

Microvalvole  
MicrovalvesGuida alle referenze  
Guide to references

MV AU4 15 3 PU ML NC P

**Prodotto**  
Product  
**MV** = Microvalvola  
Microvalve

**Connessione**  
Connection  
**AU4** = Raccordi automatici ø4mm  
ø4mm Push-in Fittings  
**M5** = M5  
**AL4** = Raccordi automatici ø4mm  
ø4mm push-in fittings (side  
ports)  
**ML5** = M5 (laterali - side ports)

**Taglia**  
Body width  
**15** = 15 mm

**Funzione**  
Function  
**2** = 2/2  
**3** = 3/2

**Azionamento**  
Operation  
**PU** = Puntale - Pushrod  
**PP** = Puntale passa-parete - Through-wall pushrod  
**LT** = Leva tasto - Push lever  
**RL** = Leva rullo - Roller lever  
**RU** = Leva rullo unidirezionale - Unidirectional roller lever  
**PB** = Per comandi a pannello - For panel mounting actuators

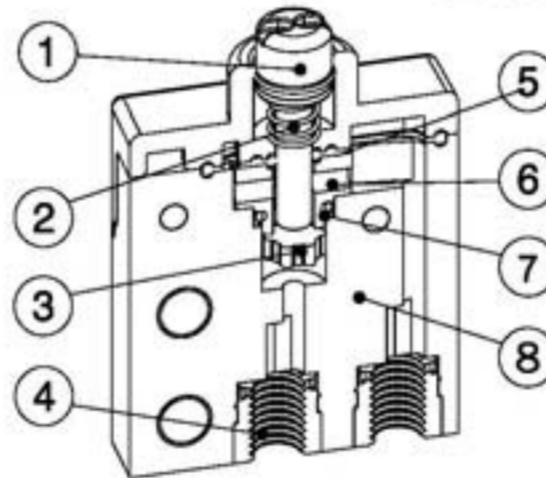
**Materiale**  
Material  
**P** = Plastica  
Plastic

**Opzione**  
Option  
**NC** = Normalmente chiusa  
Normally closed  
**NO** = Normalmente aperta  
Normally opened

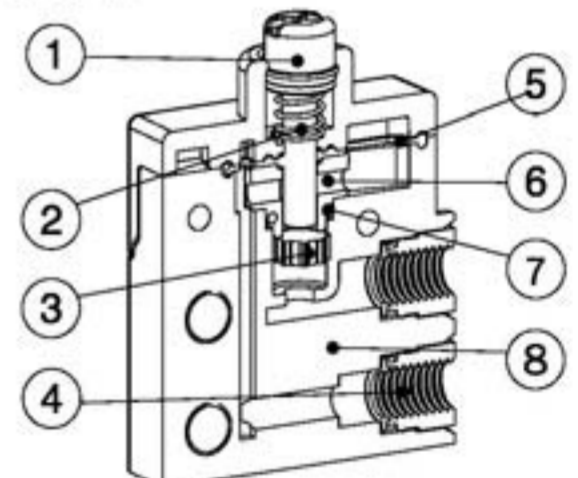
**Ritorno**  
Return  
**ML** = Molla  
Spring

Le Microvalvole ad otturatore della Linea 100 sono disponibili in una vasta gamma di versioni e azionamenti per rispondere alle applicazioni più esigenti. Minimo ingombro, velocità e precisione del segnale sono alcune delle caratteristiche di questa serie che può essere fornita sia con connessione M5, che con raccordo automatico per tubo 4 mm, nelle versioni ad attacchi posteriori oppure laterali.

Line 100 poppet Microvalves are available in a wide range of versions and actuators in order to meet the most demanding applications requirements. Reduced dimensions, speed and signal precision represent some of the features of this Line, that can be supplied both with M5 connections and push-it fittings for pipe 4 mm, in the version with rear ports or side ports.

Materiali impiegati  
Used materials

① PUNTALE: POM  
② MOLLA PUNTALE: Acciaio INOX  
③ GUARNIZIONE: NBR  
④ INSERTI: Ottone OT 58  
⑤ GUARNIZIONE: NBR  
⑥ UGELLO: POM  
⑦ O-RING: NBR  
⑧ CORPO: POM



① PUSHROD: POM  
② PUSHROD SPRING: Stainless steel  
③ SEAL: NBR  
④ INSERTS: OT 58 Brass  
⑤ SEAL: NBR  
⑥ NOZZLE: POM  
⑦ O-RING: NBR  
⑧ BODY: POM

## Dati Tecnici

Costruzione: Microvalvola ad otturatore, 2/2 - 3/2, NC e NO  
Fluido: Aria filtrata con o senza lubrificazione  
Fissaggio: Mediante fori passanti sul corpo, in qualsiasi posizione  
Tipo di connessione: M5 o Raccordi automatici ø4 mm  
Diametro nominale: 2 mm  
Pressione d'esercizio: 2÷10 Bar (0,20÷1,00 MPa)  
Range di temperatura: -5÷50°C (23÷122°F)  
Portata di riferimento (P=6 Bar - Δp=1 Bar): 75 NI/min

## Technical data

Construction: 2/2 - 3/2, NC and NO, poppet microvalve  
Fluid: Filtered air with or without lubrication  
Installation: Through holes in valve body, in any position  
Connection type: M5 or ø4 mm Push-in fittings  
Effective orifice: 2 mm  
Working pressure: 2÷10 Bar (0,20÷1,00 MPa)  
Temperature range: -5÷50°C (23÷122°F)  
Reference flow rate (P=6 Bar - Δp=1 Bar): 75 NI/min

