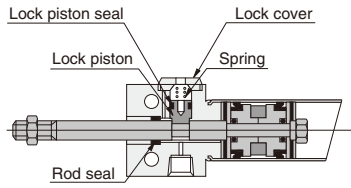


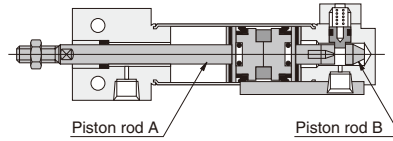
Inner Construction and Major Parts (cannot be disassembled)

● ϕ 16

● Rod side end keep

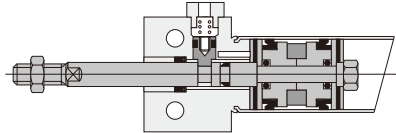


● Head side end keep

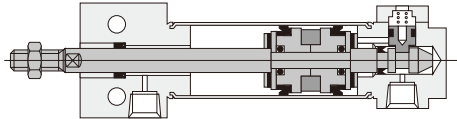


● ϕ 20, ϕ 25

● Rod side end keep

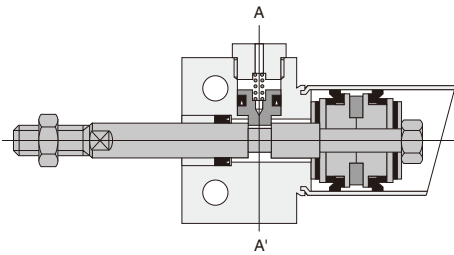
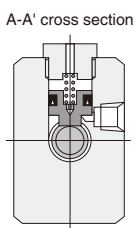


● Head side end keep

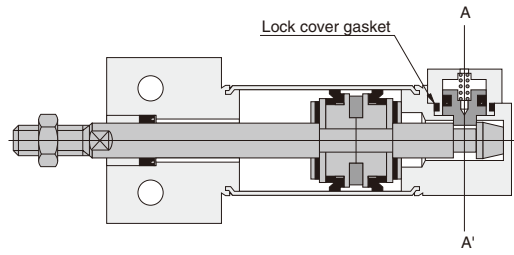


● ϕ 32, ϕ 40

● Rod side end keep

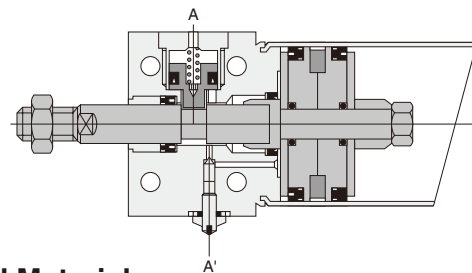
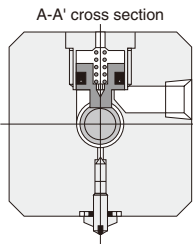


● Head side end keep

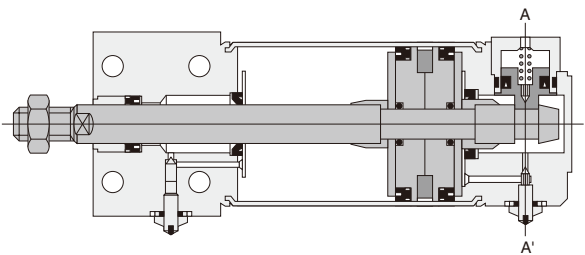


● ϕ 50, ϕ 63

● Rod side end keep



● Head side end keep



Major Parts and Materials

Parts	Bore size		
	16	20, 25	32, 40, 50, 63
Piston rod A	Stainless steel (hard chrome plated)	Steel (hard chrome plated)	
Piston rod B	Stainless steel	Steel (zinc plated)	
Spring	Stainless steel		Piano wire
Lock piston	Stainless steel		
Lock cover	Stainless steel	Aluminum (anodized)	
Y type knuckle, I type knuckle	Mild steel (zinc plated)		

Other than the items listed above, it is the same as for the standard Slim Cylinder.

Seals

Note: Seals cannot be replaced.

Parts	Rod seal	Lock piston seal	Lock cover gasket
Quantity	1	1	1
Bore mm			
16	—	MYN-5	O-ring (Special dimensions)
20	GYH-9	MYN-5	—
25	GYH-11	MYN-5	—
32	—	MYN-10A	S18
40	—	MYN-10A	S18
50	—	MYN-16	S22.4
63	—	MYN-16	S22.4

Other than the items listed above, it is the same as for the standard Slim Cylinder.

