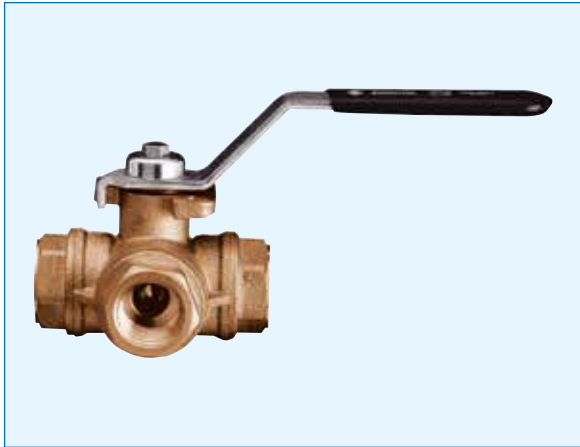


SERIES 355N (T) - 365N (L) DIRECT MOUNT 3 WAY BALL VALVE

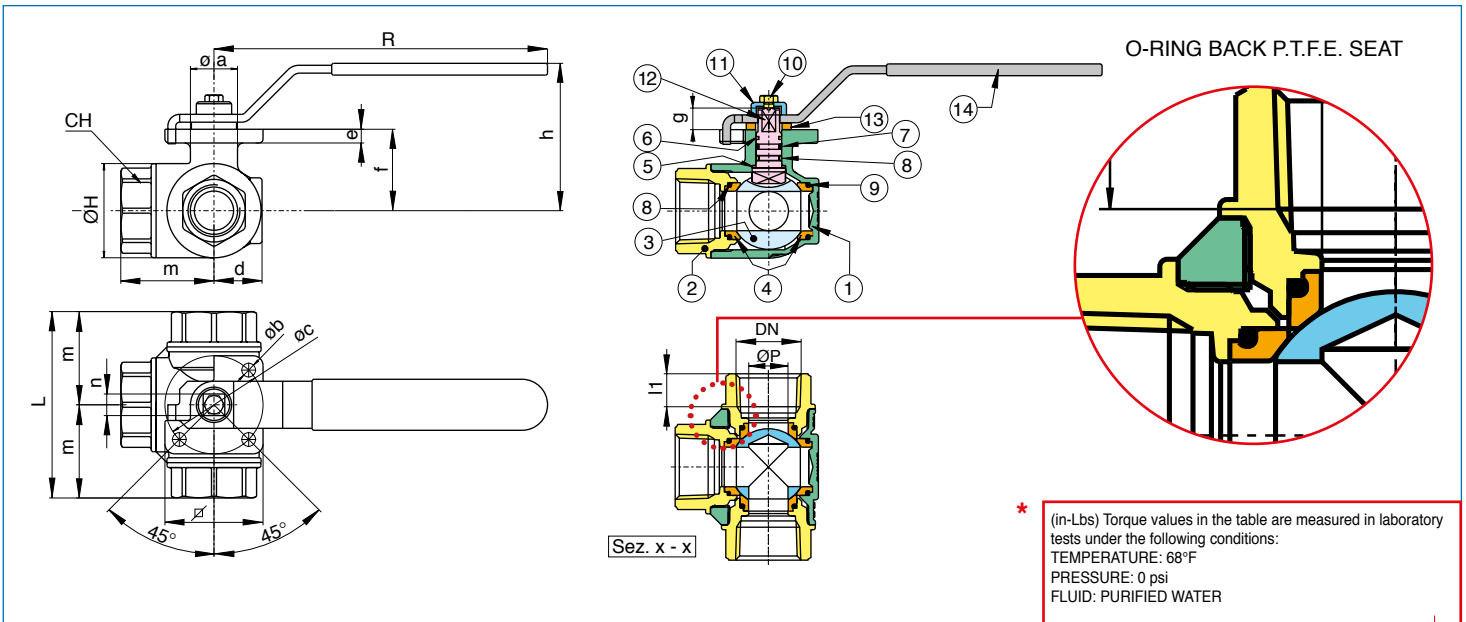


- Three way brass ball valve with ISO 5211 pad for actuator, standard port, from 1/4" to 3".
- Four seat design for sealing between pressurized ports.
- Pressure rating 400 WOG - 100 WSP.
- Model 355N (90° and 180° flow path).
- Model 365N (90° with off position).
- Temperature range -4° F to +366 °F.
- Blow out proof stem, chrome plated brass ball.
- P.T.F.E seats with O-ring backing for low operating torque.
- P.T.F.E seats and double O-ring stem packing.
- 100% electronically tested in the open and closed position at 80 psi.
- Not to be used for drinking water.

