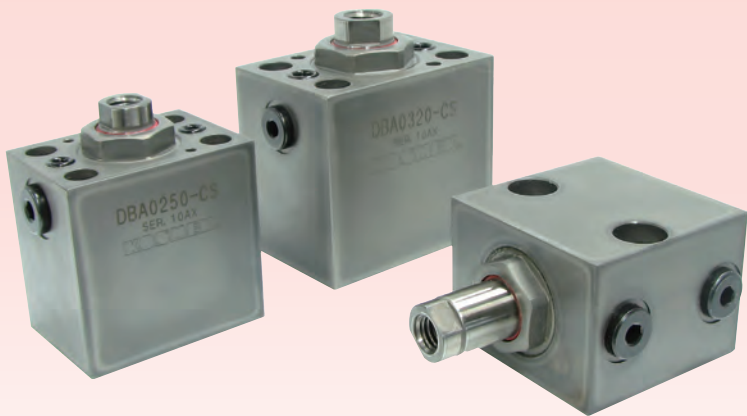


Block Cylinder

Model DBA
Model DBC



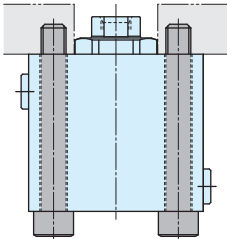
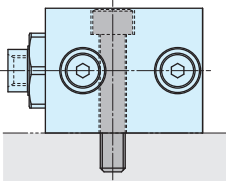


Simple and Easily Mounted Linear Cylinder

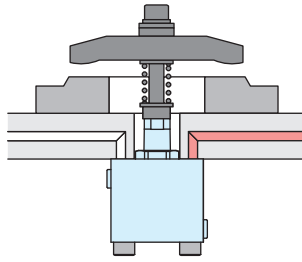
Stroke: 25mm, 50mm

● Double-Acting Linear Cylinder

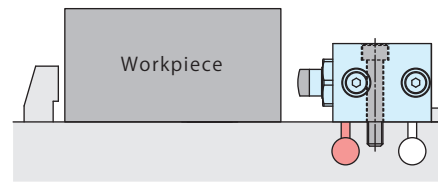
Body Size: 4 options, Mounting Method: 2 options, Piping Method: 2 options, Stroke: 25mm, 50mm
Hydraulic double-acting linear cylinder can be used with low to high pressure.

Double Action MAX. 35MPa	 Model DBA → P.919	 Model DBC → P.921
Classification	Double-Acting Linear Cylinder Bolt Up Mounting	Double-Acting Linear Cylinder Side Mounting
Pressure Range	1 ~ 35MPa	1 ~ 35MPa
Mounting Method		
Accessories → P.947	BZL, BZX, JZG, BZS ※ For BZL and BZS, pressure range is 1~7MPa. ※ For BZX, pressure range is 1~25MPa.	BZL, BZX, JZG, BZS ※ For BZL and BZS, pressure range is 1~7MPa. ※ For BZX, pressure range is 1~25MPa.

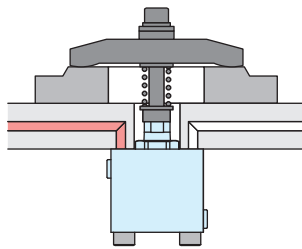
Application Examples



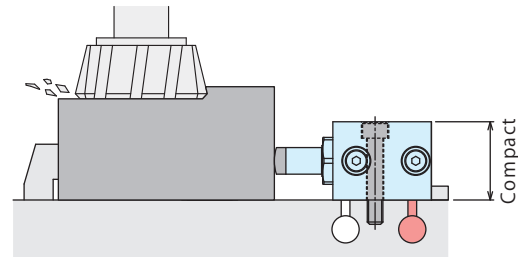
Released (Pushed) State



Released (Pulled) State



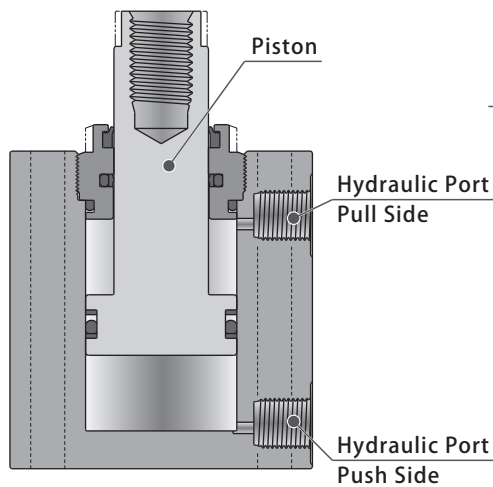
Locked (Pulled) State



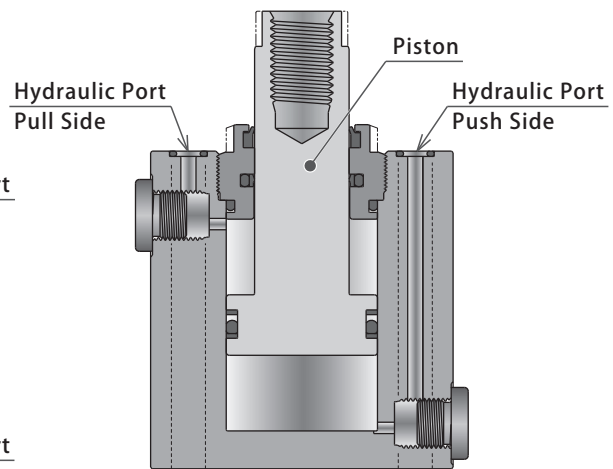
Locked (Pushed) State

Cross Section

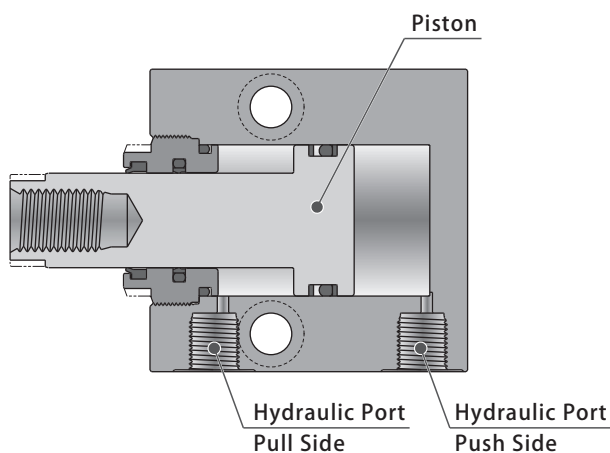
DBA □ 0-B □ : Piping Option



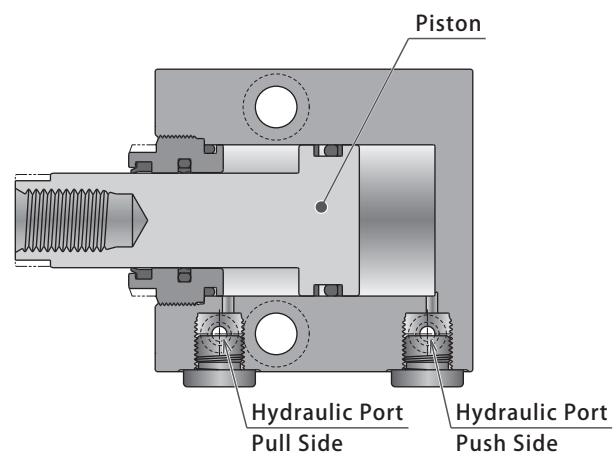
DBA □ 0-C □ : Gasket Option



DBC □ 0-B □ : Piping Option



DBC □ 0-C □ : Gasket Option



High-Power Series

Pneumatic Series

Hydraulic Series

Valve / Coupler Hydraulic Unit

Manual Operation Accessories

Cautions / Others

Hole Clamp

SFA
SFC

Swing Clamp

LHA
LHC
LHS
LHW
LG/LT
TLA-2
TLB-2
TLA-1

Link Clamp

LKA
LKC
LKW
LJ/LM
TMA-2
TMA-1

Work Support

LD
LC
TNC
TC

Air Sensing Lift Cylinder

LLW

Linear Cylinder / Compact Cylinder

LL
LLR
LLU
DP
DR
DS
DT

Block Cylinder

DBA/DBC

Centering Vise

FVA
FVD
FVC

Control Valve

BZL
BZT
BZX/JZG
BZS

Pallet Clamp

VS/VT

Expansion Locating Pin

VFL/VFM
VFJ/VFK

Pull Stud Clamp

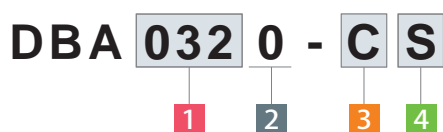
FP
FQ

Customized Spring Cylinder

DWA/DWB

Model No. Indication

Bolt Up Mounting Model



1 Cylinder Inner Diameter

- 025** : Cylinder Inner Diameter $\phi 25$
- 032** : Cylinder Inner Diameter $\phi 32$
- 040** : Cylinder Inner Diameter $\phi 40$
- 050** : Cylinder Inner Diameter $\phi 50$

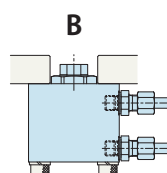
2 Design No.

- 0** : Revision Number

3 Piping Method

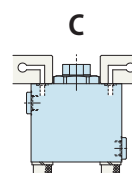
- B** : Piping Option (G Thread)
- C** : Gasket Option (With G Thread Plug)

※ Speed control valve (BZL) is sold separately.
The valve (BZL) can be used only when operating pressure is 7MPa or less.
 Please refer to P.947.



Piping Option

G Thread
No Gasket Port



Gasket Option

With G Thread Plug (able to attach Speed Control Valve)
 (Order the valve separately)
 Recommended : BZL-B

4 Stroke Code

- S** : Full Stroke 25mm
- M** : Full Stroke 50mm

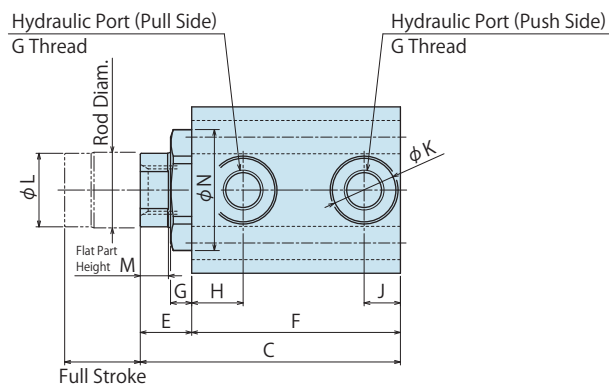
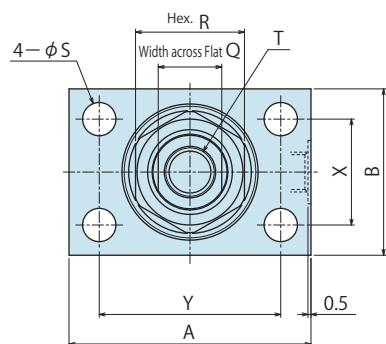
Specifications

Model No.		DBA0250		DBA0320		DBA0400		DBA0500	
Stroke Code		S	M	S	M	S	M	S	M
Full Stroke mm		25	50	25	50	25	50	25	50
Cylinder Area cm ²	Push	4.9		8.0		12.6		19.6	
	Pull	2.9		4.9		7.7		11.6	
Cylinder Force kN (Calculation Formula)	Push	P × 0.49		P × 0.80		P × 1.26		P × 1.96	
	Pull	P × 0.29		P × 0.49		P × 0.77		P × 1.16	
Cylinder Capacity cm ³	Push	12.3	24.5	20.1	40.2	31.4	62.8	49.1	98.2
	Pull	7.3	14.5	12.3	24.5	19.1	38.3	29.0	58.0
Cylinder Inner Diameter mm		ϕ25		ϕ32		ϕ40		ϕ50	
Rod Diameter mm		ϕ16		ϕ20		ϕ25		ϕ32	
Max. Operating Pressure MPa		35.0							
Min. Operating Pressure MPa		1.0							
Withstanding Pressure MPa		42.0							
Operating Temperature °C		0 ~ 70							
Usable Fluid		General Hydraulic Oil Equivalent to ISO-VG-32							
Weight kg		1.1	1.5	1.7	2.3	2.3	3.0	3.8	5.0

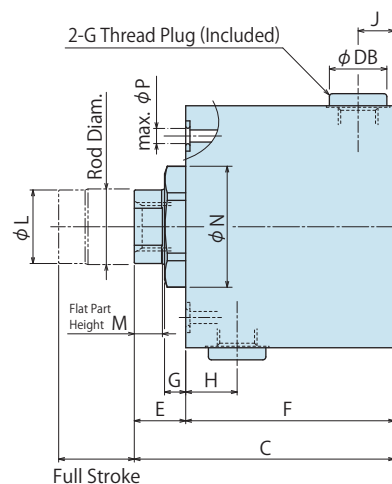
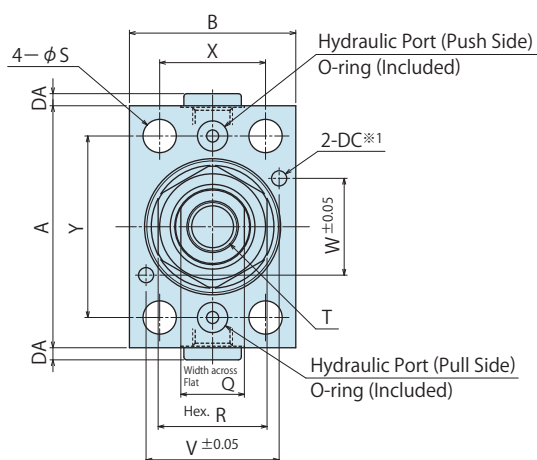
Note: 1. The symbol of cylinder force (calculation formula) shows P: Supply Hydraulic Pressure (MPa).

External Dimensions

DBA□0-B□ : Piping Option



DBA□0-C□ : Gasket Option



External Dimensions

Model No.	DBA0250		DBA0320		DBA0400		DBA0500	
Stroke Code	S	M	S	M	S	M	S	M
A	58		70		80		100	
B	42		50		55		65	
C	69	94	78	103	86	111	92	117
E	13		15		17		18	
F	56	81	63	88	69	94	74	99
G	6		6.5		7		7	
H	11.5		15		17		18	
J	9.5		10		12		13	
K	17.5		17.5		21		21	
L	15.5		19.5		24.3		31.3	
M	6.5		8		9.3		10.3	
N	26.5		33		40		50	
P	3		5		5		5	
Q	13		17		21		27	
R	24		30		36		46	
S	9		11		11		13.5	
T (Nominal×Pitch×Depth)	M10×1.5×15		M12×1.75×18		M16×2×23		M20×2.5×28	
V	32		38		44		52	
W	22		26		32		44	
X	26		30		35		42	
Y	42		50		60		76	
DA	3		3		4		4	
DB	14		14		19		19	
DC ※1	φ3 Depth 5		φ5 Depth 5		φ5 Depth 5		φ5 Depth 5	
Hydraulic Port	Option -B	G1/8	G1/8		G1/4		G1/4	
G Thread Plug	Option -C	G1/8	G1/8		G1/4		G1/4	
O-ring	Option -C	1BP5	1BP7		1BP7		1BP7	

Notes : 1. Mounting surface roughness of -C: Gasket option should be 6.3S or better.

