H100-021 Balance Cage Low Temperature Control Valve

H100-021[1] Balance cage low temperature control valve is mainly used for regulating ultralow temperature media accurately. With temperature up to -196°C, it is applicable for ethylene, liquefied natural gas (LNG), air separation and PSA oxygen generation and other low temperature devices.

The product complies with GB/T4213-2008 standard.

Standard specification

Body

Type	Straight-through balance cage cast globe valve
Nominal size	32、40、50、65、80、100、125、150、200、250、300、350、400、450、500、600mm
Nominal pressure	Class 150、300、600、900、1500；
Type of connection	Flanged: FF、RF、RJ、TG、MFM Welded: SW（40～50mm）； BW（65～250mm）、 Flange standard: JIS B2201、JB/T79.1-94(PN1.6MPa)、JB/T79.2-94(PN4.0、6.4MPa)、ANSI B16.5-2009、HG20592-2009、HG20615-2009
Size	See Table 5
Body and upper bonnet material	CF3、CF3M、CF8、CF8M 各种材质的使用温度•，请参见表 1 和表 2 See Table 1 & 2 for application temperature • pressure range of materials
Type of upper bonnet	Extension type III (EIII): -196 ~ +200°C
Type of gland	Bolted gland
Packing	V type PTFE and graphite packing. See Fig. 2
Gasket	Zigzag (316, 316L)
Surface coating	Dark gray (epoxy resin). No coating for the body if it is made of stainless steel.

Trim

Type of plug	Single seated plunger type
Trim material **Trim treatment**	See Table 1 and Figure 1 for standard material combination and application temperature • pressure range
Flow feature	See Fig. 4-1 for high-capacity flow feature ● Equal percentage feature (%F) and linear feature (LF) See Fig. 4-2 for high-accuracy flow feature ● Equal percentage feature (%) and linear feature (L) **Note: See Fig. 1-2 for operating temperature and differential pressure of PTFE seat**

Note [1]: H100-021 corresponding to old model H100;

Actuator

Model / Specification	**Pneumatic diaphragm type**	**气 Cylinder piston type**	**Electronic type**	**Intelligent type**
	HA	HV	EIL	M8 series
	Multi-spring type	Single-action and dual-action piston type		
Purpose	Regulation	Regulation	Regulation	
Air supply pressure or power supply voltage	Air supply pressure (spring range) 400（80～240）kPa	Air supply pressure 400～700kPa	Voltage: 220/380V 50HZ Input signal: 4-20mA DC	Voltage: 220 /380V 50HZ Input signal: 4-20mA DC
Connector	Air piping: NPT1/4HA11~HA41）; NPT 1/2（HA51）	Air piping: NPT 1/4（HV21~31）; NPT 3/8（HV41~51）; NPT 1/2（HV61~71）; NPT 3/4（HV81）	Wiring: 2-PF3/4	Wiring: PG13.5
Direct action	Air to valve close	Air to valve close	Input signal to valve close	Input signal to valve close
Reverse action	Air to valve open	Air to valve open	Input signal to valve open	Input signal to valve open
Hysteresis error	≤1%FS (with positioner) ≤3%FS (without positioner) ≤5%FS (with HA1 type)	≤1%FS (with positioner) ≤3%FS (without positioner)	≤1%FS	≤1%FS
Intrinsic error	） ≤±1%FS（with positioner） ≤±5%FS（without positioner） ≤±2%FS（with HA1 type）	） ≤±1%FS（with positioner） ≤±5%FS （ without positioner）	≤±1%FS	≤±1%FS
Ambient temperature	Standard type: -30 to +70°C High temperature type: -15 to +120°C Low temperature type: -40 to +70°C	Standard type: -20 to +80°C High temperature type: -15 to +120°C Low temperature type: -40 to +80°C	－20～＋70℃	－25～＋70℃
Paint color	Aqua blue (color code RAL5021)	Aqua blue (color code RAL5021)		
Accessories	Positioner, air filtration reducer, lock-up valve, valve location transmitter, hand wheel, etc.	Positioner, air filtration reducer, lock-up valve, valve location transmitter, hand wheel, etc.	EIL actuator handwheel	M8 actuator handwheel

Performance

CV value and stroke	See Table 3
Seat leakage	See Table 1
Rangeability	50:1
Allowable differential pressure	See Table 4
Weight	See Table 5

Table 1 Material combination and application temperature of body and trim • Allowable leakage of valve seat

- HT: Heat treatment
- ST: Stellite
- SS: Partial stellite
- SF: Full stellite

Table 1-1 Body material: Stainless steel

Body material		CF8, CF8M, CF3M		
Plug	**Material**	304/316/316L	304/316	304/316/316L
	Treatment	——	PCTFE	SS/SF
Valve seat	**Material**	304/316/316L	304/316/316L	304/316/316L
	Treatment	——	——	SS/SF
Guide	**Material**	304/316/316L	304/316/316L	304/316/316L
	Treatment	——	——	ST
Gasket	**Material**	316L	316L	316L
Allowable leakage of valve seat	**ANSI**	Class IV	Class VI	Class IV
	Rated Cv×	0.01%	Bubble-tight	0.01%
Application temperature °C		-196～+200	-196～+200	-196～+200

Fig. 1 Trim material · Treatment

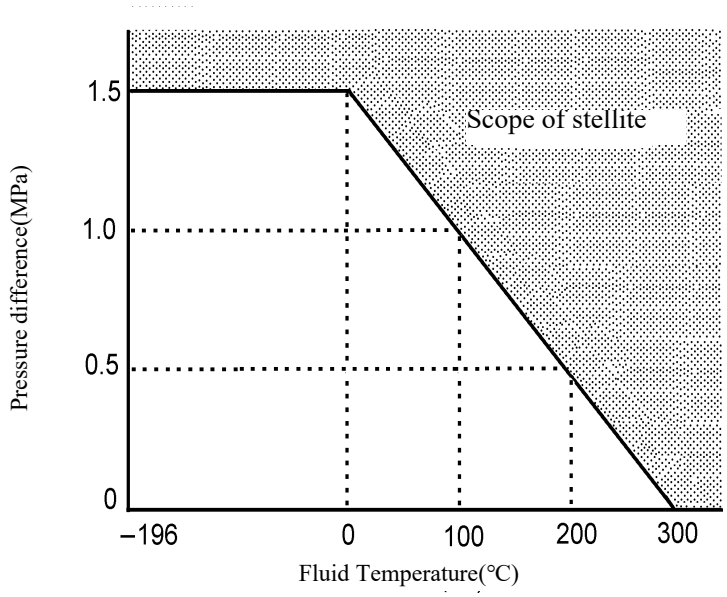


Fig. 1-1 Operating range of stellite

Note:
1. 9Cr18 hardened stainless steel is suggested for cavitation and flashing or water temperature over 100°C.
2. Cavitation, flashing, oil prohibitive service or normally-closed status.
3. If Cv≤0.16, SF or 9Cr18 hardened stainless steel is used for plug.

