

# Type RH

## Control plug valve with PTFE sleeve

- $K_{vs}$  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 < 230/280°C  
vacuum-capable

### Design characteristics

- exchangeable control plugs
- free passage possible
- easy accessible adjustment of the plug and safety stem packing
- low emission rate acc. to TA-Luft & EPA 21
- Fire-Safe - API 607 / ISO 10497
- mounting-flange for actuators acc. to ISO 5211

### Options

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



Type RH-PR

equal percentage control characteristic

# Type RH

## Technical information

		Plug: equal percentage control characteristics							
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						
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.

**Order example: F-2-RH-EXTRA-DN50-PN25-FS-1.4408-1.4408**

F = flange, 2 = two-way, RH = control valve, EXTRA = plug control characteristic, DN50 = nominal size, PN25 = nominal pressure, FS = sealing system, 1.4408 = body material, 1.4408 = plug material

# 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

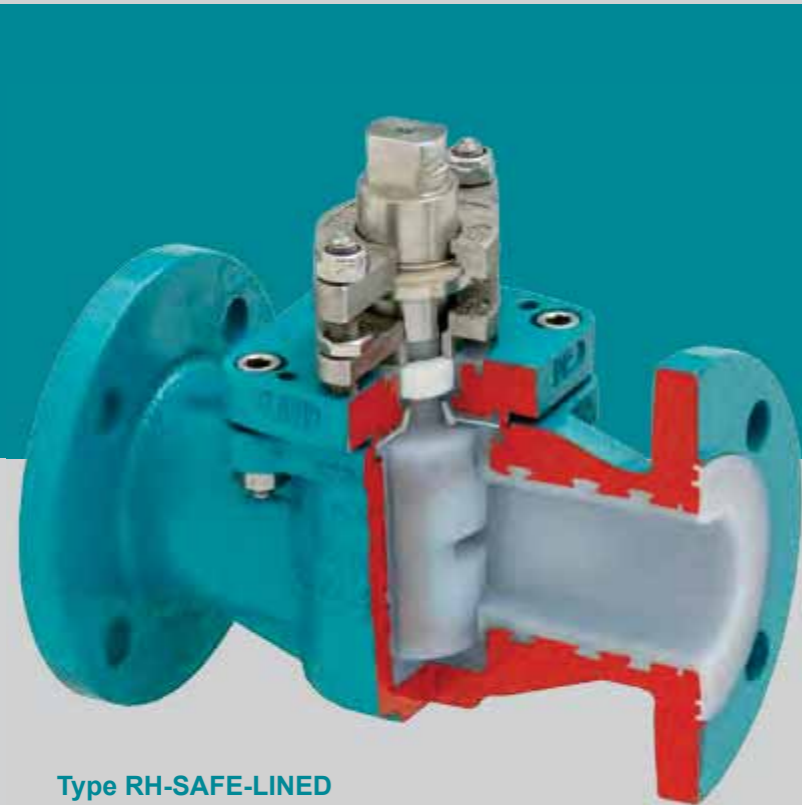
Range of application:  
-10 < T < 125/150/210°C  
vacuum-capable

