

# NELES ROTARYGLOBE CONTROL VALVE, SERIES ZX

Neles RotaryGlobe control valve is designed to control a wide range of process liquids, gases and vapors. Its reliable and rugged construction with variety of different trim choices makes the Neles RotaryGlobe an ideal choice for general, difficult and even severe service control valve applications in wide range of industries.

The RotaryGlobe valve provides excellent control accuracy with the inherent benefits of a rotary valve. The optimized design results in reliability and control stability but also reduces lifetime costs and maintenance needs.

The latest technology intelligent valve controller ensures that the control performance is in the highest class and the user-friendly software with online diagnostics enables true predictive maintenance capabilities.



## FEATURES

### Construction

- The construction combines all the benefits of a linear globe valve and a rotary control valve.
- Modular design with variety of interchangeable trims selection.
- Balanced and low noise trims for higher pressure drop application.
- Wide material selection for severe service applications.
- Meets all the requirements of both ASME and EN standards.
- Compact and lightweight design.
- Free actuator mounting directions.
- Easy to size and select.
- The valve design is pending to be patented.

### Modular and reliable design

- Modular design enables use the parts across sizes and decrease the spare part needs.
- Thrust bearing is not wetted part and is not effected by corrosive fluids

### Safety

- Stem anti-blowout construction ensures safety in operation and during maintenance.
- Valve turns clockwise to close.
- Rugged one-piece-body construction minimizes potential leak paths and makes valve insensitive to pipe stress.

- Live loaded packing as option. Economical and simple solution to reduce emissions (fulfills the ISO 15848-1 standard)

### Accurate control

- Construction is inherently stable against the flow forces resulting to stable control also with small opening angles.
- Lever less position feedback eliminates backlash and provide ruggedness and reliability

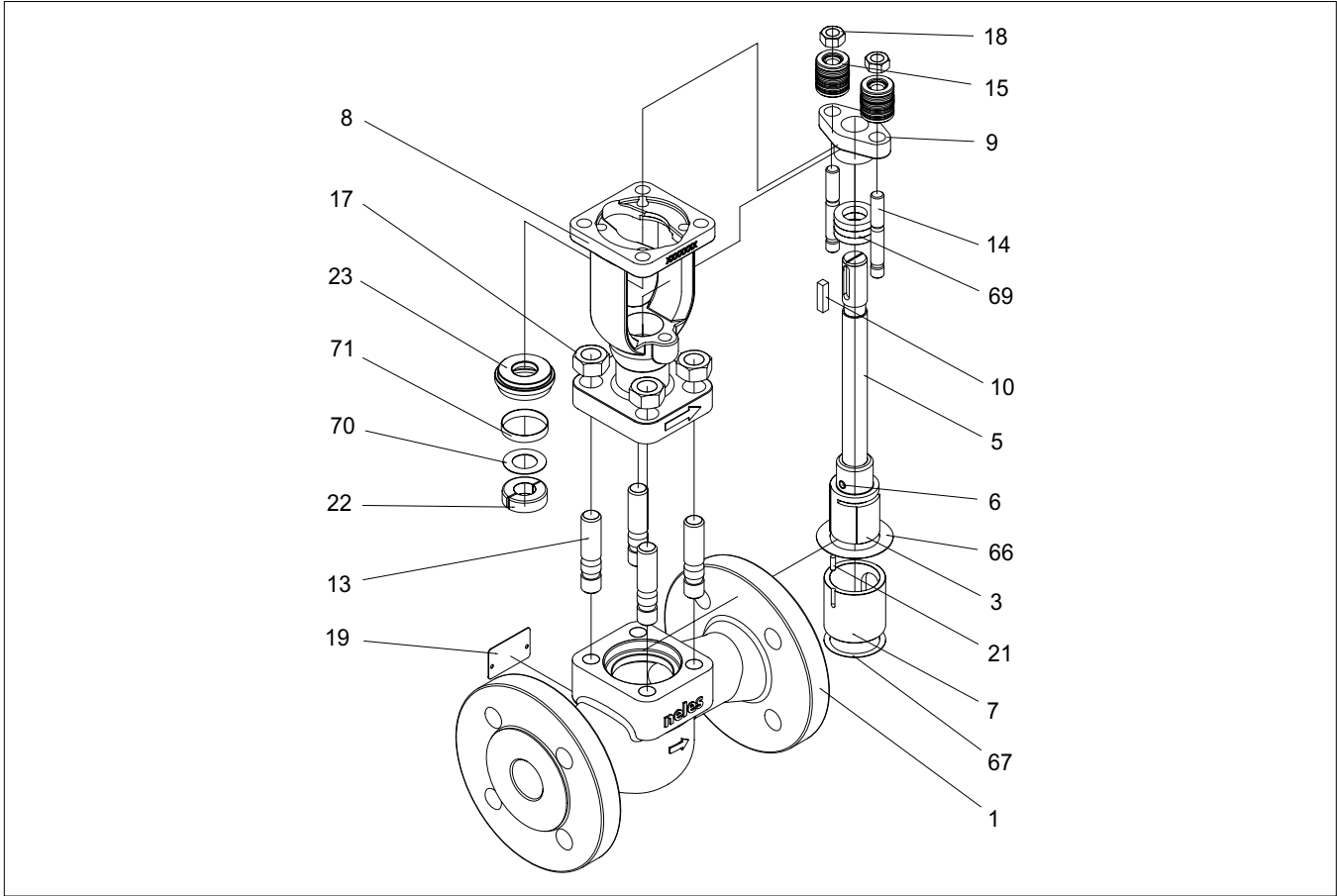
### Versatility: Wide range of applications

- Temperature limits -80 °C to +425 °C / -110 °F... +800 °F with the standard construction.
- Fulfills NACE requirements as option.
- Suitable for liquid, gas and vapor applications in all industry areas

### Easy maintenance

- Engineered for easy maintenance
- Top entry design enables inline service
- Internal parts, Cv values and flow characteristic can be easily changed with the interchangeable trim parts.
- Valve controller with the online diagnostics enables performance follow-up and predictive maintenance
- Efficient asset management with Neles FieldCare™ open architecture software and excellent networking capabilities

**EXPLODED VIEW AND PARTS LIST**



Item	Qty.	Description	Material
1	1	Body	Stainless steel CF8M/Carbon steel WCC
3	1	Plug	17-4PH + hard chrome coating
5	1	Shaft	AISI 316
6	1	Pin	AISI 316
7	1	Valve cage	Nitronic 60
8	1	Bonnet	Stainless steel CF8M/Carbon steel WCC
9	1	Gland	Stainless steel CF8M
10	1	Key	SS 142324
13	4	Stud	A2-70
14	2	Stud	A2-70
15	2	Disc spring set	SIS 2324 & CrMO steel + ENP
17	4	Hexagon nut	A2-70
18	2	Hexagon nut	A2-70
19	1	Identification plate	AISI 304
21	1	Pin	AISI 316
22	2	Thrust bearing	AISI 316
23	1	Support ring	AISI 316
66	1	Sheet ring	Graphite
67	1	Sheet ring	Graphite
69	1	Packing rings	PTFE/Graphite
70	1	Sheet ring	PTFE + AISI 316
71	1	Bearing strip	PTFE + AISI 316

## TECHNICAL SPECIFICATION

### Product type

- Flanged, RotaryGlobe control valve

### Pressure ratings

- ASME Class 150 - 1500
- PN40

### Size range

- 1/2" - 2" / DN15-50

### Temperature range

- -80°C...+425°C

### Face-to face

- ISA S75.03 (EN558-2)

