

Membrane air dryer MS6N-LDM1

FESTO

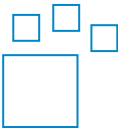


Characteristics

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](#)

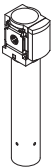


Configurable product
This product and all its product options can be ordered online via the configurator.

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 collected with a purge ring.

[PAC] Ducted



Purge air is collected and discharged via plastic tubing.

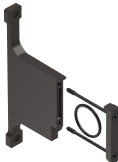
Type of mounting

[WB] Mounting centrally at rear (wall mounting top and bottom),
sub-bases not required



- For wall mounting an individual device

[WP] Mounting bracket standard design



- In conjunction with additional air preparation unit with wall mounting
- In conjunction with sub-base MS6-AQ... for mounting an individual device on a wall
- Same wall distance for mixed combination with series MS4 and MS6

[WPM] Mounting bracket for hooking in air preparation units



- In conjunction with additional air preparation unit with wall mounting
- In conjunction with sub-base 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	Width dimension 62 mm	
003	Thread type	
N	NPT thread	
004	Function	
LDM1	Membrane dryer	
005	Pneumatic connection, inch	
1/4	Internal thread NPT 1/4	
3/8	Internal thread NPT 3/8	
1/2	Internal thread NPT 1/2	
AQN	Sub-base NPT1/4	
AQP	Sub-base NPT3/8	
AQR	Sub-base NPT1/2	
AQS	Sub-base NPT3/4	

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), sub-bases not required	
WP	Mounting bracket standard design	
WPM	Mounting bracket for hooking in air preparation units	
009	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data

Size	6
Pneumatic connection 1	1/4 NPT, 3/8 NPT, 1/2 NPT
Pneumatic connection 2	1/4 NPT, 3/8 NPT, 1/2 NPT
Structural design	Membrane dryer
Type of mounting	Alternatively: In-line installation With accessories
Mounting position	Vertical $\pm 5^\circ$
Air quality class at the output	Compressed air as per ISO 8573-1:2010 [1:3:2]

Standard nominal flow rate q_{nN}

Pneumatic connection 1	1/4 NPT	3/8 NPT	1/2 NPT
Normal nominal flow rate (normalized to DIN 1343)	200 l/min	200 ... 400 l/min	400 l/min

Function



Operating and environmental conditions

Operating pressure	3 ... 12.5 bar
Operating medium	Compressed air as per ISO 8573-1:2010 [1:4:2]
Information on operating and pilot media	Operation with oil lubrication not possible
Pressure dew point reduction	20 K
Ambient temperature	2 ... 50°C
Temperature of medium	2 ... 50°C
Storage temperature	-20 ... 60°C
CE marking (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.

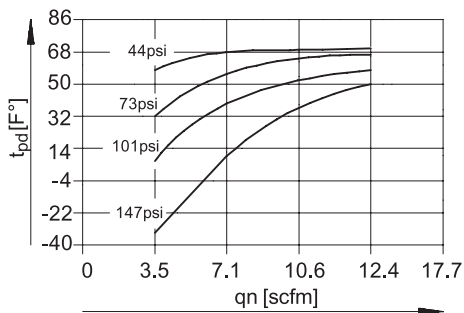
3) For more information, visit www.festo.com/x/topic/kbk

Materials

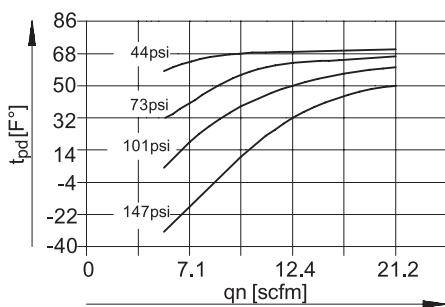
Housing material	Die-cast aluminum
Material of bowl	Wrought aluminum alloy
Note on materials	RoHS compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Datasheet

