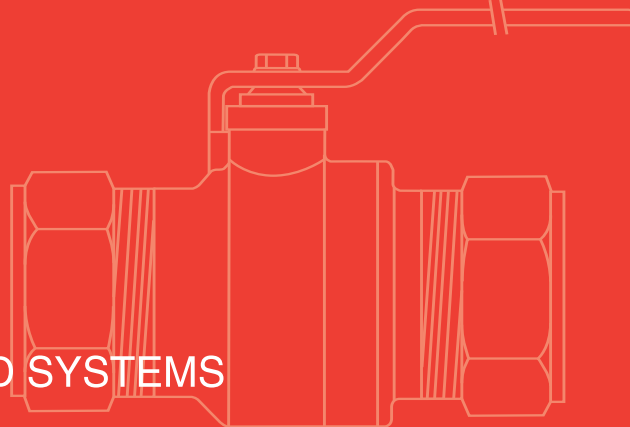
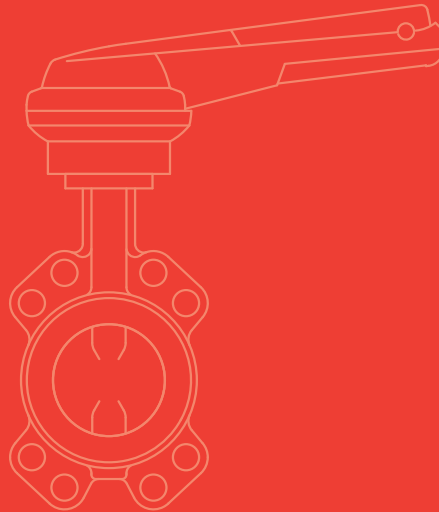
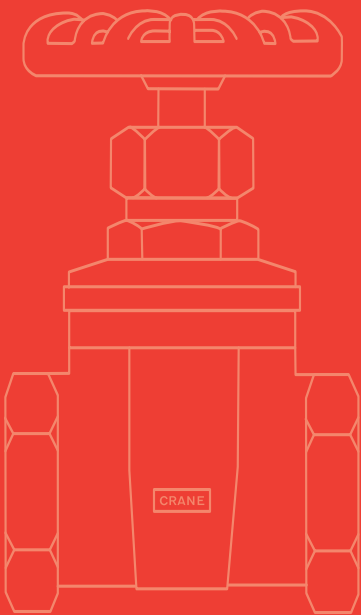


# Project Valves Technical Data

# Project Valves



FLUID SYSTEMS

## Contents

<b>Introduction</b>	<b>1</b>
<b>Dominator Z3000</b>	<b>2 - 4</b>
<b>Balancing Valves</b>	<b>5 - 15</b>
<b>Gate Valves</b>	<b>16 - 34</b>
<b>Globe Valves</b>	<b>35 - 40</b>
<b>Check Valves</b>	<b>41 - 47</b>
<b>Ball Valves</b>	<b>48 - 58</b>
<b>Butterfly Valves</b>	<b>59 - 70</b>
<b>Strainers</b>	<b>71 - 74</b>
<b>Typical Kv valves</b>	<b>75</b>



## Crane Fluid Systems

Crane Fluid Systems is a leading UK manufacturer of Valves, Fittings and Engineered Products for fluid handling applications in building services and general industrial markets. We aim to be our customers' preferred supplier by offering products which provide best value together with service levels that exceed our customers expectations.

## Customer Service

The satisfaction of customer requirements is the defining philosophy of Crane Fluid Systems. The position we hold in our markets is built on the foundations of product availability from our network of Distributors and providing expert technical support to users of valves and pipe fittings.

Customers' orders are received via EDI, fax or telephone by our Customer Service Administrators. Using our state-of-the-art computer-based Enterprise Resource Planning System, we are able to immediately confirm product availability and price. Our computers ensure orders are seamlessly transmitted to our production managers who regularly review factory plans to ensure customer requirements are satisfied on time.

Comprehensive product selection and application advice is just a phone call away. Our Internal Sales Engineers are equipped to deal with complex valve application needs, receiving customers' drawings and producing comprehensive valve schedules that will satisfy the design parameters of the heating and ventilating system. Our customers have come to regard this team as one of the most reliable sources of technical support.

## Quality Assurance

Rigid quality control and inspection at all stages of manufacture ensure that Crane products are fully suitable for their intended application and will give reliable service. Every valve and pipe fitting is individually tested in accordance with the relevant product standard.

Crane Fluid Systems is an approved manufacturer under various independent quality schemes including the British Standards Institution (BSI) Kitemark and is ISO9001 accredited. In addition, the company has been approved and/or listed by various user organisations including the United Kingdom Water Fittings Bye-Laws Scheme (WRAS approved).

## Health and Safety at Work Act

Every effort is made to ensure that when properly used in accordance with stated recommendations, goods supplied are safe and without risk to health.

Should the purchaser be uncertain as to the suitability for uses other than those stated, he/she should check with the supplier or Crane Fluid Systems.

## Control of Substances Hazardous to Health

Material supplied by Crane Fluid Systems does not constitute "substances" as defined in the Approved Code of Practice of COSHH but complies with the requirements of the Health and Safety at Work Act 1974.

Material supplied by Crane may be handled and stored in complete safety.

Crane products are safe to use provided they are utilised for their intended function and used within the limitations specified by Crane.

Note: Material is defined as equipment, supplies and spares that form the subject of a contract (ref. BS 4778).

## Pressure Equipment Directive

All Crane Fluid Systems products have been assessed in accordance with the Pressure Equipment Directive 97/23/EC and the Pressure Equipment Regulations 1999 No. 2001. Each product has been classified into a conformity assessment category based on the intended fluid contents – gas or liquid, the classification of the intended fluid contents – Group 1 or Group 2, the maximum allowable pressure and the nominal size (DN).

Crane products fall into either the "Sound Engineering Practice" (SEP), Category 1, Category 2 or Category 3. According to the Directive products classified as "SEP" shall not be CE marked. Category 1 products will bear the CE mark and those products classified as Categories 2 and 3 will bear the CE mark plus the number 0086. The number 0086 is that of the British Standards Institute who Crane have chosen as their "Notified Body" to monitor their quality assurance system as required by the Directive.

This catalogue provides technical data on the most popular HVAC project valves in the Crane range. It is not intended to cover the total range of Crane valves.

For details of all Crane products please refer to the Crane Total Product Catalogue or website [www.cranefs.com](http://www.cranefs.com)

### Threaded BSEN10226 formerly BS21 (ISO 7) For Two Unit System

#### Specification

Combination unit comprising D931 Pro-Balance valve, bronze Bypass valve, D297 Strainer, Drain Cock, union and P84 pressure tappings.

#### Application

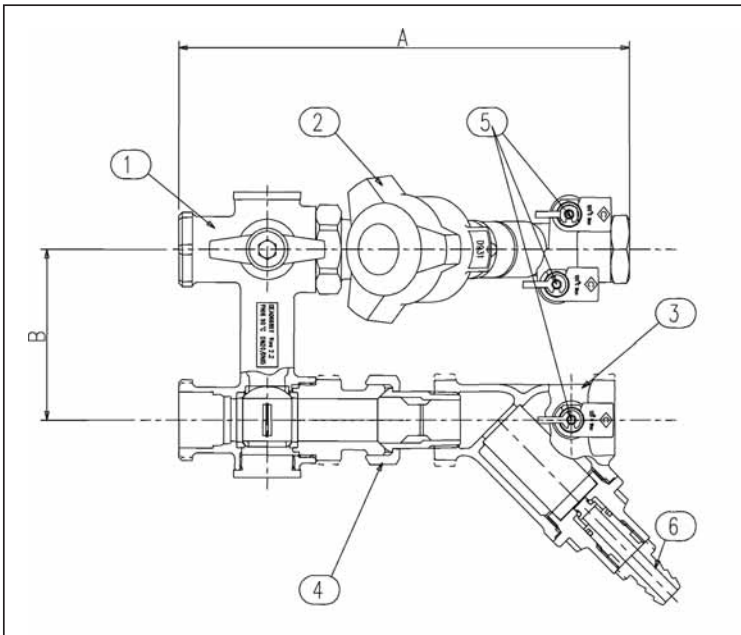
The Dominator Z3000 combines all the essential flow management components associated with fan coils, into one compact, fully assembled unit ready to connect. The unit provides much more efficient fitting of a factory-tested unit with known flow characteristics.

#### End connection kits

	Cu COMP. (Cu, C, ST, St.St)	MAPRESS	INSTAFLEX	ALU-PEX
KITS	15-R 1/2	15-R 1/2	16-R 1/2	16-R 1/2
	15-R 3/4	18-R 1/2	20-R 1/2	16-R 3/4
	22-R 1/2	15-R 3/4	20-R 3/4	18-R 1/2
	22-R 3/4	18-R 3/4	25-R 3/4	18-R 3/4
	28-R 3/4	22-R 3/4	25-R 1	20-R 1/2
	28-R 1	28-R 3/4	-	20-R 3/4
	-	28-R 1	-	25R- 3/4
	-	-	-	25-R 1

#### Materials

Item	Part	Material
1	Bypass valve	Bronze to BSEN 1982 CC491K
2	Probalance valve	(see page 7)
3	Strainer	Bronze to BSEN 1982 CC491K
4	Union	Brass to BSEN 1982 CC491K
5	Pressure tapping	DZR to BSEN 12164 CW602N
6	Drain cock	DZR to BSEN 12164 CW614



### Dominator Z3000 Standard Unit - Dimensions and Weights

STATIC	Figure No.	Weight Kg	DRV Kvs	Total Kv	A mm	B mm
0EA06680T	Z3004 DN15/15	2.65	0.58	0.53	200	80
0EA06681U	Z3003 DN15/15	2.65	1.1	0.91	200	80
0EA06682V	Z3001 DN15/15	2.65	2.2	1.51	200	80
0EA06683W	Z3004 DN20/15	2.65	0.58	0.55	200	80
0EA06684X	Z3003 DN20/15	2.65	1.1	0.97	200	80
0EA06685Y	Z3001 DN20/15	2.65	2.2	1.58	200	80
0EA06686A	Z3001 DN20/20	3.10	4.7	2.83	214	80
0EA06687B	Z3001 DN25/20	3.05	4.7	3.03	250	80
0EA06688C	Z3001 DN25/25	4.18	8.6	4.86	233	80
0EA06764W	Z3004 DN15/15EXS	2.55	0.58	0.53	200	80
0EA06765X	Z3003 DN15/15EXS	2.55	1.1	0.91	200	80
0EA06689D	Z3001 DN15/15EXS	2.65	2.2	1.51	200	80
0EA06844V	Z3004 DN20/15 EXS	2.60	0.58	0.55	200	80
0EA06845W	Z3003 DN20/15 EXS	2.60	1.1	0.97	200	80
0EA06690V	Z3001 DN20/15EXS	2.65	2.2	1.58	200	80
0EA06691W	Z3001 DN20/20EXS	3.10	4.7	2.83	214	80
0EA06692X	Z3001 DN25/20EXS	3.15	4.7	3.03	250	80
0EA06693Y	Z3001 DN25/25EXS	4.28	8.6	4.86	233	80
<b>AUTO</b>						
0EA06766Y	Z3000A DN15/15	2.80	2.2	n/a	250	80
0EA06767A	Z3000A DN20/15	2.85	2.2	n/a	250	80
0EA06768B	Z3000A DN20/20	3.05	4.7	n/a	250	80
0EA06771V	Z3000A DN15/15EXS	2.90	2.2	n/a	250	80
0EA06772W	Z3000A DN20/15EXS	2.95	2.2	n/a	250	80
0EA06773X	Z3000A DN20/20EXS	3.15	4.7	n/a	250	80

### Dominator Z3010 Less Strainer and Drain - Dimensions and Weights

STATIC	Figure No.	Weight Kg	DRV Kvs	Total Kv	A mm	B mm
0EA06782Y	Z3014 DN15/15	1.85	0.58	0.57	200	80
0EA06783A	Z3013 DN15/15	1.85	1.1	0.92	200	80
0EA06784B	Z3011 DN15/15	1.85	2.2	1.62	200	80
0EA06785C	Z3014 DN20/15	1.90	0.58	0.66	200	80
0EA06786D	Z3013 DN20/15	1.90	1.1	0.98	200	80
0EA06787E	Z3011 DN20/15	1.90	2.2	1.65	200	80
0EA06788F	Z3011 DN20/20	2.05	4.7	2.98	215	80
0EA06789G	Z3011 DN25/20	2.30	4.7	3.21	200	80
0EA06790Y	Z3011 DN25/25	2.84	8.6	5.10	200	80
0EA06791A	Z3014 DN15/15EXS	1.95	0.58	0.57	200	80
0EA06792B	Z3013 DN15/15EXS	1.95	1.1	0.92	200	80
0EA06793C	Z3011 DN15/15EXS	1.95	2.2	1.62	200	80
0EA06828V	Z3014 DN20/15EXS	2.00	0.58	0.66	200	80
0EA06829W	Z3013 DN20/15EXS	2.00	1.1	0.98	200	80
0EA06794D	Z3011 DN20/15EXS	2.00	2.2	1.65	200	80
0EA06795E	Z3011 DN20/20EXS	2.15	4.7	2.98	215	80
0EA06796F	Z3011 DN25/20EXS	2.40	4.7	3.21	250	80
0EA06797G	Z3011 DN25/25EXS	2.94	8.6	5.10	265	80
<b>AUTO</b>						
0EA06830P	Z3010A DN15/15	2.20	2.2	n/a	250	80
0EA06831Q	Z3010A DN20/15	2.25	2.2	n/a	250	80
0EA06832R	Z3010A DN20/20	2.30	4.7	n/a	250	80
0EA06833S	Z3010A DN15/15EXS	2.30	2.2	n/a	250	80
0EA06834T	Z3010A DN20/15EXS	2.35	2.2	n/a	250	80
0EA06835U	Z3010A DN20/20EXS	2.40	4.7	n/a	250	80

### Dominator Z3020 Less Strainer but Including Drain - Dimensions and Weights

STATIC	Figure No.	Weight Kg	DRV Kvs	Total Kv	A mm	B mm
0EA06798H	Z3024 DN15/15	2.25	0.58	0.57	200	80
0EA06799J	Z3023 DN15/15	2.25	1.1	0.92	200	80
0EA06800H	Z3021 DN15/15	2.25	2.2	1.60	200	80
0EA06801J	Z3024 DN20/15	2.30	0.58	0.66	200	80
0EA06802K	Z3023 DN20/15	2.30	1.1	0.98	200	80
0EA06803L	Z3021 DN20/15	2.30	2.2	1.63	200	80
0EA06804M	Z3021 DN20/20	2.65	4.7	2.97	215	80
0EA06805N	Z3021 DN25/20	2.90	4.7	3.09	250	80
0EA06806P	Z3021 DN25/25	3.64	8.6	5.07	265	80
0EA06807Q	Z3024 DN15/15EXS	2.35	0.58	0.57	200	80
0EA06808R	Z3023 DN15/15EXS	2.35	1.1	0.92	200	80
0EA06809S	Z3021 DN15/15EXS	2.35	2.2	1.60	200	80
0EA06810K	Z3024 DN20/15EXS	2.40	0.58	0.66	200	80
0EA06811L	Z3023 DN20/15EXS	2.40	1.1	0.98	200	80
0EA06812M	Z3021 DN20/15EXS	2.40	2.2	1.63	200	80
0EA06813N	Z3021 DN20/20EXS	2.75	4.7	2.97	215	80
0EA06836V	Z3021 DN25/20EXS	3.00	4.7	3.09	250	80
0EA06837W	Z3021 DN25/25EXS	3.74	8.6	5.07	265	80
<b>AUTO</b>						
0EA06838X	Z3020A DN15/15	2.60	2.2	n/a	250	80
0EA06839Y	Z3020A DN20/15	2.65	2.2	n/a	250	80
0EA06840R	Z3020A DN20/20	2.90	4.7	n/a	250	80
0EA06841S	Z3020A DN15/15EXS	2.70	2.2	n/a	250	80
0EA06842T	Z3020A DN20/15EXS	2.75	2.2	n/a	250	80
0EA06843U	Z3020A DN20/20EXS	3.74	4.7	n/a	250	80

## Features to note

*The Z3000 is compact and lightweight*

- The complete unit is factory tested
- Integrated union joints allow for custom alignment
- 80mm supply/return centres allow for ease of lagging
- Ease of installation

*The patent protected bypass valve unit comprises two T-ported ball valves*

- Allows easy back flushing, forward flushing and isolation
- The position of the T-handle gives clear indication of flow/bypass mode
- Designed around 3/4" full bore ball for optimum flow
- Can be adapted to 1/2", 3/4" and 1" end connections
- Simple attachment to existing hangers

*The strainer unit has an integral drain cock and pressure test point*

- Enabling measurement of pressure drop across load
- Allowing for flushing of strainer and coil without need to remove basket

*The balancing valve is of proven high quality and accuracy.*



## Benefits for Design Engineers

- minimal design involvement
- all the necessary components supplied as one tested unit
- no risk of a component being omitted from a system at installation
- known performance of the entire unit
- saves time, reduces specification risks and provides maximum value to the client

## Benefits for Installing Contractors

- Significant reduction in site labour and installation costs
- fast connection of one complete assembly
- standardised components with guaranteed tested performance
- less purchase orders, minimal administration
- simple on-site connection



Normal Operation



Bypass Operation



Backflush Coil Operation



Forward Flush Operation

Threaded BSEN10226 formerly BS21 (ISO 7), Conforms to BS7350\*

## Specification

D901 & D902 flow measurement devices have square edged entrance orifice plates with tappings for P84 insertion style test points. Flow measurement accuracy of  $\pm 3\%$ .

### D901 - Sizes 3/4" to 2"

Inlet - BSEN10226 formerly BS21 (ISO 7) taper female  
 Outlet - BSEN10226 formerly BS21 (ISO 7) taper male

### D901/D902 - Sizes 1/2" DN15

Inlet - BS 2779 (ISO 228) parallel female supplied with compression adaptor to suit 15mm BS EN 1057 copper tube.  
 Outlet - BSEN10226 formerly BS21 (ISO 7) taper male discard adaptor if connecting steel pipe.

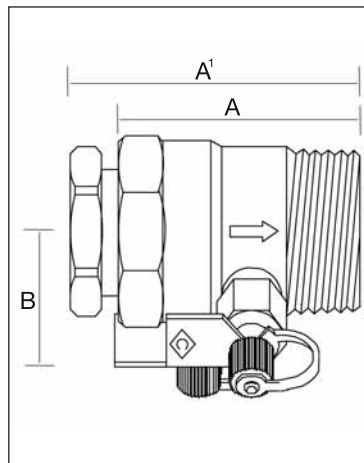
## Application

D901 flow measurement devices are suitable for systems where pipes have been sized on the basis that pipe frictional losses lie in the range 100 to 400 Pa/m.

D902 flow measurement device (1/2 /DN15 size only) is suitable for the measurement of ultra low flows in the range 0.015 to 0.06 l/s e.g. flows to fan coil units.

Please note: The fitting of P82 test points will give an increased temperature rating of 180°C.

\*Except pressure rating exceeds BS.



## Pressure Temperature Ratings

Temperature °C	-10 to 100	110	120
Pressure (Bar)	25	23.4	21.8

Maximum temperature 120°C

**Note:** In line with BS EN 1254/2 the maximum pressure must not exceed 16 bar when using compression adaptors.

## Dimensions, Coefficient and Weights

Cat. No.	Nom. Size	End to end Amm A'mm	Centre-to-top Bmm	Flow Kv	Head loss K	Kvs	Weight Kg
D901	1/2 DN15	57 66	55	2.8	13.5	2.2	0.29
	3/4 DN20	58 -	61	6.1	9.1	4.7	0.30
	1 DN25	66 -	65	11.9	6.1	8.6	0.40
	1 1/4 DN32	72 -	71	23.4	4.8	16.6	0.50
	1 1/2 DN40	72 -	73	36.2	3.7	24.5	0.54
D902	2 DN50	82 -	79	71.6	2.4	46.1	0.77
	1/2 DN15	57 66	55	0.57	333	0.54	0.29

## Materials

Part	Material	Specification
Body and Integral orifice	DZR copper alloy	BSEN12164 CW602N
P84 Pressure test point	DZR copper alloy	BSEN12164 CW602N

## BS EN 1092-2 (formerly BS 4504) Flange Mounting for Flow Measurement

### Specification

DM900 is a stainless steel orifice plate having integral orifice with true square upstream edge. The two stainless steel extension tubes are fitted with Crane Cat. No. P84 double seal pressure test points. Accuracy of flow measurement at normal velocities is  $\pm 3\%$ .

### Installation

The DM900 can be mounted between valve and/or pipe flanges to BS 4504 having PN10, PN16 or PN25 ratings. The outside diameter ensures a proper alignment when installed between PN10/16 flanges and PN25 flanges up to 80mm size. When assembling between PN25 flanges sizes 100mm and larger, ensure the device has been correctly centred with the mating flanges.

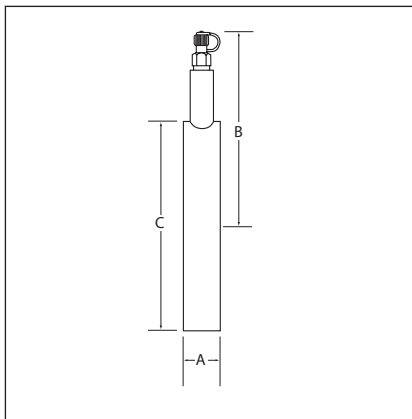
### Application

DM900 can be used as a single unit or close coupled to other regulating or isolating valves to provide accurate flow measurement.

DM900 flow measurement devices are suitable for use with PN10, PN16, or PN25 flanges or flanged valves having ratings detailed in the appropriate flange or valve product standard. When normally fitted with P84 pressure test valves, the DM900 is limited to 120°C max. For use at temperatures above 120°C suitable alternative pressure test valves should be fitted, please consult Crane.

DM900 is also available in sizes 350mm and over. Please contact Crane Fluid Systems for details.

Please note: The fitting of P82 test points will give an increased temperature rating of 180°C.



### Pressure/temperature ratings

Temperature °C	-10 to 100	110	120
Pressure (Bar)	25.0	25.0	25.0

### Materials

Part	Material
Orifice and carrier	Stainless steel
Extension tubes	Stainless steel
Pressure test points (P84)	DZR

### Dimensions and Weights

DN	Face-to-face A mm	Centre-to-top B mm	Outside diameter C mm	Weight kg
20	18	116	63	0.7
25	18	119	73	0.8
32	18	124	84	1.0
40	18	127	94	1.1
50	18	131	109	1.4
65	18	112	127	1.5
80	18	118	142	1.8
100	18	125	162	2.2
125	18	135	192	2.6
150	18	145	218	3.0
200	18	165	273	4.4
250	18	185	329	5.7
300	18	205	384	7.1

### Coefficients

DN	Flow Kv	Headloss K	Kvs
20	6.0	9.6	4.7
25	11.6	6.6	8.6
32	23.0	5.1	16.6
40	35.0	4.0	24.5
50	72.0	2.5	46.1
65	154.0	1.5	90
80	220.0	1.4	120
100	373.0	1.4	220
125	570.0	1.4	342
150	789.0	1.5	468
200	1383.0	1.6	792
250	2122.0	1.7	1224
300	3116.0	1.6	1800



# Double Regulating Valve (DRV) D921/D923 PN25



Threaded BSEN10226 formerly BS21 (ISO 7) For Two Unit System, Conforms to BS7350\*

## Specification

Y-pattern globe valves having characterised throttling disk tending towards equal percentage performance. Double regulating feature allows valve opening to be set with an Allen key. Operation of the valve is by means of the Microset hand wheel.

WRAS approved.

## End Connection

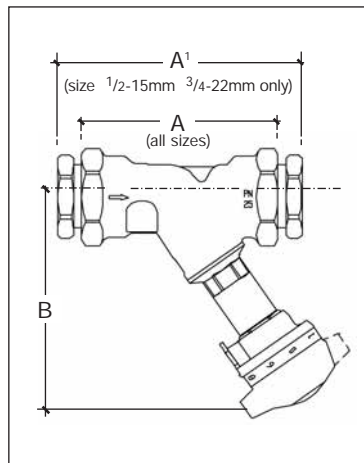
Sizes 1 to 2 BSEN10226 formerly BS21 (ISO 7) parallel  
 Sizes 1/2 & 3/4 DN15 & DN20 BS 2779 (ISO 228) parallel, supplied with compression adaptor to suit 15 & 22mm BS EN 1057 copper tube.  
 Discard adaptors if connecting to steel pipe.  
 All sizes are also available threaded ANSI B1.20.1

## Application

In two unit systems, the **D921** has sufficient authority to give effective regulation over the range of flows covered by matching flow measurement devices/valves.

In particular the **D923** low flow regulating valve has an authority matched to the range of ultra low flows covered by the D902 flow measurement device.

\*Except pressure rating exceeds BS.



## Pressure Temperature Ratings

Temperature °C	-10 to 100	110	120
Pressure (Bar)	25	23.4	21.8

Maximum temperature 120°C

**Note:** In line with BS EN 1254/2 the maximum pressure must not exceed 16 bar when using compression adaptors.

## Dimensions, Coefficient and Weights

Cat. No.	Nom. Size	Dimensions (mm)			Fully Open		Weight Kg
		A	A'	B	Flow Kv	Head loss K	
D921	1/2 DN15	87	105	105	2.14	23.11	0.54
	3/4 DN20	96	118	106	3.61	26.14	0.58
	1 DN25	100	-	127	6.37	21.45	0.88
	1 1/4 DN32	114	-	128	12.30	17.42	1.05
	1 1/2 DN40	125	-	143	21.30	10.66	1.43
	2 DN50	146	-	144	31.30	12.63	1.88
D923	1/2 DN15	87	105	105	2.26	20.72	0.54

## Materials

Part	Material	Specification	Part	Material
Body	Bronze	BSEN1982 CC491K	'O' Ring Seal	EPDM Rubber
Bonnet	DZR copper alloy	BSEN12165 CW602N	Hand Wheel	Plastic
Stem	DZR copper alloy	BSEN12164 CW602N		
Disk	DZR copper alloy	BSEN12164/5 CW602N		

# Fixed Orifice Double Regulating Valve (FODRV) D931/D933/D934



Threaded BSEN10226 formerly BS21 (ISO 7) for Single Unit Systems, Conforms to BS7350\*

## Specification

Y-pattern globe valves having characterised throttling disk tending towards equal percentage performance. Integral square edged entrance orifice plate and P84 insertion test points fitted. Double regulating feature allows valve opening to be set with an Allen key. Operation of the valve is by means of the Microset hand wheel.

## End Connection

Sizes 1 to 2 BSEN10226 formerly BS21 (ISO 7) parallel  
 Sizes 1/2 & 3/4 DN15 & DN20 BS 2779 (ISO 228) parallel, supplied with compression adaptor to suit 15 & 22mm BS EN 1057 copper tube.  
 Discard adaptors if connecting to steel pipe.  
 WRAS Approved.  
 All sizes also available threaded ANSI B1.20.1

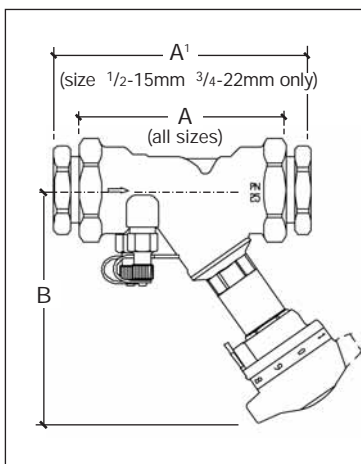
## Application

This single unit commissioning valve **D931** is designed for installation in circuits where combined functions of regulation and flow measurement are required. Accuracy of flow measurement is ±5% across all hand wheel settings.

**D933** size 1/2" low flow FODRV combines the functions of regulation and flow measurement in a unit of high authority making it particularly suitable for low flow applications in the range of 0.03 to 0.07 l/s.

**D934** size 1/2" ultra low flow FODRV combines the functions of regulation and flow measurement in a unit of high authority making it particularly suitable for ultra low flow applications in the range of 0.016 to 0.04 l/s.

\*Except pressure rating exceeds BS.



