

Series **AM2**

Air Cylinder

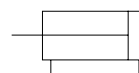
Bore size / $\varnothing 40$, $\varnothing 50$, $\varnothing 63$, $\varnothing 80$, $\varnothing 100$



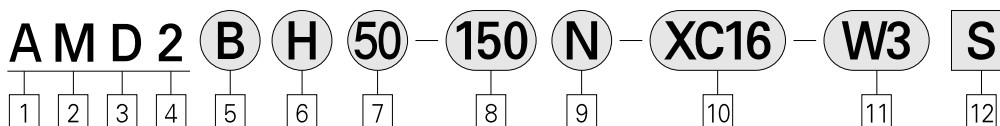
- Improved energy absorption capacity
- Cylinder with high tech appearance
- Improved cushion capacity
- Compact and lightweight design
- Increase kinetic energy absorption

Symbol

Double Acting



How to Order



1 Actuator

2 Medium Cylinder

3 Magnet

Blank : Without Magnet
D : Built-in Magnet

4 Series No

5 Mounting

B : Basic
L : Foot
F : Rod Side Flange
G : Head Side Flange
C : Single Rear Clevis
D : Double Rear Clevis
T : Center Trunnion

6 Type

Blank : Lubricated
N : Non-Lube
H : Low Pressure
F : Hydraulic

7 Bore Size

40 : 40mm
50 : 50mm
63 : 63mm
80 : 80mm
100 : 100mm

8 Standard Stroke

$\varnothing 40$: 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350
 $\varnothing 50, 63$: 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
 $\varnothing 80, 100$: 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700

9 Suffix Symbol for Cylinder

Gaiter J : Lubricator
K : Neoprene cloth
Cushion N : None
R : Rod end
H : Head end
Blank : Both end

10 Series

Blank : Standard Type
XC16 : Copper-Free

11 Applicable Auto Switches

Blank : None

W3 : existing plug point Auto Switch

W2PL : Intense-Magnetism-Resistant type

12 Number of Switches

Blank : 2 pcs
S : 1 pcs
N : n pcs

Model

Model		Acting	Packing
AM2	Lubricated	Double	O Ring
AM2ON	Non-Lube		Special
AM2OH	Low Pressure		Special

Model No. of Built-in Magnetic Cylinder

If there is no Auto switch at Built-in Magnetic, Auto switch has no sign.

ex) AM2L40-100

Parts No. Of Mounting Bracket

Bore size	ø 40	ø 50	ø 63	ø 80	ø 100
※ Foot	TCA2L40	TCA2L50	TCA2L63	TCA2L80	TCA2L100
Flange	TCA2F40	TCA2F50	TCA2F63	TCA2F80	TCA2F100
Single clevis	TCA2C40	TCA2C50	TCA2C63	TCA2C80	TCA2C100
Double clevis	TCA2D40	TCA2D50	TCA2D63	TCA2D80	TCA2D100

※ 2 pcs min for order of only one cylinder.

Specifications

Type	Lube, Non-lube	Air-hydro
Fluid	Air	L.P.Oil
Proof pressure	15kgf/cm ² {1.47MPa}	
Max. operating pressure	9.9kgf/cm ² {0.97MPa}	
Min. operating pressure	0.5kgf{0.05MPa}	1.0kgf{0.1MPa}
Ambient and fluid temperature	5~60°C	
Piston speed	50~500mm/s	0.5~300mm/s
Cushion	Air Cushion	Not Available
Stroke tolerance	~250 st : $^{+1.0}_{-0}$, 251~1,000 st : $^{+1.4}_{-0}$, 1,001~1,500 st : $^{+1.8}_{-0}$	
Mounting	Basic, Foot, Front flange, Rear flange, Single clevis, Double clevis, Center trunnion	

Weight/Aluminum Tube(Iron Tube)

(kgf)

Bore size		ø 40	ø 50	ø 63	ø 80	ø 100
Basic Weight	Basic	0.940 (0.94)	1.295 (1.40)	2.194 (2.04)	3.507 (3.63)	4.581 (5.07)
	Foot	1.130 (1.13)	1.515 (1.62)	2.534 (2.38)	4.177 (4.30)	5.841 (6.06)
	Flange	1.31 (1.30)	1.75 (1.86)	3.64 (2.84)	4.96 (5.08)	6.72 (6.99)
	Single clevis	1.17 (1.17)	1.49 (1.74)	2.83 (2.67)	4.62 (4.74)	6.63 (6.68)
	Double clevis	1.21 (1.21)	1.48 (1.83)	2.98 (2.83)	4.91 (5.03)	7.15 (7.38)
	Trunnion	1.25 (1.35)	1.84 (1.94)	2.80 (3.00)	5.03 (5.32)	7.15 (7.54)
Additional weight per 2" stroke	All mounting bracket (except trunnion iron tube)	0.22 (0.28)	0.28 (0.35)	0.37 (0.43)	0.52 (0.70)	0.65 (0.87)
	Trunnion of iron tube	(0.36)	(0.46)	(0.65)	(0.86)	(1.07)
Accessories	Single knuckle	0.23	0.26	0.26	0.60	0.83
	Double knuckle(with pin)	0.37	0.43	0.43	0.87	1.27

※ In parenthese are for Iron tube type.

