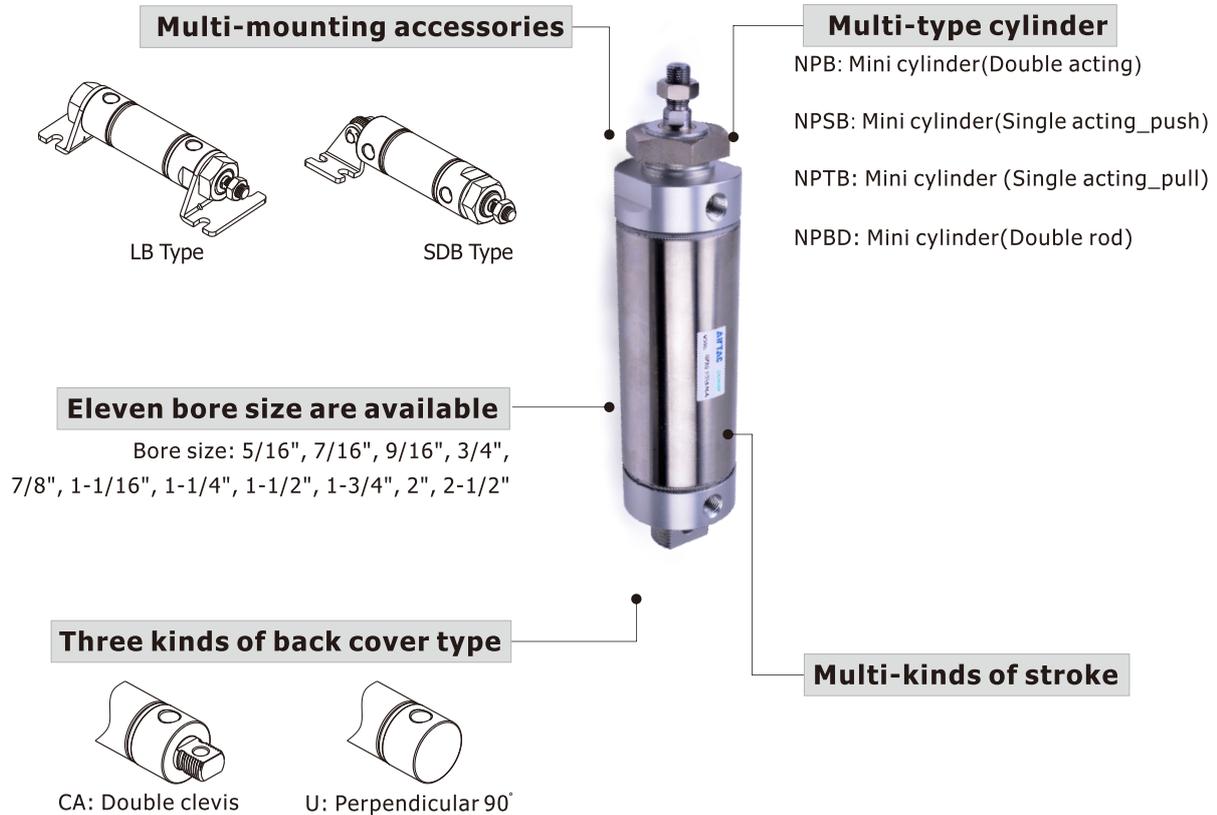




# Mini cylinder(Stainless steel)——NPB Series

## Compendium of NPB Series



## Installation and application

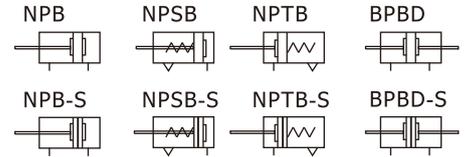


1. When load changes in the work, the cylinder with abundant output capacity shall be selected.
2. Relative cylinder with high temperature resistance or corrosion resistance shall be chosen under the condition of high temperature or corrosion.
3. Necessary protection measure shall be taken in the environment with higher humidity, much dust or water drops, oil dust and welding dregs.
4. Dirty substances in the pipe must be eliminated before cylinder is connected with pipeline to prevent the entrance of particles into the cylinder.
5. The medium used by cylinder shall be filtered to 40μm or below.
6. Anti-freezing measure shall be adopted under low temperature environment to prevent moisture freezing.
7. The load of the cylinder with the diameter of Φ4 needs to be coaxial with the cylinder to avoid side load, otherwise, piston rod will be bent and deformed and damage the thread at the end of the rod. Single-acting type can not be added in return.
8. If the cylinder is dismantled and stored for a long time, Please to conduct anti-rust treatment to the surface. Anti-dust caps shall be added in air inlet and outlet ports. The front and back cover can not be dismantled, which shall be especially noticed.



# Mini cylinder(Stainless steel)

## NPB Series



### Ordering code

**NPB 1-1/2 x 4 S □ □ T**



① Model	
NPB: Mini cylinder(Double acting)	
NPSB: Mini cylinder(Single acting_push)	
NPTB: Mini cylinder (Single acting_pull)	
NPBD: Mini cylinder(Double rod)	

⑦ Thread type	
No this code [Note]	5/16" 7/16" 9/16"
T: NPT	Others

② Bore size	
5/16"	NPB NPBD
7/16"	
9/16"	
3/4"	
7/8"	NPSB NPTB
1-1/16"	
1-1/4"	
1-1/2"	NPB NPBD
1-3/4"	
2"	
2-1/2"	

③ Stroke
Refer to stroke table for details

④ Magnet
Blank: Without magnet
S: With magnet

⑤ Back cover	
CA: Pivot type	NPB/NPSB/NPTB
U: Flat-end type	
No this code	NPBD

⑥ Mounting type	
Blank: No accessories	NPB/NPSB/NPTB
LB: LB type	
SDB: SDB typecode	
Y: Y Knuckle	
Blank: No accessories	NPBD
LB: LB type	

[Note]  $\Phi 5/16'' \sim \Phi 9/16''$  thread are #10-32 UNF.

