

22041 4W/S Hydraulic Hose (EN 856 4SP)
22041 SHAR (Super High Abrasion Resistant)



- Construction**
- **Tube** : Oil Resistant Synthetic Rubber
 - **Reinforcement** : 4W/S(4 spirals of high tensile steel wire)
 - **Cover** : Oil, ozone, weather and abrasion resistant Synthetic Rubber

- Application and Temperature Range**
- **Petroluem base hydraulic fluids and lubricating oils within a temperature range of** -40℃~+100℃(-40F~+212F)
 - **Maximum operating temperature** : +125℃(+257F)
Water, Water+Glycol and Water+Oil emulsion hydraulic fluids up to +85℃(+185F)
 - **Air withing a temperature range of** -40℃~+70℃(-40F~+158F)
- ※Maximum working pressure : 350~450Bar

Part No.														
	inch	mm	inch	mm	bar	psi	bar	psi	inch	mm	kg/m	lb/ft		
22041-K06	3/8	9.5	0.84	21.4	450	6,500	1,800	26,000	7.09	180	0.78	0.52		
22041-K08	1/2	12.7	0.97	24.6	420	6,000	1,680	24,000	9.06	230	0.93	0.62		
22041-K10	5/8	15.9	1.11	28.2	350	5,000	1,400	20,000	9.84	250	1.17	0.79		

공기 및 Gas 등의 기체를 10Bar 이상의 압력으로 사용할 경우에는 외면고무에 Pin-Prick을 하여야 하며, 20Bar 이상의 압력으로 사용할 경우에는 내가스 투과성이 우수한 수지 호스를 적용하는 것이 바람직 합니다.

22042 4W/S Hydraulic Hose (EN 856 4SH)
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- Construction**
- **Tube** : Oil Resistant Synthetic Rubber
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 - **Maximum operating temperature** : +125℃(+257F)
Water, Water+Glycol and Water+Oil emulsion hydraulic fluids up to +85℃(+185F)
 - **Air withing a temperature range of** -40℃~+70℃(-40F~+158F)
- ※Maximum working pressure : 250~420Bar

Part No.														
	inch	mm	inch	mm	bar	psi	bar	psi	inch	mm	kg/m	lb/ft		
22042-K12	3/4	19.1	1.27	32.2	420	6,000	1,680	24,000	11.02	280	1.53	1.03		
22042-K16	1	25.4	1.52	38.7	380	5,500	1,520	22,000	13.39	340	2.06	1.38		
22042-K20	1 1/4	31.8	1.79	45.5	350	5,000	1,400	20,000	18.11	460	2.46	1.65		
22042-K24	1 1/2	38.1	2.11	53.5	300	4,300	1,200	17,200	22.05	560	3.35	2.25		
22042-K32	2	50.8	2.68	68.1	250	3,600	1,000	14,400	27.56	700	4.55	3.06		

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HYDRAULC HOSE

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Hwaseung engages the world

Hwaseung creates value

Business Area



Belt

Fabric Rubber C/Belt
Steel Cord, Rubber C/
Belt
PVC/PU C/Belt



Hose

Industrial Hose
Hydraulic Hose
Welding Hose
PVC Hose



Sheet

Rubber Sheet
TPE Sheet



Fender & Marine System

Rubber Fender
Expansion-Joint
Sleeve Hose
Rubber Seal
Rubber Lining
Railroad pad
Other

Hwaseung Exwill History

- Sep. 1978** Established Tong Yang Chemical Co.,Ltd. : Commenced the production of Low Pressure Hose for automotive and industrial
- Jan. 1996** Established HWASEUNG MATERIAL Co., Ltd
- Dec. 1998** Acquired QS9000 quality certificate
- Feb. 2003** Acquired ISO14000 quality certificate
- Apr. 2007** Established HWASEUNG EXWILL Co., Ltd.
- Nov. 2008** Established R&D Center in HSMJ(China)
- Nov. 2009** Acquired U.S. FDA certificate for Fresh-Water Rubber Lining
- Feb. 2011** 2011 Acquired "MSHA 2G" certificate
- Jan. 2012** Established branch office in U.S.A.
- Sep. 2013** Acquired patent for "Cone Type Fender"
- Oct. 2014** Extended HSMJ factory in China
- Sep. 2016** Established a HWASEUNG EXWILL R&D Center
- Oct. 2017** Established a HWASEUNG EXWILL Performance R&D Center
- Apr. 2018** Established branch office in Indonesia



Since its foundation in 1953, Hwaseung has actively responded to the changing world and achieved growth with constant challenges and innovation. Currently, with a global network that embraces the world with businesses in automotive parts, advanced materials, footwear ODM, chemical and trade networks, Hwaseung is enhancing competencies in overseas business and accelerating growth to become a GLOBAL STANDARD group that enriches the future life for humanity.