※1. Cylinder can be positioned by using DC hole and spring pin.

High-Power
Series

Pneumatic Series

Hydraulic Series

Valve / Coupler
Hydraulic Unit

Manual Operation
Accessories

Cautions / Others

Hole Clamp

SFA
SFC

Swing Clamp

LHA
LHC
LHS
LHW
LG/LT
TLA-2
TLB-2
TLA-1

Link Clamp

LKA
LKC
LKW
LJ/LM
TMA-2
TMA-1

Work Support

LD
LC
TNC
TC

Air Sensing
Lift Cylinder

LLW

Linear Cylinder /
Compact Cylinder

LL
LLR
LLU
DP
DR
DS
DT

Block Cylinder

DBA/DBC

Centering Vise

FVA
FVD
FVC

Control Valve

BZL
BZT
BZX/JZG
BZS

Pallet Clamp

VS/VT

Expansion
Locating Pin

VFL/VFM
VFJ/VFK

Pull Stud Clamp

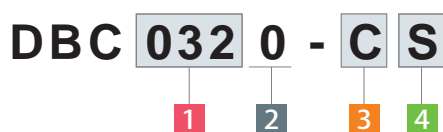
FP
FQ

Customized
Spring Cylinder

DWA/DWB

Model No. Indication

Side Mounting Model



1 Cylinder Inner Diameter

- 025** : Cylinder Inner Diameter $\phi 25$
- 032** : Cylinder Inner Diameter $\phi 32$
- 040** : Cylinder Inner Diameter $\phi 40$
- 050** : Cylinder Inner Diameter $\phi 50$

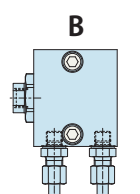
2 Design No.

- 0** : Revision Number

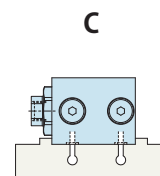
3 Piping Method

- B** : Piping Option (G Thread)
- C** : Gasket Option (With G Thread Plug)

※ Speed control valve (BZL) is sold separately.
The valve (BZL) can be used only when operating pressure is 7MPa or less.
 Please refer to P.947.



Piping Option
G Thread
No Gasket Port



Gasket Option

With G Thread Plug (able to attach Speed Control Valve)
 (Order the valve separately)
 Recommended : BZL-B

4 Stroke Code

- S** : Full Stroke 25mm
- M** : Full Stroke 50mm

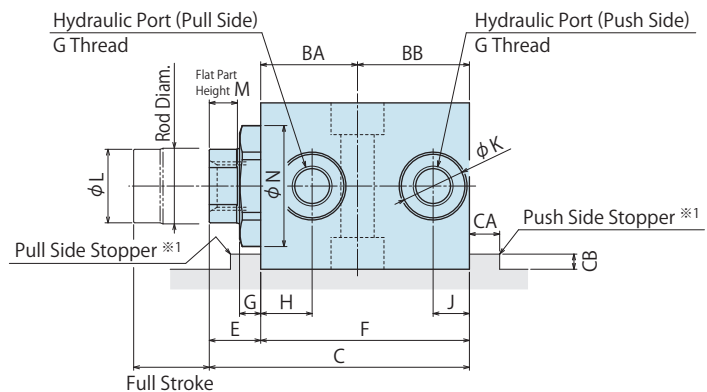
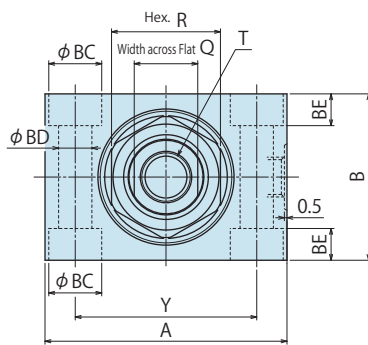
Specifications

Model No.		DBC0250		DBC0320		DBC0400		DBC0500	
Stroke Code		S	M	S	M	S	M	S	M
Full Stroke mm		25	50	25	50	25	50	25	50
Cylinder Area cm ²	Push	4.9		8.0		12.6		19.6	
	Pull	2.9		4.9		7.7		11.6	
Cylinder Force kN (Calculation Formula)	Push	P × 0.49		P × 0.80		P × 1.26		P × 1.96	
	Pull	P × 0.29		P × 0.49		P × 0.77		P × 1.16	
Cylinder Capacity cm ³	Push	12.3	24.5	20.1	40.2	31.4	62.8	49.1	98.2
	Pull	7.3	14.5	12.3	24.5	19.1	38.3	29.0	58.0
Cylinder Inner Diameter mm		ϕ25		ϕ32		ϕ40		ϕ50	
Rod Diameter mm		ϕ16		ϕ20		ϕ25		ϕ32	
Max. Operating Pressure MPa		35.0							
Min. Operating Pressure MPa		1.0							
Withstanding Pressure MPa		42.0							
Operating Temperature °C		0 ~ 70							
Usable Fluid		General Hydraulic Oil Equivalent to ISO-VG-32							
Weight kg		1.1	1.5	1.7	2.3	2.3	3.0	3.8	5.0

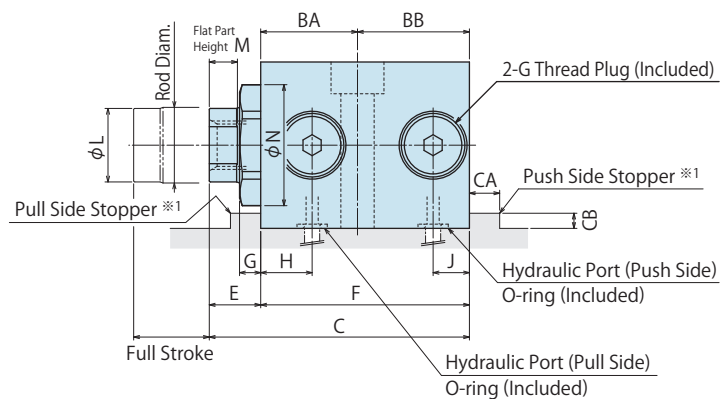
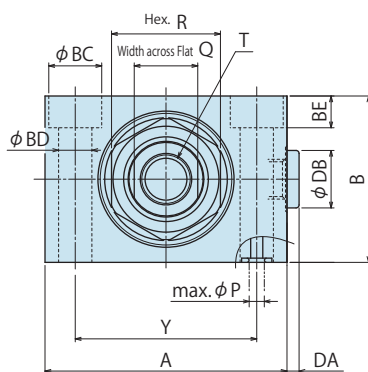
Note: 1. The symbol of cylinder force (calculation formula) shows P: Supply Hydraulic Pressure (MPa).

External Dimensions

DBC□0-B□ : Piping Option



DBC□0-C□ : Gasket Option



External Dimensions

Model No.	DBC0250		DBC0320		DBC0400		DBC0500	
Stroke Code	S	M	S	M	S	M	S	M
A	58		70		80		100	
B	42		50		55		65	
C	69	94	78	103	86	111	92	117
E	13		15		17		18	
F	56	81	63	88	69	94	74	99
G	6		6.5		7		7	
H	11.5		15		17		18	
J	9.5		10		12		13	
K	17.5		17.5		21		21	
L	15.5		19.5		24.3		31.3	
M	6.5		8		9.3		10.3	
N	26.5		33		40		50	
P	3		5		5		5	
Q	13		17		21		27	
R	24		30		36		46	
T (Nominal×Pitch×Depth)	M10×1.5×15		M12×1.75×18		M16×2×23		M20×2.5×28	
Y	42		50		60		76	
BA	23		27		32		34	
BB	33	58	36	61	37	62	40	65
BC	14		17.5		17.5		20	
BD	9		11		11		13.5	
BE	8.5		10.5		10.5		12.5	
CA	8		8		10		13	
CB	4		5		5		5	
DA	3		3		4		4	
DB	14		14		19		19	
Hydraulic Port	Option -B	G1/8	G1/8		G1/4		G1/4	
G Thread Plug	Option -C	G1/8	G1/8		G1/4		G1/4	
O-ring	Option -C	1BP5	1BP7		1BP7		1BP7	

Notes: 1. Mounting surface roughness of -C: Gasket option should be 6.3S or better.

※1. When using it with push side pressure more than 15MPa and pull side pressure more than 25MPa, install the stopper as shown in the drawing.

High-Power
Series

Pneumatic Series

Hydraulic Series

Valve / Coupler
Hydraulic Unit

Manual Operation
Accessories

Cautions / Others

Hole Clamp

SFA
SFC

Swing Clamp

LHA
LHC
LHS
LHW
LG/LT
TLA-2
TLB-2
TLA-1

Link Clamp

LKA
LKC
LKW
LJ/LM
TMA-2
TMA-1

Work Support

LD
LC
TNC
TC

Air Sensing
Lift Cylinder

LLW

Linear Cylinder /
Compact Cylinder

LL
LLR
LLU
DP
DR
DS
DT

Block Cylinder

DBA/DBC

Centering Vise

FVA
FVD
FVC

Control Valve

BZL
BZT
BZX/JZG
BZS

Pallet Clamp

VS/VT

Expansion
Locating Pin

VFL/VFM
VFJ/VFK

Pull Stud Clamp

FP
FQ

Customized
Spring Cylinder

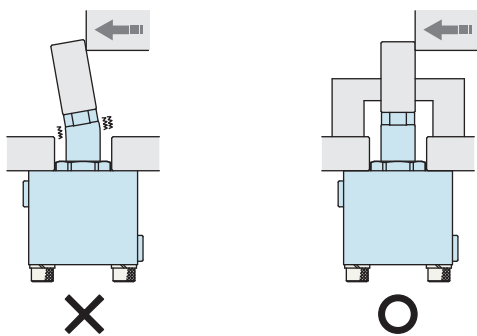
DWA/DWB

● Cautions

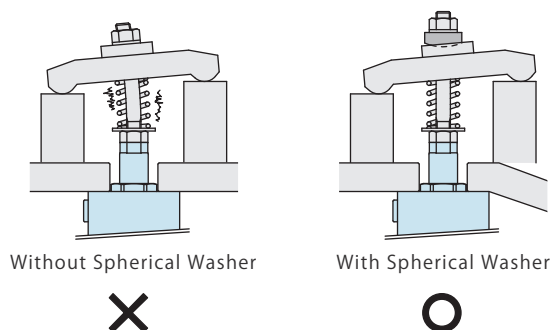
● Notes for Design

- 1) Check Specifications
 - Please use each product according to the specifications.
- 2) Notes for Circuit Design
 - Please read "Notes on Hydraulic Cylinder Speed Control Unit" for proper hydraulic circuit design. Improper circuit design may lead to malfunctions and damages. (Refer to P.1356)
 - Ensure there is no possibility of supplying hydraulic pressure to the push side and the pull side simultaneously.
- 3) Notes for Pipe Design
 - It is recommended to select as large diameter pipes as possible. The back pressure is proportional to the pipe size, so if the pipes are small the release and lock times will be longer.
- 4) When using on a welding fixture, the exposed area of piston rod should be protected.
 - If spatter attaches to the sliding surface it could lead to malfunction and fluid leakage.
- 5) The Load Direction Given to the Piston Rod
 - Make sure no force is applied to the piston rod except from the axial direction. Usage like the one shown in the figure below will apply a large bending stress to the piston rod and must be avoided.

In case a load is applied except from the axial direction



When clamping workpieces of different heights

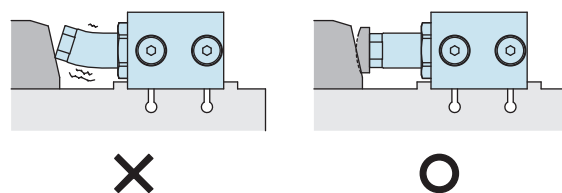


Without Spherical Washer

With Spherical Washer

- 6) When Clamping on a Sloped Surface of a Workpiece
 - When clamping an inclined surface, make sure that the clamping area is level when looking from the cylinder side. The clamping surface and the cylinder mounting surface should be parallel. A workpiece may move and a piston rod may slip when a cylinder is used on an inclined surface. (When the workpiece is a casting, it is recommended that a spiked attachment be used for a cylinder on draft angle.)

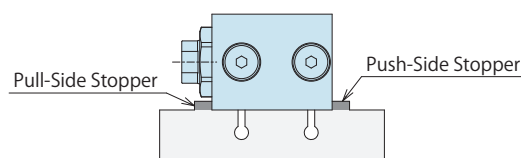
When clamping an inclined surface



- 7) Installation of the Speed Control Valve
 - Speed control valves for low pressure listed below are available for DBA□0-C□, DBC□0-C□ piping model.
Speed control valve for high pressure (BZT) cannot be used.

Model No.	Speed Control Valve Model No.	Max. Operating Pressure when using BZL
DBA/DBC0250-C□	BZL0100-B	7MPa
DBA/DBC0320-C□	BZL0100-B	7MPa
DBA/DBC0400-C□	BZL0200-B	7MPa
DBA/DBC0500-C□	BZL0200-B	7MPa

- 8) DBC : Installation of the Stopper
 - Install the push-side stopper when using the product with push-side pressure more than 15MPa. Install the pull-side stopper when using the product with pull-side pressure more than 25MPa. Refer to the external dimensions for the stopper dimensions.



● Installation Notes

1) Check the Usable Fluid

- Please use the appropriate fluid by referring to the Hydraulic Fluid List (P.1355).

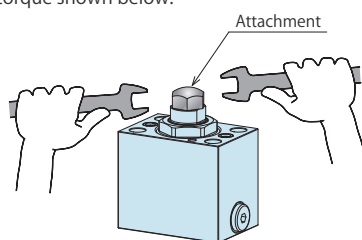
2) Installation of the Cylinder

- When mounting the cylinder, use four hexagonal socket bolts (with tensile strength of 12.9) and tighten them with the torque shown in the table below. Tightening with greater torque than recommended can dent the seating surface or break the bolt.

Model No.	Nominal×Pitch	Number of Mounting Bolts	Tightening Torque (N·m)
DBA0250	M8×1.25	4	25
DBA0320	M10×1.5	4	50
DBA0400	M10×1.5	4	50
DBA0500	M12×1.75	4	80
DBC0250	M8×1.25	2	25
DBC0320	M10×1.5	2	50
DBC0400	M10×1.5	2	50
DBC0500	M12×1.75	2	80

3) Installation / Removal of Attachment

- When installing or removing an attachment, always use a wrench on the piston rod to keep it from turning, and tighten it with the torque shown below.



