



## Magnetventil VG

### Betriebsanleitung

- Bitte lesen und aufbewahren

### Zeichenerklärung

- , 1, 2, 3... = Tätigkeit
- = Hinweis

Alle in dieser Betriebsanleitung aufgeführten Tätigkeiten dürfen nur von autorisiertem Fachpersonal ausgeführt werden!

**WANRUNG!** Unsachgemäßer Einbau, Einstellung, Veränderung, Bedienung oder Wartung kann Verletzungen oder Sachschäden verursachen.

Anleitung vor dem Gebrauch lesen. Dieses Gerät muss nach den gelgenden Vorschriften installiert werden.

### Konformitätsbescheinigung

Wir erklären als Hersteller, dass die Produkte VG, gekennzeichnet mit der Produkt-ID-Nr. CE-0063BL1553, die grundlegenden Anforderungen folgender Richtlinien erfüllen:

- 90/396/EWG in Verbindung mit EN 161,
- 98/37/EG,
- 73/23/EWG in Verbindung mit den einschlägigen Normen,
- 89/336/EWG in Verbindung mit EN 55014.

Die entsprechend bezeichneten Produkte stimmen überein mit dem bei der zugelassenen Stelle 0063 geprüften Baumuster.

Eine umfassende Qualitätssicherung ist gewährleistet durch ein zertifiziertes Qualitätsmanagementsystem nach DIN EN ISO 9001 gemäß Anhang II Absatz 3 der Richtlinie 90/396/EWG.

G. Kromschröder AG, Osnabrück

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(D) (S) (N) (P) (GR)  
 → www.kromschroeder.de



## Solenoid valve VG

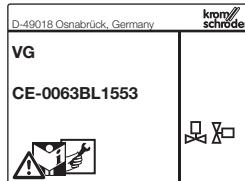
### Operating instructions

- Please read and keep in a safe place

### Explanation of symbols

- , 1, 2, 3... = Action
- = Instruction

All the work set out in these operating instructions may only be completed by authorised trained personnel!



## Electrovanne VG

### Instructions de service

- A lire attentivement et à conserver

### Légendes

- , 1, 2, 3... = action
- = remarque

Toutes les actions mentionnées dans les présentes instructions de service doivent être exécutées par des spécialistes formés et autorisés uniquement !

**ATTENTION !** Un montage, un réglage, une modification, une utilisation ou un entretien inadaptés risquent d'engendrer des dommages matériels ou corporels.

Read the instructions before use. This unit must be installed in accordance with the regulations in force.

### Attestation de conformité

We, the manufacturer, hereby declare that the products VG, marked with product ID No. CE-0063BL1553, comply with the essential requirements of the following Directives:

- 90/396/EEC in conjunction with EN 161,
- 98/37/CE,
- 73/23/EEC in conjunction with the relevant standards,
- 89/336/EEC in conjunction with EN 55014.

The relevant products correspond to the type tested by the notified body 0063.

Comprehensive quality assurance is guaranteed by a certified Quality System pursuant to DIN EN ISO 9001 according to annex II, paragraph 3 of Directive 90/396/EEC.

G. Kromschröder AG, Osnabrück

### Certificaat van overeenstemming

En tant que fabricant, nous déclarons que les produits VG, identifiés par le numéro de produit CE-0063BL1553, répondent aux exigences essentielles des directives suivantes :

- 90/396/CEE en association avec la EN 161,
- 98/37/CE,
- 73/23/CEE en association avec les normes pertinentes,
- 89/336/CEE en association avec la EN 55014.

Les produits désignés en conséquence sont conformes au type éprouvé à l'organisme notifié 0063.

Une assurance de la qualité complète est garantie par un système qualité certifié selon DIN EN ISO 9001, conformément à l'annexe II, paragraphe 3, de la directive 90/396/CEE.

G. Kromschröder AG, Osnabrück

### VG

Solenoid valve for gas for safeguarding, regulating and controlling air or gas on various appliances.

### VG

Electrovanne pour gaz assurant la sécurité, la régulation et la commande de l'air ou du gaz sur les équipements consommant de l'air ou du gaz.



## Magneetklep VG

### Bedieningsvoorschrift

- Lezen en goed bewaren a.u.b.

### Legenda

- , 1, 2, 3... = werkzaamheden
- = aanwijzing

Alle in deze bedrijfshandleiding vermelde werkzaamheden mogen alleen door technici worden uitgevoerd!

Tutte le operazioni indicate nelle presenti istruzioni d'uso devono essere eseguite soltanto dal preposto esperto autorizzato.

**WAARSCHUWING!** Ondeskundige inbouw, instelling, wijziging, bediening of onderhoudswerkzaamheden kunnen persoonlijk letsel of materiële schade veroorzaken. Aanwijzingen voor het gebruik lezen. Dit apparaat moet overeenkomstig de geldende regels worden geïnstalleerd.

### ATTENZIONE! Se montaggio, regolazione, modifica, utilizzo o manutenzione non vengono eseguiti correttamente, possono verificarsi infortuni o danni.

Si prega di leggere le istruzioni prima di utilizzare il prodotto che dovrà venire installato in base alle normative vigenti.

### Dichiarazione di conformità

Dichiariamo in qualità di costruttori che i prodotti VG, contrassegnati con il numero di identificazione CE-0063BL1553, rispondono ai requisiti essenziali posti dalle seguenti direttive:

- 90/396/CEE in unione con EN 161,
- 98/37/CE,
- 73/23/CEE in unione con le norme pertinenti,
- 89/336/CEE in unione con EN 55014.

De overeenkomstig geïdentificeerde producten komen overeen met het door de aangewezen instantie 0063 gecontroleerde type.

Een uitgebreide kwaliteitsborging wordt gegarandeerd door een gecertificeerd kwaliteitsborgingssysteem conform DIN EN ISO 9001 overeenkomstig bijlage II, lid 3 van de richtlijn 90/396/EEG.

G. Kromschröder AG, Osnabrück



## Valvola elettromagnetica VG

### Istruzioni d'uso

- Si prega di leggere e conservare

### Spiegazione dei simboli

- , 1, 2, 3... = Operazione
- = Avvertenza

Todas las actividades indicadas en estas instrucciones de utilización, sólo deben realizarse por una persona formada y autorizada!

**ADVERTENCIA!** La instalación, ajuste, modificación, manejo o mantenimiento incorrecto puede ocasionar daños personales o materiales.

Leer las instrucciones antes de usar. Este dispositivo debe ser instalado observando las normativas en vigor.

### Certificado de conformidad

Nosotros, el fabricante, declaramos que los productos VG, marcados con el nº de identificación de producto CE-0063BL1553, cumplen con los requisitos básicos de las siguientes Directivas:

- 90/396/CEE en relación con EN 161,
- 98/37/CE,
- 73/23/CEE en relación con las normas pertinentes,
- 89/336/CEE en relación con EN 55014.

Los productos denominados de la forma arriba mencionada son conformes con el modelo de construcción ensayado por el respectivo Organismo Notificado 0063.

La total seguridad de la calidad es garantizada por un sistema certificado de management de la calidad ai sensi della DIN EN ISO 9001, in base all'appendice II, comma 3 della direttiva 90/396/CEE.

G. Kromschröder AG, Osnabrück

### VG

Valvola elettromagnetica per gas per regolare, controllare e garantire la sicurezza di aria e gas degli apparecchi per utenze aria e gas.

### Certificado de conformidad

Nosotros, el fabricante, declaramos que los productos VG, marcados con el nº de identificación de producto CE-0063BL1553, cumplen con los requisitos básicos de las siguientes Directivas:

- 90/396/CEE en relación con EN 161,
- 98/37/CE,
- 73/23/CEE en relación con las normas pertinentes,
- 89/336/CEE en relación con EN 55014.

Los productos denominados de la forma arriba mencionada son conformes con el modelo de construcción ensayado por el respectivo Organismo Notificado 0063.

El exhaustivo control de calidad está garantizado por un sistema de gestión de calidad, certificado conforme a la norma DIN EN ISO 9001 según el Anexo II, Párrafo 3 de la Directiva 90/396/CEE.

G. Kromschröder AG, Osnabrück

### VG

Válvula electromagnética para gas, para la seguridad, regulación y control del aire o de gas en dispositivos de consumo de aire o de gas.

### VG

Electrovanne pour gaz assurant la sécurité, la régulation et la commande de l'air ou du gaz sur les équipements consommant de l'air ou du gaz.

### VG

Gasmagneetklep voor het beveiligen, regelen en besturen van gas of lucht aan gas- of luchttoestellen.

### VG

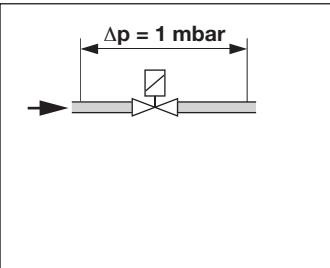
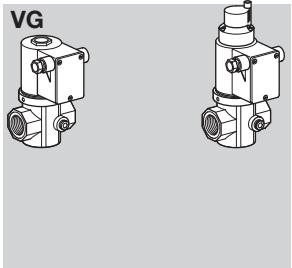
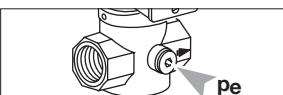
Valvola elettromagnetica per gas per regolare, controllare e garantire la sicurezza di aria e gas degli apparecchi per utenze aria e gas.

