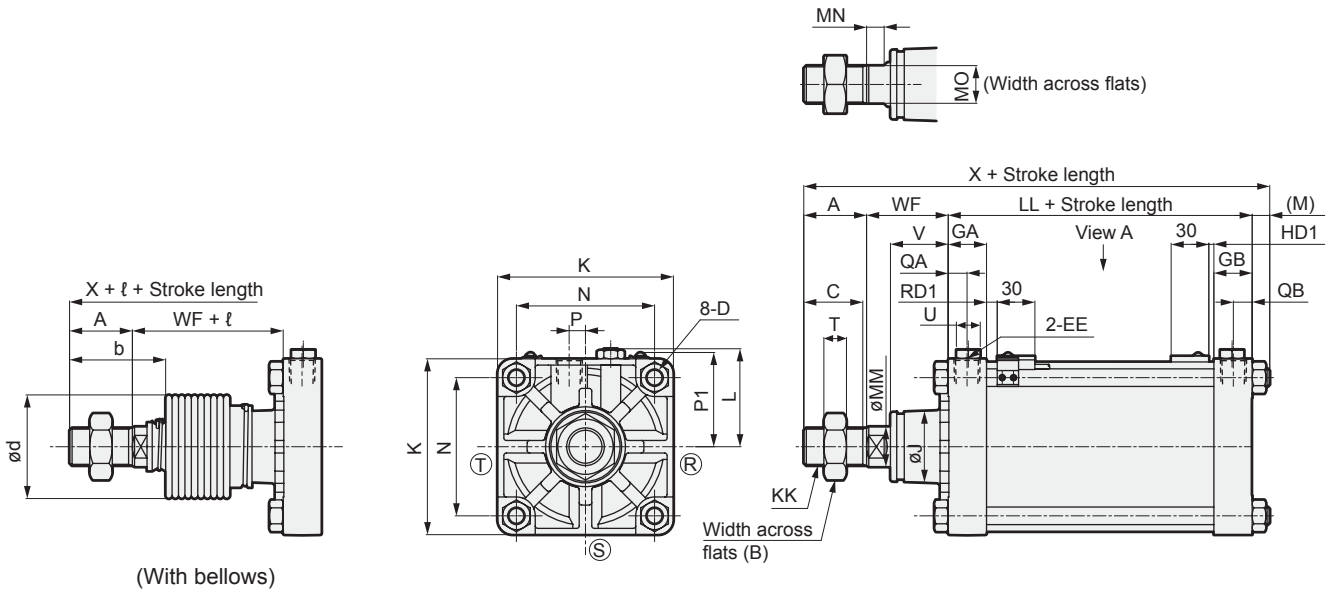
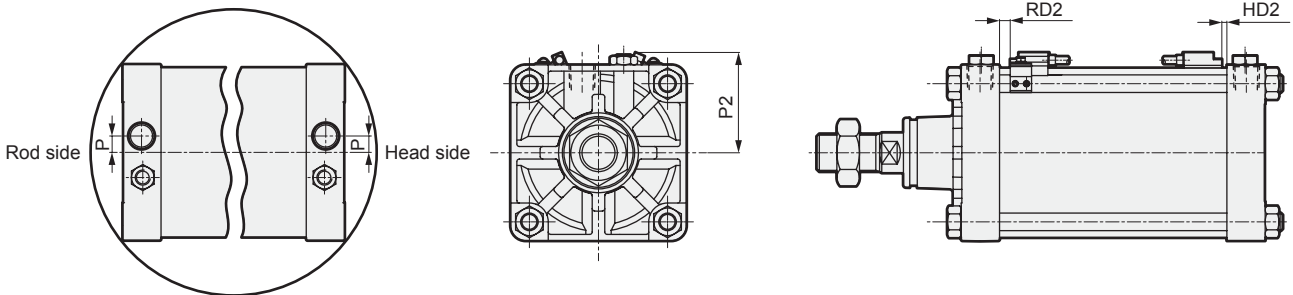


Dimensions

● SCS2 basic type (00)



● 2-color indicator, strong magnetic field, with switch.



RD: Rod side max. sensitive mounting position
HD: Head side max. sensitive mounting position

Note 1: (R)(S)(T) indicate the positions of cushion needles.

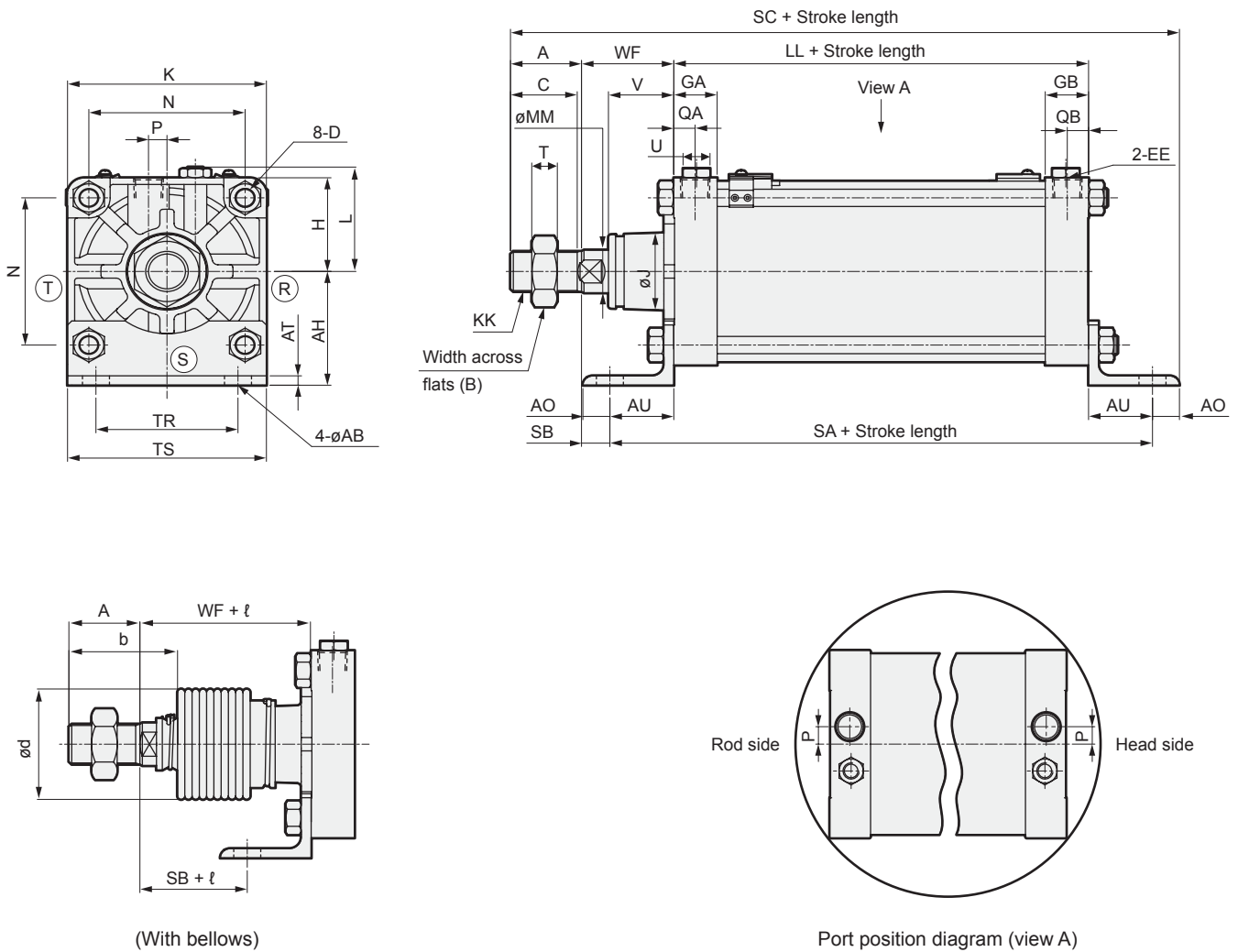
Note 2: For the ℓ dimensions, the decimal places have been rounded out.