### Tightness classification

- IEC 534-4 Class IV (water)

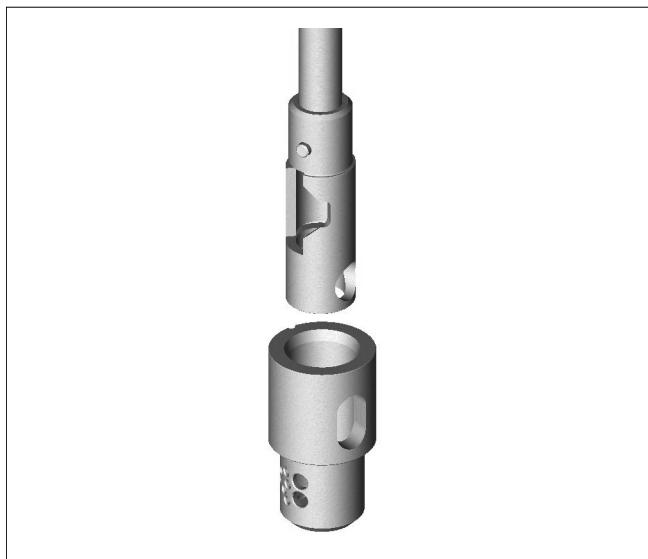
### Standard materials

- CF8M and WCC

### Optional materials

- Hastelloy C
- Alloy 20
- WC6
- CF8

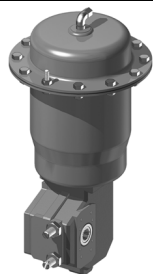
### Balanced trim for cavitation and noise abatement



- Liquid cavitation and aerodynamic noise problems can be solved with the patented Q-Trim™ valve trim. This design is based on pressure staging and flow stream division.

## ACTUATORS AND POSITIONERS

### ACTUATORS



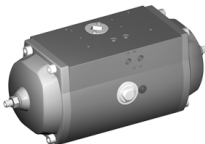
#### Series Quadra-Powr X

Type	Pneumatic rotary spring-diaphragm actuator
Temperature range	-29 to +66 °C -20 to + 150 °F
Bulletin reference	6QPX20



#### Series B1

Type	Pneumatic rotary cylinder actuator Single or double acting version
Temperature range	-40 to +120 °C / -40 to +250 °F
Bulletin reference	6B20, 6B21



#### Series E

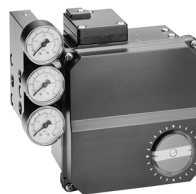
Type	Pneumatic double-diaphragm actuator Single or double acting version
Temperature range	-40 to +120 °C / -40 to +250 °F
Bulletin reference	6E20

### POSITIONERS



#### Intelligent valve controller ND9000

Input	4 - 20 mA or 0 - 100 %
Split range	4 - 12 mA, 12 - 20 mA
Temperature range	-40 to + 85 °C / -40 to +185 °F
Communication	HART, Profibus PA, Foundation FieldBus
Bulletin reference	7ND9120



#### Electropneumatic positioner, NE 700

Input	4 - 20 mA, 0 - 20 mA
Split range	4 - 12 mA, 12 - 20 mA
Temperature range	-25 to +85 °C / -15 to +185 °F
Bulletin reference	7NENP20



#### Pneumatic positioner, NP 700

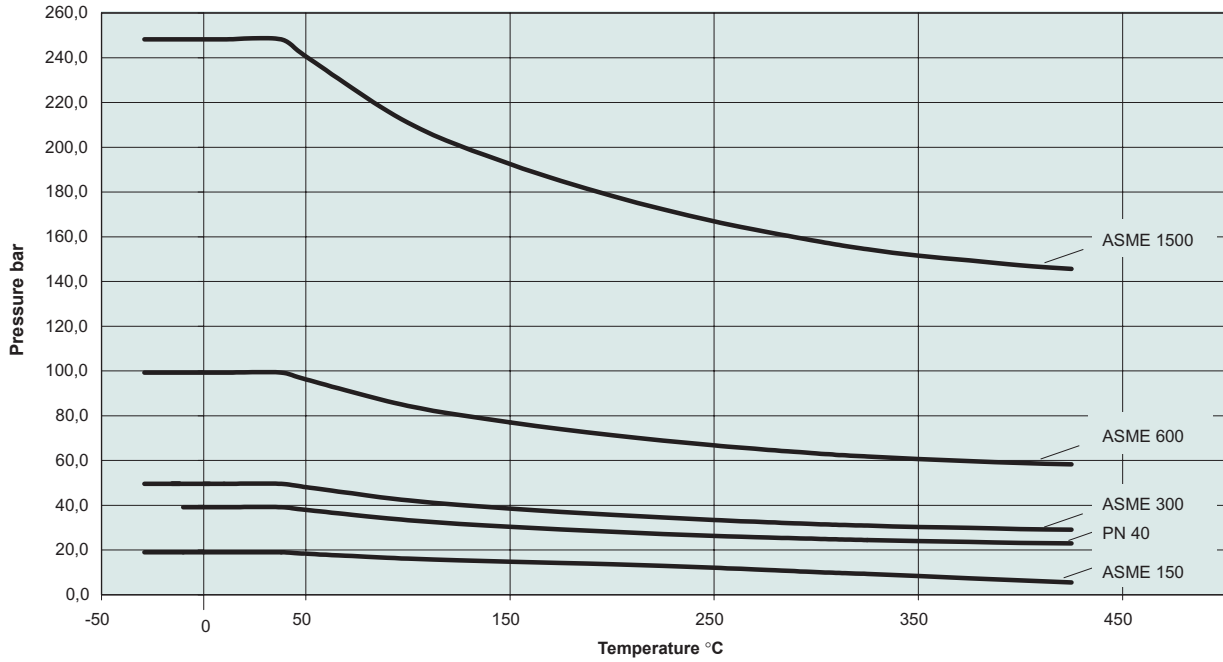
Input	0.2 - 1 bar, 20 - 200 kPa, 3 - 15 psi
Split range	0.2 - 0.6 bar, 0.6 bar - 1 bar 3 - 9 psi, 9 - 15 psi
Temperature range	-40 to +90 °C / -40 to +200 °F
Bulletin reference	7NENP20

