

# ROUND CYLINDERS

## Series M



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Excellent value for money



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Fast delivery



# Round cylinders series M

1 - CYLINDERS

## Features and certifications

Series of round cylinders not conforming to standards, available in bores from Ø 32 to 63, single acting or double acting, magnetic or non magnetic, with or without cushioning. The heads joined to the barrel through rolling ensure perfect tightening. Supplied as standard in compliance with Reach and RoHS directives, and SIL certificated. On request, they can be also supplied according to the 2014/34/EU ATEX Directive.

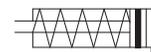


### Type MSM Ø 32 ÷ 63

da pag. 1.10.20



Round cylinders not conforming to standards, available in bores from Ø 32 to 63, single acting, magnetic. Heads joined to the barrel through rolling ensure perfect tightening. Supplied with rod nut and head nut. Possibility of applying one or more magnetic reed switches.

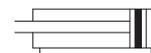


### Type MDM Ø 32 ÷ 63

da pag. 1.10.40



Round cylinders not conforming to standards, available in bores from Ø 32 to 63, double acting, magnetic. Heads joined to the barrel through rolling ensure perfect tightening. Supplied with rod nut and head nut. Possibility of applying one or more magnetic reed switches.

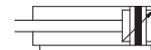


### Type MDMA Ø 32 ÷ 63

da pag. 1.10.60



Round cylinders not conforming to standards, available in bores from Ø 32 to 63, double acting, magnetic, adjustable cushioning. Heads joined to the barrel through rolling ensure perfect tightening. Supplied with rod nut and head nut. Possibility of applying one or more magnetic reed switches.



Options		
Description	Symbol	Suffix
Rear spring (available only for MSM type)		<b>T</b>
Stainless Steel AISI 304 rod		<b>K</b>
Read head without thread with radial connection		<b>T1</b>
Read head without thread with axial connection (not available for MDMA type)		<b>T2</b>
Through rod (not available for MSM type)		<b>P</b>
FKM seals <span style="float: right;">-20°C ÷ +150°C</span>		<b>V</b>
Low temperature seals <span style="float: right;">-40°C ÷ +80°C</span>		<b>BT</b>
Special male thread (indicate the requested thread. E.g.: R-M 10x1,5; the dimension AM of the special thread will be the same as the standard; cylinder will be supplied without rod nut; for further information please contact the sales department)		<b>R-M..</b>
ATEX versions on request (only with K; for further information please contact the sales department)		<b>/ATEX</b>
Special versions on request		<b>/S</b>

The options, when this is possible, can be combined with each other. For options matching see from page 1.10.4; For code key see from page 1.10.5

Round cylinders series M

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Options matching											
Series	Bore	Model	Standard options matching								
			T	K	T1	T2	P	V	BT	R-M.. <sup>(1)</sup>	/ATEX <sup>(2)</sup>
MSM	Ø 32 ÷ 63	Standard	●	●	●	●	-	●	●	●	●
		Rear spring (T)		●	●	-	-	●	●	●	●
		Stainless Steel rod (K)	●		●	●	-	●	●	●	●
		Read head without thread with radial connection (T1)	●	●		-	-	●	●	●	●
		Read head without thread with axial connection (T2)	-	●	-		-	●	●	●	●
MDM	Ø 32 ÷ 63	Standard	-	●	●	●	●	●	●	●	●
		Stainless Steel rod (K)	-		●	●	●	●	●	●	●
		Read head without thread with radial connection (T1)	-	●		-	-	●	●	●	●
		Read head without thread with axial connection (T2)	-	●	-		-	●	●	●	●
		Through rod (P)	-	●	-	-		●	●	●	●
MDMA	Ø 32 ÷ 63	Standard	-	●	●	-	●	●	●	●	●
		Stainless Steel rod (K)	-		●	-	●	●	●	●	●
		Read head without thread with radial connection (T1)	-	●		-	-	●	●	●	●
		Through rod (P)	-	●	-	-		●	●	●	●

Key

● allowed matching; - not allowed matching

Options matching - notes

- (1) Option **R-M..** require to indicate the desired thread. For further information please contact the sales department.
- (2) In the **/ATEX** versions, is required to mount the stainless steel rod (options **K**). For further information please contact the sales department.

# Round cylinders series M

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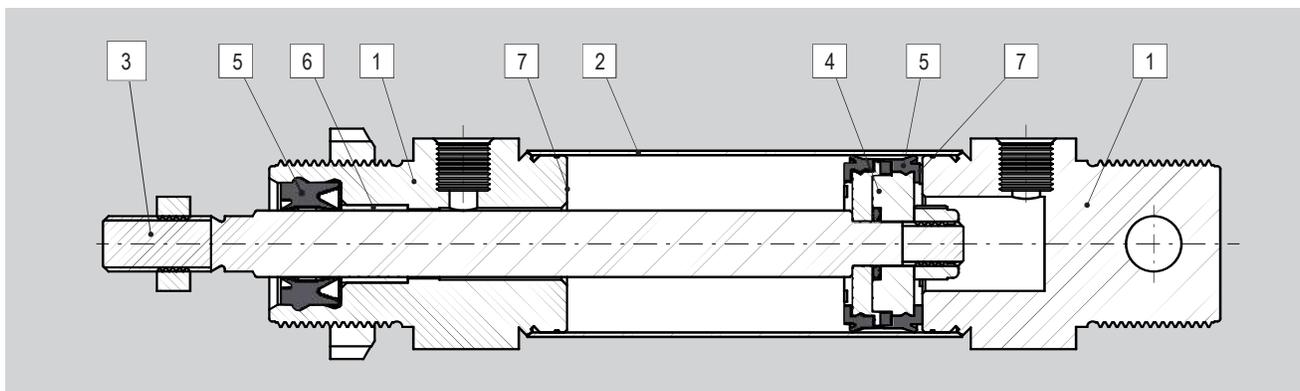
Code key											
Bore	/	Stroke	Type	Options					/	ATEX version	Special version
40	/	80	MDM	T	K	P	V	R-M.	/		S
<p>Ø 32, 40, 50, 63</p>		<p>MSM Single acting Magnetic</p> <p>MDM Double acting Magnetic</p> <p>MDMA Double acting Magnetic With cushioning</p>		<p>T</p> <p>K</p>		<p>T1</p> <p>T2*</p> <p>P</p>		<p>V</p> <p>BT</p> <p>ATEX</p>		<p>S</p> <p>CE  II 2G Ex h IIC T5 Gb II 2D Ex h IIC T100°C Db</p>	
<p>10 mm ÷ 1000 mm (MSM type up to 50 mm)</p>											

