

FIXED EXHAUST EXTRACTOR





Part No. / Réf. / Art. Nr. / Cód.:

84420 - 84421 - 84422 - 84450 - 84451 - 84452 - 84453 - 84454 - 84455 - 84440 - 84441 - 84442 - 88440 - 88442 - 88441

Alentec & Orion AB Grustagsvägen 4, SE-13840, Älta, SWEDEN · Info@alentec.se · alentec.com

Manual 84420_EN_1C 2014-05-20

Fixed exhaust extractor

Alentec & Orion AB s Fixed Exhaust Extractor is the most economical and simple solution for exhaust problems in smaller workshops. The system consists of a single hose and a balancer connected to a fan. The extractor, intended for non-mobile extraction, may be upgraded according to the changing requirements of the workshop. An important component is the balancer with lock, which automatically keeps the hose lifted from the floor. Several hosed can be connected to a central ducting system. A wide range of accessories makes the fixed exhaust extractor a flexible extraction system with large variation possibilities.



Alentec & Orion AB s swinging arm is a simple and space-saving method to increase the coverage of the exhaust hoses for example in truck workshops and car service halls. The double articulated swinging arm fitted with an exhaust hose enables the connected vehicles to move within a radius of 8-9 meters from the attachment point of the swinging arm. A balancer keeps the hose away from the floor.

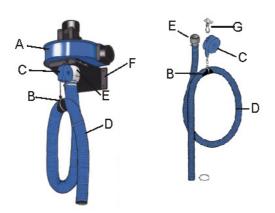
Delivery:

Single and double extractors are delivered complete with hoses, balancers and with or without fan and with or without swinging arm.

Advantages:

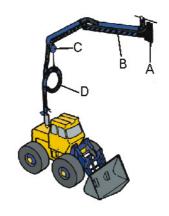
- Simple
- Economical
- Flexible
- Ideal for smaller workshops
- Applicable also for larger vehicles
- Requires little space
- Superior range of operation
- Prevents exhaust hoses from trailing all over the floor
- Easy to handle

Construction





- A. Fan 84320, 84325 for direct connection to the fixed exhaust extractor.
- B. Suspension halter, keeping the hose lifted up.
- C. Balancer witch automatically lifts the hoses from the floor(BRL).
- D. Exhaust hose, standard length 5m. Ø from 75 till 150 mm. +150 °C.
- E. Socket.
- F. Wall mounting bracket.
- G. Special balancer suspension, for attachment in ceiling, to a beam, or to a swinging arm.



Fixed exhaust extractor with swinging arm:

- A. Wall mounting bracket, prepared for mounting a fan.
- B. Double articulated swinging arm. Standard lengths 4.5, 6 and 8 m.
- C. Balancer, which automatically lifts the hoses from the floor.
- D. Exhaust hose, standard length 5m. Ø from 75 to 150 mm. +150 ℃.

Manual 84420_EN_1C

Fixed exhaust extractor without fan, for non-mobile workplaces:

Prod. no.	Connection Ø mm	Hose Ø mm	Hose length Meter	Weight kg	Recommended m³/h
88441+72121211+balancer	100	100	5	8,4	360
88442+72101021+balancer	160	150	5	10,2	1080

Fixed exhaust extractor with fan, for non-mobile workplaces:

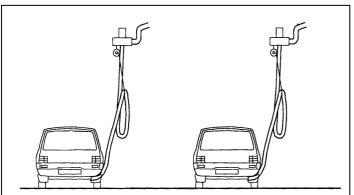
Prod. no.	Connection To ducting	Hose Ø mm	Hose length meter	Airflow per extractor m³/h	Weight kg	Fan	Fan motor kW	Voltage
84440	160	75	5	520	24,6	84320	0,37	400V, 3~
84441	160	100	5	650	25,6	84320	0,37	400V, 3~
84442	160	125	5	1200	30,2	84325	0,75	400V, 3~
84443	160	150	5	1400	31,2	84325	0,75	400V, 3~

Fixed exhaust extractor with swinging arm:

(Complete with EH-hose, BRL-balancer, suspension belt and swinging arm. Nozzle not included.)

