Pneumatic Air Preparation - AFR2 Series Combination Filter and Regulators



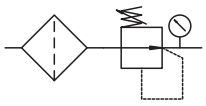
Modular Assembly Example



AFR2-6633-AD **AFR2-3233-D** **AFR2-2133-N**



Mounting bracket included.



Combination Filter-Regulator

NITRA® pneumatic combination particulate/moisture separation air filters and adjustable pressure regulators are available with 1/8", 1/4", 3/8", 1/2", 3/4" or 1" NPT female port sizes to meet a broad range of pneumatic air supply filtration and regulation applications all in a single convenient unit. Available with either a manual / semi-automatic or automatic drain. All-metal bowls with sight gauge are available in all sizes. Polycarbonate or nylon bowls with metal bowl guards are available in 2xxx, 3xxx and 4xxx sizes. Replaceable 40-micron filter elements are standard. An optional 5-micron filter element (purchased separately and customer installable) is available when stricter filtration is required.

The pressure regulator features a locking pressure adjustment knob, integral pressure gauge and is available in adjustable pressure ranges of 20 - 60 psi or 20 - 130 psi. The regulator will relieve downstream pressure if the setpoint is reduced.

Provided with a mounting bracket for stand-alone applications, the modular design also enables easy field assembly with NITRA pneumatic lubricators (using modular assembly brackets purchased separately).

Features

- Air filtration and regulation all in a single convenient unit
- 1/8", 1/4", 3/8", 1/2", 3/4" and 1" NPT female port sizes
- 40-micron replaceable filter element standard; for stricter filtration an optional 5-micron filter element purchased separately is easily customer installable
- All-metal bowls with sight gauge available on all sizes. Polycarbonateor nylon bowls with metal bowl guards available on 2xxx, 3xxx and 4xxx sizes.
- Manual / semi-automatic and automatic drains available
- Adjustable ranges of 20 - 60 psi and 20-130 psi
- Locking pressure adjustment knob
- Integral pressure gauge
- Mounting bracket provided for stand-alone applications
- Modular design enables easy field assembly with NITRA lubricators
- 2 year warranty