How to order				
Bore	/	Stroke	Type	Options
40	/	80	MDM	K P

**Notes**

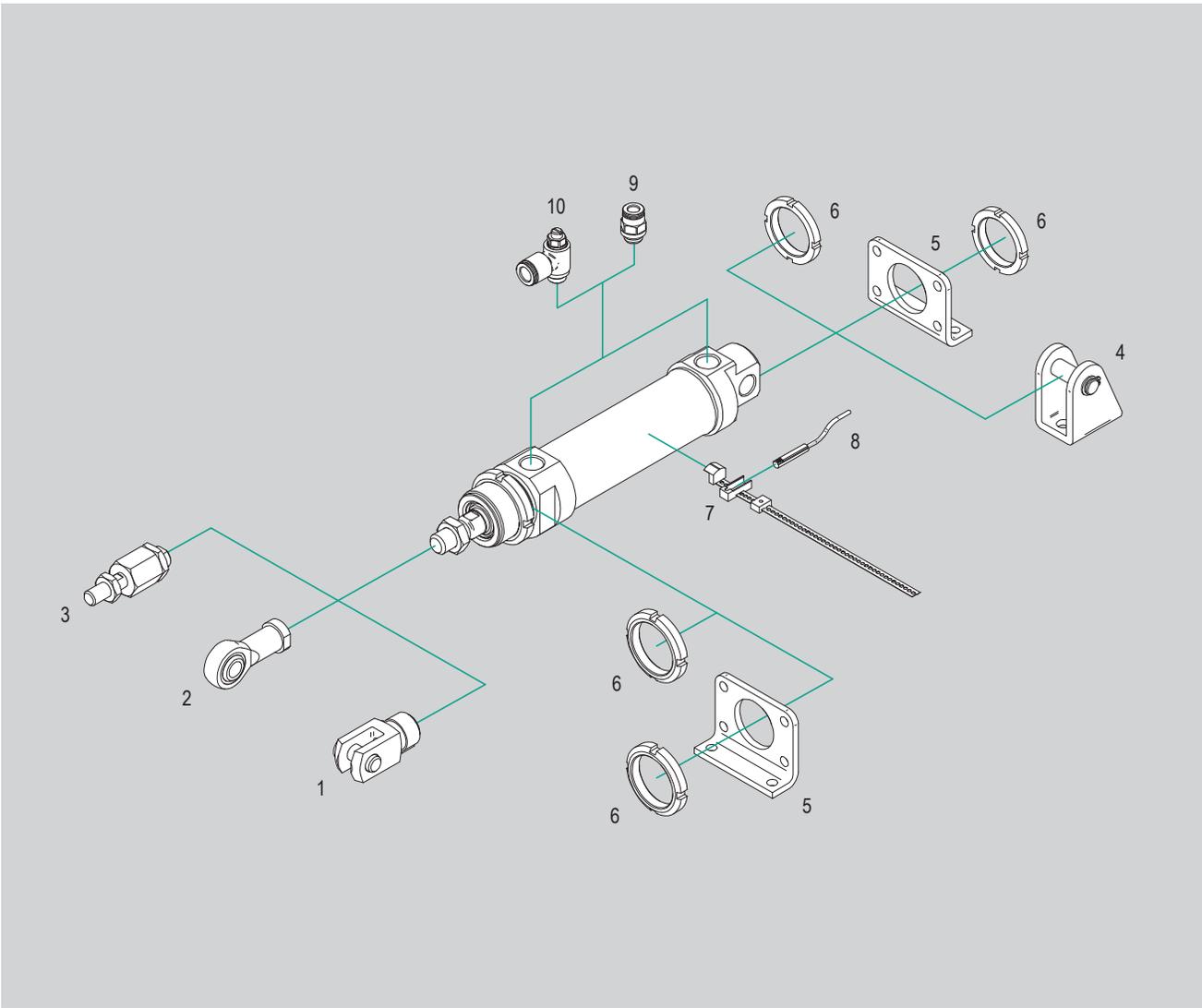
Options in the same grid are alternative to each others.  
 For further information on options and their matching, see page 1.10.3 and 1.10.4  
 \*Not available for type MDMA  
 For standard materials see the table below.  
 For further information on the ATEX 2014/34/EU Directive, on classifications and protections, see from page III.1

