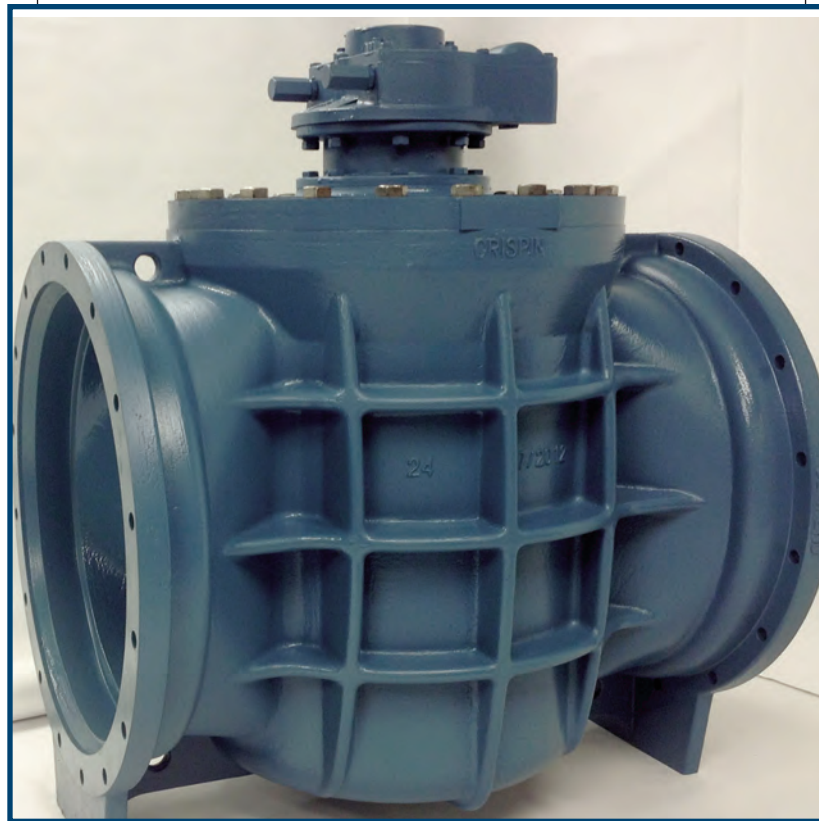
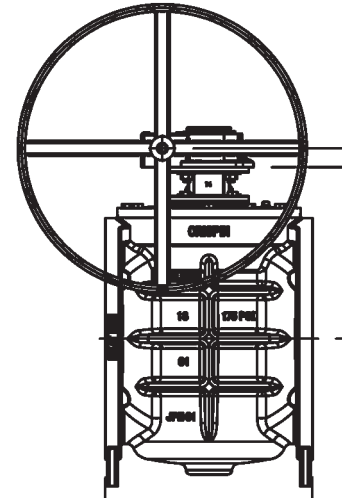
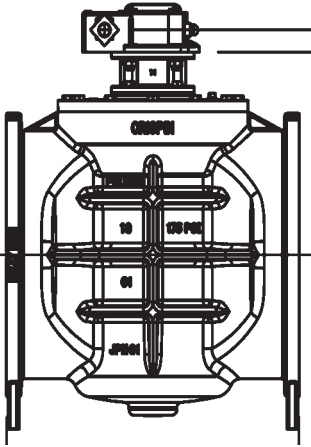


