OIL-X
COMPRESSED AIR FILTERS

The origins of modern compressed air filtration can be traced back to Parker domnick hunter in 1963, it was the first company to use microfibre filter media for purification applications, changing the compressed air industry forever. The domnick hunter OIL-X filter range was the first filter range to fully utilise this ground breaking technology and has always been synonymous with high quality compressed air. Now in the 21st century, the OIL-X name remains, but the technology has evolved beyond recognition.

Grade AO General Purpose Coalescing Filter

Filtration Performance

Filtration Grade	Filter Type	Particle Reduction (inc water & oil aerosols)	Max Remaining Oil Content at 21°C (70°F)	Filtration Efficiency	Change Element Every	Precede with Filtration Grade
AO	Coalescing	Down to 1 micron	0.5 mg/m³ 0.5 ppm(w)	99.925%	12 months	WS (for bulk liquid)

Technical Data

Filtration Grade	Filter Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temperature		Max Operating Temperature	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F
AO	PX010 - PX055 (Float Drain)	1.5	22	16	232	2	35	65	149
AO	PX010 - PX055 (Manual Drain)	1	15	20	290	2	35	80	176

Flow Rates

Stated flows are for operation at 7 bar (g) (102 psi g) with reference to 20°C, 1 bar (a), 0% relative water vapour pressure.

Model	Pipe Size	L/S	m³/min	m³/hr	cfm	Replacement Element	No.	Initial Saturated Differential Pressure							
								100% Flow		75% Flow		50% Flow		25% Flow	
								mbar	psi	mbar	psi	mbar	psi	mbar	psi
AOPX010A G FX	¼"	10	0.6	36	21	P010AO	1	123	1.8	84	1.2	53	0.8	27	0.4
AOPX010B G FX	⅜"	10	0.6	36	21	P010AO	1	124	1.8	85	1.2	55	0.8	30	0.4
AOPX010C G FX	½"	10	0.6	36	21	P010AO	1	121	1.8	82	1.2	44	0.6	15	0.2
AOPX015B G FX	⅜"	20	1.2	72	42	P015AO	1	122	1.8	84	1.2	46	0.7	20	0.3
AOPX015C G FX	½"	20	1.2	72	42	P015AO	1	91	1.3	53	0.8	31	0.4	13	0.2
AOPX020C G FX	½"	30	1.8	108	64	P020AO	1	124	1.8	82	1.2	45	0.7	20	0.3
AOPX020D G FX	¾"	30	1.8	108	64	P020AO	1	113	1.6	72	1.0	34	0.5	10	0.1
AOPX025D G FX	¾"	60	3.6	216	127	P025AO	1	125	1.8	80	1.2	43	0.6	21	0.3
AOPX025E G FX	1"	60	3.6	216	127	P025AO	1	80	1.2	50	0.7	27	0.4	11	0.2
AOPX030E G FX	1"	110	6.6	396	233	P030AO	1	125	1.8	80	1.2	42	0.6	30	0.4
AOPX030G G FX	1 ½"	110	6.6	396	233	P030AO	1	90	1.3	49	0.7	27	0.4	9	0.1
AOPX035G G FX	1 ½"	160	9.6	576	339	P035AO	1	81	1.2	44	0.6	18	0.3	5	0.1
AOPX040H G FX	2"	220	13.2	792	466	P040AO	1	113	1.6	69	1.0	40	0.6	20	0.3
AOPX045H G FX	2"	330	19.8	1188	699	P045AO	1	123	1.8	81	1.2	44	0.6	21	0.3
AOPX045I G FX	2 ½"	330	19.8	1188	699	P045AO	1	95	1.4	64	0.9	35	0.5	15	0.2
AOPX050I G FX	2 ½"	430	25.9	1548	911	P050AO	1	116	1.7	75	1.1	42	0.6	17	0.2
AOPX055I G FX	2 ½"	620	37.3	2232	1314	P055AO	1	123	1.8	81	1.2	45	0.7	24	0.3
AOPX055J G FX	3"	620	37.3	2232	1314	P055AO	1	112	1.6	55	0.8	32	0.5	17	0.2

Select G for BSPP Threads / Select N for NPT Threads

When selecting a coalescing filter for pressures above 16 bar g (232 psi g), use manual drain version and fit an external automatic drain.

