

Specification – Pneumatic Valve and Actuator

Sir Wilfred Grenfell

Section 1:

Scope: The existing keystone pneumatic valves are electrically actuated and have become unsupportable. These valves and ancillary components are to be replaced with a similar, modern system, maintaining the manual override feature and remote indication along with the ability to interface with the new Alarm and Monitoring System

Valves shall be delivered to Canadian Coast Guard Base in St. John's, NL within 12 months of contract award.

Section 2: Existing valves to be replaced.

Fuel Oil System

Quantity	Size	Notes	Tagged
6	10 inch	Ductile Iron Body #DJL3-A395 Keystone Butterfly Valves figure F1000 Aluminum Bronze Disc. Stainless Steel Shaft. Buna N seats <ul style="list-style-type: none"> • C/W 790 Actuators 453 Manual Override • 791-4 CSA NEMA 4 Solenoid • 792-4-2 SPDT CSA NEMA 4 Switchbox with Solenoid Prewired to Switchbox. 	FO1 to FO6
8	8 inch	Ductile Iron Body #DJL3-A395 Keystone Butterfly Valves figure F1000 Aluminum Bronze Disc. Stainless Steel Shaft. Buna N seats <ul style="list-style-type: none"> • C/W 790 Actuators 453 Manual Override • 791-4 CSA NEMA 4 Solenoid • 792-4-2 SPDT CSA NEMA 4 Switchbox with Solenoid Prewired to Switchbox. 	FO10 to FO17
5	6 inch	Cast Iron Body #CLJ3 Keystone Butterfly Valves figure F1000 Aluminum Bronze Disc. Stainless Steel Shaft. Buna N seats <ul style="list-style-type: none"> • C/W 790 Actuators 453 Manual Override • 791-4 CSA NEMA 4 Solenoid • 792-4-2 SPDT CSA NEMA 4 Switchbox with Solenoid Prewired to Switchbox. 	FO18 to FO21 and FO 27

Fresh Water System (include a hand-operated manual override)

Quantity	Size	Notes	Tagged
4	6 inch	<p>Ductile Iron Body #DLF3-A395</p> <p>Keystone Butterfly Valves figure F1000 Aluminum Bronze Disc. Stainless Steel Shaft. Buna N seats</p> <ul style="list-style-type: none"> • C/W 790 Actuators 453 Manual Override • 791-4 CSA NEMA 4 Solenoid • 792-4-2 SPDT CSA NEMA 4 Switchbox with Solenoid Prewired to Switchbox. 	FW1, FW2, FW3 and FW5
3	6 inch	<p>Cast Iron Body #CLF3</p> <p>Keystone Butterfly Valves figure F1000 Aluminum Bronze Disc. Stainless Steel Shaft. Buna N seats</p> <ul style="list-style-type: none"> • C/W 790 Actuators 453 Manual Override • 791-4 CSA NEMA 4 Solenoid • 792-4-2 SPDT CSA NEMA 4 Switchbox with Solenoid Prewired to Switchbox. 	FW4, FW6, and FW7

Ballast Water System (DB22 & DB23 do not exist in the system)

Quantity	Size	Notes	Tagged
12	10 inch	<p>Ductile Iron Body #DLJ3-A395</p> <p>Keystone Butterfly Valves figure F1000 Aluminum Bronze Disc. Stainless Steel Shaft. Buna N seats</p> <ul style="list-style-type: none"> • C/W 790 Actuators 453 Manual Override • 791-4 CSA NEMA 4 Solenoid • 792-4-2 SPDT CSA NEMA 4 Switchbox with Solenoid Prewired to Switchbox. 	DB1 to DB12
9	6 inch	<p>Ductile Iron Body #DLJ3-A395</p> <p>Keystone Butterfly Valves figure F1000 Aluminum Bronze Disc. Stainless Steel Shaft. Buna N seats</p> <ul style="list-style-type: none"> • C/W 790 Actuators 453 Manual Override • 791-4 CSA NEMA 4 Solenoid 	DB14 to DB24

		<ul style="list-style-type: none"> • 792-4-2 SPDT CSA NEMA 4 Switchbox with Solenoid Prewired to Switchbox. 	
1	6 inch	Cast Iron Body #CLJ3 Keystone Butterfly Valves figure F1000 Aluminum Bronze Disc. Stainless Steel Shaft. Buna N seats <ul style="list-style-type: none"> • C/W 790 Actuators 453 Manual Override • 791-4 CSA NEMA 4 Solenoid • 792-4-2 SPDT CSA NEMA 4 Switchbox with Solenoid Prewired to Switchbox. 	DB25

The Valves shall meet the following criteria as a minimum:

2.1 Class approved by TCMS recognized under IACS.

2.2 The valves shall be of comparable in size to the existing valves outlined above. Final measurements of face to face and bolt pitch diameter to be confirmed by winning bid prior to placing the order.

Section 3:

Documentation

3.1 As a minimum, the Contractor shall provide:

Certification

The Contractor shall obtain and provide to the Technical Authority all required technical Certifications as specified in the applicable rules and codes. These shall include but not be limited to the following:

1. Equipment and Component inspection certificates including all test reports supporting the certifications.
2. Material test certificates including all test reports supporting the certifications.
3. System Installation inspection certificates including proof of compliance.

Section 4:

Deliverables

4.1 Manuals (Operation and Maintenance)

IC to provide manufacturer recommended operational and maintenance manuals for each differing category of valve installed. Two (2) paper copies along with a single electronic copy shall be provided. The electronic copy shall be Adobe™ portable document format (i.e. pdf) version 5.0 or later. Files to have a resolution not less than 300 dpi, manufacture approved and

in the case of duplicated printed media, colouring as per of original document shall be maintained.

4.2 Spares: Supplier shall provide 2 spare overhaul kits for each type of valves identified above.

4.3 Warranty: Valves and Pneumatic actuators shall come with minimum of 6 months warranty.