# Crispin

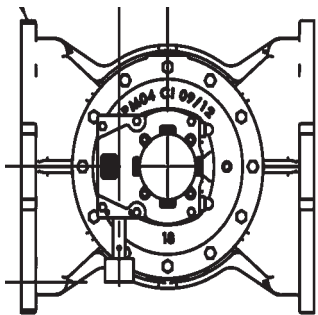
## K-FLO VALVES

**SERIES 700 100% PORT  
PLUG VALVES**

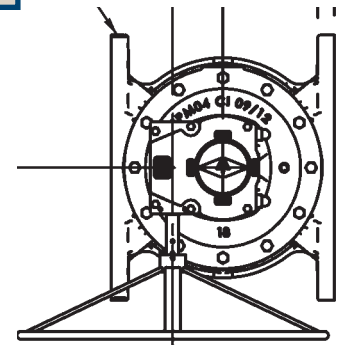


**VALVES FROM 14" THRU 48"**

# Crispin



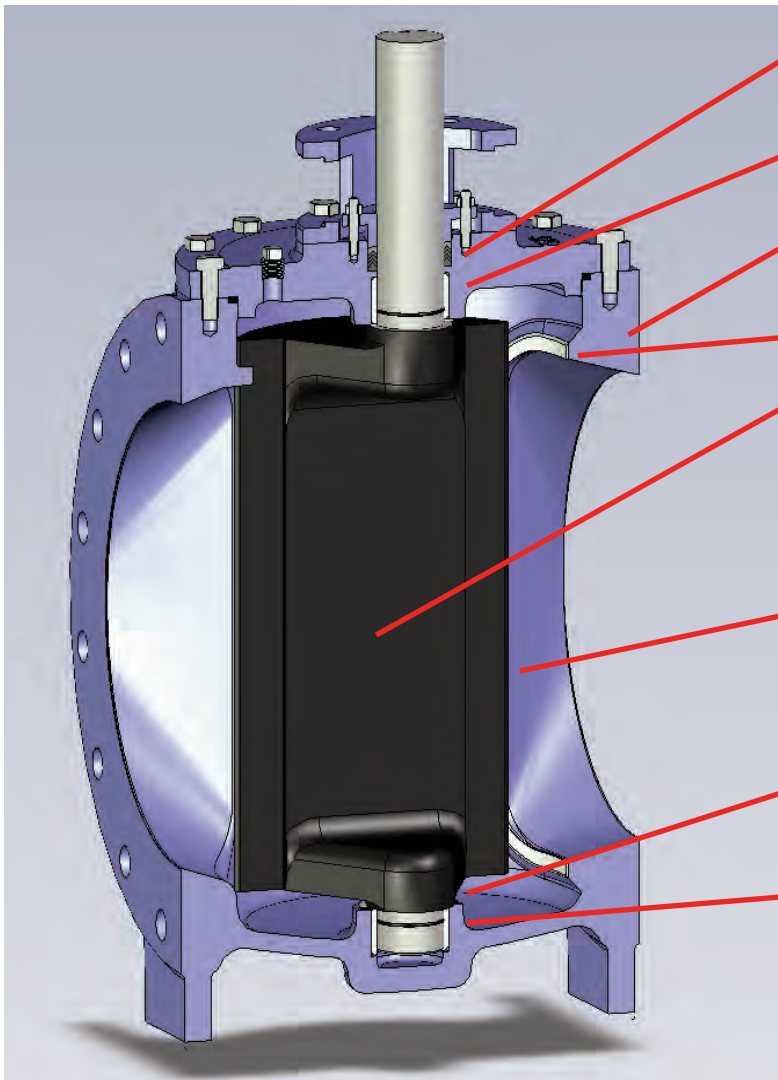
PO Box 411  
Berwick PA 18603



800-247-VALV  
[www.crispinvalve.com](http://www.crispinvalve.com)

# 700 SERIES Plug Valve Sizes 14"-48"

**C**rispin/K-Flo Series 700 is a rectangular 100% ported Eccentric Plug valve compliant to AWWA C517. Commonly used in Wastewater and arduous installations such as mining--where the pumped media can contain fouling or abrasive solids--the Eccentric Plug Valve is a simple yet critical choice for the maintenance minded end-user. *Crispin/K-Flo 700 Series gives the user 100% Full Ported performance* while incorporating many of the key features customers have identified as critical to long-term Plug Valve function. Similar to our 900 Series reduced port unit, The 700 offers as standard Top and Bottom Grit Seals, Adjustable Packing, and Stainless Steel Fasteners standard. Available in both Flanged and Mechanical Joint End versions and fully pigable.



**Adjustable Packing**--Allows for maintenance and replacement of the packing without the removal of the actuator from the valve.

**Bearings**--Stainless Steel T316, Sintered for increased lubricity and hardness

**Body**--ASTM A126 Class B Cast Iron Standard. ANSI B16.1 Class 125 Flanged or AWWA C111 Mechanical Joint ends are available. Ductile Iron Option available.

