



Maintain full operational capacity all year round, with BMG's all-encompassing range of products and services.

### **PROGRESSING WITH PURPOSE**

Since 1974, with the establishment of a small bearing shop in Durban, our company has consistently extended its product and service offerings and enjoyed a proud history of opportunity-driven expansion. This expansion has spearheaded the continuous evolution into the consolidated powerhouse that is BMG.



- A major company within Invicta Holdings Limited.
- Annual turnover in excess of R4 billion (2016)
- More than 3000 employees experts in every field in which BMG operates.
- Unrivalled product availability from more than 120 locations.
- Total customer support from spare part supply to engineered solutions and site-work.



Our continually expanding product and service ranges now cover 10 broadly defined disciplines and comprehensively cater for all industrial sectors. This breadth and scope uniquely positions BMG as an all encompassing solutions provider with the ability to combine products and services to solve productivity issues on entire production processes.

### BEARINGS • SEALS • POWER TRANSMISSION • DRIVES & MOTORS MATERIALS HANDLING • FASTENERS & TOOLS • FILTRATION • HYDRAULICS LUBRICATION • TECHNICAL RESOURCES • FIELD SERVICE





As Africa's leading distributor of engineering components, BMG offers a convenient, single source of supply to industries across the continent.

### A PART TO PLAY IN EVERY PROCESS

Every day, machines are put to work, powering mass production and driving modern industries forward. Inside every machine, a multitude of parts are hard at work, the role of each and every component is quintessential to the machine's operation and has a vital part to play in the ongoing pursuit of maximised productivity. At both micro and macro levels, from the smallest bearing to larger drive systems, BMG's engineering components all contribute to the full spectrum of production operations.

All of these products help position BMG as an integral and essential PART OF INDUSTRIAL PROCESSES. BMG is relied upon to keep machinery running, powering the mighty, relentless rhythm of progress.



BMG offers and maintains a comprehensive, unrivalled inventory of product by sourcing the best quality engineering components from around the globe.

### BRINGING IN THE WORLD'S BEST BRANDS.

In the bid to procure cutting-edge components at competitive prices, BMG is able to capitalise on longstanding relationships with leading manufacturers dedicated to excellence in design and production,

Products are imported from countries including China, Germany, Japan, United Kingdom and USA.

These products are brought to BMG's strategically located distribution facilities and regional service centres via the main distribution hub in Johannesburg.

It's in these warehouses that shipments are sorted, allocated and re-bundled according to the unique requirements of specific orders and contracts.

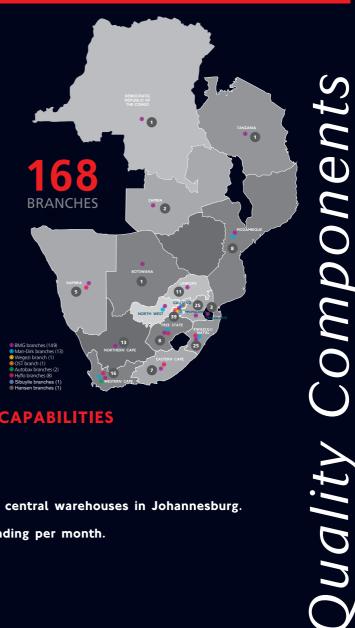






## GETTING THEM OUT TO YOU.

Products & Services are distributed via BMG's extensive distribution network. It's through the sheer size and reach of our infrastructure, that BMG can be found wherever industry has established itself; delivering the correct components at the right time, to the far-flung coalfaces of our customers' operations.



#### **EXTENSIVE STOCKHOLDING CAPABILITIES**

- 60 000 sqm of warehousing.
- Over 250 000 product line items.
- Around 4 000 transfers per day out of central warehouses in Johannesburg.
- Over 1 000 tons of imported stock landing per month.

#### A FORMIDABLE FOOTPRINT

- Over 160 strategically situated branches throughout Southern Africa.
- Vendor Managed Inventory sites (dedicated on-site stockholding).
- Our Exports Division further supplies to a number of other countries across Africa.
- Locally empowered distribution chains.







We don't JUST sell parts. In order to achieve our vision of truly enhancing every customer's operations - to truly add value – it's essential that our Quality Components are also bolstered by real Technical Expertise.



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EXCELLENCE
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## A MINDSET OF CONTINUED LEARNING.

To foster this technical expertise, we cultivate a mindset of continued learning and personal development in our people. Our in-house Academy of Excellence is accredited by MERSETA to conduct learnerships which equips all staff with the skills and knowledge necessary to more effectively meet the needs of our customers and their industry requirements. Through this resource, we train our people and ensure a continual supply of talent into the BMG organisation.

- The expertise to properly evaluate each client's production operations with a specialist authority.
- The competence required to ensure the best possible selection, application and operation of our products!







### A DEDICATED TEAM DELIVERING SPECIALIST KNOWLEDGE AND EXPERT ACTION.

Our Technical Resources team delivers a variety of specialist services on-site, in sync with customer needs for enhanced operational efficiency and maximised productivity. From custom design capabilities, to on-site maintenance and support, plus classroom and hands-on training to enhance customer knowledge.

#### **CORE SERVICES**

- Manufacturing area & capability
- On-site breakdown maintenance, repair and refurbishment.
- Product installation, commissioning and trouble shooting.
- Planned maintenance and service contracts.
- Preventative maintenance and condition monitoring (predictive maintenance).
- Laser alignment and balancing.
- Oil analysis and thermographic studies.

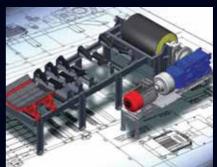
#### **SPECIALIST OFFERINGS**

- Customised product design.
- System design and evaluation.
- Reliability investigations and recommendations.
- Energy efficiency studies with suggested improvements.
- Project management.
- Unitary and bulk materials handling design and installations.











It's by virtue of our technical competencies, combined with the quality of our inimitable product offering, that BMG is able to deliver on the 3<sup>rd</sup> aspect of our promise: that of SUPERIOR SERVICE.

Our dedicated OE projects division manages projects from initial scope of work to final delivery – all from a single point of contact. Appropriate design, the correct specification of product, performance and delivery are thereby ensured.

#### **PROJECT MANAGEMENT**

- Project description.
- Project specifications.
- Deliverables.
- Documentation- Technical & commercial.
- Comprehensive quotation.
- General arrangement drawing.
- Microsoft project program at various intervals.
- Work breakdown structure.
- Subject matter experts through our Technical Resources Division.
- Progress meetings.







Provided 24 hours a day, throughout the year, BMG offers a service that satisfies the requirements of continuous process and multi-shift operations. It's an integral part of our mission to offer one source of supply to the replacement, resale and OEM markets.

It's a trusted offering that sets BMG apart in a competitive marketplace, backed up by a sought-after ISO 9001 quality certification.

This guarantees our activities conform to the highest quality assurance standards and has already established BMG as an engineering partner to many prestigious companies and organisations.

BMG 's embodied by a unified team of skilled, experienced and motivated people that get involved in meaningful client consultation; offering expert advice with added insight and foresight in relation to our products. We strive to be an integral part of our clients' business, their productivity and their operations.

BMG. Proud contributors to your success... PART OF YOUR PROCESS!

### ISO 9001 Certified

### 24hr DISTRIBUTION & SERVICE





## BEARINGS

Bearings are the firm foundation on which BMG was established, and after 40 years of nurturing strong relationships with customers and world-leading brands alike, the extensive product range remains a major element of BMG's operations.

BMG proudly supplies the full range of bearing products and associated components to industry, helping to maximise operational up-time at steel mills, mines, power stations, motor assembly plants and major agro-industrial producers.

The extensive, unbeaten BMG product range includes bearings in all sizes, from giant steel mill bearings to miniature bearings, as well as all related systems and products.

In addition, BMG's unequalled bearings offer is bolstered by training, design, installation and maintenance services from BMG's Technical Resources Division to ensure a full basket of benefits for customers.

