

## Series H-Controlair®



AVENTICS™ Series H-Controlair®



## Series H-Controlair®

- Version H-1, OUT port – delivers increasing pressure in direct proportion to pedal depression.
- Qn = 900 l/min
- Actuating element Pedal
- Internal thread / Internal thread
- Poppet valve



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	See table below
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.1 bar
Weight	2.3 kg

### Technical data

Part No.	Compressed air connection Input	Compressed air connection type Input	Compressed air connection Output
R431002613	1/4 NPT	Internal thread	1/4 NPT
R431002614	1/4 NPT	Internal thread	1/4 NPT
R431002615	1/4 NPT	Internal thread	1/4 NPT
R431002616	1/4 NPT	Internal thread	1/4 NPT
R431002617	1/4 NPT	Internal thread	1/4 NPT
R431002981	1/4 NPT	Internal thread	1/4 NPT
R431002982	1/4 NPT	Internal thread	1/4 NPT

Part No.	Compressed air connection type Output	Adjustment range min./max.	actuating force min.	
R431002613	Internal thread	0.1 ... 4.5 bar	90 N	-
R431002614	Internal thread	0.1 ... 6.9 bar	90 N	-
R431002615	Internal thread	0.1 ... 8.6 bar	90 N	-
R431002616	Internal thread	0.1 ... 10.4 bar	90 N	-
R431002617	Internal thread	0.1 ... 2 bar	90 N	-
R431002981	Internal thread	0.1 ... 4.5 bar	77 N	1)
R431002982	Internal thread	0.1 ... 6.9 bar	77 N	1)

1) Light pedal spring

### Technical information

IN port = pressure supply

OUT port – delivers increasing pressure in direct proportion to pedal depression.

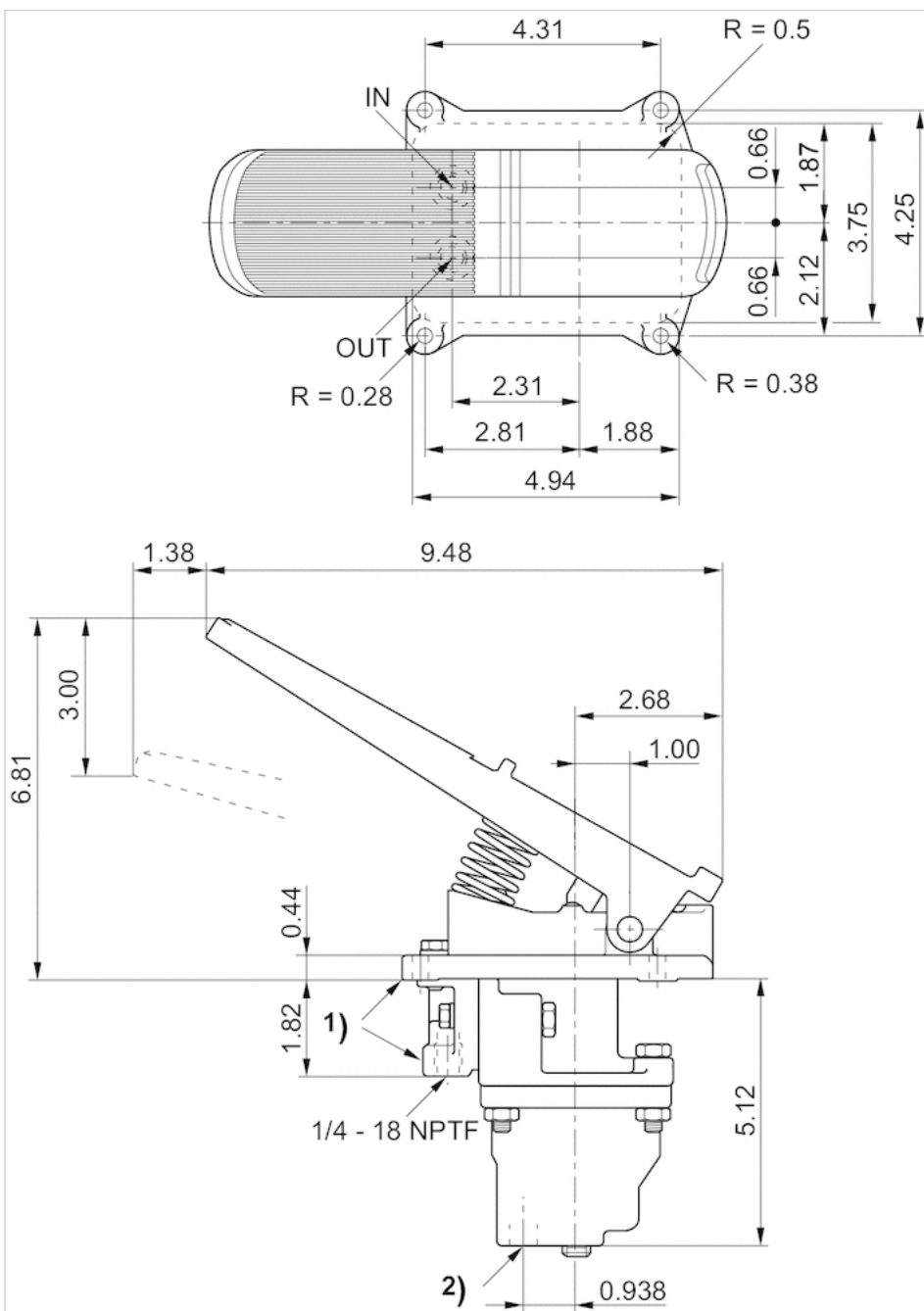
## Technical information

### Material

Housing	Die-cast aluminum
Pedal	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

## Dimensions

### Dimensions in inches



1) Order the flange mounting and tube clip separately.

2) exhaust open

## Series H-Controlair®

- Version H-1-A, OUT port – delivers increasing pressure in direct proportion to pedal depression.
- Qn = 900 l/min
- Actuating element Pedal
- Internal thread / Internal thread
- Poppet valve



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	See table below
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.1 bar
Weight	2.4 kg

### Technical data

Part No.	Compressed air connection Input	Compressed air connection type Input	Compressed air connection Output
R431003063	1/4 NPT	Internal thread	1/4 NPT
R431003064	1/4 NPT	Internal thread	1/4 NPT
R431003065	1/4 NPT	Internal thread	1/4 NPT
R431003066	1/4 NPT	Internal thread	1/4 NPT

Part No.	Compressed air connection type Output	Adjustment range min./max.	actuating force min.
R431003063	Internal thread	0.1 ... 4.5 bar	67 N
R431003064	Internal thread	0.1 ... 6.9 bar	67 N
R431003065	Internal thread	0.1 ... 8.6 bar	67 N
R431003066	Internal thread	0.1 ... 10.4 bar	67 N

### Technical information

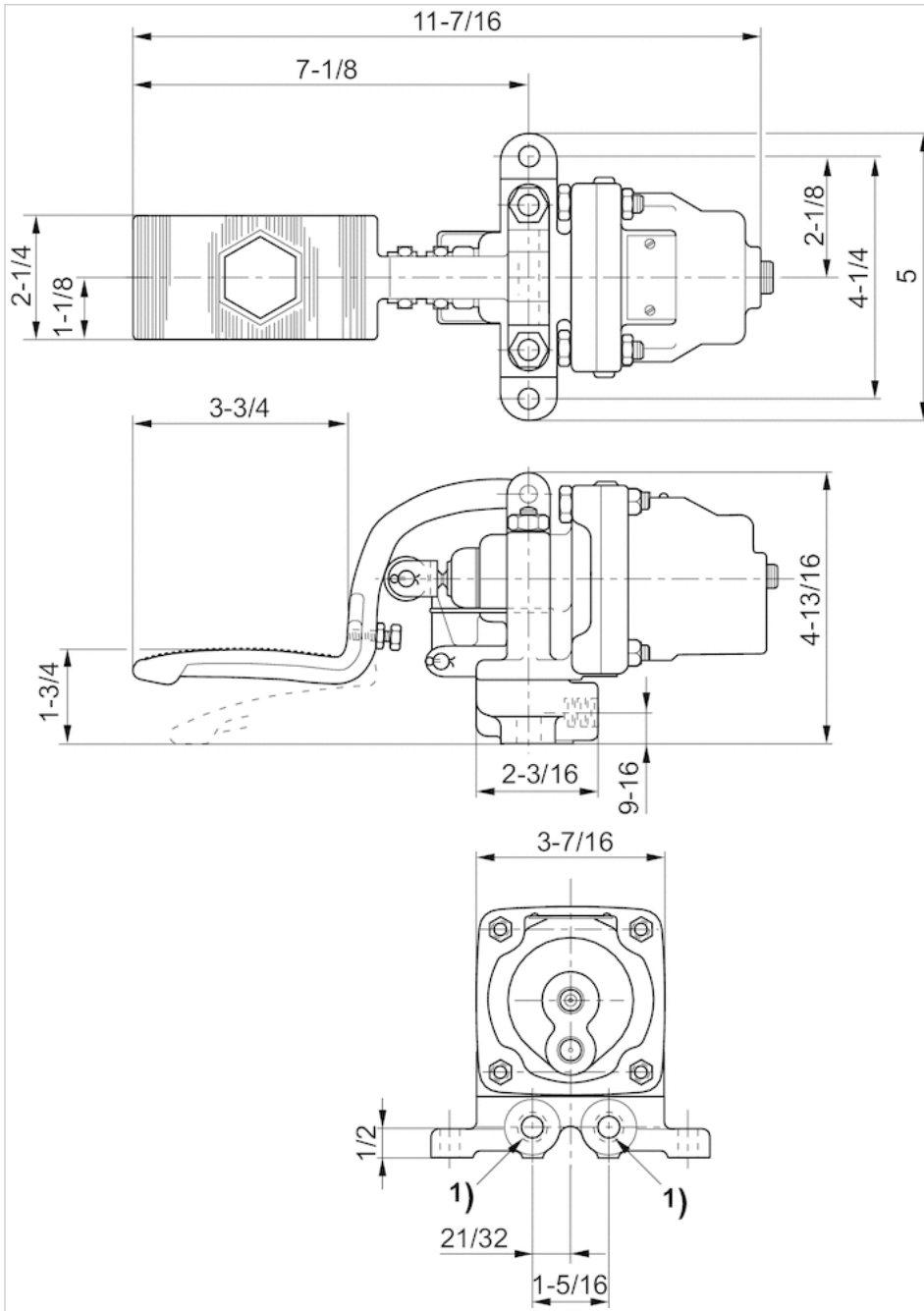
IN port = pressure supply  
 OUT port – delivers increasing pressure in direct proportion to pedal depression.

