-36	0.26	14	12.1
-35	0.286	15	12.8
-34	0.314	16	13.6
-33	0.345	17	14.5
-32	0.378	18	15.4
-31	0.414	19	16.3
-30	0.453	20	17.3
-29	0.496	21	18.3
-28	0.542	22	19.4
-27	0.592	23	20.6
-26	0.646	24	21.8
-25	0.705	25	23
-24	0.768	26	24.4
-23	0.833	27	25.8
-22	0.909	28	27.2
-21	0.989	29	28.7
-20	1.07	30	30.3
-19	1.17	31	32.3
-18	1.26	32	33.8
-17	1.37	33	35.6
-16	1.48	34	37.5
-15	1.61	35	39.6
-14	1.74	36	41.7
-13	1.88	37	43.9
-12	2.03	38	46.2
-11	2.19	39	43.6
-10	2.36	40	51.5
-9	2.54	41	53.7
-8	2.74	42	56.4
-7	2.95	43	59.3
-6	3.17	44	62.2
-5	3.41	45	65.3
-4	3.66	46	68.5
-3	3.93	47	71.9
-2	4.22	48	75.4
-1	4.52	49	79.0
		50	82.8

## Dew Point-Vapor Content-Relative Humidity Conversion Table

Dew point (°C)	Vapor content (g/m <sup>3</sup> )	Relative Humidity (%)		
		Air temperature 20°C	Air temperature 25°C	Air temperature 30°C
30	30.3	-	-	100
25	23.0	-	100	76
20	17.3	100	75	57
15	12.8	74	55	42
10	9.40	54	41	31
5	6.79	39	30	22
0	4.85	28	21	16
-5	3.41	18	14	11
-10	2.36	12	9.3	7.1
-15	1.01	8.2	6.0	4.6
-20	1.07	5.1	3.8	2.9
-25	0.705	3.2	2.4	1.8
-30	0.453	2.0	1.5	1.1
-35	0.286	1.2	0.88	0.67
-40	0.176	0.89	0.52	0.39
-45	0.106	0.40	0.30	0.22
-50	0.0617	0.22	0.17	0.13