Reliable

Model REL363GT & REL363GTC Butterfly Valve / Grooved Tapped Body

cULus Listed, FM Approved 363 psi (25 bar)

Product Description

The Reliable Model REL363GT and REL363GTC supervised butterfly valves are cULus Listed and FM Approved control valves for fire protection systems. The valves have AWWA C606 grooved end connections. They are available in 2" (50 mm), 2-1/2" (65 mm), 3" (80 mm), 4" (100 mm), 6" (150 mm), 8" (200 mm), and 10" (250 mm) nominal sizes. The valves are listed for 363 psi (25 bar) working pressure. The maximum working temperature for the valves is 212°F (100°C). The valve bodies come equipped with a plugged, tapped port on the supply and discharge side of the disc.

NOTE: In the fully open position, the disc protrudes beyond the end of the valve's grooved connection profile. The valve should be partially closed prior to installation, ensuring that the entirety of the disc is contained within the valve body.



Model REL363GT Butterfly Valve - Supervised Normally Open

Maintenance

The owner is responsible for maintaining the fire protection system in proper operating condition. Any system maintenance or testing that involves placing a control valve out of service will eliminate the fire protection that is provided by the fire protection system.

Reliable Butterfly valves and associated equipment shall periodically be given a thorough inspection and test. NFPA 25, "Inspection, Testing and Maintenance of Water Based Fire Protection Systems," provides minimum maintenance requirements.

Model REL363GTC Butterfly Valve - Supervised Normally Closed

Ordering Information

Specify the following when ordering:

Service

- Normally Open (Yellow Indicator, Red Actuator)
- Normally Closed (Red Indicator, Yellow Actuator)

Valve Size

- 2" (50 mm)
- 2-1/2" (65 mm)
- 3" (80 mm)
- 4" (100 mm)
- 6" (150 mm)
- 8" (200 mm)
- 10" (250 mm)

Guarantee

For Reliable Automatic Sprinkler Co., Inc. guarantee, terms, and conditions, visit www.reliablesprinkler.com.

Reliable Model REL363GT and REL363GTC Butterfly Valve

Technical Specifications
Pressure Rating:

363 psi (25 bar)

Material Specifications

Upper Stem: Stainless Steel ASTM A 276 Type 420 **Upper Bearing:** PTFE Bronze Sintered on Steel

O-Ring: EPDM

Body: Ductile Iron ASTM A 395, Epoxy Coated **Disc:** Ductile Iron ASTM A 395 with EPDM Encapsulation

Lower Bearing: PTFE Bronze Sintered on Steel
Lower Stem: Stainless Steel ASTM A 276 Type 420

Dust Plug: PVC **Name Plate:** Aluminum

Gear Operator: Cast Iron and Steel

Indicator Flag: Steel Handwheel: Cast Iron

Cable Gland: Nickel plated brass Plug: Carbon Steel (Zinc-plated)

Specifications

Groove Inlet: AWWA C 606

Listings and Approvals

cULus Listed FM Approved

Applications

- Indoor and outdoor use
- For use with grooved-end IPS steel pipe of any schedule or wall

thickness

• Not for use with cast ductile iron

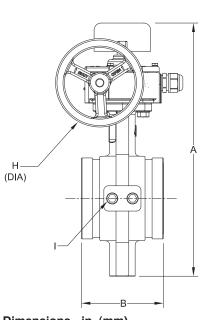
pipe

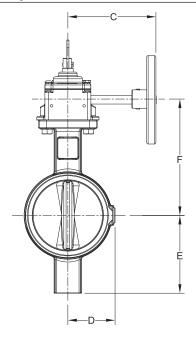
Not for submersible service



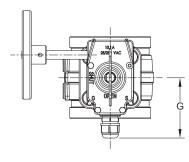
Reliable Model REL363GT and REL363GTC Butterfly Valve Dimensions

Figure 1





NOTE: HAND WHEEL WILL BE ON OPPOSITE SIDE OF GEAR HOUSING ON THE NORMALLY CLOSED (REL363GTC) VALVE.