## Pressure Temperature Ratings

Temperature °C	-10 to 100	110	120
Pressure (Bar)	25	23.4	21.8

Maximum temperature 120°C

**Note:** In line with BS EN 1254/2 the maximum pressure must not exceed 16 bar when using compression adaptors.

## Dimensions, Coefficient and Weights

Cat. No.	Nom. Size	Dimensions (mm)			Fully Open		KVs	Weight Kg
		A	A'	B	Flow Kv	Head loss K		
D931	1/2 DN15	87	105	105	1.87	30.27	2.2	0.61
	3/4 DN20	96	118	106	3.14	34.55	4.7	0.65
	1 DN25	100	-	127	5.59	27.85	8.6	0.95
	1 1/4 DN32	114	-	128	10.80	22.60	16.6	1.13
	1 1/2 DN40	125	-	143	18.10	14.76	24.5	1.52
	2 DN50	146	-	144	29.10	14.62	46.1	1.98
D933	1/2 DN15	87	105	105	1.06	90.42	1.1	0.61
D934	1/2 DN15	87	105	105	0.57	325.8	0.58	0.61

## Materials

Part	Material	Specification	Part	Material	Specification
Body	Bronze	BSEN1982 CC491K	'O' Ring Seal	EPDM Rubber	
Bonnet	DZR copper alloy	BSEN12165 CW602N	Orifice Insert	DZR copper alloy	BSEN12164 CW602N
Stem	DZR copper alloy	BSEN12164 CW602N	P84 Test Point	DZR copper alloy	BSEN12164 CW602N
Disk	DZR copper alloy	BSEN12164/5 CW602N	Hand Wheel	Plastic	

# Motorised Fixed Orifice Double Regulating Valve

## D981/D983/D984

PN16

ANSI Class 150

**CRANE**<sup>®</sup>

The Crane MotoBalance Valve offers actuated balancing solutions for heating and cooling applications and with its unique fixed orifice design, gives greater accuracy of flow measurement.

Operation of the MotoBalance valve is by means of motorised actuation. MotoBalance is based on the proven Crane D931 FODRV, modified for use with the following type of actuators:-

- 24v or 230v thermal actuators for On/Off control.
- 24v fully modulating control actuators

MotoBalance is fitted with Crane P84 test points.

### Specification

Y-pattern globe valve.  
Integral square edged entrance orifice plates and P84 insertion test points fitted.  
Double regulating feature allows valve opening to be manually set.  
Operation of the valve is by means of motorised actuator.

### End Connection

Sizes 1/2" and 3/4" DN15 & DN20 BS EN ISO 228 parallel, supplied with compression adaptor to suit 15mm and 22mm BS EN 1057 copper tube.  
Discard adaptors if connecting to steel pipe.  
All sizes also available threaded ANSI B1.20.1

### Application

The MotoBalance valve is designed for installation in circuits where combined functions of actuated regulation and flow measurement are required.  
Accuracy of flow measurement is ± 5% across all drive setting.

**D981** - The 1/2" MotoBalance has a flow range of 0.061 to 0.132 l/s.  
The 3/4" MotoBalance has a flow range of 0.131 to 0.289 l/s.

**D983** - 1/2" low flow MotoBalance is particularly suitable for low flow applications in the range of 0.03 to 0.07 l/s.

**D984** - 1/2" ultra low flow MotoBalance is particularly suitable for ultra low flow applications in the range of 0.016 to 0.04 l/s.



### Pressure Temperature Ratings

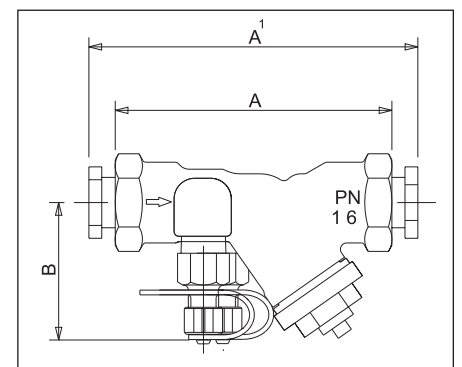
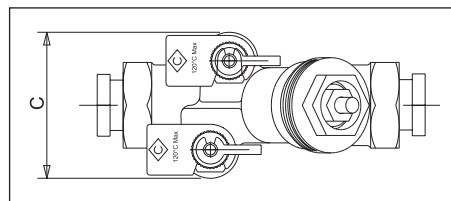
The maximum static pressure is 16 bar, the maximum differential pressure is 1.2 bar.  
Maximum working temperature: 120°C  
Minimum working temperature: -10°C

Temperature °C	-10 to 100	110	120
Pressure (bar)	16.0	14.8	13.5

Note: In line with BS EN 1254/2 the maximum pressure must not exceed 16 bar when using compression adaptors.

### Materials

Part	Material	Specification
Body	Bronze	BSEN1982 CC491K
Bonnet	DZR copper alloy	BSEN12165 CW602N
Stem	DZR copper alloy	BSEN12165 CW602N
Disk	EPDM rubber	
O' Ring Seal	EPDM rubber	BS4518 0056-024
Orifice Insert	DZR copper alloy	BSEN12165 CW602N
P84 Test Point	DZR copper alloy	BSEN12165 CW602N



### Dimensions, Coefficient and Weights

Cat. No.	Nom. Size	Dimensions (mm)				Fully Open			
		A	A1	B	C	Flow Kv	Head loss K	KVs	Weight Kg
D981	1/2" DN15	87	105	50	46	1.87	30.27	2.2	0.41
	3/4" DN20	96	118	51	51	3.14	34.55	4.7	0.45
D983	1/2" DN15	87	105	50	46	1.06	90.42	1.1	0.41
D984	1/2" DN15	87	105	50	46	0.57	325.80	0.58	0.41

# Double Regulating Valve (DRV) DM921 PN16



## Flanged BSEN1092-2 (formerly BS4504) for Two Unit System

### Specification

Y-pattern globe valves having a characterised throttling disk and ends flanged BS 4504 PN16. The valve opening may be set with an Allen key to control flow at a pre-determined rate. Operation of the valve is by means of a handwheel incorporating a micrometer/vernier device.

A bronze seat ring and PTFE disk seal are incorporated to ensure tight closure. The valves can be rendered 'tamper proof' by means of wire seals. Valves conform to requirements of BS7350.

### Application

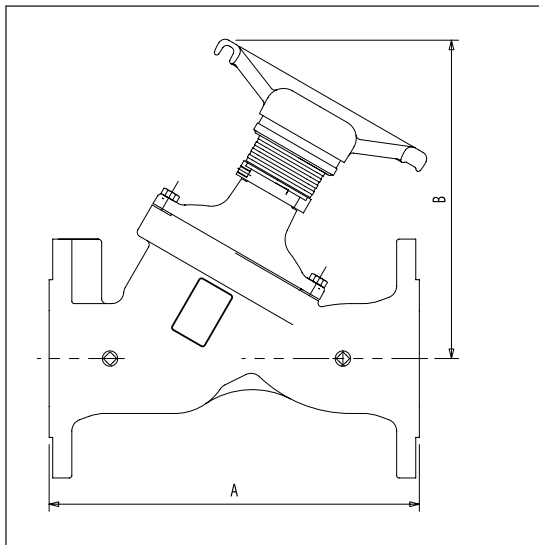
In two unit systems, the DM921 has sufficient authority to regulate flow in circuits incorporating a flow measurement device.



### Pressure/temperature ratings

Temperature °C	-10 to 100	110	120	130	140	150	160	170	180
Pressure (bar)	16.0	16.0	16.0	15.5	14.9	14.4	14.1	13.8	13.4

Ratings align with BSEN1092-2 PN16 (formerly BS 4504)



### Materials

Part	Material
Body	Ductile Iron
Bonnet	Ductile Iron
Bonnet gasket	Non-asbestos
Disc (65 to 150mm)	Bronze
Disc (200 to 300mm)	Cast Iron
Disc insert	PTFE
Stem	316 SS
Gland (65 to 150mm)	Brass
Gland (200 to 300mm)	Cast Iron
Gland nut	Brass
Packing	Non-asbestos
Seat ring	Bronze

### Dimensions and Weights

DN	Face-to-face A mm	Centre-to-top B mm	Weight kg
65	290	262	16.3
80	310	267	20.0
100	350	300	28.5
125	400	325	40.0
150	480	340	51.0
200	600	525	124.0
250	730	575	181.0
300	850	645	260.0

### Coefficients\*

DN	Flow Kv	Headloss K
65	85	4.9
80	111	5.5
100	146	9.2
125	250	7.3
150	380	6.5
200	600	7.8
250	1211	4.6
300	1521	6.0

\* Fully open position

# Variable Orifice Double Regulating Valve (VODRV) DM931 PN16 DA931 Class 125



DM931 Flanged BSEN1092-2 (formerly BS4504) Single Unit System DA931 Flanged ANSI Class 125

## Specification

These are Y-pattern globe valves DM921 fitted with two P84 pressure test points to provide flow measurement, regulation and isolation. Valves conform to requirements of BS7350.

## Application

Primarily used in injection or other circuits requiring a double regulating valve for systems balancing. Accuracy of flow measurement is  $\pm 5\%$  at the full open position of the valve. Some reduction in accuracy occurs at partial openings of the valve.

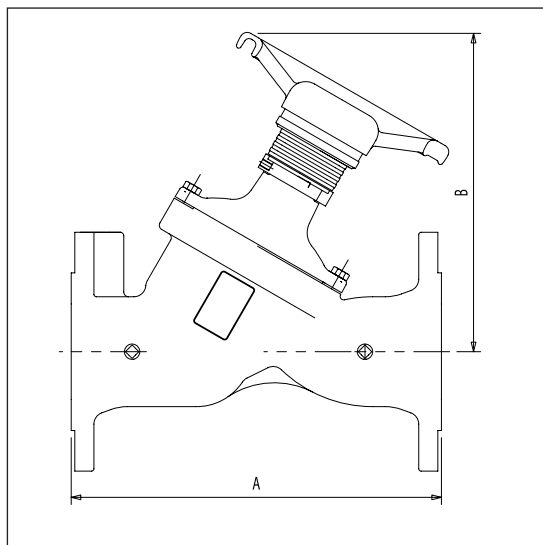
Please note: The fitting of P82 test points will give an increased temperature rating of 180°C



## Pressure/temperature ratings

Temperature °C	-10 to 100	110	120
Pressure (bar)	16.0	16.0	16.0

Ratings align with BSEN1092-2 PN16 (formerly BS4504)



## Materials

Part	Material
Body	Ductile Iron
Bonnet	Ductile Iron
Bonnet gasket	Non-asbestos
Disc (65 to 150mm)	Bronze
Disc (200 to 300mm)	Cast Iron
Disc insert	PTFE
Stem	316 SS
Gland (65 to 150mm)	Brass
Gland (200 to 300mm)	Cast Iron
Gland nut	Brass
Packing	Non-asbestos
Seat ring	Bronze

## Dimensions and Weights

DN	Face-to-face A mm	Centre-to-top B mm	Weight kg
65	290	262	16.3
80	310	267	20.0
100	350	300	28.5
125	400	325	38.0
150	480	340	51.0
200	600	525	124.0
250	730	575	194.0
300	850	645	254.0

## Coefficients\*

DN	Flow Kv	Headloss K
65	85	4.9
80	111	5.5
100	146	9.2
125	250	7.3
150	380	6.5
200	600	7.8
250	1211	4.6
300	1521	6.0

\* Fully open position

# Fixed Integral Orifice Double Regulating Valve (FODRV) DM941 PN16 DA941 Class 125



DM941 Flanged BSEN1092-2 (formerly BS4504) Single Unit System DA941 Flanged ANSI Class 125

## Specification

These are Y-pattern globe valves DM921 manufactured complete with integral orifice plates forming a fixed orifice flow measurement unit with regulation and isolation capacity. Two P84 test points supplied. Valves conform to requirements of BS7350.

## Application

Primarily used in injection or other circuits requiring a double regulating valve for systems balancing. Accuracy of flow measurement is  $\pm 5\%$  at the full open position of the valve. Some reduction in accuracy occurs at partial openings of the valve.

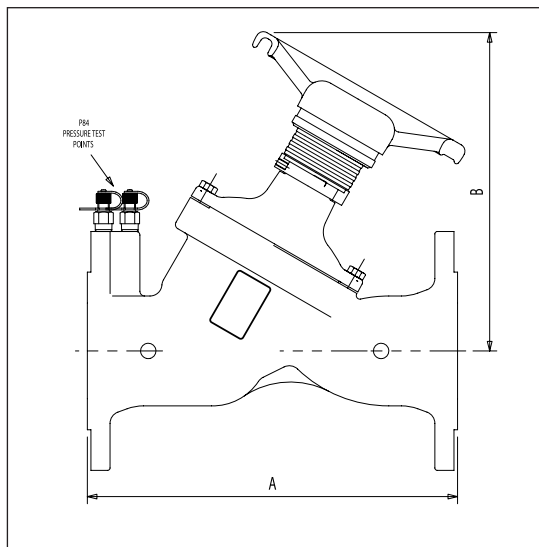
Please note: The fitting of P82 test points will give an increased temperature rating of 180°C



## Pressure/temperature ratings

Temperature °C	-10 to 100	110	120
Pressure (bar)	16.0	16.0	16.0

Ratings align with BSEN1092-2 PN16 (formerly BS4504)



## Materials

Part	Material
Body	Ductile Iron
Bonnet	Ductile Iron
Orifice plate	Bronze
Bonnet gasket	Non-asbestos
Disc (65 to 150mm)	Bronze
Disc (200 to 300mm)	Cast Iron
Disc insert	PTFE
Stem	316 SS
Gland (65 to 150mm)	Brass
Gland (200 to 300mm)	Cast Iron
Gland nut	Brass
Packing	Non-asbestos
Seat ring	Bronze

## Dimensions and Weights

DN	Face-to-face A mm	Centre-to-top B mm	Weight kg
65	290	262	16.8
80	310	267	20.9
100	350	300	29.7
125	400	325	41.2
150	480	340	52.7
200	600	525	126.0
250	730	575	196.0
300	850	645	263.0

## Coefficients\*

DN	Flow Kv	Headloss K	Kvs
65	72	6.9	90
80	100	6.8	120
100	124	12.7	220
125	229	8.7	342
150	324	8.9	468
200	525	10.3	792
250	1058	6.0	1224
300	1329	7.8	1800

\* Kv and K at fully open position

# Gearbox Operated Double Regulating Valve DM925G PN16

CRANE®

## Specification

The DM925G Double Regulating Butterfly Valve comprises a fully lugged, EPDM liner butterfly valve fitted with a Double Regulating Gearbox. The gearbox Double Regulating feature allows the valve to be used to isolate and to be re-opened to its pre-set position.

## Installation

The DM925G can be used in conjunction with a flow measurement device DM900 to regulate and measure flow.

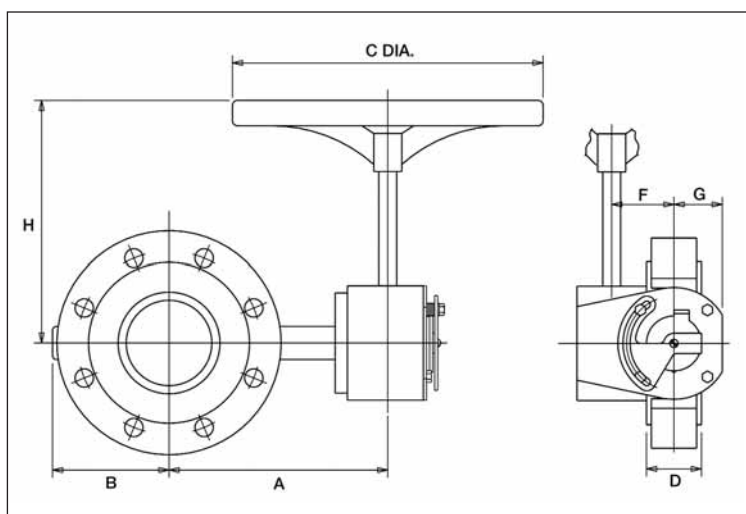
## Bill of Materials

Part	Material	Sizes
Body	Ductile Iron ASTM A536 65-45-12	All
Disc	Aluminium Bronze	All
Seat	EPDM	All
Shaft	Stainless Steel ASTM A532 Type 416	All
Taper Pin	Stainless Steel ASTM A276 Type 316	All
Key	Carbon Steel	All
'O' Ring	Nitrile (Buna)	All
Shaft Bushing	PTFE or Bronze	All



## Pressure/temperature ratings

Temperature °C	-10 to 100
Pressure (bar)	16.0



## Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	G (mm)	H (mm)
50	8.6	162	80	150	42	45	54	158
65	9.1	175	89	150	45	45	54	158
80	11.8	181	95	150	45	45	54	158
100	17.2	200	114	150	52	45	54	158
125	18.1	213	127	200	54	45	54	148
150	19.5	225	139	200	56	45	54	148
200	29.5	260	175	300	61	78	81	226
250	39.9	292	203	300	66	78	81	226
300	54.9	337	242	300	77	78	81	226

## Coefficients\*

DN	Flow Kv	Headloss K
50	100	1.216
65	170	0.856
80	261	0.856
100	519	0.650
125	884	0.553
150	1366	0.483
200	2713	0.367
250	4619	0.315
300	7136	0.266

\* Fully open position

## Specification

The DM950G comprises DM925G coupled to a fixed orifice flow measurement device using a spool piece connector, forming a fixed orifice flow measurement unit with regulation and isolation capability. Test points supplied loose.

## Installation

The DM950G is supplied ready assembled to site. Suitable gasket and bolting should be provided by the contractor/installer.

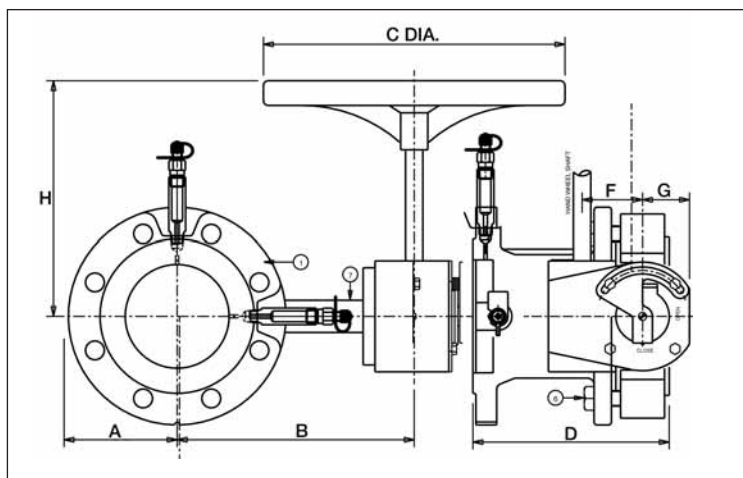
## Bill of Materials

Part	Material	Sizes
Extension piece	Steel DIN 17100 R.St.37.2/ASTM A53.Gr.A	150-400mm
Extension piece	Steel DIN 17100 R.St. 37.2	50-125mm
P84 Test Valve	See Fig No P84	All
Orifice Plate Retain	Steel DIN 17100 R.St. 37.2	All
Orifice Plate	Stainless steel BS970 316S31	All
Orifice Plate Gasket	Asbestos free	All
Flange Bolts	Steel BS3692 Gr. 8.8	All
DM925G	See Fig No DM925G Gear Operated	All
Test Point Extension	DZR Brass BSEN12164 CW602N	All
Test Point Adaptor	DZR Brass BSEN12164 CW602N	50-125mm
Socket Head Cap Screw	Steel BS4168 Gr. 12.9	All



## Pressure/temperature ratings

Temperature °C	-10 to 100
Pressure (bar)	16.0



## Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	G (mm)	H (mm)
50	19.7	162	80	150	158	45	54	158
65	20.8	175	89	150	161	45	54	158
80	23.4	181	95	150	171	45	54	158
100	32.5	200	114	150	181	45	54	158
125	38.4	213	127	200	190	45	54	148
150	47.1	225	139	200	232	45	54	148
200	67.8	260	175	300	287	78	81	226
250	89.2	292	203	300	345	78	81	226
300	124.2	337	242	300	404	78	81	226
350	170	406	260	300	451	78	81	226
400	250	447	290	450	511	120	130	277

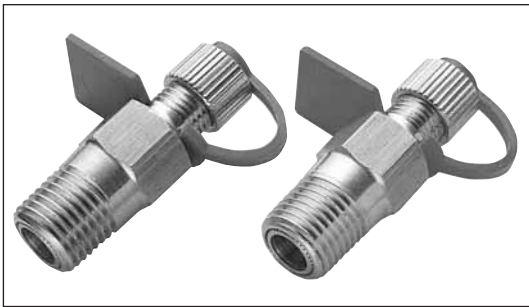
## Coefficients

DN	Flow Kv	Headloss K	Kvs
50	61	3.4	46.1
65	117	2.6	90
80	173	2.3	120
100	315	2.0	220
125	501	1.8	342
150	719	1.8	468
200	1303	1.6	792
250	2049	1.6	1224
300	3038	1.5	1800
350	2754	1.3	1795
400	3573	1.3	2334



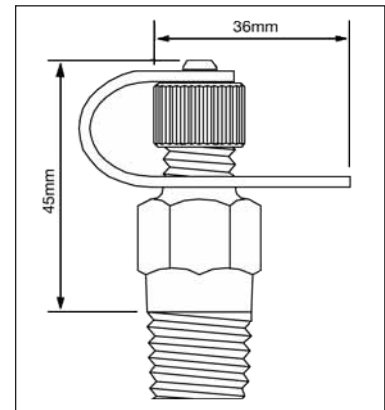
## Pressure Test Points P84

Threaded BSEN10226 formerly BS21 (ISO 7)



P84 double seal insertion style pressure test points are fitted as standard to all Crane flow measurement and regulation valves.

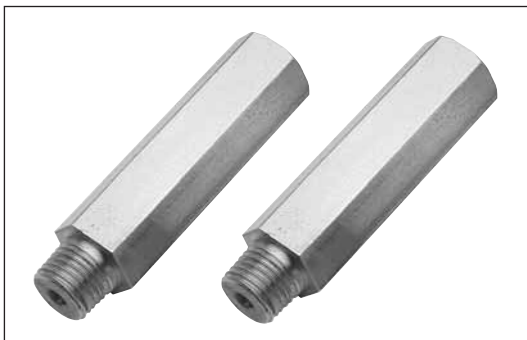
Weight	0.032kg
Pressure Rating	PN25
Max. Temp.	120°C



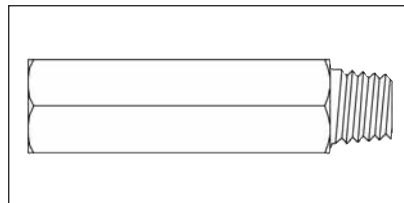
Part	Material	Specification
Cap	DZR copper alloy	BSEN12164 CW602N
Cap Washer	EPDM	
Body	DZR copper alloy	BSEN12164 CW602N
Tie	Polypropylene	
Seal	EPDM	
Retaining Ring	DZR copper alloy	BSEN12164 CW602N

## Extension Tube P83

Threaded BSEN10226 formerly BS21 (ISO 7)



Part	Material	Specification
P83	DZR copper alloy	BSEN12164 CW602N



P83 pressure test point extension tubes allow Crane valves to be insulated to a thickness of 2" without the test points being covered.

## Pressure Test Valve P82

Threaded BSEN10226 formerly BS21 (ISO 7)



### Specification

Pressure test valve P82 is suitable for use in LTHW and MTHW systems. A conventional needle valve, operated by a standard radiator aircock key, is backed by a spring loaded self-sealing ball unit to provide double sealing. The double sealing facility offers maximum operational safety in accordance with the Health & Safety at Work legislation. It also makes it possible, with the valve closed to pipeline pressure, to clear the ball seat of any pipeline debris.

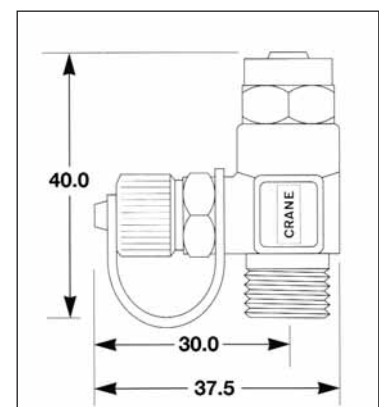
Although P82 is also suitable for use in HTHW systems it should not be operated while such a system is 'live'. For 'live' HTHW systems copper bleed tubes should be taken from the valves and terminated in needle valves, e.g. Crane D71 or D72.

The manometer connection on the valve accepts a Mechseal adaptor. When not in use a screw cap protects the connection from dust.

Weight	0.07kg
Pressure Rating	PN40
Max. Temp.	182°C

### Materials

Part	Material	Part	Material
Body	DZR	Adaptor	DZR
Stem	DZR	Ball	Stainless Steel
Shield	Brass	Spring	Stainless Steel
'O' Ring	Viton	Viton	Brass



## PN20 Bronze Gate Valve

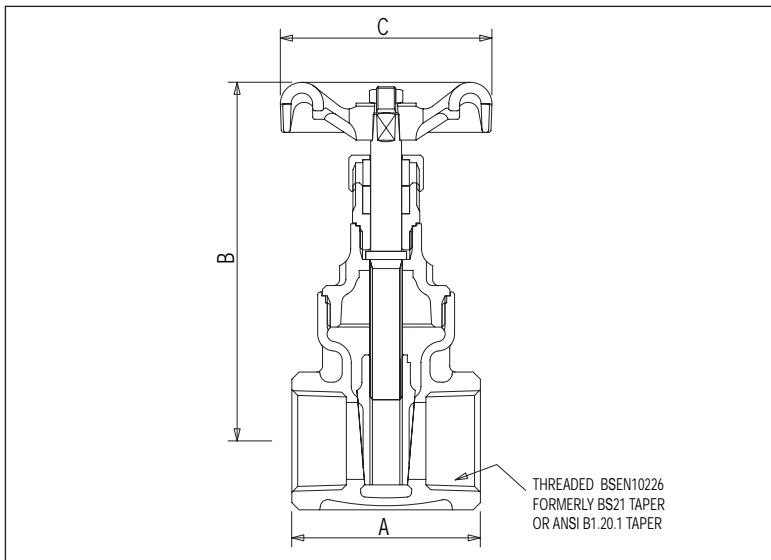
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important. The D151 carries the British Standards Institution kitemark - your assurance of exacting quality standards. In addition the D151 is WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	DZR Brass BSEN12165 CW602N	1/4 - 2
Bonnet	Bronze BSEN1982 CC491K	1/4 - 4
Stem	DZR Brass BSEN12164 CW602N	1/4 - 2
Stem	Brass BSEN12164 CW614N	2.1/2 & 3
Stem	Manganese Bronze	4
Disc	Bronze BSEN1982 CC491K	All
Stuffing Box	DZR Brass BSEN12164 CW602N	1/4 - 2
Stuffing Box	Brass BSEN12165 CW617N	2.1/2 & 3
Stuffing box	Bronze BSEN1982 CC491K	4
Packing	Asbestos Free	All
Packing Gland	Brass BSEN12164 CW614N	1/4 - 3
Packing Gland	Bronze BSEN1982 CC491K	4
Packing Nut	Brass BSEN12164 CW614N	1/4 - 3
Packing Nut	Bronze BSEN1982 CC491K	4
Handwheel	Aluminium	1/4 - 3
Handwheel	Malleable Iron BSEN1562 GJMB-300-6	4
ID. Plate	Aluminium	All
Handwheel Nut	Brass BSEN12164 CW614N	All
Gasket	Asbestos Free	3 & 4



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.27	46	75	45
3/8"	0.26	46	75	45
1/2"	0.35	51	82	52
3/4"	0.55	55	95	65
1"	0.84	63	118	70
1.1/4"	1.18	71	144	79
1.1/2"	1.66	73	166	92
2"	2.55	83	190	103
2.1/2"	4.37	96	219	103
3"	6.4	105	259	121
4"	19.7	162	366	203

**Pressure Rating:** PN20

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel.

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

#### Specification:

Solid wedge disk, non-rising stem, screwed in bonnet.

Valves are manufactured in accordance with BS5154 PN20 series B and are BSI Kitemark approved.

Valves having ANSI threads generally conform to MSS SP-80.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 180°C.

#### Available Options:

P150 locking device.

