



Pharmaceutical
Chemicals
Foods

AVS Römer your partner for individual solutions

For more than 45 years we've been known for our fittings and solenoid valves as one of the top suppliers for sophisticated applications across the entire range of industries. Our innovative development team compiles with the latest technologies the optimal solution for your requirements and is constantly expanding our extensive product range. In our manufacturing sites in Grafenau and Langenberg, we have a profound in-house production which ensures high flexibility, best quality and fast response times. In addition to our conventional machined and punched parts, we process various high-tech plastics and elastomers. The purpose required tools and molds are planned, designed and manufactured in-house.



AVS-Dispensing Valve Type EFC

Electronic Flow-Control Valve

Plastic (PPSU)

NEW



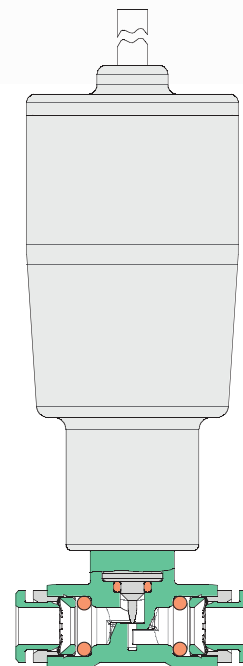
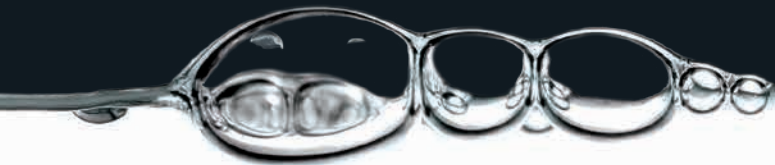
Motor driven dispensing valve for flow regulation of liquid and gaseous medium. The position of the precision throttle which is directly connected to the linear motor determines the flow. In conjunction with the established ELSA push-in fittings made of PPSU this valve finds its use even in the food industry. The integrated electronic control system in the valve housing allows almost infinitely adjustable setups for the flow rate. An adjusted position can be maintained even without power due to the stepper motor technology.

CHARACTERISTICS

- PPSU valve body
- FDA compliant seal material
- Needle made of stainless steel
AISI 316L
- Nominal diameters from
DN 0.5 up to DN 3
- ELSA push-in connectors plastic
pipe/tube OD 4 and OD 6 mm
- Operating pressure up to PN 8
- Temperature of medium up to 80°C
- Integrated control electronics with
analog input
Us = 24 VDC (supply)
Uc = 0 - 10 VDC (control signal)
- Driven by linear stepper motor

ADVANTAGES

- Less dead space
- No dirt pockets
- Low hysteresis
- Simple control
- Customer specific characteristics
possible (needle or software)
- NSF certified



AVS-MAGMA Solenoid Valve

Medium separated

These valves have especially been designed for the food industry. Due to the separation diaphragm with minimised dead space, without dirt pockets and the use of FDA-compliant materials, the magma valve is ideal for the use in hot drinks and coffee machines. In addition to the standard 2/2 and 3/2 way design we produce these valves in a number of variations such as manifolds and mixers with different nominal diameters and connections exactly adapted to your requirements.



CHARACTERISTICS

- Valve body made of glass fiber reinforced PPA
- Diaphragm FKM or EPDM, FDA compliant
- Connections ELSA push-in connectors for plastic pipe/tube OD 4 und 6 mm
- Operating pressure up to PN 16 (depending on function and DN)
- Temperature of medium up to 130 °C
- Rated voltage 24 VDC
- Directly controllable
- Total isolation valve
- FDA compliant
- Useable for hotwater applications
- High life cycle
- Valves are available with various presettings
- NSF certified



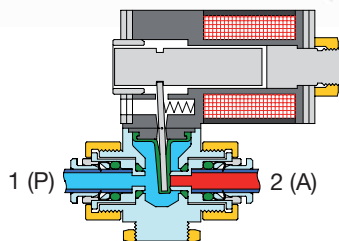
**Proven quality for many years,
the ETV 100 Series!**