**Seat**--Welded 99% nickel seat.

**Plug**--ASTM A-536-Grade 65-45-12 Ductile Iron Standard. Fully molded with Buna-N rubber, leaving no plug surface, either front or back, that is exposed to the media. The Shaft and Plug are also one integral casting, adding strength by removing any potential shear points as in other valve designs.

**100% Full Rectangular Port**--The 100% port design is a proven design standard that provides the lowest full open Head Loss values in the industry.

**Thrust Washers**--Upper and Lower reduce wear and provide secondary protection from media along with the primary Top and Bottom Grit Seals.

**Grit Seals**--Provided Top and Bottom as standard, grit seals provide frontline sealing defense against abrasive media, thus extending both packing and bearing life.

\* Class 250 valves are available. Please contact the factory.

## MATERIALS

### SIZES

14"-48" in AWWA Class 150, 250 (meets AWWA C517)

### BODY

Cast Iron (ASTM A126, Class B)  
Optional Ductile Iron (ATM A536, Grade 65-45-12)

### SEAT

99% Welded Nickel

### PORT

100% Full Rectangular Port, 14" Thru 48"

### PLUG

Ductile Iron (ASTM A536, Grade 65-45-12)  
Fully Molded Buna-N; EPDM Optional

### BEARINGS

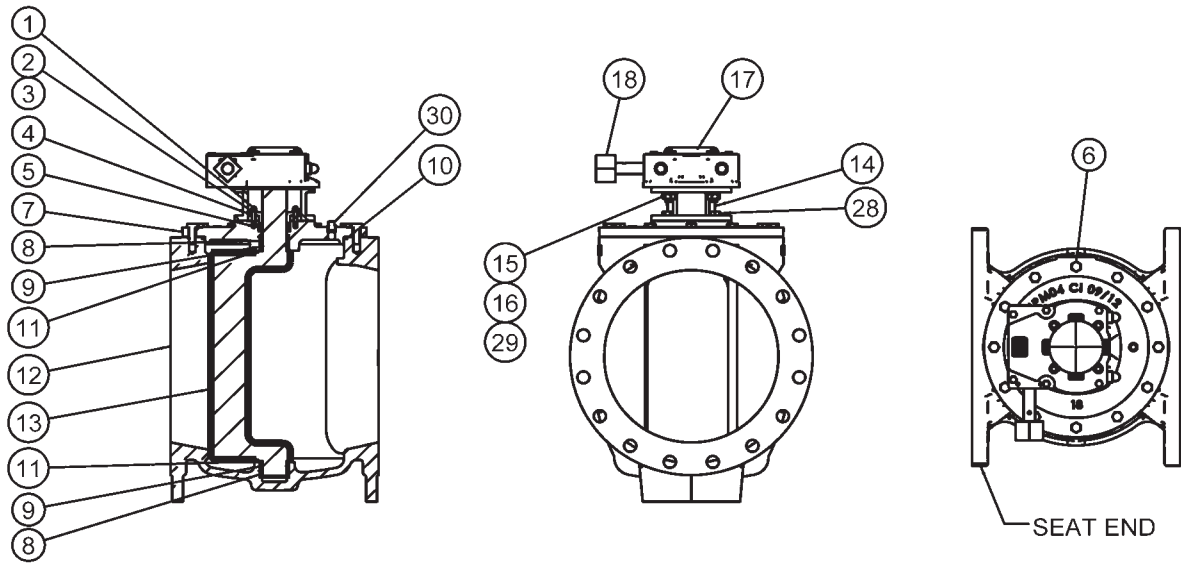
ASTM A276, Grade 316 Stainless Steel

### BOLTS AND NUTS

304 Stainless Steel Standard

# 700 SERIES MATERIAL LIST

14" to 24", 212F Max Temp., 150 psi Max Press, Bi-Directional



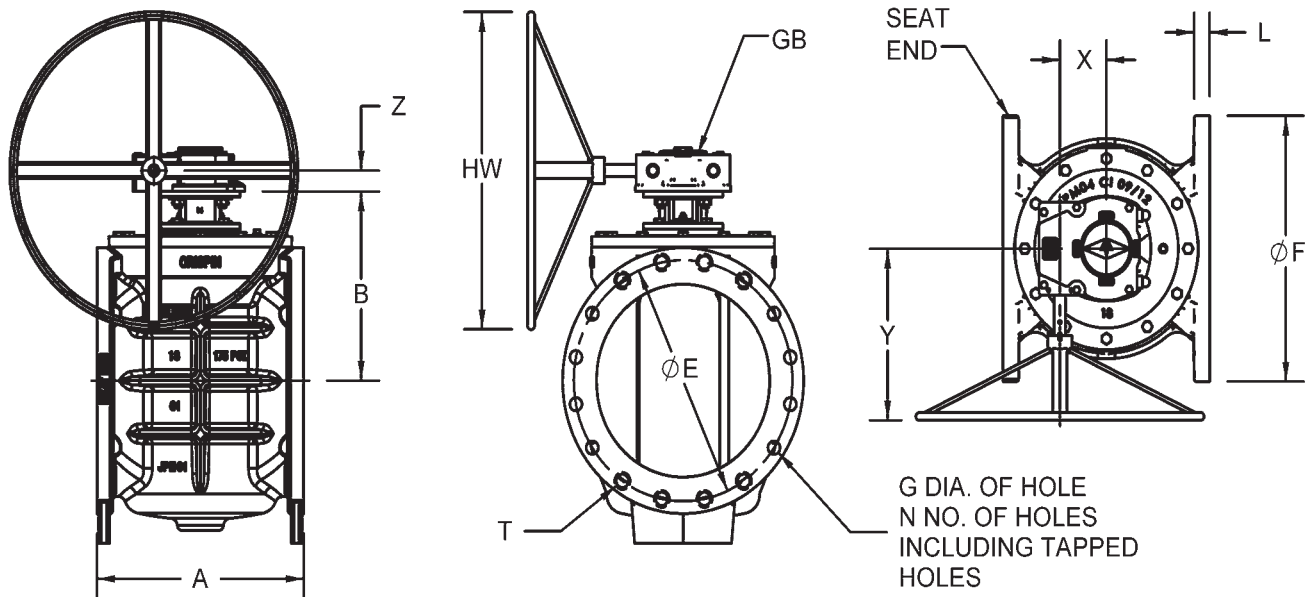
ITEM	DESCRIPTION	MATERIAL			
			11	THRUST WASHER	PTFE
01	GLAND STUD	STAINLESS STEEL	12	BODY	ASTM A126 CL.B
02	HEX NUT	STAINLESS STEEL	13	PLUG MOLDED	A536 GR.65-45-12+NBR
03	FLAT WASHER	STAINLESS STEEL	14	GEARBOX ADAPTER	ASTM A126 CL.B
04	GLAND	ASTM A126 CL.B	15	LOCK WASHER	STAINLESS STEEL
05	V-RING SET	NBR	16	HEX NUT	STAINLESS STEEL
06	HEX HEAD CAPSCREW	STAINLESS STEEL	17	MASTERGEAR WG	PURCHASED
07	COVER	ASTM A126 CL.B	18	2" AWWA NUT	CARBON STEEL
08	BEARING	SST, SINTERED	28	HEX HEAD CAPSCREW	STAINLESS STEEL
09	O-RING	NBR	29	STUD	STAINLESS STEEL
10	O-RING	NBR	30	PIPE PLUG	STAINLESS STEEL

## 700 SERIES (100% PORT) VALVE WEIGHTS

Size	14	16	18	20	24	30	36	42	48
Lbs.	765	989	1,295	1,602	2,640	5,204	8,968	Consult Factory	

