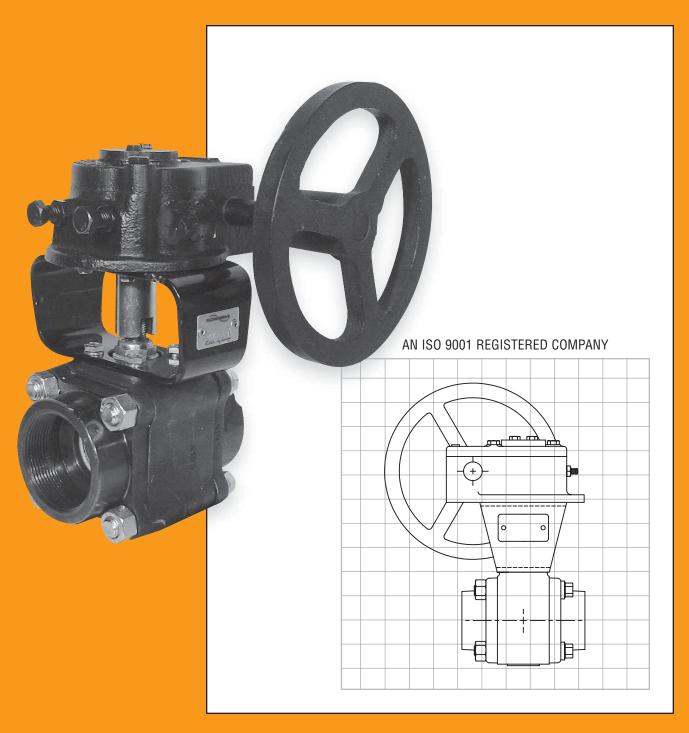


FCD WCABR1005-00 (Part PB 32)



**Series 32 Gear Operator** For Smooth, Easy, Manual Operation of Ball Valves



## The Series 32 Gear Operator for Low-Cost, Manual Operation of Ball Valves

Flowserve Worcester Controls makes manual valve operation easy with our Series 32 Operator. Designed especially for Worcester Controls ball valves, the Series 32 allows slow-opening and precise manual positioning at low cost. Available sizes: B-32, C-32, D-32, 30-32, E-32. Consult Worcester Controls for dimensions of E-32.

#### **Slow-Opening**

The slow-opening feature is critical in applications where piping systems are susceptible to water-hammer. Liquids or gases cause damage if they start down the pipeline with too high a momentum, such as in steam system applications.

#### **Precise Manual Positioning**

A high gearing ratio results in precise valve positioning. This is useful in applications where a process "over shoot" can cause violent reactions.

#### **Infinite Number of Position Settings**

The Series 32 can also be set in an infinite number of positions from  $0^{\circ}$ - $90^{\circ}$ , full open to full closed. It will maintain the selected position even under the most difficult of flow conditions until another manual change is needed, which makes the Series 32 useful in blending operations.

#### **Position Indicator, Adjustable Stops**

An integral indicator gives position status. Adjustable stops assure precise valve travel limits.

#### Compact, Lightweight and Versatile

The Series 32 Gear Operators feature a small, compact design. Built to last, the cast-iron housing is ideal for all applications which require a rugged operator housing.

#### Female-Output Shaft

The B-32 has a female output shaft and uses Worcester's standard valve mounting kits. The universally used female output allows adaptation to all types of small quarter-turn valves.

## **Specifications**

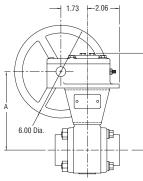
Materials	. Carbon Steel gearing and cast-iron housing	Gear Ratio	C-32	24/1 30/1	6 7.5
Weight	C-32, 15 lbs. D-32, 15 lbs.	<b>BØ</b> = 1111 Å 11 m	D-32 30-32 E-32	44/1	7.5 7.5 11
Torque	30-32, 15 lbs. E-32, 56 lbs. . B-32, 1,500 in/lb C-32, 8,000 in/lb D-32, 8,000 in/lb	Mounting	B-32 and 30-32 use standard Worcester Controls mounting kits. Refer to Mounting Kit Selection Manual, WCASS0017. C-32, D-32 and E-32 are provided with their own mounting kit.		
	30-32, 8,000 in/lb E-32, 20,000 in/lb	Finish	. Black E	Enamel	

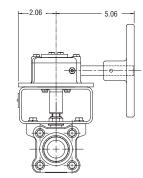


**Flow Control** 

Worcester Controls

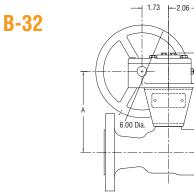
# Dimensions inches (mm)





