


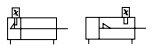



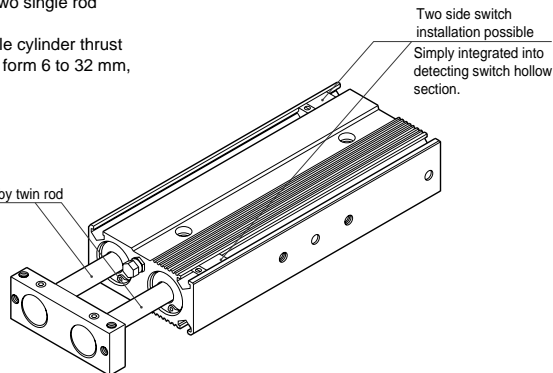
●: Standard, ◎: Option, ○: Custom order, ■: Not available

Variation	Model No. JIS symbol	Bore size (mm)	Stroke length (mm)										Max. stroke length (mm)	Option						Switch	Page		
			Stroke length (mm)											Slide bearing	Ball bearing	Material of end plate	Rear piping	Copper and PTFE	Piping port position 180° change				
			10	20	30	40	50	60	70	80	90	100										M	B
Double acting/ standard type	STR2 	6, 10	●	●	●	●	●	■	■	■	■	■	50	●	●	◎	◎	◎	◎	◎	◎	◎	1112
		16, 20, 25, 32	●	●	●	●	●	●	●	●	●	●	●	100	●	●	◎	◎	◎	◎	◎	◎	
Double acting/ low speed type	STR2-O 	6, 10	●	●	●	●	●	■	■	■	■	■	50	●	●	○	○	■	◎	◎	◎	◎	1112
		16, 20, 25, 32	●	●	●	●	●	●	●	●	●	●	●	100	●	●	○	○	■	◎	◎	◎	
Double acting/ double rod type	STR2-D 	6, 10	●	●	●	●	●	■	■	■	■	■	50	●	●	○	■	○	◎	◎	◎	◎	1112
		16, 20, 25, 32	●	●	●	●	●	●	●	●	●	●	●	100	●	●	○	■	○	◎	◎	◎	
Double acting/ position locking type	STR2-Q 	6, 10	●	●	●	●	●	■	■	■	■	■	50	●	●	○	■	○	◎	◎	◎	◎	1112
		16, 20, 25, 32	●	●	●	●	●	●	●	●	●	●	●	100	●	●	○	■	○	◎	◎	◎	
Double acting/ fine speed type	STR2-F 	10	●	●	●	●	●	■	■	■	■	■	50	●	●	◎	◎	■	■	◎	◎	◎	1136
		16, 20, 25, 32	●	●	●	●	●	●	●	●	●	●	●	100	●	●	◎	◎	■	■	◎	◎	

Product introduction

For CKD twin rod cylinder STR2-M, STR2- B series, two single rod cylinders are jointed in parallel. Double accurate revolvable angle tolerance and double cylinder thrust are realized. This series provides 6 types of bore size form 6 to 32 mm, with wide option and variation.

Double thrust and double accurate revolvable angle tolerance are realized by twin rod
Double thrust and double accurate revolvable angle tolerance are realized by double pistons structure.



SCP * 2
CMK2
CMA2
SCM
SCA2
SCS
CKV2
CAV2/
COV * 2
CAT
MDC2
MVC
SMD2
MSD/
MSDG
SSD
SSD
(large)
FC *
ULKP/
ULK
JSK2/
JSM2
JSC3
(medium)
JSC3
(large)
JSB3
UCAC
STS/
STL
LCS
LCY
STR2
UCA2
STK
USSD
USC
MFC
GLC
SHC
CAC3
HCM
HCA
MRL2
SRL2
SRG
SRM
SRT
SRB2
Combined functions
Twin rod cylinder



Pneumatic Components

Safety Precautions

Always read before starting use
Refer to Intro 45 for general details on the cylinder, and to Intro 52 for details on the cylinder switch.

Twin rod cylinder STR2 Series

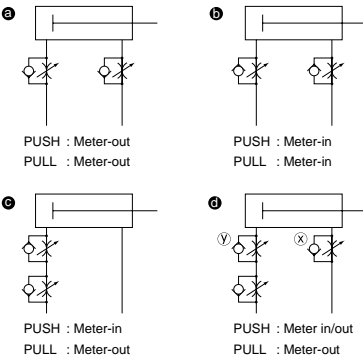
CAUTION

Design & Selection

1 Precautions for fine speed type (STR2-F)

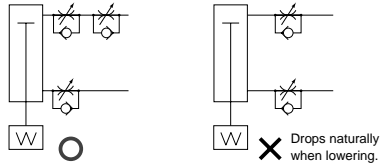
- **Use with oil-free specifications.**
Features may change if the device is lubricated.
- **Assemble the flow control valve near the cylinder.**
Adjustments become unstable if assembled away from the cylinder.
Use the SC-M3/M5, SC3W, SCD-M3/M5, or SC3WU Series flow control valve.
- **Generally, the higher air pressure, and the smaller load result in the more stable operation.**
Use a load at 50% or less.
- **Do not apply a lateral load on the cylinder. Install the cylinder so the sliding guide is not twisted.**
Operation may become unstable due to fluctuations in load and resistance.
Operation of a guide having a large difference in static and dynamic friction may become unstable.
- **Avoid use with vibration.**
The product will be adversely affected by vibration and operation will become unstable.
- **Stable speed control is achieved with a meter-out circuit.**

When driving the single rod cylinder at fine speed with the operation direction set to PUSH, popping out may occur if operation is started when load resistance is small. As a corrective action, use a **b**, **c**, or **d** circuit. Note that the **d** circuit is the most stable.

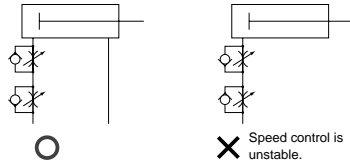


- Adjusting speed for **d** circuit PUSH operation
1. Set the speed with the x flow control valve.
 2. Lower the flow rate with the y flow control valve until popping out no longer occurs.
 3. Reconfirm speed.

Note 2: When installed vertically, the unit will drop naturally if the meter-in circuit is used. Use the meter-out circuit in this case.



Note 3: Connect the flow control valve in parallel with the following circuit:



(Cause of popping out)

- The meter-out circuit slows the flow so fine speed is attained on the exhaust side, so both sides reach the same pressure immediately after the valve is changed and the thrust of the piston pressurized area difference functions in the PUSH direction, causing popping out.

(Guide for popping out occurrence)

- Popping out occurs when the piston rod area X air pressure > load resistance.

Note 1: When circuits **b**, **c**, and **d** are compared, **d** circuit operation is most stable.

CAUTION

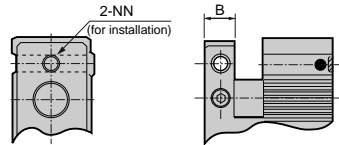
Installation & Adjustment

Piping

- The twin rod cylinder has piping ports at 2 positions each for the movement direction. Change the position of the plug based on actual use. After making any changes, check that no air leaks from the plug section.

Installation

- Check that no dents or scratches are made on main tubing installation or end plates that may adversely affect flatness. Flatness on the counterpart onto which the end plate is installed must be 0.05 mm or less.
- When using the screw hole NN on the end plate, check that the bolt length is equivalent to the B dimension. Failure to observe this may damage the end plate.



Bore size (mm)	B dimensions
6 dia.	6
10 dia.	6
16 dia.	8
20 dia.	10
25 dia.	12
32 dia.	12

- A rubber cushion is used. The following table shows kinetic energy absorbed by the cushion. If the energy exceeds these values, consider using another shock absorber.

Bore size (mm)	Allowable energy absorption J	
	PUSH	PULL
6 dia.	0.008	0.059
10 dia.	0.061	0.083
16 dia.	0.181	0.083
20 dia.	0.303	0.127
25 dia.	0.68	0.237
32 dia.	1.3	0.311



Pneumatic Components

Safety Precautions

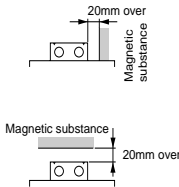
Always read before starting use
Refer to Intro 45 for general details on the cylinder, and to Intro 52 for details on the cylinder switch.

Twin rod cylinder STR2 Series

CAUTION Installation & Adjustment

4 Precautions for cylinders with switches

- The reed switch cannot be used with STR2-B-6 or 10 types.
STR2-B-6s with proximity switches must not be installed on a magnetic body such as a steel plate, or the switch may malfunction.
- The cylinder may malfunction if a magnetic substance, such as a steel plate, is nearby. Move the magnetic substance to at least 20 mm from the cylinder. (Same clearance for all diameters)



- If cylinders are installed adjacently, the cylinder switch may malfunction. Separate cylinders by the following distances.

Adjacent conditions		Switch type	6 dia.	10 dia.	16 dia.	20 dia.	25 dia.	32 dia.		
2 cylinders in parallel	Lateral 	A	K2, K3	43	45	56	66	75	111	
		B	K0, K5	40*1	47*1	62	81	85	111	
	Vertical Install switch at side of adjacent cylinder 	A	K2, K3	28	27	36	47	47	58	
		B	K0, K5	27*1	26*1	36	53	53	58	
		Vertical Install the switch on the opposite side of the cylinder at the side 	A	K2, K3	19	16	22	28	34	39
			B	K0, K5	14*1	16*1	22	33	34	39
3 or more cylinders in parallel	Lateral 	A	K2, K3	44	45	57	67	77	111	
		B	K0, K5	41*1	47*1	64	83	86	111	
	Vertical 	A	K2, K3	33	30	40	51	49	58	
		B	K0, K5	30*1	28*1	42	60	97	58	
		Vertical 	A	K2, K3	20	15	19	24	16	20
			B	K0, K5	17*1	13*1	21	33	25	20

* 1: Dimensions for STR2-M.
The reed switch cannot be used with STR2-B-6 or 10 types.

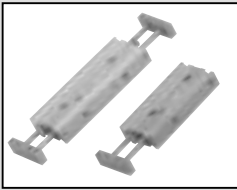


CAUTION

Installation & Adjustment

- 5** The cylinder may be damaged or may malfunction if a unit with excessive inertia, etc., is moved. Use within the allowable energy absorption range.
- 6** The twin rod cylinder has a 0 to -5 mm stroke adjustment bolt on the piston rod's return side. Loosen the hexagon nut and adjust to the required stroke. Then tighten the hexagon nut to prevent loosening.
- 7** Avoid using with the stopper bolt removed.
- 8** Precautions for fine speed type (STR2-F)
 Adjust the alignment, etc., so lateral load is not applied to the cylinder.
 Adjust and install so the sliding guide is not twisted.

 - Operation may become unstable due to fluctuations in load and resistance.
 - Operation of a guide having greatly different stationary and moving friction may become unstable.



Twin rod cylinder

STR2-^M_B Series

- Bore size: 6, 10, 16, 20, 25, 32 mm

JIS symbol



CAD DATA AVAILABLE.

Common specifications

Descriptions		STR2-M (Slide bearing) STR2-B (Ball bearing)					
Bore size	mm	6 dia.	10 dia.	16 dia.	20 dia.	25 dia.	32 dia.
Actuation		Double acting					
Working fluid		Compressed air					
Max. working pressure	MPa	0.7					
Min. working pressure	MPa	0.2	0.15			0.1	
Withstanding pressure	MPa	1.05					
Ambient temperature	°C	-10 to 60 (to be unfrozen)					
Port size		M5				Rc1/8	
Stroke length tolerance	mm	+2.0 0					
Adjustable stroke range	mm	0 to -5					
Working piston speed	mm/s	50 to 500					
Revolvable angle tolerance	STR2-M	±0.4°		±0.3°			±0.2°
	STR2-B	±0.2°		±0.1°			±0.3°
Piston rod	STR2-M	Slide bearing					
Bearing type	STR2-B	Ball bearing					
Cushion		Rubber cushion					
Lubrication		Not required (when lubrication, use turbine oil Class 1 ISOVG32.) Note 1					
Allowable energy absorption (J)	PUSH	0.008	0.061	0.181	0.303	0.68	1.3
	PULL	0.059	0.083	0.083	0.127	0.237	0.311

Note 1: Low speed type must be oil free.

Individual specifications

Model	Model No.	Descriptions	
Double rod type	STR2- ^M _D	Min. working pressure	MPa
		6 dia. 0.25 10 dia. 0.2 16 to 32 dia. 0.15	
		Working piston speed	mm/s
Low speed type	STR2- ^M _O	10 to 200	
Position locking type	STR2- ^M _Q	Min. working pressure	MPa
		16 to 32 dia. 0.15	
		Position locking mechanism	Rod side or head side
		Holding force	N
		Adjustable stroke range	mm
		Max. thrust X 0.7 <small>Cannot be adjusted (head side position locking only)</small>	

Stroke length

Model No.	Bore size	Stroke length (mm)	Max. stroke length
STR2- ^M _B	6 dia.	10, 20, 30, 40, 50	50
	10 dia.		
	16 dia.	10, 20, 30, 40, 50, 60 70, 80, 90, 100	100 Note 1
	20 dia. 25 dia., 32 dia.		

