



PRCV-STH2

PIPELINE ROTARY CONTROL VALVES



Size Range	4 in to 30 in
Max Noise Attenuation	15 dBA
Relative Capacity	Very High Capacity
Max Range-Ability	300:1
Shutoff	Class IV

Design Standard	API-6D ^{5,7} ASME 16.34 ⁸ , API 6FA ⁸
Face-Face Dimensions	API-6D
Flange Dimensions	ASME B16.5
PED / ATEX / CE	Optional ⁸
ANSI Range	150 – 1500 ANSI
End Connections	RFFE, Weld, RTJ, Combo
Trim Type	Stealth Trim, Level 2
Performance Trim Technology	Upstream Variable Diffuser Upstream Fixed Diffuser Downstream Variable Diffuser Downstream Ball Diffuser
Max Control ΔP	1000 psid
Max Shutoff ΔP	FULL ANSI ΔP
Compatible Buried Applications	YES
Flow Profile Curve	Exponential
Min Control Cv	0.33% Max Cv
Max Control Cv	85% Max Cv
Seats	1X Upstream Soft Seats Std Double Piston Effect ^{5,7,8} Metal Seats Optional ⁸
Compatible Actuators	VRG RHPA-DA VRG RHPA-SR Electric Actuators Electro-Hydraulic Actuators Other Manufacturers

Base Platform	55 / B5 / PR / WR / VP
Control Valve Specs	Per VRG PRCV Specifications

MATERIALS OF CONSTRUCTION	
Seat Seal	VITON O-Ring Insert ^{4,5,7} DELTRIN Molded Profiled Insert ⁸ Optional SS ⁸
Seat Injection	Upstream/Downstream Buttonhead ^{4,5,7,8}
O-Rings	VITON GLD ^{4,5,7,8}
Firesafe Seals	GRAPHITE ⁸
High Performance Trim	N/A
Final Assembly and Test	USA & ITALY
Country Origin	ITALY ^{4,5,7,8}
Body (Forged)	A350 LF2 ^{4,5,6,7,8}
Stem	AISI 4140 + 1.0 mil ENP ^{4,5,7} 174-PH SS ⁸
Ball	A350 LF2 + 1.0 mil ENP ^{4,5,7} ASTM A694-F60 + 3.0 mil ENP ⁸ Optional SS ⁸ PRCV Control Specification
Lubrication	Mobil SHC220 OR Valtex 2000
Stem Seal	VITON O-RINGS ^{4,5,7} PTFE V-PACK ⁸
Stem Injection**	Stem Inject & Opposing Stem Relief ^{4,5,7,8}
Body Drain**	90° From Stem ^{4,5,7,8}
Seat Ring**	A350 LF2 + ENP ^{4,5,7,8} , Optional SS ⁸ VRG Spec Seat Springs ^{4,5,6,8}

- 4 - Applies to Type 55 Platform
- 5 - Applies to Type B5 Platform
- 6 - Applies to Type PR Platform
- 7 - Applies to Type WR Platform
- 8 - Applies to Type VP Platform