Note 3: Refer to dimensions on page 14 for the accessories.

Symbol	Basic type (00) Basic dimensions																			
Bore size (mm)	A	B	C	D	EE	GA	GB	J	K	KK	L	LL	M	MM	MN	MO	N	P	QA	QB
ø125	50	46	47	M14 × 1.5	Rc1/2	30.5	30.5	57	140	M30 × 1.5	78 to 82	92	13.5	32	15	27	110	13	15	15
ø140	50	46	47	M14 × 1.5	Rc3/4	34.5	34.5	57	157	M30 × 1.5	86.5 to 91	103	13.5	32	15	27	124	15	17	17
ø160	56	55	53	M16 × 1.5	Rc3/4	34.5	34.5	62	177	M36 × 1.5	96.5 to 101	106	15.5	40	16	36	142	15	17	17
ø180	63	60	60	M18 × 1.5	Rc3/4	34.5	34.5	68	200	M40 × 1.5	108 to 112	110	17.5	45	18	41	160	15	17	17
ø200	72	70	69	M20 × 1.5	Rc3/4	37.5	37.5	75	220	M45 × 1.5	120.5 to 129	123	18.5	50	20	46	175	20	18	18
ø250	88	85	84	M24 × 1.5	Rc1	42.5	42.5	93	274	M56 × 2	147.5 to 156	141	21.5	60	22	55	216	22	21	21
Symbol	With bellows								With switch		T0, T5, T2, T3		T2W, T3W		T2Y, T3Y, T2YD, T1, T2J		T8			
Bore size (mm)	T	U	V	WF	X	b	d	ℓ	P1	P2	RD1	HD1	RD1	HD1	RD2	HD2	RD2	HD2		
ø125	18	19	45.5	65	220.5	74	75	(Stroke/4.55) + 11	76	80	8.5	4.0	10.5	5.5	7.5	2.5	2.5	0.0		
ø140	18	19	45.5	67	233.5	74	75	(Stroke/4.55) + 9	82	86	8.5	7.0	10.5	8.5	7.5	5.5	2.5	0.5		
ø160	21	19	48	71	248.5	82	80	(Stroke/5.15) + 9	90	95	10.5	8.0	12.5	10.0	9.5	7.0	4.5	1.5		
ø180	24	19	53	78	268.5	91	90	(Stroke/5.15) + 9	98	103	13.0	9.5	14.5	11.5	11.5	8.5	6.5	3.5		
ø200	27	24	60	88	301.5	102	95	(Stroke/5.30) + 9	106	111	17.5	13.0	19.0	15.0	16.0	12.0	11.0	7.0		
ø250	34	24	64	94	344.5	120	120	(Stroke/6.40) + 9	126	130	18.5	19.0	20.5	20.5	17.5	17.5	12.5	12.5		

Dimensions

● Axial foot type (LB)



Note 1: Refer to dimensions of switch on page 5 for with switch.

Note 2: (R)(S)(T) indicate the positions of cushion needles.

Note 3: For the l dimensions, the decimal places have been rounded out.

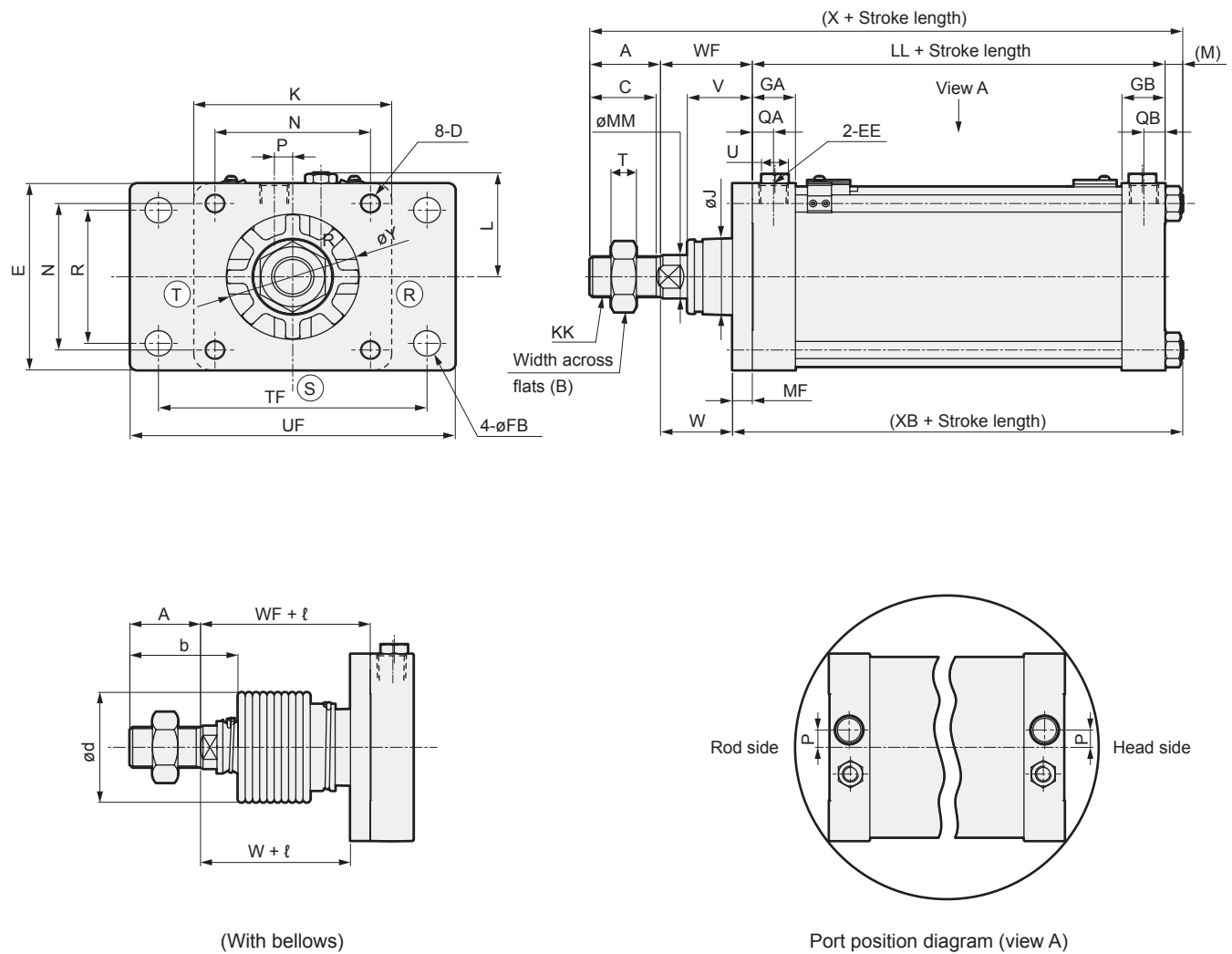
Note 4: Refer to dimensions on page 14 for the accessories.

