

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. These valves are available with two options for the wire harness; a standard 9" (0.23 m) set of wire leads, and a 39" (1 m) extended-length set of wire leads where required for international use.

Verify compatibility of the Model 363GT/GTC materials with the water supply and the environment where the valve will be used prior to installation.

Partially close the valve during installation, so that the butterfly seal does not extend past the end of the housing.

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.

2" (50mm) through 8" (200mm) valves require approximately 10 full turns to move the valve from fully open to closed (or vice versa), at which time a mechanical stop will be encountered. Any attempt to further open or close the valve beyond the mechanical stop may result in damage to the valve. (Note: 10" (250mm) valve will require approximately 15 full turns.)

See [Technical Bulletin 840](#) for instructions on adjustment of mechanical stops if the butterfly seal does not fully seat with the valve handle in the closed position.

Guarantee

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



Model REL363GT Butterfly Valve - Supervised Normally Open



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)
- 76 mm
- 3" (80 mm)
- 4" (100 mm)
- 6" (150 mm)
- 165 mm
- 8" (200 mm)
- 10" (250 mm)

Wire Harness Length

- Standard: 9" (0.23 m)
- Optional [not available in US]: 39" (1 m)

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
Stem Seal 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

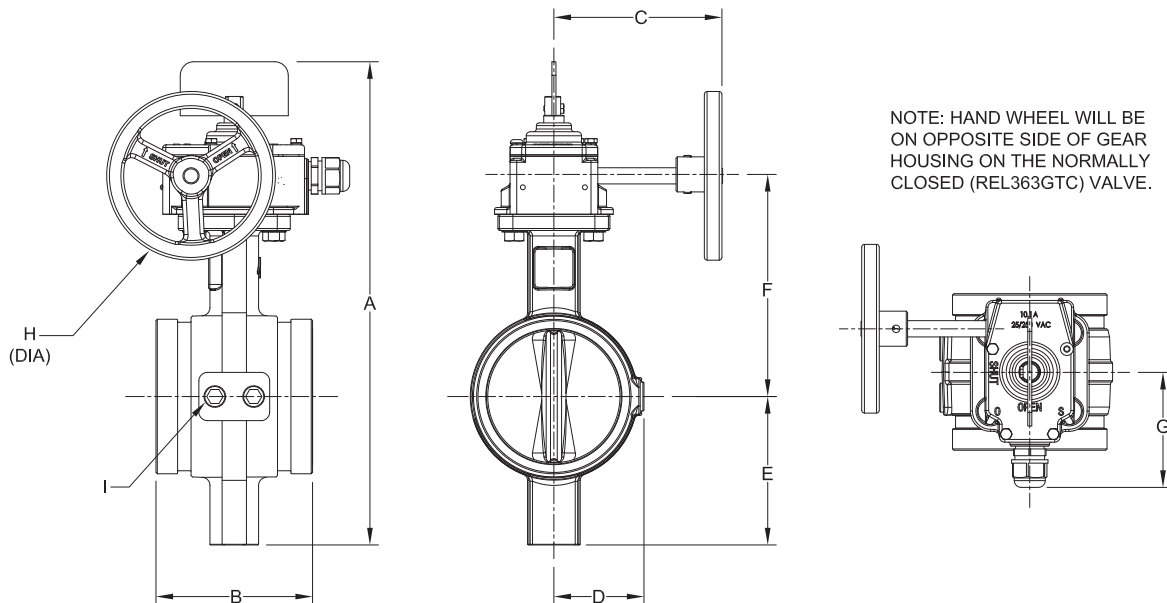
Applications

- 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



Grooved Dimensions - in. (mm)

