



Twin-Guide Cylinder

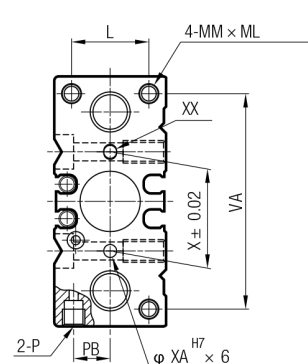
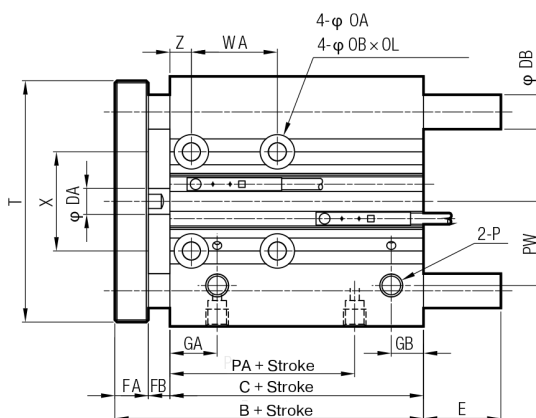
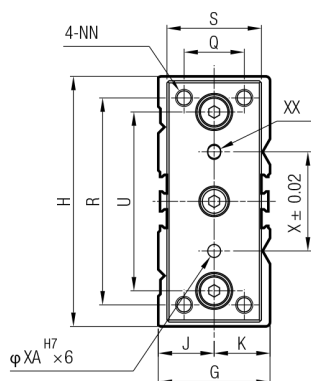
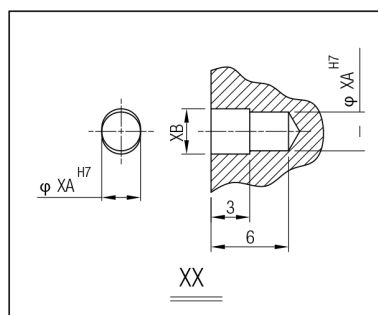
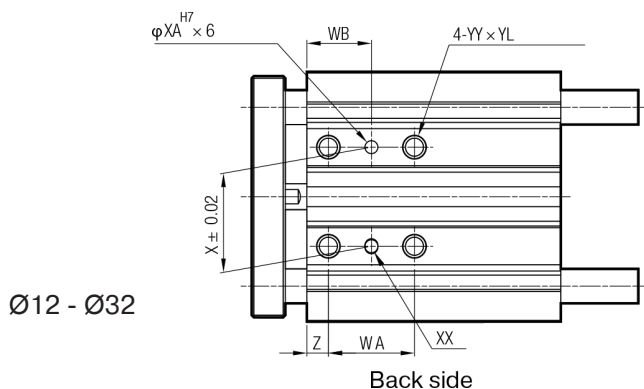
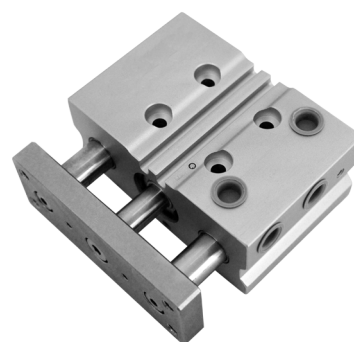


Twin-Guide Cylinder

page 66

Technical information											
Diameter	Ø6 - Ø8 - Ø12 - Ø16 - Ø20 - Ø25 - Ø32 - Ø40 - Ø50 - Ø63 mm										
	<table border="1"> <tr> <td>A-CG04</td> <td colspan="2">_____</td> </tr> <tr> <td>A-CG02</td> <td colspan="2">_____</td> </tr> <tr> <td>A-CG01</td> <td colspan="2">_____</td> </tr> </table>		A-CG04	_____		A-CG02	_____		A-CG01	_____	
A-CG04	_____										
A-CG02	_____										
A-CG01	_____										
Stroke	10 - 20 - 25 - 30 - 40 - 50 - 75 - 100 - 125 - 150 - 175 - 200 - 250 - 300 - 350 - 400 mm (A-CG01)										
	10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100 mm (A-CG02)										
	10 - 20 - 30 - 40 - 50 - 75 - 100 - 125 - 150 mm (A-CG04)										
Medium	Air										
Pressure range	1,5 ... 7 bar (A-CG04) 0,5 ... 7 bar (A-CG02) 1 ... 10 bar (A-CG01, CC_)										
Temperature range	-5°C ... +60°C (plain bearing) -20°C ... +80°C (ball bearing)										
Speed range	50 mm/s ... 500 mm/s										
	Below 0°C air has to be dried.										
Versions	A-CG01, A-CG02, A-CG04 (plain bearing)										
	CCIG6, CCBG6, CCLG6, CCVG (ball bearing)										
Materials	A_	C_									
Body	Aluminum	Aluminum									
Plate	Carbon steel	Nickel-plated steel									
Piston rod	Ø12 - Ø20 Stainless steel Ø25 - Ø63 Carbon steel	Chrome-plated steel									
Seals	NBR	NBR, PUR									

A-CG01



Ø [mm]	B	C	DA	DB	FA	FB	G	GA	GB	H	J	K	L	MM	ML	NN	OA	OB
Ø12	42	29	6	8	8	5	26	11	15*	58	13	13	18	M4x0,7	10	M4x0,7	4,3	8
Ø16	46	33	8	10	8	5	30	11	18**	64	15	15	22	M5x0,8	12	M5x0,8	4,3	8
Ø20	53	37	10	12	10	6	36	10,5	9	85	19	19	24	M5x0,8	13	M5x0,8	5,2	9,5
Ø25	53,5	37,5	12	16	10	6	42	11,5	9	96	21	21	30	M6x1,0	15	M6x1,0	5,2	9,5
Ø32	59,5	37,5	16	20	12	10	51	12,5	9	116	25	25	34	M8x1,25	20	M8x1,25	6,6	11,0

Ø [mm]	OL	P	PA	PB	PW	Q	R	S	T	U	VA	X	XA	XB	YY	YL	Z
Ø12	4,5	M5x0,8	14	8,5	18	14	48	22	56	41,5	50	23	3	3,5	M5x0,8	10	5
Ø16	4,5	M5x0,8	15	10	19	16	54	25	62	46	56	24	3	3,5	M5x0,8	10	5
Ø20	5,5	G1/8	12,5	11,5	25	18	70	30	81	55	72	28	3	3,5	M6x1,0	12	17
Ø25	5,5	G1/8	12,5	13,5	29	26	78	38	91	65	82	34	4	4,5	M6x1,0	12	17
Ø32	7,5	G1/8	7	16	34	30	96	44	110	80	98	42	4	4,5	M8x1,25	16	21

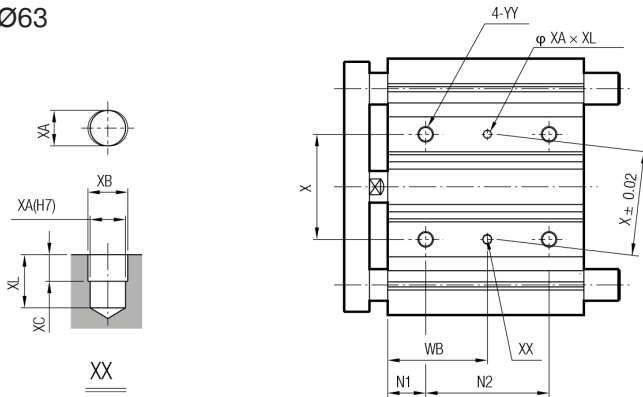
* When stroke length is equal to 19 mm or less, GB = 7.5 mm
 ** When stroke length is equal to 19 mm or less, GB = 9.0 mm



