

MG

Screwed plug valve

Cast design, thread size ½" - 3"



## Design Features

### Design Characteristics

- available with female and male threads
- free of cavities
- maintenance free - self lubricating
- mounting-flange for actuators acc. to DIN ISO 5211
- easy accessible adjustment of the plug, even with mounted actuator
- vacuum tight
- fugitive emission resp. clean air act certified (TA - Luft 2002 approval)
- PED 97/23/EG

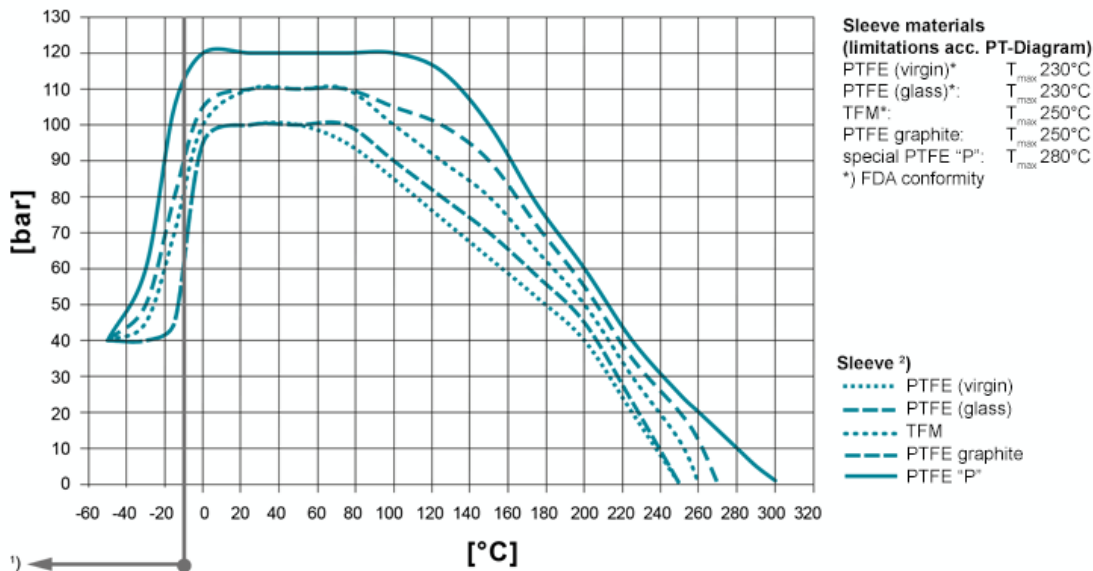
- fire safe design API 607 / ISO 10497
- FDA conformity

standard connections:

- tapered Whitworth pipe thread DIN 2999
- Whitworth pipe thread DIN ISO 228
- NPT pipe thread ANSI B 1.20.1
- BSP British standard pipe thread

## PT-Diagram

General Pressure-Temperature-Diagram



**Operating temperatures < -30°C and > 220 °C have to be checked and approved by AZ according to the operating conditions.**

Besides the P/T value of the sleeve the limitations of the valve bodies also have to be considered. Please refer to the EN 12516-1 resp. ASME B16.34 in order to choose a proper pressure rating (PN/class). The shown values refer to austenitic stainless steel 1.4408 (A351 Gr. CF8M).

- 1) For operating temperatures below -10°C low temperature / austenitic steels are required.
- 2) Sleeve: There are different sleeve materials / compounds available.

