



OMEGA GROUP

OMEGA VALVES MFG. CO. | OMEGA FLEXOJOINT MFG. CO.

ALL KINDS OF VALVES & EXPANSION BELLOWS

Specialist in Manufacturing

Valves, Expansion Joints, Bellows, Flanges, Sluice Gates, and Pipe Fittings

Always Insist on **OMEGA**



Experience that counts
Design that delivers
Service that makes you smile



OMEGA
B R A N D

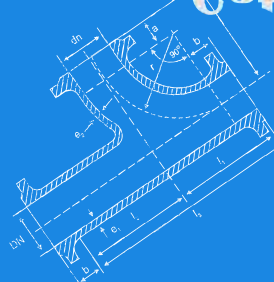
For Air, Water, Oil, Gas & Steam Uses



Look at our product gallery
Log in to: www.omegavalves.net



Catalogue V 1.16



Screw
Conveyors

Thruster
Brake

Expansion
Joints

Bellows

Valves

Sluice
Gates

Couplings

Dampers



WELCOME AT OMEGA GROUP

We have bifurcated our entity for smooth operations & service into two wings- namely,

OMEGA FLEXOJOINT MFG. CO.

[For All Bellows & Expansion Joints]

OMEGA VALVES MFG. CO.

[For All Valves, Gates, Dampers, Conveyors & Gear Drives]

:: OUR PHILOSOPHY :: OUR QUALITY STATEMENT

Obeying strict quality measures. We Strive to deliver products to our Clients that are strictly manufactured as per various norms and guidelines of engineering standards.

Making no stones unturned in respect of TESTING all our products thus certified by Qualified Engineering Professionals only.

Efficient work team makes it possible to deliver quality products.

Goal of customer satisfaction is always our prime consideration and one of our value service moto.

Availability of after sales service makes us unique in this field.

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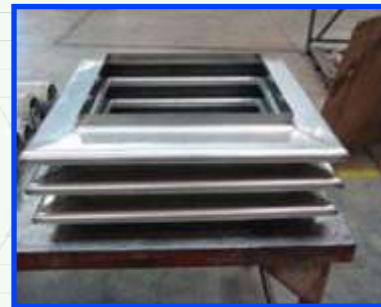
STEEL BELLOWS



OMEGA Steel bellows and expansion joints are designed to absorb and reduce vibration and relieve structural stress from working under pressure, extreme temperatures, and other variables. We specialize in thin-wall bellows, and welcome prototyping, one-offs, and other low-volume production, as well as large volume production orders.

Our metal bellows are made to meet customer requirements for movement, pitch, bend radius, and other design considerations. With in-house tool making capabilities, OMEGA can create custom metal bellows that match your exact specifications.

We can produce metal bellows in sizes from 6mm ID. through 5000 mm ID., and with wall thicknesses from 0.3 mm single-ply to 0.8 mm multiply. Our precision machining capabilities enable us to maintain tolerances within a few thousandths of a milli-metre.



RUBBER EXPANSION BELLOWS



OMEGA Rubber Expansion Bellows are designed to take care of misalignment, neutralize movement factor and minimize noise and vibration in pipelines and Ducts. They reasonably neutralize the sound and vibration generated from other equipment/machineries in the plant items in the same service building. This Rubber bellows can also be used for many other applications like water, oils, chemicals, gases and in the food industry depending upon the grade of rubber employed.

Rubber bellows are available from 25mm to 2000 mm n.b., and generically supplied complete with electroplated carbon steel or Mild Steel backing flanges, Retainer Rings, Stretcher Plates, Control Units Etc. Flanges are drilled to suit any standard type. Specially drilled flanges can also be supplied for special cases.

