Series 6100

Zetco WaterMarked DZR Brass Ball Valve Press-fit x Press-fit Lever Handle

DESCRIPTION

A DZR brass ball valve WaterMark approved to AS 5830.1 (Licence WM-000110) for use in potable water installations. The body features integral press-fit end connections which can be crimped using a range of popular V profile tools, forming a secure o-ring seal against copper pipes in a wide range of applications where quick, flame-free connections are required.

FEATURES

Design	Forged dezincification resistant brass body
	Blow-out proof stem to prevent leakage
	Conical PTFE stem sealing system for additional leak protection
Production	Manufactured in Italy under ISO 9001 Quality Management System
	All valves are pressure tested during production
	Additional testing to DVGW VP 614
Technical	Press-fit connection conforming to AS 3688
	Flow control: on/off only, not intended for throttling
	Flow capacity: Full bore
	Temperature range: -15°C to 110°C
	Max. pressure: 2500 kPa (refer to graph)
	Use with Viega®, Rothenberger® & KemPress® V-profile tools only
	Must be installed according to accompanying instructions (see p. 3-4)
Options & Variants	Size range: DN15 (1/2") to DN50 (2")
	Series 6101 WaterMarked press-fit x female lever handle
	Series 6102 WaterMarked press-fit x male lever handle
	Series 6103 WaterMarked press-fit x press-fit T handle
	Series 6107 WaterMarked press-fit x press-fit lockable lever handle
	Series 6200 AGA approved press-fit x press-fit lever handle

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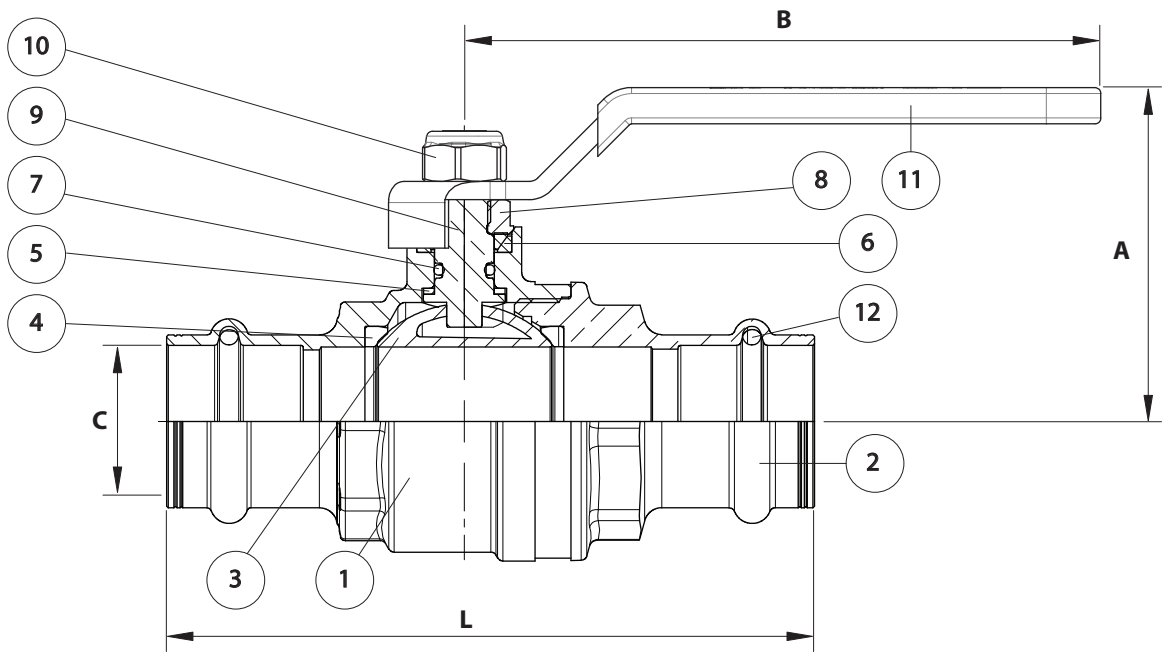
MADE IN ITALY ZETCO

