

LPG-CNG VALVES & EQUIPMENT DIVISION

# LPG TANK EQUIPMENT

Please be so kind to verify with us approvals, accessories (tubes, tubes materials, tubes fixing, anti-filling devices, tools for anti-filling devices, caps, sealants and settings) and optional features. Approvals of any kind have to be expressly specified on orders or enquires.



For orders please refer to:





# U.S.A. LPG TANK EQUIPMENT



#### **APPLICATION**

These multivalves are suitable for 100-200 lbs DOT or ASME containers. The 67.0812 can also be used for a 60 gallons tank.

### **FEATURES**

- Multi purpose valve with double back check filler valve
- Ideal for on site filling of DOT cylinder up to 200 lbs LPG capacity without interrupting service
- Includes a service valve, back check filler valve, fixed maximum liquid level gauge (specify DT lenght when ordering)
- New high discharge flow capacity pressure relief valve (1123 UL listing)
- Reduced filler valve chamber reduces the waste of LPG during filling operation
- Increased high filling capacity
- Double o-ring replaceable stem

Part number	Tank	Vapor Service	Filler	Fixed Liquid	Propane liquid capacity at various differential pressure (GPM)			it various GPM)	Pressure Relief Valve Flow Capacity (SCFM) Air			
Ture number	Connection	Connection	Connection	Level Gauge	Driengar	10 PSI	20 PSI	50 PSI	100 PSI	PRV Setting	UL	ASME
67.0805	3/4" MNPT	POL(CGA 510)	1 3/4" ACME	not captive	10.6″	9	15	23	35	375	1123	
67.0808	3/4" MNPT	POL(CGA 510)	1 3/4" ACME	not captive	11.6″	9	15	23	35	375	1123	
67.0812	3/4" MNPT	POL(CGA 510)	1 3/4" ACME	not captive	6.0″	9	15	23	35	250	n/a	n/a
67.0816	3/4" MNPT	POL(CGA 510)	1 3/4" ACME	not captive	8.2″	9	15	23	35	250	1123	
67.0817	3/4" MNPT	POL(CGA 510)	1 3/4" ACME	not captive	9.6″	9	15	23	35	250	1123	
67.0814	3/4" MNPT	POL(CGA 510)	1 3/4" ACME	not captive	9.6″	9	15	23	35	250	821	740
67.1004	3/4" MNPT	POL(CGA 510)	1 3/4" ACME	not captive	8.6″	9	15	23	35	375	1123	

# **ORDERING INFORMATION**

The features described in this illustration do not bind the manufacturer.

**A**1

EDITION JUNE 2005





# Multiple head unit



LPG-CNG VALVES & EQUIPMENT

DIVISION

67.0.490.0807 Multi Service Valve for ASME underground Propane tank.

#### **APPLICATION**

These multiservice valves are designed for use in a single opening ASME containers with a riser of 2 1/2" MNPT. A separate opening is required for liquid withdrawal valve.

### **FEATURES**

The solid brass multiservice valve incorporates:

- double check filler valve
- vapour equalizing valve with excess flow
- pressure relief valve with protective cap
- service valve with Cavagna Qualihandwheel system
- plugged 1/4" F.NPT gauge boss
- fixed liquid level gauge with DT. Specify DT length when ordering
- "Junior" size float gauge flange opening. Specify float gauge when ordering
- Internal threads accomodate 2 1/2" M.NPT riser pipe connection and a 3/4" F.NPT connection for the filling valve opening
- Douple o-ring service valve: individual replacement system
- \* Specify when ordering

	ORDERING INFORMATION											
Part number	Tank	Vapor Service	Filler	Fixed Liquid	DT length	Propane liquid capacity at various differential pressure (GPM)				Pressure Relief Valve Flow Capacity (SCFM) Air		
i art number	Connection Connecti	Connection	Connection	Level Gauge	Driengen	10 PSI	25 PSI	50 PSI	75 PSI	PRV Setting	UL	ASME
67.0807	2 1/2" MNPT	POL(CGA 510)	1 3/4" ACME	captive	*	58	98	146	186	250	1918	1808

ADDEDING INCOMATION

A2



# **Multiservice Valve**





### **APPLICATION**

Multiservice valve suitable for ASME tanks where a vapor service valve is required. This valve incorporates in the same body a service valve, a vapour withdrawal valve and a fixed level gauge.

### **FEATURES**

**Improved Stem Seal** - Two seals - a back seat and an O-ring (both TFE coated) protect against stem leakage in the service valve portion. When the service valve is fully open, the O-ring is not under pressure, increasing the service life of the O-ring.

**Easy Seal Replacement** - Should either of the stem seals need to be replaced, the tank does not have to be evacuated. Closing the service valve and removing the handwheel and bonnet permits the O-ring and back seat to be reached.

**Redesigned Body Configuration** - Installation of the 67.0720 can be made with a standard 1" socket wrench using the large center wrenching hex. The extremely low body silhouette (approximately 2 3/4") allows the use of small, economical hoods.

Convenient Level Gauge - Top mounting of the fixed liquid level gauge gives easy access.

Gauge Connection - The 1/4" FNPT gauge connection can be plugged or left unplugged for installation of a pressure gauge.

Fixed level gauge - Please specify DT length when ordering

Everseal - Preapplied on the inlet thread

Various DT length upon request

ORDERING INFORMATION										
Part number	Tank Connection	Vapor Service Connection	Vapor Line Connection	Gauge Boss	Fixed Liquid Level Gauge	Fixed Level Gauge DT length	Wrench flat hex			
67.0720	3/4" MNPT	Female POL CGA 510	11/4" M Acme	1/4" FNPT	Yes	12.00″	1"			

A3



#### **FEATURES**

**Double Back Check Construction** - All Omeca filler valves are of the double back check construction where there are: (1) a soft seated up back check, and (2) a metal-to-metal lower back check seat or also a rubber seated back check like in the 66.1104.

**Efficient Flow Characteristics** - The efficient flow channel design of the valves gives low flow resistance, prolonging pump and hose life, and high filling capacity.

One Piece Body Design - 66.1073

**Spray Fill** - The one piece body 66.1073 gives spray filling when installed in any standard or recessed half coupling. The cooling effect of spray filling minimizes tank pressure build up, allowing product to remain in the liquid state for faster filling.

- Sealant pre-applied on the tank connection threads on both valves
- Both valves are UL listed
- Smaller filling upper chamber to avoid waste of liquid propane during every filling operation
- All the valves are furnished with yellow plastic caps with strap attached

Note: For replacement components, please refer to the end of the section.

ORDERING INFORMATION										
Part number	number Container Line Wrench Propane liquid capacity at various differential pressure (GPM) connection Hex Flats 10 PSI 20 PSI 30 PSI 40 PSI 50 PSI 75 PSI							PM) 75 PSI		
66.1122	3/4" M.NPT	1 3/4 Male ACME	1 3/4"	17	23	-	28	33	37	-
66.1232	1 1/4" M.NPT	1 3/4 Male ACME	1 3/4"	58	-	98	-	-	146	186

**B**1

EDITION JUNE 2005

# **Filler Valves**



# VRN 90

66.0.290.1051 Filler valve for LP-GAS tanks. TUV approved. Furnished with solid brass cap.

### VRN 20L

66.0.290.1061 This is a special filler valve, designed for stationary underground tanks. This design facilitates the connection between the stationary tank and the hose of LPG tank truck.

**FEATURES** 





# VRN 93

VRN 88 67.0.490.0681

# - Both these valves are a double check

- filler valves where there are a soft seated upper back check and a (2) metal to metal lower back check seat
- In addition these filler valves incorporate an emergency ball shut-off valve
- These two versions can be used either for underground (VRN 88) or above ground LPG tanks (VRN 93) thanks to an oriented easy to connect design to the bobtail delivery truck
- Both valves are conforming British standards

Dout usual or	Tank Filler		Wrench	Propane liquid capacity at various differential pressure (GPM)							
Part number	connection	connection	Hex Flats	10 PSI	20 PSI	25PSI	30 PSI	40 PSI	50 PSI	75 PSI	
66.1051 (VRN 90)	1 1/4 - NPT	1 3/4 - 6 ACME	Es. 46 mm	58	-	98	-	-	146	186	
66.1061 (VRN 20L)	1 1/4 - NPT	1 3/4 - 6 ACME	Es. 46 mm	54	-	100	-	-	148	190	
66.0221 (VRN 93)	1 1/4 - NPT	1 3/4 - 6 ACME	Es. 46 mm	-	-	-	-	-	-	-	
67.0681 (VRN 88)	1 1/4 - NPT	1 3/4 - 6 ACME	Es. 46 mm	-	-	-	-	-	-	-	

# **ORDERING INFORMATION**



# **Filler Valves** with overfilling prevention device



66.0.290.1101 Filler valve suitable for underground tank. The extended body allows an easier refilling operation.



66.1106 66.0.290.1106 Filler valve with high flow capacity suitable for above ground containers. Specify tank size when ordering.



66.0.290.1093 As the other valves that incorporates an OPD, this filler has in addition an extended filler valve with ball shut-off valve manually operated.

### **APPLICATION**

These filler valves are designed for horizontal and vertical LPG containers. All the valves are equipped with an antifilling prevention device. Always specify type of tank (horizontal or vertical) diameter of the tank and location of the filler valve in the flange of the tank.

ORDERING INFORMATION									
Part number	Tank Connection	Filler Connection	Wrench flat size	Specify tank dimension when ordering					
66.1101	1 1/4" MNPT	1 3/4 ACME	1 3/4"	*					
66.1106	1 1/4" NGT	1 3/4 ACME	1 3/4"	*					
66.1093	1 1/4" NPT	1 3/4 ACME	1 3/4"	*					

B3







#### **APPLICATION**

These filler valves fitted with an OPD device are suitable for direct filling automotive applications. Both these valves incorporate standard 1' 1/4 Hex wrench flat that allowing easy installation from the top with a socket wrench.

ORDERING INFORMATION									
Part number	Tank Connection	Filler Connection	Wrench flat size	Specify tank dimension when ordering					
66.1115	3/4" NPT	1 3/4 ACME	1 1/4"	*					
66.1154	3/4" NPT	1 3/4 ACME	1 1/4"	*					
66.1157	3/4" NPT	1/2″ SAE	1 1/16"	*					



**B**4



EDITION JUNE 2005

# Internal Pressure Relief Valves for ASME and DOT Containers



Designed specifically for use as a primary pressure relief device on ASME containers up to 2000 gallons water capacity. Furnished with rain cap for protection against contamination. See ordering information for part numbers. All these valves have a pre-applied sealant on the container connection. Most of these valves are ASME approved.



# **66.1128** NEW (66.1030) OLD

66.0.290.1128 NEW (66.0.290.1030) OLD





66.1135 NEW (66.1057) OLD

66.0.290.1135 NEW (66.0.290.1057) OLD

**66.1130** NEW (66.1031) OLD

66.0.290.1130 NEW (66.0.290.1031) OLD



66.1129 NEW (66.1029) OLD

66.0.290.1129 NEW (66.0.290.1029) OLD



**66.0.290.1162** 

		ORDERING	INFORMATION		
Part number	Container Connection	Start to Discarge Setting PSI	UL (at 120% of set pressure) Flow capacity SCFM/AIR	ASME (at 120% of set pressure) Flow capacity SCFM/AIR	Wrenching Hex
66.1129 NEW 66.1029 OLD	1"-NPT	250	<b>2662</b> 2757	<b>2396</b> 2493	<b>1 7/8" NEW</b> 1 3/4"
66.1128 NEW 66.1030 OLD	3/4"-NPT	250	<b>1989</b> 2007	<b>1790</b> 1807	<b>1 3/4" NEW</b> 1 9/16"
66.1130 NEW 66.1031 OLD	1-1/4"-NPT	250	<b>4372</b> 4312	<b>3934</b> 3913	<b>2 3/8" NEW</b> 2 1/4"
66.1058	1"-NPT	312	1109	979	1 5/16″
66.1135 NEW 66.1057 OLD	1"-NPT	250	<b>1074</b> 864	<b>967</b> 786	1 5/16"
66.1127	1"-NPT	375	1491	n/a	1 5/16"
66.1162	3/4"-NPT	312	690	690	1 1/16″
66.1132	1"-NPT	375	1491	n/a	1 5/16″

The features described in this illustration do not bind the manufacturer.





PLASTIC

Rain caps for Internal Pressure Relief valves Vinyl or plastic







Type for	Part number					
66.1029 66.1129	30.0.110.0273 - 10.0.110.5033 - 10.0.950.0204					
66.1030	30.0.110.0274 - 10.0.110.5036					
66.1128	30.0.110.0274 - 10.0.950.0203					
66.1031 66.1130	30.0.110.0276 - 10.0.110.5037 - 10.0.950.0205					
66.1057 66.1058 66.1127 66.1135	10.0.110.5032					
66.1162	10.0.110.5056					
66.1027	10.0.110.5056					
66.0248	10.0.110.5038					

# ORDERING INFORMATION

EDITION JUNE 2005

C2 www.cavagnagroup.com



# Internal Pressure Relief Valves for DOT fork lift Cylinders



LPG-CNG VALVES & EQUIPMENT



#### 66.1027

66.0.290.1027 Designed specifically for use as primary relief valve on fork lift cylinders. A 45° deflector adapter is already included into the body of the valve. The design of the valve is a one-piece hot forged brass body.



# 66.0248

66.0.290.0248 Designed specifically for use as primary relief valve on fork lift cylinders. Specific protective cap is provided with 66-0248. See ordering information for part numbers.

ORDERING INFORMATION								
Part number	Container Connection	Start to Discarge Setting (PSI)	UL (at 120% of set pressure) Flow capacity SCFM/AIR	Wrenching Hex				
66.1027	3/4" NPT	375	400	1 1/16″				
66.0248	3/4" NPT	375	400	1 1/16"				

DIVISION

**C**3





#### **APPLICATION**

These valves are designed for vapor or liquid withdrawal service on DOT fork lift truck containers (80-2064) and ASME containers (all the others). All these valves are equipped with an excess flow limiter with different settings.

Since these valves do not have an integrated pressure relief valve they may only be used as an accessory valve on containers that have an indipendent PRV suitable for that container capacity (like 66.0248 or 66.1057 or 66.1058 see page pressure relief valves).

#### **FEATURES**

All these valves are supplied with preapplied sealant on the inlets. The 80.2064 has also preapplied sealant on the outlet. **Double O-ring Stem Seal** - Two O-rings form the stemseal for improved resistance to leakage due to dirt or temperature extremes.

**Tamperproof Design** - Travel stop keeps handwheel from being removed, helps to prevent tampering. Also, prevents removal of the stem and provides an additional seal against gas leakage.

Sturdy QualiHandwheel Brass Handle - Large, sturdy brass handwheel and stem threads less likely to be broken, even with rough handling.

Static Seat Disc - Since the seat disc does not rotate, abrasive wear on the disc is eliminated, improving service life.

**Recessed Excess Flow Valve** - The recessed excess flow valve helps reduce the possibility of mechanical damage or fouling from excess pipe compound.

ORDERING INFORMATION								
Part number	Part number Container Connection		Normal Application	Excess Flow Closing				
80.2063		3/8" SAE Flare (70)	ASME Motor Fuel	3.3 GPM				
80.2062		3/8" SAE Flare (90)	ASME Motor Fuel	3.3 GPM				
80.2146	3/4" MI.NGT	POL (CGA 510)	ASME Motor Fuel	1.5 GPM				
80.2064		3/8-18 NPT	DOT Forklift	2.6 GPM				

LPG-CNG VALVES & EQUIPMENT

DIVISION





# Lift Truck Connectors

These brass connectors are designed to join the carburator fuel line to the service valve on FLT.







## 66.1024

66.0.290.1024 Half coupling ACME. For installation on LP gas engine fuel lift truck service valves.





# ORDERING INFORMATION

Part number	INLET A	OUTLET <b>B</b>	Normal Application
66.1024	3/8″ F.NPT	1 1/4" M.ACME	Service Valve
66.1023	1 1/4" F.ACME	1/4″ F.NPT	Fuel Line

CYLINDER VALVES





# Fixed Liquid Level Gauges

66.1072 66.0.290.1072

Special DT length can be ordered apart. An optional instruction plate may be ordered for use with these valves. All these valves incorporate a N° 54 drill size orefice.



# **ORDERING INFORMATION**

Part number	Container connection	DT lenght
66.1072	1/4" M.NPT	12"
66.1116	1/4" M.NPT	5,4"
66.1117	1/4" M.NPT	6,6"
66.1118	1/4" M.NPT	3,8"
66.1119	1/4" M.NPT	4,1"
66.1120	1/4" M.NPT	5,6"
66.1121	1/4" M.NPT	6,9"
66.1124	1/4" M.NPT	Without
66.1125	1/4" M.NPT	5,2"
66.1161	1/4" M.NPT	_



**D**2

**66.0.290.1161** 





# **Liquid Withdrawal** Valves with excess flow

All these valves are designed for liquid withdrawal from stationary containers.



#### 69.0010 LISTED 69.0.190.0010

This new liquid withdrawal valve is designed to provide withdrawing liquid from stationary tank prior to moving the tank. This valve can also be used on permanent installations being equipped with excess flow limiter.

Designed according to the latest UL standard.



66.0.290.1109 This adapter is designed to be used with 69.0010 liquid withdrawal valve. Fully compatible with the new evacuation valves on the market.





### 66.1025



Liquid withdrawal valve with excess flow valve. The valve can also be used with one transfer shut off valve RRL16 with an adapter.

### 69.0017 69.0.190.0017

Liquid withdrawal with **Excess Flow Valve** Performance: excess flow closes 25.5÷3 m<sup>3</sup>/h (water); residual flow  $\leq$  0.020 m<sup>3</sup>/h (water) with  $\Delta P$  +1 bar



# **ORDERING INFORMATION**

Part number	Container Connection	Outlet Connection	U.L. Closing Flow (Propane)	Wrenching Hex (inches)
69.0010	3/4" MNPT	5/8 FNPT	20GPM	1 15/16"
66.1109	15/8" UNF	3/42 UNF	n/a	n/a
66.0017	1″ 1/4" NPT	3/4" NPT	n/a	1 3/4″
66.1025	3/4" MNPT	3/4" NPT	18.5 GPM	1 3/8″

E1



LPG CYLINDER VALVES

# LPG DYEARS LIMITED WARRANTY

# Service Valves for ASME and DOT containers or fuel line application





#### 80.3135

Designed expecially for vapor withdrawal service on ASME an dot containers. Since this valve has no integral pressure relief valve they may only be used as an accessory valve on containers that have an indipendent pressure relief valve sufficient for that container's capacity. This valve can be used also as a service valve on a 420lbs tank or a 300lts horizontal tank. This valve also incorporate a fixed liquid level gauge. Specify DT length when ordering.



**80.1002** 80.0.290.1002 Open-close valve with POL outlet. Designed for vapor withdrawal on small cylinders.

### **FEATURES**

**Double O-ring Stem Seal** - Two O-rings form the stemseal for improved resistance to leakage due to dirt or temperature extremes.

**Sturdy QualiHandwheel Brass Handle** - New large sturdy brass handwheel and stem threads less likely to be broken, even with rough handling. Reparable design based upon reques.

Static Seat Disc - Since the seat disc does not rotate, abrasive wear on the disc is eliminated, improving service life.

ORDERING INFORMATION							
Part number	Tank Connection	Vapor Service Connection	Fixed Liquid Level Gauge	Fixed Level Gauge DT light			
80.3135	3/4" NGT	POL CGA 510	Not captive	11,1"			
80.3144	3/4" NGT	POL CGA 510	Not captive	5,8″			
80.1002	3/4" NGT	POL CGA 510	N/A	N/A			
80.3149	3/4" NGT	POL CGA 510	Not captive	11,0"			

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F1





#### LPG CYLINDER VALVES

# LPG DYEARS







F2



# Type 1 ACME Cylinder Valve with Overfill Prevention Device (OPD)

These Type 1ACME valves (CGA791) are intended for DOT cylinders up to 40 pounds LP Gas capacity, (96 pounds water capacity), LP Gas service. This valve has a vapor service outlet, relief valve, captive fixed liquid level gauge, and an overfill prevention device (OPD).

**LPG VALVE TYPE 1** 

**MOD. P110** 

**NEW** 

**OVERFILL** 

DEVICE

PREVENTION

MOD. P1120



LPG-CNG VALVES & EQUIPMENT

LPG CYLINDER VALVES

# **FEATURES**

- Rapid Purging and filling with over One million
  BTU Withdawal Capacity
- Steel Safety Cage provides long-term Operational Protection
- > Tri-lobular one-piece forged brass handwheel
- Double "O-Ring" stem seal for improved leak resistance
- Includes Ever Seal sealant (pre-applied)
- Quad "O-Ring" check valve seat, opens only with positive seal
- High capacity BTU withdrawal allows fast purging and filling
- Upward spray filling eliminates premature shutoffs
- Steel safety cage surrounding critical welds provides additional protections to components

Part Number	Cylinder Cap.	Container Conn.	Outlet Conn.	Relief Setting	Dip Tube
80.8107	20lbs	3/4″-14 NGT	Type 1 ACME and POL	375 PSIG	4.0″
80.8109	30lbs	3/4"-14 NGT	Type 1 ACME and POL	375 PSIG	4.8″
80.8110	40lbs	3/4"-14 NGT	Type 1 ACME and POL	375 PSIG	6.5″
80.8123	14lbs	3/4"-14 NGT	Type 1 ACME and POL	375 PSIG	3.2″
80.2124	20lbs	3/4"-14NGT	Type 1 ACME and POL	375 PSG	3.8″

DIVISION

The features described in this illustration do not bind the manufacturer.

**G**1



# LPG Float Gauges Flanged 4 bolt model

These float gauges flanged 4 bolt models includes also a mounting.





# **ORDERING INFORMATION**

Part number	umber NOMINAL DIAMETER		TANK	CONTAINER	CONTAINER CAPACITY	DIMENSION (mm)	
	ø Inches	ø mm	type	gallons	litres	А	В
2069.U	24″	609,60	horizontal	120	454,25	338	285
2070.U	30″	762,00	horizontal	250/320	946,35/1.211,328	412	360
2071.U	37″	939,80	horizontal	500	1.892,70	510	438
2072.U	41″	1.041,40	horizontal	1000	3.785,40	553	477
2073.U	48″	1.219,20	horizontal			612	535
2075.U	30″	762,00	vertical			640	430
2076.U			vertical			560	477
20SO.U			horizontal			(*)	(*)
20SV.U			vertical			(*)	(*)

P.s.: MM is the month of manufacture I.E. 2000/03 = 03-00

AA is the year of manufacture

(\*) dimension on request

LPG FLOAT GAUGES



# Magnetic LPG level indicator

Die cast zinc head. Gear assembly: Die cast zinc. Float: spansil rubbér.

Part number

101-3/4



Model with thread 3/4". Manufactured for lift truck cylinder and for others type of vehicles.



Threaded 3/4" model. Die cast zinc hexagonal head (hex. 50) Gear made of antivibrating delrin. Float in spansil rubber. Dial with reading lying within 140°.

NOMINAL

ø Inches

12″

10 1/22"

**ORDERING INFORMATION** 

DIAMETER

ø mm

305

368

Advise the cylinder diameter for different request.

CONTAINER

CONNECTION

3/4" NPT

Hı

TANK

type

horizontal



LPG	T	hreaded
Floa	t	Gauges





All level gauges are produces in compliance to CEN TC 286-prEN 13799 standard. The float is made in SPANSIL rubber. This kind of material, cannot be detached from his lodge when getting in touch with caustic soda. These level gauges have been manufactured in accordance to the best available technology: a tropicalised zamac has been used both for the head and the gearing.



ORDERING INFORMAT	10	N
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Part number	NOMINAL	DIAMETER	TANK	CONTAINER	CAPACITY	DIMENSI	ON (mm)	CONTAINER
	ø Inches	ø mm	type	gallons	litres	А	В	CONNECTION
2069.U1″	24″	609,60	horizontal	120	454,25	338	285	1″
2070.U1"	30″	762,00	horizontal	250/320	946,35/1.211,328	412	360	1″
2071.U1″	37″	939,80	horizontal	500	1.892,70	510	438	1″
2072.U1″	41″	1.041,40	horizontal	1000	3.785,40	553	477	1″
2073.U1″	48″	1.219,20	horizontal			612	535	1″
2075.U1"	30″	762,00	vertical			640	430	1″
2076.U1″			vertical			560	477	1″
20SO.U1"			horizontal			(*)	(*)	1″
20SV.U1"			vertical			(*)	(*)	1″
2069.U1 1/4	24″	609,60	horizontal	120	454,25	338	285	1/4″
2070.U1 1/4	30″	762,00	horizontal	250/320	946,35/1.211,328	412	360	1/4″
2071.U1 1/4	37″	939,80	horizontal	500	1.892,70	510	438	1/4″
2072.U1 1/4	41″	1.041,40	horizontal	1000	3.785,40	553	477	1/4″
2073.U1 1/4	48″	1.219,20	horizontal			612	535	1/4″
2075.U1 1/4	30″	762,00	vertical			640	430	1/4″
2076.U1 1/4			vertical			560	477	1/4″
20SO.U1 1/4			horizontal			(*)	(*)	1/4″
20SV.U1 1/4			vertical			(*)	(*)	1/4″

AA is the year of manufacture

(A= January, B= February, C= March etc.)

P.s.: MM is the month of manufacture

I.E. 2000/03 = 03-00

(\*) dimension on request



The manufacturer declines all responsibility for incorrect use or application. We recommend to use original parts or to replace the whole valve.



Pressure gauge in glycerine bath. Scale 0-25 bar. Connection: 1/4" NPT.

Type connection	Part number
Back side	30.0.110.0179
Radial	30.0.110.0180



LPG-CNG VALVES & EQUIPMENT

Connection devices with excess flow check valve built in to be used with the multivalve GSE 35.

16.0.950.0039 (capacity 50 Kg.) 16.0.950.0052 (capacity 95 Kg.)



Rain caps for Internal Pressure Relief valves

Type for	Part number
66.1029 66.1129	30.0.110.0273 - 10.0.110.5033 - 10.0.950.0204
66.1030	30.0.110.0274 - 10.0.110.5036
66.1128	30.0.110.0274 - 10.0.950.0203
66.1031 66.1130	30.0.110.0276 - 10.0.110.5037 - 10.0.950.0205
66.1057 66.1058 66.1127 66.1135	10.0.110.5032
66.1162	10.0.110.5056
66.1027	10.0.110.5056
66.0248	10.0.110.5038



Connection for steel pipe (to be welded), applicable to RL 15 - RL 25 Cylinder Valves.

16.0.950.0026



Plug with gasket for Liquid Withdrawal Valve.

Type for	Part number
VLT 18 - VL 13	10.0.950.0080
VLF 14 - VLF 25	10.0.950.0082
66.1025	10.0.950.0044
69.0010	10.0.950.0128



DIVISION



# Tank Equipment Spare Parts



Plastic cap with ACME threading. Caps with ACME threading also available in brass.

Type for	Part number	colour
VRN14/20	10.0.950.0064	blue
GSE 35/38	10.0.950.0062	blue
66.1026	10.0.950.0053	yellow
66.1028	10.0.950.0053	yellow
66.1104	10.0.950.0053	yellow
66.1073	10.0.950.0053	yellow



Vent stem. (GSE 35 - GS 50) 03.0.950.0145



Rubber gasket	
for ACME thread	cap.

Type for	Part number
VRN20	04.0.110.2565
GSE	04.0.110.2578
66.1026	04.0.110.2565
66.1028	04.0.110.2565
66.1104	04.0.110.2565
66.1073	04.0.110.2565



Plastic rain caps for external safety relief valves.

Type for	<b>Colour White</b>
EU 19	10.0.110.5012
EU 24	10.0.110.5011
EU 29	10.0.110.5013

Type for	Colour Black
EU 20	10.0.110.5016
EU 25	10.0.110.5014
EU 30	10.0.110.5015



Bonded seals for external safety valves with cylindrical thread.

Type for	Part number
EU 20	04.0.110.2573
EU 25	04.0.110.2570
EU 30	04.0.110.2574
VS 36	04.0.110.2588
VS 45	04.0.110.2587



# **DOT ASME Cylinder Valve**





LPG-CNG VALVES & EQUIPMENT	DIVISION
APPLICATIONS	

# Stationary tank installation









**MULTISERVICE VALVE** 

66.1106



67.0807



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The features described in this illustration do not bind the manufacturer.





# **EUROPEAN** LPG TANK EQUIPMENT







# **Multiservice Valves**





# **GS 50**

67.0775 (above gr.) 67.0792 (undergr.) Multiservice Valve equipped with a pressure gauge in glycerine bath, 0+25 bar scale, and a fixed level gauge to ensure 80% of tank filling. It incorporates an excess flow valve, which closes when the flow reaches a rate of 37,5÷45 Kg/h propane (a first stage propa- installation of an outlet devine regulator with 40 Kg/h capacity and 1,5 bar setting point can be attached).

# **GS 41**

67.0773 (above gr.) Multiservice Valve with vertical outlet and fixed liquid level tube which ensures 85% max. filling of the tank. It incorporates an excess flow valve, which closes when the flow reaches a rate of 42÷54 Kg/h propane (a first stage propane regulator with 40 Kg/h capacity and 2 bar setting point can be attached).

**GS 89** 

It allows optional

ce with excess flow.

**GSE 35** 

67.0776 (above gr.)

67.0794 (undergr.)

equipped with a pressure

gauge in glycerine bath,

0÷25 bar scale, and a fixed level gauge to ensure 80% of tank filling.

Multiservice Valve

67.0774 (above gr.) Multiservice Valve with vertical outlet and fixed liquid level tube which ensures 85% max. filling of the tank. It incorporates an excess flow valve, which closes when the flow reaches a rate of 42÷54 Kg/h propane (a first stage propane regulator with 40 Kg/h capacity and 2 bar setting point can be attached).









67.0796 (above gr.)

Multiservice Valve with vertical outlet. It incorporates an excess flow valve, which closes when the flow reaches a rate of 42÷54 Kg/h propane (a first stage propane regulator with 40 Kg/h capacity and 2 bar setting point can be attached). It is a special underground fitting equipped with a pressure relief device that enables liquid discharge at 14 bar.

ORDERING INFORMATION									
Part number	Container Connection	Outlet Connection	Excess flow device	Closing Flow-CE (Propane)	Wrench Grip (mm)	Fixed level gauges with dip tube	Master gauge insp. flange	Relief devices	
67.0775 (GS 50 above gr.) 67.0792 (GS 50 undergr.)	3/4" – 14 NPT for both	W20x 1/14" LH for both	Inlet Built-in for both		30 (square) for both		Yes Yes	N/a	
67.0776 (GSE 35 above gr.) 67.0794 (GSE 35 undergr.)	3/4" – 14 NPT for both	885" – 14 NGO- LH-INT for both	Installed onto outlet connector	Between30 (squar for both42-54 kg/h40 (hex.propane (1)40 (hex.	30 (square) for both on all types	Available on all types	Yes Yes	N/a	
67.0773 (GS 41 above gr.)	3/4" – 14 NPT	UNI ISO 228/1- G 3/4-B Inlet Built-in	Inlet Built-in		42-54 kg/h	40 (hex.)	with tubes	N/a	N/a
67.0774 (GS 89 above gr.)	1 1/4″– 11.5 NPT	UNI ISO 228/1- G 3/4-B	Inlet Built-in		40 (hex.)	in different	N/a	N/a	
67.0796 (GS 90 undergr.)	1 1/4"– 11 1/2 NPT	UNI ISO 228/1- G 3/4-B	Inlet Built-in		40 (hex.)		N/a	Liquid pressure relief valve <sup>(2)</sup>	

\* see page Spe1, item 16.0.950.0039/0052. Two models depending on the capacity required - please specify when ordering

please specify length of dip tube, tank capacity and diameter when ordering Data valid when upstream pressure 2 bar and first stage 40 kg/h regulator connected – excess flow valve performance.

(2) Pressure relief device designed to discharge liquid in case of overpressure – The device starts to discharge liquid at 14 bar with a capacity of 1500 lt/h water.





# Compact Underground Tank Set



Spare a bung drill in your tank with this new concept installation set that makes the use of bulky pressure relief devices needless.







**LF-25** - **69.0004** Liquid withdrawal valve. (See page **Ee1**)

2



**3** Mod. GS-90 - 67.0796 (undergr.) Multiservice Valve (See page Ae1) Multiservice Valve with built-in safety relief valve. When valve VRN-SL and service valve GS-90 are installed on underground tanks a traditional pressure relief valve could be needless. That is because underground tanks are not subject to fire engulfment. Our service valve GS-90 is equipped with a pressure relief device, which is enabled to discharge liquid at 14 bar (setting point).



**4** Mod. VRN-SL - 66.1101 Extended filler valve designed with an 80% automatic overfilling prevention device. (See page **Be3**)

Ae2



DIVISION



**VRN 20L** 66.1063

LPG-CNG VALVES & EQUIPMENT

PROVED

### **FEATURES**

COVOC

Double Back Check Construction - All Omeca filler valves are of the double back check construction where there are: (1) a soft seated up back check, and (2) a metal-to-metal lower back check seat.