### Stroke

Bore size(in)	Standard stroke (in)	Max. Std stroke (in)	Max. stroke (in)	
NPB NPBD	5/16"	1/2 1 1-1/2 2 2-1/2 3 4 5 6	6	8
	7/16"	1/2 1 1-1/2 2 2-1/2 3 4 5 6 7 8	8	8
	9/16"	1/2 1 1-1/2 2 2-1/2 3 4 5 6 7 8 9 10 11 12	12	12
	3/4" ~ 2-1/2"	1/2 1 1-1/2 2 2-1/2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	20	32
NPSB NPTB	5/16"~9/16"	1/2 1 1-1/2 2	-	-
	3/4" ~ 1-1/2"	1/2 1 1-1/2 2 2-1/2 3 4	-	-

[Note] Consult us for non-standard stroke.

# Mini cylinder(Stainless steel)

## NPB Series

### Specification

Bore size(in)		5/16	7/16	9/16	3/4	7/8	1-1/16	1-1/4	1-1/2	1-3/4	2	2-1/2	
Acting type	NPSB/NPTB	Single acting									-		
	NPB/NPBD	Double acting											
Fluid		Air(to be filtered by 40µm filter element)											
Operating pressure	Double acting	22~145psi(0.15~1.0MPa)											
	Single acting	28~145psi(0.2~1.0MPa)											
Proof pressure		215psi(1.5MPa)											
Temperature		-5°F~160°F(-20°C~70°C)											
Speed range inch/s		2~32											
Stroke tolerance inch							0~6 <sup>+0.04</sup>		>6 <sup>+0.06</sup>				
Cushion type		Bumper											
Port size		#10-32UNF			NPT1/8					NPT1/4			

### Product feature

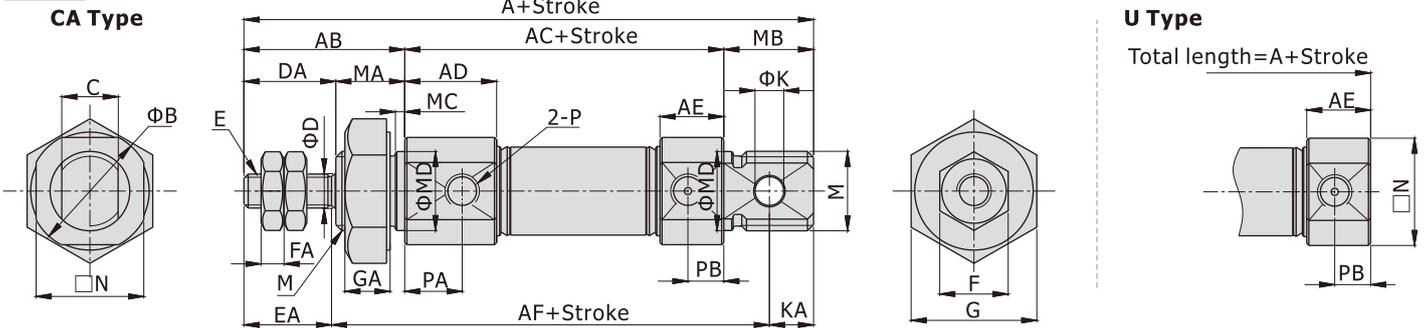
1. NFPA standard is implemented.
2. It belongs to mini cylinder that has compact structure, small volume and light weight.
3. The guide precision of piston rod is high and no additional lubricant is needed.
4. Piston rod stainless steel barrel make the cylinder adapt general corrosive working environment.
5. There are cylinders and accessories with several specifications for installation for your choice.
6. It has small cylinder diameter and quick reaction, suitable for the working environment with higher frequency.

# Mini cylinder(Stainless steel)

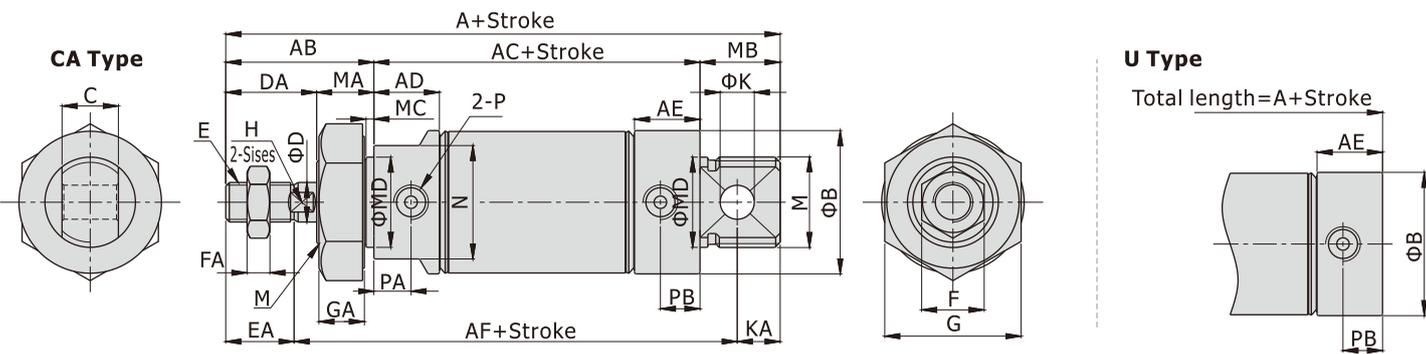
## NPB Series

### Dimensions

**NPB**  $\Phi 5/16"$   $\Phi 7/16"$



**NPB**  $\Phi 9/16"$ ~ $\Phi 2-1/2"$



[Unit:inch]

