



## Hydraulic Hose & Fittings Approvals & Certification

All products sold under the FT PRO brand in the attached document have been designed, tested and manufactured to the appropriate international standard from the following list:

EN853, DIN853, DIN20022, SAE100R1, 2, 6, 7, 8, 13, 15, 17, EN857-1SC & 2SC, EN856-4SP, EN856-4SH, MSHAR2AT

Full product compatibility tests have been undertaken and the manufacturers can certify that the hose and fittings are a matched system, and can certify the accuracy of the information enclosed in this document.

Data covers:

- Impulse
- Pressure
- Crimping
- Skive (where appropriate)
- Go and No Go

Signed the Manufacturer of Hose:

Position: General Manager  
Mr Deng Ji Sen



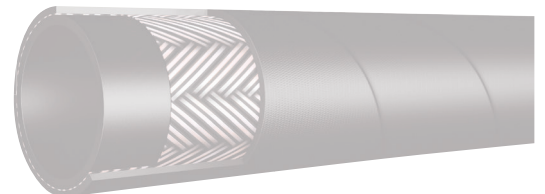
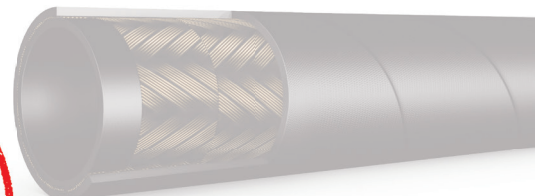
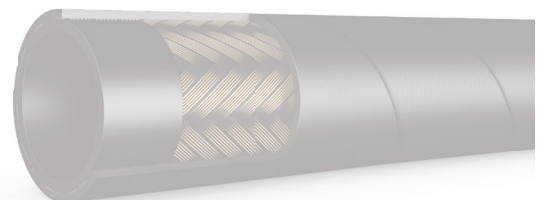
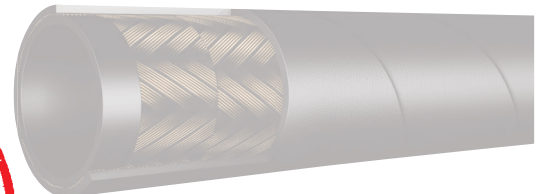
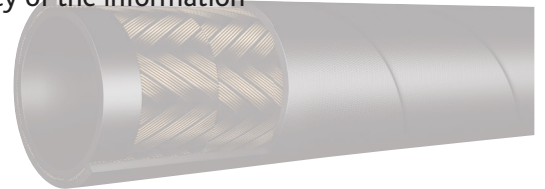
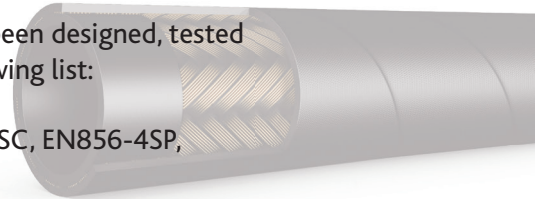
Official Stamp

Signed the Manufacturer of Fittings:

