

SERIES 700076



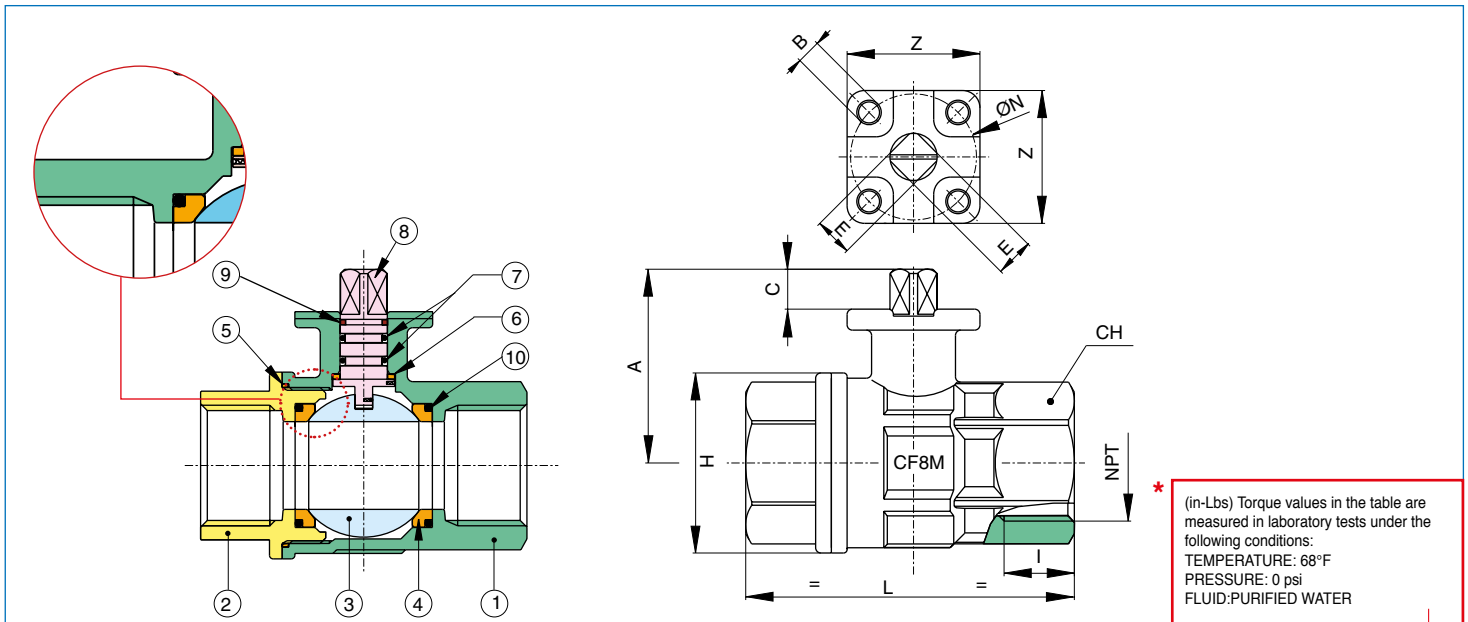
STAINLESS STEEL DIRECT MOUNT BALL VALVE

2 pc stainless steel ASTM A351 - CF8M ball valve, with ISO 5211 pad.

- Full port sizes 1/4" to 3".
- Pressure rating 1000 psi - 150 psi steam.
- Temperature -4° F to +366° F.
- Blow out proof stem.
- P.T.F.E. seats with O-ring backing for low operating torque.
- P.T.F.E. seals and double O-ring stem packing.
- 100% electronically tested in the open and closed position at 80 psi.



COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



* (in-Lbs) Torque values in the table are measured in laboratory tests under the following conditions:
 TEMPERATURE: 68°F
 PRESSURE: 0 psi
 FLUID: PURIFIED WATER

	PART NAME	MATERIAL	N PCS
1	BODY	CF8M	1
2	END CONNECTION	CF8M	1
3	BALL	AISI316-CF8M	1
4	BALL SEAT	P.T.F.E.	2
5	SEAL	P.T.F.E.	1
6	STEM SEAL	P.T.F.E.	1
7	O-RING	FKM (Viton®)	2
8	STEM	AISI 316	1
9	STEM SEAL	P.T.F.E.	1
10	O-RING	FKM (Viton®)	2

