

# SLEEVED PLUG VALVES

SLEEVED PLUG VALVES



**AUDCO ITALIANA**  
*Your Valve Specialist*

**AUDCO ITALIANA srl**  
Headquarter and plant

Via Carlo Dell'Acqua, 1 | 20027 Rescaldina (MI) - Italy  
Tel. +39.0331.1561323 | Fax. +39.0331.1561327  
info@audco.it | [www.audco.it](http://www.audco.it)

# SLEEVED PLUG VALVES

## Introduction

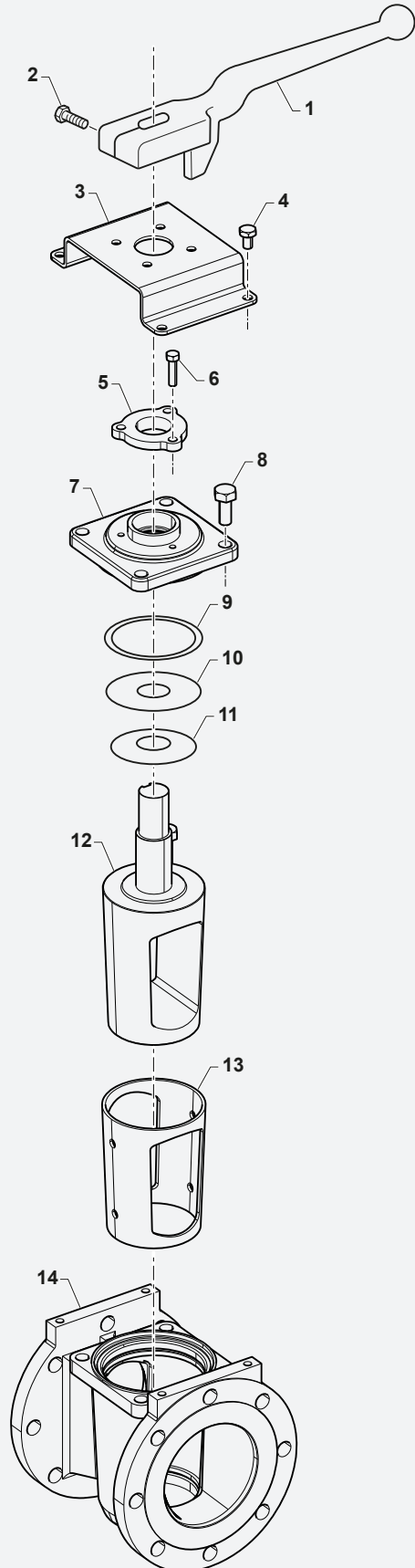
A high standard of performance is achieved by intimate contact between plug and the firmly fixed PTFE sleeve in the body and by separate atmospheric seals.

## Design Features

### Body design

The PTFE sleeve serves as the seat for the valve plug thus eliminating contact of two metal surfaces. The design permits the use of any body/plug material combination. Positive shut-off is ensured and the valves are free from regular maintenance.

PTFE has a natural tendency to flow under temperature and pressure.



Part no.	Description
1	Lever
2	Screw
3	Bracket
4	Screw
5	Flange *
6	Screw
7	Cover
8	Screw
9	Cover Gasket
10	Metal Diaphragm
11	PTFE Diaphragm
12	Plug
13	PTFE Sleeve
14	Valve body

\* ONLY FOR FUGITIVE EMISSION APPLICATIONS

- Maintenance free – self lubricating
- Directive 2014/68/EU
- Easy accessible adjustment of the plug, even with mounted actuator
- Free of cavities
- Mounting-flange for actuators acc. to DIN ISO 5211
- Firesafe design API 607 ISO 10497
- Vacuum tight
- Fugitive emission resp. clean air act certified (TA-Luft 2002 approval)
- FDA conformity

### 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

- Ductile cast iron ENJS 1049, ASTM Gr 60-40-18 / A395
- Alloy
- Monel
- Nickel
- Zirconium
- Titan
- Tantal
- Other materials on request

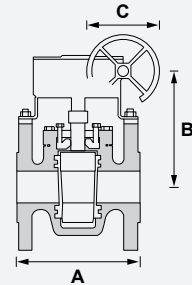
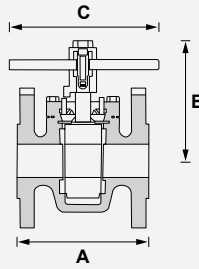
## Applicable Standard-Specification

**Plug Valves are designed to use with most refining services according to API 599 or BS 5353 norms whichever is applicable. API 6D norm aims to standardize the materials as well as instructions to manufacture valves suitable for energy transportation in the pipelines.**

