

HEATING  
VENTILATION  
AIR CON  
WATER  
GAS

**WRAS**  
APPROVED  
PRODUCT

FUTURE VALVE TECHNOLOGY

# Maximum Performance DZR Ball Valves

New

HNH Fig 100 (Threaded) / HNH Fig 100C (Compression)  
HNH Fig 100YL (Gas Threaded) / HNH 100CYL (Gas Compression)



Dezincification resistant  
WRAS Approved  
Main Joint O-Ring Seal (Threaded)  
Installation Tags  
Multiple Operating Options

 **Hattersley**<sup>TM</sup>

Quality reliability & service assured



An internationally respected market leader in valve technology for over 100 years, the Hattersley brand has become synonymous with quality, reliability and excellent service. The company's latest offering is the next generation of DZR ball valves for water, heating, ventilation, air conditioning and gas applications.

# DZR Ball Valves

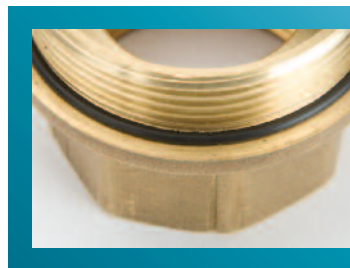
## Maximum Performance Benefits

Hattersley's 'new generation' ball valves are light, compact and easy to install and operate.

Design updates include features that improve leak protection and resistance to damage during installation.

The newly designed Hattersley Fig. 100 DZR ball valves are fully approved for potable water systems by the Water Regulatory Advisory Scheme (WRAS). The gas range, Fig. 100YL and 100CYL, have been tested by GL Industrial Services and comply with the essential requirements of BS EN 331:1998, for gas applications.

Available from 1/4" to 2" threaded fittings and 15mm to 54mm compression diameters. Customers can choose from multiple handle options - lever, extended stem, 'T' handle and lockshield, according to individual specification.



Secondary O ring seal, for additional leakage protection, aids resistance to site installation damage.

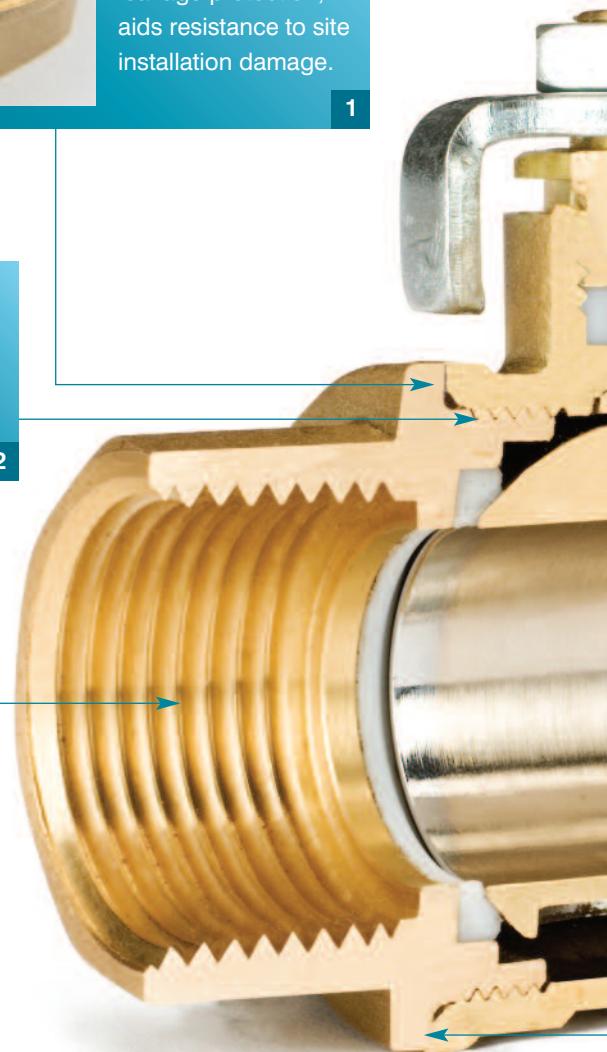
1

Loctite 648 is used on the main joint threads to give more strength and resistance to installation damage.

