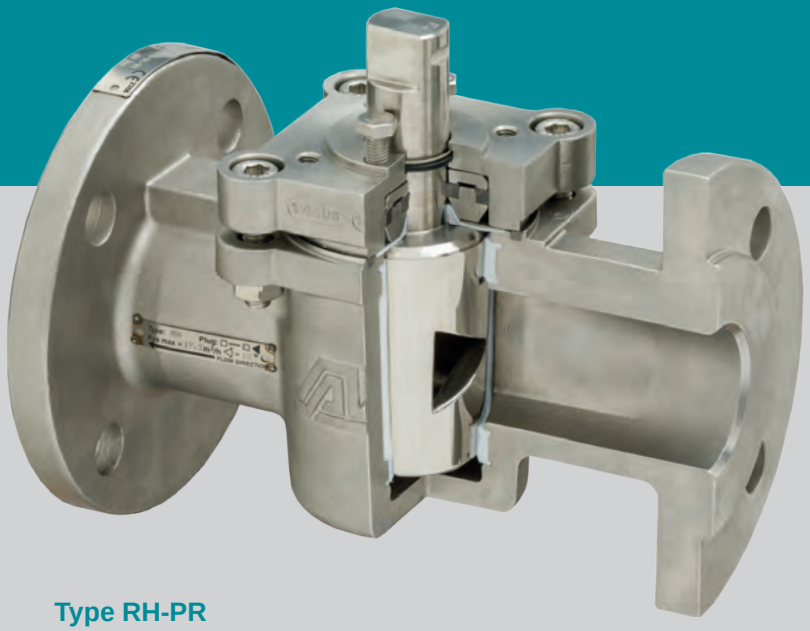
Type RH
Control plug valve with PTFE sleeve

- **C_V values optimized acc. to application**
- **shut off / tight closing feature**

NPS ½ - 24 / Class 150 - 300
Range of application:
-76 < T < 446/608°F
vacuum-capable



Type RH-PR
equal percentage control characteristic

Design characteristics

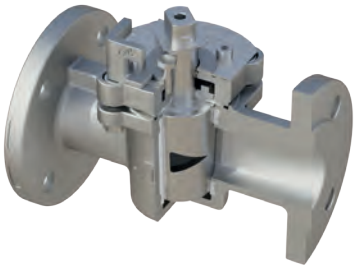
- exchangeable control plugs
- free passage possible
- easy accessible adjustment of the plug and safety stem packing
- low emission rate acc. to TA-Luft & EPA 21
- Fire-Safe - API 607 / ISO 10497
- mounting-flange for actuators acc. to ISO 5211

Options

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

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

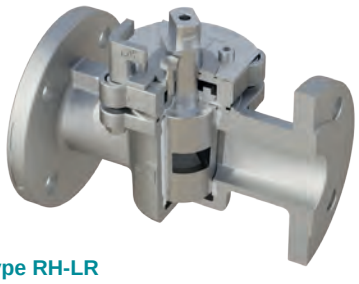
Type RH
Technical information



Type RH-PR

Plug: equal percentage control characteristics

	NPS	PR I C_V [US.gal/min]	PR II C_V [US.gal/min]	PR III C_V [US.gal/min]	PR IV C_V [US.gal/min]	PR V C_V [US.gal/min]	EXTRA C_V [US.gal/min]
ASME	½	0.8	1.6	2.5	3.6	5.7	22
	¾	0.5	1.3	2.1	3.0	5.3	42
	1	1.0	2.3	3.6	5.1	7.7	81
	1 ¼	2.0	4.3	6.8	10	14	131
	1 ½	3.5	6.9	11	16	22	223
	2	6.2	13	21	30	35	373
	2 ½	10	24	37	53	79	658
	3	10	21	34	49	67	1095
	4	10	21	32	45	65	1672
	4S	25	54	88	120	143	-
	5	37	75	120	175	239	-
	6	36	73	117	167	223	3859
	8	72	148	237	335	425	7355



