

## Type MBZ / MGZ / WA

### Instrumentation plug valves

## Type FM-100

### Manometer Plug Valve



Type MBZ



Type MGZ



Type WA

- maintenance-free, self-lubricating
- solid chambering of PTFE seals
- 2-way up to 5-way

NPS ¼ - 1 / Class 150 - 300  
(higher pressure range on request)

Range of application:  
-60 < T < 230/280°C,  
vacuum-capable

#### Design characteristics

- cavity-free
- no rotation of PTFE-sleeve
- easy accessible adjustment of the plug

#### Option

- heating jacket
- actuator

**Type MBZ** (connection ¼" - 1")  
Screwed plug valves with block body, made of solid forged / bar material or special material, male and female threads. Material:

- Titanium, Nickel, Monel, Tantalum, Alloy etc.

**Type MGZ** (connection ¼" - ½")  
Screwed plug valves with precision casting body, male and female threads, special connections on request. Material:

- Stainless Steel, 1.4408, ASTM A351 CF8M (other on request)

**Type WA** (connection G¼")  
Two-way screwed plug valves with precision casting body, male and female threads. Material:

- Stainless Steel, 1.4408, ASTM A351 CF8M (other on request)

- quarter turn valve for safe shut-off
- safe-guarded ventilation of pressure gauge

DN 15 - 25 / PN 10 - 160  
NPS ½ - 1 / Class 150 - 900

Range of application::  
-60°C bis +230/280°C

#### Design characteristics

- cavity- and maintenance-free
- lockable
- easy accessible adjustment of the plug
- material 1.4408

#### Option

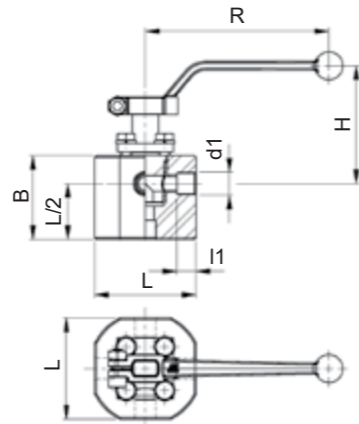
- ventilation
- test connection (M20 x 1,5)
- safety chain (test connection cap)
- anti-static device
- other materials
- other manometer connection



# Type MBZ / MGZ / WA

## Technical information

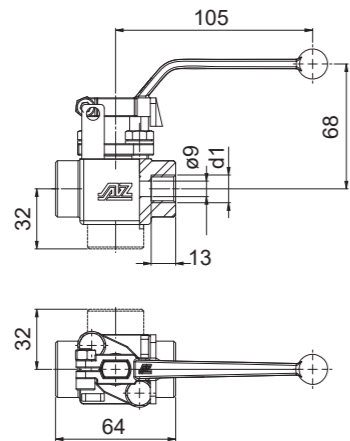
**Type MBZ (M-5)**  
with female thread



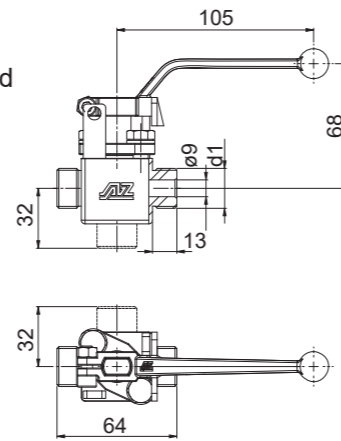
MBZ	d1 [G / Rp / Rc / NPT]	l1 [mm]	L [mm]	L2 [mm]	h [mm]	B [mm]	A [mm]	R [mm]	H [mm]
	1/4	13/10*	64/58*	32	16	32	48	105	67,5
	3/8	13/10*	64/58*	32	16	32	48	105	67,5
	1/2	13	64/80*	32/40*	16/22,5*	32	48/62,5*	105/200*	67,5/110
	3/4	13	80	40	22,5	45	62,5	200	110
	1	13	80	40	22,5	45	62,5	200	110

**Type MGZ**  
with female thread

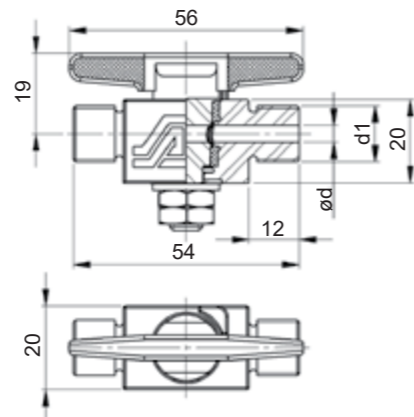
All sizes same  
dimensions  
(R 1/4" - R 1/2")