### Technical information

Material	
Housing	Die-cast aluminum
Pedal	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

# Dimensions

## Dimensions in inches



1)  $1/4$  - 18 NPTF

# Series H-Controlair®

- Version H-1-DOT, OUT port – delivers increasing pressure in direct proportion to pedal depression., Light pedal spring
- Actuating element Pedal
- Internal thread / Internal thread
- Poppet valve



Version	Poppet valve
Adjustment range min./max.	See table below
Medium	Compressed air
Hysteresis	0.1 bar

## Technical data

Part No.	Compressed air connection Input	Compressed air connection type Input	Compressed air connection Output
R431005617	1/4 NPT	Internal thread	1/4 NPT
R431005618	1/4 NPT	Internal thread	1/4 NPT
R431005619	1/4 NPT	Internal thread	1/4 NPT

Part No.	Compressed air connection type Output	Adjustment range min./max.	actuating force min.
R431005617	Internal thread	4.5 bar	67 N
R431005618	Internal thread	6.9 bar	67 N
R431005619	Internal thread	8.6 bar	67 N

## Technical information

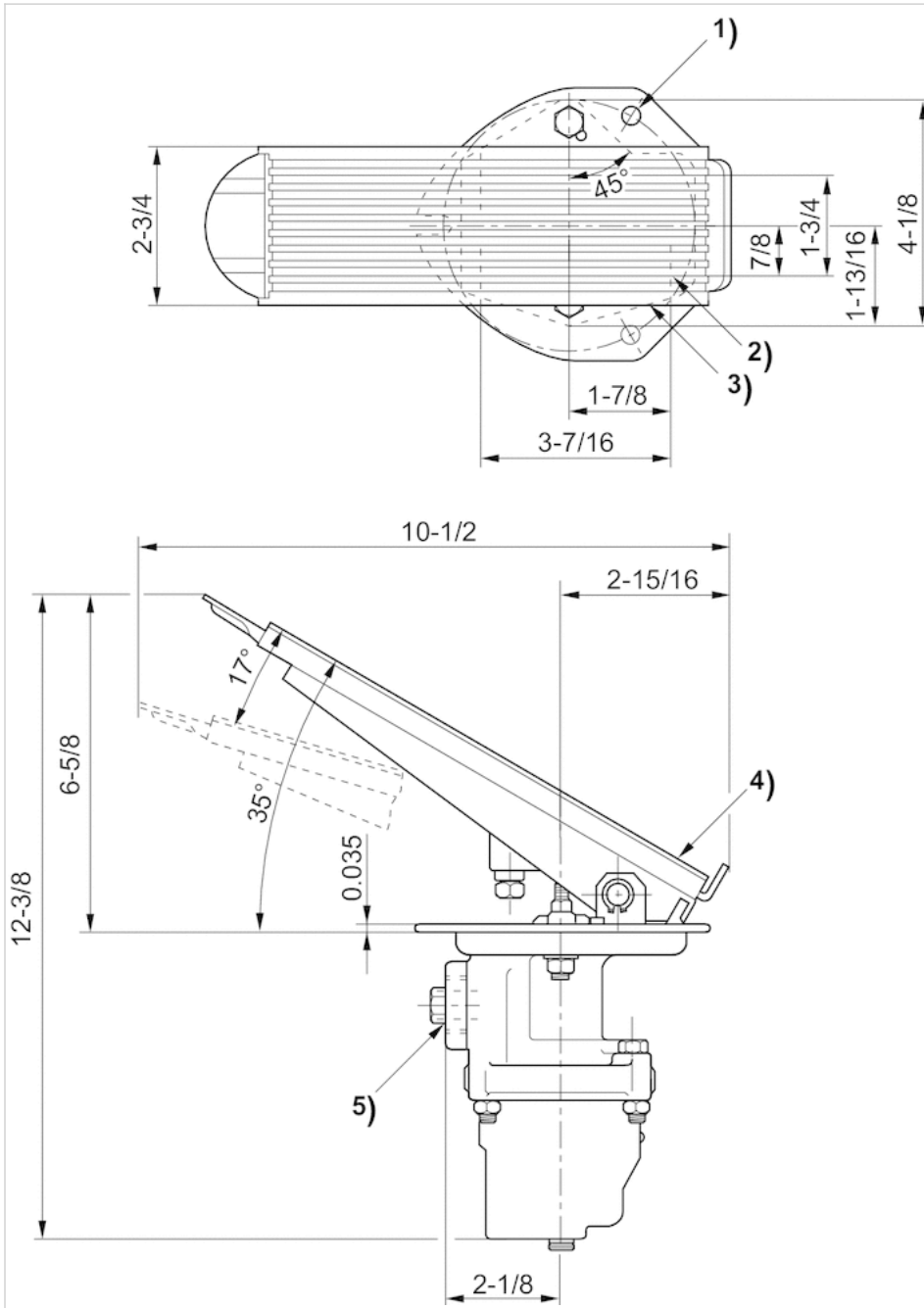
IN port = pressure supply  
 OUT port – delivers increasing pressure in direct proportion to pedal depression.

## Technical information

Material	
Housing	Die-cast aluminum
Pedal	Steel
Seals	Acrylonitrile butadiene rubber

# Dimensions

## Dimensions in inches



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

## Series H-Controlair®

- Version H-2, OUT port – delivers increasing pressure in direct proportion to clockwise lever travel from minimum pressure position (facing lever side of valve).
- Qn = 900 l/min
- Actuating element Lever
- Internal thread
- Poppet valve
- H-2-X H-2-FX H-2-LX



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	See table below
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.07 bar
Weight	2.5 kg

### Technical data

Part No.	Version	Compressed air connection Input	Compressed air connection Output
R431002638	H-2-X	1/4 NPT	1/4 NPT
R431002639	H-2-X	1/4 NPT	1/4 NPT
R431002640	H-2-X	1/4 NPT	1/4 NPT
R431002641	H-2-X	1/4 NPT	1/4 NPT
R431002642	H-2-X	1/4 NPT	1/4 NPT
R431007252	H-2-X	1/4 NPT	1/4 NPT
R431007323	H-2-X	1/4 NPT	1/4 NPT
R431007324	H-2-X	1/4 NPT	1/4 NPT
R431002643	H-2-FX	1/4 NPT	1/4 NPT
R431002644	H-2-FX	1/4 NPT	1/4 NPT
R431002645	H-2-FX	1/4 NPT	1/4 NPT
R431002646	H-2-FX	1/4 NPT	1/4 NPT
R431002647	H-2-FX	1/4 NPT	1/4 NPT
R431002648	H-2-FX	1/4 NPT	1/4 NPT
R431002649	H-2-FX	1/4 NPT	1/4 NPT
R431002650	H-2-FX	1/4 NPT	1/4 NPT
R431002651	H-2-FX	1/4 NPT	1/4 NPT
R431007308	H-2-FX	1/4 NPT	1/4 NPT
R431007328	H-2-FX	1/4 NPT	1/4 NPT
R431007329	H-2-FX	1/4 NPT	1/4 NPT
R431002652	H-2-LX	1/4 NPT	1/4 NPT
R431002653	H-2-LX	1/4 NPT	1/4 NPT
R431002654	H-2-LX	1/4 NPT	1/4 NPT
R431002655	H-2-LX	1/4 NPT	1/4 NPT



Part No.	Version	Compressed air connection Input	Compressed air connection Output
R431007326	H-2-LX	1/4 NPT	1/4 NPT
R431007325	H-2-LX	1/4 NPT	1/4 NPT
R431007327	H-2-LX	1/4 NPT	1/4 NPT

Part No.	Compressed air connection type Output	Adjustment range min./max.	Fig.
R431002638	Internal thread	0.1 ... 4.5 bar	-
R431002639	Internal thread	0.1 ... 6.9 bar	-
R431002640	Internal thread	0.1 ... 8.6 bar	-
R431002641	Internal thread	0.1 ... 10.4 bar	-
R431002642	Internal thread	0.1 ... 2 bar	-
R431007252	Internal thread	0.1 ... 8.6 bar	Fig. 1
R431007323	Internal thread	0.1 ... 8.6 bar	Fig. 2
R431007234	Internal thread	0.1 ... 8.6 bar	Fig. 3
R431002643	Internal thread	0.1 ... 4.5 bar	-
R431002644	Internal thread	0.1 ... 6.9 bar	-
R431002645	Internal thread	0.1 ... 8.6 bar	-
R431002646	Internal thread	0.1 ... 10.4 bar	-
R431002647	Internal thread	0.1 ... 12 bar	-
R431002648	Internal thread	0.1 ... 5.5 bar	-
R431002649	Internal thread	0.1 ... 4.5 bar	-
R431002650	Internal thread	0.1 ... 6.2 bar	-
R431002651	Internal thread	0.1 ... 12 bar	-
R431007308	Internal thread	0.1 ... 6.9 bar	Fig. 1
R431007328	Internal thread	0.1 ... 8.6 bar	Fig. 2
R431007329	Internal thread	0.1 ... 8.6 bar	Fig. 3
R431002652	Internal thread	0.1 ... 4.5 bar	-
R431002653	Internal thread	0.1 ... 6.9 bar	-
R431002654	Internal thread	0.1 ... 8.6 bar	-
R431002655	Internal thread	0.1 ... 10.4 bar	-
R431007326	Internal thread	0.1 ... 8.6 bar	Fig. 1
R431007325	Internal thread	0.1 ... 8.6 bar	Fig. 2
R431007327	Internal thread	0.1 ... 8.6 bar	Fig. 3

H-2-X - Lever returns to minimum pressure position when released., H-2-FX - Lever remains in the position when released., H-2-LX - Lever returns to minimum pressure position when released from any position except maximum pressure position.

## Technical information

IN port = pressure supply

OUT port – delivers increasing pressure in direct proportion to clockwise lever travel from minimum pressure position (facing lever side of valve).

