Gates Fluid Power Technical Note

April 11, 2005

G2XH Hose

Gates has released sizes -8 through -16 of our new G2XH hose. In continued efforts to develop Global products, Gates will be replacing the current G2AT-HMP hose line with the new G2XH, which will be a global wire braid hose. G2AT-HMP will be cancelled and orders for G2AT-HMP will be fulfilled with G2XH as inventory is depleted.

Although G2XH has similar performance specifications, improvements include:

- Working pressure ratings that exceed the performance requirements of SAE100R2S and EN853 2SN.
- G2XH has a new blue CSM (Hypalon) cover that improves hose performance in high temperature applications. (G2AT-HMP is constructed with a Neoprene cover). The CSM rubber compound has better heat and resistance to exotic fluids than Neoprene.
- Future additional coverage of G2XH will include sizes -4 and -6; sizes not available with G2AT-HMP.

Due to different constructions, G2XH will have crimp specifications that are different than G2AT-HMP.

eXtreme Heat G2XH Hose

Recommended For: High-pressure hydraulic applications where pressures or temperatures requirements exceed SAE 100R2AT or where resistance to either petroleum-base or phosphate ester fluids is required. Meets performance requirements of DIN 20022 2SN and EN853 2SN.

Tube: Black, oil and chemical resistant synthetic rubber. (CPE)

<u>Reinforcement:</u> Two braids of high-tensile steel wire.

<u>Cover</u> Black, oil and abrasion resistant thin synthetic rubber. (CPE) Flame resistance - U.S. MSHA 2G

Temperature Range: Petroleum based fluids: -40°F. to +300°F. Phosphate esters fluids as recommended by the fluid manufacturer, but within a range of -40°F to +212°F. For water emulsions: Max. +225°F Pressure lines, Max. +180°F Return lines.

<u>Couplings:</u> Permanent, No-skive Megacrimp.

Status	Descript ion	Product No.	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (In.)	Wt. Per 100ft. (Lbs.)
Development	4G2XH	4657-2541	1⁄4	.58	5,800	23,200	4.0″	28
Development	6G2XH	4657-2542	3/8	.73	4,800	19,200	5.0″	36
Released	8G2XH	4657-2543	1/2	.86	4,000	16,000	7.0	44
Released	10G2XH	4657-2544	5/8	.98	3,625	14,500	8.0	52
Released	12G2XH	4657-2545	3⁄4	1.14	3,100	12,400	9.5	63
Released	16G2XH	4657-2546	1	1.48	2,500	10,000	12.0	95

* Sizes ¼" and 3/8 are still under technical development and are not yet available.

Crimp Information

Crimp Data for the released size of 1/2" (-8)

G2XH Crimp Data	707	OmniCrimp 21	4-20	
Stem	8G	8G	8G	
Insertion Length	1.25	1.25	1.25	
Crimp O.D.	1.050	1.050	1.050	
Die Set	733	OM33	MC33	
Approx Digital Readout	7.58	1.377	340	

Crimp Data for the released size of 5/8" (-10)

G2XH Crimp Data	707	OmniCrimp 21	4-20	
Stem	10G	10G	10G	
Insertion Length	1.12	1.12	1.12	
Crimp O.D.	1.17	1.17	1.17	
Die Set	734	OM34	MC34	
Approx Digital Readout	5.89	1.418	255	

Crimp Data for the released size of 3/4" (-12)

G2XH Crimp Data	707	OmniCrimp 21	4-20	
Stem	12G	12G	12G	
Insertion Length	1.50	1.50	1.50	
Crimp O.D.	1.395	1.395	1.395	
Die Set	735	OM35	MC35	
Approx Digital Readout	8.17	1.363	355	

Crimp Data for the released size of 1" (-16)

G2XH Crimp Data	707	OmniCrimp 21	4-20	
Stem	16G	16G	16G	
Insertion Length	1.75	1.75	1.75	
Crimp O.D.	1.76	1.76	1.76	
Die Set	737	OM37	MC37	
Approx Digital Readout	6.65	1.398	290	