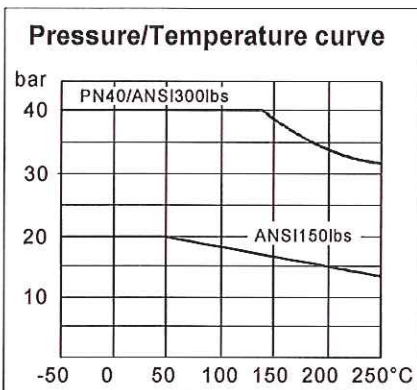


PASVE® DUAL is mounting and service valve for two pH sensors of diameter 12 mm. It can be used with practically all pH sensors in this size category. **PASVE® DUAL** allows the cleaning and calibration of pH sensors without stopping the process. When required, this can be done automatically. To protect the sensor in abrasive processes, it can be turned to the measuring position only for the duration of the actual measurement. **PASVE® DUAL** is available in a manually operated type or equipped with a pneumatic or electric actuator.

TECHNICAL SPECIFICATIONS

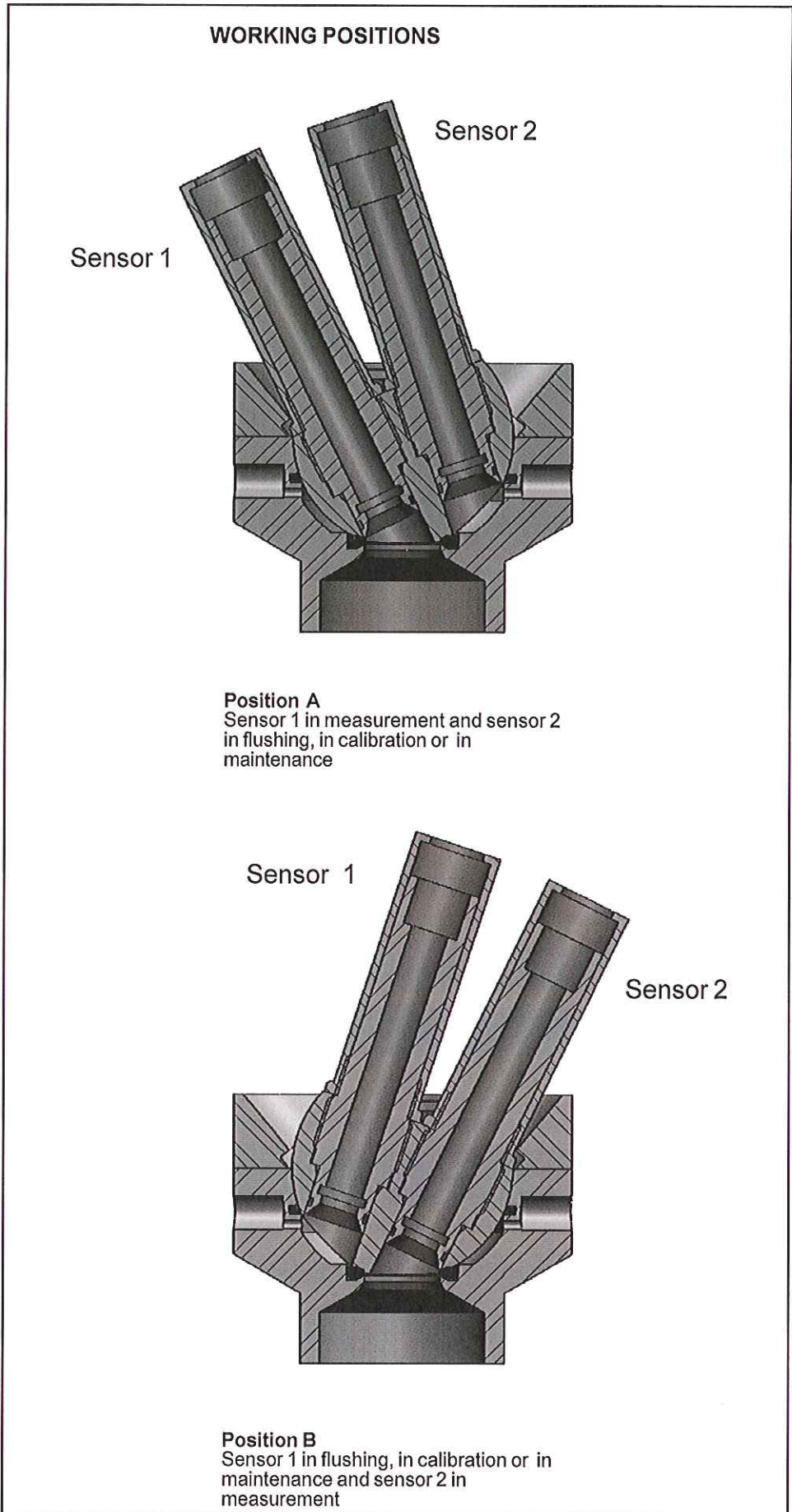
Applicable pH sensors
Refer to the Selection Table.

