

WJTA-IMCA Color Coding Scheme for Pressure Hoses - Maximum Working Pressure Applicable



^{*} The safety factor between the burst pressure and working pressure depend on the application requirements. Four to one (4:1) safety factor should be used in dynamic impulsing hydraulic applications.

This means that if the working pressure of a fitting is lower than the working pressure of the hose, the WORKING PRESSURE of the fitting becomes the WORKING PRESSURE of the entire assembly.

The maximum WORKING PRESSURE of the assembly can be found marked on each sleeve of the assembly and on the pressure test report.

INNER TUBE

Polyoxymethylene (POM)

REINFORCEMENT

Six spiral layers of higher tensile steel wire

COVER

First cover Special Polyester Copolymer Second cover Antiabrasion Polyurethane Black, non pinpricked, white ink-jet branding

INDUSTRIAL APPLICATIONS

Waterjet cutting. Tube cleaning, surface preparation and paint removal. Hydro demolition. Ships, tanks and vessel cleaning. Waterblast supply hose. General industrial cleaning. Removal of accumulated dirt from surfaces.

HYDRAULIC APPLICATIONS

Hydraulic jacks // Bolt tensioning // Testing applications // General UHP hydraulic applications

^{**} The maximum WORKING PRESSURE of an assembly is given by the component having the lowest working pressure.



pressure drop table

Last updated

July 7, 2014

HOSE ID	DN	3	1/8"		3/16" 1/4"		5/16"		3/8"		1/2"		3/4"		1"			
FLOW (I/min)	speed (m/s)	Δp (bar)	speed (m/s)	Δp (bar)	speed (m/s)	Δp (bar)	speed (m/s) Δp (bar)	speed (m/s)	Δp (bar)								
2	4,7	10,8																
4	9,4	36,2																
6	14,2	73,8	8,0	18,8														
8	18,9	122,6	10,6	31,1	7,1	11,9												
10	23,6	181,9	13,3	46,1	8,8	17,5	5,5	5,7										
15			19,9	94,5	13,3	35,9	8,3	11,7										
20			26,5	157,6	17,7	59,8	11,0	19,4	6,8	6,1								
30					26,5	123,0	16,6	39,9	10,2	12,6	6,5	4,3						
40							22,1	66,7	13,6	20,9	8,7	7,1	5,1	2,0				
50									17,0	31,1	10,8	10,6	6,4	3,0				
100									34,0	108,0	21,7	36,6	12,8	10,3	5,9	1,6		
150											32,5	75,9	19,1	21,3	8,8	3,3		
200													25,5	35,7	11,8	5,6	6,9	1,6
300															17,6	11,6	10,4	3,2
400															23,5	19,5	13,8	5,4
500																	17,3	8,1
600																	20,7	11,3

Δp (bar) on a free length of 10m.

Medium: water 20°C

Selection of an undersized hose could lead to high fluid velocity causing an excessive pressure drop and heat built up, with resultant damage to overall system performance.

After determining the system pressure, hose selection should be made so that the recommended Max WP is equal or greater than the maximum system pressure.

Do not exceed the recommended working temperature.

Grey section of the table refers to velocity < 15 m/s (low drop pressure - recommended)

Orange section of the table refers to velocity > 15 m/s (high drop pressure - not recommended)