API 6D	Specification for Pipeline Valves.	BS 2080	Face to Face - Centre to Face - End to End - Steel Valves.
API 607	Specification for Fire Test soft seat valves.	BS 5353	Specification for Steel Plug Valves.
API RP6F	Recommended - Practice for Fire Test for valves.	BS 6755 part 1	Testing of Valves (Spec. for Production Pressure Testing Requirements).
API 598	Valve Inspection and Testing.	BS 6755 part 2	Testing of Valves (Spec. for Fire Safe Testing Requirements).
API 599	Steel Plug Valves Flanged or Butt Welding Ends.	CSA Z 245. 15	Canadian Standard Association.
ASME/ANSI B 16.5	Pipe Flanges and Flanged Fittings.	MSS-SP6	Standard Finish for contact Face of Pipe Flanges.
ASME/ANSI B 16.10	Face-to-Face and End-to-End Dimensions of Valves.	MSS-SP25	Standard Marking System for Valves.
ASME/ANSI B 16.25	Buttwelding Ends.	MSS-SP44	Steel Pipe Line Flanges.
ASME/ANSI B 16.34	Valves-Flanged, threaded and Welding Ends.	MSS-SP53	Quality Standard for Steel Casting-Magnetic Particle Examination Method.
ASME/ANSI B 31.3	Chemical Plant and Petroleum Refinery Piping.	MSS-SP54	Quality Standard for Steel Casting-Radiographic Examination Method.
ASME/ANSI B 31.4	Liquid Transportation System for Liquid Petroleum Gas.	MSS-SP55	Quality Standard for Steel Casting Visual Method.
ASME/ANSI B 31.8	Gas Transmission and Distribution Piping System.	MSS-SP61	Pressure Testing of Steel Valves.
ASME	Boiler and Pressure Vessel Section VIII - DIV. 1 & 2.	NACE Std. MR 01.75 Latest Edition	National Association of Corrosion Engineers.
ASME	Boiler and Pressure Vessel Section V.	ASTM	American Society for Testing and Materials.
ASNT-TC-1A	Recommended Practice for Personnel Qualification and Certification in Non destructive Testing.		

# Sleeved Plug Valves

Class 150 & 300



## Applications (Standard Plug valves)

- Chemical Process Plants
- Fertilizer Plants
- Dyes and Pigments
- Pesticides
- Caustic Chlorine Plants
- Hazardous Fluids
- Acids and Alkalies

## Applications (Caged Plug valves)

- Phosphoric Acid Slurry
- Titanium Dioxide Slurry
- Suspended Solid Slurries
- Uranium Ore Slurries
- Caustic Soda & Lime Slurry
- Heavy Black Liquor
- Fly Ash

## Test pressure in bar (psi)

Pressure rating <sup>2)</sup>	Class 150	Class 300	PN10	PN16
Hyd. Shell	30 (435)	76 (1102)	15 (218)	24.0 (348)
Seat	22 (319)	56 (812)	11 (160)	17.6 (255)
Air Seat	← 7.0 (102) →			

Design STD: API 599, BS 5353 & API 6D  
Testing STD : API 598 & EN 12266-1

## Dimensions area in mm (inch)

Size mm (inch)	A			B	C	Port Area mm <sup>2</sup> (inch <sup>2</sup> )	% Port Open	Wt <sup>1)</sup>		
	Class 150	Class 300	DIN					Class 150	Class 300	DIN
15 (½)	108 (4.3)	140 (5.5)	130 (5.1)	95 (3.7)	225 (8.9)	120 (0.19)	92	2.0 (4.5)	3.5 (8)	2.6 (6)
20 (¾)	117 (4.6)	152 (6.0)	150 (5.9)	100 (3.9)	225 (8.9)	240 (0.37)	86	2.5 (5.5)	5.0 (11)	3.5 (8)
25 (1)	140 (5.5)	165 (6.5)	160 (6.3)	110 (4.3)	225 (8.9)	390 (0.60)	80	4.5 (10)	6.5 (14)	5.7 (13)
32 (1 ¼)	165 (6.5)	178 (7.0)	180 (7.1)	110 (4.3)	325 (12.8)	545 (0.84)	68	6.0 (13)	9.0 (20)	8.0 (18)
40 (1 ½)	165 (6.5)	190 (7.5)	200 (7.9)	120 (4.7)	325 (12.8)	750 (1.16)	66	7.5 (17)	11 (24)	9.6 (21)
50 (2)	178 (7.0)	216 (8.5)	230 (9.1)	145 (5.7)	450 (17.7)	1450 (2.25)	74	12 (27)	16 (35)	15 (33)
65 (2 ½)	190 (7.5)	241 (9.5)	290 (11.4)	141 (5.6)	450 (17.7)	2080 (3.22)	66	15 (33)	19 (42)	22 (49)
80 (3)	203 (8.0)	283 (11.1)	310 (12.2)	160 (6.3)	450 (17.7)	2540 (3.94)	53	18 (40)	22 (49)	24 (53)
100 (4)	229 (9.0)	305 (12.0)	350 (13.8)	195 (7.7)	750 (29.5)	4470 (6.93)	57	30 (66)	44 (97)	38 (84)
125 (5)	254 (10.0)	381 (15.0)	400 (15.7)	236 (9.3)	450 (17.7)	7305 (11.32)	58	52 (115)	78 (172)	78 (172)
150 (6)	267(10.5)	403 (15.9)	480 (18.9)	250 (9.8)	450 (17.7)	10010 (15.52)	55	60 (132)	91 (212)	90 (198)
200 (8)	292(11.5)	419 (16.5)	600 (23.6)	280 (11.0)	500 (19.7)	15800 (24.50)	49	96 (212)	148 (326)	166 (366)
250 (10)	330 (13.0)	457 (18.0)	730 (28.7)	340 (13.4)	500 (19.7)	23820 (36.92)	47	142 (313)	210 (463)	270 (595)
300 (12)	356(14.0)	502 (19.8)	850 (33.5)	390 (15.4)	500 (19.7)	31220 (48.40)	43	195 (430)	295 (650)	395 (870)
350 (14)	381/386 (15.0/27.0)	-	-	450 (17.7)	500 (19.7)	38180 (59.18)	43	270/300 (595/661)	-	-
400 (16)	762 (30.0)	-	-	595 (23.4)	500 (19.7)	74458 (115.41)	61	560 (1235)	-	-
450 (18)	864 (34.0)	-	-	650 (25.6)	500 (19.7)	97938 (151.80)	65	950 (2094)	-	-