# D237 Gate Valve (1/2" to 3")



WRAS  
APPROVED  
PRODUCT

CRANE®

## PN20 Bronze Gate Valve with Lockshield

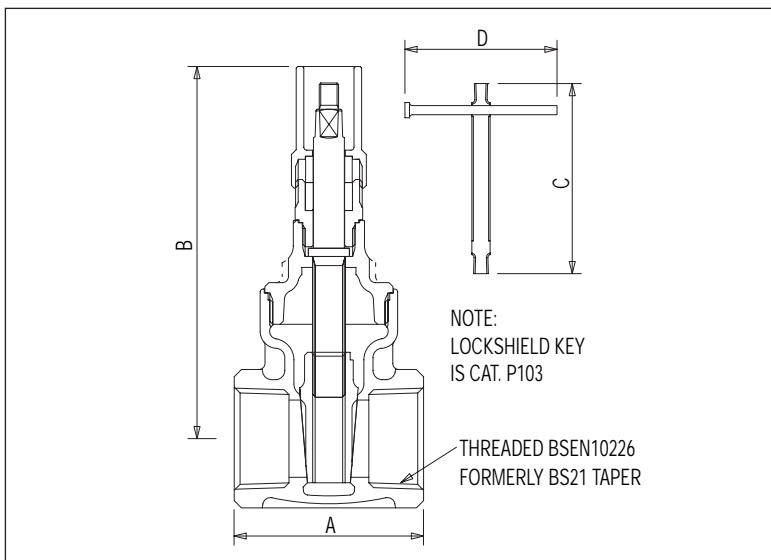
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important. The D237 carries the British Standards Institution Kitemark - your assurance of exacting quality standards. In addition the D237 is WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982	1/2 - 3
Bonnet	Bronze BSEN1982	1/2 - 3
Disc	Bronze BSEN1982	1/2 - 3
Stem	DZR Brass BSEN12164	1/2 - 3
Stuffing Box	DZR Brass BSEN12164	1/2 - 3
Gland	Brass BSEN12164	1/2 - 3
Packing	Asbestos Free	1/2 - 3
Lockshield	Brass BSEN12164	1/2 - 3
Box Spanner	Mild Steel	1/2 - 3
Tommy Bar	Mild Steel	1/2 - 3



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)
1/2"	0.35	51	86	90	100
3/4"	0.55	55	112	90	100
1"	0.84	63	124	125	100
1.1/4"	1.18	71	149	125	100
1.1/2"	1.66	73	175	125	100
2"	2.55	83	196	125	100
2.1/2"	4.15	96	218	-	-
3"	6.24	105	253	-	-

**Pressure Rating:** PN20

**End Connection:** BSEN10226 formerly BS21 Taper

**Operator:** Lockshield

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

#### Specification:

Solid wedge disk, non-rising stem, screwed in bonnet.

Valves are manufactured in accordance with BS5154 PN20 series B and are BSI Kitemark approved.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 180°C.

#### Available Options:

P103 lockshield key 1/2" - 2"

P100 lockshield key 2.1/2" - 3"

## PN20 DZR Gate Valve

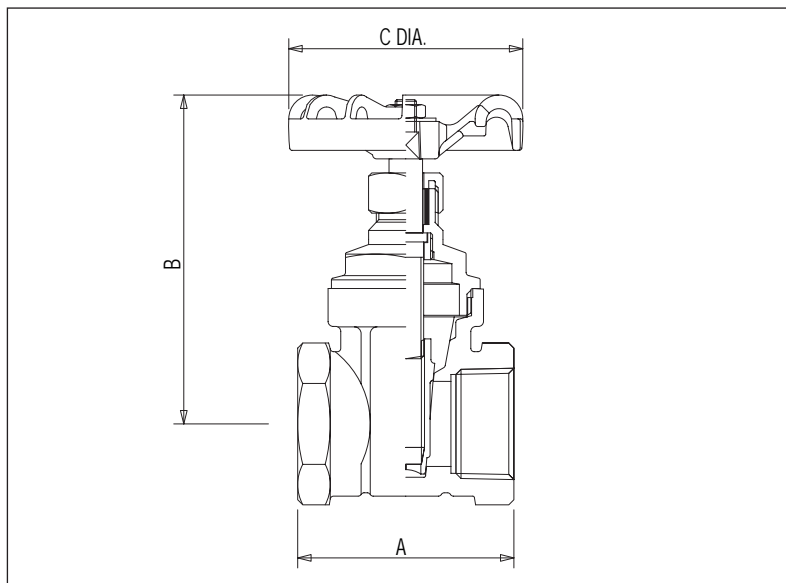
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	DZR Brass BSEN12165 CW602N	All
Bonnet	DZR Brass BSEN12165 CW602N	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing Nut	Brass BSEN12164 CW712R	All
Packing	PTFE	All
Stem Bush	DZR Brass BSEN12164 CW602N	All
Disc	DZR Brass BSEN12165 CW602N	All
Handwheel	Aluminium	All
Handwheel Nut	Steel (Zinc Plated)	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.2	43	69	45
3/8"	0.19	43	69	45
1/2"	0.23	50	69	45
3/4"	0.36	54	79	52
1"	0.5	62	92	52
1.1/4"	0.82	70	108	65
1.1/2"	1.08	72	125	70
2"	1.83	82	150	92
2.1/2"	2.9	97	176	103
3"	3.97	111	204	120

**Pressure Rating:** PN20

**End Connection:** BSEN10226 formerly BS21 Taper

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves are manufactured in accordance with BS5154 PN20 for Series B ratings.

Non Rising Stem

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 180°C.

**Available Options:**

P150 locking device.

## PN25 Bronze Gate Valve

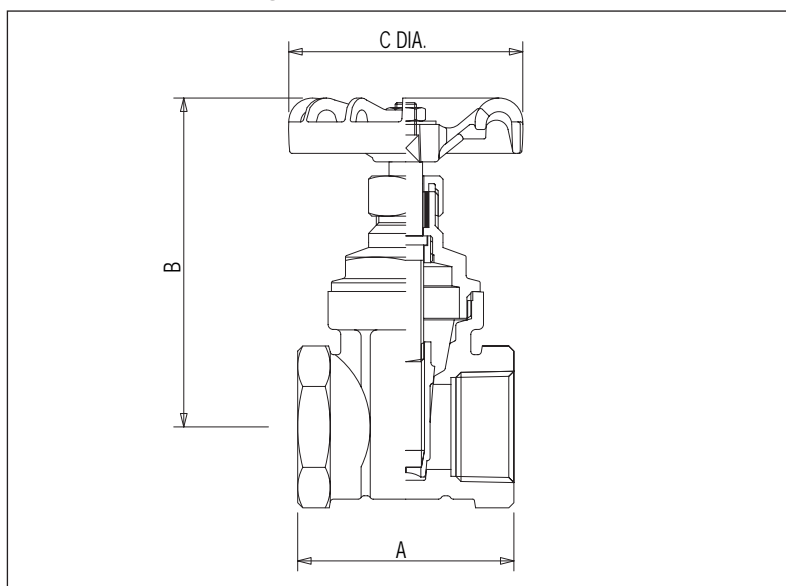
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	DZR Brass BSEN12164 CW602N	1/4 - 2
Bonnet	Bronze BSEN1982 CC491K	2.1/2 & 3
Stem	DZR Brass BSEN12164 CW602N	All
Disc	Bronze BSEN1982 CC491K	All
Stuffing Box	DZR Brass BSEN12164 CW602N	1/4 - 2
Stem Bushing	DZR Brass BSEN12164 CW602N	2.1/2 & 3 only
Packing	Asbestos Free	All
Gland	Brass BSEN12164 CW614N	All
Packing Nut	Brass BSEN12164 CW614N	All
Handwheel	Aluminium	All
ID. Plate	Aluminium	All
Handwheel Nut	Brass BSEN12164 CW614N	All
Gasket	Asbestos Free	3 only



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.27	46	75	45
3/8"	0.26	46	75	45
1/2"	0.35	51	82	52
3/4"	0.55	55	95	65
1"	0.84	63	118	70
1.1/4"	1.18	71	144	79
1.1/2"	1.66	73	166	92
2"	2.55	83	190	103
2.1/2"	4.56	105	220	103
3"	6.38	111	259	121

**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves are manufactured in accordance with BS5154 PN25 for series B ratings.

All Sizes BSI Kitemarked.

Non Rising Stem

Valves with ANSI threads also generally conform to MSS SP-80.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.

**Available Options:**

P150 locking device.

## PN16 Brass Gate Valve

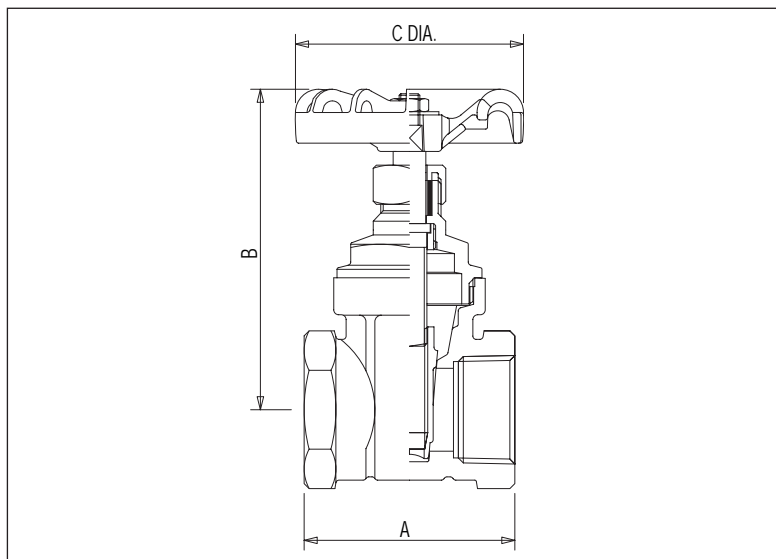
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	Brass BSEN12165 CW617N	All
Bonnet	Brass BSEN12165 CW617N	All
Stem	Brass BSEN12164 CW617N	All
Packing Nut	Brass BSEN12165 CW617N	All
Packing	Asbestos Free	All
Stem Bush	Brass BSEN12164 CW617N	All
Disc	Brass BSEN12165 CW617N	All
Handwheel	Aluminium	All
Handwheel Nut	Steel (Zinc Plated)	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.2	41	69	44
3/8"	0.2	41	69	44
1/2"	0.22	48	69	44
3/4"	0.35	54	79	52
1"	0.52	62	92	52
1.1/4"	0.77	68	108	65
1.1/2"	1.02	72	125	70
2"	1.75	82	150	92
2.1/2"	2.77	97	176	103
3"	3.9	111	204	120
4"	6.35	131	262	152

**Pressure Rating:** PN16

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel.

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves 1/4" to 2" are manufactured in accordance with BS5154 PN16 for Series B ratings.

Non rising stem

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 170°C.

**Available Options:**

P150 locking device.

## PN32 Bronze Gate Valve

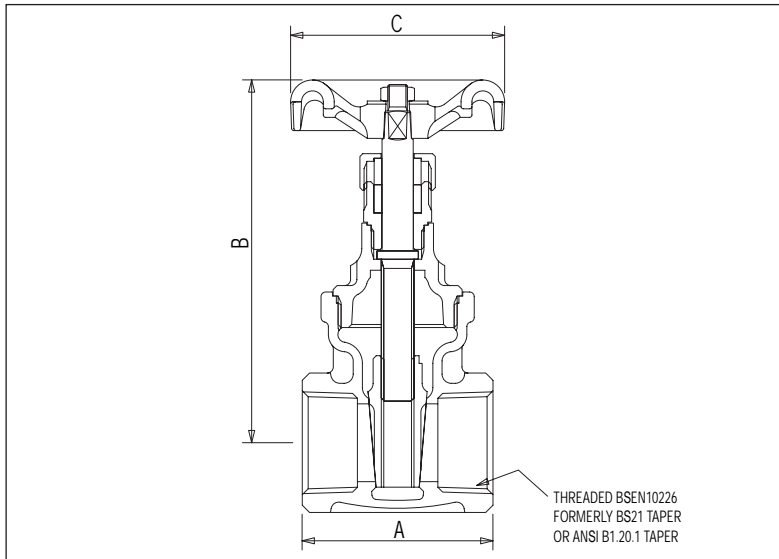
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	Bronze BSEN1982 CC491K	1/4 - 3
Stem	DZR Brass BSEN12164 CW602N	1/4 - 2
Stem	Bronze BSEN1982 CC491K	2.1/2 & 3
Disc	Bronze BSEN1982 CC491K	All
Stuffing Box	DZR Brass BSEN12164 CW602N	1/4 - 2
Stuffing Box	Bronze BSEN1982 CC491K	2.1/2 & 3
Packing	Asbestos Free	All
Gland	Brass BSEN12164 CW614N	All
Packing Nut	Brass BSEN12164 CW614N	All
Handwheel	Aluminium	All
ID. Plate	Aluminium	All
Handwheel Nut	Brass BSEN12164 CW614N	All
Gasket	Asbestos Free	3 only



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.36	46	75	45
3/8"	0.35	46	75	45
1/2"	0.47	51	82	52
3/4"	0.6	55	95	65
1"	0.92	63	118	70
1.1/4"	1.41	71	144	79
1.1/2"	1.92	73	166	92
2"	2.72	83	190	103
2.1/2"	5.62	105	232	103
3"	7.89	111	264	121

**Pressure Rating:** PN32

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves are manufactured in accordance with BS5154 PN32 for series B ratings.

Non Rising Stem

Valves having ANSI threads also generally conform to MSS SP-80.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 198°C.

**Available Options:**

P150 locking device.

## PN32 Bronze Gate Valve

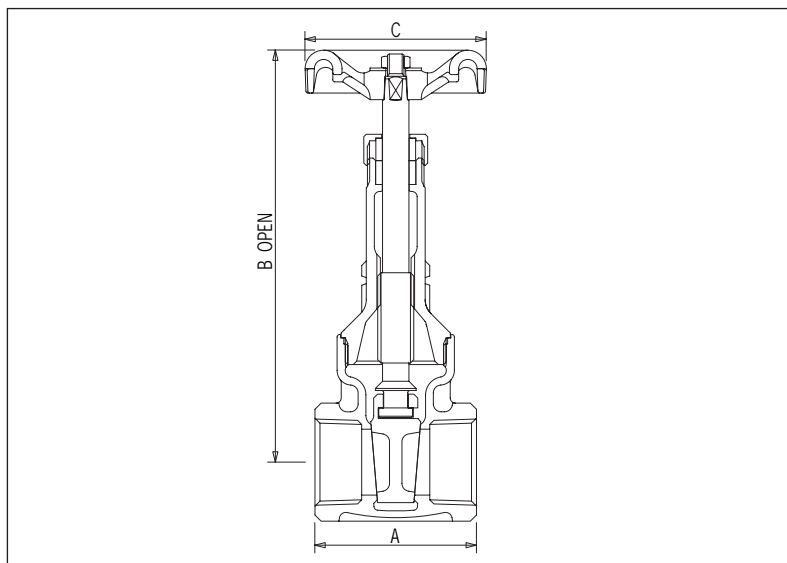
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	Bronze BSEN1982 CC491K	All
Stem	Bronze BSEN1982 CC491K	1/4 - 2
Stem	Aluminium Bronze NES 834 Pt.2	2.1/2
Stem	Manganese Bronze	3
Disc	Bronze BSEN1982 CC491K	All
Packing	Asbestos Free	All
Gland	Brass BSEN12164 CW614N	All
Packing Nut	Brass BSEN12164 CW614N	1/4 - 2
Packing Nut	Bronze BSEN1982 CC491K	2.1/2 & 3
Handwheel	Aluminium	All
ID. Plate	Aluminium	All
Handwheel Nut	Brass BSEN12164 CW614N	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.32	46	126	45
3/8"	0.31	46	126	45
1/2"	0.46	51	129	52
3/4"	0.72	55	159	65
1"	1.1	63	189	70
1.1/4"	1.5	71	219	78
1.1/2"	2.25	73	246	92
2"	3.2	83	301	92
2.1/2"	5.8	108	369	134
3"	8.52	117	416	134

**Pressure Rating:** PN32

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves are manufactured in accordance with BS5154 PN32 for series B ratings.

Rising stem

Valves having ANSI threads also generally conform to MSS SP-80

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 198°C.

**Available Options:**

P150 locking device.



## PN32 Bronze Gate Valve

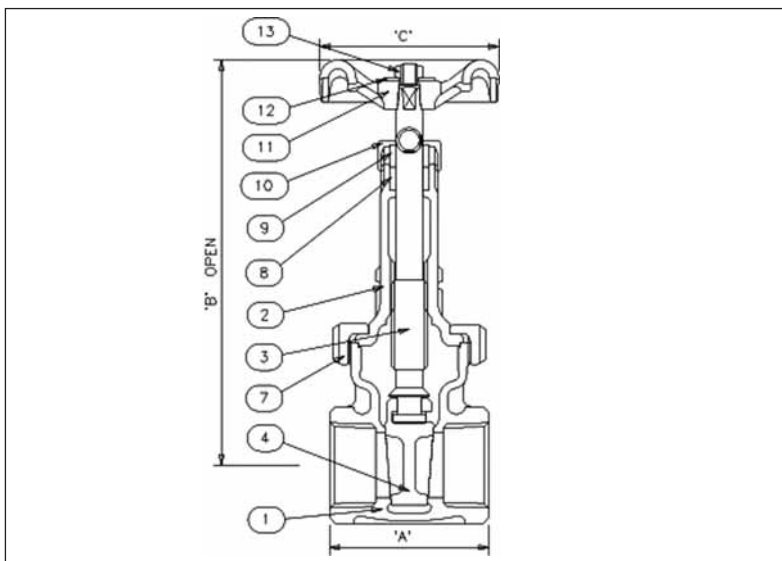
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	Bronze BSEN1982 CC491K	All
Stem	Bronze BSEN1982 CC491K	1/4 - 2
Stem	Brass BSEN12164 CW721R	2.1/2 & 3
Disc	Bronze BSEN1982 CC491K	All
Union Ring	Bronze BSEN1982 CC491K	1/4 - 2 only
Packing	Asbestos Free	All
Gland	Brass BSEN12164 CW614N	All
Packing Nut	Brass BSEN12164 CW614N	1/4 - 2
Packing Nut	Bronze BSEN1982 CC491K	2.1/2 & 3
Handwheel	Aluminium	1/4 - 2
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	2.1/2 & 3
ID. Plate	Aluminium	All
Handwheel Nut	Brass BSEN12164 CW614N	All
Stud	Steel BS970 070M20	2.1/2 & 3 only
Stud Nut	Steel BS4190 Gr.4	2.1/2 & 3 only
Gasket	Asbestos Free	2.1/2 & 3 only



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.32	46	126	45
3/8"	0.31	46	126	45
1/2"	0.46	51	129	52
3/4"	0.72	55	159	65
1"	1.1	63	189	70
1.1/4"	1.5	71	219	78
1.1/2"	2.3	73	246	92
2"	3.2	83	301	92
2.1/2"	5.8	108	369	134
3"	8.5	117	416	134

**Pressure Rating:** PN32

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves are manufactured in accordance with BS5154 PN32 for series A ratings.

Rising Stem

Sizes 1/4" to 2" have a union bonnet; sizes 2.1/2" and 3" have a bolted bonnet.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 260°C.

**Available Options:**

P150 locking device.

## PN16 Bronze Gate Valve

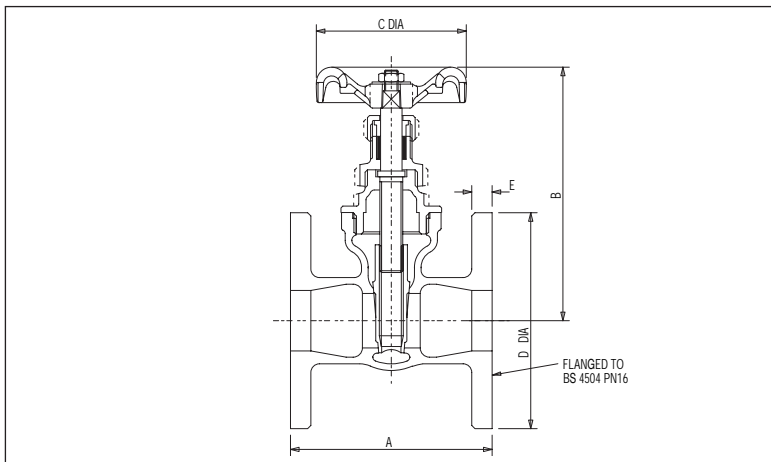
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	Bronze BSEN1982 CC491K	All
Disc	Bronze BSEN1982 CC491K	All
Stem	Bronze BSEN1982 CC491K	2.1/2 & 3
Stem	DZR Brass BSEN12164 CW602N	3/4 - 2
Packing	Asbestos Free	All
Gland	Brass BSEN12164 CW614N	All
Packing Nut	Brass BSEN12164 CW614N	All
Stuffing Box	DZR Brass BSEN12164 CW602N	1.1/4 & 1.1/ 2
Stuffing Box	Brass BSEN12164 CW614N	2 only
Stuffing Box	Bronze BSEN1982 CC491K	2.1/2 & 3
Stem Bush	Aluminium Bronze NES 834 Pt.2	3/4 & 1
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	3 only
Handwheel	Aluminium	3/4 - 2.1/2
Handwheel Nut	Brass BSEN12164 CW614N	All
ID. Plate	Aluminium	All
Gasket	Asbestos Free	3 only



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
20mm	1.57	89	105	65	105	6
25mm	2.5	99	116	70	115	8
32mm	3.38	110	141	92	140	8
40mm	4.93	120	168	92	150	9
50mm	5.54	135	189	103	165	11
65mm	8.39	165	232	103	185	13
80mm	12.25	185	264	121	200	13

**Pressure Rating:** PN16

**End Connection:** Flanged BS EN 1092-2 (formerly BS4504)

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves are manufactured in accordance with BS5154 PN16 for Series B ratings, having 'short' face to face dimensions.

Non Rising Stem

End flanges conform to BS 4504 Section 3.3 with flat face and are normally supplied drilled.

Note: Users attention is drawn to BS 4504 Section 3.3, Clause 8 regarding types of gaskets and mating flanges to be used with metric flanged valves.

**Available Options:**

Flanges undrilled, P150 Locking device.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 170°C.

## PN6 Cast Iron Gate Valve

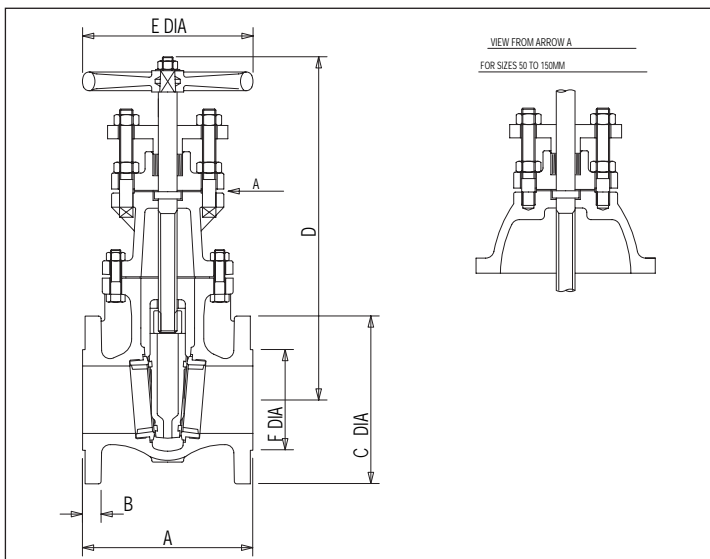
Crane cast iron gate valves offer the ultimate in dependable service wherever minimum pressure drop is important  
 Complete with Bronze trim  
 Each valve is hydrostatically tested to BS5150  
 Manufactured in accordance with BS5150

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Bonnet	Cast Iron BSEN1561 GJL-250	All
Bonnet Gasket	Asbestos Free	All
Bonnet Bolts/Nuts	Steel BS4190 Gr.4.6/4.0	All
Disc	Cast Iron BSEN1561 GJL-250	All
Stem	Brass BS2874 CZ114	All
Stuffing Box	Cast Iron BSEN1561 GJL-250	All
Gland	Cast Iron BSEN1561 GJL-250	All
Gland Bolts	Steel BS4190 Gr.4.6	Sizes 200 - 300
Gland Studs	Steel BS4439 Gr.4.8	Sizes 50 - 150
Stuffing Box Gasket	Asbestos Free	All
Packing	Asbestos Free	All
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	All
Washer	Steel	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc Stem Nut	Bronze BSEN1982 CC491K	All
Disc Ring	Bronze BSEN1982 CC491K	All
Handwheel Nut	Steel BS4190 Gr.4	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
50mm	14	150	16	140	277	140	90
65mm	16	170	16	160	296	140	110
80mm	20	180	18	190	337	152	128
100mm	27	190	18	210	369	203	148
125mm	39	200	20	240	429	229	178
150mm	44	210	20	265	470	229	202
200mm	82	292	22	320	600	305	258
250mm	123	330	24	375	722	356	312
300mm	174	356	24	440	818	406	365

**Pressure Rating:** PN6

**UK End Connection:** Flanged BSEN 1092-2

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Wedge Disk, Non-Rising Stem, Inside Screw and Yoke

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: - 10 to 150°C.

**Available Options:**

Flanges undrilled.

## Class 125 Cast Iron Gate Valve

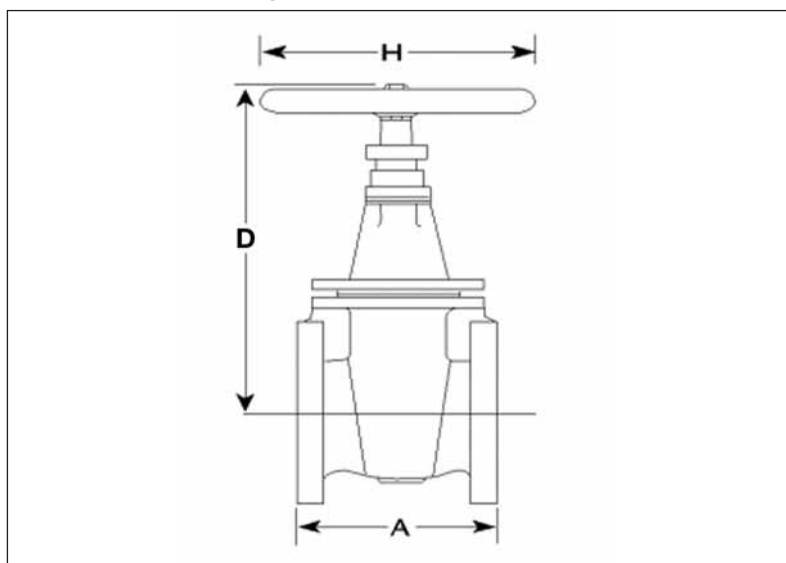
Crane cast iron gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Bonnet	Cast Iron BSEN1561 GJL-250	All
Bonnet Gasket	Asbestos Free	All
Bonnet Bolts/Nuts	Steel BS4190 Gr.4.6/4.0	All
Disc	Cast Iron BSEN1561 GJL-250	All
Stem	Brass BSEN12164 CW721R	All
Stuffing Box	Cast Iron BSEN1561 GJL-250	All
Gland	Cast Iron BSEN1561 GJL-250	All
Gland Bolts	Steel BS4190 Gr.4.6	200 - 300
Gland Studs	Steel BS4439 Gr.4.8	50 - 150
Stuffing Box Gasket	Asbestos Free	All
Packing	Asbestos Free	All
Handwheel	Malleable Iron BSEN1562 GJMB-300-6	All
Washer	Steel	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc Stem Nut	Bronze BSEN1982 CC491K	All
Disc Ring	Bronze BSEN1982 CC491K	All
Handwheel Nut	Steel BS4190 Gr.4	All
Stud/Bolt Nuts	Steel BS4190 Gr.4	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	D (mm)	H (mm)
50mm	12.7	178	277	140
65mm	15.8	190	296	140
80mm	19.5	203	337	152
100mm	29.3	229	369	203
125mm	39.5	254	429	229
150mm	45.8	267	470	229
200mm	84	292	600	305
250mm	148	330	722	356
300mm	198	356	818	406

**Pressure Rating:** Class 125

**US End Connection:** ANSI Class 125

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves are manufactured in accordance with BS5150. End flanges conform to BS1560 Section 3.2/ANSI B16.1 Class 125 with flat face and are normally supplied drilled.

Wedge disk, non-rising stem, inside screw, bronze trim.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 230°C.