## Materials

### Standard body materials

- Carbon Steel 1.0619, ASTM A216 WCB
- Stainless Steel 1.4408, ASTM A351 CF8M

- Stainless Steel 1.4308, ASTM A351 CF8
- Unalloyed stainless steel casting (low Temp.) 1.1138, LCC/LCB/A352

#### Standard plug materials

- Stainless Steel 1.4408, ASTM A351 CF8M
- Stainless Steel 1.4308, ASTM A351 CF8

#### Special materials

- Alloy
- Monel
- Nickel
- Zirconium
- Titan
- Tantal
- other materials on request

## Sealing Systems

Standard sealing for all major applications;  
T<sub>max</sub> 230°C

### Type STD

Firesafe sealing (API 607) with graphite packing for additional stem sealing; T<sub>max</sub> 230°C

### Type FS

Chemical sealing to prevent fugitive emission of aggressive and toxic media with PTFE packing for additional stem sealing; T<sub>max</sub> 230°C

### Type CA

Firesafe safety sealing (API 607) for fluctuating temperatures with 3x graphite packing (adjustable) for additional stem sealing; T<sub>max</sub> 280°C

### Type FSN

Firesafe safety sealing (API 607) for fluctuating temperatures with 3x graphite packing (live loaded disc springs) for additional stem sealing; T<sub>max</sub> 280°C

### Type FSN-SL

Chemical safety sealing for fluctuating temperatures with 3x PTFE packing (adjustment) for additional stem sealing; T<sub>max</sub> 230°C