## Standard materials



Position	Description	Materials
1	Heads	Anodised aluminium
2	Tube	Stainless Steel AISI 304
3	Rod	Steel C45 chrom-plated
4	Piston	Aluminium
5	Seals	NBR / Polyurethane (PU)
6	Bushing	Self-lubricating sintered bronze
7	Dumper	NBR

Accessories



N.	Cylinder bore	Item	Description	Compliance	Matching			Code page	Data sheet page
					MSM	MDM	MDMA		
1	Ø 32 ÷ 63	FF..	ISO female clevis with clip	ISO 8140	●	●	●	1.10.90	1.85.10
		FFP..	ISO female clevis with pin and seeger		●	●	●		1.85.11
		FFN..	ISO female clevis (body only)		●	●	●		
2	Ø 32 ÷ 63	RF..SE	Bearing head (DIN 648K) with female thread	ISO 8139	●	●	●	1.90.1	
3	Ø 32 ÷ 63	GB..	Bearing - Self-aligning articulated coupling	-	●	●	●	1.90.10	
4	Ø 32 ÷ 63	CF..M	Rear clevis	-	●	●	●	1.96.2	
5	Ø 32 ÷ 63	P..	Foot-flange	-	●	●	●	1.96.1	
6	Ø 32 ÷ 63	GH..	Heads nut	-	●	●	●		
7	Ø 32 ÷ 63	AFR..	Bracket for T type magnetic reed switches	-	●	●	●	1.120.1	
8	Ø 32 ÷ 63	ASV..	Magnetic reed switch T groove	2014/34/UE	●	●	●	1.10.91	1.110.10
		MK..	ATEX magnetic reed switch T groove		●	●	●	1.113.1	
9	Ø 32 ÷ 63	R..	Push-in fittings	-	●	●	●	4.2.1	
10	Ø 32 ÷ 63	V..C	Flow controls, for cylinders	-	●	●	●	4.94.1	

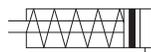
Key  
 ● matching accessory; - not matching accessory

1.10.6

Round cylinders series M  
Series MSM

Main features

32 ÷ 63



MSM

Bores Ø

Single acting  
Magnetic

Type



1 - CYLINDERS

Technical data

Bore Ø mm	32			40			50			63			
Fluid	Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.												
Pressure range	1 ÷ 10 bar												
Temperature range	-20°C ÷ +80°C (standard)			-20°C ÷ +150°C (V)			-40°C ÷ +80°C (BT)						
Strokes	10 ÷ 50 mm												
Rod thread	M10x1,25			M12x1,25			M16x1,5						
Thrust force at 6 bar (N)	482			754			1178			1869			
Traction force (N)	Stroke (mm)	10	25	50	10	25	50	10	25	50	10	25	50
	min.	57	51	40	98	86	64	147	130	101	147	130	101
	max.	62	62	62	105	105	105	158	158	158	158	158	158