SIZE	I	L	H	CH	A	C	E	ØN	B	Z	CV	psi	Lbs	* in-Lbs
1/4"	0.59	2.56	1.44	1.02	1.78	0.26	0.35	F03/F04 1.42-1.65	0.24	1.65	7.91	1000	0.95	60
3/8"	0.59	2.56	1.44	1.02	1.78	0.26	0.35	F03/F04 1.42-1.65	0.24	1.65	10.22	1000	0.89	60
1/2"	0.59	2.63	1.35	1.06	1.63	0.35	0.35	1.42 (ISO F03)	0.23	1.49	18.90	1000	0.68	53.10
3/4"	0.64	3.07	1.65	1.25	1.71	0.35	0.35	1.42 (ISO F03)	0.23	1.49	34.22	1000	0.91	53.10
1"	0.75	3.54	2.02	1.61	2.10	0.35	0.35	1.42 (ISO F03)	0.23	1.49	49.88	1000	1.35	53.10
1 1/4"	0.84	3.93	2.53	1.96	2.24	0.35	0.35	1.42 (ISO F03)	0.23	1.49	103.24	1000	2.22	53.10
1 1/2"	0.84	4.40	3.03	2.16	2.91	0.43	0.43	1.97 (ISO F05)	0.27	1.96	266.80	1000	3.69	150.46
2"	1.01	5.31	3.81	2.75	3.27	0.43	0.43	1.97 (ISO F05)	0.27	1.96	307.40	1000	6.49	150.46
2 1/2"	1.22	6.32	4.64	3.39	4.94	0.66	0.67	F07/F10 2.76-4.02	0.39 0.47	4.02	322.20	800	16.38	484
3"	1.34	7.01	5.48	4.09	5.34	0.71	0.67	F07/F10 2.76-4.02	0.39 0.47	4.02	584.44	800	22.82	772



Type 4X Indoor Use Only Enclosure.

DESIGN PROTECTED

GENERAL SPECIFICATIONS

The VALBIA electric actuators are suitable for the automation of ball and butterfly valves for the industrial and construction sector. The usage of electronic components of last generation, together with precise mechanic, thanks to a careful research and development, enables high performance and long-term reliability of the product.

The range has been manufactured with following characteristics:

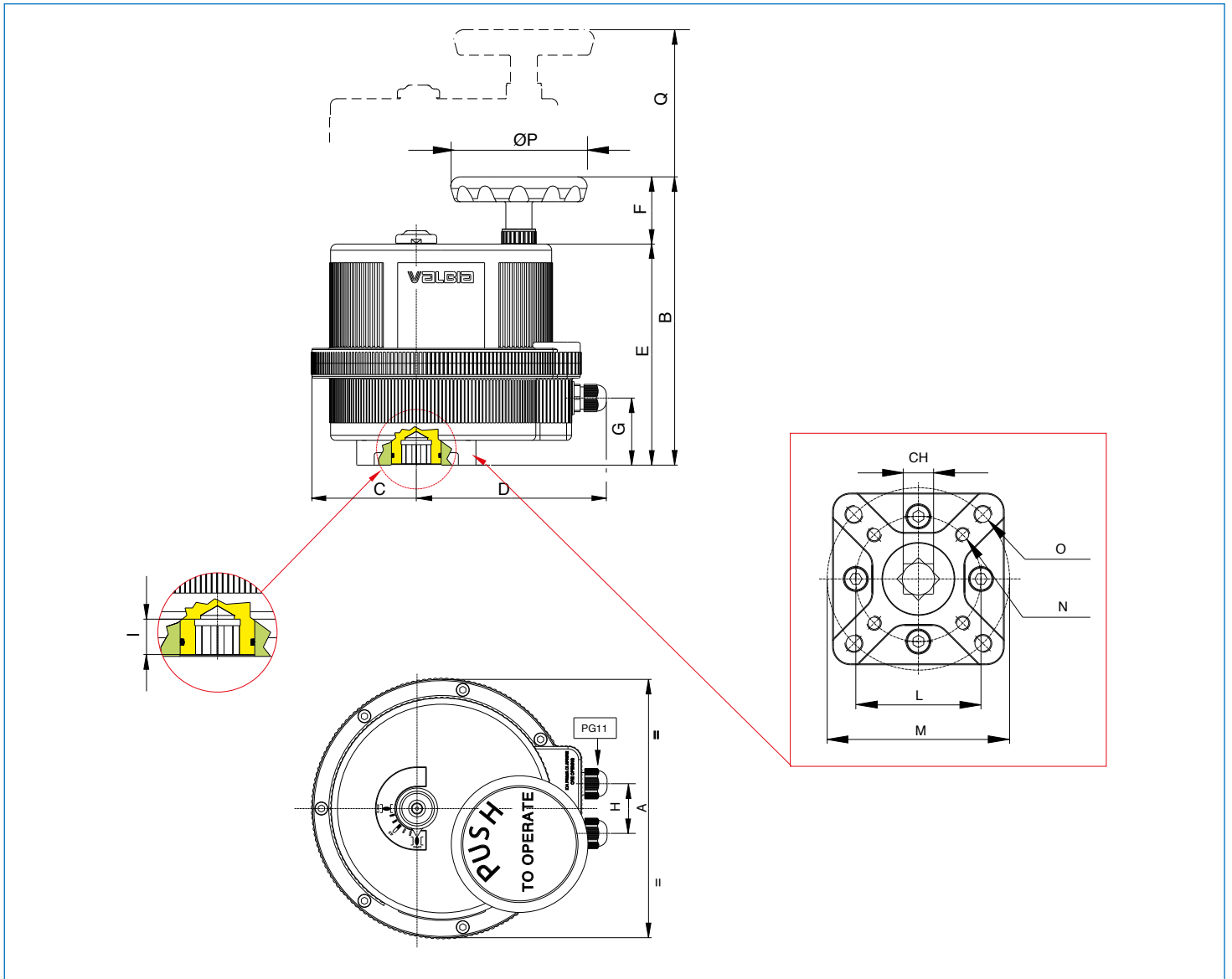
- The housing of the actuators provides a V0 self-extinguish class techno-polymer material.
- The kinematics is made by steel and techno-polymer gear wheels, sustained by hardened steel pinions, mounted on self-lubricating bushes and inserted in a strong structure of die-cast aluminium (excluding mod. VB015).
- The connection part of the actuators with the valves, is made by a die-casted and painted aluminium plate cataphoresis, with a dual drilling interface as per the ISO5211-DIN 3337 Standard.
- The electronic circuit adjusts automatically the motor speed depending on the mechanical load variations in order to drive the cycle always in the same time.
- The whole range of actuators is provided with an electronic safety system for the torque control (torque limiter).
- The whole range of actuators is standard provided of heater activated with the powered actuator.
- The whole range of actuators (except for mod. VB015) is modulable: and programmable in standard mode (4-20 mA or 0-10V) or reverse mode (20-4 mA or 10-0V)
- All electric actuators (except for mod. VB015) can be equipped with rotary potentiometer (5K Ω 1W).
- All electric actuators (except for mod. VB015 and for 12V power supply), can be equipped with battery backup for emergency control.

