

# Saunders A type diaphragm valves FLANGED EN558-1 series 7 (ex BS5156 - short body) Natural Rubber or EPM membrane SG Iron body



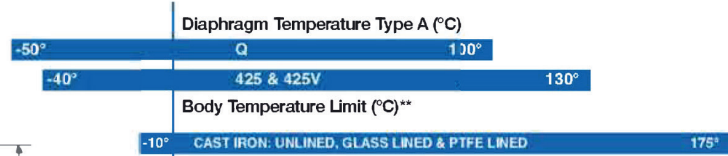
## Saunders A Type Diaphragm Valves

### Diaphragm Materials of Construction

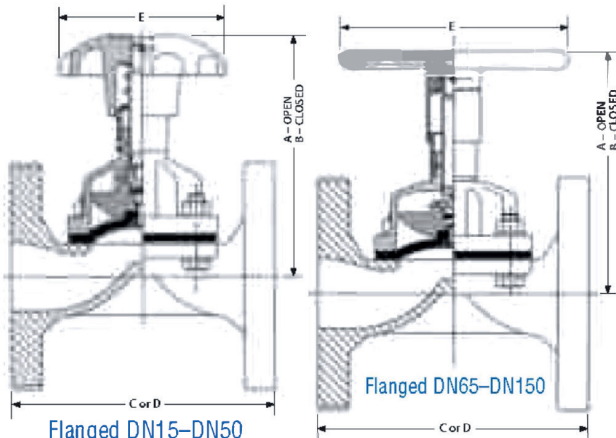
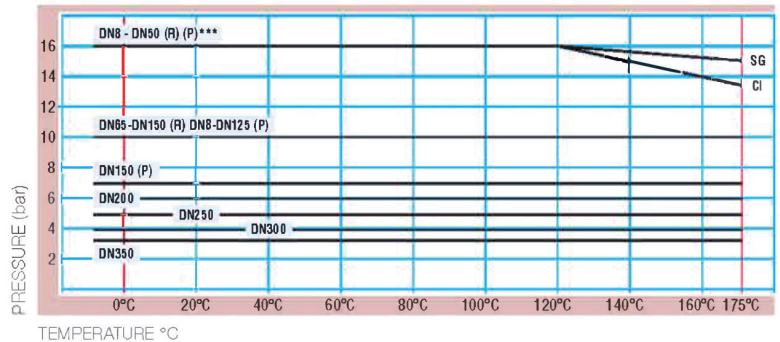
Grade	Elastomer type	General service and approvals
Q	Natural rubber polyisoprene/SBR, sulphur cured, black reinforced	Salts in water, dilute acids and alkalis, abrasives
425	Ethylene propylene (EPM) organic peroxide cured, black reinforced	Salts in water, acids and alkalis, ozone, intermittent steam, drinking water, FDA, USP, WRAS

### Diaphragm Performance

#### Temperature and Pressure Relationship



A Type Valve Body (Cast Iron) Temperature/Pressure Relationship



	Valve Diameter (DN)													
	8	10	15	20	25	32	40	50	65	80	100	125	150	
Flanged A	-	-	100	91	108	143	157	175	226	243	306	368	442	
B	-	-	93	85	98	131	141	152	194	206	262	322	367	
C	-	-	108	117	127	146	159	190	216	254	305	356	406	
Weight	-	-	1.80	1.80	2.70	4.00	4.90	7.70	14.0	19.0	31.7	48.0	62.1	

### Flow Co-efficient of Valve Range Cv (Kv)

% Open	15		20		25		DN 32	
	Cv	Kv	Cv	Kv	Cv	Kv	Cv	Kv
100	5.50	4.71	11.50	9.86	17.60	15.09	27.50	23.57
90	5.28	4.53	11.03	9.45	16.29	13.96	26.39	22.61
80	5.06	4.33	10.57	9.06	16.19	13.88	25.29	21.68
70	4.83	4.14	10.12	8.67	15.48	13.26	24.20	20.74
60	4.61	3.95	9.66	8.28	14.78	12.67	23.09	19.79
50	3.84	3.29	8.05	6.90	12.32	10.56	19.25	16.50
40	3.08	2.62	6.43	5.51	9.85	8.44	15.39	13.19
30	2.30	1.97	4.83	4.14	7.39	6.33	11.54	9.89
20	1.54	1.32	3.21	2.75	4.92	4.22	7.69	6.59
10	0.77	0.66	1.60	1.37	2.46	2.11	3.84	3.29
0	0	0	0	0	0	0	0	0

% Open	40		50		65		DN 80	
	Cv	Kv	Cv	Kv	Cv	Kv	Cv	Kv
100	43.00	36.86	80.00	68.61	127.00	108.80	185.00	158.60
90	41.28	35.40	76.80	65.86	121.00	103.70	177.00	151.70
80	39.56	33.91	73.59	63.11	116.00	99.40	170.00	145.70
70	37.84	32.43	70.40	60.37	111.00	95.10	162.00	138.90
60	36.11	30.95	67.19	57.62	106.00	90.90	155.00	132.90
50	30.10	25.81	56.00	48.03	88.90	76.20	129.00	110.60
40	24.07	20.63	44.79	38.39	71.12	60.90	103.00	88.30
30	18.05	15.47	33.59	28.79	53.33	45.70	77.70	66.60
20	12.03	10.31	22.39	19.19	35.56	30.50	51.80	44.40
10	6.01	5.15	11.19	9.60	17.78	15.20	25.90	22.20
0	0	0	0	0	0	0	0	0

% Open	100		125		150	
	Cv	Kv	Cv	Kv	Cv	Kv
100	315	270	420	360	605	519
90	302	259	403	345	580	497
80	289	248	386	331	556	477
70	277	237	369	316	532	456
60	264	226	352	302	508	435
50	220	189	294	252	423	363
40	176	151	235	201	338	290
30	132	113	176	151	254	218
20	88.20	76	117	100	169	145
10	44.10	38	59	49	85	73
0	0	0	0	0	0	0

Cv is flow in US gpm through valve at Δ P of 1 psi  
Kv is flow in m³/hr through valve at Δ P of 1 bar