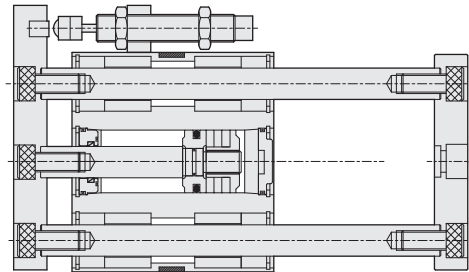
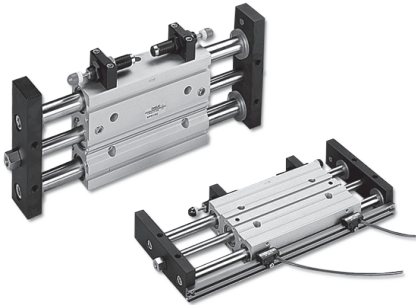


TS(X) series Guide slider unit/ Guide slide table unit

Product features

CHELIC

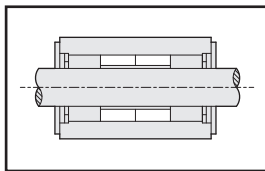
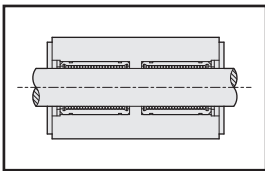
Internal instruction (TSB type)



Specification

Item	Bore size (mm)	16	20	25	32	40	50	63
Action		Double acting						
Fluid		Air						
Pressure range	kgf/cm ² (kPa)	1.5 ~ 7 (150 ~ 700)						
Max. operating pressure	kgf/cm ² (kPa)	9 (900)						
Ambient and fluid temperature	°C	0 ~ 60						
Piston speed	mm/s	50 ~ 500					50 ~ 350	
Lubrication		Lubrication free type						
Port size		M5 x 0.8			Rc 1/8		Rc 1/4	

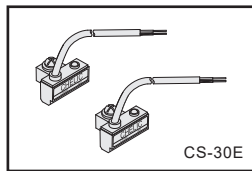
Guide type



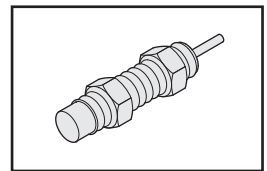
● Linear bearing guide (-U)

● Bush guide (-B)

Sensor switch (Option)



● Sensor switch type CS-30E



● Shock absorber (Option)

Standard stroke

TSB(U) series

Unit: mm

Bore size	Stroke
Ø16	25, 50, 75, 100, 125, 150, 175, 200
Ø20	25, 50, 75, 100, 125, 150, 175, 200
Ø25	25, 50, 75, 100, 125, 150, 175, 200
Ø32	30, 50, 75, 100, 125, 150, 175, 200, 250
Ø40	30, 50, 75, 100, 125, 150, 175, 200, 250
Ø50	50, 75, 100, 125, 150
Ø63	50, 75, 100, 125, 150

TXB(U) series

Unit: mm

Bore size	Stroke
Ø16	50, 75, 100, 125, 150
Ø20	50, 75, 100, 125, 150
Ø25	50, 75, 100, 125, 150
Ø32	50, 75, 100, 125, 150, 175, 200, 250
Ø40	50, 75, 100, 125, 150, 175, 200, 250
Ø50	50, 75, 100, 125, 150
Ø63	50, 75, 100, 125, 150

TB(U)2

TA(R)

TSB(U)2

TXB(U)2

TMB(U)

GCB(U)

GHB(U)

TCR

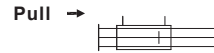
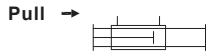
TCF

TS(X) series Guide slider unit/ Guide slide table unit

Characteristics graph, Code of order

CHELIC

Theoretical force



● TSB(U)2 Type

● TXB(U)2 Type

Unit: kgf

Bore size (mm)	Piston rod dia (mm)	Piston action	Piston area (cm ²)	Air pressure (kgf/cm ²)						
				1	2	3	4	5	6	7
16	8	Push	2.01	—	4	6	8	10.1	12.1	14.1
		Pull	1.51	—	3	4.5	6	7.6	9.1	10.6
20	10	Push	3.14	—	6	9	12	15	18	21
		Pull	2.35	—	4.7	7.1	9.4	11.8	14.1	16.5
25	12	Push	4.90	—	9	14	19	24	29	34
		Pull	3.77	—	7.5	11.3	15.1	18.9	22.6	26.3
32	16	Push	8.04	—	16	24	32	40	48	55
		Pull	6.03	—	12.1	18.1	24.1	30.2	36.2	42.2
40	16	Push	12.56	12	25	37	50	62	75	87
		Pull	10.55	10	21	31	42	52	63	73
50	20	Push	19.63	19	39	58	78	98	117	137
		Pull	16.49	16	32	49	65	82	98	115
63	20	Push	31.17	31	62	93	124	155	187	218
		Pull	28.03	28	56	84	112	140	168	196

Note: 1. The force applied to TXB(U)2 series is pulling force.

2. Above are theoretical data - please take into consideration the frictional resistance and the mechanical efficiency of value should be added calculation before using. (About 70%~80%)

Code of order

TS	B2	32	×	100	-	SE 2	-	A.M 2
Model	Guide type	Bore size		Stroke		Sensor switch		Shock absorber
		16 - Ø16 mm 20 - Ø20 mm 25 - Ø25 mm 32 - Ø32 mm 40 - Ø40 mm 50 - Ø50 mm 63 - Ø63 mm		Ø16 25 - 200 mm Ø20 25 - 200 mm Ø25 25 - 200 mm Ø32 30 - 250 mm Ø40 30 - 250 mm Ø50 50 - 150 mm Ø63 50 - 150 mm		 SE 2 SE: Sensor switch mark (CS-30E) SF: Sensor switch mark (CS-30F) 2: Quantity of sensor switch 1 = 1 PCS 2 = 2 PCS		 A: Shock absorber M: Shock absorber base 1 = 1 set 2 = 2 sets
						 SD 2 SD: Sensor switch mark (CS-9D) SB: Sensor switch mark (CS-9B) 2: Quantity of sensor switch 1 = 1 PCS 2 = 2 PCS		

How to Select Shock absorber

Bore size	Shock absorber model	Max. Absorbent
16	SAC - 1008N	0.4 Kgf.m
20	SAC - 1008N	0.4 Kgf.m
25	SAC - 1008 / SAC - 1210	0.4 / 0.5 Kgf.m
32	SAC - 1210 / SAC - 1416	0.5 / 2 Kgf.m
40	SAC - 1408 / SAC - 1416	1.5 / 2 Kgf.m
50	SAT - 1412 / SAT - 2015	1.5 / 5.9 Kgf.m
63	SAT - 1412 / SAT - 2015	1.5 / 5.9 Kgf.m

► Expression:

Shock absorber is mounted on the side of body so as to absorb the impact force. (Please indicate AM code number)

► TSB(U)2, TXB(U)2 Ø32, Ø40 and the stroke over 125 is used for SAC-1416


*Note: (1)TSB(U)2, TXB(U)2Ø10, Ø16, Ø20, Ø25 use for CS-9D.
(2)TXB(U)2 Sensor bracket is required if "-S" selected.

