

## SRD998 Intelligent Positioner with HART Communication



The intelligent positioner SRD998 is designed to operate pneumatic valve actuators and can be operated from control systems (e.g. the Foxboro I/A Series System), controllers or PC-based configuration- and operation tools such as the FDT/DTMs VALcare™. The positioner is available with HART 7 communication protocol. The extra-large multi-lingual full text graphical-LCD, in conjunction with the rotary selector, allows a comfortable and easy local configuration and operation. For installations in contact with explosive atmospheres, certificates are available.

### MAIN FEATURES

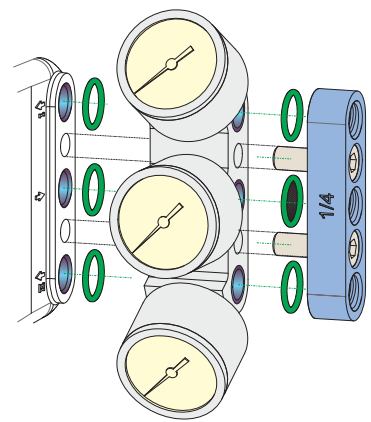
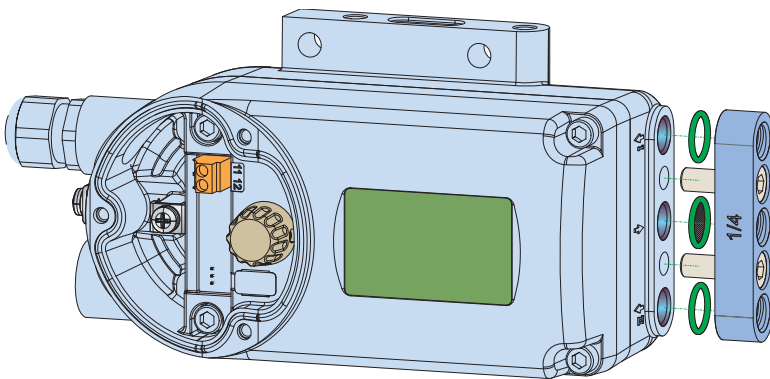
#### Intelligent

- Auto-start with self-calibration
- Self diagnostics, status- and diagnostic messages
- Easy local operation with the rotary selector
- Extra-large Multi-Lingual full text graphical LCD
- VALcare™ DTM with comprehensive data for fast configuration
- With HART 7 communication
- Stroke 8 to 260 mm (0.3 to 10.2 in) with standard lever; larger stroke with special lever
- Angle range up to 95 ° angle
- Mounting onto any linear or rotary actuator
- Supply air pressure up to 6 bar (90 psig)
- Single or double-acting
- Protection class IP 66 and NEMA 4X
- Explosion protection: Intrinsic Safety according to ATEX / IECEx, INMETRO, NEPSI, ...

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**DESIGN**



## Supply

Supply air pressure ..... 1.4 to 6 bar (20 to 87 psig)

Output to actuator ..... 0 to ~100 % of supply air pressure (up to 5.5 bar at 6 bar supply air pressure)

Air supply ..... according to ISO 8573-1  
 - Solid particle size and density class 2  
 - Oil rate ..... class 3  
 - Pressure dew point 10 K under ambient temperature

The use of **filter regulator** for air supply of positioner is strongly recommended. It reduces the air pressure to actuator's maximum pressure and keeps it constant.

For standard pneumatic flow we recommend the **FRS02** (Aluminum) or **FRS03** (SS) filter regulator.

## Travel range

Stroke range ..... 8 to 260 mm (0.3 to 10.2 in) with standard feedback levers; special levers on request

Rotation angle range ..... up to 95 °angle without mechanical stop

## Response characteristic <sup>1)2)</sup>

Sensitivity ..... < 0.1 % of travel span Non-linearity (terminal based adjustment) ..... < 0.6 % of travel span  
 Hysteresis ..... < 0.3 % of travel span  
 Supply air dependence ..... < 0.1 % / 1 bar (15 psi)  
 Temperature effect ..... < 0.3 % / 10 K  
 Mechanical vibration effect acc. IEC 60068-2-6 (2007) for 10 to 500 Hz up to 2 g .

For Pneumatcs B0S ..... < 0.25% up to 80 Hz and 1 g  
 < 0.25% up to 70 Hz and 2 g

For Pneumatcs C0S ..... < 0.25% up to 400 Hz and 1 g  
 < 0.25% up to 70 Hz and 2 g

In case of high vibrations we recommend using remote mounting solution.

## Pneumatic Performance - Air flow

\ Air flow at Air Input/output :	1.4 bar	3 bar	6 bar			
<b>Pneumatic Code B0S</b> (single acting - Standard Flow)						
to pressurize actuator	4000	7000	14000			NI/h
to vent actuator	2700	5000	10000			NI/h
<b>Pneumatic Code C0S</b> (double acting - Standard Flow)						
to pressurize actuator	3500	5000	10000			NI/h
to vent actuator	2500	3750	7500			NI/h

## Pneumatic Performance - Air consumption <sup>3)</sup> [ NI/h ]

Air consumption at steady state:		1.4 bar	3 bar	6 bar			
<b>Pneumatic Code:</b>		Input signal					
<b>B0S</b> (single acting - Standard Flow)	0 %	<100	<100	<100			NI/h
<b>B0S</b> (single acting - Standard Flow)	100 %	175	250	400			
<b>C0S</b> (double acting - Standard Flow)	0 %	175	250	400			NI/h
<b>C0S</b> (double acting - Standard Flow)	50 %	215	335	570			NI/h
<b>C0S</b> (double acting - Standard Flow)	100 %	175	250	400			NI/h

1) Data measured according to VDI/DE 2177 and IEC 61514-2

2) With 90° angle, rotary actuator

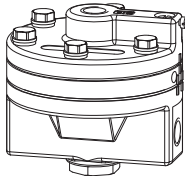
3) Measured according ANSI / ISA-75.13.01-2013

**BOOSTERS for increased air flow**

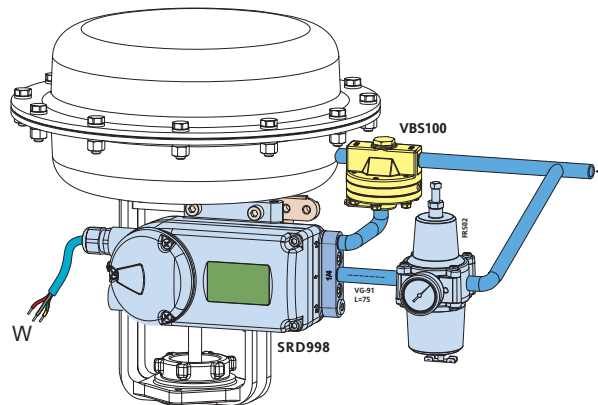
**Volume Booster Series** (to order as accessory) For large actuators or to reduce action time, a volume booster may be necessary.

**VBS100 / VBS110**

Volume boosters with Cv1 and pneumatic connection 1/4", for remote mounting  
 VBS100 in Aluminum, VBS110 in Stainless Steel 316



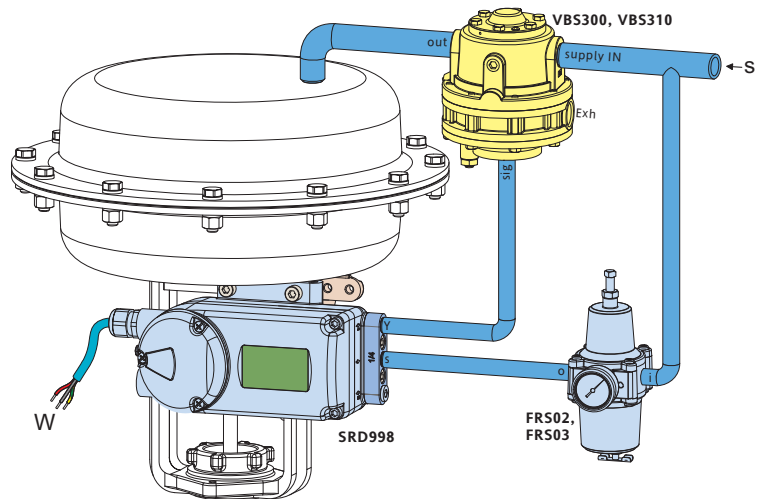
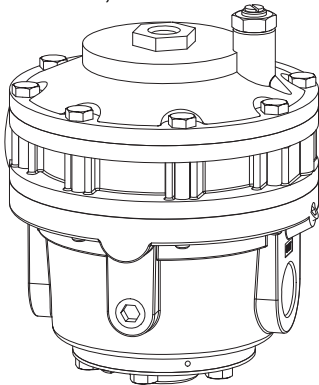
Examples for mounting



For more information please consult PSS EVE0601.