SAE HOSE WORKING PRESSURE (psi)

Specifica- tion	Hose Style	Description	NOMINAL HOSE INSIDE DIAMETER in INCHES and DASH SIZE															
			3/16 (-3)	1/4 (-4)	5/16 (-5)	3/8 (-6)	1/2 (-8)	5/8 (-10)	3/4 (-12)	1 (-16)	1-1/4 (-20)	1-1/2 (-24)	2 (-32)	2-1/2 (-40)	3 (-48)	3-1/2 (-56)	4 (-64)	
SAE J517	100R1	1WIRE BRAID	3000	2750	2500	2250	2000	1500	1250	1000	625	500	375					
SAE J517	100R1 TYPE S	HIGH PRESSURE 1WIRE BRAID	3630	3260	3120	2610	2320	1890	1520	1280	910	730	580					
SAE J517	100R2	2WIRE BRAID	5000	5000	4250	4000	3500	2750	2250	2000	1625	1250	1125	1000				
SAE J517	100R2 TYPE S	HIGH PRESSURE 2WIRE BRAID	6020	5800	5080	4790	3990	3630	3120	2390	1810	1310	1160	1020				
SAE J517	100R3	2FABRIC BRAID	1500	1250	1200	1125	1000	875	750	565	375							
SAE J517	100R4	SUCTION							300	250	200	150	100	62	56	45	35	
SAE J517	100R6	1FABRIC BRAID	500	400	400	400	400	350	300									
SAE J517	100R7	THERMOPLASTIC	3000	2750	2500	2250	2000	1500	1250	1000								
SAE J517	100R8	HIGH PRESSURE THERMOPLASTIC	5000	5000		4000	3500	2750	2250	2000								
SAE J517	100R9	4WIRE SPIRAL				4500	4000		3000	3000	2500	2000	2000					
SAE J517	100R10	HIGH PRESSURE 4WIRE SPIRAL	10000	8750		7500	6250		5000	4000	3000	2500	2500					
SAE J517	100R11	HIGH PRESSURE 6WIRE SPIRAL	12500	11250		10000	7500		6250	5000	3500	3000	3000	2500				
SAE J517	100R12	4WIRE SPIRAL				4000	4000	4000	4000	4000	3000	2500	2500					
SAE J517	100R13	5000PSI WIRE SPIRAL							5000	5000	5000	5000	5000					
SAE J517	100R15	6000PSI WIRE SPIRAL				6000	6000		6000	6000	6000	6000						
SAE J517	100R16	COMPACT WIRE BRAID		5000	4250	4000	3500	2750	2250	2000	1625							
SAE J517	100R16 TYPE S	HIGH PRESSURE COMPACT WIRE BRAID	6020	5800	5080	4790	3990	3630	3120	2390	1810							
SAE J517	100R17	3000PSI WIRE BRAID		3000	3000	3000	3000	3000	3000	3000	3000							
SAE J517	100R18	3000PSI THERMOPLASTIC	3000	3000	3000	3000	3000	3000	3000	3000								

SAE HOSE WORKING PRESSURE (psi)

Specifica- tion	Hose Style	Description	NOMINAL HOSE INSIDE DIAMETER in INCHES and DASH SIZE																
			1/8 (-3)	3/16 (-4)	1/4 (-5)	5/16 (-6)	3/8 (-7)	13/32 (-8)	1/2 (-10)	5/8 (-12)	3/4 (-14)	7/8 (-16)	1 (-18)	1-1/8 (-20)	1-3/8 (-24)	1-3/2 (-32)	2-3/8 (-40)	3 (-48)	
SAE J517	100R5	1WIRE BRAID TEXTILE COVER		3000	3000	2250		2000	1750	1500		800		625	500	350	350	200	
SAE J517	100R14	1WIRE BRAID PTFE	1500	1500	1500	1500	1500	1000	800	800	800	800	800	600					

EN HOSE WORKING PRESSURE (psi)

Specification	Hose Style	Description	NOMINAL HOSE INSIDE DIAMETER in INCHES and DASH SIZE											
			3/16 (-3)	1/4 (-4)	5/16 (-5)	3/8 (-6)	1/2 (-8)	5/8 (-10)	3/4 (-12)	1 (-16)	1-1/4 (-20)	1-1/2 (-24)	2 (-32)	
EN 853	1ST	1WIRE BRAID STANDARD COVER	3630	3265	3120	2610	2320	1890	1525	1280	915	725	580	
EN 853	1SN	1WIRE BRAID THIN COVER	3630	3265	3120	2610	2320	1890	1525	1280	915	725	580	
EN 853	2ST	2WIRE BRAID STANDARD COVER	6020	5800	5075	4785	3990	3625	3120	2395	1815	1305	1160	
EN 853	2SN	2WIRE BRAID THIN COVER	6020	5800	5075	4785	3990	3625	3120	2395	1815	1305	1160	
EN 856	4SP	4WIRE SPIRAL		6530		6455	6020	5080	5080	4065	3050	2685	2395	
EN 856	4SH	HIGH PRESSURE 4WIRE SPIRAL							6095	5515	4715	4210	3630	
EN 857	1SC	COMPACT 1WIRE BRAID		3265	3120	2610	2325	1890	1525	1280				
EN 857	2SC	COMPACT 2WIRE BRAID		5805	5080	4790	3990	3630	3120	2395				

