Rapidrop Global Ltd

British Manufacturer of Fire Detection & Suppression Equipment

Sprinklers & High Pressure Valves for High Rise Buildings

Fire Sprinklers

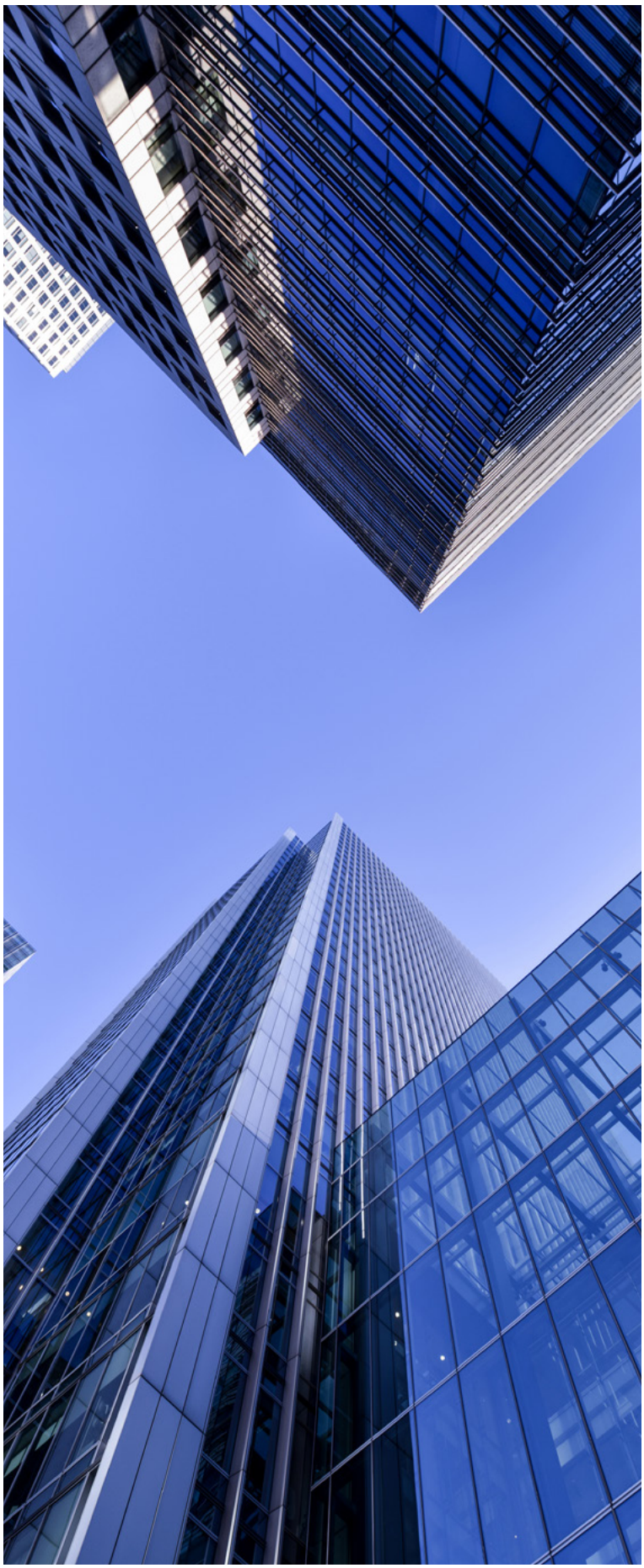
Gate Valves

Butterfly Valves

Check Valves

Wet Riser Valves

Pump Initiation Boards



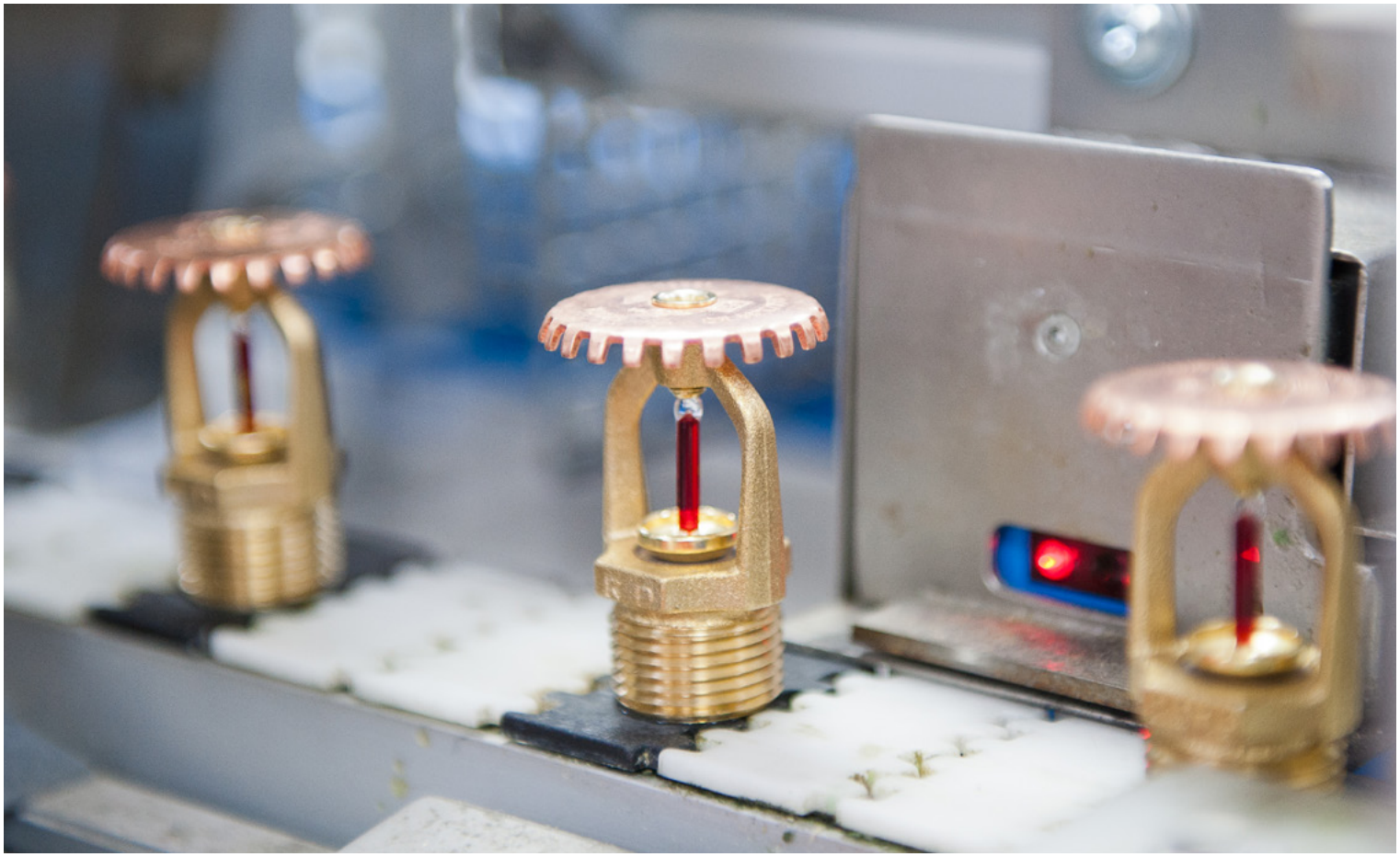
Rapidrop Global Limited is the leading UK manufacturer of fire sprinkler system products serving the needs of the fire detection and suppression industry. With a comprehensive product range Rapidrop has established a world-class reputation for quality and service

As part of Rapidrop's commitment to fire safety and protecting lives, Rapidrop invests in research and development conducted at its own state of the art test facilities, one of its kind in the UK. Dedicated to innovation, and reinforcing its position in the market place Rapidrop is focused on bringing new products to the market that makes our customers lives easier, safer and better.

Made in Britain

Rapidrop has established a world-class reputation for quality, innovation and delivering solutions in fire protection safety systems.

Our sprinklers are manufactured at our manufacturing plant in Cambridgeshire, England where each sprinkler is individually inspected.



Assessed to
ISO 9001-2008
Cert/LPCB ref. 556

MEMBERS OF

International Listings

The Rapidrop range includes products which have internationally recognised approvals and listings ranging from FM/UL/VdS and LPCB as well as local listings such as CNBOP, BSi, CNPP and SBSC

Global Projects

Rapidrop have supplied sprinklers and fire suppression systems to thousands of projects in hundreds of cities worldwide. We are able to provide fire suppression systems regardless of the size of the project, whether it is a domestic fire protection system or a project as large and iconic as London's Shard.

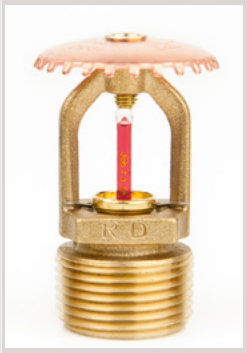
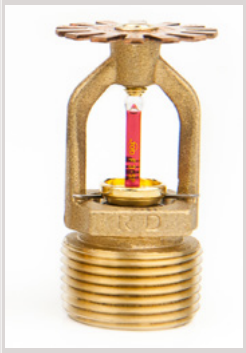
Rapidrop have manufactured sprinkler products for International airports such as Heathrow Terminals 2 and 5, London City, as well as airport hangers and RAF bases globally. Rapidrop sprinklers have been installed throughout the world in Hilton, Intercontinental, Sheraton and Novotel Hotels.

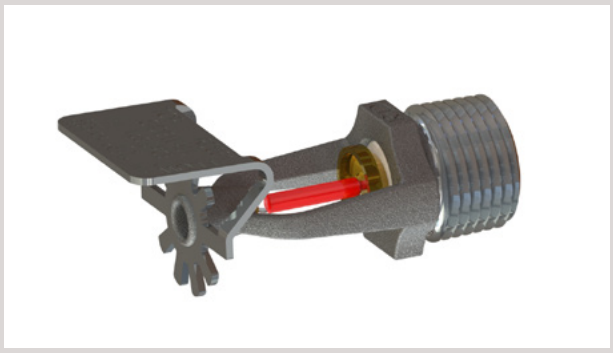
Hospitals and medical centres worldwide have been fitted with Rapidrop sprinkler systems as well as primary schools, high schools, academies, colleges and universities. Offices include the iconic the Gherkin, Canary Warf, the Shard and Aldar Headquarters.

Retail outlets range from Burberry to Ikea to Rolls Royce showrooms as well as worldwide shopping centres and malls. Rapidrop projects also extend to manufacturing facilities & warehouses worldwide.

Entertainment and sporting venues include Wimbledon All England Tennis Club, Wembley Stadium and Arsenal's Emirates Stadium, Centre Parcs, the Eden Project, Legoland Denmark, the Reykjavik Opera House and Ferrari World in Abu Dhabi.

Sprinkler Heads

										
Thread size	1/2" NPT (BSPT available on request)									
Sprinkler Type	SSU				SSP				CUP	
K Factor	K80		K115		K80		K115		K80	
Response	Standard	Quick	Standard	Quick	Standard	Quick	Standard	Quick	Standard	Quick
SIN Number	RD024	RD025	RD054	RD055	RD022	RD023	RD052	RD053	RD020	RD021
Max. Working Pressure	12 bar (175 psi)									
Min. Operating Pressure	0.5 bar (7 psi)									
Factory Pressure Test	34 bar (500 psi)									
Temperature	57°C (135°F) Orange, 68°C (155°F) Red, 79°C (175°F) Yellow, 93°C (200°F) Green, 141°C (286°F) Blue									
Weight	57 g (2.0 oz)		59 g (2.1 oz)		57 g (2.0 oz)		59 g (2.1 oz)		57 g (2.0 oz)	
Bulb protector	Pre fitted. Remove after installing sprinkler.									
Finish	Brass, Chrome, RAL matched Colours (Available on request)									
Approvals	FM, UL, LPCB, VdS, CE				FM, UL, LPCB, VdS, CE				LPCB, VdS, CE	
Data Sheet Number	4.22		4.52		4.22		4.52		4.18	

						
Thread size	3/4" NPT (BSPT available on request)				1/2" NPT (BSPT available on request)	
Sprinkler Type	SSP		SSU		HSW	
K Factor	K115		K115		K80	
Response	Standard	Quick	Standard	Quick	Standard	Quick
SIN Number	RD042	RD043	RD044	RD045	RD060	RD061
Max. Working Pressure	12 bar (175 psi)					
Min. Operating Pressure	0.5 bar (7 psi)					
Factory Pressure Test	34 bar (500 psi)					
Temperature	57°C (135°F) Orange, 68°C (155°F) Red, 79°C (175°F) Yellow, 93°C (200°F) Green, 141°C (286°F) Blue					
Weight	79 g (2.8 oz)		79 g (2.8 oz)		60.6 g (2.14 oz)	
Bulb protector	Pre fitted. Remove after installing sprinkler.					
Finish	Brass, Chrome, RAL matched Colours (Available on request)					
Approvals	FM, UL, LPCB, VdS, CE				FM, UL, LPCB, VdS, CE	
Data Sheet Number	4.51				4.53	

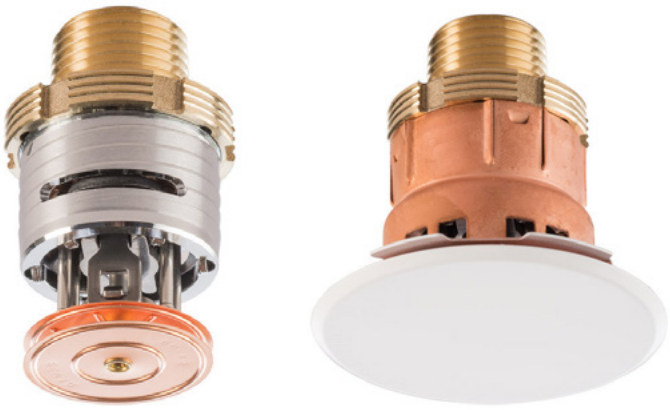
Commercial Concealed Sprinklers
RD107

BS EN 12259-1 Cert No.566f/01

Description

The Model RD107 Commercial Flat Concealed Sprinklers are automatic sprinklers of the compressed fusible solder type. These are decorative and standard response. The frame of the sprinkler hides the deflector, gasket, etc., which is in turn concealed above the ceiling by the cover plate assembly. The cover plate has a flat profile, and its diameter is extremely small. The push-on/thread-on, thread-off design of the concealed cover plate assembly allows easy installation of the cover plate. Therefore, the Model RD107 should be your first choice when aesthetics is the major consideration for ultimate appeal and unbeatable performance is desired.

They are to be used in wet pipe sprinkler systems per EN12845 or as required by the Authority having jurisdiction. The Model RD107 has a 80(5.6) K-factor. For extended installation flexibility, the Model RD107 provides 9.0mm (3/8 inch) vertical adjustment. This adjustment in installation decreases the need for precise cutting of the pipe that drops to the sprinkler and allows for a perfect fit with a range of pipe lengths. The heat sensitivity and water distribution design of Model RD107 allows for an increased chance of occupants' escape or evacuation in case of fire. However, fire sprinkler systems are not a substitute for fire safety awareness or fire safety construction required by building codes.



Standard Colours from Stock

RAL Matching

Features

Smallest approved concealed on the market

Three-Step Easy Installation

Multifunctional Protective cap with Ceiling label and tolerance Vertical height adjustment 9.5mm (3/8 inch).

Fusible Solder Link, No glass debris when activated.

Standard White, Black & Chrome available from Stock.

Optional RAL colour cover plates & wood grain finishes.

