# DEUBLIN

1139 Series Bearingless "All-Media" Rotating Unions for Coolant, MQL, and Air Service

- Single passage for all media
- Patented technology operates with closed seals for coolant, as a "pop-off" when pressure is removed, and as with a microscopic gap between the seals ("controlled leakage") with pressurised dry air
- Non-rotating element has a "stroke" (axial movement) of 0.77 - 3.0 mm, for reliable sealing even with thermal expansion of spindle and variations in drawbar position
- Full-flow design has no obstructions to trap swarf or debris
- 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) , Air (dry or lubricated)
Filtration	ISO 4406 Class 17/15/12, max. 60 micron
Max. Speed	30.000 min^{-1} 30,000 rpm
Max. Pressure	140 bar 2,030 psi Coolant
	10 bar 145 psi MQL, Air
Max. Flow	28 l/min 7.4 gpm
Max. Temperature	70°C 160°F

Recommended valve configuration to switch quickly among media.
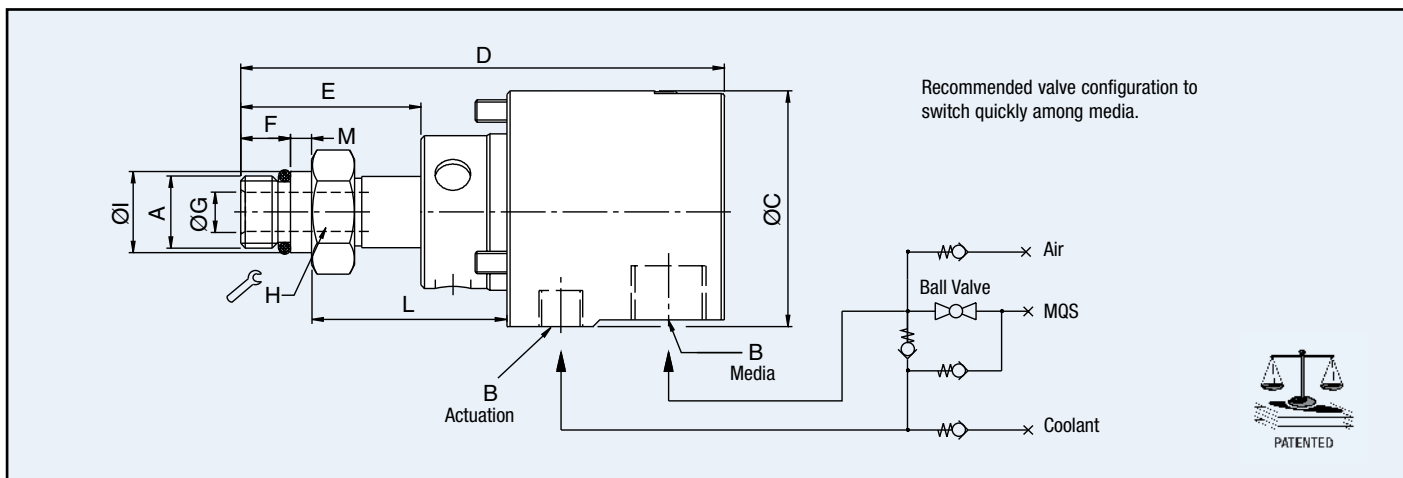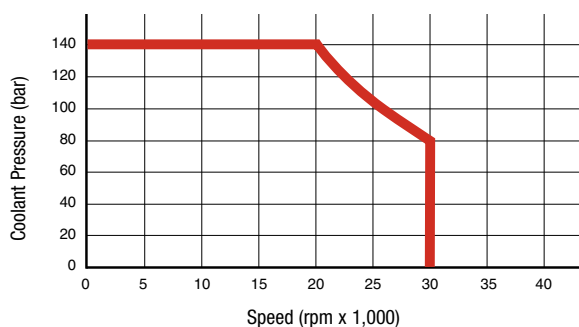
Ordering Number	B Supply Connection[A]	C Overall Diameter	D Overall Length	L Mounting Distance	A Rotor Connection	E Rotor Length	F Thread Length	G Bore Diameter	H Across Flats	I Pilot Diameter	M Pilot Length
1139-020-116	3/8 NPT Axial 1/8 NPT Radial	51	97	31.6 / 30.6	M16 x 1.5 LH	28	11	9	24	17.993 / 17.968	5
1139-032-301	3/8 PT Axial 1/8 PT Radial	54	109	44.0 / 43.0	M16 x 1.5 LH	40	11	9	24	17.994 / 17.989	5
1139-032-327	3/8 PT Axial 1/8 PT Radial	54	106	39.6 / 38.6	M12 x 1.25 LH	37	12	6	21	14.000 / 13.992	5
1139-041-301	3/8 PT Axial 1/8 PT Radial	54	109	44.0 / 43.0	M16 x 1.5 LH	40	11	9	24	17.994 / 17.989	5
1139-744-301	G 3/8 Axial G 1/8 Radial	54	101	44.0 / 43.0	M16 x 1.5 LH	40	11	9	24	17.994 / 17.989	5
1139-746-301	G 3/8 Radial G 1/8 Radial	54	108	44.0 / 43.0	M16 x 1.5 LH	40	11	9	24	17.994 / 17.989	5
1139-746-327	G 3/8 Radial G 1/8 Radial	54	105	44.0 / 43.0	M12 x 1.25 LH	37	12	9	24	14.000 / 13.992	5

(Rows 1139-020-116 to 1139-041-301 grouped under "Axial Connection"; rows 1139-746-301 and 1139-746-327 grouped under "Radial")

Note A: All 1139 series have a 1/8" radial connection for the actuation port. Please refer to connection scheme.

DEUBLIN

27