### MAXIMUM C<sub>v</sub>-VALUES

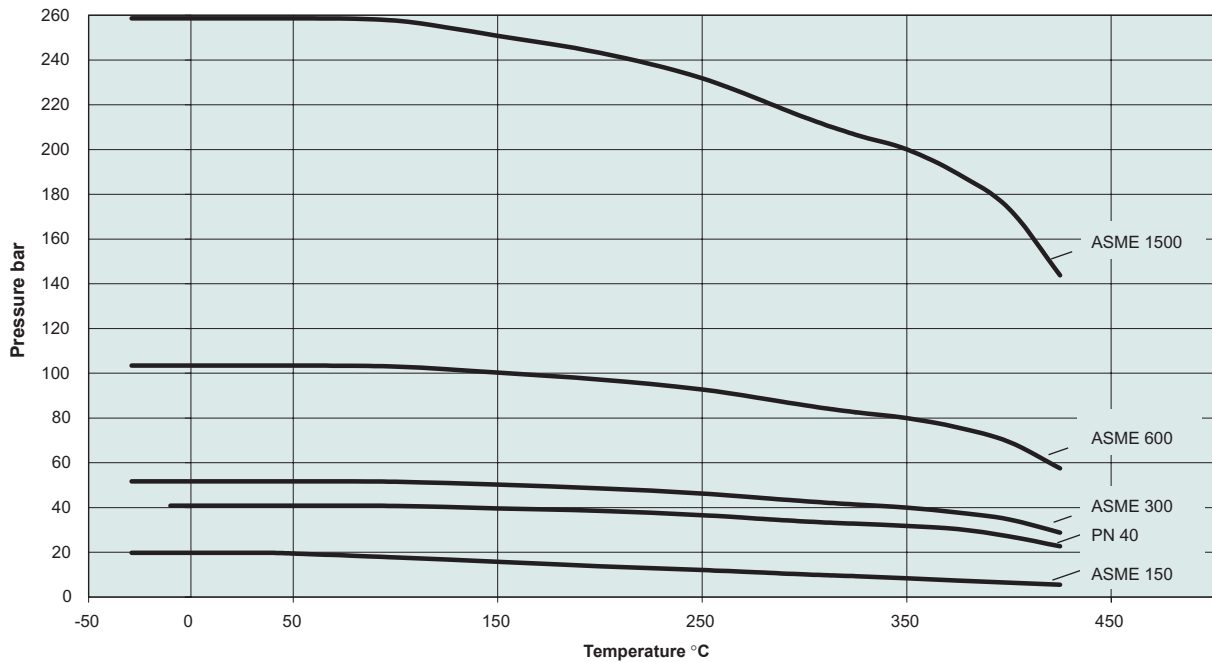
Size	Linear							Equal %				Balanced linear		
	L-trims							E-trims				B-trims		
	L001	L003	L010	L025	L070	L120	L300	E010	E025	E070	E200	B020	B050	B120
1/2"	0.1	0,3	1	2.5				1	2.5			2		
3/4"	0.1	0,3	1	2.5	6			1	2.5			2	5	
1"	0.1	0,3	1	2.5	6	12		1	2.5	7		2	5	
1 1/2"				3	7.5	18	31			6	18		6	13
2"				3	7.5	18	31			6	18		6	13

### PRESSURE/TEMPERATURE RATINGS

A 351 Gr. CF8M




A 216 Gr.WCC



### Actuator selection and maximum differential pressures

Valve		Maximum shut-off pressure, bar											
		Supply pressure 4 bar				Supply pressure 5 bar				Supply pressure 6 bar			
Size	Cv100%	EC05	EC07	EC10	EC12	EC05	EC07	EC10	EC12	EC05	EC07	EC10	EC12
1/2" - 1"	<13	80	190	250		100	250	250		100	250		
	<8	100	250			100	250			100	250		
	<3	100	250			100	250			100	250		
1 1/2" - 2"	<35		50	130	250		70	170	250		80	210	250
	<20		100	250			100	250			100	250	
	<8		100	250			100	250			100	250	

Valve		Maximum shut-off pressure, bar									
		Supply pressure 4 bar				Supply pressure 5 bar			Supply pressure 6 bar		
Size	Cv100%	B1C 6	B1C 9	B1C11	B1C13	B1C 6	B1C 9	B1C11	B1C 6	B1C 9	B1C11
1/2" - 1"	<13	220	250			250	250		250		
	<8	250				250			250		
	<3	250				250			250		
1 1/2" - 2"	<35	60	100	240	250	80	100	250	100	100	250
	<20	100	100	250		100	100	250	100	100	250
	<8	100	100	250		100	100	250	100	100	250

 Not for class 1500       Only for class 1500

Valve		Maximum shut-off pressure, bar			
		Supply pressure 4 bar min			
Size	Cv100%	EJ05	EJ07	EJ10	EJ12
1/2" - 1"	<13	75	170	250	
	<8	100	250		
	<3	100	250		
1 1/2" - 2"	<35		50	120	250
	<20		90	240	250
	<8		100	250	

Valve		Maximum shut-off pressure, bar			
		Supply pressure 4 bar min			
Size	Cv100%	EJA05	EJA07	EJA10	EJA12
1/2" - 1"	<13	45	130	250	
	<8	100	250		
	<3	100	250		
1 1/2" - 2"	<35		35	100	250
	<20		70	180	250
	<8		100	250	



Valve		Maximum shut-off pressure, bar		
		Supply pressure 3.5 bar min		
Size	Cv100%	B1J8	B1J10	B1J12
1/2" - 1"	<13	250		
	<8	250		
	<3	250		
1 1/2" - 2"	<35	75	160	250
	<20	100	250	
	<8	100	250	

Valve		Maximum shut-off pressure, bar		
		Supply pressure 3.5 bar min		
Size	Cv100%	B1JA8	B1JA10	B1JA12
1/2" - 1"	<13	230	250	
	<8	250		
	<3	250		
1 1/2" - 2"	<35	65	130	250
	<20	100	250	
	<8	100	250	

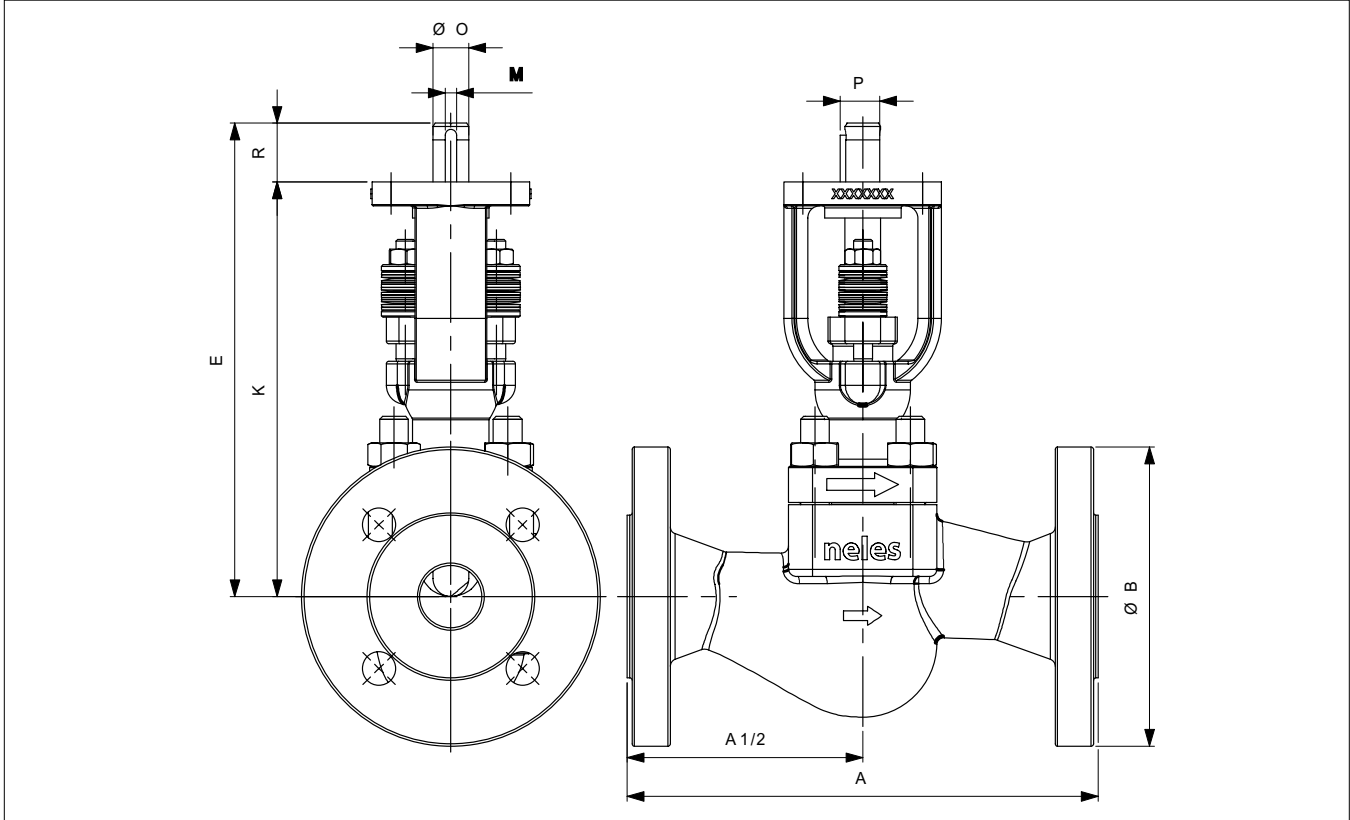
Valve		Maximum shut-off pressure, bar			
		Supply pressure 3.5 bar min			
		Spring to close			
Size	Cv100%	QPX1C	QPX2C	QPX3C	QPX4C
1/2" - 1"	<13	100	250		
	<8	100	250		
	<3	100	250		
1 1/2" - 2"	<35		85	170	250
	<20		100	100	250
	<8		100	100	250