**VBS300 / VBS310**

Volume boosters with Cv 7 and pneumatic connection 1", for remote mounting  
 VBS300 in Aluminum, VBS310 in Stainless Steel 316



For more information please consult PSS EVE0603.

## FUNCTIONAL SPECIFICATIONS

### Features

**Automatic start-up**..... (Autostart functionality)  
Automatic determination of the mechanical end positions of the valve (initial value and final value), IP motor parameters, direction of action of the spring and control parameters. The control parameters are optimized dynamically during this routine.  
This procedure makes a perfect adjustment and optimization to the actuator possible without additional manual settings! Several autostart modes are available (details see on next pages).

### Operation and Configuration

The local LCD enable a fast and easy configuration as well as clear diagnostic messages.

Local..... with local rotary selector  
Display..... multi-lingual graphic LCD

The positioner contains following menu languages:

- English • German • French • Chinese
- Portuguese • Spanish ...

**Manual local and remote settings:**

Actuator mode .....	linear or rotary actuator
Linear valve .....	left or right mounted
Rotary actuator .....	opening clockwise or counter-clockwise
Valve characteristic .....	linear, equal percentage, invers-equal percentage or custom (22 points)
Valve action .....	opens or closes with increasing setpoint
Split range .....	free upper and lower values
Travel limits .....	free upper and lower values
Cutoffs .....	free upper and lower values
Stroke range.....	configurable
Temperature unit.....	configurable (°C or °F)
Autostart.....	- Endpoints - Standard Autostart - Enhanced Autostart - Smooth response - Fast response
Control parameters .....	Determined during Autostart.
Working range .....	freely adjustable (for indication on LCD)
Manual adjustment of .....	P-gain, I-time, D-time, T63-time, and dead band
Manual operation.....	Manual input of setpoint to drive the valve in steps of 12.5 % or 1 %
Pneumatic test .....	Function to test the pneumatic output
LCD orientation .....	standard, and upside down

**Software supported configurations:**

- By means of Hand Held Terminal (HART)
- PC by means of VALcare DTM Software
- I/A Series System, Foxboro Evo and other DCSs

**Failure handling**

- In case of Single Acting, Safety position at
- Air supply failure ..... pressure y1 = zero
  - Electric power failure ..... pressure y1 = zero
  - Failure of electronics ..... pressure y1 = zero
- In case of Double Acting or spool valve amplifier, safety position at
- Air supply failure..... pressure y1 = zero;  
y2 = zero
  - Electric power failure ..... pressure y1 = zero;  
y2 = full air supply pressure
  - Failure of electronics ..... pressure y1 = zero;  
y2 = full air supply pressure

## PHYSICAL SPECIFICATIONS (common data for all versions)

### Mounting

#### Attachment to stroke actuators

- for casting yoke  
acc. to IEC 534-6 (NAMUR) with attachment kit EBZG-H  
or -H1

- for pillar yoke  
acc. to IEC 534-6 (NAMUR) with attachment kit EBZG-K  
or -K1

Stroke range with feedback lever:

- standard (EBZG-A) 8 to 70 mm / 0.31 to 2.76 in  
- extended (EBZG-B) 60 to 120 mm / 2.36 to 4.72 in  
- extended (EBZG-A1) 110 to 260 mm / 4.33 to 10.24 in  
Larger stroke ranges can be realized with special levers.

#### Attachment to rotary actuators acc. to VDI/VDE 3845

with attachment kit ..... EBZG-R  
- Further attachment kits see Model Codes page 15/16  
- Mounting orientation see attachment dimensions starting from page 17

### Materials

Housing and covers ..... Aluminum Alloy No. 230  
(GD-AISI12) Polyester Powder coated  
Sealings between covers ..... silicone elastomer and  
silicone core with Ag/Cu particles  
LCD Window ..... Polycarbonate, U.V.  
stabilized  
External Screws ..... Stainless Steel V2A 1.4301  
Motherboard ..... Coated with protective resin  
All moving parts of feedback  
system (e.g. shaft) ..... 1.4306 / 1.4571 / 1.4104  
Attachment kits ..... V4A 1.4401 or  
(depending upon version) Aluminum Alloy No. 230  
(GD-AISI12) finished with DD varnish  
Mounting bracket ..... Aluminum Alloy No. 230  
(GD-AISI12)  
Pneumatic diaphragms .... VMQ, PVMQ (Silicone  
elastomer, suitable for use in the paint industry)  
(depending upon version)

### Weight

With pneumatic B0S ..... approx. 2.1 kg (4.7 lbs)  
COS ..... approx. 2.3 kg (5.1 lbs)

### Pneumatic connection

NAMUR mounting ..... G 1/4 or 1/4-18 NPT  
via manifold

### Electrical Connection

Line entry ..... 1 cable gland M20 x1.5,  
1/2-14 NPT with Adapter AD-)  
Cable diameter ..... 6 to 12 mm (0.24 to 0.47 in)  
Screw terminals ..... 2 terminals for input  
Wire cross section ..... 0.3 to 2.5 mm<sup>2</sup> (AWG 22-14)  
max torque 0.6 Nm

### Ambient conditions

Operating conditions ..... acc. to IEC 654-1

The device can be operated at a class Dx location.

Ambient temperature

Operation <sup>1)</sup> ..... -40 to 85 °C (-40 to 185 °F)

Transport and storage .... -40 to 85 °C (-40 to 185 °F)

If the device is exposed to sunlight and the temperature may rise above 80 °C / 176 °F, we recommend a sun shade.

Storage conditions

acc. to IEC 60721-3-1 ..... 1K5; 1B1; 1C2; 1S3; 1M2

Indicators

LCD (visible) <sup>2)</sup> ..... -25 to 70 °C (-13 to 158 °F)

Relative humidity ..... up to 100 %

Protection class

acc. to IEC 60529 ..... IP 66

acc. to NEMA ..... Type 4X

### Electromagnetic compatibility EMC

Operating conditions ..... industrial environment

Immunity according to

EN 61326 ..... fulfilled

IEC 61326 ..... fulfilled

EN 61000-6-2 ..... fulfilled

Emission according to

EN 61326

Class A and Class B ..... fulfilled

EN 61000-6-4 ..... fulfilled

EN 55011 Group 1,

Class A and Class B ..... fulfilled

NAMUR recommendation

EMV NE21 ..... fulfilled

### SAFETY REQUIREMENTS

#### CE label

Electromagnetic

Compatibility ..... 2014 / 30 / EC

Low-voltage regulation ..... not applicable

See also Declaration of Conformity.

#### Safety

According to EN 61010-1

(or IEC 1010-1) ..... Safety class III

Overvoltage Category I

External fuses ..... Limitation of power supplies

for fire protection must be observed acc. to

EN 61010-1, appendix F (or IEC 1010-1).

1) Details see Certificates of Conformity.

2) Below -20 °C the LCD reacts only slowly;  
above +70 °C the background becomes dark

3) Under service as directed



**Electrical classification** <sup>1) 2)</sup>

See Certificates of Conformity EX EVE0108 A

**Intrinsically Safe according to ATEX / IEC Ex**

Code A1, A2, or A3

A1 = II 2 G Ex ia IIC T4/T6 Gb / II 1 D Ex ia IIIIC T100 °C Da  
or

A2 = II 2 G Ex ib IIC T4/T6 Gb / II 2 D Ex ib IIIIC T100 °C Db  
or

A3 = II 3 G Ex ic IIC T4/T6 Gc / II 3 D Ex ic IIIIC T100 °C Dc

For use in hazardous areas in certified safe circuits with the following maximum values:

Pi	Ui	Ii	T4	T6
900 mW	30 V	130 mA	-40°C to 80°C	
660 mW	28.1 V	130 mA	-40°C to 80°C	-40°C to 44°C
630 mW	25.7 V	130 mA	-40°C to 80°C	-40°C to 46°C
590 mW	25.3 V	130 mA	-40°C to 80°C	-40°C to 48°C
510 mW	26 V	130 mA	-40°C to 80°C	-40°C to 52°C

$L_i = < 10 \mu\text{H}$

$C_i = < 2.5 \text{ nF}$

IP degree acc. to IEC 60529..IP 66

Other electrical certifications in progress.

