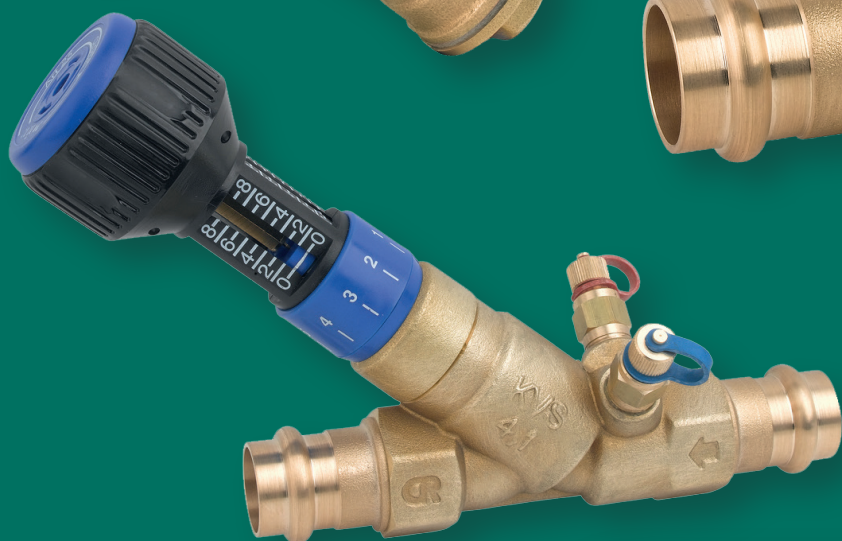
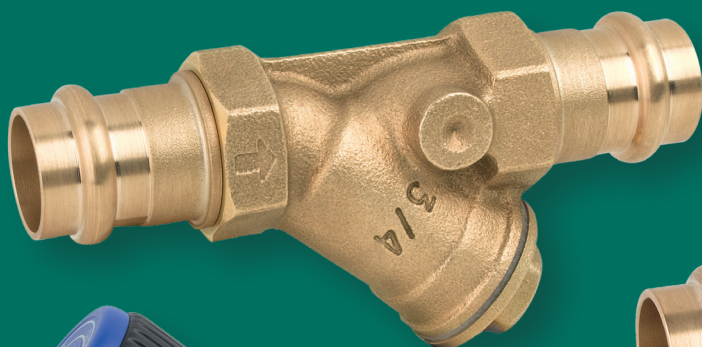
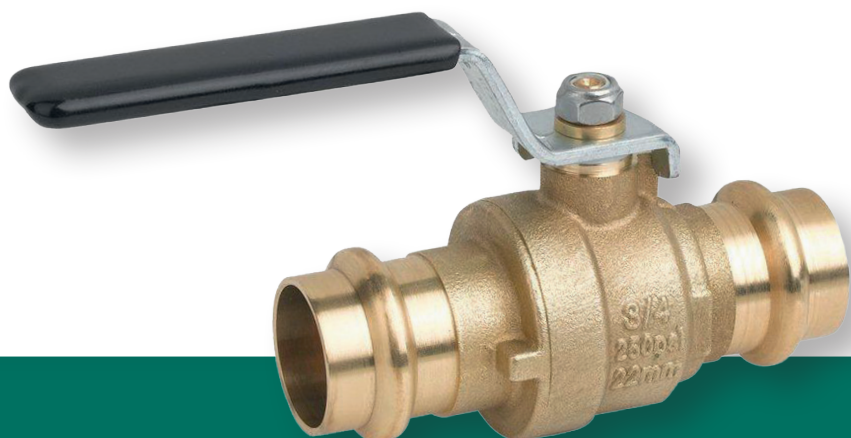




# Press Valves



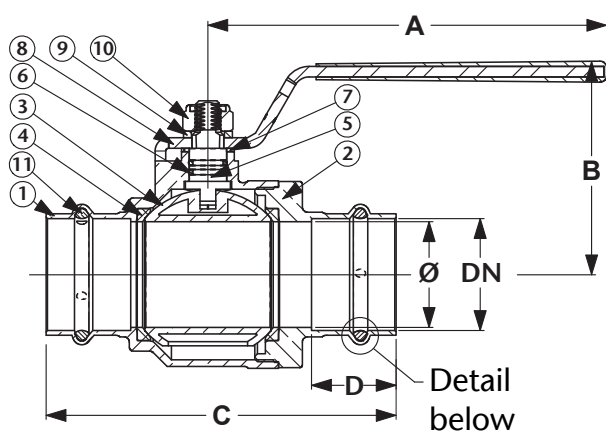
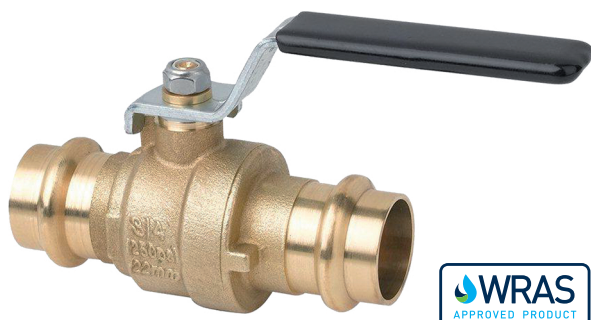
Product information