**Available Options:**

Flanges undrilled

P50 locking device

## PN10 Cast Iron Gate Valve

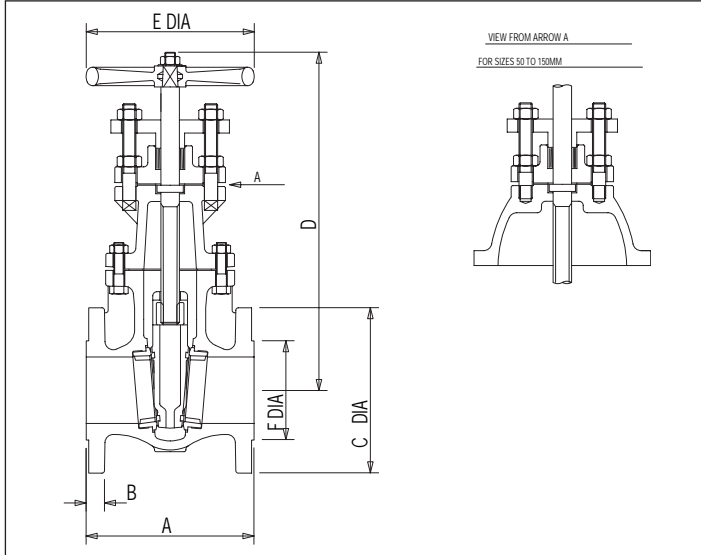
Crane cast iron gate valves offer the ultimate in dependable service wherever minimum pressure drop is important  
 Complete with Bronze trim  
 Each valve is hydrostatically tested to BS5150  
 Manufactured in accordance with BS5150

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Bonnet	Cast Iron BSEN1561 GJL-250	All
Bonnet Gasket	Asbestos Free	All
Bonnet Bolts/Nuts	Steel BS4190 Gr.4.6/4.0	All
Disc	Cast Iron BSEN1561 GJL-250	All
Stem	Brass BS2874 CZ114	All
Stuffing Box	Cast Iron BSEN1561 GJL-250	All
Gland	Cast Iron BSEN1561 GJL-250	All
Gland Bolts	Steel BS4190 Gr.4.6	Sizes 200 - 300
Gland Studs	Steel BS4439 Gr.4.8	Sizes 50 - 150
Stuffing Box Gasket	Asbestos Free	All
Packing	Asbestos Free	All
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	All
Washer	Steel	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc Stem Nut	Bronze BSEN1982 CC491K	All
Disc Ring	Bronze BSEN1982 CC491K	All
Handwheel Nut	Steel BS4190 Gr.4	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
50mm	14	178	20	165	277	140	102
65mm	17	190	20	185	296	140	122
80mm	22	203	22	200	337	152	138
100mm	30	229	24	220	369	203	158
125mm	41	254	26	250	429	229	188
150mm	47	267	26	285	470	229	212
200mm	85	292	26	340	600	305	268
250mm	146	330	28	395	722	356	320
300mm	188	356	28	445	818	406	370

**Pressure Rating:** PN10

**UK End Connection:** Flanged BSEN1092-2

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Long face to face, Wedge Disk, Non-rising stem.

Valves are manufactured in accordance with BS5150. End flanges conform to BSEN1092-2 section 3.2 table 10 with raised face and are normally supplied drilled.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: - 10 to 180°C.

**Available Options:**

Flanges undrilled, P50 locking device.

## PN16 Cast Iron Gate Valve

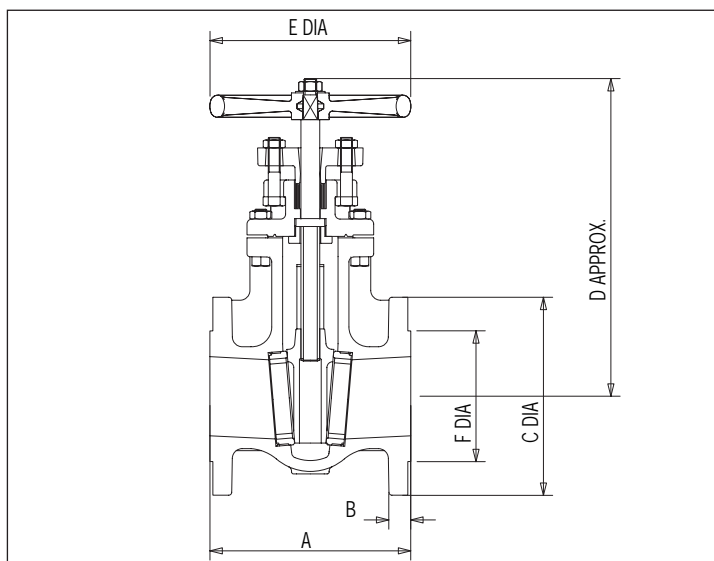
Crane cast iron gate valves offer the ultimate in dependable service wherever minimum pressure drop is important. Each valve is hydrostatically tested to BS5150. The FM63 holds the British Standards Institution Kitemark (50-100mm).

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Bonnet	Cast Iron BSEN1561 GJL-250	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc	Bronze BSEN1982 CC491K	50 - 100
Disc	Cast Iron BSEN1561 GJL-250	125 - 300
Disc Ring	Bronze BSEN1982 CC491K	125 - 300
Stem	Manganese Bronze	50 - 100
Stem	Brass ASTM B16-C36000 Half Hard	125 - 300
Gland Flange	Malleable Iron BS EN 1562 GJMB-300-6	All
Stuffing Box	Cast Iron BSEN1561 GJL-250	125 - 300
Gland Flange	Ductile Cast Iron ASTM A536 Gr.65-45-12	125 - 300
Gland	Cast Iron BSEN1561 GJL-250	125 - 300
Gaskets	Asbestos Free	All
Packing	Asbestos Free	All
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
50mm	17.9	178	20	165	288	178	102
65mm	20.7	190	20	185	307	203	122
80mm	29.3	203	22	200	318	203	138
100mm	39.6	229	24	220	379	225	158
125mm	60	254	26	250	491	305	184
150mm	77.5	267	26	285	535	305	211
200mm	130.5	292	30	340	665	356	266
250mm	194.5	330	32	405	773	406	319
300mm	275.5	356	32	460	860	457	370

**Pressure Rating:** PN16

**UK End Connection:** Flanged BSEN1092-2

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Wedge Disk, Non-Rising Stem, Inside Screw, BSI Kitemark approved.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: - 10 to 200°C.

**Available Options:**

Flanges undrilled, P50 locking device.

## PN16 Cast Iron Gate Valve

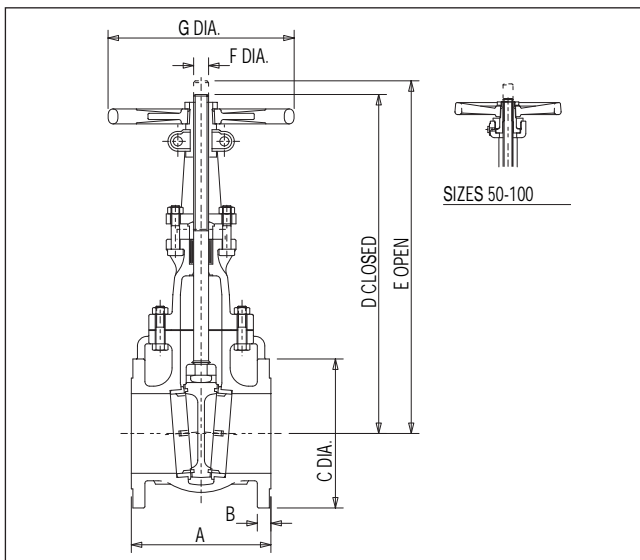
Crane cast iron gate valves offer the ultimate in dependable service wherever minimum pressure drop is important. The FM82 holds the British Standards Institution Kitemark (50-100mm).

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Bonnet	Cast Iron BSEN1561 GJL-250	All
Disc	Cast Iron BSEN 1561 GJL-250	125 - 300
Disc	Bronze BSEN1982 CC491K	50 - 100
Stem	Brass	125 - 300
Stem	Manganese Bronze BSEN12164 CW721R	50 - 100
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc Seat Ring	Bronze BSEN1982 CC491K	125 - 300
Yoke	Cast Iron BSEN1561 GJL-250	125 - 300
Yoke Hub	Bolts/Nuts	Steel BS4190
Gr.4.6/4.0	125 -300	Yoke Sleeve
Bronze BSEN1982	CC491K	125 - 300
Yoke Sleeve	Manganese Bronze ASTM B584 - C86400	50 - 100
Yoke Sleeve Nut	Ductile Iron ASTM A536 65-45-12	125 - 300
Yoke Sleeve Nut	Malleable Iron BSEN1562 GR 300-6	50 - 100
Gland Flange	Ductile Iron ASTM A536 65-45-12	125 - 300
Gland Flange	Malleable Iron BSEN1562 GR 300-6	50 - 100
Gland	Cast Iron BSEN1561 GJL-250	125 - 300
Gland Flange	Malleable Iron BSEN1562 GR 300-6	50 - 100
Gland Bolts/Nuts	Steel BS4190 Gr.4.0/4.6	125 - 300
Gland Bolts/Nuts	Steel BS3692 Gr.8.0/8.8	50 - 100
Packing	Asbestos Free	All
Bonnet Gland	Asbestos Free	All
Bonnet Bolts/Nuts	Steel BS4190 Gr.4.0/4.6	125 - 300
Bonnet Bolts/Nuts	Steel BS3692 Gr.8.0/8.8	50 - 100
Handwheel	Malleable Iron BSEN 1562 GR 300-6	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
50mm	22.5	178	20	165	334	399	19	203
65mm	26.4	190	20	185	354	432	19	203
80mm	31	203	22	200	375	469	19	203
100mm	44.3	229	24	220	449	566	22	229
125mm	72.3	254	26	254	575	714	28.5	305
150mm	88.1	267	26	279	649	813	28.5	305
200mm	140	292	30	340	800	1013	34.9	356
250mm	225	330	32	405	984	1257	39.7	406
300mm	314	356	32	460	1127	1454	39.7	457

**Pressure Rating:** PN16

**UK End Connection:** Flanged BSEN1092-2

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves are manufactured in accordance with BS5150. End flanges conform to BSEN1092-2 section 3.2 Table 11 with raised face and are normally supplied drilled. Bronze trim, rising stem, sizes 50mm to 100mm kitemarked.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC. Temperature operating range: - 10 to 200°C.

**Available Options:**

Flanges undrilled, P50 locking device.

## Class 125 Cast Iron Gate Valve

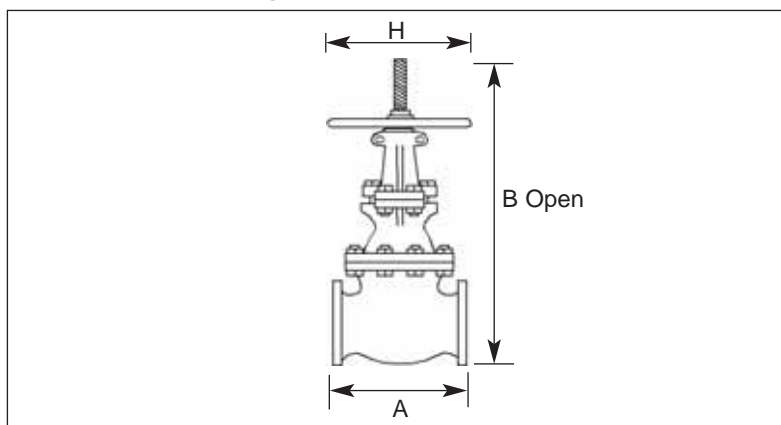
Crane cast iron gate valves offer the ultimate in dependable service wherever minimum pressure drop is important. Each valve is hydrostatically tested to BS1560.

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Bonnet	Cast Iron BSEN1561 GJL-250	All
Disc	Bronze BSEN1982 CC491K	2 - 4
Disc	Cast Iron BSEN1561 GJL-250	5 - 12
Stem	Brass BS EN 12163 CW721R	2 - 4
Stem	Brass J1S - H3250 Gr.6872	5 - 12
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc Ring	Bronze BSEN1982 CC481K	5 - 12
Yoke	Cast Iron BSEN1561 GJL-250	5 - 12
Yoke Hub Bolts/Nuts	Steel BS4190 Gr.4.6/4	5 - 12
Yoke Pad Bolts/Nuts	Steel BS4190 Gr.4.6/4	5 - 12
Yokesleeve	Manganese Bronze ASTM B584-C86400	2 - 4
Yokesleeve	Bronze BSEN1982 CC491K	5 - 12
Yokesleeve Ret'g Nut	Malleable Iron BS EN 1562 GJMB-300-6	2 - 4
Yokesleeve Nut	Malleable Iron BS EN 1562 GJMB-300-6	2 - 4
Yokesleeve Nut	Ductile Iron ASTM A536 65-45-12	5 - 12
Gland	Malleable Iron BS EN 1562 GJMB-300-6	2 - 4
Gland	Cast Iron BSEN1561 GJL-250	5 - 12
Gland Flange	Ductile Iron ASTM A536 65-45-12	5 - 12
Gland Bolts/Nuts	Steel BS3692 Gr.8.8/8	2 - 4
Gland Bolts/Nuts	Steel BS4190 Gr.4.6/4	5 - 12
Packing	Asbestos Free	All
Gasket	Asbestos Free	All
Bonnet Bolts/Nuts	Steel BS3692 Gr.8.8/8	2 - 4
Bonnet Bolts/Nuts	Steel BS4190 Gr.4.6/4	5 - 12
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	All
Grease Lubricator	Kingfisher Spin Drive	All
Body Plate	Aluminium	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	H (mm)
2"	21.5	178	399	203
2.1/2"	24.8	190	432	203
3"	29.5	203	469	203
4"	42.7	229	566	229
5"	72.3	254	714	305
6"	88.1	267	813	305
8"	140	292	1013	356
10"	225	330	1257	406
12"	314	356	1454	457

**Pressure Rating:** Class 125

**US End Connection:** ANSI Flanged

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves meet the requirements of MSS.SP-70. End flanges conform to BS1560 Section 3.2/ANSI B16.1.

Class 125 with flat face and are normally supplied drilled.

Wedge Disk, Rising Stem, Outside Screw and Yoke.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 230°C

**Available Options:**

Flanges Undrilled

P50 Locking Device



## Class 125 Cast Iron Gate Valve

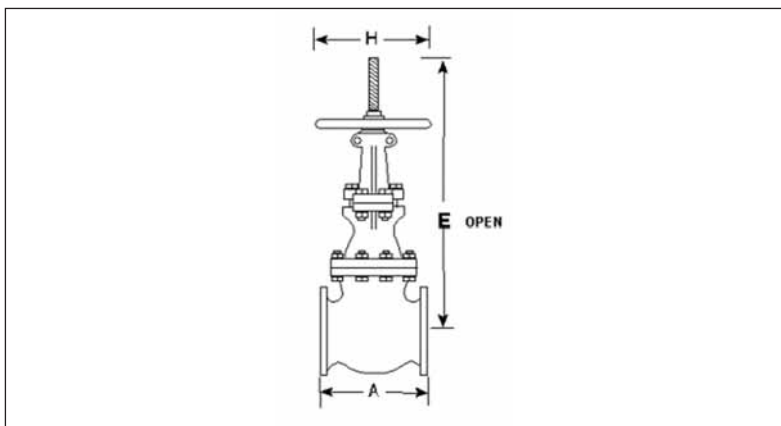
Crane cast iron gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Bonnet	Cast Iron BSEN1561 GJL-250	All
Disc	Cast Iron BSEN1561 GJL-250	All
Stem	13% Cr.Steel BS970 Pt.1 410S21 or 431S29	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc Ring	Bronze BSEN1982 CC491K	All
Yokesleeve	Bronze BSEN1982 CC491K	All
Yokesleeve Nut	Ductile Iron ASTM A536 65-45-12	2, 3, 5, 8 & 10
Yokesleeve Nut	Cast Iron BSEN1561 GJL-250	2.1/2, 4, 6 & 12
Yokesleeve Ret'g Nut	Ductile Iron ASTM A536 65-45-12	2, 3, & 5
Yokesleeve Ret'g Nut	Cast Iron BSEN1561 GJL-250	2.1/2, 4, 6 & 12
Disc Stem Nut	Bronze BSEN1982 CC491K	All
Gland	Cast Iron BSEN1561 GJL-250	All
Gland Bolts/Nuts	Steel BS4190 Gr.4.6/4.0	All
Packing	Asbestos Free	All
Gasket	Asbestos Free	All
Bonnet Bolts/Nuts	Steel BS4190 Gr.4.6/4.0	All
Yoke	Cast Iron BSEN1561 GJL-250	8, 10 & 12
Yoke Pad Bolts/Nuts	Steel BS4190 Gr.4.6/4.0	8, 10 & 12
Yoke Hub Bolts/Nuts	Steel BS4190 Gr.4.6/4.0	8 & 10
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	All
Disc Stem Nut Pin	Stainless Steel Type 304	All
Grease Lubricator	Steel or Brass	All
Body Plate	Aluminium	All
Drive Pin	Steel	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	E (mm)	H (mm)
2"	17	178	365	152
2.1/2"	20	190	448	152
3"	28	203	481	203
4"	38	229	622	229
5"	56	254	672	254
6"	60	267	835	254
8"	112	292	989	305
10"	185	330	1208	356
12"	242	356	1469	406

**Pressure Rating:** Class 125

**US End Connection:** ANSI Class 125

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

**Specification:**

Valves are manufactured in accordance with BS 5150. End flanges conform to BS 1560 section 3.2/ANSI B16.1 Class 125 with flat face and are normally supplied drilled.

Wedge disk, Rising Stem, Outside Screw and Yoke

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 230°C.

**Available Options:**

Flanges undrilled

P50 locking device

## PN16 Compression Ended Bronze Gate Valve

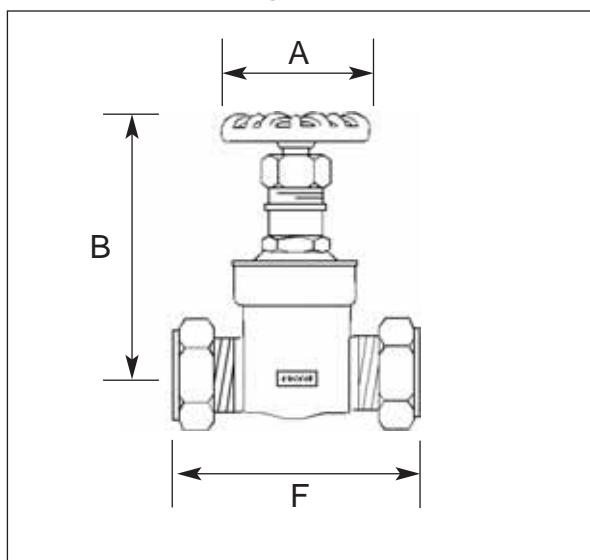
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.  
 (\* Compression ends to suit BSEN1057 copper tables x, y and z.)

### Bill of Materials

Part	Material	Sizes
Body	Bronze ASTM B62-C83600	All
Disc	Bronze ASTM B62-C83600	All
Stem	Bronze ASTM B62-C83600 or B21-C48200	All
Bonnet	Bronze ASTM B62-C83600 or B124-C37700	All
Lock Nut	Brass ASTM B16-C36000	All
Packing	PTFE or PTFE/Neoprene	All
Gland	Brass ASTM B16-C36000	All
Packing Nut	Brass ASTM B16-C36000/ASTM B124-C37700	All
ID. Plate	Aluminium	All
Handwheel	Cast Iron	All
Handwheel Nut	Steel	All
Compression Olive	Brass ASTM B135-C26000	All
Compression Nut	Brass ASTM B584-C85700	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	F (mm)
15mm	0.34	54	77	65
22mm	0.49	61	88	70
28mm	0.75	67	106	76
35mm	1.06	83	122	92
42mm	1.36	83	136	101
54mm	2.37	100	170	125

**Pressure Rating:** PN16

**UK End Connection:** Compression\*

**Operator:** Handwheel

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

### Specification:

Valves are manufactured in accordance with BS5154 PN20 for Series B ratings, but are limited to the pressure/temperature ratings detailed in BS864 for Compression end fittings.

This valve is to be used on Group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 120°C.

### Available Options:

P150 locking device.

\* Compression ends to suit BSEN1057 copper tables x, y and z.

## PN16 Compression Ended Bronze Gate Valve with Lockshield

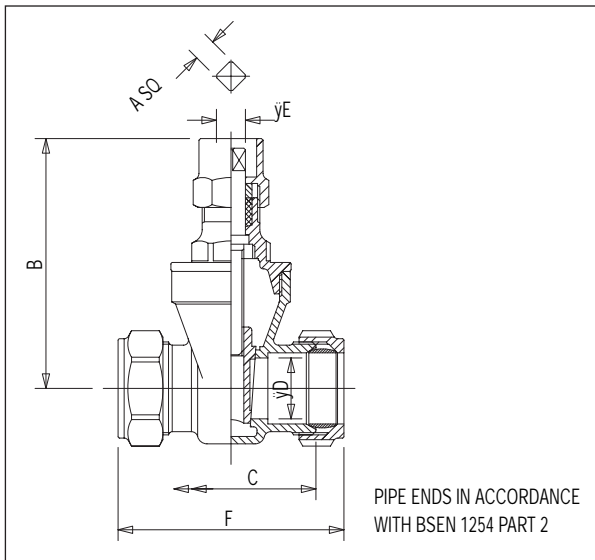
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.  
(\* Compression ends to suit BS2871 copper tables x, y and z.)

### Bill of Materials

Part	Material	Sizes
Body	Bronze ASTM B62-C83600	All
Disc	Bronze ASTM B62-C83600	All
Stem	Bronze ASTM B62-C83600 or B21-C48200	All
Bonnet	Bronze ASTM B62-C83600 or B124-C37700	All
Lock Nut	Brass ASTM B16-C36000	All
Packing	PTFE or PTFE/Neoprene	All
Gland	Brass ASTM B16-C36000	All
Lockshield	Brass ASTM B16-C36000/ASTM B124-C37000	All
Compression Olive	Brass ASTM B135-C26000	All
Compression Nut	Brass ASTM B584-C85700	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
15mm	0.28	6	64	46	12.7	7.9	65
22mm	0.41	7	75	53	19.1	8.9	70
28mm	0.63	7	89	58	25.4	10	76
35mm	0.91	8	103	72	31.8	11	92
42mm	1.21	9	117	80	38.1	12.2	101
54mm	2.07	10.3	144	97	50.8	13.5	125

**Pressure Rating:** PN16

**UK End Connection:** \*Compression

**US End Connection:** Not Specified

**Operator:** Lockshield

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

### Specification:

Valves are manufactured in accordance with BS5154 PN20 for Series B ratings, but are limited to the pressure/temperature ratings detailed in BS864 for Compression end fittings.

Non-rising stem.

This valve is to be used on Group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 120°C.

### Available Options:

P100 and P102 Lockshield Keys

## PN20 Lockshield Operated DZR Gate Valve

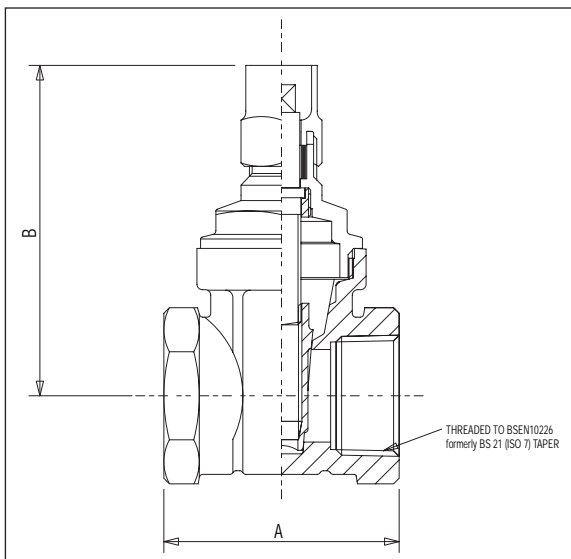
Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important.

### Bill of Materials

Part	Material	Sizes
Body	DZR Brass BSEN12165 CW602N	All
Bonnet	DZR Brass BSEN12165 CW602N	All
Stem	DZR Brass BSEN12164 CW602N	All
Lockshield	Brass BSEN12164 CW721R	All
Packing	Asbestos Free	All
Stem Bush	DZR Brass BSEN12164 CW602N	All
Disc	DZR Brass BSEN12165 CW602N	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)
1/2"	0.23	50	65
3/4"	0.36	54	75
1"	0.5	62	81
1.1/4"	0.82	70	105
1.1/2"	1.08	72	122
2"	1.83	82	149

**Pressure Rating:** PN16

**UK End Connection:** BSEN10226 formerly BS21 Taper

**Operator:** Lockshield

Gate valves are best for services that require infrequent valve operation, and where the disk is kept either fully opened or fully closed. They are not practical for throttling.

#### Specification:

Valves are manufactured in accordance with BS5154 PN20 for Series B ratings.

Non Rising Stem

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 180°C.

#### Available Options:

P100 & P102 Lockshield keys



## PN20 Bronze Globe Valve

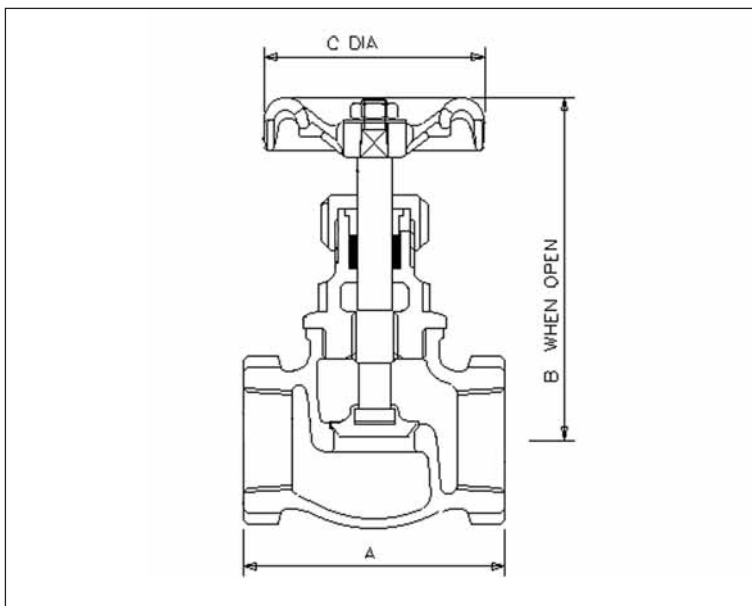
Crane Bronze globe valves are highly efficient for throttling because seat and disk designs provide flow characteristics with proportionate relationships between valve lift and flow rate.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	Bronze BSEN1982 CC491K	All
Disc	Brass BSEN12164 CW614N	1/4 - 1.1/2
Disc	Bronze BSEN1982 CC491K	2
Stem	Brass BSEN12164 CW614N	All
Packing	Asbestos Free	All
Gland	Brass BSEN12164 CW614N	All
Packing Nut	Brass BSEN12164 CW614N	All
Disc Stem Ring	Mang.Bronze BSEN12164 CW721R	2 only
Handwheel	Aluminium	All
Handwheel Nut	Brass BSEN12164 CW614N	All
ID. Plate	Aluminium	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.23	44	75	52
3/8"	0.22	44	75	52
1/2"	0.31	55	82	52
3/4"	0.42	63	89	52
1"	0.71	77	102	65
1.1/4"	1.12	91	118	70
1.1/2"	1.5	98	134	78
2"	2.48	118	171	103

**Pressure Rating:** PN20

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel

#### Specification:

Valves are manufactured in accordance with BS5154 PN20 for Series B ratings. Design incorporates a spherical shape disk spun on to the stem on sizes 1/4" to 1.1/2", and on size 2" retained by threaded ring. Body seat is integral and is a narrow contact angled type.

Sizes 1/4" to 2" BSEN10226 formerly BS21 versions BSI Kitemarked.

Metal disk, screwed bonnet

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 180°C.

#### Available Options:

P150 locking device.



## PN32\* Bronze Globe Valve

Crane Bronze globe valves are highly efficient for throttling because seat and disk designs provide flow characteristics with proportionate relationships between valve lift and flow rate.

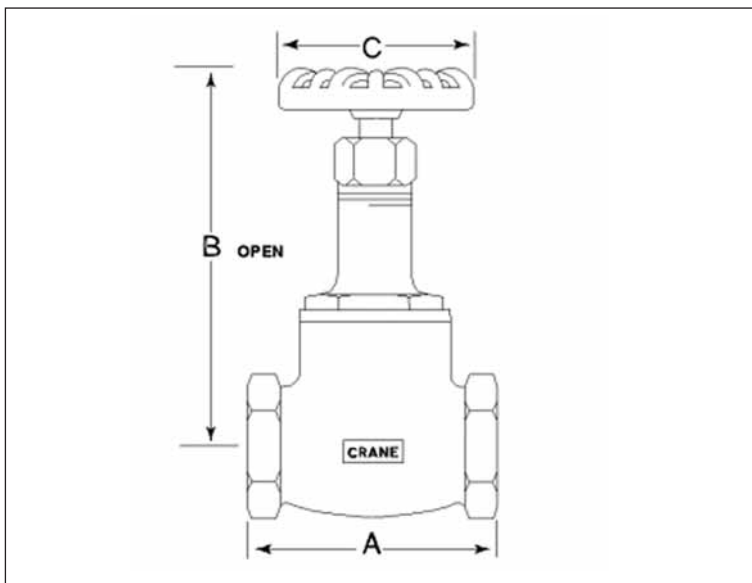
\* Sizes 2 1/2 & 3 rated PN25

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	Bronze BSEN1982 CC491K	All
Disc Stem Ring	Brass BS EN 12163 CW721R	All
Disc	Bronze BSEN1982 CC491K	All
Stem	Brass BS EN 12163 CW721R	1/4 - 2
Stem	Manganese Bronze	2.1/2 & 3
Gland	Brass BSEN12164 CW614N	All
Packing	Asbestos Free	All
Packing Nut	Brass BSEN12164 CW614N	1/4 - 2.1/2
Packing Nut	Bronze BSEN1982 CC491K	3 only
Handwheel	Aluminium	1/4 - 2.1/2
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	3 only
Handwheel Nut	Brass BSEN12164 CW614N	All
ID. Plate	Aluminium	All
Gasket	Asbestos Free	2.1/2 only
Gasket	Stainless Steel	3 only



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.39	52	100	52
3/8"	0.38	52	100	52
1/2"	0.54	62	101	52
3/4"	0.65	74	115	52
1"	0.9	90	125	70
1.1/4"	1.58	100	150	70
1.1/2"	2.06	115	159	92
2"	3.31	136	191	103
2.1/2"	5.9	166	220	121
3"	10.3	190	255	152

**Pressure Rating:** PN32

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel

#### Specification:

Valves are manufactured in accordance with BS5154 series A, PN32 for sizes 1/4 to 2 and PN25 for sizes 2.1/2 and 3.