### Type CASN

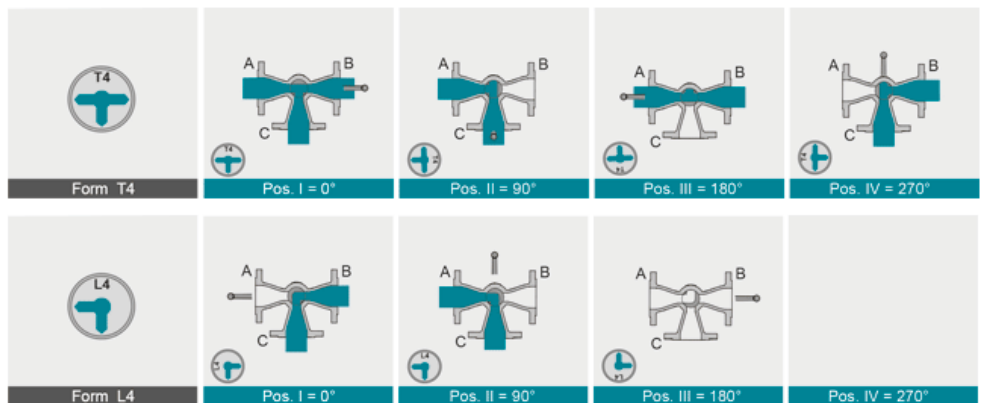
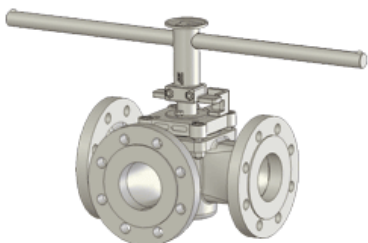
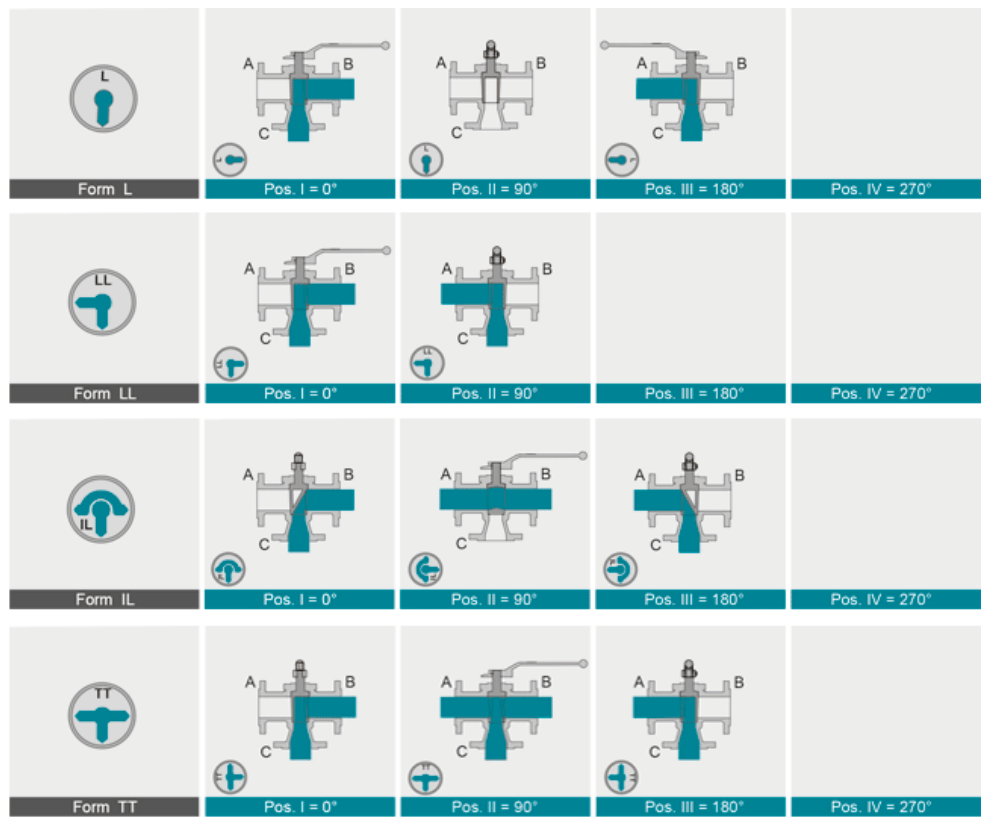
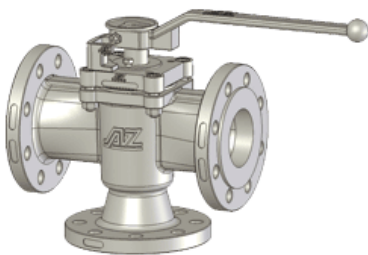
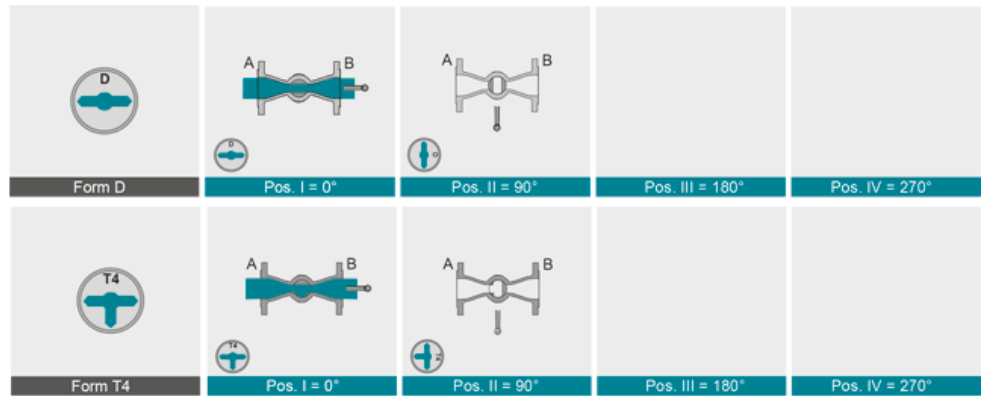
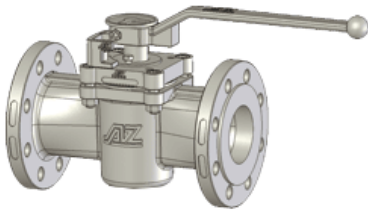
Chemical safety sealing for fluctuation temperatures with 3x PTFE packing (live loaded disc springs) for additional stem sealing; T<sub>max</sub> 230°C

