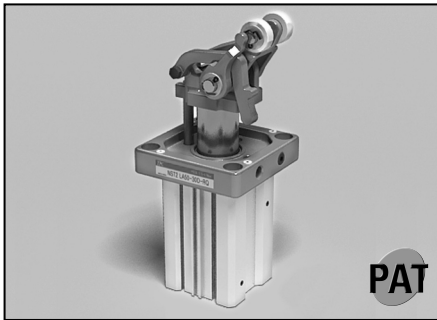


# Stopper Cylinder(Backward direction lever lock release type)

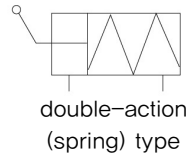
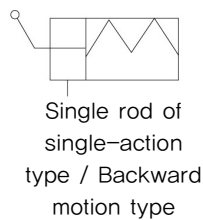
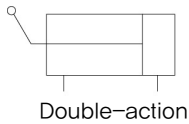
## Series NST2

Bore Size :  $\varnothing 50$



- Lever position changeable by 90(degrees) for 4 directions
- Built-in shock absorber easy for maintenance and replacement
- Single-action, Double-action, Double-action (spring lead-in type)
- Auto switch of super-compact type can be attached
- Lever lock can be released for pallet of reverse direction motion

### Symbol



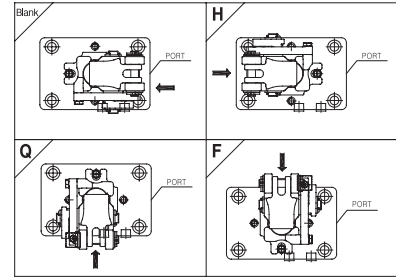
## How to Order

**NST2 LA 50 - 30 D M - R Q - W4 S**

1 2 3 4 5 6 7 8 9 10

- NST2 = NST 2nd. SERIES Stopper Cylinder**
- Rod cover shape**  
LA : Rectangle  
LC : Square
- Bore Size**  
50 :  $\varnothing 50$
- Stroke(mm)**  
50(Rectangle) : 25, 30, 40mm  
50(Square) : 30mm
- Acting**  
Blank : Single-acting / backward motion type  
D : Double-acting type  
Z : Double-acting (spring lead-in type)
- Roller**  
Blank : Resin (MC Nylon)  
M : Rolled steel
- Lever Lock Equipment**  
Blank : None  
R : Release the lever lock for pallet of backward motion (including the lever lock function)  
S : Stop the pallet (lever lock function)

### 8 lever position



### 9 Auto switch

- Blank : None  
W4 : Reed Switch  
W8H : Micro auto switch (horizontal type, 2 line type)  
W8V : Micro auto switch (vertical type, 2 line type)  
Solid State switch  
W9H : Micro auto switch (horizontal type, 2 line type)  
W9V : Micro auto switch (vertical type, 2 line type)

### 10 Number of switches

- Blank : 2 pcs.  
S : 1 pc.

## Product specification

Acting	Single-acting, Double-acting, Double-acting (spring lead-in type)
Fluid	Air
Proof pressure	1.5 MPa(15kgf/cm <sup>2</sup> )
Range of Operating pressure	0.1 MPa(1kgf/cm <sup>2</sup> )~1.0MPa(10kgf/cm <sup>2</sup> )
Ambient and fluid temperature	-5°C ~ 60°C (But, no freezing required)
Fueling	None
Cushion	Rubber
Allowable tolerance of stroke length	0~ <sup>+1.4</sup> <sub>0</sub>
Mounting	Flange
AUTO S/W(Optional)	Auto switch of super-compact attached type

