



PRCV-STH4L

PIPELINE ROTARY CONTROL VALVES



Size Range	6 in to 30 in
Max Noise Attenuation	26 dBA
Relative Capacity	High Capacity
Max Range-Ability	200:1
Shutoff	Class IV

Design Standard	ASME B16.5 & B16.34, API 6FA / PED Compliant
Face-Face Dimensions	API-6D
Flange Dimensions	ASME B16.5
PED / ATEX / CE	Optional
ANSI Range	150 – 1500 ANSI
End Connections	RFFE, Weld, RTJ, Combo
Trim Type	Stealth Trim, Level 4L
Performance Trim Technology	Upstream Variable Diffuser Parallel Ball Diffuser Plates Downstream Ball Diffuser Downstream Body Profile Insert
Max Control ΔP	1500 psid
Max Shutoff ΔP	FULL ANSI ΔP
Compatible Buried Applications	YES
Flow Profile Curve	Exponential
Min Control Cv	0.5% Max Cv
Max Control Cv	85% Max Cv
Seats	1X Upstream Soft Seats Std Double Piston Effect
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 ^{5,6,7,8}
Firesafe Seals	GRAPHITE ⁸
High Performance Trim	N/A
Final Assembly and Test	USA & ITALY
Country Origin	ITALY ^{5,6,7,8}
Body (Forged)	A350 LF2 ^{4,5,7,8}
Stem	AISI 4140 + 1.0 mil ENP ^{4,5,7}
Ball	174-PH SS ⁸ 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 ^{5,6,7,8}
Seat Ring**	A350 LF2 + ENP ^{5,6,7,8} , Optional SS ⁸ VRG Spec Seat Springs ^{4,5,7,8}