Note 1: For rear piping type, 16 mm bore: 70
20, 25 mm bore: 60
32 mm bore: 50

SCP * 2
 CMK2
 CMA2
 SCM
 SCA2
 SCS
 CKV2
 CAV2/
 COV * 2
 CAT
 MDC2
 MVC
 SMD2
 MSP/
 MSDG
 SSD
 SSD
 (large)
 FC *
 ULKP/
 ULK
 JSK2/
 JSM2
 JSC3
 (medium)
 JSC3
 (large)
 JSB3
 UCAC
 STS/
 STL
 LCS
 LCY
STR2
 UCA2
 STK
 USSD
 USC
 MFC
 GLC
 SHC
 CAC3
 HCM
 HCA
 MRL2
 SRL2
 SRG
 SRM
 SRT
 SRB2

Combined functions
 Twin rod cylinder

Switch specifications

- One color/bi-color indicator

Descriptions	Proximity 2 wire		Proximity 3 wire		Reed 2 wire	
	K2H/K2V	K2YH/K2YV	K3H/K3V	K3YH/K3YV	K0H/K0V	K5H/K5V
Applications	Programmable controller		Programmable controller, relay		Programmable controller, relay	
Power voltage	-		DC10 to 28V		-	
Load voltage	DC10 to 30V		DC30V or less		DC12V/24V	AC110V
Load current	5 to 20mA (Note 1)		50mA or less		5 to 50mA	7 to 20mA
Light	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	

Note 1: Max. load current above: 20mA is the value at 25 °C. When ambient temperature around a switch is higher than 25 °C, the value is lower than 20mA. (5 to 10mA at 60 °C).

- Equipped with preventive maintenance output

Descriptions	Proximity 3 wire		Proximity 4 wire	
	K2YFH/V	K3YFH/V	K2YMH/V	K3YMH/V
Applications	Programmable controller		Programmable controller, relay	
Light	Red/green LED (ON lighting)			
Preventive maintenance output	Yellow LED (ON lighting)			
Output	Current voltage	-	DC10 to 28V	-
	Load voltage	DC10 to 30V	DC30V or less	DC10 to 30V
	Load current	DC5 to 20mA	DC50mA or less	DC5 to 20mA
	Load voltage	DC30V or less		
	Load current	DC20mA or less	DC50mA or less	DC5 to 20mA or less

Cylinder mass

Unit: g

Bore size	Product mass when stroke length 0mm		Additional mass per S = 10mm
	STR2-M	STR2-B	
6 dia.	60	64	10
10 dia.	140	155	14
16 dia.	240	300	20
20 dia.	340	405	40
25 dia.	580	610	52
32 dia.	1300	1150	83

Mass of discrete cylinder switch

Unit (g)

Name	Model No.	Lead wire length		
		1m	3m	5m
Cylinder switch	K0	18	52	86
	K2	18	52	86
	K3	18	52	86
	K5	18	52	86

(E. g.) product mass

STR2-M-6-10-K2H-D

- When stroke length = 0mm, product mass is 60g.
- Additional mass at stroke length 10mm is 10g X 1 = 10g
- Mass of cylinder switch (two) is 18g X 2 = 36g
- Product mass: 60g + 10g + 36g = 106g

STR2-M_B Series

How to order

Without switch

STR2 - M - Model series Model No. - 16 - 30 - H - O

With switch

STR2 - M - Model series Model No. - 16 - 30 - H - K0H - R - O

A Model Series

B Type of bearing

C Bore size

D Stroke length
Note 1

E Position locking mechanism

A Model Series

When "Q", select this.

F Switch model No.

Note 2

Caution for model No. selection

Note 1: Max. stroke length of backward piping type "R"

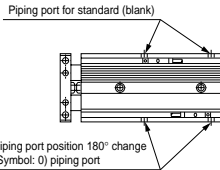
- 6, 10 mm bore : 50 mm stroke,
- 16 mm bore : 70 mm stroke,
- 20, 25 mm bore: 60 mm stroke,
- 32 mm bore : 50 mm stroke

Custom stroke length is available per 5 mm increment. Overall length dimensions are as same as the following standard stroke length increment.

Note 2: For STR2-B-6/10, reed switches are not available. Available other than listed "F" switch model No. (custom order) Please refer to Ending 1 about details.

Note 3: For ball bearing type, copper and PTFE free "P6" specifications are provided as standard.

Note 4: For "O", the piping port position is as the following diagram.



<Example of model number>

STR2-MQ-16-30-H-K0H-R-O

Model: Twin rod cylinder

- A Model Series : Position locking type
- B Type of bearing : Slide bearing
- C Bore size : 16 mm
- D Stroke length : 30 mm
- E Position locking mechanism: Head side position locking
- F Switch model No : Reed switch K0H, lead wire 1m
- G Switch quantity : One on rod side
- H Option : Piping port position 180° change

A Model Series			
Standard type	O Low speed type	D Double rod type	Q Position locking type

Symbol	Descriptions				
B Type of bearing					
M	Slide bearing	●	●	●	●
B	Ball bearing	●	●	●	●

C Bore size (mm)					
6	6 dia.	●	●	●	
10	10 dia.	●	●	●	
16	16 dia.	●	●	●	●
20	20 dia.	●	●	●	●
25	25 dia.	●	●	●	●
32	32 dia.	●	●	●	●

D Stroke length (mm)							
Bore size		Common for all series					
		6	10	16	20	25	32
10	10	●	●	●	●	●	●
20	20	●	●	●	●	●	●
30	30	●	●	●	●	●	●
40	40	●	●	●	●	●	●
50	50	●	●	●	●	●	●
60	60			●	●	●	●
70	70			●	●	●	●
80	80			●	●	●	●
90	90			●	●	●	●
100	100			●	●	●	●

E Position locking mechanism				
H	Head side position locking			●
R	Rod side position locking			●

F Switch model No.						
Axial lead wire	Lead wire L wire type	Contact	Proximity	Reed	Display	Lead
		1 color	1 color	1 color	1 color	
K0H *	K0V *	●	●	●	●	2 wire
K5H *	K5V *	●	●	●	●	2 wire
K2H *	K2V *	●	●	●	●	2 wire
K3H *	K3V *	●	●	●	●	3 wire
K2YH *	K2YV *	●	●	●	●	2 wire
K3YH *	K3YV *	●	●	●	●	3 wire
K2YFH *	K2YFV *	●	●	●	●	3 wire
K3YFH *	K3YFV *	●	●	●	●	4 wire
K2YMH *	K2YMV *	●	●	●	●	3 wire
K3YMH *	K3YMV *	●	●	●	●	4 wire

*Lead wire length				
Blank	1m (standard)	●	●	●
3	3m (option)	●	●	●
5	5m (option)	●	●	●

G Switch quantity				
R	One on rod side	●	●	●
H	One on head side	●	●	●
D	Two	●	●	●

H Option				
F	Material of end plate: Steel	●		
R	Rear piping type	●		
P6	Copper and PTFE free type	●		
O	Piping port position 180° change	●	●	●

G Switch quantity

H Option
Note 3
Note 4

How to order switch

SW - K0H *

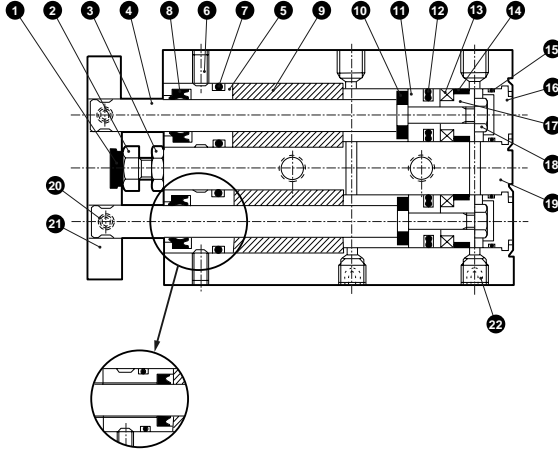
F

Switch model No.

STR2-M Series

Internal structure and parts list (slide bearing type 6, 10 mm bore)

- Standard type
STR2-M
- Low speed type
STR2-MO
- Material of end plate: Steel
STR2-M-F
- Copper and PTFE free type
STR2-M-P6
- Piping port position 180° change
STR2-M***-O



(For STR2-M-6)

No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		12	Piston packing seal	Nitrile rubber	
2	Hexagon head bolt	Stainless steel		13	Piston magnet	Plastic	
3	Hexagon nut	Stainless steel		14	Wear ring	Acetar resin	
4	Piston rod	Stainless steel		15	O ring	Nitrile rubber	
5	Housing	Stainless steel		16	Cap	Aluminum alloy	Chromate
6	Hexagon head hole set screw	Stainless steel		17	Magnet spacer	Aluminum alloy	Chromate
7	O ring	Nitrile rubber		18	Hexagon nut	Steel	Galvanizing
8	Rod packing seal	Nitrile rubber		19	Cylinder main body	Aluminum alloy	Hard alumite
9	Bush Note 1	Copper alloy		20	Hexagon head hole set screw	Stainless steel	
10	Cushion rubber (R)	Urethane rubber		21	End plate Note 2	Aluminum alloy	Alumite
11	Piston	Aluminum alloy	Chromate	22	Hexagon head hole set screw	Stainless steel	

Note 1: For copper and PTFE free specifications, cast iron system oil impregnated bearing is used.
 Note 2: For material of end plate steel, galvanized steel is used.

Repair parts list

STR2-M (standard type), STR2-M-F(material of end plate: Steel), STR2-M-P6 (copper and PTFE free type)

Bore size (mm)	Kit number	Repair parts number
6 dia.	STR2-6K	1 7 8 10 12 14
10 dia.	STR2-10K	1 7 8 10 12 14

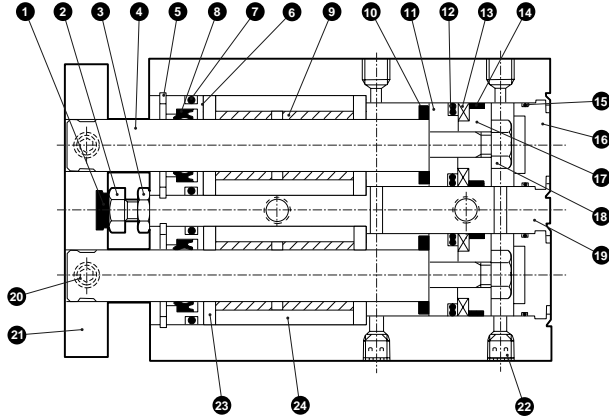
All repair parts except STR2-MO (low speed type) * piston packing seal are as same as standard.

Bore size (mm)	Kit number	Repair parts number
6 dia.	STR2-O-6K	1 7 8 10 12 14
10 dia.	STR2-O-10K	1 7 8 10 12 14

Note: When placing an order, indicate kit number.

Internal structure and parts list (slide bearing type 16, 20, 25, 32 mm bore)

- Standard type
STR2-M
- Low speed type
STR2-MO
- Material of end plate: Steel
STR2-M-F
- Copper and PTFE free type
STR2-M-P6
- Piping port position 180° change
STR2-M***-O



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		13	Piston magnet	Plastic	
2	Hexagon head bolt	Stainless steel		14	Wear ring	Acetar resin	
3	Hexagon nut	Stainless steel		15	O ring	Nitrile rubber	
4	Piston rod	Stainless steel (16, 20 dia.) Steel (25, 32 dia.)	Industrial chrome plated	16	Cap	Aluminum alloy	Chromate
5	C ring for hole	Stainless steel		17	Magnet spacer	Aluminum alloy	Chromate
6	Housing	Aluminum alloy	Chromate	18	Hexagon nut	Steel	Galvanizing
7	O ring	Nitrile rubber		19	Cylinder main body	Aluminum alloy	Hard alumite
8	Rod packing seal	Nitrile rubber		20	Hexagon socket head set screw	Stainless steel	
9	Bush Note 1	Copper alloy		21	End plate Note 2	Aluminum alloy	Alumite
10	Cushion rubber (R)	Urethane rubber		22	Hexagon socket head set screw	Stainless steel	
11	Piston	Aluminum alloy	Chromate	23	Spacer	Aluminum alloy	Chromate
12	Piston packing seal	Nitrile rubber		24	Aluminum housing	Aluminum alloy	Chromate

Note 1: For copper and PTFE free specifications, cast iron system oil impregnated bearing is used.
 Note 2: For material of end plate steel, galvanized steel is used.

Repair parts list

STR2-M (standard type), STR2-M-F(material of end plate: Steel), STR2-M-P6 (copper and PTFE free type)

Bore size (mm)	Kit number	Repair parts number
16 dia.	STR2-16K	1 7 8
20 dia.	STR2-20K	10 12 14
25 dia.	STR2-25K	
32 dia.	STR2-32K	

All repair parts except STR2-MO (low speed type) * piston packing seal are as same as standard.

Bore size (mm)	Kit number	Repair parts number
16 dia.	STR2-O-16K	
20 dia.	STR2-O-20K	1 7 8
25 dia.	STR2-O-25K	10 12 14
32 dia.	STR2-O-32K	

Note: When placing an order, indicate kit number.

