

DEUBLIN[®]

A Member of the HOERBIGER Group



ROTATING UNIONS

for High Pressure Hydraulic Service

Our aim: "To make every effort toward producing the best product of its kind on the Market".

This tenet serves as an incentive and an obligation in equal measure. Adherence to this policy has been responsible for our growth from a small garage shop to the world's largest manufacturer of Rotating Unions with a world-wide sales and service network.

Wherever water, steam, oil, coolant lubricants or other media have to be conveyed into or through turning machine parts, like rollers, shafts or spindles, rotating unions are employed in a wide range of industrial fields.

Developed in 1945, and continually improved as a result of practical requirements, **DEUBLIN** Rotating Unions are at the cutting edge of technology today.

DEUBLIN Rotating Unions - the industry standard. Our customers can rely on our engineering expertise, R&D capabilities, manufacturing techniques and more than 60 years of knowledge and experience.

Our product range is constantly being developed and expanded. In addition, we offer special solutions, customer specified variations and modular designs which enable us to provide users with the perfect solution for virtually any application.

Direct contact with customers and a close collaboration with the original equipment manufacturers provide the basis for continuous improvement.

Quality encompasses our entire enterprise. At **DEUBLIN**, reliable products at competitive prices and just-on-time deliveries are standards.

This, of course, requires an integrated total quality control system that is practiced in all areas of our organisation.

Quality is the result of teamwork!

DEUBLIN has its Corporate Headquarter in Waukegan, USA. For over 30 years the facilities in Germany and Italy have been producing for the European, African and Near Eastern Market.

Besides sales and warehouse facilities in almost every country in Europe, we also have company owned subsidiaries in Brazil, China, Germany, Finland, France, Italy, Japan, Mexico, Austria, Poland, Singapore, Spain, South Korea and the United Kingdom.

Our customers can rely on our worldwide manufacturing and sales & service network.



Due to its Total Quality Management System **DEUBLIN** was awarded its initial Certification pursuant to DIN EN ISO 9001 in 1996 by the German Standard Institute. In October 2002 the re-certification followed accompanied by the initial Certification for its Environmental Management System pursuant to DIN EN ISO 14001.

Certified as an **Authorised Economic Operator (AEO)** since **March 2009**, **DEUBLIN** has established that its supply chain is secure and customs-reliable. For its customers, it means faster flow of goods and materials. This is a significant advantage for **DEUBLIN's** partners worldwide.

DEUBLIN sets new standards.



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Rotating Union for Wind turbines, DN 15 – 40

1 - 4 Passages



- monoflow design
- self-supported rotating union
- threaded type rotor
- hydrostatic bearing design
- wear-resistant bearing
- vent for controlled leakage, depending on pressure
- shaft seal for secondary sealing
- stainless steel housing
- hardened steel rotor

Operating Data

Max. Hydraulic Pressure	3,630 PSI	250 bar
Min. Hydraulic Pressure	40 PSI	3 bar
Max. Speed	500 RPM	500 min ⁻¹
Max. Temperature	60 °C	> 60 °C consult DEUBLIN
Required Oil Cleanliness: class 17/15/12, ISO 4406		

For further information please contact **DEUBLIN** or your local representative.



- duoflow design
- flange rotor
- coaxial media passage



- duoflow design
- flange rotor
- parallel media passage
- central passage for cable
- connection for electrical slip ring

Special designs:

- three passage design
- eccentric cable passage
- drain line in rotor
- SAE housing connection



- four passage design
- flange rotor
- parallel media passage
- central passage for cable
- connection for electrical slip ring