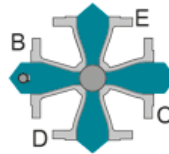
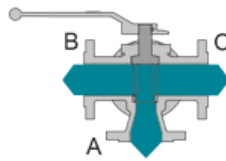
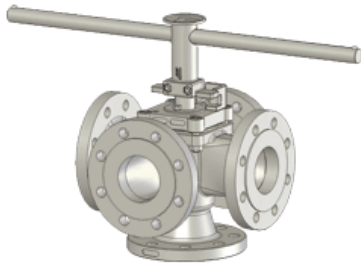
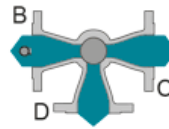
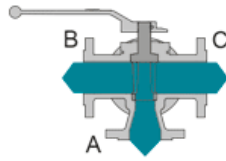
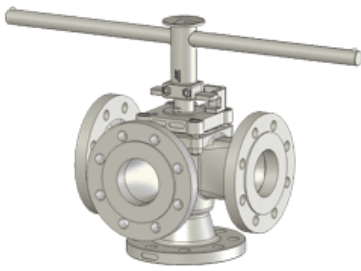
### Type CASN-SL


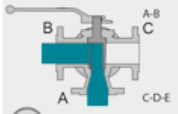
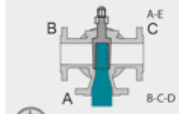
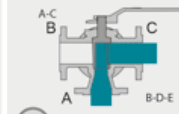
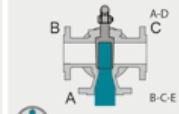

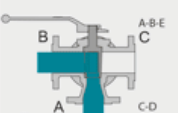
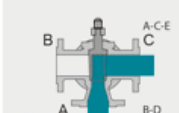
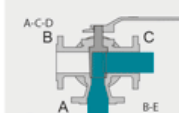
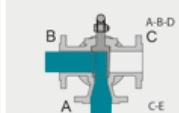

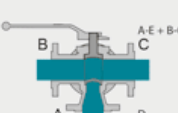
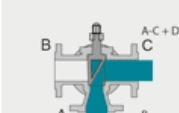
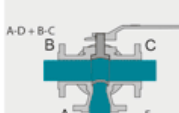
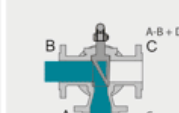

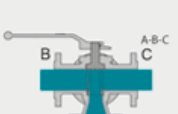
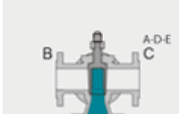
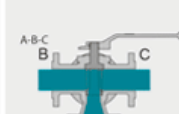
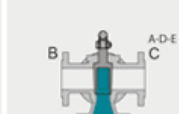

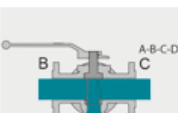
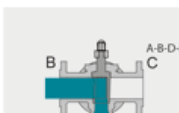
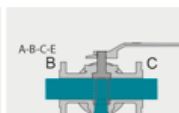
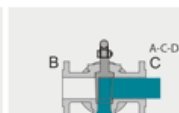
## Port Forms