## 100 MV M5-Ø4

Microvalvole a comando meccanico  
Mechanically operated Microvalves

### Dati Tecnici

Forza d'azionamento (a 6 Bar): 8 N  
Peso: 0,024 Kg

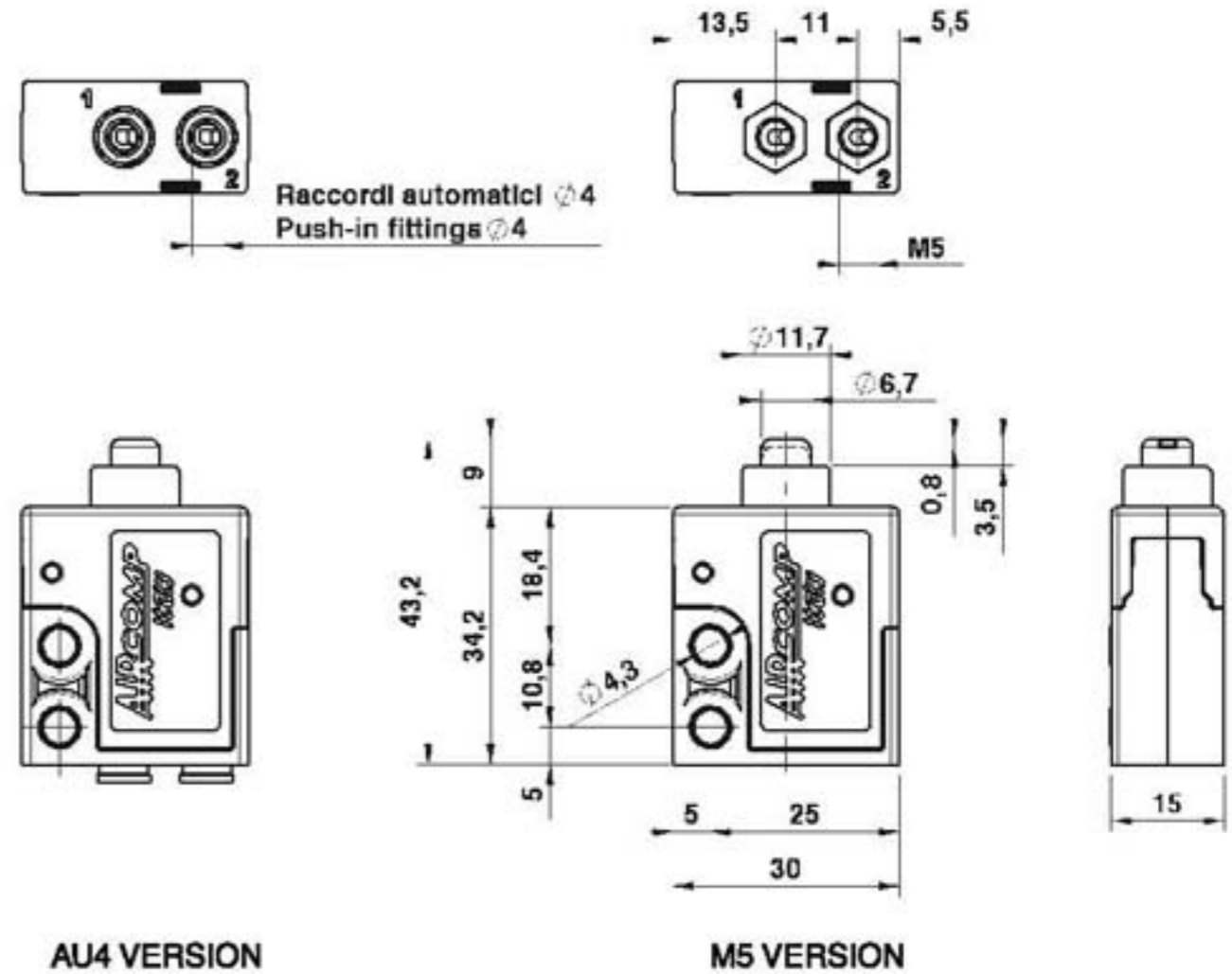
### Technical data

Thrust force (6 Bar): 8 N  
Weight: 0,024 Kg

### Codici di ordinazione Order codes

	CODE	REF.
	1000412001	MV M5 15 2 PU ML NC P
	1000492001	MV AU4 15 2 PU ML NC P
	1000413001	MV M5 15 3 PU ML NC P
	1000493001	MV AU4 15 3 PU ML NC P
	1000413002	MV M5 15 3 PU ML NO P
	1000493002	MV AU4 15 3 PU ML NO P

### Microvalvole 2/2 - 3/2 a puntale 2/2 - 3/2 Pushrod Microvalves



### Dati Tecnici

Forza d'azionamento (a 6 Bar): 8 N  
Peso: 0,024 Kg

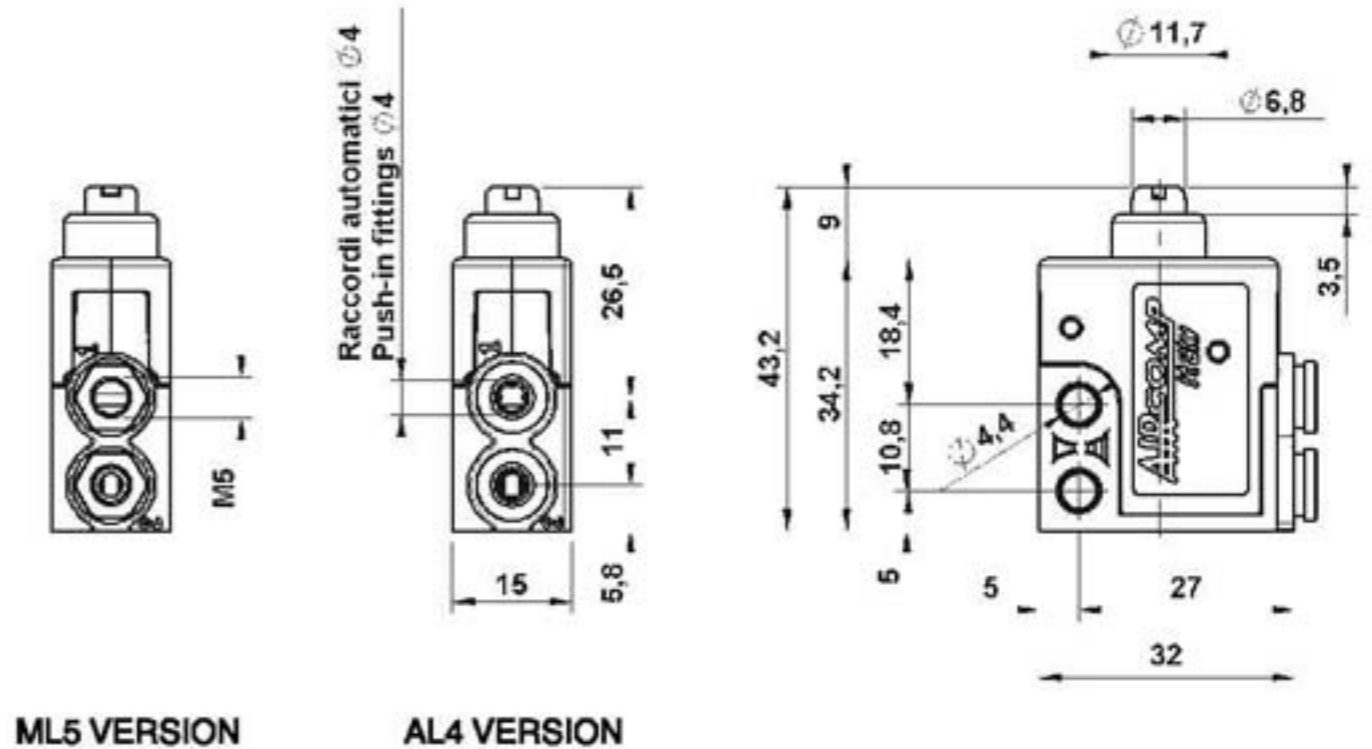
### Technical data

Thrust force (6 Bar): 8 N  
Weight: 0,024 Kg

### Codici di ordinazione Order codes

	CODE	REF.
	1000412101	MV ML5 15 2 PU ML NC P
	1000492101	MV AL4 15 2 PU ML NC P
	1000413101	MV ML5 15 3 PU ML NC P
	1000493101	MV AL4 15 3 PU ML NC P
	1000413102	MV ML5 15 3 PU ML NO P
	1000493102	MV AL4 15 3 PU ML NO P

