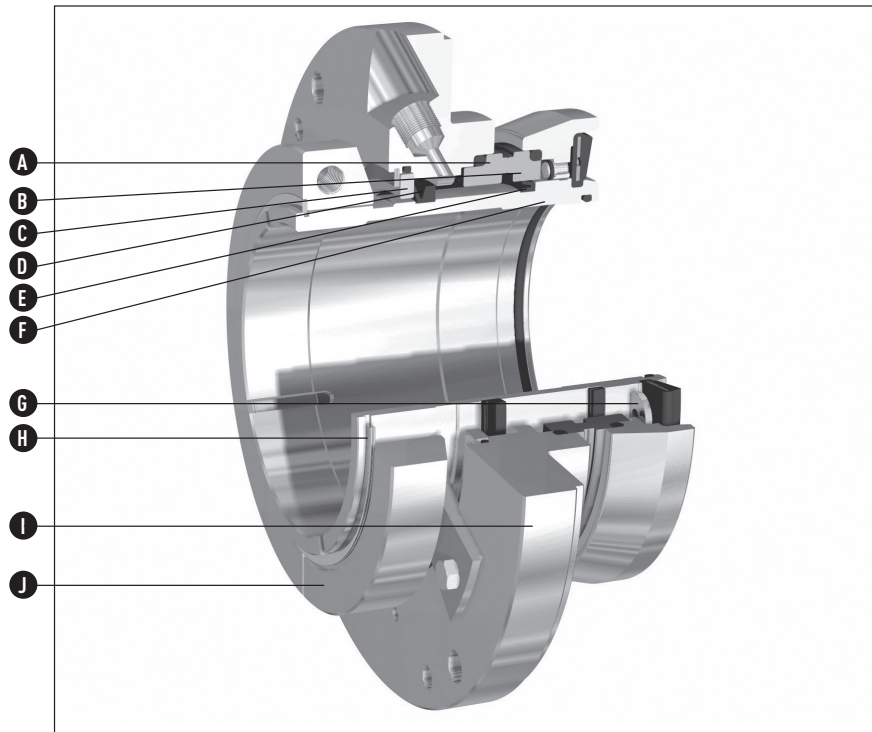


- A – Mating ring
- B – Primary ring
- C – Quench seal
- D – V-ring
- E – U-cup
- F – Sleeve
- G – Drive disc
- H – Spiral retaining ring
- I – Gland plate
- J – Drive collar



Product Description

Type 5840 is a cartridge seal design, suitable for abrasive slurry duties and capable of operating without a quench. A modular construction incorporates a cone spring which avoids clogging and eliminates the dynamic O-ring and risk of hang-up. Seal faces are silicon or tungsten carbide and identical. Adaptive hardware is alloyed stainless steel or high chrome iron to provide both excellent corrosion and abrasive resistance of wetted components. A quench seal option is available to improve service life.

Design Features

- Robust cartridge arrangement, with six (6) group sizes
- Accommodates shafts 1.37" to 8.66"/35mm to 220mm
- Modular construction for reduced inventory and ease of reconditioning
- Hydraulically balanced design with interchangeable seal faces
- Abrasion resistant seal faces in silicon or tungsten carbide
- Non-clogging cone spring eliminates dynamic O-rings
- TFE/P standard elastomers
- No flush is required
- Anti-rotation pin with O-ring

Performance Capabilities

- Temperature: Up to 75°C/167°F (without quench)
Up to 120°C/248°F (with quench)
- Pressure: Up to 21 barg/300 psig
- Speed: 3,000 fpm/15 m/s
0 to 3,600 rpm