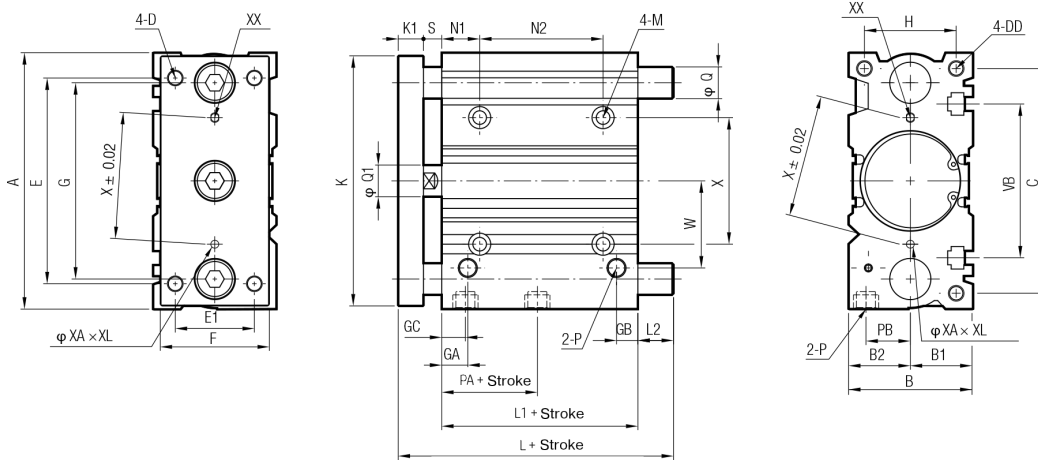
A-CG01

page 68

Ø40 - Ø63



Back side



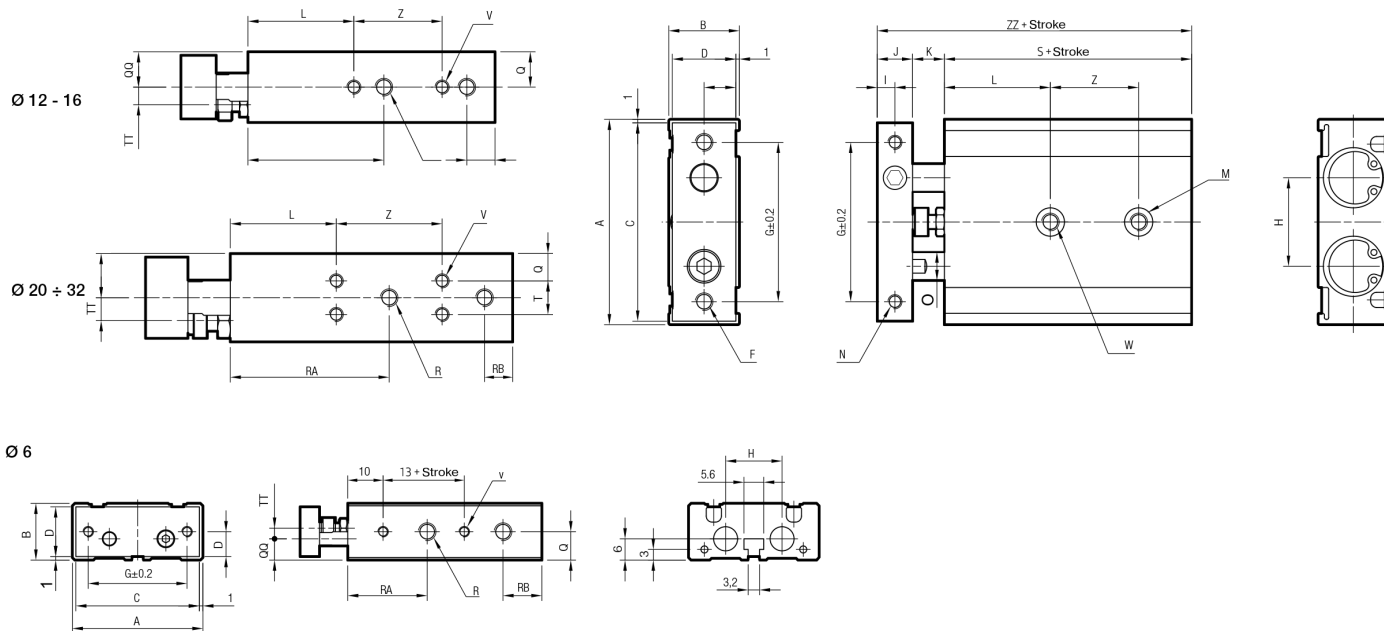
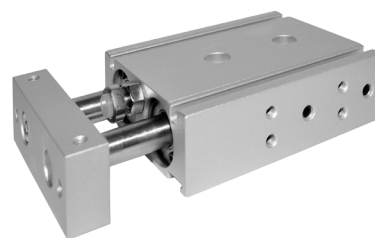
Ø [mm]	A	B	B1	B2	C	D	DD	E	E1	F	G	GA	GB	GC	H	K	K1	L1
Ø40	120	54	27	27	106	M8x1,25	M8x1,25x20	104	30	44	86	14,0	10,0	14,0	40	118	12	44
Ø50	148	64	32	32	130	M10x1,5	M10x1,5x22	130	40	60	110	14,0	11,0	12,0	46	146	16	44
Ø63	162	78	39	39	142	M10x1,5	M10x1,5x22	130	50	70	124	16,5	13,5	16,5	58	158	16	49

Ø [mm]	M	N1	P	PA	PB	Q1	S	VB	W	X	XA	XB	XC	XL	YY
Ø40	Ø6,6-Ø11x7,5	22	G1/8	13	18,0	16	10	72	38	50	4	4,5	3	6,0	M8x1,25x16
Ø50	Ø8,6-Ø14,9	24	G1/4	9	21,5	20	12	92	47	66	5	6,0	4	8,0	M10x1,5x20
Ø63	Ø8,6-Ø14,9	24	G1/4	14	28,0	20	12	110	55	80	5	6,0	4	8,0	M10x1,5x20

Ø [mm]	N2			WB			L		L2		Q
	25 mm	50-100 mm	100~ mm	25 mm	50-100 mm	100~ mm	25 - 50 mm	50~ mm	25 - 50 mm	50~ mm	
Ø40	24	48	124	34	46	84	97,0	102	31,0	36	Ø20
Ø50	24	48	124	36	48	86	106,5	118	34,5	46	Ø25
Ø63	28	52	128	38	50	88	106,5	118	39,5	41	Ø25



A-CG02



Ø [mm]	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Ø6	37	16	35	14	7	2-M3x0,5	28	16	2,75	5,5	8	13	2-Ø6,5x3,3*	2-M3x0,5	4
Ø12	46	18	44	16	8	2-M4x0,7	35	19	4,00	8,0	9	20	4-Ø6,5x3,3	4-M3x0,5x5	6
Ø16	58	20	56	18	9	2-M5x0,8	45	25	5,00	10,0	9	30	4-Ø8x4,4	4-M4x0,7x6	8
Ø20	64	25	62	23	11,5	2-M5x0,8	50	28	6,00	12,0	12	30	4-Ø9,5x5,3	4-M4x0,7x6	10
Ø25	80	30	78	28	14	2-M6x1,0	60	35	6,00	12,0	12	30	4-Ø11x6,3	4-M4x0,8x8	12
Ø32	98	38	96	36	18	2-M6x1,0	75	44	8,00	16,0	14	30	4-Ø11x6,3	4-M4x0,8x8	16