Protective cap with the ceiling label and tolerance

Pip on the cover cap to mark ceiling

Easy installation with the cover cap in situ

Cap removal tool

Cover plate easy to install & adjust, push / twist on & off

Do not paint warning

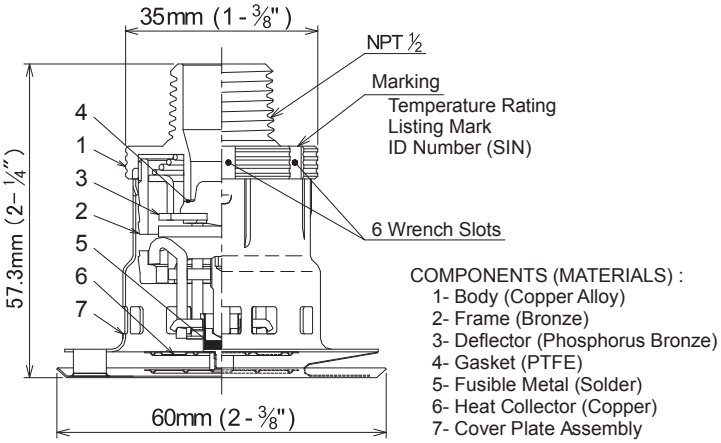
Package with a heat temperature strip

Wood Grain Finish

Bespoke Finishes

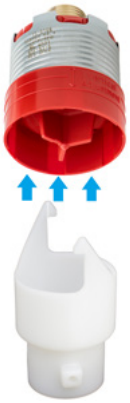
Technical Specification

Thread size	1/2" NPT, R1/2 (1/2" BSPT) available on request
Sprinkler Type	Commercial
Response	Quick Response
SIN Number	RD107
K Factor	K5.6
Max. Working Pressure	175 psi (12.1 bar)
Temperature	Sprinkler: 162°F / 72°C / Cover Plate: 140°F / 60°C
Finish	White, Black & Chrome RAL matched colours available on request
Approvals	LPCB, CE
Data Sheet Number	4.19

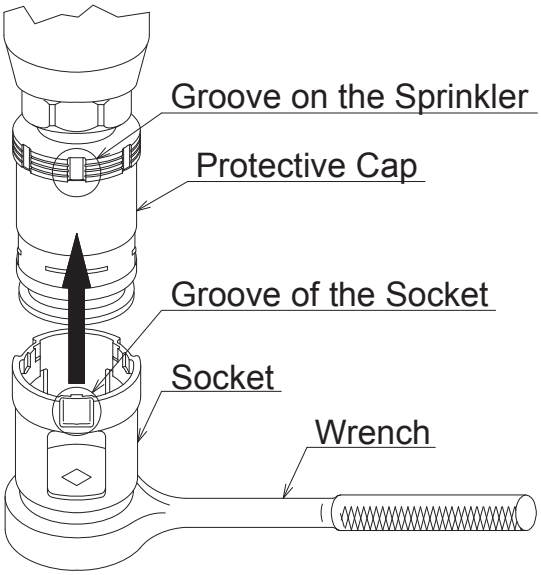


Easy Three-Step Installation

STEP 1
Install the sprinkler head with protective cap in place



STEP 2
Cap removal tool Easily removes the sprinklers protective cap



STEP 3
Install cover plates up to 3 1/4" with the magnetic cover plate installation tool

Commercial Flush Pendent Sprinklers RD101 / RD103

Assessed to ISO 9001:2008
Cert/LPCB/ ref. 566e/01

Description

The Model RD101/RD103 Flush Pendent Sprinklers are automatic sprinklers of the compressed fusible solder type. They are decorative, low profile, flush mounted sprinklers. The Frame and Cover of the sprinkler hide the Deflector and Gasket assemblies. The Model RD101/RD103 is designed for use in Commercial occupancies.

When aesthetics is the major consideration, the Model RD101/RD103 should be your first choice.

They are to be used in wet pipe sprinkler systems per NFPA 13.

The Model RD101/RD103 has a 5.6 (80.0) K-factor.

The Flush design of the Model RD101/RD103 features a separable escutcheon providing 3/8 inch (9.5 mm) vertical adjustment.

This adjustment reduces the accuracy to which the fixed pipe drops to the sprinklers must be cut to help assure a perfect fit installation.

The Model RD101/RD103 has been designed with heat sensitivity (Quick Response) and water distribution characteristics proven to help in the control of fires to improve the chance for occupants to escape or be evacuated. However, fire sprinkler systems are not a substitute for intelligent fire safety awareness or fire safety construction required by building codes.

The Sprinkler assembly contains a small fusible solder element. When exposed to sufficient heat from a fire, the solder melts and enables the internal components of the sprinkler to fall away. At this point the sprinkler activates with the deflector dropping into its operated position permitting water to flow.

RAL colour matching available on request

Features

Three-Step Easy Installation

Multifunctional Protective cap with Ceiling label and tolerance Vertical height adjustment 9.5mm (3/8 inch).

Fusible Solder Link, No glass debris when activated.

Standard White, Black & Chrome available from Stock.

Optional RAL colours.

Protective cap with the ceiling label and tolerance

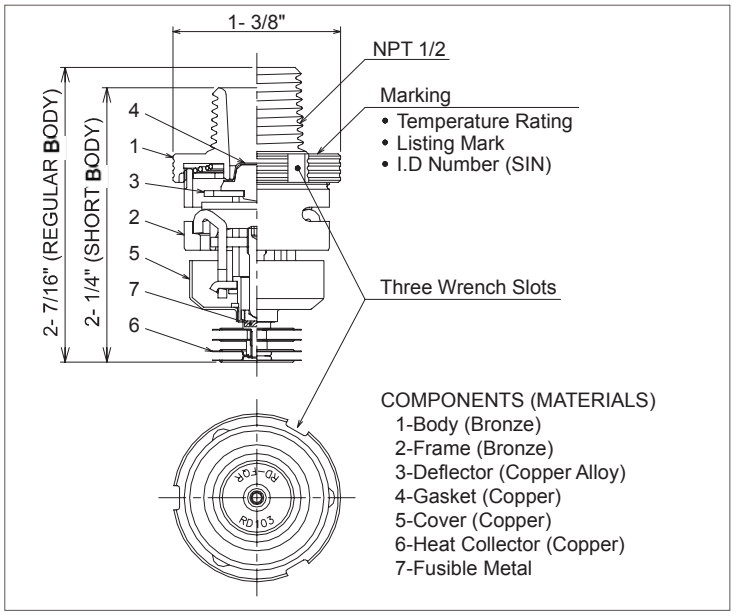
Pip on the cover cap to mark ceiling

Cap removal tool

Cover plate easy to install & adjust, push / twist on & off

Do not paint warning

Package with a heat temperature strip

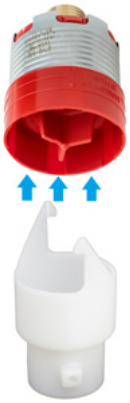


Technical Specification

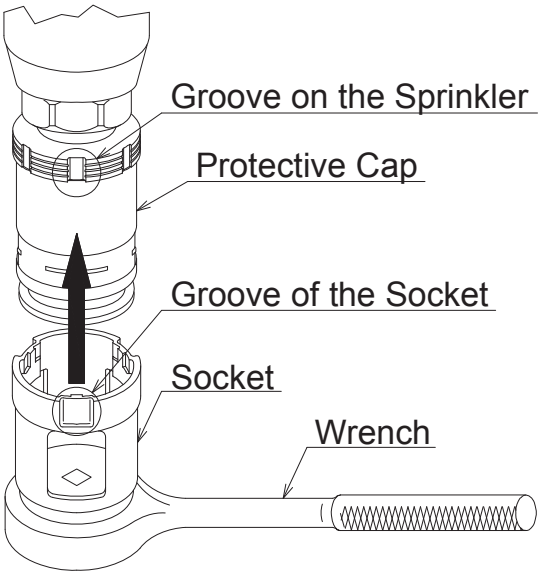
Thread size	1/2" NPT, R1/2 (1/2" BSPT) available on request	
Sprinkler Type	Commercial	
Response	Quick Response	Quick Response
SIN Number	RD101	RD103
K Factor	K5.6	K5.6
Max. Working Pressure	175 psi (12.1 bar)	175 psi (12.1 bar)
Temperature	72°C (162°F) 96°C (205°F)	72°C (162°F) 96°C (205°F)
Finish	White, Black & Chrome RAL matched colours available on request	
Approvals	LPCB, CE	cULus Listed
Data Sheet Number	4.12	4.13

Easy Three-Step Installation

STEP 1
Install the sprinkler head with protective cap in place



STEP 2
Cap removal tool Easily removes the sprinklers protective cap



STEP 3
Install cover plates up to 3 1/4" with the magnetic cover plate installation tool

Residential Concealed Sprinklers
RD207 / RD208

Description

The Model RD207/RD208 Residential Flat Concealed Sprinklers are automatic sprinklers of the compressed fusible solder type. These are decorative and fast response. The Cover Plate Assembly hides the Deflector, Heat Responsive Element etc., which is in turn concealed above the ceiling. The cover plate has a flat profile, and its diameter is extremely small (2-5/8 inch, 68mm). The push-on and/or thread-on, thread-off design of the concealed cover plate assembly allows easy installation of the cover plate. Therefore, the Model RD207/RD208 should be your first choice when aesthetics is the major consideration for ultimate appeal and unbeatable performance is desired. The Model RD207/RD208 is designed for the residential occupancies and it is perfect for use in homes, hotels and other living quarters.

The Model RD207/RD208 is to be used in wet pipe residential sprinkler systems for One and Two- Family Dwellings and Manufactured Homes per NFPA 13D; wet pipe residential sprinkler systems for Residential Occupancies up to and Including Four Stories in Height per NFPA 13R; or, wet pipe sprinkler systems for the residential portions of any occupancies per NFPA 13.

The Model RD208 has a 4.9 (70.6 LPM / √ bar) and Model RD207 has a 3.0 (43.2 LPM/ √ bar) K-Factor that meets the required residential flow rates with minimal residual pressure, which allows for smaller pipe sizes and water supply requirements.

For extended installation flexibility, the Model RD207/RD208 provides 1/2 inch (12.8mm) vertical adjustment. This adjustment in installation decreases the need for precise cutting of the pipe that drops to the sprinkler and allows for a perfect fit with a range of pipe lengths. The heat sensitivity and water distribution design of Model RD207/RD208 allows for an increased chance of residents' escape or evacuation in case of fire.

Features

Solder type

Ideal for use in wet pipe residential sprinkler systems per NFPA 13D, 13R, and 13

Cover plates are available in fourteen standard finishes and unlimited custom colour and pattern finishes

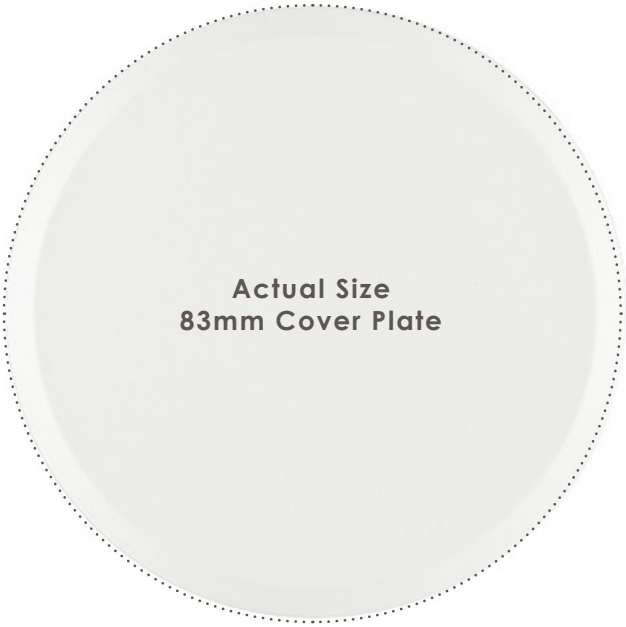
Can be used for multi-purpose and stand alone residential sprinkler systems

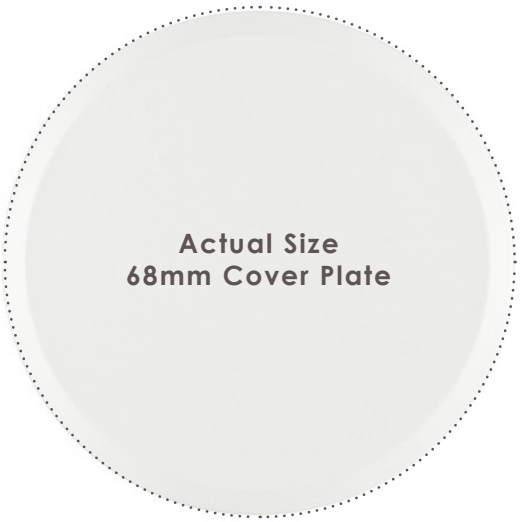
Can be installed in fewer steps and less time

Standard Colours from Stock **RAL Matching**

Wood Grain Finish

Bespoke Finishes



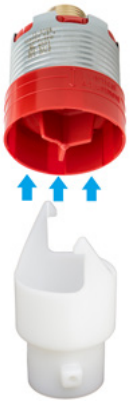


Technical Specification

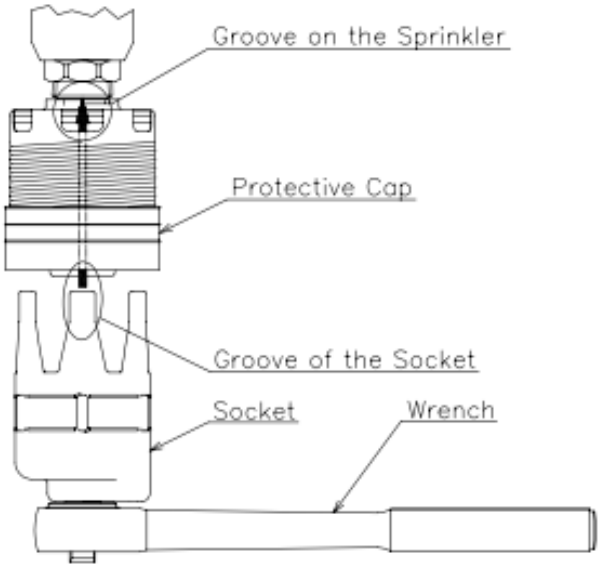
Thread size	1/2" NPT, R1/2 (1/2" BSPT) available on request	
Sprinkler Type	Residential	
Response	Quick Response Low Flow	Quick Response
SIN Number	RD207	RD208
K Factor	K3.0	K4.9
Max. Working Pressure	175 psi (12.1 bar)	175 psi (12.1 bar)
Temperature	Sprinkler: 72°C (162°F) Cover Plate: 60°C (140°F) Sprinkler: 79°C (175°F) Cover Plate: 72°C (162°F)	Sprinkler: 72°C (162°F) Cover Plate: 60°C (140°F) Sprinkler: 79°C (175°F) Cover Plate: 72°C (162°F)
Finish	White, Black & Chrome RAL matched colours available on request	
Approvals	UL Listed	UL Listed
Data Sheet Number	4.24	4.26

Easy Three-Step Installation

STEP 1
Install the sprinkler head with protective cap in place



STEP 2
Cap removal tool Easily removes the sprinklers protective cap



STEP 3
Install cover plates up to 3 1/4" with the magnetic cover plate installation tool

Residential Flush Pendent Sprinklers RD201

Description

The Model RD201 Residential Flush Pendent Sprinklers are automatic sprinklers of the compressed fusible solder type. They are decorative, low profile, flush mount sprinklers. The Frame and Cover of the sprinkler hide the Deflector and Valve Cap assemblies.

The Model RD201 is designed for use in residential occupancies such as homes, apartments, dormitories, and hotels. When aesthetics is the major consideration, the Model RD201 should be your first choice.

They are to be used in wet pipe residential sprinkler systems for one- and two-family dwellings and manufactured homes per NFPA 13D; wet pipe residential sprinkler systems for residential occupancies up to and including four stories in height per NFPA 13R; or, wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13.

The Model RD201 has a 4.2 (60.5 LPM / √ bar) K-factor which provides very low design flow rates at reduced residual pressures, enabling smaller pipe sizes and water supply requirements.

The flush design of the Model RD201 features a separable escutcheon providing 3/8 inch (9.5) vertical adjustment. This adjustment reduces the accuracy to which the fixed pipe drops to the sprinklers must be cut to help assure a perfect fit installation.

The Model RD201 has been designed with heat sensitivity and water distribution characteristics proven to help in the control of residential fires to improve the chance for occupants to escape or be evacuated. However, residential fire sprinkler systems are not a substitute for intelligent fire safety awareness or fire safety construction required by building codes.

RAL colour matching available on request

Features

Three-Step Easy Installation

Multifunctional Protective cap with Ceiling label and tolerance Vertical height adjustment 9.5mm (3/8 inch).

Fusible Solder Link, No glass debris when activated.

Standard White, Black & Chrome available from Stock.

Optional RAL colours.

