Pietro Fiorentini

Dival 600

Medium-low pressure gas regulator

QUICK START GUIDE

ENG Safety, installation and commissioning procedures.
More information and languages on page 8.

ITA Procedure di sicurezza, installazione, messa in servizio.
Ulteriori informazioni e lingue a pagina 8.

FRA Procédures de sécurité, d'installation et de mise en service.
Plus d'informations et de langues à la page 8.

DEU Sicherheits, Installations und Inbetriebnahmeverfahren.
Weitere Informationen und Sprachen auf Seite 8.

ESP Procedimientos de seguridad, instalación y puesta en servicio.
Más información e idiomas en la página 8.

RUS Процедуры безопасности, монтажа и ввода в эксплуатацию.
Дополнительная информация и языки на странице 8.

CHN 安全程序、安装和调试。
更多信息和语言，请参见第8页。

SYMBOLS USED AND PERSONAL PROTECTIVE EQUIPMENT

 Obligation to use safety or insulated gloves.	 Obligation to use safety shoes.	 Obligation to wear protective clothing.	 Obligation to use a protective helmet.	 Obligation to consult the quick start guide.
 Obligation to use safety goggles.	 Obligation to use noise protection equipment.	 Obligation to use a protective mask.	 Obligation to wear high visibility vests.	 Symbol used to identify information of particular importance.

SAFETY REQUIREMENTS

The quick start guide does not substitute the use, maintenance and warning manual. It is mandatory to consult the manual on Pietro Fiorentini website www.fiorentini.com

⚠ WARNING!

Failure to follow these instructions or to properly install and maintain the equipment may result in fire, explosion, property damage, serious injury, or death.
The equipment must be installed, operated, and maintained in compliance with all applicable local codes, regulations, and the instructions of the equipment's manual. If gas leakage or venting occurs, the equipment may require servicing. Failure to address this issue may create hazardous conditions. Contact a qualified gas service professional immediately.

⚠ WARNING!

Personal injury or equipment damage due to the bursting of pressure-containing components may occur if the equipment is overpressured or installed in conditions exceeding its specified limits.
Always refer to the manual and the nameplate for the equipment's operating limits. Additionally, ensure that adjacent piping and connections do not exceed their rated capacities. To prevent such risks, install appropriate pressure-relief or pressure-limiting devices to keep operating conditions within safe limits. Ensure compliance with all applicable local codes and regulations.

⚠ WARNING!

- **Before proceeding with installation, make sure that the upstream and downstream valves installed on the line are shut off.**
- **To safely use the equipment, please observe the data on the attached nameplate.**
- **The installation of the equipment must be carried out by authorised, trained personnel who are familiar with the PPE to be used.**
- **For any further detail or information regarding the procedures, please refer to the use, maintenance and warning manual.**

AFTER THE COMMISSIONING

WARNING!

- **Check the sealing of upstream and downstream shut-off valve with a foaming substance.**
- **Check the pressure referring to the pressure gauge located upstream and downstream.**
- **Should any mulfunction occur, please refer to the chapter 'Troubleshooting' of the manual to solve the issue, or contact Pietro Fiorentini.**

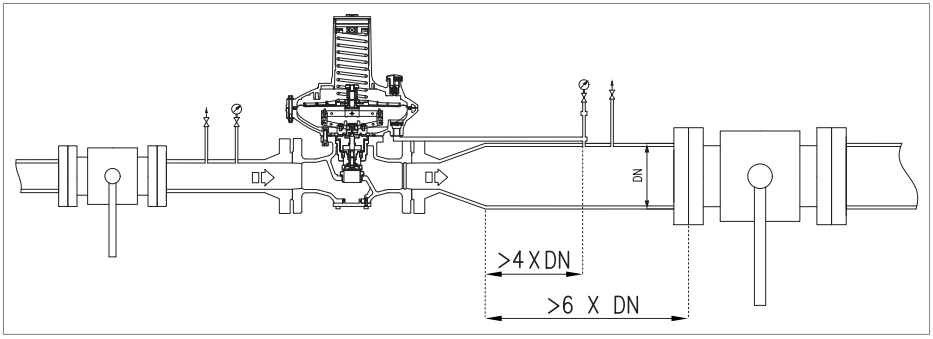
INSTALLATION PROCEDURE FOR REGULATOR

1. Place the equipment in the section of the line.
2. Place the gaskets between the line flanges and the regulator flanges.
3. Insert the bolts into the appropriate holes of the connecting flanges.
4. Screw the bolts following the rules for tightening flanges.

