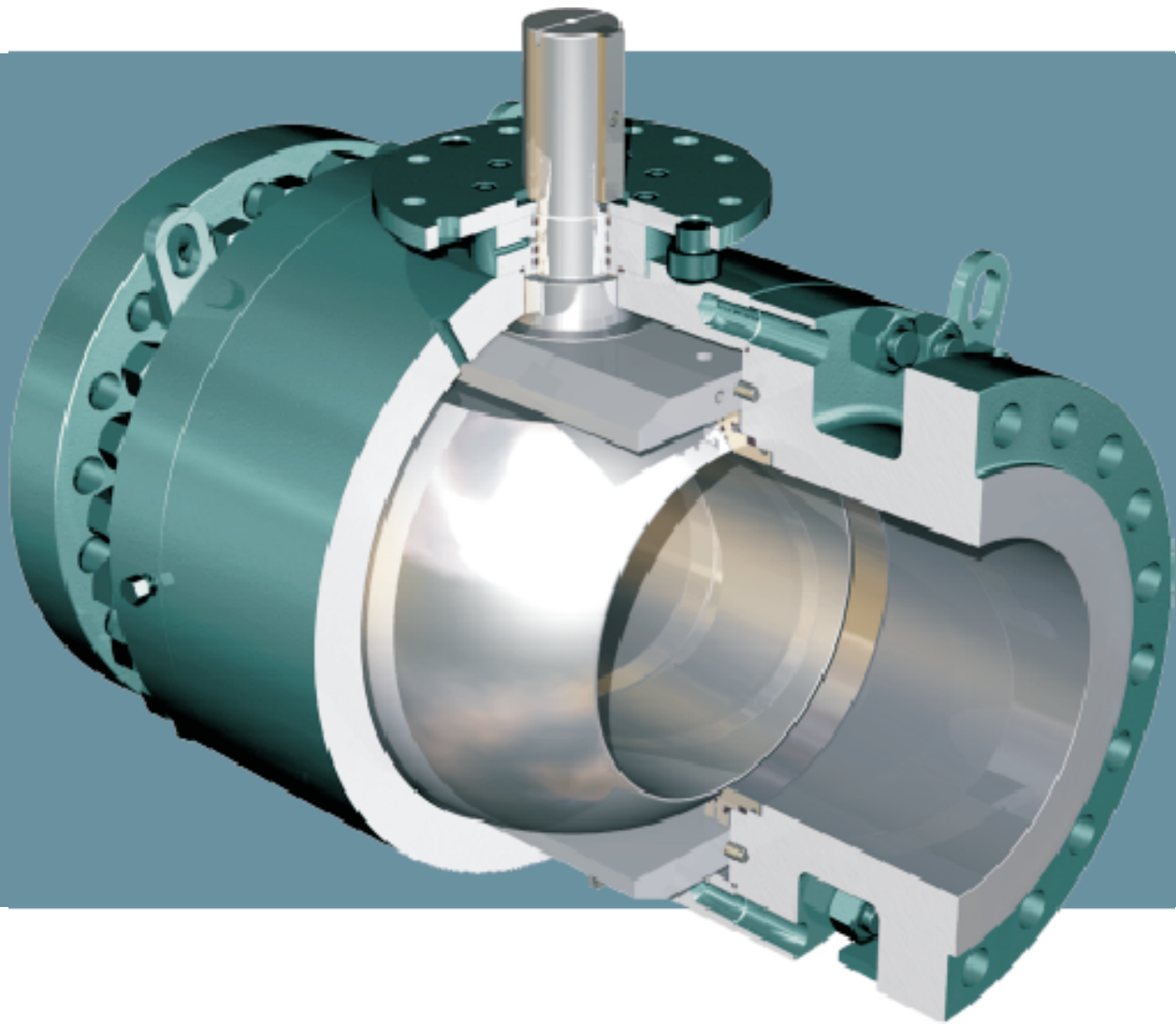


**WKM<sup>®</sup> DynaSeal<sup>®</sup> 370D5  
Trunnion Ball Valve  
20 in. and 24 in. (500 mm and 600 mm)  
ASME Classes 150, 300 and 600**



