

Specification

DESIGN

The sleeve-guided structure and pressure-balanced valve core are designed for heavy-load conditions and are used on occasions with high leakage levels. The valve body has a compact structure, and the fluid channel has an S streamline shape, multistage pressure reducing, large flow volume, wide adjustable range, and high precision flow characteristics. Good sealing properties and high allowable differential pressure. Cage-guided, balanced valve core design ensures minimum actuator thrust resulting in saving costs.

MATERIALS

Body: WCB/WCC/
WC6/WC9/C5
CF8/CF3
CF8M/CF3M etc.

Internal: 304/304L
316/316L
410/420/440C
630/XM-19

Seal: PTFE/ Metal/SurfacingSTL



OPERATION

Handle/Electric and Pneumatic control

CONNECTION

Butt Weld/Flange

PRESSURE RANGE

ANSI: CLASS150-900LB
DIN: PN16-PN160

TEMPERATURE RANGE

PTFE: -30°C - +180°C
Metal: -196°C - +570°C

The above information is for reference only and Eicmation reserves the right to alter without prior notice

Type:
TG

Balanced Single Seat
Control Valve
CLASS150-900LB
PN16-PN160
WCB/WCC
WC6/WC9/C5
CF8/CF3
CF8M/CF3M etc.

Ordering example: e.g. TGA3323617

=Balanced single seat Control valve, CF8/304, PTFE, PN16, GB Flange, DN40, Straight stroke diaphragm Pneumatic actuator, Double action, Aluminium alloy, 266, NBR, 100 Control valve

A. Type	B+C. Body/Internal	D. Sealing	E. Pressure	F. Connection	G + H. Size
TGA=Balanced single seat standard control valve	23=WCB/304	2=PTFE	3=PN16/150LB	6=GB Flange	17=11/2" 22=5"
TGB=Balanced single seat extension type control valve	33=CF8/304	D=Metal	4=PN25	M=ANSI Flange	18=2" 23=6"
TGC=Balanced single seat radiator fin control valve	24=WCB/316	M=STL	5=PN40/300LB	S=Butt weld	19=21/2" 24=8"
TGD=Balanced single seat bellows seal type control valve	35=CF8/304L		6=PN64		20=3" 25=10"
TIA=Low noise balanced sleeve single seat single seat standard control valve	55=CF3/304L		7=PN100/600LB		21=4" 26=12"
TIC=Low noise balanced sleeve single seat single seat fin type regulating valve	44=CF8M/316		8=PN160/900LB		
TQA=Combined sleeve pressure-reducing balance single-seat standard regulating valve	66=CF3M/316L				
	46=CF8M/316L				
	56=CF3/316L				
	GZ=WC6/440C				
	G4=WC6/316				

Actuator

I. Type	J. Fail position	K. Material	L + M. Specifications	N. Seal	O. Options	P. Trip
NA= Straight stroke diaphragm Pneumatic actuator	1=Double action 2=Single action-close 3=Single action-open	1=Aluminium alloy	A1=266 A4=475 A2=294 A5=590 A3=370	1=NBR 2=HNBR 3=FKM	1=No 2=Top handwheel 4=Side-mounted handwheel	1=16 4=60 2=25 5=100 3=40

