

SCPD3
CMK2
SCM
SSD2
MDC2
MSD
MSDG-L
SMG
LCR
LCG
STM
STG
STR2
SCPD3
CMK2
SCM
SCG
SSD2
SMG
LCR
STG
STS
STL
LSH
LSHL
LSHM
LST
LSTM
HMC
CKW
ABP2
SCPD3
CMK2
SCM
SSD2
MSD
MSDG-L
SMG
STG
STM
LCR
LCG
STR2
LSH
LSHL
SCPD3
CMK2
SCM
SCG
SSD2
STG



Guided cylinder Double acting/Rubber scraper

Environment-resistant cylinder

STG-M_BG-HP1 Series

● Bore size: $\varnothing 12/\varnothing 16/\varnothing 20/\varnothing 25/\varnothing 32/\varnothing 40/\varnothing 50/\varnothing 63/\varnothing 80/\varnothing 100$



Specifications

Item	STG- ^M _B G-HP1									
Bore size mm	ø12	ø16	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
Actuation	Double acting									
Working fluid	Compressed air									
Max. working pressure MPa	1.0									
Min. working pressure MPa	0.25				0.2					
Proof pressure MPa	1.6									
Ambient temperature °C	-10 to 60 (no freezing)									
Port size	M5		Rc1/8				Rc1/4		Rc3/8	
Stroke tolerance mm	+2.0									
	0									
Working piston speedmm/s	50 to 500							50 to 300		
Cushion	With rubber cushion									
Lubrication	Not required									
Allowable absorbed energy J	0.056	0.088	0.157	0.157	0.401	0.627	0.980	1.560	2.510	3.920

Stroke

Bore size	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)	Min. stroke with switch(mm)
ø12	10/20/30/40/50/75/100	250	5	5 (10) *2
ø16	125/ 150/175/200/250			
ø20	20/30/40/50/75/100/125	400		
ø25	150/175/200/250/300/350/400			
ø32	25/50/75/100 125/150/175 200/250/300 350/400			
ø40				
ø50				
ø63				
ø80				
ø100				

*1: The custom stroke is available in 5 mm increments. However, the total length is the same as that of the next longer standard stroke.

*2: For types with one or two switches. The value in () is the min. stroke for switches of the 2-color LED and AC magnetic field proof.

How to order

Without switch (built-in magnet for switch)

STG - M G - 32 - 25 - HP1

With switch (built-in magnet for switch)

STG - M G - 32 - 25 - T2H - R - HP1

Model No.

A Bearing

B Model No.

E Stroke

D Port thread

C Bore size

F Switch model No.
*1 *2 *3

G Switch quantity

⚠ Precautions for model No. selection

*1: Switches other than F switch model No. are also available. (Made to order) For details, refer to "Pneumatic Cylinders II" (No. CB-030SA).

*2: T8H/V switch cannot be installed on STG-12 or 16.

*3: Switches are shipped with the product. Contact CKD if assembling before shipment is necessary.

[Example of model No.]

STG-MG-40-50-T0H-H-HP1

Model: Guided cylinder, double acting/Rubber scraper

- A Bearing : Metal bush bearing
 B Model No. : Rubber scraper
 C Bore size : ø40 mm
 D Port thread : Rc thread
 E Stroke : 50mm
 F Switch model No. : Reed T0H switch, lead wire length 1 m
 G Switch quantity : 1 on head side

How to order switch

SW - T0V

F Switch model No.

E Stroke

Stroke (mm)	Applicable bore size									
	ø12	ø16	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
10	●	●								
20	●	●	●	●						
25										●
30	●	●	●	●						
40	●	●	●	●						
50	●	●	●	●	●	●	●	●	●	●
75	●	●	●	●	●	●	●	●	●	●
100	●	●	●	●	●	●	●	●	●	●
125	●	●	●	●	●	●	●	●	●	●
150	●	●	●	●	●	●	●	●	●	●
175	●	●	●	●	●	●	●	●	●	●
200	●	●	●	●	●	●	●	●	●	●
250	●	●	●	●	●	●	●	●	●	●
300			●	●	●	●	●	●	●	●
350			●	●	●	●	●	●	●	●
400			●	●	●	●	●	●	●	●
Min. stroke *2	5 (10)									
Custom stroke *1	In 5 mm increments									

*1: The total dimensions are the same as the longer standard stroke.