Position: General Manager  
Mr Chong er Wang



Official Stamp



## Hydraulic Hose, EN853, DIN20022, SAE100R1AT

Part Number	Size			ID		Wire Dimension		OD 1SN	Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	min	max	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	FT1 -FT2 Type Ferrule	FT3 Type Ferrule	mm	mm	mm	mm	mm	mm
100R1AT-03	4.7	3/16	-3					12.5	25	3625			100	14503	3.54	90		150000			FT3-12-03CF	15				
100R1AT-04	6.3	1/4	-4	6.2	7	10.6	11.6	14.1	22.5	3260	45	6525	90	13050	3.94	100	0.25	150000	FT1-12-04CF	17.5	FT3-12-04CF	17.8	3.86	3.67	3.67	3.45
100R1AT-05	8	5/16	-5	7.7	8.5	12.1	13.3	15.7	21.5	3120	43	6235	85	12325	4.53	115	0.31	150000	FT1-12-05CF	18.5	FT3-12-05CF	20.5	5.29	5.11	5.11	4.91
100R1AT-06	10	3/8	-6	9.3	10.1	14.5	15.7	18.1	18	2610	36	5220	72	10440	5.12	130	0.36	150000	FT1-12-06CF	21.15	FT3-12-06CF	21.6	6.78	6.42	6.42	6.13
100R1AT-08	12.5	1/2	-8	12.3	13.5	17.5	19.1	21.4	16	2320	32	4640	64	9280	7.09	180	0.45	150000	FT1-12-08CF	23.3	FT3-12-08CF	24	9.21	8.86	8.86	8.4
100R1AT-10	16	5/8	-10	15.5	16.7	20.6	22.2	24.5	13	1885	26	3770	52	7540	7.87	200	0.52	150000	FT1-12-10CF	26.8	FT3-12-10CF	28.7	12.09	11.59	11.59	10.99
100R1AT-12	19	3/4	-12	18.6	19.8	24.6	26.2	28.5	10.5	1520	21	3045	42	6090	9.45	240	0.65	150000	FT1-12-12CF	30.5	FT3-12-12CF	31.3	14.46	13.91	13.91	13.31
100R1AT-16	25	1	-16	25	26.4	32.5	34.1	36.6	8.8	1280	17.5	2540	35	5075	11.81	300	0.91	150000	FT1-12-16CF	39	FT3-12-16CF	41	18.89	18.29	18.29	17.68
100R1AT-20	31.5	1.1/4	-20	31.4	33	39.3	41.7	44.8	6.3	910	15	2175	25	3625	16.54	420	1.30	150000	FT1-12-20CF	48.4	FT3-12-20CF	48.5	25.4	24.69	24.69	23.8
100R1AT-24	38	1.1/2	-24	37.7	39.3	45.6	48	52.1	5	725	10	1450	20	2900	19.69	500	1.7	150000	FT1-12-24CF	56.8	FT3-12-24CF	58.5	31.4	30.6	30.6	29.8
100R1AT-32	51	2	-32	50.4	52	58.7	61.7	65.5	4	580	8	1160	16	2320	24.8	630	2	150000	FT1-12-32CF	69.3	FT3-12-32CF	70	41.4	40.6	40.6	30.8

## Hydraulic Hose, EN853, DIN20022, SAE100R2AT

Part Number	Size			ID		Wire Dimension		OD 2SN	Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	min	max	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	FT1 -FT2 Type Ferrule	FT3 Type Ferrule	mm	mm	mm	mm	mm	mm
100R2AT-03	4.7	3/16	-3					14.1	41.5	6019			165	23931	3.54	90		200000			FT3-12-03CF	16.4				
100R2AT-04	6.3	1/4	-4	6.2	7	12.1	13.3	15.7	40	5800	80	11600	160	23200	3.94	100	0.36	200000	FT2-12-04CF	18.5	FT3-12-04CF	18.1	3.86	3.67	3.67	3.45
100R2AT-05	8	5/16	-5	7.7	8.5	13.7	14.9	17.3	35	5075	70	10150	140	20300	4.53	115	0.45	200000	FT2-12-05CF	19.5	FT3-12-05CF	19.7	5.29	5.11	5.11	4.91
100R2AT-06	10	3/8	-6	9.3	10.1	16.1	17.3	19.7	33	4785	66	9570	132	19140	5.12	130	0.54	200000	FT2-12-06CF	22.25	FT3-12-06CF	22.1	6.78	6.42	6.42	6.13
100R2AT-08	12.5	1/2	-8	12.3	13.5	19	20.6	23	27.5	3990	55	7975	110	15950	7.09	180	0.68	200000	FT2-12-08CF	24.4	FT3-12-08CF	24.6	9.21	8.86	8.86	8.4
100R2AT-10	16	5/8	-10	15.5	16.7	22.2	23.8	26.2	25	3625	50	7250	100	14500	7.87	200	0.8	200000	FT2-12-10CF	28	FT3-12-10CF	28.2	12.09	11.59	11.59	10.99
100R2AT-12	19	3/4	-12	18.6	19.8	26.2	27.8	30.1	21.5	3120	43	6235	85	12325	9.45	240	0.94	200000	FT2-12-12CF	32	FT3-12-12CF	32.5	14.46	13.91	13.91	13.31
100R2AT-16	25	1	-16	25	26.4	34.1	35.7	38.9	16.5	2390	32.5	4710	65	9425	11.81	300	1.35	200000	FT2-12-16CF	40.2	FT3-12-16CF	40.3	18.89	18.29	18.29	17.68
100R2AT-20	31.5	1.1/4	-20	31.4	33	43.3	45.7	49.5	12.5	1810	25	3625	50	7250	16.54	420	2.15	200000	FT2-12-20CF	50	FT3-12-20CF	51.5	25.4	24.69	24.69	23.8
100R2AT-24	38	1.1/2	-24	37.7	39.3	49.6	52	55.9	9	1305	18	2310	36	5220	19.69	500	2.65	200000	FT2-12-24CF	59.5	FT3-12-24CF	59.7	31.4	30.6	30.6	29.8
100R2AT-32	51	2	-32	50.4	52	62.3	64.7	68.6	8	1160	16	2320	32	4640	24.8	630	3.42	200000	FT2-12-32CF	72.3	FT3-12-32CF	73.4	41.4	40.6	40.6	30.8

