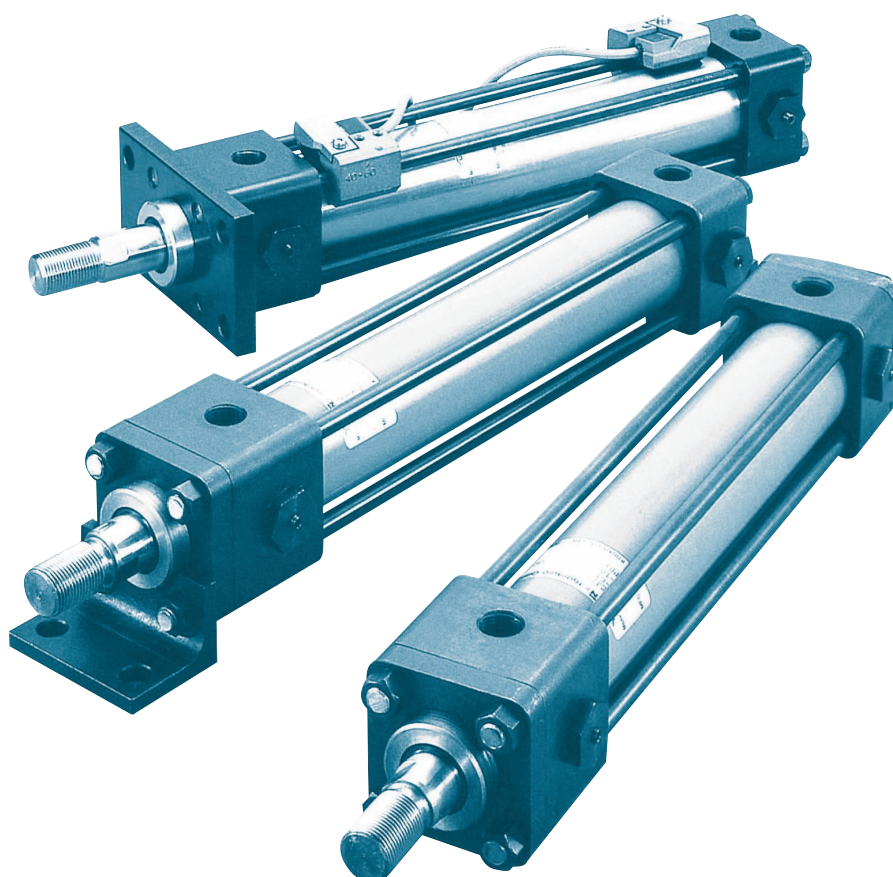


J

HYDRAULIC CYLINDER

- CJT TYPE 35 · 70 · 140 · 210 SERIES HYDRAULIC CYLINDER..... J-4
- CJT SERIES HYDRAULIC CYLINDER WITH PROXIMITY SWITCH J-45
- C6 SERIES COMPACT CYLINDER J-51



Related to the unit and the design number

■ Unit

This catalog to the International System of Units SI, and here the main display unit of the conventional (gravity units) with the { } in the notation.

(For example) the pressure- 21MPa{214kgf/cm²}

This latest international trends as the introduction of SI units are still being carried out in Japan (1986 enacted on or after January 1, revised Japanese Industrial Standards (JIS) for the week to display units in SI units.) And is determined can. Here also according to the catalog of the show was to.

In particular, the main display is shown with { } SI units and conventional units with the conversion factor is as follows. { }

- Pressure 1MPa=10.197162=10.2kgf/cm²
- Kinematic viscosity 1mm²/s=1cSt

■ For a number of design changes

Products designed to improve the numbers are subject to change without notice. However, if you change the design number one place to the bottom of the mounting dimensions and performance specifications is not a change.

Contents

CJT series hydraulic cylinder	-----	J-4
● 35 Series hydraulic cylinder	-----	J-4
● 70/140 Series Type hydraulic cylinder	-----	J-14
● 210 Series Type hydraulic cylinder	-----	J-37
CJT series hydraulic cylinder with proximity switch	-----	J-45
C6 series compact cylinder	-----	J-51

70/140 Series CJT type KS standard hydraulic cylinder

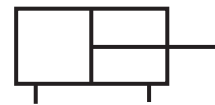
SEWON's 70/140 Series CJT type KS standard hydraulic cylinders are provided with many mouning types so that they can be used for wide use of general purpose industrial machines such as machine tools.

Moreover, Switch-Set "CJT" Series Hydraulic Cylinders with a proximity switch which facilitates detecting a position with a slide proximity switch on the cylinder body is also available.

- Various mounting types.
- Excellent ability in low speed and high-precision operation.
- Gentle stop characteristics obtained with a smooth cushion effect.



KS Graphic Symbols



Ratings

Description		Model Number		CJT70	CJT140
Cylinder Bore mm				32, 40, 50, 63, 80, 100, 125, 140, 150, 160, 180, 200, 220, 250	
Mounting				SD, LA, LB, FA, FB, FC, FD, FE, FF, FY, CA, CB, TA, TC	SD, LA, LB, FC, FD, FE, FF, FY, CA, CB, TA, TC
Operating Pressure ^{*1} MPa{kgf/cm ² }				7{71.4}	14{143}
Max. Operating Pressure ^{*2} MPa{kgf/cm ² }	Head end			9{91.8}	18{184}
	Rod end	Rod type	A	15{153}	18{184}
			B	13.5{138}	18{184}
			C	11{112}	14{143}
Min. Operating Pressure				0.3MPa{3.1kgf/cm ² } less than	
Max. Operating Speed mm/s	Cylinder Bore	32~63		400	
		80~125		300	
		100~250		200	
Min. Operating Speed mm/s				8	
Max. Stroke ^{*3} mm	Cylinder Bore	32		1000	
		40, 50		1200	
		63, 80		1600	
		100~250		2000	
Tolerance Stroke				KS B 8354 A Class ^{*4}	
Accuracy Thead at Rod End				KS B 0211-6g(2 Class)	
Range of Ambient Temperature °C				-10~+80	
Mass kg				Refer to the page J-18	

★ For operating pressure of a double rod type, see the table below.

Max. Operating Pres. of Double Rod Type

Cylinder Bore mm	Operating Pressure MPa{kgf/cm ² }	
	Rod type	
	B	C
32	7{71.4}	-
40~100	7{71.4} 14{143}	7{71.4}
125~250	7{71.4} (14{143})*	7{71.4} (14{143})*

★ In case of operating pressure 14MPa{143kgf/cm²} can load only main rod.

★ Allowable surge pressure means maximum pressure being risen intermittently including surge pressure and it should be operable in terms of strength.

★ It may be the case that the value is limited to less than the value shown in the table due to the buckling strength.

For the maximum stroke permissible from buckling strength see page 7

★ KS B 8354 A Class Tolerance Stroke

Stroke mm	Tolerance mm
~ 100	+ 0.8 0
100~ 250	+ 1.0 0
250~ 630	+ 1.25 0
630~1000	+ 1.4 0
1000~1600	+ 1.6 0
1600~	+ 1.8 0

70/140 Series CJT type KS standard hydraulic cylinder

Model Number Designation

F-	CJT	140	-LA	125	B	100	B	-A	B	D	-E	-11
Special Seals	Series Number	Operating Pressure	Mount- ing	Cylinder Bore mm	Rod type	Stroke mm	Type of Cushioning	Port Direction	Cushionin Direction	Air vent Direction	Option	Design Number
F: Indicate only if fluid with phosphatite ester is used.	CJT type KS standard hydraulic cylinder	70: 7MPa {71.4kgf/cm ² }	SD, LA LB, FA FB, FC FD, FE FF, FY CA, CB TA, TC	40, 50 63, 80 100, 125 140, 150 160, 180 200, 220 250	Series C(Standard type) Indicate necessary stroke by considering maximum stroke allowed.	B: Rod end and Head end with Cushioning R: Rod end with Cushioning H: Head end with Cushioning N: Without Cushioning	(Viewed from rod end) A:Up (Standard) B:Right (Standard) C:Down (Standard) D:Left (Standard) N: No cushionin g valve (Standard)	A:Up (Standard) B:Right (Standard) C:Down (Standard) D:Left (Standard)	B:Right (Standard) A:Up (Standard) C:Down (Standard) D:Down (Standard)	D:Left (Standard) A:Up (Standard) B:Right (Standard) C:Down (Standard)	★1 E:Long rod end screw F:With dust cover (material : nylon terpolin, upper temp. limit 80℃) G:With dust cover (material : neoprene, upper temp. limit 130℃) H: With dust cover (material : silicon glass, upper temp. limit 250℃) K : With lock nut *3 L : With piston rod attachment-knuckle *4 M: With piston rod attachment-forkend *4 N : Double rod type*5	11
		140: 14MPa {143kgf/cm ² }	SD, LA LB, FC FD, FE FF, FY CA, CB TA, TC	32, 40 50, 63 80, 100 125, 140 150, 160 180, 200 220, 250								

★ 1. Optionals can be used in combination. Indicate the symbol for the optional used.
ex. EKL

For double rod type, E, F, G, H and K are applicable to both sides. L or M is only
attached to one side (Main Rod side).

★ 2. A port and a cushioning valve cannot be put in the same direction.

★ 3. If a lock nut(K) is used at the piston rod end use a long screw
type(E).

★ 4. Cylinder bore is not available for more than Dia. 180.

★ 5. Rod type "C" of cylinder bore 32 can't manufacture double rod
"N"

Mounting

Symbol	Name	Illustration of Mounting Type	Symbol	Name	Illustration of Mounting Type
SD	Basic Type		FD	Head-end square flange type	
LA	Right-angle to axis foot type		CA	Detachable eye type	
LB	Axis direction foot type		CB	Detachable clevis type	
FA FE FY	Rod-end rectangular flange type		TA	Rod-end integral trunnion type	
FB FF	Head-end rectangular flange type		TC	Intermediate fixed trunnion type	
FC	Rod-end square flange type				

Standard hydraulic cylinder

70/140 Series CJT type KS standard hydraulic cylinder

Technical Data

- Case of Push (Pressure head side)

Cylinder Bore mm	Effective Area cm ²	Output Power kN{kgf}					Speed at Flow Rate 10 L/min	Flow Rate at Speed 10 mm/s
		1MPa {10.2kgf/cm ² }	3MPa {30.6kgf/cm ² }	7MPa {71.4kgf/cm ² }	10.5MPa {107kgf/cm ² }	14MPa {143kgf/cm ² }		
32	8.0	0.80{81.6}	2.41 {246}	5.63 {574}	8.44 {861}	11.26 {1149}	208	0.5
40	12.6	1.26 {129}	3.77 {385}	8.79 {897}	13.19 {1345}	17.58 {1793}	132	0.8
50	19.6	1.96 {200}	5.89 {601}	13.74 {1401}	20.61 {2102}	27.48 {2803}	85	1.2
63	31.2	3.12 {318}	9.35 {954}	21.81 {2225}	32.71 {3336}	43.62 {4449}	53	1.9
80	50.3	5.03 {613}	15.07 {1537}	35.17 {3587}	52.75 {5381}	70.34 {7175}	33	3.0
100	78.5	7.85 {801}	23.55 {2402}	54.95 {5605}	82.43 {8408}	109.90 {11210}	21	4.7
125	122.7	12.27 {1252}	36.80 {3754}	85.86 {8758}	128.79 {13137}	171.72 {17515}	14	7.4
140	153.9	15.39 {1570}	46.16 {4708}	107.70 {10985}	161.55 {16478}	215.40 {21971}	10.8	9.2
150	176.7	17.67 {1802}	53.01 {5407}	123.70 {12617}	185.55 {18926}	247.40 {25235}	9.4	10.6
160	201.0	20.10 {2050}	60.29 {6150}	140.67 {14348}	211.01 {21523}	281.34 {28697}	8.3	12.1
180	254.3	25.43 {2594}	76.30 {7783}	178.04 {18160}	267.06 {27240}	356.08 {36320}	6.6	15.3
200	314.0	31.40 {3203}	94.20 {9608}	219.80 {22420}	329.70 {33629}	439.60 {44839}	5.3	18.8
220	379.9	37.99 {3875}	113.98 {11626}	265.96 {27128}	398.94 {40692}	531.92 {54256}	4.4	22.8
250	490.6	49.06 {5004}	147.19 {15013}	343.44 {35031}	515.61 {52546}	686.88 {70062}	3.4	29.4

- Case of Pull (Pressure rod side)