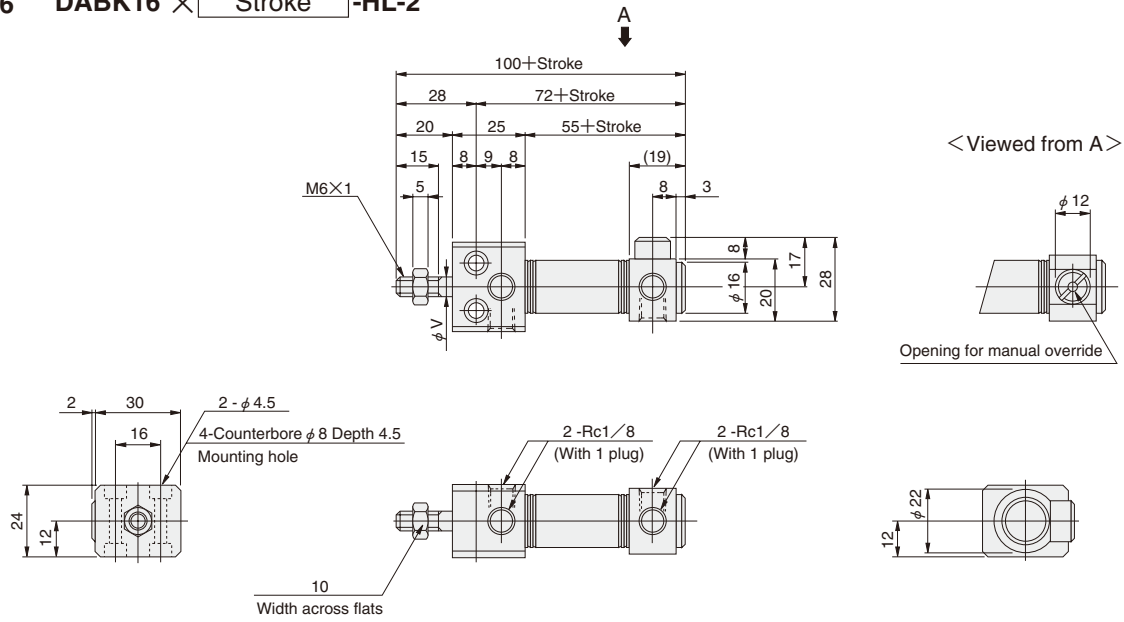
Mass

Bore size mm [in.]	Zero stroke mass				Additional mass for each 1mm [0.0394in.] stroke	Mass of knuckle	
	-HL : Head side end keep		-RL : Rod side end keep			Y type knuckle	I type knuckle
	Side mount	Front mount	Side mount	Front mount			
16 [0.630]	0.11 [0.24]	0.10 [0.22]	0.10 [0.22]	0.09 [0.20]	0.0005 [0.0011]	0.017 [0.037]	0.020 [0.044]
20 [0.787]	0.18 [0.40]	0.17 [0.37]	0.17 [0.37]	0.16 [0.35]	0.0008 [0.0018]	0.042 [0.093]	0.035 [0.077]
25 [0.984]	0.25 [0.55]	0.23 [0.51]	0.24 [0.53]	0.22 [0.49]	0.0011 [0.0024]	0.075 [0.165]	0.070 [0.154]
32 [1.260]	0.39 [0.86]	0.36 [0.79]	0.38 [0.84]	0.35 [0.77]	0.0015 [0.0033]		
40 [1.575]	0.70 [1.54]	0.67 [1.48]	0.68 [1.50]	0.65 [1.43]	0.0024 [0.0053]	0.122 [0.269]	0.132 [0.291]
50 [1.969]	1.22 [2.69]	1.17 [2.58]	1.20 [2.65]	1.14 [2.51]	0.0029 [0.0064]		
63 [2.480]	1.69 [3.73]	1.30 [2.87]	1.67 [3.68]	1.28 [2.82]	0.0035 [0.0077]		