## Composition specification

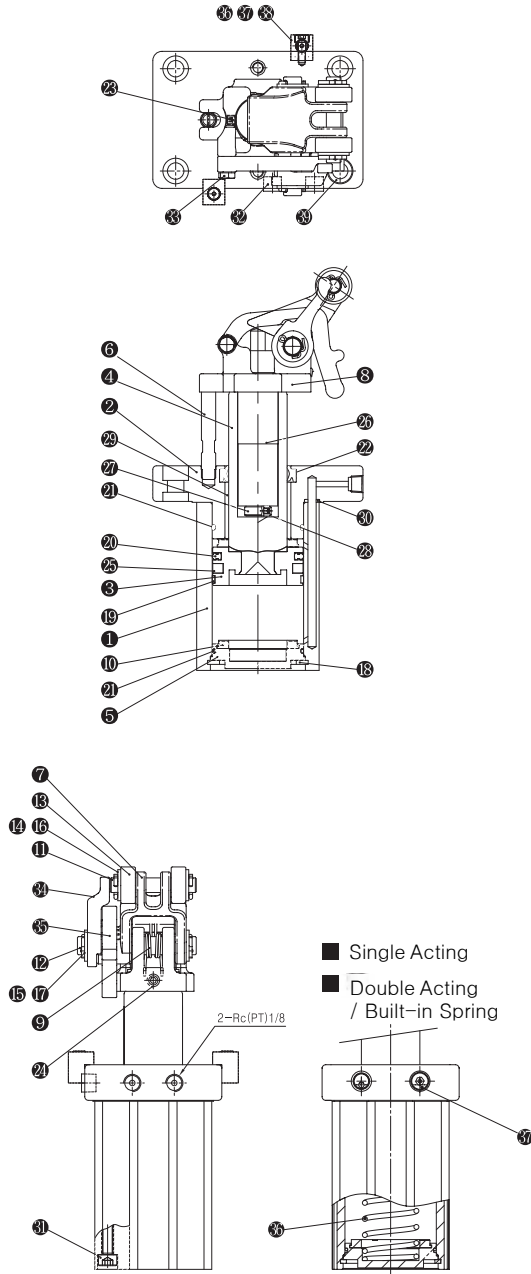
FLANGE COVER TYPE	STROKE(mm)	Weight(30st)	Bore Size	Remarks
LA	25, 30, 40	2.17 Kg	$\varnothing 32$	
LC	30	2.18 Kg	$\varnothing 32$	

- ACP
- UACP
- APM
- AS
- AX
- AM
- AM2
- AL
- ALX
- (U)AQ
- ADQ
- ADQCP
- (U)AQ2
- ADQ2
- AG
- UAG
- NGQ
- UNGQ
- AJ
- AJM
- ABK
- ACK1
- NSK
- GX
- AGX
- NDC
- NDM
- ADR
- NP
- NBP
- AMR
- UAMR
- ARD
- UARD
- NST**
- NST2**
- AST
- ASTH
- NLPD
- NLCD
- NLCS
- ASL
- NRP
- NRT
- NRC
- NFH2
- NFHL2
- NFW2
- NFP2
- NFS
- NFC3
- SB
- ABC
- SAH
- NBU
- ACU
- SE
- ARM

# NST2 Series

## Construction / Parts List

Ø 50



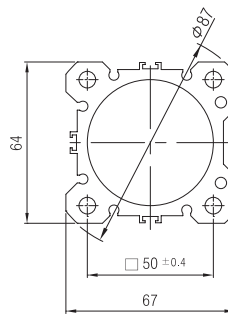
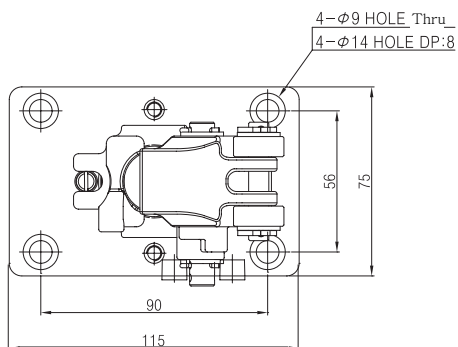
### Part List

NO	Description	Material		Note
1	TUBE	Aluminum alloy	1	
2	ROD COVER	Aluminum alloy	1	
3	PISTON	Aluminum alloy	1	
4	PISTON ROD	Carbon steel	1	
5	HEAD COVER	Aluminum alloy	1	
6	GUIDE ROD	Carbon steel	1	
7	LEVER	Carbon steel	1	
8	LEVER HOLDER	Carbon steel	1	
9	LEVER SPRING	Spring steel	1	
10	BUMPER	NBR	2	HEAD, ROD
11	ROLLER PIN	Carbon steel	1	
12	LEVER PIN	Carbon steel	1	
13	ROLLER	MC Nylon	2	
14	WASHER	Rolled steel	2	
15	WASHER	Rolled steel	2	
16	SPLIT PIN	Wrought steel	2	
17	SPLIT PIN	Wrought steel	2	
18	C SNAP RING	Spring steel	1	
19	WEARING	Resin	1	
20	PISTON PACKING	NBR	1	
21	GASKET	NBR	2	ROD COVERS, HEAD COVERS
22	ROD PACKING	NBR	1	
23	Six angles hole stop SCREW	Carbon steel	1	
24	Six angles hole stop SCREW	Carbon steel	1	
25	MAGNET RING	NBR	1	
26	SHOCK ABSORBER		(1)	
27	DAMPER		(1)	
28	Six angles hole stop SCREW	Carbon steel	(1)	
29	DU BUSH	Lead Bronze	1	
30	O - RING	NBR	2	
31	Six angles hole BOLT	Carbon steel	4	25st : 95 ℓ, 30st : 100 ℓ, 40st : 110 ℓ
32	PORT PLUG		2	
33	Fixing BOLT	Carbon steel	(1)	OPTION
34	RELEASE LEVER	Carbon steel	(1)	OPTION
35	HOOK	Carbon steel	(1)	OPTION
36	STOPPER BLOCK	Aluminum alloy	(1)	OPTION
37	Six angles hole BOLT	Carbon steel	(1)	OPTION
38	PLATE BUMPER	Urethane	(1)	OPTION
39	SPACER	Aluminum alloy	(1)	OPTION
40	RETURN SPRING	Spring steel	1	
41	PLUG WITH FIXED ORIFICE		(1)	OPTION

