cyclam
Dynamic sealing solutions

Subsidiary of AVO Carbon GROUP

Type EPR

Elastomer bellows seals

The seals are used in all rotating machines in the relevant industrial sectors.
The EPR has a supplementary positive drive mechanism that is recommended for high start up torque, viscous or sticky media, or frequent stop start operation.

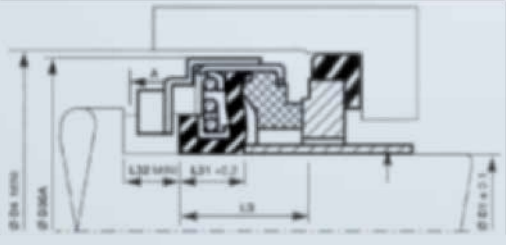
- Slightly corrosive chemicals
- Self-aligning by design
- Monobloc for rapid installation
- **Compatibles types**: LAR, TAR, LTAR, LBR or TBR.
- **Temperature**: -40 °C to 180 °C (depending on material choice)
- **Pressure**: Up to 10 bar
- **Max Speed**: 12 m/s
- **Shaft size**: 8 to 150 mm

Performances shown above are minimum values for standard conditions of use; consult our technical experts for validation.

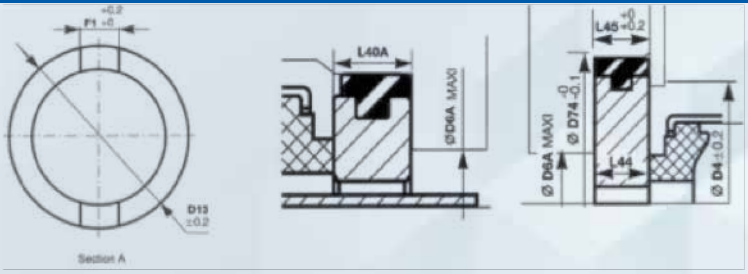
COEFFICIENT OF CORRECTION OF RESISTANCE TO PRESSURE AND SPEED

	SELECTION FACTOR	COEFFICIENT
Nature of the fluid to be sealed	Petrol/gasoline, Kerosene	× **1**
	Water, Aqueous solution	× **1**
	Flashing hydrocarbons	× **0,75**
Friction faces materials	Carbon vs. silicon carbide	× **1**
	Carbone vs. alumina	× **0,8**
	Silicon carbide vs. silicon carbide	× **0,6**
Fluid temperature	T < 80° C	× **1**
	80° C < T < 120° C	× **0,8**
	120° C < T < 180° C	× **0,4**
Speed	< 3 000 R.P.M	× **1**
	> 3 000 R.P.M	× **0,85**

POSSIBILITY OF ASSEMBLY



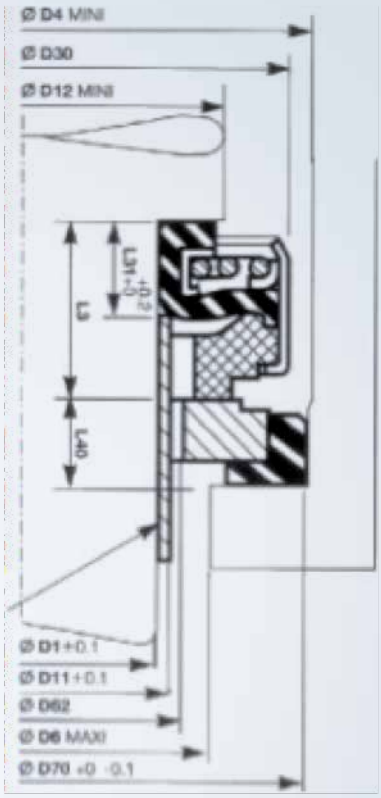
Internal seal EPR assembly with LBR seat



Alternative installation of TAR and TBR seat for EPR seals

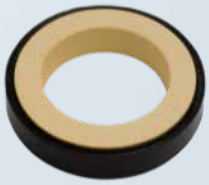
DIMENSIONS OF EPR SEALS (MM)