## Technical information

### Material

Housing	Die-cast aluminum
Pedal	Die-cast aluminum

Material	
Seals	Acrylonitrile butadiene rubber

## Dimensions

### Overview drawing

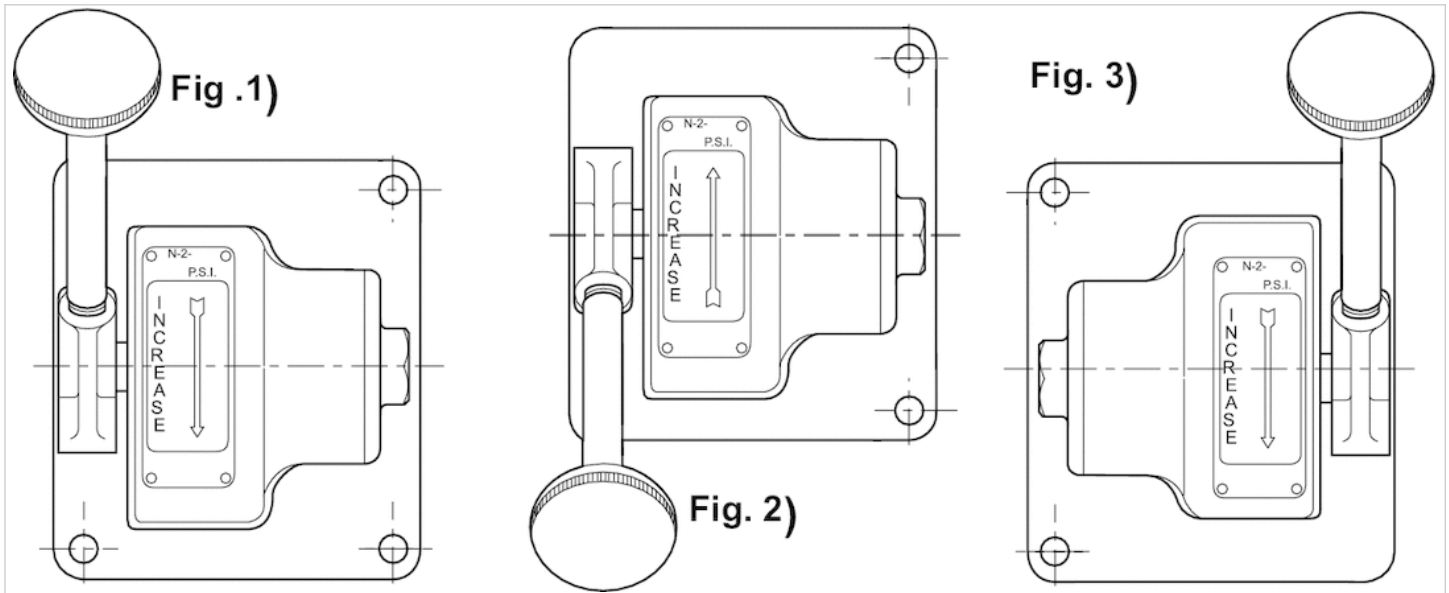
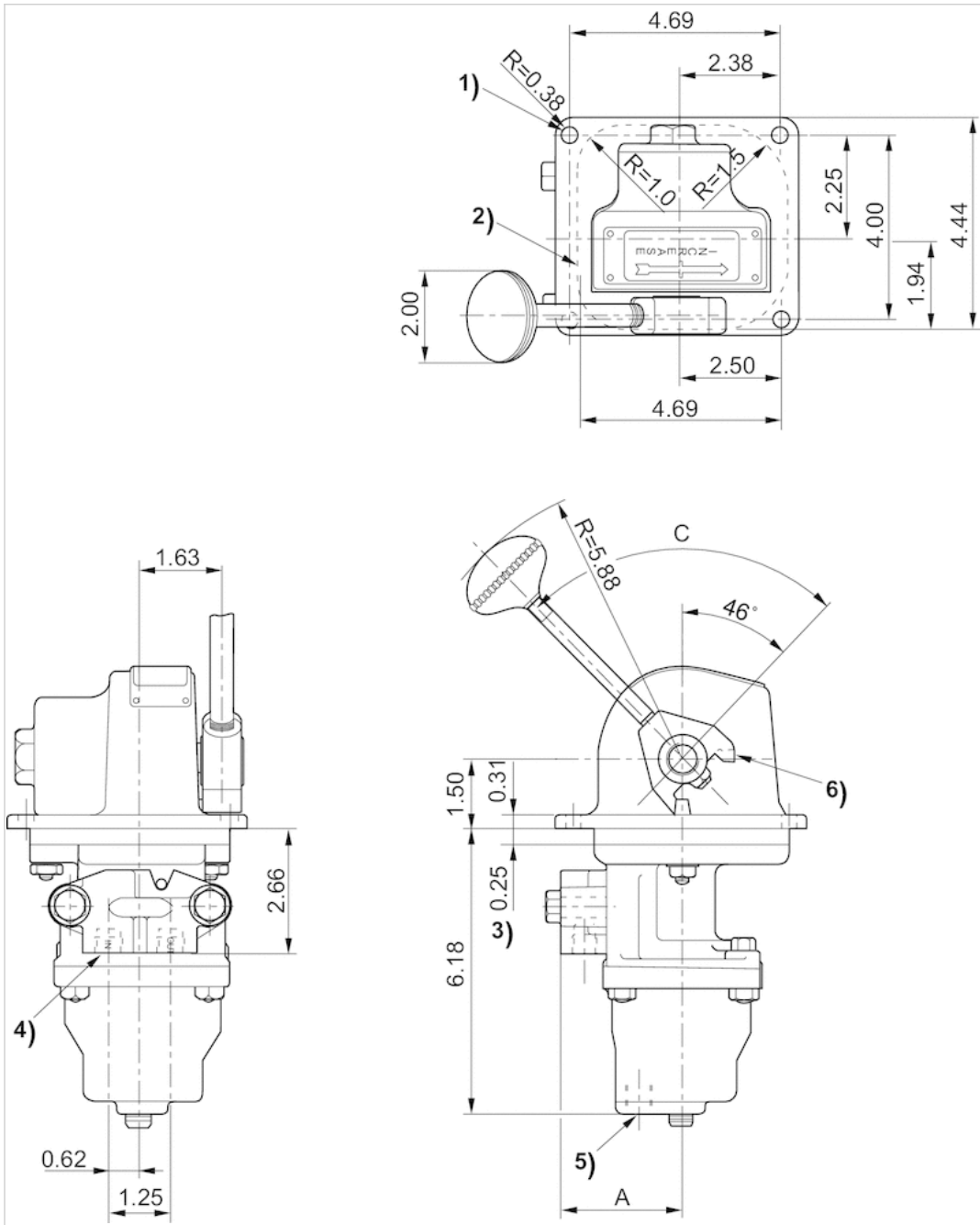


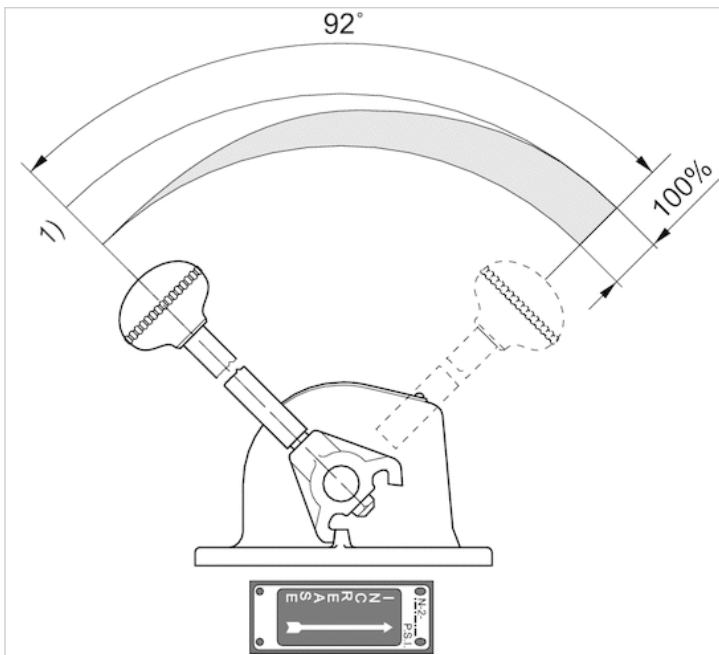
Fig. 1 Reverse name plate, standard cam  
Fig. 2 Standard name plate, reverse cam  
Fig. 3 Reverse name plate, reverse cam

Dimensions in inches



- 1) Mounting hole  $\varnothing 34$
- 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

Function



1) Pressure vs. lever travel

## Series H-Controlair®

- Version H-2-E, OUT port – delivers increasing pressure in direct proportion to clockwise lever travel from minimum pressure position (facing lever side of valve).
- Qn = 900 l/min
- Actuating element Lever
- Internal thread
- Poppet valve
- H-2-EX H-2-EFX



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	See table below
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.07 bar
Weight	2.5 kg

### Technical data

Part No.	Version	Compressed air connection Input	Compressed air connection type Input
R431002807	H-2-EX	1/4 NPT	Internal thread
R431002808	H-2-EX	1/4 NPT	Internal thread
R431002809	H-2-EX	1/4 NPT	Internal thread
R431007222	H-2-EX	1/4 NPT	Internal thread
R431007221	H-2-EX	1/4 NPT	Internal thread
R431007033	H-2-EX	1/4 NPT	Internal thread
R431002946	H-2-EFX	1/4 NPT	Internal thread
R431002947	H-2-EFX	1/4 NPT	Internal thread
R431002948	H-2-EFX	1/4 NPT	Internal thread

Part No.	Compressed air connection Output	Adjustment range min./max.	Fig.
R431002807	1/4 NPT	0.1 ... 4.5 bar	-
R431002808	1/4 NPT	0.1 ... 6.9 bar	-
R431002809	1/4 NPT	0.1 ... 8.6 bar	-
R431007222	1/4 NPT	0.1 ... 6.9 bar	Fig. 1
R431007221	1/4 NPT	0.1 ... 6.9 bar	Fig. 2
R431007033	1/4 NPT	0.1 ... 6.9 bar	Fig. 3
R431002946	1/4 NPT	0.1 ... 4.5 bar	-
R431002947	1/4 NPT	0.1 ... 6.9 bar	-
R431002948	1/4 NPT	0.1 ... 8.6 bar	-

H-2-EX - Lever automatically returns to "Off" position when released., H-2-EFX - Lever remains in the position when released.

## Technical information

IN port = pressure supply

OUT port – delivers increasing pressure in direct proportion to clockwise lever travel from minimum pressure position (facing lever side of valve).

