

SAPPHIRE HYDRAULICS

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Hydraulic Hose Fittings & Connector Sizes Charts

Below we've compiled hydraulic hose fittings charts that detail some of the more common fitting sizes and types currently in use by pipefitters and other professionals. Please contact us today at www.sapphirehydraulics.com to learn more.

Thread Dash For JIC (37° Flared)

Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors

Nominal Hose Size	Hose Dash	Nominal Thread	Thread Dash
3/16"	- 3	7/16" – 20	- 4
1/4"	- 4	7/16" – 20	- 4
1/4"	- 4	1/2" – 20	- 5
1/4"	- 4	9/16" – 18	- 6
5/16"	- 5	9/16" – 18	- 6
3/8"	- 6	9/16" – 18	- 6
3/8"	- 6	3/4" – 16	- 8
13/32"	- 6.5	3/4" – 16	- 8
1/2"	- 8	3/4" – 16	- 8
1/2"	- 8	7/8" – 14	- 10
5/8"	-10	7/8" – 14	- 10
5/8"	- 10	1-1/16" – 12	- 12
3/4"	-12	7/8" – 14	- 10
3/4"	-12	1-1/16" – 12	- 12
3/4"	-12	1-3/16" – 12	- 14
7/8"	-14	1-3/16" – 12	- 14
7/8"	-14	1-5/16" – 12	- 16
1"	-16	1-5/16" – 12	- 16
1-1/4"	-20	1-5/8" – 12	- 20
1-1/2"	-24	1-7/8" – 12	- 24
2"	-32	2-1/2" – 12	- 32

Thread Dash For NPT (Dryseal Taper)

Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors

Nominal Hose Size	Hose Dash	Dryseal Taper Thread	Thread Dash
3/16"	-3	1/8" – 27	-2
3/16	-3	1/4" – 18	-4
1/4"	-4	1/8" – 27	-2
1/4"	-4	1/4" – 18	-4
5/16"	-5	1/4" – 18	-4
5/16"	-5	3/8" – 18	-6
3/8"	-6	1/4" – 18	-4
3/8"	-6	3/8" – 18	-6
3/8"	-6	1/2" – 14	-8
13/32"	-6.5	3/8" – 18	-6
13/32"	-6.5	1/2" – 14	-8
1/2"	-8	3/8" – 18	-6
1/2"	-8	1/2" – 14	-8
5/8"	-10	1/2" – 14	-8
5/8"	-10	3/4" – 14	-12
3/4"	-12	3/4" – 14	-12
7/8"	-14	1" – 11.1/2"	-16
1"	-16	1" – 11.1/2"	-16
1-1/4"	-20	1-1/4" – 11.1/2"	-20
1-1/2"	-24	1-1/2" – 11.1/2"	-24
2"	-32	2" – 11.1/2"	-32

Thread Dash For SAE (45° Flared)

Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors

Nominal Hose Size	Hose Dash	Nominal Thread	Thread Dash
1/4"	-4	7/16" – 20	- 4
1/4"	-4	1/2" – 20	- 5
5/16"	-5	5/8" – 18	- 6
3/8"	-6	5/8" – 18	- 6
3/8"	-6	3/4" – 16	- 8
1/2"	-8	3/4" – 16	- 8
1/2"	-8	7/8" – 14	- 10
5/8"	-10	7/8" – 14	- 10
5/8"	-10	1-1/16" – 14	- 12
3/4"	-12	7/8" – 14	- 10
3/4"	-12	1-1/16" – 14	- 12

Thread Dash For ORFS (O-Ring Face Seal)

Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors

Nominal Hose Size	Hose Dash	Dryseal Taper Thread	Thread Dash
1/4"	- 4	9/16" – 18	- 4
3/8"	- 6	11/16" – 16	- 6
1/2"	- 8	13/16" – 16	- 8
5/8"	- 10	1" – 14	- 10
3/4"	- 12	1-3/16" – 12"	- 12
1"	- 16	1-7/16" – 12	- 16
1-1/4"	- 20	1-11/16" – 12	- 20
1-1/2"	- 24	2" – 12	- 24

