

spirax/sarco®

BVA200 Series Pneumatic Actuator with M20 Ball Valve

Selection tables

How to choose:

Ball valve and actuator tables for operating air pressure of 60, 75 or 90 psig.

Key: Light service (LS), Heavy service (HS), Double acting (D), Single acting with return spring (S).

Operating pressure: 60 psig

Valve M20 Size	BVA_actuator			
	Double acting		Single acting	
	LS	HS	LS	HS
1"	215D	215D	220S/4	220S/4
1-1/4"	215D	215D	220S/4	220S/4
1-1/2"	220D	220D	220S/4	225S/4
2"	220D	220D	225S/4	225S/4
2-1/2"	225D	225D	230S/4	235S/4
3"	225D	230D	235S/4	235S/4
4"	235D	240D	240S/4	245S/4
6"	240D	245D	245S/4	250S/4

Operating pressure: 75 psig

Valve M20 Size	BVA actuator			
	Double acting		Single acting	
	LS	HS	LS	HS
1"	215D	215D	220S	220S
1-1/4"	215D	215D	220S	220S
1-1/2"	220D	220D	220S	220S
2"	220D	220D	225S	225S
2-1/2"	220D	225D	225S	230S
3"	225D	230D	230S	235S
4"	235D	235D	235S	240S
6"	235D	245D	240S	250S

Operating pressure: 90 psig

Valve M20 Size	BVA actuator			
	Double acting		Single acting	
	LS	HS	LS	HS
1"	210D	210D	215S	215S
1-1/4"	215D	215D	215S	215S
1-1/2"	215D	215D	220S	220S
2"	220D	220D	220S	225S
2-1/2"	220D	220D	225S	225S
3"	220D	225D	225S	235S
4"	230D	235D	235S	240S
6"	235D	240D	240S	245S

BVL Linkage kit selection table

Valve M20 Size	BVA_actuator								
	210	215	220	225	230	235	240	245	250
1"	260	260	261						
1-1/4"		260	261						
1-1/2"		262	263	263					
2"			263	263					
2-1/2"			264	264	264	65-A			
3"			265	265	265	67			
4"					265	67	67	266	
6"						71	71	267	268

Conditions

Light service (LS)

- Clean, low viscosity fluid, without solids in suspension.
- Maximum saturated steam pressure 45 psig.
- Maximum working temperature 290°F at 150 psig.
- Maximum differential pressure 300 psig at 100°F.
- Frequent operation.

Heavy service (HS)

All those applications where at least one of the above mentioned conditions is exceeded.

Example

Select an actuator and linkage kit for the following application:

Valve required: DN50 flanged ANSI 150 M20C2 ball valve.

Available air pressure: 90 psig.

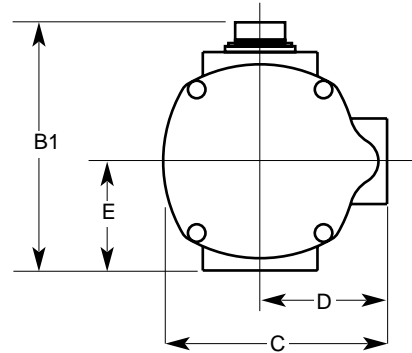
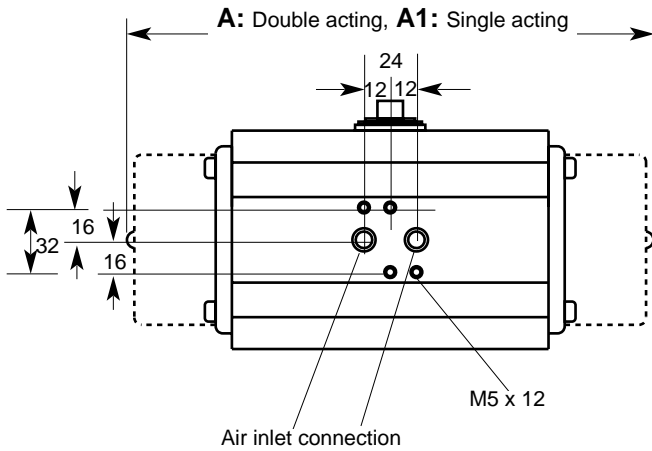
Light service, double acting actuator.

