

DNC Series ISO6431 Standard Cylinder



DNC 50 x 100

MDNC 50 x 100

TDNC 50 x 100

Ordering Code

DNC **50** × **100** — **25** — **S** —

Tube Type
 Blank: Square Type
 T: Tie-rod Type
 M: Mickey Mouse Type

Series Code
 DNC: ISO6431 Standard Double Action Type
 DNCD: ISO6431 Standard Two Axis Double Action Type
 DNCJ: ISO6431 Two Axis Stroke Adjust Type

Cylinder Bore
 32mm-125mm

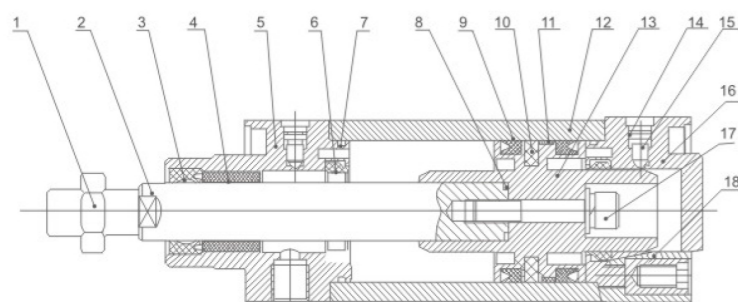
Stroke
 25: 25mm
 50: 50mm
 75: 75mm

Adjust Stroke

Magnet Code
 Blank: Without Magnet
 S: With Magnet

Fixed Type
 Blank: Normal type
 LB: Front and back fixed type
 FA: Front cover fixed type (Front flange type)
 FB: Back cover fixed type (Back flange type)
 CA: Back cover fixed type (Single earring)
 CB: Back cover fixed type (Double earring)
 SDB: Back cover fixed type

Internal structure



NO	Designation	NO	Designation
1	Piston Rod Nut	2	Piston Rod
3	Front Cover Seal Ring	4	Bearing
5	Front Cover	6	Buffering O-Ring
7	O-Ring	8	Piston rod O-Ring
9	Piston O-Ring	10	Magnet (Optional)
11	Wear Ring	12	Barrel
13	Piston	14	Cushion Seal
15	Cushion Needle	16	Back Cover
17	Hex Socket Screw	18	Profile Bolt

Specification

Bore(mm)	32	40	50	63	80	100	125
Motion Pattern	Double Action						
Working Medium	Filtered Air						
Compression Pressure	1.5MPa						
Max. Operating Pressure	1.0MPa						
Min. Operating Pressure	0.1MPa						
Buffer	Air Buffer(Standard)						
Condition Temperature	-5~70°C						
Operating Speed	50~800mm/s						
Port Size	G1/8"	G1/4"	G3/8"	G1/2"			

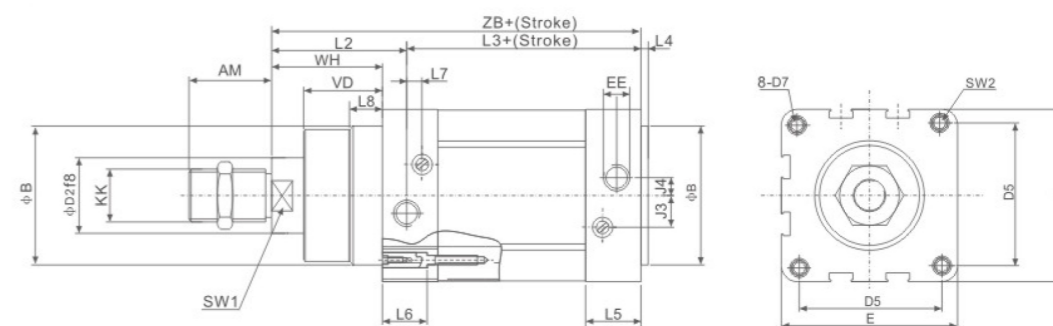
Stroke

Bore	Standard Stroke	Buffer Stroke	Stroke Range
32			
40		20	
50	25 40 50 80		10~2000
63	100 125 160	22	
80	200 250 320	32	
100	400 500	35	
125			

