

KCLS9A

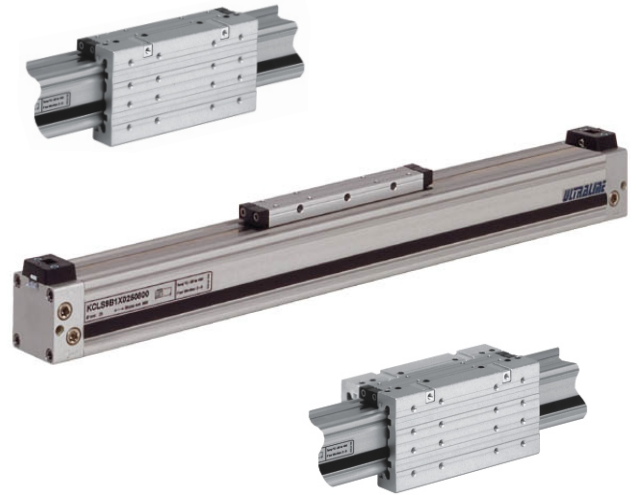
Standard Rodless Cylinder
Ø18mm - Ø63mm

KCLS9B

Standard Rodless Cylinder with Slide Bearing
Ø18mm - Ø63mm

KCLS9D

Standard Rodless Cylinder with Double Slide Bearing
Ø18mm - Ø63mm



Features

- ◆ Single or dual end porting in standard endcaps
- ◆ Precision, fine thread needle adjustment cushioning
- ◆ Optional shock absorbers
- ◆ Magnetic piston as standard
- ◆ Single or double adjustable slide bearings
- ◆ Up to 6m stroke lengths
- ◆ Integral reed switch slot
- ◆ Wire retaining enhancement strip (Ø25 to 63mm)

Materials

Body:	Anodised aluminium
Piston:	Acetal
Piston seal:	Polyurethane
Endcaps:	Anodised aluminium
Sealing strip:	Polyurethane
Cover strip:	Stainless steel
Fasteners:	Stainless steel

Stroke Lengths

Stroke lengths up to 6000mm available as standard.

Accessory Part Numbers

Bore Size Mm	Position Sensor	Shock absorbers (optional)	Foot	Mounting brackets (optional):			T Slot Mounting Nut
				Side Support	Shock Absorber		
18	UL-07..	KAD1410	KCRM018K01	KCRM018K02	KCRM018K03	-	
25	UL-34..	KAD1410	KCRM025K01	KCRM025K02	KCRM025K03	KTNM5	
32	UL-34..	KAD1410	KCRM032K01	KCRM032K02	KCRM032K03	KTNM5	
40	UL-34..	KAD2525	KCRM040K01	KCRM040K02	KCRM040K03	KTNM5	
50	UL-34..	KAD2525	KCRM050K01	KCRM050K02	KCRM050K03	KTNM5	
63	UL-34..	KAD2525	KCRM063K01	KCRM063K02	KCRM063K03	KTNM5	

Description

KCLS9A Mechanically coupled rodless cylinder, adjustable cushioning, magnetic piston.

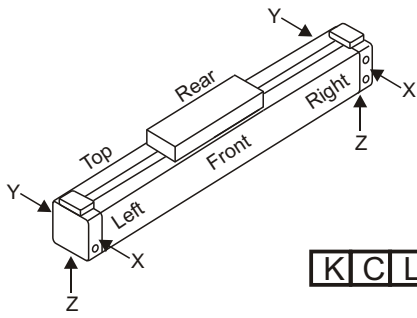
KCLS9B Mechanically coupled rodless cylinder, adjustable cushioning, magnetic piston, single slide bearing.

KCLS9D Mechanically coupled rodless cylinder, adjustable cushioning, magnetic piston, double slide bearings.