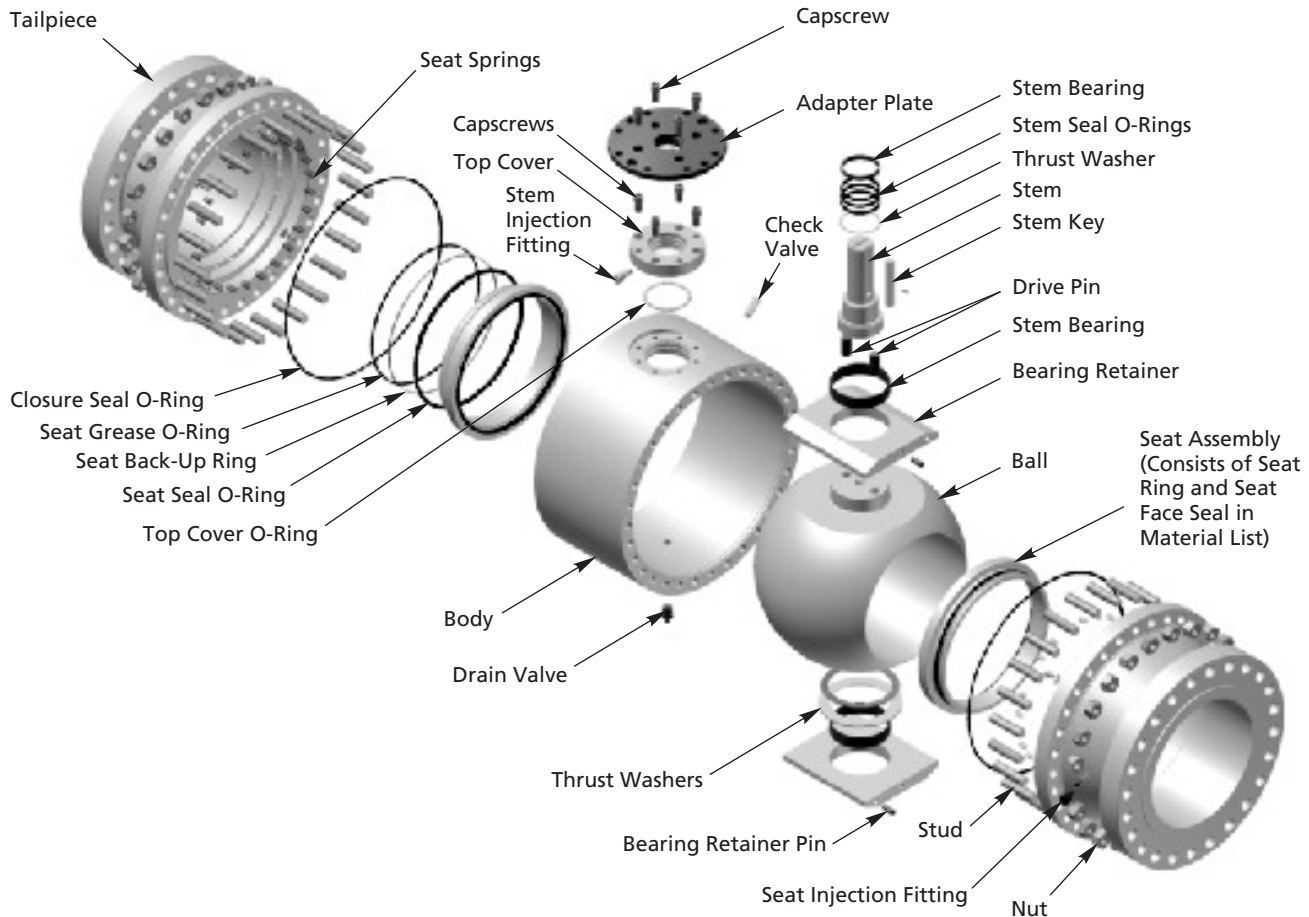


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ASME Classes 150, 300 and 600**