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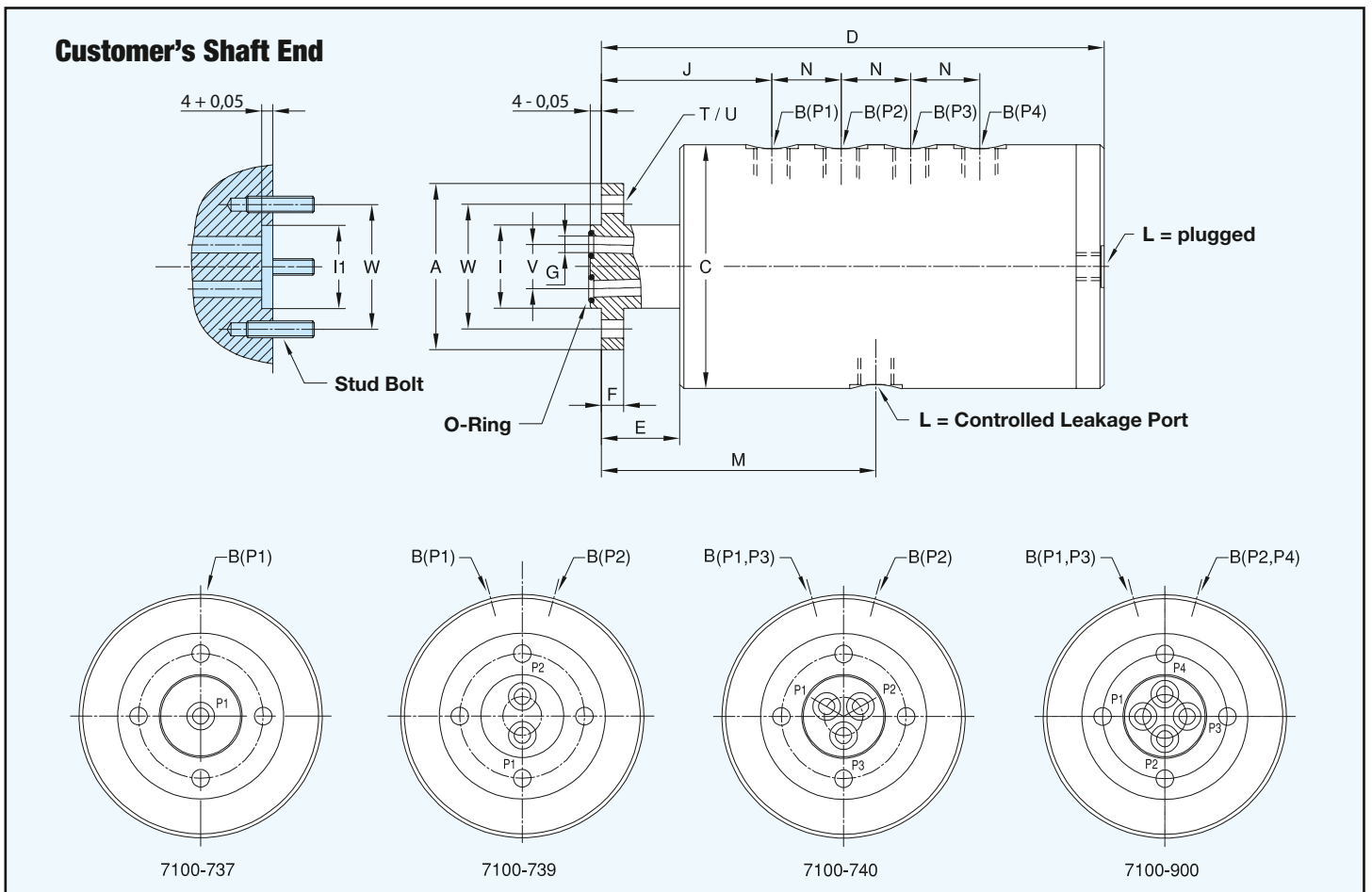
Rotating Union 7100 Series for High Pressure Hydraulic Service, DN 8, 1-4 passages


- 1-4 passages
- self-supported rotating union
- hydrostatic bearing design
- ball bearing supported
- vent for controlled leakage, depending on pressure
- shaft seal for secondary sealing
- aluminium housing
- steel rotor, coated
- special designs for higher speeds

Operating Data

Max. Hydraulic Pressure	2,900 PSI	200 bar
Min. Hydraulic Pressure	40 PSI	3 bar
Max. Speed	3,000 RPM	3 000 min ⁻¹
Max. Temperature	60 °C	> 60 °C consult DEUBLIN
Required Oil Cleanliness: class 17/15/12, ISO 4406		

For further information please contact **DEUBLIN** or your local representative.



