



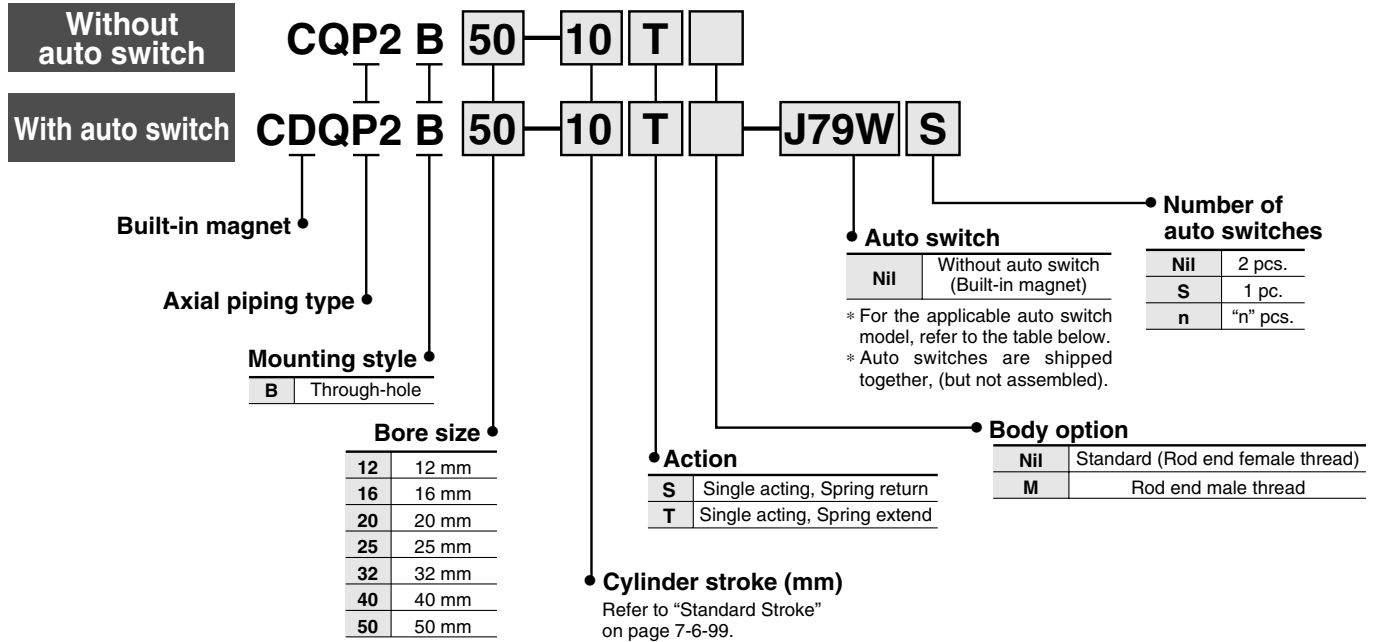
Compact Cylinder: Axial Piping Type

Single Acting, Single Rod, Spring Return/Extend

Series CQP2

ø12, ø16, ø20, ø25, ø32, ø40, ø50

How to Order



Applicable Auto Switch/Refer to page 7-9-1 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m) *				Pre-wire connector	Applicable load		
					DC	AC	Perpendicular	In-line	0.5 (Nil)	3 (L)	5 (Z)	None (N)		IC circuit	Relay, PLC	
Reed switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	—	A76H	●	●	—	—	—			—
				—	—	200 V	A72	A72H	●	●	—	—	—	—	Relay, PLC	
	Diagnostic indication (2-color indication)	Connector		2-wire	24 V	12 V	100 V	A73	A73H	●	●	●	—			—
				Grommet	—	—	—	A73C	—	●	●	●	●	—	—	
Solid state switch	—	Grommet	3-wire (NPN)	24 V	5 V, 12 V	—	F7NV	F79	●	●	○	—	○	IC circuit	Relay, PLC	
			3-wire (PNP)				F7PV	F7P	●	●	○	—	○			
		Connector	2-wire				F7BV	J79	●	●	○	—	○			
			—				J79C	—	●	●	●	●	—	—		
	Diagnostic indication (2-color indication)	Grommet	3-wire (NPN)				F7NWV	F79W	●	●	○	—	○	IC circuit		
			3-wire (PNP)				—	F7PW	●	●	○	—	○			
			Water resistant (2-color indication)				2-wire	F7BWV	J79W	●	●	○	—	○		
							—	F7BA	—	●	○	—	○	—		
With diagnostic output (2-color indication)	Grommet	4-wire (NPN)	—	F7BAV	—	—	●	○	—	—						
			—	F79F	●	●	○	—	○	IC circuit						

* Lead wire length symbols: 0.5 m.....Nil
3 m.....L
5 m.....Z
None.....N

(Example) A73C
(Example) A73CL
(Example) A73CZ
(Example) A73CN

* Solid state switches marked with "○" are produced upon receipt of order.

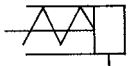
- Since there are other applicable auto switches than listed, refer to page 7-6-23 for details.
- For details about auto switches with pre-wire connector, refer to page 7-9-36.

Compact Cylinder: Axial Piping Type Single Acting, Single Rod, Spring Return/Extend Series CQP2

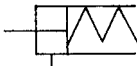


JIS Symbol

Single acting,
Spring return



Single acting,
Spring extend



Made to Order Specifications (For details, refer to page 7-10-1.)

Symbol	Specifications
-XA□	Change of rod end shape
-XC6	Piston rod and rod end nut made of stainless steel
-XC36	With boss in rod side
-X271	Fluoro rubber for seals

⚠ Precautions

Be sure to read before handling.
For Safety Instructions and Actuator Precautions, refer to pages 7-13-3 to 7-13-6.

⚠ Caution

Snap Ring Installation/Removal

- For installation and removal, use an appropriate pair of pliers (tool for installing a type C snap ring).
- Even if a proper plier (tool for installing type C snap ring) is used, it is likely to inflict damage to a human body or peripheral equipment, as a snap ring may be flown out of the tip of a plier (tool for installing a type C snap ring). Be much careful with the popping of a snap ring. Besides, be certain that a snap ring is placed firmly into the groove of rod cover before supplying air at the time of installment.