## Multi Spiral Hydraulic Hose, EN856-4SP

Part Number	Size			ID		Wire Dimension		OD		Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Skive Length JMF56 in mm	Skive Length JMF57 in mm	Crimped No Go	Crimped Go	
	mm	inch	SAE	min	max	min	max	min	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	JMF56 Type Ferrule	JMF57 Type Ferrule	mm	mm	mm	mm	External	External	mm	mm	
4SP-04	6.3	1/4	-4	6.2	7.0	14.1	15.3	17.1	18.7	45	6525	90	13050	180	26100	5.91	150	0.64	400000											
4SP-06	10	3/8	-6	9.3	10.1	16.9	18.1	20.6	22.2	44.5	6450	89	12905	178	25810	7.09	180	0.75	400000	JMF56-06CF	22.8	JMF57-06CF	23	6.78	6.42	27	-	6.42	6.13	
4SP-08	12.5	1/2	-8	12.3	13.5	19.4	21.0	23.8	25.4	41.5	6020	83	12035	166	24070	9.06	230	0.89	400000	JMF56-08CF	25.8	JMF57-08CF	26.5	9.21	8.86	28	32	8.86	8.40	
4SP-10	16	5/8	-10	15.5	16.7	23.0	24.6	27.4	29.0	35	5075	70	10150	140	20300	9.84	250	1.10	400000	JMF56-10CF	28.8	JMF57-10CF	29.7	12.09	11.59	33	-	11.59	10.99	
4SP-12	19	3/4	-12	18.6	19.8	27.4	29.0	31.4	33.0	35	5075	70	10150	148	21460	11.81	300	1.50	400000	JMF56-12CF	33.6	JMF57-12CF	34	14.46	13.91	32	40	13.91	13.31	
4SP-16	25	1	-16	25.0	26.4	34.5	36.1	38.5	40.9	28	4060	56	8120	112	16240	13.39	340	2.00	400000	JMF56-16CF	41.5	JMF57-16CF	43	18.89	18.29	42	48	18.29	17.68	
4SP-20	31.5	1.1/4	-20	31.4	33.0	45.0	47.0	49.2	52.4	21	3045	42	6090	84	12180	18.11	460	3.00	400000	JMF56-20CF	51.0	JMF57-20CF	53	25.40	24.69	48	55	24.69	23.80	
4SP-24	38	1.1/2	-24	37.7	39.3	51.4	53.4	55.6	58.8	18.5	2680	37	5365	74	10730	22.05	560	3.40	400000	JMF56-24CF	59.5	JMF57-24CF	60.5	31.40	30.60	60	68	30.60	29.80	
4SP-32	51	2	-32	50.4	52.0	64.3	66.3	68.2	71.4	16.5	2390	33	4785	66	9570	25.98	660	4.35	400000	JMF56-32CF	72.5	JMF57-32CF	74.5	41.40	40.60	61	73	40.60	30.80	

## Multi Spiral Hydraulic Hose, EN856-4SH

Part Number	Size			ID		Wire Dimension		OD		Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Skive Length in mm		Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	min	max	min	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	JMF4SH Type Ferrule	mm	mm	Internal	External	mm	mm	
4SH-12	19	3/4	-12	18.6	19.8	27.6	29.2	31.4	33.0	42	6090	84	12180	168	24360	11.02	280	1.70	400000	JMF4SH-12CF	35.1	14.46	13.91	16	43	13.91	13.31
4SH-16	25	1	-16	25.0	26.4	34.4	36.0	37.5	39.9	38	5510	76	11020	152	22040	13.39	340	2.50	400000	JMF4SH-16CF	43.4	18.89	18.29	18	59	18.29	17.68
4SH-20	31.5	1.1/4	-20	31.4	33.0	40.9	42.9	43.9	47.1	32.5	4710	65	9425	130	18850	18.11	460	3.00	400000	JMF4SH-20CF	50.0	25.40	24.69	21	68	24.69	23.80
4SH-24	38	1.1/2	-24	37.7	39.3	47.8	49.8	51.9	55.1	29	4205	58	8410	116	16820	22.05	560	3.60	400000	JMF4SH-24CF	56.0	31.40	30.60	23	76	30.60	29.80
4SH-32	51	2	-32	50.4	52.0	62.2	64.2	66.5	69.7	25	3625	50	7250	100	14500	27.56	700	5.00	400000	JMF4SH-32CF	72.4	41.40	40.60	28	80	40.60	30.80