MAGMA- 2/2-Way Solenoid Valve Type ETV Series 100



CHARACTERISTICS

- Functions:
"NC", normally closed (A)
(see illustration below)
- "NO", normally open (B)
(not illustrated)
- Nominal diameters DN 2 up to DN 4
- Power consumption 8 W

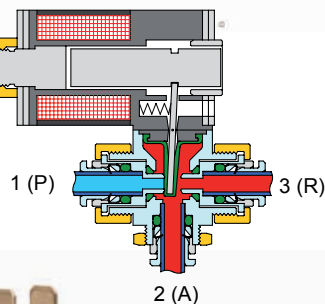


MAGMA- 3/2-Way Solenoid Valve Type ETV Series 100



CHARACTERISTICS

- Functions:
"NC" normally closed, outlet 2 discharged (C)
(see illustration below)
- "NC" normally closed at outlet 2,
outlet 4 open (F) (not illustrated)
- Nominal diameters DN 2 up to DN 4
- Power consumption 8 W



Our smallest ETV, the new ETV 200 Series

MAGMA- 2/2-Way Solenoid Valve Type ETV Series 200



CHARACTERISTICS

- Functions:
 - ”NC“, normally closed (A) (see illustration below)
 - ”NO“, normally open (B) (not illustrated)
- Nominal diameters DN 1.5 up to DN 2.5
- Power consumption 6 W

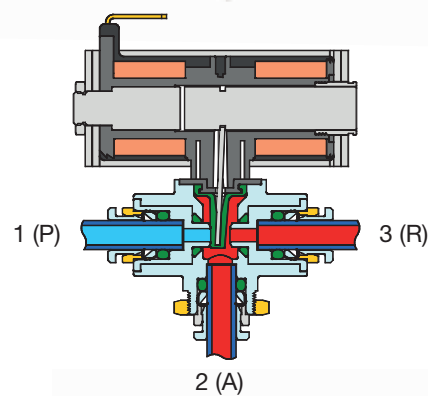
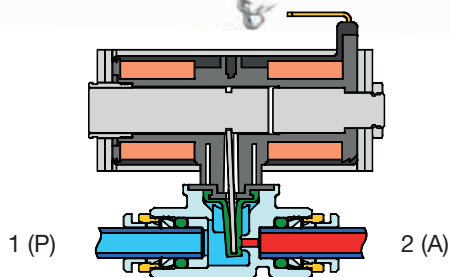
NEW



CHARACTERISTICS

- Functions:
 - ”NC“ normally closed, outlet 2 discharged (C) (see illustration below)
 - ”NC“ normally closed at outlet 2, outlet 4 open (F) (not illustrated)
- Nominal diameters DN 1.5 up to DN 3
- Power consumption 6 W

