

4" Gate Valve



⚠ WARNING

Read this instruction manual before use.

Using this device without understanding this products' operation and care may lead to injury. If you do not understand how to use this device and do not receive proper training, do not use this product.



1.0 WARRANTY

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www.awg-fire.com

- AWG Fittings LLC warrants to the original purchaser and all subsequent purchasers of the AWG Fittings LLC products that the product is free from defects in material and workmanship during a one (1) year period from the date of its sale by AWG Fittings LLC.
- AWG Fittings LLC's obligation under this warranty is specifically limited to replacing or repairing any product which is determined by AWG Fittings LLC's inspection to be in a defective condition attributed to AWG Fittings LLC's manufacture or design. If AWG Fittings LLC determines the product is defective, then AWG Fittings LLC will repair or replace the product during the warranty period. The purchaser or beneficiary must notify AWG Fittings LLC of any alleged defect within a reasonable time period.
- If AWG Fittings LLC determines that the product is defective, then it will replace the product, repair the product or refund the purchase price, at AWG Fittings LLC's election.
- This warranty is a LIMITED WARRANTY. The original purchaser of the product and any subsequent purchaser of the product and any person who is an intended or unintended beneficiary of the product shall not be entitled to recover from AWG Fittings LLC and consequential or incidental damages for injury to person and/or property resulting from any defective product manufactured or assembled by AWG Fittings LLC. It is agreed that the price stated and paid for the product is in part consideration for limiting AWG Fittings LLC's liability.
- This is a limited Expressed Warranty Only. AWG Fittings LLC EXPRESSLY DISCLAIMS WITH RESPECT TO THE PRODUCT ALL IMPLIED WARRANTIES OF **MERCHANTABILITY** AND ALL IMPLIED WARRANTIES OF **FITNESS FOR A PARTICULAR PURPOSE**.
- There are NO WARRANTIES of any nature made by AWG Fittings LLC beyond that stated in this Warranty

2.0 Safety and Cautions

Meaning of safety words

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

Safety and Cautions

DANGER

This equipment is to be used by trained firefighting personnel only. Failure to obtain proper training may result in severe injury or death.

DANGER

Do not exceed maximum operating pressure. Exceeding the maximum rated pressure for this appliance may cause malfunction or failure resulting in severe injury or death.

DANGER

Failure of fittings and hoses can result in injury. Use caution not to exceed hose pressures as stated in NFPA 1961 for the type of hose being used.

DANGER

Make sure all connections are secure and complete. Failure to ensure proper connection may result in leaks or cause the devices to become disconnected under pressure resulting in injury or death.

DANGER

Open and close all valves slowly. Failure to operate valves slowly may cause water hammer, which may result in damage or failure of hose, coupling devices, and appliances leading to injury or death.

WARNING

Do not use if damaged. Damage to product may cause malfunction or failure. Remove from service until unit can be repaired.

WARNING

Check for damage or worn coupling connections. Damage or worn connections may become disconnected under pressure. Remove from service to be repaired by an AWG certified repair facility.

CAUTION

For use with fresh or salt water, with or without firefighting foam.

WARNING

Altering of this device may reduce its operating effectiveness, or safety. Do not alter or change in any way from its intended design.



3.0 Overview

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| Style | Length* | Height* | Width* | Weight* |
|------------------------------------|---------------|----------------|--------------|------------------|
| 4" gate valve | 7.48" (190mm) | 15.47" (393mm) | 5.9" (150mm) | 12.1 lb (5.5 kg) |
| 4" gate valve w' 25° elbow | 9.29" (236mm) | 15.47" (393mm) | 5.9" (150mm) | 12.5 lb (5.7kg) |
| 4" gate valve w' 25° elbow and PRV | 9.29" (236mm) | 15.47" (393mm) | 5.9" (150mm) | 17.8 lb (8.1kg) |
| 4" gate valve w' PRV | 9.6" (245mm) | 15.5" (393mm) | 5.9" (150mm) | 16.9 lb (7.68kg) |

* w/o adapters

Operating pressures:

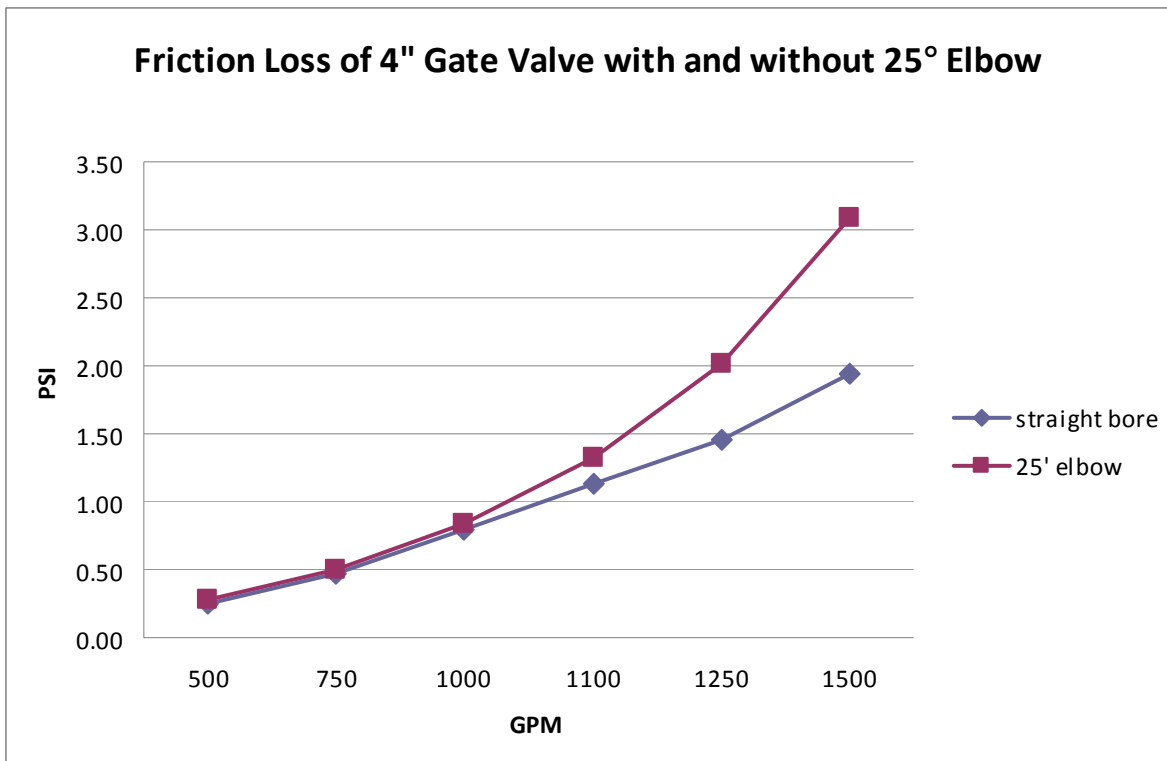
Normal operating pressure up to 250 PSI.
 Tested burst pressure hydrostatic test per NFPA1965

Construction:

Aluminum body and anodized aluminum gate.

Relief Valve operating range:

Adjustable to 75, 100, 150, 200, and 250 PSI.



3.0 Overview

⚠ WARNING

This Gate Valve may have a 25° elbow to help reduce the stress on the coupling and reduce or prevent kinking of the hose line at the gate valve. However, kinking of hose lines can only be avoided by proper planning and layout.

⚠ WARNING

This Gate Valve may also have a pressure relief valve to automatically release excess pressure in the hose line. This relief valve must be set prior to use. Excess pressure in the hose line may cause failure of the hose leading to injury.

⚠ CAUTION

Dirt or debris in the relief valve may prevent the relief valve from operating or closing which may cause the relief valve to operate prematurely with subsequent loss of pressure.

⚠ WARNING

To properly set the pressure at which the relief valve will operate please see the included operating supplement for the pressure relief valve.

⚠ DANGER

The relief valve has no field serviceable parts. Never try to repair this valve unless you are a certified repair person. Improper repair could result in serious injury and/or death.

⚠ WARNING

The relief valve when operating will discharge water at high pressure. Caution must be exercised to keep all persons away from the relief valve discharge.

4.0 Operation

Using the 4" Gate Valve.

⚠ DANGER

Attach gate valve securely to the water source, fire truck or hydrant.

This valve is intended to be attached to a fixed object such as a hydrant, stand pipe or a vehicle. It is not intended and should not be used as a connection between to hoses. If the valve is not attached to a fixed object it may move violently which could cause injury or death.

Make sure all connections are secure and complete. Failure to ensure proper connection may result in leaks or cause the devices to become disconnected under pressure resulting in injury or death.

⚠ DANGER

Make sure the valve is fully closed.

⚠ DANGER

Attach hose line securely to the valve.

Attach hose line securely to water source or appliance/apparatus on the other end.

If the gate valve is attached to the supply side of the fire apparatus open air bleeder valve to allow air to escape from hose line.

⚠ DANGER

If the gate valve is attached to the water source or fire hydrant, slowly open the gate valve and fill the hose line with water. Avoid opening quickly as this may cause a water hammer and damage valves, hoses, apparatus and/or appliances resulting in equipment failure or injury .

If the valve is attached to fire apparatus; when hose line is filled with water, and all trapped air as been bled from the hose, close the air bleeder valve and slowly open valve to supply fire apparatus.

Open and close valves with your hands only. DO NOT use tools to assist in operating the valves. Open and close valves fully, DO NOT regulate water flow or pressure with the valve.