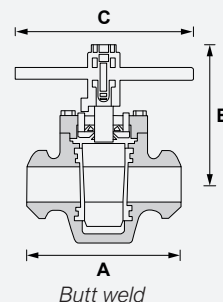
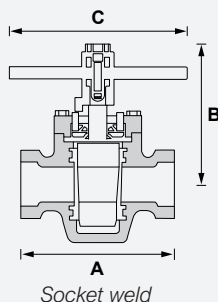
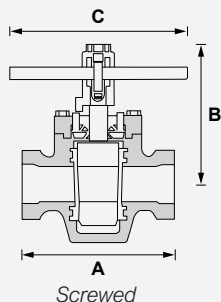
## Materials

Body & Cover <sup>3)</sup>	Ductile Iron ASTM A395/ Steel ASTM A216 Gr. WCB/ ASTM A351 Gr. CF8 / CF8M / CN7M
Plug	Steel ASTM A217 Gr. CA15 / ASTM A351 Gr. CF8 / CF8M / CN7M
Sleeve / Diaphragm	PTFE / CFT / GFT / PTFE NXT
Wedge Ring	PTFE / CFT / GFT / Grafoil <sup>5)</sup>
Metal Diaphragm / Static Eliminator	ASTM A240 Type 304
Thrust Collar	ASTM A351 Gr. CF8
Adjusting Screws	ASTM A276 Type 304
Fasteners	SS 304
Adapter / Lever	Steel - Powder coated
Gear Unit	Housing in Cast Iron, Gear in S. G. Iron and Worm in EN8
Bearing <sup>4)</sup>	PTFE
Body Gasket <sup>5)</sup>	Grafoil
Surface Protection for Ductile Iron and Cast Carbon Steel Valves	Prime Coat: Chlorine free with modified alkyd resin unobjectionable in physiological and toxicological respects. Additional External Coating: Synthetic Enamel.

<sup>1)</sup> Nett in kg (lbs) approx. (without obligation) <sup>2)</sup> Pressure rating : PN10 & PN16 for DIN valves. <sup>3)</sup> DI material for class 150 & also for Non Fire-safe design only. <sup>4)</sup> Far Caged valves only. <sup>5)</sup> For Fire-safe valves only. • Gear actuators mandatory for sizes 125mm (5") & above. • Valves can be supplied to suit ASME B16.5 flanges. Other drilling on request if possible. • Face to face dimensions (A) as per ASME B16.10 short for sizes 15mm (1/2") to 300mm (12") & regular for sizes 350mm (14") & above {EN 558 Series-3 for class 150 sizes up to 350mm (14"), Series-12 for size 400mm (16") & 450mm (18"), Series-4 for class 300}, EN 558 Series-1 for DIN valves. • Please specify working pressure, temperature & service conditions. • Valves can be supplied with Locking, Extended Stem / Electrical / Pneumatic Actuators, & accessories like Limit Switch, Solenoid Valve, Air Filter Regulator, Positioner etc. • Other materials not mentioned above available on requests.

# Sleeved Plug Valves

## Class 150, 300 & 600



### Applications (Standard Plug valves)

- Chemical Process Plants
- Fertilizer Plants
- Dyes and Pigments
- Pesticides
- Caustic Chlorine Plants
- Hazardous Fluids
- Acids and Alkalies

### Applications (Caged Plug valves)

- Phosphoric Acid Slurry
- Titanium Dioxide Slurry
- Suspended Solid Slurries
- Uranium Ore Slurries
- Caustic Soda & Lime Slurry
- Heavy Black Liquor
- Fly Ash

### Test pressure in bar (psi)

Pressure rating	Class 150	Class 300	Class 600
Hyd. Shell	30 (435)	76 (1102)	158 (2292)
Seat	22 (319)	56 (812)	110 (1595)
Air Seat	7.0 (102)		

Design STD: API 599, BS 5353 & API 6D  
Testing STD : API 598 & EN 12266-1

### Dimensions area in mm (inch)

Size mm (inch)	A		B	C	Wt <sup>1)</sup>	
	SE, SWE & BWE	Extended BWE			SE, SWE & BWE	Extended BWE
15 (½)	83 (3.3)	250 (9.8)	95 (3.7)	225 (8.9)	1.7 (3.5)	2.0 (4.5)
20 (¾)	83 (3.3)	250 (9.8)	100 (3.9)	225 (8.9)	1.9 (4.0)	2.3 (5.0)
25 (1)	117 (4.6)	280 (11.0)	110 (4.3)	225 (8.9)	3.5 (8.0)	4.0 (9.0)
32 (1 ¼)	140 (5.5)	330 (13.0)	110 (4.3)	325 (12.8)	4.0 (9.0)	4.5 (10.0)
40 (1 ½)	140 (5.5)	330 (13.0)	120 (4.7)	325 (12.8)	4.5 (10.0)	5.0 (11)
50 (2)	165 (6.5)	360 (14.2)	145 (5.7)	450 (17.7)	7.5 (17.0)	8.0 (18.0)
65 (2 ½)	190 (7.5)	400 (15.7)	141 (5.6)	450 (17.7)	8.5 (19.0)	9.0 (20.0)
80 (3)	203 (8.0)	425 (16.7)	160 (6.3)	450 (17.7)	11.0 (24.0)	12 (27.0)