Max. operating pressure/ temperature
40 bar, 250 °C, (see the appended table). Min. operating temp. -50°C. Sensor-specific limitations should also be taken into account in applications.



Materials
Wetted parts: AISI316L, AISI904L, Titanium, Hastelloy®C276, Duplex, 254 SMO®.
Seals: PTFE, PTFE with carbon and graphite filling or PTFE 50%+AISI316 50% mixture

Weight
PASVE DUAL C 4,7 kg
PASVE DUAL B and P 4,8 kg
PASVE DUAL F 8,9 kg
 Actuator 5,5 kg

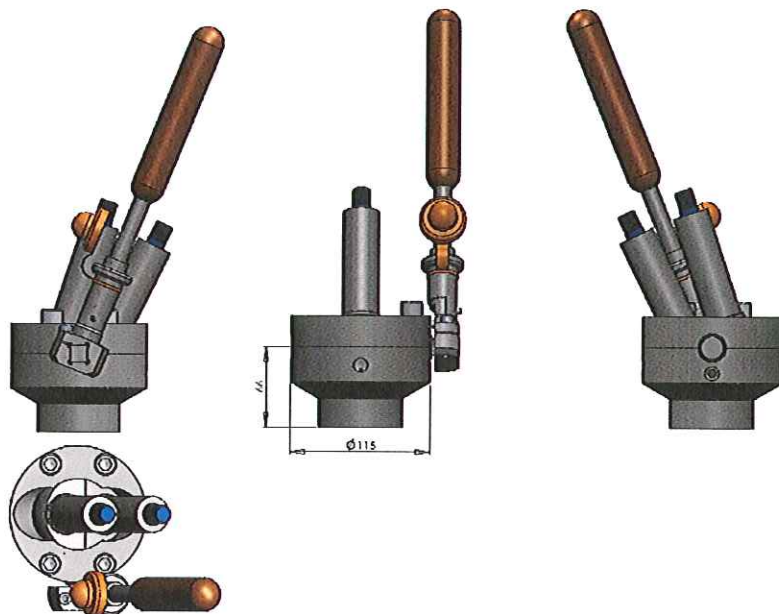


We reserve the right for technical modifications without prior notice.

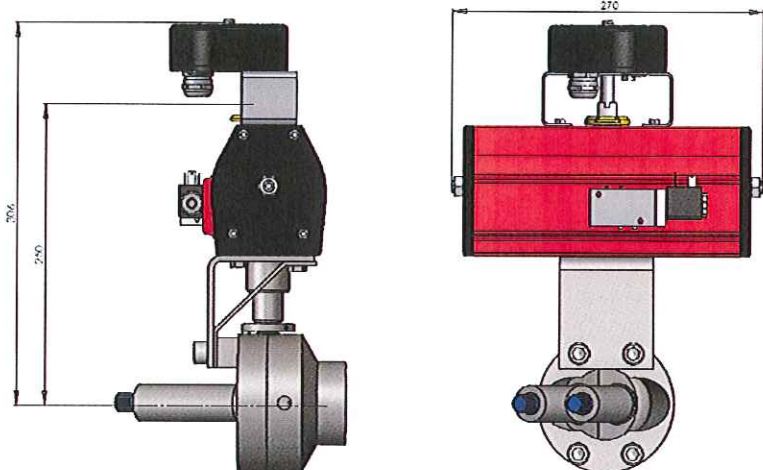
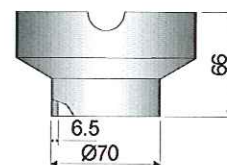
Pasve® is the registered trademark of Satron Instruments Inc.
 Hastelloy® is the registered trademark of Haynes International.
 254 SMO® is the registered trademark of Avesta Polaris AB.
 Teflon® is the registered trademark of E.I. du Pont de Nemours & Co.



