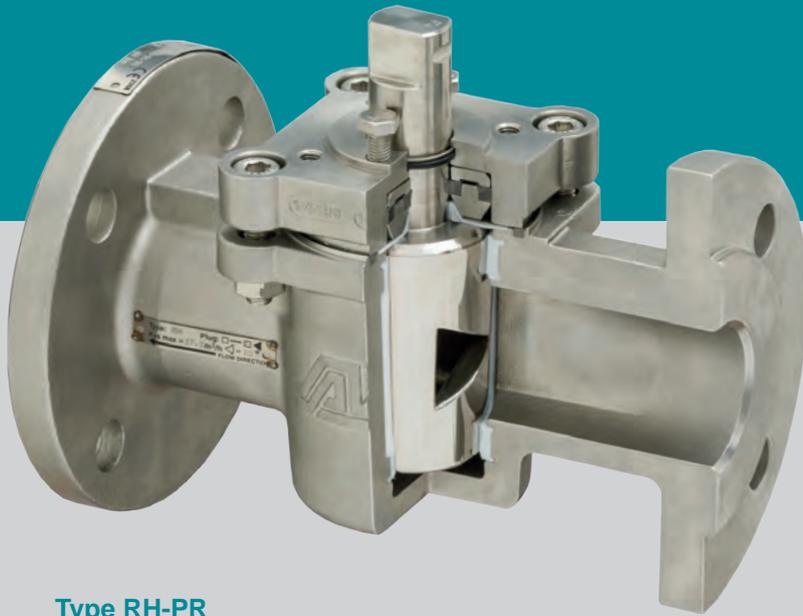


# Type RH

## Control plug valve with PTFE sleeve



### Type RH-PR

equal percentage control characteristic

- $K_{vs}$  values optimized acc. to application
- shut off / tight closing feature

DN 15 - 600 / PN 10 - 40

NPS ½ - 24 / Class 150 - 300

Range of application:

$-60 < T < 230/320^{\circ}\text{C}$

vacuum-capable

### Design characteristics

- exchangeable control plugs
- free passage possible
- easy accessible adjustment of the plug and safety stem packing
- low fugitive emission in line with TA LUFT, ISO 15848 & API 641
- Fire-Safe - API 607 / ISO 10497
- mounting-flange for actuators acc. to ISO 5211

### Options

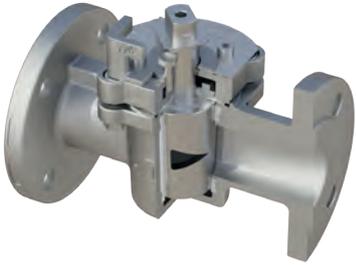
- higher pressure rating
- heating jacket
- oil and grease-free assembly



PT diagram, plug types, sealing systems, material selection: see catalogue part ENGINEERING

# Type RH

## Technical information

			Plug: equal percentage control characteristics					
								
Type RH-PR								
ASME / DIN EN	DIN	NPS	PR I $K_{vs}$ [m³/h]	PR II $K_{vs}$ [m³/h]	PR III $K_{vs}$ [m³/h]	PR IV $K_{vs}$ [m³/h]	PR V $K_{vs}$ [m³/h]	EXTRA $K_{vs}$ [m³/h]
	DN 15	½	0,7	1,4	2,2	3,1	4,9	19
	DN 20	¾	0,4	1,1	1,8	2,6	4,6	36
	DN 25	1	0,9	2,0	3,1	4,4	6,7	70
	DN 32	1 ¼	1,7	3,7	5,9	8,8	12	113
	DN 40	1 ½	3,0	6,0	9,5	14	19	193
	DN 50	2	5,4	11	18	26	30	323
	DN 65	2 ½	9,3	21	32	46	68	569
	DN 80	3	8,8	18	29	42	58	947
	DN 100	4	8,7	18	28	39	56	1446
	DN 100S	4S	22	47	76	104	124	-
	DN 125	5	32	65	104	151	198	-
DN 150	6	31	63	100	144	193	3338	
DN 200	8	62	128	205	290	368	6362	
			Plug: linear control characteristics					
								
