BRIDGESTONE

HYDRAULIC HOSE

Couplings , Accessories and Equipment

This catalog shows the product specifications in the format below so you can select the correct product for your needs and prevent the risk of danger.

Hose

Hoses are flexible tubes designed to carry fluid from one location to another or to convey pressure. Typically, they include rubber hoses (PASCALART, EPOQU, etc.) and resin hoses (PASSTAGE LINE, etc.).

[Example Specifications of Hoses]

Temperature Range : ambient
Permissible temperatures of ambient environment for the hose

Temperature Range: fluid
Permissible temperatures of fluid flowing through the hose

Inner Tube
Inner part of the hose, which comes into direct contact with the fluid
The specifications show the materials for this part.

Compatible Fluid
Fluid applicable to the hose

- Compatible Fluid / Mineral Hydraulic Oil
- Temperature Range: fluid / –40°C to 100°C / –40°F to 212°F
- Temperature Range: ambient / –40°C to 70°C / –40°F to 158°F
- Inner Tube / Oil-resistant synthetic rubber
- Outer Cover / Weather-resistant synthetic rubber

Pressure
Pressure shown in psi/MPa units

Outer Cover
Outer part of the hose, which is intended to protect its reinforcing
The specifications show the materials for this part.
*The color of this cover is black unless otherwise specified.

Catalog Number
When ordering a product, specify its catalog number.
*For details, refer to page 5.

Weight
Approximate Weight of Hose

PA01
Maximum Working Pressure
1.5MPa
500PSI

Catalog Number	I.D. inch	I.D. mm	O.D. inch	O.D. mm	Max.W.P. psi	Max.W.P. MPa	Min.B.P. psi	Min.B.P. MPa	Min.B.R. inch	Min.B.R. mm	Weight lbs/ft	Weight g/m	Reinforcement	Compatible coupling/relevant page: Factory-assembled	Compatible coupling/relevant page: UNICRIMP-crimped
PA0104*	1/4	6.3	0.55	14.0	200	1.5	870	6.0	2.17	55	0.33	150	4C	AS/27	AS/27 UL/30
PA0106*	3/8	9.5	0.69	17.4					2.56	65	0.53	240			
PA0108*	1/2	12.7	0.83	21.2					3.54	90	0.62	280			

I.D·O.D
Inner and outer diameters of the hose

Max.W.P.
Maximum usable working pressure

Min.B.R.
Minimum bending radius that can be achieved without performance degradation. This radius is specified on the inside surface of the bend area.

Min.B.P.
Pressure that the hose should withstand without problems such as coupling detachment, hose bursting, and fluid leaking from the crimped part when the hose is subjected to water or oil pressure.

Coupling Series
Series of couplings that are crimped either at a factory or with UNICRIMP. The number after "/" indicates the number of the page that describes the applicable series of couplings.
*Crimping the couplings may be impossible depending on the type of UNICRIMP used.

Reinforcement
Fibers or wires woven or spirally wrapped around an inner tube to maintain hose performance. The specifications show the structure of the reinforcing.

OKE Series
For Low Pressure

- Compatible Fluid / Mineral Oil, Water
- Inner Tube / Oil Resistant Synthetic Rubber
- Outer Cover / Weather Resistant Synthetic Rubber
- Temperature Range: fluid / –40°C to 100°C(Oil) / 0°C to 50°C(Water)
  –40°F to 212°F(Oil) / 32°F to 122°F(Water)
- Temperature Range : ambient /–40°C to 70°C(–40°F to 158°F)

OKE

Maximum Working Pressure

1.5MPa
200PSI

Catalog Number	I.D. inch	I.D. mm	O.D. inch	O.D. mm	Max.W.P. psi	Max.W.P. MPa	Min.B.P. psi	Min.B.P. MPa	Min.B.R. inch	Min.B.R. mm	Weight lbs/ft	Weight g/m	Reinforcement	Compatible coupling/relevant page Factory-assembled	Compatible coupling/relevant page UNICRIMP-crimped
OKE04	1/4	6.6	0.50	12.7	200	1.5	600	4.5	2.56	65	0.09	130	2C	LS/27	LS/27
OKE06	3/8	9.7	0.63	15.9					2.95	75	0.12	170			
OKE08	1/2	13.0	0.78	19.8					3.94	100	0.16	240			
OKE10	5/8	16.2	0.93	23.5					4.92	125	0.21	310		UT/27	UT/27
OKE12	3/4	19.3	1.09	27.7					5.91	150	0.29	430			
OKE16	1	25.7	1.44	36.5					7.87	200	0.48	720	4C		

*These hoses cannot be used under surge (shock) pressure. If the hose will be subjected to surge (shock) pressure, replace it with a PASCALART hose (PA).
*Hoses suitable for use at high temperatures (120°C and 150°C) are also available. For details, refer to the Lace-up Rubber Hose Catalog.
We recommend using water-glycol with couplings on which the wetted parts only are nickel chrome plated (the catalog numbers of these couplings end with X103).