355N: LEVER HANDLE - size 1/4" to 3", "T" flow pattern.

365N: LEVER HANDLE - size 1/4" to 3", "L" flow pattern.

MEETS THE DESIGN CRITERIA OF MSS_SP_110.



N POS	PART NAME	MATERIAL	N PCS	SIZE	ØP	ØH	l1	L	m	CH	R	h	Øa	Øb	Øc	d	e	f	g	∠	n	CV 355N	CV 365N	psi	Lbs	* in-Lbs
1	BODY	BRASS CW 617 NUNI EN 12165	1	1/4"	0.39	1.34	0.39	2.64	1.32	0.86	4.72	2.44	0.87	0.23	1.42 (ISO F03)	0.77	0.20	1.20	0.35	1.49	0.35	3.26	3.50	400	1.22	53.10
2	END CONNECTION	BRASS CW 617 NUNI EN 12165	3	3/8"	0.43	1.34	0.40	2.64	1.32	0.86	4.72	2.44	0.87	0.23	1.42 (ISO F03)	0.77	0.20	1.20	0.35	1.49	0.35	3.50	4.08	400	1.16	53.10
3	BALL	BRASS CW 617 NUNI EN 12165	1	1/2"	0.43	1.34	0.53	2.87	1.44	1.06	4.72	2.44	0.87	0.23	1.42 (ISO F03)	0.77	0.20	1.20	0.35	1.49	0.35	4.20	5.02	400	1.21	53.10
4	BALL SEAT	P.T.F.E	4	3/4"	0.59	1.53	0.55	3.19	1.60	1.25	4.72	2.52	0.87	0.23	1.42 (ISO F03)	0.87	0.20	1.29	0.35	1.49	0.35	7.00	7.70	400	1.44	53.10
5	THRUST WASHER	P.T.F.E	1	1"	0.79	1.89	0.66	3.74	1.87	1.61	6.69	2.95	0.94	0.27	1.97 (ISO F05)	1.00	0.28	1.63	0.43	1.97	0.43	12.83	14.24	400	2.64	150.46
6	STEM SEAL	P.T.F.E	1	1"1/4"	0.98	2.36	0.68	4.39	2.20	1.96	6.69	3.17	0.94	0.27	1.97 (ISO F05)	1.22	0.28	1.85	0.43	1.97	0.43	18.67	19.72	400	4.15	150.46
7	O-RING	EPDM	1	1"1/2"	1.26	2.83	0.68	4.86	2.43	2.16	6.69	3.66	1.26	0.27	1.97 (ISO F05)	1.79	0.28	2.34	0.43	1.97	0.43	29.75	30.69	400	6.02	150.46
8	O-RING	FKM (Viton®)	1	2"	1.57	3.38	0.70	5.73	2.87	2.75	9.05	4.43	1.46	0.35	2.76 (ISO F07)	1.75	0.32	2.90	0.59	2.75	0.55	43.76	48.58	400	9.08	274.37
9	O-RINGS BODY	FKM (Viton®)	4	2"1/2"	1.95	4.37	0.93	6.93	3.47	3.34	9.05	4.86	1.46	0.35	2.76 (ISO F07)	2.20	0.32	3.35	0.59	2.75	0.55	70.00	72.35	400	16.33	380.58
10	SCREW	STEEL 6/S	1	3"	1.95	4.45	1.01	7.08	3.54	4.13	9.05	4.86	1.46	0.35	2.76 (ISO F07)	2.20	0.32	3.35	0.59	2.75	0.55	70.00	72.35	400	19.55	380.58
11	BUSH	BRASS CW 614 NUNI EN 12164	1																							
12	STEM	BRASS CW 614 NUNI EN 12164	1																							
13	WASHER	NYLON	1																							
14	HANDLE	Fe DD 11 UNI EN 10111	1																							