Standard strokes

Stroke mm	MSM Bore Ø mm			
	32	40	50	63
10				
25				
50				

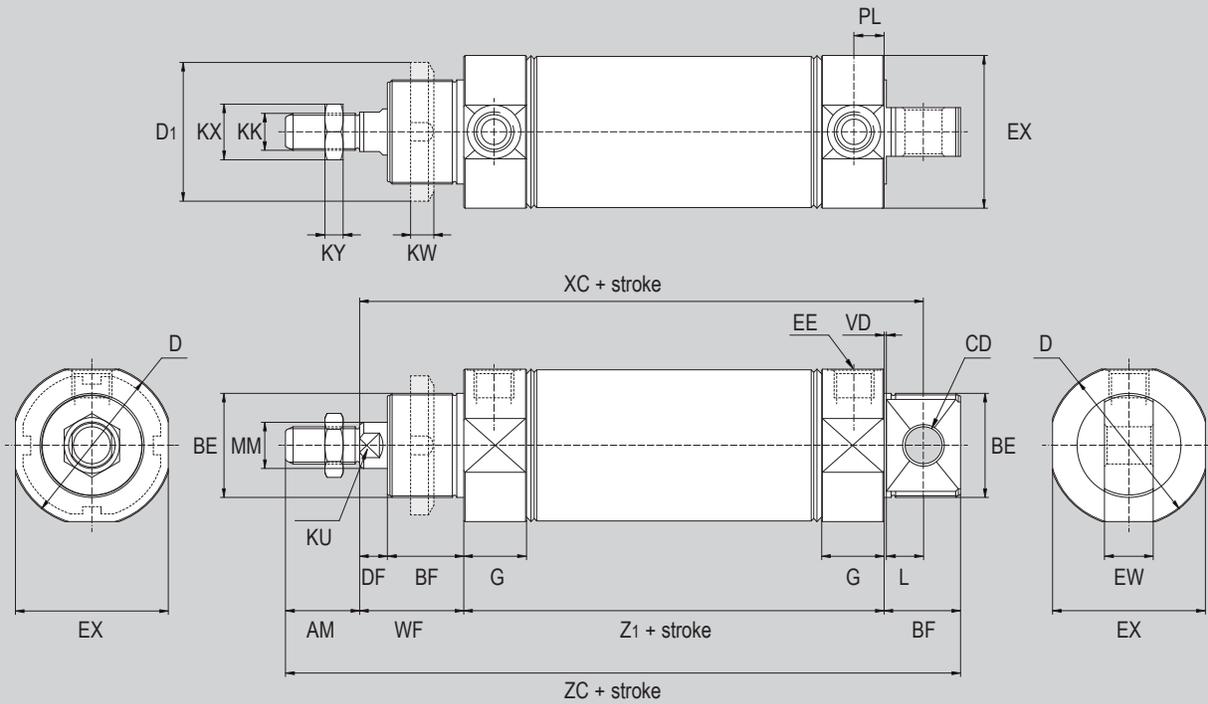
Key  
 Standard stroke

Round cylinders series M  
Series MSM

Standard dimensions

Type: **MSM**

1 - CYLINDERS

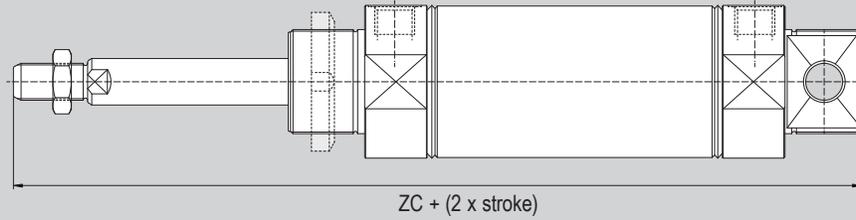


Ø (mm)	AM	BE	BF	CD	ØD	ØD1	DF	EE	EX	EW	G	KK
32	22	M30x1,5	26	10	41	42	8	G1/8"	38	16	19	M10x1,25
40	24	M38x1,5	30	12	49	50	9	G1/4"	45	18	25	M12x1,25
50	32	M45x1,5	33	16	57	60	11	G1/4"	53	21	25	M16x1,5
63	32	M45x1,5	33	16	70	60	12	G3/8"	66	21	27	M16x1,5

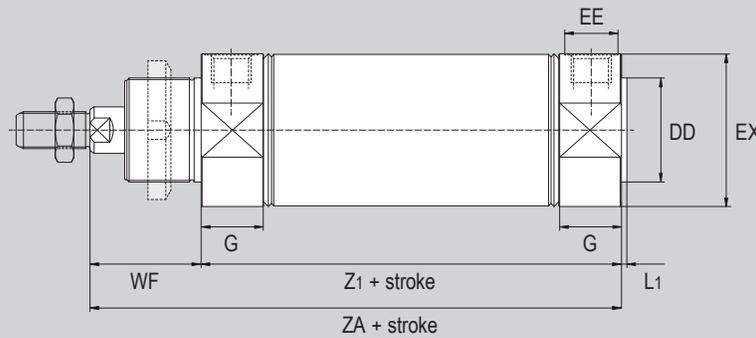
Ø (mm)	KU	KW	KX	KY	L	MM	PL	VD	WF	XC	Z1	ZC
32	10	8	17	6	13	12	9	2	34	117,5	69,5	151,5
40	13	10	19	6	15	16	12	3	39	139,6	84,6	177,6
50	17	10	24	8	16	20	12	3	44	147,2	86,2	195,2
63	17	10	24	8	16	20	13	3	45	156,2	94,2	204,2

Standard dimensions

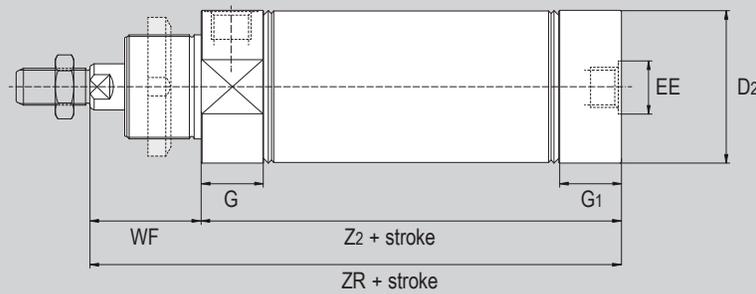
Type: ...T



Type: ...T1



Type: ...T2



Ø (mm)	G	G1	WF	ZA	ZC	ZR	Z1	Z2	L1	ØDD	ØD2	EX	EE
32	19	15	34	103,5	151,5	99,5	69,5	65,5	3	30	34	38	G1/8"
40	25	18	39	123,6	177,6	116,6	84,6	77,6	4	38	42	45	G1/4"
50	25	25	44	130,2	195,2	130,2	86,2	86,2	4	45	53	53	G1/4"
63	27	27	45	139,2	204,2	139,2	94,2	94,2	4	45	66	66	G3/8"

Round cylinders series M  
Series MDM

1 - CYLINDERS

Main features

32 ÷ 63



MDM

Bores Ø

Double acting  
Non magnetic

Type



Technical data

Bore Ø mm	32	40	50	63
Fluid	Aria compressa filtrata con o senza lubrificazione. La lubrificazione se utilizzata deve essere ininterrotta.			
Pressure range	1 ÷ 10 bar			
Temperature range	-20°C ÷ +80°C (standard)	-20°C ÷ +150°C (V)	-40°C ÷ +80°C (BT)	
Standard strokes	10 ÷ 1000 mm			
Rod thread	M10x1,25	M12x1,25	M16x1,5	

Standard strokes

Stroke mm	MDM Bore Ø mm			
	32	40	50	63
10				
25				
50				
80				
100				
125				
160				
200				
250				
320				
400				
500				