Prod. no.	Hose Ø mm	Hose length Meter	Rigid ducting Ø mm	Weight kg	Arm length meter internal + external	Wire length (balancer) meter	Recommended. flow m³/h
84450	100	5	160	56,4	2,50 + 2,00	3,0	360
84451	125	5	160	57,4	2,50 + 2,00	3,0	540
84420	150	5	160	58,4	2,50 + 2,00	3,0	1080
84452	100	5	160	83,2	3,50 + 2,50	3,0	360
84453	125	5	160	84,2	3,50 + 2,50	3,0	540
84421	150	5	160	85,2	3,50 + 2,50	3,0	1080
84454	100	5	160	112,4	4,50 + 3,50	3,0	360
84455	125	5	160	113,4	4,50 + 3,50	3,0	540
84422	150	5	160	114,4	4,50 + 3,50	3,0	1080

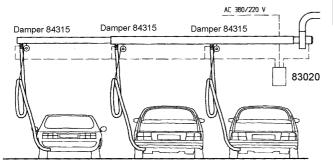
System solutions



1. In a small workshop with limited space, single extractors can be connected to separate fans. The system permits high flexibility for future demands and can easily be adapted to the demands and economy of the workshop. The fan is manually switched on and exhaust duct can go through the wall or the roof of the building.

System; 2 single fixed extractors with separate fans, 84320.

2. In bigger workshops the extractors can be connected to central ducting fitted with a stronger fan. This solution is suitable when the extracted air volume can be regarded as part of the ordinary air change.



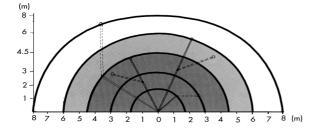
Central system; 3 single fixed extractors connected to a

3. If you are aiming at great energy savings or do not want to increase the air change more than necessary you ought to fit the system with automatic dampers (84315), pressure sensor and a control unit (83020). The system will be running only when extraction is needed.

Centralsystem; 3 fixed single extractors with automatic dampers, 84315, control unit, 83020 and a common fan.

Fixed extractor mounted on swinging arm/Mounting

In order to have the hose available when needed and simultaneously Lifted up to keep the hose clear of the floor, the lower edge of the Mounting bracket is to be mounted 3-3.5 m over floor level. The mounting bracket is prepared for mounting of fan.



System

Many swinging arms may be installed into a system (see illustration Pressure loss calculation). Using many extractors it quickly turns out to be of economic interest to use automatic dampers, control unit and starter.

Mounting height

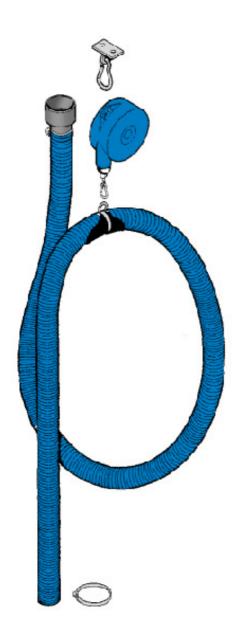
A fixed exhaust extractor with swining arm should be mounted with the lower edge of the mounting bracket approx. 3,5 m above the floor.

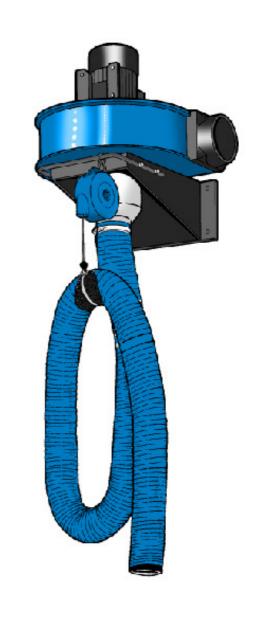
Double articulated swinging arm connected to central ducting. The inner arm 1.75 m, 2.5 m, 3.5 m or 4.5 m, the outer arm 1.25 m, 2.5 m or 3.5 m. The balancer lifts the exhaust hose providing a free working area.

Mounting instruction

Fixed exhaust extractor

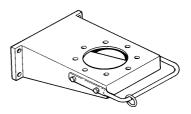
Fixed exhaust extractor with fan



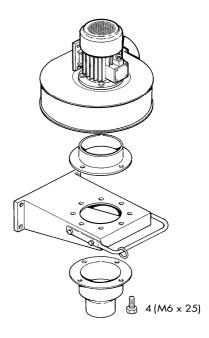


Mounting instruction

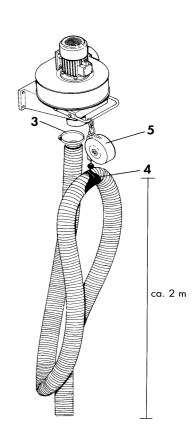
Bolt wall mounting bracket to the wall.
 Recommended height from the floor: 2,5 – 3,5 m.