Technical Specifications

Pressure range:	2 to 8 bar
Temperature range:	-20°C to +80°C
Media:	Compressed and filtered air, dry or lubricated
Maximum speed:	2.0m/sec
Cushioning:	Adjustable. Optional external shock absorbers
Position Sensing :	- Reed Switch, PNP or NPN Solid State Switch. (N/O)
Shock absorbers:	Fixed or adjustable

KCLS Ordering Information:



K C L S 9

Build Type

- A Basic Build no Attachment
- B Single Side Guide(s) (Front)
- C Single Side Guide(s) (Rear)
- D Double Side Guide(s)

Port Function

- | | | | |
|---|----------------------------------|------|--------------|
| 1 | Single End Porting (RH Standard) | BSPP | (X, Y, only) |
| 2 | Single End Porting (LH Optional) | BSPP | (X, Y, only) |
| 3 | Double End Porting | BSPP | (X, Y, Z) |
| 4 | Single End Porting | NPT | (X, Y, only) |
| 5 | Single End Porting (LH Optional) | NPT | (X, Y, only) |
| 6 | Double End Porting | NPT | (X, Y, Z) |

Port Position

- X Side Front
- Y Side Rear
- Z Bottom

Diameter (mm)

- | | |
|-----|-----------|
| 018 | 18mm bore |
| 025 | 25mm bore |
| 032 | 32mm bore |
| 040 | 40mm bore |
| 050 | 50mm bore |
| 063 | 63mm bore |

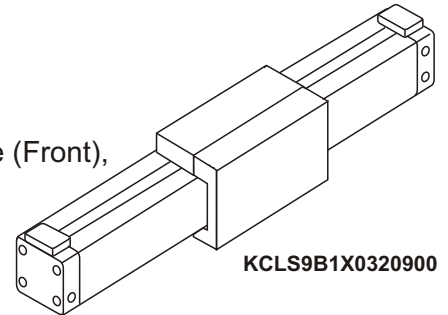
Stroke (mm)

xxxx : in mm, ie 0900 = 900mm

Example:

