

GE's Mooney Series 20 Relief Valve Capacity Chart – Natural Gas

Capacities based on 10% overpressure or 3 psig (0.21 barg), whichever is greater, showing 90% actual capacity

Orifice Designation		1.5" FB		2" FB		3" FB		4" FB		6" FB		8" FB	
Orifice Area		in ²	cm ²	in ²	cm ²	in ²	cm ²	in ²	cm ²	in ²	cm ²	in ²	cm ²
		1.622	10.464	2.764	17.832	6.321	40.781	10.760	69.419	24.950	160.967	44.180	285.032
Set Pressure		Orifice Capacity											
psig	barg	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min
15	1.03	1020	29	1109	31	3974	113	6765	192	15687	444	27778	787
20	1.37	1176	33	1279	36	4582	130	7800	221	18086	512	32026	907
30	2.06	1488	42	1618	46	5797	164	9869	279	22884	648	40521	1147
40	2.75	1831	52	1991	56	7134	202	12145	344	28161	797	49865	1412
50	3.44	2174	62	2364	67	8471	240	14420	408	33438	947	59210	1677
60	4.13	2517	71	2737	78	9808	278	16696	473	38715	1096	68554	1941
70	4.82	2860	81	3110	88	11145	316	18972	537	43992	1246	77899	2206
80	5.51	3203	91	3483	99	12482	353	21248	602	49269	1395	87243	2470
90	6.20	3546	101	3857	109	13819	391	23524	666	54546	1545	96587	2735
100	6.89	3889	110	4230	120	15156	429	25800	731	59823	1694	105932	3000
120	8.27	4575	130	4976	141	17830	505	30351	859	70378	1993	124621	3529
140	9.65	5261	149	5722	162	20504	581	34903	988	80932	2292	143310	4058
160	11.03	5948	169	6468	183	23178	656	39455	1117	91486	2591	161999	4587
180	12.41	6634	188	7214	204	25852	732	44006	1246	102041	2889	180687	5116
200	13.78	7320	208	7961	225	28526	808	48558	1375	112595	3188	199376	5646
220	15.16	8006	227	8707	247	31199	883	53110	1504	123149	3487	218065	6175
240	16.54	8692	247	9453	268	33873	959	57661	1633	133703	3786	236754	6704
260	17.92	9378	266	10199	289	36547	1035	62213	1762	144258	4085	255443	7233
280	19.30	10064	285	10945	310	39221	1111	66765	1891	154812	4384	274132	7763
300	20.68	10750	305	11692	331	41895	1186	71316	2019	165366	4683	292821	8292
320	22.06	11437	324	12438	352	44569	1262	75868	2148	175920	4981	311510	8821
340	23.44	12123	344	13184	373	47243	1338	80420	2277	186475	5280	330198	9350
360	24.82	12809	363	13930	394	49917	1413	84971	2406	197029	5579	348887	9879
380	26.20	13495	383	14676	416	52591	1489	89523	2535	207583	5878	367576	10409
400	27.57	14181	402	15423	437	55264	1565	94075	2664	218137	6177	386265	10938
420	28.95	14867	422	16169	458	57938	1641	98626	2793	228692	6476	404954	11467
440	30.33	15553	441	16915	479	60612	1716	103178	2922	239246	6775	423643	11996
460	31.71	16240	461	17661	500	63286	1792	107729	3051	249800	7074	442332	12525
480	33.09	16926	480	18407	521	65960	1868	112281	3179	260354	7372	461021	13055
500	34.47	17612	500	19154	542	68634	1943	116833	3308	270909	7671	479709	13584
600	41.36	21042	597	22885	648	82003	2322	139591	3953	323680	9166	573154	16230
700	48.26	24473	694	26616	754	95373	2701	162349	4597	376451	10660	666598	18876
750	51.71	26188	743	28481	806	102057	2890	173729	4919	402837	11407	713320	20199