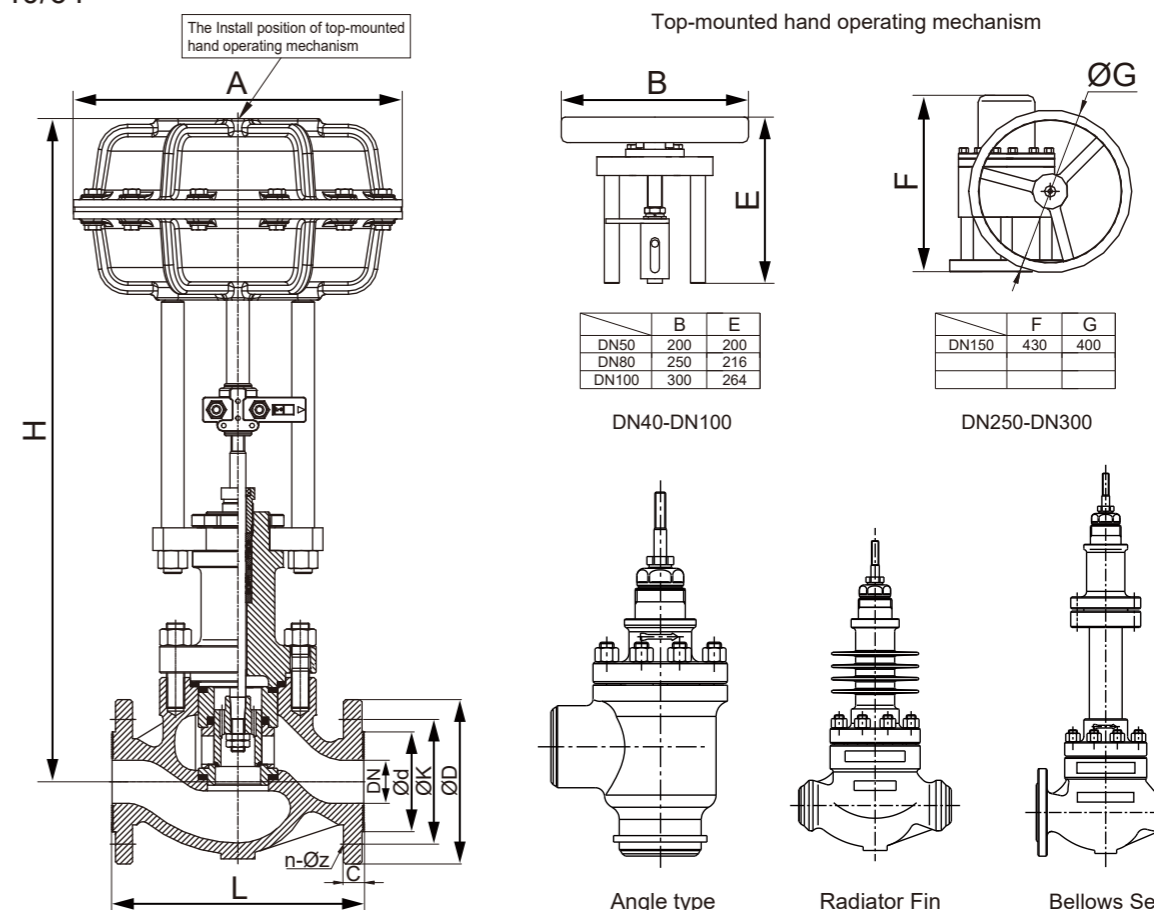
Rated CV value and Trip

Valve size (mm)	Throttle surface (mm)	Rated CV		Stroke (mm)
		EQ%	Linear	
40	6	1	---	25
	8	1.5	---	25
	10	2	---	25
	15	4	---	25
	20	8	10	25
	25	13	16	25
	32	20	25	25
50	40	32	35	25
	50	46	55	25

Valve size (mm)	Throttle surface (mm)	Rated CV		Stroke (mm)
		EQ%	Linear	
65	65	75	85	40
80	80	110	135	40
100	100	185	210	40
125	125	298	345	60
150	150	385	466	60
200	200	650	735	60
250	250	960	1000	100
300	300	1300	1500	100