## Pressure Wash Hose, Blue & Black, 1 Wire

Part Number	Size			ID		Wire Dimension		OD	Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	min	max	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	FT1 -FT2 Type Ferrule	FT3 Type Ferrule	mm	mm	mm	mm	mm	mm
PW****-04-10-R1	6.3	1/4	-4	6.2	7.0	10.6	11.6	14.1	22.5	3260	45	6525	90	13050	3.94	100	0.25	-	FT1-12-04CF	17.5	FT3-12-04CF	18.3	3.86	3.67	3.67	3.45
PW****-05-10-R1	8	5/16	-5	7.7	8.5	12.1	13.3	15.7	21.5	3120	43	6235	85	12325	4.53	115	0.31	-	FT1-12-05CF	18.5	FT3-12-05CF	-	5.29	5.11	5.11	4.91
PW****-06-10-R1	10	3/8	-6	9.3	10.1	14.5	15.7	18.1	18	2610	36	5220	72	10440	5.12	130	0.36	-	FT1-12-06CF	21.15	FT3-12-06CF	21.6	6.78	6.42	6.42	6.13

## Pressure Wash Hose Blue & Black 2 Wire

Part Number	Size			ID		Wire Dimension		OD	Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	min	max	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	FT1 -FT2 Type Ferrule	FT3 Type Ferrule	mm	mm	mm	mm	mm	mm
PW****-04-100R2	6.3	1/4	-4	6.2	7.0	12.1	13.3	15.7	40	5800	80	11600	160	23200	3.94	100	0.36	-	FT2-12-04CF	18.5	FT3-12-04CF	19.1	3.86	3.67	3.67	3.45
PW****-05-100R2	8	5/16	-5	7.7	8.5	13.7	14.9	17.3	35	5075	70	10150	140	20300	4.53	115	0.45	-	FT2-12-05CF	19.5	FT3-12-05CF	20.5	5.29	5.11	5.11	4.91
PW****-06-100R2	10	3/8	-6	9.3	10.1	16.1	17.3	19.7	33	4785	66	9570	132	19140	5.12	130	0.54	-	FT2-12-06CF	21.5	FT3-12-06CF	22	6.78	6.42	6.42	6.13



## 1 Wire Compact Hose, EN857- 1SC

Part Number	Size			ID		Wire Dimension		OD	Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	min	max	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	FT1 -FT2 Type Ferrule	FR79 Type Ferrule	mm	mm	mm	mm	mm	mm
1SC-04	6.3	1/4	-4	6.1	6.9	9.6	10.8	13.5	22.5	3260	45	6525	90	13050	2.95	75	0.20	150000	FR78-04	15.0	FR79-04	14.7	3.86	3.67	3.67	3.45
1SC-06	10	3/8	-6	9.3	10.1	12.7	14.5	16.9	18	2610	36	5220	72	10440	3.54	90	0.19	150000	FR78-06	18.6	FR79-06	19	6.78	6.42	6.42	6.13
1SC-08	12.5	1/2	-8	12.3	13.5	15.9	18.1	20.4	16	2320	32	4640	64	9280	5.12	130	0.23	150000	FR78-08	22.7	FR79-08	23.3	9.21	8.86	8.86	8.40
1SC-12	19	3/4	-12	18.6	19.8	23.2	24.4	26.7	10.5	1520	21	3045	42	6090	7.09	180	0.34	150000	-	-	FR79-12	30.8	14.46	13.91	13.91	13.31

