

Membrane air dryer MS6N-LDM1

FESTO

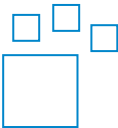


Characteristics

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 [ms6n-ldm1](#)

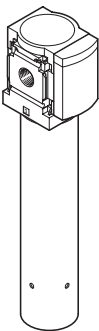


Configurable product
This product and all its product options can be ordered online via the configurator.

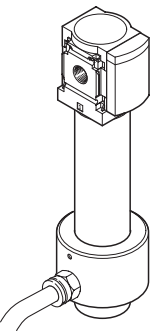
Purge air

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.

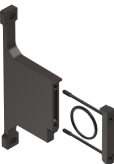
Type of mounting

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



- For wall mounting an individual device

☐ [WP] Mounting bracket basic design

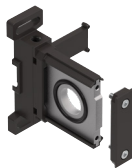


- In combination with additional service unit component with wall mounting
- In combination with connecting plate MS6-AQ... for mounting an individual device on a wall
- Same wall distance for combinations of series MS4 and MS6

Characteristics

[WPM]

Mounting bracket for hooking in service unit components



- In combination with additional service unit component with wall mounting
- In combination with connecting plate MS6-AQ... 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	
6	Grid dimension 62 mm	
003	Thread type	
N	NPT thread	
004	Function	
LDM1	Membrane air dryer	
005	Pneumatic connection, inch	
1/4	Female thread NPT 1/4	
3/8	Female thread NPT 3/8	
1/2	Female thread NPT 1/2	
AQN	Sub-base NPT 1/4	
AQP	Sub-base NPT 3/8	
AQR	Sub-base NPT 1/2	
AQS	Sub-base NPT 3/4	

006	Flow cartridge	
P20	200 l/min	
P30	300 l/min	
P40	400 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	
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	6
Pneumatic connection, port 1	1/4 NPT, 3/8 NPT, 1/2 NPT
Pneumatic connection, port 2	1/4 NPT, 3/8 NPT, 1/2 NPT
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]

Standard nominal flow rate qnN

Pneumatic connection, port 1	1/4 NPT	3/8 NPT	1/2 NPT
Standard nominal flow rate (standardised to DIN 1343)	200 l/min	200 ... 400 l/min	400 l/min

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
CE mark (see declaration of conformity) ¹⁾	—
UKCA marking (see declaration of conformity) ²⁾	—
Corrosion resistance class CRC ³⁾	2 - Moderate corrosion stress

1) More information www.festo.com/catalogue/ms6-ldm → Support/Downloads.

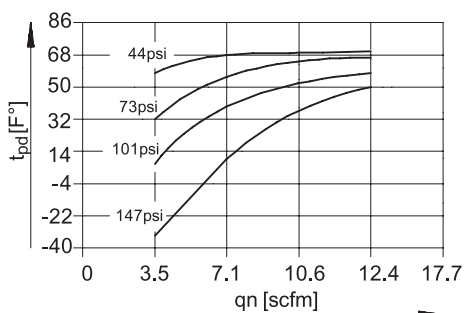
2) More information www.festo.com/catalogue/ms6-ldm → Support/Downloads.

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

Materials

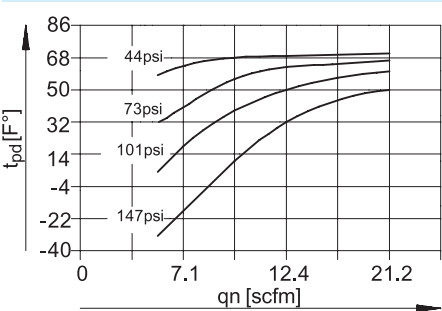
Material housing	Die-cast aluminium
Material bowl	Wrought aluminium alloy
Note on materials	RoHS compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Pressure dew point t_{pd} (output) as a function of the standard flow rate at output qn (MS6N-LDM1-...-P20)

