

SERIES 80F

HIGH PERFORMANCE BALL VALVE 3-PIECE DESIGN, FB

Sizes 1/4" - 10"

Full Bore

1/4" - 1"	PN100
1 1/4" - 2"	PN64
2 1/2" - 4"	PN50
5" - 10"	PN16

Available in WCB / SS316 body

Threaded End	80F.100	(1/4" - 4")
Socket Weld End	80F.200	(1/4" - 4")
Butt Weld End	80F.300	(1/4" - 10")

Superior Live Loaded Packing System

ISO 5211 Mounting Pad (Bracket Required)

Blowout-Proof Stem

Dual Anti-Static Devices

Standard Seat

- 25% Carbon Filled PTFE (MG1241)
(max. 250 °C)

Seat Options

- TFM1600 (max. 230 °C)

- 50% SS filled PTFE (GNP)
(max. 280 °C)

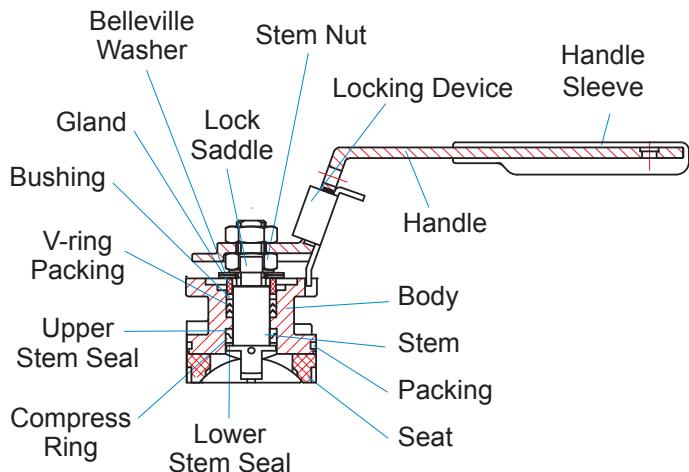
- PEEK (max. 300 °C)

Lockable Handle (1/2" - 4")

Gearbox (5" - 10")

