

# DEUBLIN

## 1005 Series "Closed Seal" Rotary Unions for Continuous Coolant Service

- Single passage for coolant or MQL
- Closed seals for transfer line and similar applications
- Full-flow design has no obstructions to trap swarf or debris
- Bearing-supported with threaded rotor for easy installation
- Labyrinth system and large vents to protect ball bearings
- Balanced mechanical seals made from silicon carbide for long life even under difficult operating conditions
- Anodised housing and stainless steel rotor resist corrosion

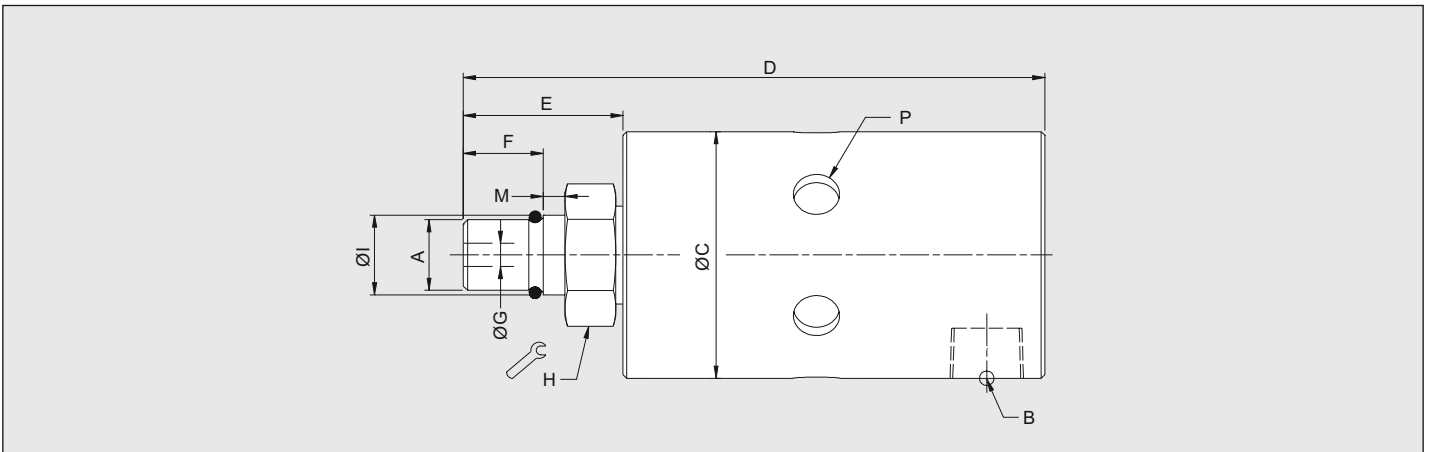
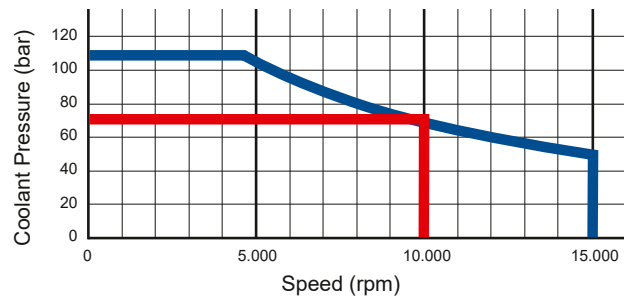


### Operating Data

Media	Water-based Coolant	
	MQL (oil mist) up to 10 bar (145 psi)	
Filtration	ISO 4406:2017 Class 17/15/12, max. 60 micron	
Max. Speed	15.000 min <sup>-1</sup>	15,000 rpm
Max. Pressure	105 bar	1,523 psi
Max. Flow	6,7 l/min	1.8 gpm
Max. Temperature	71 °C	160 °F



DO NOT RUN DRY



Other 1005 models are available for use with oil or dry air. Please refer to the Deublin Engineering Catalogue.