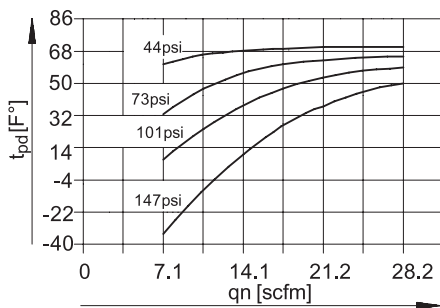
Pressure dew point t_{pd} (outlet) as a function of the standard flow rate at outlet q_n (MS6N-LDM1-...-P20)



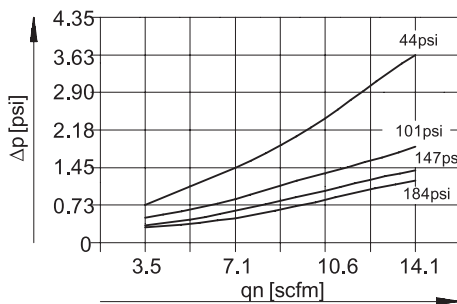
Pressure dew point t_{pd} (outlet) as a function of the standard flow rate at outlet q_n (MS6N-LDM1-...-P30)



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

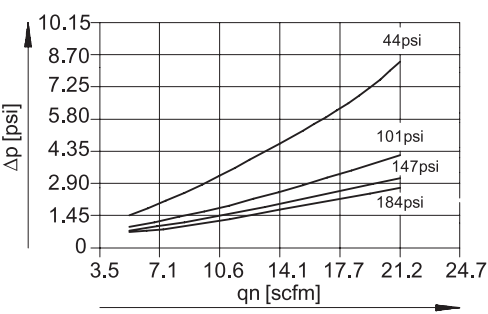


Differential pressure Δp as a function of the standard flow rate at outlet q_n (MS6N-LDM1-...-P20)

