

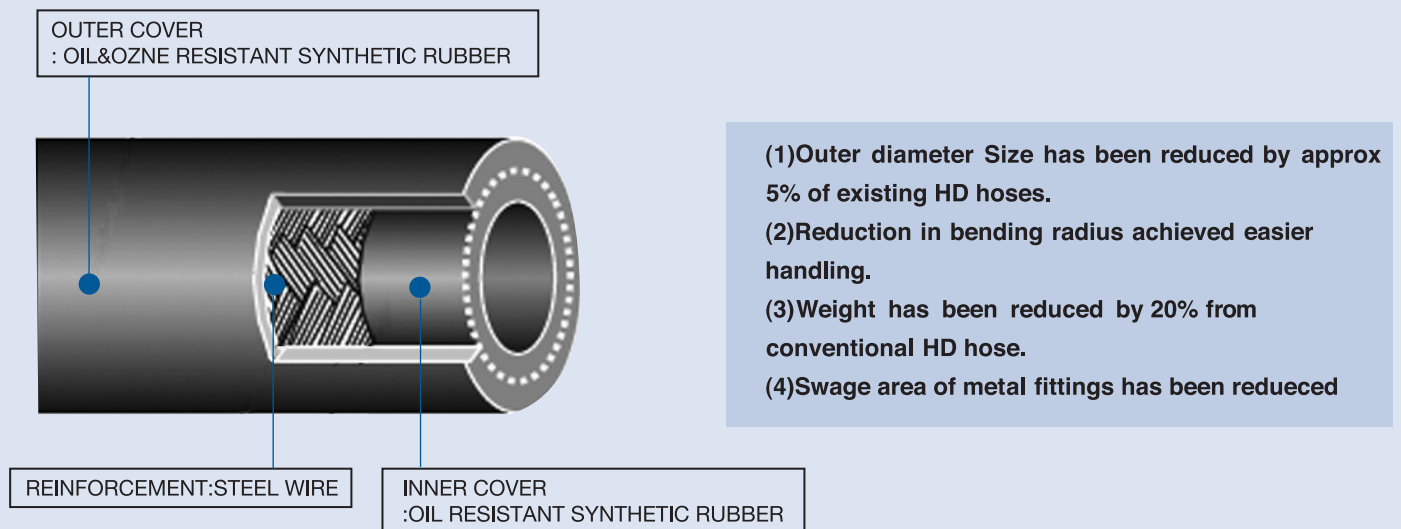
Slim Heavy Duty Hose

SHD HOSE

INTRODUCTION

Developed to accommodate with requirement of down-sizing of the hydraulic devices of construction machines.

FEATURES



Extention of Slim Hose Range

Ex.34.5MPa- ϕ 19

Bending Rad	Conventional Hose	100
	SHD Hose	90
Weight	Conventional Hose	100
	SHD Hose	80
Outer Diameter	Conventional Hose	100
	SHD Hose	95

Ex.34.5MPa- ϕ 25

Bending Rad	Conventional Hose	100
	SHD Hose	86
Weight	Conventional Hose	100
	SHD Hose	90
Outer Diameter	Conventional Hose	100
	SHD Hose	97

SHD SERIES

SHD280

HOSE STRUCTURE

INNER COVER: OIL RESISTANT SYNTHETIC RUBBER
 REINFORCEMENT: WIRE
 OUTER COVER: OIL&OZONE RESISTANT SYNTHETIC RUBBER

RECOMMENDED FLUIDS MINERAL SYNTHETIC OIL

OPERATING TEMPERATURE

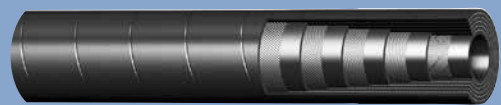
-40°C~+100°C(-40°F~+212°F)

