

MICROVALVES Ø 4

and manual operating devices



Find out our
key products



Solution for most applications



Easy and intuitive choice



Excellent value for money



Wide availability



Fast delivery



Features and certifications

Microvalves and manual operating devices.

Poppet microvalves Ø 4 mm arranged for application of manual operators. Connections with push-in fittings integrated for tube with external diameter 4 mm. According to the application, you can choose between the bottom connections and the side connections version. Supplied as standard in compliance to Reach and RoHS directives. Manual operating devices available in many shapes, colors, configurations and functions. Supplied as standard in compliance to Reach and RoHS directives, as well.

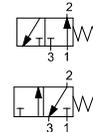


Series AM Ø 4 3/2

from page 2.181.20



Series of microvalves Ø 4 mm, 3/2 normally open and 3/2 normally closed, arranged for application of manual operators. Available with bottom or side connections.



Series AM Ø 4 5/2

from page 2.181.50



Series of microvalves Ø 4 mm, 5/2 spring return, arranged for application of manual operators. Available with bottom or side connections.



Series AP1..

from page 2.185.10



Series of manual operating devices with recessed button. Available spring return, in red, green or black.

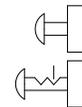


Series AP2..

from page 2.185.20



Series of manual operating devices with head push button. Available spring return, in red, green or black, and two positions detent "twist and release", only in red.

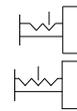


Series AP3..

from page 2.185.50



Manual selector. Available only in black, with function two and three positions detent.



Series AP4..

from page 2.185.60



Key selector. Available only in black, with function two positions detent.



Series AP5..

from page 2.185.80



Lever. Available only in black, with function three positions detent.



Microvalves Ø 4 and manual operating devices

Microvalves Ø 4



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Options microvalves Ø 4

Description	Symbol	Suffix
Side connections		L
Special versions on request		/S

The options, when this is possible, can be combined with each other. For options matching see the table below; For code key see from page 2.180.4

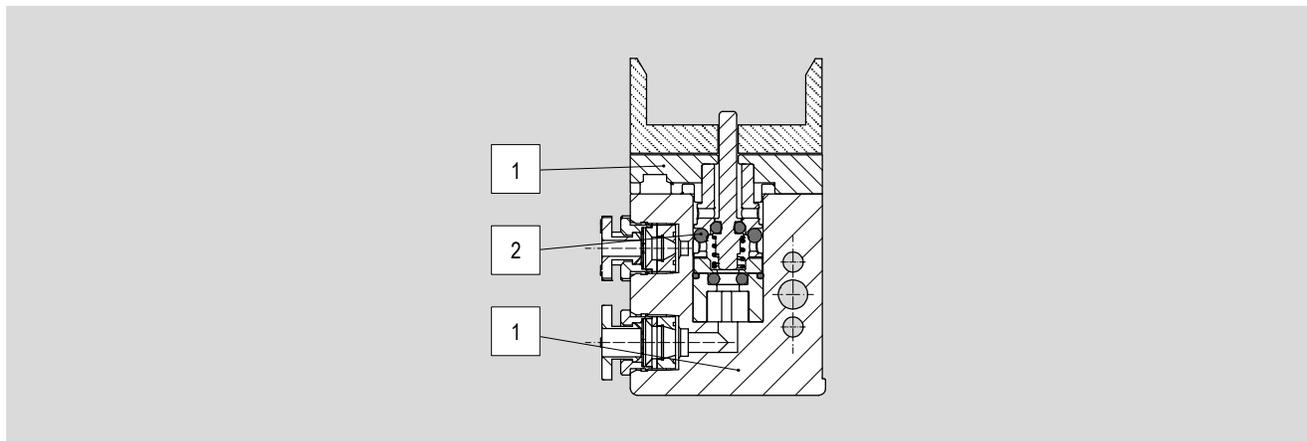
Options matching microvalves Ø 4

Series	Size	Function	Standard options matching
			L
AM	Ø 4	3/2 Normally Open	●
		3/2 Normally Closed	●
		5/2 Spring return	●

