

VBC/LBC Standard Cylinder



Specifications

Bore Size (mm)	32	40	50	63	80	100	125	160	200	250
Acting type	Double Acting									
Working medium	Clean Air(40 μm filtration)									
Working pressure (MPa)	0.1~1.0									
Guaranteed pressure (MPa)	1.5									
Working temperature (°C)	-20~70(No freezing)									
Speed range (mm/s)	50~800									
Cushion type	Air Cushion									
Cushion stroke (mm)	27	30	36	34	35	42	50			
Mounting type	LB FA FB CA CB CR									
Port size ①	G1/8	G1/4	G3/8	G1/2	G3/4	G1				

① PT、NPT port size is optional.

How to Order?

Series No	Cushion Type	Type No.	Bore X	Stroke - Adjustable Stroke	Magnet No.	Seal Material	Mounting Type	Thread Type
VB: Profile barrel LB: Round barrel	C: Air cushion Blank: Basic type D: Double shaft type J: Double shaft and adjustable stroke type	32 40 50 63 80 ... 250	25 50 75 ...	10 20 30 40 50 75 100	Blank: No magnet S: With magnet	Black: TPU seal	Blank: No CA CB J CR YJ LB YCJ FA BJ FB FD	Blank: G P: PT T: NPT

Order Example:

VBC series, double shaft air cylinder, Bore 40mm, stroke 50mm, with magnet, TPU seal material, CA mounting accessory, NPT thread.

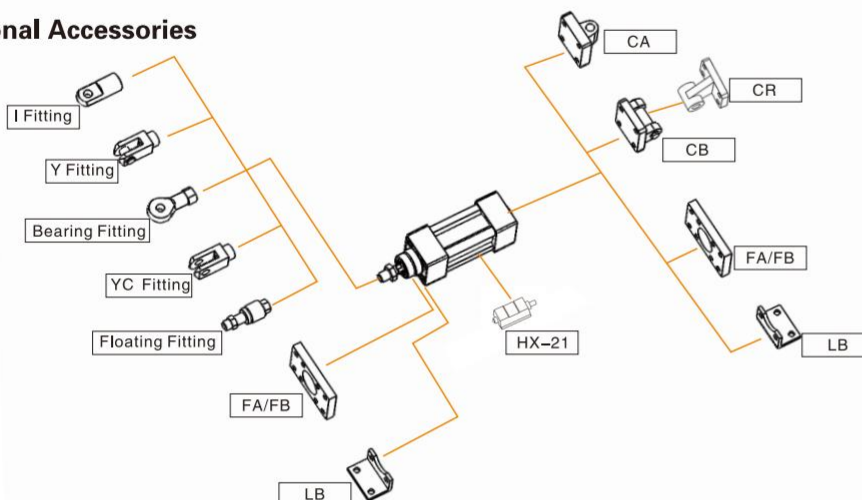
ERP code is: VBCD 40X50-S-CA-T

Note:1. If cylinder with several different mounting accessories, please use this sequential coding: CA/CB/CR/LB/FA/FB/IJ/YJ/BJ/FD

2.VBC series, bore range: Φ32-Φ200;LBC series,bore range:Φ32-Φ250

3.No CR/LB option for Φ200

Optional Accessories



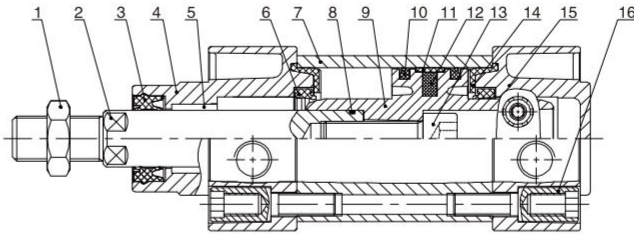
Stroke

Bore (mm)	Standard Stroke (mm)	Max. Stroke (mm)
32	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	1900
40	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800	1900
50-250	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1900