Product Selection & Correction Factors

To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating (inlet) pressure at the point of installation.

1. Obtain the minimum operating (inlet) pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum inlet pressure from the CFMIP table (always round down e.g. for 5.3 bar, use 5 bar correction factor)
3. Calculate the minimum filtration capacity. Minimum Filtration Capacity = Compressed Air Flow Rate x CFMIP
4. Using the minimum filtration capacity, select a filter model from the flow rate tables above (filter selected must have a flow rate equal to or greater than the minimum filtration capacity).

CFMIP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure																					
	bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232	248	263	277	290
Correction Factor		2.65	1.87	1.53	1.32	1.18	1.08	1.00	0.94	0.88	0.84	0.80	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.61	0.59

Grade AA High Efficiency Coalescing Filter

Filtration Performance

Filtration Grade	Filter Type	Particle Reduction (inc water & oil aerosols)	Max Remaining Oil Content at 21°C (70°F)	Filtration Efficiency	Change Element Every	Precede with Filtration Grade
AA	Coalescing	Down to 0.01 micron	0.01 mg/m³ 0.01 ppm(w)	99.9999%	12 months	AO

Technical Data

Filtration Grade	Filter Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temperature		Max Operating Temperature	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F
AA	PX010 - PX055 (Float Drain)	1.5	22	16	232	2	35	65	149
AA	PX010 - PX055 (Manual Drain)	1	15	20	290	2	35	80	176

Flow Rates

Stated flows are for operation at 7 bar (g) (102 psi g) with reference to 20°C, 1 bar (a), 0% relative water vapour pressure.

Model	Pipe Size	L/S	m³/min	m³/hr	cfm	Replacement Element	No.	Initial Saturated Differential Pressure							
								100% Flow		75% Flow		50% Flow		25% Flow	
								mbar	psi	mbar	psi	mbar	psi	mbar	psi
AAPX010A G FX	¼"	10	0.6	36	21	P010AA	1	117	1.7	83	1.2	50	0.7	25	0.4
AAPX010B G FX	⅜"	10	0.6	36	21	P010AA	1	121	1.8	85	1.2	52	0.8	27	0.4
AAPX010C G FX	½"	10	0.6	36	21	P010AA	1	111	1.6	75	1.1	41	0.6	20	0.3
AAPX015B G FX	⅜"	20	1.2	72	42	P015AA	1	115	1.7	79	1.1	44	0.6	24	0.3
AAPX015C G FX	½"	20	1.2	72	42	P015AA	1	80	1.2	51	0.7	27	0.4	12	0.2
AAPX020C G FX	½"	30	1.8	108	64	P020AA	1	122	1.8	80	1.2	41	0.6	18	0.3
AAPX020D G FX	¾"	30	1.8	108	64	P020AA	1	100	1.5	60	0.9	37	0.5	24	0.3
AAPX025D G FX	¾"	60	3.6	216	127	P025AA	1	86	1.2	57	0.8	33	0.5	10	0.1
AAPX025E G FX	1"	60	3.6	216	127	P025AA	1	66	1.0	45	0.7	25	0.4	10	0.1
AAPX030E G FX	1"	110	6.6	396	233	P030AA	1	122	1.8	82	1.2	42	0.6	11	0.2
AAPX030G G FX	1 ½"	110	6.6	396	233	P030AA	1	104	1.5	55	0.8	30	0.4	10	0.1
AAPX035G G FX	1 ½"	160	9.6	576	339	P035AA	1	75	1.1	45	0.7	20	0.3	5	0.1
AAPX040H G FX	2"	220	13.2	792	466	P040AA	1	90	1.3	60	0.9	40	0.6	20	0.3
AAPX045H G FX	2"	330	19.8	1188	699	P045AA	1	108	1.6	71	1.0	35	0.5	12	0.2
AAPX045I G FX	2 ½"	330	19.8	1188	699	P045AA	1	108	1.6	70	1.0	32	0.5	15	0.2
AAPX050I G FX	2 ½"	430	25.9	1548	911	P050AA	1	90	1.3	66	1.0	43	0.6	18	0.3
AAPX055I G FX	2 ½"	620	37.3	2232	1314	P055AA	1	119	1.7	78	1.1	44	0.6	21	0.3
AAPX055J G FX	3"	620	37.3	2232	1314	P055AA	1	104	1.5	52	0.8	25	0.4	17	0.2

