



Eaton's Carter Model 64015 Ball Valve is designed to mate with various manufacturers' underwing refueling nozzles to provide ease of strainer inspection and to add a true swivel action to the combination unit. Model 64015 is available with a variety of options for customizing the unit to fit various requirements. In one form, the strainer can be checked without the spillage of any fuel. In its simplest form, fuel spillage caused by the checking of the strainer is minimal.

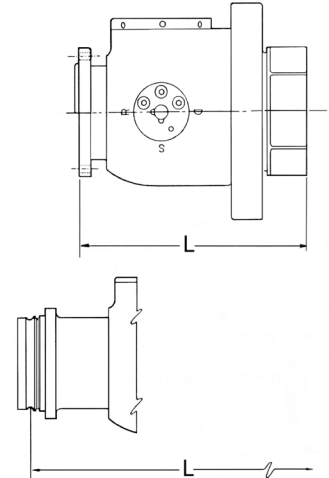
## Features

- Choice of inlets with 2 or 2½-inch NPT or BSPP threads available (3-inch NPT also available)
- Free-floating ball utilizes Teflon® downstream bearing and Viton® upstream seal
- Most replaceable spare parts are interchangeable with the similar parts from Warner Lewis Model 3510 ball valve
- Minimal weight difference over standard dry break
- No disconnect or dry break disconnect needed — no necessity to remove nozzle from hose
- Nozzle strainer can be inspected with minimum of spillage
- Option D allows for viewing strainer without any spillage
- Drag ring optional to protect operational features of ball valve and hose end control valve (Option E)

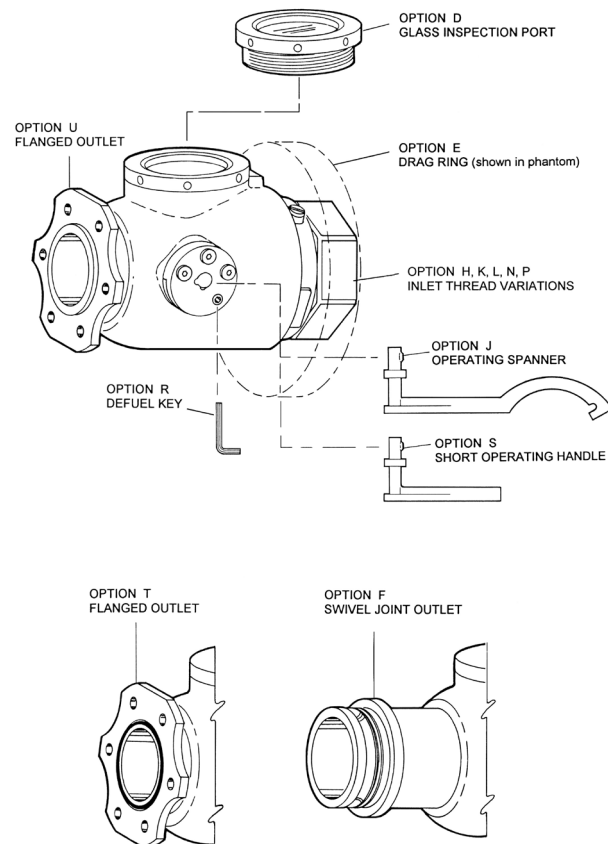
- Choice of two lengths of operating handles available to assure operational capability on all aircraft installations
- Flow direction of strainer can be reversed for convenient defueling operation — no disassembly required
- Defueling position locked out under normal situation. Separate operating handle cannot be removed in defueling position.
- True hose swivel located on inlet end of ball valve to facilitate location of inspection port for viewing strainer
- True hose swivel provided for nozzles that do not have true swivels
- Ball valves available to mate Eaton's commercial refueling nozzle models 60427, 61428 and 64348, all nozzles in accordance with MIL-N-5877 (D-1 or D-2), as well as all Whittaker and Avery Hardoll nozzles. Also available to mate Zenith nozzles upon special order.
- 40-, 60- or 100-mesh strainers available. Strainer is also common to Eaton nozzle models 61428 and 64348. Accommodates strainers made by Warner Lewis for Model 60427 Underwing Nozzle.
- Strainer retained by convenient "C" clip for easy removal
- Robust construction utilizing aluminum alloy with stainless steel trim
- Hose pressure testing can be done without removing nozzle or using a separate adapter