CONNECTING THE SENSING LINES TO THE DOWNSTREAM PIPELINE

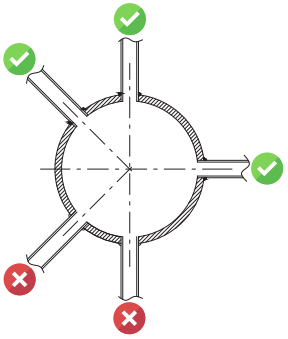
To obtain a good regulation it is essential that:

- the downstream shut-off valve is placed at least 6 times the nominal diameter of the tube downstream of the regulator;
- if there are external downstream sensing lines, check that they are placed on a straight section of pipe (of uniform diameter) with a length equal to at least 4 times the nominal diameter of the pipe itself.



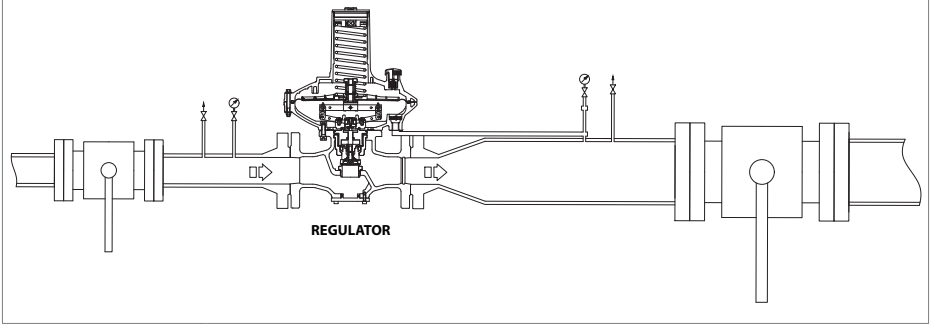
To avoid the collection of impurities and condensation in the pneumatic connections of the sensing lines it is necessary that:

- the connections of the pneumatic connection are always welded to the top or horizontal axis of the pipe itself;
- the hole on the pipe has no burrs or internal protrusions;
- the slope of the pneumatic connection is always 5-10% towards the connection of the downstream pipe.



COMMISSIONING PROCEDURE FOR REGULATOR

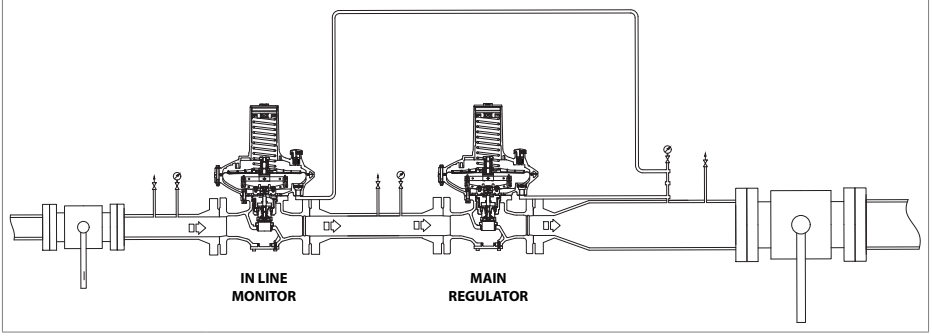
PPE required:



1. Partially open the bleed cock.
2. Partially open the upstream shut-off valve, checking that the downstream pressure (Pd) indicated on the downstream pressure gauge does not exceed the required calibration value by over 50%.
3. When the regulator is put into service, the downstream pressure (Pd) indicated on the downstream pressure gauge will be equal to the calibration value of the regulator.
4. If the pressure downstream (Pd) is not at the required calibration value, proceed as follows:
   - downstream pressure value (Pd) lower than required calibration value: load the setting spring by turning the adjustment ring nut clockwise;
   - downstream pressure value (Pd) higher than required calibration value: unload the setting spring by turning the adjustment ring nut anti-clockwise.
5. Check the downstream pressure (Pd) referring to the downstream pressure gauge.
6. Close the bleed cock.
7. Check that the downstream pressure (Pd), after an increment phase, does not exceed the closing pressure value.
8. Check the tightness of all the fittings between the shut-off valves.
9. Open downstream shut-off valve very slowly until the pipeline fills completely.

COMMISSIONING PROCEDURE OF DIVAL 600 REGULATOR + DIVAL 600 REGULATOR IN-LINE MONITOR FUNCTION

PPE required:



1. Partially open the bleed cock.
2. Partially open the upstream shut-off valve, checking that the downstream pressure (Pd) indicated on the downstream pressure gauge does not exceed the required calibration value by over 50%.
3. When the main regulator is put into service, the downstream pressure (Pd) indicated on the downstream pressure gauge will be equal to the calibration value of the main regulator.
4. Check that the regulator with in-line monitor function is fully open (100%).