HOSE STRUCTURE&REINFORCEMENT

2W/B



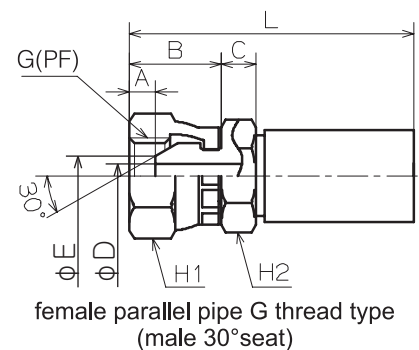
4W/S



SIZE	REINFORCEMENT	INNER DIAMETER mm (inch)	OUTER DIAMETER mm	MAX WORKING PRESSURE MPa (bar)	MIN.BURST PRESSURE MPa (bar)	MIN.BEND RADIUS mm	WEIGHT g/m
12	2W/B	12.7($\frac{1}{2}$)	21.0	28 (280)	112 (1,120)	90	590
15	4W/S	15.9($\frac{5}{8}$)	26.6	28 (280)	112 (1,120)	140	990
19	4W/S	19.0($\frac{3}{4}$)	29.8	28 (280)	112 (1,120)	175	1,155
25	4W/S	25.4(1)	36.6	28 (280)	112 (1,120)	220	1,485

SIZE	A	B	C	D	E	H1	H2	G(PF)	L	WT
12	8.5	21.5	8	9.5	13	27	22	$\frac{1}{2}$	70	160
15	9.0	23.0	11	16.0	19	36	30	$\frac{3}{4}$	80	300
19	9.0	23.0	10	16.1	19	36	30	$\frac{3}{4}$	90	350
25	9.5	25.5	12	21.0	24	41	36	1	105	544

PART NO.5



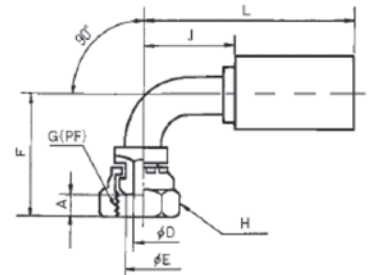
SHD SERIES

SHD280

SIZE	A	D	E	F	H	J	G(PF)	L	WT
12	7.0	9.5	13	55	27	50	1/2	88	210
15	9.0	13.6	19	70	36	64	3/4	108	405
19	9.0	17.0	19	70	36	64	3/4	120	472
25	9.5	21.0	24	87	41	68	1	133	820

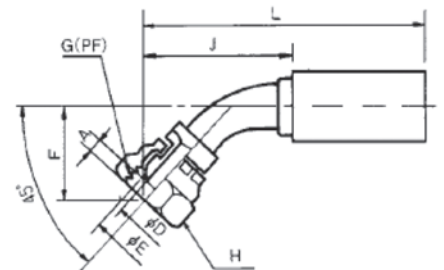
SIZE	A	D	E	F	H	J	G(PF)	L	WT
12	7.0	9.5	13	34	27	61.4	1/2	100	190
15	9.0	13.6	19	38	36	70	3/4	114	365
19	9.0	17.0	19	38	36	76	3/4	132	445
25	9.5	21.0	24	46.4	41	84.5	1	150	735