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:

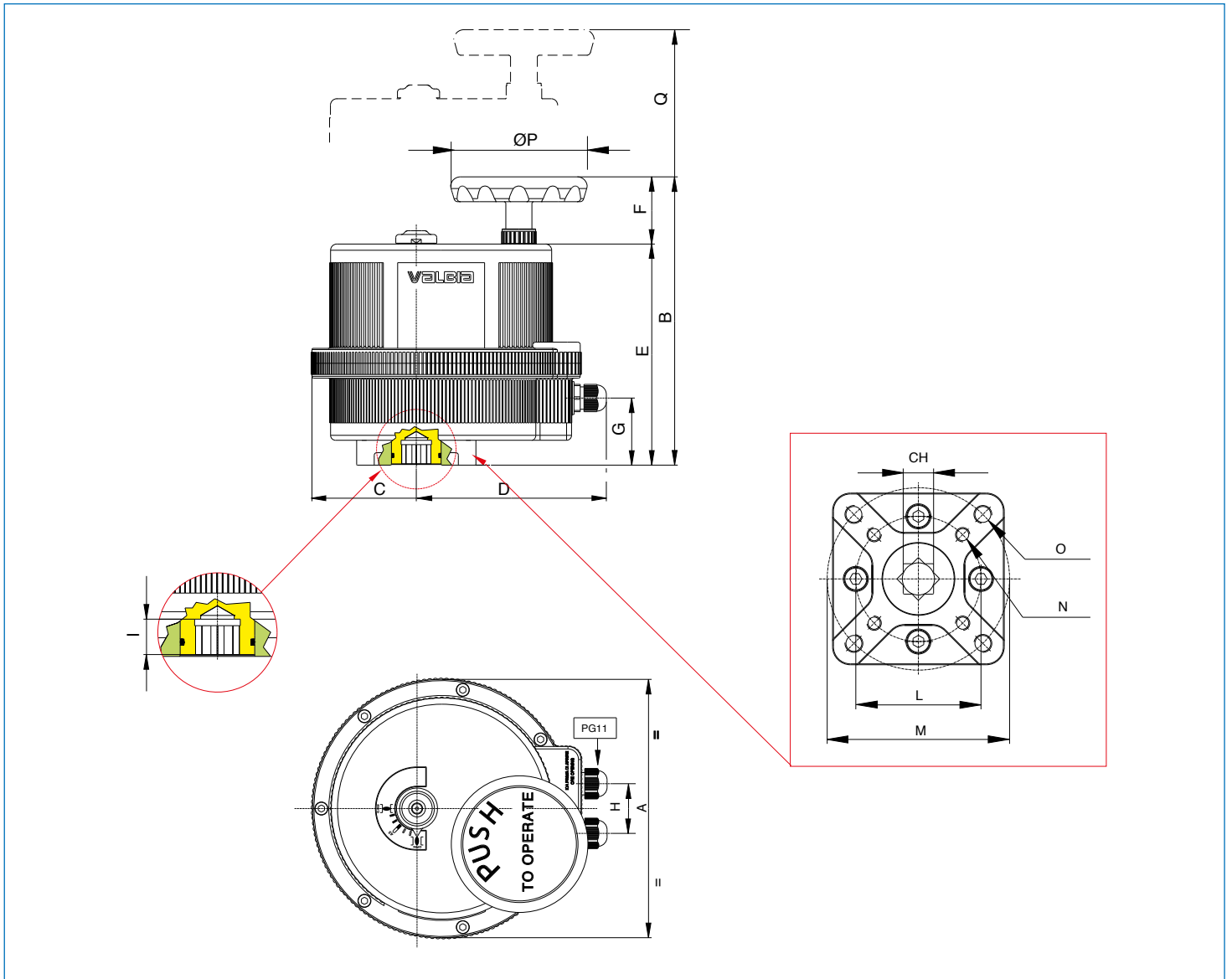
- The housing of the actuators provides a V0 self-extinguish class techno-polymer material.
- The kinematics is made by steel and techno-polymer gear wheels, sustained by hardened steel pinions, mounted on self-lubricating bushes and inserted in a strong structure of die-cast aluminium (excluding mod. 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													