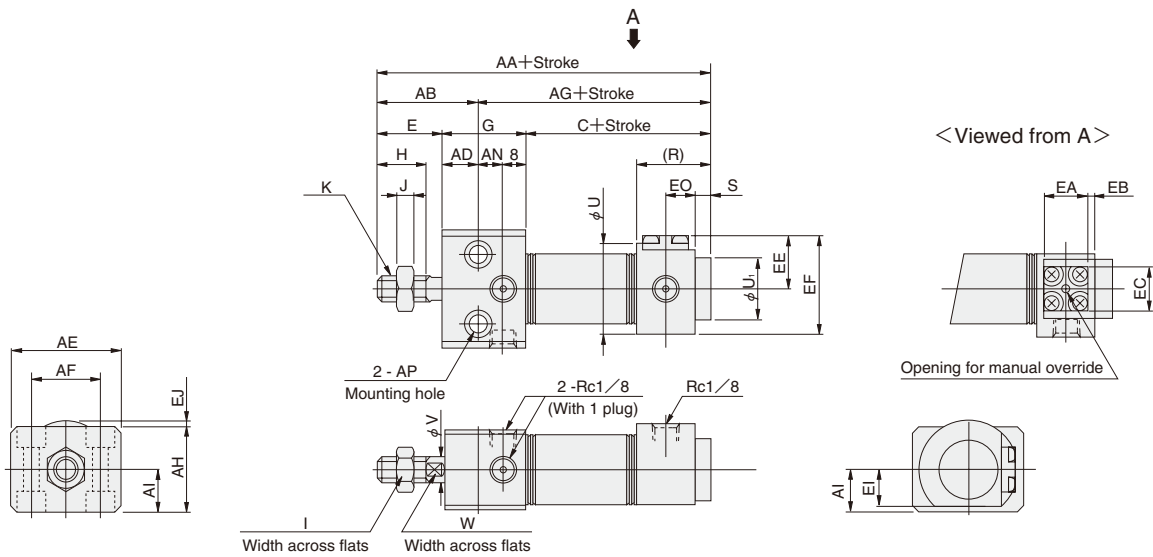
Calculation example: For head side end keep side mount type of 32mm bore size and 100mm stroke, $0.39 + (0.0015 \times 100) = 0.54\text{kg}$ [1.19lb.]

-HL Dimensions of Head Side End Keep, Side Mounting Type (mm)

● $\phi 16$ DABK16 \times -HL-2



● $\phi 20 \sim \phi 40$ DABK \times -HL-2



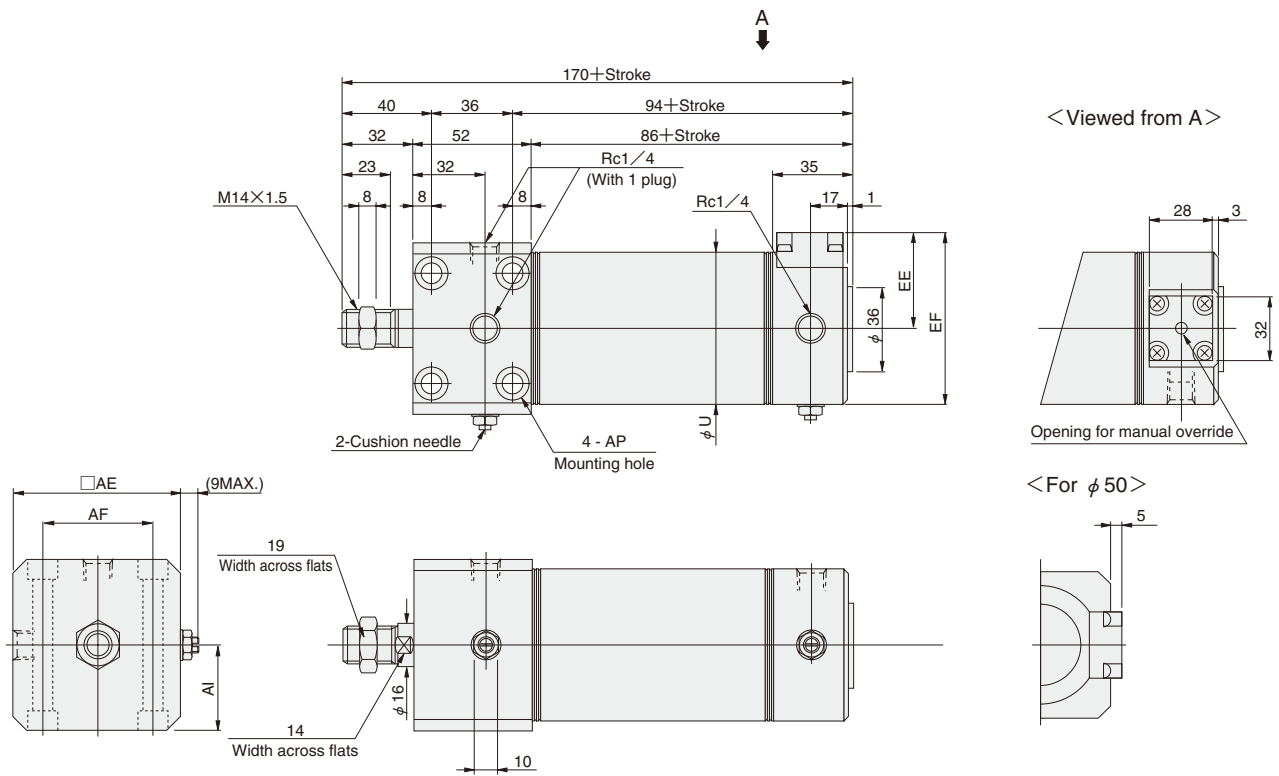
● The drawing is for the $\phi 20$ and $\phi 25$. (Contour dimensions of the $\phi 32$ and $\phi 40$ head covers are smaller than the block portion.)