PART NO.905



female parallel pipe G thread type
(male 30°seat)
90°bend fitting

PART NO.455

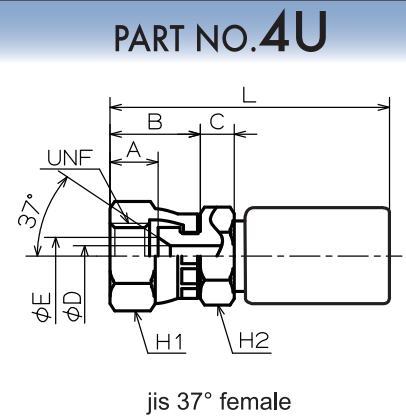


female parallel pipe G thread type
(male 30°seat)
45°bend fitting

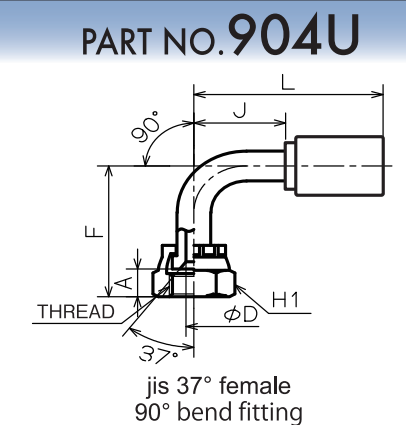
SHD SERIES

SHD280

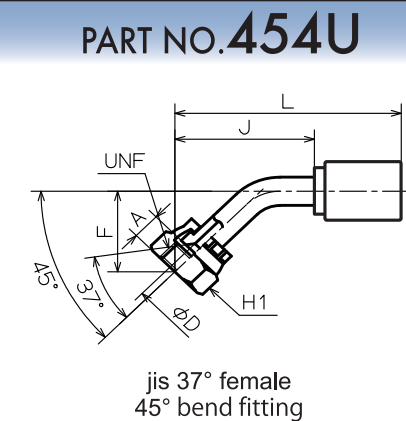
SIZE	A	B	C	D	E	H1	H2	UNF	L	WT
12	11.0	21.5	10	9.5	14.5	27	22	3/4-16	70	165
15	11.0	21.5	9	13.0	17.3	27	27	7/8-14	77	220
19	12.5	23.0	10	16.0	21.5	36	30	1-1/16-12	90	345
25	12.5	25.5	12	21.0	28.0	41	36	1-5/16-12	105	540



SIZE	A	D	F	H1	J			UNF	L	WT
12	11.0	9.5	55.5	27	50			3/4-16	88	210
15	11.0	13.0	70	27	64			7/8-14	108	500
19	12.5	16.0	70	36	64.9			1-1/16-12	121	490
25	12.5	21.0	87	41	68			1-5/16-12	133	820



SIZE	A	D	F	H1	J			UNF	L	WT
12	11.0	9.5	31.9	27	59.3			3/4-16	98	190
15	11.0	13.0	38	27	70			7/8-14	114	360
19	12.5	16.0	38	36	76.8			1-1/16-12	133	445
25	12.5	21.0	46.4	41	84.5			1-5/16-12	150	735

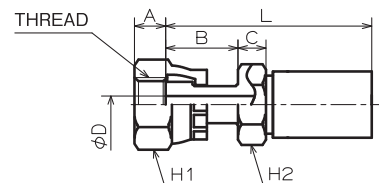


SHD SERIES

SHD280

SIZE	A	B	C	D	H1	H2	UNF	L	WT
12	10.0	22.0	10	9.5	27	22	13/16-16	70	175
15	10.5	24.5	9	13.0	32	27	1-14	80	280
	11.5	27.5	9	16.0	36	27	1-3/16-12	83	320
19	11.3	22.7	11	15.9	36	27	1-3/16-12	92	350
25	11.8	24.7	11	20.5	41	32	1-7/16-12	102	540

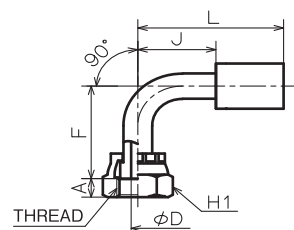
PART NO. KO



female O-ring face seal

SIZE	A	D	F	H1	J		UNF	L	WT
12	10.0	9.5	43.5	27	50		13/16-16	88	208
15	10.5	13.0	51	32	54		1-14	98	330
	11.5	16.0	58	36	64		1-3/16-12	108	390
19	11.3	15.9	58	36	64		1-3/16-12	120	445
25	11.8	20.5	66	41	76		1-7/16-12	141	738

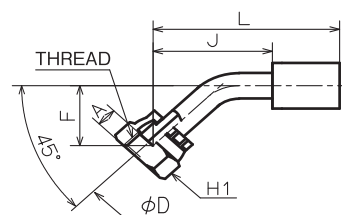
PART NO. 90KO



female O-ring face seal
90° bend fitting

SIZE	A	D	F	H1	J		UNF	L	WT
12	10.0	9.5	22	27	51		13/16-16	89	190
15	10.5	13.0	26	32	64		1-14	108	310
	11.5	16.0	26	36	64		1-3/16-12	108	350
19	11.3	15.9	26	36	64		1-3/16-12	120	380
25	11.8	20.5	31.5	41	76		1-7/16-12	141	645

PART NO. 45KO



female O-ring face seal
45° bend fitting

SHD SERIES

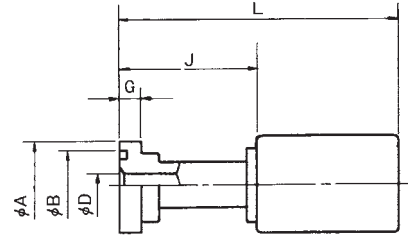
SHD280

SIZE	A	B	D	G	J			L	WT
12	30.2	25.46	9.0	6.7	51			89	195
15	38.1	31.81	12.6	6.7	54			98	300
19	38.1	31.81	17.0	6.7	54			110	325
25	44.5	39.68	20.0	8	65			130	590

