

DUAL ROD CYLINDER SERIES CXS BORE SIZES Ø6, Ø10, Ø15, Ø20, Ø25, Ø32

- ✓ Twin compact dual rod cylinder
- ✓ High non-rotating accuracy and double thrust
- ✓ High precision guide for pick & place applications
- ✓ Bearing option: slide or ball bushing types
- ✓ Tool plate has 3 mounting surfaces
- ✓ Four mounting surfaces and two porting locations (Ø6 has T-slot construction)
- ✓ Standard cushion both sides
- ✓ Adjustable stroke
- ✓ Recessed auto-switch design

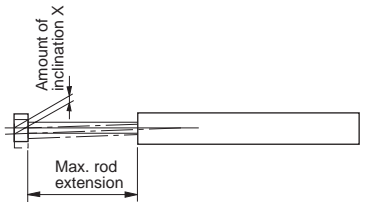


TECHNICAL SPECIFICATIONS

Cylinder bore size (mm)	6	10	15	20	25	32
Fluid	Air (Non-lubricated)					
Min. operating pressure (Bar)	1.5	1.0		0.5		
Max operating pressure (Bar)	7.0					
Proof pressure (Bar)	10.5					
Ambient and fluid temp. (C°)	5-60					
Piston Speed (mm/S)	30-300					
Port size	M5X0.8			1/8		
Stroke adjustment range	0--5mm against basic stroke					
Bearing	Slide bearing, Ball bush bearing (Same dimensions)					
Cushion	With damper (Both sides)					

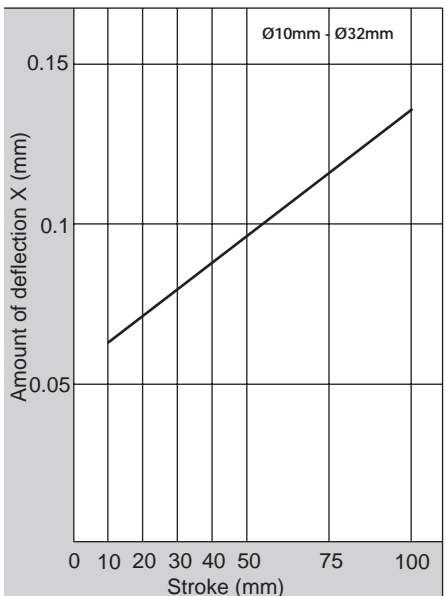
INCLINATION OF ENDPLATE

The standard amount of deflection X of the end plate when no load is applied is shown in the graph or table below. Values shown are based only on bearing clearances.



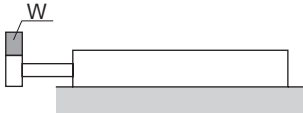
Ø6mm

Stroke	10	20	30	40	50
CXS _L M6	0.061	0.075	0.088	0.102	0.116

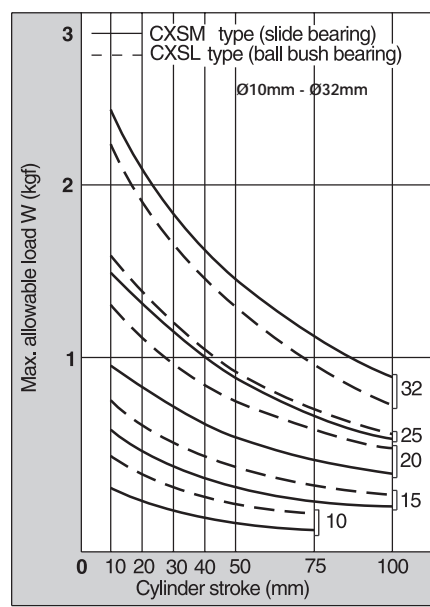


MAX. ALLOWABLE LOAD

The maximum allowable loads will be no greater than the values shown in the graph or table below, when the cylinder is mounted as shown.

