 American[®]

Right Angle Flow Controls



American Cylinder Co., Inc.

Series II Quick Connect-Disconnect
Series III Threaded Fitting Connect

TABLE OF CONTENTS

Table of Contents Page 1
 Features and Benefits Page 1
 Flow Control Operation Page 1
 Air Flow Specifications Page 1

Series II - Quick Connect-Disconnect Page 2
 Specifications and Materials Page 2
 Series III - Threaded Fitting Connect Page 3
 Specifications and Materials Page 3
 Warranty Page 4

RIGHT ANGLE FLOW CONTROLS

Series II Quick Connect-Disconnect

Series III Threaded Fitting Connect

Designed to fit directly onto American's air cylinders, American Right Angle Flow Controls offer outstanding features and benefits at the most competitive prices.

Features and Benefits

Series II and III

Full 360° Rotation - Complete full rotation for alignment.

Nickel Plated Brass Construction - Allows for high linear flow & precision control. See charts for turns and air flow.

Optional Adjustment - Manual knob or screw.

Tubing - For best results, use nylon tubing. For usage with other tubing material, consult your American Cylinder distributor.

Series II Only

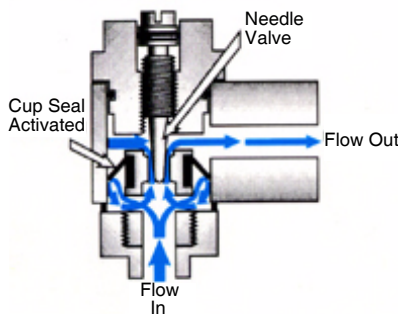
Instant Connect and Disconnect - No additional fittings needed. Tubing is permanently locked into place until deliberate effort is made to disconnect.

Flow Control Operation

Metered

Flow Direction

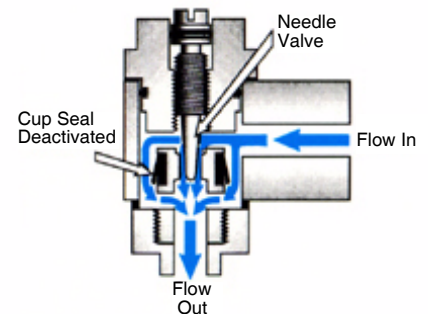
Operating pressure forces the cup seal outward against the valve wall forming an air tight seal. All flow must now go through the needle valve, allowing precise flow control.



Unmetered

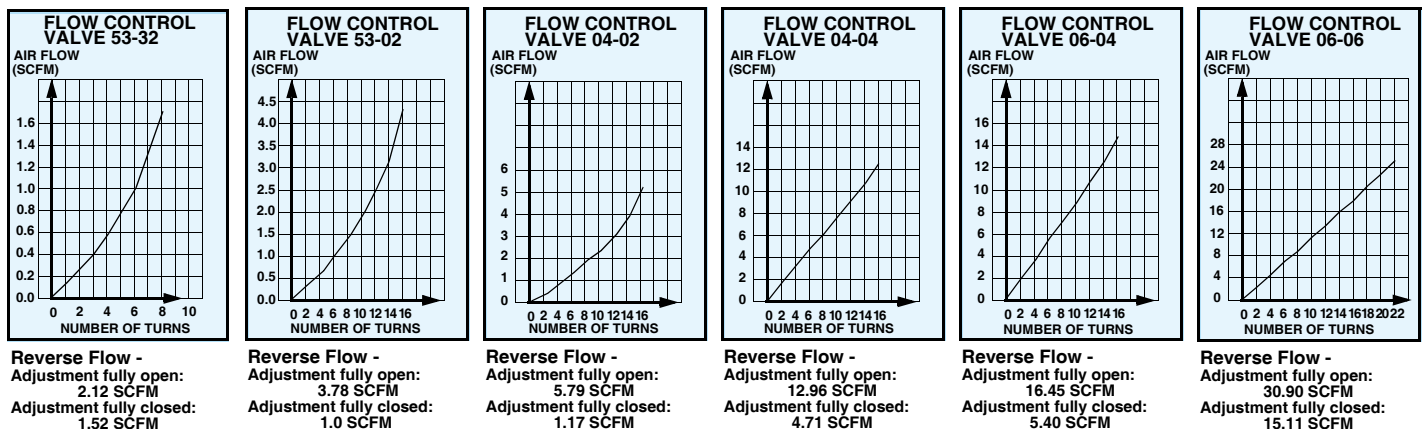
Flow Direction

Operating pressure forces the cup seal inward away from the valve wall. This allows flow to bypass the restriction of the needle valve.

