MOUNTING, OPERATION, TESTING & MAINTENANCE INSTRUCTIONS FOR ROTEX 2/2 REMOTE PULSEJT DIAPHRAGM OPERATED VALVE MODEL 26108

All details within this manual and the catalogue are subject to change without manner.

ROTEX will not be responsible for any damage whatsoever arising from the use of the Solenoid Valve, due to misuse or incorrect installation or misinterpretation of the information contained herein.

SPECIFICATIONS OF THE SOLENOID VALVE

TYPE	:	2 Ports, 2 Positions
OPERATION	:	REMOTE PULSE JET DIAPHRAGM OPERATED VALVE
ORIFICE = NW	:	28 mm
PORT CONNECTION	:	3/4" and 1"
OPERATING PRESSURE	:	0.5-8.5 bar
SEALS & SEAT	:	The valve is provided with Hytrel, NBR, EPDM, or Viton Seals & Seat materials.

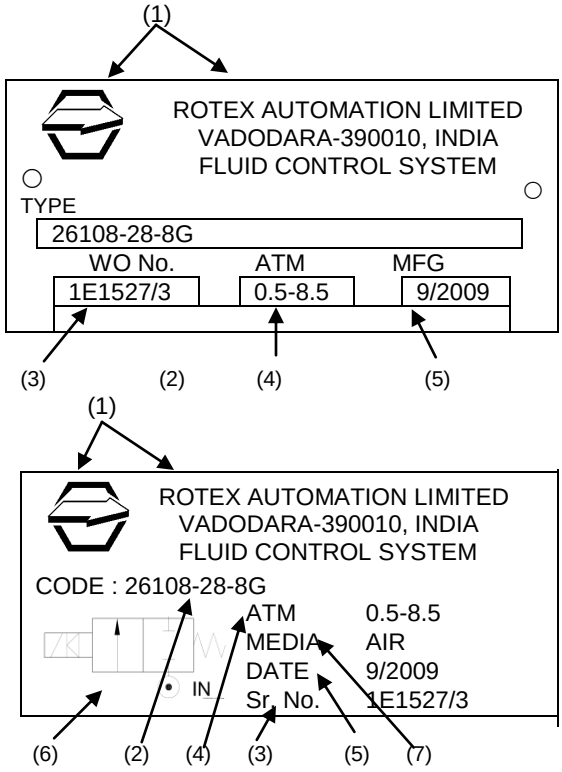
CONSTRUCTION

Body, Cover	Aluminium	(※)	SS(CF8M)	B5
Internal	-		-	
Diaphragm, Seals	Hytrel+NBR (※)	Hytrel+EPDM (S1)	Viton+Viton (S2)	

IDENTIFICATION ON THE SOLENOID VALVE

a) VALVE LABEL

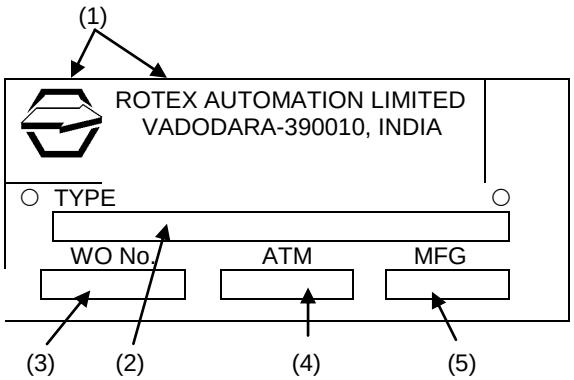
Label on the **ROTEX** Solenoid Valve shows the following details:



(1) Logo + Name & address of the Manufacturer

(2) Valve Type / Code
- 26108 = Valve Model
- Suffix = Nil
- 28 = Orifice ∅
- 8G = Port Connection (BSP)

(3) Work Order reference / Sr. No. of the Valve
(4) Operating Pressure
(5) Month & Year of manufacture
(6) Valve Symbol
(7) Media



c) **PORT IDENTIFICATION**

A solenoid Valve with NPT (F) threading is normally marked **"N"** near the port and with Metric threads are marked **"M"**. For ports with BSP threads, there is no marking.

