MAL 16-63

The tube and covers of the cylinder are treated with hard anodizing ,forming an excellant abrasion resistance and durability

Oil bearing is adopted so the piston rod do not need to be lubricated

There are several modes of back cover ,which makes the installation of cylinder more covenient

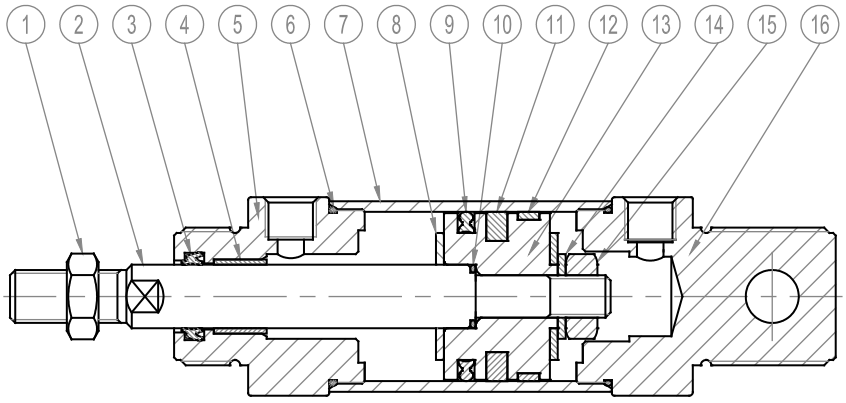
There are cylinders and mounting accessories with several specifications for your choice

The seal material with high temperature resistance is adopted to guarantee the normal operation of cylinder at 150℃

TECHNICAL DATA

BORE[Φ]	16	20	25	32	40	50	63
Pneumatic connection	M5	PT1/8"	PT1/8"	PT1/8"	PT1/4"	PT1/4"	PT1/4"
Piston rod thread	M6×1.0	M8×1.25	M10×1.25	M10×1.25	M12×1.25	M14×1.5	M14×1.5
Cushioning	Cushioning pads at both ends						
Operating temperature	0-70℃						
Operating pressure	0.05-0.7Mpa						
Operating medium	Filtered compressed air,with or without lubrication						
Version	Double acting						
Type of mounting	Via accessories						
Mounting position	Any						

1 bar=0.1MPa=14.5PSI



1	Nut,Piston rod	Carbon steel
2	Piston rod	C45 chrome-plated steel
3	Wiper seal	NBR
4	Oil bearing	Sintered steel
5	Front cover	Aluminum alloy
6	O-ring,Front cover	NBR
7	Tube	Aluminum alloy
8	Pad	NBR
9	Piston seal	NBR
10	O-ring,Piston rod	NBR
11	Magnet	Ferrite
12	Wear Ring	POM
13	Piston	Aluminum alloy
14	Spring washer	Carbon steel
15	Piston rod lock nut	Carbon steel
16	End Cover	Aluminum alloy

KEY CODE

MAL D - 50 X 50 - 25 - S - CA - LB - I

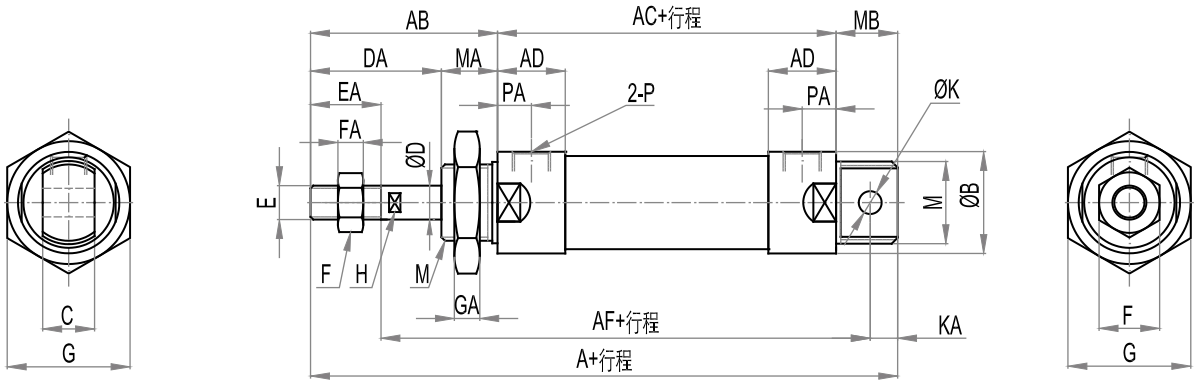
MAL	D	50	50	25	S
SERIES	TYPE	BORE	STROKE [mm]	ADJUSTABLE STROKE	MAGNETIC
MAL=Double rod type	Blank=Standard	32-40-50-63-80-100-125-160-200-250-320	As request	As request	Blank=Without magnet
MSAL=Single acting-front spring	D=Double rod type				S=With magnet
MTAL=Single acting-rear spring	J=Double rod type with adjustable stroke				