Model No.	Thread Size	Tightening Torque (N·m)
DBA/DBC0250	M10×1.5	50
DBA/DBC0320	M12×1.75	100
DBA/DBC0400	M16×2	200
DBA/DBC0500	M20×2.5	315

4) Speed Adjustment

- Adjust the rod operating speed less than 100mm/sec both the push and pull operation.
If the cylinder operates too fast the parts will be worn out leading to premature damage and ultimately complete equipment failure.
- Please make sure to release air from the circuit before adjusting speed. It will be difficult to adjust the speed accurately with air mixed in the circuit.
- Turn the speed control valve gradually from the low-speed side (small flow) to the high-speed side (large flow) to adjust the speed.

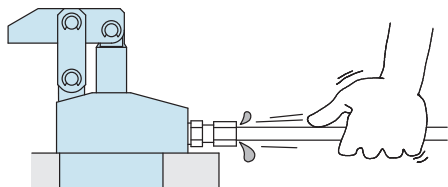
※ Please refer to P.1355 for common cautions.

• Installation Notes • Hydraulic Fluid List • Notes on Hydraulic Cylinder Speed Control Circuit
• Notes on Handling • Maintenance/Inspection • Warranty

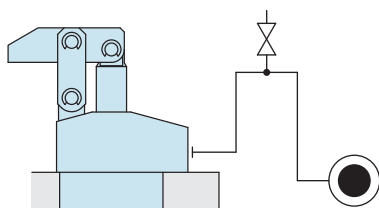
Cautions

Installation Notes (For Hydraulic Series)

- 1) Check the Usable Fluid
 - Please use the appropriate fluid by referring to the Hydraulic Fluid List.
- 2) Procedure before Piping
 - The pipeline, piping connector and fixture circuits should be cleaned by thorough flushing.
 - The dust and cutting chips in the circuit may lead to fluid leakage and malfunction.
 - There is no filter provided with Kosmek's product except for a part of valves which prevents foreign materials and contaminants from getting into the circuit.
- 3) Applying Sealing Tape
 - Wrap with tape 1 to 2 times following the screw direction.
 - Pieces of the sealing tape can lead to oil leakage and malfunction.
 - Please implement piping construction in a clear environment to prevent anything getting in products.
- 4) Air Bleeding of the Hydraulic Circuit
 - If the hydraulic circuit has excessive air, the action time may become very long. If air enters the circuit after connecting the hydraulic port or under the condition of no air in the oil tank, please perform the following steps.
 - ① Reduce hydraulic pressure to less than 2MPa.
 - ② Loosen the cap nut of pipe fitting closest to the clamp by one full turn.
 - ③ Shake the pipeline to loosen the outlet of pipe fitting.
Hydraulic fluid mixed with air comes out.



- ④ Tighten the cap nut after bleeding.
- ⑤ It is more effective to release air at the highest point inside the circuit or at the end of the circuit.
(Set an air bleeding valve at the highest point inside the circuit.)



5) Checking Looseness and Retightening

- At the beginning of the machine installation, the bolt and nut may be tightened lightly. Check the looseness and re-tighten as required.

Hydraulic Fluid List

ISO Viscosity Grade ISO-VG-32		
Maker	Anti-Wear Hydraulic Oil	Multi-Purpose Hydraulic Oil
Showa Shell Sekiyu	Tellus S2 M 32	Morlina S2 B 32
Idemitsu Kosan	Daphne Hydraulic Fluid 32	Daphne Super Multi Oil 32
JX Nippon Oil & Energy	Super Hyrando 32	Super Mulpus DX 32
Cosmo Oil	Cosmo Hydro AW32	Cosmo New Mighty Super 32
ExxonMobil	Mobil DTE 24	Mobil DTE 24 Light
Matsumura Oil	Hydol AW-32	
Castrol	Hyspin AWS 32	

Note : Please contact manufacturers when customers require products in the list above.

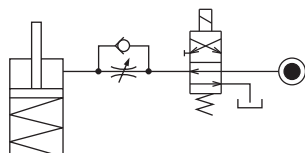
● Notes on Hydraulic Cylinder Speed Control Unit



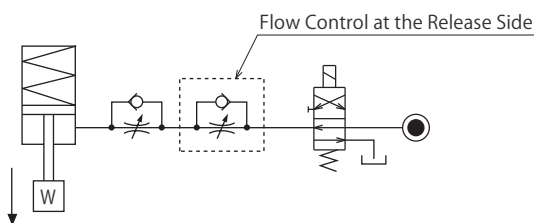
Please pay attention to the cautions below. Design the hydraulic circuit for controlling the action speed of hydraulic cylinder. Improper circuit design may lead to malfunctions and damages. Please review the circuit design in advance.

● Flow Control Circuit for Single Acting Cylinder

For spring return single acting cylinders, restricting flow during release can extremely slow down or disrupt release action. The preferred method is to control the flow during the lock action using a valve that has free-flow in the release direction. It is also preferred to provide a flow control valve at each actuator.



Accelerated clamping speed by excessive hydraulic flow to the cylinder may sustain damage. In this case add flow control to regulate flow. (Please add flow control to release flow if the lever weight is put on at the time of release action when using swing clamps.)



● Flow Control Circuit for Double Acting Cylinder

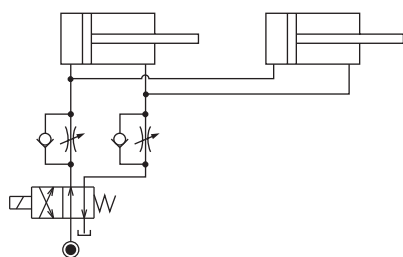
Flow control circuit for double acting cylinder should have meter-out circuits for both the lock and release sides. Meter-in control can have adverse effect by presence of air in the system.

However, in the case of controlling LKE, TMA, TLA, both lock side and release side should be meter-in circuit.

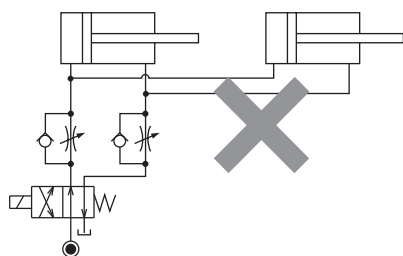
Refer to P.75 for speed adjustment of LKE.

For TMA and TLA, if meter-out circuit is used, abnormal high pressure is created, which causes oil leakage and damage.

【Meter-out Circuit】 (Except LKE/TMA/TLA)

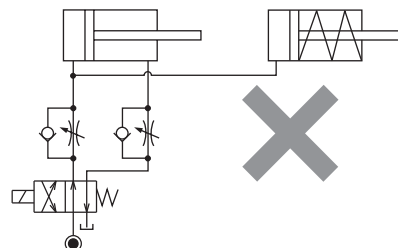


【Meter-in Circuit】 (LKE/TMA/TLA must be controlled with meter-in.)



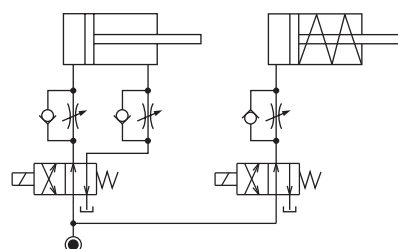
In the case of meter-out circuit, the hydraulic circuit should be designed with the following points.

- ① Single acting components should not be used in the same flow control circuit as the double acting components. The release action of the single acting cylinders may become erratic or very slow.

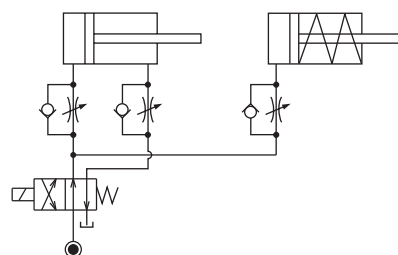


Refer to the following circuit when both the single acting cylinder and double acting cylinder are used together.

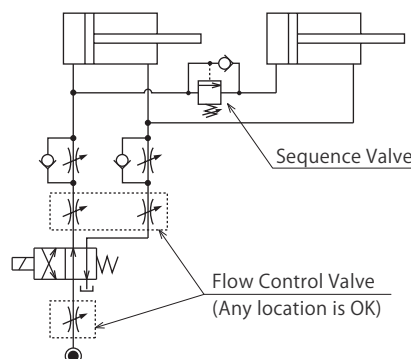
- Separate the control circuit.



- Reduce the influence of double acting cylinder control unit. However, due to the back pressure in tank line, single action cylinder is activated after double action cylinder works.



- ② In the case of meter-out circuit, the inner circuit pressure may increase during the cylinder action because of the fluid supply. The increase of the inner circuit pressure can be prevented by reducing the supplied fluid beforehand via the flow control valve. Especially when using sequence valve or pressure switches for clamping detection. If the back pressure is more than the set pressure then the system will not work as it is designed to.



High-Power
Series

Pneumatic Series

Hydraulic Series

Valve / Coupler
Hydraulic Unit

Manual Operation
Accessories

Cautions / Others

Cautions

Installation Notes
(For Hydraulic Series)

Hydraulic Fluid List

Notes on Hydraulic Cylinder
Speed Control Circuit

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Maintenance/
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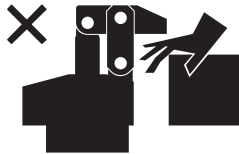
Search by
Alphabetical Order

Sales Offices

● Cautions

● Notes on Handling

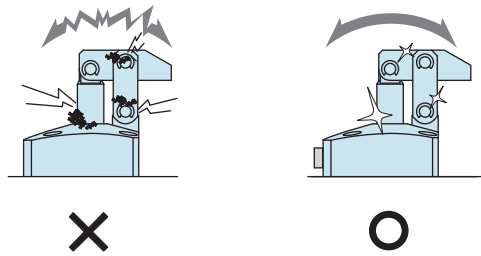
- 1) It should be operated by qualified personnel.
- The hydraulic machine and air compressor should be operated and maintained by qualified personnel.
- 2) Do not operate or remove the product unless the safety protocols are ensured.
 - ① The machine and equipment can only be inspected or prepared when it is confirmed that the safety devices are in place.
 - ② Before the product is removed, make sure that the above-mentioned safety devices are in place. Shut off the pressure and power source, and make sure no pressure exists in the air and hydraulic circuits.
 - ③ After stopping the product, do not remove until the temperature drops.
 - ④ Make sure there is no abnormality in the bolts and respective parts before restarting the machine or equipment.
- 3) Do not touch a clamp (cylinder) while it is working. Otherwise, your hands may be injured due to clinching.



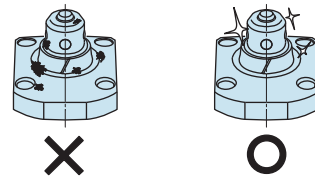
- 4) Do not disassemble or modify.
- If the equipment is taken apart or modified, the warranty will be voided even within the warranty period.

● Maintenance and Inspection

- 1) Removal of the Machine and Shut-off of Pressure Source
 - Before the machine is removed, make sure that safety devices and preventive devices are in place. Shut off the pressure and power source, and make sure no pressure exists in the air and hydraulic circuits.
 - Make sure there is no abnormality in the bolts and respective parts before restarting.
- 2) Regularly clean the area around the piston rod and plunger.
 - If it is used when the surface is contaminated with dirt, it may lead to packing seal damage, malfunctioning and fluid leakage.



- 3) Please clean out the reference surfaces on a regular basis (taper reference surface and seating surface) of the locating products. (VS/VT/VFL/VFM/VFJ/VFK/WVS/VWM/VWK/VX/VXE/VXF)
 - The locating products, except VX/VXE/VXF model, can remove contaminants with cleaning functions. However, hardened cutting chips, adhesive coolant and others may not be removed. Make sure there are no contaminants before installing a workpiece/pallet.
 - Continuous use with contaminant on components will lead to locating accuracy failure, malfunction and fluid leakage.



- 4) If disconnecting by couplers, air bleeding should be carried out on a regular basis to avoid air mixed in the circuit.
- 5) Regularly tighten nut, bolt, pin, cylinder, pipe line and others to ensure proper use.
- 6) Make sure the hydraulic fluid has not deteriorated.
- 7) Make sure there is a smooth action without an irregular noise.
 - Especially when it is restarted after left unused for a long period, make sure it can be operated correctly.
- 8) The products should be stored in the cool and dark place without direct sunshine or moisture.
- 9) Please contact us for overhaul and repair.

Cautions[Installation Notes
\(For Hydraulic Series\)](#)[Hydraulic Fluid List](#)[Notes on Hydraulic Cylinder
Speed Control Circuit](#)[Notes on Handling](#)[Maintenance/
Inspection](#)[Warranty](#)**Company Profile**[Company Profile](#)[Our Products](#)[History](#)**Index**[Search by](#)[Alphabetical Order](#)**Sales Offices**

● Warranty

1) Warranty Period

- The product warranty period is 18 months from shipment from our factory or 12 months from initial use, whichever is earlier.

2) Warranty Scope

- If the product is damaged or malfunctions during the warranty period due to faulty design, materials or workmanship, we will replace or repair the defective part at our expense.

Defects or failures caused by the following are not covered.

- ① If the stipulated maintenance and inspection are not carried out.
- ② If the product is used while it is not suitable for use based on the operator's judgment, resulting in defect.
- ③ If it is used or operated in an inappropriate way by the operator.
(Including damage caused by the misconduct of the third party.)
- ④ If the defect is caused by reasons other than our responsibility.
- ⑤ If repair or modifications are carried out by anyone other than Kosmek, or without our approval and confirmation, it will void warranty.
- ⑥ Other caused by natural disasters or calamities not attributable to our company.
- ⑦ Parts or replacement expenses due to parts consumption and deterioration.
(Such as rubber, plastic, seal material and some electric components.)

Damages excluding from direct result of a product defect shall be excluded from the warranty.