NEW



MAGMA- Stackable 2/2-Way Solenoid Valves Type ETV Series 200



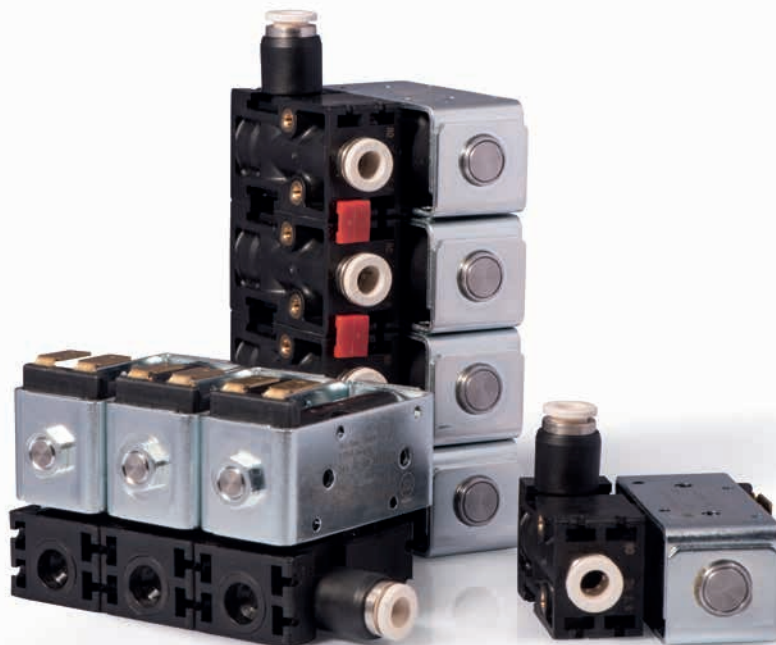
CHARACTERISTICS

- Functions:
 - "NC", normally closed (A)
 - "NO", normally open (B)
- Nominal diameters DN 1.5 up to DN 2.5
- Power consumption 6 W

OTHER FEATURES:

- Modular and extendable
- Easy to dismantle
- Space saving

NEW



AVS-Sensor Technology

AVS-inline sensors combine high quality measuring cells with the established ELSA push-in fittings made of PPSU. They are applied primarily in the food industry, in the analysis technology and in the medical technology.

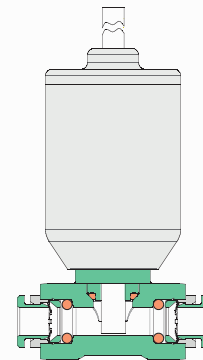
AVS-Inline Conductivity Sensor Type ICS **NEW** Plastic (PPSU)

ADVANTAGES

- Best value for money
- Large measuring range
- Minimal space requirement
- Proven ELSA-connection technology
- Temperature neutral measurement results
- Integrated temperature sensor
- Integrated evaluation electronics

CHARACTERISTICS

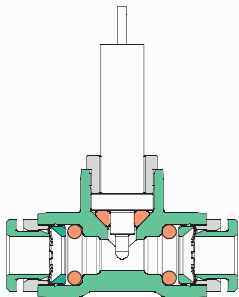
- PPSU body
- FKM or EPDM seal material, FDA compliant
- Ceramic conductivity measuring cell
- Platinum electrodes
- ELSA push-in connectors for tube OD 6 mm
- Operating pressure up to PN 16 (depending on the temperature)
- Temperature of medium up to 140 °C
- Measuring principle: Conductive 4-electrode measurement
- Measurement range: 0.2 - 20 mS/cm
- Simultaneous temperature measurement with Pt1000
- Supply voltage 9 - 36 VDC
- Output from temperature and conductivity via 0 - 5 VDC analog signal



Inline Temperature Sensor Typ ITS **NEW**

CHARACTERISTICS

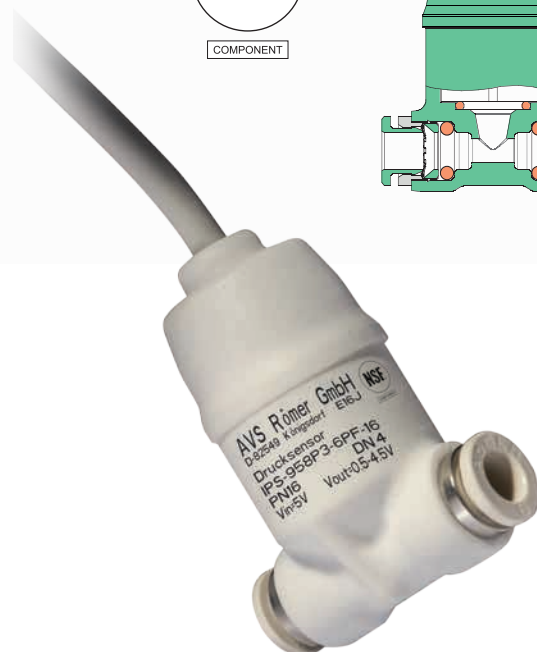
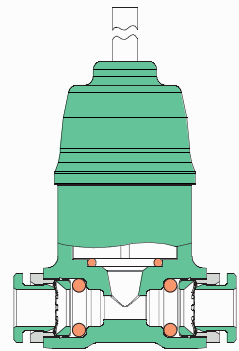
- PPSU body
- FKM or EPDM seal material, FDA compliant
- Sensor housing made of ceramic or stainless steel
- Available sensor types: Pt100, NTC 10k and NTC 47k
- Further sensor types and thermocouples on request
- ELSA push-in connections for plastic pipe/tube OD 4 and OD 6 mm
- Operating pressure up to PN 20 (depending on the temperature)
- Temperature of medium up to 135 °C (NSF-compliant up to 100 °C)



