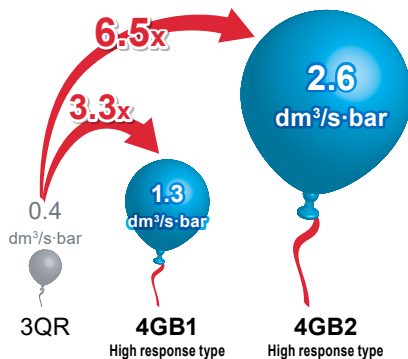


Achieves large flow rate and high response at low wattages

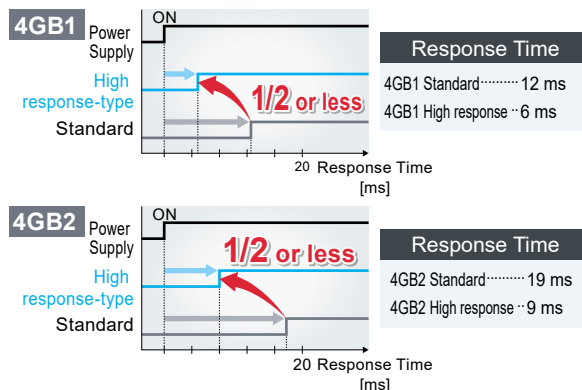


Features

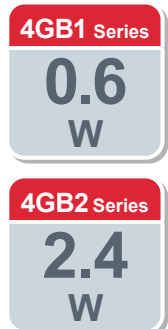
● High Flow Rate



● High Response



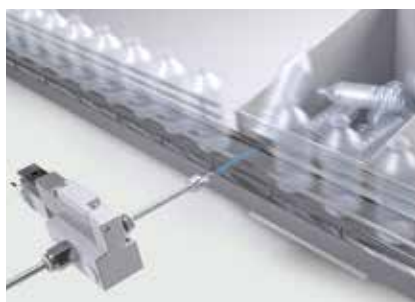
● Low power consumption



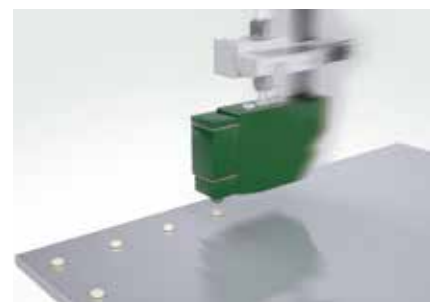
Application Example



Suction transport of parallel link robots



Ejects defective products from sorting machine



High-speed drive of hot melt gun

4GB1/4GB2 Series high-response specifications [Special Specification Product]

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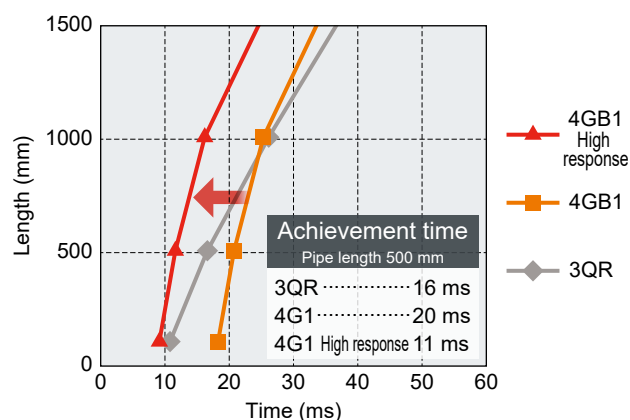
LN-018AA

●Contact a CKD Sales representative for special specifications of this product.

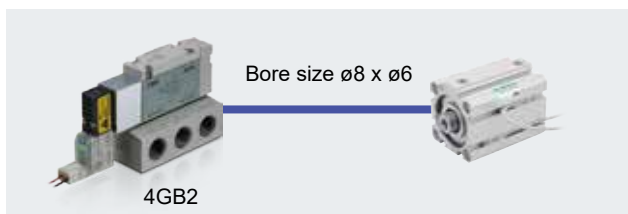
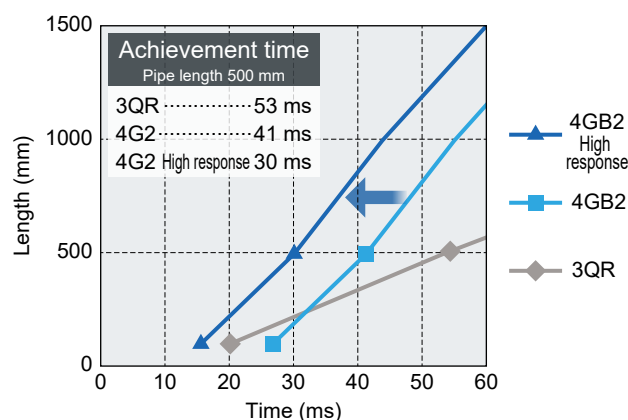
4GB1/4GB2 Series High-response specifications [Special Specification Product]

Relationship between pipe length and pressure achievement time

Time to achieve piping pressure 0.5 MPa $\phi 4 \times \phi 2.5$



Time to achieve Piping Pressure 0.5 MPa $\phi 8 \times \phi 6$



For applications requiring high responsiveness, valve response time and flow rate are both crucial factors.

4GB1/4GB2 Series high-response specifications

Valve Specifications

Item	Content
Valve Type and Operation Method	Pilot operated soft spool valve
Switching category	2-position single
Operating Fluid	Compressed Air
Lubrication	Not available
Protection Structure	Dust-proof
Vibration Resistance	m/s^2 50 or less
Shock Resistance	m/s^2 300 or less
Atmosphere	Cannot be used in corrosive gas environments

Individual specifications

Item	Content	4G1	4G2
Model		4G1	4G2
Ambient Temperature	$^{\circ}C$	0 to 50	-5 to 40 *1
Fluid Temperature	$^{\circ}C$	5 to 50	5 to 40 *1
Min. Working Press.	MPa	0.2 *2	0.2 *2
Max. Operating Press.	MPa	0.65	0.7
Proof Pressure	MPa	0.98	1.05
Manual Operation		None	Non-locking

*1: Contact CKD if the temperature exceeds 40°C.

*2: The min. specified pressure when the external pilot (option K) is selected is 0 MPa and above.
External pilot pressure should be above the main pressure and used from 0.4 MPa and above.

Electrical specifications

Item	Content	4G1	4G2
Model		4G1	4G2
Rated voltage	V DC	12, 24	12, 24
Voltage Fluctuation Range		$\pm 10\%$	$\pm 10\%$
Starting current	A	24 VDC: 0.092 12 VDC: 0.183	0.13 0.27
Holding current	A	24 VDC: 0.025 12 VDC: 0.050	0.1 0.200
Power Consumption		0.6 *3	2.4 *4
Thermal class		B	B

*3: 2.2 W for 20 ms after start.

*4: 3.2 W for 20 ms after start.

Performance characteristics

Item	Content	4G1	4G2
Model		4G1	4G2
Response characteristics *5	ms	8 or less	10 or less
Max. operating frequency	Hz	20	10
C value P→A/B *6		1.3 $dm^3/(s \cdot bar)$	2.6 $dm^3/(s \cdot bar)$
C value A/B→R1/R2		1.2 $dm^3/(s \cdot bar)$	2.6 $dm^3/(s \cdot bar)$
Service life		100 million operations	

*5: JIS B 8419:2010 According to dynamic performance test.

(Initial values at supply pressure 0.5MPa, 20°C, no lubrication, rated voltage, continuous operation)

*6: Flow rate is equivalent to the standard 4G Series.

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