Code	C	E	G	H	I	J	K	R	S	U	U ₁	V	W
20 [0.787]	66	23	28	15	12	5	M8×1	22	6		20	8	6
25 [0.984]	66	26	30	18	14	6	M10×1.25	22	6	29	22	10	8
32 [1.260]	73	31	36	23	14	6	M10×1.25	27	1		27	12	10
40 [1.575]	80	31	44	23	19	8	M14×1.5	32	1	35	33	16	14

Code	AA	AB	AD	AE	AF	AG	AH	AI	AN	AP	EA	EB	EC	EE	EF	EI	EJ	EO
20 [0.787]	117	34	11	38	22	83	28	14	9	$\phi 6.6$ Counterbore $\phi 11$ Depth 6.5	16	—	16	17.5	32	12.5	0.5	8
25 [0.984]	122	38	12	42	26	84	30	15	10	$\phi 6.6$ Counterbore $\phi 11$ Depth 6.5	16	—	16	18.5	36	13.5	2.5	8
32 [1.260]	140	45	14	54	34	95	36	18	14	$\phi 9$ Counterbore $\phi 14$ Depth 8.6	24	2	25	22.5	40.5	17.5	—	14
40 [1.575]	155	48	17	68	46	107	44	22	19	$\phi 11$ Counterbore $\phi 17.5$ Depth 10.8	24	4	25	25.5	46	21	—	16

-HL Dimensions of Head Side End Keep, Side Mounting Type (mm)