Grooved Dimensions - in. (mm)

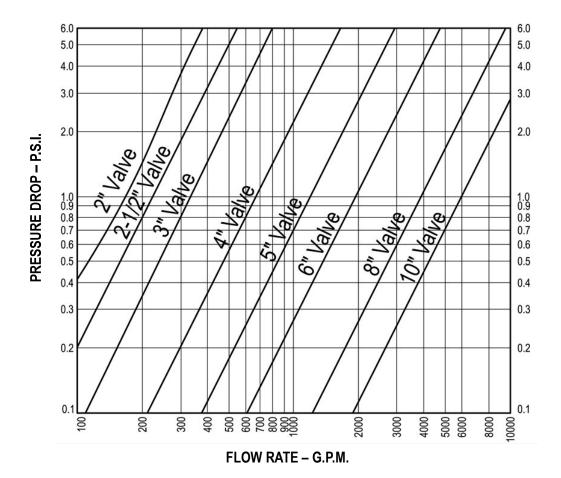
Grooved Dimensions - in. (mm)										Table A
Nominal Size	Α	В	С	D	E	F	G	Н	I	Weight lb (kg)
2"	9-13/16	3-7/8	4-15/16	1-9/16	2-1/4	4-1/4	3-3/8	4-1/4	1/4 NPT	9.9
(50)	(250)	(98)	(125)	(40)	(58)	(108)	(85)	(108)		(4.5)
2-1/2"	10-7/8	3-7/8	4-15/16	1-3/4	2-5/8	4-15/16	3-3/8	4-1/4	1/4 NPT	10.1
(65)	(276)	(98)	(125)	(45)	(68)	(125)	(85)	(108)		(4.6)
3"	11-1/2	3-7/8	4-15/16	2	2-7/8	5-1/4	3-3/8	4-1/4	1/4 NPT	11.2
(80)	(291)	(98)	(125)	(52)	(74)	(134)	(85)	(108)		(5.1)
4"	13-1/2	4-9/16	4-15/16	2-1/2	3-3/4	6-1/2	3-3/8	4-15/16	1/4 NPT	15
(100)	(342)	(116)	(125)	(63)	(95)	(164)	(85)	(125)		(6.8)
6"	15-13/16	5-7/8	6-5/8	3-9/16	4-13/16	7-13/16	3-5/8	5-7/8	1/4 NPT	32.4
(150)	(402)	(149)	(168)	(91)	(122)	(199)	(92)	(150)		(18.8)
8"	18-3/8	5-1/4	6-5/8	4-5/8	5-3/4	9-3/8	3-5/8	5-7/8	1/4 NPT	41.4
(200)	(466)	(134)	(168)	(118)	(147)	(238)	(92)	(150)		(18.8)
10"	21-5/8	6-5/16	9-7/16	5-11/16	7-1/8	11-3/16	3-15/16	9-13/16	1/4 NPT	78
(250)	(549)	(160)	(240)	(144)	(181)	(284)	(100)	(250)		(35.4)

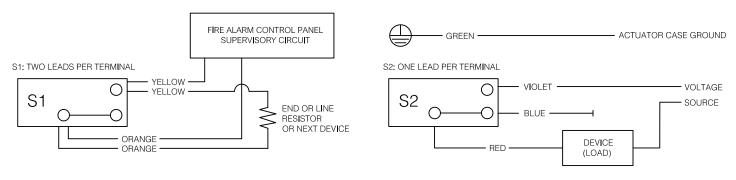
Table B **Flow Performance Data**

Pipe Size NPS (DN)	Full-Open Flow Coefficient (Cv) Calculated using GPM and PSI units	Equivalent Length of Pipe Friction Loss ft (m)
2 (50)	155	5.0 (1.4)
2-1/2 (65)	225	5.6 (1.7)
3 (80)	374	6.3 (1.9)
4 (100)	710	7.3 (2.2)
6 (150)	1640	11.4 (3.5)
8 (200)	3874	8.8 (2.7)
10 (250)	5995	11.9 (3.6)

Reliable Model REL363GT and REL363GTC Performance Data

Figure 2





SUPERVISORY CIRCUIT

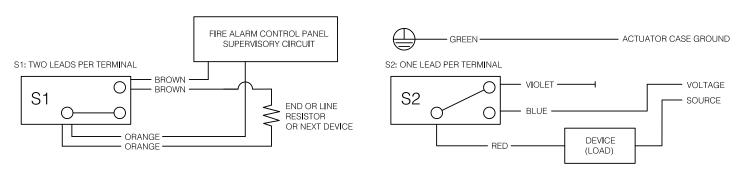
NOTIFICATION CIRCUIT

NOTES:

- WIRING SHOWN IS FOR NORMALLY OPEN CIRCUITS.
- 2. CAP ALL ENDS OF UNUSED WIRES.

Reliable Model REL363GTC Wiring Diagram - Supervised Normally Closed

Figure 4



SUPERVISORY CIRCUIT

NOTIFICATION CIRCUIT

NOTES:

- 1. WIRING SHOWN IS FOR NORMALLY OPEN CIRCUITS.
- CAP ALL ENDS OF UNUSED WIRES.