Bore size\Item	A		AB	AC	AD	AE	AF	B	C	D	DA	E	EA	F	FA	G	GA	H
	CA	U																
5/16"	2.57	2.22	0.69	1.53	0.38	0.31	2.03	0.58	1/4	-	0.38	#5-40UNC	0.38	1/4	0.11	9/16	0.22	-
7/16"	3.31	2.81	0.88	1.93	0.48	0.39	2.55	0.67	5/16	3/16	0.50	#10-32UNF	0.50	3/8	0.13	11/16	0.25	-
9/16"	3.25	2.81	0.88	1.93	0.47	0.38	2.55	0.67	5/16	3/16	0.50	#10-32UNF	0.50	3/8	0.13	11/16	0.25	-
3/4"	4.53	3.91	1.00	2.91	0.69	0.69	3.75	0.86	3/8	1/4	0.50	1/4-28UNF	0.50	7/16	0.16	15/16	0.37	-
7/8"	4.34	3.72	1.00	2.72	0.66	0.66	3.56	0.95	3/8	1/4	0.50	1/4-28UNF	0.50	7/16	0.16	15/16	0.37	-
1-1/16"	4.62	4.00	1.12	2.88	0.70	0.70	3.85	1.14	3/8	5/16	0.62	5/16-24UNF	0.50	1/2	0.19	15/16	0.37	1/4
1-1/4"	5.88	5.06	1.63	3.43	0.77	0.77	4.73	1.34	1/2	7/16	1.00	7/16-20UNF	0.75	11/16	0.25	1-1/8	0.42	3/8
1-1/2"	5.63	4.75	1.76	3.00	0.72	0.72	4.51	1.58	5/8	7/16	1.00	7/16-20UNF	0.75	11/16	0.25	1-1/2	0.50	3/8
1-3/4"	7.13	6.13	1.94	4.19	0.72	0.72	5.74	1.83	5/8	1/2	1.19	1/2-20UNF	0.88	3/4	0.31	1-1/2	0.50	7/16
2"	6.94	5.94	2.07	3.87	0.96	0.96	5.61	2.10	3/4	5/8	1.26	1/2-20UNF	0.88	3/4	0.31	1-7/8	0.50	1/2
2-1/2"	6.94	5.94	2.07	3.87	0.96	0.96	5.61	2.60	3/4	5/8	1.26	1/2-20UNF	0.88	3/4	0.31	2-1/16	0.50	1/2

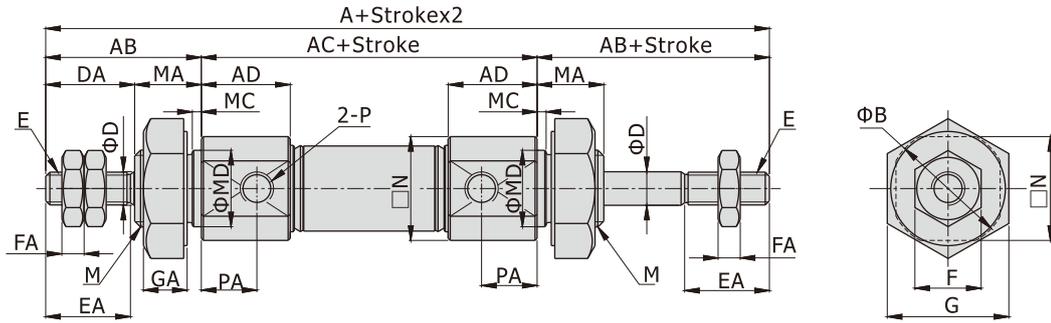
Bore size\Item	K	KA	M	MA	MB	MC	MD	N	P	PA	PB
5/16"	1/8	0.16	3/8-24UNF	0.31	0.35	-	-	1/2	#10-32UNF	0.24	0.16
7/16"	5/32	0.25	7/16-20UNF	0.38	0.50	0.05	0.437 <sup>0</sup> <sub>-0.004</sub>	3/5	#10-32UNF	0.38	0.20
9/16"	5/32	0.19	7/16-20UNF	0.38	0.44	0.06	0.437 <sup>0</sup> <sub>-0.004</sub>	9/16	#10-32UNF	0.28	0.20
3/4"	1/4	0.28	5/8-18UNF	0.50	0.62	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	3/4	NPT1/8	0.37	0.37
7/8"	1/4	0.28	5/8-18UNF	0.50	0.62	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	13/16	NPT1/8	0.37	0.37
1-1/16"	1/4	0.28	5/8-18UNF	0.50	0.62	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	1	NPT1/8	0.39	0.39
1-1/4"	1/4	0.41	3/4-16UNF	0.63	0.82	0.09	0.750 <sup>0</sup> <sub>-0.004</sub>	1-1/8	NPT1/8	0.43	0.43
1-1/2"	3/8	0.38	1-14UNS	0.75	0.88	0.09	1.000 <sup>0</sup> <sub>-0.004</sub>	1-3/8	NPT1/8	0.43	0.43
1-3/4"	3/8	0.50	1-14UNS	0.75	1.00	0.09	1.032 <sup>0</sup> <sub>-0.004</sub>	1-5/8	NPT1/4	0.51	0.51
2"	3/8	0.44	1-1/4-12UNF	0.81	1.00	0.12	1.375 <sup>0</sup> <sub>-0.004</sub>	1-7/8	NPT1/4	0.51	0.51
2-1/2"	3/8	0.44	1-3/8-12UNF	0.81	1.00	0.12	1.500 <sup>0</sup> <sub>-0.004</sub>	2-3/8	NPT1/4	0.51	0.51