Table A

Nominal Size	A	B	C	D	E	F	G	H	I	Weight lb (kg)
2" (50)	9-13/16 (250)	3-7/8 (98)	4-15/16 (125)	1-9/16 (40)	2-1/4 (58)	4-1/4 (108)	3-3/8 (85)	4-1/4 (108)	1/4 NPT	9.9 (4.5)
2-1/2" (65)	10-7/8 (276)	3-7/8 (98)	4-15/16 (125)	1-3/4 (45)	2-5/8 (68)	4-15/16 (125)	3-3/8 (85)	4-1/4 (108)	1/4 NPT	10.1 (4.6)
76 mm	10-7/8 (276)	3-7/8 (98)	4-15/16 (125)	2 (50)	2-7/8 (74)	4-15/16 (125)	3-3/8 (85)	4-1/4 (108)	1/4 NPT	10.4 (4.7)
3" (80)	11-1/2 (291)	3-7/8 (98)	4-15/16 (125)	2 (52)	2-7/8 (74)	5-1/4 (134)	3-3/8 (85)	4-1/4 (108)	1/4 NPT	11.2 (5.1)
4" (100)	13-1/2 (342)	4-9/16 (116)	4-15/16 (125)	2-1/2 (63)	3-3/4 (95)	6-1/2 (164)	3-3/8 (85)	4-15/16 (125)	1/4 NPT	15 (6.8)
6" (150)	15-13/16 (402)	5-7/8 (149)	6-5/8 (168)	3-9/16 (91)	4-13/16 (122)	7-13/16 (199)	3-5/8 (92)	5-7/8 (150)	1/4 NPT	32.4 (18.8)
165 mm	15-13/16 (402)	5-7/8 (149)	6-5/8 (168)	3-9/16 (91)	4-13/16 (122)	7-13/16 (199)	3-3/8 (85)	5-7/8 (150)	1/4 NPT	31.5 (41.3)
8" (200)	18-3/8 (466)	5-1/4 (134)	6-5/8 (168)	4-5/8 (118)	5-3/4 (147)	9-3/8 (238)	3-5/8 (92)	5-7/8 (150)	1/4 NPT	41.4 (18.8)
10" (250)	21-5/8 (549)	6-5/16 (160)	9-7/16 (240)	5-11/16 (144)	7-1/8 (181)	11-3/16 (284)	3-15/16 (100)	9-13/16 (250)	1/4 NPT	78 (35.4)

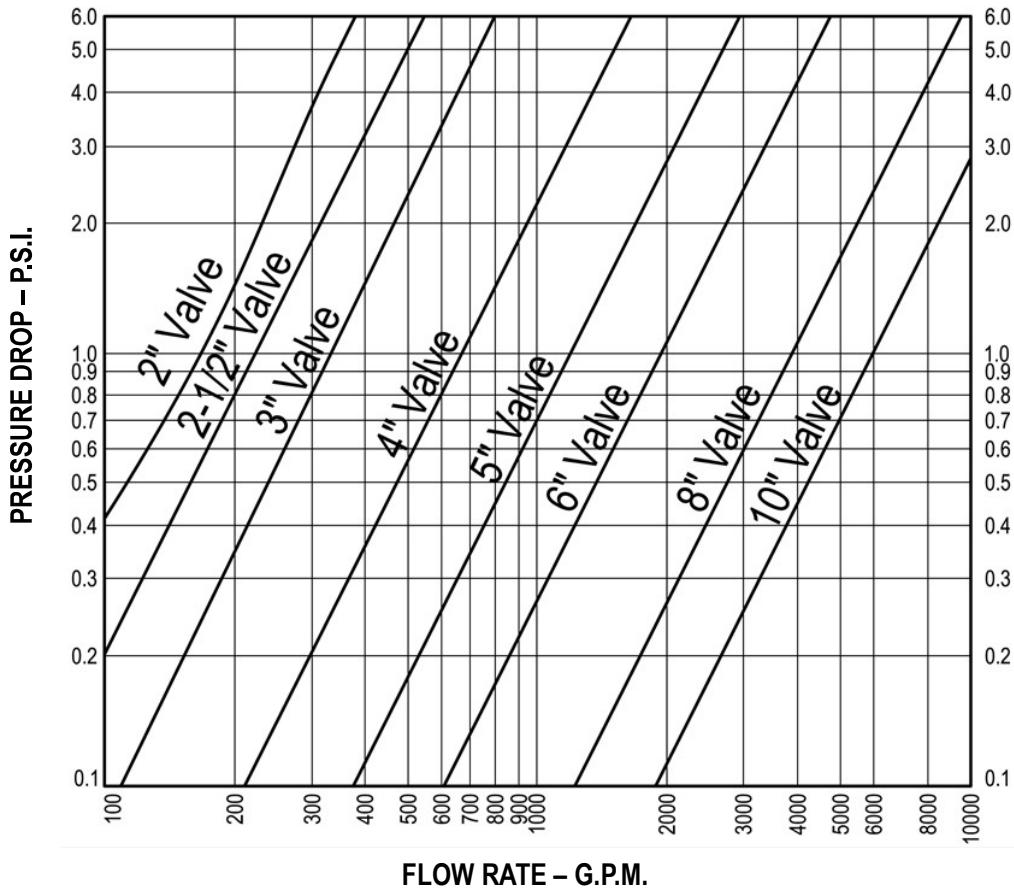
Equivalent Length of Sch 40 Pipe with CV of 120