Inline Pressure Sensor Typ IPS **NEW**

CHARACTERISTICS

- PPSU body
- FKM or EPDM seal material, FDA compliant
- Ceramic pressure sensing cell
- ELSA push-in connections for plastic pipe/tube OD 4 and OD 6 mm
- Operating pressure up to PN 16 (depending on the temperature)
- Temperature of medium up to 140 °C
- Supply voltage 5 VDC
- Analog output signal from 0.5 to 4.5 VDC
- Temperature compensated evaluation electronic
- Measuring range 0 - 4 bar and 0 - 16 bar



AVS-Non-Return Valves Plastic (PPSU) Stainless Steel AISI 316L (1.4404)

Spring-loaded cone non-return valves made entirely of FDA-compliant materials for **gases and liquids up to 140°C**. (Hot water, steam, etc.)

CHARACTERISTICS

- PPSU or stainless steel valve body
- FKM or EPDM seal material, FDA compliant
- Nominal diameter DN 4
- Pressure range 0.1 to max. 16 bar (depending on temperature)
- Temperature of medium up to 140 °C
- Elsa push-in connectors for plastic pipe/tube OD 4, 6 or 8 mm

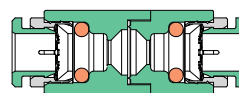
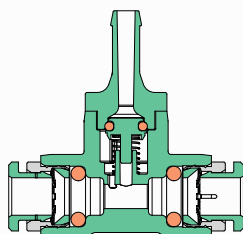
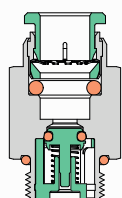
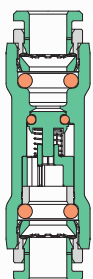
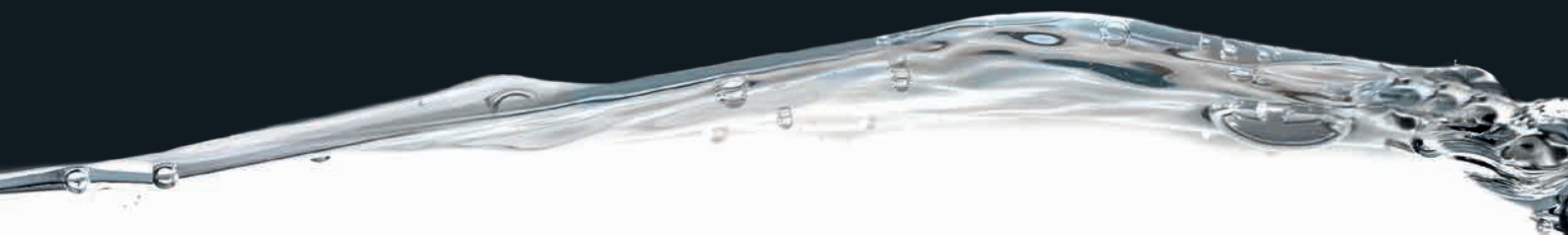
AVS-Filter with ELSA Push-in Connectors Plastic (PPSU)

For liquids up to 140 °C

CHARACTERISTICS

- PPSU body
- Stainless steel mesh filter
- Operating pressure up to PN 16 (depending on temperature)
- Temperature of medium up to 140 °C
- ELSA push-in connectors for plastic pipe/tube OD 6 mm
- Mesh size 0.1mm and 0.5 mm

New with plug-in connection



AVS-Precision Throttle Plastic (PPSU)

All parts which are in contact with the medium are FDA-compliant materials for **gases and liquids up to 140 °C**.