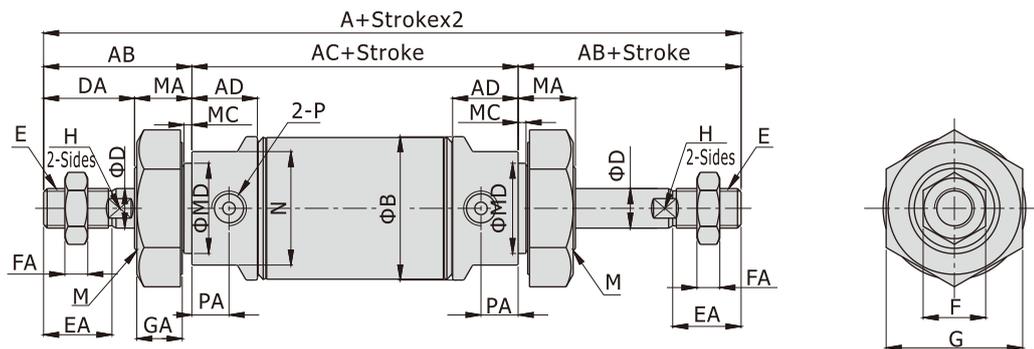
# Mini cylinder(Stainless steel)

## NPB Series

**NPBD**  $\Phi 7/16"$



**NPBD**  $\Phi 9/16" \sim \Phi 2-1/2"$



[Unit:inch]

Bore size\Item	A	AB	AC	AD	B	D	DA	E	EA	F	FA	G	GA	H
7/16"	3.78	0.88	2.02	0.48	0.67	3/16	0.50	#10-32UNF	0.50	3/8	0.13	11/16	0.25	-
9/16"	3.78	0.88	2.02	0.47	0.67	3/16	0.50	#10-32UNF	0.50	3/8	0.13	11/16	0.25	-
3/4"	4.91	1.00	2.91	0.69	0.86	1/4	0.50	1/4-28UNF	0.50	7/16	0.16	15/16	0.37	-
7/8"	4.72	1.00	2.72	0.66	0.95	1/4	0.50	1/4-28UNF	0.50	7/16	0.16	15/16	0.37	-
1-1/16"	5.12	1.12	2.88	0.70	1.14	5/16	0.62	5/16-24UNF	0.50	1/2	0.19	15/16	0.37	1/4
1-1/4"	6.69	1.63	3.43	0.77	1.34	7/16	1.00	7/16-20UNF	0.75	11/16	0.25	1-1/8	0.42	3/8
1-1/2"	6.50	1.76	3.00	0.72	1.58	7/16	1.00	7/16-20UNF	0.75	11/16	0.25	1-1/2	0.50	3/8
1-3/4"	8.07	1.94	4.19	0.72	1.83	1/2	1.19	1/2-20UNF	0.88	3/4	0.31	1-1/2	0.50	7/16
2"	8.02	2.07	3.87	0.96	2.10	5/8	1.26	1/2-20UNF	0.88	3/4	0.31	1-7/8	0.50	1/2
2-1/2"	8.02	2.07	3.87	0.96	2.60	5/8	1.26	1/2-20UNF	0.88	3/4	0.31	2-1/16	0.50	1/2

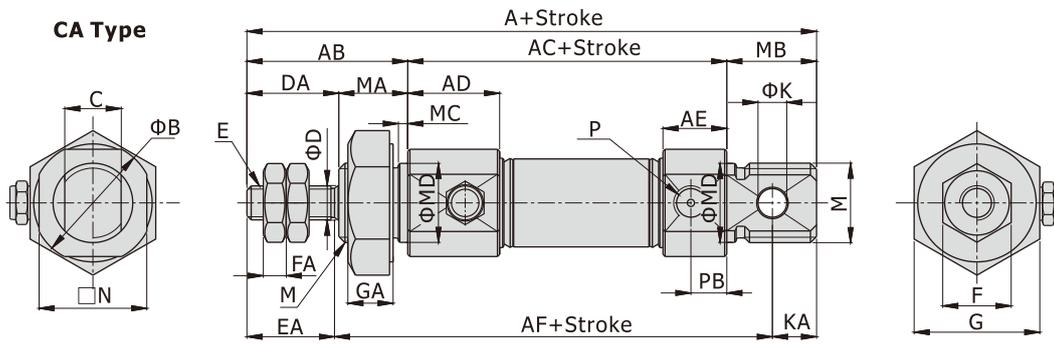
Bore size\Item	M	MA	MC	MD	N	P	PA
7/16"	7/16-20UNF	0.38	0.05	0.437 <sup>0</sup> <sub>-0.004</sub>	3/5	#10-32UNF	0.38
9/16"	7/16-20UNF	0.38	0.06	0.437 <sup>0</sup> <sub>-0.004</sub>	9/16	#10-32UNF	0.28
3/4"	5/8-18UNF	0.50	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	3/4	NPT1/8	0.37
7/8"	5/8-18UNF	0.50	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	13/16	NPT1/8	0.37
1-1/16"	5/8-18UNF	0.50	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	1	NPT1/8	0.39
1-1/4"	3/4-16UNF	0.63	0.09	0.750 <sup>0</sup> <sub>-0.004</sub>	1-1/8	NPT1/8	0.43
1-1/2"	1-14UNS	0.75	0.09	1.000 <sup>0</sup> <sub>-0.004</sub>	1-3/8	NPT1/8	0.43
1-3/4"	1-14UNS	0.75	0.09	1.032 <sup>0</sup> <sub>-0.004</sub>	1-5/8	NPT1/4	0.51
2"	1-1/4-12UNF	0.81	0.12	1.375 <sup>0</sup> <sub>-0.004</sub>	1-7/8	NPT1/4	0.51
2-1/2"	1-3/8-12UNF	0.81	0.12	1.500 <sup>0</sup> <sub>-0.004</sub>	2-3/8	NPT1/4	0.51