Protective cap with the ceiling label and tolerance

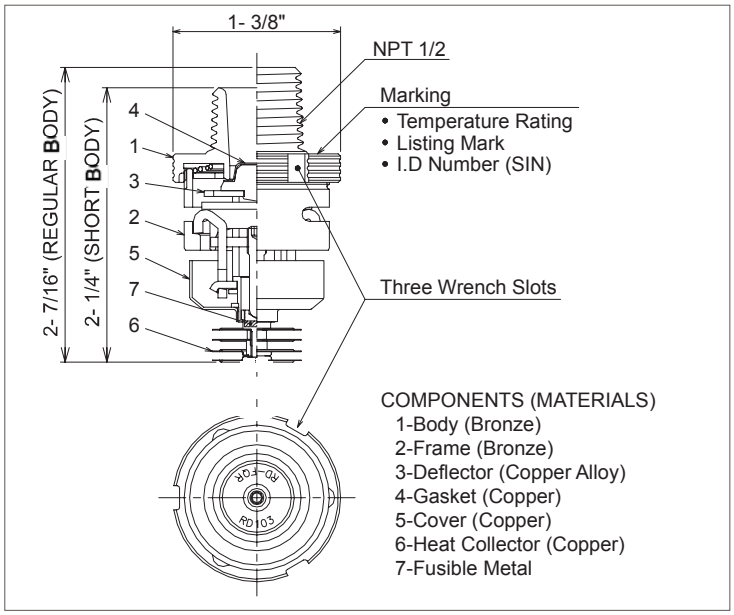
Pip on the cover cap to mark ceiling

Cap removal tool

Cover plate easy to install & adjust, push / twist on & off

Do not paint warning

Package with a heat temperature strip

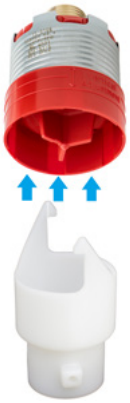


Technical Specification

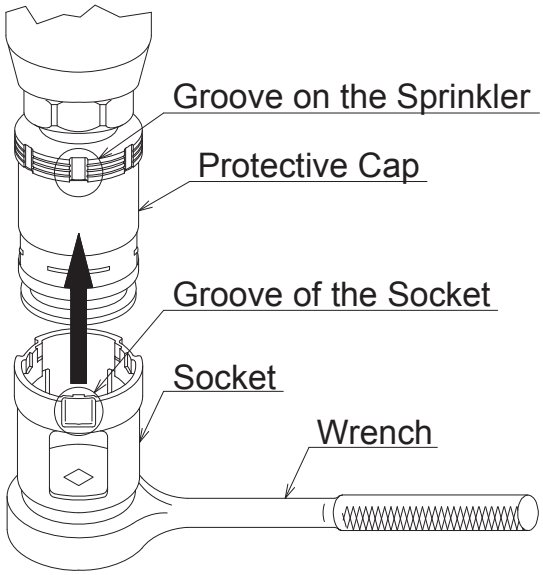
Thread size	1/2" NPT, R1/2 (1/2" BSPT) available on request
Sprinkler Type	Residential
Response	Quick Response
SIN Number	RD201
K Factor	K4.2
Max. Working Pressure	175 psi (12.1 bar)
Temperature	72 °C (162°F)
Finish	White, Black & Chrome RAL matched colours available on request
Approvals	UL Listed
Data Sheet Number	4.14

Easy Three-Step Installation

STEP 1
Install the sprinkler head with protective cap in place



STEP 2
Cap removal tool Easily removes the sprinklers protective cap



STEP 3
Install cover plates up to 3 1/4" with the magnetic cover plate installation tool

Residential Horizontal Side Wall Sprinklers RD203

Description

The Model RD203 Residential Flush Horizontal Side-Wall Sprinklers are automatic sprinklers of the compressed fusible solder type. They are decorative, low profile, flush mount sprinklers. The Frame and Cover of the sprinkler hide the Deflector and Valve Cap assemblies.

The Model RD203 is designed for use in residential occupancies such as homes, apartments, dormitories, and hotels. When aesthetics is the major consideration, the Model RD203 should be your first choice.

They are to be used in wet pipe residential sprinkler systems for one- and two-family dwellings and manufactured homes per NFPA 13D; wet pipe residential sprinkler systems for residential occupancies up to and including four stories in height per NFPA 13R; or, wet pipe sprinkler systems for the residential portions of any occupancy per NFPA 13.

The Model RD203 has a 4.2 (60.5 LPM / √ bar) K-factor which provides very low design flow rates at reduced residual pressures, enabling smaller pipe sizes and water supply requirements.

The flush design of the Model RD203 features a separable escutcheon providing 3/16 inch (4.7) of total adjustment.

This adjustment reduces the accuracy to which the fixed pipe drops to the sprinklers must be cut to help assure a perfect fit installation.

The Model RD203 has been designed with heat sensitivity and water distribution characteristics proven to help in the control of residential fires to improve the chance for occupants to escape or be evacuated. However, residential fire sprinkler systems are not a substitute for intelligent fire safety awareness or fire safety construction required by building codes.

RAL colour matching available on request

Features

Three-Step Easy Installation

Multifunctional Protective cap with Ceiling label and tolerance Vertical height adjustment 9.5mm (3/8 inch).

Fusible Solder Link, No glass debris when activated.

Standard White, Black & Chrome available from Stock.

Optional RAL colours

Protective cap with the ceiling label and tolerance

Pip on the cover cap to mark ceiling

Easy installation with the cover cap in situ

Cap removal tool

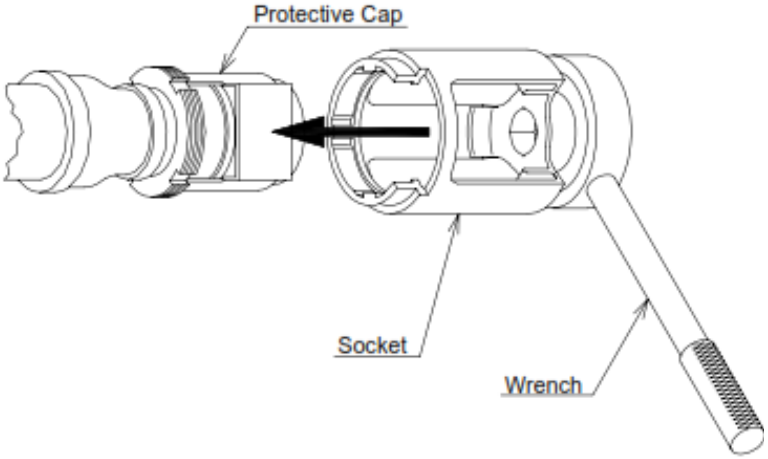
Cover plate easy to install & adjust, push / twist on & off

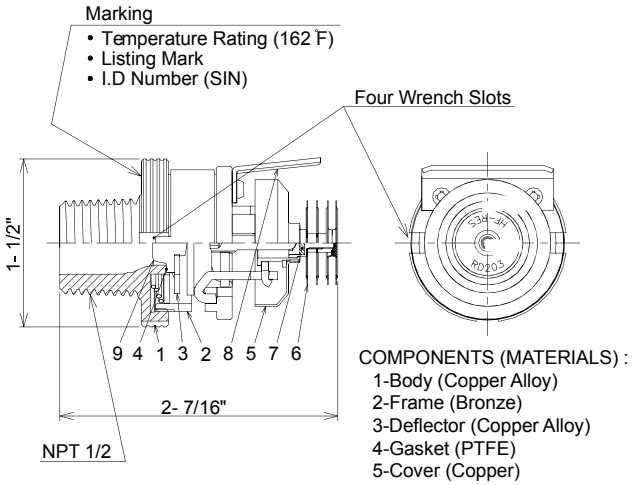
Do not paint warning

Package with a heat temperature strip

Technical Specification

Thread size	1/2" NPT, R1/2 (1/2" BSPT) available on request
Sprinkler Type	Residential
Response	Quick Response
SIN Number	RD203
K Factor	K4.2
Max. Working Pressure	175 psi (12.1 bar)
Temperature	72°C (162°F)
Finish	White, Black & Chrome RAL matched colours available on request
Approvals	UL Listed
Data Sheet Number	4.15





COMPONENTS (MATERIALS) :
1-Body (Copper Alloy)
2-Frame (Bronze)
3-Deflector (Copper Alloy)
4-Gasket (PTFE)
5-Cover (Copper)
6-Heat Collector (Copper)
7-Fusible Metal
8-Sub Deflector (Copper Alloy)
9-Valve Cap (Copper Alloy)

OS&Y Gate Valve
RDOS&Y
40 bar rated

Description

Bolted bonnet gate valves,Outside screw and yoke with rising stem and flexible wedge

Design Standards

ASME B16.34

Face to Face

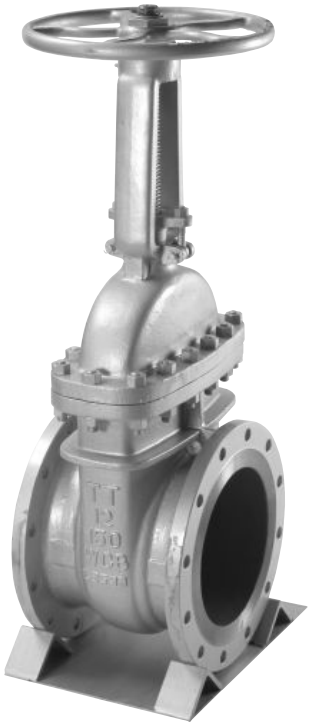
ANSI B16.10

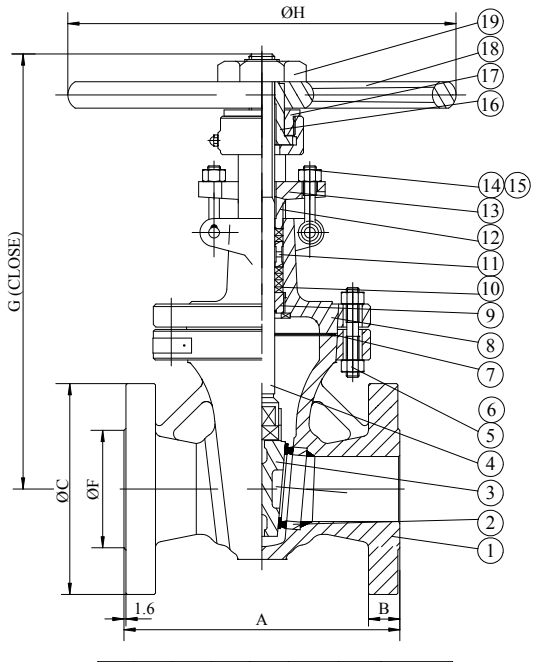
End Connection

PN40 Flange

Maximum Working Pressure

46 bar at 100 °C (Class 300)





Dimensions [mm]								
DN	Size [in]	A	B	C	F	G	H	Weight [kg]
50	2	216	23	165	92	350	200	30
65	2½	241	26	190	105	366	200	44
80	3	283	29	210	127	431	250	55
100	4	305	32	254	157	499	250	83
125	5	381	35	279	186	553	300	108
150	6	403	37	318	216	647	350	137
200	8	419	42	381	270	757	400	240
250	10	457	48	445	324	927	450	333

No.	Description
1	Body
2	Body Ring
3	Gate
4	Stem
5	Bonnet Bolt
6	Bonnet Nut
7	Basket
8	Bonnet
9	Backseat Bushing
10	Packing Ring
11	Distance Ring
12	Gland
13	Gland Flange
14	Eye Bolt
15	Eye Bolt Nut
16	Stem Nut
17	Gland Nut
18	Handwheel
19	Handwheel Nut

Cast Steel Swing Check Valve
40 bar rated

Product Description

Flanged ANSI 300RF / PN40
Design to BS 1868
Bolted Cover
A216 Gr WBC

Maximum Working Pressure

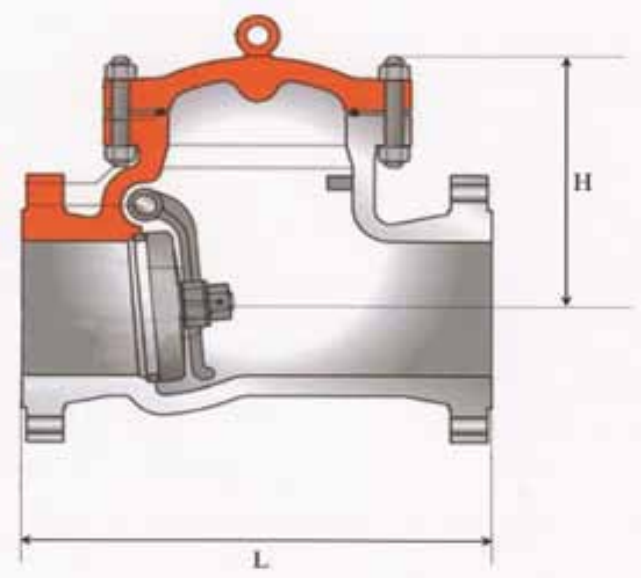
46 bar at 100 °C (Class 300)

Material Specification

Body	ASTM A216 WCB
Bonnet	ASTM A216 WCB
Bolts	B7M
Disc	Stainless Steel 316HF
Seat	Stainless Steel 316

Dimensions & Weight

Size	L (mm)	H (mm)	Weight (kg)
2"	267	175	23
2.5"	292	185	37
3"	318	210	46
4"	356	260	71
6"	445	325	118
8"	533	380	202



Model Number

RDCVS100PN40
RDCVS150PN40

High Performance Wafer Butterfly Valve 40 bar rated

Features

Shut-off and control of gaseous and liquid media

Disc has double-eccentric bearing

Centering pieces can be used as installation aid

Two seat ring systems available: R-PTFE and Inconel

Seal variants:

-soft-sealing (R-PTFE) max. 230°C

-metallic sealing (Inconel) max. 600°C

Maintenance-free

Long service life, even at high switching frequencies

FIRE SAFE BS 6755 PART 2

Available Monitored

General Applications

Chemical and petrochemical industry

Hot water and steam systems

District heat supply

Vacuum systems

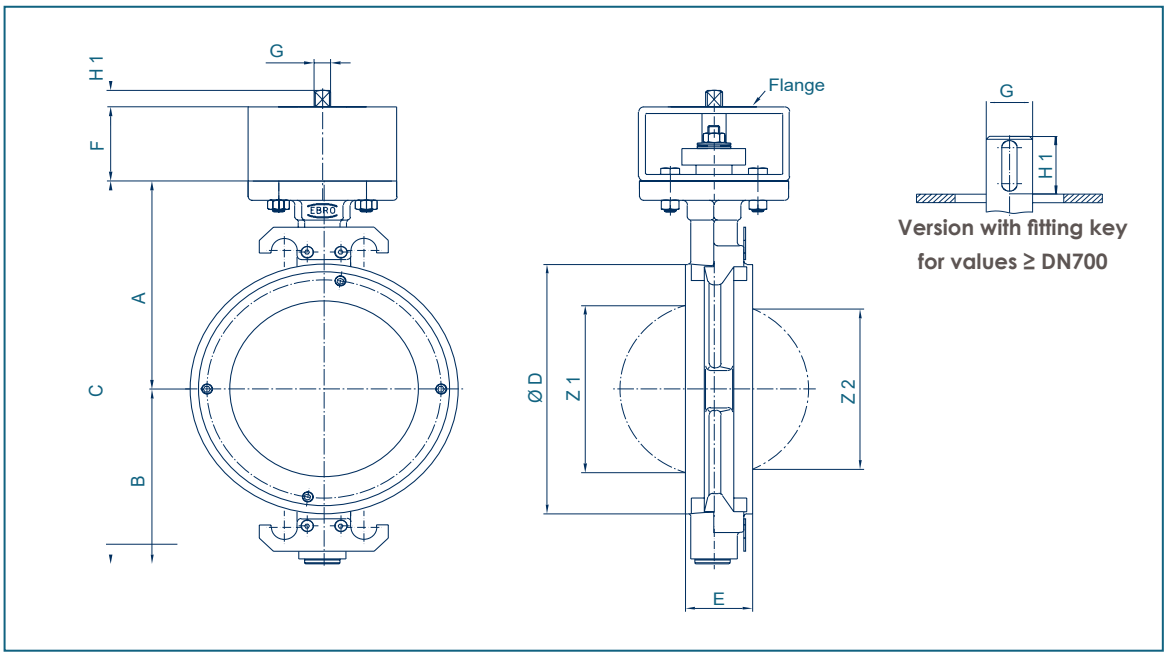
Shipbuilding

Gas process technology

Heavy duty services

Specifications

Nominal Diameter	DN 50 - DN 1200
Face-to-face	EN 558 Series 20, optional Series 25 ISO 5752 Series 20 API 609 Table 1
Flange accommodation	EN 1092 PN 10/16/25/40 (to DN 150) EN 1092 PN 10/16/25 (DN 200-DN 1200) ASME Class 150 AS 4087 PN16/21
Flange Surface Design	EN 1092, Form A/B, ASME RF,FF
Top flange	EN ISO 5211
Marking	BS EN 19
Tightness check -for R-PTFE seat: -for Inconel seat:	Independent of flow-direction EN 12266 (Leakage rate A) EN 12266 (Leakage rate B) ISO 5208, Category 3
Temperature range	-60°C to +600°C
Differential pressure	≤ DN150 max. 40 bar >DN150 max. 25 bar
Vacuum	up to 1mbar absolute