DN	B	Ordering No.	A Rotor Connections	C ∅	D	E	F	G ∅	I ∅	H ∅	J	L	M	N	T	U ∅	V ∅	W ∅	
1 x 8	1 x G 1/4	7100-737	Flange ∅ 60	88	110	28	8	1 x 6	30 f7	30 H7	61,5	G 1/8	74,5	-	4x90°	6,6	14	45	2,0
2 x 8	2 x G 1/4	7100-739	Flange ∅ 60	88	135	28	8	2 x 6	30 f7	30 H7	61,5	G 1/8	99	1 x 25	4x90°	6,6	14	45	2,6
3 x 8	3 x G 1/4	7100-740	Flange ∅ 60	88	160	28	8	3 x 6	30 f7	30 H7	61,5	G 1/4	74	2 x 25	4x90°	6,6	14	45	3,1
4 x 8	4 x G 1/4	7100-900	Flange ∅ 60	88	185	28	8	4 x 6	30 f7	30 H7	61,5	G 1/4	99	3 x 25	4x90°	6,6	14	45	3,6

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Rotating Union 7100 Series for High Pressure Hydraulic Service, DN 8 - 20, Duoflow

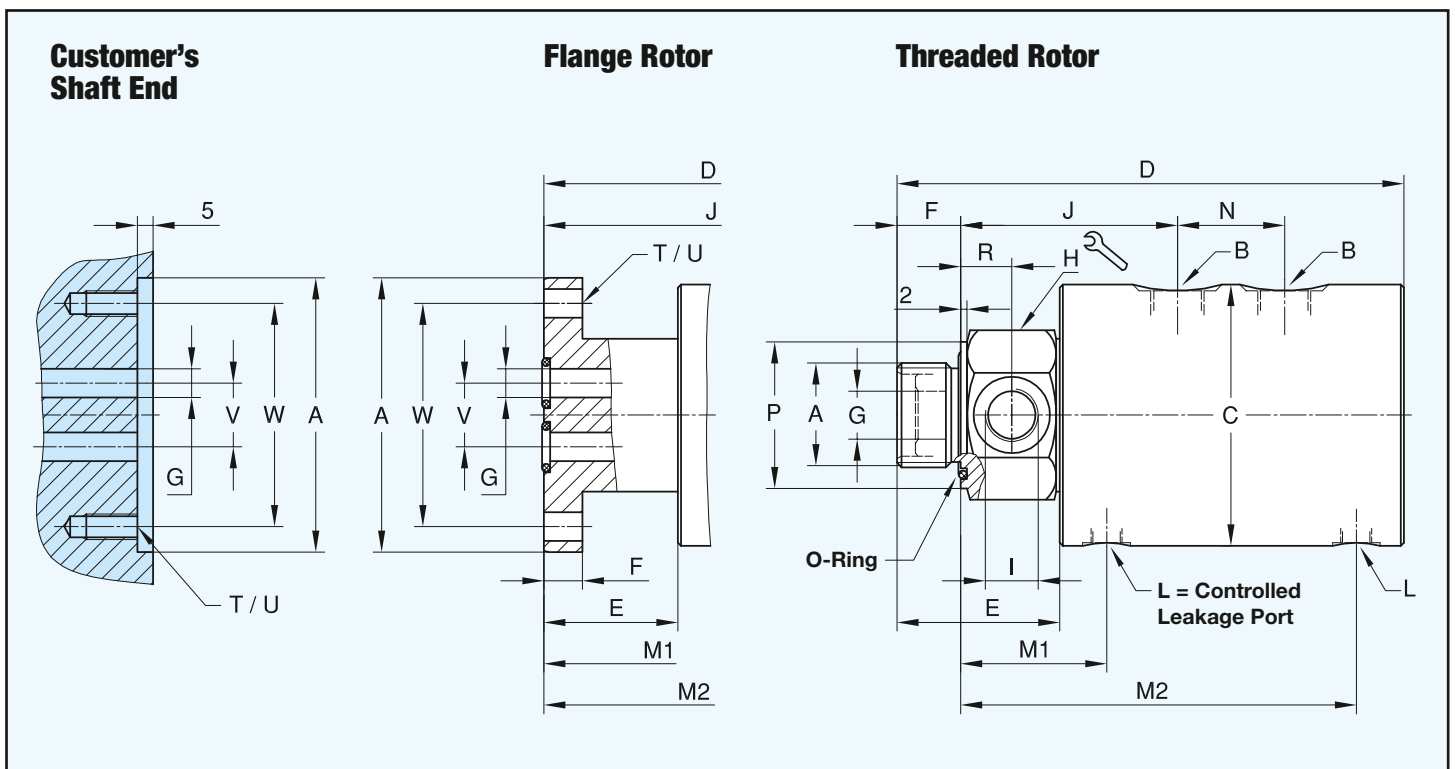


- duoflow design
- self-supported rotating union
- hydrostatic bearing design
- wear-resistant bearing
- vent for controlled leakage, depending on pressure
- shaft seal for secondary sealing
- stainless steel housing
- hardened steel rotor