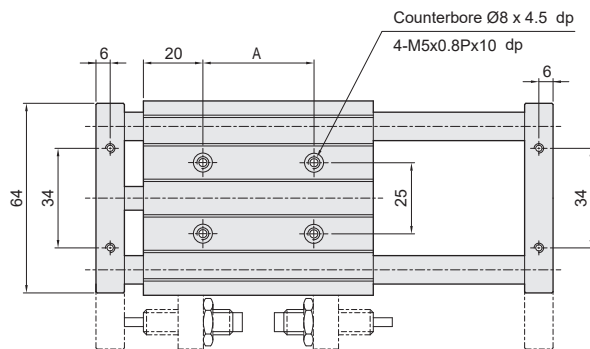
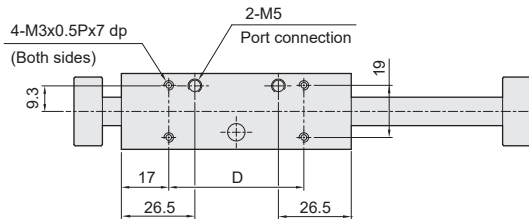
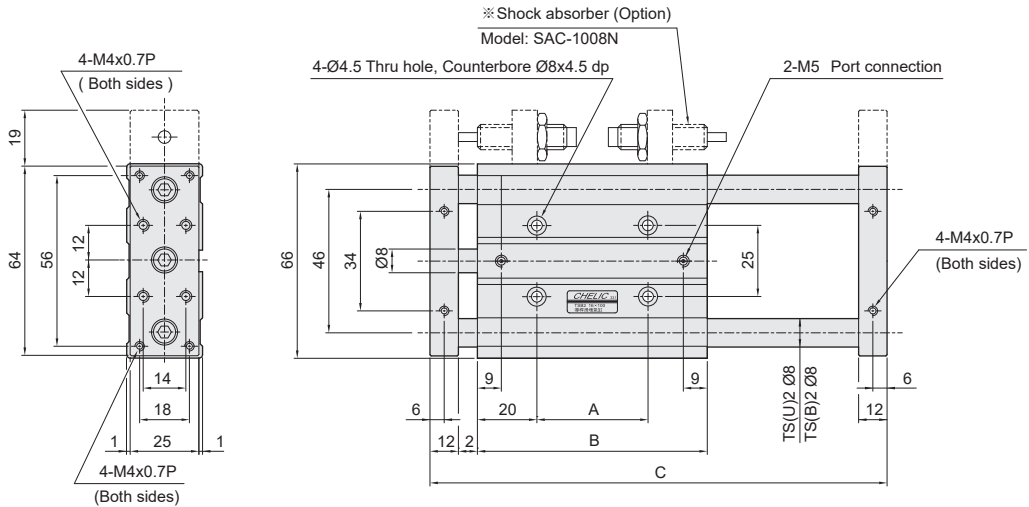
TSB(U)2 series Guide Slider Unit

Dimensions

CHELIC

TSB(U)2 Ø16 x

 TSB(U)2 16 x ST



TB(U)2

TA(R)

TSB(U)2

TXB(U)2

TMB(U)

GCB(U)

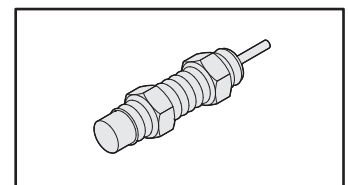
GHB(U)

Dimension

Unit: mm

Stroke Mark	25	50	75	100	125	150	175	200
A	30	55	80	105	130	155	180	205
B	70	95	120	145	170	195	220	245
C	123	173	223	273	323	373	423	473
D	36	61	86	111	136	161	186	211

Shock absorber/ Option



TCR

TCF


Please refer to P6-11.33

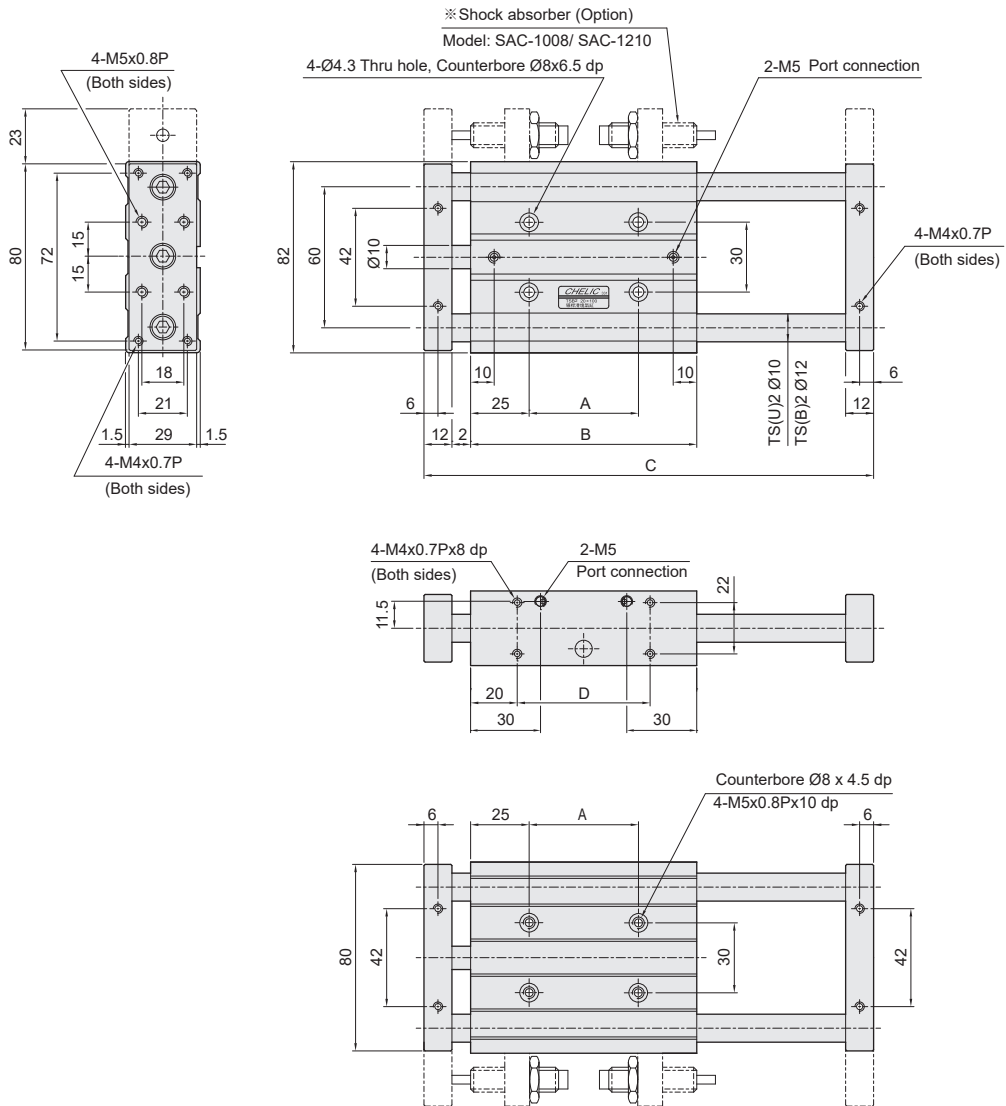
TSB(U)2 series Guide Slider Unit

Dimensions

CHELIC

TSB(U)2 Ø20 x

 TSB(U)2 20 x ST

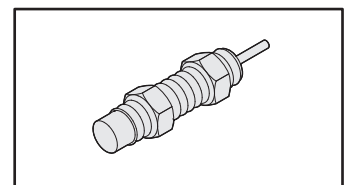


Dimension

Unit: mm

Stroke Mark	25	50	75	100	125	150	175	200
A	22	47	72	97	122	147	172	197
B	72	97	122	147	172	197	222	247
C	125	175	225	275	325	375	425	475
D	32	57	82	107	132	157	182	207

Shock absorber/ Option




Please refer to P6-11.33

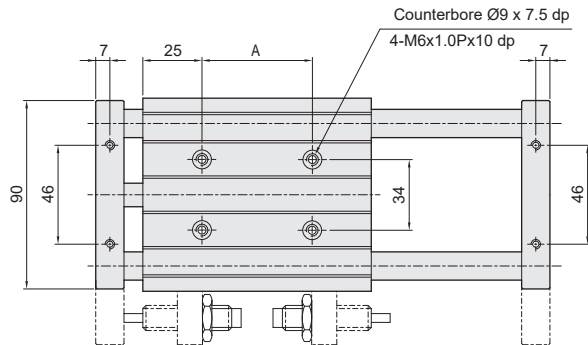
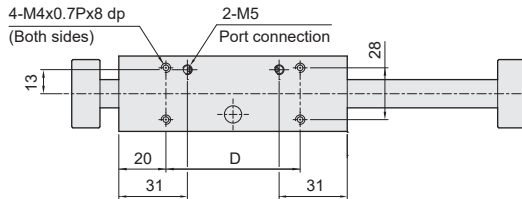
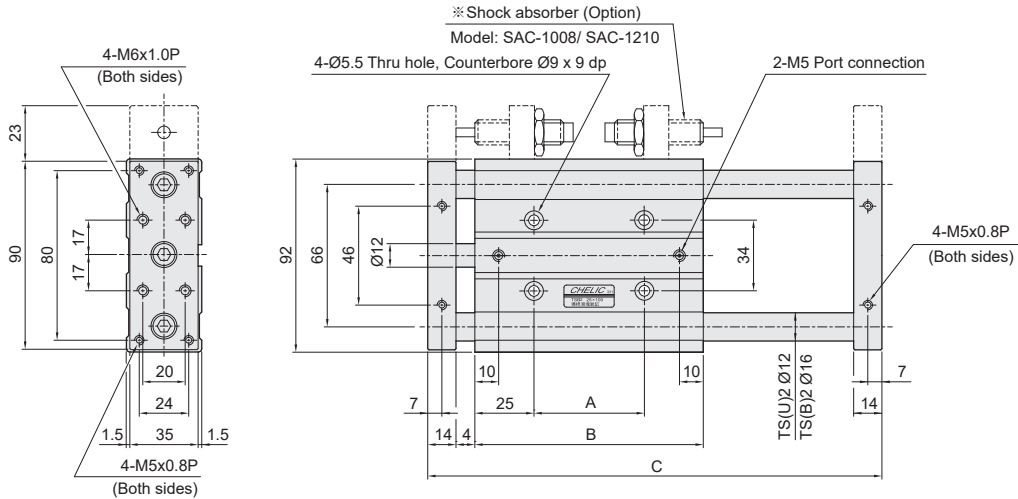
TSB(U)2 series Guide Slider Unit