Control Valve

Model BZL

Model BZT

Model BZX

Model JZG

Model BZS

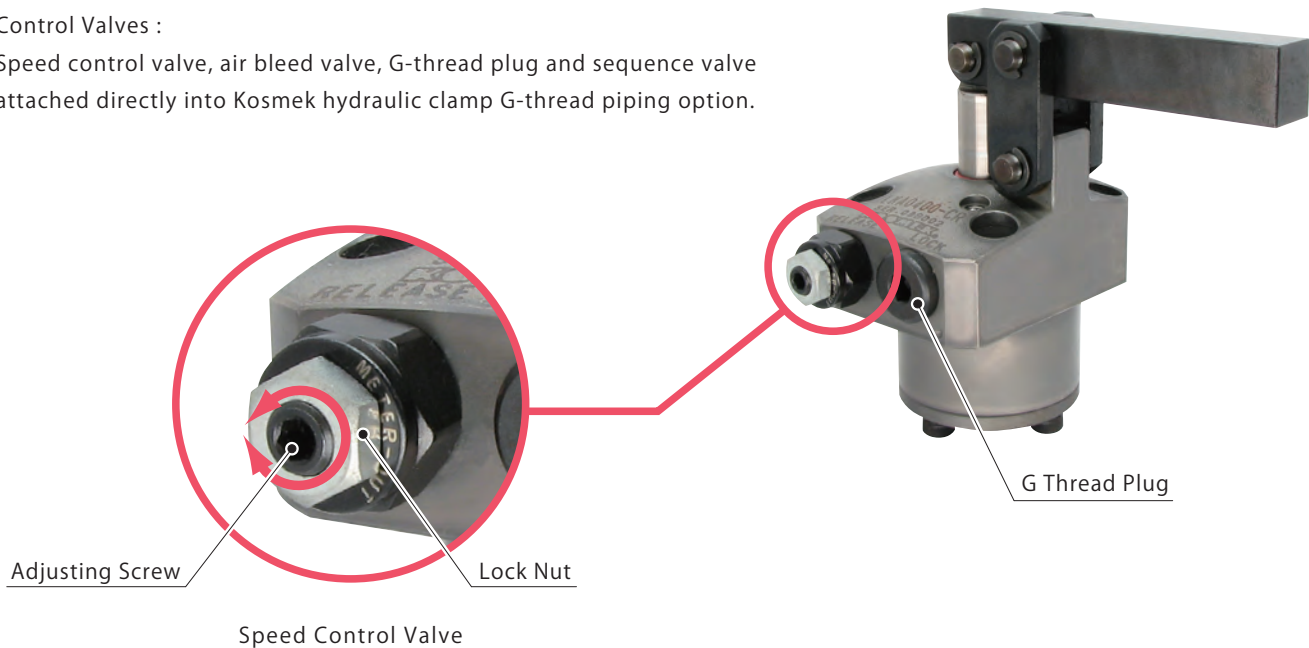


Directly-Attached Speed Control Valve, Air Bleed Valve, G-Thread Plug and Sequence Valve

• Directly Attached to Clamps

Control Valves :

Speed control valve, air bleed valve, G-thread plug and sequence valve attached directly into Kosmek hydraulic clamp G-thread piping option.



Speed Control Valve

Model BZL
Model BZT



Air Bleed Valve

Model BZX



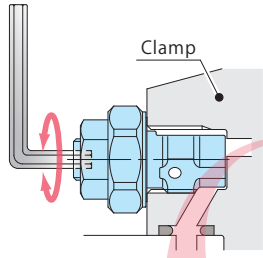
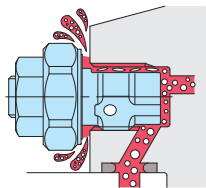
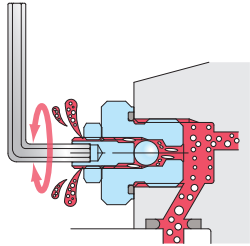
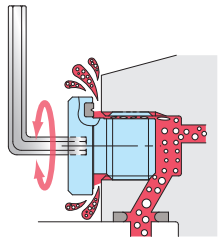
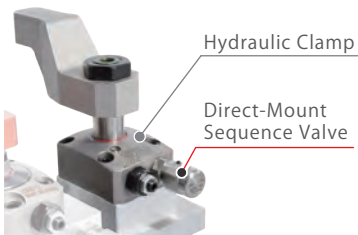
G Thread Plug

Model JZG



Direct-Mount Sequence Valve

Model BZS

	Operating Pressure Range	Action Description
Speed Control Valve (For Low Pressure) Model BZL → P.949	7MPa or less	Adjust the flow rate with a wrench. Able to adjust the clamping speed individually. 
Speed Control Valve (For High Pressure) Model BZT → P.953	35MPa or less	Air bleeding in the circuit is possible by loosening the speed control valve. 
Air Bleed Valve Model BZX → P.955	25MPa or less	Air bleeding in the circuit is possible by wrench. 
G Thread Plug Model JZG → P.957	35MPa or less	Air bleeding in the circuit is possible by loosening the G thread plug. 
Direct-Mount Sequence Valve Model BZS → P.959	7MPa or less	Sequence Valve directly attaches to KOSMEK hydraulic clamp's G-thread piping option. Controls the operating sequence of each actuator. 

High-Power Series

Pneumatic Series

Hydraulic Series

Valve / Coupler Hydraulic Unit

Manual Operation Accessories

Cautions / Others

Hole Clamp

SFA
SFC

Swing Clamp

LHA
LHC
LHS
LHW
LG/LT
TLA-2
TLB-2
TLA-1

Link Clamp

LKA
LKC
LKW
LJ/LM
TMA-2
TMA-1

Work Support

LD
LC
TNC
TC

Air Sensing Lift Cylinder

LLW

Linear Cylinder / Compact Cylinder

LL
LLR
LLU
DP
DR
DS
DT

Block Cylinder

DBA/DBC

Centering Vise

FVA
FVD
FVC

Control Valve

BZL
BZT
BZX/JZG
BZS

Pallet Clamp

VS/VT

Expansion Locating Pin

VFL/VFM
VFJ/VFK

Pull Stud Clamp

FP
FQ

Customized Spring Cylinder

DWA/DWB

Model No. Indication (Speed Control Valve for Low Pressure)

BZL 0 10 1 - B

1

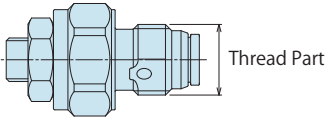
2

3



1 G Thread Size

- 10 : Thread Part G1/8A Thread
- 20 : Thread Part G1/4A Thread
- 30 : Thread Part G3/8A Thread

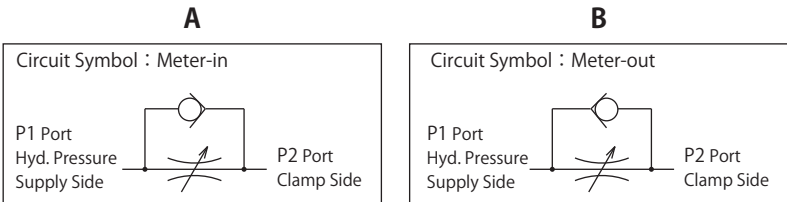


2 Design No.

- 1 : Revision Number

3 Control Method

- A : Meter-in
- B : Meter-out



Specifications

Model No.	BZL0101-A	BZL0201-A	BZL0301-A	BZL0101-B	BZL0201-B	BZL0301-B
Max. Operating Pressure MPa	7					
Withstanding Pressure MPa	10.5					
Control Method	Meter-in			Meter-out		
G Thread Size	G1/8A	G1/4A	G3/8A	G1/8A	G1/4A	G3/8A
Cracking Pressure MPa	0.04			0.12		
Max. Passage Area mm ²	2.6	5.0	11.6	2.6	5.0	10.2
Usable Fluid	General Hydraulic Oil Equivalent to ISO-VG-32					
Operating Temperature °C	0 ~ 70					
Tightening Torque for Main Body N·m	10	25	35	10	25	35
Weight g	12	26	48	12	26	48

- Notes :
- 1. It must be mounted with recommended torque. Because of the structure of the metal seal, if mounting torque is insufficient, the flow control valve may not be able to adjust the flow rate.
 - 2. Do not attach a used BZL to other clamps.
Flow control will not be made because the bottom depth difference of G thread makes metal seal insufficient.

Applicable Products

Model No.	LHA (Double Action) Swing Clamp	LHC (Double Action) Swing Clamp	LHD (Double Action) Swing Clamp	LHE (Double Action) High-Power Swing Clamp	LHS (Double Action) Swing Clamp	LHV (Double Action) Swing Clamp	LHW (Double Action) Swing Clamp	LT (Single Action) Swing Clamp	LG (Single Action) Swing Clamp
BZL0101-A	(LHA0360-C□□□) (LHA0400-C□□□) (LHA0480-C□□□) (LHA0550-C□□□)	(LHC0360-C□□□) (LHC0400-C□□□) (LHC0480-C□□□) (LHC0550-C□□□)	(LHD0400-C□□□) (LHD0480-C□□□) (LHD0550-C□□□)	/	(LHS0360-C□□□) (LHS0400-C□□□) (LHS0480-C□□□) (LHS0550-C□□□)	(LHV0400-C□□□) (LHV0480-C□□□) (LHV0550-C□□□)	(LHW0401-C□□□) (LHW0481-C□□□) (LHW0551-C□□□)	LT0301-C□□□ LT0361-C□□□ LT0401-C□□□ LT0481-C□□□ LT0551-C□□□	LG0301-C□□□ LG0361-C□□□ LG0401-C□□□ LG0481-C□□□ LG0551-C□□□
BZL0101-B	LHA0360-C□□□ LHA0400-C□□□ LHA0480-C□□□ LHA0550-C□□□	LHC0360-C□□□ LHC0400-C□□□ LHC0480-C□□□ LHC0550-C□□□	LHD0400-C□□□ LHD0480-C□□□ LHD0550-C□□□	LHE0300-C□□□ LHE0360-C□□□ LHE0400-C□□□ LHE0480-C□□□ LHE0550-C□□□	LHS0360-C□□□ LHS0400-C□□□ LHS0480-C□□□ LHS0550-C□□□	LHV0400-C□□□ LHV0480-C□□□ LHV0550-C□□□	LHW0401-C□□□ LHW0481-C□□□ LHW0551-C□□□	/	/
BZL0201-A	(LHA0650-C□□□) (LHA0750-C□□□)	(LHC0650-C□□□)	/	/	(LHS0650-C□□□) (LHS0750-C□□□)	(LHV0650-C□□□) (LHV0750-C□□□)	(LHW0651-C□□□) (LHW0751-C□□□)	LT0651-C□□□ LT0751-C□□□	LG0651-C□□□ LG0751-C□□□
BZL0201-B	LHA0650-C□□□ LHA0750-C□□□	LHC0650-C□□□	/	/	LHS0650-C□□□ LHS0750-C□□□	LHV0650-C□□□ LHV0750-C□□□	LHW0651-C□□□ LHW0751-C□□□	/	/
BZL0301-A	(LHA0900-C□□□) (LHA1050-C□□□)	/	/	/	(LHS0900-C□□□) (LHS1050-C□□□)	/	/	/	LG0901-C□□□ LG1051-C□□□
BZL0301-B	LHA0900-C□□□ LHA1050-C□□□	/	/	/	LHS0900-C□□□ LHS1050-C□□□	/	/	/	/

Model No.	LGV (Single Action) Swing Clamp	LKA (Double Action) Link Clamp	LKC (Double Action) Link Clamp	LKE (Double Action) High-Power Link Clamp	LKK (Double Action) Universal Clamp	LKV (Double Action) Link Clamp	LKW (Double Action) Link Clamp	LM (Single Action) Link Clamp	LJ (Single Action) Link Clamp
BZL0101-A	LGV0400-C□□□ LGV0480-C□□□ LGV0550-C□□□	(LKA0360-C□□□) (LKA0400-C□□□) (LKA0480-C□□□) (LKA0550-C□□□)	(LKC0400-C□□□) (LKC0480-C□□□) (LKC0550-C□□□)	LKE0300-C□□□ LKE0360-C□□□ LKE0400-C□□□ LKE0480-C□□□ LKE0550-C□□□	(LKK0360-C□□□) (LKK0400-C□□□) (LKK0480-C□□□) (LKK0550-C□□□)	(LKV0400-C□□□) (LKV0480-C□□□) (LKV0550-C□□□)	(LKW0401-C□□□) (LKW0481-C□□□) (LKW0551-C□□□)	LM0300-C□□□ LM0360-C□□□ LM0400-C□□□ LM0480-C□□□ LM0550-C□□□	LJ0302-C□□□ LJ0362-C□□□ LJ0402-C□□□ LJ0482-C□□□ LJ0552-C□□□
BZL0101-B	/	LKA0360-C□□□ LKA0400-C□□□ LKA0480-C□□□ LKA0550-C□□□	LKC0400-C□□□ LKC0480-C□□□ LKC0550-C□□□	/	LKK0360-C□□□ LKK0400-C□□□ LKK0480-C□□□ LKK0550-C□□□	LKV0400-C□□□ LKV0480-C□□□ LKV0550-C□□□	LKW0401-C□□□ LKW0481-C□□□ LKW0551-C□□□	/	/
BZL0201-A	LGV0650-C□□□ LGV0750-C□□□	(LKA0650-C□□□) (LKA0750-C□□□)	(LKC0650-C□□□)	/	(LKK0650-C□□□)	(LKV0650-C□□□) (LKV0750-C□□□)	(LKW0651-C□□□) (LKW0751-C□□□)	LM0650-C□□□ LM0750-C□□□	LJ0652-C□□□ LJ0752-C□□□
BZL0201-B	/	LKA0650-C□□□ LKA0750-C□□□	LKC0650-C□□□	/	LKK0650-C□□□	LKV0650-C□□□ LKV0750-C□□□	LKW0651-C□□□ LKW0751-C□□□	/	/
BZL0301-A	/	(LKA0900-C□□□) (LKA1050-C□□□)	/	/	/	/	/	/	LJ0902-C□□□ LJ1052-C□□□
BZL0301-B	/	LKA0900-C□□□ LKA1050-C□□□	/	/	/	/	/	/	/

Model No.	LJV (Single Action) Link Clamp	LFW (Double Action) Link Clamp	LFA (Double Action) Link Clamp	LSA (Double Action) Side Clamp	LSE (Double Action) High-Power Side Clamp	LL (Double Action) Linear Cylinder	LLR (Double Action) Linear Cylinder	LLV (Double Action) Lift Cylinder	LLW (Double Action) Lift Cylinder
BZL0101-A	LJV0400-C□□□ LJV0480-C□□□ LJV0550-C□□□	(LFW0480-C□□□) (LFW0550-C□□□)	(LFA0480-C□□□) (LFA0550-C□□□)	(LSA0360-C□□□)	LSE0360-C□□□	(LL0360-C□□□) (LL0400-C□□□) (LL0480-C□□□) (LL0550-C□□□)	(LLR0360-C□□□) (LLR0400-C□□□) (LLR0480-C□□□) (LLR0550-C□□□)	(LLV0360-C□□□) (LLV0400-C□□□) (LLV0480-C□□□)	(LLW0361-C□□□) (LLW0401-C□□□) (LLW0481-C□□□)
BZL0101-B	/	LFW0480-C□□□ LFW0550-C□□□	LFA0480-C□□□ LFA0550-C□□□	LSA0360-C□□□	/	LL0360-C□□□ LL0400-C□□□ LL0480-C□□□ LL0550-C□□□	LLR0360-C□□□ LLR0400-C□□□ LLR0480-C□□□ LLR0550-C□□□	LLV0360-C□□□ LLV0400-C□□□ LLV0480-C□□□	LLW0361-C□□□ LLW0401-C□□□ LLW0481-C□□□
BZL0201-A	LJV0650-C□□□ LJV0750-C□□□	(LFW0650-C□□□) (LFW0750-C□□□)	(LFA0650-C□□□) (LFA0750-C□□□)	/	/	(LL0650-C□□□) (LL0750-C□□□)	(LLR0650-C□□□) (LLR0750-C□□□)	/	/
BZL0201-B	/	LFW0650-C□□□ LFW0750-C□□□	LFA0650-C□□□ LFA0750-C□□□	/	/	LL0650-C□□□ LL0750-C□□□	LLR0650-C□□□ LLR0750-C□□□	/	/
BZL0301-A	/	/	/	/	/	(LL0900-C□□□) (LL1050-C□□□)	(LLR0900-C□□□) (LLR1050-C□□□)	/	/
BZL0301-B	/	/	/	/	/	LL0900-C□□□ LL1050-C□□□	LLR0900-C□□□ LLR1050-C□□□	/	/

Note : 1. Flow control circuit for double acting cylinder should have meter-out circuits for both the lock and release sides (except model LKE/LSE). Meter-in circuits can be adversely affected by any air in the system.