2


Available in different taper thread options - BS EN 10226-2 or ANSI B1.20.1.

3



## Improved installation instructions

To aid installation there are new installation tags which are water and tear resistant. They show the correct way of installing threaded or compression valves.



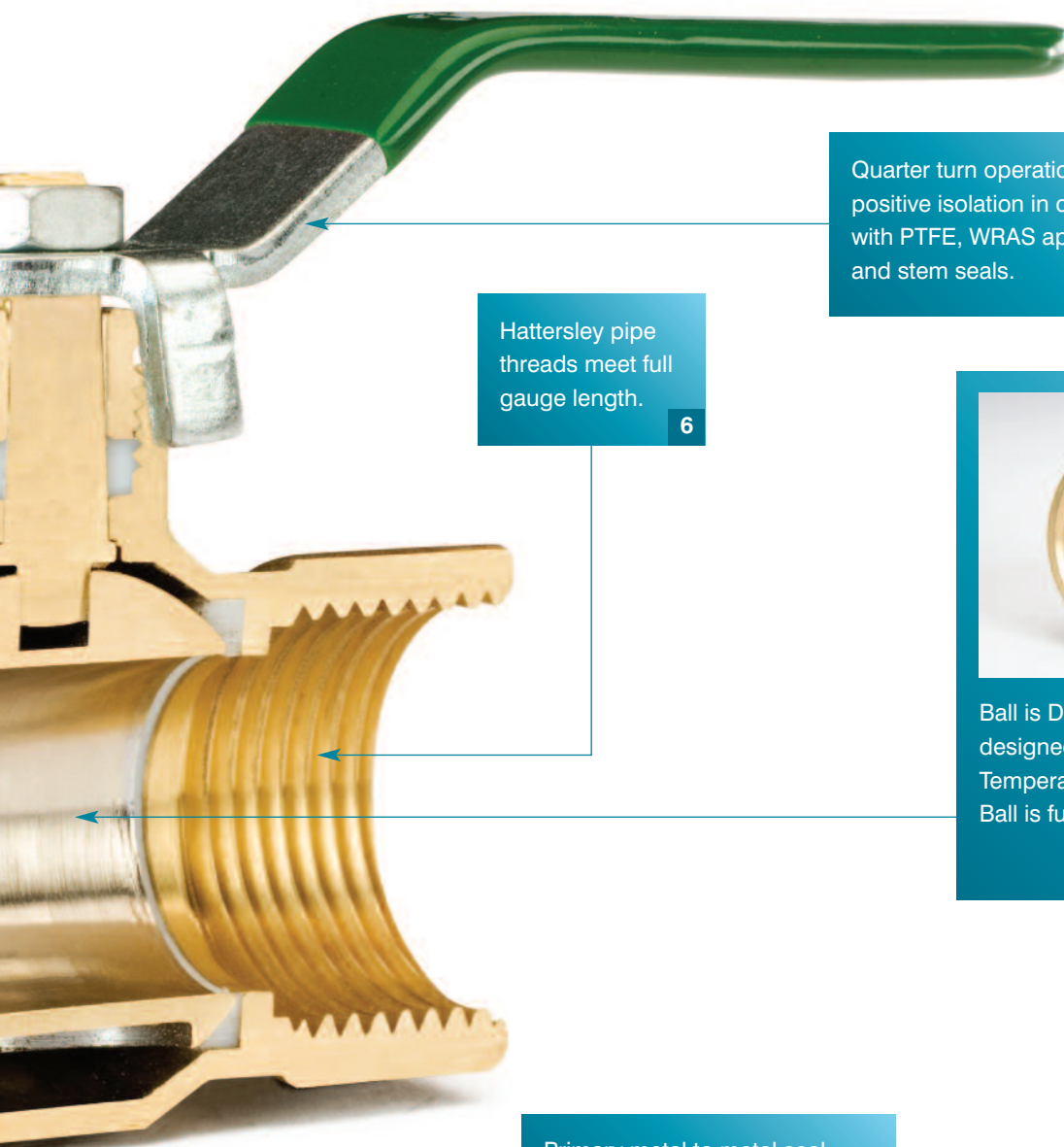
ASSEMBLE PIPE INTO VALVE TO HAND TIGHT THEN TIGHTEN BY NUMBER OF TURNS SHOWN BELOW (UP TO 1 ADDITIONAL TURN IS PERMITTED FOR ALIGNMENT)			
VALVE SIZE	TURNS	VALVE SIZE	TURNS
1/4	1.5	1	1.5
3/8	1.5	1 1/4	1.5
1/2	1.5	1 1/2	1.5
3/4	1.5	2	2

