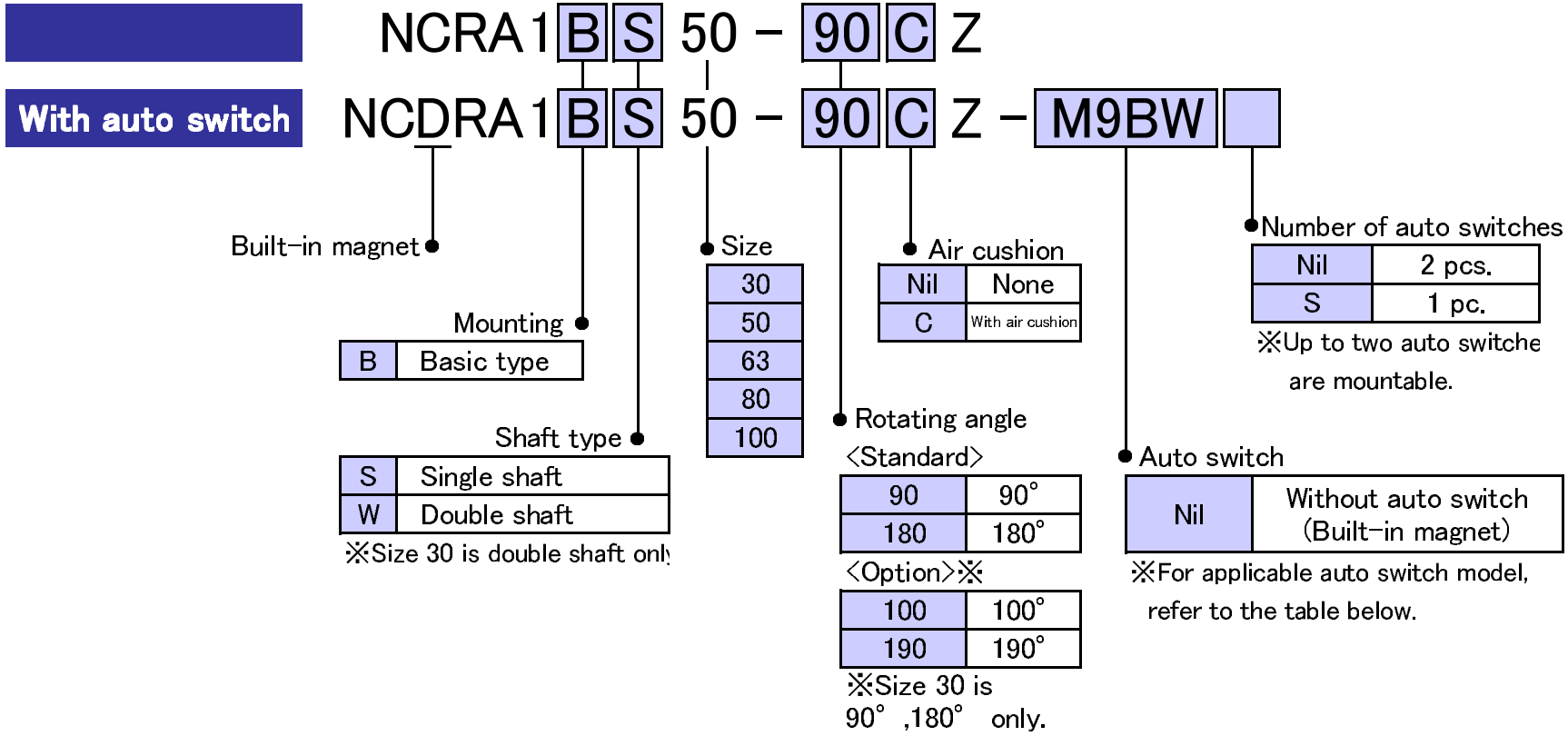
【Rotary Actuator NCRA1 Series How to Order】

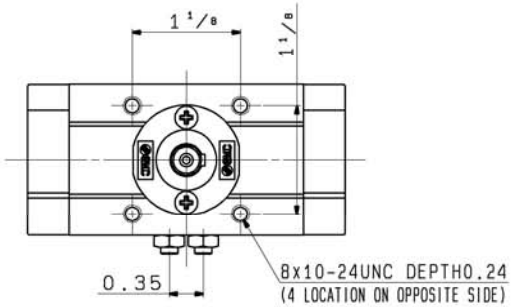


NCRA Series variations　　series variations

Size			30	50	63	80	100
Rotating angle	90°		○	○	○	○	○
	100°		–	○	○	○	○
	180°		○	○	○	○	○
	190°		–	○	○	○	○
Shaft type	Single shaft	S	–	○	○	○	○
	Double shaft	W	○	○	○	○	○
Air cushion	None		○	○	○	○	○
	With air cushion		–	○	○	○	○
Variations	With auto switch		○	○	○	○	○
Mounting	Basic type		○	○	○	○	○

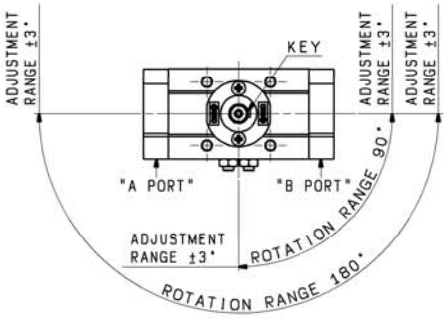
SPECIFICATIONS

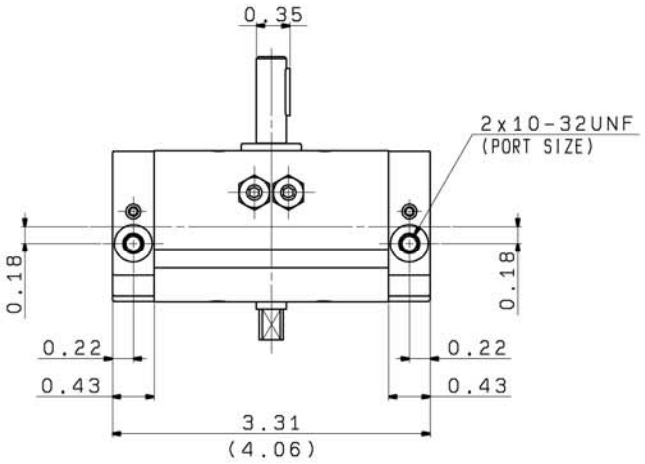
OPERATING PRESSURE RANGE	0.1~1.0MPa
OPERATING TEMPERATURE RANGE	0~60°C (BUT NO FREEZING IS ALLOWED)
ALLOWABLE KINETIC ENERGY	0.01J
ROTATION RANGE IS AS SHOWN DOWN.	
WHEN "A"PORT SIDE IS PRESSURIZED,THE SHAFT ROTATES CLOCKWISE.	