### VG

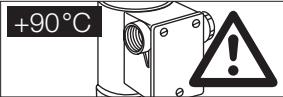
Gas-Magnetventil zum Sichern, Regeln und Steuern von Luft oder Gas an Luft- oder Gasverbrauchsseinrichtungen.

## Prüfen

- Magnetventil für Erdgas, Stadtgas, Flüssiggas oder Luft.
- Netzspannung, Eingangsdruck  $p_e$ , elektrische Leistung, Umgebungstemperatur, Schutzaart und Einbaulage – siehe Typenschild.
- VG..N  
Ausführung ohne Dämpfung.  
Schnell öffnend:  $\leq 0,5$  s.  
Schnell schließend:  $< 1$  s.
- VG..L  
Ausführung mit Dämpfung.  
Langsam öffnend: ca. 10 s.  
Schnell schließend:  $< 1$  s.
- Bei VG 10/15–40/32 kann der Eingangsdruck  $p_e$  am Mess-Stutzen abgegriffen werden.
- Luft-Volumenstrom bei Druckverlust  $\Delta p = 1$  mbar.



- Der Magnetkörper wird beim Betrieb warm – je nach Umgebungstemperatur und Spannung bis zu 90 °C.



## Testing

- Solenoid valve for natural gas, town gas, LPG or air.
- Mains voltage, inlet pressure  $p_e$ , electrical power rating, ambient temperature, enclosure and fitting position – see type label.
- VG..N  
Version without damping.  
Quick opening:  $\leq 0,5$  s.  
Quick closing:  $< 1$  s.
- VG..L  
Version with damping.  
Slow opening: approx. 10 s.  
Quick closing:  $< 1$  s.
- On VG 10/15 – 40/32, the inlet pressure  $p_e$  can be measured at the pressure test point.
- Air flow rate with pressure loss  $\Delta p = 1$  mbar.

## Vérifier

- Electrovanne pour gaz naturel, gaz de ville, GPL ou air.
- Tension du secteur, pression d'entrée  $p_e$ , puissance électrique, température ambiante, indice de protection et position de montage – voir la plaque signalétique.
- VG..N  
Modèle sans amortisseur.  
A ouverture rapide :  $\leq 0,5$  s.  
A fermeture rapide :  $< 1$  s
- VG..L  
Modèle avec amortisseur.  
A ouverture lente : env. 10 s.  
A fermeture rapide :  $< 1$  s
- Pour VG 10/15 – 40/32, la pression d'entrée  $p_e$  peut être mesurée au niveau du raccord de mesure.
- Débit d'air en cas de perte de charge  $\Delta p = 1$  mbar.

## Controleren

- Magneetklep voor aardgas, stads-gas, LPG of lucht.
- Netspanning, inlaatdruk  $p_e$ , elektrisch vermogen, omgevingstemperatuur, beschermingsklasse en inbouwpositie – zie typeplaatje.
- VG..N  
Uitvoering zonder demping.  
Snel openend:  $\leq 0,5$  s.  
Snel sluitend:  $< 1$  s.
- VG..L  
Uitvoering met demping.  
Langzaam openend: ca. 10 s.  
Snel sluitend:  $< 1$  s.
- Bij VG 10/15-40/32 kan de inlaatdruk  $p_e$  op de meetnippel worden afgetakt.
- Luchtvolumestroom bij drukverlies  $\Delta p = 1$  mbar.

## Verificare

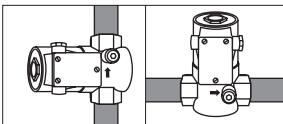
- Valvola elettromagnetica per metano, gas di città, gas liquido o aria.
- Per tensione di rete, pressione di entrata  $p_e$ , potenza elettrica, temperatura ambiente, tipo di protezione e posizione di montaggio si rimanda alla targhetta dati.
- VG..N  
Esecuzione senza smorzatore.  
Ad apertura rapida:  $\leq 0,5$  s.  
A chiusura rapida:  $< 1$  s.
- VG..L  
Esecuzione con smorzatore.  
Ad apertura lenta: circa 10 s.  
A chiusura rapida:  $< 1$  s.
- Per VG 10/15-40/32 la pressione di entrata  $p_e$  può essere misurata sulla presa di misura.
- Regolare la portata dell'aria per una perdita di carico  $\Delta p = 1$  mbar.

## Comprobar

- Válvula electromagnética para gas natural, gas ciudad, GLP o aire.
- Para la tensión de red, presión de entrada  $p_e$ , conexión eléctrica, temperatura ambiente, clase de protección y posición de montaje – véase placa de características.
- VG..N  
Ejecución sin amortiguador.  
Apertura rápida:  $\leq 0,5$  s.  
Cierre rápido:  $< 1$  s.
- VG..L  
Ejecución con amortiguador.  
Apertura lenta: aprox. 10 s.  
Cierre rápido:  $< 1$  s.
- En VG 10/15-40/32 se puede tomar la presión de entrada  $p_e$  en la toma de presión.
- Caudal de aire con pérdida de carga  $\Delta p = 1$  mbar.

## Einbauen

- Einbaulage senkrecht oder waagerecht, nicht über Kopf.
- Das Gehäuse darf kein Mauerwerk berühren. Mindestabstand 20 mm.
- Dichtmaterial und Späne dürfen nicht in das Ventilgehäuse gelangen.
- Wir empfehlen vor jede Anlage einen Filter einzubauen.
- Passenden Schraubenschlüssel verwenden.



## Installation

- Fitting position vertical or horizontal, not upside down.
- The housing may not be in contact with masonry. Minimum clearance 20 mm.
- Sealing material and swarf must not be allowed to enter the housing.
- Fit a filter upstream of each system.
- Use an appropriate spanner.

## Montage

- Position de montage verticale ou horizontale, pas à l'envers.
- Le boîtier ne doit toucher aucun mur. Distance minimale de 20 mm.
- Le matériau d'étanchéité et les copeaux ne doivent pas pénétrer dans le corps de la vanne.
- En amont de chaque installation, monter un filtre.
- Utiliser les clés appropriées.

## Inbouwen

- Inbouwpositie verticaal of horizontaal, niet ondersteboven.
- Het huis mag geen muur aanraken. Minimale afstand 20 mm.
- Afdichtingsmateriaal en spanen mogen niet in het klephuis terechtkomen.
- Wij raden u aan, bij elke installatie een filter te bouwen.
- Bijpassende sleutel gebruiken.

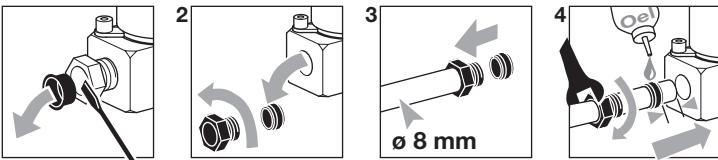
## Montaggio

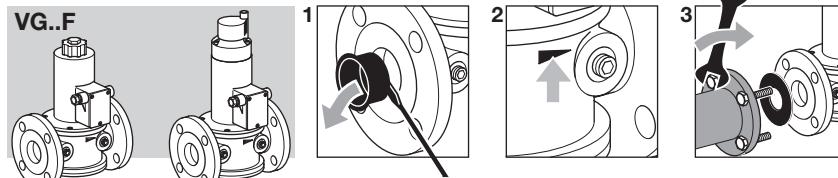
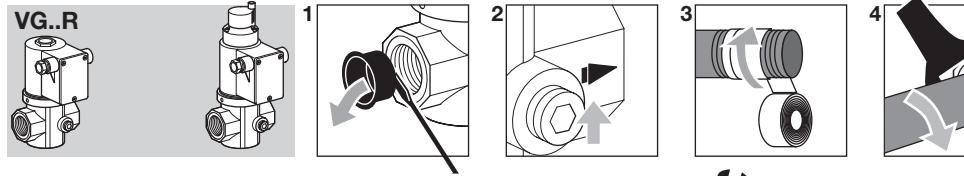
- Posizione di montaggio verticale o orizzontale, non capovolta.
- La valvola non deve toccare la muratura. Distanza minima 20 mm.
- Il materiale sigillante ed i trucioli non devono entrare nella valvola.
- A monte di ogni impianto installare un filtro.
- Utilizzare la chiave adatta.

## Montaje

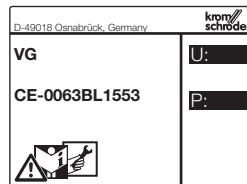
- Posición de montaje vertical u horizontal, no con el actuador en posición invertida.
- El cuerpo no debe tener ningún contacto con las paredes. Distancia mínima 20 mm.
- Evitar la entrada de material sellante y de viruta en el cuerpo de la válvula.
- Montar aguas arriba de cada instalación un filtro.
- Emplear las herramientas apropiadas.

## VG 6K





## Verdrahten



- Anlage spannungsfrei schalten.
- Gaszufuhr absperrn.

## Wiring

- Disconnect the system from the electrical power supply.
- Shut off the gas supply.

## Câblage

- Mettre l'installation hors tension.
- Fermer l'arrivée de gaz.

