

## Threaded 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)
- Directive 2014/68/EU
- fire safe design API 607 / ISO 10497
- FDA conformity

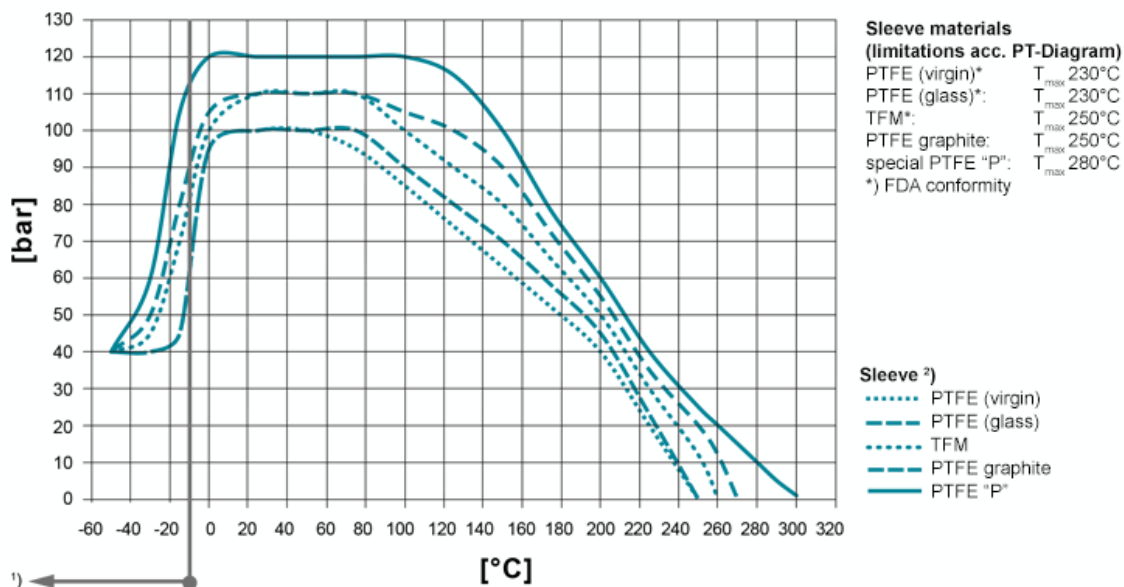
standard connections:

- 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;

Tmax 230°C

### Type STD

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Firesafe sealing (API 607) with graphite packing for additional stem sealing; Tmax 230°C

### Type FS

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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

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Firesafe safety sealing (API 607) for fluctuating temperatures

with 3x graphite packing (adjustable) for additional stem sealing; Tmax 280°C

### Type FSN

[read more \[...\]](#)

Firesafe safety sealing (API 607) for fluctuating temperatures

with 3x graphite packing (live loaded disc springs) for additional

stem sealing; Tmax 280°C

### Type FSN-SL

[read more \[...\]](#)

Chemical safety sealing for fluctuating temperatures with 3x PTFE packing (adjustment) for additional stem sealing;

Tmax 230°C

### Type CASN

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Chemical safety sealing for fluctuation temperatures

with 3x PTFE packing (live loaded disc springs) for additional stem sealing; Tmax 230°C