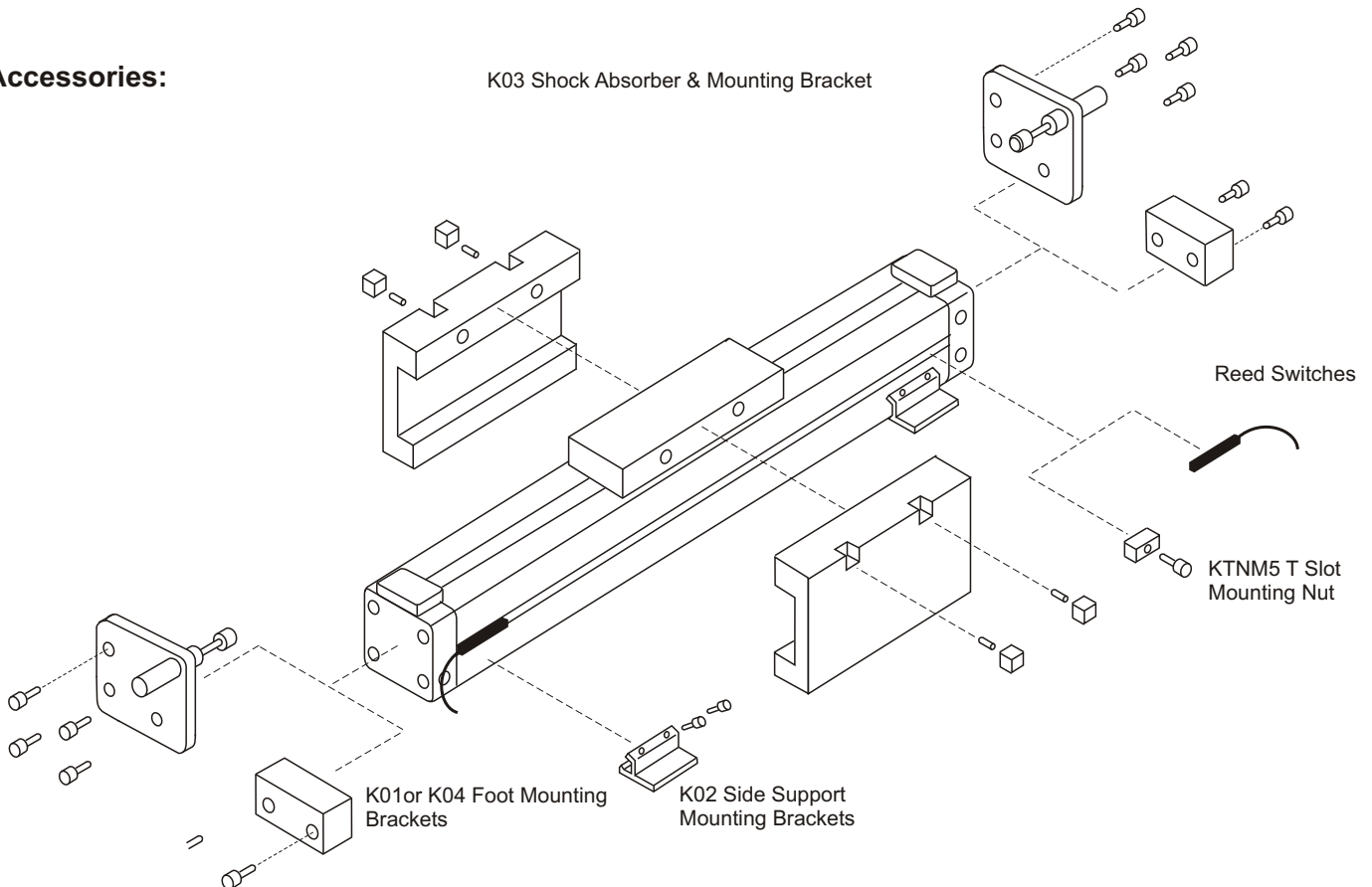
Cylinder Code: KCLS9B1X0320900

Ø32mm Standard Cylinder x 900mm stroke, fitted with Single Side Guide (Front), Single End Ported RH Side Front.



Accessories:

K03 Shock Absorber & Mounting Bracket



Dimensions and performance data

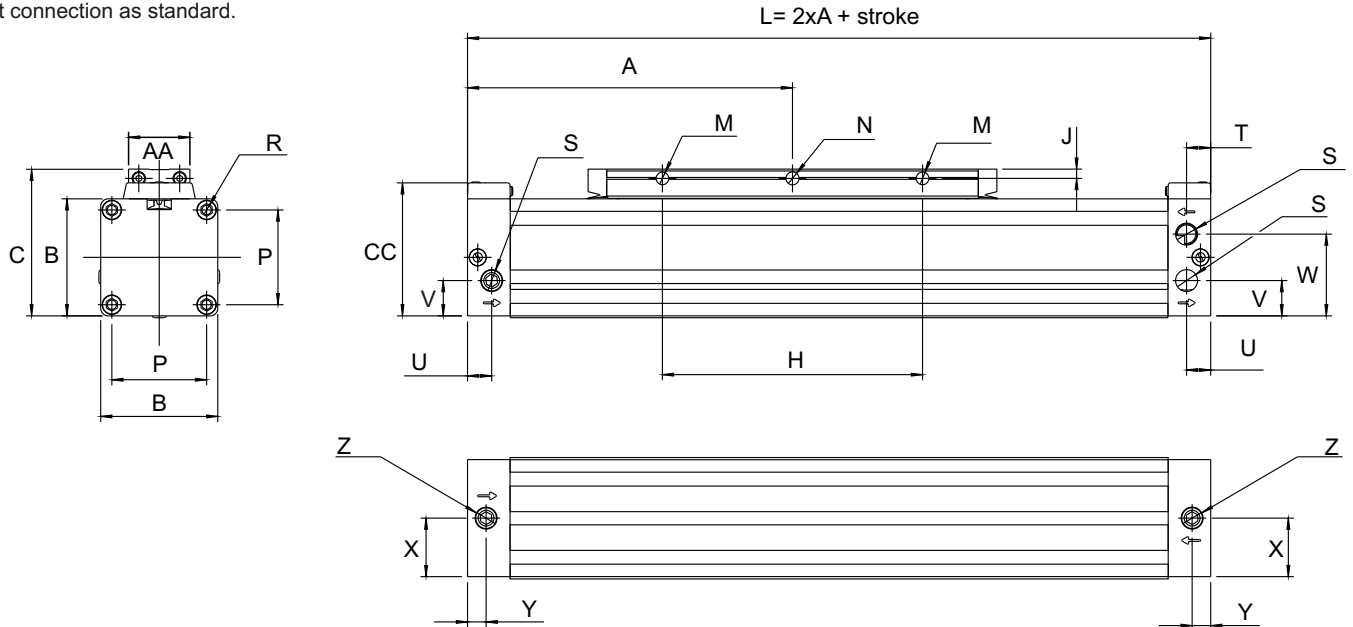
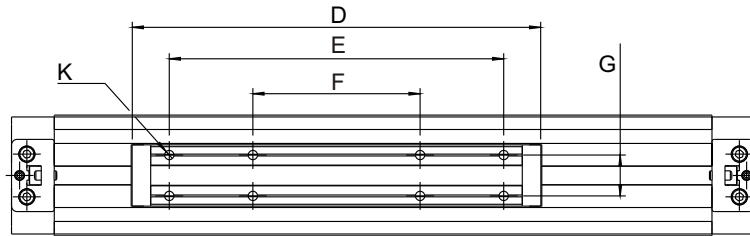
units mm