## Bedrading

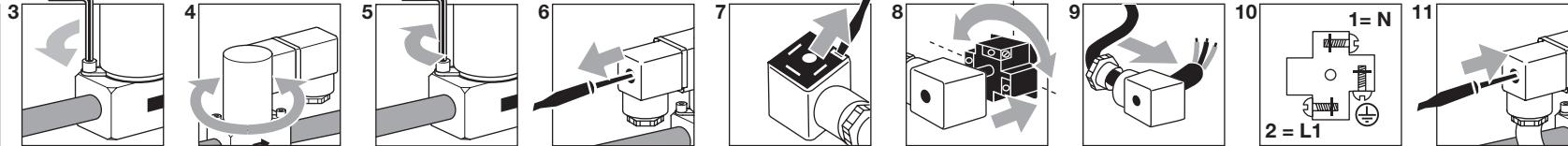
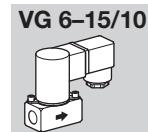
- Installatie spanningsvrij maken.
- Gastoevoer afsluiten.

## Cablaggio

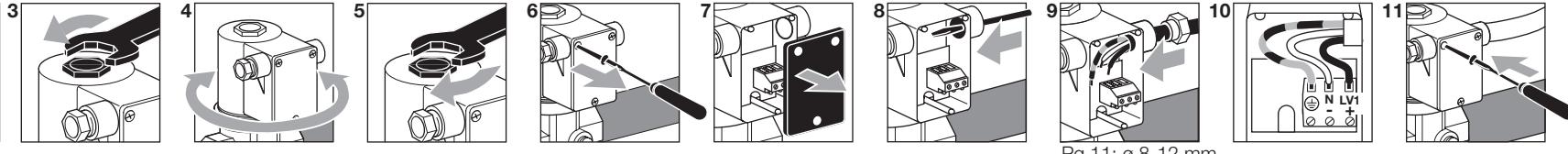
- Togliere la tensione dall'impianto.
- Interrompere l'alimentazione del gas.

## Cableado

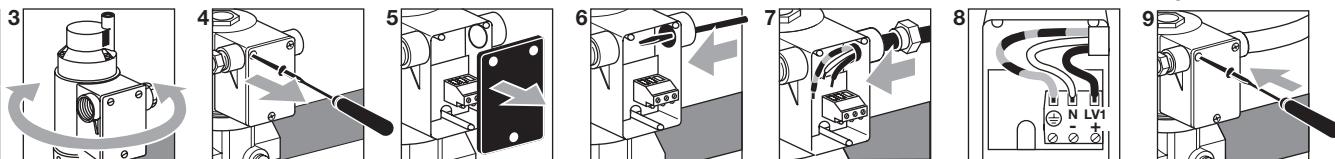
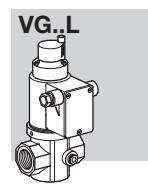
- Desconectar la instalación dejándola sin tensión.
- Cortar el suministro de gas.



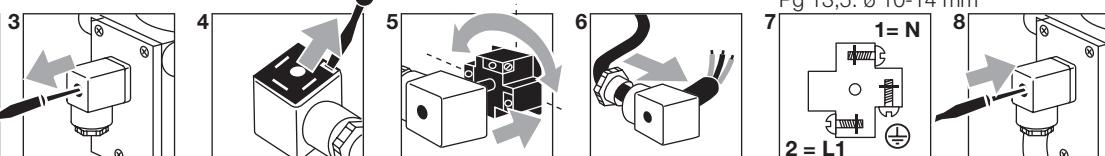
110–230V~: 1= N, 2= L1  
24 V=: 1= +, 2= -



Pg 11: ø 8-12 mm  
Pg 13,5: ø 10-14 mm



Pg 11: ø 8-12 mm  
Pg 13,5: ø 10-14 mm

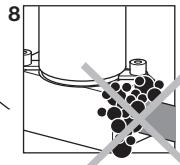
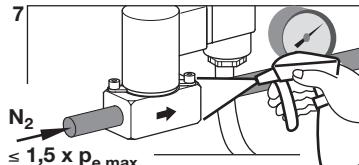
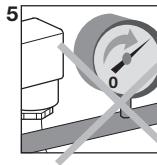
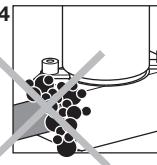
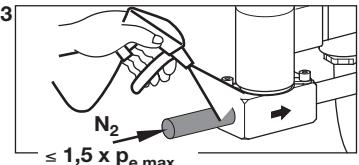
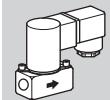


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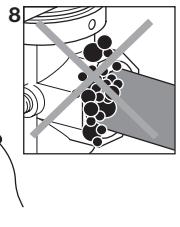
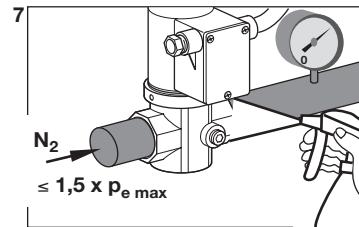
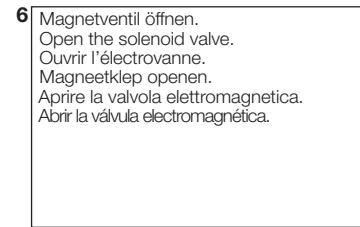
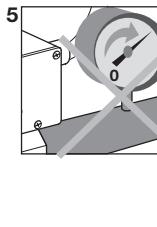
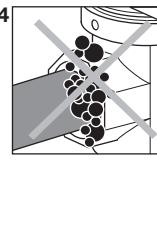
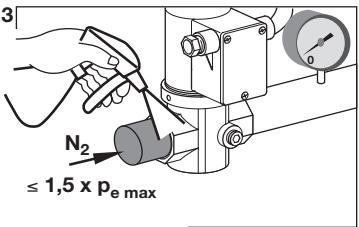
## Dichtheit prüfen

- 1 Magnetventil schließen.
- 2 Ausgang mit Steckscheibe schließen.

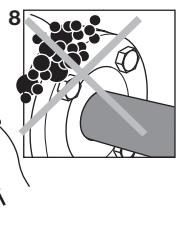
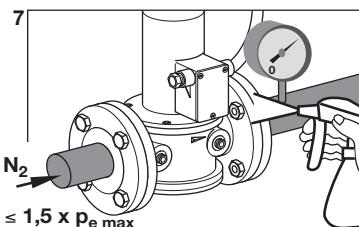
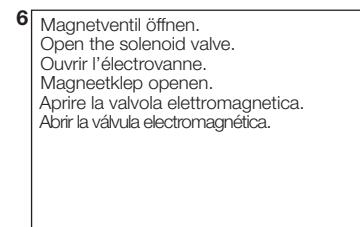
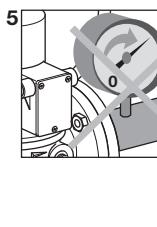
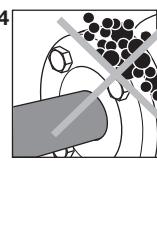
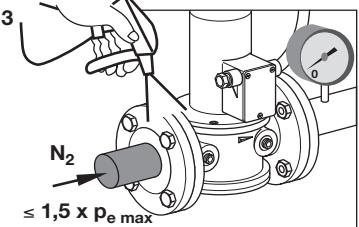
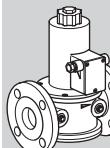
**VG 6-15/10**



**VG..R**



**VG..F**



9 Steckscheibe entfernen.

9 Remove blanking plate.

9 Retirer la plaque d'obturation.

9 Steekscheijf verwijderen.

9 Togliere il tappo a innesto.

9 Abrir la salida.

## Tightness test

- 1 Close the solenoid valve.
- 2 Close the outlet with blanking plate.

## Vérifier l'étanchéité

- 1 Fermer l'électrovanne.
- 2 Fermer la sortie avec une plaque d'obturation.

## Controle op lekkage

- 1 Magneetklep sluiten.
- 2 Uitgang met steekschijf sluiten.

## Controllo della tenuta

- 1 Chiudere la valvola elettromagnetica.
- 2 Chiudere l'uscita con un tappo a innesto.

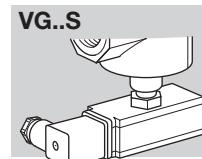
## Comprobar la estanqueidad

- 1 Cerrar la válvula electromagnética.
- 2 Cerrar la salida.

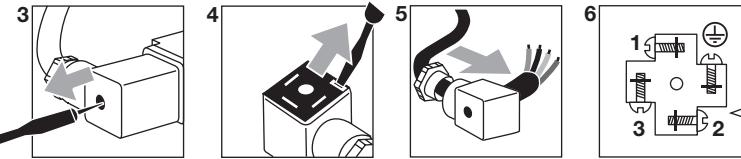
## Meldeschalter verdrahten

- 1 Anlage spannungsfrei schalten.
- 2 Gaszufuhr absperren.

## Meldeschalter für 60–250 V



**VG..S**  
60–250 V: ≤ 2 A,  
50/60 Hz



## Meldeschalter CPS für 12–250 V

- 12–24 V AC/DC  
I = 0,1 A, cos φ = 1,  
I = 0,05 A, cos φ = 0,6;
- 250 V AC  
I = 5 A, cos φ = 1,  
I = 1 A, cos φ = 0,6.
- Wenn der CPS einmal eine Spannung >24 V und einen Strom >0,1 A geschaltet hat, ist die Goldschicht an den Kontakten weggebrannt. Danach kann er nur noch mit dieser oder höherer Leistung betrieben werden.

**Achtung:** Neue Kontaktbelegung.

- 1 Anlage spannungsfrei schalten.
- 2 Gaszufuhr absperren.