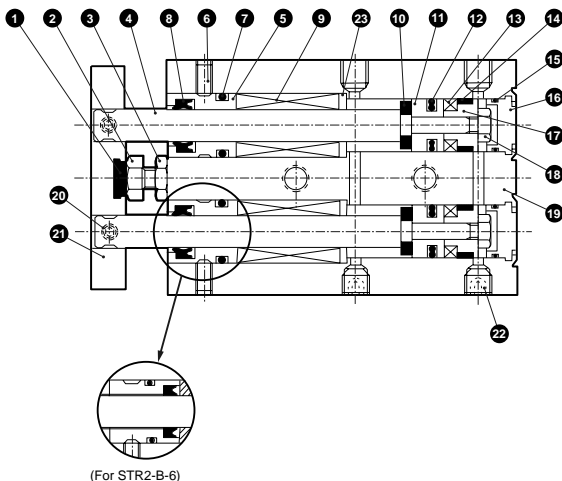
SCP * 2
 CMK2
 CMA2
 SCM
 SCA2
 SCS
 CKV2
 CAV2/
 COV * 2
 CAT
 MDC2
 MVC
 SMD2
 MSD/
 MSDG
 SSD
 SSD
 (large)
 FC *
 ULKP/
 ULK
 JSK2/
 JSM2
 JSC3
 (medium)
 JSC3
 (large)
 JSB3
 UCAC
 STS/
 STL
 LCS
 LCY
STR2
 UCA2
 STK
 USSD
 USC
 MFC
 GLC
 SHC
 CAC3
 HCM
 HCA
 MRL2
 SRL2
 SRG
 SRM
 SRT
 SRB2

Combined functions
 Twin rod cylinder

STR2-B(O) Series

Internal structure and parts list (ball bearing type 6, 10 mm bore)

- Standard type
STR2-B
- Low speed type
STR2-BO
- Material of end plate: Steel
STR2-B-F
- Piping port position 180° change
STR2-B1***-O



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		13	Piston magnet	Plastic	
2	Hexagon head bolt	Stainless steel		14	Wear ring	Acetar resin	
3	Hexagon nut	Stainless steel		15	O ring	Nitrile rubber	
4	Piston rod	Steel	Industrial chrome plated	16	Cap	Aluminum alloy	Chromate
5	Housing	Stainless steel		17	Magnet spacer	Aluminum alloy	Chromate
6	Hexagon socket head set screw	Stainless steel		18	Hexagon nut	Steel	Galvanizing
7	O ring	Nitrile rubber		19	Cylinder main body	Aluminum alloy	Hard alumite
8	Rod packing seal	Nitrile rubber		20	Hexagon socket head set screw	Stainless steel	
9	Bearing			21	End plate Note 1	Aluminum alloy	Alumite
10	Cushion rubber (R)	Urethane rubber		22	Hexagon head hole set screw	Stainless steel	
11	Piston	Aluminum alloy	Chromate	23	Spacer	Aluminum alloy	Chromate
12	Piston packing seal	Nitrile rubber					

Note 1: For material of end plate steel, galvanized steel is used.

Repair parts list

STR2-B (standard type), STR2-B-F (material of end plate: Steel)

Bore size (mm)	Kit number	Repair parts number
6 dia.	STR2-6K	1 7 8 10 12 14
10 dia.	STR2-10K	1 7 8 10 12 14

All repair parts except STR2-BO (low speed type) * piston packing seal are as same as standard.

Bore size (mm)	Kit number	Repair parts number
6 dia.	STR2-O-6K	1 7 8 10 12 14
10 dia.	STR2-O-10K	1 7 8 10 12 14

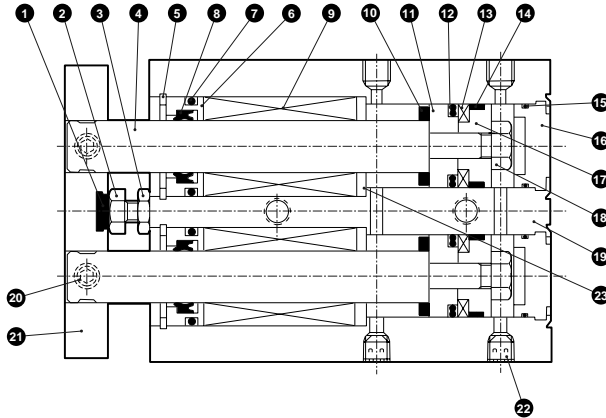
Note: When placing an order, indicate kit number.

STR2-B(O) Series

Internal structure and parts list

Internal structure and parts list (ball bearing type 16, 20, 25, 32 mm bore)

- Standard type
STR2-B
- Low speed type
STR2-BO
- Material of end plate: Steel
STR2-B-F
- Piping port position 180° change
STR2-B1***-O



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		13	Piston magnet	Plastic	
2	Hexagon head bolt	Stainless steel		14	Wear ring	Acetar resin	
3	Hexagon nut	Stainless steel		15	O ring	Nitrile rubber	
4	Piston rod	Steel	Industrial chrome plated	16	Cap	Aluminum alloy	Chromate
5	C ring for hole	Stainless steel		17	Magnet spacer	Aluminum alloy	Chromate
6	Housing	Aluminum alloy	Chromate	18	Hexagon nut	Steel	Galvanizing
7	O ring	Nitrile rubber		19	Cylinder main body	Aluminum alloy	Hard alumite
8	Rod packing seal	Nitrile rubber		20	Hexagon socket head set screw	Stainless steel	
9	Bearing			21	End plate Note 1	Aluminum alloy	Alumite
10	Cushion rubber (R)	Urethane rubber		22	Hexagon socket head set screw	Stainless steel	
11	Piston	Aluminum alloy	Chromate	23	Spacer	Aluminum alloy	Chromate
12	Piston packing seal	Nitrile rubber					

Note 1: For material of end plate steel, galvanized steel is used.

Repair parts list

STR2-B (standard type), STR2-B-F(material of end plate: Steel)

Bore size (mm)	Kit number	Repair parts number
16 dia.	STR2-16K	
20 dia.	STR2-20K	1 7 8
25 dia.	STR2-25K	10 12 14
32 dia.	STR2-32K	

All repair parts except STR2-BO (low speed type) * piston packing seal are as same as standard.

Bore size (mm)	Kit number	Repair parts number
16 dia.	STR2-O-16K	
20 dia.	STR2-O-20K	1 7 8
25 dia.	STR2-O-25K	10 12 14
32 dia.	STR2-O-32K	

Note: When placing an order, indicate kit number.

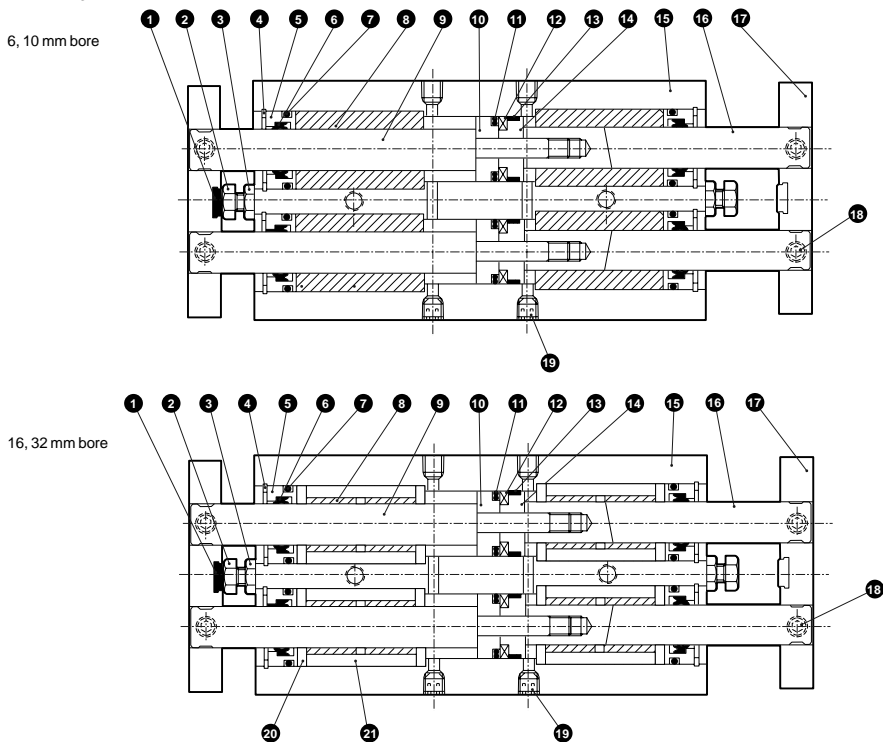
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CMK2
CMA2
SCM
SCA2
SCS
CKV2
CAV2/
COV * 2
CAT
MDC2
MVC
SMD2
MSD/
MSDG
SSD
SSD
(large)
FC *
ULKP/
ULK
JSK2/
JSM2
JSC3
(medium)
JSC3
(large)
JSB3
UCAC
STS/
STL
LCS
LCY
STR2
UCA2
STK
USSD
USC
MFC
GLC
SHC
CAC3
HCM
HCA
MRL2
SRL2
SRG
SRM
SRT
SRB2

Combined functions
Twin rod cylinder

STR2-MD Series

Internal structure and parts list (slide bearing type)

- Double rod
STR2-MD
- Piping port position 180° change
STR2-MD***-O



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		11	Piston packing seal	Nitrile rubber	
2	Hexagon head bolt	Stainless steel		12	Piston magnet	Plastic	
3	Hexagon nut	Stainless steel		13	Wear ring	Acetar resin	
4	C ring for hole	Stainless steel		14	Magnet spacer	Aluminum alloy	Chromate
5	Housing	Aluminum alloy	Chromate	15	Cylinder main body	Aluminum alloy	Hard alumite
6	Rod packing seal	Nitrile rubber		16	Piston rod (B)	Stainless steel (6 to 20 dia.) Steel (25, 32 dia.)	Industrial chrome plated (16 to 32 dia.)
7	O ring	Nitrile rubber		17	End plate	Aluminum alloy	Alumite
8	Bush	Copper alloy		18	Hexagon socket head set screw	Stainless steel	
9	Piston rod (A)	Stainless steel (6 to 20 dia.) Steel (25, 32 dia.)	Industrial chrome plated (16 to 32 dia.)	19	Hexagon socket head set screw	Stainless steel	
10	Piston	Aluminum alloy	Chromate	20	Spacer (16 to 32 dia.)	Aluminum alloy	Chromate
				21	Aluminum housing	Aluminum alloy	Chromate

Repair parts list

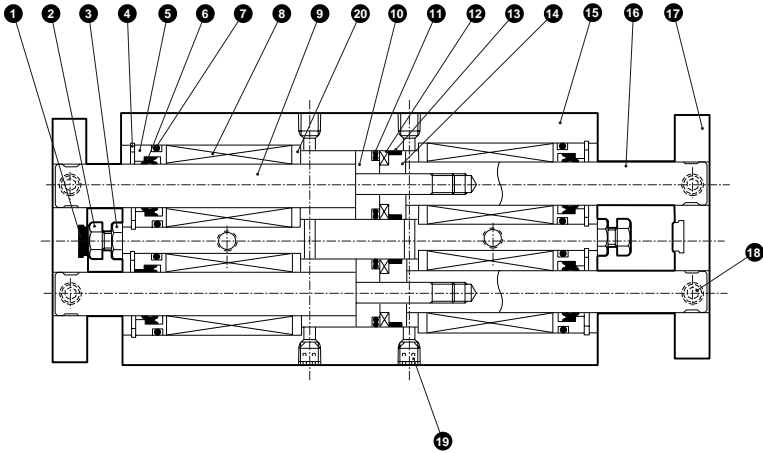
STR2-MD (double rod type)

Bore size (mm)	Kit number	Repair parts number
6 dia.	STR2-D-6K	
10 dia.	STR2-D-10K	
16 dia.	STR2-D-16K	1 6 7
20 dia.	STR2-D-20K	11 13
25 dia.	STR2-D-25K	
32 dia.	STR2-D-32K	

Note: When placing an order, indicate kit number.

Internal structure and parts list (ball bearing type)

- Double rod
STR2-BD
- Piping port position 180° change
STR2-BD***-O



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		11	Piston packing seal	Nitrile rubber	
2	Hexagon head bolt	Stainless steel		12	Piston magnet	Plastic	
3	Hexagon nut	Stainless steel		13	Wear ring	Acetar resin	
4	C ring for hole	Stainless steel		14	Magnet spacer	Aluminum alloy	Chromate
5	Housing	Stainless steel (6, 10 dia.) Aluminum alloy (16 to 32 dia.)	Chromate	15	Cylinder main body	Aluminum alloy	Hard alumite
6	Rod packing seal	Nitrile rubber		16	Piston rod (B)	Steel	Industrial chrome plated
7	O ring	Nitrile rubber		17	End plate	Aluminum alloy	Alumite
8	Bearing			18	Hexagon socket head set screw	Stainless steel	
9	Piston rod (A)	Steel	Industrial chrome plated	19	Hexagon socket head set screw	Stainless steel	
10	Piston	Aluminum alloy	Chromate	20	Spacer	Aluminum alloy	Chromate

Repair parts list

STR2-BD (double rod type)

Bore size (mm)	Kit number	Repair parts number
6 dia.	STR2-D-6K	
10 dia.	STR2-D-10K	
16 dia.	STR2-D-16K	1 6 7
20 dia.	STR2-D-20K	11 13
25 dia.	STR2-D-25K	
32 dia.	STR2-D-32K	

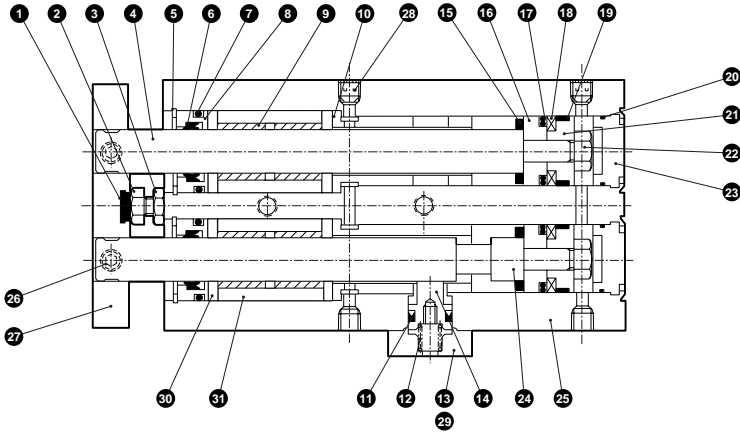
Note: When placing an order, indicate kit number.