High-Power Series

Pneumatic Series

Hydraulic Series

Valve / Coupler Hydraulic Unit

Manual Operation Accessories

Cautions / Others

Hole Clamp

SFA
SFC

Swing Clamp

LHA
LHC
LHS
LHW
LG/LT
TLA-2
TLB-2
TLA-1

Link Clamp

LKA
LKC
LKW
LJ/LM
TMA-2
TMA-1

Work Support

LD
LC
TNC
TC

Air Sensing Lift Cylinder

LLW

Linear Cylinder / Compact Cylinder

LL
LLR
LLU
DP
DR
DS
DT

Block Cylinder

DBA/DBC

Centering Vise

FVA
FVD
FVC

Control Valve

BZL
BZT
BZX/JZG
BZS

Pallet Clamp

VS/VT

Expansion Locating Pin

VFL/VFM
VFJ/VFK

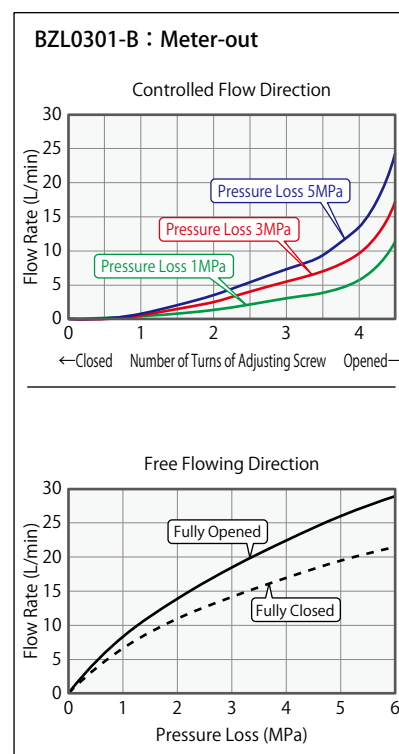
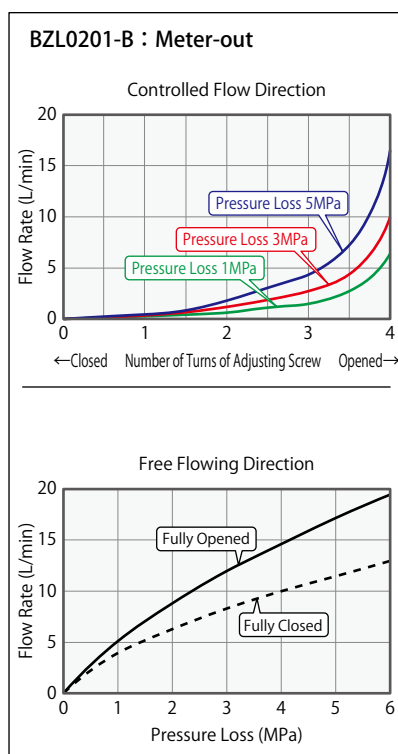
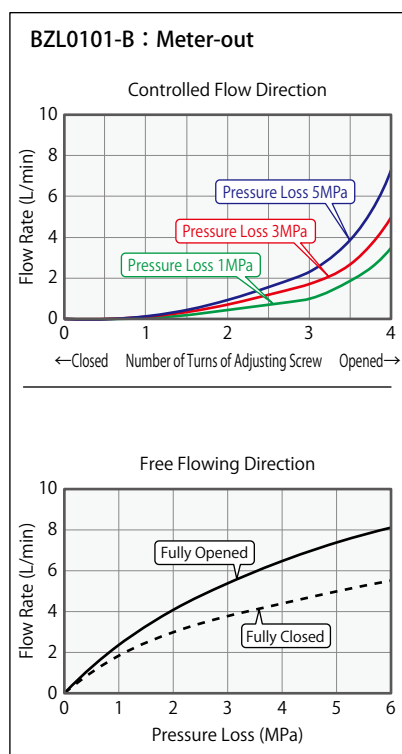
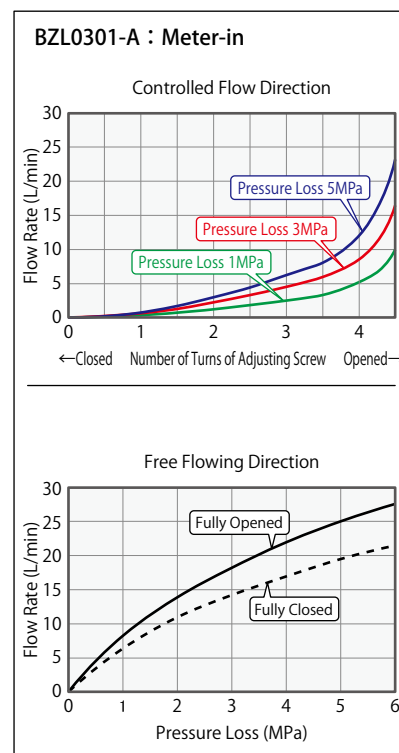
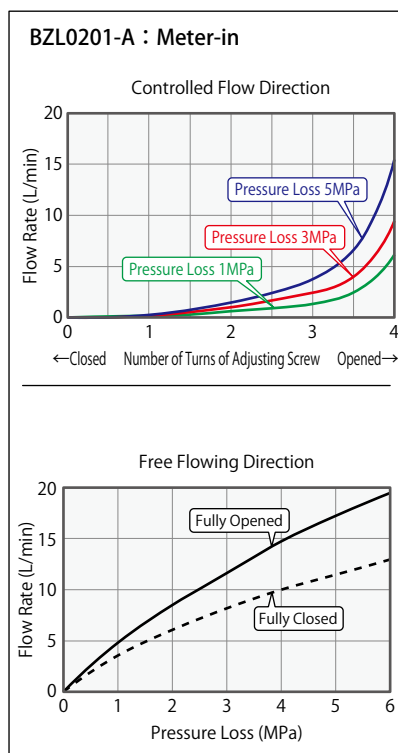
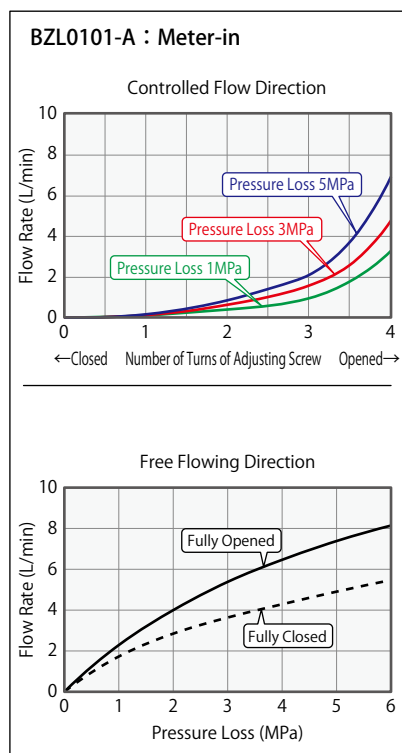
Pull Stud Clamp

FP
FQ

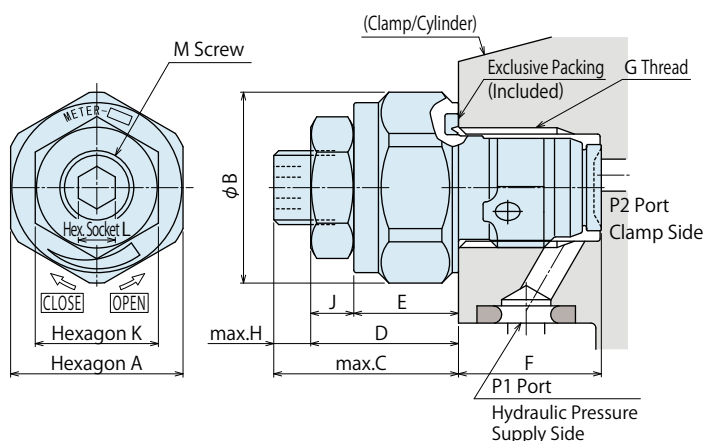
Customized Spring Cylinder

DWA/DWB

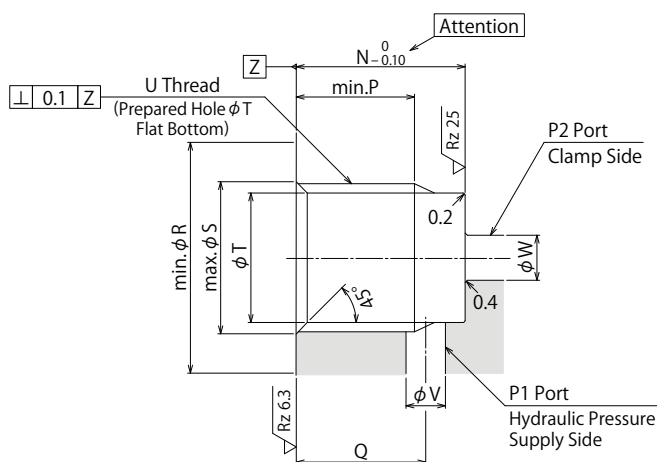
● Flow Rate Graph < Hydraulic Fluids ISO-VG32 (25~35°C) >



External Dimensions



Machining Dimensions of Mounting Area



Notes :

1. Since the $\sqrt{Rz 6.3}$ area is sealing part, be careful not to damage it.
2. Since the $\sqrt{Rz 12.5}$ area is the metal sealing part of BZL, be careful not to damage it. (Especially when deburring)
3. No cutting chips or burr should be at the tolerance part of machining hole.
4. As shown in the drawing, P1 port is used as the hydraulic supply side and P2 port as the clamp side.
5. If mounting plugs or fittings with G thread specification available in the market, the dimension '※1' should be 12.5.

Notes

1. Please read "Notes on Hydraulic Cylinder Speed Control Unit" for proper hydraulic circuit design.
Improper circuit design may lead to malfunctions and damages. (Refer to P.1356)
2. It is dangerous to release the air under high pressure. It must be done under lower pressure.
(For reference : the minimum operating range of the product within the circuit.)

(mm)

Model No.	BZL0101-□	BZL0201-□	BZL0301-□
A	14	18	22
B	15.5	20	24
C	15	16	19
D	12	13	16
E	8.5	9.5	11
F	(11.6)	(15.1)	(17.6)
G	G1/8	G1/4	G3/8
H	3	3	3
J	3.5	3.5	5
K	10	10	13
L	3	3	4
M (Nominal×Pitch)	M6×0.75	M6×0.75	M8×0.75
N	11.5	15	17.5
P	8.5	11※1	13
Q	9	11.5	13
R (Flat Surface Area)	16	20.5	24.5
S	10	13.5	17
T	8.7	11.5	15
U	G1/8	G1/4	G3/8
V	2 ~ 3	3 ~ 4	4 ~ 5
W	2.5 ~ 5	3.5 ~ 7	4.5 ~ 9

High-Power Series

Pneumatic Series

Hydraulic Series

Valve / Coupler Hydraulic Unit

Manual Operation Accessories

Cautions / Others

Hole Clamp

SFA
SFC

Swing Clamp

LHA
LHC
LHS
LHW
LG/LT
TLA-2
TLB-2
TLA-1

Link Clamp

LKA
LKC
LKW
LJ/LM
TMA-2
TMA-1

Work Support

LD
LC
TNC
TC

Air Sensing Lift Cylinder

LLW

Linear Cylinder / Compact Cylinder

LL
LLR
LLU
DP
DR
DS
DT

Block Cylinder

DBA/DBC

Centering Vise

FVA
FVD
FVC

Control Valve

BZL
BZT
BZX/JZG
BZS

Pallet Clamp

VS/VT

Expansion Locating Pin

VFL/VFM
VFJ/VFK

Pull Stud Clamp

FP
FQ

Customized Spring Cylinder

DWA/DWB

Model No. Indication (Air Bleed Valve)

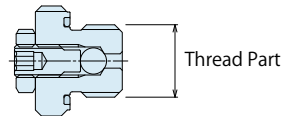
BZX0 1 0

1 2



1 G Thread Size

- 1 : Thread Part G1/8A Thread
- 2 : Thread Part G1/4A Thread
- 3 : Thread Part G3/8A Thread



2 Design No.

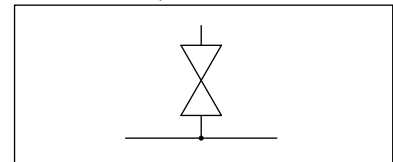
- 0 : Revision Number

Specifications

Model No.	BZX010	BZX020	BZX030
Max. Operating Pressure MPa	35		
Withstanding Pressure MPa	42		
G Thread Size	G1/8A	G1/4A	G3/8A
Usable Fluid	General Hydraulic Oil Equivalent to ISO-VG-32		
Operating Temperature °C	0 ~ 70		
Tightening Torque for Main Body N·m	10	25	35
Weight g	12	23	36

- Notes :
- Do not over-loosen the plug during air venting.
(Do not loosen further than 2 turns from the fully closed position.)
 - Air bleeding under high pressure is dangerous. It must be done under lower pressure.
(For reference : the minimum operation pressure range of the product within the circuit)
 - Refer to the machining dimensions of BZL mounting area when installing BZX into a hydraulic circuit.