Fig. 2 Application temperature·pressure range of packing

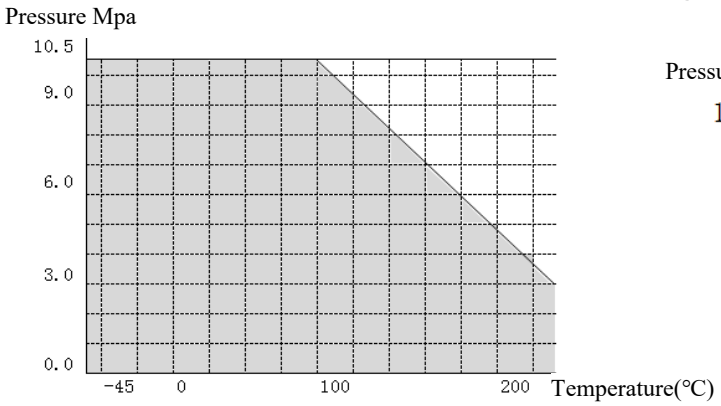


Fig. 2-1 Reinforced PTFE V type packing

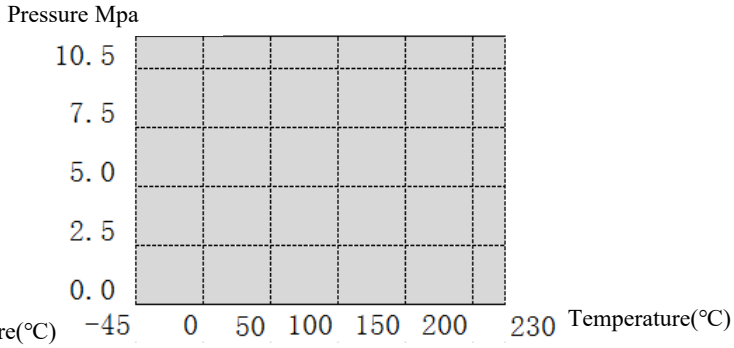


Fig. 2-2 PTFE carbon fiber

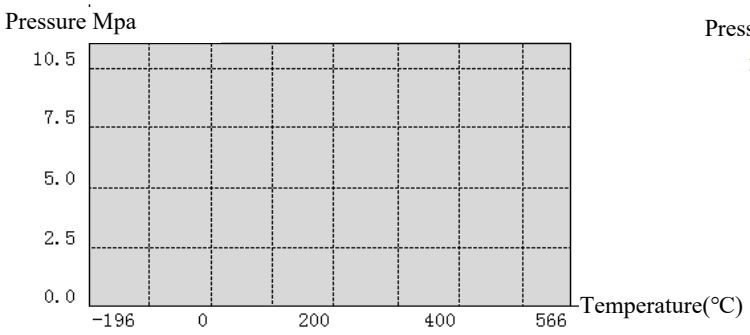


Fig. 2-3 Flexible graphite (non-oxidation environment)

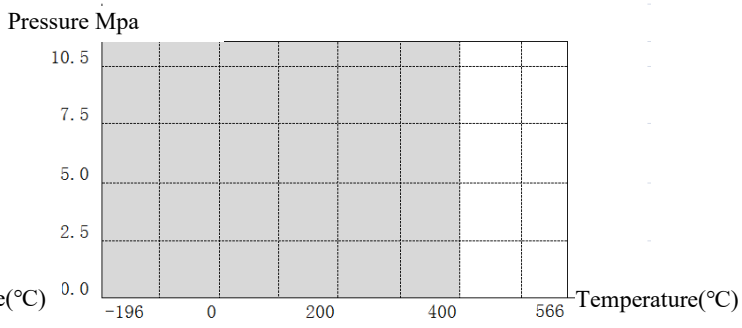


Fig. 2-3 Flexible graphite (oxidation environment)