## Technical information

### Material

Housing

Die-cast aluminum

Seals

Acrylonitrile butadiene rubber

## Dimensions

### Overview drawing

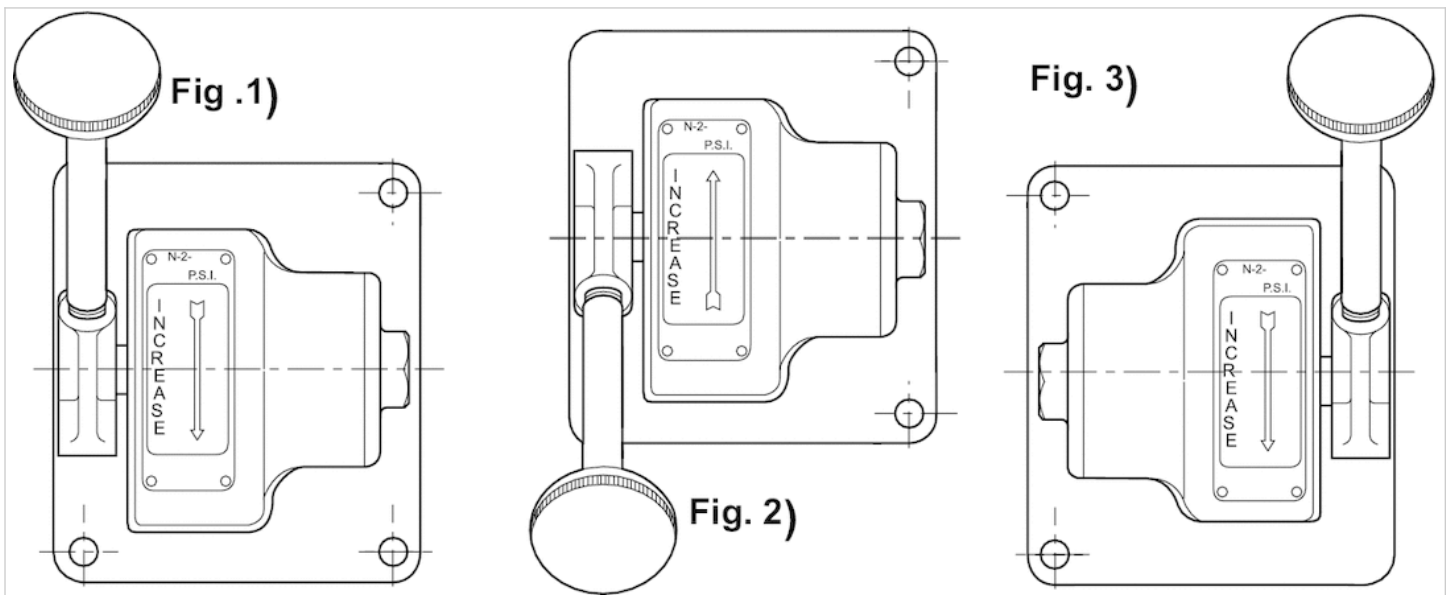
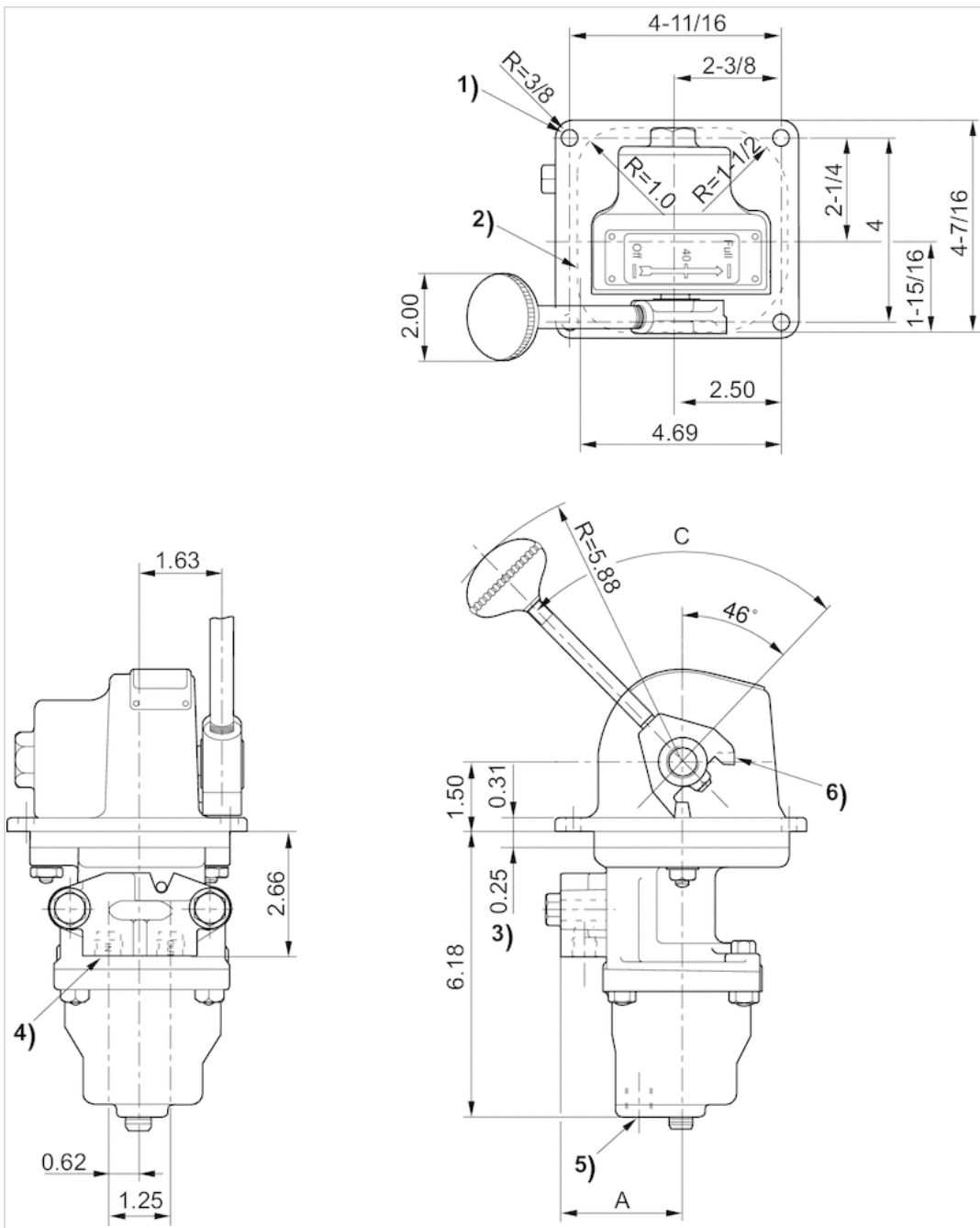


Fig. 1 Reverse name plate, standard cam

Fig. 2 Standard name plate, reverse cam

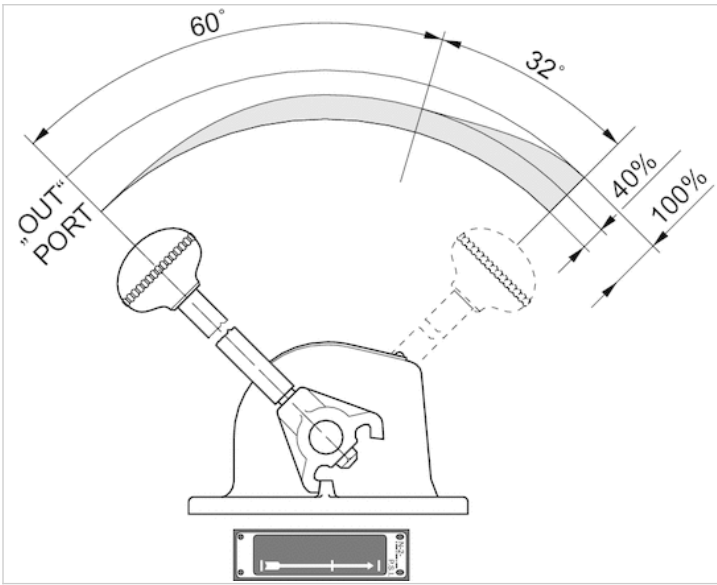
Fig. 3 Reverse name plate, reverse cam

Dimensions in inches



- 1) Mounting hole  $\text{\O}11/32$
- 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

Function



Pressure vs. lever travel



## Series H-Controlair®

- Version HC-2, OUT port – delivers increasing pressure when lever is moved clockwise from “Off” (facing lever side of valve).
- Qn = 900 l/min
- Actuating element Lever
- Internal thread
- Poppet valve
- HC-2-X HC-2-FX HC-2-LX HC-2-SX



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	See table below
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.1 bar
Weight	2.3 kg

### Technical data

Part No.	Version	Compressed air connection Input	Compressed air connection Output
R431002835	HC-2-X	1/4 NPT	1/4 NPT
R431002836	HC-2-X	1/4 NPT	1/4 NPT
R431002837	HC-2-X	1/4 NPT	1/4 NPT
R431002838	HC-2-X	1/4 NPT	1/4 NPT
R431002839	HC-2-FX	1/4 NPT	1/4 NPT
R431002840	HC-2-FX	1/4 NPT	1/4 NPT
R431002841	HC-2-FX	1/4 NPT	1/4 NPT
R431002842	HC-2-FX	1/4 NPT	1/4 NPT
R431002843	HC-2-FX	1/4 NPT	1/4 NPT
R431003824	HC-2-LX	1/4 NPT	1/4 NPT
R431003825	HC-2-LX	1/4 NPT	1/4 NPT
R431003826	HC-2-LX	1/4 NPT	1/4 NPT
R431003827	HC-2-LX	1/4 NPT	1/4 NPT
R431009114	HC-2-SX	1/4 NPT	1/4 NPT
R431002892	HC-2-SX	1/4 NPT	1/4 NPT
R431002893	HC-2-SX	1/4 NPT	1/4 NPT
R431002894	HC-2-SX	1/4 NPT	1/4 NPT
R431007030	HC-2-SX	1/4 NPT	1/4 NPT

Part No.	Compressed air connection type Output	Adjustment range min./max.
R431002835	Internal thread	0.1 ... 4.5 bar
R431002836	Internal thread	0.1 ... 6.9 bar
R431002837	Internal thread	0.1 ... 8.6 bar

Part No.	Compressed air connection type Output	Adjustment range min./max.
R431002838	Internal thread	0.1 ... 10.4 bar
R431002839	Internal thread	0.1 ... 4.5 bar
R431002840	Internal thread	0.1 ... 6.9 bar
R431002841	Internal thread	0.1 ... 8.6 bar
R431002842	Internal thread	0.1 ... 10.4 bar
R431002843	Internal thread	0.1 ... 2 bar
R431003824	Internal thread	0.1 ... 4.5 bar
R431003825	Internal thread	0.1 ... 6.9 bar
R431003826	Internal thread	0.1 ... 8.6 bar
R431003827	Internal thread	0.1 ... 10.4 bar
R431009114	Internal thread	0.1 ... 4.5 bar
R431002892	Internal thread	0.1 ... 6.9 bar
R431002893	Internal thread	0.1 ... 8.6 bar
R431002894	Internal thread	0.1 ... 10.4 bar
R431007030	Internal thread	0.1 ... 8.6 bar

HC-2-X -Lever automatically returns to “Off” position when released., HC-2-FX - Lever remains in the position when released. Holding friction is adjustable., HC-2-LX - Lever returns to minimum pressure position when released from any position except maximum pressure position., HC-2-SX- Detent 10° either side of neutral. Handle latches in one maximum position only. The handle self-returns to the neutral position from the other position in the handle travel arc. Models with latch position in either maximum pressure position are available.

