

PNEUMATRON

www.pneumatron.co.za

sales01@pneumatron.co.za

PVPOM & POM - ELECTRIC ACTUATORS

POM Series Electric Actuators have current technology with a high quality finish. High Quality parts ensure a reliable and long performance life.



GLOBAL PRODUCT SPECIFICATIONS:

- 1) Actuator Protection Rating: IP67 - Body: Alluminium Alloy - Powder Coated
- 2) Allowed Ambient operational Temperature: -25°C to +60°C
- 3) All Actuators have ISO5211 Mountings for fitment same standard Ball and Butterfly Valves.
- 4) POM Type - 2 Position Actuators is fitted with End Position (Open and Closed) Potential Free 5 Amp rated contact limit Switchees for Position Feedback signals.
- 5) PVPOM Proportional Control Type Actuators has 4-20mA standard Position Feedback on all Models
- 6) POM24C Actuators can be custom controlled with 2 seperated control signals and allows position Feedback wiring with a 1 Kohm Potentiometer. With a progammable controller this can allow Semi Proportional Control if programmed for such funtion by energising one control signal for Clockwise rotation and other for anti-Clockwise rotation.
- 7) The worm drive output shaft is made off a forged specialised copper alloy allowing for high strength and good wearability.

PNEUMATRON

www.pneumatron.co.za

sales01@pneumatron.co.za

PVPOM & POM - ELECTRIC ACTUATOR LIST

PLEASE NOTE

There are Electronic Boards inside these valve actuators and therefore they should not be mounted surfaces or pipes that vibrate excessively.

PART NO:	CONTROL METHOD	CURRENT Amp(*) RUN(MAX)	90° RUNTIME Seconds	TORQUE Output Nm	WIRING Type	RATING	WEIGHT Kg
220VAC & 24VAC POWERED ACTUATORS							
PVPOM1-220V-420-420	Proportional	0,24	As per signal	50	E	IP67	2,4
POM1-35-20S-220	Digital/Relay	0,30	20S or Less	35	B	IP67	2,4
POM1-50-30S-220	Digital/Relay	0,24	30S or Less	50	B	IP67	2,4
POM1-50-30S-24VAC	Digital/Relay	2,20	30S or Less	50	B	IP67	2,4
PVPOM2-220V-420-420	Proportional	0,32	As per signal	100	E	IP67	4,2
POM2-85-20S-220	Digital/Relay	0,40	20S or Less	85	B	IP67	4,2
POM2-100-30S-220	Digital/Relay	0,32	30S or Less	100	B	IP67	4,2
POM2-100-30S-24VAC	Digital/Relay	3,00	30S or Less	100	B	IP67	4,2
PVPOM33-220V-420-420	Proportional	0,92	As per signal	300	E	IP67	7,9
PVPOM35-220V-420-420	Proportional	0,92	As per signal	500	E	IP67	8
POM3-260-15S-220	Digital/Relay	0,92	15S or Less	260	B	IP67	8
POM3-300-30S-220	Digital/Relay	0,92	30S or Less	300	B	IP67	7,9
POM3-500-30S-220	Digital/Relay	0,92	30S or Less	500	B	IP67	8
POM3-500-30S-24VAC	Digital/Relay	8,00	30S or Less	500	B	IP67	8
POM24C-200-60S-220	Digital/Relay Potentiometer	0,70	55S or Less	400	C	IP67	7,2
24VDC POWERED ACTUATORS							
POM1-50-10S-24	Digital/Relay	2,00	15S or Less	50	F	IP67	2,4
POM2-100-10S-24	Digital/Relay	2,40	15S or Less	100	F	IP67	4,2
PVPOM33-24V-420-420	Proportional	7,50	As per signal	300	E	IP67	7,9
PVPOM35-24V-420-420	Proportional	7,50	As per signal	500	E	IP67	8
POM3-300-10S-24	Digital/Relay	7,50	15S or Less	300	F	IP67	7,9
POM3-500-10S-24	Digital/Relay	7,50	15S or Less	500	F	IP67	8

* Max current would be at most 200ms at full LOAD (specified by the Manufacturer). When we build actuators with valves - MAX current will not really happen as we oversize our actuators by 70% to 300% more than the maximum required, keeping in mind the Valve BODY Breakaway Torque and pressure required for the specific application. The large 24VDC actuators rotation time to rotate 90 Degrees from close to open/open to close is 15 seconds or less. Where 220VAC Actuator will take 15 to 30 seconds depending on the Part number and Torque above.