Type RH-LR

Plug: linear control characteristics

	NPS	LR I C_V [US.gal/min]	LR II C_V [US.gal/min]	LR III C_V [US.gal/min]	LR IV C_V [US.gal/min]	LR V C_V [US.gal/min]
ASME	½	1.0	2.2	3.6	5.4	7.5
	¾	0.6	1.7	3.2	5.0	6.1
	1	1.2	2.2	3.6	6.5	12
	1 ¼	2.1	4.2	6.7	13	24
	1 ½	3.5	6.9	11	21	42
	2	6.4	14	31	43	86
	2 ½	11	24	37	72	128
	3	11	22	32	62	112
	4	11	22	32	57	94
	4S	27	56	87	185	414
	5	37	78	121	242	424
	6	37	74	117	210	364
	8	73	149	239	439	770

Larger valves and higher operating pressures > Class 300 on request

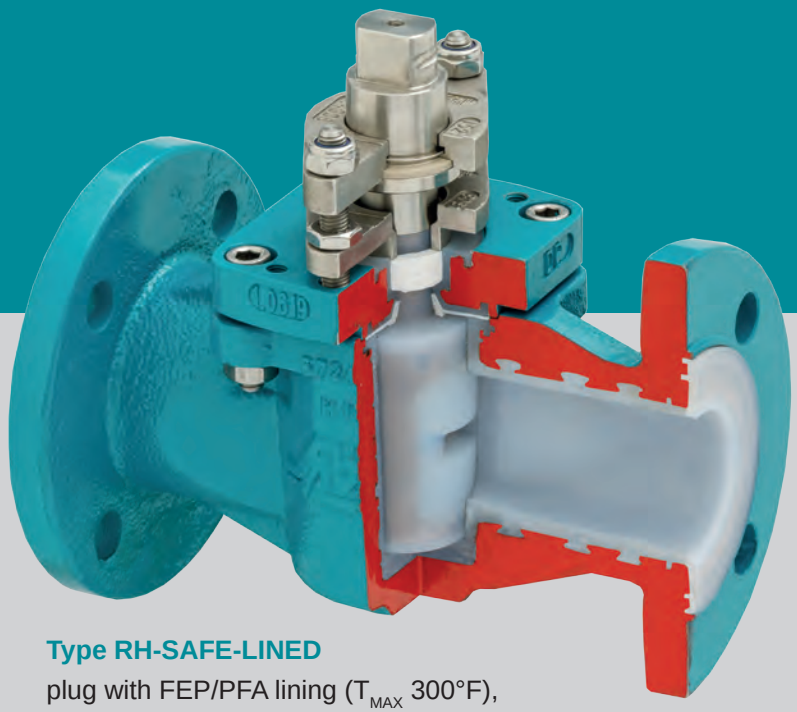
Some designs, sizes and/or configurations may be fitted with threaded flange holes.

Type RH-A & RH-SAFE-LINED

Control plug valve with PFA / FEP lining

- **C_V values optimized acc. to application**
- **shut off / tight closing feature**

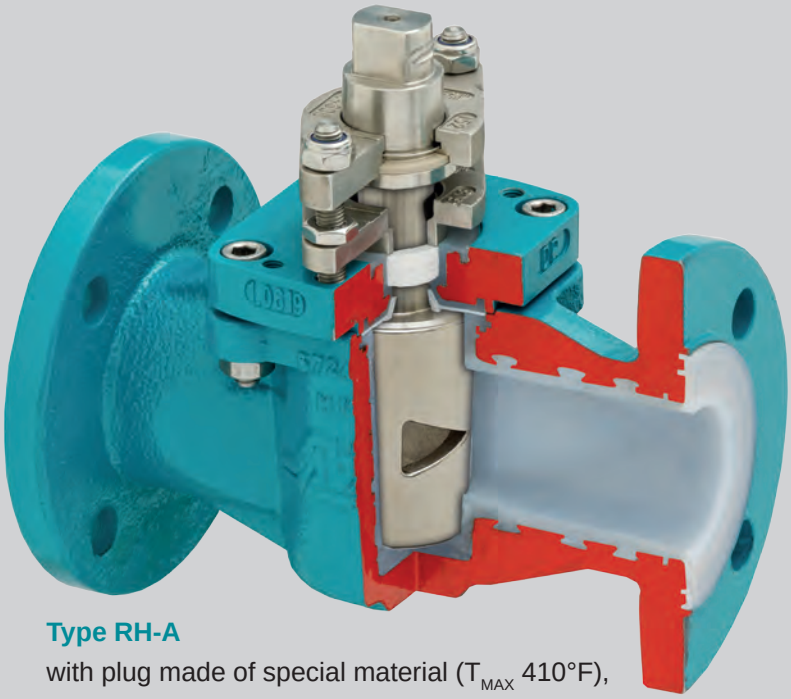
NPS ½ - 12 / Class 150 - 300
Range of application:
14 < T < 257/302/410°F
vacuum-capable