CA	LB	I
BACK COVER	MOUNTING TYPE	Connector Type
CA= Pivot type	Blank=Without accessory	Blank=Without accessory
CM= Round-end type	LB=Angle bracket	I=I joint
U= Lateral air connection	FA=Flange	Y=Y joint
	CA=Male clevis	U=Rod eye joint
	CB=Female clevis	F=Floating joint
	LNG=Square hinge	

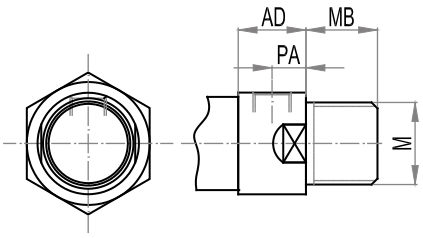
PS: High temperature seals available upon request

MAL

CA-Pivot type

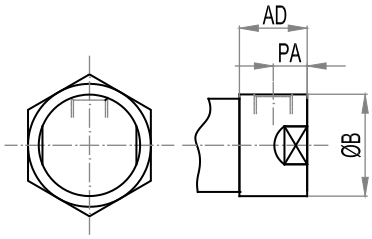


CM-Round-end type



Total length=A+STROKE

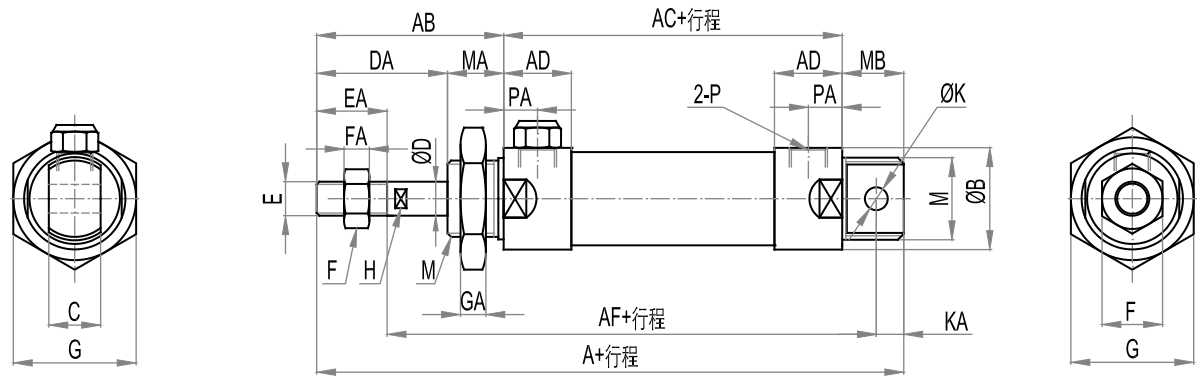
U-Lateral air connection



Total length=A+STROKE

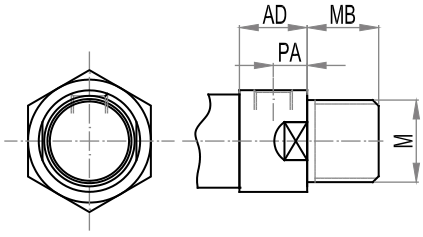
Φ [MM]		16	20	25	32	40	50	63
A	CA	114	131	135	141	165	173	173
	CM	106	122	128	128	152	160	160
	U	98	110	114	114	138	146	146
AB		38	40	44	44	46	62	62
AC		60	70	70	70	92	94	94
AD		10	16	16	16	22	22	22
AF		89	102	104	107	129	137	137
B		23	29	34	39.5	49.5	59	72
C		12	16	16	16	20	20	20
D		6	8	10	12	16	16	16
DA		21	28	30	30	32	32	32
E		M6×1.0	M8×1.25	M10×1.25	M10×1.25	M12×1.25	M14×1.5	M14×1.5
EA		18	20	22	22	24	24	24
F		10	12	17	17	17	19	19
FA		4	5	6	6	7	8	8
G		24	29	29	32	41	47	47
GA		8	8	8	8	9	13	13
H		5	6	8	10	14	14	14
K		6	8	8	10	12	14	14
KA		7	9	9	12	12	12	12
M		M16×1.5	M22×1.5	M22×1.5	M24×2.0	M30×2.0	M36×2.0	M36×2.0
MA		16	12	14	14	14	20	20
MB	CA	16	21	21	27	27	27	27
	CM	8	12	14	14	14	14	14
P		M5	PT1/8"	PT1/8"	PT1/8"	PT1/4"	PT1/4"	PT1/4"
PA		5	8	8	8	11	11	11

