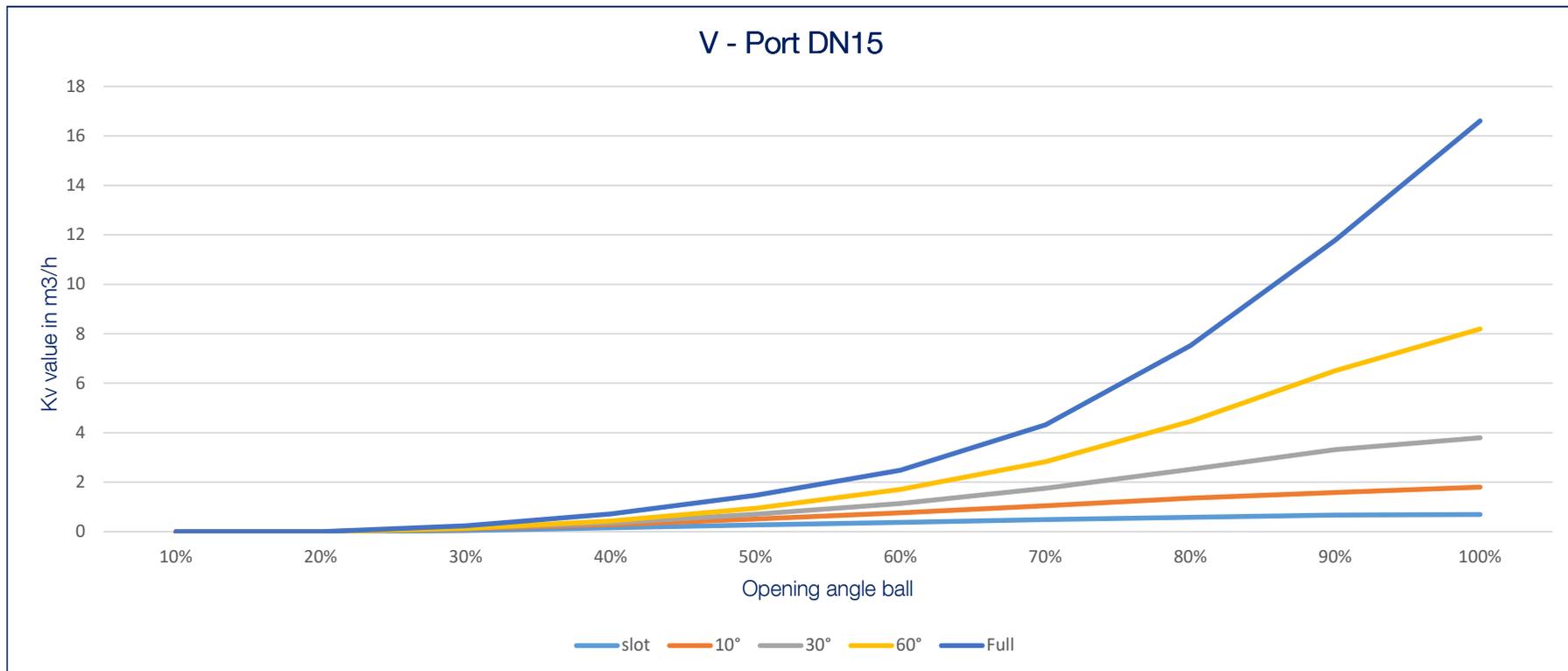


## Kv values for V-Port used in KLINGER Ballostar KHA and KHE Ball Valves

DN	max. kv values for water in m3/h				
	full bore	slotted	10°	30°	60°
15	16,6	0,7	1,8	3,8	8,2

Kv values for water in m3/h for different v-port balls and opening angles											
DN	V - port	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
15	slot	0	0	0,04	0,16	0,27	0,38	0,49	0,58	0,67	0,7
	10°	0	0	0,11	0,28	0,51	0,76	1,05	1,35	1,58	1,8
	30°	0	0	0,13	0,35	0,7	1,14	1,75	2,52	3,32	3,8
	60°	0	0	0,14	0,43	0,94	1,71	2,83	4,45	6,51	8,2
	Full	0	0	0,24	0,72	1,47	2,48	4,32	7,52	11,78	16,6