Efficient Flow Characteristics - The efficient flow channel design of the valves gives low flow resistance, prolonging pump and hose life, and high filling capacity.

#### **Two Piece Body Design**

• All valves are CE approved

• Smaller filling upper chamber to avoid waste of liquid propane during every filling operation

• VRN 20L - 66.1063 is designed to make underground tank installations more accessible to fillers.

Note: For replacement components, please refer to the end of the section. 66.1043 and 66.1063 are furnished with plastic blue caps with strap. 66.1051 is furnished with solid metal cap in brass.

• All our filler valves have a filling capacity  $\ge 8 \text{ m}^3$  water  $\Delta p= 4 \text{ bar}$ .



**VRN 20** 66.0.290.1043

ORDERING INFORMATION								
Part number	Tank	Filler	Wrench	Propane liquid	capacity at vari	ous differential	pressure (GPM)	
	connection	connection	Hex Flats	10 PSI	25PSI	50 PSI	75 PSI	
66.1051 (VRN 90)	1 1/4 - NPT	1 3/4 - 6 ACME	Es. 46 mm	58	98	146	186	
66.1063 (VRN 20L)	1 1/4 - NPT	1 3/4 - 6 ACME	Es. 46 mm	54	100	148	190	
66.1043 (VRN 20)	1 1/4 - NPT	1 3/4 - MALE ACME	1 3/4"	54	100	148	190	

Be1





# Filler Valves with Manual Ball Shut-off Features





### **FEATURES**

- Both these valves are double check filler valves where there are a soft seated upper back check and a (2) metal to metal lower back check seat
- In addition these filler valves incorporate an emergency ball shut-off valve
- These two versions can be used either for underground (VRN 88) or above ground LPG tanks (VRN 93) thanks to an oriented easy to connect design to the bobtail delivery truck
- Both valves are conforming British standards
- All our filler valves have a filling capacity  $\ge 8 \text{ m}^3$  water  $\Delta p= 4$  bar.

ORDERING INFORMATION							
Part number	Tank connection	Filler connection	Wrench Hex Flats				
66.0221 (VRN 93)	1 1/4 - NPT	1 3/4 - 6 ACME	Es. 46 mm				
67.0681 (VRN 88)	1 1/4 - NPT	1 3/4 - 6 ACME	Es. 46 mm				

Be2







# **Filler Valves** with Overfilling Prevention Device





# 66.1101

Filler valve suitable for underground tank. The extended body allows an easier refilling operation.



66.1106

Filler valve with high flow capacity suitable for above ground containers. Specify tank size when ordering.



66.1093 As the other valves that incorporates an OPD, this filler has in addition an extended filler valve with ball shut-off valve manually operated.

#### **APPLICATION**

These filler valves are designed for horizontal and vertical LPG containers. All the valves are equipped with an antifilling prevention device.

Always specify type of tank (horizontal or vertical) diameter of the tank and location of the filler valve in the flange of the tank.

• All our filler valves have a filling capacity  $\ge 8 \text{ m}^3$  water  $\Delta p = 4 \text{ bar}$ .

ORDERING INFORMATION							
Part number	Tank Connection	Filler Connection	Wrench flat size	Specify tank dimension when ordering			
66.1101	1 1/4" MNPT	1 3/4 ACME	1 3/4"	*			
66.1106	1 1/4" NGT	1 3/4 ACME	1 3/4"	*			
66.1093	1 1/4" NPT	1 3/4 ACME	1 3/4"	*			







# **ORDERING INFORMATION**

Part Number*	Bottom Male Connection	Wrench grip hexagon (mm)	Threa taper	d type parallel	Configuration suitable for this	PRV - Start to Discharge Setting (bar)	PRV - OVERPRESSURE 10% CAPACITY Nm <sup>3</sup> /min	Approval	PRV Orifice (mm)
<b>70.0014 (EU 19)</b> - <i>PRV</i> <b>71.0005 (ST 19)</b> - <i>CLD</i>	3/4" – 14 NPT 1 1/4" NPT	46 46	X X	•			41,00		19,00
<b>70.0026 (EU 20)</b> - <i>PRV</i> <b>71.0016 (ST 20)</b> - <i>CLD</i>	3/4" NPSM 1 1/4" NPT	46 46	x	x	1000 lt		41,00		19,00
<b>70.0004 (EU 30)</b> - <i>PRV</i> <b>71.0004 (ST 30)</b> - <i>CLD</i>	1 1/4" NPSM 1 1/2" NPT	60 56	x	x	3000/5000 lt	Basic setting	107,00	CE***	29,50
70.0008 (EU 24) - PRV 71.0010 (ST 24) - CLD	1" NPT 1 1/4" NPT	60 46	X X		1750 4	17,65**	78,00	CL	23,50
<b>70.0205 (EU25)</b> - <i>PRV</i> <b>71.0000 (ST 25)</b> - <i>CLD</i>	1" NPSM 1 1/4" NPT or 1" NPT	60 46	x	X	1750 It		78,00		23,50
70.0004 (EU30) - PRV 71.0011 (ST 32) - CLD	1 1/4" NPSM 2" NPT	60 60	x	x	3000/5000 lt		107,00		29,50

**OVERALL NOTE:** All our configurations PRV+CLD are suitable for a temperature range [C°] – 40 ÷ 65.

**PRV = Pressure Relief Valve** and **CLD = Check-lock Device** \*\*\* please specify your requested setting pressure when ordering – various setting points available.
 \*\*\*\* please enquiry our sales department for further local approvals – several national approvals available.

The features described in this illustration do not bind the manufacturer.







	Relief	<sup>F</sup> Valves	
		<b>VS 367</b> 17 bar <b>VS 368</b> 18 bar 70.0020	
U .	<b>VS 60</b>	70.0008 Pressure relief valve with a lower check valve available with different inlet threads.	
	Safety relief valve with big capacity.	<b>ST 36</b> 71.0.190.0026	- <b>Ψ</b>
-	<b>EU 29</b> 70.0016	VS 456 16 bar VS 45717 bar	1
	Pressure relief valve with conical thread between valve and lower check valve.	70.0015 70.0031 Pressure relief valve	
<b>.</b>	<b>ST 29</b> 71.0015	<b>ST 45</b> 71.0030	. 🏺
_			
	66.1139	66.1140	

**External Pressure** 

Pressure relief valve for small containers and

on-line pipe installations.

Setting point: 17,24 bar.

Pressure relief valve for small containers and on-line pipe installations. Setting point: 25,85bar.



ORDERING INFORMATION										
Part Number*	Bottom Male Connection	Wrench grip hexagon (mm)	Thread type		Configuration	PRV - Start to Discharge	PRV-OVERPRESSURE 10%	Approval	PRV Orifice	
			taper	parallel	tank capacity:	Setting (bar)	(If not specified otherwise)	, ipprova	(mm)	
70.0080 (VS 60) - PRV	2 1/2" NPT	110	х		10000 lt.	basic 17,65**	260,00		45,00	
70.0016 (EU 29) - PRV	1 1/4" NPT	68	Х		2000/5000 4	hadia 17 (5++	107.00	CE***	29,50	
<b>71.0015 (ST 29)</b> - CLD	2" NPT	60	х		3000/3000 It.	Dasic 17,05""	107,00			
66.1139 - PRV	1/4-18 NPT	22	х		-	17,24	18,41 (at 120%O.P.SCFM-AIR)	UL/ASME	19,00	
<b>70.0020/0008</b> (VS 367/368) - <i>PRV</i>	M 36 x 2	60		х	1000 lt.	17 and18**	72,5 and 80,00	CE***	24,50	
71.0026 (ST 36) - CLD	1 1/4" NPT	52	Х							
70.0015/0031 (vs 456/457) - PRV	M 45 x 2	68		х	1750-3200 lt.	16 and 17**	N/a		29,50	
71.0030 (ST 45) - CLD	2" NPT	62	х							
66.1140 - PRV	1/4-18 NPT	22	х		-	25,85	33,52 (at 120%O P_AIR)	UL	19,00	

**OVERALL NOTE:** All our configurations PRV+CLD are suitable for a temperature range  $[C^{\circ}] - 40 \div 65$ .

\* *PRV* = **Pressure Relief Valve** and *CLD* = **Check-lock Device** \*\*\* please specify your requested setting pressure when ordering – various setting points available. \*\*\* please enquiry our sales department for further local approvals – several national approvals available besides CE-approval.

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EDITION JUNE 2005

# Liquid Withdrawal Valves

CE





Part number	Container	Connection	Closing Flow	(mm)
69.0008 (VL 13)	3/4" – 14 NPT	3/4" – 14 NPT (plugged)	N/a	35
69.0005 (VL 25)	1 1/4"– 14 NPT	M 25x1.5 (plugged)	N/a	46
72.0029 (RL 11)	3/4" – 14 NPT	M 20x1.5-6	N/a	28 (square)
72.0004 (RL 15)	3/4" – 14 NPT	M 30x1.5	See**	28 (square)
72.0025 (RL 25)	M 25x1.5	M 30x1.5	See**	32 (square)
67.0793 (RRL 16)	3/4" – 14 NPT (with*/without* tube threading 3/4" 28UN-28 for dipping)	3/4" – 14 NPT (with plug cap)	N/a	34 (square)

cavag

group

\* please specify when ordering \*\* Data valid when upstream pressure is 2 bar - excess flow device performance equal to 28-30 Nm<sup>3</sup>/h air.




## Liquid withdrawal valves





#### **VLT 18**

#### 69.0020

Liquid withdrawal valve with dip tube available in different lengths according to various tank sizes, to be used in connection with our RL 15 Liquid Withdrawal Valve.



#### Liquid withdrawal Excess Flow Valve. Performance: excess flow closes $25.5 \div 3 \text{ m}^3/\text{h}$ (water); residual flow $\leq 0.020 \text{ m}^3/\text{h}$ (water) with $\Delta P$ +1 bar

**LF 25** 69.0004

Liquid withdrawal Excess Flow Valve.







#### **VLF 14-C**

69.0019 Liquid withdrawal Excess Flow Valve.

#### **VLF 25C**

69.0040 Liquid withdrawal Excess Flow Valve. Performance: excess flow closes 25.5÷3 m<sup>3</sup>/h (water); residual flow ≤ 0.020 m<sup>3</sup>/h (water) with ΔP +1 bar



ORDERING INFORMATION							
Part number	Container Connection	Outlet Connection	Closing Flow	Wrenching hex. Grip (mm)			
69.0020 (VLT 18)	3/4" – 14 NPT	3/4" – 14 NPT (plugged)	N/a	35			
69.0038 (LF 14)	3/4" – 14 NPT	26x1.814 - NF E 03-001	See***	36 (hex.)			
69.0019 (VLF 14-C)	3/4" – 14 NPT	W 26x1.814 (plugged)	See**	35			
69.0004 (LF 25)	1 1/4"– 14 NPT	W 26x1.814 (plugged)	See*	46 (hex.)			
69.0040 (VLF 25C)	1 1/4"– 14 NPT	3/4" – 14 NPT	See*	46			

\* Data valid for  $\Delta P = 1$  bar – excess flow device performance equal to 4,5÷5,5 m<sup>3</sup>/h water with residual flow < 0,050 m<sup>3</sup>/h.

\*\* Data valid for  $\Delta P = 1$  bar – excess flow device withdrawal performance equal to 2,5<sup>+0,5</sup> m<sup>3</sup>/h water with residual flow  $\leq$  0,050 m<sup>3</sup>/h.

\*\*\* Data valid for  $\Delta P = 1$  bar – excess flow device withdrawal performance equal to 2,5  $\pm 0.5$  m<sup>3</sup>/h water with residual flow  $\leq 0.050$  m<sup>3</sup>/h

Ee2



## LPG Float Gauges



Product was redesigned to provide comprehensive up-dating as well as a 100% operating efficiency. Our LPG float gauge can also provide full performance even under the following critical conditions:

a when humidity for any reason is found within the LPG tank.

**b** when the transmission components are subjected to very low temperatures.

The indicator is complete with plastic cover, or gasket and stainless steel screws. All gauges can be manufactured in brass or in zamac.

Available also with metal cover.

Customized float gauges can be supplied on demand.

## LPG Float Gauges with 4 Screws

LPG TANK LEVEL GAUGES						
Cod.	Tank model	Ø	Lt.			
2070/I A	horizontal	800	990/1000			
2071/I A	horizontal	1000	1750/1800			
2072/I A	horizontal	1200	3000/5000			
2073/I A	horizontal	1250	-			
2075/I A	vertical	800	500			
2076/I A	spherical	-	990			
2077/MTI-E TVA	vertical	1000	1000			
2078/MTI-E TVA	vertical	1200	1500/1650			
2078-2INT/I TVA	vertical	1200	2250/2300			



# LPG Float Gauges with Thread

LPG FLOAT GAUGES WITH THREAD 1"								
ADT	TANK						dimensions	
AKI	ø INCHES	ø mm.	type	gallons	litre	Α	В	
2069.U.1"	24″	609,60	horizontal	120	454,25	338	285	
2070.U.1"	30″	762,00	horizontal	250/320	946,35/1.211,328	412	360	
2171.U.1"	37″	939,80	horizontal	500	1.892,70	510	438	
2072.U.1"	41″	1.041,40	horizontal	1000	3.785,40	553	477	
2073.U.1"	48″	1.219,20	horizontal			612	535	
2075.U.1"	30″	762	vertical			640	430	

LPG FLOAT GAUGES WITH THREAD 1" 1/4								
ADT	TANK dimension							
AKI	ø INCHES	ø mm.	type	gallons	litre	Α	В	
2069.U.1"1/4	24″	609,60	horizontal	120	454,25	338	285	
2070.U.1"1/4	30″	762,00	horizontal	250/320	946,35/1.211,328	412	360	
2171.U.1"1/4	37″	939,80	horizontal	500	1.892,70	510	438	
2072.U.1"1/4	41″	1.041,40	horizontal	1000	3.785,40	553	477	
2073.U.1"1/4	48″	1.219,20	horizontal			612	535	
2075.U.1"1/4	30″	762	vertical			640	430	





## Tank Equipment Spare Parts

The manufacturer declines all responsibility for incorrect use or application. We recommend to use original parts or to replace the whole valve.



Pressure gauge in glycerine bath. Scale 0-25 bar. Connection: 1/4" NPT.

Type connection	Part number
Back side	30.0.110.0179
Radial	30.0.110.0180

Connection devices with excess flow check valve built in to be used with the multivalve GSE 35.

> 16.0.950.0039 (capacity 50 Kg.)

> 16.0.950.0052 (capacity 95 Kg.)





Plug with gasket for Liquid Withdrawal Valve.

Type for	Part number
VLT 18 - VL 13	10.0.950.0080
VLF 14 - VLF 25	10.0.950.0082

Cap with ACME threading.

Type for Part number

VRN14/20 10.0.950.0064

GSE 35/38 10.0.950.0062

colour

blue

blue

Connection for steel pipe (to be welded), applicable to RL <u>15 - RL 25 Cylinder Valves.</u>

16.0.950.0026



Vent stem. (GSE 35 -GS 50) 03.0.950.0145



Plastic rain caps
for Safety Valves.

Type for	Colour White
EU 19	10.0.110.5012
EU 24	10.0.110.5011
EU 29	10.0.110.5013
Type for	Colour Black
Type for EU 20	<b>Colour Black</b> 10.0.110.5016
Type for EU 20 EU 25	Colour Black 10.0.110.5016 10.0.110.5014

Type for	Part number
Rubbe	er gasket for
ACME	thread cap.

VRN 04.0.110.2565 GSE 04.0.110.2578 Bonded Seals for Safety Valves with cylindrical thread.

Type for	Part number
EU 20	04.0.110.2573
EU 25	04.0.110.2570
EU 30	04.0.110.2574
VS 36	04.0.110.2588
VS 45	04 0 110 2587



The features described in this illustration do not bind the manufacturer.





LPG-CNG VALVES & EQUIPMENT DIVISION

## Stationary Tank Installation









LPG-CNG VALVES & EQUIPMENT

## Stationary Tank Installation



DIVISION





LPG-CNG VALVES & EQUIPMENT DIVISION

# LPG CYLINDER VALVES

Please be so kind to verify with us approvals, accessories (tubes, tubes materials, tubes fixing, anti-filling devices, tools for anti-filling devices, caps, sealants and settings) and optional features. Approvals of any kind have to be expressly specified on orders or enquires.

The range of photos shown is indicative. Please contact LPG VALVES & EQUIPMENT DIVISION Staff to find a product suitable for each specific market.



For orders please refer to:



## German LPG Cylinder Valves





#### 80.6019

 $\begin{array}{l} \text{80.6.790.6019} \\ \text{Open-close handwheel} \\ \text{valve with pressure} \\ \text{relief device.} \\ \text{DIN KLEIN} \\ \text{BAM - APPROVED} \\ \pi \text{ - APPROVED} \\ 15 \text{ years reconditioning} \end{array}$ 

#### 80.6018

 $\begin{array}{c} \text{80.6.790.6018} \\ \text{Heavy duty valve with} \\ \text{pressure relief device for} \\ \text{33 Kg. LPG cylinders.} \\ \text{DIN GROSS} \\ \text{BAM - APPROVED} \\ \pi \text{ - APPROVED} \\ \text{15 years reconditioning} \end{array}$ 





#### 80.3023

80.6.490.3023
FLT cylinder valve for liquid withdrawal up to 33 Kg.
LPG cylinders.
DIN GROSS
BAM - APPROVED
π - APPROVED
15 years reconditioning

#### 80.3024

 $\begin{array}{c} \text{80.6.490.3024} \\ \text{FLT cylinder valve for} \\ \text{liquid withdrawal up to} \\ 11 \text{ Kg. LPG cylinders.} \\ \text{DIN KLEIN} \\ \text{BAM - APPROVED} \\ \pi \text{ - APPROVED} \\ 15 \text{ years reconditioning} \end{array}$ 



#### **ORDERING INFORMATION**

Part number	Cylinder Connection	Outlet Connection	Normal Application	Liquid Level Gauge	DT length	Relief Setting	15 years reconditioning	$\pi$ Mark
80.6019	DIN 477 Klein	W 21,8 x 1/14" LH DIN 477 N°2	UP to 11 Kg.	No	No	35 bar	Yes	Yes
80.6018	DIN 477 GROSS	W 21,8 x 1/14" LH DIN 477 N°1	UP to 33 Kg. Cylinders	No	No	35 bar	Yes	Yes
80.3024	DIN 477 Klein	W 21,8 x 1/14" LH DIN 477 N°1	FLT	No	120 mm	no	Yes	Yes
80.3023	DIN 477 GROSS	W 21,8 x 1/14" LH DIN 477 N°1	FLT	No	127 mm	No	n/a	Yes





## German LPG Cylinder Valves





**80.6.79**0.6101 LPG cylinders valve for welding application. Vaious lengths of tubes. DIN KLEIN DEGASSING SCREW BAM - APPROVED

ORDERING INFORMATION								
Part number	Cylinder Connection	Outlet Connection	Normal Application	Liquid Level Gauge	DT length	Relief Setting		
80.6101	DIN 477 KLEIN	G 3/8" LH DIN 477	Welding Cylinders	Yes	45 mm	35 bar		

V2 \











## LPG Handwheel Valves

The wide acceptance of Omeca cylinder valves is based on their reliable performance as well as their reputation for engineering and manufacturing excellence. Omeca utilize seat discs and stem seals which resist deterioration and provide the kind of reliable service required for L.P. GAS, hand-tight closings and a faster filling cylinder valve.







80.1059 80.6.290.1059 Open-close valve.

Available in several sizes

of outlets and inlets.

**80.2051** 80.0.390.2051 O-F valve with excess flow. Available in different inlet sizes.

#### 80.1056

80.1002

inlet sizes.

80.0.290.1002

Open-close valve with POL outlet. Available in different

80.0.290.1056 O-F valve as 2051 but without excess flow.





## 80.8010

**80.6019** 80.0.790.6019 Auf-zu valve

DIN KLEIN. In compliance with

with pressure relief valve.

BAM Specifications.

80.0.890.8010 Open-close valve with vertical outlet and side handwheel, available in different sizes of outlets and inlets

#### 80.3012

80.0.490.3012 O-F valve with fixed liquid level tube.



80.0.790.6018 Auf-zu valve with pressure relief valve. DIN GROSS. In compliance with BAM Specifications.





#### www.cavagnagroup.com

V4

#### The features described in this illustration do not bind the manufacturer.









LPG Handwheel Valves

## 80.4014

80.0.590.4014 Open-close valve with pressure relief valve for small size propane cylinders. Available with several inlets and POL outlets.

## 80.2122

80.0.390.2122 Cylinder valve with rubber flow limiter

#### 80.1019

NOW π

80.0.290.1019 LP Cylinder valve with seal gasket on the outlet.

80.2120 80.6.390.2120 Cylinder valve with flow limiter.

62.0128 Cylinder valve with dual locking pins and flow limiter. Various inlets and outlets.

62.0504

62.6.390.0504 Cylinder valve with dual locking pins, flow limiter and gasket on the outlet. Various inlets and outlets.















#### 80.3037

80.0.490.3037 Cylinder valve with single orbital locking pin and brass dip tube. Various inlets and outlets.

62.0014 62.6.290.0014 Cylinder valve with dual locking pins locking pin. Various inlets and outlets.

80.1045

80.6.290.1045 Cylinder valve inlet DIN GROSS. Outlet ø 20 mm.







## LPG Jumbo Valves





#### 66.0071

66.8.290.0071 "Jumbo" valve with safety relief. Various settings available. 19,8 x 1/4" DIN 477 inlet.

#### 66.0205

66.8.290.0205 "Jumbo" valve with safety relief. Various inlets. Various pressure settings available.





#### 66.0064

66.8.290.0064 "Jumbo" valve with safety relief valve. Inlet thread M24 x 1,5 (parallel)

#### 66.0241

66.0.290.0241 "Jumbo" valve with fusible plug. Valve designed to be used with the new technology cylinders in composite and/or aluminium materials.

 $28,8 \times 1/4''$  DIN 477 inlet. With pressure relief device.



#### 66.0034

66.8.290.0034 Parallel thread inlet. Special series for composite cylinders



#### 10.0058

Black cap. Standard protection cap.





#### 10.0057

**Blue cap.** Special protection cap with cold-resistance for low temperatures.



## LPG Jumbo Valves in one piece with Safety Relief Cartridge



**66.0038 (A)** 66.8.290.0038 One-piece "Jumbo" with safety relief valve cartridge. Various inlets/outlets and setting pressures.



#### 66.8.290.0038 One-piece "lumbo"

One-piece "Jumbo" without pressure relief device. Various inlets/outlets.



#### 10.0058

Black cap. Standard protection cap.





#### 10.0057

**Blue cap.** Special protection cap with cold-resistance for low temperatures.

## Flat Top Dirt-Free Jumbo Valves

NEW

- Real flat top New Concept
- ✓ Dirt protection
- Makes additional dust & protection caps useless



**66.0074** 66.8.290.0074

- 1) One piece Jumbo with or without Safety Relief cartridge. Various inlets/outlets and settings pressure where applicable.
- It incorporates new design by CAVAGNA with top flat surface without any niches so that sediments, dirt, sand, dust or dangerous particles are not allowed to obstract the main seal of the valve;
- 3) The absence of parts protruding from the top flat prevents accidental opening. The valve gets activeted only when regularly coupled with corresponding and conforming regulator.
- 4) The materials of the dust plug (stainless steel) and of the top rubber ring (high stamina against atmospheric agents) are tested for long duration and endurance.
- 5) The flat top configuration is totally compatible with shrink sleeves and makes the use of plastic caps redudant, this allowing or considerable saving.



EDITION JUNE 2005





## LPG Snap-tight and Bayonet Valves





#### 66.0131

66.0.290.0131 Dual sealing valve with safety relief. Outlet 27 mm, various inlets.

66.0132

66.0.290.0132 Dual sealing valve. Outlet 27 mm, various inlets with flow limiter.





#### 66.0259

66.0.290.0259 Quick-on valve outlet 27 mm, various inlets.

#### 66.0135

66.0.290.0135 Bayonet valve various inlets with flow limiter.





#### 66.0136

66.0.290.0136 Bayonet valve with safety relief, various inlets with anti-debris tube.





**V**8 \



## LPG Quick-on Valves





#### 66.0049

66.0.290.0049 "Quick-on" valve with pressure relief valve. Outlets Ø 20-21-22 mm, various inlets. Available with anti-debris tube.

#### 66.0022

66.9.290.0022 Compact quick-on valve without pressure relief device. Various inlets; ø 20, 21 and 22 mm outlets.





#### 66.0067

66.8.290.0067 "Quick-on" valve with plastic dip-tube without pressure relief valve. Available with anti-debris tube.

#### 66.0005

66.8.290.0005 Compact quick-on valve with pressure relief device (various settings). Various inlets; ø 20, 21 and 22 mm outlets.





#### 66.0035

66.8.290.0035 Quick-connection valve. With safety relief valve. Various inlets/outlets. Possibility of customising the setting pressure. Quick-on PRV 10 m<sup>3</sup>







# Real flat top New Concept Dirt protection Makes dust & protection caps useless

1) One piece Quick-on valve with or without Safety Relief cartridge. Various inlets/outlets and settings pressure where applicable.

- 2) It incorporates new design by CAVAGNA with top flat surface without any niches so that sediments, dirt, sand, dust or dangerous particles are not allowed to obstract the main seal of the valve;
- 3) The absence of parts protruding from the top flat prevents accidental opening. The valve gets activeted only when regularly coupled with corresponding and conforming regulator.
- 4) The materials of the dust plug (one piece massive brass drive cursor) and of the top rubber ring (high stamina against atmospheric agents) are tested for long duration and endurance.
- 5) The flat top configuration is totally compatible with shrink sleeves and makes the use of plastic caps redudant, this allowing or considerable saving.



## LPG Quick-on Valves





#### 66.0001

66.8.290.0001 "Quick-on" valve. Outlets Ø 20-21-22 mm, various inlets with plastic cap.

#### 66.0060

66.0.290.0060 Snap-on valve Self-closing valve with built-in safety valve. This valve combining with RECA regulator guarantees constant outlet pressure, indipendent of cylinder pressure and of through-put. Available with different inlet thread sizes.





## 66.0013

66.8.290.0013





## 66.0054

66.8.290.0054



# EDITION JUNE 2005

## For the Best Performance Quick-On System Cavagna Group Valves and Regulators



In many countries of the world the old system of manual connection of the regulator to the valve has been replaced by a quick on system allowing a consistent safe connection for the consumer without the need for tools. This system makes possible an easier vertical filling operation.

Please contact our Regulators Division (RECA) for additional information on regulators range of products.





#### Compact Quick-On 634

Low Pressure single stage regulator, with not-adjustable setting equipped with a fitting suitable for automatic quickon valves Ø 20, 21, 22, 27 mm and bayonet type.

The Compact Quick-On model has a compact and ergonomic shape, easy to handle and to use. The regulator is mounted directly

onto the gas cylinder, connecting it with an easy pressure onto the automatic valve.

The regulator is connected onto the automatic valve turning the lever in the ON position.

Generally all the models Compact Quick - On are equipped with a special thermic safety device (thermofuse), stopping the gas flow in case a fire arises.

On demand, it is possible to assemble an excess flow: a special device able to stop the gas flow in case the hose is suddenly disconnected from the gas appliance.







## **Quick-On System**





#### Jumbo 58

Low Pressure double stage regulator with non-adjustable setting with fitting suitable for automatic valves Ø 35 mm. On demand, it is possible to assemble an excess flow and a OPSO device (safety relief valve), in order to avoid any overpressure.

#### Jumbo High Pressure 84

High Pressure Regulator with adjustable setting with fitting suitable for automatic valves Ø 35 mm

## Kosanova 59

Low Pressure double stage regulator with non-adjustable setting with fitting suitable for automatic valves Ø 16 mmand 19 mm. On demand, it is possible to assemble an excess flow and a OPSO device (safety relief valve).



#### Type 511 horizontal

QUICK ON CYLINDER COUPLING Ø 20 - 21 - 22 mm On/off without pressure regulation. Horizontal.

## Type 511 vertical

QUICK ON CYLINDER COUPLING Ø 20 - 21 - 22 mm On/off without pressure regulation. Vertical.











## **Fork Lift Truck** and Carburation Valves

Omeca is introducing a new technology on the valve with dip tube for liquid withdrawal. To overcome all wellknow problems with copper or brass dip tube, we introduce a new polyamide dip tube with hi-tech performance. Fully compatible with LPG, these will be

the second generation of carburation valves

#### LPG-CNG VALVES & EOUIPMENT DIVISION



## 00.0000

00.0.000.0000 Quick-on safety adapter for FLT application.

#### 80.3014

80.8162 80.0.890.8162

80.0.490.3014 FLT valve with flow limiter. Various inlets and outlets.

80.3072 80.0.490.3072 FLT valve European version with flow limiter, POL outlet.

Various inlets.

80.3105

80.0.490.3105

FLT valve with flow limiter. Outlet with quick connection.





# **NEW** DESIGN

#### 80.8162 Kit

80.0.890.8162 Bi-check FLT service valve with quick-on outlet connection (various sizes). With excess flow valve Available with dedicated adaptors.

#### 80.3102

80.0.490.3102 FLT valve with excess flow with 5 L/min propane.





#### 67.0787

67.0.490.0787 Dual valve with safety relief and flow limiter. Various inlets, ACME outlet.

#### 80.3113

80.0.490.3113 2<sup>nd</sup> generation FLT valve. Outlet with quick connection.







The features described in this illustration do not bind the manufacturer.





## **Fork Lift Truck** and Carburation Valves





#### 80.3024

80.0.490.3024 New 2nd generation

> 80.3028 80.0.490.3028 FLT valve with long Pipe outlet 3/4 GG.





80.2064 80.0.390.2064



FLT service valve with flow limiter. Various inlets and outlets.



80.2062 80.0.380.2062 FLT service valve with flow limiter. Various inlets and outlets.





## 66.1072

66.0.290.1072 Fixed liquid level gauge. Available with different dip-tube lenghts. An optional instruction plate may be ordered for use with these valves.





## **Fork Lift Truck** and Carburation Valves





#### 80.3145

80.0.490.3145 New European FLT valve with short dip tube DIN 477 outlets and various customisable



#### 80.8060

80.0.890.8060 Liquid withdrawal valve with flow limiter. Vertical application.





#### 67.0779

67.0.490.0779 Dual valve with safety relief and flow limiter. Various inlets, male outlet.

#### 80.8021

80.0.890.8021 FLT valve with safety relief and flow limiter. Various inlets and outlets. Vertical and orizontal application.





66.1024 66.0.290.1024 LISTED Half coupling ACME. - For installation on LP gas engine fuel lift truck systems.

## Lift Truck Connectors

These brass connectors are designed to join the carburator fuel line to the service valve on FLT.

Part number	Application	Intlet	Outlet
661024M	Service Valve	3/8" F.NPT	1 1/4" M.ACME
661023F	Fuel Line	1 1/4" F.ACME	1/4" F.NPT



#### 66.1023

μ 66.0.290.1023 LISTED Female coupling ACME. - For installation on LP gas engine fuel lift truck systems. - Both connectors automatically close when disconnected.



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## LPG Cut-Off Valves



#### V641

64.0.190.0164 Stop valve.



LPG-CNG VALVES & EQUIPMENT

DIVISION

Needle valve. Various sizes.



**64.0003** 64.0.490.0003 "Push and turn" stop valve.







#### 64.0.490.0043 "Push and turn" stop valve

double version.

#### **80.0501** 80.6.190.0501 Piston type

Piston type stop valve. Various sizes.

#### IM68 Switch "on-off" 3-way valve, various sizes.





## 80.0003

80.6.190.0003 Piston type side entry stop valve 90° F. M.

**80.0512** 80.6.190.0512 Piston type stop valve. Various sizes.





The features described in this illustration do not bind the manufacturer.



## LPG Camping Cylinder **Valves**





#### 64.0203

64.0.290.0203 Volume filling valve with safety relief.





#### 64.0253

64.0.290.0253 5-ways camping valve with safety relief and degassing screw for volume filling. Various inlets and outles.



64.1091 64.0.390.1091 3-way camping valve with degassing screw. Various inlets and outlets.

64.0.290.0266 Camping valve without degassing screw and with safety relief device.





## 64.2028+68.0043

Camping cylinder ball valve with handle and gasket. Outlet: 16x1,5.

#### 64.0266



#### 64.4602

64.6.090.4602 Spindle actived camping cylinder valve.

#### 64.2001

64.0.590.2001 Hexagonal camping cylinder ball valve. Outlet: 14x1,5. Primus type.





## LPG Camping Cylinder **Valves**





#### 64.0106

64.0.190.0106 Camping valve with gasket. Various inlets and outlets.





#### 64.0124

64.0.190.0124 3-way camping valve for cartridges. Various sizes of inlet and outlet.





#### 64.1089

64.0.390.1089 Camping valve for volume filling with degassing screw.

#### 64.0310 64.0.390.0310 Camping cylinder valve with degassing screw.

64.4500 64.0.790.4500 Needle valve for gas heaters. Available with various nozzle sizes for different capacities.