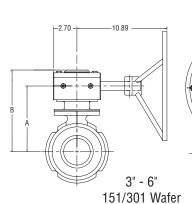
1/4" - 2" Three-piece (1/4" - 1" 44 shown)

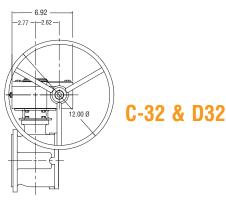
Three-Piece				
Valve	Size			
44	59	А	В	
1/4", 3/8",1/2"	1⁄4," 3/8"	4.00 (101.60)	5.19 (131.83)	
3⁄4"	1⁄2"	4.10 (104.14)	5.29 (134.37)	
1"	3⁄4"	4.33 (109.98)	5.52 (140.21)	
11⁄4"	1"	4.52 (114.81)	5.71 (145.03)	
1½"	1¼"	5.29 (134.37)	6.48 (164.59)	
2"	1½"	5.48 (139.19)	6.67 (169.42)	

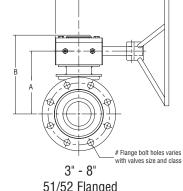


1/4" - 2" 51/52 Flanged

51/52 Flanged				
Valve Size	А	В		
1⁄2"	4.00	5.19		
/2	(101.60)	(131.83)		
3⁄4"	4.10	5.29		
74	(104.14)	(134.37)		
1"	4.33	5.52		
1	(109.98)	(140.21)		
1½"	5.29	6.48		
1 /2	(134.37)	(164.59)		
2"	5.48	6.67		
2	(139.19)	(169.42)		







-2.70

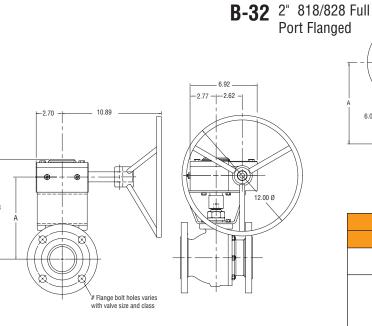
10.89

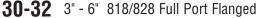
51/52	Flanged

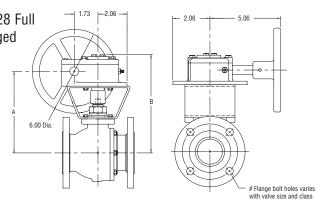
151/301 Wafer			51/52 Flanged		
Valve Size/Gear Op.	А	В	Valve Size/Gear Op.	А	В
3" / C32	6.83 (173.48)	8.41 (213.61)	3" / C32	6.83 (173.48)	8.41 (213.61)
4" / C32	7.43 (188.72)	9.01 (228.85)	4" / C32	7.43 (188.72)	9.01 (228.85)
6" / D32	9.39 (238.51)	10.97 (278.64)	6" / D32	9.39 (238.51)	10.97 (278.64)
		_	8" / D32	10.48 (266.19)	12.06 (306.32)



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818/828 Full Port Flanged				
Valve Size		A	В	
2"	818/828	8.25 (209.55)	9.44 (239.78)	
3"	818	10.69 (271.53)	12.27 (311.66)	
	828	10.73 (272.54)	12.31 (312.67)	
41	818	11.55 (293.37)	13.13 (333.50)	
4"	828	12.61 (320.29)	14.19 (360.43)	
6"	818	13.99 (355.35)	15.57 (395.48)	

### How to Order

Gear Operator Ordering Code	Valve Size	Valve Series	Mounting Kit
B-32	1⁄4" - 21⁄2"		Requires separate
30-32	3" - 6" 818 Series 3" - 4" 828 Series	See Mounting Kit Selection Manual	mounting kit
C-32	3" - 4"	Fits 3" and 4" C4, 45, 151/301, 51/52, 82/83 and 3" 59	Mounting kit included
D-32	4" - 8"	Fits 6" and 8" 51/52, 6" C4, 45, 151/301, 82/83, and 4" 59	Mounting kit included
E-32	8" - 10"	Fits 8" and 10" 82/83 and 10" 51/52	Mounting kit included

Note: For valve dimensions, refer to individual valve brochures.

Example 1: For a 1<sup>\*</sup> Series 44 Mizer Ball Valve, order a B-32 gear operator with No. 537 Mounting Kit (see mounting kit selection manual). Example 2: For an 8<sup>\*</sup> Series 51 Flanged Ball Valve, order a D-32 gear operator. The mounting kit is included.

Order Code for Mounting Kit (B-32 or 30-32 only) MK \_ \_ \_ three digit code found in mounting kit selection manual.

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can (and often does) provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Operation Maintenance (IOM) instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

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For more information about Flowserve Corporation, visit www.flowserve.com or call USA 1 800 225 6989.

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