Ø [mm]	Q	QQ	R	RA	RB	S	T	TT	V	W
Ø6	8,00	6,0	4-M5x0,8	22,5	11	45	-	3	4-M3x0,5x4,5	2-Ø3,4
Ø12	9,00	10,0	4-M5x0,8	30,0	8	55	-	3,5	4-M3x0,5x4,5	2-M4x0,7
Ø16	10,00	10,0	4-M5x0,8	38,5	8	60	-	5	4-M4x0,7x5	2-M5x0,8
Ø20	7,75	12,5	4-M5x0,8	45,0	8	70	9,5	6,5	8-M4x0,7x5,5	2-M6x1,0
Ø25	8,50	15,0	4-G1/8	46,0	9	72	13,0	9	8-M5x0,8x7,5	2-M8x1,25
Ø32	9,00	19,0	4-G1/8	56,0	10	82	20,0	11,5	8-M5x0,8x7,5	2-M8x1,25

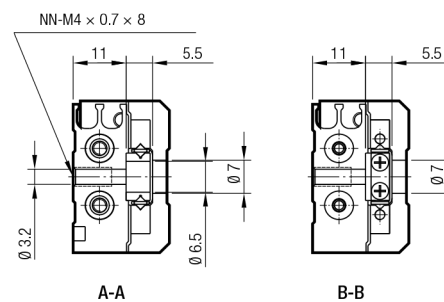
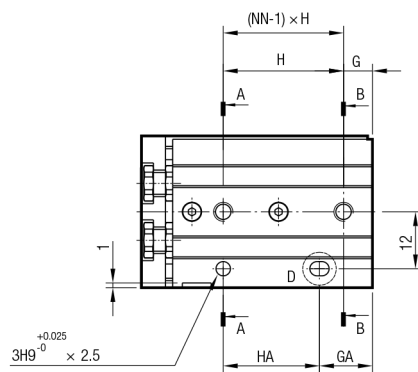
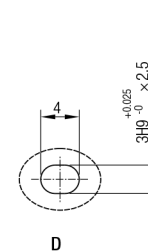
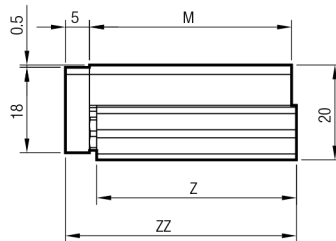
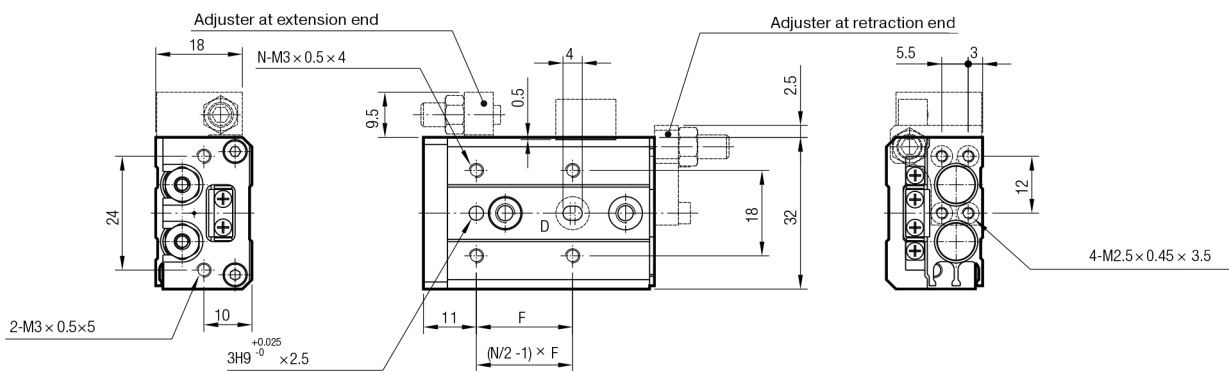
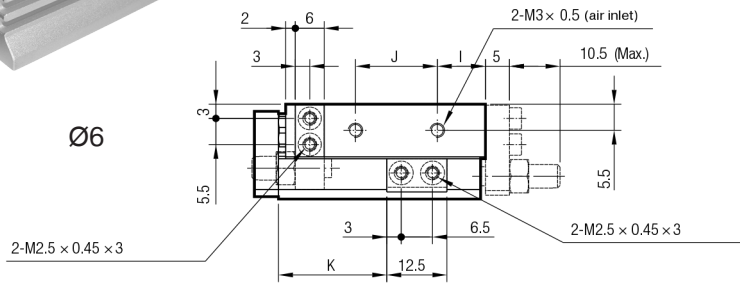
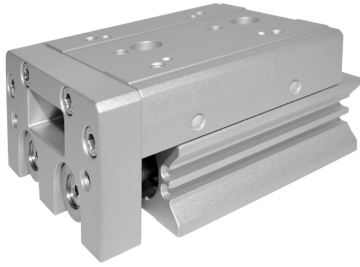
Z (stroke)						
Ø [mm]	10 ~ 25	30 ~ 50	60 ~ 75	80	90~100	ZZ
Ø6	10+1/2 Stroke**					58,8
Ø12	30	40	50	-	-	72,0
Ø16	25	35	45	45	55	79,0
Ø20	30	40	60	60	60	94,0
Ø25	30	40	60	60	60	96,0
Ø32	40	50	70	70	70	112,0

*Ø6 - single side
 **Ø6 - stroke (10-20-30 mm)