Type

Bore size (mm)		12	16	20	25	32	40	50
Pneumatic	Mounting	Through-hole (Standard)	●	●	●	●	●	●
	Built-in magnet		●	●	●	●	●	●
	Piping	Screw-in type	M5 x 0.8	M5 x 0.8	M5 x 0.8	M5 x 0.8	Rc 1/8	Rc 1/8
	Rod end male thread		●	●	●	●	●	●

Standard Specifications

Type	Pneumatic (Non-lube)
Fluid	Air
Proof pressure	1.5 MPa
Maximum operating pressure	1.0 MPa
Ambient and fluid temperature	Without auto switch: -10 to 70°C (No freezing) With auto switch: -10 to 60°C (No freezing)
Rubber bumper	None
Rod end thread	Female thread
Rod end thread tolerance	JIS Class 2
Stroke length tolerance	+1.0 0
Mounting	Through-hole
Piston speed	50 to 500 mm/s

Minimum Operating Pressure

(MPa)

Bore size (mm)	12	16	20	25	32	40	50
Single acting (Spring return/extend)	0.25	0.25	0.18	0.18	0.17	0.15	0.13

Standard Stroke

Bore size (mm)	Standard stroke
12	5, 10
16	
20	
25	
32	
40	10, 20
50	

Manufacture of Intermediate Stroke

(Single acting, Spring retract type is excluded.)

Description	Spacer is installed in the standard stroke body.	
Part no.	Refer to "How to Order" for the standard model no. on page 7-6-98.	
Description	Dealing with the stroke by the 1 mm interval is available by installing spacer with standard stroke cylinder.	
Stroke range	Bore size	Stroke range
	12 to 40	1 to 9
	50	1 to 19
Example	Part no.: CQP2B20-3T CQP2B20-5T with 2 mm width spacer inside. B dimension is 24.5 mm.	

CUJ

CU

CQS

CQM

CQ2

RQ

MU

D-

-X

20-

Data

Series CQP2

Theoretical Output

(N)

Action	Bore size (mm)	Operating pressure (MPa)		
		0.3	0.5	0.7
Spring return	12	21	44	66
	16	45	86	126
	20	79	142	205
	25	126	224	323
	32	211	372	533
	40	338	589	841
	50	535	928	1316
Spring extend	12	14	31	48
	16	24	54	85
	20	71	118	165
	25	113	189	264
	32	181	302	422
	40	317	528	739
	50	495	825	1150

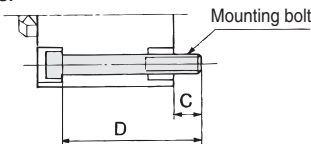
For spring force, refer to page 7-12-3.

Mounting Bolt for CQP2

Mounting method: Mounting bolt for through-hole mounting style of CQP2B is available as an option.

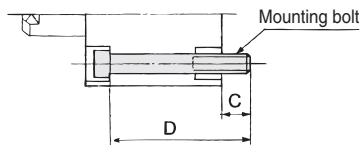
Ordering: Add the word "Bolt" in front of the bolts to be used.

Example) Bolt M3 x 25ℓ 4 pcs.



Spring Return

Model	C	D	Mounting bolt
CQP2B12-5S	6.5	25	M3 x 25ℓ
-10S		30	x 30ℓ
CQP2B16-5S	5	25	M3 x 25ℓ
-10S		30	x 30ℓ
CQP2B20-5S	7.5	25	M5 x 25ℓ
-10S		30	x 30ℓ
CQP2B25-5S	9.5	30	M5 x 30ℓ
-10S		35	x 35ℓ
CQP2B32-5S	9	30	M5 x 30ℓ
-10S		35	x 35ℓ
CQP2B40-5S	7.5	35	M5 x 35ℓ
-10S		40	x 40ℓ
CQP2B50-10S	12.5	45	M6 x 45ℓ
-20S		55	x 55ℓ



Spring Extend

Model	C	D	Mounting bolt
CQP2B12-5T	6.5	25	M3 x 25ℓ
-10T		30	x 30ℓ
CQP2B16-5T	5	25	M3 x 25ℓ
-10T		30	x 30ℓ
CQP2B20-5T	7.5	25	M5 x 25ℓ
-10T		30	x 30ℓ
CQP2B25-5T	9.5	30	M5 x 30ℓ
-10T		35	x 35ℓ
CQP2B32-5T	9	30	M5 x 30ℓ
-10T		35	x 35ℓ
CQP2B40-5T	7.5	35	M5 x 35ℓ
-10T		40	x 40ℓ
CQP2B50-10T	12.5	45	M6 x 45ℓ
-20T		55	x 55ℓ

Weight

(g)

Action	Bore size (mm)	Cylinder stroke (mm)			
		5	10	15	20
Spring return	12	33	40	—	—
	16	55	64	—	—
	20	68	83	—	—
	25	103	118	—	—
	32	149	173	—	—
	40	236	262	—	—
Spring extend	50	—	426	—	691
	12	33	40	—	—
	16	55	64	—	—
	20	73	87	—	—
	25	109	124	—	—
	32	160	180	—	—
	40	262	284	—	—
50	—	468	—	540	

Additional Weight

(g)

Bore size (mm)		12	16	20	25	32	40	50
Rod end male thread	Male thread	1.5	3	6	12	26	27	53
	Nut	1	2	4	8	17	17	32

Calculation: (Example) CQP2B32-10SM

- Cylinder weight: CQP2B32-10S..... 173 g
- Option weight: Rod end male thread..... 43 g
- 216 g

Auto Switch Mounting Bracket Part No.

Bore size (mm)	Mounting bracket part no.	Note	Applicable auto switch	
			Reed switch	Solid state switch
12, 16, 20, 25	BQ-1	<ul style="list-style-type: none"> • Switch mounting screw (M3 x 0.5 x 8 ℓ) • Square nut 	D-A7□/A80 D-A73C/A80C D-A7□H/A80H D-A79W	D-F7□/J79 D-F7□V D-J79C D-F7□W/J79W
				D-F7□WV D-F7BAL/F7BAVL D-F79F D-F7NTL
32, 40, 50	BQ-2	<ul style="list-style-type: none"> • Switch mounting screw (M3 x 0.5 x 10 ℓ) • Switch spacer • Switch mounting nut 	D-A7□H/A80H D-A79W	D-F7□WV D-F7BAL/F7BAVL D-F79F D-F7NTL



* Mounting screws set made of stainless steel

The set of stainless steel mounting screws (with nuts) described below is available and can be used depending on the operating environment. (Please order the auto switch spacer, since it is not included.)