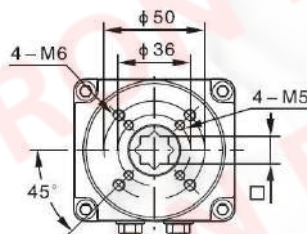
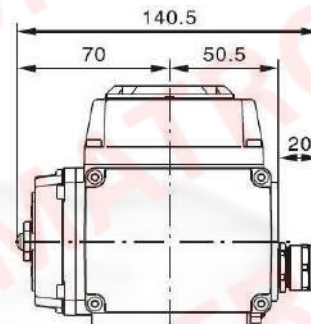
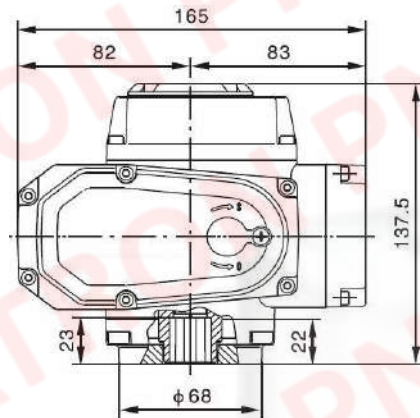
PNEUMATRON

www.pneumatron.co.za

sales01@pneumatron.co.za

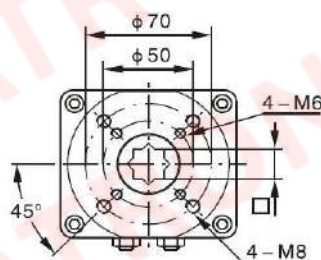
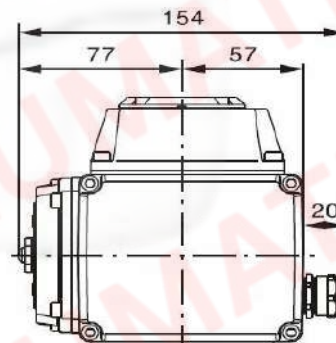
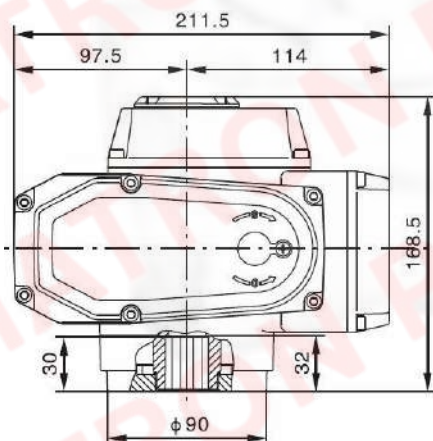
DIMENSIONS

POM 1 - DIMENSIONS



Direct-installation type parameters (ISO5211 standard)	
Square socket	$\square 9 \times 9$ $\square 11 \times 11$ $\square 14 \times 14$
Flange	F03 F05
Valve rod	Height ≤ 20 mm

POM 2 - DIMENSIONS



Direct-installation type parameters (ISO5211 standard)	
Square socket	$\square 9 \times 9$ $\square 11 \times 11$ $\square 14 \times 14$ $\square 17 \times 17$
Flange	F05 F07
Valve rod	Height ≤ 28 mm

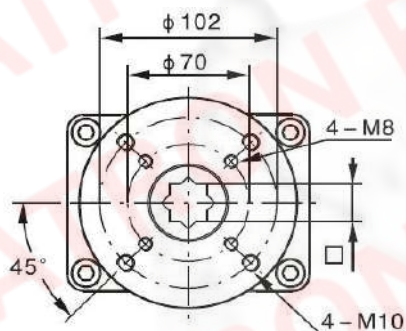
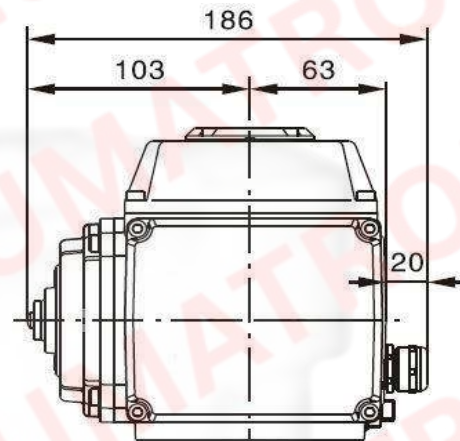
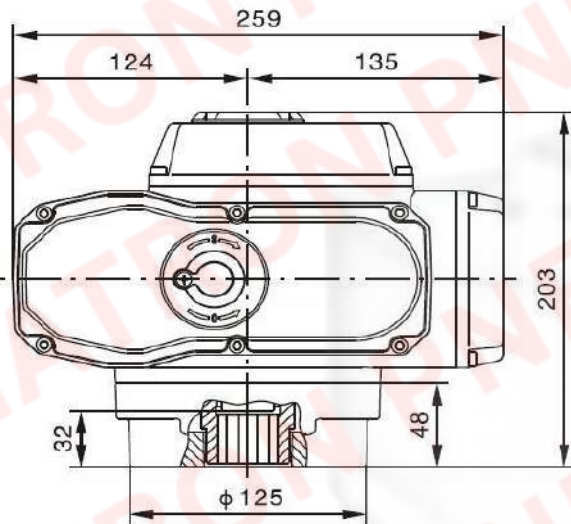
PNEUMATRON