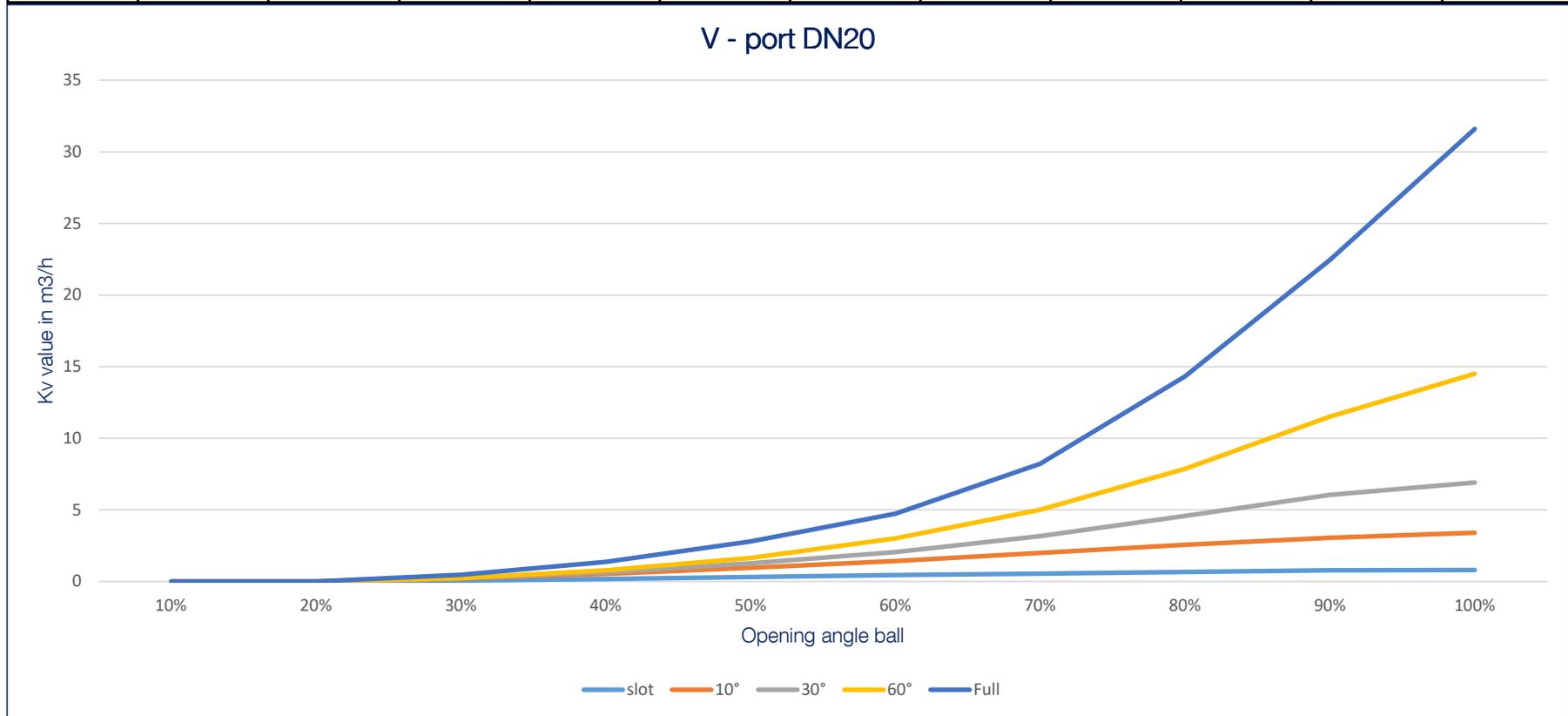


## Kv values for V-Port used in KLINGER Ballostar KHA and KHE Ball Valves

DN	max. kv values for water in m3/h				
	full bore	slotted	10°	30°	60°
20	31,60	0,8	3,4	6,9	14,5

Kv values for water in m3/h for different v-port balls and opening angles											
DN	V - port	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
20	slot	0	0	0,05	0,18	0,31	0,44	0,55	0,67	0,77	0,8
	10°	0	0	0,22	0,53	0,96	1,43	1,99	2,56	3,05	3,4
	30°	0	0	0,23	0,64	1,27	2,06	3,17	4,58	6,04	6,9
	60°	0	0	0,24	0,77	1,65	3,02	5,01	7,87	11,52	14,5
	Full	0	0	0,46	1,37	2,8	4,73	8,23	14,34	22,45	31,6