## Wiring the position indicator

- 1 Disconnect the system from the electrical power supply.
  - 2 Shut off the gas supply.
- Position indicator for 60–250 V**

## Câblage de l'indicateur de position

- 1 Mettre l'installation hors tension.
  - 2 Fermer l'arrivée de gaz.
- Indicateur de position pour 60–250 V**

## Eindschakelaar bedrazen

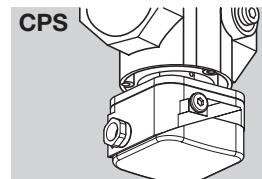
- 1 Installatie spanningsvrij maken.
  - 2 Gastoever afsluiten.
- Eindschakelaar voor 60–250 V**

## Cabaggio fine corsa

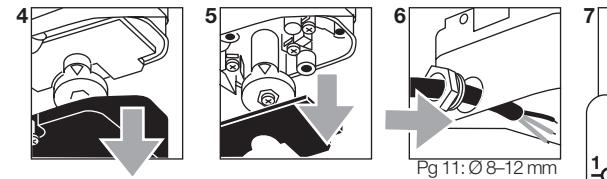
- 1 Togliere la tensione dall'impianto.
  - 2 Interrompere l'alimentazione del gas.
- Fine corsa per 60–250 V**

## Cablear el indicador de posición

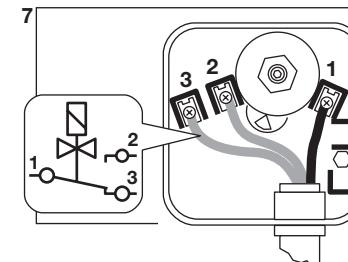
- 1 Desconectar la instalación dejándola sin tensión.
  - 2 Cortar el suministro de gas.
- Indicador de posición para 60–250 V**



**CPS**



Pg 11: Ø 8–12 mm



**Attention :** nouvelle disposition des contacts.

- Caution:** New contact assignment.
- 1 Disconnect the system from the electrical power supply.
  - 2 Shut off the gas supply.

## Indicateur de position CPS pour 12 – 250 V

- 12–24 V~ / V=  
I = 0,1 A, cos φ = 1,  
I = 0,05 A, cos φ = 0,6 ;
- 250 V~  
I = 5 A, cos φ = 1,  
I = 1 A, cos φ = 0,6.
- If the CPS has switched a voltage > 24 V and a current > 0,1 A once, the gold plating on the contacts will have been burnt through. It can then only be operated at this power rating or higher power rating.

**Attention :** nouvelle disposition des contacts.

- 1 Mettre l'installation hors tension.
- 2 Fermer l'arrivée de gaz.

## Eindschakelaar CPS voor 60–250 V

- 12–24 V~ / V=  
I = 0,1 A, cos φ = 1,  
I = 0,05 A, cos φ = 0,6 ;
- 250 V~  
I = 5 A, cos φ = 1,  
I = 1 A, cos φ = 0,6.
- Als de CPS ooit een spanning van >24 V en een stroom van >0,1 A geschakeld heeft, is de gouden laag op de contacten weggebrand. Daarna kan de CPS alleen nog maar voor dat vermogen of voor hogere vermogens worden gebruikt.

**Attenzione:** nieuwe contact aansluitingen.

- 1 Installatie spanningsvrij maken.
- 2 Gastoever afsluiten.

## Fine corsa CPS per 60–250 V

- 12–24 V~ / V=  
I = 0,1 A, cos φ = 1,  
I = 0,05 A, cos φ = 0,6 ;
- 250 V~  
I = 5 A, cos φ = 1,  
I = 1 A, cos φ = 0,6.
- Se il CPS commuta una tensione > 24 V e una corrente > 0,1 A lo strato dorato si deteriora. Successivamente può ancora essere azionato solo con potenza pari a questa o superiore.

**Attenzione:** Nuova disposizione dei contatti.

- 1 Togliere la tensione dall'impianto.
- 2 Interrompere l'alimentazione del gas.

## Indicador de posición CPS para 60–250 V

- 12–24 V ca/cc  
I = 0,1 A, cos φ = 1,  
I = 0,05 A, cos φ = 0,6 ;
- 250 V ca  
I = 5 A, cos φ = 1,  
I = 1 A, cos φ = 0,6.
- Cuando el CPS se conecta a una tensión > 24 V y una corriente > 0,1 A, se quema la capa dorada en los contactos. Despues sólo podrá funcionar con esta tensión o una superior.

**Atención:** ¡Nueva disposición de los contactos!

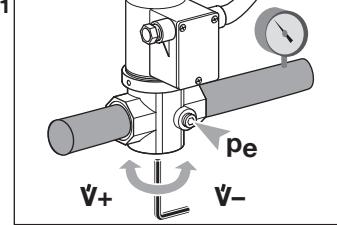
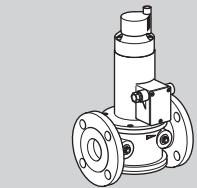
- 1 Desconectar la instalación dejándola sin tensión.
- 2 Cortar el suministro de gas.

## Volumenstrom einstellen

**VG 10/15-40/32**

- Volumenstrom mit 1/2 Umdrehung einstellbar.
- VG 40-100**
- Volumenstrom mit ca. 20 Umdrehungen einstellbar.

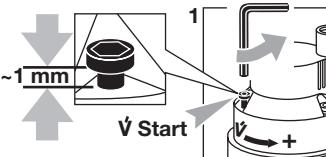
**VG..D**



## Startgasmenge einstellen

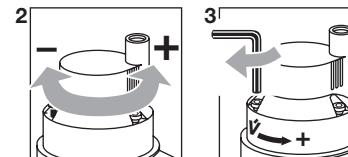
- Startgasmenge mit max. 3 Umdrehungen einstellbar.

**VG..L**



## Setting the start gas rate

- The start gas rate can be set with a maximum of 3 turns.



## Régler le débit

**VG 10/15-40/32**

- Le débit peut être réglé en tournant un 1/2 tour.
- VG 40-100**
- Le débit peut être réglé en tournant de 20 tours environ.

## Volumestroom instellen

**VG 10/15-40/32**

- Volumestroom met 1/2 omwenteling instelbaar.
- VG 40-100**
- Volumestroom met ca. 20 omwentelingen instelbaar.

## Regolazione della portata

**VG 10/15-40/32**

- Portata regolabile con 1/2 giro.
- VG 40-100**
- Portata regolabile con circa 20 giri.

## Ajustar el caudal

**VG 10/15-40/32**

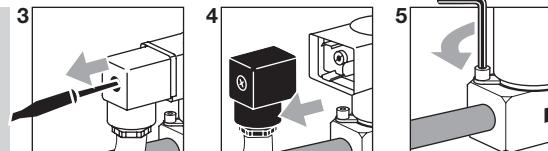
- Caudal ajustable con 1/2 vuelta.
- VG 40-100**
- Caudal ajustable con 20 vueltas aprox.

## Magnetkörper wechseln

**VG 6-15/10**

- 1 Anlage spannungsfrei schalten.
- 2 Gaszufuhr absperren.

**VG 6-15/10**



## Changing the solenoid body

**VG 6-15/10**

- 1 Disconnect the system from the electrical power supply.
- 2 Shut off the gas supply.

## Remplacer la bobine

**VG 6-15/10**

- 1 Mettre l'installation hors tension.
- 2 Fermer l'arrivée de gaz.

## Magneetspoel wisselen

**VG 6-15/10**

- 1 Installatie spanningsvrij maken.
- 2 Gastoever afsluiten.

## Sostituzione della bobina

**VG 6-15/10**

- 1 Togliere la tensione dall'impianto.
- 2 Interrrompere l'alimentazione del gas.

## Cambiar el actuador electromagnético

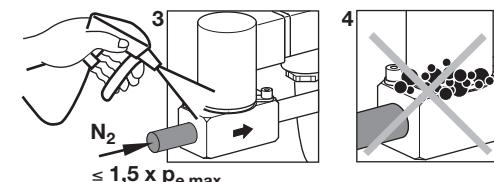
**VG 6-15/10**

- 1 Desconectar la instalación dejándola sin tensión.
- 2 Cortar el suministro de gas.

## Äußere Dichtheit prüfen

- 1 Magnetventil schließen.
- 2 Gaszufuhr absperren.

**VG 6-15/10**



## Checking for external leakage

- 1 Close the solenoid valve.
- 2 Shut off the gas supply.

## Vérifier l'étanchéité externe

- 1 Fermer l'électrovanne.
- 2 Fermer l'arrivée de gaz.

## Externe controle op lekkage

- 1 Magneetklep sluiten.
- 2 Gastoever afsluiten.

## Controllo della tenuta esterna

- 1 Chiudere la valvola elettromagnetica.
- 2 Interrrompere l'alimentazione del gas.

## Comprobar la estanqueidad externa

- 1 Cerrar la válvula electromagnética.
- 2 Cortar el suministro de gas.

**Innere Dichtheit prüfen**

- 1 Magnetventil schließen.
- 2 Gaszufuhr absperrnen.

**Checking for internal leakage**

- 1 Close the solenoid valve.
- 2 Shut off the gas supply.

**Vérifier l'étanchéité interne**

- 1 Fermer l'électrovanne.
- 2 Fermer l'arrivée de gaz.

**Interne controle op lekkage**

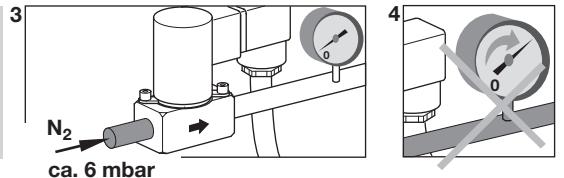
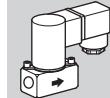
- 1 Magneetklep sluiten.
- 2 Gastoovoer afsluiten.