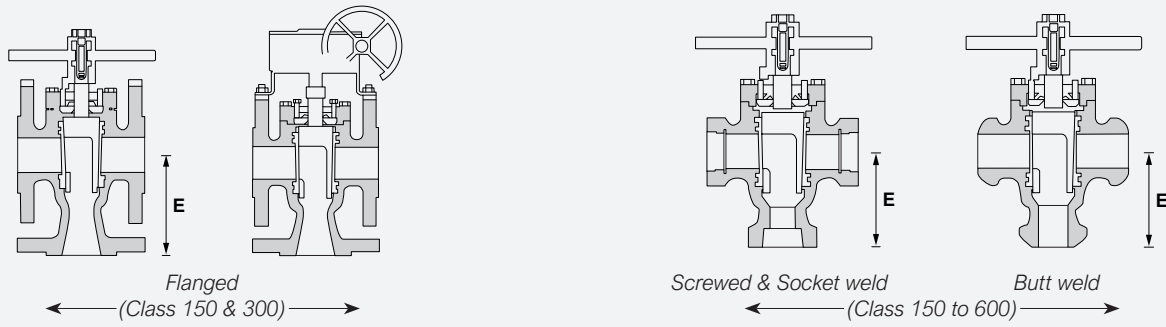
### Materials

Body & Cover <sup>2)</sup>	Ductile Iron ASTM A395/ Steel ASTM A216 Gr. WCB/ ASTM A351 Gr. CF8 / CF8M / CN7M
Plug	Steel ASTM A217 Gr. CA15 / ASTM A351 Gr. CF8 / CF8M / CN7M
Sleeve / Diaphragm	PTFE / CFT / GFT / PTFE NXT
Wedge Ring	PTFE / CFT / GFT / Grafoil <sup>4)</sup>
Metal Diaphragm / Static Eliminator	ASTM A240 Type 304
Thrust Collar	ASTM A351 Gr. CF8
Adjusting Screws	ASTM A276 Type 304
Fasteners	SS 304
Adapter / Lever	Steel - Powder coated
Gear Unit	Housing in Cast Iron, Gear in S. G. Iron and Worm in EN8
Bearing <sup>3)</sup>	PTFE
Body Gasket <sup>4)</sup>	Grafoil
Surface Protection for Ductile Iron and Cast Carbon Steel Valves	Prime Coat: Chlorine free with modified alkyd resin unobjectionable in physiological and toxicological respects. Additional External Coating: Synthetic Enamel.

<sup>1)</sup> Nett in kg. (lbs) approx. (without obligation) <sup>2)</sup> DI material for class 150, Screwed ends Non Fire-safe design only. <sup>3)</sup> For Caged valves only. <sup>4)</sup> For Fire-safe valves only.  
• Standard screwed ends to have BS:21 (parallel or taper) or ANSI / ASME B1.20.1 (NPT) threads. Socket weld ends as per ASME B16.11 & Butt weld ends as per ASME B16.25 suitable for schedule 40 / 80. • Please specify working pressure, temperature & service conditions. • Valves can be supplied with Locking, Extended Stem / Electrical / Pneumatic Actuators, & accessories like Limit Switch, Solenoid Valve, Air Filter Regulator, Positioner etc. • Other materials not mentioned above available on request.

# Sleeved Plug Valves

3 way: class 150, 300 & 600



## Dimensions area in mm (inch)

Flanged					Screwed, Socket & Butt weld		
Size	E		Wt <sup>1)</sup>		E	Wt <sup>1)</sup>	
mm (inch)	Class 150	Class 300	Class 150	Class 300	Class 150 & 300		
15 (½)	70 (2.8)	73 (2.9)	3.0 (7)	5.0 (11)	43 (1.7)	2.5 (6)	
20 (¾)	73 (2.9)	76 (3.0)	3.5 (8)	7.5 (17)	57 (2.2)	3.0 (7)	
25 (1)	89 (3.5)	95 (3.7)	5.5 (12)	9.0 (20)	60 (2.4)	4.2 (9)	
32 (1 ¼)	95 (3.7)	105 (4.1)	7.5 (17)	12.0 (27)	73 (2.9)	5.0 (11)	
40 (1 ½)	105(4.1)	110 (4.3)	9.5 (21)	16.0 (35)	73 (2.9)	5.3 (12)	
50 (2)	114 (4.5)	120 (4.7)	15.0 (33)	22.0 (49)	86 (3.4)	8.5 (19)	
65 (2 ½)	130 (5.1)	140 (5.5)	16.0 (35)	23.0 (51)	95 (3.7)	10.5 (23)	
80 (3)	130 (5.1)	140 (5.5)	24.0 (53)	32.0 (71)	105 (4.1)	12.0 (27)	
100 (4)	152 (6.0)	170 (6.7)	40.0 (88)	60.0 (132)	-	-	
125 (5)	172 (6.8)	192 (7.6)	52.0 (115)	93.0 (205)	-	-	
150 (6)	190 (7.5)	216 (8.5)	70.0 (154)	115 (254)	-	-	
200 (8)	230 (9.1)	255 (10.0)	115 (254)	182 (401)	-	-	
250 (10)	280 (11.0)	310 (12.2)	172 (379)	260 (573)	-	-	
300 (12)	320 (12.6)	350 (13.8)	240 (529)	310 (683)	-	-	
350 (14)	350 (13.8)	-	360 (794)	-	-	-	
400 (16)	390 (15.4)	-	715 (1575)	-	-	-	
450 (18)	430 (16.9)	-	1015 (2238)	-	-	-	

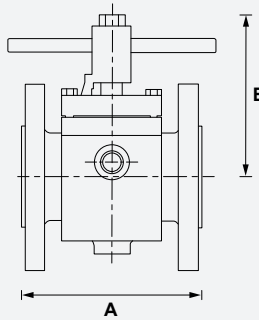
<sup>1)</sup> Nett in Kg. (lbs) Approx. (without obligation) • For other details refer previous pages.