Operating Data

Max. Hydraulic Pressure	3,630 PSI	250 bar
Min. Hydraulic Pressure	40 PSI	3 bar
Max. Speed	500 RPM	500 min ⁻¹
Max. Temperature	60 °C	> 60 °C consult DEUBLIN
Required Oil Cleanliness: class 17/15/12, ISO 4406		

For further information please contact **DEUBLIN** or your local representative.



DN	B	Ordering No.	A Rotor Connections	C ∅	D	E	F	G ∅	H	I	J	L	M1/M2	N ∅	P ∅	R	T	U ∅	V ∅	W ∅	kg
2 x 8	2 x G 1/4	7100-773	G 3/4 RH	82	176	46	17	6,4	46	G 1/4	76	G 1/8	49,5/137,5	36	46	15	-	-	-	-	4,5
2 x 8	2 x G 1/4	7100-852	Flange ∅ 86 g6/H7	82	172	42	12	9	-	-	89	G 1/8	63/151	36	-	-	4x90°	9 M8	20	70	4,5
2 x 10	2 x G 3/8	7100-777	G 1 RH	82	181	51	20	8	46	G 3/8	78	G 1/8	52/140	36	46	16	-	-	-	-	4,4
2 x 10	2 x G 3/8	7100-853	Flange ∅ 86 g6/H7	82	172	42	12	9	-	-	89	G 1/8	63/151	36	-	-	4x90°	9 M8	20	70	4,4
2 x 15	2 x G 1/2	7100-711	G 1 1/4 RH	109	244	70	26	15	55	G 1/2	101	G 1/4	70,5/180,5	50	55	18	-	-	-	-	11
2 x 15	2 x G 1/2	7100-854	Flange ∅ 108 g6/H7	109	230	56	16	12,5	-	-	113	G 1/4	82,5/192,5	50	-	-	4x90°	11 M10	20,5	88	11
2 x 20	2 x G 3/4	7100-713	G 1 1/2 RH	109	249	75	28	17,5	65	G 3/4	106	G 1/4	73,5/183,5	50	65	20	-	-	-	-	12
2 x 20	2 x G 3/4	7100-855	Flange ∅ 148 g6/H7	148	288	78	25	19	-	-	153	2x G 1/2	110,5/253	60	-	-	6x60°	13,5 M12	33	126	28



