

# H-Controlair®



H Controlair® pressure regulators



## Product overview

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## Series H-Controlair®

Flow: 900 l/min

Ambient temperature min./max.: -40 °C ... 70 °C

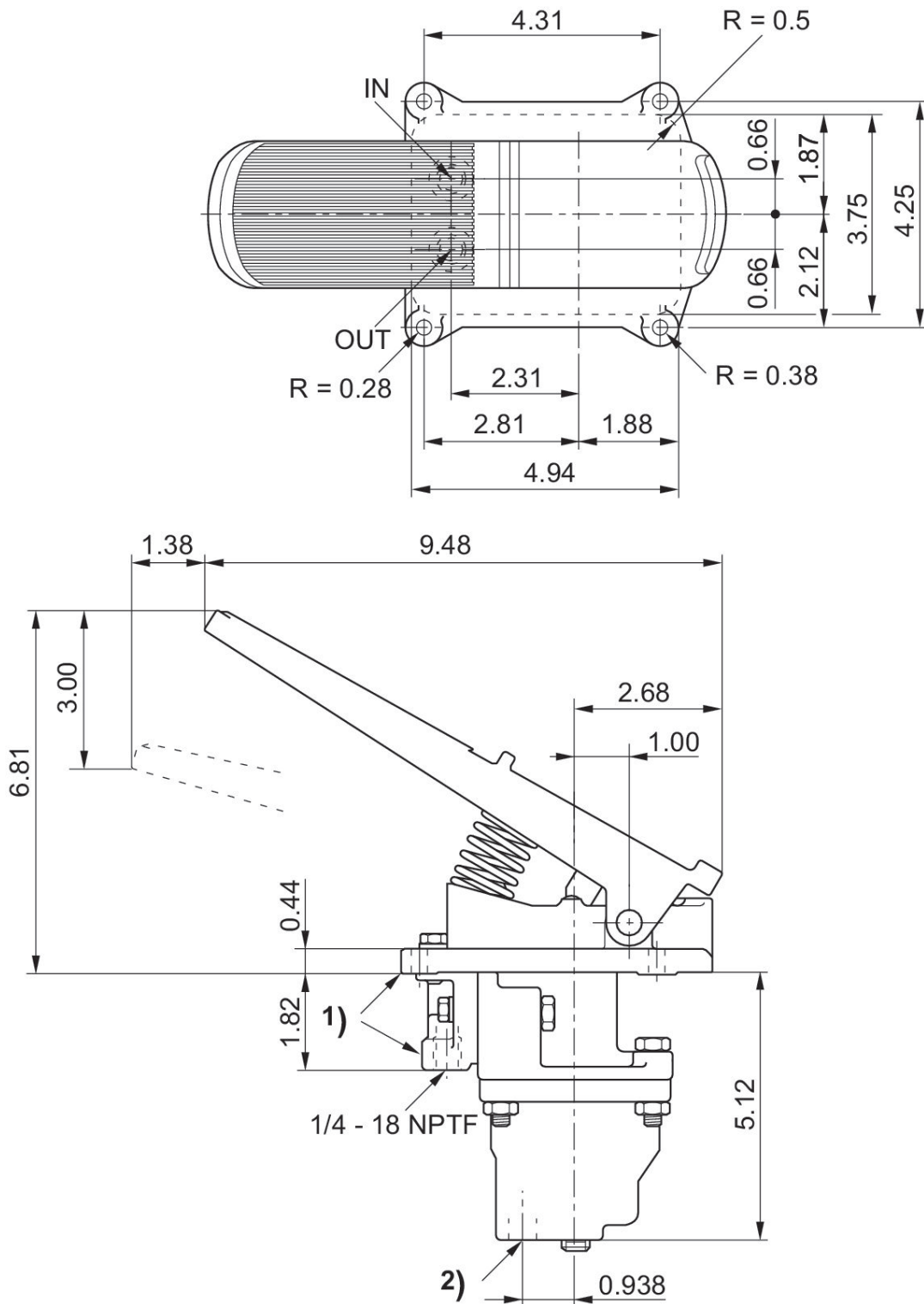
Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Min. actuating force [N]	Part No.
1/4 NPT	900	0.1	4.5	Pedal	90	R431002613
1/4 NPT	900	0.1	6.9	Pedal	90	R431002614
1/4 NPT	900	0.1	8.6	Pedal	90	R431002615
1/4 NPT	900	0.1	10.4	Pedal	90	R431002616
1/4 NPT	900	0.1	2	Pedal	90	R431002617
1/4 NPT	900	0.1	4.5	Pedal	77	R431002981
1/4 NPT	900	0.1	6.9	Pedal	77	R431002982

Dimensions in inches



- 1) Order the flange mounting and tube clip separately.
- 2) exhaust open

## Series H-Controlair®

Flow: 900 l/min

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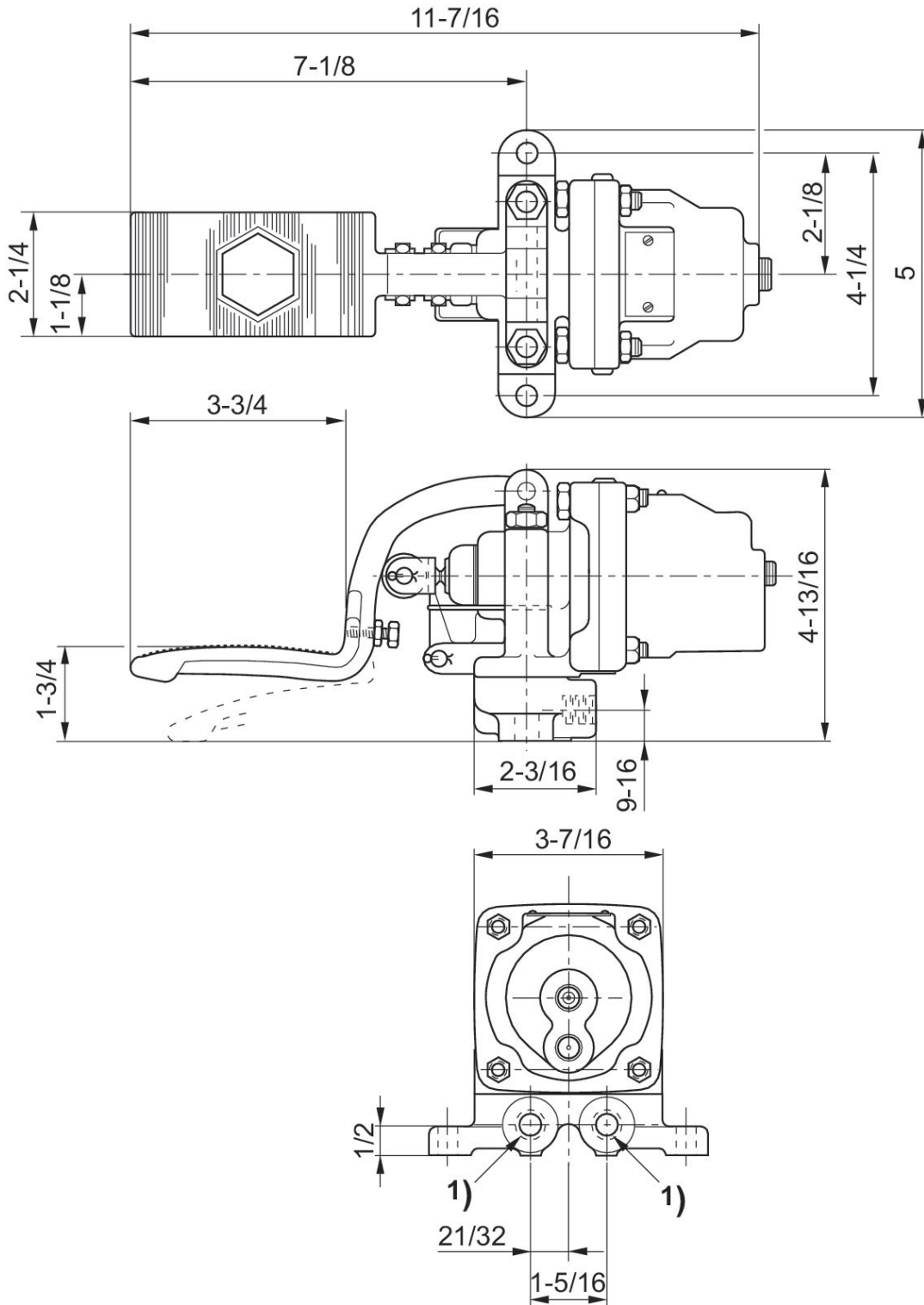
Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Min. actuating force [N]	Part No.
1/4 NPT	900	0.1	4.5	Pedal	67	R431003063
1/4 NPT	900	0.1	6.9	Pedal	67	R431003064
1/4 NPT	900	0.1	8.6	Pedal	67	R431003065
1/4 NPT	900	0.1	10.4	Pedal	67	R431003066