	Ordering Number	B Supply Connection	C Overall Diameter	D Overall Length	P Vent Size Ø (6 x 60°)	A Rotor Connection	E Rotor Length	F Thread Length	G Bore Diameter	H Across Flats	I Pilot Diameter	M Pilot Length
<b>R.</b>	1005-704-434*	1/8 NPT	34	80	3 x Rp 1/8	M10 x 1 RH	22	11	3.4	17	10.994 10.989	5
<b>Radial</b>	1005-402-401	1/8 NPT	34	80	6.4	M10 x 1 RH	22	11	3.2	17	10.994 10.989	3
	1005-402-448	1/8 NPT	34	80	6.4	M10 x 1 LH	22	11	3.2	17	10.994 10.989	3

\* Also allowed for hydraulics, compressed air and defined dry run cycles. For further information please contact Deublin.

# DEUBLIN

## 1101 Series "Closed Seal" Rotary Unions for Coolant Service

- Single passage for coolant or MQL
- Dry-running cycles and compressed air applications under rotation possible depending on the model (see \*, \*\*)
- Closed seals for transfer line and similar applications
- Full-flow design has no obstructions to trap swarf or debris
- Bearing-supported with threaded rotor for easy installation
- Labyrinth system and large vents to protect ball bearings
- Balanced mechanical seals made from silicon carbide for long life even under difficult operating conditions
- Anodised aluminium components resist corrosion

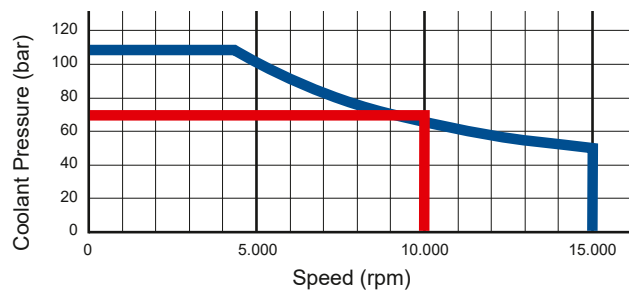


### Operating Data

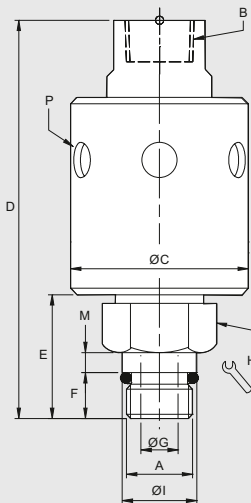
Media	Water-based Coolant
	MQL (oil mist) up to 10 bar (145 psi)
Filtration	ISO 4406:2017 Class 17/15/12, max. 60 micron
Max. Speed	15.000 min <sup>-1</sup> 15,000 rpm
Max. Pressure	105 bar 1,523 psi
Max. Flow up to	24.3 l/min 6.4 gpm
Max. Temperature	71 °C 160 °F