Fig. 3 Structure of body components

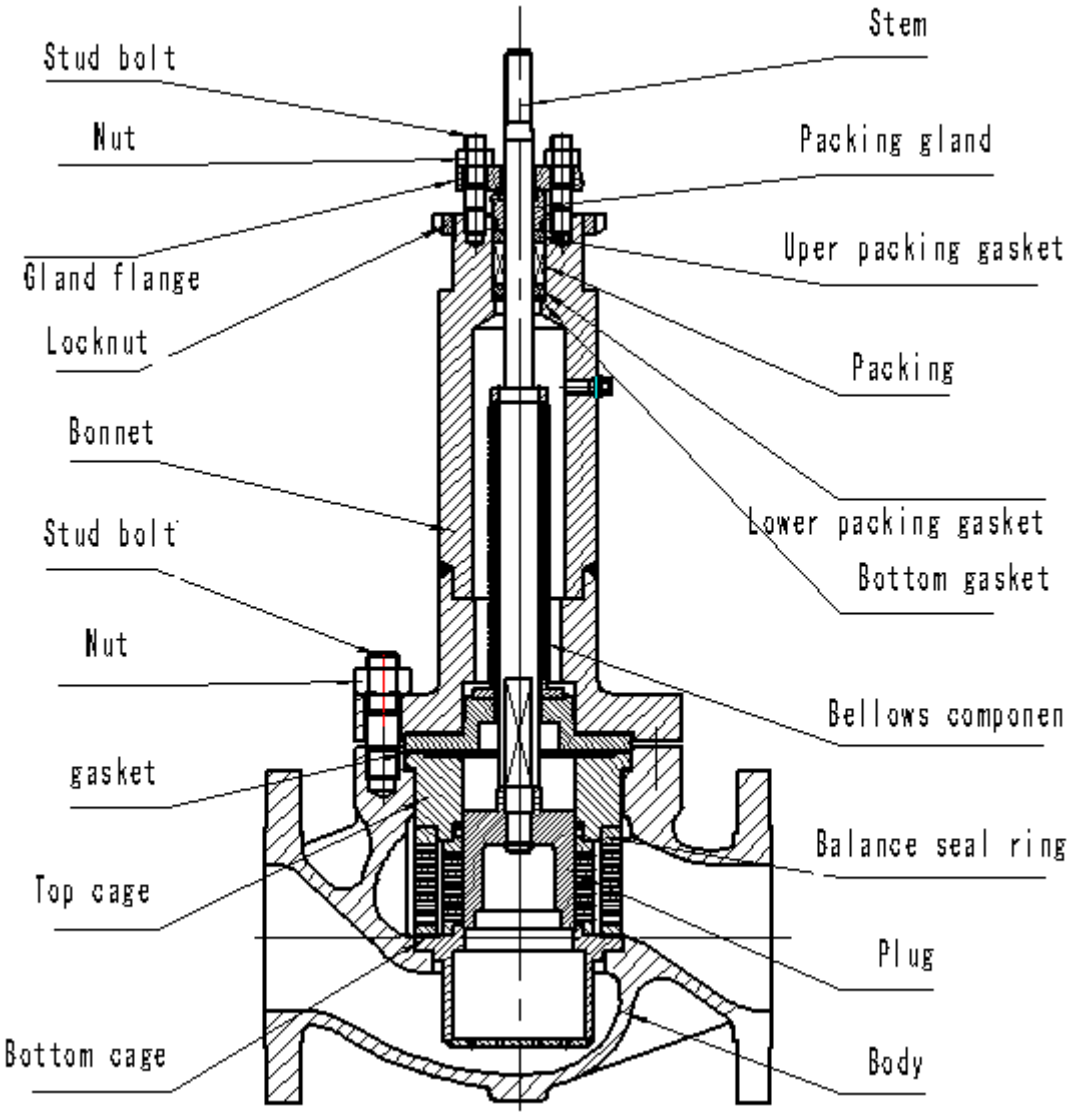


Table 3 CV value and stroke

Table 3-1 High-capacity plug (%F, LF) （Class150~600、PN16~110)

Nominal size		32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Diameter of valve seat		32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	580
Rated Cv value	Equal percentage %	24	36	60	100	140	220	320	420	820	1260	1560	2120	2750	3300	4300	5500
	Linear L	26	40	75	110	150	240	360	420	850	1350	1560	2120	2750	3300	4650	6450
Rated stroke(mm)		25			38			50		75	100		120		150		200
Rated Cv value	Equal percentage %	—			—			—		—	1350	1650	2250	2850	3600	4850	—
	Linear L	—			—			—		—	1400	1650	2250	2850	3800	5200	—
Enlarged stroke (mm)		—			—			—		—	120		150		200		—

Table 3-2 High-accuracy plug (%, L) （Class150~600、PN16~110)

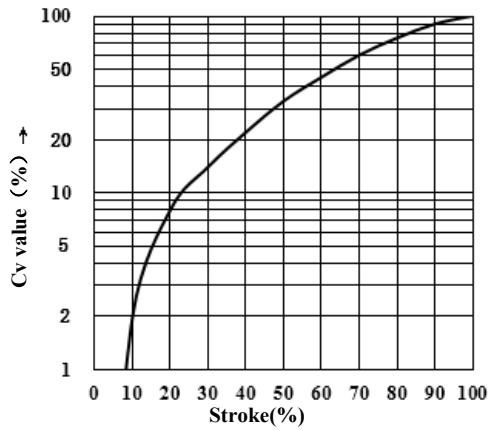
Nominal size		32		40			50			65			80			100			125			150			200		
Diameter of valve seat		32		40			50			65			80			100			125			150			200		
Rated Cv value		11	17	11	17	24	17	24	44	24	44	68	44	68	99	68	99	175	99	175	275	175	275	360	275	360	650
Equal percentage % Linear L	Meta valve seat	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
Rated stroke (mm)		25								38									50						75		
Nominal size		250			300			350			400			450		500			600								
Equal percentage		1050			1200			1700			1800			2500		3540			4180			4650			5850		
Linear		1350			1560			2120			2750			3300		4650			5500			5850			6700		
Rated stroke (mm)		100						120						150								200			280		

Note: △ indicates specification range of valves.

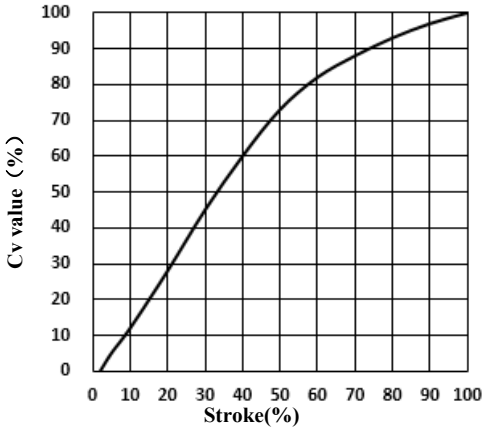
(JIS63K、Class900/1500、PN150~260)

Nominal size		32		40			50			65			80			100			150			200			250	300	350	400	450
Diameter of valve seat		32		40			50			65			75			100			150			200			250	300	350	400	450
Rated Cv value	Equal percentage %	12	17	12	17	25	17	25	50	25	50	80	50	80	110	80	110	180	180	275	360	275	360	650	1000	1440	2040	2500	3100
	Linear L	12	20	12	20	30	20	30	60	30	60	90	60	90	140	90	140	200	200	330	480	330	480	700	1050	1500	2040	2650	—
Rated stroke (mm)		25						38								50			75			100			150			175	

Fig. 4 Typical flow feature curve

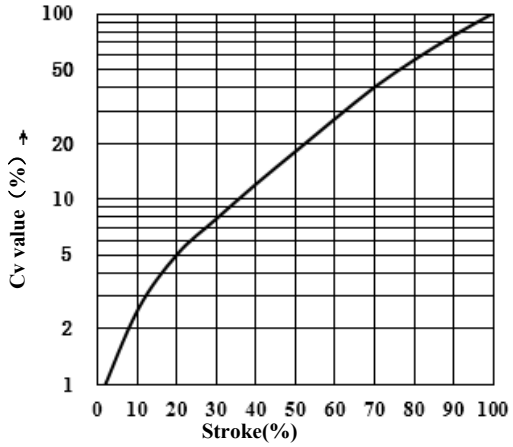


Equal percentage feature (%F)

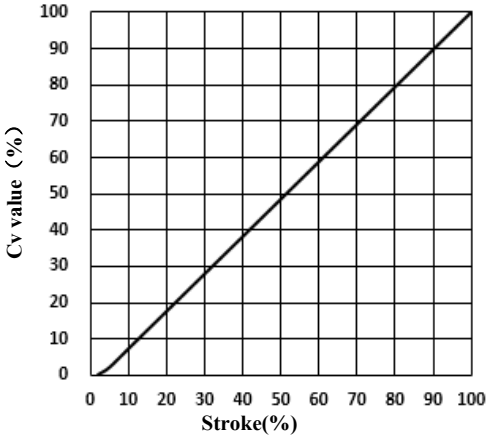


Linear feature (LF)