# Mini cylinder(Stainless steel)

## NPB Series

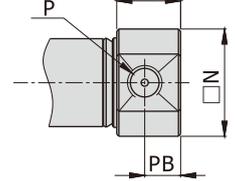
### NPSB

Φ5/16" Φ7/16"

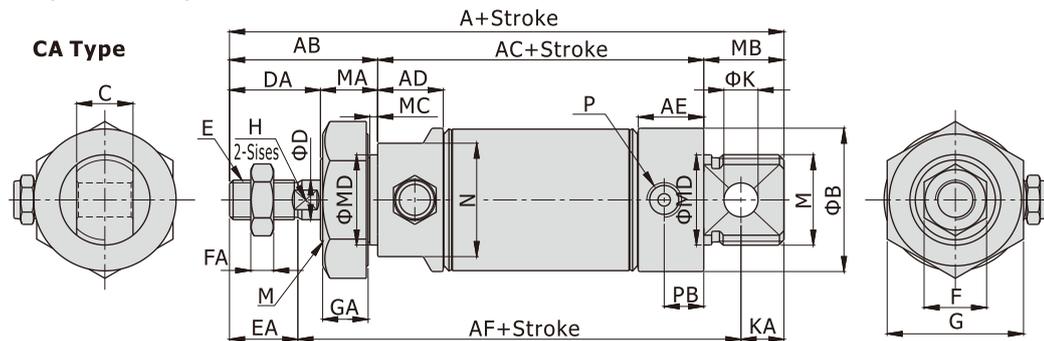


### U Type

Total length=A+Stroke

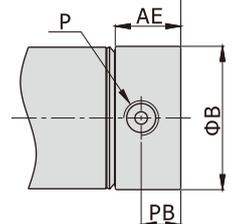


Φ9/16"~Φ1-1/2"



### U Type

Total length=A+Stroke



[Unit:inch]

Bore size\Item	A				AB	AC		AD	AE	AF		B	C	D	DA
	CA	U		-		-	-								
Stroke	0~2	2.001~4	0~2	2.001~4	-	0~2	2.001~4	-	-	0~2	2.001~4	-	-	-	-
5/16"	3.57	-	3.22	-	0.69	2.53	-	0.38	0.31	3.03	-	0.58	1/4	-	0.38
7/16"	4.31	-	3.81	-	0.88	2.93	-	0.48	0.39	3.55	-	0.67	5/16	3/16	0.50
9/16"	4.25	-	3.81	-	0.88	2.93	-	0.47	0.38	3.55	-	0.67	5/16	3/16	0.50
3/4"	5.53	6.53	4.91	5.91	1.00	3.91	4.91	0.69	0.69	4.75	5.75	0.86	3/8	1/4	0.50
7/8"	5.34	6.34	4.72	5.72	1.00	3.72	4.72	0.66	0.66	4.56	5.56	0.95	3/8	1/4	0.50
1-1/16"	5.62	6.62	5.00	6.00	1.12	3.88	4.88	0.70	0.70	4.85	5.85	1.14	3/8	5/16	0.62
1-1/4"	6.88	7.88	6.06	7.06	1.63	4.43	5.43	0.77	0.77	5.73	6.73	1.34	1/2	7/16	1.00
1-1/2"	6.63	7.63	5.75	6.75	1.76	4.00	5.00	0.72	0.72	5.51	6.51	1.58	5/8	7/16	1.00

Bore size\Item	E	EA	F	FA	G	GA	H	K	KA	M	MA	MB	MC	MD	N	P	PB
5/16"	#5-40UNC	0.38	1/4	0.11	9/16	0.22	-	1/8	0.16	3/8-24UNF	0.31	0.35	-	-	1/2	#10-32UNF	0.16
7/16"	#10-32UNF	0.50	3/8	0.13	11/16	0.25	-	5/32	0.25	7/16-20UNF	0.38	0.50	0.05	0.437 <sup>0</sup> <sub>-0.004</sub>	3/5	#10-32UNF	0.20
9/16"	#10-32UNF	0.50	3/8	0.13	11/16	0.25	-	5/32	0.19	7/16-20UNF	0.38	0.44	0.06	0.437 <sup>0</sup> <sub>-0.004</sub>	9/16	#10-32UNF	0.20
3/4"	1/4-28UNF	0.50	7/16	0.16	15/16	0.37	-	1/4	0.28	5/8-18UNF	0.50	0.62	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	3/4	NPT1/8	0.37
7/8"	1/4-28UNF	0.50	7/16	0.16	15/16	0.37	-	1/4	0.28	5/8-18UNF	0.50	0.62	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	13/16	NPT1/8	0.37
1-1/16"	5/16-24UNF	0.50	1/2	0.19	15/16	0.37	1/4	1/4	0.28	5/8-18UNF	0.50	0.62	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	1	NPT1/8	0.39
1-1/4"	7/16-20UNF	0.75	11/16	0.25	1-1/8	0.42	3/8	1/4	0.41	3/4-16UNF	0.63	0.82	0.09	0.750 <sup>0</sup> <sub>-0.004</sub>	1-1/8	NPT1/8	0.43
1-1/2"	7/16-20UNF	0.75	11/16	0.25	1-1/2	0.50	3/8	3/8	0.38	1-14UNS	0.75	0.88	0.09	1.000 <sup>0</sup> <sub>-0.004</sub>	1-3/8	NPT1/8	0.43

