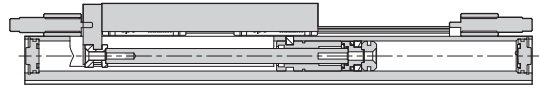


MGX series Dual Rod Slide Table

Product features/ Code of order

CHELIC

Internal structure



Specification

Item	Model	MGX-8	MGX-12	MGX-16	MGX-20
Bore size	mm	Ø8	Ø12	Ø16	Ø20
Action		Double acting			
Fluid		Air			
Pressure range	Kgf/cm ² (kPa)	1.5 ~ 7 (150 ~ 700)			
Max. operating pressure	Kgf/cm ² (kPa)	6.5 (650)			
Ambient and fluid temperature	°C	0 ~ 60			
Piston speed	mm/s	100 ~ 500			
Lubrication		Lubrication free type			
Port size		M5X0.8		PT1/8	
Cushion		Rubber cushion			

Standard stroke (MGX series)

Bore size	Stroke	Unit: mm
Ø8	25, 50, 75, 100, 125, 150	
Ø12	50, 75, 100, 125, 150	
Ø16	75, 100, 125, 150, 175, 200	
Ø20	100, 125, 150, 175, 200, 225, 250	

Theoretical force

Bore size mm	Shaft dia. mm	Piston action	Piston area	Air pressure (kgf/cm ²)						
				1	2	3	4	5	6	7
Ø8	Ø5	Push	1.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0
		Pull	0.7	0.7	1.4	2.1	2.8	3.5	4.2	4.9
Ø12	Ø6	Push	2.2	2.2	4.4	6.6	8.8	11.0	13.2	15.4
		Pull	1.7	1.7	3.4	5.1	6.8	8.5	10.2	11.9
Ø16	Ø8	Push	4.0	4.0	8.0	12.0	16.0	20.0	24.0	28.0
		Pull	3.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0
Ø20	Ø10	Push	6.2	6.2	12.4	18.6	24.8	31.0	37.2	43.4
		Pull	4.7	4.7	9.4	14.1	18.8	23.5	28.2	32.9

How to Select Shock absorber

Bore size	Shock absorber model	Max. Absorbent
12	SAT-0806	0.1 Kgf.m
16	SAT-0806	0.1 Kgf.m
20	SAT-1007	0.15 Kgf.m

Code of order

<div style="border: 1px solid black; border-radius: 10px; padding: 2px; width: 60px; margin: 0 auto;">MGX</div> <div style="border: 1px solid black; padding: 2px; width: 60px; margin: 0 auto;">Model</div> <div style="border: 1px solid black; padding: 5px; width: 60px; margin: 0 auto;"> </div>	×	<div style="border: 1px solid black; border-radius: 10px; padding: 2px; width: 60px; margin: 0 auto;">16</div> <div style="border: 1px solid black; padding: 2px; width: 60px; margin: 0 auto;">Bore size</div> <div style="border: 1px solid black; padding: 5px; width: 60px; margin: 0 auto;"> 8 - Ø8 12 - Ø12 16 - Ø16 20 - Ø20 </div>	-	<div style="border: 1px solid black; border-radius: 10px; padding: 2px; width: 60px; margin: 0 auto;">75</div> <div style="border: 1px solid black; padding: 2px; width: 60px; margin: 0 auto;">Stroke</div> <div style="border: 1px solid black; padding: 5px; width: 60px; margin: 0 auto;"> Ø8 - 25 ~ 150 Ø12 - 50 ~ 150 Ø16 - 75 ~ 200 Ø20 - 100 ~ 250 </div>	-	<div style="border: 1px solid black; border-radius: 10px; padding: 2px; width: 60px; margin: 0 auto;">SG</div> <div style="border: 1px solid black; padding: 2px; width: 60px; margin: 0 auto;">Sensor switch</div> <div style="border: 1px solid black; padding: 5px; width: 60px; margin: 0 auto;"> <div style="text-align: right; font-size: small;">CS-8G SG 2</div> </div>	-	<div style="border: 1px solid black; border-radius: 10px; padding: 2px; width: 60px; margin: 0 auto;">A</div> <div style="border: 1px solid black; padding: 2px; width: 60px; margin: 0 auto;">Shock absorber</div> <div style="border: 1px solid black; padding: 5px; width: 60px; margin: 0 auto;"> <div style="text-align: right; font-size: small;">A 2</div> </div>
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MGX :
Dual rod slide table

None: Without sensor switch
 [SG]: Sensor switch mark (CS-8G)
 [2]: Quantity of Sensor switch
 1 = 1 PCS 2 = 2 PCS
 (Option)

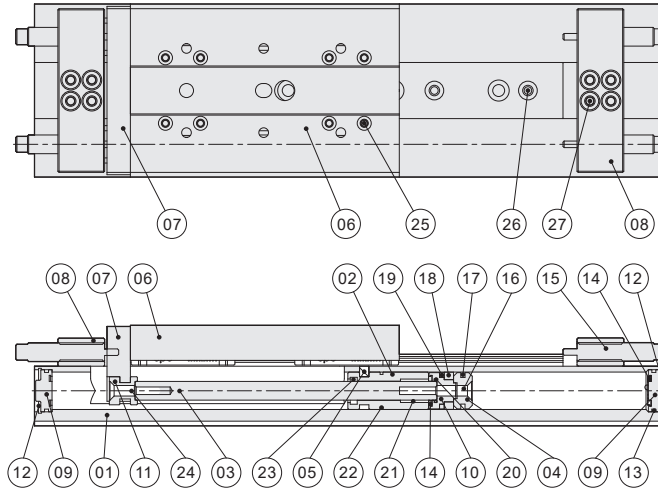
None: With metal stopper
 [A]: Shock absorber
 [2]: Quantity of Sensor absorber
 1 = 1 PCS
 2 = 2 PCS
 (Option)

