Table 1 — Standard-service nozzle loading

Nom. size		PN 20 (ASME rating 150)				PN 50 (ASME rating 300)				PN 110 (ASME rating 600)			
DN		F		M		F		M		F		M	
mm	(in)	N	(lb)	N·m	(lb·ft)	N	(lb)	N·m	(lb·ft)	N	(lb)	N·m	(lb·ft)
25	(1)	90	(20)	0	(0)	119	(27)	1	(1)	167	(37)	2	(2)
40	(1,5)	159	(36)	37	(27)	209	(47)	40	(29)	293	(66)	44	(32)
50	(2)	208	(47)	76	(56)	273	(61)	80	(59)	383	(86)	88	(65)
80	(3)	365	(82)	230	(169)	480	(108)	246	(181)	673	(151)	274	(202)
100	(4)	477	(107)	358	(264)	628	(141)	388	(286)	879	(198)	438	(323)
150	(6)	776	(175)	750	(553)	1 022	(230)	840	(620)	1 430	(322)	990	(730)
200	(8)	1 096	(246)	1 236	(911)	1 443	(324)	1 431	(1 056)	2 020	(454)	1 758	(1 297)
250	(10)	1 433	(322)	1 809	(1 335)	1 886	(424)	2 167	(1 598)	2 640	(593)	2 763	(2 038)
300	(12)	1 784	(401)	2 471	(1 822)	2 347	(528)	3 056	(2 254)	3 286	(739)	4 032	(2 974)
350	(14)	2 146	(482)	3 220	(2 375)	2 824	(635)	4 108	(3 030)	3 953	(889)	5 587	(4 121)
400	(16)	2 519	(566)	4 060	(2 995)	3 314	(745)	5 333	(3 933)	4 640	(1 043)	7 454	(5 498)
450	(18)	2 901	(652)	4 993	(3 683)	3 818	(858)	6 742	(4 973)	5 345	(1 202)	9 658	(7 123)
500	(20)	3 292	(740)	6 021	(4 441)	4 332	(974)	8 346	(6 156)	6 065	(1 363)	12 221	(9 014)

NOTE   The data above are based on the following equations:

$$F = \frac{\left(7,5\, DN^{1,2} + 0,1\, PN \cdot DN^{1,2}\right)}{5}$$

$$m = \frac{\left[4(DN - 25)^{1,4} + \left(2 \times 10^{-5}\right) PN \cdot DN^{2,7}\right]}{5}$$

where

$F = F_x = F_y = F_z$

$M = M_x = M_y = M_z$