# Modular Blast Resistant Valves – Type BV-5028

EEP's Modular Blast Resistant Valves - Type BV-5028 are used when a large airflow is required. They are suitable for both inlet and exhaust air and have been designed to with-stand loads of

2 to 6 MPa (20 bar to 60 bar) from both sides.

The modular BV-5028 blast valves can with-stand temperatures of up to 80°C.

EEP manufacture 3 versions: BV 5028/350, 5028/250 and 5028/150.
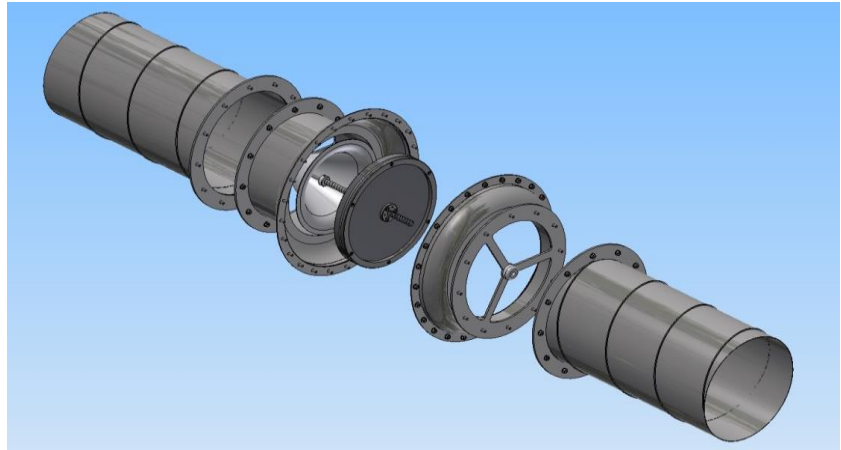
Design & Materials

The Blast Valve consists of modules fitted into wall frames, either vertically or horizontally. The Blast Valve closes upon impact of the blast and during the reverse pressure phase. When the blast has passed, the valve returns to its open position.
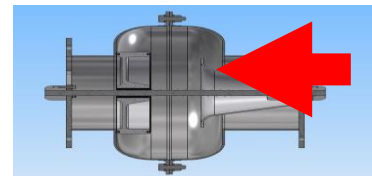
The frames are made from steel and are designed for casting into concrete. If required they can also be supplied for bolting onto, or welding into, steel walls.
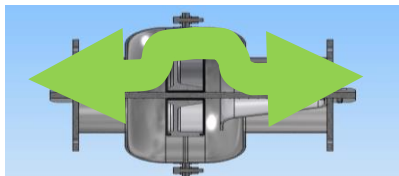
Blast valve NORMAL position
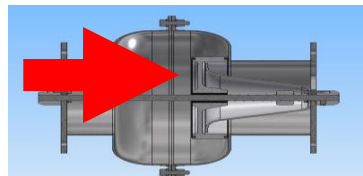
Blast valve CLOSED position during blast wave POSITIVE phase

Blast valve CLOSED position during blast wave NEGATIVE phase

Surface Treatment

Blast Valves are constructed using stainless steel and a stainless-steel sealing disc for a high level of corrosion protection. Other finishes are available upon request.
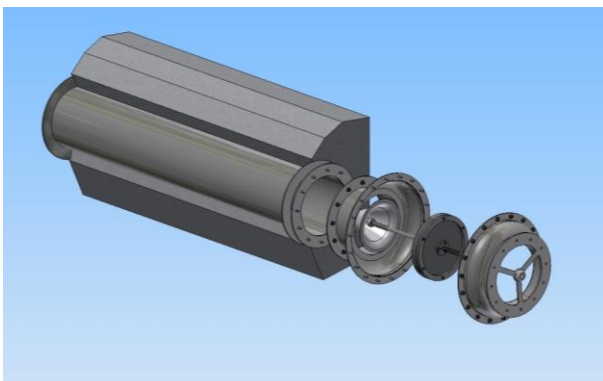
Air Flow Capacity

The air volume at the required pressure drop will determine the total number of valves required.

The chart below shows flow rates relating to one valve. The airflow/pressure drop is the same for both inlets and outlets.

For Further Information Visit: www.euro-emc.co.uk
info@euro-emc.co.uk

BLAST/GEN/TECH 7004 04/21V1

Modular Blast Resistant Valves – Type BV-5028

Blast Rating

The valves have been designed and tested to withstand loads of up to 2 MPa (20 bar) and short duration loads of up to 6 MPa (60 bar).