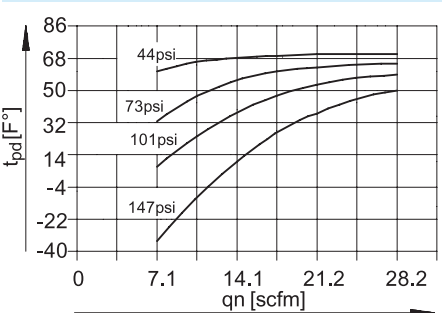


Datasheet

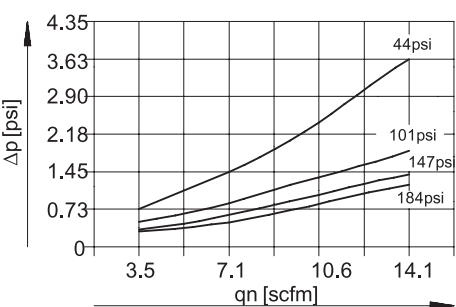
Pressure dew point t_{pd} (output) as a function of the standard flow rate at output q_n (MS6N-LDM1-...-P30)



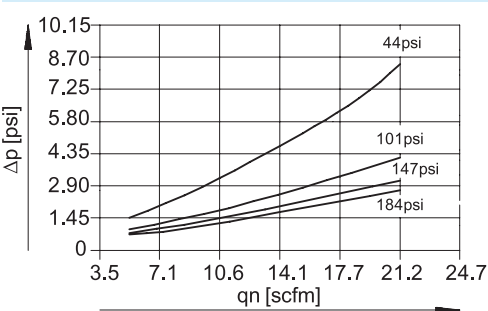
Pressure dew point t_{pd} (output) as a function of the standard flow rate at output q_n (MS6N-LDM1-...-P40)



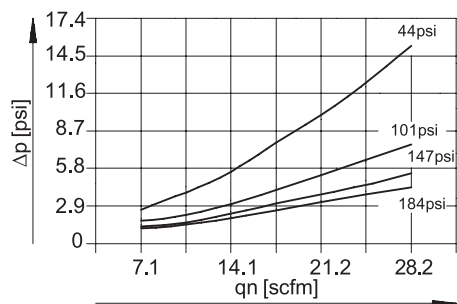
Differential pressure Δp as a function of the standard flow rate at output q_n (MS6N-LDM1-...-P20)



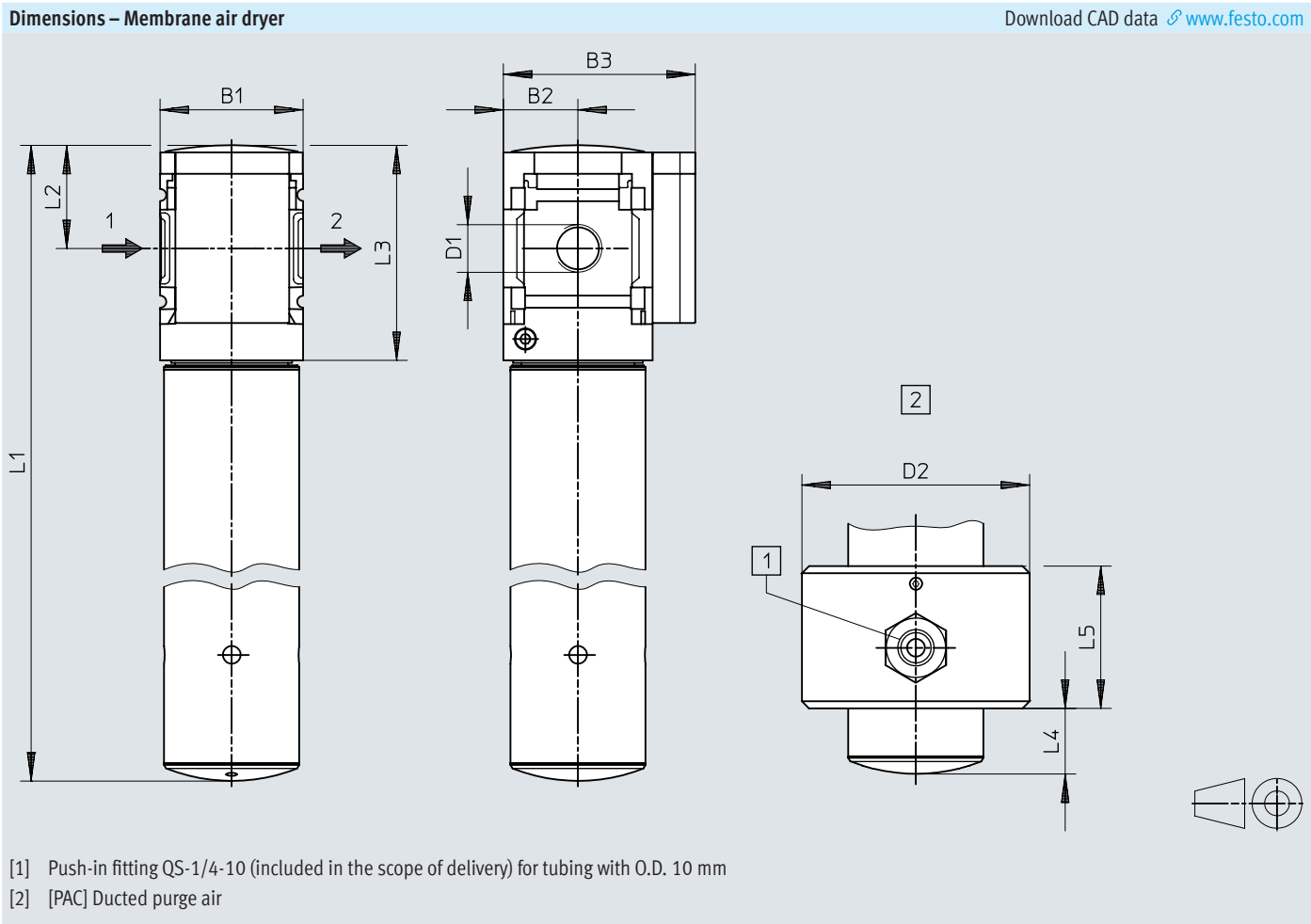
Differential pressure Δp as a function of the standard flow rate at output q_n (MS6N-LDM1-...-P30)