Symbol	Axial foot type (LB) basic dimensions																	
Bore size (mm)	A	AB	AH	AT	AO	AU	B	C	D	EE	GA	GB	J	K	KK	L	LL	MM
ø125	50	19	85	7	20	45	46	47	M14 × 1.5	Rc1/2	30.5	30.5	57	140	M30 × 1.5	78 to 82	92	32
ø140	50	19	100	8	20	50	46	47	M14 × 1.5	Rc3/4	34.5	34.5	57	157	M30 × 1.5	86.5 to 91	103	32
ø160	56	19	106	10	20	53	55	53	M16 × 1.5	Rc3/4	34.5	34.5	62	177	M36 × 1.5	96.5 to 101	106	40
ø180	63	24	125	10	27	60	60	60	M18 × 1.5	Rc3/4	34.5	34.5	68	200	M40 × 1.5	108 to 112	110	45
ø200	72	24	132	12	27	62	70	69	M20 × 1.5	Rc3/4	37.5	37.5	75	220	M45 × 1.5	120.5 to 129	123	50
ø250	88	29	160	12	28	70	85	84	M24 × 1.5	Rc1	42.5	42.5	93	274	M56 × 2	147.5 to 156	141	60

Symbol	Axial foot type (LB) basic dimensions															With bellows			
Bore size (mm)	MN	MO	N	P	QA	QB	SA	SB	SC	T	TR	TS	U	V	WF	X	b	d	l
ø125	15	27	110	13	15	15	182	20	272	18	100	140	19	45.5	65	222	74	75	(Stroke length/4.55) + 11
ø140	15	27	124	15	17	17	203	17	290	18	112	157	19	45.5	67	235	74	75	(Stroke length/4.55) + 9
ø160	16	36	142	15	17	17	212	18	306	21	118	177	19	48	71	250	82	80	(Stroke length/5.15) + 9
ø180	18	41	160	15	17	17	230	18	338	24	132	200	19	53	78	270	91	90	(Stroke length/5.15) + 9
ø200	20	46	175	20	18	18	247	26	372	27	150	220	24	60	88	303	102	95	(Stroke length/5.30) + 9
ø250	22	55	216	22	21	21	281	24	421	34	180	274	24	64	94	346	120	120	(Stroke length/6.40) + 9

Dimensions

- Rod end flange type (FA)



Note 1: Refer to dimensions of switch on page 5 for with switch.

Note 2: (R)(S)(T) indicate the positions of cushion needles.

Note 3: For the l dimensions, the decimal places have been rounded out.

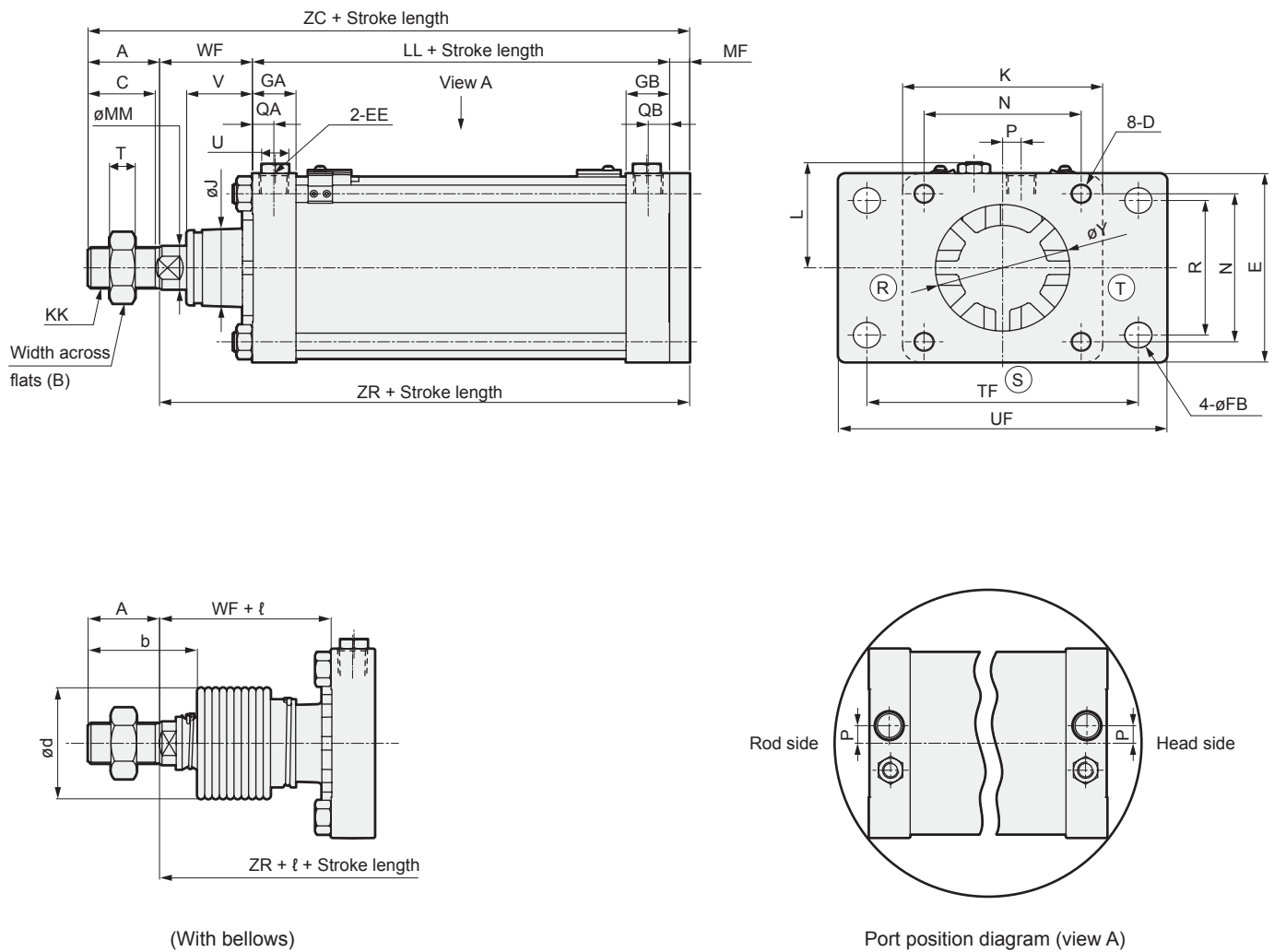
Note 4: Refer to dimensions on page 14 for the accessories.