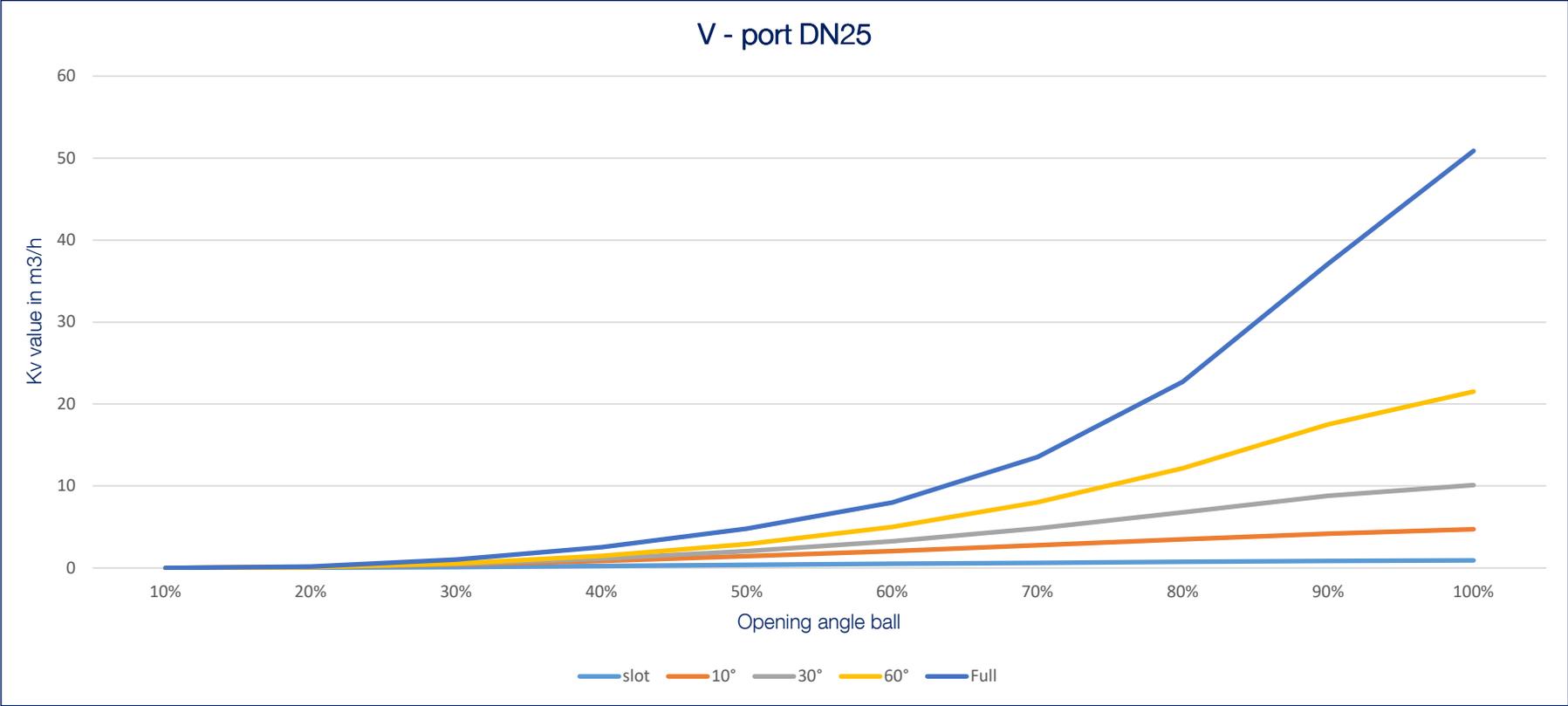


### Kv values for V-Port used in KLINGER Ballostar KHA and KHE Ball Valves

DN	max. kv values for water in m3/h				
	full bore	slotted	10°	30°	60°
25	50,9	1,1	4,7	10,1	21,5

Kv values for water in m3/h for different v-port balls and opening angles											
DN	V - port	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
25	slot	0	0,01	0,11	0,24	0,38	0,5	0,62	0,74	0,84	0,9
	10°	0	0,08	0,41	0,86	1,44	2,04	2,76	3,49	4,18	4,7
	30°	0	0,08	0,47	1,11	2,04	3,26	4,84	6,77	8,82	10,1
	60°	0	0,08	0,55	1,47	2,9	5	8,01	12,16	17,52	21,5
	Full	0	0,15	1,03	2,53	4,8	7,98	13,53	22,74	37,13	50,9