Type RH-SAFE-LINED
plug with FEP/PFA lining (T_{MAX} 300°F),
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



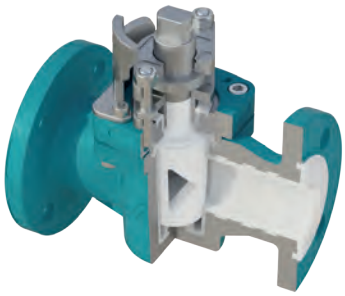
Type RH-A
with plug made of special material (T_{MAX} 410°F),
equal percent control characteristic

Options

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

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

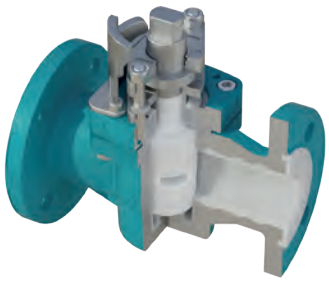
Type RH-A & RH-SAFE-LINED
Technical information



Type RH-A-PR / RH-SAFE-LINED-PR

PTFE / PFA lined plug: equal percentage control characteristics

	NPS	PR I-A C_V [US.gal/min]	PR II-A C_V [US.gal/min]	PR III-A C_V [US.gal/min]	PR IV-A C_V [US.gal/min]	PR V-A C_V [US.gal/min]
ASME	½	0.8	1.2	1.8	2.5	3.8
	¾	0.6	1.2	1.7	2.4	3.8
	1	1.4	2.9	4.7	6.9	9.4
	1 ¼	2.1	4.3	6.8	9.9	15
	1 ½	3.2	6.6	10	15	21
	2	5.0	9.9	16	23	32
	2 ½	9.8	21	34	52	57
	3	10	21	37	49	72
	4	10	20	31	45	68
	4S	24	49	80	109	120
	5	23	49	65	103	111
	6	37	73	117	167	209
	8	76	154	241	343	446



Type RH-A-LR / RH-SAFE-LINED-LR

PTFE / PFA lined plug: linear control characteristics

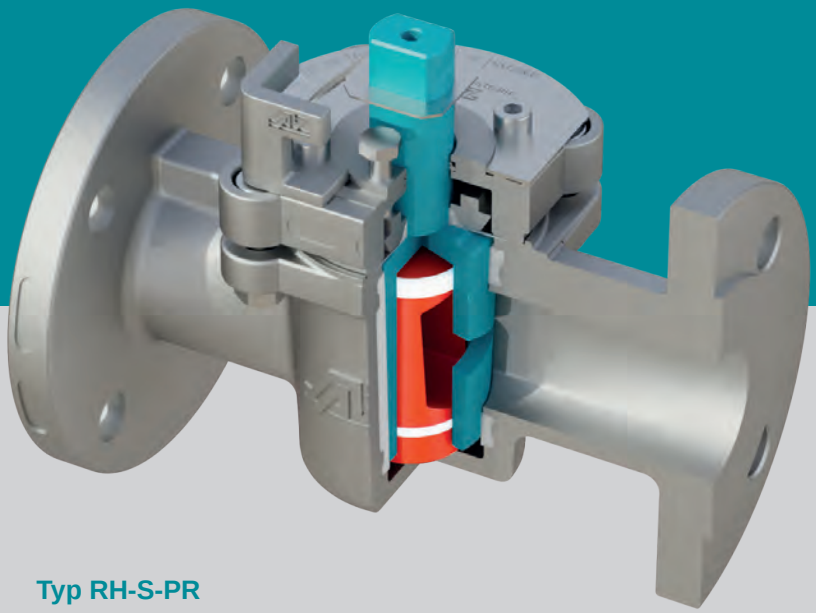
	NPS	LR I-A C_V [US.gal/min]	LR II-A C_V [US.gal/min]	LR III-A C_V [US.gal/min]	LR IV-A C_V [US.gal/min]	LR V-A C_V [US.gal/min]
ASME	½	0.8	1.7	3.1	4.5	-
	¾	0.7	1.7	2.8	4.0	-
	1	1.5	3.1	4.7	9.8	19
	1 ¼	2.1	4.4	6.8	13	24
	1 ½	3,4	6.6	11	21	38
	2	5.1	10.3	23	21	59
	2 ½	9.8	22	35	73	163
	3	11	22	34	62	110
	4	11	21	32	57	95
	4S	24	52	81	161	397
	5	24	51	78	147	295
	6	38	75	130	215	356
	8	78	161	243	473	793