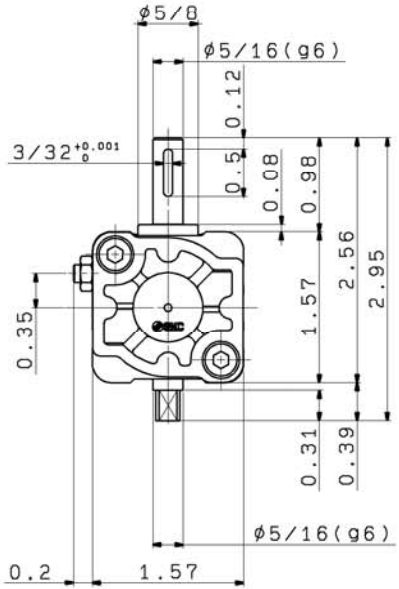


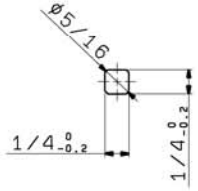
※THIS DRAWING SHOWS THE CONDITION THAT PRESSURE IS APPLIED FROM THE RIGHT PORT.("B"PORT SIDE)

※( )ARE THE DIMENSIONS FOR ROTATION OF 180°









HOW TO ORDER

NCRA1BW30-90Z

- MOUNTING STYLE B:BASIC
- ROD END SHAPE W:DOUBLE SHAFT
- SIZE 30:ø30
- ROTATION ANGLE 90: 90° 180:180°

ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS

REV	QTY	DESCRIPTION	DATE	PREPARED	REV NO
0	-	INITIAL RELEASE	2015-10-22	H.Shimane	-

TOLERANCES JIS B 0405	GRADE f	m	c
RANGE(mm)			
0.5≤D≤3	0.05	0.1	0.2
3<D≤6	0.05	0.1	0.3
6<D≤30	0.1	0.2	0.5
30<D≤120	0.15	0.3	0.8
120<D≤400	0.2	0.5	1.2
400<D≤1000	0.3	0.8	2
1000<D≤2000	0.5	1.2	3

DRAWN	R.Tomita	
DATE	2015-10-22	
DESIGNED	H.Shimane	
DATE	2015-10-22	
CHECKED	T.Kobayashi	
DATE	2015-10-22	
APPROVED	M.Magaribuchi	
DATE	2015-10-23	

SCALE	FREE
DWG NAME	ROTARY ACTUATOR
DWG NO	© NCRA1BW30-※Z
REVISION	
FINISH	
PAINT	
MASS	
PACKING	
MATERIAL	
MATERIAL SIZE	
MODEL	QTY
THIRD ANGLE	

FINISH:表面処理 / PAINT:塗装 / MASS:質量
PACKING:包装区分 / MATERIAL:材質
MATERIAL SIZE:材料寸法

DWG NAME | DWG REC | DWG ID BA45165700 | SMC Corporation

DWG NO Ⓒ NCDRA1BW30-**Z-**

HOW TO ORDER

NCDRA1 [BW] [30] - [90] Z - [ ][ ]

- BUILT-IN MAGNET
- MOUNTING STYLE B:BASIC
- ROD END SHAPE W:DOUBLE SHAFT
- SIZE 30:ø30
- ROTATION ANGLE 90: 90° 180:180°
- AUTO SWITCH -:WITHOUT SWITCH TYPE OF SWITCH
- NO.OF SWITCHES MOUNTED -:2 S:1

NOTE)0.5m is the standard lead wire length. When it is 3m,L is added to the end of the part number.Regarding lead wire length other than that,refer to the auto switch guide.

REED SWITCH	SYMBOL	TYPE
	A90	D-A90
	A93	D-A93
	A96	D-A96
	A90V	D-A90V
	A93V	D-A93V
	A96V	D-A96V

SOLID STATE SWITCH	SYMBOL	TYPE
	M9N	D-M9N
	M9P	D-M9P
	M9B	D-M9B
	M9NV	D-M9NV
	M9PV	D-M9PV
	M9BV	D-M9BV
	M9NW	D-M9NW
	M9PW	D-M9PW
	M9BW	D-M9BW
	M9NWV	D-M9NWV
	M9PWV	D-M9PWV
	M9BWV	D-M9BWV

REED SWITCH TYPE		
MODEL	D-A93(V)	
LOAD VOLTAGE	AC100V	DC24V
LOAD CURRENT RANGE	5~20mA	5~40mA
RESPONSE TIME	1.2ms	
SHOCK RESISTANCE	300m/s²	
INTERNAL VOLTAGE DROP	2.7V OR LESS	

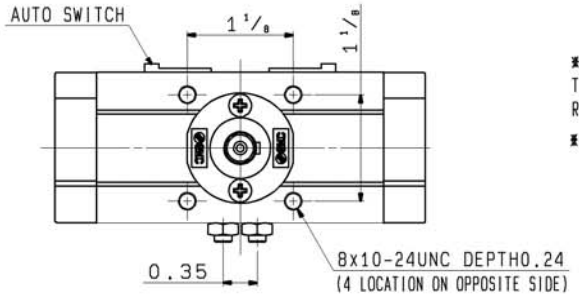
SOLID STATE SWITCH TYPE		
MODEL	D-M9N(V)	D-M9B(V)
POWER SOURCE	DC5·12·24V (DC4.5~28V)	——
CURRENT CONSUMPTION	10mA OR LESS	——
LOAD VOLTAGE	DC28V OR LESS	DC24V (DC10~28V)
RESPONSE TIME	1ms OR LESS	
SHOCK RESISTANCE	1000m/s²	
INTERNAL VOLTAGE DROP	0.8V OR LESS	4V OR LESS

SPECIFICATIONS

OPERATING PRESSURE RANGE	0.1~1.0MPa
OPERATING TEMPERATURE RANGE	0~60°C (BUT NO FREEZING IS ALLOWED)
ALLOWABLE KINETIC ENERGY	0.01J
ROTATION RANGE IS AS SHOWN DOWN.	
WHEN "A"PORT SIDE IS PRESSURIZED,THE SHAFT ROTATES CLOCKWISE.	