Dimensions in inches



1)  $1/4$  - 18 NPTF

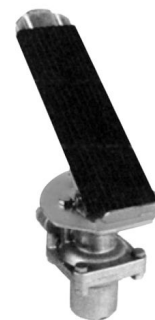
## Series H-Controlair®

Flow: 900 l/min

Ambient temperature min./max.: -40 °C ... 70 °C

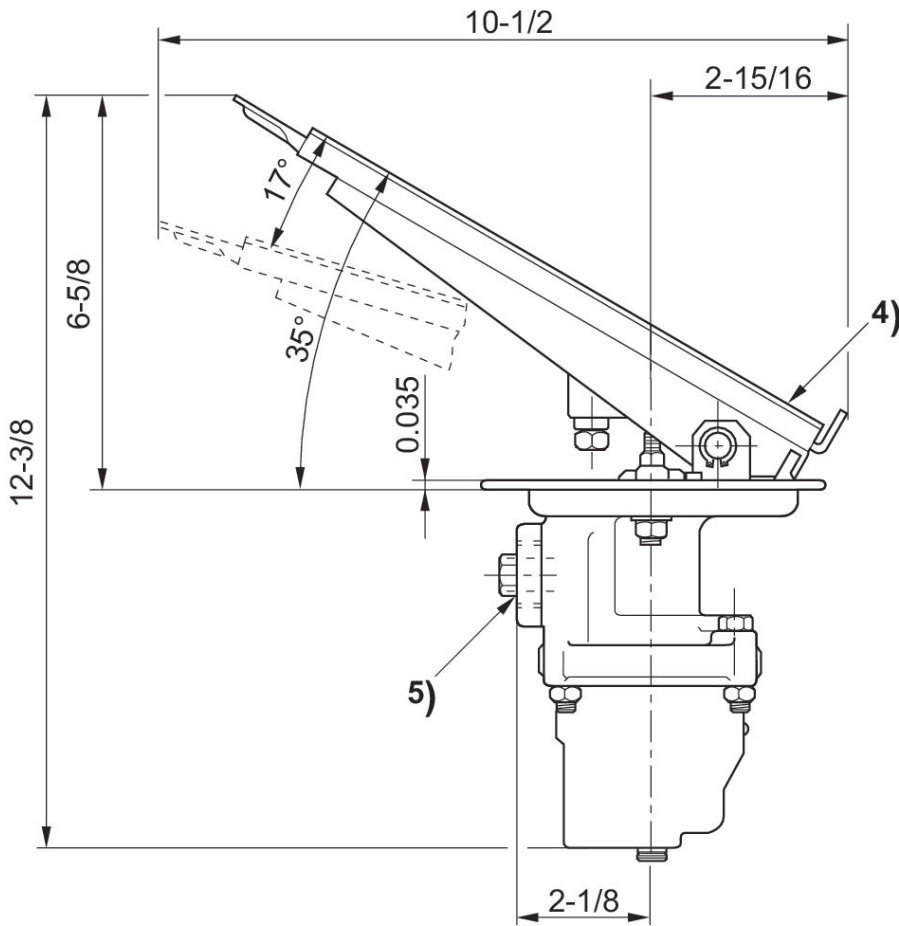
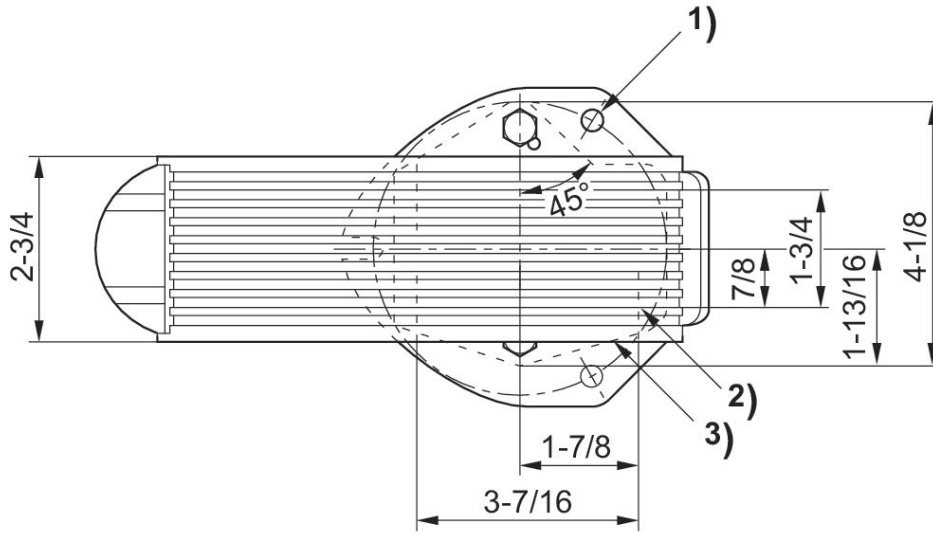
Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



Compressed air connection output	Min. regulation range [bar]	Actuating element	Min. actuating force [N]	Part No.
1/4 NPT	4.5	Pedal	67	R431005617
1/4 NPT	6.9	Pedal	67	R431005618
1/4 NPT	8.6	Pedal	67	R431005619

Dimensions in inches



- 1) panel mounting hole
- 2) Pedal
- 3) panel mounting hole
- 4) Pedal
- 5) 1/4 - 18 NPTF

## Series H-Controlair®

Flow: 900 l/min

Ambient temperature min./max.: -40 °C ... 70 °C

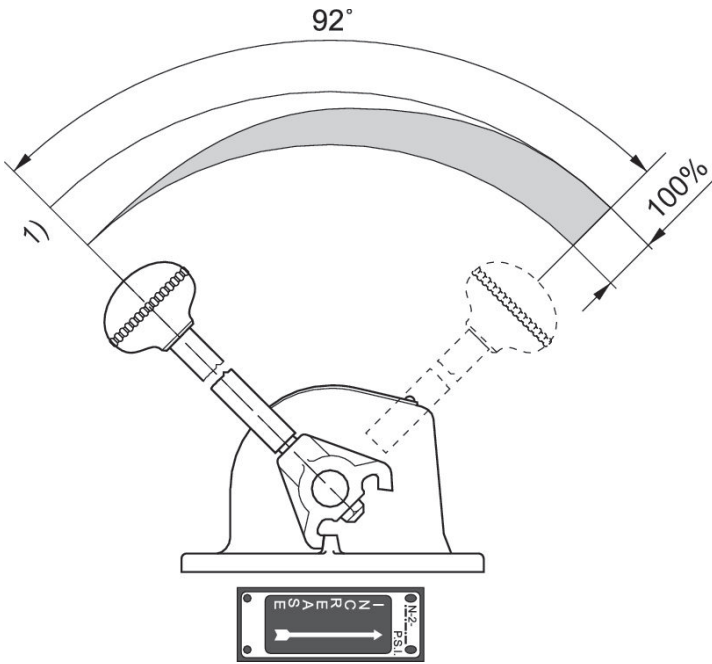
Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Type	Actuating element	Fig.	Part No.
1/4 NPT	900	0.1	4.5	H-2-X	Lever		R431002638
1/4 NPT	900	0.1	6.9	H-2-X	Lever		R431002639
1/4 NPT	900	0.1	8.6	H-2-X	Lever		R431002640
1/4 NPT	900	0.1	10.4	H-2-X	Lever		R431002641
1/4 NPT	900	0.1	2	H-2-X	Lever		R431002642
1/4 NPT	900	0.1	8.6	H-2-X	Lever	Fig. 1	R431007252
1/4 NPT	900	0.1	8.6	H-2-X	Lever	Fig. 2	R431007323
1/4 NPT	900	0.1	8.6	H-2-X	Lever	Fig. 3	R431007324
1/4 NPT	900	0.1	4.5	H-2-FX	Lever		R431002643
1/4 NPT	900	0.1	6.9	H-2-FX	Lever		R431002644
1/4 NPT	900	0.1	8.6	H-2-FX	Lever		R431002645
1/4 NPT	900	0.1	10.4	H-2-FX	Lever		R431002646
1/4 NPT	900	0.1	12	H-2-FX	Lever		R431002647
1/4 NPT	900	0.1	5.5	H-2-FX	Lever		R431002648
1/4 NPT	900	0.1	4.5	H-2-FX	Lever		R431002649
1/4 NPT	900	0.1	6.2	H-2-FX	Lever		R431002650
1/4 NPT	900	0.1	12	H-2-FX	Lever		R431002651
1/4 NPT	900	0.1	6.9	H-2-FX	Lever	Fig. 1	R431007308
1/4 NPT	900	0.1	8.6	H-2-FX	Lever	Fig. 2	R431007328
1/4 NPT	900	0.1	8.6	H-2-FX	Lever	Fig. 3	R431007329
1/4 NPT	900	0.1	4.5	H-2-LX	Lever		R431002652
1/4 NPT	900	0.1	6.9	H-2-LX	Lever		R431002653
1/4 NPT	900	0.1	8.6	H-2-LX	Lever		R431002654
1/4 NPT	900	0.1	10.4	H-2-LX	Lever		R431002655
1/4 NPT	900	0.1	8.6	H-2-LX	Lever	Fig. 1	R431007326
1/4 NPT	900	0.1	8.6	H-2-LX	Lever	Fig. 2	R431007325
1/4 NPT	900	0.1	8.6	H-2-LX	Lever	Fig. 3	R431007327