A-CG04

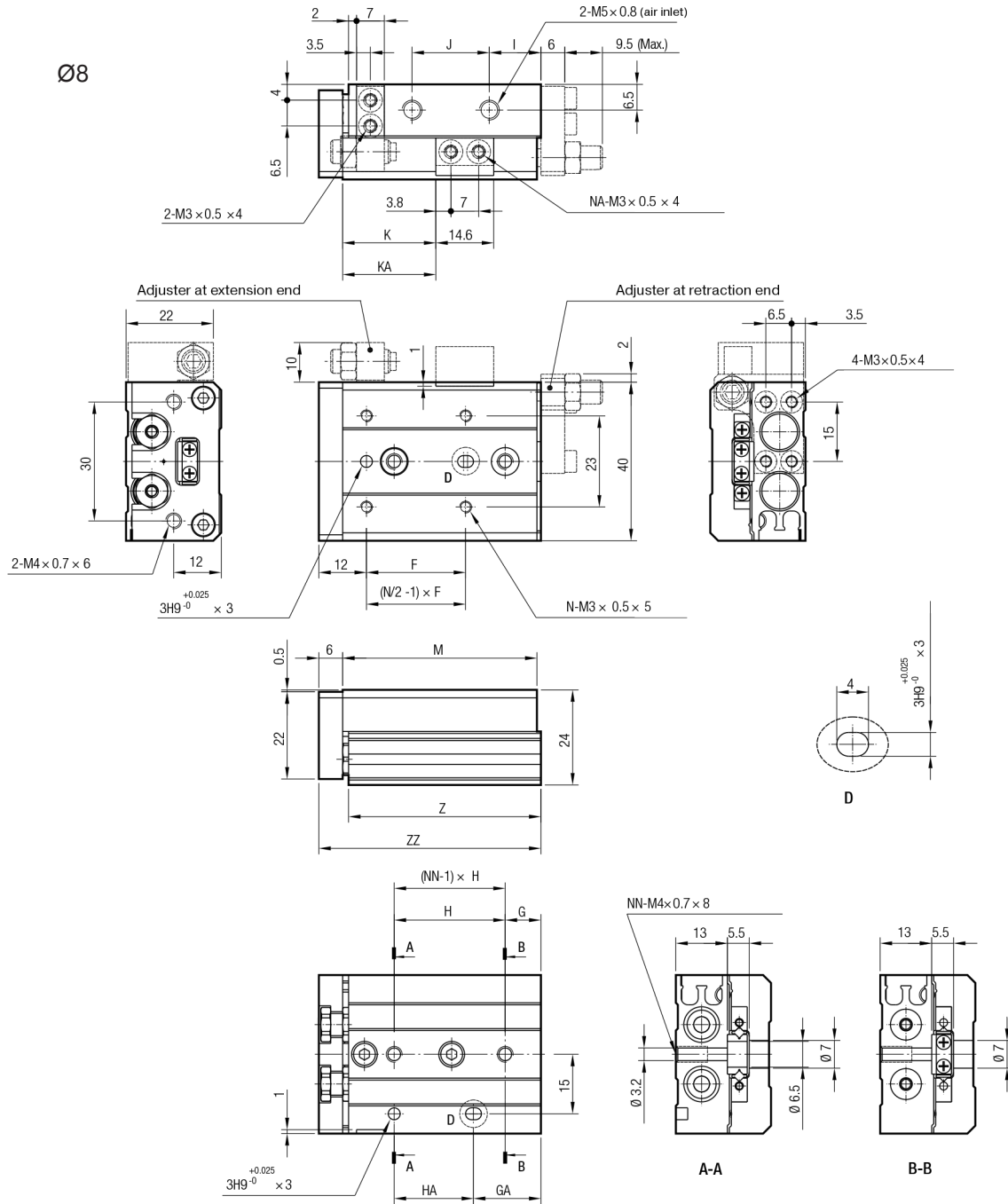
page 70



Stroke [mm]	F	G	GA	H	HA	I	J	K	M	N	NN	Z	ZZ
10	20	6	11	25	20	10	17	22,5	42	4	2	41,5	48
20	30	6	21	35	20	10	27	32,5	52	4	2	51,5	58
30	20	11	31	20	20	7	40	42,5	62	6	3	61,5	68
40	28	13	43	30	30	19	50	52,5	84	6	3	83,5	90
50	38	17	41	24	48	25	60	62,5	100	6	4	99,5	106



A-CG04

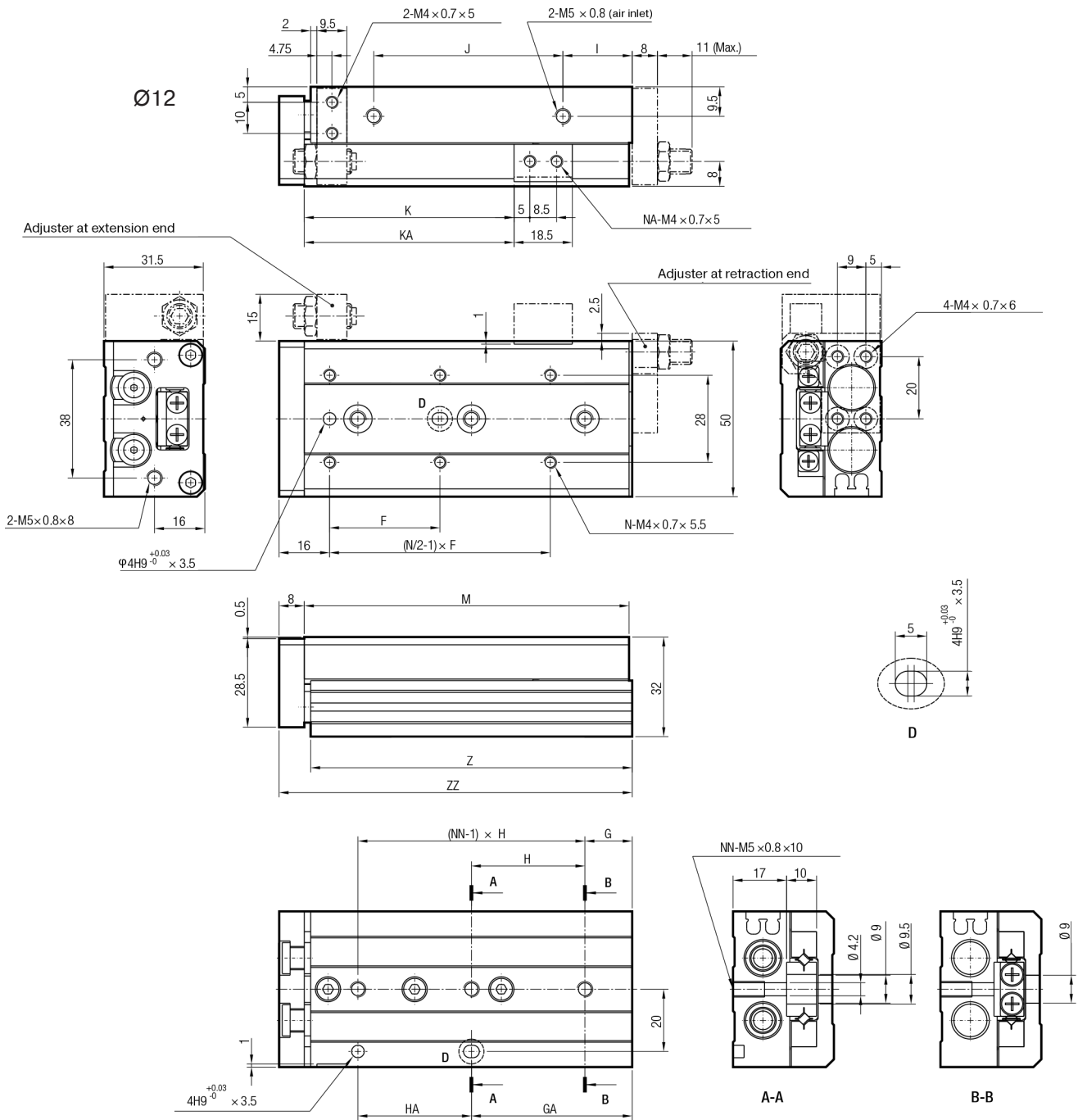


Stroke [mm]	F	G	GA	H	HA	I	J	K	KA	M	N	NA	NN	Z	ZZ
10	25	9	17	28	20	13,0	19,5	23,5	-	49	4	2	2	48,5	56
20	25	12	12	30	30	8,5	29,0	33,5	-	54	4	2	2	53,5	61
30	40	13	33	20	20	9,5	39,0	43,5	-	65	4	2	3	64,5	72
40	50	15	43	28	28	10,5	56,0	53,5	-	83	4	2	3	82,5	90
50	38	20	43	23	46	24,5	60,0	63,5	82,5	101	6	4	4	100,5	108
75	50	27	83	56	56	38,5	96,0	88,5	132,5	151	6	4	5	150,5	158