SIZE	A	B	D	F	G	J		L	WT
12	30.2	25.46	10.5	43	6.7	51.5		90	190
15	38.1	31.81	13.6	55.5	6.7	50		94	320
19	38.1	31.81	17.0	55	6.7	64		120	407
25	44.5	39.68	21.0	63	8	76		141	715

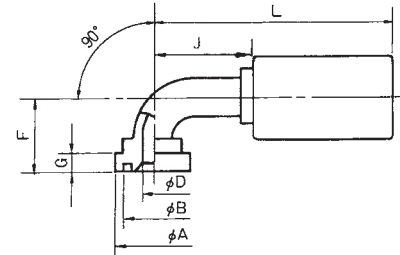
SIZE	A	B	D	F	G	J		L	WT
12	30.2	25.46	10.5	22	6.7	51		89	165
15	38.1	31.81	13.6	26	6.7	64		108	290
19	38.1	31.81	17.0	26.7	6.7	73.2		129	371
25	44.5	39.68	21.0	28	8	76		141	630

PART NO.3F



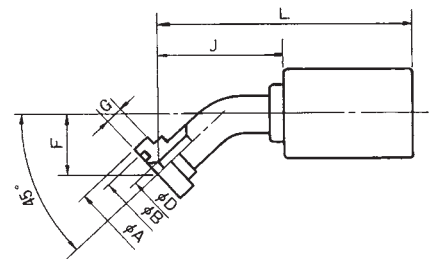
SAE standard pressure type flange (3000PSI)
(straight type)

PART NO.903F



SAE standard pressure type flange (3000PSI)
(90° bend fitting)

PART NO.453F



SAE standard pressure type flange (3000PSI)
(45° bend fitting)

SHD SERIES

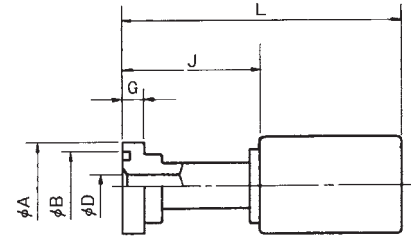
SHD280

SIZE	A	B	D	G	J			L	WT
12	31.8	25.46	9.5	7.75	51.2			90	200
15	41.3	31.81	16.0	8.75	54			98	292
19	41.3	31.81	17.0	8.75	54			110	354
25	47.6	39.68	20.0	9.5	65			130	620

SIZE	A	B	D	F	G	J		L	WT
12	31.8	25.46	10.5	44.1	7.75	51.5		90	203
15	41.3	31.81	13.6	56	8.75	64		108	350
19	41.3	31.81	17.0	56	8.75	66		122	435
25	47.6	39.68	21.0	65	9.5	76		141	745

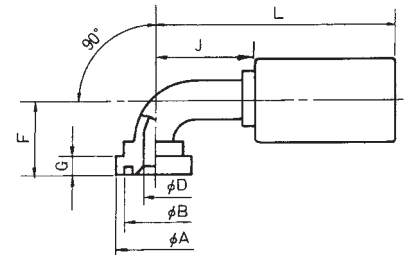
SIZE	A	B	D	F	G	J		L	WT
12	31.8	25.46	10.5	22.8	7.75	51.8		90	180
15	41.3	31.81	13.6	26.5	8.75	64.5		109	310
19	41.3	31.81	17.0	26.7	8.75	73.2		129	400
25	47.6	39.68	21.0	34	9.5	77.4		143	665

PART NO.6F



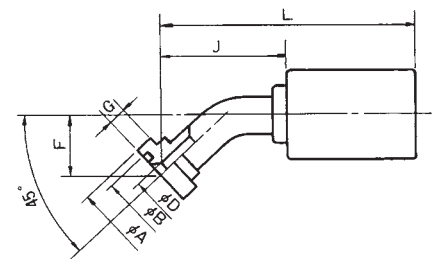
STRAIGHT SAE FLANGE
6000PSI

PART NO.906F



90° SAE FLANGE
6000PSI

PART NO.456F



45° SAE FLANGE
6000PSI

SHD SERIES

SHD350

HOSE STRUCTURE

INNER COVER: OIL RESISTANT SYNTHETIC RUBBER
 REINFORCEMENT: STEEL WIRE
 OUTER COVER: OIL&OZONE RESISTANT SYNTHETIC RUBBER

RECOMMENDED FLUIDS

MINERAL SYNTHETIC OIL

OPERATING TEMPERATURE

-40°C~+100°C(-40°F~+212°F)