MGX series Dual Rod Slide Table

Product features

CHELIC

Internal structure



Components and material list

No	Item	Material	No	Item	Material
01	Body	Aluminum alloy	15	Adjustment bolt	Alloy steel
02	Front cover	Aluminum alloy	16	Piston set screw	Alloy steel
03	Shaft	Carbon steel	17	Piston packing	NBR
04	Piston	Aluminum alloy	18	Wear ring	POM
05	Front cover block	Iron	19	Sensing magnet	Rare earth metal
06	Slider	Aluminum alloy	20	Shaft O-ring	NBR
07	Shaft connector	Iron	21	Bearing	—
08	Block	Aluminum alloy	22	Front cover O-ring	NBR
09	Rear cover	Aluminum alloy	23	Shaft packing	NBR
10	Magnet cover	Aluminum alloy	24	Connecting block screw	NBR
11	Shaft end block	Carbon steel	25	Slider set screw	Alloy steel
12	End cap C clip	Alloy steel	26	Rail set screw	Alloy steel
13	End cap O-ring	NBR	27	Block set screw	Alloy steel
14	Cushion gasket	NBR			

MSR(L)2

FMR(L)

MQX

MTX

MDQ2

MDQA

MDX

MDXL

MBX

MGX

Packing and O-ring material list

Unit: mm

Item	Piston packing	Shaft packing
Quantity	2	2
Bore size		
Ø8	COP - 08	MYA - 05
Ø12	APA - 12	MYA - 06
Ø16	APA - 16	EM - 08
Ø20	APA - 20	EM - 10

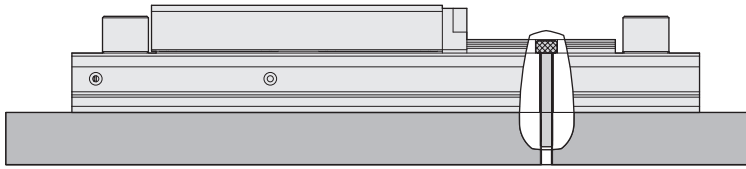
Note: The piston packing and shaft packing are from MITSUBISHI, SAKAGAMI or the same good level of quality material.

MGX series Dual Rod Slide Table

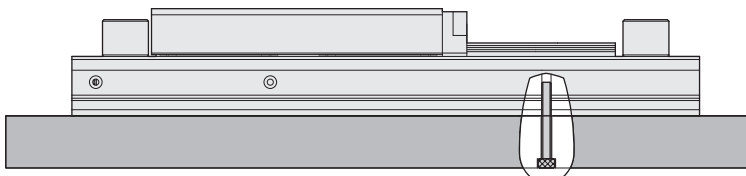
Mounting type

CHELIC

Mounting type

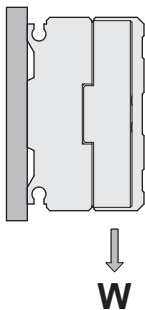
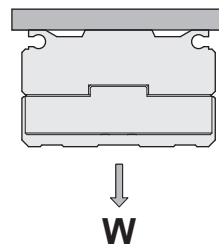
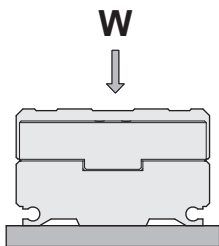


Top mounting



Bottom mounting

Maximum allowable load weight



Unit: kg

Bore size	Maximum allowable load weight
Ø08	1.8
Ø12	4.0
Ø16	7.0
Ø20	11.0

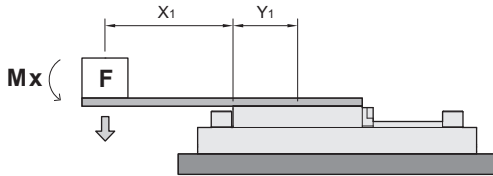
MGX series Dual Rod Slide Table

Installation

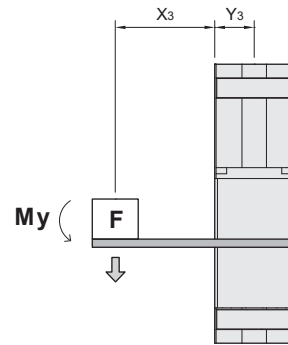
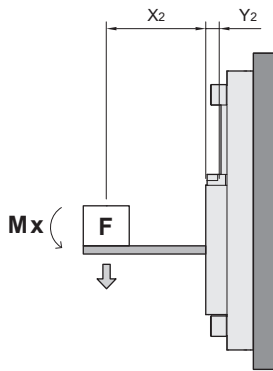
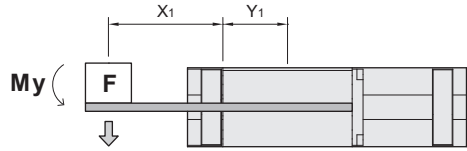
CHELIC

Allowable static load

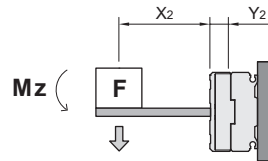
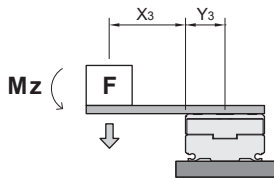
Pitch moment



Yaw moment



Rolling moment



Bore size	Y ₁	Y ₂	Y ₃	Allowable static load M _{max} (N · m)		
				M _x	M _y	M _z
Ø08	39	10.90	23	5	5	3
Ø12	48	13.05	29	10	10	6
Ø16	58	14.60	37	20	20	12
Ø20	75	26.25	49	40	40	25

Description:

- Y₁: The center distance between slider surface to base.
- Y₂: The center distance between slider to cylinder body.
- Y₃: The center distance between slider surface to slider.