# 700 SERIES Dimensional Data (100% Port)

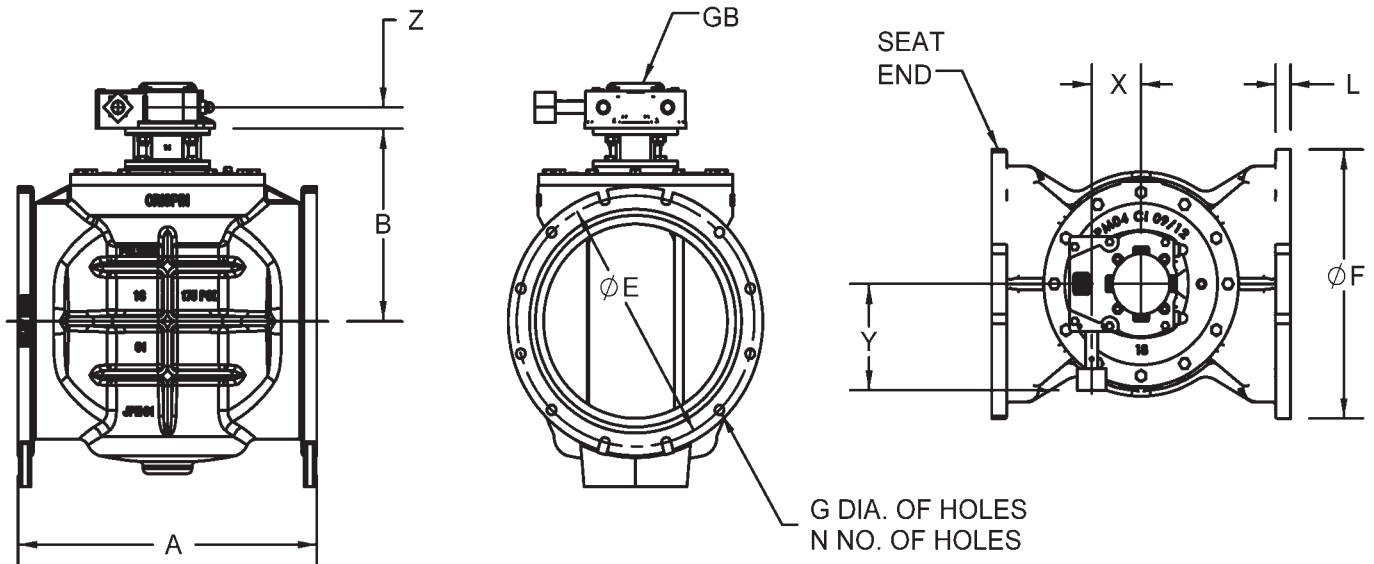
K-FLO Model 704 (FL x FL w/ Hand Wheel)



VALVE SIZE	A	B	E	F	G	N	L	T	GB	HW	X	Y	Z
14"	17.00	17.00	18.75	21.00	1.13	12	1.37	4X 1.000"-8	M15	24	4.84	14.27	1.97
16"	17.75	17.85	21.25	23.50	1.13	16	1.44	8X 1.000"-8	M15	36	4.84	15.77	1.97
18"	21.50	19.11	22.75	25.00	1.26	16	1.56	8X 1.125"-7	M15	36	4.84	16.77	1.97
20"	23.50	20.46	25.00	27.50	1.26	20	1.69	8X 1.125"-7	M15	30	3.54	19.34	2.36
24"	42.00	29.50	29.50	32.00	1.38	20	1.88	NA	M20	30	4.20	18.53	3.35
30"	51.00	27.65	36.00	38.75	1.38	38	2.25	NA	M30	36	4.20	20.89	3.35
36"	60.00	32.19	42.00	46.00	1.63	32	2.50	NA	M50	24	4.91	24.82	5.35
	Please Consult Factory												
42"													
48"													