## 2 Wire Compact Hose, EN857- 2SC

Part Number	Size			ID		Wire Dimension		OD	Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	min	max	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	FT1 -FT2 Type Ferrule	F2SC Type Ferrule	mm	mm	mm	mm	mm	mm
2SC-04	6.3	1/4	-4	6.1	6.9	10.6	11.7	14.2	40	5800	80	11600	160	23200	2.95	75	0.30	200000	FT3-12-04CF	17.2	F2SC-04	17.6	3.86	3.67	3.67	3.45
2SC-06	10	3/8	-6	9.3	10.1	14.4	15.6	18.3	33	4785	66	9570	132	19140	3.54	90	0.42	200000	FT3-12-06CF	21.0	F2SC-06	20.5	5.29	5.11	5.11	4.91
2SC-08	12.5	1/2	-8	12.3	13.5	17.5	19.1	21.5	27.5	3990	55	7975	110	15950	5.12	130	0.54	200000	FT2-12-08CF	20.6	F2SC-08	24.3	6.78	6.42	6.42	6.13
2SC-12	19	3/4	-12	18.5	19.7	24.5	26.3	28.5	21.4	3120	43	6235	86	12470	7.86	200	0.80	200000	FT3-12-12CF	30.4	F2SC-12	31.5	9.20	8.86	8.86	8.40
2SC-16	25	1	-16	25.0	26.4	32.5	34.3	36.6	16.5	2390	33	4785	66	9570	9.84	250	1.15	200000	FT3-12-16CF	37.8	F2SC-16	39	18.89	18.29	18.29	17.68



## Multi Spiral Hydraulic Hose, SAE100 R13

Part Number	Size			ID		Wire Dimension		OD		Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Skive Length in mm		Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	min	max	min	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	JMFR13 Type Ferrule	mm	mm	mm	mm	Internal	External	mm
100R13AT-12	19	3/4	-12	18.6	19.8	28.2	29.8	31.0	33.2	35	5075	70	10150	140	20300	9.45	240	2.10	500000	JMFR13-12CF	33.7	14.46	13.91	16	43	13.91	13.31
100R13AT-16	25	1	-16	25.0	26.4	34.9	36.4	37.6	39.8	35	5075	70	10150	140	20300	11.81	300	2.88	500000	JMFR13-16CF	41.5	18.89	18.29	18	59	18.29	17.68
100R13AT-20	31.5	1.1/4	-20	31.4	33.0	45.6	48.0	48.3	51.3	35	5075	70	10150	140	20300	16.54	420	4.20	500000	JMFR13-20CF	52.8	25.40	24.69	21	68	24.69	23.80
100R13AT-24	38	1.1/2	-24	37.7	39.3	53.1	55.5	55.8	58.8	35	5075	70	10150	140	20300	19.69	500	5.00	500000	JMFR13-24CF	60.5	31.40	30.60	23	76	30.60	29.80
100R13AT-32	51	2	-32	50.4	52.0	66.9	69.3	69.5	72.7	35	5075	70	10150	140	20300	25.20	640	7.00	500000	JMFR13-32CF	77.9	41.40	40.60	28	80	40.60	30.80

## Multi Spiral Hydraulic Hose, SAE100 R15

Part Number	Size			ID		Wire Dimension	OD	Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Skive Length in mm		Crimped No Go	Crimped Go		
	mm	inch	SAE	min	max	max	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	JMFR13 Type Ferrule	mm	mm	mm	mm	Internal	External	mm	mm	
100R15AT-06	10	3/8	-6	9.3	10.1	20.3	23.3	42	6090	84	12180	168	24360	5.91	150	0.80	500000	-	-	-	-	-	-	-	-	-	-
100R15AT-08	12.5	1/2	-8	12.3	13.5	24.0	26.8	42	6090	84	12180	168	24360	7.87	200	0.95	500000	-	-	-	-	-	-	-	-	-	-
100R15AT-12	19	3/4	-12	18.6	19.8	32.9	36.1	42	6090	84	12180	168	24360	10.40	265	1.85	500000	JMFR13-12CF	33.1	14.46	13.91	16	43	13.91	13.31		
100R15AT-16	25	1	-16	25.0	26.4	38.9	42.9	42	6090	84	12180	168	24360	13.00	330	2.90	500000	JMFR13-16CF	41.0	18.89	18.29	18	59	18.29	17.68		
100R15AT-20	31.5	1.1/4	-20	31.4	33.0	48.4	51.5	42	6090	84	12180	168	24360	17.52	445	4.20	500000	JMFR13-20CF	53.7	25.40	24.69	21	68	24.69	23.80		
100R15AT-24	38	1.1/2	-24	37.7	39.3	56.3	59.6	42	6090	84	12180	168	24360	20.87	530	5.60	500000	JMFR13-24CF	61.2	31.40	30.60	23	76	30.60	29.8		