1. Select from 90 psig operating pressure table an actuator for a 2" M20 ball valve, light service (LS), double acting: **BVA220D**
2. Select from BVL linkage kit selection table a BVL suitable for a 2" M20 ball valve and BVA220 actuator: **BVL263**

How to order

Example: 1- Spirax Sarco 2" flanged ANSI 150 M20C2 ball valve, with BVA220D actuator and BVL263 linkage kit, operating with 90 psig air pressure.

Dimensions/weights (approximate) in mm and kg



BVA200 series actuators

Type	Actuator weight		B1	C	D	E	Actuator weight	
	Double acting	Single acting					Double acting	Single acting
BVA210	130	215	96	76	48	34	1.1	1.5
BVA215	144	232	115	90	56	45	1.7	2.3
BVA220	162	270	137	111	66	55	2.6	4.0
BVA225	182	297	146	121	71	60	3.4	5.5
BVA230	211	332	165	135	78	70	5.1	8.4
BVA235	245	371	182	151	86	80	7.6	12.1
BVA240	275	420	199	172	96	85	10.5	16.5
BVA245	336	474	217	192	106	98	16.0	24.0
BVA250	420	578	249	212	116	114	26.0	38.0
BVA255	462	614	280	242	131	131	36.5	52.0

BVL linkage kit with M20 ball valve

Flanged PN40

Size (Valve)	F	G	H	Weight (Valve)
DN25	165	115	102	5.0
DN32	178	140	105	6.4
DN40	190	150	118	8.8
DN50	216	165	126	11.0
DN65	241	185	138	17.0
DN80	283	200	168	25.0
DN100	305	235	179	40.0
DN150	403	300	215	85.0

BVL linkage kit with M20 ball valve

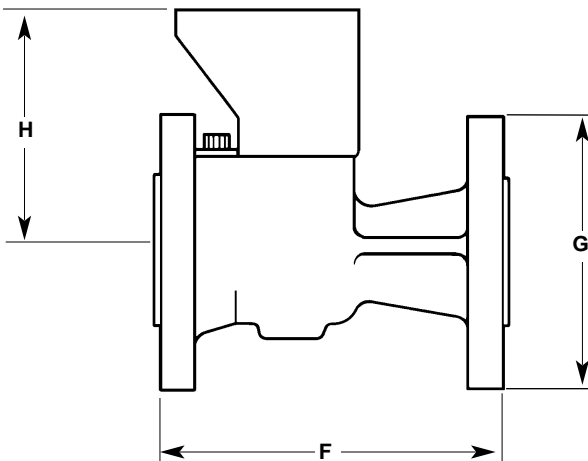
Flanged ANSI 150

Size (Valve)	F	G	H	Weight (Valve)
DN25	127	108	102	3.3
DN32	140	118	105	4.0
DN40	165	127	118	5.8
DN50	178	152	126	8.6
DN65	191	178	138	13.2
DN80	203	190	168	18.7
DN100	229	229	179	27.8
DN150	267	279	215	44.0

BVL linkage kit with M20 ball valve

Flanged ANSI 300

Size (Valve)	F	G	H	Weight (Valve)
DN25	165	124	102	5.0
DN32	178	118	105	6.0
DN40	191	156	118	8.8
DN50	216	165	126	11.0
DN65	241	190	138	17.0
DN80	283	210	168	25.0
DN100	305	254	179	40.0
DN150	403	318	215	85.0



Linkage kit description

BVL Linkage kit components and materials are as follows

Frame (1)	Zinc plated carbon steel
Stem adapter (1)	Zinc plated carbon steel
Frame-to-actuator screws (4)	Zinc plated carbon steel
Washers (4)	Zinc plated carbon steel
Frame-to-valve screws (3)	Zinc plated carbon steel
Washers (3)	Zinc plated carbon steel
Stem nut (1*)	Zinc plated carbon steel

Note: * For 3" to 6" ball valves two stem nuts will be supplied.