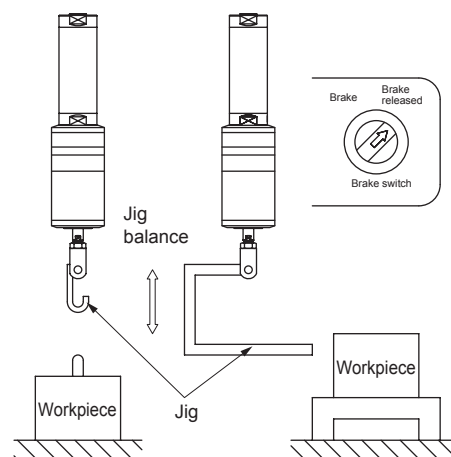
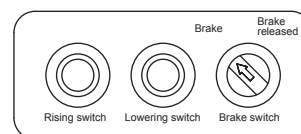


## Technical data

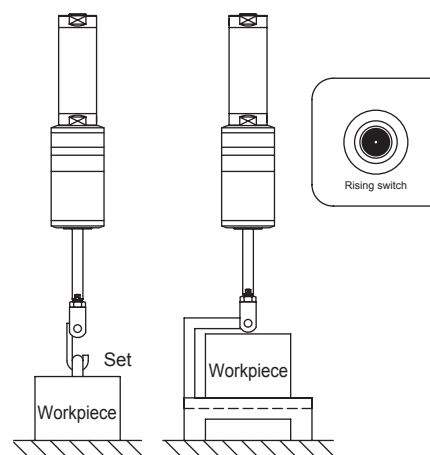
### BBS-A Series (auto pressure adjustment) operating method

Operate according to the following procedure.

- 1) Check that the brake switch is in the braking position (brake is ON).
- 2) Supply air.
- 3) Operate the brake switch to release the brake. (Jig balanced state)
- 4) The rising and lowering switches can be operated manually.



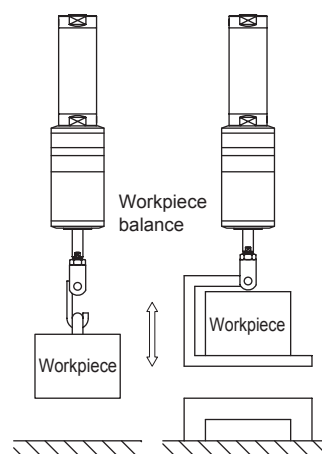
- 5) Set the workpiece into the jig.
- 6) Hold down the rising switch to lift the workpiece, releasing when the workpiece has risen about 50 mm.  
The workpiece will balance about 1 second later.  
(Note) The weight is detected about 1 second after releasing the switch. Please note that in the interim, any force applied to the workpiece or jig will be detected, causing improper balancing to occur.



- 7) The rising and lowering switches can be operated manually. However, continuous operation (inching operation) with switch cannot be performed.
- 8) Set the workpiece in the required position and press the lowering switch for 1 second to balance the jig.

Return to 4) and then move to the following operation.

If the main air source is cut off due to trouble of some kind, position locking will be activated by the built-in brakes.  
For safety reasons, return the brake switch to the braking position after completing operation.

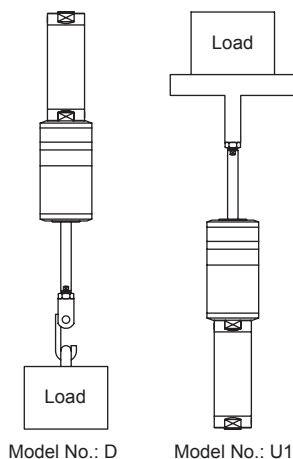


LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
<b>BBS</b>
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

## Technical data

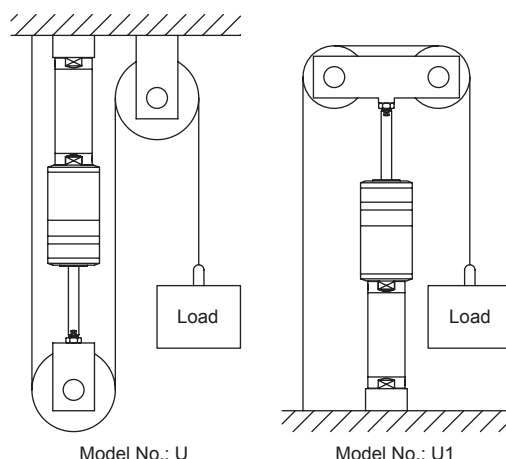
### Using the balancer unit more effectively