HOSE STRUCTURE&REINFORCEMENT

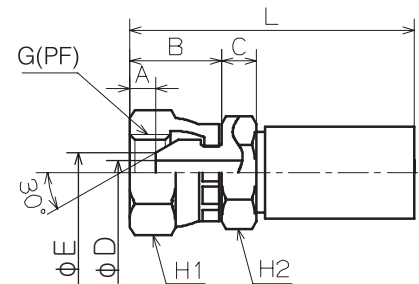
4W/S



SIZE	REINFORCEMENT	INNER DIAMETER mm (inch)	OUTER DIAMETER mm	MAX WORKING PRESSURE MPa (bar)	MIN.BURST PRESSURE MPa (bar)	MIN.BEND RADIUS mm	WEIGHT g/m
12	4W/S	12.7(1/2)	22.9	35(350)	140(1,400)	135	745
15	4W/S	15.9(5/8)	26.6	35(350)	140(1,400)	160	1,015
19	4W/S	19.0(3/4)	29.8	35(350)	140(1,400)	190	1,165
25	4W/S	25.4(1)	37.6	35(350)	140(1,400)	240	1,880

SIZE	A	B	C	D	E	H1	H2	G(PF)	L	WT
12	8.5	21.5	10	9.5	13	27	22	1/2	70	160
19	9.0	23.0	10	16	19	36	30	3/4	90	350
25	9.5	25.5	12	21	24	41	36	1	105	544

PART NO.5



female parallel pipe G thread type
 (male 30° seat)

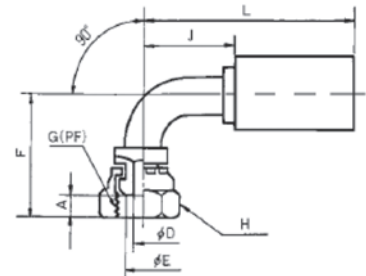
SHD SERIES

SHD350

SIZE	A	D	E	F	H	J	G(PF)	L	WT
12	7.0	9.5	13	55	27	50	1/2	88	210
19	9.0	17	19	70	36	64	3/4	119	472
25	9.5	21	24	87	41	68	1	136	820

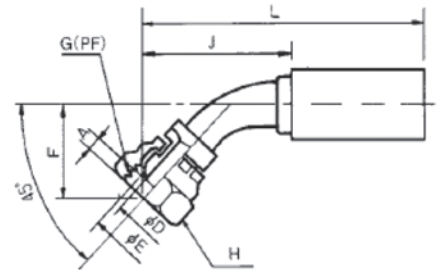
SIZE	A	D	E	F	H	J	G(PF)	L	WT
12	7.0	9.5	13	34	27	61.4	1/2	100	190
19	9.0	17.0	19	38	36	76	3/4	132	445
25	9.5	21.0	24	46.4	41	84.5	1	150	735

PART NO.905



female parallel pipe G thread type
(male 30° seat)
90° bend fitting

PART NO.455



female parallel pipe G thread type
(male 30° seat)
45° bend fitting

SHD SERIES

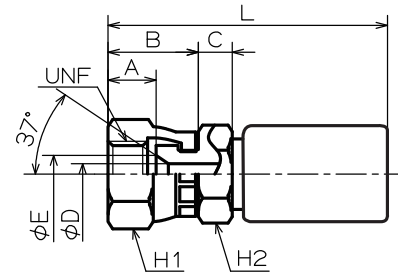
SHD350

SIZE	A	B	C	D	E	H1	H2	UNF	L	WT
12	11.0	21.5	10	9.5	14.5	27	22	3/4-16	70	165
15	11.0	21.5	9	13	17.3	27	27	7/8-14	77	220
19	12.5	23.0	10	16	21.5	36	30	1-1/16-12	90	345
25	12.5	25.5	12	21	28.0	41	36	1-5/16-12	105	540

SIZE	A	D	F	H1	J			UNF	L	WT
12	11.0	9.5	55	27	50			3/4-16	88	210
15	11.0	13.0	70	27	64			7/8-14	108	500
19	12.5	16.0	70	36	64.9			1-1/16-12	121	490
25	12.5	21.0	87	41	68			1-5/16-12	133	820