BBA2: For D-A7/A8/F7/J7

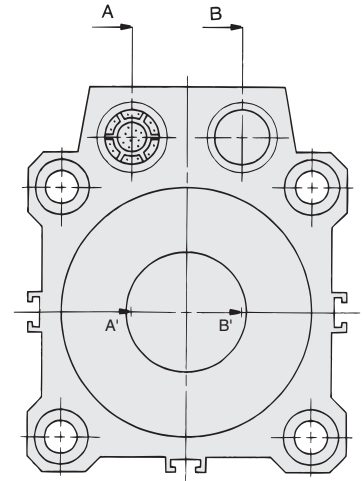
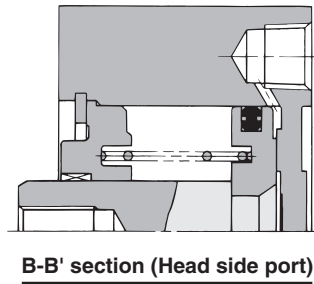
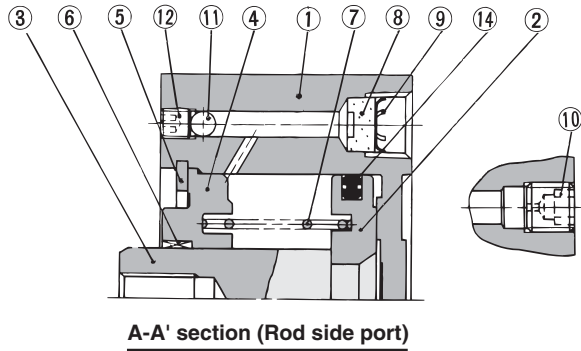
"D-F7BAL/F7BAVL" switch is set on the cylinder with the stainless steel screws above when shipped.

When only a switch is shipped independently, "BBA2" screws are attached.

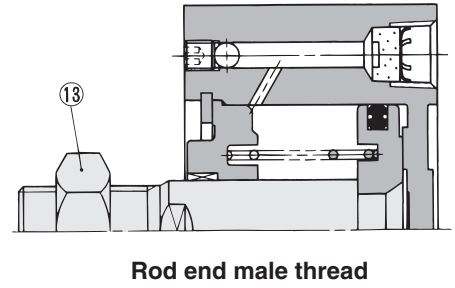
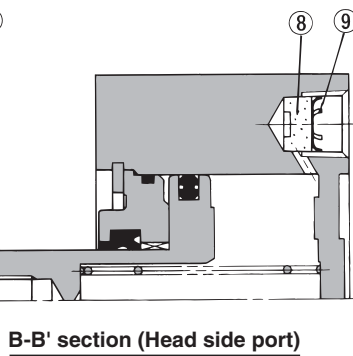
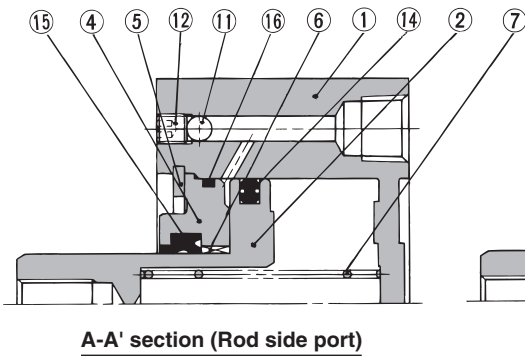
Compact Cylinder: Axial Piping Type Single Acting, Single Rod, Spring Return/Extend Series CQP2

Construction

Spring return



Spring extend



- CUJ
- CU
- CQS
- CQM
- CQ2**
- RQ
- MU
- D-
- X
- 20-
- Data

Component Parts

No.	Description	Material	Note
①	Cylinder tube	Aluminum alloy	Hard anodized
②*	Piston	Aluminum alloy	Chromated
③	Piston rod	Stainless steel	ø12 to ø25
		Carbon steel	ø32 to ø50, Hard chrome plated
④	Collar	Aluminum alloy	ø12 to ø40, Anodized
		Aluminum alloy casted	ø50, Chromate, Painted
⑤	Snap ring	Carbon tool steel	Phosphate coated
⑥	Bushing	Lead-bronze casted	ø50, Spring return
		Lead-bronze casted	ø50, Spring extend
⑦	Return spring	Piano wire	Zinc chromated
⑧	Bronze element	Sintered metallic BC	
⑨	Snap ring	Carbon tool steel	Port size Rc 1/8, 1/4
⑩	Plug with fixed orifice	Alloy steel	Port size M5 x 0.8
⑪	Steel balls	Bearing steel	
⑫	Hexagon socket head set screw	Alloy steel	Zinc chromated
⑬	Rod end nut	Carbon steel	Nickel plated

* On spring extend (Type T), piston and piston rod are integrated (stainless steel).

Replacement Parts

No.	Description	Material	Note
⑭	Piston seal	NBR	
⑮	Rod seal	NBR	
⑯	Gasket	NBR	

Replacement Parts: Seal Kit

Bore size (mm)	Single acting/Spring return	Single acting/Spring extend
12	CQ2B12-S-PS	CQ2B12-T-PS
16	CQ2B16-S-PS	CQ2B16-T-PS
20	CQ2B20-S-PS	CQ2B20-T-PS
25	CQ2B25-S-PS	CQ2B25-T-PS
32	CQ2B32-S-PS	CQ2B32-T-PS
40	CQ2B40-S-PS	CQ2B40-T-PS
50	CQ2B50-S-PS	CQ2B50-T-PS
Note	A set includes ⑭.	Kits include items ⑭, ⑮ and ⑯ from the table above
How to order	* Seal kit includes ⑭. Order the seal kit, based on each bore size.	* Seal kit includes ⑭, ⑮, ⑯. Order the seal kit, based on each bore size.

Copper-free (For CRT manufacturing process)

20 — CQP2B Bore size — Stroke S (M)
 Copper-free — ø12, ø16, ø20, ø25, ø32, ø40, ø50

To prevent the influence of copper ions or halogen ions during CRT manufacturing processes, copper and fluorine materials are not used in the component parts.

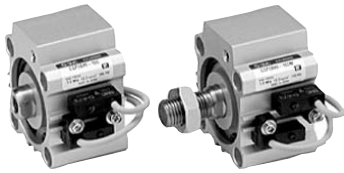
Specifications

Action	Single acting, Single rod
Bore size (mm)	12, 16, 20, 25, 32, 40, 50
Proof pressure	1.5 MPa
Maximum operating pressure	1.0 MPa
Rubber bumper	None
Piping	Screw-in piping
Piston speed	50 to 500 mm/s
Mounting	Through-hole
Auto switch	Mountable

Axial Piping: Single Acting, Single Rod Series *CDQP2* With Auto Switch



* Refer to page 7-9-1 for further information on auto switches.



Minimum Stroke for Auto Switch Mounting

(mm)

No. of auto switches mounted	D-F7□V D-J79C	D-A7□ D-A80 D-A73C D-A80C	D-F7□WV D-F7BAVL	D-A7□H D-A80H D-F7□ D-J79	D-A79W	D-F7□W D-J79W D-F7BAL D-F79F
1 pc.	5	5	10	15	15	20
2 pcs.	5	10	15	15	20	20

Note) Refer to page 7-6-92 in series CQ2, double acting for detailed specifications on auto switch.