Example

AM2L40-100(Foot, ø 40, 100st)

- Basic weight 1.13kgf
- Additional weight ... 0.22/50st
- Cylinder stroke 100st

$$1.13 + 0.22 \times 100/50 = 1.57\text{kgf}$$

Accessories

Mounting Description		Basic	Foot	Front flange	Rear flange	Single clevis	Double clevis	Center trunnion
Standard	Rod end nut	●	●	●	●	●	●	●
	Clevis pin	—	—	—	—	—	●	—
Option	Single knuckle joint	●	●	●	●	●	●	●
	Double knuckle joint(with pin)	●	●	●	●	●	●	●
	Gaiter	●	●	●	●	●	●	●

Parts No. Of Auto Switch Mounting Band

Switch model	Parts No.	Applicable bore size(mm)
W3	TBT-04	ø 40
	TBT-04	ø 50
	TBT-06	ø 63
	TBT-08	ø 80
	TBT-08	ø 100

Base Material And Surface Treatment

DescriptionMaterial		Note	
Cover		Aluminum alloy	Silver paint
Cylinder tube		Aluminum alloy	Hard alumite
		Carbon steel tube	Inside/Hard chrome plated Outside/Platinum silver
Seals areal	Lubricated	NBR	PDU JIS B2401 O-ring
	Non-lube	NBR	PDU, NLP
	Air-hydro	NBR	SCB, SKY, SDA
Piston rod		Carbon steel	—
Piston		Aluminum alloy	Chromate

Gaiter/Material

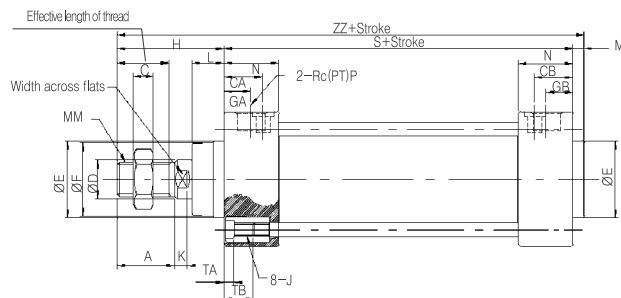
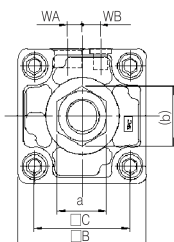
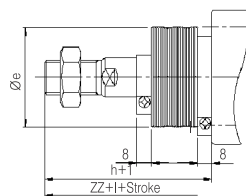
Symbol	Material	Max.ambient temperature
J	Nylon tarpaulin	60℃
K	Neoprene cloth	※110℃

※ For gaiter itself

Basic Type/(B)

Lube Type(AM2B, AM2BF), Non-Lube Type(AM2BN), Air-Hydro Type(AM2BH)

With Single Rod Boot

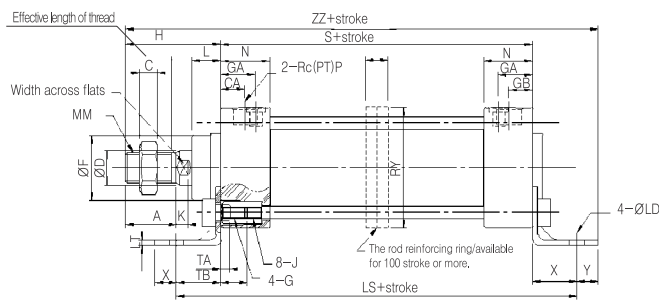
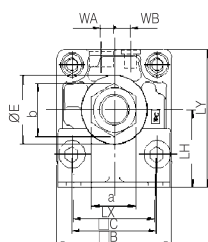
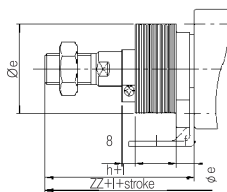


Bore size (mm)	Stroke range(mm)		Effective length of thread	Width across flats	A	□B	□C	CA	CB	ØD	ØE	ØF	GA	GB	M	N	P	S	MM	J	K	L	WA	WB	a	b	c	TA	TB	Without Rod Boot		With Rod Boot			
	Without gaiter	With gaiter																												H	ZZ	Øe	h	I	ZZ
40	~500	20~500	25	14	28	60	44	18	18	16	32	30	13	13	5	26.7	1/4	84	M14×1.5	M6×1.0	6	15	5	10.5	22	25.4	8	4.5	16	51	140	43	59	1/4 Stroke	148
50	~600	20~600	28	18	31	70	52	21	21	20	40	38	14.5	14.5	6	29.7	3/8	90	M18×1.5	M8×1.25	7	17.7	8	9.9	27	31.2	11	5.5	16	58	154	52	66		162
63	~600	20~600	28	18	31	85	64	21	21	20	40	38	15	15	6	30.7	3/8	98	M18×1.5	M8×1.25	7	17.4	9	11.5	27	31.2	11	5.5	16	58	162	52	66		170
80	~750	20~750	33	22	36	102	78	26	26	25	52	50	21	21	7	36.7	1/2	116	M22×1.5	M10×1.25	10	22.5	11	13	32	37	13	5.5	17	71	194	65	80		203
100	~750	20~750	37	26	40	116	92	28	28	30	52	50	21	21	8	39.7	1/2	126	M26×1.5	M10×1.25	10	19	13	14	41	47.3	16	5.5	17	72	206	65	81		215

Foot Type/(L)