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## WKM DYNASEAL 370D5 TRUNNION BALL VALVE ASME CLASSES 150, 300 AND 600, 20 in. and 24 in. (500 mm and 600 mm)



### FEATURES AND SPECIFICATIONS

- Three-Piece Forged Construction
- Double-Block-and-Bleed
- Stem and Seat Injection
- Adapter Plate for Direct Mount Gear
- API 6D
- NACE MR0175/ISO 15156
- MSS-SP-6 (Standard Finishes for Pipe Flanges)
- MSS-SP-25 (Standard Marking System for Valves)
- Fire Test to API 6FA

In addition the WKM DynaSeal 370D5 Trunnion Ball Valve can be supplied to comply with these Standards:

- API 598 (Valve Inspection and Testing)
- MSS-SP-61 (Pressure Testing of Steel Valves)
- ASME B16.104 (Valve Seat Leakage)

### ASME PRESSURE CLASS

in.	SIZE		CLASS		
	mm		150	300	600
20	(500)		•	•	•
24	(600)		•	•	•

## WKM DYNASEAL 370D5 TRUNNION BALL VALVE ASME CLASSES 150, 300 AND 600, 20 in. and 24 in. (500 mm and 600 mm) MATERIALS LIST

### BODY GROUP TRIM NUMBER

PART	CARBON STEEL (NACE) 24
Body	A105
Tailpiece	A105
Support Legs (not shown)	Carbon Steel
Drain Valve	Stainless Steel
Check Valve	Stainless Steel
Plugs	Carbon Steel
Top Cover	A105
Adapter Plate	A105
Stem Key	Carbon Steel
Lifting Lug	Carbon steel
Anchor Pin	Carbon Steel
Studs	A193 Gr. B7M
Nuts	A194 Gr. 2HM
Capscrews	A193 Gr. B7M
Spacer	Stainless Steel

### INTERNAL GROUP TRIM NUMBER

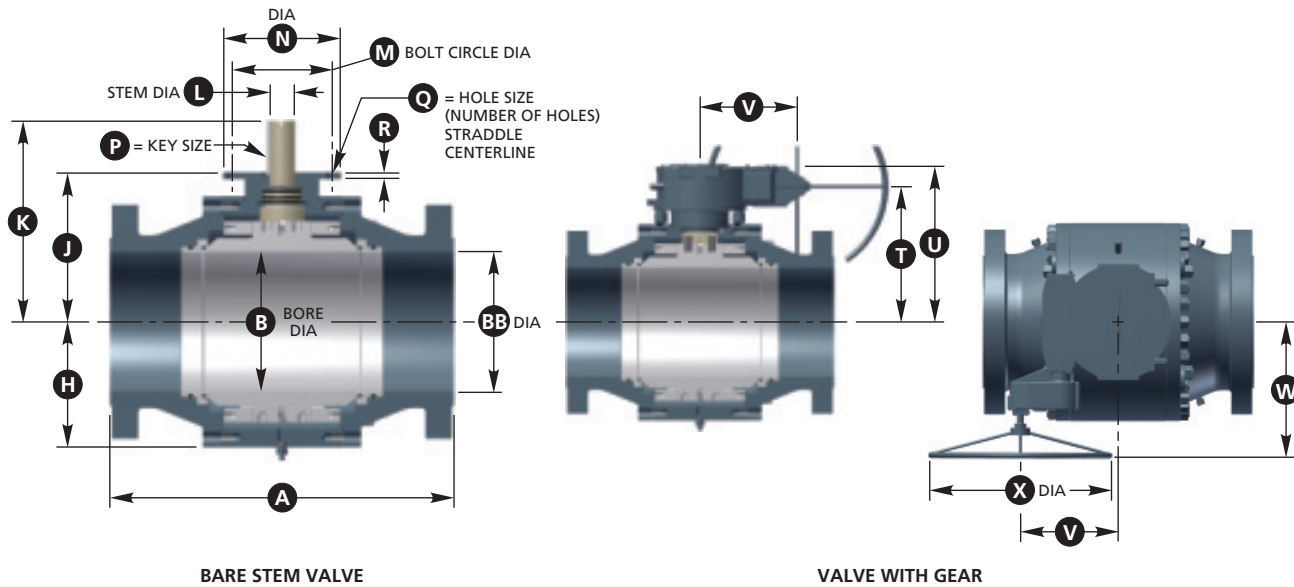
PART	CARBON STEEL (NACE) 24	STAINLESS STEEL (NACE) 23
Bearing Retainer	A516 Gr. 70	A516 Gr. 70
Bearings	SS/Filled PTFE	SS/Filled PTFE
Seat	4130/1 Mil ENP	316 SS
Seat Springs	X-750	X-750
Seat Stop Washer	A105	A105
Ball	A105/1 Mil ENP	CF8M
Stem	4130/1 Mil ENP	Type 630
Gland Bushing	4130/1 Mil ENP	4130/1 Mil ENP
Drive Pin	Type 630	Type 630
Bearing Retainer Pin	1040	1040
Ground Device	Stainless Steel	Stainless Steel