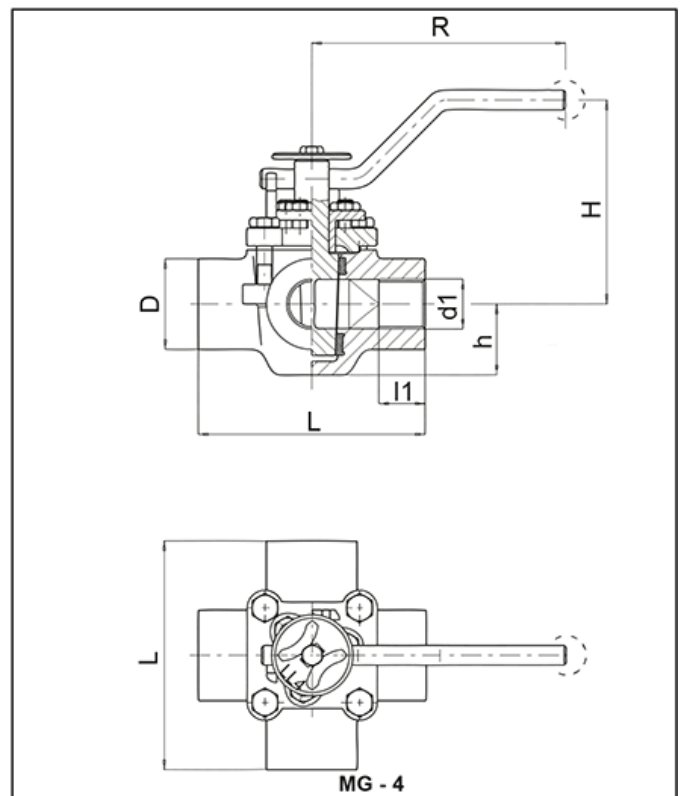
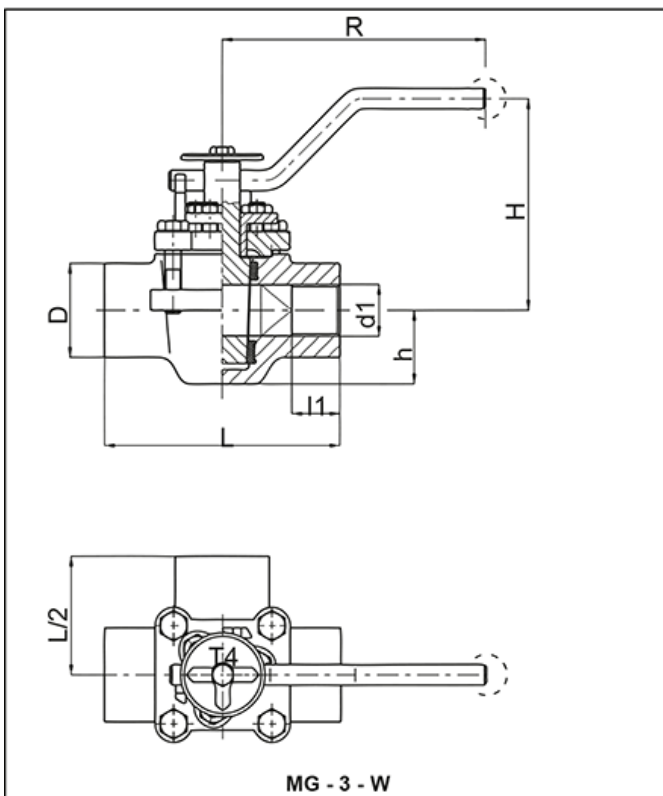
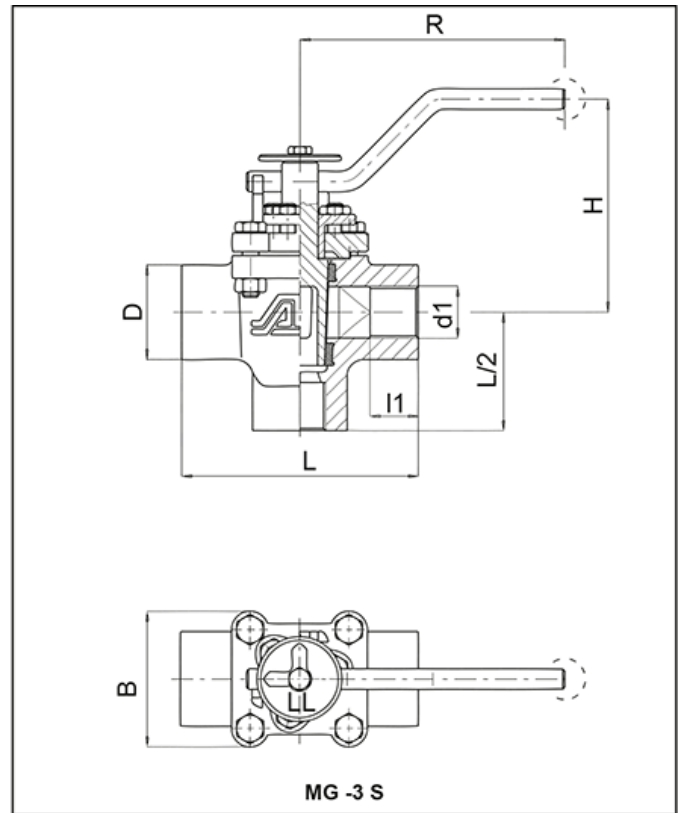
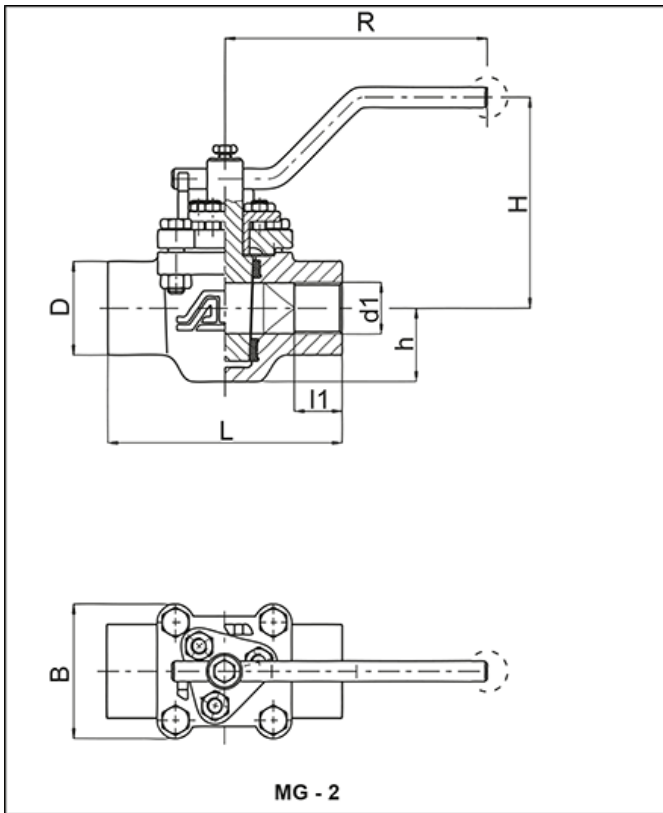
AZ plug valves are fitted with cast, rust proof position indicators  
The position indicator is securely welded to the plug to prevent it from working loose.