## Technical information

IN port = pressure supply

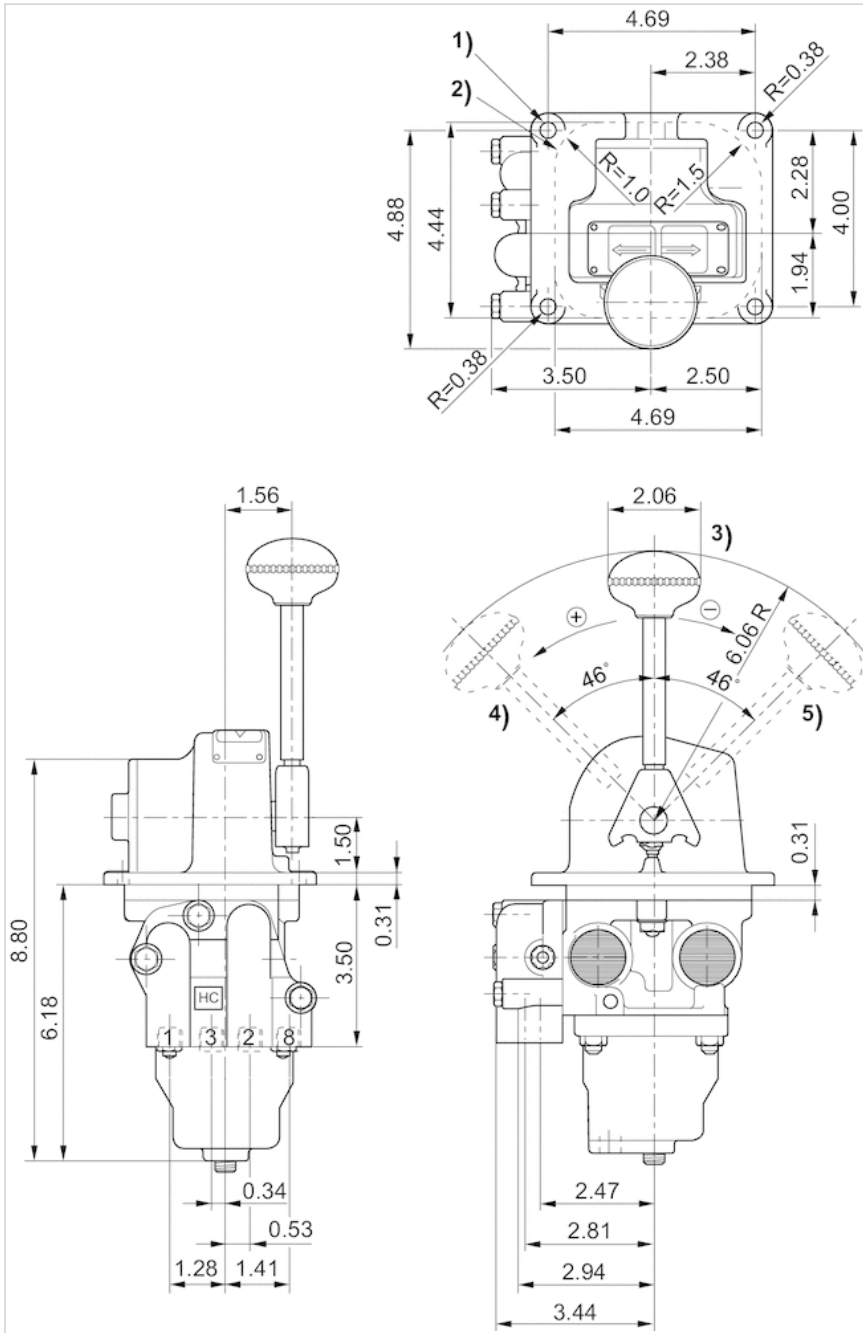
OUT port – delivers increasing pressure when lever is moved clockwise from “Off” (facing lever side of valve).

## Technical information

Material	
Housing	Die-cast aluminum
Pedal	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

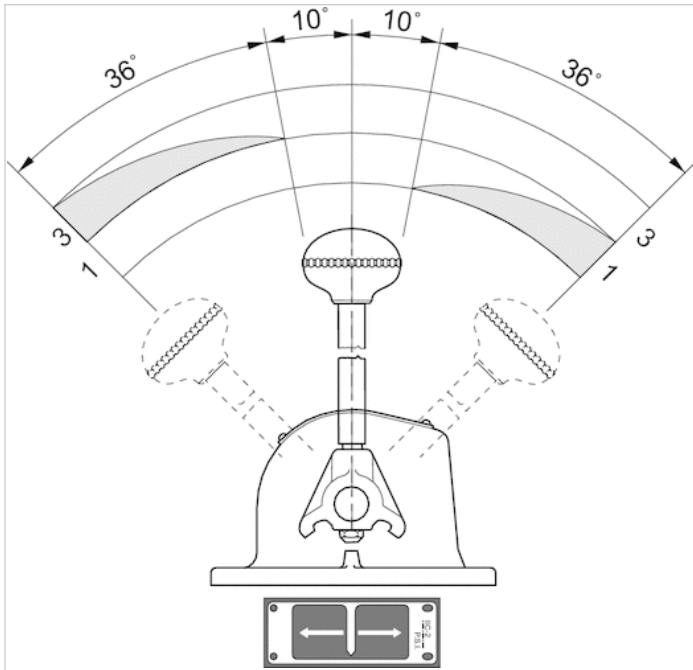
# Dimensions

## Dimensions



- 1) Mounting hole  $\varnothing 34$
- 2) Air off position
- 3) Handle position
- 4) Handle position
- 5) Exhaust opening

Function



Pressure vs. lever travel

## Series H-Controlair®

- Version HD-2, OUT port – delivers increasing pressure when lever is moved in either direction from “Neutral” (facing lever side of valve).
- Qn = 900 l/min
- Actuating element Lever
- Internal thread
- Poppet valve
- HD-2-X HD-2-FX HD-2-LX HD-2-XS



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	See table below
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.1 bar
Weight	2.3 kg

### Technical data

Part No.	Version	Compressed air connection Input	Compressed air connection Output
R431002831	HD-2-X	1/4 NPT	1/4 NPT
R431002832	HD-2-X	1/4 NPT	1/4 NPT
R431002833	HD-2-X	1/4 NPT	1/4 NPT
R431002834	HD-2-X	1/4 NPT	1/4 NPT
R431002823	HD-2-FX	1/4 NPT	1/4 NPT
R431002824	HD-2-FX	1/4 NPT	1/4 NPT
R431002825	HD-2-FX	1/4 NPT	1/4 NPT
R431002826	HD-2-FX	1/4 NPT	1/4 NPT
R431002827	HD-2-LX	1/4 NPT	1/4 NPT
R431002828	HD-2-LX	1/4 NPT	1/4 NPT
R431002829	HD-2-LX	1/4 NPT	1/4 NPT
R431002830	HD-2-LX	1/4 NPT	1/4 NPT
R431009025	HD-2-XS	1/4 NPT	1/4 NPT

Part No.	Compressed air connection type Output	Adjustment range min./max.
R431002831	Internal thread	0.1 ... 4.5 bar
R431002832	Internal thread	0.1 ... 6.9 bar
R431002833	Internal thread	0.1 ... 8.6 bar
R431002834	Internal thread	0.1 ... 10.4 bar
R431002823	Internal thread	0.1 ... 4.5 bar
R431002824	Internal thread	0.1 ... 6.9 bar
R431002825	Internal thread	0.1 ... 8.6 bar
R431002826	Internal thread	0.1 ... 10.4 bar

Part No.	Compressed air connection type Output	Adjustment range min./max.
R431002827	Internal thread	0.1 ... 4.5 bar
R431002828	Internal thread	0.1 ... 6.9 bar
R431002829	Internal thread	0.1 ... 8.6 bar
R431002830	Internal thread	0.1 ... 10.4 bar
R431009025	Internal thread	0.1 ... 4.5 bar

HD-2-x - The lever returns from the extreme position to the valve's "Neutral" or "Off" position when the operating force is removed., HD-2-FX - Lever remains in the position when released., HD-2-LX - The lever returns from the extreme position to the valve's "Neutral" or "Off" position when the operating force is removed. No graduate pressure delivery from Port 8 when handle is moved away from pipe bracket., HD-2-XS - The lever returns from the extreme position to the valve's "Neutral" or "Off" position when the operating force is removed. No graduate pressure delivery from Port 8 when handle is moved away from pipe bracket.

## Technical information

IN port = pressure supply

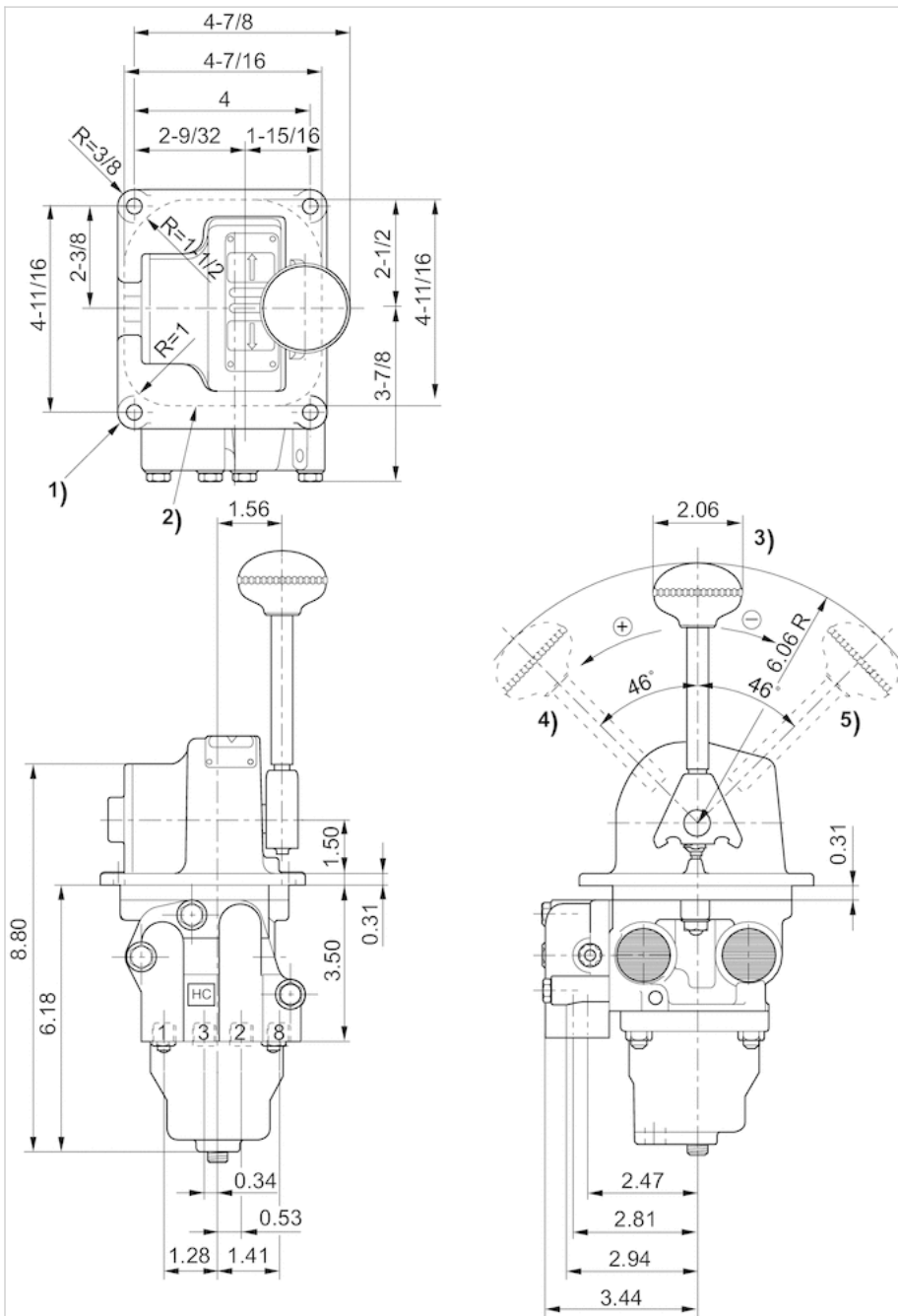
OUT port – delivers increasing pressure when lever is moved in either direction from "Neutral" (facing lever side of valve).