MSAL CA-Pivot type

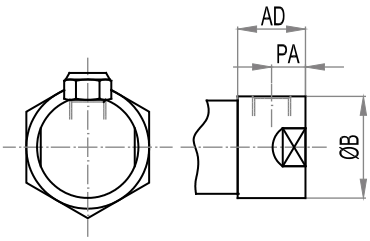


CM-Round-end type

U-Lateral air connection



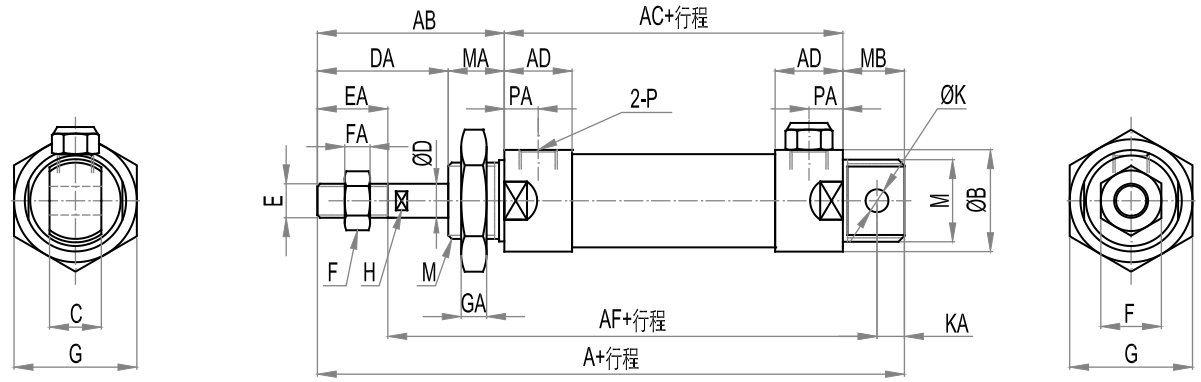
Total length=A+STROKE



Total length=A+STROKE

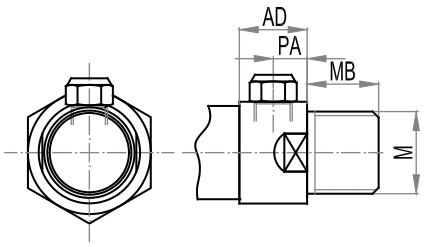
Φ [MM]		STROKE	20	25	32	40
A	CA	≤50	156	160	166	190
		51-100	181	185	196	220
		≥101	206	210	216	240
	CM	≤50	147	153	153	177
		51-100	172	178	178	202
		≥101	197	203	203	227
	U	≤50	135	139	139	163
		51-100	160	164	164	188
		≥101	185	189	189	213
AB			40	44	44	46
AC		≤50	95	95	95	117
		51-100	120	120	120	142
		≥101	145	145	145	167
AD			16	16	16	22
AF		≤50	127	129	132	154
		51-100	152	154	157	179
		≥101	177	179	182	204
B			29	34	39.5	49.5
C			16	16	16	20
D			8	10	12	16
DA			28	30	30	32
E			M8×1.25	M10×1.25	M10×1.25	M12×1.25
EA			20	22	22	24
F			12	17	17	19
FA			5	6	6	7
G			29	29	32	41
GA			8	8	8	9
H			6	8	10	14
K			8	8	10	12
M			M22×1.5	M22×1.5	M24×2.0	M30×2.0
MA			12	14	14	14
MB	CA		21	21	27	27
	CM		12	14	14	14
P			PT1/8"	PT1/8"	PT1/8"	PT1/4"
PA			8	8	8	11