Function



1) OUT port

Overview drawing

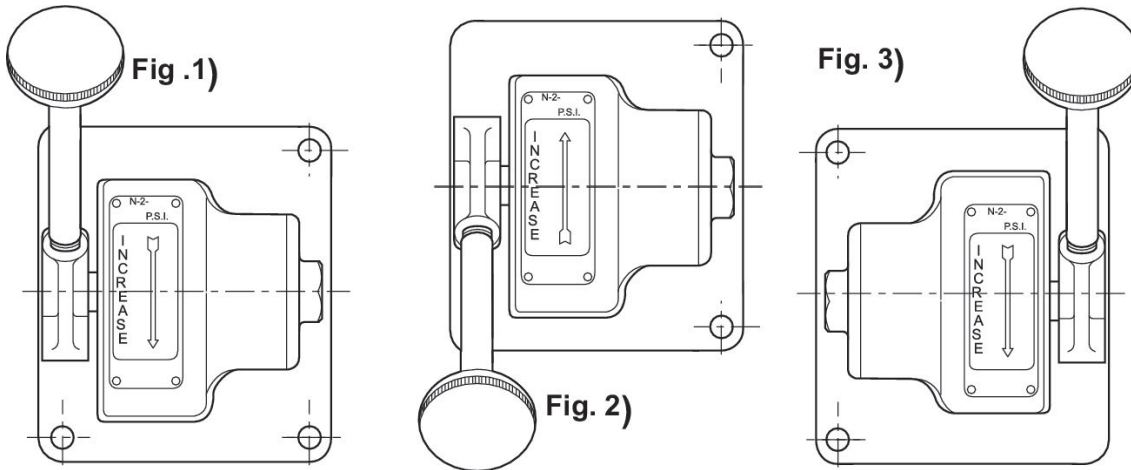


Fig. 1 Reverse name plate, standard cam  
 Fig. 2 Standard name plate, reverse cam  
 Fig. 3 Reverse name plate, reverse cam



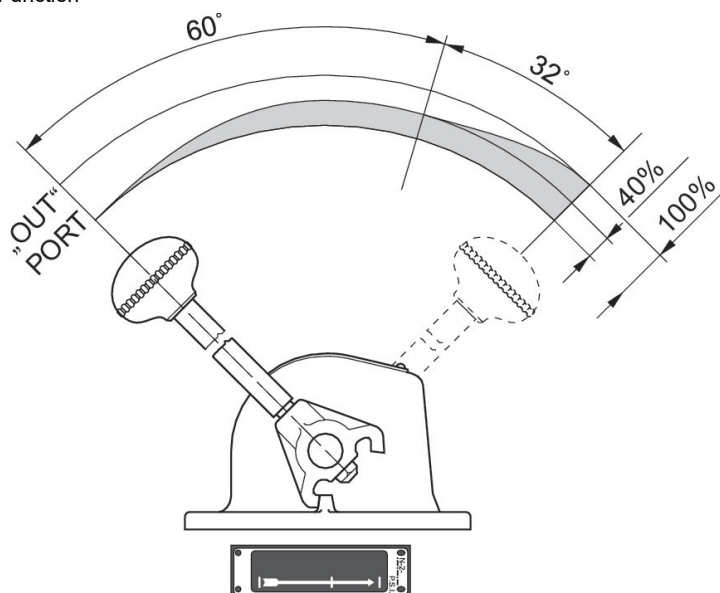
Series H-Controlair®

Flow: 900 l/min  
Ambient temperature min./max.: -40 °C ... 70 °C  
Medium temperature min./max.: -40 °C ... 70 °C  
Working pressure min./max.: 0.1 bar ... 14 bar



Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Type	Actuating element	Fig.	Part No.
1/4 NPT	900	0.1	4.5	H-2-EX	Lever		R431002807
1/4 NPT	900	0.1	6.9	H-2-EX	Lever		R431002808
1/4 NPT	900	0.1	8.6	H-2-EX	Lever		R431002809
1/4 NPT	900	0.1	6.9	H-2-EX	Lever	Fig. 1	R431007222
1/4 NPT	900	0.1	6.9	H-2-EX	Lever	Fig. 2	R431007221
1/4 NPT	900	0.1	6.9	H-2-EX	Lever	Fig. 3	R431007033
1/4 NPT	900	0.1	4.5	H-2-EFX	Lever		R431002946
1/4 NPT	900	0.1	6.9	H-2-EFX	Lever		R431002947
1/4 NPT	900	0.1	8.6	H-2-EFX	Lever		R431002948