**Controllo della tenuta interna**

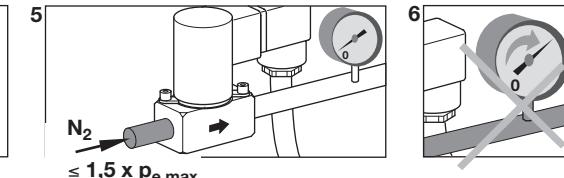
- 1 Chiudere la valvola elettromagnetica.
- 2 Interrompere l'alimentazione del gas.

**Comprobar la estanqueidad interna**

- 1 Cerrar la válvula electromagnética.
- 2 Cortar el suministro de gas.

**VG 6-15/10**

**i** Nach 60 s den Prüfdruck auf  $\leq 1,5 \times p_{e\ max}$  erhöhen.  
Increase the test pressure to  $\leq 1,5 \times p_{e\ max}$ , after 60 s.  
Après 60 s, augmenter la pression d'essai à  $\leq 1,5 \times p_{e\ max}$ .  
Na 60 s de testdruk op  $\leq 1,5 \times p_{e\ max}$  verhogen.  
Dopo 60 s aumentare la pressione di prova a  $\leq 1,5 \times p_{e\ max}$ .  
Después de 60 s, aumentar la presión de prueba a  $\leq 1,5 \times p_{e\ max}$ .

**VG 10/15-100**

- 1 Anlage spannungsfrei schalten.
- 2 Gaszufuhr absperrnen.

**VG 10/15-100**

- 1 Disconnect the system from the electrical power supply.
- 2 Shut off the gas supply.

**VG 10/15-100**

- 1 Fermer l'électrovanne.
- 2 Fermer l'arrivée de gaz.

**VG10/15-100**

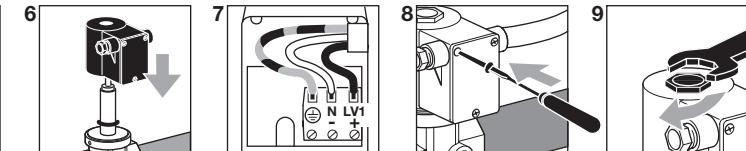
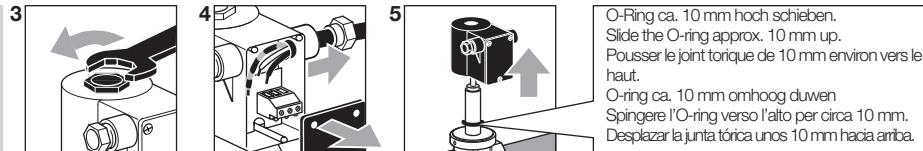
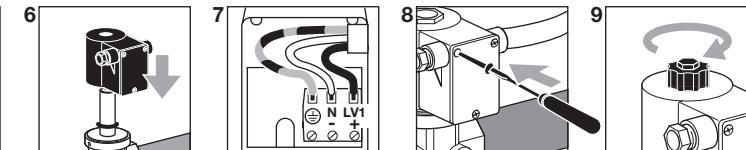
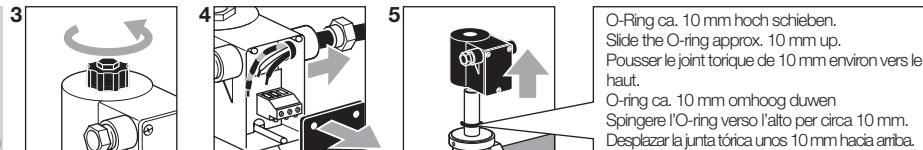
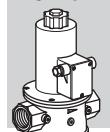
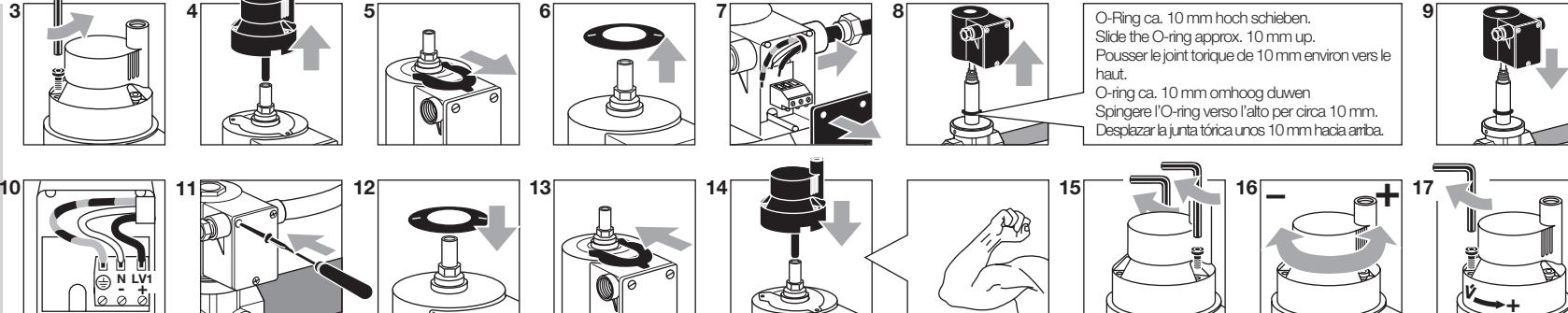
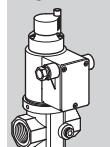
- 1 Installatie spanningsvrij maken.
- 2 Gastoovoer afsluiten.

**VG 10/15-100**

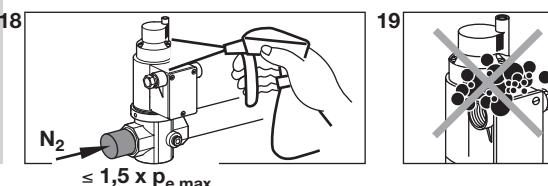
- 1 Togliere la tensione dall'impianto.
- 2 Interrompere l'alimentazione del gas.

**VG 10/15-100**

- 1 Desconectar la instalación dejándola sin tensión.
- 2 Cortar el suministro de gas.

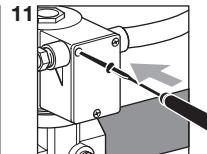
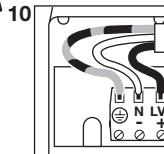
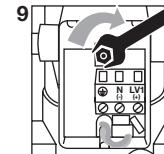
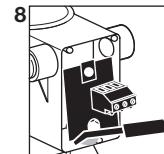
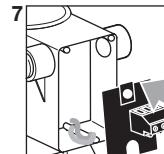
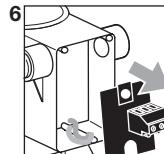
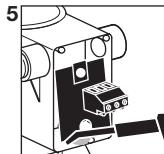
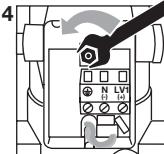
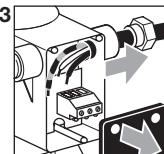
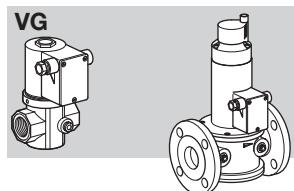
**VG 10/15-40/32..N****VG 40-100..N****VG..L**

max.  $3 \times 360^\circ$



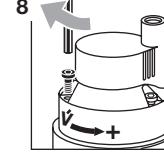
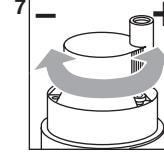
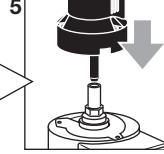
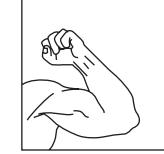
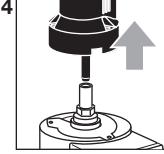
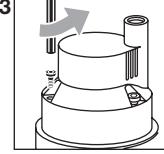
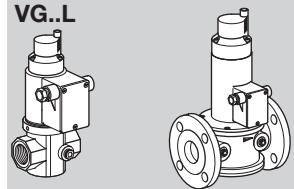
## Gleichrichterplatine wechseln

- 1 Anlage spannungsfrei schalten.
- 2 Gaszufuhr absperrn.



## Defekte Dämpfung austauschen

- 1 Anlage spannungsfrei schalten.
- 2 Gaszufuhr absperrn.



## Changing the rectifier board

- 1 Disconnect the system from the electrical power supply.
- 2 Shut off the gas supply.

## Remplacer la platine à redresseur

- 1 Mettre l'installation hors tension.
- 2 Fermer l'arrivée de gaz.

## Print van de gelijkrichter wisselen

- 1 Installatie spanningsvrij maken.
- 2 Gastoever afsluiten.

## Sostituzione della scheda del raddrizzatore

- 1 Togliere la tensione dall'impianto.
- 2 Interrompere l'alimentazione del gas.

## Cambiar el circuito rectificador

- 1 Desconectar la instalación dejándola sin tensión.
- 2 Cortar el suministro de gas.

## Exchanging a defective damping unit

- 1 Disconnect the system from the electrical power supply.
- 2 Shut off the gas supply.

## Remplacer un amortisseur défectueux

- 1 Mettre l'installation hors tension.
- 2 Fermer l'arrivée de gaz.

## Defecte demper vervangen

- 1 Installatie spanningsvrij maken.
- 2 Gastoever afsluiten.