# 700 SERIES Dimensional Data (100% Port)

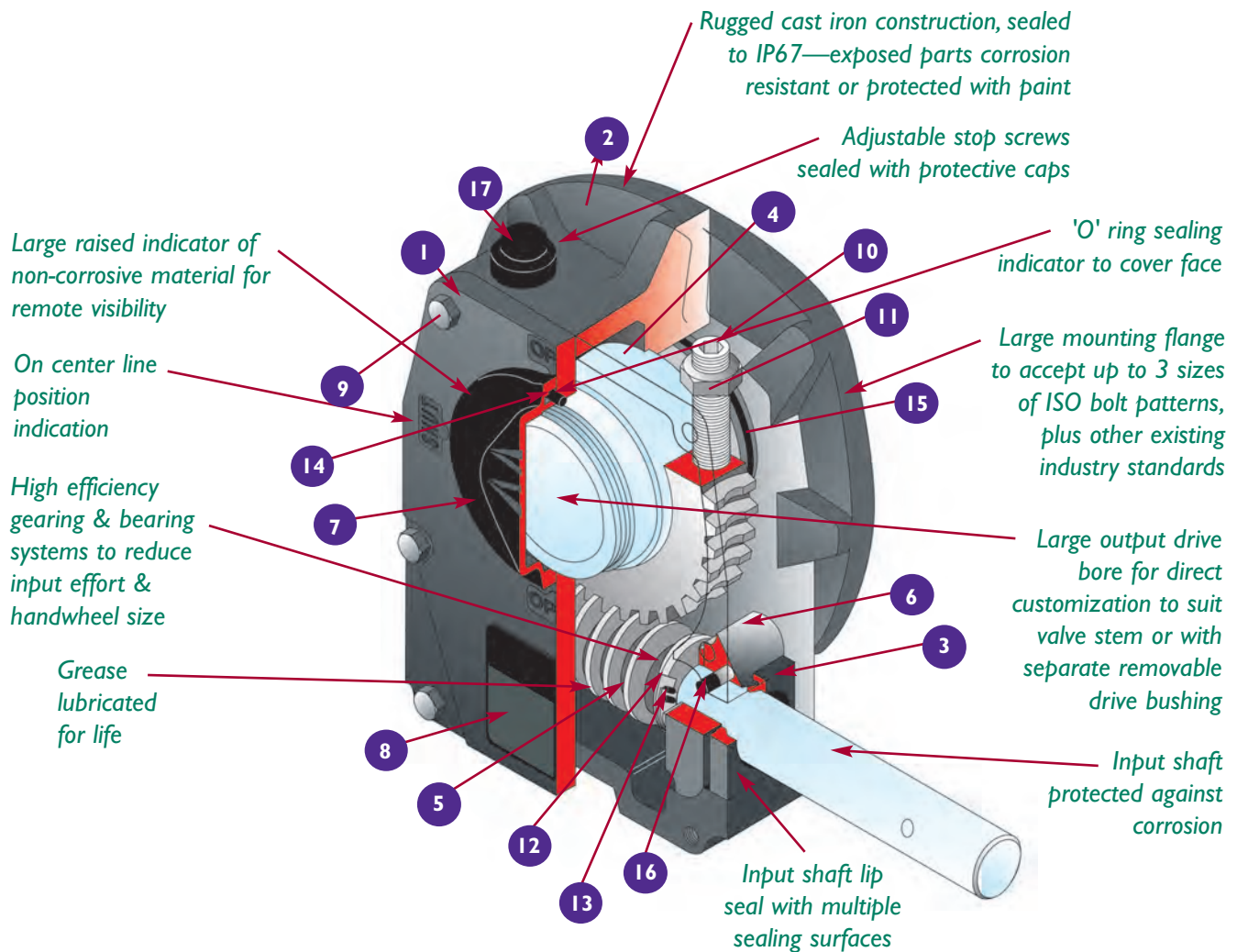
K-FLO Model 706 (MJ x MJ w/ 2" Operating Nut)



VALVE SIZE	A	B	E	F	G	N	L	GB	X	Y	Z
14"	24.50	17.00	18.75	20.28	0.87	10	1.31	M15	4.84	9.84	1.97
16"	27.25	17.85	20.00	22.56	0.87	12	1.37	M15	4.84	9.84	1.97
18"	29.25	19.00	23.25	24.84	0.87	12	1.44	M15	4.84	9.84	1.97
20"	30.00	20.46	25.50	27.08	0.87	14	1.50	M15	3.54	12.91	2.36
24"	42.00	24.50	30.00	31.58	0.87	16	1.62	M20	4.20	14.27	3.35
30"	51.00	27.65	36.88	39.12	1.13	20	1.81	M30	4.20	14.27	3.35
36"	60.00	32.18	43.25	46.00	1.13	24	2.00	M50	4.91	20.57	5.35
42"	Please Consult Factory										
48"	Please Consult Factory										

Please contact the factory for additional information.

