

Membrane air dryer MS4N-LDM1

FESTO

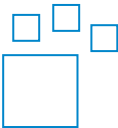


Characteristics

At a glance

The membrane air dryer removes dissolved water molecules from compressed air systems. The purge flow rate (purge air) is controlled inside the diaphragm cartridge by a fixed preset orifice plate. The membrane air dryer is maintenance-free, no adjustments are required.

Ordering data - modular system Link [ms4n-ldm1](#)

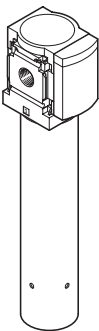


Configurable product
This product and all its product options can be ordered online via the configurator.

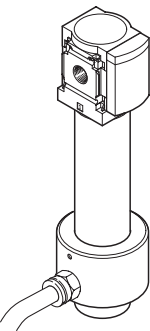
Purge air

As standard, the membrane air dryer discharges its purge air unobstructed into the environment through openings in the housing. Alternatively, the purge air can also be ducted with a purge ring.

☐ Unducted



☒ [PAC] Ducted



Purge air is ducted and discharged via plastic tubing.

Type of mounting

☒ [WB] Mounting centrally at rear (wall mounting top and bottom), connecting plates not required



- For wall mounting an individual device

☒ [WBM] Mounting centrally at rear (wall mounting top), connecting plates not required



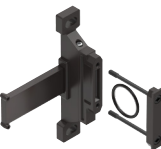
- For wall mounting an individual device

☐ [WP] Mounting bracket basic design



- In combination with additional service unit component with wall mounting
- In combination with connecting plate MS4-AG... for mounting an individual device on a wall
- Same wall distance for combinations of series MS4 and MS6

☐ [WPM] Mounting bracket for hooking in service unit components



- In combination with additional service unit component with wall mounting
- In combination with connecting plate MS4-AG... for mounting an individual device on a wall
- Fast hooking and unhooking
- For mounting the pressure regulators with rotary knob facing downwards

Type code

001	Series	
MS	MS series	
002	Size	
4	Grid dimension 40 mm	
003	Thread type	
N	NPT thread	
004	Function	
LDM1	Membrane air dryer	
005	Pneumatic connection, inch	
1/8	Female thread NPT 1/8	
1/4	Female thread NPT 1/4	
AQK	Sub-base NPT1/8	
AQN	Sub-base NPT1/4	
AQP	Sub-base NPT3/8	

006	Flow cartridge	
P05	50 l/min	
P10	100 l/min	
007	Purge air	
	Unducted	
PAC	Ducted	
008	Type of mounting	
	Without mounting bracket	
WB	Mounting centrally at rear (wall mounting top and bottom), connecting plates not required	
WBM	Mounting centrally at rear (wall mounting top), connecting plates not required	
WP	Mounting bracket basic design	
WPM	Mounting bracket for hooking in service unit components	
009	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data



Size	4
Pneumatic connection, port 1	1/8 NPT, 1/4 NPT
Pneumatic connection, port 2	1/8 NPT, 1/4 NPT
Standard nominal flow rate (standardised to DIN 1343)	100 l/min
Design	Membrane air dryer
Type of mounting	Either: Inline installation With accessories
Mounting position	Vertical +/-5°
Air purity class at output	Compressed air to ISO 8573-1:2010 [1:3:2]

Operating and environmental conditions

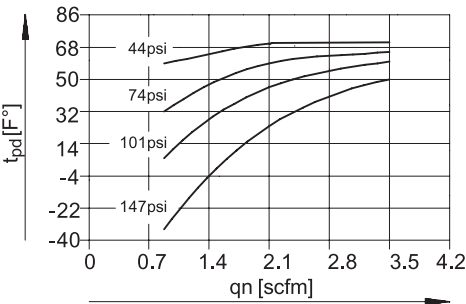
Operating pressure	3 ... 12.5 bar
Operating medium	Compressed air to ISO 8573-1:2010 [1:4:2]
Note on operating and pilot medium	Lubricated operation not possible
Pressure dew point drop	20 K
Ambient temperature	2 ... 50°C
Media temperature	2 ... 50°C
Storage temperature	-20 ... 60°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress

1) More information www.festo.com/x/topic/crc

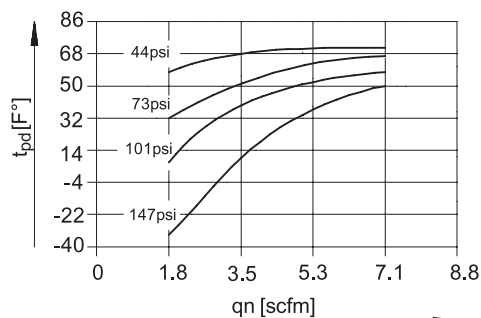
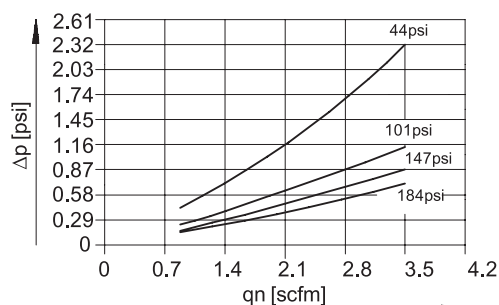
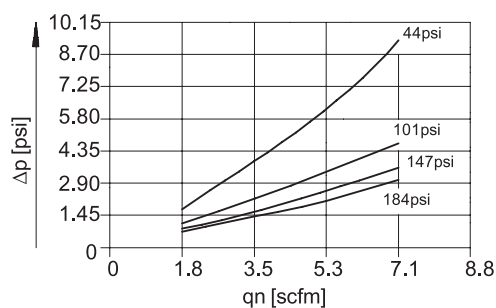
Materials

Material housing	Die-cast aluminium
Material bowl	Wrought aluminium alloy
Note on materials	RoHS compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

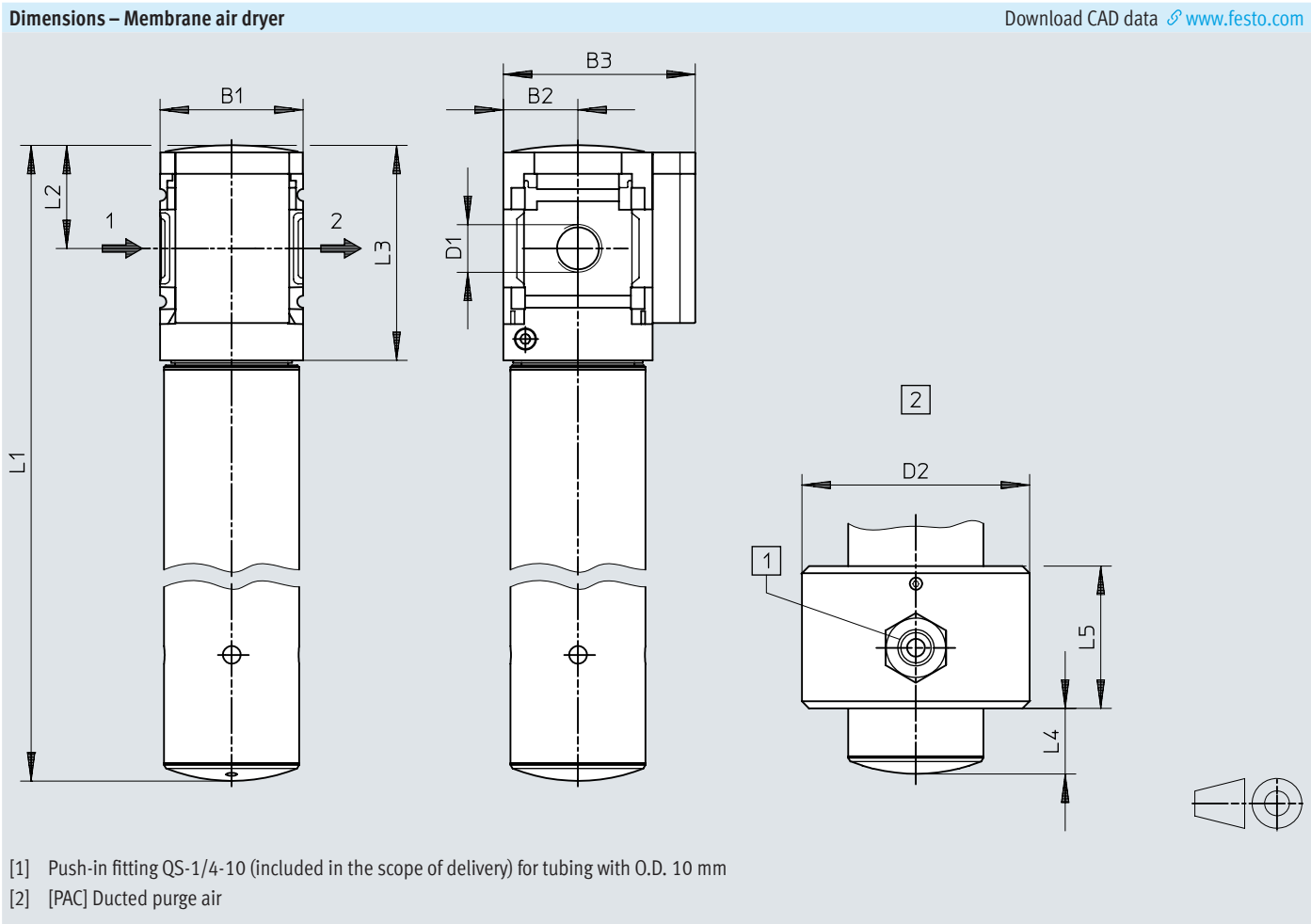
Pressure dew point t_{pd} (output) as a function of the standard flow rate at output q_n (MS4N-LDM1-...-P05)