Type RH-LR								
ASME / DIN EN	DIN	NPS	LR I $K_{vs}$ [m³/h]	LR II $K_{vs}$ [m³/h]	LR III $K_{vs}$ [m³/h]	LR IV $K_{vs}$ [m³/h]	LR V $K_{vs}$ [m³/h]	
	DN 15	½	0,9	1,9	3,1	4,7	6,5	
	DN 20	¾	0,5	1,5	2,8	4,3	5,3	
	DN 25	1	1,0	1,9	3,1	5,6	10	
	DN 32	1 ¼	1,8	3,6	5,8	11	21	
	DN 40	1 ½	3,0	6,0	9,3	18	36	
	DN 50	2	5,5	12	27	37	74	
	DN 65	2 ½	9,6	21	32	62	111	
	DN 80	3	9,2	19	28	54	97	
	DN 100	4	9,1	19	28	49	81	
	DN 100S	4S	23	48	75	160	358	
	DN 125	5	32	67	105	209	367	
DN 150	6	32	64	101	182	315		
DN 200	8	63	129	207	380	666		

Larger valves and higher operating pressures > PN 40 / class 300 on request  
Some designs, sizes and/or configurations may be fitted with threaded flange holes.

# Type RH-A / RH-SAFE-LINED

## Control plug valve with PFA / FEP lining

- $K_{vs}$  values optimized acc. to application
- shut off / tight closing feature

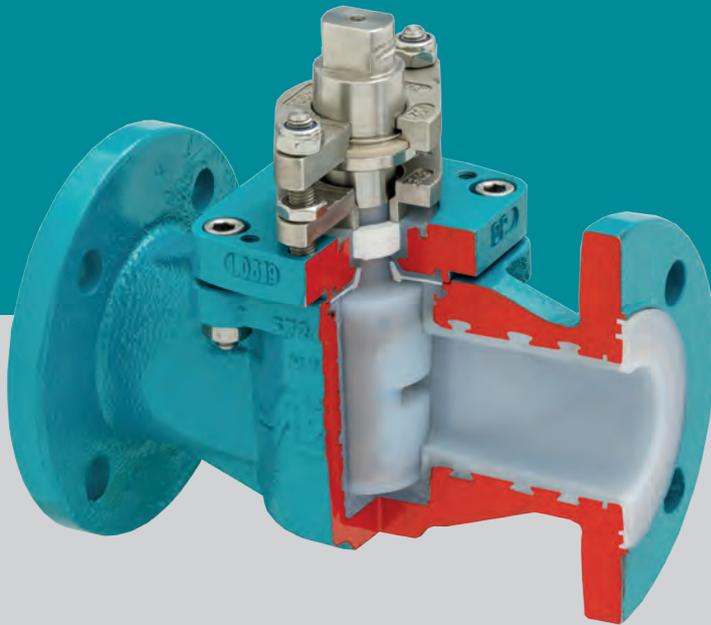
DN 15 - 300 / PN 10 - 40

NPS ½ - 12 / Class 150 - 300

Range of application:

-10 < T < 125/150/210°C

vacuum-capable



### Type RH-SAFE-LINED

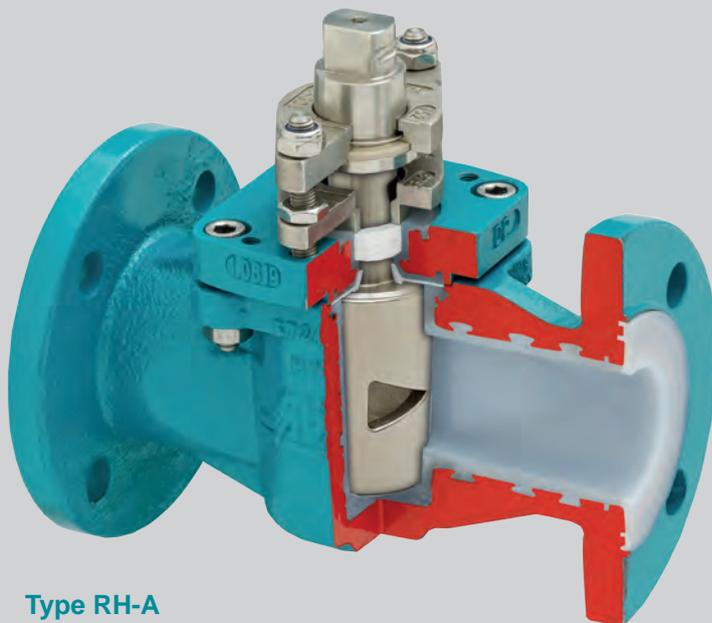
plug with FEP/PFA lining ( $T_{MAX}$  150°C),  
linear control characteristic

### Design characteristics

- type RH-SAFE-LINED with lined cover - no hidden corrosion
- exchangeable control plugs
- free passage possible
- easily accessible adjustment of the plug and safety stem packing
- low emission rate according TA-Luft & EPA 21
- mounting-flange for actuators acc. to ISO 5211