www.pneumatron.co.za

sales01@pneumatron.co.za

DIMENSIONS

POM24C & 3 also PVPOM33 & 35 - DIMENSIONS



Direct-installation type parameters(ISO5211 standard)		
Square socket	$\square 14 \times 14$	$\square 22 \times 22$
	$\square 17 \times 17$	$\square 27 \times 27$
Flange	F07	F10
Valve rod	Height $\leq 30\text{mm}$	

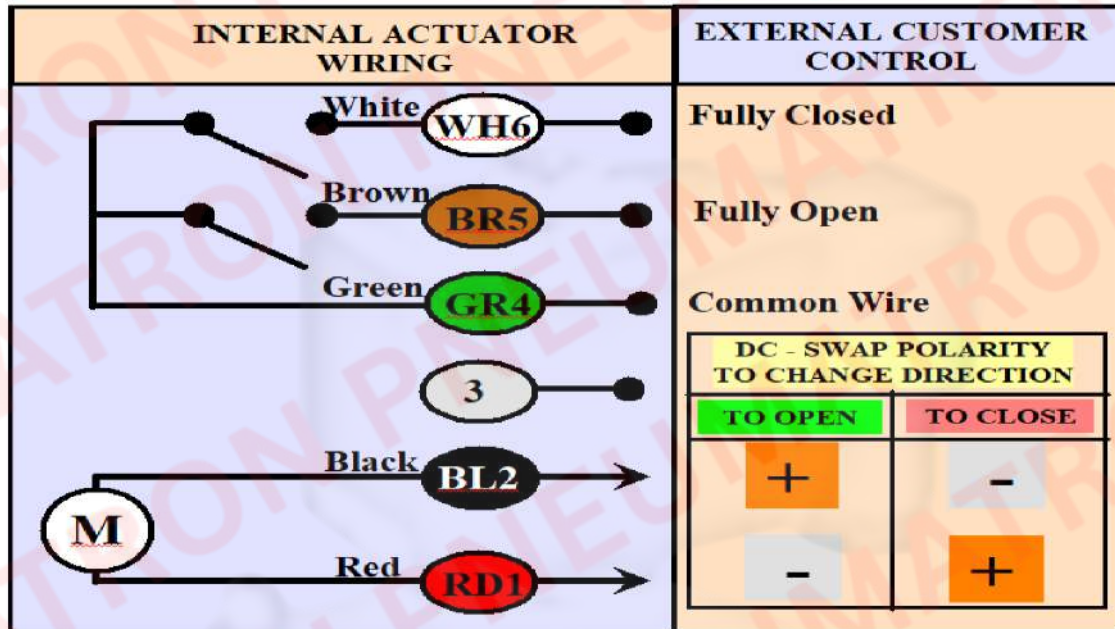
PNEUMATRON

www.pneumatron.co.za

