Specifications

Bore size(mm)	40	50	63
Fluid	Air		
Proof pressure	1.5 MPa		
Maximum operating pressure	1.0 MPa		
Minimum operating pressure	0.05 MPa		
Ambient and fluid temperature	Without magnetic switch: -10℃ to 70℃ With magnetic switch: -10℃ to 60℃		
Piston speed (mm/s)	50 to 500		
Cushion	Unclamped side (head end): With air cushion		
Speed controller	Equipped on both ends		
Lubrication	Non-lube		
Stroke length tolerance	$^{+1.0}_{0}$		
Mounting Note)	Double clevis		

Note: A clevis pin, cotter pins, flat washers are equipped as a standard.

Standard stroke table

Bore size(mm)	Standard stroke (mm)
40	50, 75, 100, 125, 150
50, 63	50, 75, 100, 125, 150, 200

Ordering code

Without magnetic ring **NCK1 A 50 □ – 100 Y □ Z**

Standard magnetic ring built-in type **NCKG1 A 50 □ – 100 Y □ Z**

Clevis width

A	16.5 mm
B	19.5 mm

Bore size

40	40mm
50	50mm
63	63mm

Thread type

Blank	Rc1/4
TN	NPT1/4
TF	G1/4

Stroke

Φ40	50, 75, 100, 125, 150
Φ50	50, 75, 100, 125, 150, 200
Φ63	50, 75, 100, 125, 150, 200

End bracket

Blank	None
I	Single knuckle joint (M6 without tap)
IA	Single knuckle joint (M6 with tap)
Y	Double knuckle joint (M6 without tap)
YA	Double knuckle joint (M6 with tap)

Note: A knuckle pin, cotter pins and flat washers are provided as a standard for Y and YA.

Option

Blank	None
B	Limit switch mounting base
D	Dog fitting Note 1)
L	Foot
K Note 2)	Pedestal (for 75, 100, 150 strokes only)

Note 1: When the dog fitting is selected, choose the rod end bracket IA or YA (M6 with tap).
2: Only available for clevis width A (16.5 mm)

End bracket/Options

Symbol	Description		Part No.	
			NCK1A/NCKG1A	NCK1B/NCKG1B
I	Single knuckle joint	M6 without tap	NCKB-I04	
IA		M6 with tap	NCKB-IA04	
Y	Double knuckle joint (A knuckle pin, cotter pins, flat washers are equipped as a standard.)	M6 without tap	NCKA-Y04	NCKB-Y04
YA		M6 with tap	NCKA-YA04	NCKB-YA04