#### 64.2044

64.6.590.2044 Round camping cylinder valve outlet 16x1,5.

## 64.0313

64.0.390.0313 Camping cylinder valve with degassing screw.





LPG-CNG VALVES & EQUIPMENT DIVISION

# **REFRIGERANT GASES VALVES**

Please be so kind to verify with us approvals, accessories (tubes, tubes materials, tubes fixing, anti-filling devices, tools for anti-filling devices, caps, sealants and settings) and optional features. Approvals of any kind have to be expressly specified on orders or enquires.



For orders please refer to:



# **RUS** series Compact Refrigerant Recovery Valves **O-Ring Style Cylinder Valves for** Refrigerant Gases Liquid/Vapor





#### **Key features**

- Tamper proof gland nut cannot be removed
- Hot forged body manufactured by Cavagna Group
- Non-refillable outlet feature, protects cylinder from contamination
- All valves are 100% leak test to full cylinder service pressure
- Complies with all New European Standards (π marked)
- Hose barb supplied for easy attachment of Dip Tube
- All valves U.L. listed
- CGA-7 pressure relief devices various settings available
- Various soft seat materials assures positive leak tight shut-off
- Inlet threads available with ever seal insuring leak tight cylinder connection and reduced friction during installation

#### **Specifications**

Maximum working pressure	500 PSI
Temperature operating	-40 +65 °C -75F to 150F
Flow Capacity (CV)	n/a
Minimum Cycle Life	6000
Discharge flow capacity of PRD	208 CFM Air @ 450 PSI

#### Materials

5 alloy
Loaded

#### **Conforming of the requirements of European Community**

- CGAV9 Standard for Gas Cylinder Valves CGA S-1.1 Standard for Pressure Relief Devices
- CGA V-1 Compressed Gas Cylinder Valve Outlet and Inlet Connections

ORDERING INFORMATION						
Part No.	CGA Outlet	Outlet Single/Dual	Outlet Thread Size	Inlet Thread Size	PRD Set Pressure	Dip Tube Length
76.0190		Single	1.030-14 NGO RH Ext.	3/4" NPT	450 PSI	barb
76.0191		Single	W 21,7 x 1/14"	W28,8 - DIN 477	450 PSI	barb

Various configurations available for your country. Please refer to sales office of OMECA Division.











## **RDU** series Diaphragm Packless Multivalves for Refrigerant Gases



#### **Key features**

- Hot forged brass body according to EN12165 alloy manufactured by Cavagna Group
- Diaphragm packless style valves
- Inlet and outlet connection comply with CGA specifications
- UL approved
- Available single or dual outlet

#### Materials

Valve Body	Brass
Handwheel	Plastic
Diaphragm	Stainless steel
Spring	Stainless steel
Spring Retainer	Brass
PRD seal cap	Plastic
DT connection	Brass

#### Options

- Various Dt lengths and materials
- Inverted Handwheels for liquid and vapour
- PRD seal cap
- Pressure relief device cartridge style
- Stainless steel body for special applications

#### Conforming with requirements of TPED (EN 849)



ORDERING INFORMATION							
Part No.	CGA Outlet	Outlet Single/Dual	Outlet Thread Size	Inlet Thread Size	PRD Set Pressure	Dip Tube Length	Antifilling device
76.0234	660	Single	1.030-14 NGO RH EXT	3/4 - 14 NGT	800 PSI	n/a	no
76.0233	660	Single	1.030-14 NGO RH EXT	3/4 - 14 NGT	600 PSI	n/a	no
76.0169	660	Dual	1.030-14 NGO RH EXT	3/4 - 14 NGT	600 PSI	43 mm	no
76.0199		Single	W21,7 x 1/14"	W28,8 x 1/14" DIN 477	no	850 mm	yes

Various DT materials and lengths available on request. Please consult the manufacturer for different models not shown in this page. Various configurations available for your country. Please refer to sales office of OMECA Division.



## **RBV** series Diaphragm Packless Valves for Refrigerant Gases



LPG-CNG VALVES & EQUIPMENT

DIVISION

EDITION JUNE 2005

#### **Key features**

- Hot forged brass body according to EN12165 alloy
- Stainless steel diaphragm guarantee against breakage for the life of the valve
- Blue nylon handwheel designed for easy operation
- Inlet and outlet connection comply with CGA specifications
- Spring loaded pressure relief device

#### Materials

Valve Body	Brass according to brass alloy EN12165
Handwheel	Plastic
Diaphragm	Stainless steel
Spring	Stainless steel
Sping Retainer	Brass



- Coloured Handwheel
- Various outlets configurations
- Various pressure relief device settings
- PRD seal cap
- Everseal preapplied on the inlet

#### Conforming with requirements of TPED (EN 849)

ORDERING INFORMATION					
Part No.	CGA Outlet	Outlet Thread Size	Inlet Thread Size	PRD	Dip Tube Length
76.0215	167	1/2" ACME	3/4 - 14 NGT	525 PSI	no
76.0216	165	1/4" SAE FLARE	3/4 - 14 NGT	525 PSI	no
76.0248		W 21,8 x 1/14" DIN 477 n 6	W 28,8 x 1 1/14" DIN 477	525 PSI	no





## **ROB** series Refrigerant cylinder valves O-ring style valves





#### **Key features**

- These valves are o-ring seal type valves
- Double o-ring materials technology reduces the possibility of leaks
- Sturdy brass handwheel united with the original Qualihandwheel<sup>®</sup> Cavagna system. Brass handwheels are a more resistant than common aluminium or zamak handwheel
- O-ring materials compatible with all different type of Refrigerant gases
- All inlets and outlets standard available
- Different handwheel sizes available
- BAM approval on certain models
- Valves are " $\pi$ " marked according to 99/36 EC

#### Materials

Valve Body	Brass according to EN 12165 alloy
Spindle	Brass according to EN 12164 alloy
Handwheel	Brass according to EN 12165 alloy
O-rings	CR
PRD Spring Retainer	Brass
PRD Spring	Stainless steel
Seat Pad	Nylon

#### **Options**

- Personalized handwheel logo
- Dip tube thread
- Dip tube material based on customer requirements
- Pressure relief devices various sett pressure
- Antifilling devices available on some models
- Everseal preapplied on the inlets

#### Conforming with requirements of TPED (EN 849)



80.1126 model



76.0023 model

Please consult the manufacturer for different models not shown in this page.



80.8045 model



8153 model

8150 model



76.0178 model



## **ROY** series Compact Refrigerant Recovery Valves O-Ring Style Cylinder Valves for Refrigerant Gases Liquid/Vapor





#### **Key features**

- Tamper proof gland nut cannot be removed
- Rugged brass forged body manufactured by Cavagna Group
- All valves are 100% leak test to full cylinder service pressure
- Complies with all New European Standards
- Hose barb supplied for easy attachment of Dip Tube
- All valves U.L. listed
- CGA-7 Pressure relief devices various settings available
- Various soft seat materials assures positive leak tight shut-off

#### **Specifications**

Maximum working pressure	500 PSI
Temperature operating	-40 +65 °C -75F to 150F
Flow Capacity (CV)	n/a
Minimum Cycle Life	6000
Discharge flow capacity of PRD	208 CFM Air @ 450 PSI

#### Materials

Brass EN 12164 alloy
CGA-7 Spring Loaded
Plastic
Various
Various

#### **Conforms to all requirements of:**

CGA V 9	Standard for Gas Cylinder Valves
CGA S-1.1	Standard for Pressure Relief Devices
CGA V-1	Compressed Gas Cylinder Valve Outlet and Inlet Connections

#### **Options**

- Everseal preapplied on the inlet







**ROY** series Compact Refrigerant Recovery Valves O-Ring Style Cylinder Valves for Refrigerant Gases Liquid/Vapor



ORDERING INFORMATION							
Part No.	CGA Outlet	Outlet Single/Dual	Outlet Thread Size	Inlet Thread Size	Material	PRD	Dip Tube Length
76-0180	165	Dual	.4375-20 UNF-2A RH Ext. (1/4" SAE Flare)	3/4" NPT	Brass	525 PSI	barb
76-0181	165	Dual	.4375-20 UNF-2A RH Ext. (1/4" SAE Flare)	3/4" NPT	Brass	525 PSI	13.0″
76-0182	165	Dual	.4375-20 UNF-2A RH Ext. (1/4" SAE Flare)	3/4" NPT	Brass	525 PSI	13.9″
76-0185	167	Dual	.500-16 ACME-2G RH Ext.	3/4" NPT	Brass	525 PSI	barb
76-0213	165	Dual	.4375-20 UNF-2A RH Ext. (1/4" SAE Flare)	3/4″ NPT	Brass	600 PSI	barb
*76-0224	165	Dual	.4375-20 UNF-2A RH Ext.	3/4″ NPT	Brass	600 PSI	13.3″
76-0225	165	Dual	.4375-20 UNF-2A RH Ext. (1/4" SAE Flare)	3/4″ NPT	Brass	525 PSI	barb
76-0226	165	Dual	.4375-20 UNF-2A RH Ext. "(1/4"" SAE Flare)"	3/4″ NPT	Brass	525 PSI	12.4″
76-0227	165	Dual	.4375-20 UNF-2A RH Ext. (1/4" SAE Flare)	3/4″ NPT	Brass	525 PSI	13.3″
76-0229	167	Dual	.500-16 ACME-2G RH Ext.	3/4″ NPT	Brass	525 PSI	12.4″
76-0228	167	Dual	.500-16 ACME-2G RH Ext.	3/4″ NPT	Brass	525 PSI	barb
76-0230	167	Dual	.500-16 ACME-2G RH Ext.	3/4″ NPT	Brass	525 PSI	13.3″
*76-0231	165	Dual	.4375-20 UNF-2A RH Ext.	3/4″ NPT	Brass	525 PSI	barb
76-0243	165	Dual	.4375-20 UNF-2A RH Ext.	3/4" NPT	Brass	525 PSI	24.2″
*76-0244	165	Dual	.4375-20 UNF-2A RH Ext.	3/4" NPT	Brass	525 PSI	24.2″

\* Valve hand wheels are reversed - Red is vapor withdrawal and Blue is liquid withdrawal.

Various dip tube material and lengths are available on request - Please consult the manufacturer for details.



## **RES** series Multiservice wrench operated valve for Refrigerant Gases





#### **Key features**

- Heavy duty multiservice valve available with single or dual part
- Tamper proof gland nut cannot be removed
- Rugged brass forged body manufactured by Cavagna Group
- Non-refillable outlet feature, protects cylinder from contamination options
- All valves are 100% leak test to full cylinder service pressure
- Complies with all new European standards (CE Registered)
- High capacity pressure relief device
- Hose barb supplied for easy attachment of Dip tube

#### Materials

Valve Body	Brass EN 12165 alloy
PRD	CG-7 Spring Loaded
O-Rings	Various
Packing rings	Teflon <sup>®</sup>
Stem	Stainless steel
Gland nut	brass

#### Options

- Handwheel operated
- Double separate outlet
- Everseal preapplied on the inlets
- Various dip tube lengths and materials

ORDERING INFORMATION						
Part No.	Outlet Single/Dual	Outlet Thread Size	Inlet Thread Size	PRD Set Pressure	Dip Tube Length	
76.0239	Single	W 21,7 x 1 1/14"	28,8 w x 1 1/14" - DIN 477	30 bar	970 mm	

Available with different DT lengths, please contact the manufacturer for more details.





76.0239





## **RIV** series Heavy duty Refrigerant gas valves O-ring style



#### **Key features**

EDITION JUNE 2005

- Hot forged brass body according to EN12165 alloy manufactured by Cavagna Group
- Heavy duty refrigerant gas valve
- Easy handwheel operation under pressure
- Spring retaned pressure relief valve suitable for bigger cylinders
- Double o-ring seal type valve

#### Materials

Body	Brass
Handwheel	Aluminum
O-ring	CR
Spindle	Brass
Antifilling device	Plastic and brass
PRD Spring	Stainless steel
PRD Spring retainer	Brass

#### **Options**

- Available with antifilling device
- Everseal preapplied on the inlet
- Dip tube various materials
- Coloured Handwheel
- Customized Handwheel logo cap

ORDERING INFORMATION						
Part No.	Outlet Thread Size	Inlet Thread Size	PRD Set Pressure	Dip Tube Length	Antifilling device	
76.0060	W 21,7 x 1/14"	W 28,8 - DIN 477	36 bar	14 mm	yes	
76.0058	W 21,7 x 1/14"	W 28,8 - DIN 477	36 bar	14 mm	no	

Various DT materials and lengths, inlet and outlet available. Please consult the manufacturer for details.



Ontoria


LPG-CNG VALVES & EQUIPMENT DIVISION

## FILLING HEADS



## **PRODUCT DESCRIPTION**

The Kosan Filling Head is based on the experience gained during the past 40 years when Kosan Teknova A/S has been developing, manufacturing and supplying LPG equipment to customers all over the world.

The **unique design** and **quality** of the Kosan Filling Head offer the consumer the highest degree of safety when LPG is used.

Maintenance and Repair Manuals for Filling heads are available upon requests.

Please be so kind to verify with us approvals, accessories (tubes, tubes materials, tubes fixing, anti-filling devices, tools for anti-filling devices, caps, sealants and settings) and optional features. Approvals of any kind have to be expressly specified on orders or enquires.

For orders please refer to:





**LPG Filling Head** for LPG Valves 16, 19 and 35 mm (Jumbo and Kosanova valves) Manually Operated



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- **1.** Balanced jig for easy suspension between filling operations.
- 2. Easy to connect and disconnect. Filling is initiated by operating the manual handle.
- 3. Slim design makes it easy to handle and it fits easily inside any shroud.

Inlet connection:	ISO 228/1-G3/8 or W21,8 x 1/14 LH
Outlet connection:	Connects to Kosan LPG valves 16, 19 and 35 mm with and without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Liquid filling product: 1-15 bar Filling time approx. 5 sec./kg LPG at 7 bar differential pressure.
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code number of the Filling Head.</li> </ul>
Packing:	The Filling Heads are individually packed in boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The head outlet is attached to the valve inlet manually. While pressing the manual handle the filling heads makes a leak tight connection to the valve then opens the valve spindle and the gas starts to flow. When the cylinder is full the filling is stopped via the scale system. By moving the handle in its opposite direction the filling head disconnects from the valve.





**LPG Filling Head** for LPG Valves 16, 19 and 35 mm (Jumbo and Kosanova valves) Manually Operated



ORDERING INFORMATION			
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION	
6882900001	ISO 228/1 - G3/8	KOSAN LPG VALVES 35 mm type 130B - with and without SRV	
6882900002	W 21,8 x 1/14 LH	KOSAN LPG VALVES 35 mm type 130B - with and without SRV	
6882900003	W 21,8 x 1/14 LH	KOSAN LPG VALVES 35 mm type 130B - with and without SRV	
6882900004	ISO 228/1 - G3/8	KOSANOVA LPG VALVES 16 mm type 130K - with or without SRV	
6882900005	ISO 228/1 - G3/8	KOSANOVA LPG VALVES 19 mm type 130L - with or without SRV	
6882900006	ISO 228/1 - G3/8	KOSANOVA LPG VALVES 19 mm type 130L - with and without SRV	
6882900007	ISO 228/1 - G3/8	KOSANOVA LPG VALVES 16 mm type 176A and 130K - with or without SRV	
6882900008	W 21,8 x 1/14 LH	KOSANOVA LPG VALVES 16 mm type 176A and 130K - with or without SRV	



## **LPG Filling Head** for LPG Valves 16, 19 and 35 mm

for LPG Valves 16, 19 and 35 mm (Jumbo and Kosanova valves) Semi-automatically Operated



LPG-CNG VALVES & EQUIPMENT

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#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- **1.** Balanced jig for easy suspension between filling operations.
- 2. Easy to connect and disconnect. Filling is initiated by opening of the pneumatic air supply.
- 3. Slim design makes it easy to handle and it fits easily inside any shroud.

Inlet connection:	LPG: ISO 228/1-G3/8 Pneum. air: ISO 228/1-G1/4
Outlet connection:	Connects to Kosan LPG valves 16, 19 and 35 mm with and without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 4 - 6 bar. Liquid filling product: 1-15 bar Filling time approx. 5 sec./kg LPG at 7 bar differential pressure.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.
Packing:	The Filling Heads are individually packed in boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The head outlet is attached to the valve inlet manually. Once the pneumatic pressure is applied to the head it forces the internal components of the head to move towards the valve top thereby establishing a leak tight connection and once this is established the further movement of the components forces the valve spindle to open and simultaneously the gas starts to flow. When the cylinder is full the filling is stopped by removing the pneumatic pressure. The internal springs of the head allows the valve to close and moves the components of the head backwards to stop the flow of gas and to disconnect the head from the valve. The head is removed manually.





LPG Filling Head for LPG Valves 16, 19 and 35 mm (Jumbo and Kosanova valve) Semi-automatically Operated



### **ORDERING INFORMATION**

REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900020	LPG: ISO 228/1 - G3/8 AIR: ISO 228/1 - G1/4	KOSAN LPG VALVES 35 mm type 130B - with or without SRV
6882900021	LPG: ISO 228/1 - G3/8 AIR: ISO 228/1 - G1/4	KOSAN LPG VALVES 35 mm type 130B - with or without SRV
6882900023	LPG: ISO 228/1 - G3/8 AIR: ISO 228/1 - G1/4	KOSANOVA LPG VALVES 19 mm type 130L - with or without SRV
6882900024	LPG: ISO 228/1 - G3/8 AIR: ISO 228/1 - G1/4	KOSANOVA LPG VALVES 19 mm type 130L - with or without SRV
6882900027	LPG: ISO 228/1 - G3/8 AIR: ISO 228/1 - G1/4	KOSANOVA LPG VALVES 16 mm type 176A and 130K, with or without SRV
6882900022	LPG: ISO 228/1 - G3/8 AIR: ISO 228/1 - G1/4	KOSANOVA LPG VALVES 16 mm type 176A and 130K, with or without SRV



## **LPG Filling Head** for LPG Valves 16 mm Kosanova Manually Operated



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- **1.** Easy to connect and disconnect. Filling is initiated by applying the filling pressure.
- 2. Slim design makes it easy to handle and it fits easily inside any shroud.
- 3. Is operated without pneumatic air supply.

Inlet connection:	W21,8 x 1/14 or ISO 228/1 - G 1/4		
Outlet connection:	Connects to Kosanova LPG valves type 176A, 16 mm with and without SRV.		
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Liquid filling product: 1-15 bar. Filling time approx. 5 sec./kg LPG at 7 bar differential pressure.		
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.		
Packing:	The Filling Heads are individually packed in boxes with instructions.		
Function and Maintenance:	The Filling Head is easy to operate. The head outlet is attached firmly to the valve inlet manually. By applying the LPG filling pressure to the filling head, the head is locked leak tight to the valve and the filling is initiated. When the cylinder is full the filling is stopped by firmly removing the filling head from the valve.		



**LPG Filling Head** for LPG Valves 16 mm Kosanova Manually Operated



ORDERING INFORMATION				
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION		
6882900025	W 21,8 x 1/14 LH	KOSANOVA LPG VALVES type 176A, 16 mm with and without SRV		
6882900026	ISO 228/1 - G1/4	KOSANOVA LPG VALVES type 176A, 16 mm with and without SRV		



**LPG Filling Head** for LPG Valves 20, 21, 22, 25.6, 27 mm Compact Manually Operated



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

1.	Balanced	jig	for	easy	sus	pension	between	filling	operations	•

- 2. Easy to connect and disconnect. Filling is initiated by operating the manual handle.
- 3. Slim design makes it easy to handle and it fits easily inside any shroud.

Inlet connection:	ISO 228/1-G3/8 or W21,8 x 1/14 LH
Outlet connection:	Connects to all Compact LPG valves 20, 21, 22, 25.6 and 27 mm with and without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Liquid filling product:1-15 bar Filling time approx. 2.5 sec./kg LPG at 7 bar differential pressure.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.
Packing:	The Filling Heads are individually packed in boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The head outlet is attached to the valve inlet manually. While pressing the manual handle the filling heads makes a leak tight connection to the valve then opens the valve spindle and the gas starts to flow. When the cylinder is full the filling is stopped via the scale system. By moving the handle in its opposite direction the filling head disconnects from the valve.
Suitable for:	All compact valves outlets. Specify type of compact valve when ordering.





**LPG Filling Head** for LPG Valves 20, 21, 22, 25.6, 27 mm Compact Manually Operated



ORDERING INFORMATION				
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION		
6882900009	ISO 228/1 - G3/8	COMPACT LPG VALVES 20 mm type 186A - with and without SRV		
6882900010	W 21,8 x 1/14 LH	COMPACT LPG VALVES 20 mm type 186A - with and without SRV		
6882900011	W 21,8 x 1/14 LH	COMPACT LPG VALVES 20 mm type 186A050 - with big SRV		
6882900012	ISO 228/1 - G3/8	COMPACT LPG VALVES 27 mm type 186C (SHELL) - with and without SRV		
6882900013	ISO 228/1 - G3/8	COMPACT LPG VALVES 22 mm type 186G - with and without SRV		
6882900014	W 21,8 x 1/14 LH	COMPACT LPG VALVES 22 mm type 186G - with and without SRV		
6882900015	ISO 228/1 - G3/8	COMPACT LPG VALVES 21 mm type 186H - with and without SRV		
6882900016	W 21,8 x 1/14 LH	COMPACT LPG VALVES 21 mm type 186H - with and without SRV		
6882900017	DIN 259-1/2" NPT	COMPACT LPG VALVES 21 mm type 186H - with and without SRV		
6882900018	ISO 228/1 - G3/8	COMPACT LPG VALVES 25.6 mm type 186 - with and without SRV		



# **LPG Filling Head** for LPG Valves 20, 21, 22, 25.6, 27 mm

**Compact Semi-automatically Operated** 



LPG-CNG VALVES & EQUIPMENT

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#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- **1.** Balanced jig for easy suspension between filling operations.
- **2.** Easy to connect and disconnect. Filling is initiated by opening of the pneumatic air supply.
- 3. Slim design makes it easy to handle and it fits easily inside any shroud.

Inlet connection:	ISO 228/1-G3/8 Pneum. air: ISO 228/1-G1/4
Outlet connection:	Connects to Compact LPG valves 20, 21, 22 and 26.6 mm with and without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 4 - 6 bar. Liquid filling product: 1-15 bar Filling time approx. 2.5 sec./kg LPG at 7 bar differential pressure.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.
Packing:	The Filling Heads are individually packed in boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The head outlet is attached to the valve inlet manually. Once the pneumatic pressure is applied to the head it forces the internal components of the head to move towards the valve top thereby establishing a leak tight connection and once this is established the further movement of the components forces the valve spindle to open and simultaneously the gas starts to flow. When the cylinder is full the filling is stopped by removing the pneumatic pressure. The internal springs of the head allows the valve to close and moves the components of the head backwards to stop the flow of gas and to disconnect the head from the valve. The head is removed manually.
Suitable for:	All compact ø valves outlets. Specify type of compact valve when ordering.

DIVISION



## **LPG Filling Head** for LPG Valves 20, 21, 22, 25.6, 27 mm Compact Semi-automatically Operated



## **ORDERING INFORMATION**

<b>REFERENCE NUMBERS</b>	INLET CONNECTION	OUTLET CONNECTION
6882900029	LPG: ISO 228/1 - G3/8 Pneum. air: ISO 228/1 - G1/4	COMPACT LPG VALVES 27 mm - type 186C and to most SHELL type valves with and without SRV
6882900030	LPG: ISO 228/1 - G3/8 Pneum. air: ISO 228/1 - G1/4	COMPACT LPG VALVES 20 mm type 186A - with and without SRV
6882900031	LPG: ISO 228/1 - G3/8 Pneum. air: ISO 228/1 - G1/4	COMPACT LPG VALVES 22 mm type 186 - with and without SRV
6882900032	LPG: ISO 228/1 - G3/8 Pneum. air: ISO 228/1 - G1/4	COMPACT LPG VALVES 21 mm type 186H - with and without SRV
6882900033	LPG: ISO 228/1 - G3/8 Pneum. air: ISO 228/1 - G1/4	COMPACT LPG VALVES 21 mm type 186H - with and without SRV
6882900034	LPG: ISO 228/1 - G3/8 Pneum. air: ISO 228/1 - G1/4	COMPACT LPG VALVES 25.6 mm type 186 - with and without SRV





#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- 1. Slim design makes it easy to handle and it fits easily inside any shroud.
- 2. Manual ON/OFF handle at the top is used for open/close of the gas flow and for attaching/ detaching the valve outlet thread.
- 3. The LPG inlet is placed at a sufficient distance from the valve connection allowing the inlet to be above most cylinder shrouds.

#### COLOUR

The Filling Head is supplied in the natural colours of the raw material.

Inlet connection:	LPG: 1/4" GAS.
Outlet connection:	Connects to camping ball valve with female threaded outlet M16 x 1,5 mm- or 3/8 BSP RH. Valves without and without PRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Liquid filling product:1-15 bar. Filling time as per the present valve specification.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code no of the Filling Head.
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The threaded filling gun outlet is connected to the valve outlet by rotating the filling head body clockwise using the open/close handle to apply the rotation. After connecting and tightening the thread the flow of gas is initiated by switching the handle 180° from the closed to the open position. The internal filling head spindle will then move towards the valve sphere and open the valve. When the filling operation should end the handle on the filling head top is switched 180° back to the closed position and the filling head is disconnected by rotating the body anti-clockwise until it releases itself from the valve thread.
Suitable for:	Omeca valve 64-0-590-2028 (see illustration above)



LPG-CNG VALVES & EQUIPMENT	DIVISION
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## LPG Filling Head for Camping Valves Manually Operated



ORDERING INFORMATION				
REFERENCE NUMBERS         INLET CONNECTION         OUTLET CONNECTION				
6882900053	1/4" NPT	M16 x 1,5 with and without SRV		



## LPG Filling Head for Hand wheel Valves Semi-automatic Operated



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- 1. Insignificant loss of product (1 cm3) when the gas flow is cut off and the filling head is released from the cylinder valve.
- 2. Balanced jig for easy suspension between filling operations.
- 3. Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 4. Slim design makes it easy to handle and it fits easily inside any shroud.

#### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue color to ensure full corrosion-resistance and longer durability.

Inlet connection:	LPG: 1/4" NPT Pneumatic air: 3/8" NPT.
Outlet connection:	Connects to standard outlet male thread valves without SRV. Specify exact valve type when ordering.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 6-10 bar. Liquid filling product: 1-15 bar Filling time as per the present valve specification.
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code number of the Filling Head.</li> </ul>
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The clamping brace is placed around the neck of the cylinder valve. Once the Filling Head outlet is aligned with the Cylinder valve outlet, the ball knob is pushed to allow the compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the cylinder valve outlet thereby obtaining a leak tight connection and simultaneously opening the gas seal initiating the LPG flow. After completing the filling operation the handle on the side of the pneumatic cylinder is pushed and the air pressure is released thereby stopping the flow of gas and the outlet disconnects from the cylinder valve. All rubber seals inside the gas section as well as the complete pneumatic cylinder can be exchanged.
Suitable for:	A wide range of standard LPG hand wheel valves without SRV.



## **LPG Filling Head** for Hand wheel Valves Semi-automatic Operated



ORDERING INFORMATION				
REFERENCE NUMBERS         INLET CONNECTION         OUTLET CONNECTION				
6882900042	LPG 1/4" AIR 3/8"	Standard Hand wheel male outlet without SRV		



## **LPG Filling Head** for Hand wheel Valves, POL outlet

Semi-automatic Operated



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- 1. Insignificant loss of product (1 cm3) when the gas flow is cut off and the filling head is released from the cylinder valve.
- 2. Balanced jig for easy suspension between filling operations.
- 3. Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 4. Slim design makes it easy to handle and it fits easily inside any shroud.

#### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue color to ensure full corrosion-resistance and longer durability.

Inlet connection:	LPG: 1/4" NPT Pneumatic air: 3/8" NPT.
Outlet connection:	Connect to POL - type valves with or without Pressure Relief Valves. Specify when ordering.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 6-10 bar. Liquid filling product: 1-15 bar Filling time as per the present valve specification.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The clamping brace is placed around the neck of the cylinder valve. Once the Filling Head outlet is aligned with the Cylinder valve outlet, the ball knob is pushed to allow the compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the cylinder valve outlet thereby obtaining a leak tight connection and simultaneously opening the gas seal initiating the LPG flow. After completing the filling operation the handle on the side of the pneumatic cylinder is pushed and the air pressure is released thereby stopping the flow of gas and the outlet disconnects from the cylinder valve. All rubber seals inside the gas section as well as the complete pneumatic cylinder can be exchanged.
Suitable for:	All different Hand wheel POL type of valves. Specify valve type and outlet when ordering.





**LPG Filling Head** for Hand wheel Valves, POL outlet Semi-automatic Operated



ORDERING INFORMATION				
REFERENCE NUMBERS         INLET CONNECTION         OUTLET CONNECTION				
6882900044	LPG 1/4" NPT AIR 3/8" NPT	Female POL thread valves with and without SRV		
<b>6882900133</b> (left hand version)	LPG 1/4" NPT AIR 3/8" NPT	Female POL thread valves with and without SRV		

EDITION JULY 2010



## LPG Filling Head for Bayonet Valves Semi-automatic Operated



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

**1.** Insignificant loss of product (1 cm<sup>3</sup>) when the gas flow is cut off and the filling head is released from the cylinder valve.

- 2. Balanced jig for easy suspension between filling operations.
- 3. Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 4. Slim design makes it easy to handle and it fits easily inside any shroud.

#### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue colour to ensure full corrosion-resistance and longer durability.

Inlet connection:	LPG: 1/4" NPT. Pneumatic air :3/8" NPT.
Outlet connection:	Connects to bayonet valves G61 acc. to EN 12864 Valves with and without PRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures Pneumatic supply: 6-10 bar. Filling time as per present valve specification.
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code no of the Filling Head.</li> </ul>
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The connector at the end of the clamping brace is pushed into the undercut of the bayonet. Once the Filing Head outlet is aligned with the cylinder valve outlet, the ball knob is pushed to allow the compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the cylinder valve outlet thereby obtaining a leak tight connection and simultaneously opening the gas seals initiating the LPG flow. After completing the filling operation the handle on the side of the pneumatic cylinder is pushed and the air pressure is released thereby stopping the flow of gas and the outlet disconnects from the cylinder valve. The connector is then removed from the valve. All rubber seals inside the gas section as well as the complete pneumatic cylinder can be exchanged.
Suitable for:	Omeca valves 66-0-290-0136, 66-0-290-0145.





**LPG Filling Head** for Bayonet Valves Semi-automatic Operated



ORDERING INFORMATION				
REFERENCE NUMBERS         INLET CONNECTION         OUTLET CONNECTION				
6882900046	LPG 1/4" NPT AIR 3/8" NPT	Automatic bayonet valve with and without SRV		



## **LPG Filling Head** for Coupling 66-0-290-1024 Semi-automatic Operated



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- **1.** Insignificant loss off product (1 cm<sup>3</sup>) when the gas flow is cut off and the filling head is released from the cylinder valve.
- **2.** Balanced jig for easy suspension between filling operations.
- 3. Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 4. Slim design makes it easy to handle and it fits easily inside any shroud.

#### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue colour to ensure full corrosion-resistance and longer durability.

Inlet connection:	LPG: 1/4" NPT. Pneumatic air: 3/8" NPT.
Outlet connection:	Connects to Omeca Coupling 66-0-290-1024
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 6-10 bar. Liquid filling product: 1-15 bar. Filling time as per present valve specification to which the coupling is connected.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code no of the Filling Head.
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The connector at the end of the clamping brace is placed around the neck of the Coupling. Once the Filling Head outlet is aligned with the Coupling outlet, the ball knob is pushed to allow the compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the Coupling outlet thereby obtaining a leak tight connection and simultaneously opening the gas seals initiating the LPG flow. After completing the filling operation the handle on the side of the pneumatic cylinder is pushed and the air pressure is released thereby stopping the flow of gas and the outlet disconnects from the Coupling. All rubber seals inside the gas sections as well as the complete pneumatic cylinder can be exchanged.
Suitable for:	Omeca valve 66-0-290-1024 (see illustration above).





## LPG Filling Head for Coupling 66-0-290-1024 Semi-automatic Operated



ORDERING INFORMATION				
REFERENCE NUMBERS         INLET CONNECTION         OUTLET CONNECTION				
6882900047	LPG 1/4" NPT AIR 3/8" NPT	Omeca coupling 66.0.290.1024		



## **LPG Filling Head** for Hand wheel Valves, OPD - type Semi-automatic Operated



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

**1.** Insignificant loss of product (1 cm<sup>3</sup>) when the gas flow is cut off and the filling head is released from the cylinder valve.

- 2. Balanced jig for easy suspension between filling operations.
- 3. Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 4. Slim design makes it easy to handle and it fits easily inside any shroud.

#### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue colour to ensure full corrosion-resistance and longer durability.