Accessories

The wall frames can be fitted with particle filters and shields for protection against weather and shrapnel. Adapter boxes can be installed for use with rectangular and square ducts.

Specifications

Air flow rate:

Model	Duct Dia (mm)	Wall Installation Airflow (m3/hr) @	Pressure differential Pa
BV-5028/150	150	750	300
BV-5028/250	250	2050	300
BV-5028/350	350	3360	300

Incident pressure durability:	2 – 6 MPa (20 – 60 bar)
Reflected pressure durability:	2 – 6 MPa (20 – 60 bar)
Working temperature:	-25 - +80°C
Shock resistance:	60 g
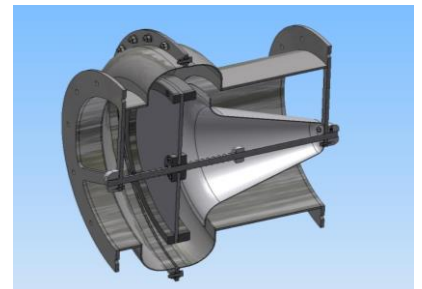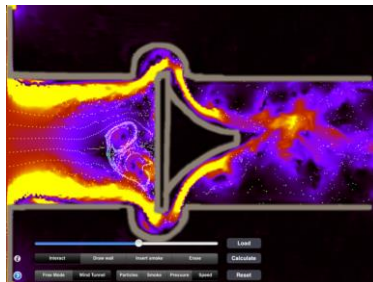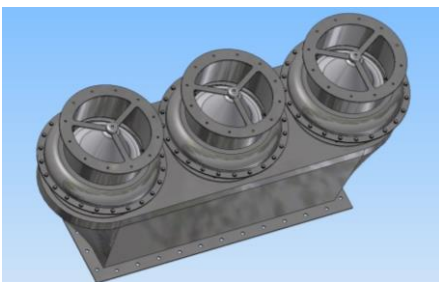
Modular Blast Resistant Valves – Type BV-5028

BV-5028/150

PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	5028-205	150 INLET DEFLECTOR CONE
2	1	5028-207	150 VALVE SHAFT
3	1	5028-208	150 SPRING CONTROL COLLAR
4	2	5028-209	150 SHAFT SUPPORT BUSH
5	1	5028-211	150 BLAST VALVE OUTLET ASSEMBLY
6	1	5028-212	150 BLAST VALVE DISC ASSEMBLY
7	1	5028-213	150 BLAST VALVE INLET ASSEMBLY
8	6	BS 3692 - M4 x 12	Precision hexagon bolts and screws
9	6	BS 4320 - M4 (Form A)	Bright metal washers - Metric series
10	3	BS 4168 - M5 x 10	Hexagon socket grubscrew with flat point
11	12	BS 3692 - M8 x 20	Precision hexagon bolts and screws
12	12	BS 3692 - M8	Precision hexagon nuts
13	24	BS 4320 - M8 (Form A)	Bright metal washers - Metric series
14	2	SPRING 150	CENTERING SPRING

OUTLET SIDE

Ø230.00   Ø340.00

264.00
224.00

A-A (1 : 2)

