# HYDRAULIC HOSE

#### HOSE FOR GENERAL HYDRAULIC OIL PIPING / Z TYPE (for high pressure)

#### <Specifications>

• Construction : Tube ----- Synthetic rubber excellent in oil resistance

Reinforcement ----- High tensile steel wire

Cover -----Synthetic rubber excellent in oil and weather resistance

• Fluid temperature : -40°C to +120°C

Ambient temperature : -40°C to +70°C

105	Part No.	Nominal Size	I.D. (mm)	0.D. (mm)	Rein- forcement	Max Working Pressure (MPa)	Min Burst Pressure (MPa)	Min Bend Radius (mm)	Approx. Weight (g/m)
100	Z-105-32	32	31.8	47.2	4S	10.5	52.5	230	3,250
	Z-105-38	38	38.1	53.7	4S	10.5	52.5	300	3,810
	Z-105-50	50	50.8	66.8	4S	10.5	52.5	490	4,930

Z-140

Z-

Part No.	Nominal Size	I.D. (mm)	O.D. (mm)	Rein- forcement	Max Working Pressure (MPa)	Min Burst Pressure (MPa)	Min Bend Radius (mm)	Approx. Weight (g/m)
Z-140-32	32	31.8	47.2	4S	14.0	70.0	230	3,250
Z-140-38	38	38.1	53.7	4S	14.0	70.0	300	3,810
Z-140-50	50	50.8	66.8	4S	14.0	70.0	500	4,930

Z-175

Part No.	Nominal Size	I.D. (mm)	O.D. (mm)	Rein- forcement	Max Working Pressure (MPa)	Min Burst Pressure (MPa)	Min Bend Radius (mm)	Approx. Weight (g/m)
Z-175-19	19	19.0	29.9	4S	17.5	87.5	150	1,350
Z-175-25	25	25.4	36.5	4S	17.5	87.5	170	1,710
Z-175-32	32	31.8	47.2	4S	17.5	87.5	230	3,250
Z-175-38	38	38.1	53.7	4S	17.5	87.5	300	3,810
Z-175-50	50	50.8	66.8	4S	17.5	87.5	520	4,930

Z-210

Part No.	Nominal Size	I.D. (mm)	O.D. (mm)	Rein- forcement	Max Working Pressure (MPa)	Min Burst Pressure (MPa)	Min Bend Radius (mm)	Approx. Weight (g/m)
Z-210-15	15	15.9	26.3	4S	21.0	105.0	140	1,150
Z-210-19	19	19.0	29.9	4S	21.0	105.0	150	1,350
Z-210-25	25	25.4	36.5	4S	21.0	105.0	190	1,710
Z-210-32	32	31.8	47.2	4S	21.0	105.0	250	3,250
Z-210-38	38	38.1	53.7	4S	21.0	105.0	330	3,810
Z-210-50	50	50.8	69.2	6S	21.0	105.0	570	6,510

# Z-250

Part No.	Nominal Size	I.D. (mm)	O.D. (mm)	Rein- forcement	Max Working Pressure (MPa)	Min Burst Pressure (MPa)	Min Bend Radius (mm)	Approx. Weight (g/m)
Z-250-12	12	12.7	23.2	4S	25.0	125.0	110	990
Z-250-15	15	15.9	26.3	4S	25.0	125.0	140	1,150
Z-250-19	19	19.0	29.9	4S	25.0	125.0	170	1,350
Z-250-25	25	25.4	38.3	4S	25.0	125.0	200	2,310
Z-250-32	32	31.8	47.2	4S	25.0	125.0	280	3,250
Z-250-38	38	38.1	56.5	6S	25.0	125.0	340	5,120
Z-250-50	50	50.8	69.2	6S	25.0	125.0	585	6,510