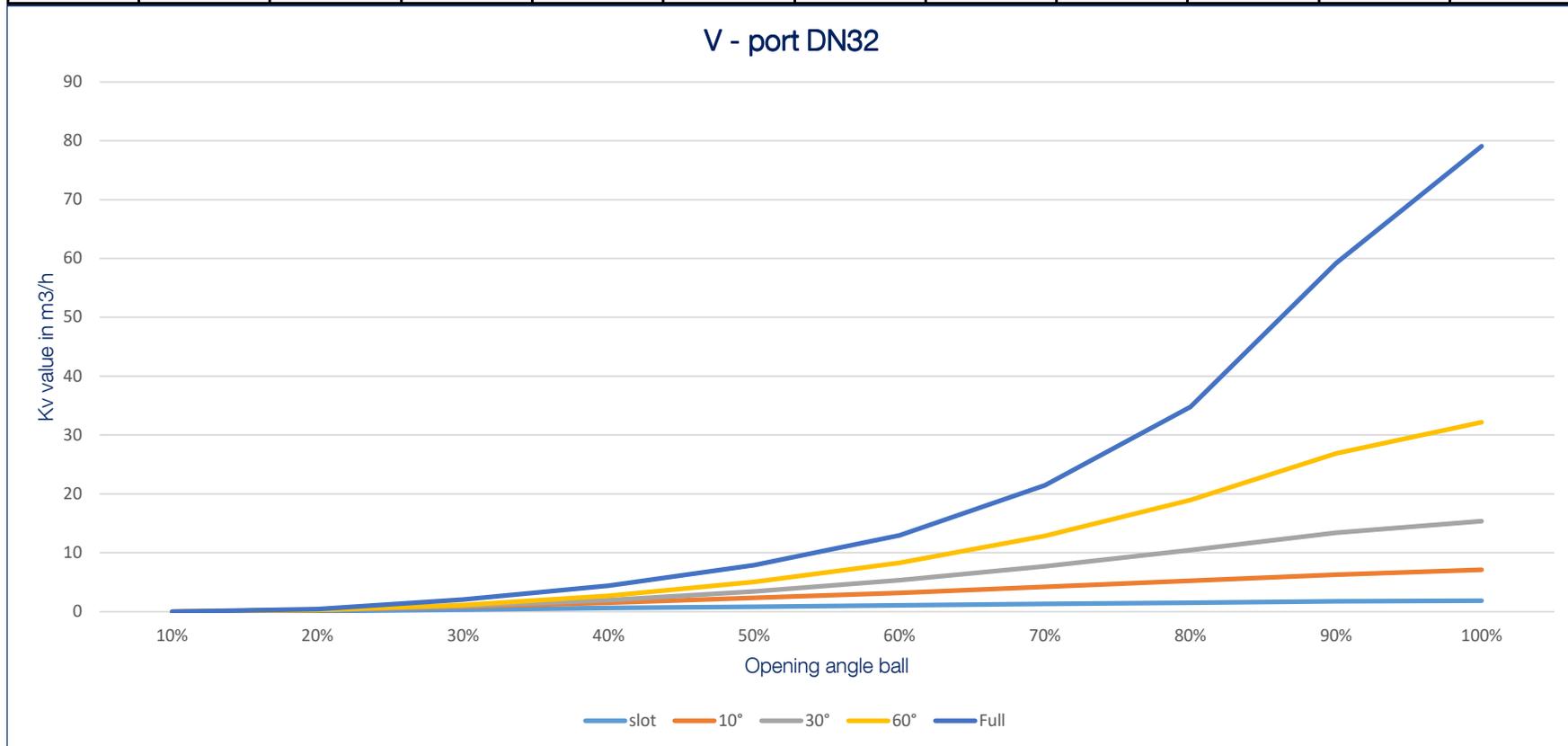


## Kv values for V-Port used in KLINGER Ballostar KHA and KHE Ball Valves

DN	max. kv values for water in m3/h				
	full bore	slotted	10°	30°	60°
32	79,1	0,0	7,1	15,4	32,2

Kv values for water in m3/h for different v-port balls and opening angles											
DN	V - port	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
32	slot	0	0,05	0,32	0,59	0,83	1,07	1,29	1,51	1,72	1,87
	10°	0	0,25	0,8	1,49	2,33	3,19	4,2	5,22	6,25	7,1
	30°	0	0,25	0,93	1,95	3,4	5,34	7,67	10,44	13,42	15,4
	60°	0	0,25	1,11	2,69	5,02	8,28	12,87	18,96	26,89	32,2
	Full	0	0,44	2,05	4,42	7,91	12,96	21,46	34,8	59,22	79,1