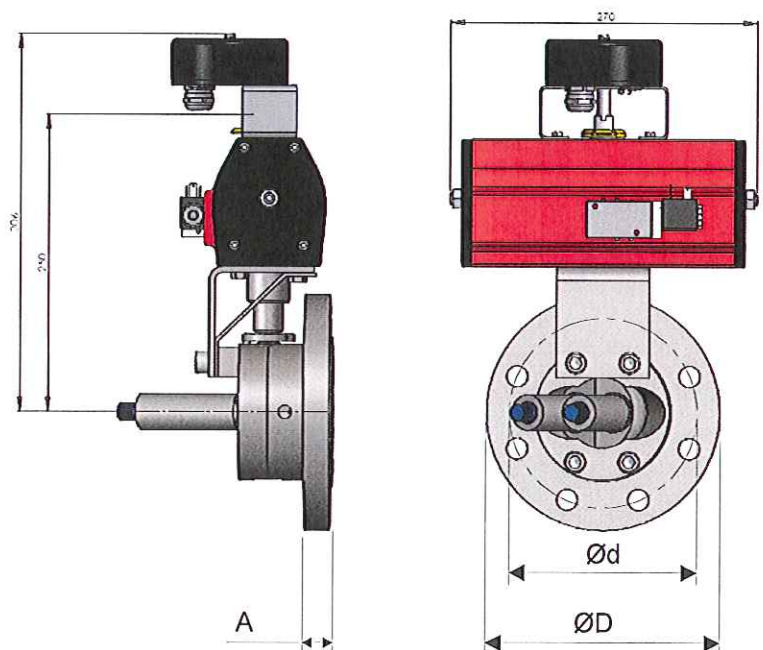
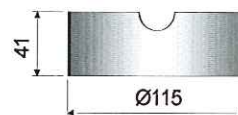
Dimensions (in mm)



PASVE DUAL P
(Shape the body to be suitable to the pipe, welded)



PASVE DUAL C
(Welded on container or horizontal pipe)

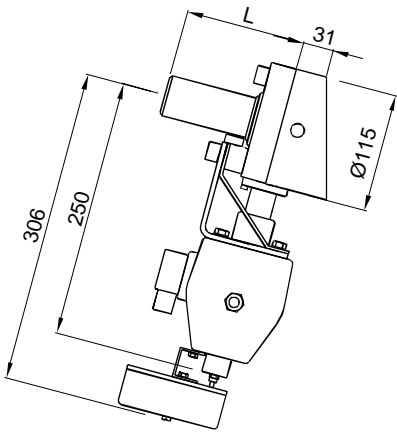


PASVE DUAL F
(Flange type)

PASVE DUAL F

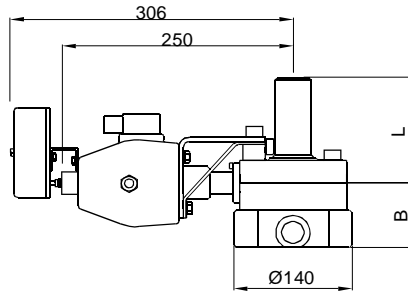
| Flange (a) | | ØD | Ød | A |
|------------|-----------------|-----|-------|----|
| Code | Type | | | |
| A | ANSI 3" 150 lbs | 191 | 152.4 | 22 |
| B | ANSI 3" 300 lbs | 210 | 168.3 | 27 |
| H | ANSI 4" 150 lbs | 229 | 190.5 | 26 |
| G | ANSI 4" 300 lbs | 254 | 200 | 29 |
| D | DN80 PN40 | 200 | 160 | 22 |
| J | DN100 PN10/16 | 220 | 180 | 22 |
| C | DN100 PN40 | 235 | 190 | 26 |
| E | JIS10K 80 | 185 | 150 | 20 |
| F | JIS40K 80 | 210 | 170 | 30 |