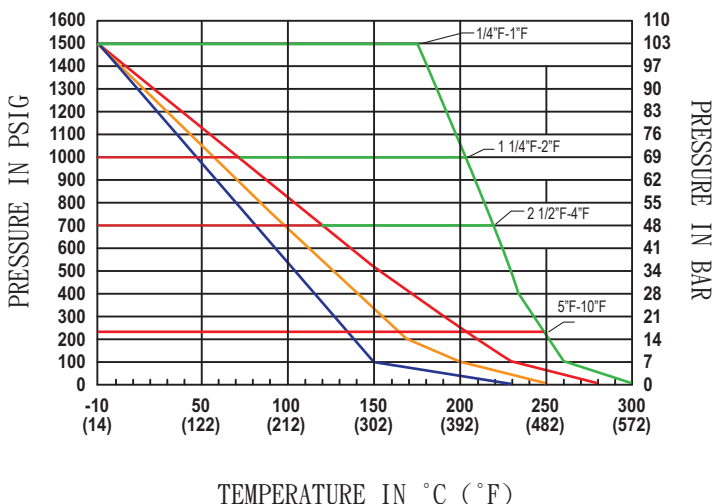


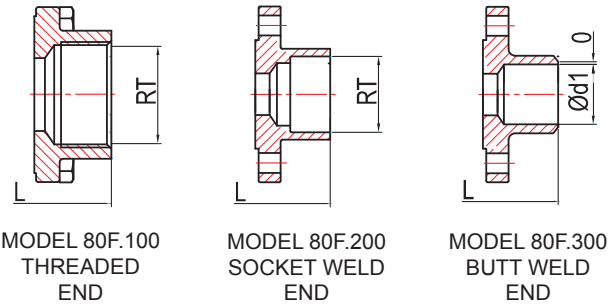
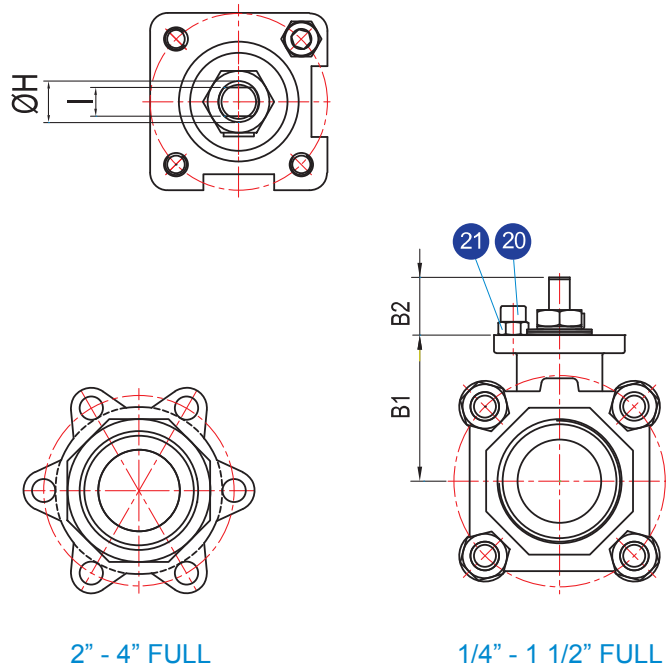
ValveWorks Series 80F 3-piece Ball Valve one of the finest quality 3-piece valves in the market. The high quality investment casting feature a fully machined bore. The superior live-loaded packing system is accomplished with Belleville washers, "V" ring packing and a unique primary pyramidal stem seal. This advanced sealing system provides protection against stem leaks experienced by ordinary ball valve.



• Pressure/Temperature Ratings

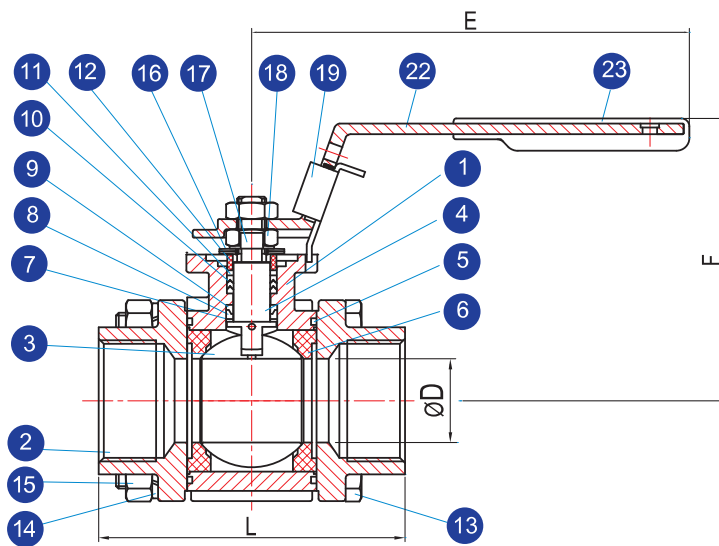
- TFM1600
- 25% Carbon filled PTFE (MG1241)
- 50% SS filled PTFE (GNP)
- PEEK





• MATERIALS LIST

NO.	PART NAME	MATERIAL
1	BODY	CF8M / WCB
2	END CAP	CF8M / WCB
3	BALL	SUS316
4	STEM	SUS316
5	PACKING	PTFE
6	SEAT	MG1241
7	LOWER STEM SEAL	50% S.S. Powder Filled PTFE
8	COMPRESS RING	SUS316
9	UPPER STEM SEAL	TFM4215
10	V-RING PACKING	MG1241
11	BUSHING	50% S.S. Powder Filled PTFE
12	GLAND	SUS304
13	BOLT	SUS304
14	WASHER	SUS304
15	BOLT NUT	SUS304
16	BELLEVILLE WASHER	SUS304
17	LOCK SADDLE	SUS304
18	STEM NUT	SUS304
19	LOCKING DEVICE	SUS304
20	STOP PIN	SUS304
21	STOP PIN NUT	SUS304
22	HANDLE	CF8
23	HANDLE SLEEVE	VINYL



• DIMENSIONS (mm)