Dimension

GB PN16/40/64

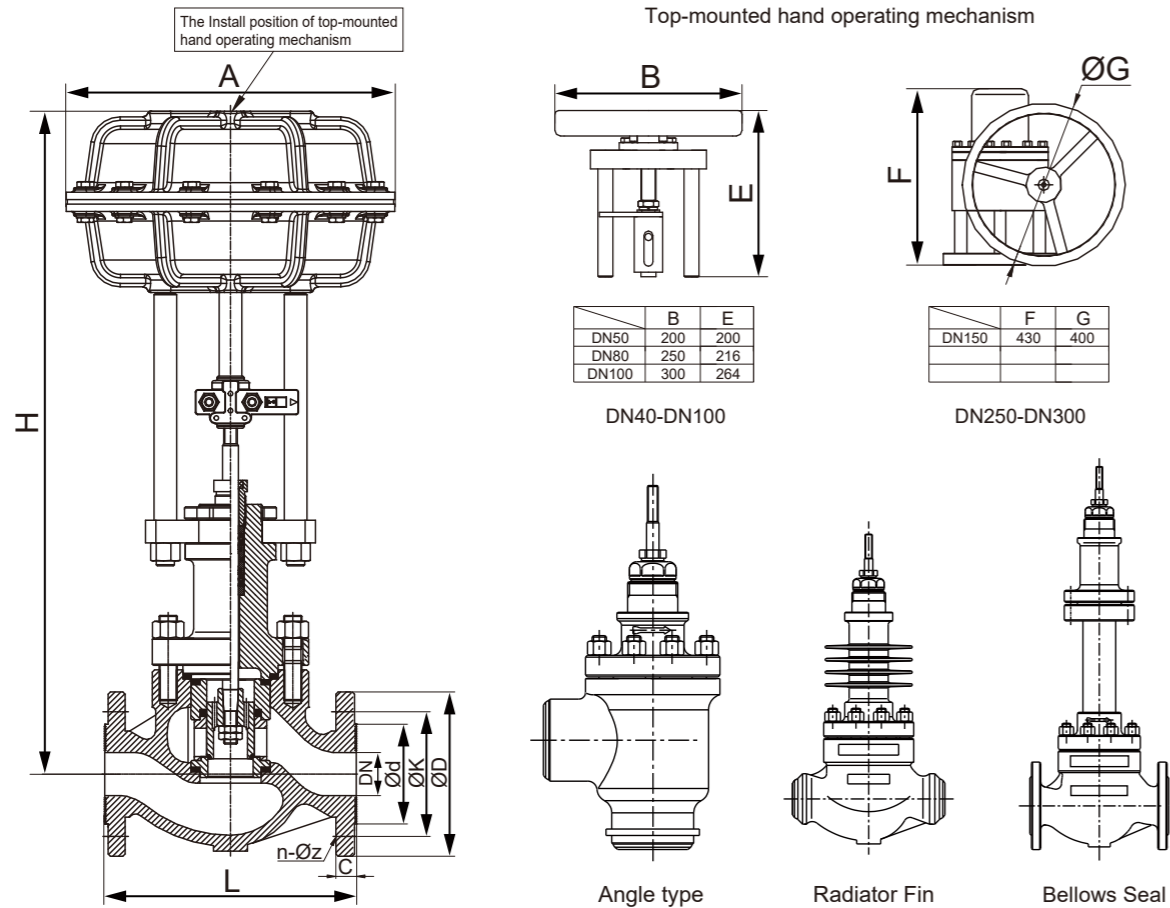


SIZE	DN	Actuator		PN16								PN40					PN64						
		Model	Specification	A	H	L	D	K	d	c	n-Øz	L	D	K	d	c	n-Øz	L	D	K	d	c	n-Øz
1-1/2"	40	NA21A2111	Ø294	294	552	222	150	110	88	18	4-Ø18	235	150	110	88	18	4-Ø18	251	170	125	88	28	4-Ø22
2"	50	NA21A2111	Ø294	294	561	254	165	125	102	18	4-Ø18	267	165	125	102	20	4-Ø18	286	180	135	102	26	4-Ø22
2-1/2"	65	NA31A3123	Ø370	370	676	276	185	145	122	18	8-Ø18	292	185	145	122	22	8-Ø18	311	205	160	122	26	8-Ø22
3"	80	NA31A3123	Ø370	370	683	298	200	160	138	20	8-Ø18	317	200	160	138	24	8-Ø18	337	215	170	138	28	8-Ø22
4"	100	NA31A3123	Ø370	370	691	352	220	180	158	20	8-Ø18	368	235	190	162	24	8-Ø22	394	250	200	162	30	8-Ø26
5"	125	NA21A4114	Ø480	480	845	403	250	210	188	22	8-Ø18	425	270	220	188	26	8-Ø26	460	295	240	188	34	8-Ø30
6"	150	NA21A4114	Ø480	480	861	451	285	240	212	22	8-Ø22	473	300	250	218	28	8-Ø26	508	345	280	218	36	8-Ø33
8"	200	NA21A4114	Ø480	480	898	543	340	295	268	24	12-Ø22	568	375	320	285	34	12-Ø30	610	415	345	285	42	12-Ø36
10"	250	NA21A5115	Ø590	590	1153	673	405	355	320	26	12-Ø26	700	450	385	345	38	12-Ø33	770	470	400	345	46	12-Ø36
12"	300	NA21A5115	Ø590	590	1177	737	460	410	378	28	16-Ø33	775	515	450	410	42	16-Ø33	819	530	460	410	52	16-Ø36

Note: The above data is for standard type, heat dispersion type, bellow type, and angular type. Please consult Eicmation's technical department.