Key

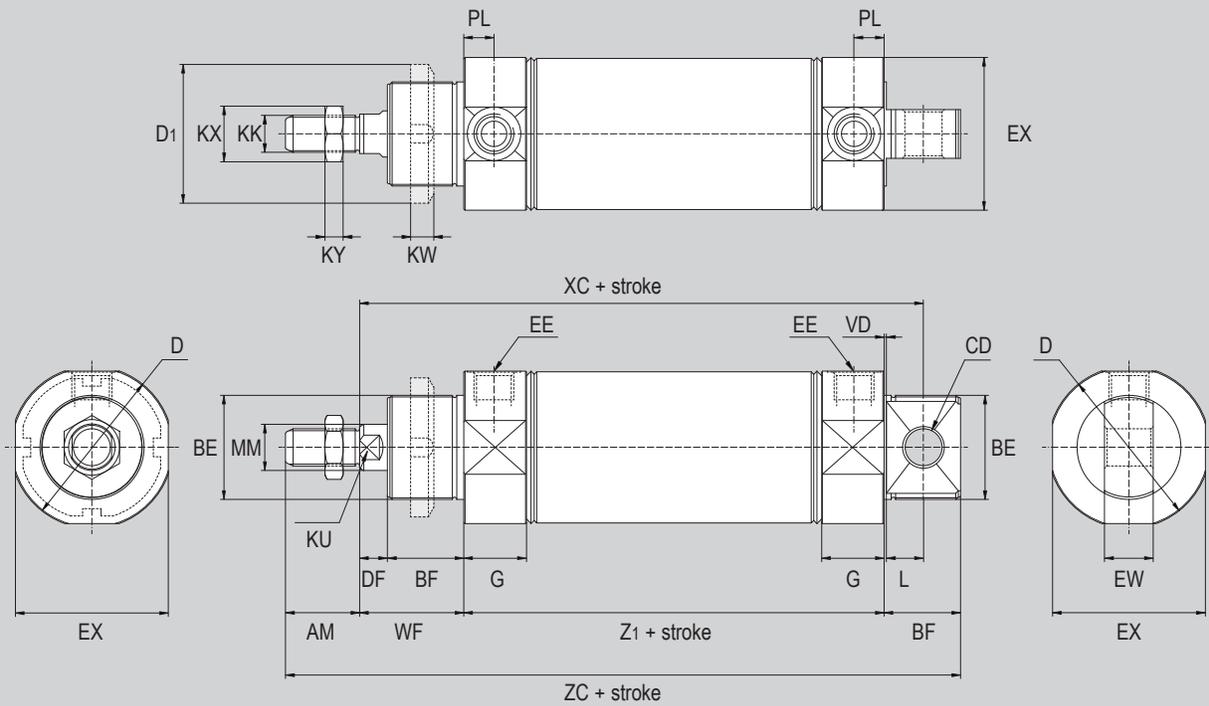
Standard stroke

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Standard dimensions

Type: MDM

1 - CYLINDERS



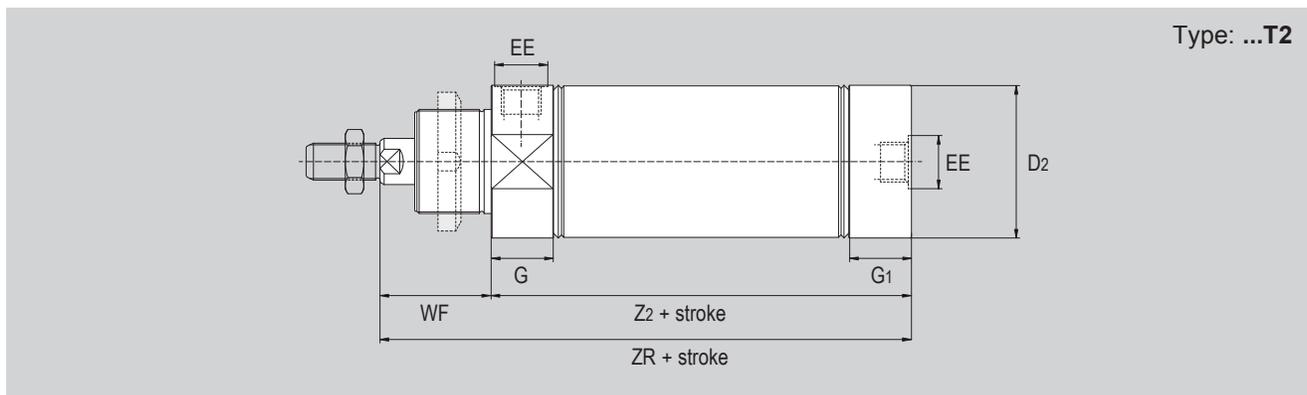
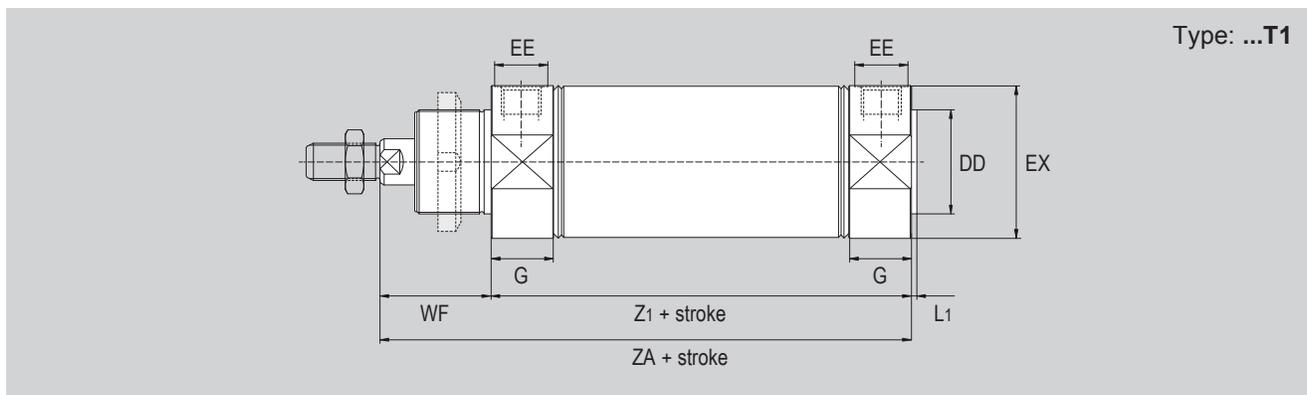
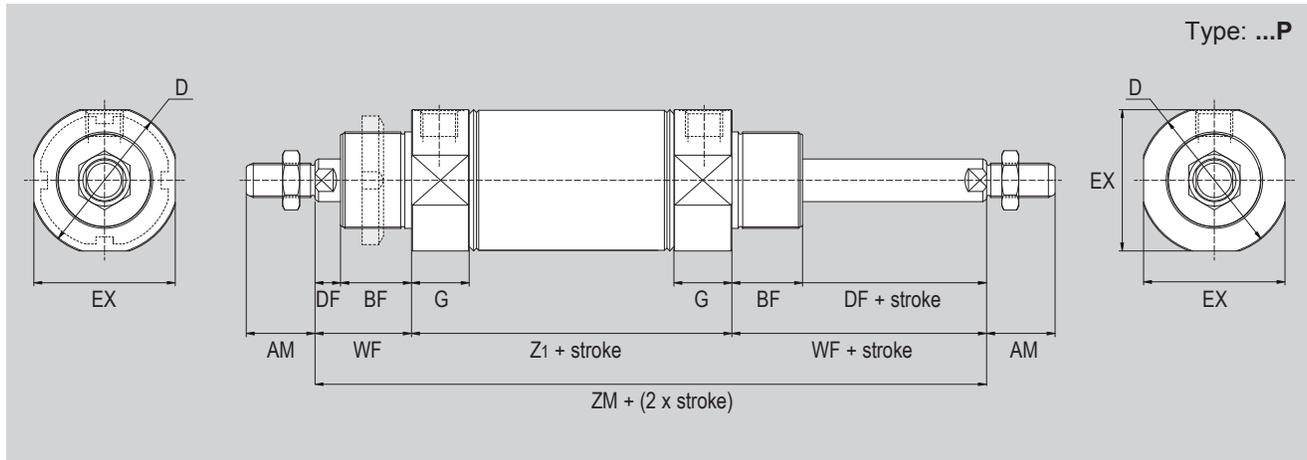
Ø (mm)	AM	BE	BF	CD	ØD	ØD1	DF	EE	EX	EW	G	KK
32	22	M30x1,5	26	10	41	42	8	G1/8"	38	16	19	M10x1,25
40	24	M38x1,5	30	12	49	50	9	G1/4"	45	18	25	M12x1,25
50	32	M45x1,5	33	16	57	60	11	G1/4"	53	21	25	M16x1,5
63	32	M45x1,5	33	16	70	60	12	G3/8"	66	21	27	M16x1,5

Ø (mm)	KU	KW	KX	KY	L	MM	PL	VD	WF	XC	Z1	ZC
32	10	8	17	6	13	12	9	2	34	117,5	69,5	151,5
40	13	10	19	6	15	16	12	3	39	139,6	84,6	177,6
50	17	10	24	8	16	20	12	3	44	147,2	86,2	195,2
63	17	10	24	8	16	20	13	3	45	156,2	94,2	204,2

Round cylinders series M  
Series MDM

1 - CYLINDERS

Standard dimensions

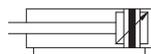