KCLS9A Series

Ports marked 'S' are duplicated on rear face of cylinder.

Positions of active ports will depend upon product coding. The remainder will be fitted with blanking plugs.

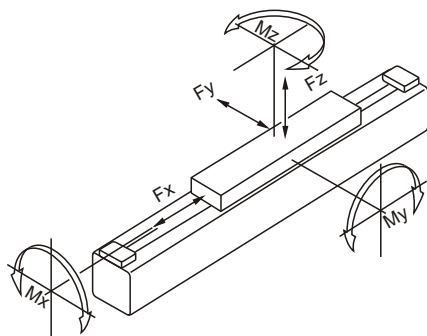
Cushion adjustment always supplied adjacent to port connection as standard.



Cylinder Dia (mm)	A	AA	B	C	CC	D	E	F	G	H	J	K	ØM	ØN	P	R
18	80	15.5	30	39	36.5	103	75	-	10	50	3.0	M3x7	3.4	3.5	23.5	M3x8
25	100	20.0	42	53	50.2	131	100	50	13	70	3.5	M4x7	4.4	4.5	33	M4x10
32	120	25.0	52	65	60.2	171	140	70	16	100	4.5	M5x9	5.3	5.5	41	M5x11
40	150	33.0	63	79	71.6	220	180	90	22	140	5.0	M6x10	6.8	7.0	51	M6x13
50	180	42.0	78	96	86.6	280	220	110	29	180	6.5	M8x12.5	6.8	7.0	63	M8x13
63	215	54.0	93	113.5	101.6	333	280	140	40	230	8.0	M8x15	8.8	9.0	78	M8x13

Cylinder Dia (mm)	Port S	Underside Port Z						
		T	U	V	W	X	Y	Z
18	M5	9.5	9.5	9.3	20.7	15	6.5	M5
25	G1/8	7.0	13	13.5	28.5	21	7.0	G1/8
32	G1/8	7.0	7.0	15.5	36.5	26	9.0	G1/8
40	G1/4	13	13	19	44	31.5	10	G1/4
50	G1/4	12	12	21	50	39	12	G1/4
63	G3/8	13	12	23	61.5	46.5	12	G3/8

Permissible loads on Rodless Cylinder KCLS9A



Cyl. Ø (mm)	Maximum Force @ 0.35m/sec			Maximum Moment (Nm)		
	Fx (N)	Fy (N)	Fz (N)	Mx	My	Mz
18	-	-	190	0.6	3.0	1.0
25	-	-	300	1.2	13.0	4.0
32	-	-	450	2.3	25.0	7.0
40	-	-	750	5.5	50.0	13.0
50	-	-	1025	10.0	90.0	23.0
63	-	-	1450	16.0	165.0	47.0