Datasheet

Differential pressure Δp as a function of the standard flow rate at output q_n (MS6N-LDM1-...-P40)

Dimensions

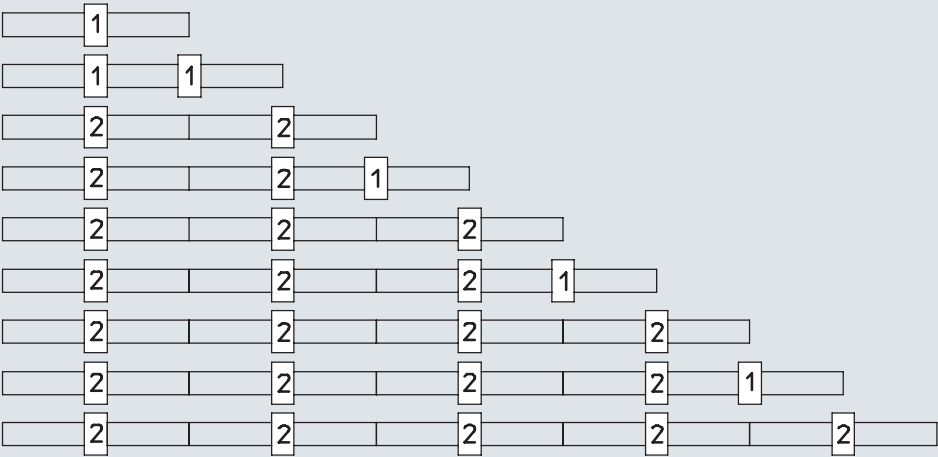
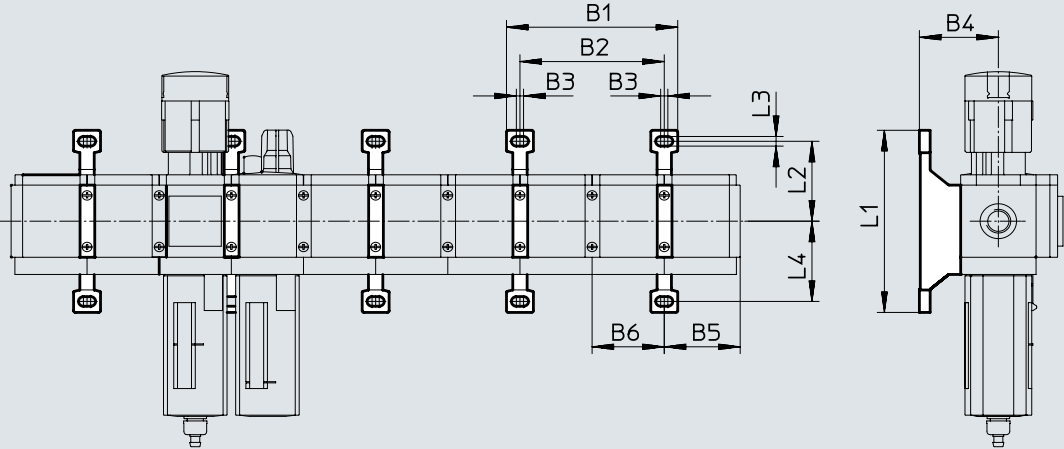