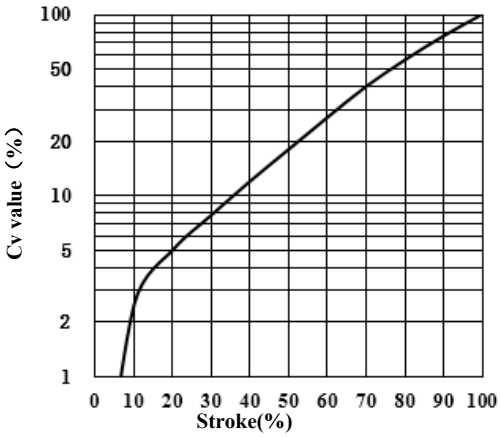
Fig. 4-1 High-capacity flow feature curve



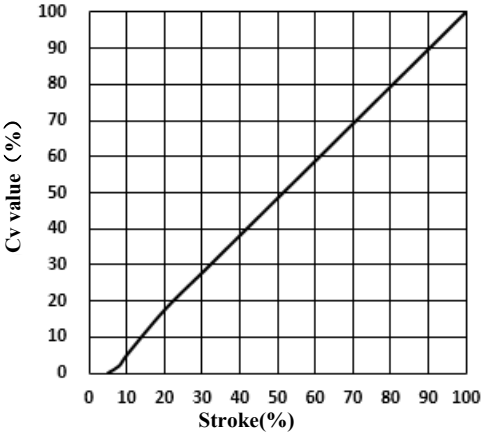
Equal percentage feature (% metal valve seat)



Linear feature (L metal valve seat)



Equal percentage feature (% flexible valve seat)



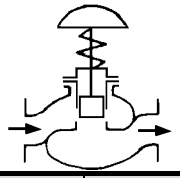
Linear feature (L flexible valve seat)

4-2 High-accuracy flow feature curve

Table 4 Allowable differential pressure

Table 4-1 Diaphragm type actuator (HA)

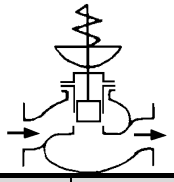
Table 4-1-1 Air-to-close valve **100kPa**



Nominal pressure	Actuator	Air supply pressure	Spring range	Type of valve seat	Allowable differential pressure										
					Nominal size										
					32	40	50	65	80	100	125	150	200	250	300
					Diameter of valve seat (mm)										
					32	40	50	65	80	100	125	150	200	250	300
Class150~Class600、PN16~PN110	HA21D8	4.0	0.8～2.4	Metal seal	100	100	100	—	—	—		—	—	—	—
	HA31D8	4.0	0.8～2.4	Metal seal	—	—	—	100	100	100	—	—	—	—	—
	HA41D8	4.0	0.8～2.4	Metal seal	—	—	—	—	—	—	100	100	80	—	—
	HA42D8	4.0	0.8～2.4	Metal seal	—	—	—	—	—	—	—	—	100	—	—
	HA51D1	4.0	1.06～2.06	Metal seal	—	—	—	—	—	—	—	—	100		
	HA51D4	4.0	1.06～2.4	Metal seal	—	—	—	—	—	—	—	—	—	100	100

Nominal pressure	Actuator	Air supply pressure	Spring range	Type of valve seat	Allowable differential pressure									
					Nominal size									
					32	40	50	65	80	100	150	200	250	300
					Diameter of valve seat									
					32	40	50	65	80	100	150	200	250	300
Class 900 Class 1500 PN150 ~260 JIS 63K	HA31D8	4.0	0.8～2.4	Metal valve seat	264	264	264	170	264	—	—	—	—	—
	HA41D8	4.0	0.8～2.4	Metal valve seat	—	—	—	—	—	264	226	158	—	—
	HA51D1	4.0	1.06~2.06	Metal valve seat	—	—	—	—	—	—	—	220	—	—
	HA51D4	4.0	1.06～2.4	Metal valve seat	—	—	—	—	—	—	—	—	137	91

Table 4-1-2 Air-to-open valve **100kPa**



Nominal pressure	Actuator	Air supply pressure	Spring range	Type of valve seat	Allowable differential pressure										
					Nominal size										
					32	40	50	65	80	100	125	150	200	250	300
					Diameter of valve seat （mm）										
					32	40	50	65	80	100	125	150	200	250	300
Class150~Class600、PN16~PN110	HA21R8	4.0	0.8～2.4	Metal seal	88.2	88.2	62.7	—	—	—	—	—	—	—	—
	HA31R8	4.0	0.8～2.4	Metal seal	100	100	100	100	90	60	—	—	—	—	—
	HA41R8	4.0	0.8～2.4	Metal seal	—	—	—	—	100	100	100	76.4	40	—	—
	HA42R8	4.0	0.8～2.4	Metal seal	—	—	—	—	—	—	—	—	100	—	—
	HA51R2	5.0	1.6～3.1	Metal seal	—	—	—	—	—	—	—	—	100	—	—
	HA51R5	5.0	1.6～3.6	Metal seal	—	—	—	—	—	—	—	—	—	100	100

Nominal pressure	Actuator	Air supply pressure	Spring range	Type of valve seat	Allowable differential pressure									
					Nominal size									
					32	40	50	65	80	100	150	200	250	300
					Diameter of valve seat （mm）									
					32	40	50	65	80	100	150	200	250	300
Class 900、Class 1500 PN150～PN260	HA31R8	4.0	0.8～2.4	Metal seal	264	264	190	113	113	—	—	—	—	—
	HA41R8	4.0	0.8～2.4	Metal seal	—	—	264	227	227	159	91	57	—	—
	HA42R8	4.0	0.8～2.4	Metal seal	—	—	—	—	—	—	181	114	—	—
	HA51R3	5.5	2.12～4.12	Metal seal	—	—	—	—	—	—	—	120	—	—
	HV61SR5	5.0	1.9～3.0	Metal seal	—	—	—	—	—	264	264	150	—	—
	HV71SR5	5.0	1.9~3.0	Metal seal	—	—	—	—	—	—	—	—	190	170

Table 4-2 Cylinder type actuator (HV dual-action) **100kPa**

Nominal pressure	Actuator	Air supply pressure	Type of valve seat	Allowable differential pressure					
				Nominal size					
				100	125	150	200	250	300
				Diameter of valve seat （mm）					
				100	125	150	200	250	300
Class150~600、PN16~110	HV41D00	5	Metal seal	100	100	100	—	—	—
	HV51D00	5	Metal seal	—	—	—	100	68	62
	HV61D00	5	Metal seal	—	—	—	—	100	100
	HV71D00	5	Metal seal	—	—	—	—	100	100

Nominal pressure	Actuator	Nominal size	Diameter of valve seat （mm）	Type of valve seat	Air supply pressure		
					3	4	5
Class 900 Class 1500 PN150~PN260	HV51D00	150	150	Metal seal	198	264	264
					242	264	264
Class 2500 PN320~420					198	264	330
					281	289	440
Class 900 Class 1500 PN150~PN260	HV61D00	200	200	Metal seal	191	255	264
					264	264	264
Class 2500 PN320~420					192	255	319
					440	440	440
Class 900	HV71D00	250	250	Metal seal	260	260	260
		300	300	Metal seal	260	260	260
Class 1500 PN150~PN260	HV81D00	350	350	Metal seal	250	260	260
		400	400	Metal seal	240	260	260
		450	450	Metal seal	220	260	260

Note: 1. The maximum allowable differential pressure shall not exceed the maximum operating pressure in ASME B16.34 or JIS B2201 standard.