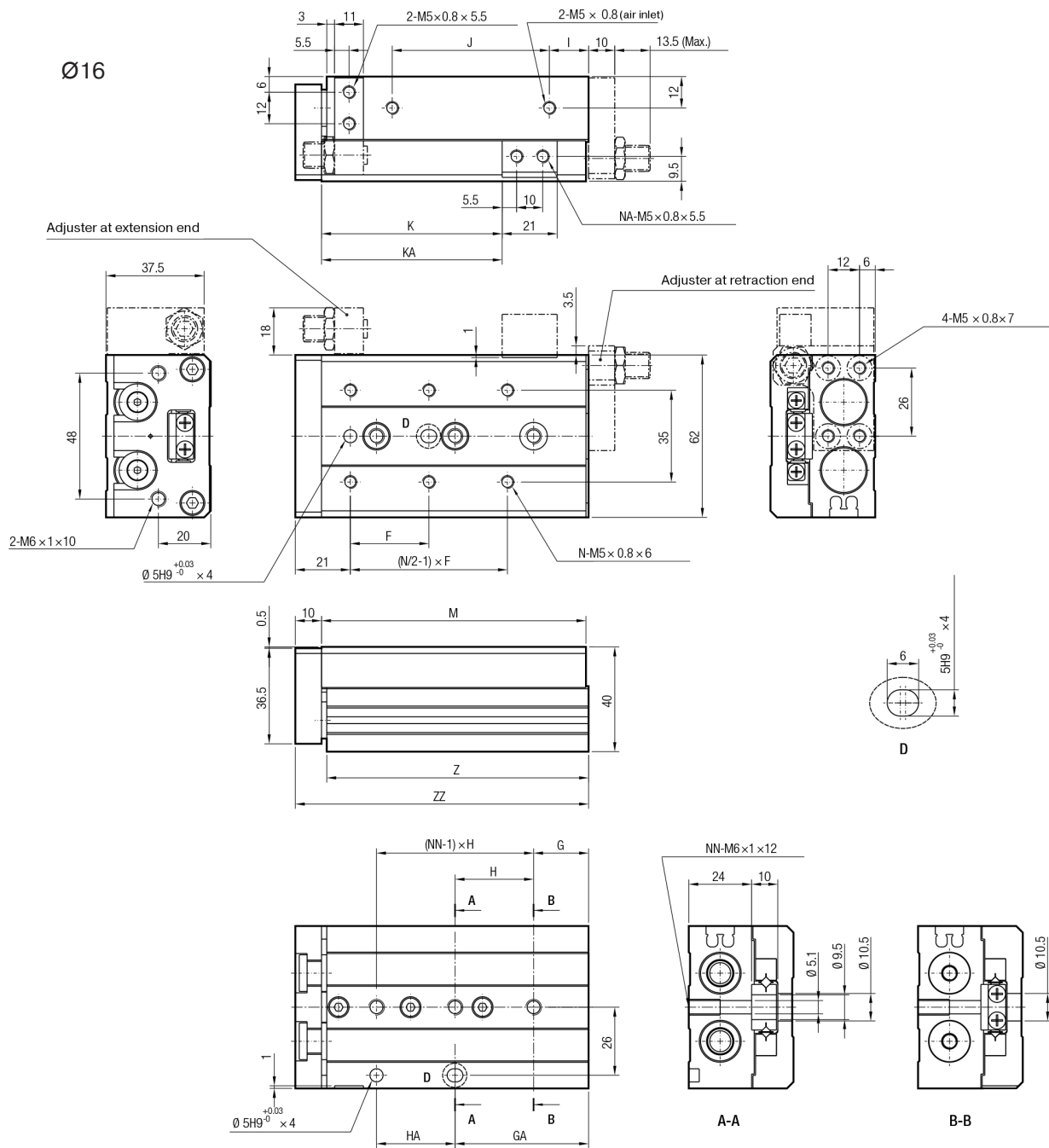
A-CG04

page 72



Stroke [mm]	F	G	GA	H	HA	I	J	K	KA	M	N	NA	NN	Z	ZZ
10	35	15	15	40	40	10	40	26,5	-	71	4	2	2	70	80
20	35	15	15	40	40	10	40	36,5	-	71	4	2	2	70	80
30	35	15	15	40	40	10	40	46,5	-	71	4	2	2	70	80
40	50	17	42	25	25	10	52	56,5	-	83	4	2	3	82	92
50	35	15	51	36	36	22	60	66,5	-	103	6	2	3	102	112
75	55	25	61	36	72	43	85	91,5	125,5	149	6	4	4	148	158
100	65	35	111	38	76	52	130	116,5	116,5	203	6	4	5	202	212

A-CG04

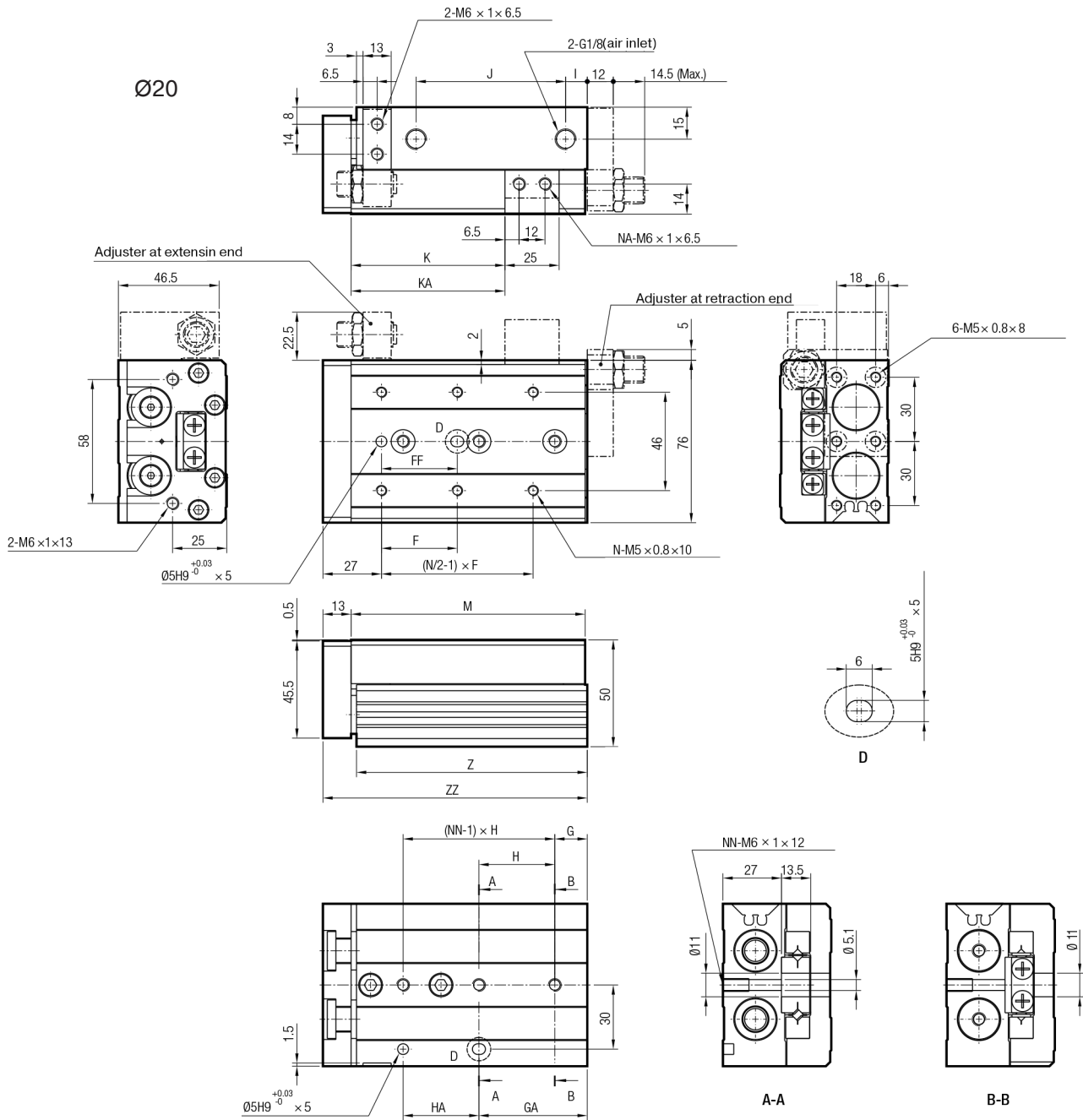


Stroke [mm]	F	G	GA	H	HA	I	J	K	KA	M	N	NA	NN	Z	ZZ
10	35	16	16	40	40	10	40	29	-	76	4	2	2	75	87
20	35	16	16	40	40	10	40	39	-	76	4	2	2	75	87
30	35	16	16	40	40	10	40	49	-	76	4	2	2	75	87
40	40	16	16	50	50	10	50	59	-	86	4	2	2	85	97
50	30	21	51	30	30	15	60	69	-	101	6	2	3	100	112
75	55	26	61	35	70	40	85	94	125	151	6	4	4	150	162
100	65	39	109	35	70	55	118	119	173	199	6	4	5	198	210
125	70	19	159	35	70	68	155	144	223	249	8	4	7	248	260