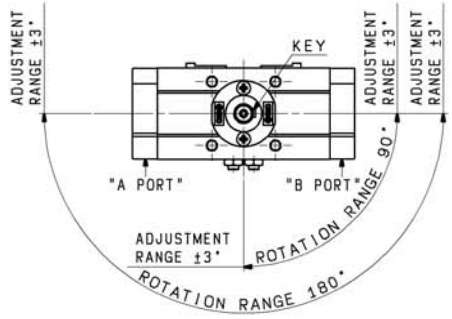
CAUTION

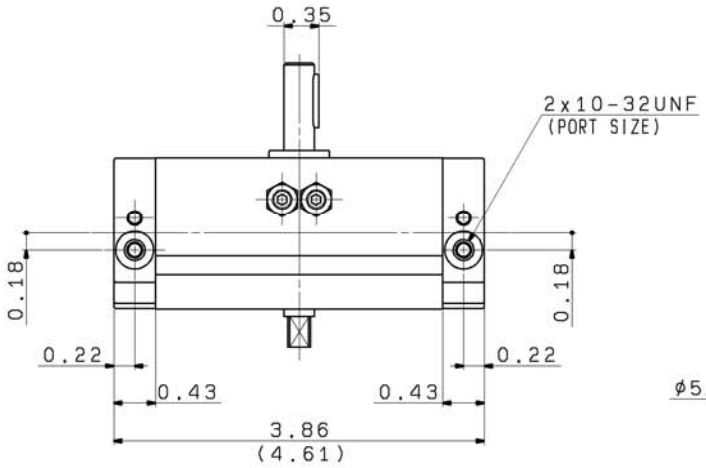
PLEASE REFER AUTO SWITCH GUIDE OF BEST PNEUMATICS FOR SPECIFICATIONS WHICH ARE NOT DESCRIBED OR OTHER MODEL.

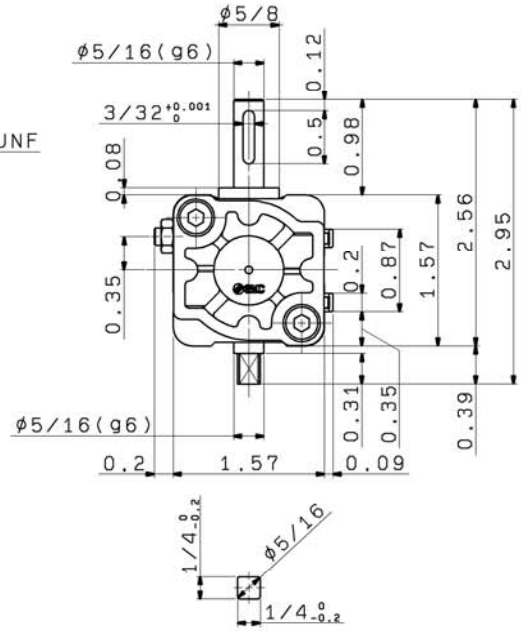


*THIS DRAWING SHOWS THE CONDITION THAT PRESSURE IS APPLIED FROM THE RIGHT PORT.("B"PORT SIDE)

*( )ARE THE DIMENSIONS FOR ROTATION OF 180°







ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS

REV	QTY	DESCRIPTION	DATE	PREPARED	REV NO
0	-	INITIAL RELEASE	2015-10-22	H.Shimane	-

TOLERANCES JIS B 0405

RANGE(mm)	GRADE f	m	c
0.5≤D≤3	0.05	0.1	0.2
3<D≤6	0.05	0.1	0.3
6<D≤30	0.1	0.2	0.5
30<D≤120	0.15	0.3	0.8
120<D≤400	0.2	0.5	1.2
400<D≤1000	0.3	0.8	2
1000<D≤2000	0.5	1.2	3

DRAWN	DATE	R.Tomita 2015-10-22
DESIGNED	DATE	H.Shimane 2015-10-22
CHECKED	DATE	T.Kobayashi 2015-10-22
APPROVED	DATE	M.Magaribuchi 2015-10-23

FINISH / PAINT / MASS / PACKING / MATERIAL / MATERIAL SIZE

SCALE FREE

THIRD ANGLE

DWG NAME ROTARY ACTUATOR

DWG NO Ⓒ NCDRA1BW30-**Z-**

REVISION

DWG NAME | DWG REC | DWG ID BA45166300

SMC Corporation

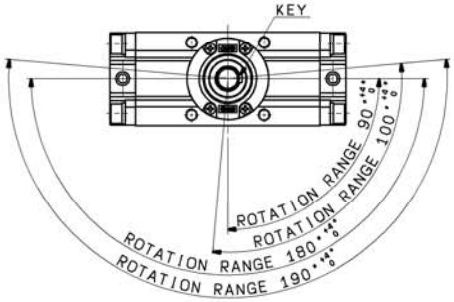
FINISH:表面処理 / PAINT:塗装 / MASS:質量
PACKING:包装区分 / MATERIAL:材質
MATERIAL SIZE:材料寸法

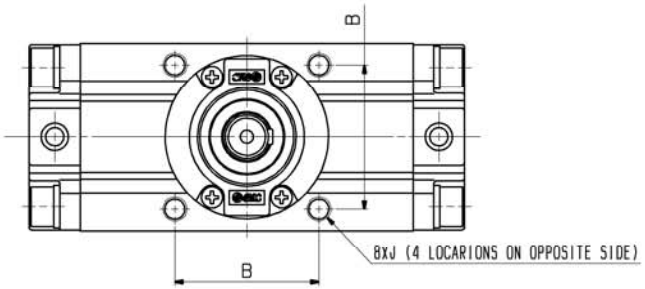
DWG NO Ⓒ NCRA1BS※-※※Z

MODEL NUMBER	A	B	C	D	DD	F	H	J	K	P	S	U	W	BA	BB	BC	CA	CB	KEY b	KEY TOLERANCE	KEY l	ALLOWABLE KINETIC ENERGY E WITHOUT CUSHION	ALLOWABLE KINETIC ENERGY E WITH CUSHION
NCRA1BS 50- $^{90}_{100}$※Z	2.44	1 7/8	1.81	9/16	1	0.1	1.42	5/16-18UNC DEPTH0.31	0.2	1/8	5.67	3.86	0.62	0.67	0.33	0.24	0.37	0.3	1/8	$^{+0.001}_{0}$	1	0.05J	0.98J
NCRA1BS 50- $^{180}_{190}$※Z											6.97												
NCRA1BS 63- $^{90}_{100}$※Z	2.99	2 3/8	2.24	5/8	1 1/8	0.1	1.61	3/8-16UNC DEPTH0.47	0.2	1/8	6.42	4.61	0.70	0.79	0.39	0.28	0.43	0.31	3/16		1.25	0.12J	1.5J
NCRA1BS 63- $^{180}_{190}$※Z											7.93												
NCRA1BS 80- $^{90}_{100}$※Z	3.62	2 1/8	2.76	3/4	1 3/8	0.12	1.97	1/2-13UNC DEPTH0.51	0.2	1/4	7.32	5.59	0.83	0.93	0.47	0.31	0.51	0.35	3/16		1.5	0.16J	2.0J
NCRA1BS 80- $^{180}_{190}$※Z											9.06												
NCRA1BS100- $^{90}_{100}$※Z	4.41	3 3/8	3.35	1	1 5/8	0.16	2.36	1/2-13UNC DEPTH0.55	0.2	3/8	9.65	6.77	1.11	0.98	0.49	0.31	0.55	0.39	1/4		1.75	0.54J	2.9J
NCRA1BS100- $^{180}_{190}$※Z											12.24												