### Options

- higher pressure rating
- heating jacket
- oil and grease-free assembly



### Type RH-A

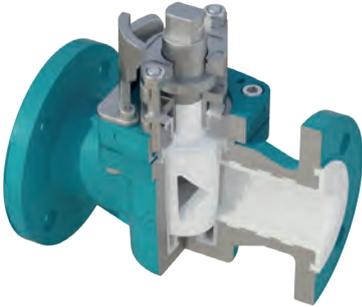
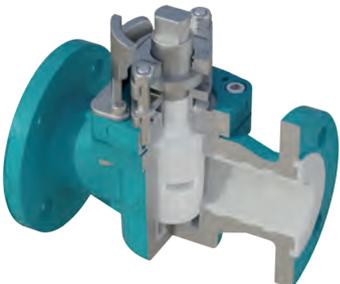
with plug made of special material ( $T_{MAX}$  210°C),  
equal percent control characteristic



PT diagram, plug types, sealing systems, material selection: see catalogue part ENGINEERING

# Type RH-A / RH-SAFE-LINED

## Technical information

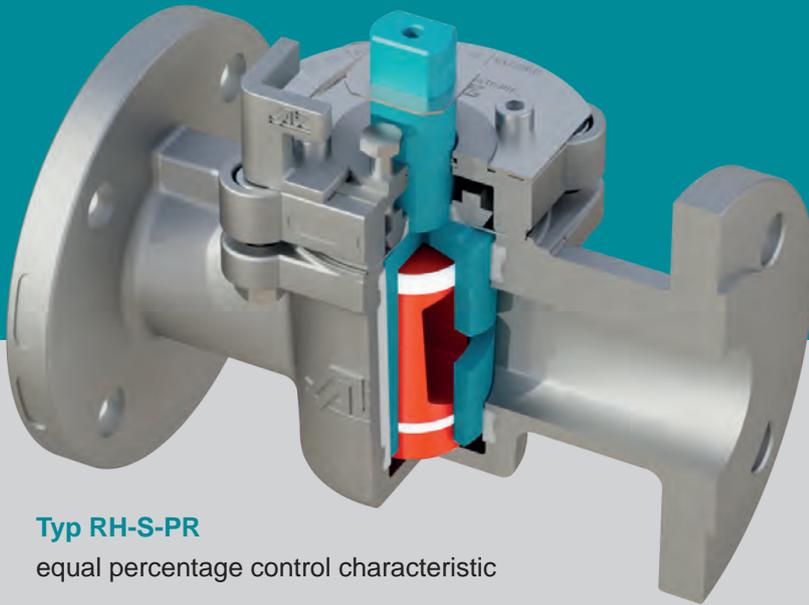
		PTFE/PFA lined plug: equal percentage control characteristics					
							
Type RH-A-PR / RH-SAFE-LINED-PR							
ASME / DIN EN	DIN	NPS	PR I-A $K_{vs}$ [m³/h]	PR II-A $K_{vs}$ [m³/h]	PR III-A $K_{vs}$ [m³/h]	PR IV-A $K_{vs}$ [m³/h]	PR V-A $K_{vs}$ [m³/h]
	DN 15	½	0,7	1,0	1,6	2,2	3,3
	DN 20	¾	0,5	1,0	1,5	2,1	3,3
	DN 25	1	1,2	2,5	4,1	6,0	8,1
	DN 32	1 ¼	1,8	3,7	5,9	8,6	13
	DN 40	1 ½	2,8	5,7	9,0	13	18
	DN 50	2	4,3	8,6	14	20	28
	DN 65	2 ½	8,5	18	29	45	49
	DN 80	3	9,0	18	32	42	62
	DN 100	4	8,7	17	27	39	59
	DN 100S	4S	21	42	69	94	104
	DN 125	5	20	42	65	89	96
DN 150	6	32	63	101	144	181	
DN 200	8	66	133	208	297	386	
		PTFE/PFA lined plug: linear control characteristics					
							
Type RH-A-LR / RH-SAFE-LINED-LR							
ASME / DIN EN	DIN	NPS	LR I-A $K_{vs}$ [m³/h]	LR II-A $K_{vs}$ [m³/h]	LR III-A $K_{vs}$ [m³/h]	LR IV-A $K_{vs}$ [m³/h]	LR V-A $K_{vs}$ [m³/h]
	DN 15	½	0,7	1,5	2,7	3,9	-
	DN 20	¾	0,6	1,5	2,4	3,5	-
	DN 25	1	1,3	2,7	4,1	8,5	16
	DN 32	1 ¼	1,8	3,8	5,9	11	21
	DN 40	1 ½	2,9	5,7	9,4	18	33
	DN 50	2	4,4	8,9	20	27	51
	DN 65	2 ½	8,5	19	30	63	141
	DN 80	3	9,4	19	29	54	95
	DN 100	4	9,2	18	28	49	82
	DN 100S	4S	21	45	70	139	343
	DN 125	5	21	44	67	127	255
DN 150	6	33	65	112	186	308	
DN 200	8	67	139	210	409	686	

Larger valves and higher operating pressures > PN 40 / class 300 on request

Some designs, sizes and/or configurations may be fitted with threaded flange holes.