See www.AutomationDirect.com for a wide variety of fitting options

NITRA PNEUMATICS

Pneumatic Air Preparation - AFR2 Series Combination Filter and Regulators

AFR2 Series Combination Filter and Regulators												
Part No.	Price	Weight (lbs)	Port Size (FNPT)	Drain Bowl Capacity	Drain Type	Fluid	Temperature	Filtering Grade	Operating Pressure	Maximum Pressure	Proof Pressure	Drawing Link
AFR2-2132-N		0.82	1/8"	25cc nylon with metal bowl guard	Manual/ Semi-Automatic	Air	-5°C to 70°C (23°F to 158°F	40µ (5µ element can be ordered separately and field installed)	20~60psi (0.14~0.41MPa) (1.4~4.1 bar)	60psi (0.41MPa) (4.1 bar)	215psi (1.5MPa) (15 bar)	PDF
AFR2-2132-D		0.85		25cc die-cast aluminum bowl w/ sight								PDF
AFR2-2132		0.83		25cc polycarbonate with metal bowl guard								PDF
AFR2-2133-N		0.83		25cc nylon with metal bowl guard					20~130psi (0.14~0.90MPa) (1.4~9.0 bar)	145psi (1.0MPa) (10 bar)		PDF
AFR2-2133-D		0.86		25cc die-cast aluminum bowl w/ sight								PDF
AFR2-2133		0.84		25cc polycarbonate with metal bowl guard								PDF
AFR2-2232-N		0.82	1/4"	25cc nylon with metal bowl guard					20~60psi (0.14~0.41MPa) (1.4~4.1 bar)	60psi (0.41MPa) (4.1 bar)		PDF
AFR2-2232-D		0.84		25cc die-cast aluminum bowl w/ sight								PDF
AFR2-2232		0.82		25cc polycarbonate with metal bowl guard								PDF
AFR2-2233-N		0.83		25cc nylon with metal bowl guard					20~130psi (0.14~0.90MPa) (1.4~9.0 bar)	145psi (1.0MPa) (10 bar)		PDF
AFR2-2233-D		0.86		25cc die-cast aluminum bowl w/ sight								PDF
AFR2-2233		0.84		25cc polycarbonate with metal bowl guard								PDF
AFR2-3232-N		1.34		60cc nylon with metal bowl guard					20~60psi (0.14~0.41MPa) (1.4~4.1 bar)	60psi (0.41MPa) (4.1 bar)		PDF
AFR2-3232-D		1.38		60cc die-cast aluminum bowl w/ sight								PDF
AFR2-3232		1.35		60cc polycarbonate with metal bowl guard								PDF
AFR2-3232-AN		1.37		60cc nylon with metal bowl guard	Automatic							PDF
AFR2-3232-AD		1.41		60cc die-cast aluminum bowl w/ sight								PDF
AFR2-3232-A		1.39		60cc polycarbonate with metal bowl guard								PDF
AFR2-3233-N		1.36		60cc nylon with metal bowl guard	Manual/ Semi-Automatic				20~130psi (0.14~0.90MPa) (1.4~9.0 bar)	145psi (1.0MPa) (10 bar)		PDF
AFR2-3233-D		1.39		60cc die-cast aluminum bowl w/ sight								PDF
AFR2-3233		1.37		60cc polycarbonate with metal bowl guard								PDF
AFR2-3233-AN		1.39		60cc nylon with metal bowl guard	Automatic							PDF
AFR2-3233-AD		1.42		60cc die-cast aluminum bowl w/ sight								PDF
AFR2-3233-A		1.4		60cc polycarbonate with metal bowl guard								PDF
AFR2-3332-N		1.33	3/8"	60cc nylon with metal bowl guard	Manual/ Semi-Automatic				20~60psi (0.14~0.41MPa) (1.4~4.1 bar)	60psi (0.41MPa) (4.1 bar)		PDF
AFR2-3332-D		1.37		60cc die-cast aluminum bowl w/ sight								PDF
AFR2-3332		1.35		60cc polycarbonate with metal bowl guard								PDF
AFR2-3332-AN		1.36		60cc nylon with metal bowl guard	Automatic							PDF
AFR2-3332-AD		1.38		60cc die-cast aluminum bowl w/ sight								PDF
AFR2-3332-A		1.38		60cc polycarbonate with metal bowl guard								PDF

See our Web site www.AutomationDirect.com for complete Engineering drawings.

Pneumatic Air Preparation - AFR2 Series Combination Filter and Regulators

AFR2 Series Combination Filter and Regulators Cont.												
Part No.	Price	Weight (lbs)	Port Size (FNPT)	Drain Bowl Capacity	Drain Type	Fluid	Temperature	Filtering Grade	Operating Pressure	Maximum Pressure	Proof Pressure	Drawing Link
AFR2-3333-N		1.34	3/8"	60cc nylon with metal bowl guard	Manual/Semi-Automatic	Air	-5°C to 70°C (23°F to 158°F	40µ (5µ element can be ordered separately and field installed)	20~130psi (0.14~0.90MPa) (1.4~9.0 bar)	145psi (1.0MPa) (10 bar)	215psi (1.5MPa) (15 bar)	PDF
AFR2-3333-D		1.39		60cc die-cast aluminum bowl w/ sight								PDF
AFR2-3333		1.37		60cc polycarbonate with metal bowl guard								PDF
AFR2-3333-AN		1.37		60cc nylon with metal bowl guard	Automatic							PDF
AFR2-3333-AD		1.42		60cc die-cast aluminum bowl w/ sight								PDF
AFR2-3333-A		1.4		60cc polycarbonate with metal bowl guard								PDF
AFR2-4433-N		2.33	1/2"	100cc nylon with metal bowl guard	Manual/Semi-Automatic							PDF
AFR2-4433-D		2.41		100cc die-cast aluminum bowl w/ sight								PDF
AFR2-4433		2.4		100cc polycarbonate with metal bowl guard								PDF
AFR2-4433-AN		2.4		100cc nylon with metal bowl guard	Automatic							PDF
AFR2-4433-AD		2.42		100cc die-cast aluminum bowl w/ sight								PDF
AFR2-4433-A		2.28		100cc polycarbonate with metal bowl guard								PDF
AFR2-6633-D		5.26	3/4"	205cc die-cast aluminum bowl w/ sight	Manual/Semi-Automatic							PDF
AFR2-6633-AD		5.29			Automatic							PDF
AFR2-6833-D		5.13	1"		Manual/Semi-Automatic							PDF
AFR2-6833-AD		5.27			Automatic							PDF