sales01@pneumatron.co.za

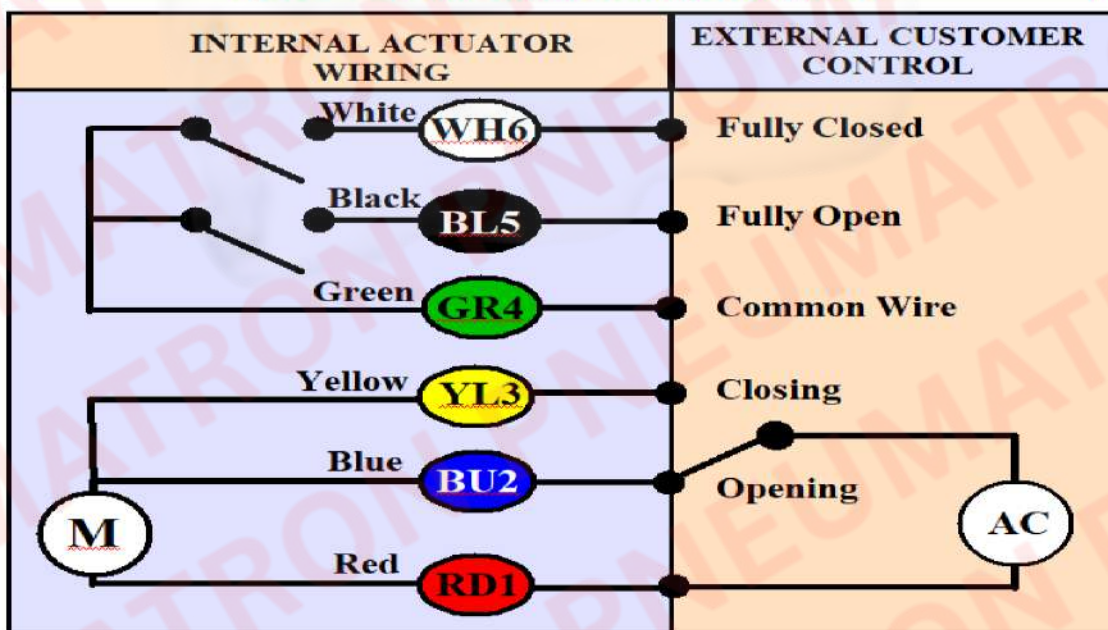
All POM- 24VDC "F" WIRING

STANDARD POM-TYPE F (DC-Direct Current)-Wiring Diagram



All POM- 24VAC/220VAC "B" WIRING

STANDARD POM-TYPE B (AC - Current)-Wiring Diagram



PNEUMATRON

www.pneumatron.co.za

sales01@pneumatron.co.za

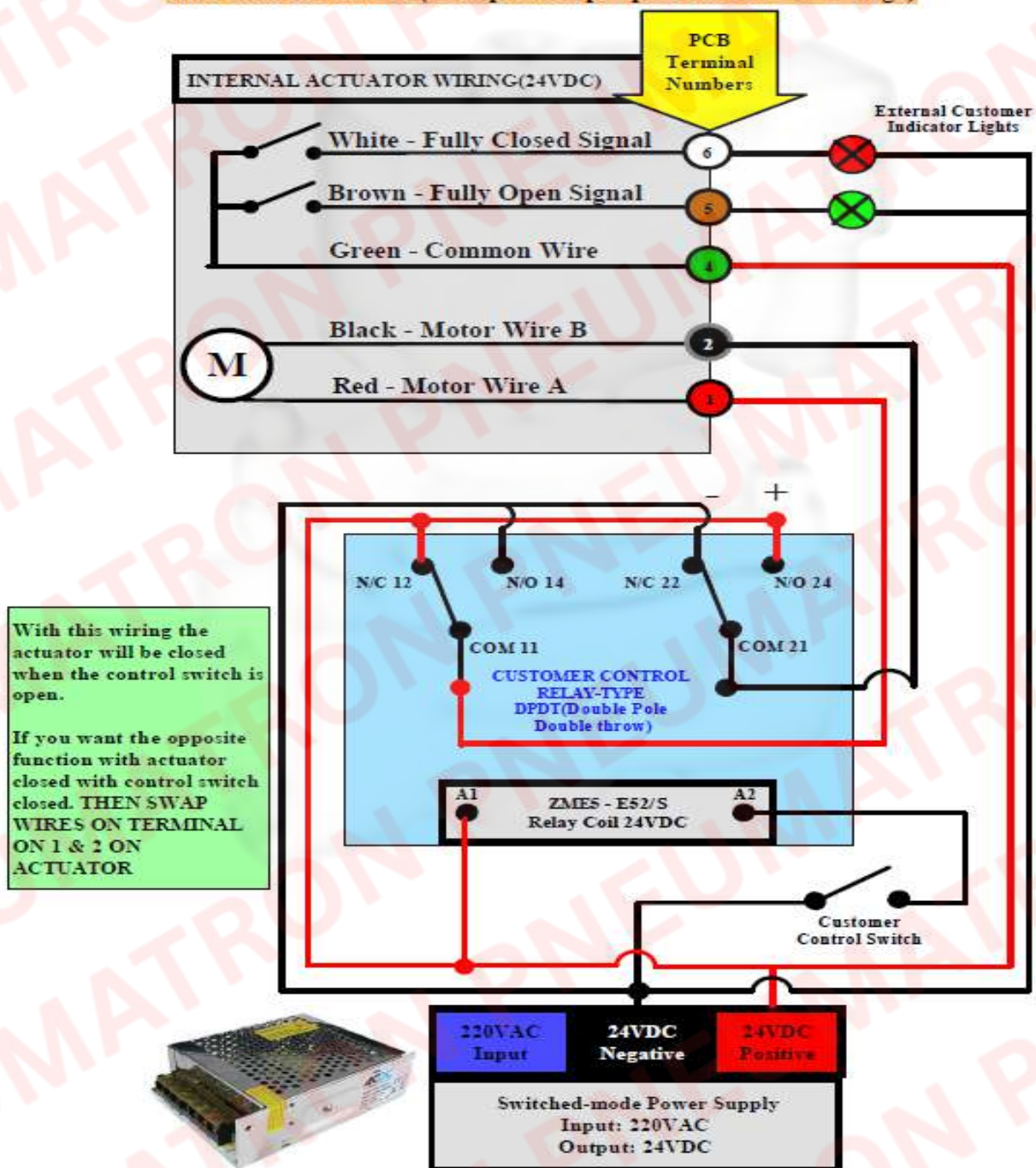
All POM 1 & 2 - 24VDC "F" SAMPLE WIRING DIAGRAM