Valve		Maximum shut-off pressure, bar			
		Supply pressure 3.5 bar min			
		Spring to open			
Size	Cv100%	QPX1C	QPX2C	QPX3C	QPX4C
1/2" - 1"	<13	65	250		
	<8	100	250		
	<3	100	250		
1 1/2" - 2"	<35		35	80	160/250*
	<20		75	100	250
	<8		100	100	250

\* supply pressure 4.1 bar min

 Not for class 1500       Only for class 1500

**DIMENSIONS, mm**



**Class 150**

TYPE	SIZE	ISO FLANGE	DIMENSIONS, mm								kg
			A	$\varnothing B$	E	K	M	$\varnothing O$	P	R	
ZXC	1/2	F05, F07	184	90	199	174	4.76	15	17	25	4.6
	3/4	F05, F07	184	100	199	174	4.76	15	17	25	5.0
	1	F05, F07	184	110	199	174	4.76	15	17	25	5.4
	1 1/2	F07, F10	222	125	236	201	4.76	20	22.2	35	11.2
	2	F07, F10	254	150	236	201	4.76	20	22.2	35	13.2

**Class 300 / PN40**

TYPE	SIZE	ISO FLANGE	DIMENSIONS, mm								kg
			A	$\varnothing B$	E	K	M	$\varnothing O$	P	R	
ZXD ZCM	1/2	F05, F07	190	95	199	174	4.76	15	17	25	5.6
	3/4	F05, F07	194	115	199	174	4.76	15	17	25	6.8
	1	F05, F07	197	125	199	174	4.76	15	17	25	7.5
	1 1/2	F07, F10	235	155	236	201	4.76	20	22.2	35	15.3
	2	F07, F10	267	165	236	201	4.76	20	22.2	35	16.9

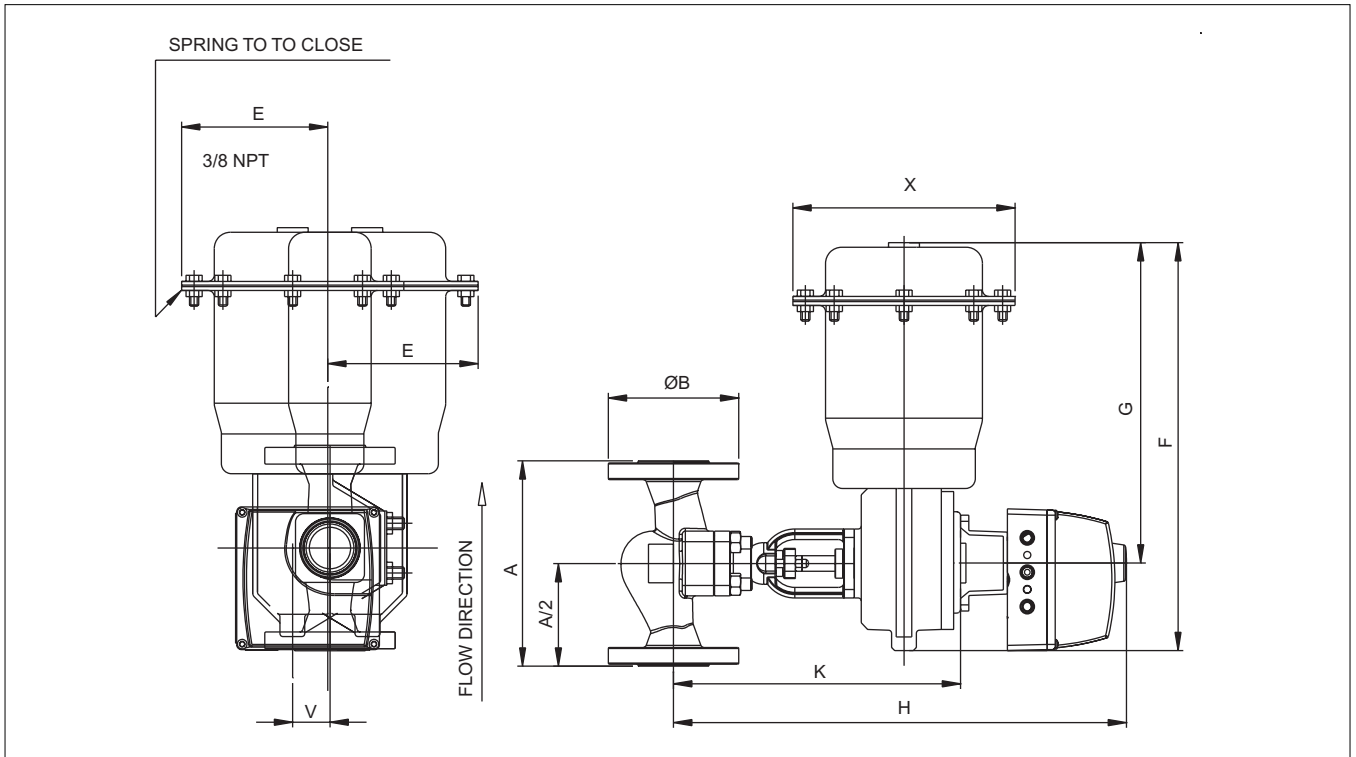
**Class 600**

TYPE	SIZE	ISO FLANGE	DIMENSIONS, mm								kg
			A	$\varnothing B$	E	K	M	$\varnothing O$	P	R	
ZXF	1/2	F05, F07	203	95	199	174	4.76	15	17	25	5.7
	3/4	F05, F07	206	115	199	174	4.76	15	17	25	6.7
	1	F05, F07	210	125	199	174	4.76	15	17	25	7.6
	1 1/2	F07, F10	251	155	236	201	4.76	20	22.2	35	15.8
	2	F07, F10	286	165	236	201	4.76	20	22.2	35	18.0