NSK RHP TIMKEN NTN SNR

- Ball bearings
- Roller bearings
- Super precision bearings
- Miniature bearings
- Ball bearing units
- Spherical roller housed units
- Plummer blocks, sleeves
   & accessories
- Steel balls & rollers
- Needle bearings
- Linear way systems
- Ball screws
- Rod ends & spherical plain bearings
- Slewing rings
- Split roller bearings
- Thin section bearings
- Oils & greases

пкп

- Bearing pullers & heaters
- Automotive bearings and components

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# SEALS

BMG boasts the widest range of seals, gaskets and sealrelated products on the African continent. With countless applications, BMG seals are truly Part of the Process, fulfilling vital functions in the demanding environments of numerous industries. BMG stocks only the world's best, innovation-driven Sealing brands.

In addition to an extensive stock holding of seal products, customised seals can be manufactured using our own CNC Seal Manufacturing made-to-order facilities, allowing BMG to meet customer requirements with precision, accuracy and 100% home-grown capabilities. These machines are strategically situated in Johannesburg, Durban and Cape Town and manufacture a wide range of seals, o-rings and special profiles from multiple materials up to 520 millimetres in diameter.

The entire compliment of sealing and gasket products is available from stock, or to order through BMG branches and exclusive seals outlets trading as BMG Sealco. These specialist branches have extensive expertise in hydraulic cylinder sealing and cater to the niche needs of Earthmoving, Mining, Agricultural and Manufacturing industries.

A complete gasket manufacturing capabilities using CNC machinery as well as traditional press cut methods fro small quantities produces a comprehensive range of gaskets from most commonly used materials.

#### SEALS

- Industrial rotary shaft seals
- Torric / face seals
- V rings
- Hydraulic cylinder seal kits for earthmoving equipment
- Hydraulic seals
- Pneumatic seals
- Custom-made seals
- O-rings & back-up rings
- O-ring kits & cord
- Rotary / union couplings
- Circlips & circlip kits
- Single spring mechanical seals
- Gland packing
- Nilos rings
- Bonded washers
- Waved washers
- Bearing isolators
- Expansion joints
- Hydraulic & industrial hose
   & fittings
- Sealants & adhesives

#### GASKETS

- Graphite sheeting & gaskets
- Rubber sheeting & gaskets
- Cork sheeting & gaskets
- Camprofile gaskets
- Boiler accessories
- Compressed fibre sheeting
   & gaskets
- PTFE sheeting & gaskets
- Flexoid sheeting & gaskets
- Spiral wound gaskets
- Halo seal gaskets
- Insulation products
- Expanded PTFE products

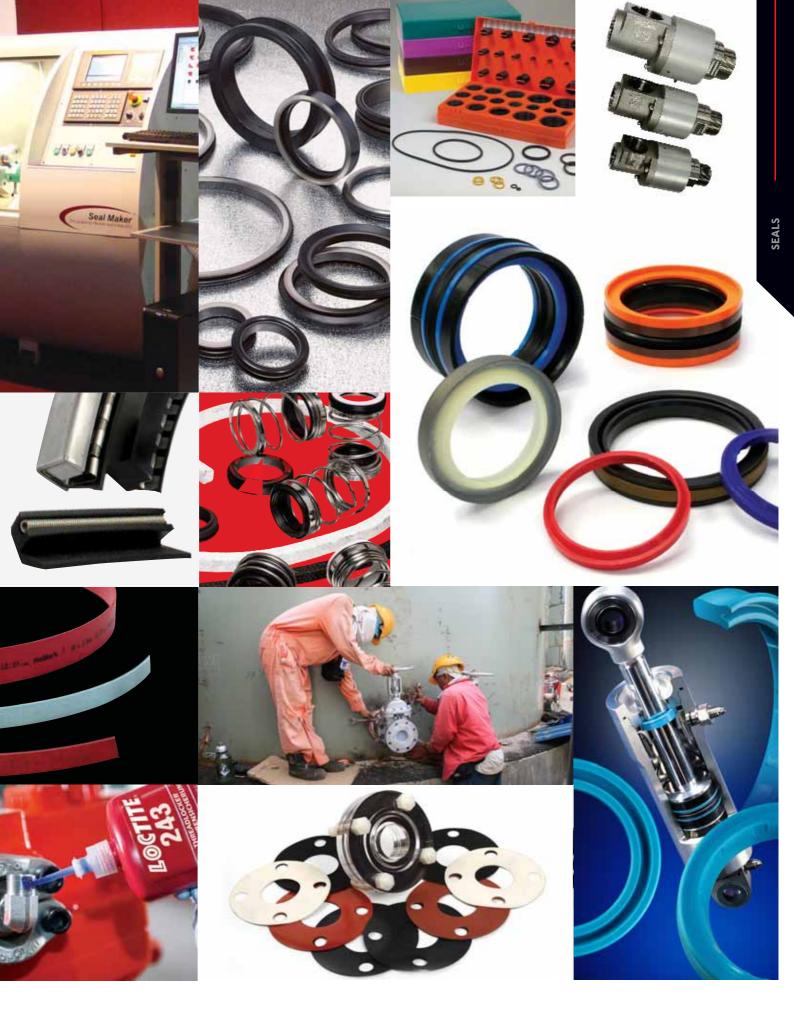
























## POWER TRANSMISSION

BMG's vast range of Power Transmission products dominates the sub Saharan region and is the respected leader in its category.

BMG Power Transmission has the exclusive distribution rights to world renowned brands like Fenner, Tsubaki and Rexnord, allowing BMG to bring our full, cutting-edge product range to customers' facilities where powerful, reliable power transmission solutions are a necessity.

BMG has established a facility where special attachment chains are assembled to exact requirements in under a week. A wide range of Tsubaki attachments are available on any suitable American or British chainproduct up to 50 metres in length.

BMG's extensive Power Transmission product range includes Ironware, Chain, Drive Belts and Agricultural Components. This offering is continually being extended through the sourcing of innovative new solutions ensuring that BMG continuously sets premier standards in product and service delivery.

#### CHAIN

- Cable carrier chains
- Transmission & conveyor chain
- Slat top chain
- Drop forged chain
- Overhead conveyor systems
- Elevator chain
- Linear actuators
- Energy / drag chain
- Cam clutches / back stops

#### **DRIVE BELTS**

- V & wedge belts
- Powertwist / Powerlink belts
- Variable speed belts
- Banded belts
- Timing belts
- Poly vee belts
- Synchronous belts

#### IRONWARE

- Couplings for all applications
- Full range of pulleys
- Sprockets
- Torque limiters
- Universal joints
- Locking elements
- Bushes
- Bolt & weld on hubs
- Agricultural components

















QUICK-FLEX™ FLEXIBLE COUPLINGS







## DRIVES & MOTORS

As a leading supplier of electric motors, gear units and variable speed drives, BMG brings together the world's leading brands to provide versatile motive power solutions to industry and mining alike throughout sub Saharan.

Integrated solutions to every conceivable application in industry and mining are engineered by BMG's wealth of experience in these fields.

Efficiency and reliability are the key consideration factors applied to every BMG drive solution with a critical eye on creating competitive advantage for our customers. For example, in designing the high quality Synergy Series of electric motos, an equal amount of emphasis was placed on energy efficiency and reliability enhancing features. The result is high dependability with low energy consumption. When combined with the ingenuity of Danfoss variable speed drives, the outcome is an unbeatable package.

Operating out of strategically located engineering hubs, BMG Field Service teams provide maintenance services on customers' plant and equipment to achieve smooth, reliable and efficient operation. By drawing from the entire BMG product arsenal, which consists of the very best products the world has to offer, these teams ensure the highest levels of productive capacity for all industry sectors in our region.

