

**FEATURES**

- M12 connection with electrical interface in the subbase:
  - Allows to change the valve without any intervention on electrical and pneumatic connection
  - Reduces installation time and wiring costs
  - Prevents wiring errors
- Spool & Sleeve or rubber packed technology in the same dimension body
- High flow rate up to 500 l/min
- Internal or external pilot pressure supply capability and compliance with ISO standard 15407-2 18 mm
- Spool & sleeve technology for long service life, rubber-packed version for high flow combined with multi-functions

**GENERAL**

**Operating pressure** See «SPECIFICATIONS» [1 bar =100 kPa]  
**Ambient temperature range (TS)** -10°C to +50°C  
**Rated flow** See «SPECIFICATIONS»  
 conforming to ISO 6358 C (5/2) = 24,24 x 10<sup>-9</sup> m<sup>3</sup>/s.Pa (sonic conductance)  
 b (5/2) = 0,28 (critical pressure ratio)  
**Pneumatic/electric base** ISO 15407-2 26 mm (M12 in the subbase)  
**Connection** Single subbase  
**Response time** See «SPECIFICATIONS»

fluids (*)	temperature range (TS)	technology	seal materials (*)
air or inert gas ISO 8573 Level 7.4.4	-10°C to +50°C	rubber packed	NBR (nitrile) + PUR (polyurethane)
	-10°C to +50°C	spool & sleeve	metal-to-metal sealing

**CONSTRUCTION**

MATERIALS IN CONTACT WITH FLUID	
(*) Ensure that the compatibility of the fluids in contact with the materials is verified	
<b>Body</b>	Aluminium, E-coating treatment
<b>Spool</b>	Aluminium or st. steel (spool & sleeve)
<b>Piston</b>	POM (rubber packed)
<b>Spring</b>	Steel
<b>Other seals</b>	NBR
<b>Other materials</b>	PA (polyamide) GF 50% (glass fiber reinforced)
<b>Subbases</b>	Aluminium, E-coating treatment

**ELECTRICAL CHARACTERISTICS**

<b>Coil insulation class</b>	F
<b>Round connector</b>	1 x 4 pin M12 male, IEC 61076-2-101
<b>PIN assignment</b>	ISO 20401
<b>Electrical safety</b>	IEC-EN 60730-1 / IEC-EN 60730-2-8
<b>Electrical enclosure protection</b>	IP65 (EN 60529)
<b>Standard voltages</b>	DC (=) : 24V
<b>Power ratings (hot / cold) (=)</b>	1,1 W / 1,3 W

M12 (ISO 20401)		1	not used
		2	not used
		3	common, 0 V
		4	supply, coil 14
		1	not used
		2	supply, coil 12
		3	common, 0 V
		4	supply, coil 14


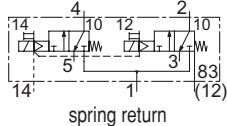
**ACCESSORIES**

<b>Straight M12 connector female</b>	with 5 m cable length (5 pin): catalogue number <b>88130212</b>	
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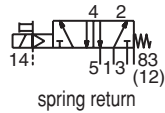
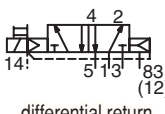
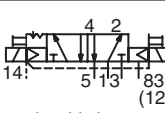
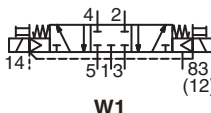
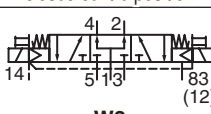
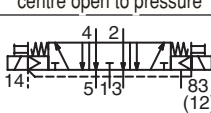


M12 electrical interface in the subbase

**SPECIFICATIONS**

										15-DIGIT PRODUCT CODE
function	symbol  pilot (14) return (12)	rated flow at 6,3 bar ΔP 1 bar l/min (ANR)		response time open / closed  (ms)	pilot pressure at 23°C (bar)		operating pressure port 1 (bar)		dimensions / type (1)	  ISO 15407-2
		1 → 2 1 → 4	2 → 3 4 → 5		min.	max.	min.	max. (PS) air (*)		
							=			
<b>SPOOL VALVE, RUBBER PACKED TECHNOLOGY, WITH IMPULSE MANUAL OPERATOR (EXTERNAL SUPPLY)</b>										
2 x 3/2 NC		500	440	36 / 15	4	8	2	8	01	R502A2BD0MA00F1