1) With appropriate order only

2) National requirements must be observed

**SRD998 with HART communication**  
**SRD998-Hxxxx**

Signal Input ..... Two wire system  
 Reverse polarity protection. standard feature  
 Signal range ..... 4 to 20 mA  
 Operating range. .... 3.6 to 21.5 mA  
 Input voltage ..... DC 12...36 V <sup>1)</sup> (unloaded)  
 Load ..... 420 Ohms, 8.4 V at 20 mA  
 Communication signal..... HART 7, 1200 Baud, FSK  
 (Frequency Shift Key)  
 modulated on 4 to 20 mA  
 0.5 Vpp at 1 kOhm load

Input impedance Zi ..... Z = 320 Ohms  
 for ac voltage 0.5 to 10 kHz with < 3 dB non-linearity  
 Cable capacity and inductance see HART standard  
 specifications (e.g. C < 100 nF).  
 Impedance of other devices at the input (parallel or  
 serial) must be within HART spec.  
 Applications without communication require not to exceed  
 input capacitance parallel to the input not higher than 5 µF.  
 Start-up time..... approx. 3 sec  
 Interruption time without power down . . . typ. 8 ms <sup>2)</sup>

1) On request we can specify higher voltage limits  
 2) Worst case conditions 4-20 mA, i/p-output with max. current

**Configuration**

The SRD998 can be configured via HART by any host system whatever is a PC with a HART Modem, Hand Held Terminal or a DCS.

**LOCAL** (by means of rotary selector and LCD display)  
 See page 6

**DTM (Device Type Manager)**

We are a leading company in term of FDT-DTM technology

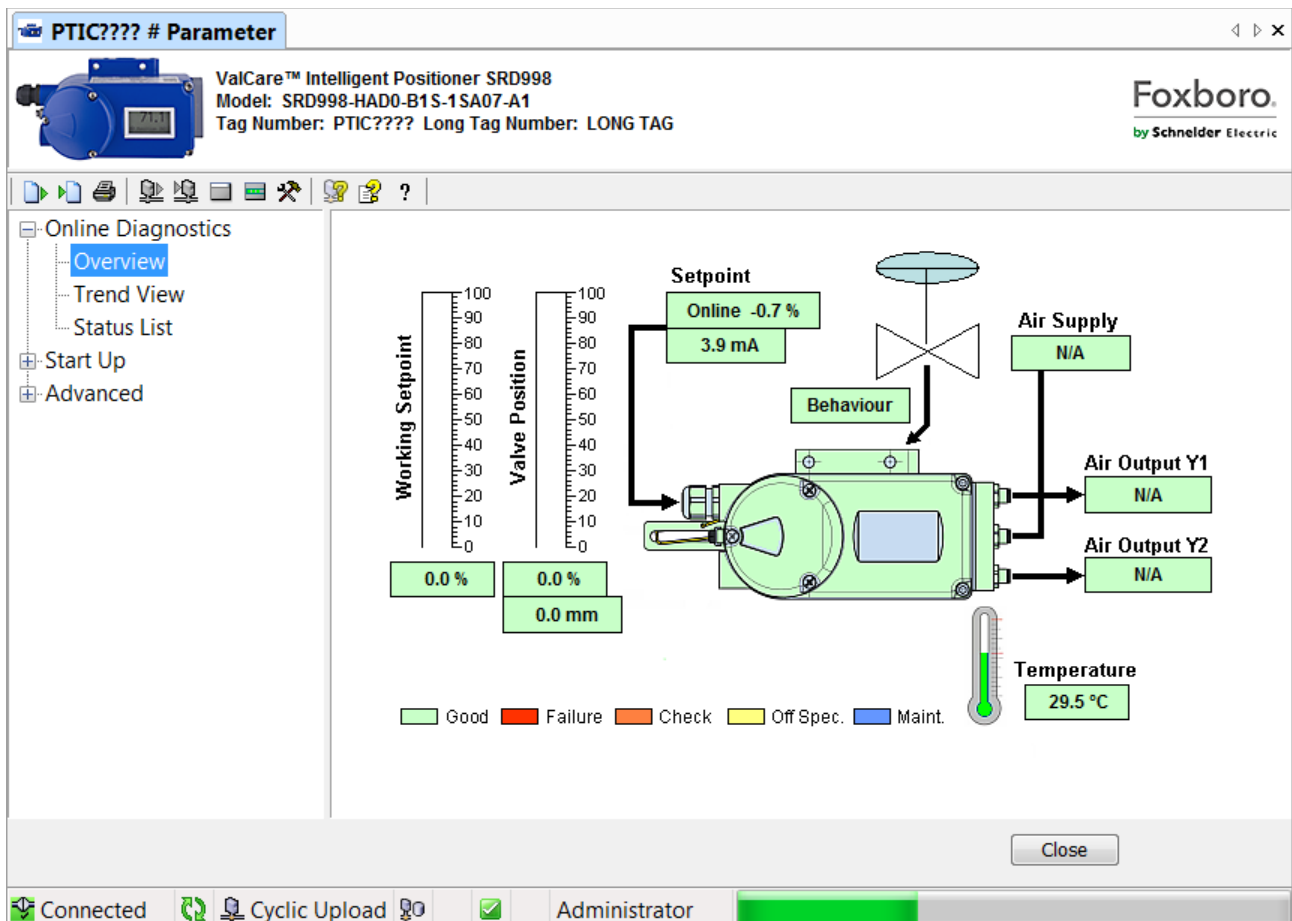
[http://www.fdtgroup.org/product-catalog/certified-dtms?company=Foxboro+Eckardt+GmbH&field\\_device\\_type\\_value\\_many\\_to\\_one=All&field\\_protocol\\_value\\_many\\_to\\_one=All](http://www.fdtgroup.org/product-catalog/certified-dtms?company=Foxboro+Eckardt+GmbH&field_device_type_value_many_to_one=All&field_protocol_value_many_to_one=All)

Therefore we provide a DTM fully certified for its interoperability and with the state-of-the-art presentation and diagnostics features.

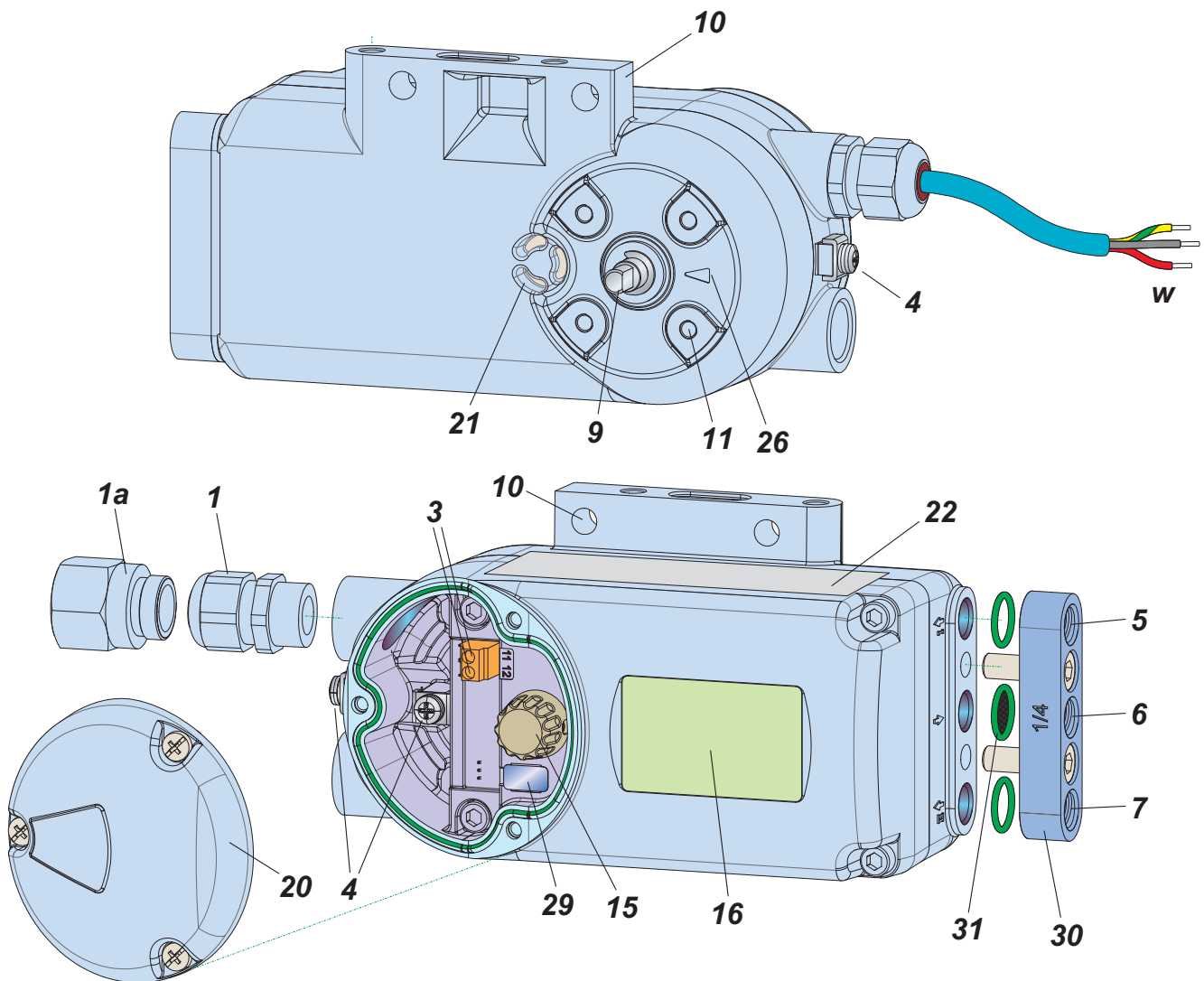
The DTM can be downloaded from our homepage.