Design incorporates a bronze 35 degree wide angle disk retained on stem by a threaded ring; body seat is integral of the narrow contact angled type.

Valves having ANSI threads also generally conform to MSS SP-80.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 260°C.

#### Available Options:

P150 locking device.



## PN32\* Bronze Globe Valve

The Crane D15 Bronze Globe Valve is highly efficient for throttling service.

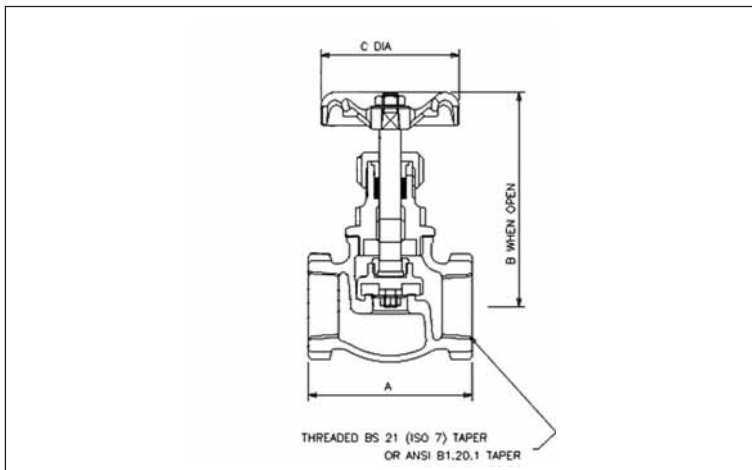
\* Sizes 2.1/2" and 3" are rated at PN25.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	Bronze BSEN1982 CC491K	All
Disc Stem Ring	Brass BS EN 12163 CW721R	All
Disc	PTFE (25% Glass Filled)	All
Disc Holder	Bronze BSEN1982 CC491K	1.1/4 - 3
Disc Holder	Brass BSEN12165 CW617N	1/4 - 1
Disc Retaining Nut	Brass BSEN12164 CW614N	1/4 - 2
Disc Retaining Nut	Bronze BSEN1982 CC491K	2.1/2 & 3
Washer	Brass BSEN12164 CW614N	1/4 - 2 only
Stem	Brass BS EN 12163 CW721R	1/4 - 2
Stem	Manganese Bronze	2.1/2 & 3
Gland	Brass BSEN12164 CW614N	All
Packing	Asbestos Free	All
Packing Nut	Brass BSEN12164 CW614N	1/4 - 2
Packing Nut	Bronze BSEN1982 CC491K	2.1/2 - 3
Handwheel	Aluminium	1/4 - 2.1/2
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	3 only
Handwheel Nut	Brass BSEN12164 CW614N	All
ID. Plate	Aluminium	All
Gasket	Asbestos Free	2.1/2 only
Gasket	Stainless Steel	3 only



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.4	52	100	52
3/8"	0.39	52	100	52
1/2"	0.54	62	101	52
3/4"	0.65	74	115	52
1"	0.81	90	125	70
1.1/4"	1.55	100	150	70
1.1/2"	2.01	115	159	92
2"	3.08	136	191	103
2.1/2"	6.1	166	220	121
3"	10.5	190	255	152

**Pressure Rating:** PN32

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel

#### Specification:

Valves are manufactured in accordance with BS5154 series B, PN32 for sizes 1/4" to 2" and PN25 for sizes 2.1/2" and 3" Sizes 1/4" to 3" BS21 versions BSI Kitemarked.

Design incorporates a disk holder retained on stem by a threaded ring; body seat is integral of the semi-crown type.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 198°C.

#### Available Options:

P150 locking device.

## PN32\* Bronze Globe Valve

Crane Bronze globe valves are highly efficient for throttling because seat and disk designs provide flow characteristics with proportionate relationships between valve lift and flow rate.

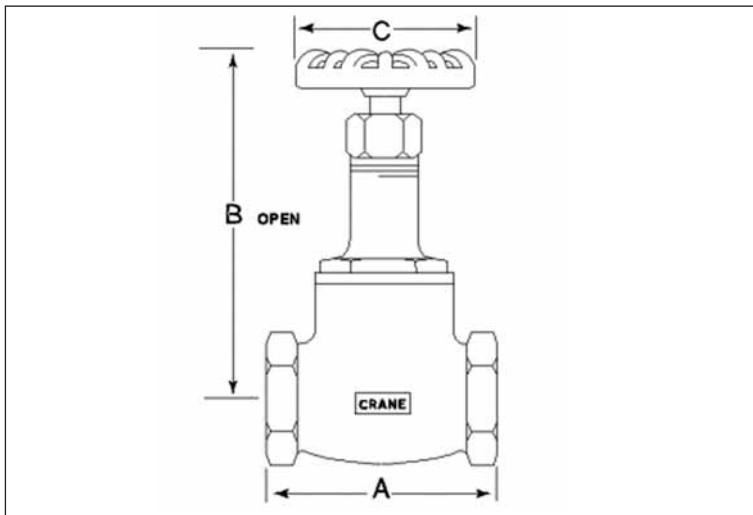
\* Please note Sizes 2.1/2" and 3" are rated at PN25

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Bonnet	Bronze BSEN1982 CC491K	All
Body Seat Ring	13% Cr.Steel BS970 Pt.1 410S21 or 431S29	All
Disc Stem Ring	Brass BS EN 12163 CW721R	All
Disc	13% Cr.Steel BS970 Pt.1 410S21 or 431S29	1/2 - 2
Disc	Nickel Alloy	1/4,3/8,2.1/2 & 3
Stem	Brass BS EN 12163 CW721R	1/4 - 2
Stem	Manganese Bronze	2.1/2 & 3
Gland	Brass BSEN12164 CW614N	All
Packing	Asbestos Free	All
Packing Nut	Brass BSEN12164 CW614N	1/4 - 2.1/2
Packing Nut	Bronze BSEN1982 CC491K	3 only
Handwheel	Aluminium	1/4 - 2.1/2
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	3 only
Handwheel Nut	Brass BSEN12164 CW614N	All
ID. Plate	Aluminium	All
Gasket	Asbestos Free	2.1/2 only
Gasket	Stainless Steel	3 only



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
1/4"	0.33	52	100	52
3/8"	0.31	52	100	52
1/2"	0.8	62	101	52
3/4"	1.24	74	115	52
1"	1.5	90	125	70
1.1/4"	1.7	100	150	70
1.1/2"	2.16	115	159	92
2"	3.67	136	191	103
2.1/2"	6	166	220	121
3"	10.9	190	255	178

**Pressure Rating:** PN32

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Handwheel

#### Specification:

Valves are manufactured in accordance with BS 5154 Series A, PN32 for sizes 1/4" to 2" and PN25 for sizes 2.1/2" and 3". Design incorporates a nickel alloy plug type disk retained on the stem by a threaded ring; body seat is a screwed-in stainless steel ring. Valves having ANSI threads also generally conform to MSS SP-80.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC. Temperature operating range: -10 to 260°C.

#### Available Options:

P150 locking device.



## PN16 Cast Iron Globe Valve

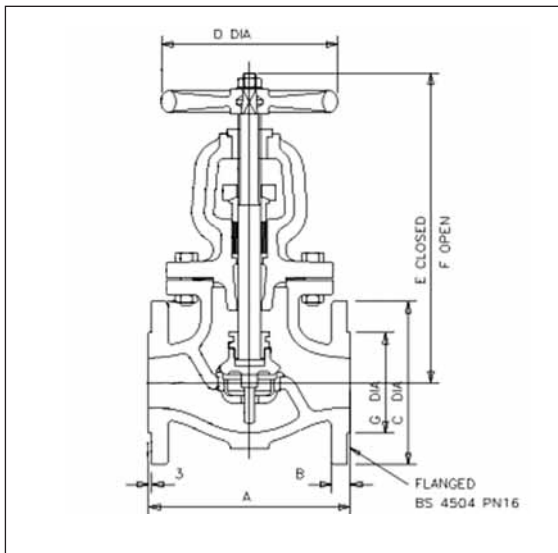
Crane cast iron globe valves are highly efficient for throttling because seat and disk designs provide flow characteristics with proportionate relationships between valve lift and flow rate.

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Bonnet	Cast Iron BSEN1561 GJL-250	All
Disc Guide Pin	Brass BSEN12164 CW721R	125 & 300
Gland	Brass BSEN12164 CW614N	All
Gland Flange	Malleable Iron BS EN 1562 GJMB-300-6	All
Gland Bolts	Steel BS3692 Gr.8.8	All
Gasket	Asbestos Free	All
Disc Stem Ring	Brass BSEN12164 CW721R	All
Lockwasher	Brass BSEN1652	All
Disc	Bronze BSEN1982 CC491K	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Stem	Brass BSEN12164 CW721R	All
Packing	Asbestos Free	All
Bonnet Bolts	Steel BS3692 Gr.8.8	All
Yoke Bushing	Brass BSEN12164 CW721R	All
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	All
Handwheel Nut	Steel BS1768	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
50mm	24.2	203	20	165	203	310	335	102
65mm	29	216	20	185	203	330	356	122
80mm	36.9	241	22	200	229	362	392	138
100mm	56	292	24	220	254	416	446	158
125mm	72.3	330	26	250	305	457	489	188
150mm	98.8	356	26	285	305	476	516	212

**Pressure Rating:** PN16

**UK End Connection:** Flanged BSEN1092-2

**Operator:** Handwheel

#### Specification:

Valves are manufactured in accordance with BS5152. End flanges conform to BSEN1092-2 Section 3.2 Table 11 with raised face. Valves are normally supplied drilled.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: - 10 to 220°C.

#### Available Options:

Flanges Undrilled

P50 locking device.

## Class 125 Cast Iron Globe Valve

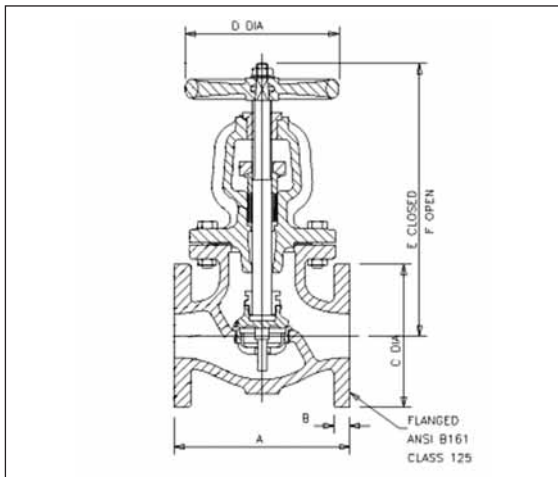
Crane cast iron globe valves are highly efficient for throttling because seat and disk designs provide flow characteristics with proportionate relationships between valve lift and flow rate.

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Bonnet	Cast Iron BSEN1561 GJL-250	All
Disc Guide Pin	Brass BSEN12164 CW721R	5 & 6
Gland	Brass BSEN12164 CW614N	All
Gland Flange	Malleable Iron BS EN 1562 GJMB-300-6	All
Gland Bolts	Steel BS3692 Gr.8.8	All
Gland Bolts Nuts	Steel BS3692 Gr.8	All
Gasket	Asbestos Free	All
Disc Stem Ring	Brass BSEN12164 CW721R	All
Lockwasher	Brass BSEN1652	All
Disc	Bronze BSEN1982 CC491K	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Stem	Brass BSEN12164 CW721R	All
Packing	Asbestos Free	All
Bonnet Bolts	Steel BS3692 Gr.8.8	All
Bonnet Bolts Nuts	Steel BS3692 Gr.8	All
Yoke Bushing	Brass BSEN12164 CW721R	All
Handwheel	Malleable Iron BS EN 1562 GJMB-300-6	All
Handwheel Nut	Steel BS1768	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
2"	23.1	203	16	152	203	310	335
2.1/2"	27.2	216	17	178	203	330	356
3"	34.5	241	19	191	229	362	392
4"	54.4	292	24	229	254	416	446
5"	70.8	330	24	254	305	457	489
6"	95.3	356	25	279	305	476	516

**Pressure Rating:** Class 125

**US End Connection:** ANSI Class 125

**Operator:** Handwheel

**Specification:**

Valves are manufactured in accordance with BS5152 and also meet the requirements of MSS.SP-85. End flanges conform to BS1560 Section 3.2/ANSI B16.1 Class 125 with Flat Face and are normally supplied drilled. Valves detailed on this page are dimensioned in metric terms.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC. Temperature operating range: -10 to 230°C.

**Available Options:**

Flanges undrilled.

P50 Locking Device



## PN25 Bronze Swing Check Valve

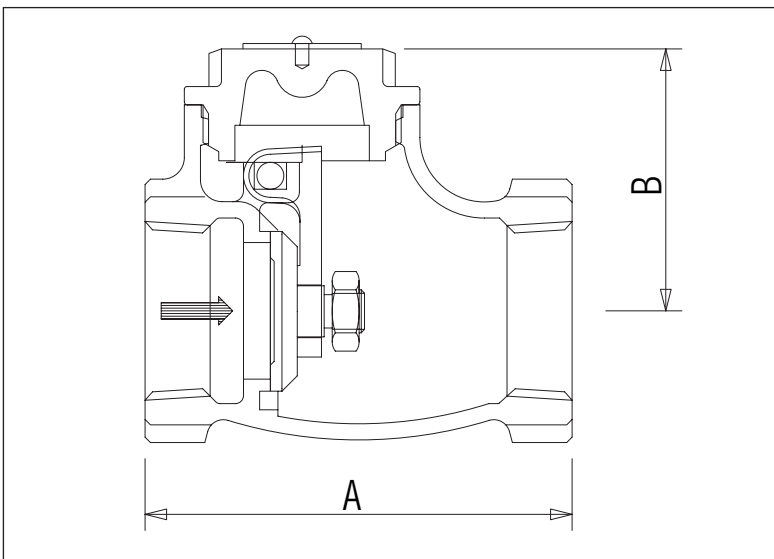
Check valves permit flow in one direction only, and close automatically if flow reverses. They are entirely automatic in action, depending upon pressure and velocity of flow within the line to perform their functions of opening and closing. The Crane D138 Bronze check valve is of the swing variety. This valve carries the British Standards Institution kitemark - your assurance of exacting quality.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Cap	Bronze BSEN1982 CC491K	All
Disc	Bronze BSEN1982 CC491K	1.1/4 - 3
Disc	Brass BSEN12164 CW614N	3/8 - 1
Hinge	Bronze BSEN1982 CC491K	All
Hinge Pin	Stainless Steel ASTM A182 Gr.F316	2.1/2 & 3
Hinge Pin	Stainless Steel	3/8 - 2
Hinge Nut	Brass BSEN 12164 CW614N	All
ID. Plate	Aluminium	All
Drive Pin	Steel - Electro Brassed	All
Hinge Pin Plug	Brass BSEN 12164 CW614N	2.1/2 & 3



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)
3/8"	0.19	48	33
1/2"	0.32	58	38
3/4"	0.43	66	42
1"	0.61	80	49
1.1/4"	1.01	89	56
1.1/2"	1.34	95	65
2"	2.12	108	76
2.1/2"	4.08	155	98
3"	5.76	190	99

**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Swing Type Check Valve

**Specification:**

Metal Disk, Screwed in Cap, BSI Kitemark Approved.

Valves are manufactured in accordance with BS5154, PN25 for Series B ratings. Disk is flat accurately ground and connected to hinge by a spud and nut, but is free to rotate.

The hinge is mounted on a hinge pin which permits free rotation in internal lugs (sizes 3/8" to 2") or body bosses (sizes 2.1/2" and 3"). There are no external plugs on sizes 3/8" to 2". Body seat is integral.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.



## PN25 Bronze Swing Check Valve

Check valves permit flow in one direction only, and close automatically if flow reverses. They are entirely automatic in action, depending upon pressure and velocity of flow within the line to perform their functions of opening and closing.

The Crane D140 Bronze check valve is of the swing variety.

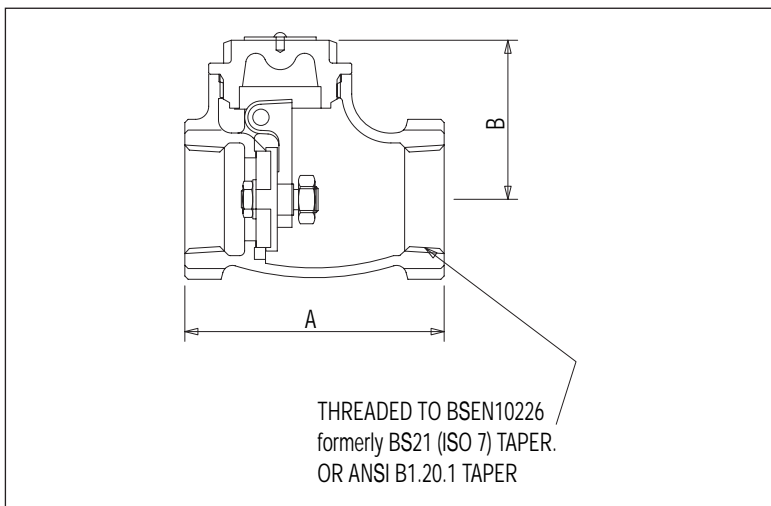
This valve carries the British Standards Institution kitemark - your assurance of exacting quality standards.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Cap	Bronze BSEN1982 CC491K	All
Disc Holder	Bronze BSEN1982 CC491K	1.1/4 - 3
Disc Holder	Brass BSEN12164 CW614N	1/2 - 1
Disc	Nitrile Rubber	All
Disc Retaining Nut	Brass BSEN12164 CW614N	1/2 - 2.1/2
Disc Retaining Nut	Bronze BSEN1982 CC491K	3 only
Washer	Brass BS2874 CZ121	1/2 - 2.1/2
Hinge	Bronze BSEN1982 CC491K	All
Hinge Pin	Stainless Steel	1/2 - 2
Hinge Pin	Brass BSEN12164 CW614N	2.1/2 & 3
Hinge Pin Plug	Brass BSEN12164 CW614N	2.1/2 & 3
Hinge Nut	Brass BSEN12164 CW614N	All
I.D. Plate	Aluminium	All
Drive Pin	Steel-electro brassed	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)
1/2"	0.33	58	38
3/4"	0.43	66	42
1"	0.63	80	49
1.1/4"	1.01	89	56
1.1/2"	1.34	95	65
2"	2.12	108	76
2.1/2"	4.2	153	98
3"	6.02	188	98

**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:**

Swing Type Check Valve

**Specification:**

Valves are manufactured in accordance with BS 5154 PN25 for Series B ratings but are limited to 100 degrees celsius maximum temperature. The rubber disk is fitted to a disk holder which is connected to the hinge by a spud and nut, but is free to rotate.

The hinge is mounted on a hinge pin which permits free rotation in internal lugs (sizes 1/2" to 2") or body bosses (sizes 2.1/2" and 3"). There are no external plugs on sizes 1/2" to 2". Body seat is integral.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC. Temperature operating range: -10 to 100°C.

## PN16 Cast Iron Check Valve

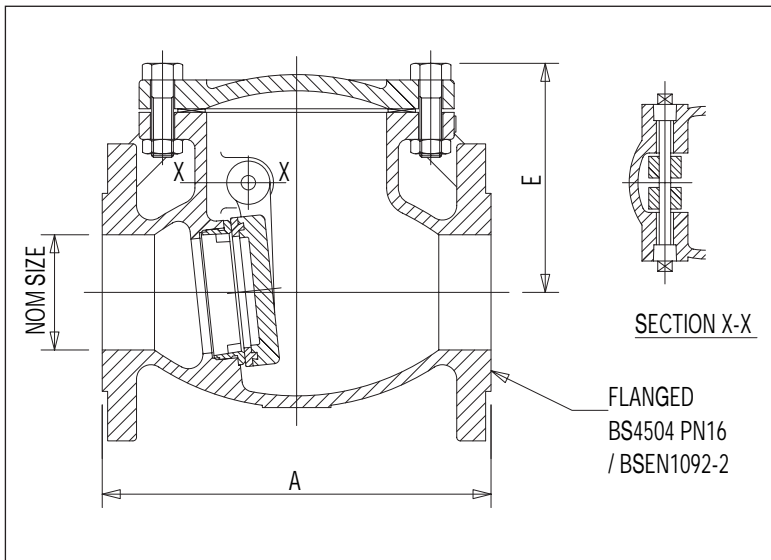
Check valves permit flow in one direction only, and close automatically if flow reverses. They are entirely automatic in action, depending upon pressure and velocity of flow within the line to perform their functions of opening and closing.  
Swing pattern, metal faced disk.

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Cap	Cast Iron BSEN1561 GJL-250	All
Disc	Cast Iron BSEN1561 GJL-250	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc Ring	Bronze BSEN1982 CC491K	All
Hinge Pin Bush	Bronze BSEN1982 CC491K	All
Hinge Pin Plug	Bronze BSEN1982 CC491K	All
Hinge Pin	13% Cr.Steel AISI Type 410	125mm - 300mm
Hinge Pin	Stainless Steel Type 304	50mm - 100mm
Cap Bolts	Steel BS3692 Gr.8.8	All
Cap Bolt Nuts	Steel BS3692 Gr.8	All
Gasket	Asbestos Free	All
Body Plate	Aluminium	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	E (mm)
50mm	11.3	203	113
65mm	15.6	216	126
80mm	19.3	241	136
100mm	26.6	292	153
125mm	44	330	186
150mm	55.5	356	207
200mm	119	495	250
250mm	175	622	352
300mm	263	698	397

**Pressure Rating:** PN16

**UK End Connection:** Flanged BSEN1092-2

**Operator:** Swing check valve

**Specification:**

Valves are manufactured in accordance with BSEN1234 End flanges conform to BSEN1092-2 Section 3.2 Table 11 with raised face and are normally supplied drilled.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 220°C.

## Class 125 Cast Iron Check Valve

The F493 is of the swing variety, complete with a Bronze trim.

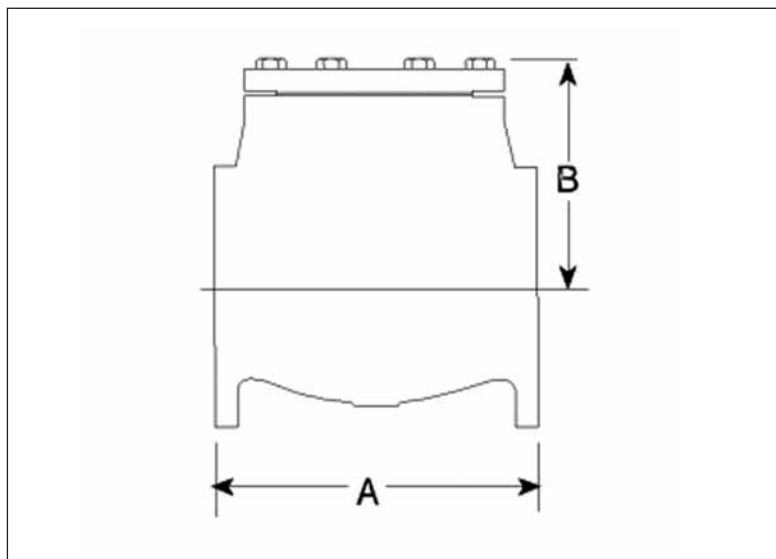
Each valve is hydrostatically tested to BS 5153

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Cap	Cast Iron BSEN1561 GJL-250	All
Disc	Cast Iron BSEN1561 GJL-250	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc Ring	Bronze BSEN1982 CC491K	All
Hinge Pin Bush	Bronze BSEN1982 CC491K	All
Hinge Pin Plug	Bronze BSEN1982 CC491K	All
Hinge Pin	Stainless Steel Type 304	2 - 4
Hinge Pin	13% Cr.Steel AISI Type 410	5 - 12
Cap Bolts	Steel BS3692 Gr.8.8	All
Cap Bolts Nuts	Steel BS3692 Gr.8	All
Gasket	Asbestos Free	All
Body Plate	Aluminium	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)
2"	11.3	203	113
2.1/2"	15.6	216	126
3"	19.3	241	136
4"	26.6	292	153
5"	44	330	186
6"	55.5	356	207
8"	119	495	250
10"	175	622	352
12"	263	698	397

**Pressure Rating:** Class 125

**US End Connection:** ANSI Class 125

**Operator:** Swing Check Valve

**Specification:**

Valves are manufactured in accordance with BS5153 and also meet the requirements of MSS.SP-71. End flanges conform to BS1560 Section 3.2/ANSI B16.1 Class 125 with flat face and are normally supplied drilled.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 232°C.

## PN16 Cast Iron Check Valve

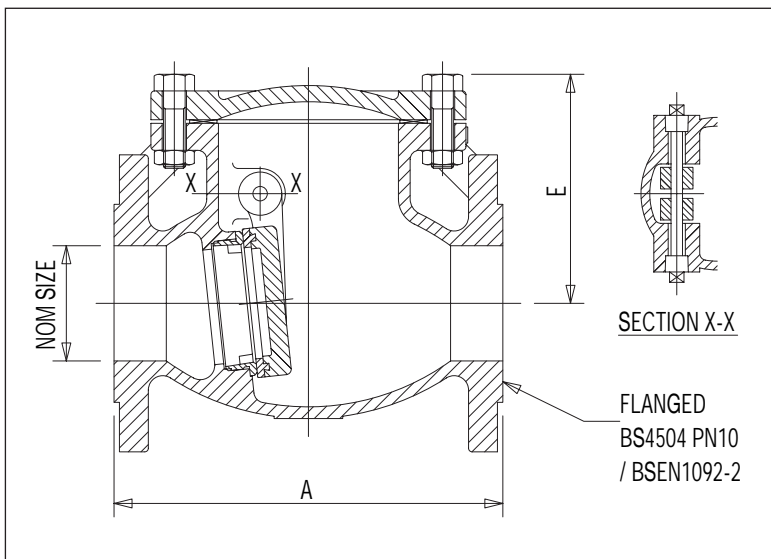
Check valves permit flow in one direction only, and close automatically if flow reverses. They are entirely automatic in action, depending upon pressure and velocity of flow within the line to perform their functions of opening and closing.  
Swing pattern, bronze trim, resilient seated.

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Cap	Cast Iron BSEN1561 GJL-250	All
Disc	Cast Iron BSEN1561 GJL-250	All
Body Seat Ring	Bronze BSEN1982 CC491K	All
Disc Ring	Nitrile Rubber	All
Hinge Pin Bush	Bronze BSEN1982 CC491K	All
Hinge Pin Plug	Bronze BSEN1982 CC491K	All
Hinge Pin	13% Cr.Steel AISI Type 410	100 - 300
Hinge Pin	Stainless Steel Type 304	50 - 80
Cap Bolts	Steel BS3692 Gr.8.8	All
Cap Bolt Nuts	Steel BS3692 Gr.8	All
Gasket	Asbestos Free	All
Body Plate	Aluminium	All
Disc Ring Ret'g Nut	Cast Iron BSEN1561 GJL-250	All
Retaining Nut Pin	Steel	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	E (mm)
50mm	11.3	203	113
65mm	15.6	216	126
80mm	19.3	241	136
100mm	26.6	292	153
125mm	44	330	186
150mm	55.5	356	207
200mm	119	495	250
250mm	175	622	352
300mm	263	698	397

**Pressure Rating:** PN16

**UK End Connection:** Flanged BSEN1092-2

**Operator:** Swing check valve

**Specification:**

Valves are manufactured in accordance with BSEN1234. End flanges conform to BSEN1092-2 Section 3.2 Table 11 with raised face and are normally supplied drilled.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 65°C.