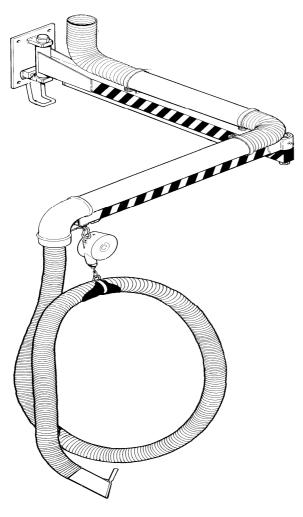
2. Attach fan and socket to the mounting bracket.



- 3. Attach the hose to the socket with a jubilee clip.
- 4. Mount the suspension halter approximately 2m from the hose ending.
- 5. Attach the balancer with the spring hook to the balancer suspension and then the suspension halter to the wire. (See sep. product manual for balancer, 84435,84440.)



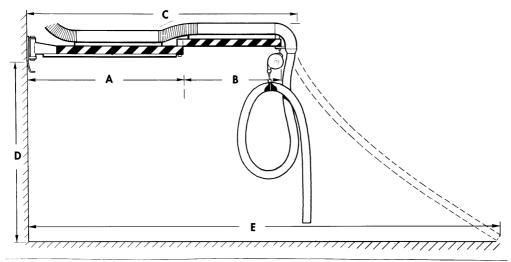
Fixed exhaust extractor on swinging arm



Alentec & Orion AB s exhaust extractor on swinging arm will enable the vehicles to move within a radius of 8-9 m from the mounting bracket.

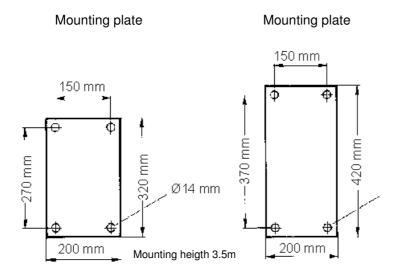
Prod. No.	Hose Ø mm	Weight	Rigid	Hose length m	Arm length m
		kg	ducting		
			Ø mm		
84450	100	55,4	160	5	4,5
84451	125	56,4	160	5	4,5
84420	150	58,4	160	5	4,5
84452	100	83,2	160	5	6
84453	125	84,2	160	5	6
84421	150	85,2	160	5	6
84454	100	112,4	160	5	8
84455	125	113,4	160	5	8
84422	150	114,4	160	5	8

Measurements



Prod.no.	A mm	B mm	C mm	D mm	E mm
84420, 84450, 84451	2500	2000	4500	3500	9050
84421, 84452, 84453	3500	2500	6000	3500	10700
84422, 84454, 84455	4500	3500	8000		

Mounting plates and attachment



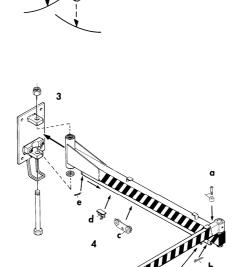
Prod.no:	Max	Security
	load force/bolt	demands/bolt
84420, 84450, 84451	kp	kp
84421, 84452, 84453	kp	kp
84422, 84454, 84455	kp	kp

Mounting instruction

1. Bolt mounting bracket to wall.

Max 200 mm

2. Mount the fan (if included).

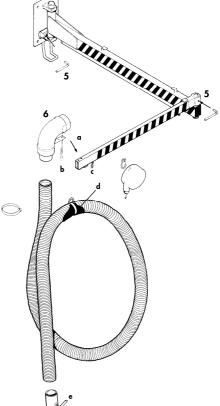


- 3. Mount the extractor arm.
- 4. Mount the details in order: a-b-c-d-e-f.