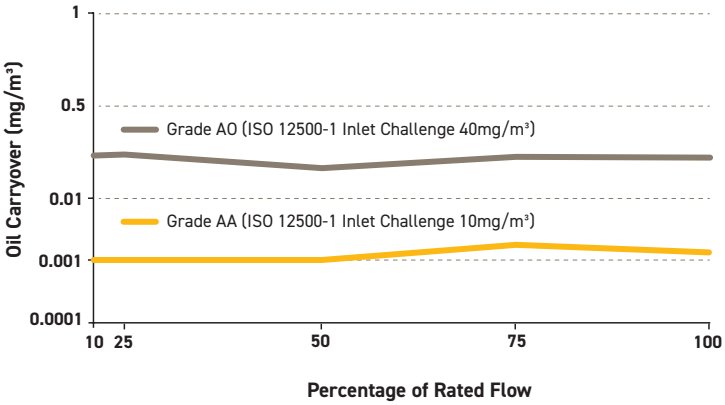
Select G for BSPP Threads / Select N for NPT Threads

When selecting a coalescing filter for pressures above 16 bar g (232 psi g), use manual drain version and fit an external automatic drain.

Filtration Tested In Accordance With

Filtration Grade	AO with float drain	AA with float drain
Filter Type	Coalescing	Coalescing
Test Methods Used	ISO 8573-2:2018 ISO 8573-4: 2019 ISO 12500-1:2007	ISO 8573-2:2018 ISO 8573-4: 2019 ISO 12500-1:2007
ISO12500-1 Inlet Challenge Concentration	40 mg of oil aerosol per cubic metre of compressed air	10 mg of oil aerosol per cubic metre of compressed air

OIL-X Grade AO & AA Oil Carryover versus Flow



Grade AO General Purpose Dry Particulate Filter

Filtration Performance

Filtration Grade	Filter Type	Particle Reduction (inc water & oil aerosols)	Max Remaining Oil Content at 21°C (70°F)	Filtration Efficiency	Change Element Every	Precede with Filtration Grade
AO	Dry Particulate	Down to 1 micron	Not Applicable	99.925%	12 months	Not Applicable

Technical Data

Filtration Grade	Filter Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temperature		Max Operating Temperature	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F
AO	PX010 - PX055 (Float Drain)	1.5	22	16	232	2	35	65	149
AO	PX010 - PX055 (Manual Drain)	1	15	20	290	2	35	80	176

Flow Rates

Stated flows are for operation at 7 bar (g) (102 psi g) with reference to 20°C, 1 bar (a), 0% relative water vapour pressure.