SPECIFICATIONS

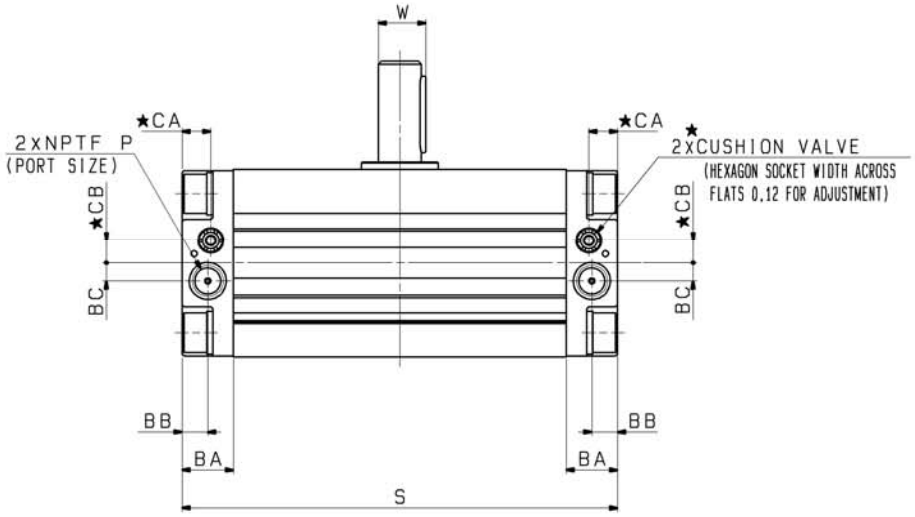
OPERATING PRESSURE RANGE	0.1~1.0MPa
OPERATING TEMPERATURE RANGE	0~60°C (BUT NO FREEZING IS ALLOWED)
ALLOWABLE KINETIC ENERGY	E J
ROTATION RANGE IS AS SHOWN DOWN.	
WHEN LEFT PORT IS PRESSURIZED, THE SHAFT ROTATES CLOCKWISE.	

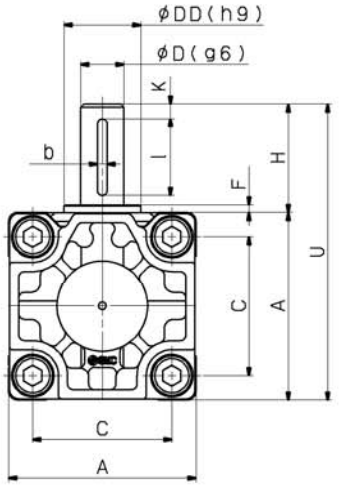




※THIS DRAWING SHOWS THE CONDITION THAT PRESSURE IS APPLIED FROM THE RIGHT PORT.

DIMENSIONS MARKED BY ★ ARE FOR "WITH CUSHION" STYLE





HOW TO ORDER

NCRA1B S 50 - 90 ※ Z

- MOUNTING STYLE: B: BASIC
- ROD END SHAPE: S: SINGLE SHAFT
- SIZE: 50: ϕ50 80: ϕ80 63: ϕ63 100: ϕ100
- ROTATION ANGLE: 90: 90° 180: 180° 100: 100° 190: 190°
- AIR CUSHION: - : WITHOUT AIR CUSHION; C : WITH AIR CUSHION

ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS

REV	QTY	DESCRIPTION	DATE	PREPARED	REV NO
0	-	INITIAL RELEASE	2015-10-22	H.Shimane	-

TOLERANCES JIS B 0405

RANGE(mm)	GRADE f	m	c
0.5≤D≤3	0.05	0.1	0.2
3<D≤6	0.05	0.1	0.3
6<D≤30	0.1	0.2	0.5
30<D≤120	0.15	0.3	0.8
120<D≤400	0.2	0.5	1.2
400<D≤1000	0.3	0.8	2
1000<D≤2000	0.5	1.2	3

DRAWN	R.Tomita	
DATE	2015-10-22	
DESIGNED	H.Shimane	
DATE	2015-10-22	
CHECKED	T.Kobayashi	
DATE	2015-10-22	
APPROVED	M.Magaribuchi	
DATE	2015-10-23	

FINISH	
PAINT	
MASS	
PACKING	
MATERIAL	
MATERIAL SIZE	
SCALE	FREE
MODEL	QTY
THIRD ANGLE	
DWG NAME	ROTARY ACTUATOR
DWG NO	Ⓒ NCRA1BS※-※※Z
REVISION	

FINISH:表面処理 / PAINT:塗装 / MASS:質量
PACKING:包装区分 / MATERIAL:材質
MATERIAL SIZE:材料寸法

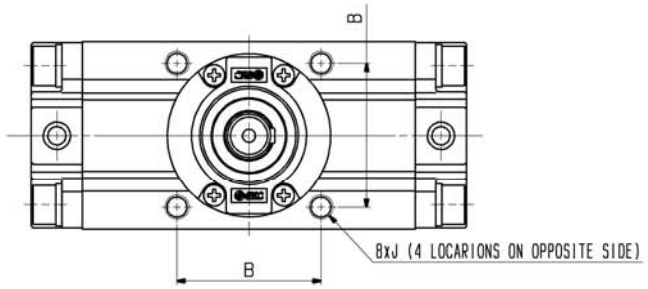
DWG NAME | DWG REC | DWG ID BA45165800 | SMC Corporation

DWG NO | © NCRA1BW※-※※Z

MODEL NUMBER	A	B	C	D	DD	F	G	H	J	K	L	M	N	P	S	U	UU	W	BA	BB	BC	CA	CB	KEY b	KEY TOLERANCE	KEY l	ALLOWABLE KINETIC ENERGY E WITHOUT CUSHION	ALLOWABLE KINETIC ENERGY E WITH CUSHION
NCRA1BW 50- 90/100※Z	2.44	1 7/8	1.81	9/16	1	0.1	7/16	1.42	5/16-18UNC DEPTH0.31	0.2	9/16	0.79	0.59	1/8	5.67	3.86	4.65	0.62	0.67	0.33	0.24	0.37	0.3	1/8	+0.001 0	1	0.05J	0.98J
NCRA1BW 50- 180/190※Z															6.97													
NCRA1BW 63- 90/100※Z	2.99	2 3/8	2.24	5/8	1 1/8	0.1	1/2	1.61	3/8-16UNC DEPTH0.47	0.2	5/8	0.87	0.67	1/8	6.42	4.61	5.47	0.70	0.79	0.39	0.28	0.43	0.31	3/16		1.25	0.12J	1.5J
NCRA1BW 63- 180/190※Z															7.93													
NCRA1BW 80- 90/100※Z	3.62	2 7/8	2.76	3/4	1 3/8	0.12	5/8	1.97	1/2-13UNC DEPTH0.51	0.2	3/4	0.98	0.79	1/4	7.32	5.59	6.57	0.83	0.93	0.47	0.31	0.51	0.35	3/16		1.5	0.16J	2.0J
NCRA1BW 80- 180/190※Z															9.06													
NCRA1BW100- 90/100※Z	4.41	3 3/8	3.35	1	1 5/8	0.16	3/4	2.36	1/2-13UNC DEPTH0.55	0.2	1	1.18	0.98	3/8	9.65	6.77	7.95	1.11	0.98	0.49	0.31	0.55	0.39	1/4		1.75	0.54J	2.9J
NCRA1BW100- 180/190※Z															12.24													