Dimensions

CHELIC

TSB(U)2 Ø25 x

 TSB(U)2 25 x ST



TSB(U)2

TA(R)

TSB(U)2

TXB(U)2

TMB(U)

GCB(U)

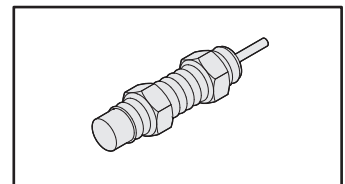
GHB(U)

Dimension

Unit: mm

Stroke Mark	25	50	75	100	125	150	175	200
A	23	48	73	98	123	148	173	198
B	73	98	123	148	173	198	223	248
C	134	184	234	284	334	384	434	484
D	33	58	83	108	133	158	183	208

Shock absorber/ Option



TCR

TCF

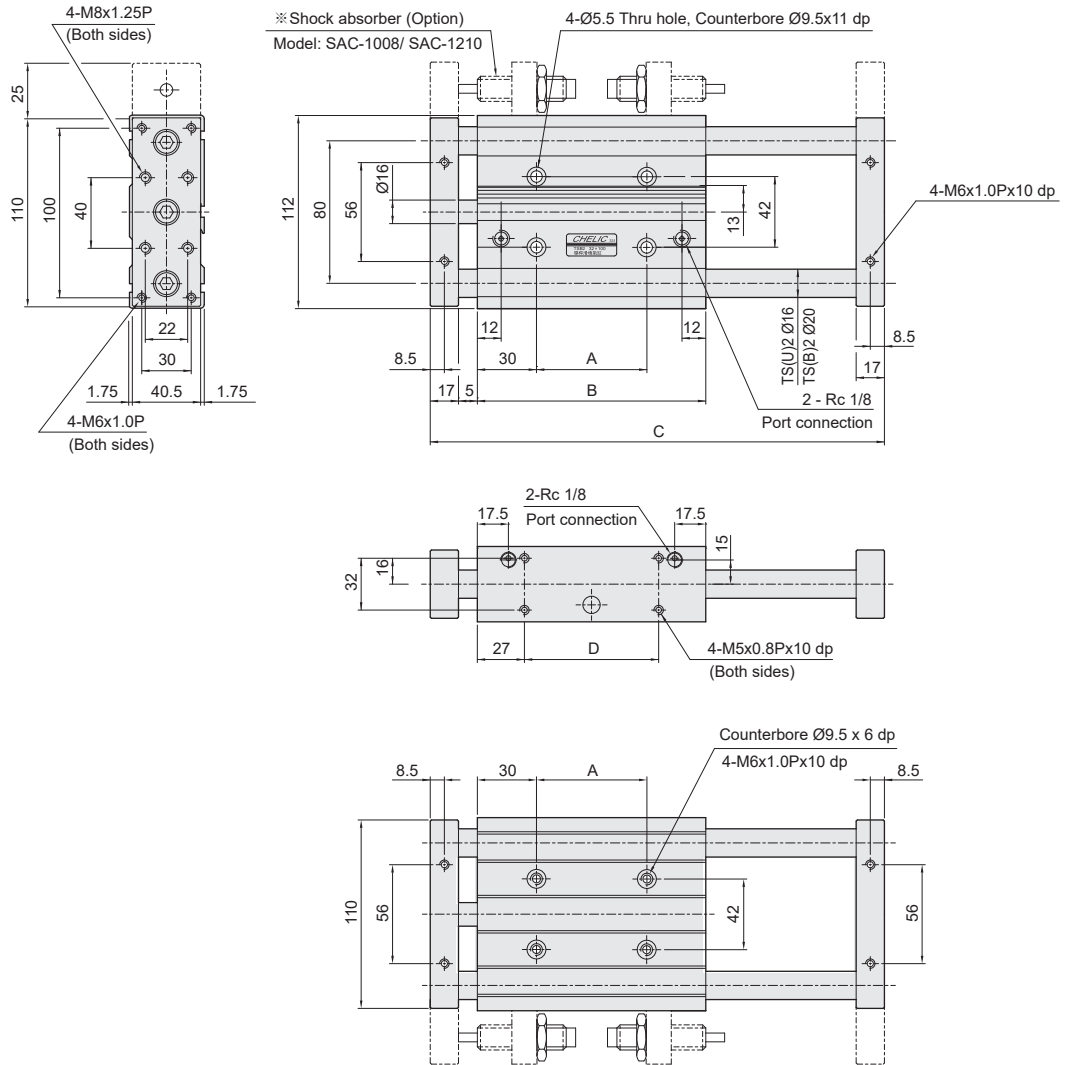
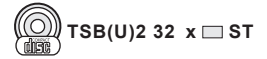
Please refer to P6-11.33

TSB(U)2 series Guide Slider Unit

Dimensions

CHELIC

TSB(U)2 Ø32 x

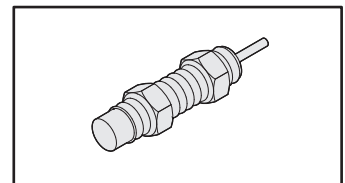


Dimension

Unit: mm

Stroke Mark	30	50	75	100	125	150	175	200	250
A	23	43	68	93	118	143	168	193	243
B	83	103	128	153	178	203	228	253	303
C	157	197	247	297	347	397	447	497	597
D	29	49	74	99	124	149	174	199	249

Shock absorber/ Option




Please refer to P6-11.33

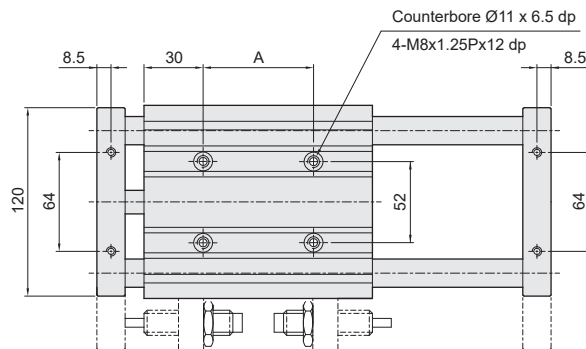
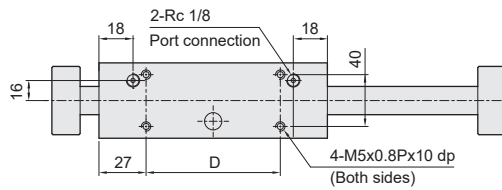
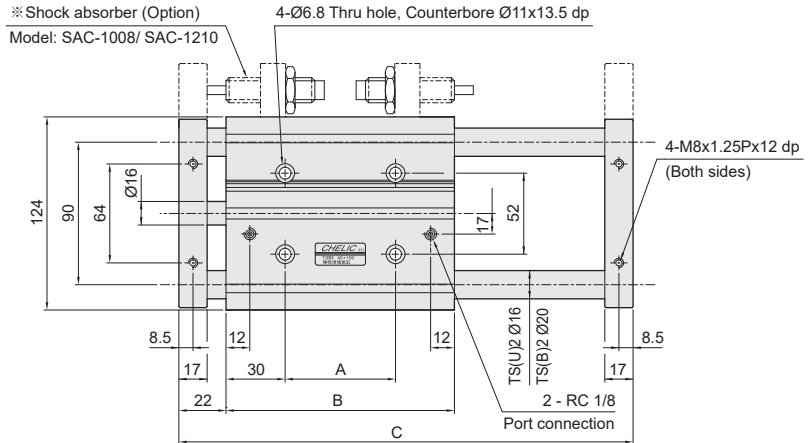
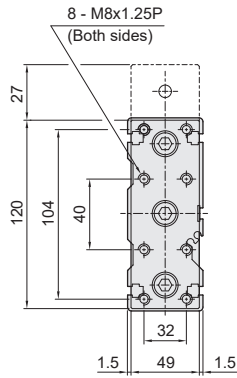
TSB(U)2 series Guide Slider Unit

Dimensions

CHELIC

TSB(U)2 Ø40 x

 TSB(U)2 40 x ST



TB(U)2

TA(R)