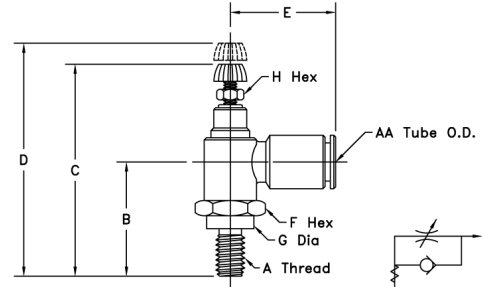
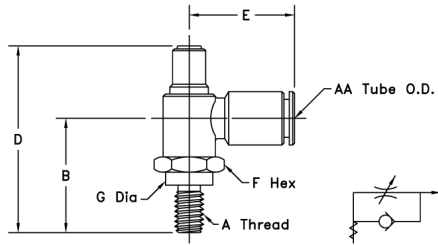


Air Flow Specifications

Air flow is determined with 85 PSI at the in port and with 70 PSI at the outlet.

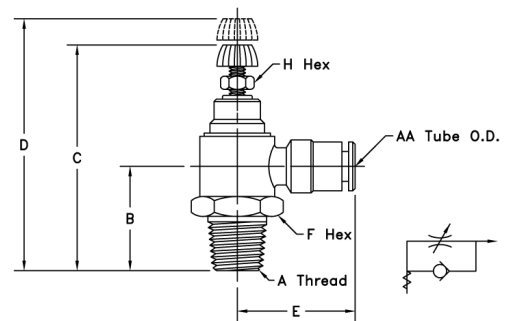
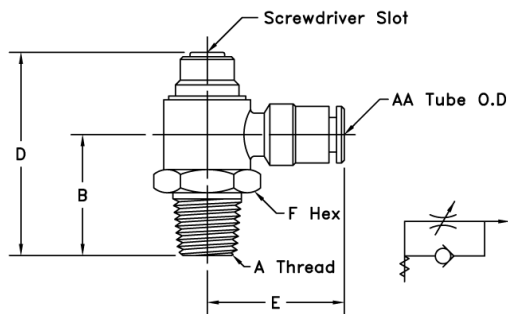


Series II Quick Connect-Disconnect



Use on American Cylinders with the following Port Sizes	Part No.	AA	A	B	D	E	F	G
10-32 UNF	ACS 53-32	5/32"	10-32 UNF	.61	1.10	.71	.32	.31

Part No.	AA	A	B	C	D	E	F	G	H
ACK 53-32	5/32"	10-32 UNF	.61	1.45	1.61	.71	.32	.31	.22



Use on American Cylinders with the following Port Sizes	Part No.	AA	A	B	D	E	F
1/8" NPT	ACS 53-02	5/32"	1/8" NPT	.78	1.44	.87	.55
1/8" NPT	ACS 04-02	1/4"	1/8" NPT	.78	1.44	.96	.55
1/4" NPT	ACS 04-04	1/4"	1/4" NPT	.94	1.61	1.04	.75
1/4" NPT	ACS 06-04	3/8"	1/4" NPT	.94	1.61	1.14	.75
3/8" NPT	ACS 06-06	3/8"	3/8" NPT	.96	1.80	1.20	.87

Part No.	AA	A	B	C	D	E	F	H
ACK 53-02	5/32"	1/8" NPT	.78	1.79	2.01	.87	.55	.28
ACK 04-02	1/4"	1/8" NPT	.78	1.79	2.01	.96	.55	.28
ACK 04-04	1/4"	1/4" NPT	.94	1.99	2.23	1.04	.75	.28
ACK 06-04	3/8"	1/4" NPT	.94	1.99	2.23	1.14	.75	.28
ACK 06-06	3/8"	3/8" NPT	.96	2.22	2.54	1.20	.87	.39

Specifications

Operating Temperature Range -

-4°F to 176°F (-20°C to 80°C)