## Hydraulic Hose, SAE 100 R17

Part Number	Size			ID		Wire Dimension	OD	Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	max	max	Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	FT1 -FT2 Type Ferrule	FR79/FT3 Type Ferrule	mm	mm	mm	mm	mm	mm
100R17-04	6.3	1/4	-4	6.2	7.0	11.0	13.2	21	3045	42	6090	84	12180	1.97	50	0.169	200000	FT2-12-04CF	FR79-04	18.5	14.7	3.86	3.67	3.67	3.45
100R17-05	8	5/16	-5	7.7	8.5	13.0	15.0	21	3045	42	6090	84	12180	2.17	55	0.210	200000	FT2-12-05CF	FR79-05	19.5	16.8	5.29	5.11	5.11	4.91
100R17-06	10	3/8	-6	9.3	10.1	15.0	17.0	21	3045	42	6090	84	12180	2.56	65	0.254	200000	FT2-12-06CF	FR79-06	21.5	19.4	6.78	6.42	6.42	6.13
100R17-08	12.5	1/2	-8	12.3	13.5	18.8	21.1	21	3045	42	6090	84	12180	3.54	90	0.466	200000	FT2-12-08CF	FT3-12-08CF	24.4	23.2	9.21	8.86	8.86	8.40
100R17-10	16	5/8	-10	15.5	16.7	23.6	25.9	21	3045	42	6090	84	12180	3.94	105	0.586	200000	FT2-12-10CF	FT3-12-10CF	28	29	12.09	11.59	11.59	10.99
100R17-12	19	3/4	-12	18.6	19.8	27.7	30.3	21	3045	42	6090	84	12180	4.72	125	0.749	200000	FT2-12-12CF	FT3-12-12CF	32	32.7	14.46	13.91	13.91	13.31
100R17-16	25	1	-16	25.0	26.4	35.6	38.6	21	3045	42	6090	84	12180	5.91	150	1.457	200000	FT2-12-16CF	FT3-12-16CF	40.2	41	18.89	18.29	18.29	17.68



## Hydraulic Hose, MSHA R2AT

Part Number	Size			ID		Wire Dimension		OD	2SN	Working Pressure		Pulse Pressure		Burst Pressure		Bend Radius		Weight	Impulse Test Rate	Crimping Dimensions	Size in mm	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	min	max	max		Mpa	psi	Mpa	psi	Mpa	psi	Inch	mm	Kg/mtr	Cycles	FT1 -FT2 Type Ferrule	FT3 Type Ferrule			mm	mm	mm	mm
MSHAR2AT-04	6.3	1/4	-4	6.2	7.0	12.1	13.3	15.7		40	5800	80	11600	160	23200	3.94	10	0.36	200000	FT2-12-04CF	18.5	FT3-12-04CF	19.1	3.86	3.67	3.67	3.45
MSHAR2AT-06	10	3/8	-6	9.3	10.1	16.1	17.3	19.7		33	4785	66	9570	132	19140	5.12	130	0.54	200000	FT2-12-06CF	22.25	FT3-12-06CF	22	6.78	6.42	6.42	6.13
MSHAR2AT-08	12.5	1/2	-8	12.3	13.5	19.0	20.6	23.0		27.5	3990	55	7975	110	15950	7.09	180	0.68	200000	FT2-12-08CF	24.4	FT3-12-08CF	24.5	9.21	8.86	8.86	8.40
MSHAR2AT-12	19	3/4	-12	18.6	19.8	26.2	27.8	30.1		21.5	3120	43	6235	85	12325	9.45	240	0.94	200000	FT2-12-12CF	32	FT3-12-12CF	32	14.46	13.91	13.91	13.31
MSHAR2AT-16	25	1	-16	25.0	26.4	34.1	35.7	38.9		16.5	2390	32.5	4710	65	9425	11.81	300	1.35	200000	FT2-12-16CF	40.2	FT3-12-16CF	41	18.89	18.29	18.29	17.68
MSHAR2AT-20	31.5	1.1/4	-20	31.4	33.0	43.3	45.7	49.5		12.5	1810	25	3625	50	7250	16.54	420	2.15	200000	FT2-12-20CF	50	FT3-12-20CF	51.5	25.40	24.69	24.69	23.8
MSHAR2AT-24	38	1.1/2	-24	37.7	39.3	49.6	52.0	55.9		9	1305	18	2310	36	5220	19.69	500	2.65	200000	FT2-12-24CF	59.5	FT3-12-24CF	59.7	31.40	30.60	30.60	29.80
MSHAR2AT-32	51	2	-32	50.4	52.0	62.3	64.7	68.6		8	1160	16	2320	32	4640	24.80	630	3.42	200000	FT2-12-32CF	72.3	FT3-12-32CF	73.4	41.40	40.60	40.60	30.80



