

ATR "C" version: protected for corrosive gas pumping

The inverted dynamic seal: an additional protection



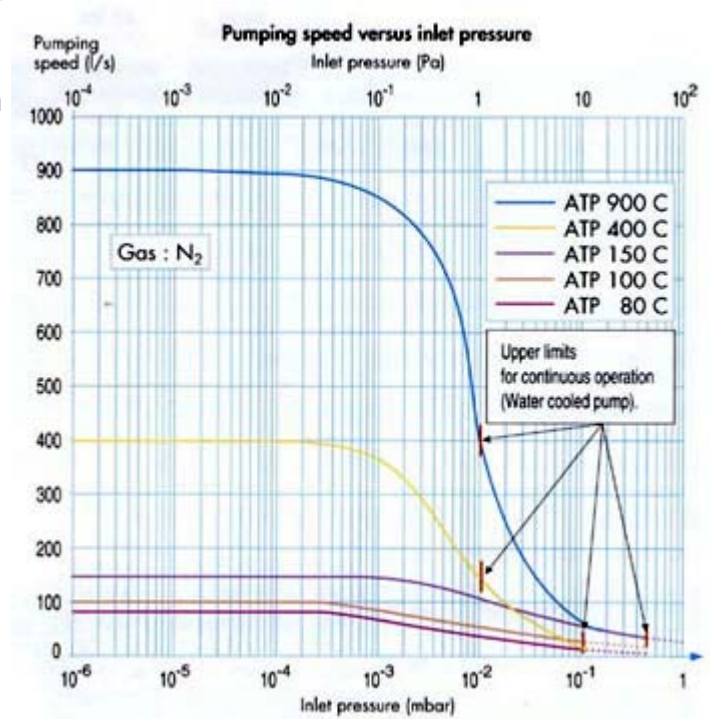
This new anti-corrosive protection is a built-in mechanical system based on the molecular drag pump principle.

The inverted dynamic seal provides a high compression ratio between the bearings and the pump exhaust and minimises the amount of corrosive gases reaching the bearings.

Protected against the corrosion effects:

The ATP pumps of the "C" version are well adapted to corrosive gas pumping.

The gas purge added to the inverted dynamic seal result in an enhanced protection against corrosion.



Characteristics			ATP 80C	ATP 100C	ATP 150C	ATP 400C	ATP 900C
Inlet flange			DN63 ISO-K	DN100 ISO-K	DN100 ISO-K	DN160 ISO-K	DN200 ISO-K
			DN63 CF-F	DN100 CF-F	DN100 CF-F	DN160 CF-F	DN200 CF-F
Pumping speed	N2	l/s	80	100	140	400	900
	He	l/s	50	60	100	300	540
	H2	l/s	40	40	80	250	300
Compression ratio	N2		8×10^7	8×10^7	7×10^8	7×10^8	1×10^9
	He		2500	2500	1.2×10^4	1.5×10^4	2×10^4
	H2		300	300	1×10^3	1×10^3	2×10^3
Ultimate pressure without pruge(1)(2)			mbar	5×10^{-9}	5×10^{-9}	5×10^{-10}	5×10^{-10}
Ultimate pressure without pruge(2)			mbar	5×10^{-8}	5×10^{-8}	1×10^{-7}	1×10^{-7}
Purging nitrogen flow rate			sccm		50		
Maximum continuous inlet pressure(2)			mbar	1×10^{-1}	1×10^{-1}	5×10^{-1}	2×10^{-2}
Maximum exhaust pressure (2)			mbar	2×10^{-1}	3×10^{-1}	4×10^{-1}	2×10^{-1}
Minimum recommended for pump				Pascal 2005 CP	Pascal 2005 CP	Pascal 2021 CP	Pascal 2033 CP
Mounting orientation					Any		
Rotational speed			rpm		27 000		
Start-up time			min	1min 45s	1 min 45s	2 min	3 min
Maximum ambient temperature			°C	40	40	40	40
Maximum bake out temperature on flange			°C	120	120	120	100
Exhaust flange			ISO-KF	DN 25	DN 25	DN 25	DN 40
N2 purge flange			ISO-KF		DN 16		
Weight	air cooled	kg(lb)	ISO-K	4 (8.8)	4 (8.8)	6.5 (14.3)	9.1 (20)
			CF-F	5.3 (11.7)	5.3 (11.7)	6.5 (14.3)	9.1 (20)
Weight	water cooled	kg(lb)	ISO-K	3.4 (7.5)	3.4 (7.7)	6.5 (14.3)	9.2 (20.2)
			CF-F	4.4 (9.7)	4.4 (10.3)	6.5 (14.3)	9.2 (20.2)

Controller		ACT 200T CFV100 OEM	ACT 200T CFV100 OEM	ACT 600T ACT 250	ACT 600T ACT 250	ACT 1000T
Controller weight	kg(lb)	mkj	2.6 (5.7)	4 (8.8)	4 (8.8)	8.5 (18.7)
Controller size		1/4 Rack	1/4 Rack	1/2 Rack	1/2 Rack	1/2 Rack
Power supply		100 to 240 V-50/60 Hz-Single phase				
Maximum power consumption	VA	100	100	300	300	800

(1) Measured to Pneurop standards with an exhaust pressure below 10^{-2} mbar

(2) Water cooled model with CF-F inlet flange

ATP "C" applications

Corrosive gas processes in:

- Industry
- Research and development
- Analytical instruments.