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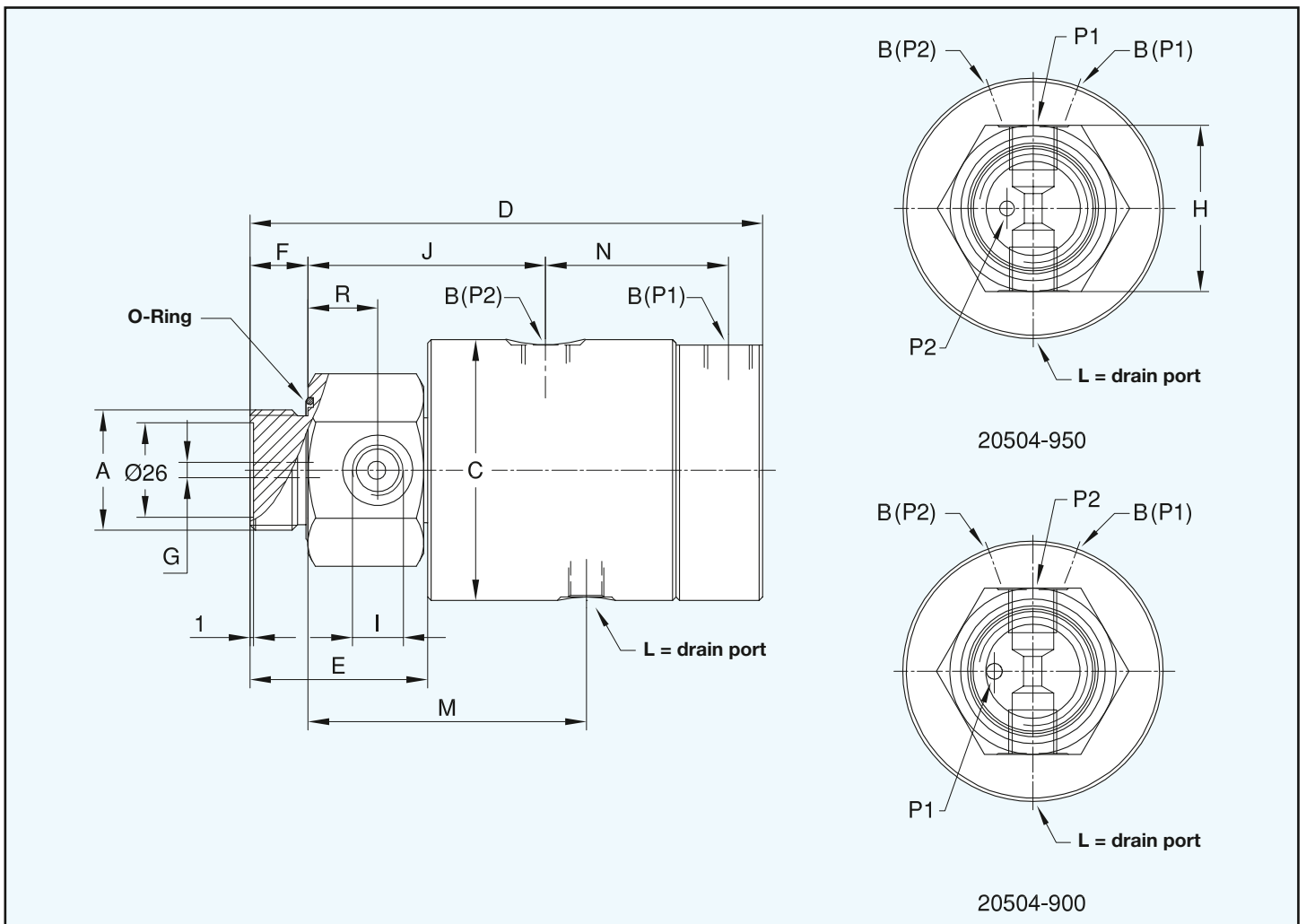
Rotating Union 20504 Series for High Pressure Hydraulic Service, DN 8, Duoflow

- duoflow design
- self-supported rotating union
- P1 pressure channel
- high-wear resistant balanced mechanical seal
Silicon Carbide/Silicon Carbide for high pressure passage (P1)
- P2 channel for release, during standstill
- carbon-filled Teflon seals
- shaft seal in seal cavity
- drain passage prevents interpassage leakage
- housing connections radial
- aluminium housing
- stainless steel rotor, hardened
- Main application: Coil Winding

Operating Data

Max. Hydraulic Pressure	3,050 PSI	210 bar
Max. Speed	250 RPM	250 min ⁻¹
Max. Temperature	60 °C	> 60 °C consult DEUBLIN
Required Oil Cleanliness:	class 17/15/12, ISO 4406	

For further information please contact **DEUBLIN** or your local representative.



DN	B	Ordering No.	A Rotor Connections		C ∅	D	E	F	G ∅	H ↻	I	J	L	M	N	R	kg
2 x 8	2 x G 1/4	20504-900	G 1	RH	72	141,5	49	16	4,3	46	G 1/4	65,5	G 1/8	77	50,5	19	1,7
2 x 8	2 x G 1/4	20504-950	G 1	RH	72	141,5	49	16	4,3	46	G 1/4	65,5	G 1/8	77	50,5	19	1,7

Important Information

A *DEUBLIN* Union is a precision-made piece of equipment and must be handled accordingly. Sealing between the rotating device - rotor - and the static device - stator - is mainly accomplished via floating seals. Improper use could result in premature leakage or failure.