DNC Series ISO6431 Standard Cylinder

Overall Dimensions

Normal Type
DNC-S

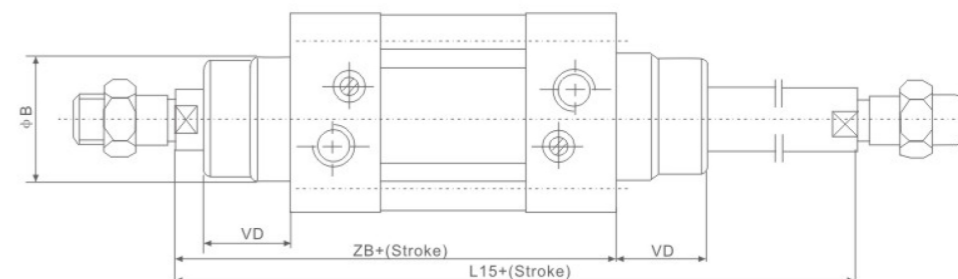


Dimension Sheet

Bore	AM	B	D2	D5	D7	E	EE(G)	J3	J4	KK	L2	L3	L4	L5	L6	L7	L8	SW1	SW2	VD	WH	ZB
32	22	30	12	32.5	M6	45	1/8	6	5.2	M10×1.25	40	80	4	26	22	3.3	8	10	6	16	26	120
40	24	35	16	38	M6	54	1/4	8	6	M12×1.25	46	89	4	29.6	22	3.6	10	13	6	20	30	135
50	32	40	20	46.5	M8	64	1/4	10	8.5	M16×1.5	54	90	4	30	22	5.1	10	17	8	27	37	144
63	32	45	20	56.5	M8	75	3/8	12.4	10	M16×1.5	57	101	4	35.5	22	6.6	10	17	8	27	37	158
80	40	45	25	72	M10	93	3/8	12.5	8	M20×1.5	65	109	4	36	25	10.5	10	22	10	34.5	46	174
100	40	55	25	89	M10	110	1/2	11.8	10	M20×1.5	71	118	4	39	25	8	12.5	22	10	38	51	189
125	54	60	32	110	M12	134	1/2	13	8	M27×2	95	128	6	44.7	30	14	12.5	28	12	46	65	223

Overall Dimensions

Double Piston Rod Type
DNC-D-S



Dimension Sheet

Bore	32	40	50	63	80	100	125
B	30	35	40	45	45	55	60
L15	146	165	182	194	220	240	298
VD	16	20	27	27	34.7	38.2	46
ZB	120	135	144	158	174	189	223

DNCB Series Booster Cylinder



DNCB-50 x 25 x 50

Specification

Motion Pattern	Filtered Air
Compression Pressure	1.5MPa
Max. Operating Pressure	1.0MPa
Min. Operating Pressure	0.1MPa
Condition Temperature	-5~70°C

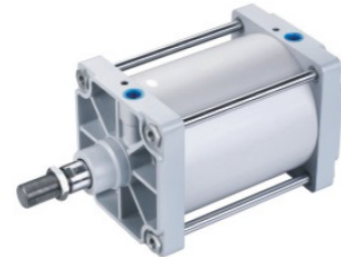
Product instruction

Booster cylinder combine 2 or more ISO15552 standard cylinder with the same bore and stroke. Create twice or multiple force as standard cylinder. The connection of 2 or more cylinders are linked with the same material Compact structure and easy for installation.

DNC Series ISO15552 Standard Cylinder



DNG 200 x 100-S



DNG 250 x 200-S

Ordering Code

DNG **160** × **100** — **25** — **S** — □

Series Code
DNG:ISO15552 Standard Double Action Type
DNGD:ISO15552 Standard Two Axis Double Action Type
DNGJ:ISO15552 Two Axis Stroke Adjust Type

