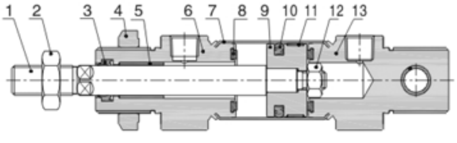
DSNU (ISO6432) Series Stainless Steel Mini Cylinder

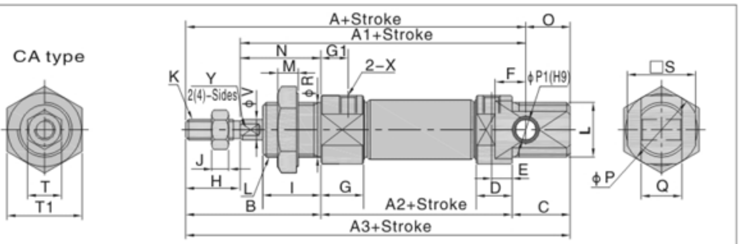
Inner structure and material of major parts

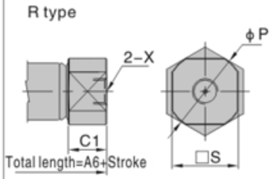

1
2
3
4
5
6
7
8
9
10
11
12
13

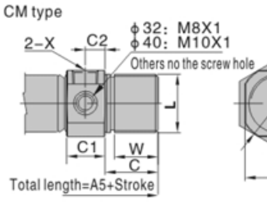
NO.	Item	Material	
		8~12(Bore size)	16~40(Bore size)
1	Rod	SUS304	
2	Rod nut	Carbon steel	
3	Front cover packing	NBR	
4	Front cover nut	Carbon steel	
5	Bushing	Wear resistant material	
6	Front cover	Aluminum alloy	
7	Barrel	SUS304	
8	Bumper	TPU	
9	Piston	SUS303	Aluminum alloy
10	Piston O-ring	NBR	
11	Wear ring	Wear resistant material	
12	Nut	Carbon steel	
13	Back cover	Aluminum alloy	

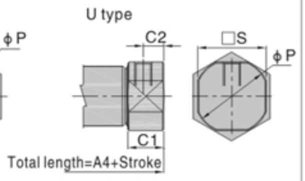
Dimensions

DSNU


CA type
A+Stroke
O
A1+Stroke
N
G1
M
φR
2-X
F
φP1(H9)
□S
K
Y
2(4)-Sides
φV
L
L
J
H
B
I
G
A2+Stroke
D
E
C
A3+Stroke
T
T1
φP
Q


R type
2-X
φP
C1
□S
Total length=A6+Stroke


CM type
2-X
C2
φ32: M8X1
φ40: M10X1
Others no the screw hole
L
C1
W
C
Total length=A5+Stroke
φP
□S


U type
C2
□S
φP
C1
Total length=A4+Stroke

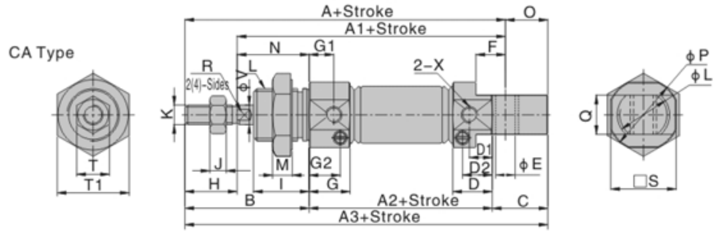
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