MODEL		VB015	VB030	VB060	VB110	VB190	VB270	VB350	
MAX WORKING TORQUE (IN-LBS)		133	266	530	975	1680	2390	3100	
VOLTAGE (V)	LOW VOLTAGE	12V AC/DC	12V AC/DC	12V AC/DC	12V AC/DC	12V AC/DC	12V AC/DC	12V AC/DC	
		24V AC/DC	24V AC/DC	24V AC/DC	24V AC/DC	24V AC/DC	24V AC/DC	24V AC/DC	
	MULTIVOLTAGE	100-240V AC	100-240V AC	100-240V AC	100-240V AC	100-240V AC	100-240V AC	100-240V AC	
WORKING TIME (sec)		10	8	9	27	27	50	50	
TORQUE LIMITER		STD	STD	STD	STD	STD	STD	STD	
DUTY RATING		12VAC/24VAC 50% 12VDC/24VDC 75% 100-240VAC	12VAC/DC 50% 24VAC/DC 75% 100-240VAC	12VAC/DC 50% 24VAC/DC 75% 100-240VAC	12VAC/DC 50% 24VAC/DC 75% 100-240VAC	12VAC/DC 50% 24VAC/DC 75% 100-240VAC	12VAC/DC 50% 24VAC/DC 75% 100-240VAC	12VAC/DC 50% 24VAC/DC 75% 100-240VAC	12VAC/DC 50% 24VAC/DC 75% 100-240VAC
PROTECTION		IP65	IP67	IP67	IP67	IP67	IP67	IP67	
ROTATION		90°	90°	90°	90°	90°	90°	90°	
UPON REQUEST		180°	180° or 270°	180° or 270°	180° or 270°	180° or 270°	180° or 270°	180° or 270°	
MANUAL OVERRIDE		STD	STD	STD	STD	STD	STD	STD	
POSITION INDICATOR		STD	STD	STD	STD	STD	STD	STD	
WORKING TEMPERATURE		-4°F + 131°F	-4°F + 131°F	-4°F + 131°F	-4°F + 131°F	-4°F + 131°F	-4°F + 131°F	-4°F + 131°F	
HEATER		STD	STD	STD	STD	STD	STD	STD	
ADDITIONAL FREE LIMIT SWITCHES		n°2 STD (type SPDT)	n°2 STD (type SPDT)	n°2 STD (type SPDT)	n°2 STD (type SPDT)	n°2 STD (type SPDT)	n°2 STD (type SPDT)	n°2 STD (type SPDT)	
DRILLING ISO 5211		*F03 - F05	*F03 - F05	F05 - F07	F07 - F10	F07 - F10	F07 - F10	F07 - F10	
SQUARE (in)		0.43	0.43	0.55	0.67	0.67	0.87	0.87	
SQUARE UPON REQUEST		0.35	0.35-0.55	0.43-0.67	0.55-0.87	0.55-0.87	0.67	0.67	
FAIL-SAFE OPERATION (BATTERY BACKUP)		NOT AVAILABLE	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST	
		NOT AVAILABLE FOR MOD. 12V							
POSITIONER STD (4~20mA or 0~10 VDC) REVERSE (20~4mA or 10~0 VDC)		NOT AVAILABLE	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST	
LINEAR POTENTIOMETER (5K Ω 1W)		NOT AVAILABLE	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST	
ELECTRICAL CONNECTIONS		PG11	PG11	PG11	PG11	PG11	PG11	PG11	
WEIGHT (LBS)		3.09	5.07	7.28	10.80	10.80	13.23	13.23	

* F04 or F07 upon request.

POWER CONSUMPTION															
MODEL		VB015		VB030		VB060		VB110		VB190		VB270		VB350	
VERSION H	NOMINAL VOLTAGE	100-240V AC													
	ABSORBED CURRENT	0.3-0.19 A		0.4-0.2 A		0.6-0.3 A		0.4-0.2 A		0.6-0.3 A		0.6-0.3 A		0.75-0.4 A	
	ABSORBED POWER	30-46 VA		40-48 VA		60-72 VA		40-48 VA		60-72 VA		60-72 VA		75-96 VA	
VERSION L	NOMINAL VOLTAGE	12V AC/DC	24V AC/DC	12V AC/DC	24V AC/DC	12V AC/DC	24V AC/DC	12V AC/DC	24V AC/DC	12V AC/DC	24V AC/DC	12V AC/DC	24V AC/DC	12V AC/DC	24V AC/DC
	ABSORBED CURRENT	1.2 A	0.6 A	2.2-1.8 A	1-0.7 A	3.8-2.85 A	1.8-1.2 A	2.2-1.8 A	1-0.7 A	3.8-2.85 A	1.8-1.2 A	3.8-2.85 A	1.8-1.2 A	4.75-3.65 A	1.95-1.65 A
	ABSORBED POWER	15 VA		26.5-22 VA	24-17 VA	46-34 VA	43-29 VA	26.5-22 VA	24-17 VA	46-34 VA	43-29 VA	46-34 VA	43-29 VA	57-44 VA	47-40 VA
FREQUENCY		50/60 HZ													