#### **GEARED MOTORS**

- Helical
- Worm
- Helical Bevel
- Planetary gear units
- Cycloidal drives
- Custom built gear units
- Speed reducers
- Drive packs

#### MOTORS

- Single & 3-phase motors
- Cast iron or alumiumium
- High voltage motors
- Energy efficiency motors
- Pad mount motors
- Brake motors

#### ELECTRONICS

- AC Frequency converters
- Soft starters













































DRIVES & MOTORS



## MATERIALS HANDLING

A wide range of products and services associated with general materials handling and conveying are available from BMG. The speciality range caters for both light and bulk materials handling sectors. With conveying equipment forming the backbone of production processes, BMG's response is to offer our customers a comprehensive, ex-stock belt and accessories supply, together with field service installation and repair services.

A wide rage of products and brands are sourced from the world's most renowned conveyor and transmission belt manufacturers to satisfy the needs of both light and bulk materials handling applications.

'Light Materials' products include synthetic, polyamide and light duty rubber belting, belt fasteners, extruded polyurethanes, modular and slat top chain and conveyor components. 'Bulk Materials Handling' products encompass heavy rubber. PVC solid woven, belt fasteners, elevator products, belt care products, conveyor frames, idlers and screen panels. Furthermore, BMG's own heavy rubber conveyor belting range has been manufactured to SABS standards to ensure that it meets South Africa's unique operational conditions.

BMG is acutely aware that conveying systems are very often at the heart of manufacturing and mining processes and that reliability, as well as rapid response when production is interrupted, are vital service elements that can have major financial implications for continuous process and multi-shift operations.

BMG is acutely aware that conveying systems are very often at the heart of manufacturing and mining processes and that reliability, as well as rapid response when production is interrupted, are vital service elements that can have major financial implications for continuous process and multi-shift operations. Therefore, in addition to our Engineering Hubs that perform fabrication operations such as belt conversion and joining, we are also proud to offer a sophisticated on site belt splicing and maintenance service that brings our expertise right into the customer's operation.

#### LIGHT MATERIALS HANDLING

- Synthetic conveyor
   & process belts
- Engineered belts
- Food quality conveyor belts
- Modular belting
- High performance flat belts
- Belt fasteners
- Endless woven belts
- Slat top chain
- Conveyor components

#### HEAVY MATERIALS HANDLING

- Plied rubber belting
- PVC solid woven belting
- Conveyor frames & idlers
- Belt care products
- Elevator products
- Screen panels
- Conveyor belt maintenance training courses
- Conveyor belt splice training
   cold method







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MEGAROLLER







## FASTENERS & TOOLS

BMG has swiftly become a preferred supplier of Tools and Fasteners to the Southern African industry. Not only do we offer the largest local stock holding fasteners, but we are establishing ourselves as the country's one-stop shop for related hand and power tools, PPE, welding, lifting & rigging.

BMG;s infrastructure enables customers to enjoy easy access to a vast, well-stocked range of key brands and products at the pinnacle of insight-driven innovation and rock-solid reliability. The range has grown exponentially, and now includes well known brands in the Tooling and Abrasives market to compliment the traditional fasteners range.

The principal Tools & Fasteners distribution centre is located in Johannesburg, with satellite warehouse in other major industry centres around South Africa. In addition, fasteners are also available from the majority of the group's branches and a growing number of specialist retail tool & equipment outlets.

Our service offering in this product range is bolstered by the ability to source non-stocked fasteners and tools countrywide within 24 hours.

#### FASTENERS

- Bolts
- Nuts
- Washers
- Rivets
- Cap screws
- Threaded rod
- Anchors
- Screws

#### TOOLS

- Tool kits
- Hand tools
- Abrasives
- Drill bits
- Electric power tools
- Pneumatic power tools
- Personal Protection Equipment (PPE)
- High pressure cleaning equipment
- Lock & lockout systems
- Cutting & drilling tools
- Electrical test equipment
- Hydraulic tools
- Lifting & rigging equipment
- Cleaning products & absorbents
- Welding equipment & accessories
- Workshop equipment & machinery

(**ÍR**) Ingersoll Rand





















FASTENERS & TOOLS



# **FILTRATION**

BMG Fluid Technology's Filtration projects efficiently serve a wide range of industries including petrochemical, power generation, mining, manufacturing, bulk fuel and oil solutions.

The South African filtration market is following international trends as it recognises the importance of using ISO4406 cleanliness level for fuels and oils. Prevention and control of contamination of water and particulate is vitally important to the reliability and long term performance and life extension of machinery, equipment and vehicles.

Filtration solutions sourced from the world's top suppliers are supported by knowledgeable BMG technicians and engineers, who in turn, draw on the global experience of our suppliers to ensure that you receive the best possible filtration solutions.

#### **PRODUCT RANGE**

- Low, medium and high pressure filters
- Filler breathers
- Suction filters
- Monitoring equipment
- Bulk filtration systems fuel and oils
- Pre-filter and fine filtration manifolds
- Mobile filtration equipment
- Onsite installation and commissioning
- Y, magnetic and basket strainers
- Filtration training
- Reusable magnetic pads











































# HYDRAULICS

By combining years of knowledge and experience with state of the art technology to deliver first rate reliable hydraulic solutions, BMG has become Southern Africa's first choice provider. BMG's ability to offer a market leading all in one service has been solidified, and draws on decades of accumulated expertise, relationships and resources.

BMG stocks the widest spectrum of hydraulic products from leading manufacturers such as Eaton Vickers, Kawasaki Staffa, OMT, Marzocchi, Galtech, EPE, Oleoweb, ISO, Pilan and Emmegi.

Supporting this product offering are value-added services that include project engineering and a mobile service workshop that swiftly bring solutions straight to customers. All work is ISO 9001 accredited.

The extensive knowledge of the hydraulics workforce, which is empowered through continual training, is the foundation on which BMG's success in this field is built. Customers also benefit from courses, including hands on competency training that exceeds requirements laid down by the SA Fluid Power Association.

#### **PRODUCT RANGE**

- Accumulators bladder and diaphragms
- Cylinders industrial and tie rod
- Heat exchangers air blast and stack/tube
- Hydraulic motors gear, vane, orbital and radial piston
- Enerpac hydraulic
- Reservoir accessories bell housings, couplings, filters, breathers, level and pressure gauges
- Pumps gear, piston and vane
- Bieri high pressure hydraulic equipment

#### HYDRAULIC SERVICES

- Hydraulic testing and repair facilities
- Project engineering and consulting
- Mobile service workshop
- Cylinder design and manufacture
- Cylinder repair and testing
- Manifold design and manufacture



























































# LUBRICATION

BMG Fluid Technology is proud to represent exclusive brands and quality products which are recognised market leaders in their respective areas of operation. The OMSA brand has carved out a unique position in the South African market as the leading supplier of complete turnkey lubrication and filtration installations. Complimentary to the lubrication systems are industrial valves, process measurement, condition monitoring and control instruments used in the build of these systems.

It is important to note that BMG Fluid Technology supply approximately 80% of the components used in the build of a lubrication system from products managed and distributed directly by BMG. This provides a unique level of control as to the quality and after sales support for systems that are in the field.

Added to this is the Bijur Delimon product range which is a world leader in light and heavy industry centralized lubrication equipment for oil and grease. A fully automated centralized lubrication system ensures operational safety, long service, life, low maintenance requirements along with minimal lubricant consumption and eco-friendliness.

A comprehensive range of oil and grease drum pumps with the required ancillary equipment completes the lubrication range.

Each system is engineered and customized for each unique application and is in accordance with customer requirements / specifications.