Function



Pressure vs. lever travel

Overview drawing

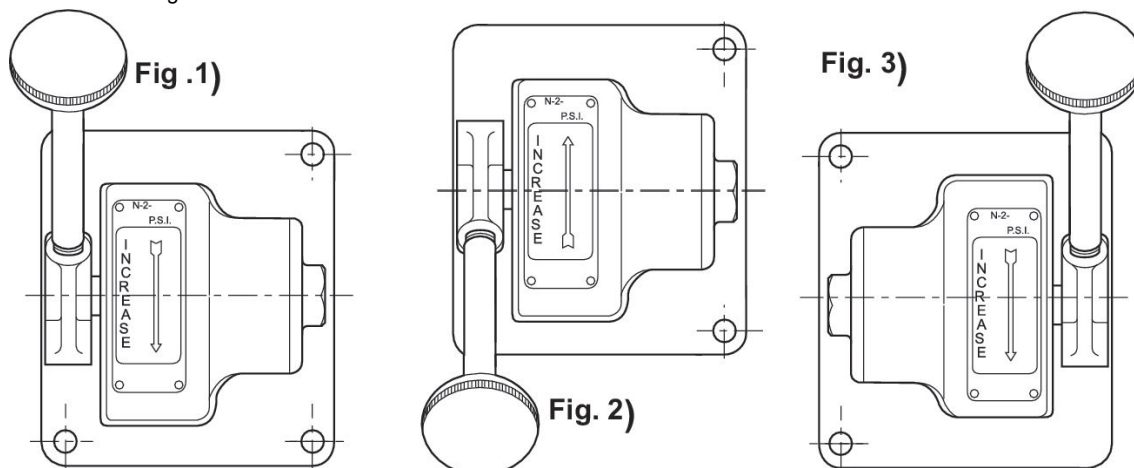
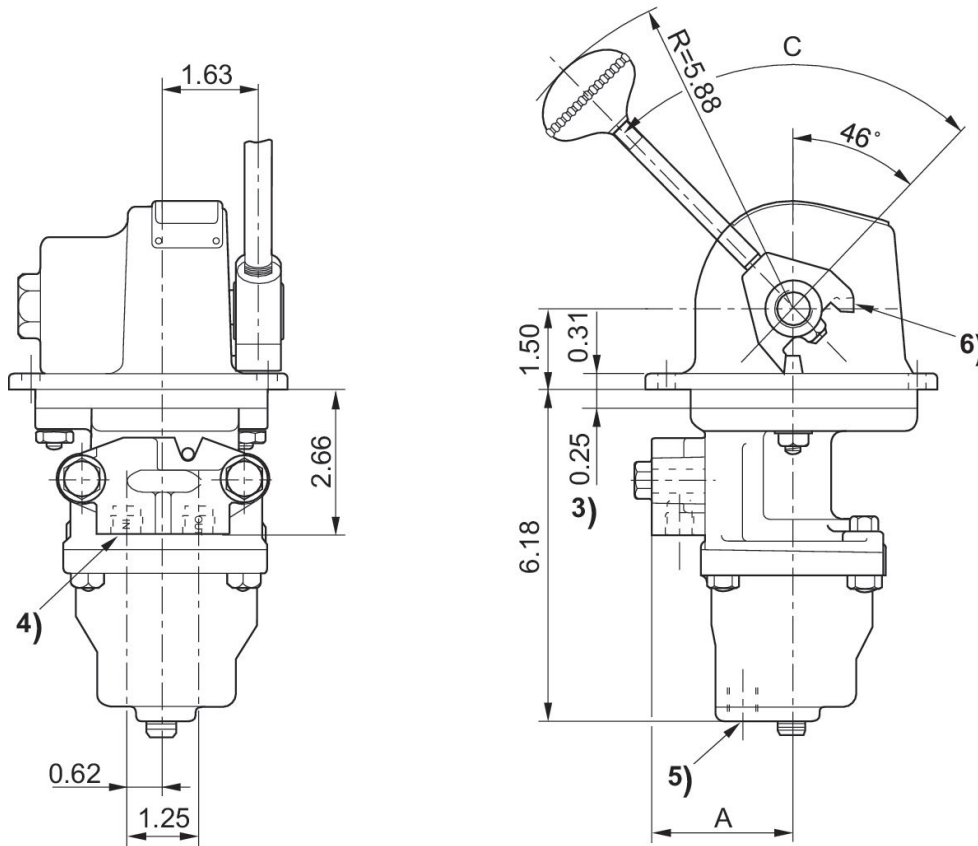
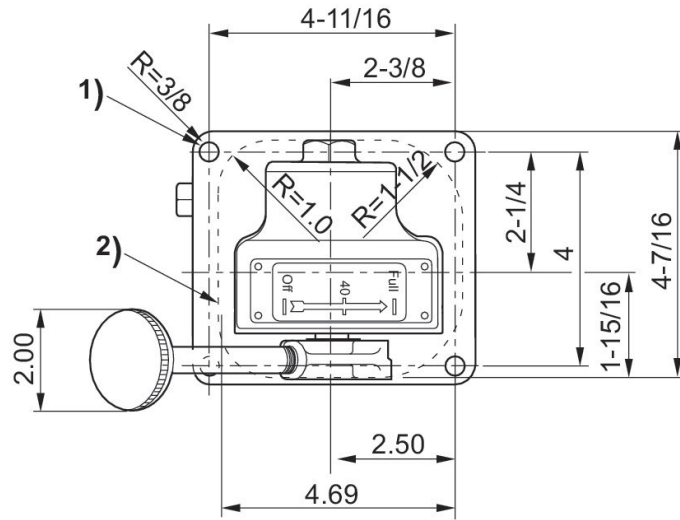


Fig. 1 Reverse name plate, standard cam  
 Fig. 2 Standard name plate, reverse cam  
 Fig. 3 Reverse name plate, reverse cam

Dimensions in inches



- 1) Mounting hole  $\varnothing 11/32$
- 2) panel mounting hole
- 3) Mounting plate max. 25 mm thick
- 4) 1/4 NPT
- 5) exhaust open
- 6) 92° lever travel shown, reverse handle yoke for 78° lever travel version

## Series H-Controlair®

Flow: 900 l/min

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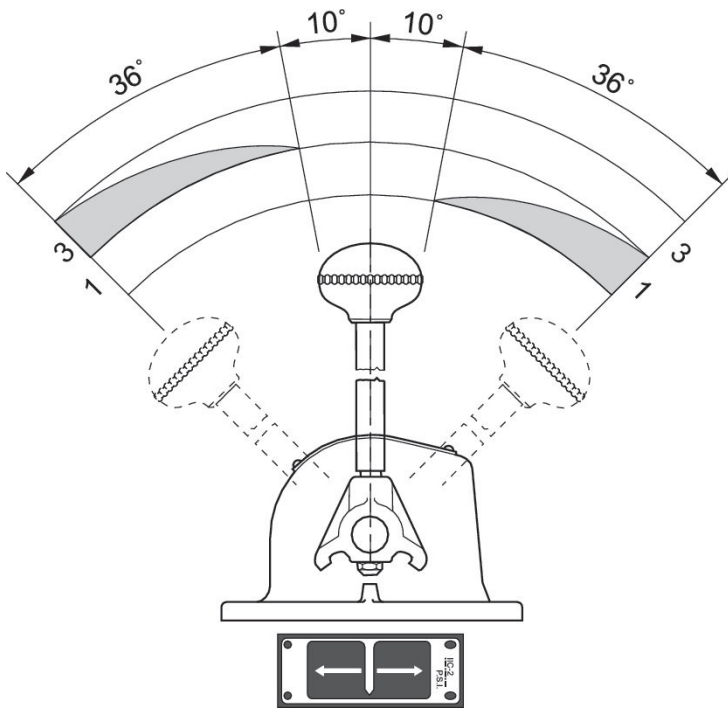
Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



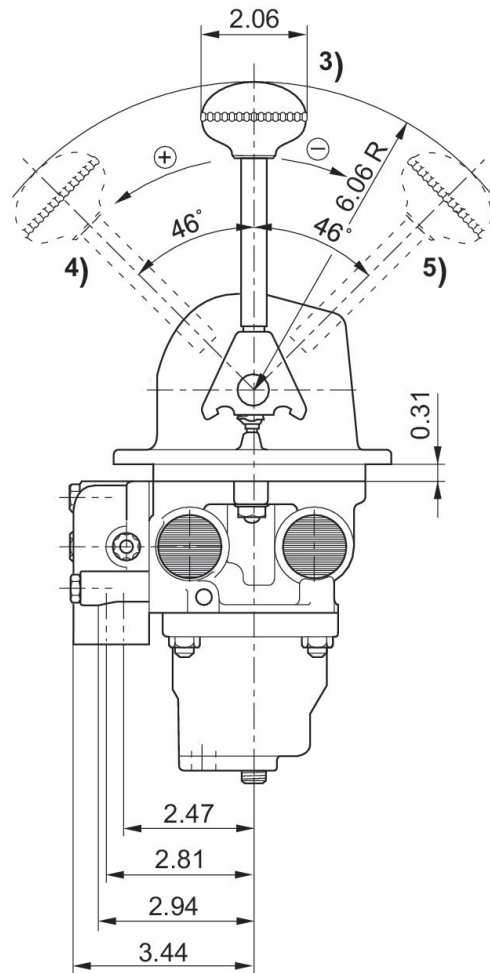
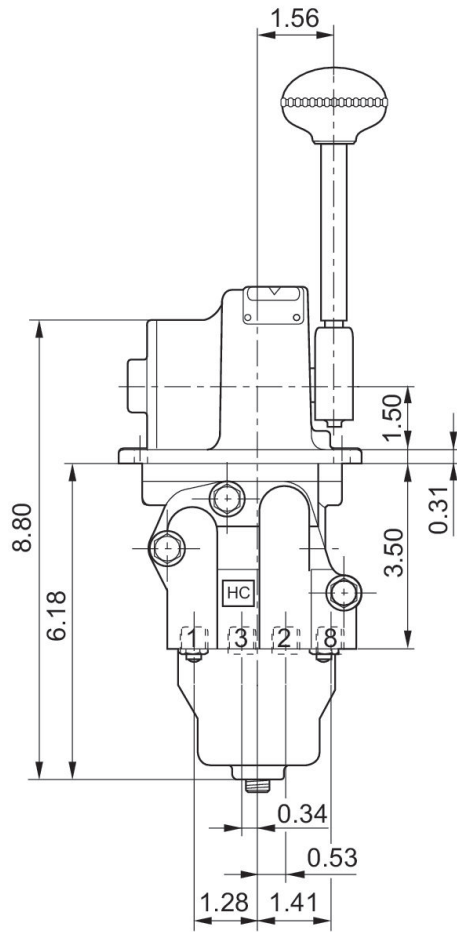
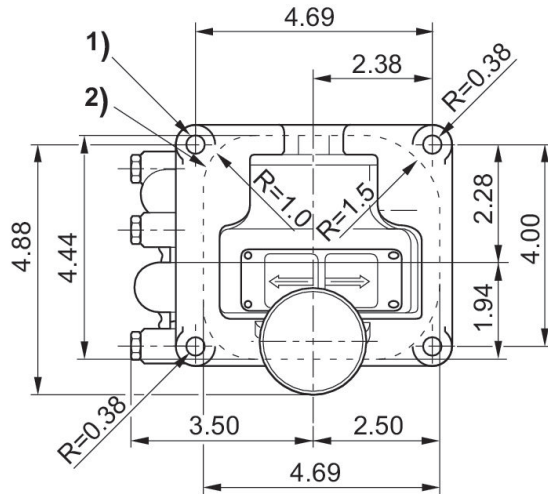
Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Type	Actuating element	Part No.
1/4 NPT	900	0.1	4.5	HC-2-X	Lever	R431002835
1/4 NPT	900	0.1	6.9	HC-2-X	Lever	R431002836
1/4 NPT	900	0.1	8.6	HC-2-X	Lever	R431002837
1/4 NPT	900	0.1	10.4	HC-2-X	Lever	R431002838
1/4 NPT	900	0.1	4.5	HC-2-FX	Lever	R431002839
1/4 NPT	900	0.1	6.9	HC-2-FX	Lever	R431002840
1/4 NPT	900	0.1	8.6	HC-2-FX	Lever	R431002841
1/4 NPT	900	0.1	10.4	HC-2-FX	Lever	R431002842
1/4 NPT	900	0.1	2	HC-2-FX	Lever	R431002843
1/4 NPT	900	0.1	4.5	HC-2-LX	Lever	R431003824
1/4 NPT	900	0.1	6.9	HC-2-LX	Lever	R431003825
1/4 NPT	900	0.1	8.6	HC-2-LX	Lever	R431003826
1/4 NPT	900	0.1	10.4	HC-2-LX	Lever	R431003827
1/4 NPT	900	0.1	4.5	HC-2-SX	Lever	R431009114
1/4 NPT	900	0.1	6.9	HC-2-SX	Lever	R431002892
1/4 NPT	900	0.1	8.6	HC-2-SX	Lever	R431002893
1/4 NPT	900	0.1	10.4	HC-2-SX	Lever	R431002894
1/4 NPT	900	0.1	8.6	HC-2-SX	Lever	R431007030