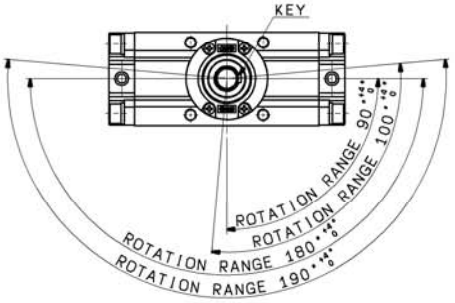
SPECIFICATIONS

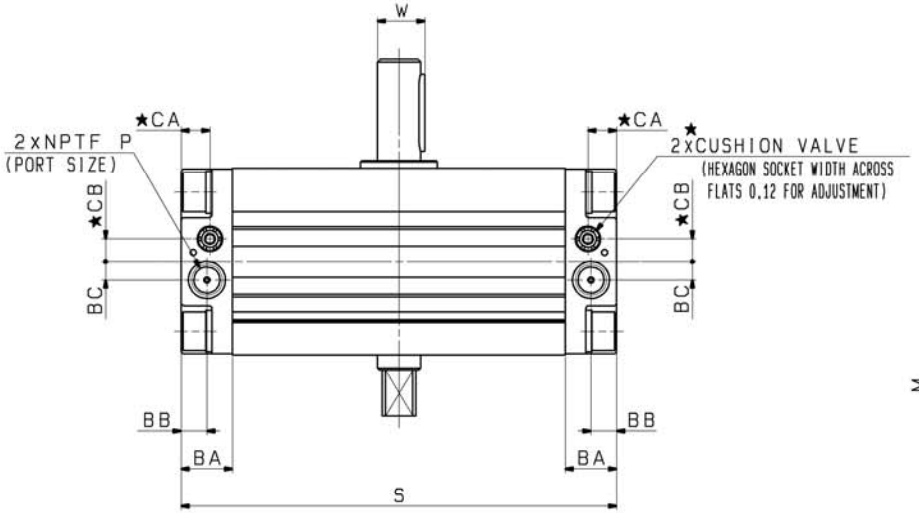
OPERATING PRESSURE RANGE	0.1~1.0MPa
OPERATING TEMPERATURE RANGE	0~60°C (BUT NO FREEZING IS ALLOWED)
ALLOWABLE KINETIC ENERGY	E J
ROTATION RANGE IS AS SHOWN DOWN.	
WHEN LEFT PORT IS PRESSURIZED, THE SHAFT ROTATES CLOCKWISE.	

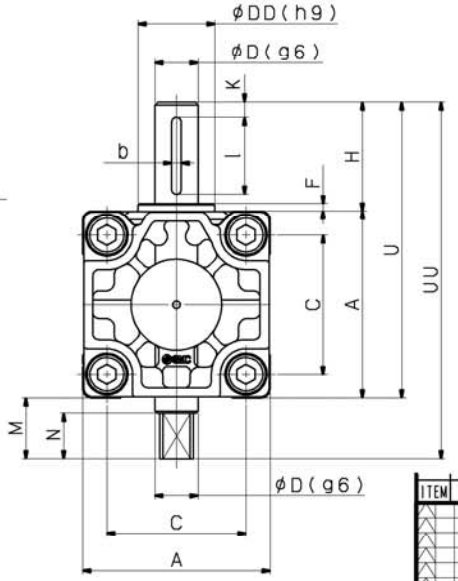


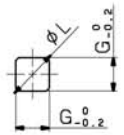
※THIS DRAWING SHOWS THE CONDITION THAT PRESSURE IS APPLIED FROM THE RIGHT PORT.

DIMENSIONS MARKED BY ★ ARE FOR "WITH CUSHION" STYLE









HOW TO ORDER

NCRA1B W 50 - 90 ※ Z

- MOUNTING STYLE: B: BASIC
- ROD END SHAPE: W: DOUBLE SHAFT
- SIZE: 50: ϕ50 80: ϕ80 63: ϕ63 100: ϕ100
- ROTATION ANGLE: 90: 90° 180: 180° 100: 100° 190: 190°
- AIR CUSHION: - : WITHOUT AIR CUSHION C : WITH AIR CUSHION

ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS

REV	QTY	DESCRIPTION	DATE	PREPARED	REV NO
0	-	INITIAL RELEASE	2015-10-22	H.Shimane	-

TOLERANCES JIS B 0405 RANGE(mm)	GRADE f	m	c	v
0.5≤D≤3	0.05	0.1	0.2	
3<D≤6	0.05	0.1	0.3	
6<D≤30	0.1	0.2	0.6	
30<D≤120	0.15	0.3	0.8	
120<D≤400	0.2	0.5	1.2	
400<D≤1000	0.3	0.8	2	
1000<D≤2000	0.5	1.2	3	

DRAWN	R.Tomita	
DATE	2015-10-22	
DESIGNED	H.Shimane	
DATE	2015-10-22	
CHECKED	T.Kobayashi	
DATE	2015-10-22	
APPROVED	M.Magaribuchi	
DATE	2015-10-23	

FINISH | PAINT | MASS | PACKING | MATERIAL | MATERIAL SIZE

SCALE: FREE

THIRD ANGLE

DWG NAME: ROTARY ACTUATOR

DWG NO: © NCRA1BW※-※※Z

REVISION

MODEL | QTY

FINISH:表面処理 / PAINT:塗装 / MASS:質量
PACKING:包装区分 / MATERIAL:材質
MATERIAL SIZE:材料寸法

DWG NAME | DWG REC | DWG ID BA45166000

SMC Corporation

A2-V06

DWG NO Ⓒ NCDRA1BS※-※※Z-※※

HOW TO ORDER

NCDRA1BS□-□□Z-□□

- BUILT-IN MAGNET
- MOUNTING STYLE B:BASIC
- ROD END SHAPE S:SINGLE SHAFT
- SIZE 50:ø50 80:ø80 63:ø63 100:ø100
- ROTATION ANGLE 90: 90° 180:180° 100:100° 190:190°
- AIR CUSHION -:WITHOUT AIR CUSHION C:WITH AIR CUSHION
- AUTO SWITCH -:WITHOUT SWITCH TYPE OF SWITCH
- NO.OF SWITCHES MOUNTED -:2 S:1

NOTE)0.5m is the standard lead wire length. When it is 3m,L is added to the end of the part number.Regarding lead wire length other than that,refer to the auto switch guide.