**Type MGZ**  
with male thread

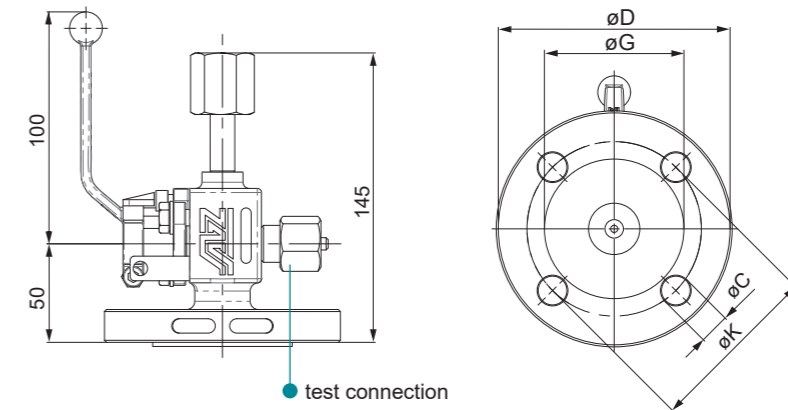


**Type WA**  
with female thread  
Ød = 4 or 6 mm



# Type FM-100

## Technical information



DN / NPS	PN / Class	øG [mm]	øD [mm]	øK [mm]	øC [mm]
DN 15	10-40	45	95	65	4x 14
DN 25	10-40	68	115	85	4x 14
NPS 1/2	150	31,5	88,9	60,5	4x 15,7
	300	30	95,2	66,5	4x 15,7
NPS 1	150	50,8	98,6	69,9	4x 15,7
	300		117,3	82,5	4x 19,0

Other flange dimensions and working pressure > PN40 / class 300 on request  
Valves with larger flange dimensions or screwed plug valves on request


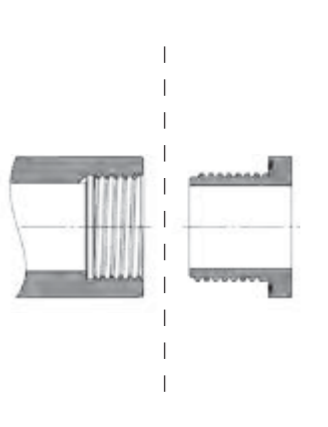
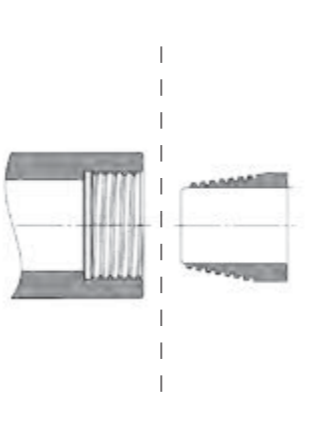
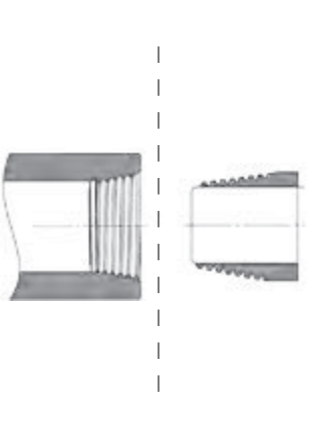
Order Example: MGZ-2-1/2"-NPT-1.4408

MGZ = type, 2 = 2-way, 1/2" = size, NPT = thread, 1.4408 = body material


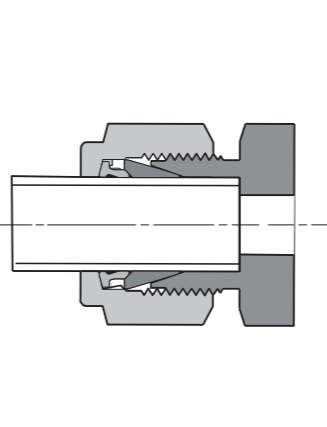
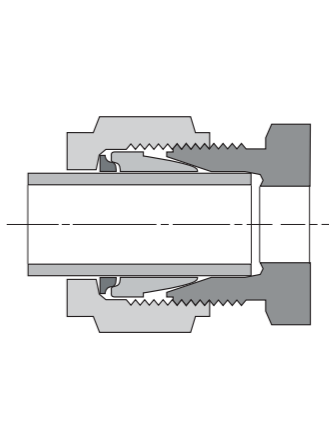
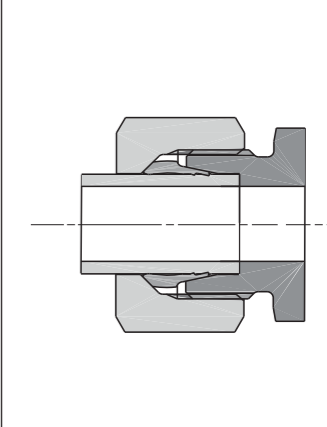
Order Example:: FM-100-DN15-PN40-1.4408