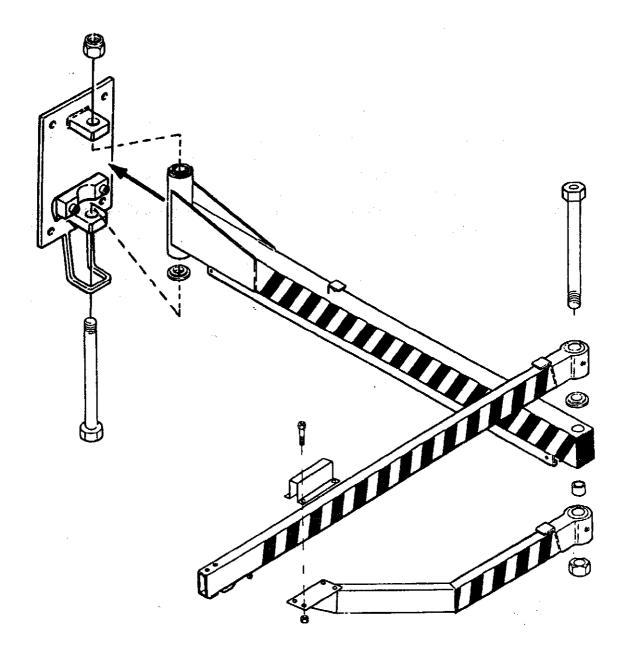




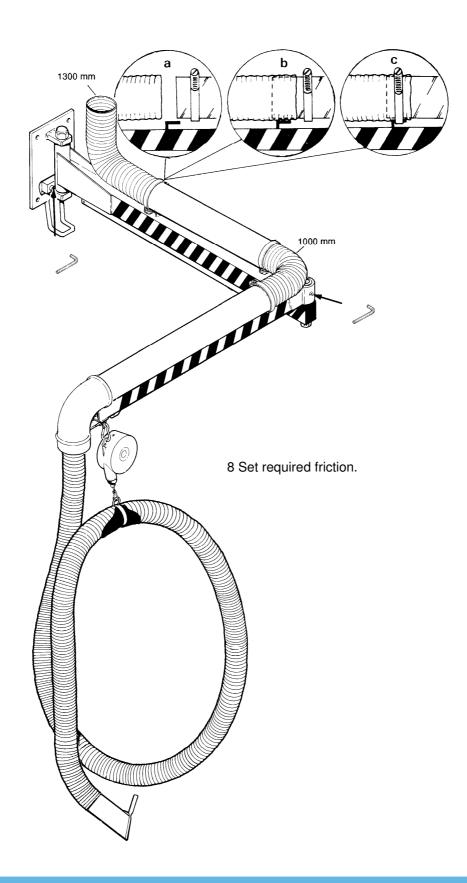
- 6. a. Mount ducting bend to the outer arm.
 - b. Mount the hose to the ducting bend.
 - c. Attach the balancer to the lug.
 - d. Mount to suspension halter.
 - e. Mount the exhaust nozzle.



Strengthening arm



Mount spiro-tubing and hose to the extractor arm.

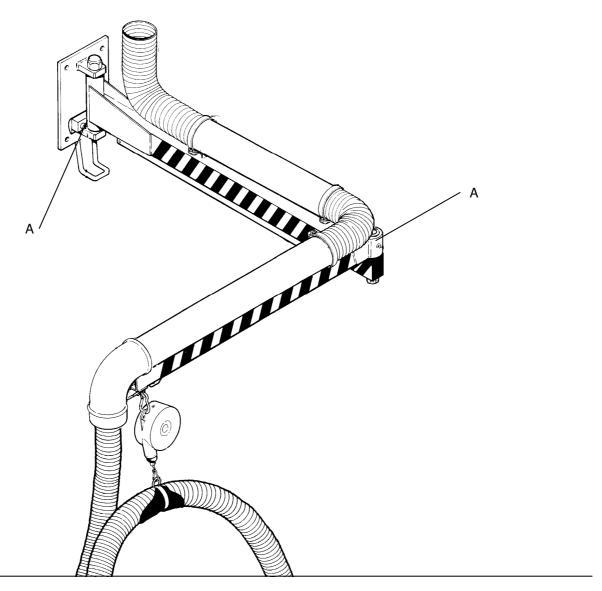


Maintenance instruction



Replacing the exhaust hose

- 1. Unhook the balancer's hook from the suspension halter.
- 2. Unscrew the hose clamp attaching the hose to the suction spigot.
- 3. Move the suspension halter from the old hose to the new one.
- 4. Mount the new hose by first attaching the hose clamp to the suction spigot.
- 5. Allow the hose to have a natural loop and after that attach the hook of the balancer to the suspension halter.
- 6. Mount nozzle, if any.