### 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

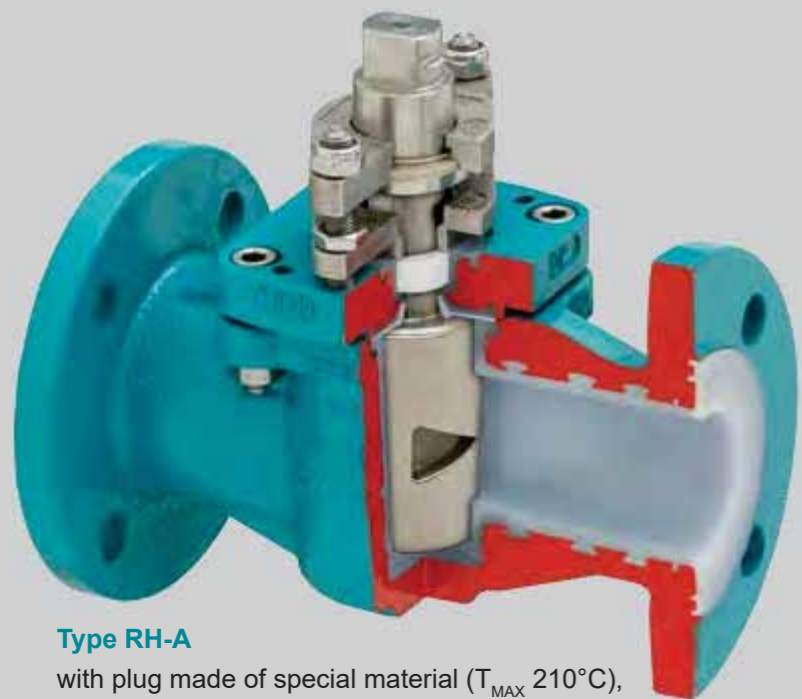
### Options

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



### Type RH-SAFE-LINED

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

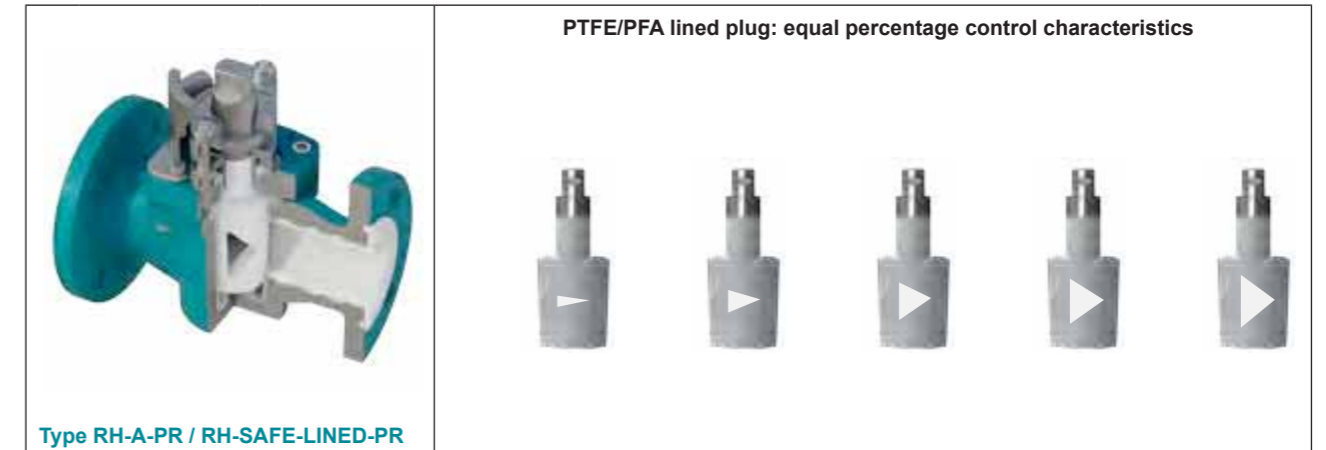


### Type RH-A

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

# Type RH-A / RH-SAFE-LINED

Technical information



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	



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.

Order example: F-2-RH-A-PR-III-A-DN20-PN16-CA-1.0619-PFA

F = flange, 2 = two-way, RH-A = control valve, PR-III = plug control characteristic, DN20 = nominal size, PN25 = nominal pressure, CA = sealing system, 1.0619 = body material, PFA = plug material

# Type RH-S

## Control plug valve with protection insert / cage

- to increase the live span of the PTFE sleeve for solid containing, abrasive media

DN 15 - 600 / PN 10 - 40  
 NPS ½ - 24 / Class 150 - 300  
 Range of application:  
 -60 < T < 230/280°C  
 vacuum-capable