FM-100 = type, DN15 = nominal size, PN40 = pressure rating, 1.4408 = material

## Available threaded connections for AZ valves (Instrumentation, piping etc.)

Pipe Thread							
	<b>Connection</b>	<b>parallel</b>		<b>parallel / tapered</b>		<b>tapered</b>	
	<b>Form</b>	female thread parallel	male thread parallel	female thread parallel	male thread tapered	female thread tapered	male thread tapered
	<b>Abbreviation</b>	BSPP (G) BSPP (Rp)	BSPP (G) BSPP (G)	BSPP (G) BSPP (Rp)	BSPT (R) BSPT (R)	NPT NPTF	NPT NPTF
	<b>Example</b>	Whitworth (DIN ISO 228) BSP thread		Whitworth (DIN 2999 / EN 10226)		NPT thread (ANSI B 1.20.1) NPTF thread (ANSI B 1.20.3) BSPT thread	
<b>Remarks</b>	threads to be sealed with O-ring or gasket		thread sealant tape to be used for leak free connection		NPT: thread sealant tape to be used for leak free connection NPTF: connection sealant leak free		
<b>Available connection for screwed AZ valves (other thread or special threads on request)</b>							
Type MG	G $\frac{1}{2}$ " - 3" BSP R $\frac{1}{4}$ " - R3"		Rp $\frac{1}{2}$ " - Rp3"	R $\frac{1}{4}$ " -R3"	NPT $\frac{1}{2}$ " - 3"	NPT $\frac{1}{2}$ " - 3"	
Type MGZ	G $\frac{1}{4}$ " - G $\frac{3}{4}$ " BSP R $\frac{1}{4}$ " - R $\frac{3}{4}$ "		Rp $\frac{1}{4}$ " - Rp $\frac{3}{4}$ "	R $\frac{1}{4}$ " - R $\frac{3}{4}$ "	NPT $\frac{1}{4}$ " - 1"	NPT $\frac{1}{4}$ " - 1"	
Type MBZ	G $\frac{1}{4}$ " - G1" BSP R $\frac{1}{4}$ " - R1"		Rp $\frac{1}{4}$ " - Rp1"	R $\frac{1}{4}$ " - R1"	NPT $\frac{1}{4}$ " - 1"	NPT $\frac{1}{4}$ " - 1"	
Type WA	G $\frac{1}{4}$ "		R $\frac{1}{4}$ "				

## Tube fitting connections for AZ plug valves

Tube fittings						
	<b>Connection</b>	<b>SWAGELOK compression fitting</b>		<b>GYROLOK compression fitting</b>	<b>ERMETO EO Ferrule Ring Coupling</b>	
	<b>Form</b>	metallic seal special material available		metallic seal special material available	metallic seal high tightening torque deformation of the pipe	
	<b>Available connection for screwed AZ valves (other thread or special threads on request)</b>					
	Type MG					
Type MGZ	<ul style="list-style-type: none"> <li>for metric pipe: pipe A.D. 10 - 14 mm</li> <li>for ANSI pipe: pipe A.D. <math>\frac{3}{8}</math>" - <math>\frac{1}{2}</math>"</li> </ul>		<ul style="list-style-type: none"> <li>for metric pipe: pipe A.D. 10 - 14 mm</li> <li>for ANSI pipe: pipe A.D. <math>\frac{3}{8}</math>" - <math>\frac{1}{2}</math>"</li> </ul>	<ul style="list-style-type: none"> <li>light: pipe A.D. 10 - 15 mm (M16x1,5 - M22x1,5)</li> <li>heavy: pipe A.D. 10 - 14 mm (M18x1,5 - M22x1,5)</li> </ul>		
Type MBZ	<ul style="list-style-type: none"> <li>for metric pipe: pipe A.D. 3 - 25 mm</li> <li>for ANSI pipe: pipe A.D. 1/16" - 1"</li> </ul>		<ul style="list-style-type: none"> <li>for metric pipe: pipe A.D. 3 - 25 mm</li> <li>for ANSI pipe: pipe A.D. 1/16" - 1"</li> </ul>	<ul style="list-style-type: none"> <li>light: pipe A.D. 6 - 22 mm (M12x1,5 - M30x1,5)</li> <li>heavy: pipe A.D. 6 - 14 mm (M14x1,5 - M22x1,5)</li> </ul>		
Type WA						

