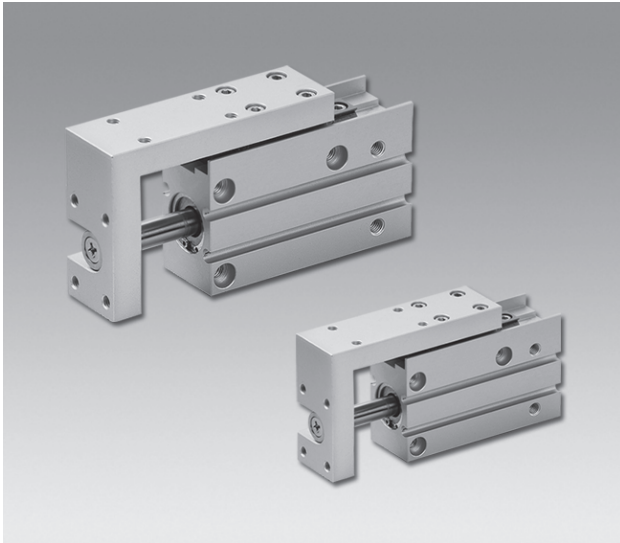


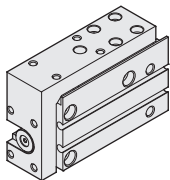
# Actuator Unit – MQX series

Compact Slide

CHELIC



MQX series  
Provide CAD external dimension.



**MQX** series ..... Compact Slide ..... Ø6 ~ Ø20 ..... P.6-9.21

MSR(L)2

FMR(L)

**MQX**

MTX

MDQ2

MDQA

MDX

MDXL

MBX

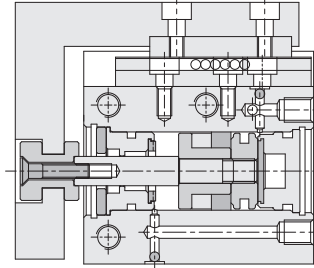
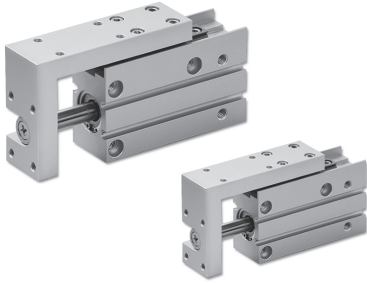
MGX

# MQX series Compact Slide

Product features/ Code of order

CHELIC

## Internal structure



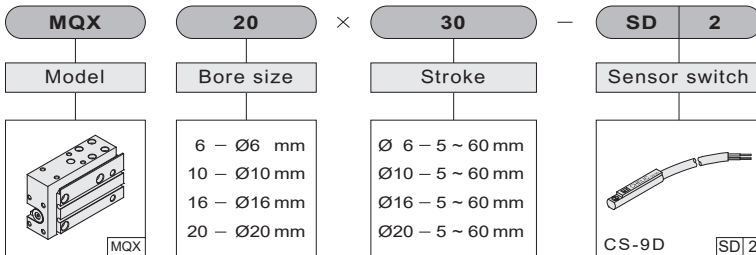
## Specification

Item	Bore size	Unit: mm			
		Ø6	Ø10	Ø16	Ø20
Action		Double acting			
Fluid		Air			
Mounting type		Horizontal mounting, Slide mounting, Vertical mounting			
Pressure range	Kgff/cm <sup>2</sup> (kPa)	1.5 ~ 7 (150 ~ 700)			
Ambient and fluid temperature	°C	0 ~ 60			
Piston speed	mm/s	100 ~ 500			
Body material		Aluminum alloy			
Cushion		Rubber washer			
Lubrication		Lubrication free type			
Port size		M5x0.8P			
Sensing device		With magnet			

## Standard stroke (MQX series)

Bore size	Stroke
Ø6	5, 10, 15, 20, 25, 30, 40, 50, 60
Ø10	5, 10, 15, 20, 25, 30, 40, 50, 60
Ø16	5, 10, 15, 20, 25, 30, 40, 50, 60
Ø20	5, 10, 15, 20, 25, 30, 40, 50, 60

## Code of order



MQX :  
Compact Slide

None : Without sensor switch

SD : Sensor switch mark (CS-9D)

SB : Sensor switch mark (CS-9B)