Dimension

ASME 150LB/300LB/600LB



SIZE	DN	Actuator		A	H	150LB						300LB						600LB					
		Model	Specification			L	D	K	d	c	n-Øz	L	D	K	d	c	n-Øz	L	D	K	d	c	n-Øz
1-1/2"	40	NA21A2111	Ø294	294	552	222	125	98.4	73	17.9	4-Ø16	235	155	114	73	21.1	4-Ø22	251	155	114	73	29.3	4-Ø22
2"	50	NA21A2111	Ø294	294	561	254	150	121	92.1	19.5	4-Ø18	267	165	127	92.1	22.7	8-Ø18	286	165	127	92.1	32.4	8-Ø18
2-1/2"	65	NA21A3113	Ø370	370	676	276	180	140	105	22.7	4-Ø18	292	190	149	105	25.9	8-Ø22	311	190	149	105	35.6	8-Ø22
3"	80	NA21A3113	Ø370	370	683	298	190	152	127	24.3	4-Ø18	317	210	168	127	29	8-Ø22	337	210	168	127	38.8	8-Ø22
4"	100	NA21A3113	Ø370	370	691	352	230	191	157	24.3	8-Ø18	368	255	200	157	32.2	8-Ø22	394	275	215	157	45.1	8-Ø26
5"	125	NA21A4114	Ø480	480	845	403	255	216	186	24.3	8-Ø22	425	280	235	186	35.4	8-Ø22	460	330	267	186	51.5	8-Ø30
6"	150	NA21A4114	Ø480	480	861	451	280	241	216	25.9	8-Ø22	473	320	270	216	37	12-Ø22	508	355	292	216	54.7	12-Ø30
8"	200	NA21A4114	Ø480	480	898	543	345	299	270	29	8-Ø22	568	380	330	270	41.7	12-Ø26	610	420	349	270	62.6	12-Ø33
10"	250	NA21A5115	Ø590	590	1153	673	405	362	324	30.6	8-Ø26	700	445	387	324	48.1	16-Ø30	770	510	432	324	70.5	16-Ø36
12"	300	NA21A5115	Ø590	590	1177	737	485	432	381	32.2	12-Ø26	775	520	451	381	51.3	16-Ø33	819	560	489	381	73.7	20-Ø36

Note: The above data is for standard type, heat dissipation type, bellow type, and angular type. Please consult Eicmation's technical department.

Specification

DESIGN

High-load type, top-guided unbalanced structure, high strength, heavy load, S streamlined channel, multistage pressure reducing, high flow capacity. Wide adjustable range and high precision of flow characteristics. Suitable for heavy loads, common or harsh conditions, tight closure, suitable for the control of fluids or gases of various pressures and temperatures. Adapted to a variety of actuators to act as a regulator.

OPERATION

Handle/Electric and Pneumatic control

CONNECTION

Butt Weld/Flange

PRESSURE RANGE

ANSI: CLASS150-900LB
DIN: PN16-PN64

TEMPERATURE RANGE

PTFE: -30°C - +180°C
Metal: -196°C - +570°C

MATERIALS

Body: WCB/WCC/
WC6/WC9/C5
CF8/CF3
CF8M/CF3M etc.

Internal: 304/304L
316/316L
410/420/440C
630/XM-19

Seal: PTFE/ Metal/SurfacingSTL

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Type:
TA
Unbalanced Single Seat
Control Valve
CLASS150-900LB
PN16-PN64
WCB/WCC
WC6/WC9/C5
CF8/CF3
CF8M/CF3M etc.

Ordering example: e.g. TAA3323614-NA11A1115

=Unbalanced single seat standard control valve, CF8/304, PTFE, PN16, GB Flange, DN20, Straight stroke diaphragm Pneumatic actuator, Double action, Aluminium alloy, 266, NBR, 100 Control valve

A. Type	B+C. Body/Internal	D. Sealing	E. Pressure	F. Connection	G+H. Size
TAA=Unbalanced single seat standard control valve	23=WCB/304	2=PTFE D=Metal M=STL	3=PN16/150LB 4=PN25 5=PN40/300LB 6=PN64 7=600LB 8=900LB	7=GB Flange M=ANSI Flange S=Butt weld	13=1/2" 18=2" 14=3/4" 19=21/2" 15=1" 20=3" 16=11/4" 21=4" 17=11/2"
TAB=Unbalanced single seat extension type control valve	33=CF8/304				
TAC=Unbalanced single seat radiator fin control valve	24=WCB/316				
TAD=Unbalanced single seat bellows seal type control valve	35=CF8/304L				
TRA=Low noise unbalanced sleeve single seat standard control valve	55=CF3/304L				
TRC=low noise unbalanced sleeve single seat fin type regulating valve	44=CF8M/316 66=CF3M/316L 46=CF8M/316L				
TFA=Combined sleeve pressure-reducing unbalanced single-seat standard regulating valve	56=CF3/316L GZ=WC6/440C G4=WC6/316				

