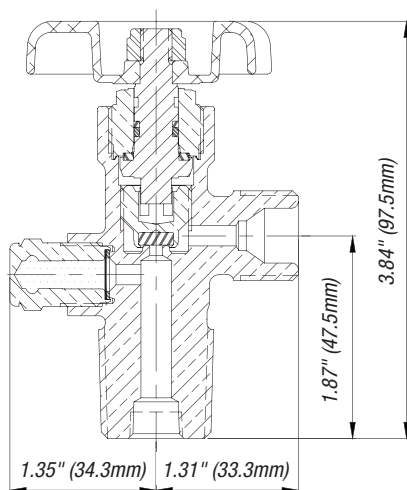
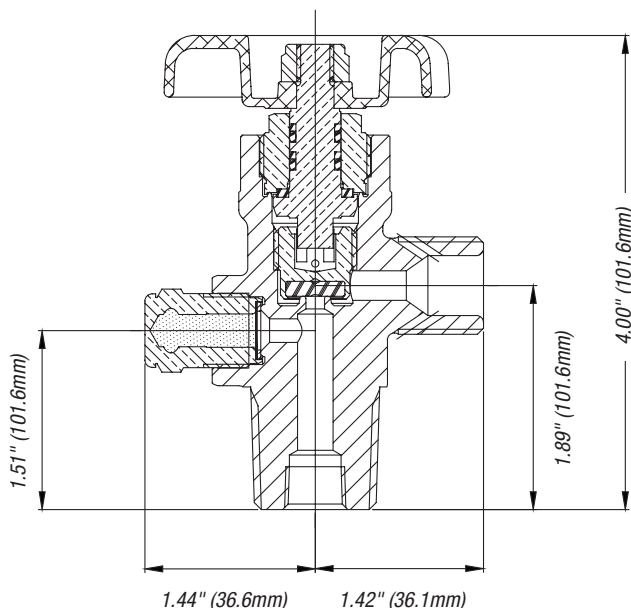


NGV, NGVHM & NGRP Series

Global Industrial Gas Valves for Hydrocarbon-Based Flammable Gases



NGV Series
Up to 3000 PSI Working Pressure



NGVHM
3001 PSI and Above Working Pressure

Global valve for hydrocarbon-based flammable gases, including compressed natural gas (CNG), methane, ethane and other similar gases.

Key Features & Benefits

- Automated assembly and testing processes ensure exceptional quality
- 100% helium leak tested
- Heavy-duty forged brass body for durability and high pressure
- Precisely machined internal components meet the most stringent international valve performance standards
- Reduced internal stress zones
- Innovative valve core design
- Durable Buna-N O-ring and PTFE backup O-ring compatible with flammable gases
- Pressure Relief Device (PRD) unitized plug design provides excellent flow characteristics
- Metal-to-metal seal below bonnet threads prevents pressure in the threads at top of valve body
- Direct-drive stem design with optimized O-ring (NGV) or double O-ring (NGVHM) seal reduces friction and operates at exceptionally low torque levels
- Available inlets include NGT, UNF, DIN477, BS, ABNT and others
- Tapped for dip tube as required

NGV, NGVHM & NGRP Series

Global Industrial Gas Valves for Hydrocarbon-Based Flammable Gases

For further ordering information, refer to the Selection of Pressure Relief Devices on **page 62**, the Pressure Relief Device Numbering Matrix on **page 65**, the Product Markings Reference on **page 66** and the Valve Part Numbering Matrix on **page 70**.

Design Specifications		
	English	Metric
NGV Max. Working Pressure	3000 PSI	200 Bar
NGVHM Max. Working Pressure	6000 PSI	413 Bar
Burst Pressure	15,000 PSI	1034 Bar
Operating Temperature Range	-50° C → +130° F	-45° C → +54° C
Leak Rate Internal/External	1x10 ⁻³ atm cc/sec.	1x10 ⁻³ Bar mL/sec.
Minimum Cycle Life	2000 Cycles	
Cv Flow Factor	Standard: .690	
Operating Torque	NGV: 10–20 in.-lbs. NGVHM: 10–20 in.-lbs.	NGV: 1.1–2.2 N-m NGVHM: 1.1–2.2 N-m
Bonnet Assembly Torques	NGV: 50–60 ft.-lbs. NGVHM: 60–70 ft.-lbs.	NGV: 67.8–81.3 N-m NGVHM: 81.3–94.9 N-m
PRD Torques	NGV: 25–35 ft.-lbs. NGVHM: 40–50 ft.-lbs.	NGV: 33.9–47.4 N-m NGVHM: 54.2–67.8 N-m
NGRPV Cap Assembly Torques	15–25 ft.-lbs.	20.3–33.9 N-m

