

# *FLEU*

**Chemical**

## **3-way Sleeved Plug Valve Type 903**

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Patented design

TA-Luft 2021 , ISO 15848-1 BH CO3 -60°C 200°C SSA 0

160 000 cycle



*FLEU*  
**3-Way Sleeved Plug Valves**

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### Applications CHEMICAL

Chemicals TDI, MDI, Ethylenoxid Chlor, Alkali, Pulp and Paper, desalination of seawater Polymers,  
Polypropylene plant ammonia, Fertilizers Hydrofluoric Acid

### Technical Details

<b>Body Materials</b>	1.0619, 1.1138 1.4308, 1.4408, 1.4529, 1.4539
<b>Size range</b>	DN15 - DN600
<b>Pressure range</b>	PN16,PN25,PN40
<b>Temperature range</b>	-50°C up to +280°C
<b>Connection</b>	Flanged End, Weld End
<b>Options</b>	Different sleeve and packing materials, Firesafe, Actuation Full bore( $\leq$ DN20) and reduced bore( $\geq$ DN25)

### Certificates

ISO15848-1 (BH CO3 -60°C 200°C SSA 0), TA-Luft 2021, DGRL 2014/68/EU, AD 2000, API607

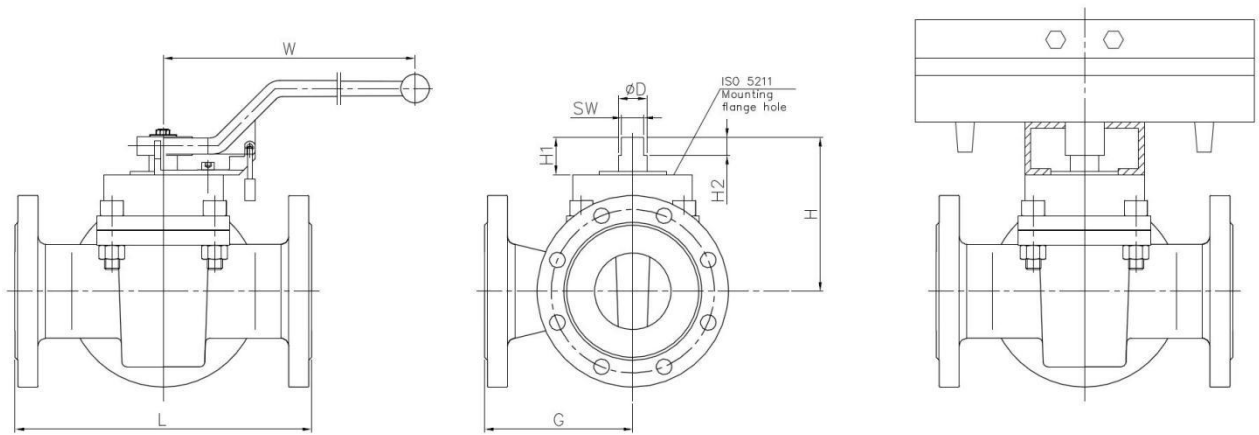
### Design features

1. Camprofiled body cover joint gasket.
2. 360° port lips on body prevent cold flow and deformation of the sleeve, eliminating the chances that the sleeve will rotate during thermal cycling.
3. Pressure relief hole depending on condition as for Hydrofluoric Acid, Chlor, Oleum.
4. With locking device.
5. DN125 and larger: Gear box.
6. Dead cavity free.
7. Maintenance free, self-lubrication, these valves prevent accumulation or contamination of process media.
8. Plug adjustability.
9. Mounting-flange for actuators acc. to DIN ISO 5211.
10. Anti-static design.

### Design standards for DIN valves

1. Design: AD 2000 A4, ATEX 2014/34/EU, EN 12516.
2. Inspection and test: EN 12266
3. Face to face dimension:  
For DN15-DN100 EN 558-1 G1, For DN125-DN200 EN 558-1 G3,  
For DN250 DN300 EN 558-1 G15, DN350 and larger EN 558-1 G4.
4. Dimension of connection end  
Flange end: EN 1092-1, Form B1  
BW end acc. to EN 12627.

