SMC
Expertise – Passion – Automation

SWITCHOVER DOCUMENT

AC Series
Air Combination Units

Improved features and related benefits

Feature
- ISO 8573-4:2010 certified air purity

Customer Benefit
- Guarantee the correct air purity for each system

Feature
- Improved flow rate

Customer Benefit
- Smaller sizes applicable for the same purpose

Feature
- Clean design and uniform style

Customer Benefit
- Improved appearance and reduced foreign matter accumulation

Current product

New product

Applicable product map

【Applicable product】

AC-A,AC-B,AF-A,AFM-A,AFD-A,AR-A,AR-B,AL-A,AW-A,AW-B,Y□00(T)-A,E□00-A,Y□10-A,Y□4-A,IS10M-A,IS10E-A, Y□0(L,T)-A,E□0-A,Y□1-A,IS10M-□Y-A,IS10E-□Y-A,AWM,AWD,VHS-A/B,VHS□510-A/B

*FRL10-A series, made-to-order products based on external metal (X425/X430/X440/X470/X480/X2622 etc.) and their derivatives are exempted.

Map of applicable products

	Product no.	Specifications \ Model / Name	AC Air Combination	AF Air Filter	AFM Mist Separator	AFD Micro Mist Separator	AR Regulator	AL Lubricator	AW Filter Regulator	AWM Mist Separator Regulator	AWD Micro Mist Separator Regulator	VHS Pressure Relief 3-Port Valve	Y□00(T) Spacer Spacer with bracket	E□00 Piping Adapter	Y□10 T-Spacer	Y□4 Cross Spacer	IS10M Pressure Switch	IS10E Pressure Switch with Piping Adapter
Catalog Items	-	Standard	● *1	● *1	●	●	● *1	● *1	● *1	●	●	●	●	●	●	●	●	●
	X64	Long bowl	●	●	●	●	—	●	●	●	●	—	—	—	—	—	—	—
	X406	0.4MPa setting	—	—	—	—	●	—	●	●	●	—	—	—	—	—	—	—
	X425	High pressure (P1=2.0MPa/P2=1.7MPa)	—	○	—	—	○	—	○	—	—	—	—	—	—	—	—	—
	X430	Low temperature (-30℃~60℃)	—	○	—	—	○	○	○	—	—	—	—	—	—	—	—	—
	X440	High temperature (-5℃~80℃)	—	○	—	—	○	○	○	—	—	—	—	—	—	—	—	—
	X2141	With element service indicator *2	—	●	●	●	—	—	—	—	—	—	—	—	—	—	—	—
	X2400	Grease-free	—	—	—	—	● *3	—	— *4	—	—	—	—	—	—	—	—	—
	X2622	Stainless Steel 316 + Special Temperature Environment (−40°C) Specifications	—	○	—	—	○	—	○	—	—	—	—	—	—	—	—	—
	10-	Low particle generation	—	●	●	●	●	—	●	●	●	—	—	—	—	—	—	—
	21-	Copper, Fluorine and Silicone-free + Low particle generation	—	●	●	●	●	—	●	●	●	—	—	—	—	—	—	—
	25A-	Secondary batteries	—	●	●	●	●	—	●	●	●	●	—	—	—	—	—	—
Non-Catalog Items	X155	Fluorine rubber	—	Special order	Special order	Special order	Special order	Special order	Special order	Special order	Special order	—	—	—	—	—	—	—
	X401	Without drain cock	—	●	●	●	—	—	—	Special order	Special order	—	—	—	—	—	—	—
	X441	Bronze element (5μm)	Special order	●	—	—	—	—	●	—	—	—	—	—	—	—	—	—
	X470	External metal	—	—	—	—	○	—	○	—	—	—	—	—	—	—	—	—
	X480	Epoxy resin coated	○	○	○	○	○	○	○	—	—	—	—	Special order	Special order	—	—	—
	X490	Metal bonnet	—	—	—	—	Special order	—	Special order	—	—	—	—	—	—	—	—	—
	-7	Non-standard rated filtration	Special order	●	—	—	—	—	●	—	—	—	—	—	—	—	—	—
	20-	Copper/Fluorine-free	Special order	Special order	Special order	Special order	Special order	—	Special order	Special order	Special order	—	—	—	—	—	—	—
	56-	ATEX compliant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●
	3C-	CCC compliant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●
	80-	Low concentration ozone measures	—	—	—	—	●	—	●	Special order	Special order	—	—	—	—	—	Special order	Special order

● Consolidated target、○ Continued to sell

*1 The FRL10-A series will continue in its current form.