## Technical information

Material	
Housing	Die-cast aluminum
Pedal	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

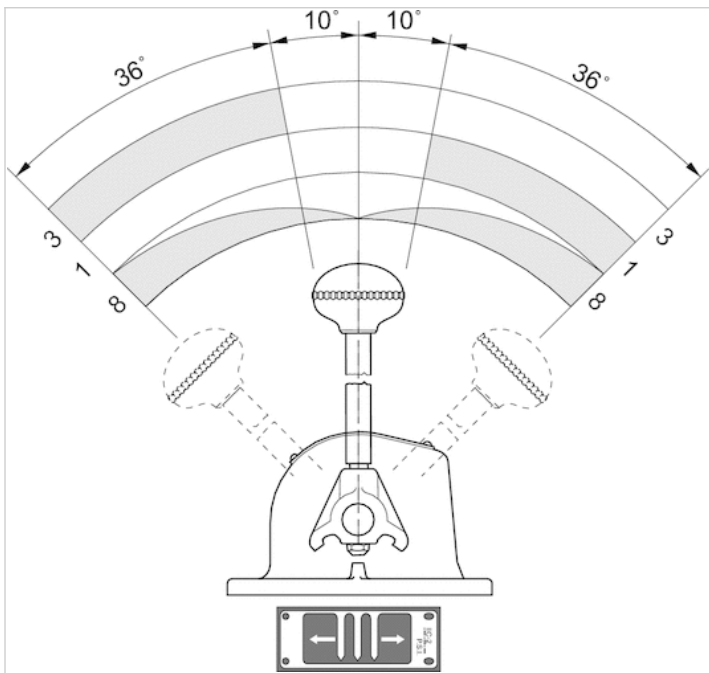
# Dimensions

## Dimensions in inches



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

Function



Pressure vs. lever travel



## Series H-Controlair®

- Version HE-2, OUT port – delivers full inlet pressure when lever is moved 10° clockwise from “Off” (facing lever side of valve).
- Qn = 900 l/min
- Actuating element Lever
- Internal thread
- Poppet valve
- HE-2-X HE-2-FX HE-2-LX



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	See table below
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.07 bar
Weight	2.3 kg

### Technical data

Part No.	Version	Compressed air connection Input	Compressed air connection Output
R431002937	HE-2-X	1/4 NPT	1/4 NPT
R431002938	HE-2-X	1/4 NPT	1/4 NPT
R431002939	HE-2-X	1/4 NPT	1/4 NPT
R431009362	HE-2-FX	1/4 NPT	1/4 NPT
R431002912	HE-2-FX	1/4 NPT	1/4 NPT
R431002913	HE-2-FX	1/4 NPT	1/4 NPT
R431002914	HE-2-FX	1/4 NPT	1/4 NPT
R431002915	HE-2-FX	1/4 NPT	1/4 NPT
R431002916	HE-2-LX	1/4 NPT	1/4 NPT
R431002917	HE-2-LX	1/4 NPT	1/4 NPT
R431002918	HE-2-LX	1/4 NPT	1/4 NPT

Part No.	Compressed air connection type Output	Adjustment range min./max.
R431002937	Internal thread	0.1 ... 4.5 bar
R431002938	Internal thread	0.1 ... 6.9 bar
R431002939	Internal thread	0.1 ... 8.6 bar
R431009362	Internal thread	0.1 ... 10.4 bar
R431002912	Internal thread	0.1 ... 4.5 bar
R431002913	Internal thread	0.1 ... 6.9 bar
R431002914	Internal thread	0.1 ... 8.6 bar
R431002915	Internal thread	0.1 ... 10.4 bar
R431002916	Internal thread	0.1 ... 4.5 bar
R431002917	Internal thread	0.1 ... 6.9 bar

Part No.	Compressed air connection type Output	Adjustment range min./max.
R431002918	Internal thread	0.1 ... 8.6 bar

HE-2-x - The lever returns from the extreme position to the valve's "clutch" or "Off" position when the operating force is removed., HE-2-FX- The lever remains in the position where released. The friction coefficient for the holding force is adjustable., HE-2-LX - The lever returns to the valve's "Neutral" or "Off" position when manually moved OUT of the latch position (extreme travel position).

## Technical information

IN port = pressure supply

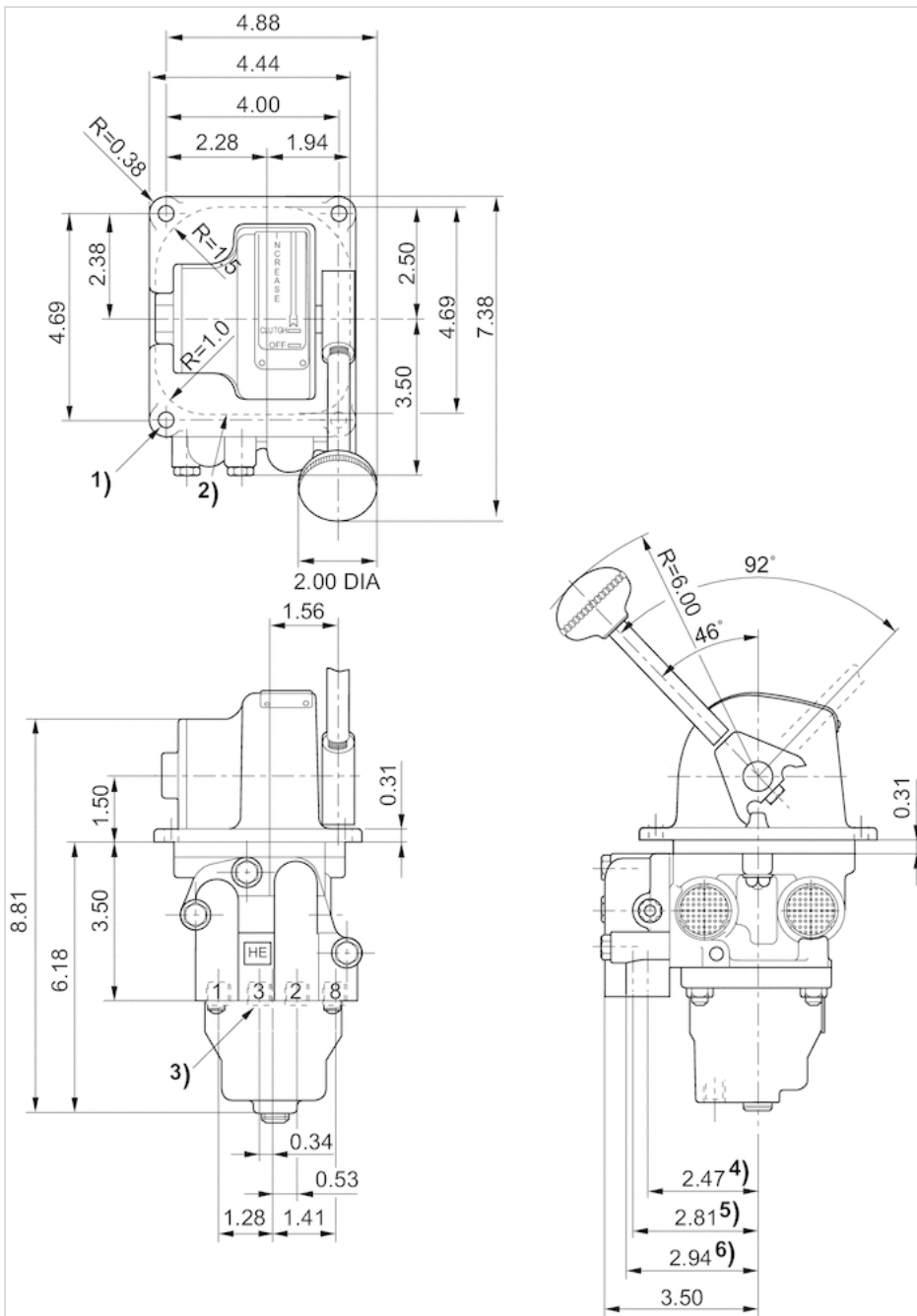
OUT port – delivers full inlet pressure when lever is moved 10° clockwise from "Off" (facing lever side of valve).