### Microvalvole 2/2 - 3/2 a puntale con uscite laterali 2/2 - 3/2 Pushrod Microvalves with side ports



## 100 MV M5-Ø4

Microvalvole a comando manuale  
Manually operated Microvalves

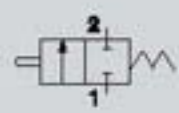
### Dati Tecnici

Forza d'azionamento (a 6 Bar): 8 N  
Peso: 0,029 Kg

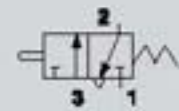
### Technical data

Thrust force (6 Bar): 8 N  
Weight: 0,029 Kg

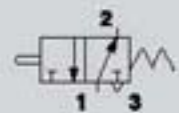
### Codici di ordinazione Order codes



CODE	REF.
1000412004	MV M5 15 2 PP ML NC P
1000492004	MV AU4 15 2 PP ML NC P

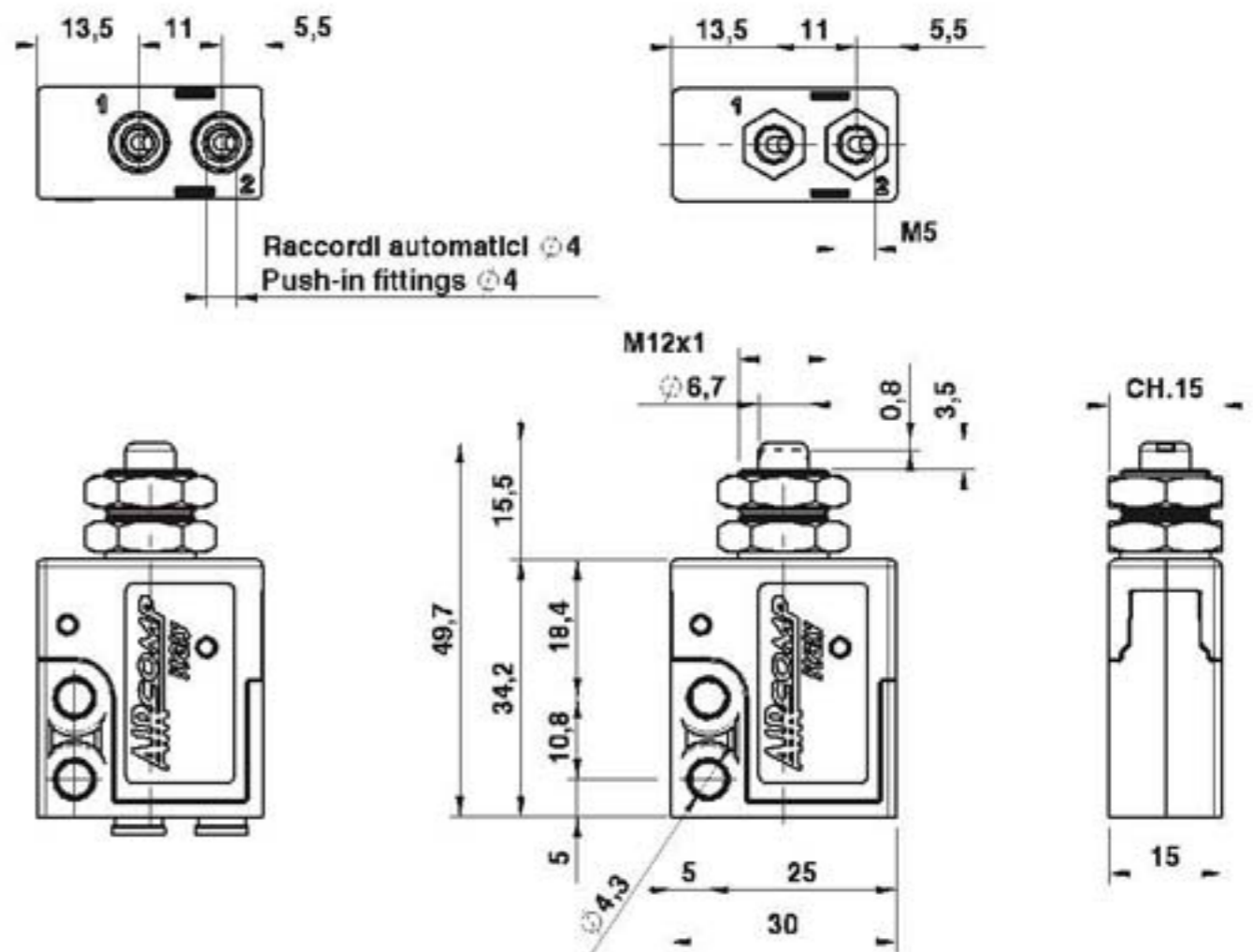


CODE	REF.
1000413007	MV M5 15 3 PP ML NC P
1000493007	MV AU4 15 3 PP ML NC P



CODE	REF.
1000413008	MV M5 15 3 PP ML NO P
1000493008	MV AU4 15 3 PP ML NO P

### Microvalvole 2/2 - 3/2 a puntale passa-parete 2/2 - 3/2 Through-wall pushrod Microvalves



AU4 VERSION

M5 VERSION

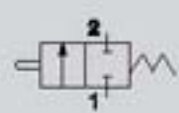
### Dati Tecnici

Forza d'azionamento (a 6 Bar): 8 N  
Peso: 0,029 Kg

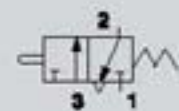
### Technical data

Thrust force (6 Bar): 8 N  
Weight: 0,029 Kg

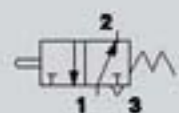
### Codici di ordinazione Order codes



CODE	REF.
1000412104	MV ML5 15 2 PP ML NC P
1000492104	MV AL4 15 2 PP ML NC P

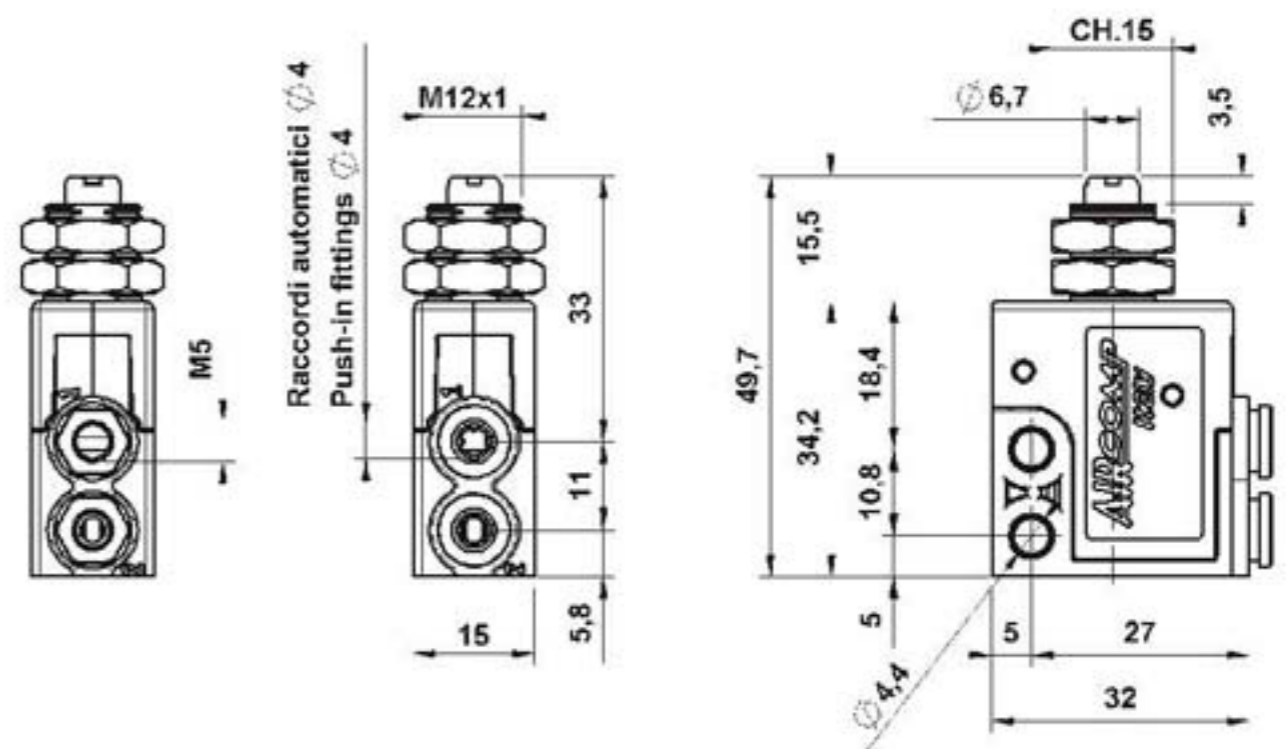


CODE	REF.
1000413107	MV ML5 15 3 PP ML NC P
1000493107	MV AL4 15 3 PP ML NC P



CODE	REF.
1000413108	MV ML5 15 3 PP ML NO P
1000493108	MV AL4 15 3 PP ML NO P

### Microvalvole 2/2 - 3/2 a puntale passa-parete con uscite laterali 2/2 - 3/2 Through-wall pushrod Microvalves with side ports