34.50   34.50   40.00

INLET SIDE

Ø230.00
Ø190.00 PCD
8 x Ø10
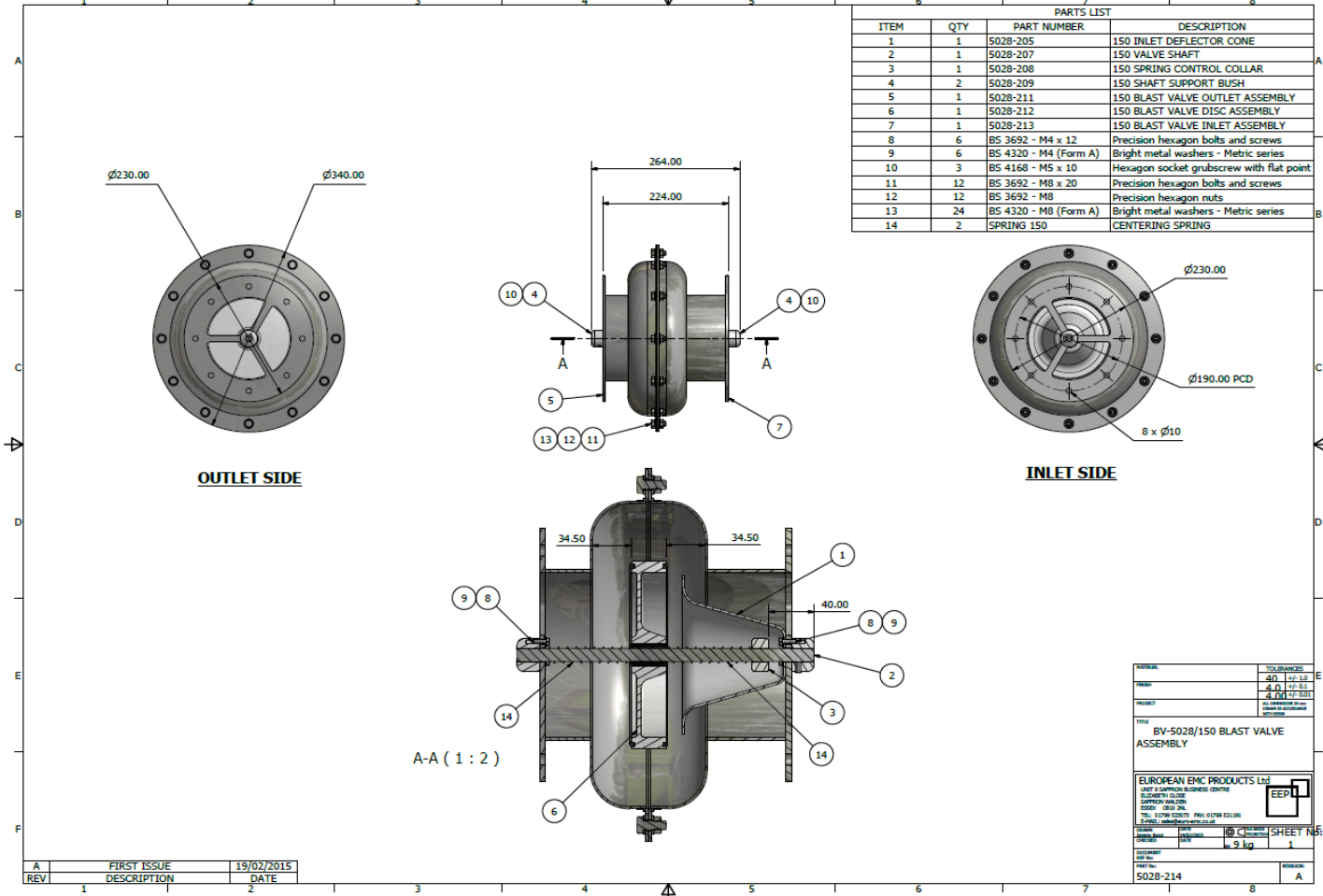
EUROPEAN EMC PRODUCTS Ltd