Key

● allowed matching; - not allowed matching

Standard materials microvalves Ø 4

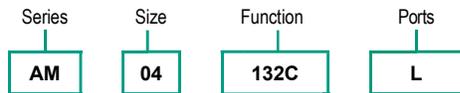


Position	Description	Material
		Ø 4
1	Body	Acetal resin
2	Seals	NBR

Code key microvalves Ø 4

Series	Size	Function	Ports
AM	04	132C	L
AM	04 = Ø 4	132A = 3/2 Normally Open 132C = 3/2 Normally Closed 1520 = 5/2 Spring return	= Bottom L = Side

How to order



Notes

Options in the same grid are alternative to each others.
 For further information on options and their matching, see page 2.180.3
 For selecting the device for the microvalve, see page 2.180.5

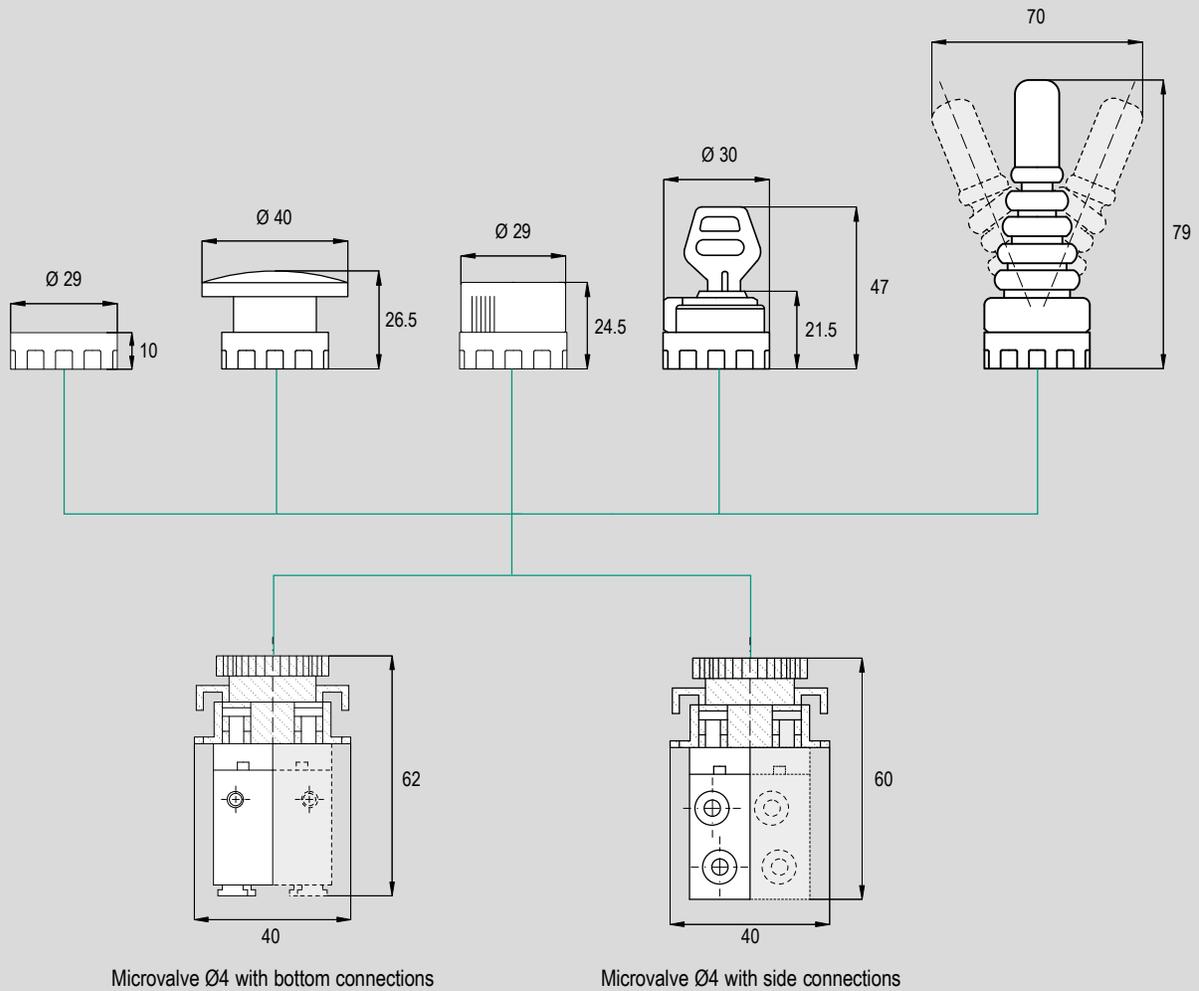
Matching microvalve Ø4 / manual operating device