Cylinder Bore mm	Rod type	Rod Dia. mm	Effective Area cm ²	Output Power kN{kgf}					Speed at Flow Rate 10 L/min	Flow Rate at Speed 10 mm/s
				1MPa {10.2kgf/cm ² }	3MPa {30.6kgf/cm ² }	7MPa {71.4kgf/cm ² }	10.5MPa {107kgf/cm ² }	14MPa {143kgf/cm ² }		
32	B	18	5.5	0.55{56.1}	1.65 {168}	3.85 {393}	5.78 {590}	7.70 {785}	303	0.3
	C	14	6.5	0.65{66.3}	1.95 {199}	4.55 {464}	6.83 {697}	9.10 {928}	256	0.4
40	A	28	6.4	0.64{65.3}	1.92 {196}	4.48 {457}	6.72 {685}	8.96 {914}	260.5	0.4
	B	22	8.8	0.88{89.8}	2.63 {268}	6.13 {625}	9.20 {938}	12.27 {1252}	189	0.5
	C	18	10.0	1.00 {102}	3.00 {306}	7.00 {714}	10.50 {1071}	14.00 {1428}	167	0.6
50	A	36	9.4	0.94{95.9}	2.82 {288}	6.58 {671}	9.87 {1007}	13.16 {1342}	177.3	0.6
	B	28	13.5	1.35 {138}	4.04 {412}	9.43 {962}	14.14 {1442}	18.86 {1924}	123	0.8
	C	22	15.8	1.58 {161}	4.75 {485}	11.08 {1130}	16.62 {1695}	22.16 {2260}	105	0.9
63	A	45	15.3	1.53 {156}	4.59 {468}	10.71 {1092}	16.07 {1639}	21.42 {2185}	109	0.9
	B	36	21.0	2.10 {214}	6.29 {642}	14.69 {1498}	22.03 {2247}	29.38 {2997}	79	1.3
	C	28	25.0	2.50 {255}	7.50 {765}	17.50 {1785}	26.25 {2678}	35.00 {3570}	67	1.5
80	A	56	25.7	2.57 {262}	7.71 {786}	17.99 {1835}	26.99 {2753}	35.98 {3670}	64.9	1.5
	B	45	34.3	3.43 {350}	10.30 {1051}	24.04 {2452}	36.06 {3678}	48.08 {4904}	49	2.1
	C	36	40.1	4.01 {409}	12.02 {1226}	28.05 {2861}	42.07 {4291}	56.09 {5721}	42	2.4
100	A	70	40.0	4.00 {408}	12.00 {1224}	28.00 {2856}	42.00 {4284}	56.00 {5712}	41.7	2.4
	B	56	53.9	5.39 {550}	16.17 {1649}	37.72 {3847}	56.58 {5771}	75.44 {7695}	31	3.2
	C	45	62.6	6.26 {639}	18.78 {1916}	43.82 {4470}	65.73 {6704}	87.65 {8940}	27	3.8
125	A	90	59.1	5.91 {603}	17.73 {1808}	41.37 {4220}	62.06 {6330}	82.74 {8439}	28.2	3.5
	B	70	84.2	8.42 {859}	25.26 {2577}	58.93 {6011}	88.40 {9017}	117.87 {12023}	20	5.1
	C	56	98.0	9.80 {1000}	29.41 {3000}	68.63 {7000}	102.94 {10500}	137.25 {14000}	17	5.9
140	A	100	75.4	7.54 {769}	22.62 {2307}	52.78 {5384}	79.17 {8075}	105.66 {10767}	22.1	4.5
	B	80	103.6	10.36 {1057}	31.09 {3171}	72.53 {7398}	108.80 {11098}	145.07 {14797}	16	6.2
	C	63	122.7	12.27 {1252}	36.81 {3755}	85.89 {8761}	128.84 {13142}	171.78 {17522}	14	7.4
150	A	106	88.5	8.85 {903}	26.55 {2708}	61.95 {6319}	92.93 {9479}	123.90 {12638}	18.8	5.3
	B	85	120.0	12.00 {1224}	35.99 {3671}	83.98 {8566}	125.97 {12849}	167.96 {17132}	13.9	7.2
	C	67	141.5	14.15 {1443}	42.44 {4329}	99.02 {10100}	148.53 {15150}	198.04 {20200}	11.8	8.5
160	A	110	106.0	10.60 {1081}	31.80 {3244}	74.20 {7568}	111.30 {11353}	148.40 {15137}	15.7	6.4
	B	90	137.4	13.74 {1401}	41.21 {4203}	96.16 {9808}	144.24 {14712}	192.33 {19618}	12	8.2
	C	70	162.5	16.25 {1658}	48.75 {4973}	113.75 {11603}	170.62 {17403}	227.49 {23204}	10.3	9.8
180	A	125	131.6	13.16 {1342}	39.48 {4027}	92.12 {9396}	138.18 {14094}	184.24 {18792}	12.7	7.9
	B	100	175.8	17.58 {1793}	52.75 {5381}	123.09 {12555}	184.63 {18832}	246.18 {25110}	9.5	10.5
	C	80	204.1	20.41 {2082}	61.23 {6245}	142.87 {14573}	214.31 {21860}	285.74 {29145}	8.2	12.2
200	A	140	160.1	16.01 {1633}	48.03 {4899}	112.07 {11431}	168.11 {17147}	224.12 {22860}	10.4	9.6
	B	110	219.0	21.90 {2234}	65.70 {6701}	153.31 {15638}	229.97 {23457}	306.62 {31275}	7.6	13.1
	C	90	250.4	25.04 {2554}	75.12 {7662}	175.29 {17880}	262.94 {26820}	350.58 {35759}	6.7	15.0
220	A	160	178.9	17.89 {1825}	53.67 {5474}	125.23 {12773}	187.85 {19161}	250.46 {25547}	9.3	10.7
	B	125	257.3	25.73 {2624}	77.19 {7873}	180.10 {18370}	270.15 {27555}	360.20 {36740}	6.5	15.4
	C	100	301.4	30.14 {3074}	90.43 {9224}	211.01 {21523}	316.51 {32284}	422.02 {43046}	5.5	18.1
250	A	180	236.3	23.63 {2410}	70.89 {7231}	165.41 {16872}	248.12 {25308}	330.82 {33744}	7.1	14.2
	B	140	336.8	33.68 {3435}	101.03 {10305}	235.74 {24045}	353.60 {36067}	471.47 {48090}	4.9	20.2
	C	110	395.6	39.56 {4035}	118.69 {12106}	276.95 {28249}	415.42 {42373}	553.90 {56498}	4.2	23.7

70/140 Series CJT type KS standard hydraulic cylinder

Mass calculation

* Estimate the mass calculated by the following calculation.

$$[\text{Mass}] = [\text{Primary mass}] + [\text{Additional mass per stroke 100mm} \times \frac{\text{stroke(mm)}}{100}]$$

- Primary mass of mounting type and additional mass per stroke 100mm

Cylinder Bore mm	Rod type	Primary mass kg													Additional mass per stroke 100mm kg
		SD	LA	LB	FA	FB	FC	FD	FE · FY	FF	CA	CB	TA	TC	
32	B	3.3	3.8	3.9	3.5	3.8	3.9	4.2	-	-	3.9	4.0	3.4	3.8	0.8
	C	3.2	3.7	3.8	3.4	3.7	3.8	4.1	-	-	3.8	3.9	3.3	3.7	0.7
40	A	4.4	4.8	4.9	4.7	5.0	5.2	5.4	4.8	5.2	5.0	5.1	4.5	5.0	1.1
	B	4.2	4.6	4.7	4.5	4.8	5.0	5.2	4.6	5.0	4.8	4.9	4.3	4.8	1.0
	C	4.1	4.5	4.6	4.4	4.7	4.9	5.1	4.5	4.9	4.7	4.8	4.2	4.7	0.9
50	A	7.3	8.1	8.1	7.8	8.4	8.7	9.3	8.3	8.9	8.3	8.5	7.4	8.3	1.7
	B	6.8	7.6	7.6	7.3	7.9	8.2	8.8	7.8	8.4	7.8	8.0	6.9	7.8	1.3
	C	6.7	7.5	7.5	7.2	7.8	8.1	8.7	7.7	8.3	7.7	7.9	6.8	7.7	1.2
63	A	10.8	11.7	12.4	11.4	12.5	12.7	13.8	12.1	13.1	13.0	13.7	11.2	12.6	2.4
	B	10.0	10.9	11.6	10.6	11.7	11.9	13.0	11.3	12.3	12.2	12.9	10.4	11.8	1.9
	C	9.9	10.8	11.5	10.5	11.6	11.8	12.9	11.2	12.2	12.1	12.8	10.3	11.7	1.6
80	A	17.0	17.8	19.1	18.0	19.8	19.9	21.6	19.0	20.7	19.8	20.7	17.4	19.2	3.6
	B	15.6	16.4	17.7	16.6	18.4	18.5	20.2	17.6	19.3	18.4	19.3	16.0	17.8	2.9
	C	15.2	16.0	17.3	16.2	18.0	18.1	19.8	17.2	18.9	18.0	18.9	15.6	17.4	2.4
100	A	28.8	30.0	32.1	30.4	33.4	33.3	36.3	32.2	35.6	34.4	35.9	29.6	33.5	5.6
	B	26.1	27.3	29.4	27.7	30.7	30.6	33.6	29.5	32.9	31.7	33.2	26.9	30.8	4.4
	C	25.7	26.9	29.0	27.3	30.3	30.2	33.2	29.1	32.5	31.3	32.8	26.5	30.4	3.8
125	A	53.4	55.5	62.5	55.9	61.3	60.7	66.0	59.1	64.4	63.4	66.4	54.0	60.5	8.9
	B	47.6	49.7	56.7	50.1	55.5	54.9	60.2	53.3	58.6	57.6	60.6	48.2	54.7	7.8
	C	47.2	49.3	56.3	49.7	55.1	54.5	59.8	52.9	58.2	57.2	60.2	47.8	54.3	6.6
140	A	70.5	73.5	83.5	73.6	81.8	80.7	87.0	78.4	85.6	85.6	91.7	72.4	81.2	11.7
	B	63.0	66.0	76.0	66.1	74.3	73.2	79.5	70.9	78.1	78.1	84.2	64.9	73.7	10.4
	C	60.4	63.4	73.4	63.5	71.7	70.6	76.9	68.3	75.5	75.5	81.6	62.3	71.1	8.9
150	A	82.6	89.1	101.0	88.7	97.4	97.0	105.0	94.6	103.0	99.8	104.5	88.9	96.6	12.7
	B	73.7	80.2	92.1	79.8	88.5	88.1	96.1	85.7	94.1	90.9	95.6	80.0	87.7	11.2
	C	70.1	76.6	88.5	76.2	84.9	84.5	92.5	82.1	90.5	87.3	92.0	76.4	84.1	9.6
160	A	98.4	102.6	115.2	103.5	114.7	113.0	124.2	109.0	120.2	120.9	129.8	100.7	114.7	13.9
	B	89.4	93.6	106.2	94.5	105.7	104.0	115.2	100.0	111.2	111.9	120.8	91.7	105.7	12.5
	C	86.1	90.3	102.9	91.2	102.4	100.7	111.9	96.7	107.9	108.6	117.5	88.4	102.4	10.6
180	A	126.1	141.8	159.1	142.6	156.9	155.0	169.2	151.4	165.7	164.4	179.4	-	153.0	19.1
	B	111.7	127.4	144.7	128.2	142.5	140.6	154.8	137.0	151.3	150.0	165.0	-	138.6	17.9
	C	106.7	122.4	139.7	123.2	137.5	135.6	149.8	132.0	146.3	145.0	160.0	-	133.6	15.7
200	A	162.1	170.7	199.0	172.3	192.2	190.5	210.4	184.3	204.2	209.2	228.6	-	178.0	23.3
	B	141.5	150.1	178.4	151.7	171.6	169.9	189.8	163.7	183.6	188.6	208.0	-	157.4	21.7
	C	136.4	145.0	173.3	146.6	166.5	164.8	184.7	158.6	178.5	183.5	202.9	-	152.3	19.0
220	A	238.0	247.2	295.0	252.3	279.7	276.4	303.8	270.8	298.2	297.7	322.7	-	273.9	33.8
	B	208.4	217.6	265.4	222.7	250.1	246.8	284.2	241.2	268.6	268.1	293.1	-	244.3	26.4
	C	198.5	207.7	255.5	212.8	240.2	236.9	264.3	231.3	258.7	258.2	283.2	-	234.4	23.0
250	A	335.7	349.1	416.2	353.2	390.7	385.6	422.8	376.9	415.1	409.4	435.0	-	373.0	40.8
	B	291.2	304.6	371.7	308.7	346.2	341.1	378.3	332.4	370.6	364.9	390.5	-	328.5	32.8
	C	280.8	294.2	361.3	298.3	335.8	330.7	367.9	322.0	360.2	354.5	380.1	-	318.1	28.4

Standard hydraulic cylinder

70/140 Series CJT type KS standard hydraulic cylinder

Maximum Stroke Permissible from Buckling Strength

● Calculation of Maximum Stroke

1. Obtain the coefficient "n" from the table on the right.
2. Obtain the maximum mounting length "L" by applying the figures such as cylinder bore, rod diameter, pressure and coefficient to the following figure.
3. Calculate drawn mounting length "Lo" from the dimensions and maximum stroke "S" from $S=L-L_o$

(Ex.) Calculating the maximum stroke when the standard cylinder with cylinder bore 100mm, rod diameter 56mm and mounting of TC (Intermediate Trunnion) type is used at pressure of 80 kgf/cm²