#### **CAPABILITIES:**

- Technical Appraisal
- Design
- Engineering
- Manufacture
- System Development
- Installation
- Commissioning
- Servicing
- Maintenance
- Repairs

#### **PRODUCTS & SERVICES:**

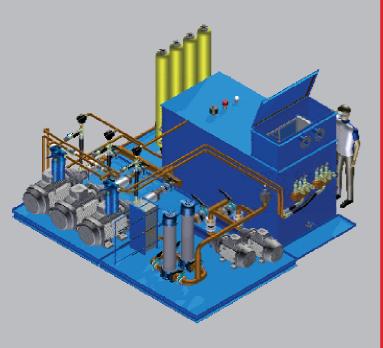
- Centralized Grease & Oil Lubrication Systems
- Oil Re-Circulation Systems
- Rope Spray Systems
- Railjet Wheel Flange
   Lubrication
- Girth Gear Spray Systems
- Air/Oil Lubrication Systems
- Drum Pumps for Grease
   & Oil
- Drip Feed Lubricators
- Spring Feed Lubricators
- Chain Lubrication Systems
- Field Services
  - Installation
    - Commissioning
    - Servicing
    - Repairs























## VALVES

BMG Fluid Technology's Valve offering has expanded and now meets the needs of a wide range of process industries.

We are proud to be exclusive partners of InterApp, manufacturers of manual and actuated butterfly valves with applications in chemical, petrochemical, mining and processing (acid extraction), pharmaceutical and foods and beverage industries. With their ultra-high wear resistance they are the ideal solution when safety and degradation resistance is crucial.

BMG's Valve range includes locally manufactured diaphragm valves available in a wide range of linings to meet any application's requirements. Complementing the diaphragm range is a long and short open frame pinch valve for slurry applications.

Our range of industrial and slurry knife gate valves include valves with hand wheels or actuators, assembled with either EPDM, polyurethane, PTFE or NBR liners and are suitable for abrasive and corrosive applications as well as water and wastewater.

#### **PRODUCTS & SERVICES**

- Diaphragm valves (straight through type)
- Diaphragm valves
   (weir type)
- Butterfly valves
- Gate valves
- Check valves
- Pinch valves
- Angle seated valves
- Ball valves

#### ACCESSORIES

- Pneumatic, hydraulic and electric motors
- Hand wheel operated gearboxes
- Hand wheel or hand lever for manual action
- Positioners, indicators and limit switches
- Replaceable liners for
   butterfly valves in our range
- Solenoid valves or coils





































