

# SHD

# SERIES

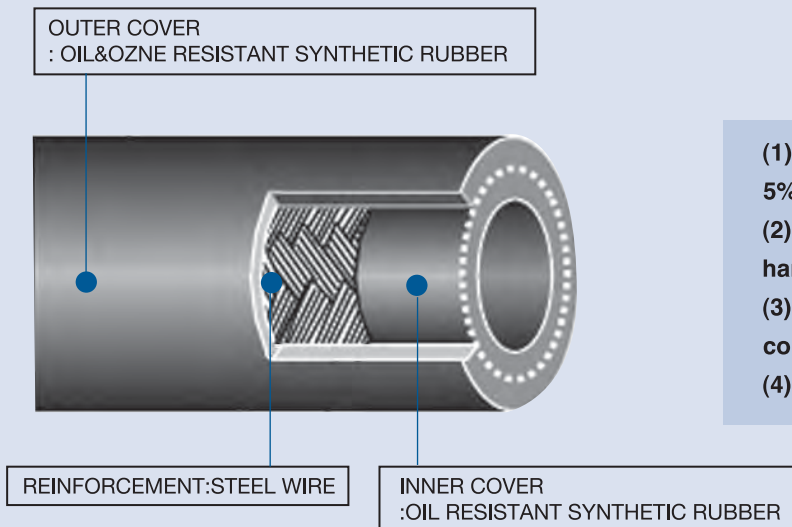
## Slim Heavy Duty Hose

### SHD HOSE

### INTRODUCTION

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

### FEATURES



- (1) Outer diameter Size has been reduced by approx 5% of existing HD hoses.
- (2) Reduction in bending radius achieved easier handling.
- (3) Weight has been reduced by 20% from conventional HD hose.
- (4) Swage area of metal fittings has been reduced

## 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

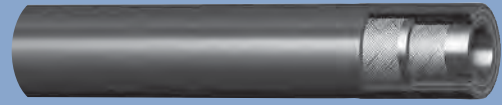
**RECOMMENDED FLUIDS** MINERAL SYNTHETIC OIL

## OPERATING TEMPERATURE

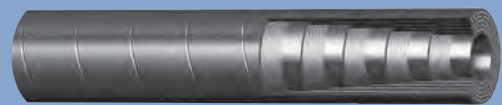
-40°C~+100°C(-40°F~+212°F)

## HOSE STRUCTURE&REINFORCEMENT

### 2W/B



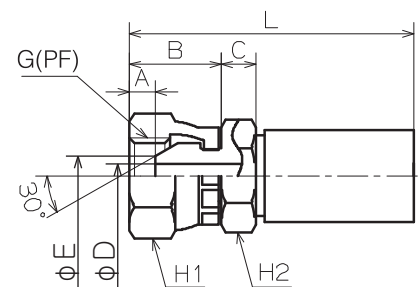
### 4W/S



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(1/2)	21.0	28 (280)	112 (1,120)	90	590
15	4W/S	15.9(5/8)	26.6	28 (280)	112 (1,120)	140	990
19	4W/S	19.0(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	1/2	70	160
15	9.0	23.0	11	16.0	19	36	30	3/4	80	300
19	9.0	23.0	10	16.1	19	36	30	3/4	90	350
25	9.5	25.5	12	21.0	24	41	36	1	105	544

## PART NO.5



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

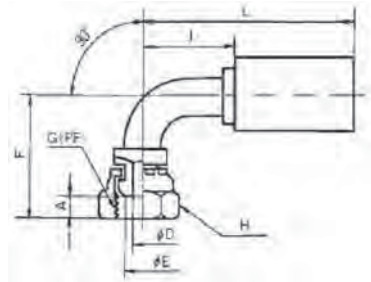
# SHD SERIES

# 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

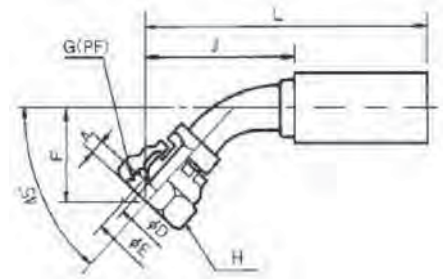
SIZE	A	D	E	F	H	J	G(PF)	L	WT
12	7.0	9.5	13	34	27	61.4	1/2	100	190
15	9.0	13.6	19	38	36	70	3/4	114	365
19	9.0	17.0	19	38	36	76	3/4	132	445
25	9.5	21.0	24	46.4	41	84.5	1	150	735