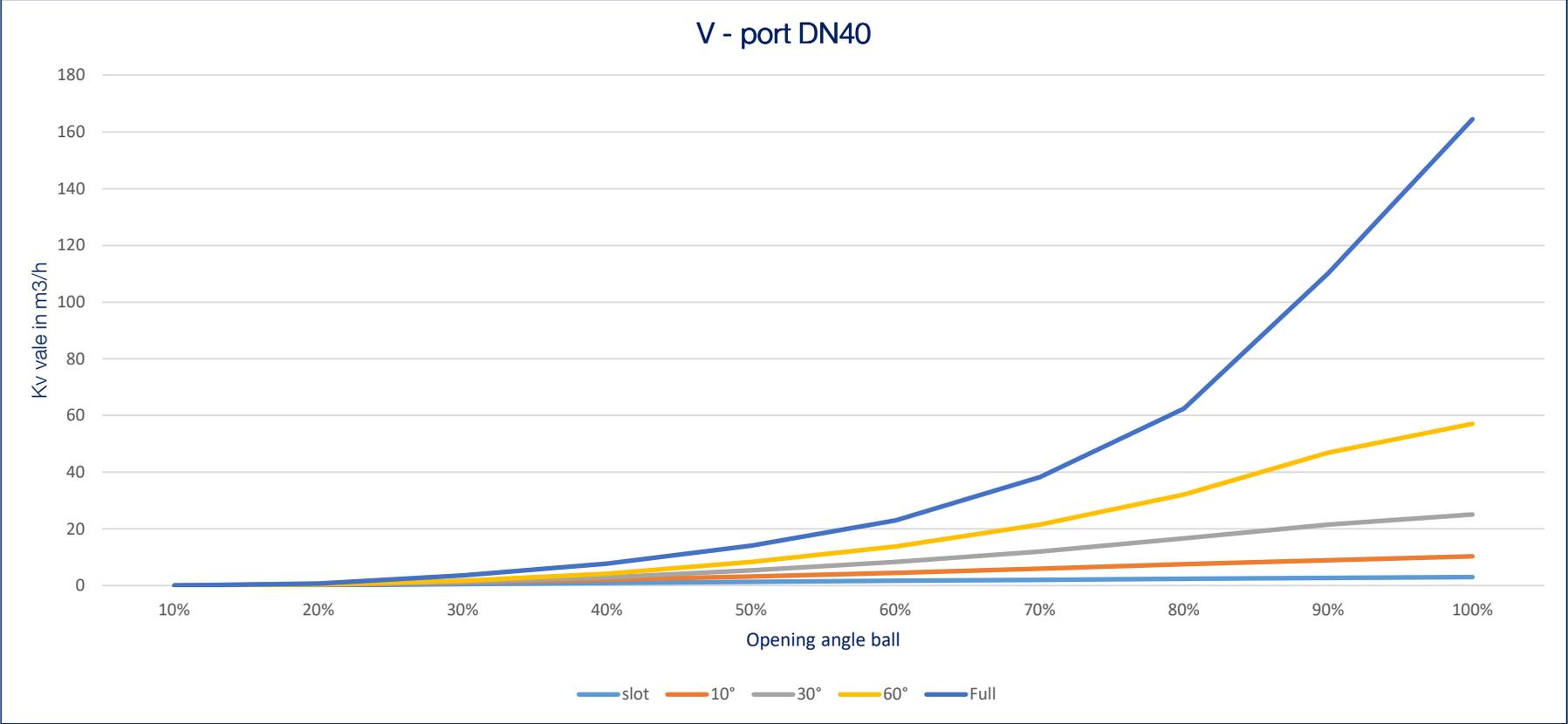


### Kv values for V-Port used in KLINGER Ballostar KHA and KHE Ball Valves

DN	max. kv values for water in m3/h				
	full bore	slotted	10°	30°	60°
40	164,4	3,0	10,3	25,1	57,0

Kv values for water in m3/h for different v-port balls and opening angles											
DN	V - port	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
40	slot	0	0,07	0,5	0,91	1,3	1,67	2,03	2,38	2,72	3
	10°	0	0,34	1,12	2,1	3,21	4,53	5,97	7,53	8,93	10,3
	30°	0	0,37	1,35	2,94	5,4	8,3	12	16,62	21,55	25,1
	60°	0	0,39	1,69	4,21	8,37	13,84	21,56	32,08	46,88	57
	Full	0	0,68	3,56	7,72	14,05	23,05	38,23	62,42	110,17	164,45