Inlet connection:	LPG: 1/4" NPT Pneumatic air: 3/8" NPT.
Outlet connection:	Connects to POL - type OPD valves with or without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 6-10 bar. Liquid filling product: 1-15 bar. Filling time as per present valve specification.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The clamping brace is placed around the neck of the cylinder valve. Once the Filling Head outlet is aligned with the Cylinder valve outlet, the ball knob is pushed to allow the compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the cylinder valve outlet thereby obtaining a leak tight connection and simultaneously opening the gas seal initiating the LPG flow. After completing the filling operation the handle on the side of the pneumatic cylinder is pushed and the air pressure is released thereby stopping the flow of gas and the outlet disconnects from the cylinder valve. All rubber seals inside the gas section as well as the complete pneumatic cylinder can be exchanged.
Suitable for:	OPD valves with POL female outlet.





**LPG Filling Head** for Hand wheel Valves, OPD - type Semi-automatic Operated



ORDERING INFORMATION		
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900050	LPG 1/4" AIR 3/8"	OPD - female POL thread valve with check-lock with and without SRV



## LPG Filling Head for Hand wheel Valves with ACME Thread Manually Operated



#### **APPLICATIONS**

LPG outlets without access to pressurized air well as plants where pressurization or vacuum purging of cylinders is required.

#### **FEATURES**

Safe operation, easily connected and manually operated.

#### **SPECIFICATIONS**

Inlet connection:	1/4" NPT male thread
Outlet connection:	Connects to 1.312-5 ACME-2G, RH, EXT.
Supply pressures:	LPG, pressurized air or vacuum.
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code number of the Filling Head.</li> </ul>
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The filling adapter is manually connected to a standard hand wheel valve having a small ACME male outlet. The front end of the filling adapter slides easy over the male acme thread and creates a firm connection. Next, the adapter handle, and thereby the internal spindle, is moved forward to seal the spindle leak tight to the valve outlet. Simultaneously, the internal spindle opens its spring loaded seat and then the LPG flows into the cylinder. After the filling, the operations are reversed and the internal spindle automatically closes the flow of LPG before it is disconnected from the valve.





LPG Filling Head for Hand wheel Valves with ACME Thread Manually Operated



ORDERING INFORMATION		
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900055	1/4" NPT male thread	1.312-5 ACME - RH - EXT



LPG Filling Head for Hand wheel POL Valves Manually Operated



#### **APPLICATIONS**

LPG outlets without access to pressurized air well as plants where pressurization or vacuum purging of cylinders is required.

#### **FEATURES**

Safe operation, easily connected and manually operated.

#### **SPECIFICATIONS**

Inlet connection:	1/4" NPT male thread
Outlet connection:	Connects to most standard POL valves.
Supply pressures:	The Filling Head is designed to operate within the normal LPG supply pressures and vacuum Liquid filling product: 1-15 bar.
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code number of the Filling Head.</li> </ul>
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The filling adapter is manually connected to a standard hand wheel valve having a POL outlet. The hook shaped front end of the filling adapter slides easy to be back side of the valve and creates a firm connection. Next, the adapter handle, and thereby the internal spindle, is moved forward to seal the spindle leak tight to the valve outlet. Simultaneously, the internal spindle opens its spring loaded seat and then the LPG flows into the cylinder. After the filling, the operations are reversed and the internal spindle automatically closes the flow of LPG before it is disconnected from the valve.





**LPG Filling Head** for Hand wheel POL Valves Manually Operated



ORDERING INFORMATION		
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900056	1/4" NPT male thread	Standard POL valves





## LPG Filling Head for Tank Filler Valves Manually <u>Operated</u>



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

1. Easy and safe to connect and disconnect. Filling is initiated by operating the manual handle.

- 2. Slim design makes it easy to handle and it fits easily inside any shroud.
- **3.** Safety lock for disconnection
- 4. The safe valve connection assures that the LPG can only flow when the filling head is leak tight connected to a filler valve.

Inlet connection:	3/4" NPT
Outlet connection:	1 3/4" x 6 ACME - 2g connects to Cavagna filler valves like 66.0.290.1043, 6602901122
Supply pressures:	The Filling Head is designed to operate within the normal LPG supply pressures. Liquid filling product: 1-15 bar.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.
Packing:	The Filling Heads are individually packed in boxes with instructions.
Function and Maintenance:	The Filling Head is easy and safe to operate. The head outlet is attached leak tight to the valve inlet manually. While pressing down the manual handle the filling head spindle opens and the gas starts to flow. When the tank is full the filling is stopped and the filling head is removed by unscrewing the nut manually. By checking the safety lock and the manual handle reverses.



## LPG Filling Head for Tank Filler Valves Manually Operated



ORDERING INFORMATION		
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900057	3/4″ NPT	1 3/4" x 6 ACME - 2g Filler valve example 6602901043 Filler valve example 6602901122



## REFRIGERANT GAS Filling Head

for Hand wheel Valves. Manually Operated, with Anti-filling opener.



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- 1. Limited loss of product when the gas flow is cut off and the filling head is removed from the cylinder valve.
- 2. Includes anti-filling device opener operating when the handle is switched to start the filing operation.
- **3.** Connected and disconnected manually by rotating the threaded ring nut.
- **5**. Slim design makes it easy to handle and it fits easily inside any shroud.

#### COLOUR

The Filling Head is supplied with a chrome plated surface for long durability.

Inlet connection:	Refrigerant gas: W21,7 x 1/14" RH male.	
Outlet connection:	Connects to valve outlet threads W21,7 x 1/14" RH male Valves with and without SRV.	
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Liquid filling product: 1-20 bar. Filling time approx. 2 sec./Kg liquid at 7 bar differential pressure.	
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code number of the Filling Head.</li> </ul>	
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.	
Function and Maintenance:	The Filling Head is easy to operate. The anti-filing opener spindle is connected to the end of the anti-filing spindle of the cylinder valve, then the ring nut threaded end is connected to the valve outlet to obtain a leak tight connection. After this the handle lever is operated and the gas will start filling the cylinder. When the cylinder is full, the handle lever is again operated to stop the filling process, and the ring nut is removed from the valve outlet. This in turn allows the anti-filling opener spindle to be disconnected and the filling head is removed from the cylinder valve. All rubber seals in contact with the gas as can be exchanged.	





## **REFRIGERANT GAS Filling Head** for Hand wheel Valves.

for Hand wheel Valves. Manually Operated, with Anti-filling opener.



## **ORDERING INFORMATION**

REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900108	REFRIGERANT GAS W21,7 x 1/14" RH.	W21,7 x 1/14" RH.



## REFRIGERANT GAS Filling Head

for Hand wheel Valves. Manually Operated, with Anti-filling opener.



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- 1. Limited loss of product when the gas flow is cut off and the filling head is removed from the cylinder valve.
- 2. Includes anti-filling device opener operating when the handle is switched to start the filing operation.
- 3. Connected and disconnected manually by rotating the threaded ring nut
- 5. Slim design makes it easy to handle and it fits easily inside any shroud.

#### COLOUR

The Filling Head is supplied with a chrome plated surface for long durability.

Inlet connection:	Refrigerant gas: G 3/8".
Outlet connection:	Connects to valve outlet threads 1,030 x 14 NGO RH, CGA660 Valves with and without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Liquid filling product: 1-20 bar. Filling time approx. 2 sec./Kg liquid at 7 bar differential pressure.
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code number of the Filling Head.</li> </ul>
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The anti-filing opener spindle is connected to the end of the anti-filing spindle of the cylinder valve, then the ring nut threaded end is connected to the valve outlet to obtain a leak tight connection. After this the handle lever is operated and the gas will start filling the cylinder. When the cylinder is full, the handle lever is again operated to stop the filling process, and the ring nut is removed from the valve outlet. This in turn allows the anti-filling opener spindle to be disconnected and the filling head is removed from the cylinder valve. All rubber seals in contact with the gas as can be exchanged.



## **REFRIGERANT GAS Filling Head** for Hand wheel Valves.

for Hand wheel Valves. Manually Operated, with Anti-filling opener.



ORDERING INFORMATION		
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900114	REFRIGERANT GAS G 3/8"	1,030 x 14 NGO RH, CGA660



## REFRIGERANT GAS Filling Head

for Hand wheel Valves. Manually Operated.



#### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

#### **FEATURES**

- **1.** Limited loss of product when the gas flow is cut off and the filling head is removed from the cylinder valve.
- 2. Connected and disconnected manually by rotating the threaded ring nut
- 3. Slim design makes it easy to handle and it fits easily inside any shroud.

#### COLOUR

The Filling Head is supplied with a chrome plated surface for long durability.

Inlet connection:	Refrigerant gas: W21,7 x 1/14" RH.
Outlet connection:	Connects to valve outlet threads W21,7 x 1/14" RH. Valves with and without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Liquid filling product: 1-20 bar Filling time approx. 2 sec./Kg liquid at 7 bar differential pressure.
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code number of the Filling Head.</li> </ul>
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The ring nut threaded end is connected to the valve outlet to obtain a leak tight connection. After this the handle lever is operated and the gas will start filling the cylinder. When the cylinder is full, the handle lever is again operated to stop the filling process, and the ring nut is removed from the valve outlet. All rubber seals in contact with the gas as can be exchanged.



## **REFRIGERANT GAS Filling Head** for Hand wheel Valves.

Manually Operated.



ORDERING INFORMATION		
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900121	REFRIGERANT GAS W21,7 x 1/14" RH.	W21,7 x 1/14" RH.


EDITION JULY 2010

# **REFRIGERANT GAS Filling Head**

for Hand wheel Valves Semi-automatic Operated



### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

### **FEATURES**

- **1.** Insignificant loss of product when the gas flow is cut off and the filling head is released from the cylinder valve.
- 2. Includes anti-filling device opener.
- **3.** Balanced jig for easy suspension between filling operations.
- 4. Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 5. Slim design makes it easy to handle and it fits easily inside any shroud.

### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue colour to ensure full corrosion-resistance and longer durability.

Inlet connection:	Refrigerant: 1/4" NPT Pneumatic air: 3/8" NPT.
Outlet connection:	Connects to standard outlet male threads such as G1, G2, G4, G5, G6, G8, G11, G12 acc. to EN 12864. Valves with and without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 6-10 bar. Liquid filling product: 1-20 bar. Filling time approx. 2 sec./Kg liquid at 7 bar differential pressure.
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code number of the Filling Head.</li> </ul>
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Packing:The Filling Heads are individually packed in cardboard boxes with instructions.Function and Maintenance:The Filling Head is easy to operate. The clamping brace is placed around the neck of the cylinder valve Once the Filling Head outlet is aligned with the Cylinder valve inlet, the ball knob is pushed to allow th compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the cylinder v thereby obtaining a leak tight connection and simultaneously opening the gas seal initiating the FREO completing the filling operation the handle on the side of the pneumatic cylinder valve. All rubbe the are caretian as well as the complete preumatic and the author of gas and the outlet disconnects from the cylinder valve. All rubbe the are caretian as well as the complete preumatic and the author of gas and the outlet disconnects from the cylinder valve. All rubbe the are caretian as well as the complete preumatic and the air released thereby stopping the flow of gas and the outlet disconnects from the cylinder valve. All rubbe the area caretian as well as the complete preumatic and the air released thereby stopping the flow of gas and the outlet disconnects from the cylinder valve. All rubbe the area caretian as well as the complete preumatic and the air released thereby stopping the flow of gas and the outlet disconnects from the cylinder valve.	





# **REFRIGERANT GAS Filling Head** for Hand wheel Valves

Semi-automatic Operated





ORDERING INFORMATION		
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900043	REFRIGERANT GAS 1/4" AIR 3/8"	Standard Hand wheel male outlet with and without SRV



# **REFRIGERANT GAS** Filling Head

for Hand wheel Valves Semi-automatic Operated



### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

### **FEATURES**

- 1. Insignificant loss of product when the gas flow is cut off and the filling head is released from the cylinder valve.
- **2.** Balanced jig for easy suspension between filling operations.
- **3.** Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 4. Slim design makes it easy to handle and it fits easily inside any shroud.

### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue colour to ensure full corrosion-resistance and longer durability.

Inlet connection:	Refrigerant gas: 1/4″ NPT Pneumatic air: 3/8″ NPT.
Outlet connection:	Connects to 1/4" SAE outlet valve male threads. Valves with and without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 6-10 bar. Liquid filling product: 1-20 bar Filling time approx. 2 sec./Kg liquid at 7 bar differential pressure.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The clamping brace is placed around the neck of the cylinder valve. Once the Filling Head outlet is aligned with the Cylinder valve outlet, the ball knob is pushed to allow the compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the cylinder valve outlet thereby obtaining a leak tight connection. Then simultaneously the gas seal opens initiating the flow of refrigerant gas into the cylinder. After completing the filling operation the handle on the side of the pneumatic cylinder is pushed and the air pressure is released thereby stopping the flow of gas and disconnecting the filling head outlet from the cylinder valve. All rubber seals in contact with the gas as well as the complete pneumatic cylinder can be exchanged.





# **REFRIGERANT GAS Filling Head** for Hand wheel Valves

Semi-automatic Operated





ORDERING INFORMATION			
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION	
6882900105	REFRIGERANT GAS 1/4" AIR 3/8"	1/4" SAE Flare valve outlet with and without SRV	



## **REFRIGERANT GAS Filling Head** for Hand wheel Valves

for Hand wheel Valves Semi-automatic Operated, with Anti-filling opener.



### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

### **FEATURES**

- 1. Insignificant loss of product when the gas flow is cut off and the filling head is released from the cylinder valve.
- 2. Includes anti-filling device opener operating automatically when the outlet engages the valve.
- **3.** Balanced jig for easy suspension between filling operations.
- 4. Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 5. Slim design makes it easy to handle and it fits easily inside any shroud.

### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue colour to ensure full corrosion-resistance and longer durability.

Inlet connection:	Refrigerant gas: 1/4″ NPT Pneumatic air: 3/8″ NPT.
Outlet connection:	Connects to standard outlet valve male threads such as G1, G2, G4, G5, G6, G8, G11, G12 acc. to EN12864. Valves with and without SRV.
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 6-10 bar. Liquid filling product: 1-20 bar Filling time approx. 2 sec./Kg liquid at 7 bar differential pressure.
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.
Function and Maintenance:	The Filling Head is easy to operate. The clamping brace is placed around the neck of the cylinder valve while the centra anti-filling opener pin is connected to the end of the anti-filling device spindle. As the Filling Head outlet is aligned with the valve outlet, the ball knob is pushed to allow the compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the cylinder valve outlet thereby obtaining a leak tight connection. Then the anti-filling device is opened and simultaneously the gas seal opens initiating the flow of refrigerant gas into the cylinder. After completing the filling operation the handle on the side of the pneumatic cylinder is pushed and the air pressure is released thereby stopping the flow of gas, closing the anti-filling device disconnecting the filling head outlet from the cylinder valve. All rubber seals in contact with the gas as well as the complete pneumatic cylinder can be exchanged.





### **REFRIGERANT GAS Filling Head** for Hand wheel Valves Semi-automatic Operated, with Anti-filling opener.



### **ORDERING INFORMATION**

REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900065	REFRIGERANT GAS 1/4" AIR 3/8"	Standard Hand wheel male outlet with and without SRV
<b>6882900127</b> (Stronger version)	REFRIGERANT GAS 1/4" AIR 3/8"	Standard Hand wheel male outlet with and without SRV



## **REFRIGERANT GAS Filling Head** for Hand wheel Valves.

for Hand wheel Valves. Semi-automatic Operated, with Anti-filling opener.



### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

### **FEATURES**

- 1. Insignificant loss of product when the gas flow is cut off and the filling head is released from the cylinder valve.
- **2.** Includes anti-filling device opener operating automatically when the outlet engages the valve.
- 3. Balanced jig for easy suspension between filling operations.
- 4. Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 5. Slim design makes it easy to handle and it fits easily inside any shroud.

### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue colour to ensure full corrosion-resistance and longer durability.

Inlet connection:	Refrigerant gas: 1/4" NPT Pneumatic air: 3/8" NPT.		
Outlet connection:	ion: Connects to outlet valve male thread 1,030"-14 NGO-RH-EXT, CGA660. Valves with and without SRV.		
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 6-10 bar. Liquid filling product: 1-20 bar Filling time approx. 2 sec./Kg liquid at 7 bar differential pressure.		
Marking:	The following information is marked on the Filling Head: • Cavagna Group logo. • Month and year of production. • The code number of the Filling Head.		
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.		
Function and Maintenance:	The Filling Head is easy to operate. The clamping brace is placed around the neck of the cylinder valve while the central anti-filling opener pin is connected to the end of the anti-filling device spindle. Once the Filling Head outlet is aligned with the Cylinder valve outlet, the ball knob is pushed to allow the compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the cylinder valve outlet thereby obtaining a leak tight connection. Then the anti-filling device is opened and simultaneously the gas seal opens initiating the flow of refrigerant gas into the cylinder. After completing the filling operation the handle on the side of the pneumatic cylinder is pushed and the air pressure is released thereby stopping the flow of gas, closing the anti-filling device disconnecting the filling head outlet from the cylinder valve. All rubber seals in contact with the gas as well as the complete pneumatic cylinder can be exchanged.		





### **REFRIGERANT GAS Filling Head** for Hand wheel Valves. Semi-automatic Operated, with Anti-filling opener.



ORDERING INFORMATION		
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900128	REFRIGERANT GAS 1/4" Air 3/8"	1,030"-14 NGO-RH-EXT, CGA660 male outlet with and without SRV



### **REFRIGERANT GAS Filling Head** for Hand wheel Valves.

for Hand wheel Valves. Semi-automatic Operated, with separate Anti-filling opener for evacuation of the fill line.



### **MATERIALS AND STANDARDS**

The Filling Head is made of corrosion-resistant materials such as stainless steel, brass, aluminium and special polymers. The rubber materials used are developed and manufactured according to the requirements of EN 549.

### **FEATURES**

- 1. Insignificant loss of product when the gas flow is cut off and the filling head is released from the cylinder valve.
- 2. Includes a separate anti-filling device opener manually/automatically operated.
- 3. Balanced jig for easy suspension between filling operations.
- 4. Easy to manually connect and disconnect. Filling is initiated simultaneously with the connection to the valve.
- 5. Slim design makes it easy to handle and it fits easily inside any shroud.

### COLOUR

The Filling Head is supplied in the natural colours of the raw material (brass and aluminium) except for the clamping brace which is painted in a blue colour to ensure full corrosion-resistance and longer durability.

Inlet connection:	Refrigerant gas: 1/4" NPT ; Pneumatic air: 3/8" NPT.		
Outlet connection:	Connects to standard outlet valve male threads such as G1, G2, G4, G5, G6, G8, G11, G12 acc. to EN12864.		
Supply pressures:	The Filling Head is designed to operate within the normal supply pressures. Pneumatic supply: 6-10 bar. Liquid filling product: 1-20 bar Filling time approx. 2 sec./Kg liquid at 7 bar differential pressure.		
Marking:	<ul> <li>The following information is marked on the Filling Head:</li> <li>Cavagna Group logo.</li> <li>Month and year of production.</li> <li>The code number of the Filling Head.</li> </ul>		
Packing:	The Filling Heads are individually packed in cardboard boxes with instructions.		
Function and Maintenance:	The Filling Head is easy to operate. In this configuration its gas Inlet must be connected to a vacuum purging line as well as to the refrigerant fill line. The clamping brace is placed around the neck of the cylinder valve while the central anti-filling opener pin is connected to the end of the anti-filling device spindle. Once the Filling Head outlet is aligned with the Cylinder valve outlet, the ball knob is pushed to allow the compressed air to fill the pneumatic cylinder. This forces the Filling head outlet to attach the cylinder valve outlet with a leak tight connection. Next step is to purge the fill line and the valve outlet. Then the control valve on the filling head centre is switched and the cylinder valve is opened to allow the filling to start. After completing the filling operation the cylinder valve is closed and the control valve on the filling head centre is again switched to close the flow of refrigerant gas and start purging the fill line and the valve outlet. Then the handle on the side of the pneumatic cylinder is pushed and the air pressure is released thereby disconnecting the filling head outlet from the cylinder valve. All rubber seals in contact with the gas as well as the complete pneumatic cylinder can be exchanged.		





### **REFRIGERANT GAS** *Filling Head* for Hand wheel Valves. Semi-automatic Operated, with separate Anti-filling opener for evacuation of the fill line.



ORDERING INFORMATION		
REFERENCE NUMBERS	INLET CONNECTION	OUTLET CONNECTION
6882900112	REFRIGERANT GAS 1/4" AIR 3/8"	Standard Hand wheel male outlet with and without SRV



# **Cross reference of LPG Filling Heads**

VALVES MODEL		Filling Heads SEMI-AUTOMATIC	Filling Heads MANUAL
	Kosanova 16 mm <b>176A, 130K</b>	6882900022 6882900027	6882900004 6882900007 6882900008
1	Kosanova 16 mm <b>176A</b>	6882900022 6882900027	6882900025 6882900026
	Kosanova 19 mm <b>130L</b>	6882900023 6882900024	6882900005 6882900006
-	Jumbo, Kosan 35mm <b>type 130B</b>	6882900020 6882900021	6882900001 6882900002 6882900003
	Compact <b>20 mm</b>	6882900009 6882900030	6882900010 6882900011
	Compact <b>21 mm</b>	6882900032 6882900033	6882900015 6882900016 6882900017
ł.	Compact <b>22 mm</b>	6882900031	6882900013 6882900014
E.	Compact <b>25,6 mm</b>	6882900034	6882900018
ł.	Compact <b>27 mm</b>	6882900029	6882900012
Ŧ	Camping valve <b>64.0.590.2028</b>	Not applicable	6882900053
F	Standard Handwheel Valve Male thread outlet	6882900042	Not applicable
- We	Standard Handwheel Valve POL outlet	6882900044 6882900133	6882900056
*	Omeca valve 67.0.490.0780	6882900045	Not applicable
-	Bajonet valves 66.0.290.0136 66.0.290.0145	6882900046	Not applicable
	Omeca coupling <b>66.0.290.1024</b>	6882900047	Not applicable
Ŧ	OPD valves Type 1 ACME American valves	6882900050	6882900055 6882900056
ł	3/8" SAE Flare outlet <b>80.0.390.2062</b>	6882900051	Not applicable
8	Filler Valve 1 3/4" x 6 ACME 6602901122 6602901043	Not applicable	6882900057



# Cross reference of Refrigerant Gas Filling Heads

	VALVES MODEL	Filling Heads SEMI-AUTOMATIC	Filling Heads MANUAL
*	W21,7x1/14" RH +/- anti-filling		6882900108
	W21,7 x 1/14" RH - anti-filling (7601900193)		6882900121
<b>A</b>	1,030 x 14 NGO RH, CGA660 +/- anti-filling	6882900128	6882900114
F	Std. male outlets - anti-filling	6882900043	
<b>F</b>	Std. male outlets +/- anti-filling	6882900065 6882900112 6882900127	
Ŧ	1/4" SAE Flare - anti-filling	6882900105	



LPG-CNG VALVES & EQUIPMENT DIVISION

# AUTOMOTIVE





# Automotive Valve GlobalOne





### VENTED MANUAL CNG CYLINDER VALVE

• Manual vented valve which does not require gas tight housing

- Thermal safety (PRD) and burst disk available upon request
- Excess flow valve available upon request
- Applications: For all kind of tanks
- Installation procedure: ISO 13341
- Material: Brass

GENERAL INFORMATION		
APPLICATION All types of tanks		
INSTALLATION PROCEDURE	ISO 13341	
MATERIAL	Brass	

TECHNICAL DATA SHEET		
Description		Value
PRESSURE	Max. Working Pressure	260 bar
TEMPERATURE	Working Temperature	-40°C / +85°C
	PRD activation Temperature	+110°C +/- 10°C
PRD SAFETY VALVE		
BURSTING DISC	Minimum area of gas flow equivalent to a 6 mm orifice	
VALVE FLOW CAPACITY		
BURSTING DISC	available with different settings	
SECURITY BUTTERFLY KNOB	Opening-closing angle	270°
EXCESS FLOW VALVE	$\Delta P$ Valve activation within	6,5 bar





# Automotive Valve GlobalOne





AVAILABLE VERSIONS		
Cylinder connections	Inlet pipe connections	Outlet pipe connections
1″ BS 341		
1″ 1/8 UNF	M12X1 1/4″ - 18NPT	
3/4″ 14 NGT		SMOOTH / LISCI D30
JIS-B-8246-V2		
W28.8 - 25E		



# Automotive Valve Global HD





### AUTOMATIC CNG CYLINDER VALVE

- Automatic CNG Cylinder Valve for heavy duty vehicles
- Thermal safety (PRD) and burst disk available upon request
- Excess flow valve available upon request
- Solenoid Valve 12-24 V

- Applications: For all types of tanks
- Installation procedure: ISO 13341
- Conforming with major ISO and National Standards
- Material: Brass
- Various surface treatments available

GENERAL INFORMATION	
APPLICATION All types of tanks	
INSTALLATION PROCEDURE	ISO 13341
MATERIAL	Brass

TECHNICAL DATA SHEET			
Description		Value	
PRESSURE	Max. Working Pressure	260 bar	
	Working Temperature	-40°C / +85°C	
TEWIPERATURE	PRD activation Temperature	+110°C +/- 10°C	
PRD SAFETY VALVE	Minimum area of gas flow ed	Minimum area of gas flow equivalent to a 8 mm orifice	
BURSTING DISC	Minimum area of gas flow equivalent to a 6 mm orifice		
VALVE FLOW CAPACITY			
BURSTING DISC	available with different settings		
SECURITY BUTTERFLY KNOB	Opening-closing angle	270°	
EXCESS FLOW VALVE	$\Delta P$ Valve activation within	6,5 bar	
SOLENOID VALVE	Voltage 12-24 VDC - Power absorbtion in all conditions 12 W (12-24 VCC) Minimum area of gas flow equivalent to a 6 mm orifice		









AVAILABLE VERSIONS		
Cylinder connections	Inlet pipe connections	
1" BS 341		
1″ 1/8 UNF	1/4"-18 NPT 9/16"-18 UNF	
3/4″ 14 NGT	M10x1	
JIS-B-8246-V2	M12x1 M14x1	
W28.8 - 25E		



# EDITION MAY 2012

# Automotive Valve Global LD 1





### AUTOMATIC CNG CYLINDER VALVE

- Automatic CNG Cylinder Valve for light duty vehicles
- Thermal safety (PRD) and burst disk available upon request
- Excess flow valve available upon request
- Solenoid Valve 12-24 V
- Applications: For all types of tanks

- Installation procedure: ISO 13341
- Material: Brass
- ValveType: Unvented
- Conforming with major ISO and National Standards
- Various surface treatments available

GENERAL INFORMATION		
APPLICATION	All types of tanks	
INSTALLATION PROCEDURE	ISO 13341	
MATERIAL	Brass	
VALVE TYPE	unvented	

TECHNICAL DATA SHEET		
Description		Value
PRESSURE	Max. Working Pressure	260 bar
TEMDEDATIIDE	Working Temperature	-40°C / +85°C
	PRD activation Temperature	+110°C +/- 10°C
PRD SAFETY VALVE		
BURSTING DISC	Minimum area of gas flow equivalent to a 6 mm orifice	
VALVE FLOW CAPACITY		
BURSTING DISC available with different settings		
SECURITY BUTTERFLY KNOB	Opening-closing angle	270°
EXCESS FLOW VALVE	$\Delta P$ Valve activation within	6,5 bar
SOLENOID VALVE	Voltage 12-24 VDC - Power absorbtion in all conditions 12 W (12-24 VCC) Minimum area of gas flow equivalent to a 6 mm orifice	



AVAILABLE VERSIONS		
Cylinder connections	Inlet pipe connections	Outlet pipe connections
1" BS 341		
1" 1/8 UNF	M12X1 - 1/4" - 18NPT	
3/4″ 14 NGT		SMOOTH / LISCI D30
JIS-B-8246-V2		
W28.8 - 25E		



# Automotive Valve Clobal LD 2

### AUTOMATIC CNG CYLINDER VALVE

- Automatic CNG Cylinder Valve for light duty vehicles
- Thermal safety (PRD) and burst disk available upon request
- Excess flow valve available upon request
- Solenoid Valve 12-24 V
- Applications: For all types of tanks

- Installation procedure: ISO 13341
- Material: Brass
- ValveType: Vented
- Conforming with major ISO and National Standards
- Various surface treatments available

GENERAL INFORMATION		
APPLICATION	All types of tanks	
INSTALLATION PROCEDURE	ISO 13341	
MATERIAL	Brass	
VALVE TYPE	vented	

TECHNICAL DATA SHEET		
Description		Value
PRESSURE	Max. Working Pressure	260 bar
	Working Temperature	-40°C / +85°C
TEMPERATORE	PRD activation Temperature	+110°C +/- 10°C
PRD SAFETY VALVE		
BURSTING DISC	Minimum area of gas flow equivalent to a 6 mm orifice	
VALVE FLOW CAPACITY		
BURSTING DISC available with different settings		
SECURITY BUTTERFLY KNOB	Opening-closing angle	270°
EXCESS FLOW VALVE	$\Delta P$ Valve activation within	6,5 bar
SOLENOID VALVE	Voltage 12-24 VDC - Power absorbtion in all conditions 12 W (12-24 VCC) Minimum area of gas flow equivalent to a 6 mm orifice	







AVAILABLE VERSIONS		
Cylinder connections	Inlet pipe connections	Outlet pipe connections
1″ BS 341	- - M12X1 - 1/4" - 18NPT	
1" 1/8 UNF		
3/4″ 14 NGT		SMOOTH / LISCI D30
JIS-B-8246-V2		
W28.8 - 25E		



# **Cut-Off Valves S3**



DIVISION

LPG-CNG VALVES & EQUIPMENT

### FEATURES

- In line cut-off automatic valve
- Low absorption solenoid valve
- Universal thread connections available to match
- CNG inlet filtering system
- Max working pressure: 260 bar
- Working temperature: -40 + 120°c



ISO 15500 / ECE R 110

GENERAL INFORMATION	
APPLICATION	All types of pipelines
INSTALLATION PROCEDURE	Internal warning
MATERIAL	Brass

TECHNICAL DATA SHEET		
Description		Value
PRESSURE	Max. Working Pressure 260 bar	
TEMPERATURE	Working Temperature	-40°C / +120°C
SECURITY BUTTERFLY KNOB	Opening-closing angle	270°
SOLENOID VALVE	Voltage 12-24 VDC - Power absorbtion in all conditions 12 W (12-24 VCC) Minimum area of gas flow equivalent to a 6 mm orifice	

AVAILABLE VERSIONS		
Cylinder Inlet pipe connections connections		External thread
M12x1	2 x M12x1	C1/2″
1/4" - 18 NPT	2 x 1/4" - 18 NPT	01/2
9/16" - 18 UNF	2 x 9/16" - 18 UNF	Smooth D21 5
M14x1	2 x M14x1	Smooth D21.5







# Filling Valve F1

### **FEATURES**

- Russia and Ukraine Type
- Check valve available
- NGV Connection on demand



GENERAL INFORMATION	
APPLICATION	All types of pipelines
INSTALLATION PROCEDURE	Internal warning
MATERIAL	Brass

TECHNICAL DATA SHEET		
Description		Value
PRESSURE	Max. Working Pressure	260 bar
TEMPERATURE	Working Temperature	-40°C / +120°C
CHECK VALVE	Minimum area of gas flow equivalent to a 6 mm orifice	
SECURITY BUTTERFLY KNOB	Opening-closing angle	270°

AVAILABLE VERSIONS			
Cylinder connections	Inlet pipe connections	External thread	
NA	2 x M12x1	C1/2″	
NA	2 x 1/4" - 18 NPT	GT/2"	
NA	2 x 9/16" - 18 UNF	Smooth D21 5	
NA	2 x M14x1	Smooth D21.5	







# **Bundle connectors**







AVAILABLE VERSIONS		
Cylinder connections	Inlet pipe connections	External thread
W28.8	2 1412 1	
1" 1/8 UNF	2 x MT2xT 2 x 1/4" - 18 NPT	G1/2″
1″ BS 341	2x 9/16" - 18 UNF	Smooth D21.5 3/4 16 UNF
3/4" NGT	2 x M14x1 Smooth	7/8 14 UNF - 3/4 16 UNF
JIS-B-8246-V2	511100011	









Approvals ISO 15500 / ECE R 110

# Additional Safety Devices P2



# **Stand Alone**





Cylinder connections	Inlet pipe connections	Outlet pipe connections
W28.8	NA	NA
1" 1/8 UNF	NA	NA
1″ BS 341	NA	NA
3/4" NGT	NA	NA
JIS-B-8246-V2	NA	NA

# L Shape





Cylinder connections	Inlet pipe connections	Outlet pipe connections
NA	M12x1	NA
NA	1/4"-18 NPT	NA
NA	9/16″ - 18 UNF	NA
NA	M14x1	NA

# T Shape





Cylinder connections	Inlet pipe connections	Outlet pipe connections
NA	2 x M12 x 1	NA
NA	2 x 1/4" - 18 NPT	NA
NA	2 x 9/16" - 18 UNF	NA
NA	2 x M14 x 1	NA

GENERAL INFORMATION	
APPLICATION	All types of pipelines
INSTALLATION PROCEDURE	ISO 13341 + Internal warning
MATERIAL	Brass

IECHNICAL DATA SHEET		
Description		Value
PRESSURE	Max. Working Pressure	260 bar
	Working Temperature	-40°C / +85°C
TEMPERATURE	PRD activation Temperature	+110°C +/- 10°C
PRD SAFETY VALVE	Minimum area of gas flow equ	uivalent to a 8 mm orifice



# Locking Wrench



LPG-CNG VALVES & EQUIPMENT DIVISION



**KEY 1** Locking wrench for valve type **G1 / G2** 



**KEY 2** Locking wrench for valve type **\$1** 



**KEY 3** Locking wrench for valve type **\$2** 



**KEY 4** Locking wrench for valve type **\$4** 





# **Spare Parts**





# **PROP 1**

Electrical connecting wire for JPT coils



**PROP 2** Gasket for vented conical thread



# **PROP 3**

12 / 24V. CNG coil with JPT connection

Other electrical connection available on request.