## Dimensional Data

Valve Option	Length "L" inches	(mm)
FH, FN, FP	8.71	(221.23)
FK	9.24	(234.70)
GH, GN, GP	9.48	(240.79)
H, N, P	7.50	(190.50)
HT, NT, PT	7.44	(188.98)
HU, NU, PU	7.54	(191.52)
KT	7.97	(202.44)
KU	8.07	(204.98)
L	8.03	(203.96)



## Options



The options shown at right may be added to the basic model number to achieve the desired configuration.

Option Letter	Description	Weight		Comments
		Ibs	(kg)	
A	Adds 40-mesh strainer	+0.05	(.023)	
B	Adds 60-mesh strainer	+0.05	(.023)	
C	Adds 100-mesh strainer	+0.05	(.023)	
D	Adds glass strainer inspection cover (47020-2)	+0.07	(.032)	Allows the inspection of the strainer with no spillage of fuel
E	Adds plastic drag ring protector	+0.88	(.399)	Recommended especially for hose reel mounted units
H*	Specifies 2½-inch NPT inlet	+1.12	(.508)	
J	Adds spanner wrench	+0.31	(.141)	Required to remove inspection lid (standard or option D). Also used to operate ball to inspection position
K*	Specifies 2½-inch BSPP inlet	+1.06	(.481)	
L*	Specifies 3-inch NPT inlet	+1.50	(.680)	
N*	Specifies 2-inch BSPP inlet	+1.30	(.590)	
P*	Specifies 2-inch NPT inlet	+1.32	(.599)	
R	Adds allen key to unlock defueling position stop	+0.00	(0.00)	Required only for use when defueling is necessary
S	Adds shortened operating handle	+0.38	(.017)	Used to operate ball valve only. Does not have spanner capability to remove inspection cover
* Option H, K, L, N, or P must be included to achieve a completed ball valve				

### Examples:

64015DEH	Ball Valve to mate Eaton Model 60427 Underwing Refueling Nozzle, Eaton Model 47013 Hose End Control Valve (HECV) or Avery Hardoll HU3000 nozzle. Includes a glass inspection port, drag ring and 2½-inch NPT inlet
64015EFJP	Ball Valve to mate Eaton Model 61428 or 61429 Underwing Refueling Nozzle with a drag ring and 2-inch inlet. Spanner wrench operating handle furnished as a loose piece.
64015DKS	Ball Valve to mate Whittaker nozzle models F116, F116N or F117. Includes a glass inspection port and 2½-inch BSPP inlet. Ball operating wrench (shortened) furnished as a loose piece.
64015HRU	Ball Valve to mate military style nozzles (D-1/D-2) with 2½-inch NPT inlet. Allen key for unlocking defueling stop provided as a loose piece.

## Mating Parts

Model 64015 Ball Valve is designed to be installed and function with Eaton's underwing refueling nozzles, as well as Whittaker or Avery Hardoll nozzles, as shown in the table (right). Units for installation on a Zenith nozzle may be obtained by special order. Use the table (right) to decide upon the correct ball valve to use.

Nozzle Mfr	Nozzle Model	Ball Valve — Comments
<b>Carter</b>	60427 — all	64015 — possible additional options — A-D, E, H, J, K, N, P, R, S
<b>Avery Hardoll</b>	HU3000/HU4000	
	61428 — with or without 44646 HECV	64015F — possible additional options — A-D, E, H, J, K, N, P, R, S
	61429/64349K — Option K	
	61429/64349 — all except Option K	64015U — possible additional options — A-D, E, H, J, K, N, P, R, S
<b>Carter</b>	64348 — without 47013 HECV	64015F — possible additional options — A-D, E, H, J, K, N, P, R, S
	64348 — with 47013 HECV	64015 — possible additional options — A-D, E, H, J, K, N, P, R, S
	6902	
	F116	64015U — possible additional options — A-D, E, H, J, K, N, P, R, S
<b>Whittaker</b>	F116/F116N/F117	64015T — possible additional options — A-D, E, H, J, K, N, P, R, S

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