Maximum Inlet Pressure -

150 PSI

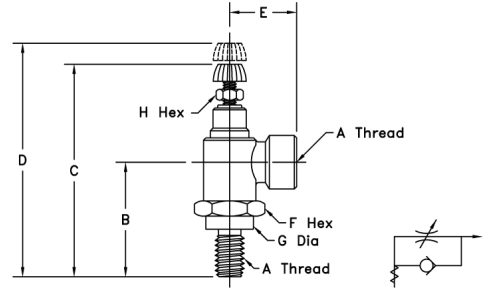
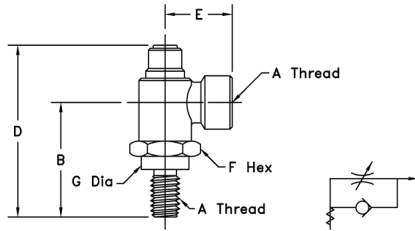
Materials

Body - Nickel Plated Brass

Needle - Brass

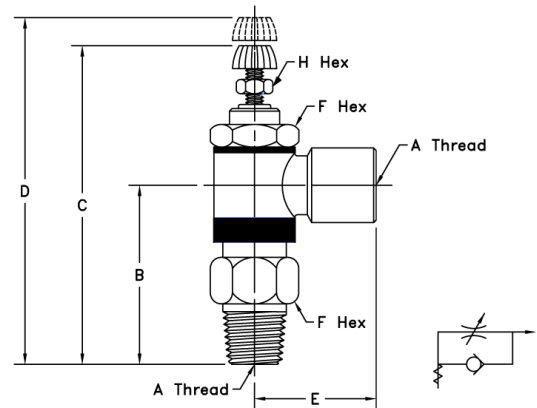
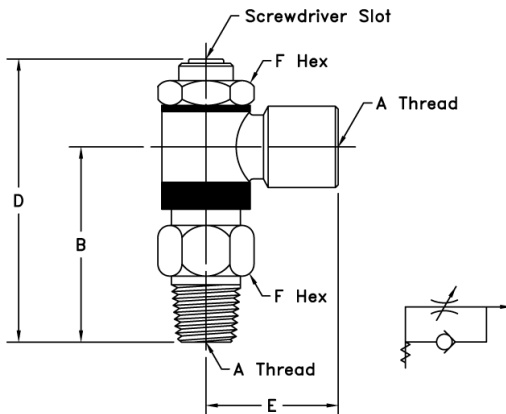
Seals - Buna-N

Series III Threaded Fitting Connect



Use on American Cylinders with the following Port Sizes	Part No.	A	B	D	E	F	G
10-32 UNF	ACSP 2023-32	10-32 UNF	.61	1.10	.41	.32	.31

Part No.	A	B	C	D	E	F	G	H
ACKP 2023-32	10-32 UNF	.61	1.45	1.61	.43	.32	.31	.22



Use on American Cylinders with the following Port Sizes	Part No.	A	B	D	E	F
1/8" NPT	ACSP 2023-02	1/8" NPT	1.20	1.75	.79	.51
1/4" NPT	ACSP 2023-04	1/4" NPT	1.42	1.97	1.00	.67
3/8" NPT	ACSP 2023-06	3/8" NPT	1.46	2.34	1.10	.79

Part No.	A	B	C	D	E	F	H
ACKP 2023-02	1/8" NPT	1.20	2.13	2.32	.79	.51	.28
ACKP 2023-04	1/4" NPT	1.42	2.40	2.62	1.00	.67	.28
ACKP 2023-06	3/8" NPT	1.46	2.86	3.18	1.09	.78	.39

Specifications

Operating Temperature Range -
-4°F to 176°F (-20°C to 80°C)

Maximum Inlet Pressure -
150 PSI

Materials

Body - Nickel Plated Brass

Needle - Brass

Seals - Buna-N



American Cylinder Co., Inc.

American Cylinder Co., Inc.
Peotone, Illinois 60468-9116
708/258-3935
FAX 708/258-3980

ON THE INTERNET

<http://www.americancylinder.com>

<http://www.ameristore.biz>

E-MAIL: amcyl@americancylinder.com

Warranty

American Cylinder Co., Inc. warrants its products to be free from defects in material and workmanship under normal wear and service for a period of 90 days from date of shipment of the order. American Cylinder Company shall have no liability under this warranty if: 1) The product is used other than in accordance with specifications. 2) The product is subjected to abuse, negligence, accident, misapplication, or unintended use. 3) The product is manufactured to buyer's specifications.

Manufacturer's liability shall be limited to allowance of credit or replacement of defective product. American Cylinder Company shall not be liable or responsible for injuries or damages to persons or property arising out of the use or operation of American Cylinder products.

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