MSR(L)2

FMR(L)

MQX

MTX

MDQ2

MDQA

MDX

MDXL

MBX

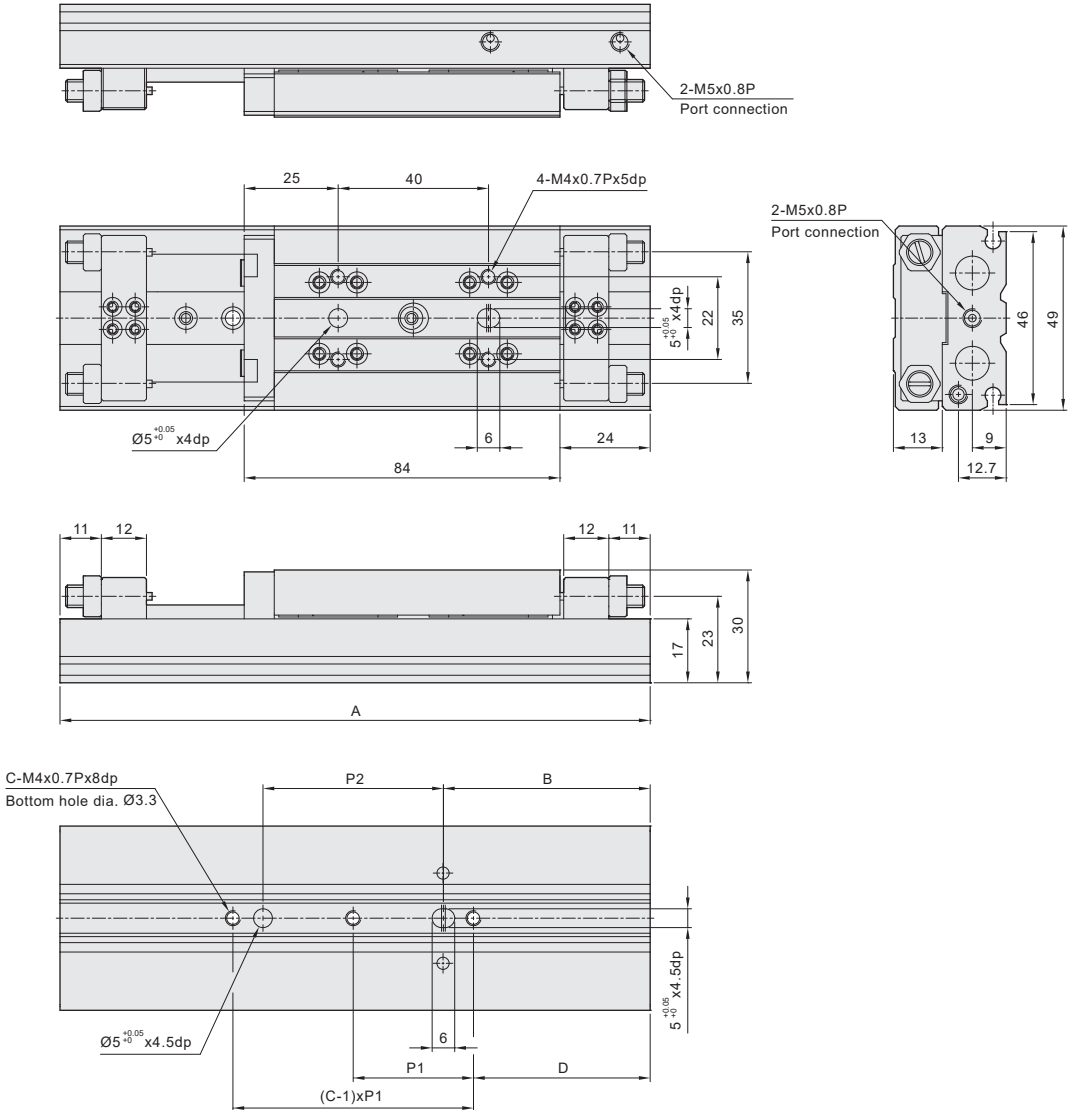
MGX

MGX series Dual Rod Slide Table

Dimensions

CHELIC

MGX 08 x ST



Unit: mm

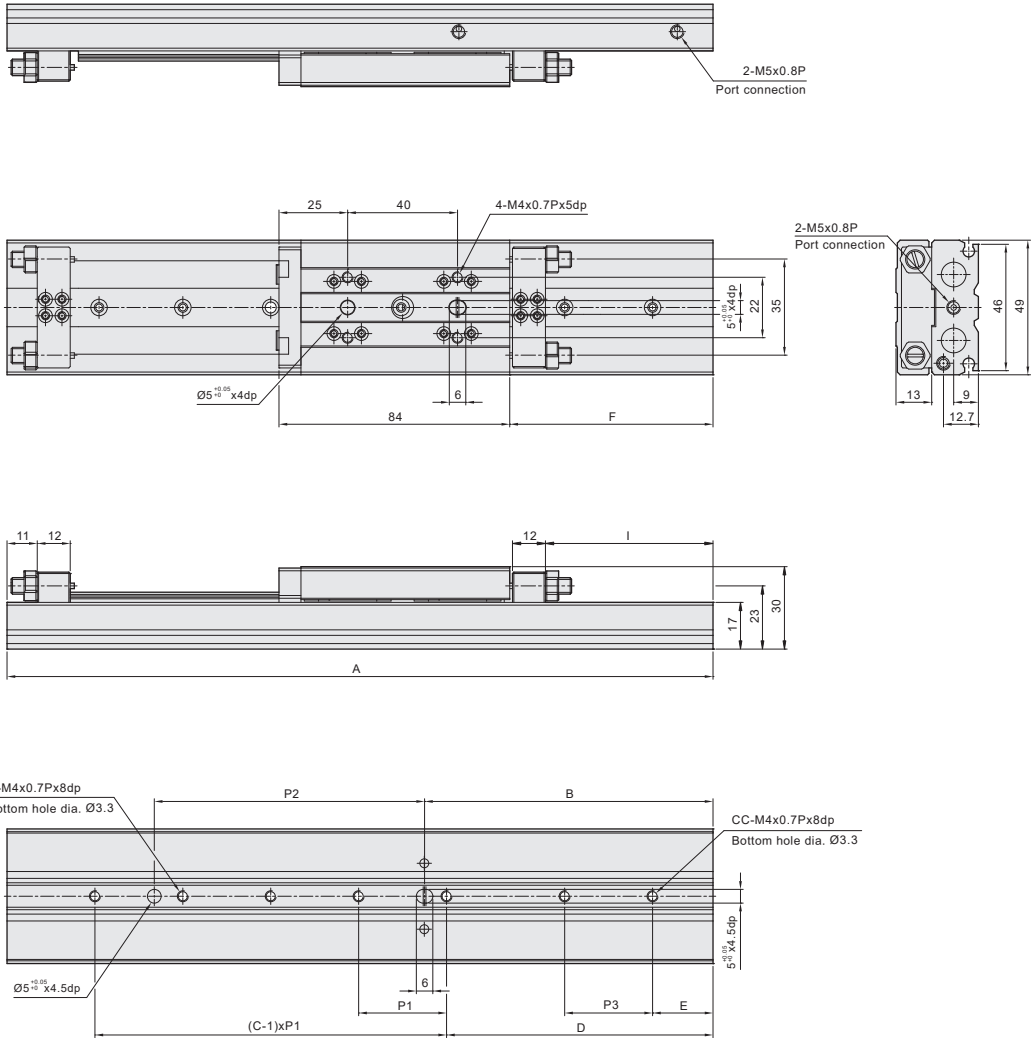
Model	A	B	C	D	P1	P2
MGX 08x25	157	55	3	47	32	48
MGX 08x50	182	53	4	46	30	76

MGX series Dual Rod Slide Table

Dimensions