Dimensions and performance data

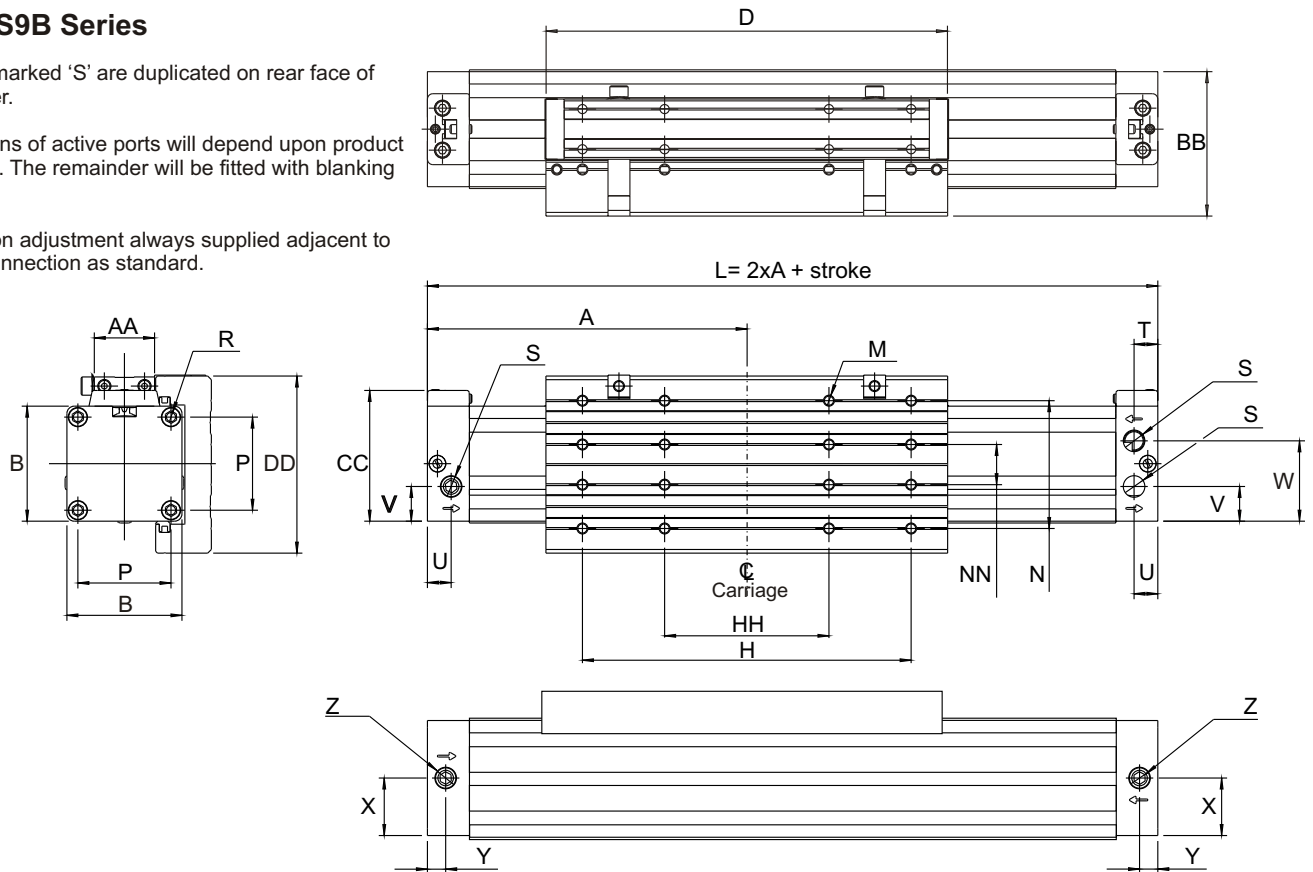
units mm

KCLS9B Series

Ports marked 'S' are duplicated on rear face of cylinder.

Positions of active ports will depend upon product coding. The remainder will be fitted with blanking plugs.

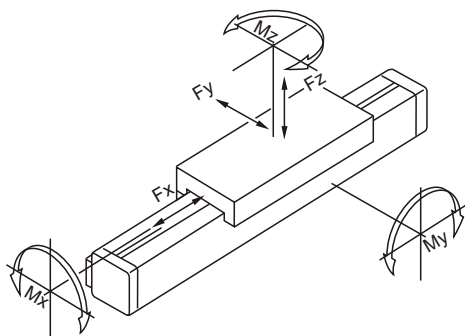
Cushion adjustment always supplied adjacent to port connection as standard.