From the table on the right: $n=1$

From the following table: $L=1980$

From the outer dimensions and piston rod attachment

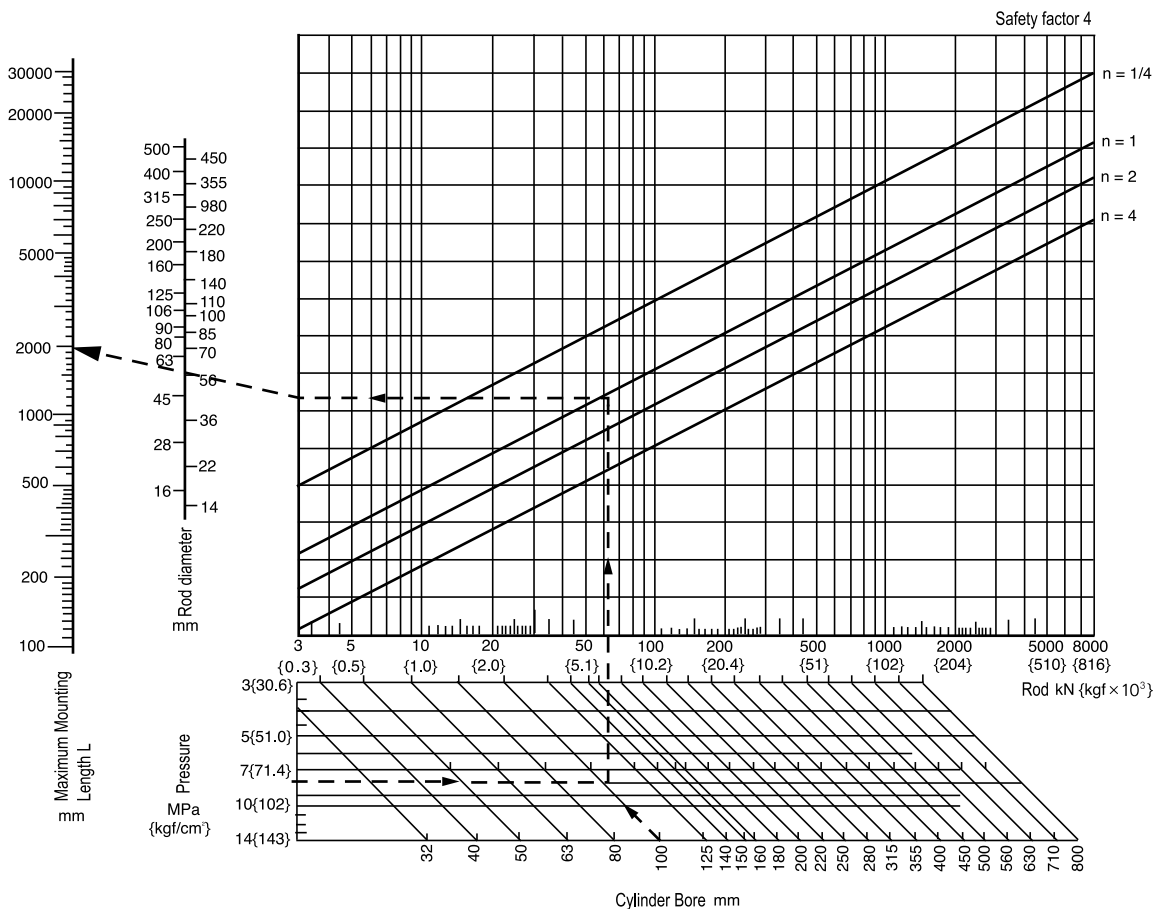
$$L_o = (156 + 145) + S/2$$

$$\text{Therefore } S = L - L_o = 1980 - [(156 + 145) + S/2]$$

$$\text{Thus } S \approx 1120 \text{ mm}$$

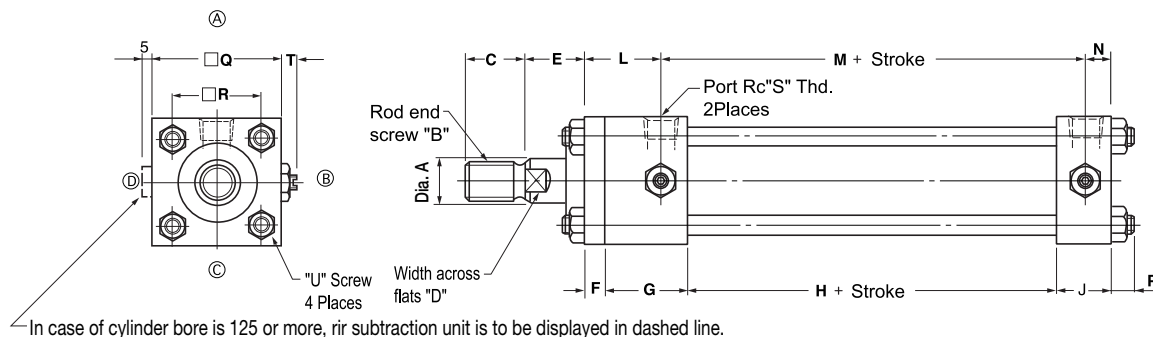
Mounting	Operating Condition	Coefficient n	Mounting	Operating Condition	Coefficient n
LA Type LB Type		1/4	FB Type		1/4
		2	FD Type		2
		4	FF Type		4
FA Type		1/4	TA Type		1
FC Type		2	TC Type		
FE Type		4	CA Type		
FY Type			CA Type		

$S = L - L_o$
 S : Stroke mm
 L : Stretched mounting length mm
 L_o : Drawn mounting length mm
 (Note) Refer to the dimensions and piston rod attachment for L_o .



70/140 Series CJT type KS standard hydraulic cylinder

SD: Basic Type ... Operating Pressure 7 · 14MPa {71.4 · 143kgf/cm²}

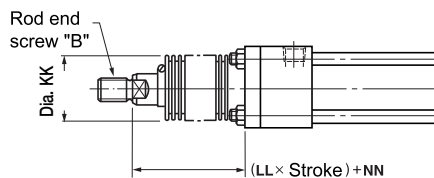


With dust cover

F: With dust cover (material : nylon terpolin, upper temp. limit 80℃)

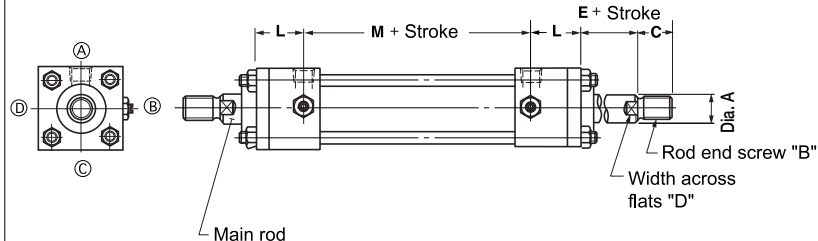
G: With dust cover(material : neoprene, upper temp. limit 130℃)

H: With dust cover (material : silicon glass, upper temp. limit 250℃)



Option

Double rod type "N"



Note) The mounting type FE has a different dimension, "LL" with other types

Note) Please refer to the page J-15 operating pressuer of double rod type

Cylinder Bore	A			B			C ^{*1}			D			KK		E	F	G	H	J	L	M	N	P	Q	R	S	T	U	LL	NN
	Rod type			Rod type			Rod type			Rod type			Rod type																	
	“A”	“B”	“C”	“A”	“B”	“C”	“A”	“B”	“C”	“A”	“B”	“C”	“B”	“C”																
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	46	46	30	11	49	46	35	39	88	14	9	58	40	3/8	8	M8 × 1.0	1/3.5	45 (45)
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	52	48	30	11	49	46	35	39	88	14	11	65	45	3/8	8	M10 × 1.25		45 (43)
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	59	52	30	13	56	46	40	44	96	15	13	80	55	1/2	8	M12 × 1.25		45 (40)
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	69	59	35	15	44	70	34	42	104	17	14.5	94	65	1/2	8	M14 × 1.5	1/4	55 (50)
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	81	69	35	18	50	78	38	48	118	18	16.5	110	82	3/4	8	M16 × 1.5		55 (49)
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	100	81	40	20	57	74	41	54	120	18	19.5	138	103	3/4	8	M20 × 1.5		55 (47)
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	118	100	45	24	67	78	51	63	134	23	23	168	125	1	9	M24 × 1.5	1/5	65 (56)
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	129	106	50	26	67	86	51	65	142	23	25	188	141	1	9	M27 × 1.5		65 (54)
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	135	112	50	28	67	91	54	67	147	26	25	196	148	1	9	M27 × 1.5		65 (54)
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	140	118	55	31	65	98	59	66	158	29	28.5	215	160	1	7.5	M30 × 1.5	1/6	65 (55)
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	151	129	55	33	75	106	61	75	172	28	27	235	182	1 1/4	7.5	M30 × 1.5		65 (52)
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	170	140	55	37	85	110	69	85	184	32	29	262	200	1 1/2	9	M33 × 1.5		65 (51)
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	183	151	60	41	85	110	69	89	184	32	34	292	225	1 1/2	9	M39 × 1.5	1/6	80 (63)
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	205	170	65	46	105	110	85	106	200	40	37	325	250	2	9	M42 × 1.5		80 (61)

* 1. In case of long rod end screw, displayed with "()"

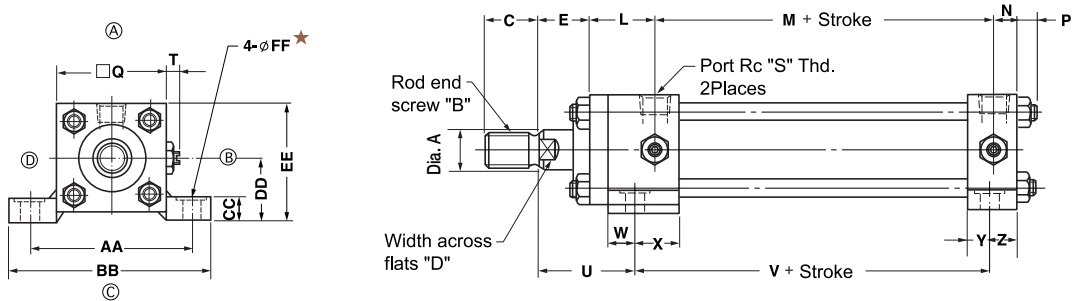
* 2. If the demension "LL" calculated has fractions below decimal point, correct to the unit of 0.5mm.

* 3. In case of FE type, displayed with "()"

Standard hydraulic cylinder

70/140 Series CJT type KS standard hydraulic cylinder

LA: Right-angle to axis foot type ... Operating Pressure 7 · 14MPa{71.4 · 143kgf/cm²}

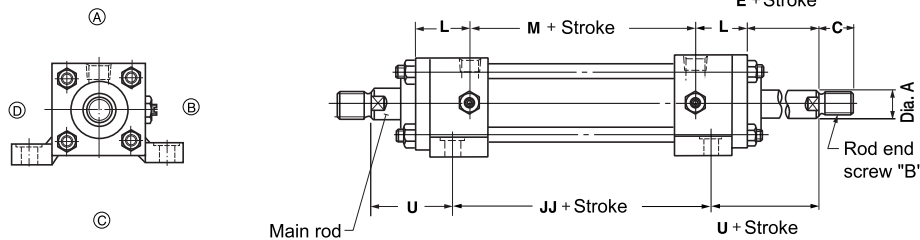


★ Use socket head cap screws for mounting.

Note) When a type with cylinder bore of 32~100 is used with the port direction ③ or ④. The pipe fitting may interfere with a cylinder mounting bolt. See the notes on operation on page 4 for details.

Option

Double rod type "N"



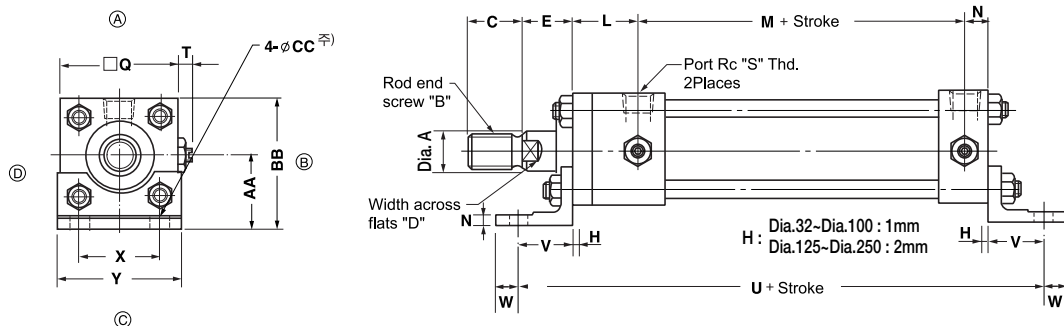
Note) Please refer to the page J-15 operating pressuer of double rod type.