Threaded tag used as example.



Multiple operating handle options (Clockwise from top right), quarter turn lever, extended stem lever, "T" handle & lockshield.

8



Quarter turn operation provides positive isolation in conjunction with PTFE, WRAS approved seats and stem seals.

7

Hattersley pipe threads meet full gauge length.

6



Ball is DZR brass chrome plated, designed for a long life. Temperature range is -10 to 120°C. Ball is full bore.

5

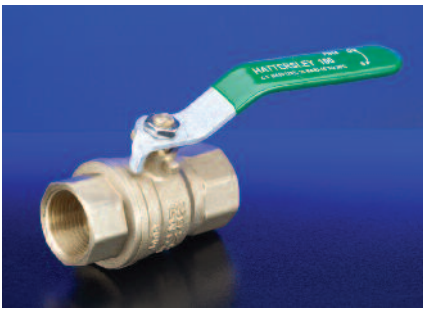
Primary metal to metal seal.

4

THE CUTAWAY SHOWN IS THE THREADED VERSION (FIG 100)



# 100 | 100EXT Extended Stem



100

100EXT

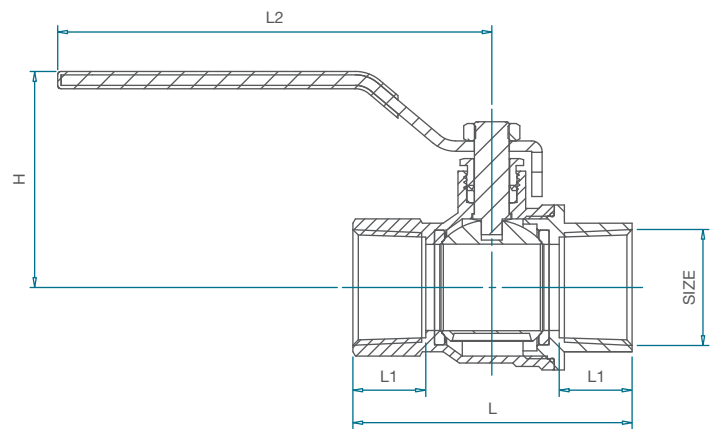
## MATERIALS

Name	Material	Quantity
Hex-Nut	Steel Plated	1
Lever	Steel Dacromet Plated	1
Sleeve	Green PVC	1
Packing Nut	Brass CW617N	1
Packing Gland	PTFE WRAS Approved	1
Body	DZR Brass CW602N	1
Seats	PTFE WRAS Approved	2
Ball	DZR Brass CW602N Chrome Plated	1
O-Ring	Rubber EPDM WRAS Approved	1
Bonnet	DZR Brass CW602N	1
Stem	DZR Brass CW602N	1
Extension Stem Outer	Aluminium	1
Extension Stem Inner	Steel Plated	1