VBC/LBC Series ISO15552 Standard Cylinder



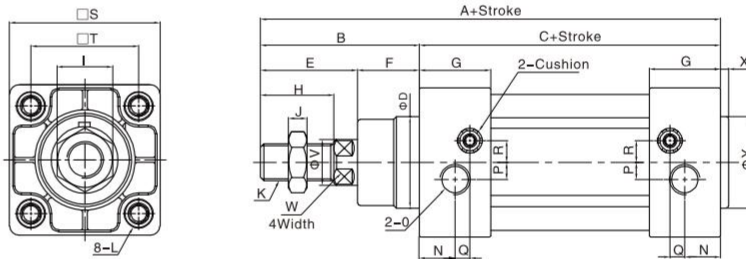
Internal Structure



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

Main Dimension

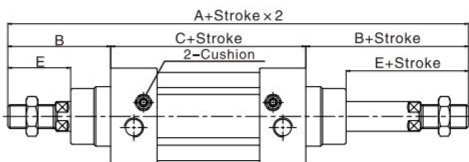
VBC



Bore/Sign	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	X	Y
32	142	48	94	30	29	19	27.5	22	17	6	M10x1.25	M6 depth16	13	1/8"	5.5	6	6	47	32.5	12	10	3	30
40	159	54	105	35	33	21	32	24	17	7	M12x1.25	M6 depth16	17	1/4"	6	7.5	8.5	53	38	16	13	3.5	35
50	175	69	106	40	42	27	31	32	23	8	M16x1.5	M8 depth16	15.5	1/4"	7.5	6.5	9.5	65	46.5	20	17	3.5	40
63	190	69	121	45	42	27	33	32	23	8	M16x1.5	M8 depth16	16.5	3/8"	7.5	7.5	11.5	75	56.5	20	17	4	45
80	214	86	128	45	53	33	33	40	26	10	M20x1.5	M10 depth17	16.5	3/8"	9	7.5	13.5	95	72	25	22	4	45
100	229	91	138	55	55	36	37	40	26	10	M20x1.5	M10 depth17	18.5	1/2"	9.5	8.5	13.5	115	89	25	22	4	55
125	279	119	160	60	74	45	46	54	41	13.5	M27x2.0	M12 depth20	23	1/2"	14	12	14	140	110	32	27	-	-
160	332	152	180	65	94	58	50	72	55	18	M36x2.0	M16 depth24	25	3/4"	15	12	20	180	140	40	36	-	-
200	347	167	180	75	110	57	50	72	55	18	M36x2.0	M16 depth24	25	3/4"	-	-	-	220	175	40	36	-	-
250	388	188	200	90	121	67	52	84	65	21	M42x2.0	M20 depth25	26.5	1"	20.5	7.5	21	270	220	50	45	10	90

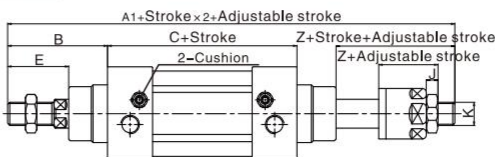
Note: With magnet and without magnet, the dimensions are same.

VBCD



Bore/Sign	A	A1	B	C	E	Z	J	K
32	190	188	48	94	29	27	6	M10x1.25
40	213	208	54	105	33	28	7	M12x1.25
50	244	233	69	106	42	31	8	M16x1.5
63	259	248	69	121	42	31	8	M16x1.5
80	300	286	86	128	53	39	10	M20x1.5
100	320	304	91	138	55	39	10	M20x1.5
125	398	372.5	119	160	74	48.5	13.5	M27x2.0
160	484	448	152	180	94	58	18	M36x2.0
200	514	462	167	180	110	58	18	M36x2.0
250	576	531	188	200	121	76	21	M42x2.0

VBCJ



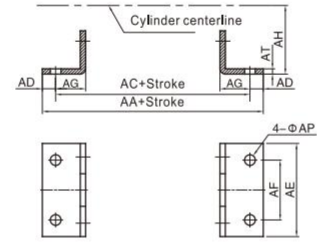
Note: 1. With magnet and no magnet, the dimensions are same.
 2. Not marked dimension is same as VBC standard type.
 3. LBC series dimensions are same as VBC.

Dimension of Mounting Accessories

LB



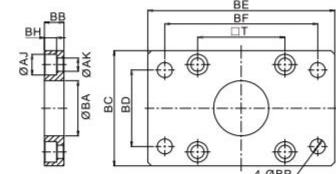
Bore	Model\Sign	AA	AC	AD	AE	AF	AG	AH	AP	AT
32	FJ-VBC32LB	158	142	8	47	32	24	32	7	4
40	FJ-VBC40LB	179	161	9	53	36	28	36	10	4
50	FJ-VBC50LB	190	170	10	65	45	32	45	10	5
63	FJ-VBC63LB	209	185	12	75	50	32	50	10	5
80	FJ-VBC80LB	248	210	19	95	63	41	63	12	6
100	FJ-VBC100LB	266	220	23	115	75	41	71	14.5	6
125	FJ-VBC125LB	290	250	20	140	90	45	90	16.5	8
160	FJ-VBC160LB	340	300	20	180	115	60	115	18.5	10
200	FJ-VBC200LB	380	320	30	220	135	70	135	24	12