FOR POM1/2 - External Relay Contacts Must be Rated minimum 5 Amp/DC

ALL Actuator Motors Will Stop on their own Automatically once they reach OPEN or CLOSED position

POM 1 & 2 ACTUATOR EXTERNAL WIRING (24 DC SUPPLY)

This Example Relay is : E52/S 24VDC (RELE' -from AC/DC)
with Base no : ZME5 (5 Amp Rated per pole for 24VDC Voltage)



PNEUMATRON

www.pneumatron.co.za

sales01@pneumatron.co.za

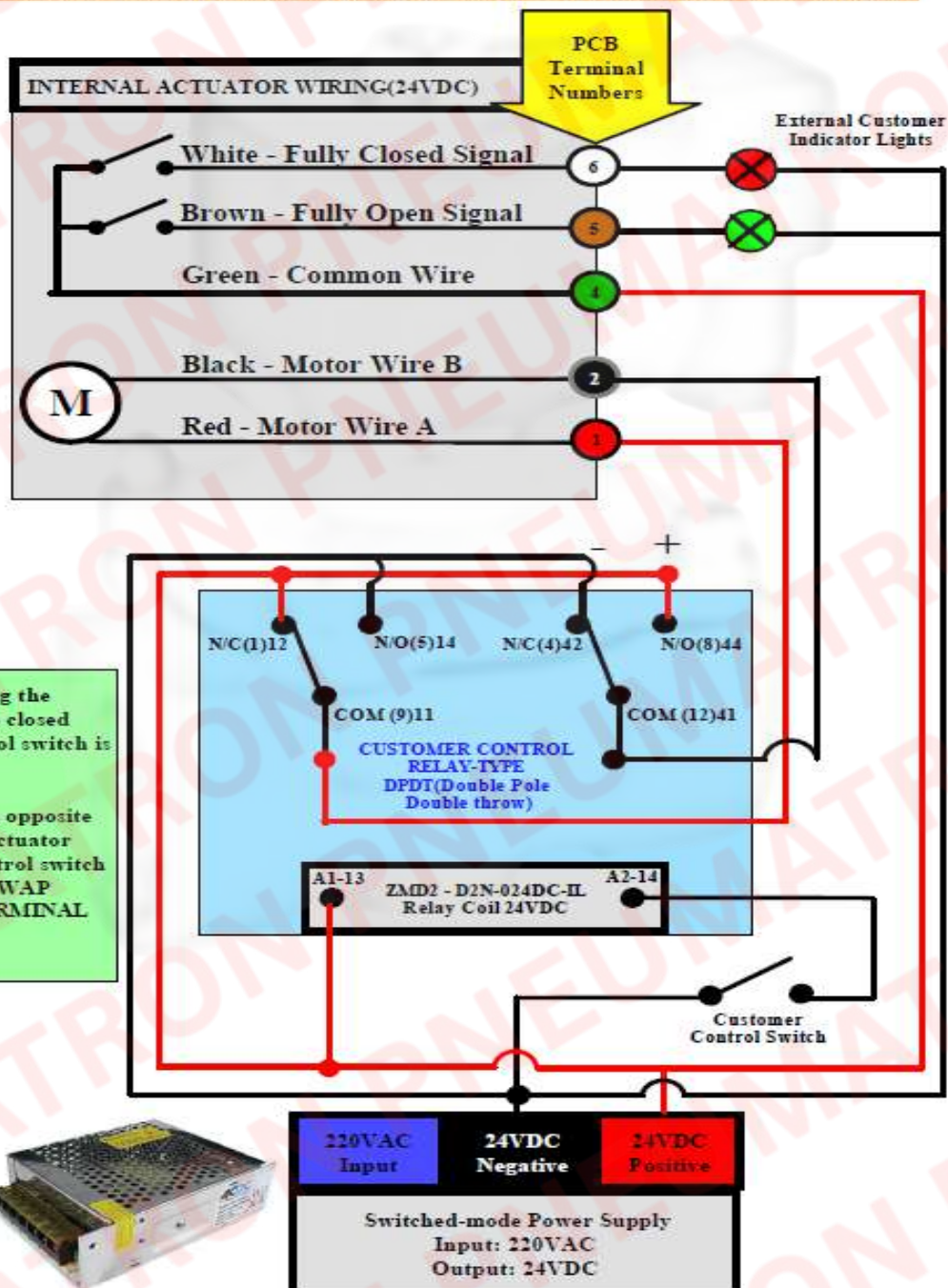
All POM 24C & 3 - 24VDC "F" SAMPLE WIRING DIAGRAM