	SYMBOL	TYPE
REED SWITCH	A90	D-A90
	A93	D-A93
	A96	D-A96
	A90V	D-A90V
	A93V	D-A93V
	A96V	D-A96V

	SYMBOL	TYPE
SOLID STATE SWITCH	M9N	D-M9N
	M9P	D-M9P
	M9B	D-M9B
	M9NV	D-M9NV
	M9PV	D-M9PV
	M9BV	D-M9BV
	M9NW	D-M9NW
	M9PW	D-M9PW
	M9BW	D-M9BW
	M9NWV	D-M9NWV
	M9PWV	D-M9PWV
	M9BWV	D-M9BWV

REED SWITCH TYPE		
MODEL	D-A93(V)	
LOAD VOLTAGE	AC100V	DC24V
LOAD CURRENT RANGE	5~20mA	5~40mA
RESPONSE TIME	1.2ms	
SHOCK RESISTANCE	300m/s²	
INTERNAL VOLTAGE DROP	2.7V OR LESS	

SOLID STATE SWITCH TYPE		
MODEL	D-M9N(V)	D-M9B(V)
POWER SOURCE	DC5・12・24V (DC4.5~28V)	——
CURRENT CONSUMPTION	10mA OR LESS	——
LOAD VOLTAGE	DC28V OR LESS	DC24V (DC10~28V)
RESPONSE TIME	1ms OR LESS	
SHOCK RESISTANCE	1000m/s²	
INTERNAL VOLTAGE DROP	0.8V OR LESS	4V OR LESS

SPECIFICATIONS

OPERATING PRESSURE RANGE	0.1~1.0MPa
OPERATING TEMPERATURE RANGE	0~60°C (BUT NO FREEZING IS ALLOWED)
ALLOWABLE KINETIC ENERGY	E J

ROTATION RANGE IS AS SHOWN DOWN.

WHEN LEFT PORT IS PRESSURIZED,THE SHAFT ROTATES CLOCKWISE.

CAUTION

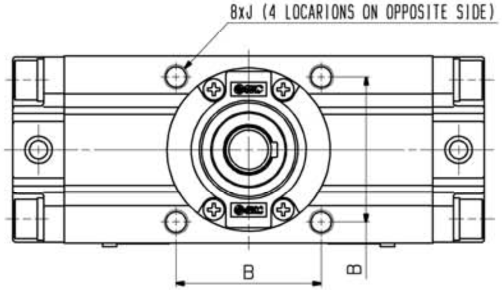
PLEASE REFER AUTO SWITCH GUIDE OF BEST PNEUMATICS FOR SPECIFICATIONS WHICH ARE NOT DESCRIBED OR OTHER MODEL.

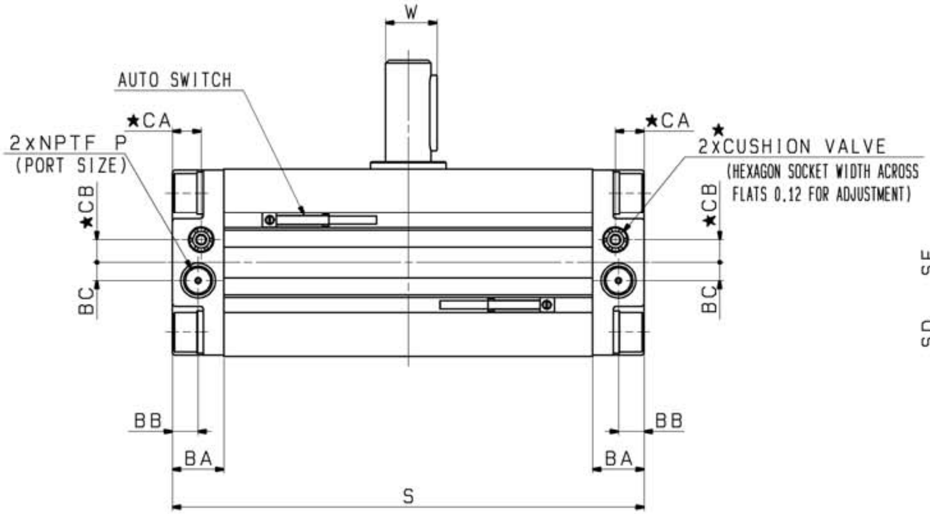
MODEL NUMBER	A	B	C	D	DD	F	H	J	K	P	S	U	W	BA	BB	BC	CA	CB
NCDRA1BS 50-90/100※Z-※※	2.44	1 7/8	1.81	9/16	1	0.1	1.42	5/16-18UNC DEPTH0.31	0.2	1/8	6.14	3.86	0.62	0.67	0.33	0.24	0.37	0.3
NCDRA1BS 50-180/190※Z-※※											7.44							
NCDRA1BS 63-90/100※Z-※※	2.99	2 3/8	2.24	5/8	1 1/8	0.1	1.61	3/8-16UNC DEPTH0.47	0.2	1/8	6.89	4.61	0.70	0.79	0.39	0.28	0.43	0.31
NCDRA1BS 63-180/190※Z-※※											8.41							
NCDRA1BS 80-90/100※Z-※※	3.62	2 7/8	2.76	3/4	1 3/8	0.12	1.97	1/2-13UNC DEPTH0.51	0.2	1/4	7.83	5.59	0.83	0.93	0.47	0.31	0.51	0.35
NCDRA1BS 80-180/190※Z-※※											9.57							
NCDRA1BS100-90/100※Z-※※	4.41	3 3/8	3.35	1	1 5/8	0.16	2.36	1/2-13UNC DEPTH0.55	0.2	3/8	10.2	6.77	1.11	0.98	0.49	0.31	0.55	0.39
NCDRA1BS100-180/190※Z-※※											12.8							

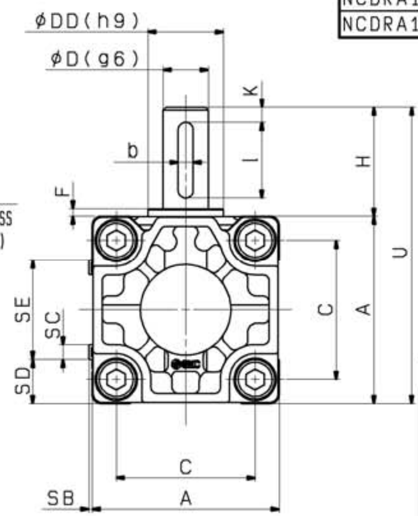
MODEL NUMBER	SB	SC	SD	SE	KEY b	KEY TOLERANCE	KEY l	ALLOWABLE KINETIC ENERGY E WITHOUT CUSHION	ALLOWABLE KINETIC ENERGY E WITH CUSHION
NCDRA1BS 50-90/100※Z-※※	0.06	0.2	0.57	1.3	1/8	+0.001 0	1	0.05J	0.98J
NCDRA1BS 50-180/190※Z-※※									
NCDRA1BS 63-90/100※Z-※※	0.06	0.2	0.85	1.3	3/16		1.25	0.12J	1.5J
NCDRA1BS 63-180/190※Z-※※									
NCDRA1BS 80-90/100※Z-※※	0.06	0.2	1.16	1.3	3/16		1.5	0.16J	2.0J
NCDRA1BS 80-180/190※Z-※※									
NCDRA1BS100-90/100※Z-※※	0.06	0.2	1.56	1.3	1/4		1.75	0.54J	2.9J
NCDRA1BS100-180/190※Z-※※									