## PN16 Cast Iron Wafer Check Valve

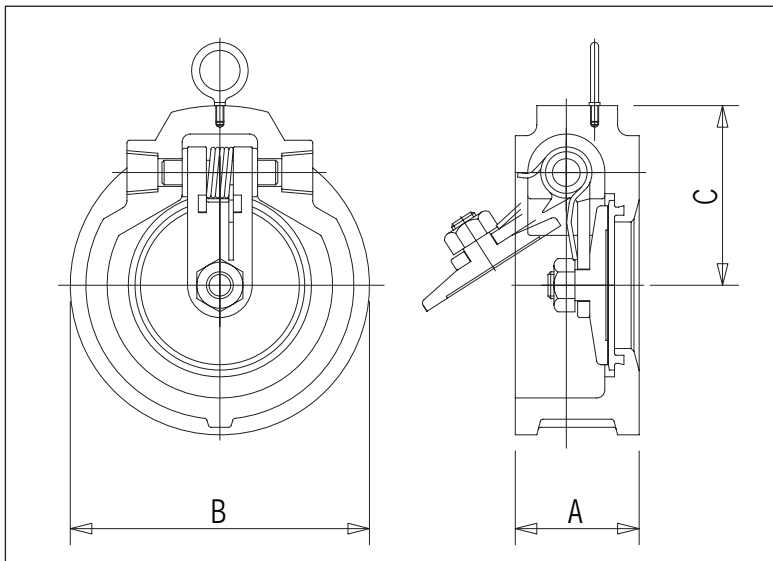
Check valves permit flow in one direction only, and close automatically if flow reverses. They are entirely automatic in action, depending upon pressure and velocity of flow within the line to perform their functions of opening and closing.  
Swing Pattern, Metal Faced Disk

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Disc	SG Cast Iron BS2789	100 - 300
Disc Ring	Bronze BSEN1982 CC491K	100 - 300
Disc	Bronze BSEN1982 CC491K	50 - 80
Hinge	Stainless Steel Type 304	All
Hinge Pin	Stainless Steel Type 304	All
Spacer	PTFE (Glass Filled)	All
Spring	Stainless Steel Type 304 or 316	All
Plug	Bronze BSEN1982 CC491K	All
Hinge Nut	Stainless Steel Type 304	All
Eye Bolt	Steel (Zinc Plated)	150 - 300
Body Seat Ring	Bronze BSEN1982 CC491K	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
50mm	1.3	43	99	57
65mm	1.8	46	111	67
80mm	2.6	49	130	73
100mm	4.7	56	162	88
125mm	7	64	194	102
150mm	9.8	70	216	168
200mm	15	71	273	194
250mm	20	76	330	227
300mm	30	83	380	255

**Pressure Rating:** PN16

**Installation Instructions:**

Wafer check valves must be correctly aligned to achieve efficient valve operation with minimum headloss, and to prevent the valve disk fouling downstream piping. With some flange/valve combinations the pipe flange bolting fits closely around the valve body, automatically centralising the valve in the pipeline. However, in a number of cases there is too much clearance between the flange bolting and the valve body to obtain correct alignment without careful manual positioning.

To overcome this problem, CRANE has developed a unique system of colour coded centralised sleeves.

A set of centralising sleeves is supplied with every valve together with easy to follow instructions. The sleeves have varying outside diameters/bore to suit the different flange/valve combinations. When fitting to horizontal pipelines the sleeves are placed over bolts in the lower half of the flanges to cradle the valve during installation and prior to bolt tightening.

In vertical pipelines the sleeves are fitted to bolts evenly spaced around the valve body to ensure the valve is positioned centrally in the pipeline.

**UK End Connection:** PN10 & PN16 BSEN 1092-2, TABLE D or E BS10

**US End Connection:** BS 1560, ANSI B16-1, ANSI B16-5

**Operator:** Swing type check.

**Specification:** One piece flangeless cast iron body. Suitable for use between flanges drilled in accordance with BSEN1092-2 PN10 and PN16, BS10 Table D or E and ANSI 125

Face to Face dimensions conform to ISO 5752.

Suitable for installation in vertical and horizontal pipelines. When installed in vertical pipelines the flow must be in an upward direction.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 230°C.

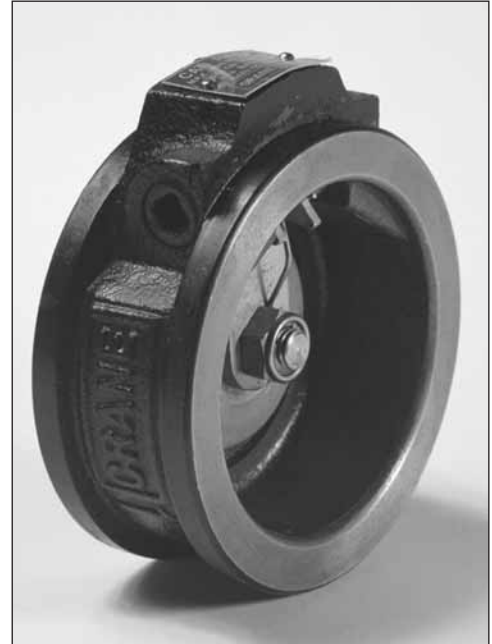


## PN16 Cast Iron Wafer Check Valve

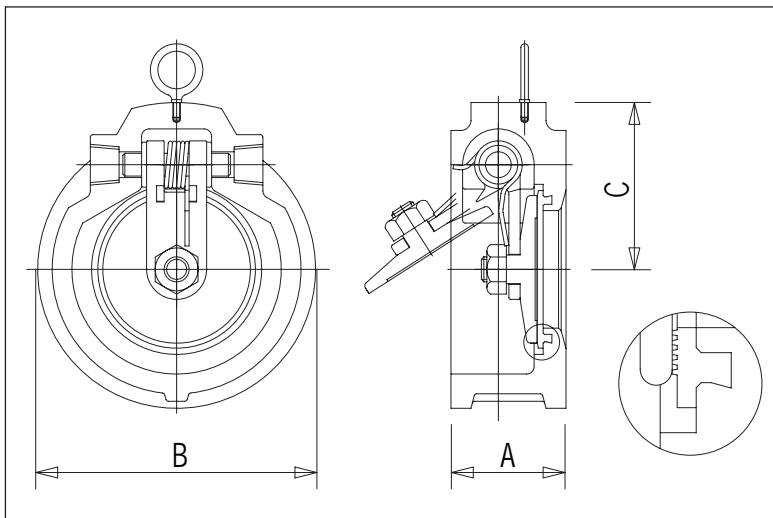
Check valves permit flow in one direction only, and close automatically if flow reverses. They are entirely automatic in action, depending upon pressure and velocity of flow within the line to perform their functions of opening and closing.  
Swing Pattern, Resilient Seated

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Disc	SG Cast Iron BS2789	100 - 300
Disc Ring	Bronze BSEN1982 CC491K	100 - 300
Disc	Bronze BSEN1982 CC491K	50 - 80
Hinge	Stainless Steel Type 304	All
Hinge Pin	Stainless Steel Type 304	All
Spacer	PTFE (Glass Filled)	All
Spring	Stainless Steel Type 304 or 316	All
Plug	Bronze BSEN1982 CC491K	All
Hinge Nut	Stainless Steel Type 304	All
Eye Bolt	Steel (Zinc Plated)	150 - 300
Body Seat Ring	Ethylene Propylene Diene Monomer	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)
50mm	1.3	43	99	57
65mm	1.8	46	111	67
80mm	2.6	49	130	73
100mm	4.7	56	162	88
125mm	7	64	194	102
150mm	9.8	70	216	168
200mm	15	71	273	194
250mm	20	76	330	227
300mm	30	83	380	255

**Pressure Rating:** PN16

#### Installation Instructions:

Wafer check valves must be correctly aligned to achieve efficient valve operation with minimum headloss, and to prevent the valve disk fouling downstream piping. With some flange/valve combinations the pipe flange bolting fits closely around the valve body, automatically centralising the valve in the pipeline. However, in a number of cases there is too much clearance between the flange bolting and the valve body to obtain correct alignment without careful manual positioning. To overcome this problem, CRANE has developed a unique system of colour coded centralised sleeves. A set of centralising sleeves is supplied with every valve together with easy to follow instructions. The sleeves have varying outside diameters/bore to suit the different flange/valve combinations. When fitting to horizontal pipelines the sleeves are placed over bolts in the lower half of the flanges to cradle the valve during installation and prior to bolt tightening. In vertical pipelines the sleeves are fitted to bolts evenly spaced around the valve body to ensure the valve is positioned centrally in the pipeline.

**UK End Connection:** PN10 & PN16 BSEN 1092-2, TABLE D or E BS10

**US End Connection:** BS 1560, ANSI B16-1, ANSI B16-5

**Operator:** Swing Pattern Check

#### Specification:

One piece flangeless cast iron body. Suitable for use between flanges drilled in accordance with BSEN1092-2 PN10 and PN16, BS10 Table D or E and ANSI 125

Face to Face dimensions conform to ISO 5752.

Suitable for installation in vertical and horizontal pipelines. When installed in vertical pipelines the flow must be in an upward direction.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 80°C.

# D171 / D171EXS Ball Valve



## D171 PN25 Bronze Ball Valve

## D171EXS PN25 Extended Stem Bronze Ball Valve

Crane D171 Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.

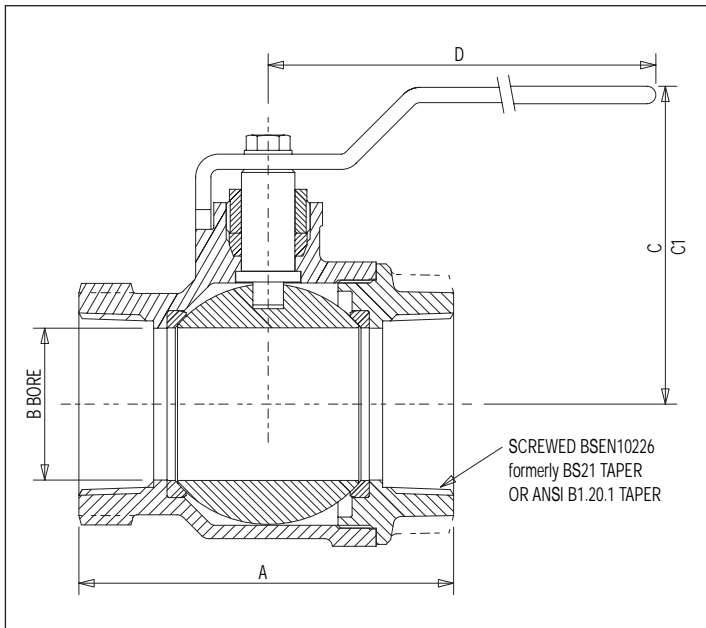
In addition the D171 and D171EXS are WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Seat Retainer	Bronze BSEN1982 CC491K	All
Ball	DZR Brass BSEN12165 CW602N	All
Seat Ring	PTFE	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing	PTFE	All
Gland Nut	Brass BSEN12164 CW617N	All
Lever	Mild Steel ( Zinc Plated)	All
Screw	Mild Steel ( Zinc Plated)	All
Lever Cover	P.V.C.	All
Extension Housing	Aluminium	D171EXS
Extension Stem	Brass BSEN12164 CW614N	D171EXS



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D171EXS	D (mm)
1/4"	0.15	46	10	39	-	81
3/8"	0.15	46	10	39	-	81
1/2"	0.22	57	15	52	97	92
3/4"	0.45	67	20	58	98	92
1"	0.69	77	25	66	118	127
1.1/4"	1.12	91	32	72	124	127
1.1/2"	1.67	103	40	82	142	142
2"	2.93	122	50	90	149	142
2.1/2"	4.98	153	65	117	-	202
3"	8.75	179	80	132	-	282

**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Lever.

#### Specification:

End Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal, WRAS listed.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.

## D171T PN25 T-Handle Bronze Ball Valve D171LS PN25 Lockshield Bronze Ball Valve

Crane D171 Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.

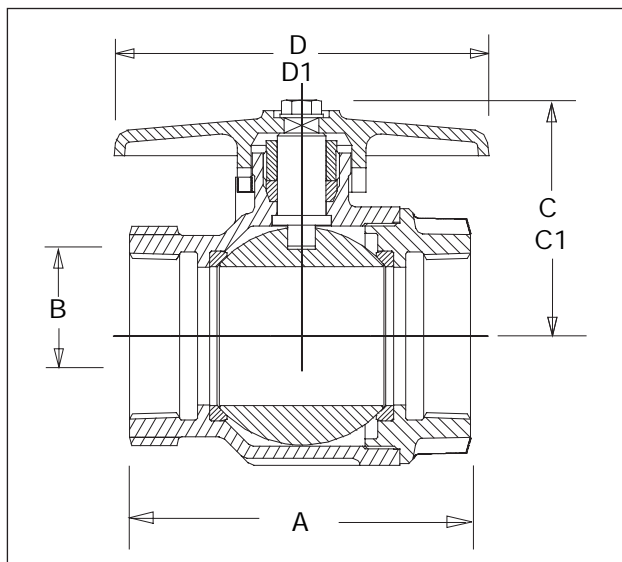
In addition the D171T and D171LS are WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Seat Retainer	Bronze BSEN1982 CC491K	All
Ball	DZR Brass BSEN12165 CW602N	All
Seats	PTFE	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing	PTFE	All
Gland Nut	Brass BSEN12164 CW617N	All
'T' Handle	Aluminium	D171T
Screw	Steel (Zinc Plated)	D171T
Lockshield Cap	Brass BSEN12164 CW617N	D171LS
Screw	Mild Steel	D171LS
Lockshield Cover	Nylon 6	D171LS



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D171LS	D (mm)	D1 (mm) D171LS
3/8"	0.13	46	10	31	-	38	-
1/2"	0.2	57	15	40	48	55	36
3/4"	0.41	67	20	43	51	55	36
1"	0.64	77	25	53	58	83	39
1.1/4"	1.07	91	32	58	63	83	39
1.1/2"	1.57	103	40	73	76	108	49
2"	2.83	122	50	80	84	108	49

**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** T-Handle / Allen key

#### Specification:

End Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal, WRAS listed.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.

## D171MHU PN25 Bronze Draw-Off Valve D171MHULS PN25 Bronze Draw-Off Ball Valve with Lockshield

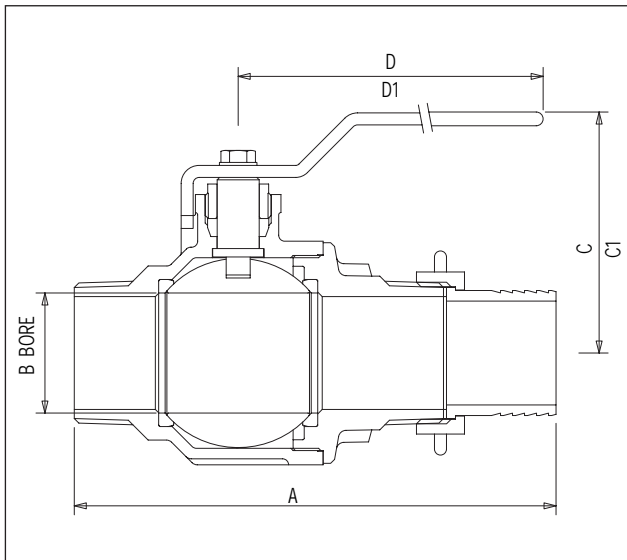
Crane D171 Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.  
In addition the D171MHU and D171MHULS are WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Seat Retainer	DZR Brass BSEN12165 CW602N	All
Ball	DZR Brass BSEN12165 CW602N-Chrome Plated	All
Seat	PTFE	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing	PTFE	All
Gland Nut	Brass BSEN12164 CW614N	All
Lever	Mild Steel (Zinc Plated)	D171MHU
Lever Screw	Mild Steel (Zinc Plated)	D171MHU
Lever Cover	PVC	D171MHU
Hose Connector	Brass BSEN12165 CW617N	All
Hose Union Nut	Brass BSEN12165 CW617N	All
Washer	PTFE	All
Lockshield Cap	Brass BSEN12164 CW617N	D171MHULS
Lockshield Cover	Nylon 6	D171MHULS



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D171MHULS	D (mm)	D1 (mm) D171MHULS
1/2"	0.27	104	15	52	48	92	29
3/4"	0.55	124	20	58	51	92	36
1"	0.88	147	25	65	58	127	39

**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21Taper/Hose union

**US End Connection:** Not Specified

**Operator:** Lever / Allen key

#### Specification:

End Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal, WRAS listed.

Male x hose union outlet

This valve is not suitable for use on Group 1 gasses and unstable fluids as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 180°C.

## D171C PN16 Compression Ended Bronze Ball Valve

## D171CEXS PN16 Compression Ended Bronze Ball Valve with Extension Stem

Crane D171 Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.

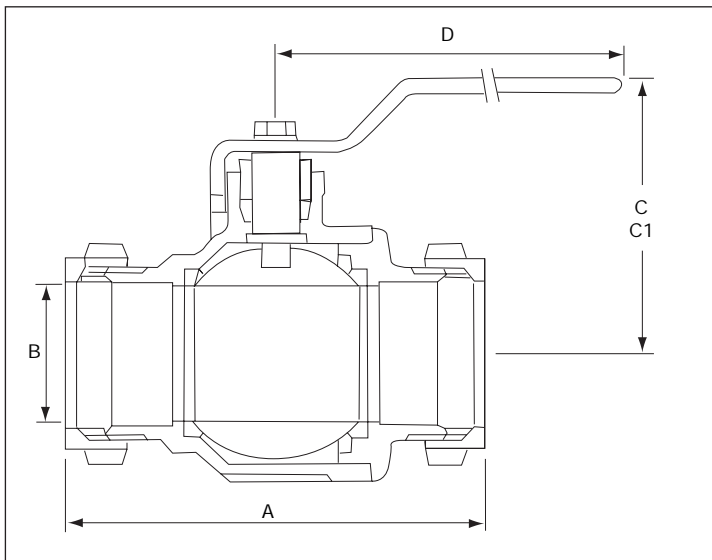
In addition the D171C and D171CEXS are WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Seat Retainer	Bronze BSEN1982 CC491K	All
Ball	DZR Brass BSEN12165 CW602N	All
Seat Ring	PTFE	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing	PTFE	All
Gland Nut	Brass BSEN12164 CW617N	All
Lever	Mild Steel (Zinc Plated)	D171C
Screw	Mild Steel (Zinc Plated)	D171C
Lever Cover	P.V.C.	D171C
Compression Sleeve	DZR Brass BSEN12164 CW602N	All
Compression Nut	DZR Brass BSEN12165 CW602N	All
Extension Housing	Aluminium	D171CEXS
Extension Stem	Brass BSEN12164	D171CEXS



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D171CEXS	D (mm)
15mm	0.27	80	15	52	97	92
22mm	0.51	84	20	58	98	92
28mm	0.78	95	25	65	118	127
35mm	1.19	111	32	70	124	127
42mm	1.82	124	40	83	142	142
54mm	3.28	149	50	91	149	142

**Pressure Rating:** PN16

**UK End Connection:** BS EN 1254 Part 2

**Operator:** Lever

**Specification:**

End Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal, WRAS listed.

This valve is intended Group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 120°C.

## D171CT PN16 Compression Ended T-Handle Ball Valve D171CLS PN16 Compression Ended Lockshield Ball Valve

Crane D171 Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.

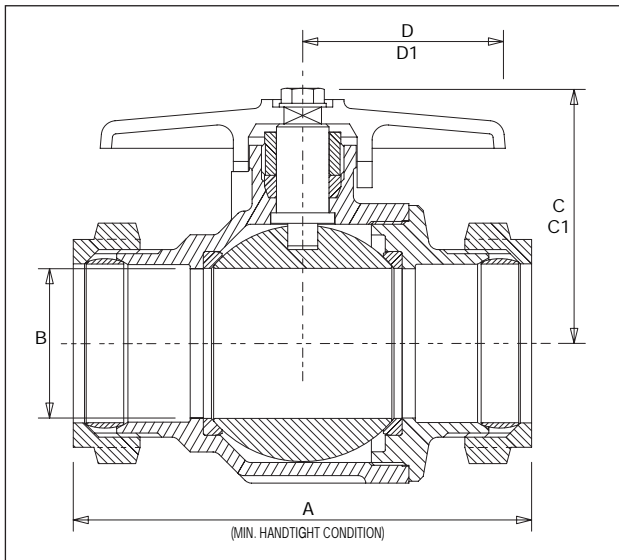
In addition the D171CT and D171CLS are WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Seat Retainer	DZR Brass BSEN12165 CW602N	15mm - 28mm
Seat Retainer	Bronze BSEN1982 CC491K	35mm - 54mm
Ball	DZR Brass BSEN12165 CW602N	All
Seat	PTFE	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing	PTFE	All
Gland Nut	Brass BSEN12164 CW617N	All
'T' Handle	Aluminium	D171CT
Screw	Steel (Zinc Plated)	D171CT
Compression Olive	DZR Brass BSEN12164 CW602N	All
Compression Nut	DZR Brass BSEN12165 CW602N	All
Lockshield	Brass BS2872	D171CLS
Lockshield Cover	Nylon 6	D171CLS



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D171CLS	D (mm)	D1 (mm) D171CLS
15mm	0.25	80	15	42	48	55	29
22mm	0.47	84	20	43	51	55	36
28mm	0.73	95	25	53	58	83	39

**Pressure Rating:** PN16

**UK End Connection:** BS EN 1254 Part 2

**Operator:** T-Handle / Allen Key

**Specification:**

End Entry, Quarter Turn, Tight Shut-Off

This valve is intended for Group 2 liquids as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 120°C.

# D171A / D171AEXS Ball Valve



## D171A PN25 DZR Ball Valve

## D171AEXS PN25 Extended Stem DZR Ball Valve

Crane D171A Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.

In addition the D171A and D171AEXS are WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	DZR Brass BSEN12165 CW602N	All
Seat Retainer	DZR Brass BSEN12165 CW602N	All
Ball	DZR Brass BSEN12165 CW602N	All
Seat	PTFE	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing	PTFE	All
Gland Nut	DZR Brass BSEN12164 CW602N	All
Lever	Mild Steel (Zinc Plated)	All
Lever Screw	Steel (Zinc Plated)	All
Lever Cover	PVC	All
Extension Housing	Aluminium	D171AEXS
Extension Stem	Brass BSEN12164	D171AEXS

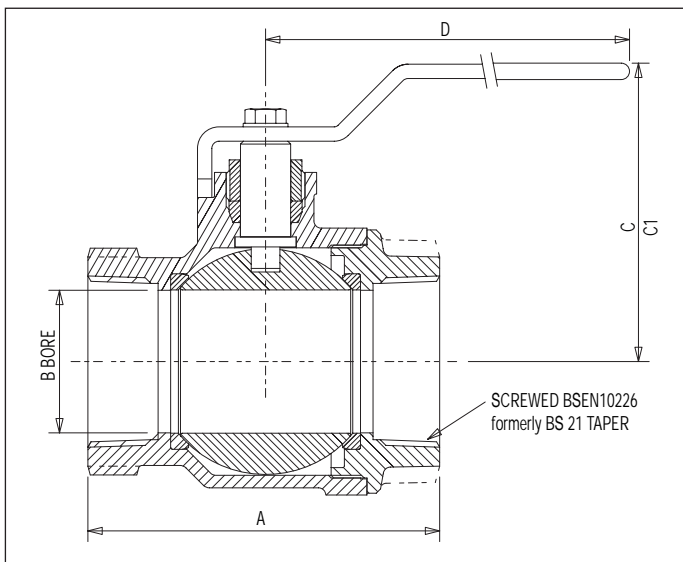


D171A



D171AEXS

### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D171AEXS	D (mm)
1/4"	0.15	48	10	37	-	82
3/8"	0.14	48	10	37	-	82
1/2"	0.19	56	15	50	97	92
3/4"	0.34	67	20	57	98	92
1"	0.58	77	25	65	118	127
1.1/4"	0.84	92	32	71	124	127
1.1/2"	1.32	103	40	79	142	142
2"	2.03	122	50	87	149	142

**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Lever.

#### Specification:

End Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal, WRAS listed.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.

## D171AT PN25 DZR T-Handle Ball Valve D171ALS PN25 DZR Lockshield Ball Valve

Crane D171 Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.

In addition the D171AT and D171ALS are WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	DZR Brass BSEN12165 CW602N	All
Seat Retainer	DZR Brass BSEN12165 CW602N	All
Ball	DZR Brass BSEN12165 CW602N	All
Seat	PTFE	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing	PTFE	All
Gland Nut	Brass BSEN 12164 CW617N	All
T Handle	Aluminium	D171AT
Screw	Steel (Zinc Plated)	D171AT
Lockshield	Brass BSEN12164	D171ALS
Lockshield Cover	Nylon 6	D171ALS

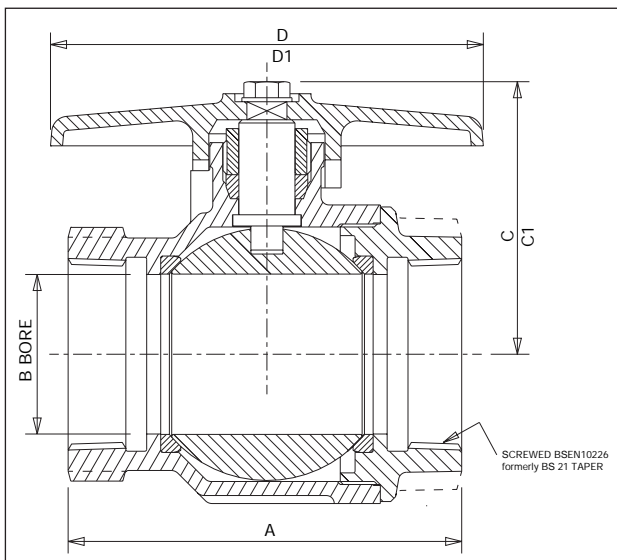


D171AT



D171ALS

### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D171ALS	D (mm)	D1 (mm) D171ALS
1/4"	0.13	46	14	54	-	38	-
3/8"	0.13	46	14	54	-	38	-
1/2"	0.2	57	20	58	46	55	36
3/4"	0.41	67	25	67	50	55	36
1"	0.64	77	32	72	57	83	39
1.1/4"	1.07	91	40	82	62	83	39
1.1/2"	1.57	103	50	90	73	108	49
2"	2.83	122	50	80	81	108	49

**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** Not Specified

**Operator:** T-Handle / Allen key

**Specification:** Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal. WRAS listed.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.



# D171AC / D171ACEXS Ball Valve



## D171AC PN16 DZR Compression Ended Ball Valve D171ACEXS PN16 DZR Compression Ended Ball Valve with Extended Stem

Crane D171 Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.

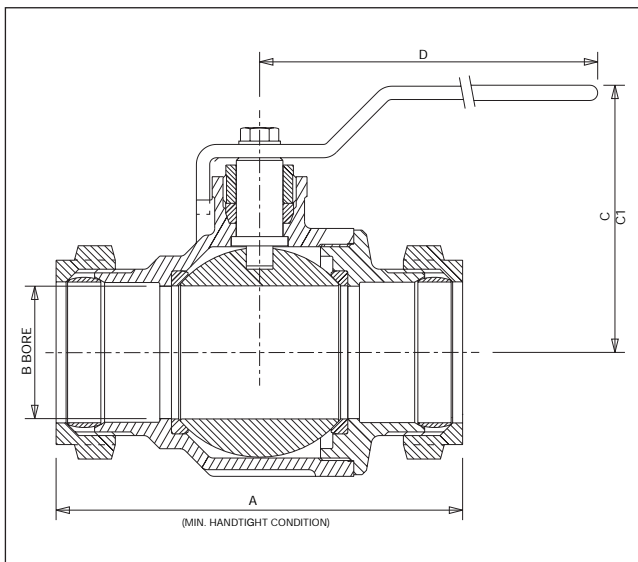
In addition the D171AC and D171ACEXS are WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	DZR Brass BSEN12165 CW602N	All
Seat Retainer	DZR Brass BSEN12165 CW602N	All
Ball	DZR Brass BSEN12165 CW602N	All
Seat	PTFE	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing	PTFE	All
Gland Nut	Brass BSEN 12164 CW617N	All
Lever	Steel (Zinc Plated)	All
Screw	Steel (Zinc Plated)	All
Lever Cover	PVC	All
Compression Sleeve	Brass BSEN 12449 CW508L	All
Compression Nut	Brass BSEN 12165 CW617N	All
Extension Housing	Aluminium	D171ACEXS
Extension Stem	Brass BSEN12164	D171ACEXS



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D171ACEXS	D (mm)
15mm	0.3	77	14	54	97	92
22mm	0.43	88	20	58	98	92
28mm	0.72	103	25	67	118	129
35mm	1.12	119	32	72	124	129
42mm	1.84	130	40	82	142	142
54mm	3.13	160	50	90	149	142

**Pressure Rating:** PN16

**UK End Connection:** BS EN 1254 Part 2

**Operator:** Lever.

#### Specification:

End Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal, WRAS listed.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.