Lube Type(AM2L, TCA2LF), Non-Lube Type(AM2LN), Air-Hydro Type(AM2LH)

With Single Rod Boot



(mm)

Bore size (mm)	Stroke range(mm)		Effective length of thread	Width across flat	A	□B	□C	CA	CB	ØD	ØE	ØF	GA	GB	L	N	P	S	MM	J	K
	Without Rod Boot	With Rod Boot																			
40	~500	20~500	25	14	28	60	44	18	18	16	32	30	13	13	15	26.7	1/4	84	M14×1.5	M6×1.0 DP 18	6
50	~600	20~600	28	18	31	70	52	21	21	20	40	38	14.5	14.5	17.7	29.7	3/8	90	M18×1.5	M8×1.25 DP 18	7
63	~600	20~600	28	18	31	85	64	21	21	20	40	38	15	15	17.4	30.7	3/8	98	M18×1.5	M8×1.25 DP 18	7
80	~750	20~750	33	22	36	102	78	26	26	25	52	50	21	21	22.5	36.7	1/2	116	M22×1.5	M10×1.25 DP 18	10
100	~750	20~750	37	26	40	116	92	28	28	30	52	50	21	21	19	39.7	1/2	126	M26×1.5	M10×1.25 DP 18	10

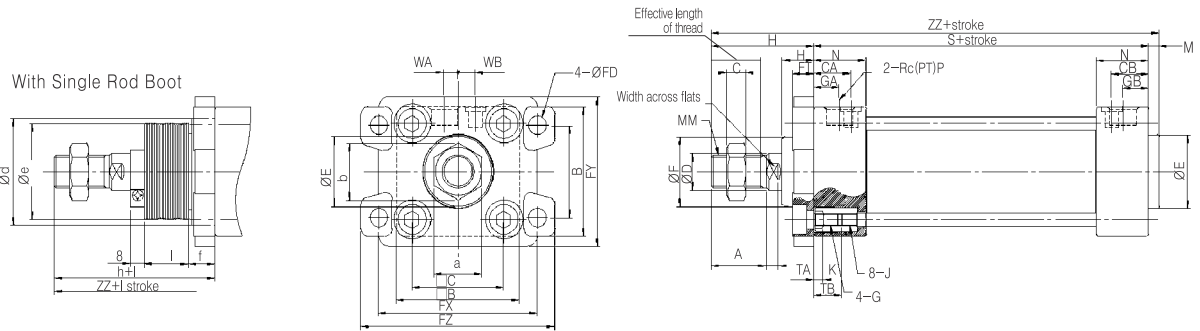
Long Stroke Type

G	WA	WB	a	b	c	TA	TB	X	Y	ØLD	LH	LS	LT	LX	LY	Without Rod Boot		With Rod Boot					
																H	ZZ	Øe	f	h	I	ZZ	
M6×1.0DP18	5	10.5	22	25.4	8	4.5	16	27	13	9	40	138	3.2	42	70	51	175	43	11.2	59	1/4 Stroke	183	
M8×	8	9.9	27	31.2	11	5.5	16	27	13	9	45	144	3.2	50	80	58	188	52	11.2	66		196	
1.25DP18	9	11.5	27	31.2	11	5.5	16	34	16	11.5	50	166	3.2	59	93	58	206	52	11.2	66		214	
M8×	11	13	32	37	13	5.5	17	44	16	13.5	65	204	4.5	76	116	71	247	65	12.5	80		256	
1.25DP18	13	14	41	47.3	16	5.5	17	43	17	13.5	75	212	6	92	133	72	258	65	14	81		267	

Bore size (mm)	Stroke range (mm)	RT	RY
40	501~800	—	—
50	601~1200	30	76
63	601~1200	40	92
80	751~1400	45	112
100	751~1400	50	136

Front Flange/(F)

Lube Type(AM2F, AM2FF), Non-Lube Type(AM2FN), Air-Hydro Type(AM2FH)



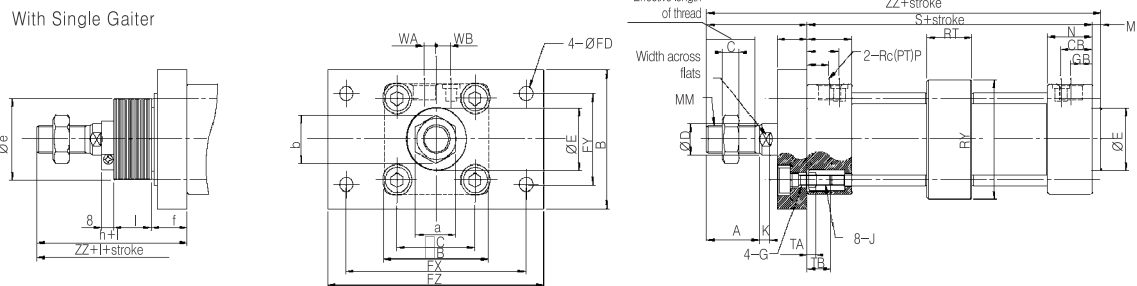
(mm)