## CONVERSION CHART METRIC - IMPERIAL

NOTE: 1" = 25.4mm

Press         0 <th></th> <th>Inch</th> <th></th> <th>1"</th> <th>2"</th> <th>3"</th> <th>4"</th> <th>5"</th> <th>6"</th> <th>7"</th> <th>8"</th> <th>9"</th> <th>10"</th>		Inch		1"	2"	3"	4"	5"	6"	7"	8"	9"	10"
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31%         0.197290         4762         30.13         35.55         90.793         100.793         117.143         1127.144         1127.144	5/32	0.15625	3.969	29.369	54.769	80.169	105.569	130.969	156.369	181.769	207.169	232.569	257.969
11344         0.20131         5         19         35.59         1132         197.29         113.59         102.59         113.54         127.54         113.54         127.55	11/64	0.171875	4.366	29.766	55.166	80.566	105.966	131.366	156.766	182.166	207.566	232.966	258.366
772         0.1197         5.556         30.956         5.556         17.96         10.756         112.956         112.957         122.955         122.952         124.40         22.9525         124.45         22.9525           17/44         0.255         6.230         51.730         77.130         27.130         27.130         127.957         13.320         118.273         124.140         20.947         25.949         20.947           17/44         0.25524         6.77         9.21.47         77.944         32.844         132.247         131.140         145.441         210.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.544         120.514         120.514           1712         0.3475         6.731         31.131         93.518         40.373         110.133         135.334         110.331         135.334         110.331         135.334         110.331         135.335         127.31         127.31         127.31         127.31         127.31         127.33         127.323         127.32         28.325	3/16	0.187500	4.762	30.163	55.563	80.963	106.363	131.763	157.163	182.563	207.963	233.363	258.763
1964         0.24479         5.993         30.333         56.733         10.733         107.833         112.99         113.333         116.130         109.133         124.633         129.993         129.993         123.147         129.543         129.997         120.135         114.14         129.947         115.141         119.947         114.141         129.947         129.142         129.144         129.441         23.547         20.144         23.547         20.144           1974         0.254275         7.7541         3.2241         52.841         3.2341         129.841         125.841         20.142         23.541         20.142         23.541         20.142         23.541         20.142         23.541         20.142         23.541         20.1381         24.531         20.1381         14.531         10.531	13/64	0.20325	5. 159	30.559	55.559	81.359	106.759	132.159	157.559	182.959	208.359	233.759	259.159
1/4         0.25         4.50         3/7.00         9/7.150         0.25.00         1/07.900         1/35.700         1/84.100         200.907         23.4490         20.0300           1/7/44         0.56201         7.744         33.544         97.947         103.247         133.247         196.441         135.741         184.547         200.947         23.247         20.3174         23.141         23.541         23.141         20.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.541         23.542         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.523         10.523         10.523         10.523         10.524         11.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         10.533         1	7/32	0.21875	5.556	30.956	56.356	81.756	107.156	132.556	157.956	183.356	208.756	234.156	259.556
17/14         0.55925         6.747         321.47         57.944         0.32.47         113.147         119.147         114.547         0.90.947         233.347         20.077           19/32         0.2182         7.144         32.544         57.944         0.32.44         108.744         108.944         114.844         200.344         235.744         20.1541           5/16         0.328125         8.3.34         53.14         64.158         109.538         116.278         111.138         23.6.538         126.278         21.11.138         23.6.538         126.278         21.11.138         23.6.538         126.273           21/44         0.528075         6.7.13         44.131         59.33         14.6.531         11.131         13.6.531         11.732         22.7.731         22.5.127         23.5	15/64	0.234375	5.953	30.353	56.753	82.153	107.553	132.953	158.353	183.753	209.153	234.553	259.953
972         0.28125         7.144         32.544         0.9744         13.144         19.9544         134.944         20.544         23.744         23.114           5716         0.312.500         7.958         33.335         56.738         44.158         10.9538         154.938         160.338         165.736         211.138         23.6538         26.1538         24.1623         23.642         22.1541         23.643         23.642         22.1541         23.643         24.538         24.1538         10.333         16.331         11.138         23.638         23.737         11.138         16.538         21.1522         23.642         25.5723         11.123         15.525         11.6123         16.532         12.1251         23.512         25.5722           23.64         0.3306.25         0.532         65.722         11.132         13.526         11.623         16.533         12.519         23.519         24.519         24.519           23.74         0.431.05         0.531.0         6.119         6.119         13.519         13.519         13.519         13.519         13.519         13.519         13.519         13.519         13.519         13.519         14.519         14.519         14.519         14.519         14.519	1/4	0.25	6.350	31.750	57.150	82.550	107.950	133.350	158.750	184.150	209.550	234.950	260.350
19/64         0.298975         7.41         22.41         92.341         13.4341         19.941         18.5431         20.741         22.6.141         22.1.641           5/16         0.31260         7.83         33.33         58.728         64.138         105.358         155.738         21.138         22.65.83         21.034           1/12         0.4373         6.731         34.131         64.331         10.1331         135.731         16.131         18.6531         211.931         22.731         22.62.731           2544         0.53997         0.132         34.632         6.072         8.172         11.172         136.721         16.1624         16.6924         112.732         21.7273         28.522         28.522         28.522         28.522         28.522         28.522         28.522         28.522         28.522         28.522         28.522         28.522         28.522         28.522         28.512         28.513         28.513         28.513         28.513         28.513         28.513         28.513         28.513         28.513         28.513         28.513         28.513         28.513         28.513         29.513         28.513         28.513         29.513         28.5135         21.633         29.5135													
5/16         0.31250         7.93         53.33         84.738         199.738         194.738         194.738         211.134         224.538         221.534           11/52         0.34375         8.731         34.131         59.531         84.651         195934         185.731         160.734         186.132         211.531         225.534         227.331         262.731           23/64         0.3573         5.731         34.435         59.44         65.328         110.726         136.128         116.328         217.275         236.123         237.718         263.123           23/64         0.390645         9.922         35.322         60.722         86.122         111.52         186.912         116.923         187.712         215.112         238.512         265.922           21/74         0.421875         10.716         35.116         61.119         85.119         113.191         137.31         182.713         184.313         214.313         239.713         265.716           21/74         0.421875         10.715         35.116         61.516         86.916         113.506         135.906         145.306         149.306         265.905           21/74         0.4317         11.509         36.909<													
21/44         0.232125         8.334         937.44         99.334         84.534         109.934         113.334         110.734         128.134         218.334         228.934         202.334           11/02         0.33737         9.118         34.528         59.935         84.538         110.728         136.128         166.528         121.238         227.318         226.731           2364         0.35737         9.128         34.528         59.728         85.725         111.123         136.525         116.522         187.735         211.272         238.122         205.527           23744         0.397645         9.932         35.327         0.6172         86.519         111.191         135.316         188.119         215.519         258.919         264.319           27/64         0.42175         0.716         35.116         85.118         117.713         138.113         186.913         214.501         23.916         264.319           27/64         0.42175         0.717         35.10         88.003         113.00         135.303         164.304         189.705         214.507         24.109         26.530           17/7         0.51262         12.300         37.703         65.130         88.000 <td></td>													
11/2         0.34075         8.731         34.131         99.31         44.931         110.331         15.731         161.131         186.533         212.331         227.331         227.331           23/64         0.359.375         9.128         34.928         60.324         85.728         111.122         136.5128         161.232         186.573         212.235         227.728         265.128           23/64         0.390625         9.922         35.322         66.722         86.122         111.52         156.922         187.732         215.122         235.522         265.922           23/74         0.421875         10.716         35.116         61.119         86.519         111.91         137.31         186.511         185.916         213.916         228.716         228.716           27/64         0.421875         10.716         35.116         61.930         87.709         113.109         135.809         164.300         189.709         214.310         240.19         240.109         265.095           13/12         0.44875         11.306         33.806         164.300         189.709         116.300         189.709         116.300         241.500         241.500         241.500         241.500         265.709													
23/04         0.539375         9.128         34-238         99.228         85.328         110.728         136.128         166.925         127.328         227.378         226.128           3/B         0.375         9.525         34.925         60.225         85.725         111.522         136.225         161.925         187.323         212.725         238.125         263.325           13/12         0.40625         10.319         35.719         61.119         86.519         111.512         135.215         187.333         121.212         238.521         263.519           2//44         0.44875         11.113         55.513         61.913         86.916         112.216         135.115         11.85.115         11.85.115         11.85.115         11.85.115         21.85.11         22.93.11         22.84.716           2//64         0.44875         11.700         35.505         61.306         135.066         135.06         138.905         164.903         190.103         21.51.06         20.509           11/2         0.5         11.200         38.100         63.500         188.001         143.001         139.700         165.100         190.500         21.500         24.13.00         20.509         21.500         24.13.00													
