FILLER CAPS '09

Aero 300 w. neck

Aero 400

VENT VALVES

CLASSIC 250

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INTRODUCTION and NOTES

INDIVIDUAL CAR MODELS. The Newton range of caps do not fit any particular vehicle. It is necessary to check the catalogue data to see what comes closest, and then modify your vehicle to adapt the selected cap to it. We suggest you seek advice from a good panel beater. Fitting direct to a new tank should be within many people's capabilities.

THE CATALOGUE PROVIDES... A lot of dimensional information on all the Aero, Zero, and Classic caps, and the range of Vent/Rollover valves.

This data will help you work out what fits your car best. Things to check to help you work this out are:

1. Inside diameter of the standard hose leading to the tank.
2. Diameter of any hole in the body where the original filler cap is. (If it is not round, you will clearly have to fill the space with a new panel to accept the round caps).
3. How much space is available to you behind the panel, to assist in working out if the cap neck will fit, and what sort of hose bend you may need.

You can then compare what you found with details shown in this catalogue.

IMPORTANT THINGS TO NOTE.

UNLEADED PETROL. Versions of Aero 300, 400 Caps and some Classic Caps are available with the ULP nozzle only flap which may be a legal requirement.

METHANOL. This affects the standard Viton® O Rings. We can obtain Nitrile rubber O rings instead to enable use of Methanol. Some delay in supply may occur, however.

VENTS. Aero 300 and Aero 400 Caps can be supplied with a vented centre pin built in as an extra cost option. There is a vented version of the Zero 200 cap. In other cases it may be necessary to use a Vent Valve.

COLOUR. Caps are supplied in Hard Anodised polished aluminium (silver) colour.
Other colour centres may be available as noted in the Tech. Specs at considerable extra cost and delay.

FIXING SCREWS. All caps come with the necessary stainless screws and nuts.

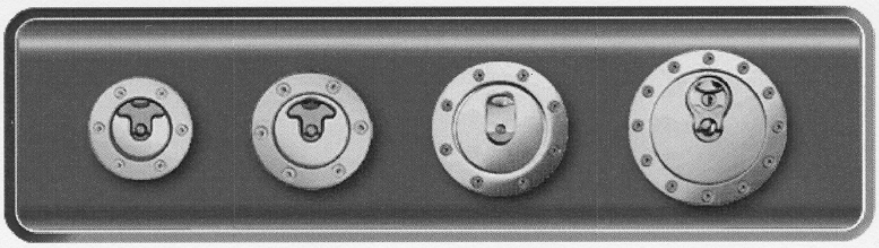
FIXING RINGS. These may assist in mounting caps as they are pre-tapped or have captive nuts.

WARRANTY. All caps and other parts described in this catalogue are warranted against any material or manufacturing defects for a period of Twelve (12) Months from the date of purchase. Damage or other problems cased by fitment of eh equipment is specifically excluded from the terms of this warranty

LIABILITY. Earl's Performance Products Australia Pty Ltd and Newton Equipment Ltd, the manufacturer, shall not in any way be liable for any damage to caps or vehicles occurring during or as a result of installation of any cap or associated equipment described in this catalogue.

AERO RANGE OF CAPS

Aero Range



Aero 200 Aero 300 Aero 400 Aero 500

Aero Range

In what is probably the world's largest range of tank filler caps will be found a product suitable for the smallest or largest vehicles - and all those in between! Aero filler caps are suitable for fuel, oil, water and any other liquid you care to mention. The Aero Range is available in four sizes, which can be supplied with an assortment of flanges, flange necks and weld-on necks. The flange/neck type is designed to connect with a suitable hose to a remote tank. All Aero filler caps are shut by means of a lever. We should also mention that every flanged filler cap has available a fixing ring that can be employed should access to the rear of the panel or inside the tank be restricted.

Installation Instructions

A flat and smooth surface should be chosen to successfully install Aero filler caps. Where the filler cap is not in contact with fuel, for example when fitted to the outside skin of a vehicle, it is possible to accommodate a slightly curved surface but care must be taken not to distort the flange by over tightening the fixing screws. Installation dimensions for each filler cap will be found under Tech Specs. With 'wet' installations, such as motorcycle and boat tanks, the use of a gasket and sealant is recommended. We recommend 'Hylomar ' sealant or a suitable equivalent.

Operation

The operation of Aero filler caps follows best aircraft practice. To release the filler cap the lever is lifted and turned. To replace and secure the filler cap return the lever to the closed position and snap shut. Aero filler caps fitted with locks can be left unlocked if required.

All locking products are supplied with two matching keys. We can supply spare keys for all Aero filler caps that have the lock number stamped on the head of the lock.

Warning

A number of people like our Aero cap design so much that they have copied it. There are several of these copies of Newton Equipment Aero caps on the market. These copies are not made from the same quality materials that Newton Equipment Aero caps are made from and are not subjected to the same level of safety and quality checks that Newton Equipment Aero caps must comply to. Don't settle for a second rate copy, only an original Newton Equipment Aero cap is finished to, and performs to the high standards for which we are justly famous.

AERO 200

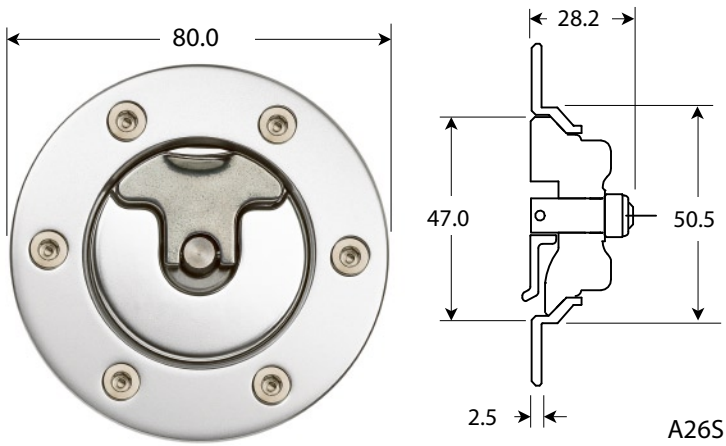
AERO 300

AERO 400

AERO 500

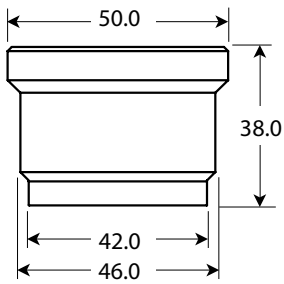
Aero 200 Tech Specs

Flange Type



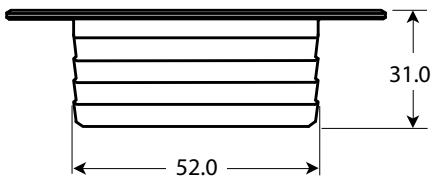
A26S

Extended Neck



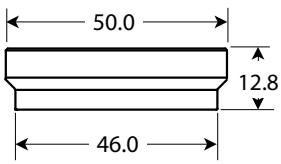
A2NSX

Flange/Neck Types



A26NS

Short Neck



A2N

Applications
Fuel, oil & water tanks
Features
Fixing Holes: 6 x 4.2 mm csk
Bolt Circle: 63.5 mm 2.5 inches
Finish
Centre anodised: Clear (Silver) , blue, purple, green & gold
Flange & Flange / Neck: Clear (Silver)