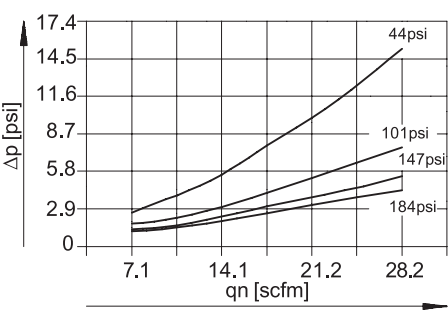


Datasheet

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

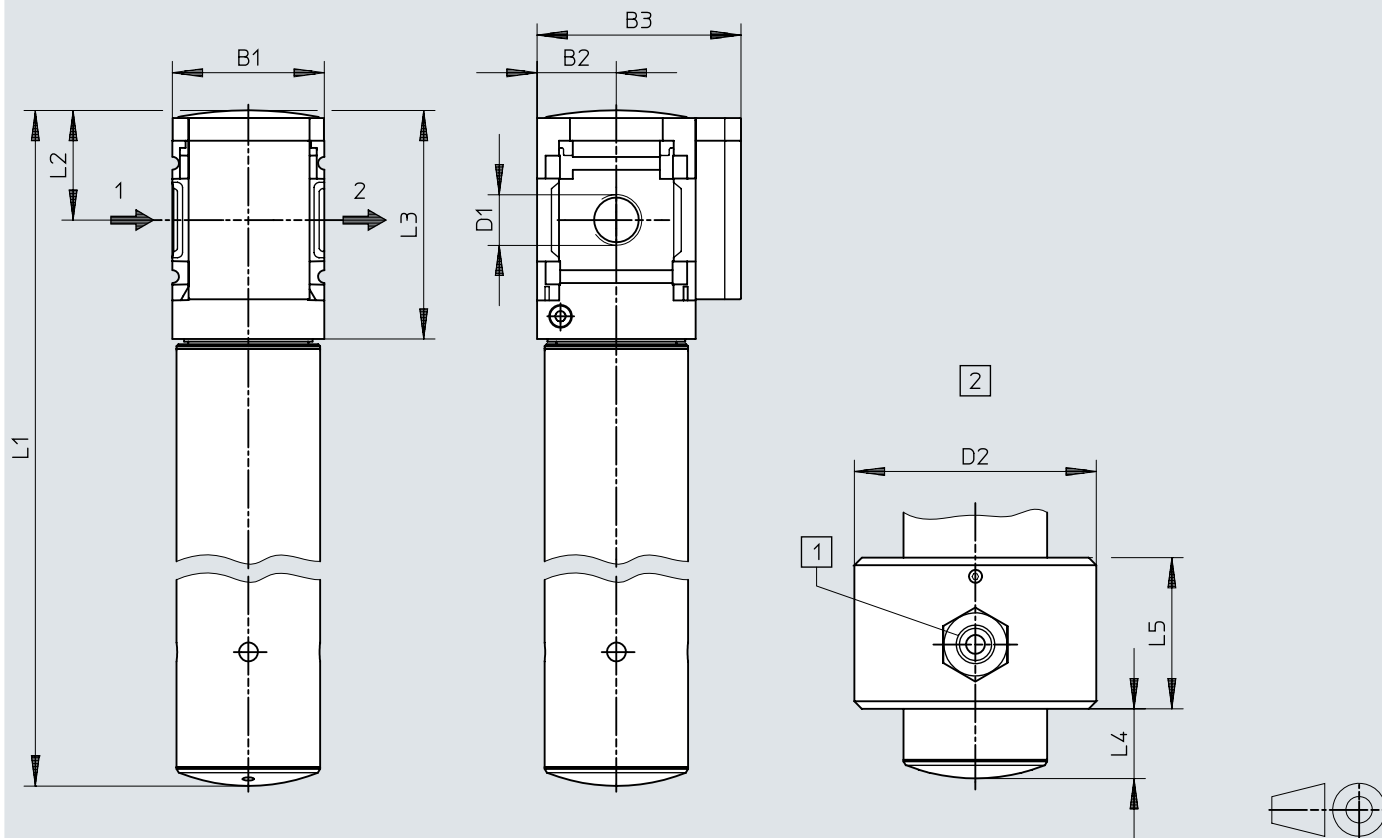


Differential pressure Δp as a function of the standard flow rate at outlet q_n (MS6N-LDM1-...-P40)



Dimensions

Dimensions – Membrane air dryer

[Download CAD data](#) www.festo.com


[1] Push-in fitting QS-1/4-10 (included in scope of delivery) for tubing mit external Ø 10 mm