A. Adjusting the joint

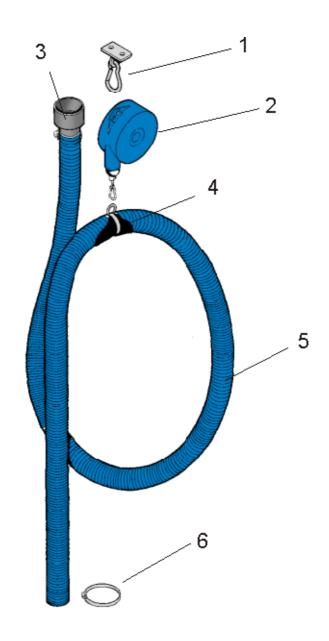
1. Tighten the socket head cap screw (A).

B. Replacing the exhaust hose

- 1. Unhook the balancer's hook from the suspension halter.
- 2. Unscrew the hose damp attaching the hose to the suction spigot.
- 3. Move the suspension halter from the old hose to the new one.
- 4. Mount the new hose by first attaching the hose clamp to the suction spigot.
- 5. Allow the hose to have a natural loop and after that attach the hook of the balancer to the suspension halter.
- 6. Mount nozzle, if any.

Spare part drawing

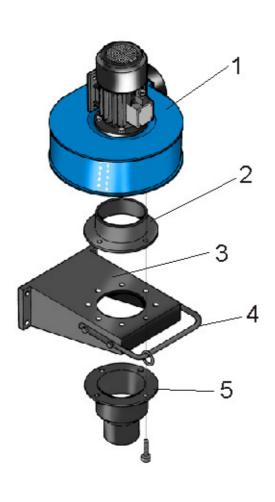
Fixed exhaust extractor

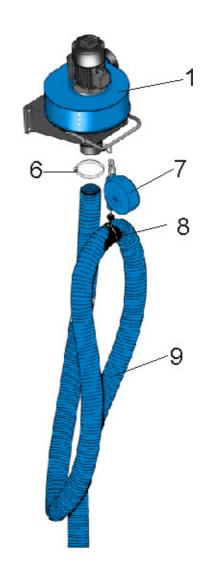


Pos. Nr.	Description
1	Bracket for balancer
2	Balancer
3	Transition piece
4	Suspension halter
5	Exhaust hose
6	Hose clip

Spare part drawing

Fixed exhaust extractor with fan

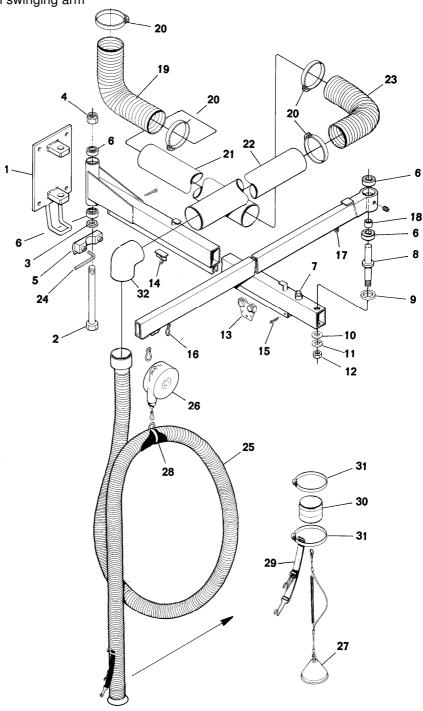




Pos.nr.	Description
1	Fan
2	Inlet
3	Wall mounting bracket
4	Bracket for balancer
5	Connection socket
6	Hose clip
7	Balancer
8	Suspension halter
9	Exhaust hose

Spare part drawing

Fixed exhaust extractor with swinging arm



Pos.	Description	Pos.	Description	Pos.	Description	Pos.	Description
nr.		nr.		nr.		nr.	
1	Mounting plate	9	Space washer	17	Suspension hook	25	Exhaust hose
2	Swivel pin	10	Washer	18	Friction pads	26	Balancer
3	Space washer	11	Lock washer	19	Flexible hose	28	Suspension halter
4	Lock nut	12	Lock nut	20	Hose clip	32	Ducting
5	Complete friction	13	Runner	21	Inner length rigid		
	brake				ducting		
6	Ball bearings	14	Sliding hanger	22	Outer length rigid		

