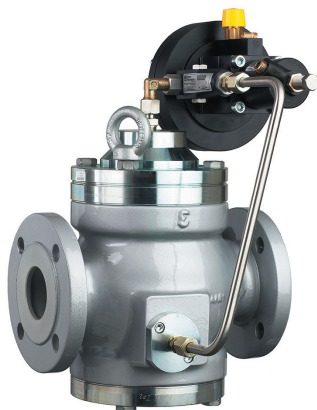


Aperval

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



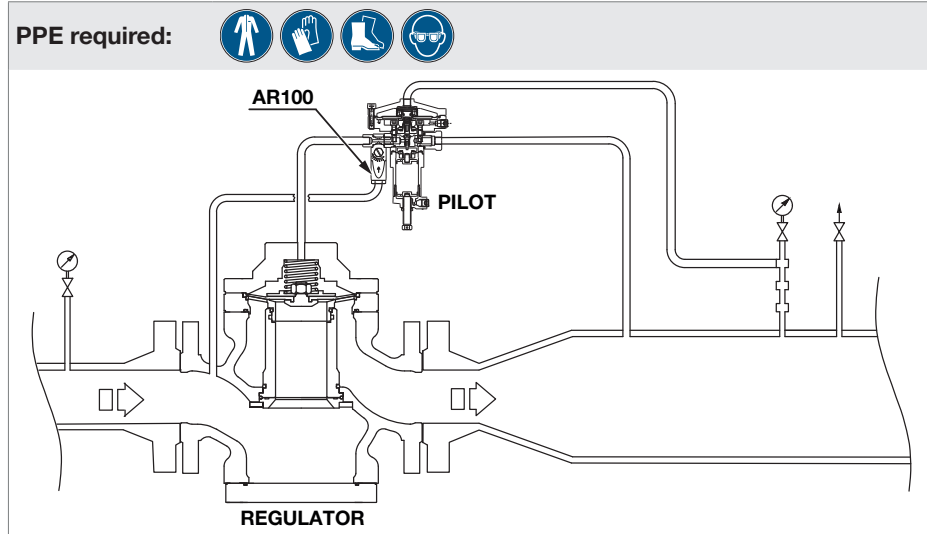
WARNING!

- 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 malfunction 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 flange and the regulator flange.
3. Insert the bolts into the appropriate holes of the connecting flanges.
4. Screw the bolts following the rules for tightening flanges.

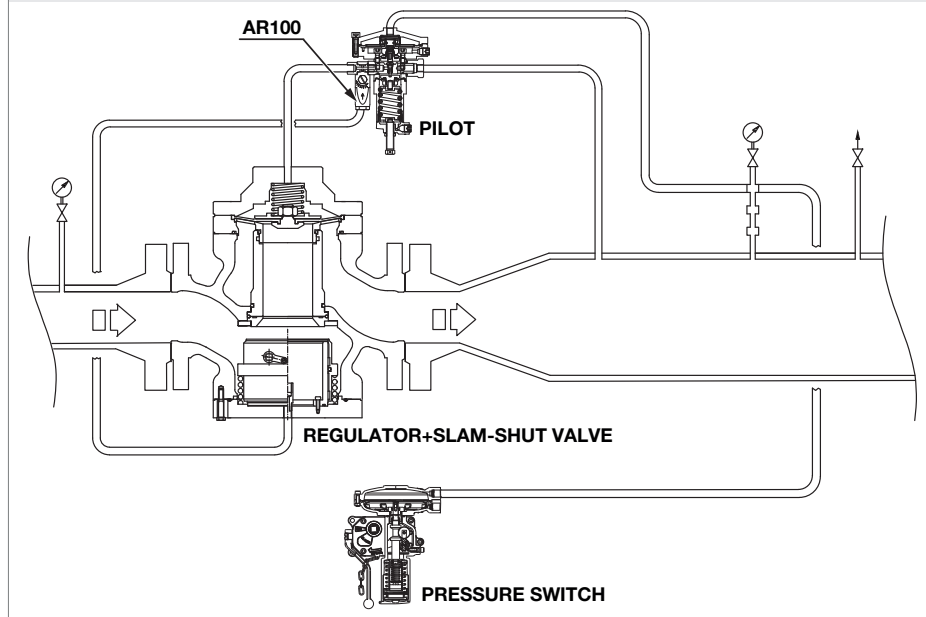
COMMISSIONING PROCEDURE FOR REGULATOR



1. Partially open the downstream bleed cock.
2. Completely unscrew the fixing nut and adjusting pilot screw to relieve the spring.
3. Check that the value of the AR100 lamination valve is between 3 and 5.
4. Open the inlet shut-off valve very slowly.
5. Turn the pilot adjustment screw clockwise to load the calibration spring to the requested regulator value.
6. Close the downstream bleed cock.
7. Check that the downstream pressure, after an increase phase, does not exceed the shut-off pressure value.
8. Open the downstream shut-off valve very slowly until the piping has been filled completely.
9. Tighten the adjusting screw and fixing nut of the pilot.