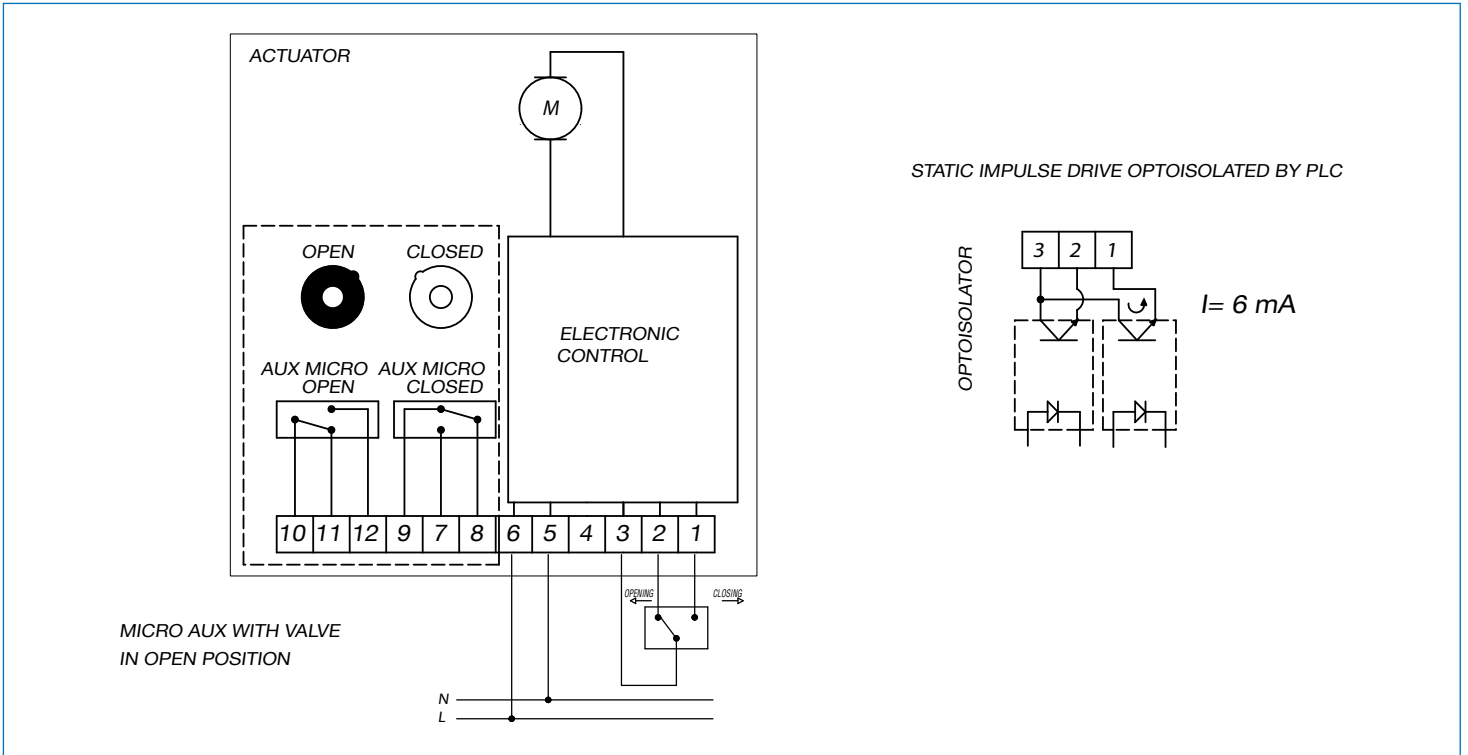




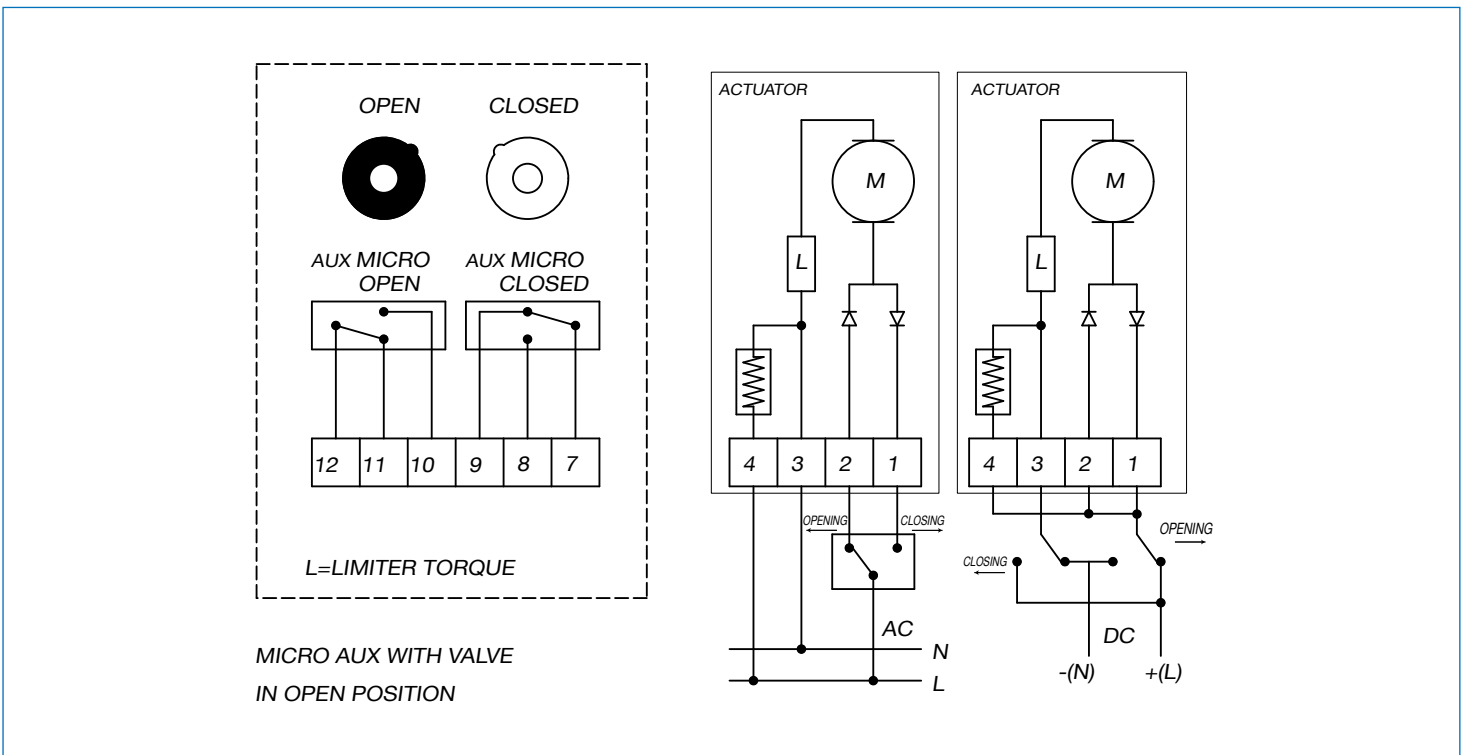
MOD.	DRILLING ISO 5211	CH	A	B	C	D	E	F	G	H	I	L	M	N	O	ØP	Q
VB015	F03 - F05 *	0.43	4.84	5.57	1.67	4.74	4.96	0.61	4.06	1.26	0.55	1.42	1.97	10-24 UNC 2BX0.47	1/4-20 UNC 2BX0.51	2.68	2.56
VB030	F03 - F05 *	0.43	6.18	7.40	2.38	5.10	5.75	1.65	1.30	1.42	0.47	1.42	1.97	10-24 UNC 2BX0.47	1/4-20 UNC 2BX0.51	2.56	3.94
VB060	F05 - F07	0.55	7.28	8.46	2.66	5.77	6.81	1.65	2.01	1.42	0.63	1.97	2.76	1/4-20 UNC 2BX0.59	5/16-18 UNC 2BX0.63	2.56	4.33
VB110	F07 - F10	0.67	8.31	9.14	3.31	6.02	7.01	2.13	2.13	1.58	0.75	2.76	4.02	5/16-18 UNC 2BX0.75	3/8-16 UNC 2BX0.75	4.33	4.53
VB190	F07 - F10	0.67	8.31	9.14	3.31	6.02	7.01	2.13	2.13	1.58	0.75	2.76	4.02	5/16-18 UNC 2BX0.75	3/8-16 UNC 2BX0.75	4.33	4.53
VB270	F07 - F10	0.87	8.74	9.19	3.03	6.69	7.17	2.03	2.13	1.58	0.95	2.76	4.02	5/16-18 UNC 2BX0.75	3/8-16 UNC 2BX0.75	4.33	4.53
VB350	F07 - F10	0.87	8.74	9.19	3.03	6.69	7.17	2.03	2.13	1.58	0.95	2.76	4.02	5/16-18 UNC 2BX0.79	3/8-16 UNC 2BX0.75	4.33	4.53

* Upon request F04 or F07.