*2: The value in () is the min. stroke for switches of the 2-color LED and AC magnetic field proof.

Code	Description					
A Bearing						
M	Metal bush bearing					
B	Ball bearing					
B Model No.						
G	Rubber scraper					
C Bore size (mm)						
12	ø12					
16	ø16					
20	ø20					
25	ø25					
32	ø32					
40	ø40					
50	ø50					
63	ø63					
80	ø80					
100	ø100					
D Port thread						
Blank	M5 (ø12 to ø16)					
	Rc thread (ø20 to ø100)					
NN	NPT thread (ø20 and over) (made to order)					
GN	G thread (ø20 and over) (made-to-order product)					
E Stroke (mm)						
Refer to the stroke table below						
F Switch model No.						
Lead wire Straight	Lead wire L-shaped	Contact	Voltage AC DC		Indicator	Lead wire
T0H*	T0V*	Reed	●	●	1-color LED	2-wire
T5H*	T5V*		●	●	No LED	
T8H*	T8V*		●	●	1-color LED	
T1H*	T1V*	Proximity	●		1-color LED	2-wire
T2H*	T2V*			●		
T3H*	T3V*			●	1-color LED bend resistant lead wire	3-wire
T2HR3	T2VR3			●		
T3PH*	T3PV*			●	1-color LED (made to order)	3-wire
T2WH*	T2WV*			●	2-color LED	2-wire
T3WH*	T3WV*			●		
T2YD*	-			●	2-color LED for AC magnetic field	2-wire
T2YDT*	-			●		
T2JH*	T2JV*			●	1-color LED off-delay	2-wire
* Lead wire length						
Blank	1 m (standard)					
3	3 m (option)					
5	5 m (option)					
G Switch quantity						
R	1 on rod side					
H	1 on head side					
D	2					
T	3					

Consumable parts list

(Note: Specify the kit No. when placing an order.)

● STG-MG-HP1 (rubber scraper)

Bore size (mm)	Kit No.	Part name
ø12	STG-MG-12K-HP1	Rod packing
ø16	STG-MG-16K-HP1	Metal gasket
ø20	STG-MG-20K-HP1	Cushion rubber
ø25	STG-MG-25K-HP1	Piston packing
ø32	STG-MG-32K-HP1	Cushion rubber
ø40	STG-MG-40K-HP1	Scraper (for piston rod)
ø50	STG-MG-50K-HP1	Scraper (for guide)
ø63	STG-MG-63K-HP1	Lube keeping structure (for guide)
ø80	STG-MG-80K-HP1	Lube keeping structure (for piston rod)
ø100	STG-MG-100K-HP1	

● STG-BG-HP1 (rubber scraper)