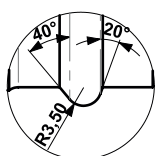
## DZR Press Ball Valve

### Features

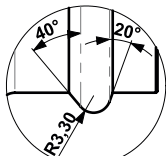
- Universal M & V Profiles 15mm to 35mm
- Dedicated M & V Profiles 42mm & 54mm (See diagram)
- Full Bore
- Thermal Extension available
- WRAS Approved
- 5 Year Warranty
- Suitable for cold pressure connection to stainless steel, copper and carbon steel pipes



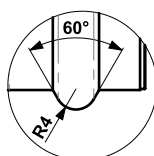
'M' Press  
(DN42)



'M' Press  
(DN54)



'V' Press  
(DN42+54)



NB: Sizes 15mm to 35mm can be pressed with both 'M' and 'V' press jaws. Always use the appropriate 'M' or 'V' press sling to press sizes 42mm and 54mm

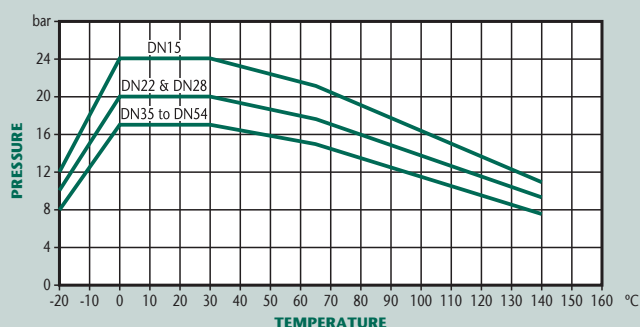
### Technical Data

Max Pressure	24 Bar (DN15), 20 Bar (DN22 & DN28), 17 Bar (DN35 to DN54)
Working Temperature	-20°C to +140°C

Dimensions in mm

This data sheet is designed as a guide and should not be regarded as wholly accurate in every detail. We reserve the right to amend the specification of any product without notice.

### Pressure / Temperature



DN	15	22	28	35	42	54
A	90	90	110	110	150	150
B	47	52	57	66	81	88
C (M Press)	78	91	99	107	133	155
C (V Press)	78	91	99	107	133	163
D (M Press)	22	25	27	27	32	33
D (V Press)	22	25	27	27	32	37
Kgs	0.19	0.31	0.49	0.72	1.17	1.66 (M) 1.75 (V)

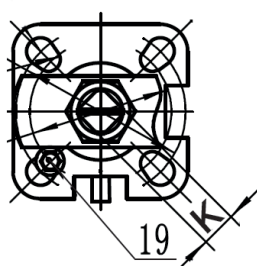
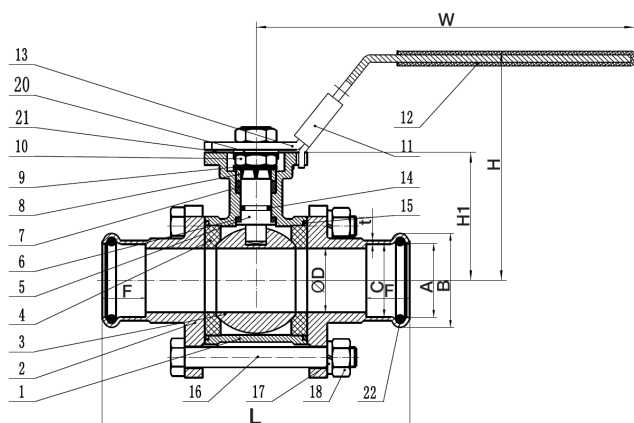
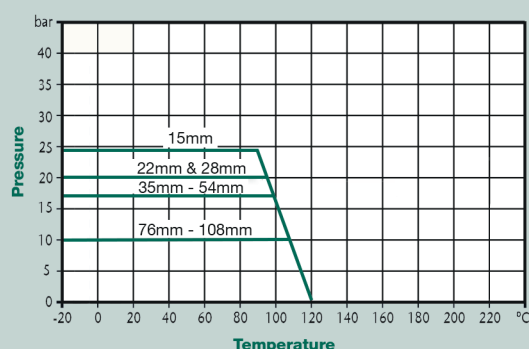
N.	Part Name	Materials
1	Body	DZR Brass
2	Screwed End	DZR Brass
3	Ball	Brass Chrome Plated
4	Ball Gaskets	PTFE
5	Stem	Brass
6	O-Ring	FKM 70 SH
7	Anti-Friction Ring	PTFE
8	Handle	Steel
9	Washer	Brass
10	Self-Locking Nut	Steel
11	O-Ring	EPDM 70 PEROX

## Stainless Steel 3 Piece Press Ball Valve ISO5211

### Features

- Dedicated M Profile
- Full Bore
- Locking Device
- ISO5211 Direct Mount

### Pressure / Temperature



ISO 5211

\* Torque - Raw torque with no safety added

### Technical Data

Max Pressure 24 Bar (15mm), 20 Bar (22mm & 28mm),  
17 Bar (35mm - 54mm), 10 Bar (76mm - 108mm)  
Working Temperature -20°C to +120°C

Dimensions in mm

This data sheet is designed as a guide and should not be regarded as wholly accurate in every detail. We reserve the right to amend the specification of any product without notice.