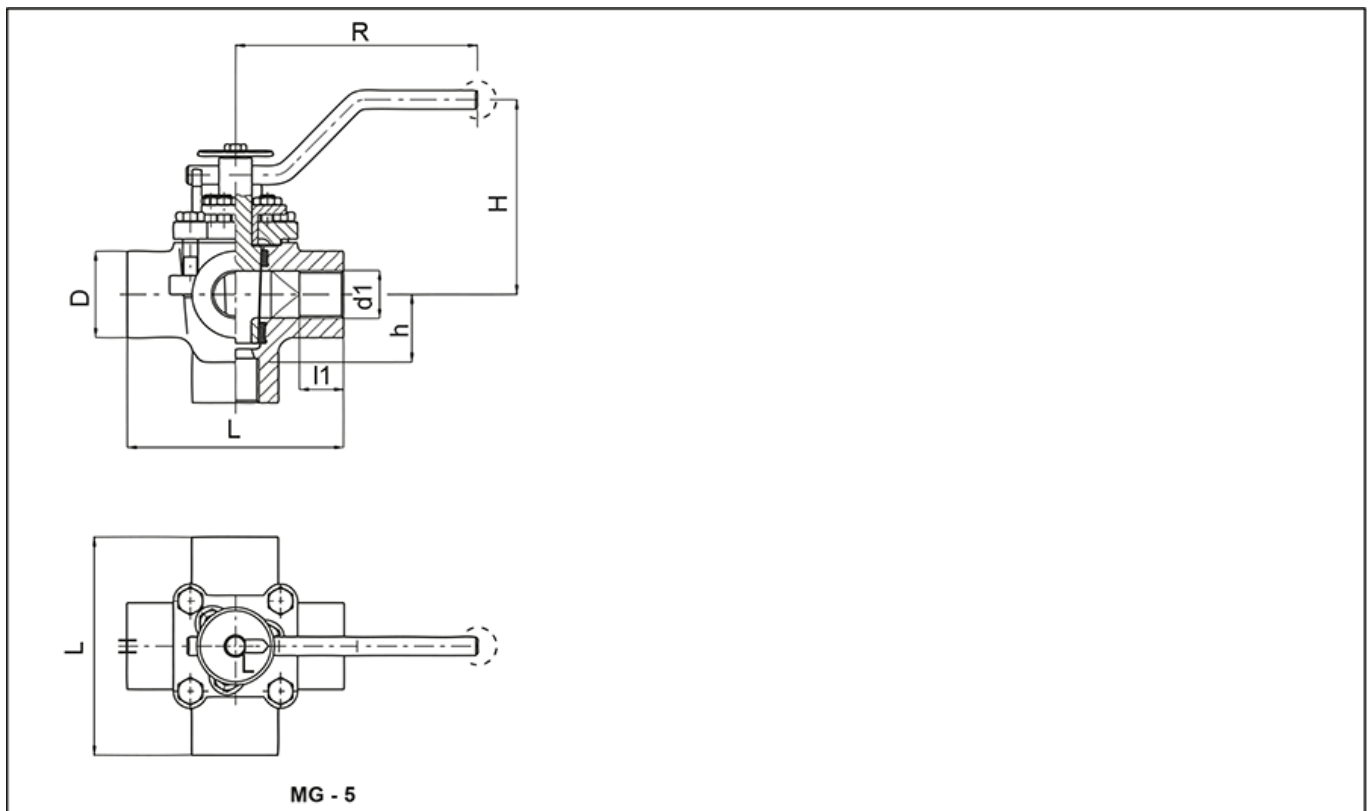




 <p>Form L</p>	 <p>Pos. I = 0°</p>	 <p>Pos. II = 90°</p>	 <p>Pos. III = 180°</p>	 <p>Pos. IV = 270°</p>
 <p>Form LL</p>	 <p>Pos. I = 0°</p>	 <p>Pos. II = 90°</p>	 <p>Pos. III = 180°</p>	 <p>Pos. IV = 270°</p>
 <p>Form IL</p>	 <p>Pos. I = 0°</p>	 <p>Pos. II = 90°</p>	 <p>Pos. III = 180°</p>	 <p>Pos. IV = 270°</p>
 <p>Form T</p>	 <p>Pos. I = 0°</p>	 <p>Pos. II = 90°</p>	 <p>Pos. III = 180°</p>	 <p>Pos. IV = 270°</p>
 <p>Form TT</p>	 <p>Pos. I = 0°</p>	 <p>Pos. II = 90°</p>	 <p>Pos. III = 180°</p>	 <p>Pos. IV = 270°</p>