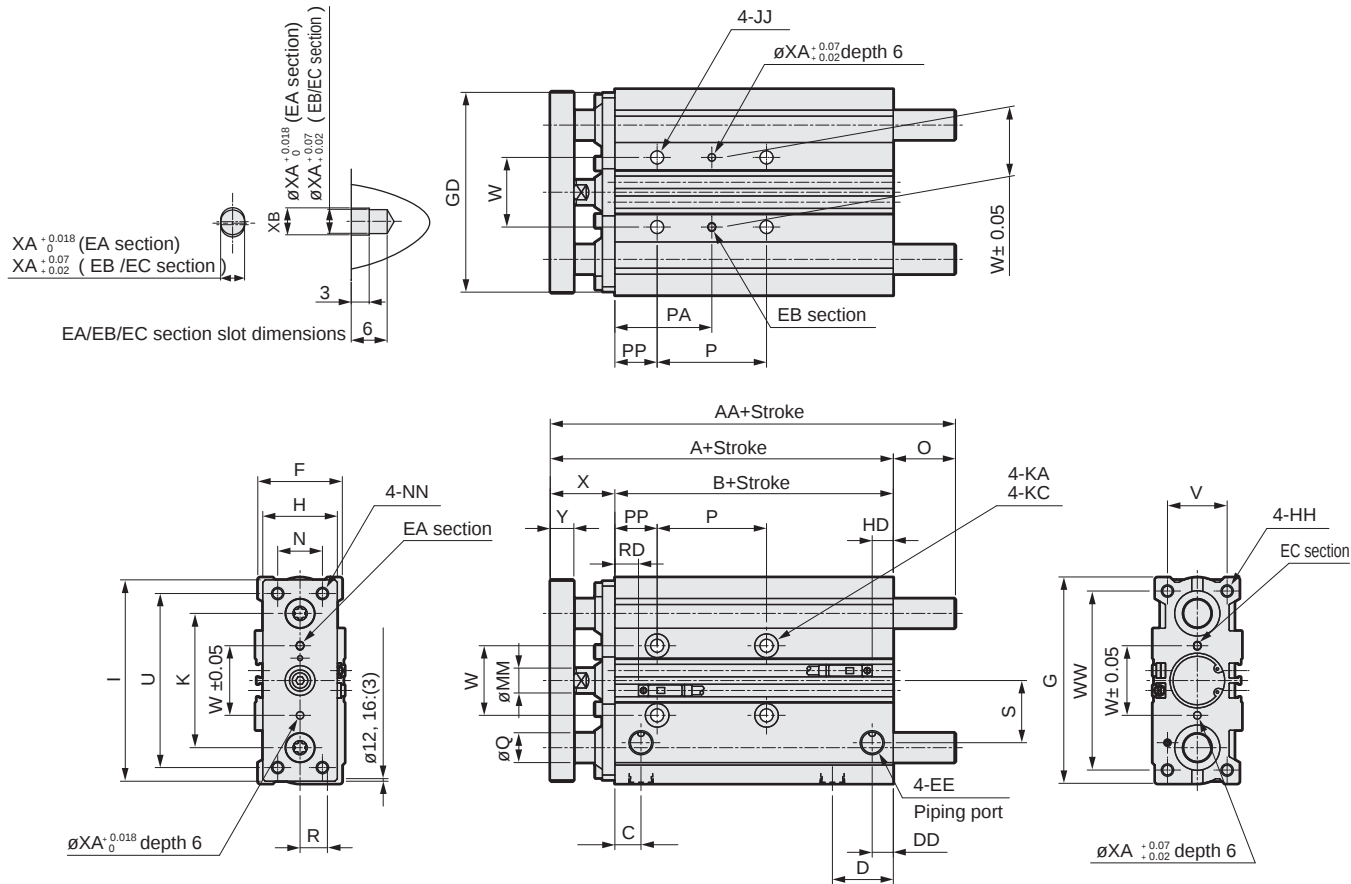
Bore size (mm)	Kit No.	Part name
ø12	STG-BG-12K-HP1	Rod packing
ø16	STG-BG-16K-HP1	Metal gasket
ø20	STG-BG-20K-HP1	Cushion rubber
ø25	STG-BG-25K-HP1	Piston packing
ø32	STG-BG-32K-HP1	Cushion rubber
ø40	STG-BG-40K-HP1	Scraper (for piston rod)
ø50	STG-BG-50K-HP1	Scraper (for guide)
ø63	STG-BG-63K-HP1	Lube keeping structure (for guide)
ø80	STG-BG-80K-HP1	Lube keeping structure (for piston rod)
ø100	STG-BG-100K-HP1	

STG-^M_BG-HP1 Series



Dimensions (ø12, ø16, ø20, ø25)

● STG-^M_BG-12, 16, 20, 25-HP1



● STG-M/B common

Code		A	B	C	D	DD	EE	F	G	GD	H	HH	I	JJ
Bore size (mm)	Standard stroke (mm)													
ø12	10, 20, 30,40, 50,75,100	57	29	12	16	7	M5	26	58	56	22	M4 depth 10	56	M5 depth 10
ø16	125,150,175, 200,250	61	33	12	18	7.5	M5	30	64	63	25	M5 depth 12	62	M5 depth 10
ø20	20,30,40, 50,75,100,125,150	68	37	10.5	24.5	8.5	Rc1/8	36	83	80	30	M5 depth 13	81	M6 depth 12
ø25	175, 200,25250, 300, 350, 400	68.5	37.5	11.5	25	9	Rc1/8	42	93	93	38	M6 depth 15	91	M6 depth 12