## PART NO.905



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

## PART NO.455

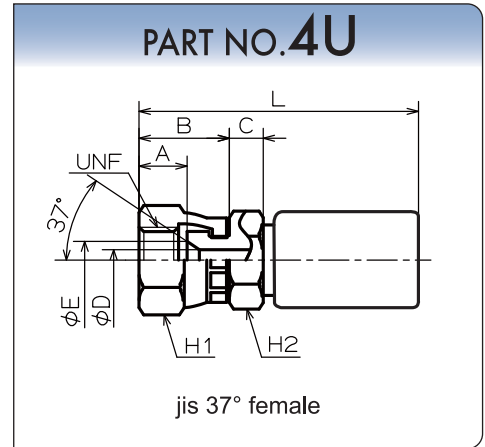


female parallel pipe G thread type  
(male 30° seat)  
45° bend fitting

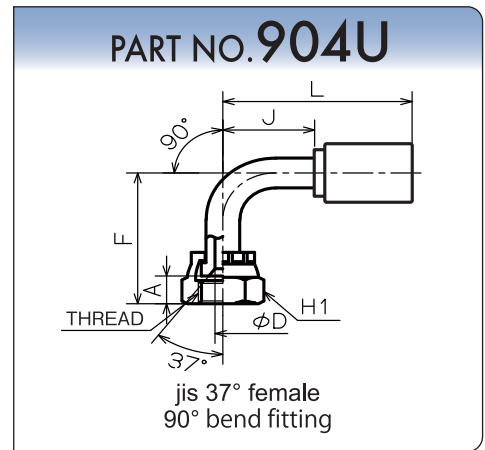
# SHD SERIES

# SHD280

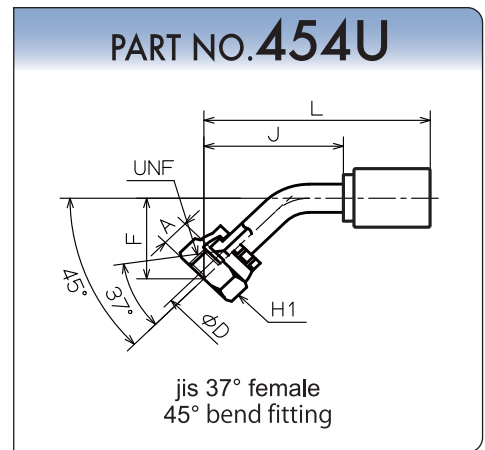
SIZE	A	B	C	D	E	H1	H2	UNF	L	WT
12	11.0	21.5	10	9.5	14.5	27	22	3/4-16	70	165
15	11.0	21.5	9	13.0	17.3	27	27	7/8-14	77	220
19	12.5	23.0	10	16.0	21.5	36	30	1-1/16-12	90	345
25	12.5	25.5	12	21.0	28.0	41	36	1-5/16-12	105	540



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



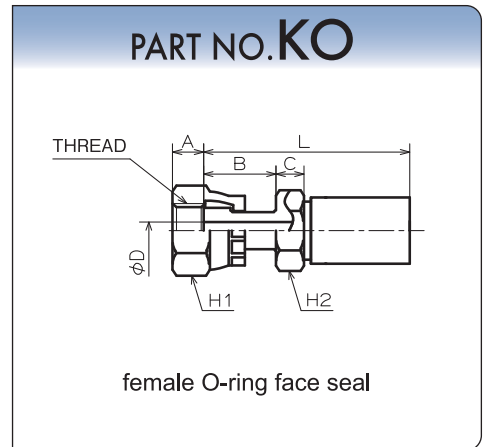
SIZE	A	D	F	H1	J			UNF	L	WT
12	11.0	9.5	31.9	27	59.3			3/4-16	98	190
15	11.0	13.0	38	27	70			7/8-14	114	360
19	12.5	16.0	38	36	76.8			1-1/16-12	133	445
25	12.5	21.0	46.4	41	84.5			1-5/16-12	150	735