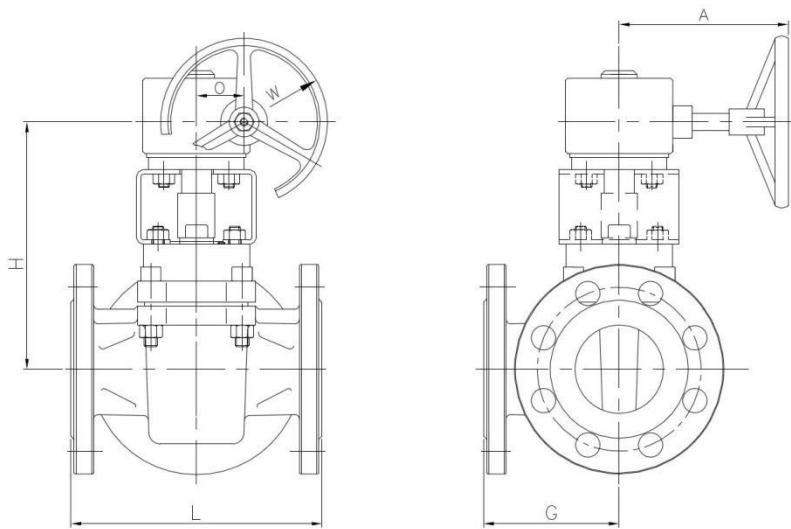
FIG.	Pressure	Material	RANGE
133.903	PN16	1.0619	DN15-DN100
134.903	PN25	1.0619	DN15-DN100
135.903	PN40	1.0619	DN15-DN100
153.903	PN16	1.4408	DN15-DN100
154.903	PN25	1.4408	DN15-DN100
155.903	PN40	1.4408	DN15-DN100
503.903	PN16	1.4539	DN15-DN100
504.903	PN25	1.4539	DN15-DN100
505.903	PN40	1.4539	DN15-DN100



**Dimension list**

PN	DN	L	G	W	H≈	DIN EN ISO 5211	H1	H2	Stem end		Weight KG
									D	SW	
PN16 PN25 PN40	100	350	175.0	780	170	F10	42	21	35.8	21	46.8
	80	310	155.0	620	161	F10	39	19	29.8	19	35.3
	50	230	115.0	480	147	F07	38	19	29.8	19	20.7
	40	200	100.0	480	135	F07	34	17	24.0	14	10.8
	25	160	80.0	270	122	F05	30	15	18.0	14	8.3
	20	150	75.0	270	105	F04	30	15	11.8	9	5.1
	15	130	65.0	270	105	F04	30	15	11.8	9	4.3