**Class 1500**

TYPE	SIZE	ISO FLANGE	DIMENSIONS, mm								kg
			A	$\varnothing B$	E	K	M	$\varnothing O$	P	R	
ZXH	1	F07, F10	292	150	264	229	4.76	20	22.2	35	23.5
	1 1/2	F10, F12	333	180	373	327	6.35	25	27.8	46	38.0
	2	F10, F12	375	215	373	327	6.35	25	27.8	46	49.2

Dimensions, QPX actuators



Class 150

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm									kg
				A	ØB	E	F	G	H	K	V	X	
ZXC	1/2	QPX1C	F05	184	90	142	338	330	430	271	36	197	17.9
	3/4	QPX1C	F05	184	100	142	338	330	430	271	36	197	18.3
	1	QPX1C	F05	184	110	142	338	330	430	271	36	197	18.7
	1 1/2	QPX2C	F07	222	125	156	430	389	464	305	42	228	32.5
	2	QPX2C	F07	254	150	156	430	389	464	305	42	228	34.4

Class 300 / PN40

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm									kg
				A	ØB	E	F	G	H	K	V	X	
ZXD ZCM	1/2	QPX1C	F05	190	95	142	338	330	430	271	36	197	18.6
	3/4	QPX1C	F05	194	115	142	338	330	430	271	36	197	19.8
	1	QPX1C	F05	197	125	142	338	330	430	271	36	197	20.5
	1 1/2	QPX2C	F07	235	155	156	430	389	464	305	42	228	36.0
		QPX3C	F07	235	155	190	520	446	472	313	53	274	50.0
	2	QPX2C	F07	267	165	156	430	389	464	305	42	228	37.9
QPX3C		F07	267	165	190	520	446	472	313	53	274	51.9	

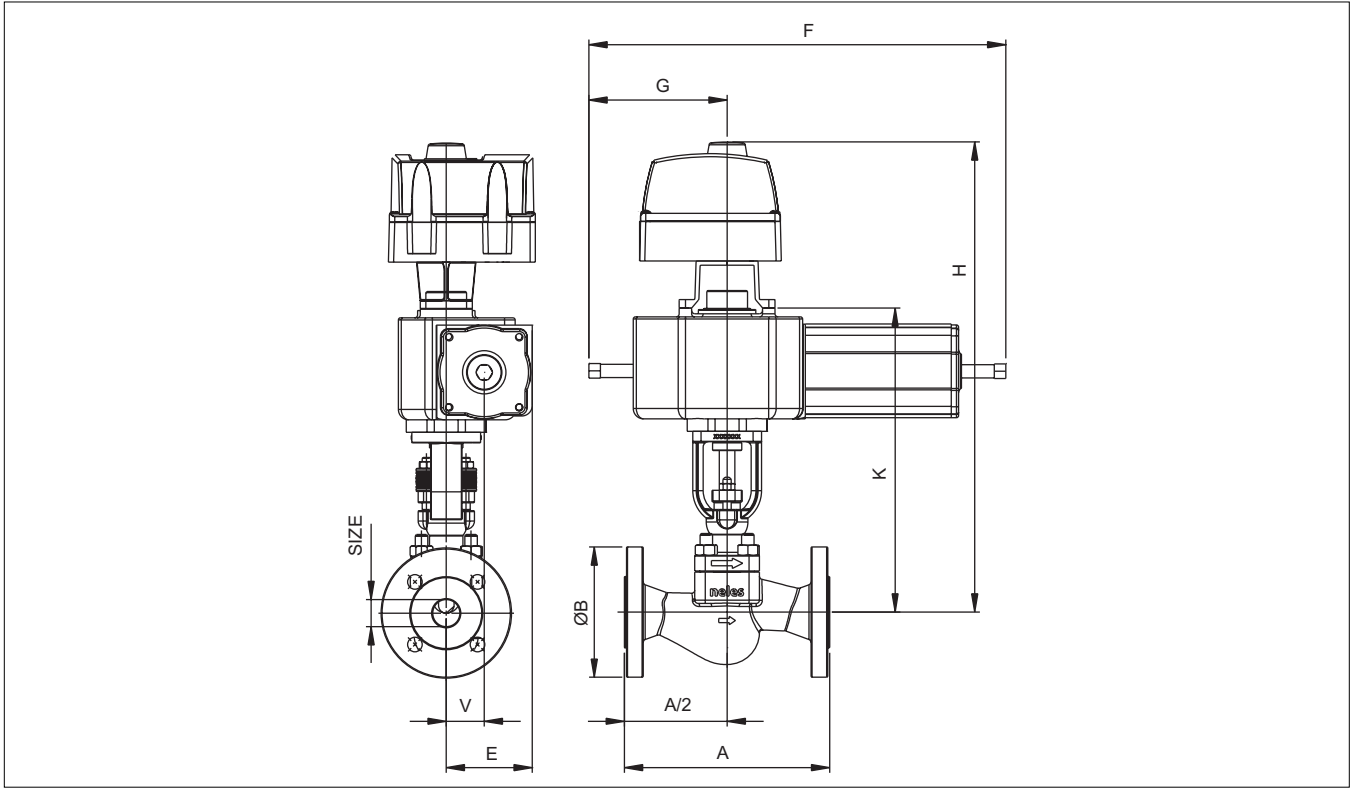
Class 600

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm									kg
				A	ØB	E	F	G	H	K	V	X	
ZXF	1/2	QPX1C	F05	203	95	142	338	330	430	271	36	197	18.7
	3/4	QPX1C	F05	206	115	142	338	330	430	271	36	197	19.7
	1	QPX1C	F05	210	125	142	338	330	430	271	36	197	20.6
		QPX2C	F07	210	125	156	430	389	437	278	42	228	28.6
	1 1/2	QPX2C	F07	251	155	156	430	389	464	305	42	228	36.8
		QPX3C	F07	251	155	190	520	446	472	313	53	274	50.8
	2	QPX2C	F07	286	165	156	430	389	464	305	42	228	39.0
QPX3C		F07	286	165	190	520	446	472	313	53	274	53.0	

Class 1500

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm									kg
				A	ØB	E	F	G	H	K	V	X	
ZXH	1	QPX2C	F07	292	150	156	430	389	492	333	42	228	44.8
	1 1/2	QPX4C	F10	333	180	228	592	495	609	450	68	320	93.5
	2	QPX4C	F10	375	215	228	592	495	609	450	68	320	104.7

Dimensions, B1C actuators



Class 150

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXC	1/2	B1C6	F07	184	90	83	395	125	451	292	36	11.1
	3/4	B1C6	F07	184	100	83	395	125	451	292	36	11.5
	1	B1C6	F07	184	110	83	395	125	451	292	36	11.9
	1 1/2	B1C6	F07	222	125	83	395	125	478	319	36	17.7
	2	B1C6	F07	254	150	83	395	125	478	319	36	19.7

Class 300 / PN40

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXD ZCM	1/2	B1C6	F07	190	95	83	395	125	451	292	36	12.1
	3/4	B1C6	F07	194	115	83	395	125	451	292	36	13.3
	1	B1C6	F07	197	125	83	395	125	451	292	36	14.0
	1 1/2	B1C6	F07	235	155	83	395	125	478	319	36	21.5
	2	B1C6	F07	267	165	83	395	125	478	319	36	23.4