CHARACTERISTICS

- PPSU valve body
- FKM or EPDM seal material, FDA compliant
- Nominal diameter DN 1.5, DN 2 and DN 3
- Pressure range up to 20 bar (depending on temperature)
- Temperature of medium up to 140 °C
- ELSA push-in connectors for plastic pipe/tube OD 4 and 6mm

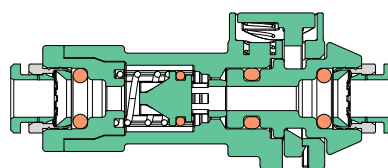
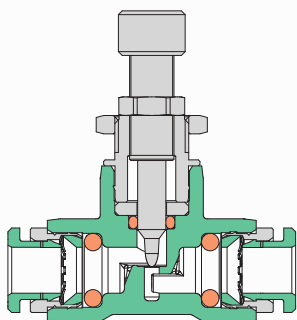
AVS Quick-Release Coupling with integrated Non-return Valve Plastic (PPSU)

Entirely from FDA-compliant materials **for liquids up to 140 °C** (hot water, steam ...)

CHARACTERISTICS

- Coupling socket PPSU
- Coupling plug PPSU
- Internal parts in contact with medium are made of PPSU
- FKM or EPDM seal material, FDA compliant
- Pressure range up to 12bar (depending on temperature)
- Temperature of medium up to 135 °C
- ELSA push-in connectors for plastic pipe/tube OD 4 and 6 mm

New with bulk-head fitting



HIGH QUALITY FOR HIGH TEMPERATURES



PROGRAM

- Plastic pipe/tube OD 4, 6 and 8 mm
- Threads M5, G1/8 up to G3/8
- Nipple in AISI 316L (1.4404)
- Thread seal with recessed O-ring
- Operating pressure up to PN 20 (depending on temperature)
- Temperature range 0 °C up to 140 °C
- FDA compliant components
- KTW approved
- Certified according to NSF



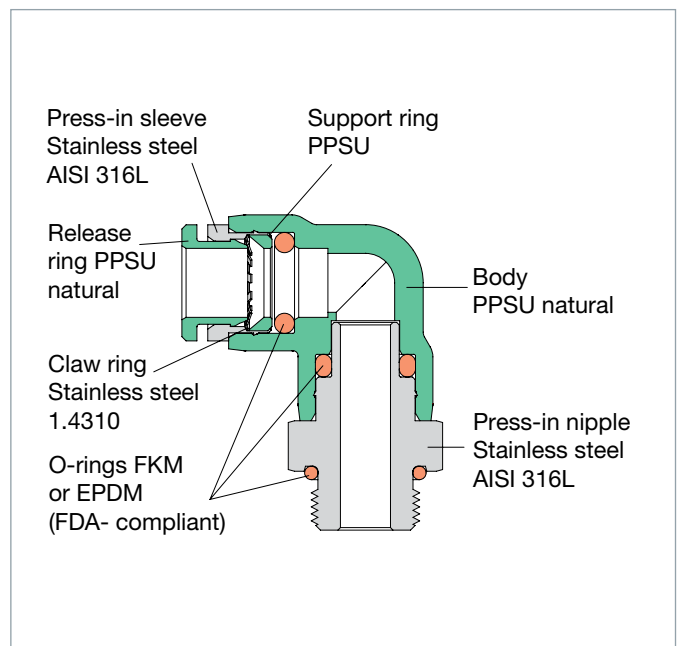
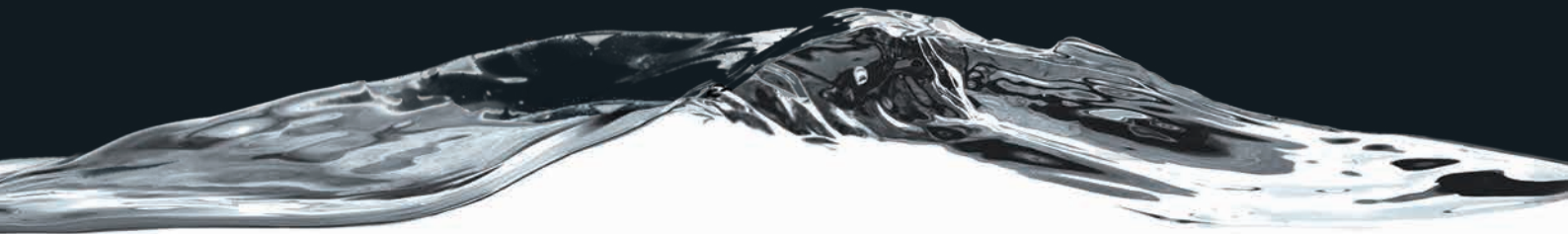