TSB(U)2

TXB(U)2

TMB(U)

GCB(U)

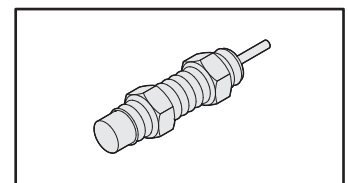
GHB(U)

Dimension

Unit: mm

Stroke Mark	30	50	75	100	125	150	175	200	250
A	23	43	68	93	118	143	168	193	243
B	83	103	128	153	178	203	228	253	303
C	157	197	247	297	347	397	447	497	597
D	29	49	74	99	124	149	174	199	249

Shock absorber/ Option



TCR

TCF


Please refer to P6-11.33

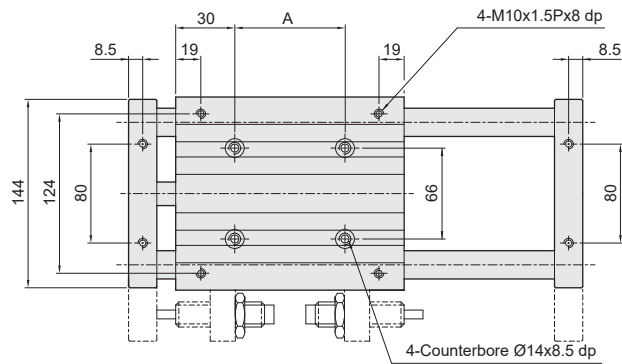
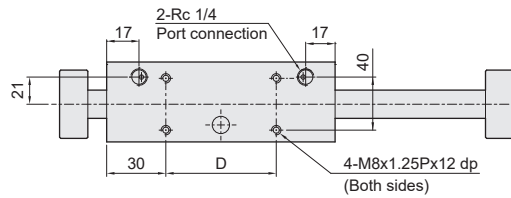
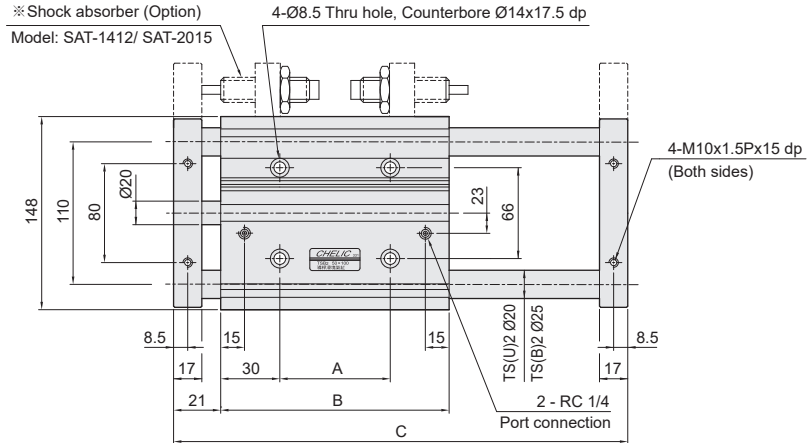
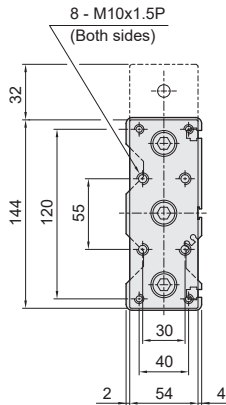
TSB(U)2 series Guide Slider Unit

Dimensions

CHELIC

TSB(U)2 Ø50 x

 TSB(U)2 50 x ST

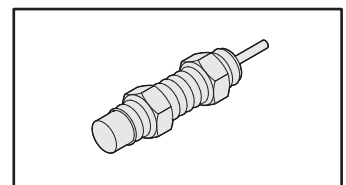


Dimension

Unit: mm

Stroke Mark	50	75	100	125	150
A	38	63	88	113	138
B	98	123	148	173	198
C	194	244	294	344	394
D	38	63	88	113	138

Shock absorber/ Option




Please refer to P6-11.33

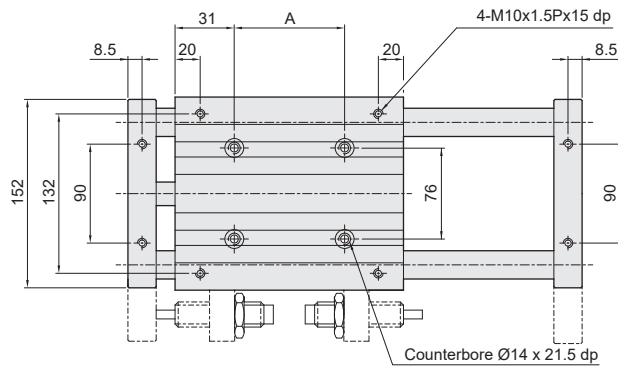
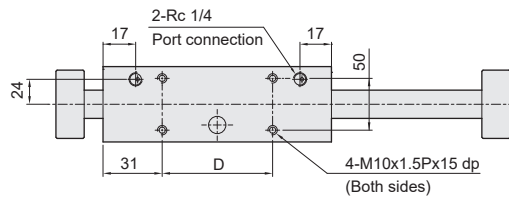
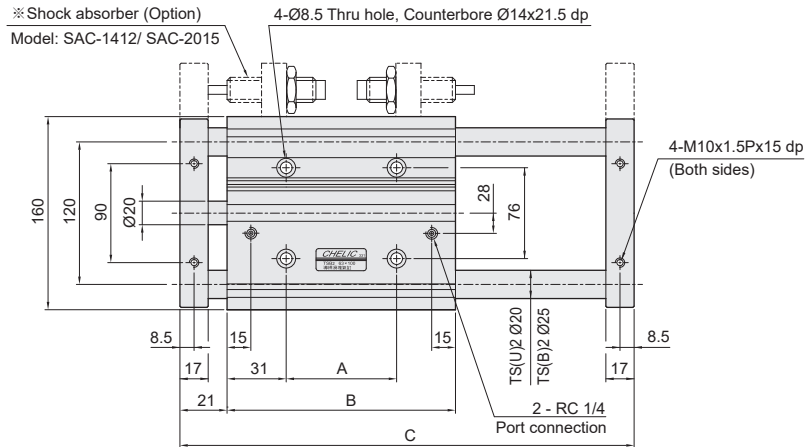
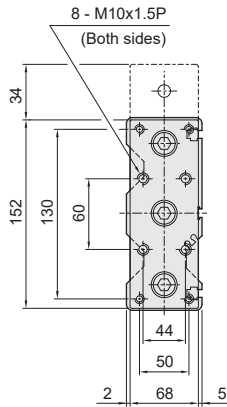
TSB(U)2 series Guide Slider Unit

Dimensions

CHELIC

TSB(U)2 Ø63 x

 TSB(U)2 63 x ST



TSB(U)2

TA(R)

TSB(U)2

TXB(U)2

TMB(U)

GCB(U)

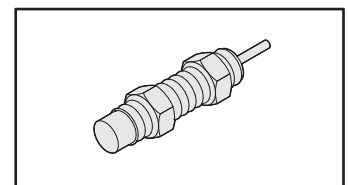
GHB(U)

Dimension

Unit: mm

Stroke Mark	50	75	100	125	150
A	38	63	88	113	138
B	100	125	150	175	200
C	194	244	294	344	394
D	38	63	88	113	138