A-CG04

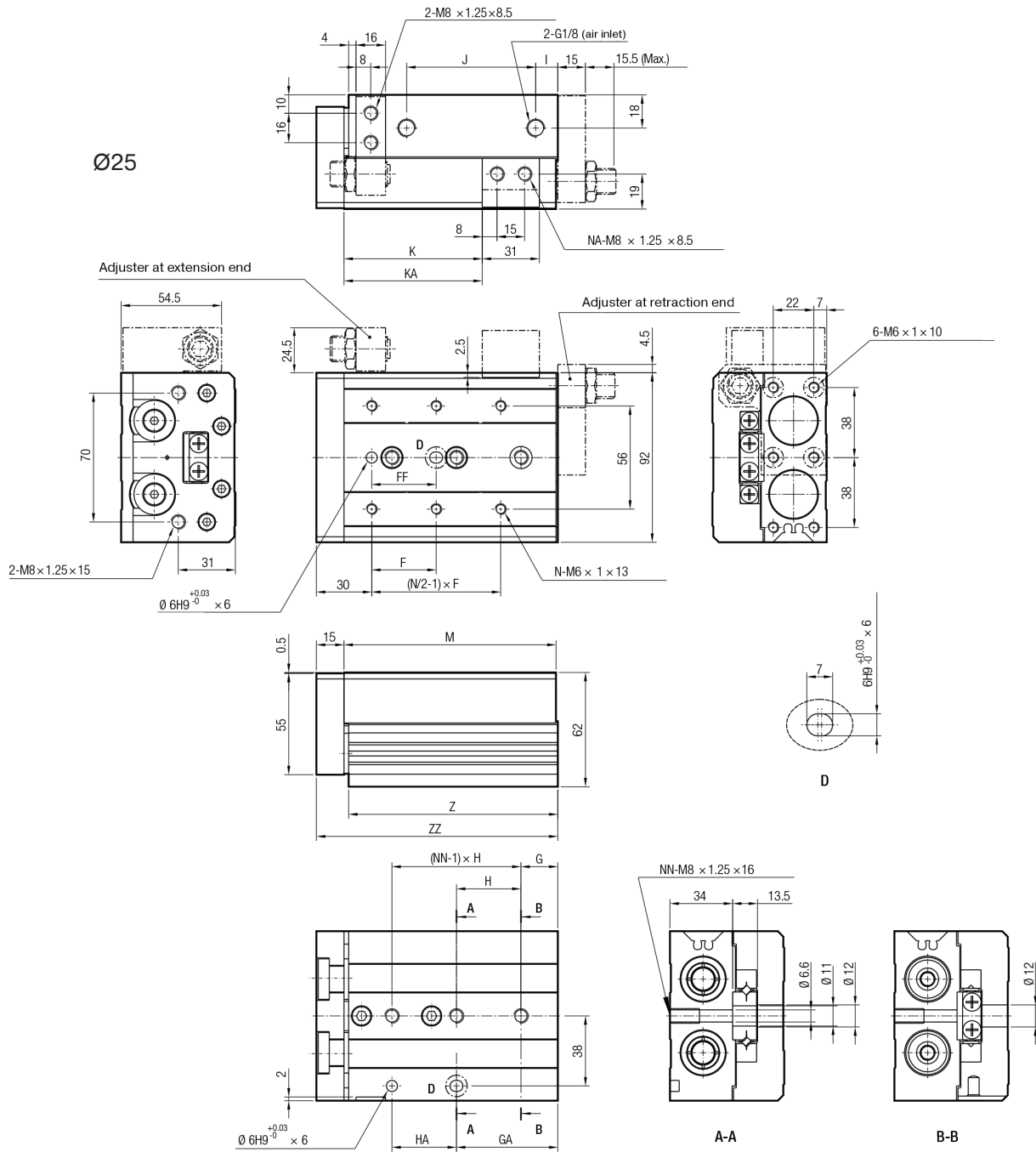
page 74



Stroke [mm]	F	FF	G	GA	H	HA	I	J	K	KA	M	N	NA	NN	Z	ZZ
10	50	40	15	25	45	35	10	44	31	-	83	4	2	2	81,5	97
20	50	40	15	25	45	35	10	44	41	-	83	4	2	2	81,5	97
30	50	40	15	25	45	35	10	44	51	-	83	4	2	2	81,5	97
40	60	50	15	35	55	35	10	54	61	-	93	4	2	2	91,5	107
50	35	35	15	50	35	35	10	69	71	-	108	6	2	3	106,5	122
75	60	60	19	54	35	70	10	108	96	-	147	6	2	4	145,5	161
100	70	70	37	107	35	70	58	113	121	169	200	6	4	5	198,5	214
125	70	70	41	155	38	76	70	155	146	223	254	8	4	6	252,5	268
150	80	80	19	195	44	88	87	190	171	275	306	8	4	7	304,5	320



A-CG04

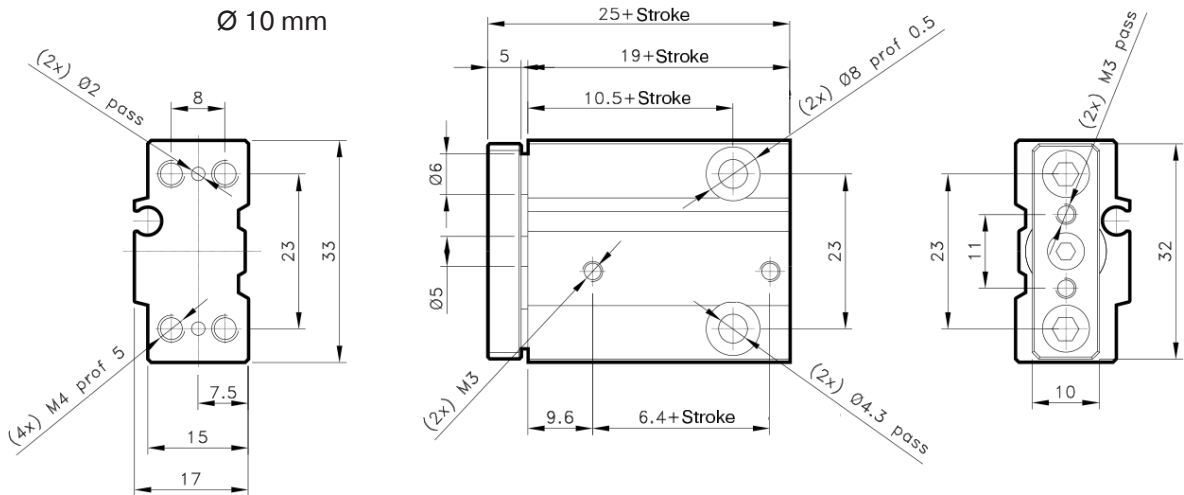
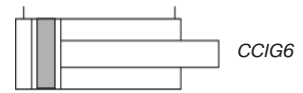


Stroke [mm]	F	FF	G	GA	H	HA	I	J	K	KA	M	N	NA	NN	Z	ZZ
10	50	40	22	22	45	45	12	47	35	-	92	4	2	2	90,5	108
20	50	40	22	22	45	45	12	47	45	-	92	4	2	2	90,5	108
30	50	40	22	22	45	45	12	47	55	-	92	4	2	2	90,5	108
40	60	50	22	22	55	55	12	57	65	-	102	4	2	2	100,5	118
50	35	35	20	55	35	35	12	70	75	-	115	6	2	3	113,5	131
75	60	60	26	61	35	70	33	90	100	-	156	6	2	4	154,5	172
100	70	70	32	102	35	70	50	114	125	162	197	6	4	5	195,5	213
125	75	75	40	154	38	76	67	155	150	218	255	8	4	6	253,5	271
150	80	80	30	190	40	80	82	180	175	258	295	8	4	7	293,5	311