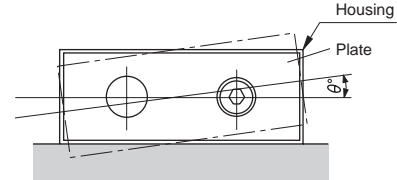


Stroke	10	20	30	40	50
CXSM6	.082	.067	.055	.047	.040
CXSL6	.110	.090	.070	.060	.050



NON ROTATING ACCURACY

Standards of non-rotating accuracy θ° are values lower than those shown in the table. Values shown are based only on bearing clearances.



Cylinder bore size (mm)	CXSM (Slide bearing)	CXSL (Ball bush bearing)
6	±0.1	
10	±0.01	±0.15
15	±0.07	±0.13
20	±0.06	±0.11
25	±0.05	±0.1
32	±0.04	±0.08



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ACCESSORIES
SOLID STATE AUTO SWITCHES

Auto switch no.	D-Y59AL-Q	D-Y69AL-Q	D-Y59BL-Q	D-Y69BL-Q	D-Y7NWL-Q	D-Y7MVL-Q	D-Y7PL-Q	D-Y7PVL-Q	D-Y7PWL-Q	D-Y7MVL-Q	D-Y7BWL-Q	D-Y7BVL-Q
Lead wire securing method	Axial direction	Right angle	Axial direction	Right angle	Axial direction	Right angle	Axial direction	Right angle	Axial direction	Right angle	Axial direction	Right angle
Wiring method	3 wire system		2 wire system		3 wire system						2 wire system	
Output method	NPN		—		NPN		PNP				—	
Application	IC circuit, Relay, Sequence controller		24VDC relay, Sequence controller		IC circuit, Relay, Sequence controller						24VDC relay, Sequence controller	
Power source	5, 12, 24VDC		—		DC5, 12, 24V(DC4.5~28V)						—	
Current consumption	1mA or less at OFF, 12mA or less at ON		—		10mA		1mA or less at OFF, 15mA or less at ON		12mA		—	
Load voltage	28VDC or less		24VDC(10~28VDC)		28VDC or less		—		—		24VDC(DC10~28V)	
Load current	150mA or less		5~150mA		40mA		150mA or less		40mA		5~40mA	
Internal voltage drop	0.4V or less at 50mA 0.8V or less at 150mA		3V or less		1.5V		0.4V or less at 50mA 0.8V or less at 150mA		0.8V		4V	
Current leakage	10µA or less at 24VDC		1mA or less at 24VDC		10µA or less at 24VDC						1mA or less at 24VDC	
Indicator lamp	ON: Red light emitting diode				ON: Red light emitting diode							

ACCESSORIES
CX S SERIES DUAL ROD CYLINDER

Recommended Auto Switches
D-Z73LReed Type
D-Y59BL-Q.....Solid state type

- Response time 1ms or less
- Lead wire Oil proof flexible vinyl cable, ø3.4, 0.2mm² 3wire (red, white, black), 2 wire (red, black) 3m
- Impact resistance 100G
- Insulation resistance 50MΩ or more under the test voltage 500VDC(between case and cable)
- Withstand voltage 1000VAC 1 min. (between case and cable)
- Ambient temperature -10~60°C
- Protection structure IEC spec IP67, Water-proof (JISC0920), oil-proof.

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ACCESSORIES
REED SWITCHES

Auto Switch No.	D-Z73L		D-Z80L		
Lead wire securing method	Axial direction		Axial direction		
Application	Relay, Sequence Controller		Relay, Sequence Controller, IC circuit		
Load voltage	24VDC	100VAC	24VAC/DC max.	48VAC	100VAC/DC
Max. load current	5~40mA	5~20mA	50mA	40mA	20mA
Internal voltage drop	2.4V max.		-	-	-
Indicator lamp	ON: RED LED		-		

HOW TO ORDER
CX S SERIES DUAL ROD CYLINDER



TYPE OF BEARING
MSlide bearing type
LBall bush bearing type

BORE (MM)