Materials
Centre Forging - Aluminium Alloy 6063
Flange - 6082 T6
Neck - 6082 T6
Centre Pin - 316 Stainless steel
Option - Metal Saddle
All dimensions are in Millimeters
Necks are not anodised

Flange Options

A20SG

The Aero 200 range is available with a Glass-in flange which is often used on motorbikes and aircraft

Necks

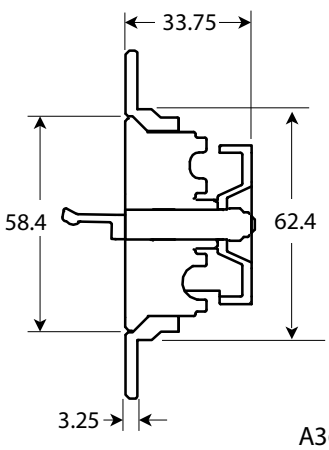
A2NSX

The necks can be supplied in steel or aluminium and are suitable for welding to a tank or for fixing directly into a hose.

Rev. 00.04.18

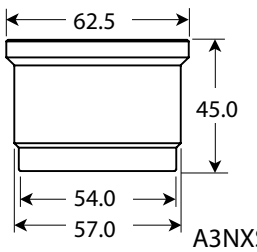
Aero 300 Tech Specs

Flange Type - no-locking mechanism



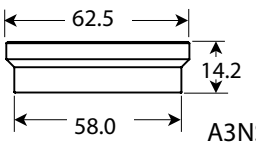
A36S/L

Extended Neck



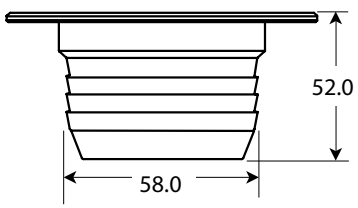
A3NXS/L

Short Neck

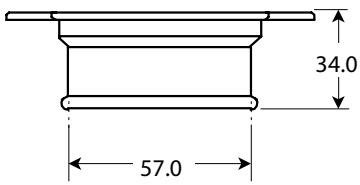


A3NS/L

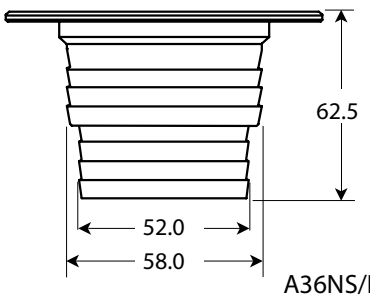
Flange/Neck Types



A36NS/L1



A36NS/L57



A36NS/L2

Applications
Fuel, oil & water tanks
Features
Fixing Holes: 6 x 5.2 mm csk
Bolt Circle: 76.2 mm 3.00 inches
Options: Venting
Lead free flap
With chain

Materials
Centre Forging - Aluminium Alloy 6063
Flange - 6082 T6
Neck - 6082 T6
Finish:
Anodised Clear (Silver) - option black
* N versions are not anodised
All dimensions are in Millimeters

Flange Options

- The Aero 300 flange is available with four different bolt configurations, 0 hole, glass-in, 6 hole and 9 hole in a teardrop shape.

Unleaded Option

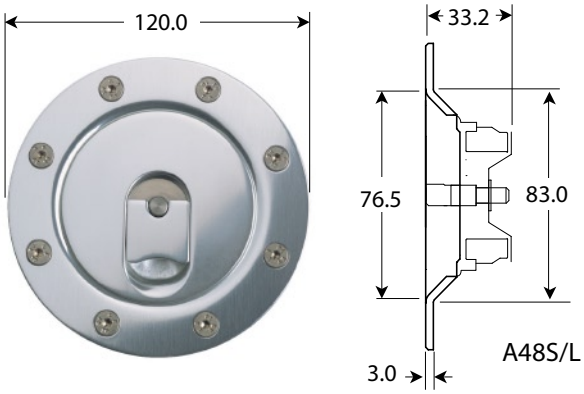
- The Aero 300 flange necks are available with lead free restrictor flaps

Locking Option

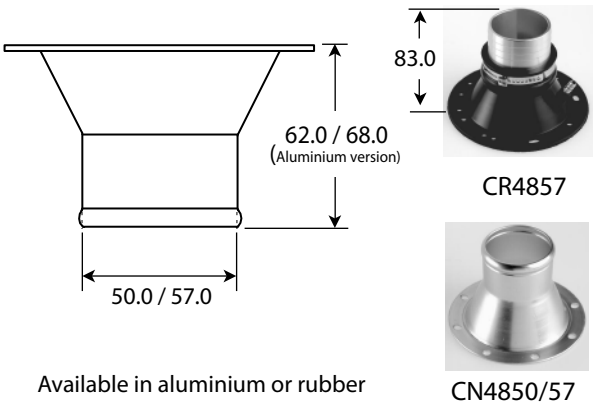
- All Aero 300 range is available in locking (L) and non-locking (S) options. Arrangements can be made to supply a series with matching key numbers

Aero 400 Tech Specs

Flange Type

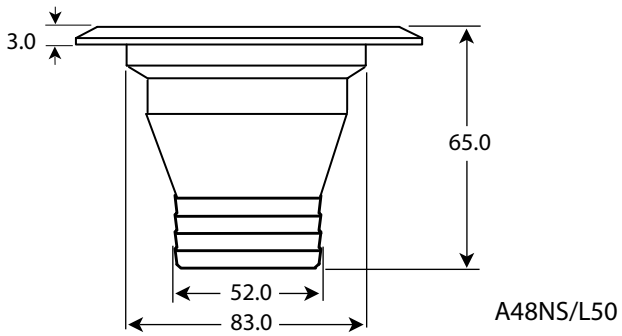


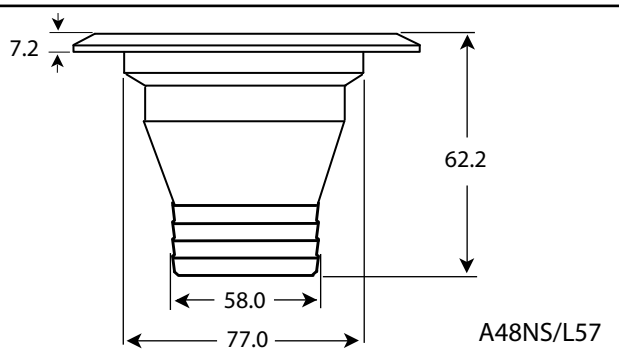
Connecting Neck



Available in aluminium or rubber

Flange / Necks





Specifications - A48S/L

Applications: Fuel oil & water tanks
Fixing Holes: 8 x 5.2mm csk
Bolt Circle : 101.6 mm
Material:
Flange & Centre: Aluminium Alloy 6082 T6
Option - Metal Saddle
Finish:
Anodised: Clear (Silver) - option: Black
All dimensions are in Millimeters