Function



Pressure vs. lever travel

Dimensions



- 1) Mounting hole Ø34
- 2) Air off position
- 3) Handle position
- 4) Handle position
- 5) Exhaust opening

## Series H-Controlair®

Flow: 900 l/min

Ambient temperature min./max.: -40 °C ... 70 °C

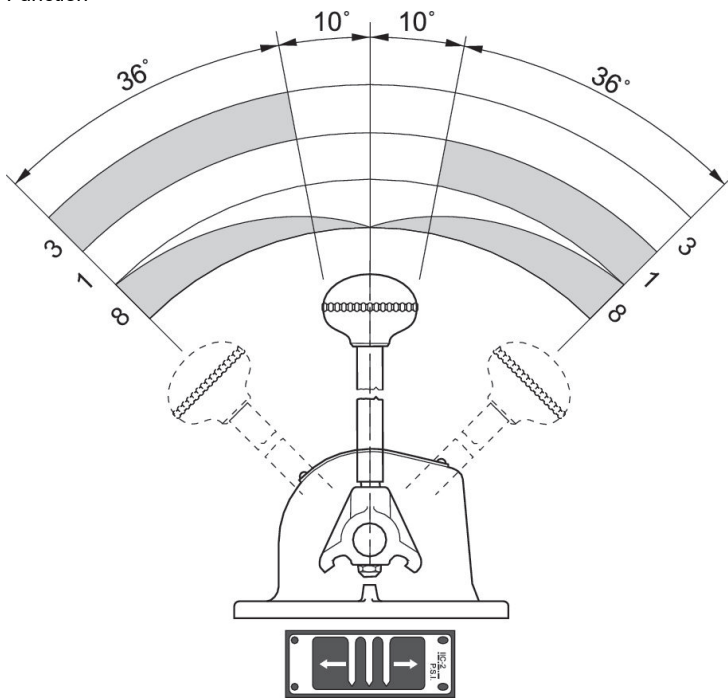
Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



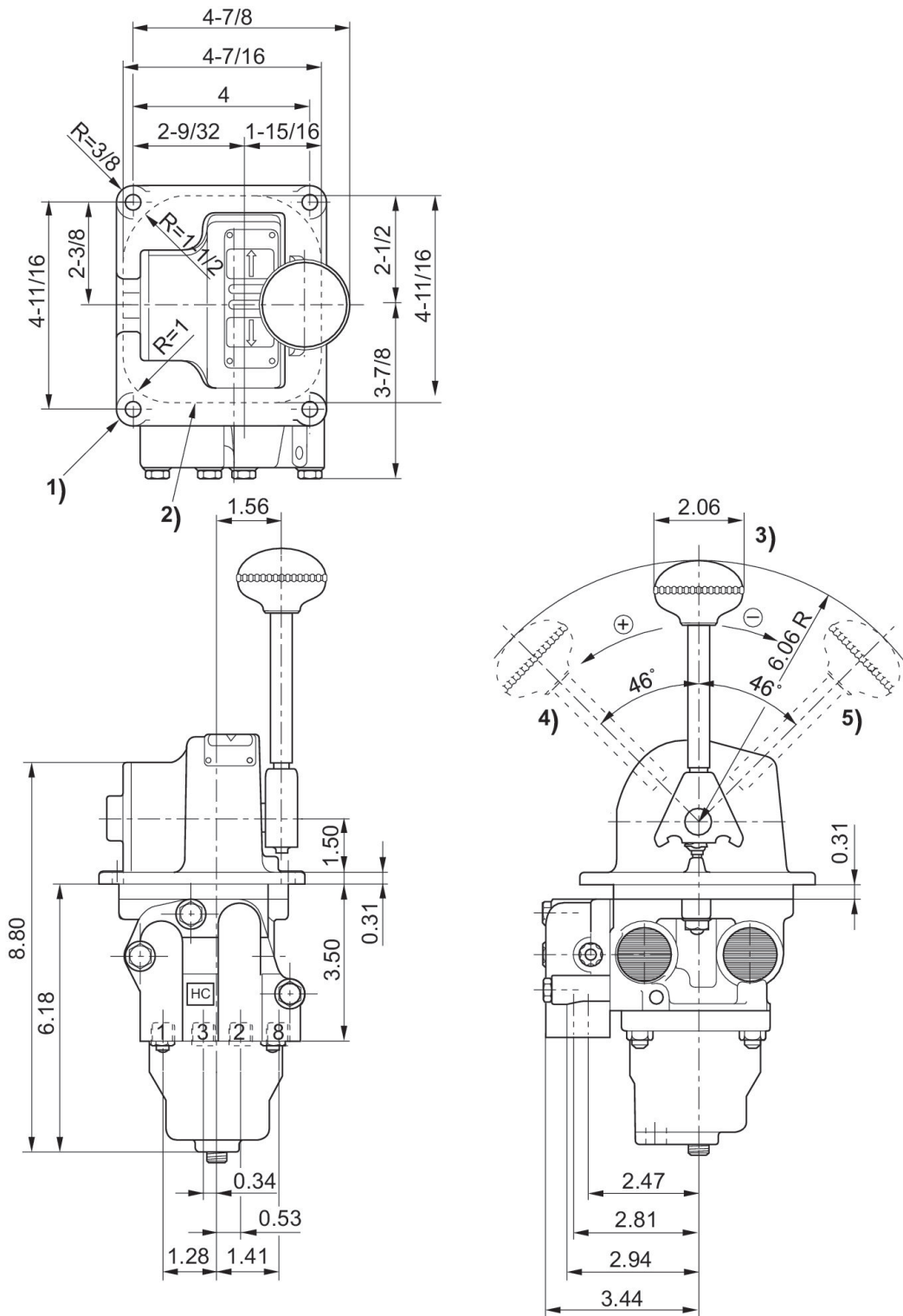
Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Type	Actuating element	Part No.
1/4 NPT	900	0.1	4.5	HD-2-X	Lever	R431002831
1/4 NPT	900	0.1	6.9	HD-2-X	Lever	R431002832
1/4 NPT	900	0.1	8.6	HD-2-X	Lever	R431002833
1/4 NPT	900	0.1	10.4	HD-2-X	Lever	R431002834
1/4 NPT	900	0.1	4.5	HD-2-FX	Lever	R431002823
1/4 NPT	900	0.1	6.9	HD-2-FX	Lever	R431002824
1/4 NPT	900	0.1	8.6	HD-2-FX	Lever	R431002825
1/4 NPT	900	0.1	10.4	HD-2-FX	Lever	R431002826
1/4 NPT	900	0.1	4.5	HD-2-LX	Lever	R431002827
1/4 NPT	900	0.1	6.9	HD-2-LX	Lever	R431002828
1/4 NPT	900	0.1	8.6	HD-2-LX	Lever	R431002829
1/4 NPT	900	0.1	10.4	HD-2-LX	Lever	R431002830
1/4 NPT	900	0.1	4.5	HD-2-XS	Lever	R431009025