Code Bore size (mm)	K	KA	MM	N	NN	KC	P				
							30 or less	Over 30 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300
ø12	41	4.3 through	6	14	M4 through	7.5 spot face depth 4.5	20	40	110	200	-
ø16	46	4.3 through	8	16	M5 through	8 spot face depth 4.5	24	44	110	200	-
ø20	54	5.2 through	10	18	M5 through	9.5 spot face depth 5.5	24	44	120	200	300
ø25	64	5.2 through	12	26	M6 through	9.5 spot face depth 5.5	24	44	120	200	300

Code	PA					PP	R	S	U	V	W	WW	X	Y	T0/T5/T2/T3		T2W/T3W		XA	XB
Bore size (mm)	30 or less	Over 30 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st										RD	HD	RD	HD		
ø12	15	25	60	105	-	5	8	17	48	18	23	50	28 ₁₅	7.5	5	5	7	7	3	3.5
ø16	17	27	60	105	-	5	10	18	54	22	24	56	28 ₁₅	7.5	4	10	6	12	3	3.5
ø20	29	39	77	117	167	17	11	25	70	24	28	72	31	9.5	9.5	8.5	11.5	10.5	3	3.5
ø25	29	39	77	117	167	17	14	29	78	30	34	82	31	9.5	10	8.5	12	10.5	4	4.5

● STG-M

Code Bore size (mm)	AA			Q	O		
	50 or less	Over 50 st to 100 st	Over 100 st		50 or less	Over 50 st to 100 st	Over 100 st
ø12	57	70	100	8	0	13	43
ø16	61	78	110	10	0	17	49

Code	AA			Q	O		
Bore size (mm)	50 or less	Over 50 st to 200 st	Over 200 st		50 or less	Over 50 st to 200 st	Over 200 st
ø20	68	93	137	12	0	25	69
ø25	68.5	99	137	16	0	30.5	68.5

● STG-B

Code Bore size (mm)	AA			Q	O		
	30 or less	Over 30 st to 100 st	Over 100 st		30 or less	Over 30 st to 100 st	Over 100 st
ø12	58	70	100	6	1	13	43
ø16	64	80	110	8	3	19	49

Code Bore size (mm)	AA				Q	O			
	30 or less	Over 30 st to 100 st	Over 100 st to 200 st	Over 200 st		30 or less	Over 30 st to 100 st	Over 100 st to 200 st	Over 200 st
ø20	74	93	115	137	10	6	25	47	69
ø25	80	99	118	137	13	11.5	30.5	49.5	68.5