Dash Size For Code 61

Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors

Nominal Hose Size	Hose Dash	Nominal Flange Size	Flange Dash
1/2"	- 8	30,16	- 8
3/4"	- 12	38,10	- 12
1"	- 16	44,45	- 16
1-1/4"	- 20	50,80	- 20
1-1/2"	- 24	60,32	- 24
2"	- 32	71,43	- 32

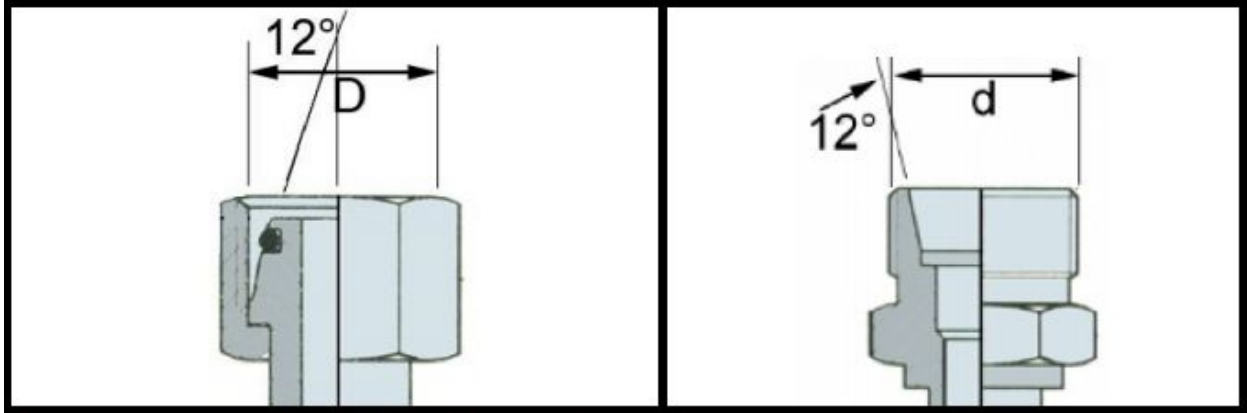
Dash Size For Code 62

Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors

Nominal Hose Size	Hose Dash	Nominal Flange Size	Flange Dash
1/2"	- 8	31,75	- 8
3/4"	- 12	41,27	- 12
1"	- 16	47,62	- 16
1-1/4"	- 20	53,97	- 20
1-1/2"	- 24	63,50	- 24
2"	- 32	79,37	- 32

Metric Connections (ISO 8434-1)

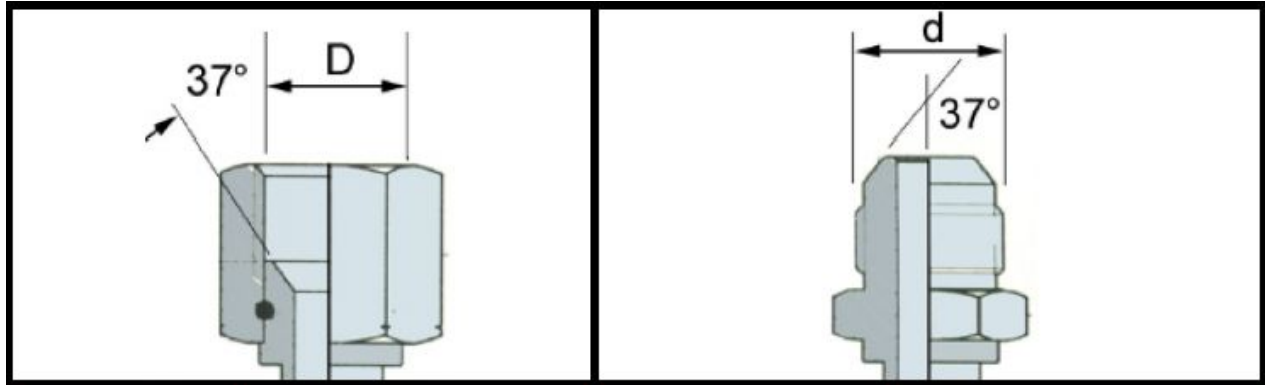
Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors



thread	D (mm)	d (mm)	Ø L pipe (mm)	Ø S pipe (mm)
M10 x 1,0	9,0	10,0	4	-
M12 x 1,5	10,5	12,0	6	-
M14 x 1,5	12,5	14,0	8	6
M16 x 1,5	14,5	16,0	10	8
M18 x 1,5	16,5	18,0	12	10
M20 x 1,5	18,5	20,0	-	12
M22 x 1,5	20,5	22,0	15	14
M24 x 1,5	22,5	24,0	-	16
M26 x 1,5	24,5	26,0	18	-
M30 x 2,0	28,0	30,0	22	20
M36 x 2,0	34,0	36,0	28	25
M42 x 2,0	40,0	42,0	-	30
M45 x 2,0	43,0	45,0	35	-
M52 x 2,0	50,0	52,0	42	38

JIC Connections (ISO 8434-2)

Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors

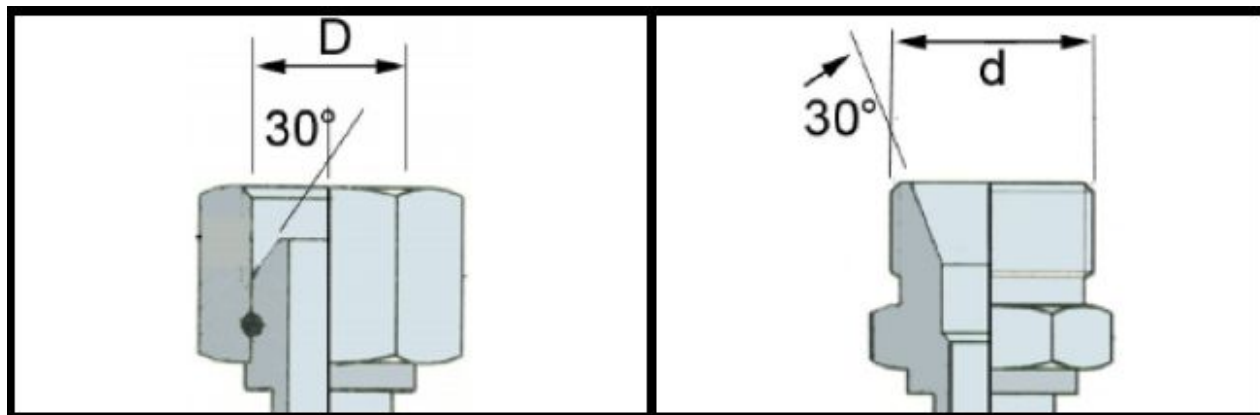


thread	D (mm)	d (mm)	threads per inch
7/16"	10,00	11,07	20
1/2"	11,60	12,70	20
9/16"	13,00	14,25	18
5/8"	14,70	15,85	18
3/4"	17,60	19,00	16
7/8"	20,50	22,17	14
1-1/16"	25,00	26,95	12
1-1/16"	25,30	26,95	14
1-3/16"	27,95	30,12	12
1-5/16"	31,30	33,30	12
1-5/8"	39,20	41,22	12
1-7/8"	45,60	47,57	12
2-1/2"	61,50	63,45	12

Sizes 5/8"-18 UNF and 1-1/16"-14 UNF are 45° flared

BSP Connections (BS 5200)

Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors



thread	D (mm)	d (mm)	threads per inch
1/8"	8,60	9,73	28
1/4"	11,60	13,16	19
3/8"	15,10	16,66	19
1/2"	18,90	20,96	14
5/8"	20,90	22,91	14
3/4"	24,40	26,44	14
1"	30,60	33,25	11
1-1/4"	39,30	41,91	11
1-1/2"	45,10	47,80	11
2"	56,70	59,60	11

NPT Connections (SAE J476)