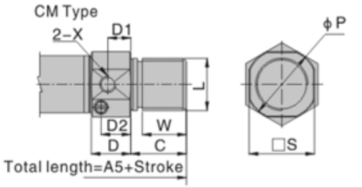
Item Bore size	A	A1	A2	A3	A4	A5	A6	B	C	C1	C2	D	E	F	G	G1	H	I
8	76	64	46	86	74	–	–	28	12	9.5	5	9.5	5	6	11.5	7	12	12
10	76	64	46	86	74	–	–	28	12	9.5	5	9.5	5	6	11.5	7	12	12
12	91	75	50	105	88	–	–	38	17	10.5	6	10.5	6	9	12.5	8	16	17
16	98	82	56	111	94	111	94	38	17	10.5	6	10.5	6	9	12.5	8	16	17
20	115	95	62	126	106	126	106	44	20	14.5	7.5	14.5	7.5	12	14.5	7.5	20	20
25	126	104	65	137	114.5	137	115	50	22	16	8	16	8	12	16	8	22	22
32	–	–	–	–	125	140	126	58	14	16.5	9	–	–	–	16.5	9	20	30
40	–	–	–	–	158	174	158	69	16	22	12	–	–	–	22	12	24	35

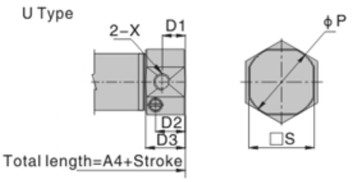
Item Bore size	J	K	L	M	N	O	P	P1	Q	R	S	T	T1	X	V	W	Y
8	2.5	M4×0.7	M12×1.25	6	16	10	17	4	8	12	15	7	17	M5×0.8	4	–	–
10	2.5	M4×0.7	M12×1.25	6	16	10	17	4	8	12	15	7	17	M5×0.8	4	–	–
12	5	M6×1.0	M16×1.5	6	22	14	20	6	12	16	18	10	22	M5×0.8	6	–	5
16	5	M6×1.0	M16×1.5	6	22	13	22	6	12	16	20	10	22	M5×0.8	6	13.5	5
20	6	M8×1.25	M22×1.5	7	24	11	29	8	16	22	25	12	29	1/8"	8	16.5	6
25	6	M10×1.25	M22×1.5	7	28	11	33.5	8	16	22	30	17	29	1/8"	10	18.5	8
32	6	M10×1.25	M30×1.5	7	38	–	37.5	–	–	30	34.5	17	36	1/8"	12	10.5	10
40	7	M12×1.25	M38×1.5	8	45	–	46.5	–	–	38	42.5	17	46	1/4"	16	12.5	14

DSNU-C

φ16~φ25


CA Type
A+Stroke
O
A1+Stroke
N
G1
F
R
2(4)-Sides
φV
L
2-X
K
J
H
M
I
G2
G
B
D1
D2
D
φE
A2+Stroke
C
A3+Stroke
T
T1
φP
φL
Q
□S


CM Type
2-X
D1
L
D2
W
D
C
Total length=A5+Stroke
φP
□S


U Type
2-X
D1
D2
D3
Total length=A4+Stroke
φP
□S

Bore size\Item	A	A1	A2	A3	A4	A5	B	C	D
16	98	82	56	111	94	111	38	17	12.1
20	115	95	62	126	106	126	44	20	14.5
25	126	104	65	137	113.5	137	50	22	16

Bore size\Item	D1	D2	D3	E	F	G	G1	G2
16	7	9	12.1	6	9	12.5	7.5	9.5
20	7.5	10.5	14.5	8	12	14.5	7.5	10.5
25	8	10.5	14.5	8	12	16	8	12

Bore size\Item	H	I	J	K	L	M	O	N
16	16	17	5	M6×1.0	M16×1.5	6	13	22
20	20	20	6	M8×1.25	M22×1.5	7	11	24
25	22	22	6	M10×1.25	M22×1.5	7	11	28

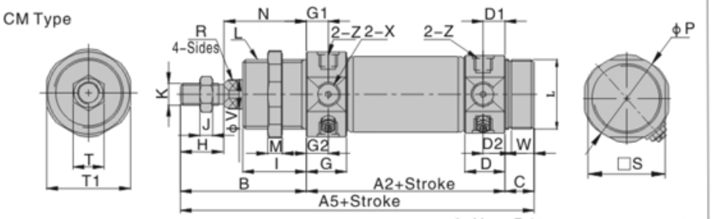
Bore size\Item	P	Q	R	S	T	T1	V	W	X
16	22	12	5	20	10	22	6	13.5	M5×0.8
20	29	16	6	25	12	29	8	16.5	1/8"
25	33.5	16	9	30	17	29	10	18.5	1/8"