AVS ELSA Push-in Fittings Plastic (PPSU)*

ELSA push-in fittings made of PPSU are primarily used in the food sector for **liquids with temperatures up to 140 °C**. (Hot water, coffee, steam, etc.). Fitted as standard with FDA-compliant FKM seals. Also available with FDA-compliant and KTW-approved EPDM sealing rings. The fittings made of this high-tech plastic are used in many application areas and therefore, a low-cost alternative to stainless steel fittings.

*PPSU (Polyphenylsulfon)

- Exceptionally high thermal stability
- High resistance to many chemicals
- Physiological and food safe





HOT AND COLD

* PVDF (Polyvinylidene fluoride)

- Very good resistance to many chemicals
- Physiological and food safe



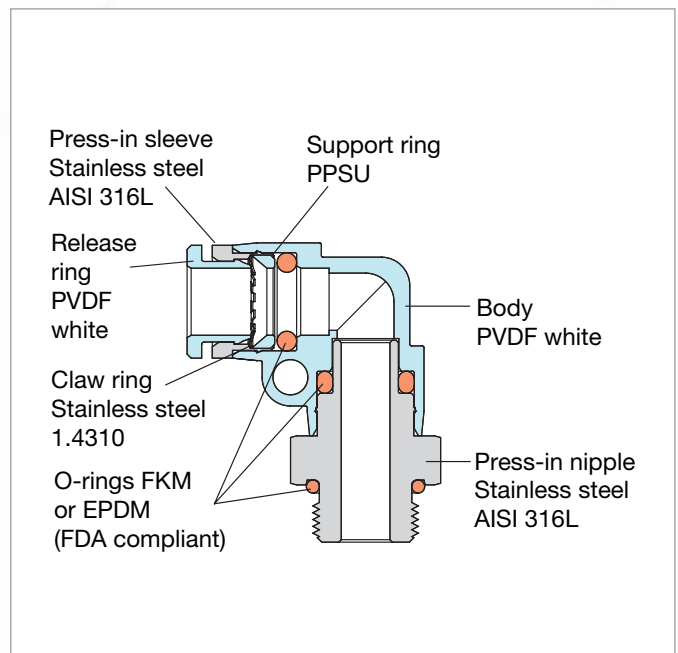


AVS ELSA Push-in Fittings Plastic (PVDF) *

ELSA push-in fittings in PVDF are mainly used in the chemical industry due to the very good chemical resistance even at higher temperatures. Fitted as standard with FDA-compliant FKM sealing rings. Also available on request with FDA-compliant and KTW-approved EPDM sealing rings. Therefore, a use in the food industry is provided.