BV-5028/150 BLAST VALVE ASSEMBLY

REV	DESCRIPTION	DATE
A	FIRST ISSUE	19/02/2015

PART No. 5028-214   REVISION A

For Further Information Visit: www.euro-emc.co.uk
info@euro-emc.co.uk

BLAST/GEN/TECH 7004 04/21V1

Modular Blast Resistant Valves – Type BV-5028

EEP
European EMC Products

BV-5028/250

A-A (1 : 4)
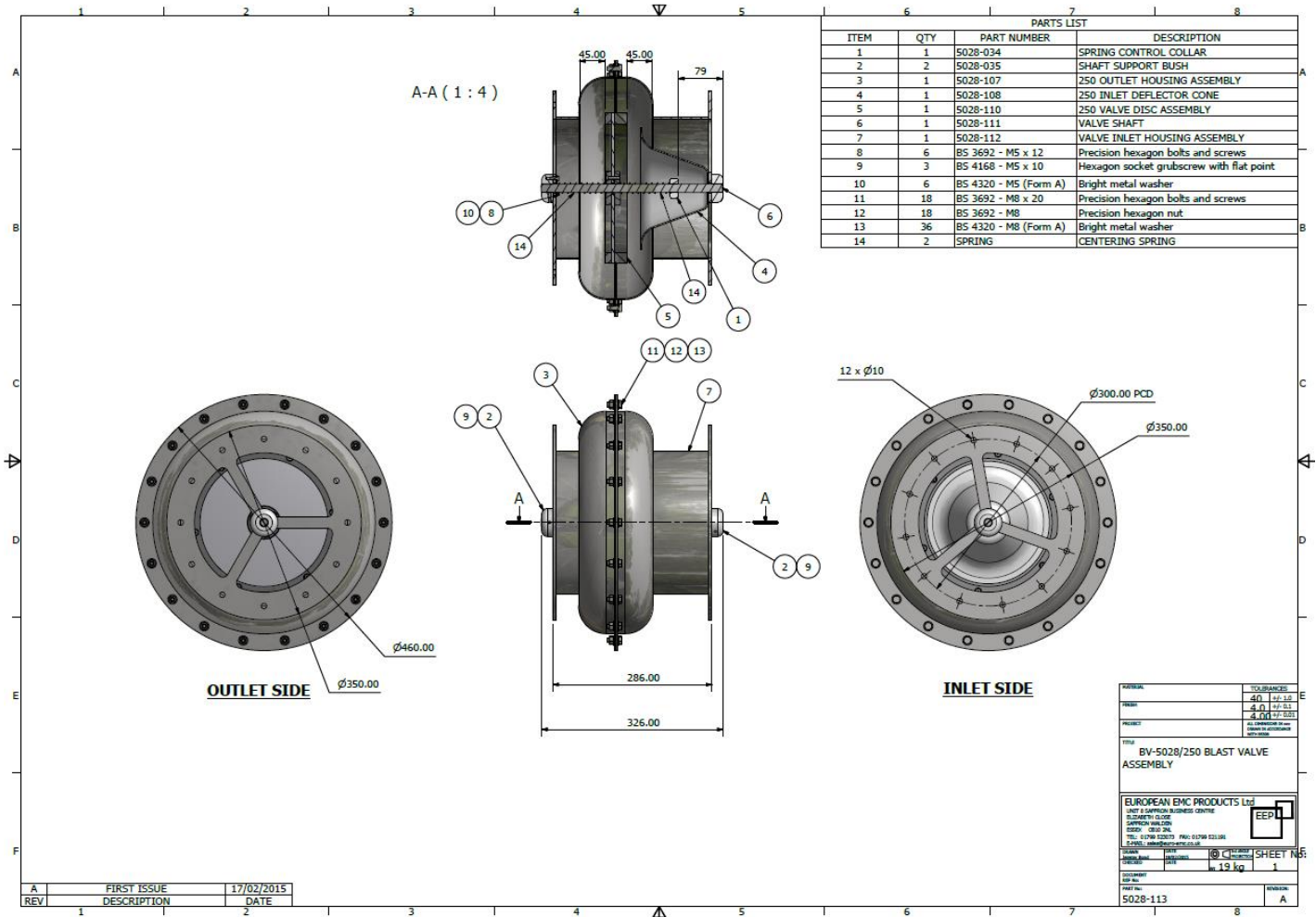
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	5028-034	SPRING CONTROL COLLAR
2	2	5028-035	SHAFT SUPPORT BUSH
3	1	5028-107	250 OUTLET HOUSING ASSEMBLY
4	1	5028-108	250 INLET DEFLECTOR CONE
5	1	5028-110	250 VALVE DISC ASSEMBLY
6	1	5028-111	VALVE SHAFT
7	1	5028-112	VALVE INLET HOUSING ASSEMBLY
8	6	BS 3692 - M5 x 12	Precision hexagon bolts and screws
9	3	BS 4168 - M5 x 10	Hexagon socket grubscrew with flat point
10	6	BS 4320 - M5 (Form A)	Bright metal washer
11	18	BS 3692 - M8 x 20	Precision hexagon bolts and screws
12	18	BS 3692 - M8	Precision hexagon nut
13	36	BS 4320 - M8 (Form A)	Bright metal washer
14	2	SPRING	CENTERING SPRING

45.00 45.00   79

12 x Ø10
Ø300.00 PCD
Ø350.00

Ø460.00
Ø350.00

OUTLET SIDE

286.00
326.00

INLET SIDE

BV-5028/250 BLAST VALVE ASSEMBLY

EUROPEAN EMC PRODUCTS Ltd
UNIT 8 SAFFRON BUSINESS CENTRE
ELIZABETH CLOSE
SAFFRON WALDEN
ESSEX   CB10 2HL
TEL: 01799 523073 FAX: 01799 521591
E-MAIL: sales@euro-emc.co.uk

19 kg   SHEET No: 1

A	FIRST ISSUE	17/02/2015
REV	DESCRIPTION	DATE

PART No.
5028-113   REVISION A

bsi
ISO 9001
Quality
Management
Systems
CERTIFIED

BLAST/GEN/TECH 7004 04/21V1

Modular Blast Resistant Valves – Type BV-5028

BV-5028/350

A-A (1 : 4)