ML5 VERSION

AL4 VERSION

## 100 MV M5-Ø4

Microvalvole a comando manuale  
Manually operated Microvalves

### Dati Tecnici

Forza d'azionamento (a 6 Bar): 6 N  
Peso: 0,028 Kg

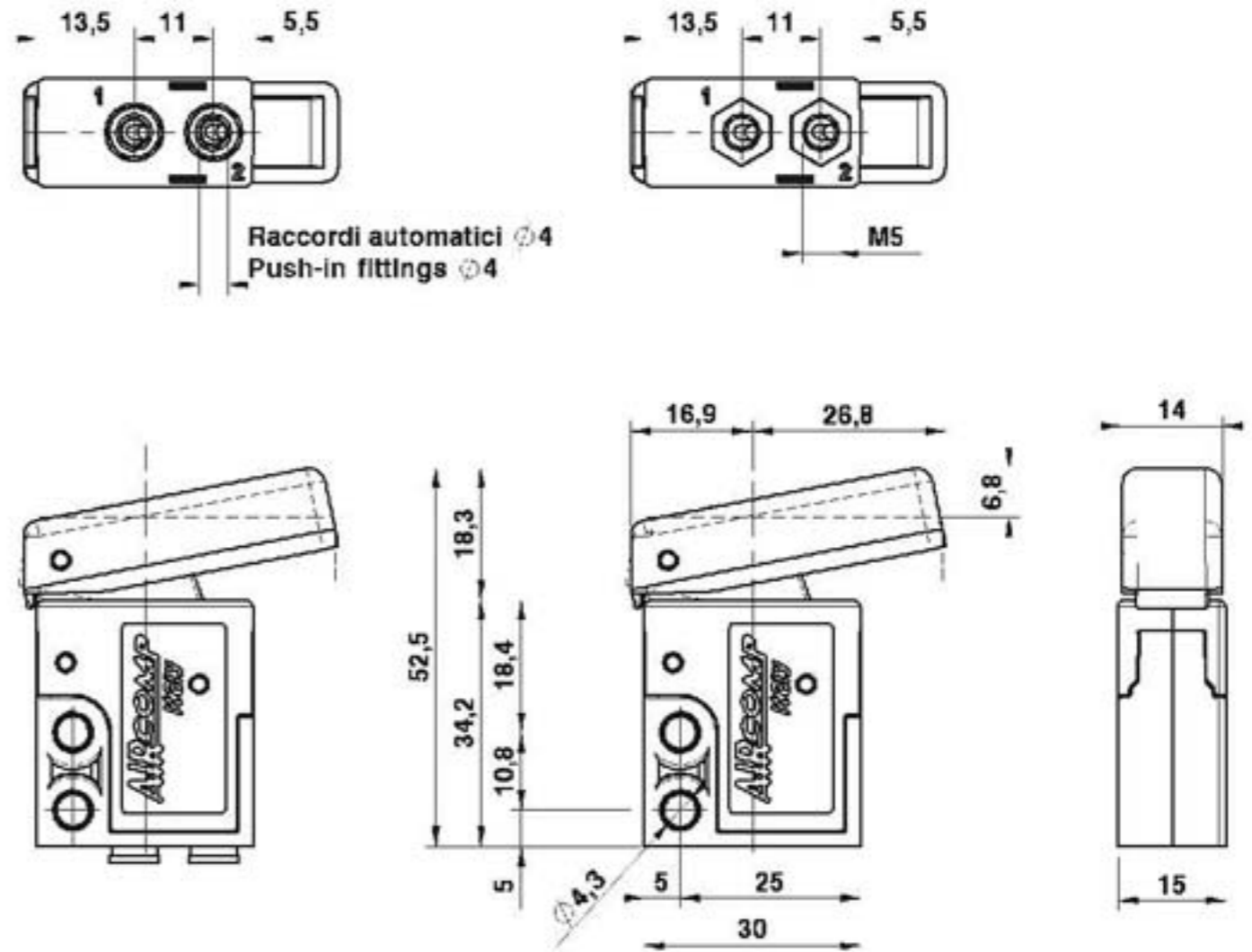
### Technical data

Thrust force (6 Bar): 6 N  
Weight: 0,028 Kg

### Codici di ordinazione Order codes

	CODE	REF.
	1000412006	MV M5 15 2 LT ML NC P
	1000492006	MV AU4 15 2 LT ML NC P
	1000413011	MV M5 15 3 LT ML NC P
	1000493011	MV AU4 15 3 LT ML NC P
	1000413012	MV M5 15 3 LT ML NO P
	1000493012	MV AU4 15 3 LT ML NO P