Microvalve Ø4			3/2 N.O. AM04132A	3/2 N.C. AM04132C	3/2 N.O. AM04132AL	3/2 N.C. AM04132CL	5/2 Spring return AM041520	5/2 Spring return AM041520L	Data sheet & code key page
Manual operating device									
Red recessed button spring return AP11R		H	●	●	●	●	●	●	2.185.10
Green recessed button spring return AP11V			●	●	●	●	●	●	
Black recessed button spring return AP11N			●	●	●	●	●	●	
Red head push button spring return AP21R		H	●	●	●	●	●	●	2.185.20
Green head push button spring return AP21V			●	●	●	●	●	●	
Black head push button spring return AP21N			●	●	●	●	●	●	
Red head push button two positions detent "twist and release" AP22R		H	●	●	●	●	●	●	
Black manual selector two positions detent AP32N		H	●	●	●	●	●	●	2.185.50
Black manual selector 3 positions detent AP33N		H	-	-	-	-	●	●	
Black key selector two positions detent AP42C		H	●	●	●	●	●	●	2.185.60
Black Lever 3 positions detent AP53N		H	-	-	-	-	●	●	2.185.80

Key

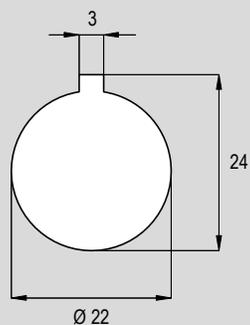
● allowed matching; - not allowed matching;

Microvalve with manual operating device mounted* overall dimensions



* For matching between microvalve Ø 4 and manual operating device, see page 2.180.5

Panel mounting



Dimensions of hole for panel mounting the microvalve Ø 4 with operating device mounted.

The panel should not exceed 6 mm.

Microvalves Ø 4 and manual operating devices

Microvalves Ø 4, 3/2 normally closed and 3/2 normally open



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Main features

Version	Code	Item	Symbol
3/2 normally open	030251	AM04132A	
3/2 normally closed	030252	AM04132C	
3/2 normally open side connections	030253	AM04132AL	
3/2 normally closed side connections	030254	AM04132CL	



Technical data

Version	3/2 normally open	3/2 normally closed	3/2 normally open with side connections	3/2 normally closed with side connections
Code	030251	030252	030253	030254
Item	AM04132A	AM04132C	AM04132AL	AM04132CL
Size	Ø 4			
Fluid	Compressed air with or without lubrication. Lubrication, if started, must be continued.			
Pressure range	0 ÷ 8 bar			
Temperature range	-20°C ÷ +80°C			
Flow at 6 bar with ΔP 1 bar	80 NI/min.			
Operating force	5 N			
Connections	Push-in fittings for tube ext. Ø 4 mm, bottom		Push-in fittings for tube ext. Ø 4 mm, side	
Fastening	Through 2 holes Ø 4 mm on the body, or through 1 hole Ø 22 mm on panel* with manual operating device mounted			
Mounting	In every position			