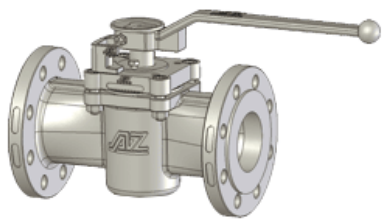
### Type CASN-SL

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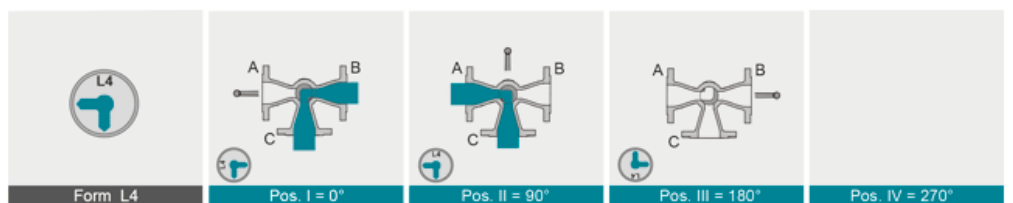
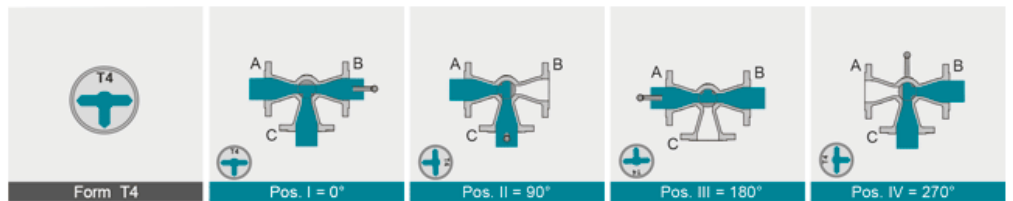
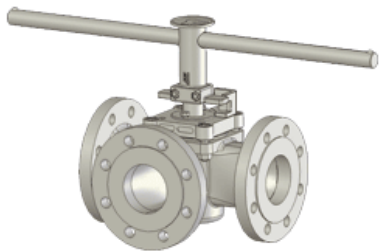
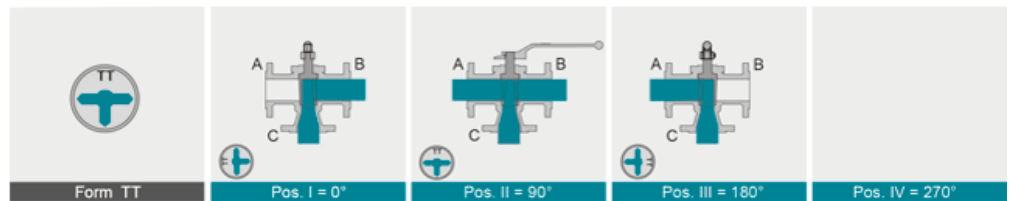
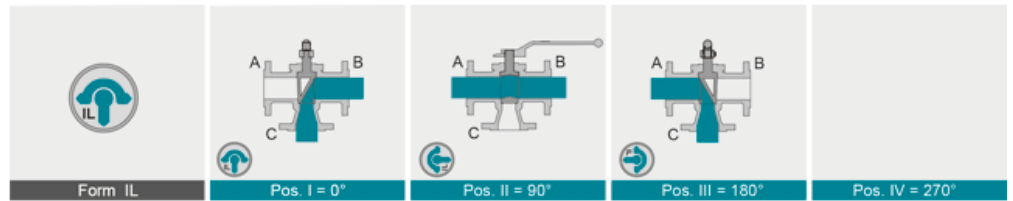
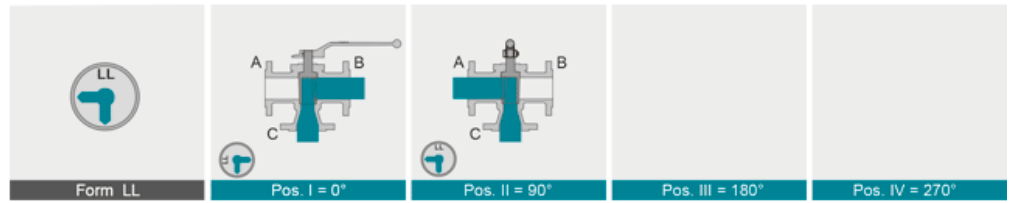
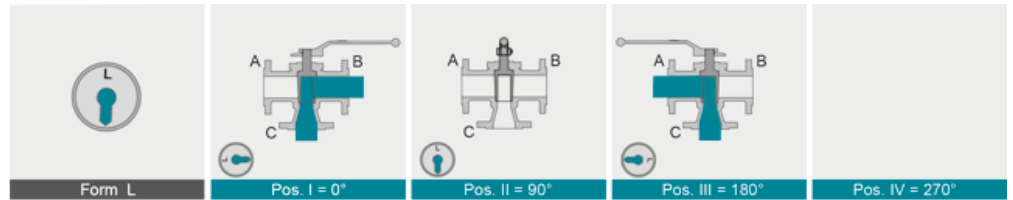
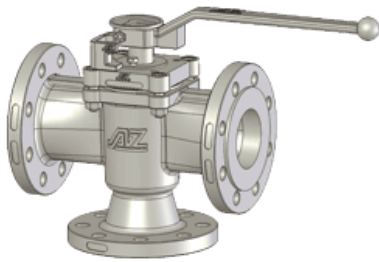
Port Forms