The regulator with monitor function is fully open, when the pressure indicated on the intermediate pressure gauge is the same as the upstream pressure gauge.

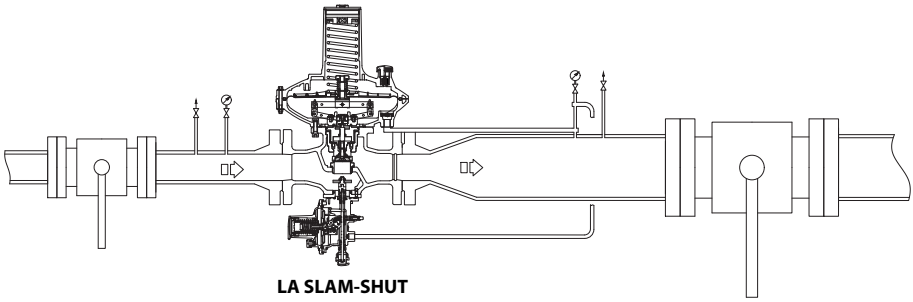
5. Open the upstream shut-off valve completely.
6. Increase the downstream pressure value (Pd) beyond the calibration pressure of the regulator with monitor function, by turning the adjustment ring nut of the main regulator clockwise.
7. Check that the regulator with in-line monitor function is running, checking that the pressure indicated on the intermediate pressure gauge is comparable to the calibration value of the regulator with in-line monitor function.
8. If the downstream pressure (Pd) is not at the required calibration value for the regulator with in-line monitor function, proceed as follows:
   - downstream pressure value (Pd) lower than required calibration value: load the setting spring by turning the adjustment ring nut clockwise;
   - downstream pressure value (Pd) higher than required calibration value: unload the setting spring by turning the adjustment ring nut anti-clockwise.
9. Slowly close the bleed cock.
10. Check that the downstream pressure, after an increment phase, does not exceed the closing pressure value of the regulator with in-line monitor function.
11. Partially open the bleed cock.
12. Discharge the regulation spring of the main regulator.
13. Check that the regulator with in-line monitor function (2) is fully open (100%).

The regulator with in-line monitor function is fully open, when the pressure indicated on the intermediate pressure gauge is the same as the upstream pressure gauge.

14. Check that the calibration pressure of the main regulator is as pre-established by referring to the pressure value indicated on the downstream pressure gauge.
15. If the pressure downstream (Pd) is not at the required calibration value, proceed as follows:
    - downstream pressure value (Pd) lower than required calibration value: load the setting spring by turning the adjustment ring nut clockwise;
    - downstream pressure value (Pd) higher than required calibration value: unload the setting spring by turning the adjustment ring nut anti-clockwise.
16. Slowly close the bleed cock.
17. Check that the downstream pressure, after an increment phase, does not exceed the closing pressure value of the main regulator.
18. Using a foaming agent, check all the joints between shut-off valves for proper sealing.
19. Slowly open the downstream shut-off valve until the piping has been completely filled.

COMMISSIONING PROCEDURE OF THE DIVAL 600 REGULATOR + SLAM-SHUT VALVE LA

PPE required:



LA SLAM-SHUT

1. Make sure that the bleed cock is partially open.
2. Check that the LA slam-shut valve is in the shut-off position.
3. Partially open the upstream shut-off valve, checking the pressure indicated by the upstream pressure gauge.
4. Perform the internal tightness check of the LA slam-shut valve.
5. Slowly pressurise the control line by turning the knob on the LA slam-shut valve, checking that the downstream pressure (Pd) indicated on the downstream pressure gauge does not exceed the required calibration value by over 50%.
6. When the regulator is put into service, the pressure on the downstream pressure gauge will be equal to the calibration value of the main regulator.
7. Open the upstream shut-off valve completely.
8. Check calibrations of the pressure switch of the LA slam-shut valve (refer to section “Calibration procedure for LA slam-shut valve”).
9. If the pressure downstream (Pd) is not at the required calibration value, proceed as follows:
    - downstream pressure value (Pd) lower than required calibration value: load the setting spring by turning the adjustment ring nut clockwise;
    - downstream pressure value (Pd) higher than required calibration value: unload the setting spring by turning the adjustment ring nut anti-clockwise.
10. Check the downstream pressure (Pd) referring to the downstream pressure gauge.
11. Close the bleed cock.

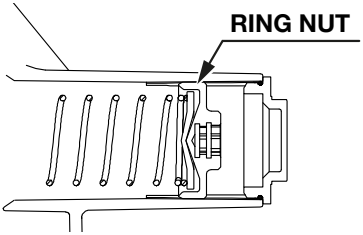
12. Check that the downstream pressure (Pd), after an increment phase, does not exceed the closing pressure value.
13. Check the tightness of all the fittings between the shut-off valves.
14. Open downstream shut-off valve very slowly until the pipeline fills completely.