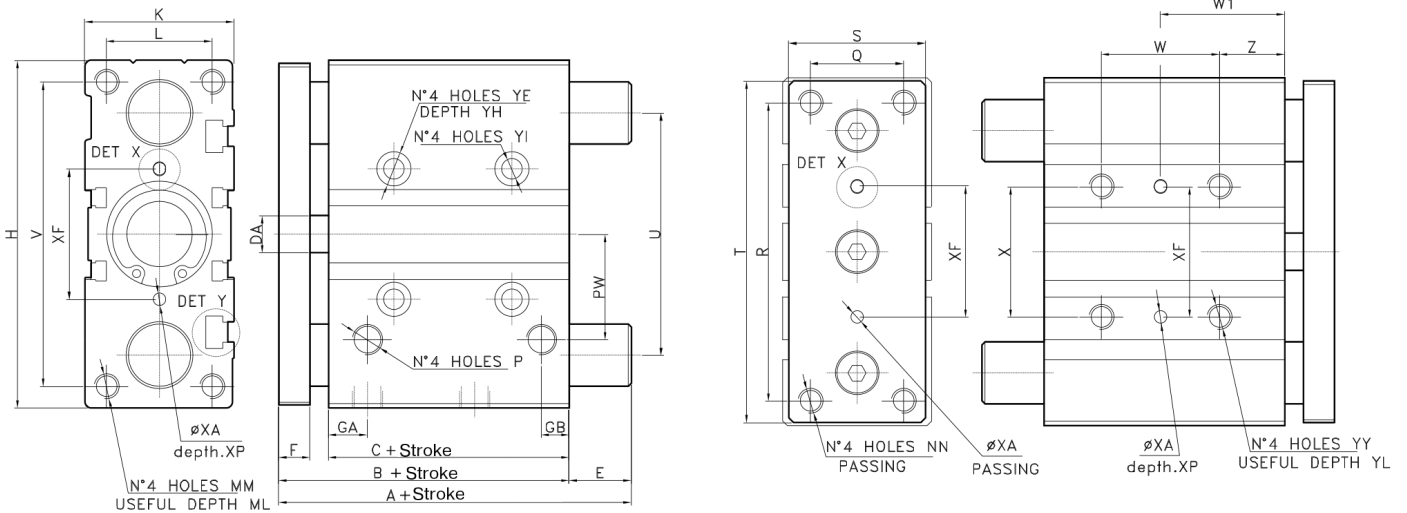
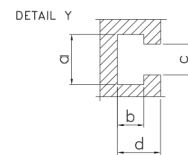
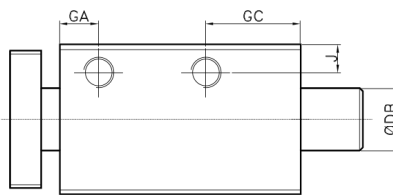
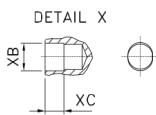


CCIG6

page 76



Ø12 - Ø63 mm



CCIG6

Ø [mm]	B	C	DA	F	GA	GB	GC	H	J	K	L	MM	ML	NN	P	PW	Q	R	S
Ø 12	42	29	6	7	10	7	18	58	5	26	18	M4	10	M4	M5	18	14	48	22
Ø 16	46	33	8	8	11	8	18	64	5	30	22	M5	12	M5	M5	19	16	54	25
Ø 20	53	37	10	10	10,5	8,5	24,5	83	6,5	36	24	M5	13	M5	G1/8	25	18	70	30
Ø 25	53,3	37,5	10	10	11,5	9	25	93	7,5	42	30	M6	15	M6	G1/8	28,5	26	78	38
Ø 32	59,5	37,5	12	12	12,5	9	30,5	112	9	48	34	M8	20	M8	G1/8	34	30	96	44
Ø 40	66	44	12	12	14	10	31	120	9	54	40	M8	20	M8	G1/8	38	30	104	44
Ø 50	72	44	16	16	14	11	35	148	9,5	64	46	M10	22	M10	G1/4	47	40	130	60
Ø 63	77	49	16	16	16,5	13,5	35	162	11	78	58	M10	22	M10	G1/4	55	50	130	70
Ø [mm]	T	U	V	X	YY	YL	YE	YH	YI	Z	XF	XA	XP	XB	XC	a	b	c	d
Ø 12	56	41	50	23	M4	10	8	4,5	4,3	5	23	3	6	3,5	3	7,4	3,7	4,4	6,2
Ø 16	62	46	56	24	M5	10	8	4,5	4,3	5	24	3	6	3,5	3	7,4	3,7	4,4	6,2
Ø 20	81	54	72	28	M6	12	9,5	5,5	5,6	17	28	3	6	3,5	3	8,4	4,5	5,5	7,3
Ø 25	91	64	82	34	M6	12	9,5	5,5	5,6	17	34	4	6	4,5	3	8,4	4,5	5,5	7,5
Ø 32	110	78	98	42	M8	16	11	7,5	6,6	21	42	4	6	4,5	3	10,5	5,5	6,5	9,0
Ø 40	118	86	106	50	M8	16	11	7,5	6,6	22	50	4	6	4,5	3	10,5	5,5	6,5	9,0
Ø 50	146	110	130	66	M10	20	14	9	8,6	24	66	5	8	6,0	4	13,5	7,5	8,5	12,0
Ø 63	158	124	142	80	M10	20	14	9	8,6	24	80	5	8	6,0	4	17,8	10	11,0	16,5

Plain bearing

Ø [mm]	A (Stroke)		E (Stroke)		DB
Ø12	42	60,5	0	18,5	8
	(10-50)	(75-100)	(10-50)	(75-100)	
Ø16	46	64,5	0	18,5	10
	(10-50)	(75-100)	(10-50)	(75-100)	
Ø20	53	84,5	0	31,5	12
	(20-50)	(75-200)	(20-50)	(75-200)	
Ø25	53,5	85	0	31,5	16
	(20-50)	(75-200)	(20-50)	(75-200)	
Ø32	97	107	37,5	47,5	20
	(25-50)	(75-200)	(25-50)	(75-200)	
Ø40	97	107	31	41	20
	(25-50)	(75-200)	(25-50)	(75-200)	
Ø50	106,5	118	34,5	46	25
	(25-50)	(75-200)	(25-50)	(75-200)	
Ø63	106,5	118	29,9	41	25
	(25-50)	(75-200)	(25-50)	(75-200)	

Ball bearing

Ø [mm]	A (Stroke)		E (Stroke)		DB		
Ø12	43	55	1	13	6		
	(10-30)	(40-100)	(10-30)	(40-100)			
Ø16	46	66	0	20	8		
	(10-30)	(40-100)	(10-30)	(40-100)			
Ø20	53	85,5	0	32,5	12		
	(20-30)	(40-200)	(20-30)	(40-200)			
Ø25	53,5	86	0	32,5	12		
	(20-30)	(40-200)	(20-30)	(40-200)			
Ø32	97	107	37,5	47,5	20		
	(25-50)	(75-200)	(25-50)	(75-200)			
Ø40	97	107	31	41	20		
	(25-50)	(75-200)	(25-50)	(75-200)			
Ø50	106,5	114	118	34,5	42	46	25
	(25)	(50)	(75-200)	(25)	(50)	(75-200)	
Ø63	106,5	114	118	29,5	37	41	25
	(25)	(50)	(75-200)	(25)	(50)	(75-200)	