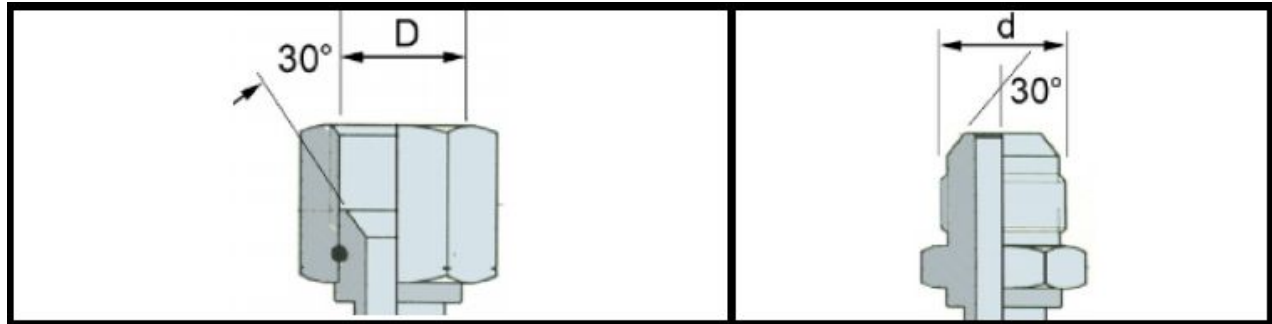
Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors



thread	d (mm)	threads per inch
1/8"	10,00	27
1/4"	13,60	18
3/8"	17,00	18
1/2"	21,00	14
3/4"	26,00	14
1"	33,50	11-1/2"
1.1/4"	42,10	11-1/2"
1.1/2"	47,80	11-1/2"
2"	59,60	11-1/2"

Japanese Metric Connections

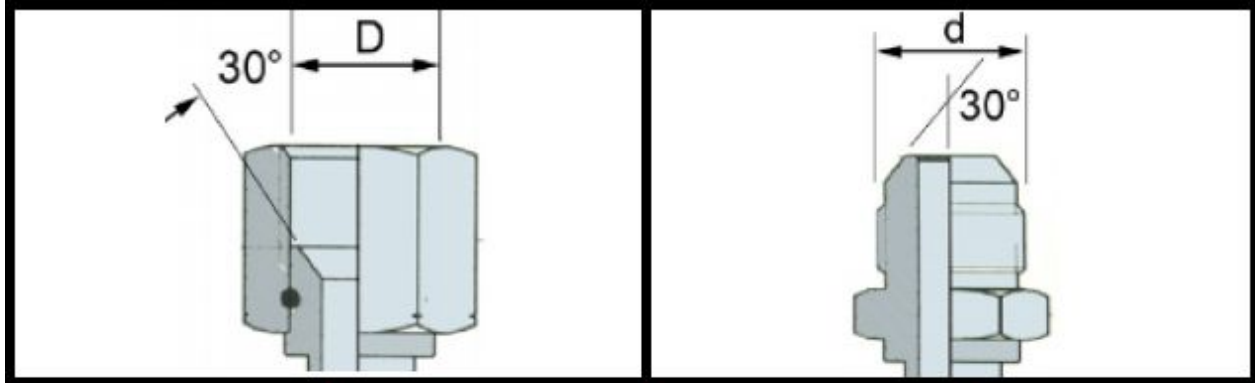
Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors



thread	D (mm)	d (mm)	pitch (mm)
M14 x 1,5	12,50	14,00	1,5
M16 x 1,5	14,50	16,00	1,5
M18 x 1,5	16,50	18,00	1,5
M22 x 1,5	20,50	22,00	1,5
M24 x 1,5	22,50	24,00	1,5
M30 x 1,5	28,50	30,00	1,5
M33 x 1,5	31,50	33,00	1,5
M42 x 1,5	40,50	42,00	1,5