Larger valves and higher operating pressures > 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**

NPS ½ - 24 / Class 150 - 300
Range of application:
-76 < T < 446°F

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

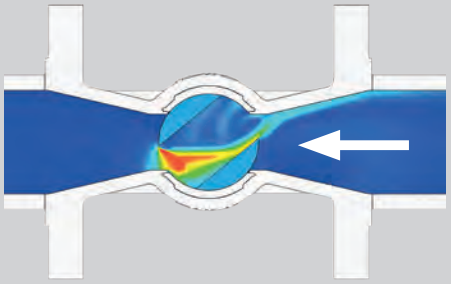
- higher pressure rating
- heating jacket
- oil and grease-free assembling

Functionality

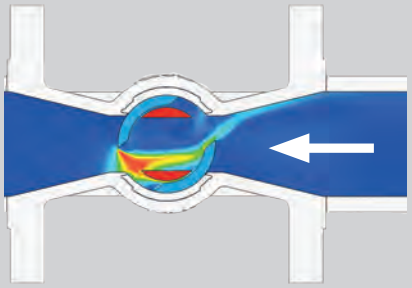
- control plug encloses the insert
- control of the product flow due to the position of the plug
- protective insert optimizes the flow and protects the sleeve
- also recommended in case of high flow velocity and high pressure loss