Although *DEUBLIN* Unions are of the highest quality and precision they are, by their very nature, a "wear and tear" product. It's important that they should be inspected periodically. Moreover, when seals wear out, the rotating union must be replaced or repaired to avoid subsequent leakage. Once a union begins to leak, it is paramount that the union be repaired immediately. Never work with leaking unions!

DEUBLIN Unions must never be used for applications other than those specified in the catalogue. It is strictly prohibited to use *DEUBLIN* Unions with hydrocarbons or other flammable media as leakage may result in a fire or explosion. The use of our product on exotic or corrosive media is strictly prohibited without our prior approval. For applications other than those stated in the catalogue, the *DEUBLIN* Engineering Department should be contacted for proper instructions. These instructions are provided by *DEUBLIN* as general guidelines and do not contain exhaustive information about the installation, use or maintenance of unions.

Operating instructions and installation manuals are available in the German and English languages for the greater part of *DEUBLIN* products. Buyers and users of *DEUBLIN* Unions should be certain that they have reviewed all of *DEUBLIN*'s product information. The operating and installation instructions must be strictly adhered to when installing *DEUBLIN* unions.

Factory Testing

All *DEUBLIN* Unions are factory-tested under pressure prior to shipment. This thorough check ensures that each single *DEUBLIN* Union is completely operational when you receive it and can - in most cases - be installed with no further consideration.

Warranty

The buyer's warranty rights assume that the product shipped be inspected upon receipt and all defects reported to *DEUBLIN* in writing immediately or for no longer than a period of 2 weeks. Defects must be reported to *DEUBLIN* in writing immediately upon detection. The warranty is void when the *DEUBLIN* Rotating Union is tampered with or misused in any way. Otherwise, our General Terms of Sale and Delivery are valid. It cannot be emphasised enough that all dynamic seal components are wear parts.

DEUBLIN will not be held liable for damage resulting from improper use, incorrect warehousing, incorrect transport, faulty assembly, faulty operation, insufficient maintenance, incorrect handling, improper installation by the customer, the use of inappropriate accessories or spare parts and natural abrasion. Please request our General Terms of Sale and Delivery.

Lubrication and Maintenance

Depending on the *DEUBLIN* product series and the operating parameters all *DEUBLIN* Unions are lubricated for life.

The unions equipped with oil cups should be lubricated periodically with 4 to 5 drops of high quality SAE 30 motor oil, approximately once a month or in extreme severe conditions (high RPM's) once a week.

Filtering

The service life of the seal is largely determined by filter quality and thus of vital importance for the perfect operation of the rotating union. We recommend a filtering of min. 60 µm. It goes without saying that all installation and operating instructions must be carefully reviewed and strictly adhered to.