### Z-280

Part No.	Nominal Size	I.D. (mm)	O.D. (mm)	Rein- forcement	Max Working Pressure (MPa)	Min Burst Pressure (MPa)	Min Bend Radius (mm)	Approx. Weight (g/m)
Z-280-09	9	9.5	19.5	4S	28.0	140.0	90	730
Z-280-12	12	12.7	23.2	4S	28.0	140.0	110	990
Z-280-15	15	15.9	26.3	4S	28.0	140.0	140	1,150
Z-280-19	19	19.0	31.5	4S	28.0	140.0	170	1,800
Z-280-25	25	25.4	38.3	4S	28.0	140.0	220	2,310
Z-280-32	32	31.8	49.5	6S	28.0	140.0	320	4,190
Z-280-38	38	38.1	56.5	6S	28.0	112.0	380	5,120
Z-280-50	50	50.8	69.2	6S	28.0	112.0	600	6,510

### Z-315

Part No.	Nominal Size	I.D. (mm)	O.D. (mm)	Rein- forcement	Max Working Pressure (MPa)	Min Burst Pressure (MPa)	Min Bend Radius (mm)	Approx. Weight (g/m)
Z-315-09	9	9.5	19.5	4S	31.5	157.5	110	730
Z-315-12	12	12.7	23.2	4S	31.5	157.5	120	990
Z-315-15	15	15.9	27.8	4S	31.5	157.5	170	1,550
Z-315-19	19	19.0	31.5	4S	31.5	157.5	200	1,800
Z-315-25	25	25.4	41.9	6S	31.5	157.5	270	3,350
Z-315-32	32	31.8	49.5	6S	31.5	157.5	370	4,190
Z-315-38	38	38.1	56.5	6S	31.5	126.0	440	5,120
Z-315-50	50	50.8	69.2	6S	31.5	126.0	615	6,510

Z-350

Part No.	Nominal Size	I.D. (mm)	O.D. (mm)	Rein- forcement	Max Working Pressure (MPa)	Min Burst Pressure (MPa)	Min Bend Radius (mm)	Approx. Weight (g/m)
Z-350-09	9	9.5	19.5	4S	35.0	175.0	130	730
Z-350-12	12	12.7	23.2	4S	35.0	175.0	130	990
Z-350-15	15	15.9	27.8	4S	35.0	175.0	190	1,550
Z-350-19	19	19.0	31.5	4S	35.0	175.0	230	1,800
Z-350-25	25	25.4	41.9	6S	35.0	175.0	310	3,350
Z-350-32	32	31.8	49.5	6S	35.0	175.0	420	4,190
Z-350-38	38	38.1	56.5	6S	35.0	140.0	500	5,120
Z-350-50	50	50.8	69.2	6S	35.0	140.0	635	6,510

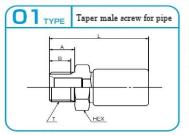


#### TOGAWA RUBBER CO., LTD. 4-2-5 MINAMI-HORIE, NISHI-KU, OSAKA, 550-0015.

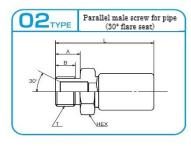
4-2-5 MINAMI-HORIE, NISHI-KU, OSAKA, 550-0015, JAPAN. TEL: +81-6-6538-1261 FAX: +81-6-6531-3238 E-mail: eigyo@togawa.co.jp URL: http://www.togawa.co.jp

#### HOSE COUPLING

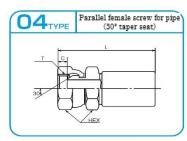
Hose for general hydraulic oil piping / Z type