Bore size (mm)	Stroke range(mm)		Effective length of thread	Width across flats	A	B	□B	□C	CA	CB	ØD	ØE	ØF	GA	GB	S	MM	G	J	K	L
	Without Rod Boot	With Rod Boot																			
40	~800	20~800	25	14	28	71	60	44	18	18	16	32	30	13	13	84	M14×1.5	M6×1.0 DP 18	M6×1.0 DP 22	6	15
50	~1000	20~1000	28	18	31	81	70	52	21	21	20	40	38	14.5	14.5	90	M18×1.5	M8×1.25 DP 18	M8×1.25 DP 24	7	17.7
63	~1000	20~1000	28	18	31	101	85	64	21	21	20	40	38	15	15	98	M18×1.5	M8×1.25 DP 22	M8×1.25 DP 24	7	17.4
80	~1000	20~1000	33	22	36	119	102	78	26	26	25	52	50	21	21	116	M22×1.5	M10×1.25 DP 24	M10×1.25 DP 26	10	22.5
100	~1000	20~1000	37	26	40	133	116	92	28	28	30	52	50	21	21	126	M26×1.5	M10×1.25 DP 24	M10×1.25 DP 26	10	19

M	N	P	WA	WB	a	b	c	TA	TB	FV	ØFD	FT	FX	FY	FZ	Without Rod Boot		With Rod Boot						
																H	ZZ	*Ød	Øe	f	h	I	ZZ	
5	26.7	1/4	5	10.5	22	25.4	8	4.5	16	60	9	12	80	42	100	51	140	52	43	15	59	1/4 Stroke	148	
6	29.7	3/8	8	9.9	27	31.2	11	5.5	16	70	9	12	90	50	110	58	154	58	52	15	66		162	
6	30.7	3/8	9	11.5	27	31.2	11	5.5	16	86	11.5	15	105	59	130	58	162	58	52	17.5	66		170	
7	36.7	1/2	11	13	32	37	13	5.5	17	102	13.5	18	130	76	160	71	194	80	65	21.5	80		203	
8	39.7	1/2	13	14	41	47.3	16	5.5	17	116	13.5	18	150	92	180	72	206	80	65	21.5	81		215	

★ Hole diameter of Rod Boot to mount Air-cylinder should be larger than the outside diameter of gaiter mounting bracket Ød.

Long Stroke (1001 Stroke or more)



※ It's for steel Flange.

(mm)

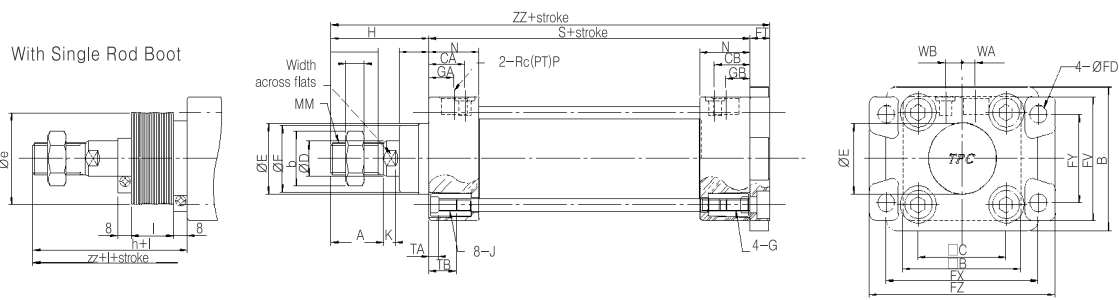
Bore size (mm)	Stroke range (mm)	Effective length of thread	Width across flats	A	B	□B	□C	CA	CB	ØD	ØE	GA	GB	P	S	MM	G	J	K	M	N
50	1001~1200	28	18	35	88	70	52	21	21	20	40	14.5	14.5	3/8	90	M18×1.5	M8×1.25 DP 26	M8×1.25 DP 24	7	6	29.7
63	1001~1200	28	18	35	105	85	64	21	21	20	40	15	15	3/8	98	M18×1.5	M8×1.25 DP 27	M8×1.25 DP 24	7	6	30.7
80	1001~1400	33	22	40	124	102	78	26	26	25	52	21	21	1/2	116	M22×1.5	M10×1.25 DP 32	M10×1.25 DP 26	11	7	36.7
100	1001~1500	37	26	40	140	116	92	28	28	30	52	21	21	1/2	126	M26×1.5	M10×1.25 DP 32	M10×1.25 DP 26	11	8	39.7

WA	WB	a	b	c	TA	TB	ØFD	FT	FX	FY	FZ	RT	RY	Without Rod Boot			With Rod Boot				
														H	ZZ	*Ød	f	h	I	ZZ	
8	9.9	27	31.2	11	5.5	17	9	20	120	58	144	30	76	67	163	52	24	75	1/4 Stroke	17	
9	11.5	27	31.2	11	5.5	17	11.5	23	140	64	170	40	92	71	175	52	27	79		18	
11	13	32	37	13	5.5	18	13.5	28	164	84	198	45	112	87	210	65	32.5	96		21	
13	14	41	47.3	16	5.5	18	13.5	29	180	100	220	50	136	89	223	65	33.5	98		23	

★ Hole diameter of Rod Boot to mount Air-cylinder should be larger than the outside diameter of gaiter mounting bracket Øe.