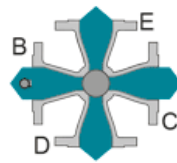
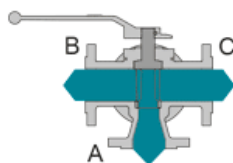
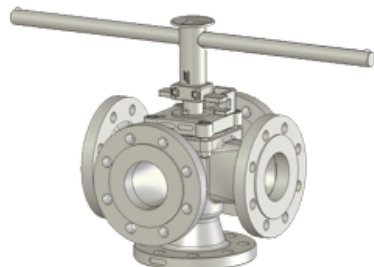
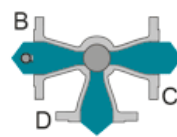
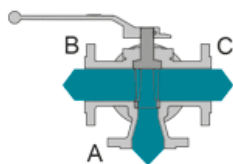
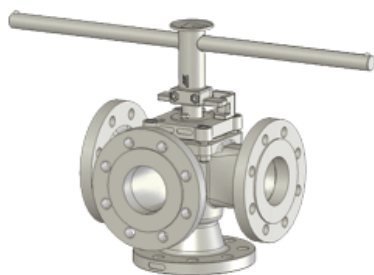


AZ plug valves are fitted with cast, rust proof position indicators. The position indicator is securely welded to the lever to prevent it from working loose.