# Type RH-S

## Control plug valve with protection insert / cage



### Typ RH-S-PR

equal percentage control characteristic

- to increase the service cycle of the sleeve in case of solids-containing media, abrasive media, high pressure loss via the valve or high flow rate

DN 15 - 600 / PN 10 - 40

NPS ½ - 24 / Class 150 - 300

Range of application:

-60 < T < 230°C

vacuum-capable

### Design characteristics

- exchangeable control plugs
- free passage possible
- easy accessible adjustment of the plug and safety stem packing possible
- low fugitive emission in line with TA LUFT, ISO 15848 & API 641
- Fire-Safe - API 607 / ISO 10497
- mounting-flange for actuators acc. to ISO 5211

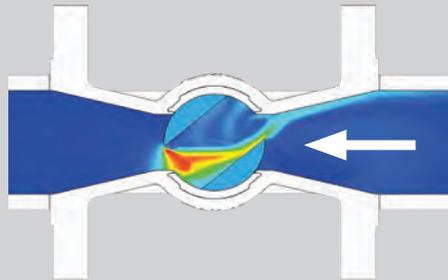
### Options

- higher pressure rating
- heating jacket
- oil and grease-free assembly

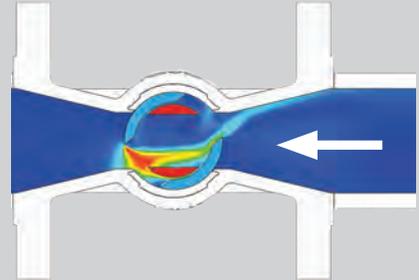


PT diagram, plug types, sealing systems, material selection: see catalogue part ENGINEERING

### Flow simulation



Type RH  
without insert

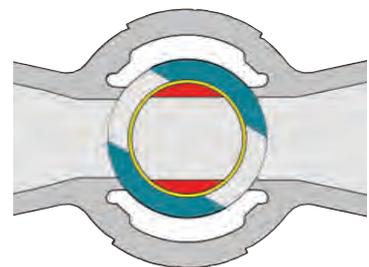


Type RH-S  
with insert (red)