Shock absorber/ Option



TCR

TCF

Please refer to P6-11.33

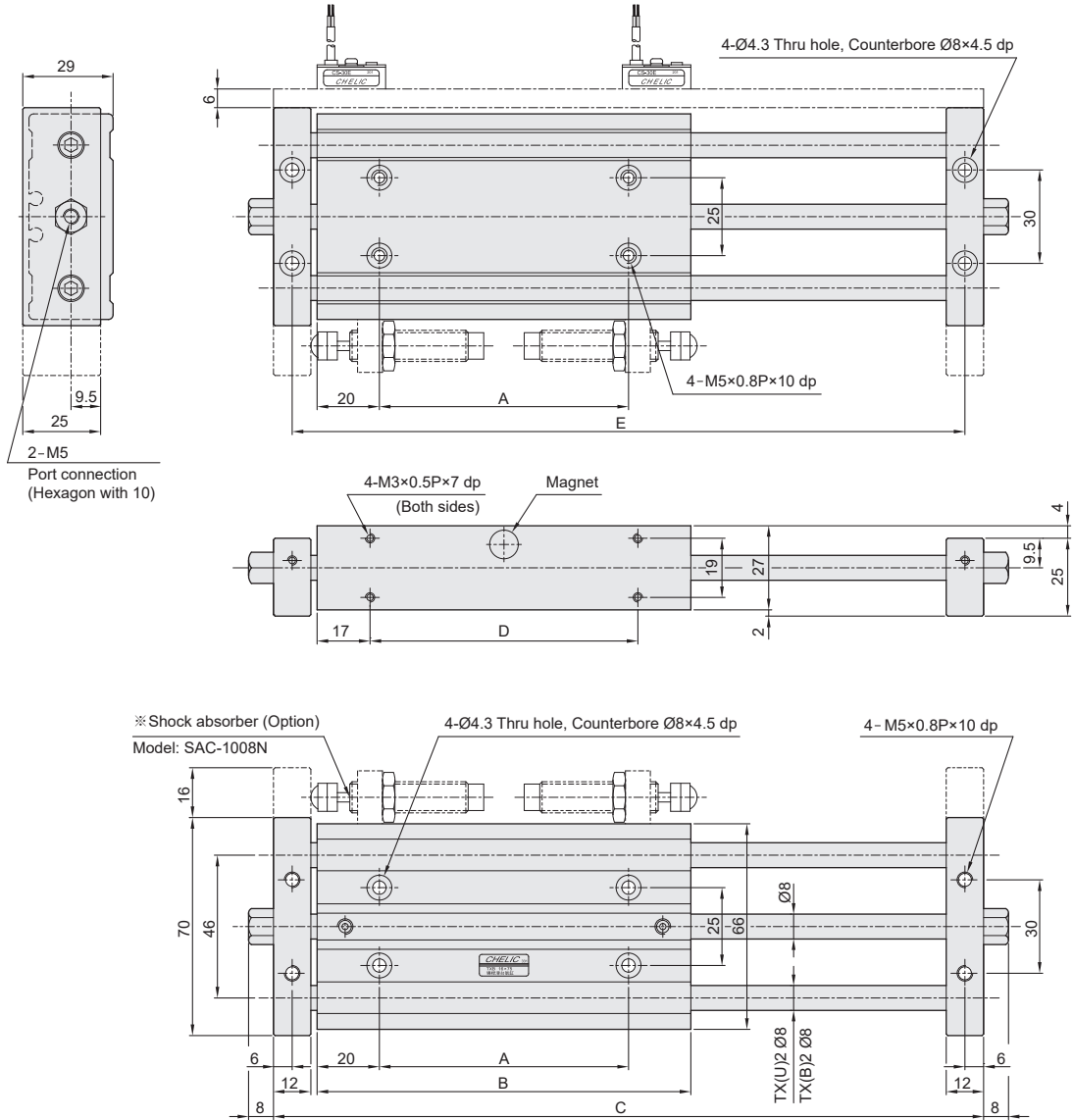
TXB(U)2 series Guide Slide Table Unit

Dimensions

CHELIC

TXB(U)2 Ø16 x

ST logo" data-bbox="742 141 785 170"/> TXB(U)2 16 x ST

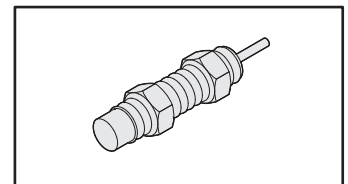


Dimension

Unit: mm

Stroke	50	75	100	125	150
A	55	80	105	130	155
B	95	120	145	170	195
C	173	223	273	323	373
D	61	86	111	136	161
E	161	211	261	311	361

Shock absorber/ Option




Please refer to P6-11.33

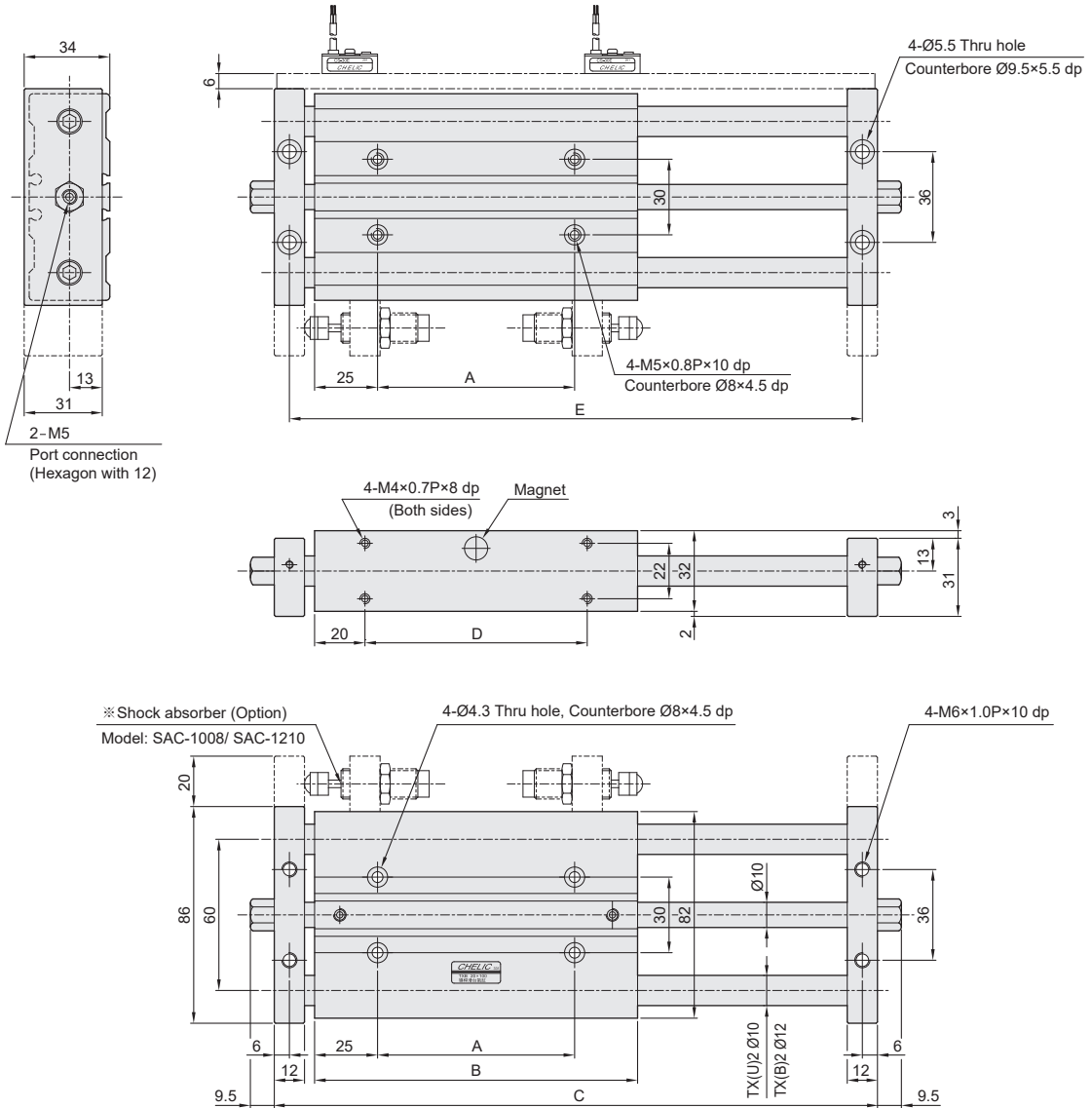
TXB(U)2 series Guide Slide Table Unit

Dimensions

CHELIC

TXB(U)2 Ø20 x

 TXB(U)2 20 x ST



TB(U)2

TA(R)

TSB(U)2

TXB(U)2

TMB(U)

GCB(U)

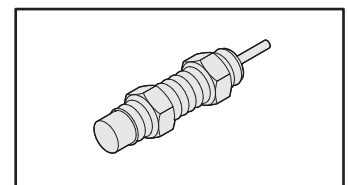
GHB(U)

Dimension

Unit: mm

Stroke Mark	50	75	100	125	150
A	47	72	97	122	147
B	97	122	147	172	197
C	175	225	275	325	375
D	57	82	107	132	157
E	163	213	263	313	363