Datasheet

Pressure dew point t_{pd} (output) as a function of the standard flow rate at output q_n (MS4N-LDM1-...-P10)Differential pressure Δp as a function of the standard flow rate at output q_n (MS4N-LDM1-...-P05)Differential pressure Δp as a function of the standard flow rate at output q_n (MS4N-LDM1-...-P10)

Dimensions



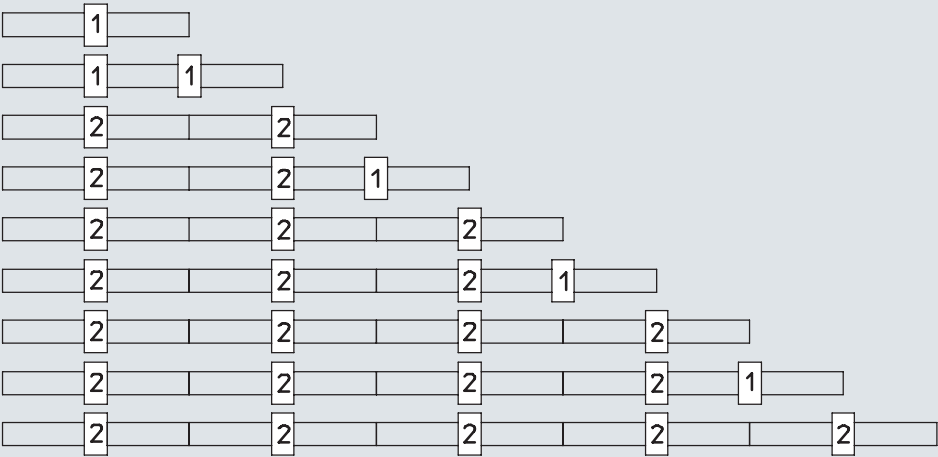
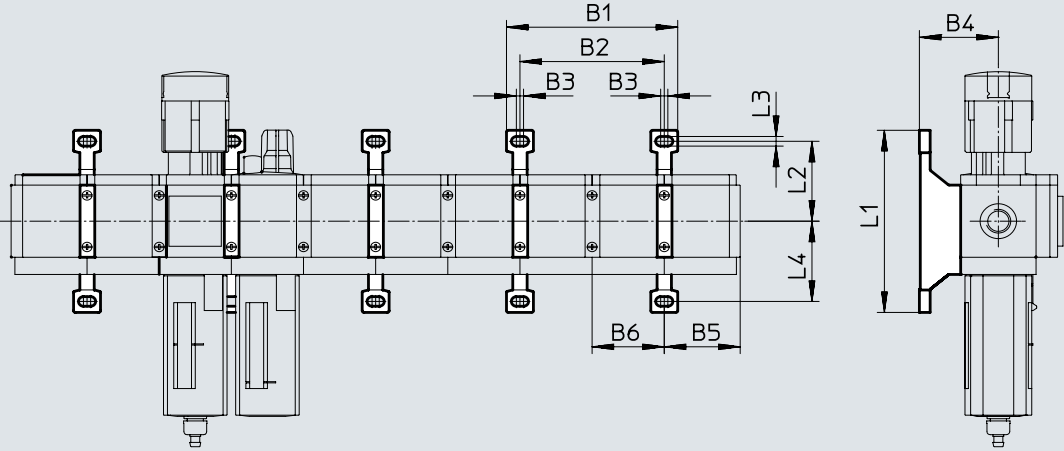
	B1 [inch]	B2 [inch]	B3 [inch]	D1	D2 [inch]	L1 [inch]	L2 [inch]	L3 [inch]	L4 [inch]	L5 [inch]
MS4N-LDM1-1/8-P05	1,57	0,83	2,13	1/8 NPT	2,52	9,65	1,14	2,36	0,71	1,57
MS4N-LDM1-1/8-P10				13,58						
MS4N-LDM1-1/4-P05				1/4 NPT		9,65				
MS4N-LDM1-1/4-P10						13,58				