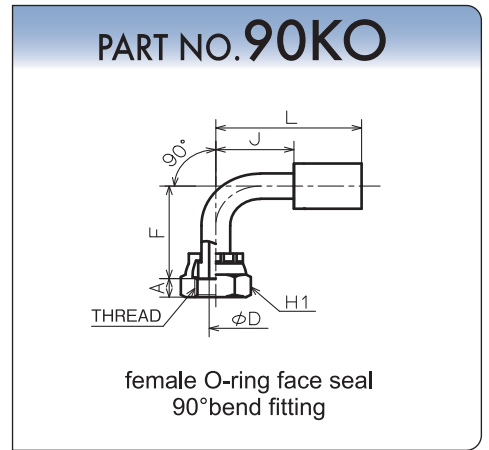
# SHD SERIES

# SHD280

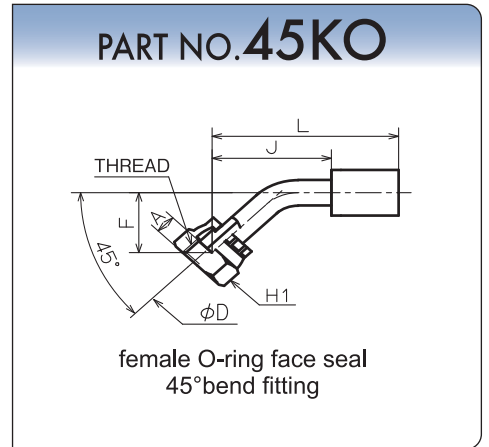
SIZE	A	B	C	D	H1	H2	UNF	L	WT
12	10.0	22.0	10	9.5	27	22	13/16-16	70	175
15	10.5	24.5	9	13.0	32	27	1-14	80	280
	11.5	27.5	9	16.0	36	27	1-3/16-12	83	320
19	11.3	22.7	11	15.9	36	27	1-3/16-12	92	350
25	11.8	24.7	11	20.5	41	32	1-7/16-12	102	540



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



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



# 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

**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

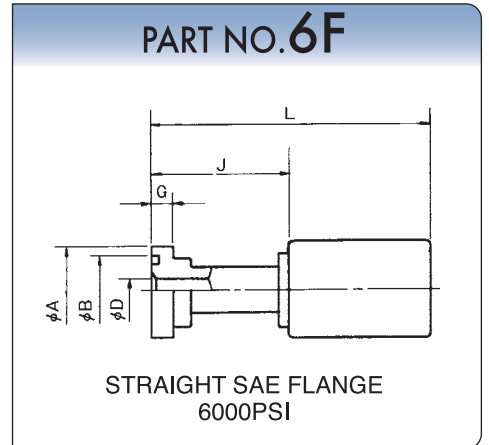
**PART NO.453F**

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

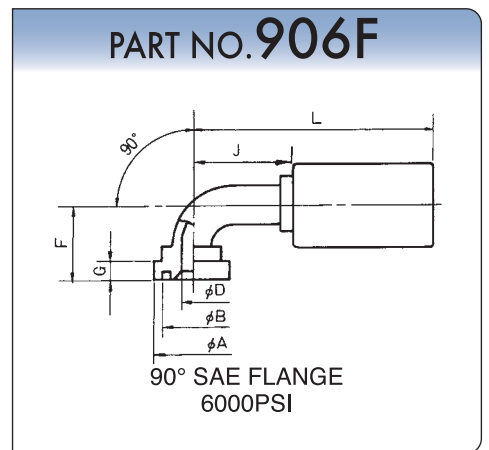
# SHD SERIES

# SHD280

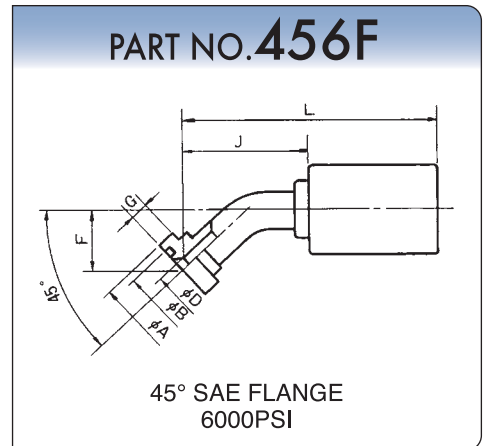
SIZE	A	B	D	G	J			L	WT
12	31.8	25.46	9.5	7.75	51.2			90	200
15	41.3	31.81	16.0	8.75	54			98	292
19	41.3	31.81	17.0	8.75	54			110	354
25	47.6	39.68	20.0	9.5	65			130	620