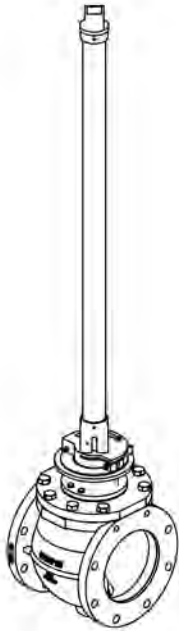
# 700 SERIES Worm Gear Data



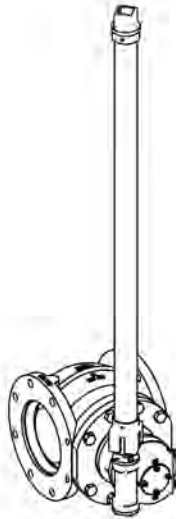
Item	Component	Material Description	Material Specification
1	<b>Cover</b>	Grey cast iron	BS1452 Grade 260
2	<b>Gearcase</b>	Grey cast iron	BS1452 Grade 260
3	<b>Wormshaft Oilseal</b>	Injection Moulded Plastic	Hytrel 5526
4	<b>Quadrant</b>	Ductile Iron	BS2789 Grade 500/7
5	<b>Wormshaft</b>	Nitempered Steel	BS970 606M36
6	<b>Wormshaft Bearings</b>	Sintered Iron Copper	FC02540
7	<b>Indicator Cap</b>	Injection Moulded Plastic	Acetal Kematal WR90
8	<b>Nameplate</b>	Self-adhesive Aluminum	Grey on Bright Background
9	<b>Cover Screws</b>	Hex. Head Set Screws	BS3692 Grade 8.8
10	<b>Stopscrews</b>	Socket Set Screws	BS4168 Part 2
11	<b>Locknut</b>	Hex. Locknut	BS3692
12	<b>Bearing Thrust Washers</b>	Needle Thrust Washer	Type AS
13	<b>Thrust Bearings</b>	Needle Thrust Bearing	Type AXK
14	<b>Indicator O-ring</b>	Medium Nitrile	60-80 Shore Hardness
15	<b>Quadrant O-ring</b>	Medium Nitrile	60-80 Shore Hardness
16	<b>Dowels</b>	Hardened & Ground Steel	BS7055 Type A
17	<b>Locknut Protection Caps</b>	Injection Moulded Plastic	Low Density Polyethylene

# ACTUATION OPTIONS & EXTENSIONS

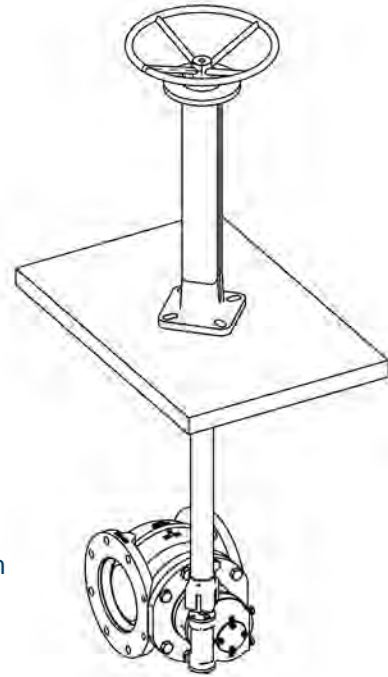
Crispin/K-Flo Series 700 Eccentric Plug valves can be mounted with any configuration of manual, electric, pneumatic, or specialized actuating device that your application may require. Crispin's highly skilled assembly personnel work closely with all major EMO and Gear manufacturers and are trained to mount, adjust, and test all types of actuation. Please contact the factory to discuss all your valve actuation needs.