SIZE	B1	B2	ØD	ØD1	E	F	ØH	I	L	O	RT	ISO 5211	CV	Weight (kg)	
1/4"	DN8	27.7	12.7	12.7	9.5	120	66	8.0	5.0	66.8	0.5	14.1	F03	7	0.50
3/8"	DN10	27.7	12.7	12.7	12.7	120	66	8.0	5.0	66.8	0.5	17.5	F03	8	0.64
1/2"	DN15	38.1	15	15	15.8	134	84	9.7	6.3	71.0	0.5	22.4	F04	25	0.87
3/4"	DN20	41.8	20	20	21	134	88	9.7	6.3	96.5	0.5	27.4	F04	50	1.41
1"	DN25	51.6	21.4	25.4	26.6	167	98	11.2	8.0	109.0	0.5	34.2	F05	80	2.05
1 1/4"	DN32	55.9	21.7	32	35.1	167	101	11.2	8.0	117.0	0.5	43.0	F05	150	2.75
1 1/2"	DN40	66.2	25.6	38	41.2	204	117	16.0	9.5	129.3	1.0	49.0	F07	240	4.10
2"	DN50	75.4	25.2	50.8	53	204	125	16.0	9.5	141.5	1.0	61.1	F07	460	5.93
2 1/2"	DN65	89.4	42.7	65	68.4	250	165	22.3	17.0	174.0	1.6	77.1	F10	820	10.20
3"	DN80	101.2	39.4	76	77.8	250	174	22.3	17.0	193.0	1.6	90.2	F10	1250	15.80
4"	DN100	131.5	21.5	100	102.3	250		SQ22	17.0	240	1.6	115.5	F10	2300	22.50

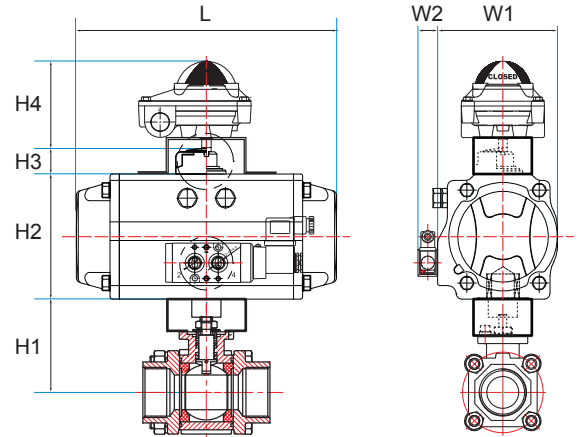
Valve Automation with HKC



• Pneumatic Actuator - Double Acting

DN (mm)	Size (inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight (kg)
8	1/4"	5.3	HP-50	66.70	73.00	20.00	90.00	72.00	29.50	144.00	3.01
10	3/8"	5.3	HP-50	66.70	73.00	20.00	90.00	72.00	29.50	144.00	3.15
15	1/2"	5.3	HP-50	77.10	73.00	20.00	90.00	72.00	29.50	144.00	3.38
20	3/4"	7.8	HP-50	80.80	73.00	20.00	90.00	72.00	29.50	144.00	3.92
25	1"	10.1	HP-50	91.60	73.00	20.00	90.00	72.00	29.50	144.00	4.56
32	1 1/4"	13.1	HP-63	95.90	87.00	20.00	90.00	85.00	29.50	163.00	5.32
40	1 1/2"	20.9	HP-66	106.20	87.00	20.00	90.00	85.00	29.50	202.00	7.19
50	2"	29.7	HP-66	115.40	104.00	20.00	90.00	96.00	29.50	210.00	9.74
65	2 1/2"	64.4	HP-88	157.40	116.00	20.00	90.00	108.00	29.50	247.00	14.61
80	3"	84.5	HP-100	169.20	128.00	20.00	90.00	123.00	29.50	268.00	24.16
100	4"	110.00	HP-115	199.50	146.00	20.00	90.00	141.00	29.50	316.00	30.86

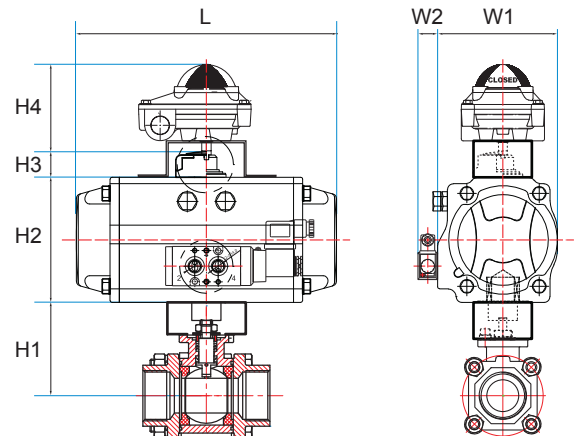
The selection of the actuators are based on below condition:-
 - Air Supply Pressure : 5.5 bar
 - Operating Pressure : 10 bar
 - Safety Factor : 30%