CHELIC

MGX 08 x ST



MSR(L)2

FMR(L)

MQX

MTX

MDQ2

MDQA

MDX

MDXL

MBX

MGX

Unit: mm

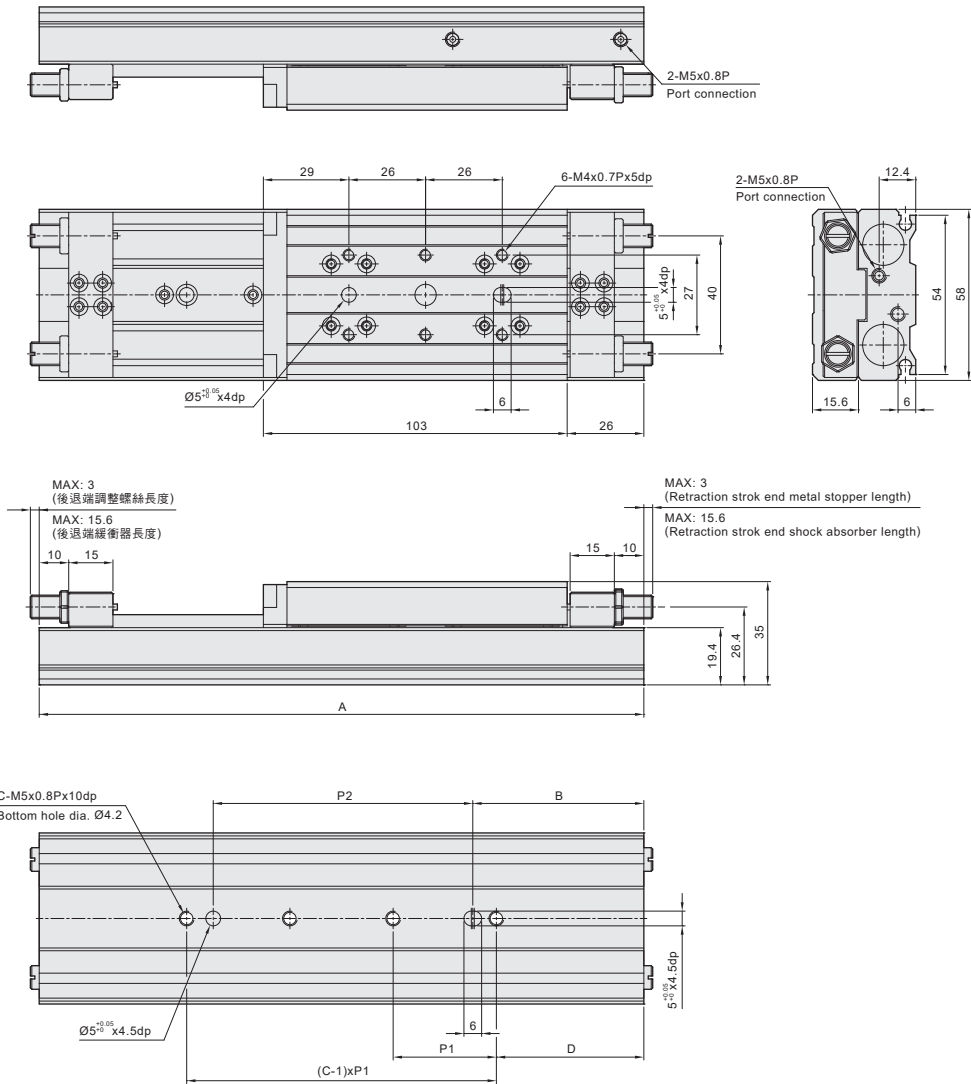
Model	A	B	C	CC	D	E	F	I	P1	P2	P3
MGX 08x75	228	71	5	1	64	19	45	31	30	106	—
MGX 08x100	278	106	5	1	98	34	70	56	32	112	—
MGX 08x125	328	129	6	2	121	25	95	81	32	144	32
MGX 08x150	378	149	7	2	141	45	120	106	32	176	32