## D171ACT PN16 DZR Compression Ended T-Handle Ball Valve D171ACLS PN16 DZR Compression Ended Lockshield Ball Valve

Crane D171 Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.

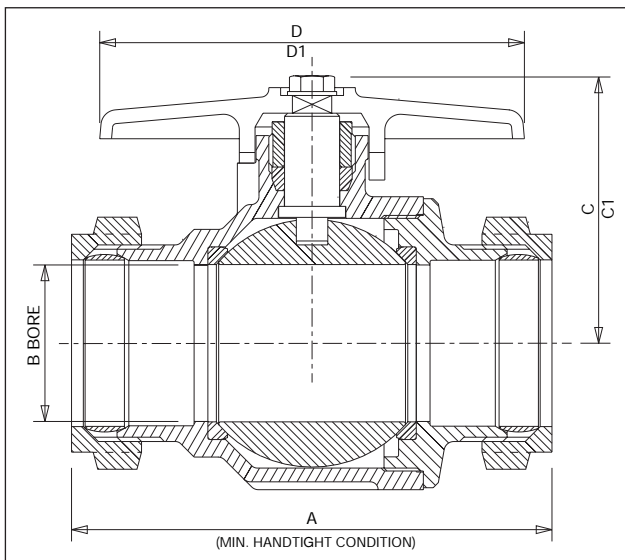
In addition the D171ACT and D171ACLS are WRAS approved.

### Bill of Materials

Part	Material	Sizes
Body	DZR Brass BSEN12165 CW602N	All
Seat Retainer	DZR Brass BSEN12165 CW602N	All
Ball	DZR Brass BSEN12165 CW602N	All
Seat	PTFE	All
Stem	DZR Brass BSEN12164 CW602N	All
Packing	PTFE	All
Gland Nut	Brass BSEN 12164 CW617N	All
T Handle	Aluminium	D171ACT
Screw	Steel (Zinc Plated)	D171ACT
Compression Sleeve	Brass BSEN 12449 CW508L	All
Compression Nut	Brass BSEN 12165 CW617N	All
Lockshield	Brass BSEN12164	D171ACLS
Lockshield Cover	Nylon 6	D171ACLS



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D171ACLS	D (mm)	D1 (mm) D171ACLS
15mm	0.25	77	14	42	50	55	36
22mm	0.52	88	20	43	51	55	36
28mm	0.66	103	25	53	58	83	39
35mm	1.15	119	32	58	63	83	39
42mm	1.6	130	40	73	76	108	49
54mm	2.6	160	50	80	84	108	49

**Pressure Rating:** PN16

**UK End Connection:** BS EB 1254 Part 2

**US End Connection:** Not specified

**Operator:** T-Handle / Allen key

**Specification:**

End Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal, WRAS listed.

This valve is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.

## D191 PN25 Brass Ball Valve

## D191EXS PN25 Brass Ball Valve with Extension stem

Crane D191 Ball valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.

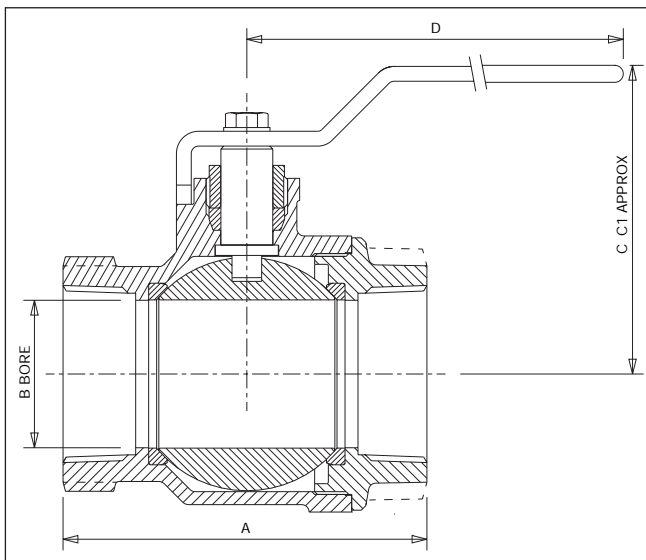
Sizes 1/4" to 2" have the added advantage of British Gas Approval.

### Bill of Materials

Part	Material	Sizes
Body	Brass BS EN 12165 CW617N(Nickel Plated)	All
Seat Retainer	Brass BS EN 12165 CW617N(Nickel Plated)	All
Ball	Brass BS EN 1982 CW617N(Chrome Plated)	All
Seat	PTFE	All
Stem	Brass BS EN 12164 CW617N	All
Packing	PTFE	All
Gland Nut	Brass BS EN 12164 CW617N	All
Lever	Mild Steel	All
Lever Screw	Steel	All
Lever Cover	PVC	All
Extension Housing	Aluminium	D191EXS
Extension Stem	Brass BSEN12164 CW617N	D191EXS



### Dimensional Drawing



**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** Lever.

**Specification:**

End Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal

Not suitable for use on unstable fluids as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.

### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm) D191	C1 (mm) D191EXS	D (mm)
1/4"	0.13	48	10	37	-	80
3/8"	0.13	48	10	37	-	80
1/2"	0.25	56	13	39	82	80
3/4"	0.35	67	20	57	97	90
1"	0.59	77	25	65	115	125
1.1/4"	0.89	92	32	71	123	125
1.1/2"	1.34	103	40	79	139	140
2"	2.04	122	50	87	146	140
2.1/2"	3.96	153	65	112	-	200
3"	5.89	179	80	123	-	280
4"	9.35	212	100	142	-	280

## D191T PN25 T-Handle Brass Ball Valve D191LS PN25 Brass Lockshield Ball Valve

Crane D191T Ball valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble free service life.  
Sizes 1/4" to 2" have the added advantage of British Gas Approval.

### Bill of Materials

Part	Material	Sizes
Body	Brass BS EN 12165 CW617N(Nickel Plated)	All
Seat Retainer	Brass BS EN 12165 CW617N(Nickel Plated)	All
Ball	Brass BS EN 12165 CW617N(Chrome Plated)	All
Seats	PTFE	All
Stem	Brass BS EN 12164 CW617N	All
Packing	PTFE	All
Gland Nut	Brass BS EN 12164 CW617N	All
'T' Handle	Aluminium	D191T
Screw	Steel	D191T
Lockshield	Brass BS EN 12164 CW617N	D191LS
Lockshield Cover	Nylon 6	D191LS

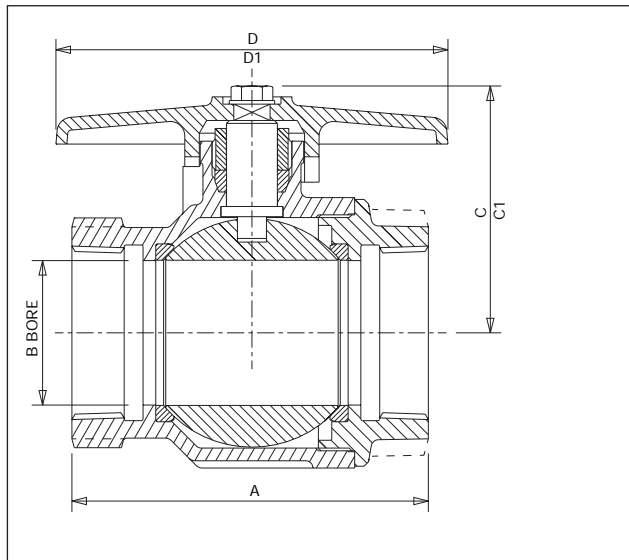


D191T



D191LS

### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	C1 (mm) D191LS	D (mm)	D1 (mm) D191LS
1/4"	0.11	48	10	30	37	39	36
3/8"	0.11	48	10	30	37	39	36
1/2"	0.22	56	13	32	50	39	36
3/4"	0.32	67	20	42	51	55	36
1"	0.55	77	25	52	58	82	39
1.1/4"	0.78	92	32	58	63	82	39
1.1/2"	1.27	103	40	68	76	110	49
2"	1.93	122	50	76	84	110	49

**Pressure Rating:** PN25

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

**Operator:** T-Handle / Allen key

#### Specification:

End Entry, Quarter Turn, Tight Shut-Off

PTFE seats and stem seal

Not suitable for use on unstable fluids as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 186°C.

## PN16 Semi Lugged Butterfly Valve to BSEN593

### Key Features:

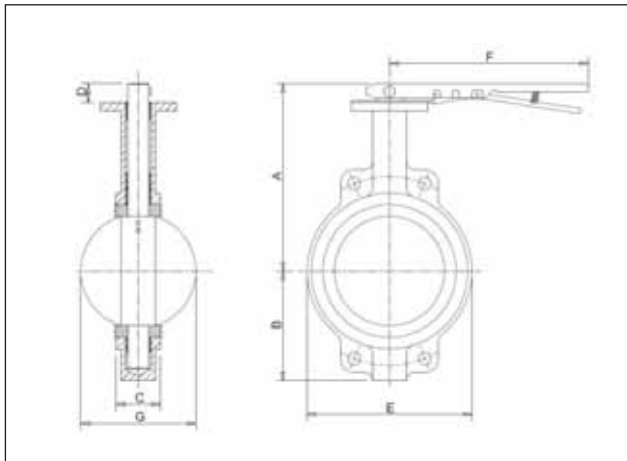
- Aluminium Bronze disc, Nitrile liner
- Stainless steel shaft
- -10 to 82°C
- Lockable trigger lever
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16 and ANSI B16.1 Class 125

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	Nitrile
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE
Lever & Screw	Carbon Steel (Epoxy Paint)
Stop Plate	Carbon Steel (Zn Plated)



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
50mm	3	195	83	44	32	102	260	32
65mm	4	207	95	48	32	121	260	46
80mm	5	213	102	48	32	130	260	64
100mm	7	232	124	54	32	171	260	90
125mm	8	245	136	57	32	197	260	111
150mm	9	257	150	57	32	219	260	145
200mm	15	305	197	63	44	268	356	193

**Pressure Rating:** PN16 / ANSI Class 125

**End Connection:** Semi Lugged

**Operator:** Lockable trigger lever

### Specification:

Suitable for group 1 and 2 gases and group 1 and 2 liquids as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 82°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

## PN16 Semi Lugged Butterfly Valve to BSEN593

### Key Features:

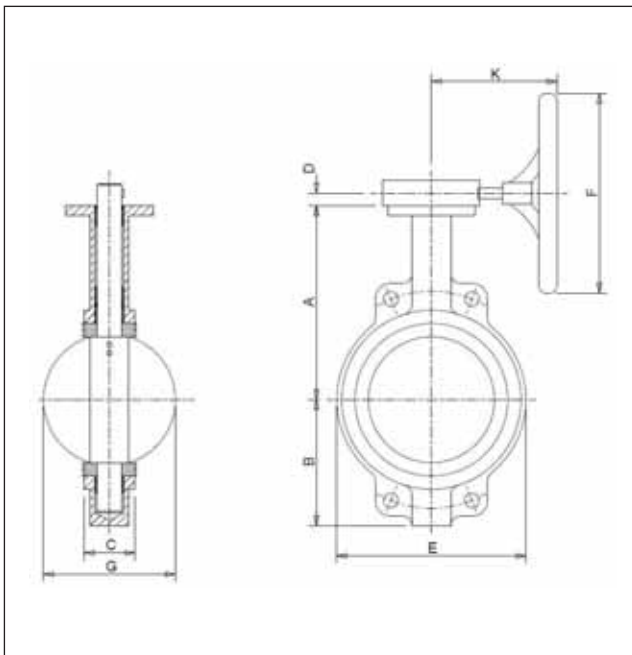
- Aluminium Bronze disc, Nitrile liner
- Stainless steel shaft
- -10 to 82°C
- Gearbox operated
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16 and ANSI B16.1 Class 125 (sizes 2" to 12")
- Sizes 350mm to 600mm PN16 only

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	Nitrile
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE



### Dimensional Drawing



### Dimensions and Weights

Size	Weight	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	K (mm)
50mm	7	162	83	44	42	102	150	32	240
65mm	8	175	95	48	42	121	150	46	240
80mm	9	181	102	48	42	130	150	64	240
100mm	10	200	124	54	42	171	150	90	240
125mm	17	213	136	57	42	197	300	111	240
150mm	18	225	150	57	42	219	300	145	240
200mm	25	260	197	63	40	268	300	193	230
250mm	31	292	210	70	40	332	300	241	230
300mm	44	337	248	79	40	410	300	290	230
350mm	60	368	279	79	40	435	300	325	230
400mm	93	400	305	89	*	508	450	380	277
450mm	112	422	381	108	*	543	450	427	277
500mm	156	479	381	133	*	592	450	474	321
600mm	251	562	457	156	*	708	450	574	335

**Pressure Rating:** PN16 / ANSI Class 125

**End Connection:** Semi-Lugged

**Operator:** Gearbox

### Specification:

Suitable for group 1 and 2 gases and group 1 and 2 liquids as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 82°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

## PN16 Fully Lugged Butterfly Valve to BSEN593

### Key Features:

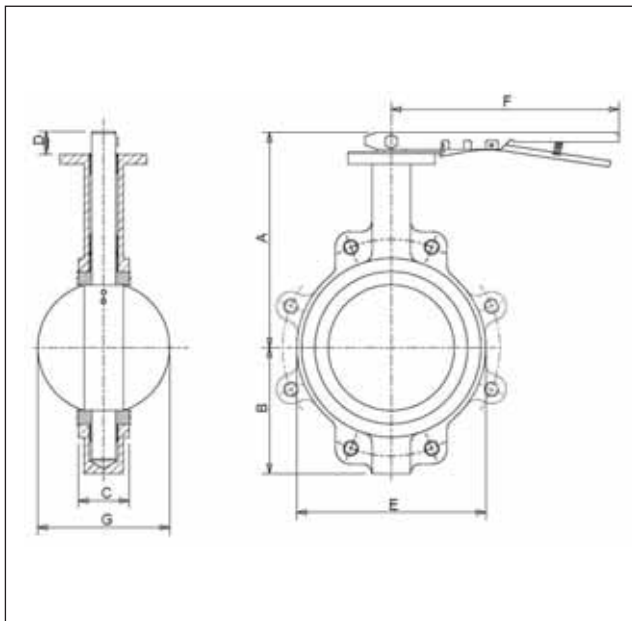
- Aluminium Bronze disc, Nitrile liner
- Stainless steel shaft
- -10 to 82°C
- Lockable trigger lever
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	Nitrile
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE
Lever & Screw	Carbon Steel (Epoxy Paint)
Stop Plate	Carbon Steel (Zn Plated)



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
50mm	3	195	83	44	32	102	260	32
65mm	4	207	95	48	32	121	260	46
80mm	6	213	102	48	32	130	260	64
100mm	12	232	124	54	32	171	260	90
125mm	13	245	136	57	32	197	260	111
150mm	14	257	150	57	32	219	260	145
200mm	22	305	197	63	44	268	356	193

**Pressure Rating:** PN16

**End Connection:** Lugged

**Operator:** Lockable trigger lever

### Specification:

Suitable for group 1 and 2 gases and group 1 and 2 liquids as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 82°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

# F615 GEM Butterfly Valve

## PN16 Fully Lugged Butterfly Valve to BSEN593

### Key Features:

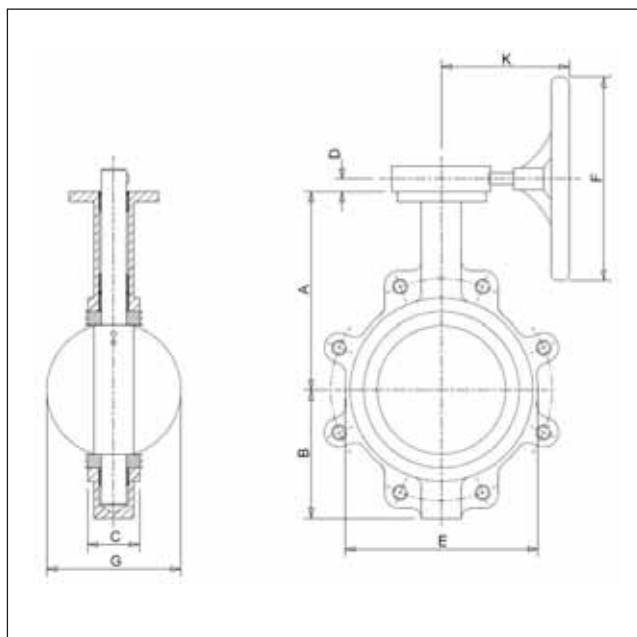
- Aluminium Bronze disc, Nitrile liner
- Stainless steel shaft
- -10 to 82°C
- Gearbox operated
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16 65-200mm. 250-600mm PN16 only

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	EPDM
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE



### Dimensional Drawing



### Dimensions and Weights

Size	Weight	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	K (mm)
50mm	7	162	83	44	42	102	150	32	240
65mm	8	175	95	48	42	121	150	46	240
80mm	9	181	102	48	42	130	150	64	240
100mm	10	200	124	54	42	171	150	90	240
125mm	17	213	136	57	42	197	300	111	240
150mm	18	225	150	57	42	219	300	145	240
200mm	25	260	197	63	40	268	300	193	230
250mm	31	292	210	70	40	332	300	241	230
300mm	44	337	248	79	40	410	300	290	230
350mm	60	368	279	79	40	435	300	325	230
400mm	93	400	305	89	*	508	450	380	277
450mm	112	422	381	108	*	543	450	427	277
500mm	156	479	381	133	*	592	450	474	321
600mm	251	562	457	156	*	708	450	574	335

**Pressure Rating:** PN16

**End Connection:** Lugged

**Operator:** Gearbox

### Specification:

Suitable for group 1 and 2 gases and group 1 and 2 liquids as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 82°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).



# F621 GEM Butterfly Valve



## PN16 Semi Lugged Butterfly Valve to BSEN593

### Key Features:

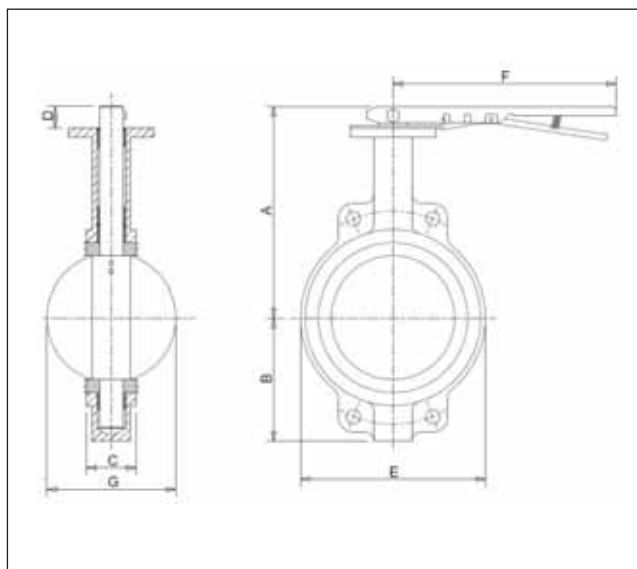
- Aluminium Bronze disc, EPDM liner
- Stainless steel shaft
- Temperature -10 to 100°C
- Lockable trigger lever
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16 and ANSI B16.1 Class 125

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	EPDM - WRAS
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE
Lever & Screw	Carbon Steel (Epoxy Paint)
Stop Plate	Carbon Steel (Zn Plated)



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
50mm	3	195	83	44	32	102	260	32
65mm	4	207	95	48	32	121	260	46
80mm	5	213	102	48	32	130	260	64
100mm	7	232	124	54	32	171	260	90
125mm	8	245	136	57	32	197	260	111
150mm	9	257	150	57	32	219	260	145
200mm	15	305	197	63	44	268	356	193

**Pressure Rating:** PN16 / ANSI Class 125

**End Connection:** Semi-Lugged

**Operator:** Lockable trigger lever

### Specification:

This valve is intended for group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 100°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

Valves are WRAS approved, suitable for drinking water applications.

# F622 GEM Butterfly Valve



## PN16 Semi Lugged Butterfly Valve to BSEN593

### Key Features:

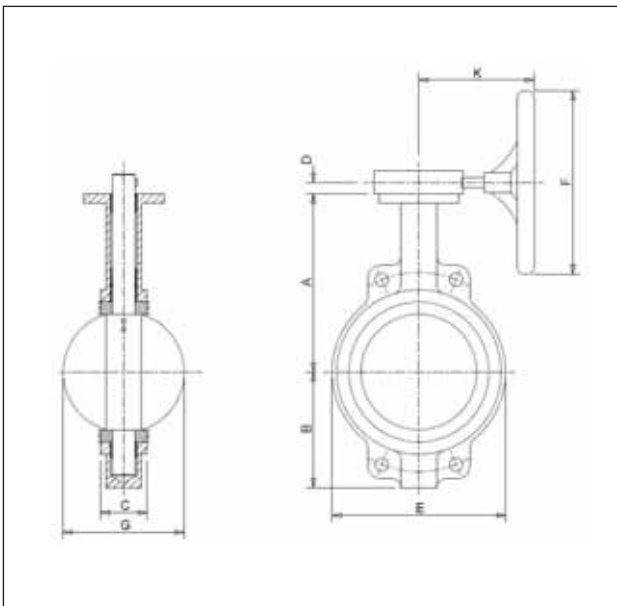
- Aluminium Bronze disc, EPDM liner
- Stainless steel shaft
- Temperature -10 to 100°C
- Gearbox operated
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16 and ANSI B16.1 Class 125 (sizes 2" to 12")
- Sizes 350mm to 600mm PN16 only

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	EPDM - WRAS
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE



### Dimensional Drawing



### Dimensions and Weights

Size	Weight	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	K (mm)
50mm	7	162	83	44	42	102	150	32	240
65mm	8	175	95	48	42	121	150	46	240
80mm	9	181	102	48	42	130	150	64	240
100mm	10	200	124	54	42	171	150	90	240
125mm	17	213	136	57	42	197	300	111	240
150mm	18	225	150	57	42	219	300	145	240
200mm	25	260	197	63	40	268	300	193	230
250mm	31	292	210	70	40	332	300	241	230
300mm	44	337	248	79	40	410	300	290	230
350mm	60	368	279	79	40	435	300	325	230
400mm	93	400	305	89	*	508	450	380	277
450mm	112	422	381	108	*	543	450	427	277
500mm	156	479	381	133	*	592	450	474	321
600mm	251	562	457	156	*	708	450	574	335

**Pressure Rating:** PN16 / ANSI Class 125 (up to 12" only)

**End Connection:** Semi-Lugged

**Operator:** Gearbox

### Specification:

This valve is intended for group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 100°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

Valves are WRAS approved, suitable for drinking water applications.

# F624 GEM Butterfly Valve



## PN16 Fully Lugged Butterfly Valve to BSEN593

### Key Features:

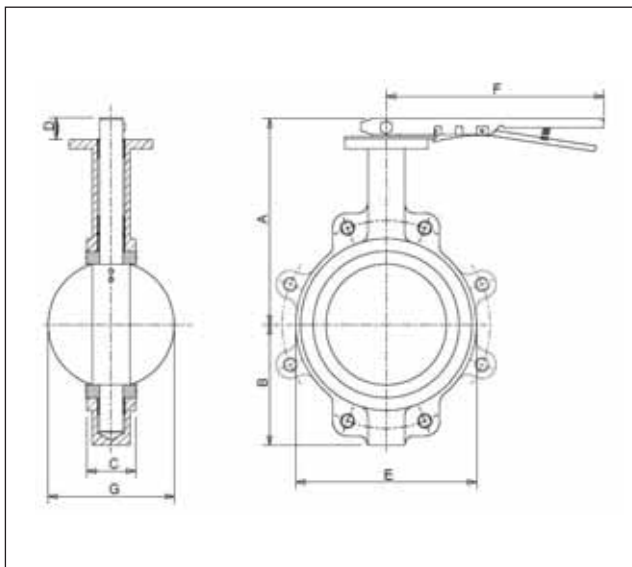
- Aluminium Bronze disc, EPDM liner
- Stainless steel shaft
- Temperature -10 to 100°C
- Lockable trigger lever
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	EPDM - WRAS
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE
Lever & Screw	Carbon Steel (Epoxy Paint)
Stop Plate	Carbon Steel (Zn Plated)



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
50mm	3	195	83	44	32	102	260	32
65mm	4	207	95	48	32	121	260	46
80mm	6	213	102	48	32	130	260	64
100mm	12	232	124	54	32	171	260	90
125mm	13	245	136	57	32	197	260	111
150mm	14	257	150	57	32	219	260	145
200mm	22	305	197	63	44	268	356	193

**Pressure Rating:** PN16

**End Connection:** Lugged

**Operator:** Lockable trigger lever

### Specification:

This valve is intended for group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 100°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

Valves are WRAS approved, suitable for drinking water applications.

# F625 GEM Butterfly Valve



## PN16 Fully Lugged Butterfly Valve to BSEN593

Key Features:

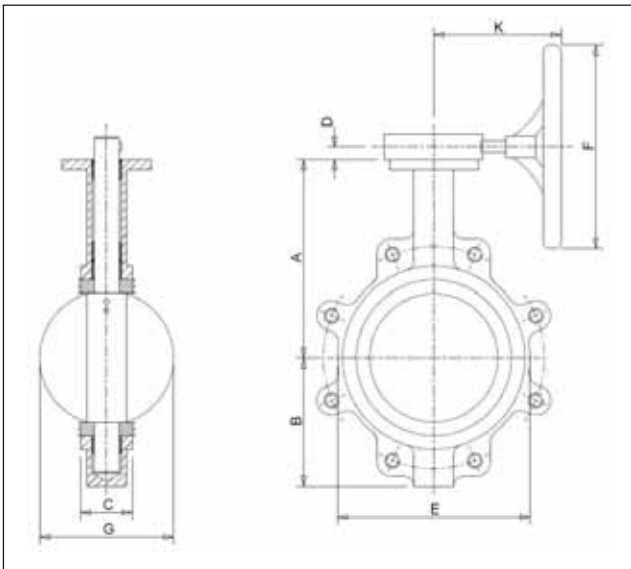
- Aluminium Bronze disc, EPDM liner
- Stainless steel shaft
- Temperature -10 to 100°C
- Gearbox operated
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16 65-200mm. 250-600mm PN16 only.

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	EPDM - WRAS
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE



### Dimensional Drawing



### Dimensions and Weights

Size	Weight	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	K (mm)
50mm	7	162	83	44	42	102	150	32	240
65mm	8	175	95	48	42	121	150	46	240
80mm	9	181	102	48	42	130	150	64	240
100mm	10	200	124	54	42	171	150	90	240
125mm	17	213	136	57	42	197	300	111	240
150mm	18	225	150	57	42	219	300	145	240
200mm	25	260	197	63	40	268	300	193	230
250mm	31	292	210	70	40	332	300	241	230
300mm	44	337	248	79	40	410	300	290	230
350mm	60	368	279	79	40	435	300	325	230
400mm	93	400	305	89	*	508	450	380	277
450mm	112	422	381	108	*	543	450	427	277
500mm	156	479	381	133	*	592	450	474	321
600mm	251	562	457	156	*	708	450	574	335

**Pressure Rating:** PN16

**End Connection:** Lugged

**Operator:** Gearbox

#### Specification:

This valve is intended for group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 100°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

Valves are WRAS approved, suitable for drinking water applications.

