

NBC

NFPA Standard Cylinder



Specifications

Bore(mm)	40(1-1/2")	50(2")	63(2-1/2")	80(3-1/4")	100(4")
Acting type	Double Acting				
Working medium	Clean Air(40 μm filtration)				
Working pressure (psi)	14.5~145				
Guaranteed pressure (psi)	215				
Working temperature (°C)	-20~70°C (-4~176°F) (No freezing)				
Speed range (mm/s)	50~800				
Cushion type	Air Cushion				
Mounting type	MSI MF1 MF2 MP2 MP4 YJ				
Port size	NPT1/4		NPT3/8		NPT1/2
Magnet switch	HX-21				

How to Order?

Series No.	Cushion Type	Type No.	Bore	Stroke	Magnet No.	Seal Material	Mounting Type
NB: Profile barrel (North American Standard)	C: Air cushion	Blank: Basic type D: Double shaft type J: Double shaft and adjustable type	40(1-1/2") 50(2") 63(2-1/2") 80(3-1/4") 100(4")	*Stroke length must be indicated as 4 digits. First and second digit:Stroke/Inch Third and fourth digit:Stroke/Hundredth of an inch Example) 0525=5.25(5-1/4) inch stroke Details in stroke chart	Blank: No magnet S: With magnet	Blank: Standard material (NBR seal) V: VITON seal	Blank: No LB CA CB FA FB YJ

Order Example:

NBC series, double shaft air cylinder, bore 40, stroke 2 inch, with magnet, NBR seal, CA mounting accessory.

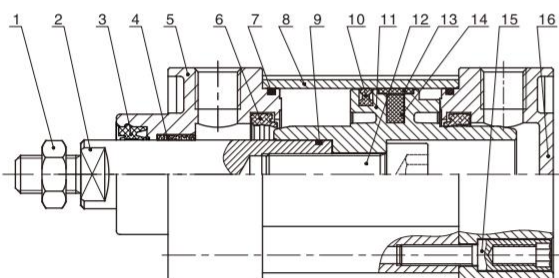
EPR code is: NBCD40-0200-S-CA

Note: If using a cylinder with different mounting accessories, please use this sequential coding: LB/CA/CB/FA/FB/YJ

Stroke

Bore Size	Standard Stroke (inch)	Max. Stroke (inch)
40~63(1-1/2"~2-1/2")	0.5 1 2 3 4 5 6 7 8 9 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	80
80~100(3-1/4"~4")	0.75 1 2 3 4 5 6 7 8 9 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	80

Internal Structure



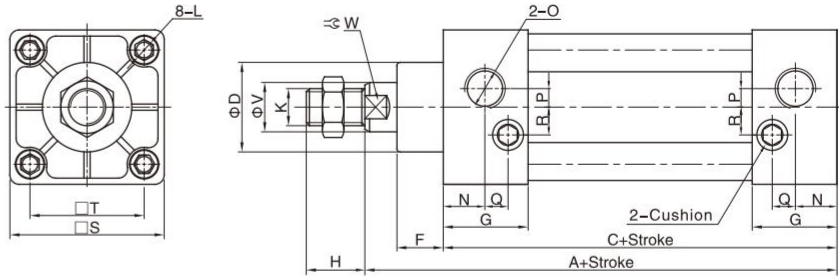
NO.	Part Name	Material
1	Nut	Carbon steel
2	Piston rod	S45C hard chrome carbon steel
3	Piston rod seal	TPU
4	Self lubricating bearing	Bronze powder
5	Head cover	Aluminum alloy
6	Cushion seal	NBR
7	O-ring	NBR
8	Barrel	Aluminum alloy
9	O-ring	NBR
10	Piston seal	NBR
11	Piston	Aluminum alloy
12	Nut	Carbon steel
13	Wear ring	PTFE
14	Magnet	Plastic
15	Tie rod nut	Carbon steel
16	Rear cover	Aluminum alloy

NBC Series NFPA Standard Cylinder



Main Dimension

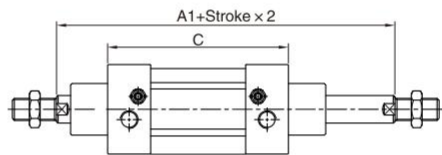
NBC



Bore	A	C	D	F	G	H	K	L	N	O	P	Q	R	S	T	V	W
40(1-1/2")	4.625	3.625	1.26	0.59	1.08	0.75	UNF 7/16-20-2A	M6	0.53	NPT1/4	0.197	0.216	0.35	1.97	1.457	0.63	0.50
50(2")	4.625	3.625	1.496	0.59	1.08	0.75	UNF 7/16-20-2A	M6	0.57	NPT1/4	0.335	0.118	0.433	2.44	1.85	0.787	0.50
63(2-1/2")	4.75	3.75	1.496	0.59	1.08	0.75	UNF 7/16-20-2A	M8	0.59	NPT3/8	0.28	0.197	0.374	2.95	2.205	0.787	0.50
80(3-1/4")	5.625	4.25	1.811	0.827	1.30	1.125	UNF 3/4-16-2A	M10	0.65	NPT3/8	0.28	0.31	0.39	3.70	2.756	0.984	0.87
100(4")	5.625	4.25	1.811	0.827	1.30	1.125	UNF 3/4-16-2A	M10	0.65	NPT1/2	0.30	0.31	0.51	4.41	3.307	0.984	0.87

Note: With magnet and No magnet, the dimensions are same.