## Hydraulic Thermoplastic Hose, SAE 100 R7

Part Number	Size			ID		OD	Working Pressure		Burst Pressure		Bend Radius	Weight	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	max	Mpa	psi	Mpa	psi	mm	Kg/mtr	FR79 Type Ferrule	mm	mm	mm	mm	
100R7-03	5	3/16	-3	4.6	5.4	11.4	21.0	3045	84	12180	90	0.073	FR79-03	12.25	-	-	-	-
100R7-04	6.3	1/4	-4	6.2	7.0	13.7	19.2	2784	77	11165	100	0.090	FR79-04	14.7	3.86	3.67	3.67	3.45
100R7-05	8	5/16	-5	7.7	8.5	15.6	17.5	2538	70	10150	115	0.128	FR79-05	17	5.29	5.11	5.11	4.91
100R7-06	10	3/8	-6	9.3	10.3	18.4	15.7	2277	63	9135	125	0.155	FR79-06	19.4	6.78	6.42	6.42	6.13
100R7-08	12.5	1/2	-8	12.3	13.5	22.5	14.0	2030	56	8120	180	0.224	FR79-08	23.8	9.21	8.86	8.86	8.40

## Hydraulic Thermoplastic Hose, SAE 100 R8

Part Number	Size			ID		OD	Working Pressure		Burst Pressure		Bend Radius	Weight	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	max	Mpa	psi	Mpa	psi	mm	Kg/mtr	FR79 Type Ferrule	mm	mm	mm	mm	
100R8-04	6.3	1/4	-4	6.2	7	16.8	35	5075	140	20300	100	0.097	FR79-04	14.5	3.86	3.67	3.67	3.45
100R8-05	8	5/16	-5	7.7	8.5	-	-	-	-	-	-	-	FR79-05	16.7	5.29	5.11	5.11	4.91
100R8-06	10	3/8	-6	9.3	10.3	20.3	28	4060	112	16240	125	0.178	FR79-06	18.6	6.78	6.42	6.42	6.13
100R8-08	12.5	1/2	-8	12.3	13.5	24.6	24.5	3553	98	14210	180	0.216	FR79-08	22.5	9.21	8.86	8.86	8.40

## Smooth Bore PTFE Hose

Part Number	Size			ID		OD	Working Pressure		Burst Pressure		Bend Radius	Weight	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	max	Mpa	psi	Mpa	psi	mm	Kg/mtr	PTFEF Type Ferrule	mm	mm	mm	mm	
SSPTFE-03	4.8	3/16	-3	4.8	5	7.7	24	3480	57	8265	50	0.090	PTFEF-03	10.9	-	-	-	-
SSPTFE-04	6.0	1/4	-4	6	6.4	8.8	23.2	3364	55.2	8004	75	0.110	PTFEF-04	12	3.86	3.67	3.67	3.45
SSPTFE-05	7.9	5/16	-5	7.9	8.2	10.8	19.4	2813	54	7830	100	0.135	PTFEF-05	12.8	5.29	5.11	5.11	4.91
SSPTFE-06	9.5	3/8	-6	9.7	10	12.4	16.2	2349	45	6525	125	0.165	PTFEF-06	15.9	6.78	6.42	6.42	6.13
SSPTFE-08	12.7	1/2	-8	12.7	13	15.9	13.9	2015.5	42.5	6162.5	165	0.230	PTFEF-08	20.8	9.21	8.86	8.86	8.40
SSPTFE-12	19.0	3/4	-12	19	19.3	22.3	9.2	1334	31.5	4567.5	230	0.405	PTFEF-12	28	14.46	13.91	13.91	13.31
SSPTFE-16	25.4	1	-16	25.2	25.6	29.8	7.2	1044	20	2900	300	0.510	PTFEF-16	34	18.89	18.29	18.29	17.68

## Convuluted Bore PTFE Hose

Part Number	Size			ID		OD	Working Pressure		Burst Pressure		Bend Radius	Weight	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	max	Mpa	psi	Mpa	psi	mm	Kg/mtr	PTFEF Type Ferrule	mm	mm	mm	mm	
SSCPTFE-04	6.35	1/4	-4	5.75	6.55	11.3	15.1	2189.5	45	6525	32	0.177	PTFEF-04	12.5	3.86	3.67	3.67	3.45
SSCPTFE-05	7.50	5/16	-5	7.75	8.55	14.1	12.6	1827	37	5365	36	0.215	PTFEF-05	13	5.29	5.11	5.11	4.91
SSCPTFE-06	9.50	3/8	-6	9.14	10.25	17.2	10.5	1522.5	31	4495	59	0.230	PTFEF-06	16	6.78	6.42	6.42	6.13
SSCPTFE-08	12.70	1/2	-8	12.6	13.3	19.3	9	1305	25	3625	82	0.276	PTFEF-08	20.9	9.21	8.86	8.86	8.40
SSCPTFE-12	19.50	3/4	-12	18.6	19.85	28.1	6	870	22	3180	113	0.570	PTFEF-12	28	14.46	13.91	13.91	13.31
SSCPTFE-16	25.40	1	-16	24.8	26.16	37.6	4.7	681.5	14.4	2088	189	0.790	PTFEF-16	33.5	18.89	18.29	18.29	17.68