38         0.375         9.525         34.925         64.325         111.25         114.622         161.322         187.232         217.25         23.125         263.922           25/64         0.390615         9.922         35.322         60.722         86.122         111.522         156.922         167.232         121.725         23.125         238.592         263.922           25/64         0.421875         10.716         56.116         66.519         117.316         137.716         165.111         185.113         165.513         188.516         213.916         228.113           26/44         0.4537.55         11.509         35.909         62.209         87.709         113.109         138.509         163.006         189.200         214.709         240.109         265.505           31/44         0.48475         12.033         37.703         63.103         88.503         113.903         199.203         114.00         199.700         125.001         241.607         246.903         266.703           11/2         0.515625         13.097         53.897         14.407         140.024         165.294         190.20         215.602         240.903         266.703           11/2         0.515625         13.													
25/h4         0.39063         9921         35.322         66.722         86.122         111.522         187.722         213.722         238.522         26.922           13/32         0.40615         10.319         35.719         61.119         66.519         111.919         137.319         162.319         218.419         213.519         238.919         264.319           2/h4         0.437125         11.13         35.513         61.913         87.731         112.713         138.113         165.319         188.913         214.313         229.713         264.710         265.113           2/h4         0.46375         11.306         37.703         62.706         88.106         113.506         153.906         164.703         190.0103         215.502         240.903         266.503           1/l         0.5         12.703         38.100         63.503         114.900         197.700         165.100         190.500         215.900         241.300         266.7007           17/l         0.513125         13.444         38.497         68.897         89.594         114.697         146.897         190.897         216.297         241.697         241.800         266.707           17/l         0.51565         14.288													
1302         0.40635         10.319         35.719         61.119         86.519         111.919         137.19         162.719         188.119         213.519         228.919         244.319           27/64         0.431875         10.716         36.116         61.516         86.916         112.316         133.716         163.116         188.516         213.916         239.316         246.171           264         0.43323         11.13         35.313         61.913         77.09         113.109         138.609         163.509         189.309         214.300         240.109         265.509           31/44         0.44875         11.3006         37.305         63.103         88.106         113.506         138.506         165.309         189.706         215.500         241.607         267.007           172         0.5         12.200         37.703         65.807         89.207         114.607         160.097         190.500         215.500         241.607         267.007           172         0.515625         13.097         38.497         65.897         89.297         114.607         140.097         165.491         190.500         214.507         267.097           172         0.515153         13.428 <td></td>													
27/44         0.47185         10.716         9.4116         61.516         88.916         11.2316         132.716         163.116         188.516         213.916         239.316         224.716           7/16         0.43735         11.13         36.513         61.913         67.709         113.109         135.30         163.909         114.702         240.100         26.5596           15/2         0.46875         11.096         37.306         62.706         88.106         113.590         153.900         116.702         240.506         26.506           11/4         0.44875         12.203         37.03         63.103         88.503         113.903         139.303         194.703         190.103         215.503         240.506         26.506           11/2         0.515625         13.097         38.497         63.897         99.694         114.697         140.097         165.190         190.597         216.397         241.697 <td></td>													
7/16         0.4375         11.113         35.513         61.913         67.313         112.713         138.113         165.513         189.309         214.313         29.713         265.113           29/64         0.453125         11.506         33.06         62.306         87.709         113.009         138.906         163.309         114.709         240.109         265.506           31/64         0.46875         11.706         37.03         65.103         88.903         113.903         199.303         119.300         121.500         24.09.03         265.505           1/2         0.515623         13.097         38.497         63.897         89.297         114.007         165.407         190.607         215.500         241.697         267.097           17/2         0.53125         13.494         38.844         64.294         89.644         115.941         140.097         165.497         190.687         216.597         241.697         241.697         247.644           35/64         0.546875         13.381         39.21         164.631         116.081         116.284         191.681         191.681         191.681         191.681         191.681         127.684         247.688         226.783 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
29/64         0.453125         11.509         38.909         67.209         113.506         138.509         163.909         124.709         24.0109         265.509           13/24         0.464375         11.306         37.306         62.706         88.106         113.506         118.706         115.505         240.905         265.305           1/2         0.5         12.700         38.100         65.500         88.500         114.300         159.00         190.103         215.505         240.905         265.305           1/2         0.515625         13.707         38.477         65.877         39.297         114.697         140.097         155.400         190.500         215.970         240.903         265.709           17/2         0.53125         13.494         38.894         64.294         89.694         115.094         140.491         165.894         191.497         127.697         24.479         267.097           3/64         0.5625         14.288         166.884         190.844         115.884         114.281         166.291         191.611         127.881         242.094         267.894           3/64         0.5625         14.288         156.884         190.844         115.884         1140.2													
15/32         0.46473         11.306         37.306         62.706         88.106         113.506         138.906         164.306         188.706         215.106         240.9506         265.903           31/4         0.5         12.700         38.100         63.303         88.503         113.903         139.303         164.703         190.103         215.503         240.903         266.303           1/2         0.5         12.700         38.497         63.897         89.397         114.697         140.097         165.497         190.897         216.597         241.697         241.697         241.097         267.097           17/2         0.55125         13.894         64.324         89.694         115.094         140.0494         165.894         191.691         217.091         241.697         267.694           35/64         0.5625         14.288         39.688         65.088         90.488         115.888         141.288         167.481         192.082         217.488         243.848         268.684           19/32         0.59375         15.081         40.481         65.088         90.488         115.284         147.681         192.081         216.594         244.791         266.584           19/32													
31/64         0.484375         12.303         37.703         63.103         88.503         113.903         139.303         164.703         190.103         215.503         240.903         266.303           1/2         0.5         12.700         38.100         63.500         88.900         114.400         155.007         156.100         190.500         215.900         241.600         266.700           17/2         0.51525         13.894         64.324         89.674         115.094         140.097         156.327         121.697         257.097           17/2         0.5525         13.491         39.291         64.661         90.081         115.881         142.281         191.661         217.482         242.491         267.891           37/64         0.5725         14.288         39.686         65.088         90.484         116.284         141.681         167.481         197.484         243.881         268.288           37/64         0.57375         15.818         40.481         65.841         91.281         116.681         142.281         167.478         193.278         218.678         244.078         269.478           38/64         0.64525         16.577         91.677         174.777         142.475													
1/2         0.5         12.700         38.100         63.500         88.900         114.300         139.700         165.100         190.500         215.900         241.300         266.700           1/72         0.53125         15.997         38.497         63.897         89.297         114.697         140.094         165.847         190.897         216.297         241.697         267.097           3/564         0.53125         15.3444         33.844         64.248         89.648         115.941         140.891         166.291         191.691         217.091         242.491         267.891           9/16         0.5525         14.288         39.688         65.088         90.488         115.284         141.684         167.084         192.484         217.848         242.888         266.288           19/32         0.59375         15.081         40.481         65.881         91.281         116.681         142.081         167.878         193.275         218.678         244.078         269.875           41/64         0.649375         15.77         14.275         166.679         174.757         142.875         168.672         194.072         219.472         244.872         270.272           217173         0.													
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17/32         0.53125         13.494         38.894         64.294         89.694         115.094         140.494         165.894         191.294         216.694         242.094         267.494           35/64         0.56625         113.891         39.291         64.691         90.091         115.491         140.891         166.281         192.088         217.488         242.241         267.891           37/64         0.578125         14.684         40.084         65.484         90.884         115.881         141.288         166.638         192.088         217.488         243.284         268.684           19/52         0.59375         15.081         40.481         65.881         91.281         116.661         147.081         167.381         192.881         218.281         243.284         269.081           39/64         0.60255         15.875         41.375         66.675         92.075         117.475         142.875         168.275         193.675         219.075         244.472         209.875           41/64         0.640625         16.272         41.672         67.269         93.266         118.269         143.265         194.050         219.472         214.472         169.056         219.472         214.452 <td></td>													