Model	Pipe Size	L/S	m³/min	m³/hr	cfm	Replacement Element	No.	Initial Dry Differential Pressure							
								100% Flow		75% Flow		50% Flow		25% Flow	
								mbar	psi	mbar	psi	mbar	psi	mbar	psi
AOPX010A G MX	¼"	10	0.6	36	21	P010AO	1	61	0.9	40	0.6	20	0.3	9	0.1
AOPX010B G MX	⅜"	10	0.6	36	21	P010AO	1	63	0.9	43	0.6	22	0.3	11	0.2
AOPX010C G MX	½"	10	0.6	36	21	P010AO	1	58	0.8	35	0.5	20	0.3	11	0.2
AOPX015B G MX	⅜"	20	1.2	72	42	P015AO	1	60	0.9	38	0.6	23	0.3	12	0.2
AOPX015C G MX	½"	20	1.2	72	42	P015AO	1	27	0.4	15	0.2	10	0.1	5	0.1
AOPX020C G MX	½"	30	1.8	108	64	P020AO	1	58	0.8	35	0.5	15	0.2	8	0.1
AOPX020D G MX	¾"	30	1.8	108	64	P020AO	1	38	0.6	20	0.3	10	0.1	5	0.1
AOPX025D G MX	¾"	60	3.6	216	127	P025AO	1	54	0.8	39	0.6	21	0.3	8	0.1
AOPX025E G MX	1"	60	3.6	216	127	P025AO	1	22	0.3	15	0.2	9	0.1	5	0.1
AOPX030E G MX	1"	110	6.6	396	233	P030AO	1	56	0.8	38	0.6	20	0.3	7	0.1
AOPX030G G MX	1 ½"	110	6.6	396	233	P030AO	1	42	0.6	26	0.4	12	0.2	6	0.1
AOPX035G G MX	1 ½"	160	9.6	576	339	P035AO	1	19	0.3	9	0.1	5	0.1	2	0.0
AOPX040H G MX	2"	220	13.2	792	466	P040AO	1	31	0.4	19	0.3	16	0.2	7	0.1
AOPX045H G MX	2"	330	19.8	1188	699	P045AO	1	51	0.7	36	0.5	18	0.3	8	0.1
AOPX045I G MX	2 ½"	330	19.8	1188	699	P045AO	1	40	0.6	27	0.4	12	0.2	6	0.1
AOPX050I G MX	2 ½"	430	25.9	1548	911	P050AO	1	36	0.5	23	0.3	16	0.2	7	0.1
AOPX055I G MX	2 ½"	620	37.3	2232	1314	P055AO	1	38	0.6	25	0.4	17	0.2	10	0.1
AOPX055J G MX	3"	620	37.3	2232	1314	P055AO	1	51	0.7	32	0.5	17	0.2	8	0.1

Select G for BSPP Threads / Select N for NPT Threads

When selecting a coalescing filter for pressures above 16 bar g (232 psi g), use manual drain version and fit an external automatic drain.

Product Selection & Correction Factors

To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating (inlet) pressure at the point of installation.

1. Obtain the minimum operating (inlet) pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum inlet pressure from the CFMIP table (always round down e.g. for 5.3 bar, use 5 bar correction factor)
3. Calculate the minimum filtration capacity. Minimum Filtration Capacity = Compressed Air Flow Rate x CFMIP
4. Using the minimum filtration capacity, select a filter model from the flow rate tables above (filter selected must have a flow rate equal to or greater than the minimum filtration capacity).

CFMIP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure																					
	bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232	248	263	277	290
Correction Factor		2.65	1.87	1.53	1.32	1.18	1.08	1.00	0.94	0.88	0.84	0.80	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.61	0.59

Grade AA High Efficiency Dry Particulate Filter

Filtration Performance

Filtration Grade	Filter Type	Particle Reduction (inc water & oil aerosols)	Max Remaining Oil Content at 21°C (70°F)	Filtration Efficiency	Change Element Every	Precede with Filtration Grade
AA	Not Applicable	Down to 0.01 micron	Not Applicable	99.9999%	12 months	AO Dry Particulate

Technical Data

Filtration Grade	Filter Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temperature		Max Operating Temperature	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F
AA	PX010 - PX055 (Float Drain)	1.5	22	16	232	2	35	65	149
AA	PX010 - PX055 (Manual Drain)	1	15	20	290	2	35	80	176