Actuator

I. Product	J. Fail position	K. Material	L+M. Specifications	N. Seal	O. Options	P. Trip
NA= Straight stroke diaphragm Pneumatic actuator	1=Double action 2=Single action-close 3=Single action-open	1=Aluminium alloy	A1=266 A2=294 A3=370 A4=475 A5=590	1=NBR 2=HNBR 3=FKM	1=No 2=Top handwheel 4=Side-mounted handwheel	1=16 4=60 2=25 5=100 3=40

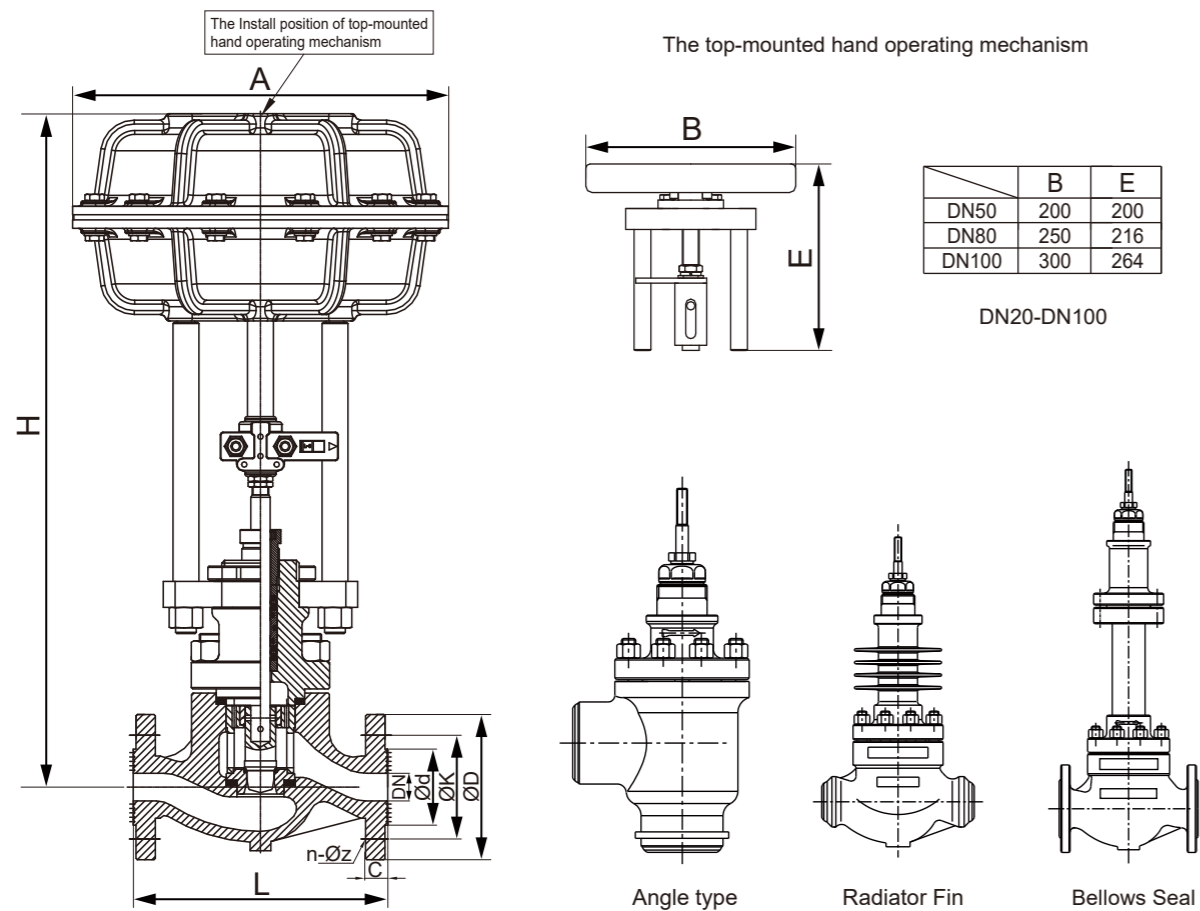
Rated CV value and Trip

Valve size (mm)	Plug size (mm)	Rated CV		Stroke (mm)
		EQ%	Linear	
20	6	1	---	16
	8	1.5	---	16
	10	2	---	16
	15	4	--	16
	20	8	10	16
25	6	1	---	16
	8	1.5	---	16
	10	2	---	16
	15	4	---	16
	20	8	10	16
25	13	16	16	