PROGRAM

- Plastic pipe/tube OD 4, 6, 8, 10, 12 mm (16 and 22 mm by request)
- Threads M5, G1/8 up to G1/2
- Nipple in AISI 316L (1.4404)
- Thread seal with recessed O-ring
- Operating pressure up to PN 16, depending on temperature
- Temperature range 0 °C up to 120 °C
- FDA compliant components
- KTW approved
- Certified according to NSF





PERMANENT AND UNTAMEABLE





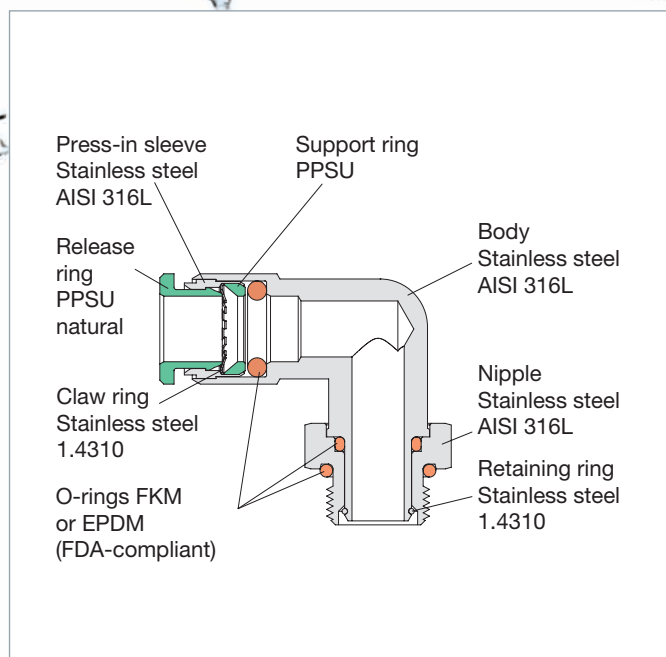
AVS ELSA Push-in Fittings

Stainless steel AISI 316L (1.4404)

ELSA push-in fittings are used in particular for aggressive gaseous and liquid mediums under harsh operating conditions. Fitted as standard with FDA-compliant FKM sealing rings. Also available on request with FDA-compliant and KTW-approved EPDM sealing rings. Therefore, an application in the food industry is provided.

PROGRAM

- Plastic pipe/tube OD 4, 6, 8, 10 and 12 mm
- Threads M5, G1/8 up to G3/8 and R1/8 up to R1/2
- Thread seal with recessed O-ring
- Operating pressure up to PN 20, depending on type
- FDA compliant components
- KTW approved
- Certified according to NSF





AVS-Rapid Fittings

Stainless Steel AISI 316L (1.4404)

Rapid fittings are used for aggressive gaseous and liquid mediums, where elastomeric seals are no longer resistant. Thanks to its conical guide and its cap nut, the fittings are ideal for an application under rough operating conditions.

PROGRAM

- Plastic pipe/tube external/internal diameter 6/4, 8/6, 10/8 and 12/10 mm
- Threads M5, G1/8 up to G3/8 and R1/8 up to R1/2 for tube LW 5 - 19
- Operating pressure up to PN 25, depending on type

**SAFETY
FIRST**





AVS-Fittings/Accessories Stainless Steel AISI 316L (1.4404)

The stainless steel fittings with cylindrical external thread are equipped with FDA compliant FKM O-rings as a special feature. The usual problems with standard flat seals are therefore omitted.

PROGRAM

- Nipple and sockets G1/8 and up to G1/2
- Hose connectors G1/8 to G1/2 for hose LW 5 - 19



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A FOUNDATION FOR PROGRESS

In 2011 the charitable Christian Joachim Römer trust was established as an honor for our company's founder and his life-work. Therefore it is possible to posthumously support young talents in engineering and technical professions including the provision of grants and financial support for trainings as Mr. Joachim Christian Römer did during his lifetime. Furthermore, it is the foundation's task to fulfill the obligation to cooperate with universities and colleges of science research in the field of mechanical engineering, preferably in the field of fluid technology. For more information please visit the J. C. Römer Foundation on www.jcroemer-stiftung.de