Weight

(g)

Action	Bore size (mm)	Cylinder stroke (mm)			
		5	10	15	20
Spring return	12	55	63	—	—
	16	92	100	—	—
	20	121	135	—	—
	25	178	191	—	—
	32	217	242	—	—
	40	323	349	—	—
Spring extend	50	—	558	—	641
	12	61	69	—	—
	16	92	100	—	—
	20	126	140	—	—
	25	184	197	—	—
	32	228	253	—	—
40	349	375	—	—	
50	—	600	—	683	

Additional Weight

(g)

Bore size (mm)		12	16	20	25	32	40	50
Rod end male thread	Male thread	1.5	3	6	12	26	27	53
	Nut	1	2	4	8	17	17	32

Calculation: (Example) CDQP2B32-10SM

- Cylinder weight: CDQP2B32-10S..... 242 g
 - Option weight: Rod end male thread..... 43 g
- 285 g

Add each weight of auto switches and mounting brackets when auto switches are mounted.

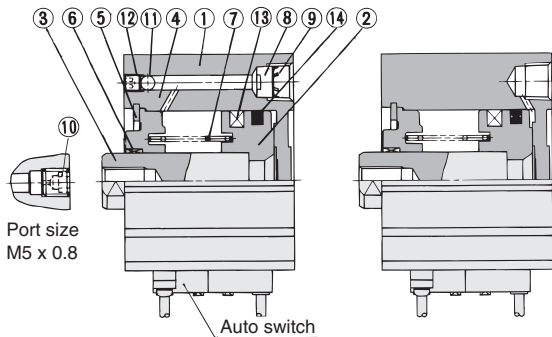
Auto Switch Mounting Bracket Weight

Mounting bracket part no.	Applicable bore size (mm)	Weight (g)
BQ-1	12 to 25	1.5
BQ-2	32 to 50	1.5

* For the auto switch weight, refer to page 7-9-1.

Construction

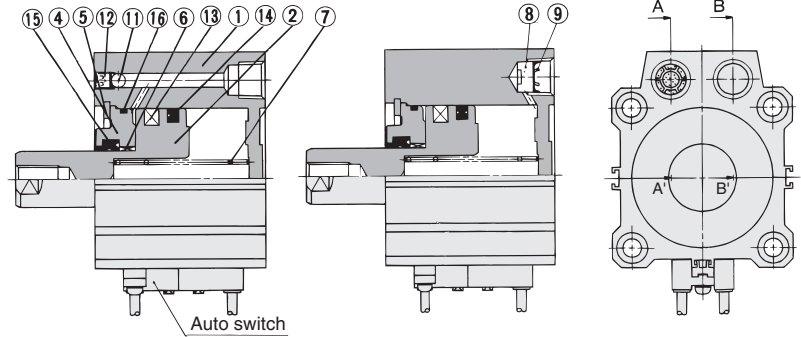
Spring return



A-A' section
(Rod side port)

B-B' section
(Head side port)

Spring extend



A-A' section
(Rod side port)

B-B' section
(Head side port)

Component Parts

No.	Description	Material	Note
①	Cylinder tube	Aluminum alloy	Hard anodized
②	Piston *	Aluminum alloy	Chromated
③	Piston rod *	Stainless steel	ø12 to ø25
		Carbon steel	ø32 to ø50, Hard chrome plated
④	Collar	Aluminum alloy	ø12 to ø40, Anodized
		Aluminum alloy casted	ø50, Chromate, Painted
⑤	Snap ring	Carbon tool steel	Phosphate coated
⑥	Bushing	Lead-bronze casted	ø50, Spring return
			ø50, Spring extend
⑦	Return spring	Piano wire	Zinc chromated
⑧	Bronze element	Sintered metallic BC	Port size Rc 1/8, 1/4
⑨	Snap ring	Carbon tool steel	
⑩	Plug with fixed orifice	Alloy steel	Port size M5 x 0.8
⑪	Steel balls	Bearing steel	
⑫	Hexagon socket head set screw	Alloy steel	Zinc chromated
⑬	Magnet	—	
⑭	Piston seal	NBR	
⑮	Rod seal	NBR	
⑯	Gasket	NBR	

* On spring extend (Type T), piston and piston rod are integrated (stainless steel).

Replacement Parts: Seal Kit

Bore size (mm)	Seal kit no.	Contents
12	CQ2B12-PS	Set of left nos. ⑭, ⑮, ⑯
16	CQ2B16-PS	
20	CQ2B20-PS	
25	CQ2B25-PS	
32	CQ2B32-PS	
40	CQ2B40-PS	
50	CQ2B50-PS	

* Seal kit includes ⑭, ⑮, ⑯. Order the seal kit, based on each bore size.

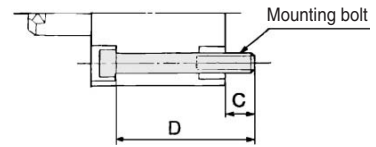
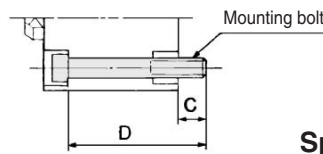
Compact Cylinder with Auto Switch: Axial Piping Type Single Acting, Single Rod, Spring Return/Extend Series **CDQP2**

Mounting Bolt for CDQP2 with Auto Switch

Mounting method: Mounting bolt for through-hole mounting style of CDQP2B is available as an option.

Ordering: Add the word "Bolt" in front of the bolts to be used.

Example) Bolt M3 x 35ℓ 2 pcs.



Spring Return

Model	C	D	Mounting bolt
CDQP2B12-5S	5.5	35	M3 x 35ℓ
-10S		40	x 40ℓ
CDQP2B16-5S	8	40	M3 x 40ℓ
-10S		45	x 45ℓ
CDQP2B20-5S	10.5	40	M5 x 40ℓ
-10S		45	x 45ℓ
CDQP2B25-5S	9.5	40	M5 x 40ℓ
-10S		45	x 45ℓ
CDQP2B32-5S	9	40	M5 x 40ℓ
-10S		45	x 45ℓ
CDQP2B40-5S	7.5	45	M5 x 45ℓ
-10S		50	x 50ℓ
CDQP2B50-10S	12.5	55	M6 x 55ℓ
-20S		60	x 60ℓ