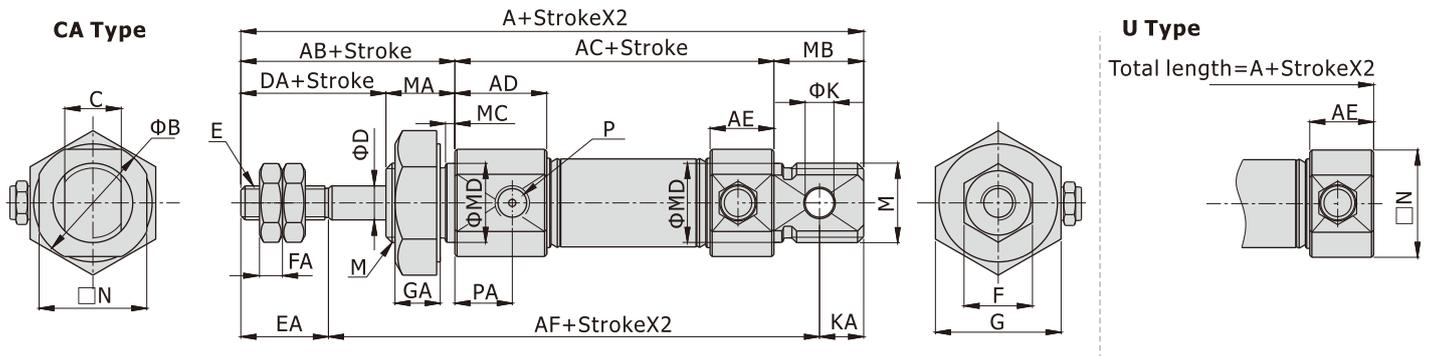


# Mini cylinder(Stainless steel)

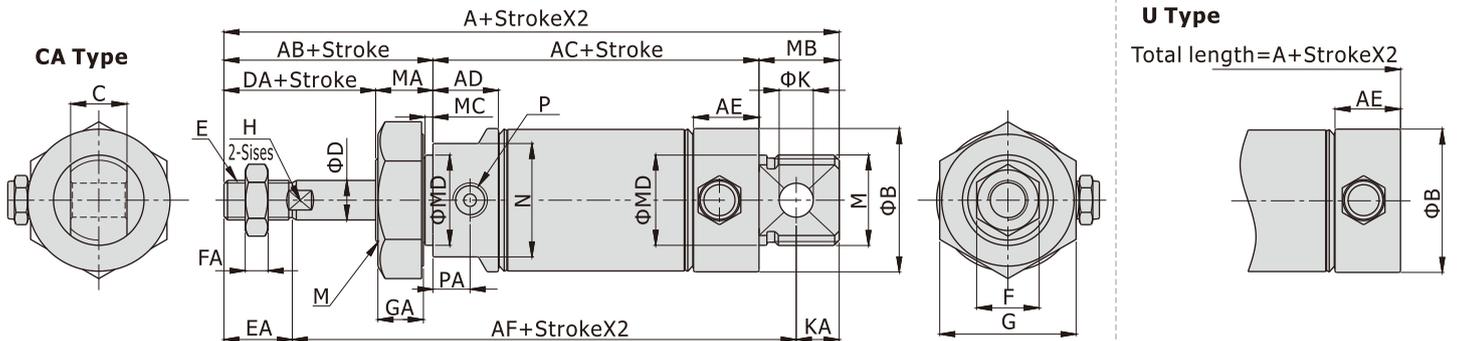
## NPB Series

### NPTB

Φ5/16" Φ7/16"



Φ9/16"~Φ1-1/2"



[Unit:inch]

Bore size\Item	A		AB	AC		AD	AE	AF		B	C	D	DA
	CA	U		-	-								
Stroke	0~2	2.001~4	-	0~2	2.001~4	-	-	0~2	2.001~4	-	-	-	-
5/16"	3.57	-	0.69	2.53	-	0.38	0.31	3.03	-	0.58	1/4	-	0.38
7/16"	4.31	-	0.88	2.93	-	0.48	0.39	3.55	-	0.67	5/16	3/16	0.50
9/16"	4.25	-	0.88	2.93	-	0.47	0.38	3.55	-	0.67	5/16	3/16	0.50
3/4"	5.53	6.53	1.00	3.91	4.91	0.69	0.69	4.75	5.75	0.86	3/8	1/4	0.50
7/8"	5.34	6.34	1.00	3.72	4.72	0.66	0.66	4.56	5.56	0.95	3/8	1/4	0.50
1-1/16"	5.62	6.62	1.12	3.88	4.88	0.70	0.70	4.85	5.85	1.14	3/8	5/16	0.62
1-1/4"	6.88	7.88	1.63	4.43	5.43	0.77	0.77	5.73	6.73	1.34	1/2	7/16	1.00
1-1/2"	6.63	7.63	1.76	4.00	5.00	0.72	0.72	5.51	6.51	1.58	5/8	7/16	1.00