Table 4-3 Electronic actuator (EIL) and intelligent actuator (M8)

100kPa

Nominal pressure	Actuator	Type of valve seat	Allowable differential pressure										
			Nominal size										
			32	40	50	65	80	100	125	150	200	250	300
			Diameter of valve seat （mm）										
			32	40	50	65	80	100	125	150	200	250	300
Class150~600、PN16~110	EIL04	Metal valve seat	100	100	100	—	—	—	—	—	—	—	—
	EIL08 M8610+L8210	Metal valve seat	—	—	—	100	100	100	—	—	—	—	—
	EIL12	Metal valve seat	—	—	—	—	—	—	98.3	88.8	—	—	—
	EIL20 M8620+L8220	Metal valve seat	—	—	—	—	—	—	—	—	100	—	—
	EIL25 M8620+L8230	Metal valve seat	—	—	—	—	—	—	—	—	—	80	75

Actuator	Nominal pressure	Type of valve seat	Allowable differential pressure								
			Nominal size								
			40	50	65	80	100	150	200	250	300
			Diameter of valve seat （mm）								
			40	50	65	80	100	150	200	250	300
EIL08 M8610+L8210	Class 900~ 1500 PN150~260 JIS63K	Metal seal	260	260	—	—	—	—	—	—	—
	Class 2500 PN320~420	Metal seal	440	423	—	—	—	—	—	—	—
EIL20 M8620+L8220	Class 900~ 1500 PN150~260 JIS63K	Metal seal	—	—	260	260	260	195	—	—	—
	Class 2500 PN320~420	Metal seal	—	—	440	440	440	263	—	—	—
EIL25 M8620+L8230	Class 900~ 1500 PN150~260 JIS63K	Metal seal	—	—	—	—	—	—	157	124	92
	Class 2500 PN320~420	Metal seal	—	—	—	—	—	—	220	165	110

Note: 1. The allowable differential pressure above is the allowable differential pressure when the valve is totally closed.
2. The figure in the gray box indicates the valve is applicable for the actuator of standard specification.

Table 5 Size Table 5-1-1 Face-to-face size

H100-021 **mm**

Nominal size	A							
	Class 150 RF JIS 10K FF RF PN16 RF	JIS 16K RF	Class 300 RF JIS 20K RF JIS 30K RF PN40 MFM	Class 600 RF JIS 40K RF PN63 MFM	JIS 16K TG	JIS 20K TG	JIS 30K TG	JIS 40K TG
32	190	—	205	210	—	—	—	—
40	222	231	235	251	235	236	248	251
50	254	263	267	286	265	267	276	286
65	276	288	292	311	290	292	303	311
80	298	313	317	337	310	317	326	337
100	352	364	368	394	360	368	379	394
125	403	—	425	457	—	425	—	457
150	451	465	473	508	475	473	486	508
200	543	560	568	610	570	568	580	610
250	673	—	708	752	—	—	—	—
300	737	—	775	819	—	—	—	—

mm

Nominal size	A						
	Class 150 RJ	Class 300 RJ	Class 600 RJ	Class 300 TG	Class 600 TG	Class 150 SW、BW	Class 150、600 SW、BW
32	235	248	251	244	248	251	251
40	235	248	251	244	248	251	251
50	267	283	289	276	283	286	286
65	289	308	314	302	308	311	311
80	311	333	340	327	333	337	337
100	365	384	397	378	391	394	394
150	464	489	511	483	505	473	508
200	556	584	613	578	606	568	610

mm

Nominal size	A						
	JIS63K	Class 900		Class 1500		Class 2500	
	RF	RF（SW，BW）	RJ	RF（SW，BW）	RJ	RF（SW，BW）	RJ
40	323	333	333	333	333	358	361
50	354	375	378	375	378	400	403
80	431	440	443	460	463	498	504
100	496	510	513	530	533	575	585
150	699	715	718	770	776	820	833
200	895	915	918	972	982	1020	1036
250	—	1137	1140	1327	1336	—	—
300	—	1311	1314	1400	1416	—	—

Note: Face-to-face size complies with IEC 60534-3 standard.

Table 5-1-2 The maximum size of side

H100-021 **mm**

Nominal size	C					
	PN16	PN40	PN64	Class150	Class300	Class600
32	147	149	152	147	149	152
40	150	150	170	150	150	170
50	177	180	184	177	180	184
65	198	202	206	198	202	206
80	209	214	218	209	214	218
100	249	256	262	249	256	275
125	301	306	316	301	312	330
150	351	358	370	351	358	370
200	434	450	458	434	450	468
250	560	568	574	560	568	580
300	575	583	589	575	583	597