Part Number	Size			ID mm		OD mm	Working Pressure		Burst Pressure		Bend Radius		Weight	Crimping Dimensions	Size in mm	Tail ID Top Tolerance	Tail ID Bottom Tolerance	Crimped No Go	Crimped Go
	mm	inch	SAE	min	max	max	Mpa	psi	Mpa	psi	inch	mm	Kg/mtr	R4F2 Type Ferrule	mm	mm	mm	mm	
RBR-100R4-12	19	3/4"	-12	18.2	19.8	34.9	2.1	305	8.4	1210	4.92	125	0.92	R4F2-12	38	14.46	13.91	13.91	13.31
RBR-100R4-16	25	1"	-16	24.6	26.2	41.3	1.7	250	7	1015	5.91	150	1.1	R4F2-16	45	18.89	18.29	18.29	17.68
RBR-100R4-20	31.5	1.1/4"	-20	30.6	33	50.8	1.4	200	5.6	810	7.87	200	1.3	R4F2-20	53	25.4	24.69	24.69	23.8
RBR-100R4-24	38	1.1/2"	-24	36.9	39.3	57.2	1.05	150	4.2	610	10.04	255	1.8	R4F2-24	59	31.4	30.6	30.6	29.8
RBR-100R4-32	51	2"	-32	49.2	52.4	69.9	0.7	100	2.8	410	11.81	300	2.23	R4F2-32	73	41.4	40.6	40.6	30.8



In Reply Refer To:  
MSHA:A&CC:PAR 98670  
Record File No.IC-267/1

November 30, 2010

MSHA reviewed your application for acceptance of compound number 171 for use as yellow air hose cover.

This construction and the information provided meet the requirements of the Standard Application Procedures for Acceptance of Flame-Resistant Solid Products Taken into Mines.

The following requirements apply to this acceptance:

1. Acceptance Marking No. "MSHA IC-267/1" must be permanently marked on the product with letters at least 1/4" high and at intervals not exceeding 3 feet. Other types of permanent markings may be used with prior approval of MSHA.
2. The accepted material thickness is 2 mm  $\pm$  0.2 mm.
3. You are obligated, as the manufacturer, to maintain the quality of the product to assure the requirements of this acceptance are being met.
4. Any change in product composition or in any other factors that may affect this acceptance must not be made without prior authorization from MSHA.
5. We have the right to revoke this acceptance for cause at any time.
6. We must be notified of any transfer of production or ownership of this product.

An invoice for the cost of processing this action will be forthcoming.

If you have any comments or questions relative to this letter, please refer them to David Creamer at 304-547-2085.

Sincerely,

A handwritten signature in cursive script, reading "John P. Faini".

John P. Faini  
Chief, Approval and Certification Center



In Reply Refer To:  
MSHA:A&CC:PAR 98669  
Record File No.IC-267

November 23, 2010

MSHA reviewed your application for acceptance of black compound number 080 for use as hydraulic hose cover.

This construction and the information provided meet the requirements of the Standard Application Procedures for Acceptance of Flame-Resistant Solid Products Taken into Mines.

The following requirements apply to this acceptance:

1. Acceptance Marking No. "MSHA IC-267" must be permanently marked on the product with letters at least 1/4" high and at intervals not exceeding 3 feet. Other types of permanent markings may be used with prior approval of MSHA.
2. The accepted material thickness is 2 mm  $\pm$  0.2 mm.
3. You are obligated, as the manufacturer, to maintain the quality of the product to assure the requirements of this acceptance are being met.
4. Any change in product composition or in any other factors that may affect this acceptance must not be made without prior authorization from MSHA.
5. We have the right to revoke this acceptance for cause at any time.
6. We must be notified of any transfer of production or ownership of this product.

An invoice for the cost of processing this action will be forthcoming.

If you have any comments or questions relative to this letter, please refer them to David Creamer at 304-547-2085.

Sincerely,

A handwritten signature in cursive script that reads "John P. Faini".

John P. Faini  
Chief, Approval and Certification Center