DN	15	22	28	35	42	54	76	88	108
L	87	100.6	130	143.2	158	186	251.4	274.7	329.2
W	141	141	162	162	188	188	233	233	330
H	75	81	93	98	109	124	151	160	172
A	15.7	22.9	28.8	35.8	42.7	54.7	79	92	112
B	22.7	30.8	36.7	43.7	52.7	64.7	94.5	108	131.2
C	15.3	22.3	28.4	35.4	42.4	54.5	77.1	89.9	109.2
D	12.5	20	25	32	38	50	64.5	76	94
F	20	21	23	27.5	31.6	36.6	61.6	66.6	81.7
t	1.5	1.5	1.5	1.5	1.5	1.5	2	2	2
ISO5211	F03/F04	F03/F04	F04/F05	F04/F05	F05/F07	F05/F07	F07/F010	F07/F010	F07/F010
H1	42	48	55	60	70	85	105	114	128
K	9	9	11	11	14	14	17	17	17
Torque	5	7	10	12	20	32	60	90	100
Kgs	0.64	0.72	1.14	1.55	2.47	3.43	7.85	11.68	22.41

N.	Part Name	Materials
1	Body	CF8M
2	Cap	CF8M
3	Ball	Stainless Steel 316
4	Seat	RPTFE (15%)
5	Stem	Stainless Steel 316
6	Thrust Washer	PTFE
7	Stem Packing	PTFE
8	Bushing	Stainless Steel 304
9	Belleville Washer	Stainless Steel 304
10	Stem Nut	Stainless Steel 304
11	Lock Device	Stainless Steel 304
12	Handle Cover	Plastic
13	Handle	Stainless Steel 304
14	O-Ring	NBR
15	Seal	PTFE
16	Bolt	Stainless Steel 304
17	Spring Washer	Stainless Steel 304
18	Bolt Nut	Stainless Steel 304
19	Stop Pin	Stainless Steel 304
20	Washer	Stainless Steel 304
21	Lug Washer	Stainless Steel 304
22	O-Ring	EPDM

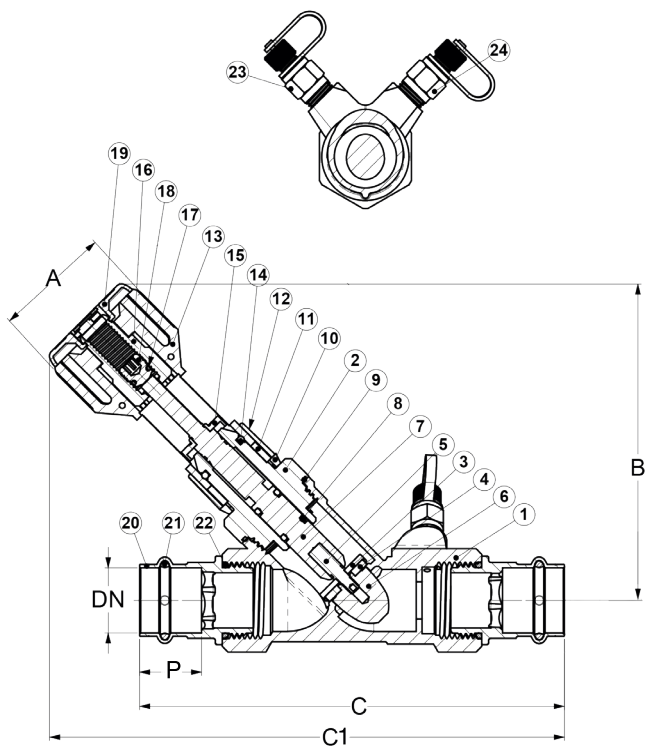
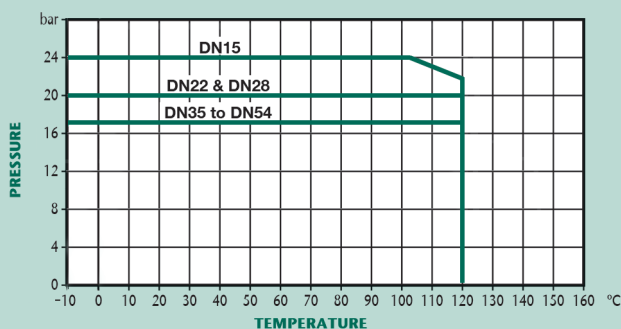


## DZR Fixed Orifice Double Regulating Valve (FODRV)

### Features

- Universal M & V Profile 15mm to 35mm
- Dedicated M Profile 42mm & 54mm
- Conforms to BS 7350 / BS 5154
- Fixed orifice with  $\pm 5\%$  flow measurement accuracy
- 5 Year Warranty

### Pressure / Temperature



### Technical Data

Max Pressure	DN15	24 Bar
	DN22 & DN28	20 Bar
	DN35 to DN54	17 Bar
Working Temperature	-10°C to 120°C	

DN	15	22	28	35	42	54
A	51	51	51	51	57	57
B	111	129	138	142	181	190
C	169	190	207	238	266	313
C1	205	233	235	256	307	329
P	40	44	44	43	48	54
CH	28	33	40	43	56	71
Kv	1.8	3.8	7.0	15.8	21.1	43.9
Kvs	1.8	4.1	7.5	16.6	23.0	47.4
Kgs	0.87	1.20	1.48	2.15	3.09	4.76