Manual 84420_EN_1C

					ducting	
7	Stop nut	15	Split pin	23	Outer flexible hose	
8	Swivel pin between 2 arms	16	Wire loop	24	Allen key	

Spare parts list

84420

Fixed exhaust extractor with swinging arm

 Product No:
 Description

 A All models
 All models

 B
 C

 D
 D

 E
 F

 G
 84450

 H
 84451

Pos	Art.nr:	Α	В	С	D	Ε	F	G	Н	I	Description
1	503 581							1	1	1	MOUNTING PLATE SMALL
	503 359										MOUNTING PLATE BIG PAINT
2	500 868							1	1	1	I-ARM AXLE D.20MM PART
	503 458										I-ARM AXLE 25MM PART
3	503 631							1	1	1	SPACE WASHER INNER
	503 557										SPACE WASHER INNER
4	957 977							1	1	1	NUT/ LOCKING M20
	958 264										NUT/ LOCKING M24
5	503 623-Z							1	1	1	INNER BRAKE SMALL
	503 565-Z										INNER BRAKE BIG
6	963 009							2	2	2	BALL BEARINGS KUA LM-2 SMALL
	963 017										BALL BEARINGS BIG UK & FM
7	503 672	1									STOP FOR OUTER ARM
8	503 953							1	1	1	OUTER ARM AXLE 20 MM
	503 987										OUTER ARM AXLE 25 MM
9	503 961							1	1	1	SPACE WASHER OUTER 20 MM
	503 995										SPACE WASHER OUTER 25 MM
10	651 939							1	1	1	WASHER 21x36x3 FZB AZ-21
	952 010										WASHER 26x45x4 FZB AZ-25
11	952 911							1	1	1	WASHER LOCK 21x36 FZB AZ-21
	952 978										WASHER LOCK 25x45 FZB AZ-25
12	957 969							1	1	1	NUT/ M20
	958 256										NUT/ M24
13	503 656-Z	1									RUNNER C-PROFILE
14	503 748-Z	3									T-SLIDER WITH HOOK
15	960 484	2									SPLIT PIN
16	964 098	6									WIRE LOOP
17	949 537	2									SUSPENSION HOOK
18	503 946							1	1	1	FRICTION RING 20 MM
	503 979,0										FRICTION RING 25 MM
19	999 219	1									FLEXIBLE HOSE L=1,3M Ø 165 MM
20	961 466	4									HOSE CLAMP SMS-168 BLACK

Spare parts list

Fixed exhaust extractor with swinging arm

 Product No:
 Description

 A All models
 All models

 B
 C

 D
 C

 E
 F

 G
 84450

 H
 84420

Pos	Art.nr:	Α	В	С	D	Е	F	G	Н	1	Description
21	979 229,1										Ø160 TUBE L-300
	979 252,1							1	1	1	Ø160 TUBE L-1300
	979 302,1										Ø160 TUBE L-2300
	979 328,1										Ø160 TUBE L-3300
22	979 245,1										Ø160 TUBE L-1100
	979 278,1							1	1	1	Ø160 TUBE L-1650
	979 302,1										Ø160 TUBE L-2300
	979 328,1										Ø160 TUBE L-3300
23	999 201	1									FLEXIBLE HOSE L=1,0M Ø165MM
24	962 902	1									ALLEN KEY 6MM
25	4-1311,1										90°BEND 160/75
	4-1176,1							1	1	1	90°BEND 160/100
26	50100-1011										EXHAUST HOSE L=5M Ø 75MM
	50200-1011							1			EXHAUST HOSE L=5M Ø 100MM
	50300-1011								1		EXHAUST HOSE L=5M Ø 125MM
	50400-1011									1	EXHAUST HOSE L=5M Ø 150MM
27	90105-1011	1									BALANCER BRL-300
28	512 608										SUSPENSION HALTER Ø 75MM
	512 616							1			SUSPENSION HALTER Ø 100MM
	512 624								1		SUSPENSION HALTER Ø 125MM
	512 632									1	SUSPENSION HALTER Ø 150MM