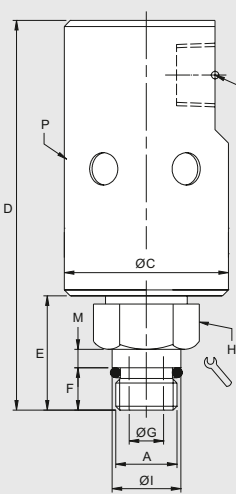
DO NOT RUN DRY



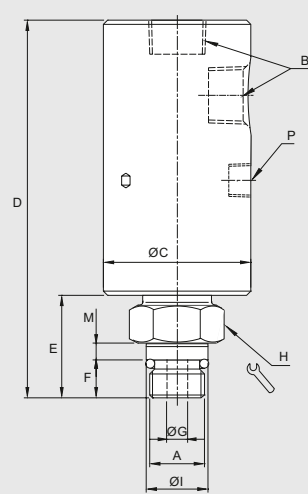
### Axial Connection



### Radial Connection



### Axial / Radial Connection



	Ordering Number	B Supply Connection	C Overall Diameter	D Overall Length	P Vent Size Ø (6 x 60°)	A Rotor Connection	E Rotor Length	F Thread Length	G Bore Diameter	H Across Flats	I Pilot Diameter	M Pilot Length
Radial	1101-265-343**	G 1/4	43	95	3 x R 1/8	M16 x 1.5 LH	30	11	6	24	17.993 / 17.988	5
	1101-265-644**	G 1/4	43	91	3 x R 1/8	Flange TK-Ø 21	26	14.5	6	4 x M4	Ø 30.01 H6	8
	1101-632-343	Rc 3/8	43	103	3 x Rc 1/8	M16 x 1.5 LH	30	11	6	24	17.993 / 17.988	5
A+R	1101-202-651*	Rc 3/8	43	110	3 x Rc 1/8	M16 x 1.5 LH	30	11	6	24	17.993 / 17.988	5
	1101-202-664*	Rc 3/8	43	110	3 x Rc 1/8	M12 x 1.25 LH	30	11	6	24	13.994 / 13.989	5
	1101-235-343	3/8 NPT	43	96	9	M16 x 1.5 LH	30	11	6	24	17.993 / 17.988	5
Axial	1101-235-238	3/8 NPT	43	100	9	5/8-18 UNF LF	34	14.3	6	24	16.649 / 16.464	5
	1101-359-343	G 3/8	43	96	9	M16 x 1.5 LH	30	11	6	24	17.993 / 17.988	5
	R: 1101-195-343	G 3/8	43	102	9	M16 x 1.5 LH	30	11	6	24	17.993 / 17.988	5

\* Also allowed for compressed air and defined dry run cycles with reduced operating data.

\*\* Also allowed for operation with hydraulic, compressed air and defined dry run cycles with reduced operating data. Please see page 21 multi-media application.

# DEUBLIN

## 1116 Series “Closed Seal” Rotary Unions for Coolant Service

- Single passage for coolant or MQL
- Dry-running cycles and compressed air applications under rotation possible depending on the model (see \*, \*\*)
- Closed seals for transfer line and similar applications
- Full-flow design has no obstructions to trap swarf or debris
- Bearing-supported with threaded rotor for easy installation
- Labyrinth system and large vents to protect ball bearings
- Balanced mechanical seals made from silicon carbide for long life even under difficult operating conditions
- Anodised aluminium housing resists corrosion

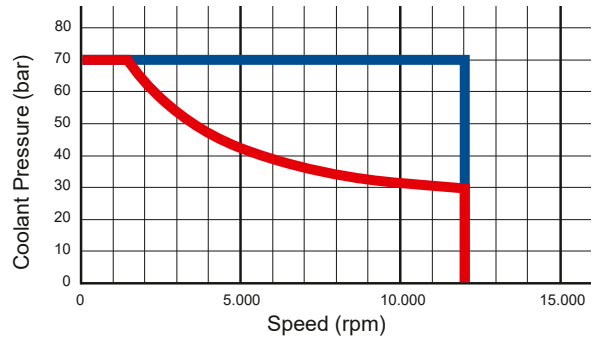


### Operating Data

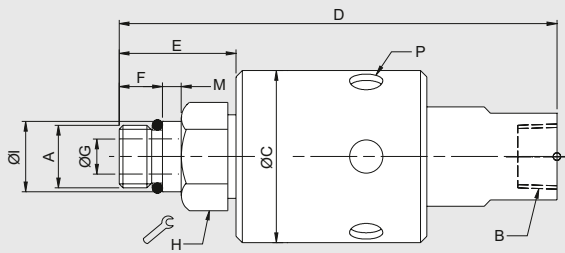
Media	Water-based Coolant
	MQL (oil mist) up to 10 bar (145 psi)
Filtration	ISO 4406:2017 Class 17/15/12, max. 60 micron
Max. Speed	12,000 min <sup>-1</sup> 12,000 rpm
Max. Pressure	70 bar 1,015 psi
Max. Flow	82 l/min 21.6 gpm
Max. Temperature	71 °C 160 °F