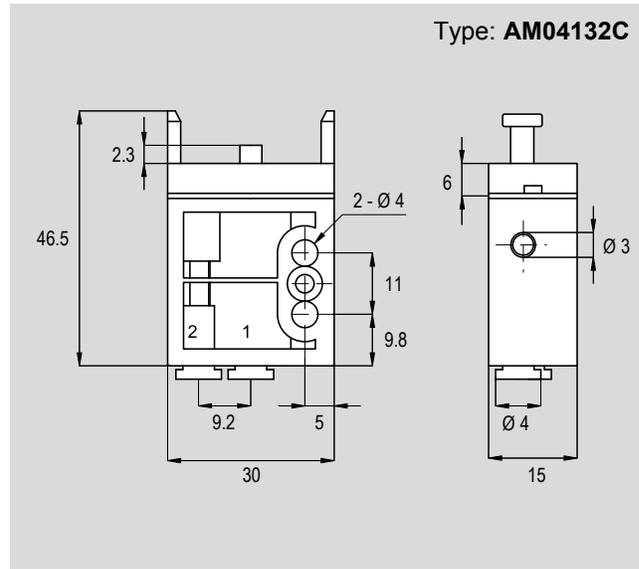
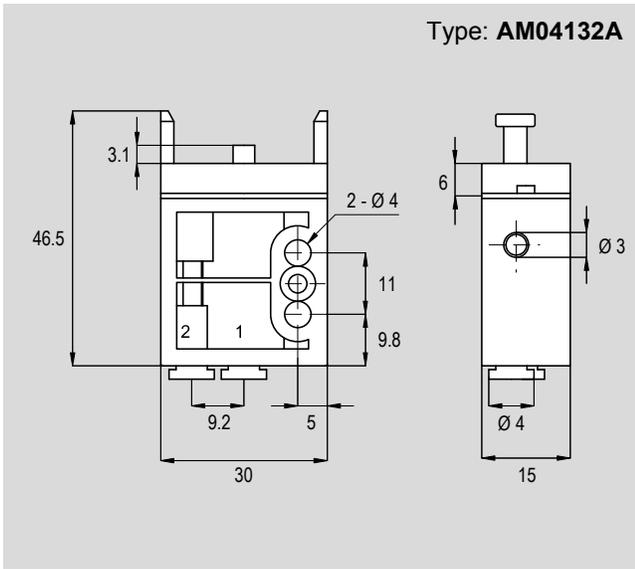
* For panel mounting hole dimensions see page 2.180.9

Notes

Manual operating device to be ordered separately, for matching see page 2.180.5.

For dimensions and features see from page 2.185.10

Dimensions* with standard connections

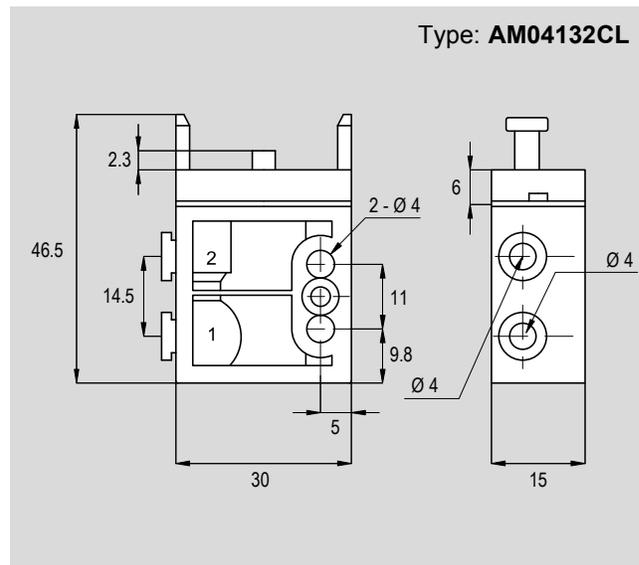
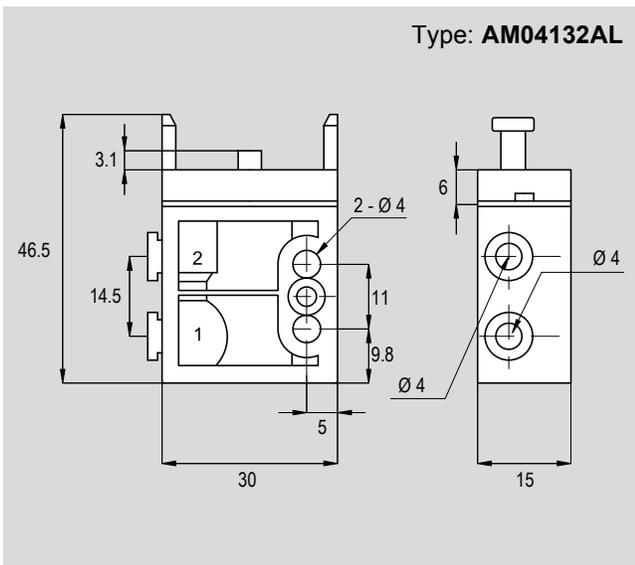