## DIMENSIONS AND WEIGHTS

Size	Weight (g) 100	Weight (g) 100EXT	L (mm) 100	L1 (mm)	L2 (mm) 100	H (mm) 100	H (mm) 100EXT
1/4"	152	-	46	12	89	41	-
3/8"	136	-	46	12	89	41	-
1/2"	205	270	58.5	15.5	98.5	48	103
3/4"	302	366	67	17	98.5	51	107
1"	511	589	80.5	21	125	62	116
1 1/4"	890	1009	94	23	140	77.5	129
1 1/2"	1292	1410	102	23	140	83	135
2"	2238	2283	124	26.5	165	95.5	150

## DIMENSIONAL DRAWING



## PRESSURE / TEMPERATURE RATINGS THREADED

Temperature °C	-10-100	120
Pressure (bar)	25	21.8

Intermediate pressure ratings shall be determined by interpolation

All dimensions are nominal.

Pressure Rating: PN25 • UK End Connection: BS EN 10226-2: 2005 formerly BS21 Taper • US End Connection: ANSI B1.20.1: 1983

Operator: Lever • Specification: Quarter Turn | PTFE seats and stem seal | WRAS listed.

# 100T T-Handle

# 100LS Lockshield



## MATERIALS

Name	Material	Quantity
Hex-Nut	Steel Plated	1
T-Handle	Aluminium AL-46100 Green	1
Packing Nut	Brass CW617N	1
Packing Gland	PTFE WRAS Approved	1
Body	DZR Brass CW602N	1
Seats	PTFE WRAS Approved	2
Ball	DZR Brass CW602N Chrome Plated	1
O-Ring	Rubber EPDM WRAS Approved	1
Bonnet	DZR Brass CW602N	1
Stem	DZR Brass CW602N	1
Lockshield	Brass CW617N	1
Lockshield Cover	Polypropelene Green	1

100T



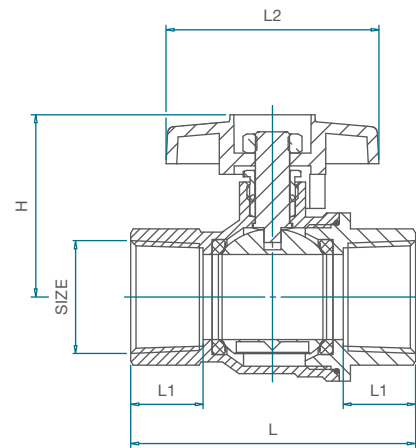
100LS



## DIMENSIONS AND WEIGHTS

Size	Weight	Weight	L (mm)	L1 (mm)	L2 (mm)	H (mm)	H (mm)
	(g) 100T	(g) 100LS					
1/2"	183	207	59	15.5	50	40	42
3/4"	277	302	67	17	50	43	45
1"	470	506	80.5	21	55	54	58
1 1/4"	809	867	94	23	82	61	67
1 1/2"	1210	1269	102	23	82	67	73.5
2"	2106	2166	124	26.5	110	80.5	86.5

## DIMENSIONAL DRAWING



## PRESSURE / TEMPERATURE RATINGS THREADED

Temperature °C	-10-100	120
Pressure (bar)	25	21.8

Intermediate pressure ratings shall be determined by interpolation

All dimensions are nominal.

Pressure Rating: PN25 • UK End Connection: BS EN 10226-2: 2005 formerly BS21 Taper • US End Connection: ANSI B1.20.1:1983

Operator: T-Handle/Spanner/Socket • Specification: Quarter Turn | PTFE seats and stem seal | WRAS listed.