WaterMark
IAPMO WM-000110
AS 5830.1

Series 6100

Zetco WaterMarked DZR Brass Ball Valve
Press-fit x Press-fit Lever Handle

DIMENSIONAL AND COMPONENT DIAGRAM



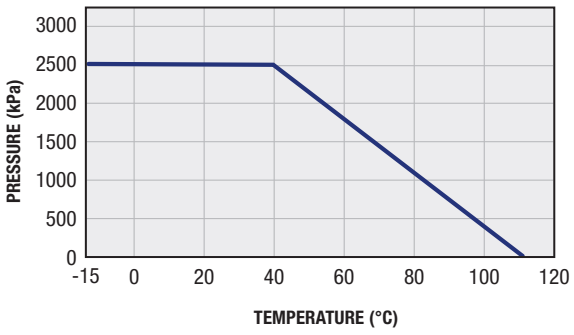
PARTS MATERIALS

POS.	PART	MATERIAL
1	BODY	DZR BRASS
2	END ADAPTOR	DZR BRASS
3	BALL	DZR BRASS (CHROME PLATED)
4	SEAL	PTFE
5	THRUST WASHER	PTFE
6	CONICAL SEAL	PTFE
7	O-RING	HNBR
8	GLAND NUT	BRASS
9	STEM	DZR BRASS
10	NUT	ZINC PLATED STEEL
11	HANDLE	ZINC PLATED STEEL
12	O-RING	EPDM PEROXIDE

DIMENSIONS (mm)

Prod. Code	DN	C	A	B	L	Kv	Wgt Kg
6100015	15	12.8	44	85	78	15	0.218
6100020	20	19.2	52	105	99	28	0.375
6100025	25	25.8	56	105	107	39	0.515
6100032	32	32.1	68	130	119	84	0.860
6100040	40	38.5	74	130	151	156	1.35
6100050	50	51.2	88	165	174	243	2.07

PRESSURE/TEMPERATURE GRAPH



Press-fit Information

WaterMark IAPMO WM-000110 AS 5830.1

AGA 5301 AS 4617

For use with Viega®, Rothenberger®, KemPress® V-profile tools only

IMPORTANT INSTALLATION INSTRUCTIONS

Follow each step carefully

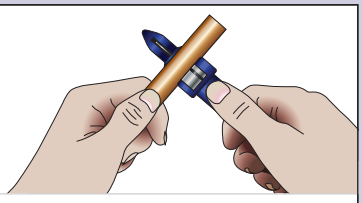
INSTALLATION INSTRUCTION SHEET

STEP 1

Refer to the design guidelines overleaf for important dimensions which must be considered prior to installation.

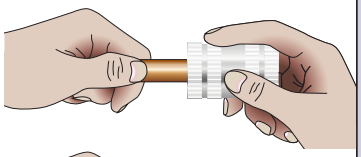
Use only Type A & B copper pipe complying with AS 1432.

Cut the copper pipe to the required length.



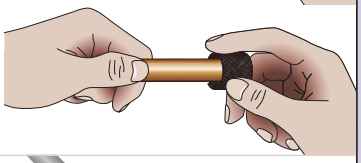
STEP 2

Carefully deburr the end of the pipe;
- INSIDE to minimise turbulence and pressure loss, and
- OUTSIDE to avoid damage to the o-ring during insertion.



For existing installations, ensure that the copper pipe complies with AS 1432 and is free of defects and in good condition.

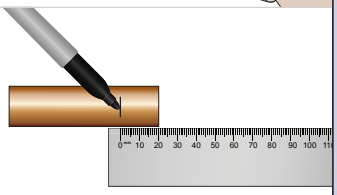
Clean the end of the pipe with emery paper or a soft scourer.



STEP 3

Measure and mark the correct insertion depth on the copper pipe.

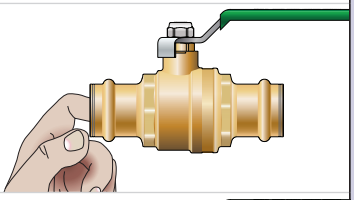
Size (mm)	15	20	25	32	40	50
Depth (mm)	17	22	23	25	31	39



STEP 4

Ensure that you are using the correct valve or fitting for your application (water or gas) and the o-rings are correctly positioned.