Cylinder Bore	A			B			C ^{★1}			D			E	L	M	N	P	Q	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	JJ
	Rod type			Rod type			Rod type			Rod type																							
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	30	39	88	14	9	58	3/8	8	57	98	16	33	19	16	88	109	14	35 ± 0.15	64	11	112
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	30	39	88	14	11	65	3/8	8	57	98	16	33	19	16	95	118	14	37.5 ± 0.15	70	11	112
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	30	44	96	15	13	80	1/2	8	60	108	17	39	23	17	115	145	17	45 ± 0.15	85	14	124
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	35	42	104	17	14.5	94	1/2	8	71	106	21	23	13	21	132	165	19	50 ± 0.15	97	18	116
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	35	48	118	18	16.5	110	3/4	8	74	124	21	29	17	21	155	190	25	60 ± 0.25	115	18	136
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	40	54	120	18	19.5	138	3/4	8	85	122	25	32	16	25	190	230	27	71 ± 0.25	140	22	138
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	45	63	134	23	23	168	1	9	99	136	30	37	21	30	224	272	32	85 ± 0.25	169	26	152
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	50	65	142	23	25	188	1	9	106	144	30	37	21	30	250	300	35	95 ± 0.25	189	26	160
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	50	67	147	26	25	196	1	9	111	146	33	34	21	33	270	320	37	106 ± 0.25	204	30	159
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	55	66	158	29	28.5	215	1	7.5	122	150	36	29	23	36	285	345	42	112 ± 0.25	219.5	33	156
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	55	75	172	28	27	235	1 1/4	7.5	123	172	35	40	26	35	315	375	47	125 ± 0.25	242.5	33	186
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	55	85	184	32	29	262	1 1/2	9	131	186	39	46	30	39	355	425	52	140 ± 0.25	271	36	202
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	60	89	184	32	34	292	1 1/2	9	140	186	39	46	30	39	395	475	52	150 ± 0.25	296	42	202
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	65	106	200	40	37	325	2	9	158	206	47	58	38	47	425	515	57	170 ± 0.25	332.5	45	226

★ 1. In case of long rod end screw, displayed with "()"

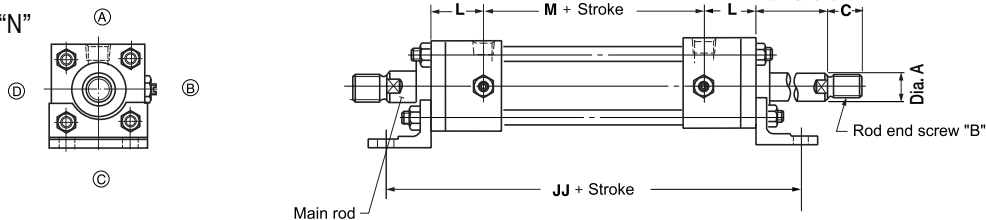
70/140 Series CJT type KS standard hydraulic cylinder

LB: Axial direction foot type ... Operating Pressure 7 · 14MPa{71.4 · 143kgf/cm²}



Option

Double rod type "N"



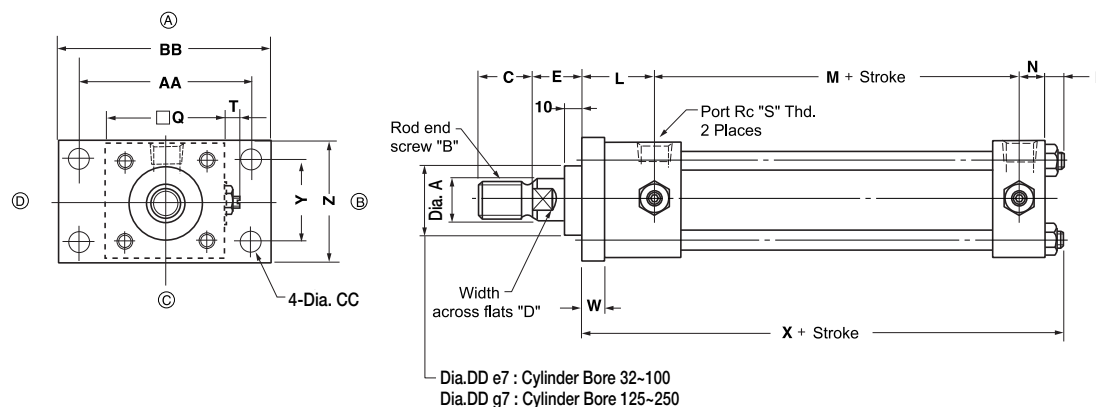
Note) Please refer to the page J-15 operating pressuer of double rod type.

Cylinder Bore	A			B			C*1			D			E	L	M	N	Q	S	T	U	V	W	X	Y	Z	AA	BB	CC	JJ
	Rod type			Rod type			Rod type			Rod type																			
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"																	
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	30	39	88	14	58	3⁄8	8	205	32	13	40	63	7.5	40 ± 0.15	69	11	230
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	30	39	88	14	65	3⁄8	8	205	32	13	46	69	7.5	43 ± 0.15	75.5	11	230
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	30	44	96	15	80	1⁄2	8	225	35	15	58	85	7.5	50 ± 0.15	90	14	254
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	35	42	104	17	94	1⁄2	8	247	42	18	65	98	11.5	60 ± 0.15	107	18	272
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	35	48	118	18	110	3⁄4	8	284	50	20	87	118	11.5	72 ± 0.25	127	18	314
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	40	54	120	18	138	3⁄4	8	302	55	23	109	150	12.5	85 ± 0.25	154	22	338
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	45	63	134	23	168	1	9	352	66	29	130	175	14.5	105 ± 0.25	189	26	397
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	50	65	142	23	188	1	9	370	70	30	145	195	17.5	115 ± 0.25	209	26	412
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	50	67	147	26	196	1	9	390	75	30	155	210	17.5	123 ± 0.25	221	30	431
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	55	66	158	29	215	1	7.5	403	75	35	170	225	17.5	132 ± 0.25	239.5	33	440
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	55	75	172	28	235	1¼	7.5	445	85	40	185	243	19.5	148 ± 0.25	265.5	33	492
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	55	85	184	32	262	1½	9	497	98	40	206	272	24.5	165 ± 0.25	296	36	550
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	60	89	184	32	292	1½	9	535	115	45	230	310	29.5	185 ± 0.25	331	42	592
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	65	106	200	40	325	2	9	606	130	50	250	335	34.5	208 ± 0.25	370.5	45	672

★ 1. In case of long rod end screw, displayed with "()"

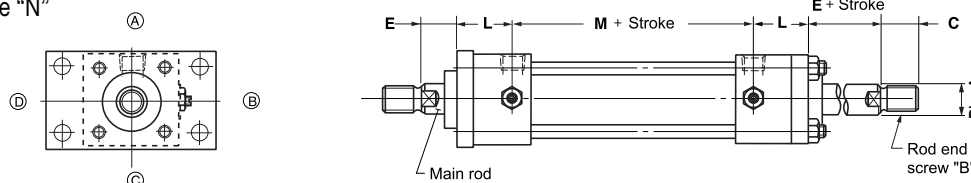
70/140 Series CJT type KS standard hydraulic cylinder

FA: Rod-end rectangular flange Type ... Operating Pressure 7MPa{71.4kgf/cm²}



Option

Double rod type "N"



Note) Please refer to the page J-15 operating pressuer of double rod type.

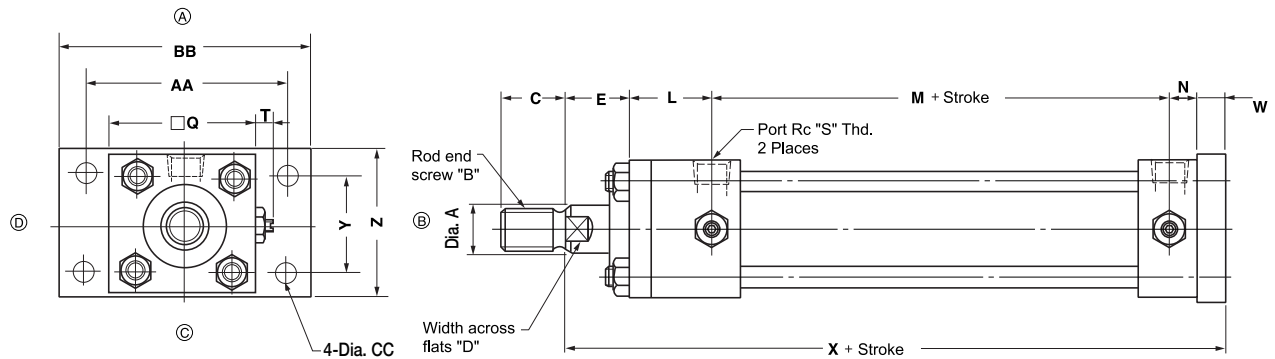
Cylinder Bore	A			B			C ^{*1}			D			DD			E	L	M	N	P	Q	S	T	W	X	Y	Z	AA	BB	C/C
	Rod type			Rod type			Rod type			Rod type			Rod type																	
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"															
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	-	34	34	30	39	88	14	9	58	¾	8	11	150	40	63	88	109	11
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	46	40	36	30	39	88	14	11	65	¾	8	11	152	46	69	95	118	11
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	55	46	40	30	44	96	15	13	80	½	8	13	168	58	85	115	145	14
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	65	55	46	35	42	104	17	14.5	94	½	8	15	177.5	65	98	132	165	18
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	80	65	55	35	48	118	18	16.5	110	¾	8	18	200.5	87	118	155	190	18
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	95	80	65	40	54	120	18	19.5	138	¾	8	20	211.5	109	150	190	230	22
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	115	95	80	45	63	134	23	23	168	1	9	24	243	130	175	224	272	26
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	125	105	85	50	65	142	23	25	188	1	9	26	255	145	195	250	300	26
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	135	110	90	50	67	147	26	25	196	1	9	28	265	155	210	270	320	30
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	140	115	95	55	66	158	29	28.5	215	1	7.5	31	281.5	170	225	285	345	33
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	150	125	105	55	75	172	28	27	235	1¼	7.5	33	302	185	243	315	375	33
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	170	140	115	55	85	184	32	29	262	1½	9	37	330	206	272	355	425	36
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	195	150	125	60	89	184	32	34	292	1½	9	41	339	230	310	395	475	42
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	215	170	140	65	106	200	40	37	325	2	9	46	383	250	335	425	515	45

★ 1. In case of long rod end screw, displayed with “()”

CJT 70/140 Type Hydraulic Cylinder

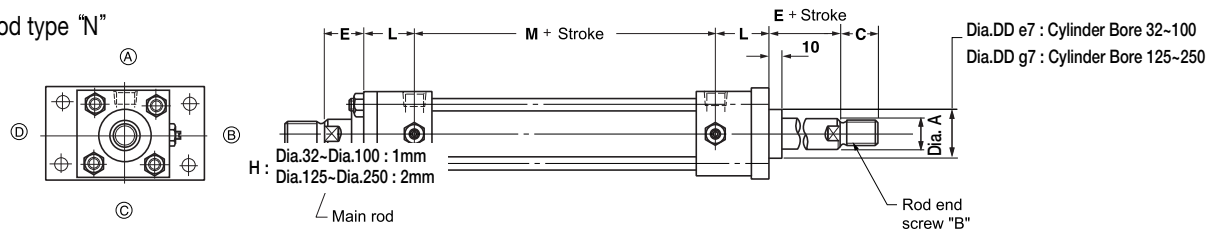
70/140 Series CJT type KS standard hydraulic cylinder

FB: Head-end rectangular flange Type ... Operating Pressure 7MPa {71.4kgf/cm²}



Option

Double rod type "N"



Note) Please refer to the page J-15 operating pressuer of double rod type.