Shock absorber/ Option



TCR

TCF


Please refer to P6-11.33

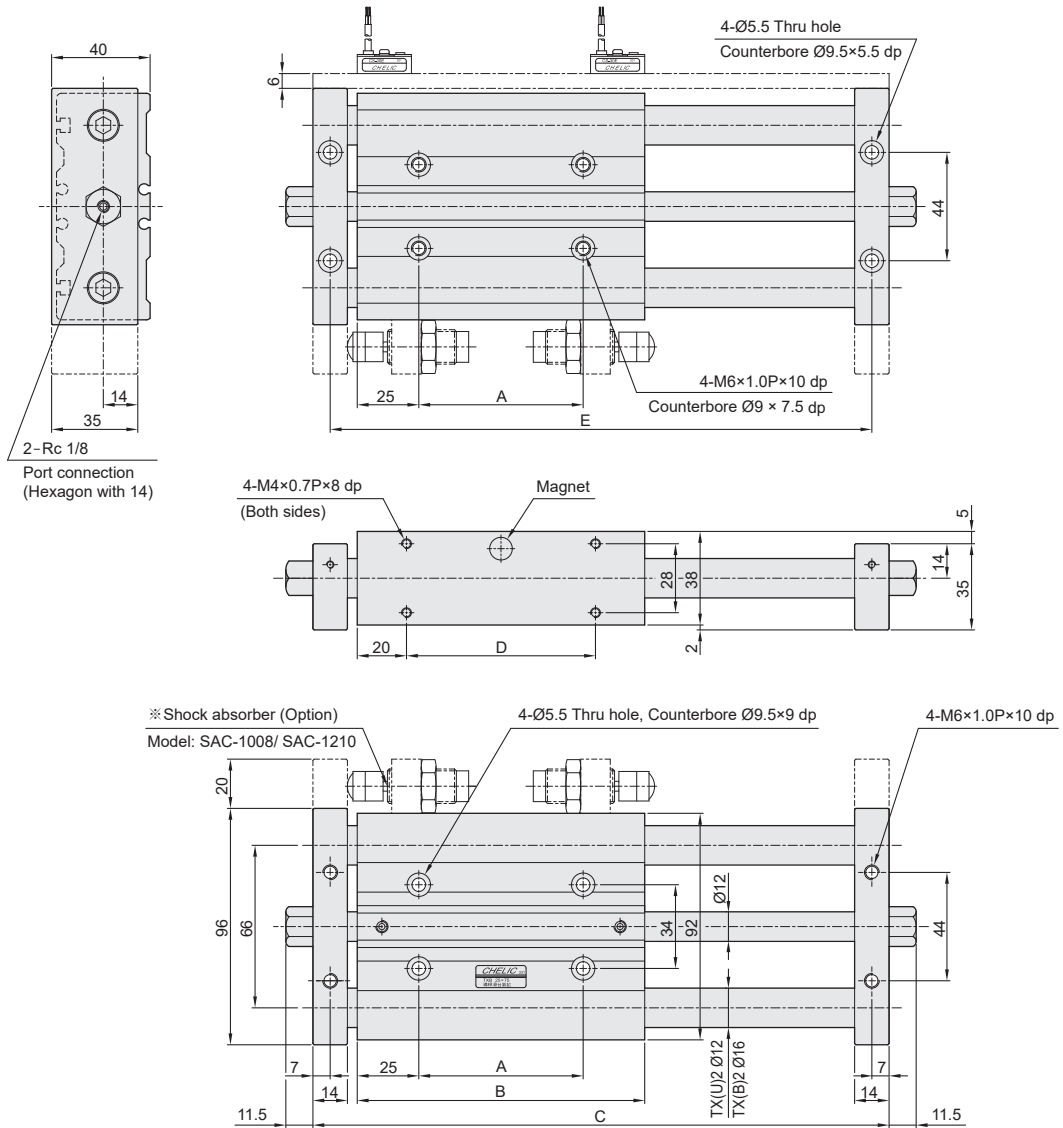
TXB(U)2 series Guide Slide Table Unit

Dimensions

CHELIC

TXB(U)2 Ø25 x

 TXB(U)2 25 x ST

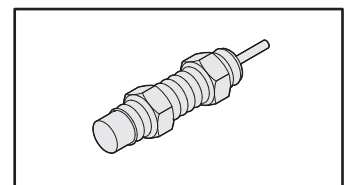


Dimension

Unit: mm

Stroke Mark	50	75	100	125	150
A	48	73	98	123	148
B	98	123	148	173	198
C	184	234	284	334	384
D	58	83	108	133	158
E	170	220	270	320	370

Shock absorber/ Option



Please refer to P6-11.33

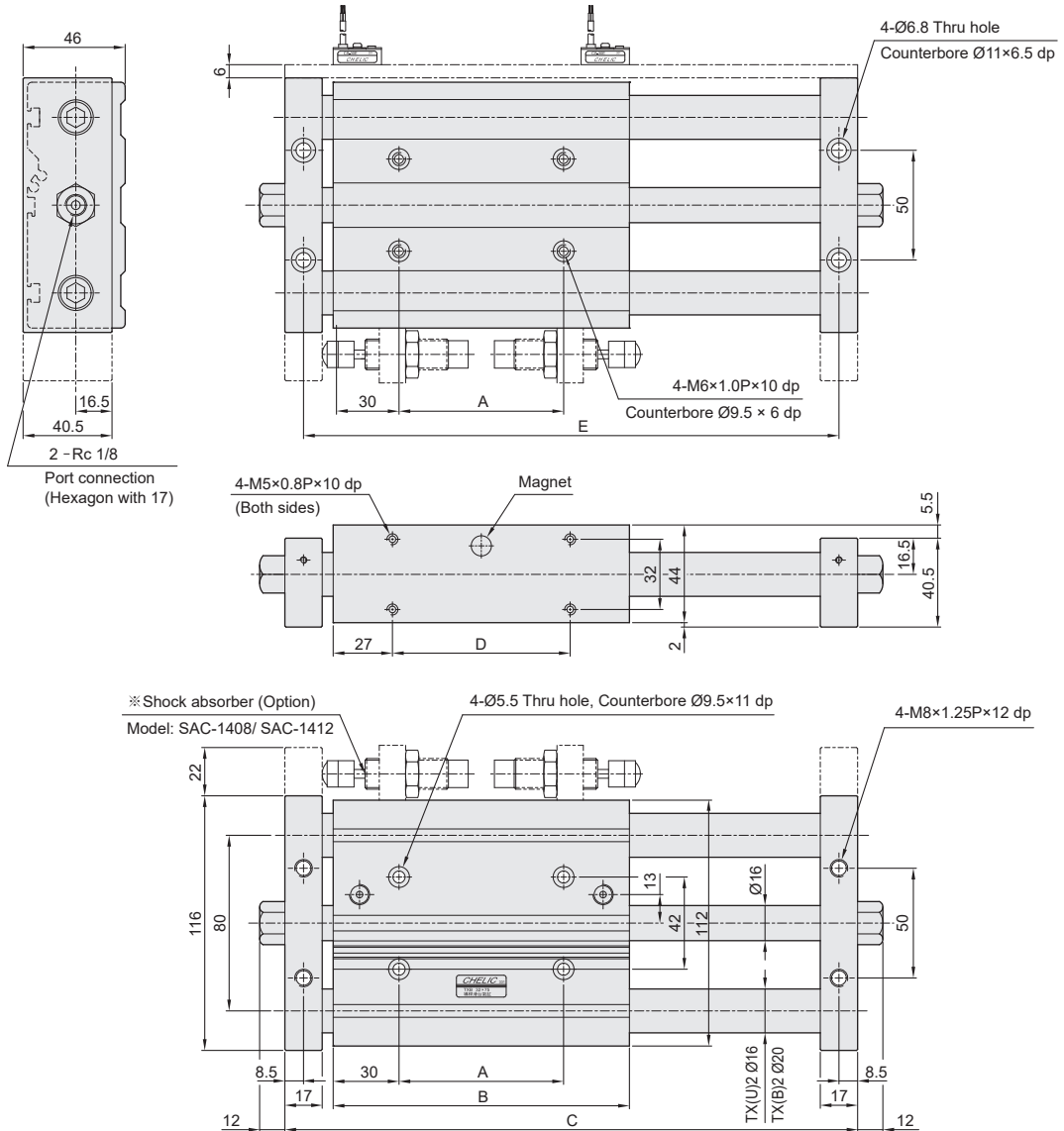
TXB(U)2 series Guide Slide Table Unit

Dimensions

CHELIC

TXB(U)2 Ø32 x

TXB(U)2 32 x ST



TB(U)2

TA(R)

TSB(U)2

TXB(U)2

TMB(U)

GCB(U)

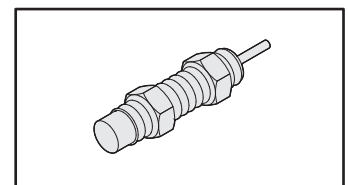
GHB(U)

Dimension

Unit: mm

Stroke Mark	50	75	100	125	150	175	200	250
A	43	68	93	118	143	168	193	243
B	103	128	153	178	203	228	253	303
C	197	247	297	347	397	447	497	597
D	49	74	99	124	149	174	199	249
E	180	230	280	330	380	430	480	580