MIN OPERATING TEMPERATURE

VP	-50 F STANDARD
T55, PR, WR	-20 F STANDARD
T54, T55, PR, WR	-50 F OPTIONAL

MAX OPERATING TEMPERATURE TEMP DEFINED BY:
ASME B16.34 PRESSURE-TEMPERATURE RATINGS



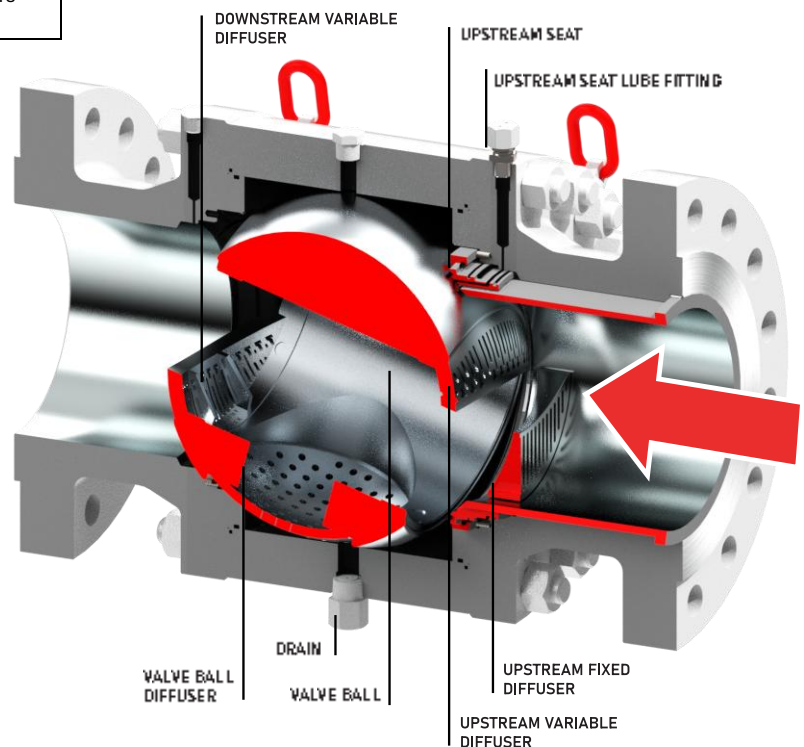
SIZE RANGE
4 in to 30 in



MAX NOISE
ATTENUATION
15 dBA



MAX RANGE-ABILITY
300:1





PRCV-STH2

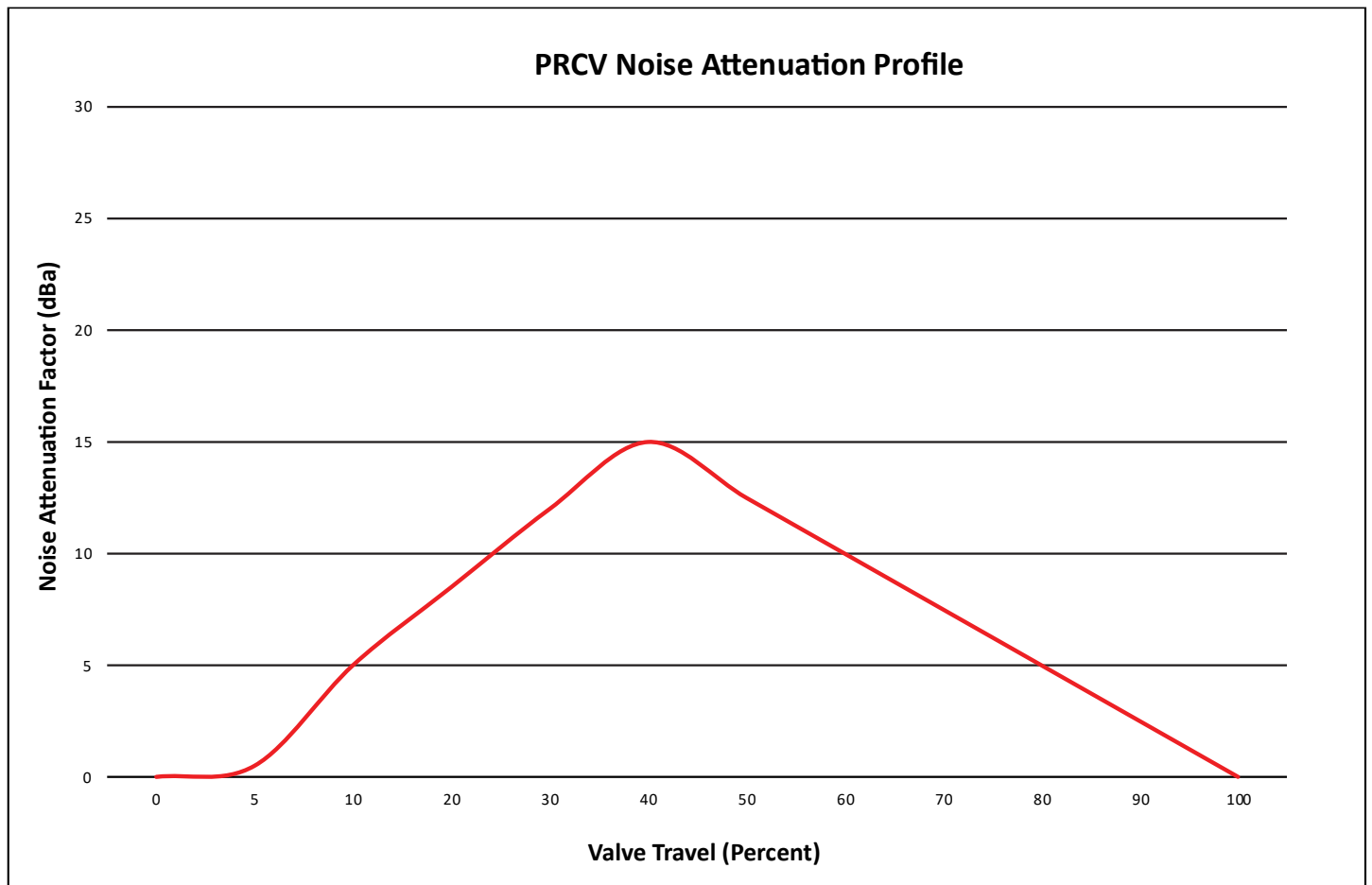
PIPELINE ROTARY CONTROL VALVES



NOISE ATTENUATION (DBA)