Ø (mm)	AM	G	G1	BF	WF	DF	ZA	ZM	ZR	Z1	Z2	L1	ØD	ØDD	ØD2	EX	EE
32	22	19	15	26	34	8	103,5	137,5	99,5	69,5	65,5	3	41	30	34	38	G1/8"
40	24	25	18	30	39	9	123,6	162,6	116,6	84,6	77,6	4	49	38	42	45	G1/4"
50	32	25	25	33	44	11	130,2	174,2	130,2	86,2	86,2	4	57	45	53	53	G1/4"
63	32	27	27	33	45	12	139,2	184,2	139,2	94,2	94,2	4	70	45	66	66	G3/8"

Round cylinders series M  
Series MDMA

Main features

32 ÷ 63



MDMA

Bores Ø

Double acting  
Magnetic  
With cushioning

Type



Technical data

Bore Ø mm	32	40	50	63
Fluid	Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.			
Pressure range	1 ÷ 10 bar			
Temperature range	-20°C ÷ +80°C (standard)	-20°C ÷ +150°C (V)	-40°C ÷ +80°C (BT)	
Strokes	25 ÷ 1000 mm			
Rod thread	M10x1,25	M12x1,25	M16x1,5	

Standard strokes

Stroke mm	MDMA Bore Ø mm			
	32	40	50	63
25				
50				
80				
100				
125				
160				
200				
250				
320				
400				
500				