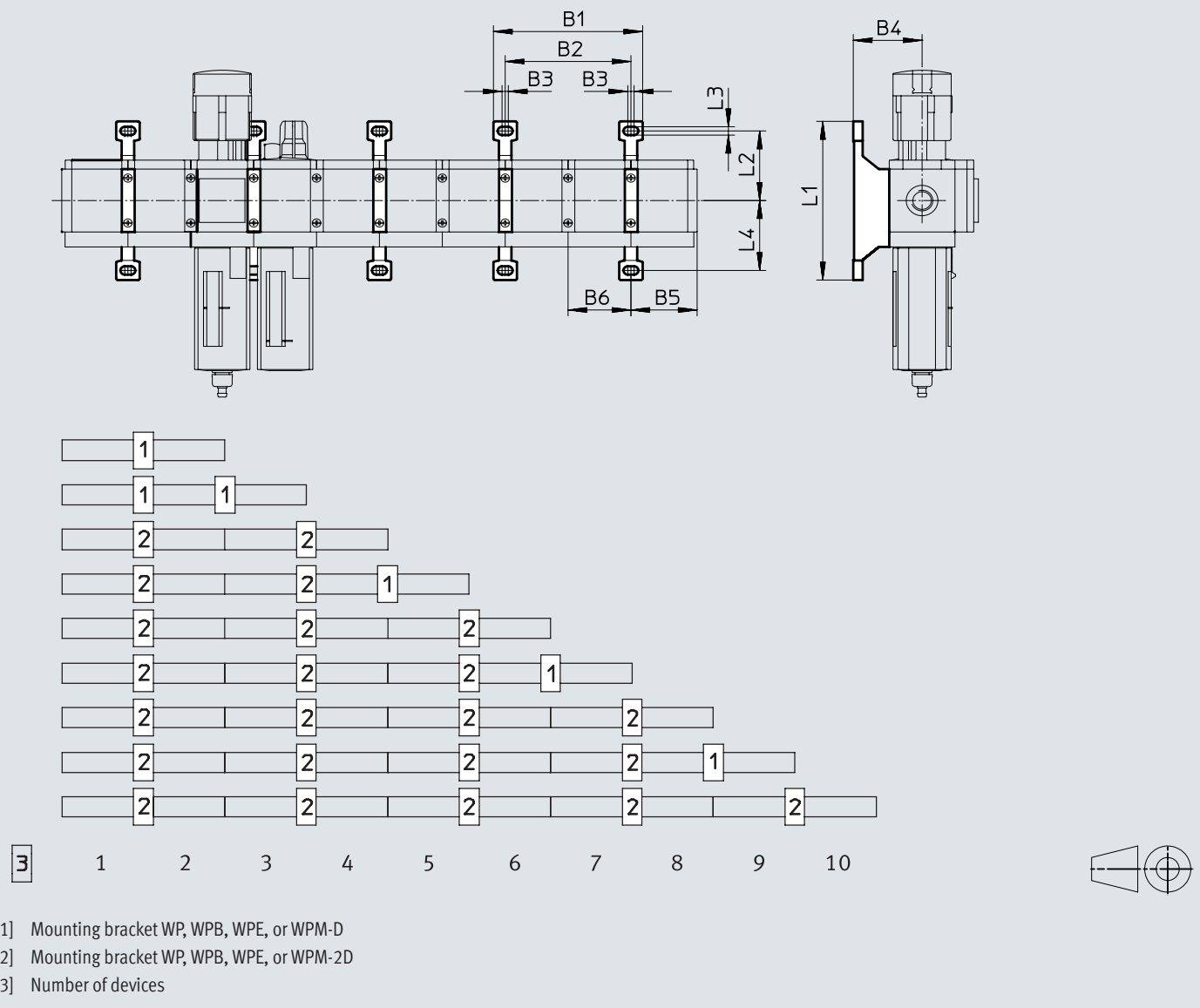
[2] [PAC] Ducted purge air

	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

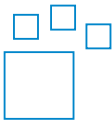
Dimensions – Download CAD data www.festo.com