## Technical information

Material	
Housing	Die-cast aluminum
Pedal	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

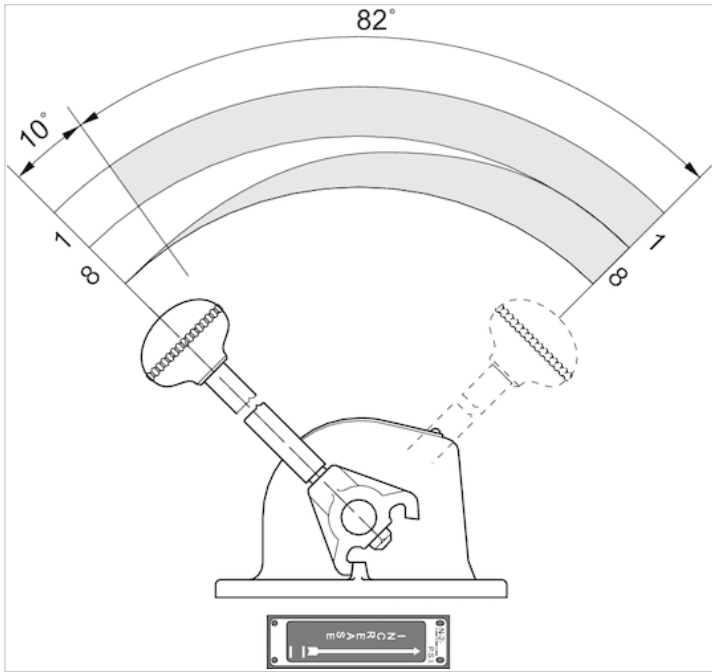
# Dimensions

## Dimensions in inches



- 1) Mounting hole  $\varnothing 34$
- 2) panel mounting hole
- 3) 1/4 - 13 NPT
- 4) Port 3, 5
- 5) Port 1
- 6) Port 2

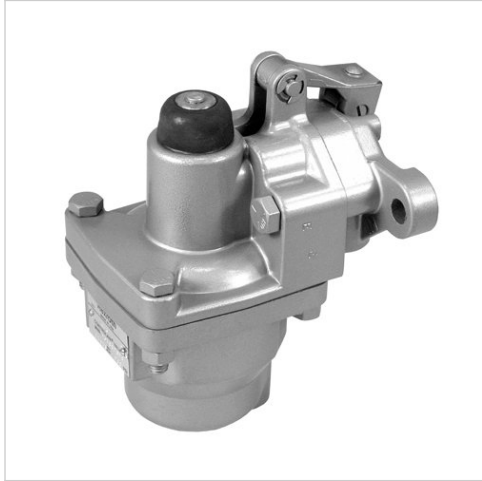
Function



Pressure vs. lever travel

# Series H-Controlair®

- Version H-3
- Qn = 900 l/min
- Actuating element Roller
- Poppet valve
- H-3



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	See table below
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.1 bar
Weight	2.3 kg

## Technical data

Part No.	Version	Compressed air connection Input	Compressed air connection Output	Adjustment range min./max.
R431002626	H-3	1/4 NPT	1/4 NPT	0.1 ... 4.5 bar
R431002627	H-3	1/4 NPT	1/4 NPT	0.1 ... 6.9 bar
R431002628	H-3	1/4 NPT	1/4 NPT	0.1 ... 8.6 bar
R431002629	H-3	1/4 NPT	1/4 NPT	0.1 ... 10.4 bar
R431002630	H-3	1/4 NPT	1/4 NPT	0.1 ... 1.7 bar
R431002631	H-3	1/4 NPT	1/4 NPT	0.1 ... 2 bar
R431002632	H-3	1/4 NPT	1/4 NPT	0.1 ... 5.2 bar

## Technical information

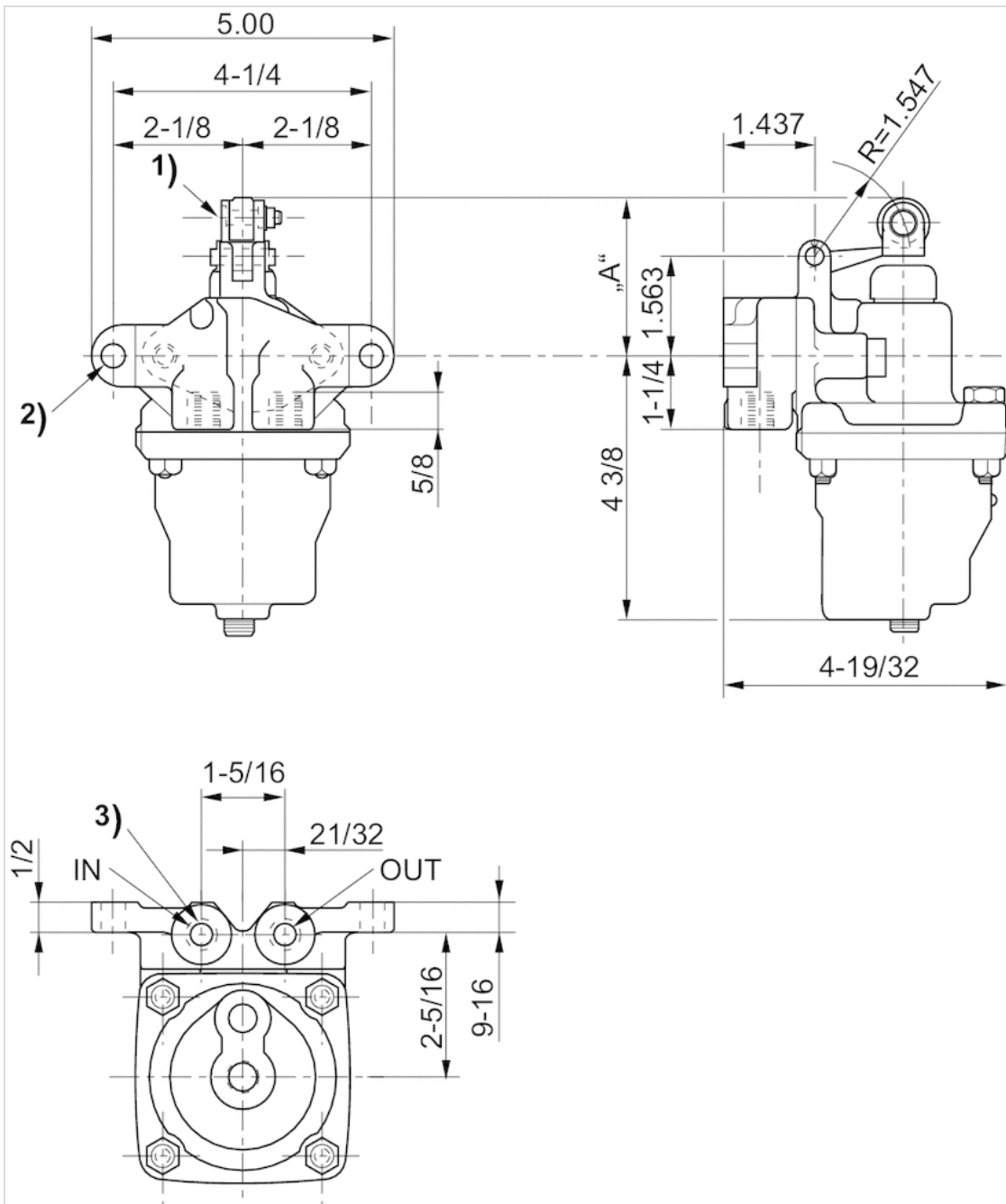
IN port = pressure supply  
 OUT port – delivers increasing pressure in direct proportion to pedal depression.

## Technical information

Material	
Housing	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

## Dimensions

### 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

# Series H-Controlair®

- Version H-3-G
- Qn = 900 l/min
- Actuating element Roller
- Internal thread
- Poppet valve
- H-3-G



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	0 ... 2.1 bar
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.1 bar
Weight	2.3 kg

## Technical data

Part No.	Version	Compressed air connection Input	Compressed air connection type Input
R431009131	H-3-G	1/4 NPT	Internal thread

Part No.	Compressed air connection Output
R431009131	1/4 NPT

## Technical information

IN port = pressure supply

OUT port – delivers increasing pressure in direct proportion to pedal depression.

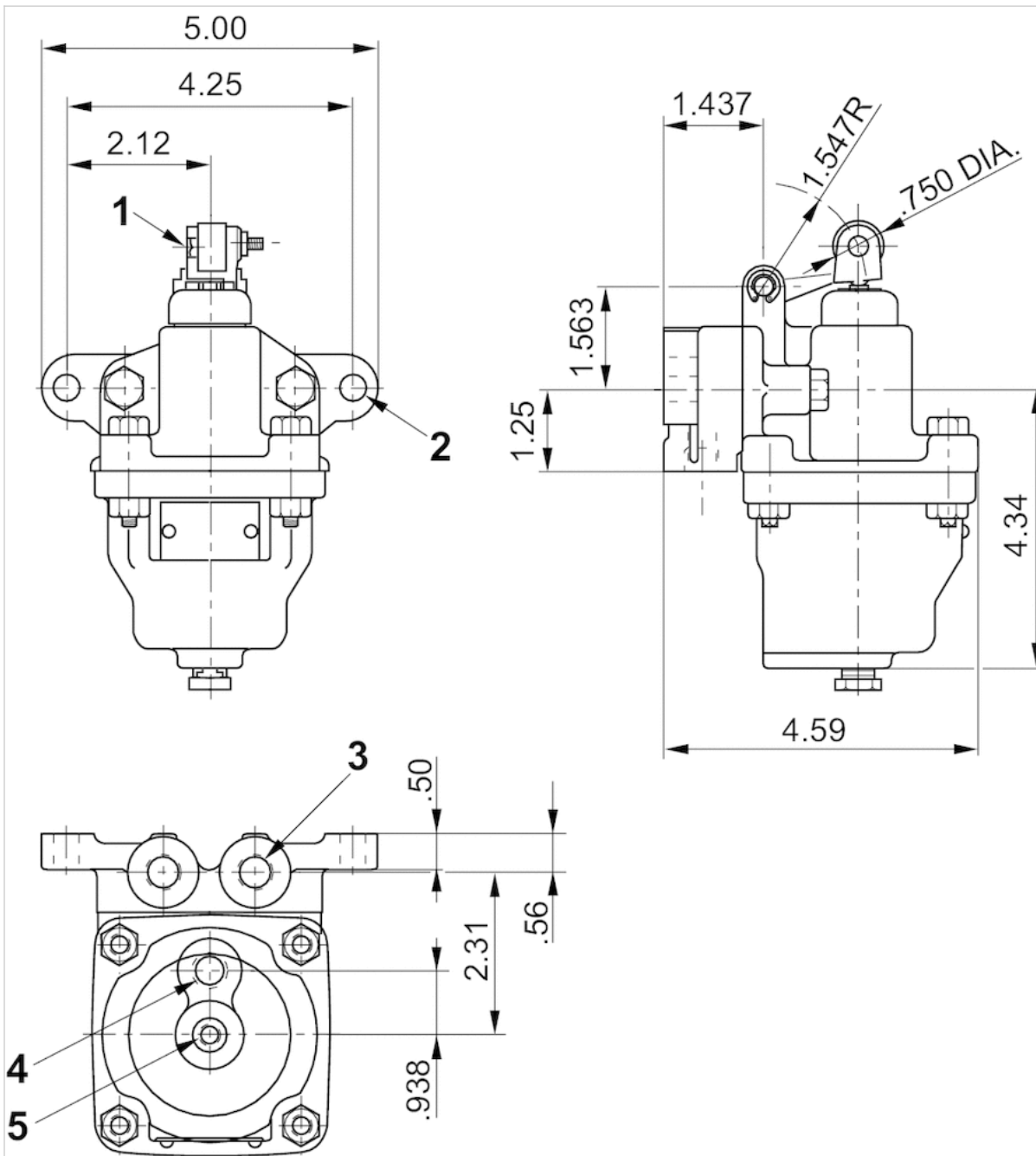
H-3-G, the spring housing area is sealed, and control pressure can be introduced through the tapped exhaust port to the underside of the diaphragm. By varying this signal, the output of the H-3-G CONTROLAIR can be biased or adjusted in proportions. This bias signal must be lower than the output signal.