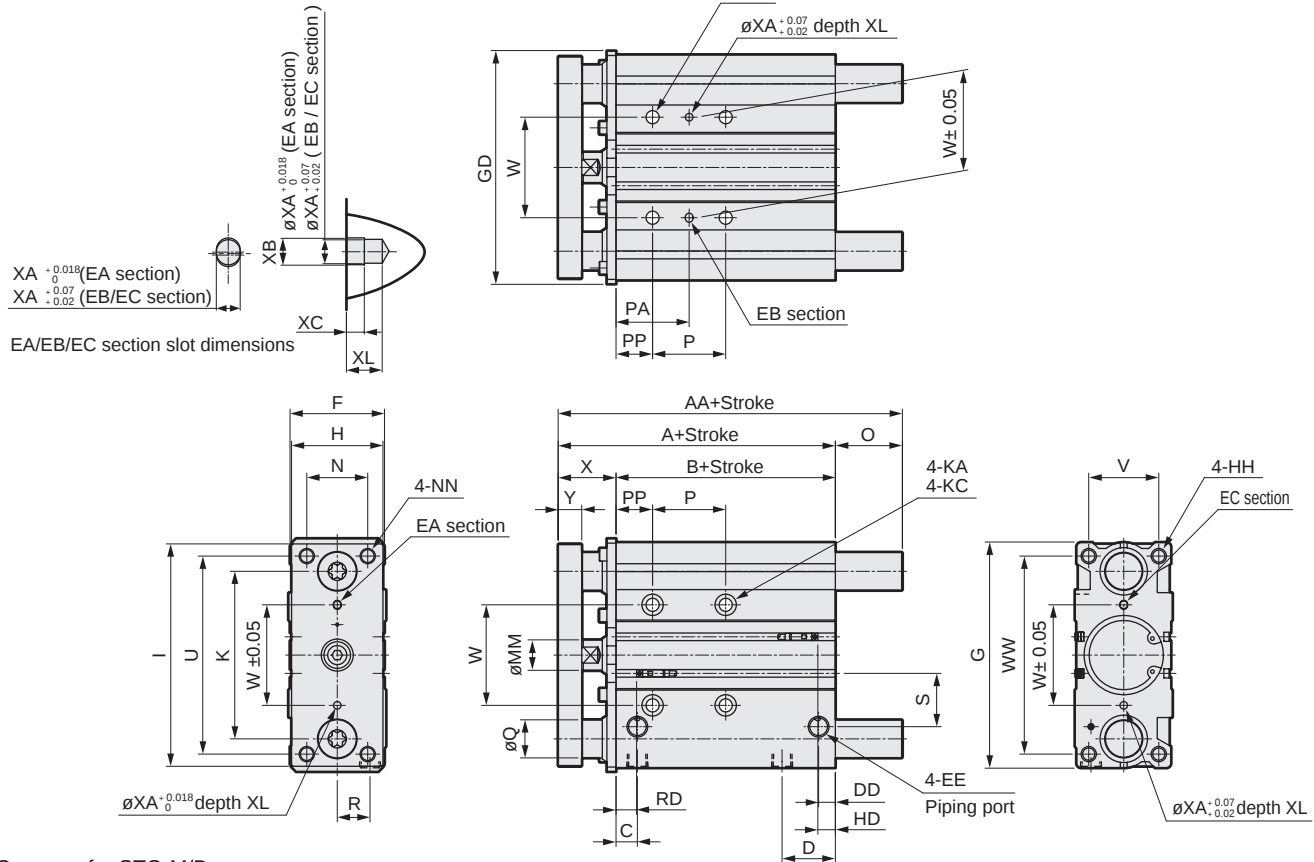
*1: When using a custom stroke, the total dimensions are the same as the longer standard stroke.

*2: Refer to "Pneumatic Cylinders II (No. CB-030SA)" for R D, HD and protruding dimensions of the 2-color display (except for T2WH/V and T3WH/V), off-delay, AC magnetic field proof, T1H/V and T8H/V switches.

Dimensions (ø32, ø40, ø50, ø63)



● STG-M G-32, 40, 50, 63-HP1



● Common for STG-M/B

Code	Bore size (mm)	Standard stroke(mm)	A	B	C	D	DD	EE	F	G	H	HH	I	JJ	K	KA
ø32		25, 50, 75, 100, 125,	74.5	37.5	12.5	30.5	9	Rc1/8	48	112	44	M8 depth 20	110	M8 depth 16	78	6.3 through
ø40		150, 175, 200, 250,	81	44	14	31	10	Rc1/8	54	120	44	M8 depth 20	118	M8 depth 16	86	6.3 through
ø50		300, 350, 400	87	44	14	35	11	Rc1/4	64	148	60	M10 depth 22	146	M10 depth 20	110	8.6 through
ø63			92	49	16.5	35	15	Rc1/4	78	162	70	M10 depth 22	158	M10 depth 20	124	8.6 through

Code	Bore size (mm)	KC	MM	N	NN	P					PA	
						25 or less	Over 25 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st	25 or less	Over 25 st to 100 st
ø32		11 spot face depth 7.5	16	30	M8 through	24	48	124	200	300	33	45
ø40		11 spot face depth 7.5	16	30	M8 through	24	48	124	200	300	34	46
ø50		14 spot face depth 9	20	40	M10 through	24	48	124	200	300	36	48
ø63		14 spot face depth 9	20	50	M10 through	28	52	128	200	300	38	50