CALIBRATION PROCEDURE FOR REGULATOR

PPE required:

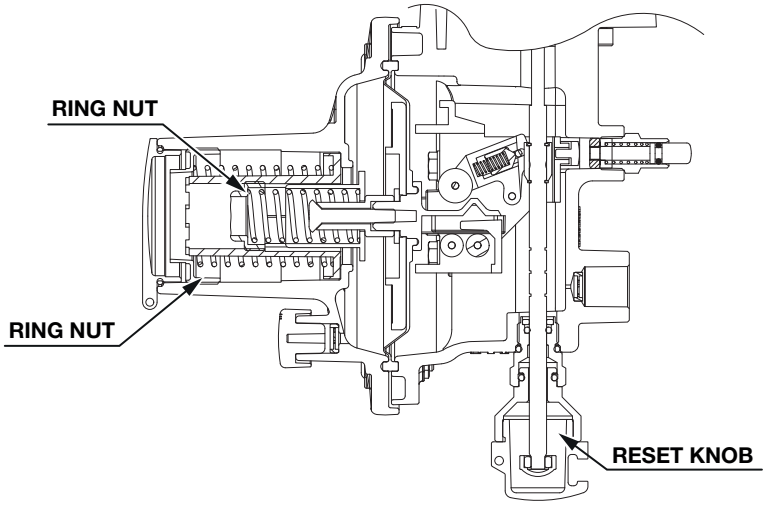
Adjust the adjustment ring nut:

- anti-clockwise to decrease the adjusted pressure;
- clockwise to increase the adjusted pressure.



CALIBRATION PROCEDURE FOR LA SLAM-SHUT VALVE (LA-BP, LA-MP, LA-TR)

PPE required:



Adjust the maximum pressure ring nut:

- anti-clockwise to decrease the slam-shut device tripping pressure.
- clockwise to increase the slam-shut device tripping pressure.

Turn the minimum pressure ring nut:

- anti-clockwise to decrease the slam-shut device tripping pressure.
- clockwise to increase the slam-shut device tripping pressure.

In order to reset the slam-shut valve, move the reset knob that engages the control device of the mobile system.Open downstream shut-off valve very slowly until the pipeline fills completely.

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PFScan app

ENG Full access to all documentation, spring calibration tables, spare parts and complete manual. **INSTRUCTIONS**: 1. Scan the QR code to download the app 2. Open the app 3. Log in or register 4. Use the app to scan the QR code on the product

ITA Accesso completo a tutta la documentazione. Tabelle di calibrazione delle molle, parti di ricambio e manuale completo. **ISTRUZIONI**: 1. Scansiona il codice QR per scaricare l'app 2. Apri l'app 3. Accedi o registrati 4. Usa l'app per scansionare il codice QR sul prodotto.

FRA Accès complet à toute la documentation, aux tableaux d'étalonnage des ressorts, aux pièces de rechange et à la notice complète. **INSTRUCTIONS** : 1. Scanner le code QR pour télécharger l'application 2. Ouvrir l'application 3. Se connecter ou s'inscrire 4. Utiliser l'application pour scanner le code QR sur le produit.

DEU Vollständiger Zugriff auf alle Unterlagen, Federkalibrierungstabellen, Ersatzteile und das komplette Handbuch. **ANWEISUNGEN** 1. Scannen Sie den QR-Code, um die App 2 herunterzuladen. Öffnen Sie die App 3. Anmelden oder registrieren 4. Verwenden Sie die App, um den QR-Code auf dem Produkt zu scannen.

ESP Acceso completo a toda la documentación, tablas de calibración de muelles, piezas de repuesto y manual completo. **INSTRUCCIONES**: 1. Escanee el código QR para descargar la aplicación 2. Abra la aplicación 3. Acceda a la sesión o regístrese 4. Utilice la aplicación para escanear el código QR del producto.

RUS Полный доступ ко всей документации, таблицам калибровки пружин, запасным частям и полному руководству. **ИНСТРУКЦИИ**: 1. Отсканируйте QR-код, чтобы скачать приложение 2. Откройте приложение 3. Войдите или зарегистрируйтесь 4. Используйте приложение для сканирования QR-кода на товаре.

CHN 可全面访问所有文档、弹簧校准表、备件和完整手册。**说明**：1.扫描二维码下载应用程序 2.打开应用程序 3.登录或注册 4.使用应用程序扫描产品上的二维码。

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