Nominal Size	T Thread	I.D (mm)	A (mm)	B (mm)	L (mm)	HEX (mm)	Part No.	Hose Part No.
9	R <sup>3</sup> /8	6.5	15	12	64	22	9-01-L-Z	Z-280~Z-350
12	R 1/2	9	19	16	70	27	12-01-L-Z	Z-250~Z-350
15	B <sup>3</sup> /4	12	20	17	83	36	15-01-L-Z	Z-210~Z-280
15	n ~/4	12	20	17	00		15-01-H-Z	Z-315·Z-350
19	B <sup>3</sup> /4	14	20	17	95	36	19-01-L-Z	Z-175~Z-250
19	П <sup>-</sup> /4	14	20		90	30	19-01-H-Z	Z-280~Z-350
							25-01-L-Z	Z-175·Z-210
25	Rl	20	23	20	103	41	25-01-H-Z	Z-250.Z-280
							25-01-S-Z	Z-315·Z-350
20	11/	00	00	00	105	FO	32-01-L-Z	Z-105~Z-250
32	R1 1/4	26	26	23	135	50	32-01-S-Z	Z-280~Z-350
20	B1 1/2	32	00	00	140	00	38-01-L-Z	Z-105~Z-210
38	RT '/2	32	26	23	146	60	38-01-S-Z	Z-250~Z-350
50	DO	10	20	00	100	70	50-01-L-Z	Z-105~Z-175
50	R2	42	30	26	166	70	50-01-S-Z	Z-210~Z-350



Nominal Size	T Thread	I.D (mm)	A (mm)	B (mm)	L (mm)	HEX (mm)	Part No.	Hose Part No.
12	G 1/2	9	19	15	70	27	12-02-L-Z	Z-250
15	G <sup>3</sup> /4	12	20	16	83	36	15-02-L-Z	Z-210.Z-250
19	G <sup>3</sup> /4	14	20	16	95	36	19-02-L-Z	Z-175~Z-250
25	G1	20	23	18	103	41	25-02-L-Z	Z-175.Z-210
		1000		0.000			25-02-H-Z	Z-250
32	G1 <sup>1</sup> /4	26	26	21	135	50	32-02-L-Z	Z-105~Z-250
20	011/	20	00	21	140	<u> </u>	38-02-L-Z	Z-105~Z-210
38	G1 1/2	32	26	21	146	60	38-02-S-Z	Z-250
50	00	40	00	05	100	70	50-02-L-Z	Z-105~Z-175
50	G2	42	30	25	166	70	50-02-S-Z	Z-210-Z-250



Nominal Size	T Thread	I.D (mm)	C (mm)	L (mm)	HEX (mm)	Part No.	Hose Part No.
12	G <sup>1</sup> /2	9	7	73	27	12-04-L-Z	Z-250
15	G <sup>3</sup> /4	12	8	88	36	15-04-L-Z	Z-210.Z-250
19	G <sup>3</sup> /4	14	8	100	36	19-04-L-Z	Z-175~Z-250
25	01	20	9	107	41	25-04-L-Z	Z-175.Z-210
25	G1	20	9	107	41	25-04-H-Z	Z-250
32	G1 <sup>1</sup> /4	26	13	138	50	32-04-L-Z	Z-105~Z-250
38	G1 1/2	32	13	150	60	38-04-L-Z	Z-105~Z-210
38	GT 72	01	10	100		38-04-S-Z	Z-250
50	00	40	10	170	70	50-04-L-Z	Z-105~Z-75
50	G2	42	16	173	70	50-04-S-Z	Z-210.Z-250

<b>05TYPE</b>	Parallel female screw for pipe (30° flare seat)
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Nominal Size	T Thread	I.D (mm)	C (mm)	L (mm)	HEX (mm)	Part No.	Hose Part No.
12	G <sup>1</sup> /2	9	12	73	27	12-05-L-Z	Z-250
15	G <sup>3</sup> /4	12	14	88	36	15-05-L-Z	Z-210·Z-250
19	G <sup>3</sup> /4	14	14	100	36	19-05-L-Z	Z-175~Z-250
25	G1	20	14	107	41	25-05-L-Z	Z-175·Z-210
						25-05-H-Z	Z-250
32	G1 1/4	26	16	138	50	32-05-L-Z	Z-105~Z-250
38	Gl <sup>1</sup> /2	32	16	150	60	38-05-L-Z	Z-105~Z-210
						38-05-S-Z	Z-250
50	G2	42	19	173	70	50-05-L-Z	Z-105~Z-175
						50-05-S-Z	Z-210·Z-250