Flange Options

Code	No. of bolts	Bolt Circle (PCD)
A48S :	8	101.6 mm
A49S :	9	101.6 mm

Unleaded Option (A48NS50/57LF)

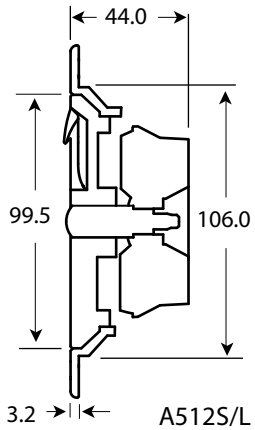
- The Aero 400 flange necks and connecting necks are available with lead free restrictor flaps.

Locking version (A48L)

- The Aero 400 is available with a locking (L) or non locking (S) option. The locking type can be supplied with matching key numbers

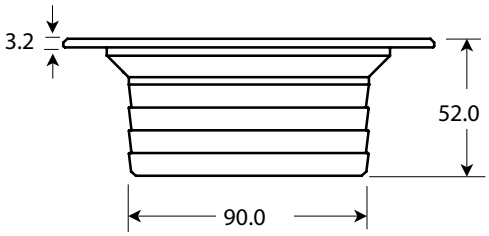
Aero 500 Tech Specs

Flange Type



A512S/L

Flange / Neck Type



A512NS/L90

Specification

Applications: Fuel, oil & water

Features:

Fixing Holes: 12 x 5.2 mm csk

Bolt Circle: 120.6mm (4.75 inches)

Material:

Flange & Flange/Neck: Aluminium Alloy 6082 T6

Lever: Stainless Steel 310

Finish:

Anodised: Clear (Silver) - option: Black

All dimensions are in Millimetres

Flange Options

Code	Weight	Bolts	PCD
A512S* :	388.5 g	12	120.6 mm
A512L* :	404.0 g	12	120.6 mm
A58S* :	361.0 g	8	117.4 mm
A58L* :	376.5 g	8	117.4 mm

FN512S/L90* - Aero 500 Flange/Neck

Code	Weight
FN512NS90 :	519.0 g.
FN512NL90 :	534.0 g.

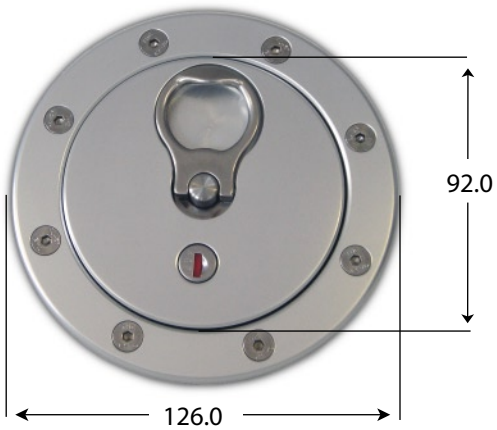
Locking version (A512L)

- The Aero 500 is available in locking *(L) and non-locking *(S) options. Arrangements can be made to supply a series with matching key numbers.

Rev. 00.05.10

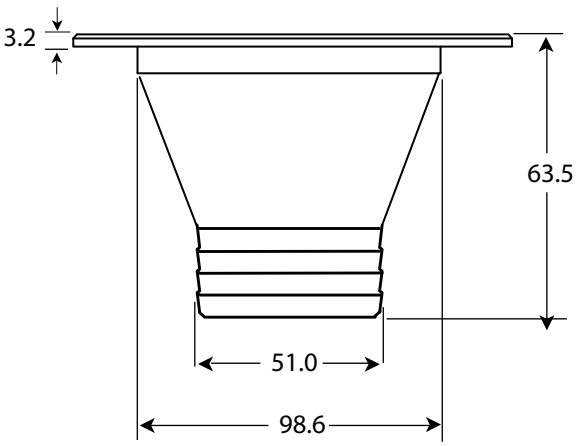
Aero 600 Tech Specs

Flange Type



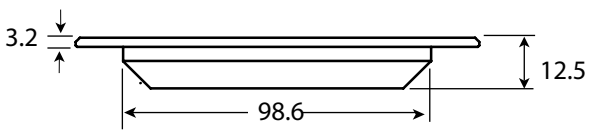
A68S/L*

Flange/ Neck Type - 50 mm



A68NS/L50*

Flange Type



A68S/L*

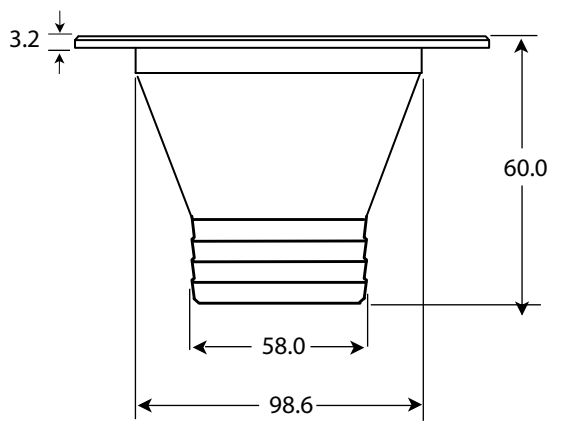
Locking version

- The Aero 600 is available in locking * (L) and non-locking * (S) options. Arrangements can be made to supply a series with matching key numbers.