35/64         0.546875         13.891         39.291         64.691         90.091         115.491         140.891         166.291         191.691         217.091         242.491         267.891           9/16         0.5625         14.288         39.688         65.088         90.488         115.888         141.1288         166.688         192.088         217.488         242.888         266.288           37/64         0.578125         14.684         40.084         65.484         90.884         116.281         167.041         192.481         218.281         243.681         269.081           39/64         0.60257         15.478         40.481         65.484         91.678         117.078         142.478         167.878         193.675         219.075         244.475         269.475           41/64         0.640625         15.275         41.672         67.072         92.472         117.472         143.275         168.675         19.072         219.472         244.872         206.93         244.473         269.875           41/64         0.640625         16.669         42.066         67.469         92.869         118.269         143.669         169.069         194.469         219.849         245.666         271.065													
9/16         0.5625         14.288         39.688         65.088         90.488         115.888         141.288         166.688         192.088         217.488         242.888         268.288           37/64         0.578125         14.684         40.084         65.484         90.884         116.284         114.1684         167.084         192.484         217.844         242.884         268.288           39/64         0.69375         15.681         40.481         65.381         91.678         117.078         142.478         167.878         193.278         218.281         242.688         269.478           5/8         0.640625         16.272         41.672         67.072         92.472         117.875         143.275         168.672         194.072         219.472         244.872         270.669           41/64         0.640625         16.669         42.069         67.469         93.266         118.269         143.666         194.666         194.866         220.266         245.666         271.066           11/16         0.6875         17.463         42.863         68.263         93.663         119.063         144.463         169.665         195.265         221.059         246.459         271.859													
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19/32         0.59375         15.081         40.481         65.881         91.281         116.681         142.081         167.481         192.881         218.281         243.681         269.081           39/64         0.609375         15.478         40.078         66.278         91.678         117.078         142.478         167.878         193.278         218.678         244.078         269.478           5/8         0.6255         15.675         41.672         66.075         92.075         117.475         143.872         168.275         193.075         219.075         244.475         269.875           41/64         0.640625         16.272         41.672         67.072         92.472         117.872         143.669         193.665         194.469         219.869         245.269         270.669           45/64         0.671875         17.465         42.865         68.263         93.663         119.656         144.463         169.864         195.263         220.663         245.666         271.463           45/64         0.73157         18.653         44.053         69.55         94.059         119.455         144.453         170.55         195.659         221.052         246.652         272.256         274.659													
39/64         0.609375         15.478         40.878         66.278         91.678         117.078         142.478         167.878         193.278         218.678         244.078         269.478           5/8         0.625         15.875         41.275         66.675         92.075         117.475         142.875         168.275         193.675         219.075         244.475         269.875           41/64         0.640625         16.272         41.672         67.072         92.472         117.872         143.272         168.672         194.072         219.472         244.872         270.272           21/32         0.65625         15.6669         42.066         67.466         93.266         118.669         169.069         194.469         219.869         245.269         270.669           43/64         0.671875         17.463         42.865         68.253         93.663         119.051         144.459         109.565         221.059         246.653         271.463           45/64         0.703125         17.859         43.259         68.659         94.059         119.459         144.457         170.556         196.055         221.456         246.459         272.256           47/64         0.734375													
5/8         0.625         15.875         41.275         66.675         92.075         117.475         142.875         168.275         193.675         219.075         244.475         269.875           41/64         0.640625         16.272         41.672         67.072         92.472         117.872         143.272         168.672         194.072         219.472         244.872         270.272           21/32         0.65615         16.669         42.069         67.469         92.869         118.269         143.669         194.469         219.869         245.269         270.669           43/64         0.671875         17.465         42.865         68.263         93.665         119.063         144.463         169.863         195.263         220.663         246.659         271.463           45/64         0.703125         17.859         43.259         68.659         94.059         119.859         144.859         170.259         195.659         221.059         246.459         271.859           23/32         0.71875         18.653         44.053         69.850         95.250         120.650         146.050         171.450         196.850         221.456         246.856         272.256           47/64 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
41/64         0.640625         16.272         41.672         67.072         92.472         117.872         143.272         168.672         194.072         219.472         244.872         270.272           21/52         0.65625         16.669         42.069         67.469         92.869         118.269         143.669         169.069         194.469         219.869         245.269         270.669           43/64         0.671875         17.465         42.866         67.866         93.266         118.666         144.065         169.865         195.265         220.666         245.666         271.066           45/64         0.703125         17.859         43.259         68.659         94.059         119.459         144.859         170.259         195.659         221.059         246.459         271.859           23/32         0.71875         18.256         43.556         69.056         94.353         120.253         145.653         171.053         196.553         221.455         246.456         273.256           47/64         0.765625         19.447         44.847         70.247         95.647         121.047         146.447         171.845         196.453         221.853         247.253         273.643													
21/32         0.65625         16.669         42.069         67.469         92.869         118.269         143.669         169.069         194.469         219.869         245.269         270.669           43/64         0.671875         17.066         42.466         67.866         93.266         118.666         144.066         169.466         194.866         220.266         245.666         271.066           11/16         0.6875         17.463         42.863         68.263         93.663         119.063         144.453         169.863         195.263         220.663         246.063         271.463           45/64         0.703125         17.859         43.256         68.659         94.059         119.455         170.656         196.056         21.456         246.459         271.859           23/32         0.71875         18.254         43.656         69.055         94.455         170.253         196.453         221.853         247.253         272.653           3/4         0.75         19.050         44.450         69.850         95.250         120.650         171.450         196.850         222.250         247.650         273.050           49/64         0.765625         19.447         44.847         70.													
43/64         0.671875         17.066         42.466         67.866         93.266         118.666         144.066         169.466         194.866         220.266         245.666         271.066           11/16         0.6875         17.463         42.863         68.263         93.663         119.063         144.463         169.863         195.263         220.663         246.063         271.463           45/64         0.703125         17.859         43.259         68.659         94.059         119.459         144.859         170.259         195.659         221.059         246.459         271.859           23/32         0.71875         18.256         43.656         69.056         94.456         119.856         145.256         170.656         196.056         221.456         246.856         272.256           47/64         0.734375         18.653         44.053         69.850         95.250         120.650         146.050         171.450         196.850         222.250         247.253         272.653           49/64         0.765625         19.447         44.847         70.247         95.647         121.047         146.447         171.847         197.247         222.647         248.047         273.844													
11/16         0.6875         17.463         42.863         68.263         93.663         119.063         144.463         169.863         195.263         220.663         246.063         271.463           45/64         0.703125         17.859         43.259         68.659         94.059         119.459         144.859         170.259         195.659         221.059         246.459         271.859           23/32         0.71875         18.256         43.656         69.056         94.456         119.856         145.256         170.656         196.056         221.456         246.856         277.256           47/64         0.734375         18.653         44.053         69.453         94.853         120.253         145.653         171.650         196.453         221.853         247.253         272.653           3/4         0.75         19.050         44.4847         70.247         95.647         121.047         146.047         171.847         197.247         222.647         248.047         273.447           25/32         0.78125         19.844         45.244         70.644         96.044         121.444         146.844         172.244         197.644         223.044         248.044         273.847 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
45/640.70312517.85943.25968.65994.059119.459144.859170.259195.659221.059246.459271.85923/320.7187518.25643.65669.05694.456119.856145.256170.656196.056221.456246.856272.25647/640.73437518.65344.05369.45394.853120.253145.653171.053196.453221.853247.253272.6533/40.7519.05044.45069.85095.250120.650146.050171.450196.850222.250247.650273.05049/640.76562519.44744.84770.24795.647121.047146.447171.847197.247222.647248.047273.44725/320.7812519.84445.24470.64496.044121.444146.844172.244197.644223.044248.844273.84451/640.79687520.21145.64171.04196.441121.841147.241197.644223.044248.844273.84453/640.82812521.03446.43471.83497.234122.634148.034173.434198.834224.234249.634275.03427/320.8437521.43146.83172.23197.631123.031148.431173.831199.231224.631250.031275.43155/640.89062522.62247.62573.02598.028123.428148.628174.228199.628<													