PASVE DUAL B
(Welded on container or vertical pipe, body 15°)

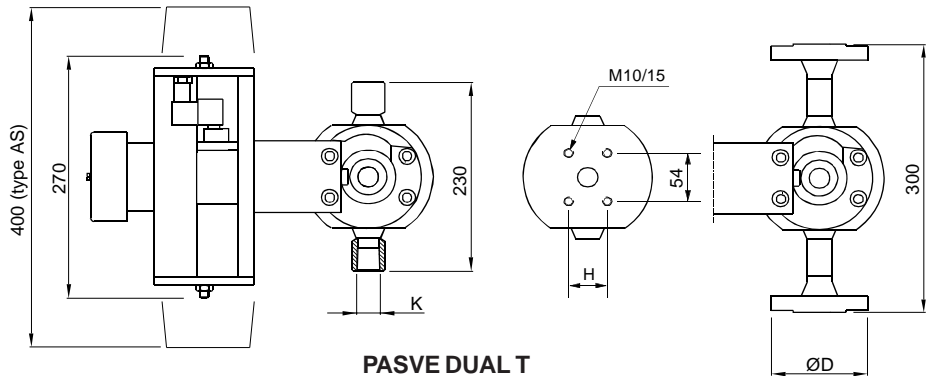
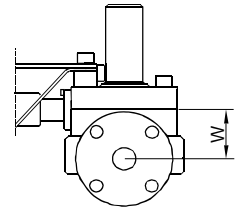


L depends on the sensor type

PASVE DUAL T
(Flow-through, threaded connection)



PASVE DUAL D
(Flow through, flange connection)



PASVE DUAL D

| FLANGE | | W | ØD | H |
|--------|-----------------|----|-----|----|
| Code | Type | | | |
| H | ANSI 1" 150 lbs | 55 | 108 | 48 |
| J | ANSI 1" 300 lbs | 55 | 124 | 48 |
| U | ANSI 2" 150 lbs | 68 | 153 | 76 |
| V | ANSI 2" 300 lbs | 68 | 165 | 76 |
| G | DN25 PN40 | 55 | 115 | 48 |
| T | DN50 PN40 | 68 | 165 | 76 |

PASVE DUAL T

| THREAD | | B | H |
|--------|--------------|-----|----|
| Code | Type (dim.K) | | |
| 2 | 1" - NPT | 77 | 48 |
| 4 | 1.5" - NPT | 92 | 64 |
| 5 | 2" - NPT | 104 | 76 |

Dimensions (in mm)

Surface temperature

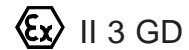
| Ambient temperature °C | Temperature class |
|---------------------------|-------------------|
| 70 | T6 |
| 85 | T5 |
| 120 | T4 |

European Directive Information

ATEX directive (94/9/EC)
Satron Instruments Inc. complies with the ATEX directive.

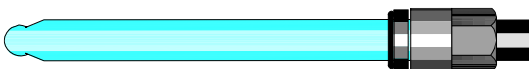
European Pressure Equipment Directive (PED) (97/23/EC)
- Sound Engineering Practice

European Certification:



Sensor connection

| Code | Sensor |
|------|---|
| A | Standard sensor connection PG13.5 / Ø12 / length 120 mm |