	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

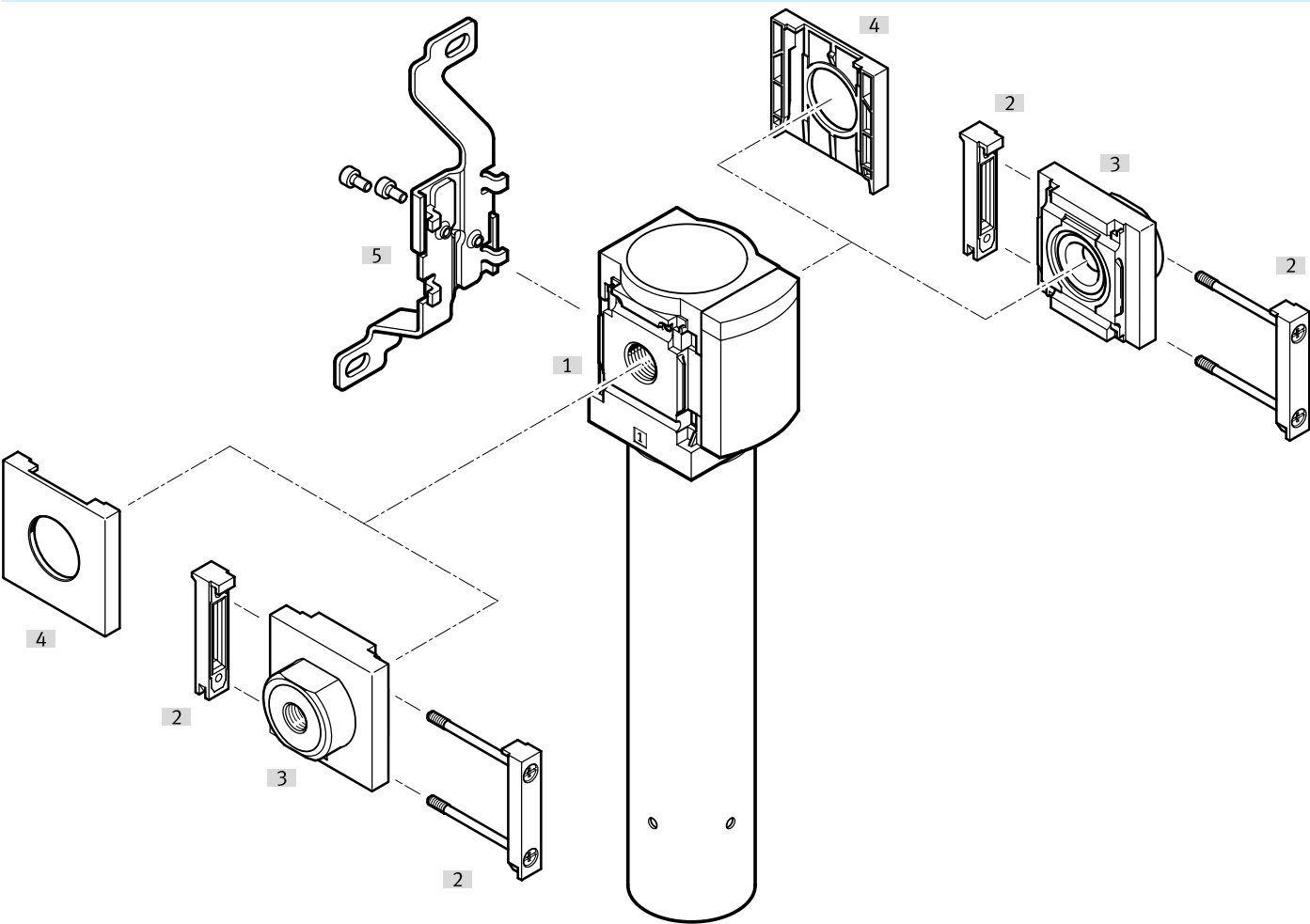
Ordering data

Ordering data						
	Pneumatic connection 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
		400 l/min	From right to left	1.3 kg	543661	MS6N-LDM1-3/8-P40-Z
	1/2 NPT		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			
	Type code	Part no.	Type
	MS6N-LDM1	543639	MS6N-LDM1

Peripherals overview

Peripherals overview

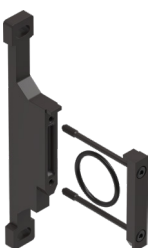


Accessories		→ Page/Internet
Type/order code	Description	
[1] Membrane air dryer MS6N-LDM1		ms6n-ldm1
[2] Module connector MS6-MV1	For device combinations and individual devices with sub-base	11
[3] Sub-base SET MS6-AQ...	Order code [AQ...]; for device combinations	11
[4] Cover cap MS6-END	For devices without sub-base	12
[5] Mounting bracket MS6-WB	Order code [WR]; for single device	11
[6] Mounting bracket MS6-WP/WPB/WPE/WPM	Not shown	11

Accessories

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

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

Mounting bracket MS6-WP...						
	Size	Bracket material	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	Die-cast aluminum	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

Sub-base-SET MS6-AG...						
	Size	Pneumatic connection 1	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	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					
	Size	Housing material	LABS (PWIS) conformity	Part no.	Type
	6	PA-reinforced	VDMA24364-B1/B2-L	538780	MS6-END