Spring Extend

Model	C	D	Mounting bolt
CDQP2B12-5T	6.1	40	M3 x 40ℓ
-10T		45	x 45ℓ
CDQP2B16-5T	8	40	M3 x 40ℓ
-10T		45	x 45ℓ
CDQP2B20-5T	10.5	40	M5 x 40ℓ
-10T		45	x 45ℓ
CDQP2B25-5T	9.5	40	M5 x 40ℓ
-10T		45	x 45ℓ
CDQP2B32-5T	9	40	M5 x 40ℓ
-10T		45	x 45ℓ
CDQP2B40-5T	7.5	45	M5 x 45ℓ
-10T		50	x 50ℓ
CDQP2B50-10T	12.5	55	M6 x 55ℓ
-20T		65	x 65ℓ

Proper Auto Switch Mounting Position (Detection at stroke end) and Its Mounting

D-A7□
D-A80

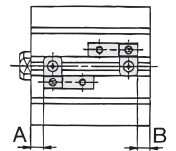
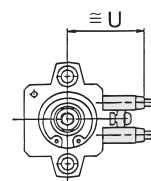
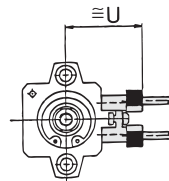
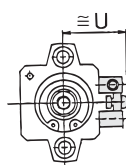
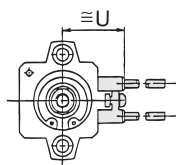
D-A7□H
D-A80H
D-F7□
D-J79

D-F7□W
D-J79W
D-F79F
D-F7NTL
D-F7BAL

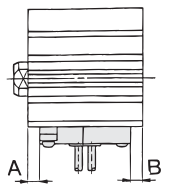
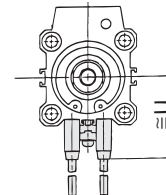
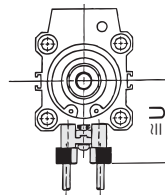
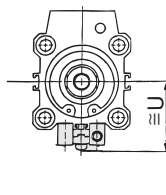
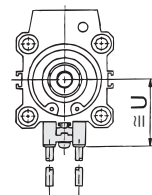
D-A73C
D-A80C
D-J79C

D-A79W
D-F7□WV
D-F7□V
D-F7BAVL

ø12 to ø25



ø32 to ø100



Proper Auto Switch Mounting Position/ Spring Return (Spring extend)

Bore size (mm)	D-A7□ D-A80		D-A7□H/A80H D-A73C/A80C D-F7□/J79 D-F7□V/J79C D-F7BAL/F7□W D-J79W/F7□WV D-F7BAVL/F79F		D-A79W	
	A	B	A	B	A	B
12	4.5	5.5(10)	5	6(10.5)	2	3(7.5)
16	7.5(5.5)	5(7)	8(6)	5.5(7.5)	5(3)	2.5(4.5)
20	7.5	6.5	8	7	5	4
25	7.5	7	8	7.5	5	4.5
32	9	6	9.5	6.5	6.5	3.5
40	13	8.5	13.5	9	10.5	6
50	11	11.5	11.5	12	8.5	9

(): Denotes spring extend.

Auto Switch Mounting Height

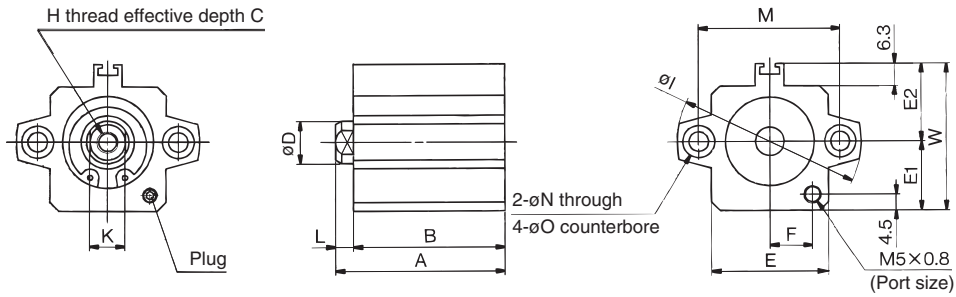
(mm)

D-A7□ D-A80	D-A7□H/A80H D-F7□/J79/F7□W D-J79W/F7BAL D-F79F/F7NTL	D-A73C D-A80C	D-F7□V D-F7□WV D-F7BAVL	D-J79C	D-A79W
U	U	U	U	U	U
19.5	20.5	26.5	23	26	22
22.5	23.5	29.5	26	29	25
24.5	25.5	31.5	28	31	27
27.5	28.5	34.5	31	34	30
31.5	32.5	38.5	35	38	34
35	36	42	38.5	41.5	37.5
41	42	48	44.5	47.5	43.5

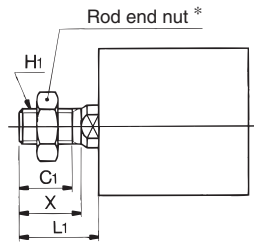
Series CDQP2

Dimensions: $\phi 12$ to $\phi 50$ /Spring Return without Auto Switch

$\phi 12$ to $\phi 25$



Rod end male thread



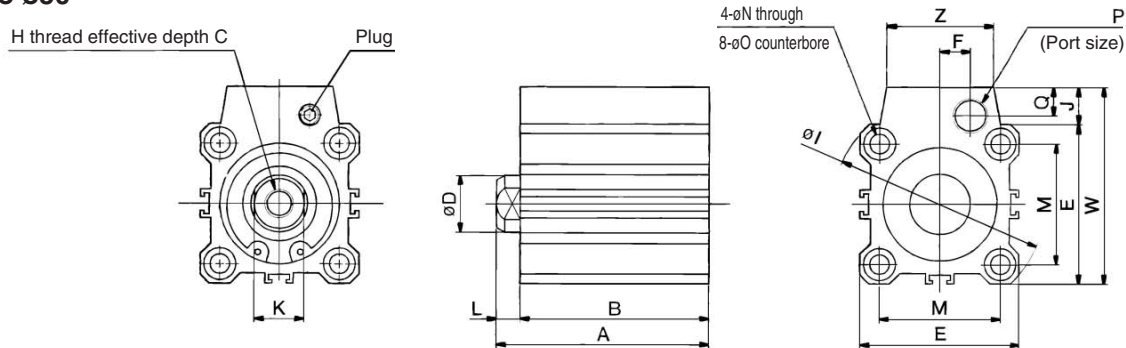
Rod End Male Thread

Bore size (mm)	C1	X	H1	L1
12	9	10.5	M5 x 0.8	14
16	10	12	M6 x 1.0	15.5
20	12	14	M8 x 1.25	18.5
25	15	17.5	M10 x 1.25	22.5

