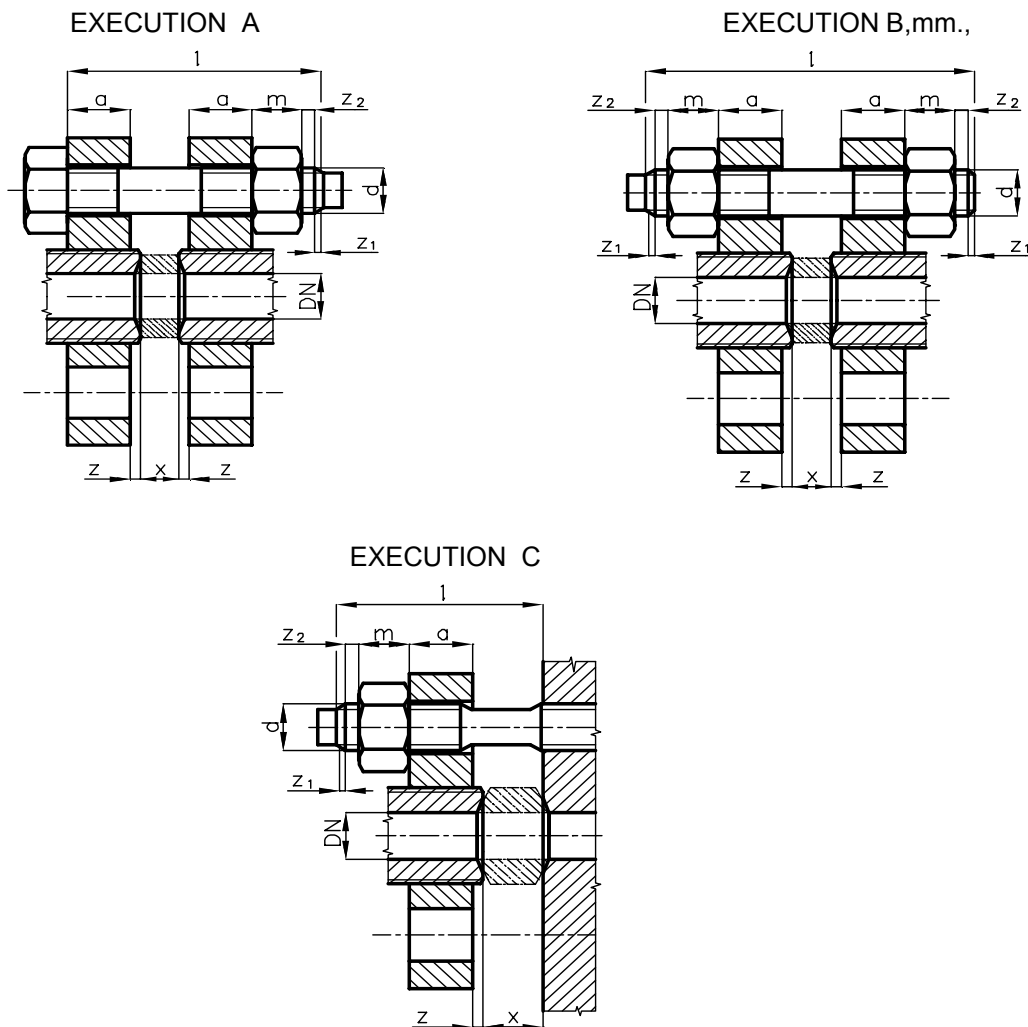


CHEMOPETROL a.s. PLANT 02	Flange joints, length of bolts assembly	N 16.10 a

This standard applies to determination of bolt length, position of flanges and bolts in a high pressure flange joint. This standard determines length of bolts (value l) in the joint with respect to the bolt type (execution A - stud bolt, execution B - stud, execution C - head bolts) and used gasket element (lense, lense connection, measuring diaphragm or nozzle).

The standard determines flange position - value z - (minimum distance from the end of coupling) and position of bolts - value z_2 - (minimum length of end of bolt thread, outstanding from the nut).

The thread end of bolt must not be sunk in to the nut. When assembling the studs in the flange joints, approximately the same part of stud thread must overhang the nuts at both ends.



replaces: N 16.10 z 10/1970	Administrator of the standard: Standardization dept. - Technical services	validity from: 1.7.1999
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DN	a	1)		2)		2)		2)		d	length "l" execution			
		t	s	x	m	z	z ₁	z ₂	A		B	C		
		s ₁					(max.)							
6	15	8,5	7	13	1	2	2		1/2"	55	75	40		
10	20	8,5	5,5	16	1	2	2,5		5/8"	70	90	50		
16	20	9	5,5	16	1	2	2,5		5/8"	70	90	50		
24	22	10	6	16	1	2	2,5		5/8"	75	95	50		
		45	41									110	130	
30	25	13	8,5	19	1	2	2,5		3/4"	85	110	60		
		45	40,5									115	140	
		45	40,5									115	140	
45	35	15	9,5	22	1	2	3		7/8"	110	135	75		
		45	39,5									140	165	
		45	39,5									140	165	
58	40	18	11,5	25	1,5	2,5	3,5		1"	125	155	85		
		45	38,5									155	185	
		50	43,5									155	190	
70	50	21	13	28	1,5	3	4		1 1/8"		185	100		
		50	42										215	
		50	42										215	
90	55	25	15,5	32	2	3	4		1 1/4"		205	110		
		50	40,5										230	
		50	40,5										230	
120	70	30	18,5	38	2	3	4,5		1 1/2"		255	135		
		50	38,5										275	
		65	53,5										290	
160	95	37	22	45	2,5	3,5	5		1 3/4"		325	175		
		55	40										345	
200	130	46	28	50	3	4,5	5,5		2"		415	220		

Notes :

- 1) t....thickness of lens
s....thickness of lens connection
s₁...thickness of measuring diaphragm of nozzle
- 2) values z, z₁, z₂ are approximate and valid only for calculation of stud length z overhang of coupling form flange
z₁..... chamfering of bolt thread
z₂..... overhang of bolt thread from nut