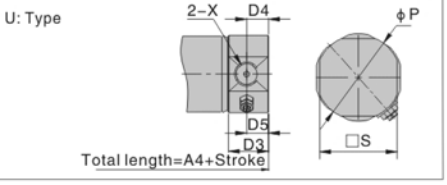
φ32、φ40

Bore size\Item	A2	A4	A5	B	C	D	D1	D2	D3	D4
32	68	124	140	58	14	16.5	9	11.5	14.5	7.5
40	89	157.5	174	69	16	22	12	12	21.5	11.5

Bore size\Item	D5	G	G1	G2	H	I	J	K
32	11	16.5	9	11.8	20	30	6	M10×1.25
40	14	22	12	12	24	35	7	M12×1.25

Bore size\Item	L	M	N	P	S	T	T1	V	W	X
32	M30×1.5	7	38	37.5	34.5	17	36	12	10.5	1/8"
40	M38×1.5	8	45	46.5	42.5	17	46	16	12.5	1/4"

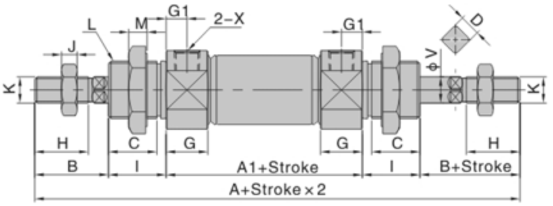

CM Type
N
G1
D1
R
4-Sides
L
2-Z
2-X
2-Z
φP
K
L
J
φV
H
M
G2
I
G
D2
W
D
B
A2+Stroke
C
A5+Stroke
T
T1
□S

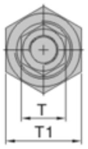

U: Type
2-X
D4
φP
D5
D3
Total length=A4+Stroke
□S

Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

DSNU (ISO6432) Series Stainless Steel Mini Cylinder

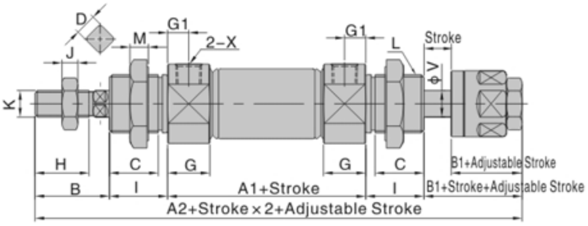
DSNU-D

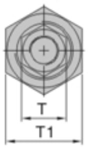

L
M
G1
2-X
G1
D
J
ϕV
K
K
H
C
G
G
C
H
B
I
A1+Stroke
I
B+Stroke
A+Stroke×2



Item / Bore size	A	A1	A2	B	B1	C	D	G	G1	H	I
8	104	48	104	16	16	9.5	–	11.5	7	10.5	12
10	104	48	104	16	16	9.5	–	11.5	7	10.5	12
12	128	52	128	21	21	14.5	5(2–Sides)	12.5	8	14	17
16	134	58	134	21	21	13.5	5(2–Sides)	12.5	8	14.5	17
20	150	62	151	24	25	16.5	6(2–Sides)	14.5	7.5	18	20
25	165	65	164	28	27	18.5	8(4–Sides)	16	8	20.5	22
32	184	68	183	28	27	26.5	10(4–Sides)	16.5	9	17.5	30
40	227	89	221	34	28	31.5	14(4–Sides)	22	12	21	35