| Selection Table | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------|--|----------------------------------|---|---------------------------------------|-----------------------------|---------------------|-----------------------------------|------------------------------|-----------------------------------|--|--|--|--|--|--|--|--|--|--|
| PASVE DUAL | | | | | | | | | | | | | | | | | | | | | |
| Mounting type | | | | Wetted parts (C, B and P) | | | | | | | | | | | | | | | | | |
| C | On container or horizontal pipe, welded | B | On container or vertical pipe, body 15°, welded | P | Shape the body to be suitable to the pipe, welded | F | On flange | T | Flow-through, threaded connection | D | Flow-through, flange connection | | | | | | | | | | |
| Code | Material | Code | Material | Code | Material | Code | Material | Code | Material | Code | Material | | | | | | | | | | |
| | 2 AISI316L (EN 1.4404) (std.) | | 3 Hastelloy® C276 (EN 2.4819) | | 4 AISI904L (EN 1.4539) | | 6 Titanium Ti-2 (EN 3.7035) | | 8 Duplex (EN 1.4462) | | K 254 SMO® | | | | | | | | | | |
| Process connection type, specified for mounting type F | | | | | | | | | | | | | | | | | | | | | |
| Flanges | | | | Flanges | | | | Wetted parts | | | | | | | | | | | | | |
| Code | Type | Code | Type | Code | Material | Code | Material | Code | Material | Code | Material | | | | | | | | | | |
| T | DN50 PN40 (only manual using) | H | ANSI 4"/150 lbs | 2 | AISI316L (EN 1.4404) | 3 | Hastelloy® C276 (EN 2.4819) | 4 | AISI904L (EN 1.4539) | 6 | Titanium Ti-2 (EN 3.7035) | | | | | | | | | | |
| D | DN80 PN40 | G | ANSI 4"/300 lbs | 3 | Hastelloy® C276 (EN 2.4819) | 4 | AISI904L (EN 1.4539) | 6 | Titanium Ti-2 (EN 3.7035) | 8 | Duplex (EN 1.4462) | | | | | | | | | | |
| J | DN100 PN10/16 | E | JIS 10K 80 | 4 | AISI904L (EN 1.4539) | 6 | Titanium Ti-2 (EN 3.7035) | 8 | Duplex (EN 1.4462) | K | 254 SMO® | | | | | | | | | | |
| C | DN100 PN40 | F | JIS 40K 80 | 6 | Titanium Ti-2 (EN 3.7035) | 8 | Duplex (EN 1.4462) | K | 254 SMO® | | | | | | | | | | | | |
| A | ANSI 3"/150 lbs | | | | | | | | | | | | | | | | | | | | |
| B | ANSI 3"/300 lbs | | | | | | | | | | | | | | | | | | | | |
| Process connection type, specified for mounting type T | | | | | | | | | | | | | | | | | | | | | |
| Threads | | | | Wetted parts | | | | | | | | | | | | | | | | | |
| Code | Type | Code | Material | Code | Material | | | | | | | | | | | | | | | | |
| 2 | 1" - NPT | 2 | AISI316L (EN 1.4404) | 3 | Hastelloy® C276 (EN 2.4819) | | | | | | | | | | | | | | | | |
| 4 | 1.5" - NPT | 4 | AISI904L (EN 1.4539) | 6 | Titanium Ti-2 (EN 3.7035) | | | | | | | | | | | | | | | | |
| 5 | 2" - NPT | 8 | Duplex (EN 1.4462) | K | 254 SMO® | | | | | | | | | | | | | | | | |
| Process connection type, specified for mounting type D | | | | | | | | | | | | | | | | | | | | | |
| Flanges | | | | Flanges | | | | Wetted parts | | | | | | | | | | | | | |
| Code | Type | Code | Type | Code | Material | Code | Material | Code | Material | | | | | | | | | | | | |
| G | DN25 PN40 | U | ANSI 2"/150 | 2 | AISI316L (EN 1.4404) | 3 | Hastelloy® C276 (EN 2.4819) | 4 | AISI904L (EN 1.4539) | | | | | | | | | | | | |
| M | DN40 PN40 | V | ANSI 2"/300 | 3 | Hastelloy® C276 (EN 2.4819) | 4 | AISI904L (EN 1.4539) | 6 | Titanium Ti-2 (EN 3.7035) | | | | | | | | | | | | |
| T | DN50 PN40 | K | JIS 10K 25 | 4 | AISI904L (EN 1.4539) | 6 | Titanium Ti-2 (EN 3.7035) | 8 | Duplex (EN 1.4462) | | | | | | | | | | | | |