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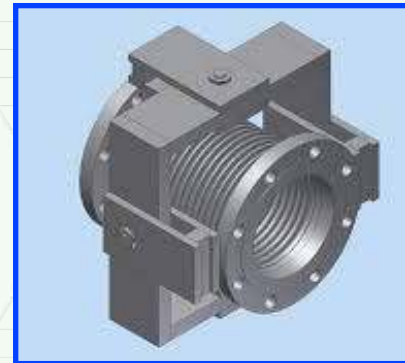
DOUBLE AXIAL BELLOWS



A Double Axial Bellow consists of two bellows joined by a common connector which is anchored to some rigid part on the installation by means of an anchor base. The anchor base may be attached to the common connector either at installation or at time of manufacture. Each bellows acts as a single expansion joint and absorbs the movement of the pipe section.

GIMBAL BELLOWS

OMEGA Gimbal Bellow can be easily paired with Gimbal Expansion Bellows to accommodate lateral deflection in any plane. The arrangement easily accommodates variable pressure thrusts for varied planes. Our range of gimbal planes is appreciated for its unique features of corrosion resistance, durability, high strength and optimum performance.



UNIVERSAL EXPANSION BELLOW



SS EXPANSION BELLOW



SS EXPANSION BELLOW



WIRE BRAIDED HOSE



WIRE BRAIDED HOSE



WIRE BRAIDED HOSE

GALLERY DISPLAY : OMEGA EXPANSION BELLOWS



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FABRIC EXPANSION BELLOWS



OMEGA Fabric Expansion Joints are designed to provide: Protection of duct work and other hardware from the effects of thermal expansion absorb expansion, vibration and when specified, installation misalignment. Minimise transmitted loads to the Turbine outlet flange and by their varying construction, Expansion Joints.'s also offer excellent acoustic properties. Primarily designed for applications with increased operating temperatures, over and above those accommodated by both our single ply Flexible Connections and higher rated Multi-Layer Seals. These applications include Gas Turbine Exhaust Systems.

FABRICATED EXPANSION BELLOWS



OMEGA is a leading manufacturer and supplier of Fabricated Expansion Bellow which have topnotch quality. These Fabricated Expansion Bellow could easily absorb the movements which are caused as the result of thermal operations. In addition to this, these expansion bellows are dimensionally stable and give consistent performance for long period of time. Apart from this, these fabric expansion bellows adhere to the industry code of conduct. Features: Powerful, Long lasting, Resistant to unwanted factors.

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GEAR COUPLING



The OMEGA Gear Couplings are normally employed to supply mechanically power between two rotating shafts which need to transmit a torque in a torsionally rigid way. The torque is transmitted from driving shaft to driven shaft through Hub to Cover then Cover to cover and lastly from cover to Hub by means of a set of Bolt.

OMEGA Gear couplings are flexible and accommodate the misalignment of connecting shafts. Gear couplings compensating both installation misalignment and in-built mis-alignment developed driving and driven equipment. Gear couplings are flexible because teeth inside the cover and teeth on hubs are floating so that they can compensate the misalignment.

RESILIENT COUPLING

OMEGA Resilient couplings are Globally accepted by all engineering sectors for its unique shock absorbing and detuning properties, Resilient Couplings have earned the reputation of being ideal for drives where trouble-free operation is essential. The coupling acts as a mechanical fuse for the drive system, helps in altering the torsional vibration frequency, and prevents build up of resonance in the system. Ranging from various applications in Industries like power, steel, sugar, paper, mines, chemical, etc., where reliability is of paramount importance, OMEGA'S standard designs range from .005 H.P. to 50 H.P. per R.P.M. However, much larger couplings of 2,000 H.P. per R.P.M. have been, and can be, supplied.



PIN & BUSH COUPLING

The OMEGA Bush type Flexible Coupling is of the cushioned drive type, transmitting the torque through high tensile steel bolts to the machine input. Highly developed rubber compounds are used in bushes to absorb shock, torsional vibrations & slight misalignments.

Simple and compact in construction, Wellman Pin Bush Couplings are capable of transmitting high torques at maximum speeds. The flanges are manufactured from cast iron I.S. 210 Grade FG 200. This type of coupling permits drives in either direction and requires neither lubrication, nor adjustment after fitting. The flexible bushes remain unaffected by water, dust and atmospheric conditions.