Rear Flange/(G)

Lube Type(AM2G, AM2GF), Non-Lube Type(AM2GN), Air-Hydro Type(AM2GH)

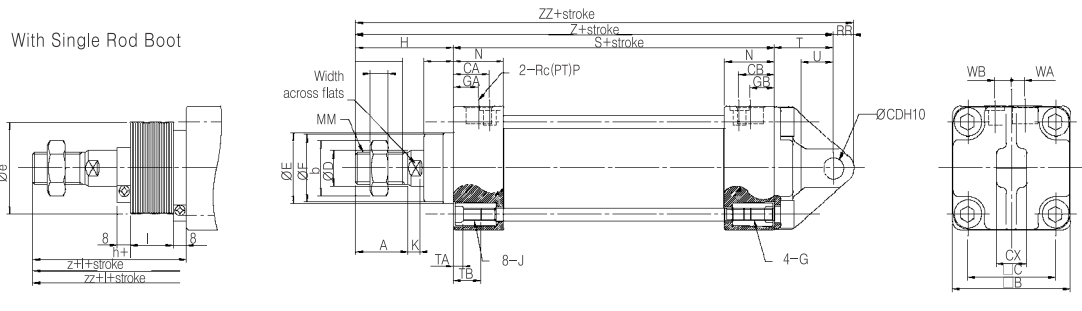


Bore size (mm)	Stroke range		Effective length of thread	Width across flats	A	B	□B	□C	CA	CB	ØD	ØE	ØF	GA	GB	S	MM	G	J	K	L
	Without Rod Boot	With Rod Boot																			
40	~500	20~500	25	14	28	71	60	44	18	18	16	32	30	13	13	84	M14×1.5	M6×1.0 DP 18	M6×1.0 DP 22	6	15
50	~600	20~600	28	18	31	81	70	52	21	21	20	40	38	14.5	14.5	90	M18×1.5	M8×1.25 DP 18	M8×1.25 DP 24	7	17.7
63	~600	20~600	28	18	31	101	85	64	21	21	20	40	38	15	15	98	M18×1.5	M8×1.25 DP 22	M8×1.25 DP 24	7	17.4
80	~750	20~750	33	22	36	119	102	78	26	26	25	52	50	21	21	116	M22×1.5	M10×1.25 DP 24	M10×1.25 DP 26	10	22.5
100	~750	20~750	37	26	40	133	116	92	28	28	30	52	50	21	21	126	M26×1.5	M10×1.25 DP 24	M10×1.25 DP 26	10	19

N	P	WA	WB	b	c	TA	TB	FV	ØFD	FT	FX	FY	FZ	Without Rod Boot		With Rod Boot		Stroke	1/4
														H	ZZ	Øe	h	I	ZZ
26.7	1/4	5	10.5	25.4	8	4.5	16	60	9	12	80	42	100	51	147	43	59	155	
29.7	3/8	8	9.9	31.2	11	5.5	16	70	9	12	90	50	110	58	160	52	66	168	
30.7	3/8	9	11.5	31.2	11	5.5	16	86	11.5	15	105	59	130	58	171	52	66	179	
36.7	1/2	11	13	37	13	5.5	17	102	13.5	18	130	76	160	71	205	65	80	214	
39.7	1/2	13	14	47.3	16	5.5	17	116	13.5	18	150	92	180	72	216	65	81	225	

Single Clevis/(C)

Lube Type(AM2C, AM2CF), Non-Lube Type(AM2CN), Air-Hydro Type(AM2CH)

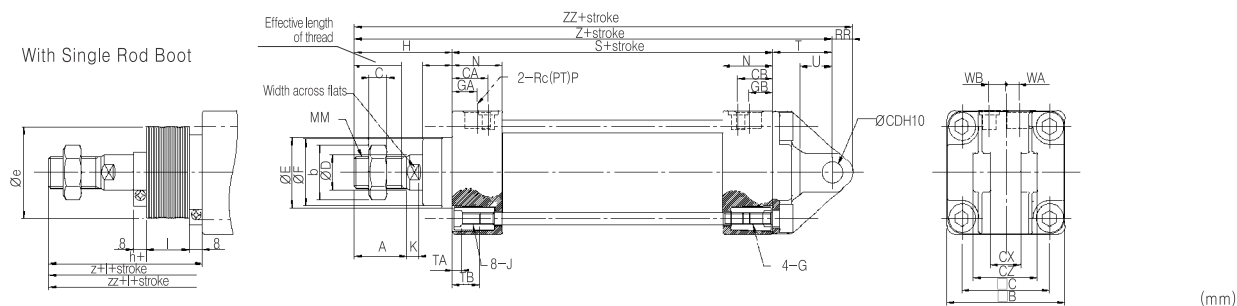


Bore size (mm)	Stroke range		Effective length of thread	Width across flats	A	□B	□C	CA	CB	ØD	ØE	ØF	GA	GB	S	MM	G	J	K
	Without Rod Boot	With Rod Boot																	
40	~500	20~500	25	14	28	60	44	18	18	16	32	30	13	13	84	M14×1.5	M6×1.0 DP 18	M6×1.0 DP 22	6
50	~600	20~600	28	18	31	70	52	21	21	20	40	38	14.5	14.5	90	M18×1.5	M8×1.25 DP 18	M8×1.25 DP 24	7
63	~600	20~600	28	18	31	85	64	21	21	20	40	38	15	15	98	M18×1.5	M8×1.25 DP 18	M8×1.25 DP 24	7
80	~750	20~750	33	22	36	102	78	26	26	25	52	50	21	21	116	M22×1.5	M10×1.25 DP 20	M10×1.25 DP 26	10
100	~750	20~750	37	26	40	116	92	28	28	30	52	50	21	21	126	M26×1.5	M10×1.25 DP 20	M10×1.25 DP 26	10