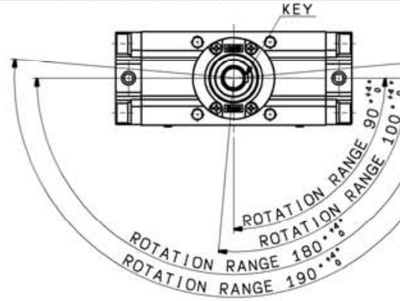
※THIS DRAWING SHOWS THE CONDITION THAT PRESSURE IS APPLIED FROM THE RIGHT PORT.

DIMENSIONS MARKED BY ★ ARE FOR "WITH CUSHION" STYLE









ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS

REV	QTY	DESCRIPTION	DATE	PREPARED	REV NO
0	-	INITIAL RELEASE	2015-10-22	H.Shimane	-

TOLERANCES JIS B 0405 RANGE (mm)	GRADE f	GRADE m	GRADE c
0.5≦D≦3	0.05	0.1	0.2
3<D≦6	0.05	0.1	0.3
6<D≦30	0.1	0.2	0.5
30<D≦120	0.15	0.3	0.8
120<D≦400	0.2	0.5	1.2
400<D≦1000	0.3	0.8	2
1000<D≦2000	0.5	1.2	3

DRAWN	R.Tomita	DATE 2015-10-22
DESIGNED	H.Shimane	DATE 2015-10-22
CHECKED	T.Kobayashi	DATE 2015-10-22
APPROVED	M.Magaribuchi	DATE 2015-10-23

SCALE FREE

FINISH / PAINT / MASS / PACKING / MATERIAL / MATERIAL SIZE

MODEL QTY

THIRD ANGLE

DWG NAME ROTARY ACTUATOR

DWG NO Ⓒ NCDRA1BS※-※※Z-※※

REVISION

DWG NAME

DWG REC

DWG ID BA45166500

SMC Corporation

FINISH:表面処理 / PAINT:塗装 / MASS:質量
PACKING:包装区分 / MATERIAL:材質
MATERIAL SIZE:材料寸法

A2-V06

DWG NO ⓒ NCDRA1BW※-※※Z-※※

HOW TO ORDER

NCDRA1BW□-□□Z-□□

- BUILT-IN MAGNET
- MOUNTING STYLE: B:BASIC
- ROD END SHAPE: W:DOUBLE SHAFT
- SIZE: 50:ø50 80:ø80 63:ø63 100:ø100
- ROTATION ANGLE: 90: 90° 180:180° 100:100° 190:190°
- AIR CUSHION: -:WITHOUT AIR CUSHION C:WITH AIR CUSHION
- NO.OF SWITCHES MOUNTED: -:2 S:1
- AUTO SWITCH: -:WITHOUT SWITCH; TYPE OF SWITCH

	SYMBOL	TYPE
REED SWITCH	A90	D-A90
	A93	D-A93
	A96	D-A96
	A90V	D-A90V
	A93V	D-A93V
	A96V	D-A96V

	SYMBOL	TYPE
SOLID STATE SWITCH	M9N	D-M9N
	M9P	D-M9P
	M9B	D-M9B
	M9NV	D-M9NV
	M9PV	D-M9PV
	M9BV	D-M9BV
	M9NW	D-M9NW
	M9PW	D-M9PW
	M9BW	D-M9BW
	M9NWV	D-M9NWV
	M9PWV	D-M9PWV
	M9BWV	D-M9BWV

NOTE)0.5m is the standard lead wire length. When it is 3m,L is added to the end of the part number.Regarding lead wire length other than that,refer to the auto switch guide.

REED SWITCH TYPE		
MODEL	D-A93(V)	
LOAD VOLTAGE	AC100V	DC24V
LOAD CURRENT RANGE	5~20mA	5~40mA
RESPONSE TIME	1.2ms	
SHOCK RESISTANCE	300m/s²	
INTERNAL VOLTAGE DROP	2.7V OR LESS	

SOLID STATE SWITCH TYPE		
MODEL	D-M9N(V)	D-M9B(V)
POWER SOURCE	DC5·12·24V (DC4.5~28V)	——
CURRENT CONSUMPTION	10mA OR LESS	——
LOAD VOLTAGE	DC28V OR LESS	DC24V (DC10~28V)
RESPONSE TIME	1ms OR LESS	
SHOCK RESISTANCE	1000m/s²	
INTERNAL VOLTAGE DROP	0.8V OR LESS	4V OR LESS

SPECIFICATIONS

OPERATING PRESSURE RANGE	0.1~1.0MPa
OPERATING TEMPERATURE RANGE	0~60°C (BUT NO FREEZING IS ALLOWED)
ALLOWABLE KINETIC ENERGY	E J
ROTATION RANGE IS AS SHOWN DOWN.	
WHEN LEFT PORT IS PRESSURIZED,THE SHAFT ROTATES CLOCKWISE.	

CAUTION

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MODEL NUMBER	A	B	C	D	DD	F	G	H	J	K	L	M	N	P	S	U	UU	W	BA	BB	BC	CA	CB
NCDRA1BW 50-$^{90}_{100}$※Z-※※	2.44	1 7/8	1.81	9/16	1	0.1	7/16	1.42	5/16-18UNC DEPTH0.31	0.2	9/16	0.79	0.59	1/8	6.14	3.86	4.65	0.62	0.67	0.33	0.24	0.37	0.3
NCDRA1BW 50-$^{180}_{190}$※Z-※※															7.44								
NCDRA1BW 63-$^{90}_{100}$※Z-※※	2.99	2 3/8	2.24	5/8	1 1/8	0.1	1/2	1.61	3/8-16UNC DEPTH0.47	0.2	5/8	0.87	0.67	1/8	6.89	4.61	5.47	0.70	0.79	0.39	0.28	0.43	0.31
NCDRA1BW 63-$^{180}_{190}$※Z-※※															8.41								
NCDRA1BW 80-$^{90}_{100}$※Z-※※	3.62	2 7/8	2.76	3/4	1 3/8	0.12	5/8	1.97	1/2-13UNC DEPTH0.51	0.2	3/4	0.98	0.79	1/4	7.83	5.59	6.57	0.83	0.93	0.47	0.31	0.51	0.35
NCDRA1BW 80-$^{180}_{190}$※Z-※※															9.57								
NCDRA1BW100-$^{90}_{100}$※Z-※※	4.41	3 3/8	3.35	1	1 5/8	0.16	3/4	2.36	1/2-13UNC DEPTH0.55	0.2	1	1.18	0.98	3/8	10.2	6.77	7.95	1.11	0.98	0.49	0.31	0.55	0.39
NCDRA1BW100-$^{180}_{190}$※Z-※※															12.8								