- 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



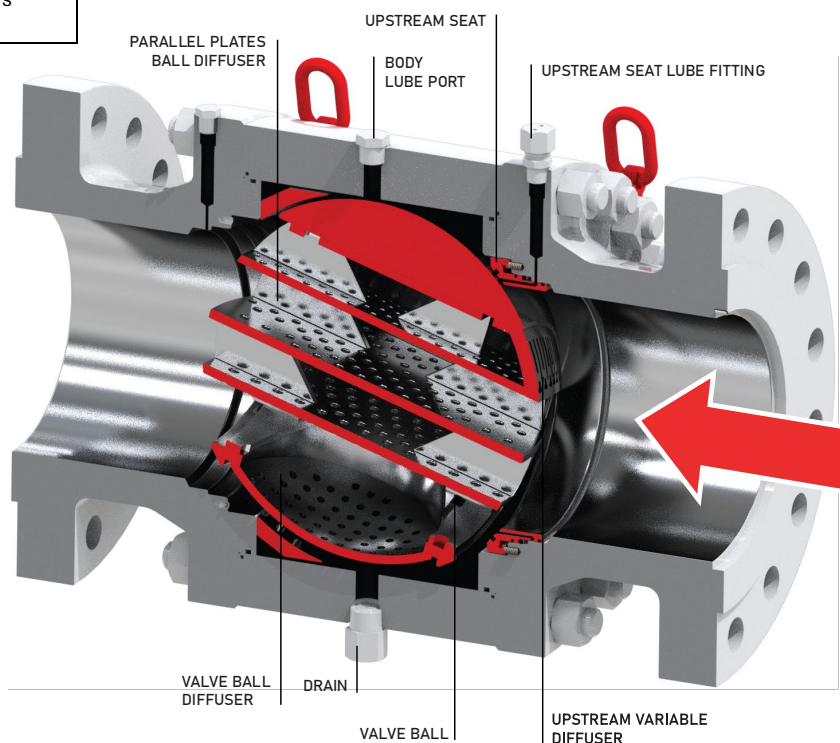
SIZE RANGE
6 in to 30 in



MAX NOISE
ATTENUATION
26 dBA



MAX RANGE-ABILITY
300:1





PRCV-STH4L

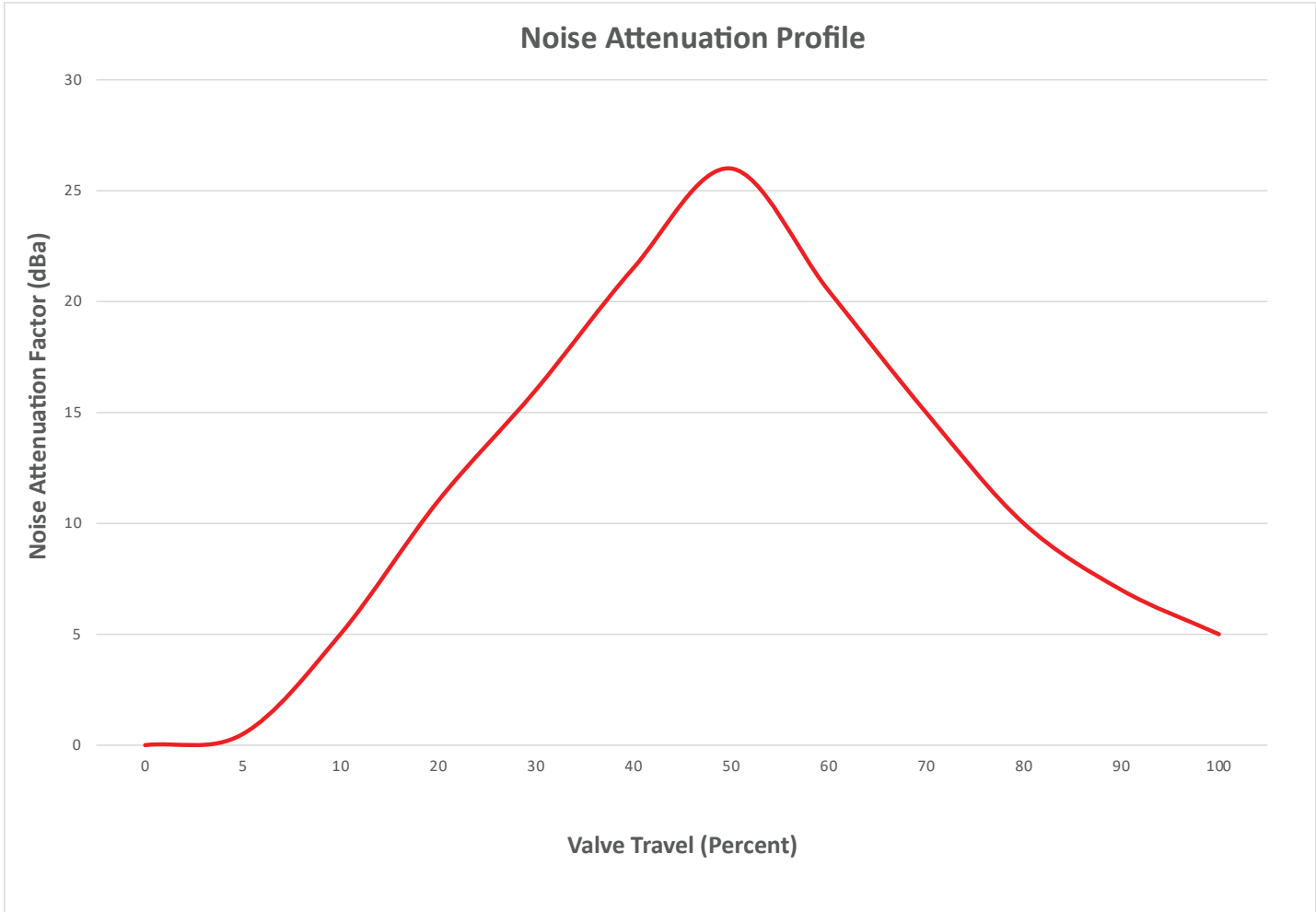
PIPELINE ROTARY CONTROL VALVES



NOISE ATTENUATION (DBA)

Percent Rotation	0	5	10	20	30	40	50	60	70	80	90	100
PRCV-STH4L	0	0.5	5	11	16	21.5	26	20.5	15	10	7	5