● $\phi 50$, $\phi 63$ DABK × -HL-2

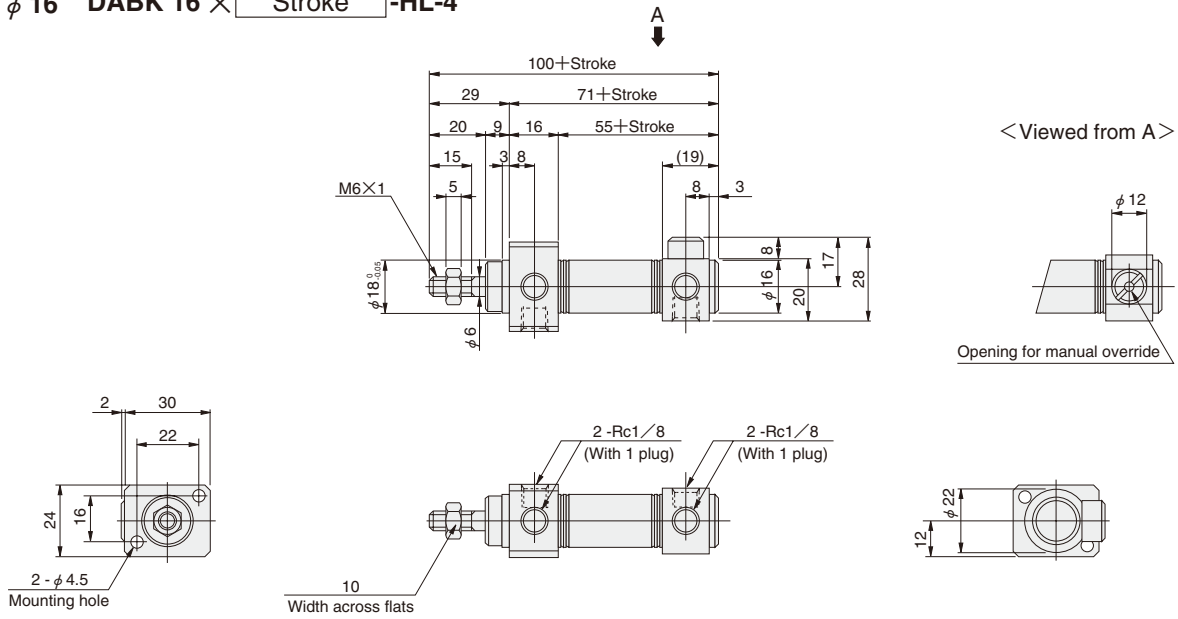


SLIM CYLINDERS

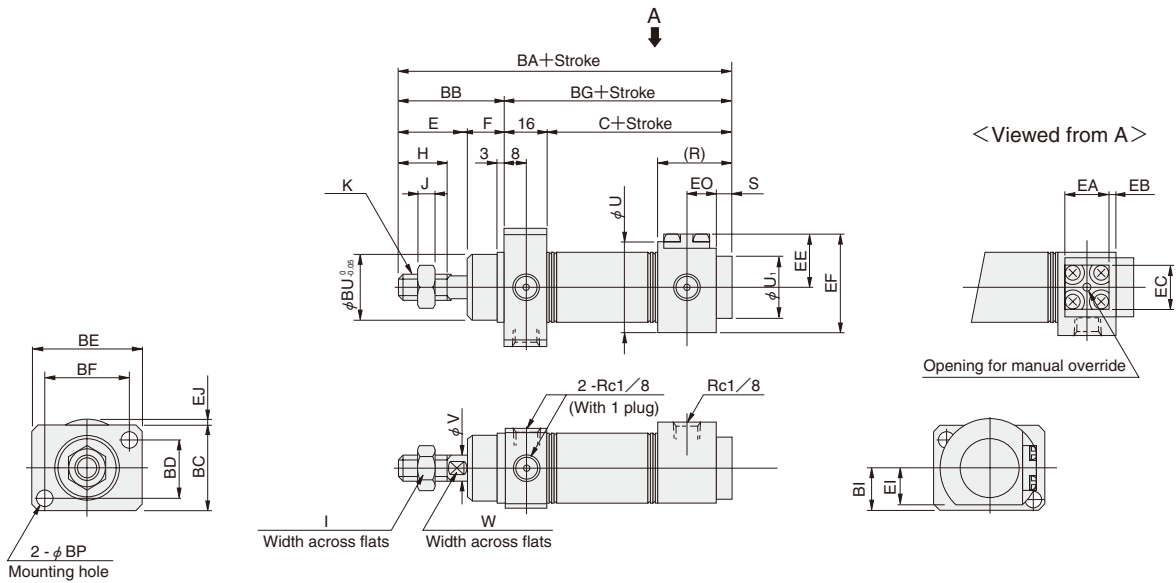
Bore mm [in.]	Code	U	AE	AF	AI	AP	EE	EF
50 [1.969]		52	62	44	31	$\phi 6.6$ Counterbore $\phi 11$ Depth 6.5	35.5	61.5
63 [2.480]		65.4	74	48	37	$\phi 9$ Counterbore $\phi 14$ Depth 8.6	35.5	68.5

-HL Dimensions of Head Side End Keep, Front Mounting Type (mm)

● $\phi 16$ DABK 16 \times -HL-4



● $\phi 20 \sim \phi 40$ DABK \times -HL-4



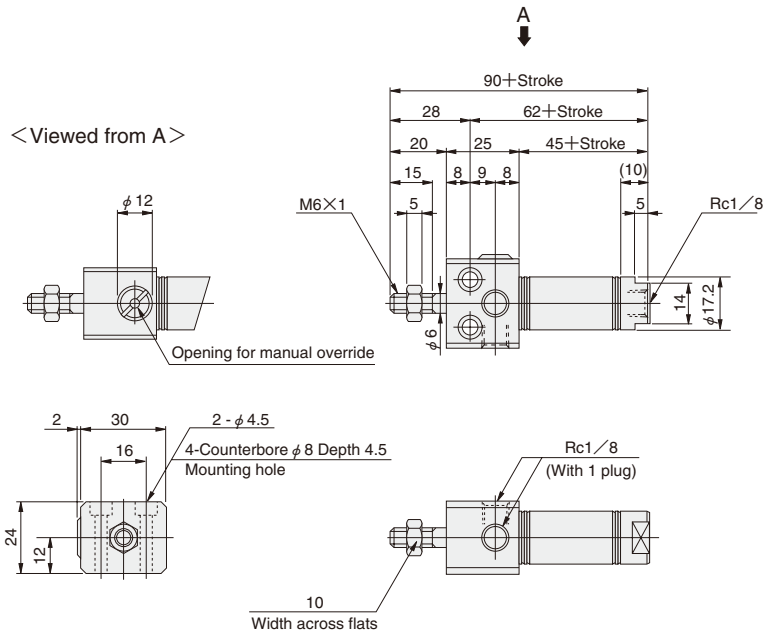
● The drawing is for the $\phi 20$ and $\phi 25$. (Contour dimensions of the $\phi 32$ and $\phi 40$ head covers are smaller than the block portion.)