mm

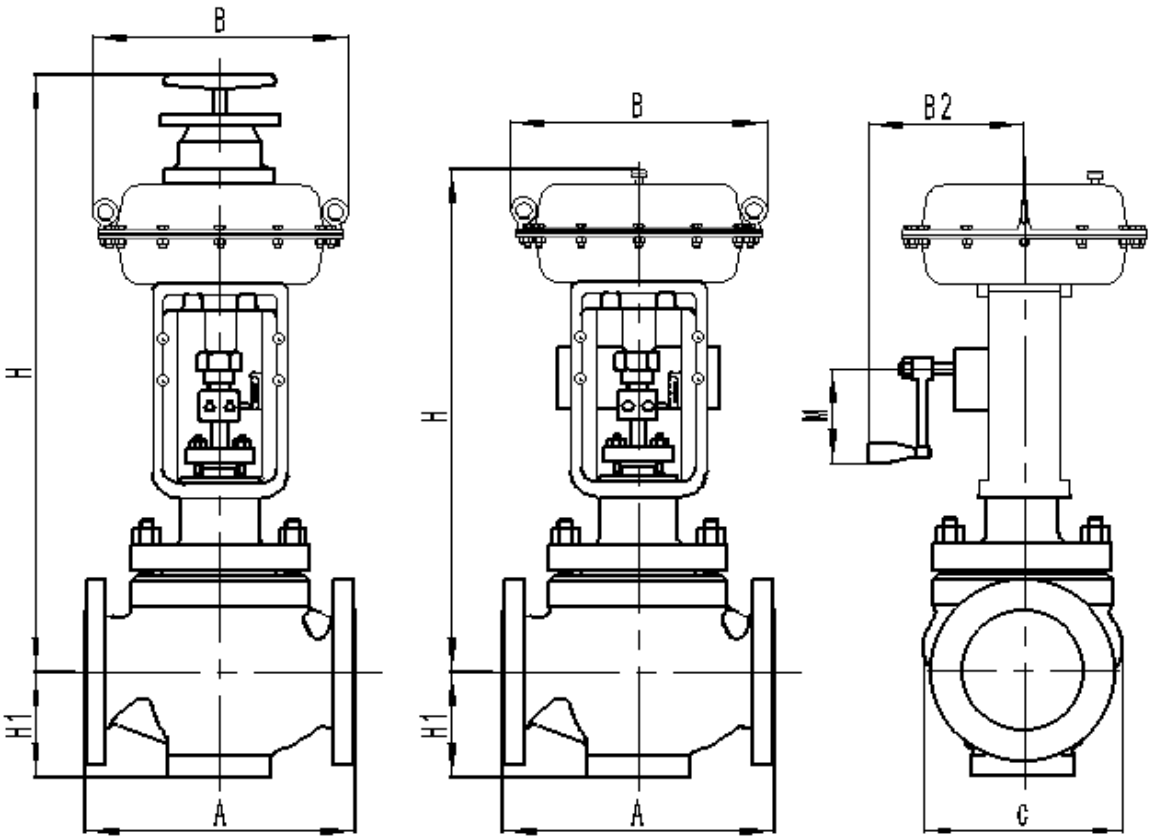
Nominal size	C		
	Class900	Class1500	Class2500
40	180	180	205
50	215	215	235
80	240	265	305
100	290	310	355
150	380	395	485
200	470	498	550