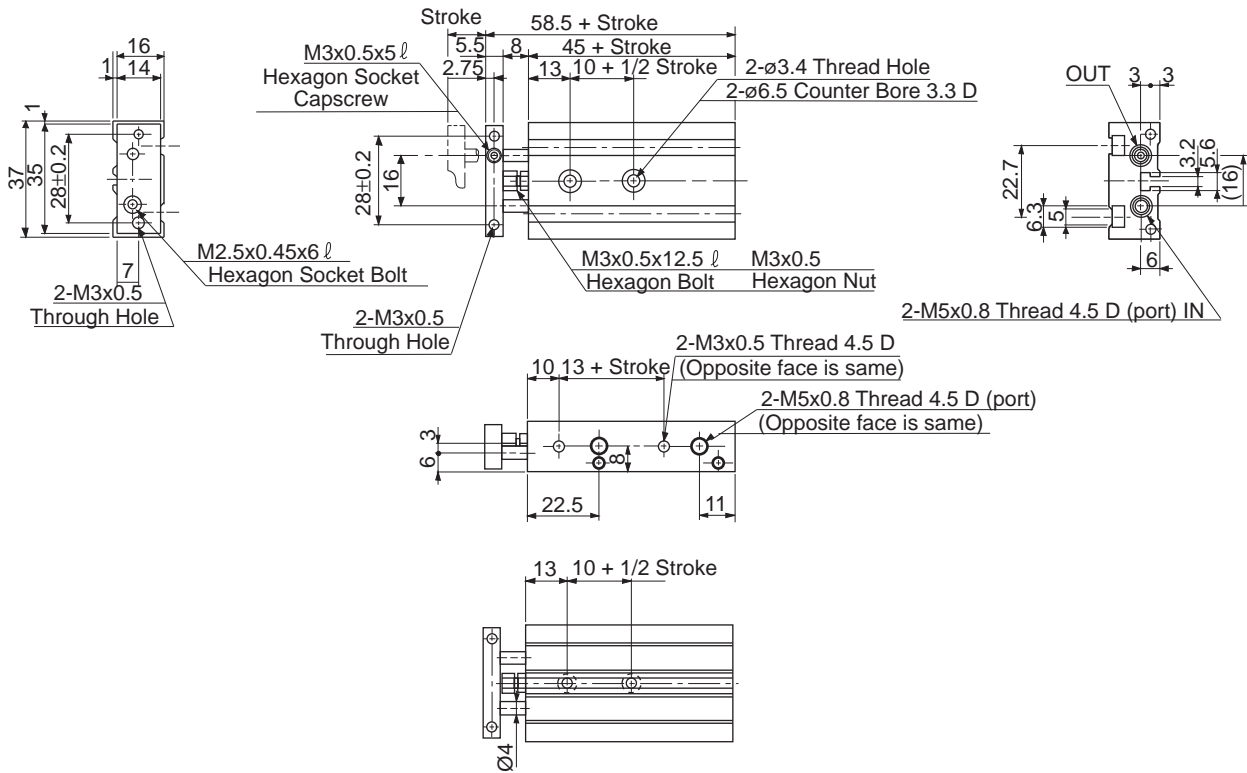
- 6
- 10
- 15
- 20
- 25
- 32

STANDARD STROKE (MM)

Bore size (mm)	Standard Stroke
6	10, 20, 30, 40, 50
10	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75
15, 20, 25, 32	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100

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DIMENSIONS
CXS6



Model	Stroke	10+1/2 Stroke	13 + Stroke	45 + Stroke	58.5 + Stroke
CXS ₆ 6-10	10	15	23	55	68.5
CXS ₆ 6-20	20	20	33	65	78.5
CXS ₆ 6-30	30	25	43	75	88.5
CXS ₆ 6-40	40	30	53	85	98.5
CXS ₆ 6-50	50	35	63	95	108.5