	B1 [inch]	B2 [inch]	B3 [inch]	D1	D2 [inch]	L1 [inch]	L2 [inch]	L3 [inch]	L4 [inch]	L5 [inch]
MS6N-LDM1-1/4-P20	2,44	1,22	2,99	1/4 NPT	3,45	13,58	1,65	3,43	1,34	1,57
MS6N-LDM1-1/4-P30						16,34				
MS6N-LDM1-1/4-P40						18,70				
MS6N-LDM1-3/8-P20				3/8 NPT		13,58				
MS6N-LDM1-3/8-P30						16,34				
MS6N-LDM1-3/8-P40						18,70				
MS6N-LDM1-1/2-P20				1/2 NPT		13,58				
MS6N-LDM1-1/2-P30						16,34				
MS6N-LDM1-1/2-P40						18,70				

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

Dimensions

Dimensions – Download CAD data www.festo.com

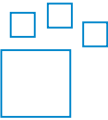


- [1] Mounting bracket WP, WPB, WPE or WPM-D
- [2] Mounting bracket WP, WPB, WPE or WPM-2D
- [3] Number of components

	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]
MS6-WP	5,55	4,88	0,18	2,13	2,54	2,44	6,22	2,80	0,26	2,80
MS6-WPB/WPE				3,56						
MS6-WPM-...D	6,61	5,43	0,69	2,13	2,68	2,72	3,88	1,63		1,63