⚠ Warning Do not use high water base fluid (HWBF) with the hoses listed above. Doing so could cause the hoses to burst or fluid to leak. Severe personal injury or death may result if these instructions are not followed.

PASCALART

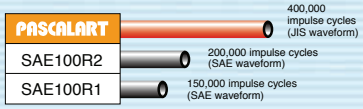
■JIS Standard
- JIS K6349-3(high-pressure rubber hose)
- JIS B8360(high-pressure rubber hose assembly)

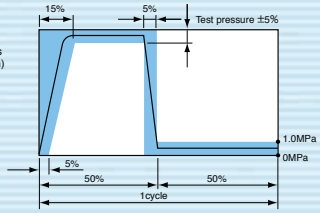
- Compatible Fluid
  Mineral Oil
- Inner Tube
  Oil Resistant Synthetic Rubber
- Outer Cover
  Weather Resistant Synthetic Rubber
- Temperature Range : fluid
  –40℃to +100℃ (–40°F to +212°F)
- Temperature Range : ambient
  –40℃to +70℃ (–40°F to +158°F)

1 LONGER HOSE LIFE

PASCALART series hose provides a longer service life and a greater fatigue resistance than conventional hose. PASCALART series hose guarantees a service life of 400,000 impulse cycles conforming to JIS heavy duty application standard B8360. Conventional hose assures a service life of only 100,000 to 200,000 impulse cycles.

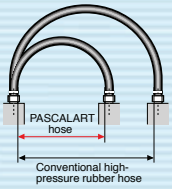
■Hose Life Comparison





2 SMALLER BENDING RADIUS

PASCALART series hose minimum bending radius is 2/3 of the JIS K6349 standard, which results in shorter hydraulic hose assemblies, and more compact hydraulic circuits.



3 BROAD RANGE

PASCALART series hose is classified into 9 different working pressure categories. This broad range of working pressures, makes it easy to select the right hose for any given hydraulic circuit pressure.

PA01

Maximum Working Pressure

1.5MPa
200PSI

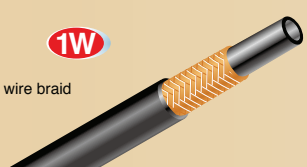
Catalog Number	I.D. inch	I.D. mm	O.D. inch	O.D. mm	Max.W.P. psi	Max.W.P. MPa	Min.B.P. psi	Min.B.P. MPa	Min.B.R. inch	Min.B.R. mm	Weight lbs/ft	Weight g/m	Reinforcement	Compatible coupling/relevant page Factory-assembled	Compatible coupling/relevant page UNICRIMP-crimped
PA0104*	1/4	6.3	0.55	14.0	200	1.5	870	6.0	2.17	55	0.33	150	4C	AS/27	AS/27 UL/30
PA0106*	3/8	9.5	0.69	17.4					2.56	65	0.53	240			
PA0108*	1/2	12.7	0.83	21.2					3.54	90	0.62	280			

We recommend using water-glycol with couplings on which the wetted parts only are nickel chrome plated (the catalog numbers of these couplings end with X103).
*For factory-assembled hoses with stainless steel fittings, select the UL series hoses.

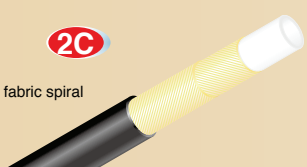
⚠ Warning Do not use high water base fluid (HWBF) with the hoses listed above. Doing so could cause the hoses to burst or fluid to leak. Severe personal injury or death may result if these instructions are not followed.

Reinforcing

1W — 1 wire braid



2C — 2 fabric spiral



2W — 2 wire braids

PA series

PA17

Maximum Working Pressure

17.0MPa
2,500PSI

Catalog Number	I.D. inch	I.D. mm	O.D. inch	O.D. mm	Max.W.P. psi	Max.W.P. MPa	Min.B.P. psi	Min.B.P. MPa	Min.B.R. inch	Min.B.R. mm	Weight lbs/ft	Weight g/m	Reinforcement	Compatible coupling/relevant page: Factory-assembled	Compatible coupling/relevant page: UNICRIMP-crimped
PA1704*	1/4	6.3	0.53	13.5	2,500	17.0	10,000	68.0	2.36	60	0.16	240	1W	UZ/34	UZ/34
PA1706*	3/8	9.5	0.66	16.7					3.15	80	0.24	360		UB/34	UB/34
PA1708	1/2	12.7	0.76	19.4					3.54	90	0.28	420		UZ/34	
PA1710	5/8	15.9	1.00	25.4					4.72	120	0.51	770	2W	UB/34	
PA1712	3/4	19.0	1.15	29.3					5.51	140	0.63	950			
PA1716	1	25.4	1.41	35.8					7.28	185	0.87	1,300			

*For factory-assembled hoses with stainless steel fittings, select the UL series hoses.