*2 If you want to select "With element service indicator" for the new product, you can use the semi-standard to do so.

*3 For details, please contact SMC

*4 For details, please contact SMC

EMC European Marketing Centre

Technical details

Standard Specification

Model		AC-B	AC-D
Type		Filter + lubricator + regulator	Filter + lubricator + regulator
Max. flow rate [l/min] (P1=0.7 MPa, P2=0.5 MPa, ΔP=0.1)	Size 20	800	1500
	Size 30	1500	3000
	Size 40	5000	5000
	Size 50	10000	10000
	Size 60	10000	12000
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
ISO 8573-4:2010 compliance		No	Yes
Weight [kg]	Size 20	0.39	0.38
	Size 30	0.70	0.75
	Size 40	0.78	1.42
	Size 50	3.43	3.34
	Size 60	3.76	3.60

Difference in specifications

Technical details

Standard Specification

Model		ACA-B	ACA-D
Type		Filter-regulator + Lubricator	Filter-regulator + Lubricator
Max. flow rate [l/min] (P1=0.7 MPa, P2=0.5 MPa, ΔP=0.1)	Size 20	800	1500
	Size 30	1500	2500
	Size 40	4000	4000
	Size 50	10000	10000
	Size 60	10000	13800
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
ISO 8573-4:2010 compliance		No	Yes
Weight [kg]	Size 20	0.33	0.31
	Size 30	0.63	0.58
	Size 40	1.15	1.12
	Size 50	3.21	2.90
	Size 60	3.36	2.97

Difference in specifications

Technical details

Standard Specification

Model		ACB-B	ACB-D
Type		Filter + Regulator	Filter + Regulator
Max. flow rate [l/min] (P1=0.7 MPa, P2=0.5 MPa, ΔP=0.1)	Size 20	800	1500
	Size 30	1500	3000
	Size 40	5000	5000
	Size 50	10000	10000
	Size 60	10000	13800
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
ISO 8573-4:2010 compliance		No	Yes
Weight [kg]	Size 20	0.27	0.25
	Size 30	0.53	0.51
	Size 40	0.91	0.95
	Size 50	2.27	2.2
	Size 60	2.45	2.39

Difference in specifications

Technical details

Standard Specification

Model		ACC-B	ACC-D
Type		Filter + Mist separator + Regulator	Filter + Mist separator + Regulator
Rated flow rate [l/min] (P1=0.7 MPa)	Size 20	200	200
	Size 30	450	450
	Size 40	1100	1100
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
ISO 8573-4:2010 compliance		No	Yes
Weight [kg]	Size 20	0.38	0.38
	Size 30	0.69	0.75
	Size 40	1.39	1.42

Difference in specifications

Technical details

Standard Specification

Model		ACD-B	ACD-D
Type		Filter-regulator + Mist separator	Filter-regulator + Mist separator
Rated flow rate [l/min] (P1=0.7 MPa)	Size 20	150	200
	Size 30	330	450
	Size 40	800	1100
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
ISO 8573-4:2010 compliance		No	Yes
Weight [kg]	Size 20	0.32	0.30
	Size 30	0.62	0.58
	Size 40	1.15	1.12

Difference in specifications

Technical details

Standard Specification

Model		AF-A	AF-D
Type		Filter	Filter
Rated flow rate [l/min] (P1=0.7 MPa)	Size 20	1500	1500
	Size 30	3600	3600
	Size 40	5800	5100
	Size 50	11000	11000
	Size 60	12500	12500
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
ISO 8573-4:2010 compliance		No	Yes
Weight [kg]	Size 20	0.08	0.09
	Size 30	0.18	0.17
	Size 40	0.36	0.35
	Size 50	0.87	0.85
	Size 60	1	0.92