21010 Hydraulic Hose (EN 853 Type 1SN / SAE 100R1 Type AT)

21010 SHAR (Super High Abrasion Resistant)



Application and Temperature Range

•Petroluem base hydraulic fluids and lubricating oils within a temperature range of -40℃~+100℃(-40F~+212F)

•Maximum operating temperature : +125℃(+257F)

Water, Water+Glycol and Water+Oil emulsion hydraulic fluids up to +85℃(+185F)

•Air withing a temperature range of -40℃~+70℃(-40F~+158F)

※Maximum working pressure : 40~230Bar

Construction

•Tube : Oil Resistant Synthetic Rubber

•Reinforcement : 1W/B braid of high tensile steel wire

•Cover : Oil, ozone, weather and abrasion resistant Synthetic Rubber

Part No.												
	inch	mm	inch	mm	bar	psi	bar	psi	inch	mm	kg/m	lb/ft
21010-K04	1/4	6.4	0.53	13.4	230	3,250	920	13,000	3.94	100	0.21	0.14
21010-K05	5/16	7.9	0.59	15.0	230	3,250	920	13,000	4.53	115	0.24	0.16
21010-K06	3/8	9.5	0.69	17.4	210	3,000	840	12,000	5.12	130	0.33	0.22
21010-K08	1/2	12.7	0.81	20.6	175	2,500	700	10,000	7.09	180	0.41	0.28
21010-K10	5/8	15.9	0.93	23.7	140	2,000	560	8,000	7.87	200	0.45	0.30
21010-K12	3/4	19.1	1.09	27.7	123	1,750	492	7,000	9.45	240	0.58	0.39
21010-K16	1	25.4	1.40	35.6	90	1,275	360	5,100	11.81	300	0.88	0.59
21010-K20	1 1/4	31.8	1.71	43.5	63	900	252	3,600	16.54	420	1.23	0.83
21010-K24	1 1/2	38.1	1.97	50.0	51	725	204	2,900	19.69	500	1.51	1.01
21010-K32	2	50.8	2.52	64.0	40	575	160	2,300	24.80	630	1.97	1.32

공기 및 Gas 등의 기체를 10Bar 이상의 압력으로 사용할 경우에는 외면고무에 Pin-Prick을 하여야 하며, 20Bar 이상의 압력으로 사용할 경우에는 내가스 투과성이 우수한 수지 호스를 적용하는 것이 바람직 합니다.

21020 Hydraulic Hose (EN 853 Type 2SN / SAE 100R2 Type AT)

21020 SHAR (Super High Abrasion Resistant)



Application and Temperature Range

•Petroluem base hydraulic fluids and lubricating oils within a temperature range of -40℃~+100℃(-40F~+212F)

•Maximum operating temperature : +125℃(+257F)

Water, Water+Glycol and Water+Oil emulsion hydraulic fluids up to +85℃(+185F)

•Air withing a temperature range of -40℃~+70℃(-40F~+158F)

※Maximum working pressure : 88~410Bar

Construction

•Tube : Oil Resistant Synthetic Rubber

•Reinforcement : 2W/B braid of high tensile steel wire

•Cover : Oil, ozone, weather and abrasion resistant Synthetic Rubber

Part No.												
	inch	mm	inch	mm	bar	psi	bar	psi	inch	mm	kg/m	lb/ft
21020-K04	1/4	6.4	0.59	15.0	410	5,800	1,640	23,200	3.94	100	0.33	0.22
21020-K05	5/16	7.9	0.65	16.6	370	5,250	1,480	21,000	4.53	115	0.39	0.26
21020-K06	3/8	9.5	0.75	19.0	350	5,000	1,400	20,000	5.12	130	0.50	0.34
21020-K08	1/2	12.7	0.87	22.2	300	4,250	1,200	17,000	7.09	180	0.59	0.40
21020-K10	5/8	15.9	1.00	25.4	250	3,625	1,000	14,500	7.87	200	0.71	0.48
21020-K12	3/4	19.1	1.15	29.3	217	3,125	868	12,500	9.45	240	0.86	0.58
21020-K16	1	25.4	1.50	38.1	175	2,500	700	10,000	11.81	300	1.28	0.86
21020-K20	1 1/4	31.8	1.90	48.3	158	2,250	632	9,000	16.54	420	2.02	1.36
21020-K24	1 1/2	38.1	2.15	54.6	123	1,800	492	7,200	19.69	500	2.20	1.48
21020-K32	2	50.8	2.65	67.3	88	1,300	352	5,200	24.80	630	2.85	1.92

공기 및 Gas 등의 기체를 10Bar 이상의 압력으로 사용할 경우에는 외면고무에 Pin-Prick을 하여야 하며, 20Bar 이상의 압력으로 사용할 경우에는 내가스 투과성이 우수한 수지 호스를 적용하는 것이 바람직 합니다.