L	N	P	T	WA	WB	b	c	TA	TB	RR	U	ØCD H10	CX	Without Rod Boot			With Rod Boot						
														H	Z	ZZ	øe	h	I	Z	ZZ		
15	26.7	1/4	30	5	10.5	25.4	8	4.5	16	10	16	10	$\frac{+0.058}{0}$	15	$\frac{-0.1}{-0.3}$	51	165	175	43	59	1/4 Stroke	173	183
17.7	29.7	3/8	35	8	9.9	31.2	11	5.5	16	12	19	12	$\frac{+0.070}{0}$	18	$\frac{-0.1}{-0.3}$	58	183	195	52	66		191	203
17.4	30.7	3/8	40	9	11.5	31.2	11	5.5	16	16	23	16	$\frac{+0.070}{0}$	25	$\frac{-0.1}{-0.3}$	58	196	212	52	66		204	220
22.5	36.7	1/2	48	11	13	37	13	5.5	17	20	28	20	$\frac{+0.084}{0}$	31.5	$\frac{-0.1}{-0.3}$	71	235	255	65	80		244	264
19	39.7	1/2	58	13	14	47.3	16	5.5	17	25	36	25	$\frac{+0.084}{0}$	35.5	$\frac{-0.1}{-0.3}$	72	256	281	65	81		265	290

Double Clevis Type/(D)

Lube type(AM2D, AM2DF), Non-Lube Type(AM2DN), Air-Hydro Type(AM2DH)

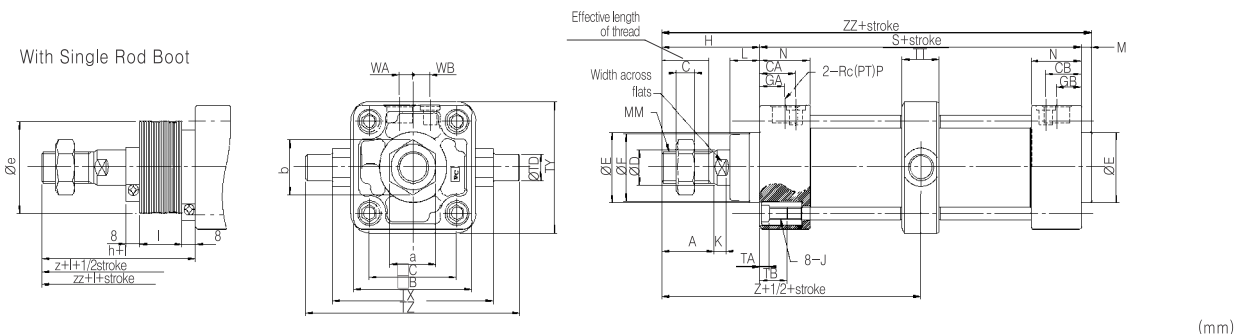


Bore size (mm)	Stroke range(mm)		Effective length of thread	Width across flats	A	 B	 C	CA	CB	ØD	ØE	ØF	GA	GB	S	MM	G	J	K
	Without Rod Boot	With Rod Boot																	
40	~500	20~500	25	14	28	60	44	18	18	16	32	30	13	13	84	M14×1.5	M6×1.0 DP 18	M6×1.0 DP 22	6
50	~600	20~600	28	18	31	70	52	21	21	20	40	38	14.5	14.5	90	M18×1.5	M8×1.25 DP 18	M8×1.25 DP 24	7
63	~600	20~600	28	18	31	85	64	21	21	20	40	38	15	15	98	M18×1.5	M8×1.25 DP 18	M8×1.25 DP 26	7
80	~750	20~750	33	22	36	102	78	26	26	25	52	50	21	21	116	M22×1.5	M10×1.25 DP 20	M10×1.25 DP 26	10
100	~750	20~750	37	26	40	116	92	28	28	30	52	50	21	21	126	M26×1.5	M10×1.25 DP 20	M10×1.25 DP 26	10

L	N	P	T	WA	WB	b	c	TA	TB	RR	U	ØCD H10	CX	CZ	Without Rod Boot			With Rod Boot						
															H	Z	ZZ	Øe	h	I	Z	ZZ		
15	26.7	1/4	30	5	10.5	25.4	8	4.5	16	10	16	10	$\frac{+0.058}{0}$	15	$\frac{+0.3}{+0.1}$	29.5	51	165	175	43	59	1/4 Stroke	173	183
17.7	29.7	3/8	35	8	9.9	31.2	11	5.5	16	12	19	12	$\frac{+0.070}{0}$	18	$\frac{+0.3}{+0.1}$	38	58	183	195	52	66		191	203
17.4	30.7	3/8	40	9	11.5	31.2	11	5.5	16	16	23	16	$\frac{+0.070}{0}$	25	$\frac{+0.3}{+0.1}$	49	58	196	212	52	66		204	220
22.5	36.7	1/2	48	11	13	37	13	5.5	17	20	28	20	$\frac{+0.084}{0}$	31.5	$\frac{+0.3}{+0.1}$	61	71	235	255	65	80		244	264
19	39.7	1/2	58	13	14	47.3	16	5.5	17	25	36	25	$\frac{+0.084}{0}$	35.5	$\frac{+0.3}{+0.1}$	64	72	256	281	65	81		265	290