Function



Pressure vs. lever travel

Dimensions in inches



- 1) Mounting hole Ø11/32
- 2) panel mounting hole
- 3) Handle position 2
- 4) Handle position 3
- 5) Handle position 1

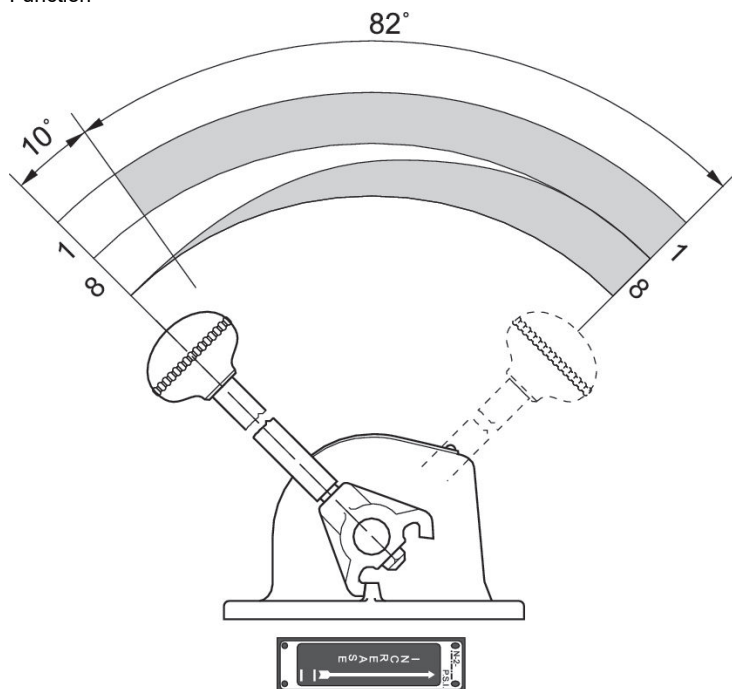
Series H-Controlair®

Flow: 900 l/min  
Ambient temperature min./max.: -40 °C ... 70 °C  
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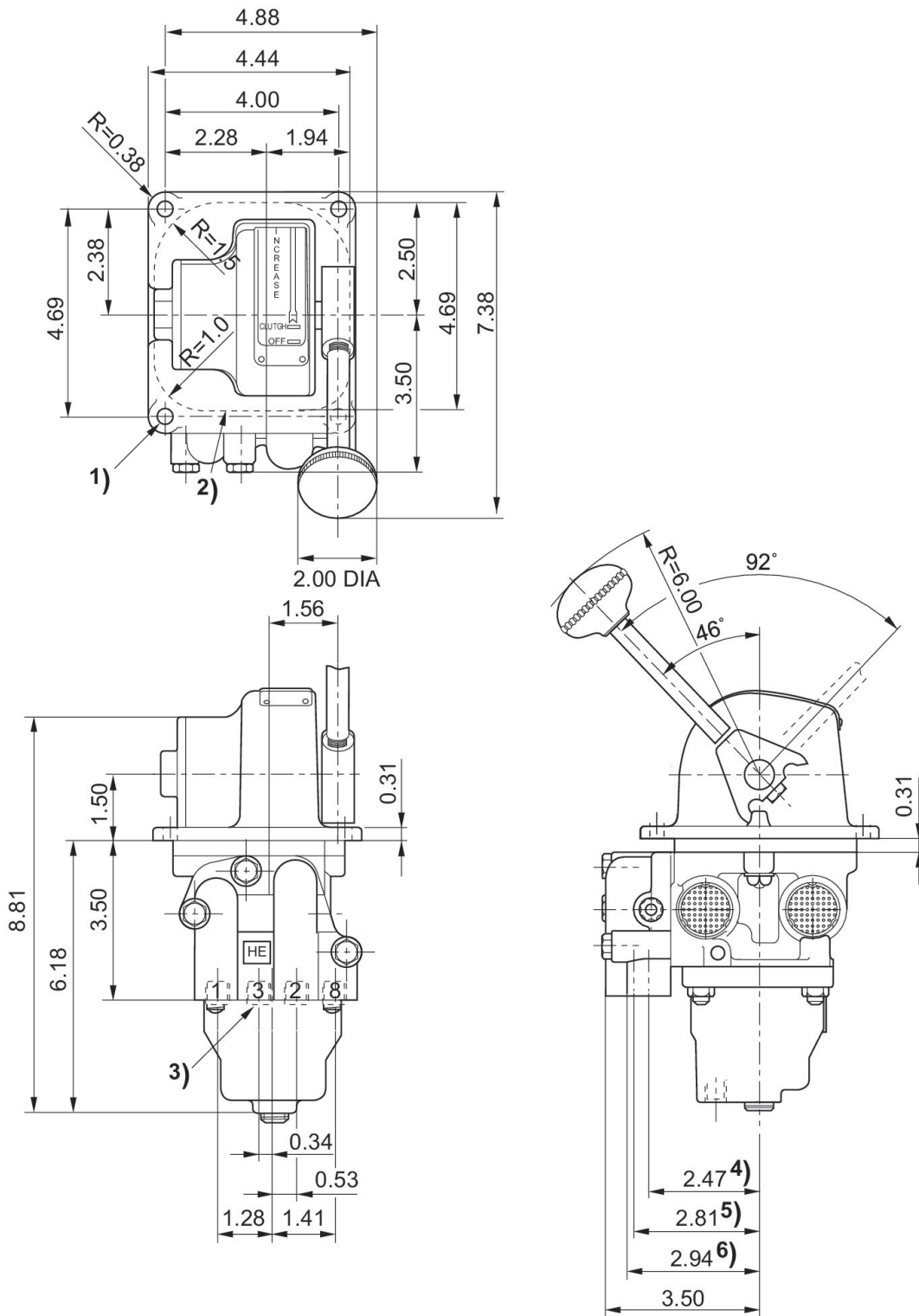
Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Type	Actuating element	Part No.
1/4 NPT	900	0.1	4.5	HE-2-X	Lever	R431002937
1/4 NPT	900	0.1	6.9	HE-2-X	Lever	R431002938
1/4 NPT	900	0.1	8.6	HE-2-X	Lever	R431002939
1/4 NPT	900	0.1	10.4	HE-2-FX	Lever	R431009362
1/4 NPT	900	0.1	4.5	HE-2-FX	Lever	R431002912
1/4 NPT	900	0.1	6.9	HE-2-FX	Lever	R431002913
1/4 NPT	900	0.1	8.6	HE-2-FX	Lever	R431002914
1/4 NPT	900	0.1	10.4	HE-2-FX	Lever	R431002915
1/4 NPT	900	0.1	4.5	HE-2-LX	Lever	R431002916
1/4 NPT	900	0.1	6.9	HE-2-LX	Lever	R431002917
1/4 NPT	900	0.1	8.6	HE-2-LX	Lever	R431002918

Function



Pressure vs. lever travel

Dimensions in inches



- 1) Mounting hole Ø34
- 2) panel mounting hole
- 3) 1/4 - 13 NPT
- 4) Port 3, 5
- 5) Port 1
- 6) Port 2

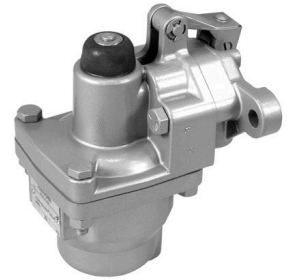
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Flow: 900 l/min