# **Fittings**





### **LINK 1** Fixing bracket + Fixing Nut G1/2



# LINK 2

- M12x1 fitting - long - for 6 mm pipes - M12x1 fitting - long - for 8 mm pipes



# LINK 3

- M14x1 fitting for 6 mm pipes - M14x1 fitting for 8 mm pipes



# LINK 4

- Bicone for pipes diam 8x1
- Bicone for pipes diam 6x1

Other electrical connection available on request.



LPG-CNG VALVES & EQUIPMENT DIVISION

# LPG BULK STORAGE AND TRUCK EQUIPMENT



LPG BULK STORAGE AND TRUCK EQUIPMENT

The images and products pictured in this catalogue section, replicate only a few of the products of the entire LPG BULK STORAGE AND TRUCK EQUIPMENT range. For further information regarding the entire range please request the specific LPG BULK STORAGE AND TRUCK EQUIPMENT catalogue.



For orders please refer to:





# **Threaded Internal Valves**

These valves, designed as primary shut-offs to control product discharge in LP-Gas service, are predominantly used in the liquid and vapour openings of bobtail and other transport vehicles. All valves satisfy the requirements of NFPA 58 and can also be used in stationary storage tank applications. All Cavagna internal valves have a robust, one piece body design and an incorporated excess flow function. Each valve has a weak section that allows the pump or piping to "shear" in the event of an accident, thereby leaving the valve mechanism intact. Cavagna threaded valves are compact and can be operated either manually or remotely via cable or pneumatic control. Valves contain spring-loaded, PTFE packing providing excellent leakage protection and the standard disc material provided is Nitrile.



EDITION MAY 2012



# **Threaded Internal Valves**



Part Number			Inlat	Quitlat	Closing Flow GPM Propane		LPG Vapour Capacity		Closing Flow
		Material	Connection	Connection			(SCFH/Propane)		GPM Ammonia
One Way	Two ways					Full Coupling	25 PSIG	100 PSIG	NH3 + LPG
6902900101		steel	1 1/4" M NPT	1 1/4″ F NPT	30		5 800	9 100	27
(000000101		steel			50	25	3.000	12 000	27
6902900102		steel	I I/4" M NPI	1 1/4" F NP1	50	35	7.650	12.900	45
6902900103		steel	1 1/4" M NPT	1 1/4" F NPT	80	65	10.950	18.800	72
6902900104	6902900130	steel	2" M NPT	2" F NPT	100	60	21.550	36.800	90
6902900105	6902900131	steel	2" M NPT	2" F NPT	150	90	33.600	57.200	135
6902900106	6902900132	steel	2" M NPT	2" F NPT	250	130			225
6902900107	6902900112	steel	3″ M NPT	3″ F NPT	150	100	28.600	48.700	135
6902900108	6902900113	steel	3" M NPT	3" F NPT	200	125	43.500	73.900	180
6902900109	6902900114	steel	3" M NPT	3″ F NPT	250	165	51.500	87.600	225
6902900110	6902900115	steel	3" M NPT	3″ F NPT	400	235	80.100	139.000	360
6902900111	6902900116	steel	3" M NPT	3″ F NPT	500	325			450



Part Number		Material	Inlet Outlet –		Closing Flow GPM Propane		LPG Vapour Capacity (SCFH/Propane)	
		Material	Connection Connec	Connection	Half Coupling	Full Coupling		
One Way	Two ways				rian couping	i un couping	25 PSIG	100 PSIG
6902900150		steel	1 1/4" M NPT	1 1/4" F NPT	30		5.800	9.100
6902900151		steel	1 1/4" M NPT	1 1/4″ F NPT	50	35	7.650	12.900
6902900152		steel	1 1/4" M NPT	1 1/4″ F NPT	80	65	10.950	18.800
6902900147		steel	1 1/2" M NPT	1 1/2″ F NPT	30		5 800	9 100
6902900148		steel	1 1/2" M NPT	1 1/2" F NPT	50	35	7 650	12 900
6002000140		steel	1 1/2" M NIDT	1 1/2" E NIDT	80	65	10.050	18 800
0702700149		SIEEI		II/Z FINFI	00	00	10.930	10.000
6902900153	6902900176	steel	2" M NPT	2" F NPT	100	60	21.550	36.800
6902900154	6902900177	steel	2" M NPT	2" F NPT	150	90	33.600	57.200
6902900155	6902900178	steel	2" M NPT	2" F NPT	250	130		
6902900156	6902900161	steel	3" M NPT	3″ F NPT	150	100	28.600	48.700
6902900157	6902900162	steel	3" M NPT	3″ F NPT	200	125	43.500	73.900
6902900158	6902900163	steel	3″ M NPT	3″ F NPT	250	165	51.500	87.600
6902900159	6902900164	steel	3″ M NPT	3″ F NPT	400	235	80.100	139.000
6902900160	6902900165	steel	3" M NPT	3″ F NPT	500	325		



# **Threaded Internal Valves**



### Threaded Valves specification:

C (CLOSED)

Pressure Rating: 400 PSI (27.58 bar) WOG Temperature: Up to 150°F (66°C) Body: Ductile Iron Packing: PTFE Seat disk: Synthetic rubber Stub, Shaft & Stem: stainless steel

DIMENSIONS						
Α	В	C	D	E	Н	
1 1/4″ NPT	1 1/4" NPT	5,90" (150 mm)	1,86" (47 mm)	2,88″ (73 mm)		
1 1/2" NPT	1 1/2" NPT	5,90" (150 mm)	1,86″ (47 mm)	2,88" (73 mm)		
2" NPT	2" NPT	8,26" (210 mm)	2,40" (61 mm)	4,05" (103 mm)		
3″ NPT	3″ NPT	8,85" (225 mm) ONE WAY 10,82" (275 mm) TWO WAY	2,56″ (65 mm) ONE WAY AND TWO WAY	4,54" (115,3 mm) ONE WAY 6,50" (165,3 mm) TWO WAY	3,26″ (83 mm)	



# Flanged Internal Valve 3"



Cavagna flanged valves, equipped with a built-in excess flow valve to prevent uncontrolled product release, are perfect for mounting a pump or other similar piping connections. Mounting bolts weakened section, provided, allow the pump or piping to "shear" in the event of an accident, thereby leaving the valve intact. Cavagna flanged valves have a protection filter to avoid pump contamination from dirt and particles, easily removable when the valve is installed on the filling piping line Cavagna flanged valves contain PTFE packing providing excellent leakage protection and the standard disc material provided is Nitrile, they can be operated manually or remotely via cable or pneumatic control.



😉 cavagna group

Part Number		Matarial	Inlat Connection	Outlet	Closing Flow	LPG Vapor Capacity (SCFH/Propane)		Closing Flow
Single	Double	Materia	Intel Connection	Connection	GPM Propane	25 PSIG Inlet	100 PSIG Inlet	NH <sub>3</sub> + LPG
6902900117	6902900122	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	150	25.100	42.700	135
6902900118	6902900123	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	200	36.900	62.800	180
6902900119	6902900124	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	250	42.200	71.800	225
6902900120	6902900125	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	400	59.400	100.900	360
6902900121	6902900126	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	500			450



Part Number		Matarial	Inlet Connection	Outlet	Closing Flow	LPG Vapor Capacity (SCFH/Propane)	
Single	Double	Material	Intel Connection	Connection	GPM Propane	25 PSIG Inlet	100 PSIG Inlet
6902900166	6902900171	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	150	25.100	42.700
6902900167	6902900172	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	200	36.900	62.800
6902900168	6902900173	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	250	42.200	71.800
6902900169	6902900174	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	400	59.400	100.900
6902900170	6902900175	steel	3"300lb ANSI RF Modified (4 7/8" dia bore)	3" 300 lb. ANSI RF	500		





# Flanged Internal Valve 4"



Cavagna flanged valves, equipped with a built-in excess flow valve to prevent uncontrolled product release, are perfect for mounting a pump or other similar piping connections. Mounting bolts weakened section, provided, allow the pump or piping to "shear" in the event of an accident, thereby leaving the valve intact. Cavagna flanged valves have a protection filter to avoid pump contamination from dirt and particles, easily removable when the valve is installed on the filling piping line Cavagna flanged valves contain PTFE packing providing excellent leakage protection and the standard disc material provided is Nitrile, they can be operated manually or remotely via cable or pneumatic control.



Part Number	Material	Inlet Connection	Outlet Connection	Closing Flow GPM Propane
6902900141	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	340
6902900142	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	440
6902900143	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	600
6902900144	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	800
6902900145	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	1.000



Part Number	Material	Inlet Connection	Outlet Connection	Closing Flow GPM Propane
6902900141	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	340
6902900142	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	440
6902900143	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	600
6902900144	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	800
6902900145	steel	4"300lb ANSI RF Modified (4 7/8" dia bore)	4" 300 lb. ANSI RF	1.000





# Flanged Internal Valve

### 3" One-Two ways





### Flanged Valves specification:

Pressure Rating: 400 PSI (27.58 bar) WOG Temperature: Up to 150°F (66°C) Body: cast steel WCB Packing: PTFE Seat disk: Synthetic rubber Stub, Shaft & Stem: stainless steel Gaskets: Non asbestos spiral wound graphite

Part Number		DIMEN	ISIONS	DIMENSIONS		
		A	В	A	В	
Single	Double	Single	Single	Double	Double	
6902900117	6902900122					
6902900118	6902900123		2,56″ (65 mm)	5,33" (133 mm)	5,62″ (143 mm)	
6902900119	6902900124	6,75″ (171 mm)				
6902900120	6902900125					
6902900121	6902900126					

### 4" One way



Flanged Valves specifi cation: Pressure Rating: 400 PSI (27.58 bar) WOG Temperature: Up to 150°F (66°C) Body: cast steel WCB Packing: PTFE Seat disk: Synthetic rubber Stub, Shaft & Stem: stainless steel Gaskets: Non asbestos spiral wound graphite

DIMENSIONS					
A B C					
Single	Single	Single			
7,55″ (192 mm)	3,66″ (93 mm)	7,88″ (200 mm)			




### Flanged Internal Valve Accessories

### 3" Single Flanged Valve



	1 UPP
Туре	Code
8 SCREWS - 3/4 - 10 UNC	1401101518
16 NUTS (8 up + 8 down) 3/4 - 10 UNC	3001102611
1 UPPER GASKET	0401105575
1 LOWER GASKET	0401105576
8 SCREWS - M 20x2,5	1401101522
16 NUTS (8 up + 8 down) M 20 x 2,5	3001102628



### **3" Double Flanged Valve**



	1 UPP	1 UPPER GASKET			
Туре	Code				
16 SCREWS (8 up + 8 down) 3/4 - 10 UNC	1401101517				
16 NUTS (8 up + 8down) 3/4 - 10 UNC	3001102611				
1 UPPER GASKET	0401105575				
1 LOWER GASKET	0401105576	11			



### 4" Single Flanged Valve



Туре	Code
8 SCREWS - 3/4 - 10 UNC	1401101519
16 NUTS (8 up + 8down) 3/4 - 10 UNC	3001102611
1 UPPER GASKET	0401105595
1 LOWER GASKET	0401105596







### **Rotary Cams Actuators**



#### **Features:**

- The actuator is preassembled and ready to install.
- Compared to current devices which require adjustments the installment is quick and easy (3 screws and 1 split pin).
- The actuator can be fitted to the valve in four separate positions allowing optimization of space on the vehicle. •
- Direct drive design does not apply side load to internal valve stem packing for maximum valve life.
- The actuator uses an internal cam mechanism, which guarantees higher performance optimizing the opening torque.
- Torque moment: The return torque moment relies only on the spring and is independent from the supply pressure. •
- Immediate and automatic closing in absence of air (no need for additional rapid discharge accessories).
- OPEN/CLOSE indicator.
- Compact design and lightweight.
- Aluminum body, components in stainless steel and aluminum.
  Valve anchoring bracket made in stainless steel.
- The actuator is self-lubricating with PTFE carbon-graphite seals.
- The actuator guarantees complete opening of the valve and is equipped with limit switch.
- Operating media: compressed filtered air, not necessarily lubricated.
- 500.000 opening cycles guaranteed.

Actuators						
Part. No.	Fits					
0-205	CAVAGNA 1"1/2 Threaded Internal Valve					
0-206	CAVAGNA 2" & 3" Threaded Internal Valve					
0-207 SF	CAVAGNA 3" Single Flange Internal Valve					
0-207	CAVAGNA 3" Double Flanged Internal Valve					
0-208 SF	CAVAGNA 4" Single Flange Internal Valve					



EDITION MAY 2012

# **Rotary Cams Actuators**

0-205







0-206







0-207 SF











# **Rotary Cams Actuators**

0-207







0-208 SF









Rotary Cams Actuators Dimensions (mm)											
	A	В	C	D	E	F	G	н	I	L	М
0-205	175,6	110,5	65,1	60	55,4	6	25	60,4	40	33	-
0-206	175,6	110,5	65,1	75	55,4	6	25	60,4	60	80	-
0-207 SF	175,6	110,5	65,1	50	55,4	6	145,4	80	60	60,4	25
0-207	175,6	110,5	65,1	130	55,4	6	125,4	25	60,4	40	-
0-208 SF	305	184,1	120,9	100,4	6	191,4	35	50	17,5°	-	-





### **Internal Valve Actuators**

Designed with a heavy duty stainless steel frame to withstand the toughest conditions. These actuators are intended to be used at remote locations or operated directly off the air brake system in bobtail or transport applications.

The actuator's smooth acting cam opens the internal valve lever when air, nitrogen, or carbon dioxide is applied to the line. When pressure to the line is released, the internal valve automatically closes. In case of a fire the factory provided thermal plug melts at 212° Fahrenheit releasing pressure allowing the internal valve to close. These actuators require no modifications and all hardware needed for installation is provided.

#### **Internal Valve Actuator Features**

- Stainless steel all weather bracket
- Field repairable without complete disconnect from internal valve •
- Repairable with common automotive brake chamber
- High gloss automotive grade black epoxy coating

### **FAStroke Actuators**







### **Power Stroke Actuators**









The features described in this illustration do not bind the manufacturer



# Accu-Max Float Gauges



#### **Application:**

Measure liquid levels within horizontal DOT and Stationary ASME Tanks with fluid capacities above 2,300 gallons. Suitable for use in bobtail, transport, railcar and bulk storage applications.

#### Features:

- All stainless steel construction for use with LPG & NH3 applications
- Welded tube to coupling design for maximum strength and durability
- Integral spring loaded shock absorber for arduous over-the-road application
  Exclusive easy to read "glow in the dark" dial face perfect for low light situations Dial face 100% sealed and argon filled to prevent moisture build-up & fogging Factory set and precision tuned for superb accuracy Dial face and mounting hardware universal with other industry standard gauges Mounts to all standard 8 bolt tank flange adapters

DOT Float Gauges								
Part No.	Description	Dial Face	Tank Diameter					
ME930-72	Accu-Max DOT Float Gauge Assembly	Glow / Black						
ME930-79 Accu-Max DOT Float Gauge Assembly		Glow / Black	Available in different sizes					
ME930-84	Accu-Max DOT Float Gauge Assembly	Glow / Black						
ME930C-72	Accu-Max DOT Float Gauge Assembly (Classic)	Silver / Black	72″					
ME930C-79	ME930C-79 Accu-Max DOT Float Gauge Assembly (Classic)		79″					
ME930C-84	Accu-Max DOT Float Gauge Assembly (Classic)	Silver / Black	84″					

ASME Stationary Float Gauges								
Part No.	Description	Dial Face	Tank Diameter					
ME940-108	Accu-Max Stationary Float Gauge Assembly	Glow / Black	108″					
ME940-130	ME940-130 Accu-Max Stationary Float Gauge Assembly		130″					
ME940C-108	Accu-Max Stationary Float Gauge Assembly (Classic)	Silver / Black	108″					
ME940C-130	Accu-Max Stationary Float Gauge Assembly (Classic)	Silver / Black	130″					

Accessories and Replacement Parts							
Part No.	Description						
ME930-805	Replacement Accu-Max DOT Float Gauge Dial - Glow / Black						
ME930C-905	Replacement Accu-Max DOT Float Gauge Dial - Silver / Black (Classic)						
ME940-905	Replacement Accu-Max Stationary Float Gauge Dial - Glow / Black						
ME940C-905	Replacement Accu-Max Stationary Float Gauge Dial - Silver / Black (Classic)						
ME931	8 Bolt Mounting Flange Adapter 2-1/2" MNPT - Steel						
ME932	8 Bolt Mounting Flange Adapter - Weld Type - Steel						







### **Rotary Gauge System**

Cavagna Group rotary gauges can be used on stationary or mobile tanks to visually indicate the amount of LP-Gas in the container. They are also used in filling the tank to the proper liquid level. On mobile applications and some large stationary storage tanks, hangers are recommended to support the horizontal length of the dip tube.

The gauge is operated by opening the small bleed orifice when the tube is in the vapor space of the tank. Moving the pointer on the dial causes the end of the tube to move until it contacts liquid in the container. At that point, discharge from the bleed orifice turns from vapor to liquid and the rotary gauges dial gives the volume percentage of liquid in the tank.

Gauges fit 1" coupling container connections. All gauges have stem and dip tubes with an extra large inside diame-







ŰL

### **Excess Flow Valves** for Liquid or Vapor

Valves are designed for Liquid or Vapor fill / withdrawal and for vapor equalization in containers or line applications. They are intended to close when the liquid or vapor passing trough the hose or the piping system exceeds the prescribed flow rate. Valves are available in different sizes and body configurations.

#### VALVE'S FUNCTIONING.

Once the flow exceeds the valve's setting, the valve closes and will remain closed until the system equalizes. Once the pressure on both sides of the poppet is equal, a built in equalizing passage automatically opens the valve.

						Approximate Closing Flows			
Part Number	Material	Inlet Connection	Connection	Wrench Hex Flats	Length	Liquid (GPM Propane)	25 PSIG Inlet	100 PSIG Inlet	
6902900127	Steel	1 1/4″	1 1/4″	2″	1 5/16"	30	5750	9800	
6902900128	Steel	1 1/4″	1 1/4″	2″	1 5/16″	40	7500	13330	
6902900129	Steel	1 1/4″	1 1/4″	2″	1 5/16″	50	8800	15970	

### Excess Flow Valves for Liquid or Vapor withdrawal

Valves are designed to be mounted on the bottom of costumer storage tanks for liquid service. They may also be mounted on the top for vapour service.

Devit		l. l.t	0.44	M/ 1	Approximate Closing Flows			
Number	Material	Connection	Connection	Wrench Hex Flats	Liquid (GPM Propane)	25 PSIG Inlet	100 PSIG Inlet	
6901900036	Steel	1 1/4″	1 1/4″	1 7/8″	55	10600	18920	
6901900037	Steel	1 1/4″	1 1/4″	1 7/8″	55	3830	6760	







Back Pressure Valves for Container or Line Applications



Valves are intended to prevent liquid discharge when the desired flow is directed into the vessel thereby allowing the flow in only one direction.

When coupled with the appropriate single check filler valve, the combination forms a double check filler valve suitable for use in filling of bulk storage tanks.

Part Number	Material	Inlet Connection	Outlet	Wrench	Lenath	Propane Liquid Capacity at different $\Delta$ Pressure			
i art Number	Wateria		Connection	Hex Flats	Lengui	5 PSIG	10 PSIG	25 PSIG	
7100900051	Steel	3/4" F NPT	3/4″ M NPT	1 3/8″	1 15/16" (49,2 mm)	10,75	15,7	24,5	
7100900050	Steel	1 1/4" F NPT	1 1/4″ M NPT	2″	2 1/2" (63,5 mm)	27,5	39,2	61,75	
7100900049	Steel	2″ F NPT	2″ M NPT	3″	3 3/8" (83,5 mm)	121,5	171,5	270,5	





### Flo-Max LE Transfer System



The **Flo-Max LE** (Low Emission) Transfer System is the industries **most efficient and cost-effective way** to transfer LP-Gas in bobtail, transport, railcar, and bulk plant applications. This product will pay for itself through gas savings during disconnect and its increased flow rate. While any part of this system is interchangeable with other standard systems, to receive maximum savings, all three products (LE Transfer Valve, LE Acme Adapter, and MEC Globe Valve) must be used simultaneously.







# Flo-Max LE Transfer System

Flo-Max LE Acme Adapters										
					Accessories		Accessories			
Part No.	Inlet (M. Acme)	Outlet (MNPT)	Factory Installed Screen	Discharge at Disconnect	Material	Mechanical Brake Interlock Retro-Fit	Electronic Proximity Interlock Kit	Back Check Test Adapter		
ME866-8	1-3/4″	1″	No	.16 CC	Brass	-	-	-		
ME866A-8	1-3/4″	1″	Yes	.16 CC	Brass	-	-	-		
ME866-10	1-3/4″	1-1/4″	No	.16 CC	Brass	-	-	-		
ME866A-10	1-3/4″	1-1/4″	Yes	.16 CC	Brass	-	-	-		
ME867-10	2-1/4″	1-1/4″	No	1.96 CC	Brass	-	-	-		
ME867A-10	2-1/4″	1-1/4″	Yes	1.96 CC	Brass	-	-	-		
ME868-16	3-1/4″	2″	No	3.11 CC	Brass	ME868MIB	ME868PIB	MEP105		
ME868A-16	3-1/4″	2″	Yes	3.11 CC	Brass	ME868MIB	ME868PIB	MEP105		
ME868-24	3-1/4″	3″	No	3.11 CC	Brass	ME868MIB	ME868PIB	MEP105		
ME868A-24	3-1/4″	3″	Yes	3.11 CC	Brass	ME868MIB	ME868PIB	MEP105		





 ME868-16 & ME441F8

 ME868-16 & ME441F8

**ME868BLK** - "Bypass Line Kit" is used to create a one-way closed loop between the upstream and downstream sides of a Marshall Excelsior 2" globe valve when used in conjunction with a ME868 Series low emission Acme adapter. The kit features a brass one-way check valve and preformed heavy wall copper tubing with brazed end fittings for durability. This product is intended to prevent over pressurization of the ME868 Series low emission Acme adapters making them truly low emission. This product will also greatly reduce pressures within the ME868 Series adapters thereby decreasing any wear that may occur to the shutoff valves or the low emission Acme adapter.

**ME868MIB** - "Mechanical Interlock Bracket" allows for a standard Parker style pneumatic air roller valve normally used in conjunction with standard bobtail brake interlock systems to be retro-fit to the ME868 Series low emission Acme adapters. This bracket system allows the standard brake interlock system and connections to be moved forward to the end of the low emission adapter where normal contact with the ME441F8 flange Acme cap can occur. The kit includes all bracketing and mounting hardware. (Kit does not include Parker style pneumatic roller valve).

**ME868PIB** - "Proximity Interlock Bracket" uses the new MEC smart interlock technology designed to connect with the Allison automatic transmission "auxiliary function range inhibit" preventing operation of the bobtail while this connection is in use. MEC smart interlock technology incorporates a high grade TURCK proximity switch that senses the presence of the stainless steel flange on the ME441F8 Acme cap when secured tightly to the ME868 Series adapter. This kit comes complete with all mounting hardware, MEC smart interlock technology and wiring harness to reach 5' below the deck of the bobtail.

**MEP105** - This adapter allows for the periodic evacuation and testing of a bobtail's internal back check valve during five year inspection requirements. The adapter fits snuggly into the female Acme side of a ME130 which then can be threaded onto the ME868 Series low emission Acme adapter pushing the valve poppet to the open position thereby depressurizing the system for testing purposes. (Note: Be sure to consult instruction manual supplied with MEP105 test adapter before attempting use.)







# Low Emission Hose End Valves

These hose end valves are leading the industry in minimal product loss during disconnect without sacrificing flow. They have instant full-on flow with the added protection of a quick closing, self-locking handle to prevent accidental opening of the valve during transport. They are designed to be used at the end of a filling hose on a bobtail, dispensing system or nurse tank.

#### **Hose End Valve Features**

- All stainless steel component construction
- Vents less than .50cc for minimal loss of product at disconnect
- Self-locking toggle handle prevents accidental valve opening •
- Toggle handle and stem assembly rotates 360. .
- Durable ductile iron valve body with automotive grade powder coat finish
- Stainless steel 1-3/4" female Acme insert cast into the handle •
- No additional adapters or connectors needed for operation
- Optional extended version offers 6 inches of additional reach for filling underground containers or other hard to reach applications
- Optional composite style offers a durable lightweight handle that is resistant to frosting and cold transfer during the filling operation
- Optional factory installed E-ZTurn stainless steel swivel



**ME800** 





ME800GWS





Part No.	Inlet (FNPT)	Outlet (F. Acme)	Handle Style	Handle Material	Factory Installed E-Z Turn Swivel	Extended Version
ME800	1″	1-3/4″	Standard	Aluminum	No	No
ME800WS	1″	1-3/4″	Standard	Aluminum	Yes	No
ME800C	1″	1-3/4″	Standard	Composite	No	No
ME800CWS	1″	1-3/4″	Standard	Composite	Yes	No
ME800G	1″	1-3/4″	Fluted	Aluminum	No	No
ME800GWS	1″	1-3/4″	Fluted	Aluminum	Yes	No
ME800GC	1″	1-3/4″	Fluted	Composite	No	No
ME800GCWS	1″	1-3/4″	Fluted	Composite	Yes	No
ME800EXT	1″	1-3/4″	Standard	Aluminum	No	Yes
ME800EXTWS	1″	1-3/4″	Standard	Aluminum	Yes	Yes





### E-ZTurn Hose End Swivel Connectors

The E-ZTurn hose end swivel connector allows the hose end valve to rotate 360° creating an easier connection to the tank filler valve while under pressure. It also promotes hose life by preventing twisting and kinking during reeling and unreeling from hose reel.

#### **E-ZTurn Hose End Swivel Connector Features**

- All stainless steel construction for maximum durability and corrosion resistance
- Large bearing surface for increased strength and durability
- 360° rotation under maximum working pressure of 400 psig
- Our UL listed seal pack design allows for extremely long life with no maintenance required
- Straight through bore for unobstructed flow characteristics
- See low emission hose end valves for factory installed E-ZTurn

### Hose End Valve Lock



#### **Application:**

For use with standard hose end delivery and quick acting dispensing valves. This hose end valve lock simply slides over the handle/bonnet assembly of the dispensing valve preventing valve operation while in place, eliminating the possibility for accidental discharge and/ or theft of product. This universal design allows for a common padlock to be installed for maximum security.

#### Features:

- Constructed from stainless steel for maximum product life
- Includes 3/8" diameter through holes for standard 2-1/2" shackle style padlock

& NH-

• Optional 2-1/2" long shackle padlocks available

Part No.	Description
ME540	Hose End and Quick Acting Valve Lock - Stainless Steel
ME540P-KA	2-1/2" Deep Shackle Padlock - Keyed Alike
ME540P-KD	2-1/2" Long Shackle Padlock - Keyed Different

### **Hose End Valve Holster**

Designed to provide a durable and convenient receptacle to store bobtail hose end delivery valves during over-the road transit. This holster can be mounted fully above deck or partially below deck in left or right hand hose reel applications with an hergonomic angle providing optimum conditions for delivery personnel.

#### **Hose End Valve Holster Features**

- All aluminum and stainless steel construction
- Urethane anti-vibration valve sleeve to prevent incidental damage to delivery valve
- Machined adjustment ribs for easy, secure height adjustment
- Deck backing plate and all mounting hardware supplied
- Optional urethane weather hood

Dart No	Kit with Smart Interlack Tachnology	Temperature	Accessories		
rart nu.	Kit with Smart Interlock recimology	Range	Urethane Weather Hood		
MEP801	Hose End Valve Holster	-	MEP801H		
MEP801PIH	Hose End Valve Holster with (MEC) Smart Interlock Technology	-20° to +160°F.	MEP801H		

**Gas Connections** 

**MEP801** 

**MEP801H** 

DIVISIO



LPG-CNG VALVES & EQUIPMENT

Inlet (FNPT)	Outlet (MNPT)
3/4″	3/4″
3/4″	1″
1″	1″
1″	3/4″
	Inlet (FNPT) 3/4" 3/4" 1" 1"





EDITION MAY 2012



# **Quick Acting Dispensing Valves**

Dispensing valves are designed to be used at the end of a filling hose on a bobtail, dispensing system or nurse tank filling operations. These valves have instant full-on flow with the added protection of a quick closing, self-locking handle to prevent accidental opening of the valve during transport.

#### **Quick Acting Dispensing Valve Features**

- All stainless steel internal components
- Self-locking toggle handle prevents accidental operation
- Durable ductile iron valve body with automotive grade powder coat finish
- Toggle handle and stem assembly rotates 360°
- Stainless steel factory installed vent valve



Part No.		Inlet		Accessories						
America	Claha	& Outlet	MNPT	MNPT x 1-3/4 F. Acme Adapter						
Angle	Globe	(FNPT)	Short Brass	Short Steel*	Extended Steel*					
ME810-4	ME820-4	1/2″	ME110 ME110C	-	ME635-4					
ME810-6	ME820-6	3/4″	ME111 ME111C	ME111S ME111SC	ME635-6					
ME810-8	ME820-8	1″	ME112 ME112C	ME635-8						
*Rated for LP-Cas & NH3										

## Economy Quick Acting Dispensing Valves

Featuring <u>all stainless steel</u> internal components allowing for use in both LP Gas and NH<sub>3</sub> applications.

#### **Application**:

These dispensing valves provide the user with instant full-on, full-off flow with the added protection of a self-locking handle to prevent accidental opening of the valve.

#### Features:

- Ductile and stainless steel construction
- Handle is self locking and rotates 360° User friendly handle is large enough to Operate easily with gloved hands
- Includes 1/4" FNPT plugged port Half the weight of standard



Economy Quick Acting Dispensing Valves									
Part No. Body Style Inlet & Outlet Size Accessories									
			Shor	t Couplings	Extended Coupling				
ME821-4	Globe	1/2" FNPT	-	ME110 Brass	ME635-4				
ME821-6	Globe	3/4" FNPT	ME111S Steel	ME111 Brass	ME635-6				





### Smart Interlock Technology

ME868PIB Patent Pending

Designed to prevent a vehicle from being operated while the hose end delivery valve or loading line is in use. The smart interlock technology connects directly to the Allison Automatic Transmission through the "auxiliary function range inhibit" or braking system for manual transmission vehicles. This revolutionary system incorporates the industry's best and most durable sensor - TURCK - which is backed with a lifetime product warranty.

#### Smart Interlock Technology

- "Potted" TURCK proximity switch for maximum security against vibration and weather resistance
- Supplied with water tight conduit and necessary wiring hardware to reach 5' below deck with water tight receptacle plug



Part No.	Description	Temperature Range	No. of Relays	LED Power Indicator	Inline Fuse	Wire Length	Accessories
MEP801 PIK	Interlock Retro Fit Kit for MEP801	-20°to +160° F.	-	-	-	-	
MEP801PIKL	Low Temperature Interlock Retro Fit Kit for MEP801	-50° to +160° F.	-	-	-	-	MEP801PC/20
ME868PIB	Sensor Bracket Assembly for ME868 Valve Series	-20° to +160° F.	-	-	-	-	(20' Proximity Cable)
ME503PIB	Sensor Bracket Assembly for ME503-16 & ME252-16	-20° to +160° F.	-	-	-	-	
MEP801PCK/20	Wiring Harness Kit	-	1	Yes	Yes	20'	(30' Provimity Cable)
MEP801PCK/30	Wiring Harness Kit	-	1	Yes	Yes	30′	(50 FTUXITILY Cable)
MEP802PCK/20	Wiring Harness Kit	-	2	Yes	Yes	20'	Includes Water Tight
MEP802PCK/30	Wiring Harness Kit	-	2	Yes	Yes	30′	Receptacle Plug
MEP803PCK/30	Wiring Harness Kit	-	3	Yes	Yes	30′	

Part No.	Description	Temperature Range	Accessories
ME200PIB	Sensor Bracket Assembly for ME200 Wheel Chocks	-20° to + 160°F.	
ME200PIBK	Sensor Bracket Assembly with ME200 Wheel Chocks	-20° to + 160°F.	MEP80TPC/20 (20' Proximity Cable)
ME217PIB	Sensor Bracket Assembly for ME217 Series	-20° to + 160°F.	MED201DC/20 (20/ Drovimity Cable)
ME503PIB	Sensor Bracket Assembly for ME503-16 & ME252-16	-20° to + 160°F.	MEROUTEC/30 (30 PTOXITILY Cable)
ME868PIB	Sensor Bracket Assembly for ME868 Valve Series	-20° to + 160°F.	Includes Water Tight Recentacle Plug
ME890PIB	Universal Sensor Bracket Assembly for Enclosures	-20° to + 160°F.	includes with high heceptude hug

# Smart Interlock Technology

ME890PIB

Designed to prevent a vehicle from being operated while the hose end delivery valve, loading line or wheel chocks are in use. The smart interlock technology connects directly to the Allison Automatic Transmission through the "auxiliary function range inhibit" or braking system for manual transmission vehicles. This revolutionary system incorporates the industry's best and most durable sensor, TURCK - which is backed with a lifetime product warranty.