Class 600

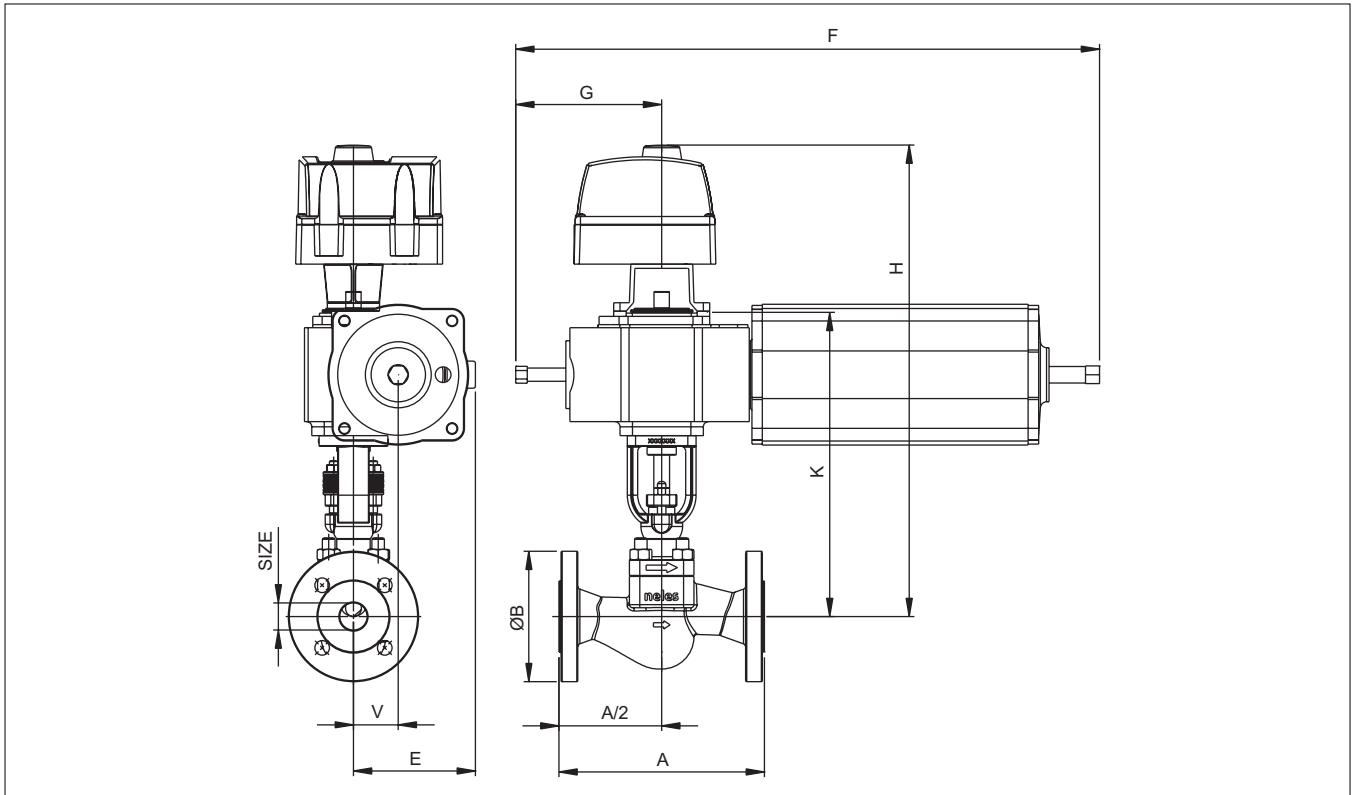
Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXF	1/2	B1C6	F07	203	95	83	395	125	451	292	36	12.2
	3/4	B1C6	F07	206	115	83	395	125	451	292	36	13.2
	1	B1C6	F07	210	125	83	395	125	451	292	36	14.1
	1 1/2	B1C6	F07	251	155	83	395	125	478	319	36	22.3
		B1C9	F07	251	155	102	450	135	480	321	43	27.7
	2	B1C6	F07	286	165	83	395	125	478	319	36	24.5
		B1C9	F07	286	165	102	450	135	480	321	43	29.9

Class 1500

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXH	25	B1C6	F07	292	150	83	395	125	506	347	36	30.0
		B1C9	F07	292	150	102	450	135	508	349	43	35.4
	1 1/2	B1C11	F10	333	180	124	535	160	620	461	51	56.3
		B1C13	F12	333	180	155	640	195	656	487	65	71.5
	2	B1C11	F10	375	215	124	535	160	620	461	51	67.5
		B1C13	F12	375	215	155	640	195	656	487	65	82.6



Dimensions, B1J actuators



Class 150

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm							kg	
				A	ØB	E	F	G	H	K		V
ZXC	1/2	B1J_8	F07	184	90	117	555	135	453	294	43	23.9
	3/4	B1J_8	F07	184	100	117	555	135	453	294	43	24.3
	1	B1J_8	F07	184	110	117	555	135	453	294	43	24.7
	1 1/2	B1J_8	F07	222	125	117	555	135	480	321	43	30.5
	2	B1J_8	F07	254	150	117	555	135	480	321	43	32.5

Class 300 / PN40

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm							kg	
				A	ØB	E	F	G	H	K		V
ZXD ZCM	1/2	B1J_8	F07	190	95	117	555	135	453	294	43	24.9
	3/4	B1J_8	F07	194	115	117	555	135	453	294	43	26.1
	1	B1J_8	F07	197	125	117	555	135	453	294	43	26.8
	1 1/2	B1J_8	F07	235	155	117	555	135	480	321	43	34.3
	2	B1J_8	F07	267	165	117	555	135	480	321	43	36.2