4.0 Operation

Slowly increase pressure in hose to desired operating pressure and desired water flow rates. Normal operating pressures are from 100 to 200 PSI.

When operations are completed, shut down valve(s) completely.

⚠ WARNING

Bleed off any excess pressure in the hose lines before you attempt to disconnect any hose or apparatus and disconnect and drain hose lines.

⚠ DANGER

If connected to the water supply, fire hydrant, or other source shut down supply completely and bleed off any excess pressure prior to disconnecting the gate valve. Attempting to disconnect the valve before pressure is relieved may result in serious injury.

⚠ WARNING

After use, clean and inspect the valve for damage or malfunctioning parts. Repair or replace damaged parts or remove the valve from service until repairs can be made. The valve should be repaired by an AWG certified repair facility.

Do not use if damaged. Damage to product may cause malfunction or failure. Remove from service until unit can be repaired.

Check for damaged or worn coupling connections. Damaged or worn connections may become disconnected under pressure. Remove from service and repair appropriate parts.

Foam may be used with this appliance. Be sure to flush completely with fresh water after use. Some foam concentrates may leave residue that may cause corrosion or become sticky and interfere with the operation of the gate valve or PRV device and shorten the service life of this appliance.

Salt water may be used with this appliance. Be sure to flush with large amounts of fresh water after use with salt water. Salt water may shorten the service life of this appliance due to corrosion.

5.0 Care and Maintenance

Flush with fresh clean water after use to remove dirt and debris. This is especially important if salt water or foam has been used in this appliance.

⚠ DANGER

Inspect appliance for damage or malfunctioning parts routinely. If appliance is damaged or not functioning properly, repair or remove appliance from service until repairs can be made.

⚠ WARNING

Check gaskets and swivels to ensure proper operation. Repair or replace as needed. If repairs cannot be made immediately, remove from service until repaired by an AWG certified technician.

Check for damaged or worn coupling connections. Damaged or worn connections may become disconnected under pressure. Remove from service and repair appropriate parts.

Do not use if damaged. Damage to product may cause malfunction or failure. Remove from service until unit can be repaired.

⚠ WARNING

In case of leakage replace gaskets as needed.

Check all screws and bolts to ensure they are securely tightened.

Check connections for damaged threads, lugs or gaskets.

⚠ DANGER

On any appliance with a non-threaded coupling, (i.e. Storz) check the locking device on coupling for damage and ensure proper operation. Make sure the coupling and the valve are clean, clear and free of damage. If locking device is malfunctioning, repair or replace the lock.

⚠ CAUTION

Dirt and debris should be clear of the gate to allow full range of motion. Dirt or debris in the relief valve may prevent the relief valve from operating or may cause the relief valve to operate causing premature loss of pressure or may cause it to fail.

5.0 Care and Maintenance

⚠ DANGER

If the relief valve operates continually, fails to operate or water leaks slowly through the relief valve during use, remove from service until valve can be cleaned, repaired, and the pressure reset.



Lubricate as necessary with AWG recommended lubricant. AWG lubricant is water resistant and does not contain mineral oil, solvents or silicone.

Using a lubricant other than the recommended lubricants may cause the O-rings to swell or degrade faster than expected. Do not use excessive amounts of lubricant, over lubricating may cause dirt to collect inside the valve.

Use only recommended lubricant, improper lubricants may cause premature failure of O-rings and seals.