### Microvalvole 2/2 - 3/2 con leva-tasto 2/2 - 3/2 Push lever Microvalves



AU4 VERSION

M5 VERSION

### Dati Tecnici

Forza d'azionamento (a 6 Bar): 6 N  
Peso: 0,028 Kg

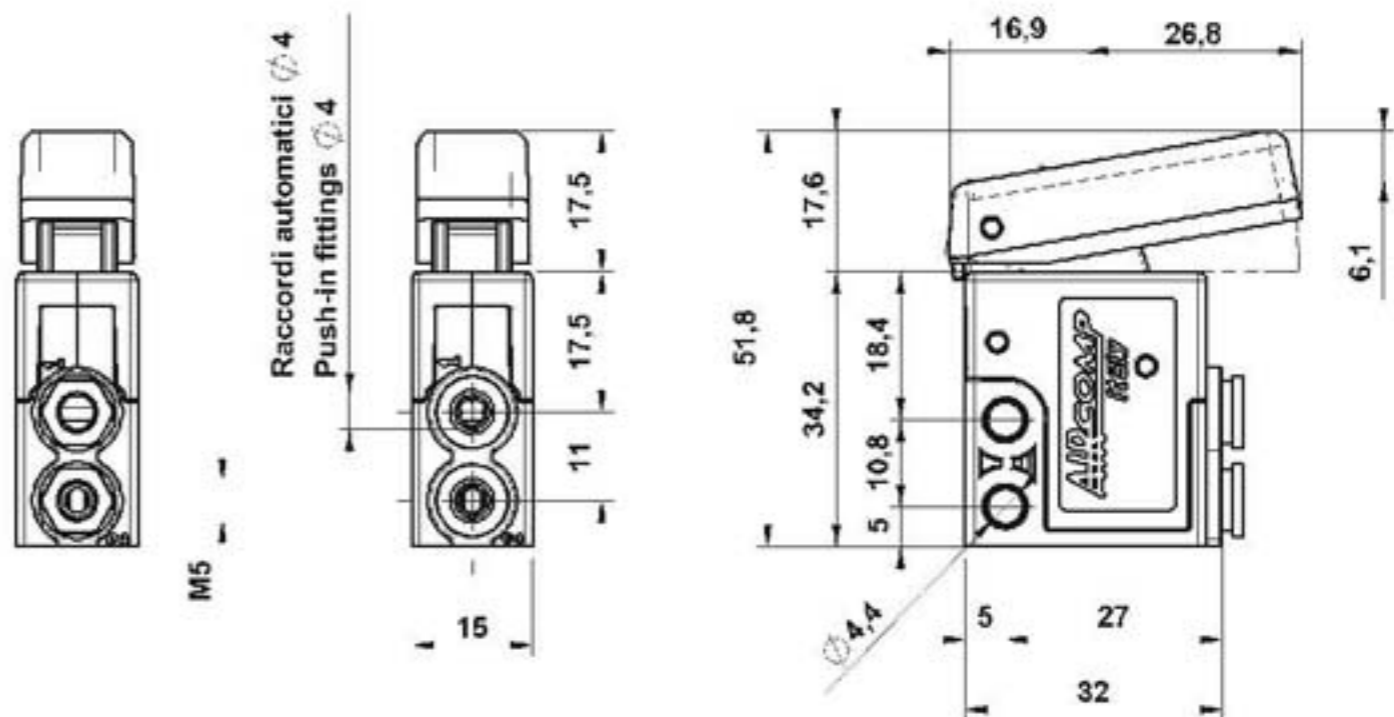
### Technical data

Thrust force (6 Bar): 6 N  
Weight: 0,028 Kg

### Codici di ordinazione Order codes

	CODE	REF.
	1000412106	MV ML5 15 2 LT ML NC P
	1000492106	MV AL4 15 2 LT ML NC P
	1000413111	MV ML5 15 3 LT ML NC P
	1000493111	MV AL4 15 3 LT ML NC P
	1000413112	MV ML5 15 3 LT ML NO P
	1000493112	MV AL4 15 3 LT ML NO P

### Microvalvole 2/2 - 3/2 con leva-tasto e uscite laterali 2/2 - 3/2 Push lever Microvalves with side ports



ML5 VERSION

AL4 VERSION

## 100 MV M5-Ø4

### Microvalvole a comando meccanico Mechanically operated Microvalves

#### Dati Tecnici

Forza d'azionamento (a 6 Bar): 6 N  
Peso: 0,031 Kg

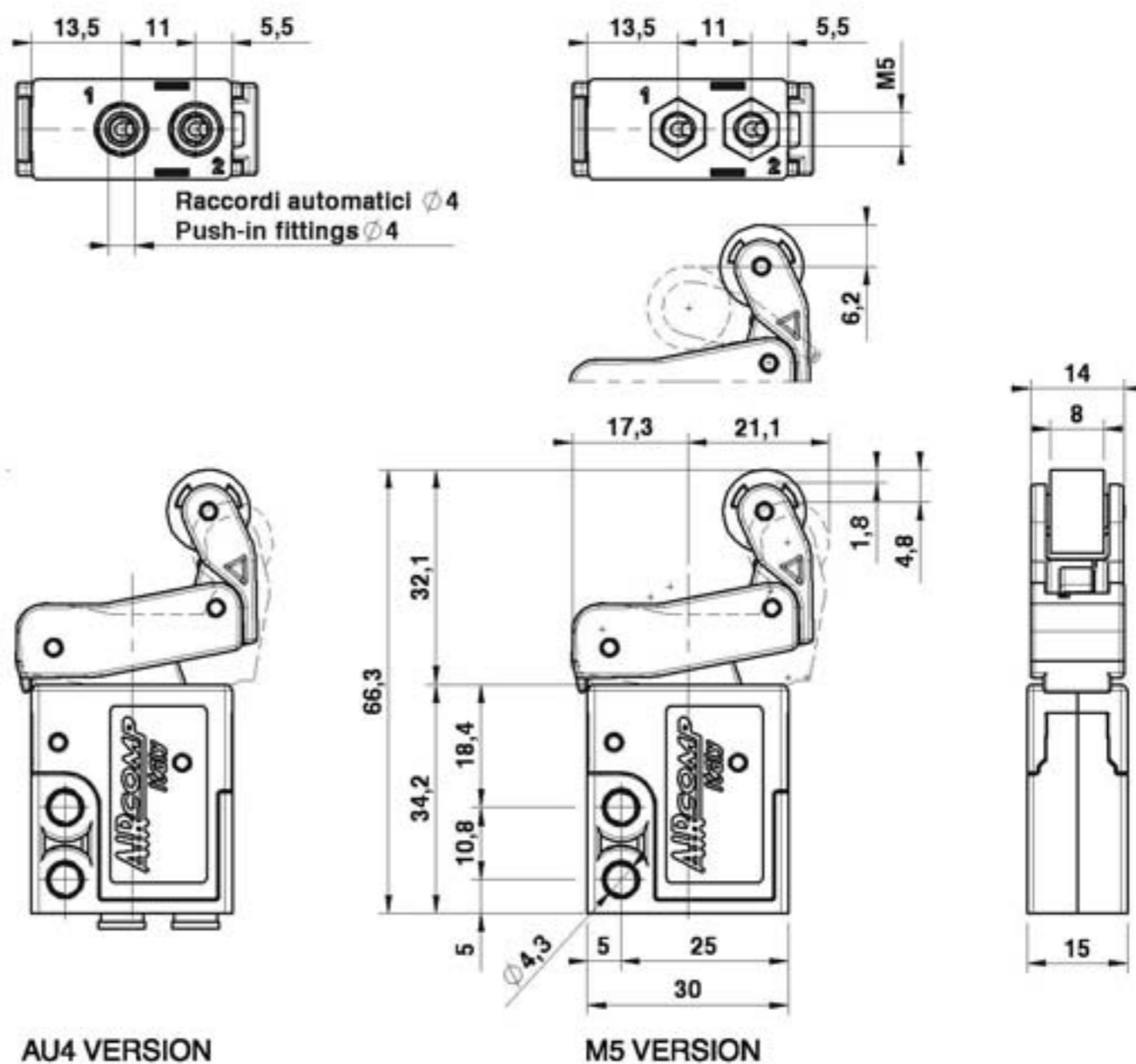
#### Technical data

Thrust force (6 Bar): 6 N  
Weight: 0,031 Kg

#### Codici di ordinazione Order codes

	CODE	REF.
	1000412003	MV M5 15 2 RU ML NC P
	1000492003	MV AU4 15 2 RU ML NC P
	1000413005	MV M5 15 3 RU ML NC P
	1000493005	MV AU4 15 3 RU ML NC P
	1000413006	MV M5 15 3 RU ML NO P
	1000493006	MV AU4 15 3 RU ML NO P