⚠ **NOTE : The product without label is out of warranty and risk.**

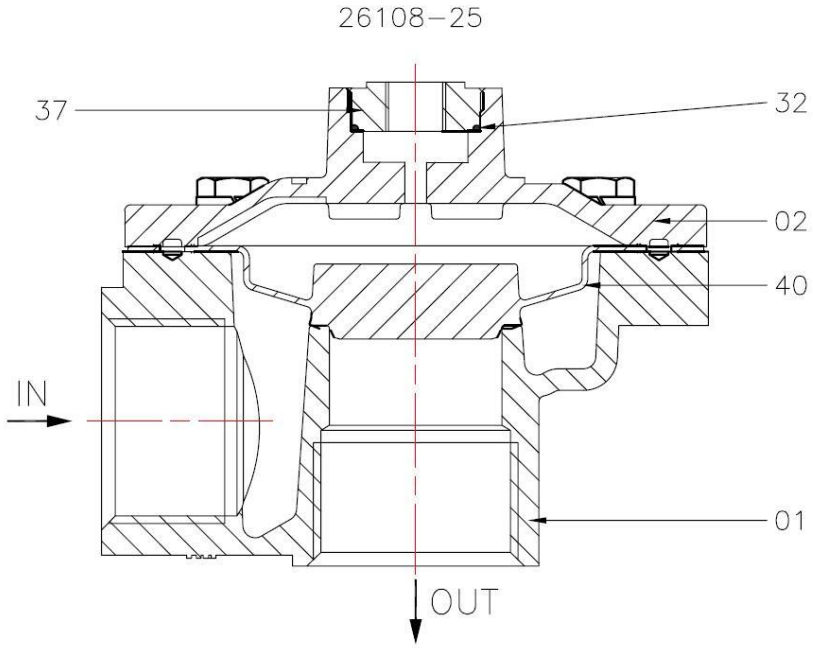
CONNECTION

VALVE TYPE	FUNCTION	IN	OUT
26108	NC	IN	OUT

(A) **OPERATING PRINCIPLE**

26108: When de-energized, pressurized media will pass through pilot hole provided in the diaphragm. This pressurized media blocked at the remote pilot port, cause media to keep diaphragm in the seated position.

When air from remote port is vented the pressure above diaphragm is vented. When air is blocked at remote port, the diaphragm seats back.



QTY.	DESCRIPTION	SR.No.	POS.No.	MATERIAL	REMARK
01	NUT	05	37	SS	
01	DIAPHRAGM	04	40	HYTREL	
01	GUIDE 'O' RING	03	32	NBR	
01	AIR DECKEL	02	02	LM6	
01	GEHAUSE	01	01	LM6	

(B) **MOUNTING/INSTALLATION PROCEDURE** :

1. ENSURE THAT:
   - a) While storing, keep the valve in cool, dry, dust free area.
   - b) On receipt of the valve, in case if the same is to be removed from the sealed plastic bag for inspection/testing, put them back with dust plugs on its ports and sealing the plastic bag as soon as the inspection/testing is over.
   - c) The valve should be removed from its card board and/or plastic bag just before the installation.
   - d) Flush lines before installing the valve.
   - e) To avoid pressure drop and to achieve optimum parameters, Pipe / Tube / Fitting from the source of pressure to the valve and to the connected equipment should have ID which is ≥ NW (Orifice) of the valve.
   - f) To avoid pressure drop, if more than one valve is being operated simultaneously from a common header, then minimum ID of the header can be calculated as under.
     ID Header = $\sqrt{(NW^2 \times n)}$
     n = Number of Valves operating at a time and which are connected to a common header,
     NW = Orifice of the Valve.
   - g) Incorporate filter in the line to avoid hard particles entering into the valve.
   - h) The valve should be installed for the media for which it is intended for. This is to avoid the malfunction of seals and the valve. In case if you intend to use valve for media other than the one specified on that valve, check compatibility of media to Body Seal material and grease. Consult **ROTEX** in case if any doubt.
   - i) Do not try to drill any additional holes or machine, modify any of the valve components.
   - j) In case if the valve is used for dangerous fluid gas/liquid then, the user is hereby advised to maintain during operation and maintenance of the valve below LEL or above UEL to avoid explosion due to internal spark as the valves have not been assessed for the same.
   - k) Inlet pressure does not exceed rated pressure.
   - l) Hemp-Filaments, 'Jute' or even Teflon-Ribbons are normally not required, as the port connections of ROTEX Valve is accurately machined.
   - m) To avoid over lap of the Teflon ribbon or cuts generated while tightening, getting carried away into the valve. Do not cover first two thread pitches with Teflon tape or sealant.
2. Provide Dust Cap on the exhaust port or ensure that the valve is mounted such a way that dust particles / rain water / process fluid do not enter into the valve through exhaust port of the valve. You can connect bend pipe of ID ≥ NW of the valve so that the exhaust port is not directly (straight) open into the atmosphere.
3. The process fluid etc. : do not fall on the valve body.
4. In case if the surrounding atmosphere has traces or some other substance other than Air, check its compatibility with the Body material of the valve, Solenoid enclosure & other exposed parts.
5. It is not likely however the user is advised to protect the valve against lightening as the same is not assessed.
6. Check internal components (wetted) parts for its compatibility with fluid passing through the valve.
7. **It is recommended to replace all the Rubber Parts including Plunger Assembly (Repair Kit – Code 99) in case if the valve is to be installed and put in service after 2 years from the date of manufacture.**

