

# AI

## Miniature limit switches

Univer limit switches, mounted on sub-bases with threaded connections or with quick couplings, may be combined with different types of manual operators for panel mounting complying with the various need of the plant.



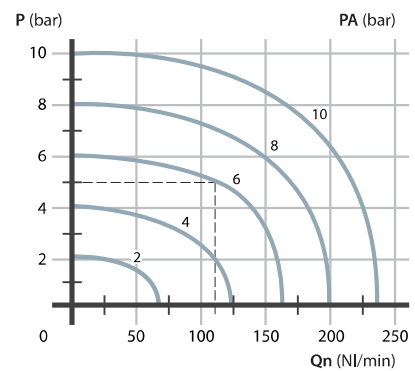
### TECHNICAL CHARACTERISTICS

Ambient temperature	-10 ÷ +90 °C
Fluid temperature	max +50 °C
Fluid	defiltered air 50 um not dehumidified, lubricated or not
Commutation system	poppet system
Ways/Positions	<b>2/2 NC, 3/2 NC, 2/2 NO, 3/2 NO</b>
Pressure	max 10 bar
Control	manual, mechanical
Return	mechanical spring
Connections	interface for sub-base
Nominal Ø	2,3 mm (1,5 sensible type)
Nominal flow rate (NI/min)	110 NI/min

### CONSTRUCTIVE CHARACTERISTICS

Valve body	zamak
Seals	nitrile rubber
Sub-base	zamak
Spool	nickel-plated brass

### Flow rate characteristics



P = Working pressure  
 PA = Supply pressure  
 Qn = Flow rate

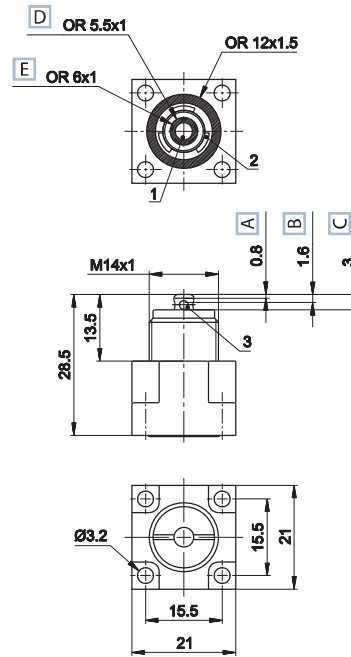
Mechanical push button - spring



- A Pre-stroke
- B Max opening
- C Total stroke
- D 3/2 NC - 3/2 NO - 2/2 NC
- E 2/2 NO

	Symbol	Ø mm	Flow rate NI/min	Force N	Weight Kg	Part no.
3/2 NC		2,3	110	15	0,040	AI-3500
		1,5	55	4	0,040	AI-3500S (a)
3/2 NO		2,3	110	15	0,040	AI-3501
		1,3	45	4	0,040	AI-3501S(a)
2/2 NC		2,3	110	15	0,040	AI-3502
2/2 NO (b)		2,3	110	15	0,040	AI-3503

(a) = sensible (b) = 2/2 NO version available upon request



1 = Supply port  
2 = Use  
3 = Exhaust

PNEUMATIC AND MECHANICAL ACTUATORS

MANUAL PUSH

	Pneumatic operator	AI-3550			<ul style="list-style-type: none"> <li>BLACK AI-3511</li> <li>RED AI-3512</li> <li>GREEN AI-3513</li> </ul>
	Amplified pneumatic operator	AI-3551			<ul style="list-style-type: none"> <li>RED AI-3514</li> <li>BLACK AI-3516</li> <li>RED AI-3514D</li> <li>BLACK AI-3516D</li> </ul>
	Roller operator 1 position	AI-3560			<ul style="list-style-type: none"> <li>GREEN AI-3515</li> <li>RED AI-3517</li> <li>BLACK AI-3519</li> </ul>
	Ball-push operator 1 position	AI-3562			<ul style="list-style-type: none"> <li>BLACK AI-3520</li> <li>BLACK AI-3521</li> </ul>
	Operator with omni-directional antenna 1 position	AI-3563			<ul style="list-style-type: none"> <li>BLACK AI-3522</li> <li>BLACK AI-3523</li> </ul>
	Roller lever operator 1 position	AI-3570			<ul style="list-style-type: none"> <li>BLACK AI-3524</li> </ul>
	Articulated roller operator 1 position Complete actuation with stroke 2,5 mm, max stroke 4,7 mm	AI-3571			<ul style="list-style-type: none"> <li>BLACK AI-3525</li> </ul>
	Key operator 1 position	AI-3572			<ul style="list-style-type: none"> <li>BLACK AI-3526</li> </ul>

For actuators dimensions see section "Accessories>Actuators"