FOR POM 24C/3 - External Relay Contacts Must be Rated minimum 10 Amp/DC

ALL Actuator Motors Will Stop on their own Automatically once they reach OPEN or CLOSED position

POM 3 ACTUATOR EXTERNAL WIRING (24 DC SUPPLY)

This Example Relay is : D2N-024DC-IL (ITALIANA RELE' -from AC/DC)
with Base no : ZMD2-(2 x 12Amp@250VAC Rated-Also for DC Voltage)



PNEUMATRON

www.pneumatron.co.za

sales01@pneumatron.co.za

PVPOM PROPORTIONAL WIRING

PVPOM 1,2,33,35 -220VAC POWERED TYPE WIRING TO CONTROL BOX(Connections Shown In Picture)

Motor & System Supply Power: 220VAC (L-Live and N-Neutral)

Proportional Control Input (IN): 4-20mA Control (+ Positive, - 0 Volt GND)

Proportional Control Output (OUT): 4-20mA Position Feedback (+ Positive, - 0 Volt GND)

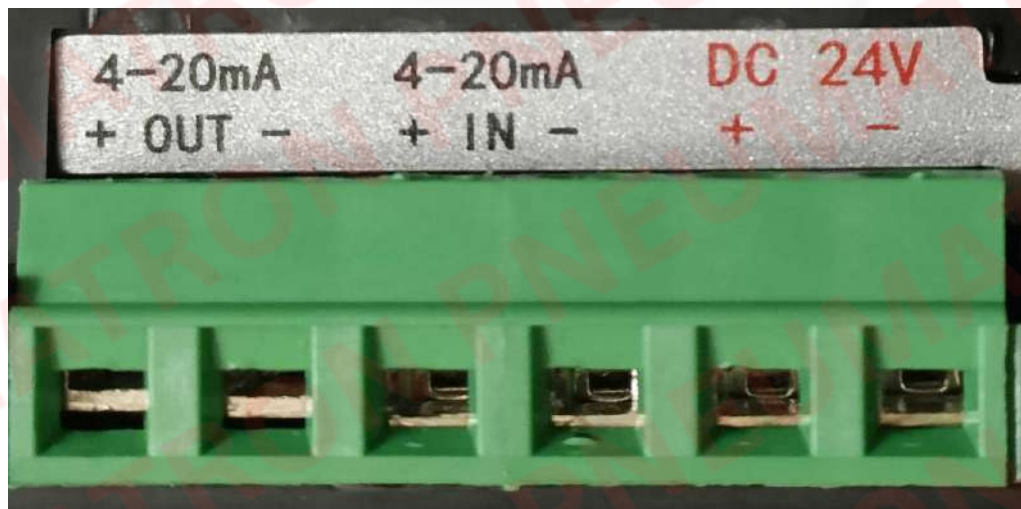


PVPOM 1,2,33,35 -24VDC POWERED TYPE WIRING TO CONTROL BOX(Connections Shown In Picture)