Specifications

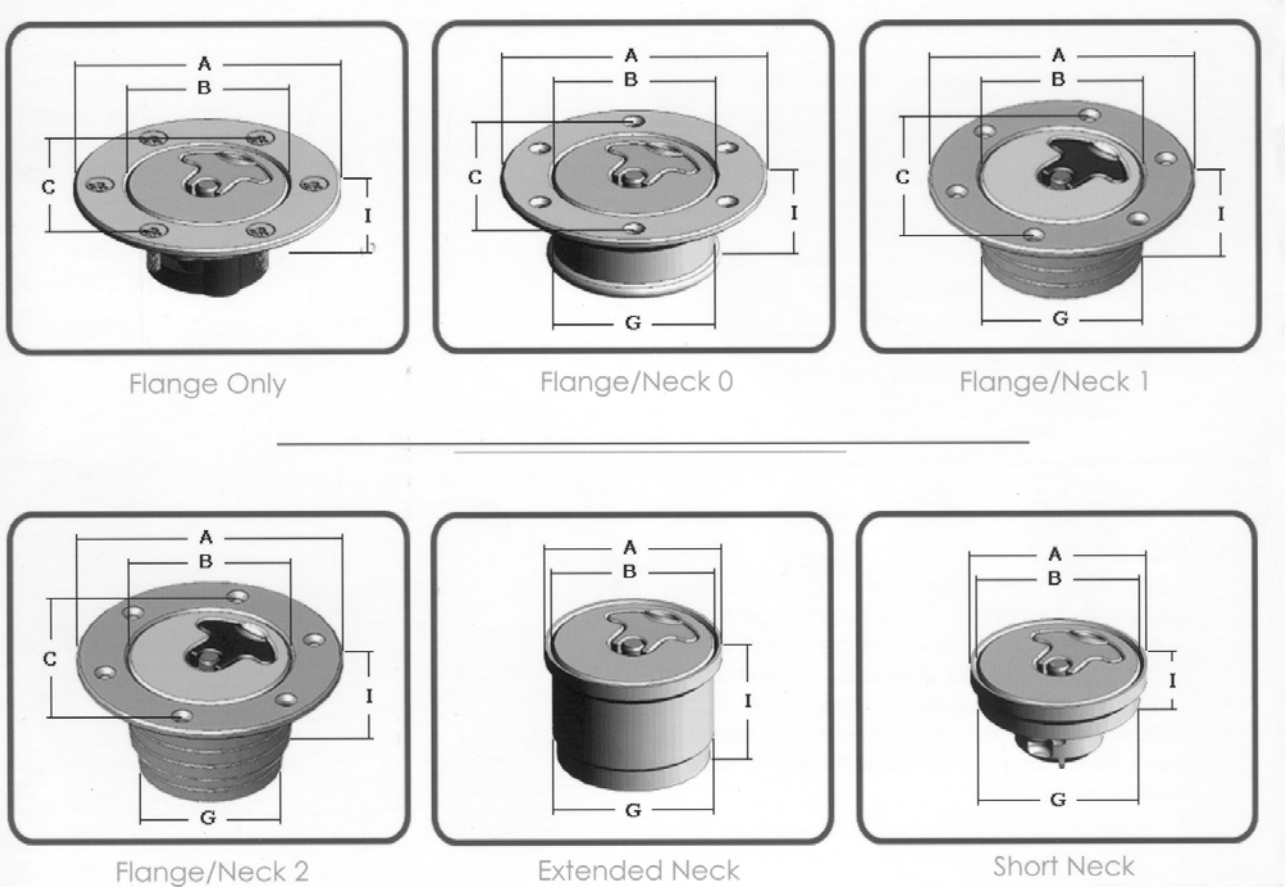
Applications: Fuel, oil & water tanks
Holes: 8 x 5.2 mm csk
Bolt Circle: 108.0mm (4.25 inches)
Filling Aperture: 77.0mm (3 inches)
Material:
Aluminium Alloy 6082 T6
Finish:
Anodised: Clear (Silver)
All dimensions are in Millimetres

Flange/Neck Type - 57mm



A68NS/L57*

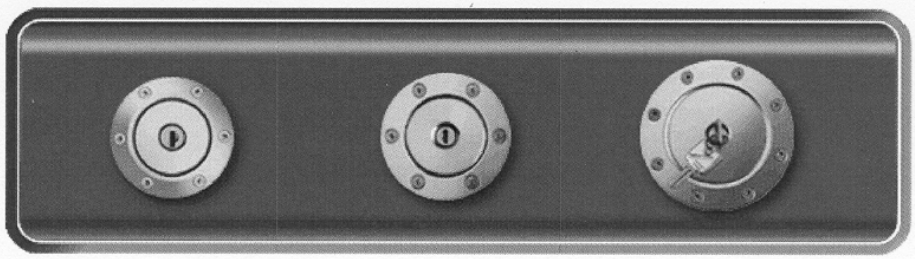
AERO CAP DIMENSIONS CHART



	Flange Only	Flange Neck 0	Flange Neck 1	Flange Neck 2	Extended Neck	Short Neck
Aero 200	**A26S**		**A26NS**		**A2NSX**	**A2NS**
A - Outer Diameter	80.0mm		80.0mm		50.0mm	52.0mm
B - Centre Diameter	46.0mm		46.0mm		46.0mm	46.0mm
C - Bolt circle Diameter	63.5mm		63.5mm		N/A	N/A
I - Overall depth	12.85mm		31.0mm		38.0mm	12.85mm
G - Neck Diameter	44.0mm		52.0mm		46.0mm	46.0mm
Aero 300	**A36S/L**	**A36NS/LO**	**A36NS/L1**	**A36NS/L2**	**A3NSX**	**A3NS**
A - Outer Diameter	94.0mm	94.0mm	94.0mm	94.0mm	62.5mm	62.5mm
B - Centre Diameter	58.0mm	58.0mm	58.0mm	58.0mm	58.0mm	58.0mm
C - Bolt circle Diameter	76.2mm	76.2mm	76.2mm	76.2mm	N/A	N/A
I - Overall depth	14.6mm	34.0mm	52.0mm	62.5mm	45.0mm	14.6mm
G - Neck Diameter	58.0mm	62.0mm	58.0mm	58/52.0mm	57.0mm	57.0mm
Aero 400	**A46S/L**		**A46NS/L50**	**A46NS/L57**		
A - Outer Diameter	120.0mm		120.0mm	120.0mm		
B - Centre Diameter	77.0mm		77.0mm	77.0mm		
C - Bolt circle Diameter	101.6mm		101.6mm	101.6mm		
I - Overall depth	13.5mm		65.0mm	67.0mm		
G - Neck Diameter	N/A		52.0mm	58.0mm		
Aero 500	**A512S**		**A512NS90**			
A - Outer Diameter	139.0mm		139.0mm			
B - Centre Diameter	99.5mm		99.5mm			
C - Bolt circle Diameter	120.65mm		120.65mm			
I - Overall depth	17.5mm		52.0mm			
G - Neck Diameter	N/A		90.0mm			

ZERO RANGE OF CAPS

Zero Range



Zero 200 Zero 300 Zero 400

Zero Models

The **Zero Range** is available in three sizes, which are 3.25" (82.5mm), 3.75" (95mm) and 4.75" (120mm) diameter overall, being the **Zero 200 , Zero 300** and **Zero 400** respectively. The Zero range of filler caps have been designed to take advantage of the latest automotive technology.

Zero 200 - The Zero 200 comes with an integrated 2.00" flange/neck. It is designed to be installed on a remote tank, using a suitable hose. This cap is also offered vented.

Zero 300 - The Zero 300 is designed to be mounted directly on to a tank using the flange.

Zero 400 - The Zero 400 comes with an integrated 2.00" flange/neck. It is designed to be installed on a remote tank, using a suitable hose.

All Zero range models are key operated and are supplied with two keys. There is a limited range of replacement keys available. The key number is not recorded, so a note should be taken of the key number stamped on the key upon installation.