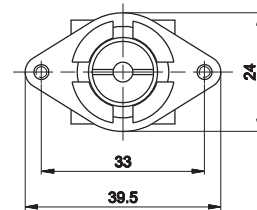
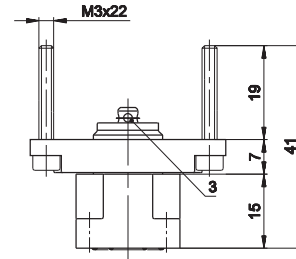
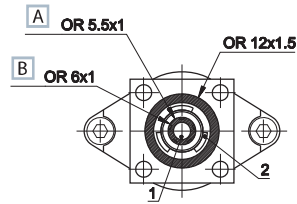
Mechanical push button for panel mounting - spring



A 3/2 NC - 3/2 NO - 2/2  
 B 2/2 NO

	Symbol	Ø mm	Flow rate Nl/min	Force N	Weight Kg	Part no.
3/2 NC		2,3	110	15	0,055	AI-3500Q
		1,5	55	4	0,055	AI-3500SQ (a)
3/2 NO		2,3	110	15	0,055	AI-3501Q
		1,3	45	4	0,055	AI-3501SQ (a)
2/2 NC		2,3	110	15	0,055	AI-3502Q
2/2 NO (b)		2,3	110	15	0,055	AI-3503Q

(a) = sensible (b) = upon request only 2/2 NO version



1 = Supply port  
 2 = Use  
 3 = Exhaust

MANUAL PUSH

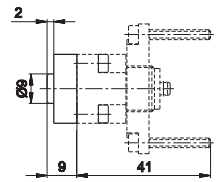
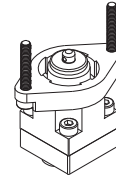
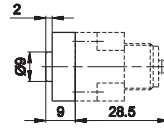
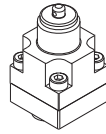
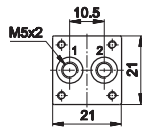
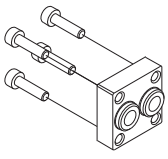
	Recessed button	<ul style="list-style-type: none"> <li>■BLACK AI-3511Q</li> <li>■RED AI-3512Q</li> <li>■GREEN AI-3513Q</li> </ul>
	Head button	<ul style="list-style-type: none"> <li>■RED AI-3514Q</li> <li>■BLACK AI-3516Q</li> <li>■RED AI-3514QD</li> <li>■BLACK AI-3516QD</li> </ul>
	Button	<ul style="list-style-type: none"> <li>■GREEN AI-3515Q</li> <li>■RED AI-3517Q</li> <li>■BLACK AI-3519Q</li> </ul>
	Accident prevention rotating selector	<ul style="list-style-type: none"> <li>■BLACK AI-3520Q</li> <li>■BLACK AI-3521Q</li> </ul>
	Rotating lever selector	<ul style="list-style-type: none"> <li>■BLACK AI-3522Q</li> <li>■BLACK AI-3523Q</li> </ul>
	Lever operator	<ul style="list-style-type: none"> <li>■BLACK AI-3524Q</li> </ul>
	Omni-directional operator	<ul style="list-style-type: none"> <li>■BLACK AI-3525Q</li> </ul>
	Push-pull operator	<ul style="list-style-type: none"> <li>■BLACK AI-3526Q</li> </ul>

For actuators dimensions see section "Accessories>Actuators"

## AI-3610

## AI-3610 + AI-3500

## AI-3610 + AI-3500Q

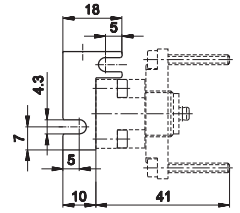
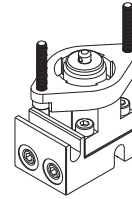
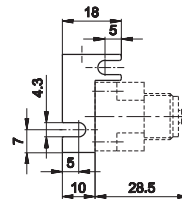
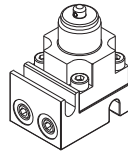
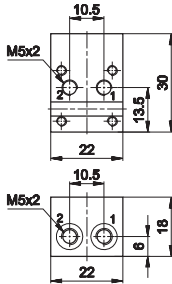
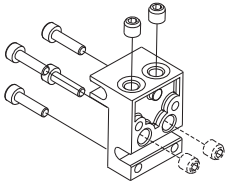


Sub-base with M5 threaded connections  
weight: 0,020 Kg

## AI-3612

## AI-3612 + AI-3500

## AI-3612 + AI-3500Q



Sub-base with side or dorsal consumptions and threaded connections M5  
weight: 0,020 Kg

Part numbers include M3x12 fixing screws (4 pcs) and M5x5 dowel pins to close the unused ways.  
The M5x5 dowel pins must be mounted with loctite (243 type). Be sure that loctite does not obstruct the ports or sinks inside the valve.  
The dowel pins must be screwed till reaching the base surface. Avoid screwing them completely.