2 : Quantity of sensor switch

1 = 1 PCS

2 = 2 PCS

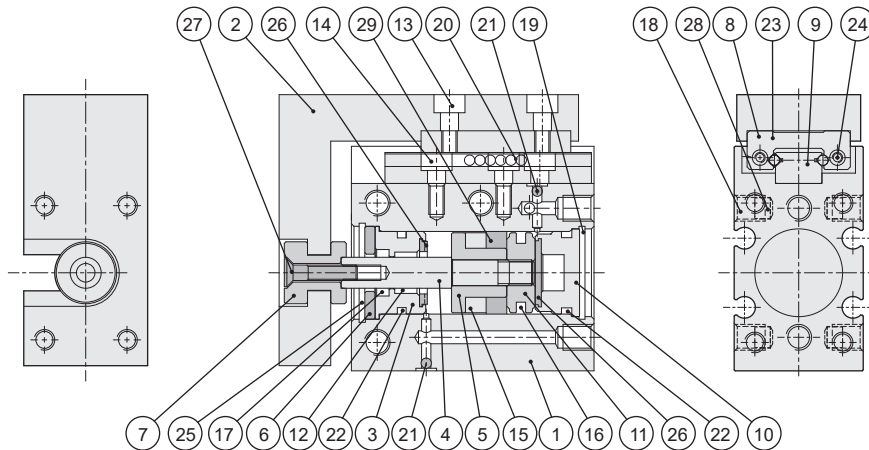
(option)

# MQX series Compact Slide

## Product features

CHELIC

### Internal structure



### Components and material list

No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	16	Piston Packing	NBR
02	Slider	Aluminum alloy	17	Shaft packing	NBR
03	Front cover	Aluminum alloy	18	Set screw	Alloy steel
04	Shaft	Stainless steel	19	Rear cover C clip	Alloy steel
05	Wear ring base	Aluminum alloy	20	Roller	Bearing steel
06	Packing plate	Aluminum alloy	21	Steel ball	Stainless steel
07	Shaft connector	Aluminum alloy	22	Front/ Rear cover O-ring	NBR
08	Slide base	Stainless steel	23	Roller block	Stainless steel
09	Rail	Stainless steel	24	Roller block set screw	Stainless steel
10	Rear cover	Aluminum alloy	25	Front cover C clip	Alloy steel
11	Piston	Stainless steel	26	Cushion rubber lining	NBR
12	Oiless bearing	Teflon	27	Shaft connector set screw	Alloy steel
13	Slider set screw	Alloy steel	28	Packing lining	NBR
14	Slide base set screw	Alloy steel	29	Wear ring	Teflon
15	Magnet	Plastic magnet			

Note: The body surface processed with anodizing.

### Packing and O-ring material list

Unit: mm

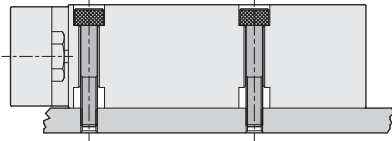
Item	Piston packing	Shaft packing	Front/ Rear cap O-ring
Quantity	1	1	2
Bore size			
Ø6	MYA-3 (2pcs)	MYA-3	5 × 1.0
Ø10	MYA-7 (2pcs)	EM-4	8 × 1.5
Ø16	COP-16	EM-6	13.2 × 1.5
Ø20	COP-20	EM-10	17.5 × 2.0

# MQX series Compact Slide

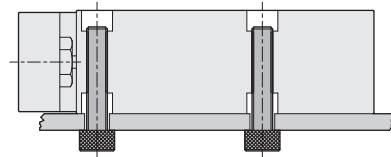
## Mounting type

CHELIC

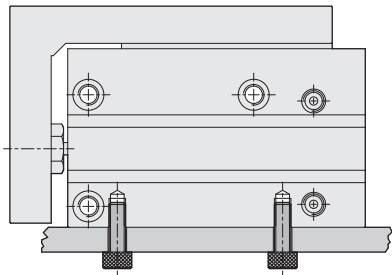
### ► Mounting type



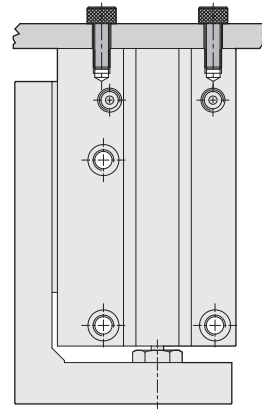
● Side mounting



● Side mounting



● Bottom mounting



● Bottom mounting

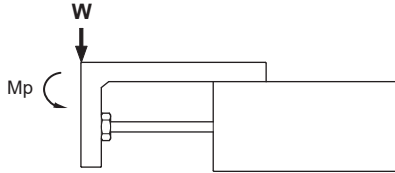
# MQX series Compact Slide

## Installation

CHELIC

### Slide base displacement due to pitch moment load

- Slide base displacement when a load acts upon the section marked with the arrow at the full stroke of the compact side (outer)