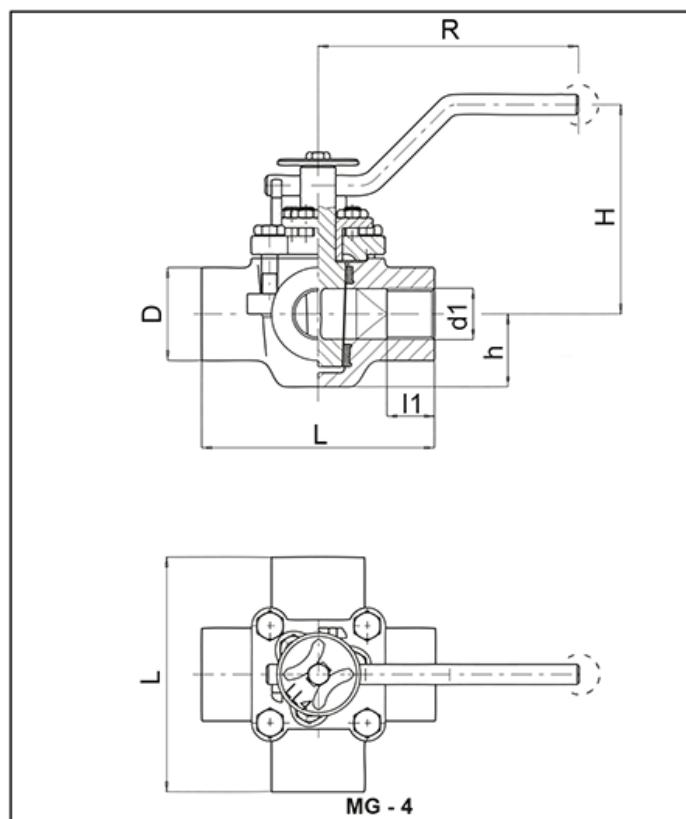
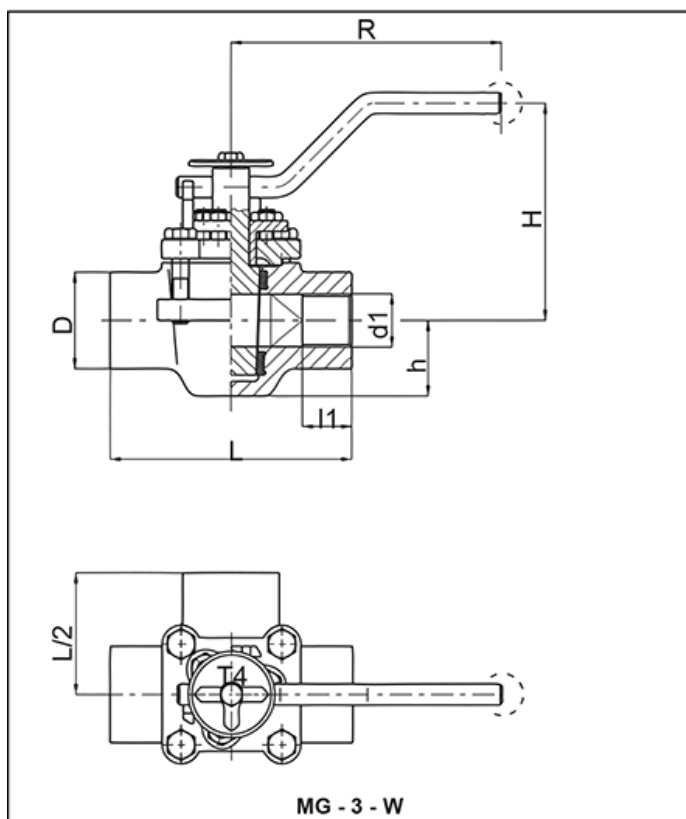
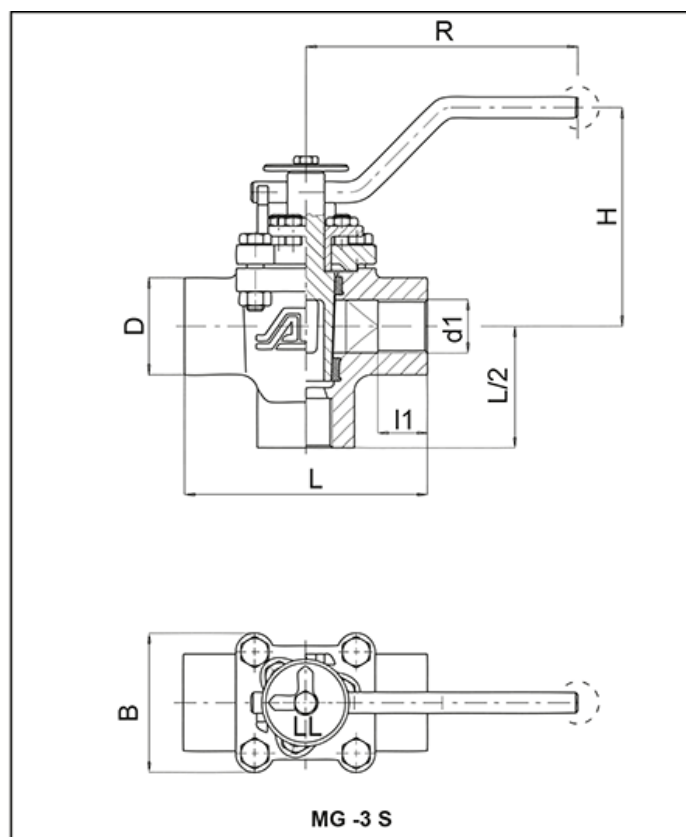
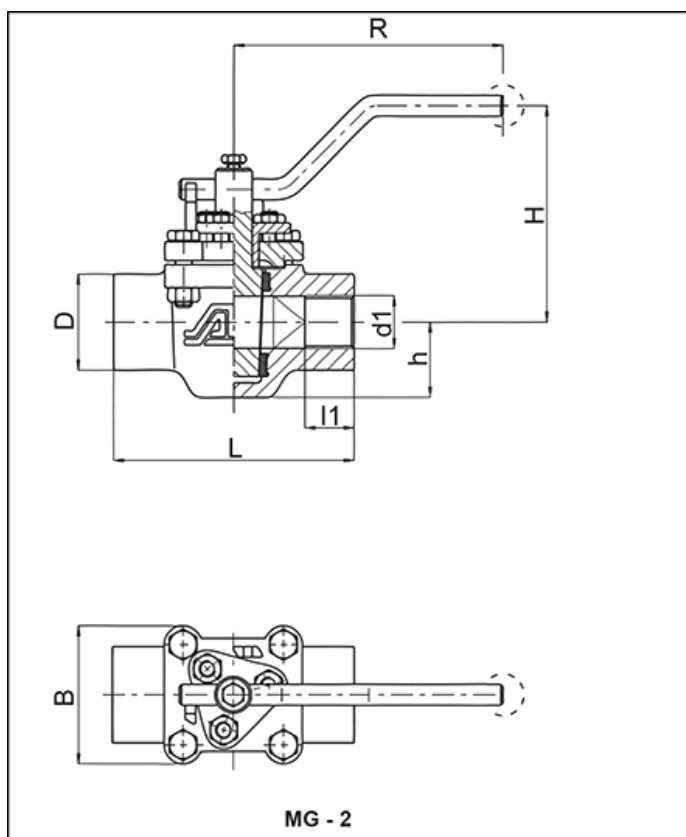
Form D	Pos. I = 0°	Pos. II = 90°	Pos. III = 180°	Pos. IV = 270°
Form T4	Pos. I = 0°	Pos. II = 90°	Pos. III = 180°	Pos. IV = 270°