N.	Part Name	Materials
1	Body	DZR Brass
2	Bonnet	DZR Brass
3	Gasket Support	DZR Brass
4	Gasket	EPDM
5	Stem for Shutter	DZR Brass
6	Shutter	DZR Brass
7	Stem	DZR Brass
8	O-Ring	EPDM PEROX
9	O-Ring	EPDM PEROX
10	Turn Index	Hostaform
11	Outdistance	Nylon
12	1/10 Turn Index	Hostaform
13	Knob	Hostaform
14	Pin	Steel
15	Index	Hostaform
16	Entrainer	Brass
17	Stem Gaskets O-Ring	NBR 70SH
18	Memory	Brass
19	Cup	Hostaform
20	Adaptor	DZR Brass
21	O-Ring (Delta)	EPDM 70 PEROX
22	O-Ring	EPDM 70 PEROX
23	Binder Point Blue	
24	Binder Point Red	

Dimensions in mm

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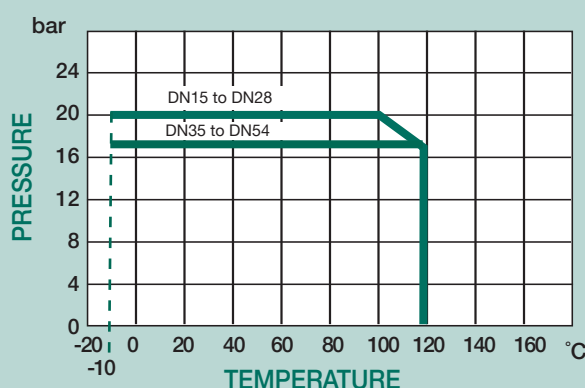


## DZR Double Regulating Valve (DRV)

### Features

- Universal M & V Profile 15mm to 35mm
- Dedicated M Profile 42mm & 54mm
- Handwheel with shut off function and clear 360° reading
- Digital scale with lock function
- Conforms to BS 7350 / BS 5154
- 5 Year Warranty

### Pressure / Temperature



DN	15	22	28	35	42	54
A	51	51	51	51	57	57
B	104.5	121	133	141	181	190
C	118	136	148	164	184.5	227
C1	163	182.5	190	199.5	251	278.5
P	22	25	27	27	32	37
CH	28	33	40	51	56	71
Kv	3.9	7.3	11.8	21.6	28.5	50.5
Kgs	0.54	0.76	1.02	1.45	2.14	3.22

N.	Part Name	Materials
1	Body	DZR Brass
2	Bonnet	DZR Brass - CW602N
3	Stem	DZR Brass - CW602N
4	Gasket	EPDM
5	Shutter	DZR Brass - CW602N
6	O-Ring	EPDM PEROX
7	Blue Index	POM
8	Blue Turn Index	POM
9	1/10 Turn Index	POM
10	Memory	Brass - CW617N
11	Stem Gasket O-Ring	NBR 70Sh
12	Pin	Steel
13	O-Ring	EPDM PEROX
14	Knob	PA6 Fiberglass
15	Entrainer	Brass - CW617N
16	Cap Blue	POM
17	Thickness	Nylon
18	Joint	DZR Brass - CW511L
19	O-Ring	EPDM PEROX
20	O-Ring	EPDM PEROX

### Technical Data

Max Pressure	DN15 to DN28	20 Bar
	DN35 to DN54	17 Bar
Working Temperature	-10°C to 120°C	

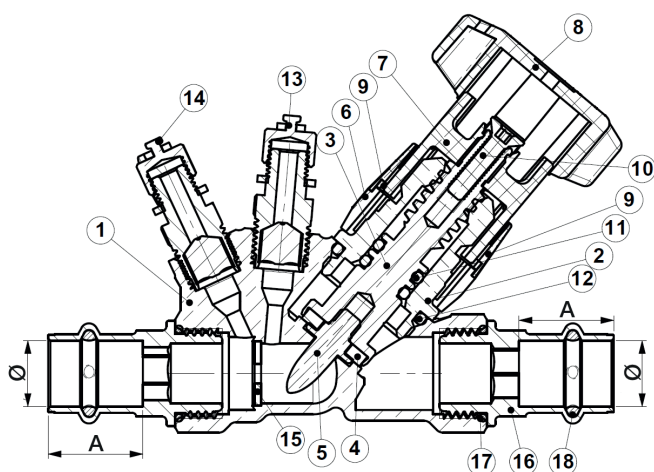
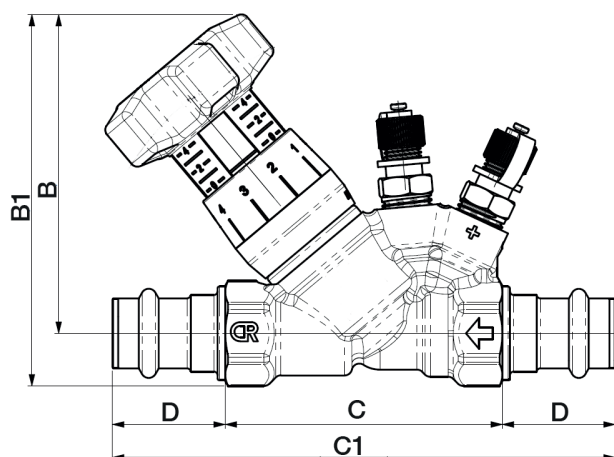
Dimensions in mm