Valve size (mm)	Plug size (mm)	Rated CV		Stroke (mm)
		EQ%	Linear	
32	32	20	25	16
40	40	32	35	25
50	50	46	55	25
65	65	75	85	40
80	80	110	135	40
100	100	185	210	40
125	125	298	345	60
150	150	385	466	60
200	200	650	735	60
250	250	960	1000	100
300	300	1300	1500	100

Dimension

GB PN16/40/64

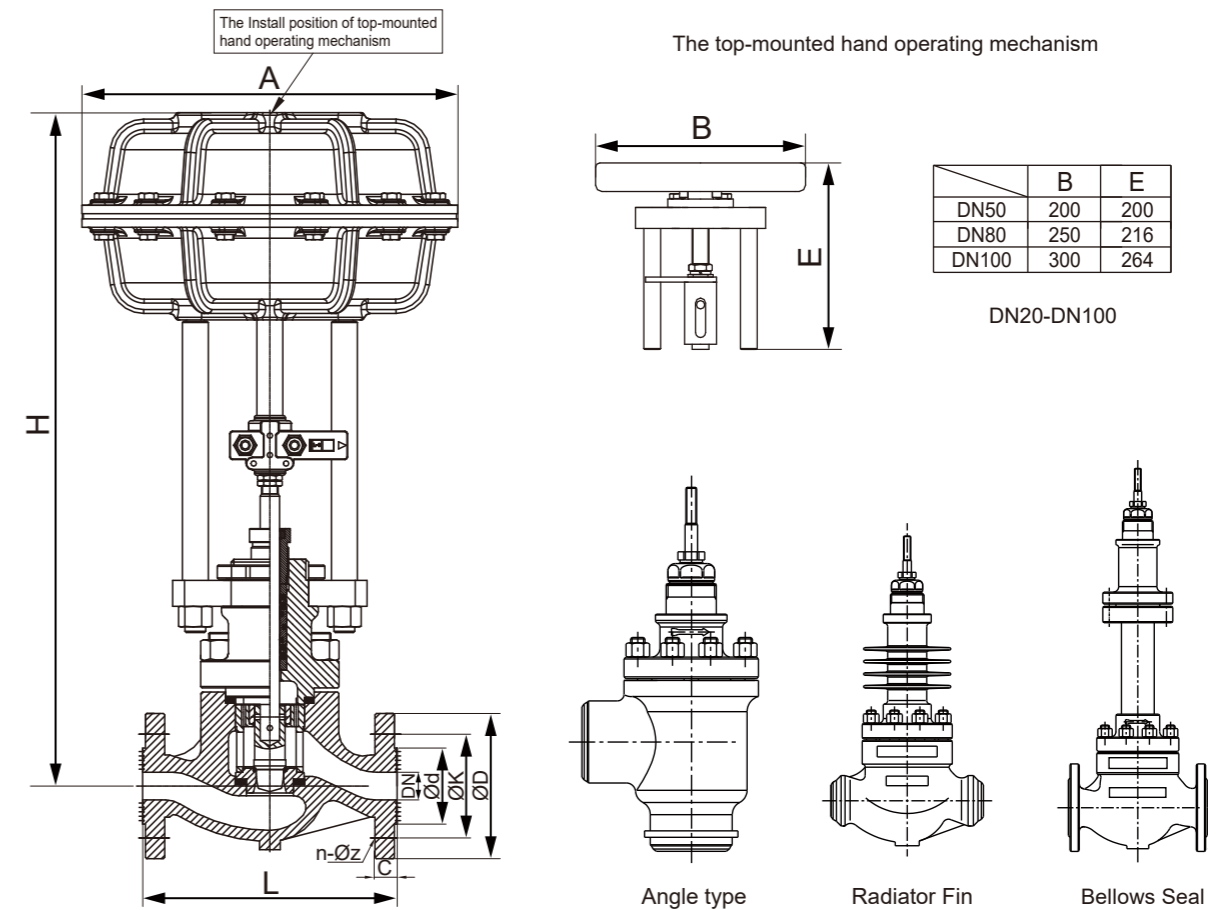


SIZE	DN	Actuator		A	H	PN16						PN40						PN64					
		Model	Specification			L	D	K	d	c	n-Øz	L	D	K	d	c	n-Øz	L	D	K	d	c	n-Øz
3/4"	20	NA21A1111	Ø226	226	468	184	105	75	58	18	4-Ø14	194	105	75	58	18	4-Ø14	206	130	90	58	22	4-Ø18
1"	25	NA21A1111	Ø226	226	468	184	115	85	68	18	4-Ø14	197	115	85	68	18	4-Ø14	210	140	100	68	24	4-Ø18
1-1/4"	32	NA21A2111	Ø294	294	552	222	140	100	78	18	4-Ø18	235	140	100	78	18	4-Ø18	251	155	110	78	24	4-Ø22
1-1/2"	40	NA21A2111	Ø294	294	552	222	150	110	88	18	4-Ø18	235	150	110	88	18	4-Ø18	251	170	125	88	28	4-Ø22
2"	50	NA21A2111	Ø294	294	561	254	165	125	102	18	4-Ø18	267	165	125	102	20	4-Ø18	286	180	135	102	26	4-Ø22
2-1/2"	65	NA21A3113	Ø370	370	676	276	185	145	122	18	8-Ø18	292	185	145	122	22	8-Ø18	311	205	160	122	26	8-Ø22
3"	80	NA21A3113	Ø370	370	683	298	200	160	138	20	8-Ø18	317	200	160	138	24	8-Ø18	337	215	170	138	28	8-Ø22
4"	100	NA21A3113	Ø370	370	691	352	220	180	158	20	8-Ø18	368	235	190	162	24	8-Ø22	394	250	200	162	30	8-Ø26

Note: 1. ≥ 4 " Parameters and data, please contact eicmation technical department.