Circuit Symbol



Applicable Products

Model No.	DBA (Double Action) Block Cylinder	DBC (Double Action) Block Cylinder	FVA (Double Action) Centering Vise	FVC (Double Action) Centering Vise	FVD (Double Action) Centering Vise	LC (Single Action) Work Support	LCW (Single Action) Work Support	TC (Single Action) Work Support
BZX010	DBA0250-C□	DBC0250-C□	FVA0401	FVC0630	FVD1600	LC0263-C□-□	LCW0363-C□	TC0403-C□-□-□
	DBA0320-C□	DBC0320-C□	FVA0631		FVD2500	LC0303-C□□-□	LCW0403-C□	TC0483-C□-□-□
			FVA1001			LC0363-C□□-□	LCW0483-C□	TC0553-C□-□-□
						LC0403-C□□-□	LCW0553-C□	TC0653-C□-□-□
						LC0483-C□□-□	LCW0653-C□	TC0753-C□-□-□
						LC0553-C□□-□		
						LC0653-C□□-□		
BZX020	DBA0400-C□	DBC0400-C□		FVC1000	FVD4000	LC0753-C□□-□		
	DBA0500-C□	DBC0500-C□		FVC1600		LC0903-C□□-□		

● Applicable Products

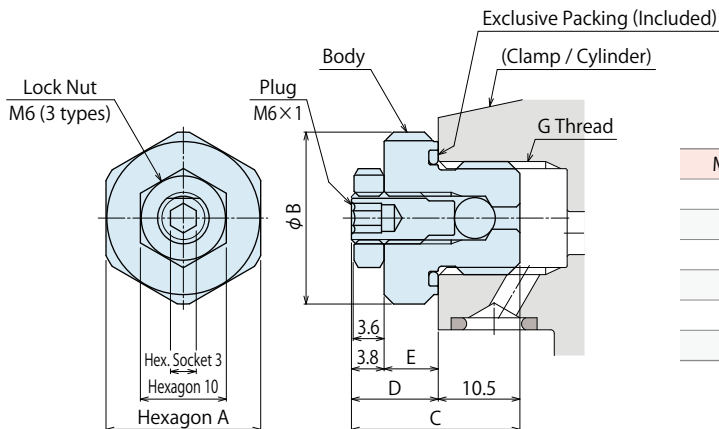
Model No.	LHA (Double Action) Swing Clamp	LHC (Double Action) Swing Clamp	LHD (Double Action) Swing Clamp	LHE (Double Action) High-Power Swing Clamp	LHS (Double Action) Swing Clamp	LHV (Double Action) Swing Clamp	LHW (Double Action) Swing Clamp	LT (Single Action) Swing Clamp	LG (Single Action) Swing Clamp
BZX010	LHA0360-C□□□	LHC0360-C□□□	LHD0400-C□□□	LHE0300-C□	LHS0360-C□□□	LHV0400-C□□□	LHW0401-C□□□	LT0301-C□□□	LG0301-C□□□
	LHA0400-C□□□	LHC0400-C□□□	LHD0480-C□□□	LHE0360-C□	LHS0400-C□□□	LHV0480-C□□□	LHW0481-C□□□	LT0361-C□□□	LG0361-C□□□
	LHA0480-C□□□	LHC0480-C□□□	LHD0550-C□□□	LHE0400-C□	LHS0480-C□□□	LHV0550-C□□□	LHW0551-C□□□	LT0401-C□□□	LG0401-C□□□
	LHA0550-C□□□	LHC0550-C□□□		LHE0480-C□	LHS0550-C□□□			LT0481-C□□□	LG0481-C□□□
BZX020	LHA0650-C□□□	LHC0650-C□□□			LHS0650-C□□□	LHV0650-C□□□	LHW0651-C□□□	LT0651-C□□□	LG0651-C□□□
	LHA0750-C□□□				LHS0750-C□□□	LHV0750-C□□□	LHW0751-C□□□	LT0751-C□□□	LG0751-C□□□
BZX030	LHA0900-C□□□				LHS0900-C□□□				LG0901-C□□□
	LHA1050-C□□□				LHS1050-C□□□				LG1051-C□□□

Model No.	LGV (Single Action) Swing Clamp
BZX010	LGV0400-C□□
	LGV0480-C□□
	LGV0550-C□□
BZX020	LGV0650-C□□
	LGV0750-C□□
BZX030	

Model No.	LKA (Double Action) Link Clamp	LKC (Double Action) Link Clamp	LKE (Double Action) High-Power Link Clamp	LKK (Double Action) Universal Clamp	LKV (Double Action) Link Clamp	LKW (Double Action) Link Clamp	LM (Single Action) Link Clamp	LJ (Single Action) Link Clamp	LJV (Single Action) Link Clamp
BZX010	LKA0360-C□□□	LKC0400-C□□□	LKE0300-C□	LKK0360-C□□	LKV0400-C□□□	LKW0401-C□□□	LM0300-C□	LJ0302-C□	LJV0400-C□□□
	LKA0400-C□□□	LKC0480-C□□□	LKE0360-C□	LKK0400-C□□	LKV0480-C□□□	LKW0481-C□□□	LM0360-C□	LJ0362-C□	LJV0480-C□□□
	LKA0480-C□□□	LKC0550-C□□□	LKE0400-C□	LKK0480-C□□	LKV0550-C□□□	LKW0551-C□□□	LM0400-C□	LJ0402-C□	LJV0550-C□□□
	LKA0550-C□□□		LKE0480-C□	LKK0550-C□□			LM0480-C□	LJ0482-C□	
BZX020	LKA0650-C□□□	LKC0650-C□□□		LKK0650-C□□	LKV0650-C□□□	LKW0651-C□□□	LM0650-C□	LJ0652-C□	LJV0650-C□□□
	LKA0750-C□□□				LKV0750-C□□□	LKW0751-C□□□	LM0750-C□	LJ0752-C□	LJV0750-C□□□
BZX030	LKA0900-C□□□							LJ0902-C□	
	LKA1050-C□□□							LJ1052-C□	

Model No.	LFW (Double Action) Link Clamp	LFA (Double Action) Link Clamp	LSA (Double Action) Side Clamp	LSE (Double Action) High-Power Side Clamp	LL (Double Action) Linear Cylinder	LLR (Double Action) Linear Cylinder	LLV (Double Action) Lift Cylinder	LLW (Double Action) Lift Cylinder	TTA (Double Action) Linear Cylinder
BZX010	LFW0480-C□□	LFA0480-C□□	LSA0360-C□□	LSE0360-C□□	LL0360-C□□□	LLR0360-C□□□	LLV0360-C□□□	LLW0361-C□□□	TTA0360-C□□□
	LFW0550-C□□	LFA0550-C□□			LL0400-C□□□	LLR0400-C□□□	LLV0400-C□□□	LLW0401-C□□□	TTA0400-C□□□
					LL0480-C□□□	LLR0480-C□□□	LLV0480-C□□□	LLW0481-C□□□	TTA0480-C□□□
					LL0550-C□□□	LLR0550-C□□□			TTA0550-C□□□
BZX020	LFW0650-C□□	LFA0650-C□□			LL0650-C□□□	LLR0650-C□□□			TTA0650-C□□□
	LFW0750-C□□	LFA0750-C□□			LL0750-C□□□	LLR0750-C□□□			
BZX030					LL0900-C□□□	LLR0900-C□□□			
					LL1050-C□□□	LLR1050-C□□□			

● External Dimensions



Model No.	BZX010	BZX020	BZX030
A	14	18	22
B	15.5	20	24
C	19.8	20.6	20.6
D	9.3	10.1	10.1
E	5.5	6.3	6.3
G	G1/8	G1/4	G3/8

High-Power Series
Pneumatic Series
Hydraulic Series
Valve / Coupler Hydraulic Unit
Manual Operation Accessories
Cautions / Others

Hole Clamp

SFA
SFC

Swing Clamp

LHA
LHC
LHS
LHW
LG/LT
TLA-2
TLB-2
TLA-1

Link Clamp

LKA
LKC
LKW
LJ/LM
TMA-2
TMA-1

Work Support

LD
LC
TNC
TC

Air Sensing Lift Cylinder

LLW

Linear Cylinder / Compact Cylinder

LL
LLR
LLU
DP
DR
DS
DT

Block Cylinder

DBA/DBC

Centering Vise

FVA
FVD
FVC

Control Valve

BZL
BZT
BZX/JZG
BZS

Pallet Clamp

VS/VT

Expansion Locating Pin

VFL/VFM
VFJ/VFK

Pull Stud Clamp

FP
FQ

Customized Spring Cylinder

DWA/DWB

Model No. Indication (G Thread Plug with Air Bleeding Function) PAT.

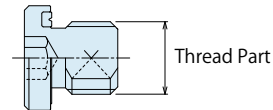
JZG0 1 0

1 2



1 G Thread Size

- 1 : Thread Part G1/8A Thread
 2 : Thread Part G1/4A Thread
 3 : Thread Part G3/8A Thread



2 Design No.

- 0 : Revision Number

Specifications

Model No.		JZG010	JZG020	JZG030
Max. Operating Pressure		MPa		
Withstanding Pressure		MPa		
G Thread Size		G1/8A	G1/4A	G3/8A
Usable Fluid		General Hydraulic Oil Equivalent to ISO-VG-32		
Operating Temperature		°C		
Tightening Torque	Female Thread Side Material : Steel	10	25	35
for Main Body	Female Thread Side Material : Aluminum (For LT/LM※1)	8	20	28
Weight	g	7	15	23

- Notes : 1. Air bleeding under high pressure is dangerous. It must be done under lower pressure.
 (For reference : the minimum operation pressure range of the product within the circuit)
 2. Refer to the machining dimensions of BZL mounting area when installing JZG into a hydraulic circuit.
 ※1. Body material of LT/LM is aluminum alloy, so install it with the tightening torque for aluminum.

Applicable Products

Model No.	LHA (Double Action) Swing Clamp	LHC (Double Action) Swing Clamp	LHD (Double Action) Swing Clamp	LHE (Double Action) High-Power Swing Clamp	LHS (Double Action) Swing Clamp	LHV (Double Action) Swing Clamp	LHW (Double Action) Swing Clamp	LT (Single Action) Swing Clamp	LG (Single Action) Swing Clamp
JZG010	LHA0360-C□□□ LHA0400-C□□□ LHA0480-C□□□ LHA0550-C□□□	LHC0360-C□□□ LHC0400-C□□□ LHC0480-C□□□ LHC0550-C□□□	LHD0400-C□□□ LHD0480-C□□□ LHD0550-C□□□	LHE0300-C□ LHE0360-C□ LHE0400-C□ LHE0480-C□ LHE0550-C□	LHS0360-C□□□ LHS0400-C□□□ LHS0480-C□□□ LHS0550-C□□□	LHV0400-C□□□ LHV0480-C□□□ LHV0550-C□□□	LHW0401-C□□□ LHW0481-C□□□ LHW0551-C□□□	LT0301-C□□□ LT0361-C□□□ LT0401-C□□□ LT0481-C□□□ LT0551-C□□□	LG0301-C□□□ LG0361-C□□□ LG0401-C□□□ LG0481-C□□□ LG0551-C□□□
JZG020	LHA0650-C□□□ LHA0750-C□□□	LHC0650-C□□□			LHS0650-C□□□ LHS0750-C□□□	LHV0650-C□□□ LHV0750-C□□□	LHW0651-C□□□ LHW0751-C□□□	LT0651-C□□□ LT0751-C□□□	LG0651-C□□□ LG0751-C□□□
JZG030	LHA0900-C□□□ LHA1050-C□□□				LHS0900-C□□□ LHS1050-C□□□				LG0901-C□□□ LG1051-C□□□

Model No.	LGV (Single Action) Swing Clamp	DBA (Double Action) Block Cylinder	DBC (Double Action) Block Cylinder	FVA (Double Action) Centering Vise	FVC (Double Action) Centering Vise	FVD (Double Action) Centering Vise	LC (Single Action) Work Support	LCW (Single Action) Work Support	TC (Single Action) Work Support
JZG010	LGV0400-C□□ LGV0480-C□□ LGV0550-C□□	DBA0250-C□ DBA0320-C□	DBC0250-C□ DBC0320-C□	FVA0401 FVA0631 FVA1001	FVC0630	FVD1600 FVD2500	LC0263-C□□□ LC0303-C□□□ LC0363-C□□□ LC0403-C□□□ LC0483-C□□□ LC0553-C□□□ LC0653-C□□□	LCW0363-C□ LCW0403-C□ LCW0483-C□ LCW0553-C□ LCW0653-C□	TC0403-C□□□ TC0483-C□□□ TC0553-C□□□ TC0653-C□□□ TC0753-C□□□
JZG020	LGV0650-C□□ LGV0750-C□□	DBA0400-C□ DBA0500-C□	DBC0400-C□ DBC0500-C□		FVC1000 FVC1600	FVD4000	LC0753-C□□□ LC0903-C□□□		

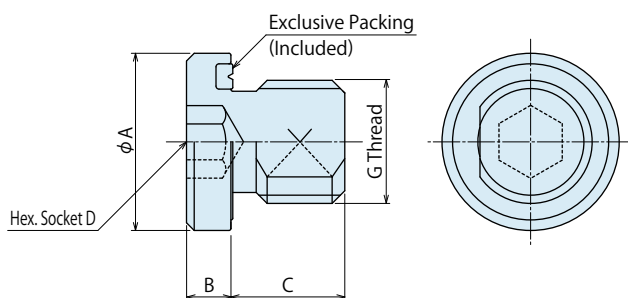
Applicable Products

Model No.	LKA (Double Action) Link Clamp	LKC (Double Action) Link Clamp	LKE (Double Action) High-Power Link Clamp	LKK (Double Action) Universal Clamp	LKV (Double Action) Link Clamp	LKW (Double Action) Link Clamp	LM (Single Action) Link Clamp	LJ (Single Action) Link Clamp	LJV (Single Action) Link Clamp
JZG010	LKA0360-C□□□	LKC0400-C□□□	LKE0300-C□	LKK0360-C□	LKV0400-C□□□	LKW0401-C□□□	LM0300-C□	LJ0302-C□	LJV0400-C□□□
	LKA0400-C□□□	LKC0480-C□□□	LKE0360-C□	LKK0400-C□	LKV0480-C□□□	LKW0481-C□□□	LM0360-C□	LJ0362-C□	LJV0480-C□□□
	LKA0480-C□□□	LKC0550-C□□□	LKE0400-C□	LKK0480-C□	LKV0550-C□□□	LKW0551-C□□□	LM0400-C□	LJ0402-C□	LJV0550-C□□□
	LKA0550-C□□□		LKE0480-C□	LKK0550-C□			LM0480-C□	LJ0482-C□	
JZG020	LKA0650-C□□□	LKC0650-C□□□		LKK0650-C□	LKV0650-C□□□	LKW0651-C□□□	LM0650-C□	LJ0652-C□	LJV0650-C□□□
	LKA0750-C□□□				LKV0750-C□□□	LKW0751-C□□□	LM0750-C□	LJ0752-C□	LJV0750-C□□□
JZG030	LKA0900-C□□□							LJ0902-C□	
	LKA1050-C□□□							LJ1052-C□	

Model No.	TLA-1 (Single Action) Swing Clamp	TLA-2 (Double Action) Swing Clamp	TLB-2 (Double Action) Swing Clamp	TLV-2 (Double Action) Swing Clamp	TMA-1 (Double Action) Link Clamp	TMA-2 (Double Action) Link Clamp	TMV-2 (Double Action) Link Clamp
JZG010	TLA0402-1C□	TLA0401-2C□□	TLB0401-2C□□	TLV0800-2C□□	TMA0250-1C□	TMA0250-2C□	TMV0400-2C□□
	TLA0602-1C□	TLA0601-2C□□	TLB0601-2C□□	TLV1000-2C□□	TMA0400-1C□	TMA0400-2C□	TMV0600-2C□□
	TLA0802-1C□	TLA0801-2C□□	TLB0801-2C□□	TLV1600-2C□□	TMA0600-1C□	TMA0600-2C□	TMV1000-2C□□
	TLA1002-1C□	TLA1001-2C□□	TLB1001-2C□□		TMA1000-1C□	TMA1000-2C□	
	TLA1602-1C□	TLA1601-2C□□	TLB1601-2C□□				
JZG020	TLA2002-1C□	TLA2001-2C□□	TLB2001-2C□□	TLV2000-2C□□	TMA1600-1C□	TMA1600-2C□	TMV1600-2C□□
	TLA2502-1C□	TLA2501-2C□□	TLB2501-2C□□		TMA2500-1C□	TMA2500-2C□	
	TLA4002-1C□	TLA4001-2C□□	TLB4001-2C□□		TMA3200-1C□	TMA3200-2C□	