# 100C | 100CEXT Extended Stem



100C



100CEXT

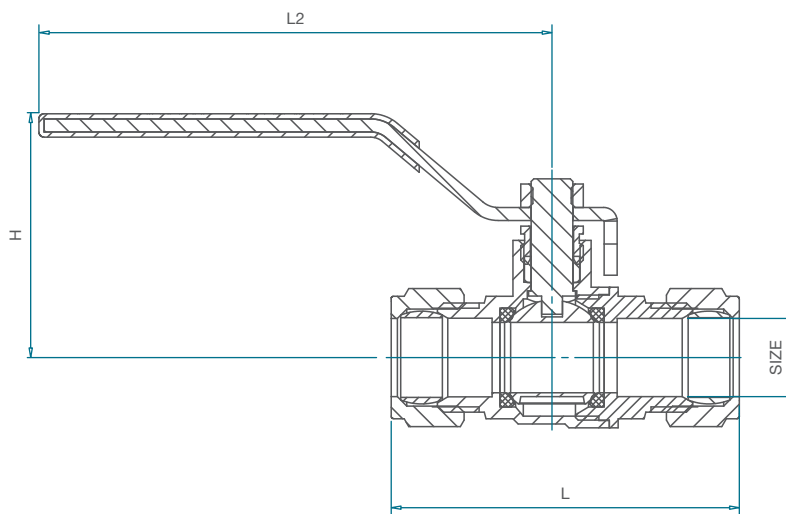
## MATERIALS

Name	Material	Quantity
Hex-Nut	Steel Plated	1
Lever	Steel Dacromet Plated	1
Handle Sleeve	Green PVC	1
Packing Nut	Brass CW617N	1
Packing Gland	PTFE WRAS Approved	1
Body	DZR Brass CW602N	1
Seats	PTFE WRAS Approved	2
Ball	DZR Brass CW602N Chrome Plated	1
Bonnet	DZR Brass CW602N	1
Compression Olive	Brass CW507L	2
Compression Nut	DZR Brass CW602N	2
Stem	DZR Brass CW602N	1
Extension Stem Outer	Aluminium	1
Extension Stem Inner	Steel Plated	1

## DIMENSIONS AND WEIGHTS

Size	Weight (g) C	Weight (g) CEXT	L (mm) C	L2 (mm) C	H (mm) C	H (mm) CEXT
15mm	212	275	66.5	98.5	47	103
22mm	368	429	80	98.5	51	107
28mm	608	682	92.5	125	62	116
35mm	1007	1125	104.5	140	77.5	129
42mm	1549	1667	122	140	83	135
54mm	2538	2683	141	165	97.5	150

## DIMENSIONAL DRAWING



## PRESSURE / TEMPERATURE RATINGS COMPRESSION

Temperature °C	-10-30	40	50	65	80	90	100	110	120
Pressure (bar)	16	14.3	12.6	10	8.7	7.8	6.9	6	5

Intermediate pressure ratings shall be determined by interpolation

All dimensions are nominal.

Pressure Rating: PN16 • UK End Connection: Compression Ends to BS EN 1254-2: 1998 • Operator: Lever

Specification: Quarter Turn | PTFE seats and stem seal | WRAS listed.

# 100CT T-Handle

# 100CLS Lockshield



100CT



100CLS

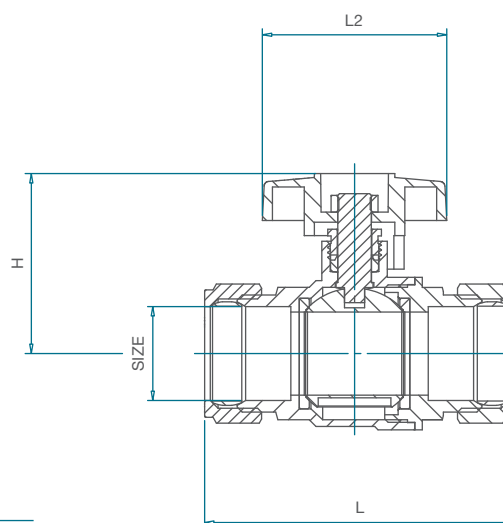
## MATERIALS

Name	Material	Quantity
Hex-Nut	Steel Plated	1
T-Handle	Aluminium AL-46100 Green	1
Packing Nut	Brass CW617N	1
Packing Gland	PTFE WRAS Approved	1
Body	DZR Brass CW602N	1
Seats	PTFE WRAS Approved	2
Ball	DZR Brass CW602N Chrome Plated	1
Bonnet	DZR Brass CW602N	1
Compression Olive	Brass CW507L	2
Compression Nut	DZR Brass CW602N	2
Stem	DZR Brass CW602N	1
Lockshield	Brass CW617N	1
Lockshield Cover	Polypropelene Green	1