TESTING OF THE VALVE AT THE TEST BENCH

Check at least once in 3 years or follow your routine maintenance schedule.

- a) Apply rated pressure at inlet port of the valve block remote pilot port. Check for leakage at outlet .
- b) Energize the valve by venting remote pilote. Check Valve operation. Then block the remote pilot and check for leakage at outlet.
- c) Plug outlet port.
- d) Check operation of the valve and leakage at the joints and pilot vent at the rated and minimum working pressure.

RECOMMENDED SPARES

- a) Diaphragms (Part No. 40).

SPARE ORDERING CODE

TYPE	SUFFIX	(a)	(b)	(c)	(d)	(e)	SPARE CODE
		ORIFICE	PORT CONNECTION	BODY & INTERNAL	MANUAL OVERRIDE	SEAL	
VALVE TYPE							

Spare Part Description	
Plunger Assembly	30
Seal Kit	98
Repair Kit	99

RECOMMENDED MAINTENANCE			**PREVENTIVE**
• Replacement of Complete Set of O Ring - Guide O Ring (Part 32), Diaphragm (Part 40)	…	…	Once in 5 years or 2 million operations.

MAINTENANCE – GENERAL INSTRUCTION

- The Valve must be removed from the site and has to be maintained under safe conditions.
- All air connections must be switched off before removing valve from the line.
- It is recommended to replace complete set of O Ring even if one of the O Ring is damaged. This is to ensure trouble free operation of the valve and will avoid its premature failure.
- Using Grease other than Silicon base Molykote 33M will lead to premature failure of O Rings of the **ROTEX** Solenoid valve.
- If necessary to clean the components, **do not use Kerosene, Diesel, Petrol to clean valve as this damages the O Rings and other rubber material. Instead use light Detergent Soap Solution.**
- Ensure that the components are free from dust, dirt, lint and metal burrs.
- Twisting of O Ring should be avoided. Ensure that the twist is removed before fitting matching part.
- While closing the matching part, the matching part should be pushed in a straight line. Turning motion should be avoided.
- Pinching of O Ring at the groove corner at the time of closing gland should be avoided.
- User is requested to use safe practice for maintenance.
- It is important to place the dismantled Valve Parts on a clean paper or cloth in same sequence in which you have dismantled them.
- Ensure to keep all the components of the valve separately to avoid their mixing up. The component appears to be same may have small differences which will cause malfunction if interchanged.
- In case of difficulty you should contact the Agent, Distributor or **ROTEX** directly.
- Using **ROTEX** genuine spares will **Guarantee** you trouble free operation and will avoid premature failure.

(C) **REPLACEMENT OF O RINGS**

1) Remove Deckel (Cover) (Part 2) by opening four screws.
2) Remove Valve Spring (Part 16).
3) Clean components, Guide O Ring (Part 32) and Diaphragm (Part 40)
4) Fix new O Rings applying light layer of Molykot 33M grease.
5) Ensure that the O Rings and other rubber parts are compatible to the media passing through the valve.
6) Reassemble the valve.
7) Check operation and leakage of the valve.
8) Contact ROTEX in case of any difficulty.

STORING,CLEANING AND MOUNTING OF ELASTOMERS : SYNTHETIC RUBBER PRODUCTS

- Store O Ring Set in sealed polyethylene bag, kept in cool, dry, dust free area and avoid direct contact with all light sources emitting ultra violet rays, or contact with fumes, solvents, fuels, lubricants, chemicals, acids, disinfectants.
- Follow Maintenance General Instruction & specific procedures to replace O Ring set as listed above.

Contact :

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