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

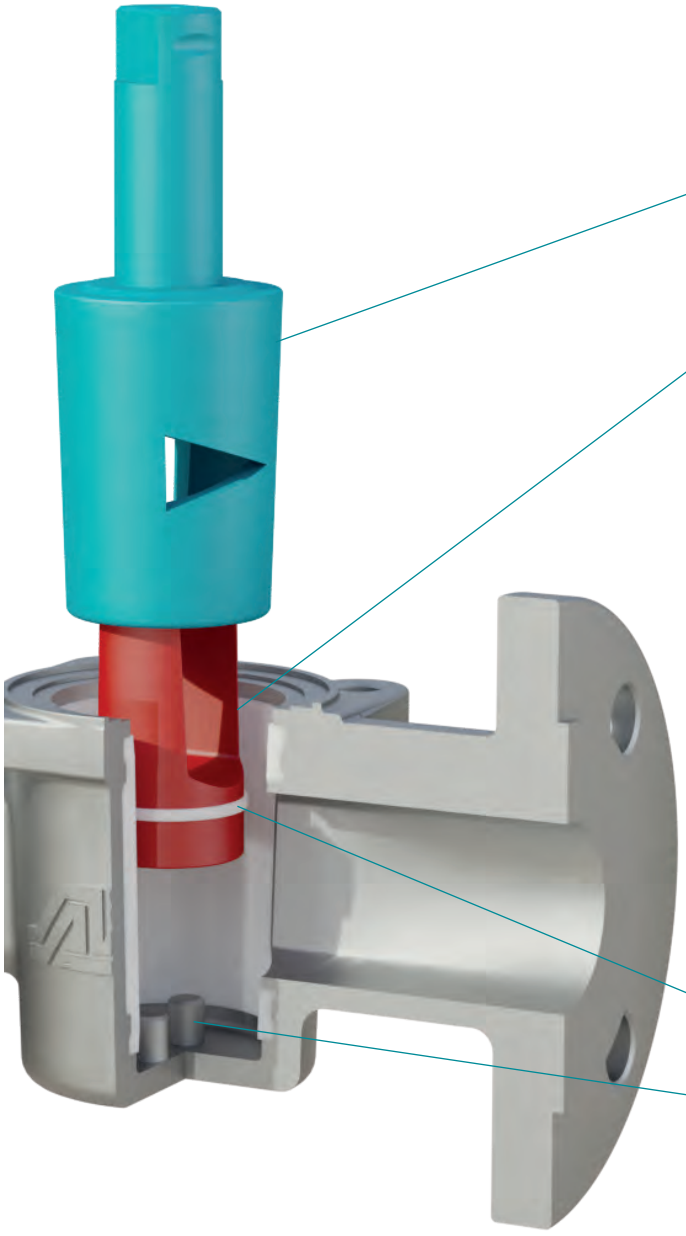
Flow simulation



Type RH without insert



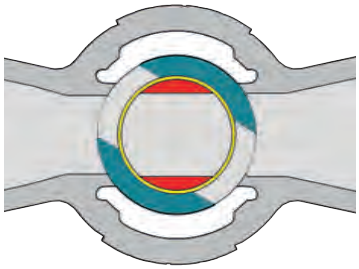
Type RH-S with insert (red)



Functionality

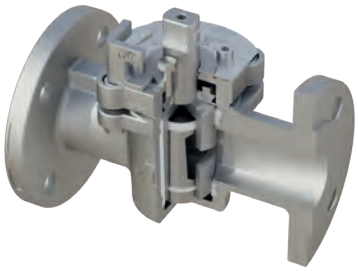
- control plug encloses the insert
- protection insert (red) optimizes the flow and protects the sleeve and proteced the sleeve

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

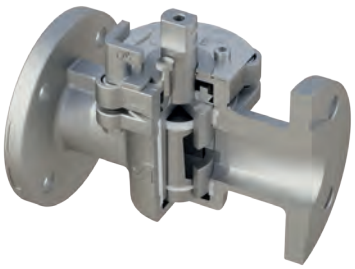
Type RH-S
Technical information



Type RH-S-PR

Plug with protection insert: equal percentage control characteristics

	NPS	PR I C_V [US.gal/min]	PR II C_V [US.gal/min]	PR III C_V [US.gal/min]	PR IV C_V [US.gal/min]	PR V C_V [US.gal/min]	EXTRA C_V [US.gal/min]
ASME	½	0.7	1.4	2.3	3.2	5.1	20
	¾	0.5	1.0	1.8	2.7	4.7	37
	1	1.0	2.1	3.2	4.6	7.1	73
	1 ¼	1.8	3.8	6.1	9.1	12	118
	1 ½	3.1	6.2	9.9	14	20	201
	2	5.7	12	19	28	31	336
	2 ½	9.7	22	34	49	71	592
	3	9.1	19	30	43	61	985
	4	9.1	10	29	41	59	1504
	4S	23	49	79	108	130	-
	5	32	68	109	167	206	-
	6	32	66	104	150	201	3473
	8	65	133	213	302	383	6620



Type RH-S-LR

Plug with protection insert: linear control characteristics

	NPS	LR I C_V [US.gal/min]	LR II C_V [US.gal/min]	LR III C_V [US.gal/min]	LR IV C_V [US.gal/min]	LR V C_V [US.gal/min]
ASME	½	0.9	2.0	3.2	4.9	6.7
	¾	0.6	1.5	2.9	4.5	5.5
	1	1.0	2.0	3.1	5.8	11
	1 ¼	1.8	3.7	6.0	11	22
	1 ½	3.1	6.2	9.6	20	38
	2	5.8	12	28	39	78
	2 ½	9.9	22	34	64	116
	3	9.6	20	29	57	102
	4	9.5	20	29	51	84
	4S	24	51	79	167	372
	5	34	71	110	217	382
	6	34	67	105	190	328
	8	66	135	215	395	604

Larger valves and higher operating pressures >class 300 on request

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