



# **High Pressure Equipment Company**

## **Remarco Valve – Normally Closed**

### **Maintenance Instructions**



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## Remarco - Normally Closed Valve

### Description:

These diaphragm operated valves provide remote operation up to 100,000 psi by means of an air input supply ranging from 25 to 90 psi to the air actuator.

An electrical solenoid valve for the air supply is provided with all Remarco valves and is mounted directly to the valve. The standard solenoid is 120 volt, 60 cycle, 11 watts with 1/8" NPT air inlet. (Other voltages available at additional charge-consult factory). The solenoid is normally closed and when energized allows air into the diaphragm casing to activate the valve. In the event of an electrical or air line failure, the valve will return to its "normal" position.

The Remarco valve features removable stem seats. Valve bodies are 316 stainless steel. Valve stems are hardened 17-4PH stainless steel. Standard packing on the 30,000 psi and 60,000 psi Remarco valves is Teflon O-ring with Buna-N, Viton, or Silicone, available at no additional cost.

Valve Series	Maximum Operating Pressure	Lock Nut Torque Setting	Approximate Air Pressure to Unseat Valve	Approximate Air Pressure to Fully Open Valve	Orifice	Connections	Tubing Size	
							O.D.	I.D.
SD10R12LF9R	10,000 psi	20 ft. lb.	55 psi	90 psi	1/4"	LF9	3/16"	5/16"
SD20R12LF9R	20,000 psi	40 ft. lb.	70 psi	90 psi	1/4"	LF9	3/16"	5/16"
SD30R12HF4R	30,000 psi	20 ft. lb.	60 psi	75 psi	1/8"	HF4	1/4"	.083"
SD30R12HF6R	30,000 psi	20 ft. lb.	60 psi	75 psi	1/8"	HF6	3/8"	1/8"
SD30R12HF9R	30,000 psi	20 ft. lb.	60 psi	75 psi	1/8"	HF9	3/16"	3/16"
SD10R12HF9R	10,000 psi	20 ft. lb.	55 psi	90 psi	1/4"	HF9	3/16"	5/16"
SD60R12HF4R	60,000 psi	20 ft. lb.	50 psi	65 psi	1/16"	HF4	1/4"	1/16"
SD60R12HF6R	60,000 psi	20 ft. lb.	50 psi	65 psi	1/16"	HF6	3/8"	1/8"
SD60R12HF9R	60,000 psi	20 ft. lb.	50 psi	65 psi	1/16"	HF9	3/16"	3/16"
SD100R12XF4R	100,000 psi	30 ft. lb.	85 psi	100 psi	1/16"	XF4	1/4"	1/16"
SD100R12XF6R	100,000 psi	30 ft. lb.	85 psi	100 psi	1/16"	XF6	3/8"	1/16"

## Remarco - Normally Closed Valve Maintenance Instructions:

### Packing Gland Adjustment Instructions:

1. Relieve the system pressure. Remove the valve from the system and place it securely in a vice.
2. Remove the cap at the top of the operator and loosen the lock nut to relieve spring tension.
3. Tighten the packing gland to the appropriate torque for the valve. Suggested packing gland torque values are listed in the Technical Information Section of the High Pressure Equipment Company Catalog.
4. Retighten the lock nut at the top of the operator to the required torque. Suggested lock nut torque values are listed in the Technical Information Section of the High Pressure Equipment Company Catalog.

### Packing Replacement Instructions:

1. Relieve the system pressure. Remove the valve from the system and place it securely in a vice.
2. Remove the cap at the top of the operator and loosen the lock nut to relieve spring tension.
3. Remove the cap screws holding the operator mounting bracket to the body.
4. Unscrew the packing gland and remove the packing gland, stem, and top works assembly from the body. Note the packing and packing washer arrangement.
5. Replace the packing, and place the packing and packing washers into the valve body.
6. Replace the packing gland, stem, and top works assembly into the valve body.
7. Tighten the packing gland to the appropriate torque for the valve. Suggested packing gland torque values are listed in the Technical Information Section of the High Pressure Equipment Company Catalog.
8. Retighten the lock nut at the top of the operator to the required torque. Suggested lock nut torque values are listed in the Technical Information Section of the High Pressure Equipment Company Catalog.
9. Replace cap on the top of the operator.

### Stem Replacement Instructions:

1. Relieve the system pressure. Remove the valve from the system and place it securely in a vice.
2. Remove the cap at the top of the operator and loosen the lock nut to relieve spring tension.
3. Remove the cap screws holding the operator mounting bracket to the body.
4. Unscrew the packing gland and remove the body.
5. Loosen and remove the stem nut.
6. Remove the old stem and insert the new stem. Replace and tighten the stem nut.
7. Replace the packing as required, and place the packing and packing washers into the valve body.
8. Replace the packing gland, stem, and tops works assembly into the valve body.
9. Tighten the packing gland to the appropriate torque for the valve. Suggested packing gland torque values are listed in the Technical Information section of the High Pressure Equipment Company catalog.
10. Retighten the lock nut at the top of the operator to the required torque. Suggested lock nut torque values are listed in the Technical Information Section of the High Pressure Equipment Company Catalog.

### Diaphragm Replacement Instructions:

1. Relieve the system pressure. Remove the valve from the system and place it securely in a vice.
2. Remove the cap at the top of the operator and loosen the lock nut to relieve spring tension.
3. Loosen and remove the twelve 3/8-24 screws along the perimeter of the diaphragm housing.
4. Remove the upper diaphragm housing.
5. Loosen the six flat head screws and remove the pressure plate.
6. Replace the diaphragm.
7. Reassemble the pressure plat and the six flat head screws.
8. Reassembled the diaphragm housing using approximately 20ft-lb on the twelve 3/8-24 screws.
9. Retighten the lock nut at the top of the operator to the required torque. Suggested lock nut torque values are listed in the Technical Information Section of the High Pressure Equipment Company Catalog.