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



# SHD SERIES

# SHD350

## HOSE STRUCTURE

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

## RECOMMENDED FLUIDS

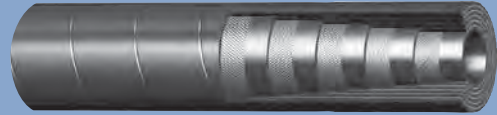
MINERAL SYNTHETIC OIL

## OPERATING TEMPERATURE

-40°C~+100°C(-40°F~+212°F)

## HOSE STRUCTURE&REINFORCEMENT

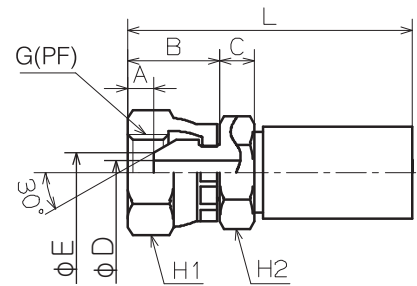
4W/S



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)



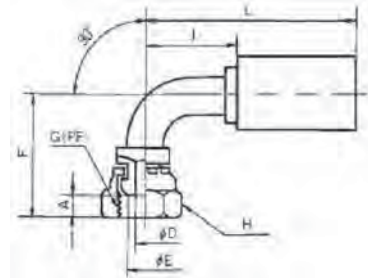
# SHD SERIES

# 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

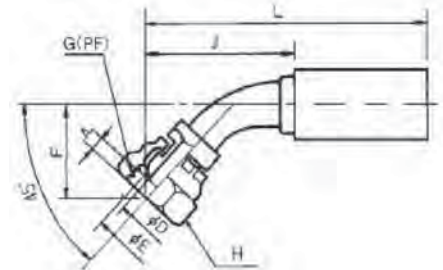
SIZE	A	D	E	F	H	J	G(PF)	L	WT
12	7.0	9.5	13	34	27	61.4	1/2	100	190
19	9.0	17.0	19	38	36	76	3/4	132	445
25	9.5	21.0	24	46.4	41	84.5	1	150	735