**DD (Device Description) and EDD (Enhanced Device Description)**

In case the host system is not supporting the FDT-DTM technology, you can download the DD and/or EDD from our homepage.



## FUNCTIONAL DESIGNATIONS



- |                                                                  |                                                                      |
|------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>1</b> Cable gland                                             | <b>11</b> Connection base for attachment to rotary actuators         |
| <b>1a</b> Adapter, eg. 1/2"-14 NPT                               | <b>15</b> Rotary selector for select Menu and press to confirm       |
| <b>3</b> Screw terminals (11 / 12) for input (w)                 | <b>16</b> LCD with true text in different languages                  |
| <b>4</b> Ground connection (inner and outer)                     | <b>20</b> Cover for electrical connection compartment                |
| <b>5</b> Output I (y1)                                           | <b>21</b> Air vent, dust and water protected                         |
| <b>6</b> Air supply (s)                                          | <b>22</b> Data label                                                 |
| <b>7</b> Output II (y2)                                          | <b>26</b> Arrow is perpendicular to shaft <b>9</b> at angle 0 degree |
| <b>9</b> Feedback shaft                                          | <b>29</b> Service only                                               |
| <b>10</b> Connection manifold for attachment to stroke actuators | <b>30</b> Connecting manifold, G 1/4 or 1/4 NPT                      |
|                                                                  | <b>31</b> Component O-ring with filter, for air supply               |



**MODEL CODES SRD998 (continued)**

**Electrical Certification**

without certification . . . . .		ZZ
ATEX / IEC Ex: II 2G Ex ia IIC T4/T6 Gb, II 1D Ex ia IIIC T100 °C Da . . . . .		A1
ATEX / IEC Ex: II 2G Ex ib IIC T4/T6 Gb, II 2D Ex ib IIIC T100 °C Db . . . . .		A2
ATEX / IEC Ex: II 3G Ex ic IIC T4/T6 Gc, II 3D Ex ic IIIC T100 °C Dc . . . . .		A3
FM certification IS . . . . . (a)		F1
CSA certification IS . . . . . (a)		C1
EAC certification IS . . . . . (a)		G1
INMETRO: Ex ia IIC T4/T6 Gb, Ex ia IIIC T100 °C Da, IP66 . . . . .		B1
INMETRO: Ex ib IIC T4/T6 Gb, Ex ib IIIC T100 °C Db, IP66 . . . . .		B2
INMETRO: Ex ic IIC T4/T6 Gc, Ex ic IIIC T100 °C Dc, IP66 . . . . .		B3
NEPSI: Ex ia IIC T4/T6 Ga, Ex ia D20 T100 Da, IP66 . . . . .		N1
NEPSI: Ex ib IIC T4/T6 Gb, Ex ib D21 T100 Db, IP66 . . . . .		N2
NEPSI: Ex ic IIC T4/T6 Gc, Ex ic D22 T100 Dc, IP66 . . . . .		N3
KOSHA certification IS . . . . . (a)		K1
TIIS certification IS . . . . . (a)		J1
CNS certification IS *		

**Options**

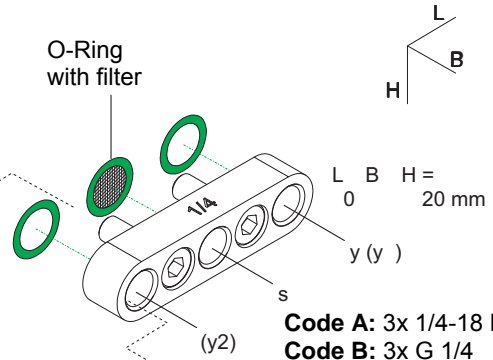
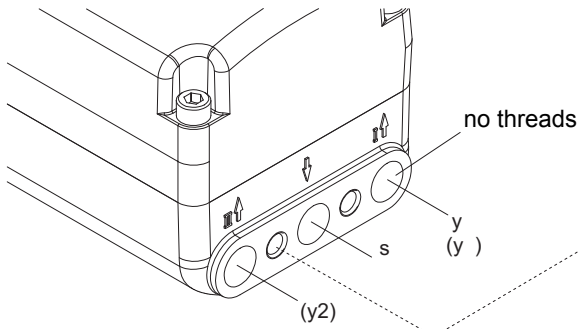
Positioner suitable for use of natural gas instead of air supply . . . . . (a)	-S
Positioner free of copper and its alloys . . . . . (a)	-C
Approved for SIL2 / SIL3 application . . . . . (a)	-Q
Stainless Steel Label Fixed With Wire . . . . .	-L
Positioner with ECEP . . . . . (a)	-X

**Example:**

SRD998 – . . . . . H . . BD . 0 . – . B . . 0 . . S . – . 1 . . S . . A . . 0 . . 7 . – . A1 . – . L  
 = Intelligent Positioner, HART, single acting, ATEX / IECEx IS certified, SS Label

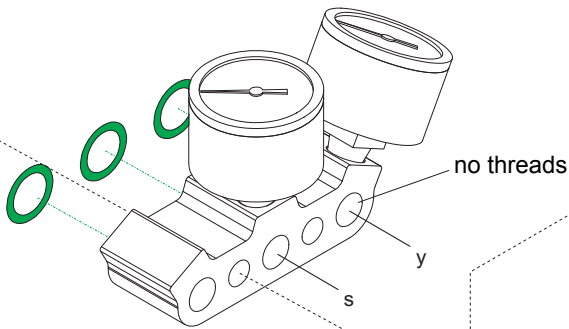
- (a) Not released
- (b) Only to be ordered with single acting model code Version B
- (c) Only to be ordered with double acting model code Version C
- \* The SRD998 has the CNS certificate for usage in Taiwan

**Accessories, for all basic devices**

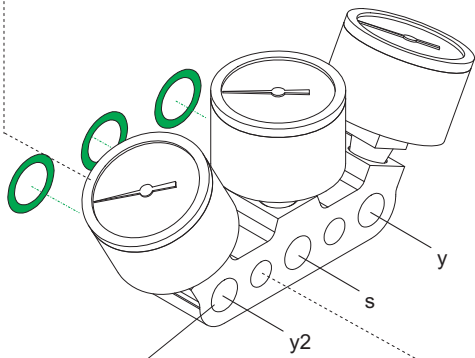


**Code A:** 3x 1/4-18 NPT  
**Code B:** 3x G 1/4  
Connection manifold

Sticker closes the unused output at single acting

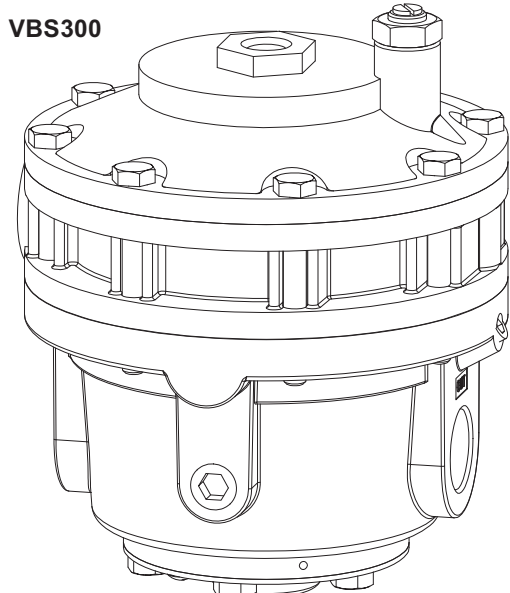
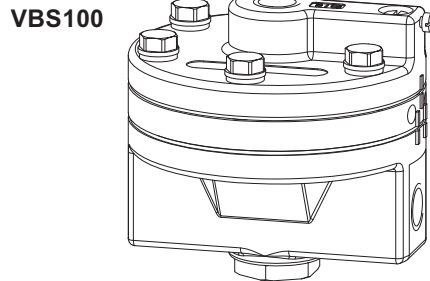