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

Dimensions

Dimensions – Mounting clearances for mounting service unit combinations

Download CAD data www.festo.com

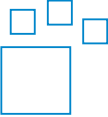


- [1] Mounting bracket WP, WPB, WPE or WPM-D
- [2] Mounting bracket WP, WPB, WPE or WPM-2D
- [3] Number of components

	B1 ¹⁾ [inch]	B2 ¹⁾ [inch]	B3 [inch]	B4 [inch]	B5 ¹⁾²⁾ [inch]	B6 ¹⁾ [inch]	L1 [inch]	L2 [inch]	L3 [inch]	L4 [inch]
MS4-WP	3,76	3,17	0,16	1,73	1,65	1,58	4,17	1,83	0,22	1,84
MS4-WPB/WPE				2,60						
MS4-WPM-...D				1,73						

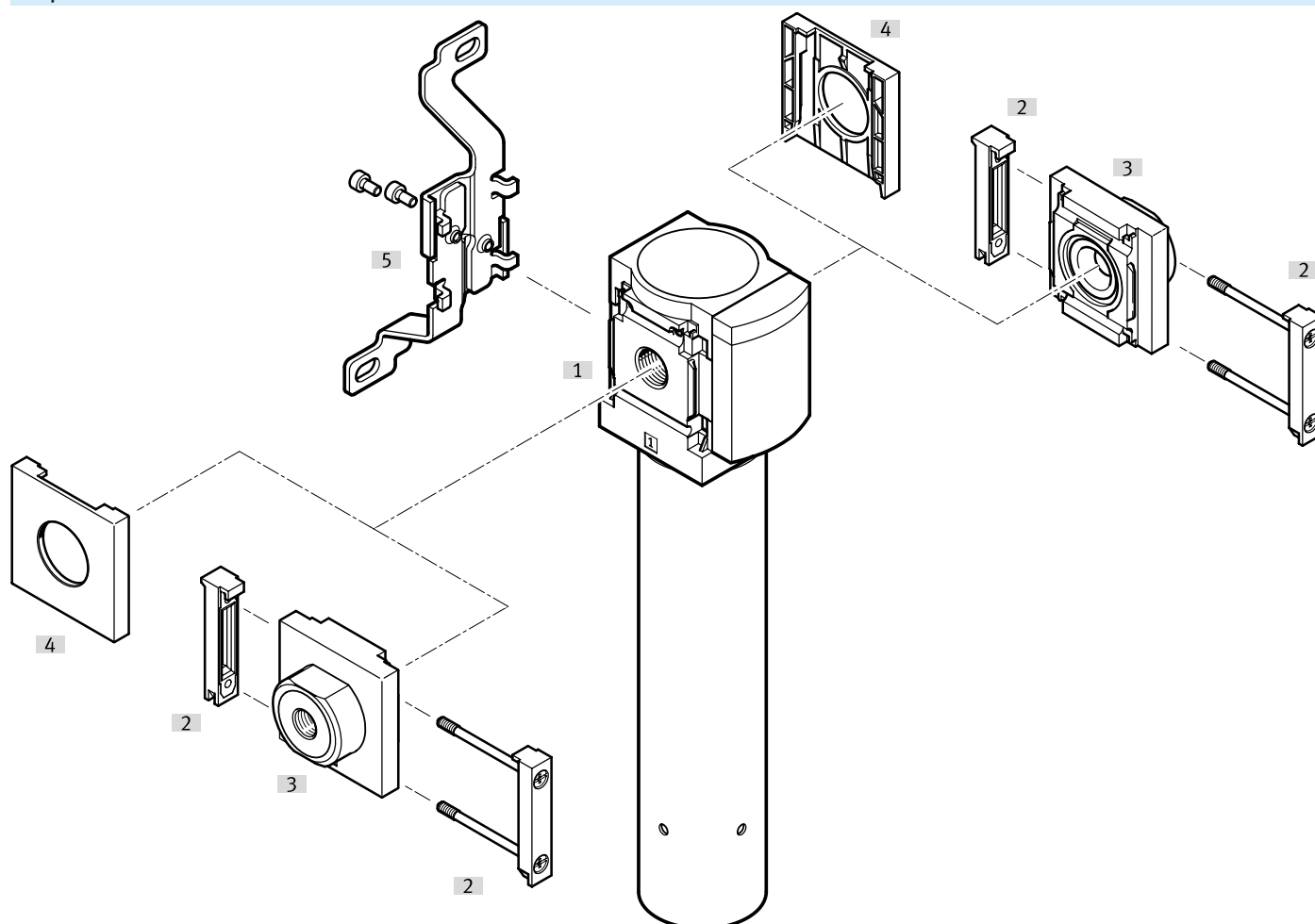
Ordering data

Ordering data						
	Pneumatic connection, port 1	Flow cartridge	Flow direction	Product weight	Part no.	Type
	1/8 NPT	100 l/min	From left to right	0.53 kg	543634	MS4N-LDM1-1/8-P10
	1/4 NPT				543636	MS4N-LDM1-1/4-P10

Ordering data – Modular product system			
	Short type code	Part no.	Type
	MS4N-LDM	543629	MS4N-LDM1

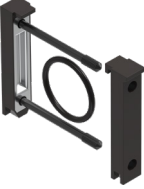
Peripherals

Peripherals overview



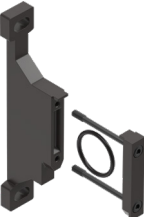
Accessories		→ Link
Type/order code	Description	
[1] Membrane air dryer MS4N-LDM1		ms4n-ldm1
[2] Module connector MS4-MV	For device combinations and individual devices with connecting plate	10