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JAW SHAFT COUPLING

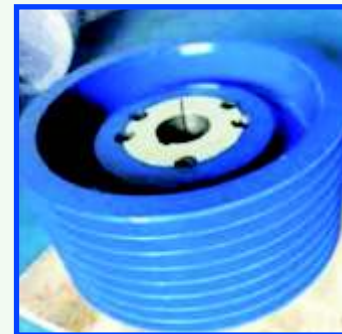


OMEGA JAW shaft couplings are available in steel, cast iron and aluminium and can come with other requested materials to suit shaft sizes from 6mm to 100mm or supplied pilot bored. These are low cost, no fuss shaft couplings. The curved jaw coupling design consists of an elastic "spider" and two hubs. The spider, made of an advanced polyurethane material, provides dampening of impulse loads, minimizing shock to the motor and other sensitive equipment.

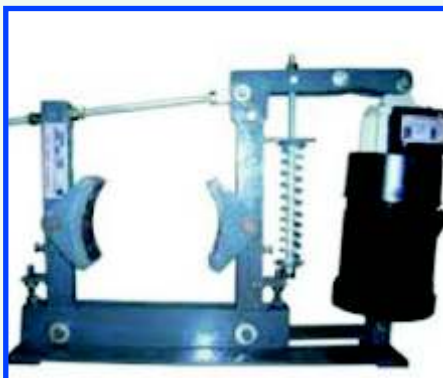
These spiders allow the user to customize the jaw coupling's performance. Selecting soft spider will give the jaw coupling the greatest dampening characteristics, while a hard spider will provide the greatest torque capacity and strength. The jaw coupling can also be considered as a fail safe device. If the spider fails, the jaws of the two hubs interlock allowing direct power transmission, allowing the application to be safely shut down for maintenance.

TAPER LOCK PULLEY

OMEGA Dual Duty Firm Lock Pulleys are the standard range of metric pulleys, as they eliminate reboring and keywaying. These pulleys need not be finished according to different bore and keyway. Firm Lock Bushes hold the shafts firmly and it is easy to dismantle when necessary. Pulleys are manufactured from graded cast iron, conforming to IS 3142 : 1993, to match V-Belts manufactured by reputed V-Belt manufacturers.



ELECTRO-HYDRAULIC THRUSTER BRAKE



OMEGA produce electrohydraulic thrusters from 2006. The thousands of the units are in exploitation in hardest working and environment condition, from the polar to tropical. Electro-hydraulic thrusters of OMEGA MAKE are extremely compacting designed and reliable. Electric motor is immersed in oil. Good cooling conditions provide long terms of continuous work and periodically inclusion up to 2000 cycles per hour. The device is conceived to satisfy the most advanced needs in force (12-400daN), stroke (50-60mm) and temperature range 45 to +45 °C. Voltage in standard execution is 440V, but we also can satisfy special request for voltage, frequency, dimensions and temperature range.

DETAIL 1:1

118

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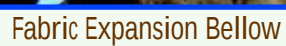
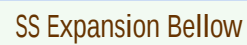
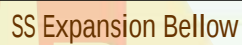
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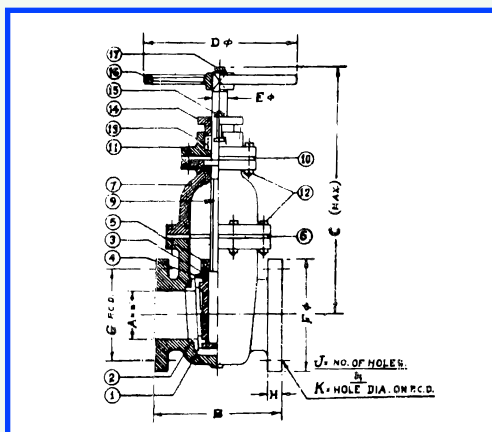
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CAST IRON SLUICE VALVE



Pic: Sluice Valve

Cast Iron Double Flanged Sluice Valve Bolted Bonnet, Gasket Joint Inside Screw, Non-rising Stem, Solid Wedge, Renewable Seats;

Flanges are faced and drilled to Relevant IS Specification.

