

1/8" - 4" BSP

- Ideally suited for most industrial applications
- Easy installation, simple operation and maintenance free
- Full bore passage giving minimum flow resistance



#### **Technical Data**

#### Medium:

Compressed air, water, inert gases and any other fluid compatible with the valve materials

## Port Sizes:

 $G^{1/8}$ ,  $G^{1/4}$ ,  $G^{3/8}$ ,  $G^{1/2}$ ,  $G^{3/4}$ , G1,  $G1^{1/4}$ ,  $G1^{1/2}$ , G2,  $G2^{1/2}$ , G3, G4.

#### Operating Pressure:

See individual details

#### Operating Temperature:

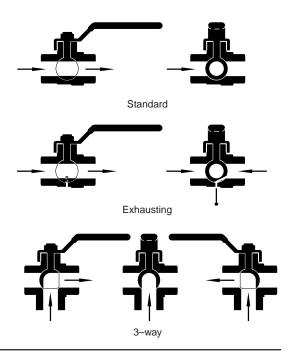
Refer to table over the page

#### Materials

Nickel plated brass body to UNI 5705-65, virgin PTFE seats, virgin PTFE, Viton or Nitrile seals, chromium plated brass ball, zinc plated steel handle with PVC grip (plastic handle on mini ball range).

## **Ordering Information**

To order quote the appropriate product numbers from the tables on the following pages.



#### **General Information**

Symbol	Series	Туре	Application	Materials		Max	Temp	Thread
				Body	Seats & Seals	Pressure (bar)	Range	Standards
12 2 10	6011	Mini	General, light duty	Brass	PTFE & Nitrile "O" ring	10	-10 to +90°C	ISO 228/1
12 2 10	6018	Lockable Exhausting	General, with exhaust	Brass	PTFE	13,6	4-60°C	ISO 228/1
12 2 10	6021	Standard	General purpose	Brass	PTFE & Viton "O" ring	45 to 10	-20 to +150°C	ISO 228/1
12 P 2 10	6021	Three Way	General diverting	Brass	PTFE & Nitrile "O" ring	25 to 16	−15 to +150°C	ISO 228/1
12 20 10	6021	Exhausting	General with exhaust	Brass	PTFE	40 to 64	-20 to +100°C	ISO 228/1
12 2 10	6041	Standard	Commercial gas and general	Brass	PTFE	55 to 20	−20 to +150°C	ISO 228/1

6011 Series: Light duty in-line brass ball valves suitable for a wide variety of low pressure industrial uses.

6018 Series: Medium duty in-line brass exhausting ball valves. Venting action & lockout design adds safety feature to valve.

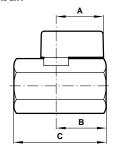
6021 Series: Medium duty in-line brass ball valves for most applications. Available as a standard valve, a three way diverting

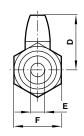
valve or with a downstream exhaust option.

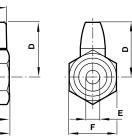
6041 Series: Special, high quality in-line ball valves with approvals from British Gas, DIN-DVGW, Danish Gas, Svenska

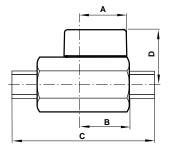
Gasfoereningen. Suitable for gas and water applications as well as more general industrial uses.

### 6011 Series Miniball

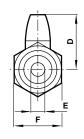








В



# Reduced bore, female/female

Model	Thread size	Max. Press.	А	В	С	D	E	F
601112118	G <sup>1</sup> /8	10	19	20	37	22	5,5	19
601112128	G <sup>1</sup> / <sub>4</sub>	10	19	20	37	22	5,5	19
601112138	G <sup>3</sup> /8	10	19	21	41	24	8,0	21
601112148	G <sup>1</sup> / <sub>2</sub>	10	22	25	48	30	10,0	25

## Reduced bore, male/female

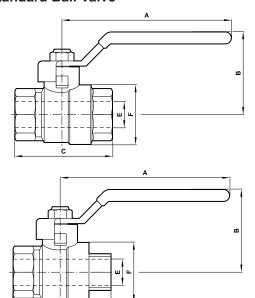
Model	Thread size	Max. Press.	Α	В	С	D	E	F
601112218	G <sup>1</sup> / <sub>8</sub>	10	19	20	37	22	5,5	19
601112228	G <sup>1</sup> / <sub>4</sub>	10	19	20	37	22	5,5	19
601112238	G <sup>3</sup> /8	10	19	21	41	24	8,0	21
601112248	G <sup>1</sup> / <sub>2</sub>	10	22	25	48	30	10,0	25

#### Reduced bore, male/male

Model	Thread	Max.	Α	В	С	D	E	F
	size	Press.						
601112318	G <sup>1</sup> /8	10	19	20	48	22	5,5	19
601112328	G <sup>1</sup> / <sub>4</sub>	10	19	20	48	22	5,5	19
601112338	G <sup>3</sup> /8	10	19	21	53	24	8,0	21
601112348	G <sup>1</sup> / <sub>2</sub>	10	22	25	62	30	10,0	25