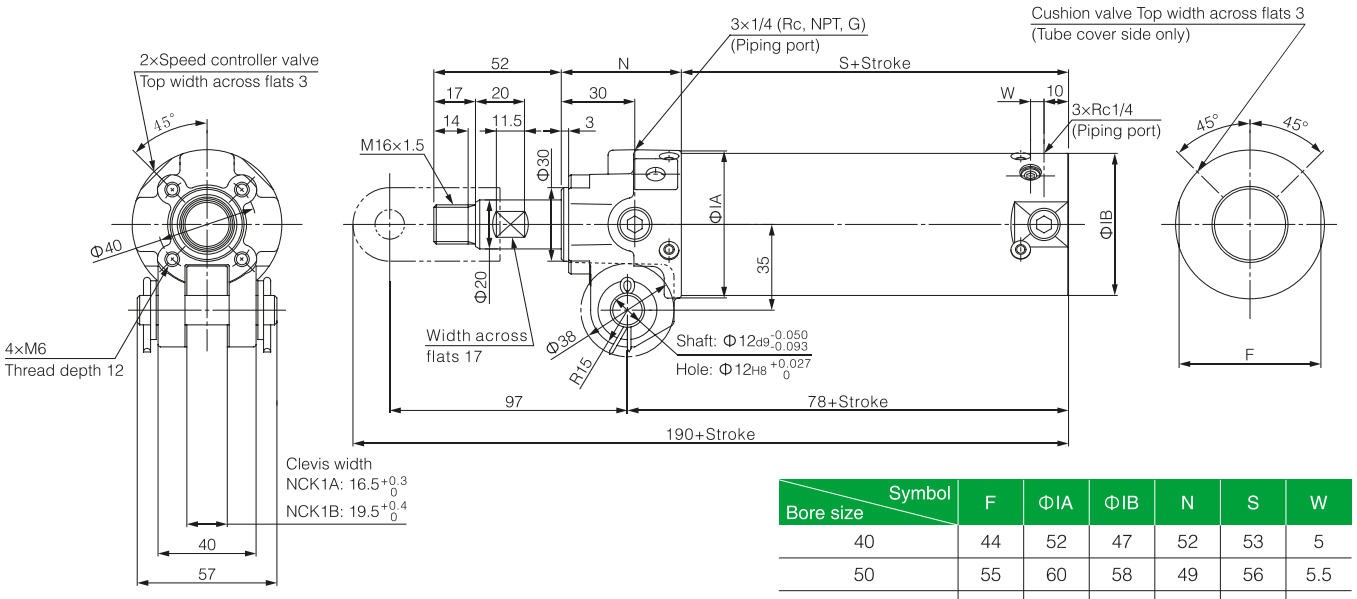
Theoretical output

Unit: N

Bore size (mm)	Rod size (mm)	Operating direction	Piston area (mm^2)	Operating pressure (MPa)			
				0.3	0.4	0.5	0.6
40	20	OUT	1260	378	504	630	756
		IN	943	283	377	472	566
50	20	OUT	1960	588	784	980	1180
		IN	1650	495	660	825	990
63	20	OUT	3120	934	1250	1560	1870
		IN	2800	840	1120	1400	1680

Dimensions

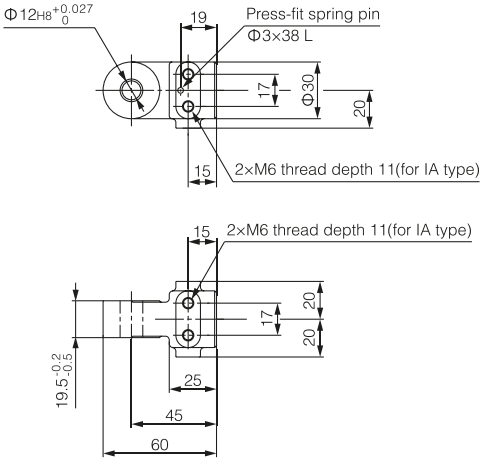
NCK□1□40, 50, 63 Band mounting type



Bore size \ Symbol	F	ΦIA	ΦIB	N	S	W
40	44	52	47	52	53	5
50	55	60	58	49	56	5.5
63	69	74	72	49	56	5.5

End bracket

Single knuckle joint

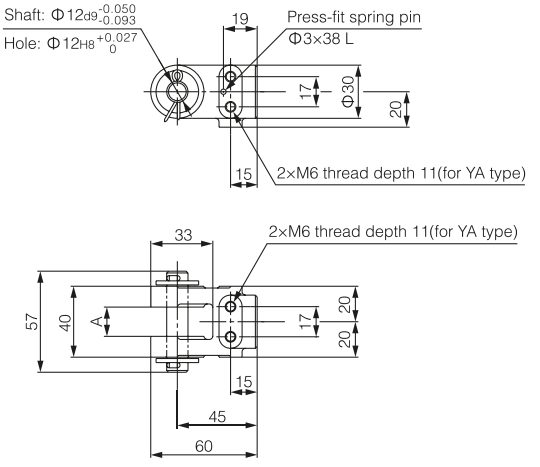


Material: Cast iron

Part No.	End bracket symbol	Applicable clamp cylinder
NCKB-I04	I (M6 without tap)	NCK□1A series NCK□1B series
NCKB-IA04	IA (M6 with tap)	

Note: 1. A spring pin is attached to the single knuckle joint as a standard.
2. The current model is equivalent to the component part number NCKB-IA04 (end bracket symbol IA).

Double knuckle joint

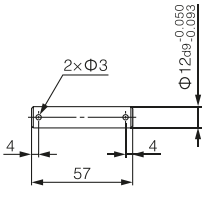


Material: Cast iron

Part No.	End bracket symbol	A	Applicable clamp cylinder
NCKA-Y04	Y (M6 without tap)	16.5 +0.3 0	NCK□1A series
NCKA-YA04	YA (M6 with tap)		
NCKB-Y04	Y (M6 without tap)	19.5 +0.4 0	NCK□1B series
NCKB-YA04	YA (M6 with tap)		

Note: 1. A knuckle pin, cotter pins, flat washers and a spring pin are attached to the double knuckle joint as a standard.
2. The current model is equivalent to the component part number NCKA-YA04, NCKB-YA04 (end bracket symbol YA).

Pin



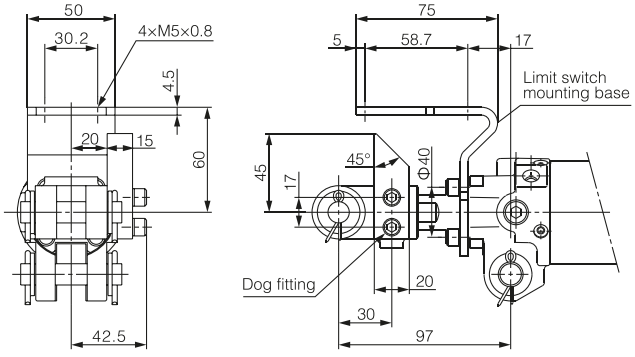
Material: Carbon steel

Part No.	Usage
NCK-P04	Knuckle pin Clevis pin

Note: Cotter pins and flat washers are attached to the pin as a standard.