• Pneumatic Actuator - Single Acting

DN (mm)	Size (inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight (kg)
8	1/4"	5.3	HP-63S (S11)	66.70	87.00	20.00	90.00	85.00	29.50	163.00	3.72
10	3/8"	5.3	HP-63S (S11)	66.70	87.00	20.00	90.00	85.00	29.50	163.00	3.86
15	1/2"	5.3	HP-63S (S11)	77.10	87.00	20.00	90.00	85.00	29.50	163.00	4.09
20	3/4"	7.8	HP-66S (S11)	80.80	87.00	20.00	90.00	85.00	29.50	202.00	4.63
25	1"	10.1	HP-66S (S11)	91.60	87.00	20.00	90.00	85.00	29.50	202.00	6.03
32	1 1/4"	13.1	HP-75S (S11)	95.90	104.00	20.00	90.00	96.00	29.50	210.00	6.79
40	1 1/2"	20.9	HP-88S (S11)	106.20	116.00	20.00	90.00	108.00	29.50	247.00	8.87
50	2"	29.7	HP-100S (S11)	115.40	128.00	20.00	90.00	123.00	29.50	268.00	12.26
65	2 1/2"	64.4	HP-125S (S11)	157.40	159.00	20.00	90.00	151.00	29.50	347.00	18.47
80	3"	84.5	HP-145S (S11)	169.20	179.00	20.00	90.00	172.00	29.50	414.00	31.28
100	4"	110.00	HP-145S (S11)	199.50	179.00	30.00	90.00	172.00	29.50	414.00	41.18

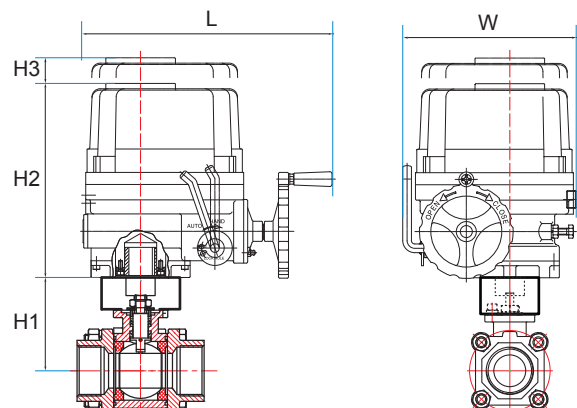
The selection of the actuators are based on below condition:-
 - Air Supply Pressure : 5.5 bar
 - Operating Pressure : 10 bar
 - Safety Factor : 30%



• Electric Actuator

DN (mm)	Size (inch)	Torques	Actuator	H1	H2	H3	W	L	Weight (kg)
8	1/4"	5.3	HQ-004	66.70	124.30		88.60	166.60	3.05
10	3/8"	5.3	HQ-004	66.70	124.30		88.60	166.60	3.19
15	1/2"	5.3	HQ-004	77.10	124.30		88.60	166.60	3.42
20	3/4"	7.8	HQ-004	80.80	124.30		88.60	166.60	3.96
25	1"	10.1	HQ-004	91.60	124.30		88.60	166.60	4.60
32	1 1/4"	13.1	HQ-004	95.90	124.30		88.60	166.60	5.36
40	1 1/2"	20.9	HQ-006	106.20	137.00		88.60	126.00	6.71
50	2"	29.7	HQ-006	115.40	235.00		105.00	126.00	10.34
65	2 1/2"	64.4	HQ-015	157.40	235.00		105.00	338.00	14.61
80	3"	84.5	HQ-020	169.20	268.00	160.00	229.00	338.00	34.76
100	4"	110.00	HQ-020	199.50	268.00	160.00	229.00	338.00	41.46

The selection of the actuators are based on below condition:-
 - Operating Pressure : 10 bar
 - Safety Factor : 50%



