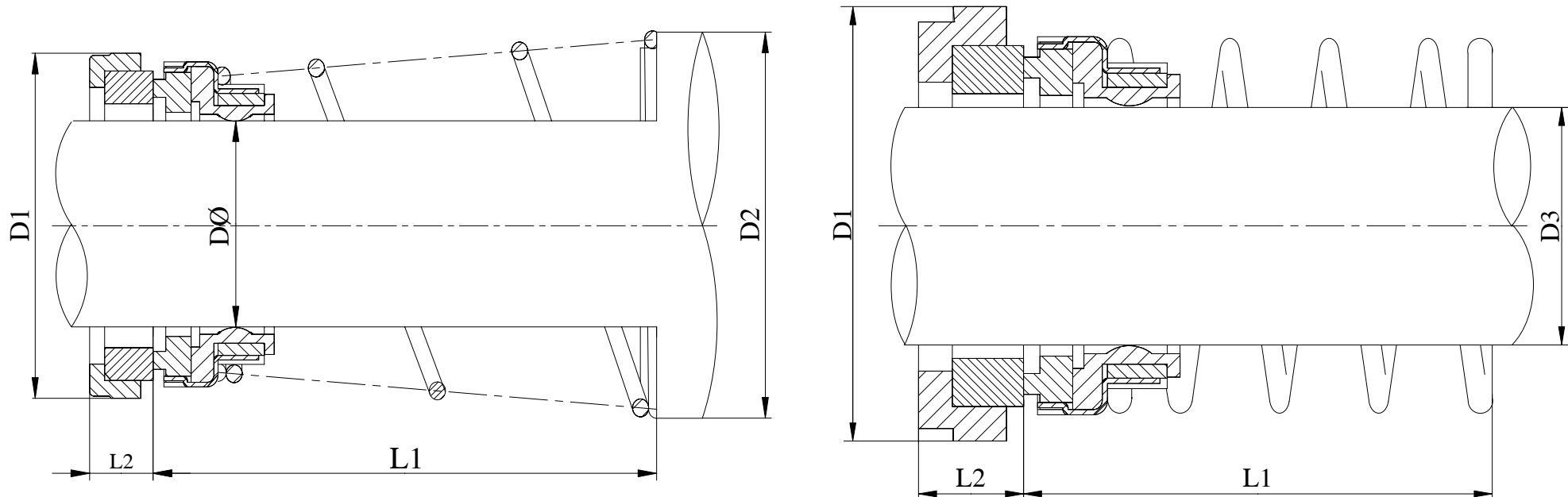


**VULCAN TYPE 277 & 278 MECHANICAL SEALS FOR T.T.K.® & THUNE-EUREKA® PUMPS**

MODIFIED VULCAN TYPE 20 SEALS WITH SPECIAL COILS DESIGNED TO SUIT THE EXACT REQUIREMENTS OF THESE COMMON MARINE PUMPS.

TYPE 277 HAS REVERSE-TAPERED COILS, AND IS NITRILE WITH CARBON VS. CERAMIC AS STANDARD

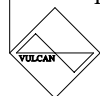
TYPE 278 HAS VERY LONG PARALLEL COILS, STEPPED-BOOT SEATS, AND IS NITRILE WITH CARBON VS. CERAMIC AS STANDARD

TYPE 277 AND 278 DO NOT HAVE COIL BASE PLATES

SHAFT SIZE DØ	SIZE CODE	D1	D2	L1	L2	L3	OEM PUMP MODEL
29mm	0290	47.63	46.0	32.0	11.99	44.0	CGA
35mm	0350	53.98	53.0	31.5	11.99	43.5	CGB
41mm	0410	60.35	59.3	32.5	11.99	44.5	CGC
48mm	0480	66.70	66.0	38.5	11.99	50.5	CGD
54mm	0540	73.05	70.0	41.0	13.50	54.5	CGE

SHAFT SIZE DØ	SIZE CODE	D1	L1	L2	L3
1.875"	0476	66.70	79.4	11.99	91.4
2.375"	0603	79.40	82.6	13.50	96.1

**Vulcan Engineering Ltd.**  
Unit 3 South West Centre  
Troutbeck Road

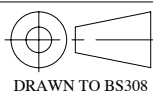


Sheffield  
S8 0JR

UNSPECIFIED  
TOLERANCES

ANG.  
±0.5°

LIN.  
±0.15



DRAWN TO BS308

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Vulcan Engineering Ltd

ISSUE	E.C.N	DATE	MODIFICATIONS	BY

DRAWN	SRL	DATE	27.07.06
CHECKED		DATE	
APPROVED		DATE	
SCALE	DIMENSIONS ARE IN MM		
NTS			

DRAWING TITLE  
**ASSEMBLY**  
MATERIAL  
SEE ABOVE CODES

DRAWING NO.  
**Type 277 & 278**

ISSUE  
**A**