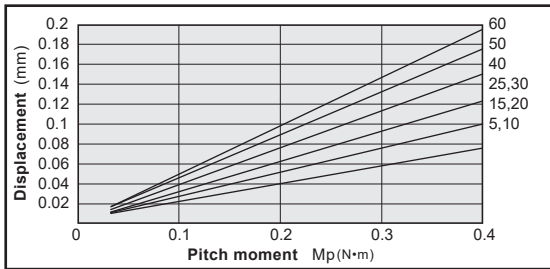


### Slide base displacement due to yaw moment load

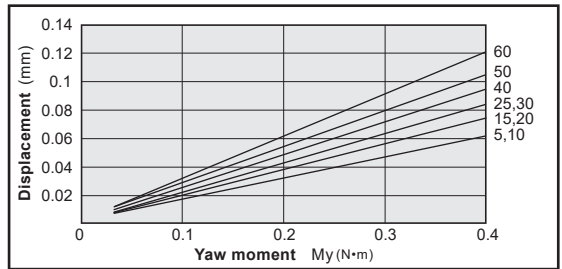
- Slide base displacement when a load acts upon the section marked with the arrow at the full stroke of the compact side (outer)



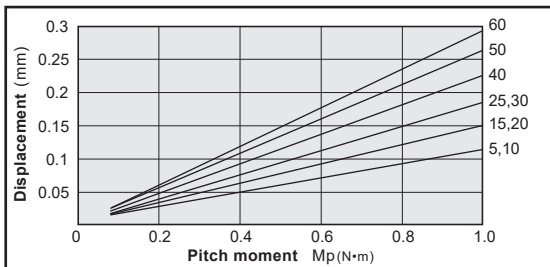
MQX Ø6



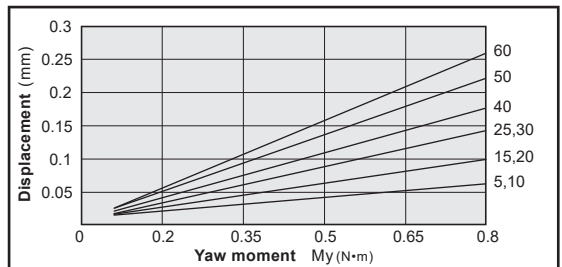
MQX Ø6



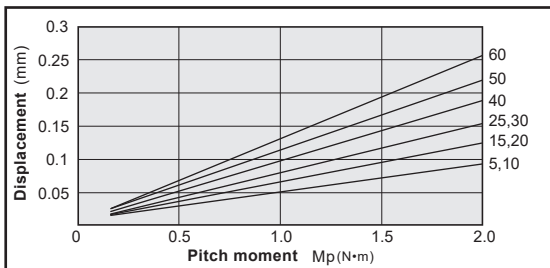
MQX Ø10



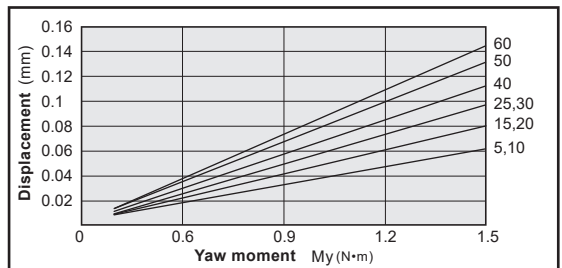
MQX Ø10



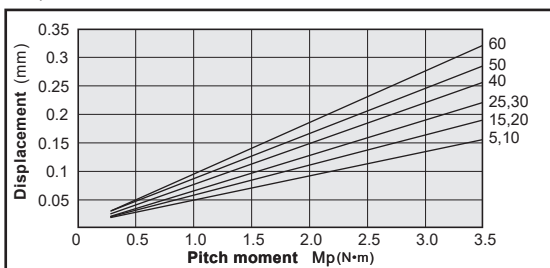
MQX Ø16



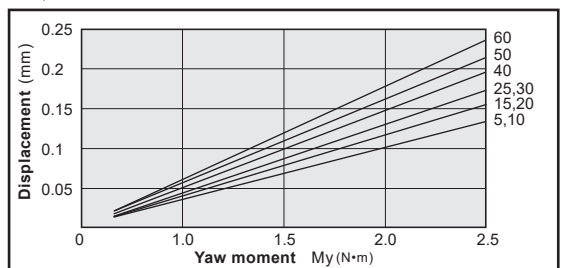
MQX Ø16



MQX Ø20



MQX Ø20



MSR(L)2

FMR(L)

MQX

MTX

MDQ2

MDQA

MDX

MDXL

MBX

MGX

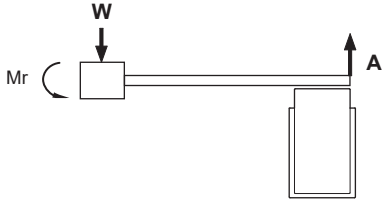
# MQX series Compact Slide

## Installation

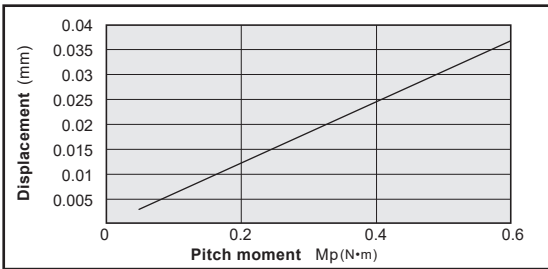
CHELIC

### Slide base displacement due to pitch moment load

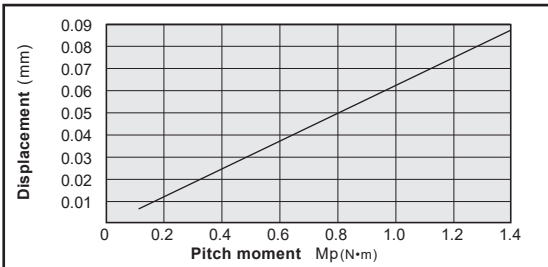
- Slide base displacement when load acts upon section W at the full stroke of the compact slide.