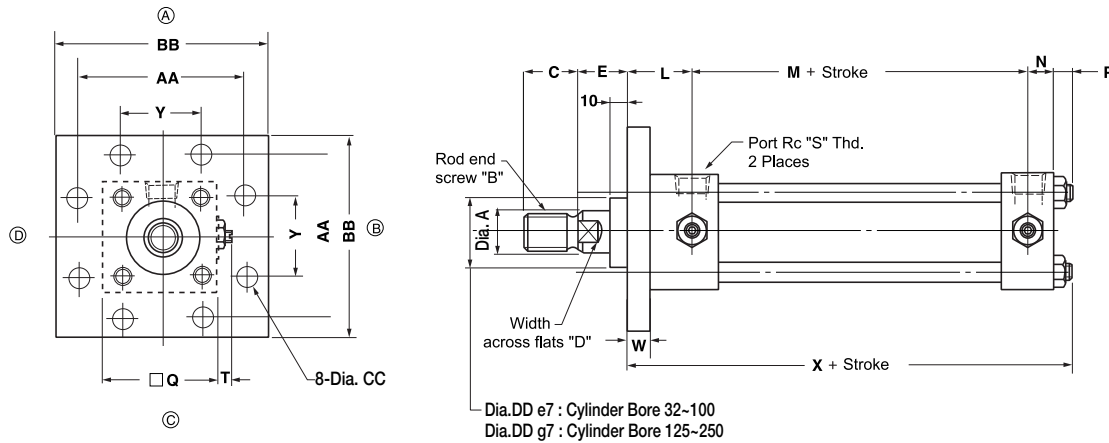
Cylinder Bore	A			B			C*1			D			DD			E	L	M	N	Q	S	T	W	X	Y	Z	AA	BB	C
	Rod type			Rod type			Rod type			Rod type			Rod type			E	L	M	N	Q	S	T	W	X	Y	Z	AA	BB	C
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"														
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	-	34	34	30	39	88	14	58	3/8	8	11	182	40	63	88	109	11
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	46	40	36	30	39	88	14	65	3/8	8	11	182	46	69	95	118	11
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	55	46	40	30	44	96	15	80	1/2	8	13	198	58	85	115	145	14
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	65	55	46	35	42	104	17	94	1/2	8	15	213	65	98	132	165	18
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	80	65	55	35	48	118	18	110	3/4	8	18	237	87	118	155	190	18
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	95	80	65	40	54	120	18	138	3/4	8	20	252	109	150	190	230	22
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	115	95	80	45	63	134	23	168	1	9	24	289	130	175	224	272	26
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	125	105	85	50	65	142	23	188	1	9	26	306	145	195	250	300	26
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	135	110	90	50	67	147	26	196	1	9	28	318	155	210	270	320	30
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	140	115	95	55	66	158	29	215	1	7.5	31	339	170	225	285	345	33
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	150	125	105	55	75	172	28	235	1 1/4	7.5	33	363	185	243	315	375	33
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	170	140	115	55	85	184	32	262	1 1/2	9	37	393	206	272	355	425	36
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	195	150	125	60	89	184	32	292	1 1/2	9	41	406	230	310	395	475	42
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	215	170	140	65	106	200	40	325	2	9	46	457	250	335	425	515	45

★ 1. In case of long rod end screw, displayed with "()"

Standard hydraulic cylinder

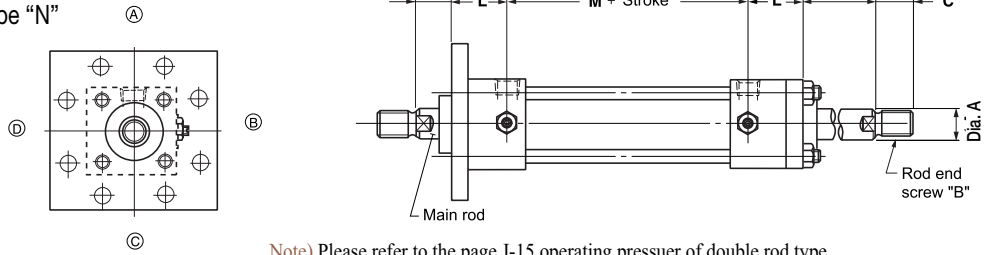
70/140 Series CJT type KS standard hydraulic cylinder

FC: Rod-end square flange type ... Operating Pressure 7·14MPa{71.4 · 143kgf/cm²}



Option

Double rod type "N"



Note) Please refer to the page J-15 operating pressuer of double rod type.

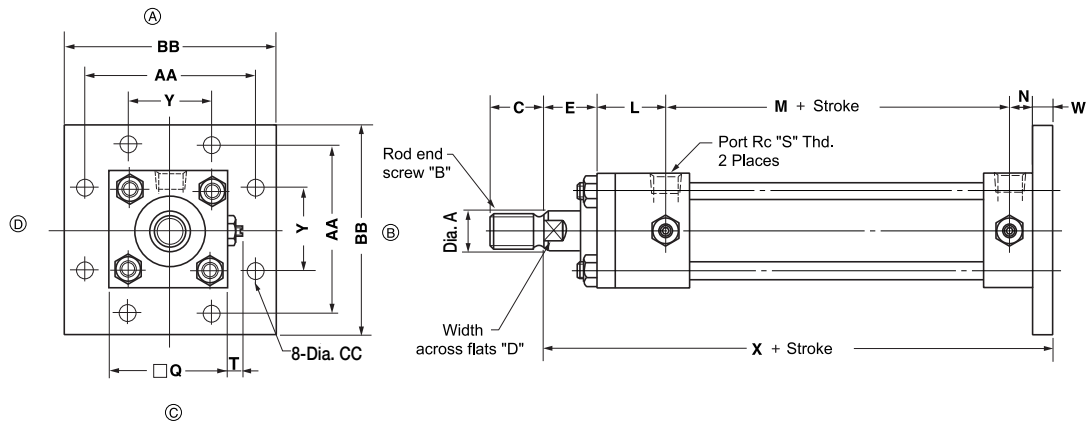
Cylinder Bore	A			B			C*1			D			DD			E	L	M	N	P	Q	S	T	W	X	Y	AA	BB	C C
	Rod type			Rod type			Rod type			Rod type			Rod type																
	“A”	“B”	“C”	“A”	“B”	“C”	“A”	“B”	“C”	“A”	“B”	“C”	“A”	“B”	“C”														
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	-	34	34	30	39	88	14	9	58	3⁄8	8	11	150	40	88	109	11
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	46	40	36	30	39	88	14	11	65	3⁄8	8	11	152	46	95	118	11
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	55	46	40	30	44	96	15	13	80	1⁄2	8	13	168	58	115	145	14
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	65	55	46	35	42	104	17	14.5	94	1⁄2	8	15	177.5	65	132	165	18
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	80	65	55	35	48	118	18	16.5	110	3⁄4	8	18	200.5	87	155	190	18
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	95	80	65	40	54	120	18	19.5	138	3⁄4	8	20	211.5	109	190	230	22
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	115	95	80	45	63	134	23	23	168	1	9	24	243	130	224	272	26
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	125	105	85	50	65	142	23	25	188	1	9	26	255	145	250	300	26
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	135	110	90	50	67	147	26	25	196	1	9	28	265	155	270	320	30
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	140	115	95	55	66	158	29	28.5	215	1	7.5	31	281.5	170	285	345	33
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	150	125	105	55	75	172	28	27	235	1¼	7.5	33	302	185	315	375	33
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	170	140	115	55	85	184	32	29	262	1½	9	37	330	206	355	425	36
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	195	150	125	60	89	184	32	34	292	1½	9	41	339	230	395	475	42
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	215	170	140	65	106	200	40	37	325	2	9	46	383	250	425	515	45

★ 1. In case of long rod end screw, displayed with "()"

CJT 35/140 type
hydraulic cylinder

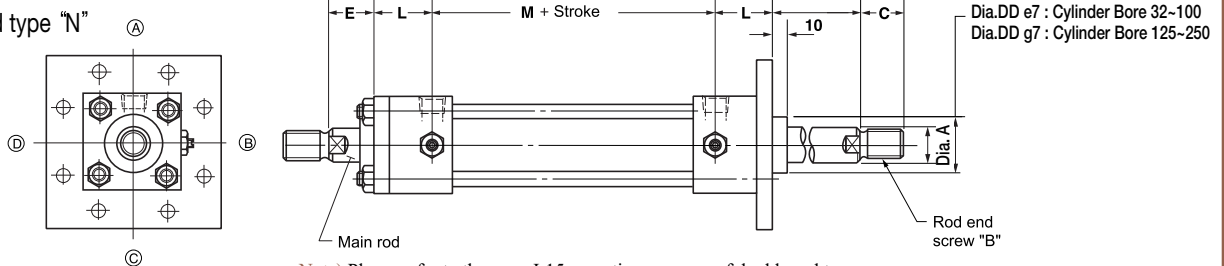
70/140 Series CJT type KS standard hydraulic cylinder

FD: Head-end square flange type ... Operating Pressure $7 \cdot 14\text{MPa}\{71.4 \cdot 143\text{kgf/cm}^2\}$



Option

Double rod type "N"



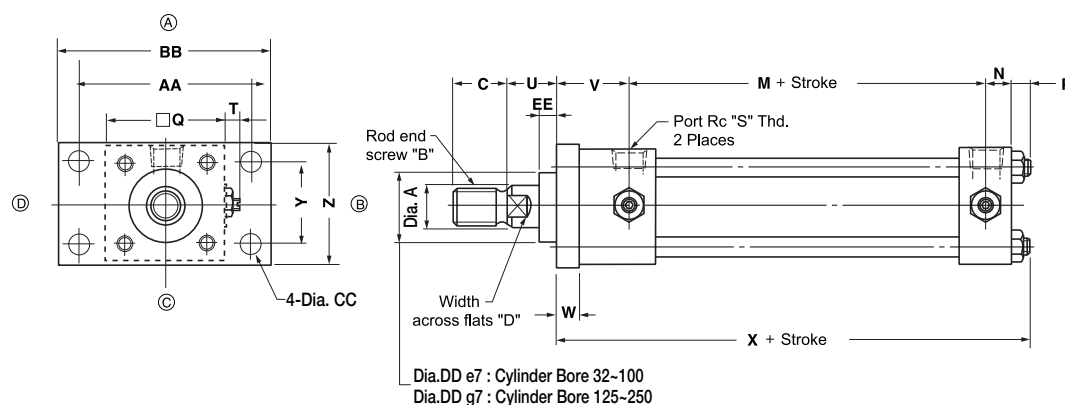
Note) Please refer to the page J-15 operating pressuer of double rod type.

Cylinder Bore	A			B			C ^{*1}			D			DD			E	L	M	N	Q	S	T	W	X	Y	AA	BB	C
	Rod type			Rod type			Rod type			Rod type			Rod type			E	L	M	N	Q	S	T	W	X	Y	AA	BB	C
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"													
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	-	34	34	30	39	88	14	58	3/8	8	11	182	40	88	109	11
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	46	40	36	30	39	88	14	65	3/8	8	11	182	46	95	118	11
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	55	46	40	30	44	96	15	80	1/2	8	13	198	58	115	145	14
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	65	55	46	35	42	104	17	94	1/2	8	15	213	65	132	165	18
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	80	65	55	35	48	118	18	110	3/4	8	18	237	87	155	190	18
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	95	80	65	40	54	120	18	138	3/4	8	20	252	109	190	230	22
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	115	95	80	45	63	134	23	168	1	9	24	289	130	224	272	26
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	125	105	85	50	65	142	23	188	1	9	26	306	145	250	300	26
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	135	110	90	50	67	147	26	196	1	9	28	318	155	270	320	30
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	140	115	95	55	66	158	29	215	1	7.5	31	339	170	285	345	33
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	150	125	105	55	75	172	28	235	1 1/4	7.5	33	363	185	315	375	33
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	170	140	115	55	85	184	32	262	1 1/2	9	37	393	206	355	425	36
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	195	150	125	60	89	184	32	292	1 1/2	9	41	406	230	395	475	42
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	215	170	140	65	106	200	40	325	2	9	46	457	250	425	515	45

★ 1. In case of long rod end screw, displayed with "()"

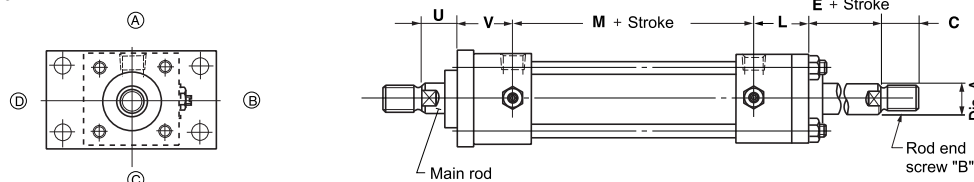
70/140 Series CJT type KS standard hydraulic cylinder

FE: Rod-end rectangular flange Type ... Operating Pressure 7 · 14MPa {71.4 · 143kgf/cm²}



Option

Double rod type "N"



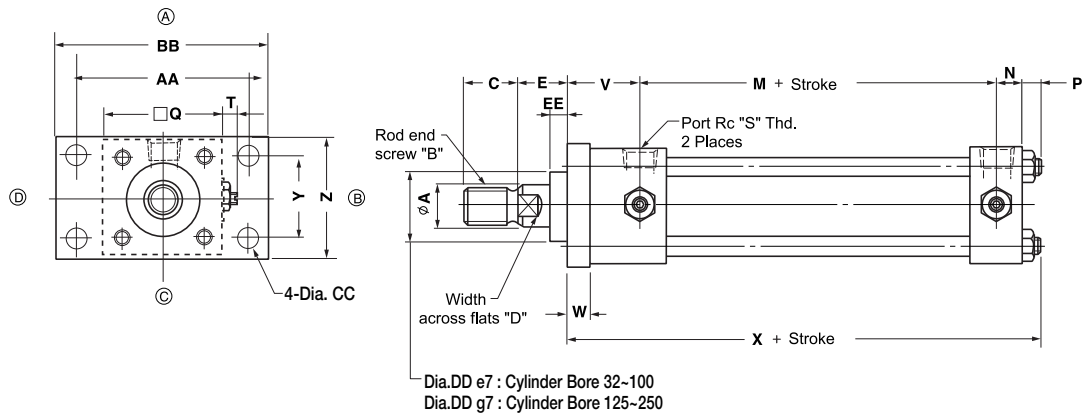
Note) Please refer to the page J-15 operating pressuer of double rod type.