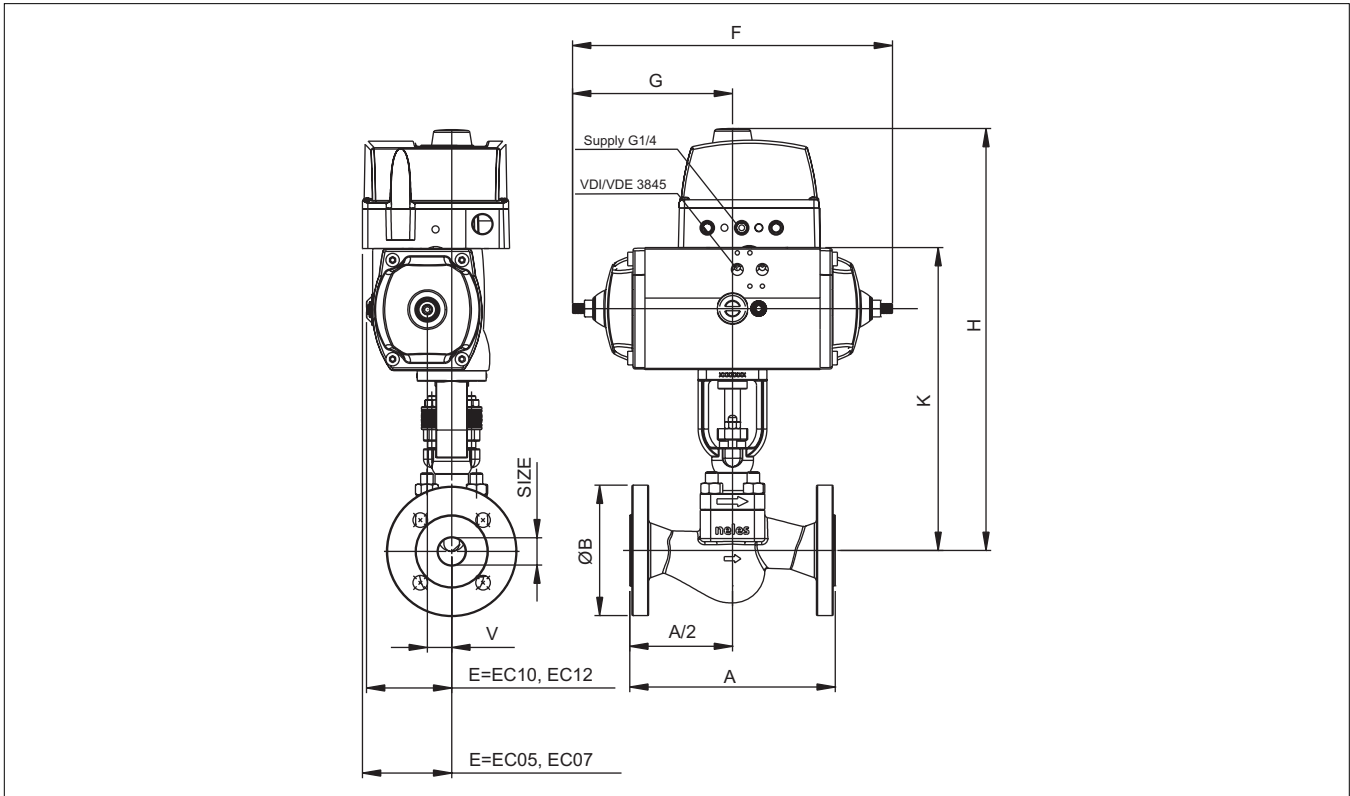
Class 600

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm							kg	
				A	ØB	E	F	G	H	K		V
ZXF	1/2	B1J_8	F07	203	95	117	555	135	453	294	43	25.0
	3/4	B1J_8	F07	206	115	117	555	135	453	294	43	26.0
	1	B1J_8	F07	210	125	117	555	135	453	294	43	26.9
	1 1/2	B1J_8	F07	251	155	117	555	135	480	321	43	35.1
		B1J_10	F10	251	155	137	640	160	494	335	51	48.1
	2	B1J_8	F07	286	165	117	555	135	480	321	43	37.3
B1J_10		F10	286	165	137	640	160	494	335	51	50.3	

Class 1500

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm							kg	
				A	ØB	E	F	G	H	K		V
ZXH	1	B1J_8	F07	292	150	117	555	135	453	294	43	42.8
		B1J_10	F10	333	180	137	640	160	522	363	51	42.8
	1 1/2	B1J_10	F10	333	180	137	640	160	620	461	51	70.3
		B1J_12	F12	333	180	172	815	195	656	487	65	97.5
	2	B1J_10	F10	375	215	137	640	160	620	461	51	81.5
		B1J_12	F12	375	215	172	815	195	656	487	65	108.6

Dimensions, EC actuators



Class 150

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXC	1/2	EC05	F05	184	90	86	256	128	379	265	18	9.9
	3/4	EC05	F05	184	100	86	256	128	379	265	18	10.3
	1	EC05	F05	184	110	86	256	128	379	265	18	10.7
	1 1/2	EC07	F07	222	125	86	308	154	432	318	23.5	19.2
	2	EC07	F07	254	150	86	308	154	432	318	23.5	21.2

Class 300 / PN40

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXD ZCM	1/2	EC05	F05	190	95	86	256	128	379	265	18	10.9
	3/4	EC05	F05	194	115	86	256	128	379	265	18	12.1
	1	EC05	F05	197	125	86	256	128	379	265	18	12.8
	1 1/2	EC07	F07	235	155	86	308	154	432	318	23.5	23.0
	2	EC07	F07	267	165	86	308	154	432	318	23.5	24.9
		EC10	F10	267	165	112	406	203	470	356	32	32.7

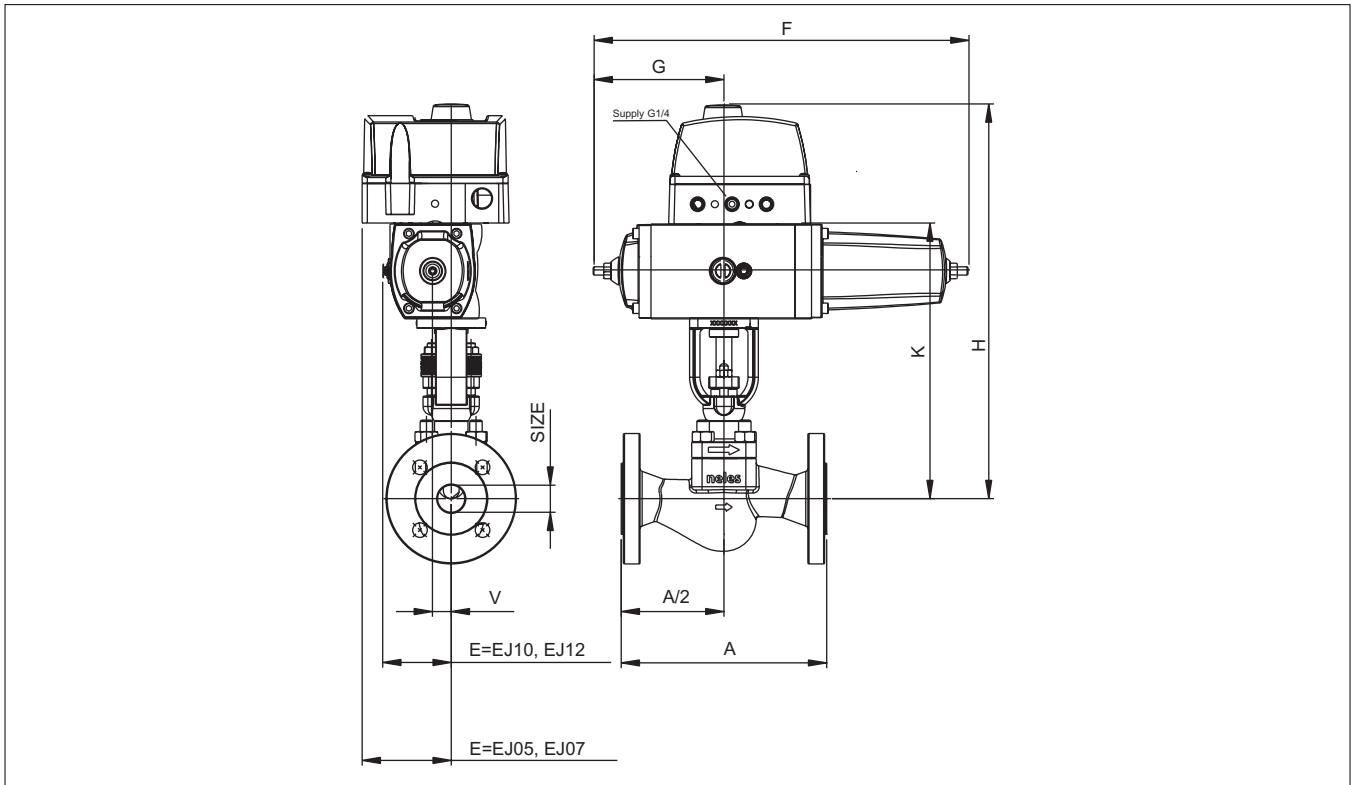
Class 600

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXF	1/2	EC05	F05	203	95	86	256	128	379	265	18	11.0
	3/4	EC05	F05	206	115	86	256	128	379	265	18	12.0
	1	EC05	F05	210	125	86	256	128	379	265	18	12.9
		EC07	F07	210	125	86	308	154	405	291	23.5	15.6
	1 1/2	EC07	F07	251	155	86	308	154	432	318	23.5	23.8
		EC10	F10	251	155	112	406	203	470	356	32	31.6
	2	EC07	F07	286	165	86	308	154	432	318	23.5	26.0
		EC10	F10	286	165	112	406	203	470	356	32	33.8