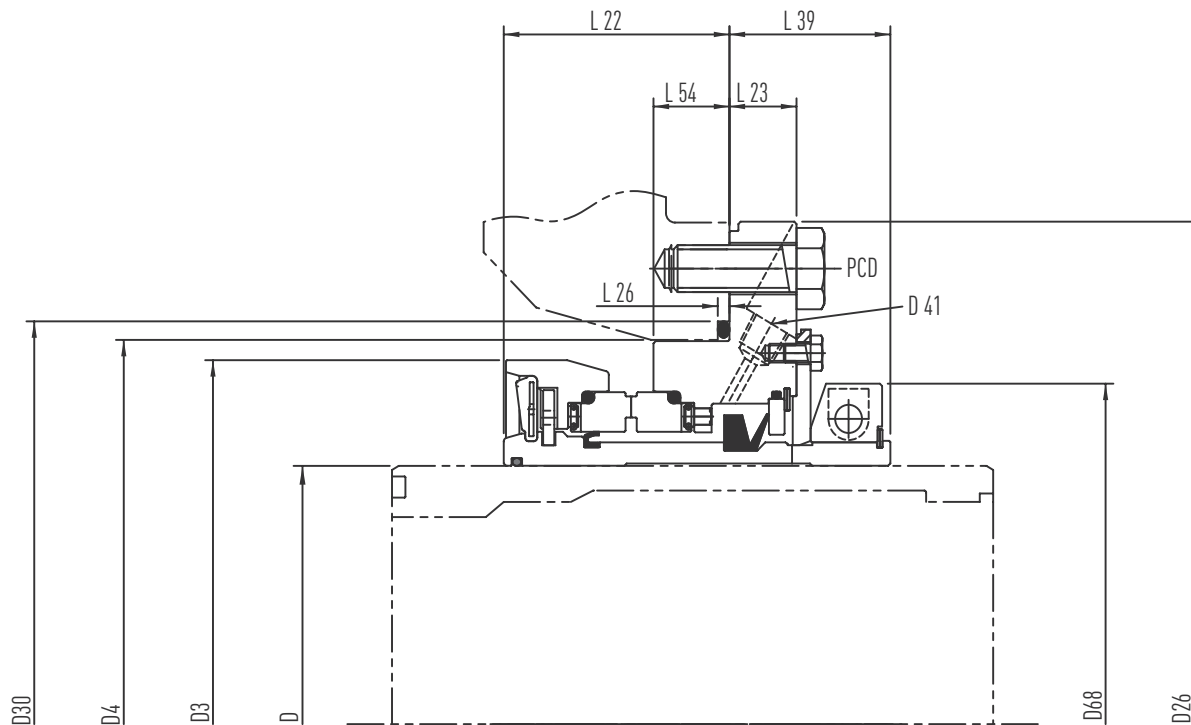
For conditions other than those listed above, please consult John Crane.

Available with John Crane Diamond® Technology

- Brings the features and benefits of pure diamond to mechanical seals
- Withstands abrasive, chemically-aggressive, poor-lubricating and intermittent, dry-running applications
- Reduces energy consumption and cooling requirements



Type 5840 Typical Arrangement



Type 5840 Dimensional Data (Inches)

Group	D	D3	D4	D26	D30	D41	D68	L22	L23	L26	L39	Gland Stud PCD	Stud Dia
1	1.375 - 2.000	3.898	—	4.961	5.236	1/4" NPT	2.480	1.654	0.957	—	1.457	—	—
2	2.000 - 3.250	5.354	6.419	8.543	6.799	1/4" NPT	4.449	2.146	0.984	0.110	1.772	7.677	M12
3	3.250 - 4.125	6.693	7.285	9.567	7.898	1/4" NPT	6.063	2.736	0.827	0.171	2.323	8.661	M12
4	4.125 - 5.313	8.032	8.269	11.339	8.882	3/8" NPT	7.717	2.736	1.063	0.171	2.638	10.236	M12
5	5.313 - 7.063	10.157	10.632	13.780	11.25	3/8" NPT	9.252	3.406	0.984	0.217	2.638	12.598	M12
6	7.063 - 8.625	12.205	12.885	16.850	13.507	3/8" NPT	11.417	3.976	1.181	0.206	2.835	15.276	M20

Type 5840 Dimensional Data (mm)

Group	D	D3	D4	D26	D30	D41	D68	L22	L23	L26	L39	Gland Stud PCD	Stud Dia
1	35.0 - 51.0	99.0	—	140.0	133.0	1/4" NPT	63.0	42.0	24.3	—	37.0	—	—
2	51.0 - 82.5	136.0	163.0	217.0	172.7	1/4" NPT	113.0	54.5	25.0	2.8	45.0	195.0	M12
3	82.5 - 105.0	170.0	185.0	243.0	200.6	1/4" NPT	154.0	69.5	21.0	4.3	59.0	220.0	M12
4	105.0 - 135.0	204.0	210.0	288.0	225.6	3/8" NPT	196.0	69.5	27.0	4.3	67.0	260.0	M12
5	135.0 - 180.0	258.0	270.0	350.0	285.8	3/8" NPT	235.0	86.5	25.0	5.5	67.0	320.0	M12
6	180.0 - 220.0	310.0	327.3	428.0	343.1	3/8" NPT	290.0	101.0	30.0	5.2	72.0	388.0	M20

Dimensions for guideline only.