Dimensions

Sizes		Diamensions [mm]												Weight [kg]
		A	B	C	D	E	F	Flange	G	H1	Z1	Z2	min pipe	
DN 50	2"	133	99	232	112	43	80	F05/F07	12	15	41	-	51	7
DN 65	2½"	133	99	232	112	43	80	F05/F07	12	15	41	-	51	7
DN 80	3"	142	113	255	138	46	80	F05/F07	12	15	71	54	80	8
DN 100	4"	158	124	282	160	52	80	F05/F07	12	15	94	82	103	9
DN 125	5"	181	140	321	192	56	80	F07/F10	14	18	115	105	124	13
DN 150	6"	195	154	349	216	56	80	F07/F10	14	18	144	135	151	15
DN 200	8"	225	191	416	270	60	80	F10/F12	17	18	187	181	196	23
DN 250	10"	168	222	490	326	68	80	F12	22	23	235	229	245	34
DN 300	12"	300	255	555	378	78	90	F14	27	28	281	276	296	48
DN 350	14"	345	304	649	438	92	100	F16	27	28	323	316	334	95
DN 400	16"	375	339	714	488	102	100	F16	36	36	372	364	385	115
DN 450	18"	412	340	752	530	114	120	F16	36	36	427	427	438	141
DN 500	20"	425	399	824	593	127	120	F16	46	46	469	466	484	186
DN 550	22"	456	405	861	635	154	200	F25	46	46	526	526	540	236
DN 600	24"	490	468	958	692	154	200	F25	55	55	544	542	560	310
DN 700	28"	554	522	1076	820	165	200	F25	80	130	673	659	678	430
DN 800	32"	605	566	1171	902	190	200	F30	90	130	748	736	776	551
DN 900	36"	660	637	1297	1006	204	200	F30	100	145	847	833	876	732
DN 1000	40"	715	687	1402	1112	216	200	F30	100	145	944	935	975	802
DN 1200	48"	815	800	1615	1328		200	F35	110	185	1139	1135	1175	1300

Dual Plate Wafer Check Valve
Series 427
40 bar rated

Working Pressure

40bar

Special Characteristics

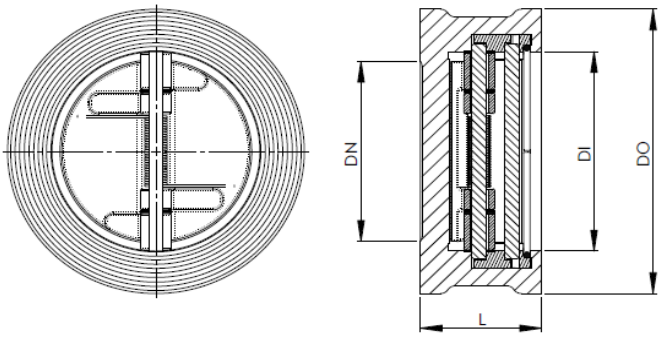
Lightweight
Compact & Economical
No leakpath to atmosphere
Easily Installed
Tight Shut-off (Resilient Seal)
Anti-Slam
Complies fully with API594
Suitable for all common flanges

Notes

Larger sizes and specials on request
Higher pressures on request
Double flanged option available
Solid lugged option available

Dimensions

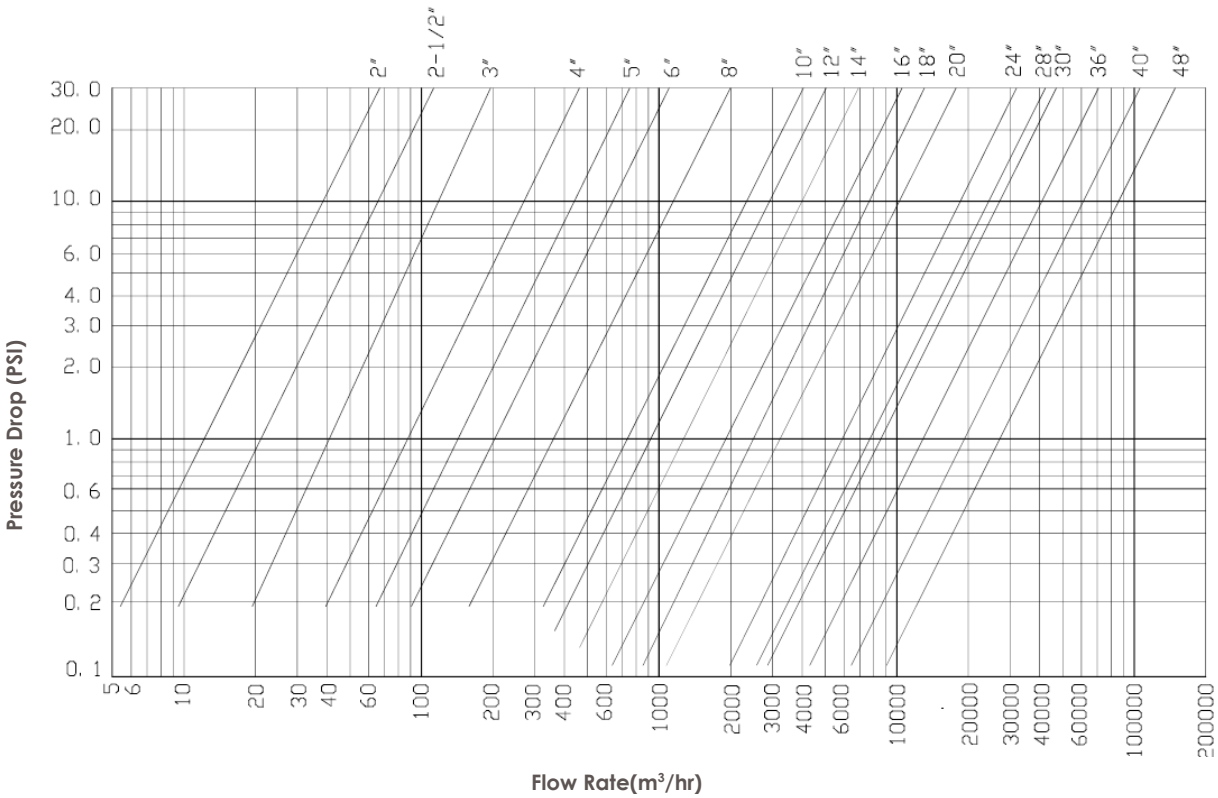
DN	DI	L	OD	Weight [kg]
50	60	60	109	3
65	73	67	129	4
80	89	73	144	5
100	114	73	170	7
125	141	86	196	14
150	168	98	226	15



Material Specifications

Body	Steel
Pin Carriers	316 SS
Plates	316 SS
Pins	316 SS
Spring	Inconel-X
Retaining Clip	316SS
Lug Bearings	316SS
Seat	Buna

Pressure Drop Chart (Water at 15.6°)



Flow Coefficient (Cv) and Flow Factor (Kv)

NPS	DN	Kv	Cv
2	50	47	55
2½	65	79	93
3	80	142	166
4	100	329	385
5	125	533	624
6	150	760	890
8	200	1367	1600
10	250	2776	3250
12	300	3511	4110
14	350	4783	5600
16	400	7260	8500
18	450	9695	10610
20	500	12232	14320
24	600	22166	25950
28	700	29067	34030
30	750	32373	37900
36	900	47961	56150
40	1000	72775	85200
48	1200	102286	119750

Notes

Kv: The flow of water through a valve at 15.6°C in cubic meters per hour (m³/hr) with a pressure of 1 bar

Cv: The flow of water through a valve at 60°F in US gallons/minute (USgpm) with a pressure of 1 psi

Electromagnetic Flow Meter
M type

Product Description

Electromagnetic M type Flow Meter is a device designed for measuring, indicating and storing flow and passed through volume data of conductive liquids. *M type flow meter* records both positive and negative flow. As there are neither moving nor mechanical parts in the flow profile the device can be applied to measure extremely polluted liquids containing even solid pollution. The only limitation is that the device can be used solely with conductive liquids.

Range of applications. Inductive *M type Flow Meter* is designed to be used in the chemical industry, paper industry, waterworks maintenance, waste-water maintenance etc.

Features. Inductive *M type flow meter* is a highly accurate and stable device. The construction of the *M type* indicator uses components with a long-term time and temperature stability. Configuration data is backed up and can be recovered after a power failure. The back-up structure enables data recovery in case of a partial loss of data (as a result of e.g. high level electrostatic discharge or high noise of power supplying). Internal CPU provides all functions usually built in electronic flow meters, incl. low flow rate correction, frequency response setting, bandwidth of sensitivity setting at low flow rates, etc.

Inputs / Outputs. *M type Flow meter* is equipped with six isolated outputs and one isolated input as standard. Digital outputs (frequency, pulse and relays) and input are user configurable. Current output 4-20 mA can be used as passive or active type. For communication are available RS232 and RS485 outputs.

Main Features

Range of sizes DN10 to DN800

Compact version IP67, remote version sensor IP68

Mounting of electronic unit in two work planes

Power supply 115/230 VAC auto selectable or 24VACDC, 50/60 Hz

Non-touch basic manual control with magnetic pointer

Programmable datalogger and real time as standard

Remote control RS485, RS232

3 programmable digital outputs, digital input, analog output 4-20mA

Dosing feature using digital input

Pipe and electronic self diagnostic

Application

Water and wastewater flowrate and total volume measuring

Chemical industry (acids, alkaline solutions)

Pipe mechanical dimensions

Size	Length [mm]
DN 10	150
DN 15-80	200
DN 100-125	250
DN 150	300
DN 200	350
DN 250	450
DN 300	500
DN 350	550
DN 400-600	600
DN 700	700
DN 800	800

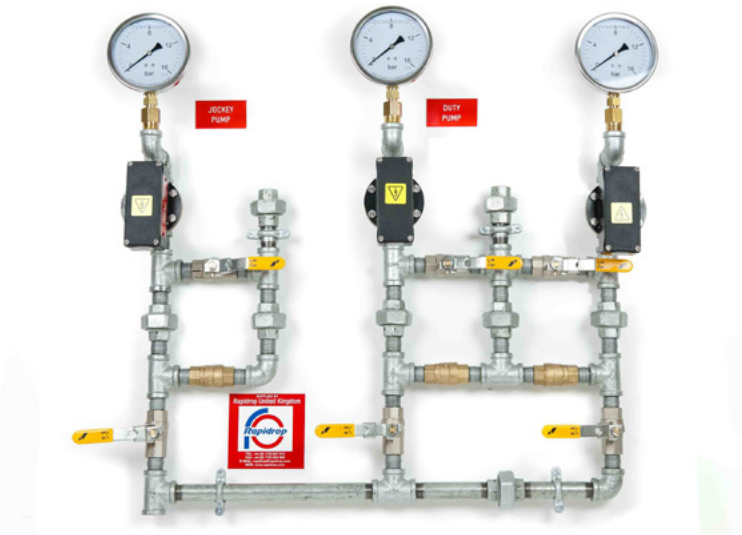
Technical Data

Nominal size	DN10 to DN800
Nominal pressure	PN16, PN25, PN40 (≤DN150) PN10, PN16, PN25(≥DN200)
Flow range	0.1 to 10 m/s (0.02 to 5000 l/s)
Accuracy	0.5 % (0.5 to 10 m/s) of reading value 1 % (0.1 to 0.5 m/s) of reading value
Maximal medium temperature	70°C (158°F) with rubber liner 130°C (266°F) with PTFE liner in remote version
Ambient temperature	-20 to 60 °C (-4 to 140°F)
Power supply	-115/230V (+10%, -15%), 50/60Hz, auto selectable -12V, 24V, 48V DC/50/60Hz as option
Power consumption	10 VA
Liner	-hard rubber -PTFE
Electrodes	-CrNi (stainless) steel 1.4571 -Hastelloy C276 -Tantalum
Measuring tube	Stainless steel 1.4201 (dimensions according to DIN 17457)
Flange	Steel 1.0402 or higher Dimensions according to EN1092, DIN2501 (BS 4504), ANSI B16.5, Sanitary (DIN11851 or Tri Clamp), flangeless wafer style
Protection category	Compact version: IP67 Remote version: sensor IP68, converter IP65 (optionally IP67)
Outputs	Frequency 0 to 12 kHz with programmable flowrate and function Pulse 0 to 50 Hz with programmable volume, function and pulse width Relay contacts 100V/0.5A with programmable function Current loop 4 to 20 mA with programmable flowrate and function
Input	Digital input with programmable function
Communication	RS485, RS232
Displayed values	Flowrate (m3/h, L/s, US.Gal/min, user) Volume (m3, L, US.Gal, user) Positive, total, negative and auxiliary (clearable, daily) volume
Control	Keyboard Magnetic pointer RS232 and RS485
Low-flow cutoff	Programmable value
Time constant	Settable in range 1 to 20 s
Other features	Test of excitation coils, status of pipe line and electronic unit Diagnostic of internal temperature and power supply voltages Real time circuit for datalogging Datalogger memory up to 15000 values (programmable sample rate) Registration of min. and max. flowrate including date and time
Conformity requirements	LVD (safety) according to EN 61010-1, EN61010-1/A2PED according to directive 97/23/EC EMC according to EN 61000 part 3-2, 3-3, EN 61000 4-3, 4-4, 4-5, 4-6, 4-8, 4-11, EN 61000 part 6-2, EN 50081-1

Pump Initiation Board
40 bar rated

Description

Pump initiation boards are ready for wall mounting in the pump house. Each initiation has a separate test arrangement and connection with a common drain. Units are pressure tested to 16, 25 or 40 Bar prior to dispatch depending on the pressure required.



Fulfils the requirements of BS EN 12845 (double switch)

Rc1/2 inlet unions (BSPT)

Rc1/2 lockable ball valves (BSPT)

3mm flow restrictor

100mm glycerin gauges c/w no loss connectors

1/2" check valves in bypass line

Model 1381 pressure switches for duty and stand by pumps

Model 1381V pressure switch for jockey pump

Descriptive labels fitted as standard

Available in 16 Bar, 25 Bar and 40 Bar

Standard configurations for 2,3 & 4 units.

Bespoke solutions available on request.

Installation & Maintenance

Assembly to be located where it will not be subject to freezing or extreme temperatures. All electrical connections to be made by qualified staff. Under normal operation the top valve must be in open position with the test valve in closed position.

Pressure switches can be set after installation with system at operating pressure. Close the top inlet valve and slowly open the bottom test valve to reduce gauge pressure to the desired level. Close test valve and adjust pressure switch. Repeat this process for each pressure switch.

To test pump operation, close the top inlet valve and slowly open bottom test valve to start pump.

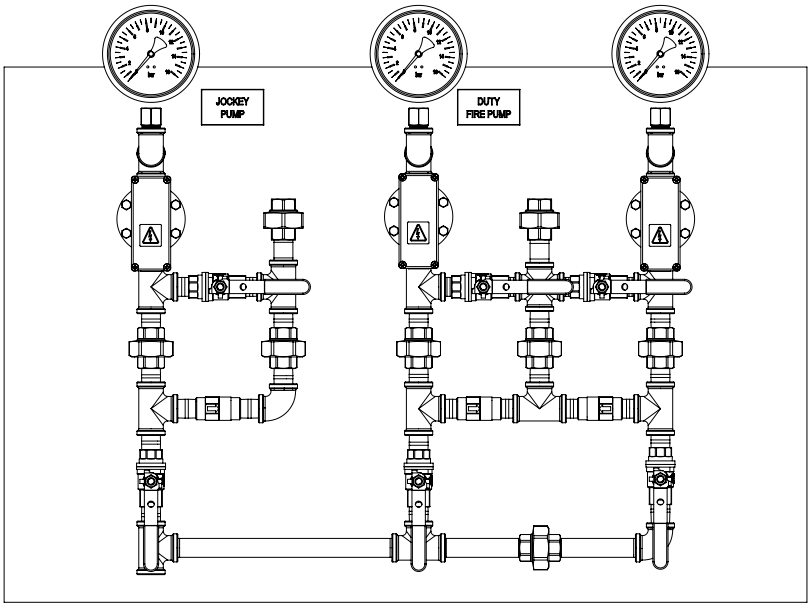
Unit is designed to be maintenance free. However pressure switches and gauges can be replaced by isolating the pump, closing top inlet valve and draining the unit via bottom test valve.