FA/FB



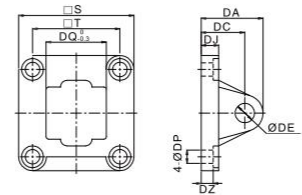
Bore	Model\Sign	AJ	AK	BA	BB	BC	BD	BE	BF	BH	BP	T
32	FJ-VBC32FA	11	6.5	30.5	10	47	32	80	64	6.5	7	32.5
40	FJ-VBC40FA	11	6.5	35.5	10	53	36	90	72	6.5	9	38
50	FJ-VBC50FA	14	9	40.5	12	65	45	108	90	8.5	9	46.5
63	FJ-VBC63FA	14	9	45.5	12	75	50	118	100	8.5	9	56.5
80	FJ-VBC80FA	17	11	45.5	16	95	63	150	126	10.5	12.5	72
100	FJ-VBC100FA	17	11	55.5	16	115	75	176	150	10.5	14.5	89
125	FJ-VBC125FA	19	13	62	20	140	90	218	180	12.5	16.5	110
160	FJ-VBC160FA	26	18	72	20	180	115	278	230	14.5	18.5	140
200	FJ-VBC200FA	26	18	82	25	220	135	318	270	17	22	175



CA



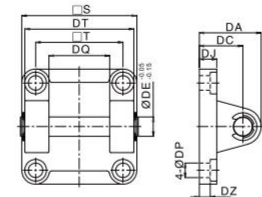
Bore	Model\Sign	DA	DC	DE	DJ	DP	DQ	DZ	S	T
32	FJ-VBC32CA	31	22	10	9.5	7	25.8	5.5	47	32.5
40	FJ-VBC40CA	37	25	12	9.5	7	27.8	5.5	53	38
50	FJ-VBC50CA	39	27	12	10.5	9	31.8	6.5	65	46.5
63	FJ-VBC63CA	47	32	16	10.5	9	39.7	6.5	75	56.5
80	FJ-VBC80CA	51	36	16	14.5	11	49.7	10	95	72
100	FJ-VBC100CA	61	41	20	14.5	11	59.7	10	115	89
125	FJ-VBC125CA	75	50	25	17.5	13	69.7	10	140	110
160	FJ-VBC160CA	82.5	55	30	20	18	89.7	19	176	140
200	FJ-VBC200CA	88.5	60	30	25	18	89.7	24	218	175



CB



Bore	Model\Sign	DA	DC	DE	DJ	DP	DQ	DT	DZ	S	T
32	FJ-VBC32CB	31	22	10	9.5	7	26 ^{+0.52} ₀	45	5.5	47	32.5
40	FJ-VBC40CB	37	25	12	9.5	7	28 ^{+0.52} ₀	52	5.5	53	38
50	FJ-VBC50CB	39	27	12	10.5	9	32 ^{+0.62} ₀	60	6.5	65	46.5
63	FJ-VBC63CB	47	32	16	10.5	9	40 ^{+0.62} ₀	70	6.5	75	56.5
80	FJ-VBC80CB	51	36	16	14.5	11	50 ^{+0.62} ₀	90	10	95	72
100	FJ-VBC100CB	61	41	20	14.5	11	60 ^{+0.74} ₀	110	10	115	89
125	FJ-VBC125CB	75	50	25	17.5	13	70 ^{+0.74} ₀	130	10	140	110
160	FJ-VBC160CB	82	55	30	20	18	90 ⁺¹ ₀	163.5	19	176.5	140
200	FJ-VBC200CB	89.5	60	30	25	18	90 ⁺¹ ₀	175	24	218	175



CR



Bore	Model\Sign	DC	DD	DE	DF	DJ	DP	DQ	DM	DN	S	T
32	FJ-VBC32CR	32	10	10	21	8	7	25.8	31	18	51	38
40	FJ-VBC40CR	36	11	12	24	10	7	27.8	35	22	54	41
50	FJ-VBC50CR	45	13	12	33	12	9	31.8	45	30	65	50
63	FJ-VBC63CR	50	15	16	37	12	9	39.7	50	35	67	52
80	FJ-VBC80CR	63	15	16	47	14	11	49.7	60	40	86	66
100	FJ-VBC100CR	71	19	20	55	15	11	59.7	70	50	96	76
125	FJ-VBC125CR	90	22.5	25	70	20	14	69.7	90	60	124	94
160	FJ-VBC160CR	115	30	30	97	26	14	90	126	88	157	118
200	FJ-VBC200CR	135	30	30	105	31	18	90	130	90	162	122