DSNU-J

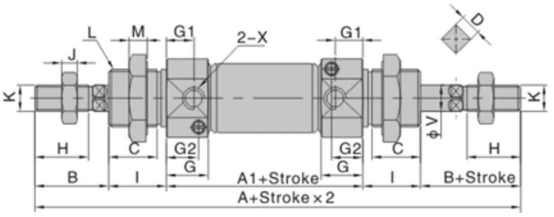

D
M
G1
2-X
G1
L
Stroke
J
ϕV
K
H
C
G
G
C
B1+Adjustable Stroke
B
I
A1+Stroke
I
B1+Stroke+Adjustable Stroke
A2+Stroke×2+Adjustable Stroke

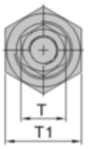


Item / Bore size	J	K	L	M	T	T1	V	X
8	2.5	M4×0.7	M12×1.25	6	7	17	4	M5×0.8
10	2.5	M4×0.7	M12×1.25	6	7	17	4	M5×0.8
12	5	M6×1	M16×1.5	6	10	22	6	M5×0.8
16	5	M6×1	M16×1.5	6	10	22	6	M5×0.8
20	6	M8×1.25	M22×1.5	7	12	29	8	1/8"
25	6	M10×1.25	M22×1.5	7	17	29	10	1/8"
32	6	M10×1.25	M30×1.5	7	17	36	12	1/8"
40	7	M12×1.25	M38×1.5	8	17	46	16	1/4"

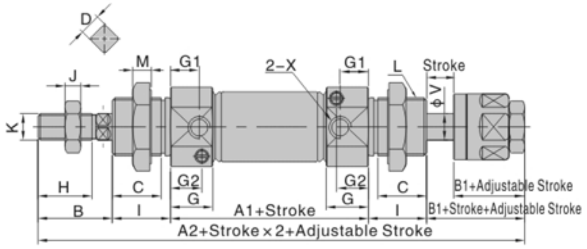
Remark: The dimensions of magnet type cylinder are the same as non–magnet type cylinder.

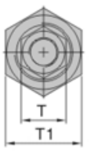
DSNU-CJ


L
M
G1
2-X
G1
D
J
K
K
ϕV
H
C
G2
G
G2
G
C
H
B
I
A1+Stroke
I
B+Stroke
A+Stroke×2



DSNU-CD


D
M
G1
2-X
G1
L
Stroke
J
ϕV
K
H
C
G2
G
G2
G
C
B1+Adjustable Stroke
B
I
A1+Stroke
I
B1+Stroke+Adjustable Stroke
A2+Stroke×2+Adjustable Stroke



Item / Bore size	A	A1	A2	B	B1	C	D	G	G1	G2	H
16	132.4	56.4	132.4	21	21	13.5	5(2–Sides)	12.5	7.5	9.5	14.5
20	150	62	151	24	25	16.5	6(2–Sides)	14.5	7.5	10.5	18
25	165	65	164	28	27	18.5	8(4–Sides)	16	8	12	20.5
32	184	68	183	28	27	26.5	10(4–Sides)	16.5	9	11.8	17.5
40	227	89	221	34	28	31.5	14(4–Sides)	22	12	12	21

Item / Bore size	I	J	K	L	M	T	T1	V	X
16	17	5	M6×1	M16×1.5	6	10	22	6	M5×0.8
20	20	6	M8×1.25	M22×1.5	7	12	29	8	1/8"
25	22	6	M10×1.25	M22×1.5	7	17	29	10	1/8"
32	30	6	M10×1.25	M30×1.5	7	17	36	12	1/8"
40	35	7	M12×1.25	M38×1.5	8	17	46	16	1/4"

Remark: The dimensions of magnet type cylinder are the same as non–magnet type cylinder.

DSNU (ISO6432) Series Stainless Steel Mini Cylinder

Accessories

Ordering code

F — 10 LB

Accessory — Cylinder model — Bore size — ① Accessory type

Mounting accessories	LB	LB Type
	FA	FA Type
	SDB ②	SDB Type
	TC	TC Type

① Please see accessory list for detailed information of accessories.
② SDB is attached with relevant PIN.