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## DZR Fixed Orifice Double Regulating Valve (FODRV)

### Features

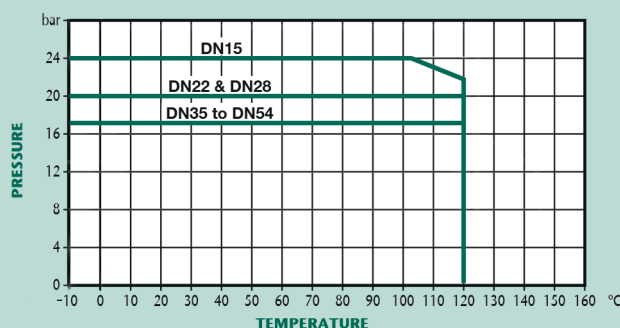
- Universal M & V Profile 15mm to 35mm
- Dedicated M Profile 42mm & 54mm
- Handwheel with shut off function and clear 360° reading
- Digital scale with lock function
- Fixed orifice with  $\pm 5\%$  flow measurement accuracy
- Conforms to BS 7350 / BS 5154
- 5 Year Warranty



### Technical Data

Max Pressure	DN15	24 Bar
	DN22 & DN28	20 Bar
	DN35 to DN54	17 Bar
Working Temperature	-10°C to 120°C	

### Pressure / Temperature



DN	15L	15ML	15	22	28	35	42	54
Ø	15.3	15.3	15.3	22.4	28.3	35.3	42.4	55.6
A	22	22	22	25	27	27	32	33
B	83.4	83.4	83.4	82.2	84.2	86.9	106.7	103.6
B1	97.1	97.1	97.1	99.5	104.4	111.9	136.2	138.6
C	72.5	72.5	72.5	82	95	122	138	161
C1	131.5	131.5	131.5	150	167	194	223	255
D	29.5	29.5	29.5	34	36	36	42.5	47
Kv	0.533	0.738	2.00	3.88	7.28	13.39	18.60	30.10
Kvs	0.6	1.1	2.3	5.3	9.2	19.0	22.1	42.3
Kgs	0.48	0.48	0.46	0.56	0.73	1.16	1.73	2.05

N.	Part Name	Materials
1	Valve Body	DZR Brass - CW602N-M
2	Bonnet	DZR Brass - CW602N-M
3	Stem for Shutter	DZR Brass - CW602N-M
4	Shutter Gasket	EPDM
5	Disc	DZR Brass - CW602N-M
6	Fixed Index	POM
7	Entrainer	Nylon 6
8	Knob	Nylon 6
9	Tenth Turn Index	POM
10	Memory Screw	Steel
11	Stem O-Ring	EPDM
12	Bonnet O-Ring	EPDM
13	Outlet Binder Point	Brass
14	Inlet Binder Point	Brass
15	Fixed Orifice	DZR Brass - CW602N-M
16	Joint	DZR Brass - CW511L-DW
17	O-Ring	EPDM
18	O-Ring	EPDM

Dimensions in mm

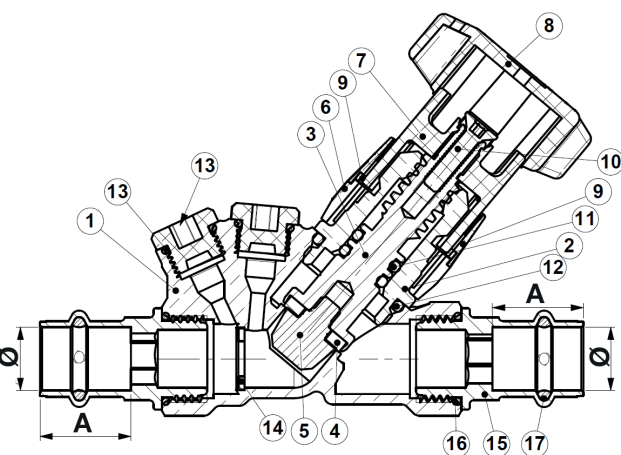
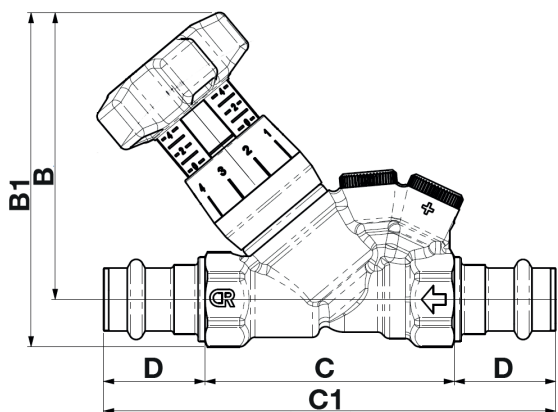
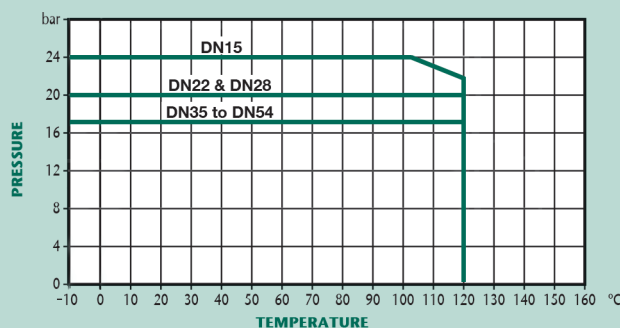
This data sheet is designed as a guide and should not be regarded as wholly accurate in every detail. We reserve the right to amend the specification of any product without notice.