## Sostituzione dello smorzatore guasto

- 1 Togliere la tensione dall'impianto.
- 2 Interrompere l'alimentazione del gas.

## Cambio de un amortiguador defectuoso

- 1 Desconectar la instalación dejándola sin tensión.
- 2 Cortar el suministro de gas.

## Wartung

→ 1 x im Jahr,  
bei Biogas 2 x im Jahr.

### VG 6-15/10

- 1 Magnetventil schließen.
- 2 Gaszufuhr absperren.

## Maintenance

→ Once per year,  
twice per year in the case of biologically produced methane.

### VG 6-15/10

- 1 Disconnect the system from the electrical power supply.
- 2 Shut off the gas supply.

## Maintenance

→ 1 fois par an,  
pour biogaz 2 fois par an.

### VG 6-15/10

- 1 Fermer l'électrovanne.
- 2 Fermer l'arrivée de gaz.

## Onderhoud

→ 1 x per jaar,  
bij biogas 2 x per jaar

### VG 6-15/10

- 1 Magneetklep sluiten.
- 2 Gastoovoer afsluiten.

## Manutención

→ 1 volta all'anno,  
per il biogás 2 volte all'anno.

### VG 6-15/10

- 1 Chiudere la valvola elettromagnetica.
- 2 Interrompere l'alimentazione del gas.

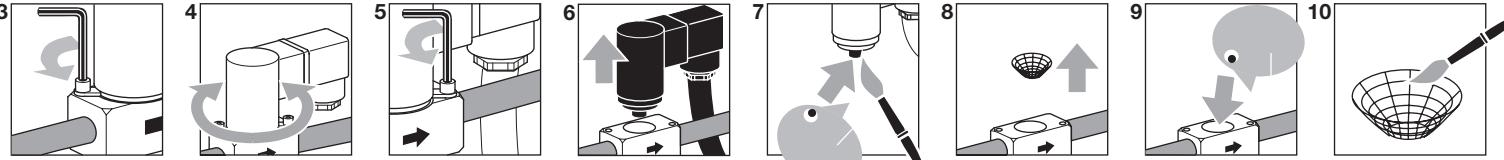
## Mantenimiento

→ 1 vez al año,  
con biogás 2 veces al año.

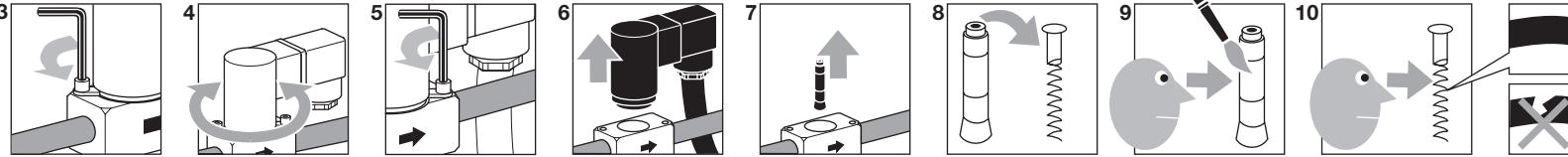
### VG 6-15/10

- 1 Cerrar la válvula electromagnética.
- 2 Cortar el suministro de gas.

### VG 6-8



### VG 10-15/10



11 Zusammenbau in umgekehrter Reihenfolge.

### Äußere Dichtheit prüfen

- 1 Magnetventil schließen.
- 2 Gaszufuhr absperren.

11 Follow the reverse procedure when reassembling.

### Checking for external leakage

- 1 Close the solenoid valve.
- 2 Shut off the gas supply.

11 Assemblage dans l'ordre inverse.

### Vérifier l'étanchéité externe

- 1 Fermer l'électrovanne.
- 2 Fermer l'arrivée de gaz.

11 Montage in omgekeerde volgorde.

### Externe controle op lekkage

- 1 Magneetklep sluiten.
- 2 Gastoovoer afsluiten.

11 Assemblaggio in sequenza inversa.

### Controllo della tenuta esterna

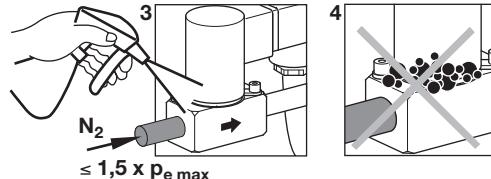
- 1 Chiudere la valvola elettromagnetica.
- 2 Interrompere l'alimentazione del gas.

11 Montaje en sucesión inversa.

### Comprobar la estanqueidad externa

- 1 Cerrar la válvula electromagnética.
- 2 Cortar el suministro de gas.

### VG 6-15/10



### Innere Dichtheit prüfen

- 1 Magnetventil schließen.
- 2 Gaszufuhr absperren.

11 Checking for internal leakage

- 1 Close the solenoid valve.
- 2 Shut off the gas supply.

11 Vérifier l'étanchéité interne

- 1 Fermer l'électrovanne.
- 2 Fermer l'arrivée de gaz.

11 Interne controle op lekkage

- 1 Magneetklep sluiten.
- 2 Gastoovoer afsluiten.

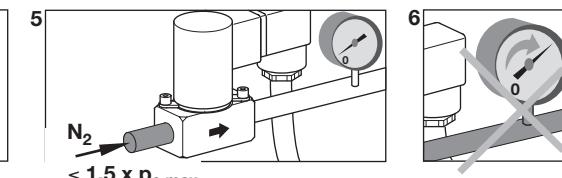
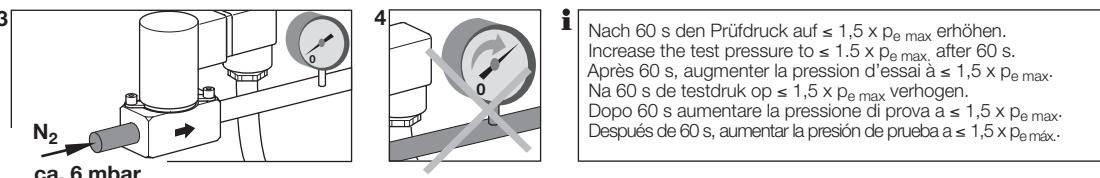
11 Controllo della tenuta interna

- 1 Chiudere la valvola elettromagnetica.
- 2 Interrompere l'alimentazione del gas.

11 Comprobar la estanqueidad interna

- 1 Cerrar la válvula electromagnética.
- 2 Cortar el suministro de gas.

### VG 6-15/10



**VG 10/15-100**

- 1 Magnetventil schließen.
- 2 Gaszufuhr absperren.

**VG 10/15-100**

- 1 Close the solenoid valve.
- 2 Shut off the gas supply.

**VG 10/15-100**

- 1 Fermer l'électrovanne.
- 2 Fermer l'arrivée de gaz.

**VG 10/15-100**

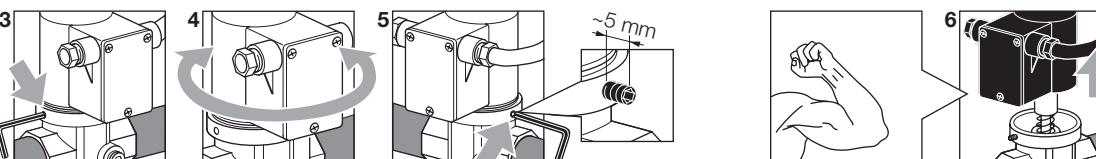
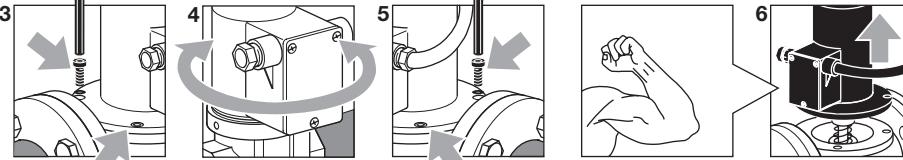
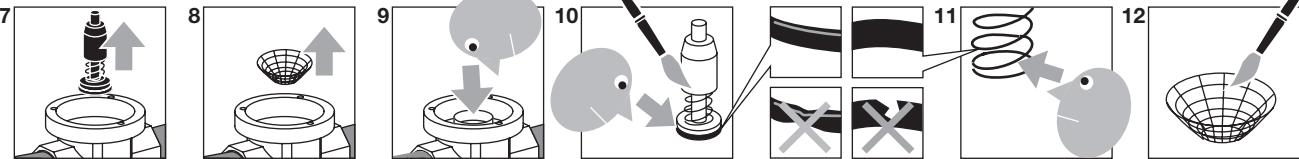
- 1 Magneetklep sluiten.
- 2 Gastoever afsluiten.

**VG 10/15-100**

- 1 Chiudere la valvola elettromagnetica.
- 2 Interrompere l'alimentazione del gas.

**VG 10/15-100**

- 1 Cerrar la válvula electromagnética.
- 2 Cortar el suministro de gas.

**VG 10/15-40/32****VG 40-100****VG 10/15-100**

13 Zusammenbau in umgekehrter Reihenfolge.

**Außere Dichtheit prüfen**

- 1 Magnetventil schließen.
- 2 Gaszufuhr absperren.

13 Follow the reverse procedure when reassembling.

**Checking for external leakage**

- 1 Close the solenoid valve.
- 2 Shut off the gas supply.

13 Assemblage dans l'ordre inverse.

**Vérifier l'étanchéité externe**

- 1 Fermer l'électrovanne.
- 2 Fermer l'arrivée de gaz.