Model No.	LFA (Double Action) Link Clamp	LFW (Double Action) Link Clamp	LSA (Double Action) Side Clamp	LSE (Double Action) High-Power Side Clamp	LL (Double Action) Linear Cylinder	LLR (Double Action) Linear Cylinder	LLV (Double Action) Lift Cylinder	LLW (Double Action) Lift Cylinder	TTA (Double Action) Linear Cylinder
JZG010	LFA0480-C□□	LFW0480-C□□	LSA0360-C□	LSE0360-C□	LL0360-C□□□	LLR0360-C□□□□	LLV0360-C□□□	LLW0361-C□□□	TTA0360-C□□□
	LFA0550-C□□	LFW0550-C□□			LL0400-C□□□	LLR0400-C□□□□	LLV0400-C□□□	LLW0401-C□□□	TTA0400-C□□□
					LL0480-C□□□	LLR0480-C□□□□	LLV0480-C□□□	LLW0481-C□□□	TTA0480-C□□□
					LL0550-C□□□	LLR0550-C□□□□			TTA0550-C□□□
JZG020	LFA0650-C□□	LFW0650-C□□			LL0650-C□□□	LLR0650-C□□□□			TTA0650-C□□□
	LFA0750-C□□	LFW0750-C□□			LL0750-C□□□	LLR0750-C□□□□			
JZG030					LL0900-C□□□	LLR0900-C□□□□			
					LL1050-C□□□	LLR1050-C□□□□			

External Dimensions



Model No.	(mm)		
	JZG010	JZG020	JZG030
A	14	18	22
B	3.5	4.5	4.5
C	8	9	10
D	5	6	8
G	G1/8A	G1/4A	G3/8A

High-Power Series

Pneumatic Series

Hydraulic Series

Valve / Coupler Hydraulic Unit

Manual Operation Accessories

Cautions / Others

Hole Clamp

SFA
SFC

Swing Clamp

LHA
LHC
LHS
LHW
LG/LT
TLA-2
TLB-2
TLA-1

Link Clamp

LKA
LKC
LKW
LJ/LM
TMA-2
TMA-1

Work Support

LD
LC
TNC
TC

Air Sensing Lift Cylinder

LLW

Linear Cylinder / Compact Cylinder

LL
LLR
LLU
DP
DR
DS
DT

Block Cylinder

DBA/DBC

Centering Vise

FVA
FVD
FVC

Control Valve

BZL
BZT
BZX/JZG
BZS

Pallet Clamp

VS/VT

Expansion Locating Pin

VFL/VFM
VFJ/VFK

Pull Stud Clamp

FP
FQ

Customized Spring Cylinder

DWA/DWB

PAT.P.

Direct-Mount Sequence Valve

Model BZS

Attaches directly into Kosmek hydraulic clamps G-thread piping option.
Easily and securely controls the operating sequence of actuators.



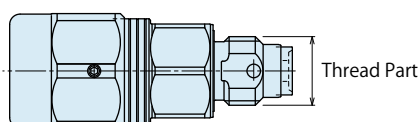
Model No. Indication

BZS 0 10 0

1
2

1 G Thread Size

- 10** : G1/8A Thread
- 20** : G1/4A Thread
- 30** : G3/8A Thread



2 Design No.

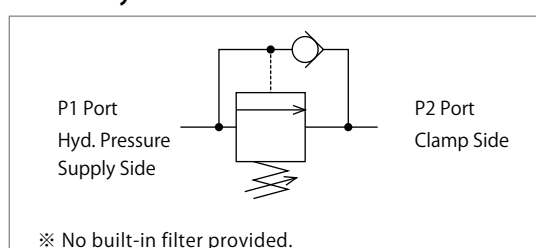
- 0** : Revision Number

Specifications

Model No.		BZS0100	BZS0200	BZS0300
Sequence Operating Pressure Adjustable Range		MPa		
Operating Pressure Range		MPa		
Withstanding Pressure		MPa		
G Thread Size		G1/8A	G1/4A	G3/8A
Cracking Pressure		MPa		
Adjusting Screw Turn Ratio:Reference		MPa/Rev		
Min. Passage Area				
		mm ²		
		P1 → P2		
		P2 → P1		
Usable Fluid		General Hydraulic Oil Equivalent to ISO-VG-32		
Operating Temperature		°C		
Tightening Torque		N·m		
Weight		g		

- Notes:
- Please mount to an actuator using Hex. E shown in External Dimensions on P.961A with the tightening torque shown in the list above. Insufficient or excessive tightening torque leads to malfunction.
 - Do not attach a used BZS to other clamps.
Sequence movement may not be done because the bottom depth difference of G thread makes metal sealing insufficient.
 - The difference between the set pressure and the supplying pressure should be 1MPa or more.
 - For using multiple sequence valves to operate cylinders in sequence, the difference of each set pressure should be 1MPa or more.
 - Depending on circuit system (actuator capacity, hydraulic pipe diameter, passage length, etc.), sometimes it is necessary to reduce hydraulic flow rate to achieve proper sequence movement. Make sure you are able to control flow rate.
(Since BZS is directly mounted on and used exclusively for one actuator, it is easily affected by hydraulic flow rate.)
 - Filter is not built in this product. Please note that contaminants such as cutting chips and sealing tapes entering into the product cause malfunction. Also when internal parts are damaged, it will not operate properly even after removing contaminants.

Circuit Symbol



What is a Sequence Valve?

The sequence valve controls the clamping and positioning sequence of multiple actuators.

When the incoming side pressure (P1 port) reaches the sequence setting pressure value, the pressure will be supplied to the outgoing side (P2 port). Refer to P.961B for the action description.

Applicable Products

Model No.	DBA (Double Action) Block Cylinder	DBC (Double Action) Block Cylinder	FVA (Double Action) Centering Vise	FVC (Double Action) Centering Vise	FVD (Double Action) Centering Vise	LHA (Double Action) Swing Clamp	LHC (Double Action) Swing Clamp	LHD (Double Action) Swing Clamp	LHE (Double Action) High-Power Swing Clamp
BZS0100	DBA0250-C□ DBA0320-C□	DBC0250-C□ DBC0320-C□	FVA0401 FVA0631 FVA1001	FVC0630	FVD1600 FVD2500	LHA0360-C□□□ LHA0400-C□□□ LHA0480-C□□□ LHA0550-C□□□	LHC0360-C□□□ LHC0400-C□□□ LHC0480-C□□□ LHC0550-C□□□	LHD0400-C□□□ LHD0480-C□□□ LHD0550-C□□□	LHE0300-C□ LHE0360-C□ LHE0400-C□ LHE0480-C□ LHE0550-C□
BZS0200	DBA0400-C□ DBA0500-C□	DBC0400-C□ DBC0500-C□		FVC1000 FVC1600※1	FVD4000	LHA0650-C□□□ LHA0750-C□□□	LHC0650-C□□□		
BZS0300						LHA0900-C□□□ LHA1050-C□□□			

Model No.	LHS (Double Action) Swing Clamp	LHV (Double Action) Swing Clamp	LHW (Double Action) Swing Clamp	LT (Single Action) Swing Clamp	LG (Single Action) Swing Clamp	LGV (Single Action) Swing Clamp	LKA (Double Action) Link Clamp	LKC (Double Action) Link Clamp	LKE (Double Action) High-Power Link Clamp
BZS0100	LHS0360-C□□□ LHS0400-C□□□ LHS0480-C□□□ LHS0550-C□□□	LHV0400-C□□□ LHV0480-C□□□ LHV0550-C□□□	LHW0401-C□□□ LHW0481-C□□□ LHW0551-C□□□	LT0301-C□□□ LT0361-C□□□ LT0401-C□□□ LT0481-C□□□ LT0551-C□□□	LG0301-C□□□ LG0361-C□□□ LG0401-C□□□ LG0481-C□□□ LG0551-C□□□	LGV0400-C□□□ LGV0480-C□□□ LGV0550-C□□□	LKA0360-C□□□ LKA0400-C□□□ LKA0480-C□□□ LKA0550-C□□□	LKC0400-C□□□ LKC0480-C□□□ LKC0550-C□□□	LKE0300-C□ LKE0360-C□ LKE0400-C□ LKE0480-C□ LKE0550-C□
BZS0200	LHS0650-C□□□ LHS0750-C□□□	LHV0650-C□□□ LHV0750-C□□□	LHW0651-C□□□ LHW0751-C□□□	LT0651-C□□□ LT0751-C□□□	LG0651-C□□□ LG0751-C□□□	LGV0650-C□□□ LGV0750-C□□□	LKA0650-C□□□ LKA0750-C□□□	LKC0650-C□□□	
BZS0300	LHS0900-C□□□ LHS1050-C□□□				LG0901-C□□□ LG1051-C□□□		LKA0900-C□□□ LKA1050-C□□□		

Model No.	LKK (Double Action) Universal Clamp	LKV (Double Action) Link Clamp	LKW (Double Action) Link Clamp	LM (Single Action) Link Clamp	LJ (Single Action) Link Clamp	LJV (Single Action) Link Clamp
BZS0100	LKK0360-C□ LKK0400-C□ LKK0480-C□ LKK0550-C□	LKV0400-C□□□ LKV0480-C□□□ LKV0550-C□□□	LKW0401-C□□□ LKW0481-C□□□ LKW0551-C□□□	LM0300-C□ LM0360-C□ LM0400-C□ LM0480-C□ LM0550-C□	LJ0302-C□ LJ0362-C□ LJ0402-C□ LJ0482-C□ LJ0552-C□	LJV0400-C□□□ LJV0480-C□□□ LJV0550-C□□□
BZS0200	LKK0650-C□	LKV0650-C□□□ LKV0750-C□□□	LKW0651-C□□□ LKW0751-C□□□	LM0650-C□ LM0750-C□	LJ0652-C□ LJ0752-C□	LJV0650-C□□□ LJV0750-C□□□
BZS0300					LJ0902-C□ LJ1052-C□	

Model No.	LFW (Double Action) Link Clamp	LFA (Double Action) Link Clamp	LSA (Double Action) Side Clamp	LSE (Double Action) High-Power Side Clamp	LL (Double Action) Linear Cylinder	LLR (Double Action) Linear Cylinder	LLV (Double Action) Lift Cylinder	LLW (Double Action) Lift Cylinder
BZS0100	LFW0480-C□□ LFW0550-C□□	LFA0480-C□□ LFA0550-C□□	LSA0360-C□	LSE0360-C□	LL0360-C□□□ LL0400-C□□□ LL0480-C□□□ LL0550-C□□□	LLR0360-C□□□ LLR0400-C□□□ LLR0480-C□□□ LLR0550-C□□□	LLV0360-C□□□ LLV0400-C□□□ LLV0480-C□□□	LLW0361-C□□□ LLW0401-C□□□ LLW0481-C□□□
BZS0200	LFW0650-C□□ LFW0750-C□□	LFA0650-C□□ LFA0750-C□□			LL0650-C□□□ LL0750-C□□□	LLR0650-C□□□ LLR0750-C□□□		
BZS0300					LL0900-C□□□ LL1050-C□□□	LLR0900-C□□□ LLR1050-C□□□		

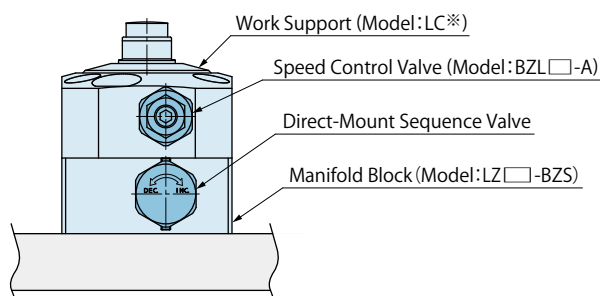
Note : ※1. It is not possible to install two BZS valves to FVC1000.

[In case of Work Support]

For using Direct-Mount Sequence Valve for Work Support (Model: LC※), mount Speed Control Valve (Model: BZL □ □ -A) on Work Support and mount Direct-Mount Sequence Valve on the Manifold Block as shown in the drawing below.

Please refer to P.962A for Manifold Block (Model: LZ □ □ -BZS).

※Please contact us when considering the installation to model LCW.



High-Power Series
Pneumatic Series
Hydraulic Series
Valve / Coupler Hydraulic Unit
Manual Operation Accessories
Cautions / Others