Motor & System Supply Power: 24VDC (+ Positive and - 0V - Negative)

Proportional Control Input (IN): 4-20mA Control (+ Positive, - 0 Volt GND)

Proportional Control Output (OUT): 4-20mA Position Feedback (+ Positive, - 0 Volt GND)

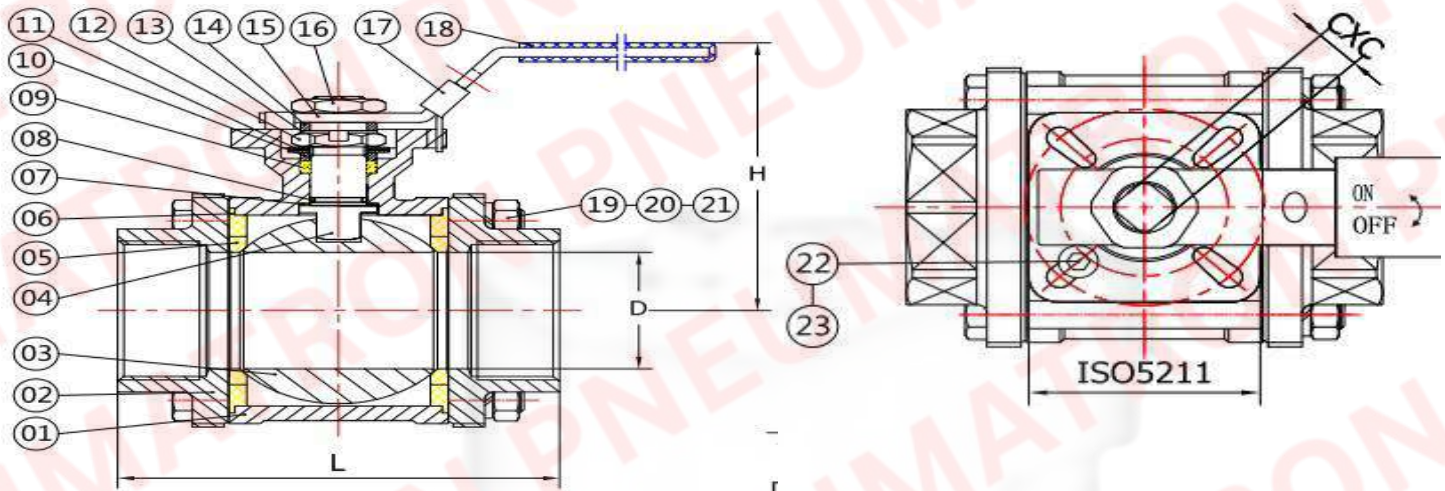


PNEUMATRON

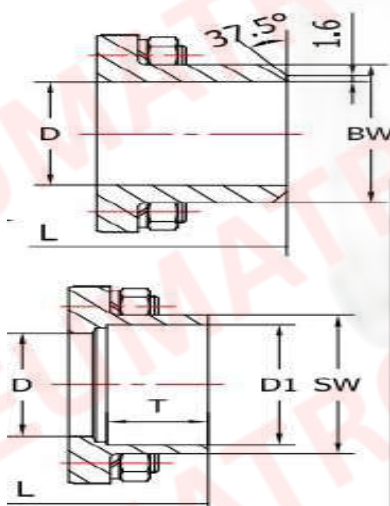
www.pneumatron.co.za

sales01@pneumatron.co.za

3 - PIECE S/STEEL 316 - 2 PORT BALL VALVE Rated MAX 50 Bar Pressure - ISO5211 - VB3B-316-IS



SIZE	D	L	E	H	C	ISO5211	Torque
1/2"	15	63	120	70	9	F03/F04	6-8N
3/4"	20	74	137	78	11	F03/F04	8-10N
1"	25	86	137	82	11	F04/F05	10-12N
1 1/4"	32	96	187	88	11	F04/F05	10-15N
1 1/2"	38	108	187	93	11	F05/F07	15-20N
2"	50	128	187	103	14	F05/F07	20-25N
2 1/2"	65	160	215	165	17	F07/F10	40-60N