Materials of Construction		
Sherwood Part Number	Part Description	Materials of Construction
<i>NGV, NGVHM & NGRP Series Industrial and Chrome-Plated Valves</i>		
N/A	Body	Brass C37700; Chrome Plating When Applicable
1400-2 (NGV and NGRP) 1400-2A (NGVHM)	Bonnet	Brass C36000; Chrome Plating When Applicable
1919A	Handwheel	Aluminum A380
1251-6	Handwheel Nut	Steel Class 8, Zinc Plating
1400-4/1400-4A	Lower Plug	Brass C48500
1400-13/1400-13A	Lower Plug Seat	Nylon, Zytel 101
See Chart on Page 62	PRD	Plug: Brass C36000; Chrome Plating When Applicable Rupture Disc: Nickel Alloy 201; Copper C22000 Webbed Seal Gasket: Copper Dead Soft C11000
1400-3	Stem	Brass C36000
G011B-65	O-Ring	Buna-N
MS28774-011T	Back-up O-Ring	PTFE
1251-5	Thrust Washer	Delrin® 500 AF

Standards Conformance	
CGA V-9	Standard for Gas Cylinder Valves
CGA S1.1	Standard for Pressure Relief Devices
CGA V-1	Compressed Gas Cylinder Valve Outlet and Inlet Specifications
ISO 10297	International Standard for Cylinder Valves Design Specifications
ISO 11363-1	25E Inlet Thread Specifications
ISO 15996	International Standard for Residual Pressure Valves Design Specifications (NGRPV)
AS2473	Australian Standard for Compressed Gas Cylinder Valves
TPED/ADR	Transportable Pressure Equipment Directive
A-A-59860	US General Services Administration Standards for Gas Cylinder Valves

Key Replacement Parts	
Sherwood Part Number	Description
1400-31NGV-101KIT (NGV)	Bonnet & Seat Assembly Kit (includes 25 sub-assemblies)
1400-33NGV-101KIT (NGVHM)	
NGRPV-KIT	NGRPV Piston Assembly Kit (includes 50 sub-assemblies)

Lubricants	
Christo-Lube	Used in Valves for All Industrial Gas Applications

NGV, NGVHM & NGRP Industrial and Chrome-Plated Precision Valves

For further ordering information, refer to the Selection of Pressure Relief Devices on **page 62**, the Pressure Relief Device Numbering Matrix on **page 65**, the Product Markings Reference on **page 66** and the Valve Part Numbering Matrix on **page 70**.

NGV and NGVHM Series

Ordering Information					
Sherwood Part Number	Gas Service @ 70° F	CGA Outlet	Outlet Thread Size	Inlet Thread	
<i>Methyl Fluoride</i>					
NGV35064-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
<i>Ethane</i>					
NGV35061-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
<i>Ethylene</i>					
NGV35061-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
<i>Methane</i>					
NGV3504X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	½"–14 NGT	
NGV3506X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
NGV3505X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	1½"–12 UNF	
NGV35025EX-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	25E ISO	
NGV3508X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	1"–11½ NGT	
NGVHM6956X-XX	3001 PSI–4700 PSI	695	1.045–14 NGO LH Int.	¾"–14 NGT	
NGVHM6955X-XX	3001 PSI–4700 PSI	695	1.045–14 NGO LH Int.	1½"–12 UNF	
NGVHM69525EX-XX	3001 PSI–4700 PSI	695	1.045–14 NGO LH Int.	25E ISO	
NGVHM7036X-XX	4701 PSI–6400 PSI	703	1.125–14 NGO LH Int.	¾"–14 NGT	
NGVHM70325EX-XX	4701 PSI–6400 PSI	703	1.125–14 NGO LH Int.	25E ISO	
<i>Natural Gas</i>					
NGV3504X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	½"–14 NGT	
NGV3506X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
NGV3505X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	1½"–12 UNF	
NGV35025EX-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	25E ISO	
NGV3508X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	1"–11½ NGT	
NGVHM6956X-XX	3001 PSI–4700 PSI	695	1.045–14 NGO LH Int.	¾"–14 NGT	
NGVHM6955X-XX	3001 PSI–4700 PSI	695	1.045–14 NGO LH Int.	1½"–12 UNF	
NGVHM69525EX-XX	3001 PSI–4700 PSI	695	1.045–14 NGO LH Int.	25E ISO	
NGVHM7036X-XX	4701 PSI–6400 PSI	703	1.125–14 NGO LH Int.	¾"–14 NGT	
NGVHM70325EX-XX	4701 PSI–6400 PSI	703	1.125–14 NGO LH Int.	25E ISO	

NGRPV Series

Ordering Information					
Sherwood Part Number	Gas Service @ 70° F	CGA Outlet	Outlet Thread Size	Inlet Thread	
<i>Methyl Fluoride</i>					
NGRPV35064-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
<i>Ethane</i>					
NGRPV35061-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
<i>Ethylene</i>					
NGRPV35061-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
<i>Methane</i>					
NGRPV35045X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	½"–14 NGT	
NGRPV3506X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
NGRPV35025EX-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	25E ISO	
<i>Natural Gas</i>					
NGRPV3504X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	½"–14 NGT	
NGRPV3506X-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	¾"–14 NGT	
NGRPV35025EX-XX	0 PSI–3000 PSI	350	.825–14 NGO LH Ext.	25E ISO	

X-XX in Part Number = safety type (X-) and safety pressure (-XX).

For example, NGV3504X-XX with a safety type of CG-5 and 4000 PSI safety pressure would be NGV35045-38.