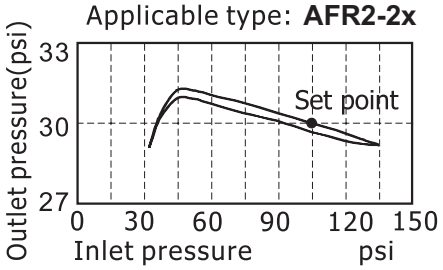
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Pneumatic Air Preparation - AFR2 Series Combination Filter and Regulators

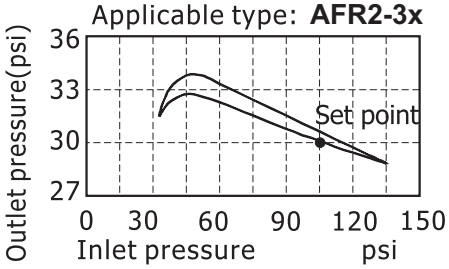
Performance Charts

Pressure chart

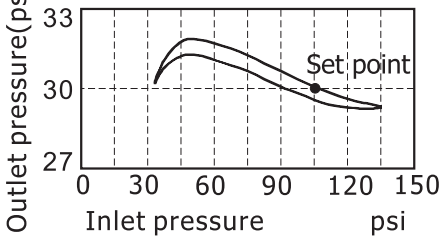
Applicable type: **AFR2-2x**



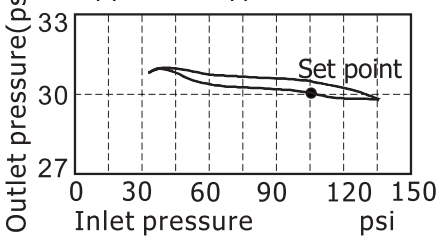
Applicable type: **AFR2-3x**



Applicable type: **AFR2-4x**

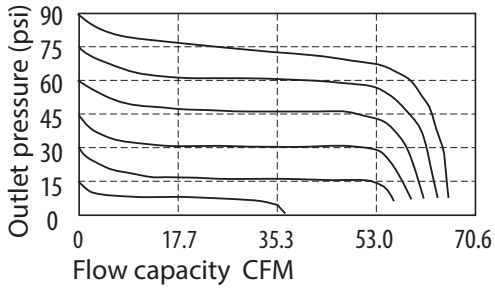


Applicable type: **AFR2-6x**

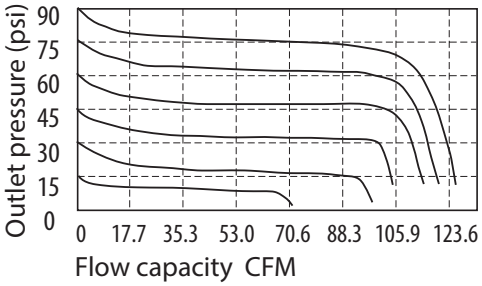


Flow chart

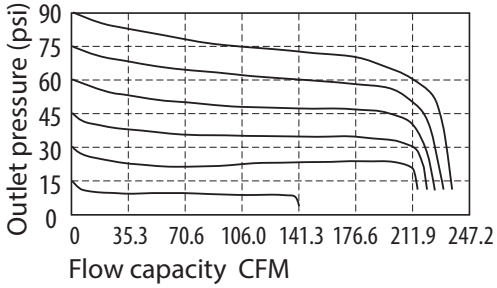
Applicable type: **AFR2-2x**
Inlet pressure: 105psi



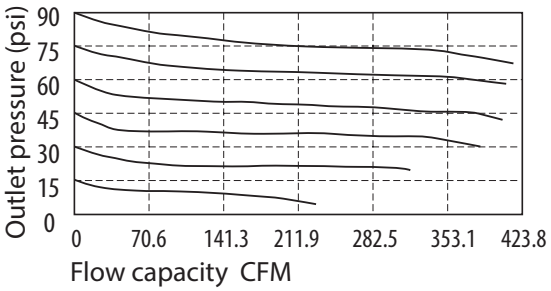
Applicable type: **AFR2-3x**
Inlet pressure: 105psi