Cylinder Bore
160mm-320mm

Stroke

Adjust Stroke
25:25mm
50:50mm
75:75mm

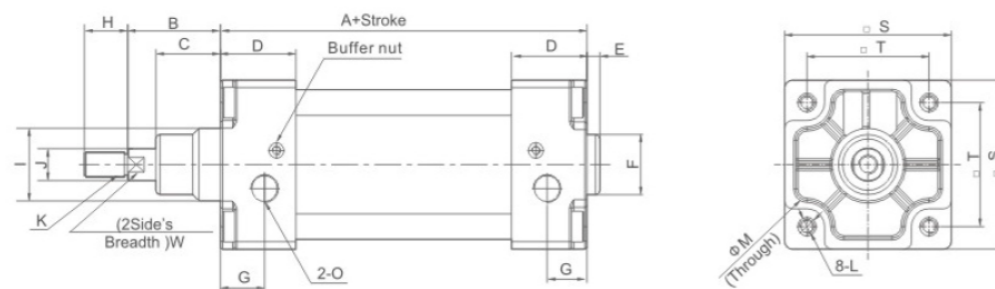
Magnet Code
Blank:Without Magnet
S:With Magnet

Fixed Type
Blank:Normal type
LB:Front and back fixed type
FA:Front cover fixed type(Front flange type)
FB:Back cover fixed type(Back flange type)
CA:Back cover fixed type (Single earring)
CB:Back cover fixed type(Double earring)

Specification

Bore(mm)	160	200	250	320
Motion Pattern	Double Action			
Working Medium	Air			
Fixed Type	Normal type FA type FB type CA type CB type LB type TC type			
Working Pressure Range	0.1~1.0MPa			
Ensured Pressure Resistance	1.5MPa			
Operating Temperature Range	-5~60℃			
Operating Speed Range	50~500mm/s			
Buffer Type	Adjustable Buffer			
Port Size	G3/4"		G1"	
Lubrication	Not required (Use Turbine oilISO Vg32 when necessary)			

Overall Dimensions



Dimension Sheet

Bore/Symbol	A	B	C	D	E	F	G	H	I	J	K	L	M	S	T	O
160	180	80	60	50	6	φ65	25	72	φ65	40	M36×2	M16	φ25φ30	180	140	G3/4"
200	180	95	70	50	6	φ75	25	72	φ75	40	M36×2	M16	φ25φ30	220	175	G3/4"
250	200	105	67	52	10	90	31	84	90	50	M42×2	M20	φ30	270	220	G1"
320	218	120	82	52	10	110	31	96	110	63	M48×2	M24	φ34	340	270	G1"

SI Series ISO6431 Standard Cylinder



SI 50 x 100



SIJ 50 x 100-25

Ordering Code

SI **50** × **50** — **25** — **S** — □

Series Code
SI:ISO6431 Standard Double Action Type
SID:ISO6431 Standard Two Axis Double Action Type
SIJ:ISO6431 Two Axis Stroke Adjust Type

Cylinder Bore
32mm-200mm

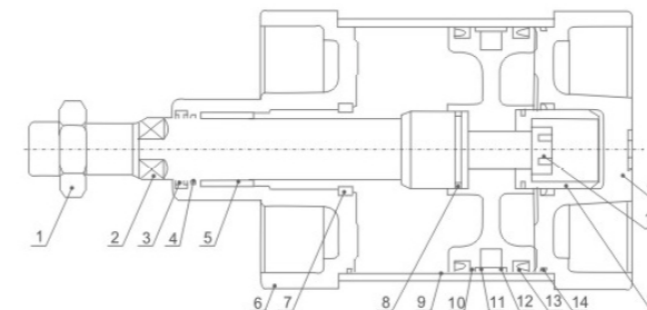
Stroke

Adjust Stroke
25:25mm
50:50mm
75:75mm

Magnet Code
Blank:Without Magnet
S:With Magnet

Fixed Type
Blank:Normal type
LB:Front and back fixed type
FA:Front cover fixed type(Front Flange Type)
FB:Back cover fixed type(Back Flange Type)
CA:Back cover fixed type (Single Earring)
CB:Back cover fixed type(Double Earring)
TC:Central trunnion type
TC-M:Central trunnion type attaching foot seat

Internal structure



NO	Designation	NO	Designation
1	Piston Rod Nut	10	Piston
2	Piston rod	11	Wearing
3	Front cover seal ring	12	Magnet(Optional)
4	O-Ring	13	Piston O-Ring
5	Bearing	14	Pipe wall O-Ring
6	Front cover	15	Damping
7	Buffering O-Ring	16	Hex socket screw
8	Piston rod O-Ring	17	Back cover
9	Barrel		