[3] Connecting plate SET MS4-AQ...	Order code [AQ...]; for device combinations	11
[4] Cover cap MS4-END	For devices without connecting plate	11
[5] Mounting bracket MS4-WB	Order code [WB]; for single device	10
[6] Mounting bracket MS4-WP/WPB/WPE/WPM	Not shown	10

Accessories

Module connector MS4-MV1					
	Material module connector	LABS (PWIS) conformity	Product weight	Part no.	Type
	POM, High-alloy stainless steel	VDMA24364-B1/B2-L	13 g	8119201	MS4-MV1

Mounting bracket MS4-WB					
	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	Steel	VDMA24364-B1/B2-L	46 g	532185	MS4-WB

Mounting bracket MS4-WBM					
	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	Steel	VDMA24364-B1/B2-L	48 g	526062	MS4-WBM

Mounting bracket MS4-WP...					
	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminium	VDMA24364-B1/B2-L		558869	MS4-WPE
			39 g	532184	MS4-WP
			45 g	526060	MS4-WPM-D
			55 g	526063	MS4-WPB
				526061	MS4-WPM-2D

Accessories

Connecting plate SET MS4N-AQ...					
	Pneumatic connection, port 1	LABS (PWIS) conformity	Product weight	Part no.	Type
	1/8 NPT	VDMA24364-B1/B2-L	128 g	526065	MS4N-AQK
	1/4 NPT			526066	MS4N-AQN
	3/8 NPT			526067	MS4N-AQP

Cover cap MS4-END				
	Material housing	LABS (PWIS) conformity	Part no.	Type
	Reinforced PA	VDMA24364-B1/B2-L	538779	MS4-END