Table 5-2 Overall size mm

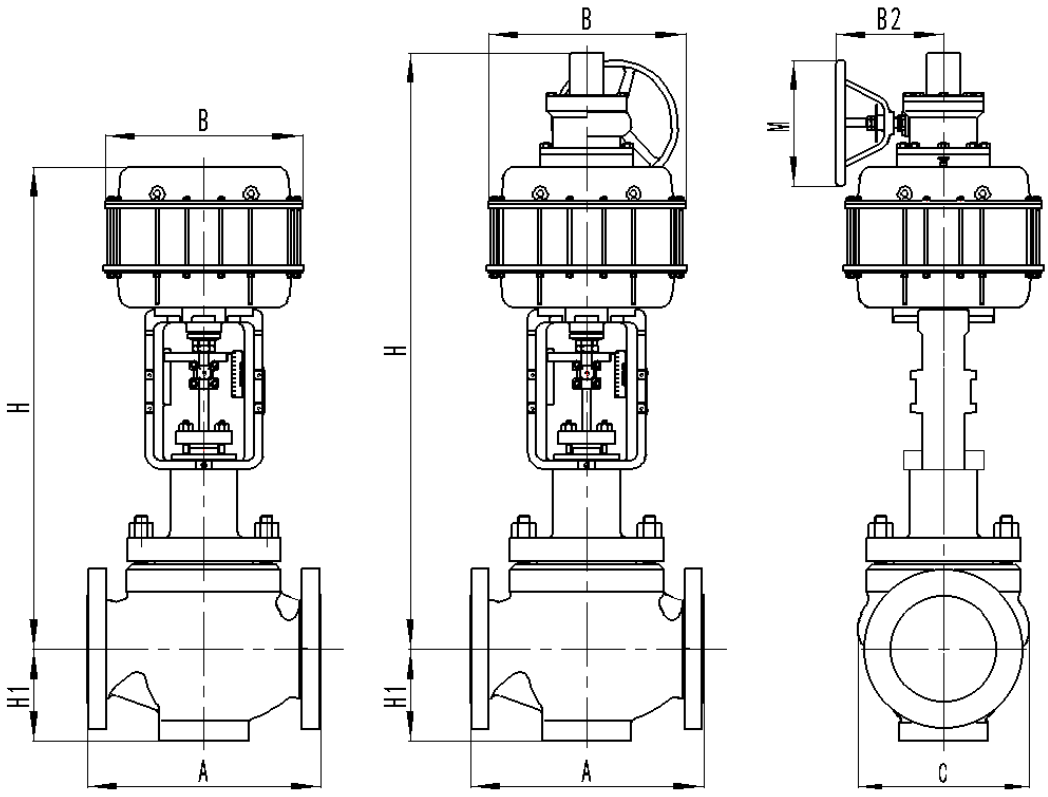
Table 5-2-1 Overall size mm

H100-021 **mm**

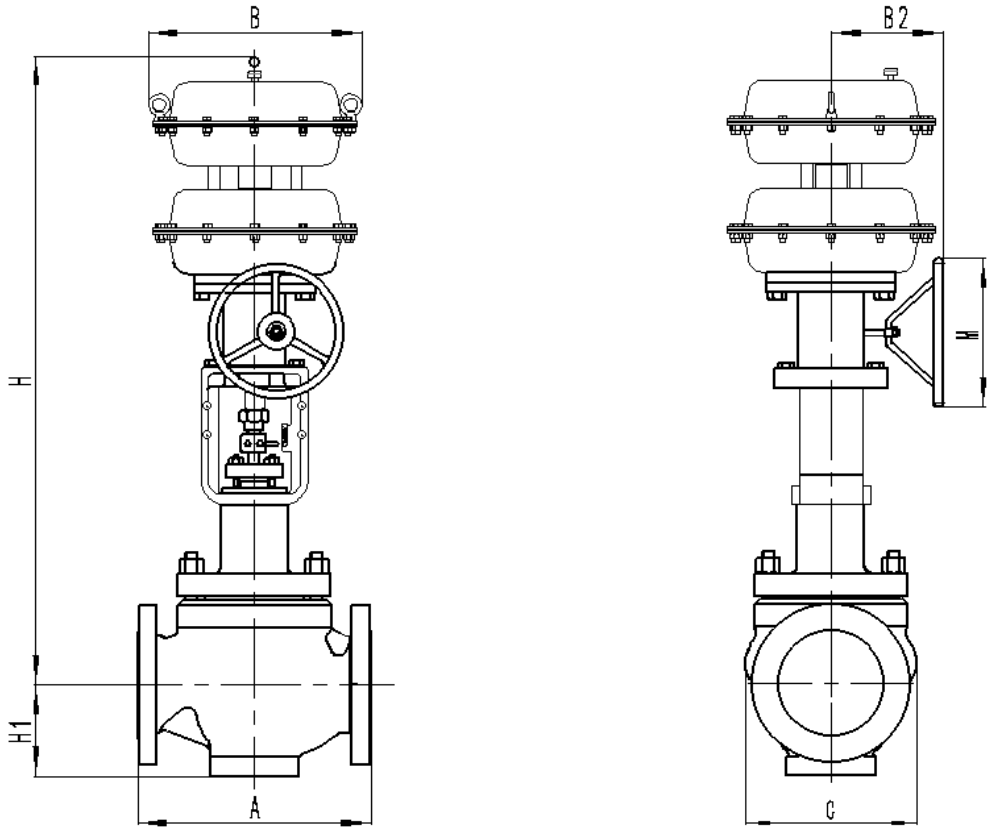
Nominal size	Actuator	H(Extension type III EIII)	B	B1	B2	B3	B4	M	H1
40	HA21D8、R8	1095	281	—	273.5	—	—	¢175	70
	HA31D8、R8	1245	363	—	278.5	—	—	¢175	
	EIL04	1310	172	—	258	—	—	—	
50	HA21D8、R8	1100	281	—	273.5	—	—	¢175	80
	HA31D8、R8	1250	363	—	278.5	—	—	¢175	
	EIL04	1315	172	—	258	—	—	—	
65	HA31D8、R8	1290	363	—	278.5	—	—	¢175	88
	HA41D8、R8	1550	520	—	303	—	—	¢320	
	EIL08	1475	229	—	338	—	—	—	
	M8610+L8210	1530	—	285	346	253	350	—	
80	HA31D8、R8	1295	363	—	278.5	—	—	¢175	98
	HA41D8、R8	1560	520	—	303	—	—	¢320	
	EIL08	1485	229	—	338	—	—	—	
	M8610+L8210	1535	—	285	346	253	350	—	
100	HA31D8、R8	1315	363	—	278.5	—	—	¢175	113
	HA41D8、R8	1575	520	—	303	—	—	¢320	
	HV61SR5	2115	475	—	384	—	—	¢380	
	HV51D00	1825	382	—	324	—	—	¢380	
	EIL08	1515	229	—	338	—	—	—	
	M8610+L8210	1555	—	285	346	253	350	—	
125	HA31D8、R8	1450	363	—	278.5	—	—	¢175	146
	HA41D8、R8	1630	520	—	303	—	—	¢320	
	HV61SR5	2175	480	—	384	—	—	¢380	
	HV51D00	1880	382	—	324	—	—	¢380	
	HV61D00	1995	480	—	384	—	—	¢380	
	HV71D00	1995	580	—	384	—	—	¢380	
	EIL08	1670	229	—	338	—	—	—	
	M8610+L8210	1795	—	313	350	253	350	—	
150	HA31D8、R8	1450	363	—	278.5	—	—	¢175	170
	HA41D8、R8	1630	520	—	303	—	—	¢320	
	HV61SR5	2175	480	—	384	—	—	¢380	
	HV51D00	1880	382	—	324	—	—	¢380	
	HV61D00	1995	480	—	384	—	—	¢380	
	HV71D00	1995	580	—	384	—	—	¢380	
	EIL08	1660	229	—	338	—	—	—	
	M8610+L8210	1795	—	313	350	253	350	—	
200	HA41D8、R8	1780	520	—	303	—	—	¢320	220
	HV51D00	2050	382	—	324	—	—	¢380	
	HV61D00	2165	480	—	384	—	—	¢380	
	HV71D00	2165	580	—	384	—	—	¢380	
	M8620+L8220	2205	—	313	350	253	350	—	
250	HA51	—	605	—	380	—	—	¢325	305
	HV61D00	—	480	—	384	—	—	¢380	
	HV71D00	—	580	—	384	—	—	¢380	
	EIL25	—	258	—	356	—	—	—	
	M8620+L8230	—	—	313	350	253	350	—	