| H | ANSI 1"/150 | R | JIS 10K 40 | 6 | Titanium Ti-2 (EN 3.7035) | 8 | Duplex (EN 1.4462) | K | 254 SMO® | | | | | | | | | | | | |
| J | ANSI 1"/300 | S | JIS 10K 40 | 8 | Duplex (EN 1.4462) | | | | | | | | | | | | | | | | |
| N | ANSI 1.5"/150 | X | JIS 10K 50 | K | 254 SMO® | | | | | | | | | | | | | | | | |
| P | ANSI 1.5"/300 | L | JIS 40K 25 | | | | | | | | | | | | | | | | | | |
| | | Y | JIS 40K 50 | | | | | | | | | | | | | | | | | | |
| Seals | | | | | | | | | | | | | | | | | | | | | |
| 0 | PTFE + 20C + 5Gr / FPM (std.) | 4 | PTFE + 20C + 5Gr / FPM+ AISI316 / PTFE 50 % (Hard) | | | | | | | | | | | | | | | | | | |
| 1 | PTFE 100% / FPM | 5 | PTFE 100% / FPM+ AISI316 / PTFE 50% (Hard) | | | | | | | | | | | | | | | | | | |
| 2 | PTFE +20C+5Gr / FFPM | 6 | PTFE 100% / FPM + PVDF 100% (Hard) | | | | | | | | | | | | | | | | | | |
| 3 | PTFE 100% / FFPM | | | | | | | | | | | | | | | | | | | | |
| Sensor connection | | | | | | | | | | | | | | | | | | | | | |
| A | PG13,5 / Ø12 / 120 mm | | | | | | | | | | | | | | | | | | | | |
| Pt100 temperature sensor | | | | | | | | | | | | | | | | | | | | | |
| 0 | No sensor | | | | | | | | | | | | | | | | | | | | |
| X | With sensor (Measuring range -50 ... +200°C) | | | | | | | | | | | | | | | | | | | | |
| Actuator | | | | | | | | | | | | | | | | | | | | | |
| MD | No actuator (manually operated) | | | | AE1 | Electric actuator 230 V 50 Hz | | | | | | | | | | | | | | | |
| AD | Double-action actuator | | | | AE3 | Electric actuator 115 V 60 Hz | | | | | | | | | | | | | | | |
| AS | Spring-return actuator | | | | A0 | No actuator, fittings to the actuator | | | | | | | | | | | | | | | |
| Solenoid for actuator (only for actuator types AD and AS) | | | | | | | | | | | | | | | | | | | | | |
| 0 | No solenoid valve | | | | 2 | 24 V DC 2.5 W (also EEx dm) | | | | 4 | 28 V DC 0.4 W (EEx ia) | | | | | | | | | | |
| 1 | 230 V AC 50 Hz 2 W (as standard) | | | | 3 | 115 V AC 60 Hz 2 W | | | | | | | | | | | | | | | |
| Solenoid explosion proof | | | | | | | | | | | | | | | | | | | | | |
| 0 | No explosion proof | | | | 2 | EEx ia IIC T6 (only 28V) | | | | | | | | | | | | | | | |
| 1 | EEx m II T5 | | | | 3 | EEx dm IIC T5/T6 (only 24V) | | | | | | | | | | | | | | | |
| Position switches | | | | | | | | | | | | | | | | | | | | | |
| 0 | None | | | | A | Position switch EEX ib IIC T5/T6 | | | | | | | | | | | | | | | |
| X | Equipped with position switches | | | | | | | | | | | | | | | | | | | | |
| E | Position switch NAMUR, DIN 19234 | | | | | | | | | | | | | | | | | | | | |
| Special options | | | | | | | | | | | | | | | | | | | | | |
| Z1 | For oxygen use | | | | Z5 | Diamond-coated ball | | | | | | | | | | | | | | | |
| Z2 | Process side flushing | | | | | | | | | | | | | | | | | | | | |
| Z3 | Actuator (AS) reverse action | | | | | | | | | | | | | | | | | | | | |
| Documentation | | | | | | | | | | | | | | | | | | | | | |
| Installation and operating instructions | | | | | | | | | | Material certificates | | | | | | | | | | | |
| IE | English | | | | 0 | No material certificate | | | | MC1 | SFS-EN 10204-2.1 (DIN50049-2.1) | | | | | | | | | | |
| IF | Finnish | | | | MC2 | SFS-EN 10204-2.2 (DIN50049-2.2) | | | | | | | | | | | | | | | |
| | | | | | | | | | | MC3 | SFS-EN 10204-3.1B (DIN50049-3.1B) | | | | | | | | | | |

Specification example: PASVE DUAL C 2 0 A X AD3 1 E Z5 IEMC1