Reference Parts:

(1). Body; (2). Body Seat Ring; (3) Wedge (4). Wedge Seat Ring; (5) Stem Nut; (6 & 10). Gasket; (7). Bonnet; (9). Stem; (11). Stuffing Box; (12).Bolts & Nuts; (13). Gland Packing; (14).Gland; (15). T-Bolts & Nuts; (16). Hand Wheel; (17). Hand Screw

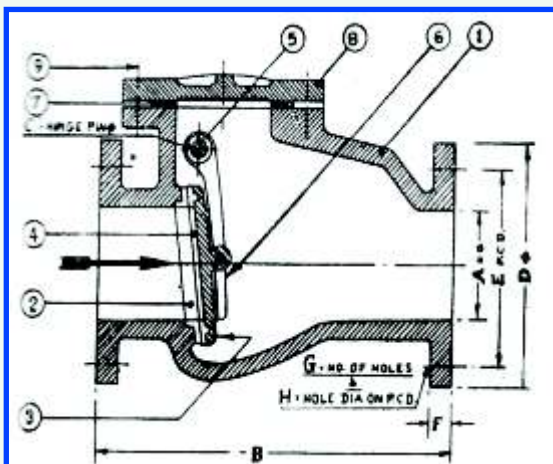
Optional Accessories:

(1). Locking Arrangement for Hand Wheel; (2). Position Indicator; (3) Anti-Friction Devices; (4). Bypass Arrangement; (5) Cleaning Door; (6). Drain Plug; (7). Air Relief Plug; (8). Channel & Shoe Arrangement (9). Chain & Chain Wheel Arrangement; (10).Gearing Arrangement; (11). Head-Stock Arrangement ;(12). Micro-Switch Arrangement for Remote Position Indication;

Manufacturing Range		Hydraulic Test Pressure			
Sizes:		PN 0.4	PN 0.6	PN 1.0	PN 1.6
1). 50 mm to 300 mm (IS 780); Pressure Rating: PN 1.0 to PN 1.6	Body	----	----	15	24
	Seat	----	----	10	16
2). 350 mm to 1200 mm (IS 2906); Pressure Rating: PN 0.4 to PN 1.6	Body	6	9	15	24
	Seat	4	6	10	16



CAST IRON CHECK TYPE VALVE



Pic: Non-Return Valve

Cast Iron Double Flanged Swing Check Type Non-Return Valve Bolted Bonnet, Gasket Joints, Renewable Seats; Flanges are faced and drilled as per IS Specification. Oil cushioned cylinder or counter weight arrangement, if asked can be provided to achieve non-slamming effect.

Reference Parts:

(1). Body; (2). Body Seat Ring; (3). Flap; (4). Flap Seat Ring; (5). Hinge Pin; (6). Hinge; (7). Gasket; (8). Cover; (9). Nuts & Bolts;

Optional Accessories Feature:

(10). Bypass Arrangement; (11). Counter Weight Arrangement; (12). Dash Pot Arrangement; General Manufacturing Standard : IS : 5312 (Part-1) 1980;



Pic: Non-Return Valve

Manufacturing Range

Sizes:

- 1). 50 mm to 125 mm;
- 2). 150 mm to 300 mm;
- 3). 350 mm to 600 mm

Note: Face to Face and Flange Dimensions can be altered as per client's requirement

Hydraulic Test Pressure

- 1). Body: 25 Kg/Cm² for 50mm to 125 mm
Seat / Back Seat: 15 Kg/Cm²
- 2). Body: 20 Kg/Cm² for 150mm to 300 mm
Seat / Back Seat: 10 Kg/Cm²
- 3). Body: 16 Kg/Cm² for 350mm to 600 mm
Seat / Back Seat: 8 Kg/Cm²



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CAST IRON GLOBE VALVE

Globe valves are closing-down valves in which the closure member is moved squarely on and off the seat. It is customary to refer to the closure member as a disc, irrespective of its shape. By this mode of disc travel, the seat opening varies in direct proportion to the travel of the disc. This proportional relationship between valve opening and disc travel is ideally suited for duties involving regulation of flow rate. In addition, the seating load of globe valves can be positively controlled by a screwed stem, and the disc moves with little or no friction onto the seat, depending on the design of seat and disc. The sealing capacity of these valves is therefore potentially high.