No.	Parts name	Material	No.	Parts name	Material
1	Body	CF8M	13	Stop washer	304
2	End cap	CF8M	14	Metal ring	304
3	Ball	316	15	Handle	SS
4	Stem	316	16	Handle nut	A2-70
5	Seat	PTFE	17	Locking pad	SS
6	Gasket	PTFE	18	Handle sleeve	PVC
7	Thrust Washer	PTFE	19	Nut	304
8	Stem O-ring		20	Elastic gasket	304
9	Packing	PTFE	21	Bolt	304
10	Metal ring	304	22	Stop nut	304
11	Belleville washer	304	23	Stop bolt	304
12	STEM NUT	304	24		

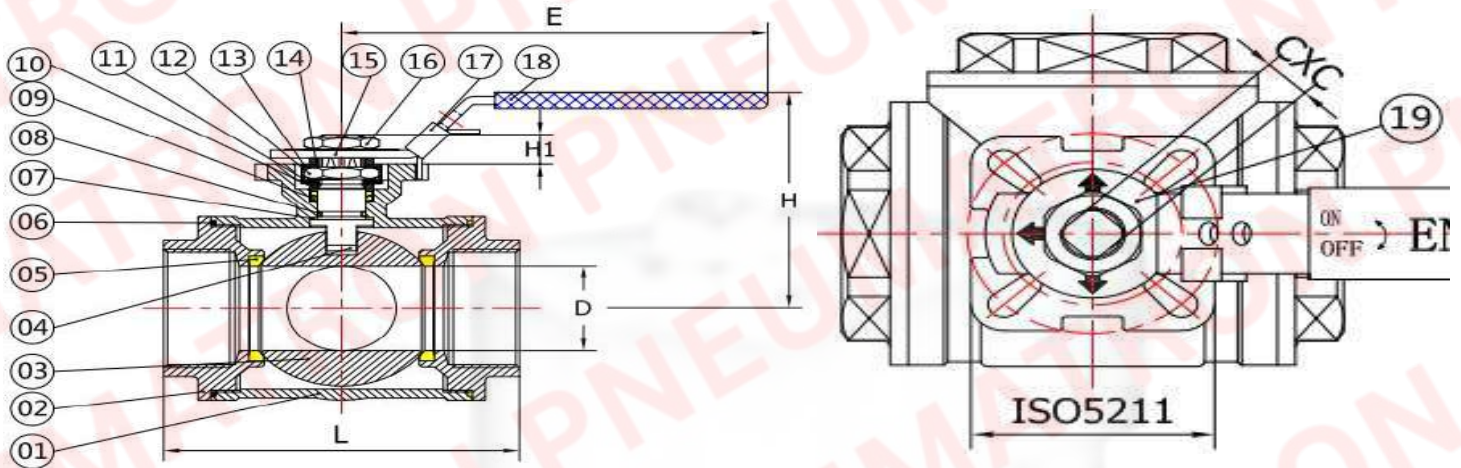
general	valve type	Straight through	standards	manufacture	ASME B 16.34
	nominal size	1/4"~4"		pressure/temperature	ASME B 16.34
	class	1000PSI		face to face	
	end type	Internal thread		Connection standard	BSP/BSPT/NPT
	operator	lever		test and inspection	API 598

PNEUMATRON

www.pneumatron.co.za

sales01@pneumatron.co.za

3 - PIECE S/STEEL 316 - 3 PORT BALL VALVE Rated MAX 50 Bar Pressure - ISO5211 - VB3B-316-IS



SIZE	D	L	H	E	H1	C	ISO 5211	Torque
1/2	12	68	71	120	9	9	F03/F04	6-8N
3/4	15	88	74	120	9	9	F03/F04	8-10N
1	20	90	90	135	11	11	F04/F05	10-15N
1 1/4	25	105	95	187	11	11	F04/F05	12-18N
1 1/2	32	120	99	187	14	14	F05/F07	15-20N
2	43	140	108	187	14	14	F05/F07	20-30N

No.	Parts name	Material	No.	Parts name	Material
1	Body	CF8M	11	Belleville washer	304
2	End cap	CF8M	12	Stem nut	304
3	Ball	316	13	Stop washer	304
4	Stem	316	14	Metal ring	304
5	Seat	PTFE	15	Handle	SS
6	Gasket	PTFE	16	Handle nut	A2-70
7	Thrust washer	PTFE	17	Locking pad	SS
8			18	Handle sleeve	PVC
9	Packing	PTFE	19	Indicator	SS
10	Gland	304			