Installation Instructions

A flat and smooth surface should be chosen to successfully install Zero filler caps. Where the filler cap is not in contact with fuel, for example when fitted to the outside skin of a vehicle, it is possible to accommodate a slightly curved surface but care must be taken not to distort the flange by over tightening the fixing screws. With 'wet' installations such as motorcycle and boat tanks, the use of a gasket and sealant is recommended. We recommend 'Hylomar ' sealant or a suitable equivalent.

Zero 200

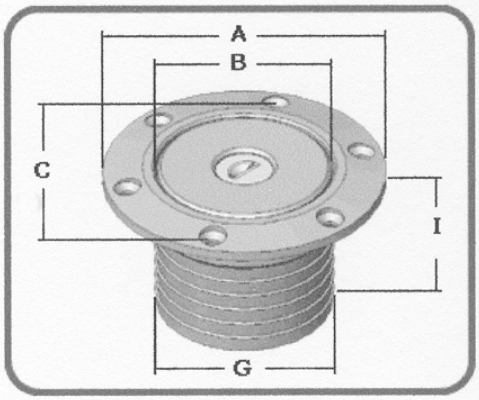
Product Description: **Zero Filler Cap, 6 Bolt Flange/Neck**

Specifications

Options	Locking only
Fixing Arrangement	6 Bolts
Applications	Fuel, Oil & Water Tanks
Materials	**Centre** Aluminium Alloy 6082 **Flange/Neck** Aluminium Alloy 6082/T6
Finish	**Anodised** Clear (Silver)
Weight	213.0g

Dimensions

Outside Diameter A	82.0 mm
Centre Diameter B	50.5 mm
Bolt Circle Dia. (PCD) C	69.9 mm
Bore	35.0 mm
Spigot	57.0 mm
Body Diameter	Not Applicable
Neck Diameter G	52.0 mm
Flange Thickness	5.0 mm
Overall Depth I	49.0 mm



PART NUMBERS

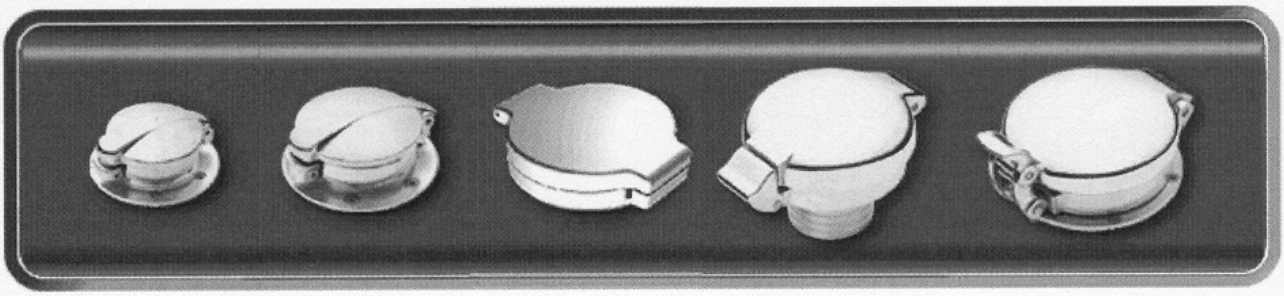
Z26NL1 - CAP, 50 mm NECK, LOCK

Z2LV - CAP, NO NECK, LOCK, VENTED

Z26NLV1 - CAP, 50 mm NECK, LOCK, VENTED

CLASSIC CAPS

Classic Range



Classic 200 Classic 250 Classic 275 Classic 300 Classic 350

Classic Range

The Classic range combines the unique style of a bygone age with the technological advances, materials and functional expectations of today. We recognise the genius of these traditional designs and feel that it is time that they were brought up to date by introducing some welcome innovation.

The Classics will be welcomed by restorers of classic vehicles and by owners who wish to add a "Classic" touch to their custom car or bike. These caps are not just suited to cars and motorcycles though; they can be used on static liquid storage tanks found on trains, passenger coaches and trucks.

Looking back to earlier days, when preparing cars and bikes for competition there was always a problem with fitting filler caps because of the limited choices of threaded necks and connectors. Our range has a full compliment of fixing flanges, flange necks and necks that allow the rapid installation of the complete assembly.

Installation Instructions

The Classic caps are screw fix, being designed to fix to a threaded flange, flange neck or threaded neck.

Features

The Classic cap cover is hinged and a sprung latch secures the cap.

We have listened to the many requests for locking versions and now offer locking options on all Classics from Classic 250 upwards. The lock takes the form of another filler cap that fits inside the "parent" . Not only does this give extra security against theft or tampering, but it also gives an extra sealing facility, ensuring that not a drop is lost. We also offer unleaded restrictor valves that fit neatly into the neck versions.

CLASSIC 200

Classic 200

Product Description: **Filler Cap Classic 200**

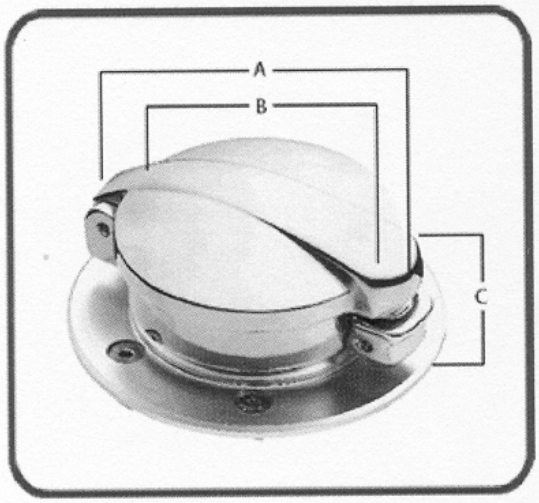
PART NUMBER - C20D

Specifications

Fixing Arrangements	Collar, Flange or Flange/Neck
Applications	Fuel, Oil & Water Tanks
Materials	**Cover - Casting:** Aluminium Alloy
	Collar Aluminium Alloy
Finish	**Anodised** Clear (Silver)
Weight	109.5 g

Dimensions

Length, including catch A	80.5 mm
Cap Diameter B	61.5 mm
Height, including catch C	29.0 mm
Thread	2"x18 tpi



Shown with Flange

CLASSIC 250

Classic 250

Product Description: **Classic 250 Filler Cap**

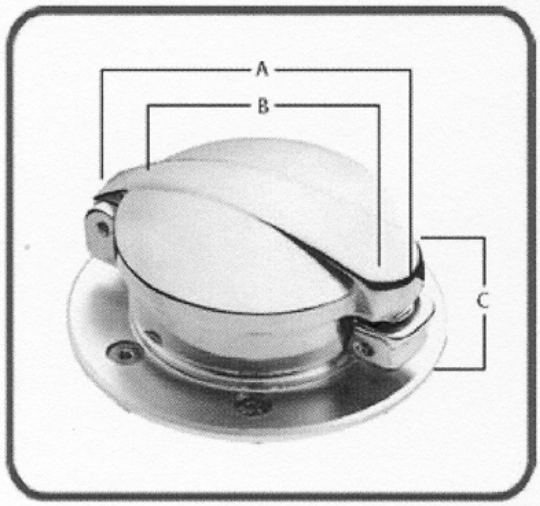
PART NUMBER - C25D

Specifications

Fixing Arrangements	Collar, Flange or Flange/Neck
Applications	Fuel, Oil & Water Tanks
Materials	**Cover - Casting:** Aluminium Alloy
Finish	**Anodised** Clear (Silver)
Weight	183.0g