Symbol	Rod end flange type (FA) basic dimensions																
Bore size (mm)	A	B	C	D	E	EE	FB	GA	GB	J	K	KK	L	LL	M	MF	MM
ø125	50	46	47	M14 × 1.5	140	Rc1/2	19	30.5	30.5	57	140	M30 × 1.5	78 to 82	92	11	14	32
ø140	50	46	47	M14 × 1.5	157	Rc3/4	19	34.5	34.5	57	157	M30 × 1.5	86.5 to 91	103	11	19	32
ø160	56	55	53	M16 × 1.5	177	Rc3/4	19	34.5	34.5	62	177	M36 × 1.5	96.5 to 101	106	13	19	40
ø180	63	60	60	M18 × 1.5	200	Rc3/4	24	34.5	34.5	68	200	M40 × 1.5	108 to 112	110	15	25	45
ø200	72	70	69	M20 × 1.5	220	Rc3/4	24	37.5	37.5	75	220	M45 × 1.5	120.5 to 129	123	16	25	50
ø250	88	85	84	M24 × 1.5	274	Rc1	29	42.5	42.5	93	274	M56 × 2	147.5 to 156	141	19	30	60

Symbol																With bellows		
Bore size (mm)	N	QA	QB	P	R	T	TF	UF	U	V	W	WF	X	XB	Y	b	d	l
ø125	110	15	15	13	100	18	190	230	19	45.5	51	65	218	117	94	74	75	(Stroke length/4.55) + 11
ø140	124	17	17	15	112	18	212	250	19	45.5	48	67	231	133	94	74	75	(Stroke length/4.55) + 9
ø160	142	17	17	15	118	21	236	280	19	48	52	71	246	138	107	82	80	(Stroke length/5.15) + 9
ø180	160	17	17	15	132	24	265	310	19	53	53	78	266	150	113	91	90	(Stroke length/5.15) + 9
ø200	175	18	18	20	150	27	280	330	24	60	63	88	299	164	131	102	95	(Stroke length/5.30) + 9
ø250	216	21	21	22	180	34	355	415	24	64	64	94	342	190	153	120	120	(Stroke length/6.40) + 9

Dimensions

● Head end flange type (FB)



(With bellows)

Port position diagram (view A)

Note 1: Refer to dimensions of switch on page 5 for with switch.

Note 2: (R)(S)(T) indicate the positions of cushion needles.

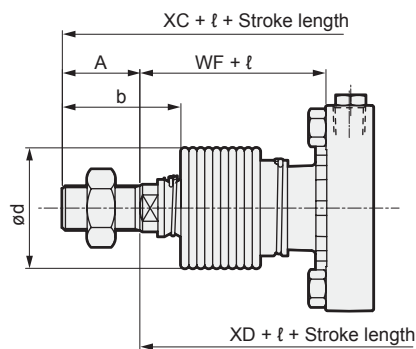
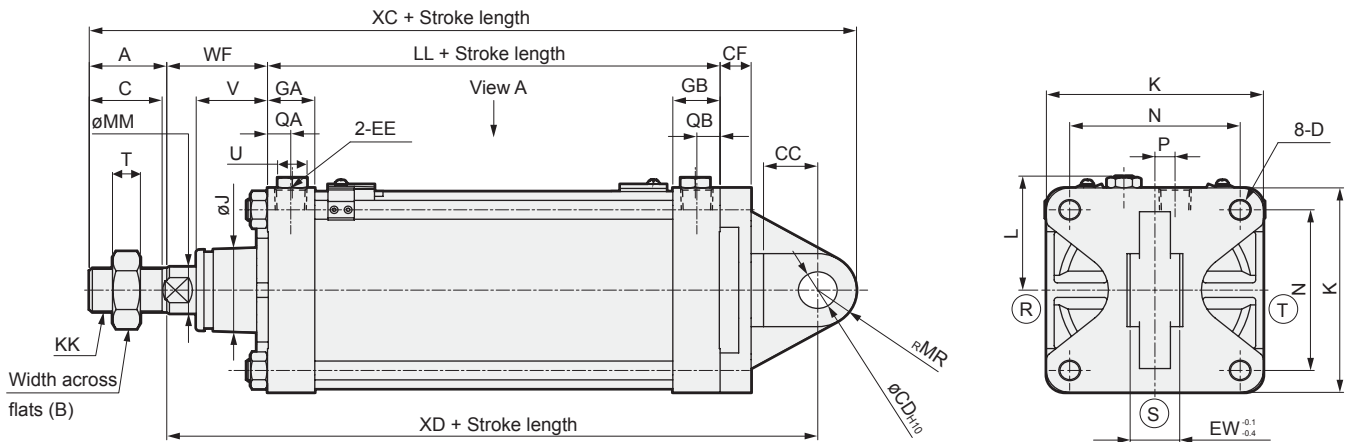
Note 3: For the l dimensions, the decimal places have been rounded out.

Note 4: Refer to dimensions on page 14 for the accessories.

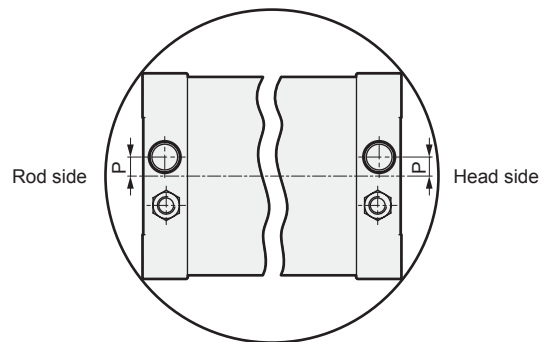
Symbol	Head end flange type (FB) basic dimensions																
Bore size (mm)	A	B	C	D	E	EE	FB	GA	GB	J	K	KK	L	LL	MF	MM	
ø125	50	46	47	M14 × 1.5	140	Rc1/2	19	30.5	30.5	57	140	M30 × 1.5	78 to 82	92	14	32	
ø140	50	46	47	M14 × 1.5	157	Rc3/4	19	34.5	34.5	57	157	M30 × 1.5	86.5 to 91	103	19	32	
ø160	56	55	53	M16 × 1.5	177	Rc3/4	19	34.5	34.5	62	177	M36 × 1.5	96.5 to 101	106	19	40	
ø180	63	60	60	M18 × 1.5	200	Rc3/4	24	34.5	34.5	68	200	M40 × 1.5	108 to 112	110	25	45	
ø200	72	70	69	M20 × 1.5	220	Rc3/4	24	37.5	37.5	75	220	M45 × 1.5	120.5 to 129	123	25	50	
ø250	88	85	84	M24 × 1.5	274	Rc1	29	42.5	42.5	93	274	M56 × 2	147.5 to 156	141	30	60	
Symbol														With bellows			
Bore size (mm)	N	QA	QB	P	R	T	TF	U	UF	V	WF	Y	ZC	ZR	b	d	l
ø125	110	15	15	13	100	18	190	19	230	45.5	65	94	221	171	74	75	(Stroke length/4.55) + 11
ø140	124	17	17	15	112	18	212	19	250	45.5	67	94	239	189	74	75	(Stroke length/4.55) + 9
ø160	142	17	17	15	118	21	236	19	280	48	71	107	252	196	82	80	(Stroke length/5.15) + 9
ø180	160	17	17	15	132	24	265	19	310	53	78	113	276	213	91	90	(Stroke length/5.15) + 9
ø200	175	18	18	20	150	27	280	24	330	60	88	131	308	236	102	95	(Stroke length/5.30) + 9
ø250	216	21	21	22	180	34	355	24	415	64	94	153	353	265	120	120	(Stroke length/6.40) + 9