Repair Service and Maintenance of *DEUBLIN* Unions by *DEUBLIN*

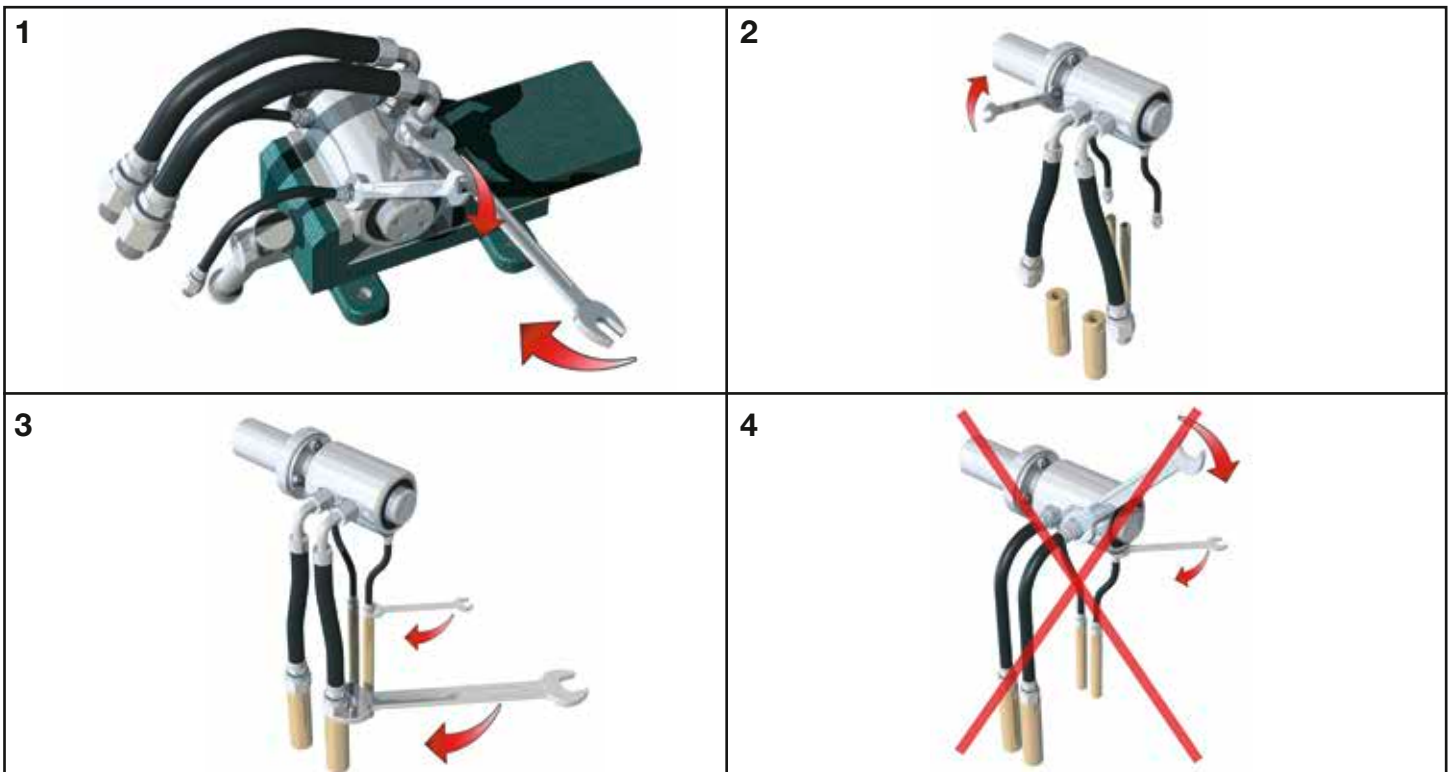
Use only *DEUBLIN* spare parts for repair of the *DEUBLIN* Rotating Unions. Prior to repair contact *DEUBLIN* or any authorised *DEUBLIN* representative. You can find a local *DEUBLIN* representative at the following internet site: www.deublin.com.

Most unions can be reconditioned in the field by use of *DEUBLIN* Repair or Rebuilding Kits. Generally, we recommend having the *DEUBLIN* Rotating Unions repaired by *DEUBLIN*. Repair Service is available at all *DEUBLIN* factories. Factory rebuilt unions carry a "New-Union-Warranty".

Tension-free Installation

When installing Rotating Unions, special attention has to be paid to a flexible and tension-free hose connection. For further suggestions please refer to our installation instructions.

Instructions for Hose Installation and Assembly of *DEUBLIN* Rotating Unions - see example 7100 series below





Since its establishment in 1945, **DEUBLIN** has consistently adhered to a policy of producing the best product of its kind in the market. The result of this policy has been constant growth through the years. For this progress we are grateful to our many loyal customers.

We cordially invite you to visit our modern manufacturing facilities in Waukegan, Illinois; Mainz, Germany; Monteveglio, Italy and Dalian, China.

Sincerely,

Donald L. Deubler
Chairman of the Board



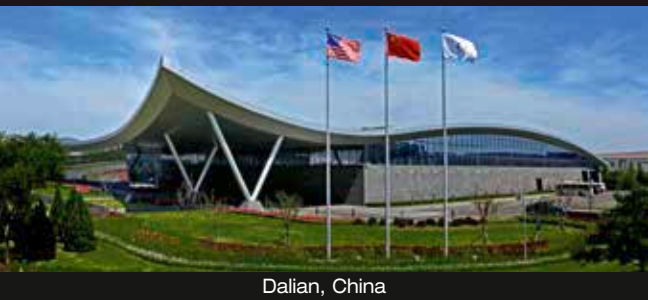
Global Headquarters in Waukegan, Illinois, U.S.A.