Applicable type: **AFR2-4x**
Inlet pressure: 105psi



Applicable type: **AFR2-6x**
Inlet pressure: 105psi



GEN 2 Pneumatic Air Prep Accessories



Part No. AGP2-21



Part No. AGP2-31



Part No. AGP2-42

GEN 2 Pneumatic Air Preparation Accessories				
Part No.	*Price*	*Description*	*Weight (lbs)*	*Drawing Link*
AGP2-21		NITRA pneumatic gauge port adapter plate, 1/8in female NPT connection(s), aluminum. For use with Ax-2 series air prep components. (3) o-rings included.	0.02	PDF
AGP2-31		NITRA pneumatic gauge port adapter plate, 1/8in female NPT connection(s), aluminum. For use with Ax-3 series air prep components. (3) o-rings included.	0.04	PDF
AGP2-42		NITRA pneumatic gauge port adapter plate, 1/4in female NPT connection(s), aluminum. For use with Ax-4 and Ax-6 series air prep components. (3) o-rings included.	0.04	PDF

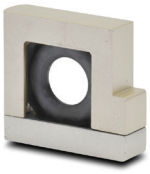
Pneumatic Air Preparation Accessories



Part No. ADB-21



Part No. AB-4T



Part No. AB-4U

Pneumatic Air Preparation Accessories			
Part No.	Price	Description	Weight (lbs)
ADB-21		NITRA pneumatic distribution block, 1/8in female NPT inlet(s), (3) 1/8in female NPT outlet(s). For use with Ax-21 series air prep components.	0.1
ADB-22		NITRA pneumatic distribution block, 1/4in female NPT inlet(s), (3) 1/4in female NPT outlet(s). For use with Ax-22 series air prep components.	0.1
ADB-32		NITRA pneumatic distribution block, 1/4in female NPT inlet(s), (3) 1/4in female NPT outlet(s). For use with Ax-32 series air prep components.	0.2
ADB-33		NITRA pneumatic distribution block, 3/8in female NPT inlet(s), (3) 3/8in female NPT outlet(s). For use with Ax-33 series air prep components.	0.2
ADB-44		NITRA pneumatic distribution block, 1/2in female NPT inlet(s), (3) 1/2in female NPT outlet(s). For use with Ax-44 series air prep components.	0.4
AB-2T		NITRA modular T-bracket, for use with Ax-2 series air prep components.	0.2
AB-2L		NITRA modular L-bracket, for use with Ax-2 series air prep components.	0.2
AB-2U		NITRA modular U-bracket, for use with Ax-2 series air prep components.	0.1
AB-3T		NITRA modular T-bracket, for use with Ax-3 series air prep components.	0.3
AB-3L		NITRA modular L-bracket, for use with Ax-3 series air prep components.	0.3
AB-3U		NITRA modular U-bracket, for use with Ax-3 series air prep components.	0.2
AB-4T		NITRA modular T-bracket, for use with Ax-4 series air prep components.	0.5
AB-4U		NITRA modular U-bracket, for use with Ax-4 series air prep components.	0.4
AB-6T		NITRA modular T-bracket, for use with Ax-6 series air prep components.	1.3
AB-6L		NITRA modular L-bracket, for use with Ax-6 series air prep components.	1.2
AB-6U		NITRA modular U-bracket, for use with Ax-6 series air prep components.	0.8