Code	C	E	F	H	I	J	K	R	S	U	U ₁	V	W
20 [0.787]	66	23	12	15	12	5	M8×1	22	6		20	8	6
25 [0.984]	66	26	14	18	14	6	M10×1.25	22	6	29	22	10	8
32 [1.260]	73	31	14	23	14	6	M10×1.25	27	1		27	12	10
40 [1.575]	80	31	14	23	19	8	M14×1.5	32	1	35	33	16	14

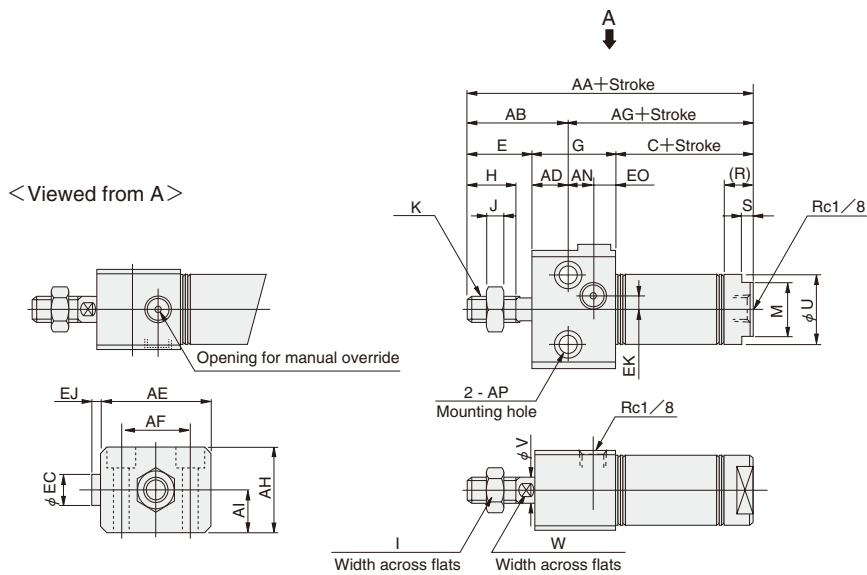
Code	BA	BB	BC	BD	BE	BF	BG	BI	BP	BU	EA	EB	EC	EE	EF	EI	EJ	EO
20 [0.787]	117	35	28	18	38	28	82	14	5.5	22	16	—	16	17.5	32	12.5	0.5	8
25 [0.984]	122	40	30	20	42	32	82	15	5.5	24	16	—	16	18.5	36	13.5	2.5	8
32 [1.260]	134	45	36	24	54	42	89	18	6.6	28	24	2	25	22.5	40.5	17.5	—	14
40 [1.575]	141	45	44	28	68	52	96	22	9	34	24	4	25	25.5	46	21	—	16

-RL Dimensions of Rod Side End Keep, Side Mounting Type (mm)

● $\phi 16$ DABK16 \times Stroke -RL-2



● $\phi 20 \sim \phi 40$ DABK Bore size \times Stroke -RL-2



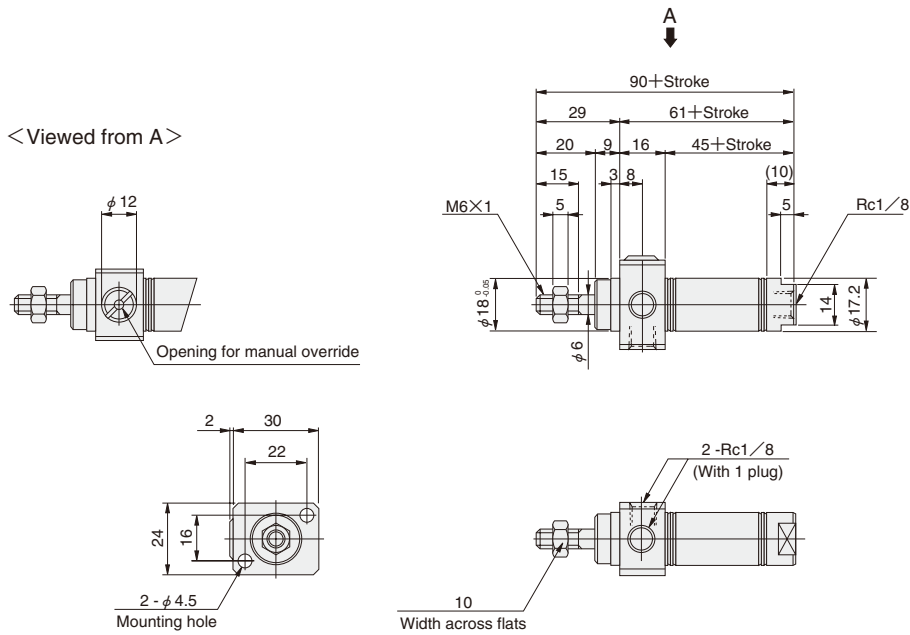
● The drawing is for the $\phi 20$ and $\phi 25$. (Contour dimensions of the $\phi 32$ and $\phi 40$ head covers are smaller than the block portion.)