Cast Iron Double Flanged Globe Valve Bolted Bonnet, Gasket Joint Renewable Seats, Flexible Disc suitable for re-packing under pressure when fully opened. Flanges are faced and drilled as per ANSI B 16.10 and B 16.5, 125 Ratings Respectively.

Reference Parts:

(1). Body; (2). Body Seat Ring; (3) Disc (4). Trust Plate; (5) Stem; (6). Locking Washer; (7). Jam Nut; (8). Gasket; (9). Stuffing Box with Yoke; (10). Back Seat Bush; (11). Gland Packing; (12). Gland; (13). Hand Wheel; (14). Set Screw.

Manufacturing Range

Size: 2" to 16"

Pressure Rating: 125 lbs/ sq. inch.

Note: Face to Face and Flange Dimensions can be altered as per client's requirement

Hydraulic Test Pressure

Body: 25 Kg/Cm²

Seat / Back Seat: 16 Kg/Cm²

Seat Air: 6 Kg/Cm²



BALL VALVE

A Ball valve is a device with a spherical closure unit that provides on/off control of flow. The sphere has a port, also known as a bore, through the center. When the valve is positioned such that the bore is aligned in the same direction as the pipeline, it is in open position and fluid can flow through it. When rotated 90 degrees, the bore becomes perpendicular to the flow path, meaning the valve is closed and the fluid cannot pass through.



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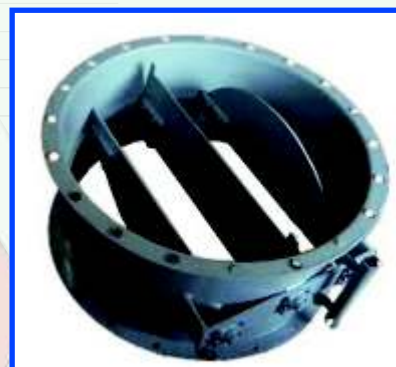
DAMPERS

We manufacture Butterfly, Louver and Multi-Louver Damper, Gillotene Dampers, etc.

Butterfly dampers, Louver, Multi-louver dampers etc, can be supplied with internal or external fiber insulation or, when required, with internal concrete (refractory) insulation. A large variety of metals are used in design and fabrication, from simple carbon steel to stainless steel and low alloy/high-alloy materials. Several types and configurations are available. Please feel free to contact us for any request or application you need.

MULTI-LOUVER DAMPER

OMEGA multi-louver opposed blade dampers are designed to provide balance flow control. Internal stainless steel spring seals furnish tight shut-off, allowing isolation of the fan for maintenance. Heavy duty adjustable blade linkage with high strength spherical rod ends provide precise blade movement, while self-lubricating high temperature spherical carbon sleeve bearings running on stainless steel shaft allow for maintenance free service.



BUTTERFLY DAMPER

OMEGA Butterfly dampers provide a simple and cost effective method of control and isolation. Stainless steel dampers for high temperature applications are available in a variety of sizes. Various sealing arrangements can be used to provide the correct efficiency for your application. Sealing efficiency can be increased to 100% with the addition of twin seals and a sealing air fan. Butterfly dampers can be actuated pneumatically, electrically or manually by a simple hand lever or reduction gearbox.

GILLOTENE DAMPER

OMEGA Guillotine dampers are best-suited for isolation applications where low leakage and pressure drop are important. The basic mechanical elements of the guillotine damper are a blade, peripheral seal system, external support members and a drive to move the blade steadily and continuously. Provides tight shut-off (up to 99.9% without seal air and 100% with seal air). The convex seat in the body makes this an ideal damper for rough and dust laden applications. The ISO-Flex Guillotine is actuated by a rack and pinion drive system where the rack





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FABRICATED GATE VALVE

We Offer a Complete Range of Fabricated Gate Valves for Water Flow Control as per Customers' Design Specification. Our Gates and Valves are made as per various standards and widely used in Irrigation, Oil, Chemical or Steam areas.