Material Specification

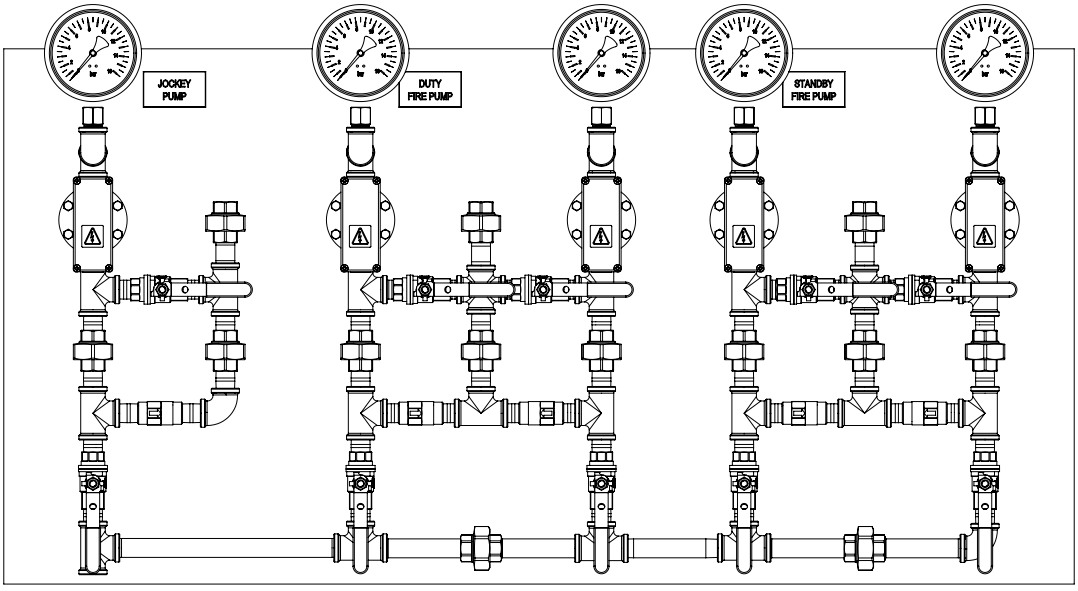
Pressure Rating	16 bar	25 bar	40 bar
Pipes & Fittings	Galvanised Carbon Steel BS143, BS1387	Galvanised Carbon Steel BS143, BS1387	Stainless Steel
Ball Valves	PN40	PN40	PN40
Pressure Switch	0-16 bar	2-28 bar	2-42 bar
Pressure Gauge	0-16 bar	0-25 bar	0-40 bar

Board Dimensions & Weight

Number of Units	Width (mm)		Height (mm)		Depth (mm)	Weight (Kg)
	16-25 bar	40 bar	16-25 bar	40 bar		
2	900	1100	600	610	190	15-23
3	1200	1400	600	610	190	22-30
4	1500	1800	600	610	190	29-40



2 Pump Initiation Board



3 Pump Initiation Board

High Pressure Grooved Butterfly Valve 27.5 bar rated

Product Description

Rapidrop High Pressure Grooved Butterfly Valve is a rotary type valve with a visual indication of whether the valve is in fully open position or not. Butterfly valves are commonly used in fire protection systems as system control valves, sectional or pump water control valves.

These valves have been designed with minimum flow restriction and pressure loss when in fully open position. To reduce the risk of a water hammer *Rapidrop Butterfly Valves* are provided with a slow close hand wheel operated gearbox.

Factory installed double tamper switch for indoor and outdoor use, complete with 1m flying lead.

Maximum Working Pressure

27.5 bar (400 PSI)

Maximum Working Temperature

120°C

Coating

Fusion Bonded Epoxy Coating in accordance with ANSI /AWWA C550

Design Standard

AI609

Face to Face Distance

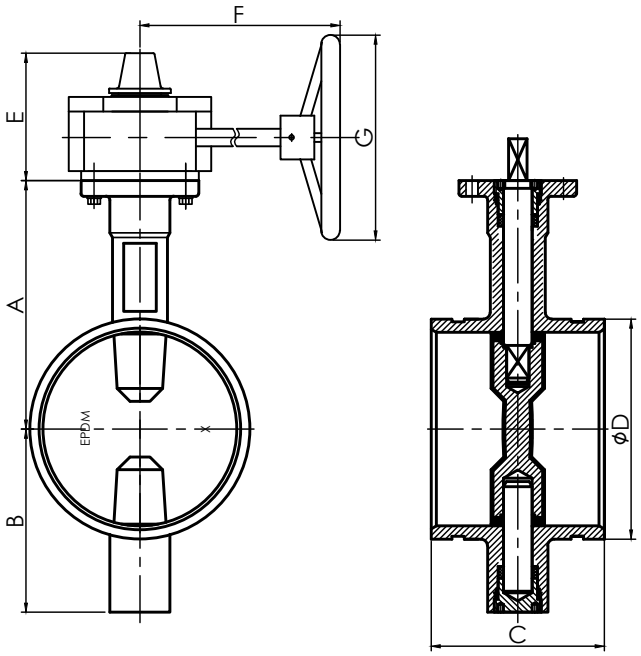
ASME B16.1

Connections

Groove to ISO6182 / AWWA C606

Gearbox Mounting Flange

ISO 5211



Dimensions

SIZES		Dimensions (mm)							Weight (Kg)	Product Ordering Code
Inch	mm	A	B	C	D	E	F	G		
2.5"	DN 65	125	95	96.4	73	111	153	152	8.8	RD221-073400
2.5"	DN 65	125	95	96.4	76.1	111	153	152	8.8	RD221-065400
3"	DN 80	140	100	97	88.9	111	153	152	9.5	RD221-080400
4"	DN 100	160	100	115.1	114.3	111	153	152	10.7	RD221-100400
5"	DN 125	170	125	132.4	139.7	111	153	152	14.2	RD221-125400
6"	DN 150	190	140	132.4	165.1	111	153	200	16.5	RD221-150400
6"	DN 150	190	140	132.4	168.3	111	153	200	16.5	RD221-168400
8"	DN 200	230	175	147.4	219.1	126	210	290	31.6	RD221-200400
10"	DN 250	260	200	159	273	126	210	290	40.5	RD221-250400
12"	DN 300	300	240	165	323.8	161	249	350	77.5	RD221-300400

Installation

Rapidrop High Pressure Grooved Butterfly Valve is suitable for indoor and outdoor use. The valve may be installed in any position and the flow may be from either direction through the valve. Valves should be supported independently to prevent the movement and stresses from the connecting piping system.

1. Ensure that the valve is in closed or almost closed position.
2. Visually inspect the valve, make sure the seating area is not damaged and that the connecting faces are clean of debris and any foreign materials.
3. Using appropriate grooved couplings connect the valve with adjacent pipe or fitting. Follow the instructions supplied by the manufacturer of the couplings.
4. Check the operation by fully opening and closing the valve.

Care and Maintenance

Rapidrop butterfly valves require no regular maintenance, however it is advisable to inspect and verify proper operation of the unit annually or in accordance with the authority having jurisdiction.

The inspection should include a visual check for leakage at the pipe connection and body to gearbox connection. Inspection and maintenance should be performed by a competent person in accordance with national codes/ requirements.

Debris in the piping system might cause difficulties in closing the valve, this problem can be fixed by backing off the handwheel and closing the valve again.

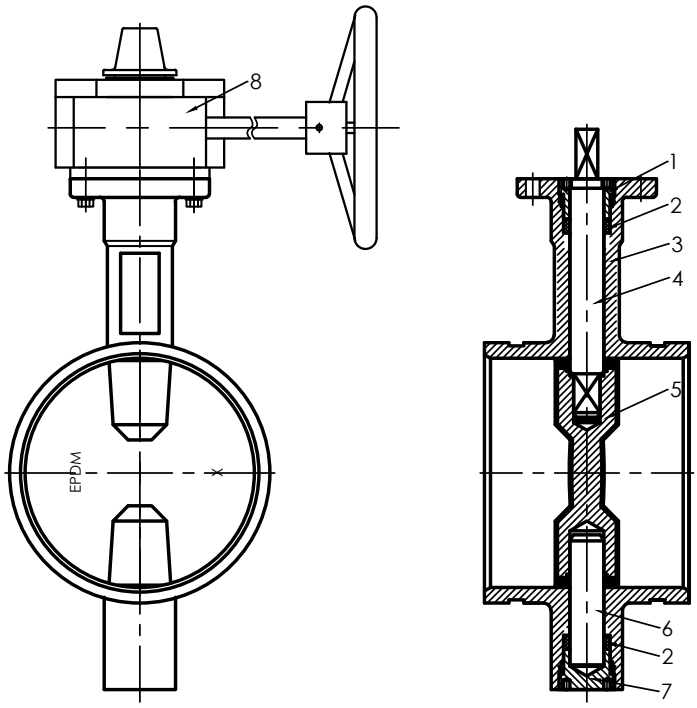
Rapidrop High Pressure Grooved Butterfly Valves are suitable for both indoor and outdoor use. Minor degradations of surface finish should not affect the performance of the valve.

The valve should never be forced to seat by applying a wrench to the hand wheel as this may distort the valve components. The use of excessive force to open or close the valve violates all warranties.

The valve should not be used to force a pipeline into position as this may result in the distortion of the valve body.

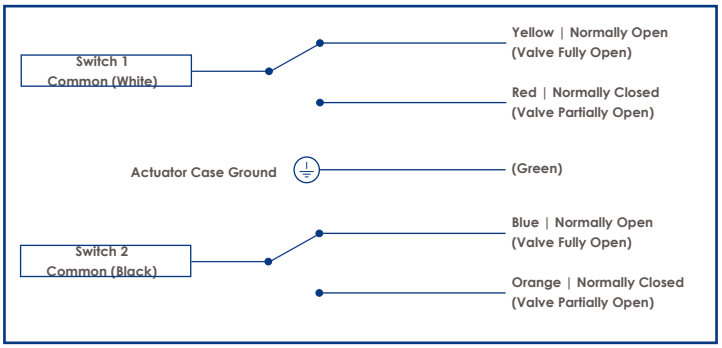
Switch Installation

An internal, factory installed, double tamper switch with 1m cables provide easy supervision of the valve. Within two handwheel turns from the "OPEN" position the switch will close indicating that the valve is not fully open.



Material Specification

No.	Item	Material
1	Upper Shaft Sealing Nut	WCB Steel
2	Shaft Seal	EPDM
3	Body	Ductile Iron ASTM A536
4	Upper Shaft	SS416
5	Disc	Ductile Iron ASTM A536 + EPDM
6	Lower Shaft	SS416
7	Lower Shaft Sealing Nut	WCB Steel
8	Stem Bushing	PTFE 2.5"-6" / C95400 8"-12"
9	Gear Box	Ductile Iron ASTM A536



High Pressure Wafer Butterfly Valve 27.5 bar rated

Product Description

Rapidrop High Pressure Wafer Butterfly Valve is a rotary type valve with a visual indication of whether the valve is in fully open position or not. Butterfly valves are commonly used in fire protection systems as system control valves, sectional or pump water control valves.

These valves have been designed with minimum flow restriction and pressure loss when in fully open position. To reduce the risk of a water hammer *Rapidrop Butterfly Valves* are provided with a slow close hand wheel operation gearbox.

Factory installed double tamper switch for indoor and outdoor use, complete with 1m flying lead.

Maximum Working Pressure

27.5 bar (400 PSI)

Maximum Temperature

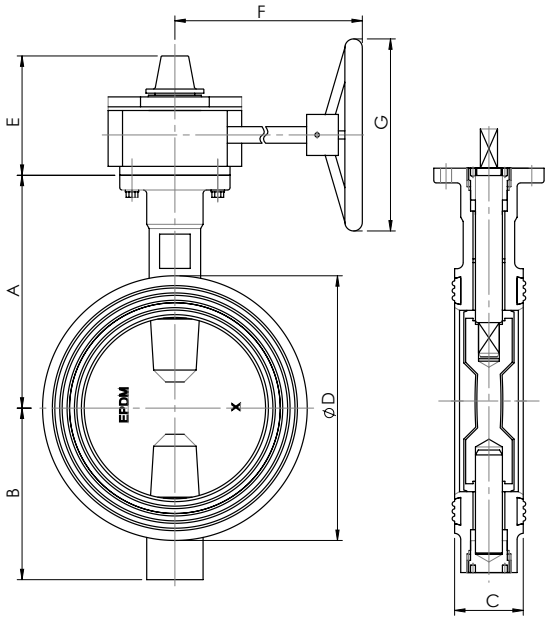
100°C

Coating

Fusion Bonded Epoxy Coating in accordance with ANSI /AWWA C550

Standards

Design:	AI609
Face to Face Distance:	ASME B16.1
Gearbox Mounting Flange:	ISO 5211
Test:	API598
Connections:	ANSI Class 125-150
	ISO 2084
	DIN 2501 PN16
	BS EN 1092 PN16



Dimensions

Sizes		Dimensions (mm)							Weight Kg	Product Ordering Code
Inch	mm	A	B	C	D	E	F	G		
2½"	DN65	125	95	44.2	112	111	153	152	9.1	RD220-065400
3"	DN80	140	100	45.3	120	111	153	152	9.2	RD220-080400
4"	DN100	160	100	52.0	165	111	153	152	11.3	RD220-100400
5"	DN125	170	125	54.4	182	111	153	152	12.4	RD220-125400
6"	DN150	190	140	55.8	216	111	153	200	15.0	RD220-150400
8"	DN200	230	175	60.5	260	126	210	300	26.4	RD220-200400
10"	DN250	260	200	66.5	320	126	210	300	34.4	RD220-250400
12"	DN300	300	240	76.9	375	161	252	350	69.5	RD220-300400

Installation

Rapidrop High Pressure Butterfly Valve is suitable for indoor and outdoor use. The valve may be installed in any position and the flow may be from either direction through the valve.

The use of additional flange gaskets is not necessary as the valve is self-sealing when connected to the piping system with appropriate flanges (ANSI/ASME Class 125/150, ISO 2084, DIN 2501 & BS EN 1092 PN16).

Valves should be supported independently to prevent the movement and stresses from the connecting piping system.

1. Ensure that the valve is in closed or almost closed position.
2. Visually inspect the valve, make sure the seating area is not damaged and that the connecting flanges are clean of debris and any foreign materials.
3. Insert the valve between the flanges and hand-tighten all flange bolts. Do not use flange gaskets. Do not apply lubricant to the seat faces as this may damage the seat material. Make sure valve is installed centrally between mating flanges.
4. Before fully tightening the bolts, slowly open the valve and check for any interference with the piping system.
5. If the valve opens freely, tighten all flange bolts using the crossover method. Recommended tightening torque is listed in the table.
6. After tightening the bolts check the operation by fully opening and closing the valve.

Care and Maintenance

Rapidrop butterfly valves require no regular maintenance, however it is advisable to inspect and verify proper operation of the unit annually or in accordance with the authority having jurisdiction.

The inspection should include a visual check for leakage at the pipe connection and body to gearbox connection. Inspection and maintenance should be performed by a competent person in accordance with national codes/ requirements.

Debris in the piping system might cause difficulties in closing the valve, this problem can be fixed by backing off the handwheel and closing the valve again.

Rapidrop High Pressure Wafer Butterfly Valves are suitable for both indoor and outdoor use. Minor degradations of surface finish should not affect the performance of the valve.

The valve should never be forced to seat by applying a wrench to the hand wheel as this may distort the valve components or score the sealing surface. The use of excessive force to open or close the valve violates all warranties.

The valve should not be used to force a pipeline into position as this may result in the distortion of the valve body.