Dimensions

Length, including catch A	101.0 mm
Cap Diameter B	75.5 mm
Height, including catch C	33.0 mm
Thread	2.5"x16 tpi



Shown with Flange

CLASSIC 275

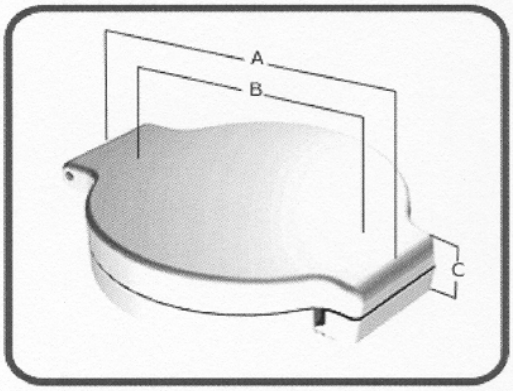
Classic 275

PART NUMBER C275

Product Description: **Filler Cap Classic 275**

Specifications

Fixing Arrangements	Collar, Flange or Flange/Neck
Applications	Fuel, Oil & Water Tanks
Materials	**Cover - Casting:** Aluminium Alloy
	Collar Aluminium Alloy
Finish	**Anodised** Clear (Silver)
Weight	



Dimensions

Length, including catch A	124.0 mm
Cap Diameter B	100.0 mm
Height, including catch C	26.0 mm
Thread	M72 x 11 tpi

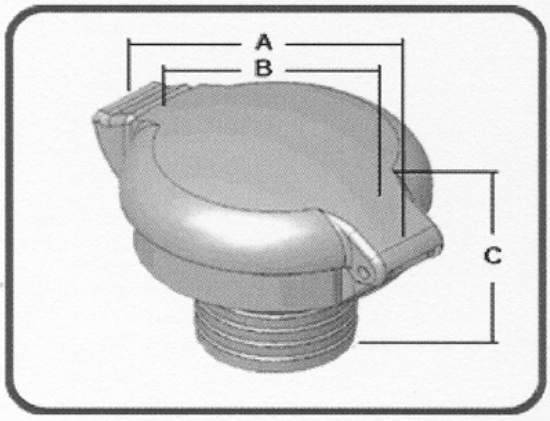
CLASSIC 300

Classic 300

Product Description: **Classic 300 Filler Cap with 50 mm Neck**

Specifications

Options	Standard Locking or No Locking (Locking conversion is available as an option)
Fixing Arrangement	Collar, Flange, Flange/Neck
Applications	Fuel, Oil & Water Tanks
Materials	**Cover - Casting:** Aluminium Alloy
	Collar Aluminium Alloy
Finish	**Polished** Clear (Silver)
Weight	303.5g



PART NUMBER C30LLD

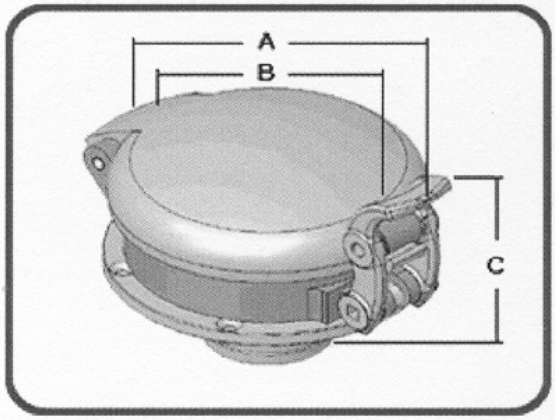
Dimensions

Length, including catch A	131 mm
Centre Diameter B	100 mm
Height, including catch C	83 mm
Thread	M72 x 11tpi

CLASSIC 350

Classic 350

Product Description: **Classic 350 Filler Cap**



PART NUMBER - C35D

Specifications

Options	Standard Locking or No Locking (Locking conversion is available as an option)
Fixing Arrangements	Collar, Flange or Flange/Neck
Applications	Fuel, Oil & Water Tanks
Materials	**Cover - Casting:** Aluminium Alloy
	Collar Aluminium Alloy
Finish	**Polished** Clear (Silver)
Weight	520 g

Dimensions

Length, including catch A	168.0 mm
Cap Diameter B	122.0 mm
Height, including catch C	68.0 mm
Thread	3.5" BSP x 11 tpi

CLASSIC CAP FLANGES

Classic Accessories

Product Description: **Classic Cap Flange**

Specifications

	CF200	CF250	CF275	C30D	CF350
Product Code					
Fixing Arrangement	6 Bolts	6 Bolts	6 Bolts		6 Bolts
Materials	Aluminium Alloy	Aluminium Alloy	Aluminium Alloy	No Flange Option	Aluminium Alloy
Finish	Anodised Clear (Silver)	Anodised Clear (Silver)	Anodised Clear (Silver)		Anodised Clear (Silver)
Weight	164.5 g	244.5 g			
Dimensions					
Full length, Including catch and hinge	83 mm	100 mm	124 mm		166 mm
Cap Diameter	60 mm	76 mm	100 mm		122 mm
Height, including catch	38 mm	39 mm	36 mm		71 mm

Options:

CF200CH - Classic 200 with flange, 6 bolt, chrome

CLASSIC CAPS WITH BASIC FLANGES

CLASSIC CAP FLANGE-NECKS

Classic Accessories

Product Description: **Classic Cap Flange Neck**

Specifications

	CFN200	CFN2502*	CNC275-50	C30LD	CNFN350
Product Code					
Fixing Arrangement	No Flange/Neck option	Flange/Neck	Flange/Neck	Threaded Neck	Flange/Neck
Materials		Aluminium Alloy	Aluminium Alloy	Aluminium Alloy	Aluminium Alloy
Finish		Anodised Clear (Silver)	Anodised Clear (Silver)	Anodised Clear (Silver)	Anodised Clear (Silver)
Weight					1104.5 g
Dimensions					
Full Length, Including catch and hinge		100 mm	124 mm	131 mm	166 mm
Cap Diameter		76 mm	100 mm	100 mm	122 mm
Height, including catch		85 mm	36 mm	83 mm	117 mm