Bore size\Item	E	EA	F	FA	G	GA	H	K	KA	M	MA	MB	MC	MD	N	P	PA
5/16"	#5-40UNC	0.38	1/4	0.11	9/16	0.22	-	1/8	0.16	3/8-24UNF	0.31	0.35	-	-	1/2	#10-32UNF	0.24
7/16"	#10-32UNF	0.50	3/8	0.13	11/16	0.25	-	5/32	0.25	7/16-20UNF	0.38	0.50	0.05	0.437 <sup>0</sup> <sub>-0.004</sub>	3/5	#10-32UNF	0.28
9/16"	#10-32UNF	0.50	3/8	0.13	11/16	0.25	-	5/32	0.19	7/16-20UNF	0.38	0.44	0.06	0.437 <sup>0</sup> <sub>-0.004</sub>	9/16	#10-32UNF	0.28
3/4"	1/4-28UNF	0.50	7/16	0.16	15/16	0.37	-	1/4	0.28	5/8-18UNF	0.50	0.62	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	3/4	NPT1/8	0.37
7/8"	1/4-28UNF	0.50	7/16	0.16	15/16	0.37	-	1/4	0.28	5/8-18UNF	0.50	0.62	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	13/16	NPT1/8	0.37
1-1/16"	5/16-24UNF	0.50	1/2	0.19	15/16	0.37	1/4	1/4	0.28	5/8-18UNF	0.50	0.62	0.09	0.624 <sup>0</sup> <sub>-0.004</sub>	1	NPT1/8	0.39
1-1/4"	7/16-20UNF	0.75	11/16	0.25	1-1/8	0.42	3/8	1/4	0.41	3/4-16UNF	0.63	0.82	0.09	0.750 <sup>0</sup> <sub>-0.004</sub>	1-1/8	NPT1/8	0.43
1-1/2"	7/16-20UNF	0.75	11/16	0.25	1-1/2	0.50	3/8	3/8	0.38	1-14UNS	0.75	0.88	0.09	1.000 <sup>0</sup> <sub>-0.004</sub>	1-3/8	NPT1/8	0.43



# Mini cylinder(Stainless steel)

## NPB Series—Accessories

### List for ordering code of accessories

Accessories Bore size	Mounting accessories		Knuckle	Sensor switch	
	LB	SDB	Y	CMSG	DMSG(S)
5/16"	F-NPB5/16LB	F-NPB5/16SDB	F-NPB5/16Y	CMSG	DMSG(S)
7/16"	F-NPB7/16LB	F-NPB7/16SDB	F-NPB7/16Y		
9/16"					
3/4"	F-NPB3/4LB	F-NPB3/4SDB	F-NPB3/4Y		
7/8"			F-NPB1-1/16Y		
1-1/16"			F-NPB1-1/4Y		
1-1/4"	F-NPB1-1/4LB	F-NPB1-1/4SDB	F-NPB1-1/4Y		
1-1/2"	F-NPB1-1/2LB	F-NPB1-1/2SDB			
1-3/4"	F-NPB1-3/4LB	F-NPB1-3/4SDB	F-NPB1-3/4Y		
2"	F-NPB2LB	F-NPB2SDB			
2-1/2"	F-NPB2-1/2LB				

### Accessory selection

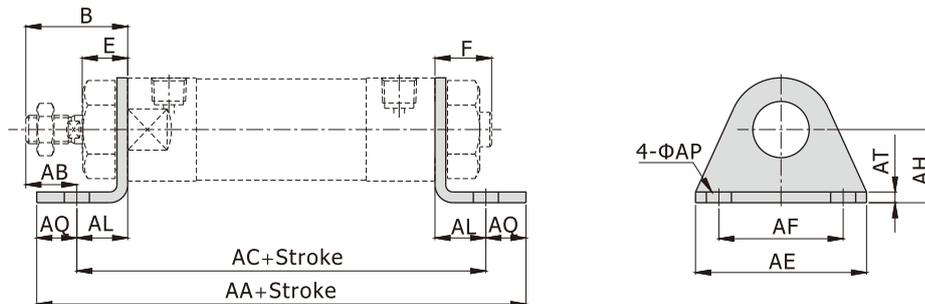
Accessories Cylinder model	Mounting accessories	Knuckle	Sensor switch			
			LB	SDB	Y	CMSG
NPB	Standard	●	●	●	×	×
NPSB/NPTB	Standard	●	●	●	×	×
NPBD	Standard	●	×	●	×	×
NPB	With magnet	●	●	●	●	●
NPSB/NPTB	With magnet	●	●	●	●	●
NPBD	With magnet	●	×	●	●	●

### Material of accessories

Accessories Bore size	Mounting accessories		Knuckle
	LB	SDB	Y
5/16"~2-1/2"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> —Steel			

### Dimensions

#### LB



[Unit:inch]