NCK1 Series options

Limit switch mounting base/Dog fitting



Material: Rolled steel

Part No.	Option symbol	Name	Applicable clamp cylinder
NCK-B04	B	Limit switch mounting base	NCK□1A series NCK□1B series
NCK-D04	D	Dog fitting	

Note: 1. Limit switch mounting base and dog fitting can be repositioned by removing the hexagon socket head cap screw.
2. When ordering the limit switch mounting base and the dog fitting individually, mounting bolts (hexagon socket head cap screw) and spring washers will be attached as a standard.

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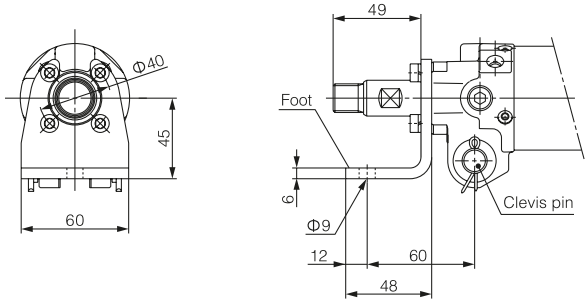
When you attach a dog fitting, be sure to use a knuckle joint, M6 with tap (end bracket symbol IA or YA).
The dog fitting cannot be attached to the knuckle joint, M6 without tap (end bracket symbol I or Y).

Foot

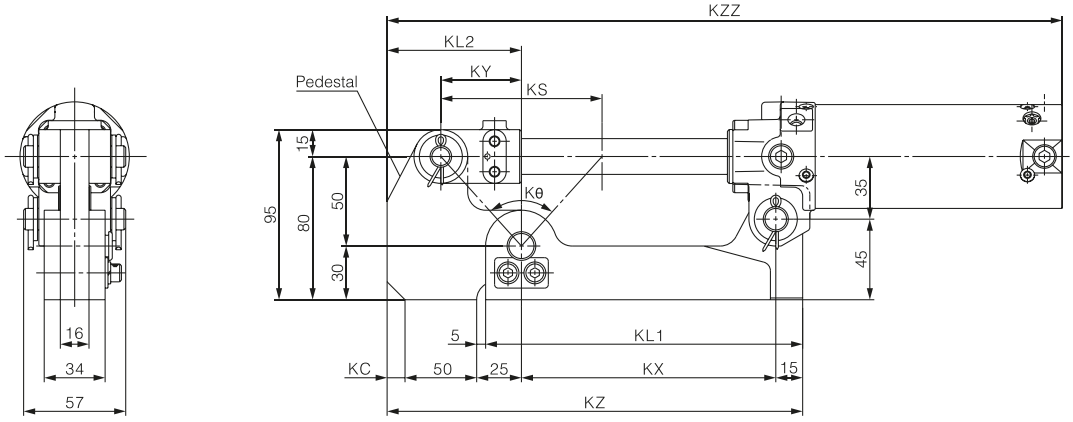


Material: Carbon steel

Part No.	Option symbol	Applicable clamp cylinder
NCK-L04	L	NCK□1A series NCK□1B series

Note: 1. A mounting bolt (hexagon socket head cap screw) and a spring washer will be attached as a standard for the foot bracket.
2. When mounting the cylinder, use both the foot and clevis pin. Please avoid using the foot by itself as this may result in damage.

Pedestal



Material: Carbon steel

Part No.	Option symbol	KL1	KL2	KS	KX	KY	KZ	Kθ	KC	KZZ				Applicable clamp cylinder
										NCKG□40	NCKP□40	NCKG□50 NCKP□50	NCKG□63 NCKP□63	
NCKA-K075	K	167	75	70	132	35	222	69° 59'	0	360	365	360		NCK□1A40-75YZ NCK□1A50-75YZ NCK□1A63-75YZ
NCKA-K100		177	75	90	142	45	232	83° 58'	0	395				NCK□1A40-100YZ NCK□1A50-100YZ NCK□1A63-100YZ
NCKA-K150		202	85	140	167	70	267	108° 55'	10	480				NCK□1A40-150YZ NCK□1A50-150YZ NCK□1A63-150YZ

Note: Only available for the NCK□1A series (Clevis width 16.5 mm)