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NCDRA1BW 63-$^{90}_{100}$※Z-※※	0.06	0.2	0.85	1.3	3/16		1.25	0.12J	1.5J
NCDRA1BW 63-$^{180}_{190}$※Z-※※									
NCDRA1BW 80-$^{90}_{100}$※Z-※※	0.06	0.2	1.16	1.3	3/16		1.5	0.16J	2.0J
NCDRA1BW 80-$^{180}_{190}$※Z-※※									
NCDRA1BW100-$^{90}_{100}$※Z-※※	0.06	0.2	1.56	1.3	1/4		1.75	0.54J	2.9J
NCDRA1BW100-$^{180}_{190}$※Z-※※									

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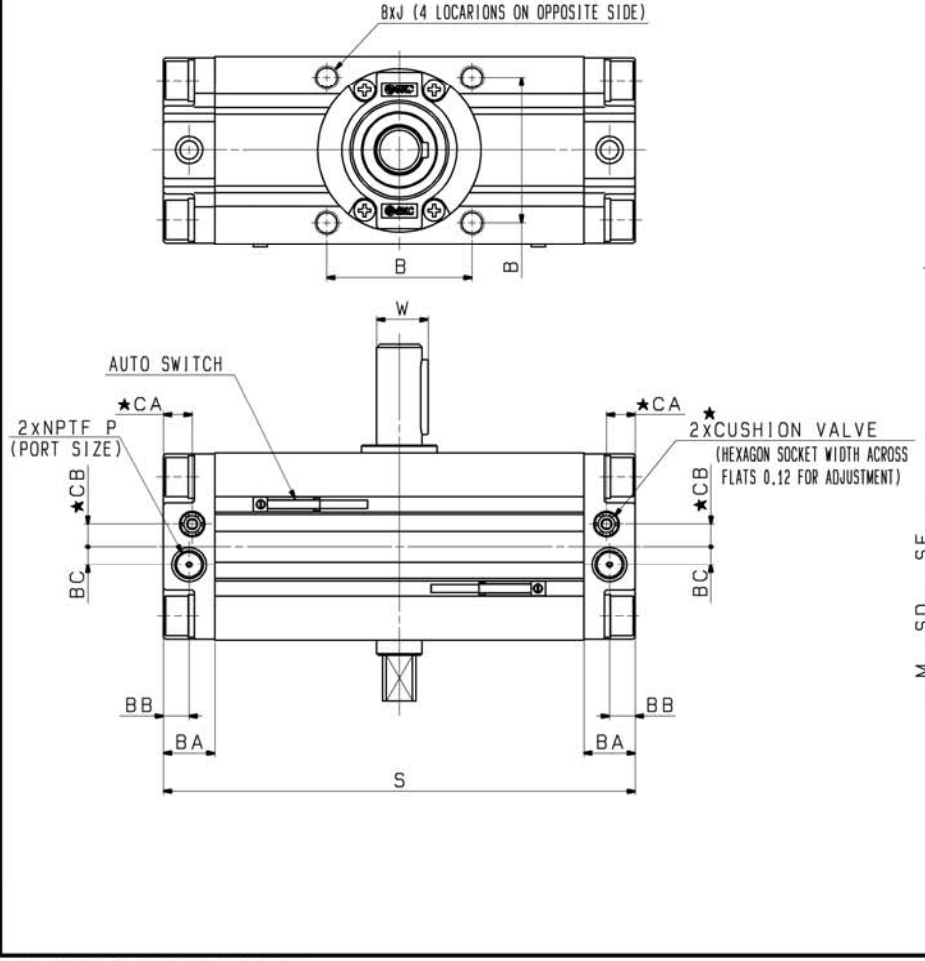

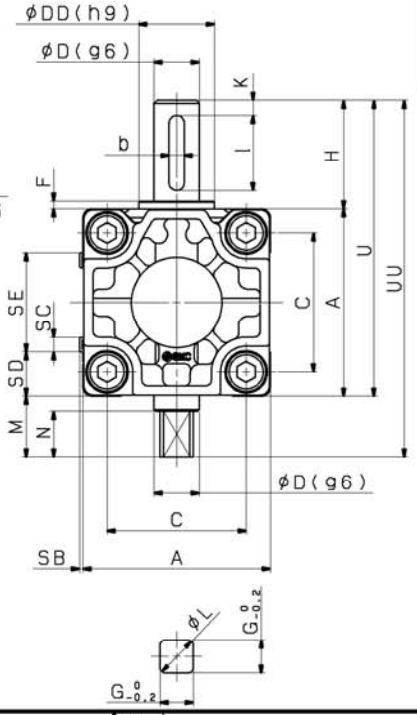

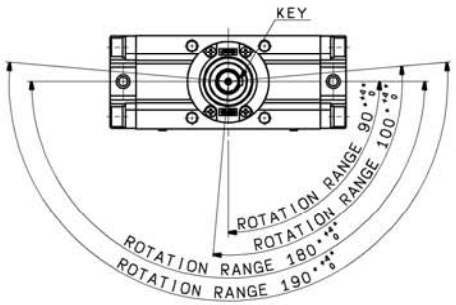

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TOLERANCES JIS B 0405

RANGE(mm)	GRADE f	m	c
0.5≤D≤3	0.05	0.1	0.2
3<D≤6	0.05	0.1	0.3
6<D≤30	0.1	0.2	0.5
30<D≤120	0.15	0.3	0.8
120<D≤400	0.2	0.5	1.2
400<D≤1000	0.3	0.8	2
1000<D≤2000	0.5	1.2	3

DRAWN	R.Tomita	2015-10-22
DESIGNED	H.Shimane	2015-10-22
CHECKED	T.Kobayashi	2015-10-22
APPROVED	M.Magaribuchi	2015-10-23

SCALE: FREE

FINISH / PAINT / MASS / PACKING / MATERIAL / MATERIAL SIZE

MODEL QTY

THIRD ANGLE

DWG NAME: ROTARY ACTUATOR

DWG NO: ⓒ NCDRA1BW※-※※Z-※※

REVISION

DWG NAME | DWG REC | DWG ID BA45166800

SMC Corporation

FINISH:表面処理 / PAINT:塗装 / MASS:質量
PACKING:包装区分 / MATERIAL:材質
MATERIAL SIZE:材料寸法

A2-V06