# F626 GEM Butterfly Valve

## PN16 Semi Lugged Butterfly Valve to BSEN593

### Key Features:

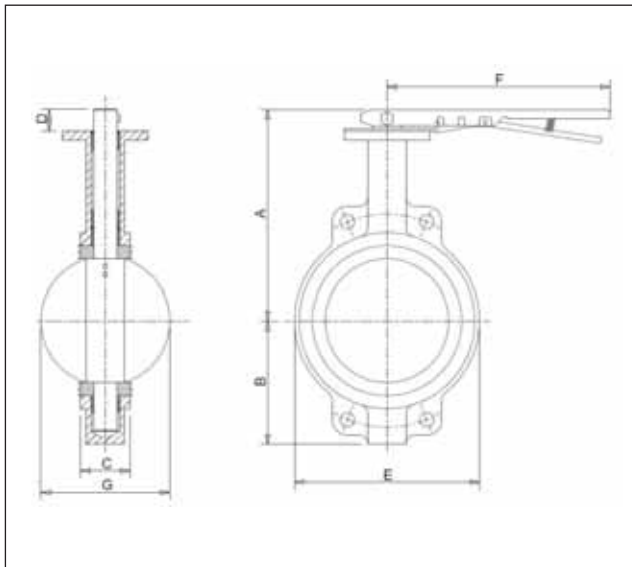
- Aluminium Bronze disc, EPDM liner
- Stainless steel shaft
- High temperature -10 to 130°C
- Lockable trigger lever
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16 and ANSI B16.1 Class 125

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	EPDM
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE
Lever & Screw	Carbon Steel (Epoxy Paint)
Stop Plate	Carbon Steel (Zn Plated)



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
50mm	3	195	83	44	32	102	260	32
65mm	4	207	95	48	32	121	260	46
80mm	5	213	102	48	32	130	260	64
100mm	7	232	124	54	32	171	260	90
125mm	8	245	136	57	32	197	260	111
150mm	9	257	150	57	32	219	260	145
200mm	15	305	197	63	44	268	356	193

**Pressure Rating:** PN16 / ANSI Class 125

**End Connection:** Semi-Lugged

**Operator:** Lockable trigger lever

### Specification:

This valve is intended for group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 130°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

# F627 GEM Butterfly Valve

## PN16 Semi Lugged Butterfly Valve to BSEN593

### Key Features:

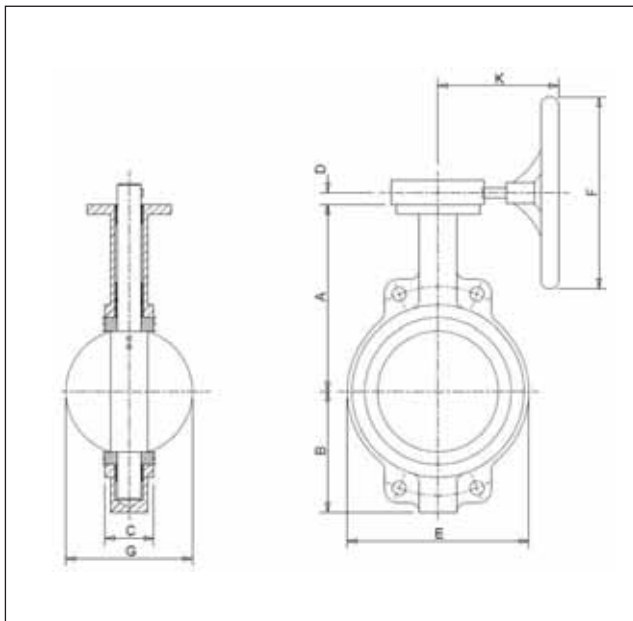
- Aluminium Bronze disc, EPDM liner
- Stainless steel shaft
- High temperature -10 to 130°C
- Gearbox operated
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16 and ANSI B16.1 Class 125 (sizes 2" to 12")
- Sizes 350mm to 600mm PN16 only

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	EPDM
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE



### Dimensional Drawing



### Dimensions and Weights

Size	Weight	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	K (mm)
50mm	7	162	83	44	42	102	150	32	240
65mm	8	175	95	48	42	121	150	46	240
80mm	9	181	102	48	42	130	150	64	240
100mm	10	200	124	54	42	171	150	90	240
125mm	17	213	136	57	42	197	300	111	240
150mm	18	225	150	57	42	219	300	145	240
200mm	25	260	197	63	40	268	300	193	230
250mm	31	292	210	70	40	332	300	241	230
300mm	44	337	248	79	40	410	300	290	230
350mm	60	368	279	79	40	435	300	325	230
400mm	93	400	305	89	*	508	450	380	277
450mm	112	422	381	108	*	543	450	427	277
500mm	156	479	381	133	*	592	450	474	321
600mm	251	562	457	156	*	708	450	574	335

**Pressure Rating:** PN16 / ANSI Class 125

**End Connection:** Semi-Lugged

**Operator:** Gearbox

### Specification:

This valve is intended for group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 130°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

## PN16 Fully Lugged Butterfly Valve to BSEN593

### Key Features:

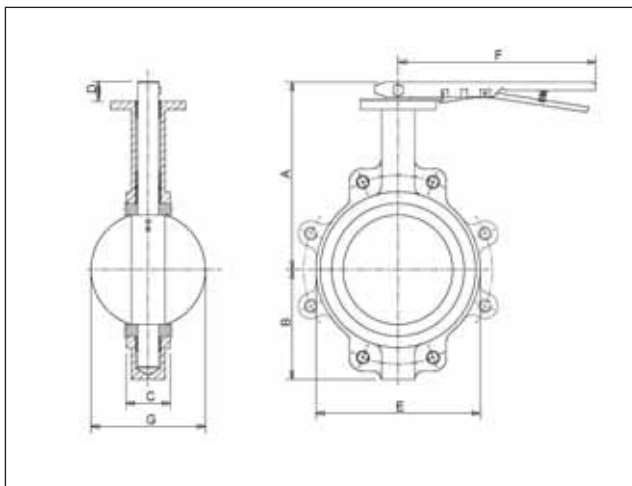
- Aluminium Bronze disc, EPDM liner
- Stainless steel shaft
- High temperature -10 to 130°C
- Lockable trigger lever
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	EPDM
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE
Lever & Screw	Carbon Steel (Epoxy Paint)
Stop Plate	Carbon Steel (Zn Plated)



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
50mm	3	195	83	44	32	102	260	32
65mm	4	207	95	48	32	121	260	46
80mm	6	213	102	48	32	130	260	64
100mm	12	232	124	54	32	171	260	90
125mm	13	245	136	57	32	197	260	111
150mm	14	257	150	57	32	219	260	145
200mm	22	305	197	63	44	268	356	193

**Pressure Rating:** PN16

**End Connection:** Lugged

**Operator:** Lockable trigger lever

### Specification:

This valve is intended for group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 130°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).

# F629 GEM Butterfly Valve

## PN16 Fully Lugged Butterfly Valve to BSEN593

### Key Features:

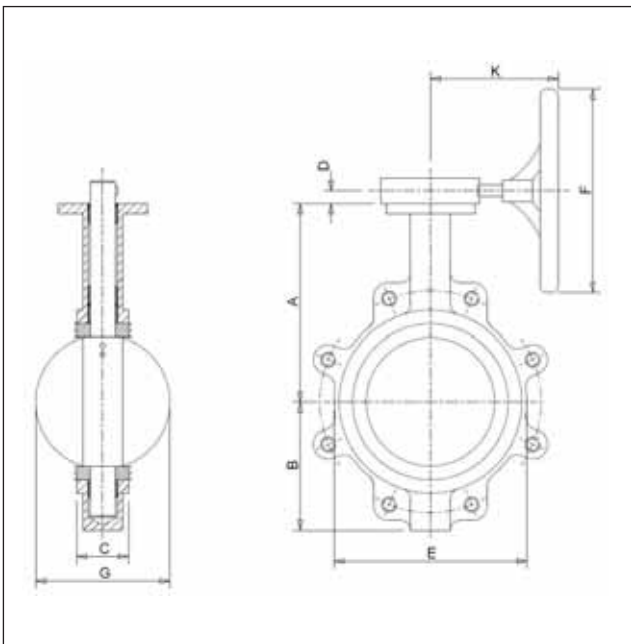
- Aluminium Bronze disc, EPDM liner
- Stainless steel shaft
- High temperature -10 to 130°C
- Gearbox operated
- Valves are suitable for use with flanges conforming to BSEN1092-2 PN10 or PN16 65-200mm. 250-600mm PN16 only.

### Bill of Materials

Part	Material
Body	Ductile Iron ASTM A536 (Epoxy Paint)
Disc	Aluminium Bronze
Liner	EPDM
Shaft	Stainless Steel Type 410
Taper Pin	Stainless Steel Type 316
Key	Carbon Steel
O Ring	Buna-N
Bushing	PTFE



### Dimensional Drawing



### Dimensions and Weights

Size	Weight	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	K (mm)
50mm	7	162	83	44	42	102	150	32	240
65mm	8	175	95	48	42	121	150	46	240
80mm	9	181	102	48	42	130	150	64	240
100mm	10	200	124	54	42	171	150	90	240
125mm	17	213	136	57	42	197	300	111	240
150mm	18	225	150	57	42	219	300	145	240
200mm	25	260	197	63	40	268	300	193	230
250mm	31	292	210	70	40	332	300	241	230
300mm	44	337	248	79	40	410	300	290	230
350mm	60	368	279	79	40	435	300	325	230
400mm	93	400	305	89	*	508	450	380	277
450mm	112	422	381	108	*	543	450	427	277
500mm	156	479	381	133	*	592	450	474	321
600mm	251	562	457	156	*	708	450	574	335

**Pressure Rating:** PN16

**End Connection:** Lugged

**Operator:** Gearbox

### Specification:

This valve is intended for group 2 liquids only, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature Operating Range: -10 to 130°C

Valves are designed in accordance with BSEN593 (supersedes BS5155).



## PN32 Bronze Strainer

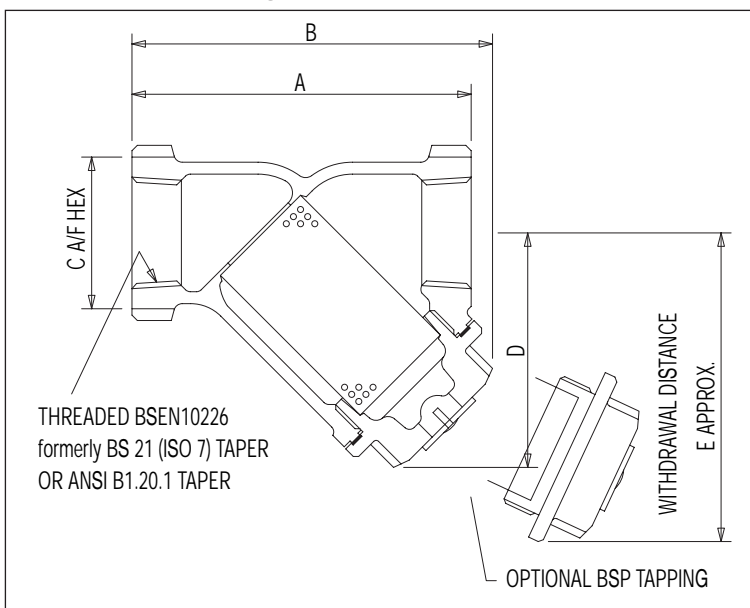
Scale and dirt in piping systems cause endless trouble and frequently serious damage to pipeline equipment. Installation of Crane strainers will help eliminate the problems caused by foreign matter within piping systems. The Crane D297 features: Perforated stainless steel screen, Robust design, Low flow resistance, High Quality Materials WRAS Approval

### Bill of Materials

Part	Material	Sizes
Body	Bronze BSEN1982 CC491K	All
Cap	Bronze BSEN1982 CC491K	All
Gasket	Asbestos Free (WRAS)	All
ID. Plate	Aluminium	All
Pin	Steel - Electro Brassed	All
Screen	Stainless Steel Type 304	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
1/2"	0.38	71	79	30	51	61
3/4"	0.63	86	96	38	64	77
1"	0.96	101	110	47	72	92
1.1/4"	1.81	134	144	56	100	128
1.1/2"	2.43	148	157	65	109	139
2"	4.13	176	183	79	126	160

**Pressure Rating:** PN32

**UK End Connection:** BSEN10226 formerly BS21 Taper

**US End Connection:** ANSI B1.20.1

#### Specification:

Strainers fitted with stainless steel perforated strainer element having 0.75mm diameter holes.

Screens fitted into Crane Strainers conform to the high standards of materials and workmanship associated with all Crane products.

This strainer is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 200°C.

## PN16 Bronze 'Y' Type Strainer

### Bill of Materials

Part	Material
Cap	Brass BSEN12420 CW617N
Screen	Stainless Steel BSEN1449 304S15
Body	Gunmetal BSEN1982 CC491K

### Pressure Temperature Ratings

Maximum working temperature: 170°C

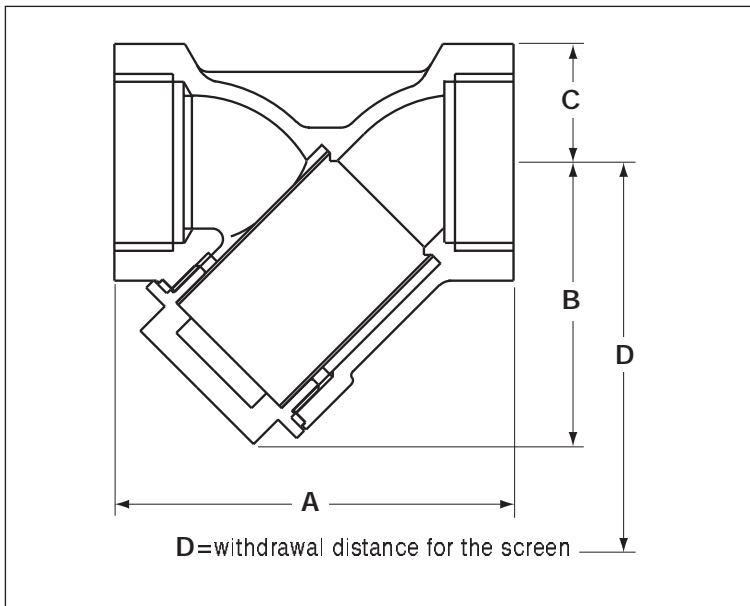
Minimum working temperature: -10°C

Temperature °C	-10 to 100	170
Pressure (bar)	16.0	7

Test Pressure: 24 bar hydraulic



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)
1/2"	0.2	62	40	15	53
3/4"	0.3	68	48	18	66
1"	0.5	79	53	23	75
1.1/4"	0.9	113	64	27	90
1.1/2"	1.2	119	74	31	107
2"	1.8	136	94	36	130

**Pressure Rating:** PN16

**UK End Connection:** Threaded to BSEN10226 formerly BS21 (ISO 7-1)

**US End Connection:** B1.20.1 ANSI

**Specification:**

Bronze body.

304 stainless steel 40 mesh screen.

Temperature operating range: -10 to 170°C.

## PN16 Cast Iron Strainer

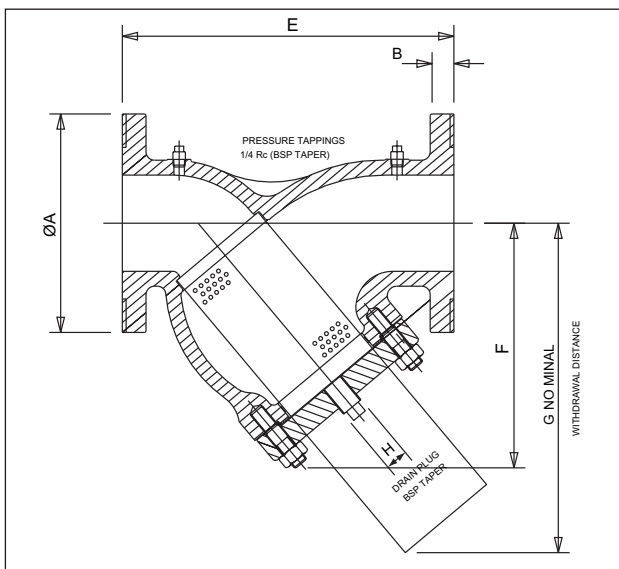
Scale and dirt in piping systems cause endless trouble and frequently serious damage to pipeline equipment. Installation of Crane strainers will help eliminate the problems caused by foreign matter within piping systems. The FM276 offers the integrity of manufacture, quality and reliability which are the hallmarks of all Crane products.

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Cap (screwed)	Cast Iron BSEN 1561 EN-GJL-250	50 - 200
Cap (bolted)	Steel BS1501-151/161 430A	250-300
Gasket	Asbestos Free	All
Stud	Steel BS 4439 GRADE 8.8	65 - 300
Nut	Steel ASTM A182 F304	65 - 300
Screen	Stainless Steel AISI Type 304	All
Plug	Malleable Iron	All
Plug Rc 1/4	Malleable Iron	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
50mm	13	165	20	102	3	226	142	193
65mm	23	185	20	122	3	290	216	272
80mm	30	200	22	138	3	306	226	272
100mm	43	220	24	158	3	350	264	330
125mm	71	250	26	188	3	399	320	406
150mm	93	285	26	212	3	480	356	457
200mm	161	340	30	268	3	600	442	577
250mm	266	405	32	320	3	686	495	696
300mm	397	460	32	378	4	757	579	828
350mm	359	520	36	438	4	946	688	988
400mm	480	580	38	490	4	1076	743	1108
450mm	630	640	40	550	4	1172	990	1410

**Pressure Rating:** PN16

**UK End Connection:** Flanged BSEN1092-2

#### Specification:

End flanges conform to BSEN1092-2 Section 3.2 table 11 with raised face and are normally supplied drilled. Strainers are normally supplied with a stainless steel perforated strainer element having 1.5mm diameter holes.

This product is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC. Temperature operating range: - 10 to 200°C.

Bosses drilled, tapped and plugged.

## Class 125 Cast Iron Strainer

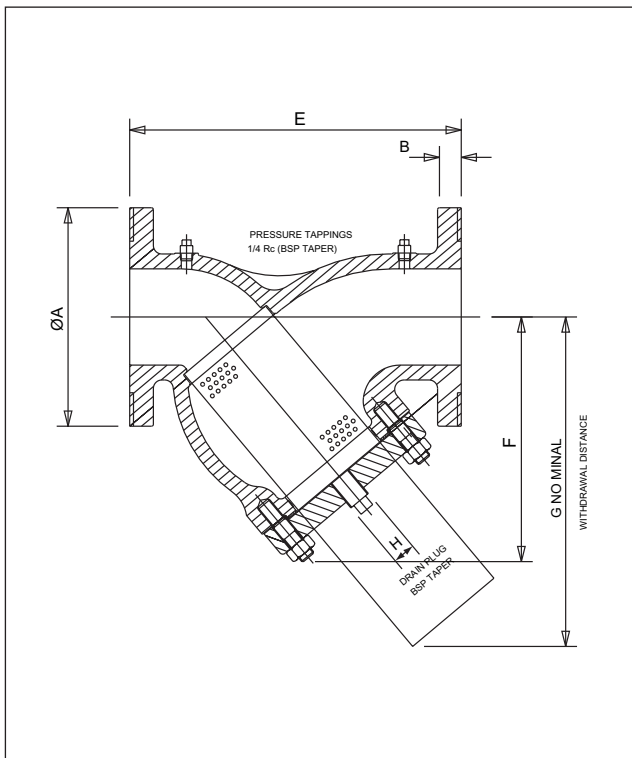
Scale and dirt in piping systems cause endless trouble and frequently serious damage to pipeline equipment. Installation of Crane strainers will help eliminate the problems caused by foreign matter within piping systems. Stainless Steel strainer element, screwed in cap or bolted cap.

### Bill of Materials

Part	Material	Sizes
Body	Cast Iron BSEN1561 GJL-250	All
Cap (screwed)	Ductile Iron BS3468 S Ni Cr 20.2	2 only
Cap (bolted)	Steel bs1501 - 151/161 430A	2.1/2 - 12
Gasket	Asbestos Free	All
Cap Studs	Steel BS4439 Gr.8.8 (Cadmium Plated)	2.1/2 - 12
Cap Studs Nuts	Steel BS3692 Gr.8 (Cadmium Plated)	2.1/2 - 12
Screen	Stainless Steel Type 304	All



### Dimensional Drawing



### Dimensions and Weights

Size	Weight (kg)	A (mm)	B (mm)	E (mm)	F (mm)	G (mm)
2"	13	165	20	226	142	193
2 1/2"	23	185	20	290	216	272
3"	30	200	22	306	226	272
4"	43	220	24	350	264	330
5"	71	250	26	399	320	406
6"	93	285	26	480	356	457
8"	161	340	30	600	442	577
10"	266	405	32	686	495	696
12"	397	460	32	757	579	828

**Pressure Rating:** Class 125

**US End Connection:** ANSI Class 125

**Specification:**

End flanges conform to BS1560 - Section 3.2/ANSI B16.1 with flat face and are normally supplied drilled.

This strainer is supplied with a stainless steel perforated element having 1.5mm diameter holes.

This product is not suitable for use on group 1 gasses or unstable fluids, as defined by the Pressure Equipment Directive 97/23/EC.

Temperature operating range: -10 to 230°C.

Typical Kv values for various valves to enable Pressure Drop calculations to be made.  
For other pipe specifications, valve sizes and valve types, please refer to Crane Fluid Systems.

## GATE VALVES (Schedule 40 Pipe)

SIZE (mm)	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Kv	21.32	38.88	65.69	116.23	161.93	280.6	411.33	635.13	1125.41	1823.03	2718.96	4873.47	7681.73	11315.64

## GLOBE VALVES (Schedule 40 Pipe)

SIZE (mm)	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Kv	3.27	5.96	10.08	17.83	24.84	43.04	63.1	97.42	172.63	279.64	417.07	747.56	1178.32	1735.74

## BUTTERFLY VALVES

SIZE (mm)	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Kv	-	-	-	-	-	133	240	410	655	900	1800	3550	7350	9100

## BALL VALVES

SIZE (mm)	8	10	15	20	25	32	40	50	65	80
Kv	9	11	20	47	77	1412	198	338	593	82

## CHECK VALVES (Schedule 40 Pipe)

SIZE (mm)	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Kv	8.53	15.55	26.27	46.49	64.77	112.24	164.53	254.05	450.16	729.21	1087.59	1949.39	3072.69	4526.25

## STRAINERS (Flanged) (BS1387 Medium Grade Steel Pipe)

SIZE (mm)	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Kv	-	-	-	-	33	57	91	131	232	372	544	952	1470	2151

## STRAINERS (Threaded) (BS1387 Medium Grade Steel Pipe)

SIZE (mm)	15	20	25	32	40	50
Kv	4.8	8.8	16.1	25.5	36	68

## COMMISSIONING VALVES: (Fixed Orifice Double Regulating Valve - Crane DM941)

SIZE (mm)	65	80	100	125	150	200	250	300
Kv	72	100	124	229	324	525	1058	1329

## COMMISSIONING VALVES: (Fixed Orifice Double Regulating Valve - Crane D931)

SIZE (mm)	15	20	25	32	40	50
Kv	1.87	3.14	5.59	10.8	18.1	29.1

Please do not hesitate to contact us if you require further information,  
Technical Helpline Tel: +44 (0) 1473 277400

# www.cranefs.com

www.cranefs.com is the home of the Crane Fluid Systems Internet Site. Here users will find a valuable information source on Crane and all of its products.

The site is split into 6 sections providing general information on Crane plus full technical data on the entire product range. It also provides a one-stop source of information on valves and their applications, as well as publishing technical papers on issues affecting the industry.

Technical advice on the range of Crane products is only an email away via the 'ask the expert' facility within the contacts section.

## home

The Home Page provides access to the news section of the site, as well as product features which focus on recently introduced Crane products. A map of how to find us is also available as well as a site map for easy navigation around the many areas of the site.

## about

Information on Crane is available in this section including the vision statement, company history, casting services and information on career opportunities with Crane.

## e-catalogue

Information on the complete range of Crane valves and fittings resides in this area of the site.

Users can view and print database generated product catalogue pages for all products within the Crane range. In addition, photos and dimensional drawings can be downloaded by the user for printing.

Being on-line, the catalogue is always up to date; the latest information on all current Crane products is just a few clicks away. The Crane Product Profile can be ordered from this section.

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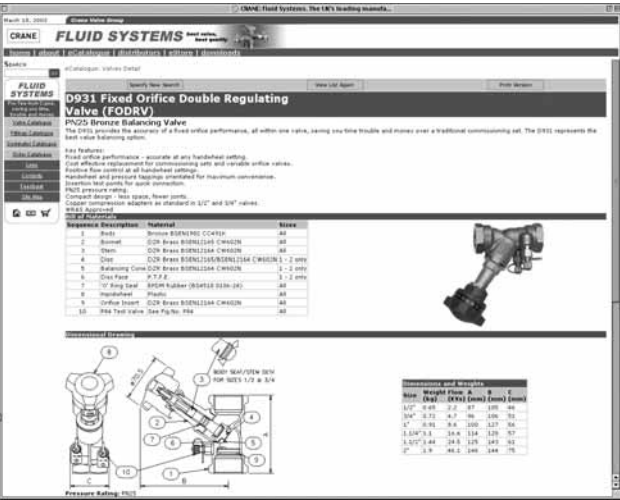
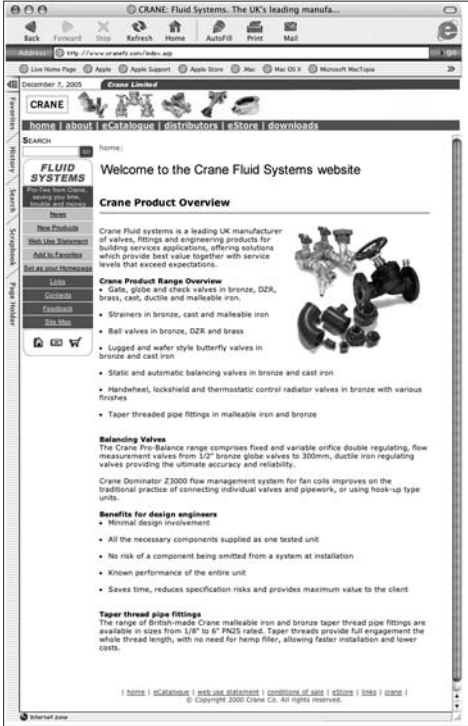
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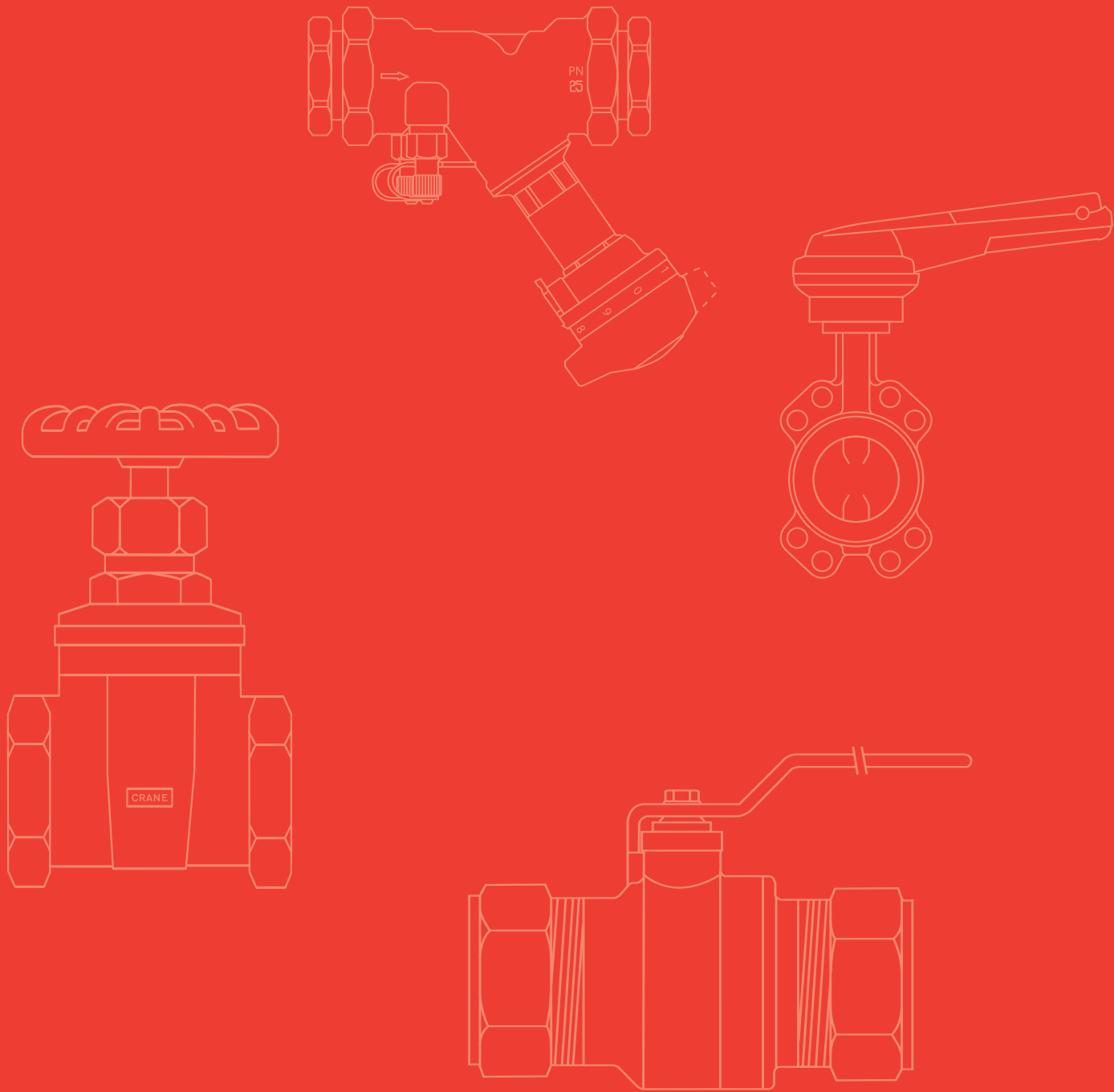
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Publication No. 0906