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





PRCV-STH4L

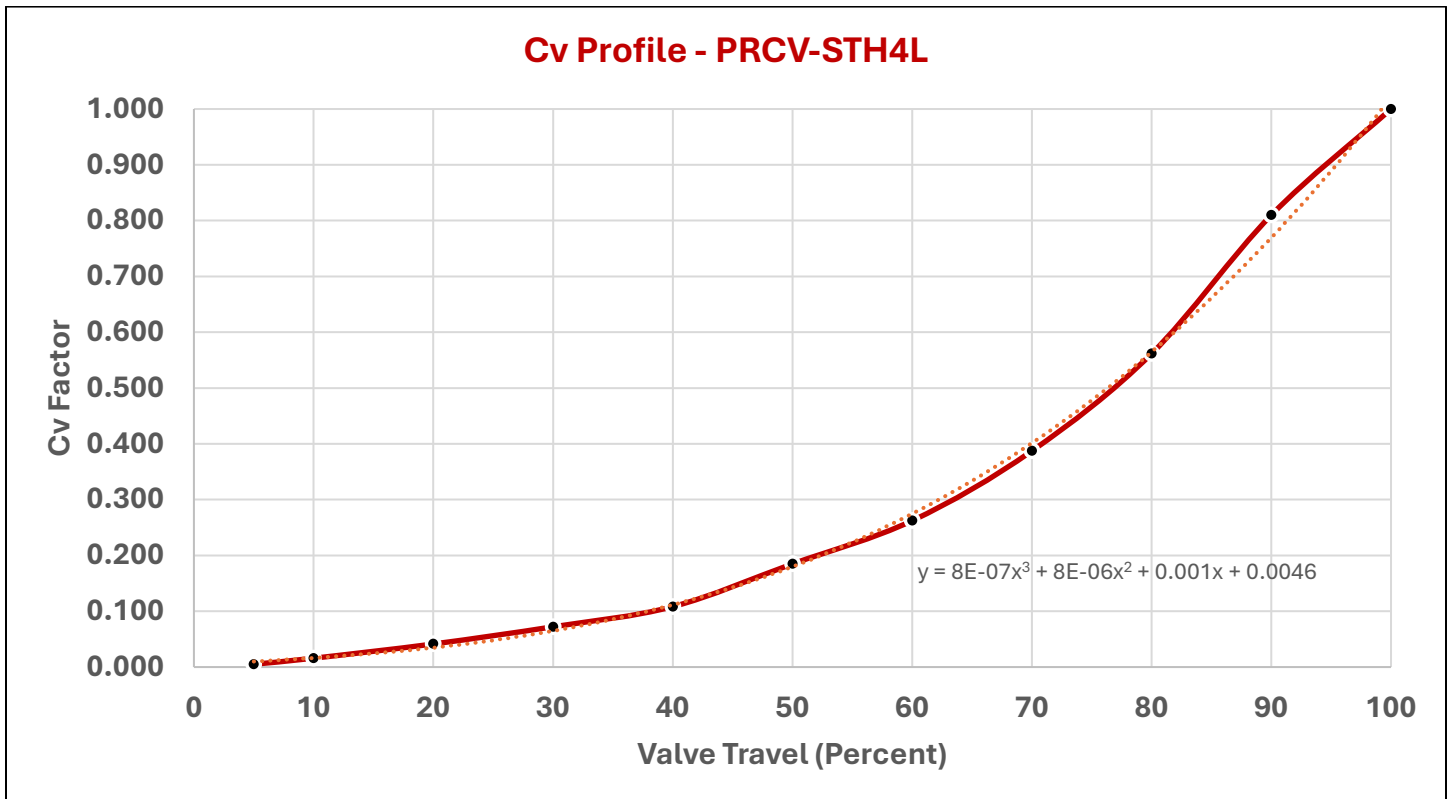
PIPELINE ROTARY CONTROL VALVES



CV PROFILE

PRCV-STH4L	MIN	5	10	20	30	40	50	60	70	80	90	100
Cv Factor	0.005	0.005	0.016	0.041	0.072	0.108	0.185	0.262	0.387	0.562	0.810	1.000
6	3	3	11	28	50	74	127	180	266	385	556	686
8	7	7	22	59	102	154	262	372	550	797	1149	1419
10	12	12	36	95	166	249	426	604	892	1293	1865	2303
12	14	14	44	116	202	303	518	735	1086	1574	2270	2803
16	24.9	24.9	79	206	360	540	921	1307	1930	2799	4036	4983
20	39	39	123	322	562	843	1439	2042	3016	4373	6306	7786
24	56	56	178	464	809	1214	2073	2941	4343	6297	9081	11213
30	88	88	278	725	1265	1897	3239	4596	6786	9840	14189	17520

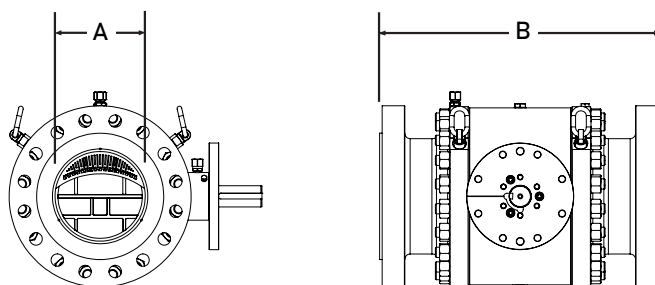
CV PROFILE – PRCV-STH4L





PRCV-STH4L

PIPELINE ROTARY CONTROL VALVES



PRCV-STH4L 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)
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	55	1397	55	1397	65	1651	0	0	0	0

PRCV-STH4L Series Standard Weights (RFFE) - QTR 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
6"	150	395	179	440	200	554	251	734	333	1053	477
8"	200	701	318	757	343	1028	466	1080	490	1518	688
10"	250	892	405	1118	507	1290	585	2015	914	2466	1118
12"	300	1435	650	1460	662	1958	888	2580	1171	3467	1572
16"	400	2137	969	2648	1201	3275	1486	4196	1903	10159	4608
20"	500	4138	1877	4987	2263	5980	2713	7137	3238	19197	8708
24"	600	8126	3686	7923	3594	9034	4098	11496	5214	0	0
30"	750	12146	5509	13664	6198	15786	7160	0	0	0	0

PRCV-STH4L 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
6"	150	405	183	448	203	628	285	813	369	1095	497
8"	200	662	300	768	348	1066	483	1445	656	1852	840
10"	250	1061	481	1166	529	1640	744	2240	1016	3658	1659
12"	300	1569	712	1762	799	2675	1214	3276	1486	5324	2415
16"	400	2721	1234	3342	1516	4383	1988	5160	2340	10184	4619
20"	500	4753	2156	5171	2345	7181	3257	9845	4466	15309	6944
24"	600	7226	3278	8722	3957	12758	5787	15873	7200	26080	11830
30"	750	12126	5500	16100	7303	19329	8767	28089	12741	0	0