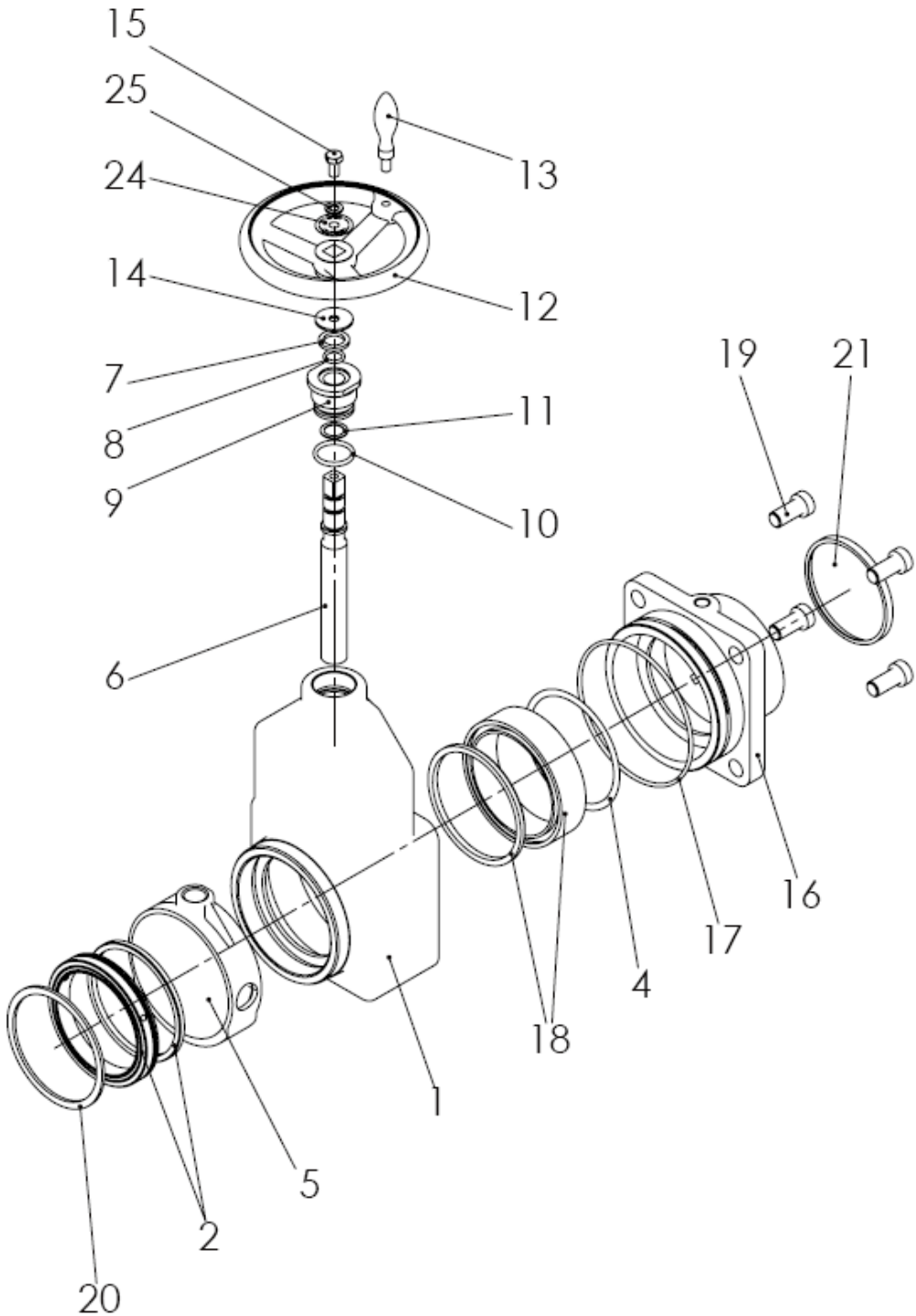
Apply lubricant to the following points to ensure smooth operation:

Lightly lubricate the gate inside the valve.

Open and close the valve several times to ensure smooth operation and spread lubricant across the face of the gate.