Difference in specifications

Technical details

Standard Specification

Model		AFM-B	AFM-D
Type		Mist separator	Mist separator
Rated flow rate [l/min] (P1=0.7 MPa)	Size 20	200	200
	Size 30	450	450
	Size 40	1100	1100
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
ISO 8573-4:2010 compliance		No	Yes
Weight [kg]	Size 20	0.09	0.1
	Size 30	0.19	0.18
	Size 40	0.38	0.37

Difference in specifications

Technical details

Standard Specification

Model		AFD-B	AFD-D
Type		Micro mist separator	Micro mist separator
Rated flow rate [l/min] (P1=0.7 MPa)	Size 20	120	120
	Size 30	240	240
	Size 40	600	600
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
ISO 8573-4:2010 compliance		No	Yes
Weight [kg]	Size 20	0.09	0.1
	Size 30	0.19	0.18
	Size 40	0.38	0.37

Difference in specifications

Technical details

Standard Specification

Model		AR-B	AR-D
Type		Regulator	Regulator
Rated flow rate [l/min] (P1=0.7 MPa)	Size 20	800	1500
	Size 30	1500	3000
	Size 40	3000	5000
	Size 50	10000	17600
	Size 60	10000	20000
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
Weight [kg]	Size 20	0.16	0.14
	Size 30	0.29	0.27
	Size 40	0.44	0.48
	Size 50	1.17	1.12
	Size 60	1.22	1.25

Difference in specifications

Technical details

Standard Specification

Model		AL-B	AL-D
Type		Lubricator	Lubricator
Rated flow rate [l/min] (P1=0.7 MPa)	Size 20	3800	3800
	Size 30	6000	6000
	Size 40	8000	8000
	Size 50	12700	15000
	Size 60	15000	15000
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
Weight [kg]	Size 20	0.1	0.1
	Size 30	0.2	0.12
	Size 40	0.38	0.37
	Size 50	0.94	0.92
	Size 60	1.09	0.99

Difference in specifications

Technical details

Standard Specification

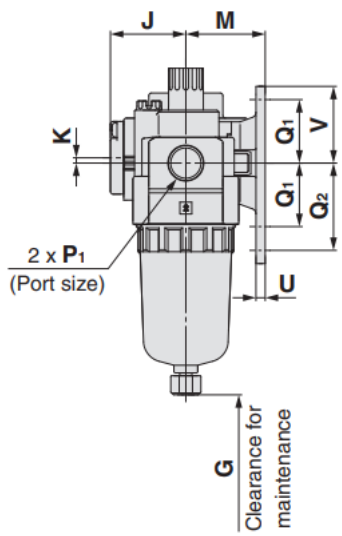
Model		AW-B	AW-D
Type		Filter-regulator	Filter-regulator
Rated flow rate [l/min] (P1=0.7 MPa)	Size 20	800	1500
	Size 30	1500	2500
	Size 40	3000	4000
	Size 60	10000	13700
Ambient and fluid temperature [ºC]		-5 to 60	-5 to 60
Max. operating pressure [MPa]		1.0	1.0
ISO 8573-4:2010 compliance		No	Yes
Weight [kg]	Size 20	0.2	0.18
	Size 30	0.36	0.34
	Size 40	0.66	0.64
	Size 60	2.05	1.76