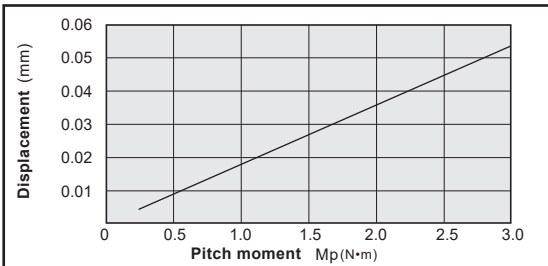
#### MQX Ø6



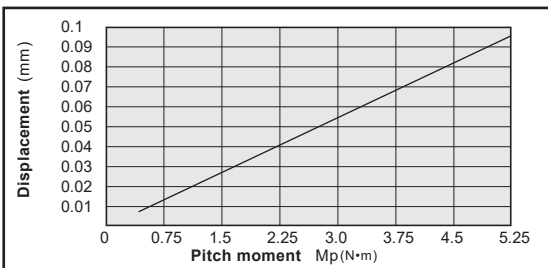
#### MQX Ø10



#### MQX Ø16



#### MQX Ø20

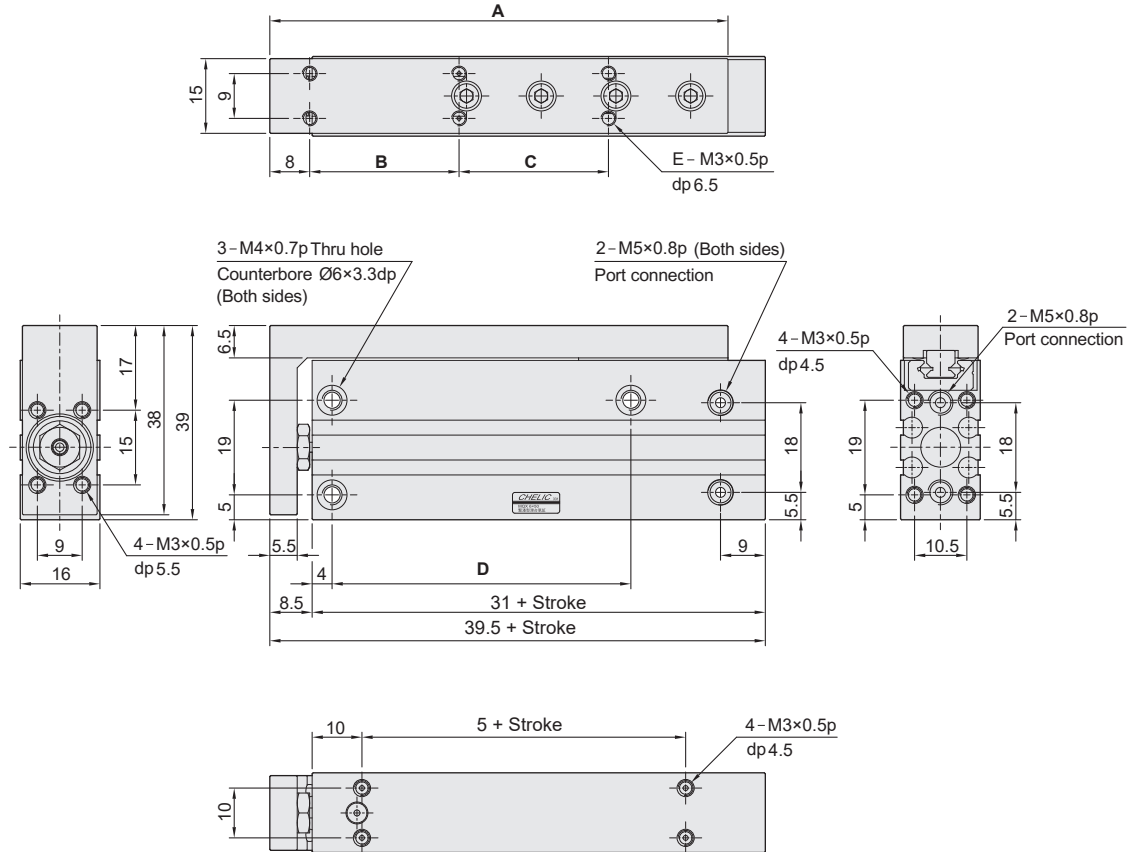
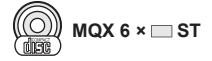


# MQX series Compact Slide

Dimensions - Ø6

CHELIC

☉ MQX Ø6 ×



MSR(L)2

FBMR(L)

**MQX**

MTX

MDQ2

MDQA

MDX

MDXL

MBX

MGX

## ☉ Dimension

Unit: mm

Stroke	Mark	A	B	C	D	E
5		42	10	—	14	4
10		42	10	—	14	4
15		52	20	—	24	4
20		52	20	—	24	4
25		62	30	—	30	4
30		62	30	—	30	4
40		72	20	20	45	6
50		82	25	25	55	6
60		92	30	30	60	6