MGX series Dual Rod Slide Table

Dimensions

CHELIC

MGX 12 x ST



Unit: mm

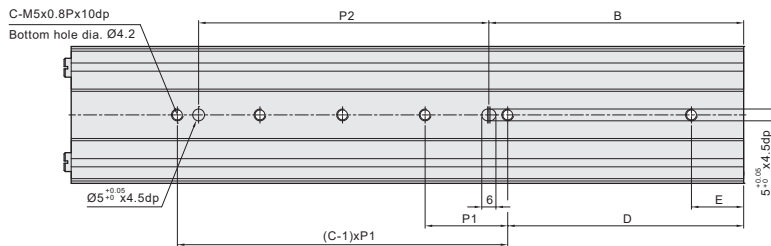
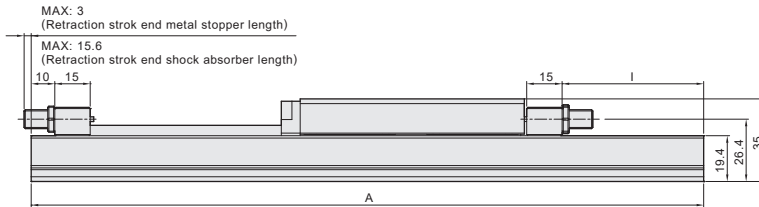
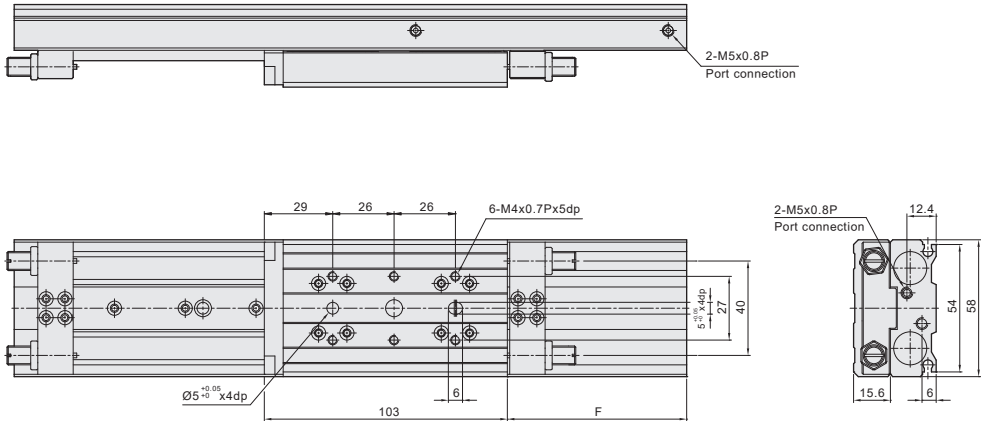
Model	A	B	C	D	P1	P2
MGX 12x50	205	58	4	50	35	88
MGX 12x75	230	63	4	55	40	103

MGX series Dual Rod Slide Table

Dimensions

CHELIC

MGX 12 x ST



Unit: mm

Model	A	B	C	D	E	F	I	P1	P2
MGX 12x100	280	91	5	82.5	30	51	35	35	123
MGX 12x125	330	111	6	102.5	32.5	76	60	35	158
MGX 12x150	380	136	6	127.5	47.5	101	85	40	182

MSR(L)2

FMR(L)