Valve Automation with EBRO Armaturen

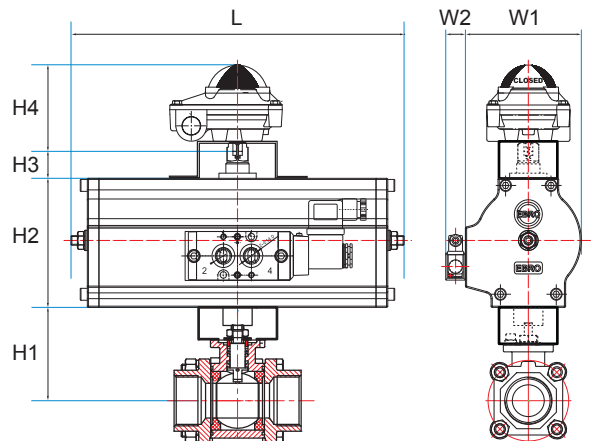


• Pneumatic Actuator - Double Acting

DN (mm)	Size (inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight (kg)
8	1/4"	5.3	EB 4.1-SYD	66.70	66.00	30.00	90.00	57.00	29.50	148.00	2.95
10	3/8"	5.3	EB 4.1-SYD	66.70	66.00	30.00	90.00	57.00	29.50	148.00	3.09
15	1/2"	5.3	EB 4.1-SYD	77.10	66.00	30.00	90.00	57.00	29.50	148.00	3.32
20	3/4"	7.8	EB 4.1-SYD	80.80	66.00	30.00	90.00	57.00	29.50	148.00	3.86
25	1"	10.1	EB 4.1-SYD	91.60	66.00	30.00	90.00	57.00	29.50	148.00	4.50
32	1 1/4"	13.1	EB 4.1-SYD	95.90	66.00	30.00	90.00	57.00	29.50	148.00	5.26
40	1 1/2"	20.9	EB 5.1-SYD	106.20	77.00	30.00	90.00	72.00	29.50	174.00	6.61
50	2"	29.7	EB 5.1-SYD	115.40	77.00	30.00	90.00	72.00	29.50	174.00	9.04
65	2 1/2"	64.4	EB 6.1-SYD	157.40	91.00	30.00	90.00	88.00	29.50	224.00	13.31
80	3"	84.5	EB 6.1-SYD	169.20	91.00	30.00	90.00	88.00	29.50	224.00	21.16
100	4"	110.0	EB 8.1-SYD	199.50	108.00	30.00	90.00	100.00	29.50	258.00	28.96