* Only available as a special order

CLASSIC CAP + FLANGE NECK + ULP FLAP

CLASSIC CAP DIMENSIONS CHART

Classic Dimensions

	Thread Only	Flange	Flange Neck
Classic 200	**C200**	**CF200**	
Full width including springs	83mm	83mm	
Cap diameter	60mm	60mm	
Height including springs	29mm	38mm	
Thread	2" x 18tpi	2" x 18tpi	
Classic 250	**C250**	**CF250**	**CFN250**
Full width including springs	100mm	100mm	100mm
Cap diameter	76mm	76mm	76mm
Height including springs	32mm	39mm	85mm
Thread	$2^{1/2}$"x 16tpi	$2^{1/2}$"x16tpi	$2^{1/2}$"x16tpi
Classic 275	**C275**	**CF275**	**CNC275-50**
Full width including springs	124mm	124mm	124mm
Cap diameter	100mm	100mm	100mm
Height including springs	26mm	36mm	76mm
Thread	$2^{3/4}$"x 16tpi	$2^{3/4}$"x 16tpi	$2^{3/4}$"x 16tpi
Classic 300	**C300**		**CNC3-50**
Full width including springs	131mm		131mm
Cap diameter	100mm		100mm
Height including springs	46mm		92mm
Thread	M72 x 11tpi		M72 x 1.5
Classic 350	**C350**	**CF350**	**CFN350**
Full width including springs	166mm	166mm	166mm
Cap diameter	122mm	122mm	122mm
Height including springs	71mm	79mm	117mm
Thread	3.52" x 11tpi	3.5" x 11tpi	3.5" x 11tpi

NEWTON EQUIPMENT LTD

TANK VENT VALVES

The object of a vent valve is to let air into the tank as the fuel level drops, and to stop fuel escaping.

The valves are installed as per the illustration. The thread or standpipe at the top is where the air enters. It passes through the valve, exiting into the tank through a hole in the side of the valve body.

The amount of air drawn into the tank through the valve is equal to the volume of fuel drawn from the tank.

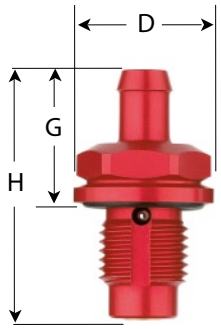
In the valve are two balls, one hollow plastic, one stainless steel. If fuel enters the valve while the vehicle is cornering or braking, the hollow ball floats on top of the fuel and moves to the top of the valve where it seals, so stopping fuel escaping.

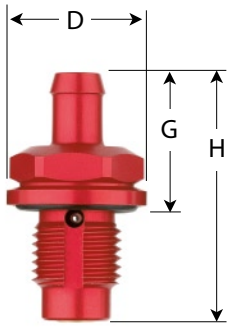
If there is a roll over, and the vehicle ends up upside down, it is possible that the hollow ball might leave the seat and allow fuel to escape. The weight of the stainless ball keeps the hollow ball on its seat, and fuel cannot then escape.

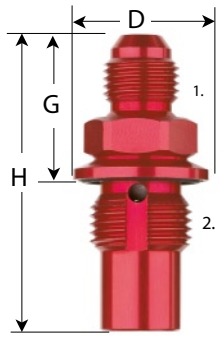
Tech Specs of the full range of valves follow.

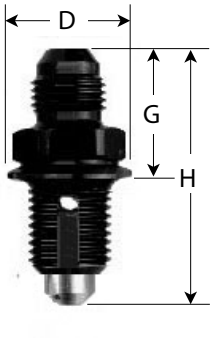
Big Tank Vent Valves

NEWTON EQUIPMENT LTD
SPECIALIST AUTOMOTIVE COMPONENTS

Part No. TRV 67	Dimensions
	D: 22.0 mm
	G: 21.0 mm
	H: 39.0 mm
	Standpipe: 7.0 mm
	Thread: 9/16 UNF (JIC 6)
	Weight: 14.0 gr.
	Material: 6082 Aluminium Alloy
	Finish: Anodised Red
	Flow capacity: 0.8 litre/sec

Dimensions	Part No. TRV 68
D: 22.0 mm	
G: 21.0 mm	
H: 39.0 mm	
Standpipe: 8.0 mm	
Thread: 9/16 UNF(JIC 6)	
Weight: 14.0 gr.	
Material: 6082 Aluminium Alloy	
Finish: Anodised Red	
Flow capacity: 0.66 litre/sec	

Part No. TRV 86	Dimensions
	D: 25.0 mm
	G: 27.0 mm
	H: 55.0 mm
	Thread 1: 9/16 x 18 UNF (JIC 6)
	Thread 2: 3/4 x 16 UNF (JIC 8)
	Weight: 26.5 gr.
	Material: 6082 Aluminium Alloy
	Finish: Anodised Red
	Flow capacity: 1 litre/sec

Dimensions	Part No. TRV 66
D: 22.0 mm	
G: 27.0 mm	
H: 45.0 mm	
Thread 1: D.06 (JIC 6)	
Thread 2: D.06 (JIC 6)	
Weight: 16.5 gr.	
Material: 6082 Aluminium Alloy	
Finish: Anodised Red	
Flow capacity: 0.66 litre/sec	

Application

The Big two -ball Valves are designed primariy for car fuel tanks in motor sport applications, where they will be subjected to violent movement.

Installation

- TRV 66, 67 : Access to inside of tank is not required for installation. A 9/16" UNF nut can be brazed or welded to the tank and mounting hole made in the tank from the outside.
- TRV 86 valve body has a thread of 3/4 inch Unf and the input thread is 9/16 Unf. It can be bolted through a plate or it can be fixed by a welded or brazed nut onto the tank.

The two-ball valves are open to atmosphere so vapour can collect inside the vehicle. All installations should be piped to the outside of the vehicle or connected to a charcoal canister. The best way for tarmac vehicles is to run the pipe to the top of the body and then down to a point just below the base of the tank. The valve should be positioned as close as possible to the rear of the tank so that under braking the fuel load will move towards the front of the tank and away from the valve. Please contact us for installation advice for vehicles designed to operate in terrain such as deserts and jungle.

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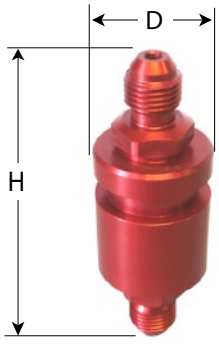
In-Line Tank Vent Valves

NEWTON EQUIPMENT LTD
SPECIALIST AUTOMOTIVE COMPONENTS

TPV Series

Part No. TPV 6	Dimensions
	D: 31.0 mm
	H: 88.6 mm
	Thread: 9/16 x 18 UNF (JIC 6)
	Weight: 76.0 gr.
	Material: 6082 Aluminium Alloy
	Finish: Anodised Red
	Negative Pressure limit:
	0.08 psi / 0.0055 bar
	Positive Pressure limit:
	0.725 psi / 0.05 bar

Dimensions	Part No. TPV 8
D: 31.0 mm	
H: 79.0 mm	
Standpipe: 8.0 mm	
Weight: 10.5 gr.	
Material: 6082 Aluminium Alloy	
Finish: Anodised Red	
Negative Pressure limit:	
0.08 psi / 0.0055 bar	
Positive Pressure limit:	
0.725 psi / 0.05 bar	

Application

The TPV series is suitable for general automotive use, for example on fuel injected vehicles. The vent prevents the escape of hydrocarbons into the atmosphere and ensures that vapours are vented when pressure builds up in the tank.