## DIMENSIONS AND WEIGHTS

Size	Weight (g) CT	Weight (g) CLS	L (mm)	L2 (mm)	H (mm) CT	H (mm) CLS
15mm	187	220	66.5	50	40	42
22mm	343	376	80	50	43	45
28mm	567	614	92.5	55	54	59.5
35mm	977	1039	104.5	82	61	67
42mm	1487	1549	122	82	67	73.5
54mm	2634	2437	141	110	80.5	86.5

## DIMENSIONAL DRAWING



All dimensions are nominal.

## PRESSURE / TEMPERATURE RATINGS COMPRESSION

Temperature °C	-10-30	40	50	65	80	90	100	110	120
Pressure (bar)	16	14.3	12.6	10	8.7	7.8	6.9	6	5

Intermediate pressure ratings shall be determined by interpolation

Pressure Rating: PN16 • UK End Connection: Compression Ends to BS EN 1254-2: 1998 • Operator: T-Handle/Spanner/Socket

Specification: Quarter Turn | PTFE seats and stem seal | WRAS listed.

# 100 YL Gas Ball Valve



100-YL

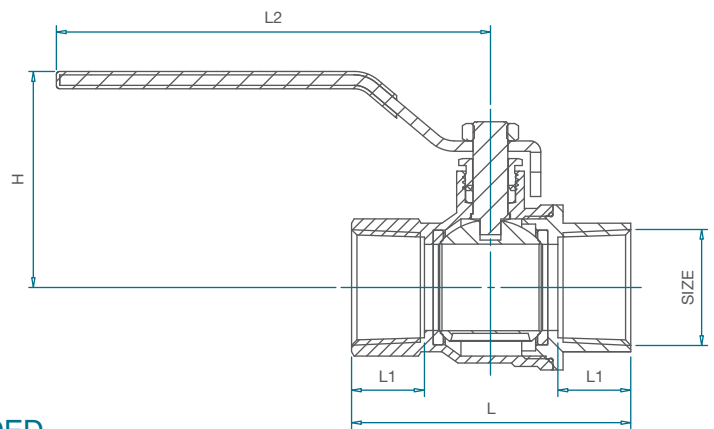
## MATERIALS

Name	Material	Quantity
Hex-Nut	Dacromet Plated Steel	1
Handle Sleeve	PVC Yellow	1
Handle	Dacromet Plated Steel	1
Packing Nut	Brass CW617N	1
Packing Gland	PTFE	1
Body	DZR Brass CW602N	1
Ball	DZR Brass CW602N	1
Seats	PTFE	2
O-Ring	NBR with BS EN549 approval	1
Bonnet	DZR Brass CW602N	1
Stem	DZR Brass CW602N	1

## DIMENSIONS AND WEIGHTS

Size	Weight (g)	L (mm)	L1 (mm)	L2 (mm)	H (mm)
1/4"	152	46	12	89	41
3/8"	136	46	12	89	41
1/2"	205	59	15.5	98.5	48
3/4"	302	67	17	98.5	51
1"	511	80.5	21	125	63
1 1/4"	890	94	23	140	78
1 1/2"	1292	102	23	140	83.5
2"	2238	124	26.5	165	97.5

## DIMENSIONAL DRAWING



## PRESSURE / TEMPERATURE RATINGS THREADED

### NON GAS APPLICATION

Temperature °C	-10 to 100	110
Pressure (bar)	25	23.5

### GAS APPLICATION

Temperature °C	-20 to 60
Pressure (bar)	5

All dimensions are nominal.