The selection of the actuators are based on below condition:-

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%

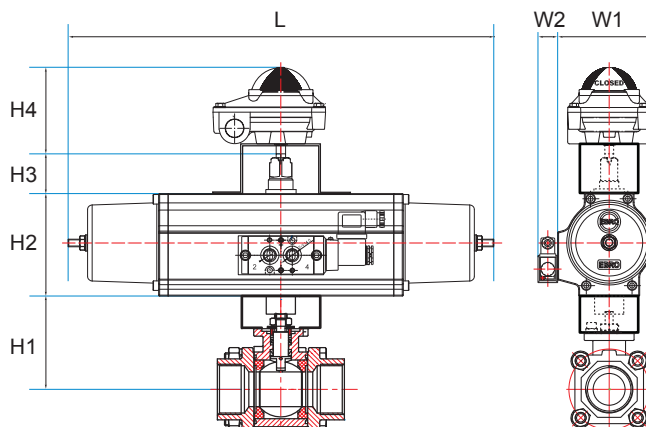


• Pneumatic Actuator - Single Acting

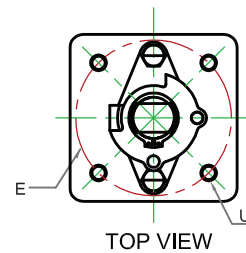
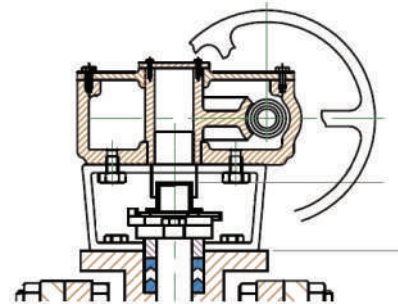
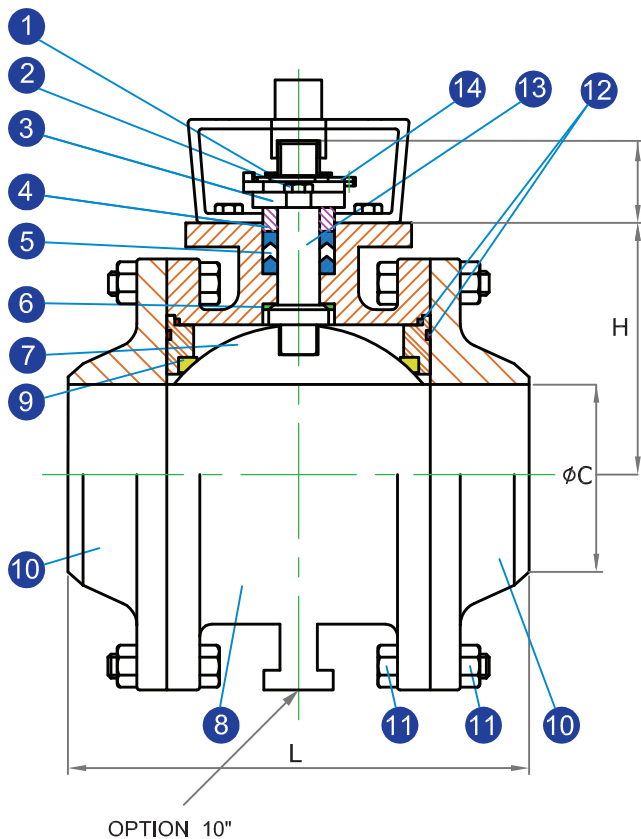
DN (mm)	Size (inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight (kg)
8	1/4"	5.3	EB 5.1-SYS (50)	66.70	77.00	30.00	90.00	72.00	29.50	280.00	4.25
10	3/8"	5.3	EB 5.1-SYS (50)	66.70	77.00	30.00	90.00	72.00	29.50	280.00	4.39
15	1/2"	5.3	EB 5.1-SYS (50)	77.10	77.00	30.00	90.00	72.00	29.50	280.00	4.62
20	3/4"	7.8	EB 5.1-SYS (50)	80.80	77.00	30.00	90.00	72.00	29.50	280.00	5.16
25	1"	10.1	EB 5.1-SYS (50)	91.60	77.00	30.00	90.00	72.00	29.50	280.00	5.80
32	1 1/4"	13.1	EB 5.1-SYS (50)	95.90	77.00	30.00	90.00	72.00	29.50	280.00	6.56
40	1 1/2"	20.9	EB 6.1-SYS (50)	106.20	91.00	30.00	90.00	88.00	29.50	351.00	7.91
50	2"	29.7	EB 6.1-SYS (50)	115.40	91.00	30.00	90.00	88.00	29.50	351.00	9.74
65	2 1/2"	64.4	EB 10.1-SYS (50)	157.40	128.00	30.00	90.00	122.00	29.50	557.00	17.91
80	3"	84.5	EB 10.1-SYS (50)	169.20	128.00	30.00	90.00	122.00	29.50	557.00	30.66
100	4"	110.0	EB 10.1-SYS (50)	199.50	128.00	30.00	90.00	122.00	29.50	557.00	37.36

The selection of the actuators are based on below condition:-

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%



DN125 - DN250



• MATERIALS LIST

NO.	PART NAME	MATERIAL	
1	SNAP RING	SS304	
2	GLAND BOLT	SS304	
3	GLAND	A351 GR.CF8	
4	GLAND BUSH	SS304	
5	PACKING	PTFE	
6	STEM SEAL	25% CARBON FILLED PTFE	
7	BALL	ASTM A351 CF8M	ASTM A351 CF8
8	BODY	ASTM A351 CF8M	ASTM A216 WCB
9	BALL SEAT	MG1241 / 50/50	
10	BUTT WELD END CAP	ASTM A351 CF8M	ASTM A216 WCB
11	BOLT & NUT	B8/8	B7/2H
12	GASKET	PTFE	
13	S2 STEM	SS316	
14	STOP PLATE	SS304	

• DIMENSIONS (mm)

SIZE	ØD	ØC	L	H	A	E	U	CV	Weight (kg)
5"	DN125	100	303.60	140.00	63	102	1/2	1,700	68
6"	DN150	125	344.00	172.50	69	125	1/2	2,705	125
8"	DN200	150	372.00	224.00	86	125	1/2	4,600	184
10"	DN250	200	520.00	267.00	86	125	1/2	9,900	316

