

Generally three types of threads are used for low pressure couplings:

- BSP
- BSPT
- NPT
- NPSM
- DIN 405-1

In Europe, BSP and BSPT threads are more commonly used than NPT threads. NPT threads are typically American threads. Since many American industrial machines and products are exported to European markets, couplings with NPT threads are a regular requirement. The main difference between the three types referred to above is the seal method used. BSP threads are sealed using a thread seal or o-ring. BSPT and NPT threads are sealed by their conical thread.

For food couplings, like food couplings complying with DIN 11851 and SMS, a round thread is used. Due to the round thread these couplings are easy to assemble, disassemble and to clean.

NPSM, or the National Standard Free-fitting Straight Mechanical Pipe Thread, is an American thread type used for DINBO steam couplings. Due to the mechanical sealing of DINBO couplings and the steam application, a straight pipe thread NPSM is used.

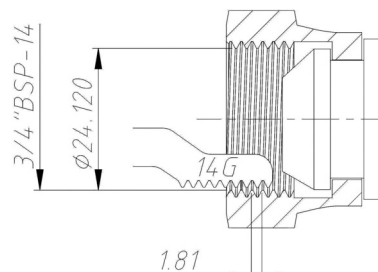
The connection of petrol hose couplings is made by screwing the ISO Metric fine thread DIN 13, of the male or female coupling into the ferrule. The ISO MF is an exception in thread type used for other low pressure couplings used in this catalogue.



## THREADS



Female thread								Female thread							
D	Pitch	Threads (inch)	Metric	BSP	NPT	NPSM	DIN 11851	D	Pitch	Threads (inch)	Metrisch	BSP	NPT	NPSM	DIN 11851
8,565		28		1/8				42,402	2		M45X2				
8,674		27			1/8			43,052	1,5		M45X1,5				
8,701	1		M10X1					44,323		11 1/2			1 1/2		
9,025	1,5		M10X1,5					44,846		11		1 1/2			
9,094		20				1/8		45,339						1 1/2	
10,052	1,5		M12X1,5					45,402	2		M48X2				
11,265		18			1/4			48,90		6					NW25(Rd52x1/6)
11,445		19		1/4				49,402	2		M52X2				
11,888						1/4		50,052	1,5		M52X1,5				
12,052	1,5		M14X1,5					50,790		11		1 3/4			
14,052	1,5		M16X1,5					54,80		6					NW32(Rd58x1/6)
14,348		18						56,363		11 1/2			2		
14,704		18			3/8			56,657		11		2			
14,950		19		3/8				57,379						2	
15,317						3/8		61,60		6					NW65(Rd65x1/6)
16,052	1,5		M18X1,5					62,402	2		M65X2				
18,052	1,5		M20X1,5					66,98		8			2 1/2		
18,161		14			1/2			68,75	3		M72X3			2 1/2	
18,633		14		1/2				69,84	2		M72X2				
18,974						1/2		72,22		11		2 1/2			
20,052	1,5		M22X1,5					74,70		6					NW50(Rd78x1/6)
20,589		14		5/8				75,67	2		M80X4				
22,052	1,5		M24X1,5					77,83	4		M80X2				
23,508		14			3/4			82,90		8			3		
24,052	1,5		M26X1,5					84,694						3	
24,120		14		3/4				84,93		11		3			
24,334						3/4		87,40	2		M90X4				
24,402	2		M27X2					88,70	4		M90X2				
24,50		8					NW10(Rd28x1/8)	91,80		6					NW65(Rd95x1/6)
27,402	2		M30X2					97,40	2		M100X4			3 1/2	
28,052	1,5		M30X1,5					98,70	4		M100X2				
29,517		11 1/2			1			104,30		4					NW80(Rd110x1/4)
30,292		11		1				107,40	4		M110X4				
30,402	2		M33X2					108,26		8			4		
30,506						1		110,07		11		4		4	
31,600		8					NW15(Rd34x1/8)	122,40	4		M125X4				
33,402	2		M36X2					124,30		4					NW100(Rd130x1/4)
36,052	1,5		M38X1,5					124,30		8			5		
38,252		11 1/2			1 1/4			135,24		11		5			
38,953		11		1 1/4				135,47							
39,269						1 1/4		137,40	4		M140X4			5	
39,402	2		M42X2					154,82		4					NW125(Rd160x1/4)
40,50		8					NW20(Rd44x1/6)	156,10	6		M160X6				
								160,87		11		6			
								162,07		8			6		
								163,881						6	
								184,30		4					NW150(Rd160x1/4)



# THREADS



## Male thread

D	Pitch	Threads (inch)	Metric	BSP	NPT	NPSM	DIN 11851
9,728		28		1/8			
9,910						1/8	
10,00	1		M10X1				
10,00		1,5	M10X1,5				
10,287		27			1/8		
12,00	1,5		M12X1,5				
13,157		19		1/4		1/4	
13,718		18			1/4		
14,00	1,5		M14X1,5				
16,00	1,5		M16X1,5				
16,622		19		3/8		3/8	
17,145		18			3/8		
18,00	1,5		M18X1,5				
20,00	1,5		M20X1,5				
20,904						1/2	
20,955		14		1/2			
21,366		14			1/2		
22,00	1,5		M22X1,5				
22,911		14		5/8			
24,00	1,5		M24X1,5				
26,00	1,5		M26X1,5				
26,263						3/4	
26,441		14		3/4			
26,67		14			3/4		
27,00	2		M27X2.0				
28,00		8					NW10(Rd28x1/8)
30,00	1.5		M30X1.5				
30,00	2		M30X2.0				
32,842						1	
33,00	2		M33X2.0				
33,249		11		1			
33,401		11 1/2			1		
34,00		8					NW15(Rd34x1/8)
36,00	2		M36X2.0				
38,00	1,5		M38X1,5				
41,605						1 1/4	
41,91		11		1 1/4			
42,00	2		M42X2.0				
42,164		11 1/2			1 1/4		

## Male thread

D	Pitch	Threads (inch)	Metric	BSP	NPT	NPSM	DIN 11851
44,00		6					NW20(Rd44x1/6)
45,00	1,5		M45X1,5				
45,00	2		M45X2				
47,371						1 1/2	
47,803		11		1 1/2			
48,00	2		M48X2				
48,26		11 1/2			1 1/2		
52,00	2		M52X2				
52,00	1,5		M52X1,5				
52,00		6					NW25(Rd52x1/6)
53,476		11		1 3/4			
58,00		6					NW32(Rd58x1/6)
59,614		11		2			
59,715						2	
60,325		11 1/2			2		
65,00	2		M65X2				
65,00		6					NW40(Rd65x1/6)
72,00	3		M72X3			2 1/2	
72,00	2		M72X2				
73,03		8			2 1/2		
75,18		11		2 1/2			
78,00		6					NW50(Rd78x1/6)
80,00	4		M80X4				
80,00	2		M80X2				
87,88		11		3		3	
88,90		8			3		
90,00	4		M90X4				
90,00	2		M90X2				
95,00		6					NW65(Rd95x1/6)
100,00	4		M100X4			3 1/2	
100,00	2		M100X2				
110,00			M110X4				NW80(Rd110x1/4)
113,03		11		4		4	
114,30		8			4		
125,00	4		M125X4				
130,00		4					NW100(Rd130x1/4)
138,43		11		5			
140,00	4		M140X4				
140,03						5	
141,30		8			5		
160,00	6		M160X6				
160,00		4					NW125(Rd160x1/4)
163,83		11		6			
168,28		8			6		
190,00		4					NW150(Rd190x1/4)