Class 1500

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXH	1	EC07	F07	292	150	86	308	154	460	346	23.5	31.5
		EC10	F10	292	150	112	406	203	498	384	32	39.3
	1 1/2	EC10	F10	333	180	112	406	203	596	482	32	53.8
		EC12	F12	333	180	145	524	262	641	527	42	70.8
	2	EC10	F10	375	215	112	406	203	596	482	32	65.0
		EC12	F12	375	215	145	524	262	641	527	42	82.0

Dimensions, EJ actuators



Class 150

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXC	1/2	EJ_05	F05	184	90	86	363	235	379	265	18	11.4
	3/4	EJ_05	F05	184	100	86	363	235	379	265	18	11.8
	1	EJ_05	F05	184	110	86	363	235	379	265	18	12.2
	1 1/2	EJ_07	F07	222	125	86	454	300	432	318	23.5	22.4
	2	EJ_07	F07	254	150	86	454	300	432	318	23.5	24.4

Class 300 / PN40

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXD ZCM	1/2	EJ_05	F05	190	95	86	363	235	379	265	18	12.4
	3/4	EJ_05	F05	194	115	86	363	235	379	265	18	13.6
	1	EJ_05	F05	197	125	86	363	235	379	265	18	14.3
	1 1/2	EJ_07	F07	235	155	86	454	300	432	318	23.5	26.2
		EJ_10	F10	235	155	112	606	403	470	356	32	37.3
	2	EJ_07	F07	267	165	86	454	300	432	318	23.5	28.1
		EJ_10	F10	267	165	112	606	403	470	356	32	39.2

Class 600

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXF	1/2	EJ_05	F05	203	95	86	363	235	379	265	18	12.5
	3/4	EJ_05	F05	206	115	86	363	235	379	265	18	13.5
	1	EJ_05	F05	210	125	86	363	235	379	265	18	14.4
		EJ_07	F07	210	125	86	454	300	405	291	23.5	18.8
	1 1/2	EJ_07	F07	251	155	86	454	300	432	318	23.5	27.0
		EJ_10	F10	251	155	112	606	403	470	356	32	38.1
	2	EJ_07	F07	286	165	86	454	300	432	318	23.5	29.2
		EJ_10	F10	286	165	112	606	403	470	356	32	40.3

Class 1500

Type	SIZE	ACTUATOR	ISO FLANGE	Dimensions, mm								kg
				A	ØB	E	F	G	H	K	V	
ZXH	1	EJ07	EJ07	292	150	86	454	300	460	346	23.5	34.7
		EJ10	EJ10	292	150	112	606	403	498	384	32	45.8
	1 1/2	EJ10	EJ10	333	180	112	606	403	596	482	32	60.3
		EJ12	EJ12	333	180	145	800	538	641	527	42	89.8
	2	EJ10	EJ10	375	215	112	606	403	596	482	32	71.5
		EJ12	EJ12	375	215	145	800	538	641	527	42	101.0

## HOW TO ORDER

### Neles RotaryGlobe Control Valve, Series Z

1.	2.	3.	4.	5.	6.	7.
ZX	D	01	A	A	A	L060

1.	VALVE SERIES, CONNECTION AND FACE TO FACE LENGTH
ZX	RotaryGlobe valve, flanged, face-to-face length acc. to ISA S75.03 and EN 558-2 series 37-39

2.	PRESSURE RATING, FLANGES, FLANGE DRILLINGS
C	ASME class 150
D	ASME class 300
F	ASME class 600
H	ASME class 1500
M	PN40 (PN10-40)

3.	SIZE
0H	1/2"
3Q	3/4"
01	1"
1H	1 1/2"
02	2"

4.	BODY MATERIAL & BODY RELATED MATERIALS
STANDARD MATERIALS	
Body and bonnet	
A	CF8M / 1.4408
D	WCC / 1.0619
Optional materials	
Body and bonnet	
J	WC6 / F11 Cl 2
H	CW-6M (Hastelloy C) / UNS N 10276
N	CN7M (Alloy 20) / UNS N08904
S	CF8 / AISI304

5. sign	PLUG, STEM, PIN AND SEAT CAGE MATERIAL			
STANDARD MATERIALS				
	Plug	Stem and pin	Seat Cage	Max. Temp.
A (with A, D or J bodies)	17-4PH + HCr	AISI 316	Nitronic 60	425 °C

5. sign	PLUG, STEM, PIN AND SEAT CAGE MATERIAL			
Optional materials				
	Plug	Stem and pin	Seat Cage	Max. Temp.
J (NACE option with A, D or J bodies)	17-4PH + HCr	AISI 316	Nitronic 50	425 °C
H (with H or N bodies)	CW-6M (Hastelloy C) + coating	CW-6M	CW-6M	220 °C
S (with S body)	AISI 304 + coating	AISI 304	AISI 304	220 °C

6.	PACKING	SEALS
STANDARD		
A	PTFE	Graphite
T	Live loaded PTFE	Graphite
F	Graphite	Graphite
G	Live loaded graphite	Graphite
OPTIONAL		
P	PTFE	PTFE
S	Live loaded PTFE	PTFE

7.	TRIM	
CV VALUES FOR SIZE DN15 - DN25 / 1/2" - 1"		
TRIM TYPE	DESCRIPTION (SIZE)	C <sub>v</sub> VALUE
L001	Linear (DN15-DN25 / 1/2" - 1")	0.1
L003	Linear (DN15-DN25 / 1/2" - 1")	0.3
L010	Linear (DN15-DN25 / 1/2" - 1")	1.0
L025	Linear (DN15-DN25 / 1/2" - 1")	2.5
L060	Linear (DN20-DN25 / 3/4" - 1")	6.0
L120	Linear (DN25 / 1")	12.0
E010	Equal % (DN15-DN25 / 1/2" - 1")	1.0
E025	Equal % (DN15-DN25 / 1/2" - 1")	2.5
E070	Equal % (DN25 / 1")	7.0
B020	Balanced trim for high Δp and noise reduction. Linear (DN15-DN25 / 1/2" - 1")	2.0
B050	Balanced trim for high Δp and noise reduction. Linear (DN20-DN25 / 3/4" - 1")	5.0
CV VALUES FOR SIZE DN40 - DN50 / 1 1/2" - 2"		
TRIM TYPE	DESCRIPTION (SIZE)	C <sub>v</sub> VALUE
L030	Linear (DN40-DN50 / 1 1/2" - 2")	3.0
L070	Linear (DN40-DN50 / 1 1/2" - 2")	7.0
L180	Linear (DN40-DN50 / 1 1/2" - 2")	18.0
L310	Linear (DN40-DN50 / 1 1/2" - 2")	31.0
E060	Equal % (DN40-DN50 / 1 1/2" - 2")	6.0
E180	Equal % (DN40-DN50 / 1 1/2" - 2")	18.0
B050	Balanced trim for high Δp and noise reduction. Linear (DN40-DN50 / 1 1/2" - 2")	5.0
B130	Balanced trim for high Δp and noise reduction. Linear (DN40-DN50 / 1 1/2" - 2")	13.0

Subject to change without prior notice.

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