**Code 1 or 2, single**  
Connection manifold for single acting positioner with pressure gauges for supply air s and output y



**Code 3 or 4, double**  
Connection manifold for double acting positioner with pressure gauges for supply air s, outputs y1 and y2

**Boosters for remote mounting:**  
(see extra PSS)



**MODEL CODES Accessories**

080915

**Accessories for SRD998****Filter Regulators**

Filter Regulator for -30°C to 70°C. . . . .	FRS02
Stainless Steel (316) Filter Regulator . . . . .	FRS03
High Flow Filter Regulator 1/2 inch / Aluminium . . . . .	FRS04
High Flow Filter Regulator 1/2 inch / Stainless Steel. . . . .	FRS05
Mounting Bracket for FRS02 or FRS03 . . . . .	EBZG-FR1
Orientable Mounting Bracket for FRS02 or FRS03 . . . . .	EBZG-FR2
Nipple for direct mounting Filter regulator 1/4 NPT both sides . . . . .	VG-91
Mounting Bracket for FRS04 . . . . .	EBZG-FR4
Mounting Bracket for FRS05 . . . . .	EBZG-FR5
Nipple 1/2 NPT (FRS04/05 side) to 1/4 NPT (SRD998 side) for direct piping. . . . .	VG-93

**Communication / Modem / DTM**

HART USB Modem (made by Ifak) with ATEX IS Certification . . . . .	MOD900
DTM for SRD Serie for HART / FF / Profibus . . . . .	VALCARE

**Booster Relay** (in case of double acting, qty. must be 2 pieces)

Booster Cv1 - Alu Housing - Remote mount . . . . .	VBS100
Booster Cv1 - SST Housing - Remote mount . . . . . (a)	VBS110
Booster Cv7 - Alu Housing - Remote mount . . . . .	VBS300
Booster Cv7 - SST Housing - Remote mount . . . . .	VBS310

**Lock-in Relays**

Lock In Relay, Single Acting, Aluminum Casing . . . . . (a)	LIR01
Lock In Relay, Double Acting, Aluminum Casing. . . . . (a)	LIR02
Lock In Relay, Single Acting, SST 316L Casing . . . . . (a)	LIR03
Lock In Relay, Double Acting, SST 316L Casing. . . . . (a)	LIR04

**Limit switch**

Mechanical Limit Switch weatherproof and plastic housing (TE Sensors XCKN2118P20) . . . . .	MLS01
---------------------------------------------------------------------------------------------	-------

**Cable Gland**

Cable Gland, M20x1.5 Plastics, Color Gray/Black . . . . .	BUSG-K6
Cable Gland, M20x1.5 Plastics, Color Blue . . . . .	BUSG-K7
Cable Gland, M20x1.5 Plastics, Color White. . . . .	BUSG-K9
Cable Gland, M20x1.5 Stainless Steel. . . . .	BUSG-S6

**Adapter**

Adapter (Brass With Nickel Coating) M20 x 1.5 To 1/2 - 14 NPT (Internal Thread). . . . .	AD-A5
Adapter (ss) M20x1.5 to 1/2-14 NPT (Internal Thread) . . . . .	AD-A6

(a) not released

**MODEL CODES Accessories**

010413

**Accessories for SRD998**

**Attachment Kits**

**EBZG**

For diaphragm actuators with casting yoke acc. NAMUR (incl. standard Couple lever) . . . . .	-H
For diaphragm actuators with pillar yoke acc. NAMUR (incl. standard Couple lever). . . . .	-K
For FoxTop / FoxPak . . . . . (g) . . . . .	-E1
For mounting to rotary actuators acc. VDI/VDE 3845 (without bracket) . . . . .	-R
Brackets VDI/VDE 3845 (A = 80 mm / 3.15 in; B = 20 mm / 0.79 in) . . . . .	-C1
Brackets VDI/VDE 3845 (A = 80 mm / 3.15 in; B = 30 mm / 1.18 in) . . . . .	-C2
Brackets VDI/VDE 3845 (A = 130 mm / 5.12 in; B = 50 mm / 1.97 in). . . . .	-C3
Brackets VDI/VDE 3845 (A = 130 mm / 5.12 in; B = 30 mm / 1.18 in). . . . .	-C4
Universal Brackets VDI/VDE 3845 (A = 80 or 130 mm; B=20 or 30 or 50 mm) . . . . .	-C5

**Couple Lever**

**EBZG**

Standard (stroke max. 80 mm) . . . . .	A
Extended (stroke max. 260 mm) . . . . .	-A1
Reduced (stroke < 8 mm) . . . . .	-A2
Fold feedback lever (stroke 8 to 70 mm) . . . . .	-A3
Short stroke (stroke 8 to 35 mm) . . . . .	-A4
Couple Lever Folded (stroke special) . . . . .	-A5
Extended (stroke max. 120 mm) . . . . .	-B