Version	Symbol	Code	Item
3/2 normally open with bottom connections		030251	AM04132A

Version	Symbol	Code	Item
3/2 normally closed with bottom connections		030252	AM04132C

* For overall dimension with manual operating device mounted, see page 2.180.6

Dimensions* with side connection option (L)



Version	Symbol	Code	Item
3/2 normally open with side connections		030253	AM04132AL

Version	Symbol	Code	Item
3/2 normally closed with side connections		030254	AM04132CL

* For overall dimension with manual operating device mounted, see page 2.180.6

Microvalves Ø 4 and manual operating devices

Microvalves Ø 4, 5/2 spring return



Main features

Version	Code	Item	Symbol
5/2 spring return	030261	AM041520	
5/2 spring return with side connections	030262	AM041520L	



Technical data

Version	5/2 spring return	5/2 spring return with side connections
Code	030261	030262
Item	AM041520	AM041520L
Size	Ø 4	
Fluid	Compressed air with or without lubrication. Lubrication, if started, must be continued.	
Pressure range	0 ÷ 8 bar	
Temperature range	-20°C ÷ +80°C	
Flow at 6 bar with ΔP 1 bar	80 NI/min.	
Operating force	5 N	
Connections	Push-in fittings for tube ext. Ø 4 mm, bottom	Push-in fittings for tube ext. Ø 4 mm, side
Fastening	Through 2 holes Ø 4 mm on the body, or through 1 hole Ø 22 mm on panel* with manual operating device mounted	
Mounting	In every position	

* For panel mounting hole dimensions see page 2.180.9

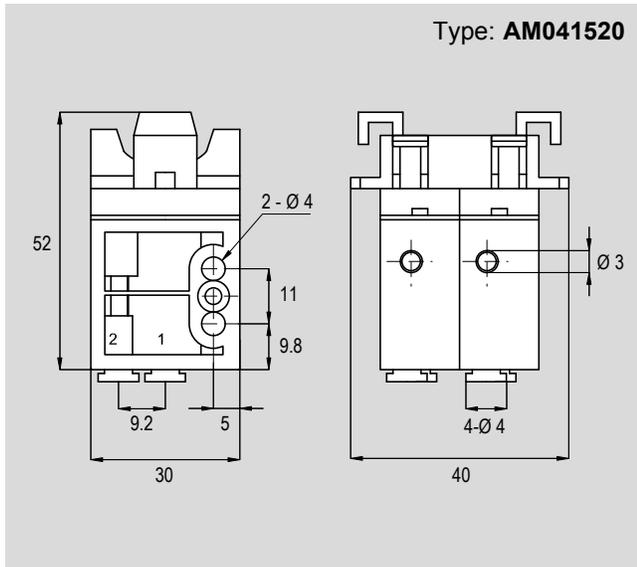
Notes

Manual operating device to be ordered separately, for matching see page 2.180.5.

For dimensions and features see from page 2.185.10

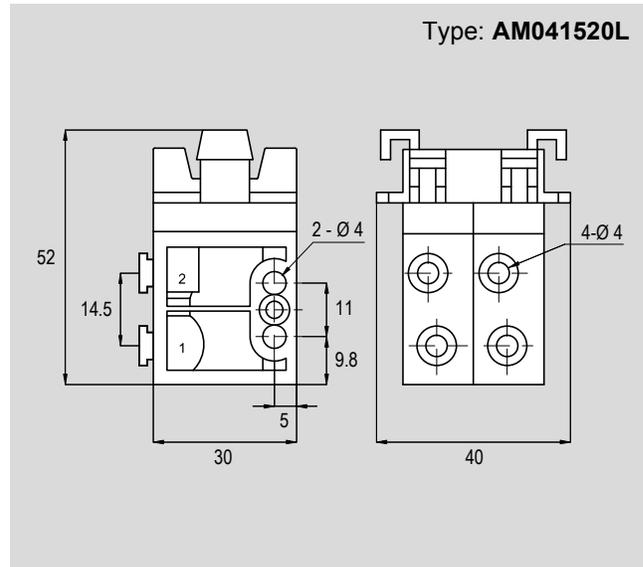
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Dimensions* with standard connections