Dimensions

● Eye bracket type (CA)



(With bellows)



Port position diagram (view A)

Note 1: Refer to dimensions of switch on page 5 for with switch.

Note 2: (R)(S)(T) indicate the positions of cushion needles.

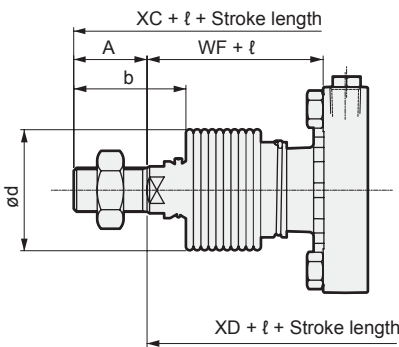
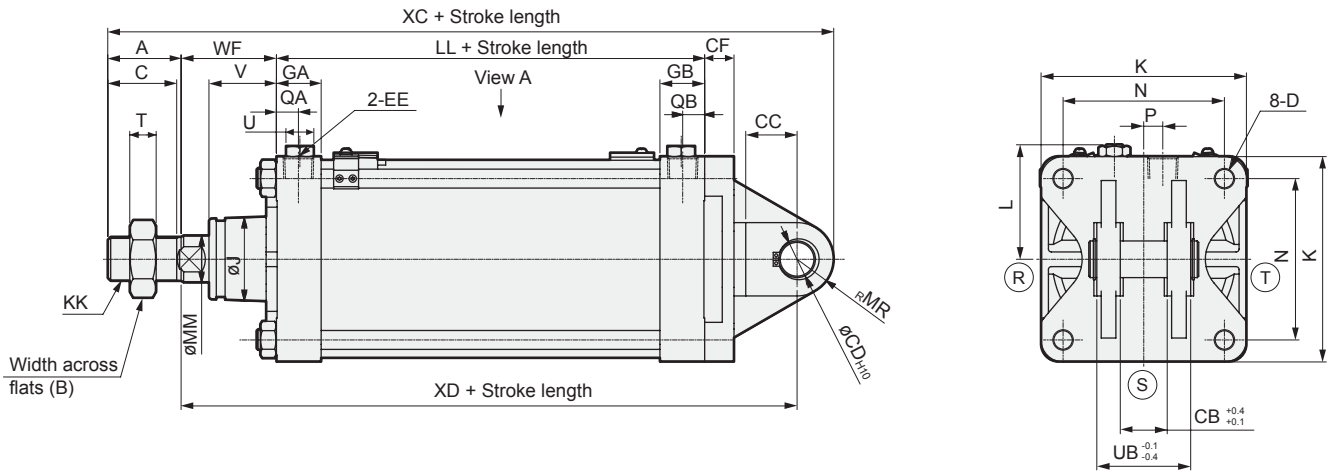
Note 3: For the ℓ dimensions, the decimal places have been rounded out.

Note 4: Refer to dimensions on page 14 for the accessories.

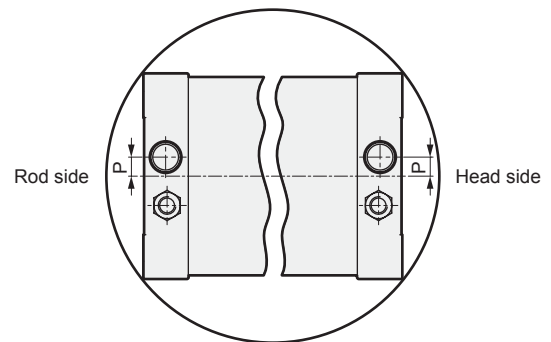
Symbol	Eye bracket type (CA) basic dimensions																
Bore size (mm)	A	B	C	D	CC	CD	CF	EE	EW	GA	GB	J	K	KK	L	LL	MM
$\phi 125$	50	46	47	M14 × 1.5	35	25	20	Rc1/2	32	30.5	30.5	57	140	M30 × 1.5	78 to 82	92	32
$\phi 140$	50	46	47	M14 × 1.5	40	28	22	Rc3/4	36	34.5	34.5	57	157	M30 × 1.5	86.5 to 91	103	32
$\phi 160$	56	55	53	M16 × 1.5	40	32	24	Rc3/4	40	34.5	34.5	62	177	M36 × 1.5	96.5 to 101	106	40
$\phi 180$	63	60	60	M18 × 1.5	55	40	25	Rc3/4	50	34.5	34.5	68	200	M40 × 1.5	108 to 112	110	45
$\phi 200$	72	70	69	M20 × 1.5	55	40	30	Rc3/4	50	37.5	37.5	75	220	M45 × 1.5	120.5 to 129	123	50
$\phi 250$	88	85	84	M24 × 1.5	65	50	35	Rc1	63	42.5	42.5	93	274	M56 × 2	147.5 to 156	141	60
Symbol													With bellows				
Bore size (mm)	MR	N	P	QA	QB	T	U	V	WF	XC	XD	b	d	ℓ			
$\phi 125$	25	110	13	15	15	18	19	45.5	65	295	220	74	75	(Stroke length/4.55) + 11			
$\phi 140$	28	124	15	17	17	18	19	45.5	67	323	245	74	75	(Stroke length/4.55) + 9			
$\phi 160$	32	142	15	17	17	21	19	48	71	340	252	82	80	(Stroke length/5.15) + 9			
$\phi 180$	40	160	15	17	17	24	19	53	78	381	278	91	90	(Stroke length/5.15) + 9			
$\phi 200$	40	175	20	18	18	27	24	60	88	413	301	102	95	(Stroke length/5.30) + 9			
$\phi 250$	50	216	22	21	21	34	24	64	94	483	345	120	120	(Stroke length/6.40) + 9			

Dimensions

- Clevis bracket type (CB)



(With bellows)



Port position diagram (view A)

Note 1: Refer to dimensions of switch on page 5 for with switch.

Note 2: (R)(S)(T) indicate the positions of cushion needles.

Note 3: For the l dimensions, the decimal places have been rounded out.