SCP * 2
CMK2
CMA2
SCM
SCA2
SCS
CKV2
CAV2/
COV * 2
CAT
MDC2
MVC
SMD2
MSD/
MSDG
SSD
SSD
(large)
FC *
JULKP/
ULK
JSK2/
JSM2
JSC3
(medium)
JSC3
(large)
JSB3
UCAC
STS/
STL
LCS
LCY
STR2
UCA2
STK
USSD
USC
MFC
GLC
SHC
CAC3
HCM
HCA
MRL2
SRL2
SRG
SRM
SRT
SRB2

Combined functions
Twin rod cylinder

Internal structure and parts list (slide bearing type)

- Position locking type
Rod side position locking
STR2-MQ-R
- Piping port position 180° change
STR2-MQ***-R***-O



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		16	Piston	Aluminum alloy	Chromate
2	Hexagon head bolt	Stainless steel		17	Piston packing seal	Nitrile rubber	
3	Hexagon nut	Stainless steel		18	Piston magnet	Plastic	
4	Piston rod (2)	Stainless steel (16, 20 dia.) Steel (25, 32 dia.)	Industrial chrome plated	19	Wear ring	Acetar resin	
5	C ring for hole	Stainless steel		20	O ring	Nitrile rubber	
6	Rod packing seal	Nitrile rubber		21	Magnet spacer	Aluminum alloy	Chromate
7	O ring	Nitrile rubber		22	Hexagon nut	Steel	Galvanizing
8	Housing	Aluminum alloy	Chromate	23	Cap	Aluminum alloy	Chromate
9	Bush	Copper alloy		24	Piston rod (1)	Stainless steel (16, 20 dia.) Steel (25, 32 dia.)	Industrial chrome plated
10	Adaptor	Aluminum alloy	Chromate	25	Cylinder main body	Aluminum alloy	Hard alumite
11	Stopper packing seal	Nitrile rubber		26	Hexagon socket head set screw	Stainless steel	
12	Cylinder spring	Piano wire	Electrodeposition coating	27	End plate	Aluminum alloy	Alumite
13	Stopper cover	Aluminum alloy	Alumite	28	Hexagon socket head set screw	Stainless steel	
14	Stopper piston	Stainless steel		29	Hexagon socket head cap screw	Stainless steel	
15	Cushion rubber (R)	Urethane rubber		30	Spacer	Aluminum alloy	Chromate
				31	Aluminum housing	Aluminum alloy	Chromate

Repair parts list

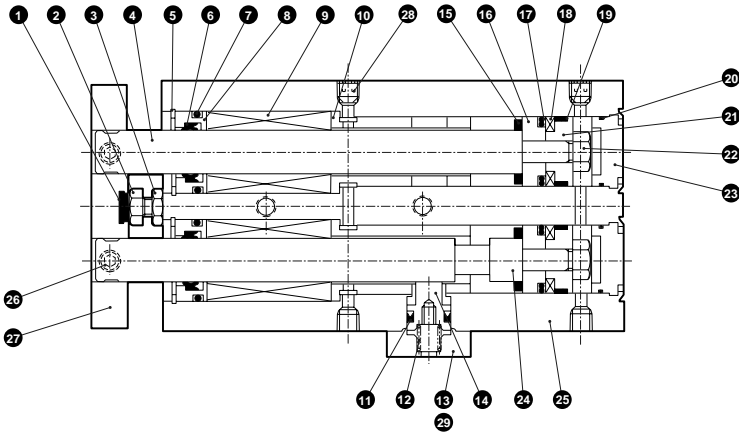
STR2-MQ-R (position locking type, rod side position locking)

Bore size (mm)	Kit number	Repair parts number
16 dia.	STR2-Q-16K	
20 dia.	STR2-Q-20K	1 6 7 11
25 dia.	STR2-Q-25K	15 17 19
32 dia.	STR2-Q-32K	

Note: When placing an order, indicate kit number.

Internal structure and parts list (ball bearing type)

- Position locking type
Rod side position locking
STR2-BQ-R
- Piping port position 180° change
STR2-BQ***-R***-O



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		16	Piston	Aluminum alloy	Chromate
2	Hexagon head bolt	Stainless steel		17	Piston packing seal	Nitrile rubber	
3	Hexagon nut	Stainless steel		18	Piston magnet	Plastic	
4	Piston rod (2)	Steel	Industrial chrome plated	19	Wear ring	Acetar resin	
5	C ring for hole	Stainless steel		20	O ring	Nitrile rubber	
6	Rod packing seal	Nitrile rubber		21	Magnet spacer	Aluminum alloy	Chromate
7	O ring	Nitrile rubber		22	Hexagon nut	Steel	Galvanizing
8	Housing	Aluminum alloy	Chromate	23	Cap	Aluminum alloy	Chromate
9	Bearing			24	Piston rod (1)	Steel	Industrial chrome plated
10	Adaptor	Aluminum alloy	Chromate	25	Cylinder main body	Aluminum alloy	Hard alumite
11	Stopper packing seal	Nitrile rubber		26	Hexagon socket head set screw	Stainless steel	
12	Cylinder spring	Piano wire	Electrodeposition coating	27	End plate	Aluminum alloy	Alumite
13	Stopper cover	Aluminum alloy	Alumite	28	Hexagon socket head set screw	Stainless steel	
14	Stopper piston	Stainless steel		29	Hexagon socket head cap screw	Stainless steel	
15	Cushion rubber (R)	Urethane rubber					

Repair parts list

STR2-BQ-R (position locking type, rod side position locking)

Bore size (mm)	Kit number	Repair parts number
16 dia.	STR2-Q-16K	
20 dia.	STR2-Q-20K	1 6 7 11
25 dia.	STR2-Q-25K	15 17 19
32 dia.	STR2-Q-32K	

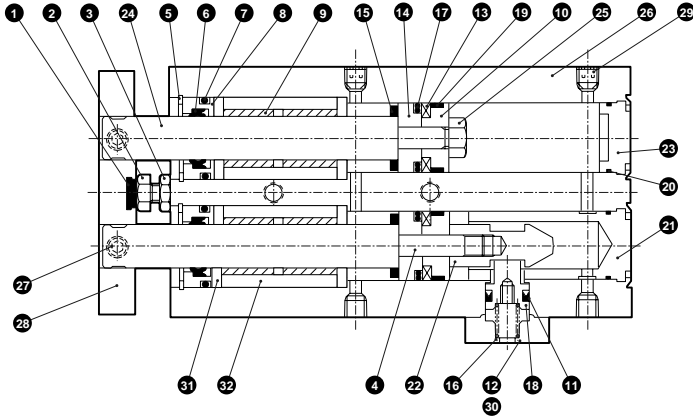
Note: When placing an order, indicate kit number.

SCP * 2
CMK2
CMA2
SCM
SCA2
SCS
CKV2
CAV2/
COV * 2
CAT
MDC2
MVC
SMD2
MSD/
MSDG
SSD
SSD
(large)
FC *
ULKP/
ULK
JSK2/
JSM2
JSC3
(medium)
JSC3
(large)
JSB3
UCAC
STS/
STL
LCS
LCY
STR2
UCA2
STK
USSD
USC
MFC
GLC
SHC
CAC3
HCM
HCA
MRL2
SRL2
SRG
SRM
SRT
SRB2

Combined functions
Twin rod cylinder

Internal structure and parts list (slide bearing type)

- Position locking type
Head side position locking
STR2-MQ-H
- Piping port position 180° change
STR2-MQ-H***-O



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		17	Piston packing seal	Nitrile rubber	
2	Hexagon head bolt	Stainless steel		18	Stopper piston	Stainless steel	
3	Hexagon nut	Stainless steel		19	Wear ring	Acetar resin	
4	Piston rod (2)	Stainless steel (16, 20 dia.) Steel (25, 32 dia.)	Industrial chrome plated	20	O ring	Nitrile rubber	
5	C ring for hole	Stainless steel		21	Head cover	Aluminum alloy	Chromate
6	Rod packing seal	Nitrile rubber		22	Sleeve	Stainless steel	
7	O ring	Nitrile rubber		23	Cap	Aluminum alloy	Chromate
8	Housing	Aluminum alloy	Chromate	24	Piston rod (1)	Stainless steel (16, 20 dia.) Steel (25, 32 dia.)	Industrial chrome plated
9	Bush	Copper alloy		25	Hexagon nut	Steel	Galvanizing
10	Magnet spacer	Aluminum alloy	Chromate	26	Cylinder main body	Aluminum alloy	Hard alumite
11	Stopper packing seal	Nitrile rubber		27	Hexagon socket head set screw	Stainless steel	
12	Stopper cover	Aluminum alloy	Alumite	28	End plate	Aluminum alloy	Alumite
13	Piston magnet	Plastic		29	Hexagon socket head set screw	Stainless steel	
14	Piston	Aluminum alloy	Chromate	30	Hexagon socket head cap screw	Stainless steel	
15	Cushion rubber (R)	Urethane rubber		31	Spacer	Aluminum alloy	Chromate
16	Cylinder spring	Piano wire	Electrodeposition coating	32	Aluminum housing	Aluminum alloy	Chromate

Repair parts list

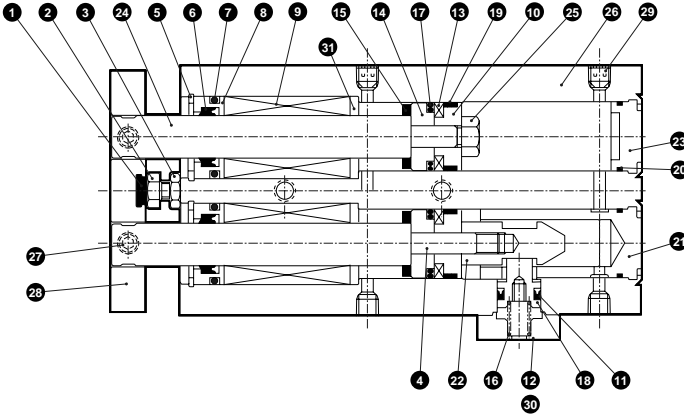
STR2-MQ-H (position locking type, head side position locking)

Bore size (mm)	Kit number	Repair parts number
16 dia.	STR2-Q-16K	1 6 7 11
20 dia.	STR2-Q-20K	15 17 19
25 dia.	STR2-Q-25K	
32 dia.	STR2-Q-32K	

Note: When placing an order, indicate kit number.

Internal structure and parts list (ball bearing type)

- Position locking type
Head side position locking
STR2-BQ-H
- Piping port position 180° change
STR2-BQ-H***-O



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		17	Piston packing seal	Nitrile rubber	
2	Hexagon head bolt	Stainless steel		18	Stopper piston	Stainless steel	
3	Hexagon nut	Stainless steel		19	Wear ring	Acetar resin	
4	Piston rod (2)	Steel	Industrial chrome plated	20	O ring	Nitrile rubber	
5	C ring for hole	Stainless steel		21	Head cover	Aluminum alloy	Chromate
6	Rod packing seal	Nitrile rubber		22	Sleeve	Stainless steel	
7	O ring	Nitrile rubber		23	Cap	Aluminum alloy	Chromate
8	Housing	Aluminum alloy	Chromate	24	Piston rod (1)	Steel	Industrial chrome plated
9	Bearing			25	Hexagon nut	Steel	Galvanizing
10	Magnet spacer	Aluminum alloy	Chromate	26	Cylinder main body	Aluminum alloy	Hard alumite
11	Stopper packing seal	Nitrile rubber		27	Hexagon socket head set screw	Stainless steel	
12	Stopper cover	Aluminum alloy	Alumite	28	End plate	Aluminum alloy	Alumite
13	Piston magnet	Plastic		29	Hexagon socket head set screw	Stainless steel	
14	Piston	Aluminum alloy	Chromate	30	Hexagon socket head cap screw	Stainless steel	
15	Cushion rubber (R)	Urethane rubber		31	Spacer	Aluminum alloy	Chromate
16	Cylinder spring	Piano wire	Electrodeposition coating				

Repair parts list

STR2-BQ-H (position locking type, head side position locking)

Bore size (mm)	Kit number	Repair parts number
16 dia.	STR2-Q-16K	
20 dia.	STR2-Q-20K	1 6 7 11
25 dia.	STR2-Q-25K	15 17 19
32 dia.	STR2-Q-32K	

Note: When placing an order, indicate kit number.

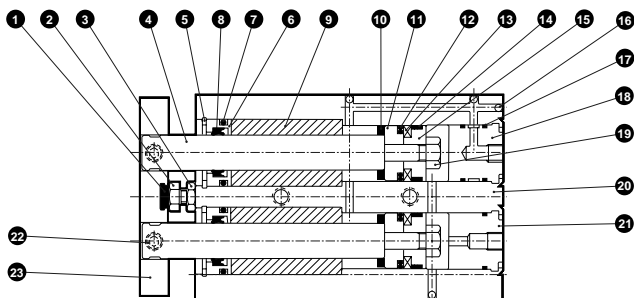
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CMA2
SCM
SCA2
SCS
CKV2
CAV2/
COV * 2
CAT
MDC2
MVC
SMD2
MSD/
MSDG
SSD
SSD
(large)
FC *
ULKP/
ULK
JSK2/
JSM2
JSC3
(medium)
JSC3
(large)
JSB3
UCAC
STS/
STL
LCS
LCY
STR2
UCA2
STK
USSD
USC
MFC
GLC
SHC
CAC3
HCM
HCA
MRL2
SRL2
SRG
SRM
SRT
SRB2
Twin rod cylinder
Combined functions

STR2-M-R Series

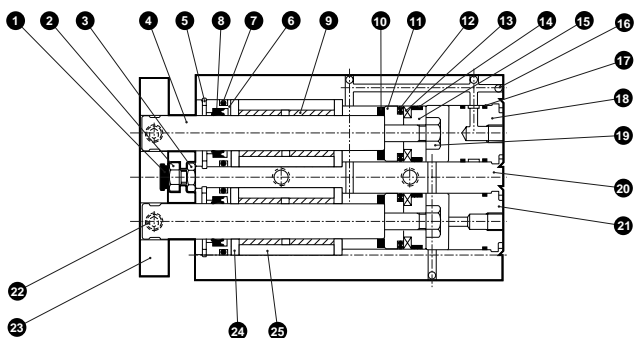
Internal structure and parts list (slide bearing type 6, 10, 16, 20, 25, 32 mm bore)