**SPECIFICATIONS**

										15-DIGIT PRODUCT CODE
function	symbol  pilot (14) return (12)	rated flow at 6,3 bar ΔP 1 bar l/min (ANR)		response time open / closed  (ms)	pilot pressure at 23°C (bar)		operating pressure port 1 (bar)		dimensions / type (1)	  ISO 15407-2
		1 → 2 1 → 4	2 → 3 4 → 5		min.	max.	min.	max. (PS) air (*)		
							=			
<b>SPOOL VALVE, SPOOL AND SLEEVE TECHNOLOGY, WITH IMPULSE MANUAL OPERATOR</b>										
5/2	 spring return	410	390	16 / 49	2	8	-0,95	8	01	R502A1B10MA00F1
	 differential return	410	390	11 / 26	1,5	8	-0,95	8	01	R502A1BN0NA00F1
	 solenoid air return	410	390	16 / 16	2	8	-0,95	8	01	R502A1B40MA00F1
5/3	 <b>W1</b> closed centre position	360	350	12 / 12	1,5	8	-0,95	8	01	R502A1B60MA00F1
	 <b>W2</b> centre open to pressure	370	350	13 / 23	1,5	8	-0,95	8	01	R502A1B70MA00F1
	 <b>W3</b> centre open to exhaust	340	350	23 / 13	1,5	8	-0,95	8	01	R502A1B50MA00F1

(1) For dimensions, see drawing(s) for each construction type on the following page(s).

(\*) Ensure that the compatibility of the fluids in contact with the materials is verified.

**How to Order  
Valves**

**15-DIGIT PRODUCT CODE**

**R 502 A 2 B N 0 M A00 F1**

**Thread connection**

R = Pad mount

**Product series**

502 (18 mm valve)

**Revision letter**

A = Initial release

**Actuation**

1 = Spool and sleeve

2 = Rubber packed (2x3/2 NC, only)

**Valve type**

B = Solenoid pilot  
(With impulse manual operator)

**Function**

D = 2x3/2 NC, dual 3-way (Rubber packed)

N = 5/2, Differential air return

1 = 5/2, spring return

4 = 5/2, solenoid air return

5 = 5/3, W3, open center to exhaust

6 = 5/3, W1, center closed

7 = 5/3, W2, open center to pressure

**Voltage - class**

F1 = 24 V DC - class F

**Options**

Plug-in valves  
(External piloting) <sup>(1)</sup>

A00 = Standard (No option)  
With impulse manual operator

11B = With maintained manual operator

11M = Without manual operator

14B = Internal pilot supply from port 1

83B = 10 b max. pressure - non UL certified

81G = 11B + 14B

82M = 11B + 83B

82N = 11M + 83B

82K = 11M + 14B

82P = 14B + 83B

69N = 14B + 11M + 83B

69P = 14B + 11B + 83B

**Electrical interface**


M = Plug-in (electrical interface in the subbase)

<sup>(1)</sup> **Single subbases:**

Used external spool valve (2 single subbases, internal or external supply).

**INSTALLATION**

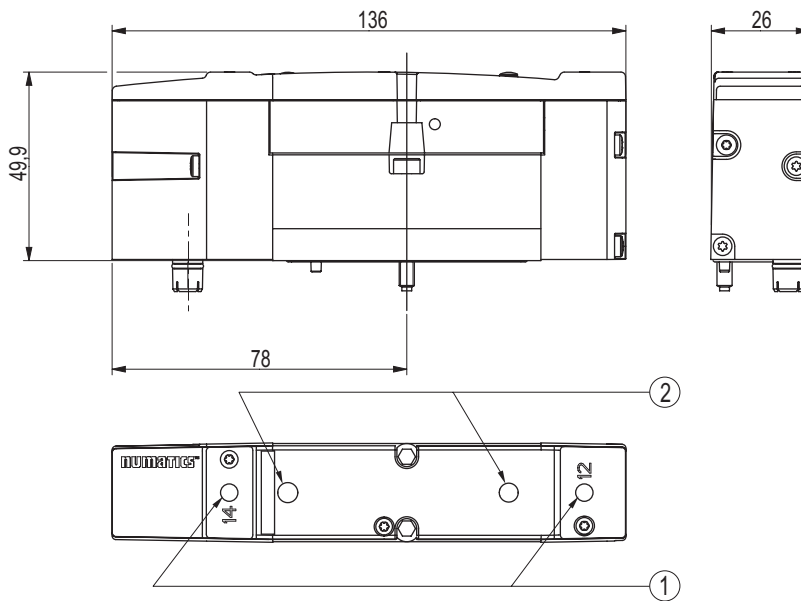
- The spool valves can be mounted in any position without affecting operation
- Spool valve supplied with mounting screws and mounting pad gasket
- ISO 15407-2 pneumatic/electric pad mounting body (plug-in version, single subbase M12)