DIMENSIONS Ø20-32
SEE NEXT PAGE

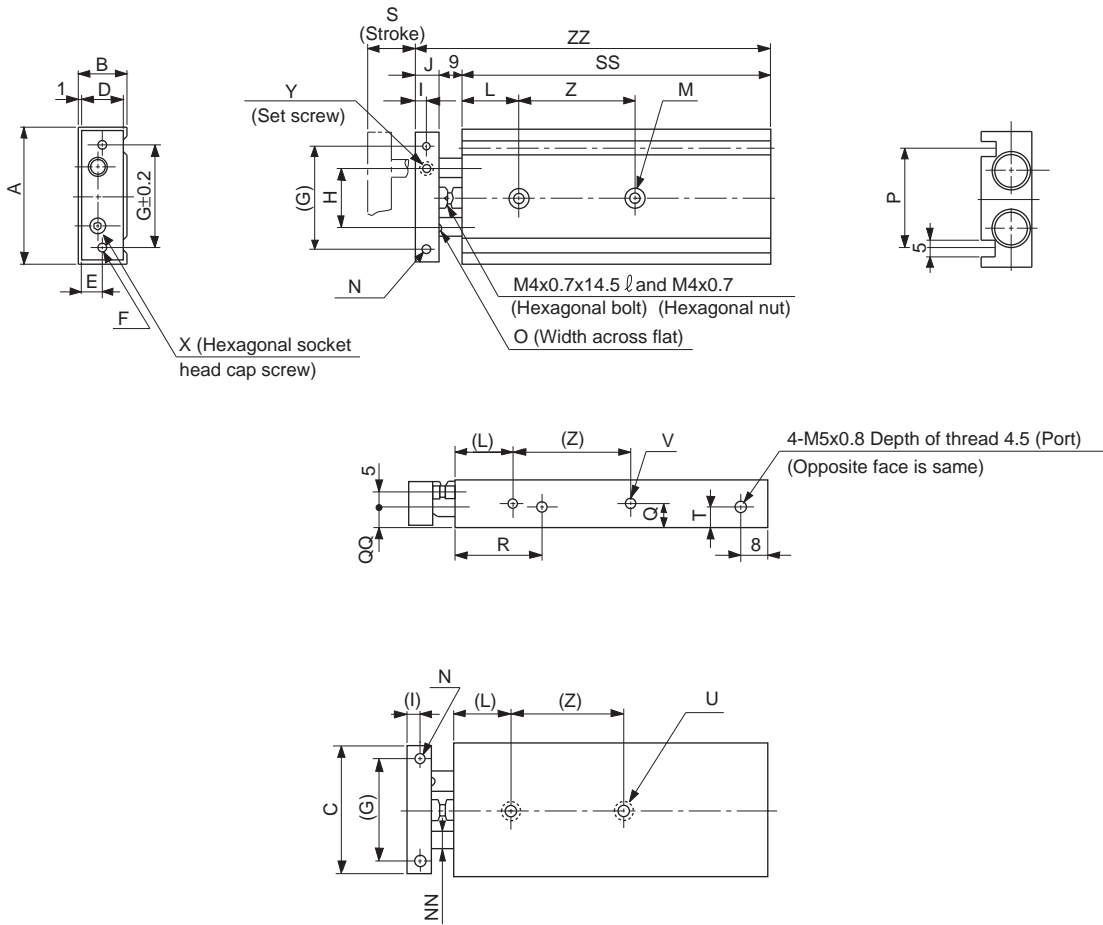


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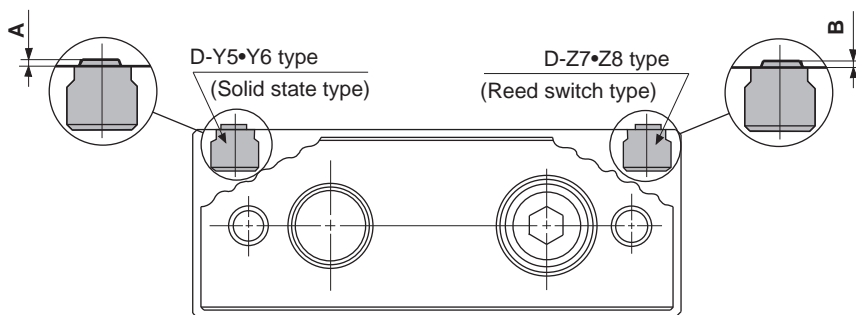
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DIMENSIONS
CXSM10,15