Cylinder Bore	A			B			C ^{*1}			D			DD			E	L	M	N	P	Q	S	T	U	V	W	X	Y	Z	AA	BB	C C	EE
	Rod type			Rod type			Rod type			Rod type			Rod type																				
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"																		
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	-	34	34	30	39	88	14	9	58	⅜	8	28	41	13	152	40	63	88	109	11	8
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	46	40	36	30	39	88	14	11	65	⅜	8	28	41	13	154	46	69	95	118	11	8
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	55	46	40	30	44	96	15	13	80	½	8	25	49	18	173	58	85	115	145	14	5
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	65	55	46	35	42	104	17	14.5	94	½	8	30	47	20	182.5	65	98	132	165	18	5
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	80	65	55	35	48	118	18	16.5	110	¾	8	29	54	24	206.5	87	118	155	190	18	4
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	95	80	65	40	54	120	18	19.5	138	¾	8	32	62	28	219.5	109	150	190	230	22	2
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	115	95	80	45	63	134	23	23	168	1	9	36	72	33	252	130	175	224	272	26	1
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	-	-	-	50	65	142	23	25	188	1	9	39	76	37	266	145	195	250	300	26	-
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	-	-	-	50	67	147	26	25	196	1	9	39	78	39	276	155	210	270	320	30	-
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	-	-	-	55	66	158	29	28.5	215	1	7.5	45	76	41	291.5	170	225	285	345	33	-
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	-	-	-	55	75	172	28	27	235	1¼	7.5	42	88	46	315	185	243	315	375	33	-
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	-	-	-	55	85	184	32	29	262	1½	9	41	99	51	344	206	272	355	425	36	-
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	-	-	-	60	89	184	32	34	292	1½	9	43	106	58	356	230	310	395	475	42	-
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	-	-	-	65	106	200	40	37	325	2	9	46	125	65	402	250	335	425	515	45	-

★ 1. In case of long rod end screw, displayed with “()”

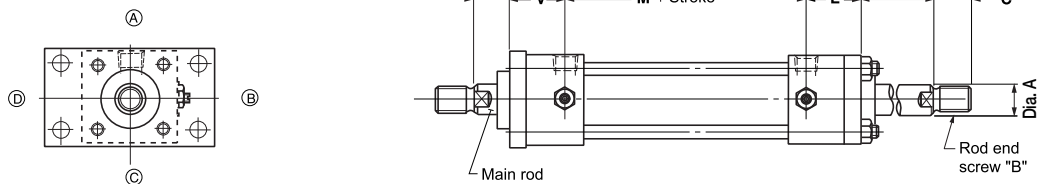
70/140 Series CJT type KS standard hydraulic cylinder

FY: Rod-end rectangular flange Type ... Operating Pressure 7 · 14MPa {71.4 · 143kgf/cm²}



Option

Double rod type "N"



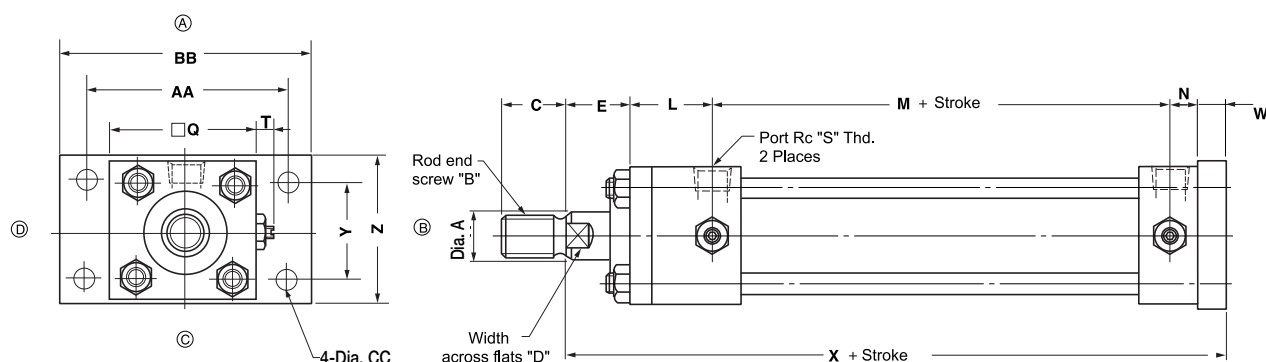
(Note) Please refer to the page J-15 operating pressuer of double rod type.

Cylinder Bore	A			B			C ^{*1}			D			DD			E	L	M	N	P	Q	S	T	V	W	X	Y	Z	AA	BB	C	EE
	Rod type			Rod type			Rod type			Rod type			Rod type			E	L	M	N	P	Q	S	T	V	W	X	Y	Z	AA	BB	C	EE
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"																	
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	-	34	34	30	39	88	14	9	58	3/8	8	41	13	152	40	63	88	109	11	8
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	46	40	36	30	39	88	14	11	65	3/8	8	41	13	154	46	69	95	118	11	8
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	55	46	40	30	44	96	15	13	80	1/2	8	49	18	173	58	85	115	145	14	10
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	65	55	46	35	42	104	17	14.5	94	1/2	8	47	20	182.5	65	98	132	165	18	10
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	80	65	55	35	48	118	18	16.5	110	3/4	8	54	24	206.5	87	118	155	190	18	10
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	95	80	65	40	54	120	18	19.5	138	3/4	8	62	28	219.5	109	150	190	230	22	10
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	115	95	80	45	63	134	23	23	168	1	9	72	33	252	130	175	224	272	26	10
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	125	105	85	50	65	142	23	25	188	1	9	76	37	266	145	195	250	300	26	10
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	135	110	90	50	67	147	26	25	196	1	9	78	39	276	155	210	270	320	30	10
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	140	115	95	55	66	158	29	28.5	215	1	7.5	76	41	291.5	170	225	285	345	33	10
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	150	125	105	55	75	172	28	27	235	1 1/4	7.5	88	46	315	185	243	315	375	33	10
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	170	140	115	55	85	184	32	29	262	1 1/2	9	99	51	344	206	272	355	425	36	10
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	195	150	125	60	89	184	32	34	292	1 1/2	9	106	58	356	230	310	395	475	42	10
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	215	170	140	65	106	200	40	37	325	2	9	125	65	402	250	335	425	515	45	10

★ 1. In case of long rod end screw, displayed with "()"

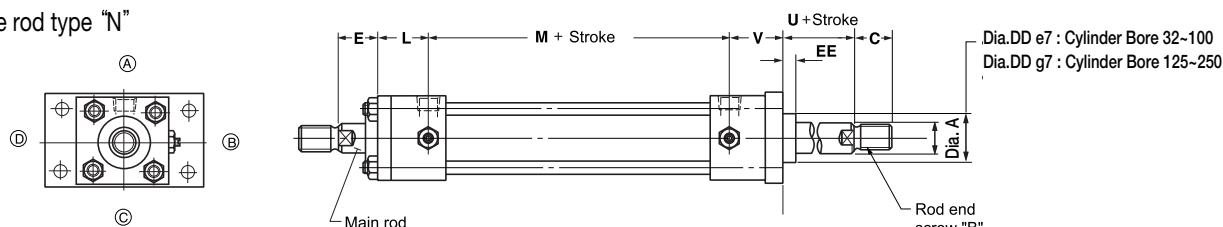
70/140 Series CJT type KS standard hydraulic cylinder

FF: Rod-end rectangular flange Type ... Operating Pressure 7 · 14MPa {71.4 · 143kgf/cm²}



Option

Double rod type "N"



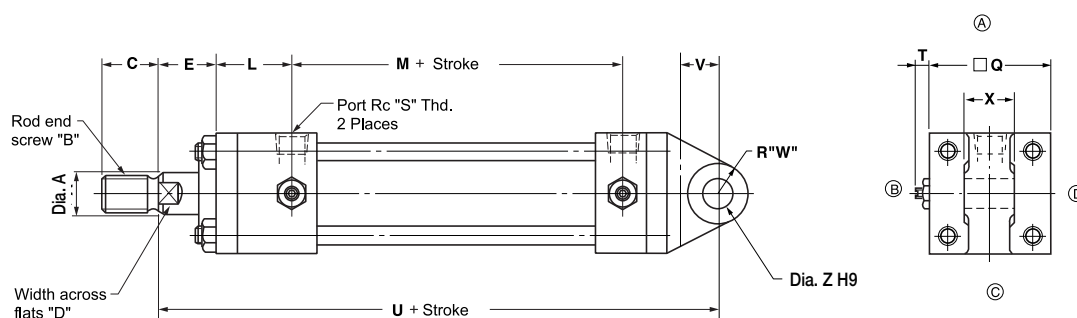
Note) Please refer to the page J-15 operating pressuer of double rod type.

Cylinder Bore	A			B			C ^{*1}			D			DD		E	L	M	N	Q	S	T	U	V	W	X	Y	Z	AA	BB	C C	EE
	Rod type			Rod type			Rod type			Rod type			Rod type																		
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"B"	"C"																	
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	34	34	30	39	88	14	58	¾	8	28	41	13	184	40	63	88	109	11	8
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	40	36	30	39	88	14	65	¾	8	28	41	13	184	46	69	95	118	11	8
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	46	40	30	44	96	15	80	½	8	25	49	18	203	58	85	115	145	14	5
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	55	46	35	42	104	17	94	½	8	30	47	20	218	65	98	132	165	18	5
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	65	55	35	48	118	18	110	¾	8	29	54	24	243	87	118	155	190	18	4
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	80	65	40	54	120	18	138	¾	8	32	62	28	260	109	150	190	230	22	2
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	95	80	45	63	134	23	168	1	9	36	72	33	298	130	175	224	272	26	1
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	-	-	50	65	142	23	188	1	9	39	76	37	317	145	195	250	300	26	-
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	-	-	50	67	147	26	196	1	9	39	78	39	329	155	210	270	320	30	-
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	-	-	55	66	158	29	215	1	7.5	45	76	41	349	170	225	285	345	33	-
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	-	-	55	75	172	28	235	1¼	7.5	42	88	46	376	185	243	315	375	33	-
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	-	-	55	85	184	32	262	1½	9	41	99	51	407	206	272	355	425	36	-
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	-	-	60	89	184	32	292	1½	9	43	106	58	423	230	310	395	475	42	-
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	-	-	65	106	200	40	325	2	9	46	125	65	476	250	335	425	515	45	-

★ 1. In case of long rod end screw, displayed with “()”

70/140 Series CJT type KS standard hydraulic cylinder

CA: Detachable eye type ... Operating Pressure 7 · 14MPa{71.4 · 143kgf/cm²}



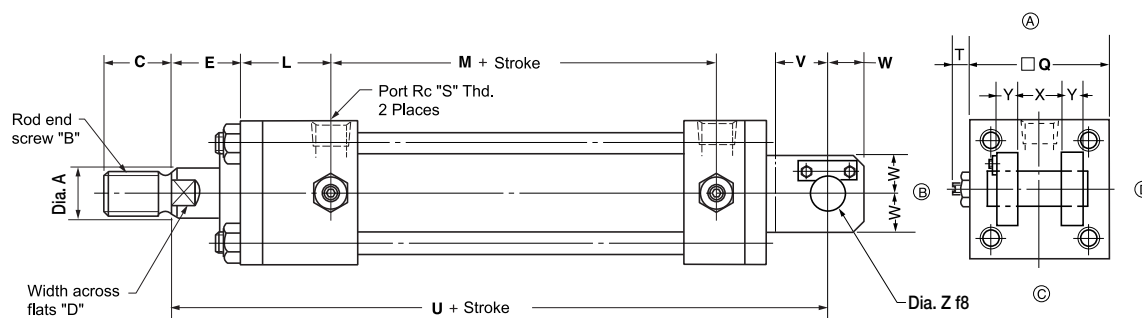
Cylinder Bore	A			B			C ^{*1}			D			E	L	M	Q	S	T	U	V	W	X	Z
	Rod type			Rod type			Rod type			Rod type													
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"											
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	30	39	88	58	3⁄8	8	209	20	16	25 -0.1 -0.4	16
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	30	39	88	65	3⁄8	8	209	20	16	25 -0.1 -0.4	16
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	30	44	96	80	1⁄2	8	230	25	20	31.5 -0.1 -0.4	20
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	35	42	104	94	1⁄2	8	261	40	31.5	40 -0.1 -0.4	31.5
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	35	48	118	110	3⁄4	8	291	40	31.5	40 -0.1 -0.4	31.5
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	40	54	120	138	3⁄4	8	316	50	40	50 -0.1 -0.4	40
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	45	63	134	168	1	9	365	62	55	63 -0.1 -0.4	50
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	50	65	142	188	1	9	400	79	65	80 -0.1 -0.6	63
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	50	67	147	196	1	9	412	82	65	80 -0.1 -0.6	63
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	55	66	158	215	1	7.5	445	89	75	80 -0.1 -0.6	71
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	55	75	172	235	1¼	7.5	480	100	80	100 -0.1 -0.6	80
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	55	85	184	262	1½	9	526	115	90	125 -0.1 -0.6	90
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	60	89	184	292	1½	9	550	125	100	125 -0.1 -0.6	100
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	65	106	200	325	2	9	596	125	110	125 -0.1 -0.6	100

★ 1. In case of long rod end screw, displayed with "()"