Ambient temperature min./max.: -40 °C ... 70 °C

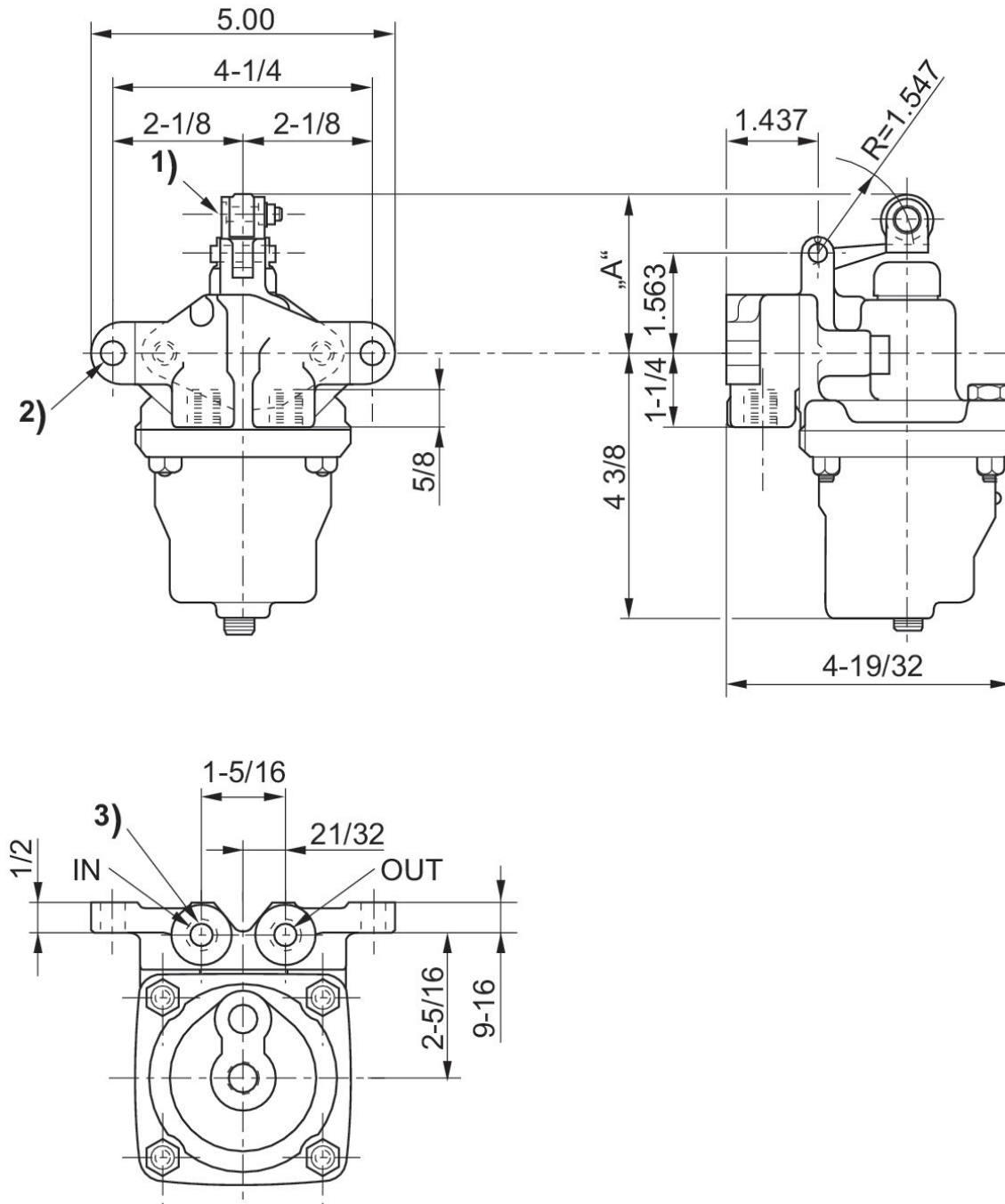
Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Type	Actuating element	Part No.
1/4 NPT	900	0.1	4.5	H-3	Roller	R431002626
1/4 NPT	900	0.1	6.9	H-3	Roller	R431002627
1/4 NPT	900	0.1	8.6	H-3	Roller	R431002628
1/4 NPT	900	0.1	10.4	H-3	Roller	R431002629
1/4 NPT	900	0.1	1.7	H-3	Roller	R431002630
1/4 NPT	900	0.1	2	H-3	Roller	R431002631
1/4 NPT	900	0.1	5.2	H-3	Roller	R431002632

Dimensions in inches



- 1) 0.031" eccentric screw for total roller adjustment of 0.062" to obtain 2.531" "A" dimension
- 2) Mounting hole  $\varnothing 13/32$
- 3) 1/4 - 18 NPTF

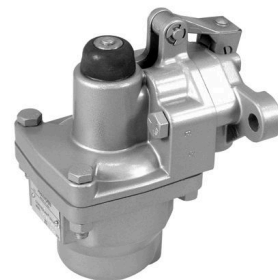
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Flow: 900 l/min

Ambient temperature min./max.: -40 °C ... 70 °C

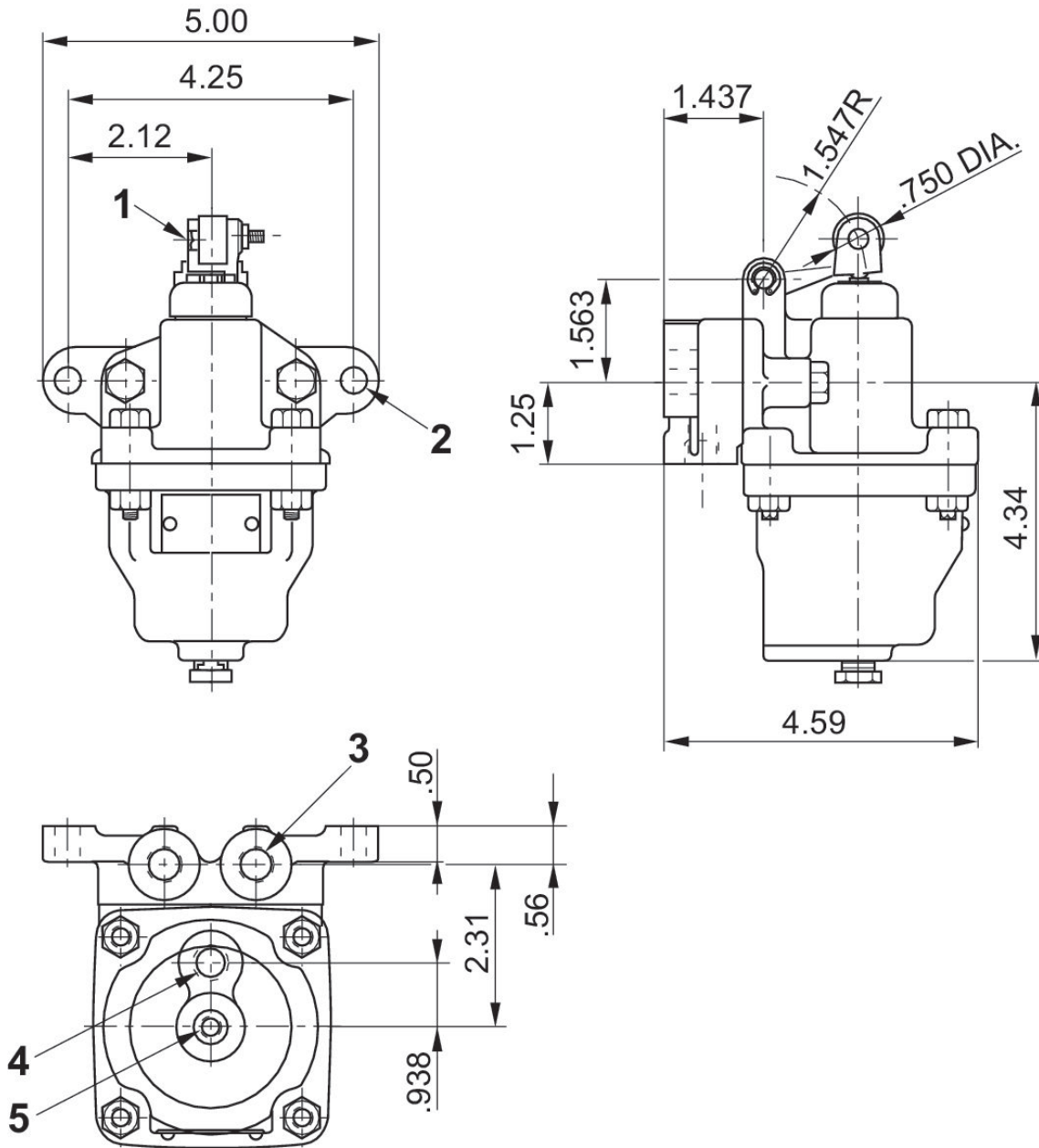
Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Type	Actuating element	Part No.
1/4 NPT	900	0	2.1	H-3-G	Roller	R431009131