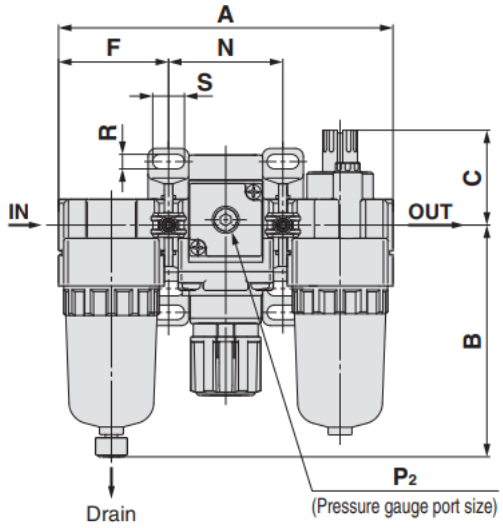
Difference in specifications

Technical details

Dimensions

AC-B vs. AC-D



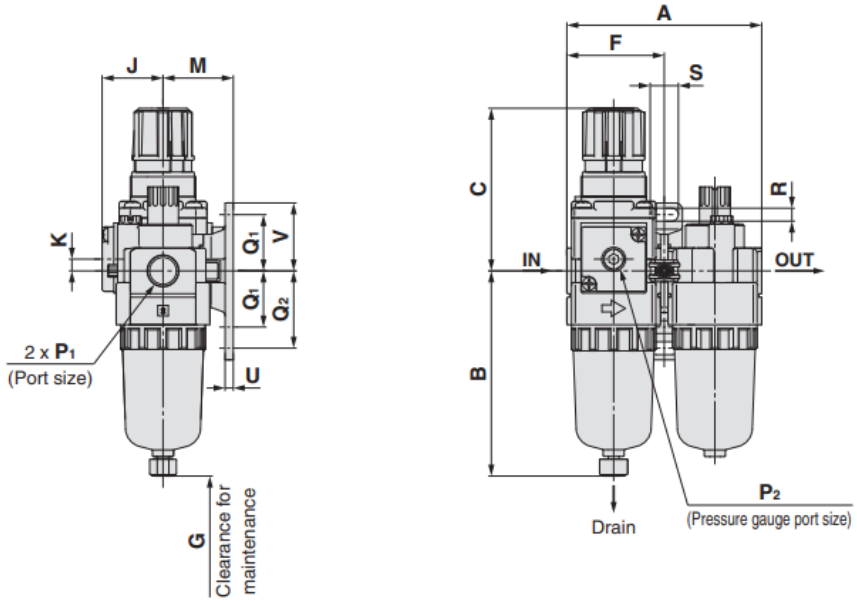


Model	P1	A	B	C		E	F	G	J		K		N		Q1	
Model	AC-B/AC-D	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B/AC-D	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B	AC-D	AC-B	AC-D	AC-B	AC-D
AC20	1/8, 1/4	126.4	87.6	35.9	35.9	-	41.6	60	12.5	21	2	2	43.2	43.2	24	24
AC30	1/4, 3/8	167.4	115.1	38.1	38.1	30	55.1	80	29.4	26.5	3.5	3.5	57.2	57.2	35	35
AC40	1/4, 3/8, 1/2	220.4	147.1	39.8	44	38.4	72.6	110	33.8	35.5	3.5	-	75.2	75.2	40	40
AC40-06	3/8	235.4	149.1	37.8	44	38.4	77.6	110	35.5	35.5	3	-	80.2	80.2	40	40
AC50	3/4, 1	282.4	220.1	41.2	48	-	93.1	110	43.3	45	3.2	-	96.2	96.2	50	50
AC60	1	297.4	234.1	44.7	48	-	98.1	110	43.3	45	3.2	-	101.2	101.2	50	50