**Carrier bolt**

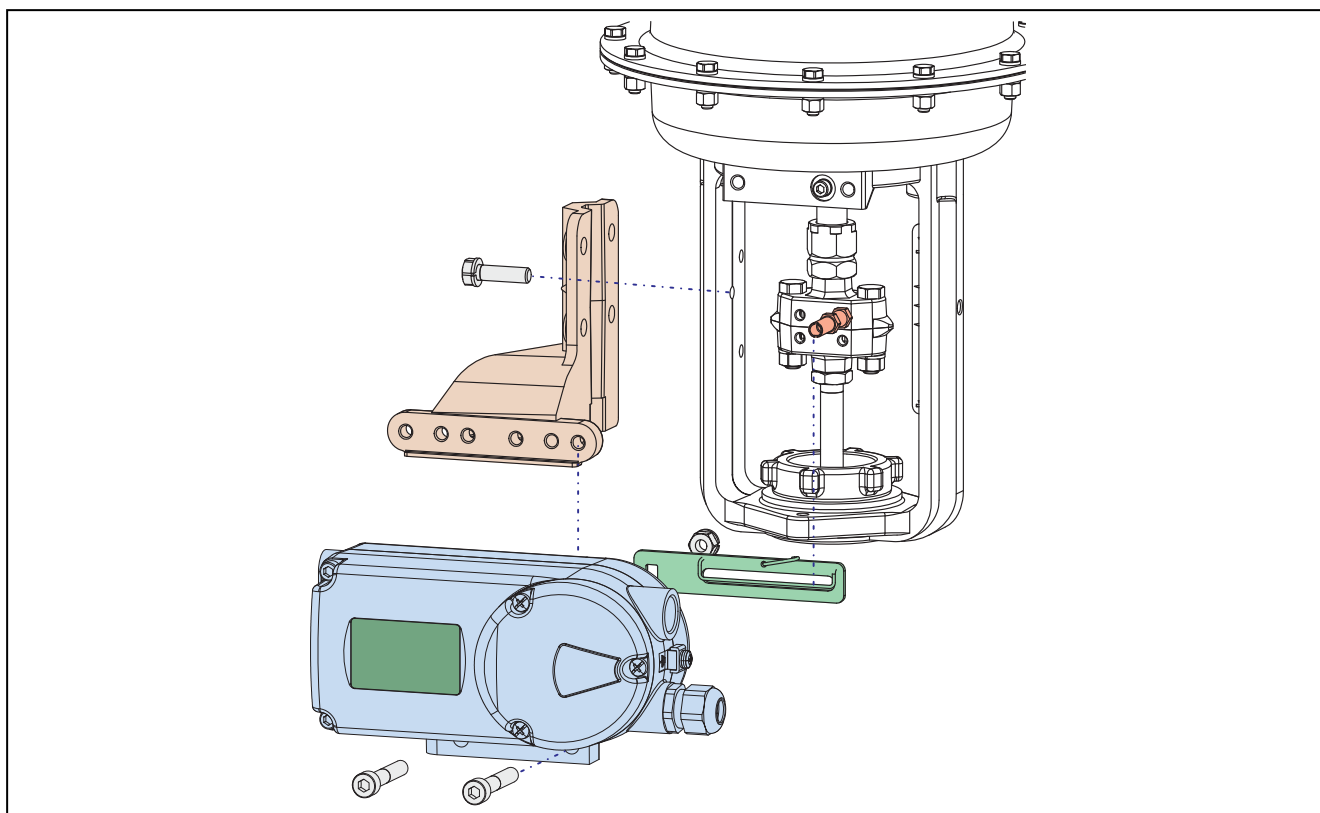
**SRXG**

Carrier bolt extra short 23 mm . . . . .	-A
Adjustable carrier bolt 20 to 37 mm . . . . .	-B
Carrier bolt 38 mm . . . . .	-C
Carrier bolt 47 mm . . . . .	-D
Carrier bolt 57 mm . . . . .	-E
Carrier bolt 65 mm . . . . .	-F
Adjustable carrier bolt with fixing system for stem diameter up to 21 mm . . . . .	-G
Adjustable carrier bolt with fixing system for stem diameter up to 34 mm . . . . .	-H
Carrier Bolt 80 mm . . . . .	-I
Adjustable carrier bolt for thread 3/8" . . . . .	-J
Adjustable carrier bolt for thread 5/16" . . . . .	-K
Extension for carrier bolt . . . . .	-L
Adjustable carrier bolt with fixing system centered for stem diameter up to 64 mm . . . . .	-M
Adjustable carrier bolt with fixing system centered for stem diameter up to 21 mm . . . . .	-G1
Adjustable carrier bolt with fixing system centered with extension up to 80 mm for stem diameter up to 21 mm . . . . .	-G2