## Technische Daten





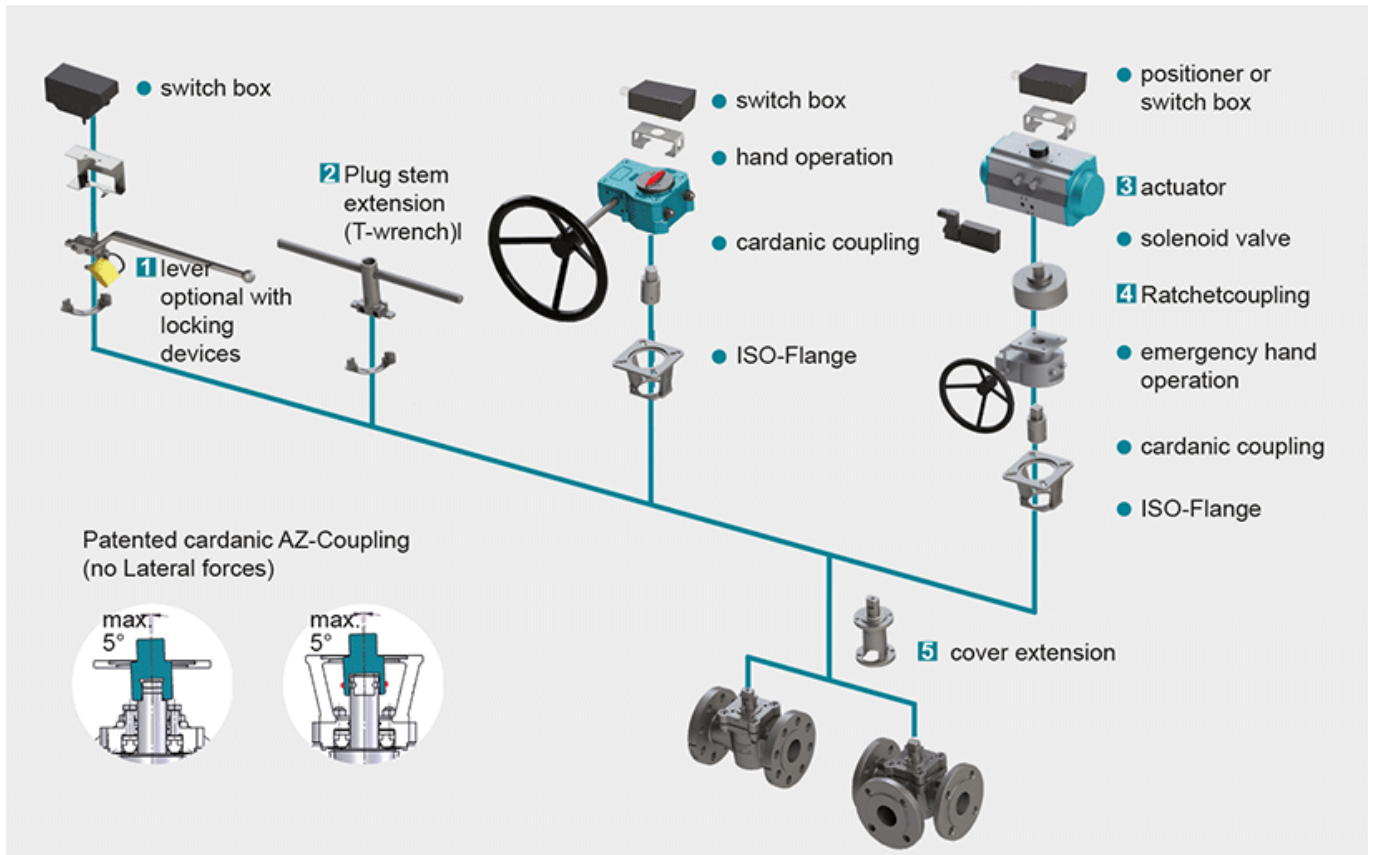
	d1	l1	L	L/2	D	h	B	R	H
<b>MG</b>	½"	22	115/165*	57,5	46	36	66	200	110
	¾"	22	115/165*	57,5	46	36	66	200	110
	1"	22	115/165*	57,5	46	36	66	200	110
	1¼"	22	150	75	60	44	84	320	125
	1½"	22	150	75	60	44	84	320	125
	2"	23	180	90	78	55	102	420	150
	2½"	24	180	90	90	66	102	420	150
	3"	24	220	110	105	86	124	600	165

\*) only for tow way valves M2, enlarge

size on request

up to R 1" lever with ball

## Actuation



### 1 Locking Devices

Pilot valve combinations, pad lock eyelets, linear key conception, indexing plunger arrestor.

### 2 Plug stem extension

Solid construction in stainless steel with T-wrench, Standard extension 100 mm or 150 mm, non standard lengths are available on request

### 3 Actuators

Actuators for mounting-flange acc. to DIN ISO 5211

NEW: Pneumatic actuator AIR GEAR for plug valves with high torque =150.000 Nm

### 4 Ratched coupling

To usw on multiport valves with standard 90° actuator for bigger switchpositions than 90°

### 5 Cover extension

Solid construction in stainless steel, Standard extension 100 mm or 150 mm high, non standard lengths are available on request . Hexagonal bolts on adjustment ring freely accessible. Note: Don't use with sealing FSN/FSN-SL and CASN/CASN-SL