Accessory selection

Accessories / Cylinder model		Mounting accessory				Knuckle ①				Sensor switch②
		LB	FA	SDB	TC	Y	I	F	U	CS1-M
	Standard	●	●	●	●	●	●	●	●	×
	With magnet	●	●	●	●	●	●	●	●	●
	Standard	●	●	●	●	●	●	●	●	×
	With magnet	●	●	●	●	●	●	●	●	●
	Standard	●	●	×	●	●	●	●	●	×
	With magnet	●	●	×	●	●	●	●	●	●
	Standard	●	●	×	●	●	●	●	●	×
	With magnet	●	●	×	●	●	●	●	●	●

①: Please refer to PⅥ-33~Ⅵ-38 for knuckle detail;
②: Please refer to PⅥ-39~Ⅵ-50 for detail of sensor switch.

Material of accessories

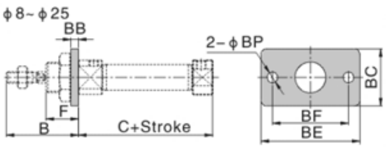
Accessories / Bore size	Mounting accessories				Joint accessories			
	LB	FA	SDB	TC	I	Y	F	U
8~40	SPCC			SUS304	Carbon steel			

List for ordering code of accessories

Accessories / Bore size	Mounting accessories			
	LB	FA	SDB	TC
8	F-MI8LB	F-MI8FA	F-MI8SDB	F-MI8TC
10				
12	F-MI12LB	F-MI12FA	F-MI12SDB	F-MI12TC
16				
20	F-MI20LB	F-MI20FA	F-MI20SDB	F-MI20TC
25				
32	F-MI32LB	–	F-MI32SDB	F-MI32TC
40	F-MI40LB	–	F-MI40SDB	F-MI40TC

Accessories / Bore size	Knuckle				Sensor switch
	I:I Knuckle	Y:Y Knuckle	F:F Knuckle	U:U Knuckle	
8	F-M040070II	F-M04070YE	–	F-M04070U	CS1-M
10			–		
12	F-M06100II	F-M06100YIE	–	F-M06100U	
16			–		
20	F-M08125II	F-M08125YE	F-M08125F	F-M08125U	
25	F-M10125II	F-M10125YE	F-M10125F	F-M10125U	
32		F-M10125YI			
40	F-M12125II	F-M12125YI	F-M12125F	F-M12125U	

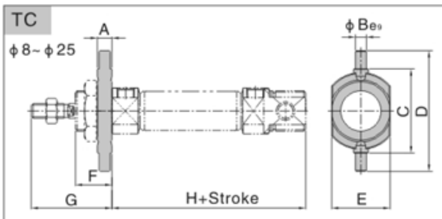
FA


ϕ8~ϕ25
BB
2-ϕBP
BC
F
B
C+Stroke
BF
BE

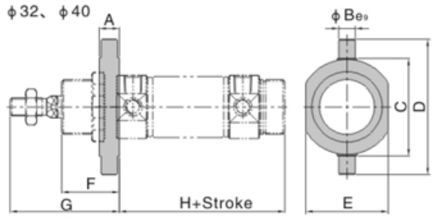
Bore size / Item	8	10	12	16	20	25
B	28	28	38	38	44	50
C	46	46	50	56	62	65
BB	3	3	4	4	5	5
BC	22	22	30	30	40	40
BE	40	40	52	52	66	66
BF	30	30	40	40	50	50
BP	4.5	4.5	5.5	5.5	6.6	6.6
F	12	12	17	17	20	22

Dimensions

TC

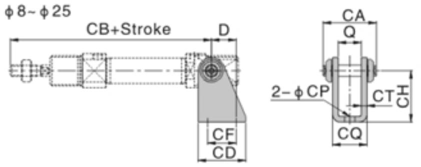

ϕ8~ϕ25
A
ϕBe9
C
D
F
G
H+Stroke
E

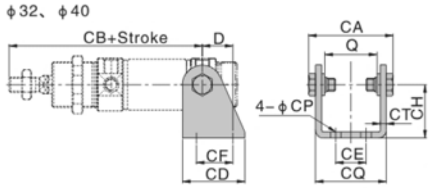
Bore size / Item	8	10	12	16
A	6	6	8	8
B	4	4	6	6
C	26	26	38	38
D	38	38	58	58
E	20	20	25	25
F	12	12	17	17
G	28	28	38	38
H	58	58	67	73