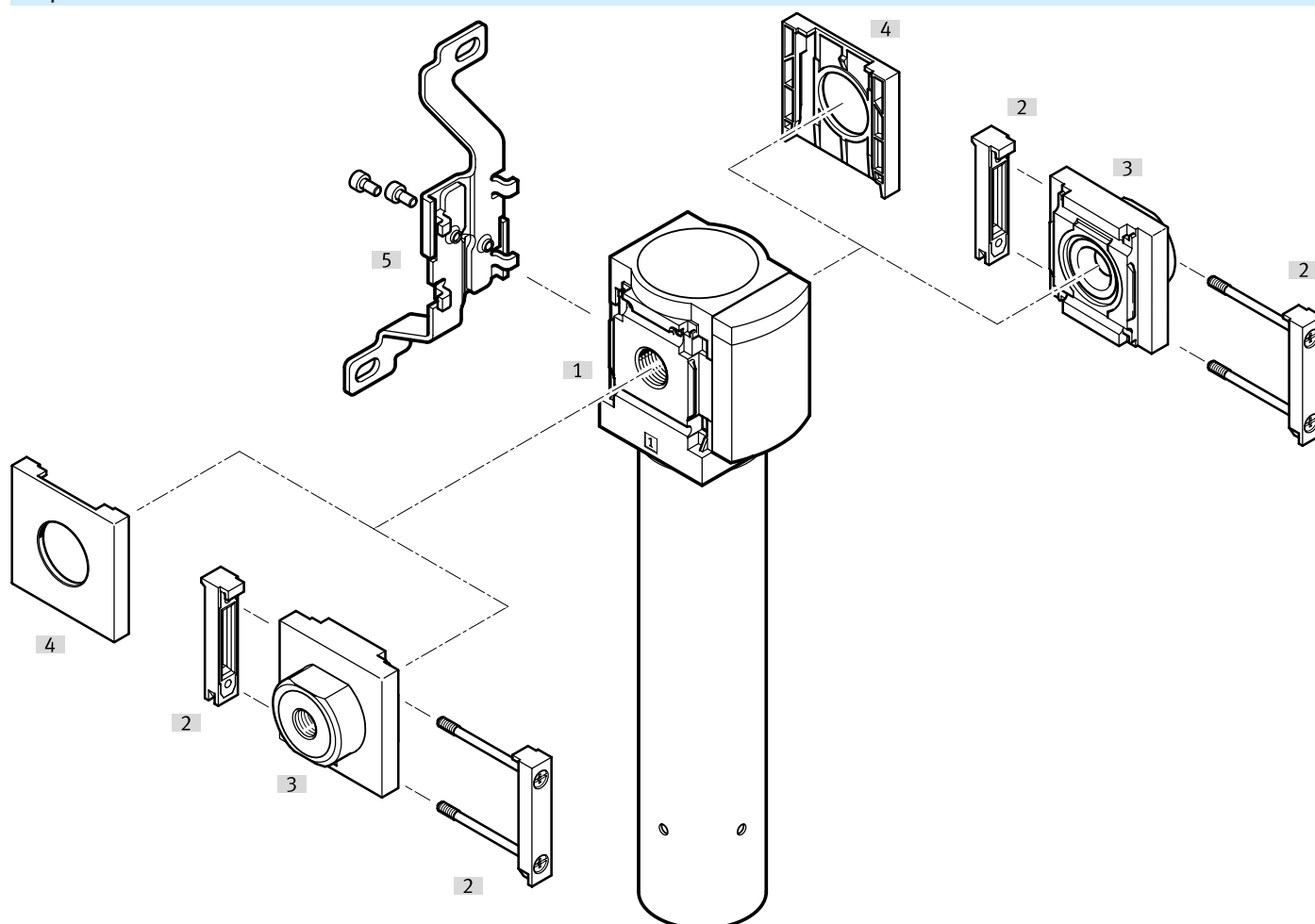
Ordering data

Ordering data						
	Pneumatic connection, port 1	Flow cartridge	Flow direction	Product weight	Part no.	Type
	1/4 NPT	200 l/min	From left to right	1.05 kg	543652	MS6N-LDM1-1/4-P20
	3/8 NPT				543654	MS6N-LDM1-3/8-P20
	1/2 NPT	400 l/min	From right to left	1.3 kg	543661	MS6N-LDM1-3/8-P40-Z
			From left to right		543662	MS6N-LDM1-1/2-P40
			From right to left		543663	MS6N-LDM1-1/2-P40-Z

Ordering data – Modular product system			
	Short type code	Part no.	Type
	MS6N-LDM1	543639	MS6N-LDM1

Peripherals

Peripherals overview

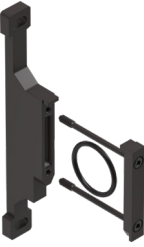


Accessories		→ Link
Type/order code	Description	
[1] Membrane air dryer MS6N-LDM1		ms6n-ldm1
[2] Module connector MS6-MV1	For device combinations and individual devices with connecting plate	12
[3] Connecting plate SET MS6-AQ...	Order code [AQ...]; for device combinations	12
[4] Cover cap MS6-END	For devices without connecting plate	13
[5] Mounting bracket MS6-WB	Order code [WR]; for single device	12
[6] Mounting bracket MS6-WP/WPB/WPE/WPM	Not shown	12

Accessories

Module connector MS6-MV1					
	Material module connector	LABS (PWIS) conformity	Product weight	Part no.	Type
	POM, High-alloy stainless steel	VDMA24364-B1/B2-L	33 g	8119204	MS6-MV1

Mounting bracket MS6-WB					
	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	Steel	VDMA24364-B1/B2-L	121 g	532196	MS6-WB

Mounting bracket MS6-WP...					
	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminium	VDMA24364-B1/B2-L		1025936	MS6-WPE
			76 g	532195	MS6-WP
			115 g	526074	MS6-WPB
			144 g	526073	MS6-WPM-D
			154 g	532186	MS6-WPM-2D

Connecting plate-SET MS6-AG...					
	Pneumatic connection, port 1	LABS (PWIS) conformity	Product weight	Part no.	Type
	1/4 NPT	VDMA24364-B1/B2-L	300 g	526076	MS6N-AQN
	3/8 NPT			526077	MS6N-AQP
	1/2 NPT			526078	MS6N-AQR
	3/4 NPT			526079	MS6N-AQS

Accessories

Cover cap MS6-END				
	Material housing	LABS (PWIS) conformity	Part no.	Type
	Reinforced PA	VDMA24364-B1/B2-L	538780	MS6-END