Code	Bore size (mm)	PA			PP	R	S	U	V	W	WW	X	Y	T0/T5/T2/T3		T2W/T3W		XA	XB	XC	XL
		Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st										RD	HD	RD	HD				
ø32		83	121	171	21	15	34	96	34	42	98	37 ^{-0.02}	11.5	10	8.5	12	10.5	4	4.5	3	6
ø40		84	122	172	22	18	38	104	40	50	106	37 ^{-0.02}	11.5	13	12	15	14	4	4.5	3	6
ø50		86	124	174	24	21.5	47	130	46	66	130	43 ^{-0.02}	15.5	13.5	11.5	15.5	13.5	5	6	4	8
ø63		88	124	174	24	28	55	130	58	80	142	43 ^{-0.02}	15.5	14	16	16	18	5	6	4	8

● STG-M

Code	Bore size (mm)	AA			Q	GD	O		
		50 or less	Over 50 st to 200 st	Over 200 st			50 or less	Over 50 st to 200 st	Over 200 st
ø32		94	115	155	20	113	19.5	40.5	80.5
ø40		94	115	155	20	121	13	34	74
ø50		106	131	176	25	153	19	44	89
ø63		106	131	176	25	166	14	39	84

● STG-B

Code	Bore size (mm)	AA				Q	GD	O			
		50 or less	Over 50 st to 100 st	Over 100 st to 200 st	Over 200 st			50 or less	Over 50 st to 100 st	Over 100 st to 200 st	Over 200 st
ø32		94	113	133	155	16	113	19.5	38.5	58.5	80.5
ø40		94	113	133	155	16	118	13	32	52	74
ø50		106	129	149	176	20	146	19	42	62	89
ø63		106	129	149	176	20	160	14	37	57	84

*1: When using a custom stroke, the total dimensions are the same as the longer standard stroke.

*2: Refer to "Pneumatic Cylinders II (No. CB-030SA)" for RD, HD and protruding dimensions of the 2-color LED (except for T2WH/V and T3WH/V), off-delay, AC magnetic field proof, T1H/V and T8H/V switches.