### SEAL GROUP TRIM CODE

PART	YRF	YRF
Temperature Limits	-20°F to 250°F	-20°F to 250°F
Face Seal	Nylon 6	Nylon 6
Thrust Washer	SS/Filled PTFE	SS/Filled PTFE
Stem O-Rings	HNBR	HNBR
Stem Back-Up Rings	Nylon 6	Nylon 6
Seat O-Rings	HNBR	HNBR
Seat Back-Up Rings	Nylon 6	Nylon 6
Body/Tailpiece O-Ring	HNBR	HNBR

NACE indicates compliance with NACE MR0175/ISO 15156.

## WKM DYNASEAL 370D5 TRUNNION BALL VALVE ASME CLASSES 150, 300 AND 600, 20 in. and 24 in. (500 mm and 600 mm)



### FULL PORT DIMENSIONS

#### ASME CLASS 150

Size in. (mm)	A		B	H	J	K	L	M	N	P	Q	R	T	U	V	W	X
	RF	RJ															
20 (250)	36 (914.4)	36.50 (927.1)	19.25 (488.9)	16.34 (415)	18.94 (481.1)	23.46 (595.9)	2.953 (74.93)	10.62 (269.7)	12.56 (319)	0.708 (17.98)	0.875-(8) -	0.91 (23.1)	23.31 (592)	24.84 (630.9)	11.52 (292.6)	22.40 (569)	23.62 (600)
24 (600)	42 (1066.8)	42.50 (1079.5)	23.25 (590.55)	19.72 (500.9)	22.5 (571.5)	29.45 (748)	3.543 (89.99)	14.17 (359.9)	16.14 (409.9)	0.875 (22.23)	1.062-(8) -	0.91 (23.1)	26.06 (661.9)	31.65 (803.9)	16.97 (431)	24.25 (616)	23.62 (600)

#### ASME CLASS 300

Size in. (mm)	A		B	H	J	K	L	M	N	P	Q	R	T	U	V	W	X
	RF	RJ															
20 (250)	39 (990.6)	39.75 (1009.7)	19.25 (488.9)	17 (431.8)	20.95 (532.1)	25.71 (653)	2.952 (75.0)	10.63 (270)	12.60 (320)	0.708 (18)	0.875-(8) -	0.91 (23.1)	22.95 (582.9)	26.50 (673.1)	10.35 (262.9)	22.46 (570.5)	23.62 (600)
24 (600)	45 (1143)	45.88 (1165.4)	23.25 (590.55)	20.16 (512.1)	23.23 (590)	30.29 (769.4)	3.543 (89.99)	14.17 (359.9)	16.14 (409.9)	0.875 (22.23)	1.062-(8) -	0.91 (23.1)	26.88 (682.8)	32.56 (827)	16.97 (431)	23.50 (596.9)	23.62 (600)