Flow Rates

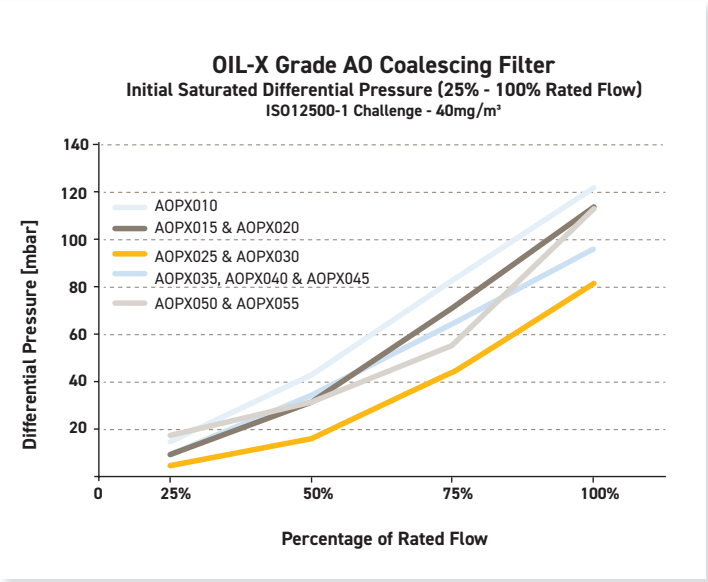
Stated flows are for operation at 7 bar (g) (102 psi g) with reference to 20°C, 1 bar (a), 0% relative water vapour pressure.

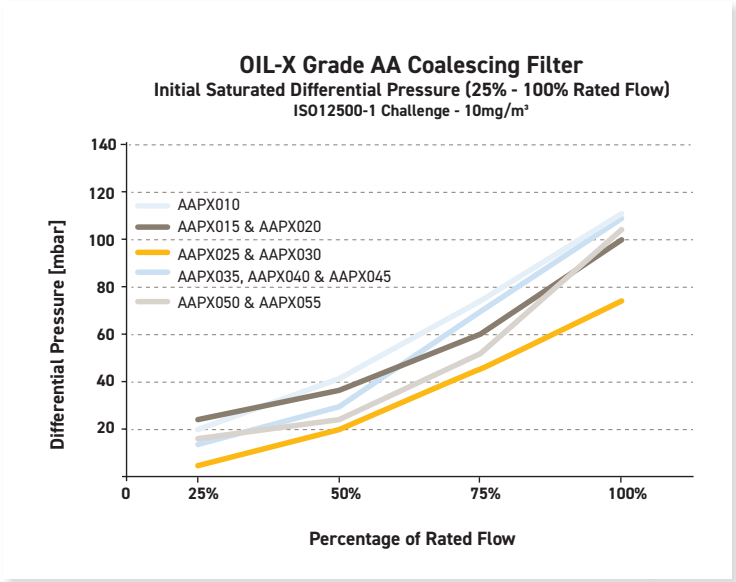
Model	Pipe Size	L/S	m³/min	m³/hr	cfm	Replacement Element	No.	Initial Dry Differential Pressure							
								100% Flow		75% Flow		50% Flow		25% Flow	
								mbar	psi	mbar	psi	mbar	psi	mbar	psi
AAPX010A G MX	¼"	10	0.6	36	21	P010AA	1	64	0.9	36	0.5	21	0.3	10	0.1
AAPX010B G MX	⅜"	10	0.6	36	21	P010AA	1	65	0.9	38	0.6	22	0.3	11	0.2
AAPX010C G MX	½"	10	0.6	36	21	P010AA	1	63	0.9	39	0.6	20	0.3	10	0.1
AAPX015B G MX	⅜"	20	1.2	72	42	P015AA	1	66	1.0	41	0.6	21	0.3	12	0.2
AAPX015C G MX	½"	20	1.2	72	42	P015AA	1	22	0.3	51	0.7	27	0.4	11	0.2
AAPX020C G MX	½"	30	1.8	108	64	P020AA	1	64	0.9	41	0.6	18	0.3	8	0.1
AAPX020D G MX	¾"	30	1.8	108	64	P020AA	1	42	0.6	22	0.3	10	0.1	5	0.1
AAPX025D G MX	¾"	60	3.6	216	127	P025AA	1	27	0.4	19	0.3	10	0.1	4	0.1
AAPX025E G MX	1"	60	3.6	216	127	P025AA	1	29	0.4	19	0.3	10	0.1	5	0.1
AAPX030E G MX	1"	110	6.6	396	233	P030AA	1	62	0.9	49	0.7	25	0.4	8	0.1
AAPX030G G MX	1 ½"	110	6.6	396	233	P030AA	1	45	0.7	27	0.4	13	0.2	5	0.1
AAPX035G G MX	1 ½"	160	9.6	576	339	P035AA	1	22	0.3	10	0.1	5	0.1	2	0.0
AAPX040H G MX	2"	220	13.2	792	466	P040AA	1	36	0.5	24	0.3	15	0.2	8	0.1
AAPX045H G MX	2"	330	19.8	1188	699	P045AA	1	47	0.7	25	0.4	18	0.3	15	0.2
AAPX045I G MX	2 ½"	330	19.8	1188	699	P045AA	1	47	0.7	30	0.4	17	0.2	8	0.1
AAPX050I G MX	2 ½"	430	25.9	1548	911	P050AA	1	40	0.6	27	0.4	16	0.2	8	0.1
AAPX055I G MX	2 ½"	620	37.3	2232	1314	P055AA	1	45	0.7	27	0.4	17	0.2	10	0.1
AAPX055J G MX	3"	620	37.3	2232	1314	P055AA	1	54	0.8	35	0.5	17	0.2	9	0.1