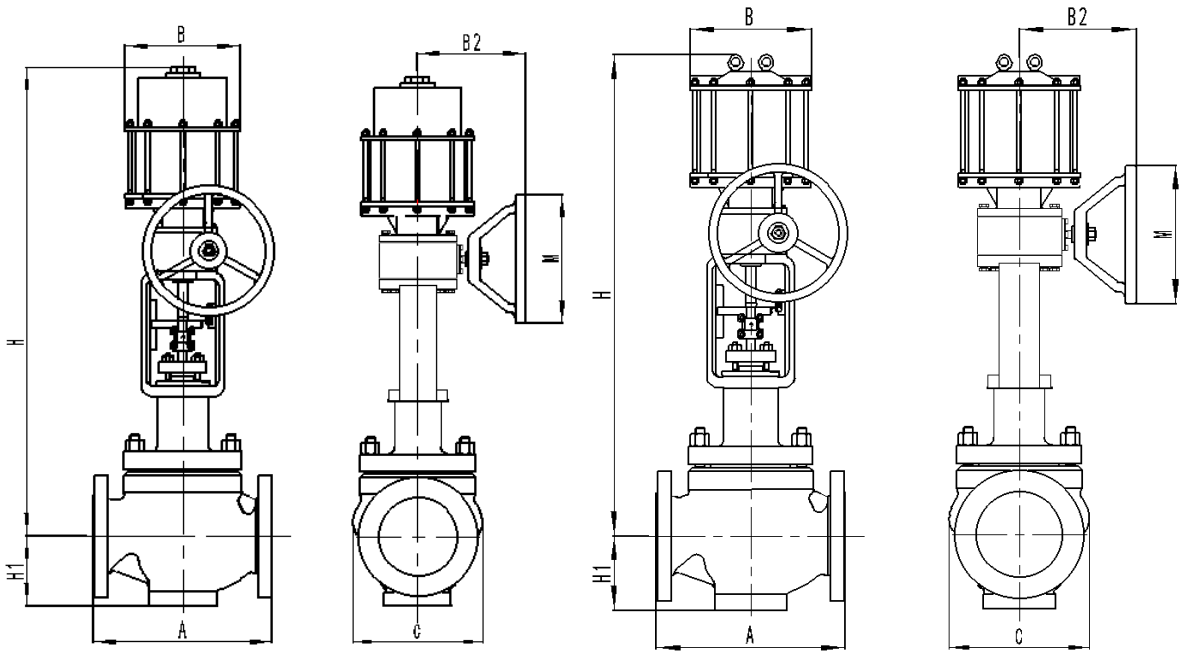
H100-311 with HA11~HA41 actuator



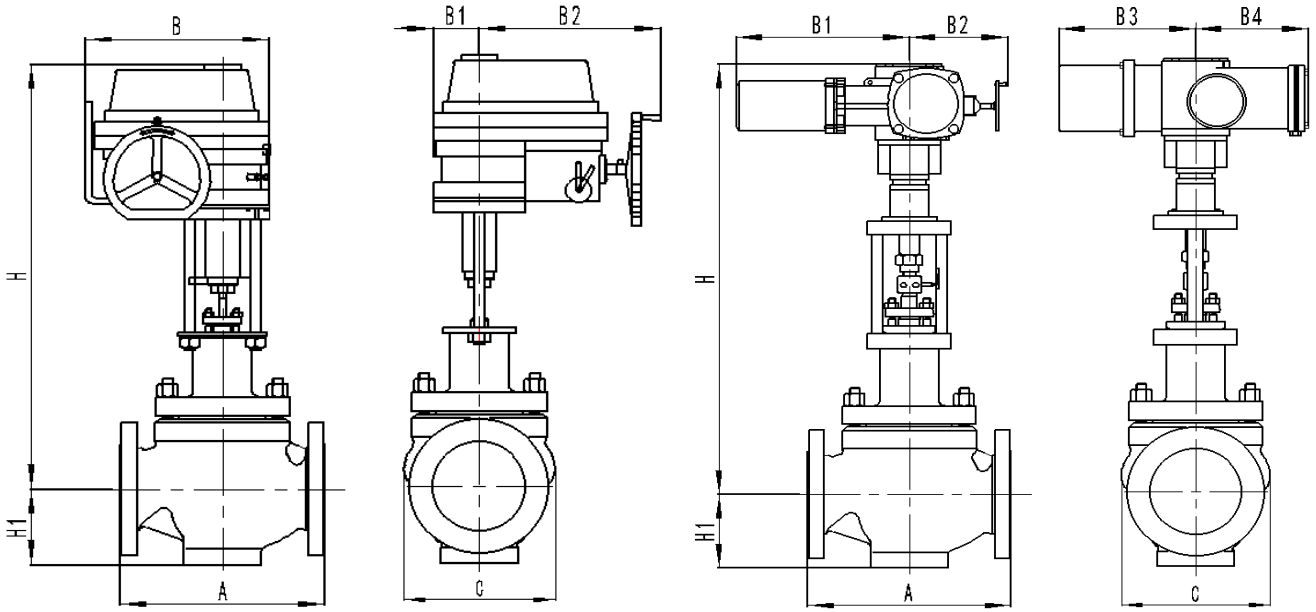
H100-311 with HA51 actuator



H100-311 with HA42 actuator



H100-311 with HV single/dual-action actuator



H100-311 with EIL\ M8 actuator

Fig. 5 Face-to-face size and overall size

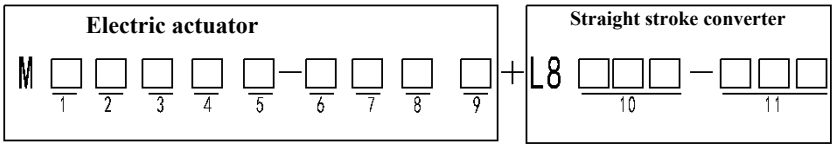
Table 6 Weight kg

H100-021 **kg**

Nominal size	Actuator	Flanged			Welded
		ANSI 125、150	ANSI 300	ANSI 600	ANSI 150、300、600
		EIII			
40	HA21D8、R8	39	44	52	44
	HA31D8、R8	51	56	64	56
	EIL04	31	36	44	36
50	HA21D8、R8	45	50	55	50
	HA31D8、R8	57	62	67	62
	EIL04	37	42	50	56
65	HA31D8、R8	65	70	87	70
	HA41D8、R8	96	101	118	101
	EIL08	49	54	71	54
	M8610+L8210	71	76	93	76
80	HA31D8、R8	80	90	112	90
	HA41D8、R8	111	121	143	121
	EIL08	64	74	96	74
	M8610+L8210	86	96	118	96
100	HA31D8、R8	93	108	143	105
	HA41D8、R8	124	139	174	136
	HV61SR5	266	281	316	278
	HV51D00	141	156	191	153
	EIL08	77	92	127	89
	M8610+L8210	99	114	149	111

Nominal size	Actuator	Flanged			Welded
		ANSI 125、150	ANSI 300	ANSI 600	ANSI 150、300、600
		EIII			
125	HA31D8、R8	168	193	243	180
	HA41D8、R8	199	224	274	211
	HV61SR5	341	366	416	353
	HV51D00	231	256	306	243
	HV61D00	291	316	366	303
	HV71D00	401	426	476	413
	EIL08	152	177	227	164
	M8610+L8210	174	199	249	186
150	HA31D8、R8	182	212	262	202
	HA41D8、R8	213	243	293	233
	HV61SR5	355	385	435	375
	HV51D00	245	275	325	265
	HV61D00	305	335	385	325
	HV71D00	415	445	495	435
	EIL08	166	196	247	186
	M8610+L8210	188	218	268	208
200	HA41D8、R8	303	353	473	343
	HV51D00	335	365	505	375
	HV61D00	395	445	565	435
	HV71D00	505	555	675	545
	M8620+L8220	283	333	453	323
250	HA5YD、R	—	—	—	—
	HV61D00	—	—	—	—
	HV71D00	—	—	—	—
	EIL20	—	—	—	—
	M8620+L8230	—	—	—	—

M series model code rules



Model rules: (1) Output type

8-8000 multi-revolution type

0-Small torque 90° type

1-Small thrust linear stroke

(2) Control module:

1-Simple ON-OFF type (MCC)

2-ON-OFF control

3-Intelligent ON-OFF type

4-Intelligent control type

5-Variable frequency ON-OFF type

6-Variable frequency control type

(3) Output torque:

1—50N.m or 100N.m/90°

2—100N.m or 200N.m/90°

3—200N.m or 300N.m/90°

4—400N.m

5—600N.m

6—1000N.m. or 600N.m/90°

3—200N.m or 300N.m/90°

7—1600N.m～2500N.m

8—3000N.m

Note: Small thrust is output thrust

(4) Output speed:

0—36r/min or 34s/90°

1—24r/min or 28s/90°

2—12r/min；

3—72r/min

4—84r/min；

6—144r/min

Small thrust default

(5) Explosion-proof rating:

None-No requirement

d—Ex dIIBT4

D—Ex dibIICT4

(6) Ambient temperature

0-Normal temperature

E-Low temperature

G-High temperature

(7) Power:

0—380V/3PH

S—220V/1PH

B—24 V d.c.

U—12 Vd.c.

X—440V～460V/3PH

(8) Communication protocol:

0-None

r-Infrared

w-Wireless

p-Profibus (2p is two-channel)

m-Modbus

f-FF fieldbus

h-HART fieldbus

(9) Feedback:

0-None

c-ON-OFF type with 4mA-20mA

(10) Specification code

(11) Stroke: not indicated in general model

e.g.: M8510-0S0C+L8210