MQX

MTX

MDQ2

MDQA

MDX

MDXL

MBX

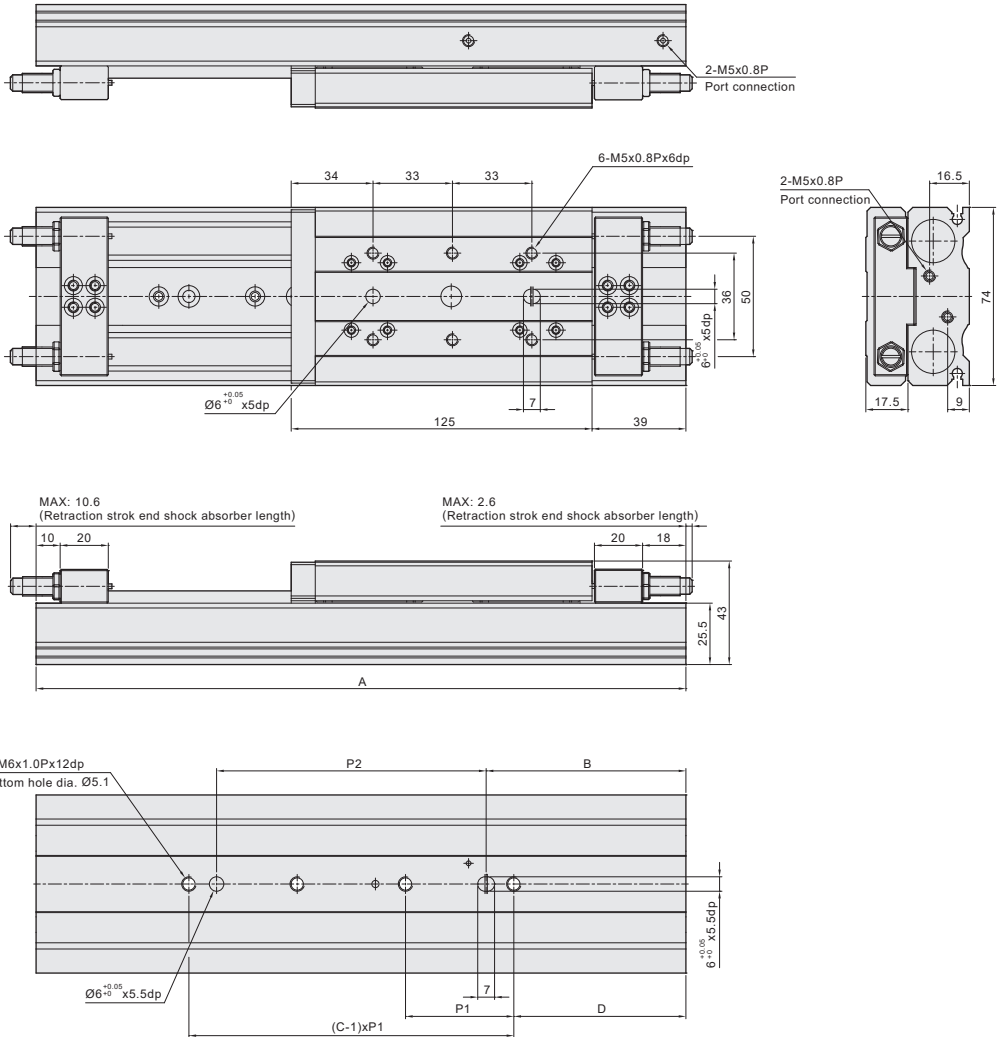
MGX

MGX series Dual Rod Slide Table

Dimensions

CHELIC

MGX 16 x ST



Unit: mm

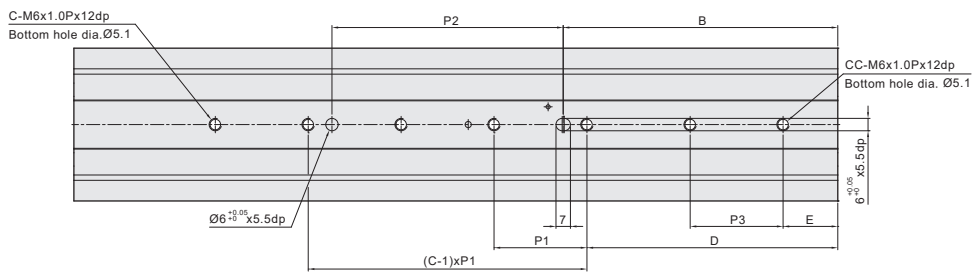
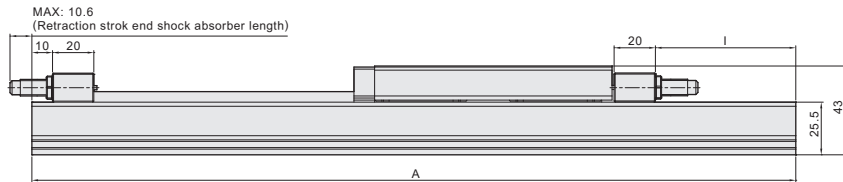
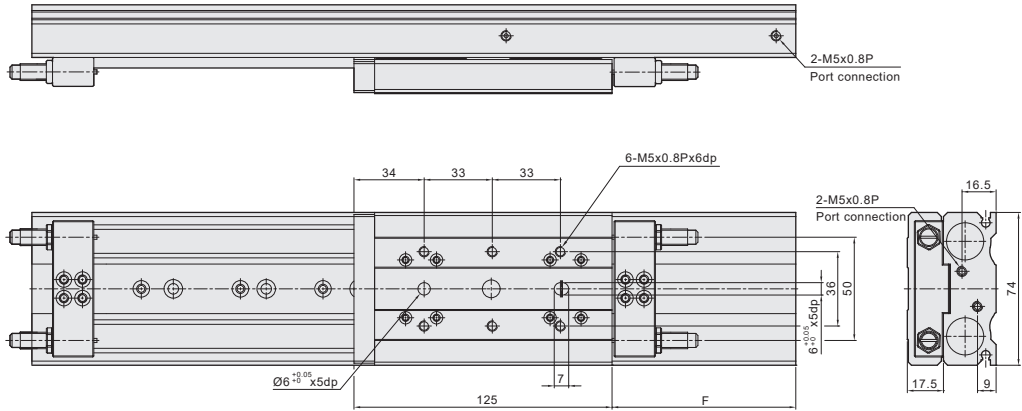
Model	A	B	C	D	P1	P2
MGX 16x75	270	83	4	71.5	45	112
MGX 16x100	295	86	4	74	50	126