Key

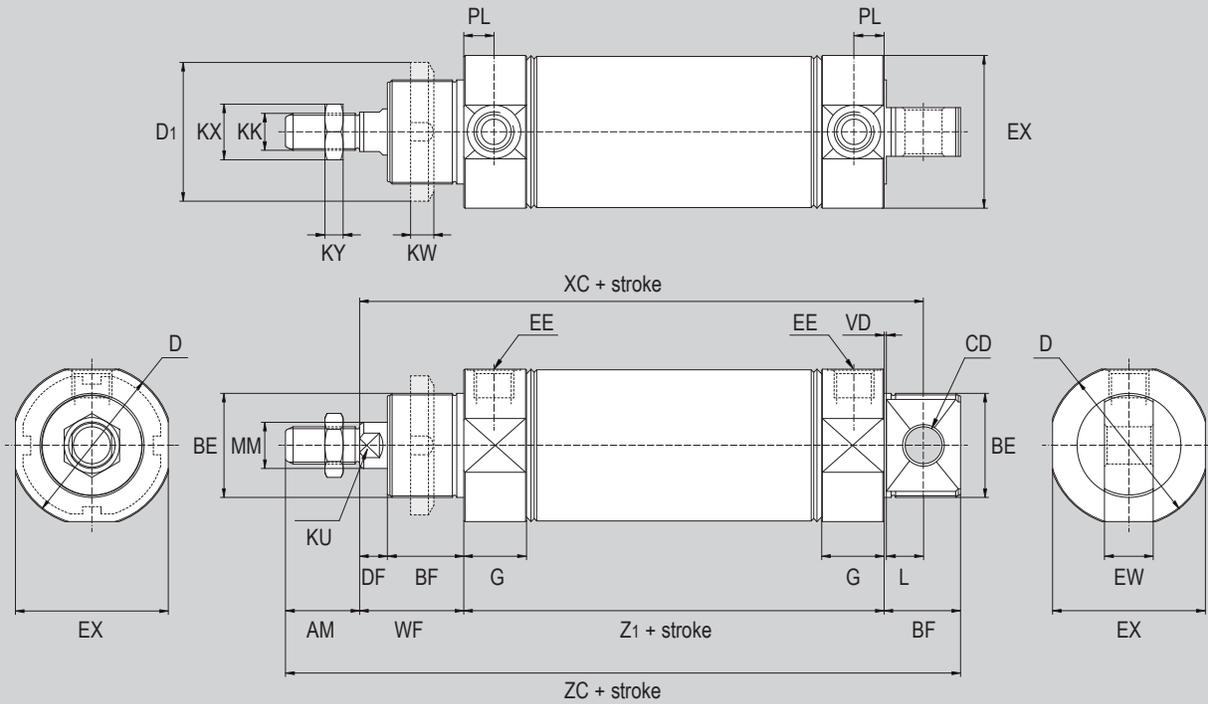
Standard stroke

Round cylinders series M  
Series MDMA

Standard dimensions

Type: MDMA

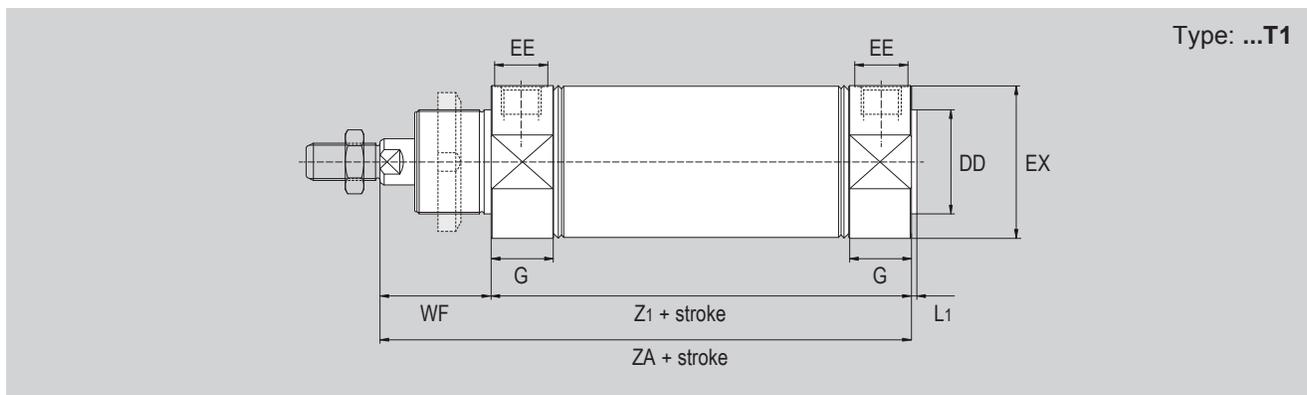
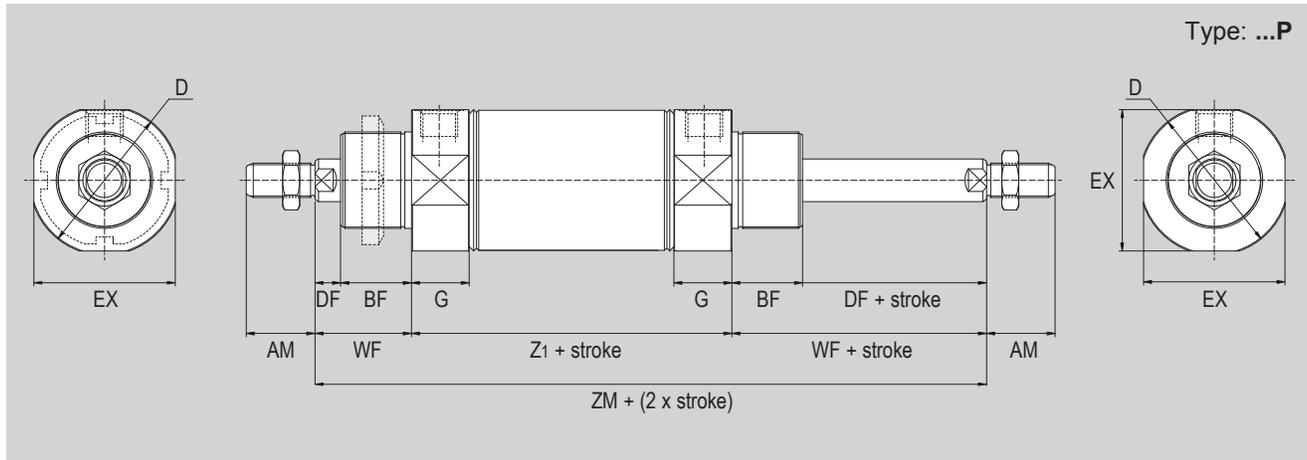
1 - CYLINDERS