Note 4: Refer to dimensions on page 14 for the accessories.

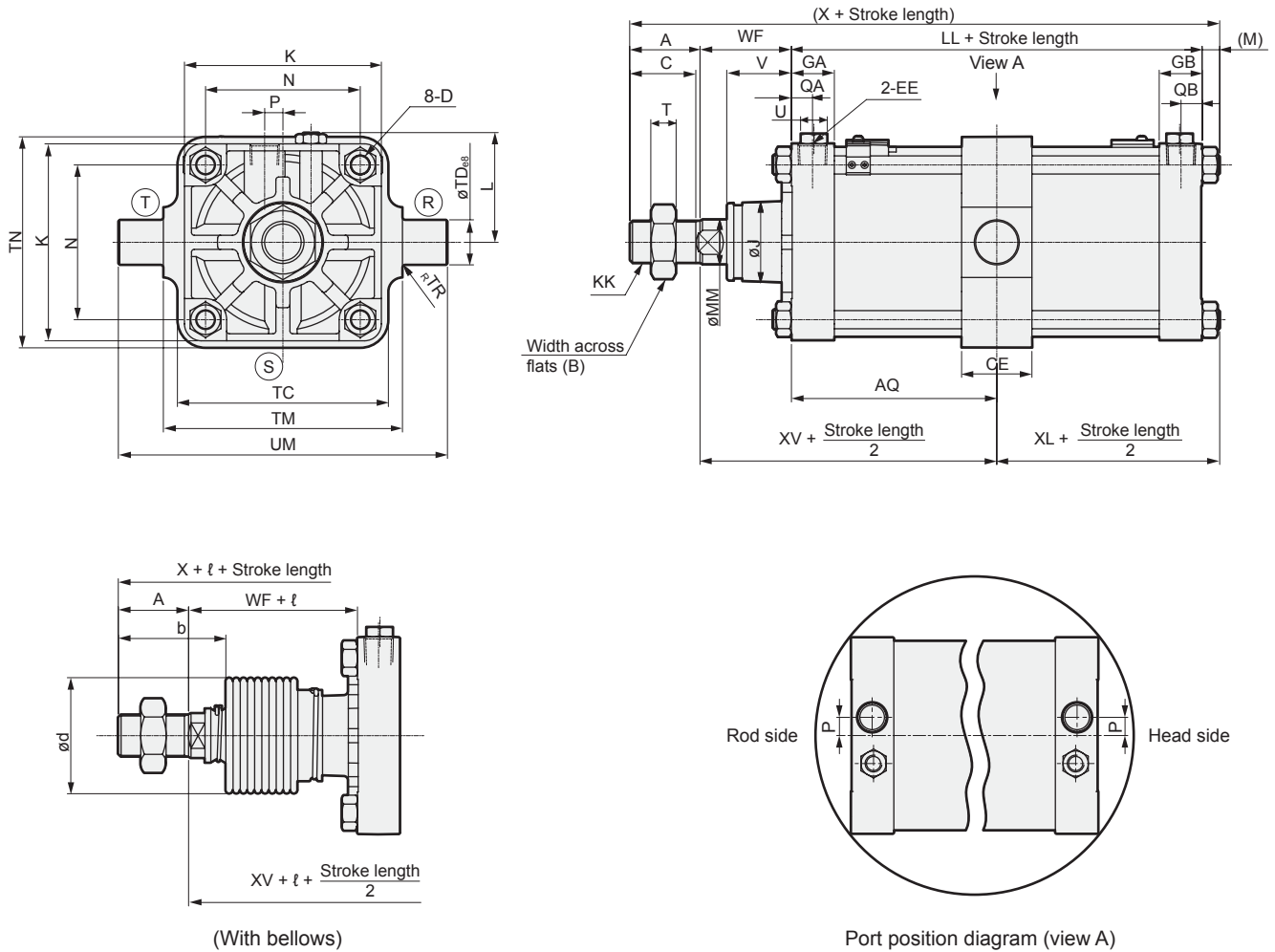
Note 5: A pin and a snap ring are attached.

Symbol	Clevis bracket type (CB) basic dimensions															
Bore size (mm)	A	B	C	D	CB	CC	CD	CF	EE	GA	GB	J	K	KK	L	LL
$\phi 125$	50	46	47	M14 × 1.5	32	35	25	20	Rc1/2	30.5	30.5	57	140	M30 × 1.5	78 to 82	92
$\phi 140$	50	46	47	M14 × 1.5	36	40	28	22	Rc3/4	34.5	34.5	57	157	M30 × 1.5	86.5 to 91	103
$\phi 160$	56	55	53	M16 × 1.5	40	40	32	24	Rc3/4	34.5	34.5	62	177	M36 × 1.5	96.5 to 101	106
$\phi 180$	63	60	60	M18 × 1.5	50	55	40	25	Rc3/4	34.5	34.5	68	200	M40 × 1.5	108 to 112	110
$\phi 200$	72	70	69	M20 × 1.5	50	55	40	30	Rc3/4	37.5	37.5	75	220	M45 × 1.5	120.5 to 129	123
$\phi 250$	88	85	84	M24 × 1.5	63	65	50	35	Rc1	42.5	42.5	93	274	M56 × 2	147.5 to 156	141

Symbol	Basic dimensions												With bellows			
Bore size (mm)	MM	MR	N	P	QA	QB	T	U	UB	V	WF	XC	XD	b	d	l
$\phi 125$	32	25	110	13	15	15	18	19	64	45.5	65	295	220	74	75	(Stroke length/4.55) + 11
$\phi 140$	32	28	124	15	17	17	18	19	72	45.5	67	323	245	74	75	(Stroke length/4.55) + 9
$\phi 160$	40	32	142	15	17	17	21	19	80	48	71	340	252	82	80	(Stroke length/5.15) + 9
$\phi 180$	45	40	160	15	17	17	24	19	100	53	78	381	278	91	90	(Stroke length/5.15) + 9
$\phi 200$	50	40	175	20	18	18	27	24	100	60	88	413	301	102	95	(Stroke length/5.30) + 9
$\phi 250$	60	50	216	22	21	21	34	24	126	64	94	483	345	120	120	(Stroke length/6.40) + 9

Dimensions

● Center trunnion type (TC)



Note 1: Refer to dimensions of switch on page 5 for with switch.

Note 2: (R)(S)(T) indicate the positions of cushion needles.

Note 3: For the ℓ dimensions, the decimal places have been rounded out.

Note 4: Refer to dimensions on page 14 for the accessories.