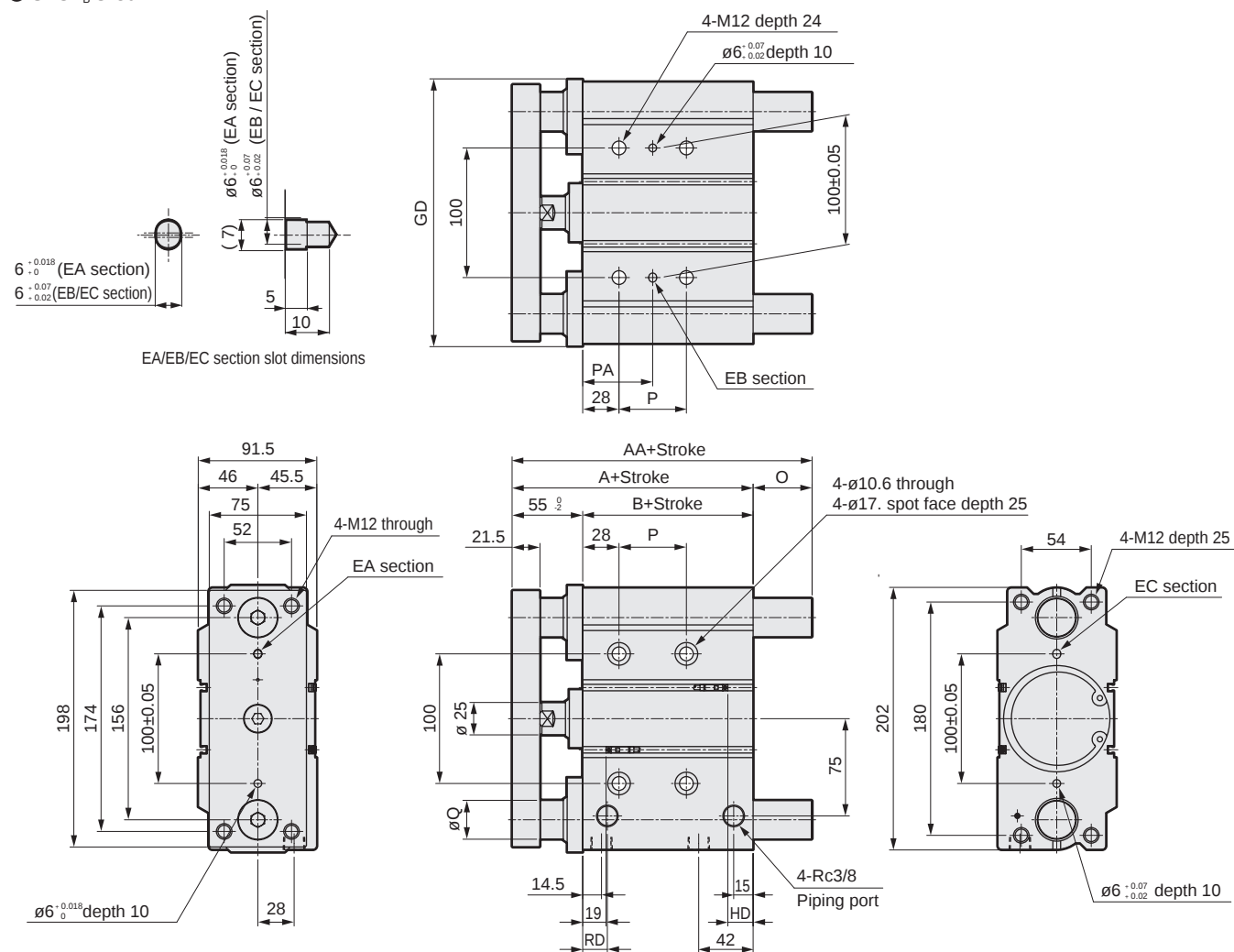
SCPD3	Long service life cylinder
CMK2	
SCM	
SSD2	
MDC2	
MSD	
MSDG-L	
SMG	
LCR	
LCG	
STM	
STG	
STR2	
SCPD3	Environment-resistant cylinder
CMK2	
SCM	
SCG	
SSD2	
SMG	
LCR	
STG	
STS	
STL	
LSH	Linear Slide Hand
LSHL	
LSHM	
LST	Low-profile long stroke hand
LSTM	
HMC	Wide Parallel Hand
CKW	Chuck
ABP2	Air Booster
SCPD3	Compatible with rechargeable batteries
CMK2	
SCM	
SSD2	
MSD	
MSDG-L	
SMG	
STG	
STM	
LCR	
LCG	
STR2	
LSH	
LSHL	
SCPD3	Supports food mfg. processes
CMK2	
SCM	
SCG	
SSD2	
STG	

STG-M_BG-HP1 Series



Dimensions (ø80)

● STG-M_BG-80-HP1



● STG-M/B common

Standard stroke	A	B	GD	P					PA					T0/T5/T2/T3		T2W/T3W	
				25 st or less	Over 25 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st	25 st or less	Over 25 st to 100st	Over 100 st to 200 st	Over 200 st to 300st	Over 300 st	RD	HD	RD	HD
25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400	111.5	56.5	206	28	52	128	200	300	42	54	92	128	178	18	19.5	20	21.5

● STG-M

AA			Q	O		
50 st or less	Over 50 st to 200 st	Over 200 st		50 st or less	Over 50 st to 200 st	Over 200 st
130	157	208	30	18.5	45.5	96.5

● STG-B

AA				Q	O			
25 st or less	Over 25 st to 50 st	Over 50 st to 200 st	Over 200 st		25 st or less	Over 25 st to 50 st	Over 50 st to 200 st	Over 200 st
124.5	145	175	208	25	13	33.5	63.5	96.5

*1: When using a custom stroke, the total dimensions are the same as the longer standard stroke.

*2: Refer to "Pneumatic Cylinders II (No. CB-030SA)" for RD, HD and protruding dimensions of the 2-color display (except for T2WH/V and T3WH/V), off-delay, AC magnetic field proof, T1H/V and T8H/V switches.