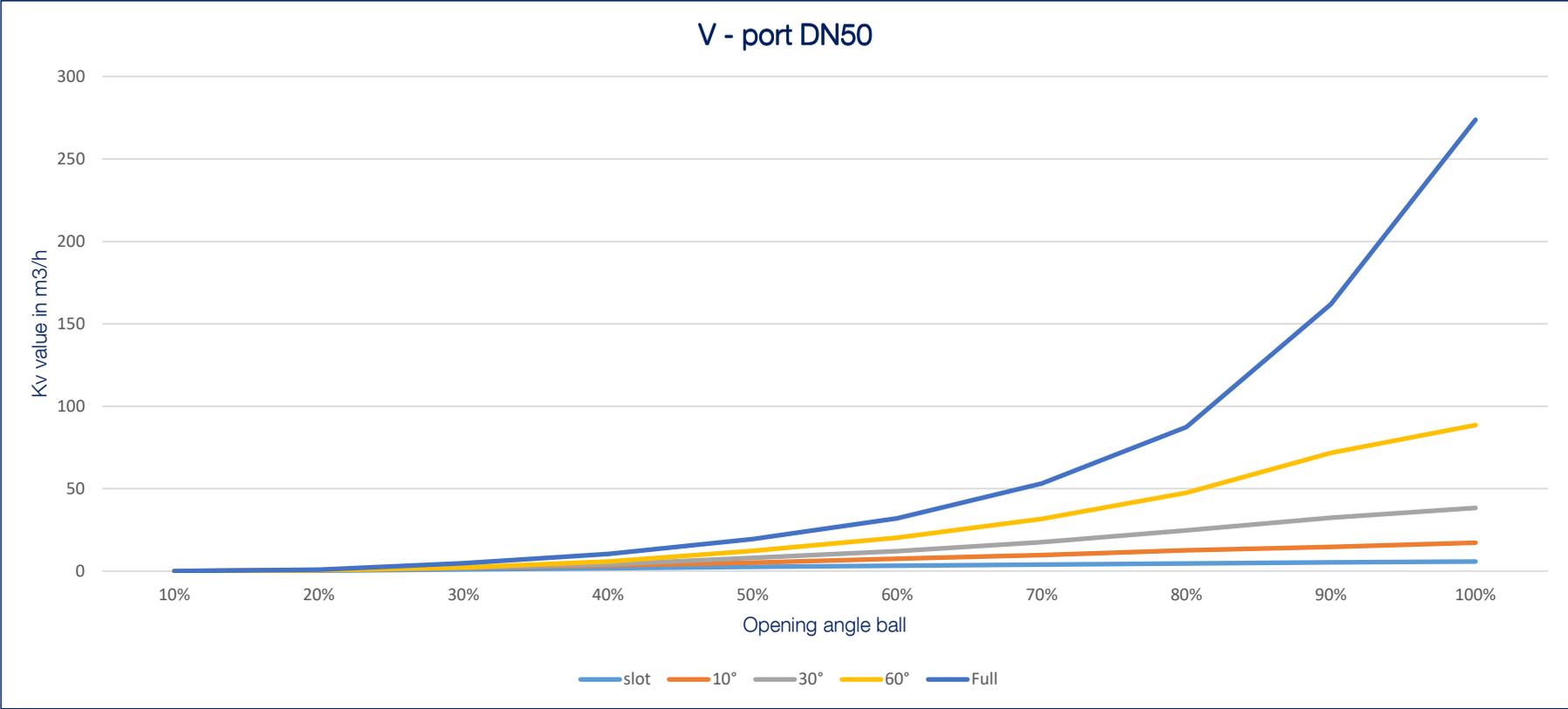


### Kv values for V-Port used in KLINGER Ballostar KHA and KHE Ball Valves

DN	max. kv values for water in m3/h				
	full bore	slotted	10°	30°	60°
50	273,8	5,8	17,2	38,2	87,4

Kv values for water in m3/h for different v-port balls and opening angles											
DN	V - port	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
50	slot	0	0,14	0,93	1,7	2,45	3,16	3,84	4,54	5,19	5,8
	10°	0	0,52	1,81	3,39	5,1	7,39	9,75	12,51	14,69	17,2
	30°	0	0,52	1,8	4,1	7,99	12	17,5	24,7	32,3	38,2
	60°	0	0,52	2,2	5,7	12,17	20,22	31,6	47,5	71,65	88,5
	Full	0	0,74	4,77	10,43	19,42	31,91	53,03	87,42	161,89	273,8