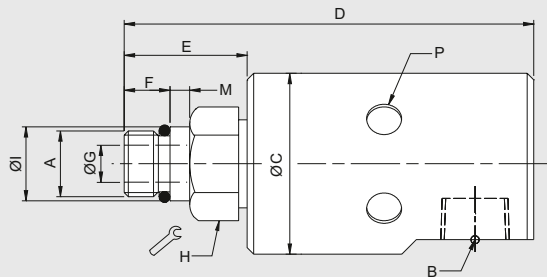
DO NOT RUN DRY



### Axial Connection



### Radial Connection



	Ordering Number	B Supply Connection	C Overall Diameter	D Overall Length	P Vent Size Ø (6 x 60°)	A Rotor Connection	E Rotor Length	F Thread Length	G Bore Diameter	H Across Flats	I Pilot Diameter	M Pilot Length
Axial	1116-048-059***	1/4 NPT	44	115	9	5/8-18 UNF LH	33	14	9	24	16.649 / 16.644	5
	1116-048-463***	1/4 NPT	44	112	9	M16 x 1.5 LH	30	11	9	24	17.993 / 17.988	5
	1116-063-463*	G 3/8	44	112	9	M16 x 1.5 LH	30	11	9	24	17.993 / 17.988	5
	1116-319-248	Ø25 Counter Bore	44	105	3 x 9.5	3/8 NPT	30	16	-	24	-	-
	1116-485-463***	G 1/4	44	112	9	M16 x 1.5 LH	30	11	9	24	17.993 / 17.988	5
	1116-600-059	3/8 NPT	44	115	9	5/8-18 UNF LH	33	14	9	24	16.650 / 16.637	5
	1116-600-463	3/8 NPT	44	112	9	M16 x 1.5 LH	30	11	9	24	17.994 / 17.989	5
	1116-610-463	G 3/8	44	112	9	M16 x 1.5 LH	30	11	9	24	17.993 / 17.988	5
Radial	1116-090-059	3/8 NPT	44	105	9	5/8-18 UNF LH	33	14	9	24	16.649 / 16.644	5
	1116-090-463	3/8 NPT	44	102	9	M16 x 1.5 LH	30	11	9	24	17.993 / 17.988	5
	1116-516-463*	G 3/8	44	102	9	M16 x 1.5 LH	29	11	9	24	17.993 / 17.988	5
R.	1116-555-463	G 3/8	44	102	9	M16 x 1.5 LH	29	11	9	24	17.993 / 17.988	5
R.	1116-987-463**	G 3/8	44	102	9	M16 x 1.5 LH	30	11	9	24	17.993 / 17.988	5

\* Also allowed for compressed air and defined dry run cycles with reduced operating data.

\*\* Also allowed for operation with hydraulic, compressed air and defined dry run cycles with reduced operating data. Please see page 21 multi-media application.

\*\*\* For selection of unions with 1/4 connection please contact Deublin engineering for operating data.

For further information please contact Deublin.

# DEUBLIN

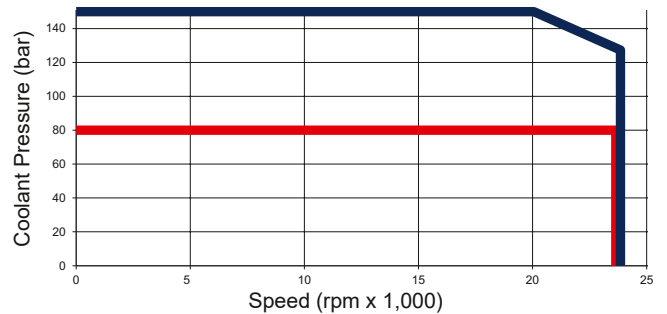
## 1108 Series "Closed Seal" Bore-Mounted Rotary Unions for Coolant Service

- Single passage for coolant or MQL
- Dry-running cycles and compressed air applications under rotation possible depending on the model (see \*)
- Closed seals
- Accepts up to 19 mm of draw bar movement
- Full-flow design has no obstructions to trap swarf or debris
- Labyrinth system and large vents to protect ball bearing
- Balanced mechanical seals made from silicon carbide for long life even under difficult operating conditions
- Stainless steel housing and rotor
- Anodised aluminium end cap