Standard hydraulic cylinder

70/140 Series CJT type KS standard hydraulic cylinder

CB: Detachable clevis type ... Operating Pressure 7 · 14MPa{71.4 · 143kgf/cm²}



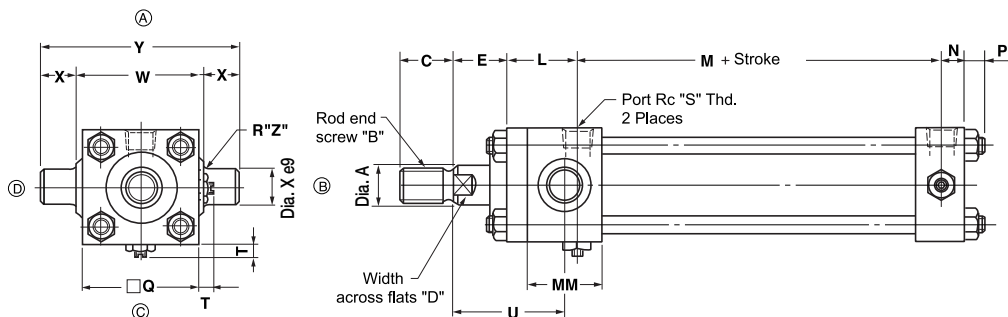
Cylinder Bore	A			B			C ^{*1}			D			E	L	M	Q	S	T	U	V	W	X	Y	Z
	Rod type			Rod type			Rod type			Rod type														
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"												
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	30	39	88	58	⅜	8	209	20	16	25 +0.1 +0.4	12.5	16
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	30	39	88	65	⅜	8	209	20	16	25 +0.1 +0.4	12.5	16
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	30	44	96	80	½	8	230	25	20	31.5 +0.1 +0.4	16	20
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	35	42	104	94	½	8	261	40	31.5	40 +0.1 +0.4	20	31.5
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	35	48	118	110	¾	8	291	40	31.5	40 +0.1 +0.4	20	31.5
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	40	54	120	138	¾	8	316	50	40	50 +0.1 +0.4	25	40
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	45	63	134	168	1	9	365	62	50	63 +0.1 +0.4	31.5	50
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	50	65	142	188	1	9	400	79	65	80 +0.1 +0.6	40	63
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	50	67	147	196	1	9	412	82	65	80 +0.1 +0.6	40	63
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	55	66	158	215	1	7.5	445	89	75	80 +0.1 +0.6	40	71
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	55	75	172	235	1¼	7.5	480	100	80	100 +0.1 +0.6	50	80
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	55	85	184	262	1½	9	526	115	90	125 +0.1 +0.6	63	90
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	60	89	184	292	1½	9	550	125	100	125 +0.1 +0.6	63	100
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	65	106	200	325	2	9	596	125	110	125 +0.1 +0.6	63	100

★ 1. In case of long rod end screw, displayed with "()"

J
CJT 70/140 Type
Hydraulic Cylinder

70/140 Series CJT type KS standard hydraulic cylinder

TA: Rod-end integral trunnion type ... Operating Pressure 7 · 14MPa{71.4 · 143kgf/cm²}



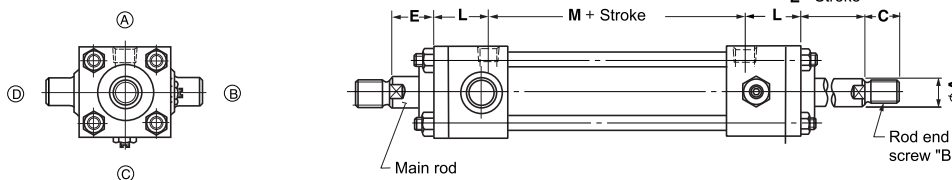
The direction for the port, cushion valve and the air vent on the rod side are fixed as follows

- Direction of port ①
- Direction of cushion valve ③
- Direction of air vent ③

Specify the direction (①, ②, ③, or ④) for head side only.

Option

Double rod type "N"



(Note) Please refer to the page J-15 operating pressure of double rod type.

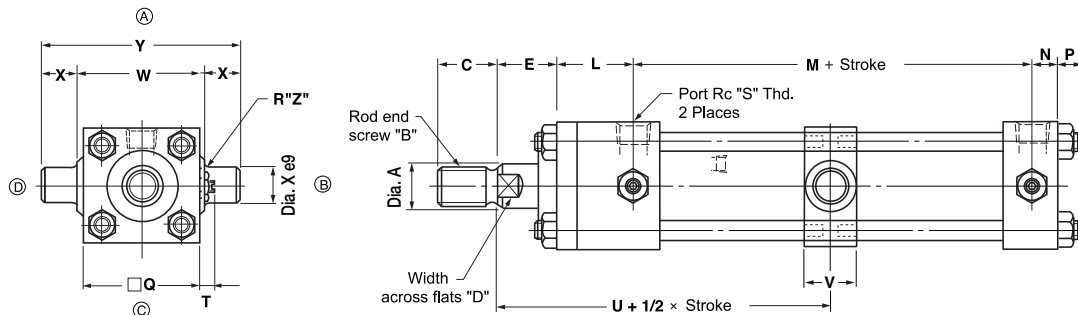
Cylinder Bore	A			B			C*1			D			E	L	M	N	P	Q	S	T	U	W	X	Y	Z	M
	Rod type			Rod type			Rod type			Rod type			E	L	M	N	P	Q	S	T	U	W	X	Y	Z	M
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"														
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	30	39	88	14	9	58	3/8	8	62	58 0 -0.3	20	98	2	49
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	30	39	88	14	11	65	3/8	8	62	69 0 -0.3	20	109	2	49
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	30	44	96	15	13	80	1/2	8	66	85 0 -0.35	25	135	2.5	56
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	35	42	104	17	14.5	94	1/2	8	74	98 0 -0.35	31.5	161	2.5	44
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	35	48	118	18	16.5	110	3/4	8	82	118 0 -0.35	31.5	181	2.5	50
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	40	54	120	18	19.5	138	3/4	8	89	145 0 -0.4	40	225	3	57
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	45	63	134	23	23	168	1	9	103	175 0 -0.4	50	275	3	67
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	50	65	142	23	25	188	1	9	112	195 0 -0.46	63	321	4	74
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	50	67	147	26	25	196	1	9	112	206 0 -0.46	63	332	4	74
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	55	66	158	29	28.5	215	1	7.5	126	218 0 -0.46	71	360	4	81

★ 1. In case of long rod end screw, displayed with "()"

Standard hydraulic cylinder

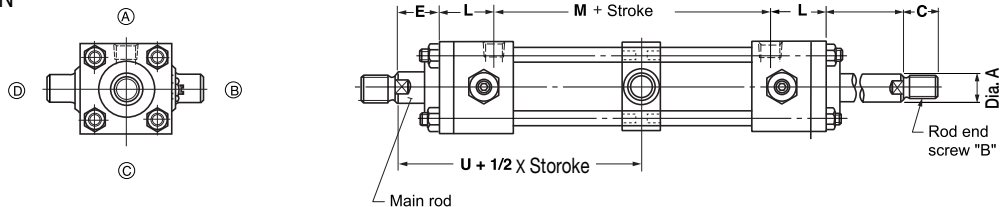
70/140 Series CJT type KS standard hydraulic cylinder

TC: Intermedia fixed trunnion type ... Operating Pressure $7 \cdot 14\text{MPa}\{71.4 \cdot 143\text{kgf/cm}^2\}$



Option

Double rod type "N"



(Note) Please refer to the page J-15 operating pressure of double rod type.

Cylinder Bore	A			B			C ^{*1}			D			E	L	M	N	P	Q	S	T	U	V	W	X	Y	Z
	Rod type			Rod type			Rod type			Rod type			E	L	M	N	P	Q	S	T	U	V	W	X	Y	Z
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"														
32	-	18	14	-	M16 × 1.5	M12 × 1.25	-	25 (32)	18 (24)	-	14	12	30	39	88	14	9	58	3/8	8	113	30	58 0 -0.3	20	98	2
40	28	22	18	M24 × 1.5	M20 × 1.5	M16 × 1.5	35	30 (40)	25 (32)	24	19	14	30	39	88	14	11	65	3/8	8	113	30	69 0 -0.3	20	109	2
50	36	28	22	M30 × 1.5	M24 × 1.5	M20 × 1.5	45	35 (48)	30 (40)	30	24	19	30	44	96	15	13	80	1/2	8	121	38	85 0 -0.35	25	135	2.5
63	45	36	28	M39 × 1.5	M30 × 1.5	M24 × 1.5	60	45 (60)	35 (48)	41	30	24	35	42	104	17	14.5	94	1/2	8	132	45	98 0 -0.35	31.5	161	2.5
80	56	45	36	M48 × 1.5	M39 × 1.5	M30 × 1.5	75	60 (78)	45 (60)	50	41	30	35	48	118	18	16.5	110	3/4	8	146	45	118 0 -0.35	31.5	181	2.5
100	70	56	45	M64 × 2.0	M48 × 1.5	M39 × 1.5	95	75 (96)	60 (78)	65	50	41	40	54	120	18	19.5	138	3/4	8	156	57	145 0 -0.4	40	225	3
125	90	70	56	M80 × 2.0	M64 × 2.0	M48 × 1.5	120	95 (128)	75 (96)	85	65	50	45	63	134	23	23	168	1	9	177	58	175 0 -0.4	50	275	3
140	100	80	63	M95 × 2.0	M72 × 2.0	M56 × 2.0	140	110 (128)	80 (112)	95	75	55	50	65	142	23	25	188	1	9	188	78	195 0 -0.46	63	321	4
150	106	85	67	M100 × 2.0	M76 × 2.0	M60 × 2.0	150	115 (128)	85 (120)	100	80	60	50	67	147	26	25	196	1	9	194	78	206 0 -0.46	63	332	4
160	110	90	70	M100 × 2.0	M80 × 2.0	M64 × 2.0	150	120 (140)	95 (128)	105	85	65	55	66	158	29	28.5	215	1	7.5	207	88	218 0 -0.46	71	360	4
180	125	100	80	M120 × 2.0	M95 × 2.0	M72 × 2.0	180	140 (165)	110 (128)	120	95	75	55	75	172	28	27	235	1 1/4	7.5	216	98	243 0 -0.46	80	403	4
200	140	110	90	M130 × 2.0	M100 × 2.0	M80 × 2.0	195	150 (175)	120 (140)	135	105	85	55	85	184	32	29	262	1 1/2	9	232	108	272 0 -0.52	90	452	5
220	160	125	100	M150 × 2.0	M120 × 2.0	M95 × 2.0	225	180 (210)	140 (175)	155	120	95	60	89	184	32	34	292	1 1/2	9	241	117	300 0 -0.52	100	500	5
250	180	140	110	M170 × 2.0	M130 × 2.0	M100 × 2.0	255	195 (225)	150 (175)	175	135	105	65	106	200	40	37	325	2	9	271	117	335 0 -0.57	100	535	5

★ 1. In case of long rod end screw, displayed with "()"

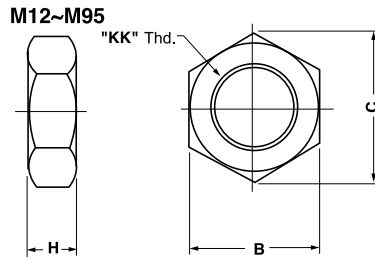
CJT 70/140 Type Hydraulic Cylinder

70/140 Series CJT type KS standard hydraulic cylinder

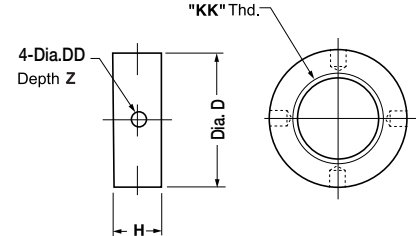
Option

Lock nut

Optional symbol : K



M100~M130

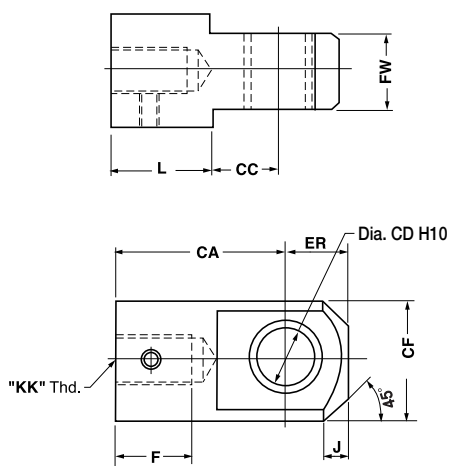


KK	H	B	C	Mass kg	KK	H	B	C	Mass kg
M12×1.25	7	19	21.9	0.02	M56×2	34	85	98	1.6
M16×1.5	10	24	27.7	0.05	M60×2	36	90	104	1.9
M20×1.5	12	30	34.6	0.1	M64×2	38	95	110	2.2
M24×1.5	14	36	41.6	0.1	M72×2	43	105	121	3.0
M30×1.5	18	46	53.1	0.3	M76×2	46	110	127	3.6
M39×1.5	23	60	69.3	0.6	M80×2	48	115	133	4.0
M48×1.5	29	75	86.5	1.1	M95×2	57	135	156	6.5