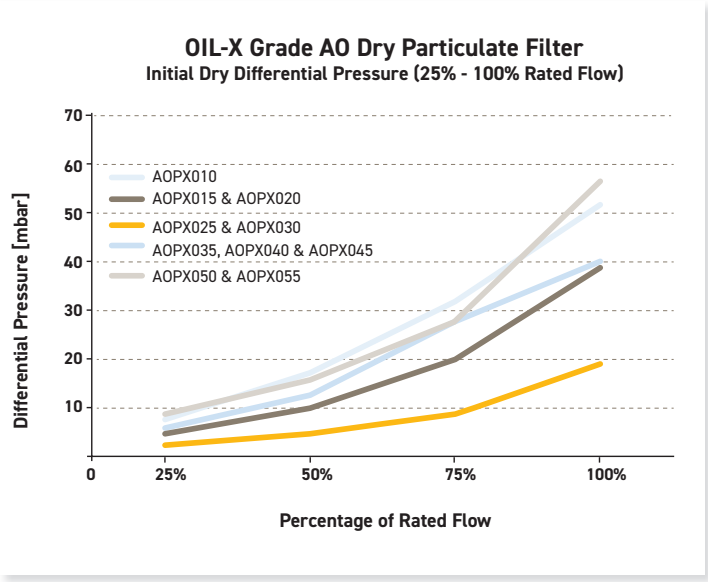
Select G for BSPP Threads / Select N for NPT Threads

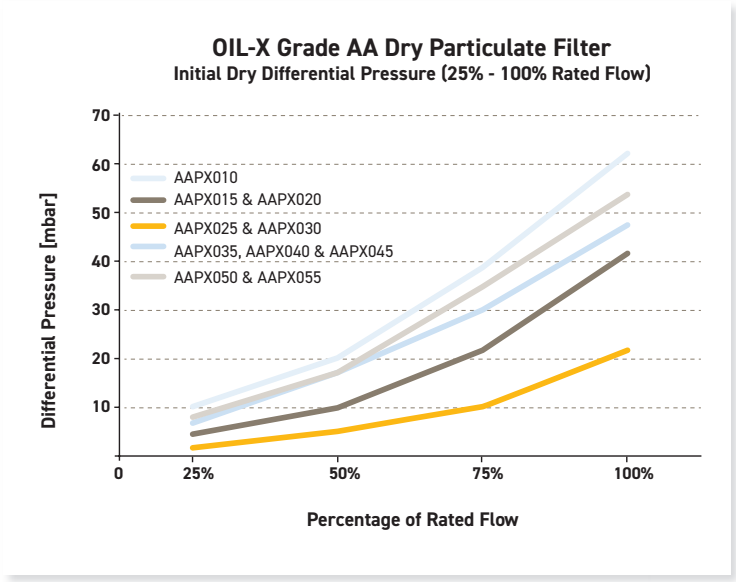
When selecting a coalescing filter for pressures above 16 bar g (232 psi g), use manual drain version and fit an external automatic drain.