Center Trunnion Type/(T)

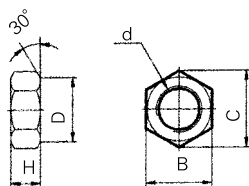
Lube Type(AM2T, AM2TF), Non-lube Type(AM2TN), Air-hydro type(AM2TH)



Bore size (mm)	Stroke range(mm)		Effective length of thread	Width across flats	A	 B	 C	CA	CB	ØD	ØE	ØF	GA	GB	L	M	N	S	MM	G	K
	Without Rod Boot	With Rod Boot																			
40	~500	20~500	25	14	28	60	44	18	18	16	32	30	13	13	15	5	26.7	84	M14×1.5	M6×1.0 DP 22	6
50	~600	20~600	28	18	31	70	52	21	21	20	40	38	14.5	14.5	17.7	6	29.7	90	M18×1.5	M8×1.25DP 24	7
63	~600	20~600	28	18	31	85	64	21	21	20	40	38	15	15	17.4	6	30.7	98	M18×1.5	M8×1.25DP 24	7
80	~750	20~750	33	22	36	102	78	26	26	25	52	50	21	21	22.5	7	36.7	116	M22×1.5	M10×1.25DP 26	10
100	~750	20~750	37	26	40	116	92	28	28	30	52	50	21	21	19	8	39.7	126	M26×1.5	M10×1.25DP 26	10

P	WA	WB	a	b	c	TA	TB	ØTD e8	TT	TX	TY	TZ	Without Rod Boot			With Rod Boot				
													H	Z	ZZ	Øe	h	I	Z	ZZ
1/4	5	10.5	22	25.4	8	4.5	17	15 ^{-0.032} _{-0.059}	22	85	62	117	51	93	140	43	59	1/4 Stroke	101	148
3/8	8	9.9	27	31.2	11	5.5	17	15 ^{-0.032} _{-0.059}	22	95	74	127	58	103	154	52	66		111	162
3/8	9	11.5	27	31.2	11	5.5	17	18 ^{-0.032} _{-0.059}	28	110	90	148	58	107	162	52	66		115	170
1/2	11	13	32	37	13	5.5	18	25 ^{-0.040} _{-0.073}	34	140	110	192	71	129	194	65	80		138	203
1/2	13	14	41	47.3	16	5.5	18	25 ^{-0.040} _{-0.073}	40	162	130	214	72	135	206	65	81		144	215

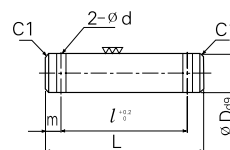
Rod End Nut(Standard accessories)



Material : Rolled steel

Part No.	Applicable bore	d	H	B	C	D
TNT-04	40	M14×1.5	8	22	25.4	21
TNT-05	50・60	M18×1.5	11	27	31.2	26
TNT-08	80	M22×1.5	13	32	37.0	31
TNT-10	100	M26×1.5	16	41	47.3	39

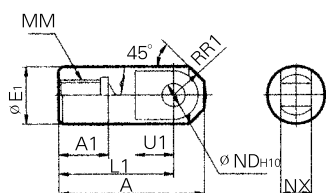
Knuckle Joint Pin/Clevis Pin



Material : Carbon steel

Part No	Bore Size		φ Dd9	L	l	m	φ d	Applicable split pin φ × l
	CLEVIS	KNUCKLE						
TCDP-2	φ 40	—	10 ^{-0.040} _{-0.076}	45.2	37.2	4	φ 3	φ 3×18l
TCDP-3	φ 50	φ 40・50・60	12 ^{-0.050} _{-0.093}	54.3	46.3	4	φ 3	φ 3×18l
TCDP-4	φ 63	—	16 ^{-0.050} _{-0.093}	70	60	5	φ 4	φ 4×24l
TCDP-5	—	φ 80	18 ^{-0.040} _{-0.076}	76	66	5	φ 4	φ 4×25l
TCDP-6	φ 80	φ 100	20 ^{-0.065} _{-0.117}	82	72	5	φ 4	φ 4×36l
TCDP-7	φ 100	—	25 ^{-0.065} _{-0.117}	87.5	77.5	5	φ 4	φ 4×36l

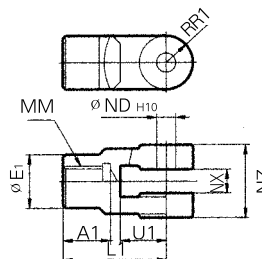
I Type Single Knuckle Joint



Material : Free cutting sulfur steel

Part No.	Applicable bore	A	A1	φ E1	L1	MM	R1	U1	φ NDH10	NX
TI-04	φ 40	69	22	24	55	M14×1.5	15.5	20	12 ^{+0.070} ₀	16 ^{-0.1} _{-0.3}
TI-05	φ 50・φ 63	74	27	28	60	M18×1.5	15.5	20	12 ^{+0.070} ₀	16 ^{-0.1} _{-0.3}
TI-08	φ 80	91	37	36	71	M22×1.5	22.5	26	18 ^{+0.070} ₀	28 ^{-0.1} _{-0.3}
TI-10	φ 100	105	37	40	83	M26×1.5	24.5	28	20 ^{+0.084} ₀	30 ^{-0.1} _{-0.3}