6.0 Parts List

4" Gate Valve w/o PRV



6.0 Parts List

4" Gate Valve w/o PRV

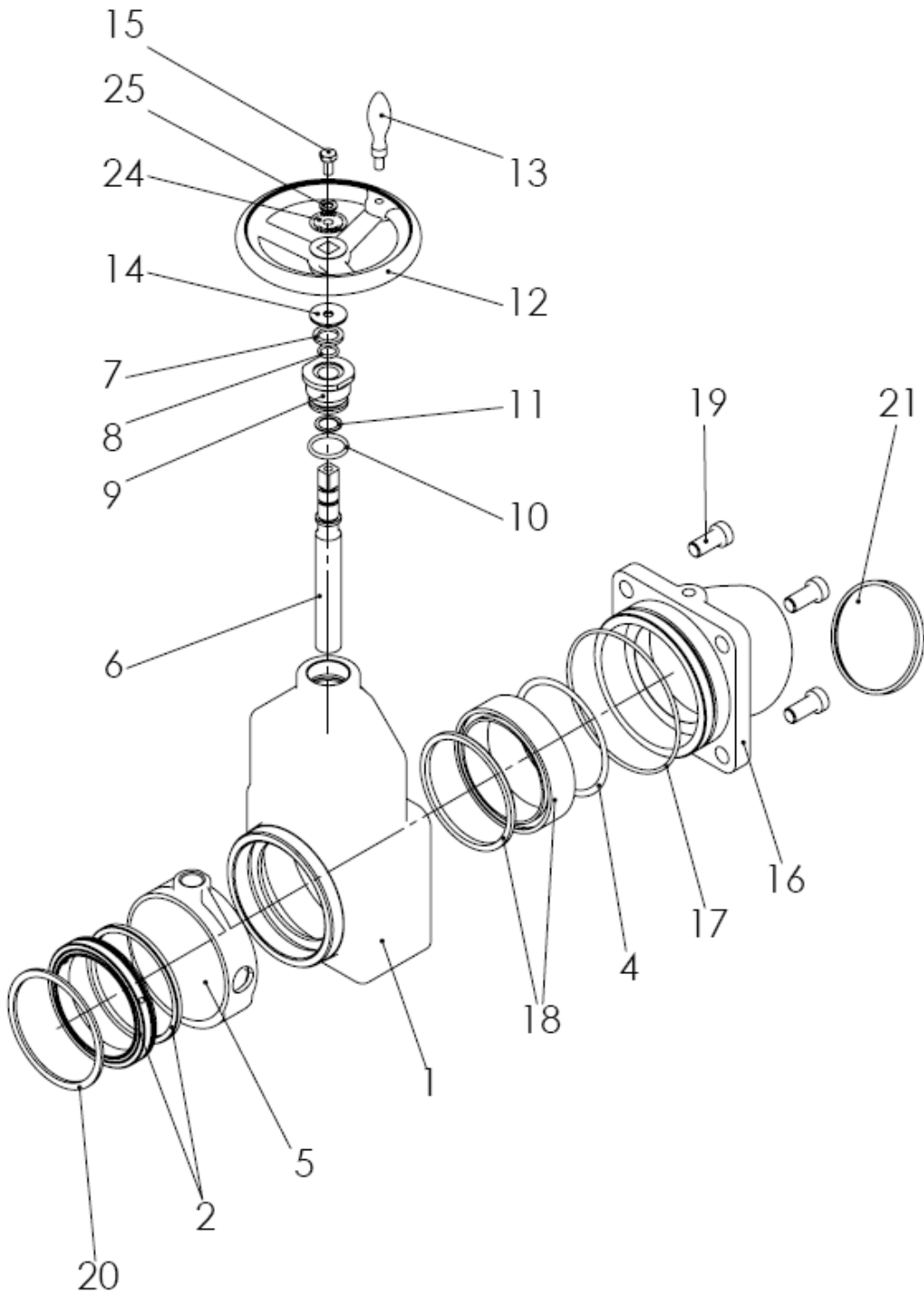
Product number 20452833

| Position | Quantity | Part-No. | Description |
|----------|----------|----------|---|
| 1 | 1 | 10453532 | Body gate valve 4" DN 100 |
| 2 | 1 | 40478033 | Support ring + Gasket Gate valve |
| 4 | 1 | 00034551 | O-RING 100.97X5.33 NBR70 |
| 5 | 1 | 30454439 | Gate for Gate valve DN 100 4" |
| 6 | 1 | 30456045 | Spindle Gate valve DN 100 |
| 7 | 1 | 00097354 | Gasket 17X23X1 TEFLON |
| 8 | 1 | 00011251 | O-RING 12.37X2.62 NBR70 |
| 9 | 1 | 80042535 | Bearing piece Gate valve DN 100 hard anodized (HEL) |
| 10 | 1 | 00021551 | O-RING 28.58X3.53 NBR70 |
| 11 | 1 | 00097554 | Gasket 18X26X3 PTFE/ORIG. |
| 12 | 1 | 00244133 | Hand wheel 160XSW14-M8 D-951 |
| 13 | 1 | 00302033 | Handle 20XM8 DIN 39-B POL. |
| 14 | 1 | 80058548 | Washer 8.4X32X2*** |
| 15 | 1 | 00169448 | Hex bolt M8X16 D-933 8.8 VZ |
| 16 | 1 | 20453132 | Square flange 150 - 4" BSP male (G4A) |
| 17 | 1 | 00024951 | O-RING 123.42X3.53 NBR70 |
| 18 | 1 | 80041233 | Support ring gate valve |
| 19 | 4 | 00218348 | Hex bolt M14X30 DIN6912 8.8VZ |
| 20 | 1 | 00074750 | Gasket 4" BSP female (G4) -100X113X3 GI.80 SH80+5 |
| 21 | 1 | 00341548 | Mesh AS DIN 14423 |
| 22 | 1 | 00319862 | Protection cap GPN 250/114.3 |
| 23 | 1 | 00324662 | Protection cap GPN600/B1090 MAT.: LD-PE |
| 24 | 1 | 80058434 | Label "OPEN - CLOSED" |
| 25 | 1 | 00126248 | Washer 8.4 DIN 433 ST |
| | | | Lubricant |

6.0 Parts List

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4" Gate Valve w/ 25° elbow w/o PRV