Japanese Gas Connections

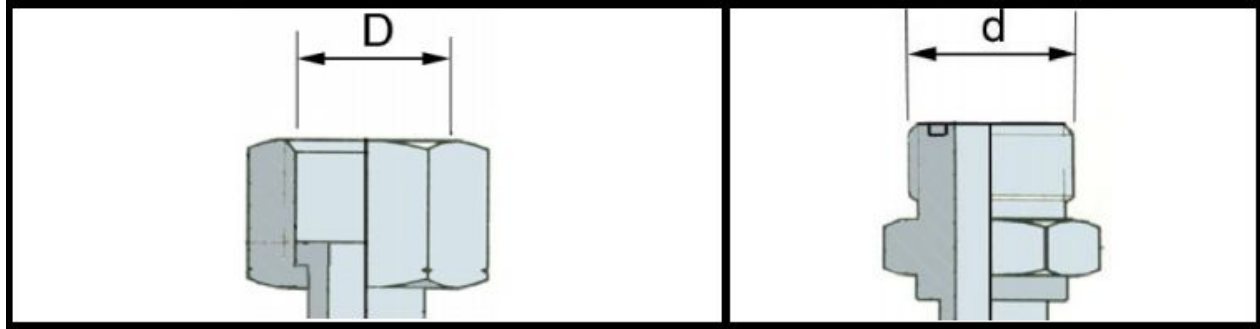
Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors



thread	D (mm)	d (mm)	threads per inch
1/8"	8,60	9,73	28
1/4"	11,60	13,16	19
3/8"	15,10	16,66	19
1/2"	18,90	20,96	14
5/8"	20,90	22,91	14
3/4"	24,40	26,44	14
1"	30,60	33,25	11
1-1/4"	39,30	41,91	11
1-1/2"	45,10	47,80	11
2"	56,70	59,60	11

ORFS Connections (ISO 8434-3)

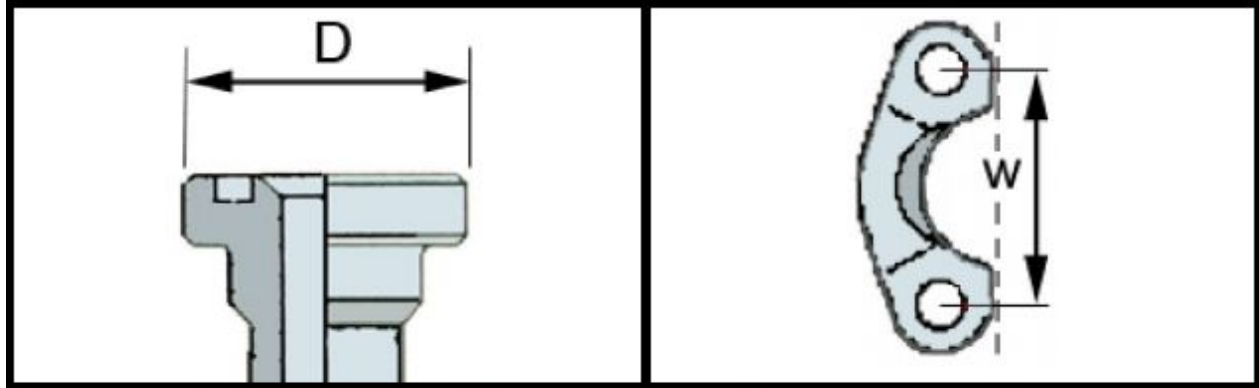
Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors



threads	d (mm)	D (mm)	threads per inch
9/16"	12,70	14,28	18
11/16"	15,87	17,46	16
13/16"	19,05	20,63	16
1"	23,81	25,40	14
1.3/16"	27,78	30,16	12
1.7/16"	34,13	36,51	12
1.11/16"	40,48	42,86	12
2"	48,41	50,80	12

Split Flanges (SAE J518)

Series 23 / 24 / P23 / P12 / P24 / P25 / 26 Connectors



DN	D (mm)	w (mm)	D (mm)	w (mm)
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	code 61 - 3000 PSI		code 62 - 6000 PSI	
1/2"	30,16	38,10	31,75	40,48
3/4"	38,10	47,62	41,27	50,80
1"	44,45	52,38	47,62	57,15
1-1/4"	50,80	58,73	53,97	66,67
1-1/2"	60,32	69,85	63,50	79,37
2"	71,43	77,78	79,37	96,83