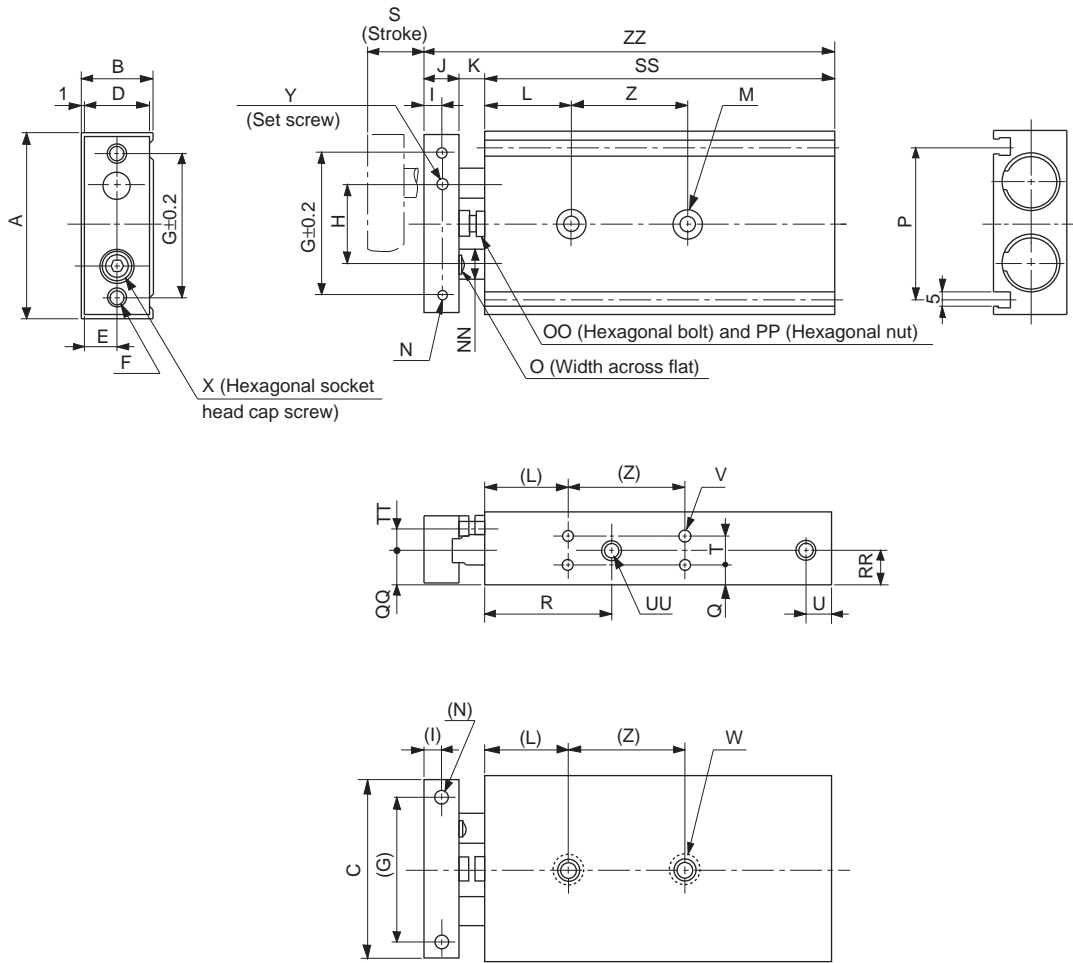
Model	A	B	C	D	E	F	G	H	I	J	L	M	N	NN	O	P	Q	QQ	R	T	U	V (opposite face is same)	X	Y
CXSM _L 10	46	17	44	15	7.5	2-M4x0.7 (through hole)	35	20	4	8	20	2-∅4 through hole 2-∅5 counter bore 3.3 deep	2-M3x0.5 depth of thread 5	∅	5	33.6	8.5	7	30	7	2-M4x0.7 depth of thread 7	4-M3x0.5 depth of thread 4.5	M3x0.5 x10	M5x0.8 x5
CXSM _L 15	58	20	56	18	9	2-M5x0.8 (through hole)	45	25	5	10	30	2-∅3 through hole 2-∅ counter bore 4.4 deep	2-M4x0.7 depth of thread 6	∅	6	48	10	10	38.5	10	2-M5x0.8 depth of thread 8	4-M4x0.7 depth of thread 5	M5x0.8 x10	M6x1.0 x5