#### Standard usage



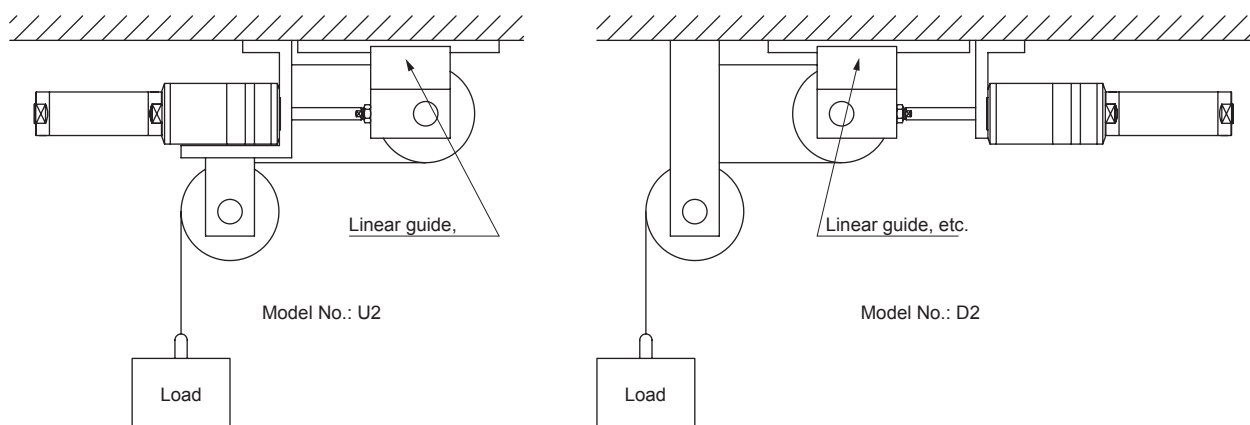
This is the simplest method of use.  
The overall height of the unit increases if the cylinder stroke is long.  
Operating force may increase slightly if the workpiece is moved rapidly due to flow resistance.

#### Speed multiplied usage



The overall height of the unit decreases as the cylinder stroke is halved compared to standard usage.  
(At 2 times speed)  
In theory the operating force is half that of the standard usage type, but the allowable maximum load is also halved.

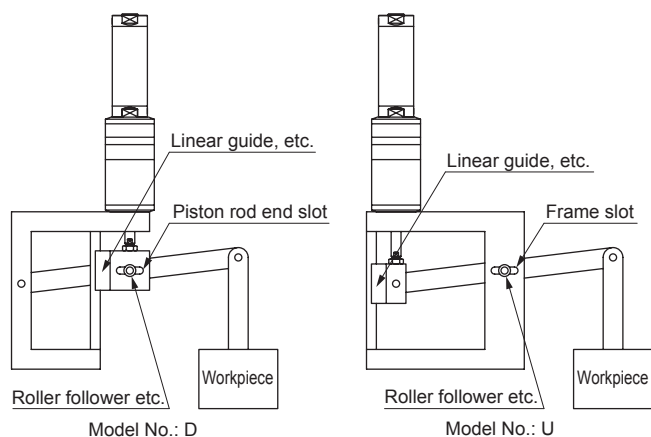
#### Horizontal speed multiplied usage



The basic specifications are the same as speed multiplied usage, but the overall height of the unit decreases due to the cylinder being horizontal.

(At 2 times speed) In theory the operating force is half that of the standard usage type, but the allowable maximum load is also halved.  
Use a linear guide and take care to ensure that self-weight moment of the piston rod or cylinder is not applied.

#### Lever usage

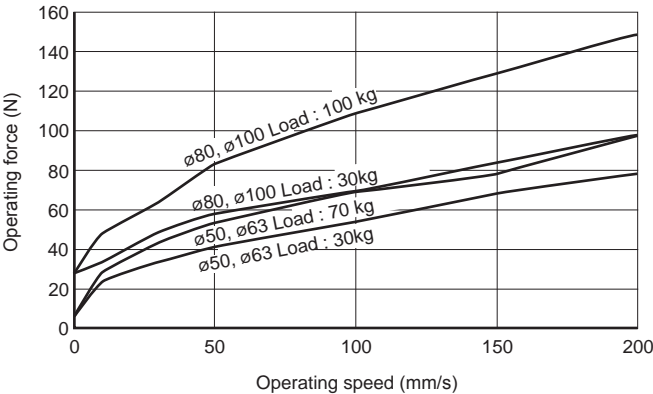


Enables greater freedom of design as the speed multiplier can be freely selected using the lever ratio.

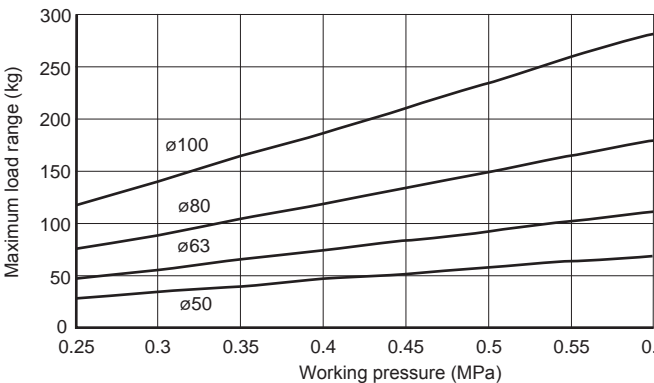
Theoretically, the operating force is divided by the lever ratio. However, the allowable maximum load is also divided by the lever ratio.

Take care to ensure the lever ratio does not change due to vertical operation by using roller followers, etc., and use a linear guide to ensure that eccentric load is not applied to the piston rod.

Operating force



Maximum load range versus working pressure



LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
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