• Rear piping
STR2-M-R

6, 10 mm bore



16 to 32 mm bore



No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		13	Piston magnet	Plastic	
2	Hexagon head bolt	Stainless steel		14	Wear ring	Acetar resin	
3	Hexagon nut	Stainless steel		15	Magnet spacer	Aluminum alloy	Chromate
4	Piston rod	Stainless steel (6 to 20 dia.) Steel (25, 32 dia.)	Industrial chrome plated (16 to 32 dia.)	16	Steel ball	Steel	
5	C ring for hole	Stainless steel		17	O ring	Nitrile rubber	
6	Housing	Stainless steel (6, 10 dia.) Aluminum alloy (16 to 32 dia.)	Chromate	18	Cap (A)	Aluminum alloy	Chromate
7	O ring	Nitrile rubber		19	Hexagon nut	Steel	Galvanizing
8	Rod packing seal	Nitrile rubber		20	Cylinder main body	Aluminum alloy	Hard alumite
9	Bush	Copper alloy		21	Cap (B)	Aluminum alloy	Chromate
10	Cushion rubber (R)	Urethane rubber		22	Hexagon socket head set screw	Stainless steel	
11	Piston	Aluminum alloy	Chromate	23	End plate	Aluminum alloy	Alumite
12	Piston packing seal	Nitrile rubber		24	Spacer	Aluminum alloy	Chromate
				25	Aluminum housing	Aluminum alloy	Chromate

Repair parts list

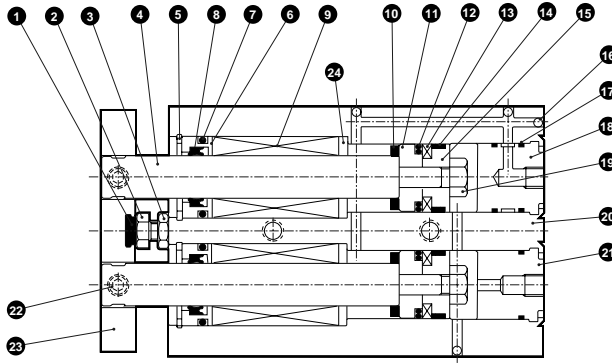
STR2-M-R (rear piping)

Bore size (mm)	Kit number	Repair parts number
6 dia.	STR2-6K	
10 dia.	STR2-10K	
16 dia.	STR2-16K	1 7 8
20 dia.	STR2-20K	10 12 14
25 dia.	STR2-25K	
32 dia.	STR2-32K	

Note: When placing an order, indicate kit number.

Internal structure and parts list (ball bearing type)

- Rear piping
STR2-B-R



SCP * 2
CMK2
CMA2
SCM
SCA2
SCS
CKV2
CAV2/
COV * 2
CAT
MDC2
MVC
SMD2
MSD/
MSDG
SSD
SSD
(large)
FC *
ULKP/
ULK
JSK2/
JSM2
JSC3
(medium)
JSC3
(large)
JSB3
UCAC
STS/
STL
LCS
LCY
STR2
UCA2
STK
USSD
USC
MFC
GLC
SHC
CAC3
HCM
HCA
MRL2
SRL2
SRG
SRM
SRT
SRB2

No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Cushion rubber (H)	Urethane rubber		13	Piston magnet	Plastic	
2	Hexagon head bolt	Stainless steel		14	Wear ring	Acetar resin	
3	Hexagon nut	Stainless steel		15	Magnet spacer	Aluminum alloy	Chromate
4	Piston rod	Steel	Industrial chrome plated	16	Steel ball	Steel	
5	C ring for hole	Stainless steel		17	O ring	Nitrile rubber	
6	Housing	Stainless steel (6, 10 dia.) Aluminum alloy (16 to 32 dia.)	Chromate	18	Cap (A)	Aluminum alloy	Chromate
7	O ring	Nitrile rubber		19	Hexagon nut	Steel	Galvanizing
8	Rod packing seal	Nitrile rubber		20	Cylinder main body	Aluminum alloy	Hard alumite
9	Bearing			21	Cap (B)	Aluminum alloy	Chromate
10	Cushion rubber (R)	Urethane rubber		22	Hexagon socket head set screw	Stainless steel	
11	Piston	Aluminum alloy	Chromate	23	End plate	Aluminum alloy	Alumite
12	Piston packing seal	Nitrile rubber		24	Spacer	Aluminum alloy	Chromate

Repair parts list

STR2-B-R (rear piping)

Bore size (mm)	Kit number	Repair parts number
6 dia.	STR2-6K	
10 dia.	STR2-10K	
16 dia.	STR2-16K	1 7 8
20 dia.	STR2-20K	10 12 14
25 dia.	STR2-25K	
32 dia.	STR2-32K	

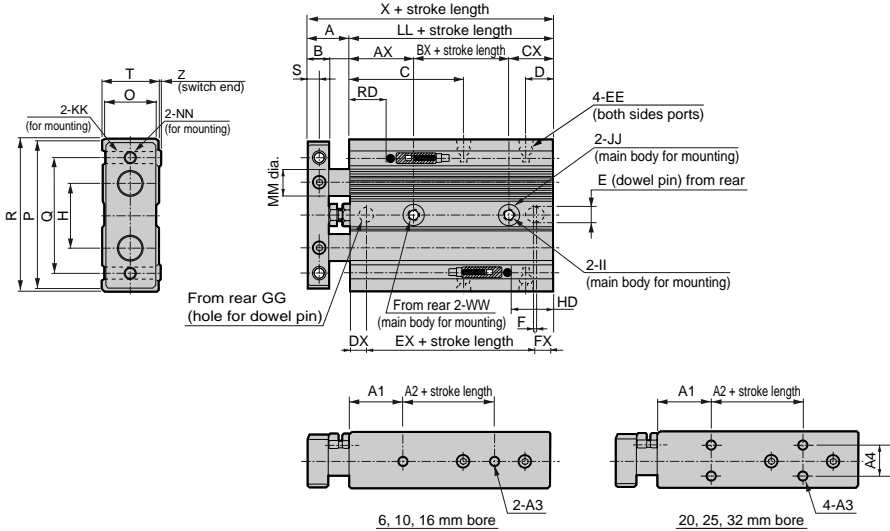
Note: When placing an order, indicate kit number.

Combined functions
Twin rod cylinder

Dimensions (6 to 32mm bore)

- Standard type, low speed type (O), material of end plate: Steel (F), copper and PTFE free type (P6), piping port position 180° change (O)

 (File name: Page 1142 or Ending 141)



Note: Please refer to Page 1133 about HD, RD and projecting section's dimensions of 2 color indicator, preventive maintenance output switch.

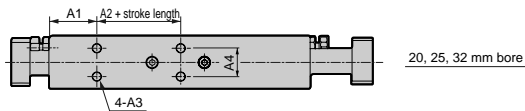
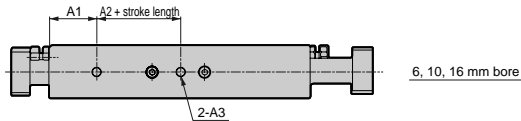
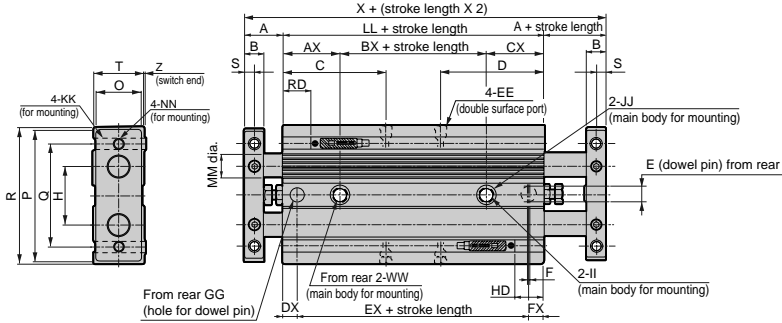
Symbol	Basic type, O, F, P6 basic dimensions																		
Bore size (mm)	A	B	C	D	E	EE	F	GG	H	II	JJ	KK	LL	MM	NN	O	P		
6 dia.	12	6	24.5	7.5	$4^{+0.07}_{-0.02}$ depth 4	M5	1	$4^{+0.07}_{-0.02}$ depth 4	14	3.4	6.5 spot face depth 3.3	M3 penetrating	44	4	M3 penetrating	11	34		
10 dia.	14	6	35	7	$4^{+0.07}_{-0.02}$ depth 4	M5	1	$4^{+0.07}_{-0.02}$ depth 4	20	4.3	8 spot face depth 4.4	M4 penetrating	55	6	M4 penetrating	13	42		
16 dia.	16	8	43	9.5	$6^{+0.07}_{-0.02}$ depth 6	M5	1	$6^{+0.07}_{-0.02}$ depth 6	25	4.3	8 spot face depth 4.4	M5 penetrating	66	10	M5 penetrating	19	52		
20 dia.	20	10	46	9.5	$6^{+0.07}_{-0.02}$ depth 6	M5	1	$6^{+0.07}_{-0.02}$ depth 6	28	5.2	9.5 spot face depth 5.4	M5 penetrating	75	12	M5 penetrating	24	60		
25 dia.	22	12	44	10.5	$6^{+0.07}_{-0.02}$ depth 6	M5	1	$6^{+0.07}_{-0.02}$ depth 6	34	6.3	11 spot face depth 6.5	M6 penetrating	75	14	M6 penetrating	30	70		
32 dia.	22	12	56	11	$6^{+0.07}_{-0.02}$ depth 6	Rc1/8	1	$6^{+0.07}_{-0.02}$ depth 6	44	6.3	11 spot face depth 6.5	M6 penetrating	91	16	M6 penetrating	36	94		
Symbol	K0/K5/K2/K3																		
Bore size (mm)	Q	R	S	T	WW	X	AX	BX	CX	DX	EX	FX	Z	A1	A2	A3	A4	HD	RD
6 dia.	29	36	3	13	M4 depth 5	56	20	10	14	7	30	7	0.5	15	10	M3 depth 4	-	3.5 Note 1	21 Note 1
10 dia.	36	44	3	15	M5 depth 6	69	24	14	17	8	38	9	0.5	15	20	M3 depth 3.5	-	2.5 Note 1	33 Note 1
16 dia.	45	58	4	21	M5 depth 6	82	24	26	16	8	50	8	0	20	25	M4 depth 4	-	7	39.5
20 dia.	50	62	5	27	M6 depth 8	95	24	33	18	9	57	9	0	20	30	M4 depth 4	13	10.5	45
25 dia.	60	72	6	33	M8 depth 8	97	24	33	18	9	57	9	0	20	30	M5 depth 6	18	11.5	43.5
32 dia.	75	96	6	38	M8 depth 8	113	24	47	20	9	73	9	0	20	40	M5 depth 8	24	15.5	55.5

Note 1: For STR2-B-6 and 10, reed switch K0/K5 are not available.

Dimensions (6 to 32 mm bore)

- Double rod type (D), piping port position 180° change (O)

 (File name: Page 1142 or Ending 141)



Note: Please refer to Page 1133, 1134 about HD, RD, and projecting section's dimensions of 2 color indicator, preventive maintenance output switch.

Symbol	Basic dimensions																	K0/K5/K2/K3		
	A	B	C	D	E	EE	F	GG	H	II	JJ	KK	LL	MM	NN	O	P	HD	RD	
6 dia.	12	6	24.5	24.5	$4^{+0.07}_{-0.02}$ depth 4	M5	1	$4^{+0.07}_{-0.02}$ depth 4	14	3.4	6.5 spot face depth 3.3	M3 penetrating	61	4	M3 penetrating	11	34	-	-	
10 dia.	14	6	35	35	$4^{+0.07}_{-0.02}$ depth 4	M5	1	$4^{+0.07}_{-0.02}$ depth 4	20	4.3	8 spot face depth 4.4	M4 penetrating	82.5	6	M4 penetrating	13	42	-	-	
16 dia.	16	8	43	43	$6^{+0.07}_{-0.02}$ depth 6	M5	1	$6^{+0.07}_{-0.02}$ depth 6	25	4.3	8 spot face depth 4.4	M5 penetrating	99	10	M5 penetrating	19	52	-	-	
20 dia.	20	10	46	46	$6^{+0.07}_{-0.02}$ depth 6	M5	1	$6^{+0.07}_{-0.02}$ depth 6	28	5.2	9.5 spot face depth 5.4	M5 penetrating	108	12	M5 penetrating	24	60	-	-	
25 dia.	22	12	44	44	$6^{+0.07}_{-0.02}$ depth 6	M5	1	$6^{+0.07}_{-0.02}$ depth 6	34	6.3	11 spot face depth 6.5	M6 penetrating	108	14	M6 penetrating	30	70	-	-	
32 dia.	22	12	56	56	$6^{+0.07}_{-0.02}$ depth 6	Rc1/8	1	$6^{+0.07}_{-0.02}$ depth 6	44	6.3	11 spot face depth 6.5	M6 penetrating	133	16	M6 penetrating	36	94	-	-	
Symbol	Basic dimensions																	K0/K5/K2/K3		
Bore size (mm)	Q	R	S	T	WW	X	AX	BX	CX	DX	EX	FX	Z	A1	A2	A3	A4	HD	RD	
6 dia.	29	36	3	13	M4 depth 5	85	20	21	20	7	47	7	0.5	15	10	M3 depth 4	-	20.5 Note 1	21 Note 1	
10 dia.	36	44	3	15	M5 depth 6	110.5	24	34.5	24	8	65.5	9	0.5	15	20	M3 depth 3.5	-	30.5 Note 1	33 Note 1	
16 dia.	45	58	4	21	M5 depth 6	131	24	51	24	8	83	8	0	20	25	M4 depth 4	-	39	39.5	
20 dia.	50	62	5	27	M6 depth 8	148	24	60	24	9	90	9	0	20	30	M4 depth 4	13	43	45	
25 dia.	60	72	6	33	M8 depth 8	152	24	60	24	9	90	9	0	20	30	M5 depth 6	18	43.5	43.5	
32 dia.	75	96	6	38	M8 depth 8	177	24	85	24	9	115	9	0	20	40	M5 depth 8	24	55.5	55.5	

Note 1: For STR2-B-6 and 10, reed switch K0/K5 are not available.