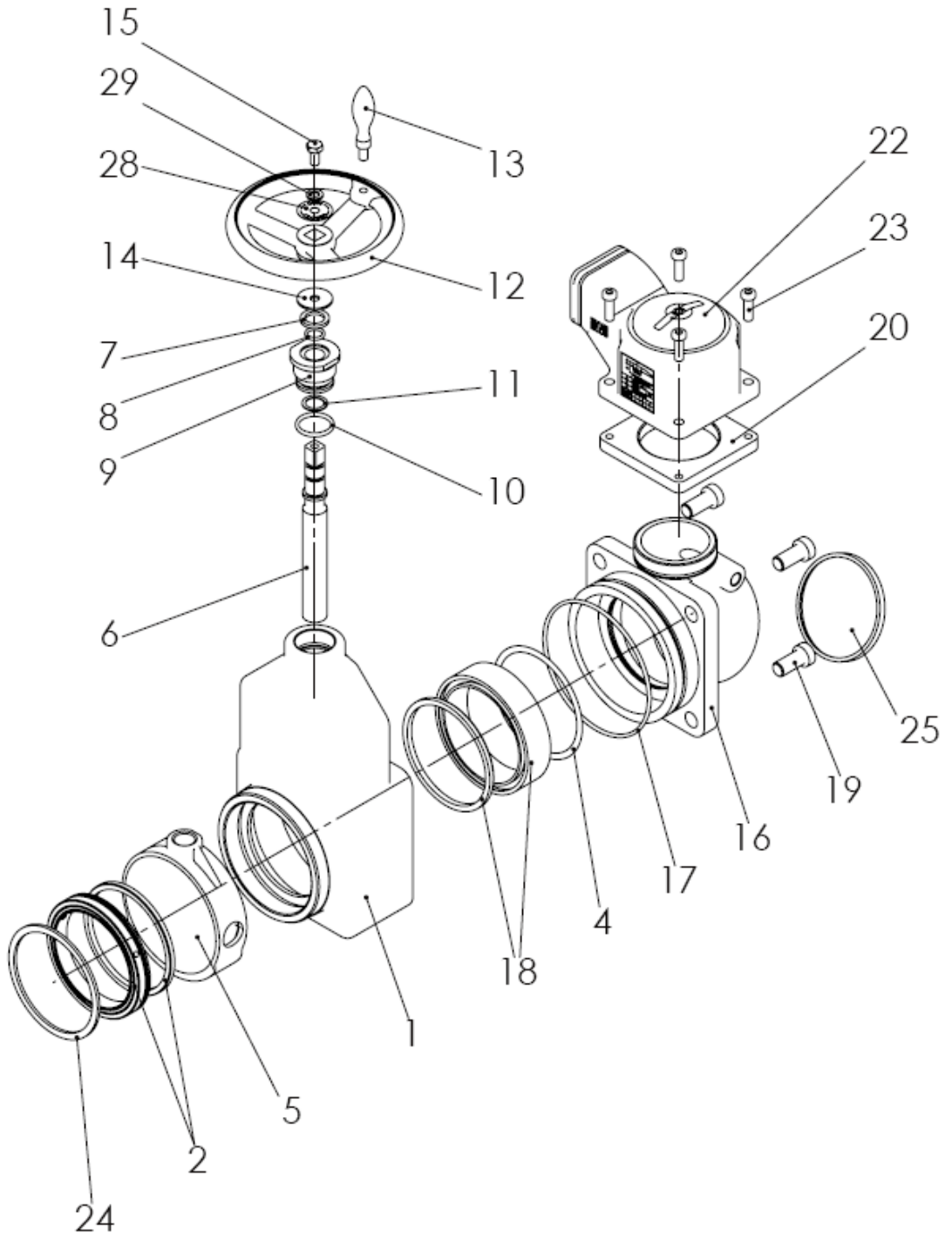
6.0 Parts List

4" Gate Valve w/ 25° elbow w/o PRV

| Position | Quantity | Part-No. | Description |
|----------|----------|----------|---|
| 1 | 1 | 10453532 | Body gate valve DN100 4" |
| 2 | 1 | 40478033 | Support ring gate valve |
| 4 | 1 | 00034551 | O-ring 100.97X5.33 NBR70 |
| 5 | 1 | 30454439 | Gate for gate valve DN 100 4" |
| 6 | 1 | 30456045 | Spindle gate valve DN 100 |
| 7 | 1 | 00097354 | Gasket 17X23X1 TEFLON PTFE GFK 25 |
| 8 | 1 | 00011251 | O-ring 12.37X2.62 NBR70 |
| 9 | 1 | 80042535 | Bearing piece gate valve DN 100 HEL |
| 10 | 1 | 00021551 | O-ring 28.58X3.53 NBR70 |
| 11 | 1 | 00097554 | Gasket 18X26X3 PTFE/ORIG. |
| 12 | 1 | 00244133 | Hand wheel 160XSW14-M8 D-951 |
| 13 | 1 | 00302033 | Handle 20XM8 DIN 39-B POL. |
| 14 | 1 | 80058548 | Washer 8.4X32X2*** |
| 15 | 1 | 00169448 | Set screwM8X16 D-933 8.8 VZ |
| 16 | 1 | 20451332 | Elbow 25 degree gate valve 4" |
| 17 | 1 | 00024951 | O-ring 123.42X3.53 NBR70 |
| 18 | 1 | 80041233 | Support ring gate valve |
| 19 | 4 | 00218348 | Hex bolt M14X30 DIN6912 8.8VZ |
| 20 | 1 | 00074750 | Gasket G4-100X113X3 GI.80 SH80+5 |
| 21 | 1 | 00341548 | MGallonage sleeve AS DIN 14423 |
| 22 | 1 | 00319862 | Protection cap GPN 250/114.3 |
| 23 | 1 | 00324662 | Protection cap GPN600/B1090 MAT.: LD-PE |
| 24 | 1 | 80058434 | Label "OPEN - CLOSED" |
| 25 | 1 | 00126248 | Washer 8.4 DIN 433 ST |
| | | | Lubricant |