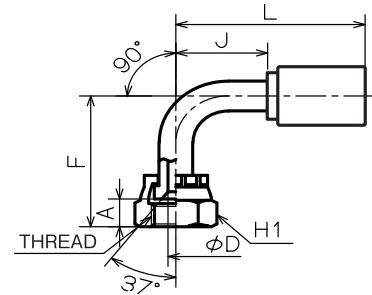
SIZE	A	D	F	H1	J			UNF	L	WT
12	11.0	9.5	31.9	27	59.3			3/4-16	98	190
15	11.0	13	38	27	70			7/8-14	114	360
19	12.5	16	38	36	76.8			1-1/16-12	133	445
25	12.5	21	46.4	41	84.5			1-5/16-12	150	735

PART NO.4U



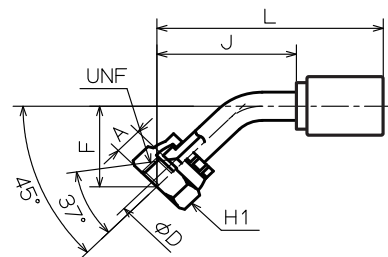
jis 37° female

PART NO.904U



jis 37° female
90° bend fitting

PART NO.454U



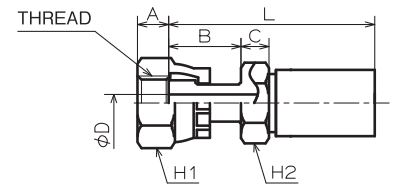
jis 37° female
45° bend fitting

SHD SERIES

SHD350

SIZE	A	B	C	D	H1	H2	UNF	L	WT
12	10.0	22.0	10	9.5	27	22	13/16-16	70	175
15	10.5	24.5	9	13.0	32	27	1-14	80	280
	11.5	27.5	9	16.0	36	27	1-3/16-12	83	320
19	11.3	22.7	11	15.9	36	27	1-3/16-12	92	350
25	11.8	24.7	11	20.5	41	32	1-7/16-12	102	540

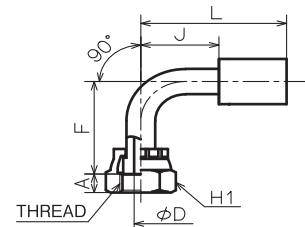
PART NO. KO



female O-ring face seal

SIZE	A	D	F	H1	J		UNF	L	WT
12	10.0	9.5	43.5	27	50		13/16-16	88	208
15	10.5	13.0	51	32	54		1-14	98	330
	11.5	16.0	58	36	64		1-3/16-12	108	390
19	11.3	15.9	58	36	64		1-3/16-12	120	445
25	11.8	20.5	66	41	76		1-7/16-12	141	738

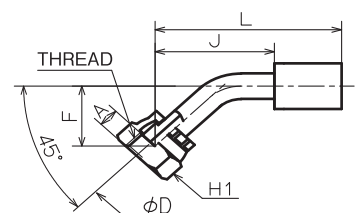
PART NO. 90KO



female O-ring face seal
90° bend fitting

SIZE	A	D	F	H1	J		UNF	L	WT
12	10.0	9.5	22	27	51		13/16-16	89	190
15	10.5	13.0	26	32	64		1-14	108	310
	11.5	16.0	26	36	64		1-3/16-12	108	350
19	11.3	15.9	26	36	64		1-3/16-12	120	380
25	11.8	20.5	31.5	41	76		1-7/16-12	141	645

PART NO. 45KO



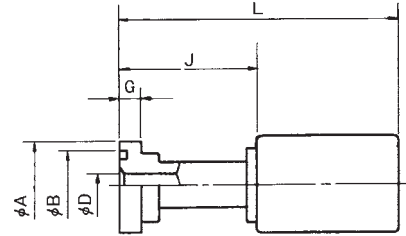
female O-ring face seal
45° bend fitting

SHD SERIES

SHD350

SIZE	A	B	D	G	J			L	WT
12	30.2	25.46	9.5	6.7	51			89	195
15	38.1	31.81	12.6	6.7	54			98	300
19	38.1	31.81	17.0	6.7	54			110	325
25	44.5	39.68	20.0	8	65			130	590

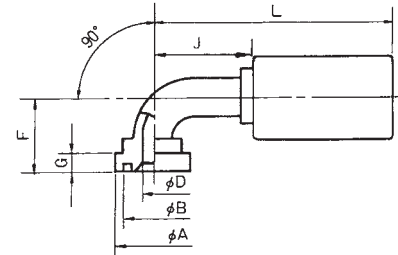
PART NO.3F



SAE standard pressure type flange (3000PSI)
(straight type)