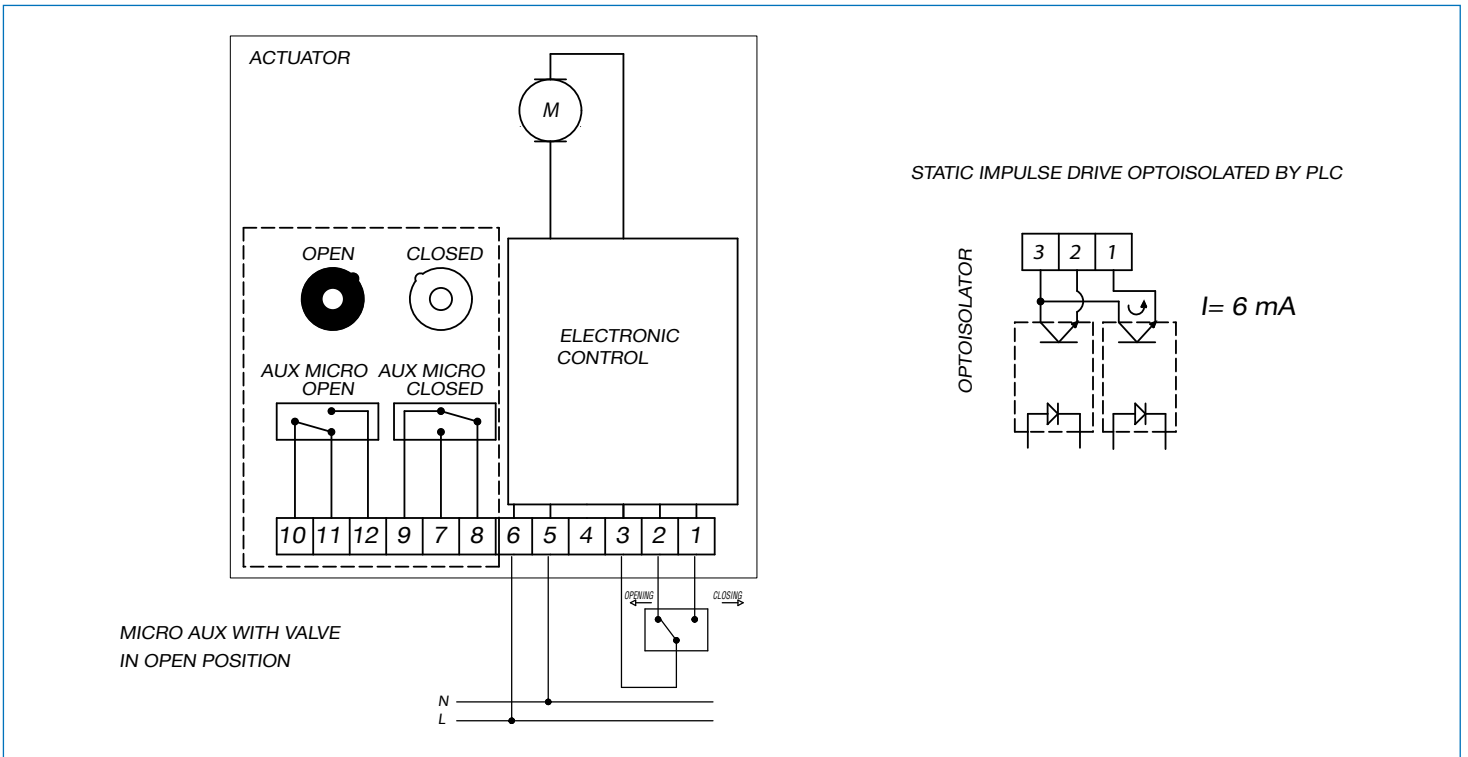




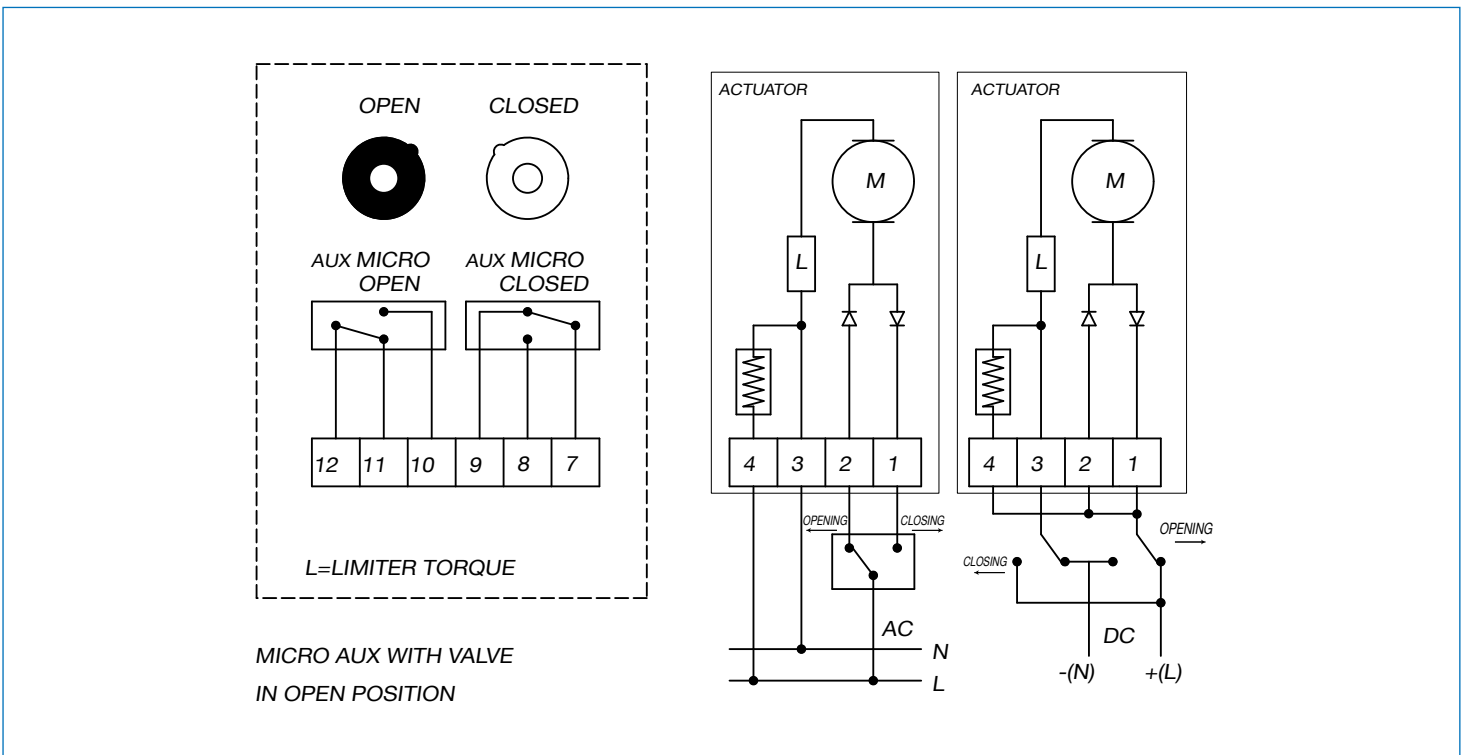
MOD.	DRILLING ISO 5211	CH	A	B	C	D	E	F	G	H	I	L	M	N	O	ØP	Q
VB015	F03 - F05 *	0.43	4.84	5.57	1.67	4.74	4.96	0.61	4.06	1.26	0.55	1.42	1.97	10-24 UNC 2BX0.47	1/4-20 UNC 2BX0.51	2.68	2.56
VB030	F03 - F05 *	0.43	6.18	7.40	2.38	5.10	5.75	1.65	1.30	1.42	0.47	1.42	1.97	10-24 UNC 2BX0.47	1/4-20 UNC 2BX0.51	2.56	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.