Installation

These valves are installed in-line connected to the fuel tank by a suitable hose. They can be mounted at any angle. There is no need to pipe the valve to the outside of the vehicle as vapour is allowed to escape from the vehicle.

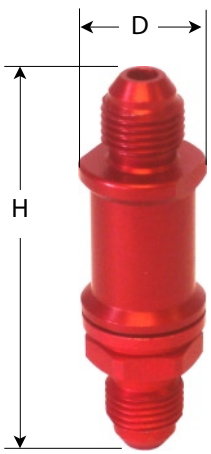
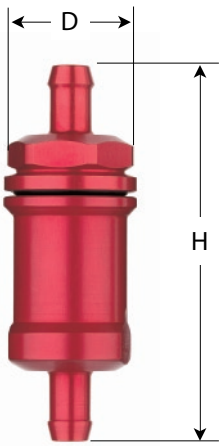
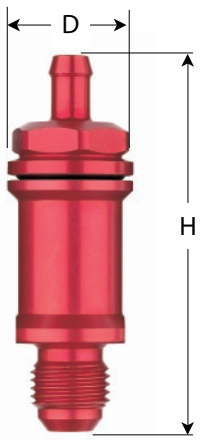
Workings

Responding to concerns about the escape of hydrocarbons into the atmosphere we have developed a new generation of vent valves that use carefully calibrated springs to control a two way valve. The benefits are that the valve is shut when the engine is switched off so there is no trace of fuel smells in the garage. The valve will open to allow air into the tank to replace the volume of fuel that has been consumed. The valve will also open should any excessive pressure build up in the tank. This function safeguards the fuel system.

In-Line Tank Vent Valves

NEWTON EQUIPMENT LTD
SPECIALIST AUTOMOTIVE COMPONENTS

TRL Series

Part No. TRL 6	Dimensions	Part No. TRL 7	Dimensions	Part No. TRL 8 / 68
	**TRL 6** D: 22.0 mm H: 71.6 mm Weight: 35.9 g Thread: 9/16 x 18 UNF (JIC 6) **TRL 7** D: 22.0 mm H: 62.5 mm Standpipe: 7.0 mm Weight: 28.0 g		**TRL8 / 68** D: 22.0 mm H: 65.6 mm Standpipe: 7.0 / 8.0 mm Thread: 9/16 x 18 UNF (JIC 6) Weight: 30.5 g **Specification** Material: 6082 Aluminium Alloy Finish: Anodised Red Flow capacity: 0.66 litre/sec	

Application

The two-ball In-Line valves (TRL 6/7/8/68) are designed primariy for motor sport applications, in environments where they will be subjected to violent movement.

Installation

The TRL series are designed to be installed in-line, connected to the fuel tank via a suitable hose. In common with all our valves, they need to be installed in a vertical position.

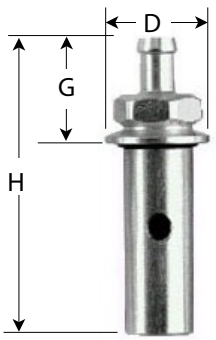
- Sealing to the tank is by an O-ring.

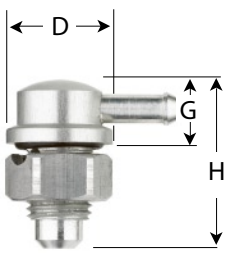
The two-ball valves are open to atmosphere so vapour can collect inside the vehicle. All installations should be piped to the outside of the vehicle or connected to a charcoal canister. The best way for tarmac vehicles is to run the pipe to the top of the body and then down to a point just below the base of the tank. The valve should be positioned as close as possible to the rear of the tank so that under braking the fuel load will move towards the front of the tank and away from the valve.

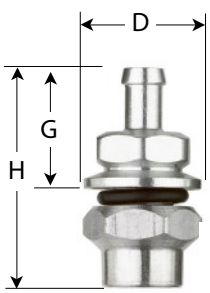
Please contact us for installation advice for vehicles designed to operate in terrain such as deserts and jungle.

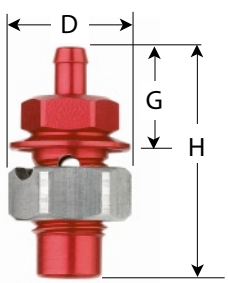
Small Tank Vent Valves

NEWTON EQUIPMENT LTD
SPECIALIST AUTOMOTIVE COMPONENTS

Part No. TBV 45	Dimensions
	D: 14.3 mm
	G: 14.75 mm
	H: 40.0 mm
	Standpipe: 4.75 mm
	Weight: 6.0 gr.
	Material: 6082 Aluminium Alloy
	Finish: Anodised Clear/Silver
	Flow capacity: 0.6 litre/sec

Dimensions	Part No. THV 45
D: 17.5 mm	
G: 10.5 mm	
H: 29.0 mm	
Standpipe: 4.75 mm	
Thread: 7/16 UNF (JIC 4)	
Weight: 10.5 gr.	
Material: 6082 Aluminium Alloy	
Finish: Anodised Clear/Silver	
Flow capacity: 0.5 litre/sec	

Part No. TVO 45	Dimensions
	D: 14.3 mm
	G: 14.8 mm
	H: 25.0 mm (with nut)
	Standpipe: 4.75 mm
	Weight: 4.5 gr.
	Material: 6082 Aluminium Alloy
	Finish: Anodised Red
	Flow capacity: No Valve

Dimensions	Part No. TRV 45
D: 17.5 mm	
G: 15.0 mm	
H: 33.5 mm	
Standpipe: 4.74 mm	
Thread: 7/16 UNF	
Weight: 9.5 gr.	
Material: 6082 Aluminium Alloy	
Finish: Anodised Red	
Flow capacity: 0.6 litre/sec	

The Small two -ball Valves are designed primarily for Motorcycle tanks in motor sport applications, where they will be subjected to violent movement.

Installation

- TBV 45: Designed to be fitted directly onto the flange of the Aero 400 filler cap. It will bolt into a 5/16 inch / 8 mm hole. A prepared flange can be supplied [part No. F481D] together with a nitrile rubber gasket [part No. GR48B1].
- THV 45 & TRV 45: Mounting hole 7/16 inch / 11 mm size. Access to the inside of the tank is required for installation

The two-ball valves are open to atmosphere so vapour can collect inside the vehicle. All installations should be piped to the outside of the vehicle or connected to a charcoal canister. The best way for tarmac vehicles is to run the pipe to the top of the body and then down to a point just below the base of the tank. The valve should be positioned as close as possible to the rear of the tank so that under braking the fuel load will move towards the front of the tank and away from the valve. Please contact us for installation advice for vehicles designed to operate in terrain such as deserts and jungle.