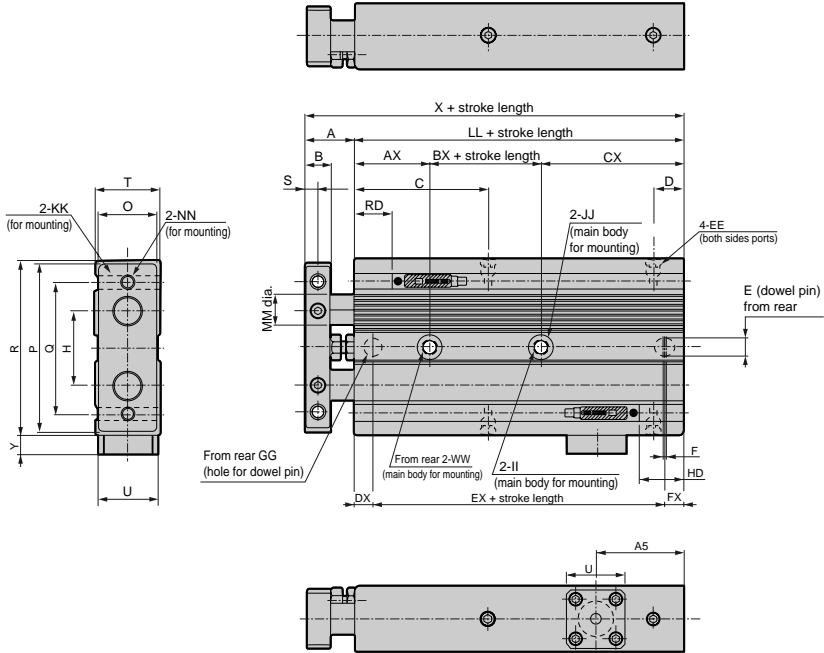
SCP * 2
CMK2
CMA2
SCM
SCA2
SCS
SCS
CKV2
CAV2/
COV * 2
CAT
MDC2
MVC
SMD2
MSD/
MSDG
SSD
SSD
(large)
FC *
ULKP/
ULK
JSK2/
JSM2
JSC3
(medium)
JSC3
(large)
JSB3
UCAC
STS/
STL
LCS
LCY
STR2
UCA2
STK
USSD
USC
MFC
GLC
SHC
CAC3
HCM
HCA
MRL2
SRL2
SRG
SRM
SRT
SRB2

Combined functions
Twin rod cylinder

Dimensions (16 to 32mm bore)

- Position locking type (Q) head side position locking (H), piping port position 180° change (O)

 (File name: Page 1142 or Ending 141)



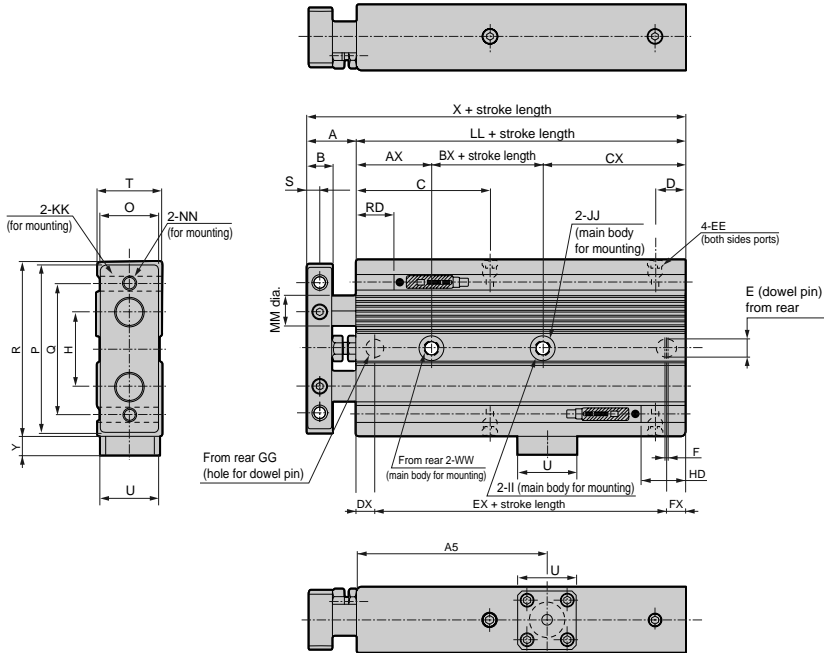
Note: Please refer to Page 1133 about HD, RD and projecting section's dimensions of 2 color indicator, preventive maintenance output switch.

Symbol		Q-H basic dimensions															
Bore size (mm)	A	B	C	D	E	EE	F	GG	H	II	JJ	KK	LL	MM	NN	O	P
16 dia.	16	8	43	9.5	$6^{+0.07}_{-0.02}$ depth 6	M5	1	$6^{+0.07}_{-0.02}$ depth 6	25	4.3	8 spot face depth 4.4	M5 penetrating	99	10	M5 penetrating	19	52
20 dia.	20	10	46	9.5	$6^{+0.07}_{-0.02}$ depth 6	M5	1	$6^{+0.07}_{-0.02}$ depth 6	28	5.2	9.5 spot face depth 5.4	M5 penetrating	105	12	M5 penetrating	24	60
25 dia.	22	12	44	10.5	$6^{+0.07}_{-0.02}$ depth 6	M5	1	$6^{+0.07}_{-0.02}$ depth 6	34	6.3	11 spot face depth 6.5	M6 penetrating	105	14	M6 penetrating	30	70
32 dia.	22	12	56	11	$6^{+0.07}_{-0.02}$ depth 6	Rc1/8	1	$6^{+0.07}_{-0.02}$ depth 6	44	6.3	11 spot face depth 6.5	M6 penetrating	121	16	M6 penetrating	36	94
Symbol		K0/K5/K2/K3															
Bore size (mm)	Q	R	S	T	U	WW	X	Y	AX	BX	CX	DX	EX	FX	A5	HD	RD
16 dia.	45	58	4	21	19	M5 depth 6	112	6	24	26	46	8	80	8	28	37	39.5
20 dia.	50	62	5	27	23	M6 depth 8	125	7.5	24	33	48	9	87	9	25	40.5	45
25 dia.	60	72	6	33	23	M8 depth 8	127	7.5	24	33	48	9	87	9	28	41.5	43.5
32 dia.	75	96	6	38	23	M8 depth 8	143	7.5	24	47	50	9	103	9	27.5	45.5	55.5

Dimensions (16 to 32mm bore)

- Position locking type (Q) rod side position locking (R), piping port position 180° change (O)

 (File name: Page 1142 or Ending 141)



Note: Please refer to Page 1133 about HD, RD and projecting section's dimensions of 2 color indicator, preventive maintenance output switch.

Symbol	Q-R basic dimensions																
	A	B	C	D	E	EE	F	GG	H	I	JJ	KK	LL	MM	NN	O	P
16 dia.	16	8	43	9.5	6 ^{+0.07} _{-0.02} depth 6	M5	1	6 ^{+0.07} _{-0.02} depth 6	25	4.3	8 spot face depth 4.4	M5 penetrating	96	10	M5 penetrating	19	52
20 dia.	20	10	46	9.5	6 ^{+0.07} _{-0.02} depth 6	M5	1	6 ^{+0.07} _{-0.02} depth 6	28	5.2	9.5 spot face depth 5.4	M5 penetrating	105	12	M5 penetrating	24	60
25 dia.	22	12	44	10.5	6 ^{+0.07} _{-0.02} depth 6	M5	1	6 ^{+0.07} _{-0.02} depth 6	34	6.3	11 spot face depth 6.5	M6 penetrating	105	14	M6 penetrating	30	70
32 dia.	22	12	56	11	6 ^{+0.07} _{-0.02} depth 6	Rc1/8	1	6 ^{+0.07} _{-0.02} depth 6	44	6.3	11 spot face depth 6.5	M6 penetrating	121	16	M6 penetrating	36	94
Symbol	K0/K5/K2/K3																
Symbol	Q	R	S	T	U	WW	X	Y	AX	BX	CX	DX	EX	FX	A5	HD	RD
16 dia.	45	58	4	21	19	M5 depth 6	112	6	24	26	46	8	80	8	61.5	7	69.5
20 dia.	50	62	5	27	23	M6 depth 8	125	7.5	24	33	48	9	87	9	61.5	10.5	75
25 dia.	60	72	6	33	23	M8 depth 8	127	7.5	24	33	48	9	87	9	61.5	11.5	73.5
32 dia.	75	96	6	38	23	M8 depth 8	143	7.5	24	47	50	9	103	9	72.5	15.5	85.5

SCP * 2
 CMK2
 CMA2
 SCM
 SCA2
 SCS
 CKV2
 CAV2/
 COV * 2
 CAT
 MDC2
 MVC
 SMD2
 MSD/
 MSDG
 SSD
 SSD
 (large)
 FC *
 ULKP/
 ULK
 JSK2/
 JSM2
 JSC3
 (medium)
 JSC3
 (large)
 JSB3
 UCAC
 STS/
 STL
 LCS
 LCY
STR2
 UCA2
 STK
 USSD
 USC
 MFC
 GLC
 SHC
 CAC3
 HCM
 HCA
 MRL2
 SRL2
 SRG
 SRM
 SRT
 SRB2
 Twin rod cylinder
 Combined functions

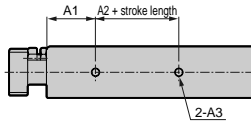
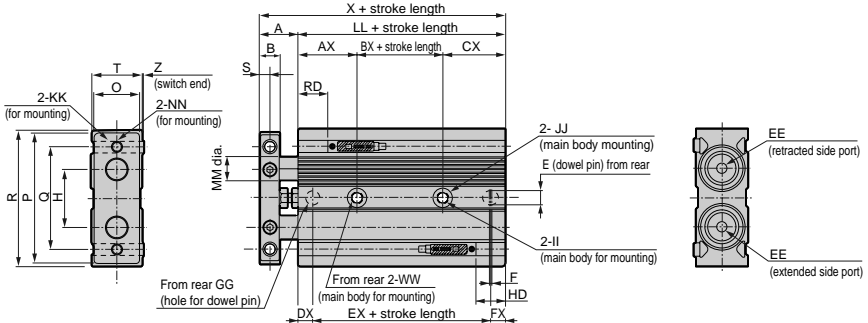
STR2-B Series

Dimensions (6 to 32 mm bore)

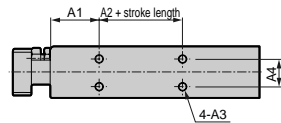
• Rear piping (R)



(File name: Page 1142 or Ending 141)



6, 10, 16 mm bore



20, 25, 32 mm bore

Note: Please refer to Page 1133 about HD, RD and projecting section's dimensions of 2 color indicator, preventive maintenance output switch.

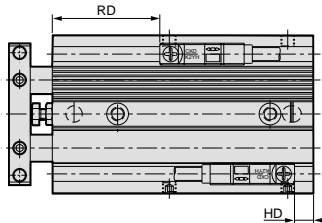
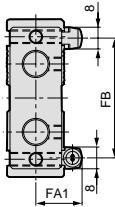
Symbol	R basic dimensions																		
Bore size (mm)	A	B	E	EE	F	GG	H	II	JJ	KK	LL	MM	NN	O	P				
6 dia.	12	6	4 ^{+0.07} _{-0.02} depth 4	M5	1	4 ^{+0.07} _{-0.02} depth 4	14	3.4	6.5 spot face depth 3.3	M3 penetrating	54	4	M3 penetrating	11	34				
10 dia.	14	6	4 ^{+0.07} _{-0.02} depth 4	M5	1	4 ^{+0.07} _{-0.02} depth 4	20	4.3	8 spot face depth 4.4	M4 penetrating	65	6	M4 penetrating	13	42				
16 dia.	16	8	6 ^{+0.07} _{-0.02} depth 6	M5	1	6 ^{+0.07} _{-0.02} depth 6	25	4.3	8 spot face depth 4.4	M5 penetrating	76	10	M5 penetrating	19	52				
20 dia.	20	10	6 ^{+0.07} _{-0.02} depth 6	M5	1	6 ^{+0.07} _{-0.02} depth 6	28	5.2	9.5 spot face depth 5.4	M5 penetrating	85	12	M5 penetrating	24	60				
25 dia.	22	12	6 ^{+0.07} _{-0.02} depth 6	M5	1	6 ^{+0.07} _{-0.02} depth 6	34	6.3	11 spot face depth 6.5	M6 penetrating	85	14	M6 penetrating	30	70				
32 dia.	22	12	6 ^{+0.07} _{-0.02} depth 6	Rc1/8	1	6 ^{+0.07} _{-0.02} depth 6	44	6.3	11 spot face depth 6.5	M6 penetrating	101	16	M6 penetrating	36	94				
Symbol	K0/K5/K2/K3																		
Bore size (mm)	Q	R	S	T	WW	X	AX	BX	CX	DX	EX	FX	Z	A1	A2	A3	A4	HD	RD
6 dia.	29	36	3	13	M4 depth 5	66	20	10	24	7	40	7	0.5	15	10	M3 depth 4	-	13.5	21
10 dia.	36	44	3	15	M5 depth 6	79	24	14	27	8	48	9	0.5	15	20	M3 depth 3.5	-	12.5	33
16 dia.	45	58	4	21	M5 depth 6	92	24	26	26	8	60	8	0	20	25	M4 depth 4	-	17	39.5
20 dia.	50	62	5	27	M6 depth 8	105	24	33	28	9	67	9	0	20	30	M4 depth 4	13	20.5	45
25 dia.	60	72	6	33	M8 depth 8	107	24	33	28	9	67	9	0	20	30	M5 depth 6	18	21.5	43.5
32 dia.	75	96	6	38	M8 depth 8	123	24	47	30	9	83	9	0	20	40	M5 depth 8	24	25.5	55.5

Note 1: For STR2-B-6/10, reed switch K0/K5 are not available.