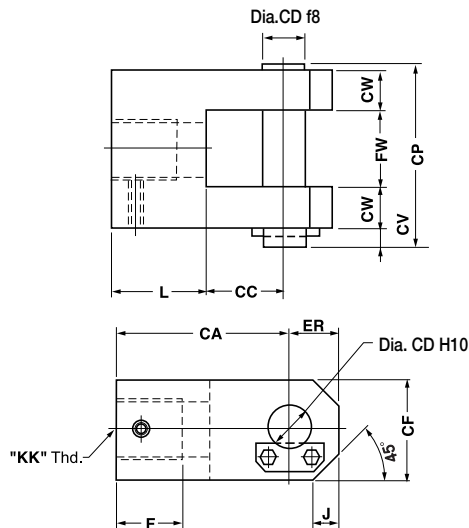
KK	H	D	DD	Z	Mass kg
M100×2	60	150	15	18	4.9
M120×2	72	180	15	18	8.9
M130×2	78	200	20	25	11.5

Knuckle

Knuckle: Optional Symbol : L



Forkend: Optional Symbol : M



Mass (kg)

Cylinder Bore		Knuckle	
		(L)	(M)
32	B	0.5	0.6
	C	0.5	0.6
40	B	0.4	0.5
	C	0.5	0.6
50	B	0.9	1.0
	C	0.9	1.1
63	B	2.4	3.4
	C	2.5	3.5
80	B	2.1	3.1
	C	2.4	3.4
100	B	4.2	7.0
	C	4.8	9.5
125	B	8.4	13.4
	C	9.8	14.8
140	B	19.0	26.4
	C	21.1	28.5
150	B	16.8	24.2
	C	19.7	27.1
160	B	22.4	32.1
	C	24.8	34.5

Cylinder Bore	Rod type	KK	F	C A	CC	CD	CF	ER	FW	J	L
32	B	M16×1.5	34	60	23	16	39	20	25	-0.1 -0.4	8 37
	C	M12×1.25	27	60	23	16	39	20	25	-0.1 -0.4	8 37
40	B	M20×1.5	39	60	23	16	39	20	25	-0.1 -0.4	8 37
	C	M16×1.5	34	60	23	16	39	20	25	-0.1 -0.4	8 37
50	B	M24×1.5	44	70	28	20	49	25	31.5	-0.1 -0.4	10 42
	C	M20×1.5	39	70	28	20	49	25	31.5	-0.1 -0.4	10 42
63	B	M30×1.5	50	115	43	31.5	62	35	40	-0.1 -0.4	15 72
	C	M24×1.5	44	115	43	31.5	62	35	40	-0.1 -0.4	15 72
80	B	M39×1.5	65	115	43	31.5	62	35	40	-0.1 -0.4	15 72
	C	M30×1.5	50	115	43	31.5	62	35	40	-0.1 -0.4	15 72
100	B	M48×1.5	80	145	55	40	79	40	50	-0.1 -0.4	20 90
	C	M39×1.5	65	145	55	40	79	40	50	-0.1 -0.4	20 90
125	B	M64×2.0	100	180	65	50	100	50	63	-0.1 -0.4	25 115
	C	M48×1.5	80	180	65	50	100	50	63	-0.1 -0.4	25 115
140	B	M72×2.0	115	225	85	63	130	65	80	-0.1 -0.6	30 140
	C	M56×2.0	85	225	85	63	130	65	80	-0.1 -0.6	30 140
150	B	M76×2.0	120	225	85	63	130	65	80	-0.1 -0.6	30 140
	C	M60×2.0	90	225	85	63	130	65	80	-0.1 -0.6	30 140
160	B	M80×2.0	125	240	90	71	140	70	80	-0.1 -0.6	35 150
	C	M64×2.0	100	240	90	71	140	70	80	-0.1 -0.6	35 150

Cylinder Bore	Rod type	KK	F	C A	CC	CD	CF	ER	CW	FW	CV	CP	J	L
32	B	M16×1.5	34	60	27	16	32	16	12.5	25	+0.1 +0.4	12	68	4 33
	C	M12×1.25	27	60	27	16	32	16	12.5	25	+0.1 +0.4	12	68	4 33
40	B	M20×1.5	39	60	27	16	32	16	12.5	25	+0.1 +0.4	12	68	4 33
	C	M16×1.5	34	60	27	16	32	16	12.5	25	+0.1 +0.4	12	68	4 33
50	B	M24×1.5	44	70	32	20	40	20	16	31.5	+0.1 +0.4	12	80	10 38
	C	M20×1.5	39	70	32	20	40	20	16	31.5	+0.1 +0.4	12	80	10 38
63	B	M30×1.5	50	115	50	31.5	60	30	20	40	+0.1 +0.4	12	98	12 65
	C	M24×1.5	44	115	50	31.5	60	30	20	40	+0.1 +0.4	12	98	12 65
80	B	M39×1.5	65	115	50	31.5	60	30	20	40	+0.1 +0.4	12	98	12 65
	C	M30×1.5	50	115	50	31.5	60	30	20	40	+0.1 +0.4	12	98	12 65
100	B	M48×1.5	80	145	60	40	80	40	25	50	+0.1 +0.4	18	125	15 85
	C	M39×1.5	65	145	60	40	80	40	25	50	+0.1 +0.4	18	125	15 85
125	B	M64×2.0	100	180	70	50	100	50	31.5	63	+0.1 +0.4	18	150	20 110
	C	M48×1.5	80	180	70	50	100	50	31.5	63	+0.1 +0.4	18	150	20 110
140	B	M72×2.0	115	225	90	63	120	65	40	80	+0.1 +0.6	18	185	25 135
	C	M56×2.0	85	225	90	63	120	65	40	80	+0.1 +0.6	18	185	25 135
150	B	M76×2.0	120	225	90	63	120	65	40	80	+0.1 +0.6	18	185	25 135
	C	M60×2.0	90	225	90	63	120	65	40	80	+0.1 +0.6	18	185	25 135
160	B	M80×2.0	125	240	100	71	140	70	40	80	+0.1 +0.6	18	185	30 140
	C	M64×2.0	100	240	100	71	140	70	40	80	+0.1 +0.6	18	185	30 140

★ Note) More than $\Phi 180$ are available, please contacts for your requirment.

Standard hydraulic cylinder

70/140 Series CJT type KS standard hydraulic cylinder

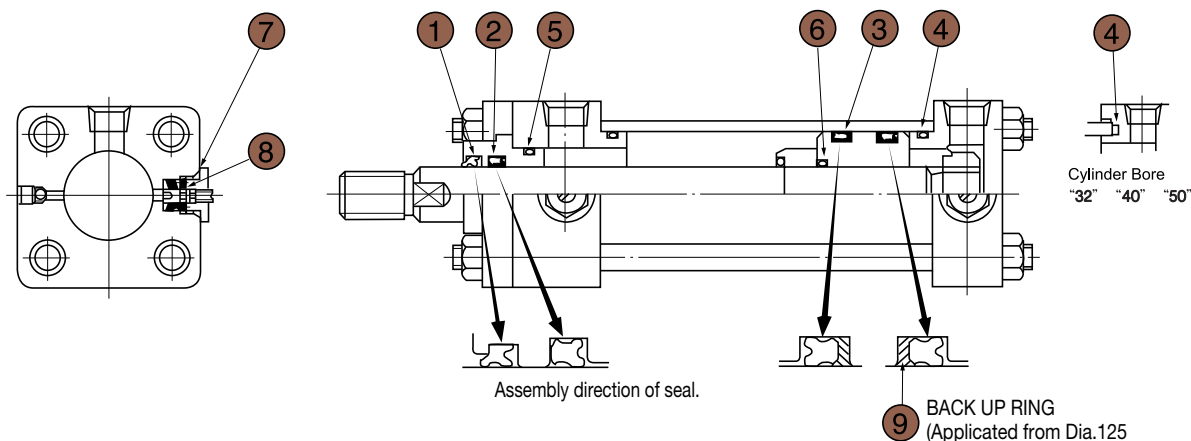
List of Seals

Number		①	②	③	④	⑤	⑥	⑦	⑧	⑨	Tightening torque for tie-rod Nm(kgf · m)
Cylinder Bore	Name	Dust Seal	Rod Packing	Piston Packing	Cover Packing	Bush O-Ring	Piston O-Ring	Plug O-Ring	Slide rod O-Ring	Back up ring	
	Number of Seal Kits Qty.	1	1	2	2	1	1	2	2	2	
32	B KS-CJT 32B-11	LBH- 18	USH- 18	USH- 24	G- 30	P 21	P12	P14	P5		18
	C KS-CJT 32C-11	LBH- 14	USH- 14								{1.8}
40	A KS-CJT 40A-11	LBH- 28	USH- 28	USH- 30	G- 40	G 30	P16	P14	P5		35
	B KS-CJT 40B-11	LBH- 22	USH- 22			G 25					{3.6}
	C KS-CJT 40C-11	LBH- 18	USH- 18								
50	A KS-CJT 50A-11	LBH- 36	USH- 36	USH- 40	G- 50	G 40	P18	P14	P5		62
	B KS-CJT 50B-11	LBH- 28	USH- 28			G 30					{6.3}
	C KS-CJT 50C-11	LBH- 22	USH- 22								
63	A KS-CJT 63A-11	LBH- 45	USH- 45A	USH- 53	G 55	G 50	G25	P14	P5		100
	B KS-CJT 63B-11	LBH- 36	USH- 36			G 40					{10.2}
	C KS-CJT 63C-11	LBH- 28	USH- 28								
80	A KS-CJT 80A-11	LBH- 56	USH- 56	USH- 71	G 75	G 60	P31	P14	P5		150
	B KS-CJT 80B-11	LBH- 45	USH- 45A			G 50					{15.3}
	C KS-CJT 80C-11	LBH- 36	USH- 36								
100	A KS-CJT100A-11	LBH- 70	USH- 70	USH- 85	G 95	G 75	P38	P14	P5		300
	B KS-CJT100B-11	LBH- 56	USH- 56			G 60					{30.6}
	C KS-CJT100C-11	LBH- 45	USH- 45A								
125	A KS-CJT125A-11	LBH- 90	USH- 90	USH-112A	G120	G 95	G45	P18	P7	BRT3 112×125×3	550
	B KS-CJT125B-11	LBH- 70	USH- 70			G 75					{56.1}
	C KS-CJT125C-11	LBH- 56	USH- 56								
140	A KS-CJT140A-11	LBH-100	USH-100	USH-125	G135	G110	G50	P18	P7	BRT3 125×140×3	800
	B KS-CJT140B-11	LBH- 80	USH- 80			G 85					{81.6}
	C KS-CJT140C-11	LBH- 63	USH- 63								
150	A KS-CJT150A-11	LBH-106	USH-106	USH-136	G145	G115	G55	P18	P7	BRT3 136×50×3	800
	B KS-CJT150B-11	LBH- 85	USH- 85			G 90					{81.6}
	C KS-CJT150C-11	LBH- 67	USH- 67								
160	A KS-CJT160A-11	LBH-110	USH-110	USH-145	G150	G125	G60	P18	P7	BRT3 145×160×3	1100
	B KS-CJT160B-11	LBH- 90	USH- 90			G 95					{112}
	C KS-CJT160C-11	LBH- 70	USH- 70								
180	A KS-CJT180A-11	LBH-125	USH-125	USH-165	GR-170	G140	G70	P18	P7	BRT3 165×180×4	1100
	B KS-CJT180B-11	LBH-100	USH-100			G110					{112}
	C KS-CJT180C-11	LBH- 80	USH- 80								

J
CJT 70/140 Type
Hydraulic Cylinder

70/140 Series CJT type KS standard hydraulic cylinder

List of Seals



Number		①	②	③	④	⑤	⑥	⑦	⑧	⑨	Tightening torque for tie-rod Nm(kgf · m)
Cylinder Bore	Name	Dust Seal	Rod Packing	Piston Packing	Cover Packing	Bush O-Ring	Piston O-Ring	Plug O-Ring	Slide rod O-Ring	Back up ring	
	Number of Seal Kits Qty.	1	1	2	2	1	1	2	6	2	
200	A KS-CJT200A-11	LBH-140	USH-140	USH-180	G190	G155	G75	P18	P7	BRT3 180×200×4	1400 {143}
	B KS-CJT200B-11	LBH-110	USH-110			G125					
	C KS-CJT200C-11	LBH- 90	USH- 90								
220	A KS-CJT220A-11	LBH-160	USH-160	USH-200	G210	G175	G85	P18	P7	BRT3 200×220×4	2400 {245}
	B KS-CJT220B-11	LBH-125	USH-125			G140					
	C KS-CJT220C-11	LBH-100	USH-100								
250	A KS-CJT250A-11	LBH-180	USH-180	USH-230	G240	G195	G95	P18	P7	BRT3 230×250×4	3000 {306}
	B KS-CJT250B-11	LBH-140	USH-140			G155					
	C KS-CJT250C-11	LBH-110	USH-110								

- ★ 1. When ordering seals, refer to the table above and specify a seal kit NO.
- ★ 2. Material for the standard packing is nitril rubber(NBR). When phosphate ester type fluids are used, viton seals are required.
Add "F" before the seal kit No.
- ★ 3. Packing symbol "S" of NO.6 is special O-Ring.