#### Microvalvole 2/2 - 3/2 a leva rullo unidirezionale 2/2 - 3/2 Unidirectional roller lever Microvalves



AU4 VERSION

M5 VERSION

#### Dati Tecnici

Forza d'azionamento (a 6 Bar): 6 N  
Peso: 0,031 Kg

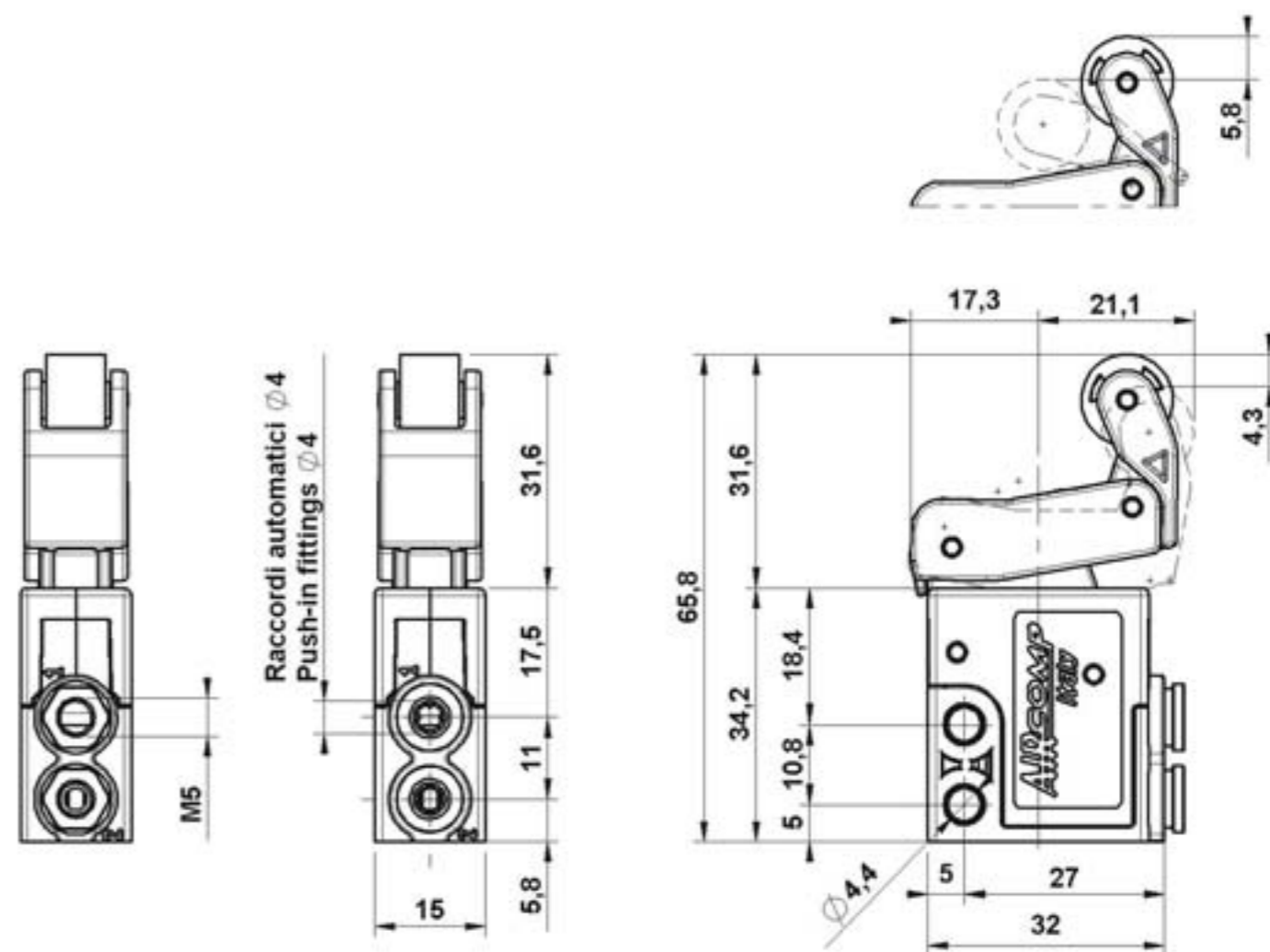
#### Technical data

Thrust force (6 Bar): 6 N  
Weight: 0,031 Kg

#### Codici di ordinazione Order codes

	CODE	REF.
	1000412103	MV ML5 15 2 RU ML NC P
	1000492103	MV AL4 15 2 RU ML NC P
	1000413105	MV ML5 15 3 RU ML NC P
	1000493105	MV AL4 15 3 RU ML NC P
	1000413106	MV ML5 15 3 RU ML NO P
	1000493106	MV AL4 15 3 RU ML NO P

#### Microvalvole 2/2 - 3/2 a leva rullo unidirezionale con uscite laterali 2/2 - 3/2 Unidirectional roller lever Microvalves with side ports



ML5 VERSION

AL4 VERSION

## 100 MV M5-Ø4

Microvalvole a comando meccanico  
Mechanically operated Microvalves

### Dati Tecnici

Forza d'azionamento (a 6 Bar): 6 N  
Peso: 0,027 Kg

### Technical data

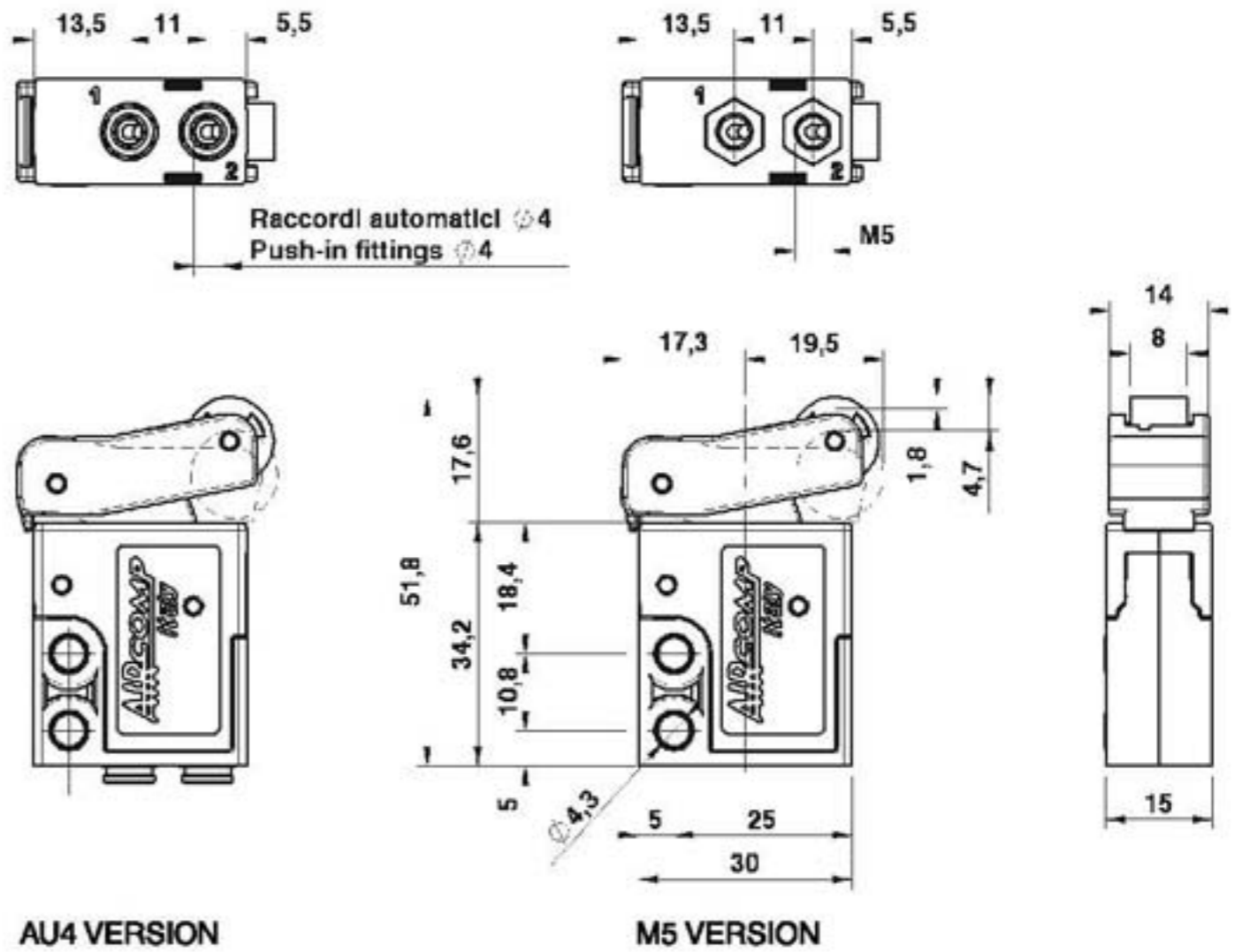
Thrust force (6 Bar): 6 N  
Weight: 0,027 Kg