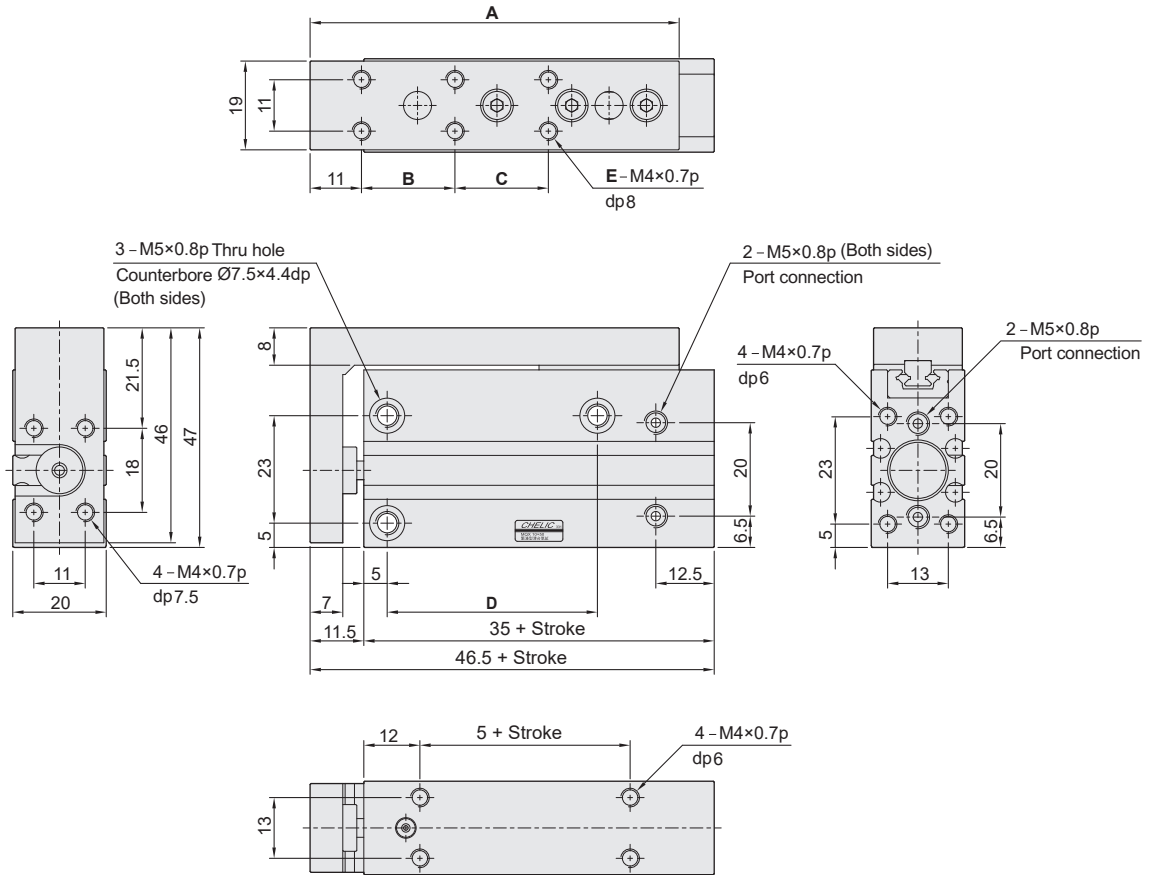
# MQX series Compact Slide

Dimensions - Ø10

CHELIC

MQX Ø10 ×

 MQX 10 ×  ST



## Dimension

Unit: mm

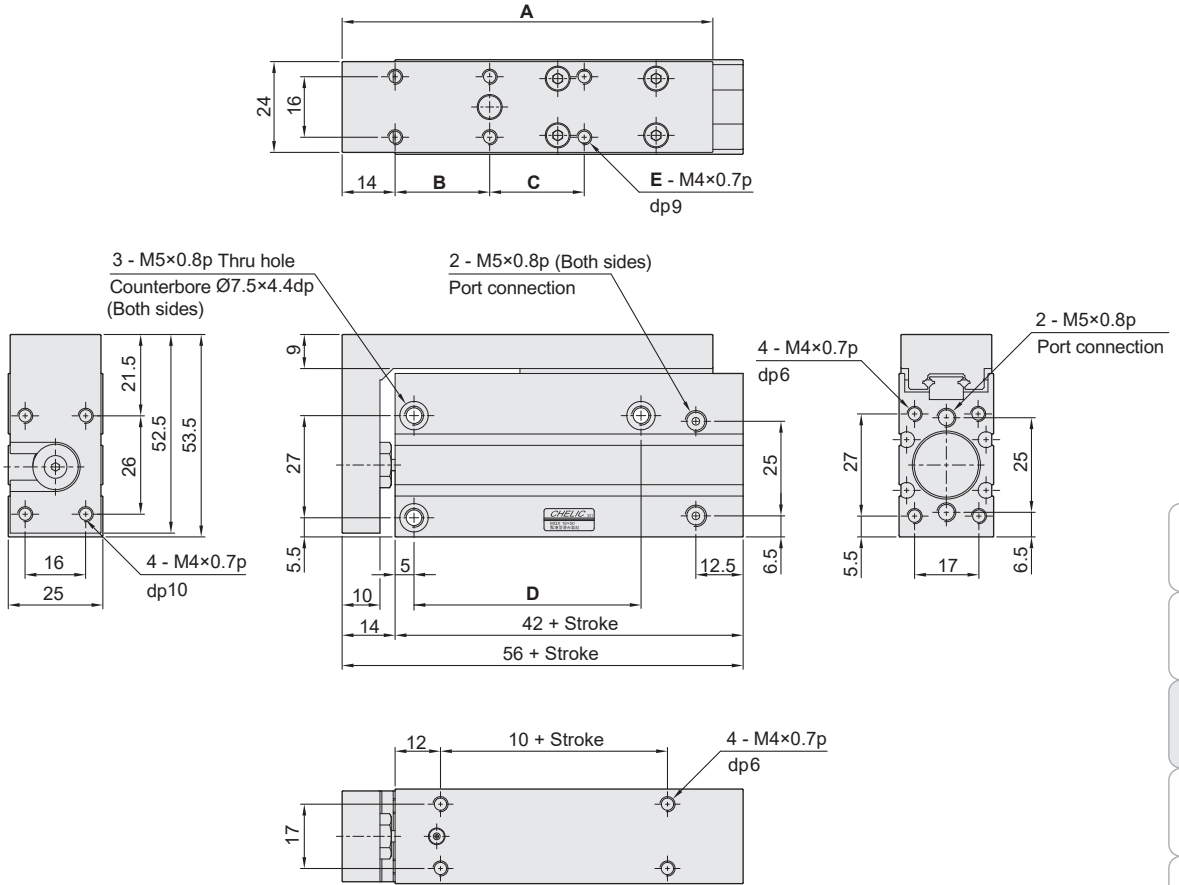
Stroke	Mark	A	B	C	D	E
5		49	10	—	14	4
10		49	10	—	14	4
15		59	20	—	24	4
20		59	20	—	24	4
25		69	30	—	30	4
30		69	30	—	30	4
40		79	20	20	45	6
50		89	25	25	55	6
60		99	30	30	60	6