Dimensions of types with switches (2 color indicator type preventive maintenance output switch)

- Standard type, low speed type (O), position locking type (Q), end plate material: Steel (F)
 Rear piping type (R), copper and PTFE free type (P6), piping port position 180° change (O)

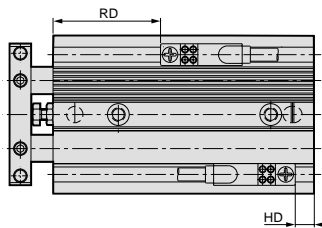
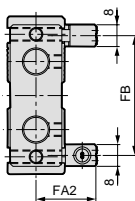
2 color indicator switch (K2YH/V, K3YH/V)



• 2 color indicator K *YH/V

Symbol	FA	FB	RD				HD			
			STR2-M _B -O STR2-M _B -F STR2-M _B -P6 STR2-M _B -O	STR2-M _B -R	STR2-M _B -Q-H	STR2-M _B -Q-R	STR2-M _B -O STR2-M _B -F STR2-M _B -P6 STR2-M _B -O	STR2-M _B -R	STR2-M _B -Q-H	STR2-M _B -Q-R
6 dia.	13.5	24	20	20	-	-	2.5	12.5	-	-
10 dia.	14.5	34	32	32	-	-	1	11	-	-
16 dia.	17	44	38.5	38.5	38.5	68.5	5.5	15.5	35.5	5.5
20 dia.	20	49	44	44	44	74	9.5	19.5	39.5	9.5
25 dia.	23	58	42.5	42.5	42.5	72.5	10.5	20.5	40.5	10.5
32 dia.	25.5	71	54.5	54.5	54.5	84.5	14.5	24.5	44.5	14.5

Preventive maintenance output switch (K2YFH/V, K2YMH/V, K3YFH/V, K3YMH/V)



• With preventive maintenance output K * Y *H/V

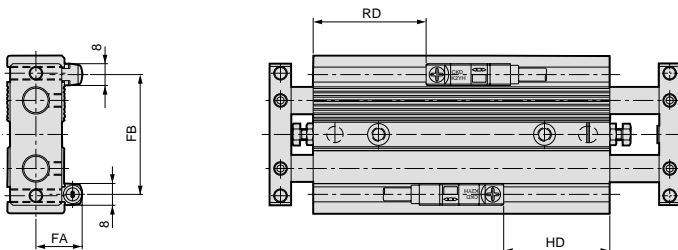
Symbol	FA	FB	RD				HD			
			STR2-M _B -O STR2-M _B -F STR2-M _B -P6 STR2-M _B -O	STR2-M _B -R	STR2-M _B -Q-H	STR2-M _B -Q-R	STR2-M _B -O STR2-M _B -F STR2-M _B -P6 STR2-M _B -O	STR2-M _B -R	STR2-M _B -Q-H	STR2-M _B -Q-R
6 dia.	18.5	24	20	20	-	-	2.5	12.5	-	-
10 dia.	19.5	34	32	32	-	-	1	11	-	-
16 dia.	22	44	38.5	38.5	38.5	68.5	5.5	15.5	35.5	5.5
20 dia.	25	49	44	44	44	74	9.5	19.5	39.5	9.5
25 dia.	28	58	42.5	42.5	42.5	72.5	10.5	20.5	40.5	10.5
32 dia.	30.5	71	54.5	54.5	54.5	84.5	14.5	24.5	44.5	14.5

Combined functions
Twin rod cylinder

Dimensions of types with switches (2 color indicator type preventive maintenance output switch)

- Double rod type (O)

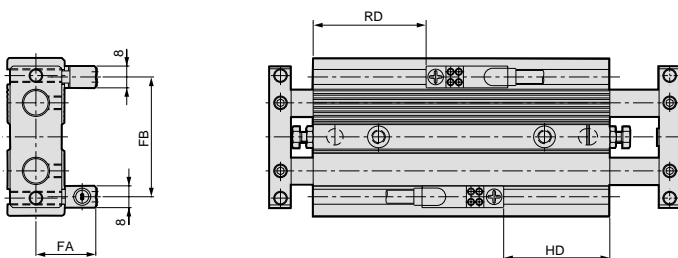
2 color indicator switch (K2YH^H/V, K3YH^H/V)



- 2 color indicator K *YH^H/V

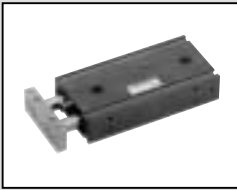
Symbol	FA	FB	RD	HD
Bore size (mm)				
6 dia.	13.5	24	20	19.5
10 dia.	14.5	34	31	29
16 dia.	17	44	39	38
20 dia.	20	49	44	42
25 dia.	23	58	43.5	42.5
32 dia.	25.5	71	56.5	54.5

Preventive maintenance output switch (K2YFH^H/V, K2YMH^H/V, K3YFH^H/V, K3YMH^H/V)



- With preventive maintenance output K * Y *H^H/V

Symbol	FA	FB	RD	HD
Bore size (mm)				
6 dia.	18.5	24	20	19.5
10 dia.	19.5	34	31	29
16 dia.	22	44	39	38
20 dia.	25	49	44	42
25 dia.	28	58	43.5	42.5
32 dia.	30.5	71	56.5	54.5



Twin rod cylinder double acting/fine speed type

STR2-M_BF Series

- Bore size: 10, 16, 20, 25, 32 mm

JIS symbol



CAD DATA AVAILABLE.

Specifications

Descriptions	STR2-MF (slide bearing), STR2-BF (ball bearing)				
Bore size mm	10 dia.	16 dia.	20 dia.	25 dia.	32 dia.
Actuation	Double acting				
Working fluid	Compressed air				
Max. working pressure MPa	0.70				
Min. working pressure MPa	0.15				0.1
Ambient temperature °C	5 to 60				
Port size	M5				Rc1/8
Stroke length tolerance mm	0 to -5				
Working piston speed mm/s	1 to 200				
Revolvable angle tolerance	STR2-MF	±0.3°			±0.2°
	STR2-BF	±0.1°			±0.3°
Piston rod	Slide bearing				
Bearing type	Ball bearing				
Cushion	Rubber cushion				
Lubrication	Must be oil free				
Allowable energy absorption J	0.061	0.181	0.303	0.68	1.3

- For 6 mm bore cylinder, we recommend fine speed type (STR2-0).

Stroke length

Model	Bore size (mm)	Standard stroke length (mm)	Max. stroke length (mm)
STR2-M _B F	10 dia.	10, 20, 30, 40, 50	50
	16, 20, 25, 32 dia.	10, 20, 30, 40, 50, 60, 70, 80, 90, 100	100

Switch specifications

- One color/bi-color indicator

Descriptions	Proximity 2 wire		Proximity 3 wire		Reed 2 wire	
	K2H/K2V	K2YH/K2YV	K3H/K3V	K3YH/K3YV	K0H/K0V	K5H/K5V
Applications	Programmable controller		Programmable controller, relay		Programmable controller, relay	
Power voltage	-		DC10 to 28V		-	
Load voltage	DC10 to 30V		DC30V or less		DC12V/24V	AC110V
Load current	5 to 20mA (Note 1)		50mA or less		5 to 50mA	7 to 20mA
Light	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	

Note 1: Max. load current above: 20mA is the value at 25 °C. When ambient temperature around a switch is higher than 25 °C, the value is lower than 20mA. (5 to 10mA at 60 °C).

- Equipped with preventive maintenance output

Descriptions	Proximity 3 wire		Proximity 4 wire		Proximity 3 wire		Proximity 4 wire	
	K2YFH/V		K3YFH/V		K2YMH/V		K3YMH/V	
Applications	Programmable controller		Programmable controller, relay		Programmable controller		Programmable controller, relay	
Light	Installation position adjustment		Red/green LED (ON lighting)					
	Preventive maintenance output		-			Yellow LED (ON lighting)		
Output	Current voltage	-	DC10 to 28V		-		DC10 to 28V	
	Load voltage	DC10 to 30V	DC30V or less		DC10 to 30V		DC30V or less	
	Load current	DC5 to 20mA	DC50mA or less		DC5 to 20mA		DC50mA or less	
Preventive maintenance output	Load voltage	DC30V or less						
	Load current	DC20mA or less	DC50mA or less		DC5 to 20mA or less		DC50mA or less	

Dimensions

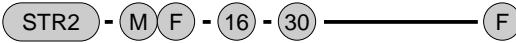
As same as double acting STR2 series. Refer to Page 1128.

Technical data

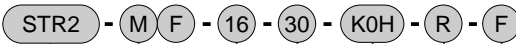
Refer to technical data (Page 741) about measuring methods.

How to order

- Without switch



- With switch



Model

A Type of bearing

B Bore size

C Stroke length
Note 1

D Switch model No.
Note 2

E Switch quantity

F Option

⚠ Cautions for model No. selection

Note 1: Max. stroke length of backward piping type "R"

- 16 mm bore : 70 mm stroke,
- 20, 25 mm bore: 60 mm stroke,
- 32 mm bore : 50 mm stroke

Note 2: For STR2-BF-10, reed switches are not available.

Available other than listed **D** switch model No.
(custom order)
Please refer to Ending 1 about details.

<Example of model number>

STR2-MF-16-30-K0H-R-F

Model: Twin rod cylinder, fine speed type

A Type of bearing : Slide bearing

B Bore size : 16 mm

C Stroke length : 30 mm

D Switch model No.: Reed switch K0H, lead wire 1m

E Switch quantity : One on rod side

F Option : Material of end plate: Steel

Symbol	Descriptions
A Type of bearing	
M	Slide bearing
B	Ball bearing

B Bore size (mm)	
10	10 dia.
16	16 dia.
20	20 dia.
25	25 dia.
32	32 dia.

C Stroke length (mm)						
Bore size	10 dia.	16 dia.	20 dia.	25 dia.	32 dia.	
10	10	●	●	●	●	●
20	20	●	●	●	●	●
30	30	●	●	●	●	●
40	40	●	●	●	●	●
50	50	●	●	●	●	●
60	60		●	●	●	●
70	70		●	●	●	●
80	80		●	●	●	●
90	90		●	●	●	●
100	100		●	●	●	●

D Switch model No.					Note 2	
Axial lead wire	Radial lead wire	Contact		Display	Lead wire	
		Reed	Proximity			
K0H *	K0V *			1 color indicator	2 wire	
K5H *	K5V *					
K2H *	K2V *			1 color indicator	2 wire	
K3H *	K3V *					
K2YH *	K2YV *			2 color indicator	2 wire	
K3YH *	K3YV *					
K2YFH *	K2YFV *			Preventive maintenance output	3 wire	
K3YFH *	K3YFV *					
K2YMH *	K2YMV *					
K3YMH *	K3YMV *					

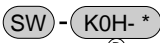
*Lead wire length	
Blank	1m (standard)
3	3m (Option)
5	5m (Option)

E Switch quantity	
R	One on rod side
H	One on head side
D	Two

F Option	
F	Material of end plate: Steel
R	Rear piping type

How to order switch

- Switch main body only



D

Switch model No.

SCP * 2

CMK2

CMA2

SCM

SCA2

SCS

CKV2

CAV2/COV * 2

CAT

MDC2

MVC

SMD2

MSD/MSDG

SSD

SSD (large)

FC *

LULKP/LULK

JSK2/JSM2

JSC3 (medium)

JSC3 (large)

JSB3

UCAC

STS/STL

LCS

LCY

STR2

UCA2

STK

USSD

USC

MFC

GLC

SHC

CAC3

HCM

HCA

MRL2

SRL2

SRG

SRM

SRT

SRB2

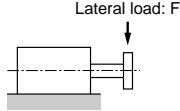
Combined functions

Twin rod cylinder

STR2-M_B Series

Technical data 1) Allowable lateral load

Allowable lateral load



• Slide bearing

Type	Stroke length (mm)									
	10	20	30	40	50	60	70	80	90	100
STR2-M-6	2.4	1.9	1.5	1.3	1.1	-	-	-	-	-
STR2-M-10	5.8	4.8	4.1	3.5	3.1	-	-	-	-	-
STR2-M-16	15.9	13.3	11.5	10.1	8.9	8.1	7.3	6.7	6.2	5.8
STR2-M-20	20.3	17.3	15.1	13.4	12.1	10.9	10.0	9.2	8.5	7.9
STR2-M-25	22.1	18.9	16.5	14.7	13.1	11.9	10.9	10.1	9.3	8.7
STR2-M-32	34.9	30.2	26.7	23.9	21.6	19.7	18.1	16.8	15.7	14.7

• Ball bearing

Type	Stroke length (mm)									
	10	20	30	40	50	60	70	80	90	100
STR2-B-6	2.6	1.9	1.5	1.2	1.0	-	-	-	-	-
STR2-B-10	6.0	4.4	3.6	3.0	2.6	-	-	-	-	-
STR2-B-16	11.4	8.5	7.0	5.9	5.1	4.5	4.0	3.7	3.3	3.0
STR2-B-20	12.7	9.6	7.9	6.8	5.9	5.3	4.7	4.3	3.9	3.6
STR2-B-25	14.7	11.1	9.2	7.9	6.9	6.1	5.5	5.0	4.6	4.2
STR2-B-32	24.3	18.5	15.4	13.3	11.7	10.5	9.5	8.7	8.0	7.4

STR2-D allowable lateral load

• Slide bearing (double rod type)