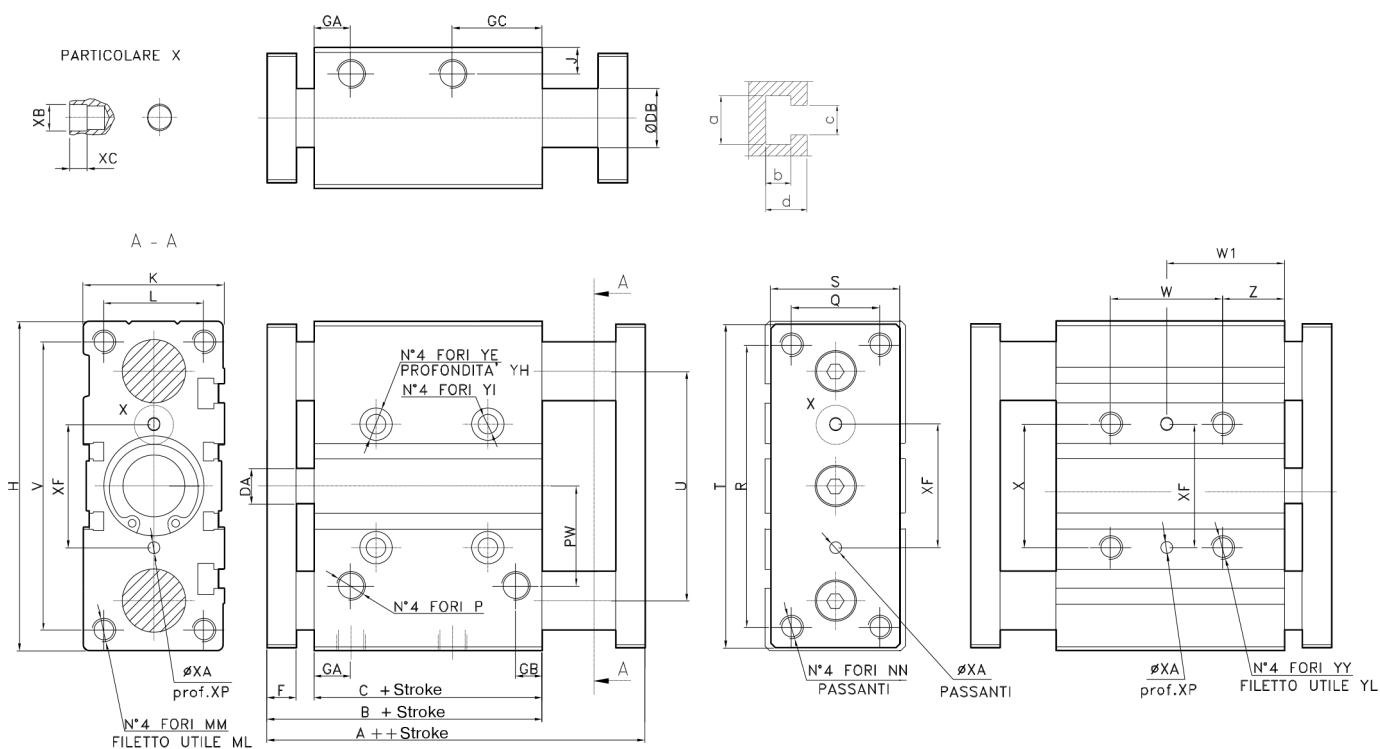
Ø [mm]	W (Stroke)		W1 (Stroke)			
Ø12	20	40	15	25		
	(10-30)	(40-100)	(10-30)	(40-100)		
Ø16	24	44	17	27		
	(10-30)	(40-100)	(10-30)	(40-100)		
Ø20	24	44	120	29	39	77
	(20-30)	(40-100)	(125-200)	(20-30)	(40-100)	(125-200)
Ø25	24	44	120	29	39	77
	(25)	(40-100)	(125-200)	(20-30)	(40-100)	(125-200)

Ø [mm]	W (Stroke)		W1 (Stroke)			
Ø32	24	48	124	33	45	83
	(25)	(50-100)	(125-200)	(25)	(50-100)	(125-200)
Ø40	24	48	124	34	46	84
	(25)	(50-100)	(125-200)	(25)	(50-100)	(125-200)
Ø50	24	48	124	36	48	86
	(25)	(50-100)	(125-200)	(25)	(50-100)	(125-200)
Ø63	28	52	128	38	50	88
	(25-50)	(50-100)	(125-200)	(25)	(50-100)	(125-200)



CCBG6

page 78



Ø [mm]	A	B	C	DA	F	GA	GB	GC	H	J	K	L	MM	ML	NN	P	PW	Q	R
Ø16	59	46	33	8	8	11	8	18	64	5	30	22	M5	12	M5	M5	19	16	54
Ø20	69	53	37	10	10	10,5	8,5	24,5	83	6,5	36	24	M5	13	M5	G1/8	25	18	70
Ø25	69,5	53,5	37,5	10	10	11,5	9	25	93	7,5	42	30	M6	15	M6	G1/8	28,5	26	78
Ø32	81,5	59,5	37,5	12	12	12,5	9	30,5	112	9	48	34	M8	20	M8	G1/8	34	30	96
Ø40	88	66	44	12	12	14	10	31	120	9	54	40	M8	20	M8	G1/8	38	30	104
Ø50	100	72	44	16	16	14	11	35	148	9,5	64	46	M10	22	M10	G1/4	47	40	130
Ø63	105	77	49	16	16	16,5	13,5	35	162	11	78	58	M10	22	M10	G1/4	55	50	130

Ø [mm]	S	T	U	V	X	XF	XA	XP	XB	XC	YY	YL	YE	YH	YI	Z	a	b	c	d
Ø16	25	62	46	56	24	24	3	6	3,5	3	M5	10	8	4,5	4,3	5	7,4	3,7	4,4	6,2
Ø20	30	81	54	72	28	28	3	6	3,5	3	M6	12	9,5	5,5	5,6	17	8,4	4,5	5,5	7,3
Ø25	38	91	64	82	34	34	4	6	4,5	3	M6	12	9,5	5,5	5,6	17	8,4	4,5	5,5	7,5
Ø32	44	110	78	98	42	42	4	6	4,5	3	M8	16	11	7,5	6,6	21	10,5	5,5	6,5	9
Ø40	44	118	86	106	50	50	4	6	4,5	3	M8	16	11	7,5	6,6	22	10,5	5,5	6,5	9
Ø50	60	146	110	130	66	66	5	8	6	4	M10	20	14	9	8,6	22	13,5	7,5	8,5	12
Ø63	70	158	124	142	80	80	5	8	6	4	M10	20	14	9	8,6	24	17,8	10	11	16,5



CCBG6

Plain bearing

Ø [mm]	DB
Ø16	10
Ø20	12
Ø25	16
Ø32	20
Ø40	20
Ø50	25
Ø63	25

Ball bearing

Ø [mm]	DB
Ø16	8
Ø20	12
Ø25	12
Ø32	20
Ø40	20
Ø50	25
Ø63	25

Ø [mm]	W (Stroke)			W1 (Stroke)		
	Ø16	24 (10-30)	44 (40-100)		17 (10-30)	27 (40-100)
Ø20	24 (20-30)	44 (40-100)		29 (20-30)	39 (40-100)	77 (125-200)
Ø25	24 (20-30)	44 (40-100)	120 (125-200)	29 (20-30)	39 (40-100)	77 (125-200)
Ø32	24 (25)	48 (40-100)	120 (125-200)	33 (25)	45 (50-100)	83 (125-200)
Ø40	24 (25)	48 (50-100)	124 (125-200)	34 (25)	46 (50-100)	84 (125-200)
Ø50	24 (25)	48 (50-100)	124 (125-200)	36 (25)	48 (50-100)	86 (125-200)
Ø60	28 (25)	52 (50-100)	128 (125-200)	38 (25)	50 (50-100)	88 (125-200)