Shock absorber/ Option



TCR

TCF


Please refer to P6-11.33

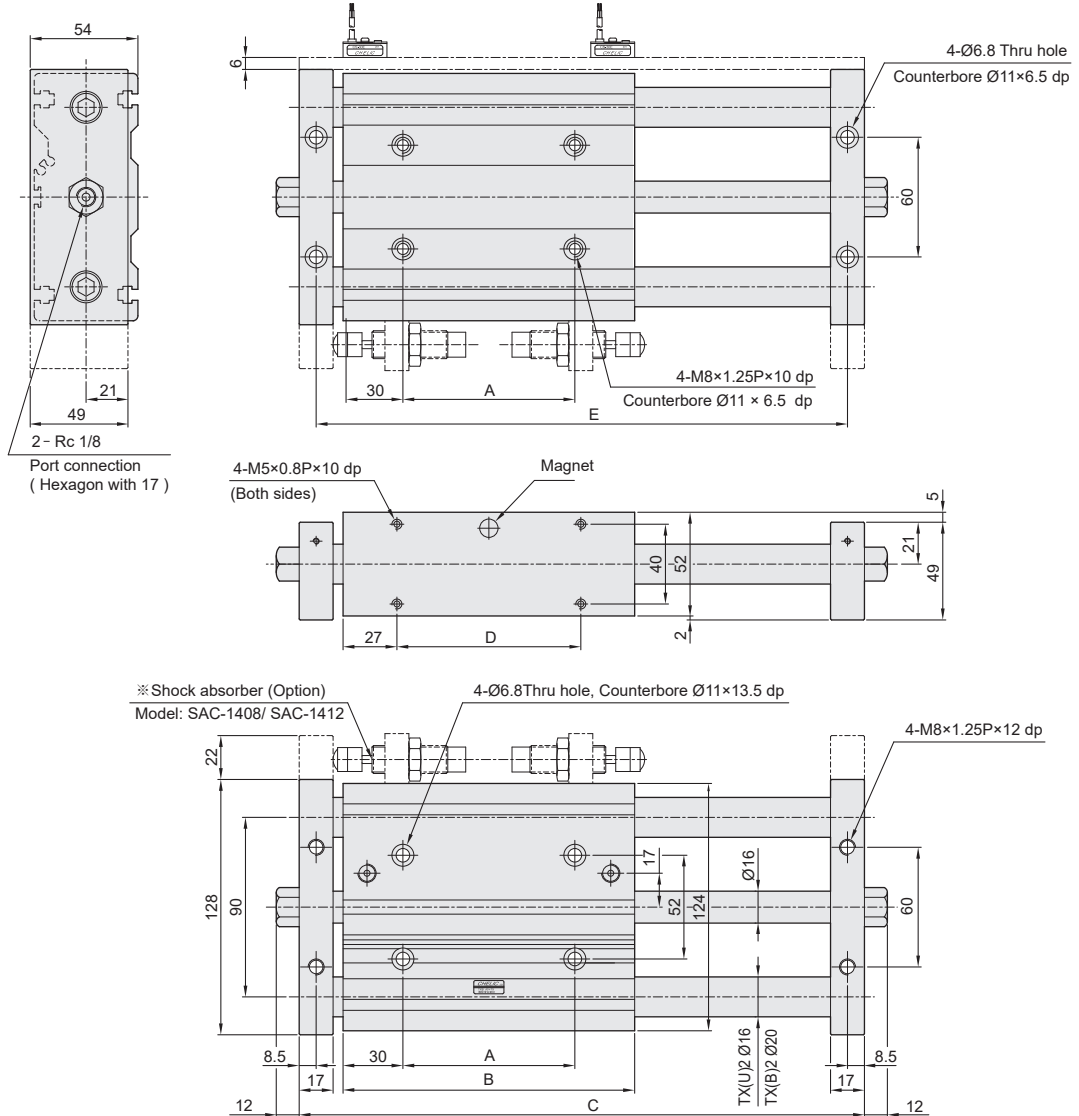
TXB(U)2 series Guide Slide Table Unit

Dimensions

CHELIC

TXB(U)2 Ø40 x

 TXB(U)2 40 x ST

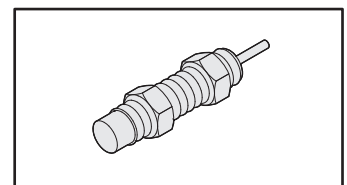


Dimension

Unit: mm

Stroke Mark	50	75	100	125	150	175	200	250
A	43	68	93	118	143	168	193	243
B	103	128	153	178	203	228	253	303
C	197	247	297	347	397	447	497	597
D	49	74	99	124	149	174	199	249
E	180	230	280	330	380	430	480	580

Shock absorber/ Option




Please refer to P6-11.33

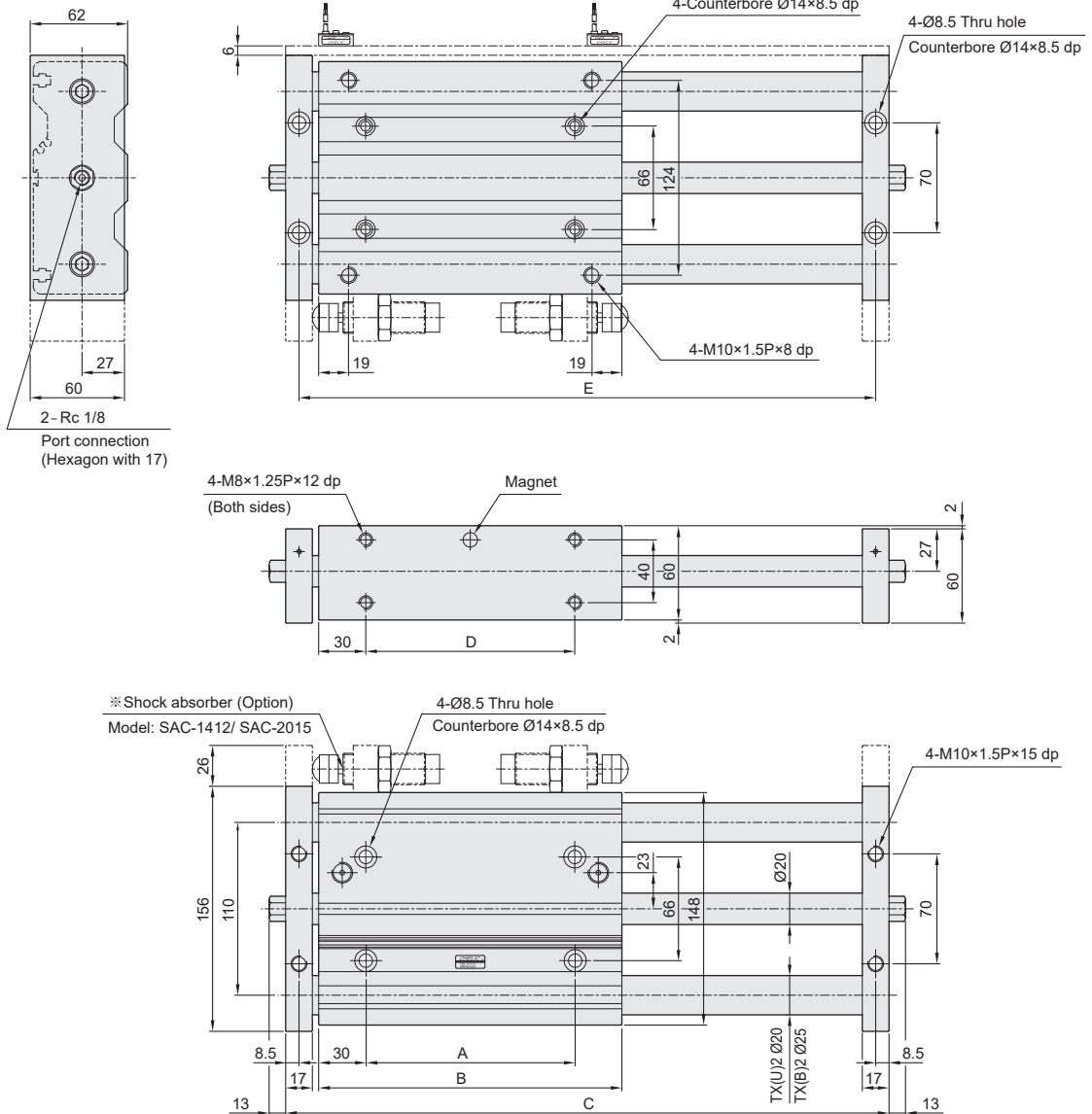
TXB(U)2 series Guide Slide Table Unit

Dimensions

CHELIC

TXB(U)2 Ø50 x

 TXB(U)2 50 x ST



TXB(U)2

TA(R)