Stroke	SS												Z				ZZ																			
	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	10, 15, 20,	25	30, 35, 40, 45, 50	60, 70, 75	80	90, 100	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100
CXSM _L 10	65	70	75	80	85	90	95	100	105	115	125	130	—	—	—	30	30	40	50	—	—	82	87	92	97	102	107	112	117	122	132	142	147	—	—	—
CXSM _L 15	70	75	80	85	90	95	100	105	110	120	130	135	140	150	160	25	35	35	45	45	55	89	94	99	104	109	114	119	124	129	139	149	154	159	169	179



Auto switch type	Symbol	Bore size					
		6	10	15	20	25	32
D-Y5, Y6, Y7 type	A	0.65	0.65	0.15			
D-Z7, Z8 type	B	1.15	1.15	0.65			

DIMENSIONS
CXS20~32



Model	A	B	C	D	E	F (Through hole)	G	H	I	J	K	L	M	N	NN	O	OO	P	OO
CXS ^M 20	64	25	62	23	11.5	2-M5X0.8	50	28	6	12	12	30	2-∅.5 through hole 2-∅.5 counter bore 5.3 deep	2-M4x0.7 depth of thread 6	∅0	8	M6x1.0x18.5	53	M8x1.25x5
CXS ^M 25	80	30	78	28	14	2-M6x1.0	60	35	6	12	12	30	2-∅.9 through hole 2-∅.1 counter bore 6.3 deep	2-M5x0.8 depth of thread 7.5	∅2	10	M6x1.0x18.5	64	M8x1.25x5
CXS ^M 32	98	38	96	36	18	2-M6x1.0	75	44	8	16	14	30	2-∅.9 through hole 2-∅.1 counter bore 6.3 deep	2-M5x0.8 depth of thread 8	∅6	13	M8x1.25x23	76	M10x1.5x8

Model	PP	Q	QQ	R	RR	T	TT	U	UU (Opposite face is same)	V (Opposite face is same)	W	X	Y
CXS ^M 20	M6x1.0	7.75	12.5	45	12.5	9.5	6.5	8	4-M5X0.8 Depth of thread 4.5	8-M4x0.7 Depth of thread 6	2-M6x1.0 Depth of thread 10		M8x1.25x5
CXS ^M 25	M6x1.0	8.5	15	46	15	13	9	9	4-Rc (PT) 1/8 Depth of thread 6.5	8-M5x0.8 Depth of thread 7.5	2-M8x1.25 Depth of thread 12	M6x1.0x14	M8x1.25x5
CXS ^M 32	M8x1.25	9	19	56	19	20	11.5	10	4-Rc (PT) 1/8 Depth of thread 6.5	8-M5x0.8 Depth of thread 7.5	2-M8x1.25 Depth of thread 12		

Stroke	SS										Z			ZZ																			
Bore	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	10, 15, 20, 25	30, 35, 40, 45, 50	60, 70, 75, 80, 90, 100	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100
CXS ^M 20	80	85	90	95	100	105	110	115	120	130	140	145	150	160	170	30	40	60	104	109	114	119	124	129	134	139	144	154	164	169	174	184	194
CXS ^M 25	82	87	92	97	102	107	112	117	122	132	142	147	152	162	172	30	40	60	106	111	116	121	126	131	136	141	146	156	166	171	176	186	196
CXS ^M 32	92	97	102	107	112	117	122	127	132	142	152	157	162	172	182	40	50	70	122	127	132	137	142	147	152	157	162	172	182	187	192	202	212



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