Percent Rotation	0	5	10	20	30	40	50	60	70	80	90	100
PRCV-STH2	0	0.5	5	8.5	12	15	13	10	8	5	3	0

NOISE ATTENUATION (DBA) VS. ROTATION OF PRCV CONTROL VALVE





PRCV-STH2

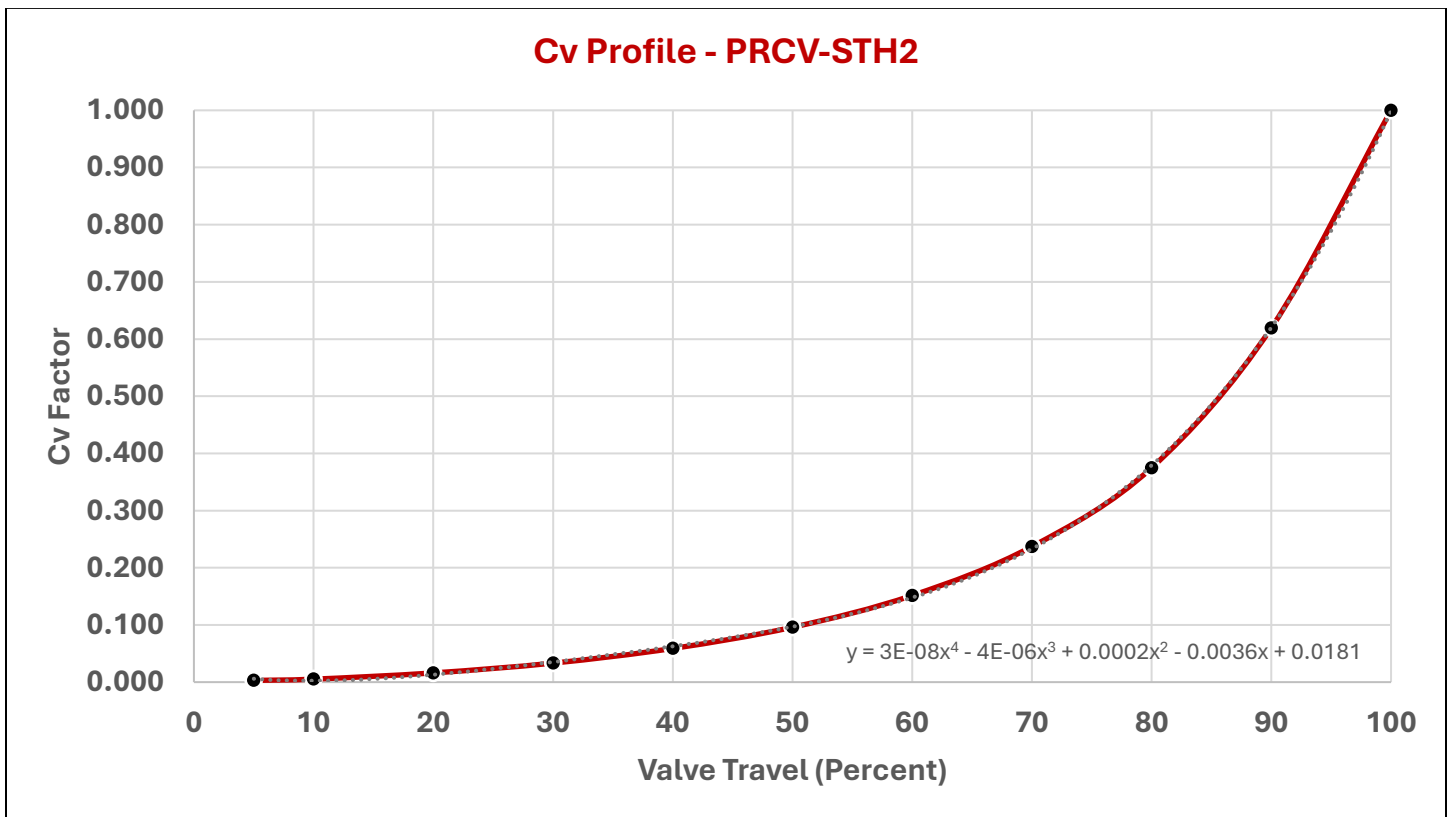
PIPELINE ROTARY CONTROL VALVES



CV PROFILE

PRCV-STH2	MIN	5	10	20	30	40	50	60	70	80	90	100
Cv Factor	0.003	0.003	0.005	0.016	0.033	0.059	0.096	0.152	0.237	0.375	0.619	1.000
4	2	2	3	10	20	36	58	92	144	228	377	609
6	5	4	7	22	46	81	132	208	325	514	849	1371
8	7	6	11	34	70	124	202	319	499	789	1304	2105
10	11	10	18	55	113	200	326	515	806	1274	2106	3399
12	15	14	24	75	155	274	447	705	1103	1745	2884	4655
16	27	24	42	130	268	475	773	1221	1910	3021	4992	8059
20	41	37	65	199	411	727	1185	1871	2927	4628	7648	12346
24	59	53	93	287	591	1047	1706	2694	4214	6664	11013	17778
30	92	83	145	449	924	1636	2666	4210	6585	10412	17208	27778

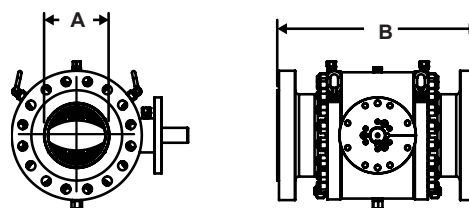
CV PROFILE – PRCV-STH2





PRCV-STH2

PIPELINE ROTARY CONTROL VALVES



PRCV-STH2 Series Face to Face Dimensions (RFFE)

A.Size (Bore)		B.150 ANSI		B.300 ANSI		B.600 ANSI		B.900 ANSI		B.1500 ANSI	
In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)
4"	100	9	229	12	305	17	432	18	457	21.5	546
6"	150	15.5	394	15.875	403	22	559	24	610	28	711
8"	200	18	457	19.75	502	26	660	29	737	32.75	832
10"	250	21	533	20.375	518	31	787	33	838	39	991
12"	300	24	610	25.5	648	33	838	38	965	44.5	1130
16"	400	30	762	33	838	39	991	44.5	1130	54.5	1384