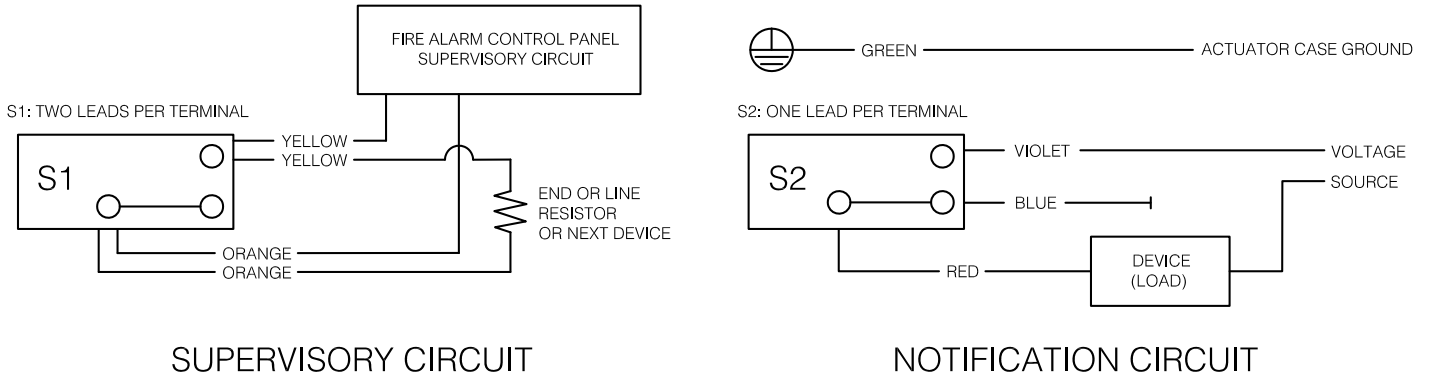
Table B

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 (1.5)
2-1/2 (65)	225	5 (1.5)
76 mm	225	5 (1.5)
3 (80)	374	6 (1.8)
4 (100)	710	6 (1.8)
6 (150)	1640	9 (2.7)
165 mm	1640	9 (2.7)
8 (200)	3874	7 (2.1)
10 (250)	5995	9 (2.7)

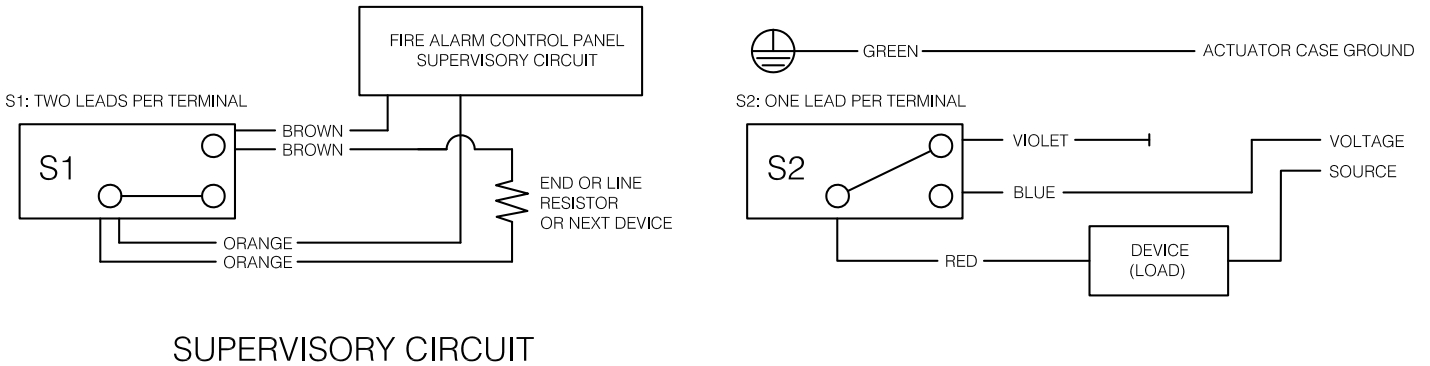
Reliable Model REL363GT and REL363GTC Performance Data

Figure 2





- NOTES:
1. WIRING SHOWN IS FOR NORMALLY OPEN CIRCUITS.
 2. CAP ALL ENDS OF UNUSED WIRES.
 3. SWITCH RATING: 10.1A, 125/250 VAC



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