Material Specification

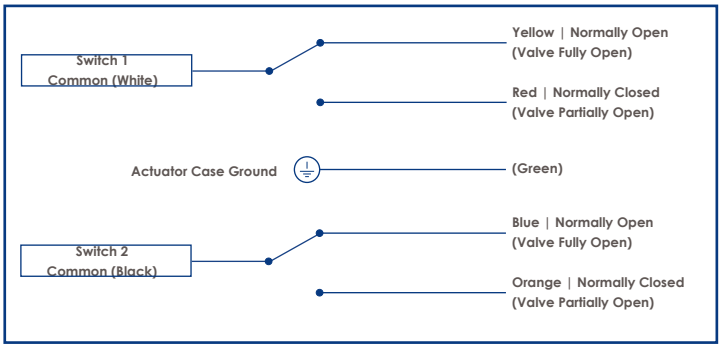
Item	Material
Upper Shaft Sealing Nut	Cast Steel
Shaft Seal	EPDM
Body	Ductile Iron ASTM A536
Upper Shaft	SS416
Disc	Ductile Iron ASTM A536 + EPDM
Lower Shaft	SS416
Lower Shaft Sealing Nut	WCB Steel
End Face Seal	EPDM
Stem Bushing	PTFE 2.5"-6" / C95400 8"-12"
Gear Box	Ductile Iron ASTM A536

Recommended Bolt Tightening Torque

Size	Recommended Minimum Torque
2"-4" DN50-DN100	30-40 Nm
5"-8" DN125-DN200	45-70 Nm
10" DN250	75-100 Nm
12" DN300	110-150 Nm

Switch Installation

An internal, factory installed, double tamper switch with 1m cables provide easy supervision of the valve. Within two handwheel turns from the "OPEN" position the switch will close indicating that the valve is not fully open.



High Pressure OS&Y Resilient Wedge Grooved Gate Valve 27.5 bar rated

Product Description

Rapidrop High Pressure OS&Y Resilient Wedge Grooved Gate Valve is a manually operated, outside screw & yoke resilient wedge gate valve designed for use in fire protection systems for on/off operation only. The lightweight ductile iron body allows for easier handling and reduced shipping costs. Valves are suitable for both vertical and horizontal installation.

Valve components are corrosion resistant or coated with a thermally applied fusion-bonded epoxy. The EPDM encapsulated ductile iron wedge with a compression mechanism is designed to achieve water tight sealing and low torque operation. The stem is pre notched to accommodate OSY2 limit switch.

Maximum Working Pressure

27.5 bar (400 PSI)

Maximum Working Temperature

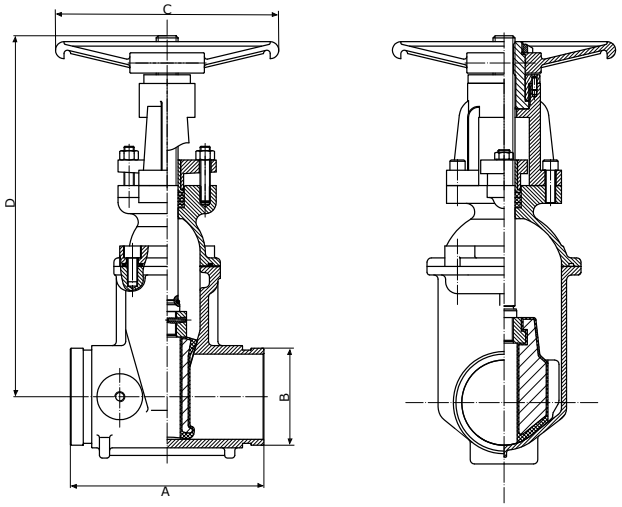
71°C / 160°F

Coating

Fusion Bonded Epoxy Coating in accordance with ANSI /AWWA C550

Groove Specification

ISO 6182-12 (Up to DN300/12")

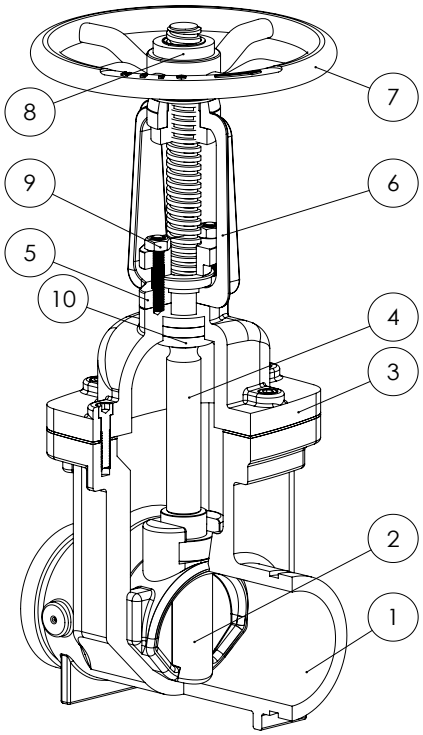


Dimensions

Sizes		Dimensions (mm)					Turns to Open	Weight (Kg)	Product Ordering Code
Inch	mm	A	B	C	D (Open)	D Closed)			
2.5"	DN 65	190.5	73.0	200	486	411	8.8	20	RD103GG065400
2.5"	DN 65	190.5	76.1	200	486	411	8.8	20	RD103GG076400
3"	DN 80	203	88.9	200	593	434	10.5	24	RD103GG080400
4"	DN 100	229	114.3	260	608	462	13	43	RD103GGRD100400
6"	DN 150	267	165.1	315	747	597	15.7	70	RD103GG150400
6"	DN 150	267	168.3	315	747	597	15.7	70	RD103GG168400
8"	DN 200	292	219.1	375	963	727	17.2	112	RD103GG200400
10"	DN 250	330	273.0	416	1145	891	21.4	159	RD103GG250400

Material Specification

No	Description	Material
1	Valve Body	Ductile Iron
2	Disc	Ductile Iron+ EPDM
3	Bonnet	Ductile Iron
4	Stem	Stainless Steel
5	Gland	Grey Iron
6	Yoke	Ductile Iron
7	Handwheel	Ductile Iron
8	Locknut	Carbon Steel
9	Gland Nut	
10	Stem Packing	EPDM



Installation

Rapidrop High Pressure OS&Y Grooved Gate Valve is suitable for indoor and outdoor use. The valve should be installed in a location easily accessible for operation and maintenance. The valve may be installed in any position and the flow may be from either direction through the valve. Valves should be supported independently to prevent the movement and stresses from the connecting piping system.

1. Visually inspect the valve, make sure the seating area is not damaged and that the connecting faces are clean of debris and any foreign materials.
2. Ensure that valve is in the closed position during handling and installation process.
3. Using appropriate grooved couplings connect the valve with adjacent pipe or fitting. Follow the instructions supplied by the manufacturer of the couplings.
4. Before pressurising the system make sure the valve is in fully open position.

Care and Maintenance

The valve should never be forced to seat by applying a wrench to the handwheel as this may distort the valve components. The use of excessive force to open or close the valve violates all warranties.

The valve should not be used to force a pipeline into position as this may result in the damage of the valve components.

Rapidrop gate valves require no regular maintenance, however it is advisable to inspect and verify proper operation of the unit annually or in accordance with the authority having jurisdiction.

The inspection should include a visual check for leakage at the pipe connection and the stem. In case of leakage around the stem area, tighten the gland nuts (9) evenly approximately a quarter turn in clockwise direction.

It is recommended to shut down the system if repacking the valve is necessary. Inspection and maintenance should be performed by a competent person in accordance with national codes/ requirements.

Debris in the piping system might cause difficulties in closing the valve, this problem can be overcome by backing off the handwheel and closing the valve again.

Rapidrop High Pressure OS&Y Grooved Gate Valves are suitable for both indoor and outdoor use. Minor degradations of surface finish should not affect the performance of the valve.

High Pressure Grooved Swing Check Valve 27.5 bar rated

General Description

Rapidrop High Pressure Grooved Swing Check Valve is *a* rubber faced, grooved swing type check valve that allows water flow in one direction only.

A hinged clapper remains open with water flowing in one direction, and automatically closes, with the help of an incorporated spring, when flow stops preventing backflow. The clapper seat design permits leak free sealing of back pressures in service conditions ranging from 24 bar to as low as 0.35 bar (710 mm water head).

Rapidrop High Pressure Grooved Swing Check Valve grooved swing check valve is suitable for installation in both horizontal and vertical (with the flow upwards) pipelines.

Connections

Groove to ISO 6182

Maximum Working Pressure

400PSI (27.5 bar)

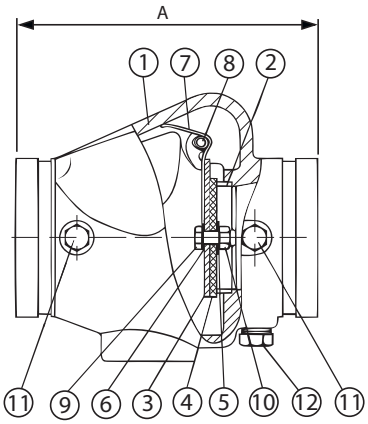
Coating

Fusion Bonded Epoxy Coating

In accordance with ANSI / AWWA C550 or painting upon request

Installation

The valve must be installed with the direction arrow on the body coincident with the direction of the flow in the pipeline. Rapidrop grooved swing check valve can be installed horizontally or vertically. For vertical pipework the flow direction should be upwards only. Large valves are provided with lifting eye bolt, which should be used to manoeuvre the valve.



Dimensions

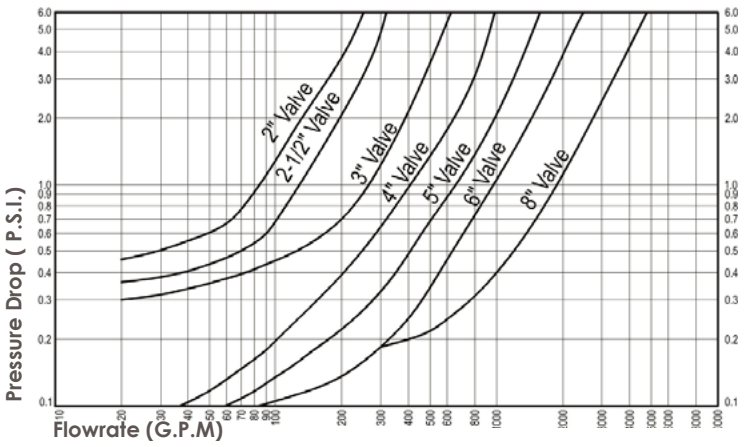
Sizes		Dimensions (mm)		Weight (kg)	Product Ordering Code
In.	mm	OD	A		
2"	DN 50	60.3	169	2.5	RDCV050G400
2 1/2"	DN 65	73.0	183	4	RDCV073G400
2 1/2"	DN 65	76.1	183	4	RDCV065G400
3"	DN 80	88.9	198	6	RDCV080G400
4"	DN 100	114.3	218	9	RDCV100G400
5"	DN 125	139.7	248	15	RDCV139G400
5"	DN 125	141.3	248	15	RDCV125G400
6"	DN 150	165.1	270	19	RDCV150G400
6"	DN 150	168.3	270	19	RDCV168G400
8"	DN 200	219.1	325	35	RDCV200G400

Material Specification

Number	Part	Specification
1	Body	Ductile Iron ASTM A 563
2	Seat	Bronze
3	Clapper	Stainless Steel 304
4	Facing Seal	EPDM Rubber
5	Clamping Ring	Stainless Steel 304
6	Gasket	EPDM Rubber
7	Spring	Stainless Steel 304
8	Hinge Pin	Stainless Steel 304
9	Bolt	Stainless Steel 304
10	Locknut	Stainless Steel 304
11	Plug 1/4" NPT	Carbon Steel
12	Plug 1/2" NPT	Carbon Steel

Flow coefficient Values

Sizes		OD (mm)	Cv (Full Open)
In.	mm		
2"*	DN 50	60.3	100
2 1/2"	DN 65	73.0	140
2 1/2"	DN 65	76.1	140
3"	DN 80	88.9	250
4"	DN 100	114.3	390
5"	DN 125	139.7	700
5"	DN 125	141.3	700
6"	DN 150	165.1	1000
6"	DN 150	168.3	1000
8"	DN 200	219.1	1800



Brass Gate Valve - PN25

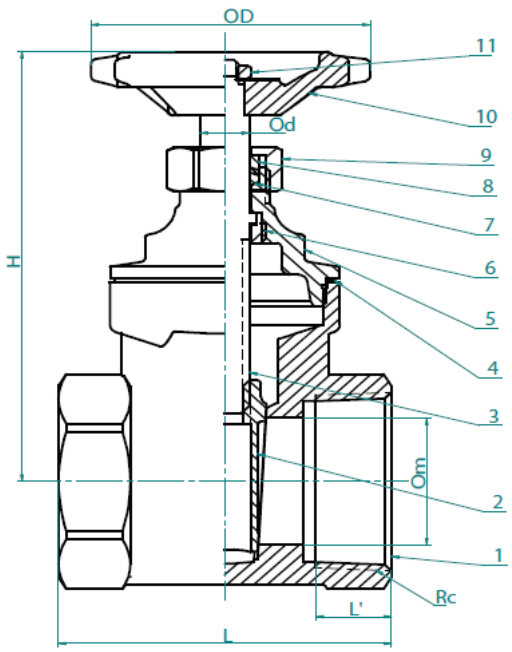
Description

Screwed BSPT, Brass Body & Bonnet, Full Bore, Cast Handwheel, Heavy Pattern

Pressure / Temperature Specifications

Pressure PN25

Temperature -20°C to 120°C ,



Material Specifications

No	Part	Material
1	Body	Brass HBb59-1
2	Wedge	Brass HBb59-1
3	Stem	Aluminium Bronze CC333G
4	Gasket	PTFE
5	Bonnet	Brass HBb59-1
6	Nut	Brass HBb59-1
7	Packing	Epoxy Laminate F4
8	Packing Gland	Brass HBb59-1
9	Gland Nut	Brass HBb59-1
10	Handwheel	Cast Iron HT200
11	Lock Nut	Brass HBb59-1

Dimensions

Size	OD	H	L	L'	Rc	Od	Om	Kg
½"	56	76	54	12.5	½	7	12.7	0.33
¾"	56	80	59	12.7	¾	8	19	0.43
1"	71	98	66	14.5	1	9.5	25	0.66
1¼"	71	112	74	16.8	1¼	11	32	0.94
1½"	71	120	75	16.8	1½	11	39	1.28
2"	81	146	86	21.1	2	12.5	50	2.2
2½"	100	192	99	23.2	2½	14	63.5	3.64
3"	108	218	115	26.3	3	15.5	76	5.6
4"	126	264	134	32.2	4	17.5	100	9.37

Forged Steel Gate Valve

Description

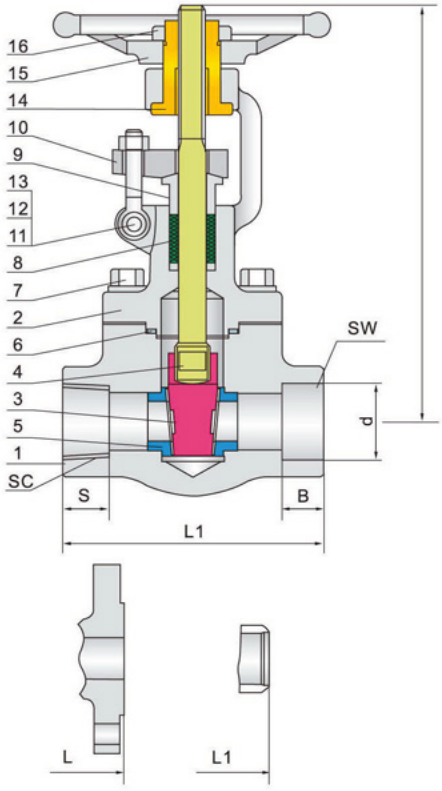
Class 800 A105 to API 602, Trim 13% CR + HFS No. 8, Tested to API 598

Pressure / Temperature Specifications

Maximum Pressure	136.2 Bar @ 38°C
Temperature	-29°C to 425°C

Material Specifications

No	Part Name	ASTM Material		
		C-Si	16Cr-12Ni-2Mo	1 ¼ Cr- ½ Mo-Si
1	Body	A105	A182-F316	A182-F11
2	Bonnet	A105	A182-F316	A182-F11
3	Wedge	A182-F6a	A182-F316	A182-F6a+HF
4	Stem	A276-410	A276-316	A276-410
5	Seat Ring	A276-410	A182-F316	A276-410+HF
6	Bonnet Gasket	Graphite+304	Graphite+316	Graphite+304
7	Bonnet Stud	A193-B7	A193-B8M	A193-B16
8	Packing	Graphite	19	RDCV150G400
9	Gland	A276-410	A276-316	A276-410
10	Gland Flange	A105	A182-F316	A182-F11
11	Eyebolt Pin	A276-410	A276-316	A276-410
12	Eyebolt	A193-B7	A193-B8M	A193-B16
13	Eyebolt Nut	A194-2H	A194-8M	A194-2H
14	Yokesleeve	A276-410		
15	Handwheel	Malleable İron		
16	Handwheel Nut	Carbon Steel		