#### **Smart Interlock Technology Features**

- "Potted" TURCK proximity switch for maximum weather resistance and security against vibration
- Supplied with water tight conduit and necessary wiring hardware o reach 5' below deck with water tight receptacle plug

#### **Sensor Bracket Assembly Features**

- Smart interlock technology
- Molded urethane sensor body housing for durability and maximum sensor protection
- Stainless steel all weather mounting band and hardware



DIVISION

**MEP801PIH** 

LPG-CNG VALVES & EQUIPMENT

ME868-16

& ME441F8 not included Smart Valve Technology

The features described in this illustration do not bind the manufacturer





### **Hose End Fill Check Adapters**

These adapters are intended to be attached to the LP-Gas delivery truck hose outlets. They feature minimal flow restriction which allows for fast delivery while providing an integral check valve to prevent further product loss if the tank fill valve fails to close. In the event the tank fill valve should fail, leave the fill adapter connected to the fill valve and disconnect the filler hose end valve. Then place the filler valve cap onto the fill adapter. The tank fill valve should be repaired immediately.

To increase flow up to 30 percent over standard hose end filler adapters use the Flo-Max hose end fill adapter (ME578). It is a full-flow, manually operated hose end fill adapter where the user controls whether the valve is open or closed, providing maximum protection against product discharge.

#### **Hose End Fill Adapter Features**

- Integral breakaway feature in the event of truck roll away leaving check intact on tank
- ME570, ME572, ME574, ME578 shortest overall height in the industry allowing adapters to fit inside tank hood
- ME571 has a floating internal seat design which allows check to swivel freely when installed on hose end valve
- Flo-Max (ME578) full-port design allows up to 30% More Flow
- Removable shutoff key and key ring supplied
- Extended versions provide an additional 7" for use on underground tanks
- Prevents pinching or cutting of the delivery hose on the protective tank collar
- Eliminate's dangerous extensions that do not incorporate the appropriate fill check device
- Eliminates unsafe stacking of multiple fill check adapters to obtain the desirable fill connection height •
- Overall length allows adapter to fit inside protective tank collar
- Optional heavy duty aluminum handle with a stainless steel 1-3/4" female Acme insert cast into the handle





Part No.	Filler Valve F. Acme Connection	Hose End M. Acme Connection	Handle Style	Handle Material	Swivels	Factory Installed Vent Valve	Extended Version	Additional Keys
ME570	1-3/4″	1-3/4″	Standard	Brass	No	No	No	-
ME571	1-3/4″	1-3/4″	Standard	Brass	Yes*	No	No	-
ME572	1-3/4″	1-3/4″	Standard	Brass	Yes	No	No	-
ME572EXT	1-3/4″	1-3/4″	Standard	Brass	Yes	No	Yes	-
ME572EXTHD	1-3/4″	1-3/4″	Heavy Duty	Cast Aluminum	Yes	No	Yes	-
ME574	1-3/4″	1-3/4″	Standard	Brass	Yes	Yes	No	-
ME574EXT	1-3/4″	1-3/4″	Standard	Brass	Yes	Yes	Yes	-
ME574EXTHD	1-3/4″	1-3/4″	Heavy Duty	Cast Aluminum	Yes	Yes	Yes	-
ME578	1-3/4″	1-3/4″	Standard	Brass	Yes	No	No	ME578-02
ME578C	1-3/4″	1-3/4″	Heavy Duty	Brass	Yes	No	No	ME578-02
*ME571 allows th	e hose end valve to s	swivel while connec	ted to the filler ho	se end adapter				





LPG-CNG VALVES & EQUIPMENT DIVISION

# High Flow Globe & Angle Valves



#### **High Flow Globe and Angle Valve Features**

- All stainless steel internal components with rotating seat disc design & V-cup Teflon® packing stem seals
- Double stem seal design ensures leak free operation
- Double lead stem thread ensures quick and efficient operation •
- Durable ductile iron valve body with automotive grade powder coat • finish
- 1-1/4" & larger globe valves have 35° seat angle for maximum product flow
- 1-1/4" & larger globe valve designed ergonomically
- correct for bobtail transport and bulk plant applications 1-3/4", 2-1/4" & 3-1/4" Acme threads available on globe valves
- Rated for 400 WOG
- Operating temperature -40° to +212° Fahrenheit .

Part	No.			Side Port	No. of	Flange		Accessories	
Angle	Globe	Inlet (FNPT)	Outlet	(FNPT)	Side Ports	Style Bonnet	E-Z Turn Knob	Hydrostatic Relief Valves	Vent Valves
ME815-4	ME825-4	1/2″	1/2" FNPT	1/4″	1	No	-		
ME815-6	ME825-6	3/4″	3/4" FNPT	1/4″	1	No	-		
ME815-8	ME825-8	1″	1" FNPT	1/4″	1	No	-		
ME815-10	ME825-10	1-1/4″	1-1/4" FNPT	1/4″	2	Yes	ME829	MEH225	MEI400
-	ME826-10	1-1/4″	1-3/4" M. Acme	1/4″	2	Yes	ME829	MEH22555 MFH25/450	MEJ402S
-	ME827-10	1-1/4″	2-1/4" M. Acme	1/4″	2	Yes	ME829		
ME815-12	ME825-12	1-1/2″	1-1/2" FNPT	1/4″	2	Yes	ME829		
ME815-16	ME825-16	2″	2" FNPT	1/4″	2	Yes	ME829		
-	ME824-16	2″	2" FNPT	1/2″	2	Yes	ME829	MEH50/460	-
-	ME828-16	2″	3-1/4" M. Acme	1/4″	2	Yes	ME829	MEH225	ME 400
ME815-24	ME825-24	3″	3" FNPT	1/4″	2	Yes	included	MEH22555 MEH25/450	MEJ402S

i.e. ME815T-10 or ME815V-10

Teflon® is a trademark of DuPont Company and Viton® is a trademark of DuPont Performance Elastomers.



Part No.							Accessories				
Ang	le	Globe		Inlet Outlet	Outlet Bort		Flange	E-Z	Hydrostatic	Vont	
Integrated Back Check	Pilot Feature	Integrated Back Check	Pilot Feature	(FNPT)	(FNPT) Outlet (F		(FNPT) Side Ports		Turn Knob	Relief Valves	Valves
ME815IBC-16	ME815P-16	ME825IBC-16	ME825P-16	2″	2" FNPT	1/4″	2	Yes	ME829	MEH225	MEJ400
-	-	ME828IBC-16	ME828P-16	2″	3-1/4" M. Acme	1/4″	2	Yes	ME829	MEH22555 MEH25/450	MEJ402S
-	-	ME824IBC-16	ME824P-16	2″	2" FNPT	1/2″	2	Yes	ME829	MEH50/460	-







# **Full Internal Relief Valves**

#### **MEV200FIR & MEV300FIR**



#### **Application:**

Designed for use in mobile LPG & NH3 containers as a primary pressure relief valve for bobtail and transport trailer installations. All working components are internal to the container connection preventing damage to the valve should a roll-over incident occur.

#### **Features:**

- Durable stainless steel body construction.
- All stainless steel internal components for maximum corrosion resistance.
- Available with Nitrile, Viton®, or Kalrez® valve seals.
- Large seating surface for superior seal performance & reliability.
  Available with 250 & 265 PSI set pressures.

				Flow Capacity SCFM/AI <b>R</b> **	Service		
Part No.	STD / PSIG	Container Connection	Installation Hex	UL @ 120% Set Pressure	LPG	NH <sub>3</sub>	Seat Material
MEV200FIR/250	250	2" MNPT	1-1/2″	4460	Yes	Yes	Nitrile
MEV200FIR/265	265	2" MNPT	1-1/2″	4670	Yes	Yes	Nitrile
MEV200FIRV/250	250	2" MNPT	1-1/2″	4460	Yes	No	Viton®
MEV200FIRV/265	265	2" MNPT	1-1/2″	4670	Yes	No	Viton®
MEV200FIRK/250*	250	2" MNPT	1-1/2″	4460	Yes	Yes	Kalrez® ~
MEV200FIRK/265*	265	2" MNPT	1-1/2″	4670	Yes	Yes	Kalrez® ~
MEV300FIR/250	250	3" MNPT	2-1/2"	10865	Yes	Yes	Nitrile
MEV300FIR/265	265	3" MNPT	2-1/2"	11600	Yes	Yes	Nitrile
MEV300FIRV/250	250	3" MNPT	2-1/2″	10865	Yes	No	Viton®
MEV300FIRV/265	265	3" MNPT	2-1/2″	11600	Yes	No	Viton®
MEV300FIRK/250*	250	3" MNPT	2-1/2″	10865	Yes	Yes	Kalrez® ~
MEV300FIRK/265*	265	3" MNPT	2-1/2″	11600	Yes	Yes	Kalrez® ~

\* Seat Material not UL listed \*\* Flow rates are shown as bare relief valves. \*\*\* Size relief capacity per NFPA 58 2011, table 5.7.2.6 ~ Recommended for LPG & NH3 Dual Service Applications

Accessories			
Part No.	Description		
ME200FIR-09	2" Internal Relief Valve Cap & Lanyard		
ME300FIR-09	3" Internal Relief Valve Cap & Lanyard		
MEP200FIR	1-1/2" Hex Installation Tool for MEV200FIR Valves		
MEP300FIR	2-1/2" Hex Installation Tool for MEV300FIR Valves		





### **Flanged Full Internal Relief Valves**



#### **Application:**

Designed for use in mobile LPG & NH3 containers as a primary pressure relief valve for bobtail and transport trailer installations. All working components are internal to the container connection preventing damage to the valve should a roll-over incident occur. Our unique design incorporates a standard 3" - 300LB. raised face flange connection to assure a 100% leak free connection for rugged over the road applica-tions. This eliminates problems associated with NPT threaded connections and/or tank coupling wear providing maximum tank and relief valve service life.

#### **Features:**

- Durable single piece stainless steel body construction.
- All stainless steel internal components for maximum corrosion resistance.
- Available with Nitrile, Viton®, or Kalrez® valve seals.
- Large seating surface for superior seal performance & reliability.
- Available with 250 & 265 PSI set pressures.

			Flow Capacity SCFM/AIR**	Service		
Part No.	STD / PSIG	Container Connection	UL @ 120% Set Pressure	LPG	NH <sub>3</sub>	Seat Material
MEV300FIR-3F/250	250	3" 300LB. Flange	10865	Yes	Yes	Nitrile
MEV300FIR-3F/265	265	3" 300LB. Flange	11600	Yes	Yes	Nitrile
MEV300FIRV-3F/250	250	3" 300LB. Flange	10865	Yes	No	Viton®
MEV300FIRV-3F/265	265	3" 300LB. Flange	11600	Yes	No	Viton®
MEV300FIRK-3F/250*	250	3" 300LB. Flange	10865	Yes	Yes	Kalrez® ~
MEV300FIRK-3F/265*	265	3" 300LB. Flange	11600	Yes	Yes	Kalrez® ~

\* Seat Material not UL listed

\*\*\* Flow rates are shown as bare relief valves. \*\*\* Size relief capacity per NFPA 58 2011, table 5.7.2.6 ~ Recommended for LPG & NH3 Dual Service Applications

Accessories			
Part No. Description			
ME300FIR-09	3" Internal Relief Valve Cap & Lanyard		



T26





### Semi Internal Relief Valves



#### **Application:**

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Designed for use in large stationary LPG containers as a primary pressure relief valve. These pressure relief valves have been specifically designed to provide optimum performance when installed in either a 2" half or a 2" full coupling making them perfect for most large stationary tank installations.

#### Note: Available with all stainless steel construction for NH3 service applications.

#### Features:

- Durable forged brass body with 2" NPT and 3" NPT inlet pipeaway thread
- All steel & stainless steel stem, spring, and valve gasket holder for maximum corrosion resistance
- Available with Nitrile, Viton®, or Kalrez® valve seals
- Large seating surface for superior seal performance & reliability
- Available with 125, 250 & 265 PSI set pressures

				Flow Capacity SCFM/AIR**	Service		
Part No.	STD / PSIG	Container Connection	Installation Hex	UL @ 120% Set Pressure	LPG	NH <sub>3</sub>	Seat Material
MEV200SIR/125	125	2" MNPT	3-1/2″	4,870	Yes	No	Nitrile
MEV200SIR/250	250	2" MNPT	3-1/2″	10,925	Yes	No	Nitrile
MEV200SIR/265	265	2" MNPT	3-1/2″	11,475	Yes	No	Nitrile
MEV200SIRV/125	125	2" MNPT	3-1/2″	4,870	Yes	No	Viton®
MEV200SIRV/250	250	2" MNPT	3-1/2″	10,925	Yes	No	Viton®
MEV200SIRV/265	265	2" MNPT	3-1/2″	11,475	Yes	No	Viton®
MEV200SIRK/125*	125	2" MNPT	3-1/2″	4,870	Yes	No	Kalrez®
MEV200SIRK/250*	250	2" MNPT	3-1/2″	10,925	Yes	No	Kalrez®
MEV200SIRK/265*	265	2" MNPT	3-1/2″	11,475	Yes	No	Kalrez®

\* Seat Material not UL listed

\*\*\* Flow rates are shown as bare relief valves. \*\*\* Size relief capacity per NFPA 58 2011, table 5.7.2.6

Accessories			
Part No.	Description		
MEV200SIR-106	2" Semi Internal Relief Valve Cap & Lanyard		
MEP104-24	3" FNPT X 3" FNPT Pipeaway Adapter - Zinc Plated Steel		





### **High Flow Bypass Valves** For Bobtail Truck - Plant Applications

#### **Application:**

These bypass valves are specifically designed to protect truck and plant pumps from damage due to excessive pressure while providing the industry's best bypass flow rates across a full range of set pressures. They feature wide open flow channels with an orifice weep hole chamber to prevent the valve from slamming open / closed. The weep hole chamber also helps to prevent valve seat chatter by allowing constant pressure communication both upstream and downstream of the seat.

#### **Features:**

- All ductile iron body and bonnet
- All stainless steel wetted components
- Wide open flow channels for industry best flow rates
- Orifice weep hole to maintain constant pressure above and below valve seat
- Large range of set pressure springs
  Weldable steel NPT and socket weld flanges

- Vendable steer for rand socket weld hanges
  Zinc dichromate finish for maximum corrosion resistance
  Available with or without flanges assembled
  Available 1-1/4" through 2" NPT and socket weld flange ends
- Universal 4 bold, flanged body configuration
- Two 1/4" FNPT plugged auxiliary pressure ports
- Heavy duty protective stem cap



Part No.	Description	Spring Range
ME840-10-125	1-1/4" FNPT High Flow Bypass Valve	91-125 PSI
ME841-10-125	1-1/4" Socket Weld High Flow Bypass Valve	91-125 PSI
ME840-12-125	1-1/2" FNPT High Flow Bypass Valve	91-125 PSI
ME841-12-125	1-1/2" Socket Weld High Flow Bypass Valve	91-125 PSI
ME840-16-125	2" FNPT High Flow Bypass Valve	91-125 PSI
ME841-16-125	2" Socket Weld High Flow Bypass Valve	91-125 PSI
ME840-125	1-1/4"- 2" Universal High Flow Bypass w/o Flanges	91-125 PSI

Universal Flange Kits				
Part No.	Description			
ME840-10F	1-1/4" FNPT 4 Bolt Flange Adapter Plate w/ Bolts & O-Ring			
ME841-10F	1-1/4" Socket Weld 4 Bolt Flange Adapter Plate w/ Bolts & O-Ring			
ME840-12F	1-1/2" FNPT 4 Bolt Flange Adapter Plate w/ Bolts & O-Ring			
ME841-12F	1-1/2" Socket Weld 4 Bolt Flange Adapter Plate w/ Bolts & O-Ring			
ME840-16F	2" FNPT 4 Bolt Flange Adapter Plate w/ Bolts & O-Ring			
ME841-16F	2" Socket Weld 4 Bolt Flange Adapter Plate w/ Bolts & O-Ring			
MEP840-10	1-1/4" FNPT 4 Bolt 90° Flange Adapter Elbow w/ Bolts & O-Ring			
MEP841-10	1-1/4" Socket Weld 4 Bolt 90° Flange Adapter Elbow w/ Bolts & O-Ring			
MEP840-12	1-1/2" FNPT 4 Bolt 90° Flange Adapter Elbow w/ Bolts & O-Ring			
MEP841-12	1-1/2" Socket Weld 4 Bolt 90° Flange Adapter Elbow w/ Bolts & O-Ring			
MEP840-16	2" FNPT 4 Bolt 90° Flange Adapter Elbow w/ Bolts & O-Ring			
MEP841-16	2" Socket Weld 4 Bolt 90° Flange Adapter Elbow w/ Bolts & O-Ring			

Parts & Accessories				
Part No.	Description			
ME840K	1-1/4" - 2" Complete Bypass Repair Kit - Less Spring			
ME840SRK	1-1/4" - 2" Bypass Seal Repair Kit			
ME840-16-108-40	1-1/4" - 2" Bypass Valve Spring 20-40 PSI			
ME840-16-108-70	1-1/4" - 2" Bypass Valve Spring 41-70 PSI			
ME840-16-108-90	1-1/4" - 2" Bypass Valve Spring 71-90 PSI			
ME840-16-108-125	1-1/4" - 2" Bypass Valve Spring 91-125 PSI			
ME840-16-108-150	1-1/4" - 2" Bypass Valve Spring 126-150 PSI			
ME868-16-05	1-1/4" - 2" Universal 4 Bolt Flange O-Ring			
ME840-16-109	1-1/4" - 2" Universal Bonnet O-Ring			
ME840-16-110	1-1/4" - 2" Universal Spring Guide O-Ring			
ME840-16-104	1-1/4" - 2" Universal Valve Poppet - Stainless Steel			







# High Flow Bypass Valves for Dispensing Applications

#### **Application:**

Intended for use in small cylinder filling applications as a bypass and primer valve for turbine style dispensing pumps. These bypass valves have a special "check ball" mechanism that helps eliminate vapor from liquid while keeping the pump flooded and properly primed. The priming and vapor elimination feature reduces pump wear and promotes seal longevity.

#### Features:

- All ductile iron body and bonnet
- Large range of set pressure springs
- Two 1/4" FNPT plugged auxiliary pressure ports
- Stainless steel main valve poppet
- Heavy duty protective stem cap
- Available in 3/4" & 1" FNPT versions
- Factory set at 125 PSI
- Durable powder coat finish

ME840-6/150

Part No.	Description	Spring Range
ME840-6-150	3/4" FNPT High Flow Bypass Valve	50-150 PSI
ME840-8-150	1" FNPT High Flow Bypass Valve	50-150 PSI

Parts & Accessories				
Part No.	Description			
ME840-6K	3/4" - 1" Complete Bypass Repair Kit - Less Spring			
ME840-6SRK	3/4" - 1" Bypass Seal Repair Kit			
ME840-8-108-60	3/4" - 1" Bypass Valve Spring 25-60 PSI			
ME840-8-108-150	3/4" - 1" Bypass Valve Spring 50-150 PSI			
ME840-8-108-225	3/4" - 1" Bypass Valve Spring 100-225 PSI			
ME870-24-06	3/4" - 1" Bypass Valve Replacment Bonnet O-Ring			





# 3" Bypass Valve for Plant Applications

#### **Application:**

Specifically designed for plant systems where maximum bypass flow is necessary to protect the pump from rapid pressure changes or over pressurization. Perfectly suited for 4" base mount pumps or larger pump applications.

#### **Features:**

- All ductile iron body and bonnet
- All stainless steel wetted internal components
- Bonnet / seat positioned at 35° angle for maximum product flow
- Downstream bleed port to boost product flow during bypass
  Two 1/4" FNTP plugged pressure ports
  Heavy duty protective stem cap
  Durable powder coat finish

- Factory set at 100 PSI



ME840-24/150

Part No.	Description	Spring Range
ME840-24-150	3" FNPT High Flow Bypass Valve	76-150 PSI

Parts & Accessories				
Part No.	Description			
ME840-24K	3" Complete Bypass Repair Kit - Less Spring			
ME840-24SRK	3" Bypass Seal Repair Kit			
ME840-24-105-75	3" Bypass Valve Spring 25-75 PSI			
ME840-24-105-150	3" Bypass Valve Spring 76-150 PSI			





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**Combination Valves** 



Developed to mount a pressure gauge and fixed tube liquid level gauge all in one valve. The shutoff portion of the valve increases the pressure gauge's life and accuracy by eliminating constant gauge pressure and allows for easy gauge replacement. To replace a gauge simply close the valve and open the vent valve to relieve pressure before disassembling pressure gauge.

The valve can be installed at the maximum fill level or an 1/8" MNPT dip tube can be installed on the container connection side to set any liquid level desired. For use in ASME bulk storage containers and DOT transport tank installations.

#### **Combination Valve Features**

- All steel and stainless steel component construction
- Integral #54 orifice provides gauge dampening protection
  Durable ductile iron body with automotive grade powder coat finish or plated steel body



		Cantalaan	True Comilies	Din Taha	Accessories		
Part No.	Material	Material Connection Connections Conne MNPT FNPT FN		Connection FNPT	Stainless Steel Vent Valve	Stainless Steel 0-400 PSIG Pressure Gauge	
ME830	Ductile Iron	3/4" MNPT	1/4" FNPT	1/8″	Included	MEJ526 MEJ542	
MEJ415	Steel	3/4" MNPT	1/4" FNPT	1/8″	MEJ402S	MEJ542	
MEJ415G	Steel	3/4" MNPT	1/4" FNPT	1/8″	Included	Included	

# **Container Thermometers**



Designed for use in LP-Gas or NH3 storage tanks, nurse tanks, bobtails and transports. These stainless steel, dust and water proof thermometers have 1/2" MNPT connection with a tempe-rature range from -40° to +120° Fahrenheit.

Part No.	Dial Diameter	Probe Length
MEJ700	2″	4″
MEJ701	2″	6″
MEJ702	3″	4″
MEJ703	3″	6″







### Liquid Transfer Valves & Adapters

Designed to provide a safe means by which to transfer liquid from a tank during an emergency or container relocation. These valves can be equipped with an integral excess flow device for direct product transfer or without when used in conjunction with liquid withdrawal adapter (ME458 Series) and tank valve (ME460 & ME462 Series).

**Warning:** An excess flow valve will not activate if there is a break or leak downstream of the valve that does not equal or exceed the closing flow of the valve or if the excess flow valve installed exceeds the flow capacity of the system. See the Excess Flow Warning page for more information regarding the use of excess flow.

#### **Liquid Transfer Valve Features**

- Double O-ring stem seal design ensures leak free operation
- Double lead stem thread ensures quick and efficient operation
- 3/4" MNPT inlet x 3/4" FNPT outlet
- Additional features for steel transfer valves
- All stainless steel internal components
- Durable ductile iron valve body with automotive grade powder coat finish
- Equipped with convenient upstream and downstream 1/4" FNPT plugged ports for optional accessories



#### **Tank Valve Features**

- Provides excess flow protection in the event of a downstream connection or line failure
- Safety breakaway feature leaves valve seals intact in the event of truck roll-away
- 6-14 psig closing flow pressure differential for maximum product transfer
- Fully interchangeable with all existing valve models and adapters
- Additional features for steel and stainless steel tank valves
  - Meets requirements for installation into DOT storage containers like bobtails and transports
  - Steel model features a rust inhibitor compound between the cap and threads to prevent corrosion

Part No. Mater							A	ccessories			
	Excor	Excess	Evenue Clasing	Liquid Withdrawal		Liquid Withdrawal Tank Valve 1-5/8" UNF Male			Hydrostatic Relief Valve	Vent Valve	
	Material	Flow Flow/GPM		Adapter 3/4" FNPT x 1-5/8" UNF		3/4" 1-1/4" MNPT		г			
					Brass	Steel*	Brass	Brass	Steel*	Stainless Steel*	
ME449	Brass	No	-	ME458	ME458S	ME460	ME462	-	-	MEH225 MEH25/450	
ME449H	Brass	No	-	ME458	ME458S	-	-	-	-	Factory Installed MEH225	MEJ400 MEJ400SC
ME449S	Ductile Iron*	No	-	-	ME458S	-	-	ME462S	ME462SS	MEH225SS/300 MEH225SS/400	MEJ400/72
ME449EXS/22	Ductile Iron*	Yes	22	-	-	-	-	-	-		MEJ402S
ME449EXS/28	Ductile Iron*	Yes	28	-	-	-	-	-	-	MEH225SS/440	



ME462S





# **ACME** Adapters

Part No.						
Brass			MArmo	ENDT	MNDT	
No Screen	Factory Installed Screen	Steel*	м. Асте	FNFI	MINP I	
ME498-4/2	-	-	1-1/4″	1/4″	1/2"**	
ME498-6/3	-	-	1-1/4″	3/8″	3/4"**	
ME192	-	-	1-1/4″	1/2″	-	
ME193	-	-	1-1/4″	3/4″	-	
ME210	-	-	1-3/4″	1/4″	-	
ME211	-	-	1-3/4″	3/8″	-	
ME212	-	-	1-3/4″	1/2″	-	
ME213	-	ME213S	1-3/4″	3/4″	-	
ME214	-	ME214S	1-3/4″	1″	-	
ME502-12/8	-	-	2-1/4″	1″	1-1/2"**	
ME502-16/10	-	ME502S-16/10	2-1/4″	1-1/4″	2″**	
ME502-16/12	-	-	2-1/4"	1-1/2"	2″**	
ME250	ME250A	-	3-1/4″	1-1/4″	-	
ME251	ME251A	-	3-1/4″	1-1/2"	-	
ME252-16	ME252A-16	ME252S-16	3-1/4″	2″	-	
ME508-24	ME508A-24	ME508S-24	3-1/4″	3″	-	

\* Rated for LP-Gas & NH3 \*\* Male Thread Outside & Female Thread Inside



Brass			Steel*				
Factory Machined 1/4″ FNPT with Vent Hole	Factory Installed Brass Vent Valve	Factory Installed Stainless Steel Vent Valve	Factory Machined 1/4" FNPT with Vent Hole	Factory Installed Brass Vent Valve	Factory Installed Stainless Steel Vent Valve	M. Acme	FNPT/ MNPT
ME252J-16	ME252 B-16	ME252 S-16	ME252SJ-16	ME252SJB-16	ME252SJS-16	3-1/4″	2" FNPT
ME503J-16	ME503JB-16	ME503JS-16	ME503SJ-16	ME503SJB-16	ME503SJS-16	3-1/4″	2" MNPT
To add a factory installe	d screen use an " $\Delta$ " after	the prefix number i.e. N	/F252AIB-16				

To add a factory installed s \* Rated for LP-Gas & NH3 the prefix number i.e. ME252AJB-16

# **ACME** Adapters

	Part No.				
Br	ass			MINDT	FNIDT
No Screen	Factory Installed Screen	Steel*	M. Acme	MNPI	FNPT
ME498-4/2	-	-	1-1/4″	1/2″	1/4″**
ME498-6/3	-	-	1-1/4″	3/4″	3/8"**
-	-	ME520S-8	1-1/4″	1″	-
-	-	ME521S-4	1-3/4″	1/2″	-
ME215	-	ME215S	1-3/4"	3/4″	-
ME216	-	ME216S	1-3/4"	1″	-
ME217	ME217A	ME217S	1-3/4"	1-1/4″	-
ME233	-	ME233S	2-1/4"	1-1/4″	-
ME502-12/8	-	-	2-1/4"	1-1/2"	1″**
ME502-16/10	-	ME502S-16/10	2-1/4"	2″	1-1/4"**
ME502-16/12	-	-	2-1/4"	2″	1-1/2"**
ME503-16	-	ME503S-16	3-1/4"	2″	-
ME503-20	-	-	3-1/4"	2-1/2"	-
ME262	-	ME262S	3-1/4"	3″	-
* Rated for LP-Gas &	NH3		•		



Part No. M. Acme M. Acme Brass Steel \* 1-1/4" 1-1/4" ME270 1-3/4" ME273 ME273S 1-3/4" ME275 ME275S 2-1/4" 2-1/4" ME277 ME277S 3-1/4" 3-1/4" \* Rated for LP-Gas & NH3 2-1/4″





US

Part	No.	М.	Female			
Brass	Steel *	Acme	Thread			
ME209	ME209S	1-3/4″	3/8"-16			
To hold hose end valve secure when not in use						
* Rated for LP-Gas & NH3						

ME215S





ME252S-16

ME192

ME212

Acme Adapter with Screen

ME503-16

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The features described in this illustration do not bind the manufacturer.

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LPG-CNG VALVES & EQUIPMENT DIVISION

# **ACME Reducer Couplings**



Par	t No.	F. A	M. Acme		
Brass	Steel *	г. Асте			
ME611	ME611S	2-1/4"	1-3/4″		
ME612	ME612S	3-1/4″	1-3/4″		
ME614	-	3-1/4"	2-1/4"		
ME442	-	3-1/4″	1-1/4" FNPT		
* Rated for LP-Gas & NH3					









Part No.								Accessory
Brass		Plastic		Steel **		<b>F</b> .	Style	Chain
Cap Only	Cap with Chain	Cap Only	Cap with Chain	Cap Only	Cap with Chain	Acme	,	Only***
-	-	ME108	ME108-1	-	-	1-1/4″	Pin Hole	MEP147
ME220	ME220 1	ME109 or	ME109-1 or	MEDDOS	ME229S-1	1-3/4″	Pin Hole	MED1 49
IVIEZZ9	IVIEZZ9-1	ME109-NH3*	ME109-NH3-1*	IVIEZZ93				IVIEP 140
ME229F	ME229F-1	-	-	ME229FS	ME229FS-1	1-3/4″	Knob	MEP167
ME431F	ME431F-1	-	-	ME431FS	ME431FS-1	2-1/4″	Knob	MEP167
ME431R	ME431R-1	-	-	-	-	2-1/4″	Tapped hole	MEP167
-	-	ME106	ME106-1	-	-	3-1/4"	Pin Hole	MEP183
ME441F	ME441F-1	-	-	ME441FS	ME441FS-1	3-1/4″	Knob	MEP167
ME441R	ME441R-1	-	-	ME441RS	ME441RS-1	3-1/4"	Tapped hole	MEP167
* Rated for NH3								

\*\* Rated for LP-Gas & NH3 \*\*\* MEP147 ring fits over 3/4" MNPT—MEP148 ring fits over 1-1/4" MNPT

# **ACME** Caps

The flange allows for easy operation of the pneumatic or proximity interlock switches which control the safety systems of transport vehicles. The flange is 8" diameter stainless steel, flush mounted to a 3-1/4" Acme cap.

	Part	No.			Accessory	
Br	ass	Steel **			•	
Cap with Flange	Cap with Flange & Chain	Cap with Flange	Cap with Flange & Chain	F. Acme	Style	Chain Only
ME441F8	ME441F8-1	ME441FS8	ME441FS8-1	3-1/4″	Knob	MEP167
ME441R8	ME441R8-1	-	-	3-1/4″	Tapped hole	MEP67
* Rated for LF	P-Gas & NH					





ME441F8

Flange







# Filler & Vapor Couplings

These couplings are used as connections between the hose and transfer valve. The filler coupling is designed to provide different connections for the end of a hose (inlet) or an angle, globe or quick acting valve (outlet) when transferring liquid. The vapor coupling is designed to be used with valves having an upper check mechanism. The nose piece on the vapor coupling opens the check valve allowing vapor equalization.

The extended style has a stainless steel female Acme nut insert cast into the heavy duty aluminum handle. All filler and vapor couplings come with a factory installed retaining ring unless noted. The retaining ring limits the travel of the handle or nut during disconnect reducing spin-offs and promoting proper venting of the captured product.