Seal Pressure Rating

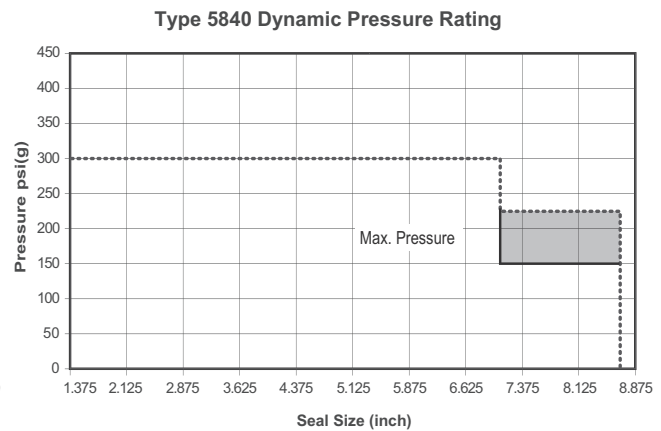
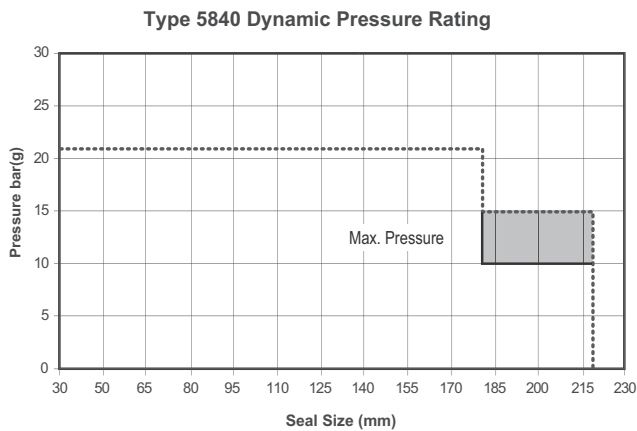
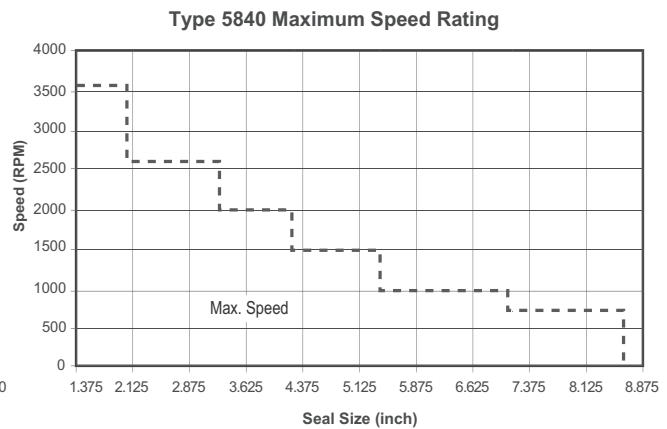
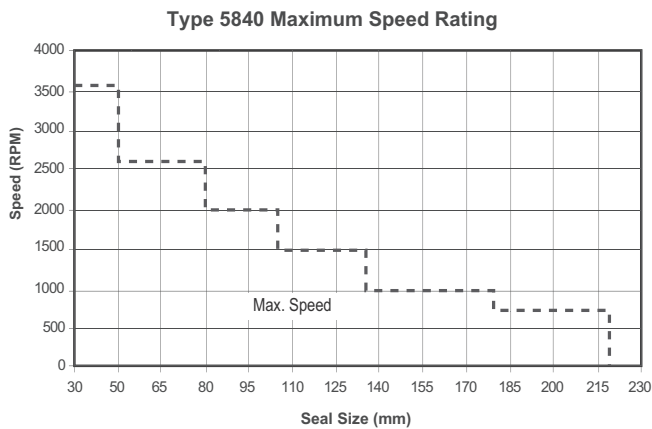
For seal sizes up to 180mm/7.09", the dynamic pressure rating is 21 barg/300 psig.

For larger seals up to 220mm/8.66" the pressure is limit is 15 barg/218 psig, for applications over 10 barg/145 psig please consult John Crane.

The maximum static pressure rating is 30 barg/435 psig, for seal sizes up to 180mm/7.09" and 21 barg/300 psig for larger seals up to 220mm/8.66".

Type 5840 Speed and Pressure Rating (Metric)

Type 5840 Speed and Pressure Rating (Imperial)



For sizes over 180mm/7.087" consult John Crane for pressures over 10 barg/145 psig.

Materials of Construction		
SEAL COMPONENTS	MATERIALS	
Description	Standard	Options
Gland plate Shaft sleeve Primary ring carrier	Duplex stainless steel (wrought) CD4MCU-N cast	Super Duplex 28% Hard Chrome Iron (1.436/1.438) Alloy C-276
Drive collar	316 stainless steel	304 stainless steel Duplex stainless steel
Cone Spring	AFLAS® (TFE/P)	—
Primary ring Mating ring	Silicon carbide	John Crane Diamond® Tungsten Carbide (to 135mm/5.715")
Secondary containment mating ring	Tungsten carbide	—
Soc. HD. capscrew	Alloy steel (grade 12.9) zinc PLT	—
Spiral Retaining Ring	302 stainless steel	—
Setting piece	316 stainless steel	304 stainless steel
Hex. HD. screws Pin Drive disc	316 stainless steel	—
Elastomer	AFLAS® (TFE/P)	—

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