216 - 6SWH - HELIX																		
	hose size			ID		OD		WP		BP		safety factor	bend radius		weight		ferrule part no.		quantity
part no.	dash	inch	DN	mm	inch	mm	inch	bar	psi	bar	psi		mm	inch	g/m	lbs/ft	standard	A316L	m
2161	-3	3/16	DN5	5,1	0,201	14,8	0,583	2800	40000	7000	100000	2,5:1	210	8,268	600	0,403	HAF111	-	766
2162	-4	1/4	DN6	6,3	0,248	16,5	0,650	2800	40000	7000	100000	2,5:1	250	9,843	770	0,517	HAF121	-	798
2163	-5	5/16	DN8	8,1	0,319	19,0	0,748	2500	36200	6250	90500	2,5:1	250	9,843	980	0,659	HAF131	-	578
2165	-8	1/2	DN12	12,8	0,504	25,6	1,008	2050	30000	5125	75000	2,5:1	300	11,811	1650	1,109	HAF151	-	N/A
2167	-12	3/4	DN20	18,8	0,740	33,7	1,327	1600	23200	4000	58000	2,5:1	350	13,780	2300	1,546	HAF171	-	301

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

10,000 PSI / 690 bar 15,000 PSI / 1034 Bar 20,000 PSI / 1379 Bar 30,000 PSI / 2068 Bar 40,000 PSI / 2758 Bar 55,000 PSI / 3792 Bar

* 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.

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

DN 5-8: Polyoxymethylene (POM); DN 12-20: Polyamide (PA)

REINFORCEMENT

Six spiral layers of steel wire

COVER

Special Polyester Copolymer, non pinpricked, black 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

FEATURES

Ultra high working pressure // Excellent chemical resistance // Resistance to ozone, ultraviolet light and aging // High resistance against abrasion // Low volumetric expansion at maximum working pressure // Resistant to sea water // High impulse resistance // Long length capability // Excellent cut and crush resistance

FEATURES

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TEMPERATURE RANGE

-30 °C to +60 °C (-22 °F to +140 °F)

DESCRIPTION

Ultra High Pressure hose utilising high tensile steel wire applied in counter rotating multiple spiral layers. Tube and cover of engineering polymer with intermediate adhesion layers. Available also as factory made assemblies: please contact our sales office for further details.

AVAILABLE INSERTS

				F-BSPP	M-BSPP	F-Met 24°-60°	F-DKOS	F-JIC	F-NPT	M-NPT	Type-M Fem	M-MP	M-HP	M-Met HP	F-HP	M-GAS	Male Met	GAS 100°	M-Usit	M-Flat Seal	Male DIN3852	Male Flat Seal Met
216 - 6SWH	#	inch	DN	HB	HP	HC	HD	HE	HH	HI	HF	HL	HM	HN	HG	HJ	HK	HQ	HR	HS	HT	HU
2161	-3	3/16	DN5	HBF		HCF					HFF		HMF	HNF	HGF			HQF				
2162	-4	1/4	DN6								HFF		HMF	HNF								
2163	-5	5/16	DN8				HDF				HFF	HLF	HMF	HNF								
2165	-8	1/2	DN12				HDF				HFF	HLF	HMF									
2167	-12	3/4	DN20				HDE				HFE											

TRANSFER OIL

thermoplastic and ptfe hoses - fittings and assemblies

pressure drop table

Last updated July 7, 2014

HOSE ID	DN3		1/8"		3/16"		1/4"		5/16"		3/8"		1/2"		3/4"		1"	
FLOW (l/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)	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)