## PART NO.905



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

## PART NO.455

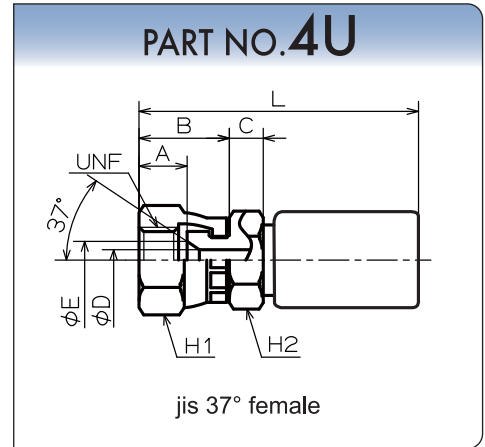


female parallel pipe G thread type  
(male 30° seat)  
45° bend fitting

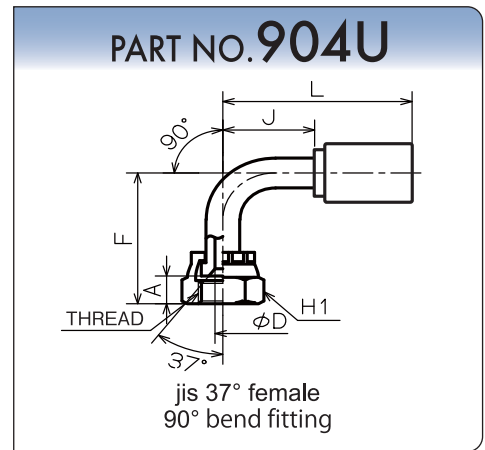
# SHD SERIES

# SHD350

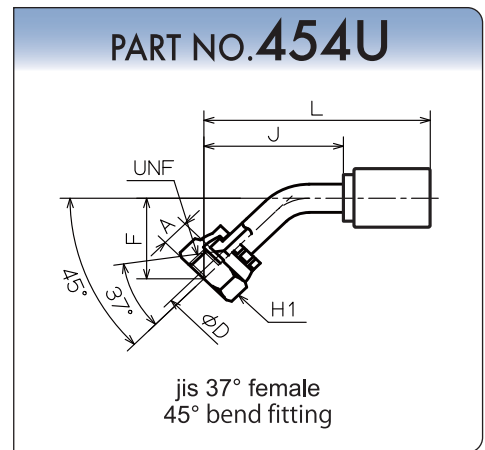
SIZE	A	B	C	D	E	H1	H2	UNF	L	WT
12	11.0	21.5	10	9.5	14.5	27	22	3/4-16	70	165
15	11.0	21.5	9	13	17.3	27	27	7/8-14	77	220
19	12.5	23.0	10	16	21.5	36	30	1-1/16-12	90	345
25	12.5	25.5	12	21	28.0	41	36	1-5/16-12	105	540



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



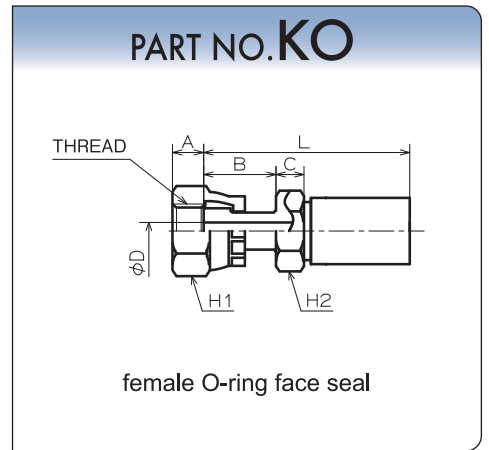
SIZE	A	D	F	H1	J			UNF	L	WT
12	11.0	9.5	31.9	27	59.3			3/4-16	98	190
15	11.0	13	38	27	70			7/8-14	114	360
19	12.5	16	38	36	76.8			1-1/16-12	133	445
25	12.5	21	46.4	41	84.5			1-5/16-12	150	735



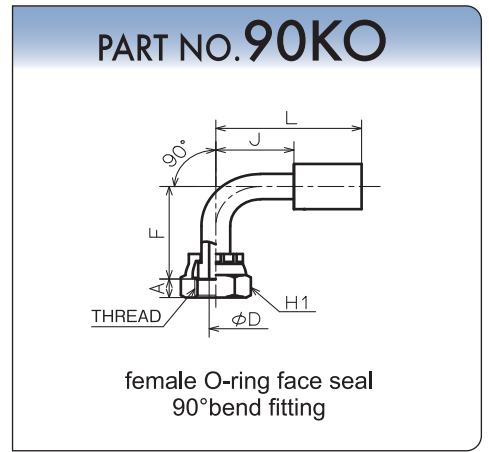
# SHD SERIES

# SHD350

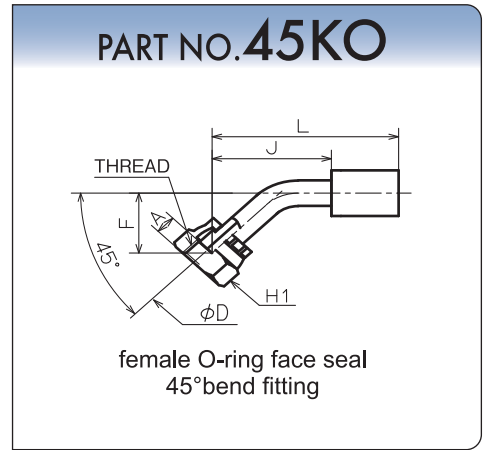
SIZE	A	B	C	D	H1	H2	UNF	L	WT
12	10.0	22.0	10	9.5	27	22	13/16-16	70	175
15	10.5	24.5	9	13.0	32	27	1-14	80	280
	11.5	27.5	9	16.0	36	27	1-3/16-12	83	320
19	11.3	22.7	11	15.9	36	27	1-3/16-12	92	350
25	11.8	24.7	11	20.5	41	32	1-7/16-12	102	540