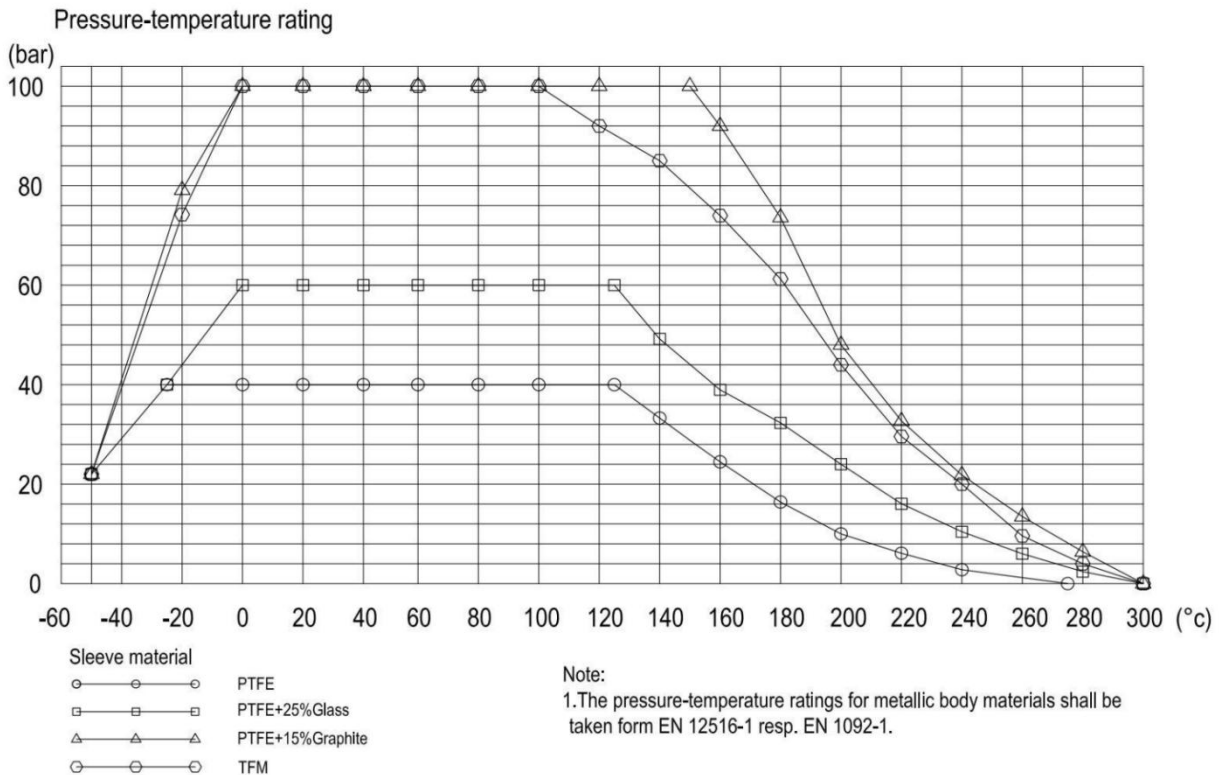
FIG.	Pressure	Material	RANGE
133.903	PN16	1.0619	DN125-DN600
134.903	PN25	1.0619	DN125-DN600
135.903	PN40	1.0619	DN125-DN600
153.903	PN16	1.4408	DN125-DN600
154.903	PN25	1.4408	DN125-DN600
155.903	PN40	1.4408	DN125-DN600
503.903	PN16	1.4539	DN125-DN600
504.903	PN25	1.4539	DN125-DN600
505.903	PN40	1.4539	DN125-DN600



**Dimension list**

PN	DN	L	G	W	H	O	A	DIN EN ISO 5211	Weight KG
PN16 PN25 PN40	600	1143	-	500	1020	180.0	520	F30	625
	500	991	-	500	910	180.0	520	F30	405
	450	914	-	500	820	180.0	520	F30	320
	400	838	-	500	675	137.5	465	F25	255
	350	762	-	500	610	137.5	465	F25	185
	300	500	325	500	535	117.5	465	F16	125
	250	450	275	400	475	117.5	465	F16	88
	200	292	220	350	385	96.5	350	F16	65
	150	267	200	320	365	84.0	290	F12	48
125	254	162	250	265	84.0	290	F12	38	

**Pressure-temperature rating, Max. & opening torque**



**Max. torque & opening torque**

Size DN	PTFE Sleeve			PTFE+25% Glass Sleeve			PTFE+25% Graphite Sleeve		
	Max.	10 Bar	40 Bar	Max.	10 Bar	40 Bar	Max.	10 Bar	40 Bar
15	120	33	33	120	40	40	120	40	40
20	120	33	33	120	40	40	120	40	40
25	180	60	60	180	70	70	180	70	70
40	260	95	95	260	110	110	260	110	110
50	600	150	150	600	180	180	600	180	180
80	600	220	220	600	260	260	600	260	260
100	900	280	280	900	330	330	900	330	330
125	1200	400	400	1200	460	460	1200	460	460
150	1600	630	630	1600	730	730	1600	730	730
200	2600	960	960	2600	1100	1100	2600	1100	1100
250	3400	1200	1200	3400	1380	1380	3400	1380	1380
300	5500	2080	2080	5500	2390	2390	5500	2390	2390
350	12000	4400	4400	12000	5060	5060	12000	5060	5060
400	12000	4400	4400	12000	5060	5060	12000	5060	5060
450	14000	5120	5120	14000	5890	5890	14000	5890	5890
500	17000	6000	6000	17000	6900	6900	17000	6900	6900
600	17000	6000	6000	17000	6900	6900	17000	6900	6900