Hole Clamp

SFA
SFC

Swing Clamp

LHA
LHC
LHS
LHW
LG/LT
TLA-2
TLB-2
TLA-1

Link Clamp

LKA
LKC
LKW
LJ/LM
TMA-2
TMA-1

Work Support

LD
LC
TNC
TC

Air Sensing Lift Cylinder

LLW

Linear Cylinder / Compact Cylinder

LL
LLR
LLU
DP
DR
DS
DT

Block Cylinder

DBA/DBC

Centering Vise

FVA
FVD
FVC

Control Valve

BZL
BZT
BZX/JZG
BZS

Pallet Clamp

VS/VT

Expansion Locating Pin

VFL/VFM
VFJ/VFK

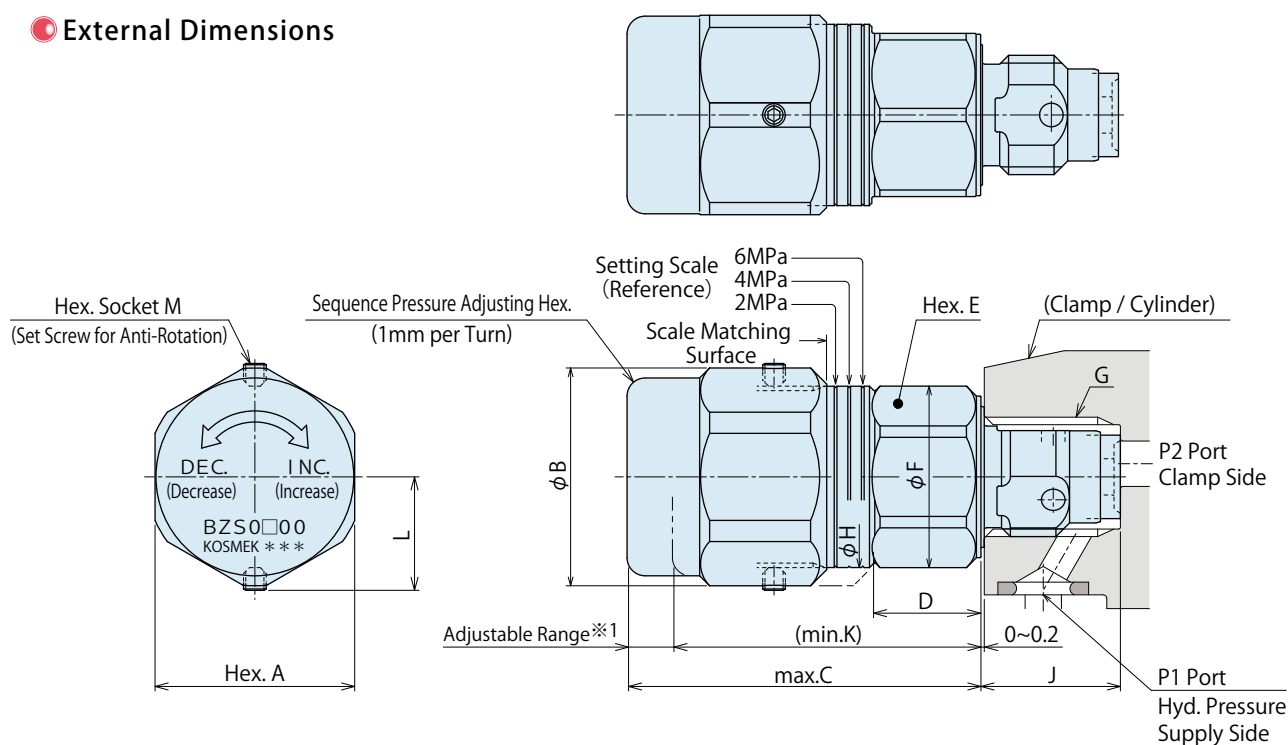
Pull Stud Clamp

FP
FQ

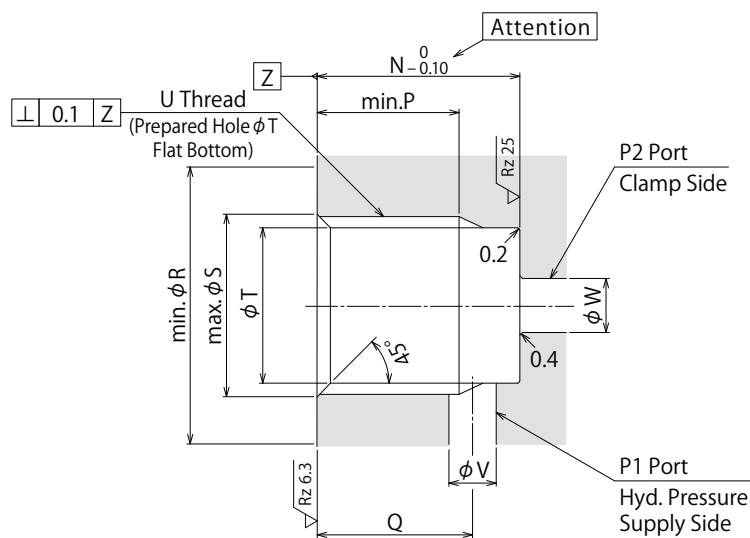
Customized Spring Cylinder

DWA/DWB

External Dimensions



Machining Dimensions of Mounting Area



(mm)

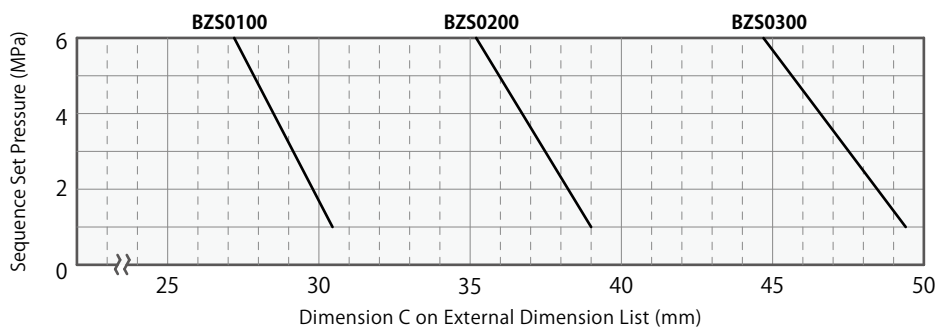
Model No.	BZS0100	BZS0200	BZS0300
A	16	22	27
B	17.5	24	29.5
C	30.5	39	49.5
D	7.5	12	15
E	14	18	22
F	15.5	20	24
G	G1/8	G1/4	G3/8
H	13.8	20	24
J ※2	(11.6)	(15.1)	(17.6)
K	(26.5)	(34)	(44)
L	9.5	12.5	15
M	1.3	1.3	1.5
N	11.5	15	17.5
P	8.5	11※3	13
Q	9	11.5	13
R (Flat Surface Area)	16	20.5	24.5
S	10	13.5	17
T	8.7	11.5	15
U	G1/8	G1/4	G3/8
V	2 ~ 3	3 ~ 4	4 ~ 5
W	2.5 ~ 5	3.5 ~ 7	4.5 ~ 9

Notes:

- Since the $\sqrt{Rz 6.3}$ area is sealing part, be careful not to damage it.
 - Since the $\sqrt{Rz 12.5}$ area is the metal sealing part at the edge of BZS, be careful not to damage it (especially when deburring).
 - No cutting chips or burr should be at the tolerance part of machining hole.
 - As shown in the drawing, P1 port is used as the hydraulic supply and P2 port as the clamp side.
- ※1. Use the sequence pressure adjusting hex. within the adjustable range of ※2 (the dimensions K~C in the above).
Please note that if it is loosened further than max. C, pressure adjusting hex. part and internal spring will come off.
- ※2. Dimension when mounted. (+0.5mm before mounted.)
- ※3. If mounting plugs or fittings with G thread specification available in the market, the dimension '※3' should be 12.5.

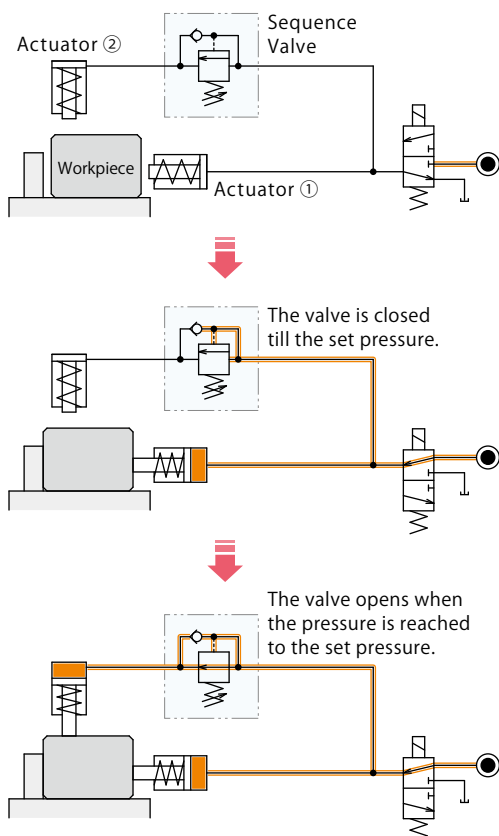
Cautions

1. Please design hydraulic circuit properly. Improper circuit design may lead to malfunctions and damages.
2. Filter is not built in this product. Be aware that contaminants such as cutting chips and sealing tapes entering into the product cause malfunction. Also when internal parts are damaged, it will not operate properly even after removing contaminants.
3. Depending on circuit system (actuator capacity, hydraulic pipe diameter, passage length, etc.), sometimes it is necessary to reduce hydraulic flow rate to achieve proper sequence movement. Make sure you are able to control flow rate.
(Since BZS is directly mounted on and used exclusively for one actuator, it is easily affected by hydraulic flow rate.)
4. The difference between the set pressure and the supplying pressure should be 1MPa or more.
5. For using multiple sequence valves to operate cylinders in sequence, the difference of each set pressure should be 1MPa or more.
6. For using multiple sequence valves to operate cylinders simultaneously, adjust them gradually by checking their actions.
7. Please keep in mind that the minimum passage area of each actuator will be decreased by mounting this product and thus operating time may become longer.
8. Please mount to an actuator using Hex. E shown in External Dimensions on P.961 with the tightening torque shown in the specification list on P.959. Insufficient or excessive tightening torque leads to malfunction.
9. Air bleeding is required as air mixed in the circuit causes malfunction.
10. At shipment, sequence pressure is not adjusted. Please adjust it by referring to the graph below. Install a pressure gauge on the circuit to check pressure as necessary. After adjustment, tighten one or more set screw for anti-rotation. (Tightening torque: 0.2N·m)



(This graph is a reference, and the values will not be guaranteed.)

Action Description



Operating Procedure		Note
Locking	Hydraulic pressure is ON.	
	Actuator ① is activated.	
	Pressure increases to the sequence operation set pressure.	The difference between the operating pressure and the sequence operation set pressure should be 1MPa or more.
	The sequence valve circuit opens.	
	Actuator ② is activated.	
Releasing	Locking action is completed.	
	Machining, etc.	
	Hydraulic pressure is OFF.	
	The actuators ① and ② are released almost simultaneously.	The check valve in the sequence valve opens when the incoming side pressure decreases.
Releasing action is completed.		

Sales Offices

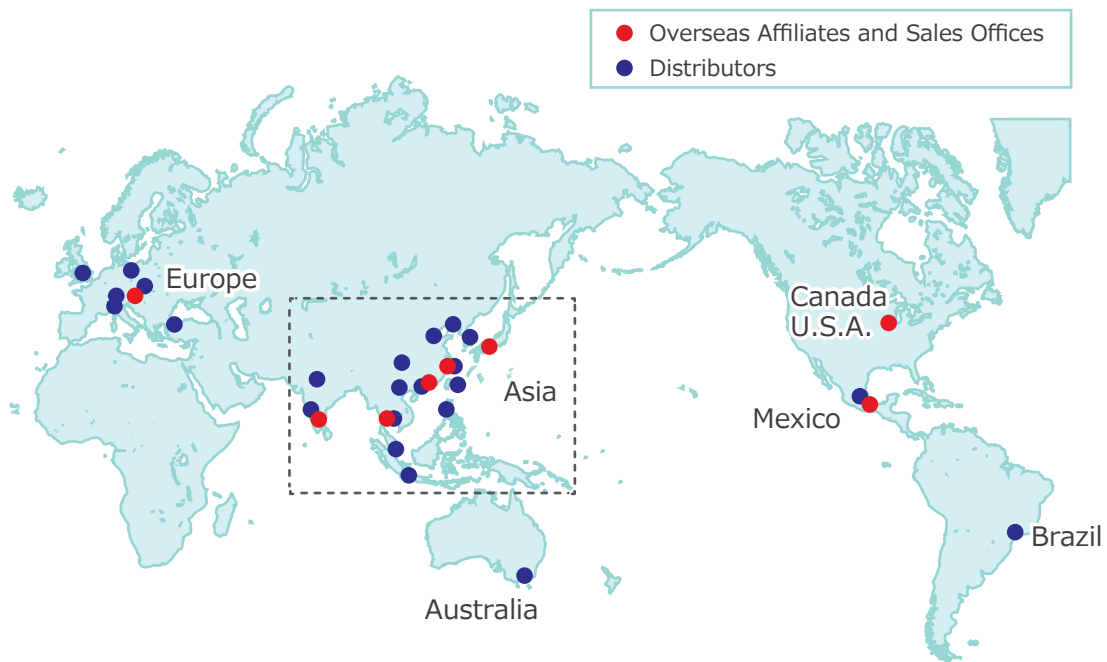
Sales Offices across the World

JAPAN HEAD OFFICE Overseas Sales	TEL. +81-78-991-5162	FAX. +81-78-991-8787
	KOSMEK LTD. 1-5, 2-chome, Murotani, Nishi-ku, Kobe-city, Hyogo, Japan 651-2241 〒651-2241 兵庫県神戸市西区室谷2丁目1番5号	
United States of America SUBSIDIARY KOSMEK (USA) LTD.	TEL. +1-630-620-7650	FAX. +1-630-620-9015
	650 Springer Drive, Lombard, IL 60148 USA	
MEXICO REPRESENTATIVE OFFICE KOSMEK USA Mexico Office	TEL. +52-442-161-2347	
	Av. Santa Fe #103 int 59 Col. Santa Fe Juriquilla C.P. 76230 Queretaro, Qro Mexico	
EUROPE SUBSIDIARY KOSMEK EUROPE GmbH	TEL. +43-463-287587	FAX. +43-463-287587-20
	Schleppeplatz 2 9020 Klagenfurt am Wörthersee Austria	
CHINA KOSMEK (CHINA) LTD. 考世美(上海)贸易有限公司	TEL. +86-21-54253000	FAX. +86-21-54253709
	Room601, RIVERSIDE PYRAMID No.55, Lane21, Pusan Rd, Pudong Shanghai 200125, China 中国上海市浦东新区浦三路21弄55号银亿滨江中心601室 200125	
INDIA BRANCH OFFICE KOSMEK LTD - INDIA	TEL. +91-9880561695	
	F 203, Level-2, First Floor, Prestige Center Point, Cunningham Road, Bangalore -560052 India	
THAILAND REPRESENTATIVE OFFICE KOSMEK Thailand Representation Office	TEL. +66-2-300-5132	FAX. +66-2-300-5133
	67 Soi 58, RAMA 9 Rd., Suanluang, Suanluang, Bangkok 10250, Thailand	
TAIWAN (Taiwan Exclusive Distributor) Full Life Trading Co., Ltd. 盈生貿易有限公司	TEL. +886-2-82261860	FAX. +886-2-82261890
	16F-4, No.2, Jian Ba Rd., Zhonghe District, New Taipei City Taiwan 23511 台湾新北市中和區建八路2號 16F-4 (遠東世紀廣場)	
PHILIPPINES (Philippines Exclusive Distributor) G.E.T. Inc, Phil.	TEL. +63-2-310-7286	FAX. +63-2-310-7286
	Victoria Wave Special Economic Zone Mt. Apo Building, Brgy. 186, North Caloocan City, Metro Manila, Philippines 1427	
INDONESIA (Indonesia Exclusive Distributor) PT. Yamata Machinery	TEL. +62-21-29628607	FAX. +62-21-29628608
	Delta Commercial Park I, Jl. Kenari Raya B-08, Desa Jayamukti, Kec. Cikarang Pusat Kab. Bekasi 17530 Indonesia	

Sales Offices in Japan

Head Office Osaka Sales Office Overseas Sales	TEL. 078-991-5162	FAX. 078-991-8787
	〒651-2241 兵庫県神戸市西区室谷2丁目1番5号	
Tokyo Sales Office	TEL. 048-652-8839	FAX. 048-652-8828
	〒331-0815 埼玉県さいたま市北区大成町4丁目81番地	
Nagoya Sales Office	TEL. 0566-74-8778	FAX. 0566-74-8808
	〒446-0076 愛知県安城市美園町2丁目10番地1	
Fukuoka Sales Office	TEL. 092-433-0424	FAX. 092-433-0426
	〒812-0006 福岡県福岡市博多区上牟田1丁目8-10-101	

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Asia Detailed Map