PA21

Maximum Working Pressure

20.5MPa
3,000PSI

Catalog Number	I.D. inch	I.D. mm	O.D. inch	O.D. mm	Max.W.P. psi	Max.W.P. MPa	Min.B.P. psi	Min.B.P. MPa	Min.B.R. inch	Min.B.R. mm	Weight lbs/ft	Weight g/m	Reinforcement	Compatible coupling/relevant page: Factory-assembled	Compatible coupling/relevant page: UNICRIMP-crimped
PA2104	1/4	6.3	0.53	13.5	3,000	20.5	12,000	82.0	2.76	70	0.17	250	1W	UZ/34	UZ/34
PA2106	3/8	9.5	0.71	18.0					3.54	90	0.31	470	2W	UB/34	UB/34
PA2108	1/2	12.7	0.87	22.2					4.33	110	0.43	650		UZ/34	
PA2110	5/8	15.9	1.00	25.4					5.51	140	0.51	770		UB/34	
PA2112	3/4	19.0	1.15	29.3					6.69	170	0.64	960			
PA2116	1	25.4	1.41	35.8					8.27	210	0.87	1,300			
PA2120	1-1/4	31.8	1.78	45.2					10.24	260	1.57	2,360	4S	UZ/34	UZ/34
PA2124	1-1/2	38.1	2.07	52.7					12.20	310	2.04	3,060		HW/40	HW/40
PA2132	2	50.8	2.60	66.0					16.93	430	2.77	4,150			

PA28

Maximum Working Pressure

27.5MPa
4,000PSI

Catalog Number	I.D. inch	I.D. mm	O.D. inch	O.D. mm	Max.W.P. psi	Max.W.P. MPa	Min.B.P. psi	Min.B.P. MPa	Min.B.R. inch	Min.B.R. mm	Weight lbs/ft	Weight g/m	Reinforcement	Compatible coupling/relevant page: Factory-assembled	Compatible coupling/relevant page: UNICRIMP-crimped
PA2804	1/4	6.3	0.59	15.1	4,000	27.5	16,000	110.0	2.76	70	0.25	380	2W	UZ/34	UZ/34
PA2806	3/8	9.5	0.75	19.1					3.94	100	0.36	540		UB/34	UB/34
PA2808	1/2	12.7	0.87	22.2					4.33	110	0.52	780	4S		
PA2810	5/8	15.9	1.04	26.4					5.51	140	0.67	1,000			
PA2812	3/4	19.0	1.14	29.0					6.69	170	0.75	1,130			
PA2816	1	25.4	1.41	35.9					8.66	220	1.17	1,750			
PA2820	1-1/4	31.8	1.80	45.6					11.02	280	1.74	2,610		UZ/34	UZ/34
PA2824	1-1/2	38.1	2.20	55.9					12.60	320	2.93	4,390	6S	KN/41	—
PA2832	2	50.8	2.95	75.0					16.93	430	5.27	7,900		KD/41	—

PA35

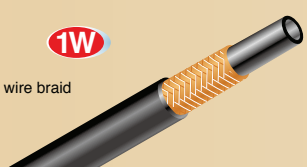
Maximum Working Pressure

34.5MPa
5,000PSI

Catalog Number	I.D. inch	I.D. mm	O.D. inch	O.D. mm	Max.W.P. psi	Max.W.P. MPa	Min.B.P. psi	Min.B.P. MPa	Min.B.R. inch	Min.B.R. mm	Weight lbs/ft	Weight g/m	Reinforcement	Compatible coupling/relevant page: Factory-assembled	Compatible coupling/relevant page: UNICRIMP-crimped
PA3504	1/4	6.3	0.59	15.1	5,000	34.5	20,000	138.0	3.15	80	0.26	390	2W	UZ/34	UZ/34
PA3506	3/8	9.5	0.75	19.1					4.33	110	0.37	550		UB/34	UB/34
PA3508	1/2	12.7	0.87	22.2					5.91	150	0.53	800	4S		
PA3510	5/8	15.9	1.04	26.4					6.69	170	0.67	1,000			
PA3512	3/4	19.0	1.14	29.0					8.66	220	0.75	1,130			
PA3516	1	25.4	1.44	36.6					11.02	280	1.33	2,000			
PA3520	1-1/4	31.8	1.93	49.0					12.99	330	2.57	3,850	6S		UZ/34
PA3524	1-1/2	38.1	2.20	55.9					14.96	380	2.96	4,440		KN/41	—
PA3532	2	50.8	2.95	75.0					19.69	500	5.33	8,000		KD/41	—

Reinforcing

1W
1 wire braid



2W
2 wire braids

4S
4 spiral wires