Bore mm [in.]	Code	C	E	G	H	I	J	K	M	R	S	U	V	W
20	[0.787]	53	23	28	15	12	5	M8×1	17	10	5	21.4	8	6
25	[0.984]	53	26	30	18	14	6	M10×1.25	19	10	5	26.4	10	8
32	[1.260]	54	31	36	23	14	6	M10×1.25	22	11	6	33.6	12	10
40	[1.575]	60	31	50	23	19	8	M14×1.5	22	13	6	41.6	16	14

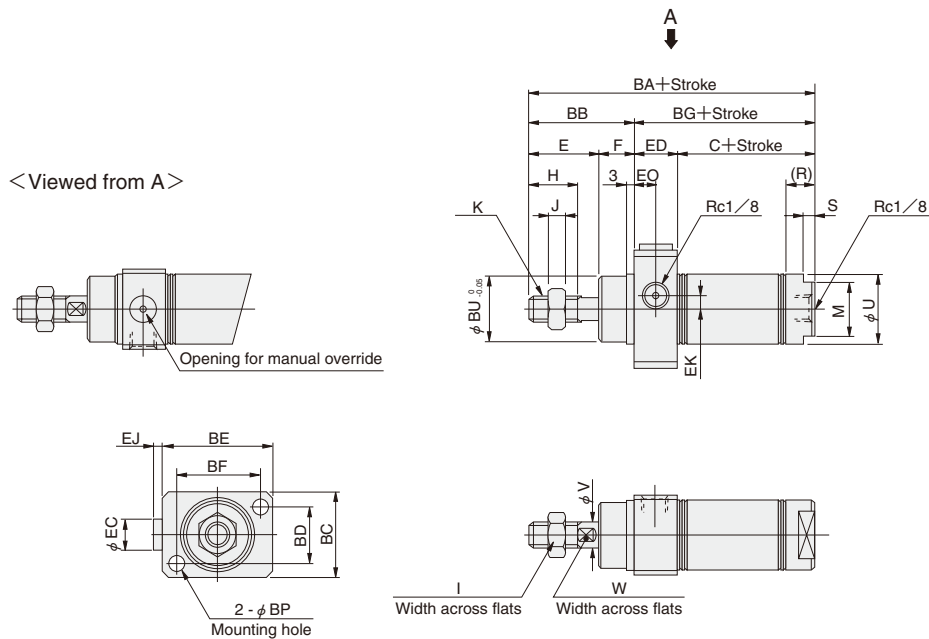
Bore mm [in.]	Code	AA	AB	AD	AE	AF	AG	AH	AI	AN	AP	EC	EJ	EK	EO
20	[0.787]	104	34	11	38	22	70	28	14	9	$\phi 6.6$ Counterbore $\phi 11$ Depth6.5	12	4	0	8
25	[0.984]	109	38	12	42	26	71	30	15	10	$\phi 6.6$ Counterbore $\phi 11$ Depth6.5	12	3	0	8
32	[1.260]	121	42	11	54	34	79	36	18	14	$\phi 9$ Counterbore $\phi 14$ Depth8.6	17.5	5	7.5	11
40	[1.575]	141	48	17	68	46	93	44	22	19	$\phi 11$ Counterbore $\phi 17.5$ Depth10.8	—	0	10	14

-RL Dimensions of Rod Side End Keep, Front Mounting Type (mm)