Specification

Bore(mm)	32	40	50	63	80	100	125	160	200
Motion Pattern	Double Action								
Working Medium	Air								
Fixed Type	Normal type FA type FB type CA type CB type LB type TC type								
Working Pressure Range	0.1~0.9MPa								
Ensured Pressure Resistance	1.35MPa								
Operating Temperature Range	-5~70℃								
Operating Speed Range	50~800mm/s								
Buffer Type	Adjustable Buffer								
Buffer Stroke					24			32	
Port Size	G1/8"	G1/4"		G3/8"		G1/2"		G3/4"	

SI Series ISO6431 Standard Cylinder

Cylinder theory output

Cylinder inside Diameter	External Diameter of Piston Rod	Motion Pattern	Compression Area(cm ²)	Air Pressure(kgf/cm ²)								
				1	2	3	4	5	6	7	8	9
32	12	Double Action Press Side	8.04	8.04	16.08	24.12	32.16	40.20	48.24	56.28	64.32	72.36
		Pull Side	6.90	6.90	13.80	20.07	27.60	34.50	41.40	48.30	55.20	62.10
40	16	Double Action Press Side	12.56	12.56	25.12	37.68	50.24	62.80	75.36	87.92	100.24	113.04
		Pull Side	10.55	10.55	21.10	31.65	42.20	52.75	63.30	73.85	84.40	94.95
50	20	Double Action Press Side	19.63	19.63	39.26	58.89	78.52	98.15	117.78	137.41	157.04	176.67
		Pull Side	16.49	16.49	32.98	49.47	65.96	82.45	98.94	115.43	139.92	148.41
63	20	Double Action Press Side	31.17	31.17	62.34	93.51	124.68	155.85	187.02	218.19	249.36	280.53
		Pull Side	28.03	28.03	56.06	84.09	112.12	140.15	168.18	196.21	224.24	252.27
80	25	Double Action Press Side	50.26	50.26	100.52	150.78	201.04	251.30	301.56	351.82	402.08	452.34
		Pull Side	45.36	45.36	90.72	136.08	181.44	226.80	272.16	317.52	362.88	408.24
100	25	Double Action Press Side	78.53	78.53	157.06	235.59	314.12	392.65	471.18	549.71	628.24	706.77
		Pull Side	71.47	71.47	142.94	214.41	285.88	357.35	428.82	500.29	571.76	643.23
125	32	Double Action Press Side	122.72	122.72	245.44	368.16	490.88	613.60	736.32	859.04	981.76	1104.48
		Pull Side	114.68	114.68	229.36	344.04	458.72	573.40	688.08	802.76	917.44	1032.12
160	40	Double Action Press Side	201.06	201.06	402.12	603.18	804.24	1005.30	1206.36	1407.42	1608.48	1809.54
		Pull Side	188.49	188.49	376.98	565.47	753.96	942.45	1130.94	1319.43	1507.92	1696.41
200	40	Double Action Press Side	314.16	314.16	628.32	942.48	1256.64	1570.80	1884.96	2199.12	2513.28	2827.44
		Pull Side	301.57	301.57	603.14	904.71	1206.28	1507.80	1809.42	2100.99	2412.56	2714.13