**DIMENSIONS (mm), WEIGHT (kg)** 

[Configurator - CAD Files](#)



**TYPE 01**  
 Electrical interface "M"  
 ISO 15407-2 / ISO 20401  
 IP65



type	weight
01	0,236

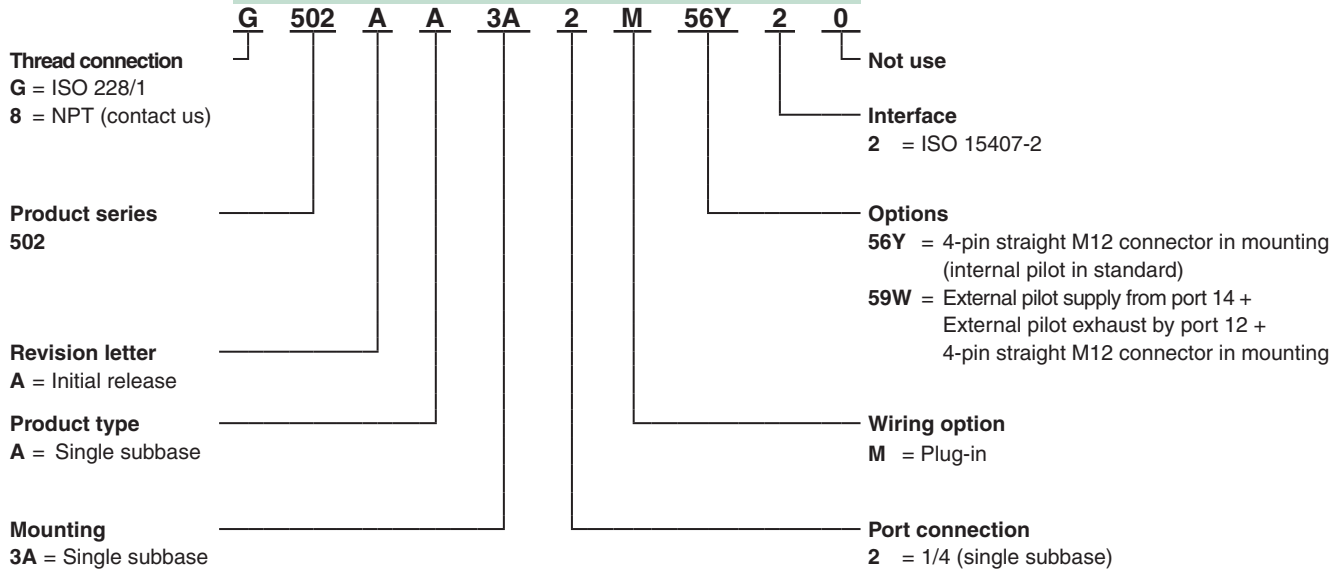
- ① Manual operator
- ② LED indicator

**SINGLE SUBBASES**

**HOW TO ORDER**



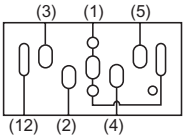

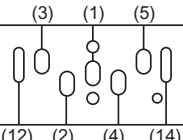
[Configurator - CAD Files](#)

**15-DIGIT PRODUCT CODE**



**SINGLE SUBBASES**

**15-DIGIT PRODUCT CODE**

function	designation	thread type	dimensions / type (1)	
<b>SINGLE SUBBASE (ISO 15407-2) FOR PLUG-IN VALVE</b>				
	 <p><b>internal supply</b>                      1-2-3-4-5 = 1/4                      12 = 1/8 (pilot exhaust)                      (mounting interface surface with electrical connector)</p>	G	02	<b>G502AA3A2M56Y20</b>
	 <p><b>external supply</b>                      1-2-3-4-5 = 1/4                      12 = 1/8 (pilot exhaust)                      14 = 1/8 (pilot external supply)                      (mounting interface surface with electrical connector)</p>	G	02	<b>G502AA3A2M59W20</b>

(1) For dimensions, see drawing(s) for each construction type on the following page(s).