Pneumatic Air Preparation Accessories



Part No. AFE2-43



Part No. AFE2-41



Part No. AFE-24



Part No. AFE-35

Pneumatic Air Preparation Accessories			
Part No.	**Price**	**Description**	**Weight (lbs)**
NITRA Gen 2 Particulate Filters			
AFE2-23		NITRA particulate filter element, replacement, 40 micron particles, high-density polyethylene (HDPE). For use with AF-2 series filters or AFR-2 series filter-regulators.	0.01
AFE2-33		NITRA particulate filter element, replacement, 40 micron particles, high-density polyethylene (HDPE). For use with AF-3 series filters or AFR-3 series filter-regulators.	0.01
AFE2-43		NITRA particulate filter element, replacement, 40 micron particles, high-density polyethylene (HDPE). For use with AF-4 series filters or AFR-4 series filter-regulators.	0.01
AFE2-63		NITRA particulate filter element, replacement, 40 micron particles, high-density polyethylene (HDPE). For use with AF-6 series filters or AFR-6 series filter-regulators.	0.04
AFE2-31		NITRA particulate filter element, replacement, 5 micron particles, high-density polyethylene (HDPE). For use with AF-3 series filters or AFR-3 series filter-regulators.	0.01
AFE2-41		NITRA particulate filter element, replacement, 5 micron particles, high-density polyethylene (HDPE). For use with AF-4 series filters or AFR-4 series filter-regulators.	0.01
AFE2-61		NITRA particulate filter element, replacement, 5 micron particles, high-density polyethylene (HDPE). For use with AF-6 series filters or AFR-6 series filter-regulators.	0.04
NITRA Coalescing Filters			
AFE-24		NITRA coalescing oil removal filter element, replacement, 0.3 micron particles, borosilicate glass microfiber. For use with AC-2 series coalescing filters.	0.05
AFE-34		NITRA coalescing oil removal filter element, replacement, 0.3 micron particles, borosilicate glass microfiber. For use with AC-3 series coalescing filters.	0.05
AFE-44		NITRA coalescing oil removal filter element, replacement, 0.3 micron particles, borosilicate glass microfiber. For use with AC-4 series coalescing filters.	0.1
AFE-25		NITRA coalescing oil removal filter element, replacement, 0.01 micron particles, borosilicate glass microfiber. For use with AC-2 series coalescing filters.	0.04
AFE-35		NITRA coalescing oil removal filter element, replacement, 0.01 micron particles, borosilicate glass microfiber. For use with AC-3 series coalescing filters.	0.05
AFE-45		NITRA coalescing oil removal filter element, replacement, 0.01 micron particles, borosilicate glass microfiber. For use with AC-4 series coalescing filters.	0.1

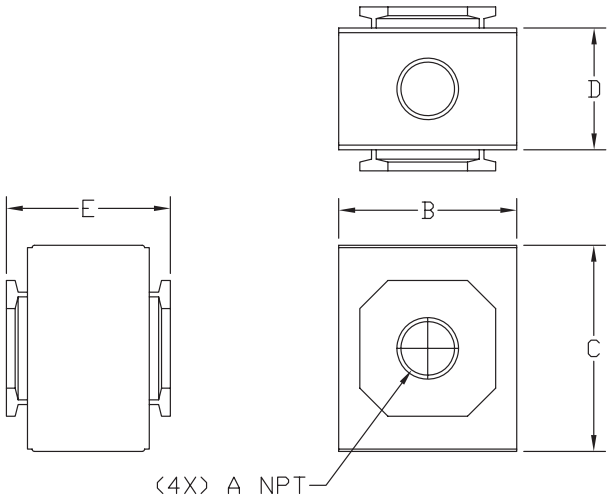
Pneumatic Air Preparation Accessories

Dimensions

mm [inches]

ADB-x

PART NO.	A NPT	DIM B	DIM C	DIM D	DIM E
ADB-21	1/8	30.0 [1.18]	36.0 [1.42]	19.5 [0.77]	28.5 [1.12]
ADB-22	1/4	30.0 [1.18]	36.0 [1.42]	19.5 [0.77]	28.5 [1.12]
ADB-32	1/4	38.0 [1.50]	44.0 [1.73]	26.0 [1.02]	35.0 [1.38]
ADB-33	3/8	38.0 [1.50]	44.0 [1.73]	26.0 [1.02]	35.0 [1.38]
ADB-44	1/2	52.0 [2.05]	52.0 [2.05]	30.0 [1.18]	42.0 [1.65]



See our Web site www.AutomationDirect.com for complete Engineering drawings.