# MQX series Compact Slide

Dimensions - Ø16

CHELIC

☉ MQX Ø16 ×



MSR(L)2

FMR(L)

MQX

MTX

MDQ2

MDQA

MDX

MDXL

MBX

MGX

## ☉ Dimension

Unit: mm

Stroke	Mark	A	B	C	D	E
5		58	10	—	20	4
10		58	10	—	20	4
15		68	20	—	30	4
20		68	20	—	30	4
25		78	30	—	40	4
30		78	30	—	40	4
40		88	20	20	50	6
50		98	25	25	60	6
60		108	30	30	60	6

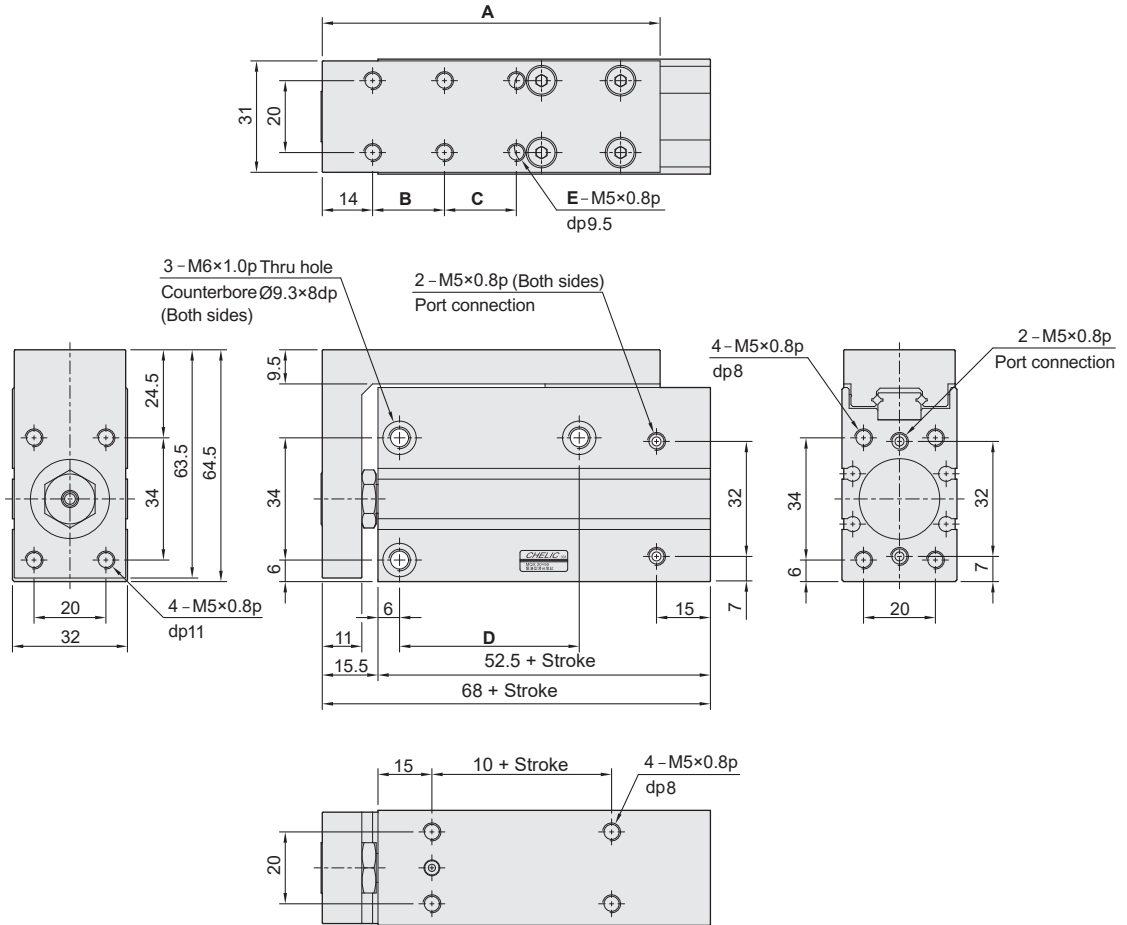
# MQX series Compact Slide

Dimensions - Ø20

CHELIC

☉ MQX Ø20 ×

 MQX 20 ×  ST



## ☉ Dimension

Unit: mm

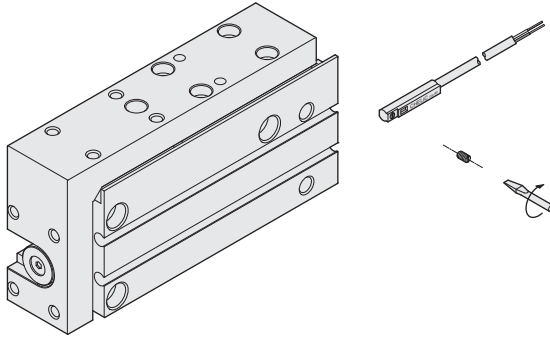
Stroke	Mark	A	B	C	D	E
5		64	10	—	20	4
10		64	10	—	20	4
15		74	20	—	25	4
20		74	20	—	25	4
25		84	30	—	40	4
30		84	30	—	40	4
40		94	20	20	50	6
50		104	25	25	70	6
60		114	30	30	70	6