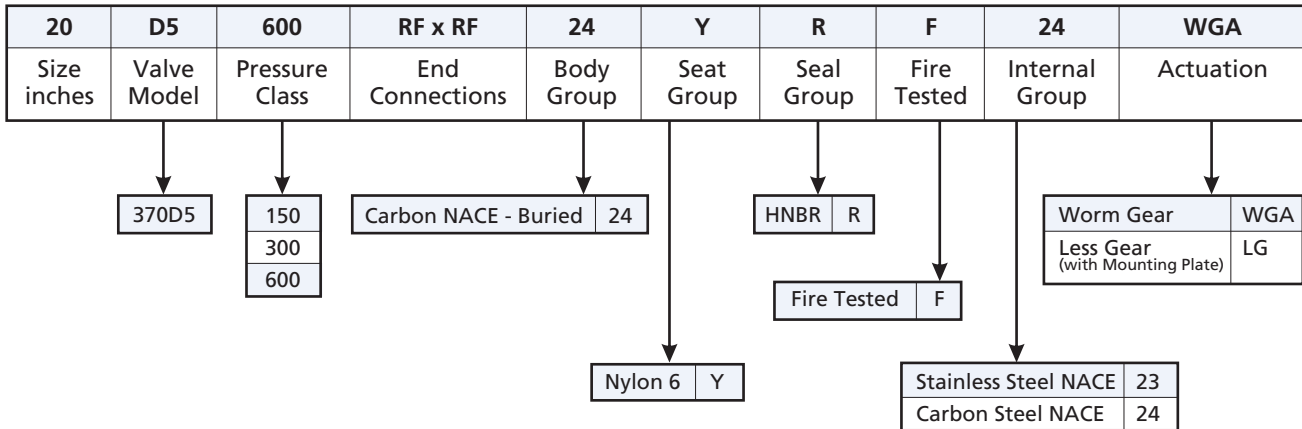
#### ASME CLASS 600

Size in. (mm)	A		B	H	J	K	L	M	N	P	Q	R	T	U	V	W	X
	RF	RJ															
20 (250)	47 (1193.8)	47.25 (1200.2)	19.25 (488.9)	17.20 (436.9)	20.45 (519.4)	27.46 (697.5)	3.543 (89.99)	14.17 (359.9)	16.14 (409.9)	0.875 (22.23)	1.062-(8) -	0.91 (23.1)	23.75 (603.3)	29.67 (753.7)	17.05 (433.1)	20.35 (516.9)	23.62 (600)
24 (600)	55 (1397)	55.38 (1406.7)	23.25 (590.55)	20.20 (513.1)	23.64 (600.5)	31.69 (804.9)	4.724 (120)	16.54 (420.1)	18.90 (480.1)	1.25 (31.8)	1.188-(8) -	1.10 (27.9)	27.41 (696.2)	32.93 (836.4)	16.97 (431)	23.50 (596.9)	23.62 (600)

# WKM DYNASEAL 370D5 TRUNNION BALL VALVE

## HOW TO ORDER

### 370D5



## TRIM APPLICATION INFORMATION

The chart above identifies in general terms each of the standard WKM trims.

- Valves ordered with Worm Gears (WGA) are shipped with gears installed, but Handwheels are not installed (shipped separately)
- Valves ordered Less Gear (LG) with Gear Mounting Plate installed (for actuation by others)

Please contact factory personnel for information concerning availability of trims other than those listed or for any additional information concerning the choice or guidance for application of the trims listed.

NACE MR0175/ISO 15156 Compliance - Materials of construction shall be in compliance with the pre-qualified material requirements specified by NACE MR0175/ISO 15156. According to NACE MR0175/ISO 15156, it is the manufacturer's responsibility for meeting metallurgical requirements and the customer/user responsibility to ensure that a material will be satisfactory in the intended environment. When given the application requirements (environment) by the customer/user, Cameron can make technical recommendations in accordance with NACE MR0175/ISO 15156 but in no way certifies or warrants the product or materials for the application.