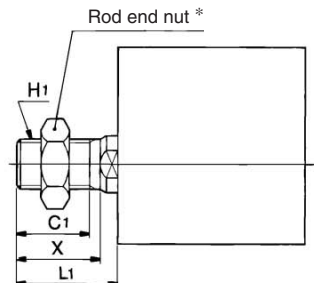
Basic Style

Bore size (mm)	A		B			C	D	E	E1	E2	F	H	I	K	L	M	N	O	W
	5 st	10 st	5 st	10 st	20 st														
12	25.5	30.5	22	27	—	6	6	23	13	14	7	M3 x 0.5	32	5	3.5	22	3.5	6.5 depth 3.5	27
16	27	32	23.5	28.5	—	8	8	26	15	17	8.5	M4 x 0.7	38	6	3.5	28	3.5	6.5 depth 3.5	32
20	29	34	24.5	29.5	—	7	10	30	17	19	10.5	M5 x 0.8	47	8	4.5	36	5.5	9 depth 7	36
25	32.5	37.5	27.5	32.5	—	12	12	33	19.5	22	12	M6 x 1.0	52	10	5	40	5.5	9 depth 7	41.5

$\phi 32$ to $\phi 50$



Rod end male thread



Rod End Male Thread

Bore size (mm)	C1	X	H1	L1
32	20.5	23.5	M14 x 1.5	28.5
40	20.5	23.5	M14 x 1.5	28.5
50	26	28.5	M18 x 1.5	33.5

Basic Style

Bore size (mm)	A			B			C	D	E	F	H	I	J	K	L	M	N	O	P	Q	W	Z
	5 st	10 st	20 st	5 st	10 st	20 st																
32	35	40	—	28	33	—	13	16	45	8.5	M8 x 1.25	60	10.5	14	7	34	5.5	9 depth 7	Rc 1/8	8	55.5	30
40	41.5	46.5	—	34.5	39.5	—	13	16	52	8.5	M8 x 1.25	69	10	14	7	40	5.5	9 depth 7	Rc 1/8	8	62	30
50	—	48.5	58.5	—	40.5	50.5	15	20	64	11	M10 x 1.5	86	13	17	8	50	6.6	11 depth 8	Rc 1/4	10	77	39

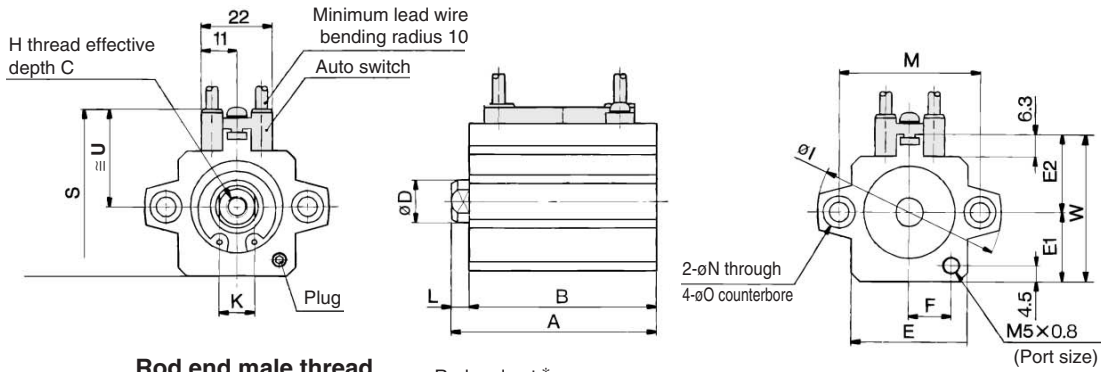


For details about the rod end nut and accessory brackets, refer to page 7-6-20.

Compact Cylinder with Auto Switch: Axial Piping Type Single Acting, Single Rod, Spring Return/Extend Series **CDQP2**

Dimensions: $\phi 12$ to $\phi 50$ /Spring Return with Auto Switch

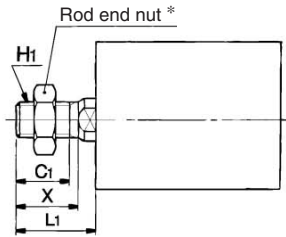
$\phi 12$ to $\phi 25$



Rod end male thread



Auto switch shown above is D-A73 and D-A80. For auto switch mounting position and its mounting height, refer to page 7-6-103.



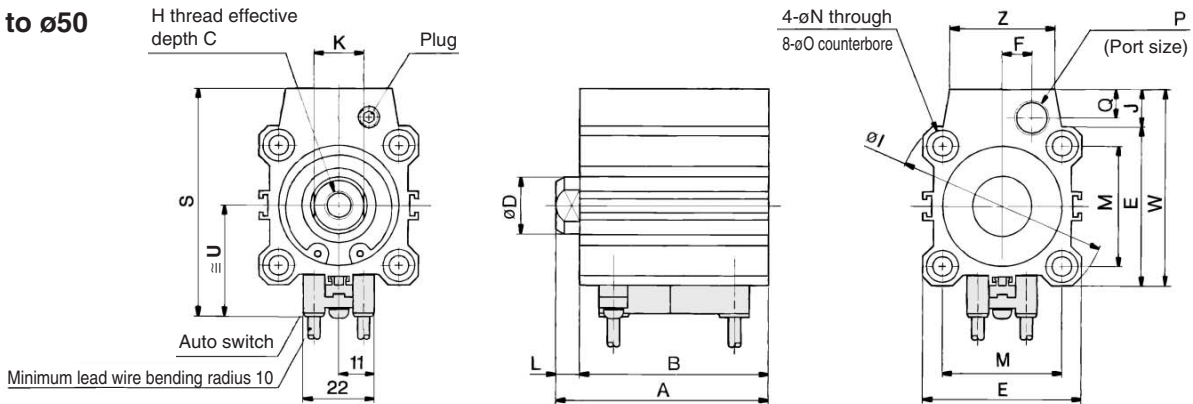
Rod End Male Thread

Bore size (mm)	C1	X	H1	L1
12	9	10.5	M5 x 0.8	14
16	10	12	M6 x 1.0	15.5
20	12	14	M8 x 1.25	18.5
25	15	17.5	M10 x 1.25	22.5

Basic Style

Bore size (mm)	A		B		C	D	E	E1	E2	F	H	I	K	L	M	N	O	S	U	W
	5 st	10 st	5 st	10 st																
12	36.5	41.5	33	38	6	6	23	13	14	7	M3 x 0.5	32	5	3.5	22	3.5	6.5 depth 3.5	32.5	19.5	27
16	39	44	35.5	40.5	8	8	26	15	17	8.5	M4 x 0.7	38	6	3.5	28	3.5	6.5 depth 3.5	37.5	22.5	32
20	41	46	36.5	41.5	7	10	30	17	19	10.5	M5 x 0.8	47	8	4.5	36	5.5	9 depth 7	41.5	24.5	36
25	42.5	47.5	37.5	42.5	12	12	33	19.5	22	12	M6 x 1.0	52	10	5	40	5.5	9 depth 7	47	27.5	41.5

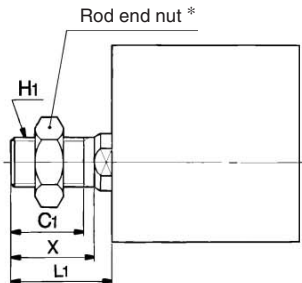
$\phi 32$ to $\phi 50$



Rod end male thread



Auto switch shown above is D-A73 and D-A80. For the auto switch mounting position and its mounting height, refer to page 7-6-103.