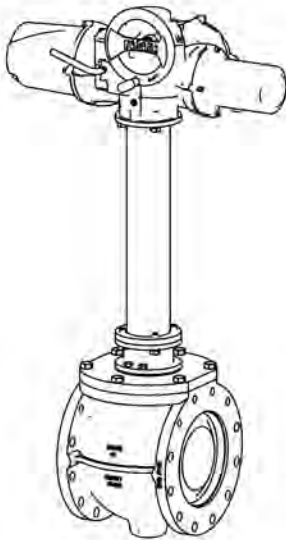
2" Drive Nut w/ Extension Stem



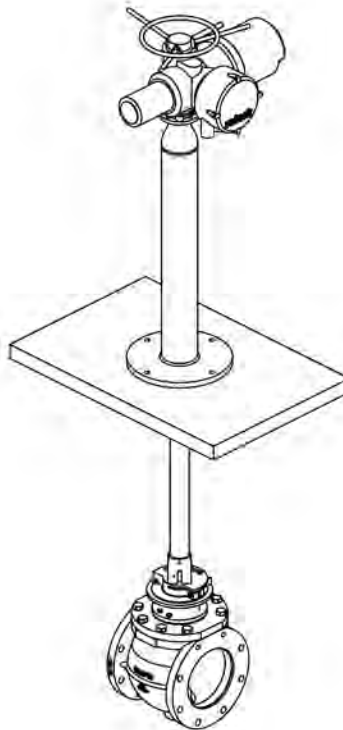
Worm Gear w/ Extension Stem



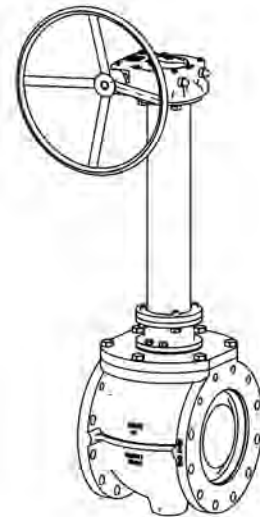
Worm Gear w/ Extension Stem & Indicating Floor Stand



EMO w/ Extended Bonnet



EMO w/ Extension Stem & Non-Indicating Floor Stand



Worm Gear w/ Extended Bonnet

# CRISPIN/K-FLO SERIES 700 SPECIFICATIONS

Plug Valves shall be of the non-lubricated eccentric type with an elastomer covering the entire Plug seating surfaces, both front and back. The elastomer shall be chosen for the service intended.

Flanged valves shall be manufactured in accordance with ANSI B16.1 Class 125/150 including facing, drilling and flange thickness. Mechanical joint ends shall be in compliance with AWWA/ANSI C-111-92.

Ports shall be round on sizes 2½"-12" (Series 800) and rectangular 100% full port area design on valves 14" and larger. All valves shall be capable of being "pigged" with a soft pig when required. Valve bodies shall be of ASTM A-126 Class B cast iron in accordance with AWWA C-517.

Valves 3" and larger shall be furnished with a welded-in overlay seat of 1/8" thick of not less than 99% nickel in accordance with AWWA C-517-09, Section 4.3.3.4. Sprayed, plated or screwed-in seats are not acceptable. Plugs shall be of ASTM A-536-Grade 65-45-12 for sizes 20" and smaller, and ASTM A126 Class B Cast Iron for sizes 24" and larger in compliance with AWWA C-517.

The plugs shall be of one piece solid construction with PTFE thrust bearings on the upper and lower bearing journals to reduce torque and prevent dirt and grit from entering the bearing and seal area. Valves shall be furnished with replaceable Stainless Steel, sintered sleeve type bearings conforming to AWWA C-517. Bearings shall be of sintered, oil impregnated type 316 stainless steel ASTM A-743 Grade CF-8M.

Upper valve shaft packing shall be of the "Vee" type in accordance with AWWA C-517. Packing shall be fully adjustable and replaceable without removing the actuator from the valve.

Wrench operated valves 2½"-8" shall be capable of being converted to worm gear or automated operation without removing the bonnet or plug from the valve. All wrench operated valves shall be equipped with a 2" square nut for use with removable levers or extended "T" handles.

Worm gear operators, where required, shall be constructed with a ductile iron quadrant, a one-piece input worm shaft, and axial needle roller bearings. The one-piece worm shaft shall be manufactured of corrosion resistant Nitempered Steel.

Valves shall be designed and manufactured to shut off drip tight at 175 psi for valves 2½"-12" and 150 psi for valves 14" and larger. Each valve shall be given a hydrostatic and seat test with the test results being certified when required by the customer. Certified copies of Proof-of-Design test reports shall be furnished as outlined in AWWA C-517 when requested.

Plug valves shall be 700 Series as manufactured by Crispin/K-Flo of Berwick, PA