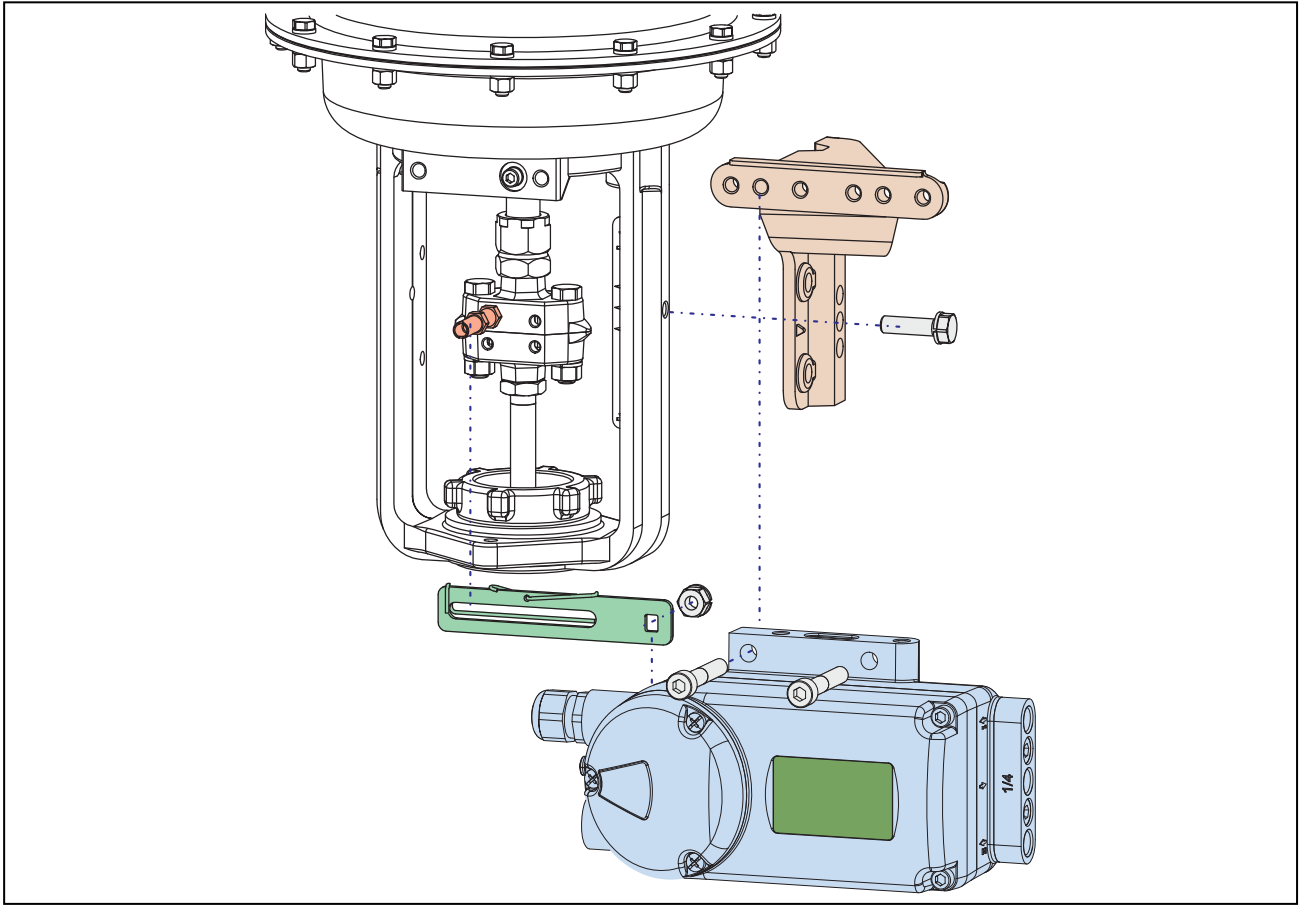
**MOUNTING TO LINEAR ACTUATORS**

Attachment to stroke actuators acc. to IEC 534-6 (NAMUR), left hand



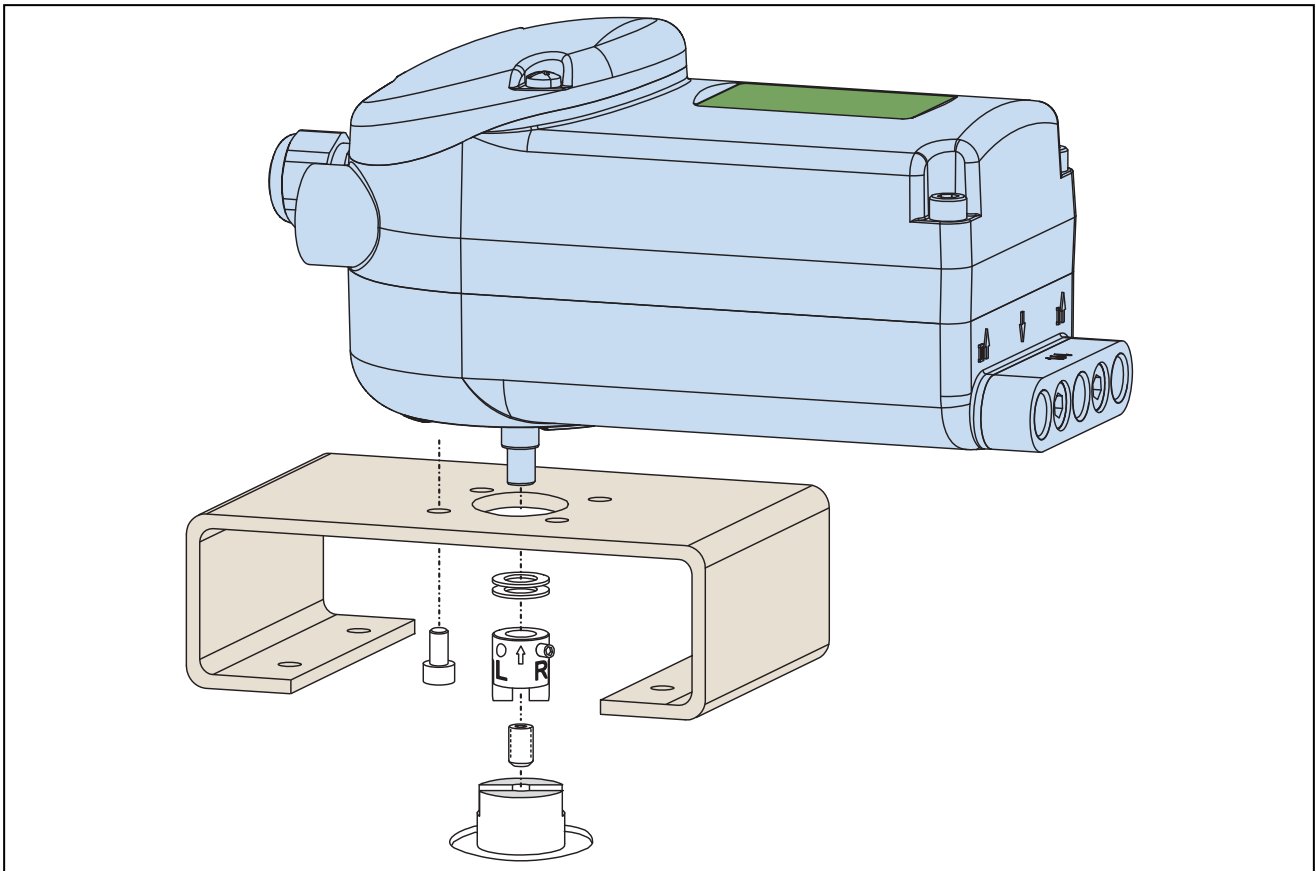
### MOUNTING TO LINEAR ACTUATORS

Attachment to stroke actuators acc. to IEC 534-6 (NAMUR), right hand

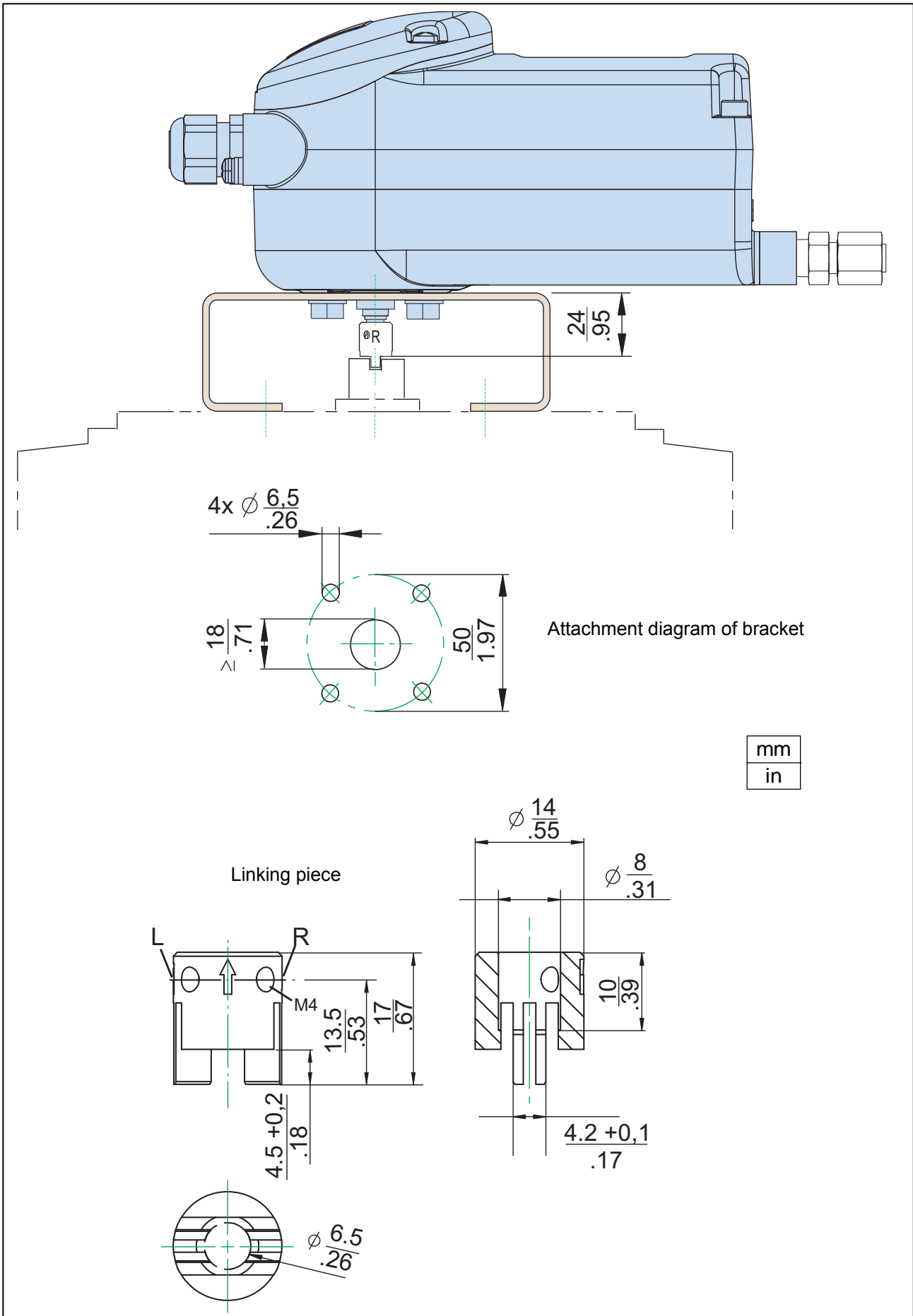


### MOUNTING TO ROTARY ACTUATORS

Delivery of bracket by manufacturer of actuator

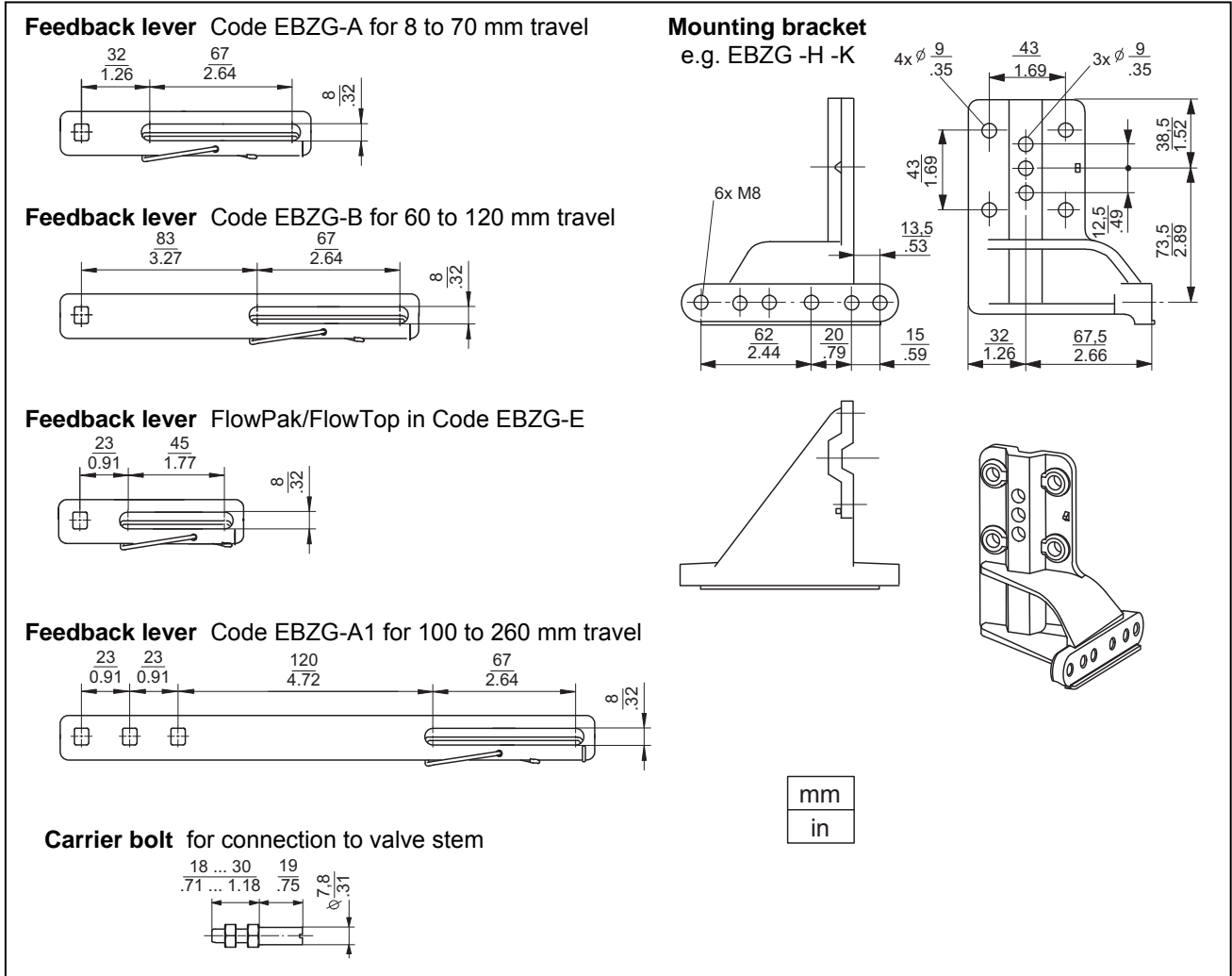


**DIMENSIONS – Attachment to rotary actuators**

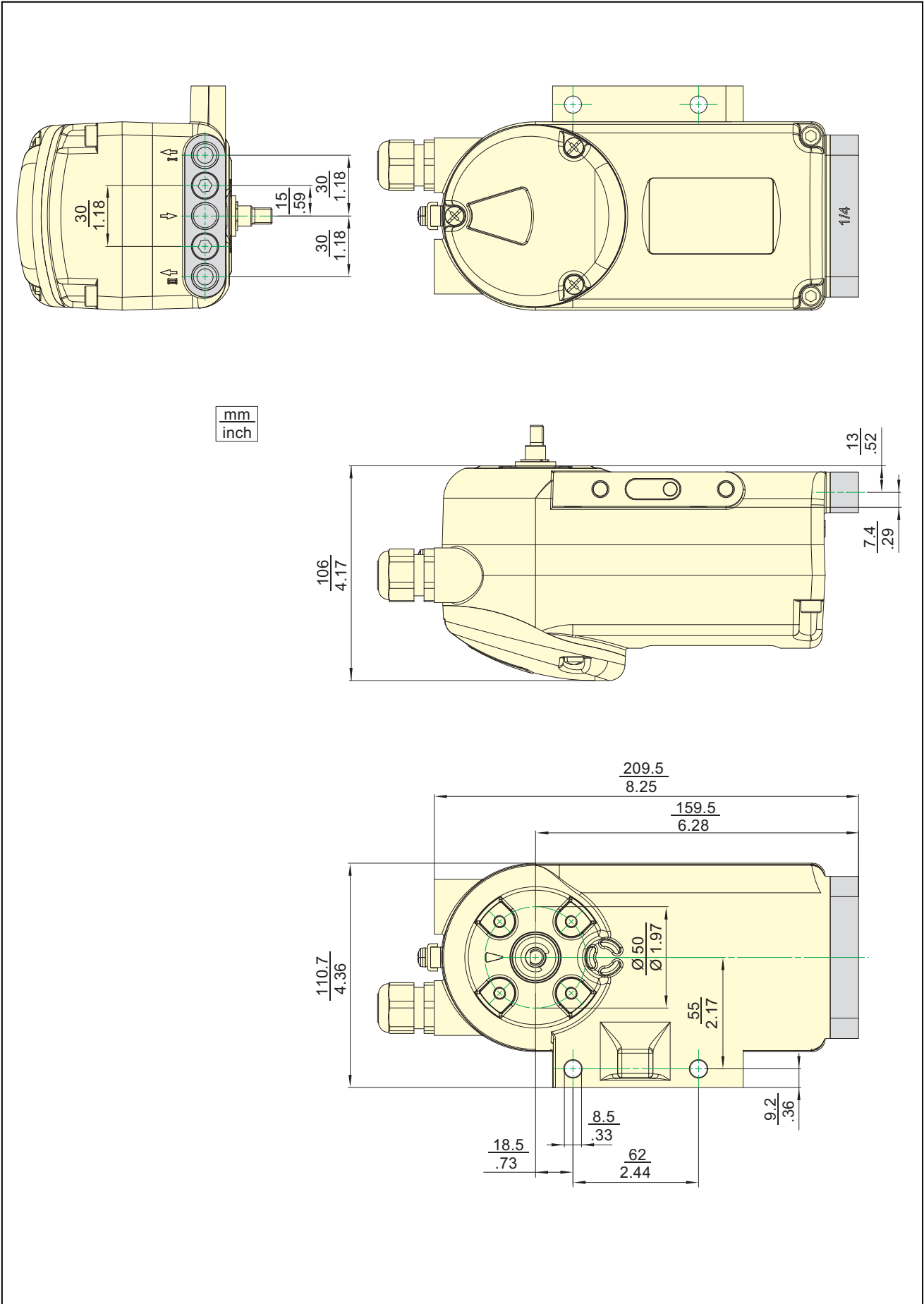