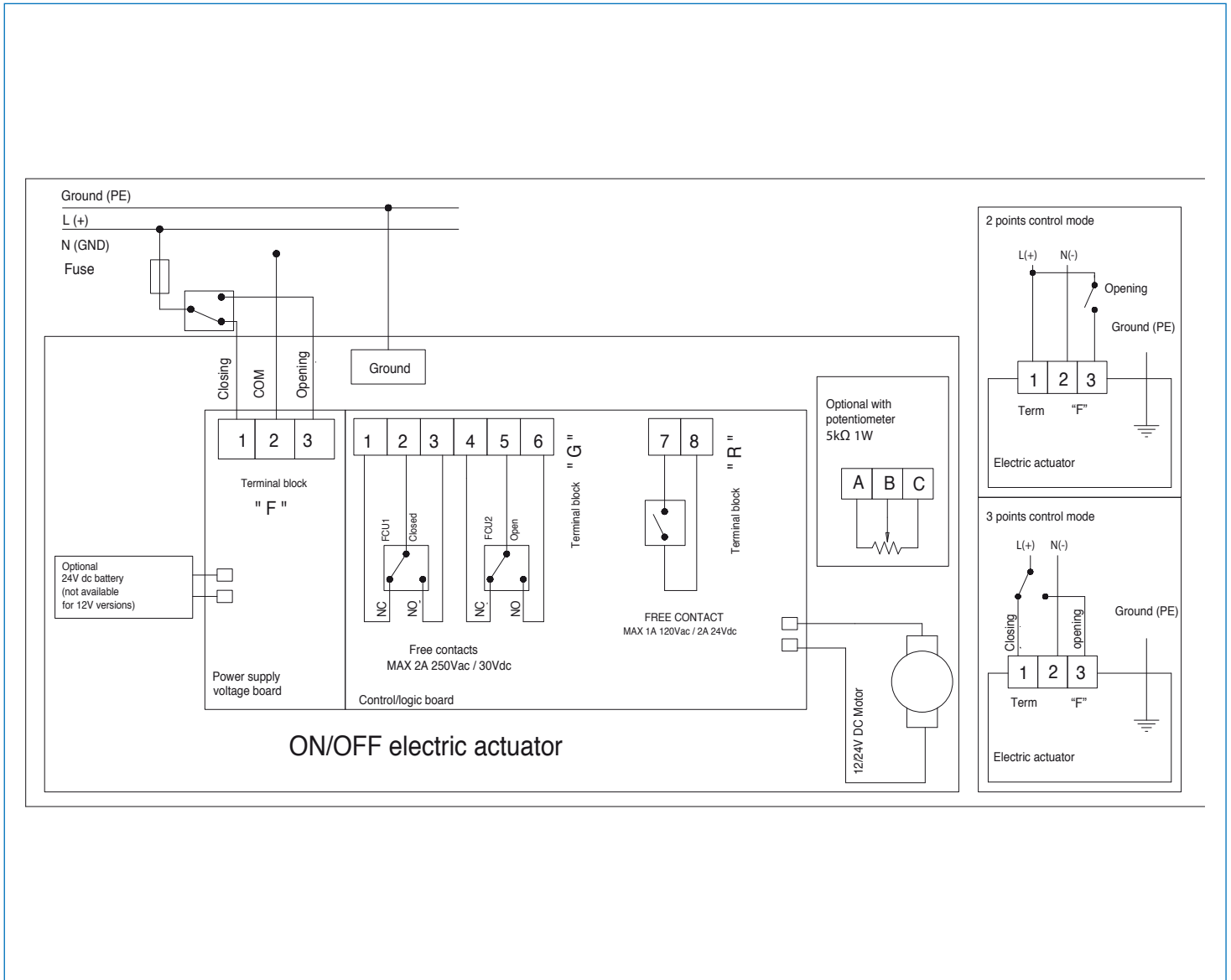
ELECTRIC WIRING VB015 100–240V 50/60Hz



ELECTRIC WIRING VB015 12V–24V AC/DC 50/60 Hz



ELECTRIC WIRING FROM VB030 TO VB350 12V AC/DC 50/60 Hz, 24V AC/DC 50/60 Hz, 100-240V AC 50/60 Hz



ELECTRIC WIRING WITH POSITIONER FROM VB030 TO VB350 12V AC/DC 50/60 Hz, 24V AC/DC 50/60 Hz, 100-240V AC 50/60 Hz