Rod End Male Thread

Bore size (mm)	C1	X	H1	L1
32	20.5	23.5	M14 x 1.5	28.5
40	20.5	23.5	M14 x 1.5	28.5
50	26	28.5	M18 x 1.5	33.5

Basic Style

Bore size (mm)	A			B			C	D	E	F	H	I	J	K	L	M	N	O	P	Q	S	U	W	Z
	5 st	10 st	20 st	5 st	10 st	20 st																		
32	45	50	—	38	43	—	13	16	45	8.5	M8 x 1.25	60	10.5	14	7	34	5.5	9 depth 7	Rc 1/8	8	64.5	31.5	55.5	30
40	51.5	56.5	—	44.5	49.5	—	13	16	52	8.5	M8 x 1.25	69	10	14	7	40	5.5	9 depth 7	Rc 1/8	8	71	35	62	30
50	—	58.5	68.5	—	50.5	60.5	15	20	64	11	M10 x 1.5	86	13	17	8	50	6.6	11 depth 8	Rc 1/4	10	86	41	77	39

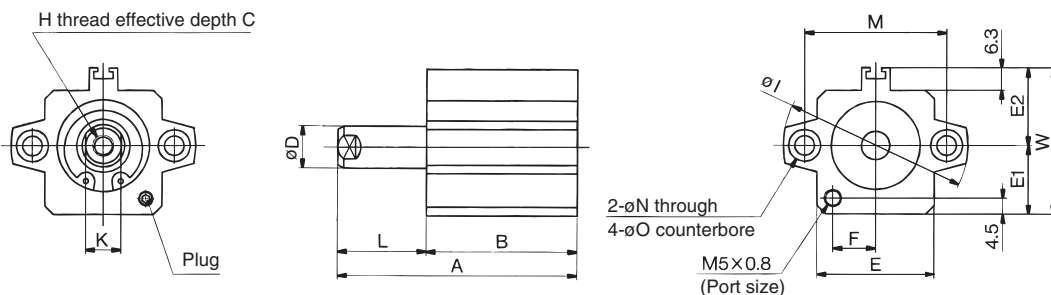


* For details about the rod end nut and accessory brackets, refer to page 7-6-20.

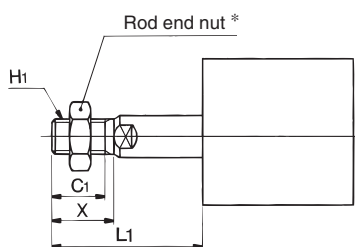
Series CDQP2

Dimensions: $\phi 12$ to $\phi 50$ /Spring Extend without Auto Switch

$\phi 12$ to $\phi 25$



Rod end male thread



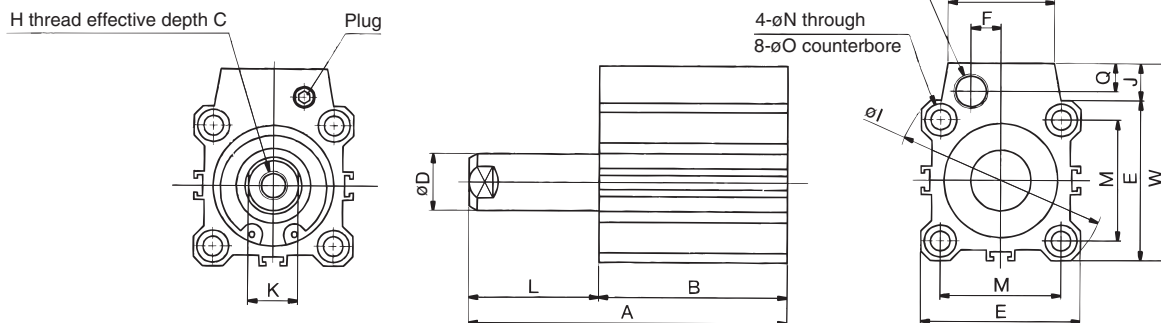
Rod End Male Thread

Bore size (mm)	C1	H1	L1		X
			5 st	10 st	
12	9	M5 x 0.8	19	24	10.5
16	10	M6 x 1.0	20.5	25.5	12
20	12	M8 x 1.25	23.5	28.5	14
25	15	M10 x 1.25	27.5	32.5	17.5

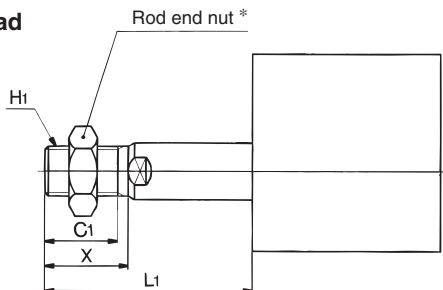
Basic Style

Bore size (mm)	A		B		C	D	E	E1	E2	F	H	I	K	L		M	N	O	W
	5 st	10 st	5 st	10 st										5 st	10 st				
12	30.5	40.5	22	27	6	6	23	13	14	7	M3 x 0.5	32	5	8.5	13.5	22	3.5	6.5 depth 3.5	27
16	32	42	23.5	28.5	8	8	26	15	17	8.5	M4 x 0.7	38	6	8.5	13.5	28	3.5	6.5 depth 3.5	32
20	34	44	24.5	29.5	7	10	30	17	19	10.5	M5 x 0.8	47	8	9.5	14.5	36	5.5	9 depth 7	36
25	37.5	47.5	27.5	32.5	12	12	33	19.5	22	12	M6 x 1.0	52	10	10	15	40	5.5	9 depth 7	41.5

$\phi 32$ to $\phi 50$



Rod end male thread



Rod End Male Thread

Bore size (mm)	C1	X	H1	L1		
				5 st	10 st	20 st
32	20.5	23.5	M14 x 1.5	33.5	38.5	—
40	20.5	23.5	M14 x 1.5	33.5	38.5	—
50	26	28.5	M18 x 1.5	—	43.5	53.5