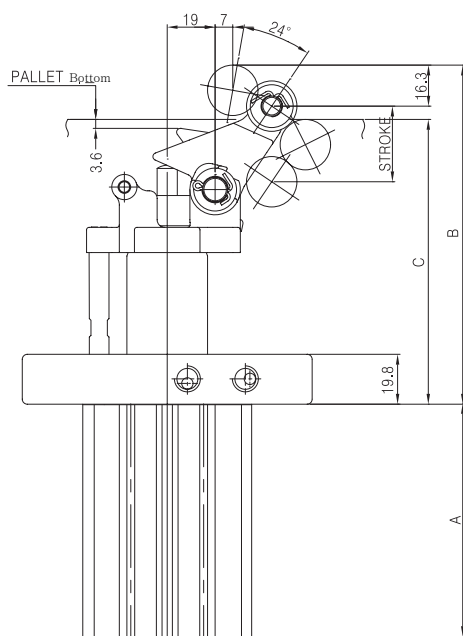
# Stopper Cylinder(Backward direction lever lock release type) **NST2** Series

## Dimensions

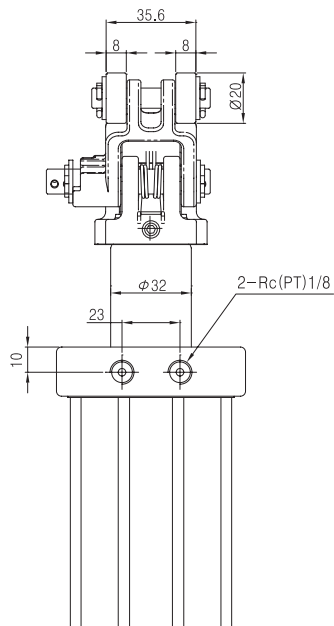
NST2LA50 (Standard)



VIEW "A"



↑  
"A"



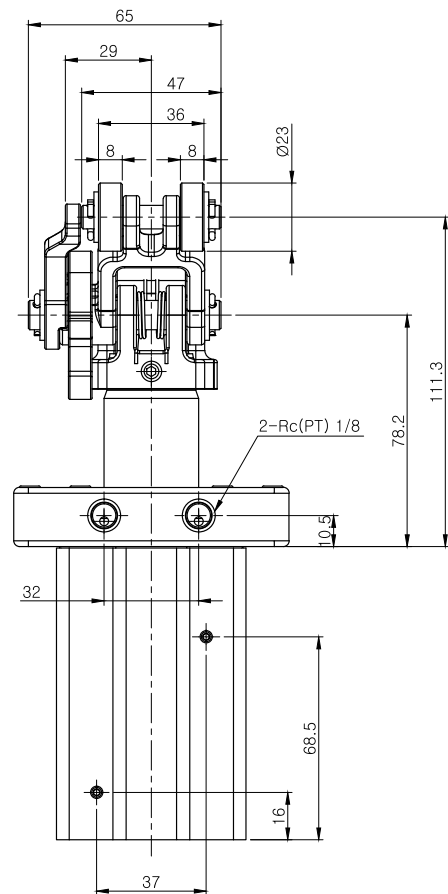
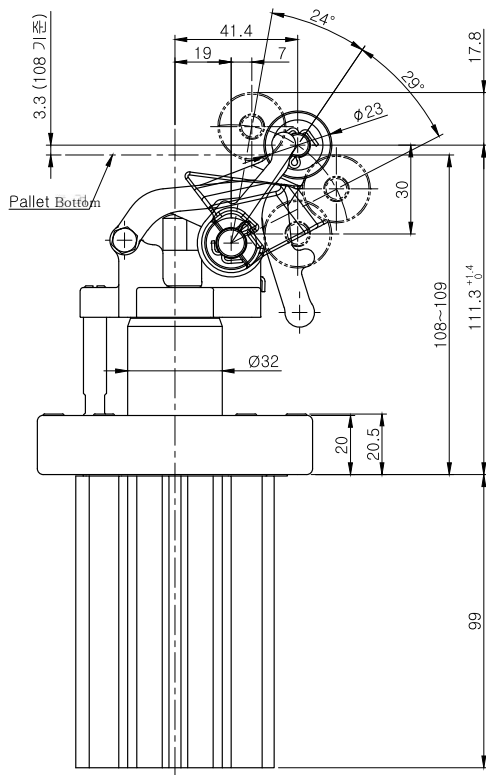
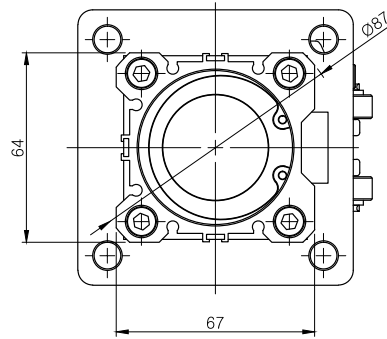
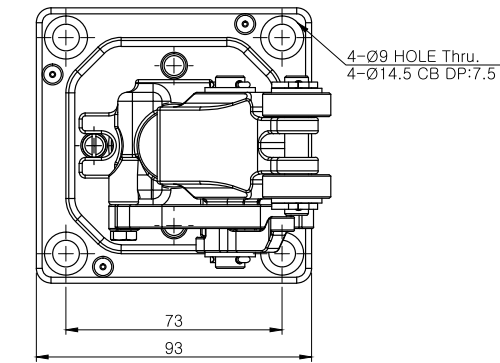
Unit (mm)