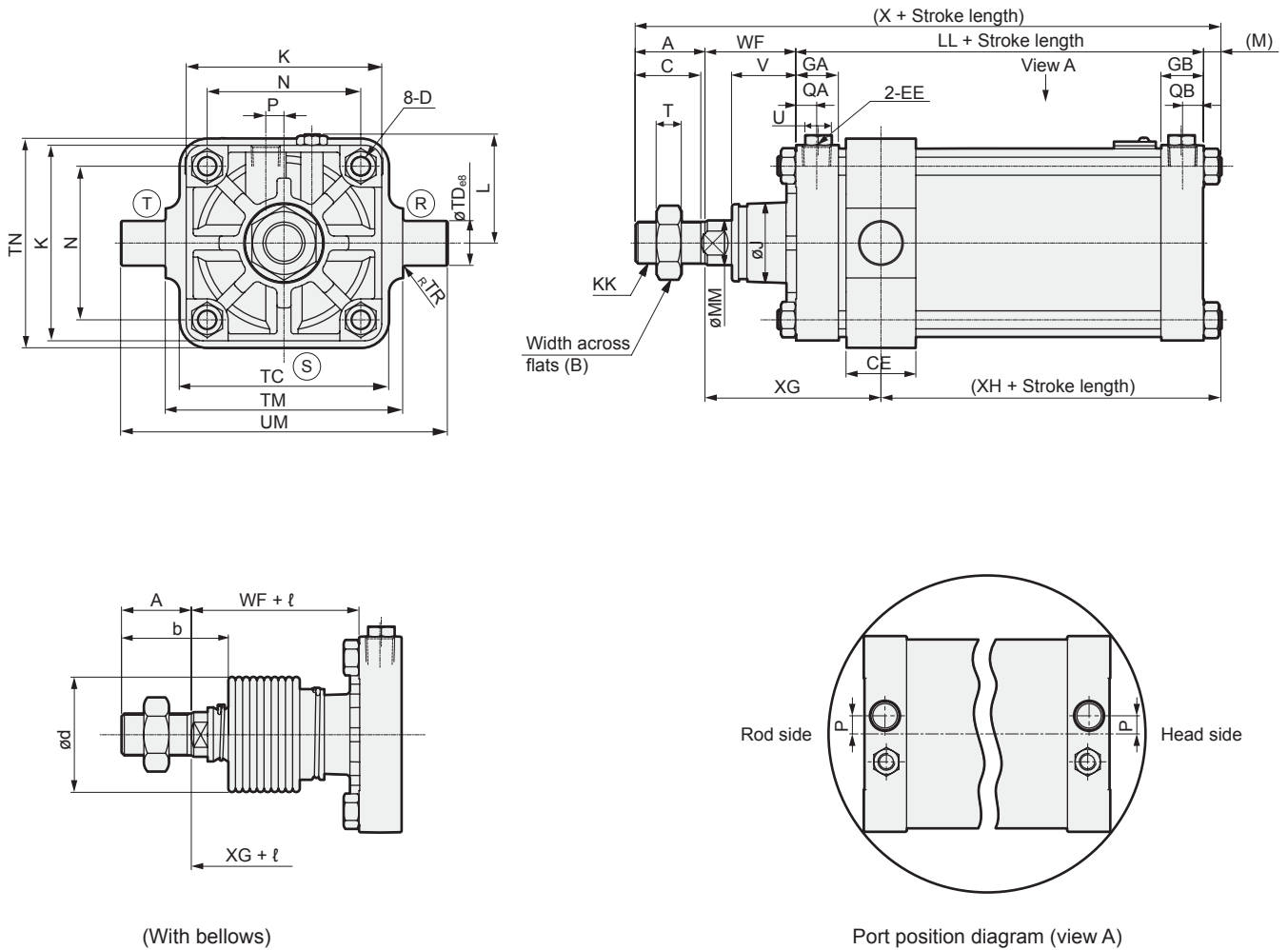
Note 5: Refer to min. stroke length on page 1.

Symbol	Center trunnion type (TC) basic dimensions																	
Bore size (mm)	A	AQ	B	C	CE	D	EE	GA	GB	J	K	KK	L	LL	M	MM	N	P
ø125	50	46 + St/2	46	47	50	M14 × 1.5	Rc1/2	30.5	30.5	57	140	M30 × 1.5	78 to 82	92	11	32	110	13
ø140	50	51.5 + St/2	46	47	55	M14 × 1.5	Rc3/4	34.5	34.5	57	157	M30 × 1.5	86.5 to 91	103	11	32	124	15
ø160	56	53 + St/2	55	53	60	M16 × 1.5	Rc3/4	34.5	34.5	62	177	M36 × 1.5	96.5 to 101	106	13	40	142	15
ø180	63	55 + St/2	60	60	65	M18 × 1.5	Rc3/4	34.5	34.5	68	200	M40 × 1.5	108 to 112	110	15	45	160	15
ø200	72	61.5 + St/2	70	69	70	M20 × 1.5	Rc3/4	37.5	37.5	75	220	M45 × 1.5	120.5 to 129	123	16	50	175	20
ø250	88	70.5 + St/2	85	84	80	M24 × 1.5	Rc1	42.5	42.5	93	274	M56 × 2	147.5 to 156	141	19	60	216	22

Symbol	With bellows																	
Bore size (mm)	QA	QB	T	TC	TD	TM	TN	TR	U	UM	V	WF	X	XV	XL	b	d	ℓ
ø125	15	15	18	150	32	170	150	2	19	234	45.5	65	218	111	57	74	75	(Stroke length/4.55) + 11
ø140	17	17	18	154	36	190	170	2	19	262	45.5	67	231	118.5	62.5	74	75	(Stroke length/4.55) + 9
ø160	17	17	21	190	40	212	190	2	19	292	48	71	246	124	66	82	80	(Stroke length/5.15) + 9
ø180	17	17	24	210	45	236	210	2	19	326	53	78	266	133	70	91	90	(Stroke length/5.15) + 9
ø200	18	18	27	242	45	265	242	2	24	355	60	88	299	149.5	77.5	102	95	(Stroke length/5.30) + 9
ø250	21	21	34	300	56	335	300	2	24	447	64	94	342	164.5	89.5	120	120	(Stroke length/6.40) + 9

Dimensions

● Rod end trunnion type (TA)



(With bellows)

Port position diagram (view A)

Note 1: Refer to dimensions of switch on page 5 for with switch.

Note 2: (R)(S)(T) indicate the positions of cushion needles.

Note 3: For the ℓ dimensions, the decimal places have been rounded out.

Note 4: Refer to dimensions on page 14 for the accessories.

Note 5: Refer to min. stroke length on page 1.