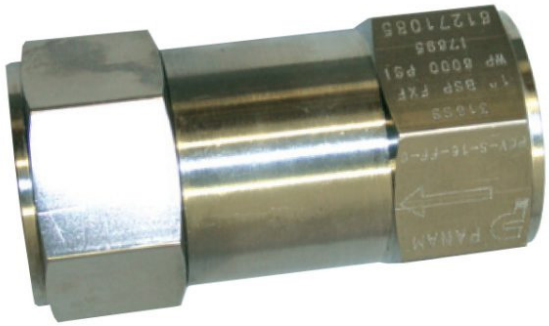
Dimensions

NPS DN	Unit	L	L (Flanged Ends)			d	SW		SC		H (Open)	D0
			150Lb	300Lb	600Lb		D	B	NPT	S		
3/8 10	in mm	3.12 79	4.00 102	5.50 140	6.50 165	0.394 10	0.693 17.6	0.378 9.6	3/8	0.540 13.6	6.00 151	4.00 100
1/2 15	in mm	3.12 79	4.25 108	5.50 140	6.50 165	0.394 10	0.858 21.8	0.378 9.6	1/2	0.535 13.6	6.00 151	4.00 100
3/4 20	in mm	2.63 92	4.62 117	6.00 152	7.50 190	0.531 13.5	1.067 27.1	0.500 12.7	3/4	0.547 13.9	6.25 158	4.00 100
1 25	in mm	4.38 111	5.00 127	6.50 165	8.50 216	0.709 18	1.331 33.8	0.500 12.7	1	0.681 17.3	7.25 185	5.00 125
1 ¼ 32	in mm	4.75 120	5.50 140	7.00 178	9.00 229	0.945 24	1.677 42.6	0.500 12.7	1 ¼	0.709 18	9.38 239	6.25 160
1 ½ 40	in mm	4.75 120	6.50 165	7.50 190	9.50 241	1.181 30	1.917 48.7	0.500 12.7	1 ½	0.724 18.4	9.50 243	6.25 160
2 50	in mm	5.50 140	7.00 178	8.50 216	11.50 292	1.437 36.5	2.406 61.1	0.626 15.9	2	0.756 19.2	11.00 279	7.00 180

316 Stainless Steel Check Valve

Description

Stainless Steel Body from Bar Stock, Stainless Steel Spring & Disc, Buna N Seat, Cracking Pressure 0.33psi



Pressure / Temperature Specifications

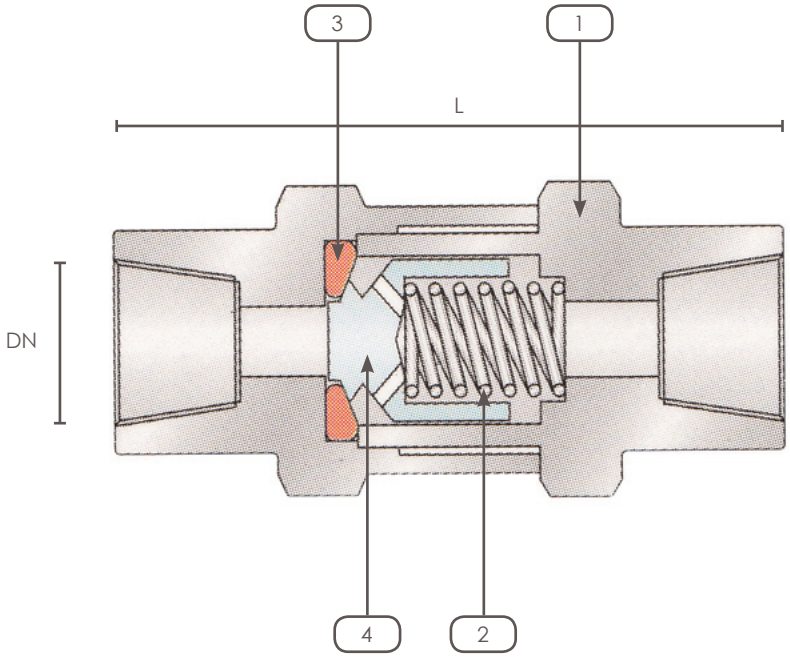
Maximum Pressure	400 Bar Rated
Temperature	-34°C to 135°C

Material Specifications

No	Part	Material
1	Body	A479-316 Stainless Steel
2	Spring	Stainless Steel 302
3	O-ring	Buna-N
4	Poppet	A479-316 Stainless Steel

Material Specification

DN	L
¼"	60
⅜	60
½"	84
¾"	84
1"	98.5



Pressure Regulating Valve for Wet Riser Model: DRV010

Product Description

DRV010, 65mm diameter Gun Metal high pressure "bib nose" pattern regulating landing valve is field adjustable which allows the user to set the valve outlet pressure as desired, according to the conditions of the fire protection system in which the valves are installed.

The valve comes with flanged inlet connections.

The design and construction of the landing valves are strictly in accordance with BS5041:Part 1 and the requirements of BS9990:2015.

The valve is suitable for connection of a high pressure water supply of up to 30 bar (435 psi) and will provide a reduced outlet pressure which can be set in-situ during testing and commissioning of the fire protection system.

The shut-off of the valve watertight sealing is achieved by using a high quality rubber bonded seat disc which acts as a primary rubber to metal seal, whilst a secondary metal to metal shut-off is also incorporated in the design of the valve.

Every valve manufactured is hydrostatically tested to 22 bars and 30.0 bars for the valve seat and body respectively. The valve outlet static pressure is factory pre-set at 10-11 bars as required in BS9990:2015.

The internal casting finish of every valve is of high quality ensuring a low flow restriction that meets the standards water flow test requirement.

The valve comes complete with standard "red" plastic plug and chain. Alternative plugs made of brass or gun metal are also available upon request.

Standards

The Rapidrop DRV010 Pressure regulating valve is designed and built in accordance with BS5041 Part 1 to meet the requirements of BS9990: 2015

Manufactured from LG2 bronze the DRV010 has a PN25 inlet connection and a BS336 Female connection.

Features

When the valve is open, the inlet pressure flows into the upper part of the pressure chamber. By adjusting the spring below, a balance pressure of these two forces determines the degree of the valve opening to maintain a constant outlet pressure.

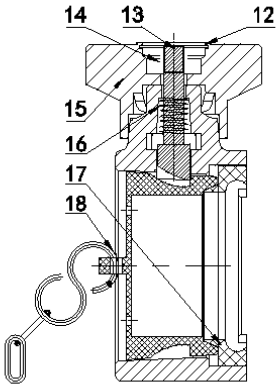
When the valve outlet pressure is regulated, it will remain set unless it is being tempered. The valve outlet pressure setting can only be regulated under a flowing condition. A small flow coming out of the valve outlet is sufficient to perform the task.

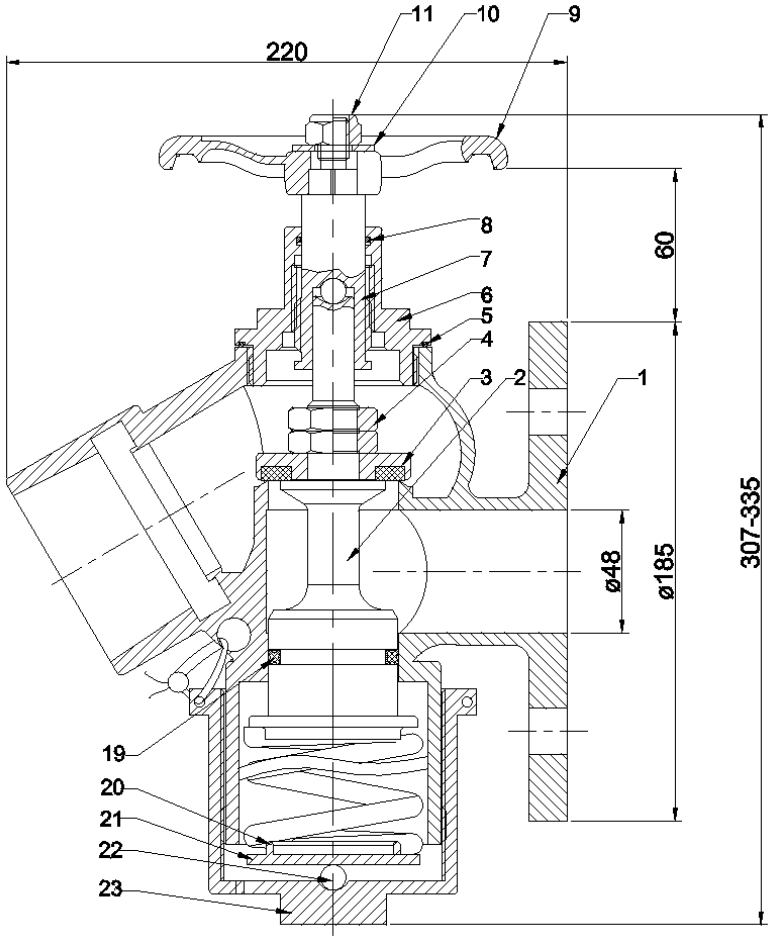
The valve counter balance spring design allows the outlet pressure ranges from 10 to 30 bars.

The valve/spring can be adjusted and set to the desired flow by rotating the lower valve housing using a 'C' spanner.

Specifications

Size	65 mm (2 ½")
Approx Weight	12k g
Material	Gun Metal
Pressure Rating	Tested to 22 bar
Inlet Connection	PN25 Flange
Outlet Connection	BS336 Female
Manufactured in Accordance to	BS5041 Part 1





Material Specification

Item	Part Description	Qty	Material
1	Valve Body	1	Gun Metal
2	Spindle	1	Brass
3	Disc Holder	1	Brass
4	Locknut	2	Brass
5	O-ring	1	Nitrile
6	Top Cover	1	Gun Metal
7	Shut Down Spindle	1	Brass
8	O-ring	1	Nitrile
9	Handwheel	1	Cast Iron
10	Handwheel Gasket	1	Steel
11	Nyloc Nut	1	Steel
12	Cap	1	Plastic

Item	Part Description	Qty	Material
13	Bolt	1	Brass
14	Nyloc Nut	1	Steel
15	Winged Cap	1	Brass
16	Spring	1	Stainless Steel
17	Inst Seal	1	Nitrile
18	Cap with Chain	1	Plastic and Steel
19	Seal	1	Nitrile
20	Spring	1	Spring Steel
21	Spring Carrier	1	Gun Metal
22	Ball	2	Rubber
23	Adjusting Cap	1	Gun Metal

Cla-Val Pressure Reducing Valve
Model: 90G 21 & 90A 21

Product Description

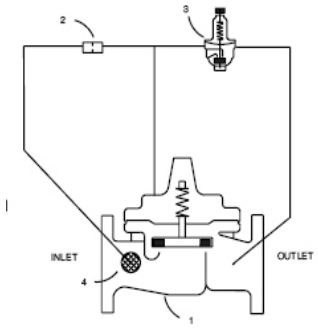
Globe or Angle Pattern
Proven Reliable Design
Available in Cast Bronze, Ductile Iron and Cast Steel
Accurate Pressure Control
In Line Service
Grooved Ends (40 - 200 mm)

The 90G-21 (globe) and 90A-21 (angle) Pressure Reducing Valves are indispensable in any fire protection system. The diaphragm actuated design is proven highly reliable and easy to maintain. Available are globe or angle pattern with a full range of adjustments. A variety of material options are also available. Epoxy coating is strongly recommended for all fire system valves (excluding bronze valves). The 90G-21 and 90A-21 can be supplied with optional internal and external epoxy coating of the main valve wetted surfaces.

The RD 90G-21 (globe) and 90A-21 (angle) Pressure Reducing Valves automatically reduce a higher inlet pressure to a steady lower outlet pressure regardless of changing flow rate and/or varying inlet pressure. The valves pilot control system is very sensitive to slight downstream pressure fluctuations, and will automatically open or close to maintain the desired pressure setting. The downstream pressure can be set over a wide range by turning the adjustment screw on the CRD pilot control. The adjustment screw is protected by a screw-on cover, which can be sealed to discourage tampering.

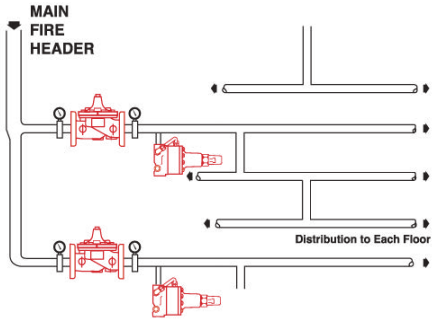
Schematic Diagram

Item	Description
1	PRV (Globe or Angle)
2	Restriction Tube Fitting
3	Pressure Reducing Control
4	Flow Clean Strainer



Typical Application

Underwriters Laboratories requires the installation of pressure gauges upstream and downstream of the Pressure Reducing Valve. Also, a relief valve of not less than 15 mm in size must be installed on the downstream side of the pressure control valve. Adequate drainage for the relief valve discharge must be provided.



When Ordering Please Specify

1. Model Number 90-21
2. Size
3. Globe or Angle Pattern
4. Main Valve Body and Cover Material
5. Threaded, Flanged or Grooved
6. Pressure Class
7. Optional Epoxy Coating

UL Listings

Sizes		Ductile Iron 150# Flanged	Ductile Iron 300# Screwed	Ductile Iron 300# Flanged	Bronze 300# Threaded	Cast Steel 300# Flanged	Globe Pattern Ductile Iron Grooved End	Angle Pattern Ductile Iron Grooved End
inch	mm							
1½"	40	UL	UL	UL	UL	UL	UL	
2"	50	UL	UL	UL	UL	UL	UL	UL
2½"	65	UL	UL	UL	UL	UL	UL	
3"	80	UL	UL	UL	UL	UL	UL	UL
4"	100	UL		UL		UL	UL	UL
6"	150	UL		UL		UL	UL	UL
8"	200	UL		UL			UL	
10"	250							

Flow Capacity Table

Valve Size mm	40	50	65	80	100	150	200	250
Max Flow Rate LPM of Water	606	992	1412	2180	3755	8521	14763	23280

Specifications

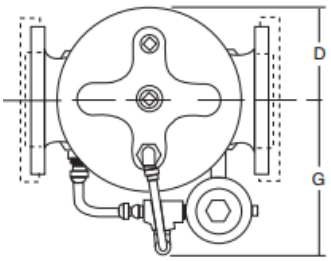
Size	Class 175 lb.	40 mm - 200 mm (Globe)
		50 mm - 150 mm (Angle)
	Class 300 lb.	40 mm - 200 mm (Globe)
		50 mm - 150 mm (Angle)
End Details	150 ANSI B16.42 (Ductile Iron) (Bronze)	
	300# (Ductile Iron)	
	300# (Cast Steel)	
	300# (Ductile Grooved End)	
Pressure Differential	0.7 Bar Min.	
Pressure Adjustment Range	Class 175 lb. 2 – 11.3 Bar	
	Class 300 lb. 2 – 11.3 Bar	
Temperature Range	Water to 82°C Max.	