● $\phi 16$ DABK16 \times Stroke -RL-4



● $\phi 20 \sim \phi 40$ DABK Bore size \times Stroke -RL-4



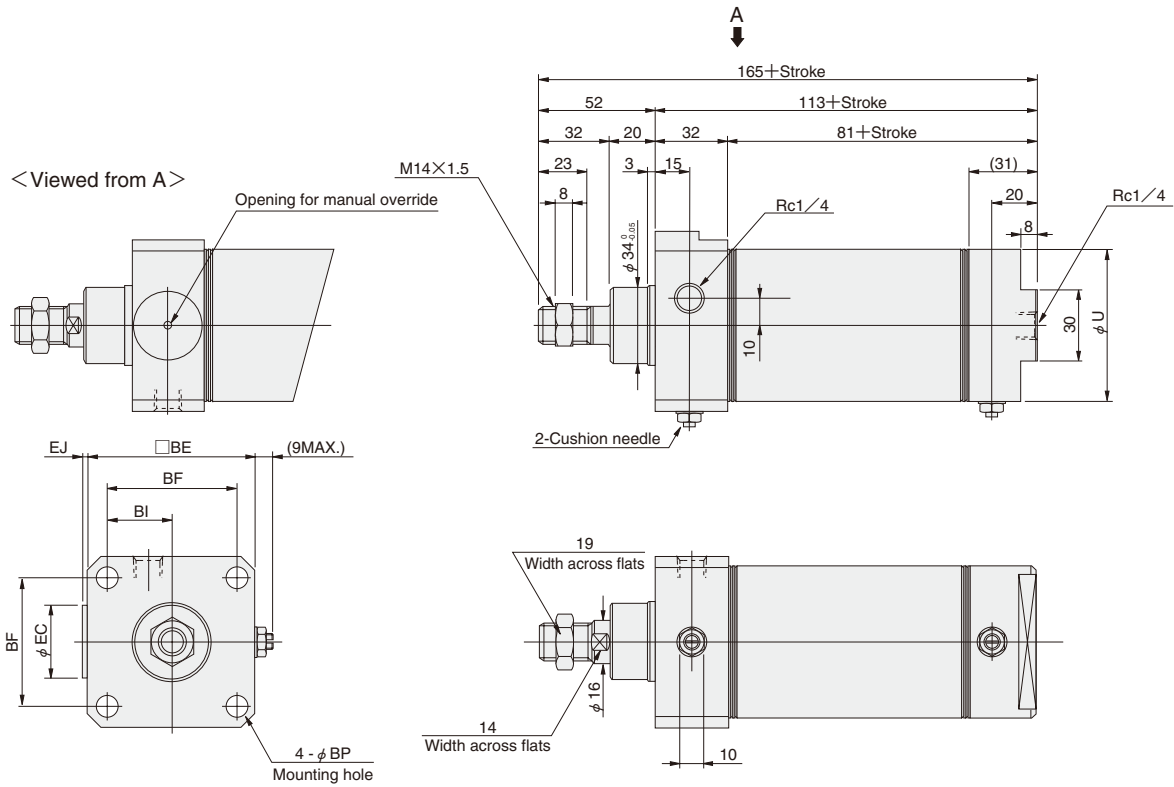
● The drawing is for the $\phi 20$ and $\phi 25$. (Contour dimensions of the $\phi 32$ and $\phi 40$ head covers are smaller than the block portion.)

Bore mm [in.]	Code	C	E	F	H	I	J	K	M	R	S	U	V	W
20 [0.787]		53	23	12	15	12	5	M8×1	17	10	5	21.4	8	6
25 [0.984]		53	26	14	18	14	6	M10×1.25	19	10	5	26.4	10	8
32 [1.260]		54	31	14	23	14	6	M10×1.25	22	11	6	33.6	12	10
40 [1.575]		60	31	14	23	19	8	M14×1.5	22	13	6	41.6	16	14

Bore mm [in.]	Code	BA	BB	BC	BD	BE	BF	BG	BP	BU	EC	ED	EJ	EK	EO
20 [0.787]		104	35	28	18	38	28	69	5.5	22		16	4	0	8
25 [0.984]		109	40	30	20	42	32	69	5.5	24	12	16	3	0	8
32 [1.260]		124	45	36	24	54	42	79	6.6	28		25	5	7.5	11
40 [1.575]		131	45	44	28	68	52	86	9	34	12	26	0	10	14

-RL Dimensions of Rod Side End Keep, Front Mounting Type (mm)

● $\phi 50$, $\phi 63$ DABK \times -RL-4



SLIM CYLINDERS

Bore mm [in.]	Code	U	BE	BF	BI	BP	EC	EJ
50 [1.969]		52	62	48	24	6.6	30	6
63 [2.480]		65.4	74	58	29	9	—	0