MTAL CA-Pivot type

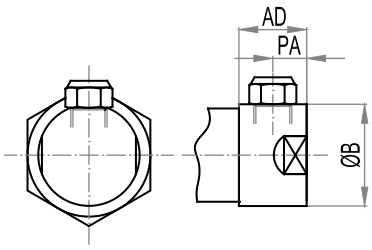


CM-Round-end type

U-Lateral air connection



Total length=A+STROKE

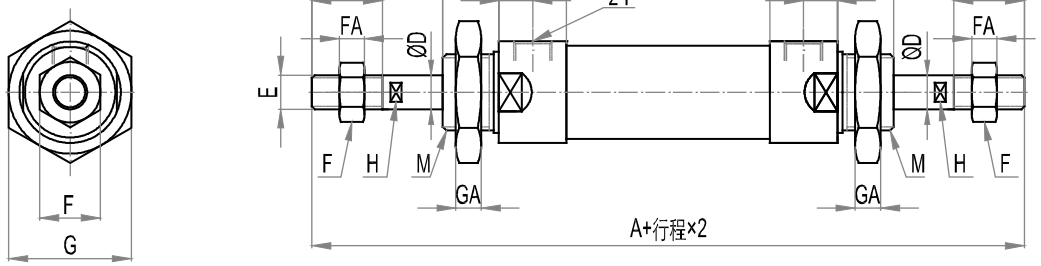


Total length=A+STROKE

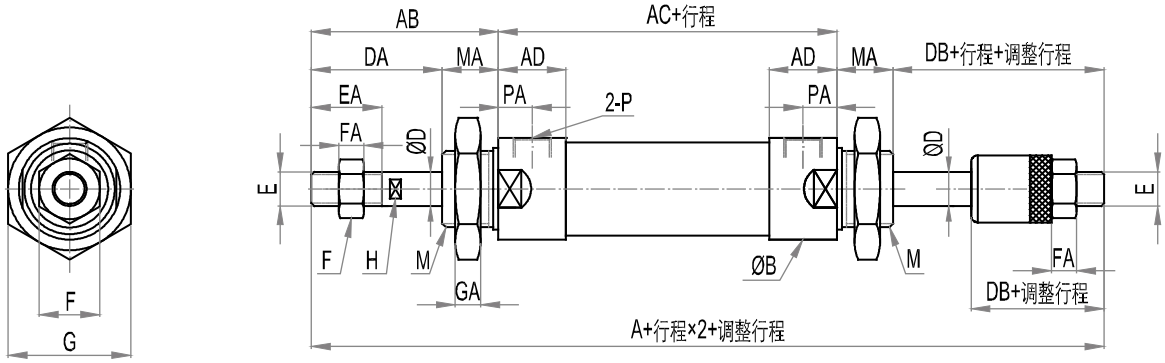
Φ [MM]		STROKE	20	25	32	40
A	CA	0-25	146	150	156	180
		26-50	156	160	166	190
		51-75	171	175	186	210
		76-100	181	185	196	220
	CM	0-25	137	143	143	167
		26-50	147	153	153	177
		51-75	162	168	173	197
		76-100	172	178	183	207
	U	0-25	125	129	129	153
		26-50	135	139	139	163
		51-75	150	154	159	183
		76-100	160	164	169	193
AB			40	44	44	46
AC		0-25	85	85	85	107
		26-50	95	95	95	117
		51-75	110	110	115	137
		76-100	120	120	125	147
AD			16	16	16	22
AF		0-25	117	121	122	144
		26-50	127	131	132	154
		51-75	142	146	152	174
		76-100	152	156	162	184
B			29	34	39.5	49.5
C			16	16	16	20
D			8	10	12	16
DA			28	30	30	32
E			M8×1.25	M10×1.25	M10×1.25	M12×1.25
EA			20	22	22	24
F			12	17	17	19
FA			5	6	6	7
G			29	29	32	41
GA			8	8	8	9
H			6	8	10	14
K			8	8	10	12

Φ [MM]	STROKE	20	25	32	40
M		M22×1.5	M22×1.5	M24×2.0	M30×2.0
MA		12	14	14	14
MB	CA	21	21	27	27
	CM	12	14	14	14
P		PT1/8"	PT1/8"	PT1/8"	PT1/4"
PA		8	8	8	11

MALD Double rod type



MALJ Double rod type with adjustable stroke



Φ [MM]		16	20	25	32	40	50	63
A	MALD	136	150	158	158	184	198	198
	MALJ	136	147	155	155	180	-	-
AB		38	40	44	44	46	62	62
AC		60	70	70	70	92	94	94
AD		10	16	16	16	22	22	22
B		23	29	34	39.5	49.5	59	72
C		12	16	16	16	20	20	20
D		6	8	10	12	16	16	16
DA		21	28	30	30	32	32	32
DB	MALJ	21	25	27	27	28		
E		M6×1.0	M8×1.25	M10×1.25	M10×1.25	M12×1.25	M14×1.5	M14×1.5
EA		18	20	22	22	24	24	24
F		10	12	17	17	19	19	19
FA		4	5	6	6	7	8	8
G		24	29	29	32	41	47	47
GA		8	8	8	8	9	13	13
H		5	6	8	10	14	14	14
K		6	8	8	10	12	14	14
MA		16	12	14	14	14	20	20
MB	CA	16	21	21	27	27	27	27
	CM	8	12	14	14	14	14	14
P		M5	PT1/8"	PT1/8"	PT1/8"	PT1/4"	PT1/4"	PT1/4"
PA		5	8	8	8	11	11	11