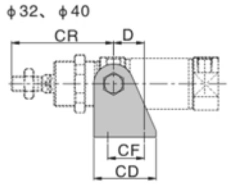

ϕ32、ϕ40
A
ϕBe9
C
D
F
G
H+Stroke
E

Bore size / Item	20	25	32	40
A	8	8	11	12
B	6	6	9	10
C	46	46	54	64
D	66	66	74	84
E	32	32	45	55
F	20	22	30	35
G	44	50	58	69
H	82	87	82	101

SDB


ϕ8~ϕ25
CB+Stroke
D
CA
Q
2-ϕCP
CT
CH
CF
CD
CQ

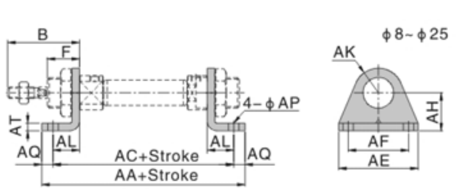

ϕ32、ϕ40
CB+Stroke
D
CA
Q
4-ϕCP
CT
CH
CF
CD
CE
CQ


ϕ32、ϕ40
CR
D
CF
CD

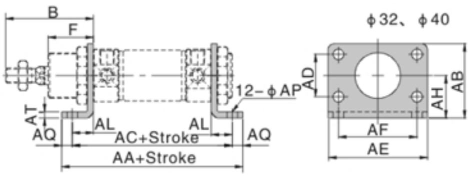
Item\Bore size	8	10	12	16
D	11	11	13	13
Q	8.1	8.1	12.1	12.1
CA	18.4	18.4	28	28
CB	76	76	91	98
CD	20	20	25	25
CE	–	–	–	–
CF	12.5	12.5	15	15
CH	24	24	27	27
CP	4.5	4.5	5.5	5.5
CQ	13.1	13.1	18.1	18.1
CT	2.5	2.5	3	3
CR	–	–	–	–

Item\Bore size	20	25	32	40
D	16	16	20	27
Q	16.1	16.1	34.6	42.6
CA	38	38	55.6	69.6
CB	115	126	117	146
CD	32	32	41	52
CE	–	–	20	28
CF	20	20	24	30
CH	30	30	35	40
CP	6.6	6.6	7	9
CQ	24.1	24.1	46.6	58.6
CT	4	4	4	5
CR	–	–	67	81

LB


ϕ8~ϕ25
B
F
AK
4-ϕAP
AH
AT
AQ
AL
AC+Stroke
AL
AQ
AA+Stroke
AF
AE

Bore size / Item	8	10	12	16
B	28	28	38	38
F	12	12	17	17
AA	78	78	90	96
AC	68	68	78	84
AD	–	–	–	–
AE	35	35	42	42
AF	25	25	32	32
AH	16	16	20	20
AK	10	10	13	13
AL	11	11	14	14
AP	4.5	4.5	5.5	5.5
AQ	5	5	6	6
AT	3	3	4	4


ϕ32、ϕ40
B
F
12-ϕAP
AD
AH
AB
AT
AQ
AL
AC+Stroke
AL
AQ
AA+Stroke
AF
AE

Bore size / Item	20	25	32	40
B	44	50	58	69
F	20	22	30	35
AA	112	115	110	149
AB	–	–	49	58
AC	96	99	96	129
AD	–	–	28	30
AE	54	54	66	80
AF	40	40	52	60
AH	25	25	28	33
AK	20	20	–	–
AL	17	17	14	20
AP	6.6	6.6	7	9
AQ	8	8	7	10
AT	5	5	4	5