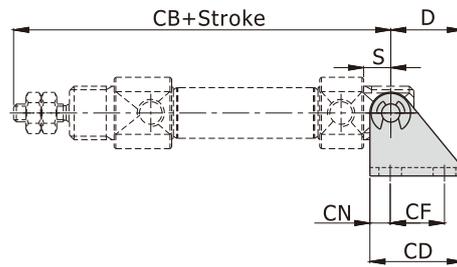
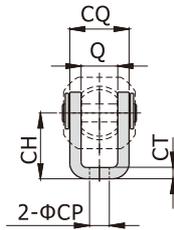
Bore size\Item	AA	AA(NPSB)		AC	AC(NPSB)		B	E	F	AB	AE	AF	AL	AQ	AP	AT	AH
		0~2	2.001~4		0~2	2.001~4											
5/16"	2.29	3.29	-	2.03	3.03	-	0.69	0.31	0.35	0.44	1.00	0.75	0.25	0.13	0.14	0.08	0.44
7/16"	3.30	4.30	-	2.69	3.69	-	0.88	0.38	0.50	0.50	1.38	1.00	0.38	0.31	0.19	0.10	0.56
9/16"	3.30	4.30	-	2.69	3.69	-	0.88	0.38	0.44	0.50	1.38	1.00	0.38	0.31	0.19	0.10	0.56
3/4"	4.91	5.91	6.91	4.03	5.03	6.03	1.00	0.50	0.62	0.44	1.89	1.50	0.56	0.44	0.28	0.12	0.81
7/8"	4.72	5.72	6.72	3.84	4.84	5.84	1.00	0.50	0.62	0.44	1.89	1.50	0.56	0.44	0.28	0.12	0.81
1-1/16"	4.88	5.88	6.88	4.00	5.00	6.00	1.12	0.50	0.62	0.56	1.89	1.50	0.56	0.44	0.28	0.12	0.81
1-1/4"	6.44	7.44	8.44	4.93	5.93	6.93	1.63	0.63	0.82	0.88	2.50	1.88	0.75	0.75	0.28	0.14	1.00
1-1/2"	6.00	7.00	8.00	4.50	5.50	6.50	1.76	0.75	0.88	1.01	2.50	1.88	0.75	0.75	0.28	0.14	1.12
1-3/4"	7.19	8.19	9.19	5.94	6.94	7.94	1.94	0.75	1.00	1.06	3.00	2.24	0.88	0.62	0.34	0.18	1.25
2"	7.11	8.11	9.11	5.87	6.87	7.87	2.07	0.81	1.00	1.07	3.13	2.24	1.00	0.62	0.34	0.18	1.50
2-1/2"	7.11	8.11	9.11	5.87	6.87	7.87	2.07	0.81	1.00	1.07	3.75	2.87	1.00	0.62	0.34	0.18	1.75

# Mini cylinder(Stainless steel)

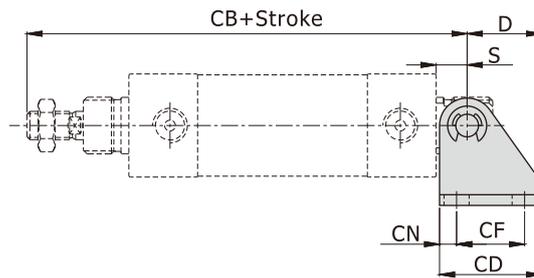
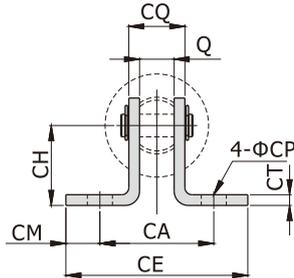
## NPB Series—Accessories

### SDB

Φ5/16"



Φ7/16"~Φ2-1/2"

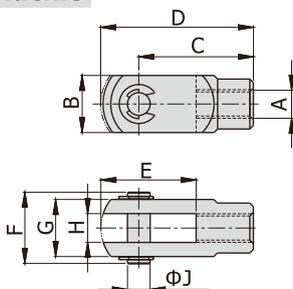


[Unit:inch]

Bore size\Item Stroke	D	S	Q	CA	CB (NPB)	CB(NPSB)		CD	CE	CF	CH	CM	CN	CT	CP	CQ
						0~2	2.001~4									
5/16"	0.50	0.19	1/4	-	2.41	3.41	-	0.63	-	0.38	0.44	-	0.13	0.08	0.14	0.42
7/16"	0.56	0.25	5/16	0.88	3.05	4.05	-	0.75	1.31	0.50	0.56	0.22	0.13	0.08	0.19	0.47
9/16"	0.56	0.25	5/16	0.88	3.05	4.05	-	0.75	1.31	0.50	0.56	0.22	0.13	0.08	0.19	0.47
3/4"	0.81	0.34	3/8	1.26	4.25	5.25	6.25	1.12	2.01	0.75	0.88	0.37	0.19	0.12	0.28	0.63
7/8"	0.81	0.34	3/8	1.26	4.06	5.06	6.06	1.12	2.01	0.75	0.88	0.37	0.19	0.12	0.28	0.63
1-1/16"	0.81	0.34	3/8	1.26	4.35	5.35	6.35	1.12	2.01	0.75	0.88	0.37	0.19	0.12	0.28	0.63
1-1/4"	0.81	0.41	1/2	1.39	5.48	6.48	7.48	1.12	2.13	0.75	0.88	0.37	0.19	0.12	0.28	0.74
1-1/2"	1.13	0.50	5/8	1.75	5.26	6.26	7.26	1.50	2.63	1.00	1.38	0.44	0.25	0.12	0.28	0.87
1-3/4"	1.13	0.50	5/8	2.00	6.62	7.62	8.62	1.50	2.88	1.00	1.38	0.44	0.25	0.16	0.28	0.95
2"	1.13	0.56	3/4	2.14	6.49	7.49	8.49	1.50	3.01	1.00	1.38	0.44	0.25	0.16	0.28	1.08
2-1/2"	1.13	0.56	3/4	2.14	6.49	7.49	8.49	1.50	3.01	1.00	1.38	0.44	0.25	0.16	0.28	1.08

### Y Knuckle

[Unit:inch]



Bore size\Item	A	B	C	D	E	F	G	H	J
F-NPB5/16Y	#5-40UNC	0.32	0.44	0.56	0.38	0.50	0.32	1/8	1/8
F-NPB7/16Y	#10-32UNF	0.38	0.75	0.94	0.56	0.56	0.38	3/16	3/16
F-NPB3/4Y	1/4-28UNF	0.50	0.94	1.19	0.69	0.69	0.50	1/4	1/4
F-NPB1-1/16Y	5/16-24UNF	0.50	0.94	1.19	0.69	0.69	0.50	1/4	1/4
F-NPB1-1/4Y	7/16-20UNF	0.75	1.31	1.69	0.94	1.02	0.75	3/8	3/8
F-NPB1-3/4Y	1/2-20UNF	0.75	1.31	1.69	0.94	1.02	0.75	3/8	3/8