Mainz, Germany



Monteveglio, Italy



Dalian, China



DEUBLIN PRODUCTS & SERVICES ARE AVAILABLE THROUGHOUT THE WORLD

www.deublin.com

AMERICA

DEUBLIN USA

2050 Norman Drive
Waukegan, IL 60085-6747 U.S.A
Phone: +1 847-689 8600
Fax: +1 847-689 8690
e-mail: customerservice@deublin.com

DEUBLIN Brazil

Rua Fagundes de Oliveira, 538 - Galpão A11
Piraporinha
09950-300 - Diadema - SP - Brasil
Phone: +55 11-2455 3245
Fax: +55 11-2455 2358
e-mail: deublinbrasil@deublinbrasil.com.br

DEUBLIN Mexico

Norte 79-A No. 77, Col. Claveria
02080 Mexico, D.F.
Phone: +52 55-5342 0362
Fax: +52 55-5342 0157
e-mail: deublinmexicocs@deublin.com

ASIA

DEUBLIN China

No. 2, 6th DD Street,
DD Port Dalian, 116620, China
Phone: +86 411-8754 9678
Fax: +86 411-8754 9679
e-mail: info@deublin.cn

Shanghai Branch Office

Room 15A07, Wangjiao Plaza
No. 175 East Yan'an Road, Huangpu District
Shanghai 200002
Phone: +86 21-5298 0791
Fax: +86 21-5298 0790
e-mail: info@deublin.cn

DEUBLIN Asia Pacific

51 Goldhill Plaza
#17-02 Singapore 308900
Phone: +65 6259-92 25
Fax: +65 6259-97 23
email: deublin@singnet.com.sg

DEUBLIN Japan

2-13-1, Minamihanayashiki, Kawanishi City
Hyogo 666-0026, Japan
Phone: +81 72-757 0099
Fax: +81 72-757 0120
e-mail: customerservice@deublin-japan.co.jp
2-4-10-3F, Ryogoku, Sumida-ku
Tokyo 130-0026, Japan
Phone: +81 35-625 0777
Fax: +81 35-625 0888
e-mail: customerservice@deublin-japan.co.jp
1-9-2-4F, Mikawaanjo-cho, Anjo City
Aichi 446-0056, Japan
Phone: +81 566-71 4360
Fax: +81 566-71 4361
e-mail: customerservice@deublin-japan.co.jp

DEUBLIN Korea

Star Tower #1003, Sangdaewon-dong 223-25,
Jungwon-gu, Seongnam-si, Gyeonggi-do,
South Korea
Phone: +82 31-8018 5777
Fax: +82 31-8018 5780
e-mail: customerservice@deublin.co.kr

EUROPE

DEUBLIN Germany

Florenz-Allee 1
55129 Mainz, Germany
Phone: +49 6131-49980
e-mail: info@deublin.de

DEUBLIN Italy

Via Guido Rossa 9 - Loc. Monteveglio
40053 Comune di Valsamoggia (BO), Italy
Phone: +39 051-835611
Fax: +39 051-832091
e-mail: info@deublin.it

DEUBLIN Austria

Lainzer Straße 35
1130 Wien, Austria
Phone: +43 1-8768450
Fax: +43 1-876845030
e-mail: info@deublin.at

DEUBLIN France

61 Bis, Avenue de l'Europe
Z.A.C de la Malnoue
77184 Emerainville, France
Phone: +33 1-64616161
Fax: +33 1-64616364
e-mail: service.client@deublin.fr

DEUBLIN Poland

ul. Bierutowaska 57-59
51-317 Wrocław, Poland
Phone: +48 71-3528152
Fax: +48 71-3207306
e-mail: info@deublin.pl

DEUBLIN Russia

5ya yl. Sokolinof gori, 18, bld 2, 1st floor
Moscow, 105275, Russia
Phone: +7 495-647 1434
e-mail: info@deublinrussia.ru

DEUBLIN Spain

C/ Lola Anglada, 20 local 1
08228 Les Fonts (Terrassa), Spain
Phone: +34 93-221 1223
e-mail: deublin@deublin.es

DEUBLIN United Kingdom

6 Sopwith Park, Royce Close, West Portway
Andover SP10 3TS, UK
Phone: +44 1264-33 3355
Fax: +44 1264-33 3304
e-mail: info@deublin.co.uk