### Codici di ordinazione

Order codes

	CODE	REF.
	1000412002	MV M5 15 2 RL ML NC P
	1000492002	MV AU4 15 2 RL ML NC P
	1000413003	MV M5 15 3 RL ML NC P
	1000493003	MV AU4 15 3 RL ML NC P
	1000413004	MV M5 15 3 RL ML NO P
	1000493004	MV AU4 15 3 RL ML NO P

### Microvalvole 2/2 - 3/2 a leva rullo 2/2 - 3/2 Roller lever Microvalves



### Dati Tecnici

Forza d'azionamento (a 6 Bar): 6 N  
Peso: 0,027 Kg

### Technical data

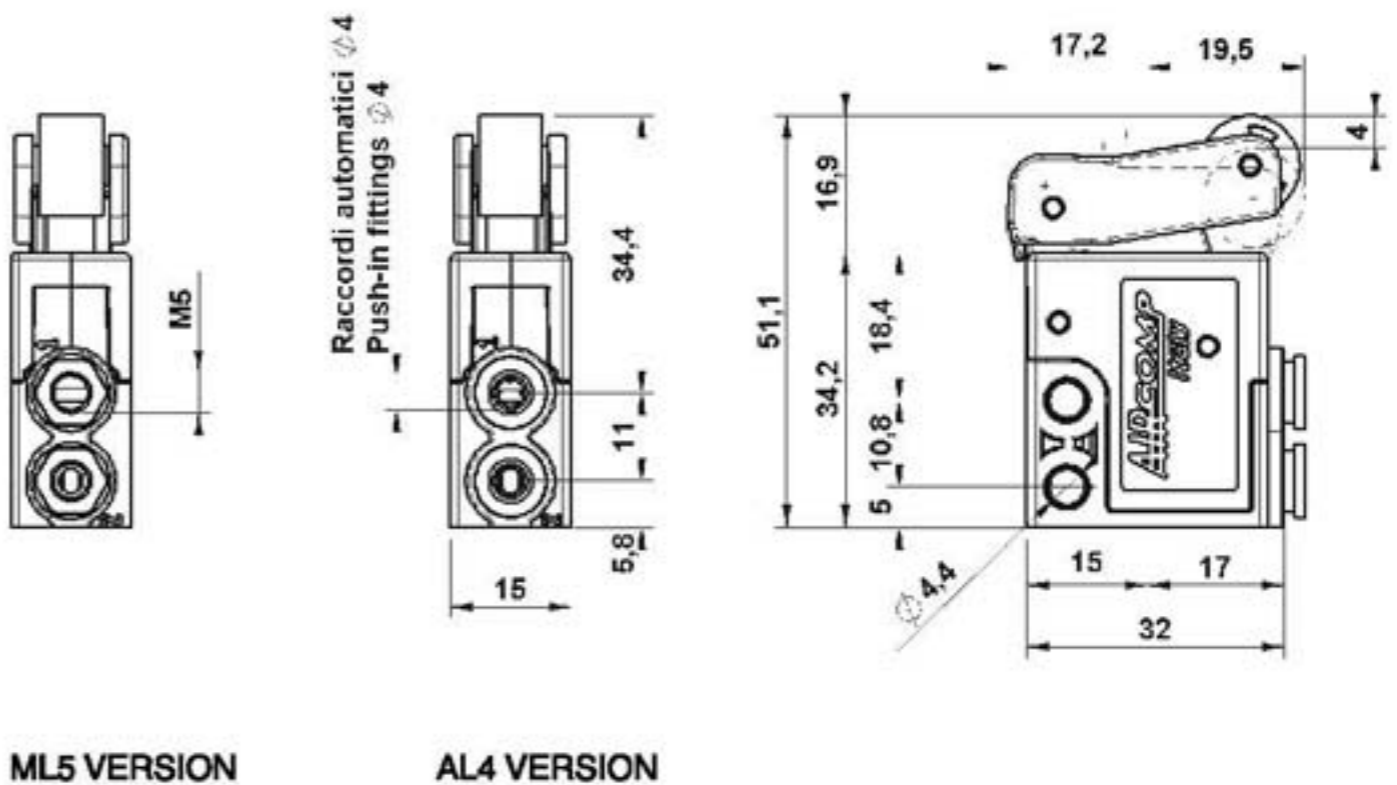
Thrust force (6 Bar): 6 N  
Weight: 0,027 Kg

### Codici di ordinazione

Order codes

	CODE	REF.
	1000412102	MV ML5 15 2 RL ML NC P
	1000492102	MV AL4 15 2 RL ML NC P
	1000413103	MV ML5 15 3 RL ML NC P
	1000493103	MV AL4 15 3 RL ML NC P
	1000413104	MV ML5 15 3 RL ML NO P
	1000493104	MV AL4 15 3 RL ML NO P