# Sleeved Three way Pattern

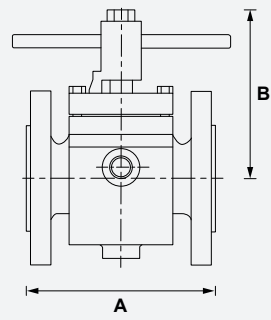
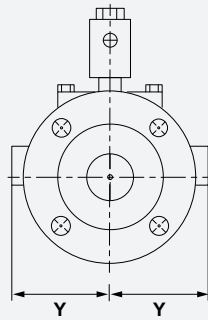
Type	L	LL	T	Y
Position 1 0°				
Position 2 90°				
Position 3 180°				
	Non Transflow	Transflow	Transflow	Transflow

# Sleeved Plug Valves

## Fully & partially jacketed



Fully Jacketed



Partially Jacketed

## Applications

- Molten Sulphur
- Bitumen (Coal Tar)
- For heating and cooling of fluids

## Dimensions area in mm (inch)

Size	Flange Size	A		Y	Partially jacketing		Fully jacketing		Class - 150 & 300	
		← mm (inch) →	← mm (inch) →		← Wt <sup>1)</sup> →	← Wt <sup>1)</sup> →	← mm (inch) →	← mm (inch) →		
		Class 150	Class 300		Class 150	Class 300	Class 150	Class 300	Partially jacketing	Fully jacketing
15 (½)	25 (1)	108 (4.3)	140 (5.5)	35 (1.4)	2.0 (4)	3.5 (8)	3.0 (7)	6.5 (14)	95 (3.7)	125 (4.9)
20 (¾)	40 (1 ½)	117 (4.6)	152 (6.0)	40 (1.6)	2.5 (6)	5.0 (11)	4.5 (10)	8.0 (18)	100 (3.9)	130 (5.1)
25 (1)	50 (2)	140 (5.5)	165 (6.5)	45 (1.8)	4.5 (10)	6.5 (14)	7.5 (17)	10.0 (22)	110 (4.3)	142 (5.6)
32 (1 ¼)	50 (2)	165 (6.5)	178 (7.0)	45 (1.8)	6.0 (13)	9.0 (20)	9.0 (20)	14.0 (31)	110 (4.3)	142 (5.6)
40 (1 ½)	65 (2 ½)	165 (6.5)	190 (7.5)	50 (2.0)	7.5 (17)	11.0 (24)	10.0 (22)	16.0 (35)	120 (4.7)	148 (5.8)
50 (2)	80 (3)	178 (7.0)	216 (8.5)	60 (2.4)	12.0 (27)	16.0 (35)	15.0 (33)	20.0 (44)	145 (5.7)	175 (6.9)
65 (2 ½)	100 (4)	190 (7.5)	241 (9.5)	70 (2.8)	15.0 (33)	18.0 (40)	18.0 (40)	24.0 (53)	141 (5.6)	180 (7.1)
80 (3)	100 (4)	203 (8.0)	283 (11.1)	70 (2.8)	18.0 (40)	22.0 (49)	24.0 (53)	30.0 (66)	160 (6.3)	188 (7.4)
100 (4)	150 (6)	229 (9.0)	305 (12.0)	80 (3.1)	30.0 (66)	44.0 (97)	37.0 (82)	54.0 (119)	195 (7.7)	235 (9.3)
125 (5)	150 (6)	254 (10.0)	381 (15.0)	80 (3.1)	51.0 (113)	78.0 (172)	55.0 (121)	88.0 (194)	236 (9.3)	235 (9.3)
150 (6)	200 (8)	267 (10.5)	403 (15.9)	115 (4.5)	60.0 (132)	91.0 (201)	80.0 (176)	115.0 (254)	250 (9.8)	250 (9.8)
200 (8)	250 (10)	292 (11.5)	419 (16.5)	130 (5.1)	96.0 (211)	148.0 (326)	125.0 (276)	170.0 (375)	280 (11.0)	280 (11.0)
250 (10)	300 (12)	330 (13.0)	457 (18.0)	145 (5.7)	142.0 (313)	210.0 (463)	160.0 (353)	260.0 (573)	340 (13.4)	340 (13.4)
300 (12)	350 (14)	356 (14.0)	502 (19.8)	150 (5.9)	195.0 (430)	-	230.0 (507)	-	390 (15.4)	390 (15.4)
350 (14)	400 (16)	381/686 (15.0/27.0)	-	165 (6.5)	325.0 (717)	-	330.0 (728)	-	450 (17.7)	450 (17.7)
400 (16)	500 (20)	762 (30.0)	-	265 (10.4)	650.0 (1433)	-	670.0 (1477)	-	595 (23.4)	595 (23.4)
450 (18)	500 (20)	864 (34.0)	-	300 (11.8)	998.0 (2200)	-	1050.0 (2315)	-	650 (25.6)	650 (25.6)

<sup>1)</sup> Nett in kg. (lbs) approx. (without obligation) • Size 15mm (½") to 100mm (4") lever operated, size 125mm (5") & above gear operated. • Jacket test pressure 7 bar (102 psi).  
 • Higher size flange for fully jacketed valves only. • Standard jackets are carbon steel. • Inlet / outlet / drain connection: ¼" NPT for sizes 15mm (½") to 40mm (1 ½"), ½" NPT for 50mm (2") to 100mm (4"), ¾" NPT for 125mm (5") to 200mm (8") & 1" NPT for 250mm (10") & above. • For other details refer previous pages.