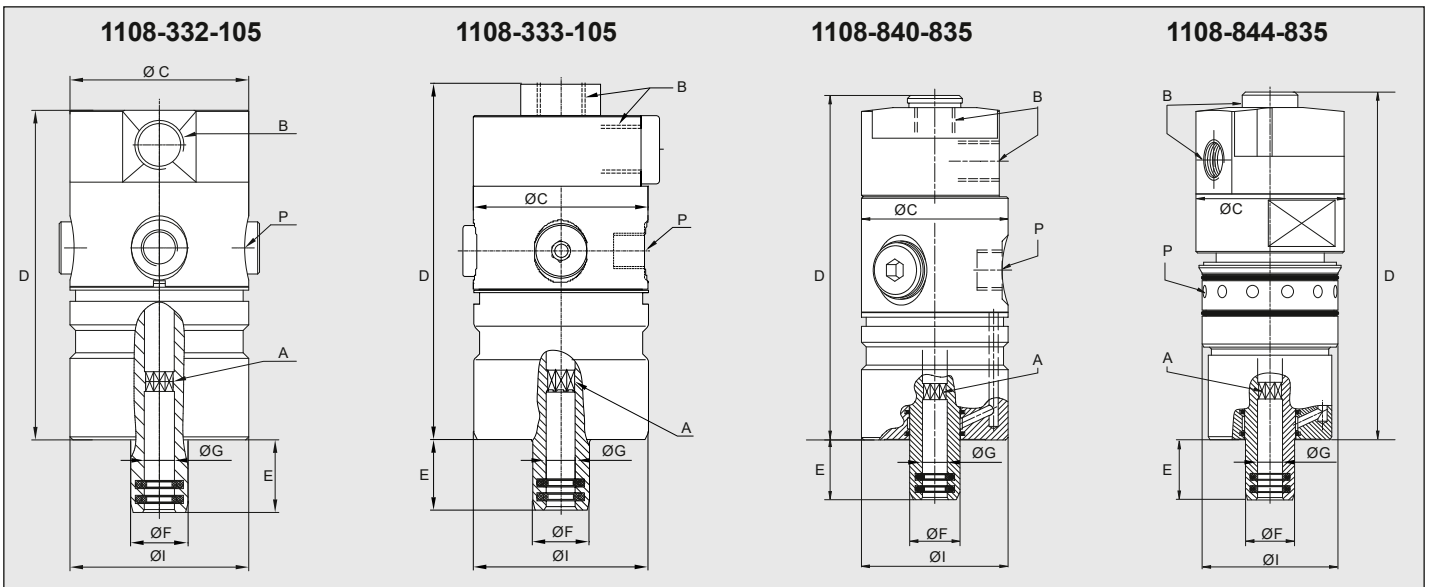


### Operating Data

Media	Water-based Coolant MQL (oil mist) up to 10 bar (145 psi)	
Filtration	ISO 4406:2017 Class 17/15/12, max. 60 micron	
Max. Speed	24.000 min <sup>-1</sup>	24,000 rpm
Max. Pressure	see graph/table	
Max. Flow	24,3 l/min	6.4 gpm
Max. Temperature	71 °C	160 °F



■ 1108-332-105, 1108-333-105   ■ 1108-840-835, 1108-844-835



Ordering Number	B Supply Connection	C Overall Diameter	D Housing Length	P Vent Size Ø	A Rotor Connection	E Rotor Length	F Rotor Overall Diameter	G Bore Diameter	I Pilot Diameter	Max. Speed (rpm)	Max. Pressure (bar)
1108-332-105*	G 1/4 Radial	48	88.5	G 1/8 (4x90°)	Octagon 7.4 D10	19.5	15.4	8.1 F9	48 h7	24,000	80
1108-333-105*	G 1/4 Axial & Radial	48	98	G 1/8 (4x90°)	Octagon 7.4 D10	19.5	15.4	8.1 F9	48 h7	24,000	80
1108-840-835	G 1/4 Axial & Radial	48	112	G 1/4 (3x120°)	Octagon 7.4 D10	19.5	15.9	8.1 F9	48 g6	24,000	150
1108-844-835	G 1/4 Axial & Radial	48	113	12 x Ø4	Octagon 7.4 D10	19.5	15.9	8.1 F9	44.000 43.959	24,000	150

\* Also allowed for compressed air and defined dry run cycles with reduced operating data. For further information please contact Deublin.