TSB(U)2

TXB(U)2

TMB(U)

GCB(U)

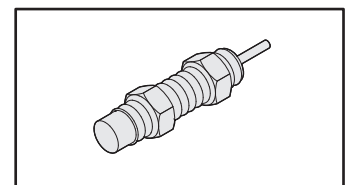
GHB(U)

Dimension

Unit: mm

Stroke Mark	50	75	100	125	150
A	38	63	88	113	138
B	98	123	148	173	198
C	194	244	294	344	394
D	38	63	88	113	138
E	177	227	277	327	377

Shock absorber/ Option



TCR

TCF

Please refer to P6-11.33

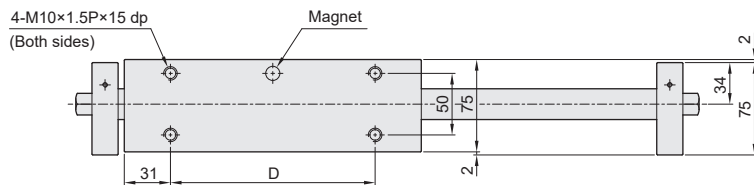
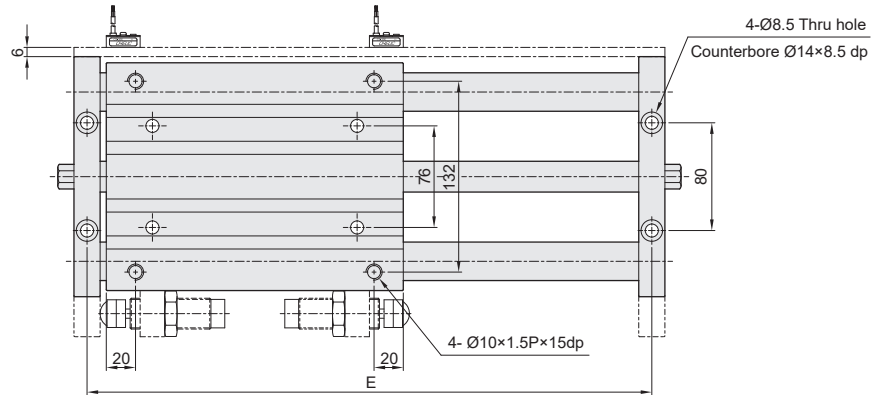
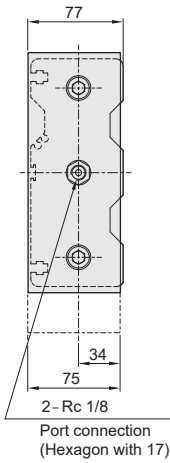
TXB(U)2 series Guide Slide Table Unit

Dimensions

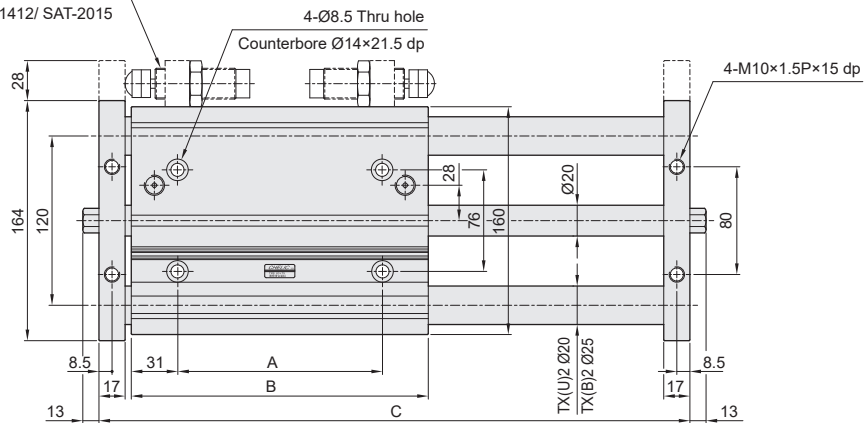
CHELIC

TXB(U)2 Ø63 x

TXB(U)2 63 x ST



※ Shock absorber (Option)
Model: SAT-1412/ SAT-2015

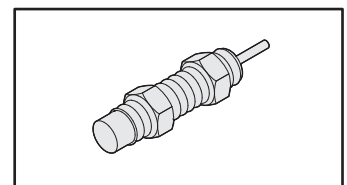


Dimension

Unit: mm

Stroke Mark	50	75	100	125	150
A	38	63	88	113	138
B	100	125	150	175	200
C	194	244	294	344	394
D	38	63	88	113	138
E	177	227	277	327	377

▼ Shock absorber/ Option



Please refer to P6-11.33

TSB(U), TSB(U)2, TXB(U)2 series Guide Slide Table Unit

Mounting type and operation of sensor switch

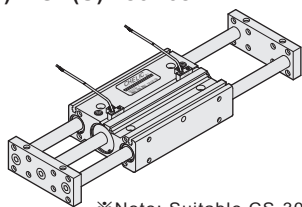
CHELIC

How to select shock absorber

Stroke	25	30	50	75	100	125	150	175	200
10	SAC-1005N	—	SAC-1008N	SAC-1008N	SAC-1008N	—	—	—	—
16	SAC-1005N	—	SAC-1008N	SAC-1008N	SAC-1008N	SAC-1008N	SAC-1008N	SAC-1008N	SAC-1008N
20	SAC-1005N	—	SAC-1008N	SAC-1008N	SAC-1008N	SAC-1008N	SAC-1008N	SAC-1008N	SAC-1008N
25	SAC-1005C	—	SAC-1210N	SAC-1210N	SAC-1210N	SAC-1210N	SAC-1210N	SAC-1210N	SAC-1210N
32	—	SAC-1210C	SAC-1408N	SAC-1408N	SAC-1408N	SAC-1408N	SAC-1408N	SAC-1408N	SAC-1408N
40	—	SAC-1408C	SAC-1408C	SAC-1408N	SAC-1412N	SAC-1412N	SAC-1412N	SAC-1412N	SAC-1412N
50	—	—	SAT-1412C	SAT-1412C	SAT-2015N	SAT-2015N	SAT-2015N	—	—
63	—	—	SAT-1412C	SAT-1412C	SAT-2015N	SAT-2015N	SAT-2015N	—	—

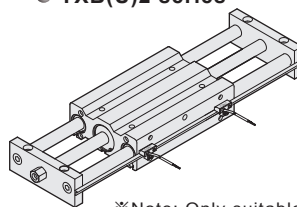
Sensor switch mounting type

TSB(U)/ TSB(U)2 series



※Note: Suitable CS-30E, CS-9D, CS-9B

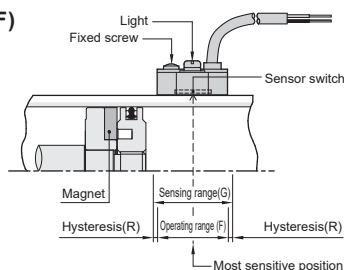
TXB(U)2 series



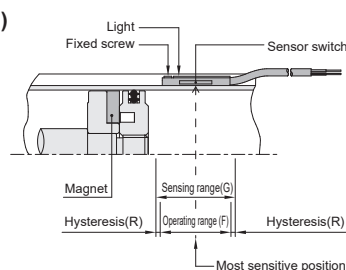
※Note: Only suitable for CS-30F or CS-9D

Sensor switch setting and operating range

CS-30E(F)



CS-9D(B)



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.

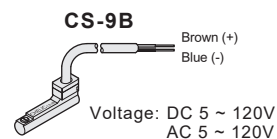
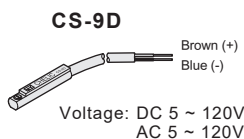
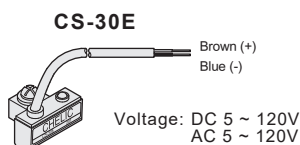
Operating range

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 right table)

Unit: mm

Model	CS-30E		CS-9D(B)	
	Operating range (F)	Hysteresis (R)	Operating range (F)	Hysteresis (R)
∅ 10	10	1	10	1
∅ 16	7	1	7	1
∅ 20	8	1	8	1
∅ 25	12.5	1	12.5	1
∅ 32	11	1.2	13	1.2
∅ 40	13	1.2	13	1.2
∅ 50	12	1.4	10	1.3
∅ 63	13	1.4	13	1.4

Sensor switch introduction



TB(U)2

TA(R)

TSB(U)2

TXB(U)2

TMB(U)

GCB(U)

GHB(U)

TCR

TCF