UPON REQUEST FACE TO FACE DIN - EN 558 SERIES 1



# FE – SLEEVED PLUG VALVE

## Fugitive emission sleeved plug valve

FE SLEEVED PLUG VALVES for chemical, petrochemical and refinery applications complying to Low Fugitive Emission requirements as per ISO 15848.

The growing industry norms demand control of fugitive emissions and toxic industrial gases released to the atmosphere to keep the environment clean and safe to the operating personnel and promote the green life.

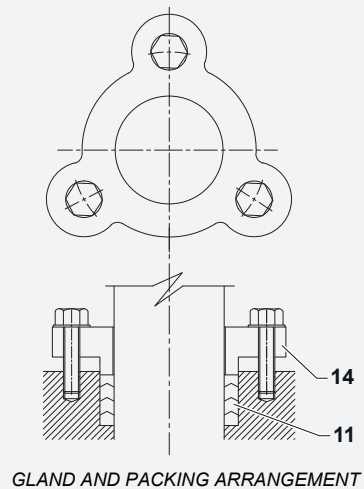
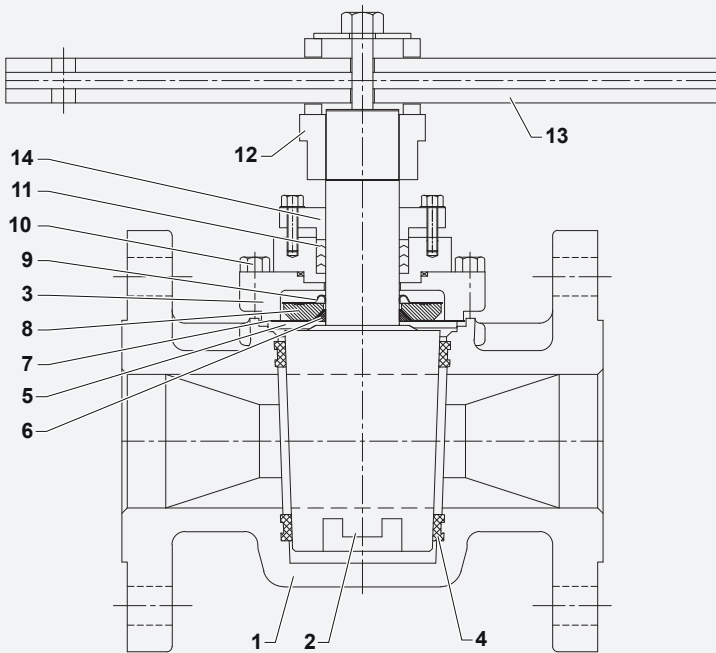
While the standard sleeved plug valves are designed to handle the requirements of the process fluids and the tight shut off conditions, it becomes imperative to adopt special designs to comply with the Low Fugitive Emission requirements.

SLEEVED PLUG VALVES are designed, manufactured and Quality tested for low fugitive emissions to handle Hydrocarbons, Industrial gases and other severe services such as Chlorine, Ammonia, Hydrochloric Acid etc.

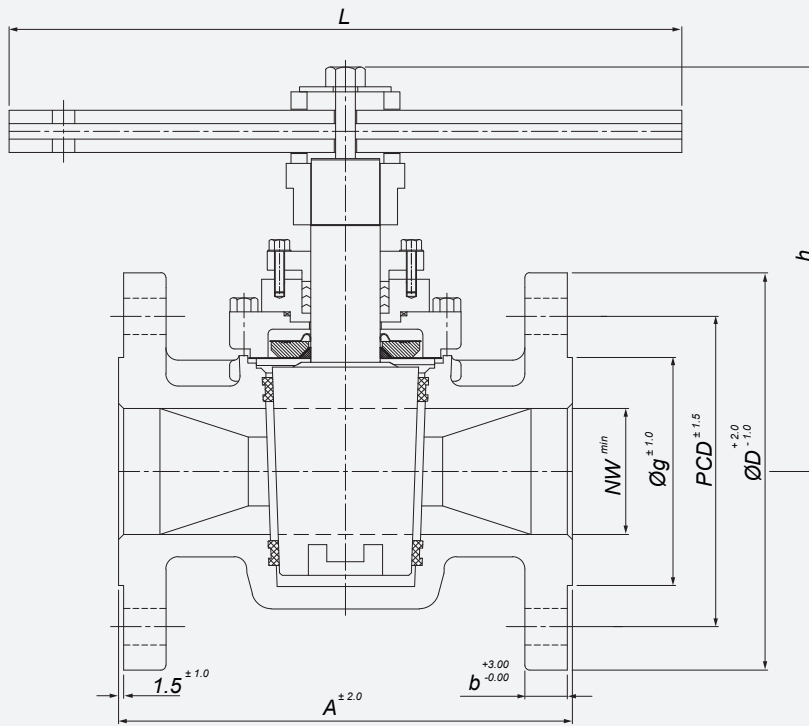
The valves have been successfully qualified to type test certification requirements of ISO 15848 Part-1 and are available.