MGX series Dual Rod Slide Table

Dimensions

CHELIC

MGX 16 x ST



Unit: mm

Model	A	B	C	CC	D	E	F	I	P1	P2	P3
MGX 16x125	345	110	5	1	99	31.5	64	43	45	157	—
MGX 16x150	395	136	5	1	124	24	89	68	50	176	—
MGX 16x175	445	163	6	2	151.5	39	114	93	45	202	45
MGX 16x200	495	186	6	2	174	24	139	118	50	226	50

MSR(L)2

FMR(L)

MQX

MTX

MDQ2

MDQA

MDX

MDXL

MBX

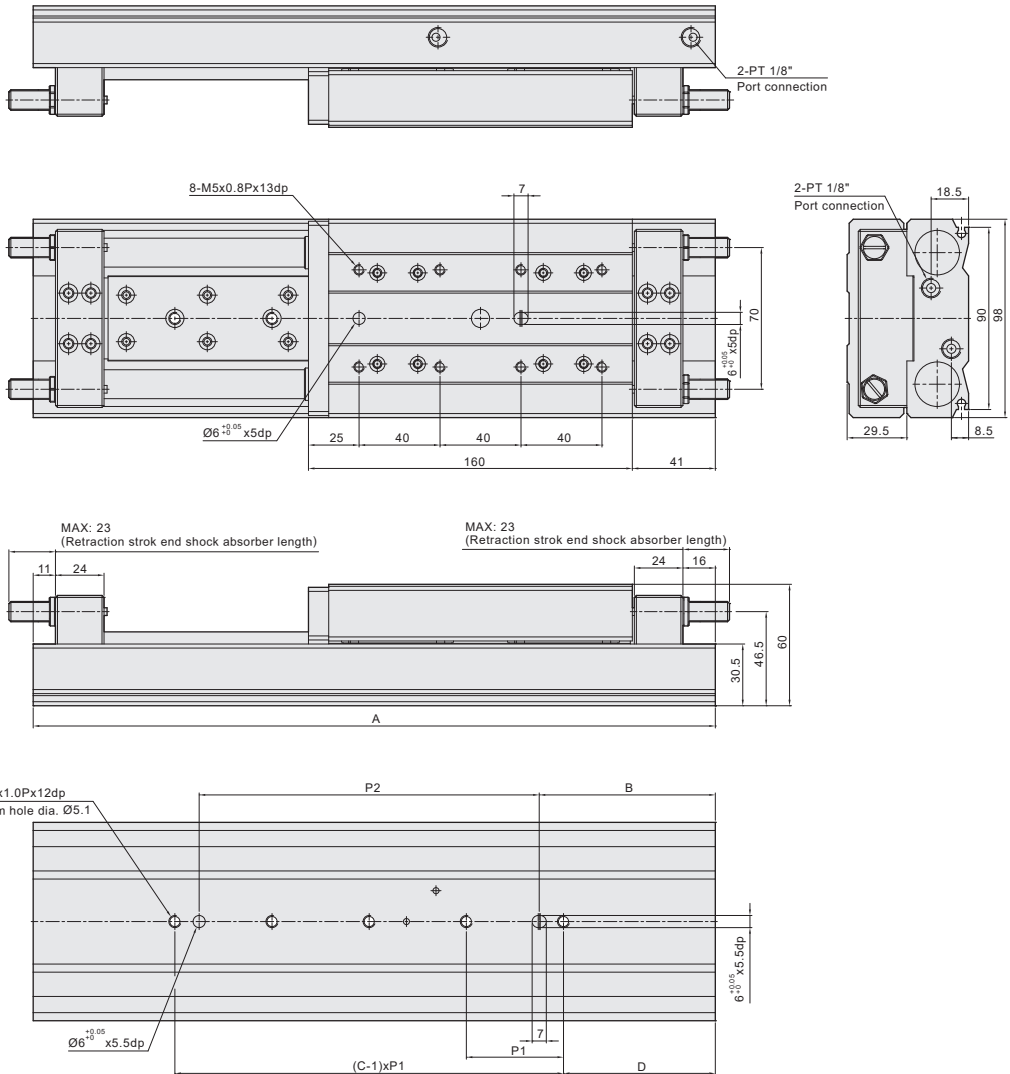
MGX

MGX series Dual Rod Slide Table

Dimensions

CHELIC

MGX 20 x ST



Unit: mm

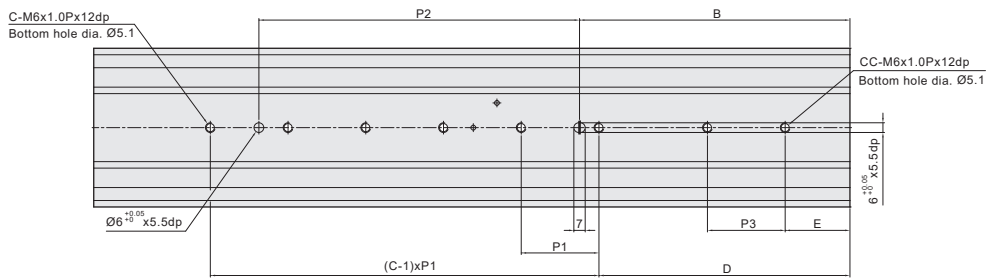
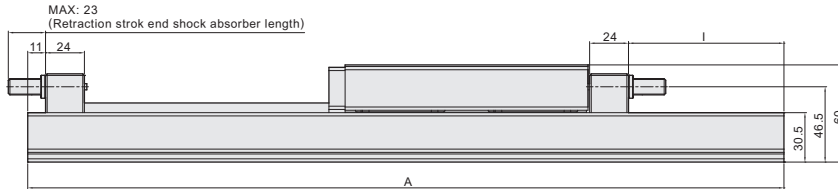
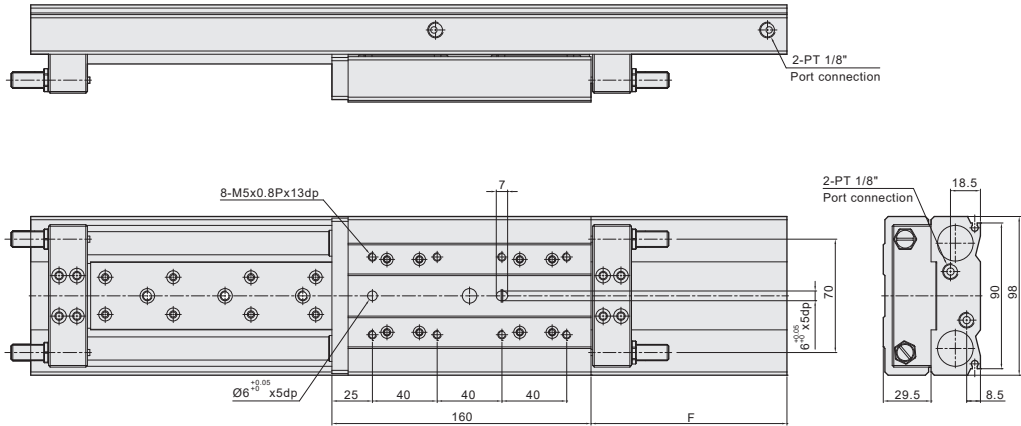
Model	A	B	C	D	P1	P2
MGX 20x100	337	87	5	75	48	168
MGX 20x125	362	91	5	79.5	52	185

MGX series Dual Rod Slide Table

Dimensions

CHELIC

MGX 20 x ST



Unit: mm

Model	A	B	C	CC	D	E	F	I	P1	P2	P3