Cylinder Dia (mm)	A	AA	B	BB	CC	D	DD	H	HH	M	N	NN	P	R	Port S	T
18	80	15.5	30	39	36.5	103	50	75	-	M3x7	35	10	23.5	M3x8	M5	9.5
25	100	20	42	53	50.2	131	66	100	50	M4x7	45	13	33	M4x10	G1/8	7.0
32	120	25	52	65	60.2	171	80	140	70	M5x9	55	16	41	M5x11	G1/8	7.0
40	150	33	63	79	71.6	220	97	180	90	M6x10	70	22	51	M6x13	G1/4	13
50	180	42	78	96	86.6	280	116	220	110	M8x12.5	85	29	63	M8x13	G1/4	12
63	215	54	93	113.5	101.6	333	136	280	140	M8x15	105	40	78	M8x13	G3/8	13

Cylinder Dia (mm)	U	V	W	X	Y	Underside Port Z
18	9.5	9.3	20.7	15	6.5	M5
25	13	13.5	28.5	21	7.0	G1/8
32	7	15.5	36.5	26	9.0	G1/8
40	13	19	44.0	31.5	10	G1/4
50	12	21	50.0	39	12	G1/4
63	12	23	61.5	46.5	12	G3/8

Permissible loads on Single Slide Bearing KCLS9B



Cyl. Ø (mm)	Maximum Force @ 0.35m/sec			Maximum Moment (Nm)		
	Fx (N)	Fy (N)	Fz (N)	Mx	My	Mz
18	-	220	220	3.0	6.0	6.0
25	-	470	470	8.0	18.0	20.0
32	-	600	600	15.0	35.0	40.0
40	-	1150	1150	28.0	65.0	75.0
50	-	1400	1400	40.0	120	120
63	-	2000	2000	75.0	200	250

Dimensions and performance data

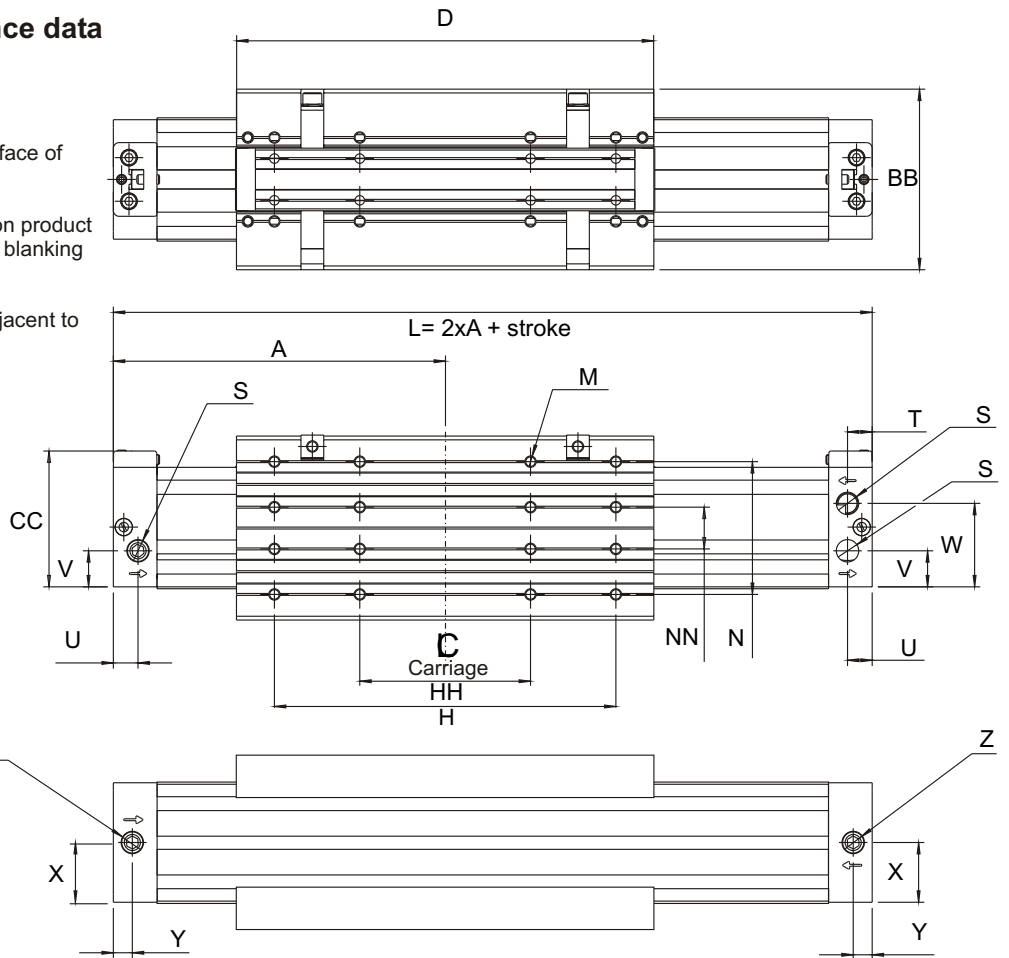
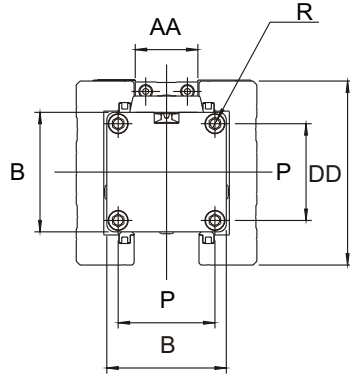
units mm

