



iPUR®

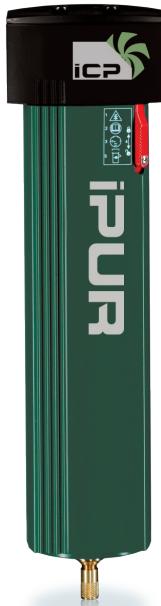
Threaded Water Separators

Features and Benefits

ENERGY EFFICIENT BY DESIGN:
the innovative passive air flow rectifier significantly reduces lost flow

FLOW OPTIMIZED HOUSING:
the unique curved outlet design was engineered to provide the lowest possible differential pressure

MAXIMUM RELIABILITY:
double threaded filter head, extruded, fully anodized sea-water resistant housing, and zero loss drain option



COMPREHENSIVE LINE:
threaded units are available from 25 to 1,500 scfm

SIMPLIFIED MAINTENANCE:
the only preventative maintenance required is that of the condensate drain

Operating Principles

1 Connections

The connections are perfectly matched to the outlet of the compressor. The flow-optimized inlet leads to reduced flow resistance.

2 Internal swirl insert

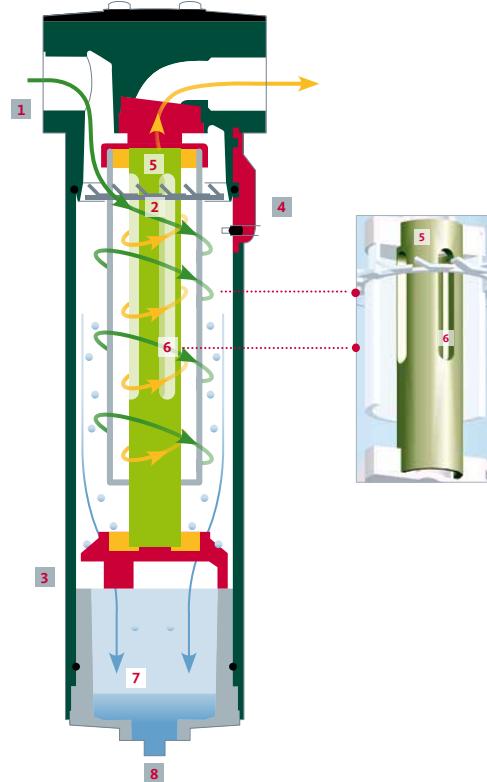
When the compressed air has entered the iPUR® water separator housing, it reaches a special internal swirl insert that makes the entering compressed air flow experience a special rotary motion with high velocity. The consequence: the outwardly directed rotational forces lead the condensate droplets to the separator wall, from where they flow into the collecting zone.

3 Effective corrosion protection

Condensate accumulating during compressed air filtration is almost always aggressive, so that unprotected housings corrode. iPUR® water separator filter housings are made of saltwater proof aluminum and, in addition, are fully anodized and their outside is powder coated.

4 Increased safety

The safe shutter mechanism offers a 100% control when opening the filter housing. In the event that the housing is opened under pressure, a warning signal sounds. The shutter mechanism also prevents unlatching during vibrations.



5 Rising pipe

A specially designed rising pipe avoids particle transfer to the upwardly directed rotational flow of the already purified compressed air.

6 Rectifier

The innovative rectifier leads the compressed air to the outlet and reduces flow losses to a minimum.

7 Shielded collecting zone

The shielding of the collecting zone settles the air flow in this area in order to effectively avoid the dispersion and re-entrainment of already separated liquids.

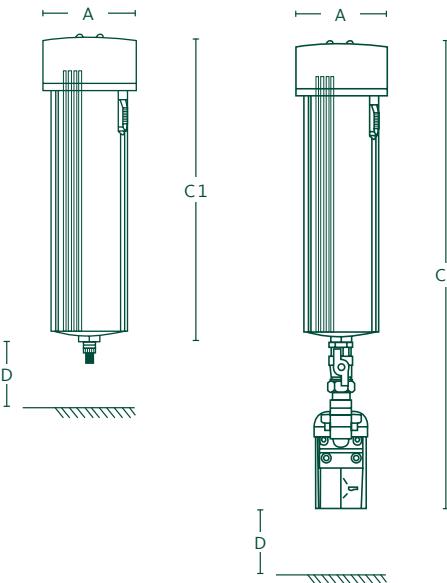
8 iMAT®

More than 60% of the total amount of condensate already accumulates in the water separator. The electronically level controlled iMAT® ensures reliable drainage.

iPUR® Threaded Water Separators

with float drain or iMAT® and connection kit

Performance-optimized volume flow increased by 30%
 Validated in accordance with ISO 12500-1 and 3
 Float drain only available on sizes iMSEP 25–160
 Max. operating temperature 140°F
 Max. operating pressure 232 psig
 Fully anodized powder coated aluminum



iPUR®	iMSEP 25	iMSEP 30	iMSEP 50	iMSEP 100	iMSEP 125	iMSEP 160	iMSEP 250	iMSEP 450	iMSEP 500	iMSEP 600	iMSEP 1000	iMSEP 1500
Pipe size (NPT)	5/8"	1/2"	1/2"	5/4"	1 "	1 "	1 1/2"	1 1/2"	2"	2 1/2"	2 1/2"	3"
Flow rate (scfm)	25	30	50	100	125	160	250	450	500	600	1000	1500
Element Size	04W	04W	05W	07W	07W	10W	15W	20W	20W	22W	25W	30W
Dimension data												
A (inches)	2.95	2.95	2.95	3.94	3.94	3.94	5.75	5.75	5.75	5.75	10.24	10.24
C1 (inches)	7.09	7.09	8.27	11.02	11.02	13.78	-	-	-	-	-	-
C2 (inches)	15.55	15.55	16.73	19.49	19.49	22.24	22.83	26.89	26.89	30.71	34.88	39.76
D (inches)	5.91	5.91	5.91	5.91	5.91	6.30	6.30	6.30	6.30	7.87	7.87	7.87
Weight (lbs)	1.65	1.65	1.87	3.75	4.18	4.63	9.04	10.61	11.24	13.45	43.87	57.10

ELEMENT GRADE	ELEMENT TYPE	Δ PRESSURE (psid)	REMOVAL RATE
Grade W	Water Separator	.87	99.0%

Correction Factor

Operating Pressure (psig)	20	40	60	80	90	100	110	120	130	140	160	180	200	230
Correction Factor	.30	.48	.65	.82	.91	1.00	1.09	1.17	1.26	1.35	1.52	1.70	1.87	2.13