## WKM DYNASEAL 370D5 TRUNNION BALL VALVE ASME CLASSES 150, 300 AND 600

### WEIGHTS lb. (kg) - VALVE ONLY - BARE STEM

VALVE PORT SIZE in. (mm)	VALVE PRESSURE CLASS		
	150	300	600
20 (500)	4850 (2200)	5090 (2309)	6340 (2876)
24 (600)	7200 (3266)	7560 (3429)	9430 (4277)

### WEIGHTS lb. (kg) - WORM GEAR ACTUATOR ONLY

VALVE PORT SIZE in. (mm)	VALVE PRESSURE CLASS		
	150	300	600
20 (500)	154 (70)	496 (225)	496 (225)
24 (600)	496 (225)	496 (225)	496 (225)

### FLOW CHARACTERISTICS (C<sub>v</sub>)\*

VALVE PORT SIZE in. (mm)	VALVE PRESSURE CLASS		
	150	300	600
20 x 20 (500 x 500)	67597	64664	58226
24 x 24 (600 x 600)	106055	100830	95605

\* Flow of water in U.S. gal/min/1 psi pressure drop across a fully open valve.

## WKM DYNASEAL 370D5 TRUNNION BALL VALVE ASME CLASSES 150 THROUGH 600# MOP

### BALL VALVE TORQUE CHART

VALVE PORT SIZE in. (mm)	PRESSURE (P) (psig)	TORQUE EXPRESSIONS		BREAK TORQUE @ MAX. P (in-lbs)	RUN TORQUE @ MAX. P (in-lbs)	RESEAT TORQUE @ MAX. P (in-lbs)
		BREAK TORQUE (in-lbs)	RUN TORQUE (in-lbs)			
20 (500)	0 - 285	29650 + (49.95 x P)	19201 + (22.4 x P)	41004	25585	32803
	286 - 740	29650 + (49.95 x P)	19201 + (22.4 x P)	66564	35777	53251
	741 - 1480	29650 + (49.95 x P)	19201 + (22.4 x P)	104184	52353	83347
24 (600)	0-285	50282 + (65.52 x P)	25613 + (38.5 x P)	67956	36586	54365
	286-740	50282 + (65.52 x P)	25613 + (38.5 x P)	100404	54103	80323
	741-1480	50282 + (65.52 x P)	25613 + (38.5 x P)	148224	82593	118579

The above values are new valve torque values, where **P** is the maximum operating pressure (psig) of the valve.

The above torque values do not contain service factors.

Soaking effects and/or particle matter in the valve may cause an increase in the torque.

For intermediate pressure use the torque expressions for the stated pressure range.

For example, an intermediate pressure of 1000 psig uses the torque equations that correspond to the 751-1500 psig pressure range.

The reseal torque is taken as **0.75** times the break torque.

For power operation, multiply all of the above values by a factor of **1.25** or customer specified factor whichever is larger.

For operating temperatures between -20°F to -50°F multiply these values by **1.20**.

Actuator selection should be made on customer experience and appropriate service factors.



## TRADEMARK INFORMATION

WKM® is a registered trademark which is owned by Cameron.

This document contains references to registered trademarks or product designations, which are not owned by Cameron.

<b>Trademark</b>	<b>Owner</b>	<b>Common Name</b>	<b>Comparable Cameron Abbreviated Name (in Trim Charts)</b>
AFLAS	Asahi Glass Company	TFE Propylene	FXM
DEVLON	Devol Engineering Limited		
PEEK	Victrix PLC Corp United Kingdom	Polyetheretherketone	PK
TEFLON	E.I. DuPont De Nemours & Company	Poly Tetra Fluoro Ethylene	PTFE
VITON	E.I. DuPont De Nemours & Company	Fluoroelastomer	FKM
17-4PH	Armco Advanced Materials Corp.	17-4PH Stainless Steel	Type 630
		Electroless Nickel Plating	ENP





**VALVES & MEASUREMENT**

3250 Briarpark Drive, Suite 300  
Houston, Texas 77042  
USA Toll Free 800 323 9160

For the most current contact and location information go to: [www.c-a-m.com/valvesandmeasurement](http://www.c-a-m.com/valvesandmeasurement)