23/32         0.71875         18.256         43.656         69.056         94.456         119.856         145.256         170.656         196.056         221.456         246.856         272.256           47/64         0.734375         18.653         44.053         69.453         94.853         120.253         145.653         171.053         196.453         221.853         247.253         272.653           3/4         0.75         19.050         44.450         69.850         95.250         120.650         146.050         171.450         196.850         222.250         247.650         273.050           49/64         0.765625         19.447         44.847         70.247         95.647         121.047         146.447         171.847         197.247         222.647         246.047         273.447           25/32         0.78125         19.844         45.244         70.644         96.044         121.441         146.844         172.244         197.644         223.044         248.841         274.241           13/16         0.8125         20.638         46.638         71.438         96.838         122.238         147.638         173.038         198.438         223.441         248.641         274.241 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>													
47/640.73437518.65344.05369.45394.853120.253145.653171.053196.453221.853247.253272.6533/40.7519.05044.45069.85095.250120.650146.050171.450196.850222.250247.650273.05049/640.76562519.44744.84770.24795.647121.047146.447171.847197.247222.647248.047273.44725/320.7812519.84445.24470.64496.044121.444146.844172.244197.644223.044248.444273.84451/640.79687520.24145.64171.04196.441121.841147.241172.641198.041223.441248.841274.24113/160.812520.63846.03871.43896.838122238147.638173.038198.438223.838249.238274.63853/640.82812521.03446.43471.83497.234122.634148.034173.434198.834224.234249.634275.03427/320.8437521.43146.83172.23197.631123.031148.431173.831199.231224.631250.031275.43155/640.85937521.82847.22873.02598.425123.825174.625200.025225.028250.428275.8287/80.87522.22547.62573.02598.425123.825174.625200.025225.82												-	
3/40.7519.05044.45069.85095.250120.650146.050171.450196.850222.250247.650273.05049/640.76562519.44744.84770.24795.647121.047146.447171.847197.247222.647248.047273.44725/320.7812519.84445.24470.64496.044121.444146.844172.244197.644223.044248.444273.84451/640.79687520.24145.64171.04196.441121.841147.241172.641198.041223.441248.841274.24113/160.812520.63846.03871.43896.838122.238147.638173.038198.438223.838249.238274.63853/640.82812521.03446.43471.83497.234122.634148.034173.434198.834224.234249.634275.03427/320.8437521.43146.83172.23197.631123.031148.431173.831199.231224.631250.031275.43155/640.85937521.82847.22873.02598.425123.825149.225174.625200.025225.425250.825276.22557/640.89062522.62248.02273.42298.822124.222149.622175.022200.422225.822251.222276.62229/320.9062523.01948.41973.81999.219124.619150.019175.419 <td></td>													
49/640.76562519.44744.84770.24795.647121.047146.447171.847197.247222.647248.047273.44725/320.7812519.84445.24470.64496.044121.444146.844172.244197.644223.044248.444273.84451/640.79687520.24145.64171.04196.441121.841147.241172.641198.041223.441248.841274.24113/160.812520.63846.03871.43896.838122.238147.638173.038198.438223.838249.238274.63853/640.82812521.03446.43471.83497.234122.634148.034173.434198.834224.234249.634275.03427/320.8437521.43146.83172.23197.631123.031148.431173.831199.231224.631250.031275.43155/640.85937521.82847.22872.62898.028123.428148.28174.228199.628225.028250.428275.8287/80.87522.22547.62573.02598.425123.825149.225174.625200.025225.425250.825276.22557/640.89062522.62248.02273.42298.822124.222149.622175.022200.422225.822251.122276.62229/320.9062523.01948.41973.81999.219124.619150.019175.419 <td></td>													
25/320.7812519.84445.24470.64496.044121.444146.844172.244197.644223.044248.444273.84451/640.79687520.24145.64171.04196.441121.841147.241172.641198.041223.441248.841274.24113/160.812520.63846.03871.43896.838122.238147.638173.038198.438223.838249.238274.63853/640.82812521.03446.43471.83497.234122.634148.034173.434198.834224.234249.634275.03427/320.8437521.43146.83172.23197.631123.031148.431173.831199.231224.631250.031275.43155/640.85937521.82847.22872.62898.028123.428148.228174.228199.628225.028250.428275.8287/80.87522.22547.62573.02598.425123.825149.225174.625200.025225.425250.825276.22557/640.89062522.62248.02273.42298.822124.222149.622175.02220.422225.822251.222276.62229/320.9062523.01948.41973.81999.19124.619150.019175.419200.819226.119251.619277.01959/640.92187523.41648.81674.21699.616125.016150.416175.816 <td></td>													
51/640.79687520.24145.64171.04196.441121.841147.241172.641198.041223.441248.841274.24113/160.812520.63846.03871.43896.838122.238147.638173.038198.438223.838249.238274.63853/640.82812521.03446.43471.83497.234122.634148.034173.434198.834224.234249.634275.03427/320.8437521.43146.83172.23197.631123.031148.431173.831199.231224.631250.031275.43155/640.85937521.82847.22872.62898.028123.428148.828174.228199.628225.028250.428275.8287/80.87522.22547.62573.02598.425123.825149.225174.625200.025225.425250.825276.22557/640.89062522.62248.02273.42298.822124.222149.622175.022200.422225.822251.222276.62229/320.9062523.01948.41973.81999.219124.619150.019175.419200.819226.219251.619277.01959/640.92187523.81349.21374.613100.013125.413150.813176.213201.613227.013252.413277.81361/640.95312524.20949.60975.009100.409125.809151.209176.60		0.78125				96.044					223.044		
13/160.812520.63846.03871.43896.838122.238147.638173.038198.438223.838249.238274.63853/640.82812521.03446.43471.83497.234122.634148.034173.434198.834224.234249.634275.03427/320.8437521.43146.83172.23197.631123.031148.431173.831199.231224.631250.031275.43155/640.85937521.82847.22872.62898.028123.428148.828174.228199.628225.028250.428275.8287/80.87522.22547.62573.02598.425123.825149.225174.625200.025225.425250.825276.22557/640.89062522.62248.02273.42298.822124.222149.622175.022200.422225.822251.222276.62229/320.9062523.01948.41973.81999.219124.619150.019175.419200.819226.219251.619277.01959/640.92187523.41648.81674.21699.616125.016150.416175.816201.216226.616252.016277.41615/160.937523.81349.21374.613100.013125.413150.813176.213201.613227.013252.413277.81361/640.95312524.60650.00675.406100.806126.206151.606 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>													
53/640.82812521.03446.43471.83497.234122.634148.034173.434198.834224.234249.634275.03427/320.8437521.43146.83172.23197.631123.031148.431173.831199.231224.631250.031275.43155/640.85937521.82847.22872.62898.028123.428148.828174.228199.628225.028250.428275.8287/80.87522.22547.62573.02598.425123.825149.225174.625200.025225.425250.825276.22557/640.89062522.62248.02273.42298.822124.222149.622175.022200.422225.822251.222276.62229/320.9062523.01948.41973.81999.219124.619150.019175.419200.819226.219251.619277.01959/640.92187523.41648.81674.21699.616125.016150.416175.816201.216226.616252.016277.41615/160.937523.81349.21374.613100.013125.413150.813176.213201.613227.013252.413277.81361/640.95312524.60650.00675.406100.806126.206151.606177.006202.406227.806253.206278.60631/320.9687524.60650.00675.406100.806126.206151.606177.00													
55/640.85937521.82847.22872.62898.028123.428148.828174.228199.628225.028250.428275.8287/80.87522.22547.62573.02598.425123.825149.225174.625200.025225.425250.825276.22557/640.89062522.62248.02273.42298.822124.222149.622175.022200.422225.822251.222276.62229/320.9062523.01948.41973.81999.219124.619150.019175.419200.819226.219251.619277.01959/640.92187523.41648.81674.21699.616125.016150.416175.816201.216226.616252.016277.41615/160.937523.81349.21374.613100.013125.413150.813176.213201.613227.013252.413277.81361/640.95312524.20949.60975.009100.409125.809151.209176.609202.009227.409252.809278.20931/320.9687524.60650.00675.406100.806126.206151.606177.006202.406227.806253.206278.606	53/64	0.828125	21.034	46.434	71.834	97.234	122.634	148.034	173.434	198.834	224.234	249.634	275.034
7/80.87522.22547.62573.02598.425123.825149.225174.625200.025225.425250.825276.22557/640.89062522.62248.02273.42298.822124.222149.622175.022200.422225.822251.222276.62229/320.9062523.01948.41973.81999.219124.619150.019175.419200.819226.219251.619277.01959/640.92187523.41648.81674.21699.616125.016150.416175.816201.216226.616252.016277.41615/160.937523.81349.21374.613100.013125.413150.813176.213201.613227.013252.413277.81361/640.95312524.20949.60975.009100.409125.809151.209176.609202.009227.409252.809278.20931/320.9687524.60650.00675.406100.806126.206151.606177.006202.406227.806253.206278.606	27/32	0.84375	21.431	46.831	72.231	97.631	123.031	148.431	173.831	199.231	224.631	250.031	275.431
57/640.89062522.62248.02273.42298.822124.222149.622175.022200.422225.822251.222276.62229/320.9062523.01948.41973.81999.219124.619150.019175.419200.819226.219251.619277.01959/640.92187523.41648.81674.21699.616125.016150.416175.816201.216226.616252.016277.41615/160.937523.81349.21374.613100.013125.413150.813176.213201.613227.013252.413277.81361/640.95312524.20949.60975.009100.409125.809151.209176.609202.009227.409252.809278.20931/320.9687524.60650.00675.406100.806126.206151.606177.006202.406227.806253.206278.606	55/64	0.859375	21.828	47.228	72.628	98.028	123.428	148.828	174.228	199.628	225.028	250.428	275.828
57/640.89062522.62248.02273.42298.822124.222149.622175.022200.422225.822251.222276.62229/320.9062523.01948.41973.81999.219124.619150.019175.419200.819226.219251.619277.01959/640.92187523.41648.81674.21699.616125.016150.416175.816201.216226.616252.016277.41615/160.937523.81349.21374.613100.013125.413150.813176.213201.613227.013252.413277.81361/640.95312524.20949.60975.009100.409125.809151.209176.609202.009227.409252.809278.20931/320.9687524.60650.00675.406100.806126.206151.606177.006202.406227.806253.206278.606	7/8	0.875	22.225	47.625	73.025	98.425	123.825	149.225	174.625	200.025	225.425	250.825	276.225
29/320.9062523.01948.41973.81999.219124.619150.019175.419200.819226.219251.619277.01959/640.92187523.41648.81674.21699.616125.016150.416175.816201.216226.616252.016277.41615/160.937523.81349.21374.613100.013125.413150.813176.213201.613227.013252.413277.81361/640.95312524.20949.60975.009100.409125.809151.209176.609202.009227.409252.809278.20931/320.9687524.60650.00675.406100.806126.206151.606177.006202.406227.806253.206278.606										-		-	
59/640.92187523.41648.81674.21699.616125.016150.416175.816201.216226.616252.016277.41615/160.937523.81349.21374.613100.013125.413150.813176.213201.613227.013252.413277.81361/640.95312524.20949.60975.009100.409125.809151.209176.609202.009227.409252.809278.20931/320.9687524.60650.00675.406100.806126.206151.606177.006202.406227.806253.206278.606						99.219					226.219	251.619	
61/64         0.953125         24.209         49.609         75.009         100.409         125.809         151.209         176.609         202.009         227.409         252.809         278.209           31/32         0.96875         24.606         50.006         75.406         100.806         126.206         151.606         177.006         202.406         227.806         253.206         278.606	59/64	0.921875	23.416	48.816	74.216	99.616	125.016	150.416	175.816	201.216	226.616	252.016	277.416
31/32         0.96875         24.606         50.006         75.406         100.806         126.206         151.606         177.006         202.406         227.806         253.206         278.606	15/16	0.9375	23.813	49.213	74.613	100.013	125.413	150.813	176.213	201.613	227.013	252.413	277.813
	61/64	0.953125	24.209	49.609	75.009	100.409	125.809	151.209	176.609	202.009	227.409	252.809	278.209
63/64         0.984375         25.003         50.403         75.803         101.203         126.603         152.003         177.403         202.803         228.203         253.603         279.003	31/32	0.96875	24.606	50.006	75.406	100.806	126.206	151.606	177.006	202.406	227.806	253.206	278.606
	63/64	0.984375	25.003	50.403	75.803	101.203	126.603	152.003	177.403	202.803	228.203	253.603	279.003

EME

NOTES





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