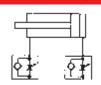
One-way control valves

Function of flow control and one-way control valves

xhaust air can be controlled (One-way control)



Standard (exhaust air)

Exhaust air can be controlled - free of supply air (throttled from male thread to the hose)

Recommended use:

For cylinder from Ø 16 mm

✓Advantages:

- · Good operating options without jumping
- · Smooth operation
- Forward and return strokes possible at different speeds

GRLAIQSM ... GRLAIQS ... GRAIQS ...

Supply air can be controlled (On-way control)



Special version (supply air)

GRLBIQS ...

GRLA ...

Supply air can be controlled - free of supply air (throttled from hose to male thread)

Recommended use: For smaller Ø and short strokes (small volumes)

✓Advantages: • Even small air volumes can be controlled

• Forward and return strokes possible at different speeds

Supply and exhaust air can be controlled



Special version (flow control valve)

Supply and exhaust air can be controlled Recommended use:

For small and single-acting cylinder



• Inlet and return flow same speeds

Disadvantages:

GRLD ...

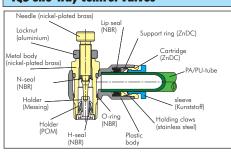
· Only used rarely without "jumping"

GRL.

IQS one-way control valves

Item:

Standard/Mini



Functional principle: One-way control valves choke the flow in one direction, while the flow remains unrestricted in the other direction. The standard construction of the one-way control valves is "exhaust air flow controlling". If they are screwed into a cylinder, for example, then they provide for an even flow without causing a slip-stick effect. In the case of cylinders with small volumes (a small diameter/low stroke rate), one-way control valves are utilised with the special "supply air flow controlling" construction. Media: Compressed air, neutral gases

ontrolling

Only with screwdriver adjustable





One-way control valves, cylindrical threads

Standard

Materials: Body: Brass nickel-plated/PA 66, sleeve: PA 66, seal: NBR, holding claws: Stainless steel, cartridge: ZnDC zinc-plated (only silicone-free seals and lubricants are used during assembly)

Temperature range: -20°C to max. +80°C Operating pressure: -0.95 to 20 bar

Advantages: • Compact design

• Can be easily adjusted without tools

Type exhaust air	Type supply air			
flow controlling	flow controlling	G	D	
GRLAIQS M54	GRLBIQS M54	M 5	4	
GRLAIQS M56	GRLBIQS M56	M 5	6	
GRLAIQS 184 G	GRLBIQS 184 G	G 1/8"	4	
GRLAIQS 186 G	GRLBIQS 186 G	G 1/8"	6	
GRLAIQS 188 G	GRLBIQS 188 G	G 1/8"	8	
GRLAIQS 144 G	GRLBIQS 144 G	G 1/4"	4	
GRLAIQS 146 G	GRLBIQS 146 G	G 1/4"	6	
GRLAIQS 148 G	GRLBIQS 148 G	G 1/4"	8	

	Type exhaust air	Type supply air		
	flow controlling	flow controlling	G	D
l	GRLAIQS 1410 G	GRLBIQS 1410 G	G 1/4"	10
l	GRLAIQS 386 G	GRLBIQS 386 G	G 3/8"	6
l	GRLAIQS 388 G	GRLBIQS 388 G	G 3/8"	8
l	GRLAIQS 3810 G	GRLBIQS 3810 G	G 3/8"	10
l	GRLAIQS 3812 G	GRLBIQS 3812 G	G 3/8"	12
l	GRLAIQS 128 G	GRLBIQS 128 G	G 1/2"	8
l	GRLAIQS 1210 G	GRLBIQS 1210 G	G 1/2"	10
l	GRLAIQS 1212 G		G 1/2"	12

One-way control valves with slotted screws

Standard

Materials: Body: Brass nickel-plated/PA 66, sleeve: PA 66, seal: NBR, holding claws: Stainless steel, cartridge: ZnDC zinc-plated (only silicone-free seals and lubricants are used during assembly)

Temperature range: -20°C to max. +80°C Operating pressure: -0.95 to 20 bar

Advantages: • Compact design

• Can be easily adjusted without tools

PU, PA, PTFE and PE hoses from page 192	

Type exhaust air			Type exhaust air		
flow controlling	G	D	flow controlling	G	D
GRLAIQS M54 S	M 5	4	GRLAIQS 146 G S	G 1/4"	6
GRLAIQS M56 S	M 5	6	GRLAIQS 148 G S	G 1/4"	8
GRLAIQS 184 G S	G 1/8"	4	GRLAIQS 1410 G S	G 1/4"	10
GRLAIQS 186 G S	G 1/8"	6	GRLAIQS 386 G S	G 3/8"	6
GRLAIQS 188 G S	G 1/8"	8	GRLAIQS 388 G S	G 3/8"	8
GRLAIQS 144 G S	G 1/4"	4	GRLAIQS 3810 G S	G 3/8"	10

Type exhaust air		
flow controlling	G	D
GRLAIQS 3812 G S	G 3/8"	12
GRLAIQS 128 G S	G 1/2"	8
GRLAIQS 1210 G S	G 1/2"	10
GRLAIQS 1212 G S	G 1/2"	12

All data are considered to be unbinding reference values. We accept no liability for data selection that is not confirmed in writing. Pressure data refer, if not otherwise indicated, to liquids of Group II at +20°C