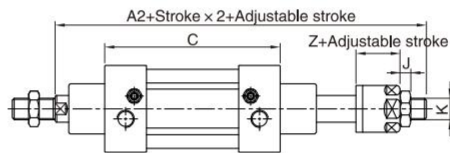
NBCD



Bore	A1	A2	C	J	K	Z
40(1-1/2")	5.626	6.319	3.625	0.276	M12x1.25	0.827
50(2")	5.626	6.437	3.625	0.315	M16x1.5	0.906
63(2-1/2")	5.752	6.563	3.75	0.315	M16x1.5	0.906
80(3-1/4")	7.0	7.988	4.25	0.394	M20x1.5	1.142
100(4")	7.0	7.988	4.25	0.394	M20x1.5	1.142

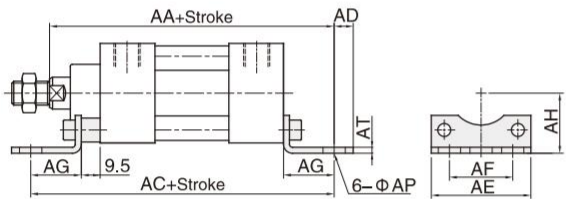
Note: 1. With magnet and without magnet, the dimensions are same.
2. The unmarked dimension is the same as NBC standard type.

NBCJ



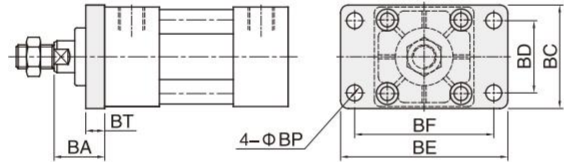
Main Dimension

NBC□S-MS1

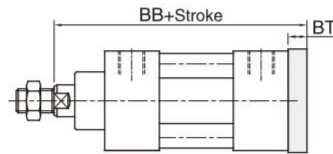


Bore	AA	AC	AD	AE	AF	AG	AH	AP	AT
40(1-1/2")	5.625	6.00	0.38	1.97	1.25	1.00	1.188	0.44	0.12
50(2")	5.625	6.00	0.38	2.44	1.75	1.00	1.438	0.44	0.12
63(2-1/2")	5.75	6.125	0.38	2.95	2.25	1.00	1.625	0.44	0.12
80(3-1/4")	6.875	7.375	0.50	3.74	2.75	1.25	1.938	0.56	0.16
100(4")	6.875	7.375	0.50	4.41	3.50	1.25	2.25	0.56	0.16

NBC□S-MF1

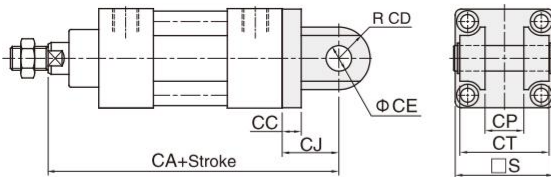


NBC□S-MF2

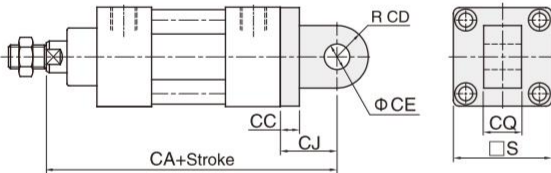


Bore	BA	BB	BC	BD	BE	BF	BP	BT
40(1-1/2")	1.00	5.00	2.05	1.43	3.31	2.75	0.315	0.375
50(2")	1.00	5.00	2.56	1.84	4.13	3.375	0.375	0.375
63(2-1/2")	1.00	5.125	2.87	2.19	4.57	3.875	0.375	0.375
80(3-1/4")	1.375	6.25	3.62	2.76	5.63	4.685	0.435	0.63
100(4")	1.375	6.25	4.50	3.31	6.34	5.435	0.435	0.63

NBC□S-MP2

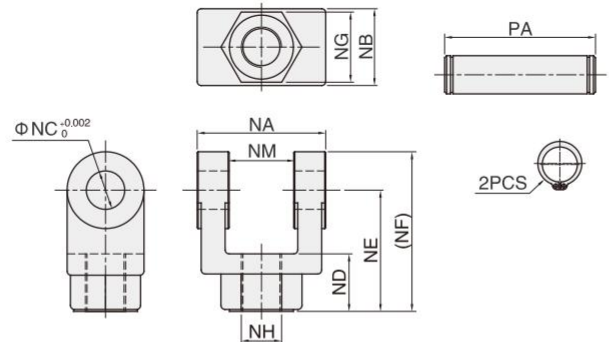


NBC□S-MP4



Bore	CA	CC	CD	CE	CJ	CP	CQ	CT	S
40(1-1/2")	5.75	0.38	0.62	0.50	1.125	0.765	0.75	1.765	1.95
50(2")	5.75	0.38	0.62	0.50	1.125	0.765	0.75	1.765	2.42
63(2-1/2")	5.875	0.38	0.62	0.50	1.125	0.765	0.75	1.765	2.93
80(3-1/4")	7.50	0.63	0.87	0.75	1.875	1.265	1.25	2.515	3.66
100(4")	7.50	0.63	0.87	0.75	1.875	1.265	1.25	2.515	4.37

NBC□S-YJ



Bore	NA	NB	NC	ND	NE	NF	NG	NH	NM	PA
40(1-1/2")	1.764	1.00	0.504	0.75	1.5	2.0	1.0	UNF-7/16-20-2A	0.764	2.17
50(2")	1.764	1.00	0.504	0.75	1.5	2.0	1.0	UNF-7/16-20-2A	0.764	2.17
63(2-1/2")	1.764	1.00	0.504	0.75	1.5	2.0	1.0	UNF-7/16-20-2A	0.764	2.17
80(3-1/4")	2.516	1.50	0.752	1.13	2.37	3.13	1.37	UNF 3/4-16-2A	1.264	2.95
100(4")	2.516	1.50	0.752	1.13	2.37	3.13	1.37	UNF 3/4-16-2A	1.264	2.95