## DZR Double Regulating Valve (DRV)

### Features

- Universal M & V Profile 15mm to 35mm
- Dedicated M Profile 42mm & 54mm
- Handwheel with shut off function and clear 360° reading
- Digital scale with lock function
- Conforms to BS 5154
- 5 Year Warranty

### Pressure / Temperature



### Technical Data

Max Pressure	DN15	24 Bar
	DN22 & DN28	20 Bar
	DN35 to DN54	17 Bar
Working Temperature	-10°C to 120°C	

DN	15L	15	22	28	35	42	54
Ø	15.3	15.3	22.4	28.3	35.3	42.4	55.6
A	22	22	25	27	27	32	33
B	83.4	83.4	82.2	84.2	86.9	106.7	103.6
B1	97.1	97.1	99.5	104.4	111.9	136.2	138.6
C	72.5	72.5	82	95	122	138	161
C1	131.5	131.5	150	167	194	223	255
D	29.5	29.5	34	36	36	42.5	47
Kv	0.533	2.00	3.88	7.28	13.39	18.60	30.10
Kgs	0.45	0.46	0.55	0.72	1.15	1.71	2.03

N.	Part Name	Materials
1	Valve Body	DZR Brass - CW602N-M
2	Bonnet	DZR Brass - CW602N-M
3	Stem for Shutter	DZR Brass - CW602N-M
4	Shutter Gasket	EPDM
5	Disc	DZR Brass - CW602N-M
6	Fixed Index	POM
7	Entrainer	Nylon 6
8	Knob	Nylon 6
9	Tenth Turn Index	POM
10	Memory Screw	Steel
11	Stem O-Ring	EPDM
12	Bonnet O-Ring	EPDM
13	Plug with O-Ring NBR	Nylon 6.6 / NBR 70SH
14	Fixed Orifice	DZR Brass - CW602N-M
15	Joint	DZR Brass - CW511L-DW
16	O-Ring	EPDM
17	O-Ring	EPDM

Dimensions in mm

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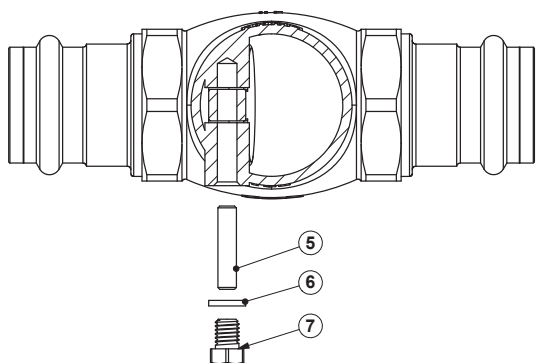
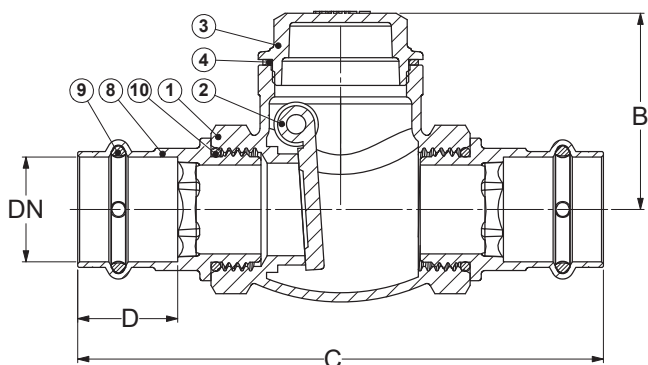
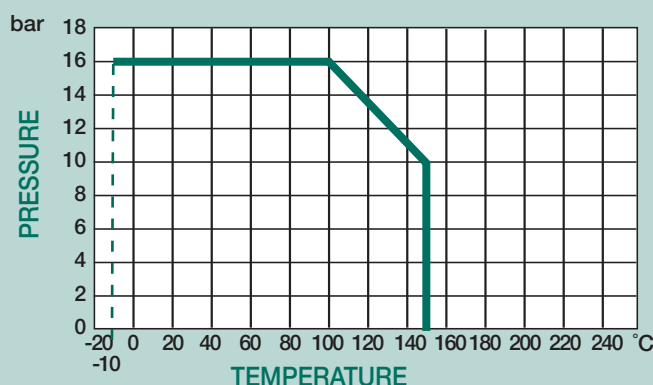


## PN16 Brass Swing Check Valve

### Features

- Universal M & V Profile 15mm to 35mm
- Dedicated M Profile 42mm & 54mm
- Brass Body
- EPDM 'O' Rings
- 5 Year Warranty