# MQX series Compact Slide

## Sensor switch operating range and the setting

CHELIC

### Sensor switch mounting type



### Sensing range

Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the Sensor switch when it enters the operating range. It has 0.5mm differential.

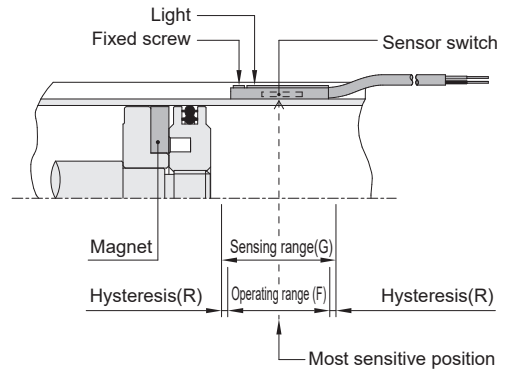
### Operating range

When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch. (Please refer to the below table)

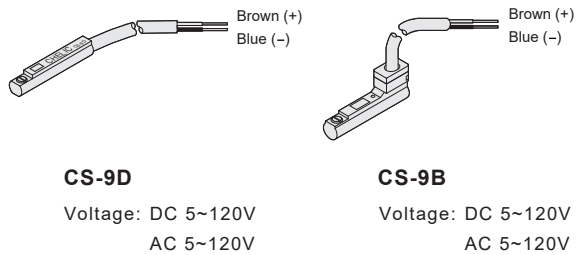
Unit: mm

Model	CS-9D(B)	
Bore size	Operating range (F)	Hysteresis(R)
Ø6	5	1
Ø10	5	1
Ø16	5	1
Ø20	8	1

### Sensor switch setting and operating range



### Sensor switch introduction



MSR(L)2

FMR(L)

MQX

MTX

MDQ2

MDQA

MDX

MDXL

MBX

MGX