**DIMENSIONS**

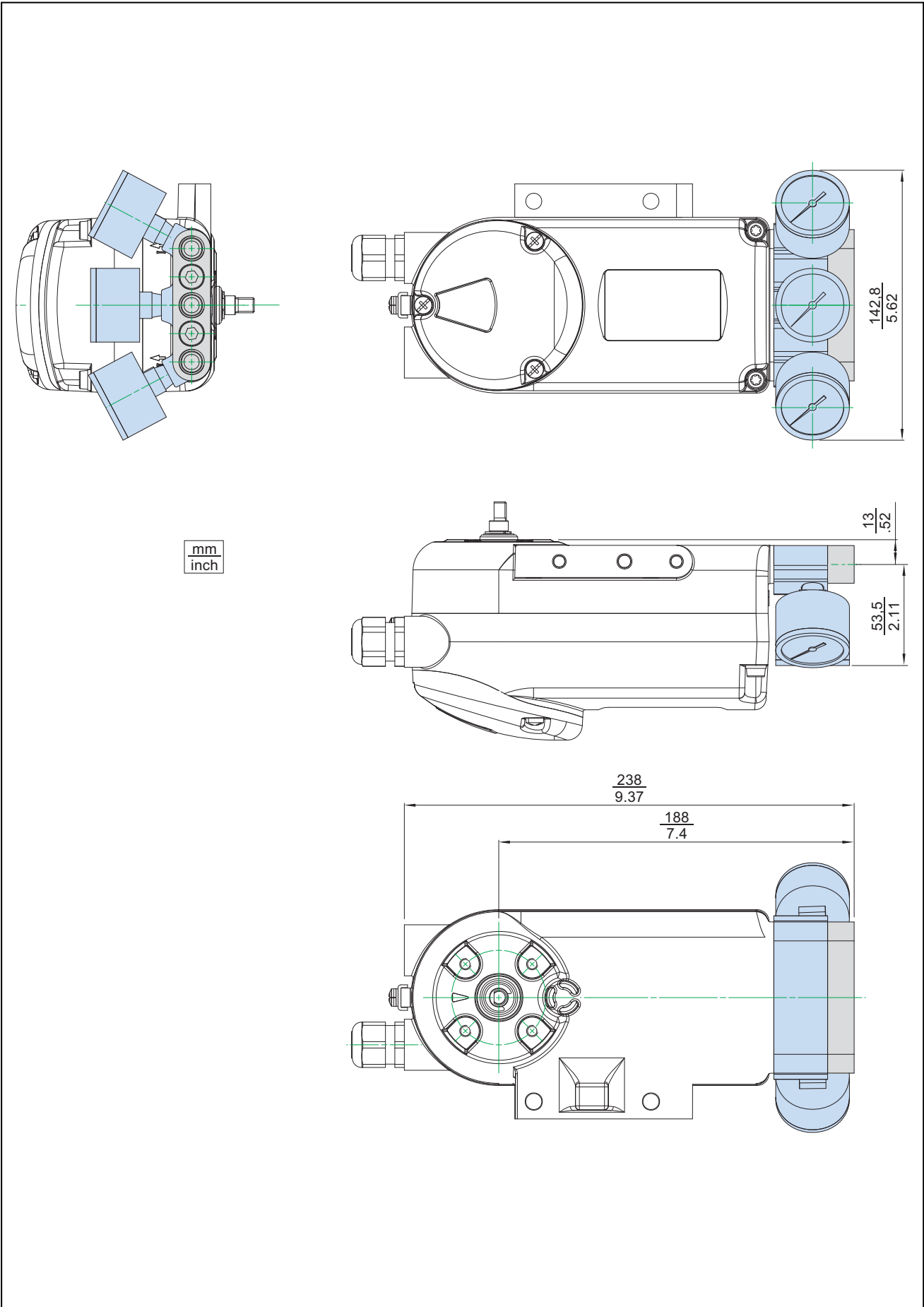
Components of Attachment kits (samples)



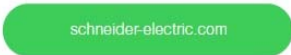
**DIMENSIONS with manifold**



**DIMENSIONS** with gauges and manifold



Invensys Systems, Inc.  
38 Neponset Avenue  
Foxboro, MA 02035  
United States of America



Global Customer Support  
Toll free: 1-866-746-6477  
Global: 1-508-549-2424  
Website:  
<http://support.ips.invensys.com>

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