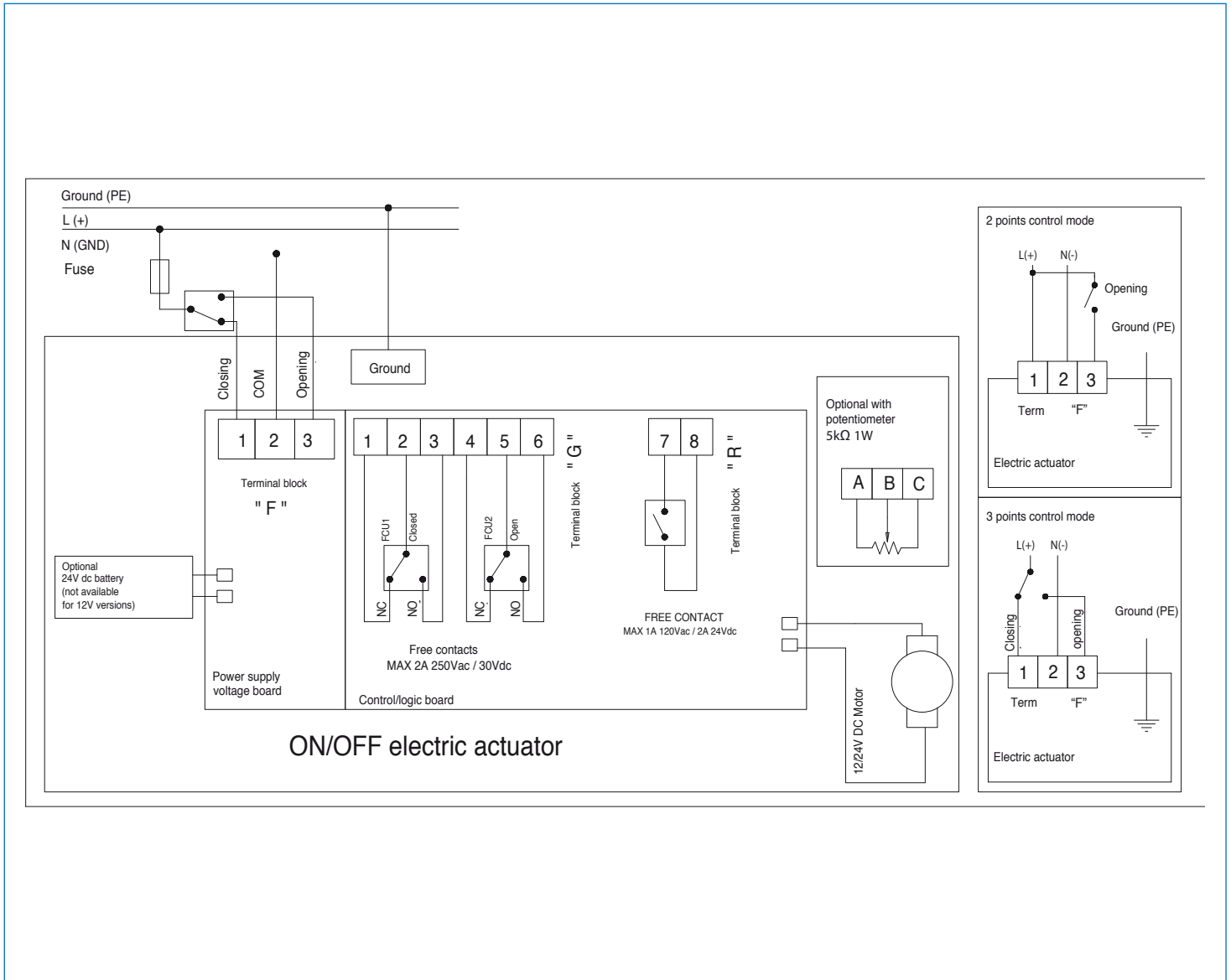
ELECTRIC WIRING VB015 100–240V 50/60Hz



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