6.0 Parts list

4" Gate Valve w/ 25° elbow w/ PRV



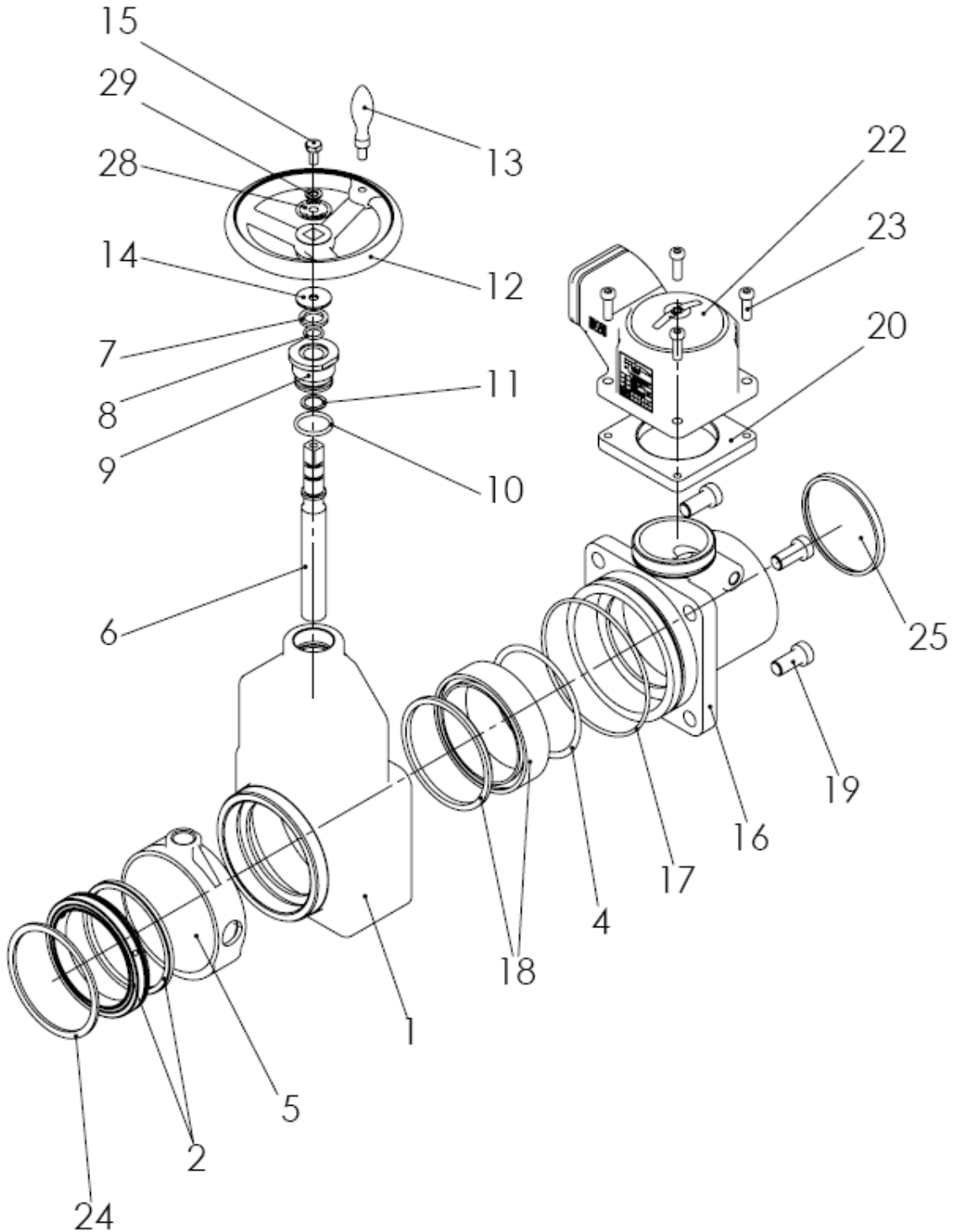
6.0 Parts list

4" Gate Valve w/ 25° elbow w/ PRV

| Position | Quantity | Part-No. | Description |
|----------|----------|----------|---|
| 1 | 1 | 10453532 | Body gate valve DN100 4" |
| 2 | 1 | 40478033 | Support ring gate valve |
| 4 | 1 | 00034551 | O-ring 100.97X5.33 NBR70 |
| 5 | 1 | 30454439 | Gate for gate valve DN 100 4" |
| 6 | 1 | 30456045 | Spindle gate valve DN 100 |
| 7 | 1 | 00097354 | Gasket 17X23X1 TEFLON PTFE GFK 25 |
| 8 | 1 | 00011251 | O-ring 12.37X2.62 NBR70 |
| 9 | 1 | 80042535 | Bearing piece gate valve DN 100 HEL |
| 10 | 1 | 00021551 | O-ring 28.58X3.53 NBR70 |
| 11 | 1 | 00097554 | Gasket 18X26X3 PTFE/ORIG. |
| 12 | 1 | 00244133 | Hand wheel 160XSW14-M8 D-951 |
| 13 | 1 | 00302033 | Handle 20XM8 DIN 39-B POL. |
| 14 | 1 | 80058548 | Washer 8.4X32X2*** |
| 15 | 1 | 00169448 | Set screwM8X16 D-933 8.8 VZ |
| 16 | 1 | 20450832 | Elbow 25 degree gate valve 4" |
| 17 | 1 | 00024951 | O-ring 123.42X3.53 NBR70 |
| 18 | 1 | 80041233 | Support ring gate valve |
| 19 | 4 | 00218348 | Hex bolt M14X30 DIN6912 8.8VZ |
| 20 | 1 | 40480332 | Square flange 105-W75X14" LK125 |
| 22 | 1 | 30277633 | Pressure relief valve IL 82 200PSI |
| 23 | 4 | 00214448 | Hex bolt M 8X25 D6912 8.8 VZ |
| 24 | 1 | 00074750 | Gasket G4-100X113X3 GI.80 SH80+5 |
| 25 | 1 | 00341548 | MGallorage sleeve AS DIN 14423 |
| 26 | 1 | 00319862 | Protection cap GPN 250/114.3 |
| 27 | 1 | 00324662 | Protection cap GPN600/B1090 MAT.: LD-PE |
| 28 | 1 | 80058434 | Label "OPEN - CLOSED" |
| 29 | 1 | 00126248 | Washer 8.4 DIN 433 ST |