Part No.									
Comico	Br	ass	Brass Wing		Ste	el*		F.	MANDT
Jervice	Knurled	Wing	Nut/Steel	Knurled	Mine Nut	Extende	d Handle	Acme	IVINP I
туре	Nut	Nut	Nipple	Nut	wing Nut	Standard	Fluted		
	ME100	-	-	-		-	-	1-1/4″	3/8″
	ME101	-	-	-		-	-	1-1/4″	1/2″
	ME110	ME110C	-	-	-	ME635-4	ME635G-4	1-3/4"	1/2″
	ME111	ME111C	-	ME111S	ME111SC	ME635-6	ME635G-6	1-3/4″	3/4″
					NE1126C			1 2/4//	3/4″
امنى با	-	-	-	-	MET 135C	-	-	1-3/4	FNPT
Liquid	ME112	ME112C	-	ME112S	ME112SC	ME635-8	ME635G-8	1-3/4″	1″
	-	-	-	-	-	ME635-10	ME635G-10	1-3/4"	1″
	-	ME120**	ME120S**	-	ME121S**	-	-	2-1/4″	1-1/4″
		ME120WR	ME120SWR		ME121SWR			-	
		ME130B**	ME130**		ME130S**			2 1 / 4//	2//
	-	ME130BWR	ME130WR	-	ME130SWR	-	-	3-1/4	Ζ.
	ME140	-	-	-	-	-	-	1-1/4″	3/8″
	ME141	-	-	ME141S	-	-	-	1-1/4″	1/2″
	-	-	-	-	-	ME646-4	ME646G-4	1-3/4″	1/2″
Vapor	ME150	ME150C	-	ME150S	ME150SC	ME646-6	ME646G-6	1-3/4"	3/4″
•	ME151	ME151C	-	ME151S	ME151SC	ME646-8	ME646G-8	1-3/4"	1″
	-	-	-	-	-	-	-	1-3/4"	1-1/4″
	-	-	ME160	ME160S	-	-	-	2-1/4"	1-1/4″
* Rated for	I P-Cas & NH								

\* Rated for LP-Gas & NH<sub>3</sub>

\*\* Does not include a factory installed retaining ring





# Quad-Port Relief Valve Manifold

Designed for use with large LP-Gas and NH3 stationary storage containers with flanged openings. These relief manifolds have an additional relief valve excluded from the flow rating, which allows for service and/or exchange of any one relief valve without evacuating the tank. Our large port selection handle allows for each specific valve port to be closed off so that the relief valve may be removed while the remaining valves remain under pressure protecting the tank and contents. Each manifold model is rated based on the flow through the relief valves with one valve removed from service.

#### **External Pressure Relief Valve Features**

- Heavy duty ductile iron body
- Durable V-cup Teflon® packing stem seals
- Molded rubber weather guard for manifold rotary gear with port plug
- Integral breakaway feature leaves seat and seal intact
- Weep hole deflector and hex socket plugs supplied
- Integrated pilot equalizing feature
- Corrosion resistant finish
- Convenient lifting chain included
- 3-1/2"-8 outlet thread accepts 3" MNPT pipeaway



					Factor	Accessory		
Part No.	Flange Size	No of Relief Valves	Application	Flow Capacity SCFM/Air** UL @ 120% Set Pressure	Seal Material*	Start-to- Discharge Setting PSIG	Part No.	8 Stud/Nut Universal Mounting Kit
ME903S-3F/250VM	3" - 300# **	3	LPG	20,400 (2)	Viton®	250	MEV250VM/250	ME904SK
ME903S-3F/250CN	3" - 300# **	3	LPG & NH₃	20,400 (2)	Nitrile	250	MEV250CN/250	ME904SK
ME903S-4F/250VM	4" - 300#	3	LPG	20,400 (2)	Viton®	250	MEV250VM/250	ME904SK
ME903S-4F/250CN	4" - 300#	3	LPG & NH₃	20,400 (2)	Nitrile	250	MEV250CN/250	ME904SK
ME904S-3F/250VM	3" - 300# **	4	LPG	27,740 (3)	Viton®	250	MEV250VM/250	ME904SK
ME904S-3F/250CN	3" - 300# **	4	LPG & NH₃	27,740 (3)	Nitrile	250	MEV250CN/250	ME904SK
ME904S-4F/250VM	4" - 300#	4	LPG	27,740 (3)	Viton®	250	MEV250VM/250	ME904SK
ME904S-4F/250CN	4" - 300#	4	LPG & NH₃	27,740 (3)	Nitrile	250	MEV250CN/250	ME904SK
ME903S-3F/265VM	3" - 300# **	3	LPG	20,555 (2)	Viton®	265	MEV250VM/265	ME904SK
ME903S-3F/ 265CN	3" - 300# **	3	LPG & NH₃	20,555 (2)	Nitrile	265	MEV250CN/265	ME904SK
ME903S-4F/ 265VM	4" - 300#	3	LPG	20,555 (2)	Viton®	265	MEV250VM/265	ME904SK
ME903S-4F/ 265CN	4" - 300#	3	LPG & NH₃	20,555 (2)	Nitrile	265	MEV250CN/265	ME904SK
ME904S-3F/ 265VM	3" - 300# **	4	LPG	28,550 (3)	Viton®	265	MEV250VM/265	ME904SK
ME904S-3F/ 265CN	3" - 300# **	4	LPG & NH₃	28,550 (3)	Nitrile	265	MEV250CN/265	ME904SK
ME904S-4F/ 265VM	4" - 300#	4	LPG	28,550 (3)	Viton®	265	MEV250VM/265	ME904SK
ME904S-4F/ 265CN	4" - 300#	4	LPG & NH₃	28,550 (3)	Nitrile	265	MEV250CN/265	ME904SK
* Nitrile not UL Listed				*** Flow rating bas	ed on number of v	valves indicated in	parenthesis ()	
** For use with modified 300 # ANSI Flange with 4" port				Flow rates are s	hown as bare relie	f valves, pipeaways	will reduce flow	

Teflon® is a trademark of DuPont Company and Viton® is a trademark of DuPont Performance Elastomers.







### External Pressure Relief Valve





**VS 60** 70.0.090.0080

Safety relief valve with big capacity.

Designed for installation on ASME containers such as bulk plant, skid tanks, underground and above ground containers, as the primary pressure relief valve.





**PRV 250** 66.0.290.1139

Pressure relief valve for small containers and on-line pipe installations. Setting point: 17,24 bar.



**PRV 375** 66.0.290.1140

Pressure relief valve for small containers and on-line pipe installations. Setting point: 25,85bar. Designed for small containers and online pipe installation, to protect piping and shutoff valves from over pressure situations where LPG has the potential to be trapped. These relief valves provide pressure relief at or in excess of the stated pressure setting, protecting against line or plumbing system failures.

	Bottom Male Wrench grip		Thread type	Thread type Configuration		PRV-OVERPRESSURE 10%		<b>PRV</b> Orifice
Part Number*	Connection	hexagon (mm)	taper	suitable for this tank capacity:	Discharge Setting (bar)	CAPACITY Nm <sup>3</sup> /min. (If not specified otherwise)	Approval	(mm)
70.0080 (VS 60) - PRV	2 1/2″NPT	110	х	10000 lt.	basic 17,65**	260,00	CE***	45,00
66.1139 - PRV	1/4-18 NPT	22	х	-	17,24	18,41 (at 120%O.P. SCFM-AIR)	UL/ASME	19,00
66.1140 - PRV	1/4-18 NPT	22	х	-	25,85	33,52 (at 120%O.P. AIR)	UL	19,00



# **Hydrostatic Pressure Relief Valves**

Designed to protect piping and shutoff valves from over pressure situations where liquid LP-Gas or NH3 has the potential to be trapped. These relief valves provide pressure relief at or in excess of the stated pressure setting, protecting against line or plumbing system failures.

Note: NFPA #58 states, "Hydrostatic relief valves designed to relieve the hydrostatic pressure that can develop in sections of liquid piping between closed shutoff valves shall have pressure settings not less than 400 psig or more than 500 psig unless installed in systems designed to operate above 350 psig. Hydrostatic relief valves for use in systems designed to operate above 350 psig shall have settings not less than 110 percent or more than 125 percent of the system design pressure.

#### **Hydrostatic Relief Valve Features**

- Compact design to fit any application
- Stainless steel spring
- Non-adjustable, tamper resistant design
- Stainless steel models rated for LP-Gas & NH3
- Specially designed internal components to increase flow at discharge





MEH225SS MEH25 MEH75

MEH50



5 A	Part No.	Body Material	Seal Material	Start-to- Discharge Setting PSIG	Inlet MNPT	A	В	c	D	Accessory Pipeaway Adapter
Î	MEH225	Brass	Nitrile	440	1/4″	1-1/16″	13/16″	1/4″	9/16" Hex	-
	MEH225SS/350	Stainless Steel	Nitrile	350	1/4″	1-1/16"	13/16"	1/4″	9/16" Hex	-
	MEH225SS/400	Stainless Steel	Nitrile	400	1/4″	1-1/16″	13/16"	1/4″	9/16" Hex	-
	MEH225SS/440	Stainless Steel	Nitrile	440	1/4″	1-1/16"	13/16"	1/4″	9/16" Hex	-
	MEH25/450	Brass	Nitrile	450	1/4″	1-59/64"	1-43/64"	1/4″	7/8" Hex	MEP173*
	MEH25V/450	Brass	Viton®	450	1/4″	1-59/64"	1-43/64"	1/4″	7/8" Hex	MEP173*
	MEH50/460	Brass	Nitrile	460	1/2″	2-1/2"	2-1/8"	3/8″	1-1/8" Hex	MEP174**
	MEH75/460	Brass	Nitrile	460	3/4″	2-21/32"	2-5/32"	1/2″	1-1/8" Hex	MEP174**
	* 1/4" FNPT Outlet;	** 1/2" FNPT Outlet								

#### Viton® is a trademark of DuPont Performance Elastomers

### **Vent Valves**

Marshall Excelsior is the only manufacturer in the industry that offers three types of vent valves - Low Emission, Self-Cleaning Low Emission, and **Standard Vent Valves.** All the vent valves below are designed to minimize loss of product while allowing the operator to effectively bleed down connections and detect liquid levels while filling containers. Vent valves provide an effective means to verify valves have closed in the transfer system when installed into the downstream auxiliary port on the Marshall Excelsior globe and angle valves. Opening the vent valve until liquid or vapor stops venting indicates it is safe to disconnect.

All brass versions have knurled stems that completely unscrew from the valve making the stems replaceable. The stainless steel version has a t-handle stem that is non-removable.

The Low Emission Vent Valve and the Self-Cleaning Low Emission Vent Valve reduce emissions by 70 Percent during normal container filling operations. The Self-Cleaning Low Emission Vent Valve cleans out the orifice hole each time it is operated. The hole is cleaned out with a #54 orifice drill that reams the valve's orifice hole each time the adjusting screw is loosened or tightened, eliminating nuisance orifice clogging. The reduced venting emissions is achieved by forcing product to pass between the #54 orifice hole and the flutes of the captured self-cleaning apparatus. The selfcleaning replacement screw (MEI401SC) is compatible with all existing standard vent valve bodies allowing a standard vent valve to be converted into a self-cleaning low emission vent valve without reinstalling the valve body.

The **Standard Vent Valve** has a #54 orifice with no self-cleaning apparatus. The Low Emission Vent Valve has a #72 orifice.

#### Vent Valve Features

- 70% emission reduction with our Self-Cleaning and Low Emission vent valves
- 1/4" MNPT Connection



	Part No.				
Туре	Brass	Brass Replacement Stems	Stainless Steel*		
Low Emission #72 Orifice	MEJ400/72	MEJ401	-		
Self-Cleaning Low Emission #54 Orifice	MEJ400SC	MEJ401SC	-		
Standard #54 Orifice	MEJ400	MEJ401 - MEJ401SC	MEJ402S		
* Rated for LP-Gas & NH3					



The features described in this illustration do not bind the manufacturer



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### Liquid Withdrawal & Transfer Valves



**VL 13** 69.0.290.0008 Liquid withdrawal valve.

#### **RL 15** 72.0.090.0004

Liquid Transfer Valve to be used with our VL 13 and VLT 18. It incorporates an excess flow limiter.





VL 25 69.0.290.0005

Liquid withdrawal valve to be used with our RL 25 Liquid Withdrawal Valve. **RL 25** 72.0.090.0025

Liquid Transfer Valve to be used with our VL 25. It incorporates an excess flow limiter.





#### LF 25C

Liquid withdrawal Excess Flow Valve. Performance: excess flow closes  $4.5 \div 5.5 \text{ m3/h}$  (water); residual flow  $\leq 0.050 \text{ m3/h}$  (water) with  $\Delta P$  +1 bar RRL 16 A-P Liquid withdrawal

valve complete with

protection cap.



Part number	Container Connection	Outlet Connection	Wrenching Grip (mm)
69.0008 (VL 13)	3/4" – 14 NPT	3/4" – 14 NPT (plugged)	35
69.0005 (VL 25)	1 1/4"– 14 NPT	M 25x1.5 (plugged)	46
72.0004 (RL 15)	3/4" – 14 NPT	M 30x1.5	28 (square)
72.0025 (RL 25)	M 25x1.5	M 30x1.5	32 (square)
67.0793 (RRL 16)	3/4" – 14 NPT (with*/without* tube threading 3/4" 28UN-2B for dipping)	3/4" – 14 NPT (with plug cap)	34 (square)
69.0040 (LF 25C)	1 1/4"– 14 NPT	3/4" – 14 NPT	46



# **Pipeaway Adapter**

Designed to be installed between semi-internal pressure relief valves and vent stacks or at any point in plant plumbing where breakaway protection is needed. This plated steel adapter has a weak section to help protect the relief valve if vent stack is damaged or to help protect plant plumbing from cata-strophic failure.

Part No.	Outlet MNPT
MEP104-24	3" FNPT

## Clamp Style Hose Couplings

These hose couplings are user friendly and can be easily installed in the field. A steel or ductile hose barb is inserted into the hose and two outer clamps, positioned on the outside of the hose, have a boss to keep the bolts from rotating while the clamps compress the hose for a leak free seal.

Note: Clamps must be installed with clamp lip fully engaged into flange groove on hose barb body.

#### **Clamp Style Hose Coupling Features**

• Hose barbs constructed of zinc plated steel or ductile iron with automotive grade powder coat finish

**Outlet MNPT** 

- All hose clamps are ductile iron with automotive grade powder coat finish
- Optional integrated female Acme swivel eliminates weight of additional couplings
- Includes hose barb and two clamps, nuts and bolts



ME3162-32B

Part No.



ME3162-323S



ME3162-20

Marshall Excelsion
<ul> <li>Gas Connections</li> </ul>

ME3162-08	1/2″	1/2″
ME3162-12	3/4″	3/4″
ME3162-12S	3/4″	1-3/4" F. Acme Steel
ME3162-16	1″	1″
ME3162-2016	1-1/4″	1″
ME3162-20	1-1/4″	1-1/4″
ME3162-24	1-1/2″	1-1/2″
ME3162-32	2″	2″
ME3162-32B*	2″	3-1/4" F. Acme Brass
ME3162-32S	2″	3-1/4" F. Acme Steel
* Rated for LP-Gas		

Hose Barb



& NH<sub>3</sub>



EDITION MAY 2012



# **Self-Cleaning Y-Strainers**



Designed for flow in one direction to guard against debris in pipelines that could cause damage to pumps, valves or other equipment. Can be installed horizontally or vertically. They are available in three stainless steel mesh sizes. The mesh size equals the number of holes per square inch i.e. the smaller the number the larger the holes.

A shutoff valve installed on the filter basket outlet allows for convenient blow-off cleaning of y-strainer while under pressure.

#### **Self-Cleaning Y-Strainer Features**

- Durable ductile iron body with automotive grade powder coat finish
- Rated 600 WOG
- Optional factory installed plug
- Designed for LP-Gas or NH3

Part No.	DI	iniet &	
40 Mesh Screen	80 Mesh Screen	Plug Size	Outlet F8PT
ME650S	ME650S/80	1/2″	1/2″
ME651S	ME651S/80	1/2″	3/4″
ME652S	ME652S/80	3/4″	1″
ME653S	ME653S/80	3/4″	1-1/4″
ME654S	-	1″	1-1/2″
ME655S	ME6555/80	1″	2″
ME656S	ME656S/80	1-1/4″	3″
	40 Mesh Screen           ME650S           ME651S           ME652S           ME653S           ME654S           ME655S           ME656S	40 Mesh Screen         80 Mesh Screen           ME650S         ME650S/80           ME651S         ME651S/80           ME652S         ME652S/80           ME653S         ME653S/80           ME654S         -           ME655S         ME655S/80           ME655S         ME655S/80           ME656S         ME656S/80	40 Mesh Screen         80 Mesh Screen         Blow-Off Plug Size           ME650S         ME650S/80         1/2"           ME651S         ME651S/80         1/2"           ME652S         ME652S/80         3/4"           ME653S         ME653S/80         3/4"           ME654S         -         1"           ME655S         ME655S/80         1"           ME655S         ME655S/80         1"           ME656S         ME656S/80         1-1/4"

To add a factory installed plug use a "P" after the prefix number i.e. ME650SP/20

# Breakaway Couplings

Designed to provide a safe way to transfer LP-Gas and NH3 without sacrificing flow. The Flo Kill Breakaway Coupling flows both directions and protects against expensive loss of product or equipment damage if a pull-away occurs during a transfer operation. One end of the breakaway coupling should be attached to a fixed or sturdy point. In the event of an excessive amount of pull force, the breakaway coupling will separate and immediately shutoff product flow in both directions.

To reconnect the valve, pressure needs to be relieved from both ends of the line, therefore it is recommended that a safe way to bleed down the line is provided upstream and downstream. After the lines have been depressurized use Marshall Excelsior's re-installation tool (MEP128-6) for 3/4" or slide the male end into the female side and pull the collar back until they lock. After reconnection the line must be tested using Marshall Excelsior Leak Detector to check for leaks before any product is transferred. The breakaway coupling may be used on vapor or liquid lines on transports, delivery trucks, motor fuel containers, fill cabinets and other miscellaneous filling operations.

Note: It is recommended that breakaway couplings be safety tested monthly to confirm that proper separation occurs in the event of a pullaway. Dry air is suggested for a source of pressure during testing.

#### **FloKill Breakaway Coupling Features**

- Nitrile soft seat provides positive shutoff both upstream and downstream of source
- 100 300 lbs of force required for disconnect
- Approximately 100 lbs of force to reconnect
- Large internal bore for increased flow
- Durable plated steel construction
- Rated for LP-Gas & NH3







# **Heavy Duty Acme Spanner Wrench**



Aluminum Acme spanner wrench for 1-3/4", 2-1/4", 3-1/4" and 4-1/4" female Acme caps.

Part No.	Length
MEP120B	17-1/2″

A	cn	1e	D	ust	Ρ	uas

Part No.										
Aluminum			Brass			Plastic			М.	
Plug Only	Chain Only*	Plug with Chain	Plug Only	Chain Only*	Plug with Chain	Plug Only	Chain Only*	Plug with Chain	Acme	
-	-	-	ME178B	MEP148	ME178B-1	ME178	MEP147	ME178-1	1-1/4″	
ME239	MEP148	ME239-1	ME179B	MEP148	ME179B-1	ME179	MEP148	ME179-1	1-3/4″	
-	-	-	ME180B	MEP167	ME180B-1	ME180	MEP148	ME180-1	2-1/4″	
-	-	-	ME181B	MEP167	ME181B-1	ME181	MEP183	ME181-1	3-1/4″	





# **Wheel Chock**

Designed with a "Double Grip" handle for easy carrying and dual traction grips for the road and tire. The aluminum material makes the wheel chock lightweight and able to withstand the toughest environments. Turn the wheel chock upside down and the points on top of the wheel chock will dig into the snow and ice to prevent sliding. Durable safety yellow powder coat finish.

Part No.	Height	Length	Width	
ME200	7″	10″	7″	

# Wheel Chock Bracket



Designed to provide a durable and convenient receptacle to store wheel chocks during over-the-road transit. Durable aluminum construction and molded inserts prevent damage to wheel chocks. For installations that require additional mounting clearance a standoff extension kit is available.

Deut No	Height Lengt	Laundh	Depth	Wheel	Accessory	
Part NO.		Length		Included	Standoff Extension Kit	
ME200B	7-3/4″	20″	7″	No	MEDOOEVE	
ME200BK	9-3/4″	20″	8″	Yes	ME200EXT	





**Advanced Solutions for Gas Control** 

LPG-CNG VALVES & EQUIPMENT DIVISION





# **Ball Valves and Actuators**






### Ball Valves Construction Details

Designed in compliance with ASME/API/EN, Omal ball valves are meant to operated with actuators. For this reason valves are provided with actuator connections and their sealing elements are specifically engineered for a very high number of cycles. OMAL wafer, split wafer and split body ball valves are designed with all the details which set them above many competitors. The "fire safe" version built in compliance with recent, very strict standards and provided with antistatic devices, a complex stem sealing system and all relevant fugitive emission, ATEX and fire safe certifications guarantees best performance and total reliability.

#### FIRE SAFE: API 6 FA - UNI EN ISO 10497

TA LUFT/FUGITIVE EMISSION Thanks to the special stem double sealing system consisting of a V-pack loaded with Omal springs washer. OMAL valves are certified in compliance with very strict emission standards TA LUFT Tal – 194058 – 001.

ATEX: The body-stem and ball-stem connections are provided with antistatic devices which guarantee power continuity.

The valve is in compliance with Directive 94/9 EC – ATEX.

**STEM:** Being assembled inside, the stem is completely anti blow-out. A double anti-friction washer in PTFE allows the stem to rotate with low friction and the valve to perform flawlessly for a very high number of cycles.







### **Carbon Steel Wafer**



#### STANDARD FEATURES

- No protuding fl oating ball
- Soft-seat seal (TFM 1600) Standard for connecting fl anges: EN 1092-1 ed. 2008; ANSI; B16.5
- Operating temperature: from -10°C to +200°C (see temperature pressure diagram)
- Operating pressure: PN16-40; ANSI 150-300 Intercepted fl uid: air, water, gas, petroleum and petrochemical products.
- Antistatic device
- Stem seal: TFM 1600 V-pack
- Additional seal on stem with FKM O-ring
- Anti Blow-out stem
- Actuator connection as per standard ISO 5211 Closing angle >7°
- Superfi cial treatment: blueing

#### **SPECIAL FEATURES ON REQUEST**

- LF2 carbon steel for low temperature execution (-40 C°)
- For other fl ange types please contact our sales department
- Heating jacket Sealing in: PTFE reinforced with glass (RPTFE), PTFE reinforced with carbon-graphite (CTFE). For other types of materials please contact our sales department Cavity fi ller seat in PTFE
- Monó-directional version with pressure-compensating hole in the ball
- Stainless steel lever
- For special versions in materials diff erent from the standard (body, ball, stem), please contact our sales department. Stainless steel Stem nuts and springs Superfi cial treatment: white zinc coating ,epoxy coating

- For other coating please contact our sales department

#### **CERTIFICATIONS**

- In compliance with European Directive 97/23 EC PED In compliance with ATEX 94/9/CE Directive (on request)
- Fugitive Emission UNI EN ISO 15848 (2006) TA-LUFT VDI 2440 (2000)
- FIRE SAFE DESIGN: certifi cation on process

#### ENGINEERING STANDARDS EMPLOYED

- Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.
- Materials and rating in compliance with ASME B16.34 for
  ANSI valves and EN 12516 for PN valves

## **Stainless Steel Wafer**





#### **STANDARD FEATURES**

- No protuding fl oating ball
- Soft-seat seal (TFM 1600)
- Standard for connecting fl anges: EN 1092-1 ed. 2008; ANSI B16.5
- Operating temperature: from -40°C to +200°C (see temperature pressure diagram)
- Operating pressure: PN16-40 ANSI 150-300
- Intercepted fl uid: air, water, gas, petroleum and petrochemical products, aggressive fl uids
- Antistatic device
- Stem seal: TFM 1600 V-pack
- Additional seal on stem with FKM O-ring
- Anti Blow-out stem
- Actuator connection as per standard ISO 5211
- Closing angle >7°



#### For other fl ange types please contact our sales department Heating iacket

- Sealing in: PTFE reinforced with glass (RPTFE), PTFE reinforced with carbon-graphite (CTFE). For other types of materials please contact our sales department
- PTFE cavity fi ller seat
- · Mono-directional version with pressure-compensating hole in the ball
- Stainless steel lever
- Stainless steel Stem nuts and springs

**SPECIAL FEATURES ON REQUEST** 

• For special versions in material's diff erent from the standard (body, ball, stem), please contact our sales department.

### CERTIFICATIONS

- In compliance with European Directive 97/23 EC PED
- In compliance with ATEX 94/9/CE Directive (on request)
- Fugitive Emission UNI EN ISO 15848 (2006)
- TA-LUFT VDI 2440 (2000)
- FIRE SAFE DESIGN: certifi cation on process

#### **ENGINEERING STANDARDS EMPLOYED**

- Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.
- Materials and rating in compliance with ASME B16.34 for
- ANSI valves and EN 12516 for PN valves



# Wafer Series Construction Details

			Body Stainless Steel	Body Carbon Steel					
MA	TERIAL TABL	E	V480 / V481	V580 / V581					
1	Body	up to DN 40	ASTM A182 F316 / A479 TP.316 (x)						
			(1.4401 / x5CrNiMo17-12-2)						
		over DN 40	ASTM A351 CF8M						
			(1.4408 / Gx5CrNiMo19-12-2)	ASTNA A105 (*)					
2	Ring nut	up to DN 50	ASTM A182 F316 / A479 TP.316	ASTMIATOS ( )					
			(1.4401 / x5CrNiMo17-12-2)						
		over DN 50	ASTM A351 CF8M						
			(1.4408 / Gx5CrNiMo19-12-2)						
3	Ball		ASTM A351 CF8M	ASTM A351 CF8(**)					
			(1.4408 / Gx5CrNiMo19-12-2)	(1.4308 / Gx5CrNiMo19-10)					
4	Stem		ASTM A182 F316 / A479 TP.316	ASTM A182 F6A / A479 TP.410 (***)					
			(1.4401 / x5CrNiMo17-12-2)	(1.4006 / X12Cr13)					
5	Seats		TFM	1600					
6	Ring nut gas	ket	TFM	1600					
7	Bottom sealir	ng	TFM	1600					
8	Chevron ring	S	TFM	1600					
9	Stem o'ring		FI	KM	(15)				
10	Gland nut rin	ig	ASTM A182 F304 / A479 TP.304		0				
			(1.4301 / X5XrNi18-10)	Carbon Steel ZINCATO-galvanized (x)	(10)				
11	Nut holder		AISI	304	(17)				
12	Stem nut (x)		UNI 3740-1 6S ZIN	CATO-galvanized (x)					
13	Spring washe	er (xx)	50CrV4 ZINCATO	50CrV4 ZINCATO - galvanized (xx)					
14	Antistatic dev	vice	ASTM A182 F316 / A479 TP.316						
15	Lock nut		UNI 3740-1 6S ZINCATO-galvanized						
16	Holder screw		A2 UNI EN ISO 3506-1						
17	Holder		Carbon Steel ZIN	ICATO-galvanized					
18	Lever		Fe 37 ZINCA	TO galvanized					



#### **AVAILABLE ON REQUEST:**

	(*) A350LF2	(**) A351 CF8M	(***)316 S.S.	(x) 304 s.s.	(xx) 301 s.s.	
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 H
 70
 73

 Y
 140
 140



SIZE	ØE	L	B	C	ATT.ISO	ØМ	ØN	F/T
DN15	13	36	52	10	F03	36	M5	10/6
DN20	19	39	55	10	F03	36	M5	10/6
DN25	25	43	68	15	F04	42	M5	12/8
DN32	32	51 o 54	73	15	F04	42	M5	12/8
DN40	38	63	93	21	F05	50	M6	16/10
DN50	51	83	102	21	F05	50	M6	16/10
DN65	64	107	130,5	28	F07	70	M8	22/14
DN80	76	120	137,5	28	F07	70	M8	22/14
DN100	95	152	166	35	F10	102	M10	30/18

ALL VALVES HAVE NO PROTUDING BALL EXCEPT DN32 (FACE TO FACE 51 mm)

91

150 150 275

86

DN15 DN20 DN25 DN32 DN40 DN50 DN65 DN80 DN100

117

275

142

350

108







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149 350

191 450





### Wafer Series Construction Details

	BARE SHAFT V LEVER OPERAT	ALVE CODE (V_ TED VALVE COD	) E (L)											
	Body Stainless steel	Body Carbon steel	SIZE	PN	A	ØG	ØR	F	ØH	N°FORI	ØI	Р	KG.	L
	L/V480B0604	L/V580A0604	DN15	PN16-40	32	90	45	1	65	4	M12	14	1,4	36
	L/V480BC604	L/V580AC604	DN15	ANSI 150	32	90	45	1	60,5	4	1/2″UNC	14	1,4	36
	L/V481BC604	L/V581C0604	DN15	ANSI 300	34	90	45	1	66,7	4	1/2″UNC	14	1,4	36
	L/V480B0605	L/V580A0605	DN20	PN16-40	35	100	58	2	75	4	M12	14	1,8	39
	L/V480BC605	L/V580AC605	DN20	ANSI 150	35	100	52	1,6	69,8	4	1/2″UNC	14	1,8	39
	L/V481BC605	L/V581AC605	DN20	ANSI 300	39	110	52	1,6	82,5	4	5/8″UNC	14	2,1	39
	L/V480B0606	L/V580A0606	DN25	PN16-40	42	110	68	2	85	4	M12	16	2,5	43
	L/V480BC606	L/V580AC606	DN25	ANSI 150	42	110	60	1,6	79,4	4	1/2″UNC	16	2,5	43
	L/V481BC606	L/V581AC606	DN25	ANSI 300	45	120	60	1,6	88,9	4	5/8″UNC	16	2,9	43
	L/V480B0607	L/V580A0607	DN32	PN16-40	47	130	78	2	100	4	M16	20	4,0	51
	L/V480B0607S	L/V580A0607S	DN32	PN16-40	47	130	78	2	100	4	M16	20	4,3	54
	L/V480BC607	L/V580AC607	DN32	ANSI 150	47	118	72	1,6	88,9	4	1/2″UNC	20	3,8	54
	L/V481BC607	L/V581AC607	DN32	ANSI 300	47	130	72	1,6	98,4	4	5/8″UNC	20	4,3	54
	L/V480B0608	L/V580A0608	DN40	PN16-40	58	140	88	3	110	4	M16	20	5,9	63
	L/V480BC608	L/V580AC608	DN40	ANSI 150	58	127	82	1,6	98,4	4	1/2″UNC	20	5,1	63
	L/V481BC608	L/V581AC608	DN40	ANSI 300	58	150	82	1,6	114,3	4	3/4″UNC	25	7,0	63
	L/V480B0609	L/V580A0609	DN50	PN16-40	67	150	102	3	125	4	M16	20	8,9	83
	L/V480BC609	L/V580AC609	DN50	ANSI 150	67	150	102	1,6	120,6	4	5/8″UNC	20	9,1	83
	L/V481BC609	L/V581AC609	DN50	ANSI 150	67	160	102	1,6	127,0	8	5/8″UNC	20	10,4	83
	L/V480B0610	L/V580A0610	DN65	PN16	83	178	122	3	145	4	M16	20	16,2	107
	L/V481B0610	L/V581A0610	DN65	PN25-40	83	178	122	3	145	8	M16	20	16,1	107
	L/V480BC610	L/V580AC610	DN65	ANSI 150	83	178	122	1,6	139,7	4	5/8″UNC	20	16,4	107
	L/V481BC610	L/V581AC610	DN65	ANSI 300	89	190	122	1,6	149,2	8	3/4″UNC	25	18,6	107
	L/V480B0611	L/V580A0611	DN80	PN16-40	90	190	138	3	160	8	M16	20	20,0	120
7	L/V480BC611	L/V580AC611	DN80	ANSI 150	90	190	135	1,6	152,5	4	5/8″UNC	20	20,4	120
IOIL	L/V481BC611	L/V581AC611	DN80	ANSI 300	96	205	138	1,6	168,3	8	3/4″UNC	25	24,0	120
XECI	L/V480B0612	L/V580A0612	DN100	PN16	101	220	160	3	180	8	M16	20	34,0	152
CK	L/V481B0612	L/V581A0612	DN100	PN25-40	105	235	162	3	190	8	M20	25	39,1	152
R STC	L/V480BC612	L/V580AC612	DN100	ANSI 150	101	220	160	1,6	190,5	8	5/8″UNC	20	34,0	152
BA	L/V481BC612	L/V581AC612	DN100	ANSI 300	115	250	160	1,6	200,0	8	3/4″UNC	25	46,4	152
	L/V480E0609		DN50	PN16	67	165	102	3	125	4	M16	15	6,3	83
	L/V480EC609		DN50	ANSI 150	67	150	102	1,6	120,6	4	5/8″UNC	17,4	5,9	83
	L/V481E0610		DN65	PN16	83	185	122	3	145	4	M16	15	9,9	107
	L/V480EC610		DN65	ANSI 150	83	178	122	1,6	139,7	4	5/8″UNC	20,6	10,6	107
	L/V480E0611		DN80	PN16	90	200	138	3	160	8	M16	17	12,6	120
~	L/V480EC611		DN80	ANSI 150	90	190	135	1,6	152,5	4	5/8″UNC	22,2	13,1	120
VSTEC	L/V480E0612		DN100	PN16	101	220	160	3	180	8	M16	17	20,0	152
Ċ	L/V480EC612		DN100	ANSI 150	101	228	160	1,6	190,5	8	5/8″UNC	22,2	21,5	152