KNIFE GATE VALVE

A knife gate valve is used to cut through extremely thick fluids and dry bulk solids. The design of this valve makes it inherently self-cleaning, as the knife is cleared of abrasives with each stroke as it passes the seat rings and skirts. The gate unit of this type of valve is thin compared to other gate valve types and is guided in place by the water-type body that sandwiches the gate.

SLUICE GATE

We Offer a Complete Range of Sluice Gate Structural and Sluice Gate Valves for Water Flow Control as per Customers' Design Specification. Our Gates and Valves are made as per various standards and widely used in Irrigation Purpose in many places in India.



SCREW CONVEYOR

In industrial control applications the device is often used as a variable rate feeder by varying the rotation rate of the shaft to deliver a measured rate or quantity of material into a process. Screw conveyors is a very economical method of elevating and conveying. As the angle of inclination increases, the capacity of a given unit rapidly decreases.

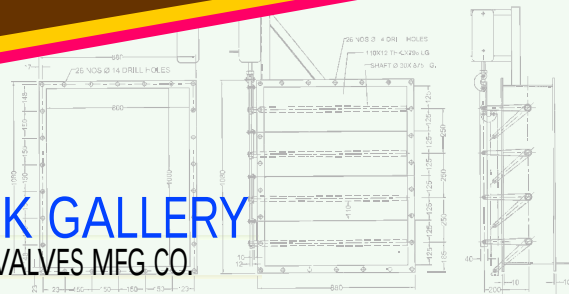
GEAR DRIVES

We make custom size gears for large operations in industrial conveyors and Rotational Parts. Supply ranges:-- Helical, Planetary, Spur Gears as per norms. Omega offers a great range of gear and accessories fittings as per conditions.



OMEGA WORK GALLERY

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OMEGA GROUP
VALVES, BELLOWS & EXPANSION JOINTS



SCREW CONVEYORS

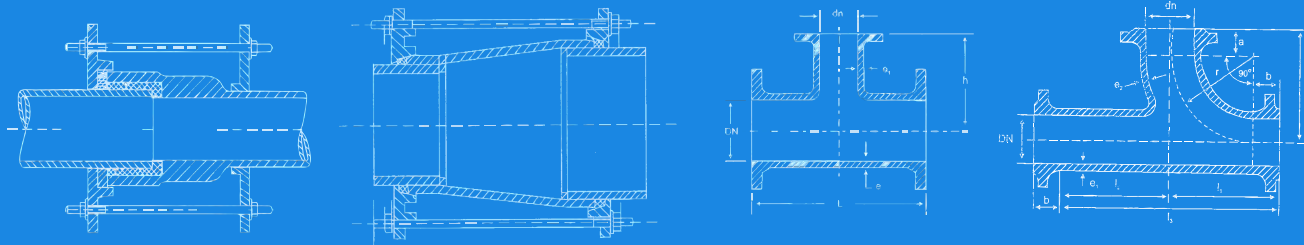


CONVEYOR SPARE PARTS

Screw conveyor usually consist of a trough or tube containing either a spiral blade coiled around a shaft, driven at one end and held at the other. The rate of volume transfer is proportional to the rotation rate of the shaft. In industrial control applications the device is often used as a variable rate feeder by varying the rotation rate of the shaft to deliver a measured rate or quantity of material into a process. Screw conveyors can be operated with the flow of material inclined upward. When space allows, this is a very economical method of elevating and conveying. As the angle of inclination increases, the capacity of a given unit rapidly decreases.



SCREW CONVEYORS



Total Quality Management Approach at OMEGA



Our Products get thoroughly Checked & Certified by Qualified Engineers



OMEGA GROUP

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