20"	500	36	914	39	991	47	1194	52	1321	65.5	1664
24"	600	42	1067	45	1143	55	1397	61	1549	80.5	2045
30"	750	51	1295	55	1397	65	1651	0	0	0	0

PRCV-STH2 Series Standard Weights - 54 / 55 PLATFORM

Size (Bore)		150 ANSI		300 ANSI		600 ANSI		900 ANSI		1500 ANSI	
In.	mm	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg
4"	100	140	64	167	76	167	76	361	163	369	167
6"	150	389	177	433	196	545	247	723	328	1037	470
8"	200	689	313	745	337	1012	459	1062	482	1494	678
10"	250	878	398	1100	499	1269	576	1983	899	2427	1100
12"	300	1412	640	1437	651	1927	874	2539	1152	3412	1548
16"	400	2103	953	2606	1183	3224	1462	4130	1873	9998	4535
20"	500	4072	1848	4907	2226	5885	2670	7024	3186	18892	8569
24"	600	7998	3628	7798	3537	8890	4033	11313	5132	0	0
30"	750	11954	5422	13447	6099	15536	7047	0	0	0	0

PRCV-STH2 Series Standard Weights (RFFE) - VP PLATFORM

Size (Bore)		150 ANSI		300 ANSI		600 ANSI		900 ANSI		1500 ANSI	
In.	mm	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg
4"	100	151	69	197	89	323	146	373	169	402	182
6"	150	398	180	440	200	618	280	800	363	1078	488
8"	200	651	295	756	342	1049	476	1422	645	1822	827
10"	250	1044	474	1147	520	1614	732	2205	1000	3599	1633
12"	300	1545	700	1734	787	2633	1195	3225	1462	5240	2377
16"	400	2678	1214	3289	1492	4313	1957	5078	2304	10022	4546
20"	500	4678	2122	5089	2309	7067	3205	9688	4395	15067	6834
24"	600	7111	3226	8584	3893	12555	5695	15622	7086	25666	11642
30"	750	11933	5413	15844	7187	19022	8628	27644	12539	0	0