Valve Automation with HKC

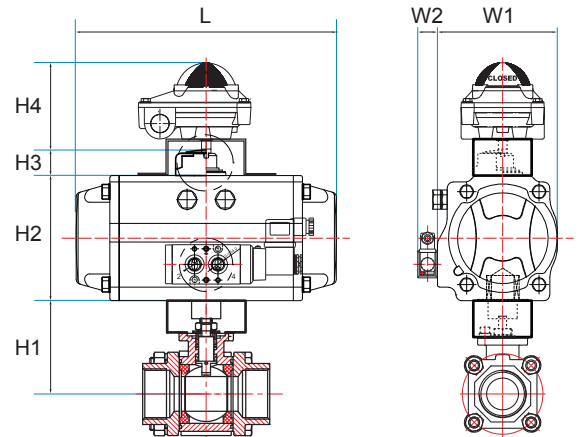


DN125 - DN250

• Pneumatic Actuator - Double Acting

DN (mm)	Size (inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight (kg)
125	5"	375	HP-160	179.00	179.00	30.00	90.00	172.00	29.50	414.00	89.10
150	6"	405	HP-160	203.00	196.00	30.00	90.00	190.00	29.50	467.00	146.10
200	8"	510	HP-180	241.50	221.00	30.00	90.00	206.00	29.50	497.00	213.00
250	10"	1320	HP-211	290.00	256.00	30.00	90.00	236.00	29.50	504.00	369.00

The selection of the actuators are based on below condition:-
 - Air Supply Pressure : 5.5 bar
 - Operating Pressure : 10 bar
 - Safety Factor : 30%



• Pneumatic Actuator - Single Acting

DN (mm)	Size (inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight (kg)
125	5"	375	HP-200S (S11)	179.00	247.00	30.00	90.00	227.00	29.50	555.00	114.10
150	6"	405	HP-211S (S11)	203.00	256.00	30.00	90.00	236.00	29.50	669.00	192.10
200	8"	510	HP-212S (S11)	241.00	256.00	30.00	90.00	236.00	29.50	1022.00	290.20
250	10"	1320									

The selection of the actuators are based on below condition:-
 - Air Supply Pressure : 5.5 bar
 - Operating Pressure : 10 bar
 - Safety Factor : 30%

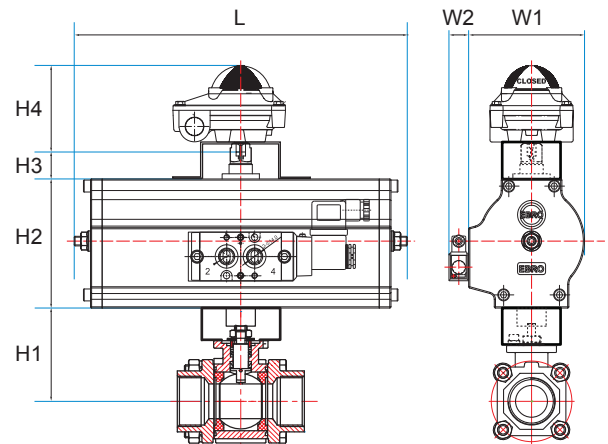
Valve Automation with EBRO Armaturen



• Pneumatic Actuator - Double Acting

DN (mm)	Size (inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight (kg)
125	5"	375	EB10.1-SYD	179.00	129.00	30.00	90.00	122.00	29.50	334.00	82.50
150	6"	405	EB12.1-SYD	203.00	156.00	30.00	90.00	145.00	29.50	392.00	144.70
200	8"	510	EB12.1-SYD	241.00	156.00	30.00	90.00	145.00	29.50	392.00	203.70
250	10"	1320	EB16.1-SYD	290.00	212.00	30.00	90.00	172.00	29.50	525.00	352.00

The selection of the actuators are based on below condition:-
 - Air Supply Pressure : 5.5 bar
 - Operating Pressure : 10 bar
 - Safety Factor : 30%



• Pneumatic Actuator - Single Acting

DN (mm)	Size (inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight (kg)
125	5"	375	EB16.1-SYS	179.00	212.00	30.00	90.00	150.00	29.50	856.00	118.00
150	6"	405	EB16.1-SYS	203.00	212.00	30.00	90.00	196.00	29.50	902.00	171.60
200	8"	510	EB18.1-SYS	241.50	243.00	30.00	90.00	196.00	29.50	902.00	246.30
250	10"	1320	EB26.1-SYS	290.00	350.00	30.00	90.00	336.00	29.50	1472.00	532.60

The selection of the actuators are based on below condition:-
 - Air Supply Pressure : 5.5 bar
 - Operating Pressure : 10 bar
 - Safety Factor : 30%