Version	Symbol	Code	Item
5/2 spring return with bottom connections		030261	AM041520

Dimensions* with side connection option (L)



Version	Symbol	Code	Item
5/2 spring return with side connections		030262	AM041520L

* For overall dimension with manual operating device mounted, see page 2.180.6

Main features

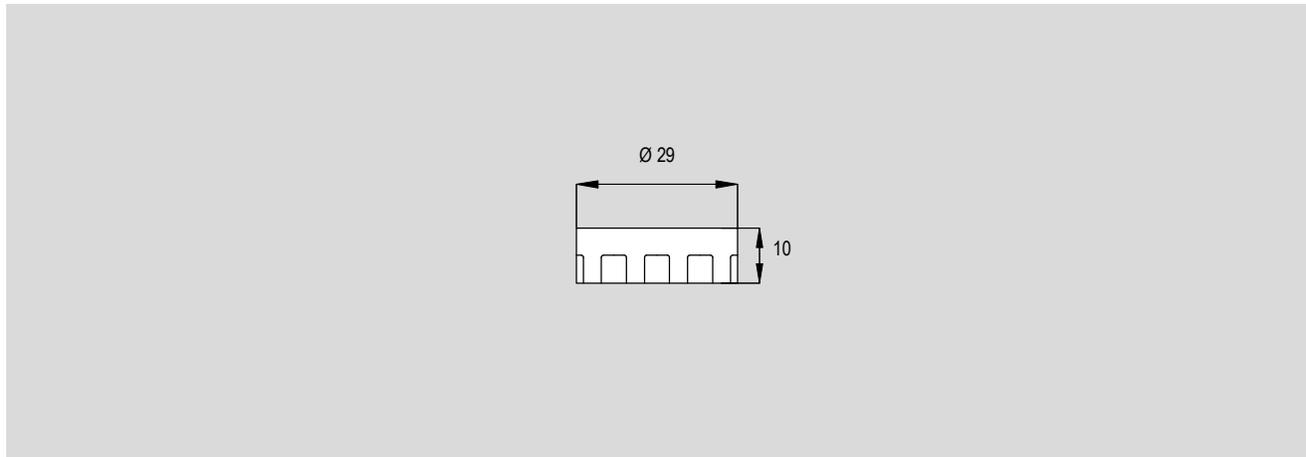
Version	Symbol	Code	Item
Red recessed button spring return		030271	AP11R
Green recessed button spring return		030273	AP11V
Black recessed button spring return		030272	AP11N



Technical data

Version	AP11		
Code	030271	030273	030272
Item	AP11R	AP11V	AP11N
Device type	Recessed button		
Function	Spring return		
Button color	Red	Green	Black
Temperature range	-20°C ÷ +80°C		
Microvalves matching	See page 2.180.5		

Dimensions*



* For overall dimension of manual operating device mounted on the microvalve, see page 2.180.6

Main features

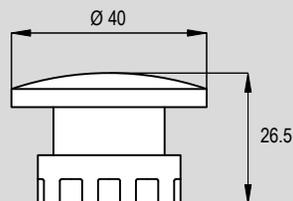
Version	Symbol	Code	Item
Red push head button spring return		030274	AP21R
Green push head button spring return		030280	AP21V
Black push head button spring return		030281	AP21N
Red push head button two positions detent "twist and release"		030275	AP22R



Technical data

Version	AP2			
Code	030274	030280	030281	030275
Item	AP21R	AP21V	AP21N	AP22R
Device type	Push head			
Function	Spring return			Two positions detent
Button color	Red	Green	Black	Red
Temperature range	-20°C ÷ +80°C			
Microvalves matching	See page 2.180.5			