KCLS9D Series

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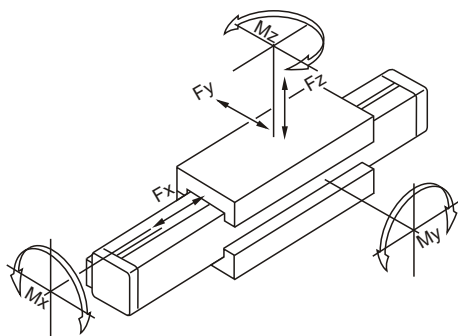
Cushion adjustment always supplied adjacent to port connection as standard.



Cylinder Dia (mm)	A	AA	B	BB	CC	D	DD	H	HH	M	N	NN	P	R	Port S	T
18	80	15.5	30	48	36.5	103	50	75	-	M3x7	35	10	23.5	M3x8	M5	9.5
25	100	20	42	64	50.2	131	66	100	50	M4x7	45	13	33	M4x10	G1/8	7
32	120	25	52	78	60.2	171	80	140	70	M5x9	55	16	41	M5x11	G1/8	7
40	150	33	63	95	71.6	220	97	180	90	M6x10	70	22	51	M6x13	G1/4	13
50	180	42	78	114	86.6	280	116	220	110	M8x12.5	85	29	63	M8x13	G1/4	12
63	215	54	93	134	101.6	333	136	280	140	M8x15	105	40	78	M8x13	G3/8	13

Cylinder Dia (mm)	U	V	W	X	Y	Underside Port Z
18	9.5	9.3	20.7	15	6.5	M5
25	13	13.5	28.5	21	7.0	G1/8
32	7	15.5	36.5	26	9.0	G1/8
40	13	19.0	44	31.5	10	G1/4
50	12	21.0	50	39	12	G1/4
63	12	23.0	61.5	46.5	12	G3/8

Permissible loads on Double Slide Bearing KCLS9D



Cyl. Ø (mm)	Maximum Force @ 0.35m/sec			Maximum Moment (Nm)		
	Fx (N)	Fy (N)	Fz (N)	Mx	My	Mz
18	-	375	330	4.0	9.0	9.0
25	-	825	705	12.0	30.0	30.0
32	-	1035	900	27.0	67.0	67.0
40	-	2175	1725	42.0	110	110
50	-	2625	2100	80.0	220	220
63	-	3900	3000	112	370	370

Notes :