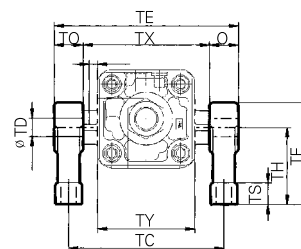
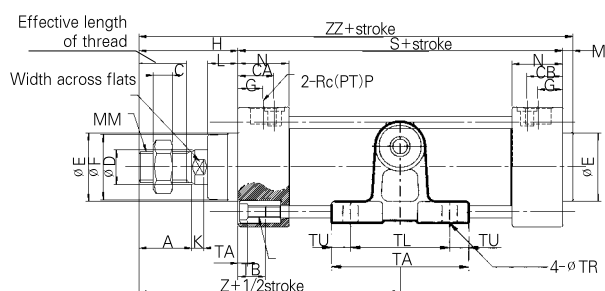
Y Type Double Knuckle Joint



Cast iron

Part No.	Applicable bore	A1	φ E1	L1	MM	R1	U1	φ NDH10	NX	NZ
TY-04A	φ 40	22	24	55	M14×1.5	13	25	12 ^{+0.070} ₀	16 ^{+0.3} _{+0.1}	38
TY-05A	φ 50・φ 63	27	28	60	M18×1.5	15	27	12 ^{+0.070} ₀	16 ^{+0.3} _{+0.1}	38
TY-08A	φ 80	37	36	71	M22×1.5	19	28	18 ^{+0.070} ₀	28 ^{+0.3} _{+0.1}	55
TY-10A	φ 100	37	40	83	M26×1.5	21	38	20 ^{+0.084} ₀	30 ^{+0.3} _{+0.1}	61

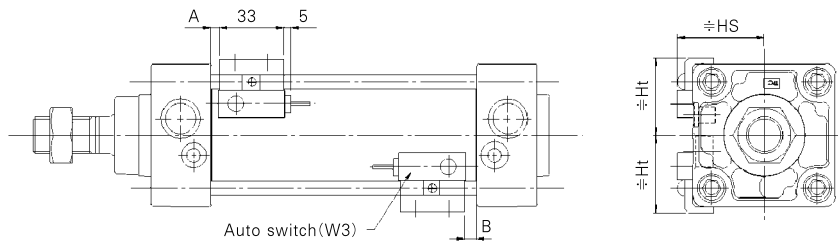
Trunnion Bracket



Part No.	Applicable bore	TA	TL	TU	TC	TX	TE	TO	φ TR	φ TT	TS	TH	TF	TY	W1	Z	φ TD-H10
TCA2-S04	φ 40	80	60	10	102	85	119	17	9	17	12	45	60	62	10	93	15 ^{+0.070} ₀
	φ 50	80	60	10	112	95	129	17	9	17	12	45	60	74	10	103	15 ^{+0.070} ₀
TCA2-S06	φ 63	100	70	15	130	110	150	20	11	22	14	55	73	90	10	107	18 ^{+0.070} ₀
TCA2-S08	φ 80	120	90	15	166	140	192	26	13.5	24	17	75	100	110	12	129	25 ^{+0.084} ₀
	φ 100	120	90	15	188	162	214	26	13.5	24	17	75	100	130	12	135	25 ^{+0.084} ₀

Series AM2

With Auto Switch



(mm)

Part No. of Auto switch	Mounting position of Auto switch	Position				
		ø 40	ø 50	ø 63	ø 80	ø 100
W3	A	0(0)	0(0)	0(2.5)	2(6)	4(7.5)
	B	1(0)	1(0)	5(1.5)	8(4)	10(6.5)
	Hs	37	41	46	53	61
	Ht	31	35	42	50	57

※ () is for long stroke, Non-Lube and Low Pressure Hydro.
Mounting possible for Foot & Front Flange.

Minimum Stroke of Attaching Auto Switch

n: Number of Auto Switch

Part No. of Auto switch	Number of Auto switch	Mounting Bracket for Auto switch	Center Trunnion Type			
			ø 40, ø 50	ø 63	ø 80	ø 100
W3	2 pcs(same, across flats)	15	90	100	110	120
	1 pcs	15+55	90+100	100+55	110+55	120+55
	n pcs(same flats)	$\left(\frac{n-2}{2} \right)$ n=1, 2, 3, 4, ...	$\left(\frac{n-4}{2} \right)$ n=4, 8, 12, 16, ...	$\left(\frac{n-4}{2} \right)$ n=4, 8, 12, 16, ...	$\left(\frac{n-4}{2} \right)$ n=4, 8, 12, 16, ...	$\left(\frac{n-4}{2} \right)$ n=4, 8, 12, 16, ...

List of Improved parts No.

Item	Before	After	비 고
	AM Series	AM2 Series	
1	Head Cover	Changing Appearance	
	Rod Cover	Changing Appearance	
2	Cushion Packing	fixed ⇒ Pre Flow	
3	Nut (fix Tierod)	Hex Nut ⇒ Socket Nut	
4	Stop Ring	Addition	
5	Tie Rod	Changing length	
6	Air is supplied to just section of cushion ring When it's out of cushion range, flow rate is increased suddenly and cracking pressure is being low so that unstable acting is happened.	Air is supplied to section of cushion ring and piston, which prohibits sudden starting (Check Seal Cushion)	