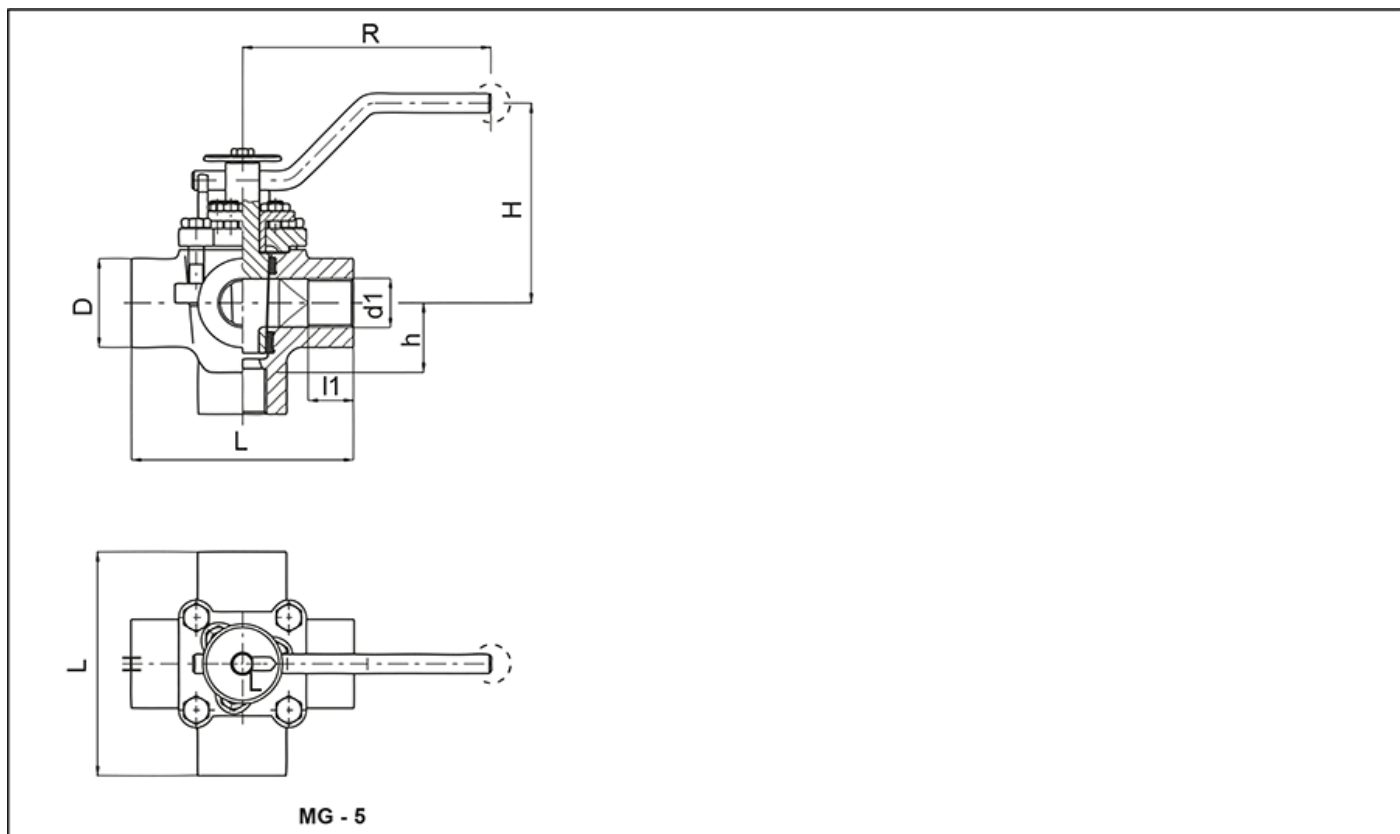




 Form L	 Pos. I = 0°	 Pos. II = 90°	 Pos. III = 180°	 Pos. IV = 270°
 Form LL	 Pos. I = 0°	 Pos. II = 90°	 Pos. III = 180°	 Pos. IV = 270°
 Form IL	 Pos. I = 0°	 Pos. II = 90°	 Pos. III = 180°	 Pos. IV = 270°
 Form T	 Pos. I = 0°	 Pos. II = 90°	 Pos. III = 180°	 Pos. IV = 270°
 Form TT	 Pos. I = 0°	 Pos.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