Intermediate pressure ratings shall be determined by interpolation

Pressure Rating: PN25 • UK End Connection: BS EN 10226-2: 2005 formerly BS21 Taper • US End Connection ANSI B1.20.1: 1983  
 Operator: Lever • Specification: Quarter Turn | PTFE seats and stem seal | Tested by GL Industrial Services and complies with the essential requirements of BS EN 331: 1998



# 100 CYL Gas Ball Valve



100-CYL

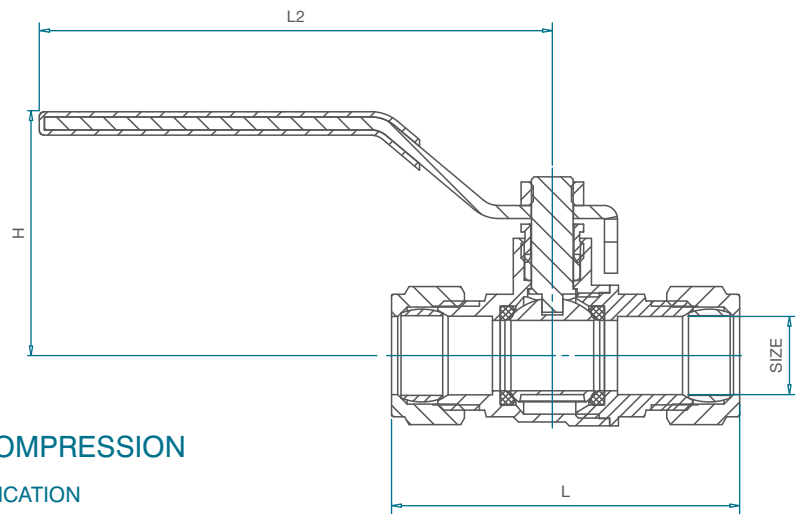
## MATERIALS

Name	Material	Quantity
Handle Sleeve	PVC Yellow	1
Hex-Nut	Dacromet Plated Steel	1
Handle	Dacromet Plated Steel	1
Packing Nut	Brass CW617N	1
Packing Gland	PTFE	1
Body	DZR Brass CW602N	1
Seats	PTFE	2
Ball	CW602N	1
O-Ring	NBR with BS EN549 approval	1
Bonnet	DZR Brass CW602N	1
Sleeve	CW507L	1
Sleeve Nut	CW602N	1
Stem	DZR Brass CW602N	1

## DIMENSIONS AND WEIGHTS

Size	Weight (g)	L (mm)	L2 (mm)	H (mm)
15mm	212	66.5	98.5	47
22mm	368	80	98.5	51
28mm	608	92.5	125	63
35mm	1007	104.5	140	78
42mm	1545	122	140	83.5
54mm	2538	141	165	97.5

## DIMENSIONAL DRAWING



## PRESSURE / TEMPERATURE RATINGS COMPRESSION

### NON GAS APPLICATION

Temperature °C	-10 to 30	110
Pressure (bar)	16	5

### GAS APPLICATION

Temperature °C	-10 to 60
Pressure (bar)	5

Intermediate pressure ratings shall be determined by interpolation

All dimensions are nominal.

Pressure Rating: PN16 • UK End Connection: Compression Ends to BS EN 1254-2: 1998 • Operator: Lever

Specification: Quarter Turn | PTFE seats and stem seal | Tested by GL Industrial Services and complies with the essential requirements of BS EN 331: 1998



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FM311  
ISO 9001



- The Fig. 100 and 100C ranges are WRAS approved for use on potable water
- The Fig. 100YL and 100CYL have been tested by GL Industrial Services and comply with the essential requirements of BS EN 331: 1998
- Designed and manufactured under quality management systems in accordance with BS EN ISO 9001: 2008

The Company reserve the right to amend any product without notice.

H\_DZR\_04\_2010

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