LPG-CNG VALVES & EQUIPMENT DIVISION

All valves have no protuding ball except DN32 (Face to face 51 mm)



EXECUTION FROM SOLID BAR



**EXECUTION FROM CASTING** 

### **PN 16-40 Wafer Series** Spring Return Pneumatic Actuator

		PN 16-40 Wa	ifer Serie Sp	oring Return	Pneun	natic A	ctuat	or		
	Body Stainless Steel	Body/ Carbon Steel	Actuator	Connecting Kit	SIZE	PN	N	н	Kg	L
	S480BH064	S580AH064	SR015401S	KCF033761		16	221	152.4	3.0	26
	S481BH064	S581AH064	SR003401S	KCF043767	כדאוט	25-40	240	162.4	3.4	20
	S480BH065	S580AH065	SR030402S	KCF043767	DN20	16-40	240	165.4	4.2	39
	S480BH066	S580AH066	SR030402S	KCF043807	DN25	16-40	240	172.4	4.8	43
	S480BH067	S580AH067	CD0454016	KCE052760	0122	16.40	20.4	104.5	7.0	51
	S480BH067S	S580AH067S	3K0454015	KCF053768	DIN32	16-40	294	184.5	7.3	54
	S480BH068	S580AH068	SR060401S	KCF053764	DN40	16-40	320	224,4	11,1	63
	S480BH069	S580AH069	SR090401S	KCF073769		16	357	243	13,5	0.2
Z	S481BH069	S581AH069	SR120401S	KCF073769	DINSU	25-40	372	253,4	15,7	83
Ĕ	S480BH070	S580AH070	SR120401S	KCF073765	DNICE	16	372	279,4	22,7	107
Ũ	S481BH070	S581AH070	SR180401S	KCF103770	DINOS	25-40	436	291	25,3	107
≦ ⊻	S480BH071	S580AH071	SR180401S	KCF103770		16	436	298	30,0	120
8	S481BH071	S581AH071	SR240401S	KCF103770	DINOU	25-40	456	310	30,8	120
R ST	S480BH072	S580AH072	SR360401S	KCF123778		16	566	359	51,8	150
ΒA	S481BH072	S581AH072	SR480401S	KCF123771	DINTOU	25-40	602	371,2	58,2	132
	S480EH069	-	SR090401S	KCF073769	DN50	16	357	243	10,9	83
	S480EH070	-	SR120401S	KCF073765	DN65	16	372	279,4	16,4	107
STE	S480EH071	-	SR180401S	KCF103770	DN80	16	436	298	22,6	120
S	S480EH072	-	SR360401S	KCF123778	DN100	16	566	359	37,8	152

# ANSI 150-300 Wafer Series Spring Return Pneumatic Actuator



EXECUTION FROM SOLID BAR



**EXECUTION FROM CASTING** 

		ANSI 150-300	Wafer Serie	e Spring Retu	rn Pne	umatic A	Actuat	or		
	Body Stainless Steel	Body/ Carbon Steel	Actuator	Connecting Kit	SIZE	CL	N	Н	Kg	L
	S480BHC64	S580AHC64	SR015401S	KCF033761		Ansi 150	221	152,4	3,0	26
	S481BHC64	\$581AHC64	SR003401S	KCF043888	DINIS	Ansi 300	240	164,4	3,4	20
	S480BHC65	S580AHC65	500204025	KCF043767	01/20	Ansi 150	240	165,4	4,2	20
	S481BHC65	\$581AHC65	3KU3U4UZ3	KCF043889	DINZU	Ansi 300	240	169,4	4,5	29
	S480BHC66	S580AHC66	500204025	KCF043807	DNI25	Ansi 150	240	172,4	4,8	42
	S481BHC66	S581AHC66	3KU3U4UZ3	KCF043890	DINZS	Ansi 300	240	175,4	5,2	45
	S480BHC67	\$580AHC67	500454015	VCF052769	01/22	Ansi 150	294	184,5	6,8	5.4
	S481BHC67	\$581AHC67	3K0434013	NCF033700	DINGZ	Ansi 300	294	184,5	7,3	54
	S480BHC68	\$580AHC68	500/04015	KCEOE27CA		Ansi 150	320	224,4	10,9	()
	S481BHC68	\$581AHC68	3KU0U4U13	KCF033704	DIN40	Ansi 300	320	224,4	12,3	00
	S480BHC69	S580AHC69	SR090401S	KCF073769	DNIGO	Ansi 150	357	243	13,7	0.7
Z	S481BHC69	\$581AHC69	SR120401S	KCF073891	DINOU	Ansi 300	372	259,4	17,1	60
Ĕ	S480BHC70	S580AHC70	SR120401S	KCF073765		Ansi 150	372	279,4	22,9	107
Ē	S481BHC70	\$581AHC70	SR180401S	KCF103892	DINOS	Ansi 300	436	297	27,7	107
ŝ	S480BHC71	\$580AHC71	SR180401S	KCF103770		Ansi 150	436	298	30,4	1 20
00	S481BHC71	\$581AHC71	SR240401S	KCF103892	DINOU	Ansi 300	456	316	34,8	120
R ST	S480BHC72	\$580AHC72	SR360401S	KCF123778		Ansi 150	566	359	52,2	150
ΒA	S481BHC72	S581AHC72	SR480401S	KCF123893	DINTOU	Ansi 300	602	381,2	65,2	132
	S480EHC69	-	SR090401S	KCF073769	DN50	Ansi 150	357	243	10,4	83
	S480EHC70	-	SR120401S	KCF073765	DN65	Ansi 150	372	279,4	17,1	107
STE	S480EHC71	-	SR180401S	KCF103770	DN80	Ansi 150	436	298	23,1	120
5	\$480FHC72	-	SR360401S	KCF123778	DN100	Ansi 150	566	359	393	152







### **Carbon Steel Split Wafer**



#### **STANDARD FEATURES**

- No protuding fl oating ball
- Soft-seat seaf (TFM 1600)
- Standard for connecting fl anges: EN 1092-1 ed. 2008; ANSI; B16.5
- Operating temperature: from -10°C to +200°C (see temperature pressure diagram)
- Operating pressure: PN16-40; ANSI 150-300 Intercepted fl uid: air, water, gas, petroleum and petrochemical products.
- Antistatic device Stem seal: TFM 1600 V-pack
- Additional seal on stem with FKM O-ring
- Anti Blow-out stem
- Actuator connection as per standard ISO 5211
- Closing angle  $>7^{\circ}$
- Superfi cial treatment: blueing

#### SPECIAL FEATURES ON REQUEST

- LF2 carbon steel for low temperature execution (-40 C°)
- For other fl ange types please contact our sales department
- Heating sleeve
- Sealing in: PTFE reinforced with glass (RPTFE), PTFE reinforced with carbon-graphite (CTFE) . For other types of materials please contact our sales department Cavity fi ller seatin PTFE
- Monó-directional version with pressure-compensating hole in the ball
- Stainless steel lever
- For special versions in materials diff erent from the standard (body, ball, stem), please contact our sales department.
- Stainless steel Stem nuts and springs
- Superfi cial treatment: white zinc coating ,epoxy coating For other coating please contact our sales department

#### CERTIFICATIONS

- In compliance with European Directive 97/23 EC PED In compliance with ATEX 94/9/CE Directive (on request) Fugitive Emission UNI EN ISO 15848 (2006)
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- TA-LUFT VDI 2440 (2000)
- FIRE SAFE DESIGN: in the process of certification

#### **ENGINEERING STANDARDS EMPLOYED**

- Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.
- Materials and rating in compliance with ASME B16.34 for
- ANSI valves and EN 12516 for PN valves





#### **STANDARD FEATURES**

- No protuding fl oating ball Soft-seat seal (TFM 1600)
- Standard for connecting fl anges: EN 1092-1 ed. 2008;ANSI; B16.5 Operating temperature: from -40°C to +200°C (see temperature pressure diagram) Operating pressure: PN16-40 ANSI 150-300 Intercepted fl uid: air, water, gas, petroleum and petrochemical products, aggressive fl uids

- Antistatic device Stem seal: TFM 1600 V-pack
- Additional seal on stem with FKM O-ring
- Anti Blow-out stem
- Actuator connection as per standard ISO 5211 Closing angle >7°

- **SPECIAL FEATURES ON REQUEST**
- For other fl ange types please contact our sales department
- Heating jacket
- Sealing in: PTFE reinforced with glass (RPTFE), PTFE reinforced with carbon-graphite (CTFE). For other types of materials please contact our sales department PTFE cavity fi ller seat
- Mono-directional version with pressure-compensating hole in the ball
- Stainless steel lever
- Stainless steel Stem nuts and springs
- For special versions in material's diff erent from the standard (body, ball, stem), please contact our sales department.

#### CERTIFICATIONS

- In compliance with European Directive 97/23 EC PED
   In compliance with ATEX 94/9/CE Directive (on request)
- Fugitive Emission UNI EN ISO 15848 (2006) TA-LUFT VDI 2440 (2000)
- FIRE SAFE DESIGN: certifi cation on process

#### **ENGINEERING STANDARDS EMPLOYED**

- Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.
- Materials and rating in compliance with ASME B16.34 for
- ANSI valves and EN 12516 for PN valves





LPG-CNG VALVES & EQUIPMENT DIVISION

# **Split Wafer Series Construction Details**



SIZE	ØE	L	В	C	ATT.ISO	ØМ	ØN	f/t
DN50	51	90	102	21	F05	50	M6	10/6
DN65	64	107	130,5	28	F07	70	M8	22/14
DN80	76	120	68	28	F07	70	M8	22/14
DN100	102	167	73	35	F10	102	M8	30/18
DN125	118	180	93	35	F10	102	M10	30/18
DN150	152	240	102	40,5	F14	140	M10	45/30
DN200	203	314	130,5	44,8	F14	140	M16	52/35



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	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Н	117	142	149	198	208	215	295
Υ	275	350	350	450	450	800	800



BARE SHAFT	VALVE COD	E (V	) / LEVER	OP	ERAT	ED V	/ALV	'E CO	DE (L	)			
Body Stainless steel	Body Carbon steel	SIZE	PN/ANSI	A	ØG	ØR	F	ØН	N° FORI	ØI	Р	KG.	L
L/V485B0609	L/V585A0609	DN50	PN16-40	67	150	102	3	125	4	M16	20	9,7	90
L/V485BC609	L/V585AC609	DN50	ANSI 150	67	150	92	1,6	120,6	4	5/8″UNC	20	9,7	90
L/V486BC609	L/V586AC609	DN50	ANSI 300	73	150	92	1,6	127,0	8	5/8″UNC	20	9,7	90
L/V485B0610	L/V585A0610	DN65	PN16	83	178	122	3	145	4	M16	20	16,4	107
L/V486B0610	L/V586A0610	DN65	PN25-40	83	178	122	3	145	8	M16	20	16,1	107
L/V485BC610	L/V585AC610	DN65	ANSI 150	83	178	104,7	1,6	139,7	4	5/8"UNC	20	16,5	107
L/V486B0610	L/V586AC610	DN65	ANSI 300	89	190	104,7	1,6	149,2	8	3/4″UNC	25	18,7	107
L/V485B0611	L/V585A0611	DN80	PN16-40	90	190	138	3	160	8	M16	20	20,2	120
L/V485BC611	L/V585AC611	DN80	ANSI 150	90	190	127	1,6	152,4	4	5/8″UNC	20	20,7	120
L/V486BC611	L/V586AC611	DN80	ANSI 300	90	205	127	1,6	168,3	8	3/4"UNC	25	24,0	120
L/V485B0612	L/V585A0612	DN100	PN16	107	235	158	3	180	8	M16	20	40,4	167
L/V486B0612	L/V586A0612	DN100	PN25-40	107	235	162	3	190	8	M20	25	40,5	167
L/V485BC612	L/V585AC612	DN100	ANSI 150	107	235	157,2	1,6	190,5	8	5/8″UNC	20	40,7	167
L/V486BC612	L/V586AC612	DN100	ANSI 300	115	250	157,2	1,6	200,0	8	3/4"UNC	25	48,2	167
L/V485B0613	L/V585A0613	DN125	PN16	117	250	188	3	210	8	M16	25	48,2	180
L/V486B0613	L/V586A0613	DN125	PN25-40	125	270	188	3	220	8	M24	30	57,9	180
L/V485BC613	L/V585AC613	DN125	ANSI 150	117	250	185,2	1,6	216	8	3/4"UNC	25	48,3	180
L/V485B0614	L/V585A0614	DN150	PN16	154	332	212	3	240	8	M20	25	109,3	240
L/V485BC614	L/V585AC614	DN150	ANSI 150	154	332	216	1,6	241,3	8	3/4"UNC	25	110,3	240
L/V485B0615	L/V585A0615	DN200	PN16	188	396	268	3	295	12	M20	30	191,8	314
L/V485BC615	L/V585AC615	DN200	ANSI 150	188	396	269,8	1,6	298,4	8	3/4"UNC	25	193,7	314



		Body Stainless Steel	Body Carbon Steel						
M/	ATERIAL TABLE	V485 / V486	V585 / V586						
1	Body	ASTM A182 E316 / A470 TD 316 (v)							
2	Ring nut	(1.4401 / X5CrNiMo17-12-2)	ASTM A105 (*)						
3	Ball	ASTM A351 CF8M (1.4408 / GX5CrNiMo19-12-2)	ASTM A351 CF8(**) (1) (1.4308 / GX5CrNiMo19-10)						
4	Stem	ASTM A182 F316 / A479 TP.316 (1.4401 / X5CrNiMo17-12-2)							
5	Seats	TFM	1600						
6	Ring nut gasket	GRAFITE / GRAPHITE							
7	Bottom sealing	TFM	TFM 1600						
8	Chevron rings	TFM	1600						
9	Stem o'ring	TFM 1600							
10	Gland nut ring	ASTM A182 F304 / A479 TP.304 (1.4301 / X5CrNi18-10)	Carbon Steel ZINCATO galvanized (x) (3)						
11	Nut holder	AISI 304							
12	Stem nut	UNI 3740-1 6S ZIN	CATO-galvanized (x)						
13	Spring washer	50CrV4 ZINCATO - galvanized (xx)							
14	Antistatic device	ASTM A182 F31	16 / A479 TP.316						
19	Body ring nut screw	A2-70 UNI 3740	8.8 uni 3740 - galvanized						
15	Lock nut (x)	UNI 3740-1 6S ZINCATO-galvanized							
16	Holder screw	A2 UNI EN ISO 3506-1							
17	Holder	Carbon Steel ZINCATO-galvanized							
18	Lever (x)	Fe 37 ZINCA	TO galvanized						

#### AVAILABLE ON REQUEST: (\*) A350LF2 (\*\*) A351 CF8M (\*\*\*)316 S.S. (x) 304 s.s. (x) 301 s.s. (1) for DN 100-125-150-200 only A351-CF8M (2) for DN 150-200 only 316 s.s. (3) for DN 150-200 only 304 s.s.







## **Carbon Steel Split Body**



### **STANDARD FEATURES**

- Floating ball, full bore
- Soft-seat seal TFM 1600
- Standard for connecting flanges: EN 1092-1 ed. 2008; ANSI B16.5
- Operating temperature see temperature pressure diagram Pressure class: PN16-40; ANSI 150-300 Intercepted fluid: air, water, gas, petroleum

- Antistatic device EN12662-2 Stem seal: TFM 1600 V-ring packing Additional seal on stem with FKM O-ring
- Anti Blow-out stem
- Actuator connection as per standard ISO 5211
- Closing angle  $>7^{\circ}$
- Superficial treatment: blueing

### SPECIAL FEATURES ON REOUEST

- LF2 carbon steel for low temperature execution (-40 C°)
- For other flange types please contact our sales department. Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite (RPTFE-CF). For other types of materials
- please contact our sales department Cavity filler seatin PTFE
- Mono-directional version with pressure-compensating hole in the ball
- Stainless steel lever
- For special versions in materials different from the standard (body, ball, stem), please contact our sales department. Stainless steel Stem nuts and springs
- Superficial treatment: white zinc coating ,epoxy coating
  For other coating please contact our sales department

#### **CERTIFICATIONS**

- In compliance with European Directive 97/23 EC PED
  In compliance with ATEX 94/9/CE Directive (on request)
  Fugitive Emission UNI EN ISO 15848 (2006)
  TA-LUFT VDI 2440 (2000)
  FIRE SAFE: API 607:2005/ISO 10497:2010 API6FA:1999
- API 6D: certificato n°6D-1007 only for valves with ANSI face to face

#### **ENGINEERING STANDARDS**

**SPECIAL FEATURES ON REQUEST** 

Stainless steel Stem nuts and springs

Stainless steel lever

**CERTIFICATIONS** 

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• • TA-LUFT VDI 2440:2000

**ENGINEERING STANDARDS** 

valves and EN 12516 for PN valves

div.1, EN 12516 *API 6D* 

- Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.
   API 6D
- Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves

For other flange types please contact our sales department. Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite (RPTFE-CF). For other types of materials please contact our sales department PTFE cavity filler seat

Mono-diréctional version with pressure-relief hole in the ball

For special versions in material's different from the standard (body, ball, stem), please contact our sales department.

In compliance with European Directive 97/23 EC PED
 In compliance with ATEX 94/9/CE Directive (on request)
 Fugitive Emission UNI EN ISO 15848:2006

FIRE SAFE: API 607:2005/ISO 10497:2010 - API6FA:1999 API 6D: certificate no 6D-1007 only for valves with ANSI face to face

Body thickness in compliance with: ASME B16.34, ASME VIII

Materials and rating in compliance with ASME B16.34 for ANSI

## **Stainless Steel Split Body**



### STANDARD FEATURES

- Floating ball, full bore Soft-seat seal TFM 1600
- Standard for connecting flanges: EN 1092-1 ed. 2008; ANSI B16.5

- Standard for connecting flanges: EN 1092-1 ed. 2008; ANSI E Operating temperature see temperature pressure diagram Pressure class: PN16-40 ANSI 150-300 Intercepted fluid: air, water, gas, petroleum and petrochemical products, aggressive fluids Antistatic device EN12662-2 Stem seal: TFM 1600 V-ring packing Additional seal on stem with FKM O-ring Apti Blow out stem

- Anti Blow-out stem
- Actuator connection as per standard ISO 5211

### Closing angle >7°



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### Split Body Series Construction Details

	MATERIALS	Stainless steel body	Carbon steel body						
	DESCRIPTION	V470 / V471	V570 / V471						
1 2	Body Connector	ASTM A182 F316 / A479 TP.316 (x) (1.4401 / X5CrNiMo17-12-2)	ASTM A105 (*)						
3	Ball	ASTM A351 CF8M (1.4408 / Gx5CrNiMo19-12-2)	ASTM A351 CF8 (**) (1.4308 / GX5CrNi19-10)						
4	Stem	ASTM A182 F316/A479 TP.316/A564-TP.630 (17-4 PH) (1.4401 / X5CrNiMo17-12-2)	ASTM A182 F6A / A479 TP.410 (***) (1.4006 / X12Cr13)						
5	Seats	TFM 16	500 (•)						
6	Body gasket	GRAI	FOIL						
7	Bottom sealing	TFM 16	TFM 1600 (•)						
8	Chevron rings	TFM 16	TFM 1600 (•)						
9	Stem o'ring	FKM	(•)						
10	Gland nut ring	ASTM A182 F304 / A479 TP.304 (1.4301 / X5CrNi18-10) / 174 PH (AISI 630)	Zinc coated carbon steel (x) (1)						
11	Nut holder	AISI	304						
12	Stem nut	UNI 3740-1 6S ZINC	ATO - galvanized (x)						
13	Spring washer	50CrV4 ZINCATO	- galvanized (xx)						
14	Antistatic device	ASTM A182 F31	6 / A479 TP.316						
15	Stud bolt	ASTM A193-B8	ASTM A193-B7						
16	Nut	ASTM A194-Gr.8	ASTM A194-2H						
17	Lock nut (x)	UNI 3740-1 6S ZINC	UNI 3740-1 6S ZINCATO - galvanized (x)						
18	Holder screw	A2 UNI EN	A2 UNI EN ISO 3506-1						
19	Holder	Zinc coated carbon steel (x)							
20	Lever (x)	Fe 37 ZINCAT	D - galvanized						

(1): per DN150-200 disponibile solo on 304 s.s. (1): for DN150-200 only 304 s.s.

#### AVAILABLE ON REQUEST:

(\*) A350LF2 (x) 304 s.s. (\*\*) A351 CF8M (xx) 301 s.s. (\*\*\*) 316 S.S./17-4PH

(•) Other materials available on request







EDITION MAY 2012



Split Body Series Construction Details











	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Н	70	73	86	91	108	117	142	149	198	208	274	321
Y	140	140	150	150	275	275	350	350	450	450	800	800





# DIVISION

# Split Body Series Construction Details

BARE SHAFT VALVE CODE (V) LEVER OPERATED VALVE CODE (L)																				
Body Stainless steel	Body Carbon steel	SIZE	ØE	PN/ANSI	A	в	c	ATT. ISO	ØМ	ØN	f/t	ØG	ØR	F	P	ØН	N° FORI	ØI	KG.	L
L/V470B0604	L/V570A0604	DN15	13	PN16-40	32	52	10	F03	36	M5	10/6	95	45	2	16	65	4	14	2,8	115 (1)
L/V470BD604	L/V570AD604	DN15	13	ansi150	32	52	10	F03	36	M5	10/6	90	35	1,6	11,2	60,3	4	16	2,4	108 (3)
L/V471BD604	L/V571AD604	DN15	13	ansi300	32	52	10	F03	36	M5	10/6	95	35	1,6	14,5	66,7	4	16	2,7	140 (3)
L/V470B0605	L/V570A0605	DN20	19	PN16-40	35	55	10	F03	36	M5	10/6	105	58	2	18	75	4	14	3,6	120 (1)
L/V470BD605	L/V570AD605	DN20	19	ansi150	35	55	10	F03	36	M5	10/6	100	43	1,6	13	69,9	4	16	2,9	117 (3)
L/V471BD605	L/V571AD605	DN20	19	ansi300	35	55	10	F03	36	M5	10/6	115	43	1,6	16,6	82,6	4	19	3,9	152 (3)
L/V470B0606	L/V570A0606	DN25	25	PN16-40	42	68	15	F04	42	M5	12/8	115	68	2	18	85	4	14	5,2	125 (1)
L/V470BD606	L/V570AD606	DN25	25	ansi150	42	68	15	F04	42	M5	12/8	110	51	1,6	14,5	79,4	4	16	6,6	127 (3)
L/V471BD606	L/V571AD606	DN25	25	ansi300	42	68	15	F04	42	M5	12/8	125	51	1,6	18	88,9	4	19	5,9	165 (3)
L/V470B0607	L/V570A0607	DN32	32	PN16-40	47	73	15	F04	42	M5	12/8	140	78	2	18	100	4	18	7,6	130 (1)
L/V470BD607	L/V570AD607	DN32	32	ansi150	47	73	15	F04	42	M5	12/8	115	63,5	1,6	16	89	4	16	6,2	140 (3)
L/V471BD607	L/V571AD607	DN32	32	ansi300	47	73	15	F04	42	M5	12/8	135	63,5	1,6	19,5	98,4	4	19	8,7	178 (3)
L/V470B0608	L/V570A0608	DN40	38	PN16-40	58	93	21	F05	50	M6	16/10	150	88	3	18	110	4	18	10	140 (1)
L/V470BD608	L/V570AD608	DN40	38	ansi150	58	93	21	F05	50	M6	16/10	125	73	1,6	18	98,4	4	16	9,4	165 (3)
L/V471BD608	L/V571AD608	DN40	38	ansi300	58	93	21	F05	50	M6	16/10	155	73	1,6	21	114,3	4	22	12	190 (3)
L/V470B0609	L/V570A0609	DN50	51	PN16-40	67	102	21	F05	50	M6	16/10	165	102	3	20	125	4	18	14,3	150 (1)
L/V470BD609	L/V570AD609	DN50	51	ansi150	67	102	21	F05	50	M6	16/10	150	92	1,6	18	120,6	4	19	14,4	178 (4)
L/V471BD609	L/V571AD609	DN50	51	ansi300	67	102	21	F05	50	M6	16/10	165	92	1,6	21	127,0	8	19	17,2	216 (4)
L/V470B0610	L/V570A0610	DN65	64	PN16	83	130,5	28	F07	70	M8	22/14	185	122	3	18	145	4	18	20,2	170 (1)
L/V471B0610	L/V571A0610	DN65	64	PN25-40	83	130,5	28	F07	70	M8	22/14	185	122	3	22	145	8	18	28,2	270 (2)
L/V470BD610	L/V570AD610	DN65	64	ansi150	83	130,5	28	F07	70	M8	22/14	180	104,8	1,6	22,6	139,7	4	19	23,1	191 (4)
L/V471BD610	L/V571AD610	DN65	64	ansi300	83	130,5	28	F07	70	M8	22/14	190	104,8	1,6	26,1	149,2	8	22	27,3	241 (4)
L/V470B0611	L/V570A0611	DN80	76	PN16-40	90	137,5	28	F07	70	M8	22/14	200	138	3	24	160	8	18	25,4	180 (1)
L/V470BD611	L/V570AD611	DN80	76	ansi150	90	137,5	28	F07	70	M8	22/14	190	127	1,6	24	152,4	4	19	27	203 (4)
L/V471BD611	L/V571AD611	DN80	76	ansi300	96	137,5	28	F07	70	M8	22/14	210	127	1,6	29	168,3	8	22	28,6	282 (4)
L/V470B0612	L/V570A0612	DN100	102	PN16	111	172	35	F10	102	M10	30/18	220	158	3	20	180	8	18	38	190 (1)
L/V471B0612	L/V571A0612	DN100	102	PN25-40	111	172	35	F10	102	M10	30/18	235	162	3	22	190	8	22	57,8	300 (2)
L/V470BD612	L/V570AD612	DN100	102	ansi150	111	172	35	F10	102	M10	30/18	230	157,2	1,6	24,6	190,5	8	18	46	229 (4)
L/V471BD612	L/V571AD612	DN100	102	ansi300	111	172	35	F10	102	M10	30/18	255	157,2	1,6	32,6	200,0	8	22	67,7	305 (4)
L/V470B0613	L/V570A0613	DN125	118	PN16	117	182	35	F10	102	M10	30/18	250	188	3	22	210	8	18	68	325 (2)
L/V470BD613	L/V570AD613	DN125	118	ansi150	117	182	35	F10	102	M10	30/18	255	185,7	1,6	24	215,9	8	22	62	254 (3)
L/V471BD613	L/V571AD613	DN125	118	ansi300	125	182	35	F10	102	M10	30/18	280	185,7	1,6	36,6	235	8	22	89	381 (3)
L/V470B0614	L/V570A0614	DN150	152	PN16	154	227,5	40,5	F14	140	M16	45/30	285	212	3	22	240	8	22	121	350 (2)
L/V470BD614	L/V570AD614	DN150	152	ansi150	154	227,5	40,5	F14	140	M16	45/30	280	216	1,6	25,6	241,3	8	22	126	394 (4)
L/V470B0615	L/V570A0615	DN200	203	PN16	188	274	44,8	F14	140	M16	52/35	340	268	3	24	295	12	22	198	400 (2)
L/V470BD615	L/V570AD615	DN200	203	ansi150	188	274	44.8	F14	140	M16	52/35	345	269.9	1.6	29	298.4	8	22	210	457 (4)

(1) EN558 TAB. 2 COL. 14 / DIN 3202-1 F4 (2) EN558 TAB. 2 COL. 15 / DIN 3202-1 F5 (3) ANSI B16.10 (4) B16.10 / API6D



EDITION MAY 2012





#### SPRING RETURN PNEUMATIC ACTUATOR PN 16-40





### PN 16-40 Split Body Series Spring Return Pneumatic Actuator

PN 16-40 Wafer Serie Spring Return Pneumatic Actuator													
Body Stainless Steel	Body/ Carbon Steel	Actuator	Connecting Kit	SIZE	PN	N	н	Kg	L				
S470BH064	S570AH064	SR015401S	KCF033761		16	221	152,4	4,5	115				
S471BH064	S571AH064	SR030402S	KCF043767	DIN 13	25-40	240	162,4	4,8	113				
S470BH065	S570AH065	SR030402S	KCF043767	DN 20	16-40	240	165,4	6,0	120				
S470BH066	S570AH066	SR030402S	KCF043807	DN 25	16-40	240	172,4	7,6	125				
S470BH067	S570AH067	SR045401S	KCF053768	DN 32	16-40	294	184,5	10,8	130				
S470BH068	S570AH068	SR060401S	KCF053764	DN 40	16-40	320	224,4	13,2	140				
S470BH069	S570AH069	SR090401S	KCF073769	DN 50	16	375	243	18,8	150				
S471BH069	S571AH069	SR120401S	KCF073769		25-40	372	253,4	20,7					
S470BH070	S570AH070	SR120401S	KCF073765		16	372	279,4	26,7	170				
S471BH070	S571AH070	SR180401S	KCF103770	DIN 03	25-40	436	291	37,2	270				
S470BH071	S570AH071	SR180401S	VCF102770		16	436	298	35,4	100				
S471BH071	S571AH071	SR240401S	KCF103770	DIN 60	25-40	456	310	36,2	160				
S470BH072	S570AH072	SR360401S	KCF104150	DNI 100	16	566	369	56,0	190				
S471BH072	S571AH072	SR480401S	KCF123771	DIN TOU	25-40	602	381,2	76,8	300				
S470BH073	S570AH073	SR480401S	KCF123778	DN 125	16	602	384,2	87,1	325				
S470BH074	S570AH074	SR720401S	KCF163901	DN 150	16	834	613	178	350				
S470BH075	S570AH075	SR1440E16D8A	KCF163903	DN 200	16	975	622,5	282	400				

#### SPRING RETURN PNEUMATIC ACTUATOR ANSI 150-300





### ANSI 150-300 Split Body Series Spring Return Pneumatic Actuator

PN 16-40 Wafer Serie Spring Return Pneumatic Actuator													
Body Stainless Steel	Body/ Carbon Steel	Actuator	Connecting Kit	SIZE	ANSI	N	H	Kg	L				
S470BHD64	S570AHD64	SR015401S	KCF033761		Ansi 150	221	152,4	4,0	108				
S471BHD64	\$571AHD64	SR030402S	KCF043767	DIN 13	Ansi 300	240	162,4	4,7	140				
S470BHD65	\$570AHD65	500204025	KCF043767	DN 20	Ansi 150	240	165,4	5,3	117				
\$471BHD65	S571AHD65	3KU3U4U23		DIN 20	Ansi 300	240	164,4	6,3	152				
S470BHD66	\$570AHD66	500204025	KCF043807	DN 25	Ansi 150	240	172,4	6,9	127				
S471BHD66	\$571AHD66	3KU3U4U23			Ansi 300	240	172,4	8,3	165				
S470BHD67	S570AHD67	500454015	KCF053768	DN 32	Ansi 150	294	184,5	7,2	140				
S471BHD67	S571AHD67	3K0434013			Ansi 300	294	184,5	11,8	178				
S470BHD68	\$570AHD68	500/04015	KCF053764	DN 40	Ansi 150	320	224,4	15,2	165				
S471BHD68	S571AHD68	3KU0U4U13			Ansi 300	320	224,4	17,8	190				
S470BHD69	S570AHD69	SR090401S	KCF073769 DN	DN 50	Ansi 150	357	243	18,8	178				
S471BHD69	\$571AHD69	SR120401S			Ansi 300	372	254,4	24,1	216				
S470BHD70	S570AHD70	SR120401S	KCF073765		Ansi 150	372	279,4	29,6	191				
S471BHD70	S571AHD70	SR180401S	KCF103770	DIN 03	Ansi 300	436	291	36,5	241				
\$470BHD71	S570AHD71	SR180401S	KCF103770		Ansi 150	436	298	37,0	203				
\$471BHD71	\$571AHD71	SR240401S	KCF103892	DIN OU	Ansi 300	456	310	49,4	282				
S470BHD72	S570AHD72	SR360401S	KCF104150	DNI 100	Ansi 150	566	369	62,8	229				
S471BHD72	S571AHD72	SR480401S	KCF123771	DIN 100	Ansi 300	602	381,2	86,8	305				
\$470BHD73	\$570AHD73	SR480401S	KCF123778	DNI 125	Ansi 150	602	387,2	81,8	254				
S471BHD73	S571AHD73	SR720401S	KCF143899	DIN 125	Ansi 300	712	421	117	381				
S470BHD74	\$570AHD74	SR720401S	KCF163901	DN 150	Ansi 150	834	613	190	394				
S470BHD75	\$570AHD75	SR1440E16D8A	KCF163903	DN 200	Ansi 150	975	622,5	283	457				