PT. NO.	PART NAME	MATERIAL
1	Body	ASTM A216 Gr. WCB/ ASTM A351 Gr. CF8 / CF8M / CN7M
2	Plug	A217 Gr. CA15 / ASTM A351 Gr. CF8 / CF8M / CN7M
3	Cover	ASTM A216 Gr. WCB/ ASTM A351 Gr. CF8 / CF8M / CN7M
4	Sleeve	PTFE / CFT / GFT / PTFE NXT
5	Plastic Diaphragm	PTFE / CFT / GFT / PTFE NXT
6	Wedge Ring	PTFE / CFT / GFT / Grafoil
7	Metal Diaphragm	ASTM A276 Type 316
8	Thrust Collar	ASTM A351 Gr. CF8M/SS 316
9	Static Eliminator	ASTM A276 Type 316
10	Hex. Screw/Bolt	ASTM A193 Gr. B7
11	V-Packing	PTFE NEXT
12	Adaptor	ASTM A216 Gr. WCB
13	Adaptor Pipe	'C' CLASS PIPE
14	Gland Flange	ASTM A276 Type 316

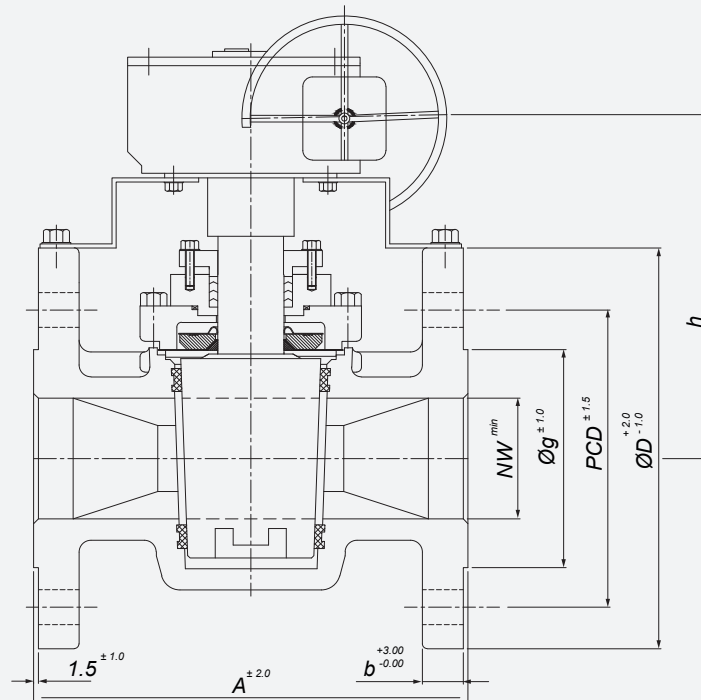


# SLEEVED PLUG VALVES



Size	Dimensional Data In mm									No. of Holes	QTY.	Data Sheet No.	Approx. Wt. in Kgs.	Item No.
	A	NW	h (approx)	L (approx)	ØD	b	Øg	PCD	HoleØ					
15 (½")	108	13	95	225	89	7.9	35.1	60.5	15.8	4	5	---	2.0	1
20 (¾")	117	19	100	225	99	8.9	42.9	69.8	15.8	4	15+10	---	2.5	7 & 10
25 (1")	140	25	110	225	108	9.6	50.8	79.2	15.8	4	10+15	---	4.5	2 & 8
40 (1 ½")	165	38	120	325	127	12.7	73	98.6	15.8	4	3+10	---	7.5	9 & 11
50 (2")	178	50	145	450	152	14.3	91.9	120.6	19.1	4	20+10	---	12.0	3 & 12
80 (3")	203	76	160	450	190	17.5	127	152.4	19.1	4	10+5	---	18.0	4 & 13

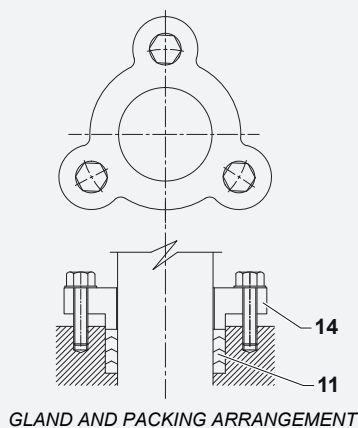
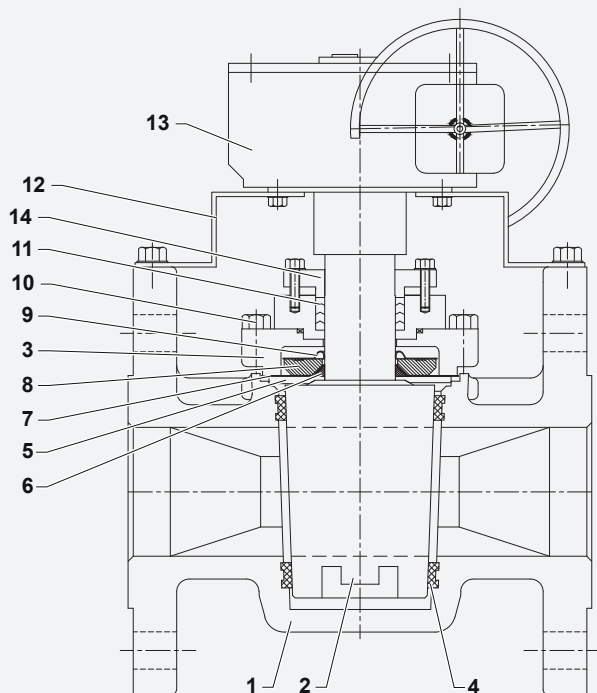
UPON REQUEST FACE TO FACE DIN - EN 558 SERIES 1