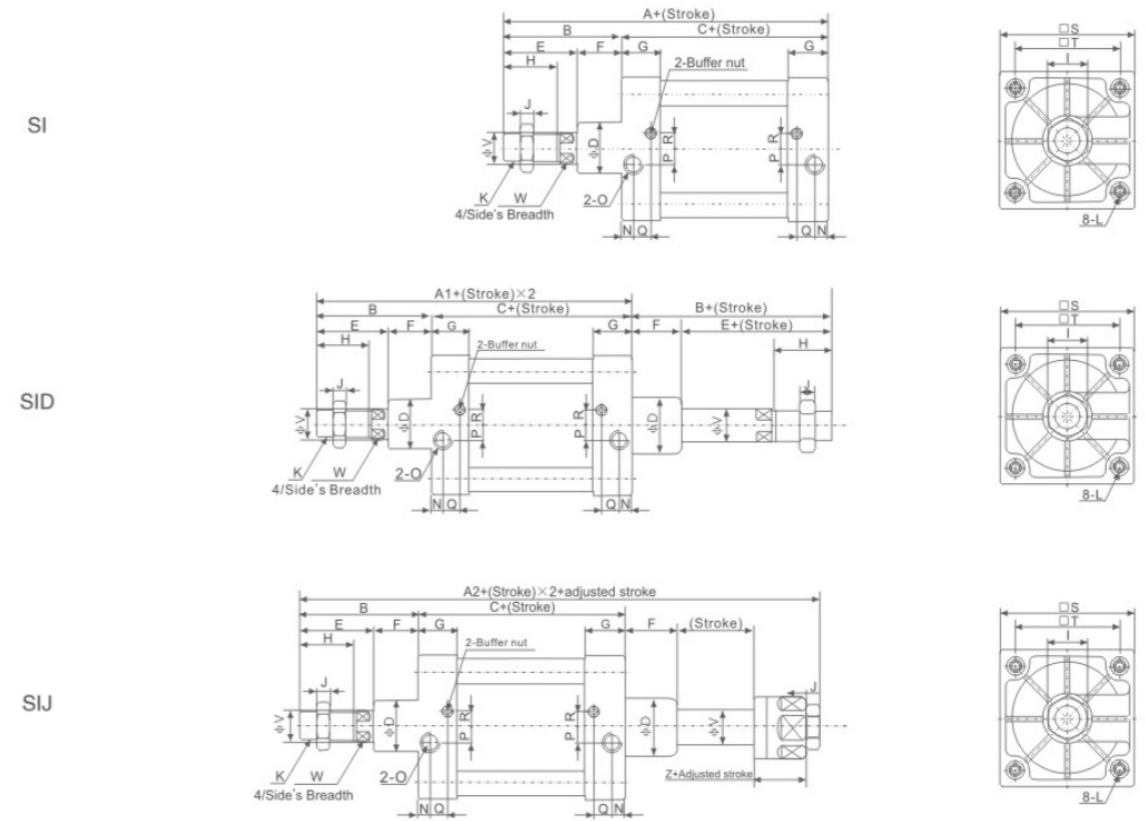
Stroke

Bore(mm)	Standard Stroke	Max.Stroke	Permissible Stroke
32	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
160	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

If you need special stroke, please Tell us, we can make according your require.

SI Series ISO6431 Standard Cylinder

Overall Dimensions



Dimension Sheet

Bore/Symbol	A	A1	A2	B	C	D	E	F	G	H	I	J	K	L
32	142	190	185	48	94	30	32	16	27.5	22	17	6	M10×1.25	M6
40	159	213	205	54	105	35	36	18	29	24	19	7	M12×1.25	M6
50	175	244	231	70	105	40	45	25	30	32	24	8	M16×1.5	M8
63	190	259	245	70	120	45	46	24	31	32	24	8	M16×1.5	M8
80	214	300	283	86	128	45	56	30	35	40	30	10	M20×1.5	M10
100	227	316	298	89	138	55	57	32	36	40	30	10	M20×1.5	M10
125	278	396	368	118	160	60	73	45	46	54	41	10	M27×2	M12
160	332	484	448	152	180	65	94	58	50	72	55	18	M36×2	M16
200	337	494	452	157	180	75	100	51	51	72	55	18	M36×2	M16

Bore/Symbol	N	O	P	Q	R	S	T	V	W	Z
32	13.5	G1/8"	4	7.5	7	47	32.5	12	10	21
40	16	G1/4"	6	8.5	9	53	38	16	13	21
50	15.5	G1/4"	8.5	7.5	7.5	65	46.5	20	17	23
63	16.5	G3/8"	7.5	8.5	9	75	56.5	20	17	23
80	16.5	G3/8"	11	8.5	13.5	95	72	25	22	29
100	18.5	G1/2"	13.5	9.5	14.5	115	89	25	22	29
125	23	G1/2"	14	12	14	140	110	32	28	35
160	25	G3/4"	15	12	20	180	140	40	36	40
200	25	G3/4"	15	12	20	220	175	40	36	40