Dimensions



- 1) 0.031" eccentric screw for total roller adjustment of 0.062" to obtain 2.531" "A" dimension
- 2) Mounting hole 2x Ø41
- 3) 1/4 - 18 NPTF
- 4) Controlled port
- 5) Exhaust

## Series H-Controlair®

Flow: 900 l/min

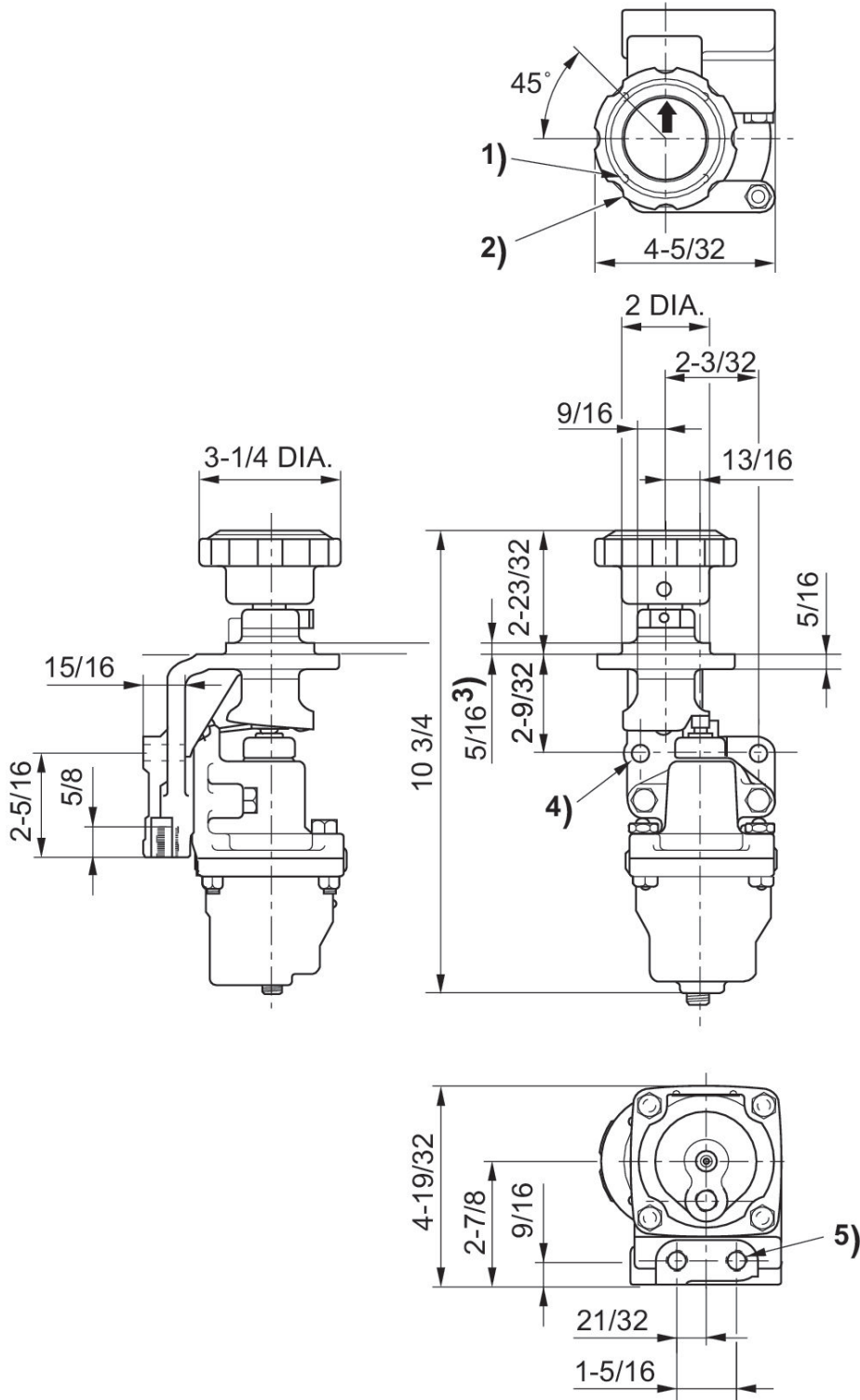
Ambient temperature min./max.: -40 °C ... 70 °C

Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Part No.
1/4 NPT	900	0.7	4.5	Rotary knob	R431002818
1/4 NPT	900	0.7	6.9	Rotary knob	R431002819
1/4 NPT	900	0.7	8.6	Rotary knob	R431002820
1/4 NPT	900	0.7	10.4	Rotary knob	R431002821
1/4 NPT	900	0.7	2	Rotary knob	R431002822
1/4 NPT	900	0.7	4.5	Rotary knob	R431002885
1/4 NPT	900	0.7	6.9	Rotary knob	R431002886



## Series H-Controlair®

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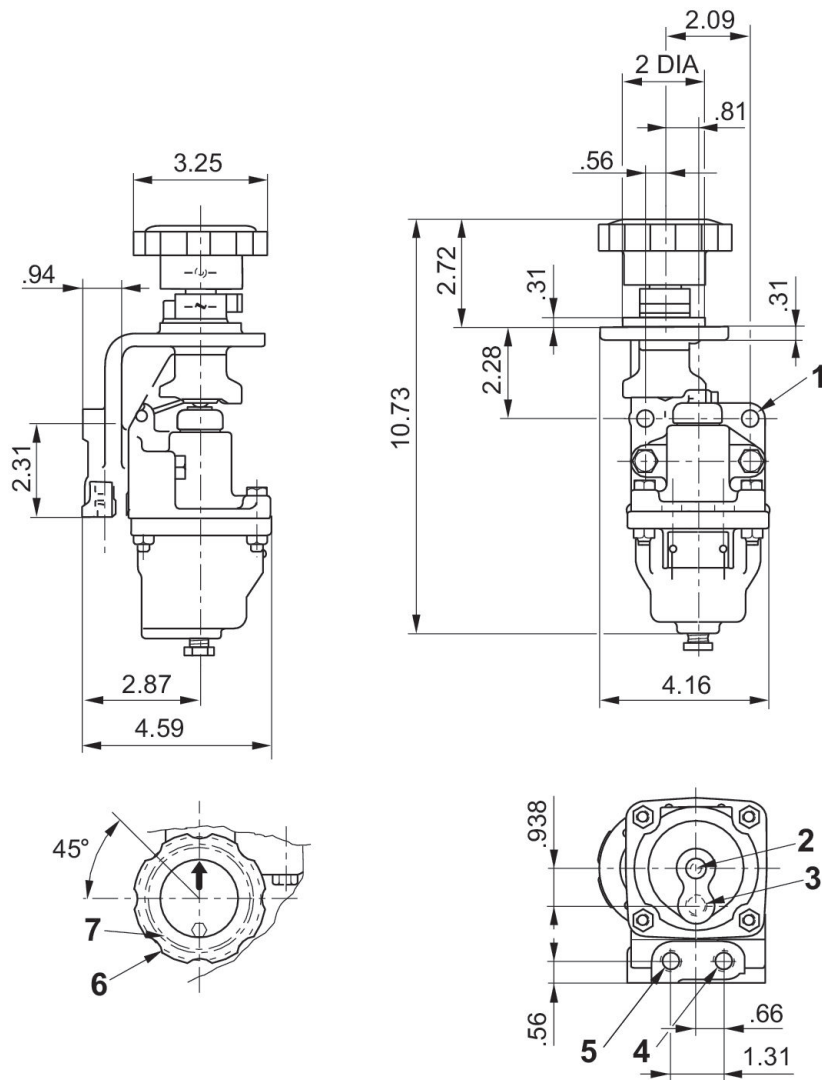
Medium temperature min./max.: -40 °C ... 70 °C

Working pressure min./max.: 0.1 bar ... 14 bar



Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Part No.
1/4 NPT	900	0	4.5	Rotary knob	R431002962
1/4 NPT	900	0	4.5	Rotary knob	R431002963

Dimensions in inches







- 1) Mounting hole 2x Ø41
- 2) Exhaust
- 3) Controlled port
- 4) 1/4 NPT
- 5) Inlet
- 6) Clockwise rotation of the button increases pressure unless otherwise specified, 240° max. effective button rotation. (adjustable)
- 7) #10-24 UNC-28, 4 holes equally spaced on a 2.56 B.C diameter

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control valves



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