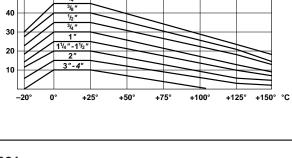


6021 Standard Ball Valve



# Pressure/Temperature diagram

Bar 50



## Full bore, female/female

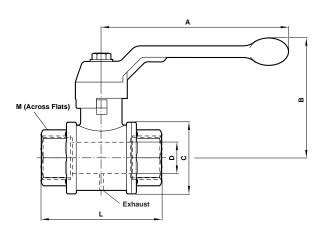
Model	Thread size	Max. Press.	А	В	С	E	F
602112128	G <sup>1</sup> / <sub>4</sub>	45	85	36	48	8	23
602112138	G <sup>3</sup> / <sub>8</sub>	40	85	36	49	10	24
602112148	G <sup>1</sup> / <sub>2</sub>	35	85	40	60	15	30
602112168	G <sup>3</sup> / <sub>4</sub>	30	105	47	69	20	38
602112188	G1	25	105	51	83	25	46
6021121A8	G1 <sup>1</sup> / <sub>4</sub>	20	130	63	96	32	58
6021121B8	G1 <sup>1</sup> / <sub>2</sub>	20	130	69	106	40	70
6021121C8	G2	16	165	83	129	50	86
6021121D8	G2 <sup>1</sup> / <sub>2</sub>	16	248	99	159	65	111
6021121E8	G3	10	248	110	182	80	135
6021121F8	G4	10	248	129	219	100	167

## Full bore, male/female

1	Model	Thread size	Max. Press.	А	В	С	E	F
	602112228	G <sup>1</sup> / <sub>4</sub>	45	85	36	50	8	23
(	602112238	G <sup>3</sup> / <sub>8</sub>	40	85	36	54	10	24
(	602112248	G <sup>1</sup> / <sub>2</sub>	35	85	40	65	15	30
(	602112268	G <sup>3</sup> / <sub>4</sub>	30	105	47	75	20	38
	602112288	G1	25	105	51	86	25	46
	6021122A8	G1 <sup>1</sup> / <sub>4</sub>	20	130	63	99	32	58

For T handle valves, substitute 2 for 1 at 4th digit.

# 6021 Exhausting Ball Valve



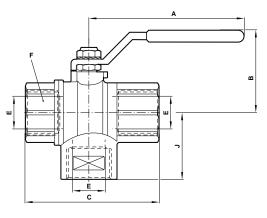
# Full bore, female/female

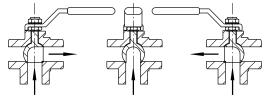
Model		Max.	А	В	С	D Thur David	L	M
	size	Press.				Thro Bore		A/F
602113128EX	G <sup>1</sup> / <sub>4</sub>	64	100	61	29	8	52	22
602113138EX	G <sup>3</sup> /8	64	100	61	29	10	54	22
602113148EX	G <sup>1</sup> / <sub>2</sub>	50	100	64	36	15	69	27
602113168EX	G <sup>3</sup> / <sub>4</sub>	50	120	76	45	20	77	33
602113188EX	G1	50	120	80	54	25	89	40
6021131A8EX	G1 <sup>1</sup> / <sub>4</sub>	40	150	98	65	32	103	50

For T handle valves, substitute 2 for 1 at 4th digit.



6021 3-Way Ball Valve



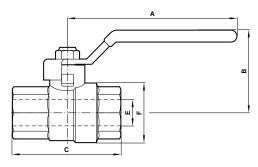


# Full bore, female/female/female

Model	Thread size	Max. Press.	А	В	С	E	F	J
602114428	G <sup>1</sup> / <sub>4</sub>	25	98	42	52	10	22	26,0
602114438	G <sup>3</sup> /8	25	98	42	52	10	22	26,0
602114448	G <sup>1</sup> / <sub>2</sub>	25	98	45	64	15	27	33,5
602114468	G <sup>3</sup> / <sub>4</sub>	16	118	57	74	20	32	39,5
6021144A8	G1 <sup>1</sup> / <sub>4</sub>	10	118	66	100	32	50	54,5

Test specification differs from standard. Please consult our Technical Service for futher details.

6041 Gas Approved Ball Valve

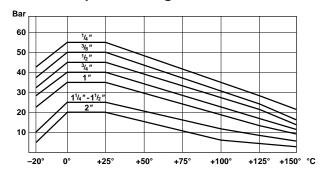


# Full bore, female/female

Model	Thread size	Max. Press.	А	В	С	E	F
604112128	G <sup>1</sup> / <sub>4</sub>	55	85	41	48	8	23
604112138	G <sup>3</sup> / <sub>8</sub>	50	85	41	49	10	24
604112148	G <sup>1</sup> / <sub>2</sub>	45	85	44	61	15	32
604112168	G <sup>3</sup> / <sub>4</sub>	40	105	53	70	20	40
604112188	G1	35	105	57	84	25	48
6041121A8	G1 <sup>1</sup> / <sub>4</sub>	25	130	70	98	32	60
6041121B8	G1 <sup>1</sup> / <sub>2</sub>	25	130	76	108	40	72
6041121C8	G2	20	165	92	130	50	88

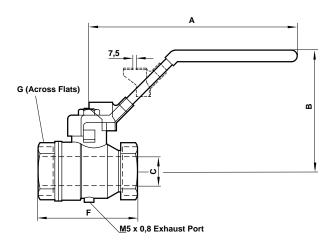
For T handle valves, substitute 2 for 1 at 4th digit.

# Pressure/Temperature diagram





## 6018 **Lockable Exhausting Ball Valve**



## Full bore, female/female

Model	Thread	Max.	A	В	С	F	G
	size	Press.			Thro Bore		A/F
601812128	1/4	13,6 bar	93	45	8	44	20
601812138	3/8	13,6 bar	93	45	9	44	20
601812148	1/2	13,6 bar	93	50	14	58	24
601812168	3/4	13,6 bar	114	57	19	64	30
601812188	1	13,6 bar	114	61	24	81	40

Lever lockable only in closed position. Standard handle accepts Ø 7mm shackle.

Test specification differs from standard. Please consult our Technical Service for futher details.

#### Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not

within published specifications, consult Norgren.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products where applicable.