 2. The above data is for standard type, heat dissipation type, bellow type, and angular type. Please consult Eicmation's technical department.

Dimension

ASME 150LB/300LB/600LB



SIZE	DN	Actuator		A	H	150LB						300LB						600LB					
		Model	Specification			L	D	K	d	c	n-Øz	L	D	K	d	c	n-Øz	L	D	K	d	c	n-Øz
3/4"	20	NA21A1111	Ø226	226	468	184	100	69.9	42.9	13.2	4-Ø16	194	115	82.6	42.9	16.3	4-Ø18	206	115	82.6	42.9	22.9	4-Ø18
1"	25	NA21A1111	Ø226	226	468	184	110	79.4	50.8	14.7	4-Ø16	197	125	88.9	50.8	17.9	4-Ø18	210	125	88.9	50.8	24.5	4-Ø18
1-1/4"	32	NA21A2111	Ø294	294	552	222	115	88.9	63.5	16.3	4-Ø16	235	135	98.4	63.5	19.5	4-Ø18	251	135	98.4	63.5	27.7	4-Ø22
1-1/2"	40	NA21A2111	Ø294	294	552	222	125	98.4	73	17.9	4-Ø16	235	155	114	73	21.1	4-Ø22	251	155	114	73	29.3	4-Ø22
2"	50	NA21A2111	Ø294	294	561	254	150	121	92.1	19.5	4-Ø18	267	165	127	92.1	22.7	8-Ø18	286	165	127	92.1	32.4	8-Ø18
2-1/2"	65	NA21A3113	Ø370	370	676	276	180	140	105	22.7	4-Ø18	292	190	149	105	25.9	8-Ø22	311	190	149	105	35.6	8-Ø22
3"	80	NA21A3113	Ø370	370	683	298	190	152	127	24.3	4-Ø18	317	210	168	127	29	8-Ø22	337	210	168	127	38.8	8-Ø22
4"	100	NA21A3113	Ø370	370	691	352	230	191	157	24.3	8-Ø18	368	255	200	157	32.2	8-Ø22	394	275	215	157	45.1	8-Ø26

Note: 1. ≥ 4 " Parameters and data, please contact eicmation technical department.
 2. The above data is for standard type, heat dissipation type, bellow type, and angular type. Please consult Eicmation's technical department.