Basic Style

Bore size (mm)	A			B			C	D	E	F	H	I	J	K	L			M	N	O	P	Q	W	Z
	5 st	10 st	20 st	5 st	10 st	20 st									5 st	10 st	20 st							
32	40	50	—	28	33	—	13	16	45	8.5	M8 x 1.25	60	10.5	14	12	17	—	34	5.5	9 depth 7	Rc 1/8	8	55.5	30
40	46.5	56.5	—	34.5	39.5	—	13	16	52	8.5	M8 x 1.25	69	10	14	12	17	—	40	5.5	9 depth 7	Rc 1/8	8	62	30
50	—	58.5	78.5	—	40.5	50.5	15	20	64	11	M10 x 1.5	86	13	17	—	18	28	50	6.6	11 depth 8	Rc 1/4	10	77	39

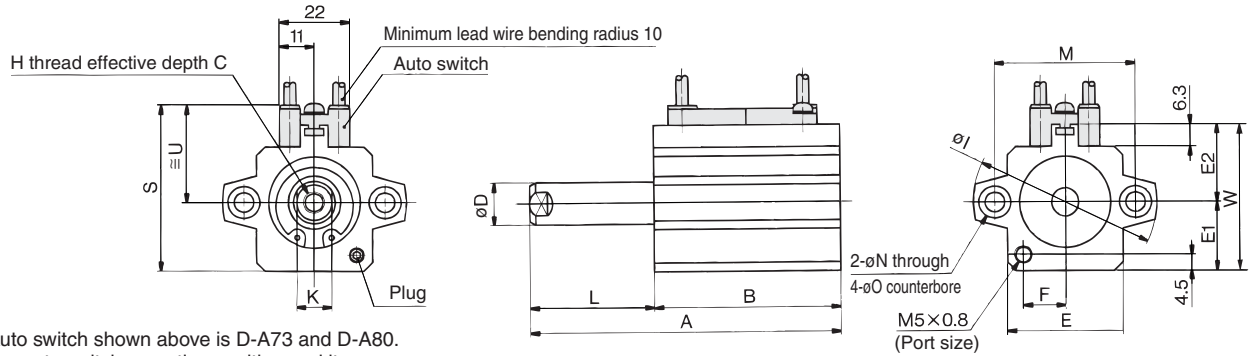


* For details about the rod end nut and accessory brackets, refer to page 7-6-20.

Compact Cylinder with Auto Switch: Axial Piping Type Single Acting, Single Rod, Spring Return/Extend Series **CDQP2**

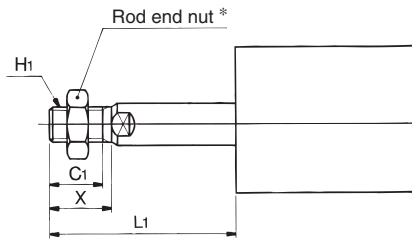
Dimensions: $\phi 12$ to $\phi 50$ /Spring Extend with Auto Switch

$\phi 12$ to $\phi 25$



Auto switch shown above is D-A73 and D-A80.
For auto switch mounting position and its mounting height, refer to page 7-6-103.

Rod end male thread



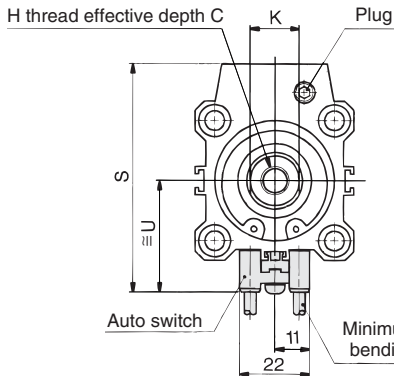
Rod End Male Thread

Bore size (mm)	C1	X	H1	L1	
				5 st	10 st
12	9	10.5	M5 x 0.8	19	24
16	10	12	M6 x 1.0	20.5	25.5
20	12	14	M8 x 1.25	23.5	28.5
25	15	17.5	M10 x 1.25	27.5	32.5

Basic Style

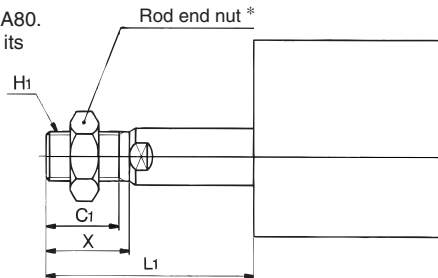
Bore size (mm)	A		B		C	D	E	E1	E2	F	H	I	K	L		M	N	O	S	U	W
	5 st	10 st	5 st	10 st										5 st	10 st						
12	45.9	55.9	37.4	42.4	6	6	23	13	14	7	M3 x 0.5	32	5	8.5	13.5	22	3.5	6.5 depth 3.5	32.5	19.5	27
16	44	54	35.5	40.5	8	8	26	15	17	8.5	M4 x 0.7	38	6	8.5	13.5	28	3.5	6.5 depth 3.5	37.5	22.5	32
20	46	56	36.5	41.5	7	10	30	17	19	10.5	M5 x 0.8	47	8	9.5	14.5	36	5.5	9 depth 7	41.5	24.5	36
25	47.5	57.5	37.5	42.5	12	12	33	19.5	22	12	M6 x 1.0	52	10	10	15	40	5.5	9 depth 7	47	27.5	41.5

$\phi 32$ to $\phi 50$



Auto switch shown above is D-A73 and D-A80.
For the auto switch mounting position and its mounting height, refer to page 7-6-103.

Rod end male thread



Rod End Male Thread

Bore size (mm)	C1	X	H1	L1		
				5 st	10 st	20 st
32	20.5	23.5	M14 x 1.5	33.5	38.5	—
40	20.5	23.5	M14 x 1.5	33.5	38.5	—
50	26	28.5	M18 x 1.5	—	43.5	53.5

Basic Style

Bore size (mm)	A			B			C	D	E	F	H	I	J	K	L			M	N	O	P	Q	S	U	W	Z
	5 st	10 st	20 st	5 st	10 st	20 st									5 st	10 st	20 st									
32	50	60	—	38	43	—	13	16	45	8.5	M8 x 1.25	60	10.5	14	12	17	—	34	5.5	9 depth 7	Rc 1/8	8	64.5	31.5	55.5	30
40	56.5	66.5	—	44.5	49.5	—	13	16	52	8.5	M8 x 1.25	69	10	14	12	17	—	40	5.5	9 depth 7	Rc 1/8	8	71	35	62	30
50	—	68.5	88.5	—	50.5	60.5	15	20	64	11	M10 x 1.5	86	13	17	—	18	28	50	6.6	11 depth 8	Rc 1/4	10	86	41	77	39

* For details about the rod end nut and accessory brackets, refer to page 7-6-20.