COMMISSIONING PROCEDURE FOR REGULATOR WITH SLAM-SHUT VALVE

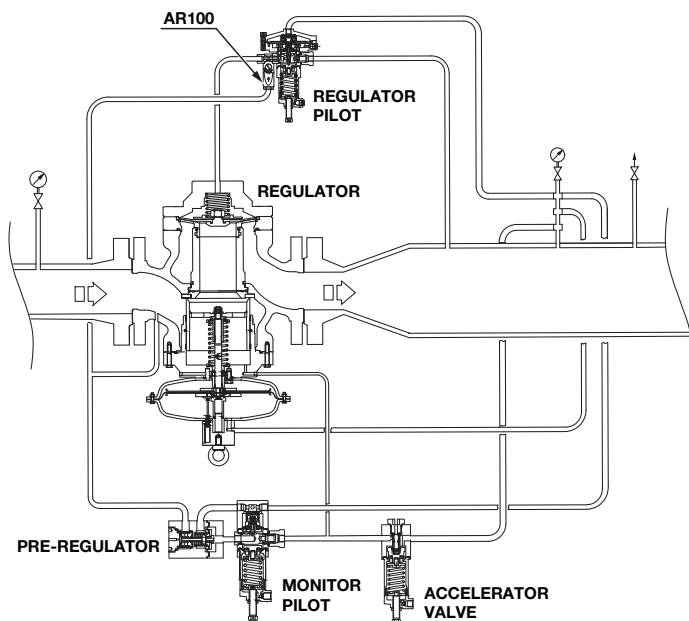
PPE required:



1. Make sure that the downstream bleed cock is partially open.
2. Check that the slam-shut valve is in the closed position.
3. Partially open the upstream shut-off valve, checking the pressure indicated by the upstream pressure gauge.
4. Slowly pressurise the regulating line, acting on the reset lever of the slam-shut valve checking that the downstream pressure indicated by the downstream pressure gauge does not exceed the required setting value by more than 50%.
5. 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.
6. Open the upstream shut-off valve completely.
7. If the pressure downstream is not at the required calibration value, proceed as follows:
 - value of the downstream pressure is lower than the required calibration value: load the pilot calibration spring by turning the adjustment screw clockwise.
 - value of the downstream pressure is higher than the required calibration value: unload the pilot calibration spring by turning the adjustment screw clockwise.
8. Check the downstream pressure referring to the downstream pressure gauge.
9. Close the downstream bleed cock.
10. Check that the downstream pressure, after an increment phase, does not exceed the closing pressure.
11. If external leaks are noticed, eliminate the leak points and repeat the procedure from step 6.
12. Open downstream shut-off valve very slowly until the pipeline fills completely.

COMMISSIONING PROCEDURE FOR REGULATOR WITH INCORPORATED MONITOR AND ACCELERATOR VALVE

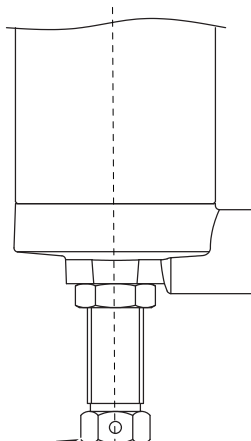
PPE required:



1. Partially open the downstream bleed cock.
2. Completely unscrew the fixing nut of the adjusting screw of the pilots and the accelerator valve.
3. Completely compress the regulator pilot spring by turning the adjusting screw clockwise.
4. Completely relieve the monitor pilot spring by turning the adjusting screw anti-clockwise.
5. Fully compress the accelerator valve spring by turning the adjusting screw clockwise.
6. Open the inlet shut-off valve very slowly.
7. Slowly increase the downstream pressure by turning the adjusting screw of the monitor pilot clockwise until the value of the accelerator valve's starting pressure is reached.
8. Turn the adjusting screw of the accelerator valve anti-clockwise to decrease the calibration of the cut-in pressure value until gas is released from the gas outlet.
9. Turn the adjusting screw on the monitor pilot anti-clockwise to decrease the downstream pressure value to the selected monitor operating value.
10. Turn the adjusting screw on the regulator pilot anti-clockwise to relieve the calibration spring until the regulator trips.
11. Make sure that the monitor is fully open by checking the position of the stroke indicator rod.
12. Check that the calibration pressure is at the set value (refer to the downstream pressure gauge).
13. Slowly close the downstream bleed cock.
14. Check that the downstream pressure, after an increase phase, does not exceed the closing pressure value.
15. Slowly open the downstream shut-off valve until the piping has been completely filled.
16. Tighten the adjusting screws and the fixing nuts of the pilots and the accelerator valve.

CALIBRATION PROCEDURE FOR PILOT AND M/A ACCELERATING VALVE

PPE required:



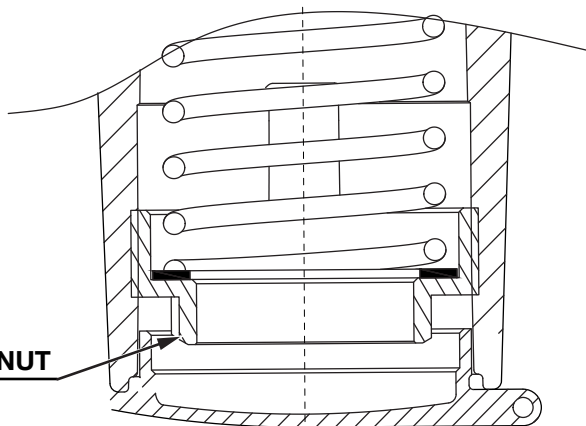
ADJUSTING SCREW

Turn the adjusting screw:

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

CALIBRATION PROCEDURE FOR V25 ACCELERATING VALVE

PPE required:



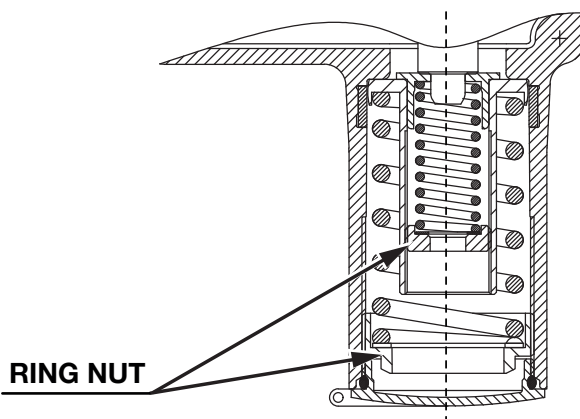
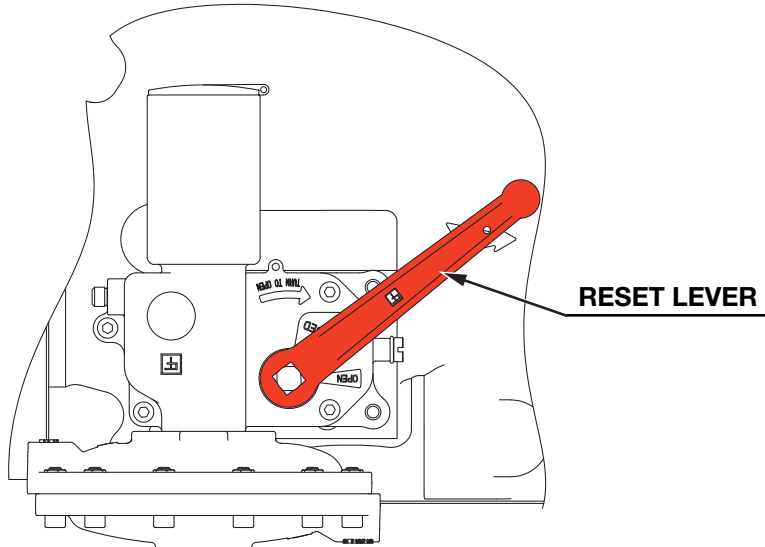
RING NUT

Adjust the adjustment ring nut:

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

CALIBRATION PROCEDURE FOR PRESSURE SWITCH

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 lever 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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