13 Montage in omgekeerde volgorde.

**Externe controle op lekkage**

- 1 Magneetklep sluiten.
- 2 Gastoever afsluiten.

13 Assemblaggio in sequenza inversa.

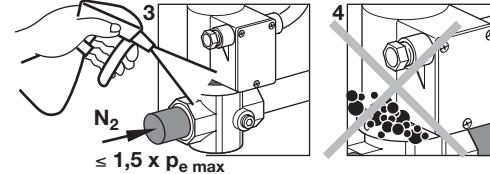
**Controllo della tenuta esterna**

- 1 Chiudere la valvola elettromagnetica.
- 2 Interrompere l'alimentazione del gas.

13 Montaje en sucesión inversa.

**Comprobar la estanqueidad externa**

- 1 Cerrar la válvula electromagnética.
- 2 Cortar el suministro de gas.

**VG 10/15-100****Innere Dichtheit prüfen**

- 1 Magnetventil schließen.
- 2 Gaszufuhr absperren.

**Checking for internal leakage**

- 1 Close the solenoid valve.
- 2 Shut off the gas supply.

**Vérifier l'étanchéité interne**

- 1 Fermer l'électrovanne.
- 2 Fermer l'arrivée de gaz.

**Interne controle op lekkage**

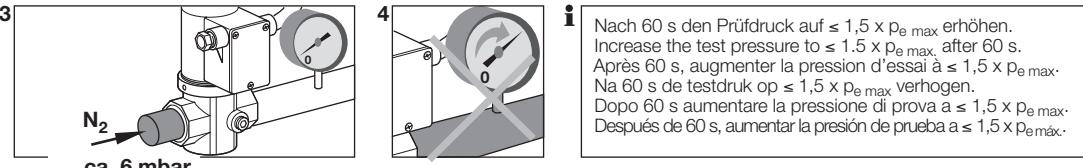
- 1 Magneetklep sluiten.
- 2 Gastoever afsluiten.

**Controllo della tenuta interna**

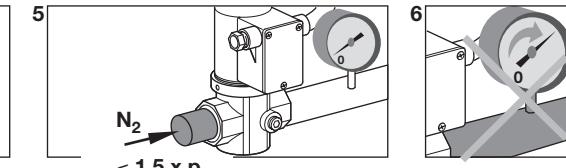
- 1 Chiudere la valvola elettromagnetica.
- 2 Interrompere l'alimentazione del gas.

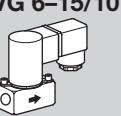
**Comprobar la estanqueidad interna**

- 1 Cerrar la válvula electromagnética.
- 2 Cortar el suministro de gas.

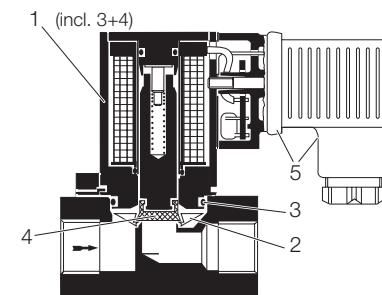
**VG 10/15-100**

**i** Nach 60 s den Prüfdruck auf  $\leq 1,5 \times p_{e\ max}$  erhöhen.  
Increase the test pressure to  $\leq 1,5 \times p_{e\ max}$  after 60 s.  
Après 60 s, augmenter la pression d'essai à  $\leq 1,5 \times p_{e\ max}$ .  
Na 60 s de testdruk op  $\leq 1,5 \times p_{e\ max}$  verhogen.  
Dopo 60 s aumentare la pressione di prova a  $\leq 1,5 \times p_{e\ max}$ .  
Después de 60 s, aumentar la presión de prueba a  $\leq 1,5 \times p_{e\ max}$ .



**Ersatzteile****Spare parts****Pièces de rechange****Reserveonderdelen****Pezzi di ricambio****Piezas de recambio****VG 6-15/10**

i

**VG 6 K03G**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74912734 |
| 1 | 120 V     | 74912735 |
| 1 | 24 V      | 74912736 |
| 2 |           | 35443249 |
| 3 |           | 03109324 |
| 4 |           | 35436798 |
| 5 |           | 04115238 |

**VG 6+8 K05/R05**

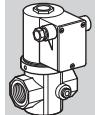
|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 75442327 |
| 1 | 120 V     | 74912732 |
| 1 | 24 V      | 74912733 |
| 2 |           | 35443249 |
| 3 |           | 03109324 |
| 4 |           | 35436798 |
| 5 |           | 04115238 |

**VG 8 R18/N60**

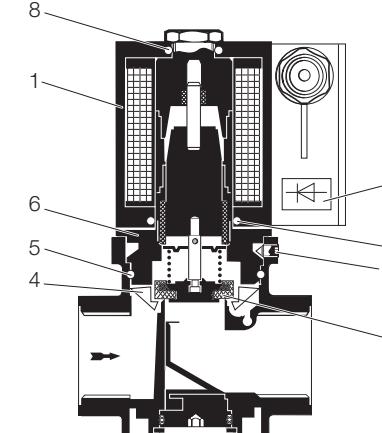
|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74912743 |
| 1 | 120 V     | 74912744 |
| 1 | 24 V      | 74912745 |
| 2 |           | 35443249 |
| 3 |           | 03109324 |
| 4 |           | 35436798 |
| 5 |           | 04115238 |

**VG 10 R01, VG 15/10 R01**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74912746 |
| 1 | 120 V     | 74912747 |
| 1 | 24 V      | 74912748 |
| 2 |           | 35443250 |
| 3 |           | 03109323 |
| 4 |           | 35440930 |
| 5 |           | 04115238 |

**VG 10/15-40/32..N**

i

**VG 10/15R02N..D**

|    |           |          |
|----|-----------|----------|
| 1  | 220/240 V | 74951912 |
| 1  | 120 V     | 74971069 |
| 1  | 24 V      | 74951925 |
| 2  | 220/120 V | 74912142 |
| 2  | 24 V      | 74912143 |
| 3  |           | 35443961 |
| 4  |           | 35438019 |
| 5  |           | 03109218 |
| 6  |           | 74960047 |
| 8  |           | 03109290 |
| 9  |           | 03109292 |
| 10 |           | 03563025 |

**VG 20+25R03N..D**

|    |           |          |
|----|-----------|----------|
| 1  | 220/240 V | 74951914 |
| 1  | 120 V     | 74971071 |
| 1  | 24 V      | 74951927 |
| 2  | 220/120 V | 74912142 |
| 2  | 24 V      | 74912143 |
| 3  |           | 35439084 |
| 4  |           | 35438043 |
| 5  |           | 03110079 |
| 6  |           | 74960043 |
| 8  |           | 03109290 |
| 9  |           | 03109292 |
| 10 |           | 03563026 |

**VG 10/15R03N..D**

|    |           |          |
|----|-----------|----------|
| 1  | 220/240 V | 74951912 |
| 1  | 120 V     | 74971069 |
| 1  | 24 V      | 74951925 |
| 2  | 220/120 V | 74912142 |
| 2  | 24 V      | 74912143 |
| 3  |           | 35439083 |
| 4  |           | 35438043 |
| 5  |           | 03110079 |
| 6  |           | 74960097 |
| 8  |           | 03109290 |
| 9  |           | 03109292 |
| 10 |           | 03563025 |

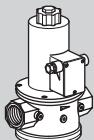
**VG 15/12R18N..31**

|    |           |          |
|----|-----------|----------|
| 1  | 220/240 V | 74951913 |
| 1  | 120 V     | 74971070 |
| 1  | 24 V      | 74951926 |
| 2  | 220/120 V | 74912142 |
| 2  | 24 V      | 74912143 |
| 3  |           | 35443718 |
| 4  |           | 35438019 |
| 5  |           | 03109218 |
| 6  |           | 74960096 |
| 8  |           | 03109290 |
| 9  |           | 03109292 |
| 10 |           | 03563025 |

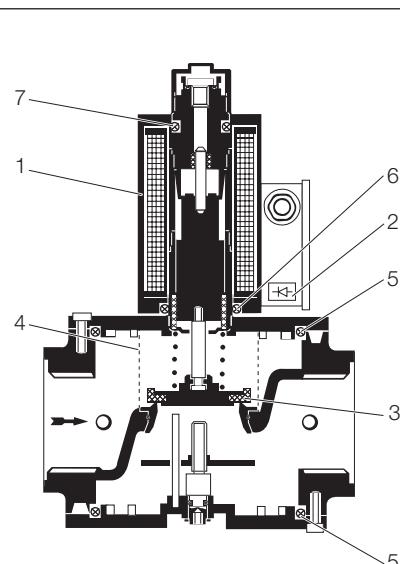
**VG 20+25R02N..D**

|    |           |          |
|----|-----------|----------|
| 1  | 220/240 V | 74951914 |
| 1  | 120 V     | 74971071 |
| 1  | 24 V      | 74951927 |
| 2  | 220/120 V | 74912142 |
| 2  | 24 V      | 74912143 |
| 3  |           | 35443963 |
| 4  |           | 35438057 |
| 5  |           | 03109219 |
| 6  |           | 74960045 |
| 8  |           | 03109290 |
| 9  |           | 03109292 |
| 10 |           | 03563026 |



**VG 40-100..N**

i

**VG 40..02N..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74960020 |
| 1 | 120 V     | 74971061 |
| 1 | 24 V      | 74960021 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440783 |
| 4 |           | 35440828 |
| 5 |           | 03109274 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |

**VG 50..03N..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74955152 |
| 1 | 120 V     | 74971063 |
| 1 | 24 V      | 74955164 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440784 |
| 4 |           | 35440829 |
| 5 |           | 03109275 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |

**VG 65/49..10N**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952558 |
| 1 | 120 V     | 74971064 |
| 1 | 24 V      | 74952591 |
| 2 | 220/120 V | 74913601 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440784 |
| 4 |           | 35440830 |
| 5 |           | 03109276 |
| 6 |           | 03109346 |
| 7 |           | 03109321 |

**VG 40..03N..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952296 |
| 1 | 120 V     | 74971062 |
| 1 | 24 V      | 74952589 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440783 |
| 4 |           | 35440828 |
| 5 |           | 03109274 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |

**VG 40/33..10N**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952296 |
| 1 | 120 V     | 74971062 |
| 1 | 24 V      | 74952589 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35439085 |
| 4 |           | 35440828 |
| 5 |           | 03109274 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |

**VG 50..02N..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952296 |
| 1 | 120 V     | 74971062 |
| 1 | 24 V      | 74952589 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440784 |
| 4 |           | 35440829 |
| 5 |           | 03109275 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |

**VG 65..03N..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952558 |
| 1 | 120 V     | 74971064 |
| 1 | 24 V      | 74952591 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440785 |
| 4 |           | 35440830 |
| 5 |           | 03109276 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |

**VG 65..02N..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74955152 |
| 1 | 120 V     | 74971063 |
| 1 | 24 V      | 74955164 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440785 |
| 4 |           | 35440830 |
| 5 |           | 03109276 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |

**VG 80F02N..D**

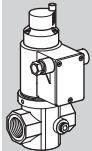
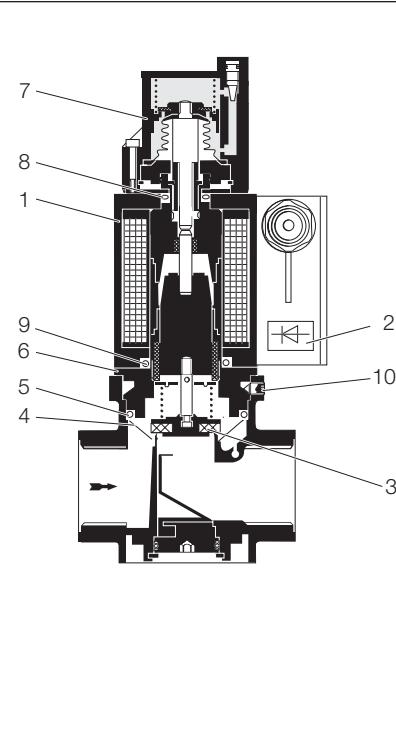
|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952558 |
| 1 | 120 V     | 74971064 |
| 1 | 24 V      | 74952591 |
| 2 | 220/120 V | 74913601 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35441452 |
| 4 |           | 74919322 |
| 5 |           | 03109277 |
| 6 |           | 03109346 |
| 7 |           | 03109321 |

**VG 80F03N..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952559 |
| 1 | 120 V     | 74971065 |
| 1 | 24 V      | 74952592 |
| 2 | 220/120 V | 74913601 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35441452 |
| 4 |           | 74919322 |
| 5 |           | 03109277 |
| 6 |           | 03109346 |
| 7 |           | 03109321 |

**VG 100F02N..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952559 |
| 1 | 120 V     | 74971065 |
| 1 | 24 V      | 74952592 |
| 2 | 220/120 V | 74913601 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35441454 |
| 4 |           | 74919323 |
| 5 |           | 03109277 |
| 6 |           | 03109346 |
| 7 |           | 03109321 |

**VG 10/15-40/32..L****i****VG 10/15R02L..D**

|    |           |          |
|----|-----------|----------|
| 1  | 220/240 V | 74951912 |
| 1  | 120 V     | 74971069 |
| 1  | 24 V      | 74951925 |
| 2  | 220/120 V | 74912142 |
| 2  | 24 V      | 74912143 |
| 3  |           | 35443961 |
| 4  |           | 35438019 |
| 5  |           | 03109218 |
| 6  |           | 74960042 |
| 7  |           | 74952012 |
| 8  |           | 03109290 |
| 9  |           | 03109292 |
| 10 |           | 03563025 |

**VG 10/15R03L..D**

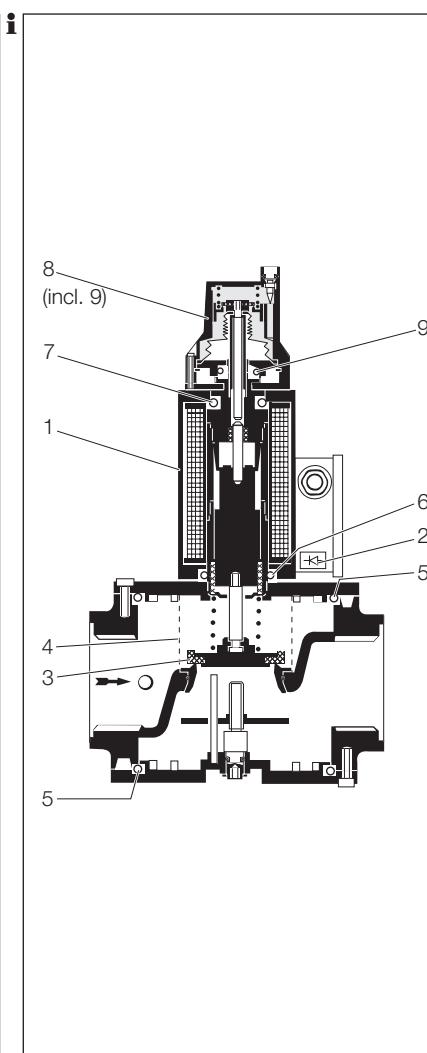
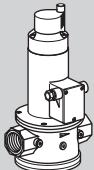
|    |           |          |
|----|-----------|----------|
| 1  | 220/240 V | 74951913 |
| 1  | 120 V     | 74971070 |
| 1  | 24 V      | 74951926 |
| 2  | 220/120 V | 74912142 |
| 2  | 24 V      | 74912143 |
| 3  |           | 35439083 |
| 4  |           | 35438019 |
| 5  |           | 03109218 |
| 6  |           | 74960042 |
| 7  |           | 74952012 |
| 8  |           | 03109290 |
| 9  |           | 03109292 |
| 10 |           | 03563025 |

**VG 20+25R02L..D**

|    |           |          |
|----|-----------|----------|
| 1  | 220/240 V | 74951913 |
| 1  | 120 V     | 74971070 |
| 1  | 24 V      | 74951926 |
| 2  | 220/120 V | 74912142 |
| 2  | 24 V      | 74912143 |
| 3  |           | 35443962 |
| 4  |           | 35438043 |
| 5  |           | 03110079 |
| 6  |           | 74960044 |
| 7  |           | 74952014 |
| 8  |           | 03109290 |
| 9  |           | 03109292 |
| 10 |           | 03563026 |

**VG 20+25R03L..D**

|    |           |          |
|----|-----------|----------|
| 1  | 220/240 V | 74951914 |
| 1  | 120 V     | 74971071 |
| 1  | 24 V      | 74951927 |
| 2  | 220/120 V | 74912142 |
| 2  | 24 V      | 74912143 |
| 3  |           | 35443963 |
| 4  |           | 35438057 |
| 5  |           | 03109219 |
| 6  |           | 74960046 |
| 7  |           | 74952015 |
| 8  |           | 03109290 |
| 9  |           | 03109292 |
| 10 |           | 03563026 |

**VG 40-100..L**

**VG 40..03L..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952296 |
| 1 | 120 V     | 74971062 |
| 1 | 24 V      | 74952589 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440783 |
| 4 |           | 35440828 |
| 5 |           | 03109274 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |
| 8 |           | 74952271 |
| 9 |           | 03109250 |

**VG 50..02L..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952296 |
| 1 | 120 V     | 74971062 |
| 1 | 24 V      | 74955164 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440784 |
| 4 |           | 35440829 |
| 5 |           | 03109275 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |
| 8 |           | 74952271 |
| 9 |           | 03109250 |

**VG 50..03L..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74955152 |
| 1 | 120 V     | 74971063 |
| 1 | 24 V      | 74955164 |
| 2 | 220/120 V | 74913606 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35440784 |
| 4 |           | 35440829 |
| 5 |           | 03109275 |
| 6 |           | 03109322 |
| 7 |           | 03109321 |
| 8 |           | 74952271 |
| 9 |           | 03109250 |

**VG 80F02L..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952558 |
| 1 | 120 V     | 74971064 |
| 1 | 24 V      | 74952591 |
| 2 | 220/120 V | 74913601 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35441452 |
| 4 |           | 74919322 |
| 5 |           | 03109277 |
| 6 |           | 03109346 |
| 7 |           | 03109321 |
| 8 |           | 74952557 |
| 9 |           | 03109250 |

**VG 80F03L..D**

|   |           |          |
|---|-----------|----------|
| 1 | 220/240 V | 74952559 |
| 1 | 120 V     | 74971065 |
| 1 | 24 V      | 74952592 |
| 2 | 220/120 V | 74913601 |
| 2 | 24 V      | 74913607 |
| 3 |           | 35441452 |
| 4 |           | 74919322 |
| 5 |           | 03109277 |
| 6 |           | 03109346 |
| 7 |           | 03109321 |
| 8 |           | 74952557 |
| 9 |           | 03109250 |

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