Pneumatic Air Preparation Accessories

Dimensions

mm [inches]

AB-xT

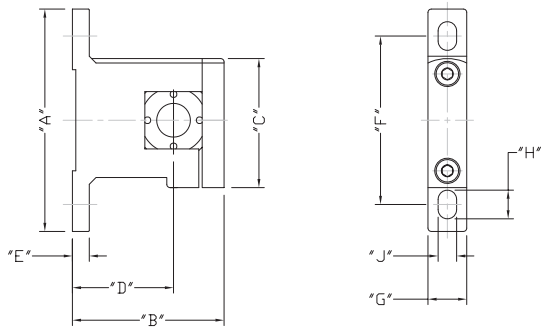


TABLE 1									
PART NUMBER	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"	DIM "H"	DIM "J"
AB-2T	66.0 [2.60]	45.0 [1.77]	38.3 [1.51]	30.0 [1.18]	5.0 [0.20]	50.0 [1.97]	11.5 [0.45]	8.5 [0.33]	5.5 [0.22]
AB-3T	88.0 [3.46]	60.5 [2.38]	49.3 [1.94]	41.5 [1.63]	7.0 [0.28]	70.0 [2.76]	12.5 [0.49]	9.0 [0.35]	6.5 [0.26]
AB-4T	104.0 [4.09]	76.0 [2.99]	58.5 [2.30]	50.0 [1.97]	7.0 [0.28]	80.0 [3.15]	15.5 [0.61]	12.0 [0.47]	8.6 [0.34]
AB-6T	128.0 [5.04]	104.0 [4.09]	79.5 [3.13]	70.0 [2.76]	10.0 [0.39]	100.0 [3.94]	19.5 [0.77]	16.0 [0.63]	11.0 [0.43]

AB-xL

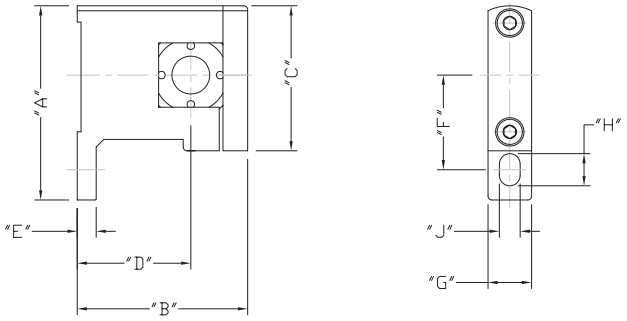


TABLE 1									
PART NUMBER	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"	DIM "H"	DIM "J"
AB-2L	51.3 [2.02]	45.0 [1.77]	38.3 [1.51]	30.0 [1.18]	5.0 [0.20]	25.0 [0.98]	11.5 [0.45]	8.5 [0.33]	5.5 [0.22]
AB-3L	68.6 [2.70]	60.5 [2.38]	49.3 [1.94]	41.5 [1.63]	7.0 [0.28]	35.0 [1.38]	12.5 [0.49]	9.0 [0.35]	6.5 [0.26]
AB-4L	79.5 [3.13]	76.0 [2.99]	58.5 [2.30]	50.0 [1.97]	7.0 [0.28]	40.0 [1.57]	15.5 [0.61]	12.0 [0.47]	8.6 [0.34]
AB-6L	103.5 [4.07]	104.0 [4.09]	79.5 [3.13]	70.0 [2.76]	10.0 [0.39]	50.0 [1.97]	19.5 [0.77]	16.0 [0.63]	11.0 [0.43]

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Pneumatic Air Preparation Accessories

Dimensions

mm [inches]

AB-xU

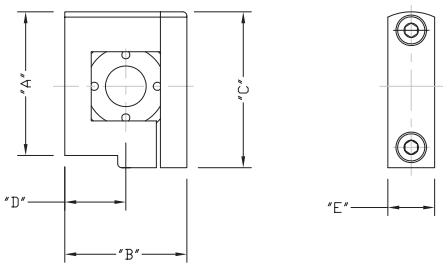


TABLE 1

PART NUMBER	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"
AB-2U	35.5 [1.39]	30.0 [1.18]	38.3 [1.51]	15.0 [0.59]	11.5 [0.45]
AB-3U	43.8 [1.72]	38.0 [1.50]	49.3 [1.94]	19.5 [0.75]	12.5 [0.49]
AB-4U	52.5 [2.07]	52.0 [2.05]	58.5 [2.30]	26.0 [1.02]	15.5 [0.61]
AB-6U	76.5 [3.01]	68.0 [2.68]	79.5 [3.13]	34.0 [1.34]	19.5 [0.77]

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