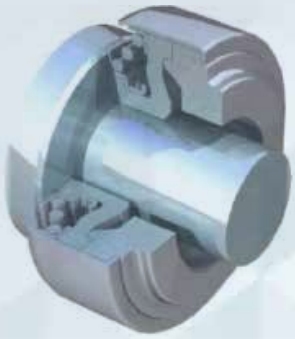
	SEAL HEAD		SEAT AND HOUSING (SHAFT DIAMETER-HOUSING-THICKNESS)			
Shaft diameter (D1)	External diameter (D30)	Working length (L3)	LAR	TAR/LTAR	TBR	LBR
8	24	11,25 ±0,25	-	8-26-8	-	-
10	28	12,15 ±0,35	-	10-31-8	10-38-8	-
12	32	13,15 ±0,35	-	12-35-8	-	-
14	35	13,15 ±0,35	-	15-38-8	16-45-8	-
15	35	13,15 ±0,35	15-38-6	15-38-8	16-45-8	-
16	35	13,15 ±0,35	16-38-6	16-38-6	16-45-8	-
17	39	13,15 ±0,35	18-42-6	18-42-8	18-50-10	18-50-7
18	39	13,15 ±0,35	18-42-6	18-42-6	18-50-10	18-50-7
19	42	13,15 ±0,35	20-45-7	20-45-10	20-53-10	20-53-7
20	42	13,15 ±0,35	20-45-7	20-45-10	20-53-10	20-53-7
22	42	13,15 ±0,35	20-45-7	20-45-10	20-53-10	20-53-7
23	-	-	25-50-7	25-50-10	25-57-10	25-57-7
24	48	14 ±0,50	25-50-7	25-50-10	25-57-10	25-57-7
25	48	14 ±0,50	25-50-7	25-50-10	25-57-10	25-57-7
28	55	15,5 ±0,50	30-57-7	30-57-10	30-68-10	30-68-8
30	55	15,5 ±0,50	30-57-7	30-57-10	30-68-10	30-68-8
32	55	15,5 ±0,50	32-57-7	32-57-10	32-68-10	32-68-8
35	61	16,5 ±0,50	35-63-8	35-63-10	-	35-73-8
38	67	18,5 ±0,50	40-68-8	40-68-12	40-80-12	40-80-8
40	67	18,5 ±0,50	40-68-8	40-68-12	40-80-12	40-80-8
45	72	20,5 ±0,50	45-73-8	45-73-12	45-85-12	45-85-10
50	87	24,5 ±0,50	50-88-10	50-88-15	-	50-100-100
55	87	24,5 ±0,50	55-88-10	55-88-15	55-100-15	55-100-10
60	108	30,5 ±0,50	65-110-12	65-110-15	-	-
65	108	30,5 ±0,50	65-110-12	70-110-15	-	-
70	108	30,5 ±0,50	70-110-12	70-110-15	-	70-125-12
75	118	32,5 ±0,50	75-120-15	-	-	-
80	123	32,5 ±0,50	80-125-15	-	-	80-141-15
85	-	-	85-135-15	-	-	85-151-15
90	138	36,5 ±0,50	90-140-20	-	-	90-156-20
95	-	-	95-145-20	-	-	-
100	148	38,5 ±0,50	100-150-20	-	-	-
105	153	40 ±0,50	105-155-20	-	-	-
110	163	40 ±0,50	110-165-20	-	-	-
115	-	-	115-170-25	-	-	-
120	174	40 ±0,50	120-194-25	-	-	120-194-25
150	-	48 ±0,50		-	-	-



DESIGNATION OF MATERIALS

COMPONENT DESIGNATION	MATERIALS
Friction washer	Molded resin carbon
	Carbographite
	Carbon impregnated with resin
	Silicon carbide
	Tungsten carbide (option)
	PTFE charged glass (optional)
Elastomer parts	Nitrile
	Ethylene propylene
	FPM
Metal part and spring	Stainless steel
Seat	Porous silicon carbide
	Stainless steel
	Silicon carbide
	Alumina (99% optional)
	Tungsten carbide (option)





For other materials, contact us.

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