SIZE	A	B	D	F	G	J		L	WT
12	30.2	25.46	10.5	43	6.7	51.5		90	190
15	38.1	31.81	13.6	55.5	6.7	50		94	320
19	38.1	31.81	17.0	55	6.7	64		120	407
25	44.5	39.68	21.0	63	8	76		141	715

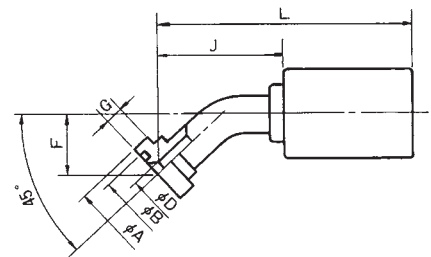
PART NO.903F



SAE standard pressure type flange (3000PSI)
(90°bend fitting)

SIZE	A	B	D	F	G	J		L	WT
12	30.2	25.46	10.5	22	6.7	51		89	165
15	38.1	31.81	13.6	26	6.7	64		108	290
19	38.1	31.81	17.0	26.7	6.7	73.2		129	371
25	44.5	39.68	21.0	28	8	76		141	630

PART NO.453F



SAE standard pressure type flange (3000PSI)
(45°bend fitting)

SHD SERIES

SHD350

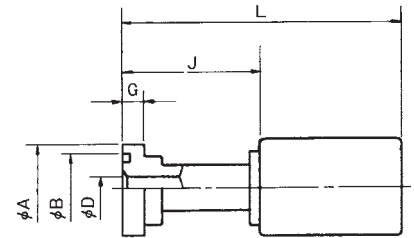
SIZE	A	B	D	G	J		L	WT
12	36.8	25.46	9.5	7.75	51.2		90	200
15	41.3	31.81	16.0	8.75	54		98	292
19	41.3	31.81	17.0	8.75	54		110	354
25	47.6	39.68	20.0	9.5	65		130	620

SIZE	A	B	D	F	G	J	L	WT
12	36.8	25.46	10.5	44.1	7.75	51.5	90	203
15	41.3	31.81	13.6	56	8.75	64	108	350
19	41.3	31.81	17.0	56	8.75	66	122	435
25	47.6	39.68	21.0	65	9.5	76	141	745

SIZE	A	B	D	F	G	J	L	WT
12	31.8	25.46	10.5	22.8	7.75	51.8	90	180
15	41.3	31.81	13.6	26.5	8.75	64.5	109	310
19	41.3	31.81	17.0	26.7	8.75	73.2	129	400
25	47.6	39.68	21.0	34	9.5	77.4	143	665

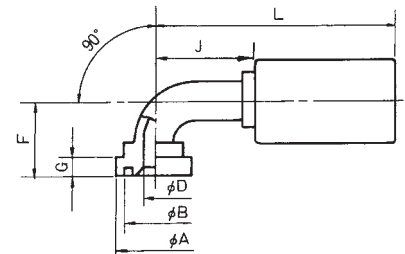
SIZE	A	B	H				L	THREAD	WT
12	1.0	24.7	30				63.7	M24×1.5	175
15	4.0	25.4	36				73.4	M30×2.0	275
19	3.0	28.0	46				87.0	M36×2.0	392
25	4.0	32.5	50				101.5	M42×2.0	720

PART NO.6F



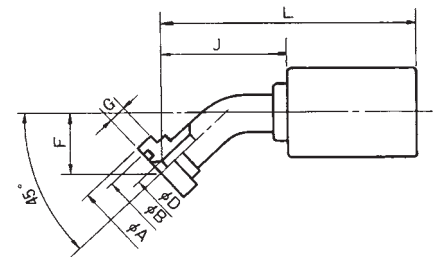
STRAIGHT SAE FLANGE
6000PSI

PART NO.906F



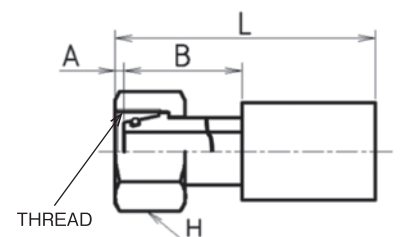
90° SAE FLANGE
6000PSI

PART NO.456F



45° SAE FLANGE
6000PSI

PART NO.DKOS



24° CONE FEMALE