$\varnothing$ (mm)	AM	BE	BF	CD	$\varnothing D$	$\varnothing D_1$	DF	EE	EX	EW	G	KK
32	22	M30x1,5	26	10	41	42	8	G1/8"	38	16	19	M10x1,25
40	24	M38x1,5	30	12	49	50	9	G1/4"	45	18	25	M12x1,25
50	32	M45x1,5	33	16	57	60	11	G1/4"	53	21	25	M16x1,5
63	32	M45x1,5	33	16	70	60	12	G3/8"	66	21	27	M16x1,5

$\varnothing$ (mm)	KU	KW	KX	KY	L	MM	PL	VD	WF	XC	Z1	ZC
32	10	8	17	6	13	12	9	2	34	117,5	69,5	151,5
40	13	10	19	6	15	16	12	3	39	139,6	84,6	177,6
50	17	10	24	8	16	20	12	3	44	147,2	86,2	195,2
63	17	10	24	8	16	20	13	3	45	156,2	94,2	204,2

Standard dimensions



Ø (mm)	AM	G	BF	WF	DF	ZA	ZM	Z1	L1	ØD	ØDD	EX	EE
32	22	19	26	34	8	103,5	137,5	69,5	3	41	30	38	G1/8"
40	24	25	30	39	9	123,6	162,6	84,6	4	49	38	45	G1/4"
50	32	25	33	44	11	130,2	174,2	86,2	4	57	45	53	G1/4"
63	32	27	33	45	12	139,2	184,2	94,2	4	70	45	66	G3/8"

1 - CYLINDERS

Accessories for round cylinders series M

1 - CYLINDERS

Female clevis with clip FF..ISO

	For cylinder Ø mm	Code	Item	Compliance 
	32	041004	FF10ISO	
	40	041005	FF12ISO	
	50	041006	FF16ISO	
	63			

Female clevis with pin and seeger FFP..ISO

	For cylinder Ø mm	Code	Item	Compliance 
	32	041051	FFP10ISO	
	40	041040	FFP12ISO	
	50	041013	FFP16ISO	
	63			

Female clevis (body only) FFN..ISO

	For cylinder Ø mm	Code	Item	Compliance 
	32	041014	FFN10ISO	
	40	041016	FFN12ISO	
	50	041012	FFN16ISO	
	63			

Bearing heads (DIN 648K) with female thread RF..SE

	For cylinder Ø mm	Code	Item	Compliance 
	32	041554	RF10SE	
	40	041555	RF12SE	
	50	041557	RF16SE	
	63			

Self-aligning articulated coupling GB..

	For cylinder Ø mm	Code	Item	Compliance -
	32	041704	GB040	
	40	041706	GB060	
	50	041708	GB0100	
	63			

Rear clevis in steel with pin and seeger CF..M

	For cylinder Ø mm	Code	Item	Compliance 
	32	040212	CF32M	
	40	040213	CF40M	
	50	040214	CF50-63M	
	63			

Kit composed by rear clevis, pin and two seeger.

Foot-flange in steel P..AQM

	For cylinder Ø mm	Code	Item	Compliance -
	32	040054	P032AQM	
	40	040055	P040AQM	
	50	040056	P050AQM	
	63	040057	P063AQM	

For mounting on cylinder require heads nut GH..AQM

Head nuts in steel GH..AQM

	For cylinder Ø mm	Code	Item	Compliance -
	32	040066	GH032AQM	
	40	040067	GH040AQM	
	50	040068	GH050/063AQM	
	63			

Magnetic reed switch T groove ASV..

	For cylinder Ø mm	Code	Item	Cylinder matching
	32 ÷ 63	070946 	ASV1C525	MSM* MDM* MDMA*
		071863	ASV1C550	
		071864	ASV1C51K	
		071189	ASV1C5M8	
		073639	ASV4D225	
		070246 	ASV4D2M8	
		074900	ASV7N225	
		070247	ASV7N2M8	
		070372	ASV7M2M8	
		072920	ASV1H510	
		072918	ASV1H525	

\*With bracket type AFR1063 for magnetic reed switches T groove

ATEX magnetic reed switch T groove MK..

	For cylinder Ø mm	Code	Item	Compliance	Cylinder matching
	32 ÷ 63	071120	MK500A		MSM* MDM* MDMA*
		071108	MK502A		

\*With bracket type AFR1063 for magnetic reed switches T groove

Bracket AFR.. for magnetic reed switches T groove

	For cylinder Ø mm	Code	Item	Compliance
	32 ÷ 63	072907	AFR1063	-