## Technical information

Material	
Housing	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

## Dimensions

### 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®

- Version H-4
- Qn = 900 l/min
- Actuating element Rotary knob
- Internal thread
- Poppet valve



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	See table below
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.07 bar
Weight	2.3 kg

## Technical data

Part No.	Compressed air connection Input	Compressed air connection Output	Compressed air connection type Output
R431002818	1/4 NPT	1/4 NPT	Internal thread
R431002819	1/4 NPT	1/4 NPT	Internal thread
R431002820	1/4 NPT	1/4 NPT	Internal thread
R431002821	1/4 NPT	1/4 NPT	Internal thread
R431002822	1/4 NPT	1/4 NPT	Internal thread
R431002885	1/4 NPT	1/4 NPT	Internal thread
R431002886	1/4 NPT	1/4 NPT	Internal thread

Part No.	Adjustment range min./max.
R431002818	0.7 ... 4.5 bar
R431002819	0.7 ... 6.9 bar
R431002820	0.7 ... 8.6 bar
R431002821	0.7 ... 10.4 bar
R431002822	0.7 ... 2 bar
R431002885	0.7 ... 4.5 bar
R431002886	0.7 ... 6.9 bar

## Technical information

IN port = pressure supply

OUT port – delivers increasing pressure when lever is moved clockwise from “Off” (facing lever side of valve).

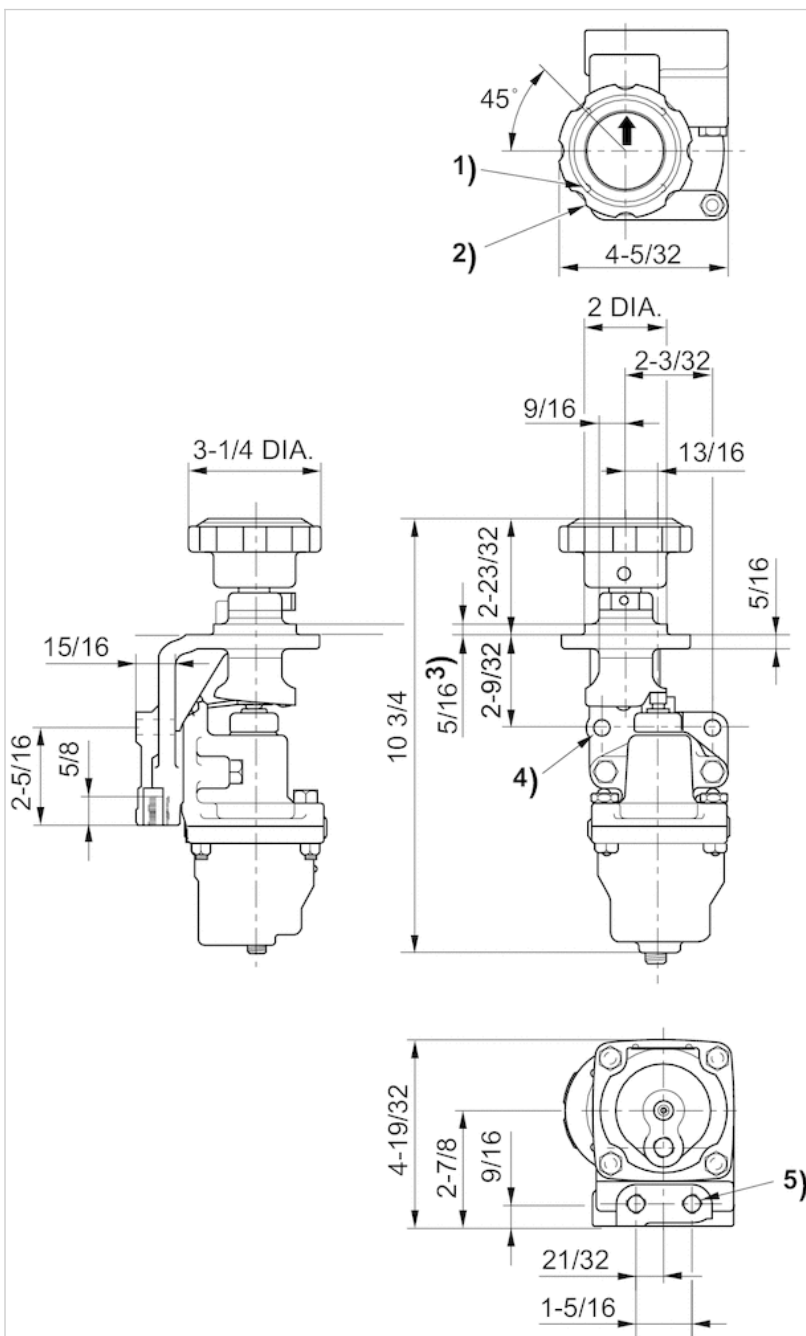
## Technical information

### Material

Housing	Die-cast aluminum
Pedal	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

## Dimensions

### Dimensions in inches



- 1) #10-24 NC-3, 4 holes equally spaced on 2-9/16 diameter
- 2) Max. effective handle rotation 240° (adjustable)
- 3) Two holes Ø13/32

4) Two holes 1/4-18 NPT

# Series H-Controlair®

- Version H-4-G
- Qn = 900 l/min
- Actuating element Rotary knob
- Internal thread
- Poppet valve



Version	Poppet valve
Working pressure min./max.	0.1 ... 14 bar
Adjustment range min./max.	0 ... 4.5 bar
Ambient temperature min./max.	-40 ... 70 °C
Medium temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Nominal flow Qn	900 l/min
Hysteresis	0.07 bar
Weight	2.3 kg

## Technical data

Part No.	Compressed air connection Input	Compressed air connection Output	Compressed air connection type Output
R431002962	1/4 NPT	1/4 NPT	Internal thread
R431002963	1/4 NPT	1/4 NPT	Internal thread

Standard thread ports

## Technical information

IN port = pressure supply

OUT port – delivers increasing pressure when lever is moved clockwise from “Off” (facing lever side of valve).

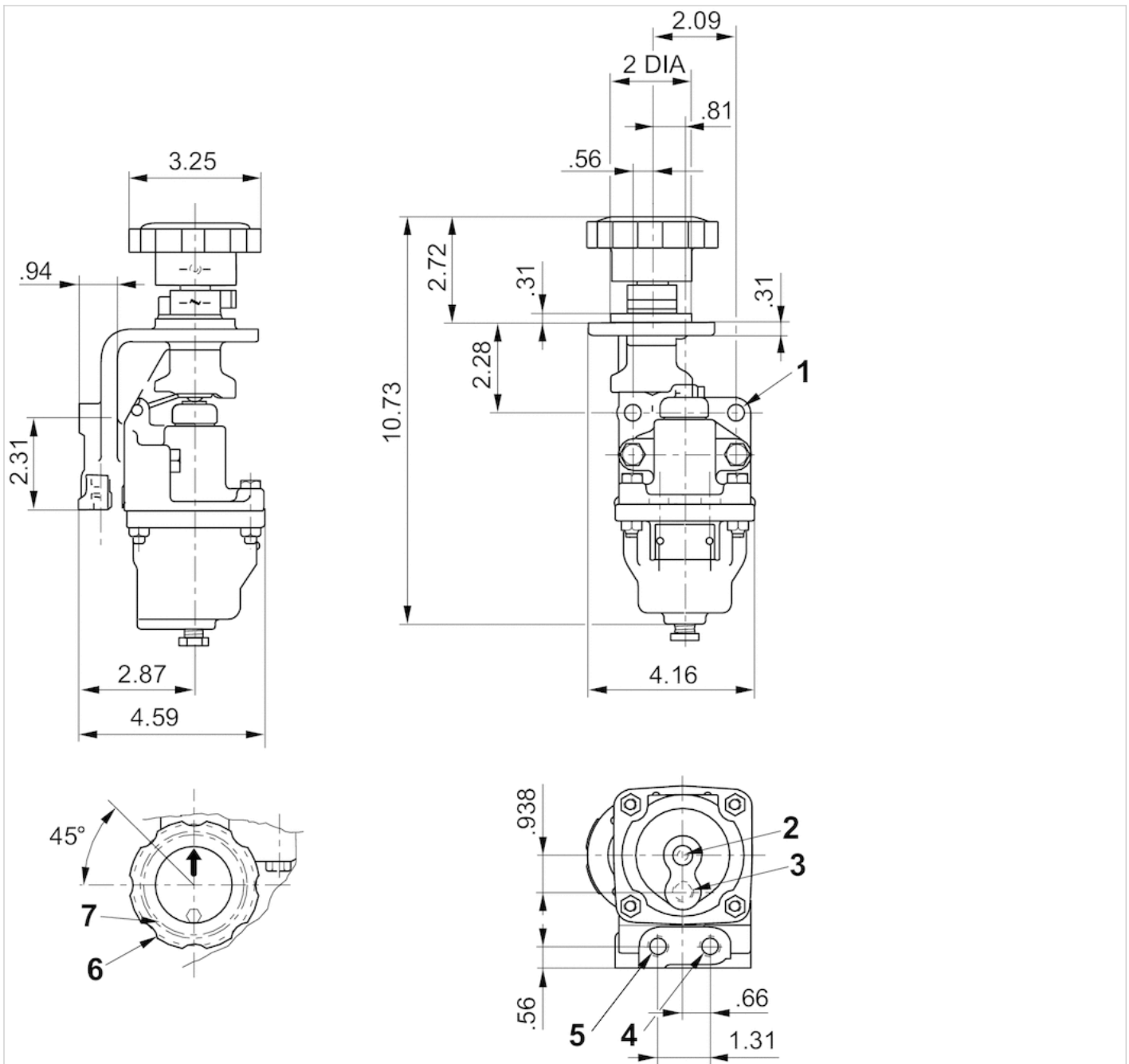
H-4-G, the spring housing area is sealed, and a control signal can be introduced under the diaphragm through the tapped exhaust port. The delivery pressure is then biased (decreased) by this signal. The bias signal must always be lower than the output signal called for by the knob travel.

## Technical information

Material	
Housing	Die-cast aluminum
Pedal	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

## Dimensions

### 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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