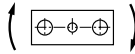
Type	Stroke length (mm)									
	10	20	30	40	50	60	70	80	90	100
STR2-MD-6	3.3	3.2	3.1	3.0	2.9	-	-	-	-	-
STR2-MD-10	8.0	7.6	7.3	7.1	7.0	-	-	-	-	-
STR2-MD-16	21.7	20.5	19.7	19.1	18.7	18.3	18.0	17.8	17.6	17.5
STR2-MD-20	26.7	25.3	24.3	23.7	23.1	22.7	22.4	22.1	21.9	21.7
STR2-MD-25	29.3	27.8	26.7	26.0	25.4	24.9	24.6	24.3	24.0	23.8
STR2-MD-32	45.2	42.9	41.3	40.1	39.1	38.3	37.7	37.2	36.7	36.3

• Ball bearing (double rod type)

Type	Stroke length (mm)									
	10	20	30	40	50	60	70	80	90	100
STR2-BD-6	3.7	3.0	2.7	2.5	2.3	-	-	-	-	-
STR2-BD-10	8.6	6.9	6.2	5.7	5.3	-	-	-	-	-
STR2-BD-16	16.6	13.3	11.7	10.7	10.0	9.4	9.0	8.6	8.3	8.0
STR2-BD-20	17.8	14.3	12.6	11.5	10.8	10.2	9.8	9.3	9.0	8.7
STR2-BD-25	20.8	16.7	14.7	13.5	12.6	11.9	11.4	10.9	10.5	10.2
STR2-BD-32	34.5	27.6	24.2	22.1	20.6	19.5	18.5	17.8	17.1	16.6

Allowable torque

Torque: T (N·m)



• Slide bearing

Type	Stroke length (mm)									
	10	20	30	40	50	60	70	80	90	100
STR2-M-6	8.4	6.7	5.3	4.6	3.9	-	-	-	-	-
STR2-M-10	29.0	24.0	20.5	17.5	15.5	-	-	-	-	-
STR2-M-16	99.4	83.1	71.9	63.1	55.6	50.6	45.6	41.9	38.8	36.3
STR2-M-20	142.1	121.1	105.7	93.8	84.7	76.3	70.0	64.4	59.5	55.3
STR2-M-25	187.9	160.7	140.3	125.0	111.4	101.2	92.7	85.9	79.1	74.0
STR2-M-32	383.9	332.2	293.7	262.9	237.6	216.7	199.1	184.8	172.7	161.7

• Ball bearing

Type	Stroke length (mm)									
	10	20	30	40	50	60	70	80	90	100
STR2-B-6	9.1	6.7	5.3	4.2	3.5	-	-	-	-	-
STR2-B-10	30.0	22.0	18.0	15.0	13.0	-	-	-	-	-
STR2-B-16	71.3	53.1	43.8	36.9	31.9	28.1	25.0	23.1	20.6	18.8
STR2-B-20	88.9	67.2	55.3	47.6	41.3	37.1	32.9	30.1	27.3	25.2
STR2-B-25	125.0	94.4	78.2	67.2	58.7	51.9	46.8	42.5	39.1	35.7
STR2-B-32	267.3	203.5	169.4	146.3	128.7	115.5	104.5	95.7	88.0	81.4

STR2-D Allowable torque

• Slide bearing (double rod type)

Type	Stroke length (mm)									
	10	20	30	40	50	60	70	80	90	100
STR2-MD-6	11.6	11.2	10.9	10.5	10.2	-	-	-	-	-
STR2-MD-10	40.0	38.0	36.5	35.5	35.0	-	-	-	-	-
STR2-MD-16	135.6	128.1	123.1	119.4	116.9	114.4	112.5	111.3	110.0	109.4
STR2-MD-20	186.9	177.1	170.1	165.9	161.7	158.9	156.8	154.7	153.3	151.9
STR2-MD-25	249.1	236.3	227.0	221.0	215.9	211.7	209.1	206.6	204.0	202.3
STR2-MD-32	497.2	471.9	454.3	441.1	430.1	421.3	414.7	409.2	403.7	399.3

• Ball bearing (double rod type)

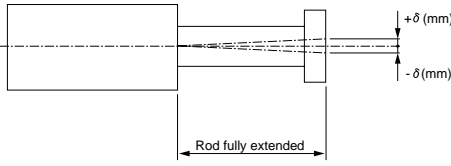
Type	Stroke length (mm)									
	10	20	30	40	50	60	70	80	90	100
STR2-BD-6	13.0	10.5	9.5	8.8	8.1	-	-	-	-	-
STR2-BD-10	43.0	34.5	31.0	28.5	26.5	-	-	-	-	-
STR2-BD-16	103.8	83.1	73.1	66.9	62.5	55.8	56.3	53.8	51.9	50.0
STR2-BD-20	124.6	100.1	88.2	80.5	75.6	71.4	68.6	65.1	63.0	60.9
STR2-BD-25	176.8	142.0	125.0	114.8	107.1	101.2	96.9	92.7	89.3	86.7
STR2-BD-32	379.5	303.6	266.2	243.1	226.6	214.5	203.5	195.8	188.1	182.6

SCP * 2
 CMK2
 CMA2
 SCM
 SCA2
 SCS
 CKV2
 CAV2/
 COV * 2
 CAT
 MDC2
 MVC
 SMD2
 MSD/
 MSDG
 SSD
 SSD
 (large)
 FC *
 ULKP/
 ULK
 JSK2/
 JSM2
 JSC3
 (medium)
 JSC3
 (large)
 JSB3
 UCAC
 STS/
 STL
 LCS
 LCY
 STR2
 UCA2
 STK
 USSD
 USC
 MFC
 GLC
 SHC
 CAC3
 HCM
 HCA
 MRL2
 SRL2
 SRG
 SRM
 SRT
 SRB2
 Combined functions
 Twin rod cylinder

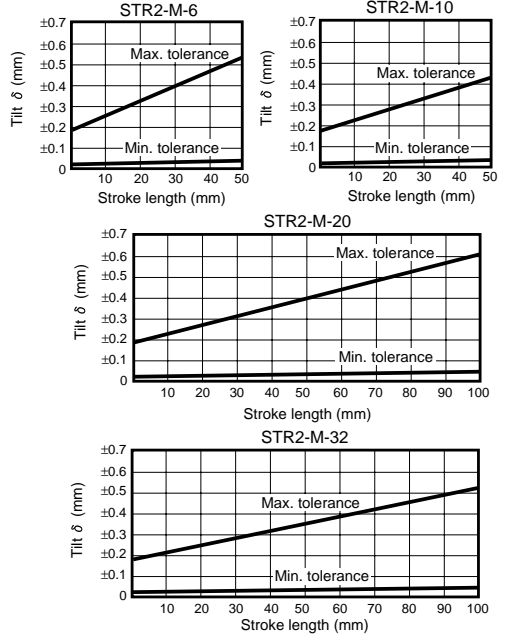
STR2-M_B Series

Technical data 3) Deflection

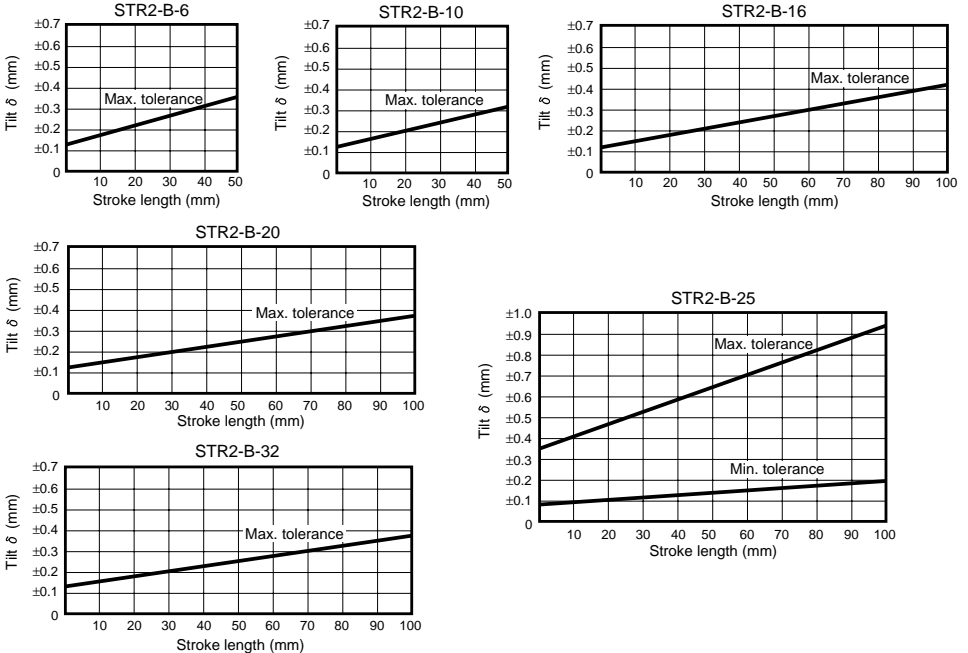
Deflection Refer to values on the following graph for end plate end tilt angle at no load.
 (Reference value) (Bent of piston rod excluded)



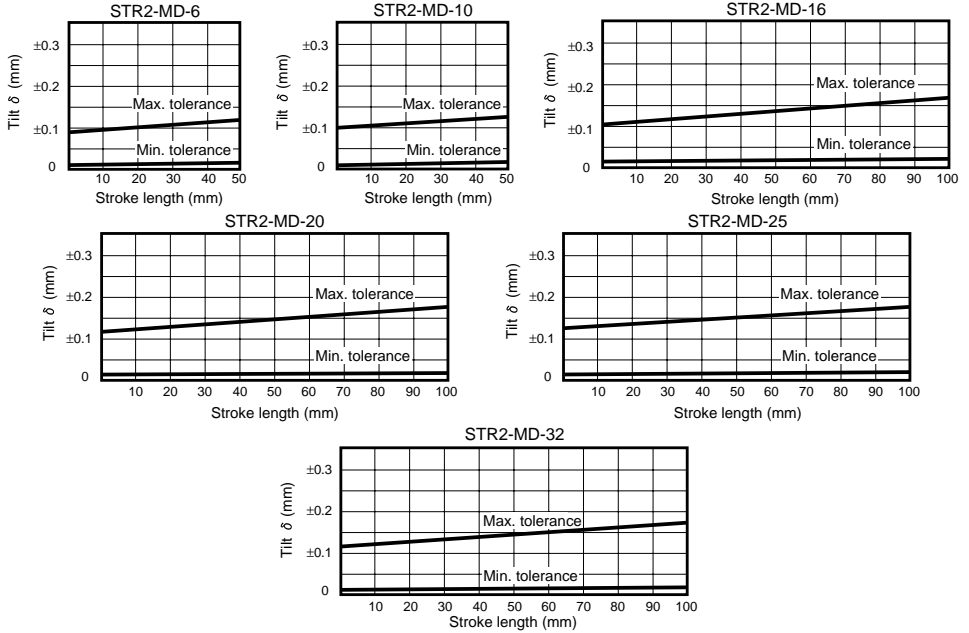
■STR2-M



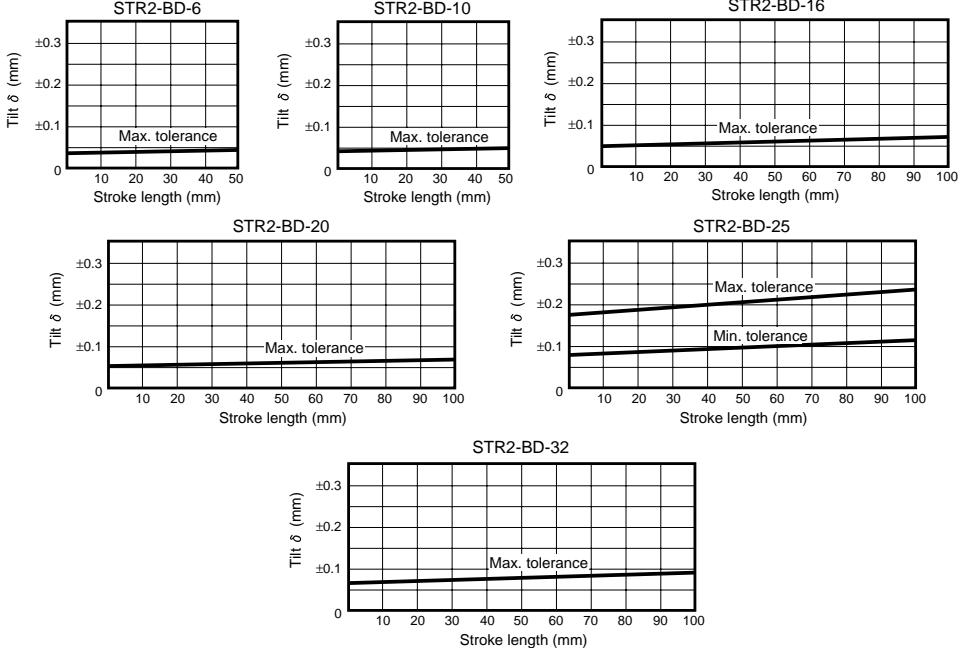
■STR2-B



■ STR2-MD



■ STR2-BD



- SCP * 2
- CMK2
- CMA2
- SCM
- SCA2
- SCS
- CKV2
- CAV2/COV * 2
- CAT
- MDC2
- MVC
- SMD2
- MSD/MSDG
- SSD
- SSD (large)
- FC *
- ULKP/ULK
- JSK2/JSK2
- JSM2
- JSC3 (medium)
- JSC3 (large)
- JSB3
- UCAC
- STS/STL
- LCS
- LCY
- STR2**
- UCA2
- STK
- USSD
- USC
- MFC
- GLC
- SHC
- CAC3
- HCM
- HCA
- MRL2
- SRL2
- SRG
- SRM
- SRT
- SRB2

Combined functions
Twin rod cylinder