### Microvalvole 2/2 - 3/2 a leva rullo con uscite laterali 2/2 - 3/2 Roller lever Microvalves with side ports



## 100 MV M5-Ø4

Microvalvole a comando manuale  
Manually operated Microvalves

### Dati Tecnici

Peso: 0,030 Kg

### Technical data

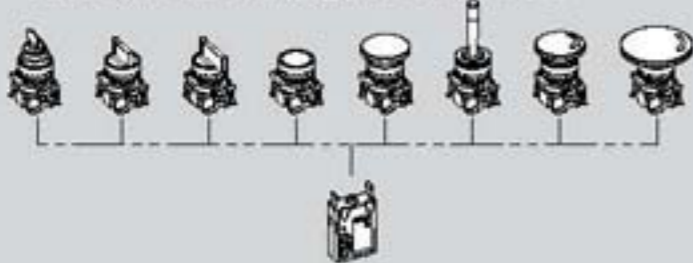
Weight: 0,030 Kg

### Codici di ordinazione Order codes

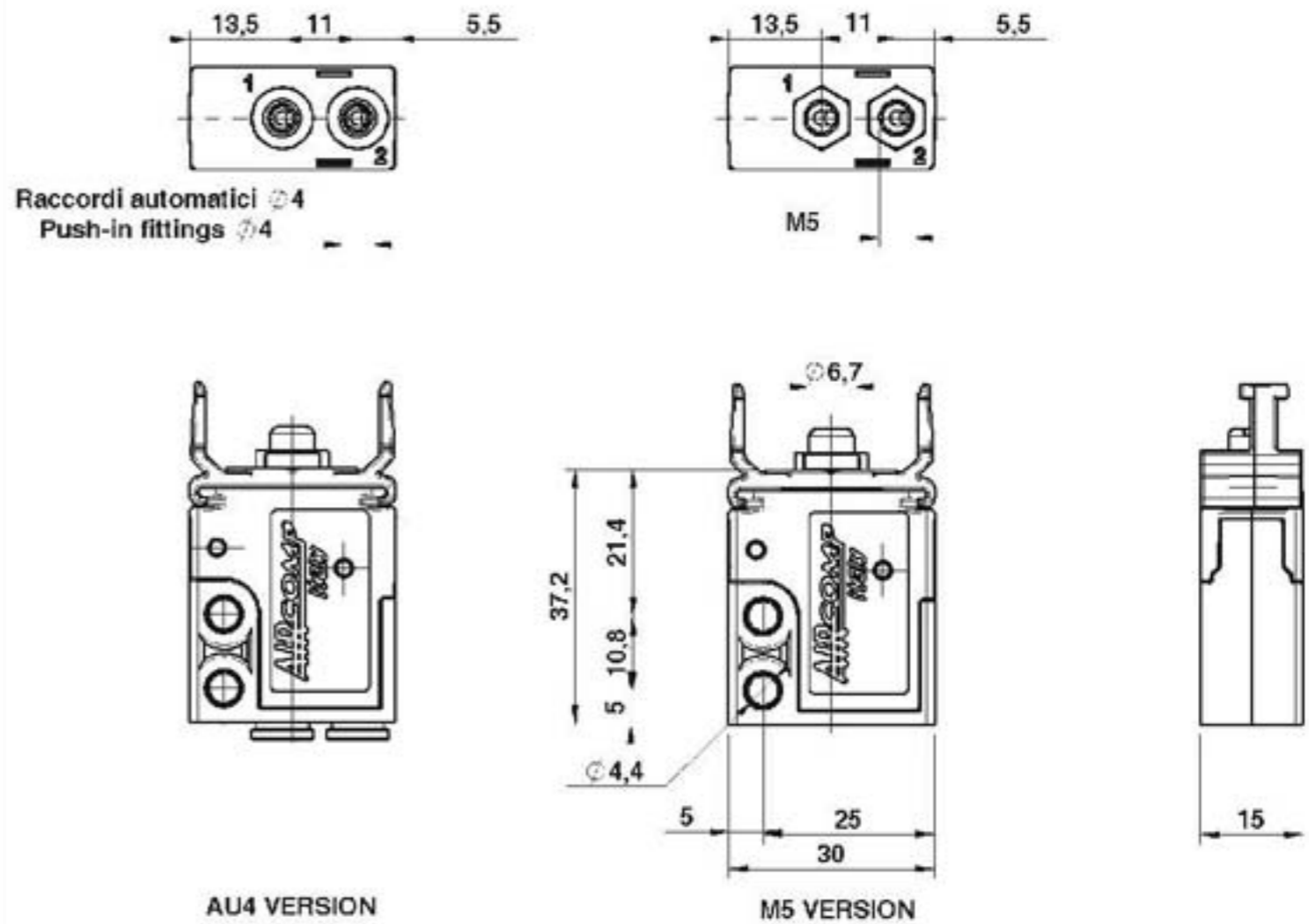
	CODE	REF.
	1000412005	MV M5 15 2 PB ML NC P
	1000492005	MV AU4 15 2 PB ML NC P
	1000413009	MV M5 15 3 PB ML NC P
	1000493009	MV AU4 15 3 PB ML NC P
	1000413010	MV M5 15 3 PB ML NO P
	1000493010	MV AU4 15 3 PB ML NO P

NB: Combinazioni possibili  
NB: Possible combinations  
5/2 = 3/2 NC + 3/2 NO  
5/3 Centri aperti (Open centres) = 3/2 NC + 3/2 NC  
5/3 Centri in pressione (Pressure centres) = 3/2 NO + 3/2 NO

### Configurazioni disponibili (\*) Available configurations (\*)



### Microvalvole 2/2 - 3/2 predisposte per comando a pannello 2/2 - 3/2 Microvalves for panel mounting actuators



(\*) Per la consultazione dei codici e delle caratteristiche degli attuatori vedi pag. 77  
(\*) For actuators codes and features, refer to page 77

### Dati Tecnici

Peso: 0,030 Kg

### Technical data

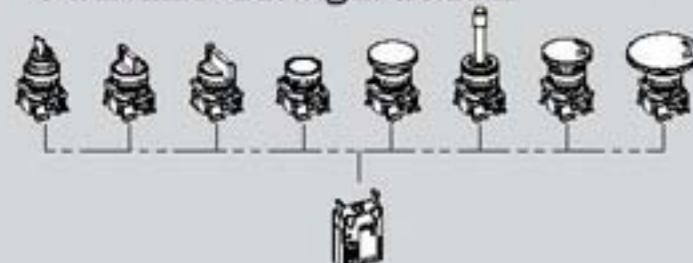
Weight: 0,030 Kg

### Codici di ordinazione Order codes

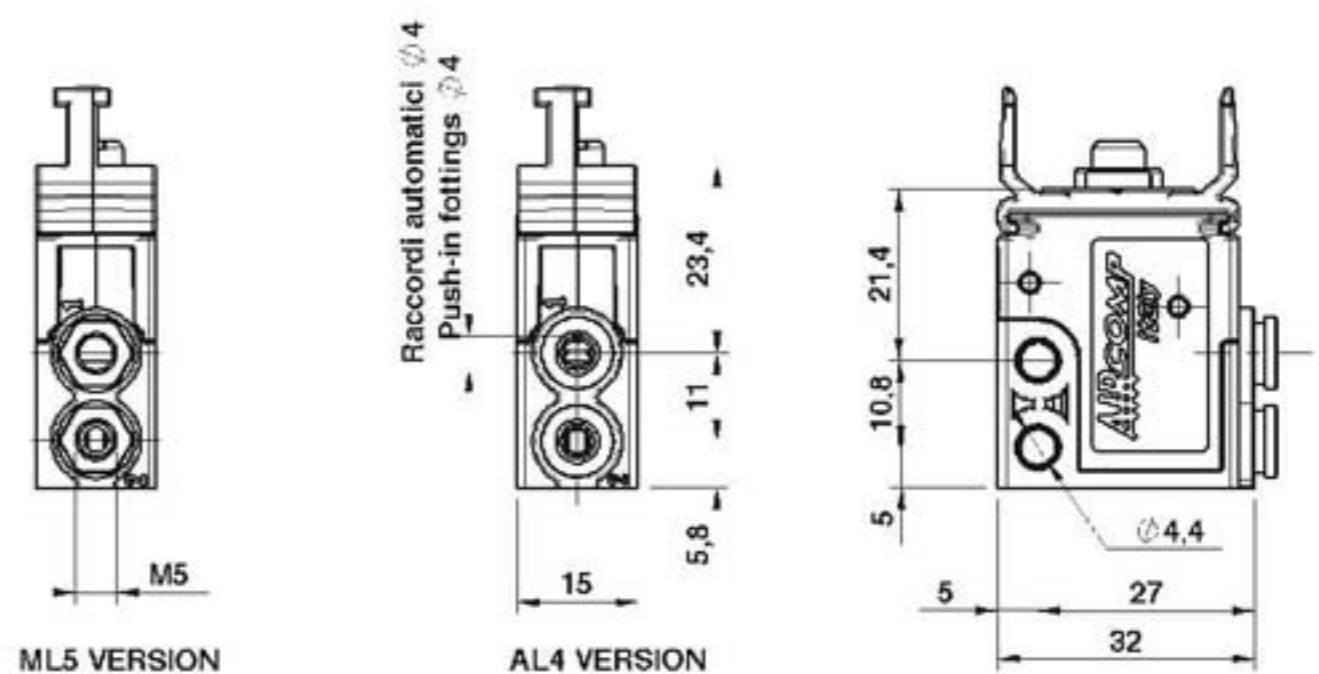
	CODE	REF.
	1000412105	MV ML5 15 2 PB ML NC P
	1000492105	MV AL4 15 2 PB ML NC P
	1000413109	MV ML5 15 3 PB ML NC P
	1000493109	MV AL4 15 3 PB ML NC P
	1000413110	MV ML5 15 3 PB ML NO P
	1000493110	MV AL4 15 3 PB ML NO P

NB: Combinazioni possibili  
NB: Possible combinations  
5/2 = 3/2 NC + 3/2 NO  
5/3 Centri aperti (Open centres) = 3/2 NC + 3/2 NC  
5/3 Centri in pressione (Pressure centres) = 3/2 NO + 3/2 NO

### Configurazioni disponibili (\*) Available configurations (\*)



### Microvalvole 2/2 - 3/2 per comando a pannello con uscite laterali 2/2 - 3/2 Microvalves for panel mounting actuators with side ports



(\*) Per la consultazione dei codici e delle caratteristiche degli attuatori vedi pag. 9  
(\*) For actuators codes and features refer to page 9