**DIMENSIONS (mm), WEIGHT (kg)**

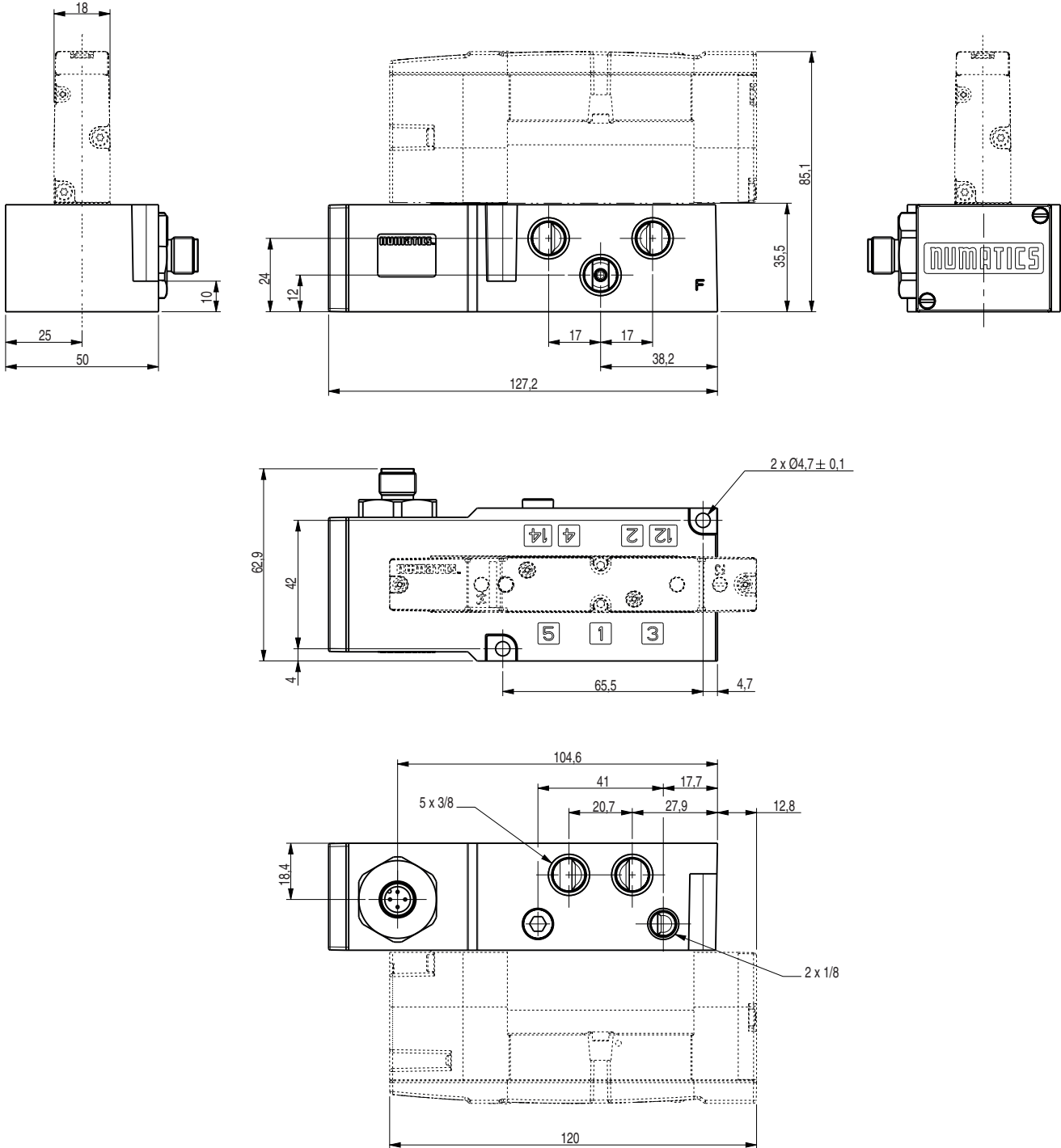
[Configurator - CAD Files](#)



**TYPE 02**

Single subbases, M12 connector in mounting  
 ISO 15407-2, plug-in version  
 3/8 = 1, 2, 3, 4, 5 ports  
 1/8 = 12, 14 ports

**G502AA3A3M56Y20 - G502AA3A3M59W20**



type	code	weight
02	G502AA3A3M56Y20	0,231
	G502AA3A3M59W20	0,228