Dimensions*



* For overall dimension of manual operating device mounted on the microvalve, see page 2.180.6

Main features

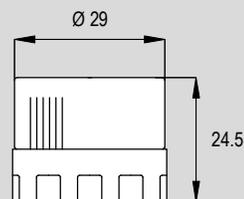
Version	Symbol	Code	Item
Black manual selector Two positions detent		030276	AP32N
Black manual selector Three positions detent		030277	AP33N



Technical data

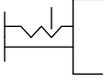
Version	AP3	
Code	030276	030277
Item	AP32N	AP33N
Device type	Manual selector	
Function	Two positions detent	Three positions detent
Button color	Black	
Temperature range	-20°C ÷ +80°C	
Microvalves matching	See page 2.180.5	

Dimensions*



* For overall dimension of manual operating device mounted on the microvalve, see page 2.180.6

Main features

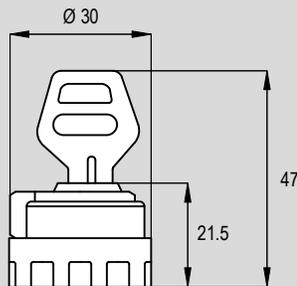
Version	Symbol	Code	Item
Black key selector Two positions detent		030278	AP42C



Technical data

Version	AP42C
Code	030278
Item	AP42C
Device type	Key selector
Function	Two positions detent
Button color	Black
Temperature range	-20°C ÷ +80°C
Microvalves matching	See page 2.180.5

Dimensions*



* For overall dimension of manual operating device mounted on the microvalve, see page 2.180.6

Microvalves Ø 4 and manual operating devices

Manual operating devices series AP53



2 - VALVES

Main features

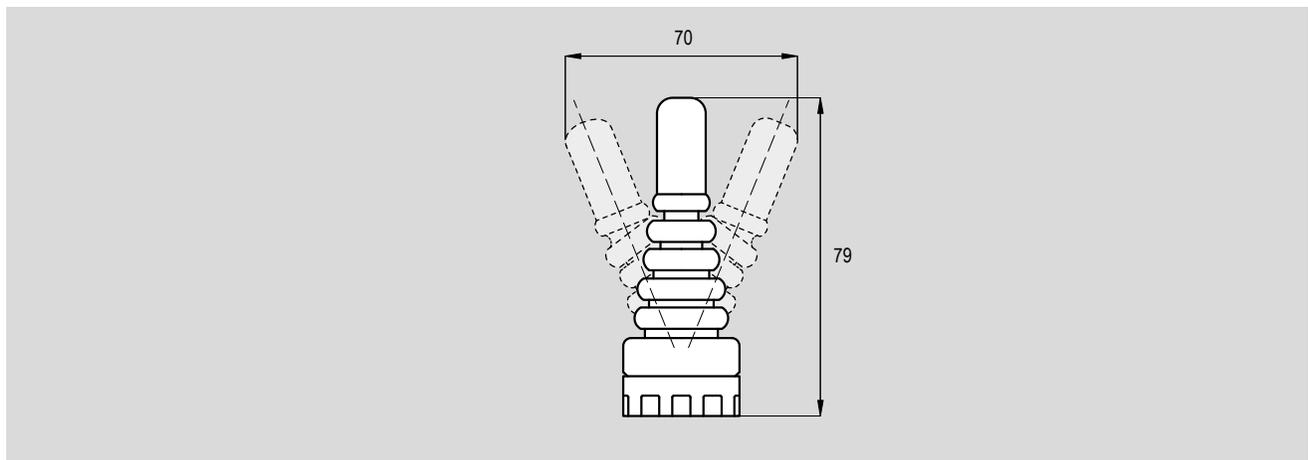
Version	Symbol	Code	Item
Black lever Three positions detent		030279	AP53N



Technical data

Version	AP53C
Code	030279
Item	AP53C
Device type	Lever
Function	Three positions detent
Lever color	Black
Temperature range	-20°C ÷ +80°C
Microvalves matching	See page 2.180.5

Dimensions*



* For overall dimension of manual operating device mounted on the microvalve, see page 2.180.6