| | | | Lubricant |

6.0 Parts list

4" Gate Valve straight w/ PRV



6.0 Parts list

4" Gate Valve straight w/ PRV

| Position | Quantity | Part-No. | Description |
|----------|----------|----------|---|
| 1 | 1 | 10453532 | Body gate valve DN100 4" |
| 2 | 1 | 40478033 | Support ring gate valve |
| 4 | 1 | 00034551 | O-ring 100.97X5.33 NBR70 |
| 5 | 1 | 30454439 | Gate for gate valve DN 100 4" |
| 6 | 1 | 30456045 | Spindle gate valve DN 100 |
| 7 | 1 | 00097354 | Gasket 17X23X1 TEFLON PTFE GFK 25 |
| 8 | 1 | 00011251 | O-ring 12.37X2.62 NBR70 |
| 9 | 1 | 80042535 | Bearing piece gate valve DN 100 HEL |
| 10 | 1 | 00021551 | O-ring 28.58X3.53 NBR70 |
| 11 | 1 | 00097554 | Gasket 18X26X3 PTFE/ORIG. |
| 12 | 1 | 00244133 | Hand wheel 160XSW14-M8 D-951 |
| 13 | 1 | 00302033 | Handle 20XM8 DIN 39-B POL. |
| 14 | 1 | 80058548 | Washer 8.4X32X2*** |
| 15 | 1 | 00169448 | Set screwM8X16 D-933 8.8 VZ |
| 16 | 1 | 20200232 | Square flange150X150 gate valve WA |
| 17 | 1 | 00024951 | O-ring 123.42X3.53 NBR70 |
| 18 | 1 | 80041233 | Support ring gate valve |
| 19 | 4 | 00218348 | Hex bolt M14X30 DIN6912 8.8VZ |
| 20 | 1 | 40480332 | Square flange 105-W75X14" LK125 |
| 22 | 1 | 30277633 | Pressure relief valve IL 82 200PSI |
| 23 | 4 | 00214448 | Hex bolt M 8X25 D6912 8.8 VZ |
| 24 | 1 | 00074750 | Gasket G4-100X113X3 GI.80 SH80+5 |
| 25 | 1 | 00341548 | MGallonage sleeve AS DIN 14423 |
| 26 | 1 | 00319862 | Protection cap GPN 250/114.3 |
| 27 | 1 | 00324662 | Protection cap GPN600/B1090 MAT.: LD-PE |
| 28 | 1 | 80058434 | Label "OPEN - CLOSED" |
| 29 | 1 | 00126248 | Washer 8.4 DIN 433 ST |
| | | | Lubricant |