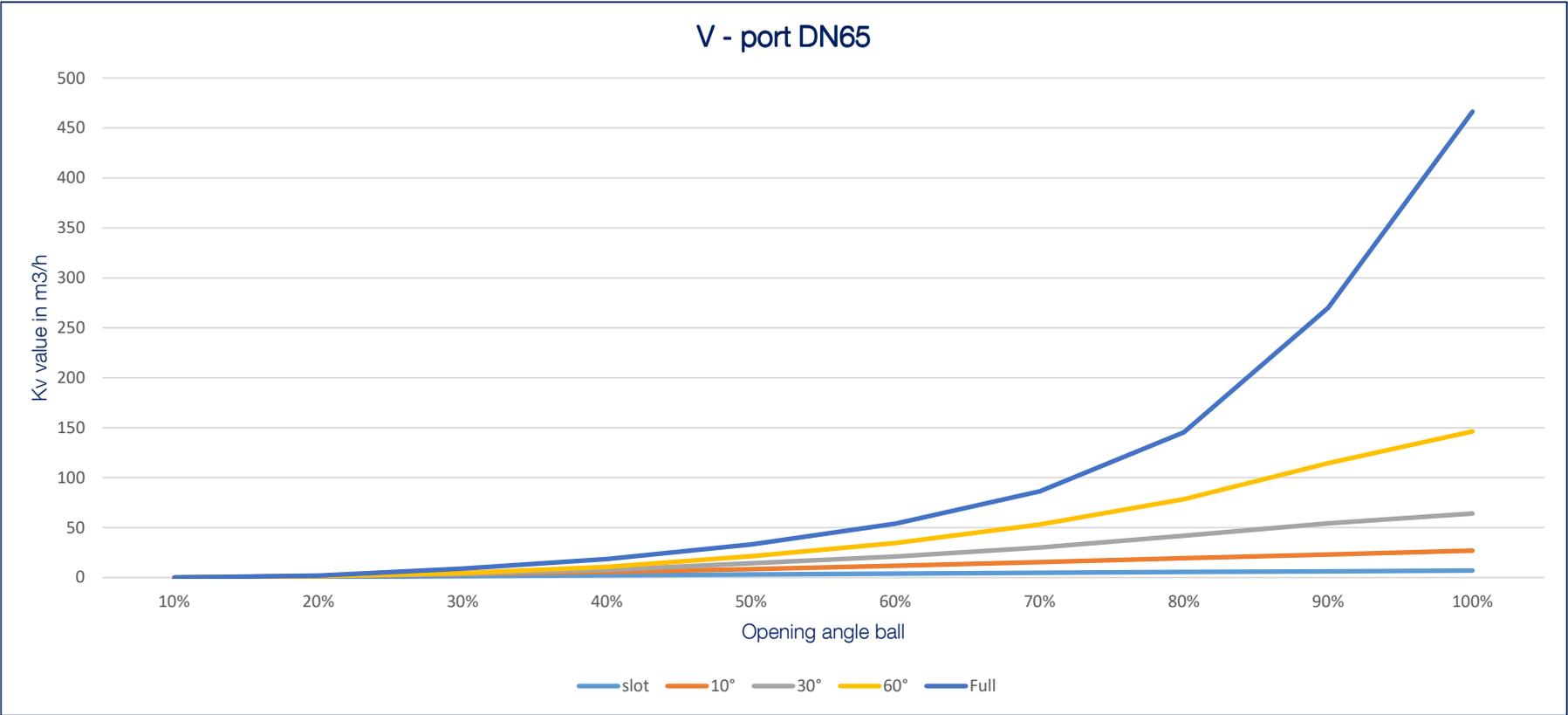


### Kv values for V-Port used in KLINGER Ballostar KHA and KHE Ball Valves

DN	max. kv values for water in m3/h				
	full bore	slotted	10°	30°	60°
65	466,5	7,6	27,0	64,1	146,3

Kv values for water in m3/h for different v-port balls and opening angles											
DN	V - port	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
65	slot	0	0,4	1,34	2,21	3,07	3,89	4,69	5,49	6,23	7
	10°	0	1,22	3,23	5,7	8,44	11,78	15,29	19,48	23,09	27
	30°	0	1,26	3,68	7,63	14,16	21,08	30,06	41,85	54,2	64,1
	60°	0	1,34	4,51	10,57	21,25	34,64	53,18	78,3	114,52	146,3
	Full	0	2,04	8,94	18,59	33,27	54,05	86,4	145,48	270,11	466,46