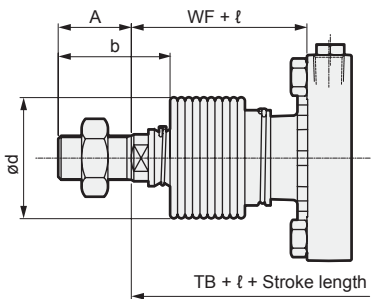
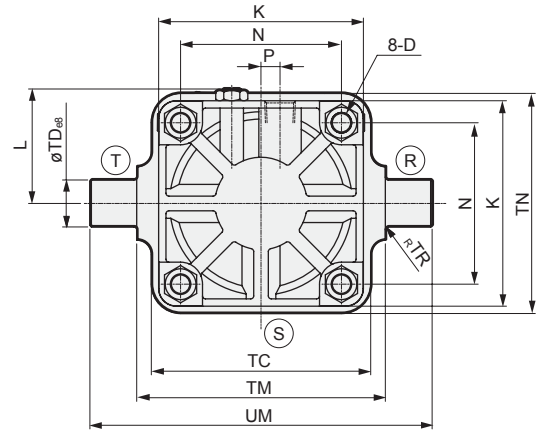
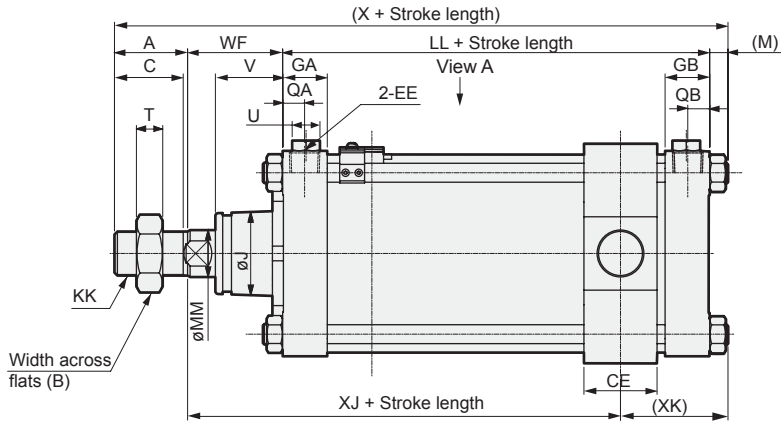
Note 6: The position cannot be detected at the stroke end of rod side.

Symbol	Rod end trunnion type (TA) basic dimensions																
Bore size (mm)	A	B	C	CE	D	EE	GA	GB	J	K	KK	L	LL	M	MM	N	P
ø125	50	46	47	50	M14 × 1.5	Rc1/2	30.5	30.5	57	140	M30 × 1.5	78 to 82	92	11	32	110	13
ø140	50	46	47	55	M14 × 1.5	Rc3/4	34.5	34.5	57	157	M30 × 1.5	86.5 to 91	103	11	32	124	15
ø160	56	55	53	60	M16 × 1.5	Rc3/4	34.5	34.5	62	177	M36 × 1.5	96.5 to 101	106	13	40	142	15
ø180	63	60	60	65	M18 × 1.5	Rc3/4	34.5	34.5	68	200	M40 × 1.5	108 to 112	110	15	45	160	15
ø200	72	70	69	70	M20 × 1.5	Rc3/4	37.5	37.5	75	220	M45 × 1.5	120.5 to 129	123	16	50	175	20
ø250	88	85	84	80	M24 × 1.5	Rc1	42.5	42.5	93	274	M56 × 2	147.5 to 156	141	19	60	216	22

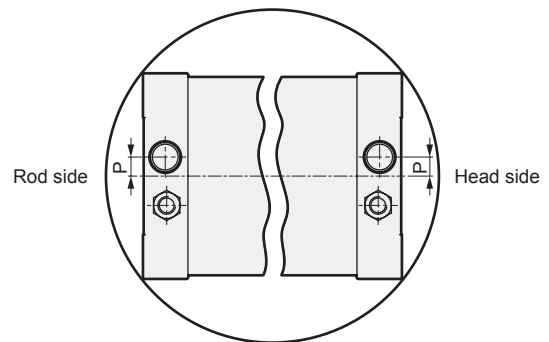
Symbol															With bellows			
Bore size (mm)	QA	QB	T	TC	TD	TM	TN	TR	U	UM	V	WF	X	XG	XH	b	d	ℓ
ø125	15	15	18	150	32	170	150	2	19	234	45.5	65	218	126	42	74	75	(Stroke length/4.55) + 11
ø140	17	17	18	154	36	190	170	2	19	262	45.5	67	231	134.5	46.5	74	75	(Stroke length/4.55) + 9
ø160	17	17	21	190	40	212	190	2	19	292	48	71	246	141	49	82	80	(Stroke length/5.15) + 9
ø180	17	17	24	210	45	236	210	2	19	326	53	78	266	150.5	52.5	91	90	(Stroke length/5.15) + 9
ø200	18	18	27	242	45	265	242	2	24	355	60	88	299	168	59	102	95	(Stroke length/5.30) + 9
ø250	21	21	34	300	56	335	300	2	24	447	64	94	342	184	70	120	120	(Stroke length/6.40) + 9

Dimensions

● Head end trunnion type (TB)



(With bellows)



Port position diagram (view A)

Note 1: Refer to dimensions of switch on page 5 for with switch.

Note 2: (R)(S)(T) indicate the positions of cushion needles.

Note 3: For the ℓ dimensions, the decimal places have been rounded out.

Note 4: Refer to dimensions on page 14 for the accessories.

Note 5: Refer to min. stroke length on page 1.

Note 6: The position cannot be detected at the stroke end of head side.

Symbol	Head end trunnion type (TA) basic dimensions																
Bore size (mm)	A	B	C	CE	D	EE	GA	GB	J	K	KK	L	LL	M	MM	N	P
ø125	50	46	47	50	M14 × 1.5	Rc1/2	30.5	30.5	57	140	M30 × 1.5	78 to 82	92	11	32	110	13
ø140	50	46	47	55	M14 × 1.5	Rc3/4	34.5	34.5	57	157	M30 × 1.5	86.5 to 91	103	11	32	124	15
ø160	56	55	53	60	M16 × 1.5	Rc3/4	34.5	34.5	62	177	M36 × 1.5	96.5 to 101	106	13	40	142	15
ø180	63	60	60	65	M18 × 1.5	Rc3/4	34.5	34.5	68	200	M40 × 1.5	108 to 112	110	15	45	160	15
ø200	72	70	69	70	M20 × 1.5	Rc3/4	37.5	37.5	75	220	M45 × 1.5	120.5 to 129	123	16	50	175	20
ø250	88	85	84	80	M24 × 1.5	Rc1	42.5	42.5	93	274	M56 × 2	147.5 to 156	141	19	60	216	22

Symbol															With bellows			
Bore size (mm)	QA	QB	T	XJ	TC	TD	TM	TN	TR	U	UM	V	WF	X	XK	b	d	ℓ
ø125	15	15	18	96	150	32	170	150	2	19	234	45.5	65	218	72	74	75	(Stroke length/4.55) + 11
ø140	17	17	18	102.5	154	36	190	170	2	19	262	45.5	67	231	78.5	74	75	(Stroke length/4.55) + 9
ø160	17	17	21	107	190	40	212	190	2	19	292	48	71	246	83	82	80	(Stroke length/5.15) + 9
ø180	17	17	24	115.5	210	45	236	210	2	19	326	53	78	266	87.5	91	90	(Stroke length/5.15) + 9
ø200	18	18	27	131	242	45	265	242	2	24	355	60	88	299	96	102	95	(Stroke length/5.30) + 9
ø250	21	21	34	145	300	56	335	300	2	24	447	64	94	342	109	120	120	(Stroke length/6.40) + 9