### Design characteristics

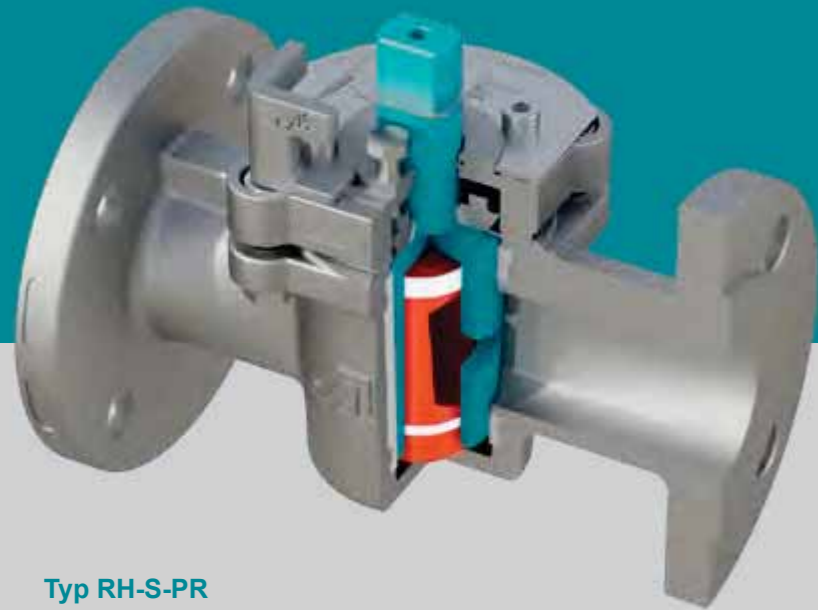
- exchangeable control plugs
- free passage possible
- easy accessible adjustment of the plug and safety stem packing possible
- low emission rate acc. to TA-Luft & EPA 21
- Fire-Safe - API 607 / ISO 10497
- mounting-flange for actuators acc. to ISO 5211

### Options

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

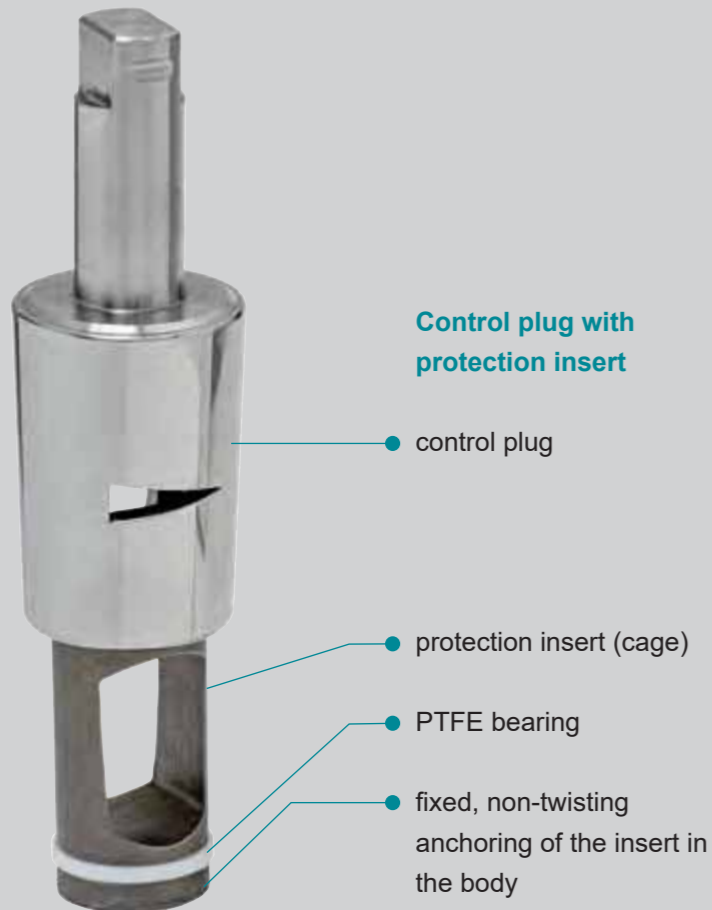
### Functionality

- control plug encloses the insert
- control of the product flow due to the position of the plug
- protective insert optimizes the flow and protects the sleeve
- also recommended in case of high flow velocity and high pressure loss



Typ RH-S-PR

equal percentage control characteristic



Control plug with protection insert

• control plug

• protection insert (cage)

• PTFE bearing

• fixed, non-twisting anchoring of the insert in the body

# Type RH-S

## Technical information



Type RH-S-PR

ASME / DIN EN	DIN	NPS	PR I	PR II	PR III	PR IV	PR V	EXTRA
			K <sub>vs</sub> [m³/h]	K <sub>vs</sub> [m³/h]	K <sub>vs</sub> [m³/h]	K <sub>vs</sub> [m³/h]	K <sub>vs</sub> [m³/h]	K <sub>vs</sub> [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



Type RH-S-LR

ASME / DIN EN	DIN	NPS	LR I	LR II	LR III	LR IV	LR V
			K <sub>vs</sub> [m³/h]	K <sub>vs</sub> [m³/h]	K <sub>vs</sub> [m³/h]	K <sub>vs</sub> [m³/h]	K <sub>vs</sub> [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.