### Pressure / Temperature



### Technical Data

Max Pressure	16 Bar
Working Temperature	-10°C to +150°C

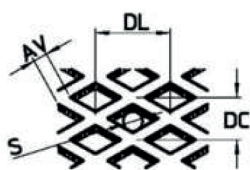
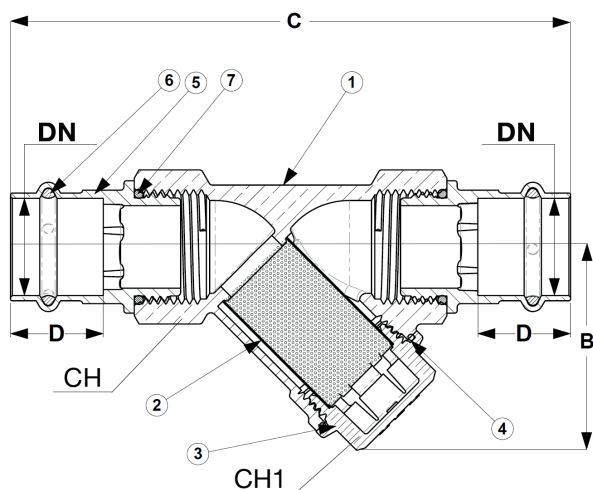
DN	15	22	28	35	42	54
B	42.5	46	53	61	62.5	70
C	111	130	142	156	172	208
D	22	25	27	27	32	37
Kgs	0.32	0.48	0.74	1.04	1.25	2.07

N.	Part Name	Materials
1	Body	Brass
2	Swing Disc	Brass
3	Plug	Brass
4	Gasket	NA1100 Black
5	Pin	Brass
6	Gasket	Vulkan
7	Screw	Brass
8	Adaptor	DZR Brass
9	O-Ring (Delta)	EPDM 70 PEROX
10	O-Ring	EPDM 70 PEROX

Dimensions in mm

This data sheet is designed as a guide and should not be regarded as wholly accurate in every detail. We reserve the right to amend the specification of any product without notice.





## Technical Data

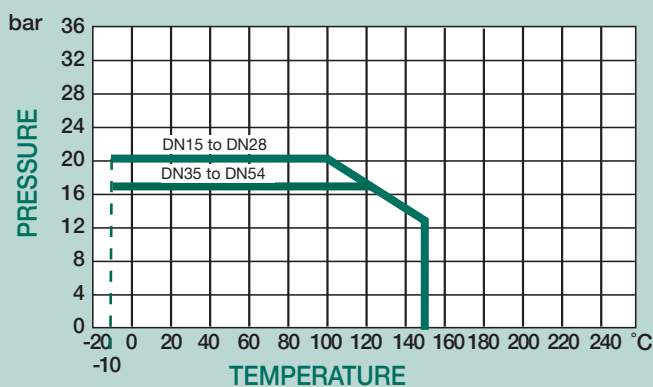
Max Pressure	DN15 to DN28	20 Bar
	DN35 to DN54	17 Bar
Working Temperature	-10°C to 150°C	

## PN20 DZR Brass 'Y' Type Strainer

### Features

- Universal M & V Profile 15mm to 35mm
- Dedicated M Profile 42mm & 54mm
- DZR Brass Body
- EPDM 'O' Rings
- Stainless Steel Strainer
- 5 Year Warranty

### Pressure / Temperature



DN	15x15	22x22	28x28	35x35	42x42	54x54
B	39	50	60	71	81.5	100
C	152	170	185	202	219	263
D	42	46.5	47	47	51.5	60
CH	28	33	40	51	56	71
CH1	18	22	29	34	39	55
AV	0.4	0.4	0.4	0.4	0.4	0.4
DL	2.5	2.5	2.5	2.5	2.5	2.5
S	0.25	0.25	0.25	0.25	0.25	0.25
DC	1.4	1.4	1.4	1.4	1.4	1.4
KV	3.4	7	10	16	24	35
Kgs	0.36	0.52	0.77	1.20	1.55	2.72

N.	Part Name	Materials
1	Body	DZR Brass
2	Strainer	Stainless Steel 304
3	Bonnet	DZR Brass
4	O-Ring	FKM70 Red
5	Joint	DZR Brass
6	O-Ring (Delta)	EPDM 70 PEROX
7	O-Ring	EPDM 70 PEROX

Dimensions in mm

This data sheet is designed as a guide and should not be regarded as wholly accurate in every detail. We reserve the right to amend the specification of any product without notice.

## 1. SERVICE RECOMMENDATIONS

Art. 55PRS ball valves are designed for direct connection to carbon steel and copper pipe work using standard cold pressure press tools. Art. 55PRS is suitable for sanitary and heating applications and for drinking water and compressed air networks.

## 2. FEATURES

- Quick & easy installation using standard press tools;
- Installation without the use of solder or soldering torch;
- Patented o-ring design assuring every connection to be pressed & sealed, avoiding installation errors;
- Integrated, compact design eliminating potential leak points;
- Cost effective and installation time reduction compared to threaded valves;
- Suitable for plumbing and heating applications: pressure class PN16 and temperature rating of 120°C;
- Made of DZR brass "CR" which guarantees added protection against corrosion;
- Available in the range DN15 to DN54.

## 3. CONNECTION TECHNIQUE

The press connection is made by inserting the pipe into the press fitting as far as the marked insertion depth. The connection is created by pressing, using an approved pressing tool.

During the pressing process a deformation takes place on two sections. The first section creates a permanent connection and provides mechanical pipe locking through the mechanical deformation of the press fitting and the pipe. On the second section the seal ring is deformed in its cross section and through its elastic properties creates the permanently tight joint.