Difference in specifications

Dimensions

ACA-B vs. ACA-D



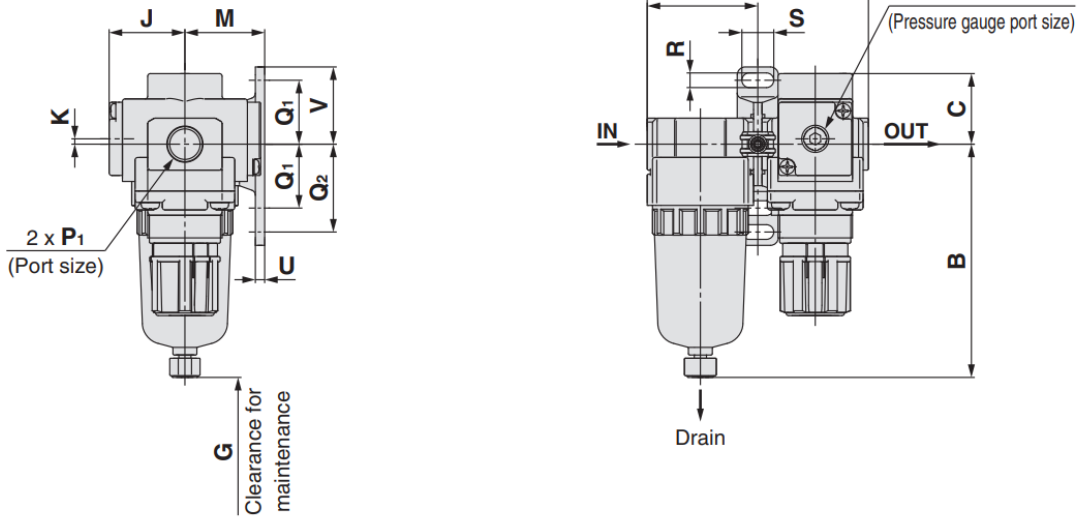
Model	P1	A	B	C		E	F	G	J		K		Q1	
Model	AC-B/AC-D	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B/AC-D	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B	AC-D	AC-B	AC-D
AC20A	1/8, 1/4	83.2	87.6	72.4	71.8	-	41.6	60	28.5	21	5	5	24	24
AC30A	1/4, 3/8	110.2	115.3	85.6	86.5	30	55.1	80	29.4	26.5	3.5	3.5	35	35
AC40A	1/4, 3/8, 1/2	145.2	147.1	91.7	91.5	38.4	72.6	110	33.8	35.5	1.5	-	40	40
AC40A-06	3/8	155.2	149.1	93.2	93	38.4	41.6	110	33.8	35.5	1.2	-	40	40
AC50A	3/4, 1	191.2	234.1	175.5	155	-	98.1	110	43.3	45	3.2	-	50	50
AC60A	1	191.2	234.1	175.5	155	-	98.1	110	43.3	45	3.2	-	50	50

Difference in specifications

Technical details

Dimensions

ACB-B vs. ACB-D



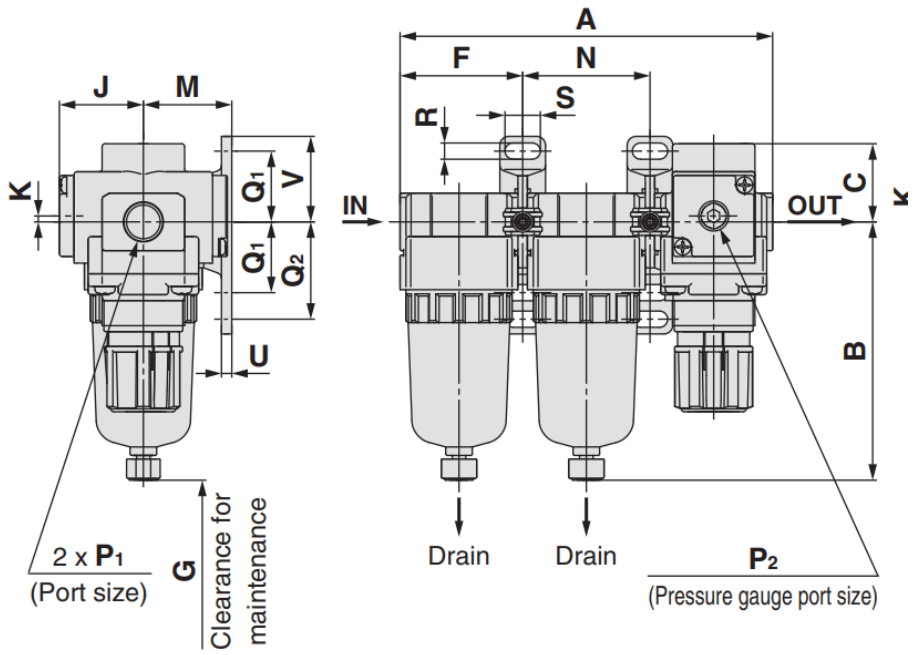
Dimension	P1	A	B		C		E	F	G	J		K		Q1	
Model	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B	AC-D	AC-B/AC-D	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B	AC-D	AC-B	AC-D
AC20B	1/8, 1/4	83.2	87.6	87.6	26.5	26.5	-	41.6	25	28.5	21	2	2	24	24
AC30B	1/4, 3/8	110.2	115.1	115.4	30.7	30.5	30	55.1	35	29.4	26.5	3.5	3.5	35	35
AC40B	1/4, 3/8, 1/2	145.2	147.1	147.1	35.8	35.5	38.4	72.6	40	33.8	35.5	3.5	-	40	40
AC40B-06	3/8	155.2	149.1	149.1	35.58	35.5	38.4	77.6	40	33.8	35.5	3	-	40	40
AC50B	3/4, 1	186.2	220.1	220.1	43	43	-	93.1	30	43.3	45	3.2	-	50	50
AC60B	1	196.2	234.1	234.1	45	45	-	98.1	30	43.3	45	3.2	-	50	50