## 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

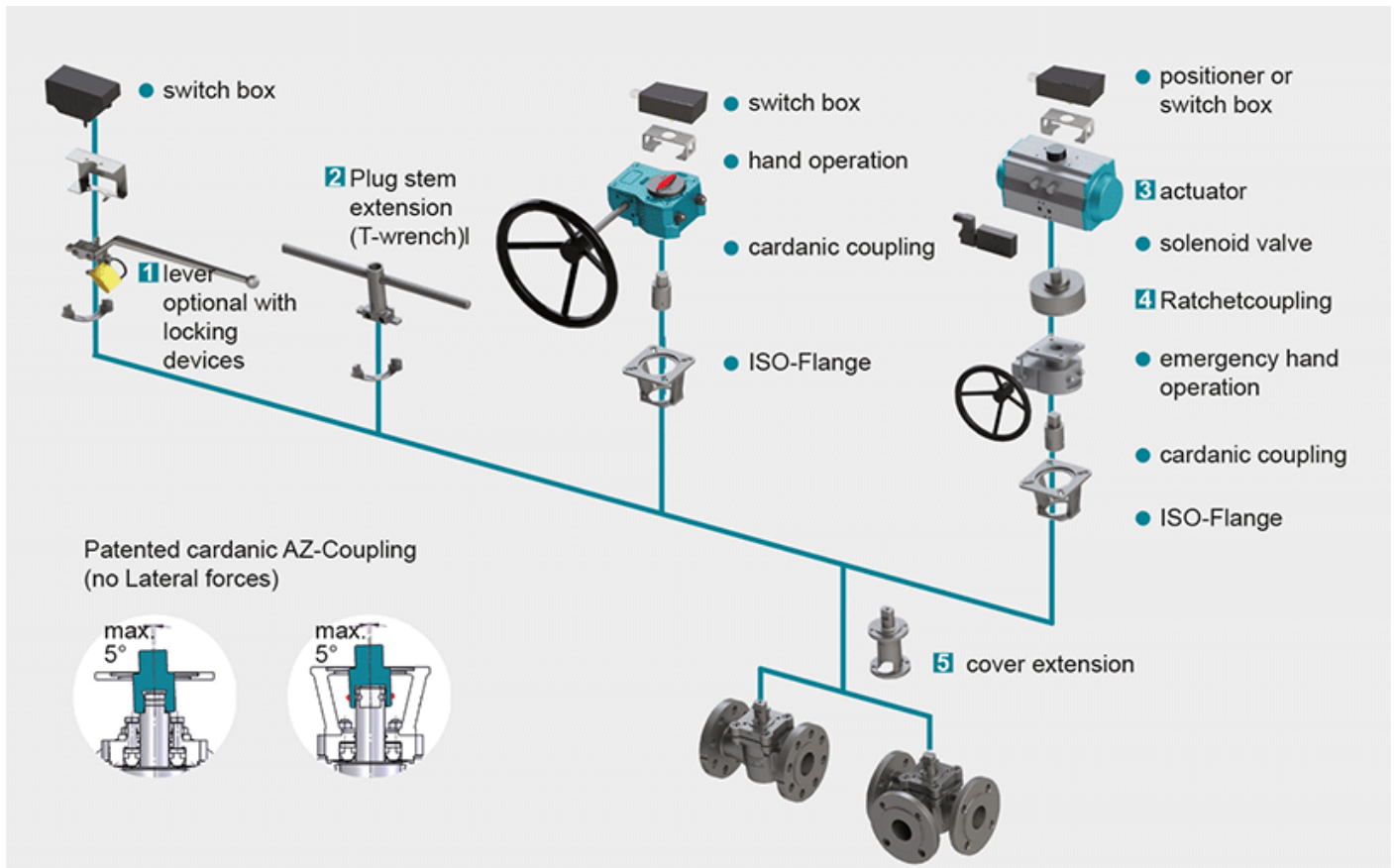
\*) only for tow way valves M2, enlarge

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.  
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## 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  
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## 3 Actuators

Actuators for mounting-flange acc. to DIN ISO 5211  
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NEW: Pneumatic actuator AIR GEAR for plug valves with high torque =150.000 Nm  
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## 4 Ratched coupling

To usw on multiport valves with standard 90° actuator for bigger switchpositions than 90°  
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## 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  
[read more \[...\]](#)