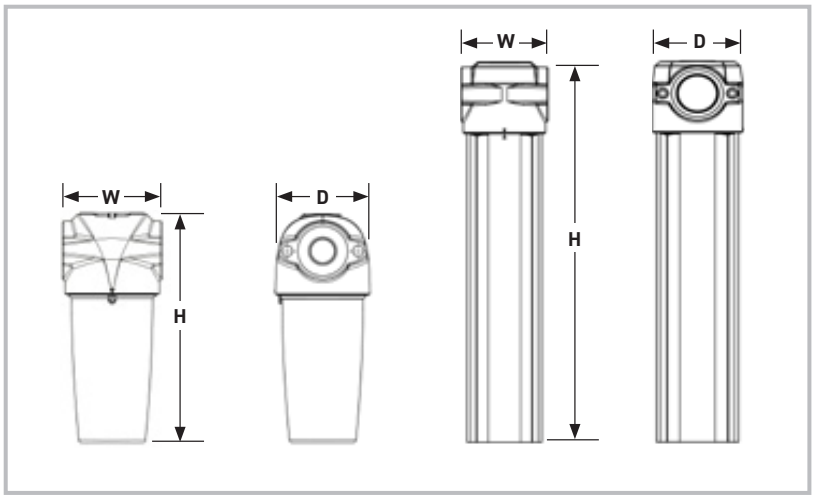
OIL-X Grades AO & AA - Differential Pressure Curves











Weight & Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	ins	mm	ins	mm	ins	kg	lbs
010	180	7.09	76	2.99	65	2. 56	0.81	1.78
015	238	9.37	89	3.50	84	3.31	1.41	3.10
020	238	9.37	89	3.50	84	3.31	1.41	3.10
025	277	10.91	120	4.72	115	4.53	2.66	5.86
030	367	14.45	120	4.72	115	4.53	3.01	6.63
035	440	17.32	164	6.46	157	6.18	6.87	15.14
040	532	20.94	164	6.46	157	6.18	7.18	15.82
045	532	20.94	164	6.46	157	6.18	7.18	15.82
050	654	25.75	192	7.56	183	7.20	10.18	22.43
055	844	33.23	192	7.56	183	7.20	15.78	34.78

Parker Catalogue Numbers (BSPP Models)

Model	General Purpose Coalescing Filters	General Purpose Dry Particulate Filters	High Efficiency Coalescing Filters	High Efficiency Dry Particulate Filters
PX010A	AOPX010AGFX	AOPX010AGMX	AAPX010AGFX	AAPX010AGMX
PX010B	AOPX010BGFX	AOPX010BGMX	AAPX010BGFX	AAPX010BGMX
PX010C	AOPX010CGFX	AOPX010CGMX	AAPX010CGFX	AAPX010CGMX
PX015C	AOPX015CGFX	AOPX015CGMX	AAPX015CGFX	AAPX015CGMX
PX020C	AOPX020CGFX	AOPX020CGMX	AAPX020CGFX	AAPX020CGMX
PX020D	AOPX020DGFX	AOPX020DGMX	AAPX020DGFX	AAPX020DGMX
PX025D	AOPX025DGFX	AOPX025DGMX	AAPX025DGFX	AAPX025DGMX
PX025E	AOPX025EGFX	AOPX025EGMX	AAPX025EGFX	AAPX025EGMX
PX030G	AOPX030GGFX	AOPX030GGMX	AAPX030GGFX	AAPX030GGMX
PX035G	AOPX035GGFX	AOPX035GGMX	AAPX035GGFX	AAPX035GGMX
PX040H	AOPX040HGFX	AOPX040HGMX	AAPX040HGFX	AAPX040HGMX
PX045I	AOPX045IGFX	AOPX045IGMX	AAPX045IGFX	AAPX045IGMX
PX050I	AOPX050IGFX	AOPX050IGMX	AAPX050IGFX	AAPX050IGMX
PX055I	AOPX055IGFX	AOPX055IGMX	AAPX055IGFX	AAPX055IGMX
PX055J	AOPX055JGFX	AOPX055JGMX	AAPX055JGFX	AAPX055JGMX