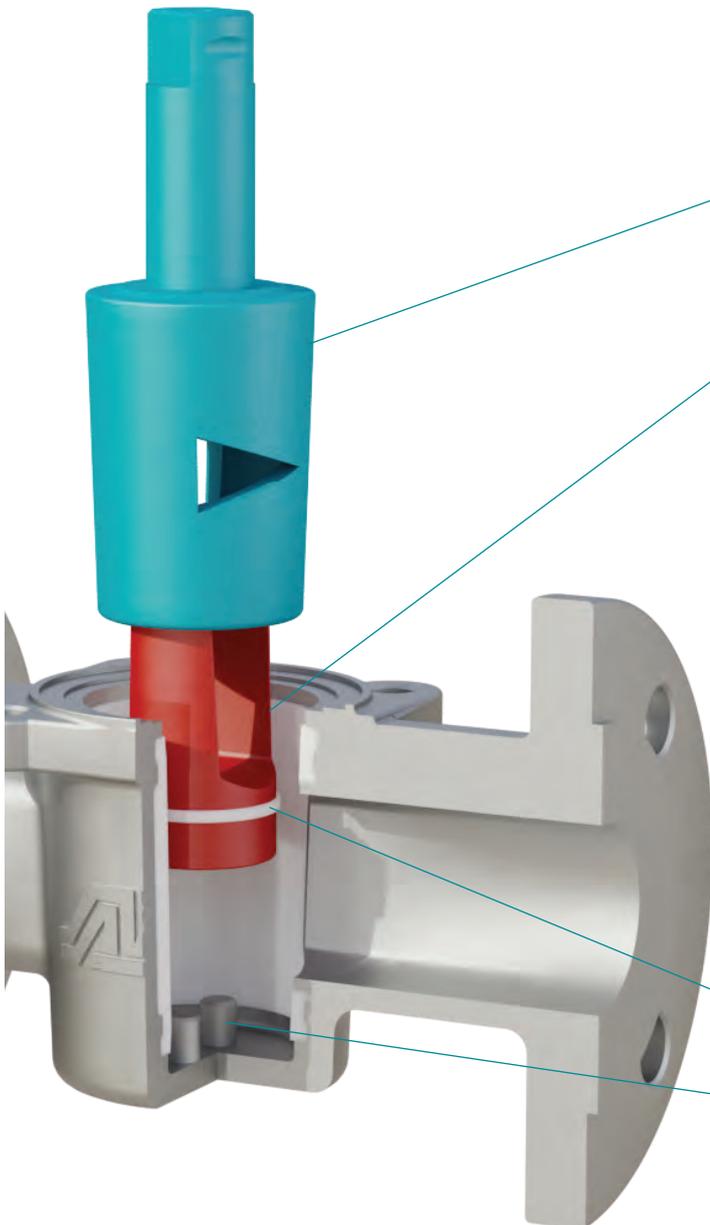
### Functionality

- control plug encloses the insert
- protection insert (red) optimizes the flow and protects the sleeve and protected the sleeve

AZ control geometry is carried out in the plug and not in the insert, therefore precise control of the product flow through the plug position even with small opening angles

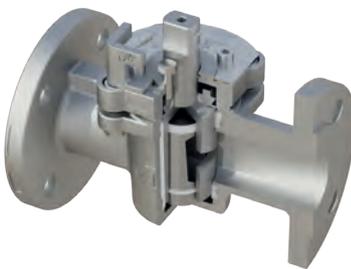
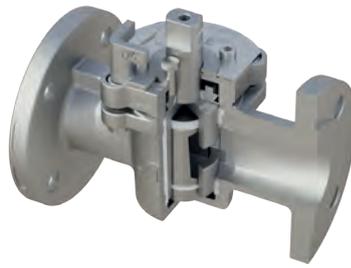


- PTFE-bearing
- fixed, non-twisting anchoring of the insert in the body



# Type RH-S

## Technical information

			Plug with protection insert: equal percentage control characteristics					
								
Type RH-S-PR								
ASME / DIN EN	DIN	NPS	PR I $K_{vs}$ [m³/h]	PR II $K_{vs}$ [m³/h]	PR III $K_{vs}$ [m³/h]	PR IV $K_{vs}$ [m³/h]	PR V $K_{vs}$ [m³/h]	EXTRA $K_{vs}$ [m³/h]
	DN 15	½	0,6	1,2	2,0	2,8	4,4	17
	DN 20	¾	0,4	0,9	1,6	2,3	4,1	32
	DN 25	1	0,9	1,8	2,8	4,0	6,1	63
	DN 32	1 ¼	1,6	3,3	5,3	7,9	10	102
	DN 40	1 ½	2,7	5,4	8,6	12	17	174
	DN 50	2	4,9	10	16	24	27	291
	DN 65	2 ½	8,4	19	29	42	61	512
	DN 80	3	7,9	16	26	37	53	852
	DN 100	4	7,9	16	25	35	51	1301
	DN 100S	4S	20	42	68	93	112	-
	DN 125	5	28	59	94	136	178	-
DN 150	6	28	57	90	130	174	3004	
DN 200	8	56	115	184	261	331	5726	
			Plug with protection insert: linear control characteristics					
								
Type RH-S-LR								
ASME / DIN EN	DIN	NPS	LR I $K_{vs}$ [m³/h]	LR II $K_{vs}$ [m³/h]	LR III $K_{vs}$ [m³/h]	LR IV $K_{vs}$ [m³/h]	LR V $K_{vs}$ [m³/h]	
	DN 15	½	0,8	1,7	2,8	4,2	5,8	
	DN 20	¾	0,5	1,3	2,5	3,9	4,8	
	DN 25	1	0,9	1,7	2,7	5,0	9,1	
	DN 32	1 ¼	1,6	3,2	5,2	9,8	19	
	DN 40	1 ½	2,7	5,4	8,3	17	33	
	DN 50	2	5,0	10	24	34	67	
	DN 65	2 ½	8,6	19	29	55	100	
	DN 80	3	8,3	17	25	49	88	
	DN 100	4	8,2	17	25	44	73	
	DN 100S	4S	21	44	68	144	322	
	DN 125	5	29	61	95	188	330	
DN 150	6	29	58	91	164	284		
DN 200	8	57	117	186	342	600		

Larger valves and higher operating pressures > PN 40 / class 300 on request

Some designs, sizes and/or configurations may be fitted with threaded flange holes.