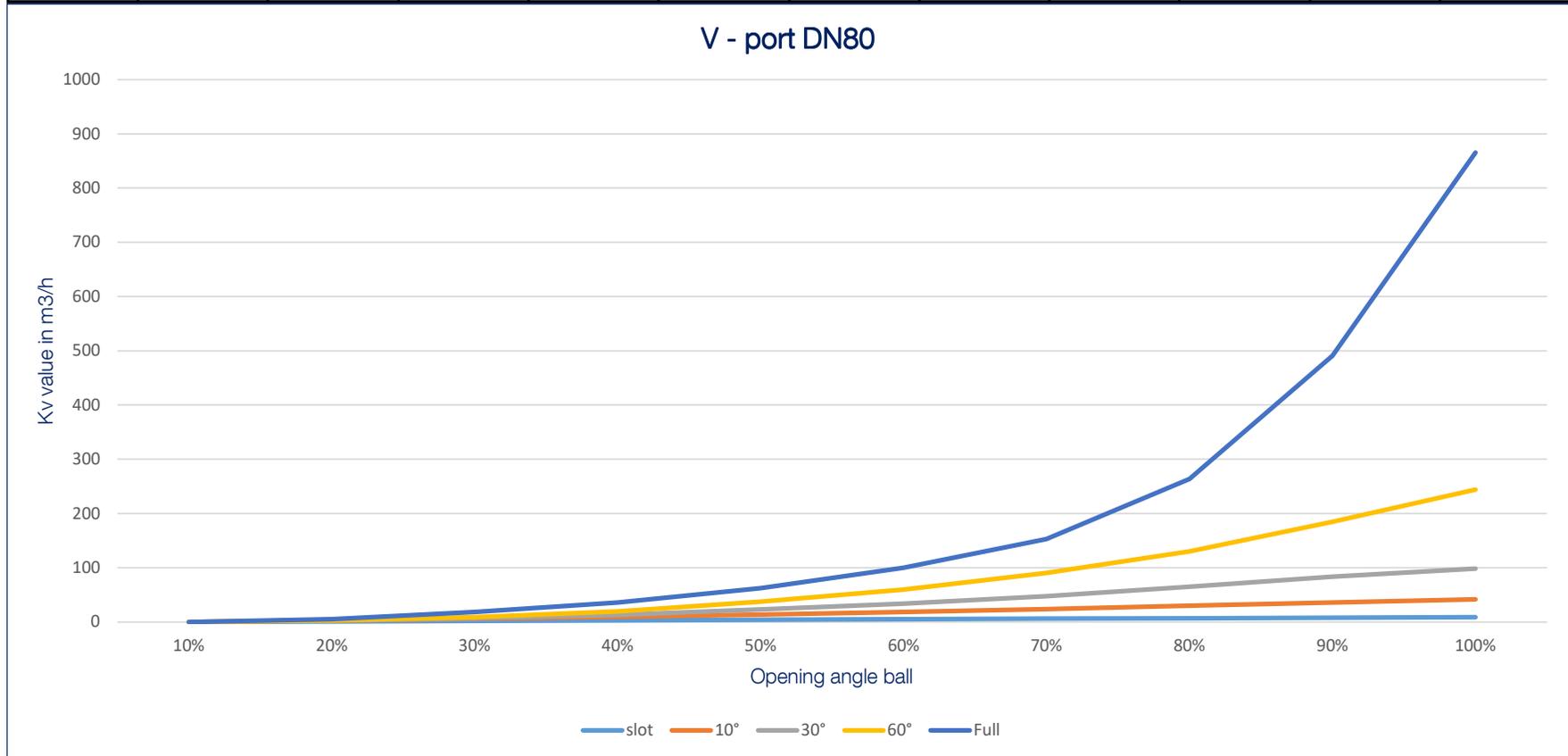


## Kv values for V-Port used in KLINGER Ballostar KHA and KHE Ball Valves

DN	max. kv values for water in m3/h				
	full bore	slotted	10°	30°	60°
80	865,4	8,7	41,8	98,6	244,1

Kv values for water in m3/h for different v-port balls and opening angles											
DN	V - port	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
80	slot	0	0,78	1,93	2,96	3,98	4,93	5,89	6,85	7,7	8,7
	10°	0	2,51	5,58	9,39	13,75	18,51	23,63	29,91	35,8	41,8
	30°	0	2,53	6,67	12,89	22,94	33,87	47,31	64,99	83,38	98,6
	60°	0	3,06	8,99	19,54	37,36	59,83	90,29	130,26	184,53	244,1
	Full	0	5,23	18,1	36	62,07	99,71	152,97	263,51	490,55	865,44



## Kv values for V-Port used in KLINGER Ballostar KHA and KHE Ball Valves

DN	max. kv values for water in m3/h				
	full bore	slotted	10°	30°	60°
100	1150,2	9,2	62,7	148,8	352,7

Kv values for water in m3/h for different v-port balls and opening angles											
DN	V - port	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
100	slot	0	1,13	2,32	3,35	4,37	5,32	6,3	7,27	8,1	9,2
	10°	0	4,69	9,26	14,94	21,63	28,17	35,4	44,5	53,78	62,7
	30°	0	4,7	11,6	21,2	36,38	53,3	73,01	99	125,85	148,8
	60°	0	5,6	15,1	31	56,74	89,39	132,73	187,67	257,15	352,7
	Full	0	8,86	26,06	49,86	82,94	131,76	193,57	341,71	637,92	1150,24