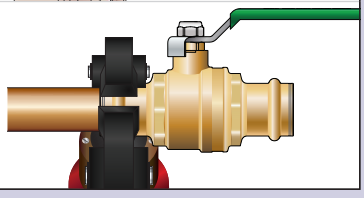
Check that the ends are completely free of swarf, sharp metal or other debris which may cause damage the o-rings.



STEP 5

Push the valve or fitting onto the copper pipe up to the insertion depth. Recheck engagement with the pipe prior to pressing.

Rest the raised bump in the groove of the press tool and operate press tool according to manufacturer's instructions. Inspect joint.



WARNING

NOT SUITABLE FOR

Solar hot water systems, medical gases, refrigeration and air-conditioning gases, acetylene, urea solution, glycerin triacetate, coolant inhibitor, sodium hydroxide or ammoniac gases.

DO NOT USE MINERAL OIL TO LUBRICATE THE O-RINGS

WATER APPLICATIONS	
Medium	Potable water
Max. Temp.	110°C
Max. Pressure	2500 kPa
GAS APPLICATIONS	
Medium	NG, LPG
Max. Temp.	100°C
Max. Pressure	2100 kPa*

*According to AS 5601 Table 4.1, operating pressure of consumer gas piping systems containing copper tube is limited to 200 kPa.

Disclaimer: Zetco Valves Pty Ltd will not accept responsibility for damage caused by failure to follow the instructions & warnings provided.

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Also available for download at www.zetco.com.au

Press-fit Information

For use with Viega®, Rothenberger®, KemPress® V-profile tools only

INSTALLATION DESIGN INFORMATION

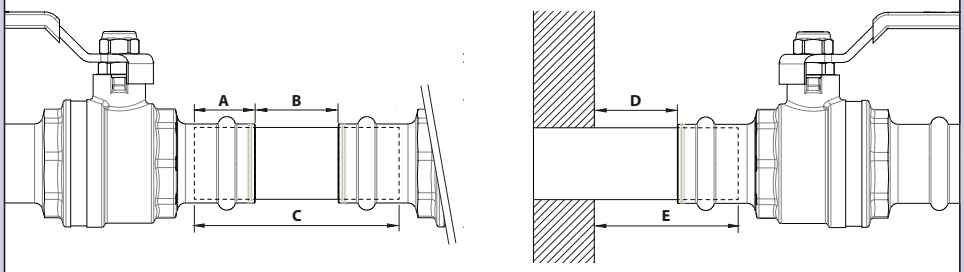
Follow carefully to avoid damage

WaterMark IAPMO WM-000110 AS 5830.1

AGA 5301 AS 4617

DESIGN GUIDE

SPACE REQUIREMENTS



The table below shows the minimum distances required between a press joint and other objects.

Nom. Size mm	Pipe OD mm	A mm	B mm	C mm	D mm	E mm
DN15	12.70	17	10	50	60	80
DN20	19.05	22	10	60	60	85
DN25	25.40	23	10	62	60	86
DN32	31.75	25	20	76	60	88
DN40	38.10	31	20	88	60	94
DN50	50.80	39	20	110	60	106

BRAZING & SOLDERING

Brazing or soldering close to press joints may result in damage to the o-rings.
The table below shows the minimum distance required between a press joint and any brazing activity. In cases where this distance cannot be achieved, ensure that the valve or fitting is adequately protected from heat and kept cool during the brazing procedure.

Size (mm)	15	20	25	32	40	50
Min. Clearance	350	500	650	800	1000	1300

WARNING Unpressed connections may not be detected during post-installation pressure testing due to a temporary sealing effect of the o-rings. To ensure that correct sealing has been achieved, visually inspect every joint to ensure that each one is pressed correctly.

The most recent version of this information sheet, plus additional technical information can be accessed at the Zetco website: **www.zetco.com.au**

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