St.	Dim	A	B	C
25		87.2	129	108
30		92.2	134	113
40		102.2	144	123

# NST2 Series

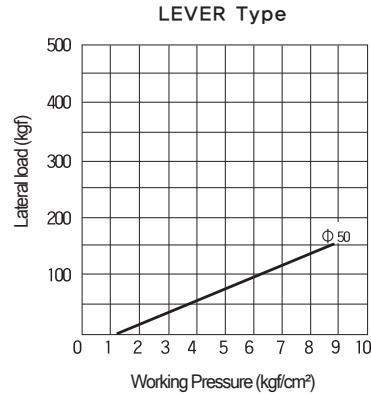
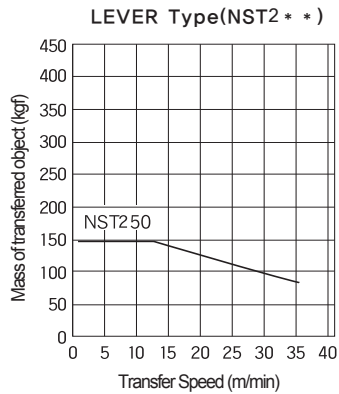
## Dimensions

NST2LC50(Rod Cover Square type)



# Stopper Cylinder(Backward direction lever lock release type) **NST2 Series**

## Stopper Cylinder Selection Process



### ⚠️ Precaution

Please be fully aware before using  
Please read the notice(Page 36) for safety.

### Selection

- When lever is in standing up position, do not make collision with pallet.
- when lever is in standing up position in shock absorber's inner lever type, in case pallet collides with it, energy is absorbed to the cylinder body, therefore, don't make collision happen.
- Please make sure no not to scratch the Connection parts.
- piston rod is not hardened, so damage can be occurred if connection part of pallet is sharp. In case of this, do not use. It causes non-function.

- When stopping temporarily loay which is be absorbed to cylinder in Stopper cylinder.
- Within the range of usage of CAT. Just use when stopping the pallet.
- In case of stopping the stopper cylinder, if the cylinder impellent force becomes horizontally lowered, please contact us.

### Mounting

- Do not give the rotation torque to cylinder rod.
- Contact area of cylinder should be parallel to contact area of pallet in order not to cause rotation torque on the cylinder rod.

### Operation

- Do not make outside force after lever locking when attaching a lever type lock device.
- When adjusting conveyor, move after pull down the cylinder.
- Do not use the oil at the connection area of piston rod.
- Oil causes non-function.
- Please be careful with hands and clothing during operation.

### Repair and inspection

When replacing the shock absorber, please fix the shock absorber well with fixing bolt.

## STOPPER CYLINDER Selection Process

1. From the crossing point of the maximum weight of the returned product and speed we select the size of the cylinder and damper model.
2. Through the friction calculation of the conveyor roller and pallet we bring out the constant horizontal weight.  
(Constant horizontal weight = Returned product weight × Friction calculation)
3. Set up the user pressure and select the cylinder size.

Application example

※ Condition used = Conveyor speed : 14m/min, Returned product total weight : 230kgf, Pressure used : 5kgf/cm<sup>2</sup>, Friction calculation number : 0.1

※ Selection method

- Select the damper model and cylinder size  
LB(strong type) damper, 50 size cylinder
- Find the constant horizontal weight

Returned product weight × Friction calculation number = 230kgf×0.1=23(kgf)

The 50size cylinder is selected on the crossing point of the pressure used at 5kgf/cm<sup>2</sup>, and at the constant horizontal weight of 23kgf