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	5028-004	VALVE DISC ASSEMBLY
2	1	5028-034	SPRING CONTROL COLLAR
3	2	5028-035	SHAFT SUPPORT BUSH
4	1	5028-036	VALVE SHAFT
5	1	5028-037	OUTLET HOUSING ASSEMBLY
6	1	5028-039	INLET DEFLECTOR CONE
7	1	5028-040	VALVE INLET HOUSING ASSEMBLY
8	6	BS 3692 - M5 x 12	Precision hexagon bolts and screws
9	3	BS 4168 - M5 x 10	Hexagon socket grubscrew with flat point
10	6	BS 4320 - M5 (Form A)	Bright metal washer
11	24	BS 3692 - M8 x 20	Precision hexagon bolts and screws
12	24	BS 3692 - M8	Precision hexagon nut
13	48	BS 4320 - M8 (Form A)	Bright metal washer
14	2	SPRING	CENTERING SPRING

45.00 45.00

138

Ø560.00

Ø450.00

346.00

OUTLET SIDE

12 x Ø10

Ø450.00

Ø400.00 PCD

INLET SIDE

TOLERANCES

40 +/- 1.0
4.0 +/- 0.1
4.00 +/- 0.01

TITLE
BV-5028/350 BLAST VALVE ASSEMBLY

EUROPEAN EMC PRODUCTS Ltd

32 kg   SHEET No 1

PART No
5028-038

REVISION
A

A	FIRST ISSUE	17/02/2015
REV	DESCRIPTION	DATE

For Further Information Visit: www.euro-emc.co.uk
info@euro-emc.co.uk

BLAST/GEN/TECH 7004 04/21V1

BLAST VALVE TO DUCT CONNECTOR
ADAPTOR BOXES

400

1100

ADAPTOR DUCT TO SUIT
THE OPENINGS ON SITE

3 OFF BV-5028/350 ASSEMBLIES

580.00   580.00

Ø560.00

804.00

458.00

RECTANGULAR ADAPTOR ASSEMBLY

EUROPEAN EMC PRODUCTS Ltd
UNIT 3 SAFFRON BUSINESS CENTRE
ELIZABETH CLOSE
SAFFRON WALDEN
ESSEX CB11 3HX
TEL: 01799 523076 FAX: 01799 521391
E-MAIL: sales@euro-emc.co.uk

152 kg

SHEET No 1

INLET ADAPTOR ASSEMBLY

A	FIRST ISSUE	02/04/2015
REV	DESCRIPTION	DATE

For Further Information Visit: www.euro-emc.co.uk
info@euro-emc.co.uk

bsi
ISO 9001
Quality
Management
Systems
CERTIFIED

BLAST/GEN/TECH 7004 04/21V1

EEP

European EMC Products

Product Datasheet

About Us

Established in 1996, European EMC Products (EEP) are an established British company whose experience and understanding of the science of shielding makes it an ideal partner in whom you can place your trust with confidence. The purpose of installing EEP shielding systems is to protect people and equipment against the threats posed by electromagnetic and radio frequency (RF) interference, radiation, magnetic fields and electromagnetic pulses. Our diverse range of turnkey products and services, including design, project management, testing and consultancy are delivered across multiple sectors to an international client base.

Quality

European EMC Products Limited are registered to BS EN ISO 9001:2015, Certificate Number FS38901.
Registered Scope: The design, assembly, installation, servicing and testing of RF Shielded Structures and equipment including EMI Shielding, Blast Doors, Gas Tight Doors and specialised mobile Electromagnetic Pulse Protection (EMPP) containers.
Radio Frequency, Magnetic Shielding and Quench systems for MRI (Magnetic Resonance Imaging) scanners.
The design, assembly and installation of Ionising Radiation Protection facilities.
The design, manufacture and installation of LED lighting systems for medical applications.
EEP Filters Limited are registered to BS EN ISO 9001:2015, Certificate Number FS38901.
Registered Scope: The design, manufacture, management of installation and testing of high performance EMC and EMP Power and Data Line Filters.

Disclaimer

NB: All the information provided within this datasheet is for reference only. Product specifications are subject to change without notice.

For Further Information Visit: www.euro-emc.co.uk

info@euro-emc.co.uk

bsi ISO 9001 Quality Management Systems CERTIFIED