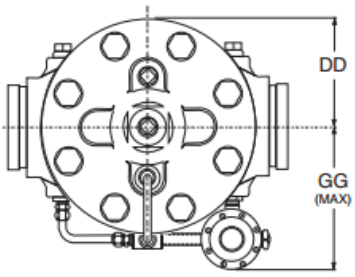
Materials

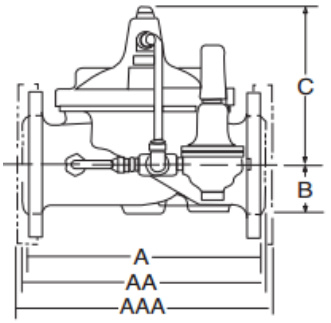
Main valve body & cover	Ductile Iron - ASTM A536
Main valve internal trim	Stainless Steel 316 seat and disc guide
	Stainless Steel 303 stem, stem nut and cover bearing
Pilot control system	Bronze ASTM B62 with Stainless Steel 303 internal trim
Pilot control valve	Stainless Steel 303 tubing with Stainless Steel 316 fittings
Main valve and pilot valve	diaphragm and disc: Buna-N® synthetic rubber

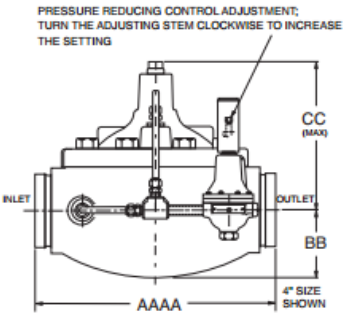
Dimensions

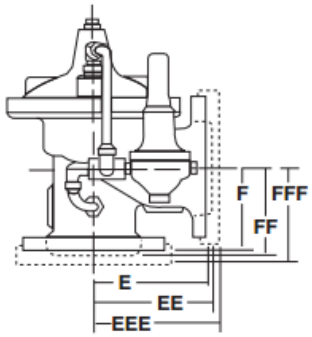
Value Size (mm)	40	50	65	80	100	150	200	250
A Threaded	184	238	279	318	-	-	-	-
AA 150 ANSI	216	238	279	305	381	508	645	756
AAA 300 ANSI	229	254	295	337	397	533	670	790
AAAA Grooved	216	228	279	318	381	508	645	-
B	28	38	43	65	81	109	135	235
BB Grooved	52	54	73	6.00	4.13	6.00	184	-
C (Max)	140	161	192	208	270	340	406	435
CC (Max) Grooved	104	127	175	165	223	281	369	-
D	71	84	102	116	146	200	254	300
DD Grooved	71	84	102	116	146	200	254	-
E Threaded	83	121	140	159	-	-	-	-
EE 150 ANSI	102	121	140	152	191	254	324	378
EEE 300 ANSI	108	127	149	162	200	267	349	395
EEEE Grooved	-	121	-	152	191	-	-	-
F Threaded	48	83	102	114	-	-	-	-
FF 150 ANSI	102	83	102	102	127	152	203	219
FFF 300 ANSI	108	89	109	111	135	165	216	236
FFFF Grooved	-	121	-	114	127	-	-	-
G (Max)	191	197	197	203	228	241	267	292
GG (Max)	206	203	-	207	236	267	292	-

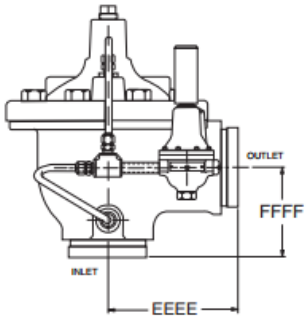












Cla-Val Pressure Relief Valve Model: 50B -4KG-1

Product Description

The RD Model 50B-4KG-1 Globe / 2050B-4KG Angle Pressure Relief Velve is designed specifically to automatically relieve excess pressure in fire protection pumping system. Pilot controlled, it maintains constant system pressure at the pump discharge within very close limits as demands change.

Product Features

Fast Opening to Maintain Steady Line Pressure

Accommodates Wide Range of Flow Rates

Closes Gradually for Surge-Free Operation

Adjustable Pressure Settings, Not Affected by Pressure at Valve Discharge

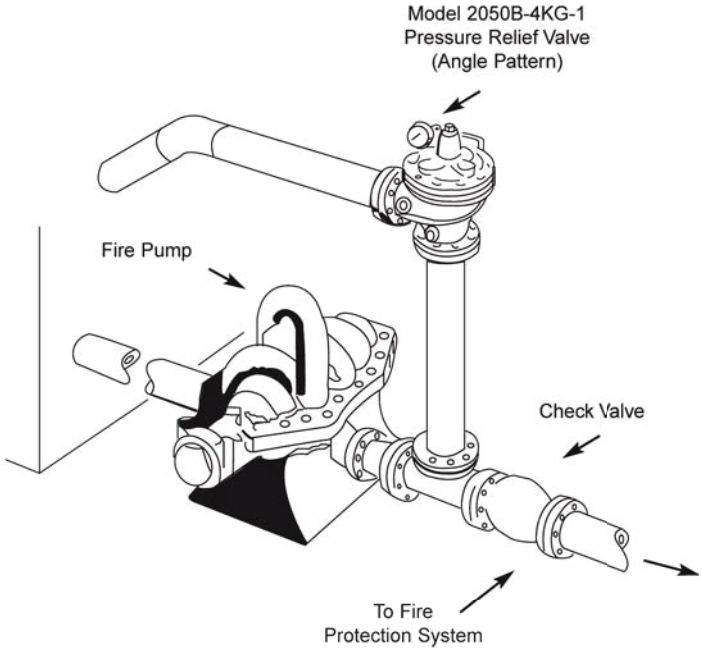
Operation Sequence

At pump start, the Relief Valve modulates to relieve excess pump capacity, maintaining positive system pressure at the pump discharge.

When fire demand slows or ceases, the Model 50B-4KG-1 opens. diverting entire pump output to discahnge, allowing fire pump to be stopped without causing surging in the lines.

(Please note that if the Model 50B-4KG-1 is to be used on a comtinous duty basis to maintain fire-system pressure, suitable back pressure must be provided on the valve to prevent cavitation damage. Please enquire for further details).

Typical Application



Specifications

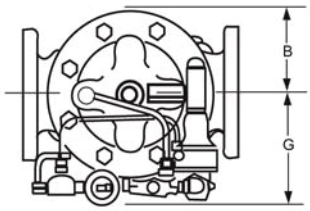
Size	50 mm - 300 mm (Globe)
	50 mm - 300 mm (Angle)
End Details	150 and 300 ANSI B16.42
Pressure Differential	0.7 Bar Min.
Pressure Ratings	Class 150 – 12.0 Bar Max
	Class 300 – 20.6 Bar Max
Temperature Range	Water to 82°C Max.

Valve Capacity Table

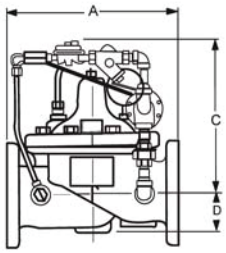
Valve Size mm	50	65	80	100	150	200	250	300
NFPA 20 Maximum Recommended LPM (Litres per Min)	787	1136	1893	3785	9464	18927	41640	60567

Dimensions

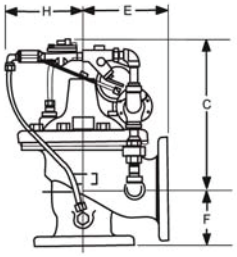
Value Size (mm)	50	65	80	100	150	200	250	300
Threaded Ends	238	279	318	-	-	-	-	-
A 150 Flanged	238	279	305	381	508	645	756	864
300 Flanged	254	295	337	397	533	670	790	902
300 x 150	-	-	327	389	522	657	773	883
B	84	102	116	146	200	254	330	356
C	305	311	318	330	363	414	457	522
D	38	43	65	81	109	135	235	273
Threaded Ends	121	140	159	-	-	-	-	-
E 150 Flanged	121	140	152	191	254	324	378	432
300 Flanged	127	149	162	200	267	337	395	451
Threaded Ends	83	102	114	-	-	-	-	-
E 150 Flanged	83	102	102	127	152	203	219	349
300 Flanged	89	109	111	135	165	216	236	368
G & H	152	170	197	200	216	248	337	362



Model 50B-4KG-1 Globe



Model 2050B-4KG-1 Angle



We recommend providing adequate space around valve for maintenance work

Material

Main Valve Body & Cover: Ductile iron - ASTM A536, Naval Bronze ASTM B61, Other Material Available

Standard main Valve Trim: Bronze Seat, Teflon Coated, Stainless Steel Stem, Delrin Sleeved

Standard Pilot Control System: Cast Bronze with Stainless Steel trim

Adjustment Range

Available in the following relief pressure ranges: 1.4 - 13.8 Bar (150 Class) , 6.9 - 20.7 Bar (300 Class)

Optional

Protective epoxy resin coating of wetted surfaces of main valve cast iron components (UL listed HNFX EX2855)

Sea Water Service option

Globe: 50mm - 250mm Flanged. Angle: 50mm - 250mFlanged. Please consult us for further details

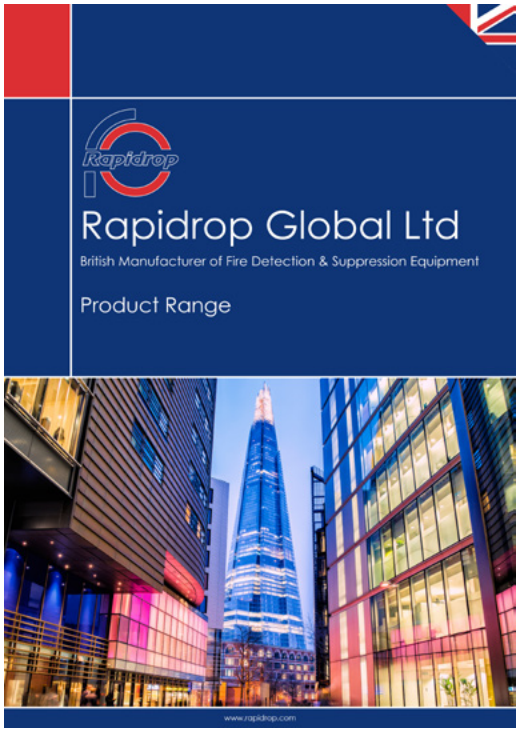
Purchase Specifications

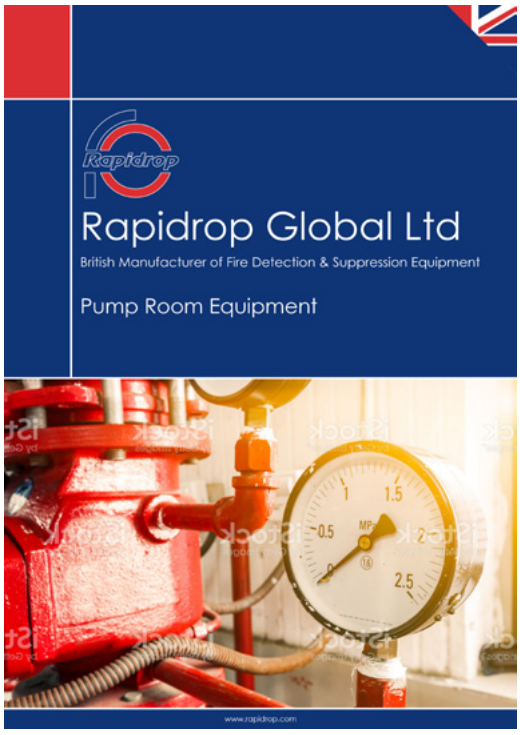
The Fire Pump Pressure Relief Valve shall modulate to relieve excess pressure in a fire protection system. It shall maintain constant pressure in the system regardless of demand changes. It shall be pilot controlled and back pressure shall not affect its set point. It shall be actuated by line pressure through a pilot control system and open fast in order to maintain steady system pressure as system demand decreases. It shall close gradually to control surges and shall re-seat drip-tight within 5% of its pressure setting. The main Valve shall be of the hydraulically-operated, pilot-controlled, diaphragm-type, globe or angle valve. It shall have a single, removable, teflon-coated seat, a grooved stem guided at both ends, and a resilient disc with a rectangular cross section, being contained on 3 1/2 sides. No external packing glands shall be permitted and the diaphragm shall not be used as a seating surface. The pilot control shall be a direct-acting, adjustable, spring-loaded, diaphragm-type valve designed for modulating service to permit flow when controlling pressure excess spring setting. This valve shall be UL Listed and Factory Mutual approved. It shall be the Model 50B-4KG-1 (globe) or Model 2050B- 4KG-1 (angle) Pressure Relief Valve.

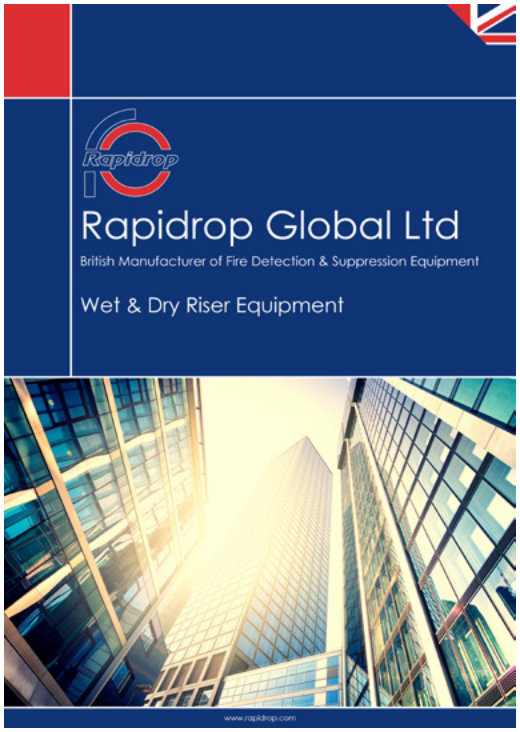
*Special Note:

The Model 50B-4KG-1 Pressure Relief Valve is available with 300# ANSI inflet flange and 150# ANSI outlet flange. This valve is used on higher pressure systems where 300# flange connections are required, and allows for adapting of a discharge cone (generally supplied with 150# flange) to accommodate "atmospheric break" at relief valve discharge. This relief valve, with 300# / 150# flanges is available special order, and is UNDERWRITERS LABORATORIES LISTED AND FACTORY MUTUAL APPROVED.

Rapidrop Catalogues



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British Manufacturer of Fire Detection & Suppression Equipment
Wet & Dry Riser Equipment


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Jactone
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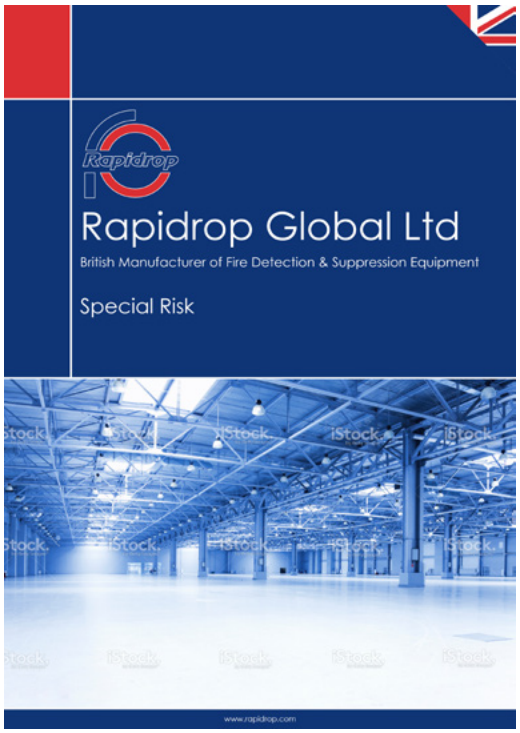
POWDER
EXTINGUISHER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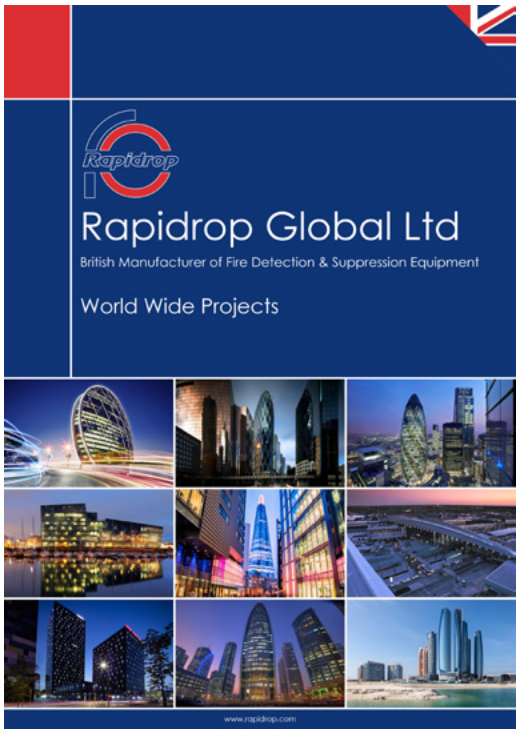
Special Risk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British Manufacturer of Fire Detection & Suppression Equipment
World Wide Projects

Rapidrop Global Ltd

Rapidrop: A Global company, British manufactured

British based manufacturer of fire sprinkler system products with international sales and distribution serving the needs of the fire detection and suppression industry worldwide.

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Approvals

The Rapidrop range includes products which have internationally recognised approvals and listings from FM/UL/VDS and LPCB.

FM APPROVED · UL · LPCB Assessed to ISO 9001:2008 Cert/LPCB ref. 556 · VdS · CE

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