## 4. SEALING RING PROFILE

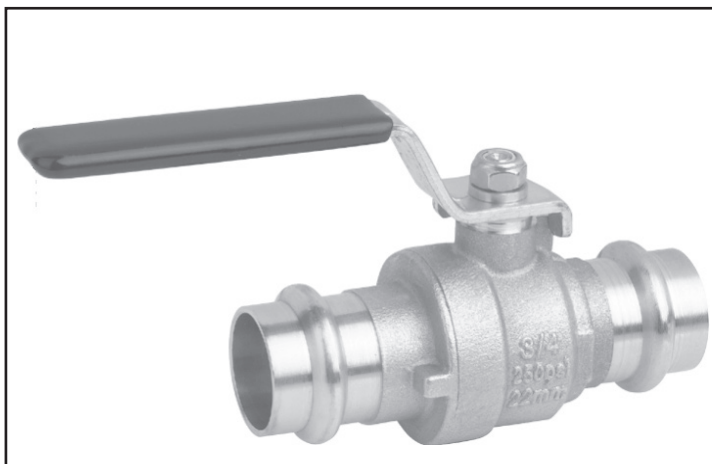
Traditional press fitting systems use round

sealing rings, which can easily be damaged by careless pipe insertion. Art. 55PRS uses a patented sealing ring with a lenticular profile which fits the press crimp groove.

This provides the following advantages:

- 20% enlargement of the sealing surface area;
- Reduction of the risk of the sealing ring being pressed out or damaged.

The black EPDM Perox sealing ring in the range 15 to 54 mm is supplied with an additional safety feature that during pressure tests will report a leakage in case of accidentally un-pressed connections.



## 5. PRESSING TOOLS

Basically, pressing tools consist of pressing machine and pressing jaws or collars/chains. Many of the pressing jaws/collars can generally be used with the pressing machines from one manufacturer. Additionally, many manufacturers of pressing tools have standard jaw connections that pressing jaws from other manufacturers can also be used. All metallic press fitting systems have a pressing profile on the press fittings which matches the one of the pressing jaws/collars. For this reason it is necessary to have the information of the jaws to be used by the manufacturer of the press fittings.

**For Art. 55PRS pressing, only jaws with "M" profile shall be used.**

Note: in addition, it is important to follow exactly the

maintenance and servicing instructions issued by the pressing tool manufacturer.

## 6. PIPES - CUTTING TO LENGTH AND DEBURRING

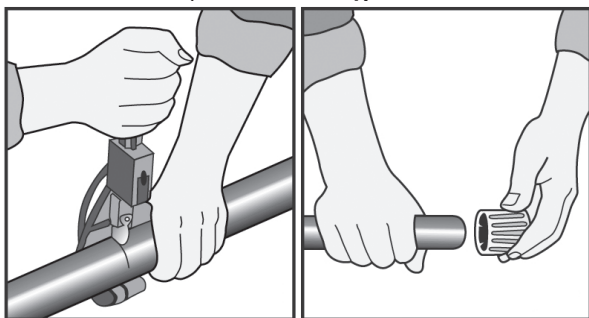
Pipes should be cut to length using professional pipe cutters suitable for the material in use.

Alternatively, fine-tooth hacksaws or suitable electric saws may be used. Avoid the use of:

- Tools which may cause tarnishing during the cutting operation;
- Oil-cooled saws;
- Flame cutting or angle grinders.

After cutting, carefully deburr the pipe, both inside and outside to avoid any damage to sealing ring when inserting the pipe into the press fitting.

Deburring can be carried out using manual deburring tools which are suitable for the material in use, whilst for larger dimensions



## 7. MARKING THE INSERTION DEPTH/ STRIPPING

Check that the seal rings in the valve are clean, undamaged and placed correctly. Do not oil or grease the seal rings. Insert pre-prepared pipe end into the valve and push it until the pipes stop, marking the depth of the engagement. Ensure that the insertion depth mark on the pipe corresponds with the press fitting end, otherwise the mechanical stability of the

connection cannot be guaranteed. Ensure to have free area around the pipe to operate with the press jaws.

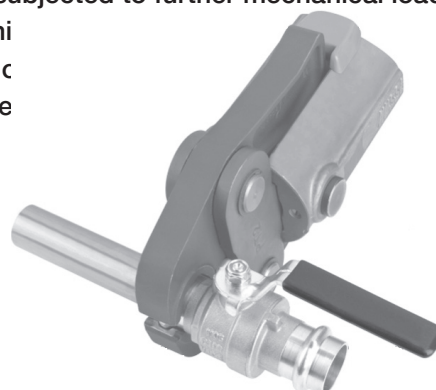
## 8. PRESSING

Insert the pipe by pushing firmly with a twisting action until it fits tight against the base of the valve end. If the tolerances are so narrow that additional force is required to insert the pipe into the press fitting, then water or soapy water may be used as a lubricant. Oil and grease are not permitted for use as lubricants. Pressing is carried out using suitable pressing tools and dimension-matching pressing jaws or collars/ chains.

**For Art. 55PRS pressing, only jaws with “M” profile shall be used.**

The matching pressing jaw is mounted in the pressing machine, or the appropriate collar/chain mounted on the fitting, depending on the dimensions of the press fitting. The slot of the pressing jaw/collar must be positioned exactly over the press fitting formed end. After pressing, the complete connection should then be checked to ensure that the work has been carried out properly and that the insertion depth is correct. The installer should also ensure that all connections

have actually been pressed. The pressing points shall not be subjected to further mechanical loading. The positioni  
sealing c  
place be





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