MGX 20x150	412	113	6	1	101	29	66	41	48	216	—
MGX 20x175	462	140	6	1	128.5	50.5	91	66	52	237	—
MGX 20x200	512	164	7	1	152	56	116	91	48	264	—
MGX 20x225	562	189	7	1	177.5	73.5	141	116	52	288	—
MGX 20x250	612	215	8	2	203	59	166	141	48	312	48

MSR(L)2

FMR(L)

MQX

MTX

MDQ2

MDQA

MDX

MDXL

MBX

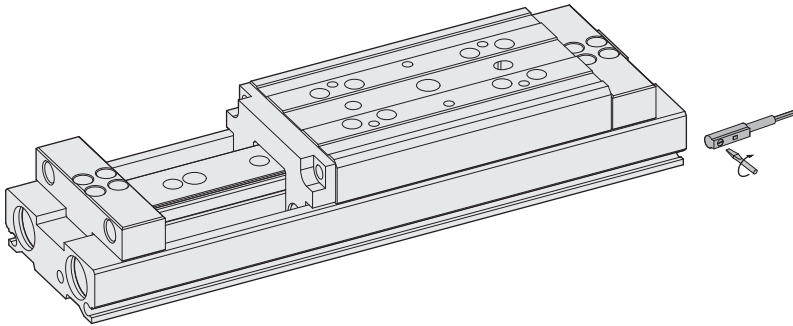
MGX

MGX series Dual Rod Slide Table

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.

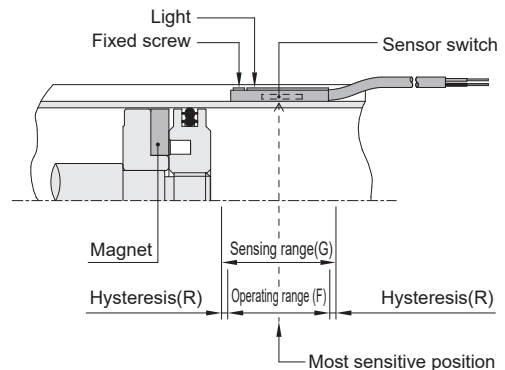
◉ Operating range

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)

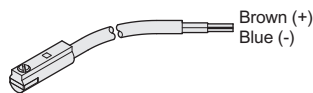
Unit: mm

Model	CS-8G	
Bore size	Operating range (F)	Hysteresis(R)
08	2.5	1
10	4.0	1
12	4.5	1
16	5.3	1.2
20	5.3	1.2

◉ Sensor switch setting and operating range



◉ Sensor switch introduction



CS-8G

Voltage: DC 5~30V