Difference in specifications

Technical details

Dimensions

ACC-B vs. ACC-D



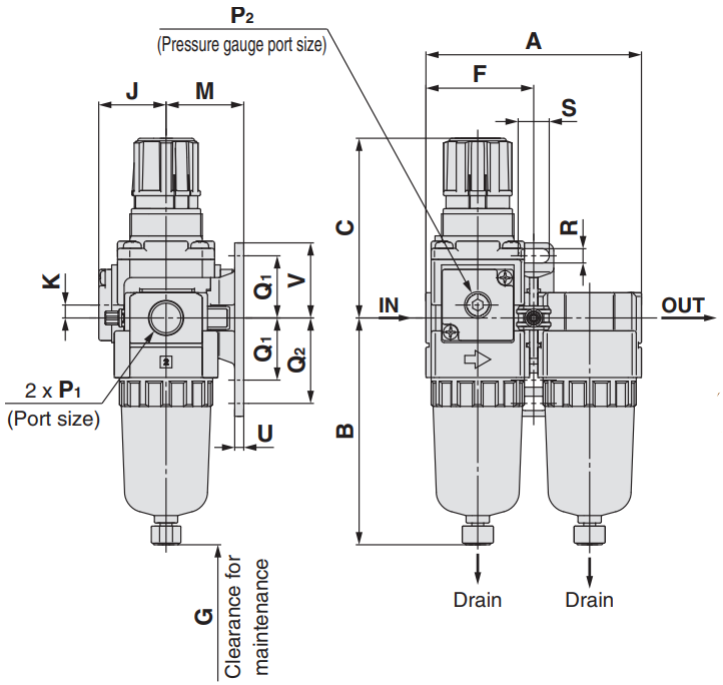
Dimension	P1	A	B	C		E	F	G	J		K		N		Q1	
Model	AC-B/AC-D	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B/AC-D	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B	AC-D	AC-B	AC-D	AC-B	AC-D
AC20C	1/8, 1/4	126.4	87.6	26.5	26.5	-	41.6	45	28.5	21	2	2	43.2	43.2	24	24
AC30C	1/4, 3/8	167.4	115.4	30.7	30.5	30	55.1	70	29.4	26.5	3.5	3.5	57.2	57.2	35	35
AC40C	1/4, 3/8, 1/2	220.4	147.1	35.8	35.5	38.4	72.6	75	33.8	35.5	3.5	-	75.2	75.2	40	40
AC40C-06	3/8	235.4	149.1	35.8	35.5	38.4	77.6	75	33.8	35.5	3	-	80.2	80.2	40	40

Difference in specifications

Technical details

Dimensions

ACD-B vs. ACD-D



Dimension	P1	A	B	C		E	F	G	J		K		Q1	
Model	AC-B/AC-D	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B/AC-D	AC-B/AC-D	AC-B/AC-D	AC-B	AC-D	AC-B	AC-D	AC-B	AC-D
AC20D	1/8, 1/4	83.2	87.6	72.4	71.8	-	41.6	40	28.5	21	5	5	24	24
AC30D	1/4, 3/8	110.2	115.1	85.6	86.5	30	55.1	50	29.4	26.5	3.5	3.5	35	35
AC40D	1/4, 3/8, 1/2	145.2	147.1	91.7	91.5	38.4	72.6	75	33.8	35.5	1.5	-	40	40
AC40D-06	3/8	155.2	149.1	93.2	93	38.4	77.6	75	33.8	35.5	1.2	-	40	40

Difference in specifications