Capacity Chart – Air

Capacities based on 10% overpressure or 3 psig (0.21 barg), whichever is greater, showing 90% actual capacity

Orifice Designation		1.5" FB		2" FB		3" FB		4" FB		6" FB		8" FB	
Orifice Area		in ²	cm ²	in ²	cm ²	in ²	cm ²	in ²	cm ²	in ²	cm ²	in ²	cm ²
Set Pressure		Orifice Capacity											
psig	barg	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min	ft ³ /min	m ³ /min
15	1.03	854	24	1456	41	3331	94	5670	160	13148	372	23281	659
20	1.37	985	27	1679	47	3840	108	6537	185	15158	429	26841	760
30	2.06	1246	35	2124	60	4858	137	8271	234	19179	543	33961	961
40	2.75	1534	43	2614	74	5979	169	10178	288	23602	668	41793	1183
50	3.44	1821	51	3104	87	7100	201	12086	342	28024	793	49624	1405
60	4.13	2109	59	3594	101	8220	232	13993	396	32447	918	57456	1626
70	4.82	2396	67	4084	115	9341	264	15900	450	36870	1044	65288	1848
80	5.51	2684	76	4574	129	10461	296	17808	504	41293	1169	73120	2070
90	6.20	2972	84	5064	143	11582	327	19715	558	45716	1294	80952	2292
100	6.89	3259	92	5554	157	12702	359	21623	612	50139	1419	88783	2514
120	8.27	3834	108	6534	185	14943	423	25438	720	58985	1670	104447	2957
140	9.65	4409	124	7514	212	17184	486	29252	828	67830	1920	120110	3401
160	11.03	4984	141	8494	240	19425	550	33067	936	76676	2171	135774	3844
180	12.41	5559	157	9474	268	21666	613	36882	1044	85522	2421	151438	4288
200	13.78	6134	173	10454	296	23907	676	40697	1152	94368	2672	167101	4731
220	15.16	6709	189	11434	323	26148	740	44512	1260	103213	2922	182765	5175
240	16.54	7285	206	12414	351	28389	803	48327	1368	112059	3173	198428	5618
260	17.92	7860	222	13394	379	30630	867	52141	1476	120905	3423	214092	6062
280	19.30	8435	238	14374	407	32872	930	55956	1584	129751	3674	229755	6505
300	20.68	9010	255	15353	434	35113	994	59771	1692	138596	3924	245419	6949
320	22.06	9585	271	16333	462	37354	1057	63586	1800	147442	4175	261082	7393
340	23.44	10160	287	17313	490	39595	1121	67401	1908	156288	4425	276746	7836
360	24.82	10735	303	18293	518	41836	1184	71216	2016	165134	4676	292410	8280
380	26.20	11310	320	19273	545	44077	1248	75031	2124	173979	4926	308073	8723
400	27.57	11885	336	20253	573	46318	1311	78845	2232	182825	5177	323737	9167
420	28.95	12460	352	21233	601	48559	1375	82660	2340	191671	5427	339400	9610
440	30.33	13035	369	22213	629	50800	1438	86475	2448	200517	5678	355064	10054
460	31.71	13610	385	23193	656	53041	1501	90290	2556	209363	5928	370727	10497
480	33.09	14185	401	24173	684	55282	1565	94105	2664	218208	6178	386391	10941
500	34.47	14760	417	25153	712	57523	1628	97920	2772	227054	6429	402054	11384
600	41.36	17636	499	30053	851	68728	1946	116994	3312	271283	7681	480372	13602
700	48.26	20511	580	34952	989	79933	2263	136068	3853	315512	8934	558690	15820
750	51.71	21949	621	37402	1059	85536	2422	145605	4123	337626	9560	597849	16929

Capacity charts are for reference only. Capacities are based on actual test results but under very specific conditions. Depending on your end-use conditions, actual experience will vary. Final selection of pressure relief devices should always be made using the manufacturer's specific sizing program.

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