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



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

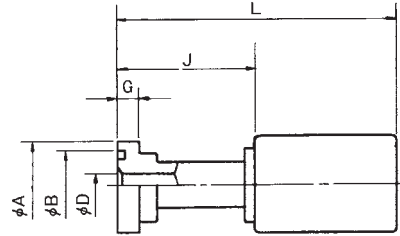


# SHD SERIES

# 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

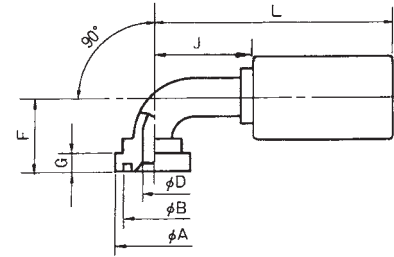
## PART NO. 3F



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

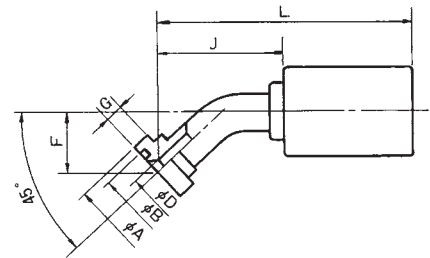
## PART NO. 903F



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

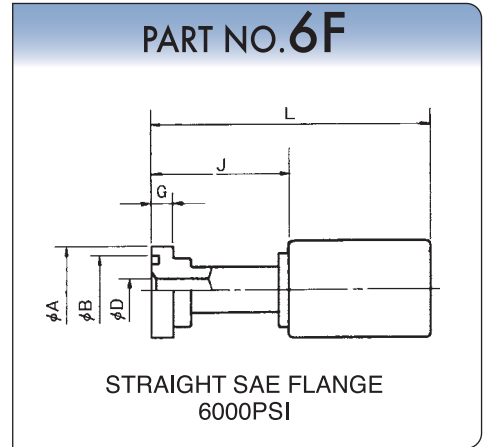


SAE standard pressure type flange (3000PSI)  
(45° bend fitting)

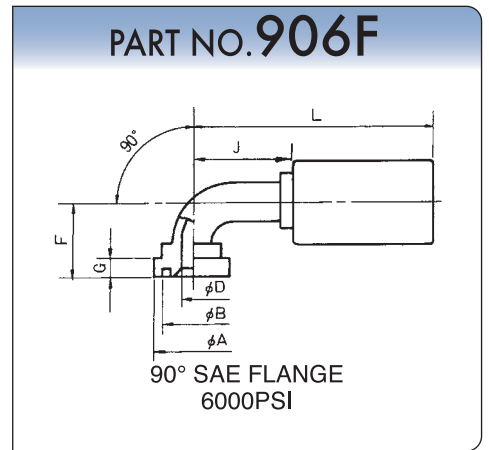
# SHD SERIES

# SHD350

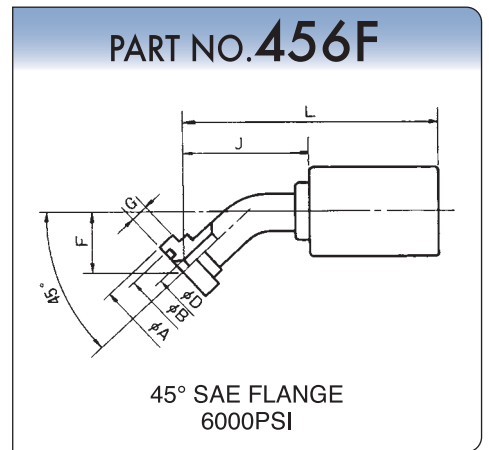
SIZE	A	B	D	G	J	L	WT
12	36.8	25.46	9.5	7.75	51.2	90	200
15	41.3	31.81	16.0	8.75	54	98	292
19	41.3	31.81	17.0	8.75	54	110	354
25	47.6	39.68	20.0	9.5	65	130	620



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