Size	Dimensional Data In mm								No. of Holes	QTY.	Approx. Wt. in Kgs.	Data Sheet No.	Item No.
	A	NW	h (approx)	ØD	b	Øg	PCD	HoleØ					
100 (4")	229	98	225	229	22.3	157.2	190.5	19.1	8	5	30	---	5
150 (6")	267	148	250	280	23.9	215.9	241.3	22.2	8	5	60.0	---	6

UPON REQUEST FACE TO FACE DIN - EN 558 SERIES 1

PT. NO.	PART NAME	MATERIAL
1	Body	ASTM A216 Gr. WCB/ ASTM A351 Gr. CF8 / CF8M / CN7M
2	Plug	A217 Gr. CA15 / ASTM A351 Gr. CF8 / CF8M / CN7M
3	Cover	ASTM A216 Gr. WCB/ ASTM A351 Gr. CF8 / CF8M / CN7M
4	Sleeve	PTFE / CFT / GFT / PTFE NXT
5	Plastic Diaphragm	PTFE / CFT / GFT / PTFE NXT
6	Wedge Ring	PTFE / CFT / GFT / Grafoil
7	Metal Diaphragm	ASTM A 276 Type 316
8	Thrust Collar	ASTM A 351 Gr. CF8M/SS 316
9	Static Eliminator	ASTM A 276 Type 316
10	Hex. Screw/Bolt	ASTM A 193 Gr. B7
11	V-Packing	PTFE NEXT
12	Bracket	WCB/STEEL
13	Gear Actuator	CI HOUSING
14	Gland Flange	ASTM A 276 Type 316



**Pressure - Testing - API 6D - API 598 - DIN 3230**

Valve Rating (-20 to 100 °F)	Max. Oper. Pres. (M.O.P)		Body Test (minimum)		Seat Test (minimum)	
	bar	psig	bar	psig	bar	psig
CLASS 150 PN20	19,0	275	29,0	425	21,0	300
CLASS 300 PN50	49,6	720	76,0	1100	55,0	800
CLASS 600 PN100	99,3	1440	150	2175	110	1600
CLASS 800 PN140	138	2000	207	3000	152	2200
CLASS 900 PN150	149	2160	224	3250	166	2400
CLASS PN16	16.0	-	24.0	-	17.6	-
CLASS PN25	25.0	-	37.5	-	27.5	-
CLASS PN40	40.0	-	60.0	-	44.0	-
CLASS PN64	64.0	-	96.0	-	70.4	-

**Duration of Hydrostatic Tests in Minutes (minimum)**

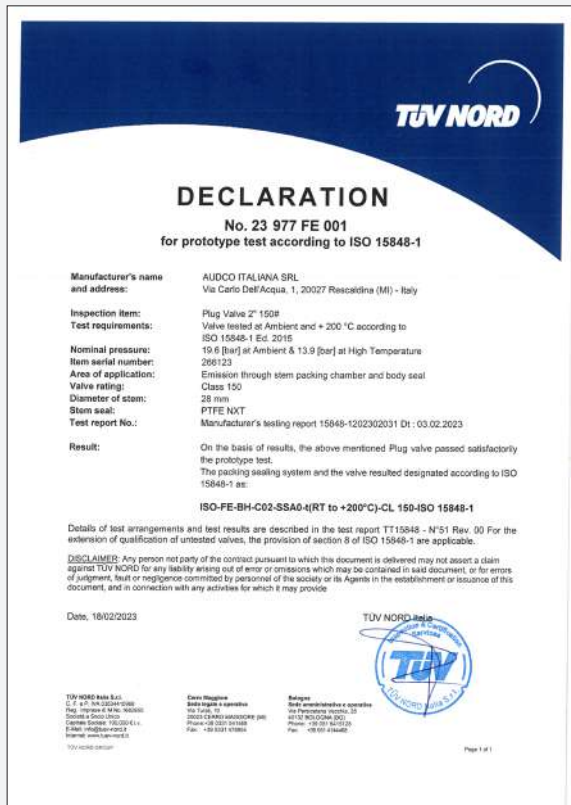
Valve Size		API 598		API 6 D	
		Shell Test	Seat Test	Shell Test	Seat Test
≤ 50 mm	≤ 2"	15 Sec.	15 Sec.	not applicable	
50 mm to 100 mm	2" to 4"	-	-	2'	2'
65 mm to 150 mm	2 ½" to 6"	1'	1'	2'	2'
150 mm to 250 mm	-	-	-	5'	5'
200 mm to 300 mm	8" to 12"	2'	2'	5'	5'
350 mm and over	≥ 14"	5'	2'	-	-
300 mm to 450 mm	12" to 18"	-	-	15'	5'

API 6D also requires a 5.5 bar (80 psi) air seat test for the same duration

**Options:**

- FIRESAFE
- Oil- and Grease-free
- i.e. for oxygen
- Relief hole or slot for polymerizing media and chlorine
- Special designs for specific applications

**CERTIFICATION**



**APPROVED**  
**ISO 15848-1**  
 FUGITIVE EMISSION CERTIFICATION  
**SLEEVED PLUG VALVE**  
**FULL PORT BALL VALVES**  
 Size Range: 1/2" to 8"



**APPROVED**  
 MANAGEMENT SYSTEM AS PER  
**ISO 9001 : 2015**